2. Need and options considered

2.1 Strategic need for the proposal

The upgrade of the Great Western Highway between Katoomba and Lithgow, including Medlow Bath, is supported by reference to several strategic planning and policy documents including *NSW Future Transport Strategy 2056* (TfNSW, 2018a) and the *NSW Freight and Ports Plan* (TfNSW, 2018b). The proposal is needed to provide a safer and more efficient link between Central West NSW and the Sydney Motorway network for freight, tourist and general traffic.

The current performance of the corridor constrains local and inter regional traffic. Average daily traffic volumes vary from around 20,000 vehicles per day near Katoomba to around 8,500 vehicles per day towards Forty Bends and are growing between 1-1.7 per cent per annum. There is a relatively high proportion of heavy vehicles along the corridor (between 12 and 24 per cent) with 18,500 tonnes of freight transported each day (10,300 towards Sydney and 8,500 towards the Central West).

Upgrading the highway from two lanes to four lanes would provide travel time savings for all traffic users and would largely maintain those savings well into the future. Without an upgrade, travel times would worsen, while congestion would deteriorate to unacceptable levels.

The results of crash data analysis in Medlow Bath over a five year period ending in 2019 revealed an existing safety concern at Bellevue Crescent with 44 per cent of total crashes occurring at this location. The pedestrian refuge is also highly susceptible to near miss incidents involving pedestrians and highway traffic due to its geometry and placement.

The proposal would address known safety concerns and provide ongoing safety benefits for local traffic and pedestrians:

- improved traffic flows which would benefit local and regional traffic. In particular, the upgraded highway would be able to support longer, heavier vehicles that are able to transport more freight per vehicle
- improved safety for vehicles with upgraded intersections at Bellevue Crescent and the Hydro Majestic Hotel with new turning lanes, U-turn bay, signalisation, lane markings and signage
- minimising potential for pedestrian/vehicle conflicts through the installation of a new pedestrian bridge, stairs and lifts that would provide an accessible path of travel across the highway and to public transport facilities
- enhanced public transport facilities including new kiss and ride and indented bus bays which would provide a safe location for customers to transfer between modes
- a new shared path for pedestrians and cyclists which would also help to improve safety, as well as promote better health and encourage tourism by enhancing connections to existing trails
- additional commuter parking at Railway Parade, including accessible parking.

2.2 Transport accessibility

The NSW Government is committed to facilitating and encouraging the use of public transport, such as trains, by upgrading stations to make them more accessible, and improving interchanges around stations with other modes of transport such as buses, bikes and cars.

The Transport Access Program is a NSW Government initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure where it is needed most.

The Transport Access Program aims to provide:

- stations that are accessible to people with disabilities or limited mobility, parents/carers with prams and customers with luggage
- modern buildings and facilities for all modes that meet the needs of a growing population
- modern interchanges that support an integrated network and allow seamless transfers between all modes for all customers
- safety improvements including extra lighting, lift alarms, fences and security measures for car parks and interchanges, including stations, bus stops and wharves
- signage improvements so customers can more easily use public transport and transfer between modes at interchanges.

Medlow Bath Station has been identified for an accessibility upgrade as it does not currently meet the key requirements for the Disability Standards for Accessible Public Transport (DSAPT) or the Commonwealth *Disability Discrimination Act 1992* (DDA).

The following accessibility issues have been identified at Medlow Bath Station and will be addressed in the design of the upgrade and be further assessed:

- the existing paths from the public domain footpaths to the station entries are not currently compliant with DDA standards
- access to platforms is currently via a level crossing and steep ramp or stairs that are not compliant with DDA standards
- existing tactile ground surface indicators on the platform are non-compliant with DDA standards
- there are no existing accessible car parking spaces within the rail customer car park along Railway Parade.

As part of this proposal, a new pedestrian bridge is proposed to improve accessibility between adjoining streets, bus interchanges and the station where there is currently poor accessibility.

2.2.1 Strategic planning and policy framework

The proposal has been reviewed against, and is found to be consistent with, relevant strategic plans as summarised below.

NSW Premier's and State priorities

The New South Wales Government has committed to achieve 12 Premier's priorities and 18 state priorities to grow the economy, deliver infrastructure, protect the vulnerable, and improve health, education and public services across NSW.

The proposal supports and is relevant to the following Premier's priority:

- Building infrastructure - Key infrastructure projects to be delivered on time and on budget across NSW.

The proposal supports and is relevant to the following state priorities:

- Improving road travel reliability - 90 per cent of peak travel on key road routes is on time
- A safe transport system for every customer with the aim for zero deaths or serious injuries on the network by 2056.

Together with other safety upgrades in the Great Western Highway corridor, the proposal would reduce travel time and improve road safety by improving traffic flow. Therefore, the proposal is considered to be consistent with the Premier's and state priorities.

Future Transport Strategy 2056

The *NSW Future Transport Strategy 2056* (TfNSW, 2018a) outlines a clear framework to address transport challenges in NSW over the next 40 years and is an update of the *NSW Long Term Transport Master Plan* released in 2012. It integrates planning for roads, freight and all other modes of transport and sets out initiatives, solutions and actions to meet NSW transport challenges.

By providing an upgraded road constructed to current design standards, the proposal would directly support the following regional NSW transport customer outcomes:

- supporting centres with appropriate transport services and infrastructure.
- the appropriate movement and place balance is established enabling people and goods to move efficiently through the network whilst ensuring local access and vibrant places.
- economic development is enabled by regional transport services and infrastructure.
- a safe transport system for every customer with the aim for zero deaths or serious injuries on the network by 2056.
- customers enjoy improved connectivity, integrated services and better use of capacity.

Prepared alongside the *Greater Sydney Region Plan* (Greater Sydney Commission, 2018a), *NSW Future Transport Strategy 2056* (TfNSW, 2018a) aims to align the long term planning of the transport network within Greater Sydney, through acknowledging its role in land use, tourism, and economic development of the region.

Future Transport Strategy 2056 identifies future directions for road customers including the provision of better road connections, an expanded network of bus lanes, and safer roads, particularly during extreme weather events. The proposal aims to meet these directions by improving road capacity, providing bus prioritisation at intersections and improving flood immunity.

Regional NSW Services and Infrastructure Plan

The *Regional NSW Services and Infrastructure Plan* (TfNSW, 2018c) is the NSW Government's blueprint for transport in regional NSW from now until 2056. It sets out the Government's thinking on the big trends, issues, services and infrastructure needs which are now, or will soon shape transport in regional NSW.

The plan includes the following that are directly relevant to the proposal:

- 0 to 10 years for investigation – Great Dividing Range long term solution study
- 0 to 10 years for investigation – Great Dividing Range long term solution corridor preservation
- 20 years plus initiative – Delivery of Great Dividing Range long term solution – Delivery of solution to improve freight connectivity across the Great Dividing Range in order to connect inland areas to Sydney/Wollongong/Newcastle.

Tourism and Transport Plan

The *Tourism and Transport Plan* (TfNSW, 2018d) is a companion document to the *NSW Future Transport Strategy 2056* (TfNSW, 2018a) that recognises the connection between transport and tourism and identifies the potential to support and enhance existing tourism as well as create new economic development opportunities.

The plan includes the following four customer outcomes:

- Customer Outcome 1: Enhancing the visitor experience
- Customer Outcome 2: Greater access to more of NSW
- Customer Outcome 3: Making transport the attraction
- Customer Outcome 4: A seamless experience.

By improving transport infrastructure on the main route to the Central West region, the proposal aligns with Customer Outcome 2. There may also be opportunities to contribute to Customer Outcomes 1 and 3 as the proposal development process continues.

Central West and Orana Regional Plan 2036

The *Central West and Orana Regional Plan 2036* (Department of Planning and Environment, 2017) provides an overarching framework to guide subsequent and more detailed land use plans, development proposals and infrastructure funding decisions for the region. The proposal is consistent with the following directions under Goal 3: Quality freight, transport and infrastructure networks:

- Direction 18: Improve freight connections to markets and global gateways
- Direction 19: Enhance road and rail freight links.

Western City District Plan

The *Western City District Plan* (Greater Sydney Commission, 2018b) is a 20-year plan to manage growth in the context of economic, social and environmental matters to achieve the 40-year vision of the *Greater Sydney Region Plan*, providing a bridge between regional and local planning. This will assist the Greater Sydney Commission, responsible for metropolitan planning in a partnership between State and local government, to coordinate and align the planning that will shape the future of Greater Sydney and make it more liveable, productive and sustainable.

The *Western City District Plan* aims to ensure well-coordinated, integrated and effective planning for land use, transport and infrastructure within the Blue Mountains and Western Sydney District; guides the implementation of the *draft Greater Sydney Region Plan* at a district level; and guides the implementation of a *Metropolis of Three Cities – The Greater Sydney Region Plan* across the five Districts that form the metropolitan area.

The proposal aligns with Planning Priority N1 of the *Western City District Plan* which is planning for a city supported by infrastructure.

NSW Road Safety Strategy 2012-2021

The *NSW Road Safety Strategy 2012-2021* (TfNSW, 2012) sets the direction for road safety in NSW. This strategy is underpinned by the safe system approach to improving road safety. This takes a holistic view of the road transport system and interactions among the key components of that system – the road user, the roads and roadsides, the vehicle and travel speeds.

The proposal would provide the opportunity to reduce crashes and help achieve the targets set by the strategy by providing road safety improvements including increased flood immunity, upgraded intersections which would reduce congestion, and to improve pedestrian and cyclist facilities.

Road Safety Plan 2021

The *Road Safety Plan 2021* (TfNSW, 2018e) outlines how the NSW Government will work towards the State Priority Target of reducing fatalities by 30 per cent by the end of 2021 compared to average annual fatalities over 2008–2010. It also aligns the Towards Zero vision with *NSW Future Transport Strategy 2056*, which aims to have a NSW transport network with zero trauma by 2056.

The proposal is consistent with the directions set out in *Road Safety Plan 2021* because it would provide a better standard of road with improved safety through the separation of carriageways and the implementation of contemporary design standards.

NSW Freight and Ports Strategy 2013

The *NSW Freight and Ports Strategy* (TfNSW, 2013) targets specific challenges associated with the forecast doubling of the NSW freight task by 2031. It recognises that providing a network that minimises congestion will support economic growth and productivity and encourage regional development. In this context the strategy identifies the need to develop and maintain capacity for freight on the road network.

Objectives of the *NSW Freight and Ports Strategy* relevant to the proposal include:

- delivery of a freight network that efficiently supports the projected growth of the NSW economy
- balancing freight needs with those of the broader community and the environment
- actions and tasks of the strategy and task actions relevant to the proposal include:
    - Action 2B – Develop and maintain capacity for freight on the road network
    - Task 2B-2 – Prioritise road infrastructure investments
    - Action 3B – Manage congestion, noise and emission impacts of freight transport
    - Task 3B-1 – Recognise costs of congestion.

The proposal is considered consistent with the objectives, actions and tasks referenced above. It would also help address growth in freight demand and would reduce congestion and enhance safety for all road users.

NSW Freight and Ports Plan 2018-2023

The *NSW Freight and Ports Plan* (TfNSW, 2018b) is aligned with the *NSW Future Transport Strategy 2056* and has the aim of providing a network to move goods in an efficient, safe and environmentally sustainable manner, providing successful outcomes for communities and industry.

The proposal directly supports the following plan objectives:

- Objective 2 Efficiency, connectivity and access – Improving the efficiency of existing infrastructure and ensuring greater connectivity and access along key freight routes
- Objective 4 Creating a safe freight supply chain, involving safe networks, safe transport, safe speeds and safe people – Creating a safe freight supply chain, involving safe networks, safe transport, safe speeds and safe people.

The plan also includes *Goal 2: Deliver new infrastructure to increase road freight capacity and improve safety*. To address this goal several committed initiatives and initiatives for investigation are identified. This includes the following initiative for investigation:

- capacity enhancements crossing the Blue Mountains, including bypasses of Blackheath and Mount Victoria, duplication of the Great Western Highway from Katoomba to Forty Bends.

2.3 Limitations of existing infrastructure

The Great Western Highway is a key transport route across and along the Great Diving Range for all vehicles, including emergency and essential services, local and through rail customers, tourists and freight. The Great Western Highway between Katoomba and Lithgow has a higher average traffic volume than other duplicated highways. There are over 19,000 vehicle movements per day at Medlow Bath, and vehicle movements are expected to increase due to population growth, particularly in the Central West region, and increased freight, private vehicle usage and tourism in both the Blue Mountains and Central West NSW region.

The existing infrastructure is already restrained in its capacity to accommodate the existing vehicle moments, with traffic peaks and congestion a common occurrence at current merge points on the highway

through both the week and weekends. Congestion is especially restrictive during special event and the school holiday periods.

The existing arrangement of the Great Western Highway at Medlow Bath also has a number of safety issues. The results of crash data analysis associated with the Medlow Bath alignment over a five year period ending in 2019 reveal there were nine crashes recorded along the Medlow Bath corridor including one serious injury crash, five moderate injury crashes and three non-casualty towaway crashes.

There exists a safety concern at the Bellevue Crescent intersection where 44 per cent of total crashes were present at this location. In addition, one pedestrian crash was recorded near the Hydro Majestic Hotel entrance at the Medlow Bath Station during the 2009-13 period. The pedestrian refuge is also highly susceptible to near miss incidents involving pedestrians and highway traffic due to its geometry and placement. Currently there are no dedicated right turns for eastbound vehicles to turn into the Hydro Majestic Hotel or Bellevue Crescent, resulting in customers interrupting the flow of eastbound traffic while waiting for a break in westbound traffic to safely conduct a right-turn.

Emergency services access during incidents such as bushfires is also currently limited with a single lane arrangement and restricted traffic flows due to congestion, limited overtaking opportunities and steep gradients.

Pedestrian access to the Medlow Bath Station is currently limited from the western side of the Great Western Highway, with pedestrians needing to walk up Station Street to cross the Great Western Highway and Railway Parade to access the existing pathways to the station.

Additionally, the closest access point to Medlow Bath Station from the highway is via a single set of stairs off an overbridge between the Great Western Highway and Railway Parade. No lift facilities are currently provided and any customers unable to use stairs are required to walk approximately 200 metres south of the northern station entry to access the station via a railway crossing and ramp.

2.4 Proposal objectives and development criteria

The highway's topography and constrained two lane carriageway design (which in places is almost 200 years old) results in the following constraints:

- reduces freight efficiency by limiting access for safer and more sustainable high productivity vehicles
- limits access during incidents and natural disasters
- slows travel speeds with limited overtaking opportunities and steep gradients (more than double the recommended maximum level)
- causes delays of up to 80 minutes in peak times and hours if there is an incident
- has higher than state average crash rates, and
- impairs amenity for local communities with high through traffic volumes and congestion.

2.4.1 Proposal objectives

As part of a staged upgrade program, the proposal aims to deliver outcomes consistent with the Great Western Highway Upgrade Program objectives, for the Medlow Bath locality. Table 2-1 summarises how the proposal would address the overall objectives of the Great Western Highway Upgrade Program.

Table 2-1: Medlow Bath proposal response to Great Western Highway Upgrade Program objectives

Current problem	Great Western Highway Upgrade objective	Medlow Bath proposal response
1. Economic development, productivity and recovery	Improve ability to drive regional economic development and freight productivity	Provide four lanes with dedicated turn lanes to separate heavy vehicle flow from locally turning traffic
2. Resilience and future proofing	Provide a dependable and adaptable transport network that enables continuity of transport and essential services	Make network provisions for emergency services and provide safe continuous access to transport services
3. Network performance	Improve transport network efficiency	Provide suitable capacity to reduce congestion during peak periods through Medlow Bath
4. Safety	Reduce actual and perceived safety risks	Separate traffic flows and user groups, upgrade intersections and provide safer facilities. Remove trees that have reached end of life to address risk of falling trees along the highway and railway corridor
5. Movement, place and amenity	Maintain and enhance local amenity and character, and protect environmental and cultural assets	Improve active transport and local traffic connectivity along and across the corridors. Preserve local heritage assets and enhance local amenity and character through sensitive urban design.

2.4.2 Development criteria

Development criteria for the proposal have been developed to meet the above program objectives and to address current constraints at Medlow Bath. These criteria are to:

- maintain the functional operation of the highway to traffic and users at all times
- make best use of the defined road corridor between the road rail boundary and the heritage stone wall of the Hydro Majestic Hotel to maintain heritage value
- provide four lanes separated by median suitable for 60 kilometres per hour at Medlow Bath
- provide a safe all movement intersection for Bellevue Crescent that provides for U-turning traffic impacted by median separation of highway traffic
- provide a shared path for active transport users appropriately linked to the Great Blue Mountains Trail and public transport nodes
- remove the railway level crossing and pedestrian refuge in favour of a physically separated and fully accessible structure to improve rail safety and provide for accessible public transport
- turning provisions to be maintained at the Hydro Majestic Hotel. Eastbound right turn bay, left in left out plus one vehicle access closure.
- remove failing pine trees that have reached end of life to address the community safety risk of falling trees
- provide for trees in the median for as much of the length as possible to maintain the village feel

- adjust, maintain, relocate or reinstate property access to all private properties along the highway frontage
- work to enhance local amenity in developing a design that preserves or reinterprets local heritage values
- adopt water quality control measures to improve the management of stormwater out flows into the drinking catchment
- no impact to the Greater Blue Mountains World Heritage Area.

2.4.3 Urban design objectives

The urban design vision adopted for the proposal is:

> *Within the context of the rugged terrain and bushland setting of the Blue Mountains and the unique natural and cultural landscapes and precincts through which it passes, the Great Western Highway should:*
>
> - *reinforce the journey sequence of bushland and village*
> - *evoke a sense of its history and heritage*
> - *provide connectivity and permeability for pedestrians*
> - *provide views and a clear sense of orientation for users*
> - *maximise the amenity of the public domain*
> - *create a road design that integrates urban design and engineering.*

To achieve this vision, the urban design objectives for the proposal are to:

- develop an integrated design that fits with the existing high visual qualities, ecology and character of Medlow Bath and the Blue Mountains setting
- minimise impacts to the integrity of heritage sites, significant trees and cultural values of the community within the proposal
- contribute to the functionality of public spaces and enhance local and regional connectivity.

2.4.4 Transport accessibility objectives at Medlow Bath

Medlow Bath Station has been identified for an accessibility upgrade as it does not currently meet key requirements of the DSAPT or the DDA. The non-compliant level crossing and steep ramp to access the platforms do not facilitate access for people with reduced mobility, parents/carers with prams or customers with luggage.

The proposal would provide safe and equitable access to the platforms and to the pedestrian network surrounding the station. The specific objectives of the Medlow Bath Station upgrade are to:

- provide a station that is accessible to people with a disability or limited mobility, parents/carers with prams and customers with luggage
- improve customer experience through improved weather protection, interchange facilities and visual appearance
- minimise pedestrian conflict and crowding points
- improve integration with surrounding precinct
- improve customer safety
- improve wayfinding in and around the station
- improve customer amenity
- improve cross corridor access/pedestrian links to Railway Parade and the Great Western Highway.

2.5 Corridor upgrade options between Katoomba and Lithgow

An upgrade of the Great Western Highway in Medlow Bath is constrained by ridgetop terrain, private property along the Highway, and the rail line. Bypassing the township on the east was considered in the 1950s and ruled out due to impacts on the residential area. Bypassing further to the east would impact on the World Heritage listed Blue Mountains National Park and sensitive water catchment areas, and shift the alignment onto difficult and steep, undulating terrain. By keeping the Great Western Highway on the ridgeline through Medlow Bath we can reduce environmental impact while still providing opportunities to support and enhance the character of Medlow Bath village as a tourist destination.

Since the 1950s corridor options have been considered through Medlow Bath and beyond. All corridor options at Medlow Bath have focussed on using the existing corridor which was set aside for future widening. The bridge over railway was completed in 2002, confirming the four-lane highway alignment would cross the rail at Medlow Bath.

In 2013, planning and investigations for the duplication of the Great Western Highway for the entire corridor between Katoomba and Lithgow were undertaken to inform the LEP corridor reservation. All options reconfirmed the use of the existing corridor through Medlow Bath.

For options development during the 2013 phase, the highway corridor was divided into four zones (refer to Figure 2-1):

A. Katoomba to Medlow Bath

B. Medlow Bath to Blackheath bypass

C. Blackheath bypass

D. Blackheath bypass to Browntown Oval at Mount Victoria.

The proposal is located within Zone A (ie Katoomba to Medlow Bath).

Several options within the existing highway corridor were considered between Katoomba and Blackheath but all options followed the existing corridor through Medlow Bath.

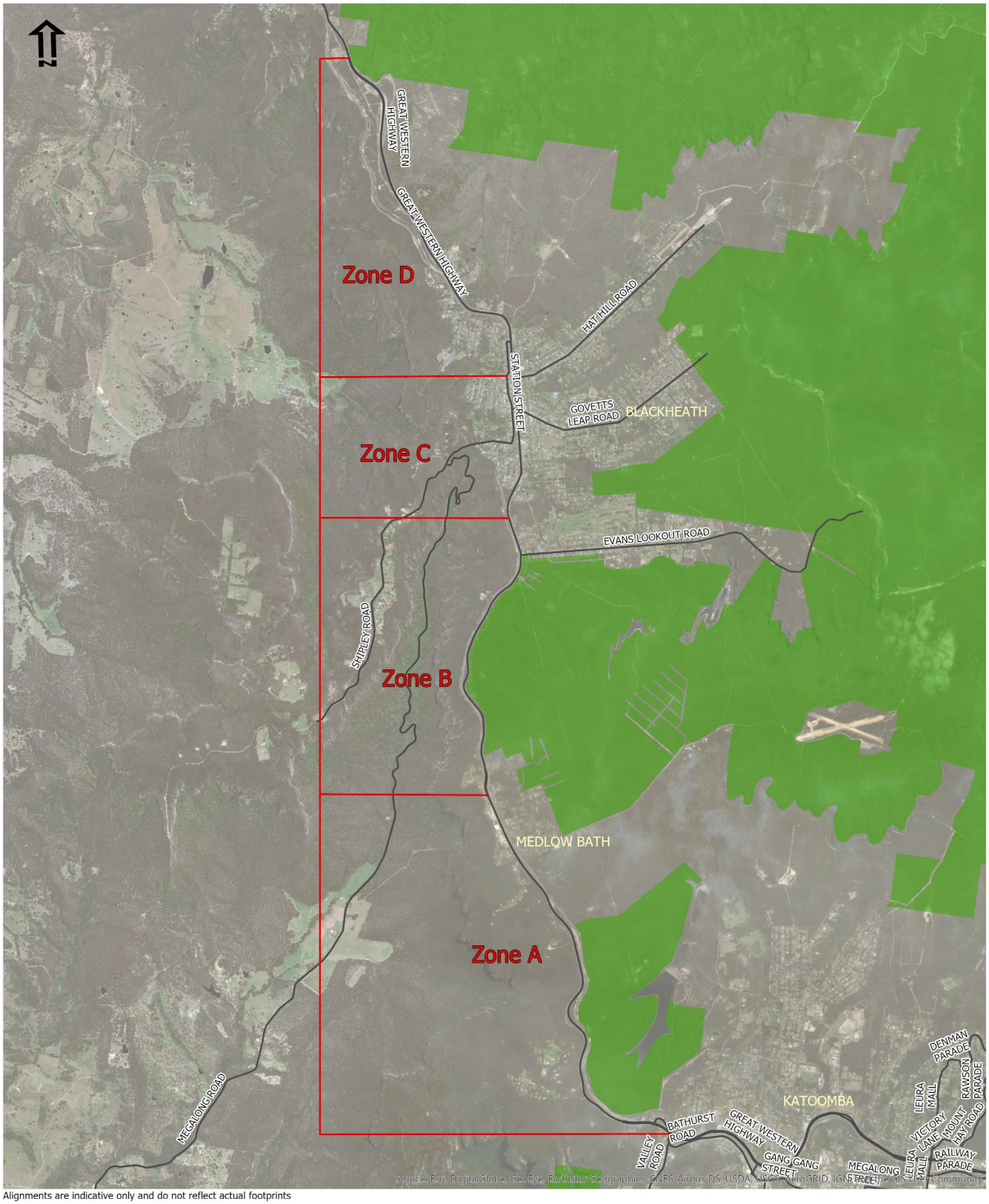

Figure 2-1: Zones of the highway corridor between Katoomba and Blackheath

2.6 Analysis of options

Options developed for the upgrade of the Great Western Highway between Katoomba and Blackheath (including Medlow Bath) adopted the following key features:

- four lane dual carriageway separated by a median
- design speed generally 90 kilometres per hour and posted speed limit 80 kilometres per hour except through Medlow Bath where design and posted speed limit are 60 kilometres per hour
- 3.5 metre travel lanes and wide 2.5 metre shoulders between Blue Mountains villages (for better road safety and provision for cyclists)
- connection with existing four lane sections built at Katoomba in the 1990s; and the bridge over rail at Medlow Bath built in in 2002
- design alignment and pavement to allow potential future improvement to freight productivity (including 26 metre and 30 metre B-doubles)
- adequate heavy vehicle rest stop facilities consistent with a finalised corridor strategy or plan when confirmed
- safe, accessible heavy vehicle enforcement infrastructure
- desired one in 20-year flood immunity
- potential active transport infrastructure (to be investigated through development of an Urban Design Framework).

A number of design, constructability, environmental and community issues influenced the selection of the preferred option through a series of workshops. These included:

- the safe and continuous operation of the highway to road user groups
- providing local access onto, along and across the highway corridor
- steep terrain and a constrained corridor
- interaction with the Main West Line
- presence of the Blue Mountains National Park and Greater Blue Mountains World Heritage Area
- presence of threatened species and ecological communities
- presence of drinking water catchments
- Aboriginal and non-Aboriginal heritage values
- community concerns about major infrastructure impacts and expectations for improved urban amenity in highway townships.

Workshops (which considered function, constructability, environment, property, community and costs issues) were used as a tool to assist in with identifying the advantages and disadvantages of options. In Medlow Bath the proposal would allow for the upgrade of the road surface road through the village with minimal property and environmental impacts, provide a clear buffer between the road and footpath, and improve safety for motorists, cyclists and pedestrians with a new shared pathway and pedestrian bridge.

2.7 Strategic design

In March 2019, the NSW Government committed $2.5 billion in funding towards the duplication of the Great Western Highway between Katoomba and Lithgow. Medlow Bath was identified as a priority section to progress to construction based on the prior preferred route identified in 2013.

Following the NSW Government announcement, a strategic design was displayed to the community for feedback in July 2020. This strategic design included:

- four 3.35 metre lanes separated by a variable width median suitable for 60 kilometres per hour
- an all movement intersection at Bellevue Crescent
- a shared path for walking and cycling linked to the Great Blue Mountains Trail and public transport modes
- removal of the railway level crossing and pedestrian refuge in favour of a pedestrian bridge with lifts and stairs to improve rail safety and provide for accessible public transport.
- turning provisions at the Hydro Majestic Hotel by providing an eastbound right turn bay, left in left out plus close one vehicle access gate. Parking removal on the highway was also adopted
- removal of failing pine trees that have reached end of life to address the community safety risk of falling trees
- provision for trees in the median for as much of the length as possible to maintain the village feel
- adjustment, relocation or reinstatement of safe property access to all private properties along the highway frontage.

As part of the development of a concept design for the preferred option (detailed in Chapter 3 the following improvements were then incorporated:

- Transport Access Program and Railway Parade improvements
- water quality management
- revisions to improve Station Street by widening the highway towards railway
- definition of property access adjustments at Delmonte Avenue and Bellevue Crescent
- U turn bay and private property acquisition.

These improvements were identified and refined following a value management process including risk assessment, and health and safety in design workshop and ongoing consultation with key stakeholder and specialists.

Where possible, TfNSW has have improved the concept design in response to feedback, including:

- traffic lights at Bellevue Crescent to make accessing the crescent safer and to slow and control traffic entering the 60 kilometre per hour zone in Medlow Bath
- a U-turn bay at Bellevue Crescent to help traffic change direction to access the service station and other properties on the eastern side of the highway
- Station Street would remain open to two-way traffic and the existing property access would remain
- retaining walls along Station Street have been removed by keeping levels close to the existing conditions
- better separation between the shared pathway and the highway with a one metre vegetated buffer in addition to the road shoulder
- improved landscaping using as many of the existing council-planted trees, along with new trees to improve the look and feel of Medlow Bath. Every tree removed including the failing radiata pines along the highway would be replaced as part of the upgrade program
- safer access for residents whose properties directly access the highway, with relocated driveways to be installed as part of the proposal.

In addition to the above, as part of the development of the detailed design of the preferred option, an alternative option for Bellevue Crescent has been identified (refer Section 3.1.2).

2.8 Upgrade options for Medlow Bath

Two options were considered for the upgrade of the Medlow Bath section of the highway (the proposal). These included:

1. Do nothing option

The 'do nothing' option would have the least environmental impacts as it would involve no construction or change to the existing Great Western Highway at Medlow Bath. It would not achieve any proposal objectives, improve safety or traffic flow with conditions worsening over time as adjoining sections are upgraded.

2. Upgrade of the Great Western Highway – Medlow Bath option

This option would involve the upgrade and duplication of the existing surface road corridor of the Great Western Highway at Medlow Bath including intersection improvements and a new pedestrian bridge (the proposal). The design meets the objectives as described in Section 2.4 and delivers on NSW Government commitments to the Great Western Highway Upgrade Program.