

22. Justification of the project

22.1 Need and benefits of the project

The SWRL project is needed to meet a range of strategic, operational and environmental objectives. As discussed in Section 2.4, the proposed SWRL would provide an opportunity to provide transport choice and accessibility and to support sustainable land release in the developing South West Growth Centre. The SWRL creates an opportunity for public transport to be attractive by allowing for the development of an integrated public transport network within the South West Growth Centre. The provision of an accessible public transport link for existing and future residents in this area would help to reduce the already high reliance on private cars as the main mode of transport for journeys to and from the area. In promoting integrated transport and land use planning in the Growth Centre, the proposed SWRL would aid in achieving the appropriate levels of urban consolidation and commercial development around transport nodes, as higher density development is more attractive and, therefore, more viable, around established and reliable transport nodes. In achieving these levels of urban consolidation, the objectives of the Metropolitan Strategy relating to the provision of housing choice could also be achieved.

The specific need for each component of the SWRL is detailed in Sections 2.4.2 to 2.4.5 of this document. In particular, there is a recognised need to provide an additional train stabling facility to accommodate the projected growth on the rail network, and ensure the provision of efficient and reliable rail services for the outer-metropolitan region. The need for this additional stabling is a key project driver for the SWRL.

The anticipated benefits of the project are detailed in Section 2.7 and include the following key regional benefits:

- improved access to public transport for existing and future residents of the South West Growth Centre
- improved access to employment within the Global Arc centres, educational and cultural facilities
- reduced road congestion/pressure on regional roads (such as Narellan Road) as growth in the South West Growth Centre increases the number of commuters wishing to access the Main South Line between Macarthur and Glenfield
- facilitating sustainable land release by establishing a mass transit corridor early, to serve a planned regional centre; thereby making higher density development more attractive and viable
- removal of the need for residents of new developments in the area to travel to existing network stations, thereby reducing congestion on the Main South Line
- reduced net travel times for car, bus and rail commuters
- reduced motor vehicle costs (fuel and operating costs) due to less reliance on cars
- reduced negative externalities such as accidents, noise/air pollution, greenhouse gas emissions and energy consumption due to the reduction in car usage
- increased stabling capacity for trains in the outer metropolitan area (PB 2006b; PriceWaterhouseCoopers 2006).

22.2 Overview of the environmental, social and economic impacts

As summarised above, the SWRL project is expected to have significant environmental, social and economic benefits for the South West region of Sydney and the wider metropolitan area. Economic benefits are expected to include regional economic growth and improvements in access to employment areas. However, the nature of the project means that some potential adverse impacts, including some significant impacts, are unavoidable.

The key potential environmental and social impacts of the project comprise:

- *Permanent impacts on directly affected properties and land uses crossed by the proposed SWRL corridor* — These properties would be acquired (in full or in part) at market rates in accordance with the Land Acquisition (Just Terms Compensation) Act 1991. In the context of the proposed future development of the area, this impact is not considered significant.
- *Land use severance, sterilisation and access impacts* — As the area is proposed to be developed, these issues are not expected to be significant in the long-term, as precinct planning would take account of these issues. Short and medium-term management measures are proposed to manage impacts prior to the development of surrounding areas. Further consultation is proposed with the Department of Planning to manage impacts on the Western Sydney Parklands, and other agencies responsible for precinct planning in the South West Growth Centre to ensure the future design of the SWRL makes allowance for any required measures to improve connectivity across the corridor to mitigate severance impacts.
- *Construction phase impacts on adjacent land uses, including noise and vibration amenity, visual amenity, social disruption, traffic/transport amenity and business impacts* — These issues are considered to be manageable with the effective implementation of standard construction environmental management measures and adoption of mitigation in accordance with the Statement of Commitments.
- *Increases in flood levels for larger flood events up to the PMF and changes in flood behaviour in the vicinity of Edmondson Park Station* — Impacts on property from these changes are anticipated to be relatively minor and can be managed through appropriate crossing design, additional assessment and incorporation of appropriate mitigation measures.
- *Residual direct and indirect impacts on threatened biodiversity, including Cumberland Plain Woodland, Sydney Coastal River Flat Forest, the Cumberland Plain Large Land Snail and (potentially) Pimelea spicata* — These residual impacts (following mitigation) are proposed to be managed/compensated at a regional level, partly through the Growth Centres Commission certification process for the South West Growth Centre; however, additional off-sets may be required for the SWRL as explained in Chapter 14.
- *Direct and indirect impacts on historic heritage items, including historic viewsheds* — These impacts are considered to be manageable with the implementation of proposed management measures following further assessment, including preservation of viewsheds and heritage items as far as practicable.
- *Direct and indirect impacts on the visual environment* — The rail corridor has the potential to be a visually dominant feature in the landscape. These impacts would be reduced in the long-term as the area is developed and impacts would be managed through the design development by the implementation of urban design and visual management measures.

- *Social impacts, including immediate impacts on residential amenity, community severance and concern over relocation/acquisition* — Overall, these impacts would be manageable in the long-term as the area is developed and the SWRL is integrated with the wider Growth Centre developments. Short to medium-term measures are proposed to mitigate impacts prior to when this development occurs.

Overall, the benefits of the project are considered to outweigh the adverse impacts, considering the proposed implementation of management commitments, mitigation measures and safeguards by TIDC during the further design, construction and operational stages.

22.3 Consistency with the principles of ESD

The NSW Government is committed to ensuring that its projects are undertaken in a manner that is consistent with the principles of ecologically sustainable development, and these principles are incorporated into its Project Management System.

The four principles of ecologically sustainable development are outlined in Section 6(2) of the NSW *Protection of the Environment Administration Act* 1991 and Schedule 2 of the *Environmental Planning and Assessment Regulation* 2000. Justification for the project against the principles of ecologically sustainable development (ESD) is provided below.

The SWRL is planned as part of a program of sustainable land release and is essential to the principles of ESD (transport) for the broader release and Sydney metropolitan area.

22.3.1 The precautionary principle

The 'precautionary principle' deals with certainty in decision making and requires that the proponent of an activity anticipates (and adopts) best practice environmental standards goals and measures to minimise the risk of environmental damage arising from the activity.

The scope and methodology adopted for this Environmental Assessment was derived based on detailed consultation with the relevant government agencies, the community and other stakeholders and adopts best practice environmental standards as goals wherever practicable. This Environmental Assessment proposes measures to assist in the minimisation and prevention of impacts and additional investigations where uncertainty exists or relevant information is not currently available. It also contains detailed assessment of alternatives and design options, emphasising that the preferred option for the proposed SWRL would best achieve the desired outcomes. It provides a basis for future investigations to better define site-specific environmental impacts, mitigation measures and safeguards. These would be addressed in subsequent assessments for the project.

22.3.2 Intergenerational equity

Intergenerational equity is the principle that future generations have a fair and equal right to the same standard of quality of life and environment as the present generation.

The proponent has sought to ensure that any potential long-term effects resulting from the proposed SWRL are minimised, in order to ensure that future generations have the same (or better) benefits in comparison to those of the present. Rail-related issues that may have long-term implications include energy consumption (including during construction), waste,

renewable and non-renewable resource demand and the provision of economic, social and environmental benefits through improved access to public transport and reduced private vehicle use. The SWRL would provide support for the planned sustainable land releases in the South West Growth Centre by providing infrastructure early that is designed for the long term. These issues have been addressed in Part D of this report.

22.3.3 Conservation of biological diversity and ecological integrity

This principle requires that the conservation of biological diversity and ecological integrity is considered as a fundamental part of decision-making. The conservation of biological diversity and ecological integrity has influenced the selection of the preferred SWRL route and the design development process (as described in Chapter 6 and Technical Paper 3). Potential impacts on biological and ecological integrity arising from the project have been avoided as far as possible, and where unavoidable would be minimised and/or mitigated through design development and other measures. Off-sets are proposed to compensate for the potential residual impacts of the SWRL on threatened biodiversity and to maintain or improve biodiversity values.

22.3.4 The improved valuation and pricing of environmental issues

Consideration of environmental issues in the early stages of project planning has helped achieve improved consideration of environmental resources by ensuring that these issues were considered in the strategic planning and establishment of the need for the project. As described in Section 2.6, environmental issues were considered in the economic and financial feasibility assessments for the project undertaken by PriceWaterhouseCoopers (2006) on behalf of TIDC.

22.4 Suitability of the corridor

A number of route alternatives were considered in developing and assessing the proposed SWRL concept. The alternative routes and the criteria used to identify the proposed route as the preferred option are detailed in Chapter 6.

Numerous studies have been undertaken to define the most suitable horizontal and vertical alignment for the SWRL and other components of the Concept Plan, as described in Chapter 6. These studies included assessment of potential impacts of the various options on traffic, biodiversity, heritage, social and economic factors, property and land use, flooding, visual landscape and residential amenity. Operational, cost and engineering considerations were also considered.

More recent considerations of the SWRL have been informed by future planning and development of Sydney's South West Growth Centre to house its growing population and the requirement to provide transport to this population. These studies focused on the feasibility of a rail link and determining an alignment that would provide the best balance between social, environmental, economic and engineering issues. The consideration and development of alternatives for the SWRL also involved community consultation, with alternative options considered (or rejected) in response to issues raised during consultation with the local community, other State government departments, local government and other stakeholders.

On balance, the proposed SWRL corridor along the proposed northern refined alignment is considered to be the most suitable corridor considering the range of operational, engineering and environmental issues considered.

22.5 Public interest

The SWRL is proposed for the benefit of the public, specifically the existing and future residents and other land uses within the South West Growth Centre and, more generally, for the residents and business owners of the wider Sydney metropolitan area. The public interest benefits of the proposed SWRL are discussed in Section 2.7 and Technical Paper 8, and include alleviation of future congestion of roads and provision of a quick and efficient link for the population of Sydney's south west with the Sydney CBD and other regional and local centres (including Liverpool and Cabramatta).

In addition to the above, the provision of the proposed new stabling facility is essential to the provision of rail services to the outer metropolitan network. The benefits of the stabling facility extend beyond the South West Growth Centre all the way to the CBD (the 'global arc'), due to the increased number of services that could be provided because of the facility.

The benefits of the SWRL to the public would grow as the new residential areas are developed and as the population increases. With the SWRL in operation, Leppington and Edmondson Park would not only become more accessible places to visit, but residents residing in these areas would have improved access to areas outside their local area. In addition, the provision of public transport would see less reliance on cars.

The SWRL would also support planned future growth in the South West Growth Centre and is a major part of the NSW Government's plans to provide a comprehensive transport network to connect job and economic centres, people and services.

The SWRL would provide the essential transport link required in a developing area. The alignment over time would be a key feature of the community that it would identify with. Stations, which would be coupled with a level of retail/commercial activity, would most likely become the social hub of the community.

The SWRL is part of a package of transport infrastructure projects that would provide new and existing residents of the South West Growth Centre with real public transport alternatives, by providing direct access to employment, education, health, commercial services, retail and recreation facilities. In the shorter term, it would service development in areas surrounding Edmondson Park and Leppington. The SWRL would connect the newly developing suburbs of South West Sydney to key centres and facilities in Sydney, while providing viable and efficient public transport for residents and workers in the area (Department of Infrastructure, Planning and Natural Resources 2005).

22.6 Consequences of not proceeding

The consequences of not proceeding with the SWRL (i.e. doing nothing) are summarised in the *South West Sector Public Transport Corridor Study, Consolidated Summary Final Report*, prepared by KBR for DIPNR (2004). Based on the findings of that report and this Environmental Assessment, if the SWRL was not constructed the following consequences would be likely to occur:

- Additional stabling would need to be provided for the existing network in the South West region (e.g. at Campbelltown), which would not only cost more (an estimated \$46 million more (KBR 2004)), but would also require significant future empty running of trains to the point of demand, which is Glenfield. This would incur additional empty running costs each year.
- Predicted growth on the Campbelltown to East Hills Line would mean that a flyover would need to be constructed at Glenfield Junction, regardless of the SWRL.
- The private car would dominate even more than at present as the main mode of transport for journeys to and from the South West Growth Centre. This would lead to a significant increase in traffic congestion and major potential impacts on accessibility as the South West Growth Centre develops.
- Public transport patronage would be low and accessibility limited.
- Without the support of a rail link, buses alone would not provide sufficient encouragement to future residents for public transport infrastructure-led development to occur in the South West Growth Centre. The SWRL would provide an essential link between the bus network within the area and major employment areas such as the Sydney CBD.
- It is unlikely that the planned levels of urban consolidation and commercial development would be achieved in the South West Growth Sector.
- People wishing to travel elsewhere in Sydney by rail from the South West Growth Centre would need to travel to Liverpool or other stations on the Campbelltown Line by either bus or car. The capital cost of the additional interchange and parking works required to facilitate such movements in already developed areas would be considerable.
- Increased congestion/pressure on the already heavily congested road network would occur, including the M5 Motorway, as more commuters would choose to drive their entire journey in response to increased congestion on the existing rail network.

There is no real 'do nothing' option for the SWRL project. Should the SWRL not proceed, the urgent need for additional train stabling, the upgrade of Glenfield Station and the Glenfield North Flyover would remain. In particular, the existing Glenfield North Junction is not expected to be able to cope with forecast train numbers beyond 2011.