

Flood Assessment Certificate

FC250299

Issued pursuant to NH-SCHED1 of the Partially Operative Selwyn District Plan.



Property Address:	Stage 1 - 555 Birchs Road
Legal Description:	Proposed Lots 1-13 & 19 of RC245532
Date of Issue:	30 July 2025
This certificate is valid until:	30 July 2027

This site is not located on land within a high hazard area.

The site is likely to be subject to inundation in a 200-year Average Recurrence Interval (ARI) flood event.

Minimum finished floor level shall be:

Lot Number	Minimum FFL (m NZVD2016)
1	12.82
2	12.71
3	12.97
4	13.01
5	Existing Dwelling
6	13.08
7	Existing Dwelling
8	13.10
9	13.08
10	13.06
11	13.02
12	12.71
13	12.70
19	12.85

Disclaimers:

- Whether the site is likely to be subject to inundation in a 200-year ARI flood event, and the minimum finished floor level have been determined with reference to:
 - The most up to date models and maps held by Selwyn District Council or Canterbury Regional Council;
 - Any relevant field information; and
 - Any site specific flood assessment prepared by a suitably qualified and experienced person, including a site specific Flood Hazard Assessment prepared by Canterbury Regional Council.
- This certificate is based on the best information available to Selwyn District Council at the time the certificate was issued. This information is subject to change and may be updated at any time, including during the valid period of this certificate. Selwyn District Council accepts no liability for changes in this information.
- This certificate relies on flood modelling. Flood modelling is a tool that predicts what might happen in a flood event of a given magnitude. A flood model uses hypothetical scenarios and makes assumptions about how a flood event might unfold however there are many more variables that can influence how a site is affected in an actual flood event. The minimum finished floor level does not infer that no damage will occur to a structure built above the minimum finished floor level in a flood event.

4. The Building Act 2004 also manages flood risk. The minimum floor level certified under the Partially Operative District Plan may be different to the floor level required by the Building Act 2004, which must be met in order to obtain a building consent.
5. Any activity or construction carried out on a site where a Flood Assessment Certificate is issued is carried out at your own risk, and Council recommend that you carefully consider the impact of any flooding risk associated with this site.

Advice notes:

- a) For a new residential unit or principal building or the alteration of, or addition to any residential unit or principal building to be a permitted activity under the Selwyn District Plan as a whole, all other relevant rules must be complied with.
- b) If the certified level is for a particular location on the site, the certified level is the minimum floor level for the proposed building location shown on the attached plan. If you wish to build elsewhere on the site the minimum floor level may be different, and you will need to request another certificate for the new location.
- c) For the purposes of this certificate, ground level means:
 - a. The actual finished surface level of the ground after the most recent subdivision that created at least one additional allotment was completed (when the record of title is created);
 - b. If the ground level cannot be identified under paragraph (a), the existing surface level of the ground;
 - c. If, in any case under paragraph (a) or (b), a retaining wall or retaining structure is located on the boundary, the level of the exterior surface of the retaining wall or retaining structure where it intersects the boundary.
- d) You must reference this certificate when applying for a building consent or the building consent will not be accepted.

Signed for and on behalf of the Selwyn District Council:



Emma Larsen

Head of Resource Consents

FLOW DEPTH			Colour
Lower value	Upper value		
0.10	to 0.15	m	
0.15	to 0.20	m	
0.20	to 0.25	m	
0.25	to 0.30	m	
0.30	to 0.35	m	
0.35	to 0.40	m	
0.40	to 0.45	m	
0.45	to 0.50	m	
0.50	to 10.00	m	

Indicative site plan only. The finished floor level must comply with the attached Flood Assessment Certificate

AMENDMENTS		
AMENDMENT	DATE	DESCRIPTION

NOTES :

THIS PLAN HAS BEEN PREPARED FOR THE USE OF SELWYN DISTRICT COUNCIL AND IS NOT TO BE PROVIDED TO ANY OTHER PARTIES. NO LIABILITY IS ACCEPTED IN RELATION TO ANY OTHER PARTIES.

THIS FLOOD ANALYSIS HAS BEEN COMPLETED USING THE 2D ROADFLOW SURFACE FLOW MODULE IN THE 12D DESIGN SOFTWARE. 2D ROADFLOW IS BASED ON RAIN ON GRID ANALYSIS AND ALLOWS MODELLING OF COMBINED DRAINAGE NETWORK FLOWS AND SURFACE FLOWS.

PARAMETERS HAVE BEEN SET IN ACCORDANCE WITH WATERWAY, WETLANDS, AND DRAINAGE GUIDE (WWDG) 21-4, ADVANCED ANALYSIS.

THE INPUTS REQUIRED FOR THIS PROGRAMME ARE:

- MANNING'S N VALUE (WWDG TABLE 22-1)
- RAINFALL INTENSITY (HIRDS V4)
- DESIGN SURFACE MODEL (12D TIN)
- DESIGN STORMWATER NETWORK (12D DESIGN)
- INFILTRATION RATES (WWDG TABLE 21-10)
- PONDING DEPTHS (WWDG TABLE 21-7)

USING THESE INPUTS, THE ANALYSIS SOFTWARE CREATES A SURFACE OF SQUARE CELLS (GRID TIN) THAT HAVE A DEPTH AND SLOPE. THIS ALLOWS FOR FLOW TO PASS TO ADJACENT LOWER CELLS. THE DRAINAGE NETWORK IS HYDRAULICALLY LINKED TO THE GRID TIN ALLOWING SURCHARGING OF THE PIPED NETWORK IN ADDITION TO FLOW THROUGH THE SURFACE CELLS.

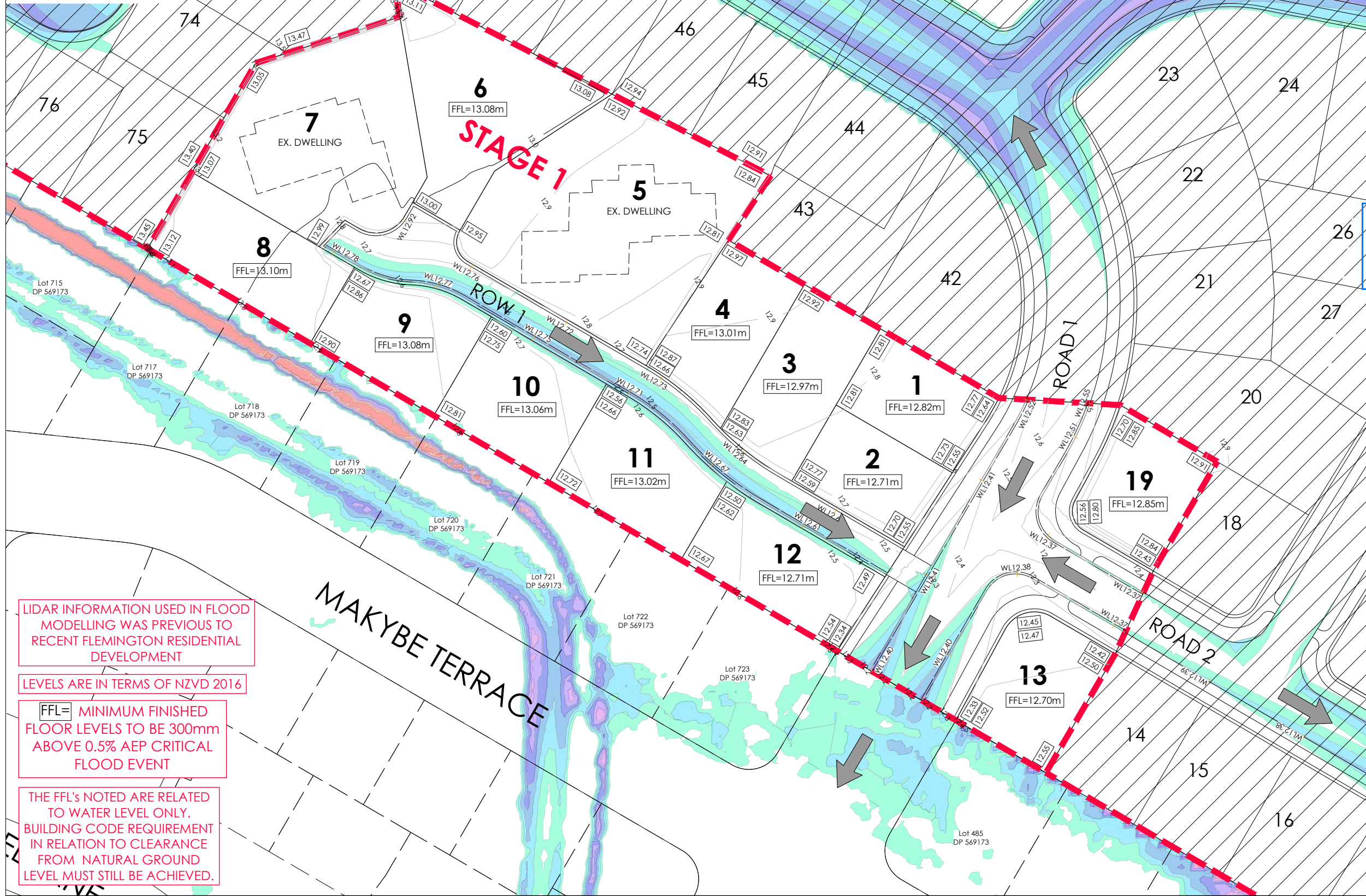
-A RAINFALL HYETOGRAPH HAS BEEN FORMED IN ACCORDANCE WITH FIGURE 21-6 WITH A MAXIMUM INTENSITY OF TWO TIMES THE AVERAGE INTENSITY OCCURRING AT 70% OF THE STORM DURATION.

-INFILTRATION HAS BEEN SET IN ACCORDANCE WITH WWDG TABLE 21-10 FOR POORLY DRAINING SOILS.

-PONDING IN PERVIOUS AREAS HAS BEEN SET AT 5MM AND IN IMPERVIOUS AREAS 2.5MM AS DEFINED BY TABLE 21-7 IN THE WWDG.

ORIGIN OF LEVELS
MA67 DP518987 (F5J0)
RL=11.39

LEVELS IN TERMS OF NZVD 2016



LIDAR INFORMATION USED IN FLOOD MODELLING WAS PREVIOUS TO RECENT FLEMINGTON RESIDENTIAL DEVELOPMENT

LEVELS ARE IN TERMS OF NZVD 2016

FFL= MINIMUM FINISHED FLOOR LEVELS TO BE 300mm ABOVE 0.5% AEP CRITICAL FLOOD EVENT

THE FFL's NOTED ARE RELATED TO WATER LEVEL ONLY. BUILDING CODE REQUIREMENT IN RELATION TO CLEARANCE FROM NATURAL GROUND LEVEL MUST STILL BE ACHIEVED.

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30/07/2025 - Murray Johnston

LEGEND :			
FFL=12.86	MINIMUM FINISH FLOOR LEVEL		
WL=12.86	120min 200 YEARS WATER LEVELS		
SEC. FLOW	DIRECTION OF FLOW		
EXISTING SERVICES		PROPOSED SERVICES	
KERB		KERB	
DESIGNED BY	JALAY SHAH	SIGNED	
CHECKED BY	BEN FOX	DATE	

DAVE LOVELL-SMITH
PLANNING SURVEYING ENGINEERING

116 Wrights Road P O Box 679 Christchurch 8140, New Zealand
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:
**555 Birchs Road, Lincoln
Stage 1
RC245532 & RC245534**

SHEET TITLE:
**120 Mins 200 Years
Flood Modelling & FFL**

DRAWING STATUS
For Information

SCALE: 1:375@A1 1:750@A3 DATE: June 2025

CAD FILE: J:\21270\Eng\Drawings\FMA\STAGE 1\21270_120Min FMA_R0 STAGE 1.dwg
DRAWING No: **E.21270** SHEET No: **FMA7.1** REVISION: **R0**