Chapter 21

Appendices



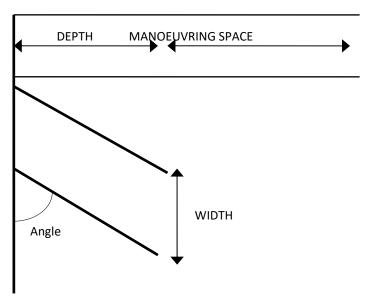
APPENDICES

APPENDIX 1: Carparking dimensions

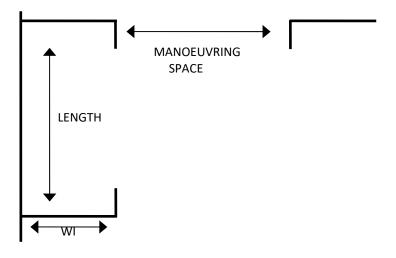
Minimum requirements for carparking spaces

Parking type	Width	Depth	Manoeuvring space	Total depth needed
Angle parking 90 ⁰	2.5m	4.9m	7.7m	12.6m
Angle parking 75 ⁰	2.5m	5.2m	6.3m	11.5m
Angle parking 60 ⁰	2.5m	5.2m	4.1m	9.3m
Angle parking 45 ⁰	2.5m	4.9m	3.7m	8.6m
Angle parking 30 ⁰	2.5m	4.0m	3.7m	7.7m
		Length		
Parallel parking	2.5m	6.1m	3.7m	

ANGLE PARKING



PARALLEL PARKING



APPENDIX 2: Designations and Requirements

Ref No.	Designating authority	Designation Purpose	Locality	Legal description
A1	Minister of Justice Department for Courts	Ōpōtiki District Courthouse	Corner of Church and Elliot Street Ōpōtiki	Blk III Ōpōtiki SD Lot 447, Sec 2 Town of Ōpōtiki
		Section 176A of the R will consult with the I	lesource Management Act Heritage New Zealand Pou	truction in accordance with t 1991, the requiring authority where Taonga on any proposed onsultation with the outline
B1	Telecom New Zealand Limited	Ōpōtiki Cellular Site	Ōhiwa Harbour Road Ōpōtiki	Pt Lot 1 DP 6545 shown as Area A Plan SO 43300
В2		Ōpōtiki Exchange	Potts Avenue Ōpōtiki	Lot 1 DP 3227 and Pt Lots 2 and 3 DP 7785, Blk III Ōpōtiki SD
В3		Te Kaha Exchange	State Highway 35 Te Kaha	Lot 1 DP 8357
В4		Waihau Bay Exchange	Orete Point Road Waihau Bay	Pt Lot 4 DP 5347, Blk V, Whangaparaoa SD
С	NZ Transport Agency	To undertake maintenance, improvements, operation and use of the State Highway network.		State Highway 2 State Highway 35 Note: That the legal property width and the associated designation of the state highway network is the physical road reserve boundary
D1	Transpower New Zealand Limited	National Grid Activities (Including substation and associated ancillary infrastructure.	Corner of Te Maara Place and Copenhagen Road, Te Kaha	Sec 1 SO 8319 Blk V Te Kaha SD
D2		National Grid Activities (Including substation and associated ancillary infrastructure.	31 Gabriels Gally Road, Waiōtahe	Sec 1 SO 1818 Blk I Ōpōtiki SD
E1	Ministry of Education	Ashbrook School	Wellington Street Ōpōtiki	Lots 353, 354, 355, and Pt Lots 352, 399, 400, 401, and 402 Sec 2 Town of Ōpōtiki
E2		Kutarere School	State Highway No.2 Kutarere	Pt Lot 191A Waiotahi Parish, Blk XI, Whakatane SD.

APPENDICES

Ref No.	Designating authority	Designation Purpose	Locality	Legal description
E3		Te Kura Mana	State Highway 35	Pt Maraenui Blk II Tokata SD
		Maori_Maraenui	Haupoto	
E4		Te Kura o Omaio	State Highway 35 Omaio	Omaio 10 Blk V Haparapara SD School Reserve (Omaio) Blk V Haparapara SD
E5		Omaramutu School	RD 1 Ōpōtiki	Pt Opape 3Y1B2 Block, Blk V Waiaua SD
E6	Ministry of Education	Ōpōtiki College	St John Street Ōpōtiki	Lot 2 and Pt Lots 1 and 3 DP 14521AK and Lot 426 Sec 2 Town of Ōpōtiki Blk III Ōpōtiki SD, Pt Lots 1 and 3 DP 14521AK, Lots 1 and 2 DP 3167, Lot 1 DP 4459, Lots 276, 318, 319 Sec 2 Town of Ōpōtiki Blk III Ōpōtiki SD, Pt Lots 318 and 319 Sec 2 Town of Ōpōtiki Blk III Ōpōtiki SD
E7	Ministry of Education	Ōpōtiki School	Church Street Ōpōtiki	Lots 107 - 111 Sec 2 Town of Ōpōtiki Blk III Ōpōtiki SD, Lot 452 Sec 2 Town of Ōpōtiki Blk III Ōpōtiki SD, Lots 453 and 458 Sec 2 Town of Ōpōtiki Blk III Ōpōtiki SD
E8		Raukokore School	State Highway 35 Ōpōtiki	Pt Te Poiti No 1, Reserve Block IV and Pt School Reserve Whangaparaoa SD
E9		Te Whanau-A- Apanui Area School	State Highway 35 Te Kaha	Pt 2,3 and 4 Pt Te Kaha 8 Blk V Te Kaha SD, Pt Maori School Reserve Blk V Te Kaha, Pt Te Kaha C7 Block V Te Kaha SD
E10		Te Kura o Torere	State Highway 35 Torere	Sec 1 Blk II Waiaua SD
E11		Te Kura Kaupapa Maori o Waioeka	Waioeka Pa Road Waioeka	Lot 337A Waioeka Parish Blk XI Ōpōtiki SD, Pt Lots 337B6A and 337B6B Waioeka Parish Blk XI Ōpōtiki SD
E12	Ministry of Education	Waiotahi Valley School	Gabriels Gully Road Waiotahi	Lot 1 DP 3810 Blk I Ōpōtiki SD, Lot 2 DP 3272 and Pt Lot 4 DP 10412AK Blk I Ōpōtiki SD
E13		"Intentionally Blank"	"Intentionally Blank"	"Intentionally Blank"
E14		Te Kura Mana Maori o Whangaparaoa	State Highway 35 Whangaparaoa	Sec 2 and 3 Blk I Town of Whangaparaoa Blk II Whangaparaoa SD, Sec 3 Blk II Whangaparaoa SD

APPENDICES

Ref	Designating	Designation	Locality	Legal description
No.	authority	Purpose		
E15		Woodlands School	Hukutaia Road	Sec 45 Hukutaia Settlement
			Woodlands	Blk VI Ōpōtiki SD
F1	Minister of Police	Ōpōtiki Police	King Street	Sec 1 SO 8544 Blk III Ōpōtiki
		Station	Ōpōtiki	SD
F2		Te Kaha Police	State Highway 35	Lot 2 DP 8905, State Highway
		Station	Te Kaha	35 Te Kaha
G1	Ōpōtiki District	Hukutaia Water	Crooked Road,	Lot 1 DP5409 Blk VI Ōpōtiki
	Council	Supply	Hukutaia	SD
			Ōpōtiki	
		ō -:::-	N II	
G2		Ōpōtiki Town	Volkners Island	Local Purpose Reserve
		Sewerage Scheme	Potts Avenue	Sewage Treatment, Lot 341, Pt Volkners Island Reserve
				Town of Ōpōtiki
				Town of Opotiki
G3		Ōhiwa Water	Ōhiwa Harbour Road	Recreation Reserve Pt Lot 92
		Supply	Ōhiwa	Waiotahi Paris, Blk I Ōpōtiki
				SD
G4		Waihau Bay	Otutehapari Road	Local Purpose Reserve
		Sewerage Scheme	Waihau Bay	Sewage Treatment, Lots 30
				and 36 DP 6105
				Whangaparaoa SD
G5	Ōpōtiki District	Ōpōtiki Town	Ōtara Road East	Local Purpose Reserve, Lots 3
	Council	Water Supply	Ōpōtiki	and 4 DP 15744, Lot 1 DP
				2937, Blk XII Ōpōtiki SD, Sec
				12 Blk XIII Waiau SD.
				Local Purpose Reserve (Water
1				Supply) Sec 4 Blk VIII, Lot 1
				DP15744AK, Lot 2 DP15744AK
G6		Ōpōtiki Town	Snells Road	Local Purpose Reserve
GO		Sewerage Works	Öpötiki	(Sewerage Works) Sec 1 and
		Sewerage Works	Орошкі	, ,
				Sec 2 SO 8737 Blk III, Ōpōtiki
				SD

APPENDIX 3: Noise Standards For Temporary Military Training

Activities

Temporary Military Training Activities identified as permitted activities shall comply with the following noise standards:

1. Weapons firing and/or the use of explosives

- a. Notice is provided to the Council at least 5 working days prior to the commencement of the activity.
- b. The activity complies with the following minimum separation distances to the notional boundary of any building housing a noise sensitive activity:

0700 to 1900 hours: 500m 1900 to 0700 hours: 1,250m

c. Where the minimum separation distances specified above cannot be met, then the activity shall comply with the following peak sound pressure level when measured at the notional boundary of any building housing a noise sensitive activity:

0700 to 1900 hours: 95 dBC 1900 to 0700 hours: 85 dBC

2. Mobile noise sources

Shall comply with the noise limits set out in Tables 2 and 3 of *NZS6803:1999 Acoustics – Construction Noise*, with reference to 'construction noise' taken to refer to mobile noise sources*.

Note: Mobile noise sources (other than firing of weapons and explosives) include personnel, light and heavy vehicles, self-propelled equipment, earthmoving equipment.

3. Fixed (stationary) noise sources

Shall comply with the noise limits set out in the table below when measured at the notional boundary of any building housing a noise sensitive activity*.

Time (Monday to Sunday)	L _{Aeq (15 min)}	L _{AFmax}
0700 to 1900 hours	55 dB	na
1900 to 2200 hours	50 dB	n.a.
2200 to 0700 hours the next day	45 dB	75 dB

Note: Fixed (stationary) noise sources (other than firing of weapons and explosives) include power generation, heating, ventilation or air conditioning systems, or water or wastewater pumping/treatment systems.

4. Helicopter landing areas

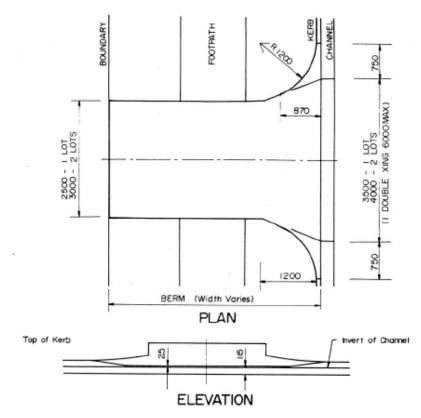
Shall comply with NZS6807:1994 Noise Management and Land Use Planning for Helicopter Landing Areas*.

* Noise levels shall be measured in accordance with NZS6801:2008 Acoustics – Measurement of Sound.

APPENDIX 4: Vehicle Entrance Designs

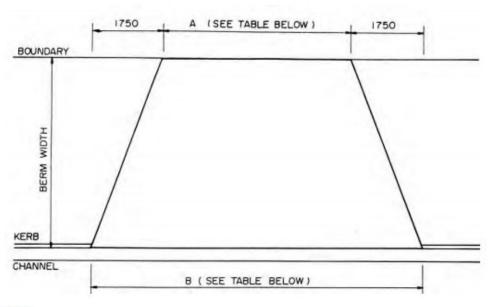
Vehicle Entrances shall be designed and constructed in accordance with the Ōpōtiki District Council "Code of Practice – Subdivision and Development" which are set out below. These provide a means of compliance.

Alternative design and construction may be established where the road control authority has approved the alternate design and a copy of the approval is submitted to the Council.



- 1. All concrete shall be 115 thick, have a strength of 20.0 MPa and be wood floated to a smooth surface.
- All existing footpath to be replaced unless specifically exempted by the Engineer and the crossing shall run
 continuously between the kerb boundary and the property boundary.
- If there is no existing footpath the Council will provide level pegs to ensure that the work ties in with the future footpath development.
- The work shall be carried out in such a manner as to ensure the safety of road and footpath users.
- Vehicle crossings shall be reinforced with hrc 665 mesh centrally placed. For more than 2 Lots refer to industrial/commercial Drawing R 09.
- Vehicle crossings shall be in accordance with the NZ Transport Agency's Pedestrian Planning and Design Guide October 2009 (PPDG)
 - a) the maximum crossfall of the ramp shall be 2% (1:50), in accordance with Table 15.2 of the PPDG
 - b) the minimum width of a footpath shall be 1.65m, in accordance with Table 14.3 of the PPDG

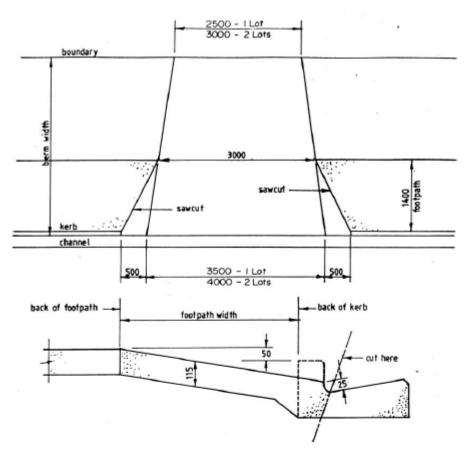
	Standard Drawings	Not to Scale
OpotikiiDistrict.Council	Vehicle Crossing Residential	R 08



- The concrete including the new channel shall be 200mm thick and reinforced with one layer of hrc 665 mesh with 50mm cover from the bottom of the slab.
- The concrete shall have a minimum crushing strength of 20MPa at 28 days and shall comply with NZS 3124:1987.
- All existing footpath, kerb and channel are to be replaced and the crossing shall run continuously between the kerb and the property boundary.
- 4. If there is no existing footpath the contractor shall ensure that the work ties in with future footpath construction.
- 5. A 150mm thick concrete slab shall be constructed under the kerb and channel for all heavy industrial crossings.
- 6. The work shall be carried out in such a manner as ton ensure the safety of road and footpath.

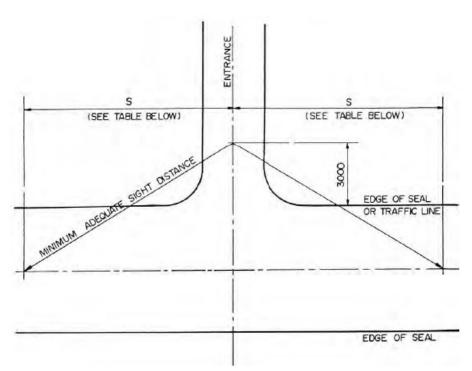
Dimension	Heavy Industrial Double Lane	Heavy Industrial Single Lane	Light Industrial Commercial Single Lane	Light Industrial Commercial Double Lane
Α	7000	4500	3500	6000
В	10500	8000	7000	9500

	Standard Drawings	Not to Scale
Opotiki District Council	Vehicle Crossing Industrial/Commercial	R 09



- 1. All concrete shall be 115 thick, have a strength of 20.0 MPa and be wood floated to a smooth surface.
- All existing footpath to be replaced unless specifically exempted by the Engineer and the crossing shall run
 continuously between the kerb boundary and the property boundary.
- If there is no existing footpath the contractor shall ensure that the work ties in with the future footpath development.
- 4. The work shall be carried out in such a manner as to ensure the safety of road and footpath users.
- Vehicle crossings shall be reinforced with hrc 665 mesh centrally placed. For more than 2 Lots refer to industrial/commercial Drawing R 09.
- Vehicle crossings shall be in accordance with the NZ Transport Agency's Pedestrian Planning and Design Guide October 2009 (PPDG)
 - a) the maximum crossfall of the ramp shall be 2% (1:50), in accordance with Table 15.2 of the PPDG
 - b) the minimum width of a footpath shall be 1.65m, in accordance with Table 14.3 of the PPDG

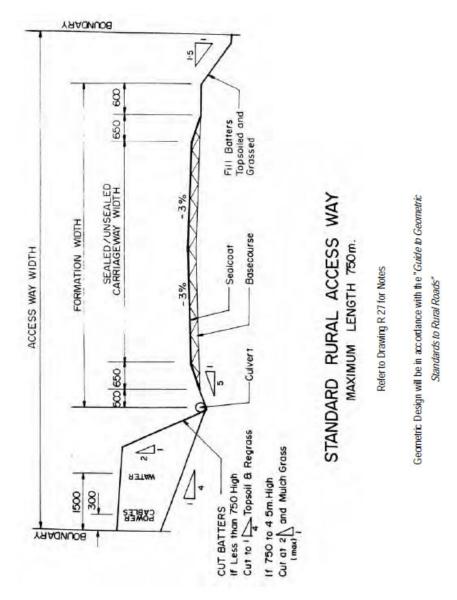
Opotiki District Council	Standard Drawings	Not to Scale
OpotikiiDistrict.Council	Vehicle Crossing ~ Existing Residential Footpath Behind Kerb	R 10



Design Speed of Main Road Km/h	Safe Stopping Distance (M) S
30	35
40	45
50	60
60	75
70	95
80	110
90	125
100	145
110	185

	Standard Drawings	Not to Scale
Opotiki District Council	Sight Distances for Vehicle Entrances	R 25

Note: The Safe Stopping Sight Distances are only applicable to the Ōpōtiki District Local Road Network



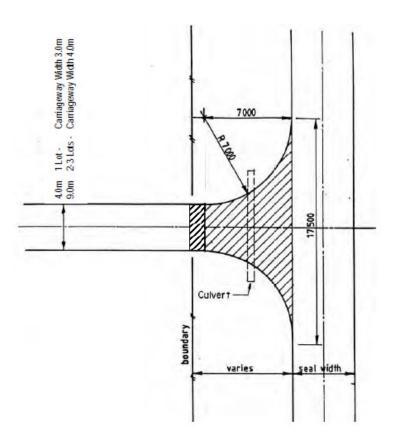
	Standard Drawings	Not to Scale
Opotiki District Council	Standard Rural Accessways	R 26

TABLE 1 - RURAL ACCESSWAY

No of Lots	Accessway Width *See Note 10	Carriageway Width	Metal Depth	
1	4.0	3.0	100mm	
2 - 3	9.0	4.0		
4 - 6	12.0	5.0 (sealed)	125mm	

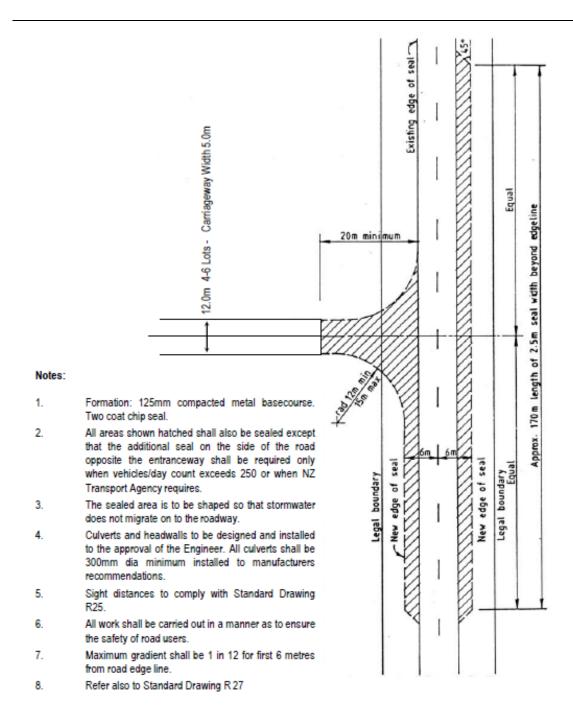
- Passing Bays: Shall be provided outside the minimum carriageway width at not more than 200 metre
 intervals. Passing Bays shall be large enough to enable a 90 percentile two axled truck to enter,
 park and exit in one manoeuvre. If the access serves all lots smaller than 1 hectare in size then the
 passing bay shall be constructed for the 90 percentile car.
- Visibility: Minimum sight distances to be in accordance with Standard Drawing R 25.
- Dimensions: Minimum dimensions are shown in Table 1. A grassed berm at least 2.5m shall be provided in one side of the carriageway for the provision of underground services.
- 4. Access and Gradient: The maximum carriageway gradient shall be 1 in 6 with the first 6 metres from edge of seal/metal at a gradient of 1 in 12. All lots relying on the access strip shall have a safe and practical access point to the formed carriageway to meet criteria herein.
- Subgrade: Subgrade shall exclude organic or wet material and shall be trimmed and compacted.
 Minimum CBR 7.0 or 33mm blow with scala penetrometer.
- Basecourse: Shall be GAP 40 or MAP 40 compacted to a dense state. Clegg impact value of 33 or better. Minimum compacted thickness shall be 100mm for unsealed access or 125mm for sealed access.
- Stormwater: Provision shall be made for the collection and disposal of stormwater. All upstream
 catchment shall be provided for. Consideration shall be given to scour and/or silting. All culverts
 shall be 300mm dia minimum installed to manufactures recommendations.
- Sealcoat: Shall be 2 coat chipseal Grade 4 (First Coat) and Grade 5 (Second Coat). Asphaltic concrete
 and cobblestone paving will be permitted subject to specific approval of details.
- 9. Curves and Corners: Minimum inside radius of curves shall be 9 metres.
- Accessway Width: The legal boundary of the accessway shall include all cut and fill batters and passing bays and if necessary minimum dimensions in Table 1 shall be increased.

Opotiki District Council	Standard Drawings	Not to Scale
	Standard Rural Access Strip	R 27



- 1. Formation: 100mm compacted metal basecourse.
- Where the road is sealed the entrance area (shown hatched) shall also be sealed. The sealed area is to be shaped so that stormwater does not migrate on to the Highway.
- Culverts and headwalls to be designed and installed to the approval of the Engineer. All culverts shall be 300mm dia minimum installed to manufacturers recommendations.
- Sight distances to comply with Standard Drawing R 25.
- 5. All work shall be carried out in a manner as to ensure the safety of road users.
- 6. Maximum gradient shall be 1 in 12 for first 6 metres from road edge line.
- Refer also to Standard Drawing R 27.

Opotiki District Council	Standard Drawings	Not to Scale
	Rural Vehicle Entrance (1 to 3 Lots)	R 28



Opotiki District Council	Standard Drawings	Not to Scale
	Rural Vehicle Entrance (4 or More Lots)	R 29

APPENDIX 5: Accidental Discovery Protocol

On any site it is possible that unrecorded archaeological sites are present below ground level and may be exposed by earthworks.

- 1. The following accidental discovery protocol applies:
 - a. If, at any time during site works, potential k\(\tilde{o}\)iwi, archaeology or artefacts of M\(\tilde{a}\)ori origin are discovered, then all site works including earth moving machinery must stop to avoid adverse effects on the k\(\tilde{o}\)iwi, archaeology or artefacts of M\(\tilde{a}\)ori origin
 - b. The site owner or the site manager must immediately advise the *Council* and the kaitiaki and kaumātua of the relevant iwi representatives and Heritage New Zealand Pouhere Taonga
 - c. The site owner or the site manager must secure the site until approval to proceed with work has been granted by *Council* in consultation with iwi representatives
 - d. Further work at the site must be suspended, should iwi representatives wish to carry out their procedures and tikanga for the site and the nature of the discovery
 - e. The site owner or the site manager must immediately arrange a site inspection by iwi representatives and their advisors and statutory agencies
 - f. The site owner or the site manager must ensure that representatives are available to guide those party to the site inspection through the site
 - g. The site inspection will determine whether the discovery is likely to be extensive and whether a thorough site investigation is required
 - h. Iwi representatives will determine the tikanga for appropriate preservation, management and handling of the kōiwi, archaeology or artefacts of Māori origin that are uncovered, which may include removal of the kōiwi, archaeology or artefacts of Māori origin from the site by Mana Whenua or preservation within the site
 - i. Preservation of the kōiwi, archaeology or artefacts of Māori origin that are uncovered may require amendments to the site works to avoid adverse effects on sites of significance to iwi representatives and Māori values
 - i. Work at the site must not recommence until approval has been granted by the council in consultation with iwi representatives.
- 2. Where kōiwi, archaeology or artefacts of Māori origin are uncovered during site works, the *Council* will work with iwi representatives to record the following information that will contribute to their knowledge base of their Māori cultural heritage:
 - a. site location
 - b. details of content
 - c. Carbon dating.

APPENDIX 6: Carparking provision guidance

This appendix applies to the Residential Zone, the Town Centre Zone, the Mixed Activity Zone, the Marine Services Zone and the Industrial Zone.

Where minimum parking rate requirements are not included in the relevant chapter, this appendix can be used for guidance on the number of carparks.

The dimensions and design standards for carparking are set out in Appendix 1.

Residential Zone

Dwellings 2 spaces per dwelling

Home occupations 1 space per 15m² of the site used for the activity

Visitor accommodation 1 to 4 people - 1 space in addition to the dwelling requirement

Over 4 people - 1 space per unit plus 2 for staff

Community activities 1 space per 20m² of net site area

Residential care facility 1 space per 3 beds plus one space for every two staff employed

on the site at any one time

Education facilities 2 spaces for visitors plus adequate and reasonable provision for

cars and buses to drop off and pick up students and:

Preschool 1 space per staff member

Primary 2 spaces per 3 staff members

Secondary 1 space per 20 students
Tertiary 1 space per 20 students

Places of assembly 1 space per 10m² total floor area

Retail activities 1 space per 15m² total floor area

Commercial Activities 1 space per 20m² total floor area

Food selling premises 1 space per 15m² total floor area

Police stations 1 space per 50m² total floor area

Community corrections 1 space for every 2 full time equivalent employees and

activities 1 space for every 10 people the facility is designed to service.

Emergency Services 5 spaces per emergency service vehicle bay

Seasonal worker 1 space for every 6 people accommodated on site

accommodation

Town Centre Zone

Retail activities 1 space per 20m² total floor area

Commercial Activities 1 space per 40m² total floor area

Service industries 1 space per 50m² total floor area

Police stations 1 space per 50m² total floor area

Emergency Service facilities 5 spaces for every emergency service vehicle bay

Residential accommodation 1 space per dwelling
Places of assembly 1 space per 5 persons

Visitor accommodation (1-4) 1 space per unit

Visitor accommodation (4+) 1 space per unit plus 2 for staff
Food selling premises 1 space per 20m² total floor area

Education facilities 2 spaces for visitors plus adequate and reasonable_provision

for cars and buses to drop off and pick up students and:

Preschool 1 space per staff member
Primary 2 space per 20 students

Secondary 1 space per 20 students
Tertiary 1 space per 20 students

Community corrections 1 space for every 2 full time equivalent employees and 1

activities space for every 10 people the facility is designed to service.

Seasonal worker 1 space for every 6 people accommodated on site

accommodation

Reduction in carparking where on-site bicycle stands are provided, where the reduction is one carparking space for every five bicycle spaces, provided that:

- a. For employee parking, where the bicycle stand(s) is secure and well-lit, and shower facilities for staff are provided, the above dispensation rate can be doubled (i.e., 2 spaces per 5 bicycle spaces provided).
- b. The maximum reduction in carparking spaces under these provisions is 10% of the number of carparking spaces.

Mixed Activity Zone

Dwellings 2 spaces per dwelling

Residential care facility 1 space per 5 beds plus 2 spaces for staff

Places of assembly 1 space per 5 persons accommodated

Visitor accommodation 1 to 4 people, 1 space per unit

Over 4 people, 1 space per unit plus 2 for staff

Education facilities 2 spaces for visitors plus adequate and reasonable

provision for cars and buses to drop off and pick up

students and:

Preschool 1 space per staff member

Primary 2 spaces per 3 staff members

Secondary 1 space per 20 students
Tertiary 1 space per 20 students

Commercial Activities 1 space per 40m² total floor area

Accessory retail activities 1 space per 20m² total floor area

Food selling premises 1 space per 20m² total floor area

Service industries 1 space per 50m² total floor area

Tradesmen's depots 1 space per 50m² total floor area

Police stations 1 space per 50m² total floor area

Community corrections 1 space for every 2 full time equivalent employees and

activities 1 space for every 10 people the facility is designed to

1 space per 50m² of display area

service

Emergency service facilities 5 spaces for every emergency service vehicle bay

Marine Services Zone

Vehicle and machinery sales

Marinas 0.6 space/wet berth

0.2 space/swing mooring

Retail activities1 space per 20m² total floor areaCommercial activities1 space per 40m² total floor areaFood selling premises1 space per 20m² total floor areaService industries1 space per 50m² total floor area

Places of assembly 1 space per 5 persons accommodated

Industrial Zone

Industrial activities1 space per 50m² total floor areaAccessory retail activities1 space per 20m² total floor areaCommercial activity1 space per 40m² total floor areaFood selling premises1 space per 20m² total floor areaService industries1 space per 50m² total floor areaContractors' depots1 space per 50m² total floor area

Dwelling 1 space per dwelling

Places of assembly 1 space per 5 persons accommodated

Education facilities 2 spaces for visitors plus adequate and reasonable

provision for cars and buses to drop off and pick up

students and

Preschool 1 space per staff member

Primary 2 spaces per 3 staff members

Secondary 1 space per 20 students
Tertiary 1 space per 20 students

Police stations 1 space per 50m² total floor area

Community corrections 1 space for every 2 full time equivalent employees and

activities one space for every 10 people the facility is designed to

service.

Cool Stores 1 space for every 500m² total floor area.

Emergency service facilities 5 spaces for every 1 emergency vehicle bay

Seasonal worker 1 space for every 6 people accommodated

accommodation

Appendix 7: Deer Fencing Standards and Goat Farming Fence Standards

Deer Fencing Standards

1. Minimum fence *height* above ground

2m.

2. <u>Line wires</u>

All line wires fastened to inside of posts with the exception of angle posts.

3. Wire spacings

Minimum of 8 wires up to 1.2m high, maximum of 150mm apart.

Minimum of 5 wires above 1.2m high, maximum of 250mm apart.

4. Height above ground to first wire

No greater than 75mm.

5. <u>Batten and stay wire spacings</u>

(a) Netting

Maximum 300mm up to 1.2m high. Above 1.2m maximum 800mm. No hinge joint netting with stay wire spacings greater than 200mm to be used for up to 1.2m in fence *height*.

(b) Battens

Maximum 600mm apart (fallow);

Maximum 800mm apart (other deer species).

6. Wire gauge

2.5mm galvanised high tensile or wire equal to or of greater tensile strength.

7. Post spacings

Maximum 5m.

8. <u>Post sizes</u>

- (a) Rounds minimum 100mm small end diameter
- (b) Half rounds 175mm minimum face width
- (c) Quarter rounds 100mm smallest face width; or

(d) A post length of 2.7m or the operative New Zealand Deer Farmers Industry Standard, whichever is the more stringent.

9. Strainer posts

- (a) Rounds Minimum of 175mm small end diameter; or
- (b) Minimum post length of 3.0m.

10. Strainer distances

Maximum of 400m.

11. Stays

Minimum of 120mm small end diameter and minimum length of 2.7m. Tie backs and internal angle stays are acceptable.

12. Footings

Responsibility of person erecting the fence to use suitable footings according to soil types and other soil conditions.

13. Top-up fences

Base fence must be in a sound condition, contain minimum of 8 line wires up to 1.2m with maximum wire spacings no greater than listed above. Every second post in the base of the fence will be a deer fence post. All strainer posts will be subject to the requirements above.

14. Gates

- (a) **Timber** minimum *height* of 1.9m. Rails minimum 100mm x 25mm. Three uprights (one centred) and two diagonal stays on each side of gate. Minimum of M10 bolts to be used. Rail spacings to 0.2m high maximum 100mm apart. Above 1.2 maximum 150mm apart.
- (b) **Steel** minimum *height* over frame of 1.9m, minimum wall thickness of 3mm. Internal diameter 25mm. Gate covered with chain link of maximum aperture of 75mm and minimum wire gauge of 3.15mm. Mesh should be laced with minimum 2mm gauged wire. Hardfill under all external gates.

15. Gate hinges

Hinges and gudgeons to be a minimum of 20mm diameter. One hinge reversed or otherwise constructed to prevent the gate from being lifted off.

16. Gate Locks

Must comprise a sturdy chain and padlock.

17. Hanging Gates

Hung gates must butt against the full inside surface of the latching post and open inwards.

18. Flood Gates

Fences across streams and waterways shall require a floodgate that does not allow deer to pass through. Flood gates across culverted water courses shall be on the downstream side of the culvert.

19. Staples

- (a) **Post** minimum of 50mm in length and minimum gauge of 4.0mm
- . Batten Softwood minimum of 30mm in length and minimum gauge of 3.15mm
- . **Hardwood** minimum of 27mm x 2.8mm
- (b) Steel fasteners for concrete posts can be used.

20. Netting

No hinge joint netting with spacings greater than 200mm. Stay wire spacings shall be used below 1.2m in *height* above ground level.

Goat farming boundary fence standards:

- 1. Bulldozed line or benching or some other method, if required, to ensure that the bottom wire is no more than 70mm above ground level.
- 2. Nine wire post and batten fence, to be kept tight at all times, with no internal or external stays.
 - (a) Minimum high tensile 2.5mm diameter galvanized steel
 - (b) Bottom wire should be placed at 70 mm above ground level and, above that, wires placed at the following intervals 100, 100, 100, 110, 120, 135, 150 and 165mm
 - (c) The top wire should be approximately 50 mm below the top of the post.
- 3. Bottom wire shall be barbed wire instead of high tensile wire where the fence is situated on land subject to erosion.
- 4. Posts to be at the following intervals:
 - (a) less than 30 degrees ground slope: 5m
 - (b) 30 degrees to less than 45 degrees: 4m
 - (c) 45 degrees or more: 3m
- 5. Battens to be at 1m intervals

APPENDICES

- 6. All fences regularly checked and maintained to the above standards
- 7. Fences across streams and waterways shall require a floodgate that does not allow goats to pass through. Floodgates shall be constructed of H3 treated 100mm x 50mm timber suspended from an overhead wire or rail in such a way that the spacings will allow the passage of water but will not allow stock including goats to pass through. A cross-bar shall be positioned in the top third of the floodgate. Wire netting will not be used in floodgate construction.
- 8. Fences along watercourses shall be constructed alongside the *waterbody* with an appropriate setback to avoid possible slumping which may cause a breach of the fencing standard.