



4.0 Existing Development and Features

4.1 Community Profile

The Carterton community is generally reflective of smaller New Zealand towns with a wide rural resource base, but also part of a larger and increasingly diverse Wairarapa region. A low projected population increase over the next 20 years means the town is unlikely to experience significant growth pressure (in terms of land resource and infrastructure). However, that does not mean that future land use changes should not be planned carefully.

In fact, with a relatively small resource base, it is important that urban growth is managed in a manner that maximises the land and other resources available to this community. This Structure Plan sets out a way in which the southern part of Carterton could develop in the future – providing a degree of certainty to existing and future occupants of Carterton as to how this area and the wider Carterton urban area will look into the future.

Some Facts

- ☐ Total Area of Carterton District is 1,145km²
- ☐ Population in 2006 was 7098
- ☐ Population projected to grow by 4% by 2026 (medium projection) to 7200

- ☐ In 2006, the largest age group representation was in the 45-49 age group
- ☐ There was also another bulge in the population aged between 0 and 19
- ☐ The number of households in 2006 was 2757 – 1 family households made up 1959 (71%) of these, 657 (25%) were 1 person households
- ☐ 64% of households were owned or partly owned in 2006
- ☐ 83% of Carterton's population say they are within the 'European' ethnic group. Maori represent nearly 10% of the population and Pacific Peoples 2%.
- ☐ Couples without children made up 933 (46%) of the 2013 recorded families within Carterton District; couples with children 822 (41%); and one parent with children families 261 (13%)
- ☐ 3618 people (65%) are recorded as being employed full time or part time out of a total of 5604 people aged 15 and over. 129 people (2%) of this total were recorded as being unemployed
- ☐ Managers, labourers and professionals made up the largest occupational groups (in that order) in 2006



- ❑ 95% of the population aged 15 and over that recorded their income (5148) earn less than \$70,000
- ❑ 91% of the population have access to one or more motor vehicles as part of their household
- ❑ On census day in 2006, 177 Carterton District residents travelled to work by train

(Source: Statistics New Zealand)

Recreation facilities are generally also all provided to the north. The only recreation facility in close proximity is South End Park on Brooklyn Road.



New urban character residential development is occurring throughout much of the structure plan study area. An isolated cluster of commercial activity remains on Dalefield Road near Lincoln Road, at the edge of the study area.

4.3 Landuse Patterns and existing constraints

Land Use Patterns

Existing land use patterns in the study area are very much a mixture of urban residential, pasture/grazing, roading infrastructure, and a relatively small area of industrial/employment. Residential development is clustered around the Philip-Gertrude-Daffodil-Endelave cluster, and a linear strip alongside SH2. The small industrial/employment node is located on Dalefield Road, not far from Lincoln Road. Pastoral/grazing activity makes up the remainder of the study area.

To the north of the study area are the town's principal amenities. The town centre is approximately 1km to the north along SH2. All schools are also to the north, although the closest (Southend Primary) is very near the study area.

Lot size and Density Comparison in Carterton

Using GIS an analysis of existing density in Carterton was undertaken. Two established areas were analysed, as were two new developments. Defining 'density' has been done using a number of assumptions. Firstly, the number of 'lots' (in this case residential sections) per hectare has been established, and it has been assumed that there is one dwelling per lot. It has also been assumed that there is one household per dwelling. The average household size in Carterton District is 2.5 people, compared with an average of 2.7 people for all of New Zealand (2006 Census, Department of Statistics). Measurements have been



made to each of individual property boundaries, and excludes any area within the public realm.

An analysis shows the following densities:

| Area: Density | Total Area (ha) | Total Lot Area (ha) | No. of Lots | Average Lot Area (ha) |
|-------------------------------|-----------------|---------------------|-------------|-----------------------|
| Danske Close | 1.832 | 1.694 | 11 | 0.1540 |
| Endelave Way | 2.1 | 1.633 | 8 | 0.2040 |
| SH2/Philip/Gertrude/Frederick | 4.2200 | 4.2200 | 48 | 0.088 |
| Fisher/Victoria | 2.43 | 2.43 | 28 | 0.087 |

Infrastructure

Sewer, water, stormwater, transportation and recreation demand and constraints have been addressed in section 4 of this report. In general the development of the study area can be accommodated subject to cost and timing factors.

Constraints

A review of background and technical documents was undertaken in order to identify the following key constraints, which required consideration in the development of the Structure Plan.

Landscape, Ecology, and Heritage Features

There are no significant natural areas located within the study area, while the flat nature of the area means that there are no dominant landscape features. There are no specifically identified notable trees located within the area, however there are several large totara trees to the east of SH2 (High Street) in the vicinity of Howard Street) that have been commented on during public consultation. There are no recorded (in the PWCDP) archaeological, geological, tangata whenua or wahi tapu sites located in the study area.

Natural Hazards

Carterton and its surrounding plains are generally exposed to risk of natural hazards, in particular earthquakes from rupture of the Carterton and Wairarapa faults to the north, and flooding as a result of inundation from the Mangatarere and Waikakariki Streams to the west. Drainage of groundwater during high rainfall events has been identified as also problematic due to a high water table (submissions received by Council on the Proposed District Plan).

Physical Constraints

- ☐ State Highway 2 (south west to north east)
- ☐ Lack of internal roads (within study area)
- ☐ Wairarapa Rail Corridor (north)
- ☐ High Voltage Transmission Lines (west)
- ☐ Mangatarere and Waikakariki Streams (west)
- ☐ Waiohine River (south)
- ☐ Sewage Treatment Plant and Landfill (south west)



4.4 Water Supply

Carterton urban area is linear in form with development extending continuously some 3.9 km along SH2. Underground mains for water and sewage extend from the northern to the southern boundary of the urban ward along High Street and Lincoln Road/-Taverner Street and the reticulated network extends along most formed streets. The extent of water and sewage reticulation essentially establishes the boundary of the urban ward.

The Council currently provides an on-demand, reticulated, water supply to the township of Carterton. Water is sourced from the Kaipatangata Stream and augmented with groundwater from three bores (Frederick Street) on an as-needed basis. One additional bore is currently being developed at the Frederick Street site. This will result in both sources supplying similar capacity to the network.

The Council owns and operates two water treatment plants – a gravity plant based on the Kaipatangata Stream, west of the town centre, and a bore field complete with booster pumps and storage reservoir in Lincoln Road. Both sites have storage capacity of 2000m³ in total, which equates to approximately six hours of operation. The gravity system is the main means of water supply, however during rainfall events when turbidity is too high, or during times of low flow, the bore field is used.

Overall the urban water supply and reticulation network consists of 9km of trunk supply main, 39.5km of reticulation piping (varying in diameter from 19mm to 380mm), 232 fire hydrants, 3 storage reservoirs/tanks, the headwork dam, and

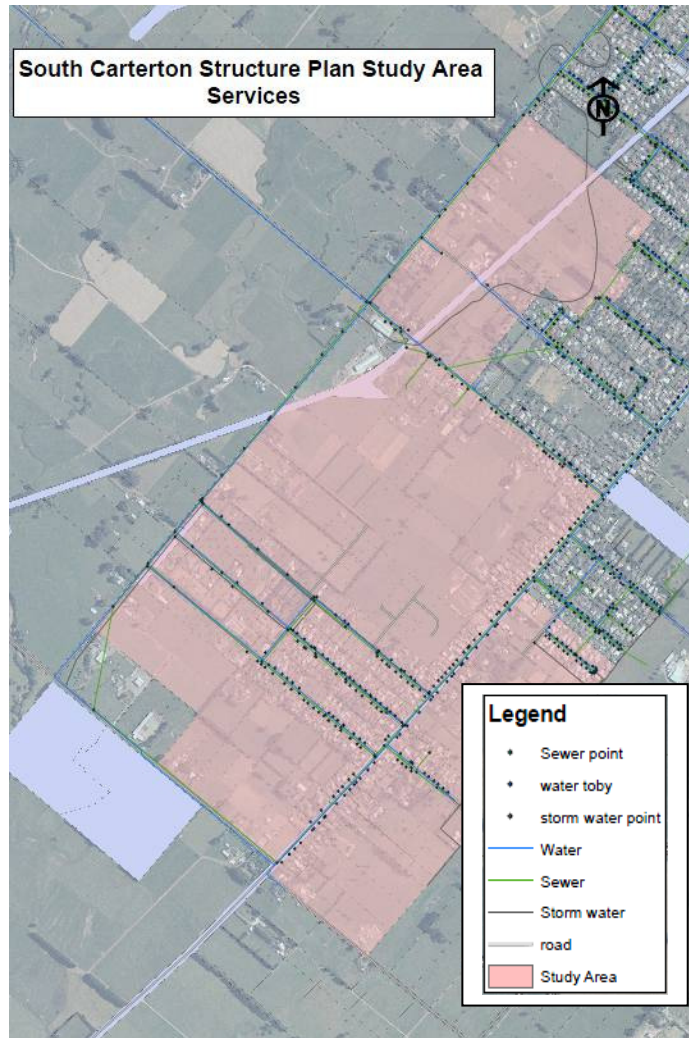
the supplementary bore operation. All new connections and toby replacement works now have double check valves fitted together with meters. New connections are placed on a user pays basis. Water meters have been installed to all urban properties, and meter billing commenced July 2008. A map showing connections to the network is shown overleaf.

Where possible, dead ends are avoided, however there may be several still in the network. There are no reports of these causing significant public health issues.

Water supplies are currently funded by a uniform rate targeted at each serviced or 'serviceable' property. 'Serviceable' is defined as serviced or with "premises which are not connected to the Council supply, but which lie within a nominal 100m of the supply". These uniform rates provide one hundred percent cost recovery.

The current Water Asset Management Plan (WAMP) notes that the existing underground piping network is able to cope with existing and known foreseeable demand with only minor pressure points (generally at the northing end of the network).

The WAMP also identifies that although the 2006 Census information shows a small overall increase in the population of the District, which has mostly been in the rural area, this contrasts with the significant amount of subdivision occurring within the urban area. Further investigations are identified as being required by the WAMP to understand the reasons for this, but initial indications are that the population density per dwelling is reducing.



4.5 Waste

Sanitary Services

Sanitary Services include drainage works, sewerage works, and works for the disposal of sewage; waterworks; works for the collection and disposal of refuse, nightsoil, and other offensive matter; sanitary conveniences for the use of the public; cemeteries; crematoria). It has the same meaning as sanitary works in section 25(1)(a), (b), (c), (d), (h), and (i) of the Health Act 1956.

The study area has been modelled by Opus and this modelling indicates that generally with some upgrading in specific places the existing sewer mains can cope with anticipated increases in sewage discharge likely to arise from development to the level provided for by the structure plan. Council is currently investigating the possibility of a new main from Brooklyn Road to Dalefield Road to reduce pressure on the Lincoln Road/High Street South sewer lines and line up with the proposed internal roading patterns.

Key assumptions:

- The Waste and Sanitary Services Activity Plan (WASSA) states that Council has no immediate plan to extend the wastewater reticulation network other than to accommodate new developments on the fringes of the urban / residential area and it has been assumed that this takes into account the potential for low density residential development as envisaged by the previously Operative and Proposed District Plans, and this structure plan.



- ☐ Any new wastewater reticulation piping will be provided at the cost of the developer.
- ☐ Any new development must ensure lot sizes that are capable of disposing of stormwater on site.

Cemeteries & Crematoria

in Carterton District there is one operational public cemetery managed by the Council. In addition to this, there are 3 private cemeteries known of by Council, however there could be additional cemeteries (especially small urupa) that are not recorded.

There is one crematorium in the district, located at the Cemetery, with other facilities at Masterton and Greytown.

Wastewater

The Council is responsible for an urban wastewater collection and treatment system consisting of approximately 1614 properties, 29.2 km of reticulation, 8 pump stations and the treatment facility at Dalefield Road. Pipes range in diameter from 80mm to 380mm, and the network consists of 30.8 km of underground piping. There are 7 pump stations at strategic locations throughout the town to lift sewage from low lying areas up into the gravity network.

The Council operates a sewage treatment plant at Dalefield Road, and the process includes agitation and primary and secondary treatment processes. Treated effluent is routed to three oxidation ponds for further treatment, prior to discharging to the Mangatarere Stream via an overland flow.

While the plant can adequately treat dry weather flows, some overloading does occur during very prolonged rainfall events owing to infiltration. Some works are planned to the plant to increase its efficiency and its effectiveness. An application has recently been made to the Greater Wellington Regional Council towards a renewal for resource consent

Given low forecast population growth Council has no immediate plan to extend the reticulation network other than to accommodate new developments on the fringes of the urban / residential area.

However in the event that the low density development area covered by the structure plan is to develop, Council's engineers have confirmed that it would be desirable to extend a new main sewer line from the Dalefield Road treatment plant to Brooklyn Road via existing infrastructure in Endelave Way.

It is also understood that any new developments in that area covered by the structure plan to the east of SH2 will require pump stations to lift sewage up into the gravity network.



Stormwater

The stormwater system comprises of a combination of street kerb collection and channel systems, piped drains and open drains. The length of piped drains is approximately 10 kilometres (with the pipes varying in diameter from 150 mm up to 1200 mm) and the open drain system (excluding natural water courses) is over 5 kilometres. There are no publicly owned stormwater treatment systems in the Carterton District, and collected stormwater is discharged into the Managatarere Stream west of the town and to the Waiohine River south of the town via two open drains on the eastern side of Carterton.

The urban stormwater network in Carterton generally provides for stormwater runoff from roads and from stormwater runoff from roofs within the CBD. Dwellings typically have their roof water connected to a private soak pit. The District Plan requires that all stormwater is to be disposed of on site. The subdivision code requires stormwater systems to be designed for a 1 in 5 year event, with secondary flow paths, such as road kerb and channel acting as a secondary flow path.

Public Toilets

Currently there are three sites with public conveniences in the district, in addition to the privately owned toilets available for customer use such as at petrol stations and restaurant's. The existing public toilets are well distributed at sites of high usage around Carterton Township. The WASSA states that unless the habits of the population change, there is no anticipated need for further services.

Solid Waste

CDC no longer operates a solid waste facility and has contributed to the planning of a region wide waste approach through Wairarapa Waste and therefore has not been considered as part of the WASSA. However, it is noted that all domestic refuse is transported from the Dalefield Refuse Disposal area to Masterton, and from there (by contractor) to Marton. Only green waste and car bodies are currently being processed at the Dalefield Road facility.

4.6 Roading

Carterton's urban area, and the study area are bisected by SH2 which is categorised as a Strategic Arterial Route in the PWCDP. Strategic Arterial Routes are defined as being roads which form part of the network of nationally or regionally important arterial routes that predominantly carry 'through traffic' and the major traffic movements in and out of the District. SH2 is not a "Limited Access Road" through the Carterton Urban Area – although any new intersections with the State Highway must meet NZTA requirements.

SH2 in the vicinity of its intersection with Dalefield Road and Portland Road marks the southern end of Carterton and, the entrance to the urban area.

Lincoln Road and those parts of Dalefield and Moreton Roads within the Study Area are classified in the District Plan as being District Arterial roads – defined as being roads that cater for traffic movement within or between major areas of the District and as alternative routes to neighbouring territorial authorities.



The part of Lincoln Road which borders the study area at the southern end is classified as a Collector Road in the District Plan. Collector Roads are defined in the Proposed District Plan as being locally preferred routes forming a link between the arterial roads and residential, commercial, industrial and recreational areas. Although having a major through traffic function, they also serve adjacent property.

The Roding Activity Management Plan 2009 (RAMP) identifies Collector Roads as generally carry 200-500 vehicles per day, and providing access from the local roads to the arterial roads. All other roads in the study area are Sealed or Unsealed Urban Local Routes. Sealed Urban Local Routes are defined in the RAMP as providing access in and around the urban township and not generally being heavily loaded. Unsealed Urban Local Routes generally carry less than 200 vehicles per day.

In addition to the roads provided for and monitored as part of the RAMP, there are several Paper Roads within the study area, most significantly at the end of Philip and Charles Streets.

The main roads providing access to the Study Area will be off existing roads including Dalefield Road, Lincoln Road and SH2.

Key assumptions for the Structure plan were that:

- ☐ Any new internal roading within the study area will need to be designed to fit the criteria of the roading hierarchy,

- ☐ Any new intersections with SH2 or access ways off SH2 will require the approval of NZTA.



Unformed 'paper' roads in the study area, that on the left is in essence a gravel shared 'driveway' serving several properties, while that on the right is grazed by stock.

Council's Roding Activity Management Plan

As contained in the Roding Activity Management Plan 2009 (RAMP), Council's goals are:

- ☐ A cost effective district wide road network,
- ☐ Safe, comfortable and reliable road conditions,
- ☐ Effective road signs and markings,



- ☐ Sustainable road transport services with flexibility for change and growth,
- ☐ Safe and accessible regional road links,
- ☐ Improved public transport services.

This document notes, on the basis of no major changes (increases or decreases) to the population, that the future demand on roading activities is likely to be driven by changes in the use of the roads resulting from changes in land use, and from increased customer expectations with regard to quality and safety, as opposed to significant increases in residential or domestic vehicle volumes.

The RAMP states that there are no specific new vegetation or streetscape assets forecast for construction in the next 10 years.

The RAMP requires specific design standards to be applied for various road types in order to provide for the expected level of service for roads, generally in line with NZS4404.



Bus facilities are provided along SH2, and rail services provide regular access to Wellington for commuters.

4.7 Rail

The Wairarapa Branch Railway runs through the northern end of the study area.

Carterton Railway Station is a single platform railway station in the town of Carterton. It is located at the corner of Wheatstone and Broadway Streets. The station has recently been upgraded to allow for the new rail carriages. Between Monday and Thursday there are five Wairarapa Connection trains each way between Wellington and Masterton, six on Friday and two on Saturday and Sunday. Carterton is three stops away from Masterton (17 minutes), and eight stops to Wellington (taking 1 hour 19 minutes).



The railway station is a key destination for Wellington commuters who arrive by car, cycle, and foot to access rail transport.

This station retains its original station building, freight yard and loading bank, though freight is no longer accepted. The station buildings are leased by Council, and are sub-leased to the Railway Restoration Society Who run a museum in the main station building and store heritage rolling stock is stored in the yard. There are occasional excursion trains, such as the Daffodil Express and the Taranaki Tourer run by Mainline Steam.

The railway line corridor is designated in the District Plan.

4.8 Walking and Cycling

There are no known dedicated walking or cycle networks in the vicinity of Carterton. However recreational cycling is known to be a popular activity on many local rural roads around Carterton, as well as within the urban area. A marked cycle lane is provided on the SH2 corridor, however markings are faded decreasing the attractiveness of the facility.

With respect to walkways, while several informal off-road walkways exist, formal walkways are restricted to footpaths. Most notable of the off-road walkways is one which provides access from the south to the railway station. This appears well used despite its relative lack of attractiveness and potential for perceived lack of safety. It does however reinforce the desire for such facilities to be made available, and thus confirms an objective for the structure plan.



Left (Left to Right): Cyclists en-route to Gladstone, and an informal well-used walkway in Carterton.

Above: (Clockwise) grass-only swale road verges in the study area, and the need to provide for the mobility impaired and buggies.



4.9 Parks & Reserves

There is only one park within or near the study area, South End Park located on Brooklyn Road. Some further improvements are planned for this park, however it also lies on a possible connection between Brooklyn Road and Costley Street. A small reserve is also to be further developed at the urban boundary on Moreton Road, just to the north of the study area.

Some of the Wairarapa's regional services for sport are based at The Clareville Complex to the north east of the urban area. In addition there are sport fields, and an outdoor pool provided by the Council, all in the northern half of the urban area.

Private organisations, such as clubs, provide several facilities (including an indoor pool) which also service people from the adjoining South Wairarapa District. Two large complexes in the District provide most of the facilities: Gladstone (a small rural settlement to the south east) and Clareville – and cater for a range of sports including tennis, rugby, netball, hockey, badminton, table tennis, basketball, archery, bowls and pony club.

The “Wairarapa Physical Activity Strategy – Current Situation” document notes that: Carterton has recognised the town-country spread by supporting developments at the edge of town and in outlying villages.

Carterton township

The town's reserves provision is characterised by large parks mainly on its northern boundary which appear to cater for predominantly formal/active sport

and recreation. The other type of reserves provision is urban parks associated with the town centre such as Millennium Park and Memorial Square.

There appear to be few neighbourhood parks with the exception of South End Park – which is on the town centre's southern extremity and borders the Structure Plan Study Area.

The role of schools in fulfilling the community's recreation needs is not fully known but it is likely that they do support a range of local uses. The schools in the town are all located on the town's eastern side, and all are located to the north of Brooklyn Road and outside the study area. Southend School is, however, very close and has a catchment that encompasses primary school age children within the study area.

An indicative quantitative analysis² of reserves provision in the town is:

| Reserve | Function | Area (ha) |
|-----------------------------|---|-----------|
| Carrington Park | In town centre Bowling Club Athletics Cricket School sports | 9.9339 |
| Howard Booth Park/Carterton | Squash Club Carterton Soccer Club | 8.6517 |

² There was some difficulty in obtaining the areas of the reserves accurately. The areas of some reserves have therefore been approximated only and none of the figures used have been verified.



| Reserve | Function | Area (ha) |
|----------------------------|---|-----------------|
| Holiday Park | | |
| Carterton RFC ³ | Former A&P Showgrounds Clubrooms Historic seating stand Several fields | 6.000 (approx) |
| Sparks Park | Community project to develop a passive park/lake; plantings Run by a Trust | 2.2155 |
| South End | BMX | 0.4000 (approx) |
| Pool | | 0.3200 (approx) |
| Memorial Square | Town Centre | 0.1800 (approx) |
| Millennium Park | Town Centre | 0.0845 |
| TOTAL | | 27.3856 |

A commonly used standard for assessing reserves provision is to use an allowance of 4ha/1000 people. This ratio can be modified up or down according to the local authority's desired level of service for its community. This is very much a measure of quantity and needs to be considered alongside quality of provision in determining how best to meet the community's needs.

³ Privately owned/maintained

It is not known whether the Council have considered reserves provision on this basis – but it is assumed it doesn't currently use this measure.

Based on the information above and using 2006 census information:

| | | |
|---------------------|------|--------------------------------------|
| District population | 7098 | <u>3.8582</u> ha/1000 people. |
| Carterton township | 4122 | <u>6.6437</u> ha/1000 |

Using this method, it could be argued that the current provision of parks and reserves in Carterton is slightly insufficient to serve the District population – however this is likely to be mitigated by:

The use of school facilities

- ☐ The use of recreation facilities in the smaller District towns of Gladstone and Clareville
- ☐ The use of private facilities (such as golf courses, bowling clubs etc)

However it would appear that Carterton town is adequately served using the above technique as the ratio is considerably in excess of the 4 ha/1000.



Potential Future Provision

The study area could potentially provide for an additional 2000 people (800 lots @ 2.5 people/household⁴).

If no further reserves were provided and based on the information above, the following ratios would result for an additional 2000 and 4000 people respectively:

| | | |
|---------------------|-----------------|------------------------------|
| District population | 7098+2000=9098 | <u>3.3221 ha/1000</u> |
| | 7098+4000=11098 | <u>4.0524 ha/1000</u> |
| Township | 4122+2000=6122 | <u>2.2354 ha/1000</u> |
| | 4122+4000=8122 | <u>2.9657 ha/1000</u> |

The extra population would therefore have a marked impact on reserves provision if no new areas are added – and in most cases dropping the ratio well below the 4ha/1000 ratio.

On a very basic level, and using the standard ratio applied above, additional reserve land (less than 1 ha) should be considered in the study area.

There are no parks in the study area – the closest being South End Park on Brooklyn Road.

⁴ Average household size is 2.5 people, Statistics New Zealand 2006 Census



South End Park, the only area of open space near south Carterton is well utilised but not within walking distance from most properties in the study area.

The following points are made in respect of whether or not the study/potential growth area should provide reserves:

- ☐ The smaller the lot size means that less “on-site” recreation opportunities are available for residents and there is an associated demand on public facilities and open spaces. The converse applies.
- ☐ The demographic characteristics may influence the types of parks or open spaces for the study area. For example a younger family moving to the area may seek local play opportunities within a walkable distance of their property (500-800 metres); older people may desire areas with an amenity or social focus or use of walkways.



- ❑ There is a marked pattern of spatial distribution in the current township – therefore consideration to “balancing out” the spread of reserves to meet the demand of those in the growth area should be considered.
- ❑ The type of reserves that should be considered in this area should therefore be focussed on meeting mainly neighbourhood needs. Desirable characteristics of neighbourhood reserves are:
 - A minimum size of 2000-2500 m²
 - Good visibility (fronting streets not down the end of cul-de-sacs)
 - Good accessibility and useability – the reserve should be of a shape and size that potentially meets a range of community recreation needs
- ❑ The focus of any new reserves should be passive/informal (as opposed to providing sportsfields for active or formal recreation such as sport) and potentially would serve more as amenity areas or ‘play’-focussed. This is recommended as the current town provision is oriented to the north and to active and formal recreation uses.
- ❑ Having “green space” amongst the urban form – especially in areas of higher density – are desirable from an amenity perspective and also can be important for marketing of subdivisions.
- ❑ It is not known what walkway provision exists but the growth area should provide connections, where possible, whether to strengthen linkages with the existing reserves network or to provide a thematic linkages.
- ❑ The study/growth area could also provide scope for innovative or different parks design such as:
 - Something related to the daffodil theme – maybe a Fairy Park/garden?
 - Using swales and planting to manage stormwater
 - The Council would also need to consider whether or not it was prepared to “take on” additional parks and reserves which have annual on-going costs which need to be met from rates; the appropriateness and desirability of “private” reserves may also need to be considered.

Recreation and Open Space - conclusion

Carterton currently has good reserve provision which serves both the wider District and the town’s needs. The existing reserves are, however, large and focussed on active recreation and are predominantly located on the town’s northern boundary.

Depending on the expected population, it is recommended that the Council consider additional reserves provision in the study area for the following reasons:



- ☐ To balance the spatial distribution of reserves so they are spread from north to south; the focus of reserves should therefore be to the west and south (given the presence of a number of schools on the eastern boundary).
- ☐ To provide opportunities on a neighbourhood level – for less formal recreation such as play and amenity.
- ☐ To potentially assist in the marketing of the resultant subdivisions.
- ☐ To explore the opportunities of providing a unique or different experience for the town that capitalises on its branding.

4.10 Heritage Sites

The following heritage sites fall within the study area:

| District Plan Reference | Name | Location and Legal Description | Category | District Plan Map No. |
|-------------------------|---|---|----------|-----------------------|
| Hc052 | Father Halbwachs Cottage (Zillwood Cottage) | 463 High Street South, Carterton (Lot 2 DP 28774) | N/A | 57 |
| Hc053 | Courthouse | 16 Hilton Road, | N/A | 57 |

| | | | | |
|-------|-----------------|---|-----|----|
| | Cottage | Carterton (Lot 3 DP 344163) | | |
| Hc054 | Royal Oak Hotel | 321 High Street South, Carterton (Lot 1 DP 28774) | N/A | 57 |

4.11 Cultural Sites

There are no known sites of cultural significance within the study area.

4.12 Summary : Key Facts on Existing Networks

Water

- ☐ No new trunk supply main pipes will be required in the Study Area
- ☐ Any new reticulation piping will be provided at the cost of the developer.

Roading (including walking and cycling)

- ☐ Any new internal roading within the study area will need to be designed to fit the criteria of the roading hierarchy.
- ☐ Any new intersections with SH2 or access ways off SH2 will require the approval of NZTA.
- ☐ Currently there are very few road links north-south within the study area, resulting in a reliance on SH2 and Lincoln Road, and increased travel distances



- ☐ Very little existing provision is made within the structure plan area for non-motorised forms of transport such as walking, cycling, and for mobility scooters and baby buggies, this needs to be addressed.

Rail

- ☐ The commuter rail service to Wellington is highly utilised and the railway station a major 'destination' for local movements in the morning and a major 'origin' of the at night.

Sanitary Services

- ☐ Any new wastewater reticulation piping will be provided at the cost of the developer.
- ☐ Any new development must ensure lot sizes that are capable of disposing of stormwater on site.
- ☐ A new trunk sewer is desirable between Dalefield Road and Brooklyn Road via existing infrastructure in Endelave Way.
- ☐ Development on the east side of SH2 will almost certainly require to be pumped up to the gravity sewer network.

Recreation and Open Space

- ☐ Development within the structure plan area will result in a shortfall in open space, both in terms of the amount of open space available and its accessibility (distance from the development)
- ☐ Recreation provision should focus on passive and play facilities rather than active sports facilities