

Selwyn District Council

Prebbleton Sports Ground

Site Options Assessment

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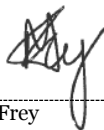


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Executive Summary

This report commissioned by Selwyn District Council (SDC) seeks to undertake a preliminary site options assessment to evaluate the suitability of four sites identified by SDC for sports ground purchase/development purposes. The four sites considered are:

- Site One: Lot 2 DP 73548 (Shands Road)
- Site Two: Lot 1 DP 4932 (Hamptons Road)
- Site Three: Lot 2 DP 365486 (Birches/Leadleys Road)
- Site Four: Lot 1 DP 34032 (105 Tosswill Rd, Prebbleton)

Each site has been assessed against the following criteria:

- Geographical location, orientation and shape (suitability for sports ground layout)
- Access and traffic flows (pedestrian, cycle and vehicle)
- Connection to Prebbleton township and/or other complementary land uses
- Planning implications including zoning, designations and sites of significance
- Environmental constraints such as soil and hydrological constraints
- Contamination (high level check of the possibility of a site on the HAIL¹)
- Proximity to services
- Other distinguishable site features.

A weighted decision matrix was then been developed and used to determine the most suitable site for potential purchase and investigation into the development into a sports ground. The decision matrix is included in Appendix 2.

Site Three (Leadleys/Birches Road) has been identified as the preferred site option for the location of a new sports ground. Site Three provides opportunity for the establishment of at least four north-south orientated rugby pitches as well as additional amenities. The site has good connections to the 'Rail Trail', is within close proximity to residential development in Prebbleton and is within close proximity to Lincoln (5 minute drive). This site also provides for future expansion should this be required.

It is recommended that Site Three be investigated further for the development of a sports ground.

¹ The Hazardous Activities and Industries List (HAIL) is a compilation of activities and industries that are considered likely to cause land contamination resulting from hazardous substance use, storage or disposal (Ministry for the Environment, 2015).

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Introduction

Selwyn District Council (SDC) have engaged Opus International Consultants to undertake a preliminary site options assessment to assess four greenfield sites for their suitability for sports ground purchase/development purposes. The appropriate greenfield site should accommodate at least four full sized sports pitches to meet short to medium term demand.

The Council has identified four (non-council owned) sites for consideration, all between 8 and 21 ha in size where a sports ground could be located. These sites are described below. A location map is also contained in Appendix One of this report.

- Site One: Lot 2 DP 73548 (Shands Road)
- Site Two: Lot 1 DP 4932 (Hamptons Road)
- Site Three: Lot 2 DP 365486 (Birches/Leadleys Road)
- Site Four: Lot 1 DP 34032 (105 Tosswill Rd, Prebbleton)

Council has also identified four alternative sites available for consideration should none of the four sites identified above be suitable to establish a new sports ground.

This report is a desktop study only; however, site visits were undertaken by Michele Frey and Kate Randell to identify any obvious physical constraints at each site.

This report assesses each sites against the following criteria:

- Geographical location, orientation and shape (suitability for sports ground layout)
- Access and traffic flows (pedestrian, cycle and vehicle)
- Connection to Prebbleton Township and/or other complementary land uses
- Planning implications including zoning, designations and sites of significance
- Environmental Constraints such as soil and hydrological constraints
- Contamination (high level check of the possibility of a site on the HAIL²)
- Proximity to services
- Other distinguishable site features.

A weighted decision matrix has then been developed and used to determine the most suitable site for potential purchase and investigation into the development into a sports ground.

This report does not explore the need for an additional sports ground in Prebbleton nor does it make recommendations around land purchase. It is noted that all sites are currently in private ownership and it has been assumed that SDC will engage with the landowners and consider the cost to purchase in the detailed site assessment that will follow this report.

² The Hazardous Activities and Industries List (HAIL) is a compilation of activities and industries that are considered likely to cause land contamination resulting from hazardous substance use, storage or disposal (Ministry for the Environment, 2015).

Decision Making Criteria

There are a number of factors that need to be taken into consideration when determining the most appropriate location for a sports ground. This section discusses the key factors that require consideration for a sports ground in Prebbleton.

1.1 Geographical location, shape and orientation

Best practice shows that sports grounds are best located within reasonable distance of populations. Rural, isolated land some distance from Prebbleton Township is therefore less desirable.

8 ha has been identified as the minimum land area required for a sports ground. This size is to accommodate a minimum of four full sized fields plus extra space for training/junior fields.

Any potential sports ground must be able to accommodate playing fields with competitive dimensions for rugby, soccer and cricket. The International Rugby Board (IRB) specifies that the field of play for rugby is 120 metres in length and 70 metres in width (8,400 m² in total). New Zealand Football (NZ Football) specified that the field of play for soccer is 105 metres in length and 68 metres in width.

The sports ground site must be able to accommodate four full sized rugby pitches side by side. It should be noted that the site must also be able to accommodate vehicle access ways, car parking, spectator areas, general play areas/training areas and clubrooms.

Sites should allow for north-south orientation of the sports field, which is desirable in comparison to an east-west orientation. Orientation of a site is also important when taking into account Crime Prevention through Urban Design (CPTED) principles. Sports field sites must be able to be orientated in a manner that discourages crime, provides for casual surveillance, and enhances perceptions of safety and way-finding.

Avoid directly conflicting activities that occur adjacent to or close to the proposed site. Conflicting activities might include existing rubbish dumps and industries discharging undesirable emissions for example.

1.2 Access and Traffic Flows

Current best practice suggests that successful sports grounds are those that can be accessed easily, both through vehicle use and by more active modes such as cycling and walking. Consideration should also be given to limitations caused by physical barriers such as major roads.

Vehicle access to facilities includes factors such as safe routes of travel, reasonable distance to travel and easy parking upon arrival at the facility for example.

Cycle access to facilities includes consideration of factors such as safe cycleway provision, reasonable distance to travel for cyclists and suitable cycle lock up facilities on site.

Walking access to facilities includes consideration of factors such as safe walkway provision and reasonable distance for walkers to get to the sports ground (taking into account any equipment that may need to be carried). A comfortable walking distance has been defined by Massey University's Centre for Social and Health Outcomes Research and Evaluation as 800 metres to community facilities.

Public transport should be another factor for consideration; however, currently there is very limited public transport provision in the Selwyn District. Location of the facility along public bus routes should be considered in the future where public transport options are available.

1.3 Connection to Prebbleton Township and/or other complementary land uses

Open spaces are important in providing physical linkages for transport routes, to connect activities and develop 'green corridors'.

The latest demographic data for Selwyn shows that Prebbleton is growing at a significant rate and subsequently demand for open space and associated facilities is also increasing. It remains important that sports grounds and other open spaces are developed in a co-ordinated manner to ensure they are well connected and effective to meet the demands of the community.

Sites located within close proximity to the existing Prebbleton Township and/or areas marked for significant residential subdivision development will be well connected to the community. This will help to install CPTED principles at the site as community ownership of a space encourages people to take care of the space and feel associated with it.

Multi-use of facilities (use by a number of sports codes as opposed to exclusive use) has been shown to be an effective, cost saving option for sports codes.

Trends and best practice suggests that the 'Sportville model' or the support of a variety of sports codes by one administrative body can have positive impacts on the respective codes. There is a reduced reliance on volunteer resources whilst the communities benefit from the greater efficiency of resource use such as paid staff.

1.4 Planning Implications

Given the scale of the sports ground development and the rural nature of all sites considered it is likely resource consent/s or a designation process could be required for its development on any of the site options. However, there are some planning requirements that could make development of a sports ground on a particular site undesirable. This includes storm water consent requirements on sites that require onsite storm water attenuation, irrigation requirements, large car parking shortfalls, and impacts on neighbours (in particular the effect of locating a recreational facility next to residential properties) with associated effects like increased traffic movements, lighting and noise.

Resource consent may be required from Environment Canterbury for any activities involving, earthworks, and discharges to surface and/or groundwater or to land where it may enter water, the take and use of groundwater and/or surface water and works within the bed of a river.

Resource consent or a designation process may be required from Selwyn District Council for the use of land and the associated car parking, traffic movement, lighting, noise and ancillary buildings.

In addition to this any site with an identified risk of discovery of archaeological material may require additional approvals from Heritage New Zealand Pouhere Taonga, which may be in the form of an archaeological authority. Cultural and heritage factors also require consideration.

A brief assessment has been made in terms of the planning implications at each site. Relative risks have been factored into the site analysis.

1.5 Environmental Considerations

Relatively flat land can help to reduce construction complexity and cost. A flat site is easier to remove topsoil and find solid ground.

Natural sports fields (sand and soil based) will not perform in extreme climatic conditions including drought, coldness, wind and high rainfall periods.

The physical properties of soil on-site can affect the type of sports field to be developed including the need for costly foundations for artificial turfs and structures on-site (such as goal posts, clubrooms, toilet blocks etc.).

Sites must have provision for water storage or stormwater detention ponds.

Excessive shade from trees can be detrimental to grass growth during winter. Tree roots may also pose risk to turf drainage systems resulting in drainage failure.

1.6 Contamination

Land is considered contaminated when there are any hazardous substances that could pose a threat to human health or the environment.

Hazardous land uses include orchards, market gardens and other horticultural land where chemicals may have been stored or spraying may have occurred; service stations and other underground or above-ground storage of hazardous substances; motor vehicle workshops, timber treatment sites and some industrial sites.

Environment Canterbury maintains a database, called the Listed Land Use Register (LLUR) to meet its requirements under S.30 of the Resource Management Act (RMA). This requires the identification and monitoring of contaminated land, which is land defined by the Ministry for the Environment (MfE) on the Hazardous Activities and Industries List² (HAIL – Appendix 1).

Any site on the LLUR would require a preliminary and/or detailed site investigation to be undertaken by a suitability qualified person to determine the level of contamination and risk to human health. This may result in the need for the site to be remedied prior to the establishment of a sports ground.

With a proposed change of land use from agriculture to recreation, an investigation of contamination via a Preliminary Site Investigation (PSI) will be required as an initial step to comply with the

National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES).

1.7 Proximity to services

Given the predominately rural nature of Prebbleton not every site identified is serviced by reticulated sewer and/or water (or able to easily be connected to the reticulated network).

Sites unable to be serviced would result in the need to install onsite treatment systems for both water and sewer, which is costly.

Site Analysis

2 Site One: Shands Road

Site one is described as Lot 2 DP 73548. The site is located on the western side of Shands Road approximately 280 metres south of the intersection with Trents Road (see figure one and figure two below).



Figure 1 – Aerial Photograph showing Site One (highlighted in red)



Figure 2 – Aerial Photograph of the site (outlined in red)

The site is owned by Wang Paul Ming-Lung & Julie Shou-Li: The Wang Family Trust No 2, is 10 ha in size and currently in pasture.

2.1 Geographical location, shape and orientation

The site is located approximately 1.7 km from the centre of Prebbleton Township on the east side of town on the road toward Christchurch. The surrounding sites are rural and there is a large lot directly opposite to the site on Shands Road that is earmarked for future rural-residential development. The site is, however, located close to the parcels of land identified in the Selwyn District Plan as the Kingcraft Drive existing residential development.

The site is rectangular in shape with an additional square block to the north.

The site is orientated toward the north. The site would accommodate approximately five north-south orientated sports fields.

Shelter belts surround eastern, southern and part of the western boundary of the site. These will provide shelter from the southerly and westerly winds.

Power lines cross over the middle of the site.

The site is located within Earthquake Zone B and the high wind zone.

2.2 Access and Traffic Flows

The site is accessed from Shands Road. There is currently partial driveway access to the site.

Shands Road is identified in the Selwyn District Plan as Arterial Road, which means that it is a road that connects areas of district importance not already provided by State Highways. Arterial roads connect the district's townships and other important places and activities together, including across district boundaries. Arterial roads are subject to high traffic flows. The speed limit 80 km/hour.

The site itself and Shands Road are identified within the area encompassed by the 2007 Christchurch, Rolleston and Environs Transportation Study (CRETS). CRETS identifies that following the extension of the Christchurch Southern Motorway a full interchange will be installed at the Shands/Marshs Roads Intersection, which will attract traffic to use Shands Road in preference to Springs Road.

Shands Road will create a significant barrier for access, especially for walking and cycling.

Given the site is 10 ha, which makes it on the larger side, there is plenty of space to establish car parking on the site. However, safe access to and from the site for vehicles from Shands Road may be difficult to establish without reducing the speed limit on the road.

There is no designated cycle or pedestrian access to the site currently. With regards to Massey University's 800 metres comfortable walking distance guide, a majority of the Prebbleton Township is located greater than 800 metres from the site.

2.3 Connection to Prebbleton Township and/or other complementary land uses.

As discussed in Section 2.1 above, the site is located approximately 1.7 km to the west of the Prebbleton Township. In terms of connection to the township the site's location on Shands Road creates a barrier in terms of having to cross an 80 km/hr road to get the township.

The site is located some distance from Prebbleton Township; however, it is noted that is directly opposite an area earmarked for possible future rural residential subdivision (RRS Areas). Should this future development occur it may provide linkages from the site to the residential development within the Kingscraft Drive subdivision.

The site is also not located close to any other parks and recreation facilities. It is, however, located close to the Shands Road Cemetery, which is a passive open space area.

2.4 Planning Implications

The site is currently zoned for 'Rural Inner Plains' use in the Selwyn District Plan (District Plan). The consequence of this is that a sports ground development would not be anticipated by the zoning requirements in the Plan and a resource consent or a designation process would be required. Given the open space nature of a sports ground it is likely that effects could be assessed as less than minor; however, this cannot be established until concept design for the development is undertaken.

The main planning constraint at the site will be around vehicle access: the Council would need to demonstrate safe entry and exit points from the site onto Shands Road and also the provision of sufficient onsite car parking.

Resource Consent would also likely be required from Environment Canterbury for the diversion of drainage water (if required), discharge of drainage water, discharge of stormwater from the site during construction and the taking of groundwater for irrigation if required. As the site is not serviced consent would also be required should the council decide to install an onsite human effluent discharge system (septic tank). The site is located within a Red (over allocated) groundwater zone meaning that there may be restrictions around irrigation. The site is also located in a red nutrient allocation zone, which means Environment Canterbury will generally control the amount of nitrogen able to be applied to the land (in relation to groundwater leaching). However, fertiliser application to sports fields is exempt from this requirement.

There are no known cultural or heritage risks associated the development of a sports ground at this site.

2.5 Environmental Considerations

The site and surrounding area is almost flat with a maximum slope of 0.5% (north to south).

The site is located in a high wind zone (44 metres/second) and is susceptible to both morning and evening frosts in the winter.

Landcare S-maps Soil describe the area of the proposed sports grounds as follows:

Soil Type	Dominant soil texture:	Dominant soil drainage	Dominant soil depth	ECAN soil group	Weighted Average PAW 30cm:	Weighted Average PAW 60cm:	Confidence
Templeton Deep Silty Loam (60%) and Templeton Deep Silty Loam (40%)	Silty	Imperfectly Drained	Deep (>100cm)	Heavy	52	98	Moderate

The site is located over the unconfined/semi confined aquifer system. Groundwater at the site is recorded at its highest at 4 metres below ground level.

2.6 Contamination

The site is not listed on ECan's LLUR as containing or previously containing a HAIL site. A review of aerial images dating back to the early-1940s indicate that currently and historically, the site appears to have been predominantly used for agricultural purposes, such as grazing and possibly cropping.

It is noted that general farming is not an activity listed on the Ministry for the Environment's (MfE) HAIL, and therefore the potential for the site being contaminated from past and current agricultural use is low. However, if SDC wishes to have more certainty with respect to the potential for soil contamination (e.g. pesticide use, or livestock dips), a more comprehensive Preliminary Site Investigation (PSI) could be undertaken. This would include investigating property files and the SDC databases, historic title searches, a site walkover by a contaminated land specialist.

2.7 Services

The site is not connected to any reticulated sewer, water or stormwater networks. Nor are there any neighbouring connections. Overhead power lines do run over the site.

There are existing wells onsite that could be utilised as water supply for the site, subject to a water permit being approved or transferred to the site. Please note that existing well is approximately 35 m deep and may be unsuitable for potable supply due to the unconfined/semi-confined nature of the first (topmost) aquifer in the area, and the expected elevated levels of contaminants (such as Nitrate-Nitrogen). This is likely due to the surrounding agricultural land use. Given this, deeper bores would be required to supply "clean" potable water to the site.

3 Site Two: Hamptons Road

Site two is described as Lot 1 DP 4932. The site is located on the southern side of Hamptons Road approximately 402 metres east of the intersection with Springs Road (see figure three and figure four below).

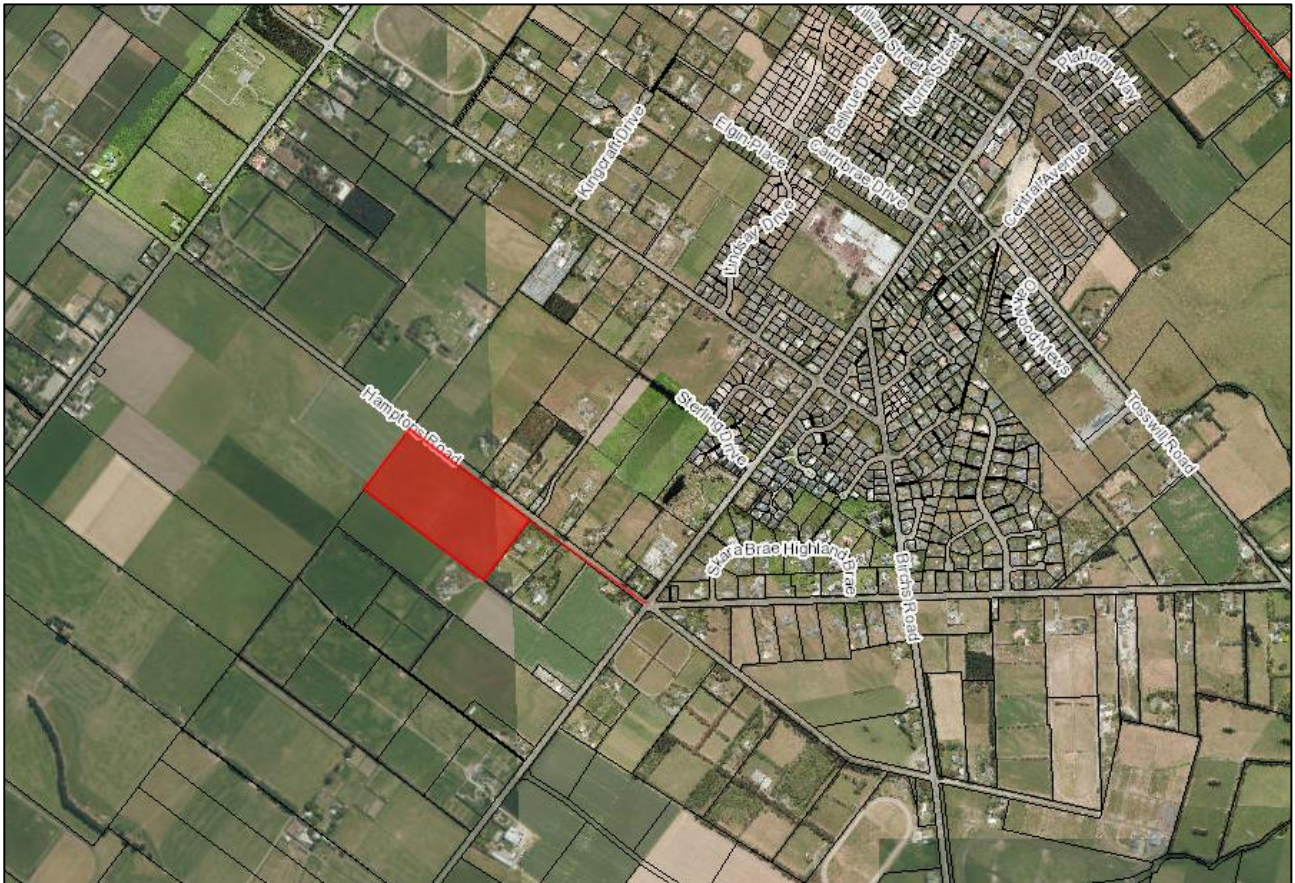


Figure 3 – Aerial Photograph showing Site Two (highlighted in red)



Figure 4 – Aerial Photograph of the site (outlined in red)

The site is owned by Frances David Phillip and James Alan and William, D Richardson and Gerard Thwaites, is 8.7 ha in size and currently in pasture.

3.1 Geographical location, shape and orientation

The site is located approximately 1 km from the centre of Prebbleton Township on the south west side of town. The surrounding sites are rural to the north and west of the site. The predominant land use to the east of the site is residential. There is a large lot close to the site that is earmarked for future rural-residential development.

The site is rectangular in shape. The site would accommodate at least four north-south orientated sports fields, but is possibly more suited to an east-west orientation.

Power lines run across the site's frontage with Hamptons Road.

3.2 Access and Traffic Flows

The site is accessed from Hamptons Road. There is currently no driveway access to the site.

Hamptons Road is identified in the Selwyn District Plan as an Arterial Road, which means that it is a road connecting areas of district importance not already provided by State Highways. Arterial roads connect the district's townships and other important places and activities together, including across

district boundaries. Arterial roads are subject to high traffic flows. The speed limit is 80 km/hour. This section of road is expected to have substantially higher traffic volume following the construction of the Christchurch Southern Motorway.

Given the site is over 8 ha it makes it on the larger side therefore there is plenty of space to establish car parking on the site. However, safe access to and from the site for vehicles from Hamptons Road may be difficult to establish without reducing the speed limit on the road.

There is no designated cycle or pedestrian access to the site currently. With regards to Massey University's 800 metres comfortable walking distance guide, the majority of the eastern side of the Prebbleton Township is located within 800 metres from the site. However, the township itself including the Primary School are located over 1 km away.

The rural nature of the site and the high speed limits on Hamptons Road may deter people from walking to the site. However, connections may be able to be made to the site via the proposed residential developments.

3.3 Connection to Prebbleton Township and/or other complementary land uses.

As discussed in Section 3.1 above, the site is located approximately 1 km to the south-west of the Prebbleton Township. In terms of connection to the township the sites has the potential to be connected via walkways through the existing and potential residential developments.

The site is located some distance from Prebbleton Township however it is noted that it is directly opposite an area earmarked for possible future rural residential subdivision (RRS Areas). Should this future development occur it may provide linkages from the site to the residential development within the Kingscraft Drive subdivision.

The site is also not located close to any other parks and recreation facilities.

3.4 Planning Implications

The site is currently zoned for 'Rural Inner Plains' use in the Selwyn District Plan (District Plan). The consequence of this is that a sports ground development would not be anticipated by the zoning requirements in the Plan and a resource consent or designation process would be required. Given the open space nature of a sports ground it is likely that effects could be assessed as less than minor however this cannot be established until concept design for the development is undertaken.

The main planning constraint at the site will be around vehicle access, the Council would need to demonstrate safe entrance and exit from the site onto Hamptons Road and also the provision of sufficient onsite car parking.

Resource Consent would also likely be required from Environment Canterbury for the diversion of drainage water (if required), discharge of drainage water, discharge of stormwater from the site during construction and the taking of groundwater for irrigation if required. As the site is not serviced, consent would also be required should the Council decide to install an onsite human

effluent discharge system (septic tank). The site is also located in a red nutrient allocation zone, which means Environment Canterbury will generally control the amount of nitrogen able to be applied to the land (in relation to groundwater leaching). However, fertiliser application to sports fields is exempt from this requirement.

There are no known cultural or heritage risks associated the development of a sports ground at this site.

3.5 Environmental Considerations

The site and surrounding area is almost flat with a maximum slope of 0.5% (north to south).

The site is susceptible to both morning and evening frosts in the winter.

Landcare S-maps Soil describe the area of the proposed playing grounds as follows:

Soil Type	Dominant soil texture:	Dominant soil drainage	Dominant soil depth	ECAN soil group	Weighted Average PAW 30cm:	Weighted Average PAW 60cm:	Confidence
Eyre shallow loam (60%), Eyre shallow loam (40%)	Loamy	Well-drained	Shallow (20-44cm)	Medium	63	85	Moderate
Templeton deep silty loam (50%), Templeton moderately deep silty loam (30%), Templeton deep silty loam (20%)	Silty	Moderately well-drained	Deep (>100cm)	Heavy	53	99	Moderate
Templeton deep silty loam (70%), Templeton moderately deep silty loam (30%)	Silty	Moderately well-drained	Deep (>100cm)	Heavy	58	106	Moderate

The site is located over the unconfined/semi confined aquifer system. Groundwater at the site is recorded at its highest at 7 metres below ground level.

3.6 Contamination

The site is not listed on ECan's LLUR as containing or previously containing a HAIL site. A review of aerial images dating back to the mid-1960s indicate that currently and historically, the site appears

to have been predominantly used for agricultural purposes, such as grazing and possibly cropping. It is noted that general farming is not an activity listed on the Ministry for the Environment's (MfE) HAIL, and therefore the potential for the site being contaminated from past and current agricultural use is low. However, if SDC wishes to have more certainty with respect to the potential for soil contamination (e.g. pesticide use, or livestock dips), a more comprehensive PSI could be undertaken. This would include investigating property files and the SDC databases, historic title searches, a site walkover by a contaminated land specialist.

3.7 Services

The site is not connected to any reticulated sewer, water or stormwater networks. An existing water line is in relatively close proximity to this site that could provide for a future connection. Overhead power lines run over the site.

There are no existing wells that can be utilised as water supply for the site. If a well was to be required for the site, please note that due to the unconfined/semi-confined nature of the first (topmost) aquifer in the area, is expected that some elevated levels of contaminants (such as Nitrate-Nitrogen) may be present in the shallow groundwater source. This is likely due to the surrounding agricultural land use. Given this, deeper bores would be required to supply "clean" potable water to the site.

4 Site Three: Birches/Leadleys Road

Site three is described as Lot 2 DP 365486. The site is located on the northern side of Leadleys Road at the intersection with Birches Road. The site has frontages onto both Birches and Leadleys Road (see figure five and figure six below).



Figure 5 – Aerial Photograph showing Site three (highlighted in red)



Figure 6 – Aerial Photograph of the site (outlined in red)

The site is owned by Stanley and Jennifer Laming, is 21.46 ha in size and currently in pasture. There is a dwelling located on the site.

4.1 Geographical location, shape and orientation

The site is located approximately 1.5 km from the centre of Prebbleton Township on the southern side of town. The surrounding sites are rural to the north and west of the site. The predominant land use to the north of the site is residential. There is a large lot adjacent to the site that is earmarked for future rural-residential development.

The site has street frontages on three sites, fronting Leadleys, Hamptons and Birches Road.

The site is rectangular in shape. The site would accommodate approximately eleven north-south orientated sports fields.

Power lines run across diagonally south-east corner of the site and then cross Leadleys Road.

There is a creek (water race) running through the site.

4.2 Access and Traffic Flows

The site is accessed from Leadleys, Hamptons and Birches Road. There is an existing driveway access to the site off Hamptons Road. There is currently no drive access from Leadleys or Birches Road.

Hamptons and Leadleys Roads are identified in the Selwyn District Plan as Arterial Roads, which means that they are roads that connect areas of district importance not already provided by State Highways. Arterial roads connect the district's townships and other important places and activities together, including across district boundaries. Arterial roads are subject to high traffic flows. The speed limit is 100 km/hour.

Birches Road is identified in the Selwyn District Plan as Collector Road. The speed limit on Birches Road at the site is 100 km/hr. Birches Road drops to a speed limit of 70 km/hr 40 metres north of the intersection with Hamptons Road and then to 50 km/hr following the intersection with Trices Road as the road enters the urban area of Prebbleton.

Given the site is over 21 ha there is plenty of space to establish car parking on the site; however, safe access to and from the site for vehicles from either Birches or Leadleys Road may be difficult to establish without reducing the speed limit on these roads.

The Rail Trail cycle track runs along the Birches Road frontage on the site and provides an excellent existing connection to the town. With regards to Massey University's 800 metres comfortable walking distance guide, the majority of the southern side of the Prebbleton Township is located within 800 metres from the site. However, the township itself including the Primary School are located over 1km away.

The rural nature of the site and the high speed limits on Birches and Leadleys Road may deter people from walking to the site. However, connections may be able to be made to the site via the proposed residential developments. Future development to the north of the site may also result in reduced speed limits on either Hamptons or Birches Road.

4.3 Connection to Prebbleton Township and/or other complementary land uses.

As discussed in section 4.1 above, the site is located approximately 1.5 km to the north of the Prebbleton Township. In terms of connection to the township the sites has the potential to be connected via walkways through the existing and potential residential developments.

The site is located some distance from Prebbleton Township; however, it is noted that is directly opposite an area earmarked for possible future rural residential subdivision (RRS Area). Should this future development occur it may provide linkages from the site to the township.

The site is not located close to any other parks and recreation facilities. This site is relatively close (a 5 minute drive) to Lincoln Township and the existing Rail Trail connection also provides an easily accessible route to this nearby town.

4.4 Planning Implications

The site is currently zoned for 'Rural Inner Plains' use in the Selwyn District Plan (District Plan). The consequence of this is that a sports ground development would not be anticipated by the zoning requirements in the Plan and a resource consent or designation process would be required. Given

the open space nature of a sports ground it is likely that effects could be assessed as less than minor; however, this cannot be established until concept design for the development is undertaken.

The main planning constraint at the site will be around vehicle access, the Council would need to demonstrate safe entrance and exit points from the site onto Leadleys and/or Birches Road and also the provision of sufficient onsite car parking.

Resource Consent would also likely be required from Environment Canterbury for the diversion of drainage water (if required), discharge of drainage water, discharge of stormwater from the site during construction, any extraction within 50 metres of the creek/drain running through the site and the taking of groundwater for irrigation if required. As the site is not currently serviced consent would also be required should the Council decided to install an onsite human effluent discharge system (septic tank). The site is also located in a red nutrient allocation zone, which means Environment Canterbury will generally control the amount of nitrogen able to be applied to the land (in relation to groundwater leaching). However, fertiliser application to sports fields is exempt from this requirement.

If the existing water race was closed and reverted to a drain, consent would be required for discharge of any drainage from the sports fields.

There are no known cultural or heritage risks associated the development of a sports ground at this site.

4.5 Environmental Considerations

The site and surrounding area is almost flat with a maximum slope of 0.5% (north to south).

The site is susceptible to both morning and evening frosts in the winter.

Landcare S-maps Soil describe the area of the proposed playing fields as follows:

Soil Type	Dominant soil texture:	Dominant soil drainage	Dominant soil depth	ECAN soil group	Weighted Average PAW 30cm:	Weighted Average PAW 60cm:	Confidence
Eyre shallow loam (60%), Eyre very shallow loam (30%), Eyre shallow loam (10%)	Clayey	Well drained	Shallow (20-45 cm)	Very Light	44	59	Moderate
Flaxton deep silty loam (100%) Templeton deep silty loam (50%),	Silty	Poorly drained	Deep (>100 cm)	Poorly Drained	86	158	High

Templeton moderately deep silty loam (30%), Templeton deep silty loam (20%)							
Temuka deep silty loam over clay (70%), Temuka deep clay (30%)	Silty	Moderately well-drained	Deep (>100 cm)	Heavy	53	99	Moderate
Wakanui deep silty loam (60%), Wakanui deep silty loam over sandy loam (40%)	Clayey	Imperfectly drained	Deep (>100 cm)	Poorly Drained	78	133	High

The site is located over the unconfined/semi confined aquifer system. Groundwater at the site is recorded at its highest at 4.1 metres below ground level.

There is a drain that runs through the site splitting it in two. This would potentially be developed as a feature of the site.

4.6 Contamination

The site is not listed on ECan's LLUR as containing or previously containing a HAIL site. A review of aerial images dating back to the mid-1960s indicate that currently and historically, the site appears to have been predominantly used for agricultural purposes, such as grazing and possibly cropping. It is noted that general farming is not an activity listed on the Ministry for the Environment's (MfE) HAIL, and therefore the potential for the site being contaminated from past and current agricultural use is low. However, if SDC wishes to have more certainty with respect to the potential for soil contamination (e.g. pesticide use, or livestock dips), a more comprehensive PSI could be undertaken. This would include investigating property files and the SDC databases, historic title searches, a site walkover by a contaminated land specialist.

4.7 Services

The site is not connected to any reticulated sewer, water or stormwater networks; however, there is reticulated stormwater running up Birches Road. The site provides room for stormwater detention ponds.

Nor are there any neighbouring connections. Overhead power lines run over the south east corner of the site.

There are two existing wells onsite that could be utilised as water supply for the site. However, both these wells are relatively shallow, and due to the unconfined/semi-confined nature of the first (topmost) aquifer in the area, is expected that some elevated levels of contaminants (such as Nitrate-

Nitrogen) may be present in the shallow groundwater source. This is likely due to the surrounding agricultural land use. Given this, the two bores are unlikely to provide “clean” potable water to the site and a deeper bore would be required.

5 Site Four: 105 Tosswill Rd, Prebbleton

Site four is described as Lot 1 DP 34032. The site is located at 105 Tosswill Road. The site fronts Tosswill Road approximately 218 metres north-west of the intersection with Trices Road (see figure seven and figure eight below).



Figure 7 – Aerial Photograph showing Site three (highlighted in red)



Figure 8 – Aerial Photograph of the site (outlined in red)

The site is owned by Terrence Richard Waghorn and Myrtle Louise Davey, is 8.1 ha in size and currently in pasture. There is a dwelling and sheds located on the site.

5.1 Geographical location, shape and orientation

The site is located approximately 600 metres from the centre of Prebbleton Township on the south-eastern side of town. The surrounding sites are residential to the west of the site. The predominant land use to the north, east and south of the site is rural. There is a large lot adjacent to the site that is earmarked for future rural-residential development.

The site has street frontage to Tosswill Road and is located within close proximity to the existing Prebbleton Domain.

The site is rectangular in shape. The site would accommodate approximately four north-south orientated sports fields.

There is a creek running along the eastern and southern boundaries of the site.

5.2 Access and Traffic Flows

The site is accessed from Tosswill Road. There is an existing driveway access to the site off Tosswill Road.

Tosswill Road is identified in the Selwyn District Plan as collector road. The speed limit on Tosswill Road at the site is 70 km/hr. Tosswill Road drops to a speed limit of 50 km/hr 50 metres north of the site as the road enters the urban area of Prebbleton.

Given the site is 8 ha there is plenty of space to establish car parking on the site the lower speed limit on the road allows for the establishment of safe access to and from the site for vehicles.

There is no designated cycle or pedestrian access to the site currently. With regards to Massey University's 800 metres comfortable walking distance guide, the majority of the eastern side of the Prebbleton Township is located within 800 metres from the site. The centre of the township is located 600-800 metres from the site.

There is an opportunity to develop both cycle and walking connections to the site from the township given its close proximity to the urban area (including the Prebbleton Domain, which already contains walking and cycling connections to the township) and the lower speed limits on Tosswill Road.

5.3 Connection to Prebbleton Township and/or other complementary land uses.

As discussed in Section 3.1 above, the site is located approximately 600-800 metres to the south-east of the Prebbleton Township. In terms of connection to the township the site has the potential to be connected via walkways through the existing and potential residential developments.

The site is located 100 metres away from the existing Prebbleton Domain.

5.4 Planning Implications

The site is currently zoned for 'Rural Inner Plains' use in the Selwyn District Plan (District Plan). The consequence of this is that a sports ground development would not be anticipated by the zoning requirements in the Plan and a resource consent or designation process would be required. Given the open space nature of a sports ground it is likely that effects could be assessed as less than minor however this cannot be established until concept design for the development is undertaken.

The main planning constraint at the site will be around vehicle access, the Council would need to demonstrate safe entrance and exit from the site onto Tosswill Road and also the provision of sufficient onsite car parking.

Resource Consent would also likely be required from Environment Canterbury for the diversion of drainage water (if required), discharge of drainage water, discharge of stormwater from the site during construction, any exaction within 50 metres of the creek/drain running through the corner of the site and the taking of groundwater for irrigation if required. The site is also located in a red nutrient allocation zone, which means Environment Canterbury will generally control the amount of nitrogen able to be applied to the land (in relation to groundwater leaching). However, fertiliser application to sports fields is exempt from this requirement.

There are no known cultural or heritage risks associated the development of a sports ground at this site.

5.5 Environmental Considerations

The site and surrounding area is almost flat with a maximum slope of 0.5% (north to south).

The site is susceptible to both morning and evening frosts in the winter.

Landcare S-maps Soil describe the area of the proposed playing fields as follows:

Soil Type	Dominant soil texture:	Dominant soil drainage	Dominant soil depth	ECAN soil group	Weighted Average PAW 30cm:	Weighted Average PAW 60cm:	Confidence
Eyre shallow loam (60%), Eyre shallow loam (40%)	Loamy	Well-drained	Shallow (20-45 cm)	Medium	63	85	Moderate
Templeton deep silty loam (70%), Templeton moderately deep silty loam (30%)	Silty	Moderately well-drained	Deep (>100 cm)	Heavy	58	106	Moderate
Temuka deep silty loam over clay (60%), Flaxton deep silty loam over clay (40%)	Clayey	Poorly drained	Deep (>100 cm)	Poorly Drained	84	140	Moderate
Wakanui deep silty loam (85%), Templeton deep silty loam (15%)	Silty	Imperfectly drained	Deep (>100 cm)	Heavy	50	91	High

The site is located over the unconfined/semi confined aquifer system. Groundwater at the site is recorded at its highest at 3.5 metres below ground level.

There is a drain that adjoins the south-eastern boundary of the site.

5.6 Contamination

The site is not listed on ECan's LLUR as containing or previously containing a HAIL site. A review of aerial images dating back to the mid-1960s indicate that currently and historically, the site appears to have been predominantly used for agricultural purposes, such as grazing and possibly cropping. It is noted that general farming is not an activity listed on the Ministry for the Environment's (MfE) HAIL, and therefore the potential for the site being contaminated from past and current agricultural use is low.

However, it is noted that parts of the site are shown to have been potentially used for material storage in the early to mid-1970s. Given this, to determine the level of contamination and remediation requirements with respect to the potential for soil contamination, a more comprehensive PSI would be required. This would include investigating property files and the SDC databases, historic title searches, a site walkover by a contaminated land specialist. If the PSI determines the potential for soil contamination, then a Detailed Site Investigation (DSI) would be required, and potentially a resource consent under the NES.

5.7 Services

The site is not currently connected to any reticulated sewer, water or stormwater networks; however, there is reticulated services (water and sewer) running adjacent to the site and connected to the neighbouring residential developments.

There are no overhead power lines run over or adjacent to the site. It can be assumed that there are electrical and telecommunication services in the adjacent residential subdivision.

There is one existing active well (and one inactive well) onsite that could also be utilised as water supply if required. However, both these wells are shallow, and due to the unconfined/semi-confined nature of the first (topmost) aquifer in the area, is expected that some elevated levels of contaminants (such as Nitrate-Nitrogen) may be present in the shallow groundwater source. This is likely due to the surrounding agricultural land use. Given this, the two bores are unlikely to provide "clean" potable water to the site and a deeper bore would be required.

Recommendation

Each of the decision making criteria discussed for each site above has been applied through a decision-making matrix attached as Appendix Two. A weighting has been applied based on whether each criteria offers a significant opportunity or constraint i.e. site size has been weighted the highest weighting (4) as this factor is either an opportunity or constraint to the establishment of four sports fields and is not easily influenced. District and Regional consenting constraints have been given a low rating as these constraints can be addressed through the resource consent/ designation process, and therefore can be moderated.

A score has then been given to each site based as to whether or not the site offers opportunity or constraints in relation to the relevant criteria. A score of 1 has been given if a site presents an opportunity, a score of 0 has been given where a site offers no opportunity or constraint, and a score of -1 has been given when the particular criteria is a constraint.

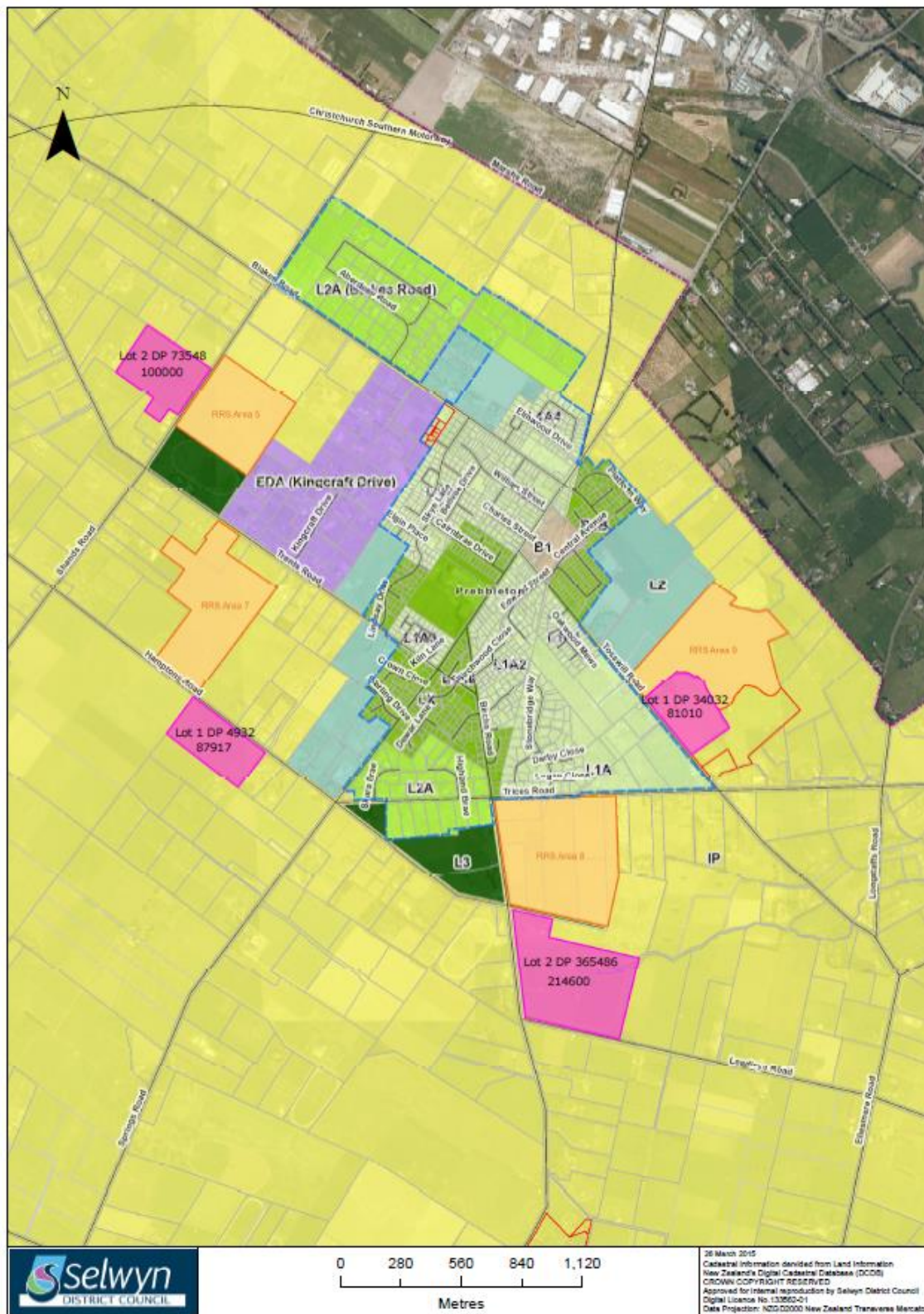
Using the results of the decision matrix and site options assessment in Section 2 to 5 above a recommendation is made that **Site Three** (Lot 2 DP 365486, Leadleys/Birches Road) is the preferred site for the development of a sports ground and should be subject to further investigation.

The location of the new sports grounds at **Site Three** presents the following opportunities:

- There is sufficient space to establish at least four north-south orientated sports fields plus additional room for car parking, walking and cycle links, sports clubrooms, public toilets and other amenities.
- There is sufficient space for future expansion for other recreational uses or additional sports fields or surfaces such as artificial turfs.
- The site has multiple street frontage, which offers opportunity for traffic flows through the site.
- Whilst both Leadleys and Birches Road currently have 100 km/hr speed limits adjacent to the site, the speed of Birches Road does drop to 70 km/hr approximately 40 metres from the intersection at Hamptons Road. Future residential development on Birches Road may result in the need to reduce the speed limit of Birches Road adjacent to Site Three.
- The site is located approximately 1.5 km to the south of the Prebbleton Township.
- The site has the potential to be connected to the township via walkways through the existing and potential residential developments.
- The site is adjacent to an area earmarked for future residential development.
- The site does not contain any known contamination or planning constraints (although it is likely that either a designation of the site or resource consent would be required).

- The site has excellent cycling and walking connectivity via the existing Rail Trail along Birches Road.
- The site is relatively close and has good connectivity to Lincoln and would help service recreational needs of this township.
- Whilst the site has a drain running through the middle of it, given site's size this will not restrict the development of sports fields and can instead be potentially utilised as an amenity feature.
- The sports field design will need to consider the high groundwater and soil type at the site. However, these are unlikely to constrain the development of sports fields on the site.
- The site is not on ECan's Listed Land Use Register as a potentially contaminated site, and the potential for the site being contaminated from past and current agricultural use is low. However, if SDC wishes to have more certainty with respect to the potential for soil contamination, a more comprehensive PSI could be undertaken.
- The site is not connected to any reticulated water or wastewater networks; however, future residential development opposite the site may present opportunity to connect.
- Overhead power lines cross one corner of the site, but this does not adversely affect the site's usability.
- There are two existing wells onsite that could be utilised as water supply for the site (although this may be subject to consent).

Appendix One: Location Map



Appendix Two: Decision Matrix

Decision Criteria	Weighting	Site 1	Site 1	Site 2	Site 2	Site 3	Site 3	Site 4	Site 4
Geographical Location, Shape, Orientation & Physical Constraints									
The site is located adjacent to residential land uses (current or future)	4	1	4	1	4	1	4	1	4
Site is greater than 8ha	4	1	4	1	4	1	4	1	4
There are no conflicting activities adjacent	2	1	2	1	2	1	2	1	2
The site can fit at least 4 north-south oriented sports fields plus car park & ancillary facilities	4	1	4	1	4	1	4	1	4
Space is available for future expansion	3	0	0	-1	-3	1	3	-1	-3
The site has substantial buildings/structures that require removal	3	1	3	1	3	0	0	-1	-3
The site has permanent infrastructure that will limit development potential	4	-1	-4	0	0	0	0	0	0
Access & Traffic Flows									
Walkability - The site is within easy walking distance (800m) of a large proportion of residents	3	0	0	0	0	0	0	1	3
Cyclability - The site is easy and safe to get to by cycle	3	-1	-3	-1	-3	1	3	0	0
Driveability - The site is easily accessible for drivers (within 15 minutes drive of catchment)	3	1	3	1	3	1	3	1	3
The site has multiple road frontages	3	-1	-3	-1	-3	1	3	-1	-3
The site is safe to access by road (reduced speed environment)	3	0	0	0	0	0	0	1	3
Connections to Prebbleton Township & Complementary Facilities									
The site is located within 1 km of Prebbleton Township	3	0	0	0	0	0	0	1	3
The site is centrally located close to schools and education facilities	2	0	0	0	0	0	0	0	0
The site is connected to residential areas with opportunity for safe off road walking & cycling links - no barriers	3	-1	-3	-1	-3	1	3	1	3
There are nearby complementary facilities	2	0	0	0	0	0	0	1	2
Planning Implications									
District Planning constraints have been identified at the site	2	0	0	0	0	0	0	0	0
Regional Planning constraints have been identified at the site	2	0	0	0	0	0	0	0	0
Environmental Considerations									
The site has free draining soils	2	-1	-2	1	2	-1	-2	0	0
Groundwater depth is greater than 6 metres	2	0	0	1	2	0	0	0	0
The site has features that add to the amenity value	2	0	0	0	0	1	2	1	2
There are trees/shelter belts on site that will be of value	2	1	2	0	0	1	2	1	2
Contamination									
The site is listed on Ecan's Listed Landuse Register	3	0	0	0	0	0	0	0	0
The site is a HAIL site or has been identified as having previous activities that have the potential to cause contamination	3	0	0	0	0	0	0	-1	-3
Proximity to Services									
Location near a reticulated waste water network	2	0	0	0	0	0	0	1	2
Location near a reticulated water supply network	2	0	1	0	0	0	0	1	2
Location near a storm water network or discharge point	2	1	2	1	2	1	2	1	2
Location near a power supply network	2	1	2	1	2	1	2	1	2
Total Score			12		16		35		31