A1

PROPOSED BASEMENT TO CDC APPROVED DWELLING
43 IDALINE ST, COLLAROY PLATEAU NSW 2097

GENERAL NOTES:

1. MAIN STORMWATER DRAINS ≥ 300mm DIAMETER SHALL FALL AS NOTED. HOWEVER, ALL OTHER BRANCH DRAINS SHALL HAVE A MINIMUM GRADE OF 1%.
2. STORMWATER DRAINS SHALL BE RUBBER RING JOINTED FRC (CLASS 2) OR RCP OF EQUIVALENT CLASS. PIPES OF SIZE LESS THAN 300mm SHALL BE DWV GRADE PVC WITH SOLVENT CEMENT JOINTS.
3. STORMWATER PIT LIDS LOCATED IN DRIVEWAY AREAS SHALL BE EQUAL TO CI & D CAST IRON GRATES AND FRAMES - CLASS D.
4. STORMWATER PIT LIDS TO LANDSCAPED AND PEDESTRIAN AREAS SHALL BE EQUAL TO CI & D CAST IRON GRATES AND FRAMES - CLASS A.
5. ALL WORKS SHALL BE CARRIED OUT TO THE REQUIREMENTS OF THE RELEVANT COUNCIL / AUTHORITY, AS 3500.3, AS 2032, AS 3996 AND AS 3725.
6. AT THE COMPLETION OF THE WORKS PROVIDE A "WORK AS EXECUTED" PLAN OF THE STORMWATER DRAINAGE AND DETENTION SYSTEM. THE PLAN SHALL BE PREPARED AND CERTIFIED BY THE REGISTERED SURVEYOR AND SHOW ALL PIPE SIZES, INVERTS, PIT COVER AND BASE LEVELS AND ALL DETENTION TANK DIMENSIONS, SURFACE LEVELS AND THE ORIFICE PLATE SIZE (IF APPLICABLE).
7. PITS SHALL BE CI & D PRECAST CONCRETE OR APPROVED EQUAL WITH EXTENSION RISERS AS REQUIRED. PITS SHALL BE BEDDED ON A 50mm LAYER OF 4:1 CEMENT MORTAR AND BACKFILLED WITH EXCAVATED MATERIAL IN 200mm THICK COMPACTED LAYERS TO FINISHED SURFACE LEVEL.
8. COVERS TO PITS LOCATED WITHIN PAVED AREAS SHALL BE CAST IN WITH THE CONCRETE POUR. ALL OTHER PIT COVERS SHALL BE PROVIDED WITH A 150mm CONCRETE SURROUND.
9. PROVIDE TO EACH STORMWATER PIT A 1m LONG SECTION OF SUB-SOIL DRAINAGE, Ø75mm WITH GEOTEXTILE, LAID WITHIN THE UPSTREAM TRENCH.
10. PROVIDE 25mm DIAMETER GALVANIZED STEP-IRONS AT INTERVALS OF 300mm WHERE THE INTERNAL DEPTH OF THE PIT EXCEEDS 1000mm, TO AS 4108.
11. RETENTION TANK TO BE CLEANED & ALL SLUDGE REMOVED ON AN ANNUAL INSPECTION.
12. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE THE POSITION & LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS.
13. LOCATION OF DOWNPIPES & FLOOR WASTES ARE INDICATIVE ONLY. DOWNPIPE & FLOOR WASTE SIZE, LOCATION & QUANTITY TO BE DETERMINED BY BUILDER & IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
14. THE GRATES (HEAVY DUTY IN THE DRIVEWAYS) SHALL BE HINGED AND LOCKABLE.
15. THE PLANS SHALL INDICATE THAT DRIVEWAYS AND LAYBACKS MUST BE CONSTRUCTED AT LEAST 1-METRE CLEAR OF STORMWATER PITS/LINTELS, TREES, TELSTRA PITS AND EXISTING POWER POLES.
16. REFER TO ENGINEER ANY SERVICES THAT INTERFERE WITH THE REQUIREMENTS OF THESE PLANS.

SITEWORKS NOTES:

1. DATUM A.H.D.
2. ORIGIN OF LEVELS. REFER TO BENCH OR STATE SURVEY MARKS WHERE SHOWN ON PLAN.
3. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK.
4. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE DIRECTIONS OF THE SUPERINTENDENT.
5. EXISTING SERVICES UNLESS SHOWN ON SURVEY PLAN HAVE BEEN PLOTTED FROM SERVICES SEARCH PLANS AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
6. WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS ACHIEVED.
7. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
8. CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATION IS TO BE UNDERTAKEN OVER TELSTRA OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.
9. CONTRACTOR TO OBTAIN AUTHORITY APPROVALS WHERE APPLICABLE.
10. MAKE SMOOTH TRANSITION NEW TO EXISTING SURFACES AND MAKE GOOD AS APPLICABLE.
11. THESE PLANS SHALL BE READ IN CONJUNCTION WITH APPROVED LANDSCAPE, ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND MECHANICAL DRAWINGS AND SPECIFICATIONS OR WRITTEN INSTRUCTIONS THAT MAY BE ISSUED RELATING TO DEVELOPMENT AT THE SITE BY THE SUPERINTENDENT.
12. TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MINIMUM OF 50mm IN BITUMINOUS PAVING.
13. ALL BRANCH GAS AND WATER SERVICES UNDER DRIVEWAYS AND BRICK PAVING SHALL BE LOCATED IN 80Ø uPVC SEWER GRADE CONDUITS EXTENDING A MINIMUM OF 500mm BEYOND EDGE OF PAVING.
14. GRADES TO PAVEMENTS TO BE AS INDICATED ON PLAN . GRADE EVENLY BETWEEN NOMINATED RL'S. AREAS EXHIBITING PONDING GREATER THAN 5mm DEPTH WILL NOT BE ACCEPTED UNLESS IN A DESIGNATED SAG DRAINAGE LOCATION.
15. ALL COVERS AND GRATES ETC. TO EXISTING SERVICE UTILITIES ARE TO BE ADJUSTED TO SUIT NEW FINISHED SURFACE LEVELS WHERE APPLICABLE TO AUTHORITY REQUIREMENTS.

EROSION CONTROL NOTES:

1. ALL EROSION & SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH 'MANAGING URBAN STORMWATER, 4th EDITION PRODUCED BY LANDCOM.
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 CLEARED 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. DISCHARGE TURBIDITY NOT TO EXCEED 50mg/L

CHARGED PIPE SYSTEMS

1. GENERAL REQUIREMENTS FOR CHARGED PIPE SYSTEMS:
   (A) WHERE THE BOUNDARY LEVEL IS ABOVE ANY KERB WITHIN 15m OF THE SITE OR A COUNCIL PIPE IS AVAILABLE, THE ROOF WATER IS TO DRAIN BY GRAVITY FROM THE BOUNDARY TO THE COUNCIL SYSTEM VIA A SILT/LITTER ARRESTOR PIT. WHERE A GRAVITY DISCHARGE TO THE COUNCIL SYSTEM IS NOT VIABLE THE CHARGED PIPE MAY CONNECT DIRECTLY TO THE KERB.
   (B) FLAP (REFLUX) VALVES ARE TO BE INSTALLED ON THE OUTLET PIPES FROM THE CHARGED SYSTEM THAT DISCHARGE TO THE SILT/LITTER ARRESTOR PIT TO MINIMISE MOSQUITO NUISANCE.
   (C) THE LOWEST LEVEL OF THE CHARGED SYSTEM SHALL DRAIN BY GRAVITY TO A SMALL INSPECTION PIT (600mm x 600mm MIN.) WITH SUMP FOR CLEANING. There shall be a minimum of ONE METRE OF PIPE FROM THE LAST DOWNPIPE TO THE INSPECTION PIT. THE CONNECTION TO THE PIT IS TO HAVE A SEALED SCREW CAP TO ALLOW FOR PERIODIC CLEANING AND REMOVAL OF RUBBISH. THE CAP IS TO HAVE A 5mm DRIBBLE HOLE TO ALLOW TRAPPED WATER TO DISCHARGE SLOWLY. REFER TO CHARGED PIPE CLEAN-OUT PIT DETAIL.
   (D) ONLY SEWER GRADE PVC OR PRESSURE PIPES ARE TO BE USED TO CONVEY CHARGED FLOWS.
   (E) ALL PIPES AND DOWNPIPES ARE TO BE SEALED TO A MINIMUM OF 0.5m ABOVE THE MAXIMUM WATER LEVEL IN THE SYSTEM. THE SYSTEM SHALL BE PRESSURE TESTED PRIOR TO BACKFILLING. THE USE OF EXPOSED PIPELINE SHALL BE MINIMISED.
   (F) ALL GUTTERS MUST HAVE LEAF GUTTER GUARDS INSTALLED AND UNDERTAKE REGULARLY CLEANING OF THE DOWNPIPES TO ENSURE EFFECTIVENESS OF THE SYSTEM.
2. REQUIREMENTS FOR CHARGED PIPE SYSTEMS FOR ROOF SYSTEMS:
   (A) THE EAVE GUTTER LEVEL SHALL BE A MINIMUM OF 0.6m AN PREFERABLY 1.6m ABOVE THE HIGHER OF THE TOP OF THE KERB OUTLET OR THE TOP STORAGE LEVEL (E.G. RAINWATER TAKN). WHERE THE HEIGHT IS BEWTEEN 0.5m AND 1.5m AN ANALYSIS OF HEAD LOSSES SHALL BE PROVIDED.
3. REQUIREMENTS FOR CHARGED PIPE SYSTEMS FOR ABOVEGROUND RAINWATER TANKS:
   (A) THE OVERFLOW FROM THE RAINWATER TANK IS TO BE A MINIMUM OF 0.5m AND PREFERABLY 1.5m ABOVE THE TOP OF THE KERB OUTLET. WHERE THE HEIGHT IS BEWTEEN 0.5m AND 1.5m AN ANALYSIS OF HEAD LOSSES SHALL BE PROVIDED.
   (B) THE INLET PIPES FROM THE ROOF SYSTEM TO THE RAINWATER TANK MAY ENTER DIRECTLY, OR THROUGH A CHARGE SYSTEM, WHERE A CHARGE SYSTEM IS USED EACH LINE WILL HAVE A CLEAN-OUT PIT.
   (C) FLAP VALVES ARE TO BE INSTALLED ON THE INLET PIPES TO THE RAINWATER TANK FROM THE CHARGED SYSTEM TO MINIMISE MOSQUITO NUISANCE.
   (D) THE DESIGN AND INSTALLATION SHALL COMPLY WITH HB 230 - RAINWATER TANK DESIGN AND INSTALLATION HANDBOOK.

FOR APPROVAL

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
A	FOR D. A. SUBMISSION	ZHF	DY	10/04/2025

BEFORE YOU DIG www.byda.com.au

CLIENT: J & M DANIELI

ARCHITECT: MAP ARCHITECTS

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PROJECT: PROPOSED BASEMENT TO CDC APPROVED DWELLING
43 IDALINE ST, COLLAROY PLATEAU NSW 2097

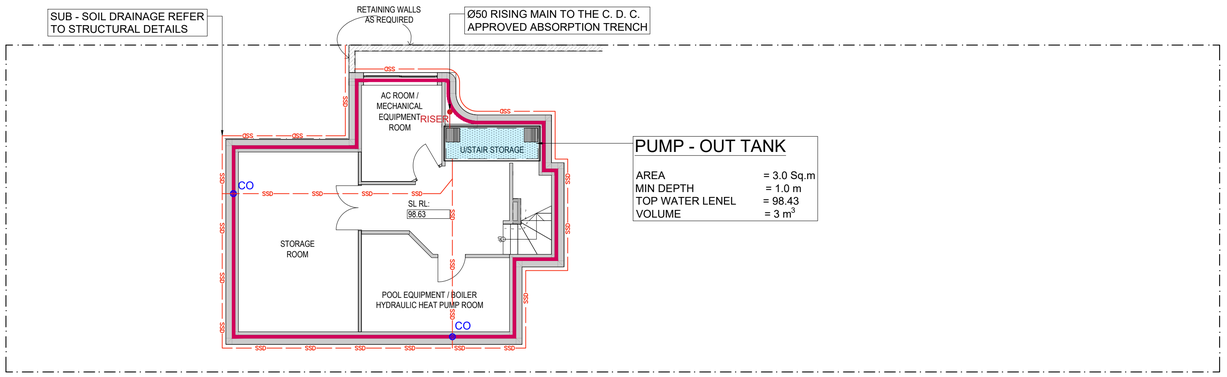
TITLE: GENERAL NOTES & LOCALITY PLAN

DRAWN	DESIGNED	DATE
ZHF	DY	APR 2025
CHECKED	APPROVED	SCALE
DY	DY	NOT TO SCALE

DRAWING NUMBER: 24187D1.00

REVISION: A

A1



PUMP - OUT TANK

AREA	= 3.0 Sq.m
MIN DEPTH	= 1.0 m
TOP WATER LENEL	= 98.43
VOLUME	= 3 m^3

BASEMENT STORMWATER DRAINAGE PLAN

SCALE 1:100

KEY NOTES:

INSTALL STEP IRONS FOR EASE OF ACCESS DURING MAINTENANCE OF PUMP OUT CONTROL PIT TO COUNCIL SATISFACTION.

INSTALL CONFINED SPACE SIGN ABOVE PUMP OUT PIT FOR PUBLIC AWARENESS AND WARNING.

ALL STORMWATER PIPES ARE Ø100mm uPVC AND SLOPING @ 1.0% U.N.O (TYP).

ALL BUILDING AND HYDRAULIC SERVICES TO BE PROPERLY CO-ORDINATED WITH STORMWATER PIPES AND ENSURE NO CLASHES ARE PRESENT DURING CONSTRUCTION (TYP).

STORMWATER PIPE ARRANGEMENT TO BE CO-ORDINTED WITH STRUCTURAL SLAB AND BEAMS WHERE REQUIRED (TYP).

PUMP STORAGE CALCS:

SEEPAGE VOLUME

EXPOSED WALL AREA	= 40.35 X 1.37
	= 55.28 m²
SEEPAGE RATE	= 0.001 L/S/m²
DURATION	= 3hrs
FLOW RATE	= 55.28 X 0.001
	= 0.055 L/S

TOTAL SEEPAGE VOLUME = 0.59 m³

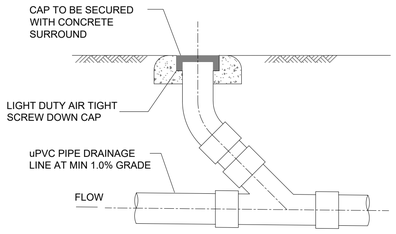
PUMP-OUT VOLUME REQUIRED = 0.59 m^3
PUMP-OUT VOLUME PROVIDED = 3 m^3

PUMP DISCHARGE RATE : 0.055 L/s REQUIRED @ 2.8 m OF HEAD

RECOMMENDED PUMP: DUAL SABRE MODEL NO. KS-03 PUMPS WITH 40mm PVC CLASS 12 OUTLETS.

LEGEND

- PROPOSED BOUNDARY
- PROPOSED SURFACE INLET PIT
- Ø100 DP — DOWNPIPE FROM ABOVE
- Ø100 DP — DOWNPIPE CONTINUES UNDER
- ØXXX — CHARGED PIPE SIZE AS NOMINATED
- ØXXX — UPVC PIPE @1% MIN SIZE AS NOTED
- RWT/OSD/OSR
- SSD — SUB-SOIL DRAINAGE PIPE
- GRATED DRAIN
- SWPM — PUMP PIPE
- PERIMETRE DRAIN
- FF — FIRST FLUSH DIVERTER
- CO — CLEANING EYE



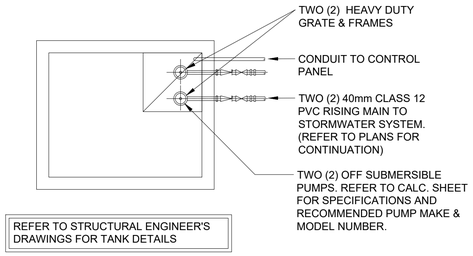
CLEANING EYE DETAIL

SCALE: 1:10

PUMP TO BE USED (IN ACCORDANCE WITH AS/NZS 3500.3 A 0.10 L/S PUMP IS REQUIRED AT MINUMUM)

Type	Output		Outlet		Rated Head	Rated Capacity	Maximum Head	Maximum Capacity	Weigh	Dimension		
	HP	kW	mm	Inch	M	LPM	M	LPM	Kg	L(mm)	W(mm)	H(mm)
KS-03	1/3	0.25	40	1.1/2"	3	130	8	180	9	188	141	305
KS-04	1/2	0.4	50	2"	5	150	8	220	11	208	140	359
KS-05	1/2	0.4	50	2"	5	160	10	260	14	230	156	375
KS-08	1	0.75	50	2"	6	240	13	380	21	290	180	425
KS-20	2	1.5	80	3"	10	300	16	600	31	278	182	475
KS-30	3	2.2	80	3"	10	500	18	800	42	390	250	450
KS-50	5	3.7	100	4"	10	800	21	1100	48	450	240	530
KS-75	7.1/2	5.6	100	4"	15	800	23	1300	60	550	310	590
KS-100	10	7.5	150	6"	18	900	25	1600	70	550	310	610

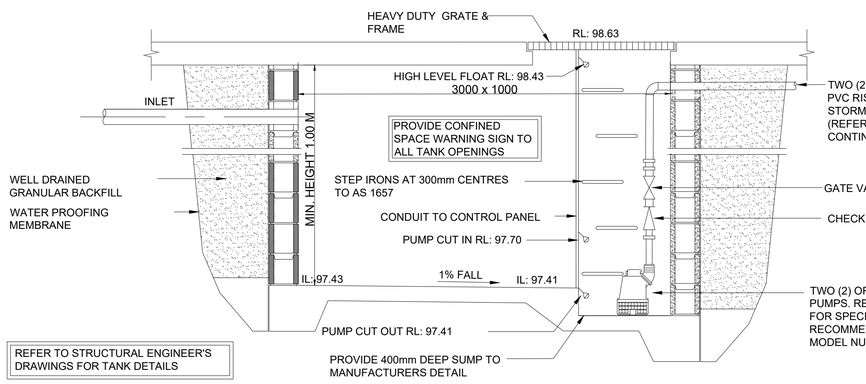
PUMP PERFORMANCE CURVES:



REFER TO STRUCTURAL ENGINEER'S DRAWINGS FOR TANK DETAILS

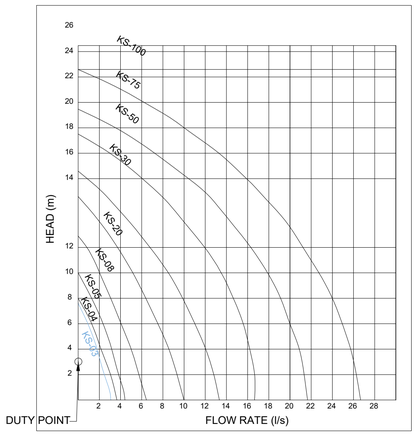
PUMP-OUT TANK PLAN DETAIL 'A'

N.T.S.



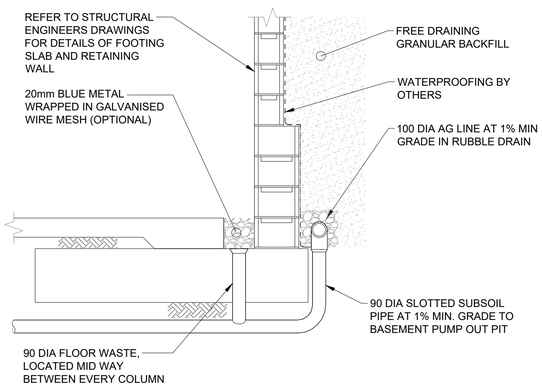
PUMP-OUT TANK SECTION DETAIL

N.T.S.



PUMP MAKE & MODEL DETAILS

N.T.S.



TYPICAL GROUNDWATER DRAINAGE DETAIL

SCALE 1:20

FOR APPROVAL

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	FOR D. A. SUBMISSION	ZHF	DY	11/04/2025
A	FOR D. A. SUBMISSION	ZHF	DY	10/04/2025

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PROJECT: PROPOSED BASEMENT TO CDC APPROVED DWELLING
43 IDALINE ST, COLLAROY PLATEAU NSW 2097

TITLE: BASEMENT DRAINAGE PLAN AND DETAILS

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DY	DY	1:100

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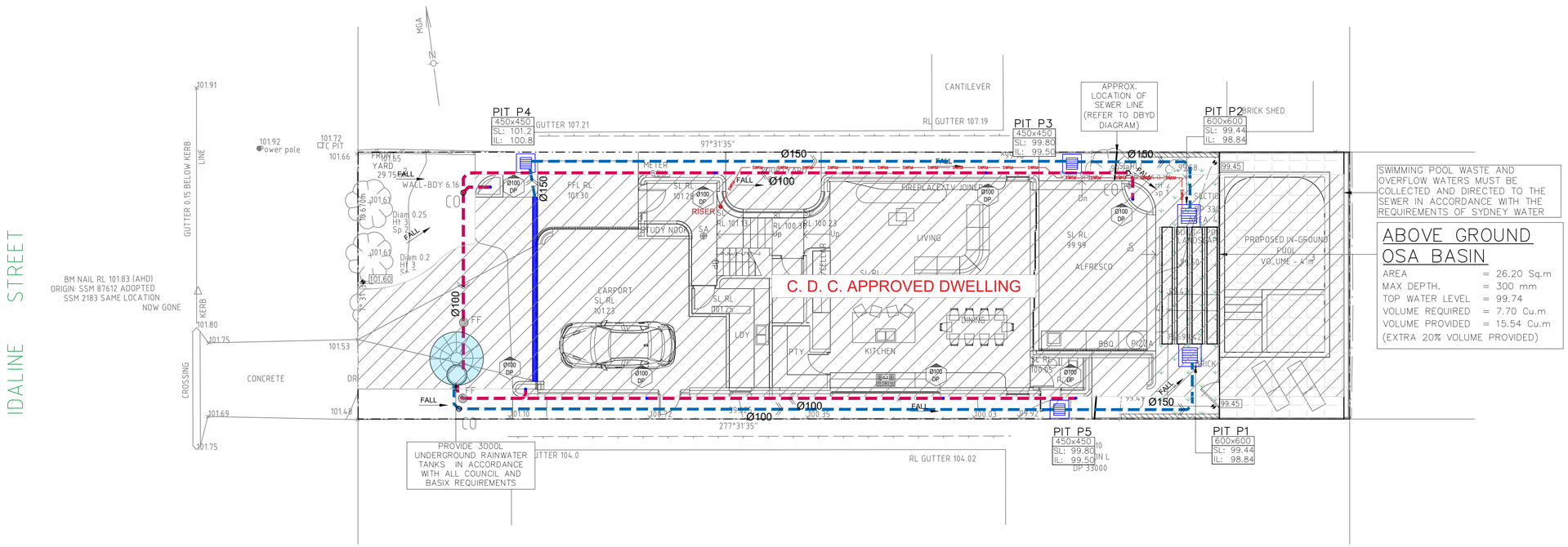
A1



LEGEND

- PROPOSED BOUNDARY
- PROPOSED SURFACE INLET PIT
- DOWNPIPE FROM ABOVE
- DOWNPIPE CONTINUES UNDER
- ØXXX — CHARGED PIPE SIZE AS NOMINATED
- ØXXX — UPVC PIPE @1% MIN SIZE AS NOTED
- RWT/OSD/OSR
- SUB-SOIL DRAINAGE PIPE
- GRATED DRAIN
- PUMP PIPE
- PERIMETRE DRAIN
- FF — FIRST FLUSH DIVERTER
- CO — CLEANING EYE

C. D. C. APPROVED STORMWATER PLAN - GROUND FLOOR

SCALE 1:100

FOR APPROVAL

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
A	FOR D. A. SUBMISSION	ZHF	DY	11/04/2025

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PROJECT: PROPOSED BASEMENT TO CDC APPROVED DWELLING
43 IDALINE ST, COLLAROY PLATEAU NSW 2097

TITLE: C.D.C. APPROVED STORMWATER PLAN - GROUND FLOOR

DRAWN	DESIGNED	DATE
ZHF	DY	APR 2025
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DY	DY	1:100

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