Steve Webster

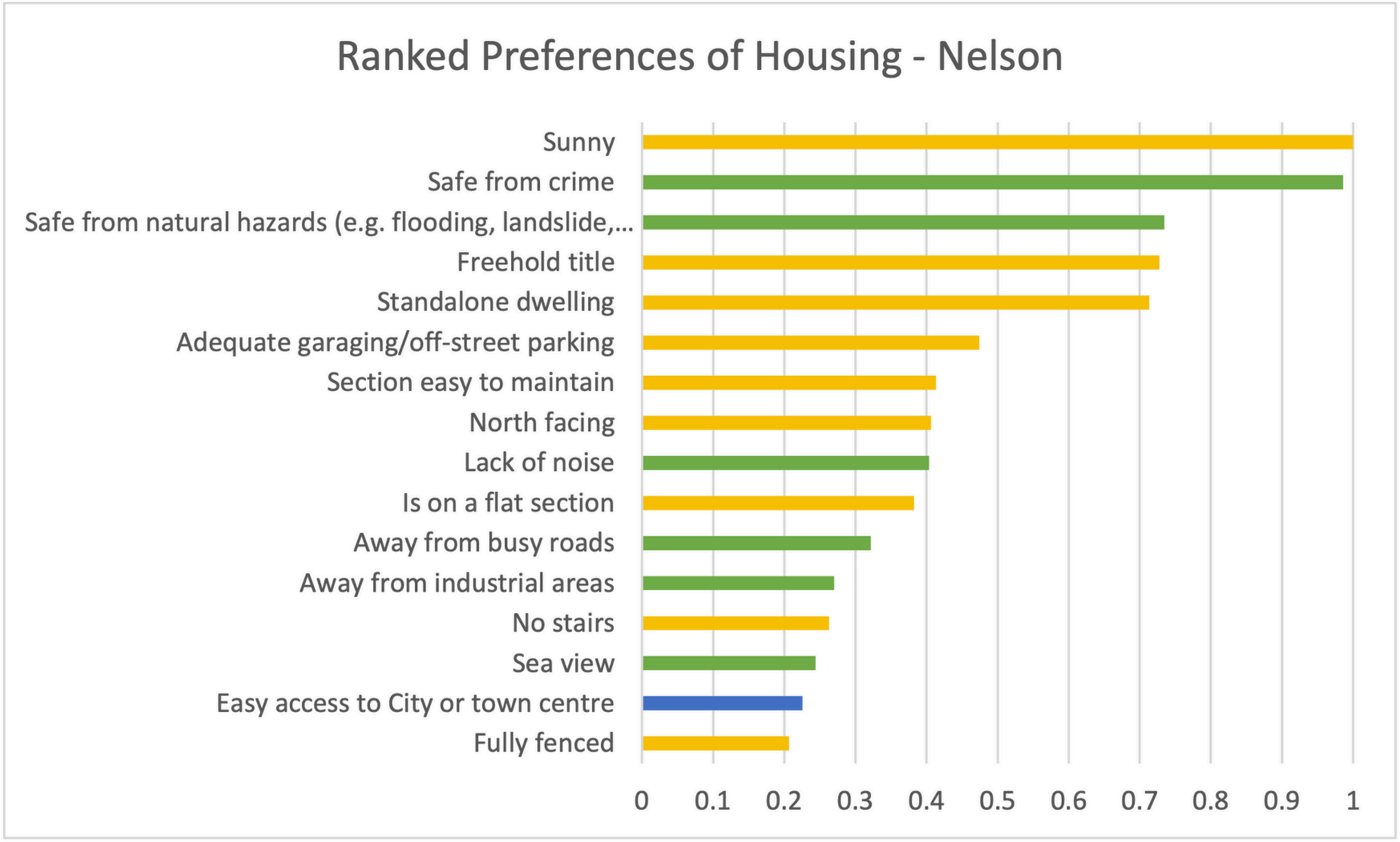
Mean monthly days of occurrence - ground frost

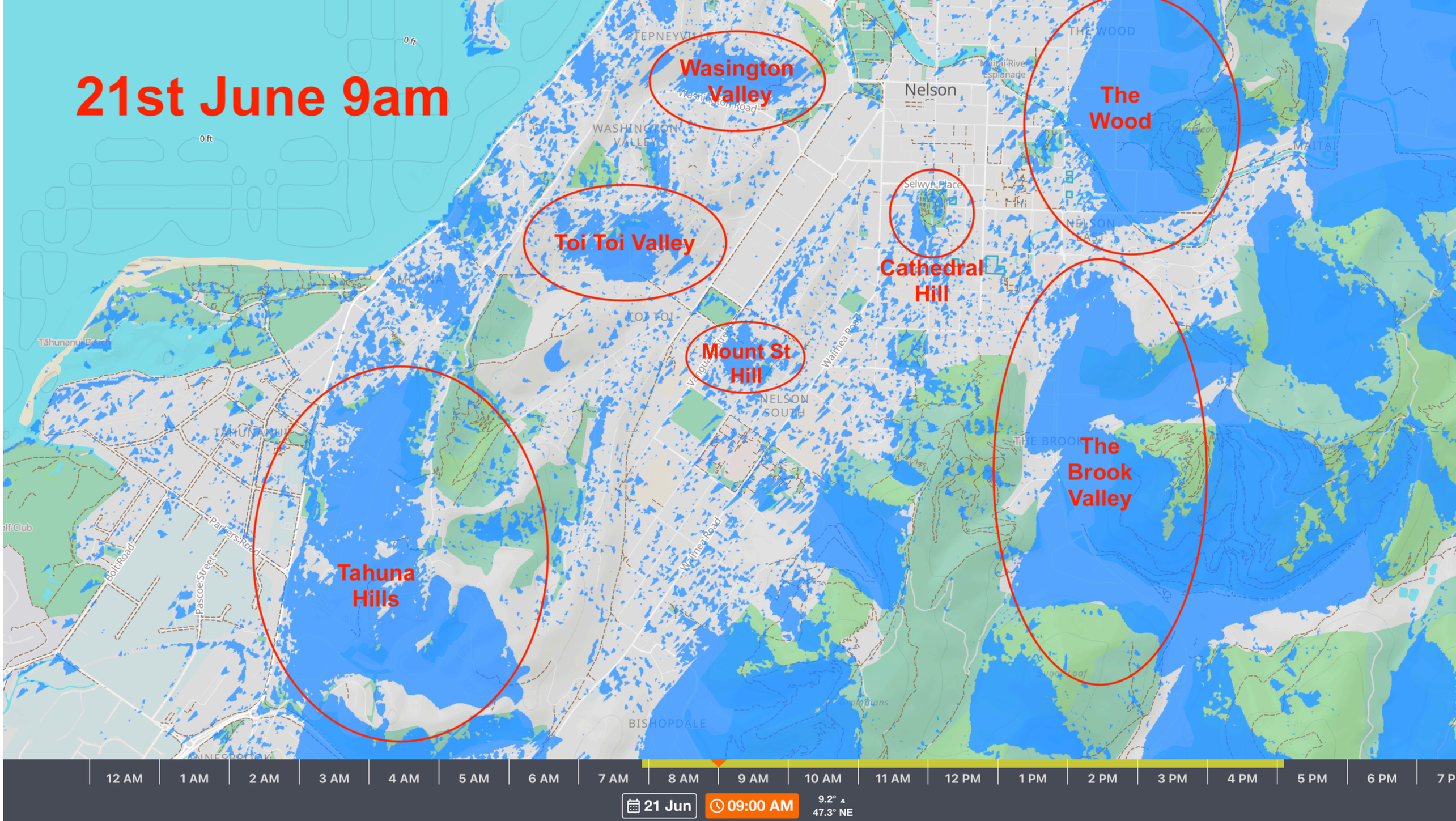
Data are mean monthly values for the 1991-2020 period for locations having at least 5 complete years of data

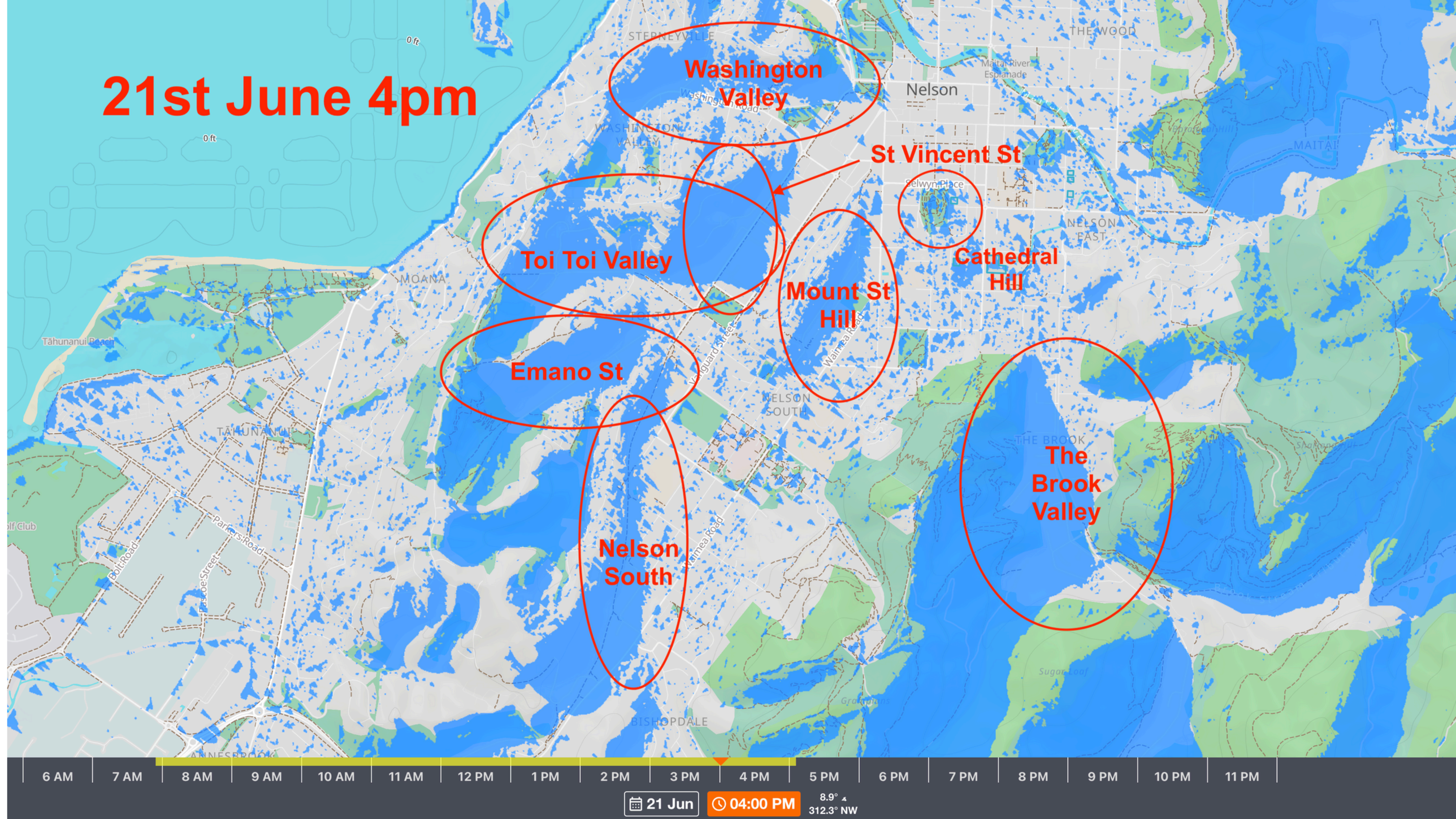
Station details are available in separate table

LOCATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
Lake Tekapo	2.2	1.9	5.4	13.7	19.3	23.7	26.5	24.6	17.2	12.6	7.4	3.5	158.0
Mt Cook	2.3	2.6	6.9	15.2	19.6	21.5	24.1	22.0	15.9	13.1	9.7	4.4	157.3
Queenstown	0.1	0.2	1.1	5.9	13.3	21.0	24.5	21.5	15.1	9.9	3.9	0.3	116.8
Alexandra	0.0	0.1	1.3	7.4	14.4	22.6	25.5	22.3	13.5	7.2	2.3	0.2	116.6
Christchurch	0.0	0.2	0.9	3.6	10.0	16.4	18.4	15.7	11.1	5.6	2.6	0.3	84.8
Timaru	0.0	0.0	0.3	1.9	9.3	18.9	20.7	14.4	8.8	3.4	0.5	0.0	78.3
Nelson	0.0	0.0	0.3	2.0	8.2	15.9	19.7	15.2	8.6	3.7	1.1	0.1	74.9
Invercargill	0.3	0.6	2.2	3.6	6.4	12.0	15.5	13.2	7.1	3.7	1.6	0.7	66.8
Dunedin	0.0	0.1	0.1	1.1	4.7	10.8	15.3	9.1	5.3	2.8	0.5	0.0	49.8
Blenheim	0.0	0.0	0.1	1.0	4.8	11.2	14.0	9.6	4.3	2.2	0.6	0.0	47.8
Hamilton	0.0	0.1	0.4	2.2	5.9	8.1	11.6	7.8	5.5	2.8	1.0	0.2	45.5
Palmerston North	0.1	0.1	0.4	2.2	5.2	8.2	9.7	7.6	4.7	2.3	1.0	0.1	41.4
Rotorua	0.0	0.0	0.1	1.0	3.6	7.2	10.2	8.5	4.1	1.8	0.4	0.1	36.8
Hokitika	0.0	0.0	0.0	0.8	2.6	8.5	11.9	7.3	3.1	0.6	0.1	0.0	34.9
Gisborne	0.0	0.0	0.0	0.2	3.0	7.8	7.8	6.8	4.4	1.7	0.4	0.0	32.1
Napier	0.0	0.0	0.0	0.1	1.3	5.4	6.0	4.2	1.6	0.4	0.0	0.0	18.8
Westport	0.0	0.0	0.0	0.3	1.2	3.7	5.7	2.3	1.1	0.3	0.0	0.0	14.7
New Plymouth	0.0	0.0	0.0	0.0	0.7	1.4	3.3	1.7	0.8	0.4	0.2	0.0	8.4
Wanganui	0.0	0.0	0.0	0.0	0.3	1.3	2.7	1.5	0.6	0.2	0.0	0.0	6.5
Auckland	0.0	0.0	0.0	0.0	0.2	1.4	1.9	0.4	0.4	0.0	0.0	0.0	4.2
Wellington	0.0	0.0	0.0	0.0	0.1	0.8	1.2	0.9	0.2	0.0	0.0	0.0	3.1
Kaitaia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1

Figure 4.9: Ranked Preferences of Housing – Nelson Urban




21st June 9am
Wasington Valley
Toi Toi Valley
Mount St Hill
Cathedral Hill
The Wood
The Brook Valley
Tahuna Hills
Nelson
STEPNEYVILLE
WASHINGTON VALLEY
TOI TOI
NELSON SOUTH
MAITAI
NELSON EAST
THE WOOD
THE BROOK
TAHUNANUI
BISHOPDALE
Tāhunanui Beach
Selwyn Place
Waimea Road
Parkers Road
Pascoe Street
Bolt Road
0 ft
12 AM
1 AM
2 AM
3 AM
4 AM
5 AM
6 AM
7 AM
8 AM
9 AM
10 AM
11 AM
12 PM
1 PM
2 PM
3 PM
4 PM
5 PM
6 PM
21 Jun
09:00 AM
9.2°
47.3° NE


21st June 4pm
Washington Valley
St Vincent St
Toi Toi Valley
Mount St Hill
Cathedral Hill
Emano St
Nelson South
The Brook Valley
Nelson
STERNEYVILLE
WASHINGTON VALLEY
THE WOOD
Maitai River Esplanade
Selwyn Place
NELSON EAST
MAITAI
MOANA
Tāhunanui Beach
TĀHUNANUI
NELSON SOUTH
THE BROOK
Sugar Loaf
BISHOPDALE
ANNESBROOK
Golf Club
Golf Road
Parkers Road
Tasman Street
Vanguard Street
Waimea Road
Washington Road
Waimea Road
0 ft
0 ft
6 AM
7 AM
8 AM
9 AM
10 AM
11 AM
12 PM
1 PM
2 PM
3 PM
4 PM
5 PM
6 PM
7 PM
8 PM
9 PM
10 PM
11 PM
21 Jun
04:00 PM
8.9°
312.3° NW



AP15.7 how to use daylight over

a. At any site boundary a building is allowed to be a maximum of 2.5m high.
b. Within the site the building is allowed to reach 2.5m plus the additional height indicated by the relevant angle on the elevation indicator in Figure 1 measured at any point along the boundary (e.g. 2.5m plus 35° measured from the boundary).
c. To find this angle, orient the building plan towards North, and place the elevation indicator on the plan so that it is touching the inside of the site boundary concerned.

AP15.7.i Make sure the central control arrow is pointing due North as shown in Figure 2. The angle where the indicator touches the boundary is the angle to be applied 2.5m above ground level at the boundary. This is illustrated in Figure 3 and Figure 6.

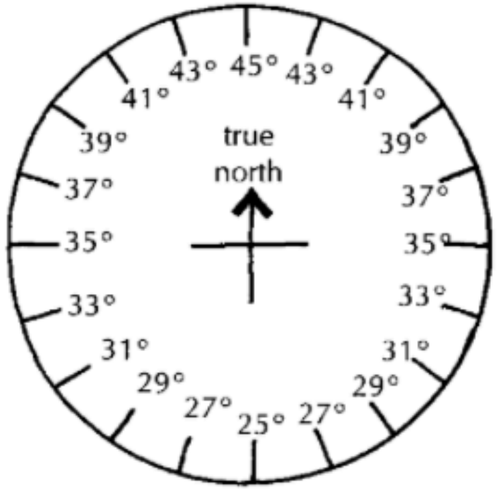


figure 1

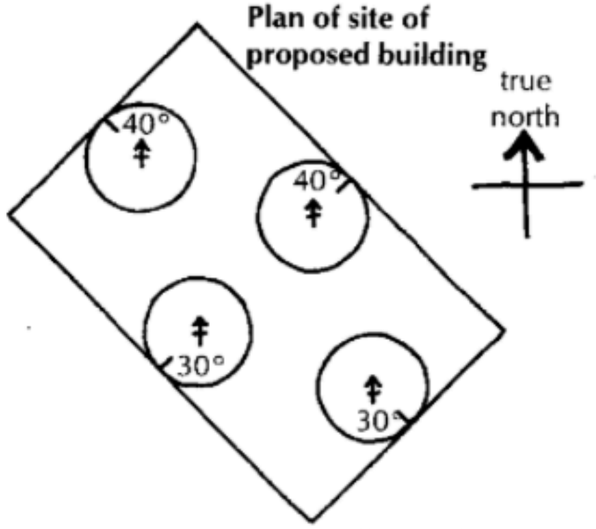


figure 2

Note: the daylight over provisions may have an additional benefit of protecting to some degree the privacy of neighbouring properties, as well as to avoid shading.

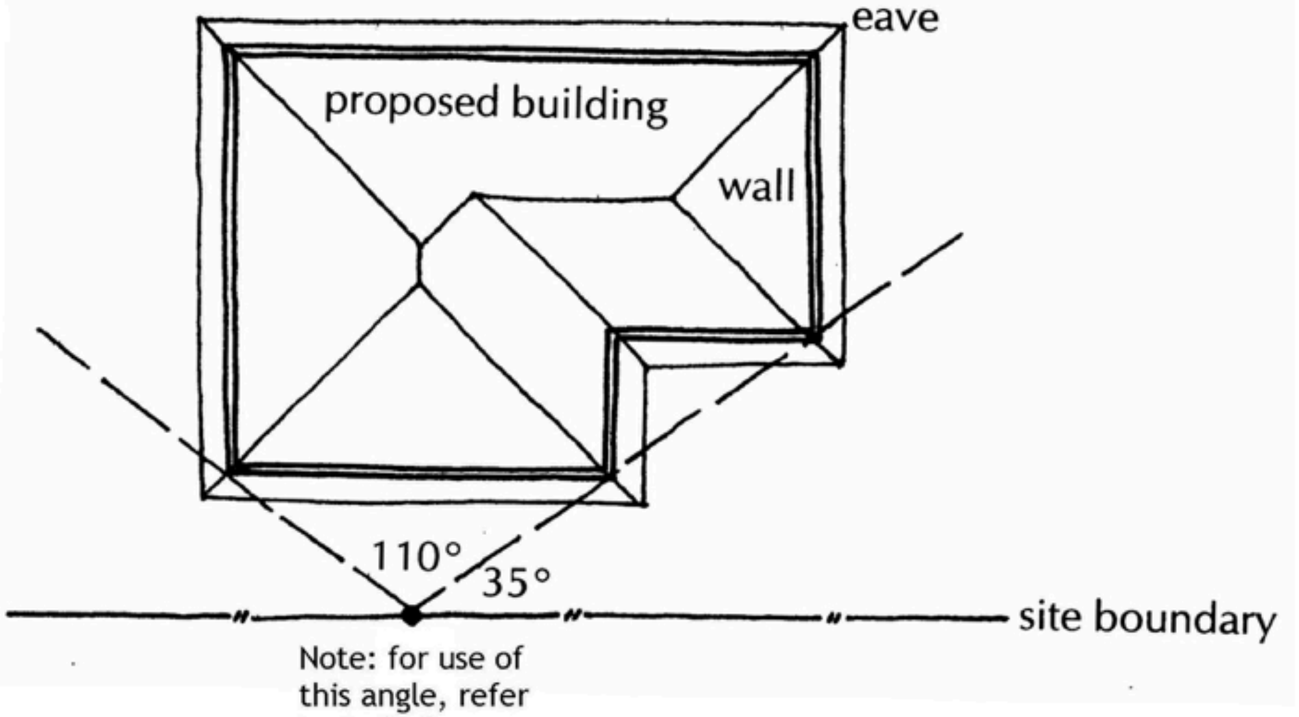
AP15.9 how to use daylight around

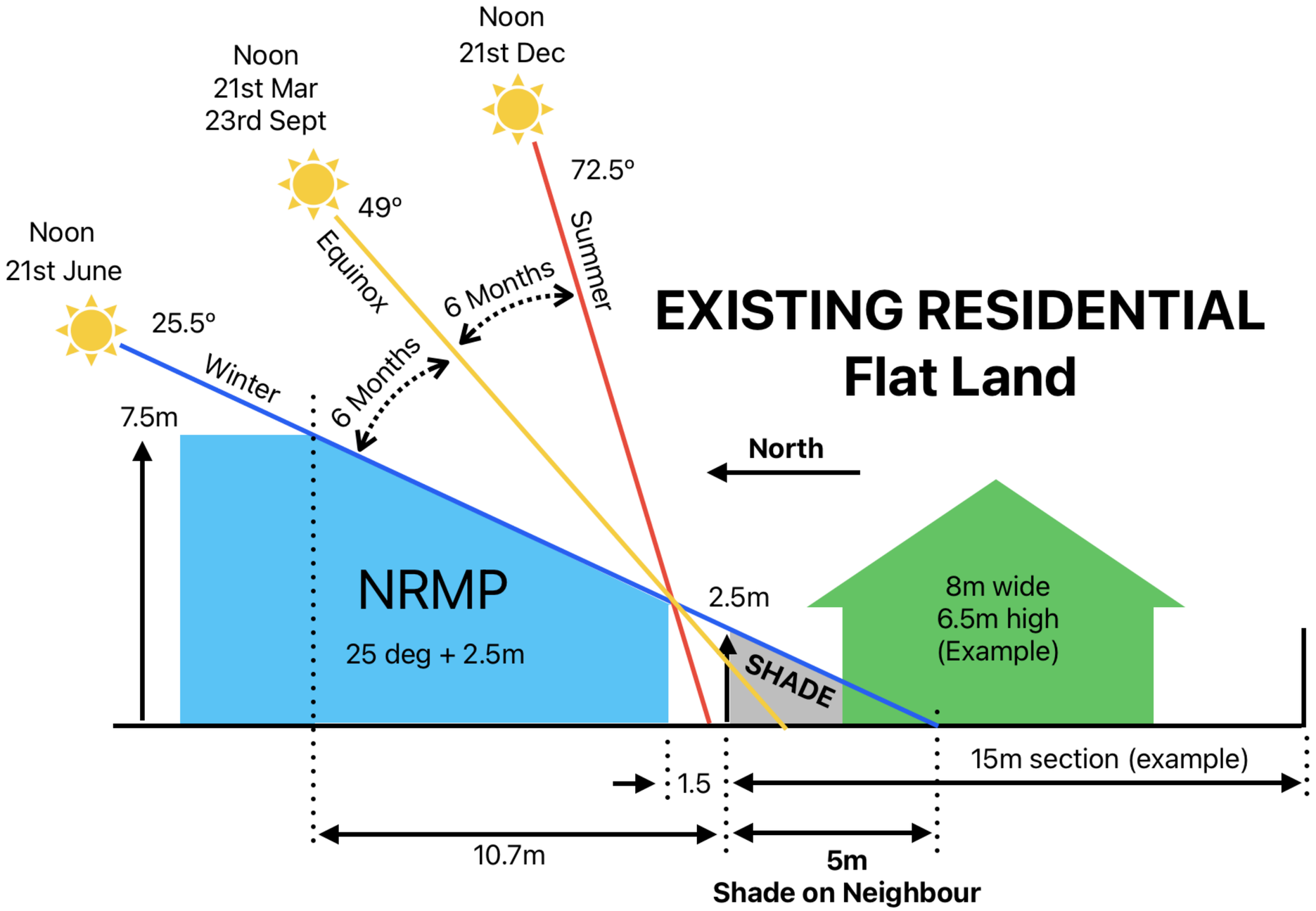
AP15.9.i Place a 110° angle 35° from the boundary (as shown in Figure 4). A complying building will fit within the arms of this angle and may be up to or average 7.5m high (see definition of height measurement). Only one angle may be used on any one boundary.

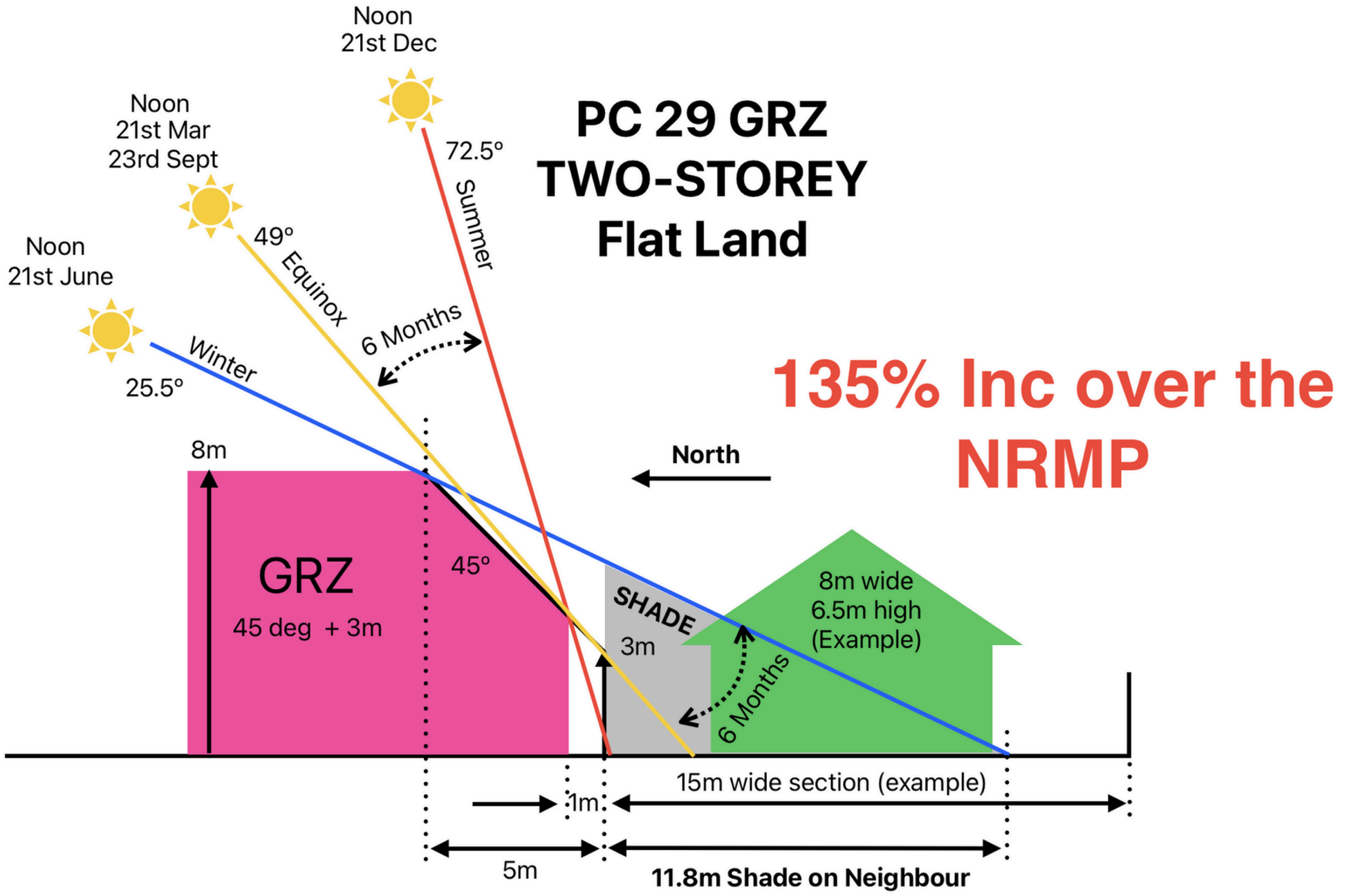
AP15.9.ii 'Ground level', 'height' and 'height measurement' are determined by their definition.

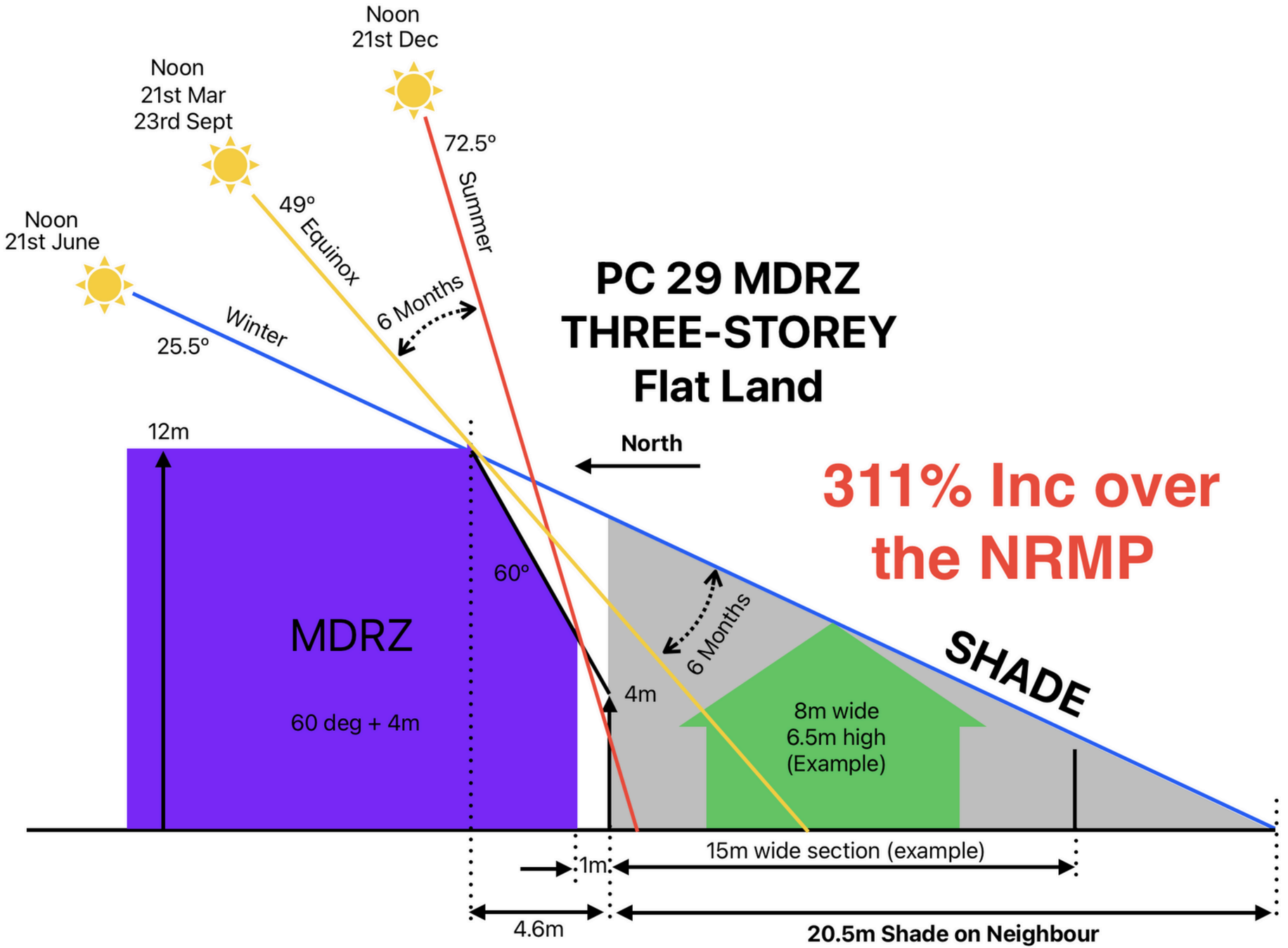
Notes: Any portion of a building or accessory building not contained within the arms of the angle must comply with AP15.9.iii.

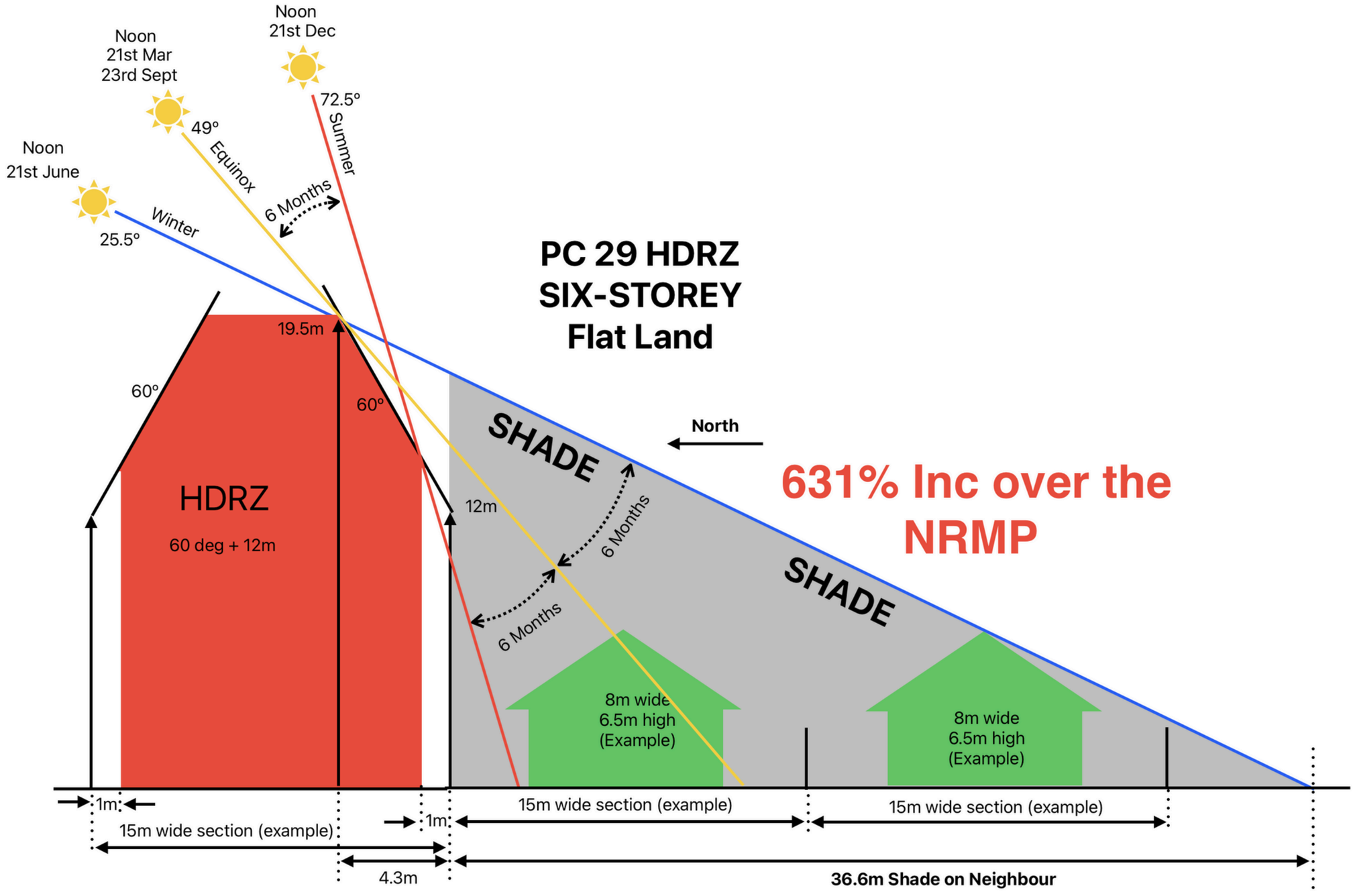
If daylight around is the method by which compliance with the permitted standard is shown for a site boundary, then the daylight over method cannot be used for that site boundary in any future developments to establish compliance with the permitted standards. If any future development on site cannot be located within the established daylight around angle, or is not an exemption listed under AP15.9.iii, resource consent will be required.

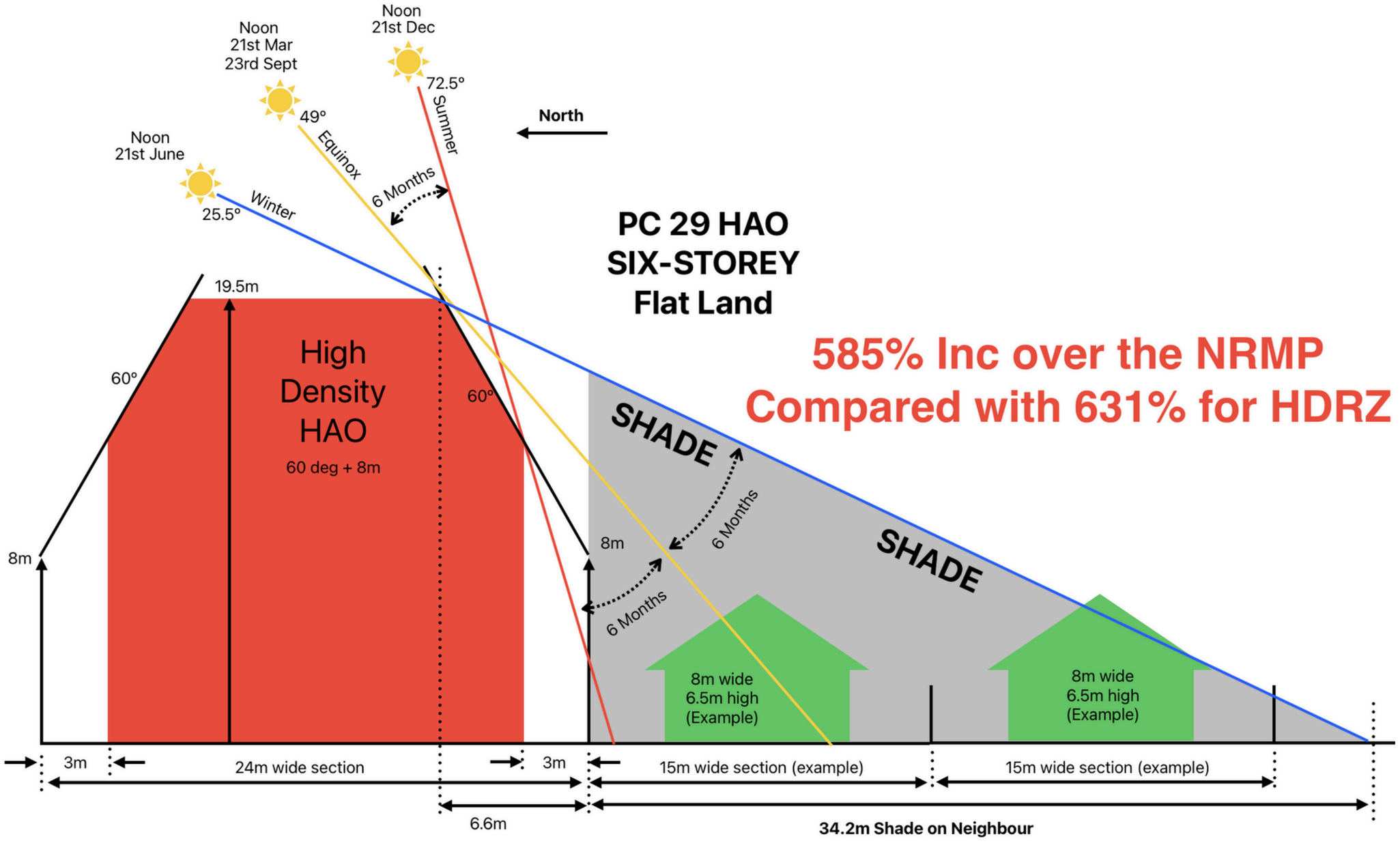


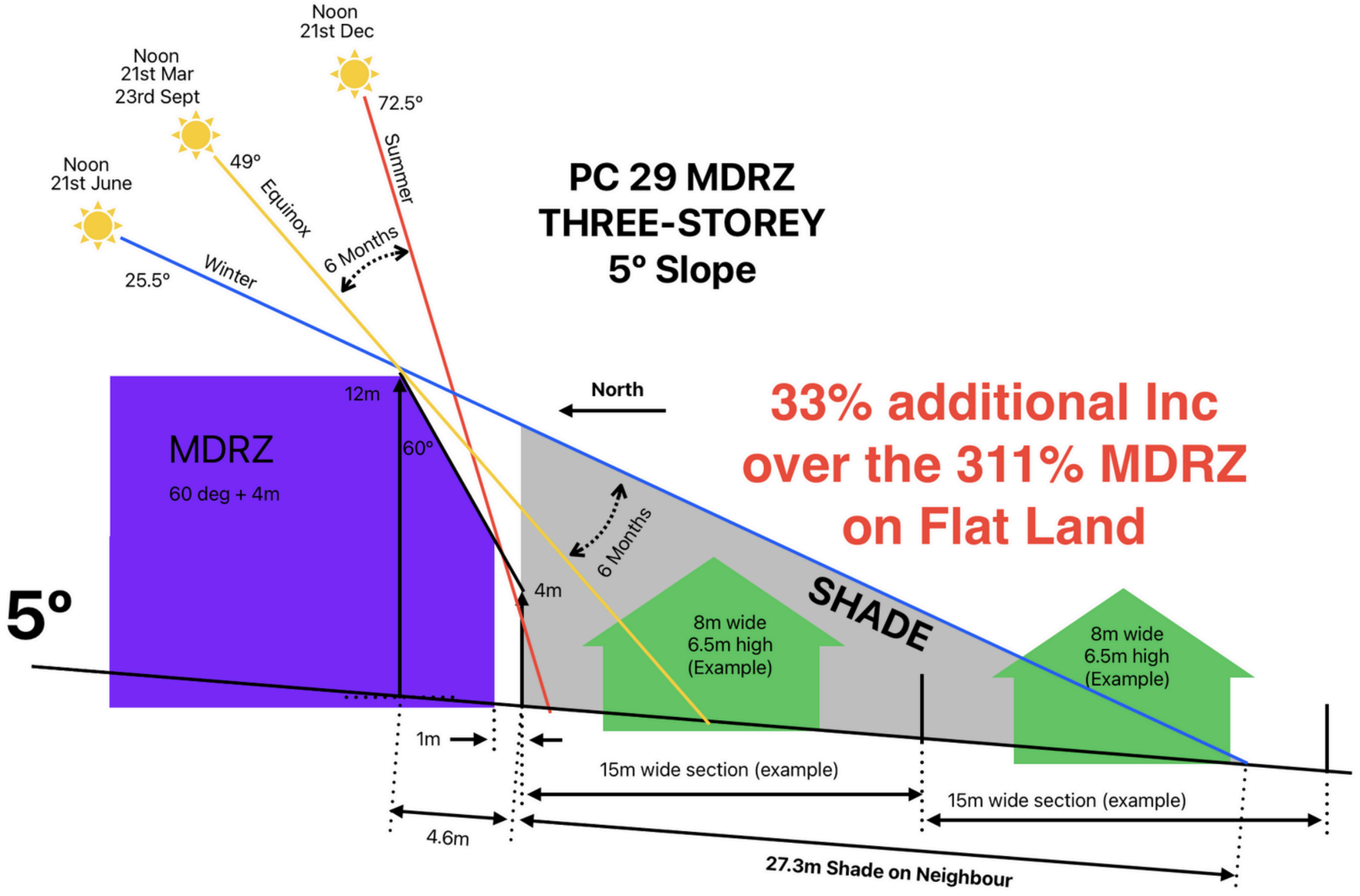

Noon
21st Dec
Noon
21st Mar
23rd Sept
Noon
21st June
72.5°
49°
25.5°
Summer
Equinox
Winter
6 Months
6 Months
EXISTING RESIDENTIAL
Flat Land
North
7.5m
NRMP
25 deg + 2.5m
2.5m
SHADE
8m wide
6.5m high
(Example)
15m section (example)
1.5
10.7m
5m
Shade on Neighbour

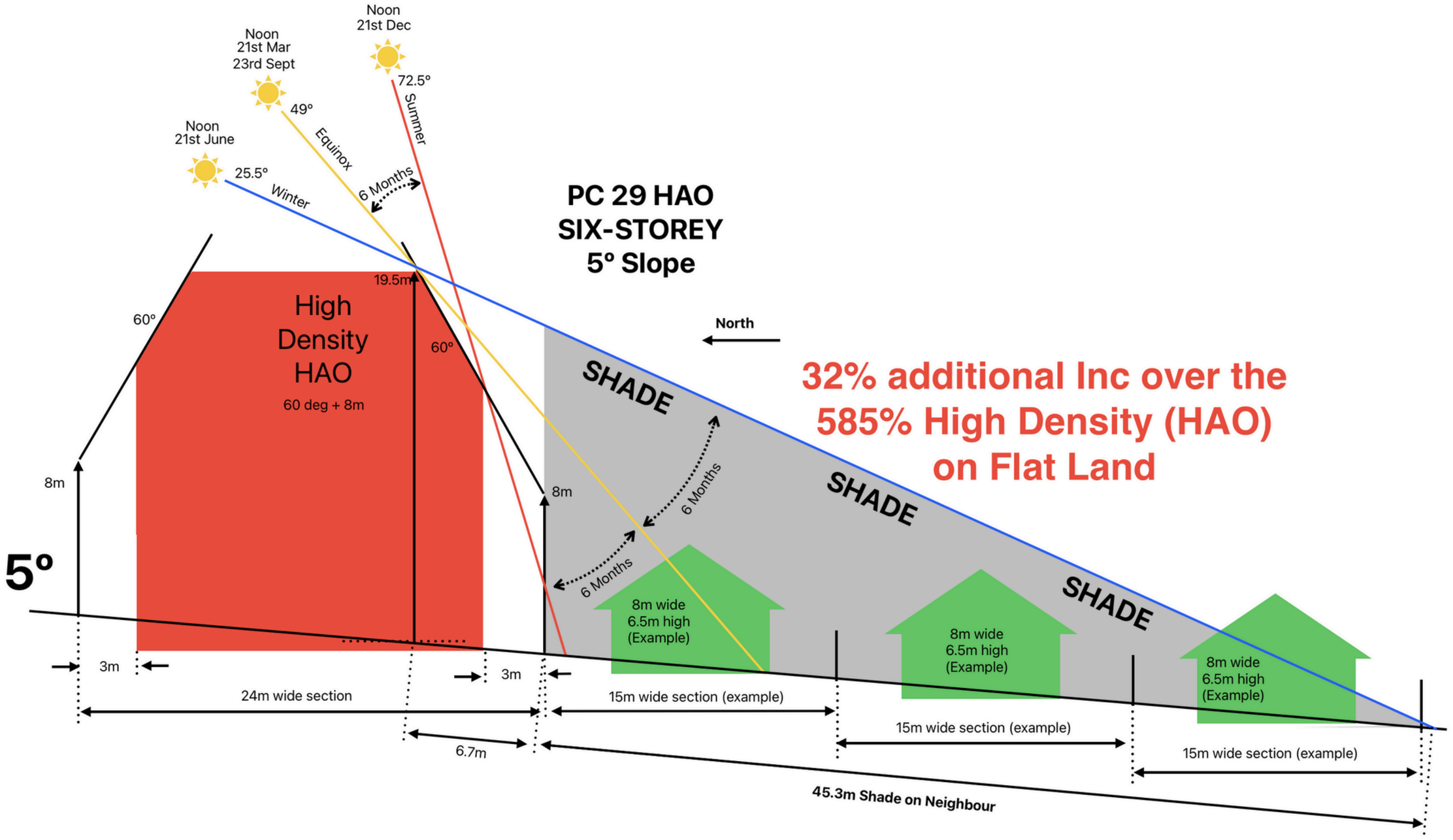

Noon
21st Dec
Noon
21st Mar
23rd Sept
Noon
21st June
72.5°
Summer
49°
Equinox
6 Months
Winter
25.5°
PC 29 GRZ
TWO-STOREY
Flat Land
135% Inc over the
NRMP
8m
North
GRZ
45 deg + 3m
45°
SHADE
3m
6 Months
8m wide
6.5m high
(Example)
15m wide section (example)
1m
5m
11.8m Shade on Neighbour

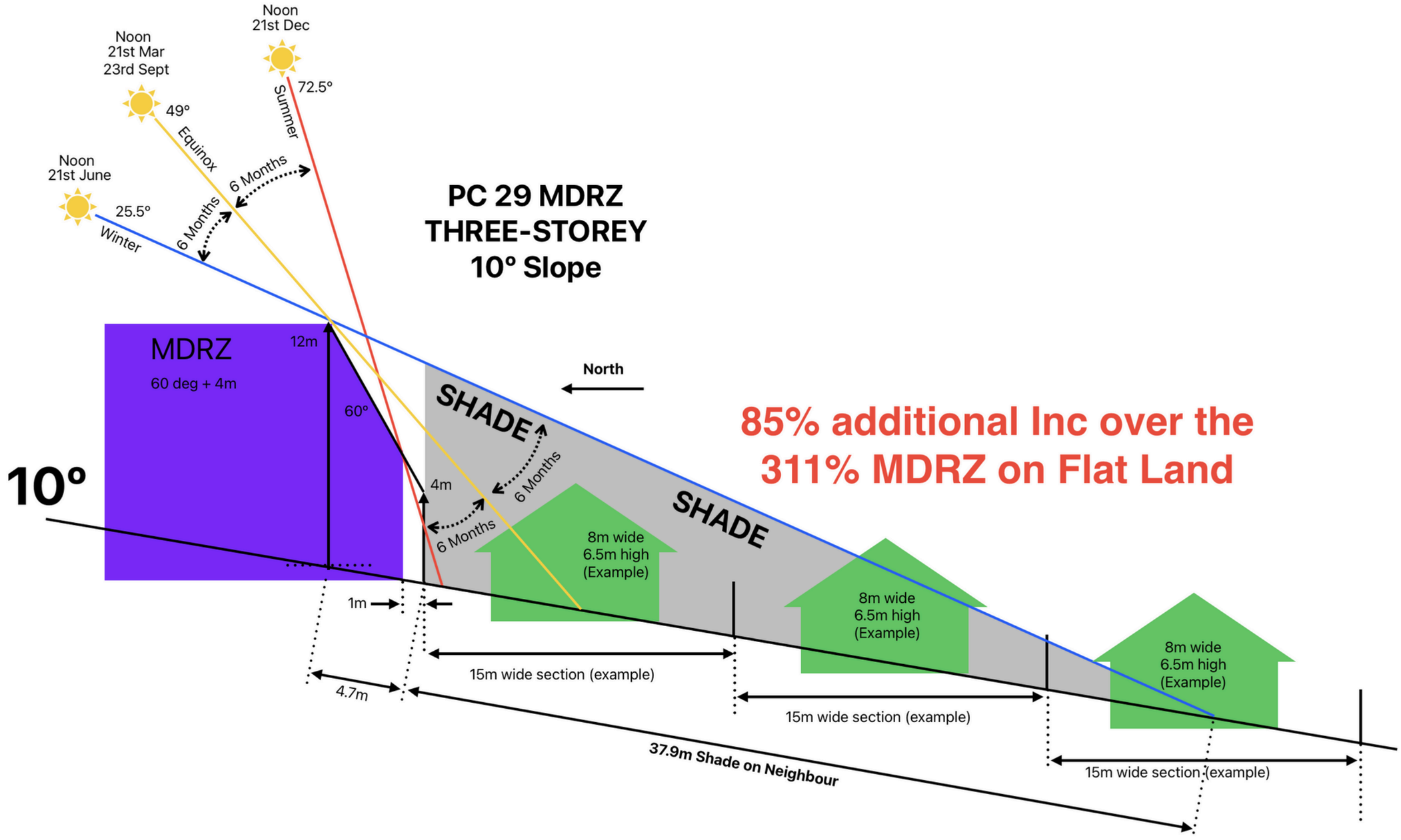

Noon
21st Dec
Noon
21st Mar
23rd Sept
Noon
21st June
72.5°
Summer
49°
Equinox
Winter
25.5°
6 Months
PC 29 MDRZ
THREE-STOREY
Flat Land
North
311% Inc over
the NRMP
12m
60°
MDRZ
60 deg + 4m
6 Months
SHADE
4m
8m wide
6.5m high
(Example)
1m
15m wide section (example)
4.6m
20.5m Shade on Neighbour

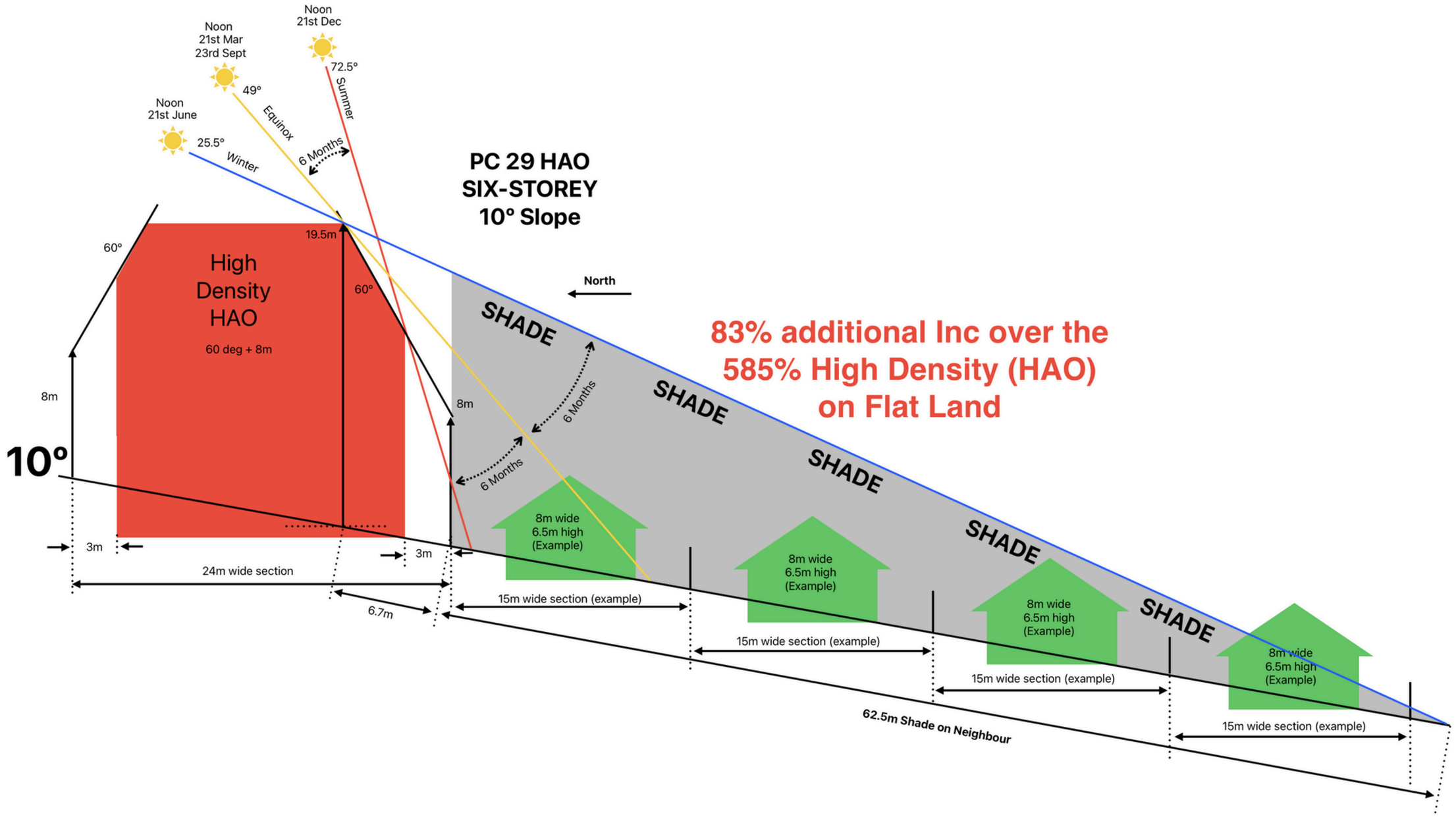

Noon
21st Dec
Noon
21st Mar
23rd Sept
Noon
21st June
72.5°
Summer
49°
Equinox
6 Months
Winter
25.5°
PC 29 HDRZ
SIX-STOREY
Flat Land
19.5m
60°
60°
HDRZ
60 deg + 12m
12m
SHADE
North
631% Inc over the
NRMP
6 Months
6 Months
SHADE
8m wide
6.5m high
(Example)
8m wide
6.5m high
(Example)
1m
15m wide section (example)
1m
15m wide section (example)
15m wide section (example)
4.3m
36.6m Shade on Neighbour

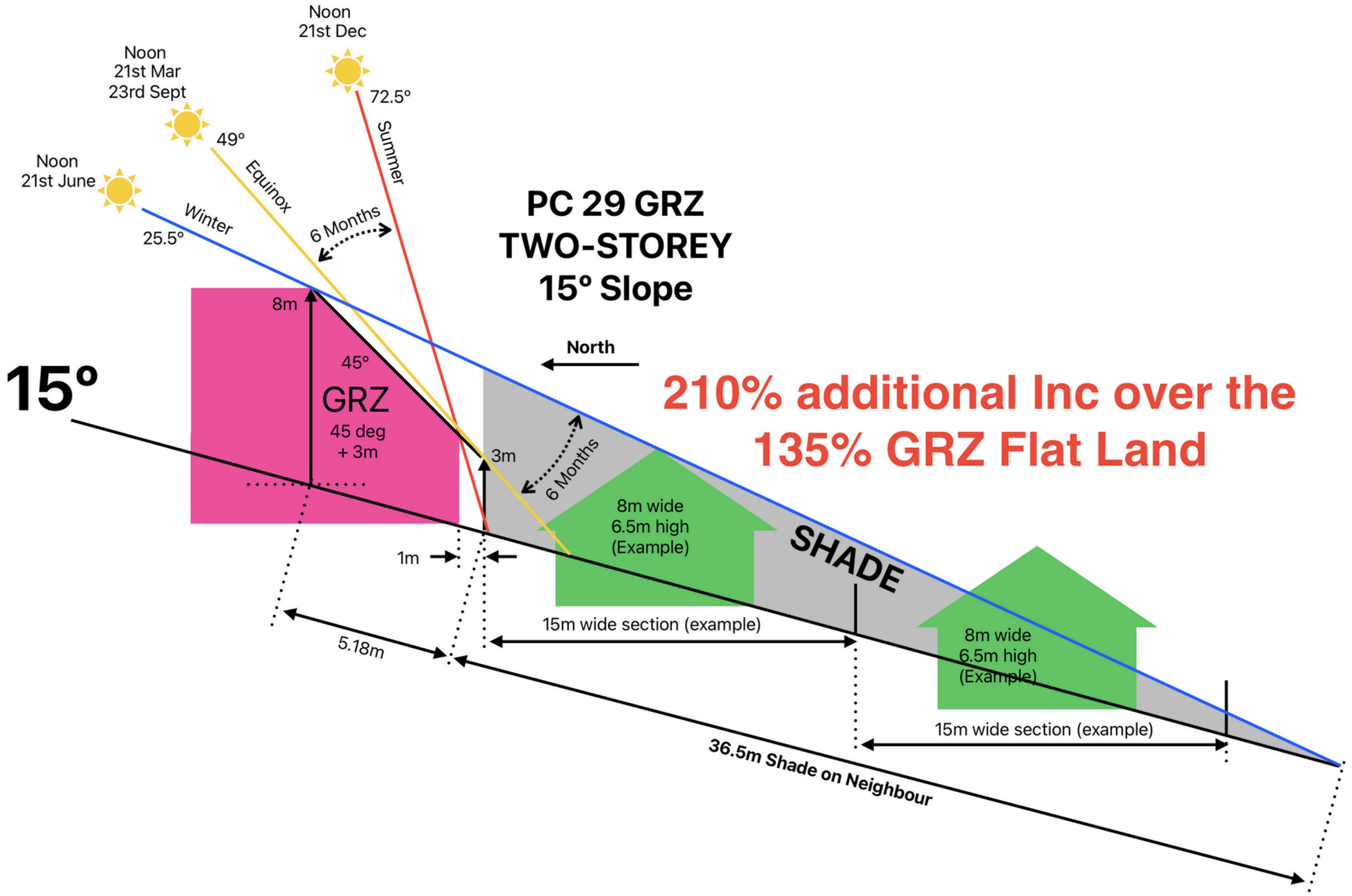

Noon
21st Dec
Noon
21st Mar
23rd Sept
Noon
21st June
72.5°
49°
25.5°
Summer
Equinox
Winter
6 Months
North
PC 29 HAO
SIX-STOREY
Flat Land
585% Inc over the NRMP
Compared with 631% for HDRZ
19.5m
60°
60°
High
Density
HAO
60 deg + 8m
SHADE
SHADE
6 Months
6 Months
8m
8m
8m wide
6.5m high
(Example)
8m wide
6.5m high
(Example)
3m
24m wide section
3m
15m wide section (example)
15m wide section (example)
6.6m
34.2m Shade on Neighbour

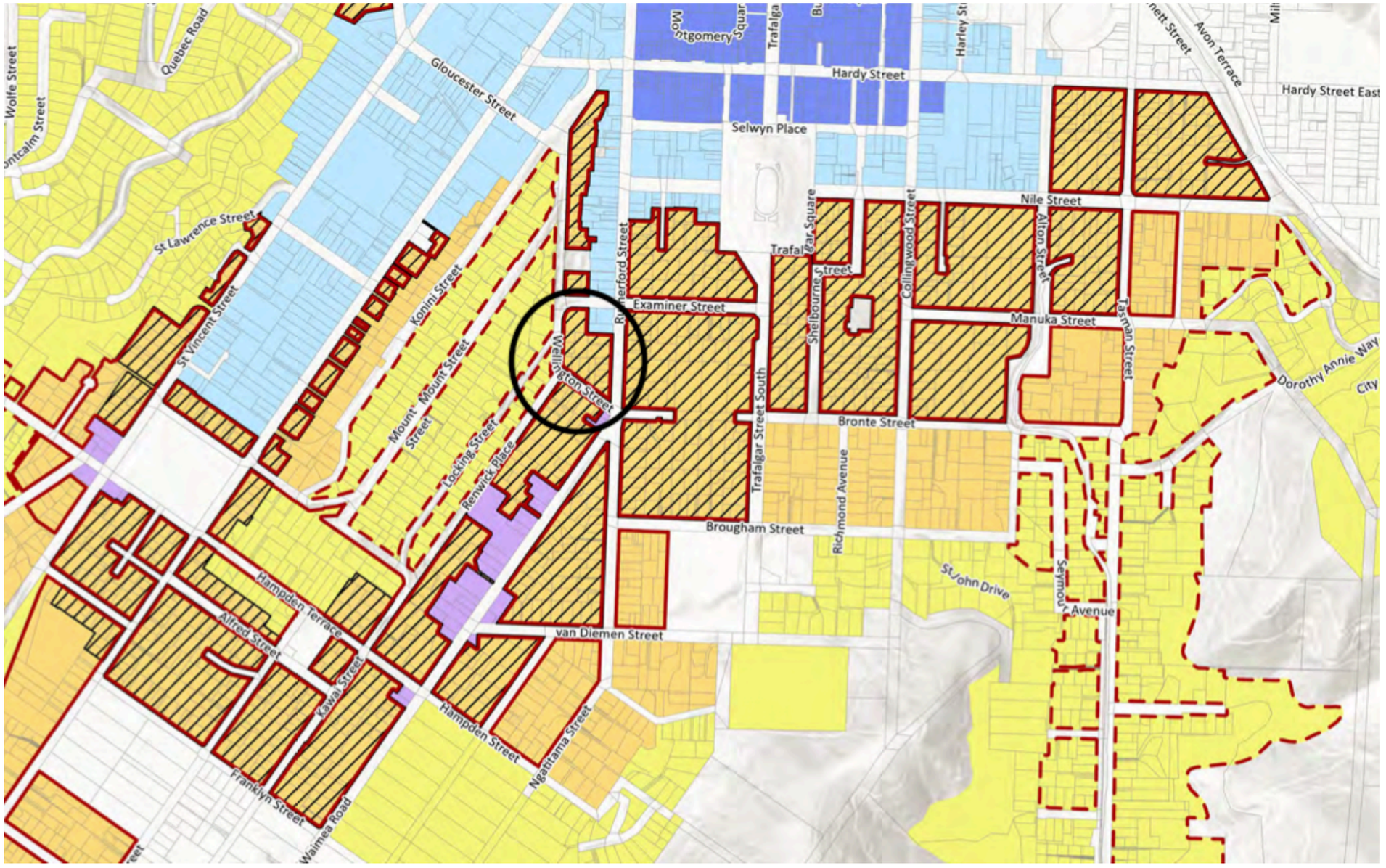

Noon
21st Dec
72.5°
Summer
Noon
21st Mar
23rd Sept
49°
Equinox
Noon
21st June
25.5°
Winter
6 Months
PC 29 MDRZ
THREE-STOREY
5° Slope
North
33% additional Inc
over the 311% MDRZ
on Flat Land
12m
MDRZ
60 deg + 4m
60°
6 Months
4m
SHADE
5°
8m wide
6.5m high
(Example)
8m wide
6.5m high
(Example)
1m
15m wide section (example)
15m wide section (example)
4.6m
27.3m Shade on Neighbour


Noon
21st Dec
Noon
21st Mar
23rd Sept
Noon
21st June
72.5°
Summer
49°
Equinox
25.5°
Winter
6 Months
PC 29 HAO
SIX-STOREY
5° Slope
North
19.5m
60°
60°
High
Density
HAO
60 deg + 8m
SHADE
SHADE
SHADE
32% additional Inc over the
585% High Density (HAO)
on Flat Land
8m
8m
5°
6 Months
6 Months
8m wide
6.5m high
(Example)
8m wide
6.5m high
(Example)
8m wide
6.5m high
(Example)
3m
3m
24m wide section
15m wide section (example)
15m wide section (example)
15m wide section (example)
6.7m
45.3m Shade on Neighbour


Noon
21st Dec
Noon
21st Mar
23rd Sept
Noon
21st June
72.5°
49°
25.5°
Summer
Equinox
Winter
6 Months
6 Months
6 Months
6 Months
PC 29 MDRZ
THREE-STOREY
10° Slope
MDRZ
60 deg + 4m
12m
60°
10°
North
SHADE
SHADE
4m
85% additional Inc over the
311% MDRZ on Flat Land
8m wide
6.5m high
(Example)
8m wide
6.5m high
(Example)
8m wide
6.5m high
(Example)
1m
4.7m
15m wide section (example)
15m wide section (example)
15m wide section (example)
37.9m Shade on Neighbour


Noon
21st Dec
Noon
21st Mar
23rd Sept
Noon
21st June
72.5°
49°
25.5°
Summer
Equinox
Winter
6 Months
PC 29 HAO
SIX-STOREY
10° Slope
North
60°
19.5m
60°
High
Density
HAO
60 deg + 8m
8m
10°
8m
SHADE
SHADE
SHADE
SHADE
SHADE
6 Months
6 Months
83% additional Inc over the
585% High Density (HAO)
on Flat Land
8m wide
6.5m high
(Example)
8m wide
6.5m high
(Example)
8m wide
6.5m high
(Example)
8m wide
6.5m high
(Example)
3m
3m
24m wide section
6.7m
15m wide section (example)
15m wide section (example)
15m wide section (example)
15m wide section (example)
62.5m Shade on Neighbour


Noon
21st Dec
Noon
21st Mar
23rd Sept
Noon
21st June
72.5°
49°
25.5°
Summer
Equinox
Winter
6 Months
PC 29 GRZ
TWO-STOREY
15° Slope
North
15°
8m
45°
GRZ
45 deg
+ 3m
3m
6 Months
210% additional Inc over the
135% GRZ Flat Land
8m wide
6.5m high
(Example)
SHADE
1m
15m wide section (example)
5.18m
8m wide
6.5m high
(Example)
15m wide section (example)
36.5m Shade on Neighbour


Wolfe Street
Quebec Road
Gloucester Street
Hardy Street
Selwyn Place
Harley St
Avon Terrace
Hardy Street East
St Lawrence Street
St Vincent Street
Konini Street
Mount Mount Street
Wellington Street
Rutherford Street
Examiner Street
Trafalgar Square
Shelbourne Street
Collingwood Street
Nile Street
Alton Street
Manuka Street
Tasman Street
Dorothy Annie Way
Bronte Street
Trafalgar Street South
Richmond Avenue
Brougham Street
St John Drive
Seymour Avenue
Locking Street
Renwick Place
Hampden Terrace
Alfred Street
Kawau Street
van Diemen Street
Hampden Street
Ngatitama Street
Franklyn Street
Waimea Road

Play Videos

Plan Change 29 Media Release in August 2023

Whakatū Nelson's population increased by

13,400

between 1996 and 2020 (at a rate greater than the national average)

We're expecting approximately

27%

growth in population over the 2020–2051 period

This means by 2051, the population is estimated to increase by an additional



11,860 people



6,470 households

Figure 2-2: Geographic Demand Catchments by SA2 in Nelson City

