

GENERAL NOTES:

1. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH NORTHERN BEACHES COUNCIL'S STORMWATER, DETENTION & SEDIMENT CODE
2. THE CONTRACTOR SHALL LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE OR ADJUST IF NECESSARY.
3. THE CONTRACTOR SHALL NOT ENTER UPON NOR DO ANY WORK WITHIN ADJOINING LANDS WITHOUT THE PERMISSION OF THE SUPERINTENDENT.
4. ALL NEW WORKS SHALL MAKE SMOOTH CONNECTION TO EXISTING CONDITIONS.
5. ALL IMPORTED FILL SHALL BE APPROVED BY THE COUNCIL. THE FILL SHALL BE PLACED IN NOT MORE THAN 300mm LAYERS AND SHALL BE COMPACTED TO AT LEAST 98% STANDARD COMPACTION TO COUNCIL'S SPECIFICATION.
6. PROVIDE VEHICULAR CROSSING TO COUNCIL'S SPECIFICATION IN KERB WHERE SHOWN (IF APPLICABLE).
7. THE CONTRACTOR SHALL MAINTAIN SERVICES AND ALL WEATHER ACCESS AT ALL TIMES TO ADJOINING PROPERTIES.
8. ALL IMPORTED FILL TO BE USED TO SUPPORT GROUND SLABS SHALL BE COMPACTED TO A MINIMUM LEVEL OF COMPACTION OF 98% OF MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN +/- 2% OF OPTIMUM (AS1289.5.1.1)
9. STEP IRONS AT 300mm CENTRES & TO COUNCIL'S SPECIFICATIONS SHALL BE PROVIDED WHERE PITS ARE DEEPER THAN 1000mm
10. ALL DOWNPIPES ARE SHOWN DIAGRAMATICALLY POSITION OF DOWNPIPES SHALL BE CONFIRMED ON SITE
11. EXISTING LEVELS AND SERVICE DEPTH AND LOCATION TO BE CHECKED PRIOR TO CONSTRUCTION.
12. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH OTHER CONSULTANTS DOCUMENTATION WHICH INCLUDE BUT IS NOT LIMITED TO ARCHITECTURAL AND SURVEY DRAWINGS

SEDIMENT & EROSION CONTROL

1. THE CONTRACTOR SHALL IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES TO THE COUNCIL'S SPECIFICATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND DURING CONSTRUCTION.
2. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED IN A SATISFACTORY WORKING ORDER DURING THE CONSTRUCTION PERIOD. INSPECTIONS OF THESE DEVICES SHALL BE CARRIED OUT AFTER EACH STORM. REPAIRS AND/OR DE-CLOGGING SHALL BE CARRIED OUT TO ENSURE PROPER OPERATION OF THE DEVICE.
3. PROVIDE TEMPORARY CONSTRUCTION EXIT TO SHAKE OFF SITE MATERIALS FROM EXITING VEHICLES AND SHALL CONSIST OF A PAD OF COURSE CRUSHED ROCK, (75mm TO 150mm RANGE) HAVING A MINIMUM DEPTH OF 200mm, A MINIMUM LENGTH OF 25m AND 3.5m WIDE OR "CATTLE GRID" SYSTEM.
4. THE GULLY PITS SHALL BE PROTECTED IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS
5. THE GRATED SURFACE PITS SHALL BE PROTECTED IN ACCORDANCE TO COUNCIL'S REQUIREMENTS
6. ENSURE ACCESS IS PROVIDED TO PROPOSED RAINWATER TANK FOR MAINTENANCE PURPOSES.

STORMWATER DRAINAGE NOTES:

THE STORMWATER DRAINAGE WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH AS/NZS 3500.3:2021 "STORMWATER DRAINAGE" & AS/NZS 3500.3.2:1998 "STORMWATER DRAINAGE-ACCEPTABLE SOLUTIONS".

ANY VARIATIONS TO THE NOMINATED LEVELS SHALL BE REFERRED TO ENGINEER IMMEDIATELY.

ANY VARIATIONS TO SPECIFIED PRODUCTS OR DETAILS SHALL BE REFERRED TO THE ENGINEER FOR APPROVAL.

BOX COLORBOND OR ZINCALUME STEEL GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP UNO.

EAVES GUTTERS SHALL BE COLORBOND OR ZINCALUME STEEL AND HAVE A MINIMUM EFFECTIVE CROSS-SECTIONAL AREA (A<sub>e</sub>) OF 9,800mm<sup>2</sup> UNO. MINIMUM EFFECTIVE EAVES GUTTER SLOPE = 1:500.

ALL DRAINAGE LINES SHALL BE SEWER GRADE UPVC PIPES, UNO.

ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN, UNO.

FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES TO BUILDER'S DETAIL.

SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM.

SYMBOLS & ABBREVIATIONS:

DP = Ø100 OR 100 x 75 RECTANGULAR DOWN PIPE, UNO.  
FO = Ø150 FLOOR OUTLET  
GSIP = GRATED SURFACE INLET PIT (NO LINTEL)  
Ø100 (c) = Ø100 CHARGED LINE  
IP = Ø100 INSPECTION POINT  
SP = RAINWATER DOWNPIPE SPREADER  
EX DP = EXISTING DOWNPIPE  
RH & SP = RAINHEAD AND DOWNPIPE SPREADER  
RH & DP = RAINHEAD AND DOWNPIPE  
BG = BOX GUTTER  
TOW = TOW OF WALL RL  
GSIP = GRATED SURFACE INLET PIT  
NGL = NATURAL GROUND LEVEL

XXXXX = PROPOSED FINISHED SURFACE LEVEL

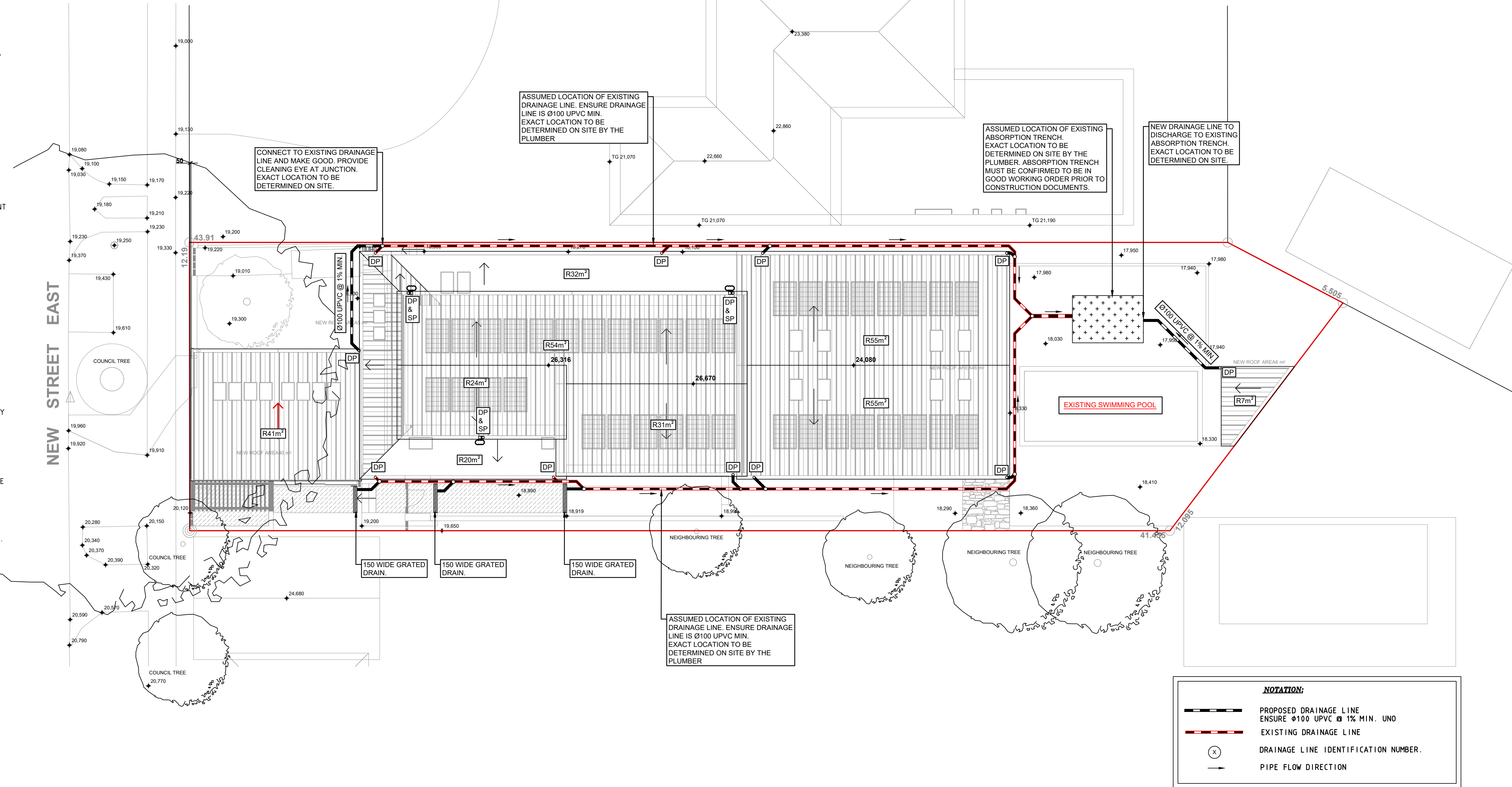
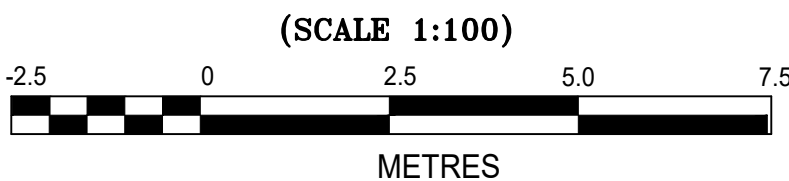
R16.4m<sup>2</sup> = CATCHMENT AREA (WHERE R=ROOF, P=PAVED, L=LANDSCAPED,  
S = COMBINED SURFACE)

NOT FOR CONSTRUCTION  
- CONCEPT DRAWINGS FOR  
DEVELOPMENT APPLICATION

SITE SPECIFIC NOTES:

1. THE EXISTING DRAINAGE SYSTEM SHOWN ON THIS PLAN ARE INDICATIVE AND ARE BASED ON THE INFORMATION PROVIDED BY THE CLIENT. THE CONTRACTOR IS TO CARRYOUT INVESTIGATIONS PRIOR TO THE COMMENCEMENT OF WORKS AND DETERMINE THE EXACT LOCATION, SIZE & MATERIAL OF THE EXISTING DRAINAGE SYSTEMS SHOWN ON THESE PLANS. ALL INGROUND DRAINAGE PIPES MUST BE Ø100 MINIMUM.
2. PORTIONS OF THE EXISTING DRAINAGE SYSTEMS BEING RETAINED AS SHOWN ON THESE PLANS INCLUDING DOWNPIPES, INGROUND DRAINAGE LINES ETC SERVICING THE EXISTING DWELLING ARE TO BE ASSESSED BY A PLUMBER AND REPLACED WITH NEW IF FOUND TO BE IN POOR WORKING CONDITION. REPLACEMENT OF THE EXISTING DRAINAGE SYSTEM IS TO BE GENERALLY IN ACCORDANCE WITH THESE PLANS;
3. THE EXISTING ABSORPTION TRENCH LOCATION IS ASSUMED AND IS TO BE CONFIRMED BY A LICENSED PLUMBER TO BE IN GOOD WORKING ORDER PRIOR TO CONSTRUCTION DOCUMENTS. ANY VARIATIONS ARE TO BE NOTIFIED TO ENGINEER.

PLAN- GENERAL DRAINAGE LAYOUT







N.T.S

PIPE DIA 'D'	W	X MIN	Y
100-150	300	75	75
225-300	600	75	75



N.T.S

NOTE



JOB ADDRESS: 8 NELSON ROAD, LINDFIELD  
A.R.I. IN YEARS: 20  
TIME OF CONC.: 5min  
RAINFALL INTENSITY: 199mm/hr (OBTAINED FROM B.O.M. DECEMBER 2024)  
MANNINGS ROUGHNESS: 0.01 "n" UPVC

DRAINAGE CALCULATIONS														
L I N	IN No.	LET Type	AREA m <sup>2</sup>	RUNOFF COEF. "C"	INLET IMP AREA	DISC "Q" l/s	SIDE Lin	LINE Area	TOT. IMP. AREA	DESIGN "Q" l/s	DIA mm	PIPE GRADE %	NOM. CAP. l/s	REMARKS
1	1	DP	16.0	1.00	41.0	2.4	SP	27.0	41.0	2.4	100.0	1.0	6.7	ROOF AREA
	2	DP	16.0	1.00	16.0	0.9			12.0	4.9	100.0	1.0	6.7	ROOF AREA
	3	DP	16.0	1.00	16.0	0.9			84.0	7.3	100.0	1.5	8.2	ROOF AREA
	4	DP	27.5	1.00	27.5	1.6			154.5	8.9	100.0	2.0	9.5	ROOF AREA
	5	DP	27.5	1.00	27.5	1.6			182.0	10.5	100.0	2.5	10.6	ROOF AREA CONNECT TO LINE 3
2	1	DP	10.0	1.00	10.0	0.6			10.0	0.6	100.0	1.0	6.7	ROOF AREA
	2	DP	10.0	1.00	10.0	0.6			20.0	1.2	100.0	1.0	6.7	ROOF AREA
	3	DP	31.0	1.00	31.0	1.9			51.0	2.9	100.0	1.0	6.7	ROOF AREA
	4	DP	27.5	1.00	27.5	1.6			78.5	4.5	100.0	1.0	6.7	ROOF AREA
	5	DP	27.5	1.00	27.5	1.6			106.0	6.1	100.0	1.0	6.7	ROOF AREA CONNECT TO LINE 3
3	1	LINE 1 + 2	288.0	1.00	288.0	16.6			288.0	16.6	150.0	1.0	19.8	LINE 1 + 2 ROOF AREA DISCHARGE TO PIT
4	1	DP	7.0	1.00	7.0	0.4			7.0	0.4	150.0	1.00	19.8	ROOF AREA DISCHARGE TO PIT



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DEVELOPMENT APPLICATION

**CLIENT:** MATT & NAT DeGARIS

**PROJECT:** PROPOSED DEVELOPMENT AT  
2 NEW STREET, EAST BALGOWLAH

**APPROVED**

  
**ADAM GILLETT**  
**B.ENG (Hons), M.I.E. AUST.**

**DRAWING TITLE:**  
**DRAINAGE DETAILS & CALCULATIONS**

			DRAWN BY: NS	ENGINEER: NS
			DATE: 28/01/2025	
A	28/01/2025	FOR COUNCIL APPROVAL - NOT FOR CONSTRUCTION	SCALE: AS SHOWN ON A1	<i>SHEET No:</i>
ISSUE	DATE	REVISIONS:	<i>JOB NO: 241094</i>	<i>C02</i>