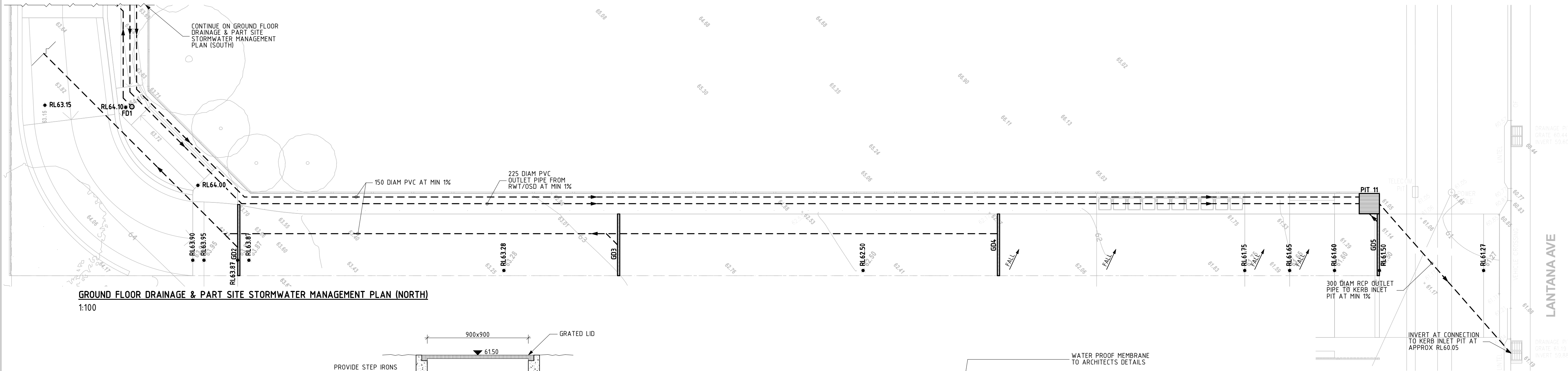
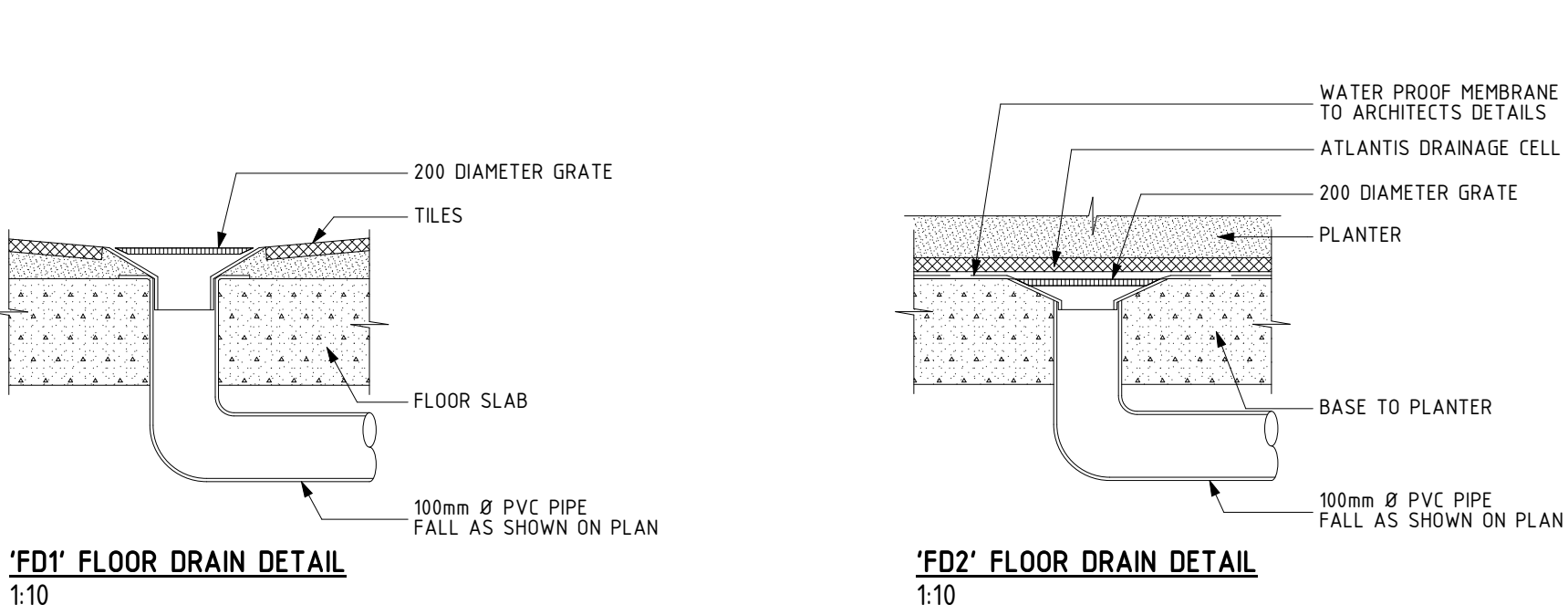
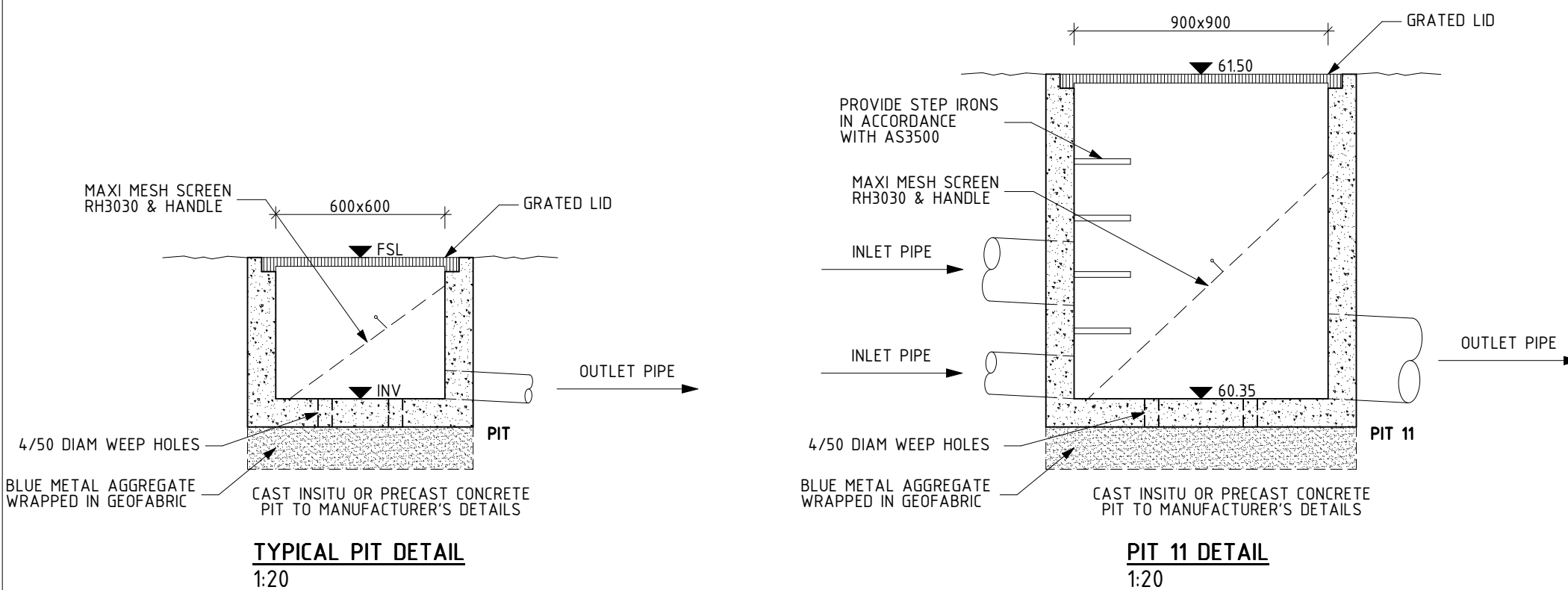


GROUND FLOOR DRAINAGE & PART SITE STORMWATER MANAGEMENT PLAN (SOUTH)
1:100



GROUND FLOOR DRAINAGE & PART SITE STORMWATER MANAGEMENT PLAN (NORTH)
1:100



- STORMWATER NOTES:**
1. ALL PIPES TO BE 100mm Ø UNLESS NOTED OTHERWISE.
 2. ALL PIPES TO BE UPVC UNLESS NOTED OTHERWISE.
 3. ALL PIPES TO BE LAID AT 1 % MINIMUM GRADE UNLESS NOTED OTHERWISE.
 4. ALL PIPES SHALL BE LAID ON A 75mm SAND BED, COMPACTED TO 100% S.M.D. BELOW PAVEMENTS. (NO COMPACTION REQUIRED BELOW LANDSCAPING) COVER TO SURFACE FROM TOP OF PIPE TO BE 300mm MINIMUM. BACKFILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY METHOD OF RAMMING AND WATERING IN TRENCHES TO BE FILLED WITH GRANULAR MATERIAL, AS SPECIFIED.
 5. ALL PIPES SHOWN ON PLAN ARE SHOWN INDICATIVELY ONLY & MINIMUM CLEARANCES FROM THE EXTERNAL WALLS OF BUILDINGS, FOR THE EXCAVATION OF TRENCHES, ARE TO BE PROVIDED IN ACCORDANCE WITH AS3500.
 6. ALL DOWN PIPES TO BE 90mm Ø UNLESS NOTED OTHERWISE.
 7. DOWN PIPE LOCATIONS ARE INDICATIVE ONLY. LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
 8. PROVIDE CLEANING EYES AT ALL DOWNPIPES UNO.
 9. ALL PITS GREATER THAN 1000mm DEEP SHALL HAVE STEP IRONS AS PER COUNCIL STANDARDS.
 10. ALL WORK TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS AND SPECIFICATIONS.
 11. ALL LEVELS SHOWN ARE TO AHD.
 12. ENSURE THAT ALL PITS AND STORMWATER PIPES ARE LOCATED CLEAR FROM TREE ROOT SYSTEMS.
 13. EXCAVATION OF TRENCHES ADJACENT TO TREES TO BE CARRIED OUT USING HAND TOOLS ONLY.
 14. ALL EXISTING EARTHENWARE PIPES TO BE UPGRADED TO UPVC.
 15. ALL WORKS TO BE IN ACCORDANCE WITH AS 3500.
 16. THE FOLLOWING ABBREVIATIONS DENOTE:
FSL - FINISHED SURFACE LEVEL
INV - INVERT
 17. PROVIDE FALLS IN SURFACES TO ALL PITS, GRATED DRAINS & FLOOR DRAINS IN ACCORDANCE WITH AS3500 & ARCHITECT'S DETAILS.

RL65.15 DENOTES EXISTING LEVELS
RL65.15 DENOTES PROPOSED LEVELS

ON-SITE DETENTION (OSD) CALCULATION SHEET			
DEVELOPMENT TYPE:	SEPP HSPD	FULL COMPUTATION METHOD	
DESIGN METHOD USED:			
PRE DEVELOPMENT IMPERVIOUS AREA:	2029 m²		
SITE AREA:	782 m²		
POST DEVELOPMENT IMPERVIOUS AREA:	0 m² (DRAINS)		
INCREASE IN IMPERVIOUS AREA:	1428 m²		
IMPERVIOUS AREA DRAINING TO OSD:	646 m²		
PERVIOUS AREA DRAINING TO OSD:	1341 m²		
IMPERVIOUS AREA BYPASSING OSD:	87 m²		
PERVIOUS AREA BYPASSING OSD:	240 m²		
PRE DEVELOPMENT SITE DISCHARGE (5-YEAR):	36 l/s		
POST DEVELOPMENT SITE DISCHARGE (5-YEAR):	36 l/s		
PRE DEVELOPMENT SITE DISCHARGE (100-YEAR):	85 l/s		
POST DEVELOPMENT SITE DISCHARGE (100-YEAR):	45 l/s		
SITE STORAGE REQUIREMENT (ISSR):	61 m³		
RAINFALL RE-USE TANK REQUIRED FOR BASIX:	25000 l		
RAINFALL RE-USE TANK PROVIDED:	25000 l		
OSD VOLUME REQUIRED:	36 m³		
TYPE OF CONTROL:	BELOW GROUND CONCRETE TANK ON BASEMENT		
DIMENSIONS OF OSD:	18.7m² x 1.4m + 7.1m² x 0.1m + 0.9m x 0.9m x 1.65m + 7.1m² x 1.1m		
OSD VOLUME PROVIDED:	36.0 m³		
ORIFICE SIZE:	106 mm Ø		

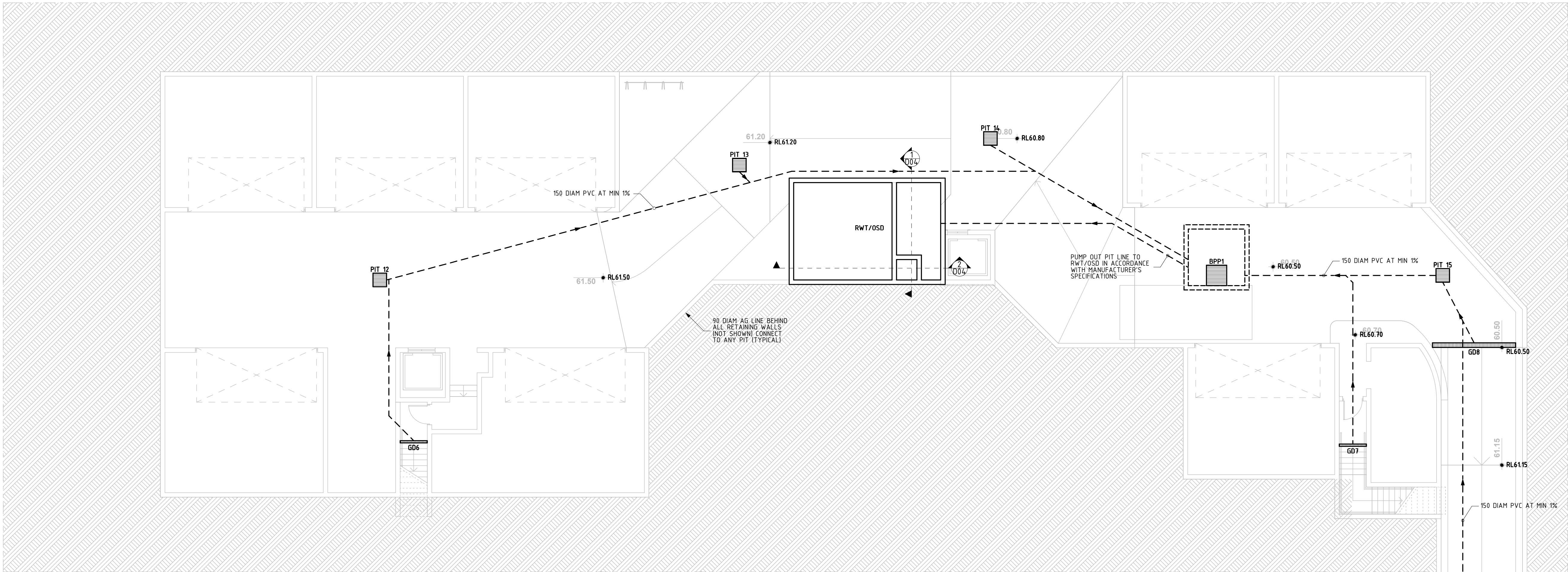
- NOTE:**
- PROVIDE GUTTER GUARD TO ALL GUTTERS
 - MOSQUITO PROOF MESH TO BE PROVIDED AT ALL END POINTS TO CHARGED LINES
 - ALL PIPES UNDER SUSPENDED FLOOR TO BE STRAPPED TO UNDERSIDE OF FLOOR STRUCTURE AT MIN 1%

MARK	SIZE/TYPE	FSL	INV
AH1	600x600 GRATED ACCESS HATCH	64.25	-
AH2	600x600 GRATED ACCESS HATCH	64.25	-
AH3	600x600 GRATED ACCESS HATCH	64.25	-
AH4	600x600 GRATED ACCESS HATCH	64.25	-
PIT 1	600x600 PIT WITH GRATED LID WITH OCEANGUARD BASKET - REFER DETAIL	64.36	63.86
PIT 2	600x600 PIT WITH GRATED LID WITH OCEANGUARD BASKET - REFER DETAIL	63.75	63.45
PIT 3	600x600 PIT WITH GRATED LID WITH OCEANGUARD BASKET - REFER DETAIL	62.61	62.11
PIT 4	600x600 PIT WITH GRATED LID WITH OCEANGUARD BASKET - REFER DETAIL	61.75	61.25
PIT 5	600x600 PIT WITH GRATED LID WITH OCEANGUARD BASKET - REFER DETAIL	64.90	64.40
PIT 6	600x600 PIT WITH GRATED LID WITH OCEANGUARD BASKET - REFER DETAIL	64.28	63.78
PIT 7	600x600 PIT WITH GRATED LID WITH OCEANGUARD BASKET - REFER DETAIL	65.24	64.74
PIT 8	600x600 PIT WITH GRATED LID WITH OCEANGUARD BASKET - REFER DETAIL	65.32	64.82
PIT 9	600x600 PIT WITH GRATED LID WITH OCEANGUARD BASKET - REFER DETAIL	64.93	64.43
PIT 10	600x600 PIT WITH GRATED LID WITH OCEANGUARD BASKET - REFER DETAIL	63.81	63.31
PIT 11	900x900 PIT WITH GRATED LID WITH OCEANGUARD BASKET - REFER DETAIL	61.50	60.35
GD1	100 WIDE x 100 DEEP GRATED DRAIN	60.5	60.5
GD2	100 WIDE x 100 DEEP GRATED DRAIN	63.87	63.77
GD3	100 WIDE x 100 DEEP GRATED DRAIN	63.03	62.93
GD4	100 WIDE x 100 DEEP GRATED DRAIN	62.23	62.13
GD5	100 WIDE x 100 DEEP GRATED DRAIN	61.50	61.40
FD1	200 DIAMETER FLOOR DRAIN	-	-
FD2	200 DIAMETER FLOOR DRAIN (PLANTER)	-	-
DP	100 DIAMETER PVC DOWNPIPE	-	-
DP1	100 DIAMETER PVC DOWNPIPE TO COLLECT WATER FROM BALCONY & TERRACE ONLY	-	-
DP2	100 DIAMETER SEWER GRADE PVC PRESSURE SEALED CHARGED DOWNPIPE	-	-
RWT/OSD	61800 LITRE BELOW GROUND COMBINED ON-SITE DETENTION & RAINWATER RE-USE TANK (18.7m²x24000 + 7.1m²x1000 + 900x900x18500 + 7.1m²x1000). TANK TO COLLECT RAINWATER RUNOFF FROM ALL ROOF AREAS AS SHOWN & BE CONNECTED FOR GARDEN IRRIGATION. TANK TO BE FITTED WITH FIRST FLUSH DEVICE & WATER FILTRATION DEVICES & INSTALLED IN ACCORDANCE WITH AS3500, BASIX & SYDNEY WATER REQUIREMENTS. ALL CONNECTIONS INTO & OUT OF RWT TO BE FULLY SEALED.	-	-

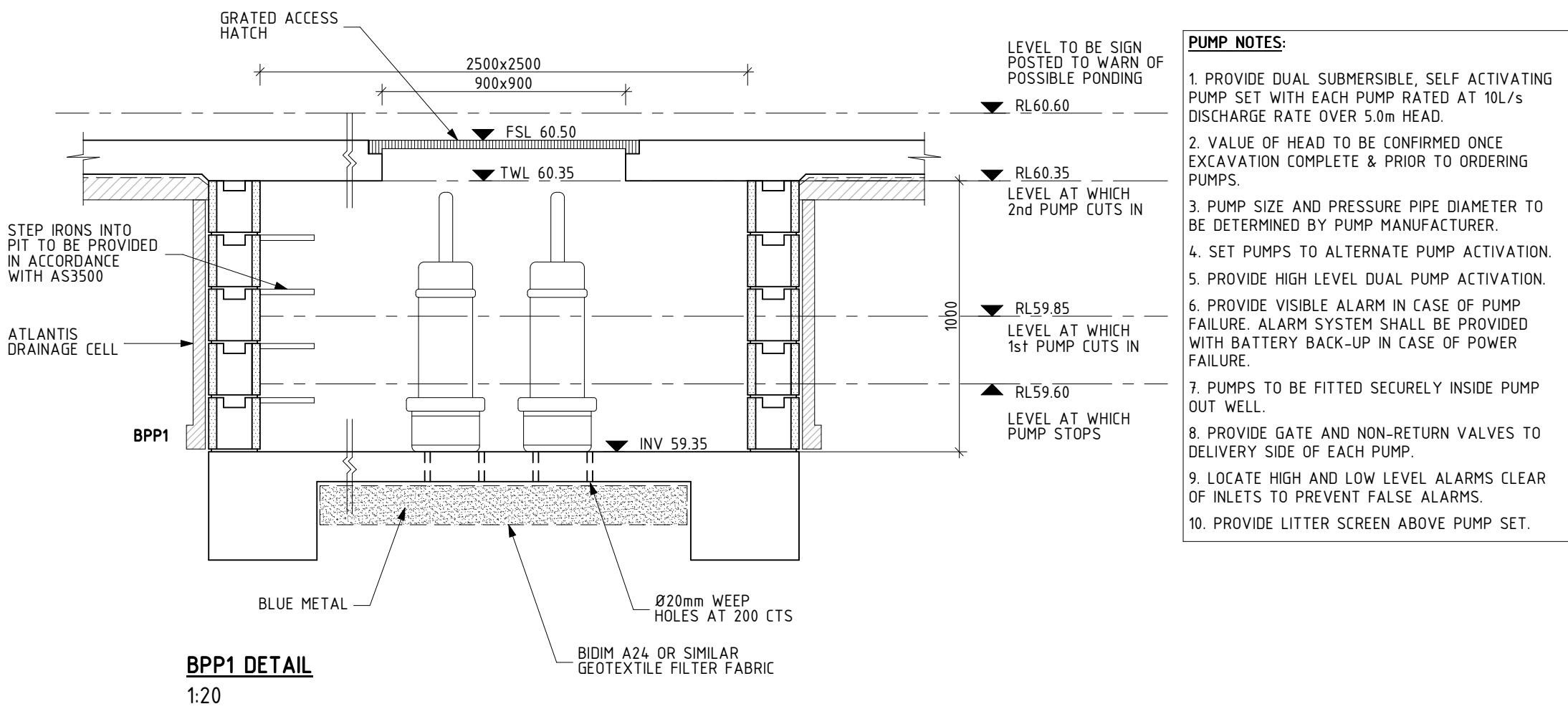
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A	11.12.20	ISSUE FOR DA SUBMISSION ONLY	DI			
1	08.12.20	ISSUE FOR REVIEW ONLY	DI			

ARCHITECT	GARTNER TROVATO ARCHITECTS
CLIENT	ROB MASON

STATUS	ISSUE FOR DA SUBMISSION ONLY	DATE	DEC 2020
PROJECT	45 LANTANA AVENUE, WHEELER HEIGHTS	PROJECT NUMBER	201110
DRAWING	GROUND FLOOR DRAINAGE & SITE STORMWATER MANAGEMENT PLAN	DRAWING NUMBER	D01

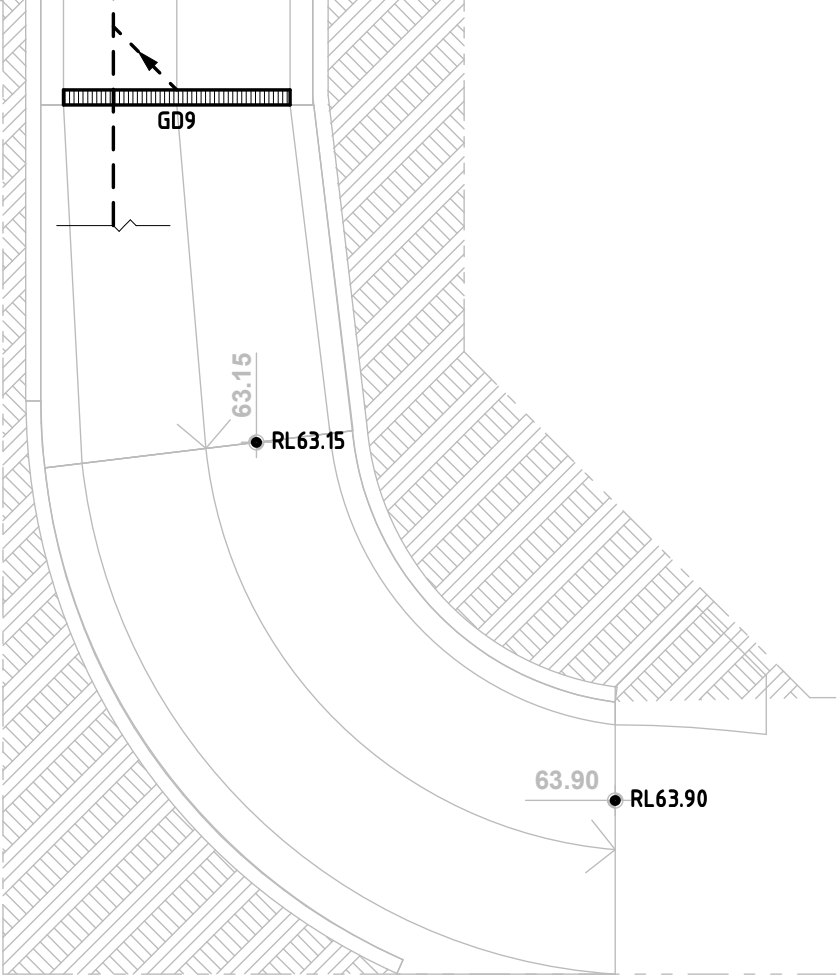


BASEMENT DRAINAGE PLAN
1:100



BPP1 DETAIL
1:20

- PUMP NOTES:**
1. PROVIDE DUAL SUBMERSIBLE, SELF ACTIVATING PUMP SET WITH EACH PUMP RATED AT 10L/s DISCHARGE RATE OVER 5.0m HEAD.
 2. VALUE OF HEAD TO BE CONFIRMED ONCE EXCAVATION COMPLETE & PRIOR TO ORDERING PUMPS.
 3. PUMP SIZE AND PRESSURE PIPE DIAMETER TO BE DETERMINED BY PUMP MANUFACTURER.
 4. SET PUMPS TO ALTERNATE PUMP ACTIVATION.
 5. PROVIDE HIGH LEVEL DUAL PUMP ACTIVATION.
 6. PROVIDE VISIBLE ALARM IN CASE OF PUMP FAILURE. ALARM SYSTEM SHALL BE PROVIDED WITH BATTERY BACK-UP IN CASE OF POWER FAILURE.
 7. PUMPS TO BE FITTED SECURELY INSIDE PUMP OUT WELL.
 8. PROVIDE GATE AND NON-RETURN VALVES TO DELIVERY SIDE OF EACH PUMP.
 9. LOCATE HIGH AND LOW LEVEL ALARMS CLEAR OF INLETS TO PREVENT FALSE ALARMS.
 10. PROVIDE LITTER SCREEN ABOVE PUMP SET.



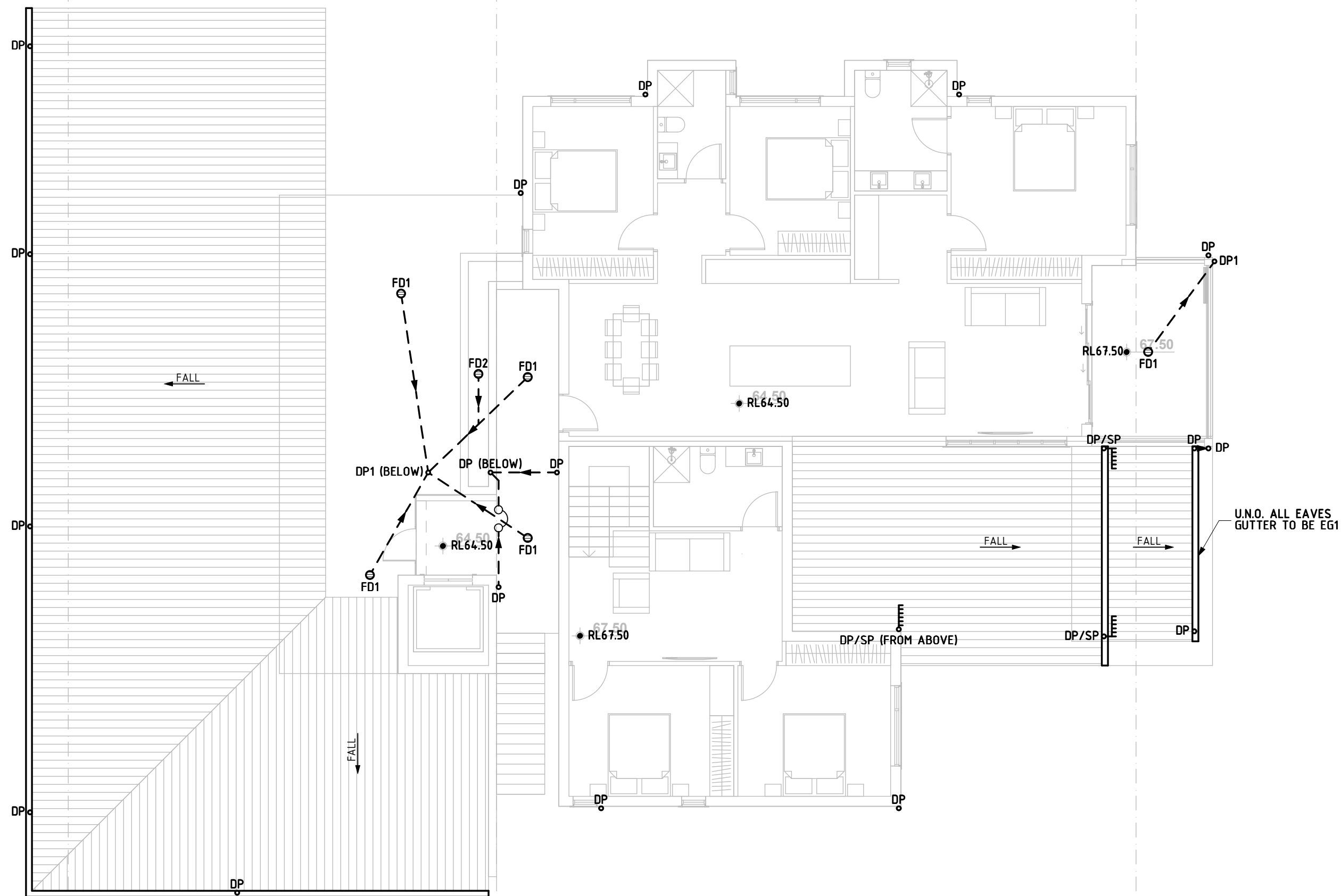
MARK	SIZE/TYPE	FSL	INV
PIT 12	600x600 PIT WITH GRATED LID	61.50	61.00
PIT 13	600x600 PIT WITH GRATED LID	61.20	60.70
PIT 14	600x600 PIT WITH GRATED LID	60.80	60.30
PIT 15	600x600 PIT WITH GRATED LID WITH OCEANGUARD BASKET - REFER DETAIL	60.50	60.00
BPP1	MIN 6m³ BASEMENT PUMP OUT PIT - REFER DETAIL	60.50	59.35
GD6	100 WIDE x 100 DEEP GRATED DRAIN	61.50	61.40
GD7	100 WIDE x 100 DEEP GRATED DRAIN	60.70	60.60
GD8	200 WIDE x 100 DEEP GRATED DRAIN	60.50	60.40
GD9	200 WIDE x 100 DEEP GRATED DRAIN	61.27 COS	61.17 COS
RWT/OSD	BELOW GROUND COMBINED ON-SITE DETENTION & RAINWATER RE-USE TANK REFER TO SCHEDULE ON D01	-	-

REV.	DATE	REVISION DESCRIPTION	BY	REV.	DATE	REVISION DESCRIPTION	BY
A	11.12.20	ISSUE FOR DA SUBMISSION ONLY	DI				
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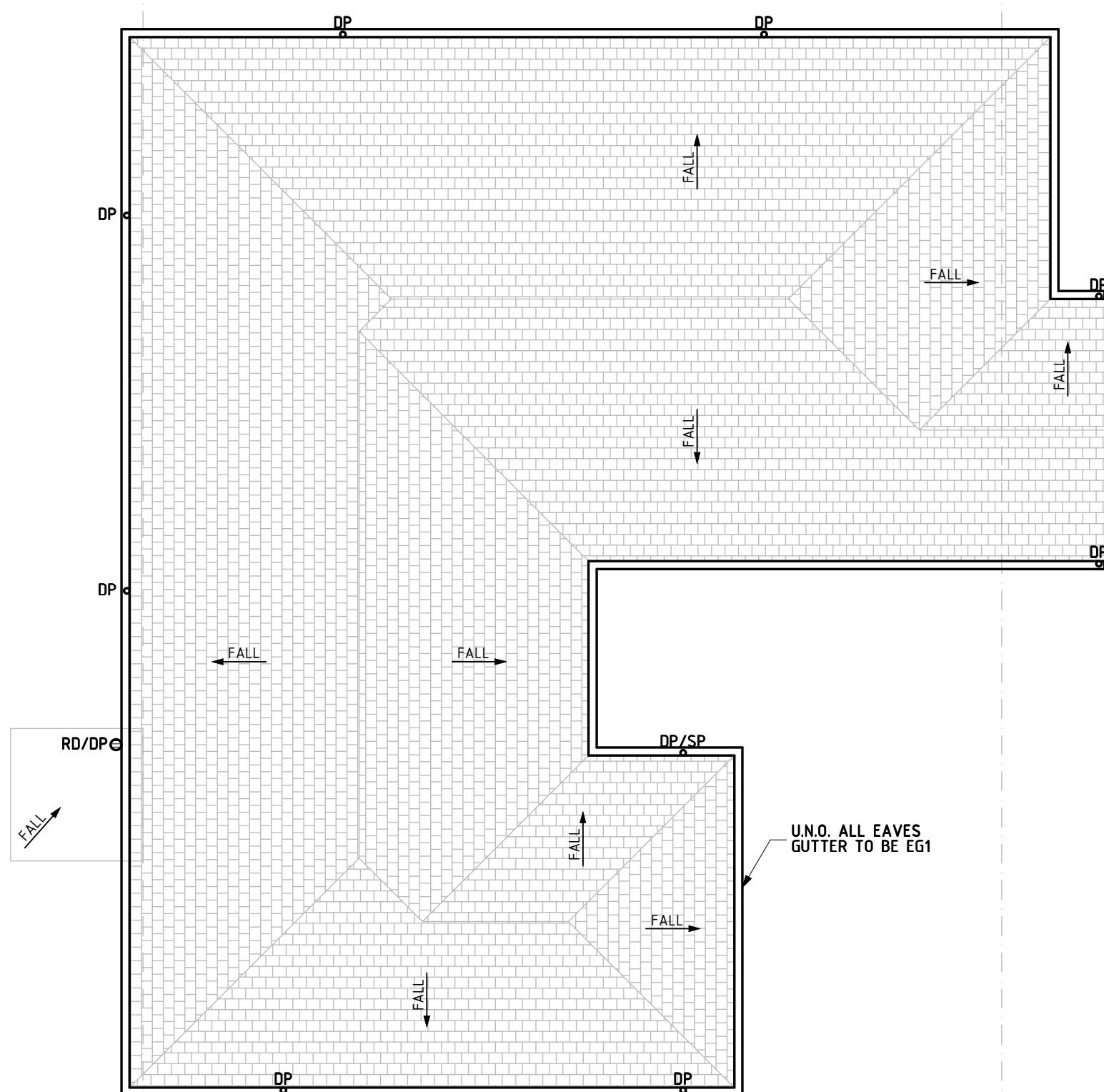
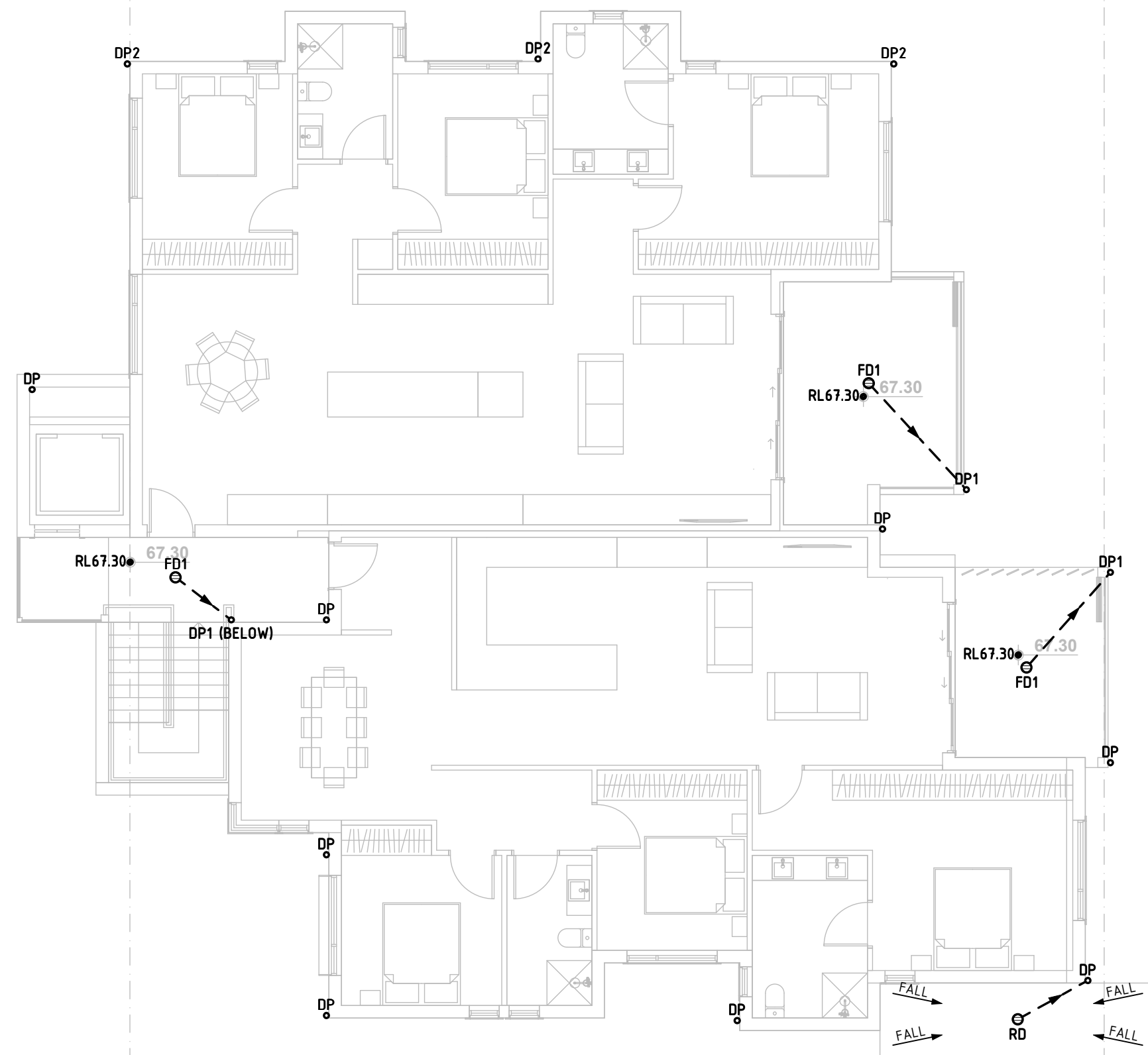
ARCHITECT	GARTNER TROVATO ARCHITECTS
CLIENT	ROB MASON

STATUS	ISSUE FOR DA SUBMISSION ONLY	DATE	DEC 2020
PROJECT	45 LANTANA AVENUE, WHEELER HEIGHTS	PROJECT NUMBER	201110
DRAWING	BASEMENT DRAINAGE PLAN	DRAWING NUMBER	D02

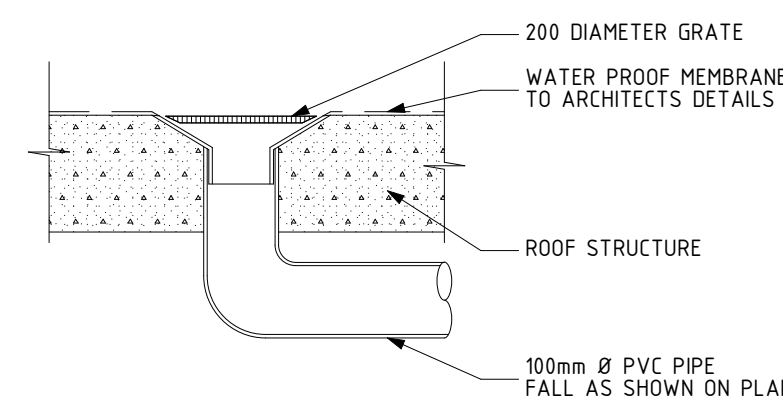
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FIRST FLOOR DRAINAGE PLAN
1:100



ROOF DRAINAGE PLAN
1:100



MARK	SIZE/TYPE	FSL	INV
FD1	200 DIAMETER FLOOR DRAIN	-	-
FD2	200 DIAMETER FLOOR DRAIN (PLANTER)	-	-
DP	100 DIAMETER PVC DOWNPIPE	-	-
DP1	100 DIAMETER PVC DOWNPIPE TO COLLECT WATER FROM BALCONY & TERRACE ONLY	-	-
DP2	100 DIAMETER SEWER GRADE PVC PRESSURE SEALED CHARGED DOWNPIPE	-	-
SP	SPREADER ONTO LOWER ROOF	-	-
EG1	QUAD 150 EAVES GUTTER	-	-
RD	200 DIAMETER ROOF DRAIN	-	-

NOTE:
- PROVIDE GUTTER GUARD TO ALL GUTTERS
- MOSQUITO PROOF MESH TO BE PROVIDED AT ALL END POINTS TO CHARGED LINES
- ALL PIPES UNDER SUSPENDED FLOOR TO BE STRAPPED TO UNDERSIDE OF FLOOR STRUCTURE AT MIN 1%

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ARCHITECT	GARTNER TROVATO ARCHITECTS
CLIENT	ROB MASON

STATUS	ISSUE FOR DA SUBMISSION ONLY	DATE	DEC 2020
PROJECT	45 LANTANA AVENUE, WHEELER HEIGHTS	PROJECT NUMBER	201110
DRAWING	FIRST FLOOR & ROOF DRAINAGE PLANS	DRAWING NUMBER	D03

