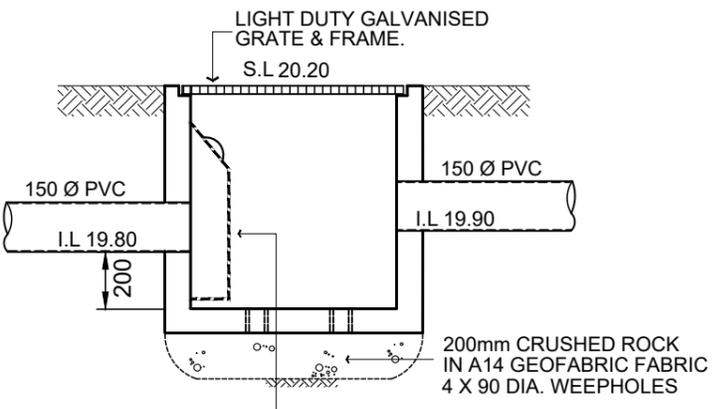
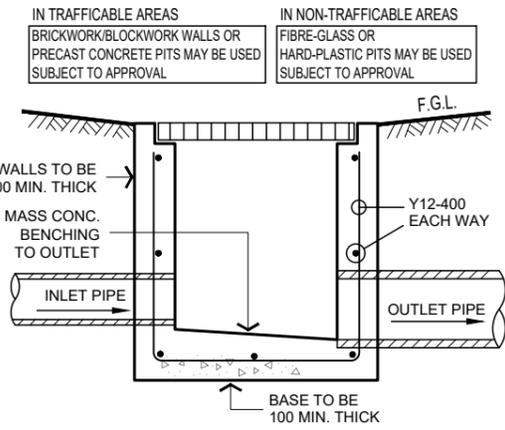
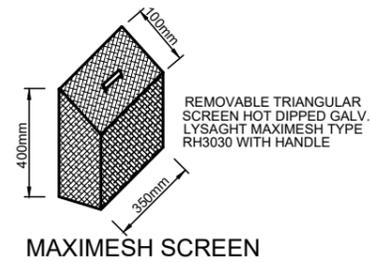
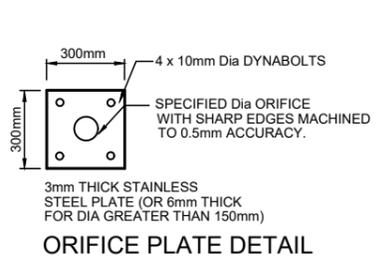


8000L TUB BY RAINWASTER (4100L x 2500W)
BELOW GROUND DETENTION TANK



PIT P1 - 450x450

ENSURE ALL CONNECTIONS WITHIN CHARGED SYSTEM ARE SOLVENT WELDED

ALL DOWNPIPES ARE TO BE ENTIRELY PVC. PIPES ARE TO BE SEALED UPTO U/S OF ROOF GUTTERS

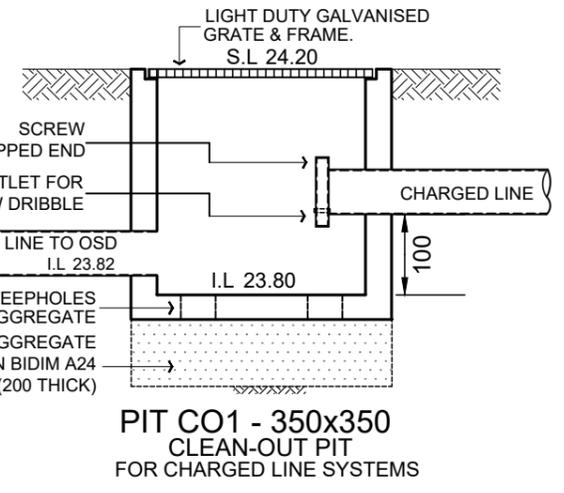
ROOF GUTTERS I.L. 29.91
TANK INLET I.L. 27.94
HEAD PRESSURE - 1970mm

STORMWATER LAYOUT NOTES

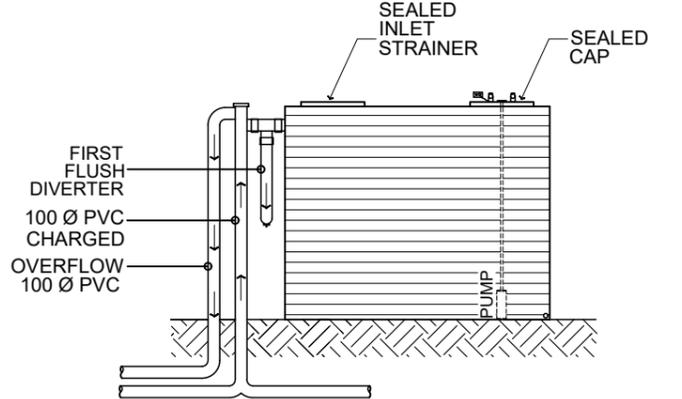
- 1) PITS DEEPER THAN 600mm TO BE 600 X 900 W, ELSE 375 SQ U.N.O.
- 2) ALL PIPES TO HAVE 1% MIN. GRADE U.N.O.
- 3) ALL DOWNPIPES TO BE 100 X 50 BOX OR 90 Ø.
- 4) PIPES TO BE U.P.V.C. OR STORMWATER PIPE TO A.S.1254.
- 5) PITS TO BE STANDARD PRECAST CONCRETE PITS OR BRICK RENDERED WITH CONCRETE HEAVY DUTY GRATES SIZED AS PITS PER PLAN.
- 6) NO SEWER VENTS, GULLY PITS OR SIMILAR TO BE LOCATED BELOW THE MAXIMUM WATER SURFACE LEVEL IN DETENTION BASINS.
- 7) PERSONS UTILISING THIS PLAN FOR ANY PURPOSES SHALL VERIFY THE DATUM & RESPECTIVE LEVELS PRIOR TO COMMENCING ANY WORKS & NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- 8) DRIVEWAY LEVELS PROVIDED FOR DRAINAGE DESIGN PURPOSES ONLY. LEVELS MAY BE ADJUSTED TO SUIT FINAL HOUSE CUT/FILL CONDITIONS BUT NEED TO MAINTAIN INTENT OF DRAINAGE SYSTEM. ENGINEER TO BE CONSULTED PRIOR TO CONSTRUCTION TO ENSURE INTENT MAINTAINED.
- 9) END OF EXISTING DRAINAGE LINE TO BE EXPOSED & LEVELS CONFIRMED BY BUILDER PRIOR TO COMMENCEMENT OF WORKS.
- 10) BUILDERS TO ENSURE SERVICES CONNECTIONS TO HOUSE DO NOT CONFLICT WITH DRAINAGE DESIGN REQUIREMENTS.
- 11) ALL WORKS TO BE CONSTRUCTED TO GOOD BUILDING PRACTICE & MATERIALS TO MEET ACCEPTED SPECIFICATIONS.

LEGEND

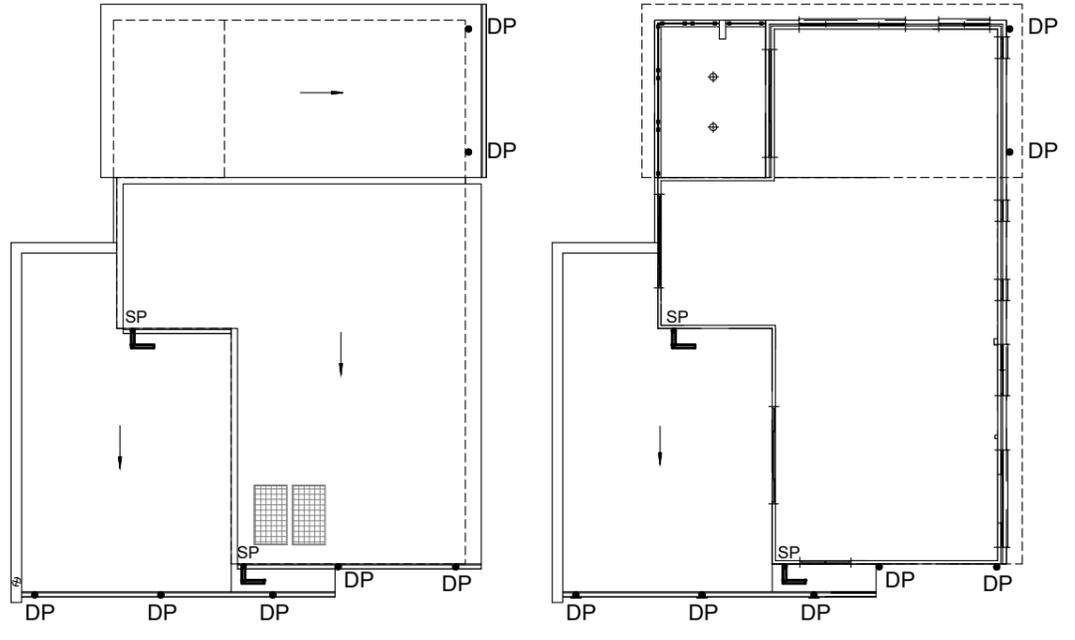
P1	PIT LABEL	G.F.L.	GARAGE FLOOR LEVEL
[Symbol]	SUMP PIT	• 0.00	EXISTING REDUCED LEVEL
[Symbol]	300x300 FLOOR GULLY	• R.L. 157.00	PROPOSED REDUCED LEVEL
[Symbol]	100/150 Ø GARDEN GULLY	■ DP	DOWNPIPE
[Symbol]	DRAINAGE PIPE	■ SP	SPITTER/SPREADER
[Symbol]	AERIAL PIPE	⊙	CLEANING EYE
S.L.	SURFACE LEVEL	#####	SEDIMENT FENCE
I.L.	INVERT LEVEL	- - - -	AG LINE
F.F.L.	FINISHED FLOOR LEVEL	⇒	OVERLAND FLOW



PIT CO1 - 350x350
CLEAN-OUT PIT
FOR CHARGED LINE SYSTEMS



RAINWATER TANK CONFIGURATION
BY DESIGNER TANKS
NOTE: SYSTEM TO BE FULLY SEALED



ROOF & FIRST FLOOR LAYOUT
SCALE 1:200/A3

STORMWATER LAYOUT NOTES

- 1) PITS DEEPER THAN 600mm TO BE 600 X 900 W, ELSE 375 SQ U.N.O.
- 2) ALL PIPES TO HAVE 1% MIN. GRADE U.N.O.
- 3) ALL DOWNPIPES TO BE 100 X 50 BOX OR 90 Ø.
- 4) PIPES TO BE U.P.V.C. OR STORMWATER PIPE TO A.S.1254.
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LEGEND

P1	PIT LABEL	G.F.L.	GARAGE FLOOR LEVEL
[Symbol]	SUMP PIT	• 0.00	EXISTING REDUCED LEVEL
[Symbol]	300x300 FLOOR GULLY	• R.L. 157.00	PROPOSED REDUCED LEVEL
[Symbol]	100/150 Ø GARDEN GULLY	■ DP	DOWNPIPE
[Symbol]	DRAINAGE PIPE	■ SP	SPITTER/SPREADER
[Symbol]	AERIAL PIPE	⊙	CLEANING EYE
S.L.	SURFACE LEVEL	#####	SEDIMENT FENCE
I.L.	INVERT LEVEL	- - - -	AG LINE
F.F.L.	FINISHED FLOOR LEVEL	⇒	OVERLAND FLOW

alwdesign
CIVIL ENGINEERING CONSULTANTS

P: 02 9802 5509 E: admin@alwdesign.com.au
M: 0413 763 432 69 DELANGE ROAD, PUTNEY NSW 2112

JOB NUMBER: SW22252 DRAWING NUMBER: SW22252 - S1	PROJECT:	PROPOSED RESIDENTIAL DWELLING AT LOTS 34+35, # 231-233 MCCARRS CREEK RD. CHURCH POINT NSW
	DRAWING:	SITE STORMWATER MANAGEMENT LAYOUT
	DESIGNED DRAWN CHECKED:	A.W N.W ANDREW L WAHBE - BE (CIVIL) MIEAUST PENG
	ISSUE	ISSUED FOR DEVELOPMENT APPLICATION
	REVISION DESCRIPTION	03/10/23
		APPR. DATE

DCP

S.L 22.70
C.L 21.45
I.L 21.375
600x900



LENGTH = 3900mm
WIDTH = 2200mm
AVERAGE DEPTH = 932mm
VOLUME STORED = 8.00 m3

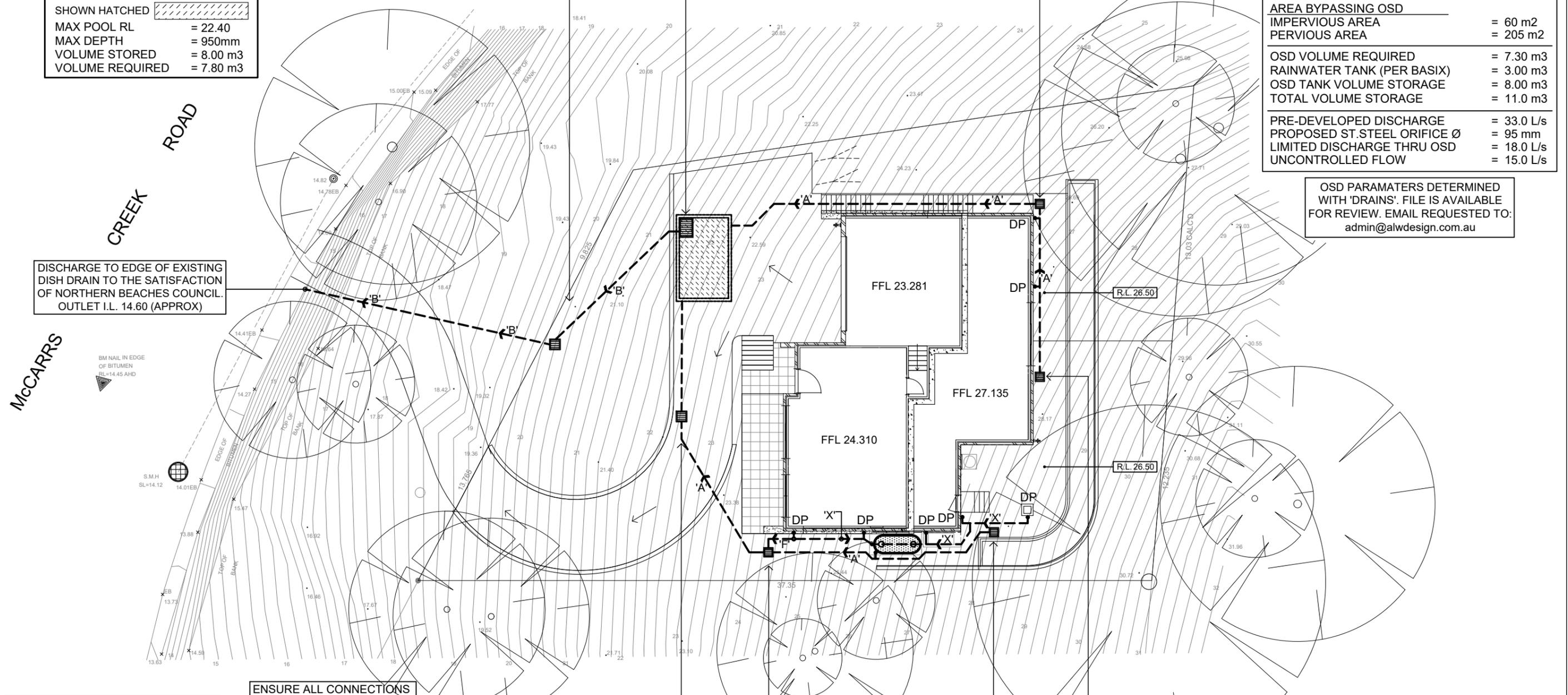
BELOW GROUND DETENTION TANK

SHOWN HATCHED
MAX POOL RL = 22.40
MAX DEPTH = 950mm
VOLUME STORED = 8.00 m3
VOLUME REQUIRED = 7.80 m3

DRAINAGE REQUIREMENT TO W.C POLICY
SITE AREA = 734 m2
SITE COVERAGE AREA = 313 m2
SITE COVERAGE = 43 %
ON-SITE DETENTION IS REQUIRED

AREA ROUTED THROUGH OSD
IMPERVIOUS AREA = 253 m2
PERVIOUS AREA = 205 m2
AREA BYPASSING OSD
IMPERVIOUS AREA = 60 m2
PERVIOUS AREA = 205 m2
OSD VOLUME REQUIRED = 7.30 m3
RAINWATER TANK (PER BASIX) = 3.00 m3
OSD TANK VOLUME STORAGE = 8.00 m3
TOTAL VOLUME STORAGE = 11.0 m3
PRE-DEVELOPED DISCHARGE = 33.0 L/s
PROPOSED ST. STEEL ORIFICE Ø = 95 mm
LIMITED DISCHARGE THRU OSD = 18.0 L/s
UNCONTROLLED FLOW = 15.0 L/s

OSD PARAMETERS DETERMINED WITH 'DRAINS'. FILE IS AVAILABLE FOR REVIEW. EMAIL REQUESTED TO: admin@alwdesign.com.au



DISCHARGE TO EDGE OF EXISTING DISH DRAIN TO THE SATISFACTION OF NORTHERN BEACHES COUNCIL. OUTLET I.L. 14.60 (APPROX)

McCARRS CREEK ROAD

ENSURE ALL CONNECTIONS WITHIN CHARGED SYSTEM ARE SOLVENT WELDED

ALL DOWNPIPES ARE TO BE ENTIRELY PVC. PIPES ARE TO BE SEALED UP TO U/S OF ROOF GUTTERS

ROOF GUTTERS I.L. 29.91
TANK INLET I.L. 27.94
HEAD PRESSURE - 1970mm

RAINWATER TANK AS SHOWN ON PLAN
PROVIDE A RAINWATER TANK 3000L IN CAPACITY TO SUIT ALL BASIX REQUIREMENTS. TANK TO BE CONNECTED AS SPECIFIED IN BASIX REPORT.

PIT P3
S.L 22.50
I.L 22.10
450x450

PIT CO1
S.L 24.20
I.L 23.90
350x350

PIT P4
S.L 26.40
I.L 26.00
350x350

PIT P5
S.L 26.40
I.L 26.10
350x350

PIPE SCHEDULE

TAG	SIZE	MATERIAL	GRADE	DESCRIPTION
'A'	100 Ø	P.V.C	1% MIN	REGULAR GRAVITY PIPE
'B'	150 Ø	P.V.C	1% MIN	REGULAR GRAVITY PIPE
'X'	100 Ø	P.V.C	CHARGED	TO FEED RAINWATER TANK
'F'	100 Ø	P.V.C	1% MIN	FLUSHING LINE - CAPPED END

SITE STORMWATER MANAGEMENT LAYOUT
SCALE 1:200/A3

alwdesign
CIVIL ENGINEERING CONSULTANTS

JOB NUMBER: SW22252
DRAWING NUMBER: SW22252 - S2
PROJECT: PROPOSED RESIDENTIAL DWELLING AT LOTS 34+35, # 231-233 MCCARRS CREEK RD, CHURCH POINT NSW
DRAWING: ROOF LAYOUT & GENERAL DETAILS
DESIGNED: A.W. DRAWN: N.W. CHECKED: ANDREW L WAHBE - BE (CIVIL) MIEAUST PENG
DRAWINGS NOT TO BE USED FOR CONSTRUCTION UNLESS SIGNED BY DESIGNING ENGINEER
B ISSUED FOR DEVELOPMENT APPLICATION 03/10/23
ISSUE REVISION DESCRIPTION APPR. DATE

P: 02 9802 5509 E: admin@alwdesign.com.au
M: 0413 763 432 69 DELANGE ROAD, PUTNEY NSW 2112