

Job Name: Proposed Plan Change - Rudolf Steiner School, Welcome Bay
Report Name: Landscape and Visual Assessment
Client Name: Rudolf Steiner School
Our Reference: 2586/ C2/FM
Date: 10 November 2008
Report Status: Draft

Isthmus Group Limited
5 Wharf Street
PO Box 13 338
Tauranga

Tel: 07 579 0487

Fax: 07 579 0485

Copyright. The contents of this document must not be copied or reproduced in whole without the written consent of the Isthmus Group Limited

Contents

1.0	Introduction
2.0	Proposed Plan Change and Planning Context
3.0	Wider Landscape Context
4.0	The Site
5.0	Visual Catchment
6.0	Actual and Potential Landscape and Visual Effects
7.0	Mitigation and Enhancement
8.0	Conclusion

Appendices

Appendix 1 – Site Context Plan

Appendix 2 – Site Character Plan

Appendix 3 – Site Photographs

Appendix 4 – Schematic Landscape Plan

1.0 Introduction

- 1.1 Isthmus was engaged by Beca Carter Hollings & Ferner Ltd on behalf of Rudolf Steiner School – Welcome Bay to prepare a Landscape and Visual Assessment for a Plan Change, to re-zone land zoned Rural Residential to a proposed Education Centre 3 Zone, under the Tauranga District Plan (District Plan).
- 1.2 The full school site was originally zoned Greenbelt, however a previous Plan Change re-zoned approximately half the site Rural Residential, which has not yet been reflected in the planning maps of the District Plan. The proposal is to re-zone this part of the site from Rural Residential to Education Centre 3 Zone, whilst retaining the remainder of the site as Greenbelt Zone.
- 1.3 The Plan Change will enable Rudolf Steiner School to develop their existing school site to accommodate the future growth of the school, which is expected to eventually double in size to a role of 300 students, ranging from early childhood through to Class 12 children.

Methodology

- 1.4 The following methodology was used to assess landscape and visual effects for the Plan Change:
 - a) Site visit and analysis of the land to be re-zoned and surrounding landscape;
 - b) Identify the visual catchment and viewing audience;
 - c) Provide an assessment of the relevant landscape provisions of both the Rural Residential Zone and Education Centre 3 Zone;
 - d) Compare the landscape change and associated effects of a Education Centre 3 Zone change with what may be developed on the site under the existing Rural Residential Zone;
 - e) Appraisal of the existing landscape character of the site and surrounding locations;
 - f) Assess the appropriateness of the land to be re-zoned to Education Centre 3 Zone, including an assessment of the potential landscape and visual effects on neighbouring properties, public roads and the public realm;
 - g) Recommend and illustrate proposed zone provisions and structuring elements to mitigate potentially adverse landscape and visual effects and improve the amenity of the neighbouring residents, visual audience and visitors to the site.

2.0 Proposed Plan Change and Planning Context

- 2.1 The subject site is located at R/364 Welcome Bay Road, on the eastern outskirts of the residential suburb of Welcome Bay, located in Tauranga, in illustrated on the **Site Context Plan, in Appendix 1**. It is divided into both Greenbelt and Rural Residential Zones under the District Plan. The Greenbelt Zone

occupies the western half of the site, which includes a gully and watercourse, whilst the eastern part of the site is zoned Rural Residential and includes the existing school buildings, car parking and playing fields. The application is for the eastern part of the site zoned Rural Residential to adopt the proposed Education Centre 3 Zone, which will form part of the District Plan.

- 2.2 The proposed Education Centre 3 Zone will enable the existing school site to be developed, to accommodate the anticipated future growth of the school, in a manner which is sympathetic to the surrounding rural character.
- 2.3 As illustrated in the **Schematic Landscape Plan, in Appendix 4**, the site has been divided into three sub zones, named Sub Zone A, B and C, which indicate the approximate locations of particular types of development. In general, Sub Zones A and C will contain the buildings, sports grounds and places of assembly, whilst Sub Zone B will include the vehicle related areas, such as car parking. The key difference between Sub Zone A and C is that Sub Zone C allows for taller buildings, with a maximum height of 15m, compared to Sub Zone A, which has a maximum building height of 12m. This will enable development of larger buildings required for a school, such as assembly halls.
- 2.4 Sub Zone C (taller buildings, including sports fields and assembly areas) is located on relatively flat topography, in the middle of the proposed Education Centre 3 Zone.
- 2.5 Sub Zone A (buildings, sports fields and assembly areas) is located on the western half of the proposed Education Centre 3 Zone, adjacent the gully.
- 2.6 Sub Zone B (vehicle related areas) is located on the eastern half of the proposed Education Centre 3 Zone, between Sub Zone A and the neighbouring properties to the east, which are zoned Rural Residential.
- 2.7 In addition to the sub zones, are two landscape buffers on the eastern and southern boundaries of the site. The landscape buffers are 3m wide and will comprise both exotic and indigenous planting species found in the local rural environment. The landscape buffers will provide separation and screening between the site and neighbouring properties, zoned Rural Residential.
- 2.8 The District Plan does not identify any notable trees or significant landscape features within the site, which are worthy of protection, however the poplar trees on the southern boundary will be retained for screening and backdrop vegetation.
- 2.9 It is anticipated that the weedy vegetation on the western edge of the gully slopes, within the Greenbelt

Zone of the site will gradually be replaced with indigenous vegetation, similar to that recently planted on the eastern slopes of the gully.

2.10 A comparison and analysis of the zone rules in relation to landscape and visual matters between the existing Rural Residential Zone and proposed Education Centre 3 Zone is outlined in Table 1 below:

Table 1: Rural Residential Zone and Education Centre 3 Zone Landscape Provisions Comparison

Issue	Rural Residential Zone	Education Centre 3 Zone	Comments
Permitted Activities	19.1 Large dwellings, home based businesses, daycare centres, primary production activities, produce stalls, reserves, etc.	23.1 Education facilities, conference facilities, residential accommodation (associated with the education centre), horticultural facilities, places of assembly, recreational sports grounds, student confidence and training structures, etc.	A number of the activities permitted within the two zones have similarities. For example the Rural Residential Zone provides for primary production and reserve areas, whilst the Education Centre 3 Zone allows for horticultural facilities and playing fields.
Building Height	19.2.1.2 (a) Maximum building height is 9m.	23.2.1.4 (a) Maximum building height is 12m, except in Sub Zone C where the maximum height is 15m.	Buildings located in Sub Zone A will have a 3m height difference, whilst buildings in Sub Zone C will have a 6m height difference. Sub Zone C is limited to a small part of the site, which located at a lower contour, so the building will not be prominent.
Over Shadowing	19.2.1.6 Buildings shall be within a building envelope of 2.7m height above ground level and a specified angle in Appendix 19D.	23.2.1.11 Buildings shall be within a building envelope of 2.7m height above ground level and a specified angle in Appendix 19D.	Over shadowing will not be an issue, because both zones share the same over shadowing controls.
Road boundaries (streetscene)	19.2.1.4 (a) Buildings setback 10m from road boundaries.	Not applicable because the site is setback from the road.	Road boundary controls are not applicable for the site, as it is setback from Welcome Bay Road and is accessed via a driveway.
Site boundaries (excl road boundaries)	19.2.1.5 (a) Buildings to be setback 1.5m from side and rear boundaries.	23.2.1.10 Buildings to be setback 1.5m from side and rear boundaries.	Side and rear boundary controls are identical for both the Rural Residential and Education 3 Zone. The site will be separated from the adjacent Rural Residential Zone to the east and south by a landscape buffer, 5m wide. The gully (zoned Greenbelt) within the site will separate the development area of the site from the Residential A Zone to the west.
Traffic	19.2.1.3 On-site vehicle	23.2.1.9 On-site vehicle	Whilst the traffic management

Management	<p>parking, manoeuvring, loading and access.</p> <p>25 car parks are provided as a permitted activity, further parking spaces will require a Traffic Impact Study.</p> <p>19.3.1.3 (d) The minimum access width in the Rural Residential Zone is 4m.</p>	<p>parking, manoeuvring, loading and access.</p> <p>25 car parks are provided as a permitted activity, further parking spaces will require a Traffic Impact Study.</p>	<p>controls for the two zones are the same, the Education Centre 3 Zone is expected to have a higher volume of traffic movements, particularly at two peak times.</p> <p>Large vehicles, such as school buses, are likely to be prominent in the Education Centre 3 Zone.</p> <p>Expansive hard surface areas will be required in the Education Centre 3 Zone to accommodate large vehicles and greater traffic movements.</p>
Development Intensity and Scale	<p>19.2.1.1 (i) One dwelling per site.</p> <p>19.3.1.3 (a) Minimum allotment area of 3000m², with a minimum area of 4000m² for subdivisions.</p>	<p>23.2.1.3 Building development is limited to educational facilities, up to 300 pupils and 35 staff, until all buildings are connected to sanitary sewerage system.</p>	<p>A higher built coverage is allowed for in the Education 3 Zone, compared to the Rural Residential Zone, which permits one dwelling per site.</p> <p>Given that dwellings in the Rural Residential Zone are larger than dwellings located in the standard Residential A Zone, both the Education Centre 3 Zone and Rural Residential Zone are likely to have buildings that have a large footprint.</p> <p>Buildings in the Education Centre 3 Zone are likely to have consistency in their architectural detail, materials and/or colour scheme creating a comprehensive development.</p> <p>The Education Centre 3 Zone includes a higher concentration of supplementary built elements such as seating, rubbish bins, play grounds, sporting facilities, shade structures, etc.</p>
Exterior Lighting and Glare	<p>19.2.1.12 25 lux during the day 10 lux during night</p>	<p>23.2.1.14 25 lux during the day 10 lux during night</p>	<p>Exterior light and glare controls are the same for both zones.</p>
Visual Amenity	<p>19.3.1.3 (d) Controls on the bulk and location of buildings and their connection with the landscape.</p> <p>Controls on location and design of fencing.</p> <p>Planting of vegetation and/ or landscaping.</p>	<p>23.3.2.3 Buildings are integrated with the rural environment.</p> <p>Appropriate tree planting is undertaken in parking and landscaping areas.</p>	<p>Both the Rural Residential Zone and Education Zone seek to integrate development into the surrounding rural environment.</p> <p>Planting of native vegetation and/ or landscaping is encouraged in both zones.</p> <p>There are no significant landscape features or notable trees within the</p>

	Protection of features of landscape significance or heritage.		site.
--	---	--	-------

- 2.11 In summary, the main differences between the two zones, which are likely to create landscape and visual effects, are that the Education Centre 3 Zone provides for more intensive development, at a larger scale, particularly in Sub Zone C, where the maximum building height is 15m. The greater building coverage will reduce the perceived openness between buildings, a characteristic of the Rural Residential Zone, which contributes towards rural amenity. Anticipated supplementary built features, such as play ground structures, will also have an effect on the perceived openness between buildings. The allowance for taller buildings to be constructed in the Education Centre 3 Zone, particularly Sub Zone C, will potentially increase the prominence of such buildings in the surrounding landscape.
- 2.12 The Education Centre 3 Zone will have greater traffic movements, particularly during peak times. Large hard surface areas will be required to accommodate car parking and manoeuvring of large vehicles, such as buses. Car parking is less prominent in the Rural Residential Zone because there are generally less vehicles, and some vehicles are parked within garages and therefore concealed from view.
- 2.13 Whilst there are a number of differences between the expected development outcomes under the two zones, there are also a number of similarities and consistencies. Both zones are concerned with the preservation of rural character and amenity and have specific provisions, which seek to integrate built development into the rural landscape via controls on the placement, scale and location of buildings. In addition to this, both zones encourage the planting of indigenous vegetation and/or appropriate tree planting to improve landscape quality and amenity.

3.0 Wider Landscape Context

- 3.1 Rudolf Steiner School is located on the eastern limits of the residential suburb of Welcome Bay, located in Tauranga. Welcome Bay comprises a number of valleys and gully systems in the Welcome Bay Hills. It is characterised by the way its sloping topography has been urbanised with residential development and roads. Large swathes of land, mainly in the gullies, have been retained for parks and drainage reserves. In the upper areas of the foothills, where the most recent residential development is located, expansive views of Welcome Bay, Rangataua Bay, Tauranga City and Mauao are obtainable. Welcome Bay comprises three primary schools which include Welcome Bay School, Selwyn Ridge School and Rudolf Steiner School.

4.0 The Site

- 4.1 The subject site (Lot 2 DPS 47587) is located in the middle of a valley and comprises 6.4613 hectares on the eastern periphery of the residential suburb of Welcome Bay. Access is obtained from R/364 Welcome Bay Road via a driveway which is approximately 100m long. The driveway is shared with a number of Rural Residential properties, located immediately east of the site, which are currently undeveloped, with the exception of a two storey dwelling located on the eastern slopes setback 250m from the sites eastern boundary.
- 4.2 The valley slopes south of the site, are also zoned Rural Residential, and similar to the eastern slopes, a great number of the properties are undeveloped and are currently in open pasture, which collectively create a strong rural character surrounding the site. The properties located on the escarpments further south, have been developed with large scale dwellings that take advantage of the views to Mauao and Welcome Bay to the north. These properties are accessed from Oceana Drive.
- 4.3 To the west, adjacent the gully within the site, (which is zoned Greenbelt) the steep escarpment above Waikite Road comprises properties zoned Residential A, which have been developed, with large contemporary style homes. The majority of these properties are screened by the vegetation on the edges of the gully.
- 4.4 To the northwest is large property (approx. 6.9020 hectares) located between the gully and Waikite Road, which is currently being transformed for residential development. The valley encompassing the site is a significant development area of Welcome Bay and the wider Tauranga area.
- 4.5 As illustrated in the **Site Character Plan, in Appendix 2**, the site is fan-shaped, with its widest part located at the southern end of the site, which tapers down to the driveway located at the northern end. The western half of the site contains an incised gully system, which manages the drainage of the wider valley catchment. It includes a water course and small pond, which forms a weir halfway along the watercourse. The gully is overgrown in grass and weeds, such as gorse, pampas grass and blackberry. Two mature macrocarpa trees and a number of ponga tree ferns are located on western slopes of the gully. The eastern slopes have been recently planted with indigenous planting, including kauri trees, cabbage trees and flax. The gully and its vegetation, form a buffer, approximately 50m wide, between the eastern half of the site (the area proposed for re-zoning), and the residential development to the west.
- 4.6 The eastern half of the site comprises both flat and gently sloping topography which is more suitable for the development of buildings. The flat area includes the northern end and mid section of the site, which

contain the existing school buildings, car park and playing fields, whilst the sloping topography is in the southern part of the site, which is currently in open pasture. The southern boundary is defined by a row of tall poplar trees, while the eastern boundary is relatively undefined with the exception of a post and wire fence and a prominent batter slope, some 3m tall, adjacent the flat area of the site. The highpoint of the site is located in the southeast corner. The topography gently falls away to the northwest, where the gully and playing fields are located. Approximately mid way down the slope is a small grass terrace jutting out from the hillside.

5.0 Visual Catchment

5.1 The visual catchment area, in which the subject site forms part of the local visible landscape, is relatively restricted due to the valley landform and enclosing topography and vegetation. Views of the subject site will generally be from elevated locations on the surrounding escarpments and along the eastern boundary of the site.

5.2 The main existing and foreseeable viewing audiences include:

- Future residents living in residential properties (currently undeveloped) on the edge of escarpments northwest of the site, adjacent the gully zoned Greenbelt.
- Residents living in residential properties on the escarpment either side of Waikite Road, to the west.
- Motorists (including cyclists and pedestrians) on a small section of Waikite Road, adjacent land zoned Greenbelt
- Future residents living in the two rural residential properties, currently undeveloped, adjacent the eastern boundary of the site.
- Future and existing residents living in rural residential properties on the escarpments surrounding the site to the east and south.
- Motorists on Estates Terrace and part of Oceana Drive, where it intersects with Estates Terrace, south of the site.

6.0 Actual and Potential Landscape and Visual Effects

6.1 The actual and potential landscape and visual effects of the proposal include:

- Effects on surrounding rural character
- Specific effects on neighbouring properties and public roads.

Effects on Surrounding Rural Character

- 6.2 The subject site is located within a large valley catchment, in the Welcome Bay Hills. An incised gully system forms the western half of the subject site, zoned Greenbelt. The escarpment to the west, above Waikite Road, comprises residential development extending up to the ridgeline. Additional residential development is currently under construction to the northwest. The gully provides a buffer between the Residential A Zone and Rural Residential Zone to the east.
- 6.3 Whilst the eastern and southern slopes surrounding the site are relatively undeveloped, the area is zoned Rural Residential and is likely to undergo significant development in the future. Although the Rural Residential Zone provides for low density development, which retains openness between the buildings, the eventual development of these slopes with large scale Rural Residential dwellings will somewhat reduce the existing rural character of the area.
- 6.4 Whilst the Education Centre 3 Zone permits a higher density than the Rural Residential Zone, walkways and associated planting will provide openness and greenery between the buildings. Large areas of open space will also be established within the site, such as playing fields, places of assembly and car parking. Although the car parking is likely to comprise hard stand surfaces. It will be softened with landscape planting, integrated with the adjacent landscape buffers.
- 6.5 The proposed Plan Change will provide a band of greenery and open space along the eastern and southern boundaries of the site, in the form of a landscape buffer, 3m wide. This will provide partial screening and a vegetated backdrop to future development within the site, enabling it to better integrate with the surrounding landscape.
- 6.6 Whilst the subject site has an underlying Rural Residential zoning, it has already been developed with existing school buildings, playing fields and car parking. The proposed Plan Change will enable further development of the school site, which will be largely controlled by the proposed sub zones, which determine the location of various types of development. Sub Zone A generally provides for buildings, playing fields and places of assembly. This is separated from the Residential A Zone development to the west by the gully and separated from the Rural Residential Zone to the east and south by the landscape buffer and landscaped car parking areas in Sub Zone B.
- 6.7 Sub Zone C which provides for taller buildings up to a maximum height of 15m is located in a flat area of the site, rather than the upper southern slopes or grass terrace, where a tall building would be prominent.
- 6.8 Sub Zone B which incorporates the car parking and vehicle areas will be landscaped with trees and

shrub planting, integrated with the landscape buffer planting on the eastern and southern boundaries of the site. This will provide further separation between neighbouring properties and building development provided for under Sub Zone A, reducing the potential for reverse sensitivity issues to occur between the Rural Residential Zone and proposed Education Centre 3 Zone.

Effects of Neighbouring Properties and Public Roads

- 6.9 To the west, distant views of the southern slopes and northern end of the site can be obtained from the residential properties located on the escarpment above Waikite Road, as illustrated in **Site Photographs 1, 7, 8, and 15, in Appendix 3**. However the views are mostly obscured by the extensive vegetation located on the edges of the gully in the western half of the site, zoned Greenbelt. Narrow view shafts into the site are obtainable through breaks in the vegetation or where there is a low point in the vegetation. Given the distance of the view (approximately 300m) and narrow view shaft the effects on these properties will be low.
- 6.10 A narrow view of the site is also available from a short section of Waikite Road, adjacent to the Greenbelt Zone, comprising the upper catchment of the gully (refer to **Site Photograph 18, in Appendix 3**). The effects on Waikite Road will be low to negligible, given that the site is mostly screened from view by the vegetation in the gully.
- 6.11 Expansive views of the subject site are available from the eastern slopes surrounding the site, which are zoned Rural Residential and have a northwest outlook across the northern part of the site (refer to **Site Photographs 1, 5 and 6, in Appendix 3**). The neighbouring properties are currently undeveloped and comprise open pasture with the exception of one established dwelling. The boundary between the properties and site is relatively open, defined only by a post and wire fence. A proposed landscape buffer, 3m wide, will be established along this boundary to provide partial screening and separation between the two zones. The buffer will comprise of trees and shrub planting, which is broadly illustrated in the **Schematic Landscape Plan in Appendix 4**. In addition to this, it should be noted that once the two properties (Lot 2 DP382937 and Lot 3 DP382937) immediately adjacent the site (landscape buffer) are developed, the buildings and associated cartilage in these properties is likely to further obscure views of the site, from residences set further back. Once the landscape buffer has established (approximately 5 years) the effects on the surrounding properties east of the site will be medium to low.
- 6.12 To the south, views of the site can be obtained from the Rural Residential properties on the slopes rising above the site. The existing poplar trees on the southern boundary provide partial screening of the site. However this is less effective during the winter months, when the deciduous poplar trees loose their leaves, allowing filtered views into the site. A number of large scale dwellings have been recently developed on the escarpments further south, which gain views of Mauao and Welcome Bay. Whilst

views from these dwellings are some distance away, the lower properties, which are currently undeveloped, extend to the southern boundary of the site as illustrated in **Site Photographs 19 and 20, in Appendix 3**. When the properties are developed, views into the site will be restricted to properties immediately adjacent the site.

- 6.13 Views of the site are also available from Estates Terrace and part of Oceana Drive, near its intersection with Estates Terrace. However as described above, these views are partially screened by the poplar trees and views of the site will be further obscured once development occurs in the foreground of the view, immediately behind the southern boundary of the site.
- 6.14 While the properties and roads in the hills to the south, behind the site, currently enjoy a semi rural aspect over the undeveloped Rural Residential land and the southern part of the site, the openness and greenery is not protected. When the land is eventually developed as its zoning permits, the presence of dwellings and associated curtilage will reduce the openness and rural character of this outlook.
- 6.15 The large residential subdivision currently under construction immediately adjacent the northern area of the gully within the site will not be significantly effected by the proposed Plan Change because the residential development on this property is most likely to be oriented north away from the site. Also the recently planted native vegetation along the west facing slopes of the gully, within the site, will provide partial screening of the subject area. It is expected that the steep escarpment below the property will be rehabilitated with indigenous planting, which will provide further screening.

7.0 Mitigation and Enhancement

- 7.1 The following mitigation and enhancement features illustrated in the **Schematic Landscape Plan in Appendix 4** should be incorporated into the proposal:
- All development should nestle into the natural landform. Where possible access roads should follow the natural contour.
 - A 3m wide landscape buffer should be established along the eastern boundary of the site and where possible integrated with the car parking and vehicle areas anticipated within the adjacent Sub Zone B. The landscape buffer would include trees and shrub planting found within the local rural environment.
 - Any significant earthworks resulting in batter slopes and/ or retaining walls should be rehabilitated and softened with landscape planting.

- All boundary fencing should be rural and open in character, such as a post and rail or post and wire fence. Closed timber fences should be avoided, or concealed with planting.
- Large bulky buildings should be modulated, so they appear as a cluster of smaller building components, which are less prominent.
- Large car parks should also be modulated and broken down into a series interconnected smaller car parks. This can be achieved with landscape planting.
- The architecture of the buildings should be rural in character. For example, round roofs could be used, which reflect the half round hay barns typically found in the rural landscape.
- The buildings should be constructed from materials typically found in the rural environment, such as weathered timber board and baton and corrugated steel.
- A comprehensive school development should be achieved through the use of the consistent architectural style, building materials and colour scheme of the school buildings, so they appear unified and coherent.
- The colours of all building including external components (such as guttering, spouting, and window joinery) should be of natural tones within the British Standard (BS) 5252 range, groups A and B, with a maximum reflectivity of 40%. Colours that are reflective should be avoided.

8.0 Conclusions

- 8.1 The subject site has a split zoning comprising Greenbelt and Rural Residential Zones. The proposal is to re-zone the Rural Residential Zone into a proposed Education Centre 3 Zone, which will enable the school to expand in response to predicted growth of the school, whilst remaining sympathetic to the surrounding rural character.
- 8.2 The area to be re-zoned is divided into sub zones, which control the location of specific types of development typically required in schools. The buildings in Sub Zone A will be located away from the sensitive edges of the site, and will contain large areas of open space, such as playing fields. Sub Zone C, which provides for taller buildings is relatively small and is located at a low contour enabling taller buildings to be better integrated with the landscape. Sub Zone B which provides for car parking and landscaping is located along the eastern boundary of the site, providing separation between the school development and properties zoned Rural Residential.
- 8.3 Landscape buffer planting is proposed along sensitive edges of the site to provide screening and integration of future development, including buildings and car parking, with the surrounding landscape.

8.4 Building design measures are recommended to ensure the buildings integrate with the landscape and achieve a comprehensive development, which is unified and coherent and maintains rural character.

Appendix 1 – Site Context Plan

Appendix 2 – Site Character Plan

Appendix 3 – Site Photographs

Appendix 4 – Schematic Landscape Plan