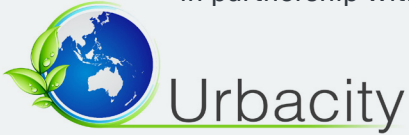




in partnership with



THIRLMERE CENTRE DETAILED REPORT

DECEMBER 2020



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1 Thirlmere

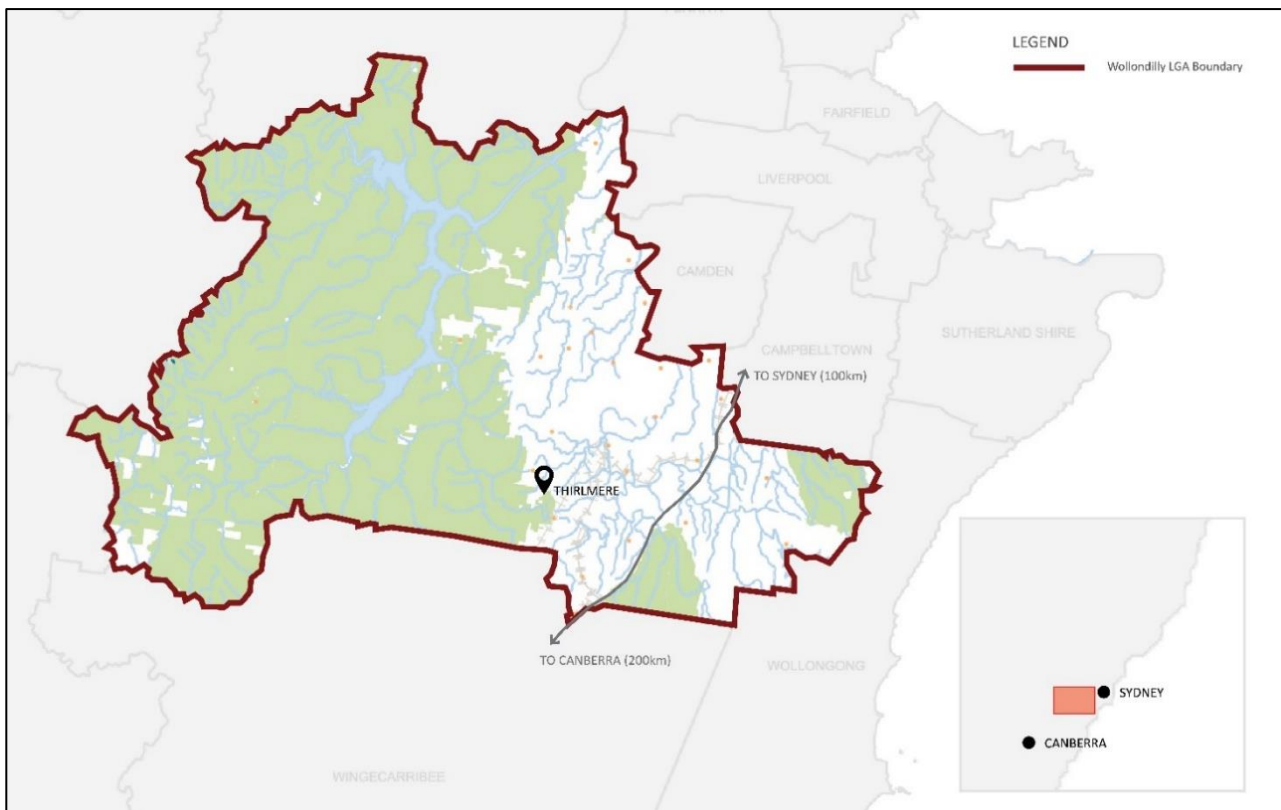


Figure 1-1 Thirlmere locality map.

1.1 Thirlmere Village, Activity Core and Edges

The key characteristics of Thirlmere are listed in the table below:

Population	2016 Census	4,589	Increase 1,943 (42% increase on 2016 population size)
	2041 Projection	6,532	
Centre Typology	LSPS: Larger Centre		Centres Study: Village
Centre Functions	Retail – local and limited passing trade, weekend tourism (Rail Museum), specialty services Education – Primary school (360 students) Recreation – Sportsfields, natural areas, parks and playgrounds Civic and community – Community hall closed for review of location Employment – local scale, small scale Capacity – 6,000m ² + of floor space potential under current LEP		
Centre Special Features	Compact and walkable core Diverse land uses in centre Ample spare capacity within the core and edges for intensification and diversification of development.		
Edges	Edges suitable for expansion and infill with adaptable building typologies. Potential for diverse residential densities within walking distance, creating opportunities for connectivity Improved continuity of pathways is needed to provide connectivity to the village core.		
Future focus	Retain and enhance heritage and village character Opportunities for infill development and adaptable buildings Tourism and recreation opportunities		

1.2 Treatment in the LSPS

The Local Strategic Planning Statement (LSPS) includes the following Actions specific to Thirlmere:

Action	Timeframe	Centres Study Opportunity
<i>7.11 Investigate options to strengthen and expand heritage protection in and around the Thirlmere heritage conservation area</i>	<i>Short term</i>	This Centres Study recommends a detailed urban design investigation to identify building siting and dimensions, building elements, colour schemes and materials of heritage items that are to be replicated in new buildings and renovations in the Centre. The intention is to enhance a design theme that creates cohesion and sense of place. The outcomes from the analysis should inform additional controls in Volume 1 Section 6.5 to the DCP for Thirlmere centre as a Key Site.
<i>9.5 Review and develop events for Wollondilly and develop the Thirlmere Festival of Steam into a signature event for the Shire</i>	<i>Short term</i>	<p>This Centres Study and other studies and strategies previously adopted by Council identify the importance of Thirlmere Rail Museum to the Centre.</p> <p>Increased visitation to the museum is an opportunity to encourage visitors to walk around the Centre. Special events are opportunities to try disruptive temporary installations to test improvements in pedestrian movement.</p> <p>This Centres Study recommends everyday pedestrian connection to cross Oaks Street and Barbour Road should be enhanced.</p> <p>Specific design needs further investigation by Traffic Engineers and could be trialled with temporary disruptive devices such as moveable bollards, planter boxes, pavement marking and the like in conjunction with the Festival of Steam to test peak pedestrian and traffic flow.</p>

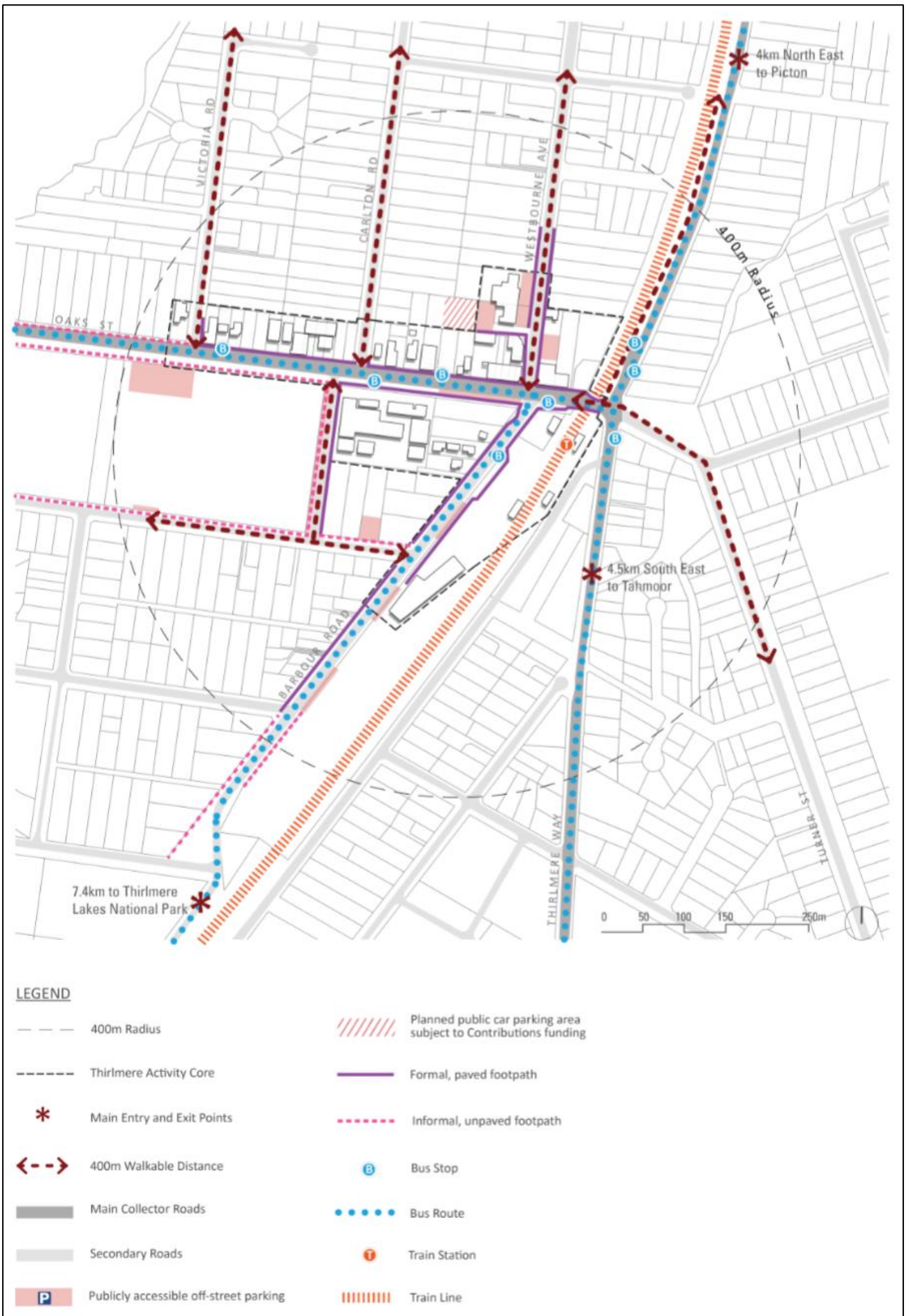


Figure 1-2 Thirlmere activity core and access map.

2 Centre Appraisal and Opportunities

2.1 History

Thirlmere, like the rest of the shire, is part of the traditional country of the Gundungura and Tharawal Aboriginal people. European settlement first occurred in the 1790s and a boom in settlement occurred with the construction of the original Southern Rail Line.

The railway commenced operation in 1883. The location was originally called 'Redbank' after the colour of the dirt in the rail cuttings but was re-named Thirlmere in 1886. Timber milling, which first commenced to make sleepers from local timber, continued to make milled timber for construction. The main rail line deviated to bypass Thirlmere in 1919 and the railway and station ceased use.

Estonian immigrants arrived in Thirlmere from 1924 to 1939 and established a thriving poultry industry. At one stage Thirlmere was the main source of eggs to the NSW market. Poultry farming – mostly for turkey meat continues to current times.

Thirlmere Rail Museum first opened in 1976, with a \$30 million upgrade of the museum completed in 2010. The museum is the largest and oldest operative rail museum in Australia and is maintained by a large group of volunteers. The museum hosts the annual Festival of Steam, which is the largest tourism event in the Wollondilly LGA.



Figure 2-1 Historic photos of Thirlmere; Thirlmere Railway Station c1905 (left), Family Hotel – cnr The Oaks Rd and Westbourne Avenue c1900 (right) (Source: Wollondilly Advertiser)

2.1.2 Heritage items and Heritage Conservation Areas

Heritage items and the heritage conservation area in the Centre are indicated in **Figure 2-2**. The heritage items in the Centres listed in Schedule 1 to WLEP 2011 and located in Thirlmere Centre are:

Item name	Address	Property description	Significance	Item no.
1. Thirlmere Railway Precinct and Heritage Centre	10 Barbour Road	Lot 11, DP 1124669; Lot 10, DP 1118845	State	I251
2. Stationmaster's House	2 Oaks Street	Lot 2, DP 812022	Local	I258
3. Thirlmere Public School and Residence	10 Oaks Street	Lot 1, DP 598357	Local	I259
4. Kungla supermarket sign	39 Oaks Road	Lots 8 and 9, DP 25135	Local	I260

Thirlmere Heritage Conservation area includes residential properties with original dwellings, the Thirlmere Station, level crossing and station master's residence, Thirlmere Inn, the primary school and Memorial Park and contains both modern and original buildings.

Opportunities:

The objectives in Wollondilly DCP Volume 1 Section 6.5 adequately require new work to reflect the heritage features and themes of the heritage items and conservation area. However, the DCP controls are limited to:

1. *New Commercial Buildings must incorporate skillion verandahs that extend over the footpath to the street edge.*
- > It is recommended a detailed analysis of built form and streetscape be undertaken to expand on the controls and provide indicative diagrams in the DCP for all new work (including renovations, additional and alterations to all buildings) to capture and replicate the desirable and functional elements and to improve cohesion of the Centre's built form and public realm.

Examples of works to be encouraged are:

- Minimal front setbacks, ideally with limited driveways, garages and no parking evident within the front setback.
- Front porches and verandahs with sufficient dimensions for passive outdoor use (tables and chairs), to promote the potential for informal exchange between residents and passing pedestrians.
- Street furniture elements and street façade features of buildings could reflect the colour scheme and design elements of the Thirlmere Railway station such as awnings, shade structures, balustrades/railings, lighting and public artworks to reflect elements of Thirlmere's unique history.

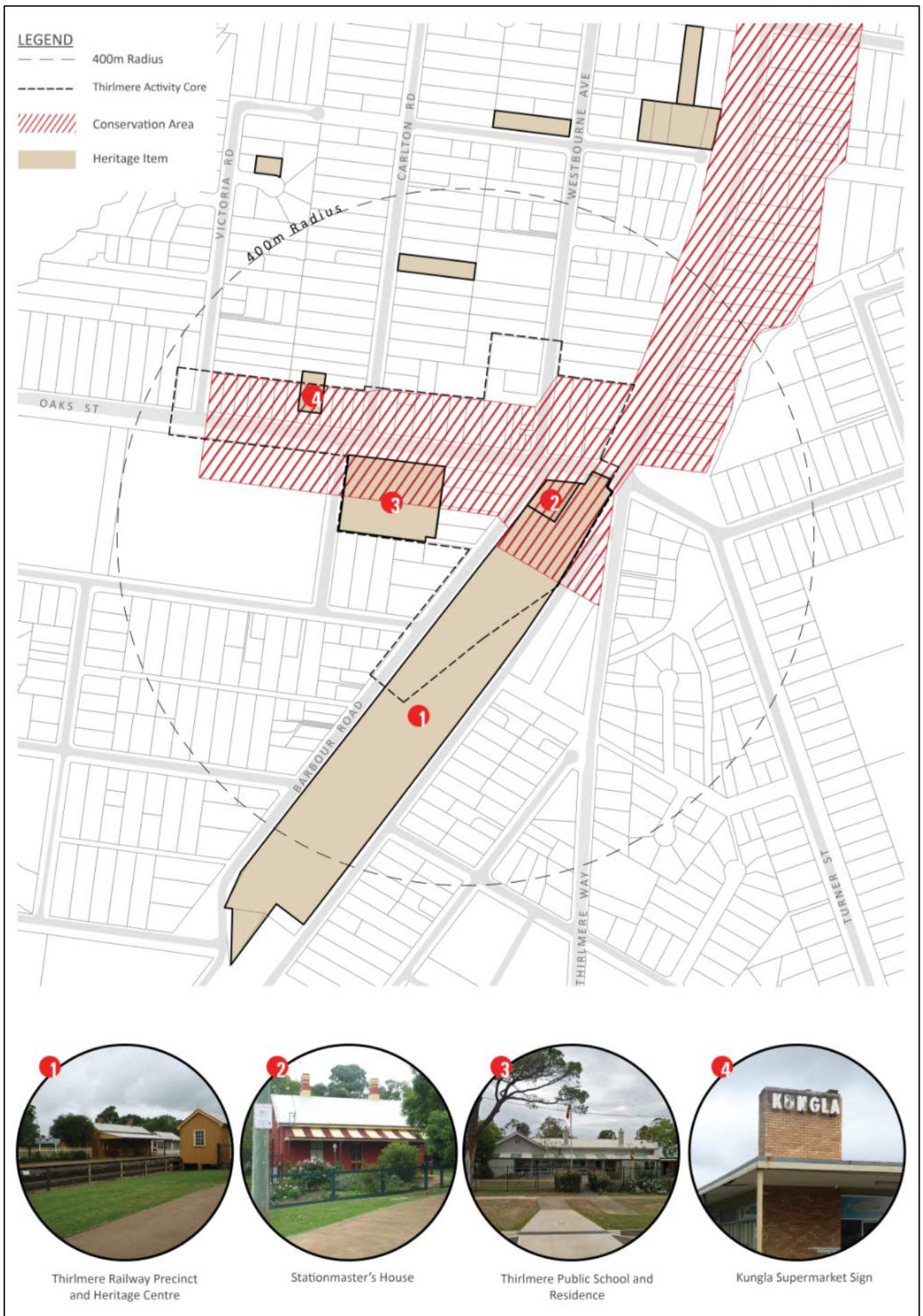


Figure 2-2 Thirlmere heritage map.

2.2 Primary Production Influences

Poultry farming and timber milling were the two prominent primary production activities in Thirlmere. There are no current elements of Thirlmere Centre that reflect these uses. Primary production continues to the present requiring bulk transport and heavy vehicle movements on load limited roads.

Opportunities:

- > Introduce street art / public art / public photo display to symbolise the influence of poultry farming and timber milling such as the murals in Sheffield Tasmania.
- > Investigate whether the exhibition specific to the Estonian migrants and their lives in Thirlmere, which was held at the Wollondilly Heritage Centre at The Oaks, could be permanently displayed/replicated at the Rail Museum.

2.3 Natural, Cultural, Community and Scenic Assets

Thirlmere has an excellent variety of community assets in close proximity and easily accessible to the Centre, as shown in **Figure 2-3** and described below. Such assets are essential elements in providing a variety of experiences and opportunities for social interaction and sense of place for locals and visitors. All places are easily identifiable in the landscape of Thirlmere Centre with the possible exception of Lin Gordon Reserve.

Thirlmere Lakes National Park

Thirlmere Lakes National Park is 2km south of Thirlmere town centre along Barbour Road. The lakes have cultural value to Aboriginal people, provide biodiversity and scenic value and allow for bushwalking, canoeing swimming, picnicking and boating.

The existing walking trails could be connected to the Great Burragorang Valley Walk, which has the potential to be a world-class, multi-day walk linking the Blue Mountains to the Southern Highlands. It is in the earliest stages of planning and feasibility investigations and is a 'game-changer' in the Wollondilly Destination Management Plan (DMP) 2018.

Lin Gordon Reserve

Lin Gordon Reserve is located at the western edge of the town centre. It is an 8.8ha bushland reserve owned and managed by Council with BBQ and picnic facilities, car parking and a dog off leash area and walking trail.

Memorial Park, Oaks Street

Located in the centre of Thirlmere at the corner of Oaks Street and Balfour Road, Memorial Park functions as a traditional village square with a variety of facilities that directly support community wellbeing and social interactions. The park contains BBQ and picnic facilities, a war memorial, playground equipment, public toilets and tennis courts. It is adjacent to the public school and a focal point for informal gatherings for all age groups.

Thirlmere Community Hall

Thirlmere Community Hall is currently closed. Council is considering redevelopment opportunities for this site. The previous functions of the community hall can be accommodated at the Rail Museum which is available for group bookings and gatherings.

Thirlmere Public School (est. 1888)

Located in the centre of Thirlmere on Oaks Street, the school provides classes Kindergarten to Year 6 and had 360 enrolments in 2019.

Thirlmere Inn

Located at the main street intersection of the Centre – corner of Westbourne Avenue and Oaks Street, the Welcome Inn was first opened in 1885. It provides indoor and outdoor dining and entertainment.

Community Directory Sign

The community map/directory board within Memorial Park is effective in identifying the main features of the town and 'things to do.'

Opportunities:

- > The redevelopment opportunities for the Community Hall have potential to enhance small scale group meeting space opportunities so that choice is not limited to the museum function rooms.

2.4 Scenic Landscape Elements and View Corridors

The view of the rail precinct from the level crossing south through to the railway museum function building is an important scene in the Centre. The regular movement of traffic through the level crossing and roundabout means this view is only practical for pedestrians standing on the northern side of the level crossing.

Oaks Street is a broad main street and the secondary streets running north (Victoria, Carlton and Westbourne) are also broad. They allow good quality views along each street and good exposure of the street facades and public footpaths.

The broad streets and adequate footpath reserve are conducive to reduced front setbacks of buildings and a more intimate relationship between the public realm and the front facades of buildings without compromising the view corridors along the streets.

Opportunities:

- > The broad streets support zero front setbacks currently permitted in the DCP. Additional objectives and controls for adaptable building forms are suitable for Thirlmere centre and edges. A key sites maps is recommended for adaptable building forms.
- > The streets and footpath reserves are of sufficient width to support canopy street trees that enhance views corridors along streets. The existing street tree specimens are mostly in poor condition and should be replaced.
- > Land on the northern side of Oaks Street between Westbourne Avenue and the rail line, which includes the 'Welcome Inn' has potential for redevelopment and is in the B2 Local Centres zone. The rail line is infrequently used for tourist trains and noise and vibration are of minimal constraint to development of this land. Lots C and D DP 106009 and Lot 2 DP 740980 have outstanding views along the rail line and any future development should capitalise on these views for the general public. A micro-analysis of the urban design potential of this section of land should be undertaken in the short term to guide future redevelopment.

2.5 Infrastructure and Utilities

Limitations to potable water supply requires scheduled upgrading works by Sydney Water within 2 years. These works are included on an approved Servicing Plan.

Limitations to reticulated sewer services which will prevent zoning changes for increased density of development beyond the existing LEP prior to 2025.

Opportunities:

- > The majority of buildings in the existing Centre do not utilise the maximum allowable floor space under the current LEP provisions (see **Section 2.10**). Future growth in the short term (to 2025) in Thirlmere is expected to be small scale and incremental and within the capacity of the existing utilities. The limitations on new sewer service connections will not inhibit the small scale change anticipated for Thirlmere Centre before 2025.
- > Council should continue to work with Sydney Water to ensure reticulated sewer capacity is increased so as not to inhibit growth.

2.6 Special Events, Regular Community Events and Activities for Individuals and Groups

There are sufficient spaces throughout Thirlmere village for informal and formal gatherings and events. The Thirlmere Railway Museum caters for functions and activities including weddings and conferences and small groups. The Memorial Park has BBQ and picnic facilities and public toilets.

The Thirlmere Festival of Steam has been run for over 30 years. It is held at Thirlmere Rail Museum and along Main Street. The festival will be run by the Rotary Club of Picton, NSW Rail Museum and WSC.

The sportsfields cater for a variety of sport and recreation-related activities.

Opportunities:

- > Investigate the potential for a 'rail trail' between Thirlmere and Buxton and including a connection with Thirlmere Lakes for tourism potential.
- > Investigate relocating the community hall functions to a multi-function building at the sportsgrounds.

2.7 Community

2.7.1 Who uses the Centre and why?

Thirlmere is visited for daily convenience needs of residents in the local catchment. Trade and daily activity is mostly related to residents passing through as they travel to and from workplaces, school pick-ups and drop offs and organised sports at the sportsgrounds. Visits are predominantly private-car based trips.

The Thirlmere Rail Museum generates day-trip visitors mostly on weekends although the venue is open 7 days. Other special events and activities that generate large scale attendance and interest by the local community are sporting events at the sportsgrounds and the Thirlmere Festival of Steam, which is held one weekend per year and is based at the Rail Museum.

2.7.2 PlaceScore Engagement Survey

The following is a collection of the responses to Council's PlaceScore Engagement Survey specific to Thirlmere and/or made by residents of Thirlmere:

Things for families to do. We travel to Narellan etc, for entertainment, there is not enough in our shire. Money is spent out of Shire.

Music and performing arts centre using music to empower people and our future generation

Local cinemas and a street full of great restaurants and cafes utilising meats and produce.

Residents place greatest value the safety and familiarity of Thirlmere village, and their sense of connection with local businesses. They have identified the need for improvements to the availability of evening entertainment, local employment and the condition of the public realm, particularly the movement options and care for natural assets.

Opportunities:

- > Introduce adaptable building typologies on key sites in the DCP.
- > Provide improvements to the public realm for better movement options particularly for pedestrians. Council's current commitments for streetscape embellishment to Oaks Street and upgrades to Memorial Park are also aligned with this recommendation and community aspirations.

2.7.3 Responses to the draft LSPS Public Exhibition Period

Comments specific to Thirlmere:

Issue Raised in Submission	Council response
<ul style="list-style-type: none">○ <i>One of the fundamental requirements for towns and village centres is a public hall. Advocates for the Thirlmere public hall to be rebuilt to modern standards.</i>	<ul style="list-style-type: none">○ <i>While it may be nice to have a hall in each town or village, there is very real prospect that it would be underutilised or not used and run down.</i>

Council's commitment to the Community, Civic and Cultural Centre in Picton will introduce new entertainment facilities and events for Shire residents.

Council's committed works in the Operational Plan and Contributions Plan target improvements to streetscape, roads and Memorial Park.

There is adequate capacity for infill and redevelopment of existing land in Thirlmere centre for new commercial uses and some new employment opportunities.

Opportunities:

- > Adaptable building typologies are recommended.
- > Improve connectivity of the pathway network between the village centre and surrounding residential land.

2.8 Land Uses, Open Spaces and Community Services and Facilities

Thirlmere has a diverse mix of land uses within the Centre contained in a walkable network of streets, as shown in **Figure 2-3**. This figure also shows the location of recently approved developments in the Centre as discussed below.

Open spaces are well sited in relation to the Centre. Memorial Park is highly visible in the Centre as it is perfectly positioned at a prominent intersection and high traffic pedestrian route. It is well connected by the footpath network and adjacent to the school. It is suitable for informal and formal community activities and a variety of gatherings and recreation.

The sportsfields, which are within walking distance of the commercial Centre and immediately adjacent to the school, allow for a range of sports. Lighting is available, together with a grandstand and amenities.

Publicly accessible parking is well distributed in Thirlmere and is well connected by the public footpath network to and through the Centre. Most parking opportunities are on-street and readily visible. Parking is well connected by the public footpath network to and through the Centre. The ability to walk through and within the Centre is good in terms of footpath connectivity and gradients. The demands for parking fluctuate with peaks generated by school pick up and drop off during the week, sports events on weekends and visitors to Thirlmere Train Museum on weekends.

The new public parking area off Penny Lane to be constructed with DA2018/0188 will not be readily visible from the street and needs to cater for 'back of house' access (loading/unloading and bin storage etc) for adjoining commercial premises fronting Oaks Street. It will be connected to Oaks Street via a laneway within the redevelopment site DA2018/0188.

The construction of the Penny Lane public car park with Development Consent DA2018/0188 (at 27 Oaks Street) will activate the rear of the commercial properties fronting Oaks Street. It will be a catalyst to promote the more intense use of properties from No.13 through to No.25 Oaks Street as well as properties from No.60 to No.64 Carlton Road (currently in Zone R3 Medium Density Residential) and No.77 Westbourne Ave (St. Stephens Anglican Church), No.79 Westbourne Ave (Thirlmere Community Hall), No.86 and 88 Westbourne Ave which are all currently in the B2 Local Centre zone. Future development consents creating public access through a site between Penny Lane car park and a public street must include conditions to protect and maintain public access.

Land between Memorial Park and Marsh Street is within the B2 Local Centre zone. However, the majority of the land is part of Thirlmere Primary School and also includes an Army Reserve Hall. Of the three (3) residential properties fronting Barbour Road, one contains 3 villas and is highly unlikely to be used for commercial purposes. The other two properties have potential for a change of future use and a mix of residential and commercial use or accommodation would be appropriate. The existing land use control table in the LEP provides sufficient options for future land uses of these two properties.

Opportunities:

- > Undertake a micro-analysis of the urban design potential of the land on the northern side of Oaks Street between Westbourne Avenue and the rail line (as above). A mini-masterplan of this site is recommended to be included in the DCP Volume 1 Section 6.5.
- > Reduce the perceived separation between Memorial Park and the northern side of Oaks Street. This could be achieved by road pavement variation, as well as a pedestrian refuge 'bubble' extending into some parking bays on the southern side of Oaks Street. The design objective being to make the Park and the centre of the commercial lands a cohesive element of activity.
- > Provide unification in the colour scheme between buildings in the rail museum and those of buildings in the centre. The objective being to attempt to unify the village and the museum and add to the character and sense of place.
- > Undertake a review of the design of the Penny Lane car park interface with adjoining properties with the intention of including site specific controls in the DCP. This review should consider matters including:
 - The safe movement of pedestrians of all abilities to move through the parking area and access the existing public footpath area.
 - The ability for commercial properties fronting Oaks Street to use the car parking area to access 'back of house' functions particularly waste management.
 - The facades of buildings facing the car park for optimising natural surveillance and permeability.
 - Prevention of solid high fencing to the perimeter of the car park.

2.9 Urban Structure and Built Form

Thirlmere Centre has an urban structure characterised by:

- Grid pattern of streets and allotments.
- The rail line as a prominent visual and navigational feature.
- Main street (Oaks Street) and secondary cross street pattern (Victoria Road, Carlton Road and Westbourne Avenue) being straight, broad, gently sloping and easily navigable.
- Large lots in the town centre despite there being no minimum lot size control in the LEP for commercial zoned land.
- Most existing buildings with low site coverage and large areas of unbuilt space / underutilised rear areas (see **Section 2.10** for details on potential commercial floor space).
- No consistency in street front setbacks.
- Broad streets and footpaths in variable condition suitable for improved footpath pavement and street planting.
- Walkable topography and footpaths widths throughout the Centre.
- Mostly single storey with two storey buildings at Oaks Street / Westbourne Ave intersection. Two storey redevelopment is a suitable scale throughout the Centre.
- No common design theme – heritage items and conservation areas have the potential to set design themes and character elements for consistency.

Opportunities:

- > Maintain the grid street pattern and enhance permeability with consideration for new through links north of Oaks Street and to the Penny Lane car park.
- > Enhance opportunities to experience the view corridor south along the rail line from Oaks Street and immediately north of Oaks Street with a micro-master plan for the commercial land between Westbourne Ave and the rail line.
- > Maintain the primary function of Oaks Street as the 'main street'.
- > Add DCP controls for adaptable buildings on key sites.
- > Add DCP controls for first floor levels in the Centre and edges to include verandahs/balconies to the street front to enhance the street scape, natural surveillance and interaction with the street.
- > Footpath continuity and upgrading footpath surfaces.
- > Street furniture (seats and rubbish bins) and street trees need replacement with a common design and planting theme.
- > Street trees to be canopy trees suitable to maintain the view lines along streets for pedestrians.
- > Minimise vehicle crossings to the footpath by facilitating 'back of house' / rear or side access to Penny Lane carpark and reducing requirements for on-site parking requirements.

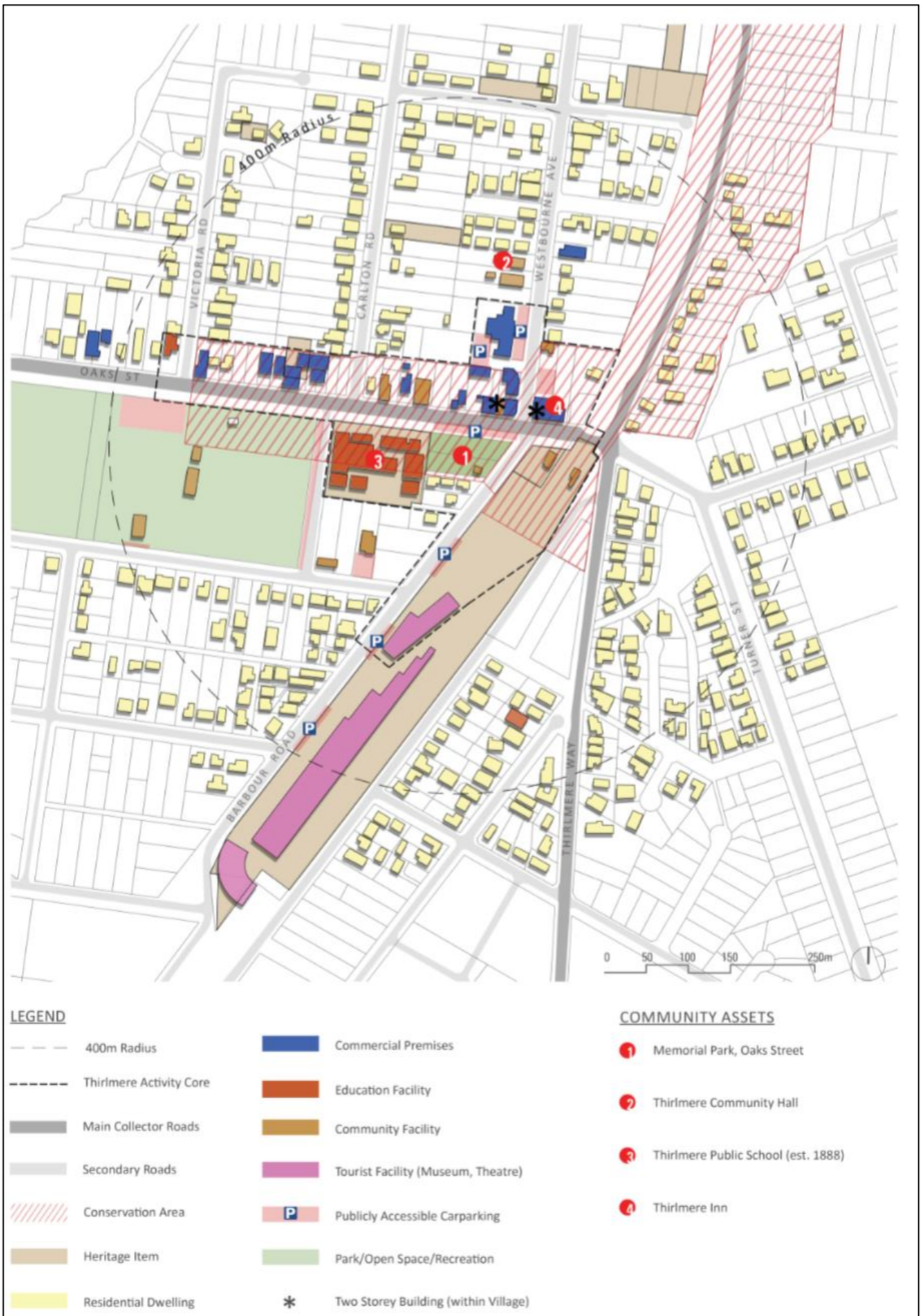


Figure 2-3 Urban structure, built form and access analysis for Thirlmere.

2.10 Commercial Floor Space and Capacity for Growth

The Draft Centres Study 2008 identified the following for Thirlmere commercial land:

- *3750 square metres of commercial/retail floor space (7% of the total commercial/retail floor space in Wollondilly LGA).*
- *Two small convenience supermarkets and some strip shops.*
- *11 vacant premises in the town centre (10% total retail vacancy rate for the LGA).*
- *750 square metres of vacant commercial/retail floor space. (20% vacancy rate of commercial/retail floor space in Thirlmere).*

There has been no actual change in the floor space within the commercial-zoned land since the 2008 study. New development consents have been limited to:

- DA for the Off the Rails Café at 17 Oaks Street – with no significant increase in floor space but substantial improvement in quality of site use with renovations to the facade and an outdoor seating area.
- DA2018/0188 at 27 Oaks Street for restoration of the existing building and construction of a two storey shop top housing development with basement parking accessed via the rear of the site (including construction of the Penny Lane public car park).
- DA2016/0336 at 21 Oaks Street – for commercial premises and shop top housing currently under construction.
- DA2015/0968 at 49 Oaks Street for two (2) new ground floor shops and four (4) shop top apartments. Not yet constructed.

A large portion of the commercial zoned land in the Centre applies to school property, the Church and Community hall. This land will not contribute to new commercial and business uses. However, the school and church add diversity of activity and interest to the Centre and the current zoning is appropriate.

Within the existing commercial zoned land there is redevelopment and new development capacity of more than double the current commercial floor space under the current LEP provisions. This is equivalent to more than 6,000m² of additional floor space based only on maximising floor space yield under current planning provisions. New floor space could include a mix of commercial floor space and shop top housing or first floor non-retail uses.

In practical terms this additional yield is not likely to be realised due to the inertia of existing built form and the preference for design outcomes that best fit the context and setting of each site.

At the town edges there is capacity for horizontal expansion of a mix of uses by encouraging adaptable building typologies.

Shop top housing is permitted for the land in the B2 Local Centres zone. The built form is amenable to first floor residential development. It is recommended the DCP provide guidance on good design elements for shop top housing.

Medium density residential land was added to the north of the commercial land in LEP 2011 based on the recommendations of the Medium Density Housing Review (MDRR) 2008.

Existing Clause 5.10 to the LEP provides sufficient flexibility and incentive for redevelopment of heritage items. However, other incentives are recommended in the DCP for land in the heritage conservation area to retain contributory buildings at the street frontage and increase density elsewhere on the site.

Opportunities:

- > Micro-masterplan development potential on commercial zoned land between Westbourne Ave and the rail line to optimise public view corridor and guide future infill development. Infill incentives could be considered.
- > Incorporate DCP provisions for future development surrounding Penny Lane car park to promote mixed uses and functional connectivity to the parking area. The objective is to optimise redevelopment fronting both the car park and street frontages and minimise blank walls and back of house functions detracting from the safety and amenity of the car park.
- > Add DCP provisions for adaptable building typologies on key sites.
- > As land in Thirlmere has been zoned for medium density for some time yet has not been developed, Council may wish to take a more pro-active position in terms of a demonstration project in partnership with

a developer. The likely main issue is the conservative nature of the local building and development industry. Thirlmere has enough critical mass and retail resources to facilitate more density. However, some testing of site sizes and typologies through additional analysis might be required. Zoning for a particular density may not be enough to unlock the market and sites and there may be some latent demand from potential product buyers that is not evident in the current builder/developer market.

- > Land along Mason Street and Oaks Street adjacent to the sportsfields is supported for consideration as future medium density housing provided this is aligned with the Housing Strategy, as it has excellent walking distance and connectivity to public open space, the school and the commercial centre.

2.11 Access and Movement

The Centre and Edges of Thirlmere village are easily traversed by car and by foot with grid patterns, wide streets with a 10-15m wide carriageway, gentle slope and a diverse mix of land uses in close proximity. Public parking is well distributed and readily visible in the streetscape.

There are opportunities to improve pedestrian pathway connectivity through the Centre, extending to the surrounding residential lands and adding pathway connection to the sportsfields car park in Oaks Street.

There is a 15 tonne road load limit through Oaks Street. Heavy vehicles require a permit from Council to traverse load limited roads.

Opportunities:

- > Improve opportunities for pedestrian crossing of Oaks Street and Barbour Road near the roundabout intersection.
- > Improve connectivity and continuity of the footpath network linking the sportsfield car park in Oaks Street with the existing footpath on the southern side of Oaks Street.
- > Improve connecting pathways between the Centre and the residential areas to the east along Turner Street, Marion Street and Thirlmere Way.
- > Improve pedestrian prioritisation connection across Oaks Street between the northern frontage of Memorial Park and the southern side of Oaks Street (west of the roundabout)
- > Investigate opportunity for a rail trail for recreation and tourism to connect Picton, Thirlmere and Buxton along with other places of interest such as Thirlmere Lakes and the rail museum.

2.12 Street Appeal - Public Realm and Pedestrian Experience

The appeal of the public realm varies as shown in **Figure 2-4**. The main daily focal points of the Centre function well and create a positive street experience with buildings addressing the street, good quality footpath pavements and connectivity and buildings interfacing directly with the street.

Opportunities for improvement exist on commercial zoned land with redevelopment potential such as the land between Westbourne Avenue and the rail line as well as the land fronting the northern side of Oaks Street and west of Carlton Road.

Improvements to the public footpath continuity linking to the sportsground car park will improve the public realm experience on the southern side of Oaks Street and west of the school.

Detailed design requirements for the Penny Lane public car park and its interface with the rear and side boundaries of adjoining properties will improve the street appeal extending from No.15 in **Figure 2-4**.

Opportunities:

- > Micro-scale master plan for the land between Westbourne Avenue and the rail line for building siting, building orientation and publicly accessible spaces.
- > Introduce adaptable building typologies with key sites in Thirlmere.

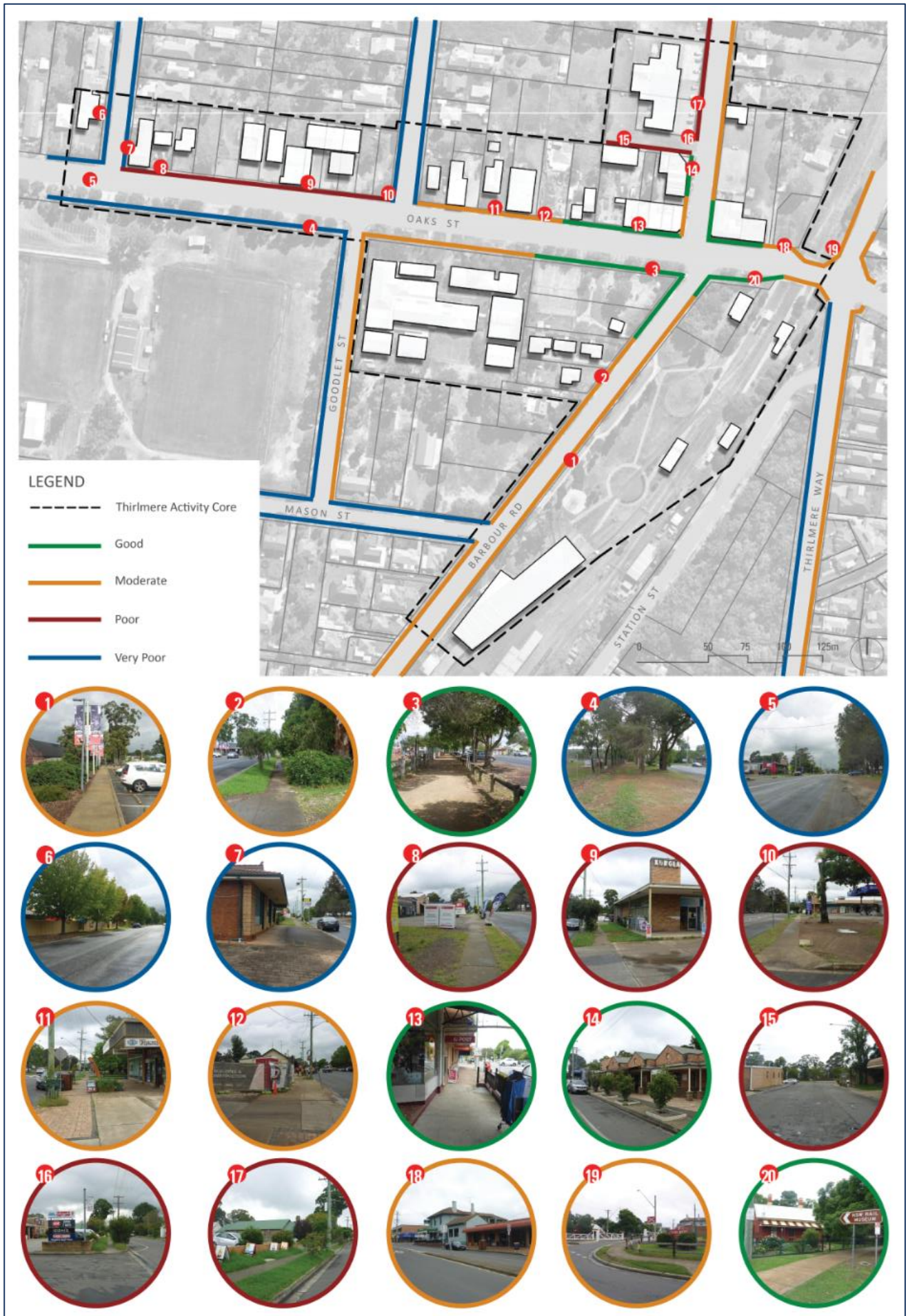


Figure 2-4 Evaluation of street appeal factors within Thirlmere.

3 Current Commitments to Works, Adopted Plans and Strategies

3.1 Objectives for Thirlmere from Previous Centres Study

The Commercial Centres Study 2006 recommended a full line supermarket would be needed by 2016 plus speciality shops total floor space of 4,000m² requiring a consolidated site of minimum 6,000m² (requiring amalgamation of 6 to 8 lots).

The amount of commercial-zoned land in Thirlmere was increased with WLEP 2011 to potentially accommodate suitable land. However, since 2006 there were two full line supermarkets constructed at Tahmoor. New commercial zoned land created since 2011 has not been redeveloped in Thirlmere.

Opportunities:

There is ample capacity for commercial growth within the existing commercial zoned land in Thirlmere.

3.2 WLEP 2011 provisions

No changes are recommended for the land use zoning and land use tables for Thirlmere Centre. Adaptable building typologies can be accommodated within land in the B2 Local Centres zone and the R3 Medium Density Residential zone.

Additional medium density housing along Mason Road and between Carlton and Victoria is supported, if this is consistent with the Housing Strategy.

There are no natural assets or natural hazards that limit future infill development for Thirlmere Centre.



Figure 3-1 Current land use zoning pursuant to WLEP 2011 and recommended areas for consideration of adaptable building typologies.

Opportunities:

- > Adaptable building typologies are suitable here with excellent walking distance and connectivity to public open space, the school and the commercial centre.
- > Improved pathway connectivity to the urban release areas east and south east of the centre is recommended (refer to **Figure 4-1**).

3.3 DCP Provisions

Opportunities:

- > Implement changes to WDCP 2016 as summarised in **Section 4.1.1**.

3.4 Council's Current Commitments

Council's commitments in the Operational Plan and Contributions Plan identifies:

- Upgrades to Memorial Park;
- Public car parking in the Penny Lane Car Park; and
- Thirlmere Streetscape upgrades Roadworks, footpaths and beautification.

Opportunities:

The works committed in the Operational and Contributions Plans are consistent with the recommendations for improvements in this Centres Study.

4 Summary of Opportunities

The following opportunities have been identified for Thirlmere, as shown in the Structure Plan in **Figure 4-1**:

4.1.1 Opportunities for DCP Changes

- > Undertake a detailed urban design investigation to identify building siting and dimensions, building elements, colour schemes and materials of heritage items that are to be replicated in new buildings and renovations throughout the Centre. Street-facing verandahs and balconies to first floor level should be encouraged. The outcomes from the analysis should inform additional controls in Volume 1 Section 6.5 to the DCP to achieve some unification and consistency in character throughout the Centre. This investigation should also make recommendations on the style, colours and materials for works in the public realm (footpaths, street furniture, street trees, signage, lighting etc.).
- > Undertake a micro-analysis of the urban design potential of land on the northern side of Oaks Street between Westbourne Avenue and the rail line in the short term to guide future redevelopment and enhance views along the rail line for the general public.
- > Review the design of the Penny Lane car park interface with adjoining properties with the intention of including site specific controls in the DCP. The design review should consider matters including:
 - The safe movement of pedestrians of all abilities to move through the parking area and access the existing public footpath area.
 - The ability for commercial properties fronting Oaks Street to use the car parking area to access 'back of house' functions particularly waste management.
 - The facades of buildings facing the car park for optimising natural surveillance and permeability.
 - Prevention of solid high fencing to the perimeter of the car park.
- > Investigate options for reducing on-site parking in return for minimising driveway crossings that disrupt pedestrian routes.
- > Introduce new DCP controls for adaptable building typologies on Key Sites.

4.1.2 Opportunities for Future Council Programs

- > Consider a demonstration redevelopment project in partnership with a developer to construct an exemplary mixed use development on the site of the community hall.
- > Enhance everyday pedestrian connection to cross Oaks Street and Barbour Road. Specific designs will need further investigation by Traffic Engineers and collaboration with TfNSW.
- > Reduce the perceived separation between the northern frontage of Memorial Park and the northern side of Oaks Street to make the Park and the centre of the commercial lands a cohesive element of activity. This could be achieved by road pavement variation, as well as a pedestrian refuge 'bubble' extending into some parking bays on the southern side of Oaks Street.
- > Consider replacing the community hall with multi-purpose facilities at the sportsground located with a street frontage to Oaks Street.
- > New street tree planting to be informed by heritage analysis and detailed landscape capability investigation.
- > Continue the footpath to link the sportsfield car park with the remainder of the footpath on the southern side of Oaks Street.
- > Improve connecting pathways between the Centre and the new residential urban release area to the east.
- > Encourage murals and street art to reflect Thirlmere's heritage.
- > Investigate display/replication of an Estonian migrant's exhibition in Thirlmere.
- > Investigate a 'rail trail' between Picton, Thirlmere and Buxton and including a connection with Thirlmere Lakes and other places of interest and recreation for tourism potential in collaboration with TfNSW. Council to submit a Problem Statement to TfNSW Research Hub requesting collaboration, resource and funding assistance (see <https://www.transport.nsw.gov.au/data-and-research/research-hub/about-research-hub>).

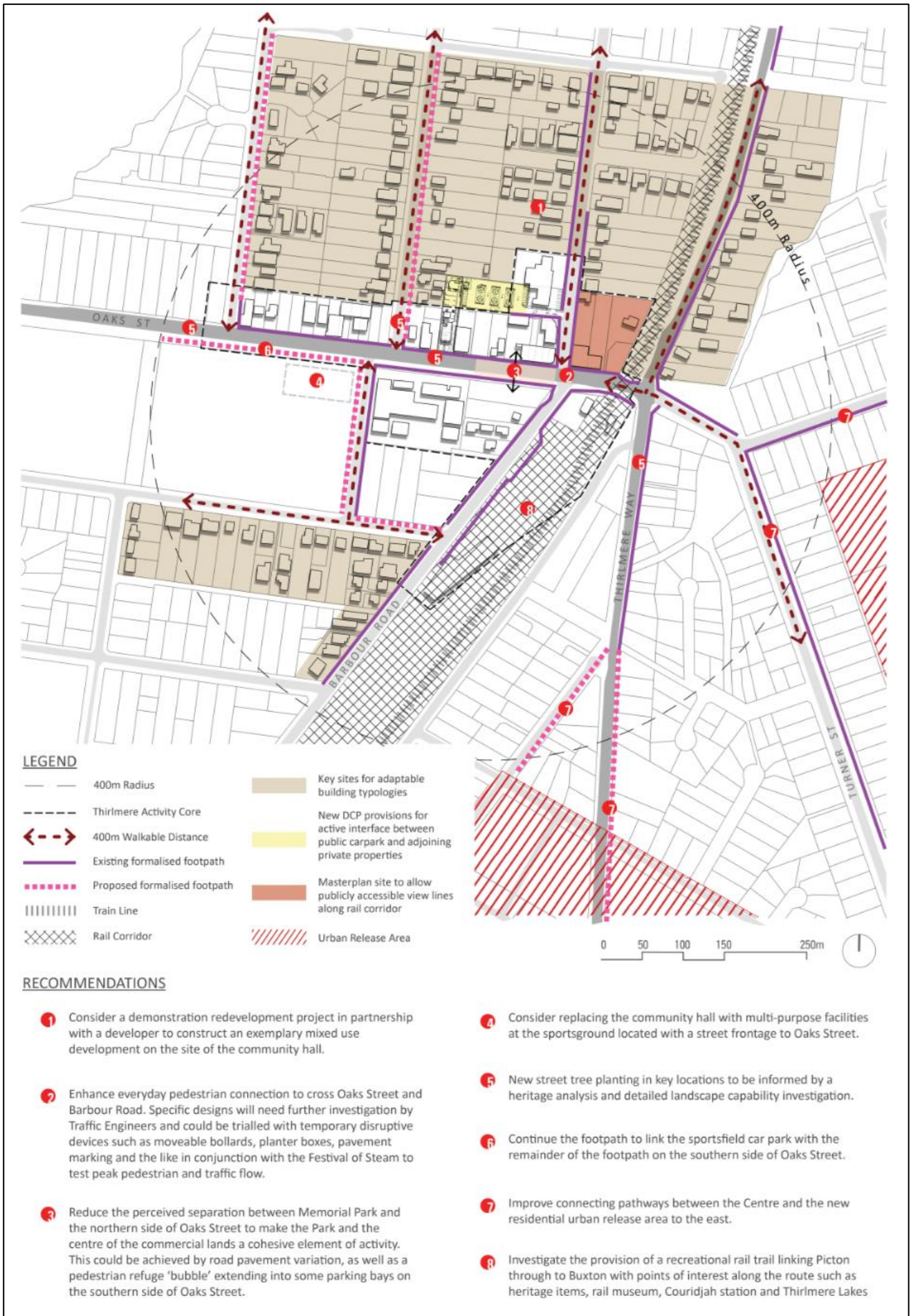


Figure 4-1 Structure plan of opportunities for Thirlmere