Ruakaka Travel Centre

Urban Design, Landscape and Visual Assessment

Appendix 3 - Graphic Supplement FEBRUARY 2021



Ruakaka Travel Centre



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NZGD2000 / New Zealand Transverse Mercator 2000 1722327.69153176,6022553.93296114 1737324.04076964,6031664.24023426



RUAKAKA TRAVEL CENTRE Wider Site Context







NZGD2000 / New Zealand Transverse Mercator 2000 1725405.1869608,6024973.83645468 1733083.3177706,6029638.31377852

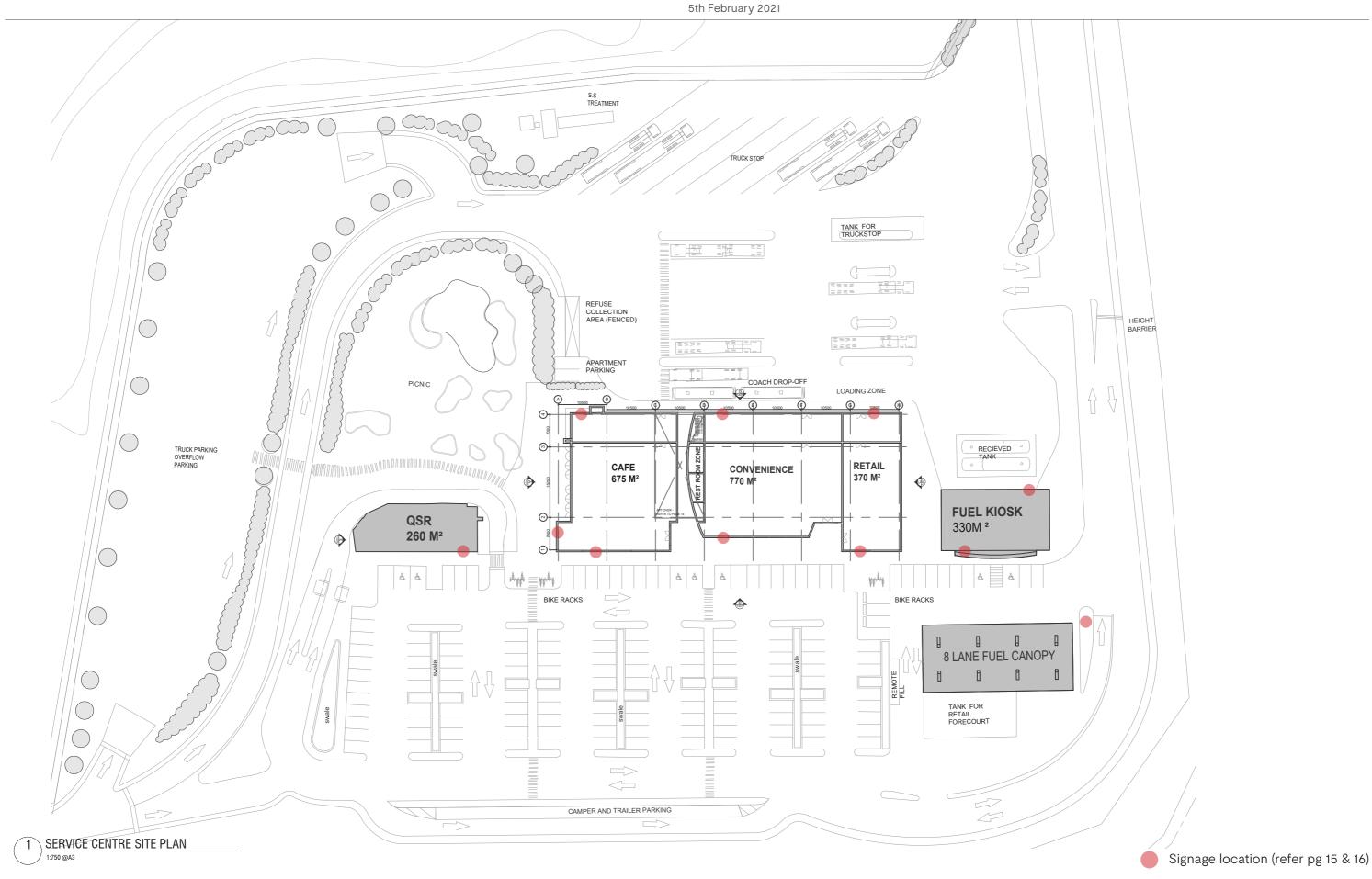


RUAKAKA TRAVEL CENTRE

Site Context

Date: 28 August 2020 Revision: 0 Plan prepared for by Boffa Miskell Limited

Project Manager: Julia.Wick@boffamiskell.co.nz | Drawn: JMy | Checked: PMio



BUCHAN

Auckland Studio Masterplanning

PROPOSED.SERVICE.CENTRE SITE.LAYOUT CONCEPT A-RC-170321-02







NZGD2000 / New Zealand Transverse Mercator 2000 1725221.1700707,6024898.14429868 1732899.3008805,6029562.62162252



RUAKAKA TRAVEL CENTRE

District plan - Planning Map

Project Manager: Julia.Wick@boffamiskell.co.nz | Drawn: JMy | Checked: PMio

Figure 4





Scale 1: 5,000 at A3



NZGD2000 / New Zealand Transverse Mercator 2000 1727472.51768123,6025919.12025704 1731161.57618897,6028160.22947776



RUAKAKA TRAVEL CENTRE

House Inventory Plan

Project Manager: Julia.Wick@boffamiskell.co.nz | Drawn: JMy | Checked: PMio





Projection: NZGD 2000 New Zealand Transverse Mercator



BM19339 RUAKAKA TRAVEL CENTRE

Project Manager: Emma.Todd@boffamiskell.co.nz | Drawn: SGa | Checked: JWi

Viewpoint Locations

Date: 28 August 2020 | Revision: 0

Plan prepared by Boffa Miskell Limited





Date of Photography : 2 June 2020 NZDT

RUAKAKA TRAVEL CENTRE

VP





NZTM Easting : 1 729447 mE
NZTM Northing : 6027003 mN
Elevation/Eye Height : 7m / 1.6m
Date of Photography : 2:32pm 2 June 2020 NZST

Horizontal Field of View : 40°
Vertical Field of View : 25°
Projection : NA
Image Reading Distance @ A3 is 50 cm

Data sources: Photography - BML; 1m Contours - NRC/ 2017 Aerials - 1m Urban Northland - 2014/15; Model - 20200615 - 917004 - Ruakaka Service Centre.skp

RUAKAKA TRAVEL CENTRE

View from SH1 Service Stop looking North

Project Manager: Julia.Wick@boffamiskell.co.nz | Drawn: JMy | Checked: PMio

Plan prepared for by Boffa Miskell Limited

VS





NZTM Easting : 1 729447 mE
NZTM Northing : 6027003 mN
Elevation/Eye Height : 7m / 1.6m
Date of Photography : 2:32pm 2 June 2020 NZST

Horizontal Field of View : 40°
Vertical Field of View : 25°
Projection : NA
Image Reading Distance @ A3 is 50 cm

Data sources: Photography - BML; 1m Contours - NRC/ 2017 Aerials - 1m Urban Northland - 2014/15; Model - 20200615 - 917004 - Ruakaka Service Centre.skp

RUAKAKA TRAVEL CENTRE

View from SH1 Service Stop looking North

Date: 23 February 2021 Revision: 2

Plan prepared for by Boffa Miskell Limited





NZTM Easting : 1 753 434 mE NZTM Northing : 5 924 687 mN Elevation/Eye Height : 92.2m / 1.6m Date of Photography : 14:59pm 22 May 2020 NZST Horizontal Field of View : 40° Vertical Field of View : 25° Image Reading Distance @ A3 is 50 cm

Data sources: Photography - BML; 1m Contours - NRC/ 2017 Aerials - 1m Urban Northland - 2014/15; Model - 20200615 - 917004 - Ruakaka Service Centre.skp

View from Eastern Shoulder of SH1 looking South East

Project Manager: Julia.Wick@boffamiskell.co.nz | Drawn: JMy | Checked: PMio

VP





Date of Photography : 3 June 2019 NZDT





Date of Photography : 2 June 2020 NZDT

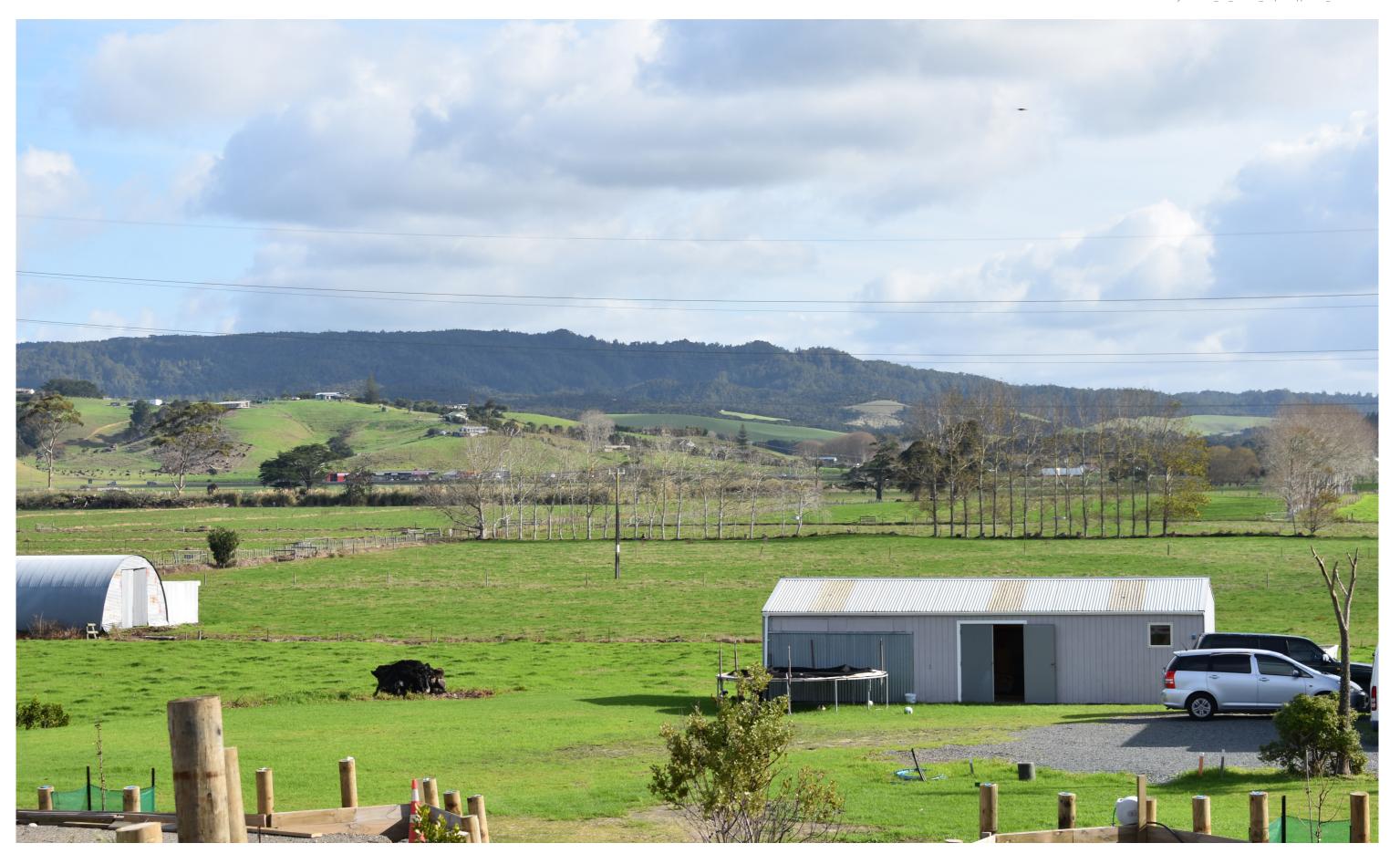
RUAKAKA TRAVEL CENTRE

VP





Date of Photography : 2 June 2020 NZDT





Date of Photography : 3 June 2019 NZDT





Date of Photography : 3 June 2019 NZDT





NZTM Easting : 1 729116 mE NZTM Northing : 6027024 mN Elevation/Eye Height : 29m / 1.6m Date of Photography : 3:58pm 2 June 2020 NZST Horizontal Field of View Vertical Field of View Image Reading Distance @ A3 is 50 cm

Data sources: Photography - BML; 1m Contours - NRC/ 2017 Aerials - 1m Urban Northland - 2014/15; Model - 20200615 - 917004 - Ruakaka Service Centre.skp

RUAKAKA TRAVEL CENTRE

View from road outside 39 Heatherlea Drive looking East

VS





NZTM Easting : 1 729116 mE
NZTM Northing : 6027024 mN
Elevation/Eye Height : 29m / 1.6m
Date of Photography : 3:58pm 2 June 2020 NZST

Horizontal Field of View : 40°
Vertical Field of View : 25°
Projection : NA
Image Reading Distance @ A3 is 50 cm

Data sources: Photography - BML; 1m Contours - NRC/ 2017 Aerials - 1m Urban Northland - 2014/15; Model - 20200615 - 917004 - Ruakaka Service Centre.skp

RUAKAKA TRAVEL CENTRE

View from road outside 39 Heatherlea Drive looking East

Date: 23 February 2021 Revision: 2

Plan prepared for by Boffa Miskell Limited





NZTM Easting : 1729116 mE NZTM Northing :6027024 mN Elevation/Eye Height : 92.2m / 1.6m Date of Photography : 6:18pm 2 June 2020 NZST

- 20200615 - 917004 - Ruakaka Service Centre.skp

Horizontal Field of View Vertical Field of View : 25° Projection : NA Image Reading Distance @ A3 is 50 cm

Data sources: Photography - BML; 1m Contours - NRC/ 2017 Aerials - 1m Urban Northland - 2014/15; Model

View from road outside 39 Heatherlea Drive looking East - Night

Date: 28 August 2020 Revision: 0

Plan prepared for by Boffa Miskell Limited





NZTM Easting : 1729116 mE NZTM Northing :6027024 mN Elevation/Eye Height : 92.2m / 1.6m Date of Photography : 6:18pm 2 June 2020 NZST Horizontal Field of View Vertical Field of View : 25° Projection : NA Image Reading Distance @ A3 is 50 cm

Data sources: Photography - BML; 1m Contours - NRC/ 2017 Aerials - 1m Urban Northland - 2014/15; Model - 20200615 - 917004 - Ruakaka Service Centre.skp

RUAKAKA TRAVEL CENTRE

View from road outside 39 Heatherlea Drive looking East - Night

VS





Date of Photography : 2 June 2020 NZDT

RUAKAKA TRAVEL CENTRE

VP

VISUAL SIMULATIONS - METHODOLOGY

SITE VISIT & PHOTOGRAPHY

Site photographs were taken with a Canon digital SLR camera fitted with a 50mm focal length lens, mounted on a tripod and panoramic head. A series of photos were taken at predetermined viewpoints, situated on public land. The locations of each viewpoint were fixed by field measurements and GPS.

NZILA GUIDELINES & PANORAMA PREPARATION

The visualisations have been produced in accordance with the NZILA Best Practice Guidelines for Visual Simulations (BPG 10.2) and also adhere to Boffa Miskell's internal Visualisation Guidelines.

Camera lenses of different focal lengths capture images with differing fields of view. To understand how illusions are created by different lens sizes, one must understand depth of field and how "depth of field" and "field of view" are related. As can be seen below (derived from Fig 9 of the NZILA BPG), a photo taken with a 28mm lens will provide a horizontal field of view of 65° - using a 50mm lens will provide a "cropped" (40°) version of the same view. The same image size can also be achieved by taking multiple 50mm photos in "portrait" mode, and using digital stitching software to merge and crop to 65° or 40° .

COMPOSITING

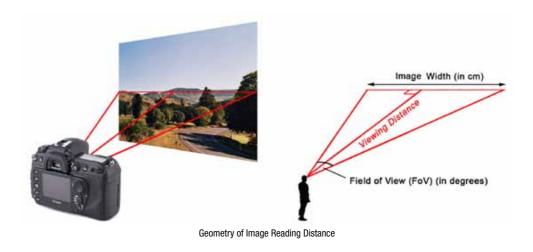
Virtual camera views were then created in 3D modelling software, and a combination of 3D LIDAR (point cloud) data and 3D engineering drawings imported to each of these views. These were then matched to the corresponding photographic panorama, using identifiable features in the landscape and the characteristics of the camera to match the two together. The simulations were then assembled using graphic design software.

RECOMMENDED IMAGE READING DISTANCE

According to the NZILA Guidelines, views which have a field of view of 40° should be viewed from a distance of 55 cm when printed at A3. For convenience, Boffa Miskell has adopted an image reading distances of 50cm.

This will ensure that each simulation is viewed as if standing on-site at the actual camera location, and is in accordance with Section 7.11 of the NZILA BPG (reproduced below). Users are encouraged to print these pages on A3 transparency, go to the viewpoint and hold at the specified reading distance in order to verify the methodology.

LENS	HORIZ FoV 1	PAPER SIZE	ACTUAL IMAGE SIZE ²	READING DISTANCE 3
28mm	65°	A4	277mm W x 185mm H	215mm
		A3	400mm W x 267mm H	315mm
		A2	574mm W x 383mm H	450mm
50mm	40°	A4	277mm W x 185mm H	380mm
		A3	400mm W x 267mm H	550mm
		A2	574mm W x 383mm H	790mm







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