

**REPORT TO THE STATUTORY
MANAGEMENT COMMITTEE**

**NOTICE OF REQUIREMENT LODGED BY
WEL NETWORKS LIMITED FOR AN
ELECTRICITY SUBSTATION
BORMAN ROAD, ROTOTUNA**

DECEMBER 2007

**HAMILTON CITY COUNCIL
REPORT FOR STATUTORY MANGEMENT COMMITTEE**

REQUIRING AUTHORITY:	WEL Networks Limited
PROPOSAL:	Notice of Requirement to designate land for an Electricity Substation.
LOCATION:	Site located on the southern side of Borman Road approximately 50 metres west of the Resolution Drive/Borman Road intersection. The site is 1,536m ² in size and broadly rectangular in shape.
LEGAL DESCRIPTION:	Part of land legally described as Allotment 518 Kirikiriroa Parish (SO 48706). The land is owned by The Roman Catholic Bishop of the Diocese of Hamilton.
ZONING:	The site is zoned as Residential Zone under the Hamilton City Proposed District Plan.
RECOMMENDATION:	Confirm the Requirement with Conditions.

This report has been prepared by Craig Sharman, an Environmental Consultant with Environmental Management Services Limited (EMS), to provide an independent planning evaluation and recommendation to the Statutory Management Committee on the notice of requirement.

Table of Contents

Table of Contents	3
1 Introduction	5
1.1 Background	5
1.3 Requiring Authority Status and Designations	5
1.8 Statutory Matters	6
1.10 Other Consents Sought	7
1.11 Consultation.....	7
1.13 Notification	7
2 The Proposal	8
2.1 Nature of the Proposed Public Work	8
2.3 Nature of Proposed Restrictions	9
2.4 Site to which the Notice of Requirement Applies.....	9
3 Statutory Assessment	10
3.2 Submissions Received	11
3.5 Part II Matters	11
3.6 Section 5 - Purpose of the RMA	11
3.8 Section 6 - Matters of National Importance	12
3.11 Section 7 - Other Matters	12
3.14 Section 8 - Treaty of Waitangi	13
3.15 Relevant Statutory Planning Documents	13
3.16 National Policy Statements	13
3.17 Regional Planning Documents	13
3.19 Hamilton City Proposed District Plan	14
3.34 Section 171(1)(b) - Consideration of Alternatives.....	17
3.43 Section 171(1)(c) - Necessity of the Works and the Designation.....	19
3.50 Section 171(1)(d) – Other Matters.....	20
3.51 City Scope	20
3.56 Rototuna Structure Plan.....	21
4 Assessment of Environmental Effects	21
4.3 Visual and Amenity Effects	22
4.21 Noise	26
4.27 Electric and Magnetic Fields	27
4.33 Hazardous Substances.....	28
4.38 Traffic Effects.....	28
4.40 Construction Effects.....	29
4.42 Heritage/Cultural.....	29
4.44 Ecology.....	29
4.45 Infrastructure	29
4.49 Other Issues	30

5 Conclusions 30

6 Recommendation..... 31

Appendices

Appendix A – Notice of Requirement as Publicly Notified

Appendix B – Revised Plans and Further Information Received

Appendix C – Summary of Submissions

Appendix D – Copies of Submissions Received

Appendix E – Review of Proposed Horsham Downs Substation – EMF Issues

Appendix F – Other Correspondence

1 Introduction

Background

- 1.1 This report provides an assessment of a notice of requirement for an 'Electricity Substation' lodged with Hamilton City Council ('the Council') dated 8 August 2007 from WEL Networks Limited ('WEL'). The notice of requirement details the proposal to designate a 1536m² block of land for the purposes of establishing an electricity substation. The proposal consists of a building containing all of the electrical substation equipment, surrounded by a sealed yard and landscaping. Access to and from the site is directly from Borman Road approximately 75 metres from the Resolution Drive/Borman Road roundabout. A full description of the proposed works and the nature of the restrictions that would apply are provided in Section 2 of this report. A copy of the notice of requirement is attached as Appendix A. Further information received by WEL with revised plans is attached as Appendix B.
- 1.2 This report considers the notice of requirement lodged by WEL (as revised by the further information lodged following public notification), the decisions sought in the submissions received, and the statutory provisions of the Resource Management Act 1991 ('the Act'), and makes a recommendation to the committee. In particular, the report considers whether the Council should recommend to WEL either to confirm the requirement, modify the requirement, impose conditions, or withdraw the requirement.

Requiring Authority Status and Designations

- 1.3 WEL is a requiring authority approved under Section 167 of the Act. Approval of WEL Networks as a requiring authority was advertised in the Gazette in March 2004. A copy of this notice is attached to the notice of requirement as Annexure 1.
- 1.4 A requiring authority can at any time give notice to a territorial authority (i.e. Council) of its requirement to designate a site or route. A designation is a provision made in a district plan which relates to a parcel of land and authorises a requiring authority to carry out its work without the need for resource consents from Council. Once a designation is confirmed, the requiring authority can do anything within a designated area that is in accordance with the purpose of the designation without restriction from the district plan, subject to compliance with any conditions imposed on the designation.
- 1.5 Section 176A of the Act makes provision for outline plan applications to be submitted to the territorial authority prior to construction. Outline plans are not required where:
- the details of the proposed public work or project are incorporated into the designation; or
 - the territorial authority waives the requirement for an outline plan; or
 - the work or project has been otherwise approved under this Act.
- 1.6 The purpose of an outline plan is to enable territorial authorities to assess the detail of the site layout, and the buildings and structures associated with a public work, and are required to be lodged prior to construction of those buildings and structures.

- 1.7 WEL have indicated the project will be constructed in accordance with the detail and information contained in the notice of requirement. Therefore in this instance, an outline plan would only be required if the design of the project changed significantly from that submitted with the notice of requirement, or if any future works were undertaken on the site that were not covered by the notice of requirement.

Statutory Matters

- 1.8 The notice of requirement has been lodged under Section 168 of the Act, and is before the committee for consideration under Section 171 of the Act. Section 171 states that:

- (1) *When considering a requirement and any submissions received, a territorial authority must, subject to Part 2, consider the effects on the environment of allowing the requirement, having particular regard to-*
- (a) *any relevant provisions of-*
 - (i) *a national policy statement;*
 - (ii) *a New Zealand Coastal Policy Statement*
 - (iii) *a regional policy statement or proposed regional policy statement;*
 - (iv) *a plan or proposed plan; and*
 - (b) *whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if -*
 - (i) *the requiring authority does not have an interest in the land sufficient for undertaking the work; or*
 - (ii) *it is likely that the work will have a significant adverse effect on the environment; and*
 - (c) *whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and*
 - (d) *any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the requirement-*
- (2) *The territorial authority may recommend to the requiring authority that it-*
- (a) *confirm the requirement;*
 - (b) *modify the requirement;*
 - (c) *impose conditions;*
 - (d) *withdraw the requirement.*
- (3) *The territorial authority must give reasons for its recommendation under subsection (2).*

- 1.9 Section 3 of this report assess the application against the statutory requirements of section 171 of the Act. In particular the assessment includes:

- An assessment of environmental effects;
- Consideration of submissions received;
- Review of relevant policy documents and plans;
- Consideration of alternatives;
- Consideration of the necessity of the works and the designation;

- Other matters considered necessary in the assessment.

Other Consents Sought

1.10 WEL consider that no further resource consents are needed to establish the substation from either Environment Waikato or Hamilton City Council. An assessment of the relevant planning provisions is provided in Annexure 6 to the notice of requirement. This is discussed in Section 3 of this report but this assessment is concurred with based on the information submitted.

Consultation

1.11 WEL Networks has undertaken a programme of consultation with the key stakeholders to identify and resolve issues. These parties have been identified by WEL as being:

- The Roman Catholic Bishop of the Diocese of Hamilton (the landowner);
- Nga Mana Toopu O Kirikiriroa;
- Hamilton City Council staff;
- Environment Waikato;
- Telecom NZ Ltd;
- CDL Land New Zealand Limited (adjacent landowner); and
- Nearby residents on Gambia Grove and Killegray Close (nearby residential streets).

1.12 All of the submissions received are from local residents. Based on the absence of submissions from the other groups, it appears that any issues of interest have been satisfactorily resolved. Advice received from WEL's consultant was that CDL Land New Zealand was satisfied with the proposal, and that Telecom had requested further information which has been responded to. A letter was received from Nga Mana Toopu O Kirikiriroa (NaMTOK) that subject to a protocol being followed with respect to the unearthing of human remains or taonga there were no issues. Environment Waikato sent a letter outlining the relevant Regional Plan rules but that raises no particular issues. This correspondence is attached in Appendix F.

Notification

1.13 A notice of requirement was lodged with Hamilton City Council in July 2007, but subsequently superseded by a second notice of requirement lodged in August 2007. The revised notice of requirement was publicly notified on Wednesday 15th August 2007, with the submission period closing on the 12th September 2007. Twenty-two submissions were received within the submission period, and one late submission was received. Notification was in the form of public notices in the Waikato Times and Hamilton Press, and letters were sent to the site landowner, potentially affected parties, and various statutory bodies as required by the Act. These are discussed in Section 3 of this report.

2 The Proposal

Nature of the Proposed Public Work

2.1 The nature of the proposed public work is *“the establishment, construction, operation, maintenance, replacement, repair, and minor upgrading of a substation, and parts of, and works for, or relating to, electricity transformation and distribution”*.

2.2 Annexure 4 to the notice of requirement details the project work and the substation operation. The notice of requirement as it was publicly notified has been subsequently revised through additional information and revised plans lodged by WEL. The notice of requirement as it was publicly notified is attached as Appendix A. The revisions and further information received since the public notification are attached as Appendix B. The general features described below are based on those revisions and are:

- Minor excavations and re-contouring of the site;
- Construction of a short accessway to Borman Road and vehicle crossing;
- Laying of underground 33kV cables to the substation from the existing network and underground 11kV cables from the substation to the existing underground 11kV distribution line;
- Construction of an approximately 220m² building that is 8.9 metres in height at the highest point with a mono-pitch style roof;
- Installation of substation electrical equipment inside of the building that includes two 33/11kV transformers, 33kV circuit breakers, 33kV disconnectors, internal switchgear, load control plant and ancillary equipment;
- Construction of a sealed yard around the front of the building for car parking;
- Construction of a 2 metre by 3.5 metre shed approximately 2.5 metres in height in the south-west corner of the site, constructed using colour steel with a gable roof, to accommodate equipment to provide electricity to the substation itself;
- Erection of a 1.8 metre high timber fence around the perimeter of the western, southern and eastern site boundaries, and a 1.8 metre high metal railing fence along the front boundary;
- Erection of a sign approximately 1000mm by 500mm sign located at the entranceway;
- Installation of security lighting, envisaged to be two security lights on the front of the building and one at the rear, operated by motion sensors and of a design typical of residential properties;
- Landscaping around the site consisting of semi-mature trees along the southern boundary to provide screening, and planting around the remainder of the site in a ‘contemporary garden’ format.

Nature of Proposed Restrictions

2.3 The notice of requirement lodged by WEL details ten restrictions that would apply to the designation. These are essentially suggested conditions to be placed on the designation. They are listed in clause 7 of the notice of requirement. In summary they relate to:

- Construction noise;
- Operational noise;
- Electric and magnetic field levels at the substation property boundary;
- Radio frequency radiation levels at the substation property boundary;
- Landscaping;
- Hazardous substances;
- Dust control;
- Outline Plan applications;
- A protocol to deal with discovery of any Maori artefacts or historic objects;
- A protocol to deal with discovery of bodily remains.

Site to which the Notice of Requirement Applies

2.4 The site is located approximately 50 metres west of Resolution Drive adjacent to the recently constructed extension of Borman Road. The legal description of the land is part of Allotment 518 Kirikiriroa Parish (SO 48706) and is owned by The Roman Catholic Bishop of the Diocese of Hamilton. The land is 1536m² in area and is broadly rectangular in shape, being approximately 28 metres by 75 metres in size. The site is part of an 11 hectare block of land that extends along the western side of the corridor for the future extension of Resolution Drive to the city boundary at Kay Road. Figure 1 below shows the location of the site and the existing Proposed District Plan zonings.

2.5 The land is flat and clear of significant vegetation or physical features. The land is vacant of any buildings and while it appears to have been used as grazing in the past, it is now 'landlocked' from the remainder of the property by the recent construction of the Borman Road extension and appears to have no current land use. The only legal road frontage to the land is Borman Road. Annexure 3 and Appendix 1 to the notice of requirement clearly set out the property details and location. Photographs of the site and surrounding area are located in Annexure 5 of the notice of requirement.

2.6 The surrounding area is flat and clear of significant features. There is a row of large exotic trees on the site to the south which is owned by CDL Land New Zealand which have some local significance. It is understood that this land will be developed for housing and that the trees are likely to be removed by CDL. The Te Awa O Katapaki reserve is located to the south, although only appears to adjoin the site at the eastern corner. The directly adjoining land to the west is part of the same property as the subject site owned by the Catholic Church. The land to the north

and east is road reserve and occupied by the recently constructed extension of Borman Road.

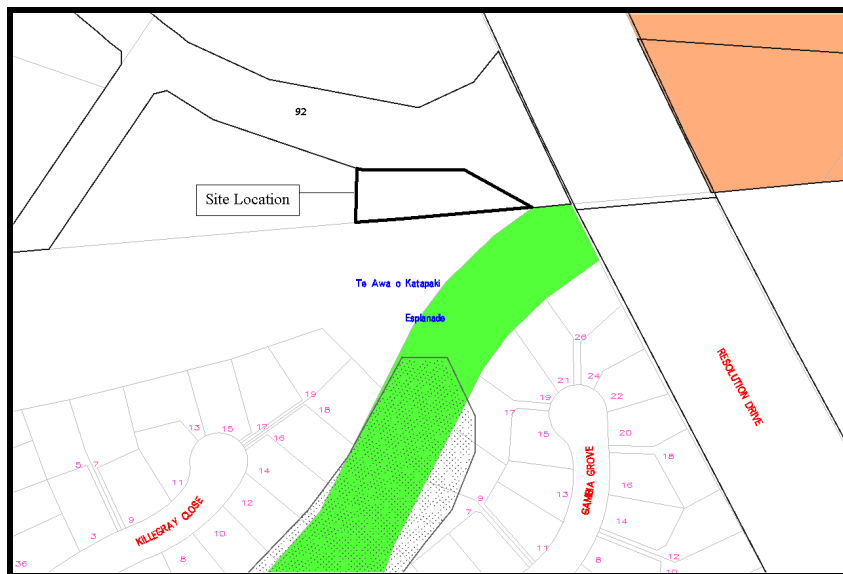


Figure 1: Location plan

- 2.7 The Borman Road/Resolution Drive intersection will become one of the key transportation junctions for the Rototuna area. To the north-east is the proposed Rototuna Town Centre site which is a planned major cluster of commercial, community, and residential activities. To the south-east is the Ashmore residential subdivision being developed by CDL Land New Zealand. To the north-west of the intersection is the remainder of the land owned by the Catholic Church, and to the south-west is the subject site. The 116 lot Glaisdale subdivision is being developed a few hundred metres to the north-west of the subject site, and all of the land in this area to the west of Resolution Drive is zoned Residential and will be developed for residential use in the future. The site is effectively on the edge of current urban development given the Gambia Grove and Killegray Close area is an established housing area, and the land to the north of Borman Road is undeveloped.
- 2.8 In terms of the roading hierarchy Resolution Drive is a major arterial, and Borman Road is a minor arterial. The arterial status of both roads reflects the anticipated future traffic volumes, as currently they are not open to the public.

3 Statutory Assessment

- 3.1 Section 171 of the Act sets out the relevant considerations a territorial authority shall have regard to in assessing a notice of requirement. In summary these are:
- Submissions received;
 - Part II of the Act matters (purpose and principles);
 - the effects on the environment;
 - the relevant statutory planning documents;

- consideration of alternative sites, routes or methods of undertaking the work;
- the necessity of the work and designation for achieving the objectives of the requiring authority; and
- any other matters considered relevant.

Submissions Received

3.2 A total of 23 submissions have been received. All of the submissions received were from residents within the locality. The main issues raised were as follows:

- Electric and magnetic fields generated by the substation;
- Noise generated from the substation;
- An alternative site should be found for the substation;
- Amenity effects on local residents are unacceptable;
- The zone standards are being contravened;
- Concerns with hazardous substances; and
- Devaluation of property values in the locality.

3.3 Two other issues were raised each by only one submitter, being concern with the removal of trees (submission 10), and the potential for future upgrading and expansion of the facility given growth in the area (submission 14).

3.4 All of the issues raised by submitters are discussed in Section 4 of this report which discusses the potential environmental effects of the proposal.

Part II Matters

3.5 Section 171 of the Act requires the consent authority to consider the proposal against the matters set out in Part II (Purpose and Principles) of the Act.

Section 5 – Purpose of the RMA

3.6 The purpose of the Act is to promote the sustainable management of natural and physical resources. Sustainable management is defined in Section 5 of the Act as:

‘managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while —

- Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonable foreseeable needs of future generations; and*
- Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- Avoiding, remedying, or mitigating any adverse effects of activities on the environment.’*

3.7 It is considered that the project accords with the enabling purpose of Section 5 in that it provides for a key piece of electrical infrastructure that is required to continue serving the electricity needs of the growing residential development in the Rototuna

area. Furthermore any potential adverse environmental effects can be managed effectively to ensure the purpose of the Act is achieved.

Section 6 – Matters of National Importance

3.8 Section 6 identifies a number of matters of national importance. These are as follows:

- (a) *The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes, and rivers and their margins, and the protection of them from inappropriate subdivision, use and development.*
- (b) *The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development;*
- (c) *The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna;*
- (d) *The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers;*
- (e) *The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga;*
- (f) *The protection of historic heritage from inappropriate subdivision, use, and development;*
- (g) *The protection of recognised customary activities.*

3.9 There are not considered to be any matters of national importance relevant to this notice of requirement. A report has been provided by NaMTOK which does not note any significant sites or concerns to Maori in this area. The site does not contain any significant areas of indigenous vegetation or habitats, outstanding landscapes, or other notable features.

3.10 Accordingly no matters of national importance are considered to be compromised by the notice of requirement.

Section 7 – Other Matters

3.11 Section 7 sets out a number of “other matters” to which persons exercising functions and powers under the Act shall have particular regard to. These matters include:

- “(a) Kaitiakitanga;*
- (aa) The ethic of stewardship;*
- (b) The efficient use and development of natural and physical resources;*
- (ba) The efficiency of the end use of energy;*
- (c) The maintenance and enhancement of amenity values;*
- (d) Intrinsic values of ecosystems;*
- (f) Maintenance and enhancement of the quality of the environment;*
- (g) Any finite characteristics of natural and physical resources;*

- (h) *The protection of the habitat of trout and salmon;*
- (i) *The effects of climate change;*
- (j) *The benefits to be derived from the use and development of renewable energy”.*

- 3.12 It is considered that the proposal is consistent in this regard. The proposal is part of the urbanisation of the Rototuna area which has proceeded in general accordance with the Rototuna Structure Plan since the 1990s. The proposal represents an efficient use of a physical resource given provision for electricity is an essential public good, and necessary to support a rapidly growing urban area. The site does not contain any significant features or particular finite characteristics, and the quality of the amenity of the area will be maintained, albeit as an urban environment.
- 3.13 Discussions with NaMTOK have not highlighted any particular associations with this specific site or issues in respect of kaitiakitanga. Accordingly it is considered that the proposal is consistent with the matters set out in Section 7 of the Act.

Section 8 – Treaty of Waitangi

- 3.14 Section 8 requires all persons exercising functions and powers under the Act to take into account the principles of the Treaty of Waitangi. It is noted that NaMTOK have been involved in discussions regarding the proposal. It is considered that the principles of the Treaty of Waitangi have not been compromised by the preparation of the notice of requirement in any respect.

Relevant Statutory Planning Documents

- 3.15 Pursuant to Section 171(1) of the Act particular regard should be had to any relevant provisions of any national policy statement, a New Zealand Coastal Policy Statement, a regional policy statement, regional and district plans.

National Policy Statements

- 3.16 In this regard clearly the New Zealand Coastal Policy Statement has no relevance, and there are no national policy statements that have relevance to this notice of requirement. There is a national policy statement being prepared in terms of electricity transmission lines but this focuses on the national grid operated by Transpower, rather than local distribution networks.

Regional Planning Documents

- 3.17 In terms of the **Waikato Regional Policy Statement**, the proposal is entirely consistent with the various approaches, objectives and policies promoted through this document. The site is located within a rapidly urbanising area that has been planned for urban development for over a decade. All aspects of this urbanisation have been developed in the context of the regional policy statement. There is no aspect of the notice of requirement that challenges the regional policy statement in any way.
- 3.18 Likewise the **Waikato Regional Plan** will be complied with in all respects.

Hamilton City Proposed District Plan

- 3.19 The site is within the Residential Zone and has been signalled in the Rototuna Structure Plan as being for residential development. The objectives and associated policies below are considered the most relevant to the notice of requirement.
- 3.20 **Objective 4.3.1 Provision for Network Utilities** - *“To accommodate network utilities throughout the city in a manner which enables the community to meet its needs while minimising adverse effects on the environment”.*

The associated policies (where relevant) are:

- a) *Control network utilities in a manner which matches the degree of control to the level of likely effect of the activity on the amenity values or environmental values of the surrounding area.*
 - b) *Manage network utilities that generate electromagnetic and radiofrequency radiation in accordance with accepted and operative national and international standards.*
 - c) *Ensure that where technically and economically possible network utilities are placed underground.*
 - d) *Ensure the visual effects of network utilities and structures associated with the generation, storage and transmission of network utilities are no more than minor with respect to the scale of local buildings and the sensitivity of the environment in which they are located.*
- 3.21 Comment: The objective both recognises the important role of infrastructure such as electrical substations to support urban development, and the need to minimise adverse effects on the surrounding environment. The policies then address the issue of how network utilities are controlled (primarily this is done through rules restricting height, size, location etc), the management of EMF issues, encouragement of undergrounding, and the minimisation of visual effects.
- 3.22 In terms of these issues, the sensitivity of the area has to be considered as being high given it is a residential environment. The site is bounded by arterial roads to the north and east which provides some visual separation from future houses in those directions. With the exception of the future town centre the locality is suburban residential in character. In terms of the network utility standards that apply to the Residential Zone, if the application was for a resource consent rather than being a notice of requirement, it would be a discretionary activity. The structure does not comply with the 6.5 cubic metre above ground volume standard, the maximum three metre dimension standard, and the 40 cubic metre underground volume standard (in respect of the transformer oil bunds) (Rule 3.3.2a)ii) of the Proposed District Plan). There is not considered to be any adverse visual effect from this however given the transformer equipment is housed within a building that sits within a landscaped site. The provisions of Rule 3.3.2a)ii) are really aimed at managing the size of ‘naked’ network utility structures in residential areas. The transmission lines to and from the site will be underground and the substation itself consists of a building with all electrical equipment housed inside. National and international guidelines in terms of EMF will be complied with.

- 3.23 It is considered that the proposal does minimise adverse effects on the environment. The transformer equipment is housed within a building designed to fit within a residential environment, and the site incorporates landscaping to further screen the building. The site is also well located at the intersection of two arterial roads and with potential for housing on only two sides. Due to the shape of the site and surrounding properties, no more than 3-4 houses will be constructed adjoining the site. It is considered that the proposal meets Objective 4.3.1 and associated policies.
- 3.24 **Objective 5.1.3 Non-Residential Activities** – *“To enable for a range of non-residential activities within residential areas, while ensuring that they do not detract from the amenity values of the area”*.
- 3.25 The associated policies (where relevant) are:
- a) Not relevant.
 - b) *Control non-residential activities so that noise, odour, dust, vibration, glare, noxiousness or danger do not cause a nuisance or adversely affect the health of occupants of surrounding residential properties.*
 - c) *Ensure that non-residential activities and building are designed so that they do not physically dominate any residential building or affect the residential character of the neighbourhood.*
 - d) *Ensure that non-residential activities are compatible with the surrounding residential area in terms of traffic generated, the need for parking and the role of the street in the road hierarchy.*
 - e) *Avoid the establishment of activities which generate high traffic volumes of traffic, pedestrian movements, noise and that create significant adverse effects on the overall amenity values of the residential environment.*
 - f) Not relevant.
- 3.26 Comment: The Proposed District Plan is based on a zone approach that seeks to separate activities that are not considered compatible. The network utility provisions of the District Plan recognise that of necessity network utility structures will be built within residential areas. The focus of the objective and associated policies is the avoidance of detrimentally affecting amenity values. Aside from temporary construction effects which are discussed elsewhere, the potential effects are primarily noise, visual and EMF. Traffic generation is very low, and in terms of visual effects the building complies in almost all respects with the Residential Zone standards. While EMF and noise are key submitter concerns, it is clear from the information submitted by WEL that the generation of EMF and noise beyond the boundaries of the site will not have an adverse effect on nearby residential properties. While the appearance of the site in general is somewhat different from a residential property, the building will not visually dominate the area or have a significant adverse effect on the amenity or character of the area.
- 3.27 **Objective 6.6.1 Hazardous Substances** – *“To allow for the continued use of hazardous substances whilst ensuring the adverse environmental effects of the use,*

storage, disposal or transportation of hazardous substances are avoided, remedied or mitigated”.

The associated policies (where relevant) are as follows:

- a) *Control activities involving the use or storage of single or multiple hazardous substances in a manner which reflects the level of risk posed by the substances to the community and the environment.*
- b) *Control the establishment of facilities and activities which use or store hazardous substances in a manner which reflects the level of risk they pose relative to the sensitivity of the surrounding population and environment.*
- c) *Control the design, construction and operation of facilities employing significant quantities or types of hazardous substances in order to minimise the risk of adverse effects on the environment and on people’s health and safety.*
- d) *Ensure that appropriate facilities are in place to avoid the pollution of soil, groundwater, watercourses and air in the event of accidents (such as spills, gas escapes, etc.) involving hazardous substances.*

3.28 Comment: The level of control of hazardous substances is appropriate given the volume and type of hazardous substances at the site. Spill containment measures are incorporated into the design of the facility and are appropriate for the activity. While there is a watercourse within 20-30 metres of the site boundary and therefore the sensitivity of the area has to be considered as reasonably high, the Environmental Health Unit consider that the measures incorporated into the substation design successfully mitigate the risk factors. This objective and associated policies have been met.

3.29 **Objective 7.4.1 Noise from Non-Residential Activities** – *“To protect the accepted ambient noise environment of residential areas from the adverse effects of noise arising from non-residential activities”.*

The associated policies are as follows:

- a) *Ensure that noise emissions from commercial, industrial and community activities received at the boundary of residential properties are consistent with the existing ambient noise environment.*
- b) *Control the noise emissions of non-residential activities, including home occupations, in residential areas to protect residential amenity values.*
- c) Not relevant.

3.30 Comment: This objective is considered to have been met. WEL have demonstrated that given the sound attenuation of the building and the distance between the transformers and the site boundary, the noise extending beyond the site boundaries will be comfortably within the noise limits for the Residential Zone (Rule 5.1.1b)). Therefore the noise generation will not result in a change to the ambient noise levels.

3.31 There are three transportation objectives which have some relevance as follows:

Objective 4.2.1 Transport Network – *“To maintain a safe and efficient transport network that allows the city to function and develop with minimal conflicts between land uses, traffic and people”.*

Objective 4.2.2 Access – *“To ensure that the location and distribution of access points for activities along roads do not adversely affect the safe and efficient functioning of the transport network”.*

Objective 4.2.3 Parking and Loading – *“To ensure that sufficient and accessible off-street parking, loading and manoeuvring areas are provided as part of development without adverse effects on traffic flows, amenity values or public safety”.*

- 3.32 Comment: The extent of traffic generation is extremely low, estimated at less than 10 vehicle trips per month. This is far lower than that of a residential dwelling and is not of concern in terms of the ability of the network to cope. The vehicle access arrangement has been a point of discussion as the notified notice of requirement showed two vehicle crossings, one of which failed the standard for the distance to an arterial intersection. The site layout has since been revised to achieve compliance. Sufficient space is available for vehicles to park and manoeuvre but given the low traffic generation the demand for parking will be very low also. The proposal is considered to be consistent with these objectives.
- 3.33 In summary, the proposal is considered to be consistent with the objectives and policies of the Proposed District Plan.

Section 171(1)(b) – Consideration of Alternatives

- 3.34 Council must have particular regard to whether adequate consideration has been given to alternative sites, routes and methods of undertaking the work, where the requiring authority does not have an interest in the land sufficient for undertaking the work (i.e. as in this case where WEL do not own the land). Given the nature of a substation, the key considerations here relate to the site chosen and the method of undertaking the work.
- 3.35 Annexure 2 of the notice of requirement details the alternative sites considered. In response to a further information request, WEL also provided additional information in the letter dated 13 September 2007. That information summarises the process WEL went through to identify the preferred site that is now the subject of this notice of requirement. WEL describe that this general locality is considered optimal to serve the growing load demand in the Rototuna area given the distance to the existing Chartwell Substation located on Wairere Drive (that currently serves the Rototuna area). Essentially, the proposed substation will ‘feed back’ to the Chartwell Substation and therefore needs to be in a location that enables this to occur effectively. For the substation to have maximum effectiveness WEL states the site needs to be located as far south as possible in order to meet existing demand, as well as future demand growth from further north. The area around the Resolution Drive/Borman Road intersection is considered to be the optimal location.

- 3.36 WEL identified four potential sites within the general locality, as shown in Annexure 2 of the notice of requirement. The alternative sites have been considered in terms of:
- Proximity to connections for electricity demand and existing WEL assets (i.e. effectiveness);
 - Availability for sale (i.e. willingness of landowner);
 - Current and future land use considerations (in particular the Rototuna Structure Plan);
 - Proximity to a legally formed road and ability to provide a connection based on Council standards;
 - Feedback from Council staff;
 - Compliance with District Plan standards;
 - Environmental effects; and
 - Predicted number of affected parties.
- 3.37 The above criteria are considered to be robust. They represent an assessment of the statutory criteria a notice of requirement will be assessed against, the potential environmental effects, the ability to have suitable roading access (given the roading network in the area largely remains a rural network), Council's and the community's vision for the area as represented by the structure plan, and the ability to implement the project in a timely manner.
- 3.38 Based on this assessment, site 1 was deemed unsuitable because the landowner is unwilling to sell, there are road access issues, and the location is the least suitable in terms of WEL's existing assets. WEL describe (further information dated 13 September 2007) that site 2 was not favoured by the developer or Council staff due to conflicts with land uses identified on the Rototuna Structure Plan. WEL advise that they attempted to purchase site 3, however the developer is unwilling to sell. Furthermore there are access difficulties as the extension of Resolution Drive is not programmed for a number of years and it is not currently a legal road. The only legal road in the area is North City Road which is a substantial distance from site 3.
- 3.39 WEL describe (further information dated 13 September 2007) that there remains considerable uncertainty over the layout of roading in the Rototuna Town Centre area, which makes it difficult for WEL to ascertain at this point in time how access to a possible site would be gained. WEL advise they could not risk designating a site for a substation in a location that they could not obtain legal access to and hence the roading issue became critical.
- 3.40 The further information submitted by WEL dated 13 September 2007 states that site 4 was chosen because of the:
- Close proximity to electricity demand and existing WEL assets;
 - Location next to the roundabout and the shape of the site made it less suitable for other uses;
 - Availability for sale;

- Positive Council staff feedback;
- Minor environmental effects given mitigation measures proposed.

- 3.41 It is considered that Council can be satisfied WEL has given adequate consideration to alternative sites for the substation. The process has been undertaken over two years, four sites were identified within a large area deemed as being optimal in terms of meeting the objectives of WEL as a requiring authority, and the evaluation was based on criteria that addressed the key issues. Council's role is not to re-evaluate the alternatives considered, but rather to ensure a robust consideration of alternatives has taken place, and then pursuant to the other provisions of section 171 of the Act make a recommendation to the requiring authority on the notice of requirement as it has been lodged. It is considered Council can be satisfied WEL have fulfilled their obligations under this section.
- 3.42 In terms of consideration of alternative methods of undertaking the work, there are obvious technological constraints on the range of alternatives available. The substation will 'transform' the electricity by lowering the voltage from 33kV to 11kV, allowing it to then be fed into the local network for use by local electricity users. There are no viable alternatives to this process that WEL could utilise, or alternative physical arrangements (e.g. locating the substation underground) for undertaking the process. WEL advise that they have considered the merits of an indoor substation versus an outdoor substation. Given the urban environment of the site, WEL advise that housing the transformers within a building was considered preferable. Council can be satisfied that adequate consideration has been given to alternative methods of undertaking the work.

Section 171(1)(c) – Necessity of the Works and the Designation

- 3.43 Council needs to have regard to whether the public work (i.e. the substation) and the designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought. The notice of requirement (clause 5) lists the objectives of WEL Networks for the designation as being:
- The distribution of safe and reliable electricity to people, local communities and industry in and around the Rototuna and Horsham Downs areas;
 - The control of electricity flows over the distribution network; and
 - The transformation of electricity from higher to lower voltages.
- 3.44 The work is considered reasonably necessary for achieving the objectives of the requiring authority as a substation is needed to meet the current and expected future demand originating from this area, and that the electricity voltage must be lowered (i.e. transformed) so that it can be distributed and used locally. This reasoning is very clear and Council can be satisfied that the substation is reasonably necessary for achieving the objectives of the requiring authority.
- 3.45 In terms of the designation being reasonably necessary as a planning technique for achieving the objectives of the requiring authority, clause 5 of the notice of

requirement details a number of reasons that are concurred with. In summary these are based on the advantages the designation process gives to WEL to complete the project in a timely manner, the nature of electricity infrastructure and the contentious issues involved, and providing certainty under the Resource Management Act.

- 3.46 Designations provide a high level of certainty as designated sites are clearly shown on district plan maps to alert people to their presence. Furthermore a designation provides protection to WEL as other parties then require the approval of the requiring authority before doing anything on the site.
- 3.47 The high level of investment and commitment required to establish electrical infrastructure such as a substation requires a strong level of security and certainty in terms of the Resource Management Act processes. This security cannot be provided by district plan provisions, resource consents, or existing use rights in as effective a manner. The designation and outline plan process provides the certainty and security of status that large investments such as a substation require, which is important given the essential nature of the infrastructure.
- 3.48 Particularly in respect of upgrading and maintenance works a designation provides a key advantage. Upgrading and maintenance works will be required over the life of a facility such as a substation, yet such future works can rarely be envisaged with any certainty when a facility goes through the consenting process. Without a designation, upgrading and maintenance works may often require individual resource consents which could threaten the viability of the facility in the long term. In comparison, a designation provides certainty around these issues.
- 3.49 It is considered that Council can be satisfied that the designation process is reasonably necessary for achieving the objectives of the requiring authority.

Section 171(1)(d) – Other Matters

- 3.50 The Council can consider any other matter considered reasonably necessary in order to make a recommendation on the notice of requirement. Two ‘other matters’ are discussed below:

CityScope

- 3.51 CityScope is the urban design strategy for Hamilton and reflects the aspirations of the community and Council for enhancements to the urban form of the city. CityScope articulates a city vision and a framework to guide the decision-making processes of Council, the private sector, and the community as a whole, and identifies a series of action points to achieve the vision.
- 3.52 Vista is the recently released Hamilton City Design Guide and has been developed as a tool to assist people involved in development projects to achieve the best outcome. It identifies features of the city that are distinctive and should be reflected and enhanced through development, and defines good design elements under the headings design quality, sense of place, access, public space, lifestyle and sustainable environments.
- 3.53 The proposed substation is located within a rapidly growing area where the various elements of physical infrastructure are being developed to serve the needs of the

area. These include arterial and local roads, reticulated wastewater, gas and water networks, and various elements of community infrastructure such as schools and community facilities. Electrical infrastructure has to be considered in the same context as being an essential component to serve both the existing and future housing and other land uses in Rototuna.

- 3.54 The design of the substation is considered to be sympathetic to the local environment. While electrical infrastructure by its nature tends to be unattractive, WEL have demonstrated a clear commitment to good design through this designation process by undertaking revisions to the appearance of the building in response to public submissions.

Rototuna Structure Plan

- 3.55 The Proposed District Plan contains the Rototuna Structure Plan (October 2001) which remains the statutory structure plan for the area. Council staff are revising the Rototuna Structure Plan and the February 2007 plan is the latest reflection of that process. A copy of the 2007 plan is attached to the notice of requirement as Appendix 8.
- 3.56 The Rototuna Structure Plan (October 2001) remains the statutory plan for managing growth in the Rototuna area. The 2001 plan shows an indicative route for the Borman Road extension that has since been designated and is now being built. The 2001 plan shows the area subject to this notice of requirement as being a residential enclave, but given this is simply a broad future land use classification, this neither provides specific support, or is inconsistent with this proposal.
- 3.57 The February 2007 version has no statutory basis at this time although it has been through a public consultation exercise and has been debated by Council. The 2007 plan more accurately reflects elements like the route of the Borman Road extension and the remainder of the future transportation network, an enlarged town centre area, the location of future schooling and recreational facilities in more detail, and the indicative location of high density residential areas in and around the town centre to ensure the viability of the town centre.
- 3.58 The Rototuna Structure Plan provides general guidance as to the location of future transportation networks and key land use elements, but is not intended to provide strong guidance at the level of a specific site, except where a specific key element is shown. Given in this case no such key element is shown at this location, it can be concluded that the proposal is not inconsistent with either the Rototuna Structure Plan 2001 or the revised structure plan being prepared.

4 Assessment of Environmental Effects

- 4.1 A key part of the evaluation under Section 171 of the Act is an assessment of the environmental effects of allowing the requirement. Annexure 5 of the notice of requirement details the potential adverse effects that could arise.
- 4.2 The potential adverse effects are considered to fall into the following categories:

- Visual and amenity effects;
- Noise;
- Electric and magnetic fields;
- Hazardous Substances;
- Traffic Effects;
- Construction Effects;
- Heritage/Cultural;
- Ecology; and
- Infrastructure.

Each is discussed separately below.

Visual and Amenity Effects

- 4.3 The issue of visual and amenity effects was the most commonly raised issue by submitters and is considered to be a key issue. In summary, submitters considered the substation building was unsuitable for a residential area due to its size and appearance, would generate a significant detrimental visual impact, and that the building should be subject to the same bulk and location standards that apply to houses in the Proposed District Plan.
- 4.4 The locality is currently a mix of rural and residential land uses with an established housing area to the south straddling both sides of the Te Awa O Katapaki stream around Gambia Grove, Killegray Close and Tuirangi Street. To the north and west is currently undeveloped land that is residentially zoned and likely to be developed within the next ten years. To the east on the opposite side of Resolution Drive is the Ashmore subdivision which is being completed currently. The immediately adjoining land to the south and west is zoned as Residential and will also be developed in the near future. It is therefore considered critical that the substation building is designed sensitively to fit within a residential environment, is well screened by vegetation, and that 'institutional' features such as security fences and signage, that are not a typical feature of residential properties, are avoided wherever possible or are screened.
- 4.5 A future feature of this general locality will be the Rototuna Town Centre to the north-east of the site, on the opposite side of Resolution Drive. This area is planned as an approximately 15 hectare mixed use town centre with a range of commercial and employment activities, and community facilities. One of the key aspects of these proposals is maximising the intensity of activity within a small area to ensure the economic viability of the centre. For this reason a concentration of housing is also proposed in and around the town centre and is likely to be at a higher density than is currently found in Rototuna.
- 4.6 The town centre site is currently vacant but is intended to be developed within a ten year period once a sufficient residential catchment has developed. The town centre is intended to be characterised by a more intense urban form, a mix of land uses, and a concentration of residential living to provide an interesting, diverse and active urban space. This appears to be contrary to the perception submitters have of the

town centre area. That perception is that the town centre is a commercial and industrial area that would be ideally suited to the substation given the absence of residential properties. In fact there will be a significant concentration of residential activity within the town centre area.

Visual Appearance of the Substation Building

- 4.7 The visual appearance of the substation building has been substantially revised by the further information lodged by WEL dated 23 November 2007. The proposed substation building is 8.9 metres in height, and is to be constructed using a tilt slab construction method with veneer tile cladding at the lower level and 'Hardiflex' cladding at the upper level. The building incorporates tinted glass windows, corrugated metal roofing with an angled mono-pitch style. The aim of the design is to produce a contemporary style residential dwelling.
- 4.8 Importantly the fencing and landscaping proposed will reinforce the appearance of a residential property. The notified version of the notice of requirement was unclear in terms of what security fencing will be required. WEL have confirmed (in the further information dated 23 November 2007) that a 1.8 metre high wooden fence would be built around the back and sides of the site in a style typical of residential properties in the locality. A metal railing fence along the front boundary is proposed to maintain a domestic appearance while maximising visibility from the street to deter vandalism. It is understood that the building will be secure so the fencing can be designed to act as a barrier to public access to some extent, but not be the primary method of security. A sealed parking and turning area at the front of the site will provide vehicle access to WEL staff to enter the property.

Landscaping

- 4.9 The landscaping proposed is indicative only at this stage but will consist of semi-mature trees lining the rear boundary of the property to provide screening, and on the remainder consisting of low maintenance planting "*to be formed as a contemporary garden, to compliment the character of the building*" (WEL further information dated 23 November 2007). This planting will be aimed to enhance the amenity of the site, rather than to screen the building. This varies from the landscaping proposed in the notice of requirement as publicly notified which stated planting would be undertaken around the perimeter of the site to provide screening to a depth of between 2 and 3 metres, and with a planted area on the eastern side of the site.
- 4.10 Landscaping is a key element to integrate the substation building and site with the residential surroundings. As a guide the planting standards of the District Plan for a non-residential activity in the Residential Zone require planting of 30% of the building setback from the road boundary. This is aimed at ensuring the appearance of the site as viewed from the street is consistent with residential properties.
- 4.11 The key landscaping elements needed within the site are considered to be the open area to the east of the substation building, and some screening along the rear boundary to replace the likely removal of the large exotic trees. Council has undertaken planting along both sides of the Te Awa O Katapaki stream with native species. There is an opportunity at the eastern end of the site to design native

themed landscaping that provides a continuation of this into the site. WEL have also indicated that screening will be provided along the rear boundary which is supported as a way of addressing the concerns expressed by submitters. Preferably this should be with evergreen species to provide year-round screening.

- 4.12 A recommended condition on the designation requires that WEL produce a detailed landscape plan to be approved by Council staff prior to construction of the substation building. That plan should be in general accordance with the landscaping proposed in the further information dated 23 November 2007. In addition the condition requires that at least three large trees be planted in the open space area to the east of the substation building, as this is considered to be a key opportunity to enhance the appearance of the site. It is also understood that part of this area will be used as a 'rain garden' as the catchment management plan for this area requires a certain level of stormwater recharge to ground.
- 4.13 Based on the implementation of this landscaping plan, the landscaping will provide strong visual mitigation and ensure the visual amenity of the locality is not detrimentally affected. The wording of the draft condition also enables Council staff to have some input into the detail of the planting in terms of location and species selection.

Residential Zone Standards

- 4.14 Many submissions raise the issue of the scale of the substation building and the level of compliance with Residential Zone standards. An assessment of the revised plans (submitted with the further information dated 23 November 2007) has been carried out to determine the level of compliance. The standards of the Residential Zone and the level of compliance are as follows:

Name of Standard	Standard	Extent of Compliance
Density	400m ² minimum site size	1536m ² - complies
Maximum Site Coverage	40% of site can be covered with buildings	220m ² floor area (14%) - complies
Maximum Building Height	10 metres	8.9 metres – complies
Height Control Plan	No part of any building shall penetrate a plane rising at an angle of 45 ⁰ at an elevation of 3 metres measured at any point on the boundary, except the southern boundary where a 28 ⁰ is used.	Complies in respect of front and side boundaries. Does not comply with the 28 degree angle in respect of the southern boundary by approximately 1.5 metres.
Minimum Building Setback from front boundary	5 metres given Borman Road is a Minor Arterial	Approximately 5.7 metres at the closest point - complies

Minimum Building Setback from any other boundary	1.5 metres	Substation building is at least 5 metres. Small shed is within the 1.5 metres setbacks however.
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- 4.15 It is apparent that the scale of the substation building is generally consistent with the Residential Zone standards. The non-compliances of the small shed being in the side and rear setbacks, and the substation building exceeding the height control plane by up to 1.5 metres have only very localised effects on the directly adjoining neighbours. The landowner of the adjoining land to the south (CDL Land New Zealand) has not made any comments on this matter by way of a submission. It should also be noted if the proposal was a residential development proceeding through the resource consent process, only the adjoining neighbours would be deemed to be affected parties in terms of the potential shadowing effect that might arise from the height control plan non-compliance, and the potential visual effect from the proximity of the shed to the boundary.
- 4.16 The scale of the building set within this site is not considered to be contrary to the Residential Zone standards or the character of the area. Indeed the adjoining properties when developed could contain dwellings of the same height and scale as the substation building as of right.
- 4.17 In terms of other Proposed District Plan standards, if not a designation process the type and volume of hazardous substances proposed to be on site would be a discretionary activity and require resource consent under the screening procedure Council uses (Rule 3.2). Also under the network utility provisions (Rule 3.3.2a)ii) the proposal exceeds the following standards for network utility structures in the Residential Zone:
- 6.5m³ maximum volume standard;
 - three metre maximum dimension standard; and
 - 40m³ maximum volume for an underground structure.
- 4.18 This would simply mean the proposal could not be undertaken as of right and would require resource consent. The assessment of the Environmental Health Unit is that the hazardous substances are well controlled by the measures proposed by WEL. Furthermore, given that the substation equipment is housed within a building, the non-compliances with the network utility provisions generate no adverse visual effects as they are not visible from beyond the site.

Property Values

- 4.19 The issue of property values diminishing as a result of the substation was stated by a number of submitters. The Act does not attempt to protect property values as such, but rather seeks to ensure that adverse effects on the environment are avoided, remedied or mitigated. The assertion that the proposal will have a detrimental impact on property values is more of an issue of public perception and is very difficult to quantify. The focus of Council in evaluating this notice of

requirement should be based on considering the specific areas of potential effects and ensuring sufficient mitigation measures are incorporated, and not on property values per se.

Summary of Visual and Amenity Effects

- 4.20 The substation building and site are considered to be consistent with the scale and form expected for the Residential Zone. The approach of designing the building to look like a dwelling is supported as it downplays the institutional nature of the building's use. It is not possible to entirely mimic the appearance of a residential property and certain elements such as signage, the lack of activity at the site, and the absence of a letterbox will signal the building is not a dwelling on closer inspection. At 'first glance' though it is considered the pedestrian or driver would not notice the property is something other than a residential dwelling however. The landscaping will further help absorb the site into the local environment. Given these factors it is considered that the visual and amenity effects of the proposal on the local environment are no more than minor.

Noise

- 4.21 There are considered to be two aspects to this issue, being construction noise and substation operation noise. Operating noise was raised in many of the submissions received as being a key concern, both in terms of type and amount of noise.
- 4.22 In terms of construction noise, the construction activity is temporary in nature and the extent of works are relatively minor. The notice of requirement states that the New Zealand Standard NZS 6803:1999 *Acoustics – Construction Noise* will be complied with to manage potential effects. Construction activity is an expected part of residential development and is already a feature of this area given the on-going subdivision and road building activity being carried out. The Environmental Health Unit are satisfied that the "*potential excessive and unreasonable noise effects during the demolition/construction period will be managed by all contractors through compliance with the noise standards of NZS 6803:1999 'Acoustics – Construction Noise'*". This issue is able to be managed to ensure that any adverse effects are no more than minor and temporary in nature. A condition on the designation is recommended to manage this issue.
- 4.23 The operational noise relates to the transformer equipment and is a key issue given the proximity to future dwellings on adjoining land, particularly given that the substation will operate continually. Appendix 2 of the notice of requirement contains a report from Hegley Acoustic Consultants. The report concludes that given the sound attenuation qualities of the building (a sound reduction of 35dBA will be achieved), the 40dBA (L10) night-time standard that has been used as the design standard, will be complied with comfortably. Council staff are satisfied that the revised building design will not alter the acoustic performance of the building significantly. WEL have indicated that they will provide information to confirm this position at the hearing.
- 4.24 Advice from Council's Environmental Health Unit confirms that the noise generation will be well within the Proposed District Plan standards. A condition on the

designation has been recommended requiring compliance with this standard, and a further condition requiring that an acoustic attenuation report be provided at the building consent stage for the building to demonstrate compliance will be achieved. This latter condition may not be necessary if Council is satisfied at the hearing that compliance with the standard will be achieved.

- 4.25 The District Plan standard for the Residential Zone of 40dBA (L10) is the noise limit for all activities within the zone. Therefore there is no justification for a more onerous standard as suggested by some submitters. The extent of sound attenuation by the building will ensure that the level of noise generation from the substation will be no higher than other activities in the area.
- 4.26 Subject to the designation conditions recommended, there are not considered to be any adverse effects in this regard.

Electric and Magnetic Fields

- 4.27 Submitters have expressed concern regarding the potential detrimental health and safety effects of an electrical substation being in close proximity to residential dwellings.
- 4.28 Appendix 5 and 6 to the notice of requirement provides comprehensive information addressing the issue of EMF. The notice of requirement states that the electric field levels are unlikely to exceed 0.06 kV/m when the ICNIRP guidelines (international guidelines adopted by the Ministry of Health) are set at 5kV/m, and that magnetic field levels are unlikely to exceed 2 microtesla when the ICNIRP guidelines are set at 100 microtesla.
- 4.29 The notice of requirement details factors that ensure potential effects are avoided, remedied or mitigated. These are:
- The substation is of a medium/low capacity, when high capacity substations comply with the ICNIRP guidelines;
 - The likelihood of people standing beside or near the substation boundary for long periods is unlikely; and
 - The transformers will be located within a building and behind landscaping, that will further reduce any EMF fields.
- 4.30 However, given the extent of concern expressed by submitters on this issue, Council staff have engaged Dr Martin Gledhill from the National Radiation Laboratory to provide independent expert advice on this matter. Dr Gledhill undertook a peer review of the information provided by WEL to assess the potential adverse health effects from the substation in this locality. Dr Gledhill's report is attached as Appendix E.
- 4.31 Dr Gledhill's report concludes that "*the proposed substation would have no effect on electric field levels on nearby properties*". Furthermore, that in terms of magnetic fields, that "*I would expect the proposed substation to make a negligible difference to magnetic field exposures on nearby properties*".
- 4.32 Dr Gledhill has recommended a condition on the designation to ensure compliance with the ICNIRP guidelines be maintained. This condition is part of the recommendations, along with a monitoring clause to ensure that compliance is

achieved under normal operating conditions. Based on this assessment, the information submitted by WEL, and the recommended condition, it is considered that the extent of adverse health and safety effects in terms of EMF issues are negligible.

Hazardous Substances

- 4.33 Submitters have expressed concern over the hazardous substances to be used within the substation site, and potential adverse effects as a result.
- 4.34 Transformer oil is a hazardous substance that needs to be managed appropriately to avoid soil and water contamination. The notice of requirement details that the area beneath the transformers will be bunded by concrete stands with automated isolation valves to contain any oil spill. The bunded area drains into a sump containing a valve and alarm system.
- 4.35 This issue has been reviewed by Council's Environmental Health Unit who advise that *"the storage and use of hazardous substances (transformer oil) has been addressed by the applicant to ensure that any potential discharge or accidental release will have 'no more than minor' effects on the surrounding environment. This has been addressed by way of a concrete bund around each transformer that can contain greater than the maximum volume of oil stored"*.
- 4.36 The report goes on to say *"additionally the transformers will be within a building, creating a low risk for any release of transformer oil to cause contamination of soil or water bodies. Additionally WEL networks have provided clean up procedures and confirmation of spill kits that will be present on the site in the event there is a spill or an accidental release occurs"*.
- 4.37 On this basis and subject to the recommended conditions, Environmental Health consider the potential effects are no more than minor and support the proposal. This view is concurred with.

Traffic Effects

- 4.38 Traffic generation from the substation is anticipated to be very low, in the order of 6-8 vehicle trips per month. The substation is unoccupied but sporadically WEL staff will visit the site for maintenance and on-going checks. Accordingly, there is not considered to be any adverse effect in this regard.
- 4.39 There has been some discussion about the number and location of vehicle crossings proposed. The notice of requirement as notified showed two crossings with one located in a position that failed the standard for the minimum crossing distance from an intersection of arterial roads. The revised site plan shows a single crossing in a complying location. The photomontage provided by WEL also shows the accessway entering the road at an indented parking bay. Transportation Unit staff advise that given the very low traffic generation from the site this is unlikely to be an issue and that there other examples of this at other locations in the city operating satisfactorily. Transportation Unit advise that they are satisfied that there will no adverse effect on traffic safety or the transportation networks in the locality.

Construction Effects

- 4.40 Construction effects relate to short-term traffic effects, dust and other temporary nuisance effects. Advice from Council's Environmental Health Unit states that management of the site in accordance with the New Zealand Standard 6803:1999 *Acoustics – Construction Noise*, and enforcement of the dust rule of the Proposed District Plan (Rule 5.5.1a), will ensure avoidance of any adverse effects in this regard. The distance to the nearest dwellings is sufficient to further buffer any potential adverse effects in this regard.
- 4.41 It is also noted that there is substantial on-going construction activity in the area as a result of the Borman Road extension and the subdivisions being constructed to the north-west and on the eastern side of Resolution Drive. The sensitivity to such effects is therefore lower in this locality. Furthermore the extent of earthworks is relatively small, and the level of traffic generation from construction vehicles will not be significantly larger than for other construction projects. Issues such as dust control can be managed through routine site management techniques and need not generate any nuisance beyond the site. Overall it is considered that the potential for adverse effects in this respect are no more than minor.

Heritage/Cultural

- 4.42 Correspondence from NaMTOK indicate that Mr Wiremu Puke visited the site in August 2007. The correspondence notes that the area was heavily forested until the 1600s when it was gradually cleared for cultivation. From the 1880's local Maori assisted Pakeha farmers to drain the land for farming. A number of wooden artefacts have been unearthed over the past few years during excavations and that such artefacts could be unearthed on this site. A condition on the designation has been recommended to ensure that appropriate protocols are followed should human remains or taonga be unearthed during construction, as requested by NaMTOK.
- 4.43 Subject to this condition being imposed and adhered to, it is considered that the potential for adverse effects in this regard are negligible.

Ecology

- 4.44 The site is heavily modified through decades of farming activity, and more recently from earthworks associated with the extension of Borman Road west of Resolution Drive. There are no ecological values or habitats to be protected. The avoidance of any sediment run-off in the nearby Te Awa O Katapaki stream is easily achieved through the use of routine sediment control measures. Accordingly, the extent of adverse effects in this respect are considered to be nil.

Infrastructure

- 4.45 The notice of requirement indicated that wastewater and stormwater will be directed to Council services or to an on-site soakage pit. It has now been clarified with WEL that no Council wastewater or stormwater drainage exists in close proximity to the site, nor are any Council networks planned.
- 4.46 Based on that advice WEL have advised that an incinerating toilet system will be used similar to that operated at other substations, and that a soakhole will be used

to deal with the small amount of wastewater arising from the use of the hand-basin. Given the occasional usage only, Council's Water and Waste Services Unit are satisfied with these arrangements and have advised that the details can be determined at the building consent stage.

- 4.47 With respect to stormwater the Te Awa O Katapaki Catchment Management Plan is used to manage stormwater in this catchment. The plan contains standards for the amount of groundwater discharge required and requires that stormwater discharges arising from the substation must be attenuated to pre-development flow rates prior to discharge. WEL have indicated rain gardens or similar methods will be used to meet these standards. The Water and Waste Services Unit is satisfied that the detail of the stormwater control methods can be determined at the building consent stage.
- 4.48 There are not considered to be any other infrastructure issues arising from the notice of requirement. Accordingly it is concluded that there will be no adverse effects in this regard.

Other Issues

- 4.49 The issue of the row of existing mature trees to the rear of the substation was raised by submitter 10. The trees are not located within the site being designated by WEL and are located on the block of land to the south owned by CDL Land New Zealand Limited. WEL therefore have no control over whether these trees will be retained. The trees are not protected under the Proposed District Plan.
- 4.50 The issue of the potential for future upgrading and expansion of the substation facility given growth in the area was raised by submitter 14. There is no indication from WEL that there is any intention to expand the facility in the future, however if this was the case then any such expansion would need to comply with the conditions attached to this designation and would require the lodgement of an Outline Plan for consideration by Council.

5 Conclusions

- 5.1 WEL Networks Limited has lodged a notice of requirement to designate land for an electrical substation on Borman Road, in Rototuna. The notice has been lodged under section 168 of the Resource Management Act and is before the Statutory Management Committee for consideration under section 171 of the Act. Council may recommend to WEL Networks Limited that it:
- Confirm the requirement;
 - Modify the requirement;
 - Impose conditions;
 - Withdraw the requirement.
- 5.2 The notice of requirement has been assessed in light of the submissions received and against the relevant criteria stipulated in section 171 of the Act. It is considered that the proposal is consistent with Part II of the Act, and the relevant policy statements and plans. It is considered that WEL Networks has given appropriate consideration to alternative sites and methods for undertaking the work, and it is

considered that Council can be satisfied that the works and the designation are reasonably necessary for achieving the objectives of WEL Networks.

6 Recommendation

That the Statutory Management Committee having had regard to the provisions of the Resource Management Act 1991 and in particular Part II and Part VIII; and having considered the effects on the environment of allowing the requirement; and having particular regard to the provisions of all the relevant planning instruments, the alternative sites and methods considered, whether the designation is reasonably necessary, and any other matter reasonably necessary in order to make a recommendation on the requirement; and having considered the evidence presented by the Requiring Authority, the submissions received and the evidence tendered at the hearing in support of those submissions, and the planning report, recommends that WEL Networks Limited **confirms the notice of requirement** to designate land in the Hamilton City Proposed District Plan for an 'Electricity Substation', subject to the conditions stated below:

Conditions

1. Construction noise emanating from the site shall not exceed the limits in, and be measured and assessed in accordance with, the New Zealand Standard NZS 6803:1999 '*Acoustics – Construction Noise*'.
2. The substation shall be designed and operated to not exceed a noise level of 40dBA (L10) at or as near as practicable to the boundary of any other site within the Residential Zone. Noise levels shall be measured in accordance with NZS 6801:1999 '*Acoustics – Measurement of Environmental Sound*' and assessed in accordance with NZS 6802:1991 '*Assessment of Environmental Sound*'.
3. A building design report demonstrating acoustic attenuation performance sufficient to meet the standard specified in condition 2, shall be provided to Council's Environmental Health Unit with the building consent application for the substation building.
4. Exposures to extremely low frequency electric and magnetic fields around the boundary of the site and at all publicly accessible areas within the site shall comply with the guidelines recommended by the International Commission on Non-Ionizing Radiation Protection in 1998. A report from a suitably qualified expert shall be provided to Council's Environmental Health Unit to demonstrate compliance with these guidelines, within six months of the substation commencing operation. The report shall state the operating conditions at the time of measurement.
5. Radio frequency radiation levels at the substation boundary shall not exceed the levels specified in the New Zealand Standard NZS 6609:1990 '*Radio Frequency Radiation*' and NZS 2772.1:1999 '*RadioFrequency Fields Part 1: Maximum exposure levels 3kHz – 300GHz*'.

6. Landscaping shall be undertaken in general accordance with the further information submitted by WEL Networks Ltd dated 23 November 2007. Furthermore, at least three trees capable of growing to at least five metres in height shall be planted on the open space area to the east of the substation building. A detailed landscape plan shall be submitted prior to or with the building consent application for the substation building for approval by Hamilton City Council. The landscaping shall be completed in accordance with the approved plan prior to commencement of the operation of the substation, and be maintained for the life of the substation with replacement planting as required.
7. The management of hazardous substances shall be in general accordance with the information submitted in the notice of requirement, unless otherwise agreed with the Environmental Health Unit of Hamilton City Council.
8. During construction compliance shall be maintained with Rule 5.5.1a) of the Hamilton City Proposed District Plan relating to dust management, at all times. Any stockpiles of loose material shall be contained or maintained to prevent dispersal of material into the air.
9. In the event that any archaeological artefacts, features or remains are accidentally uncovered or are suspected to have been discovered, all works within the vicinity shall cease immediately. Evidence of archaeological sites can include oven stones, charcoal, shell middens, ditches, banks, pits, old building foundations, artefacts of Maori and European origin or human burials.
In cases other than suspected human remains, WEL Networks shall immediately secure the area and advise Nga Mana Toopu O Kirikiriroa and the New Zealand Historic Places Trust of the occurrence. WEL Networks must consult with Nga Mana Toopu O Kirikiriroa and the New Zealand Historic Places Trust to determine what further actions are appropriate to safeguard the site or its contents.
Where human remains are suspected, WEL Networks must take steps immediately to secure the area in a way that ensures human remains are not further disturbed and notify the Police as soon as is practicably possible after the remains have been disturbed. WEL Networks shall notify Nga Mana Toopu O Kirikiriroa and the New Zealand Historic Places Trust within 12 hours of the suspected human remains being disturbed or otherwise as soon as practicably possible. Excavation of the site shall not resume until the Police, New Zealand Historic Places Trust and kaumatua have each given the necessary approvals for excavation to proceed.
10. All security and night lighting installed within the substation site shall be positioned to avoid a spill of light onto any other site exceeding 3 lux (horizontal and vertical) when measured at or within the boundary of any other site, or result in illumination on roads which may dazzle or distract road users or interfere with any traffic aids or signals.

Advisory Notes

- a) All necessary consents must be obtained from Environment Waikato prior to commencement of construction works.
- b) An Outline Plan application may be required pursuant to Section 176A of the Resource Management Act 1991, if the design of the substation building changes significantly from that provided with the notice of requirement, or for any future works undertaken on the designated land. In these circumstances the Planning Guidance Unit should be contacted on (07) 838-6800 to discuss whether an Outline Plan need be submitted.
- c) The building consent application will be reviewed by the Water and Waste Services Unit in terms of the on-site wastewater disposal proposed, and the proposed stormwater disposal to demonstrate compliance with the Te Awa O Katapaki Catchment Management Plan.

Reasons

That pursuant to Section 171(3) of the Resource Management Act 1991, the reasons for the recommendation are as follows:

1. The notice of requirement has been assessed with consideration of the submissions received and against the relevant criteria stipulated in section 171 of the Resource Management Act 1991. It is considered that the proposal is consistent with Part II of the Act, and the relevant policy statements and plans.
2. It is considered that the Requiring Authority has given sufficient consideration to alternative sites and methods for undertaking the work, and Council is satisfied that the works and designation are reasonably necessary for achieving the objectives of the Requiring Authority.
3. The notice of requirement is consistent with the objectives and policies of the Hamilton City Proposed District Plan, and not contrary to the relevant national and regional policy statements and plans.
4. The extent of adverse environmental effects are no more than minor and can be effectively avoided, remedied or mitigated through conditions on the designation.

Report prepared by:

Report authorised by:

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