

Designation Schedule - Kordia Ltd

Number	Purpose	Location
3300	Microwave transmission corridor ...	100 Victoria Street West, Central Auckland to 539 Scenic Drive, Waiatarua
3301	Broadcasting and telecommunications facility ...	539 Scenic Drive, Waiatarua
3302	Broadcasting and telecommunications facility ...	Kaipara Hills Road (Pt Allotment 201 Psh Tauhoa), Kaipara Hills
3303	Broadcasting and telecommunications facility ...	Section 1 Survey Office Plan 557618, 192A Browns Bay Road, Pine Hill
3304	Broadcasting and telecommunications facility ...	Repeater Road (Pt Allotment 33 Psh of Atou and Pt Allotment 65A Psh of Atou), Hunua Ranges

3300 Microwave Transmission Corridor

Designation Number	3300*
Requiring Authority	Kordia Ltd
Location	100 Victoria Street West, Auckland Central to 539 Scenic Drive, Waiaurua
Roll Over Designation	Yes
Legacy Reference	Designation 301, Auckland Council District Plan (Central Area Section) 2005; Designation B0802, Auckland Council District Plan (Isthmus Section) 1999; and Designation K2, Auckland Council District Plan (Waitakere Section) 2003
Lapse Date	Given effect to (i.e. no lapse date)

*Joint Kordia Ltd and Television New Zealand Ltd (Designation 8301) designation from 100 Victoria Street West, Auckland Central to Ponsonby Road, Ponsonby. Kordia Ltd only designation from Ponsonby Road to 539 Scenic Drive, Waiaurua.

Purpose

Microwave transmission corridor – a protection corridor of specified height (elevation above sea level) and width through which no building, structure or tree can pass to ensure continuity of a microwave linking / transmission path from the TVNZ Broadcasting Centre at 100 Victoria Street West, Central Auckland to the Waiaurua transmission tower at 539 Scenic Drive, Waiaurua.

Conditions

1. All masts, antennas, aerials and other facilities must comply with New Zealand Standard NZS2772.1:1999 or any amendments, at all times.

The following table shows, at specific points along the path of the corridor, the width of the corridor and the base height of the corridor. Intermediate widths and heights shall be determined by extending straight lines between adjacent points.

The 19.3km corridor runs between 100 Victoria Street West, Central Auckland, being 803494.03mN, 399729.84mE and 539 Scenic Drive, Waiaurua, being 794818.46mN, 382527.82mE (Points A and E respectively in the 'Key specific points' annotation following the table).

Levels provided are in terms of Auckland Vertical Datum (MSL) 1946; Origin SM 6181 SO 53103C RL=30.645. Coordinates are in terms of Geodetic datum Mount Eden Circuit.

Path Length (KM)	Corridor Width (m)	Maximum Obstruction Height above Mean Sea Level (m)
0.000 (a)	6.8	62.6
0.025	6.8	63.0
0.050	6.8	63.4
0.075	6.8	63.8

Path Length (KM)	Corridor Width (m)	Maximum Obstruction Height above Mean Sea Level (m)
0.100	6.8	64.2
0.125	6.8	64.6
0.150	6.8	65.0
0.175	6.8	65.4
0.200	6.8	65.8
0.225	6.8	66.2
0.250	6.8	66.6
0.275	6.8	67.0
0.300	6.8	67.3
0.325	6.8	67.7
0.350	6.8	68.1
0.375	6.8	68.5
0.400	6.8	68.9
0.425	6.8	69.3
0.450	6.8	69.7
0.475	6.8	70.1
0.500	6.8	70.5
0.525	6.8	70.9
0.550	6.8	71.3
0.575	6.8	71.7
0.600	6.8	72.1
0.625	6.8	72.5
0.650	6.8	72.9
0.675	6.8	73.3
0.700	6.8	73.7
0.725	6.8	74.1
0.750	6.8	74.5
0.775	6.8	74.9
0.800	6.8	75.3
0.825	6.8	75.7
0.850	6.8	76.1
0.875	6.8	76.5
0.900	6.9	76.8
0.925	7.0	77.2

Path Length (KM)	Corridor Width (m)	Maximum Obstruction Height above Mean Sea Level (m)
0.950	7.1	77.6
0.975	7.2	77.9
1.000	7.3	78.3
1.10	7.6	79.7
1.20	7.9	81.1
1.30	8.2	82.6
1.40	8.5	84.1
1.50 (b)	8.8	85.5
1.60	9.1	87.0
1.70	9.3	88.5
1.80	9.6	90.0
1.90	9.8	91.5
2.00	10.0	93.0
2.10 (c)	10.2	94.5
2.20	10.4	96.1
2.30	10.6	97.6
2.40	10.8	99.1
2.50	11.0	100.7
2.60	11.2	102.2
2.70	11.4	103.8
2.80	11.6	105.3
2.90	11.7	106.9
3.00	11.9	108.4
3.10	12.1	110.0
3.20	12.2	111.6
3.30	12.4	113.2
3.40	12.5	114.7
3.50 (d)	12.7	116.3
3.60	12.8	117.9
3.70	12.9	119.5
3.80	13.1	121.1
3.90	13.2	122.7
4.00	13.3	124.3
4.5	13.9	132.4

Path Length (KM)	Corridor Width (m)	Maximum Obstruction Height above Mean Sea Level (m)
5.0	14.4	140.6
5.5	14.8	148.8
6.0	15.2	157.2
6.5	15.5	165.6
7.0	15.8	174.2
7.5	16.0	182.8
8.0	16.2	191.4
8.5	16.3	200.2
9.0	16.4	209.0
9.5	16.4	218.0
10.0	16.4	227.0
10.5	16.4	236.0
11.0	16.3	245.2
11.5	16.1	254.4
12.0	15.9	263.7
12.5	15.7	273.1
13.0	15.4	282.6
13.5	15.1	292.1
14.0	14.7	301.8
14.5	14.2	311.5
15.0	13.7	321.3
15.5	13.1	331.2
16.0	12.4	341.2
16.5	11.6	351.4
17.0	10.6	361.6
17.5	9.6	372.0
18.0	8.2	382.5
18.5	6.8	393.2
19.0	6.8	403.2
19.1	6.8	405.2
19.2	6.8	407.2
19.3 (e)	6.8	409.2

Key specific points:

a. Network Centre;

- b. Ponsonby Road;
- c. Corner of Richmond Road and Chamberlain Street;
- d. Corner of Old Mill Road and West View Road; and
- e. Waiaituru.

2. Any significant increase in radio frequency energy levels from this source shall comply with any statutory regulation controlling radio frequency exposure levels.

Attachments

None.

3301 Waiatarua Broadcasting and Telecommunications Facility

Designation Number	3301
Requiring Authority	Kordia Ltd
Location	539 Scenic Drive, Waiatarua
Roll Over Designation	Yes
Legacy Reference	Designation K1, Auckland Council District Plan (Waitakere Section) 2003
Lapse Date	Given effect to (i.e. no lapse date)

Purpose

Broadcasting and telecommunications facility the continued operation of the existing broadcasting and telecommunications facility including two lattice towers of 121.9m and 27.5m height, a transmission building with roof top antenna mounting gantry, broadcasting and telecommunication antennas, and ancillary and associated works including power transformer, backup power generator etc.

Conditions

1. The Notice shall be given effect to in accordance with the requirement/application and assessment of effects on the environment prepared by Hey Consulting 2011 Limited, and Plans titled 'Waiatarua Tower Layout' being drawing number 18141101, 'Waiatarua Tower Locations', "Waiatarua Tower No 2 Antenna Locations" 18141102, "Waiatarua Building East Gantry Antenna Locations" 18141103 and "Waiatarua Site Plan" being drawing Ref 18141010.
2. An Outline Plan is not required for the addition and replacement of antennas on the existing tower provided the antenna including the mount, the shroud, and ancillary equipment shall fit within the dimensions of a square shape in plan view that, when measured from the centre of the tower base, does not increase the effective visual width of the tower by more than 50% (see attached Diagram 1).
3. An Outline Plan is not required for the addition or replacement of antennas attached to or above the existing transmission building provided that:
 - a. No gantry, pipe mount or antenna extends to an elevation greater than 3m above the roof line of the building; and/or
 - b. No antenna affixed to a building measures greater than 1.2m in dimension.
4. No new structures having a height of more than 2m shall be erected on the site without submission of an Outline Plan of works pursuant to section 176A of the Resource Management Act 1991 other than the antennas or supporting infrastructure as set out in conditions 2 and 3 above or as provided for by any other national standards.
5. Structures which are either intended to replace existing structures or any temporary structures erected for the purposes of allowing maintenance or repair of existing structures are permitted provided that any temporary or replaced structures are removed once any such replacement, maintenance or repair has been completed.
6. Only two telecommunications tower shall be on the site with the main tower having a maximum height of 121.9m and a secondary tower having a maximum height of 27.5m including any attachments.
7. Radio frequency radiation emissions from the site shall comply with NZS 2772.1:1999 Radio Frequency Fields (Maximum Exposure Levels 3kHz to 300GHz).

Building East Gantry Antenna Locations

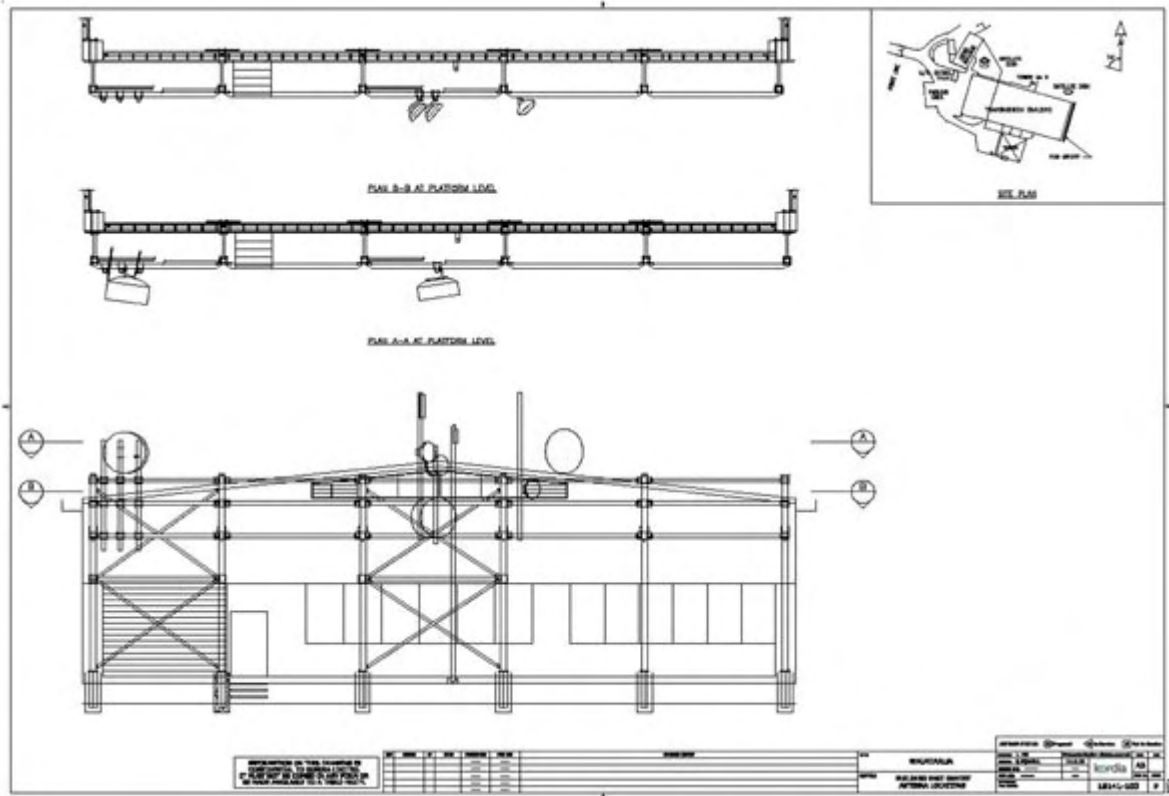
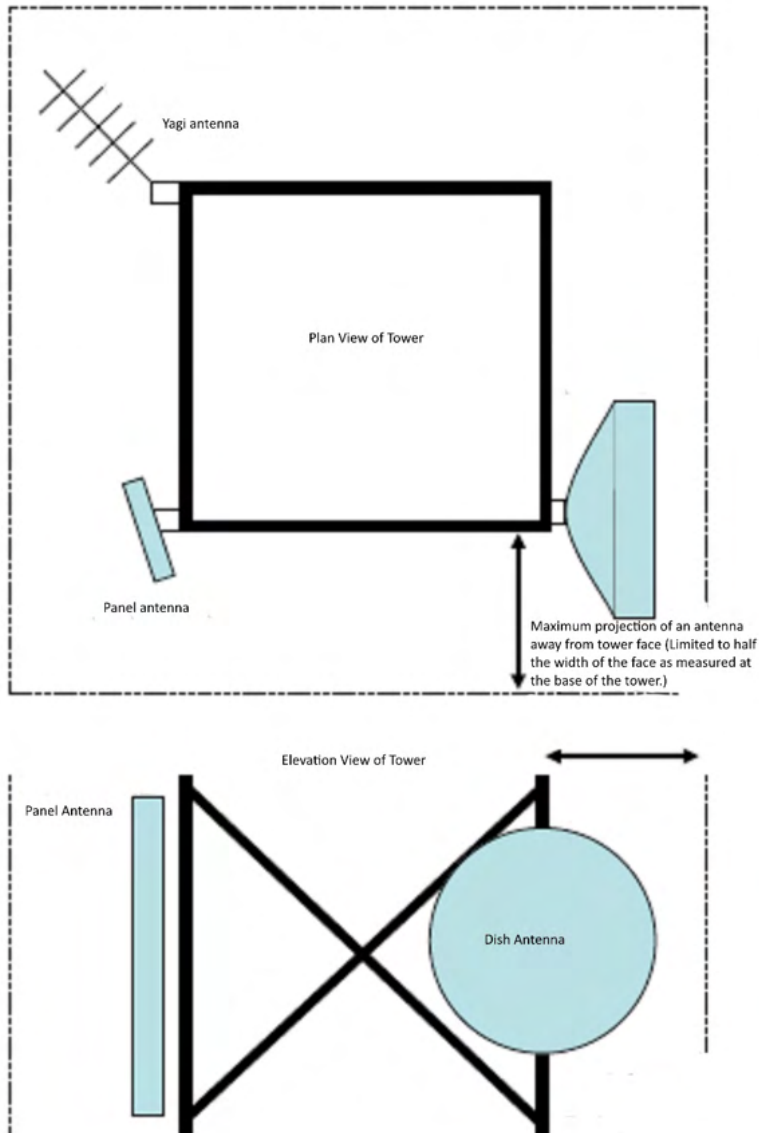


Diagram 1 - Depiction of Antenna Size Condition and Potential Effect

Depiction of Antenna Size Condition and Potential Edge Effect



3302 Kaipara Hills Broadcasting and Telecommunications Facility

Designation Number	3302
Requiring Authority	Kordia Ltd
Location	Kaipara Hills Road, (Pt allotment 201 Psh Tauhoa) Kaipara Hills
Roll Over Designation	Yes
Legacy Reference	Designation 970, Auckland Council District Plan (Rodney Section) 2011
Lapse Date	Given effect to (i.e. no lapse date)

Purpose

Broadcasting and telecommunications facility – the continued operation of the existing broadcasting and telecommunications facility including a monopole mast of 23m height, a transmission building with ancillary and associated works including power transformer, backup power generator etc.

Conditions

1. General

The activity shall proceed in general accordance with the Notice Of Requirement submitted to council, dated 31st August 2000, and attached plans drawn by Connell Wagner Ltd, Numbered 4290NT/A01, A02, C01, C02, and C03, and plans drawn by WoodwardClyde (NZ) Ltd Numbered AA28110026/01/A001 and AA28110026/01/S001 including the recessive colour scheme proposed.

2. Additional Equipment

The following equipment shall be permitted to be attached to or erected on the mast and associated structures or elsewhere on the site, on a permanent basis without the provision of an Outline Plan pursuant to section 176A of the Resource Management Act in terms of conditions 1 above:

- a. A steel unipole mast of up to 23m height with an additional 2m lightning rod located at the top of the mast;
- b. Up to six (6) dish antennas with a diameter greater than 2.5m, but less than 5.0m;
- c. Broadcasting, telecommunication and radio communication antennas including whip, grid, yagi, dipoles and panels or similar ancillary equipment, but no single antenna shall have a solid frontal surface area of greater than 5.0m² or 2.5m in diameter in the case of dish antennas unless otherwise specified in (b) above;
- d. Up to two single storey equipment shelters with a combined floor area of less than 50m²; and
- e. A vehicular access track between the level area of the proposed mast and the road adjacent together with an area for parking and turning adjacent to the main structures.

3. New Structures

No new structures greater than 2m in height shall be erected on the site without the submission of an Outline Plan pursuant to section 176A of the Resource Management Act other than those provided for in Condition 2 above, or those permitted under other nationally controlling standards or structures on the site, or any other temporary structures erected for the purposes of allowing maintenance or repair of existing structures (providing that such temporary structures will be removed once any such maintenance or repair has ceased).

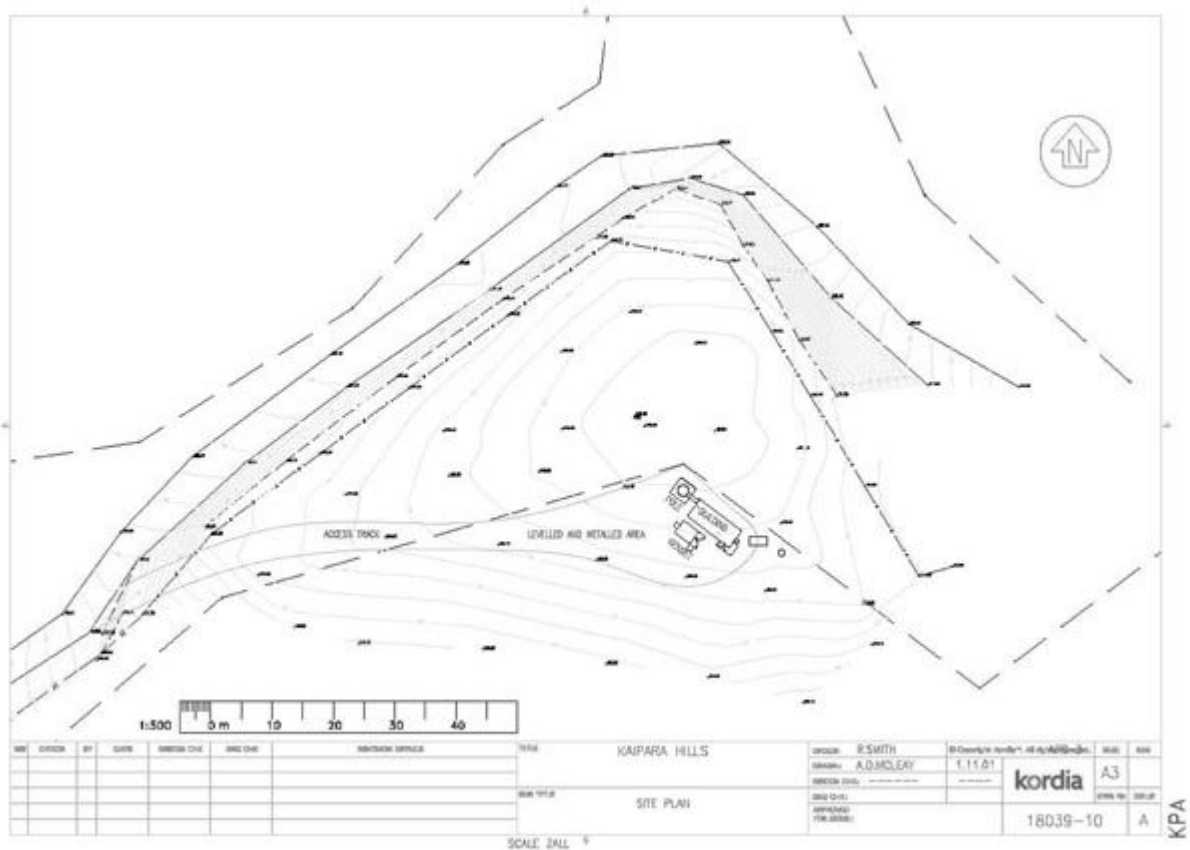
4. Radio Frequency Exposure

- a. The Broadcasting and telecommunications facility shall be operated so that it satisfies the requirements of NZS2772.1:1999 in respect of all areas to which the public may have access.

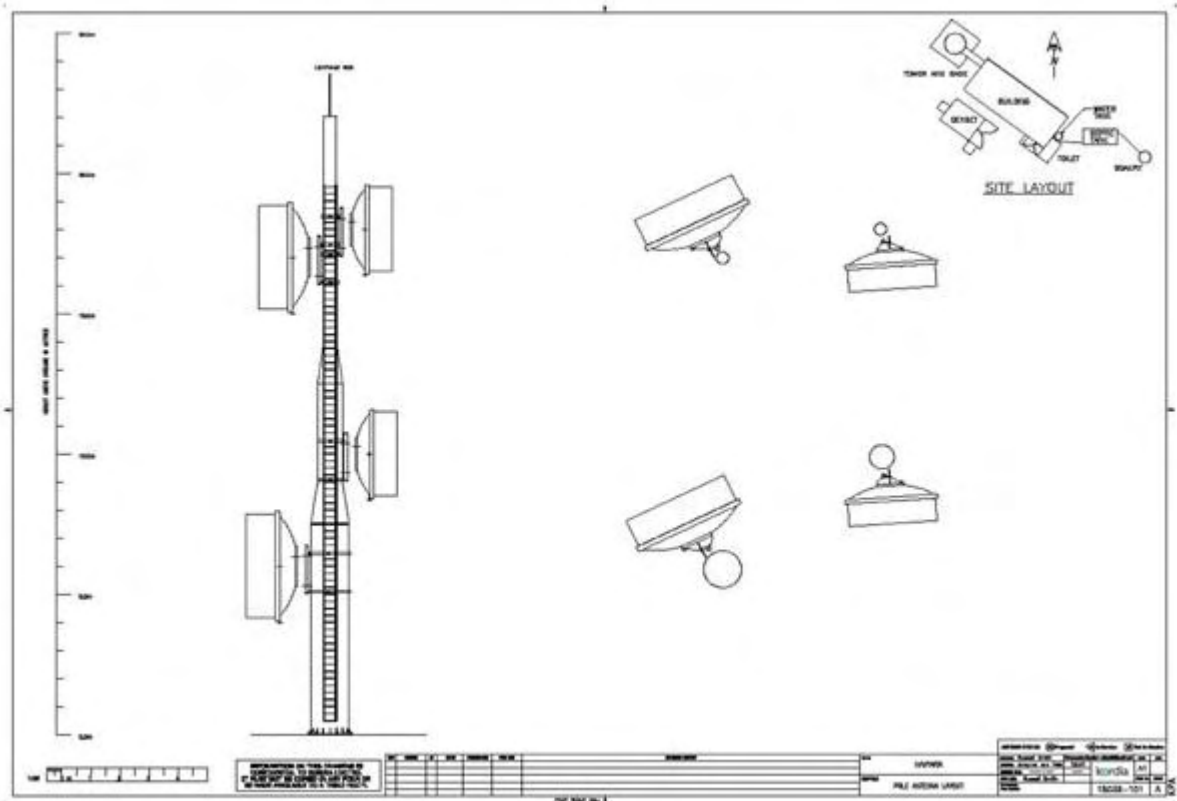
- b. A report from a suitably qualified person shall be submitted to the satisfaction of the Consents Manager within three months of the installation commencing operation, confirming that the site is operating in accordance with the NZS2772.1:1999.
- c. If the levels do not comply with NZS2772.1:1999, operation shall cease until such time as measures are put in place to ensure compliance with the standard

Attachments

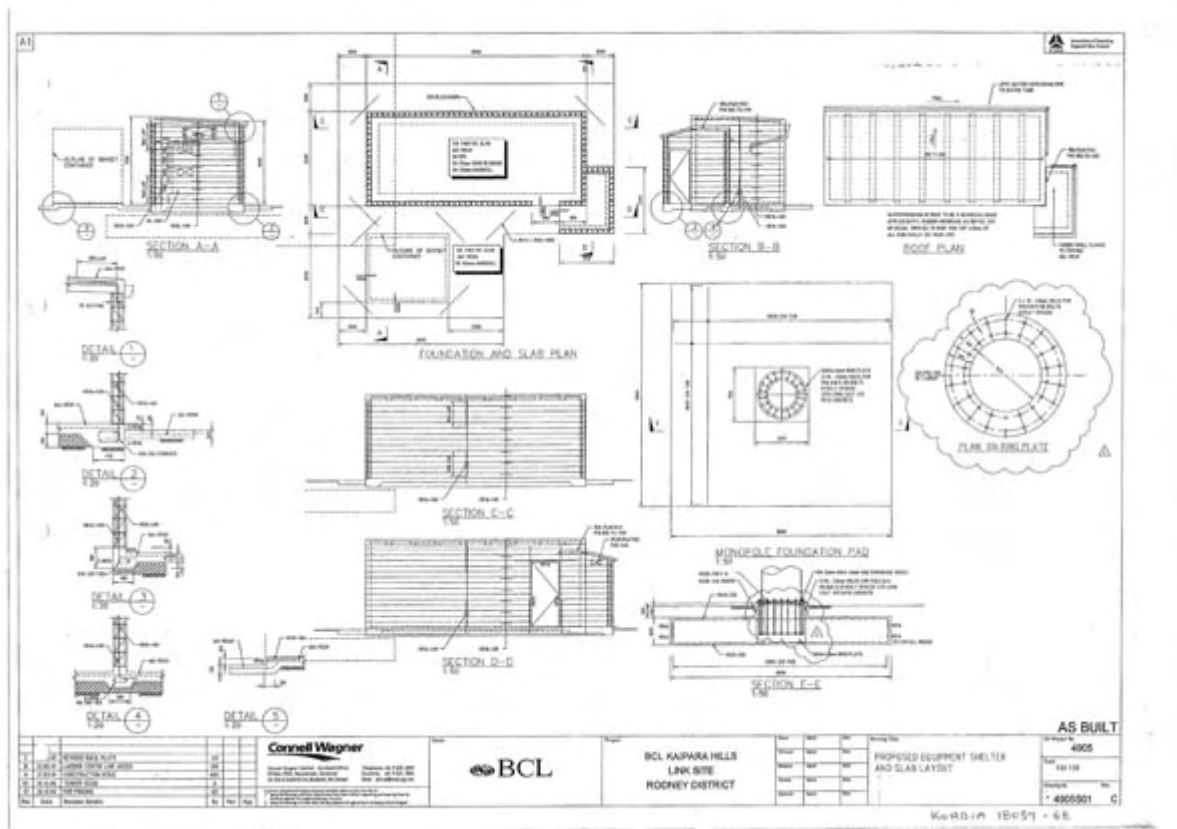
Site Plan



Pole Antennae Layout



Proposed Equipment Shelter and Slab Layout



3303 Pine Hill Broadcasting and Telecommunications Facility

Designation Number	3303
Requiring Authority	Kordia Ltd
Location	Section 1 Survey Office Plan 557618, 192A Browns Bay Road, Pine Hill
Roll Over Designation	Yes
Legacy Reference	Designation 184, Auckland Council District Plan (North Shore Section) 2002
Lapse Date	Given effect to (i.e. no lapse date)

Purpose

Broadcasting and telecommunications facility the continued operation of the existing broadcasting and telecommunications facility including a monopole mast of 27.5m height, a transmission building with ancillary and associated works and activities.

Conditions

1. The following equipment shall be permitted to be attached to or erected on the existing mast, on a permanent basis without the provision of any outline plan of works pursuant to section 176A of the Resource Management Act 1991:
 - a. Broadcasting, telecommunication and radio communication antennas including, whip, grid, yagi, dipoles and panels or similar ancillary equipment, but no single antenna dish or panel shall have a solid frontal surface area of greater than 0.6m² or dimension greater than 1.2m in length or 0.6m in width;
 - b. No part of an antenna may project a horizontal distance greater than 1.4m from the face of the mast measured radially on an axis from the centre of the mast to the furthest edge of the antenna.
2. Antennas defined in Condition 1 may only be mounted on the Mast and or the telecommunications building. No antennas or additional masts may be mounted elsewhere on the site or the access to the site from Browns Bay Road without the provision of an outline plan of works.
3. No new structures greater than 2m in height shall be erected on the site without the submission of an Outline Plan pursuant to section 176A of the Resource Management Act other than those provided for in Condition 1 above, those permitted by National Environmental Standards or structures on the site, or any other temporary structures erected for the purposes of allowing maintenance or repair of existing structures (providing that such temporary structures will be removed once any such maintenance or repair has ceased).
4. Structures which are either intended to replace existing structures or any temporary structures erected for the purposes of allowing maintenance or repair of existing structures are permitted (provided that such temporary structures will be removed once any such maintenance or repair has ceased).
5. Only one monopole telecommunications mast shall be on the site with a maximum height of 27.5m including any attachments (makes provision for a lightning rod).
6. The maximum area of buildings permitted on the site shall be a sum total of 40m² and shall have a height no greater than 5m above ground.
7. All new antennas shall be grey (or similar) in colour with a reflectivity less than 33% as measured by the British Standard BS5252 colour range.

8. The Broadcasting and telecommunications facility shall be operated so that it satisfies the requirements of NZS2772.1:1999 in respect of all areas to which the public may have access.

9. The noise levels generated by the activity must at all times comply with the permitted noise standards of the Auckland Unitary Plan.

10. Kordia is responsible for ensuring that any third parties services located on the mast do not interfere with the transmission of telecommunication and radio communication services.

Advice Notes

1. Any works outside the 'envelope of effects' established by the conditions of the Notice of Requirement (as above) will require an alteration to the designation to be lodged and processed in accordance with Section 181 of the Resource Management Act 1991.

Attachments

Site and Locality Plan



3304 Hunua Broadcasting and Telecommunications Facility

Designation Number	3304
Requiring Authority	Kordia Ltd
Location	Repeater Road (Pt Allotment 33 Psh of Atou and Pt Allotment 65A Psh of Atou), Hunua Ranges
Roll Over Designation	Yes
Legacy Reference	Designation 17, Auckland Council District Plan (Franklin Section) 2000
Lapse Date	Given effect to (i.e. no lapse date)

Purpose

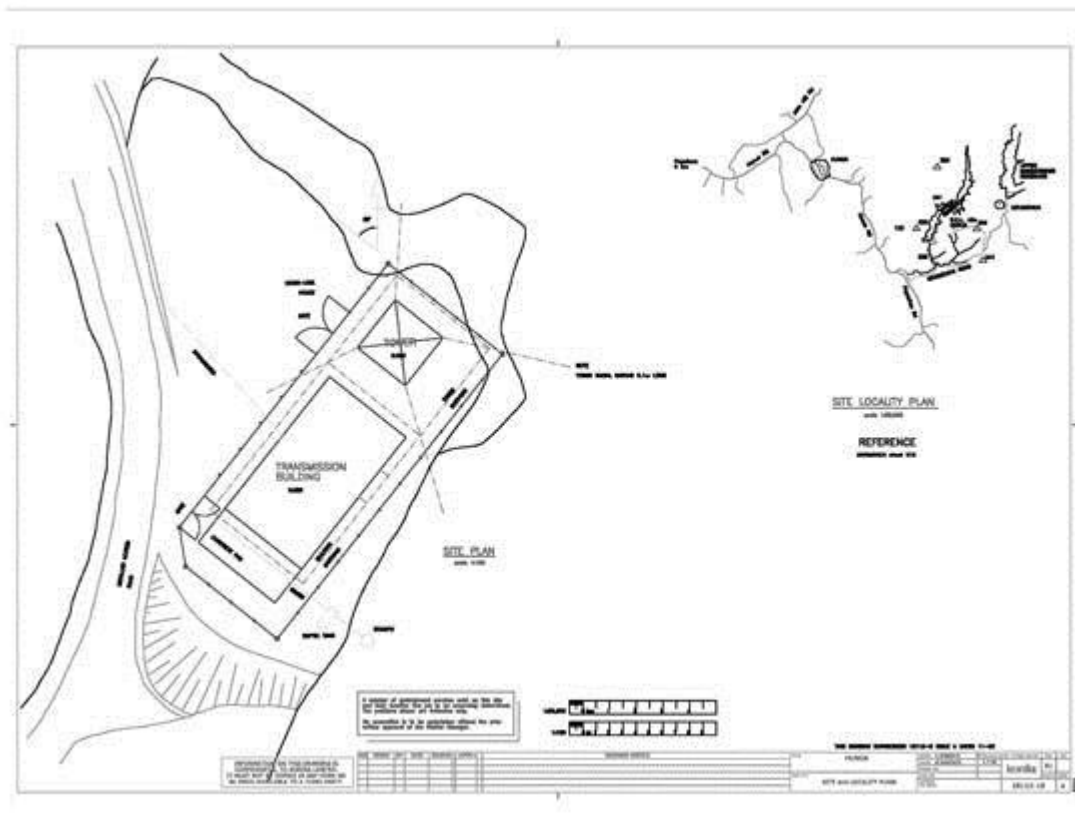
Broadcasting and telecommunications facility the continued operation of the existing broadcasting and telecommunications facility including a lattice tower of up to 28m in height, a transmission building with ancillary and associated works including power transformer, backup power generator etc.

Conditions

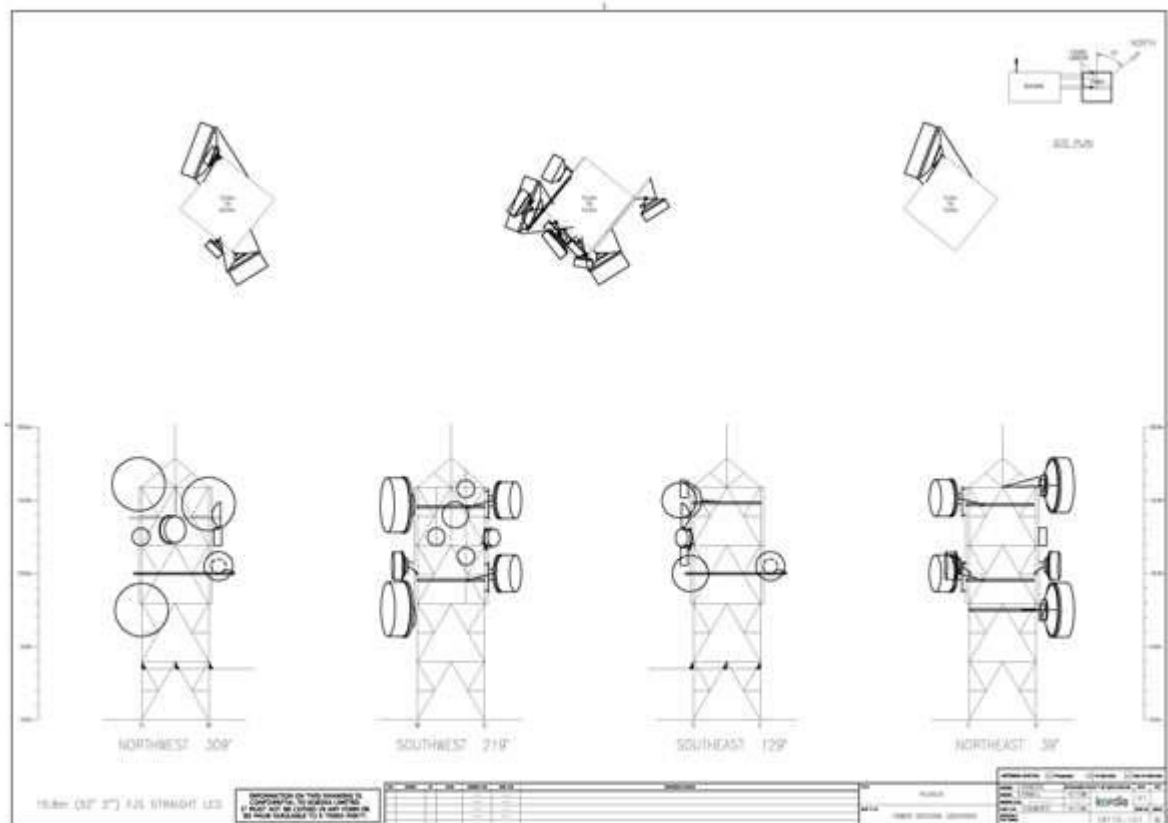
1. The Notice shall be given effect to in accordance with the requirement/application and assessment of effects on the environment prepared by Hey Consulting 2011 Limited, and Plans titled 'Hunua Tower Layout' being drawing number 18115101, 18115101mod and 'Hunua Site and Locality Plans' being drawing Ref 18115102.
2. An Outline Plan is not required for the addition and replacement of antennas on the existing tower provided the antenna including the mount, the shroud, and ancillary equipment shall fit within the dimensions of a square shape in plan view that, when measured from the centre of the tower base, does not increase the effective visual width of the tower by more than 50% (see attached Diagram 1).
3. No new structures greater than 2m high shall be erected on the site without submission of an Outline Plan of works pursuant to section 176A of the Resource Management Act 1991 other than the antennas or supporting infrastructure as set out in conditions 2 and 3 above or as provided for as a permitted activity in any nationally controlling standards.
4. Structures which are either intended to replace existing structures or any temporary structures erected for the purposes of allowing maintenance or repair of existing structures are permitted provided that any temporary or replaced structures are removed once any such replacement, maintenance or repair has been completed.
5. Only one telecommunications tower shall be on the site with a maximum height of **28m** including any attachments. This includes the provision for a lightning rod.
6. Radio frequency radiation emissions from the site shall comply with NZS 2772.1:1999 Radio Frequency Fields (Maximum Exposure Levels 3kHz to 300GHz).

Attachments

Site and Locality Plan



Tower Antennae Locations



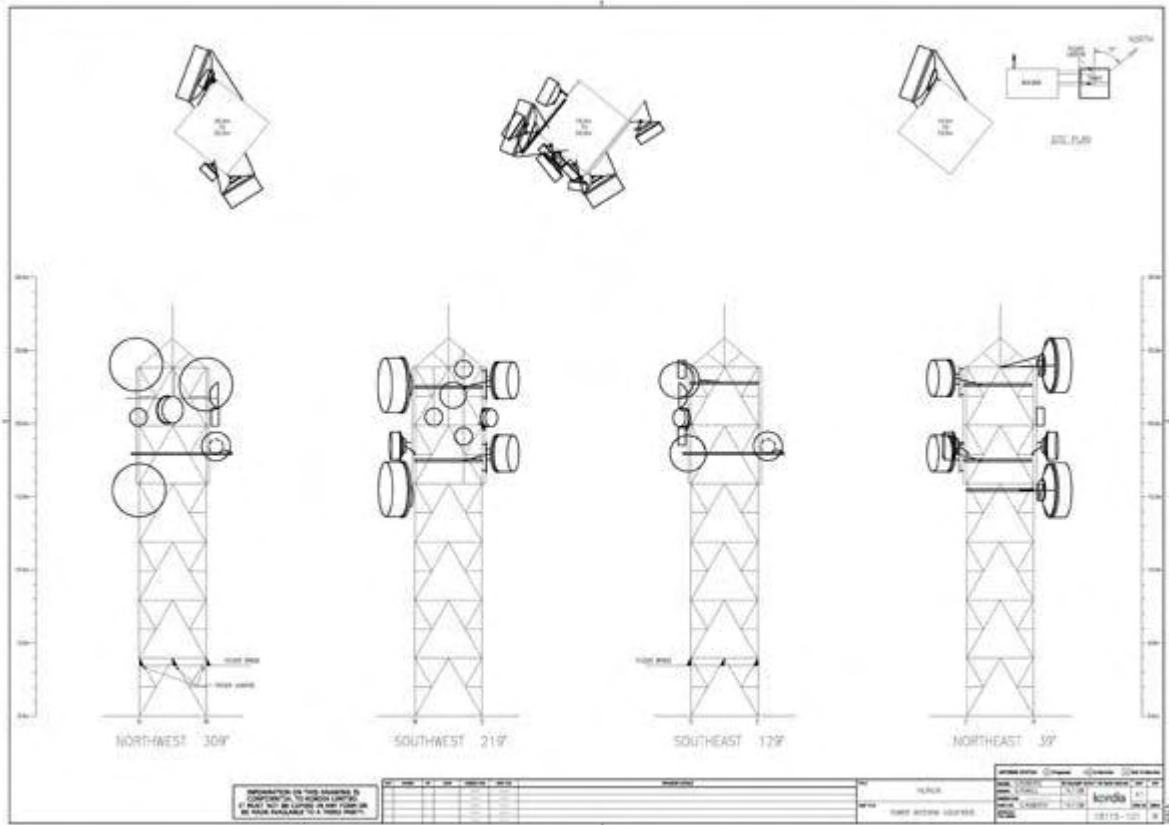


Diagram 1 - Depiction of Antenna Size Condition and Potential Effect

Depiction of Antenna Size Condition and Potential Edge Effect

