

CHAPTER 08

Land Use and Tenure

BORDER TO GOWRIE REVISED DRAFT ENVIRONMENTAL IMPACT STATEMENT

Contents

8.	LAND USE AND TENURE	8-1
8.1	Scope of chapter	8-1
8.2	Regulatory environment	8-1
8.3	Methodology	8-8
8.3.1	Study area and impact assessment area	8-8
8.3.2	Existing and future land use and tenure	8-32
8.3.3	Impact assessment methodology	8-33
8.3.4	Data sources	8-33
8.4	Existing environment	8-35
8.4.1	Existing land use	8-37
8.4.2	Existing land tenure	8-144
8.4.3	Offset areas	8-173
8.4.4	Future land use intent and development activity	8-173
8.5	Potential impacts	8-182
8.5.1	Land-use impacts	8-183
8.5.2	Land tenure and land acquisition	8-212
8.5.3	Offset areas	8-213
8.5.4	Land use and planning instruments	8-213
8.6	Mitigation measures	8-218
8.6.1	Mitigation through the revised reference design	8-218
8.6.2	Proposed mitigation measures	8-218
8.6.3	Summary	8-224
8.7	Conclusions	8-228

Figures

Figure 8-1a-w	Land use and tenure study area and impact assessment area	8-9
Figure 8-2	Land use and tenure compliance impact assessment methodology	8-33
Figure 8-3	Regional planning and local government area boundaries	8-36
Figure 8-4a-w	QLUMP land use	8-39
Figure 8-5a-w	Land use	8-62
Figure 8-6a-w	Queensland Agricultural Land Audit	8-91
Figure 8-7a-w	Areas of regional interest	8-114
Figure 8-8a-w	Land tenure	8-150
Figure 8-9a-c	State forest revocation areas	8-206
Figure 8-10a-c	Significant land uses and tenures within State Forests	8-209

Tables

Table 8-1	Regulatory context	8-1	Table 8-27	Development activity relevant to the Project	8-179
Table 8-2	Database and document review summary	8-34	Table 8-28	Potential impacts to prominent land uses within or near the Project footprint	8-183
Table 8-3	Land use—NSW/QLD Border to Whetstone (Ch 30.6 km (NS2B) to Ch 44.5 km)	8-38	Table 8-29	Impacts to Areas of Regional Interest	8-185
Table 8-4	Land use—Whetstone to Millmerran (Ch 44.5 km to Ch 140.0 km)	8-85	Table 8-30	Land uses within the Project footprint (outside of existing rail and road corridors) by LGA	8-186
Table 8-5	Land use—Millmerran to Yarranlea (Ch 140.0 km to Ch 154.65 km)	8-86	Table 8-31	Percentage of land type within Goondiwindi LGA traversed by the Project footprint (outside of existing rail and road corridors)	8-186
Table 8-6	Land use—Yarranlea to Gowrie Junction (Ch 154.65 km to Ch 208.22 km)	8-87	Table 8-32	Percentage of land type within Toowoomba LGA traversed by the Project footprint (outside of existing rail and road corridors)	8-187
Table 8-7	Existing land uses within the Project footprint	8-88	Table 8-33	Potential impacts to intensive livestock operations	8-188
Table 8-8	Existing land uses within the Project footprint excluding existing rail and road corridors	8-88	Table 8-34	Apiary sites located within the Project footprint	8-189
Table 8-9	Area of regional planning interests traversed by the Project	8-90	Table 8-35	Potential impacts to stock routes within the Project footprint	8-190
Table 8-10	Agricultural land identified by the Queensland Agricultural Land Audit within the Project footprint	8-90	Table 8-36	Lot impacts within the permanent footprint	8-193
Table 8-11	Agricultural land identified by the Queensland Agricultural Land Audit within the Project footprint excluding existing rail and road corridors	8-137	Table 8-37	Partial area of State forest to be revoked	8-194
Table 8-12	Definition of agricultural land classes	8-137	Table 8-38	Leases over land within the Bringalily and Whetstone State forests	8-195
Table 8-13	Current intensive livestock operations within the Project footprint	8-139	Table 8-39	Impact of Project on existing Environmental Authority for prescribed environmentally relevant activities	8-196
Table 8-14	Stock routes traversed by the Project	8-140	Table 8-40	Future development within, or within proximity to, the Project footprint	8-197
Table 8-15	Apiary permits in Bringalily and Whetstone State forests	8-142	Table 8-41	Total areas potentially impacted by velocity FIO exceedances outside the Permanent footprint (unmitigated)	8-198
Table 8-16	Apiary sites located near the Project footprint	8-142	Table 8-42	Road–rail interfaces in the revised reference design, by treatment type and road manager	8-199
Table 8-17	Coal resource area within the Project footprint	8-143	Table 8-43	Summary of utility interface treatments by service type	8-201
Table 8-18	Utilities within the Project footprint	8-144	Table 8-44	Locations for non-resident workforce accommodation facilities	8-201
Table 8-19	Tenure within the Project footprint	8-145	Table 8-45	Laydown areas and their use ¹	8-202
Table 8-20	Mineral and coal resource interests traversed by the Project footprint	8-146	Table 8-46	Project's consistency with the relevant SPP State interests	8-214
Table 8-21	Pipeline licences and Petroleum leases traversed by the Project footprint	8-147	Table 8-47	Local planning scheme zoning impacted by the Project	8-217
Table 8-22	Properties where native title has not been extinguished	8-147	Table 8-48	Mitigation measures of potential impacts on developments	8-219
Table 8-23	Native title claims and Determinations relevant to the Project footprint	8-149	Table 8-49	Land acquisition approaches	8-220
Table 8-24	State Planning Policy State interests relevant to the Project	8-173	Table 8-50	Summary of State forest access mitigation measures	8-222
Table 8-25	Goondiwindi Region Planning Scheme zones relevant to the Project	8-178	Table 8-51	Land use and tenure mitigation and management measures	8-225
Table 8-26	Toowoomba Regional Planning Scheme zones relevant to the Project	8-178			

8. Land use and tenure

8.1 Scope of chapter

The purpose of this chapter is to identify existing land use and tenure within the study area and impact assessment area (Section 8.4), assess the potential impacts of the Inland Rail—Border to Gowrie project (the Project) on land use and tenure, and to identify appropriate mitigation measures to address impacts.

This chapter addresses the 'Land' section of the Terms of reference for an Environmental Impact Statement (EIS): Inland Rail—Border to Gowrie project (November 2018) (ToR) inclusive of ToR items 11.70 to 11.83 and additional information requested for the Project by the Coordinator-General. Appendix A2: Terms of Reference Cross-reference Table provides a cross reference for each ToR against relevant sections in the revised draft EIS.

The nature of the additional information that was requested by the Coordinator-General included the following land-use and tenure matters:

- ▶ State forest revocation
- ▶ Impacts to matters protected under local government planning schemes
- ▶ Impacts to areas of regional interest protected under the *Regional Planning Interests Act 2014* (Qld) (RPI Act).

This chapter identifies the land use and tenure aspects relevant to the Project and, in doing so, addresses the following:

- ▶ The legislative context for land use and tenure for the Project (Section 8.2)
- ▶ The existing land use within the study area and impact assessment area (Section 8.4.1)
- ▶ The existing land tenure for properties within the study area and impact assessment area (Section 8.4.2)
- ▶ The likely and planned future land use environment within the study area and impact assessment area (Section 8.4.4.1)
- ▶ The potential impacts of the Project on existing and future land use within the impact assessment area (Section 8.5.1)
- ▶ The potential impacts of the Project on tenure within the impact assessment area (Section 8.5.2)
- ▶ An assessment of consistency with the provisions of the relevant land use planning instruments (Section 8.5.4)
- ▶ Mitigation measures relevant to land use and tenure issues (Section 8.6).

8.2 Regulatory environment

The land use planning legislative frameworks, policies, strategies, plans and guidelines that regulate and guide land use planning and tenure within the study area are outlined in Table 8-1.

The Commonwealth and State legislation applicable to the Project is discussed in Chapter 3: Legislation and Project Approvals Process.

TABLE 8-1 REGULATORY CONTEXT

Regulatory context	Relevance to the Project
	National legislation, policies and strategies
<i>Native Title Act 1993</i> (Cth) (NT Act)	The NT Act establishes a framework for the protection and recognition of native title, including by conferring on Indigenous people who hold (or claim to hold) native title rights and interests in respect of any land or waters, the right to be consulted on, and in some cases participate in, decisions about activities proposed to be undertaken on the land (or in the waters). The NT Act provides for the validation of past Commonwealth acts and makes the same provision for each of the states and territories. The NT Act also establishes the processes involved in having native title recognised and the roles and responsibilities of the different bodies involved in this process. The NT Act adopts the common law definition of 'native title' and establishes the National Native Title Tribunal. Unallocated State land (USL) may coexist with native title interests and rights; some State forests, national parks, public reserves; some leases, such as non-exclusive pastoral or agricultural leases; waters that are not privately owned; as well as on certain land held by, or for, Aboriginal people or Torres Strait Islanders. The NT Act prescribes statutory processes to enable State and Territory governments to grant freehold and other interests in land subject to native title to private entities, subject to native title being first addressed either by agreement with the relevant native title parties or by compulsory process.

Regulatory context	Relevance to the Project
<i>2021 Australian Infrastructure Plan</i> (Infrastructure Australia, 2021a)	The <i>2021 Australian Infrastructure Plan</i> is a practical and actionable roadmap for infrastructure reform. It is intended to deliver infrastructure for a stronger Australia and support our national recovery from the still-unfolding COVID-19 pandemic, as well as the bushfires, drought, floods and cyber-attacks that have tested our resilience in recent years.
State legislation, policies and strategies	
<i>Acquisition of Land Act 1967</i> (Qld) (AL Act)	The AL Act provides the process for the acquisition and resumption of land by a constructing authority. The AL Act provides for the taking of an interest in land for a purpose under Schedule 1 of the AL Act. Schedule 1, Part 1 includes purposes relating to transportation, including railways and related purposes. The acquisition of land and interests in land will be required for the construction and operation of the Project, including aboveground and volumetric lots. The acquisition of land and interests will be undertaken by the Department of Transport and Main Roads (DTMR), as the constructing authority for the Project.
<i>Biosecurity Act 2014</i> (Qld) (Biosecurity Act)	Biosecurity involves managing the risks and impacts associated with pests and diseases. It plays a vital role in Queensland's agricultural industries. The Biosecurity Act provides measures to protect our agricultural sector, economy, environment and the community from biosecurity risks. Protecting our farms from pests and diseases: ▶ Ensures continued market access for our products ▶ Helps support profitable industries ▶ Maintains our reputation for high standards of animal care ▶ Reduces the risk of chemical contamination and promotes a safe food supply ▶ Reduces risks to the natural resources needed for sustainable production ▶ Keeps our environment healthy. There are three types of barrier fences identified in the Biosecurity Act. These are the wild dog barrier fence, wild dog check fence (WDCF) and the rabbit fence. The WDCF and the Darling Downs–Moreton Rabbit Board (DDMRB) rabbit fence are both traversed by the Project.
<i>Electricity Act 1994</i> (Qld)	The Project interfaces with existing electricity infrastructure and easements operated by Energy Queensland (Ergon and Energex), Powerlink Queensland and Essential Energy. This includes the proposed rail alignment crossing under or over infrastructure, new access tracks through easements and altering current access roads.
<i>Environmental Protection Act 1994</i> (Qld) (EP Act)	The EP Act is Queensland's overarching environmental legislative framework for the protection and management of environmental values. The EP Act regulates activities that will or may have the potential to cause environmental harm and prescribes several mechanisms to ensure the objectives of the EP Act are met, including the provision for a licensing system for Environmentally Relevant Activities (ERAs). The EP Act also lists obligations and duties to prevent environmental harm, nuisance and contamination.
<i>Environmental Offset Act 2014</i> (Qld) (EO Act)	The EO Act establishes the framework for environmental offsets in Queensland. It supports development assessment by coordinating the delivery of environmental offsets across jurisdictions and placing limits on when an environmental offset condition may be imposed. It also provides for the subsequent assessment, delivery, and compliance with offset conditions once imposed. The EO Act is supported by the <i>Environmental Offsets Regulation 2014</i> (Qld) and the <i>Queensland Environmental Offsets Policy</i>. Within the study area, there are no legally secured offset areas considered a matter of State environmental significance (MSES).
<i>Economic Development Act 2012</i> (Qld)	The main purpose of the <i>Economic Development Act 2012</i> is achieved primarily through enabling the Minister for Economic Development Queensland to plan, carry out, promote or coordinate activities to facilitate economic development, and development for community purposes, in the State. It provides for a streamlined planning and development framework for particular areas of the State (declared as Priority Development Areas to facilitate economic development, and development for community purposes). There are no Priority Development Areas located within the study area; however, it is anticipated that the Project will act as an enabler for regional economic development along the Inland Rail corridor.

Regulatory context	Relevance to the Project
<i>Forestry Act 1959</i> (Qld) (Forestry Act)	The Forestry Act provides for forest reservations, together with the management, silvicultural treatment and protection of State forests, and the sale and disposal of forest products and quarry material, on State forests, timber reserves and on other lands. The Queensland Government manages native forest timber production in State forests under the Forestry Act. Licences and permits for activities other than production forestry, such as quarry reserves and apiary sites, may be granted for land within State forests. The Project footprint encroaches on the Whetstone State Forest and traverses the Bringalily State Forest, which are protected for native timber production.
<i>Land Act 1994</i> (Qld) (Land Act)	The Land Act prescribes the framework for the allocation of non-freehold land tenure and its subsequent management. The Land Act is administered by the Department of Resources (DoR) and regulates the management of State land in Queensland for the benefit of the people by having regard to seven key principles: sustainability, evaluation, development, community purpose, protection, consultation and administration. State land and local roads are generally managed under the Land Act. State land (including local roads) will be required to be secured for the construction and operation of the Project under the Land Act. In addition, the Australian Rail Track Corporation (ARTC) will also liaise with adjoining property owners and the relevant road/rail manager (i.e. local government, DTMR or Queensland Rail (QR)) if temporary or permanent works (such as road closures) are required.
<i>Land Title Act 1994</i> (Qld) (Land Title Act)	The Land Title Act prescribes the framework for the registration of freehold land and interests in freehold land in Queensland. The Land Title Act gives provisions for the implementation of the Torrens System in Queensland, which ensures that the interests of registered owners, and other registered proprietors, of land are protected. The Land Title Act is administered by the DoR, affording functions and powers to the Registrar of Titles to maintain the Freehold Land Register (also known as the Land Registry and the Titles Office) by way of the computerised Automated Titles System. As a system of 'title by registration', it is the act of registration which transfers or creates a legal interest. Under Section 28 of the Land Title Act, the Registrar must record in the Freehold Land Register details of every lot and of every interest in a lot. The majority of land to be leased to ARTC for construction will be freehold land and the leases will be standard leases under the Land Title Act. Where the Project requires the transfer or leasing of freehold land, ARTC and/or the constructing authority will engage with the Land Titles Office within the DoR, and the relevant landowner to discuss options and undertake the land registration requirements in accordance with the Land Title Act.
<i>Mineral Resources Act 1989</i> (Qld)	The Mineral Resources Act provides the framework for exploration, development and mining tenures. Under the Mineral Resources Act the following mineral or coal authorities can be granted (in order of ascending hierarchy): ▶ Prospecting permits—a prospecting permit can be sought for any mineral other than coal, and entitles the holder to prospect, hand-mine and peg a mining lease or claim ▶ Exploration permits—exploration permits allow for more advanced methods to determine the quantity and quality of materials present. Permitted activities under exploration permit includes prospecting, conducting of geophysical surveys, drilling and sampling and testing of materials ▶ Mineral development licences—mineral development licences are issued to allow the holder to evaluate the development potential of the defined resource. Mineral development licences can be granted if an exploration permit is held where there is a significant mineral occurrence of possible economic potential ▶ Mining claims—a mining claim can be issued for any mineral other than coal. A mining claim allows the holder to conduct small-scale mining operations such as prospecting and hand-mining ▶ Mining leases—a mining lease allows the holder to conduct larger scale mining operations. Mining leases can be issued for any specified material, with permitted activities within the lease area including machine mining or other activities associated with mining or promoting the activity of mining. The Project traverses mineral or coal resource interests mining lease (ML) 50151 and ML 700072, mineral development licence (MDL) 299 (within proximity to MDL 301), part of mining lease application (MLA) 700072, exploration permit for coal (EPC) 970, exploration permit for minerals (EPM) 27546, and exploration permit for geothermal (EPG) 2026, EPG 2030 and EPG 2031.

Regulatory context	Relevance to the Project
<i>Native Title (Queensland) Act 1993</i> (Qld) (NT (Qld) Act)	Consistent with the NT Act, the NT (Qld) Act provides for the validation of certain historic acts done in Queensland that were invalidated because of the existence of native title. The NT (Qld) Act confirms that particular acts previously done in Queensland have resulted in the extinguishment of native title. The NT (Qld) Act was also developed to ensure that Queensland law is consistent with standards set by the Commonwealth NT Act for future dealings affecting native title.
<i>Petroleum and Gas (Production and Safety) Act 2004</i> (Qld) (P&G Act)	The P&G Act regulates the carrying out of petroleum activities and facilitates the development of a safe, efficient and viable petroleum and fuel gas industry. Petroleum and gas authorities are granted for: ▶ Exploration: authority to prospect, potential commercial area ▶ Production: petroleum lease ▶ Infrastructure development: petroleum facility licence and petroleum pipeline licence ▶ Information gathering: petroleum survey licence, water monitoring authority and data acquisition authority. The holder of the authority to prospect may carry out the following activities within the area of the authority: explore for petroleum, test for petroleum production, evaluate the feasibility of petroleum production and evaluate or test natural underground reservoirs for the storage of petroleum or a prescribed storage gas. An authority to prospect area can be declared a potential commercial area under Section 90 of the P&G Act. A potential commercial area retains an authority to prospect beyond its term to provide more time to commercialise the resource. The <i>Petroleum Act 1923</i> (Qld) continues to regulate some petroleum licences granted prior to 1993 due to native title issues. The Project traverses infrastructure regulated under the P&G Act, being land subject to a petroleum pipeline licence, being the Moonie to Brisbane Pipeline (petroleum pipeline licence (PPL) 1) and the Roma to Brisbane Pipeline (PPL 2), as well as a petroleum lease (PL) 1041 at Turallin.
<i>Planning Act 2016</i> (Qld) (Planning Act)	The purpose of the Planning Act is to establish an efficient, effective, transparent, integrated, coordinated and accountable system of land use planning, development assessment and related matters that facilitate the achievement of ecological sustainability. The Planning Act establishes a hierarchy of State and local planning instruments, being: ▶ State planning policies (including temporary policies) ▶ Regional plans ▶ Planning schemes ▶ Temporary local planning instruments ▶ Planning scheme policies. The Project will trigger the requirement to obtain development approvals for various aspects of development assessable under the Planning Regulation depending on the type and location of activity and whether any exemptions apply. Such approvals are to be obtained post-EIS. The Project, however, is not assessable under a local government planning scheme by Schedule 6, Part 5, Section 26 as it is 'development for the construction of government supported transport infrastructure'. The Project is 'government supported transport infrastructure', given it is transport infrastructure (rail transport infrastructure) as defined under Schedule 6 of the <i>Transport Infrastructure Act 1994</i> (Qld) (TI Act) and is funded partly by the Australian Government.

Regulatory context	Relevance to the Project
<i>Regional Planning Interests Act 2014 (Qld) (RPI Act)</i>	The RPI Act regulates areas of regional interest (including strategic cropping areas (SCA)) and requires that a resource activity or a regulated activity proposed to be located in an area of regional interest obtain a regional interests development approval following an assessment of the extent of the expected impact of the activity on the area. There are four areas of regional interest protected under the RPI Act being: ▶ Priority agricultural area (PAA) ▶ SCA ▶ Priority living area (PLA) ▶ Strategic environmental area (SEA). A regional interests development approval may be required when a resource or regulated activity is proposed in an area of regional interest. The Project intersects PAA land mapped throughout the Darling Downs, particularly between Yelarbon and Inglewood, and between Millwood and Gowrie. There are patches of mapped priority living areas that are affected by the Project footprint located in Yelarbon, Inglewood, Millmerran, Pittsworth, and Gowrie. Part of the Project footprint is mapped within SCAs. The Project does not traverse any SEAs. The Project is not a resource activity nor a regulated activity under the RPI Act and therefore the Act does not apply.
<i>State Development and Public Works Organisation Act 1971 (Qld) (SDPWO Act)</i>	The SDPWO Act is administered by the Coordinator-General. Relevantly, the Coordinator-General may declare a project to be a 'coordinated project' for which an EIS is required. The SDPWO Act also includes mechanisms for the Coordinator-General to control and manage State Development Areas, administer prescribed projects and critical infrastructure projects and compulsorily acquire land. An EIS provides the Coordinator-General with a framework to: ▶ Consider the environmental, social and economic aspects of the Project in the context of legislative and policy provisions, and decide whether the Project can proceed ▶ State, recommend or impose conditions for approval, as appropriate ▶ Ensure appropriate environmental management and monitoring programs to avoid, minimise, mitigate or offset any adverse impacts. On 16 March 2018, the Project was gazetted as a 'coordinated project for which an EIS is required' by the Coordinator-General under Section 26(1)(a) of the SDPWO Act. The coordinated project declaration under the SDPWO Act does not exempt ARTC from the need to obtain development approvals under the Planning Act.
<i>Stock Route Management Act 2002 (Qld)</i>	The Stock Route Management Act provides for management of the stock route network in Queensland. Under the Act, a stock route means a road or route ordinarily used for travelling stock or declared under regulation to be a stock route. A stock route has no separate title or tenure from the underlying road reserve, and the same roads are used for walking and assisting stock and vehicular transport. The Land Act and the TI Act also include relevant provisions for stock routes and associated grazing access.
<i>Transport Infrastructure Act 1994 (Qld) (TI Act)</i>	The TI Act provides a framework for integrated planning and the efficient management of transport infrastructure. The objectives of the TI Act are to allow the State government to have a strategic overview of the provision and operation of all transport infrastructure. Chapter 7 of the TI Act prescribes the Ministers' powers with respect to rail transport infrastructure, with Section 242 giving the Minister the power, by gazette notice, to declare land as future railway land. Following approval of the Project, the Project is proposed to be declared as future railway under the TI Act.
<i>Transport Planning and Coordination Act 1994 (Qld) (TPC Act)</i>	The TPC Act is the primary legislation relating to transport in Queensland. The TPC Act aims to achieve transport effectiveness through strategic planning and management of transport services, to improve Queensland's economic, trade and regional development performance, and the quality of life of Queenslanders. For the purposes of the State Planning Policy, a State transport corridor and a future State transport corridor are defined as an active transport corridor and a future transport corridor under a guideline made pursuant to the TPC Act.

Regulatory context	Relevance to the Project
<i>Vegetation Management Act 1999 (Qld) (VM Act)</i>	The VM Act regulates and manages the process and impacts of native vegetation clearing. The objectives of the VM Act include conservation of remnant regional ecosystems, prevention of the loss of biodiversity, maintenance of ecological processes, and conservation of vegetation in areas of high nature conservation value or lands vulnerable to land degradation. Clearing of relevant remnant or regulated regrowth vegetation constitutes operational works under Schedule 10 of the Planning Regulation that will require development approval, unless the clearing is exempt clearing work, or the clearing is undertaken in accordance with an accepted development clearing code. A vegetation offset area under the VM Act is a secured spatial area with the purpose of mitigating environmental losses from a development. Vegetation offset areas are legally secured offset areas under the EO Act. There are no legally secured offset areas within the study area for the Project.
<i>Queensland Government Land Transaction Policy (Queensland Treasury, 2021)</i>	The <i>Queensland Government Land Transaction Policy</i> provides government agencies with a consistent set of guidelines for land and property transactions based on openness and transparency, defensibility, streamlined decision making, and delivering best value for Queensland. The <i>Queensland Government Land Transaction Policy</i> sits alongside the land and property transaction decision-making process of each individual agency and aims to reduce red tape, while maintaining a high level of integrity for property transactions. The <i>Queensland Government Land Transaction Policy</i> supports the Executive Government-endorsed property principles. In circumstances where former owners do not want to buy back the land, the land will be disposed of in accordance with the <i>Queensland Government Land Transaction Policy</i>. ARTC, in conjunction with DTMR, will facilitate any necessary disposal and rationalisation activities, in accordance with State legislation and policy.
<i>State Infrastructure Strategy (Department of State Development, Infrastructure, Local Government and Planning (DSDILGP), 2022a)</i>	The <i>State Infrastructure Strategy</i> presents a clear vision of the Queensland Government's infrastructure requirements over the next two decades. It sets out the objectives for infrastructure and the priority actions to deliver on the objectives. The strategy sets out to align infrastructure investment across agencies to help inform industry and other levels of government. It promotes place-based infrastructure planning, working closely with industry and the broader community to leverage experience and knowledge. The strategy seeks to do more with less, driving performance and tackling complex issues, while providing infrastructure that meets the changing needs of Queensland's population and industries. The strategy will be revised every four years to continue to guide and reflect the evolving nature of infrastructure.
<i>Strategic airports and aviation facilities State interest (DSDILGP, 2021a)</i>	This guidance material has been prepared to assist local government in the interpretation, integration and advancement of the strategic airports and aviation facilities State interest, when making or amending a planning scheme. No strategic airports or aviation facilities are traversed by the Project. The closest strategic airport is the Toowoomba Wellcamp Airport. The Project footprint is approximately 865 metres (m) west of the northern limit of the runway for Toowoomba Wellcamp Airport. The only other strategic airport located within the general vicinity of the Project is the Army Aviation Centre Oakey. This airbase is located approximately 11.4 kilometres (km) from the Project.
<i>State Planning Policy (SPP) (Department of Infrastructure, Local Government and Planning, 2017a) and Delivery of state interests through the Planning Regulation 2017 – Guidance for local government (DSDILGP, 2021b)</i>	The SPP is a key component of the Queensland land use planning system, which articulates the Queensland Government's 17 State interests in land use planning and development across the following five key themes: ▶ Liveable communities and housing ▶ Environment and heritage ▶ Infrastructure. ▶ Economic growth ▶ Safety and resilience to hazards The SPP is a statutory instrument and requires that the State interests be integrated into local government planning schemes. Some State interests in the SPP include assessment benchmarks that apply to certain types of development where a local government planning scheme does not appropriately integrate the relevant State interest. The <i>Delivery of state interests through the Planning Regulation 2017– Guidance for local government</i> (DSDILGP, 2021b) has been prepared to assist local governments in understanding how the <i>Planning Regulation 2017 (Qld)</i> requirements are to be considered when addressing State interests in local government planning schemes.

Regulatory context	Relevance to the Project
	Regional plans, strategies, and statutory guidelines
<i>Darling Downs Regional Plan</i> (Department of State Development, Infrastructure and Planning (DSDIP), 2013a)	The <i>Darling Downs Regional Plan</i> is the regional plan for the Darling Downs region and came into effect in October 2013. The <i>Darling Downs Regional Plan</i> provides the strategic direction and policies to deliver regional outcomes that align with the State's interests in planning and development.
<i>Darling Downs Regional Transport Plan</i> (DTMR, 2019b)	The purpose of the <i>Darling Downs Regional Transport Plan</i> is to set out regional transport priorities and actions for developing the transport system in a way that supports regional goals for the community, economy and environment. The plan has been developed in accordance with the TPC Act and meets the department's legislative responsibility to develop integrated regional transport plans that complement land use planning, and support the goals and objectives of regional plans.
<i>RPI Act Statutory Guideline 03/14—Carrying out resource activities in the strategic cropping area</i> (Department of State Development, Manufacturing, Infrastructure and Planning, 2019)	A guideline to assist in understanding when and how to apply for a regional interests development approval under the RPI Act for proposed resource activities in the SCA. The Project will traverse mapped SCAs within the Darling Downs and the South East Queensland regions. While not applicable to the Project, <i>RPI Act Statutory Guideline 03/14—Carrying out resource activities in the strategic cropping area</i> prescribes a 2 per cent threshold of permanent impact to SCA on an individual property to determine whether a resource activity will result in a material impact. The Project will not exceed this threshold of mapped SCA within either of the relevant regional planning areas.
<i>RPI Act Statutory Guideline 02/14—Carrying out resource activities in a Priority Agricultural Area</i> (DSDILGP, 2023b)	A guideline to assist in understanding when and how to apply for a regional interests development approval under the RPI Act for proposed resource activities in the PAA. The Project will traverse mapped PAAs within the Darling Downs and the South East Queensland regional planning areas. While not applicable to the Project, <i>Statutory Guideline 02/14—Carrying out resource activities in a Priority Agricultural Area</i> prescribes a 2 per cent threshold of permanent impact to PAA on an individual property to determine whether a resource activity will result in a material impact. The Project will not exceed this threshold of mapped PAA within either of the relevant regional planning areas.
<i>South East Queensland Regional Plan</i> (ShapingSEQ 2023) (DSDILGP, 2023a)	ShapingSEQ 2023 is the regional plan for the South East Queensland region and was given effect on 16 December 2023. ShapingSEQ 2023 is the Queensland Government's long-term vision for the growth of the region, and sets out a series of outcomes and actions to achieve this vision. Through its revised approach to implementing the plan, ShapingSEQ 2023 has a strong focus on ensuring that these outcomes and actions result in delivery on the ground. To focus this implementation, the plan identifies 10 regional priorities which underpin all priority actions. These regional priorities are: ▶ A sustainable growth pattern ▶ More homes, faster—supply, diversity and affordability ▶ More social and affordable homes ▶ Well-designed communities ▶ Integrating land use and infrastructure ▶ New economic opportunities and jobs ▶ A sufficient pipeline of industrial land ▶ Incorporating Aboriginal and Torres Strait Islander knowledge, culture, traditions and aspirations ▶ Regional approach to natural hazards ▶ Better biodiversity outcomes for growth areas.

Regulatory context	Relevance to the Project
	Planning schemes
<i>Goondiwindi Region Planning Scheme 2018</i> (Goondiwindi Regional Council (GRC), 2018a)	The <i>Goondiwindi Region Planning Scheme</i> is the primary planning document for land located within the Goondiwindi local government area (LGA). The Project is located partly within the Goondiwindi LGA. The zoning intent under the <i>Goondiwindi Region Planning Scheme</i> has been taken into consideration when determining the impacts of the Project on future land uses in the area. Details of the zoning intent of the Project footprint is provided in Section 8.4.4.1.
<i>Toowoomba Regional Planning Scheme</i> (Toowoomba Regional Council (TRC), 2012)	The <i>Toowoomba Regional Planning Scheme</i> is the primary planning document for land located within the Toowoomba LGA. The Project is located partly within the Toowoomba LGA. The zoning intent under the <i>Toowoomba Regional Planning Scheme</i> has been taken into consideration when determining the impacts of the Project on future land uses in the area. Details of the zoning intent of the Project footprint is provided in Section 8.4.4.1.

8.3 Methodology

8.3.1 Study area and impact assessment area

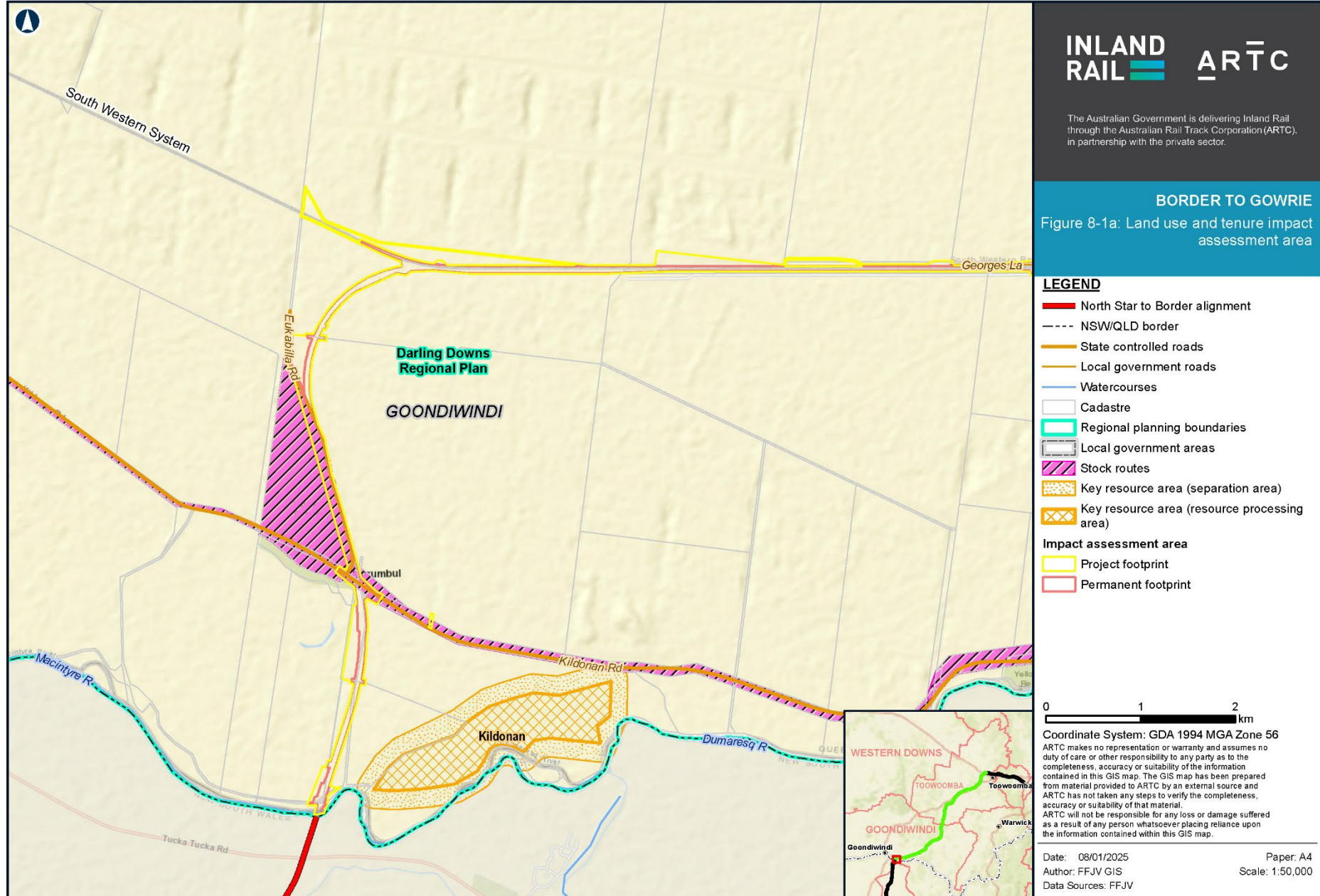
The study area for the Project comprises a 2 km (approximate) corridor, 1 km either side of the proposed Project rail alignment. Notable land uses and tenures within the study area are identified to capture potential instances where indirect impacts to land use and tenure may occur. This may include where the Project is in proximity to mining operations or where traversing agricultural land, which may result in both direct and indirect impacts on activities adjacent to the Project. The impact assessment area for the Project is within the study area.

The impact assessment area for land use and tenure is the Project footprint, which is comprised of:

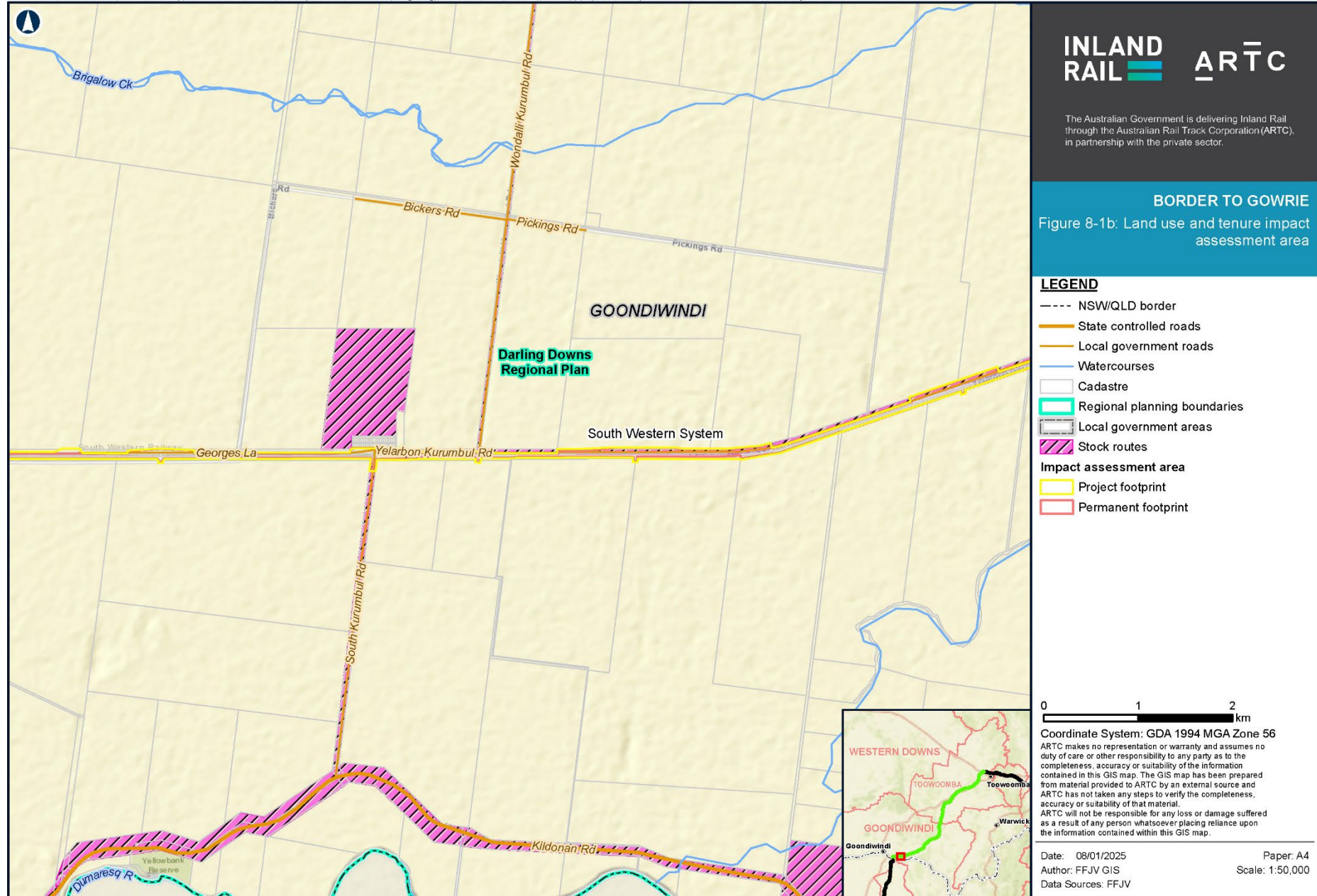
- ▶ Permanent footprint: the area required to accommodate permanent infrastructure associated with the Project, including rail, road and other miscellaneous infrastructure. Rail infrastructure includes rail tracks, crossing loops, turnouts, earthworks, bridges, drainage, level crossings, grade separations, rail maintenance access roads, signalling and fencing. Road-related works resulting from the Project encompasses new and upgraded roads, realignments and diversions, intersection improvements and closures.
- ▶ Temporary footprint: the area required to accommodate construction activities and facilities of a temporary nature and duration to support the Project. The temporary footprint is generally wider than the permanent footprint to allow for the construction of Project elements including fencing, drainage controls including erosion and sediment measures, temporary stockpiling and soil and vegetation, and to allow necessary construction access and turnaround provisions. Temporary Project facilities include laydowns, site office areas, non-resident workforce accommodation, a material distribution centre, concrete batch plants and borrow pits.

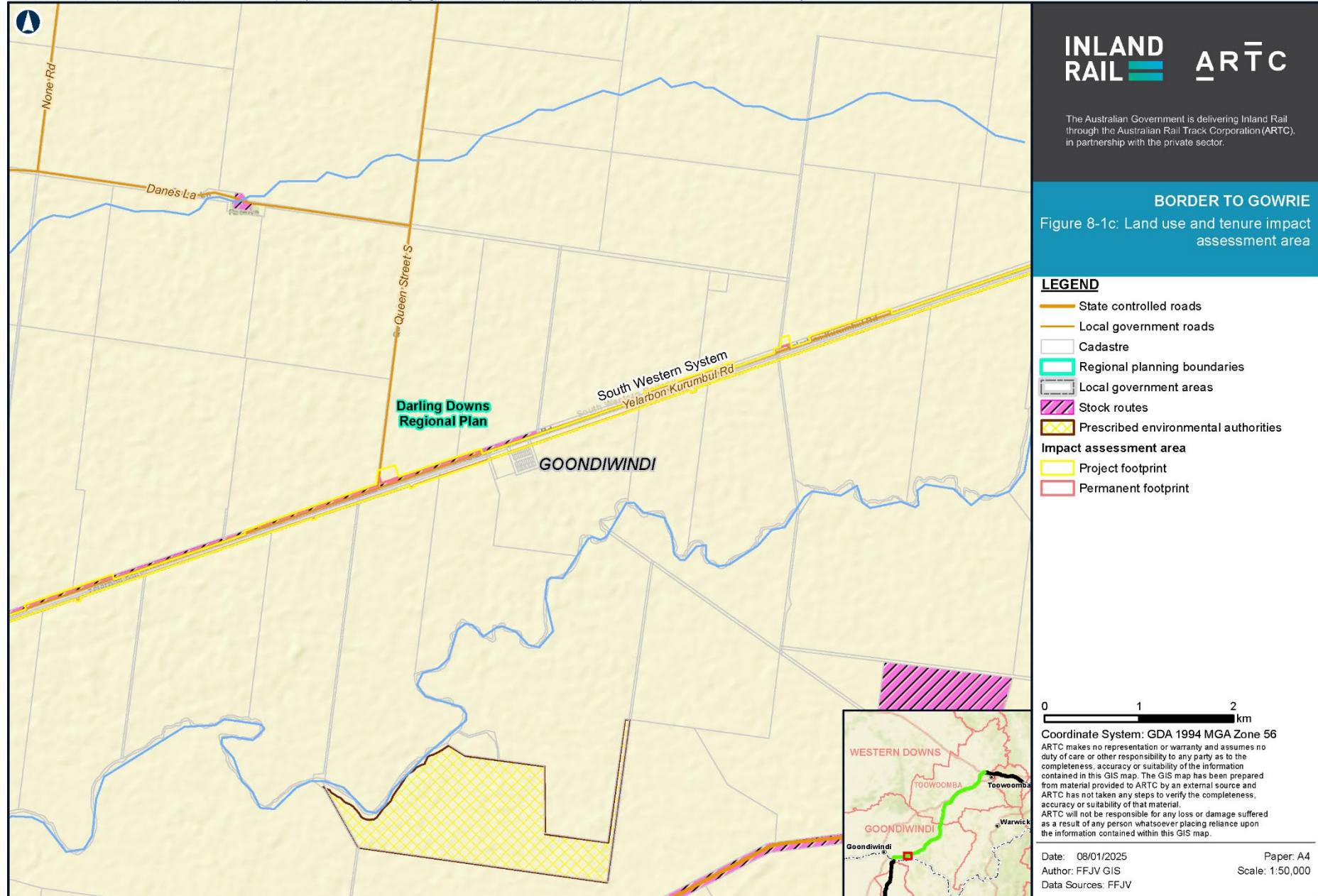
The impact assessment area for land use and tenure is depicted on Figure 8-1.

Where existing land use and tenure or potential impacts to land use and tenure have been discussed, these are presented in the context of the permanent footprint, the temporary footprint, the Project footprint (temporary and permanent footprints combined) or the study area (areas adjoining the Project footprint).



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community





Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-1d: Land use and tenure impact assessment area

LEGEND

- State controlled roads
- Local government roads
- Watercourses
- Cadastral
- Regional planning boundaries
- Local government areas
- Stock routes
- Prescribed environmental authorities
- Impact assessment area
- Project footprint
- Permanent footprint

0 1 2 km

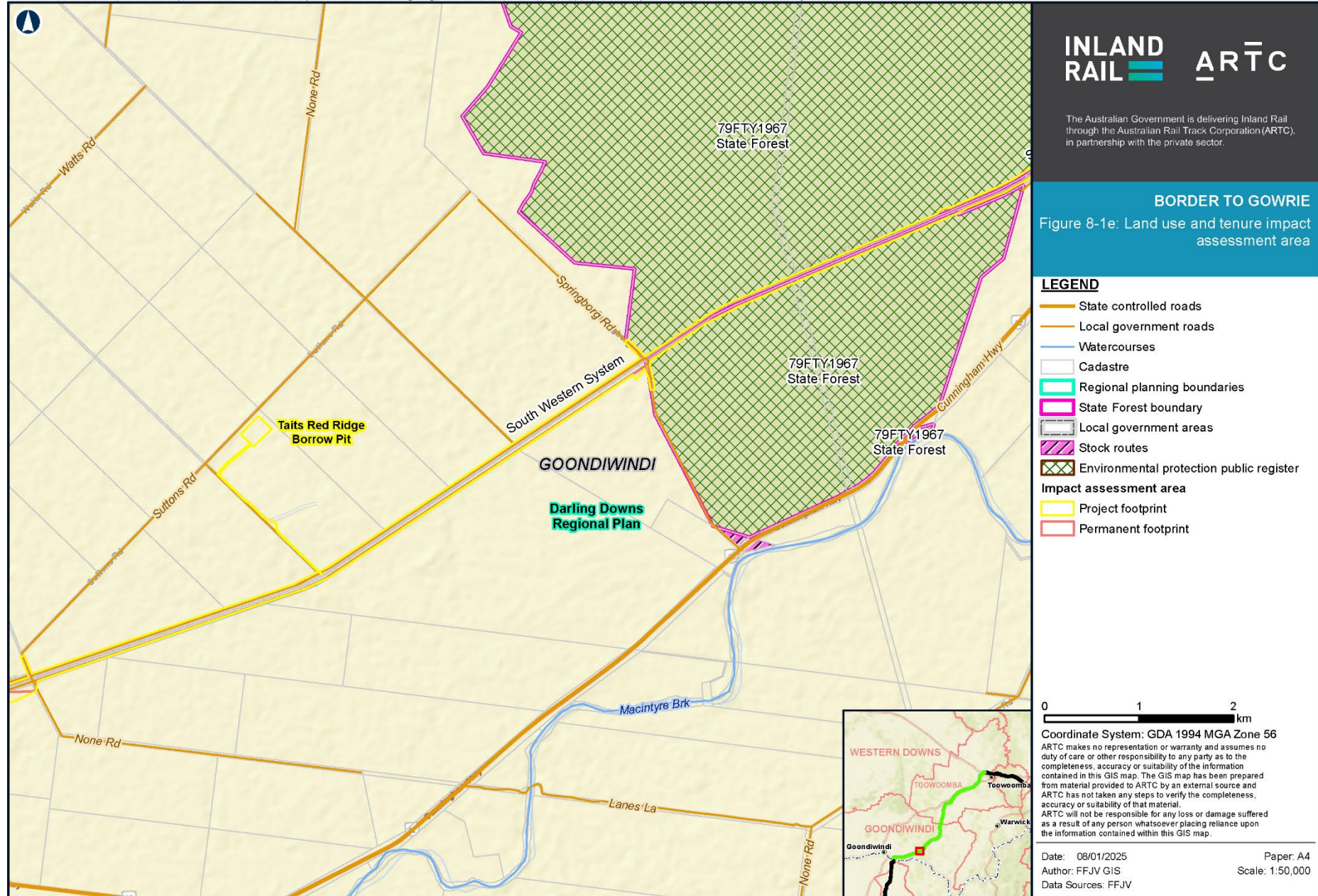
Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

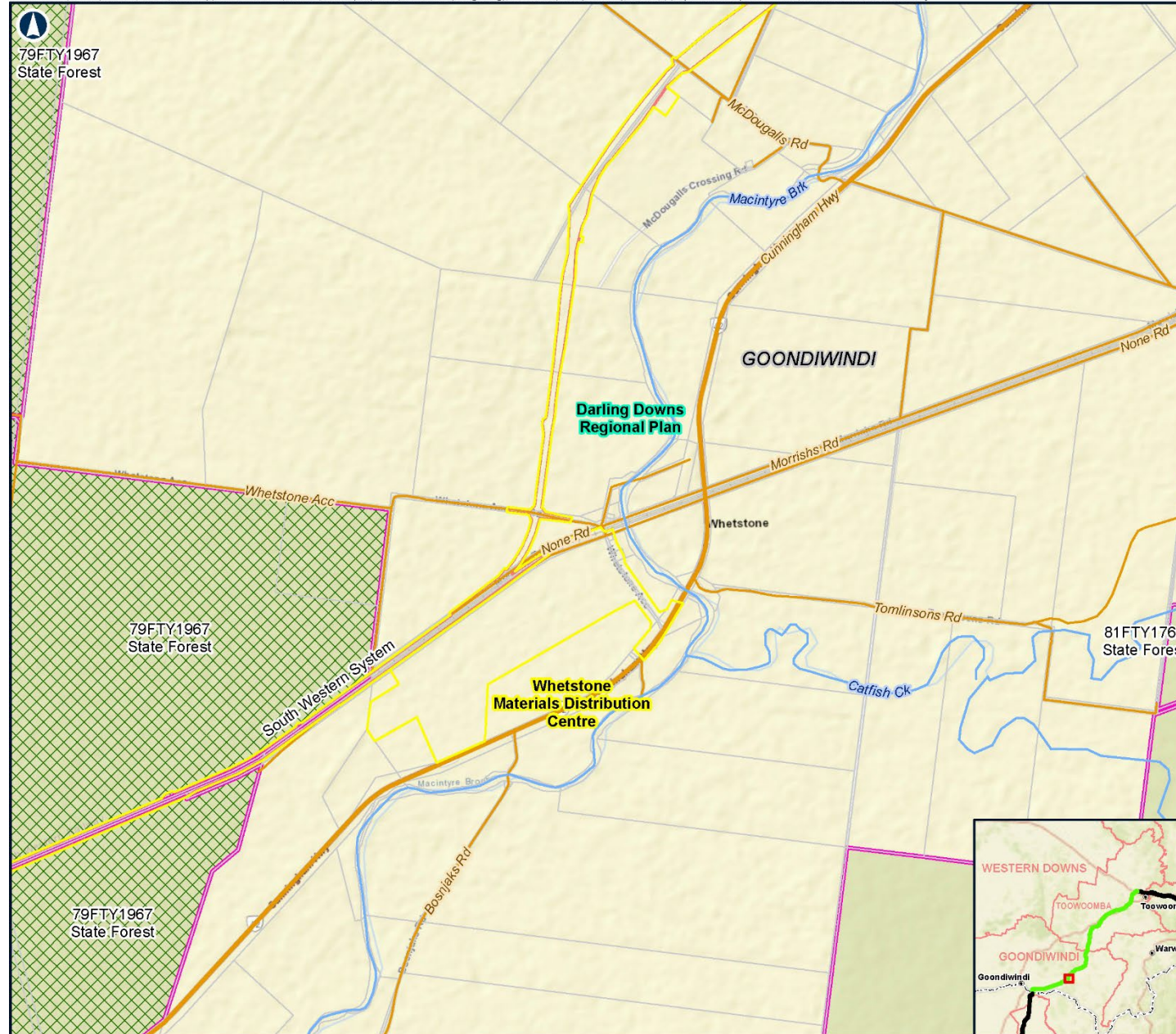
Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/FC/KG/TM/AWS Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-1_Impact_AreaA4_v9.mxd Date: 15/01/2025 12:01



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-1f: Land use and tenure impact assessment area

LEGEND

-  State controlled roads
-  Local government roads
-  Watercourses
-  Cadastre
-  Regional planning boundaries
-  State Forest boundary
-  Local government areas
-  Environmental protection public register
- Impact assessment area**
-  Project footprint
-  Permanent footprint

0 1 2 km

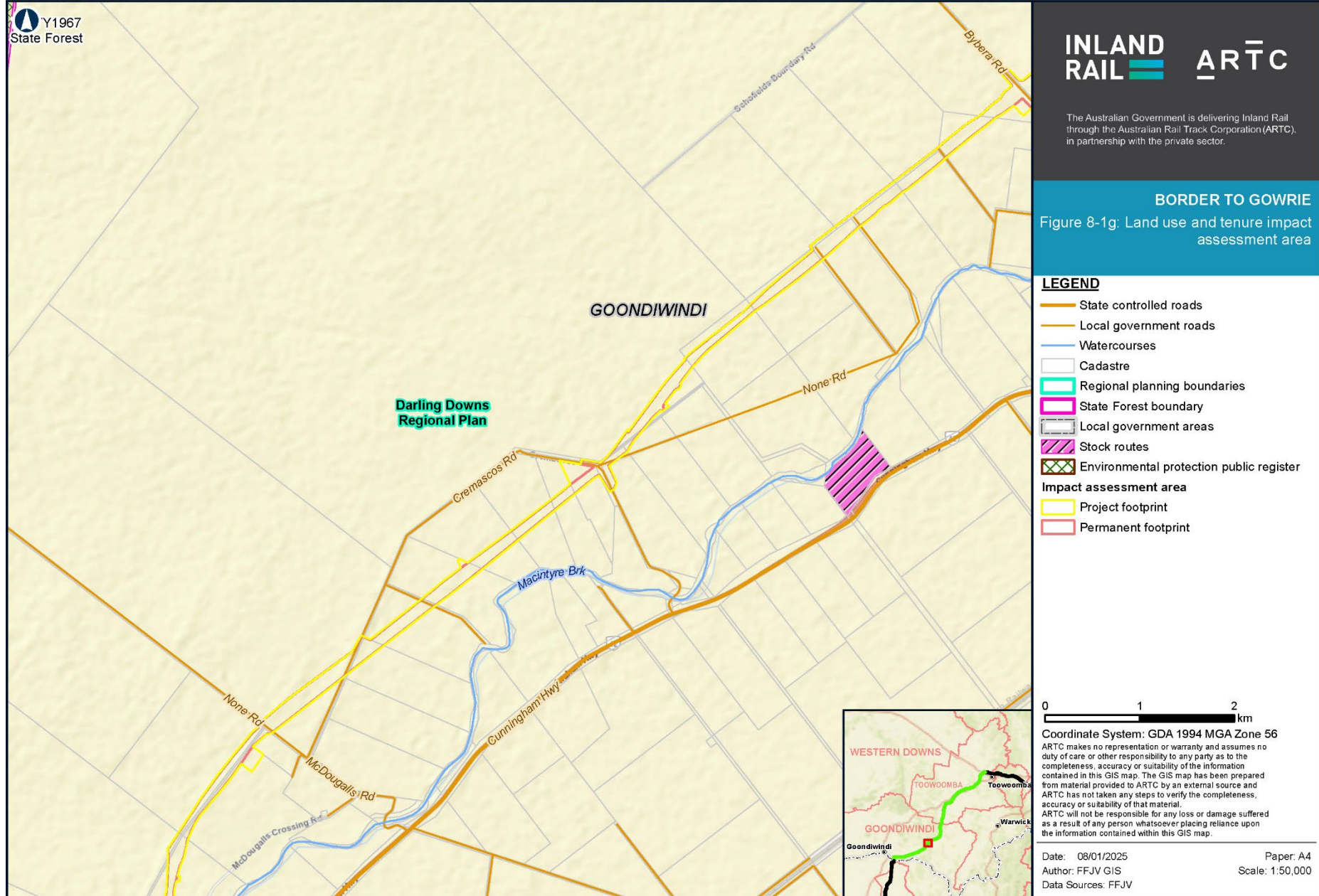
Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

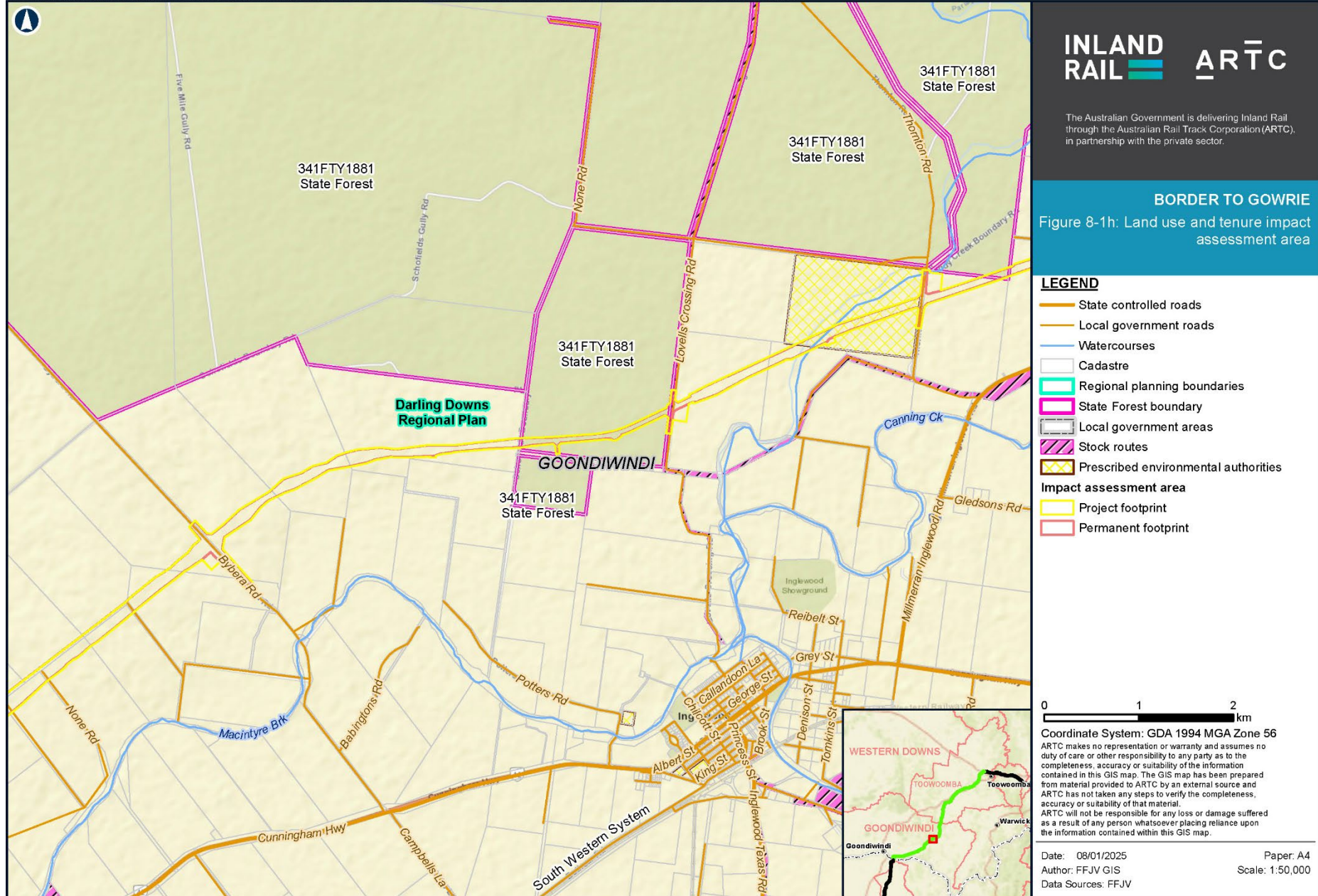
Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

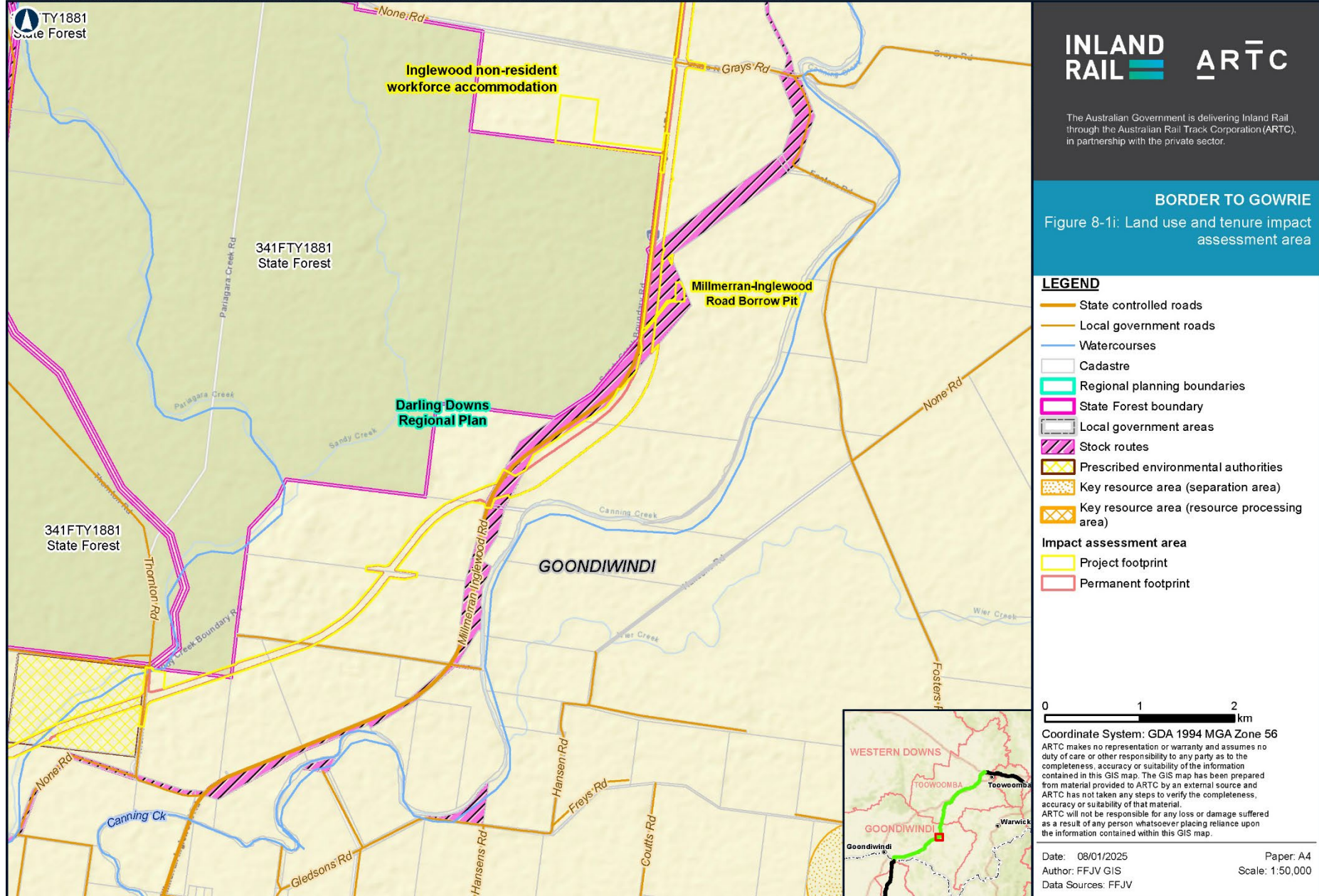
Map by: LUC/RB/CB/FC/KG/TM/AWS Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_FigB-1_Impact_AreaA4_v9.mxd Date: 15/01/2025 12:01



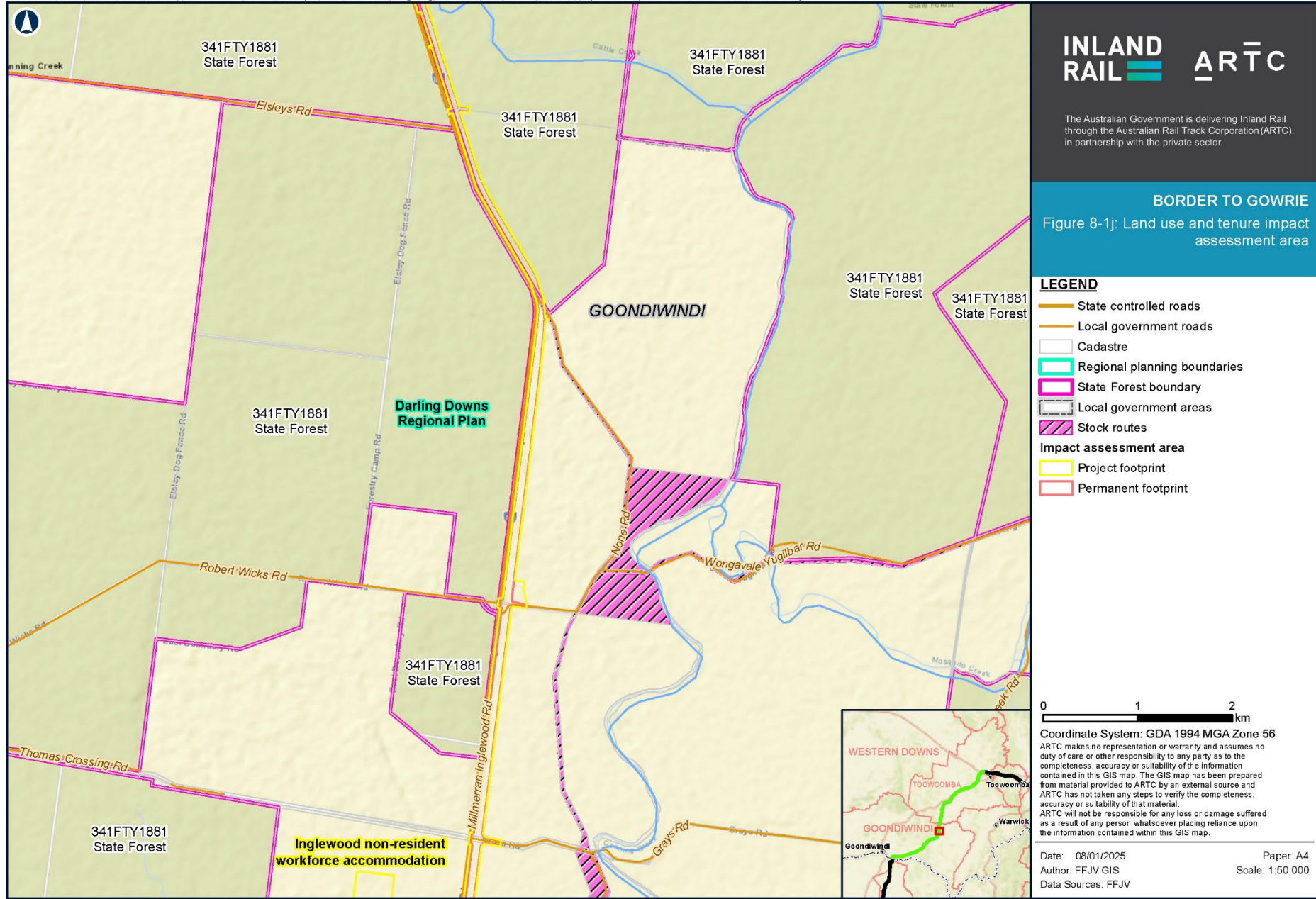
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



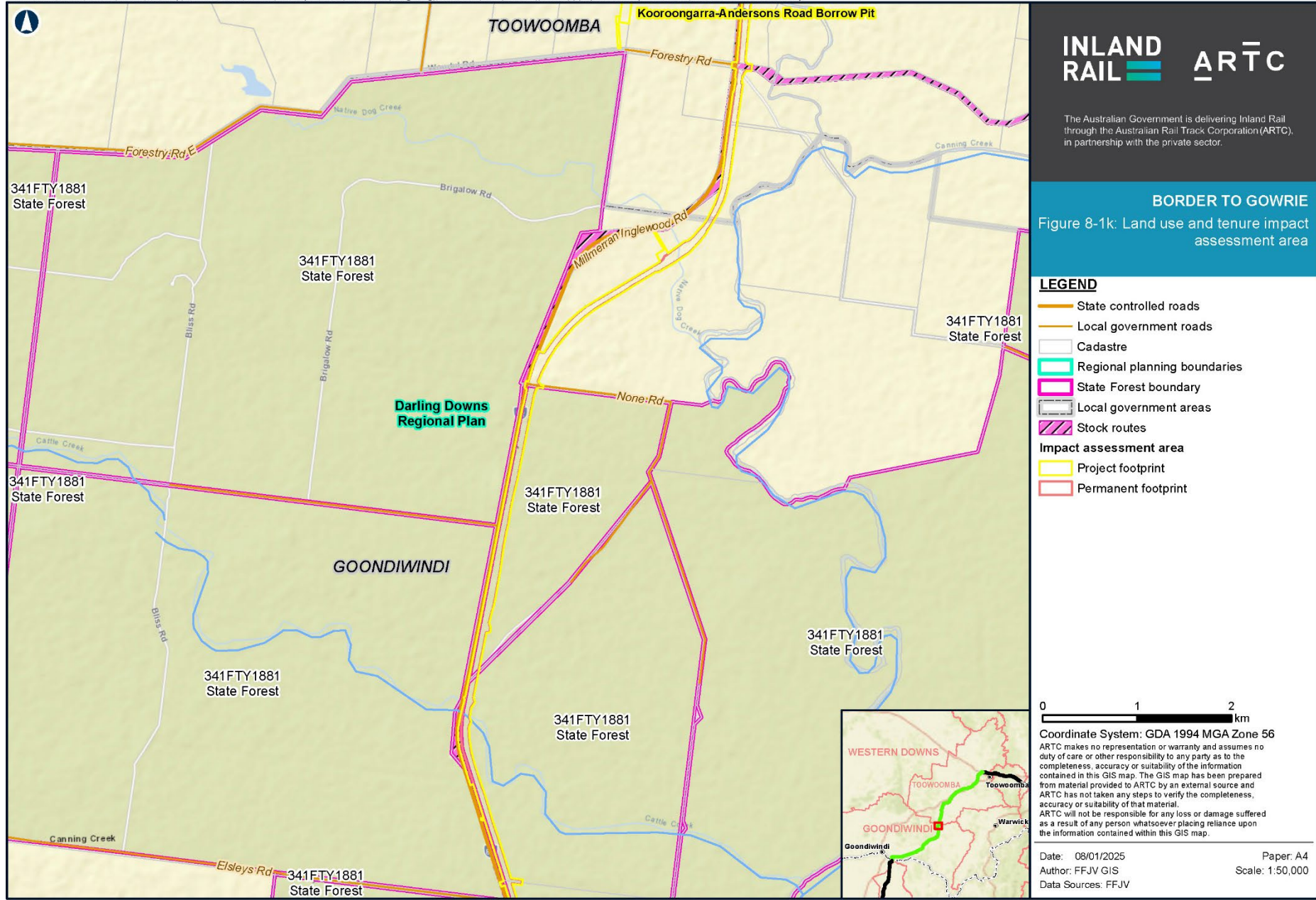
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



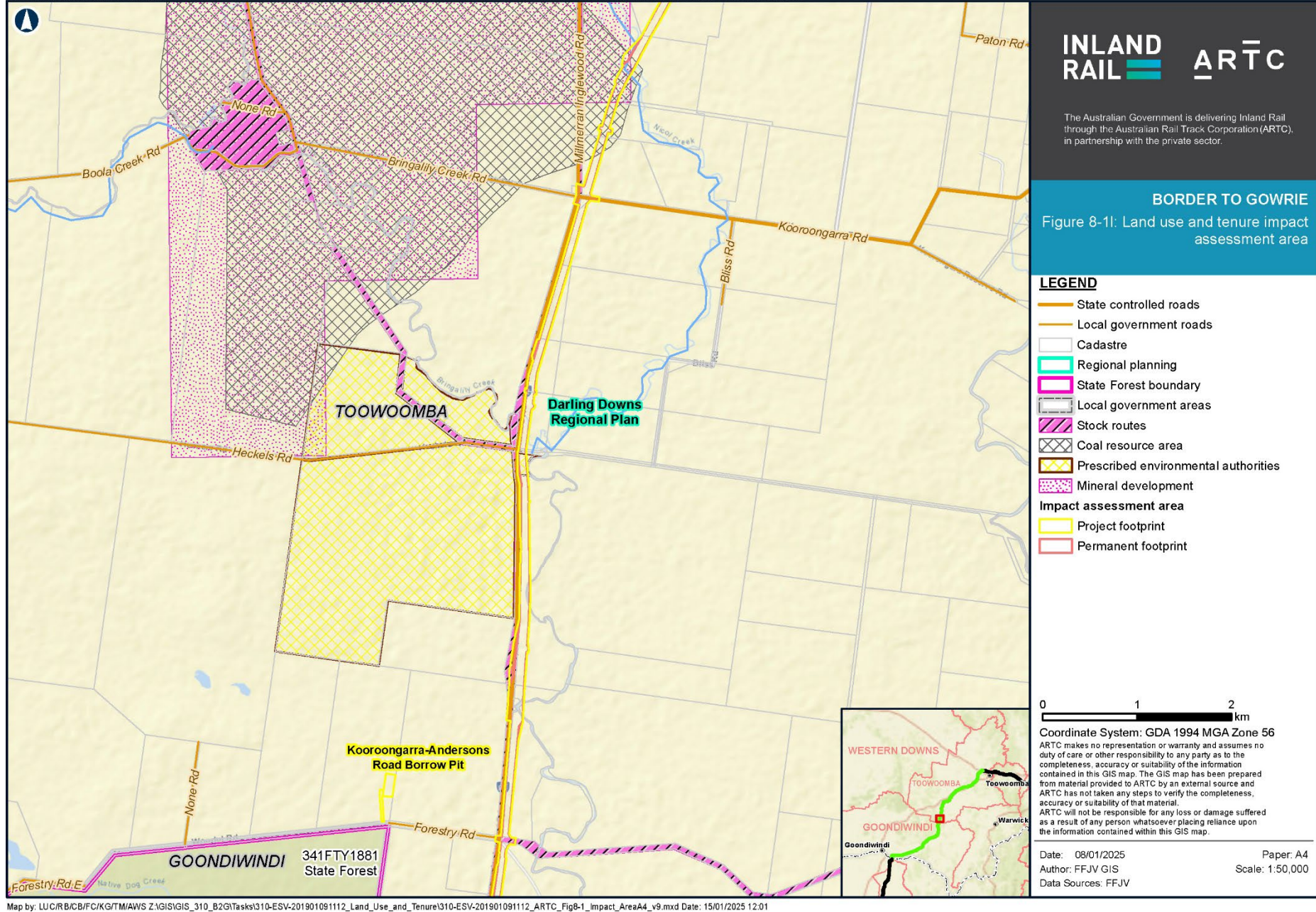
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



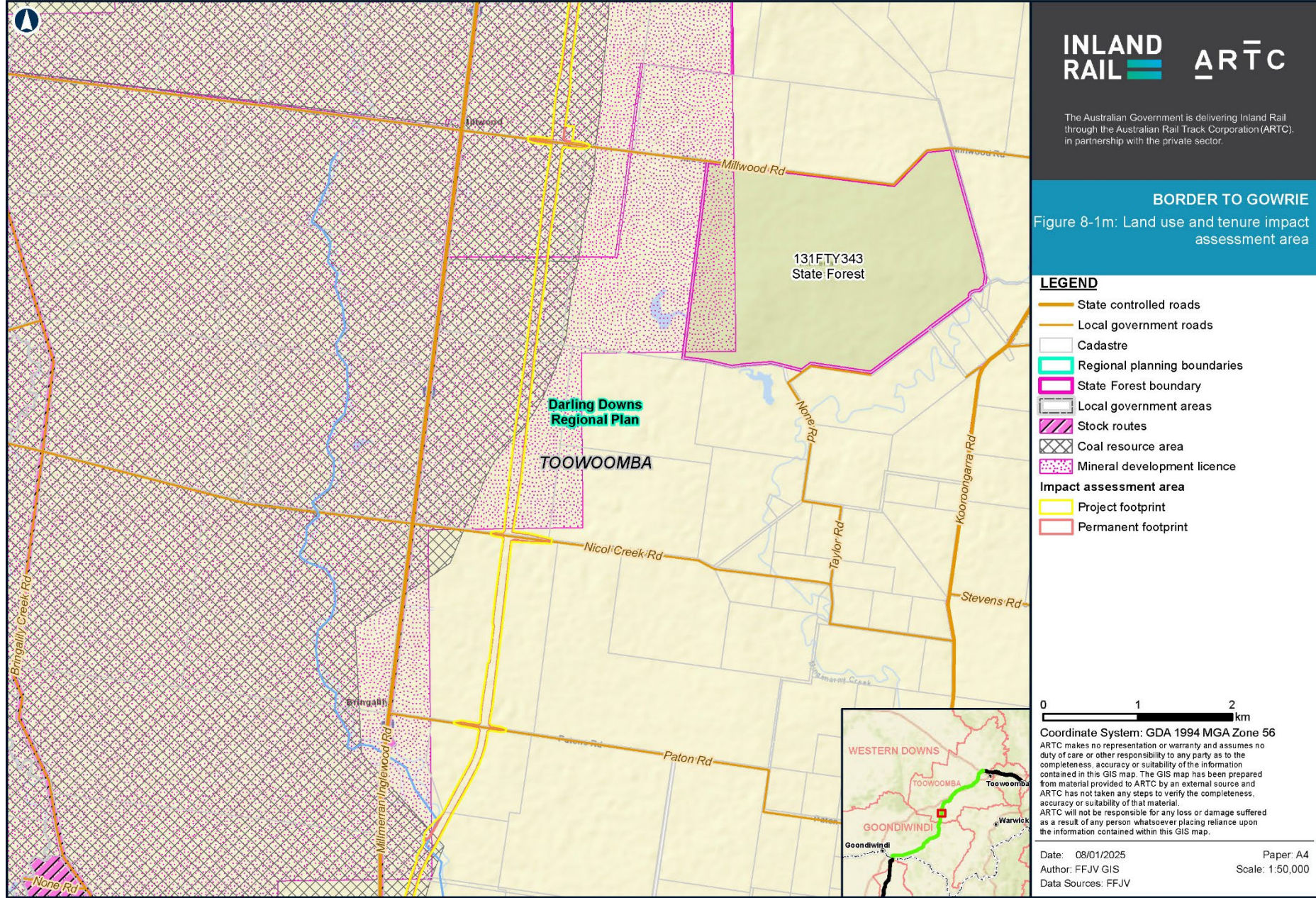
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



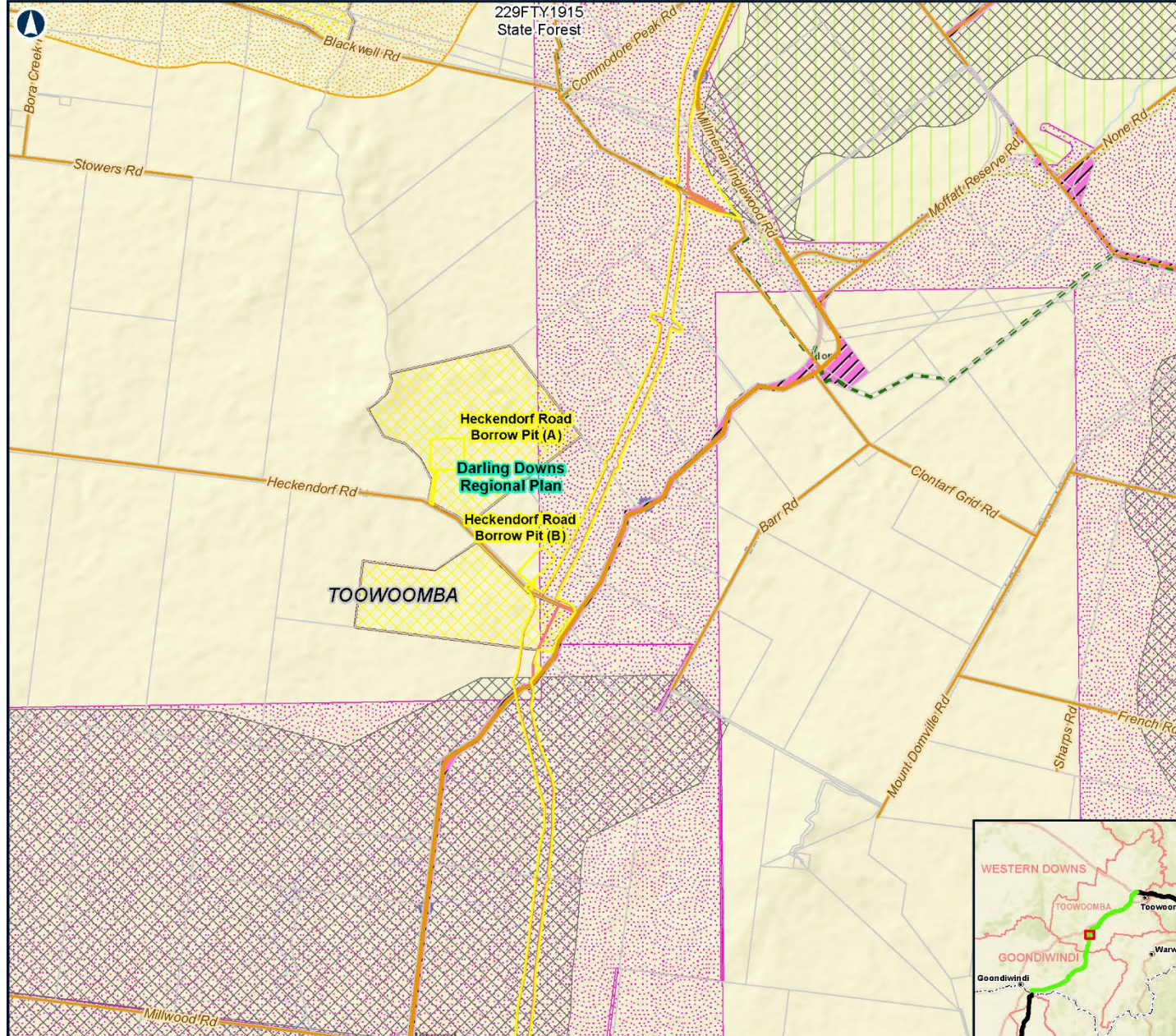
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-1n: Land use and tenure impact assessment area

LEGEND

- State controlled roads
- Local government roads
- Rabbit fence
- Cadastral
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Stock routes
- Coal resource area
- Prescribed environmental authorities
- Key resource area (separation)
- Mineral development licence
- Mining leases
- Impact assessment area
- Project footprint
- Permanent footprint

0 1 2 km

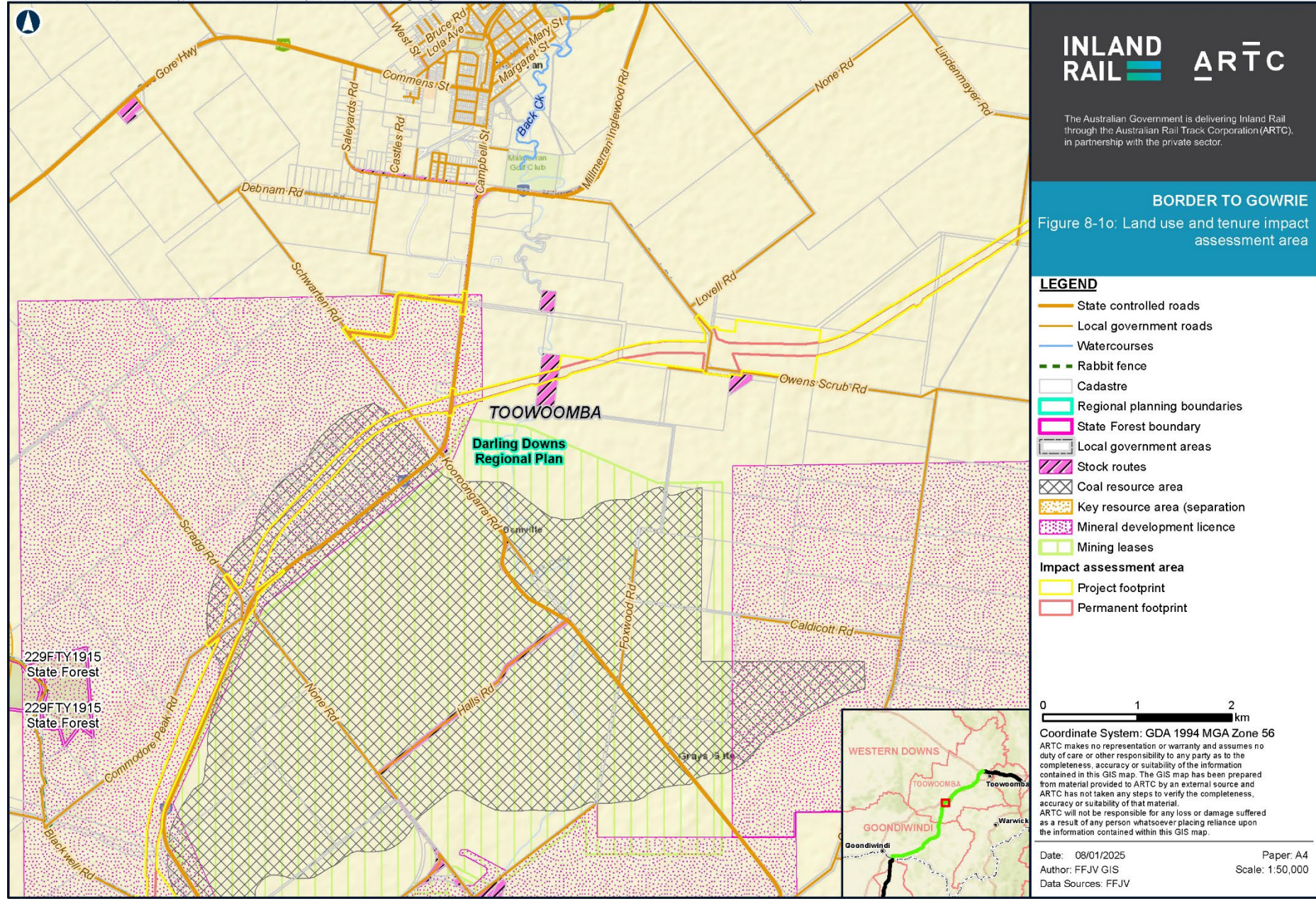
Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

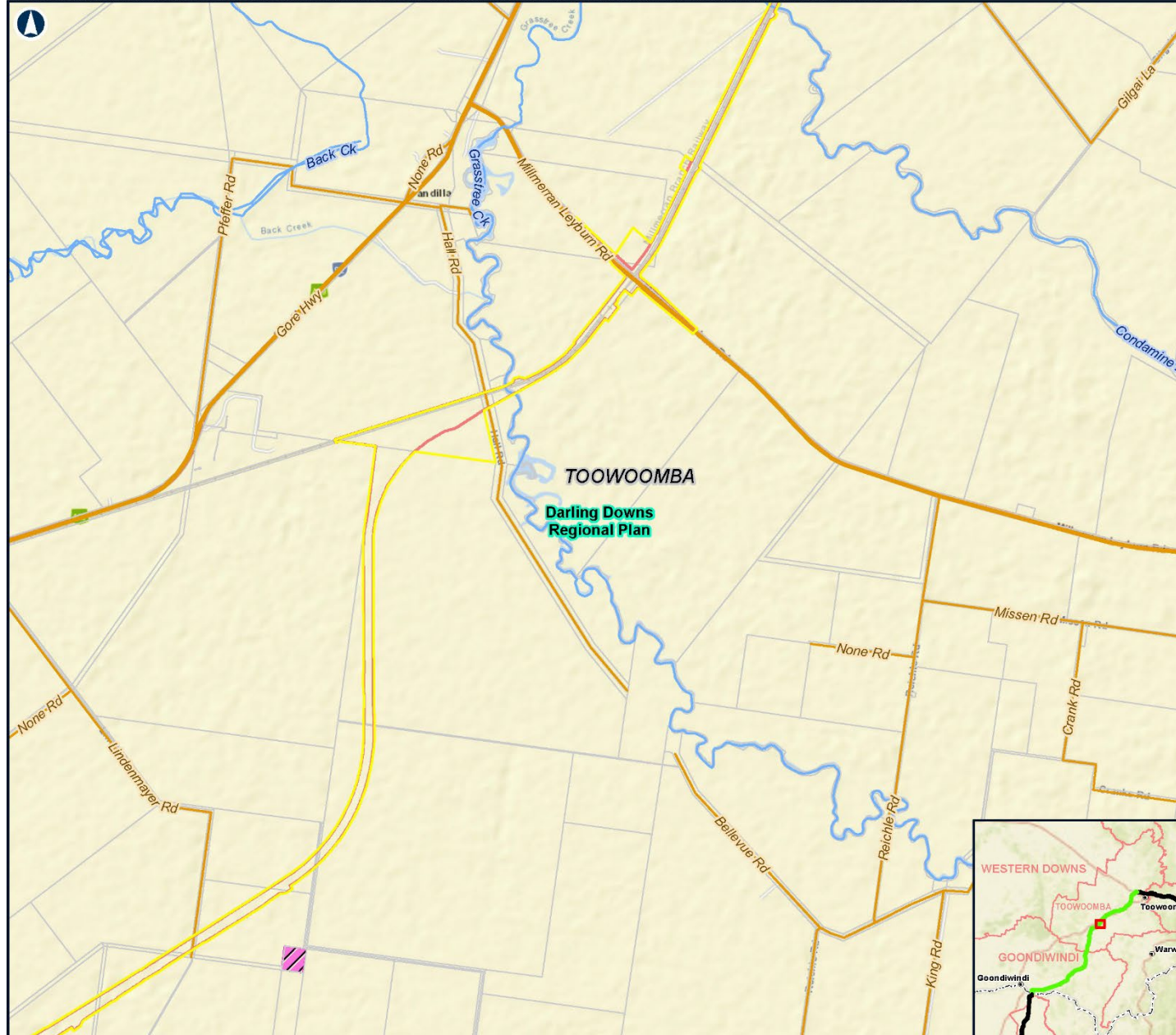
Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/FC/KG/TM/AWS Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-1_Impact_AreaA4_v9.mxd Date: 15/01/2025 12:01



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-1p: Land use and tenure impact assessment area

LEGEND

-  State controlled roads
-  Local government roads
-  Watercourses
-  Cadastre
-  Regional planning boundaries
-  Local government areas
-  Stock routes
- Impact assessment area**
-  Project footprint
-  Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

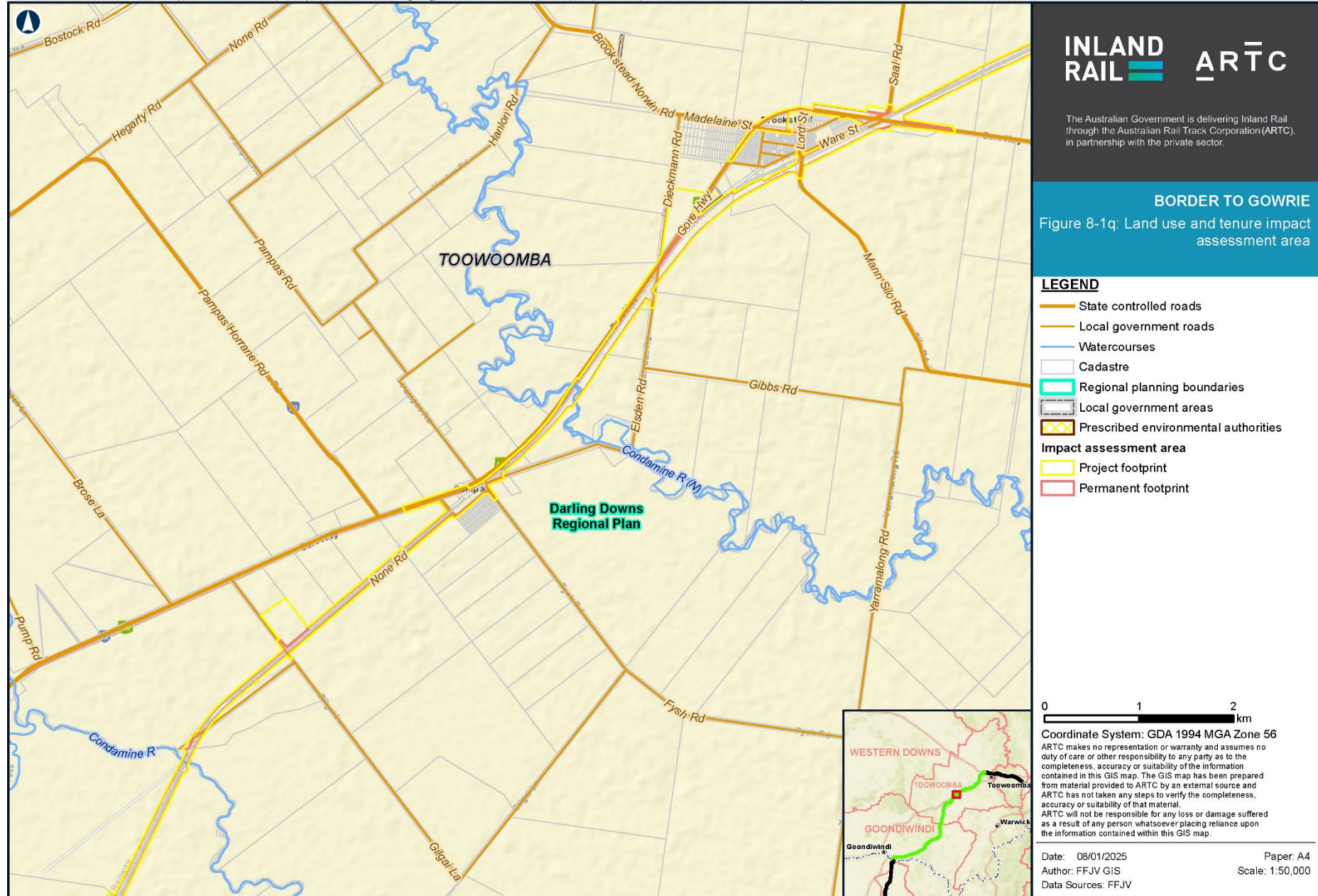
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

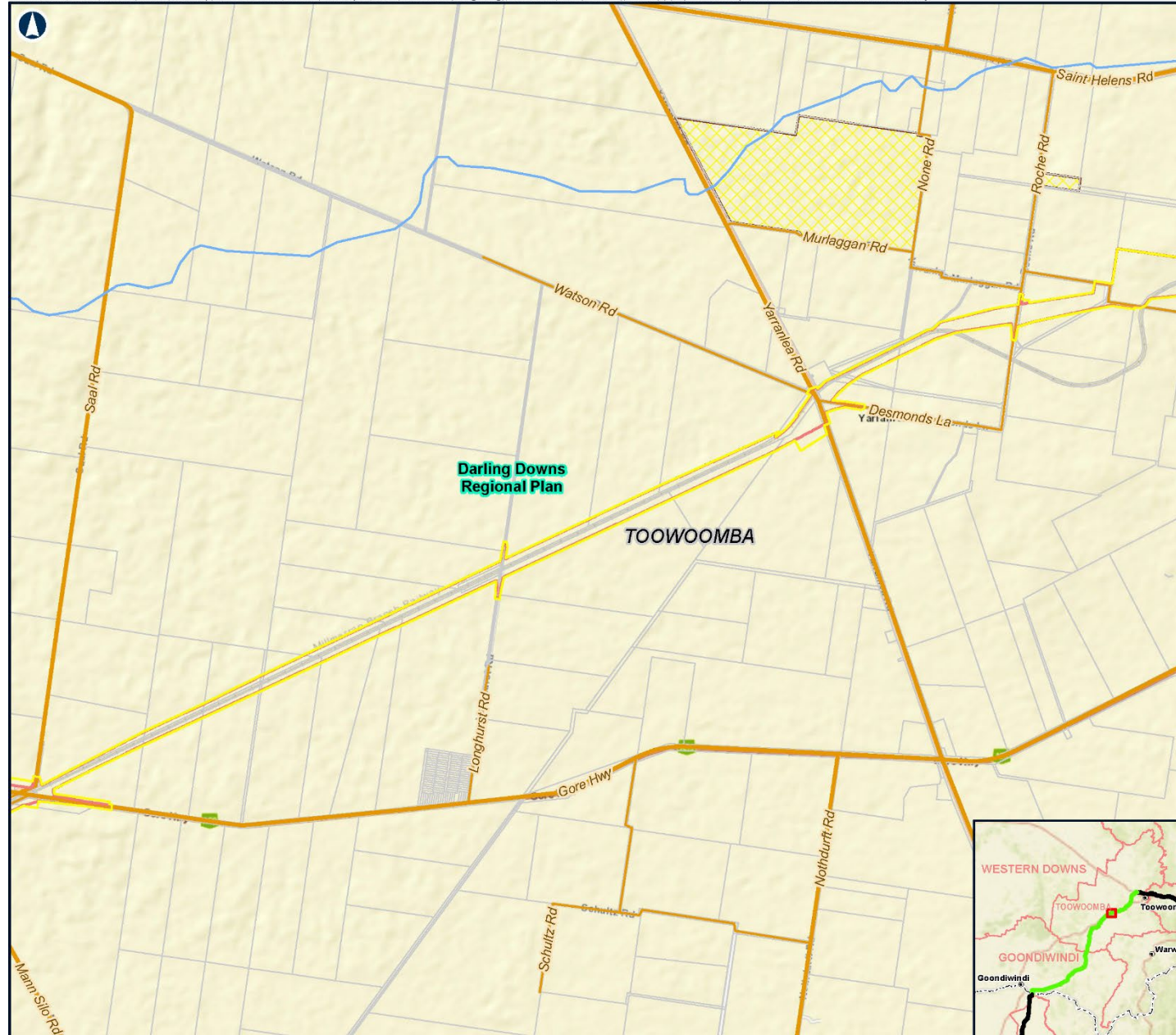
Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/FC/KG/TMAWS Z:\GIS\GIS_310_B2GI\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-1_Impact_AreaA4_v9.mxd Date: 15/01/2025 12:01

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-1r: Land use and tenure impact assessment area

LEGEND

-  State controlled roads
-  Local government roads
-  Cadastre
-  Regional planning boundaries
-  Local government areas
-  Prescribed environmental authorities
- Impact assessment area**
 -  Project footprint
 -  Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

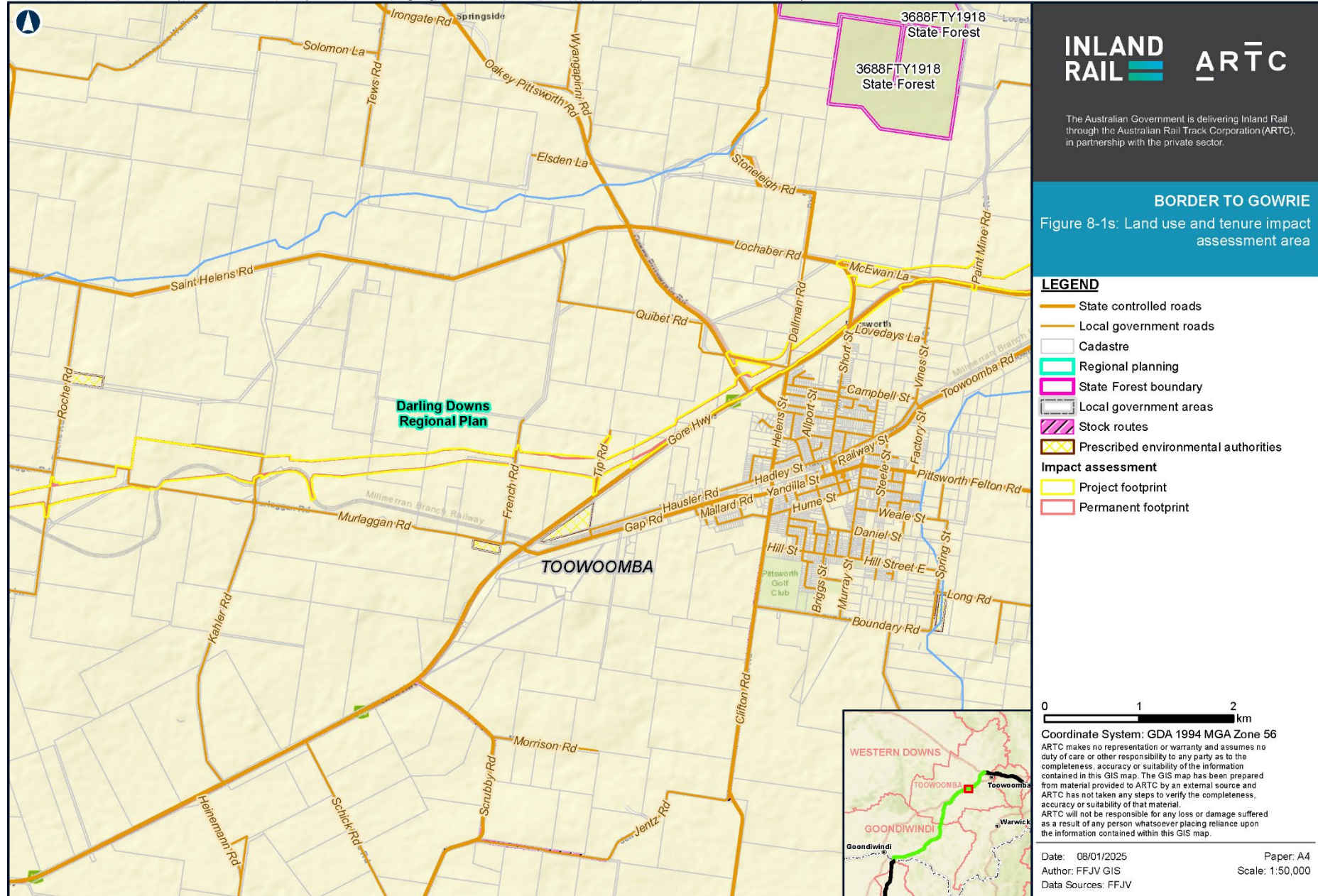
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

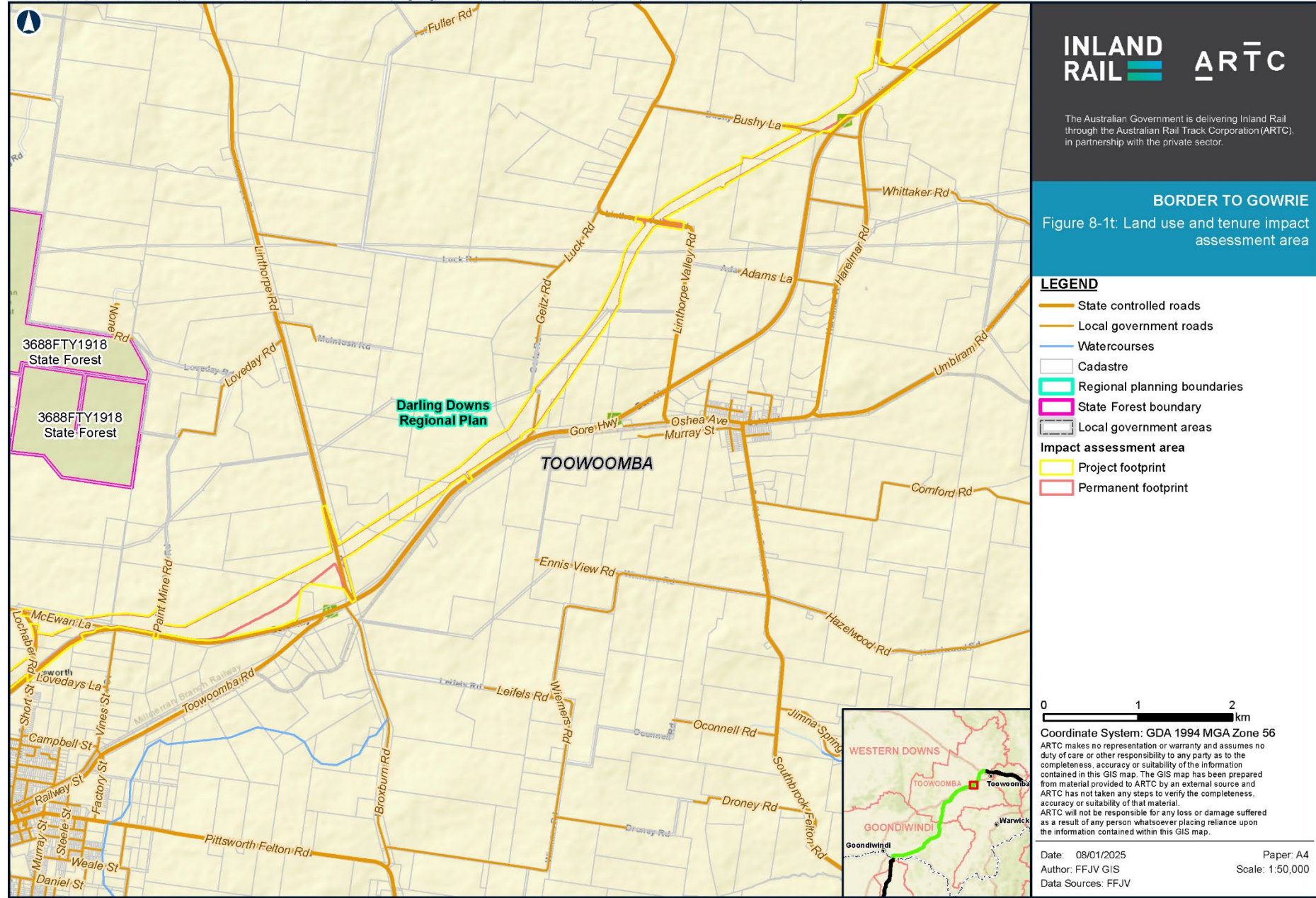
Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/FC/KG/TMAWS Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-1_Impact_AreaA4_v9.mxd Date: 15/01/2025 12:01

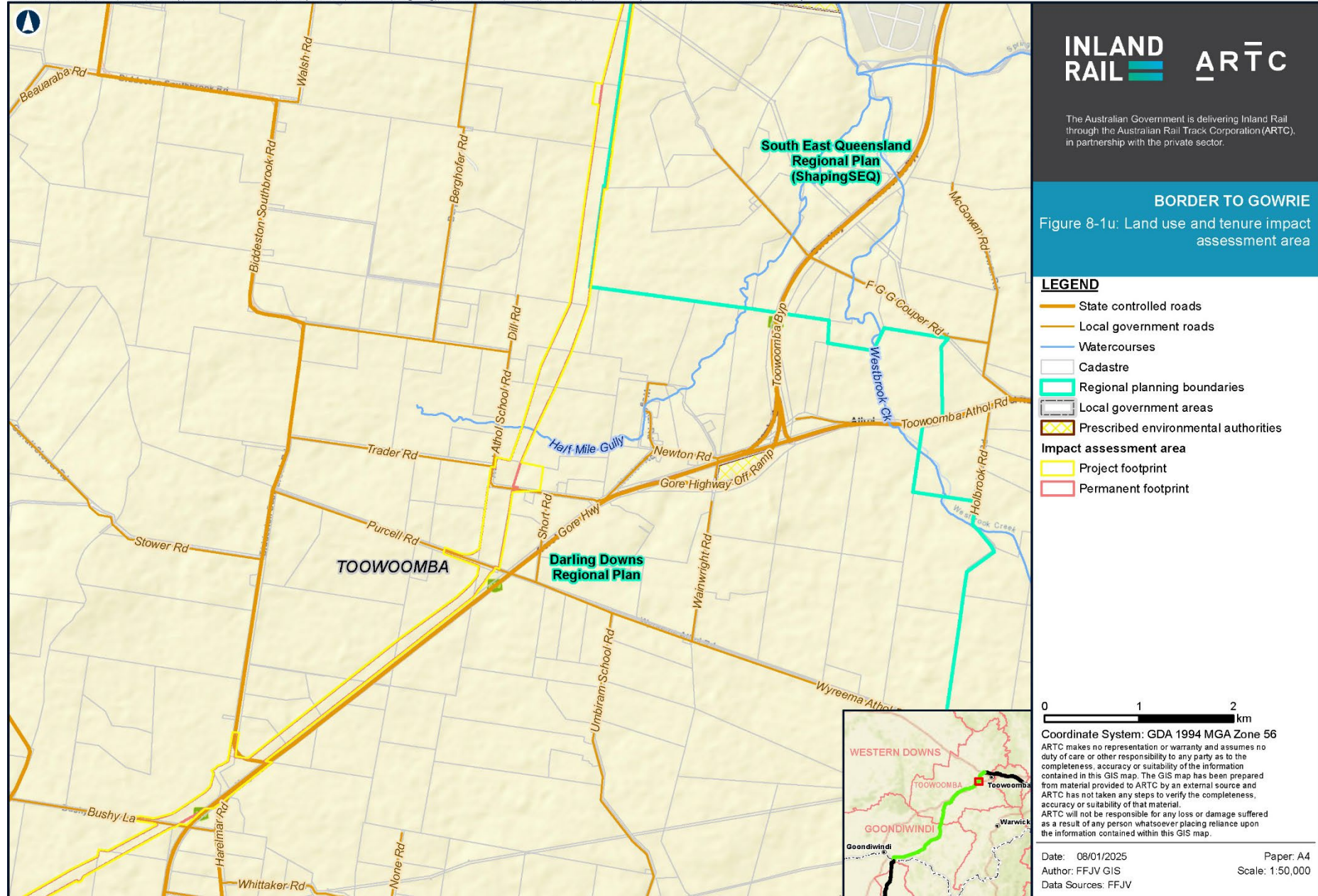
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Map by: LUC\R\B\CB\FC\K\G\TM\AWS Z\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-1_Impact_AreaA4_v9.mxd Date: 15/01/2025 12:01

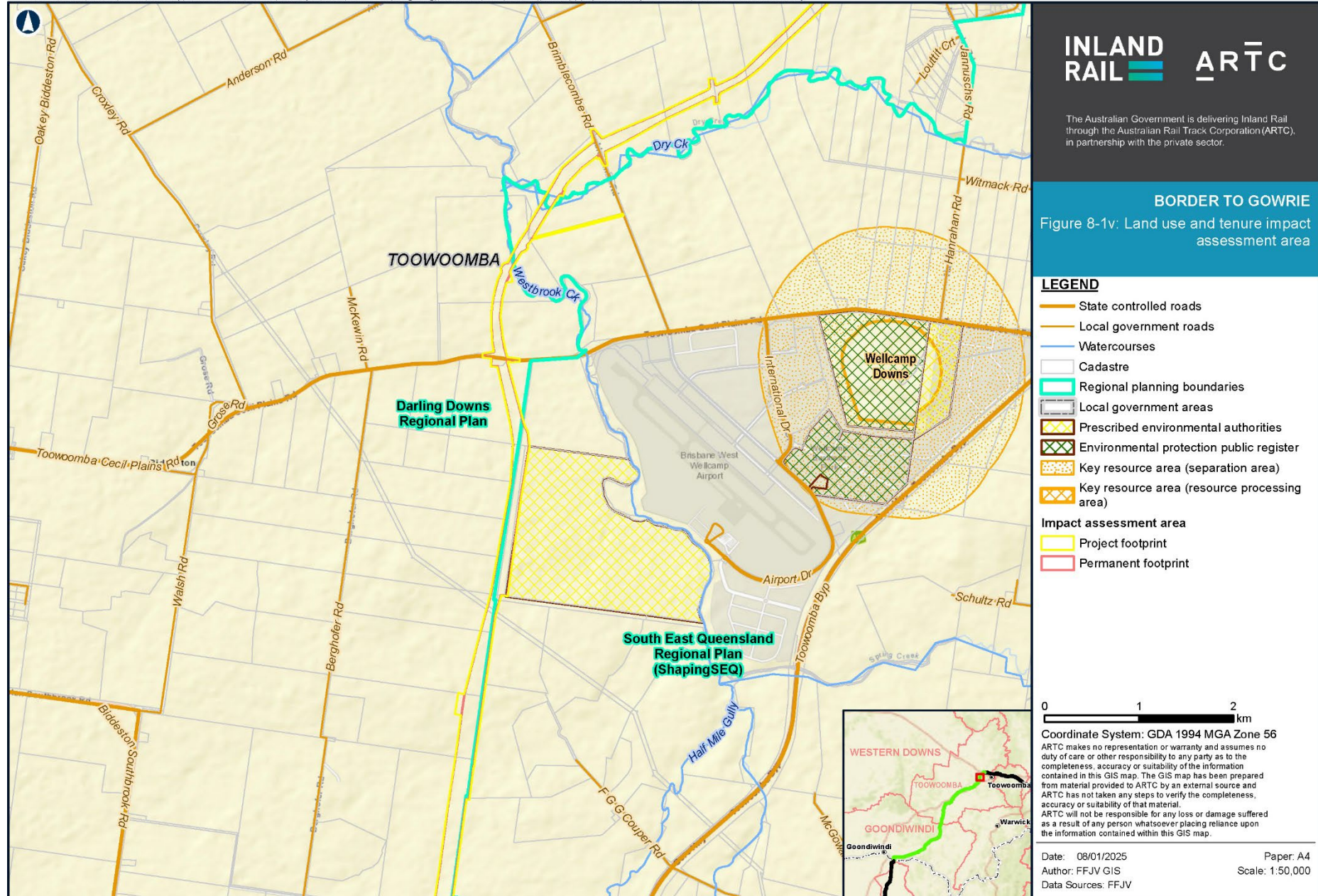


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

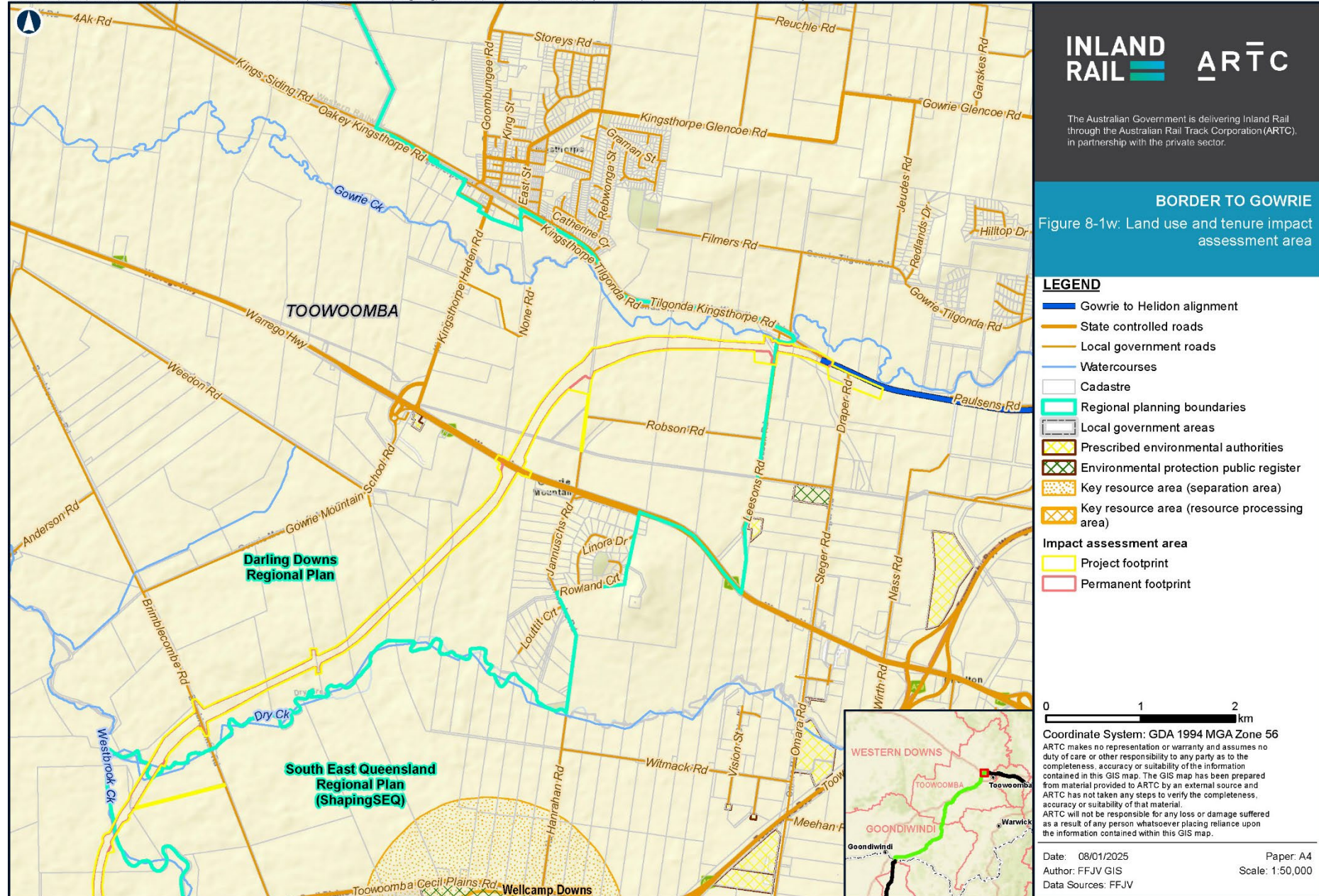


Map by: LUC\B\CB\FC\K\G\TM\AWS Z\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-1_Impact_AreaA4_v9.mxd Date: 15/01/2025 12:01

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



8.3.2 Existing and future land use and tenure

The following tasks were undertaken to understand existing and future land use and tenure within the impact assessment area and, where applicable, the study area:

- ▶ Determination of the impact assessment area and study area, as defined in Section 8.3.1, to clearly define the areas of assessment relating to land use and tenure
- ▶ Identification, review and mapping of the existing tenure through a review of the DoR Digital Cadastre Database (DCDB) mapping and survey adjusted cadastral data, where available
- ▶ A land use assessment (desktop and site verification) to review, identify and map existing land uses, and the approximate distance of the Project activities to these uses, including:
 - ▶ Land uses based on the Queensland Land Use Mapping Program (QLUMP). Verification of these land uses was undertaken by means of a Project footprint site inspection, undertaken on 15 August to 16 August 2018, combined with landowner consultation feedback
 - ▶ Agricultural uses, including land identified by the *Queensland Agricultural Land Audit* (Department of Agriculture and Fisheries (DAF), 2018b) as being important to current and future agricultural production in Queensland, any areas of regionally significant farmland, areas used for cropping, grazing and/or horticulture, stock routes and agricultural infrastructure
 - ▶ Protected and sensitive land uses, including conservation reserves, national parks, State forests, native title and other special interests
 - ▶ Key resource areas (KRAs), exploration and mining leases and licences, petroleum and gas resource interests
 - ▶ Infrastructure, including railways, road reserves, utilities and pipelines
 - ▶ Intermodal terminals
 - ▶ State interests identified in the SPP.
- ▶ Review of key strategic planning and land use planning provisions of the relevant State and local planning instruments to identify the future land use planning intent
- ▶ Identification of current planned development activity and approved development plans over the previous six years, including:
 - ▶ Approved and planned development activity within the Goondiwindi and Toowoomba LGAs (2022)
 - ▶ Coordinated projects declared under the SDPWO Act
 - ▶ NSW Department of Planning and Environment records
 - ▶ Environmental authorities (EAs) for environmentally relevant activities (ERAs) issued under the EP Act
 - ▶ Development projects undertaken by Economic Development Queensland
 - ▶ Declared Priority Development Areas in accordance with the *Economic Development Act 2012* (Qld)
 - ▶ Declared State Development Areas in accordance with the SDPWO Act
 - ▶ Private infrastructure facilities in accordance with the SDPWO Act
 - ▶ *Infrastructure Australia Infrastructure Priority List* (2023) and *2021 Australian Infrastructure Plan* (Infrastructure Australia, 2021a)
 - ▶ *State Infrastructure Strategy* (DSDILGP, 2022a)
 - ▶ *Queensland Transport and Roads Investment Program 2023–24 to 2026–27* (DTMR, 2022a)
 - ▶ Queensland regional projects under the Queensland Government *Building our Regions Infrastructure Program* (DSDILGP, 2021d) and *Transport Infrastructure Development Scheme Policy* (DTMR, 2022b).
 - ▶ Infrastructure designations in accordance with the Planning Act.
- ▶ Review of landowner and community consultation data to understand their feedback on the potential land use impacts and issues associated with the Project
- ▶ Consultation with relevant State agencies, as well as GRC and TRC in relation to proposed new developments
- ▶ Consultation with utility infrastructure providers including APA, Energy Queensland (Ergon), Essential Energy, GRC, Millmerran Operating Co., Nextgen, Powerlink, Santos, Telstra, TRC and TPG/Powertel/AAPT
- ▶ Assessment of potential impacts to land use and tenure, including an assessment of the Project's consistency with the relevant future land use planning intent
- ▶ Identification of opportunities for the Project to support future industry development
- ▶ Feedback on the findings of this assessment into the revised reference design to ensure relevant matters are addressed in the design of the Project, where possible
- ▶ Identification of mitigation measures to minimise impacts to land use and tenure.

The assessment of potential impacts to land use and tenure has been undertaken using the methodology detailed in Section 8.3.3 and illustrated in Figure 8-2.

8.3.3 Impact assessment methodology

A compliance assessment method has been adopted for the assessment of land use and tenure impacts. The approach involved determining the consistency of the Project with land use and planning instruments and other requirements relevant to the study area.

The compliance assessment recognises the inclusion of mitigation measures in the development of the revised reference design (Section 8.6.1), in addition to identifying mitigation and management measures for future stages of the Project (Section 8.6.2). These additional mitigation and management measures have been identified to:

- ▶ Achieve compliance with the adopted performance criteria, if required
- ▶ Demonstrate ARTC's commitment to avoiding or minimising potential impacts, as far as is reasonably practicable.

Figure 8-2 illustrates the compliance assessment methodology for land use and tenure. The outcomes of the compliance assessment are provided in Section 8.6.3. Chapter 4: Assessment Methodology details the impact assessment methodologies used in the revised draft EIS.

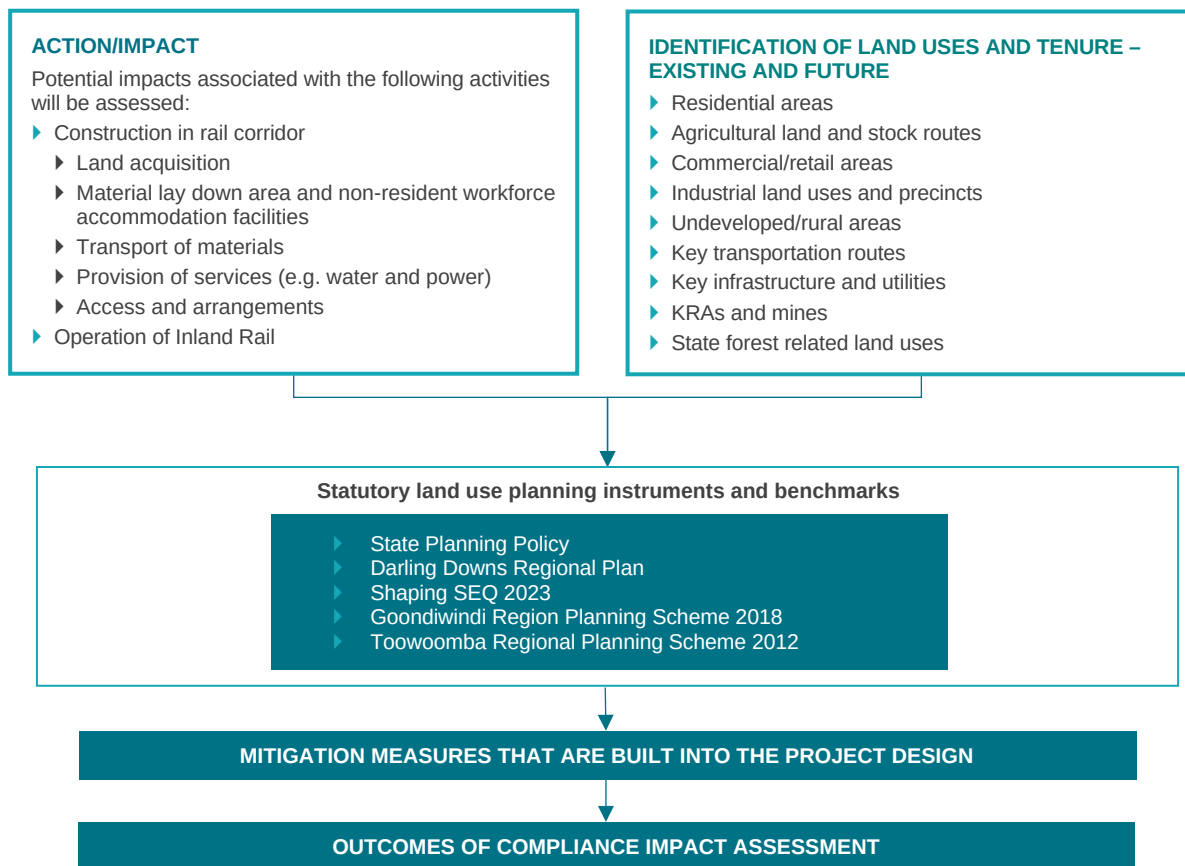


FIGURE 8-2 LAND USE AND TENURE COMPLIANCE IMPACT ASSESSMENT METHODOLOGY

8.3.4 Data sources

This section details the desktop analysis undertaken to identify existing land uses, and constraints related to land use and tenure. Details of the relevant database sources and types of information considered for the desktop study are summarised in Table 8-2.

TABLE 8-2 DATABASE AND DOCUMENT REVIEW SUMMARY

Database/data source name	
Queensland globe data layers (accessed November 2023) from online database: gldglobe.information.qld.gov.au	
Boundaries	Imagery and base maps
▶ Local government ▶ Locality	▶ Imagery
Economy (accessed 30 March 2023)	Planning cadastre
▶ Exploration permits ▶ Coal ▶ Geothermal ▶ Greenhouse gas ▶ Mineral ▶ Mineral development licence ▶ Petroleum ▶ Potential commercial area ▶ Infrastructure permits ▶ Petroleum facilities licences ▶ Petroleum pipeline licence areas ▶ Petroleum pipeline licence centrelines ▶ Production permits ▶ Geothermal leases ▶ Greenhouse leases ▶ Mining claims ▶ Mining leases ▶ Petroleum leases ▶ Resources ▶ Coal resources – Coal resource boundary – Coal resource area ▶ KRA – KRA transport route – KRA haulage corridor – KRA transport route separation area – KRA resource/processing area – KRA separation area	▶ Coordinated projects—the Coordinator-General ▶ Land parcel tenure ▶ Land parcels¹ ▶ Land parcel ▶ Land parcel label ▶ Natural boundary ▶ Rights and interests – Easement parcel – Strata parcel – Volumetric parcel ▶ Road parcel ▶ Priority Development Areas ▶ Land use ▶ Lease and reserve parcel ▶ Regional planning ▶ Regional planning boundaries ▶ South East Queensland Regional Plan—ShapingSEQ 2023 ▶ State development areas
Environment	Society
▶ Parks ▶ Special Management Areas (scientific areas according to the Forestry Act) ▶ State forests under the Forestry Act	▶ National Native Title Tribunal ▶ Registered native title bodies corporate ▶ Future act determination applications ▶ Future act objections ▶ Future act notices current ▶ Native title determinations ▶ Native title determination outcomes ▶ Register of native title claims ▶ Schedule of native title determination applications ▶ Representative Aboriginal and Torres Strait Islander Body areas
Farming	Transportation
▶ Agricultural land audit ▶ Current agriculture – Aquaculture – Cattle feedlot – Forestry plantations – Land based aquaculture – Piggeries – Poultry farms ▶ Region boundary ▶ Sown pasture ▶ SPP and regional interests ▶ Stock routes ▶ Stock routes ▶ Stock route reserves ▶ Water facility	▶ Airports and heliports ▶ Ports ▶ Railway line ▶ Railway stops ▶ Regulated air services ▶ Road

Database/data source name

Utilities (data obtained from utility owners)

APA	Geographical information systems (GIS) files
▶ Utility data	
▶ Pipelines	
Energex electrical network spatial data	Esri Shapefile
Ergon Energy utility network	Esri Shapefile
Goondiwindi Regional Council	GIS files
▶ Underground services; water, stormwater, wastewater	
▶ Roads	
NBN GIS data	GIS files
New Acland Coal – New Hope Group	DWG files
Optus utility network information	GIS files
Santos pipeline alignments	MapInfo TAB
Seqwater infrastructure	GIS files
Telstra geographic data	DXF format
Toowoomba Regional Council	GIS files
▶ Communications infrastructure	
▶ Underground services: water, sewer and stormwater	
▶ Roads	

Table note:

1 Referred to as lots throughout the revised draft EIS

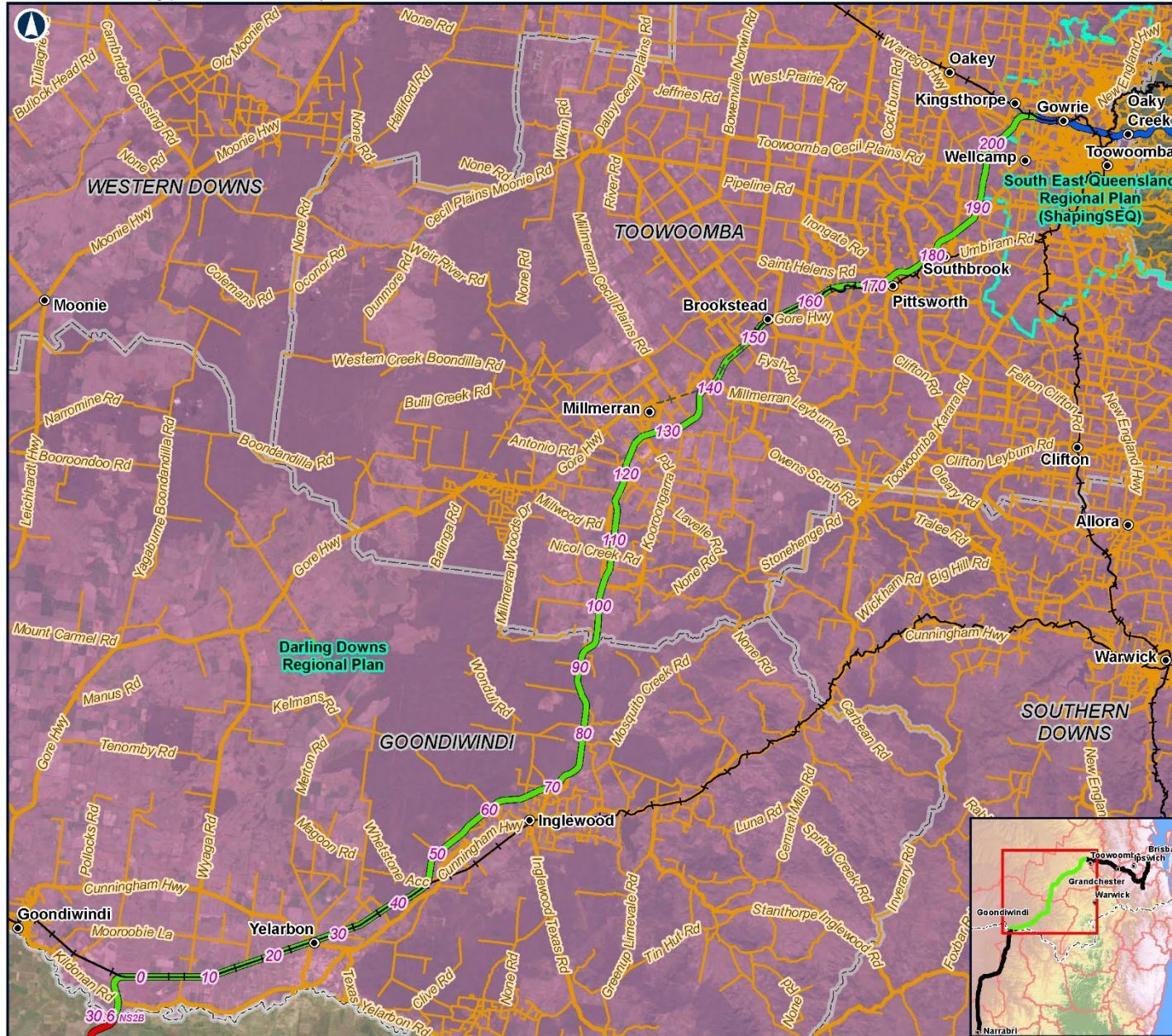
8.4 Existing environment

The entirety of the Project is located within the Darling Downs region. Due to overlapping of Queensland regional areas, 8 km of the Project, between Kingsthorpe and Gowrie, is also located within the South East Queensland region. The Project traverses the LGAs of Goondiwindi and Toowoomba. The Project, in the context of regional planning and local government boundaries, is shown on Figure 8-3.

The Project extends for approximately 217.48 km, from the New South Wales (NSW)/Queensland (QLD) border approximately 18 km to the southeast of Goondiwindi near Kurumbul, through to Gowrie Junction, northwest of Toowoomba.

Existing land use and tenure, future land use intent, and development activity within the study area and impact assessment area are outlined in the following sections.

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE
Figure 8-3: Regional planning and Local Government Area boundaries

LEGEND

- 5 Chainage (km)
- Localities
- North Star to NSW/QLD border alignment
- Border to Gowrie alignment
- Gowrie to Helidon alignment
- Existing rail (operational)
- Existing rail (non-operational)
- State controlled roads
- Local government roads
- NSW/QLD border
- Local Government Area boundary
- Regional planning boundaries
- Darling Downs
- South East Queensland

0 20 40 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:800,000

Map by: KG/TM/AWS Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-3_Regional_planning_and_LGA_v4.mxd Date: 8/01/2025 09:28

8.4.1 Existing land use

8.4.1.1 Overview of existing land use

The study area is generally characterised by agriculture, grazing, mining, industry, transport (road and rail corridors) and Toowoomba Wellcamp Airport land uses, having been subject to clearing and land disturbance.

The most prominent land use is grazing land. The next most common land uses are also predominately of an agricultural nature, including cropping and irrigated cropping. Other land uses include land classified as 'other minimal use' (including areas of land under residual native vegetation cover or land reserved for stock routes), production forestry, and irrigated cropping. Land use as mapped by QLUMP is shown on Figure 8-4.

The following sections provide a summary of the land uses within geographical areas along the Project. They provide a summary of the typical land uses, prominent land uses, and any land use features identified in the SPP (e.g. KRAs). These geographical areas are:

- ▶ NSW/QLD Border to Whetstone (Chainage (Ch) 30.6 km (North Star to Border (NS2B) section of the Inland Rail to Ch 44.5 km) (refer Table 8-3)
- ▶ Whetstone to Millmerran (Ch 44.5 to Ch 140.0 km) (refer Table 8-4)
- ▶ Millmerran to Yarranlea (Ch 140.0 km to Ch 154.65 km) (refer Table 8-5)
- ▶ Yarranlea to Gowrie Junction (Ch 154.65 km to Ch 202.22 km) (refer Table 8-6).

NSW/QLD Border to Whetstone (Ch 30.6 km (NS2B) to Ch 44.5 km)

Starting at the NSW/QLD border (Ch 30.6 km (NS2B)), the Project traverses primarily grazing and cropping land uses for approximately 7 km northwards before joining the existing QR South Western Line rail corridor. The Project also traverses along the eastern boundary of Rainbow Reserve, a stock route and bush camping area located adjacent to the Macintyre River.

At Ch 37.0 km (NS2B), the Project continues northeast, utilising the existing rail corridor for approximately 47 km, traversing through the localities of Kurumbul, Yelarbon and the south of the Whetstone locality as well as Whetstone State Forest and grazing native vegetation, cropping and production forestry. The Whetstone State Forest is a defined native forest timber production area, protected under the provisions of the Forestry Act.

At its closest point, the Project is located west of the Kildonan KRA (KRA 120) resource/processing area and west of the southeast corner of the separation area, avoiding land within the separation and resource/processing areas.

The Project traverses through the townships of Kurumbul and Yelarbon. Land uses within these townships consist of rural residential properties, services, infrastructure associated with GrainCorp's Yelarbon operations and the Sapphire Feedlot and the Smithfield Cattle Company.

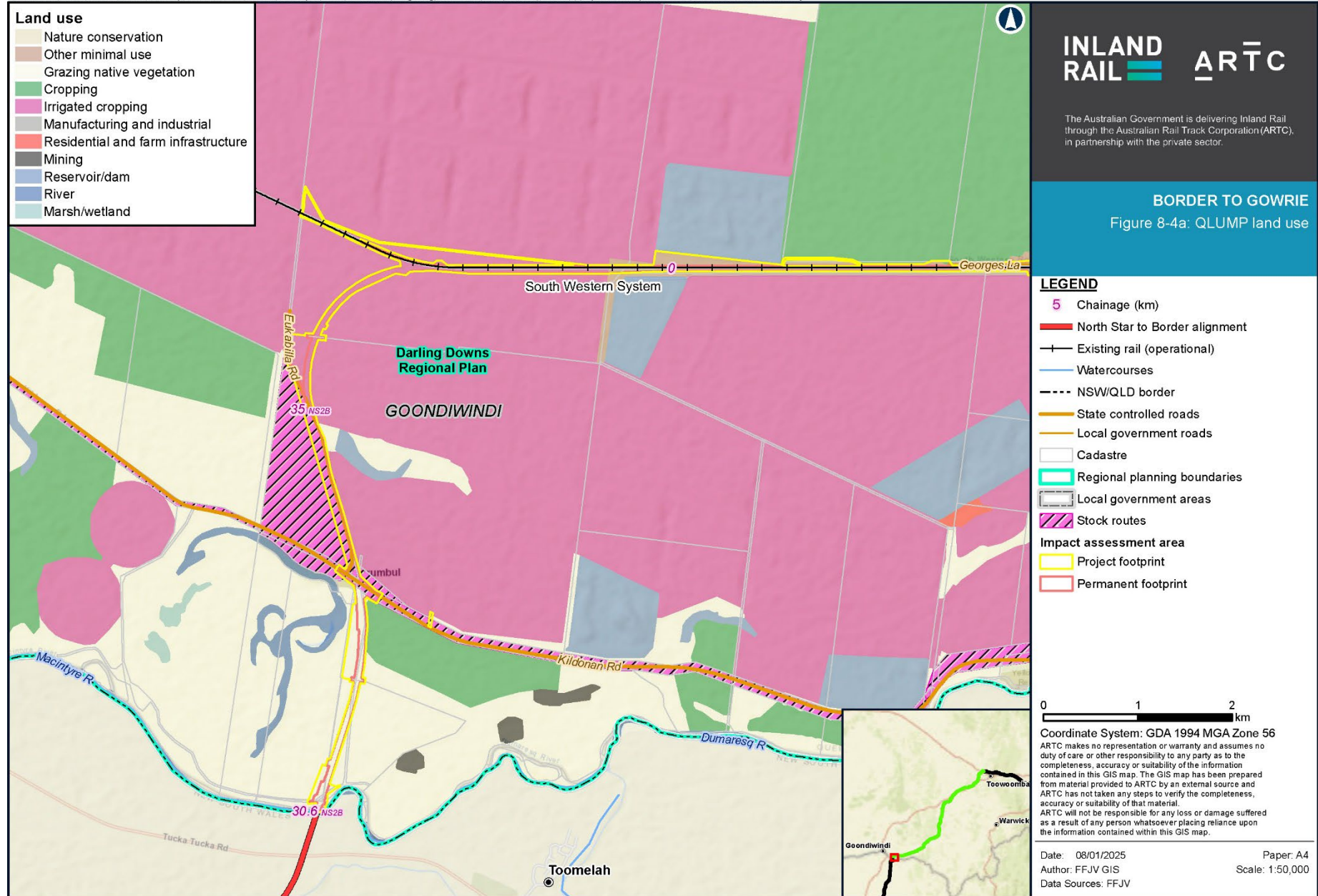
TABLE 8-3 LAND USE—NSW/QLD BORDER TO WHETSTONE (CH 30.6 KM (NS2B) TO CH 44.5 KM)

Locality	Land use ¹ within Project footprint	Land use within the study area	Figure reference
Kurumbul	From the NSW/QLD border to Kurumbul, land use predominately consists of grazing native vegetation and irrigated cropping. The Project traverses along the eastern boundary of Rainbow Reserve, a bush camping area located adjacent to the Macintyre River.	From the NSW/QLD border to Kurumbul, land uses consist of grazing land, with some parcels of irrigated cropping, cropping and mining uses (associated with the Kildonan KRA 120).	Figure 8-4a Figure 8-5a
Kurumbul	The existing QR South Western Line rail corridor is mapped as 'other minimal use' when traversing through Kurumbul. Adjoining the existing rail corridor are land uses including cropping, irrigated cropping and residential.	Land use at Kurumbul predominately consists of irrigated cropping, cropping and intensive animal production (Sapphire Feedlot and Smithfield Cattle Company).	Figure 8-4a–b Figure 8-5a–b
Yelarbon	The existing QR South Western Line rail corridor is mapped as grazing native vegetation when traversing through Yelarbon. The Project traverses mapped stock routes in the Yelarbon locality, immediately east of the township. Adjoining the existing rail corridor is predominately grazing land.	Land use at Yelarbon predominately consists of large parcels of grazing land, with smaller parcels of cropping and irrigated cropping. In the Yelarbon township, land uses include residential and service uses, as well as infrastructure associated with GrainCorp's Yelarbon operations.	Figure 8-4c–d Figure 8-5c–d
Whetstone (southern area)	The existing QR South Western Line rail corridor is mapped as grazing native vegetation, cropping and production forestry (Whetstone State Forest). Adjoining the existing rail corridor is predominately production forestry.	Land use is predominately large parcels of grazing land, with some parcels of cropping and irrigated cropping, and production forestry when traversing through the Whetstone State Forest.	Figure 8-4e–f Figure 8-5e–f

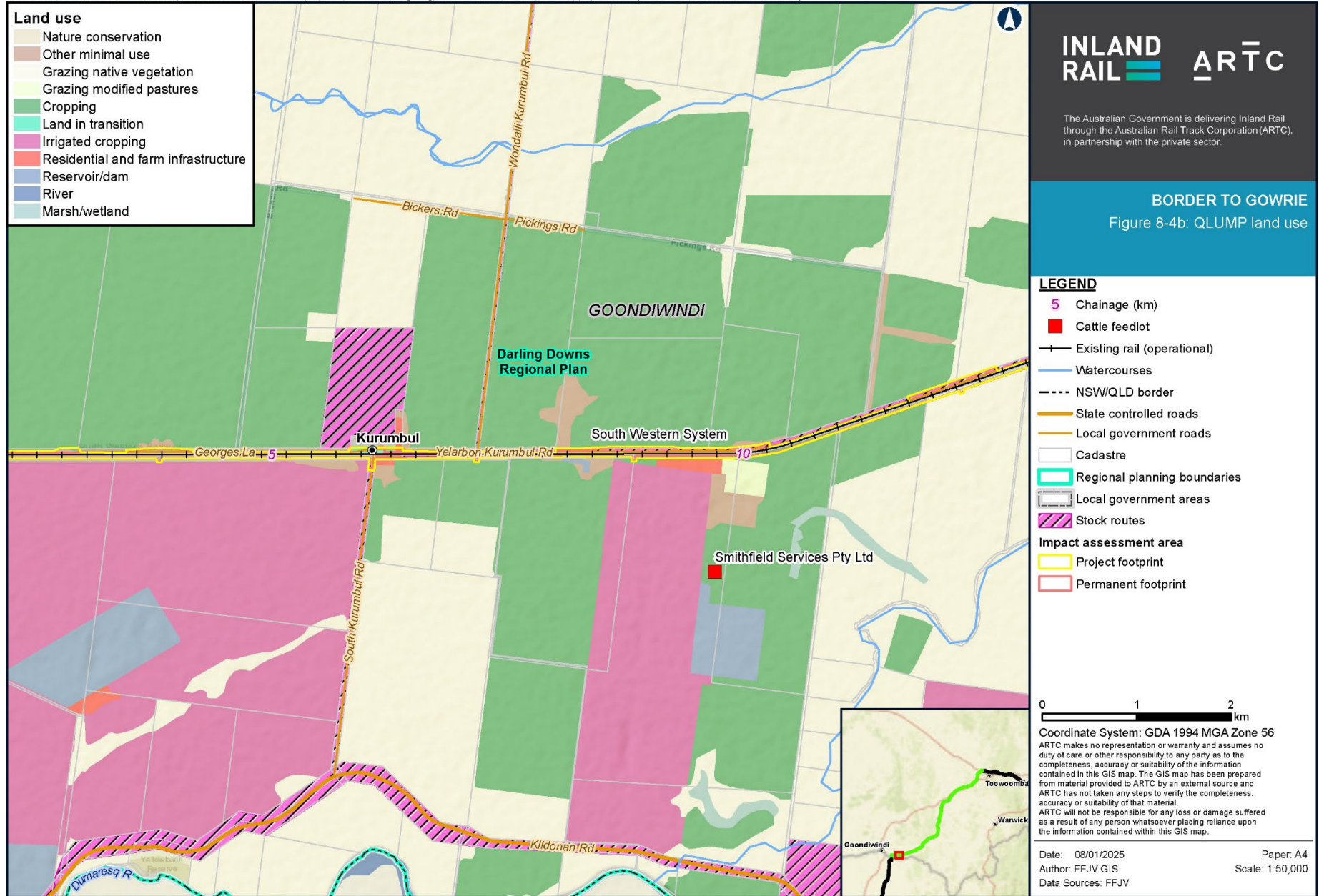
Table note:

1. Land use as per the QLUMP.

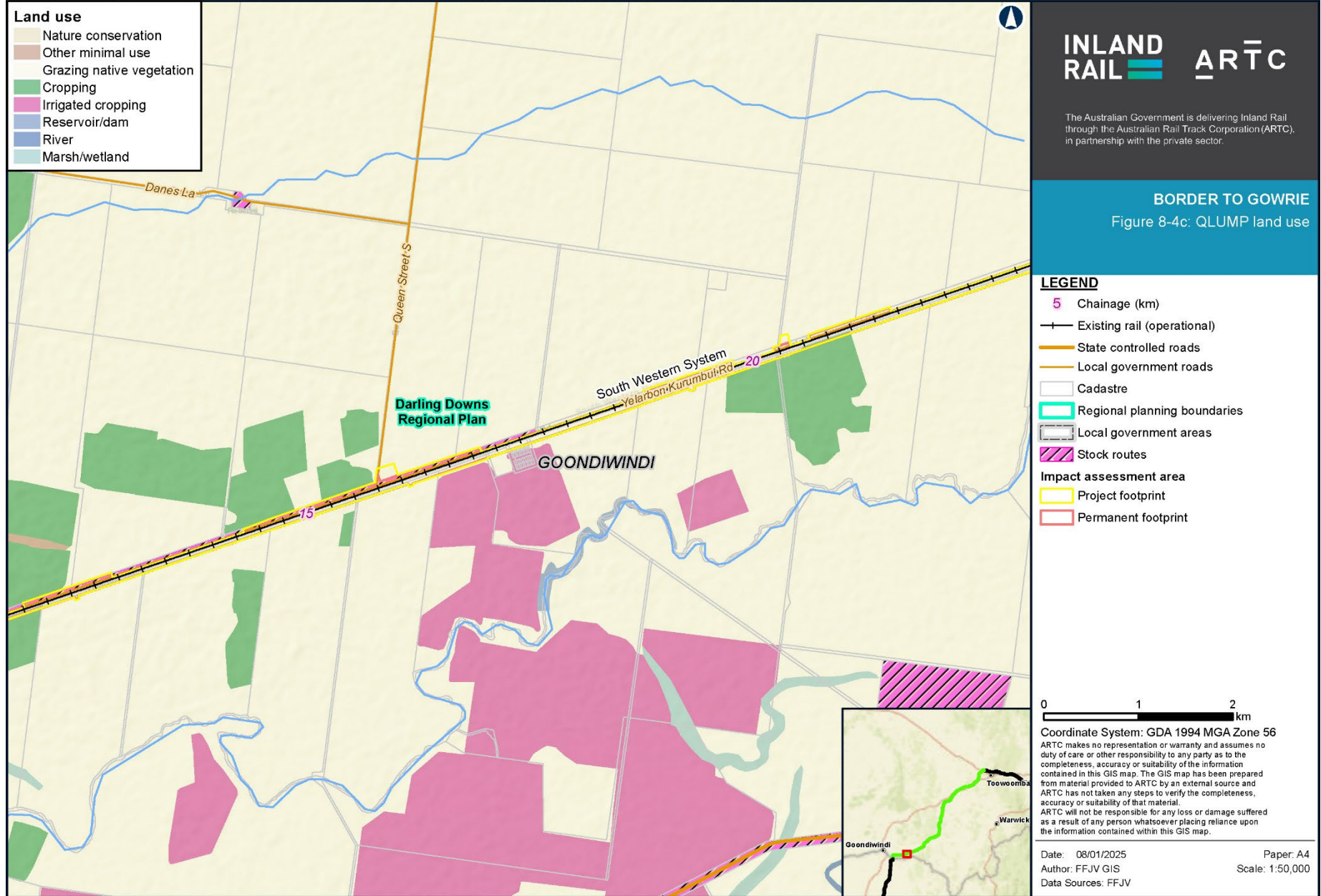
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



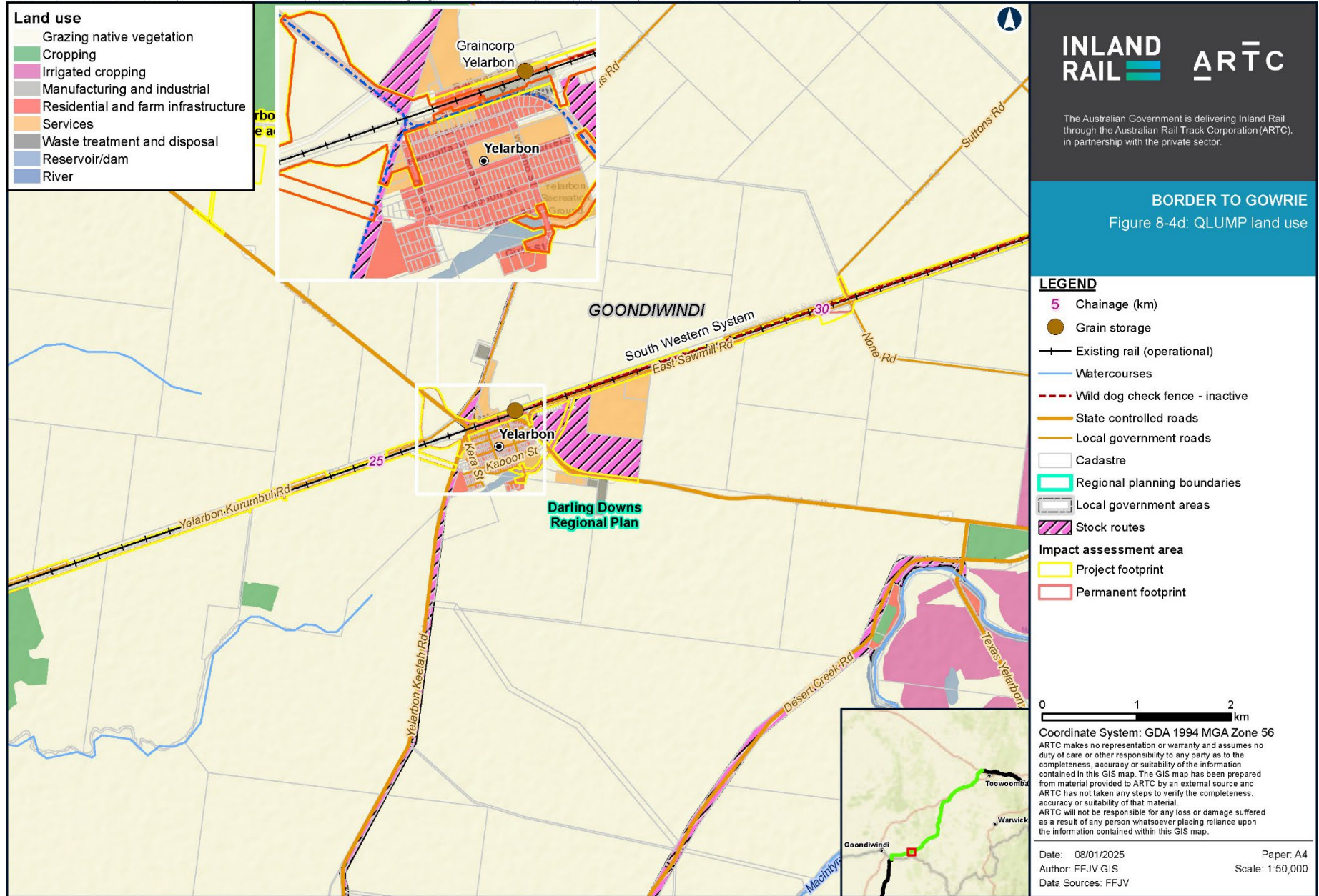
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

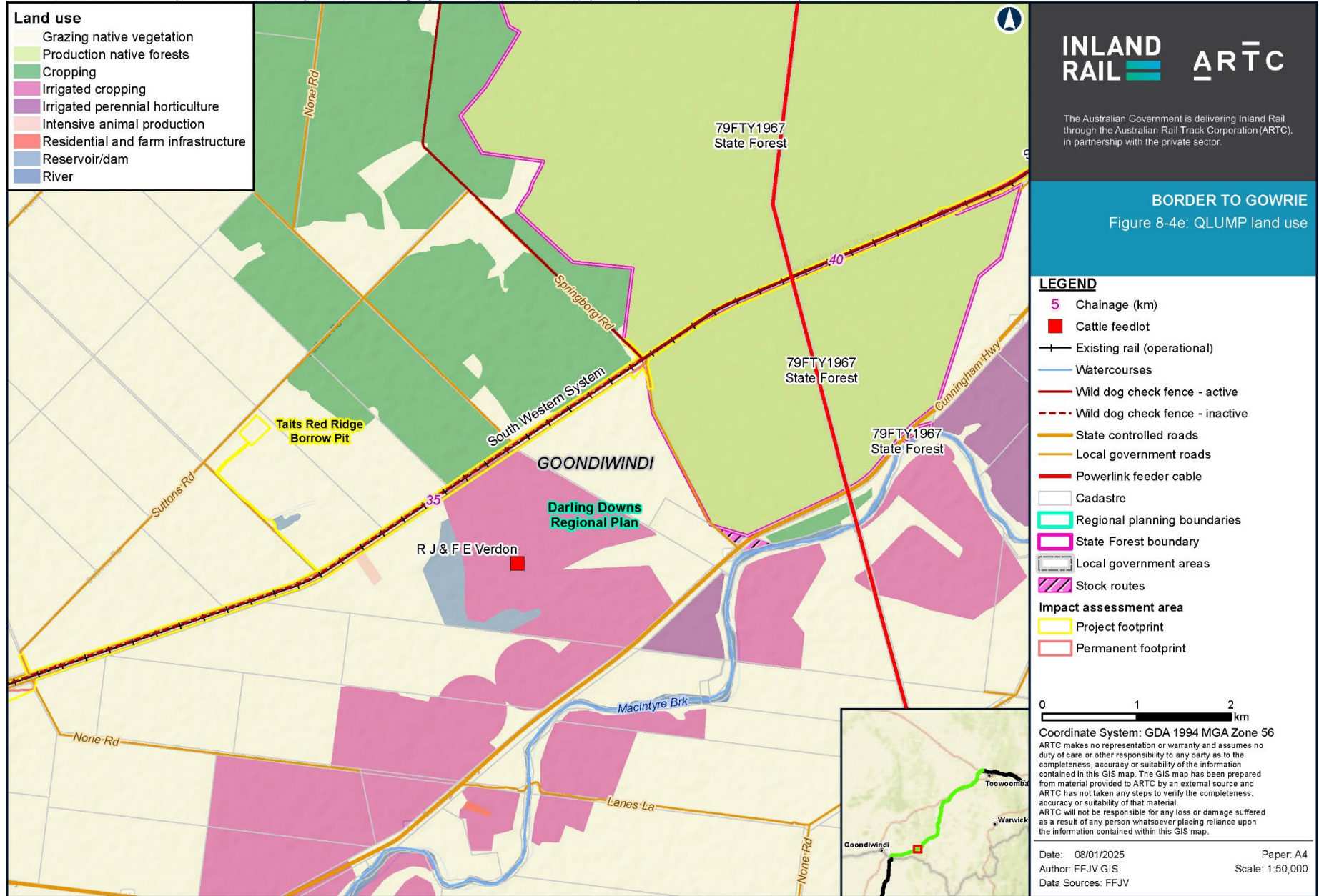


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

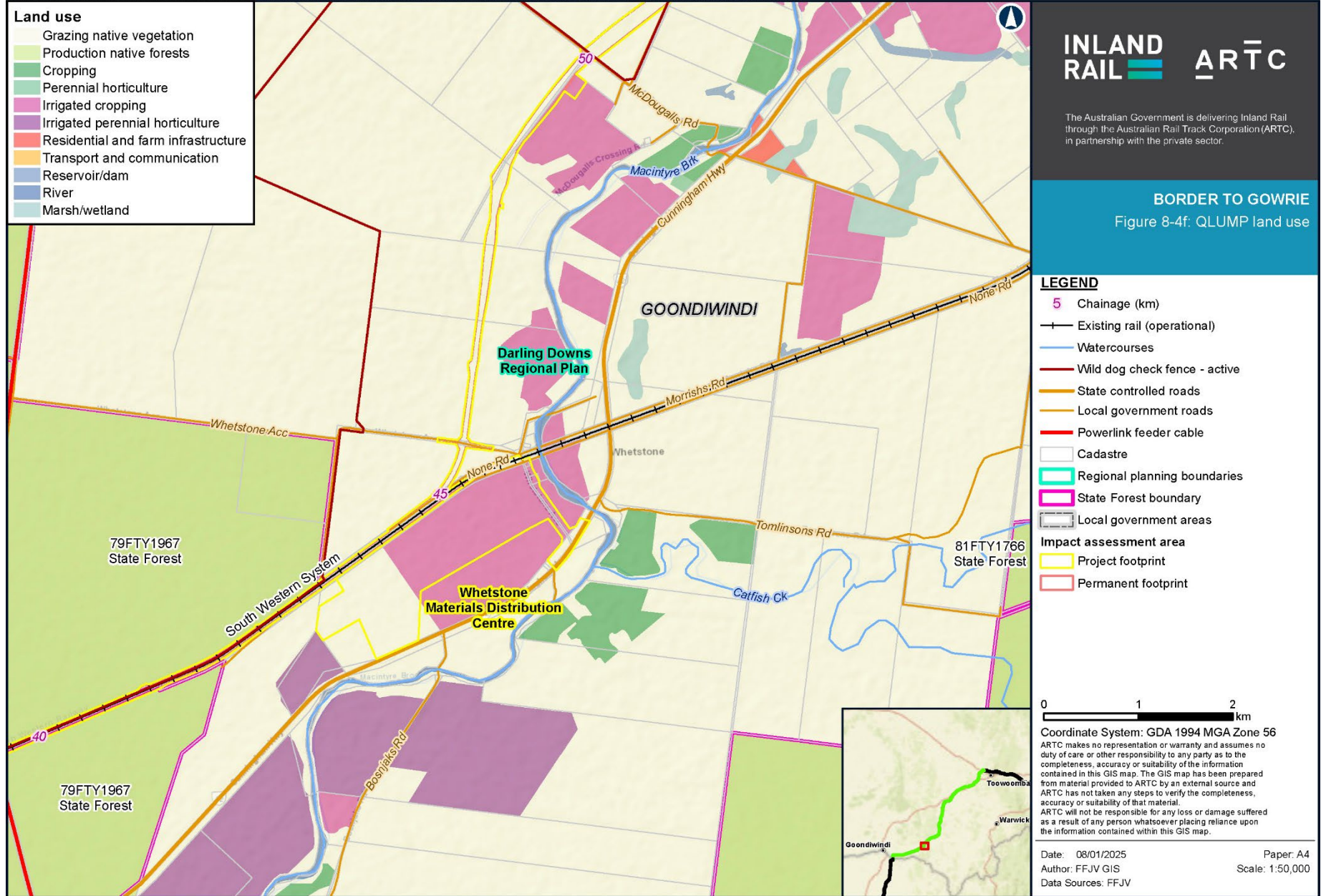


Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-4_QLUMP_land_use_v5_inset1.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

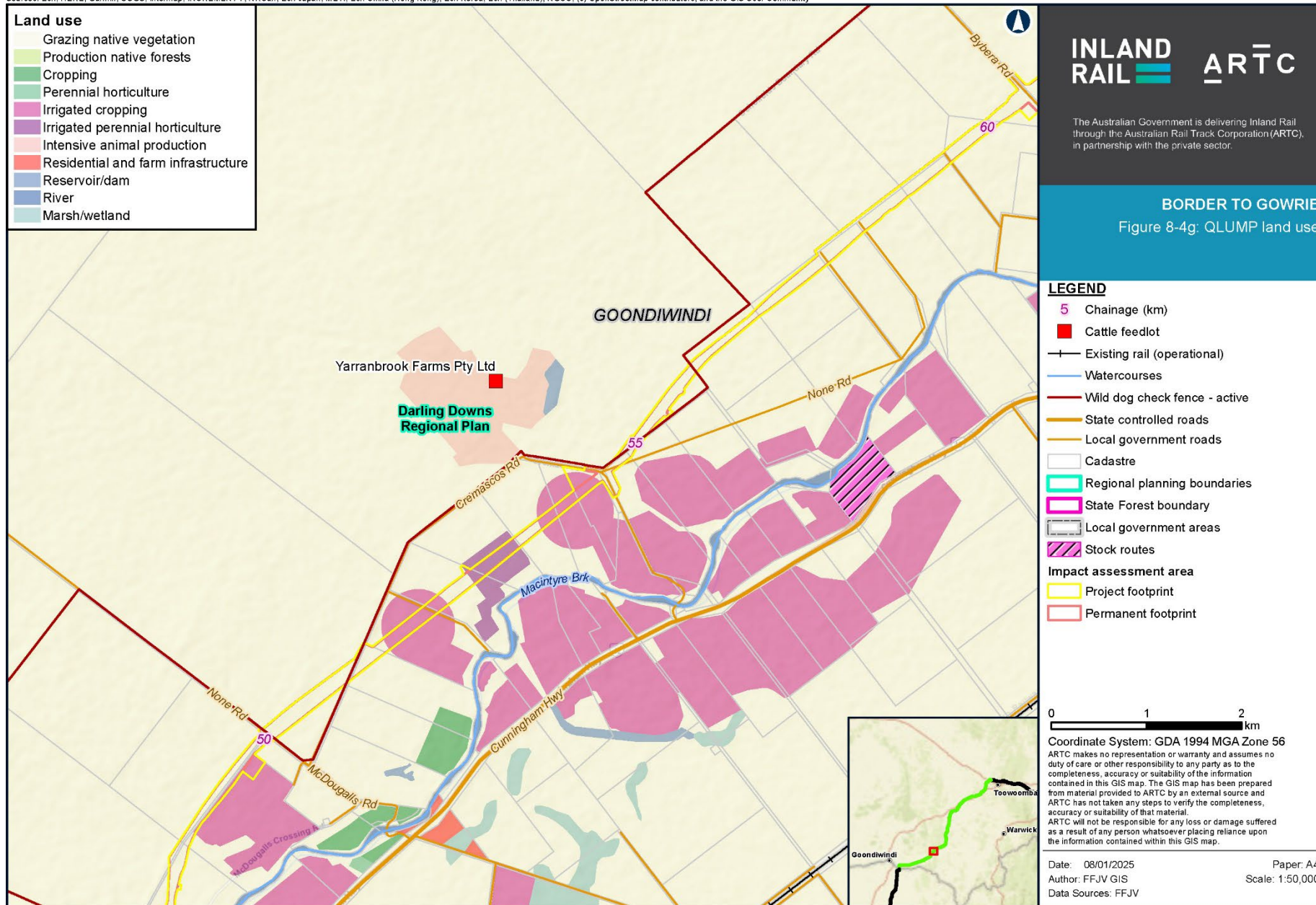


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



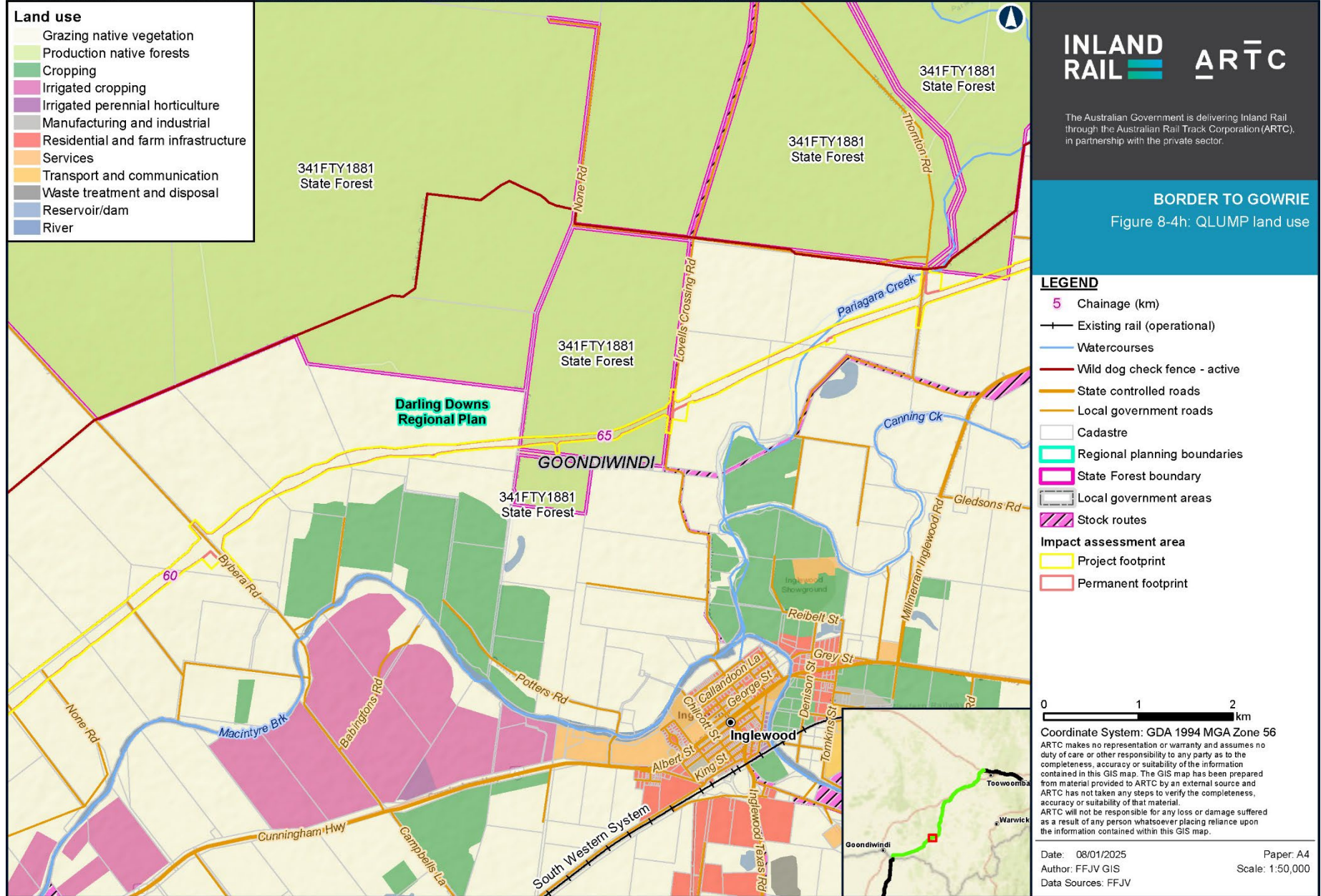
Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-4_QLUMP_land_use_v5.mxd Date: 15/01/2025 12:01

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

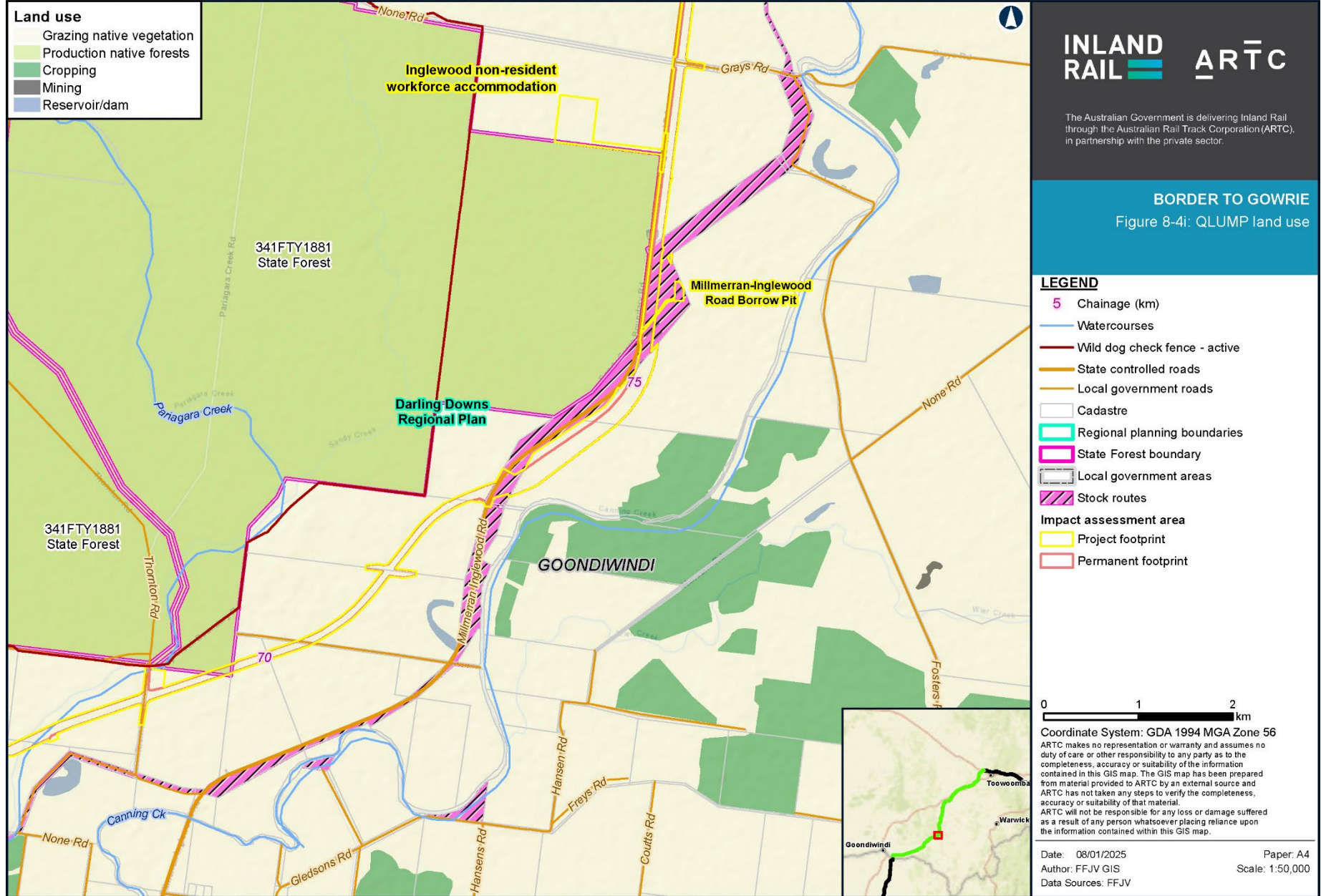


Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-4_QLUMP_land_use_v5.mxd Date: 15/01/2025 12:01

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

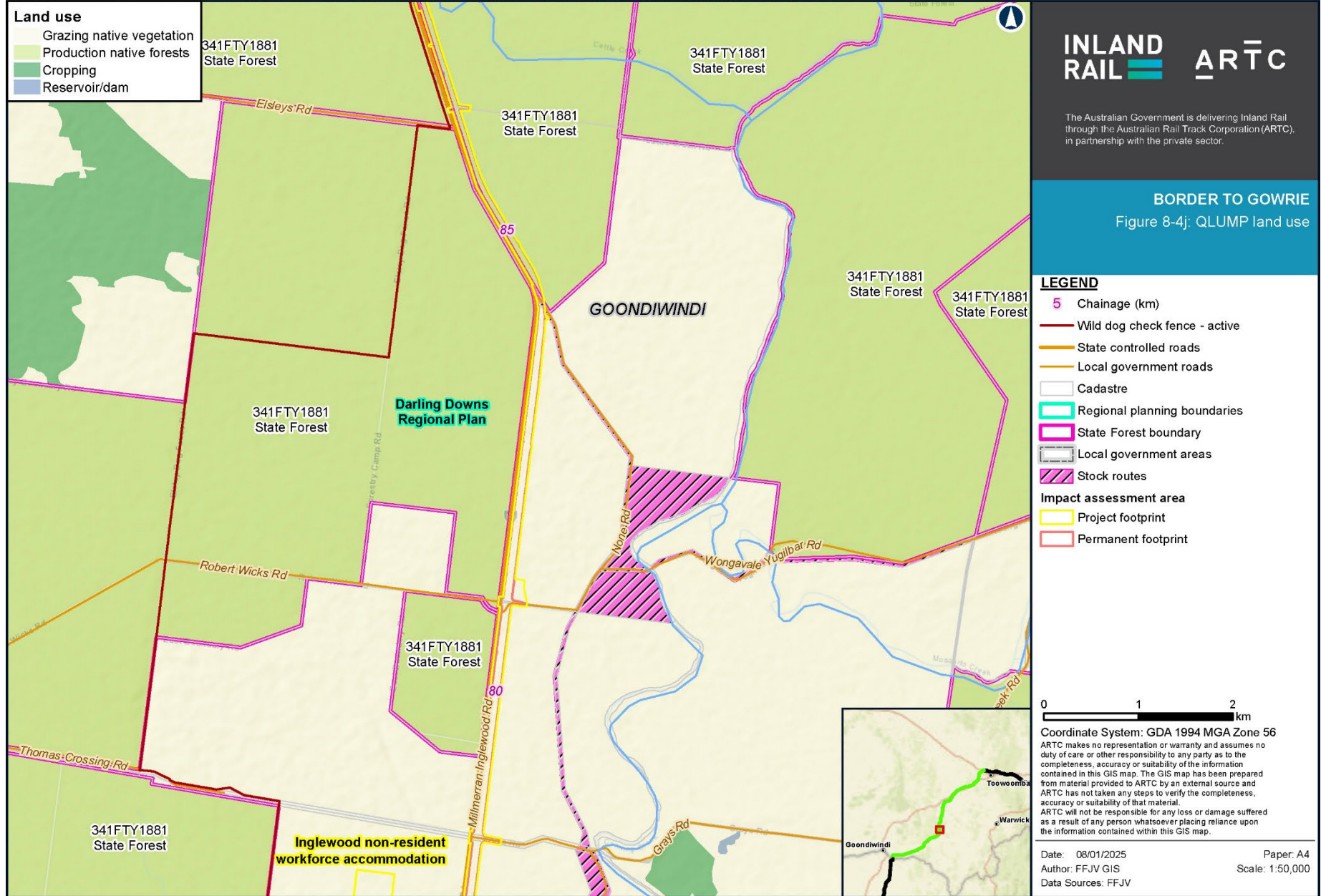


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

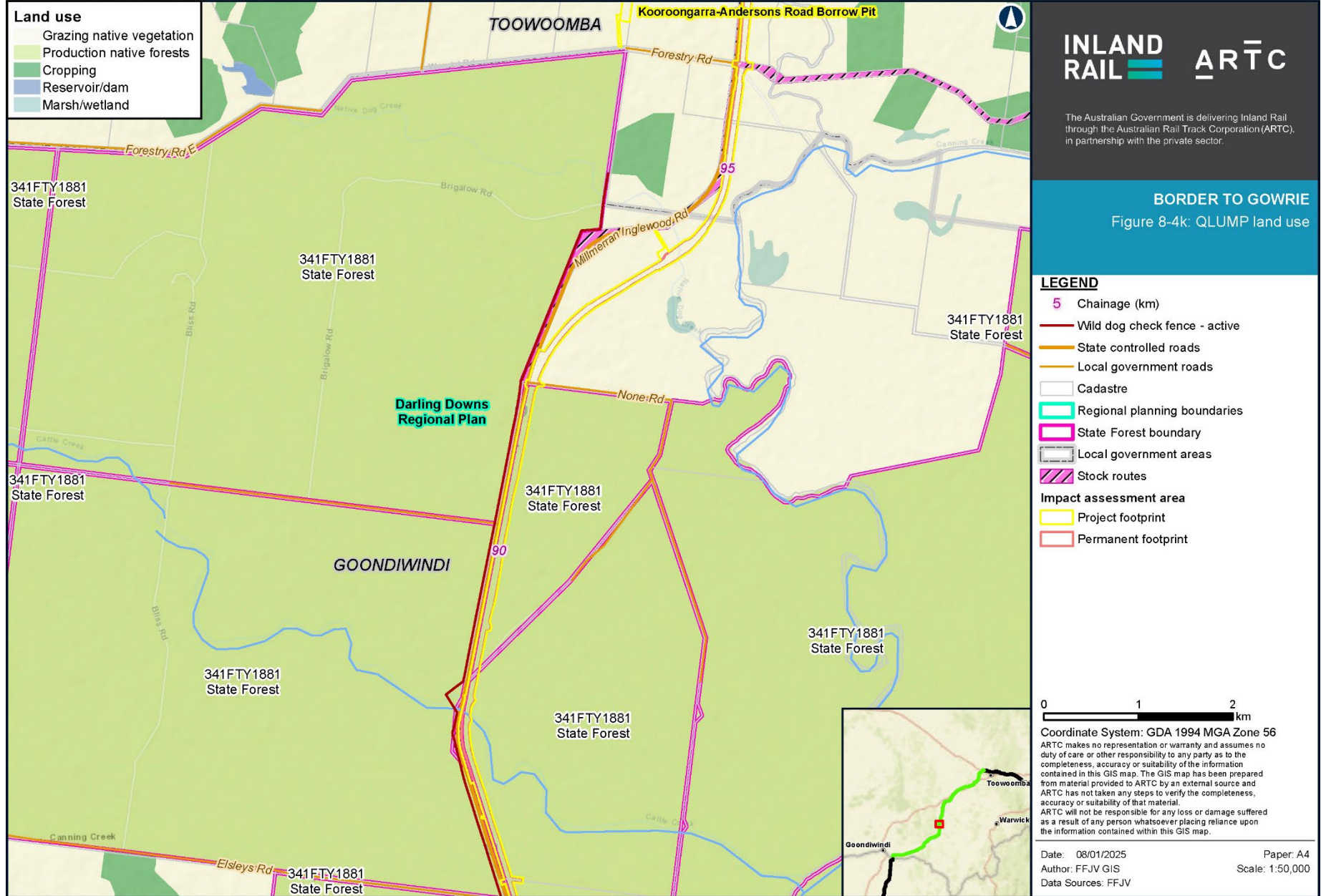


Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-4_QLUMP_land_use_v5.mxd Date: 15/01/2025 12:01

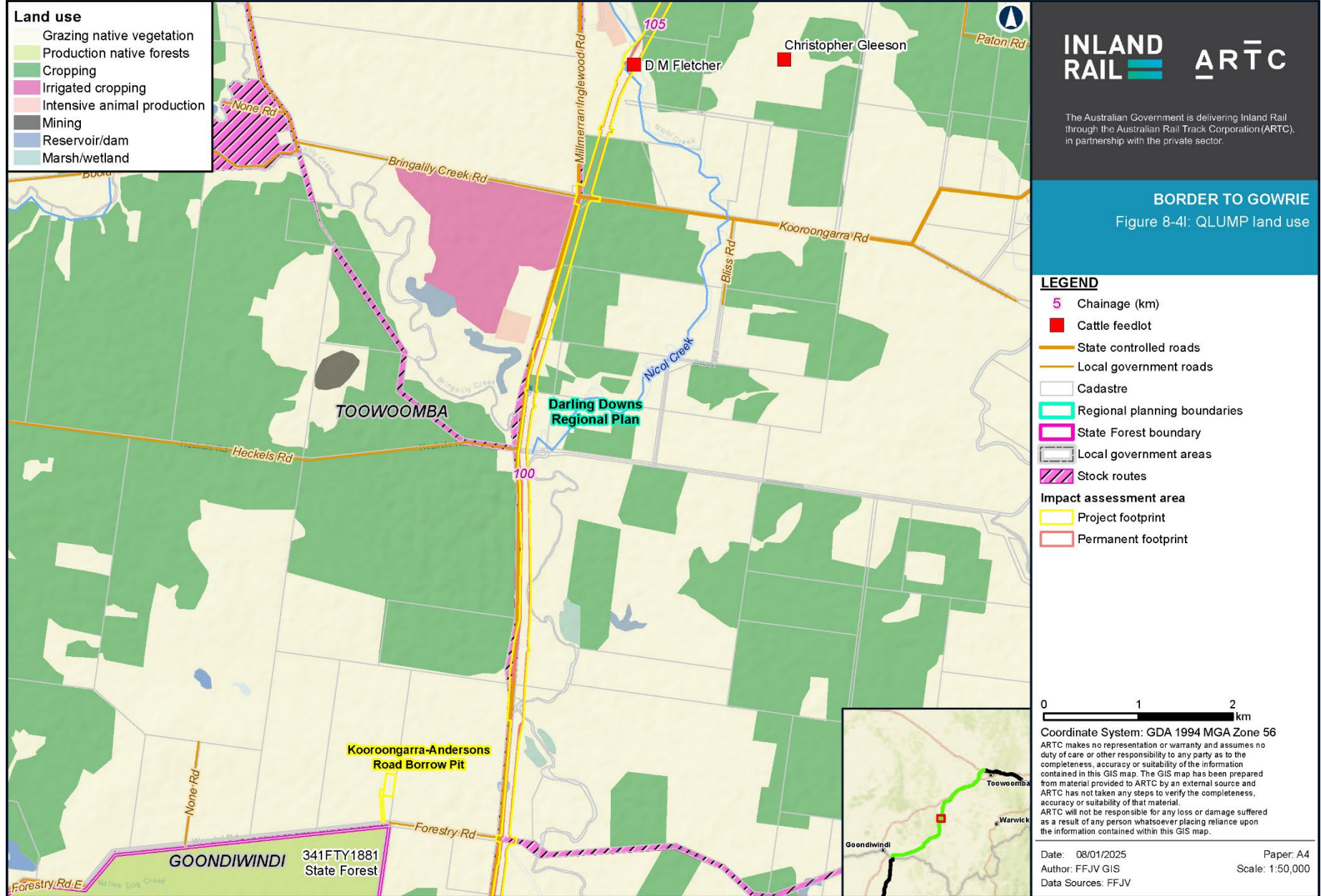
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



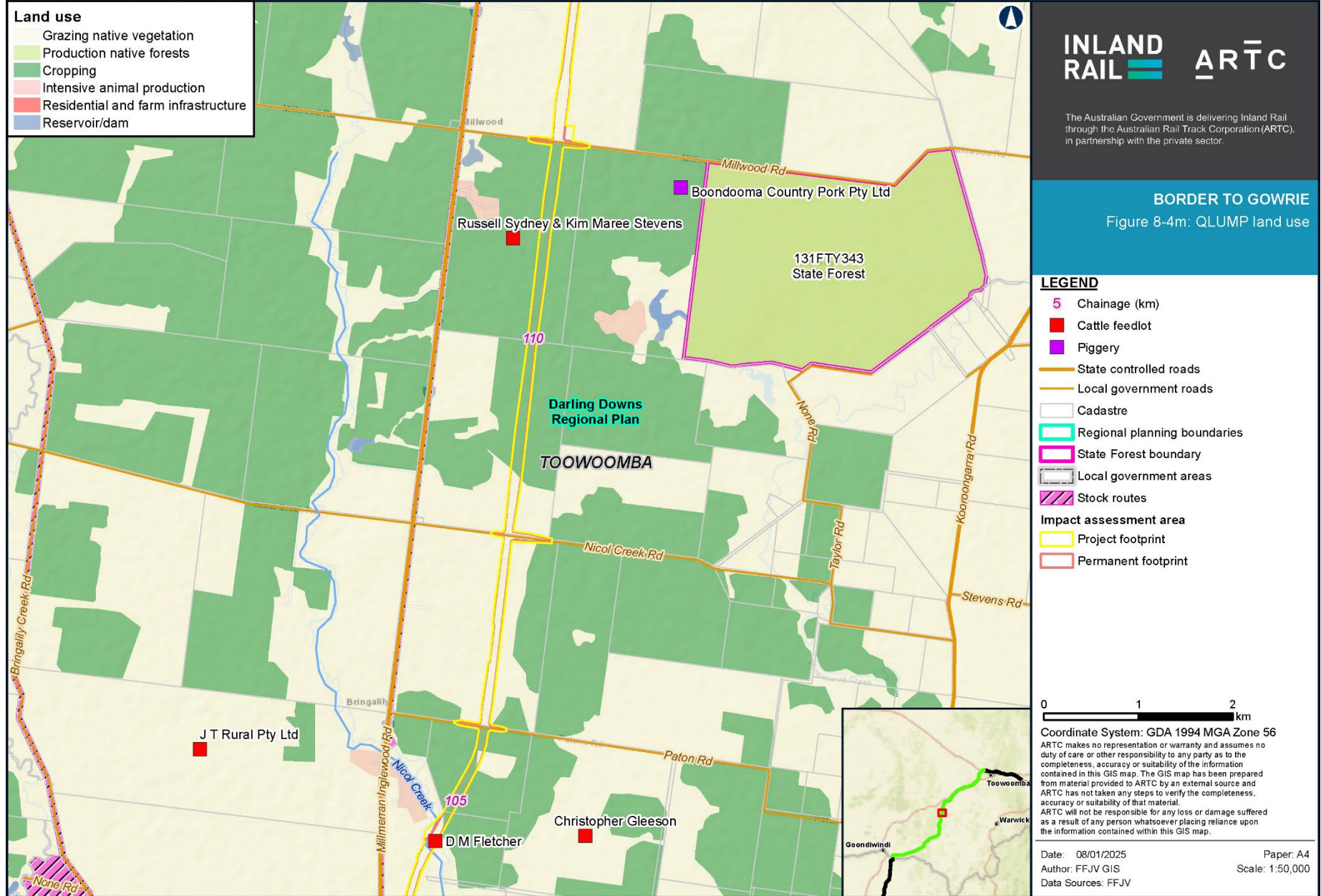
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



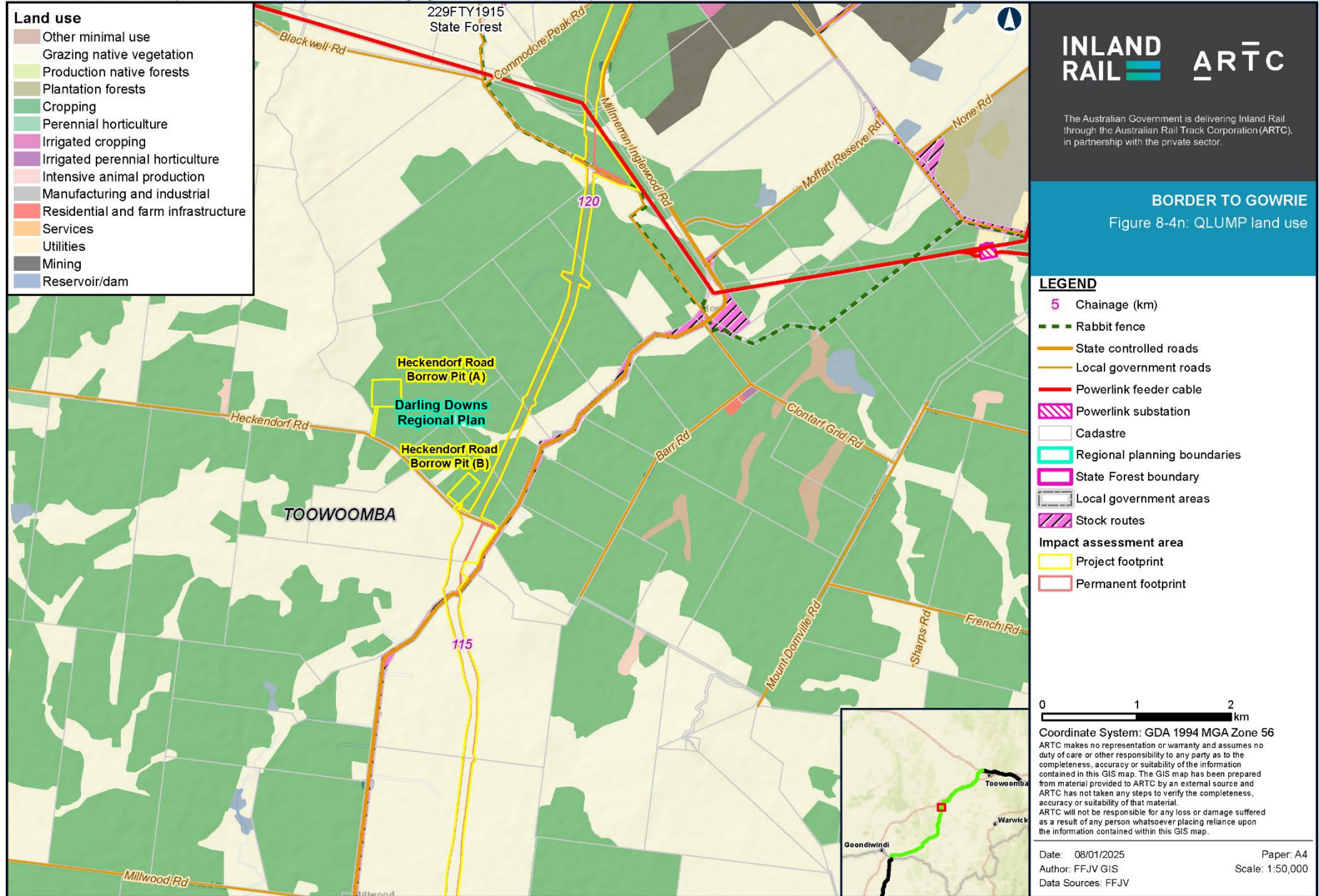
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



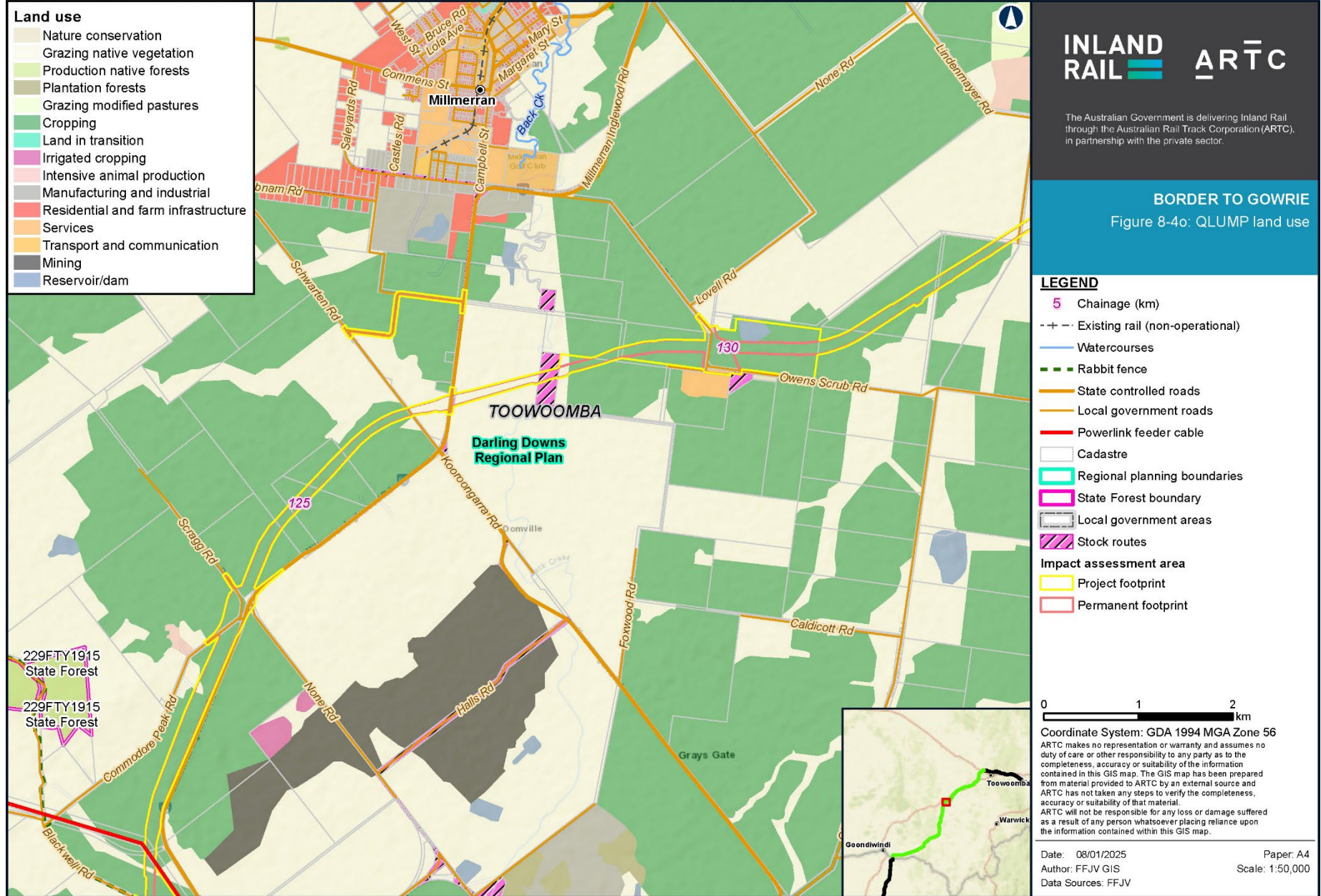
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



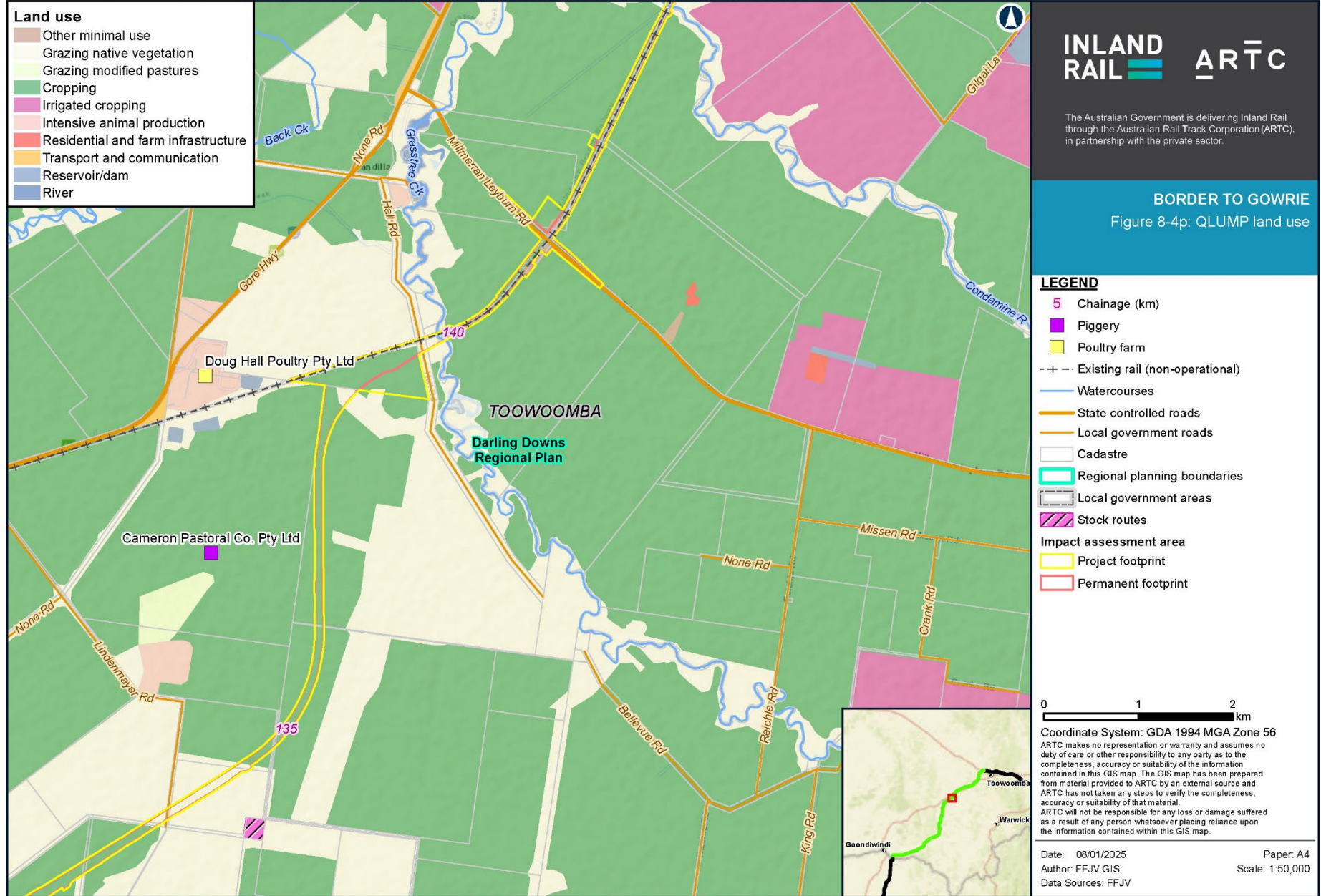
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



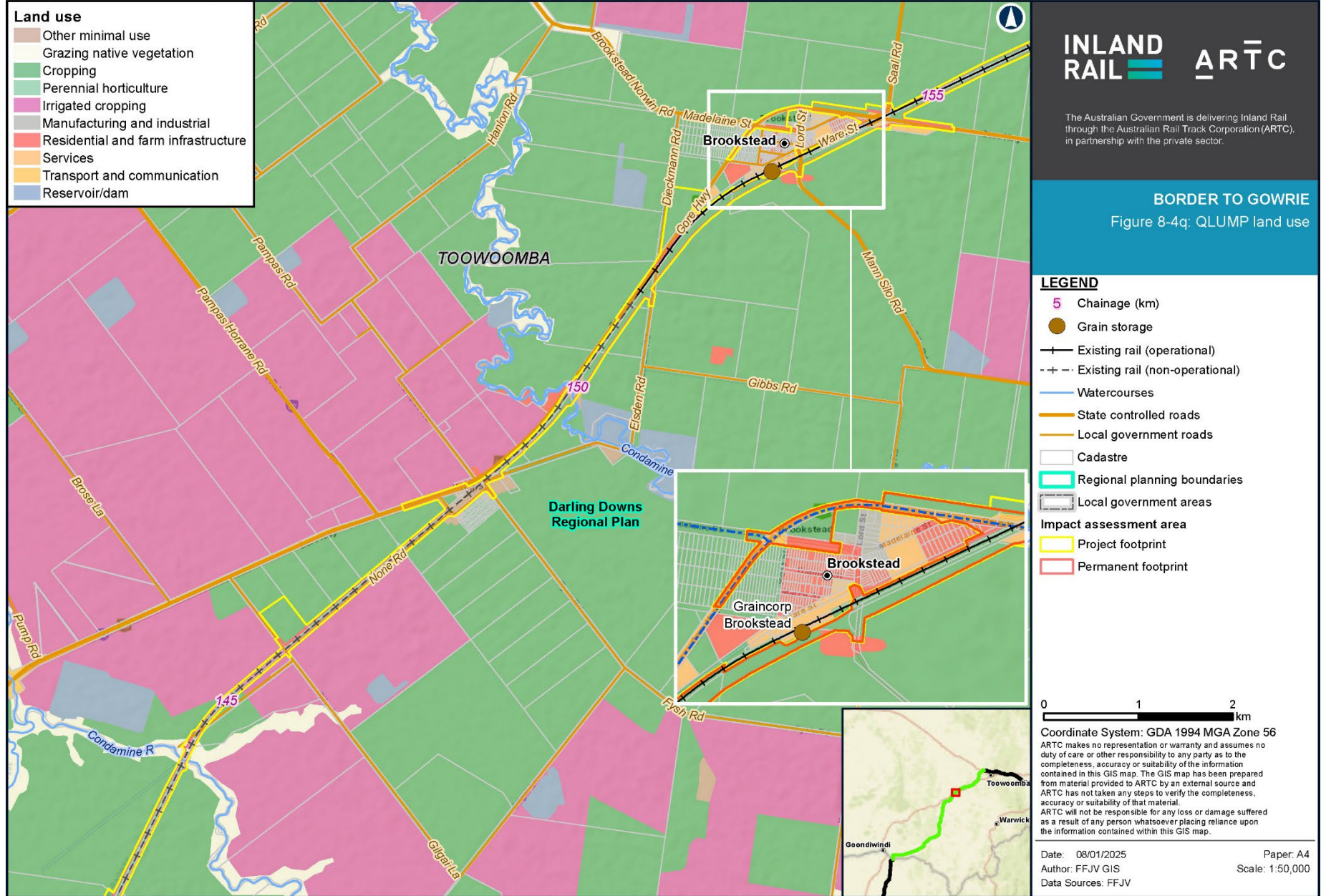
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

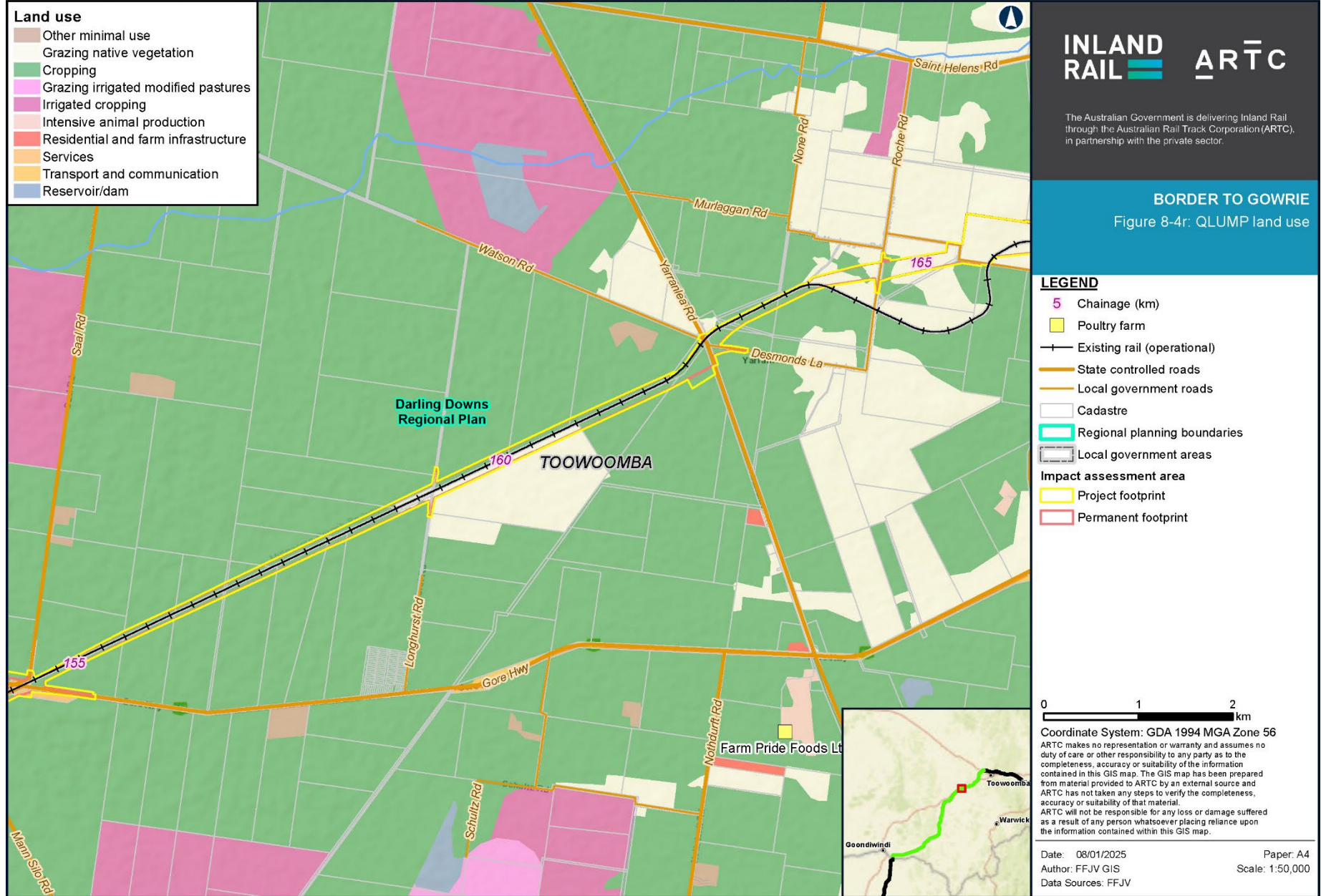


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

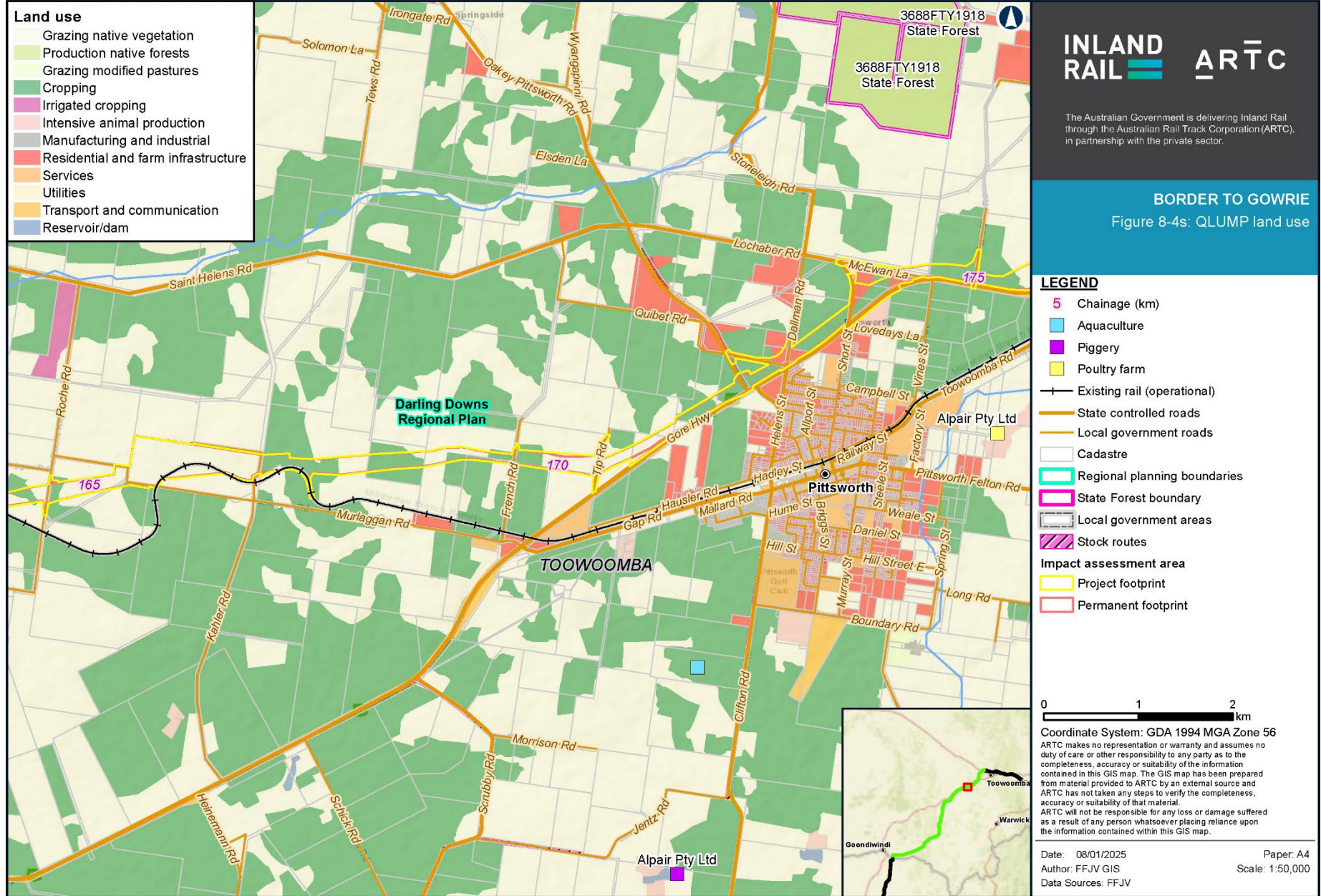


Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\GIS_310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-4_QLUMP_land_use_v5_inset2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

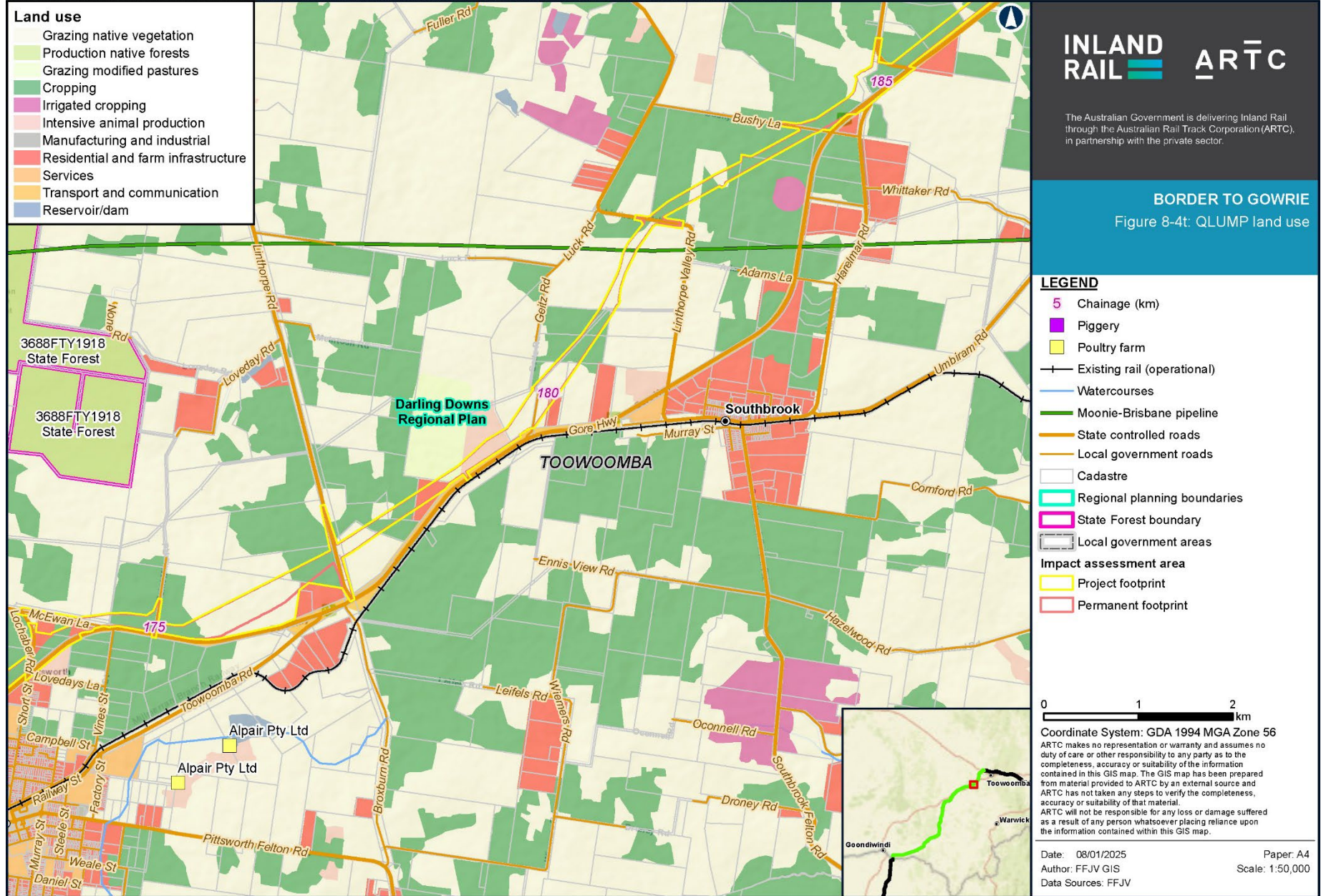


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

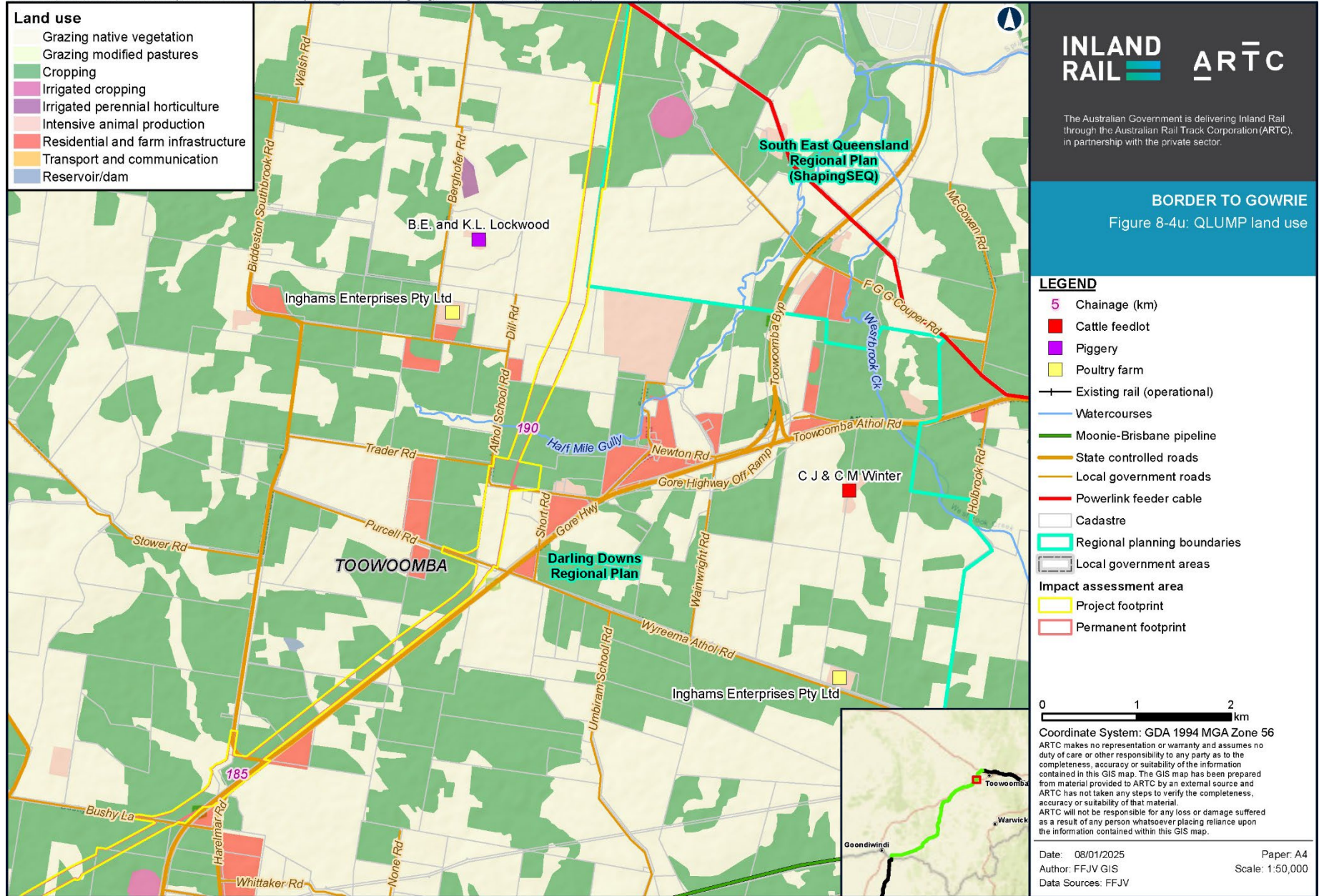


Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-4_QLUMP_land_use_v5.mxd Date: 15/01/2025 12:01

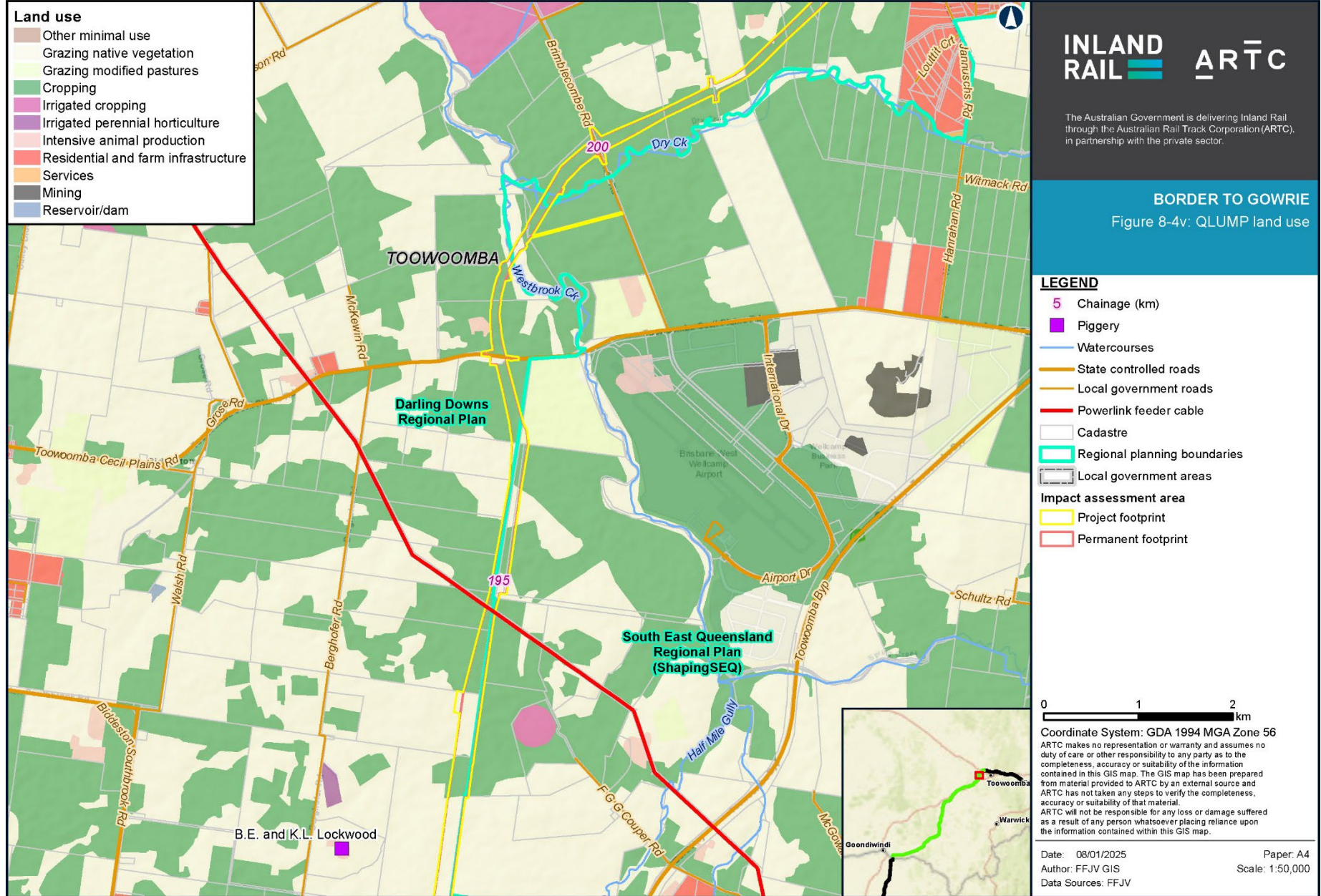
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



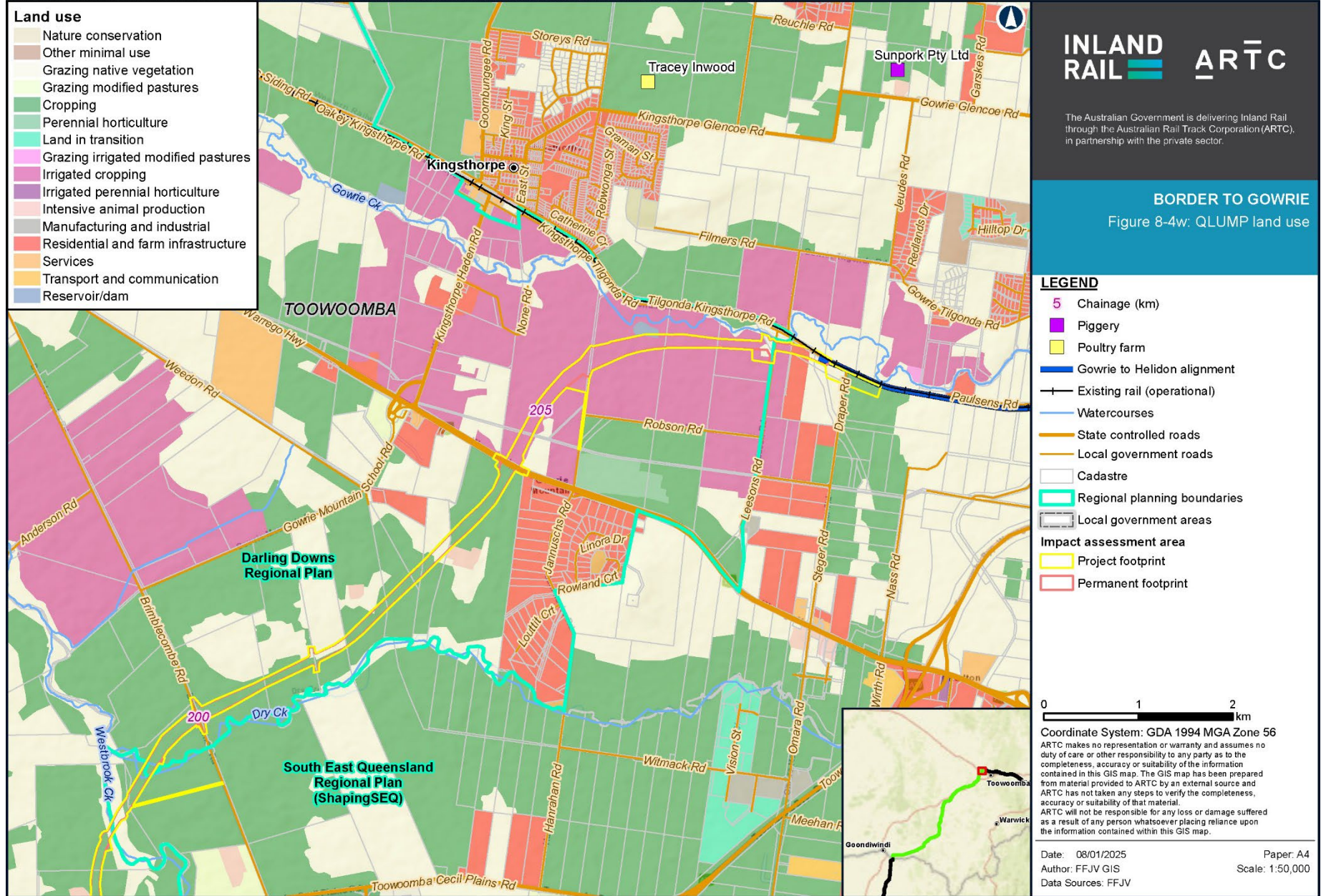
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

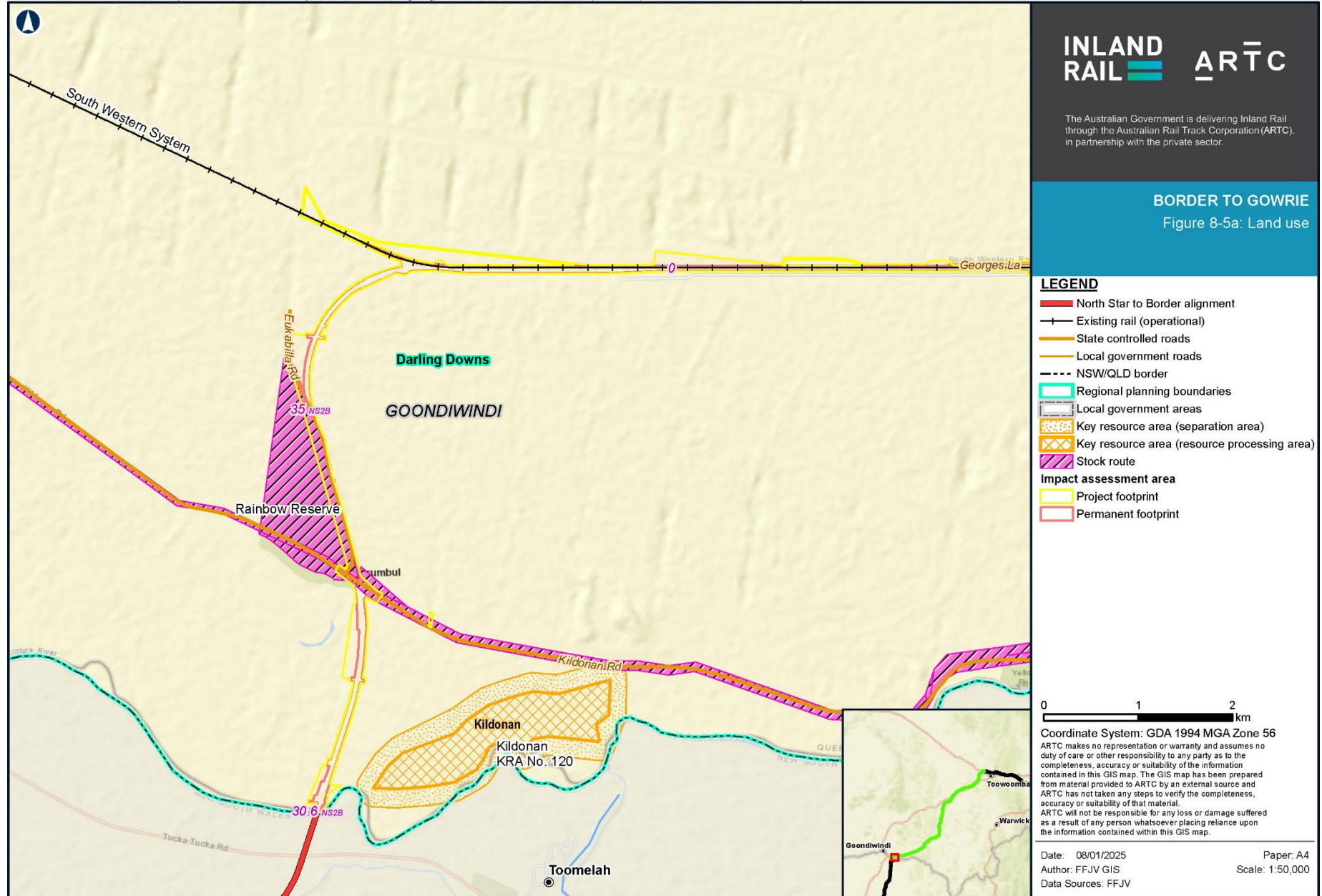


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

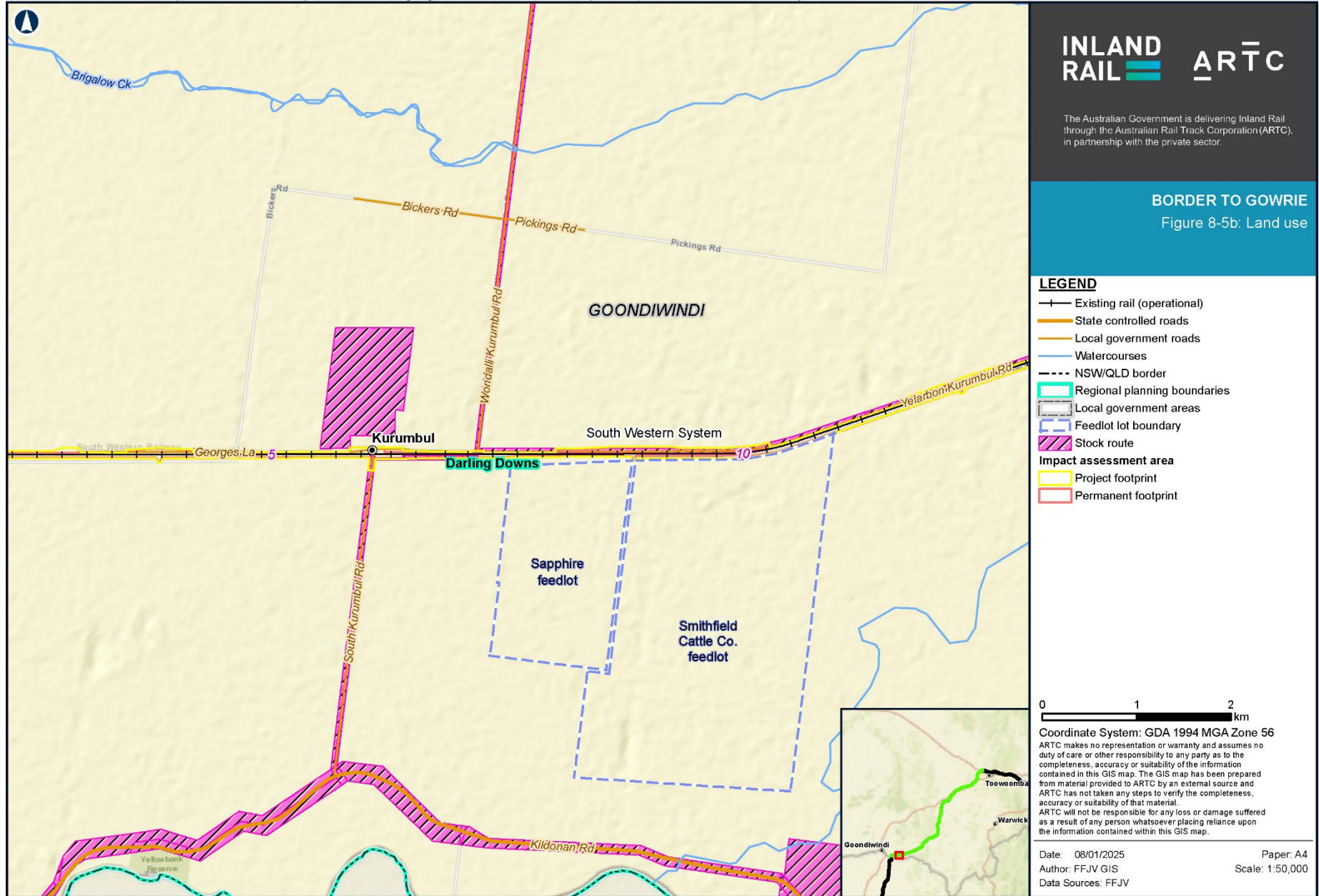


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community





Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-5c: Land use

LEGEND

- Existing rail (operational)
- State controlled roads
- Local government roads
- Regional planning boundaries
- Local government areas
- Prescribed environmental authorities
- Feedlot lot boundary
- Stock route
- Impact assessment area
- Project footprint
- Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

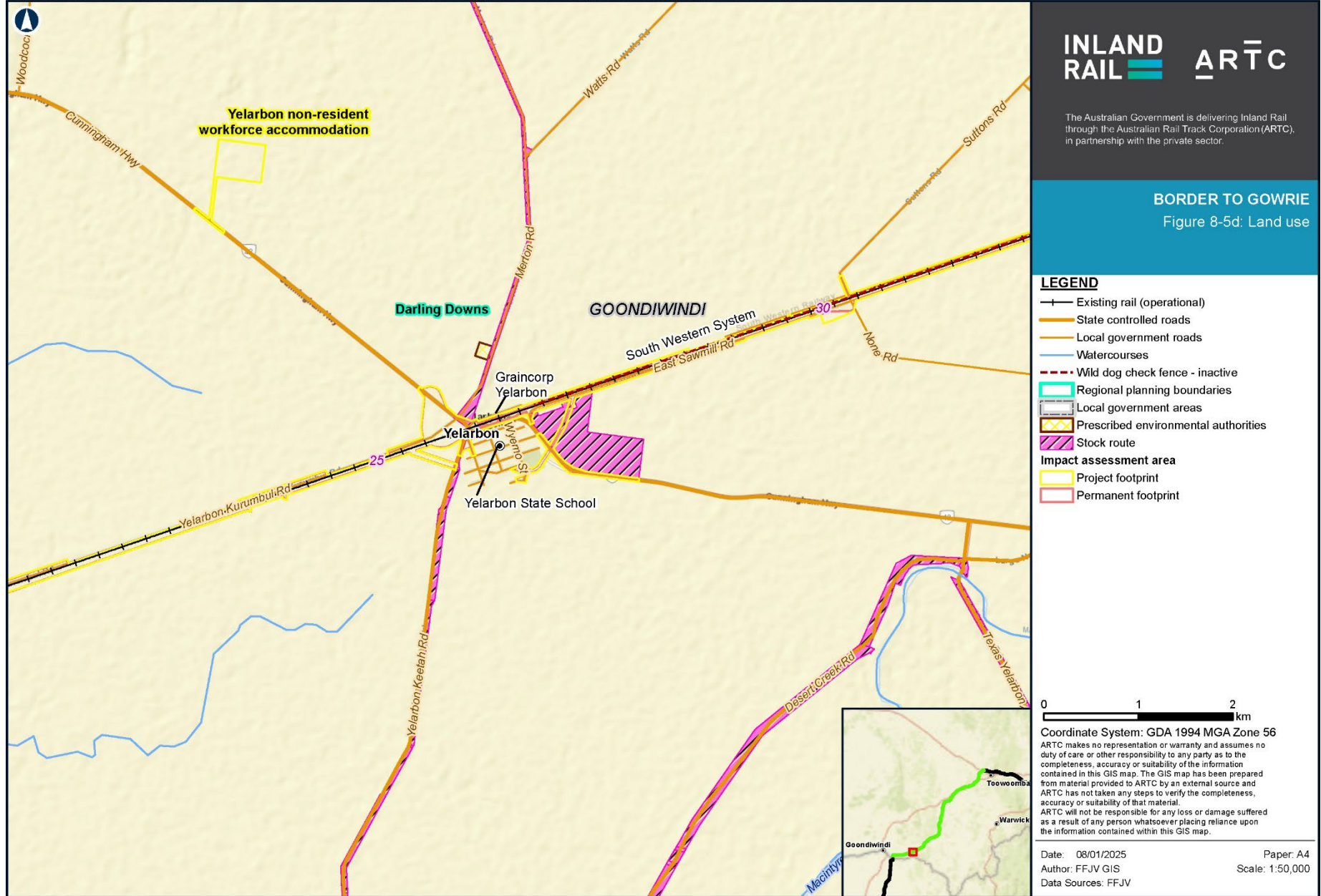
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

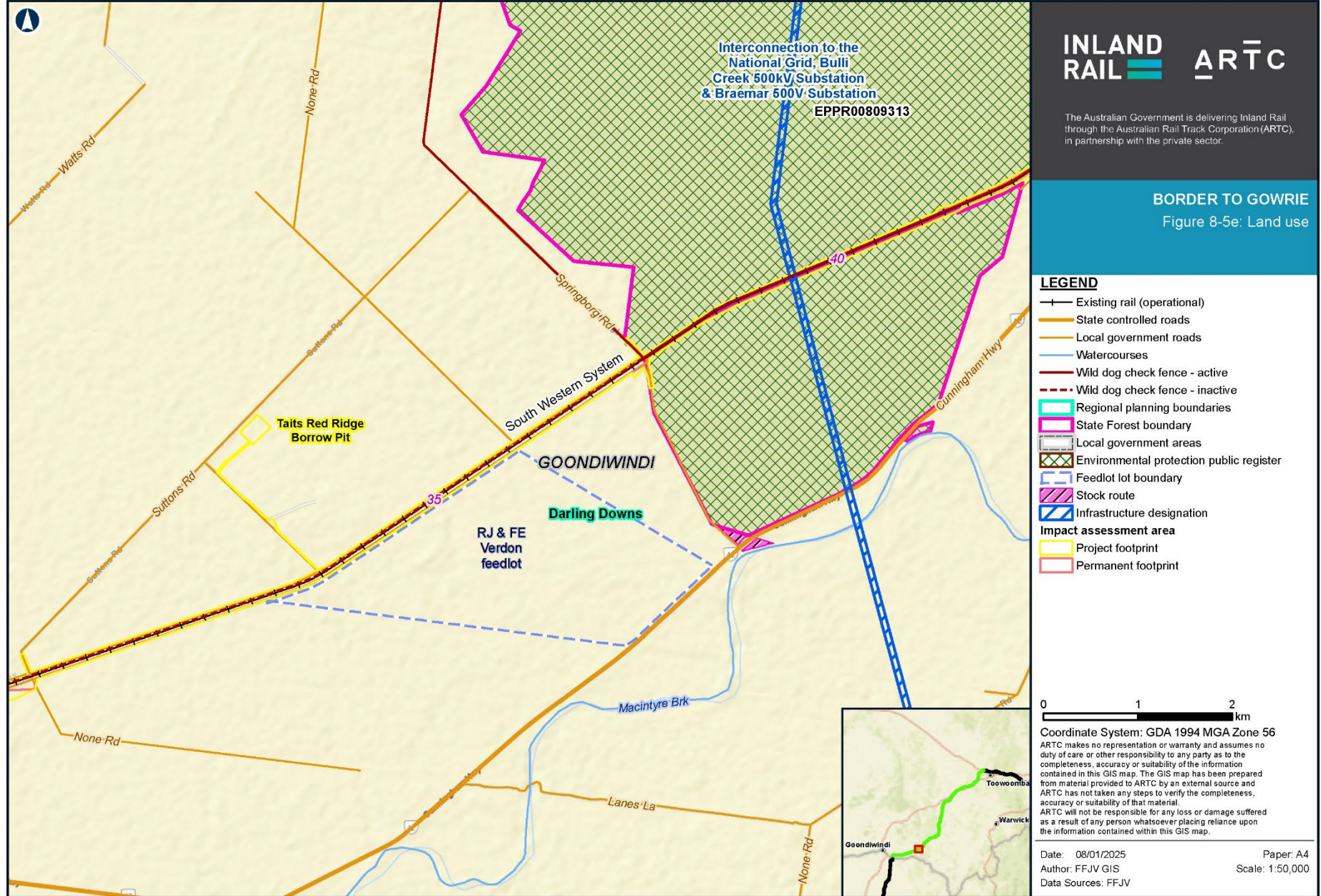
Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-5_Land_use_v5.mxd Date: 15/01/2025 12:01

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

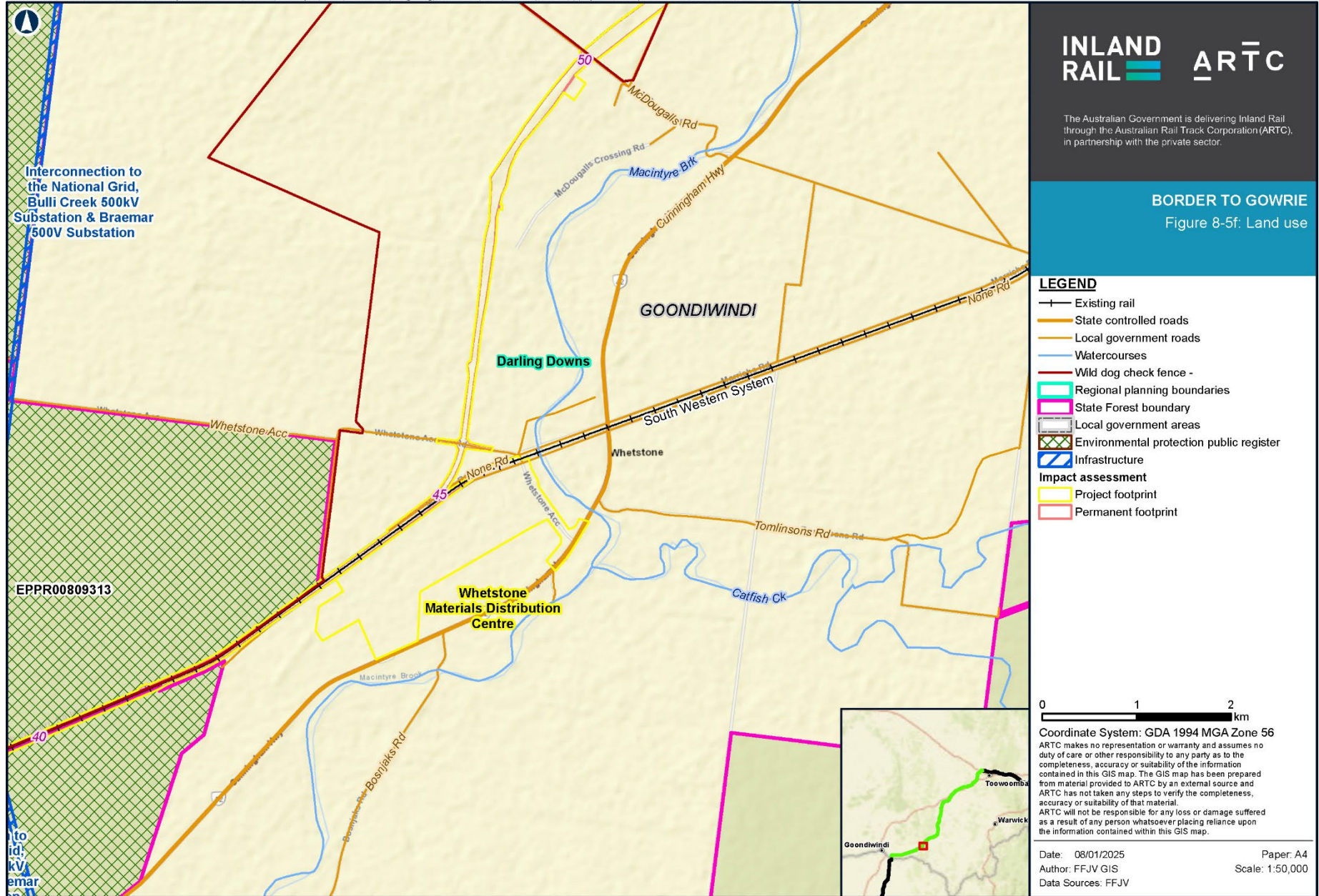


Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-5_Land_use_v5.mxd Date: 15/01/2025 12:01

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-5g: Land use

LEGEND

-  Existing rail (operational)
-  State controlled roads
-  Local government roads
-  Watercourses
-  Wild dog check fence - active
-  Regional planning boundaries
-  State Forest boundary
-  Local government areas
-  Environmental protection public register
-  Feedlot lot boundary
-  Stock route
- Impact assessment area**
 -  Project footprint
 -  Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

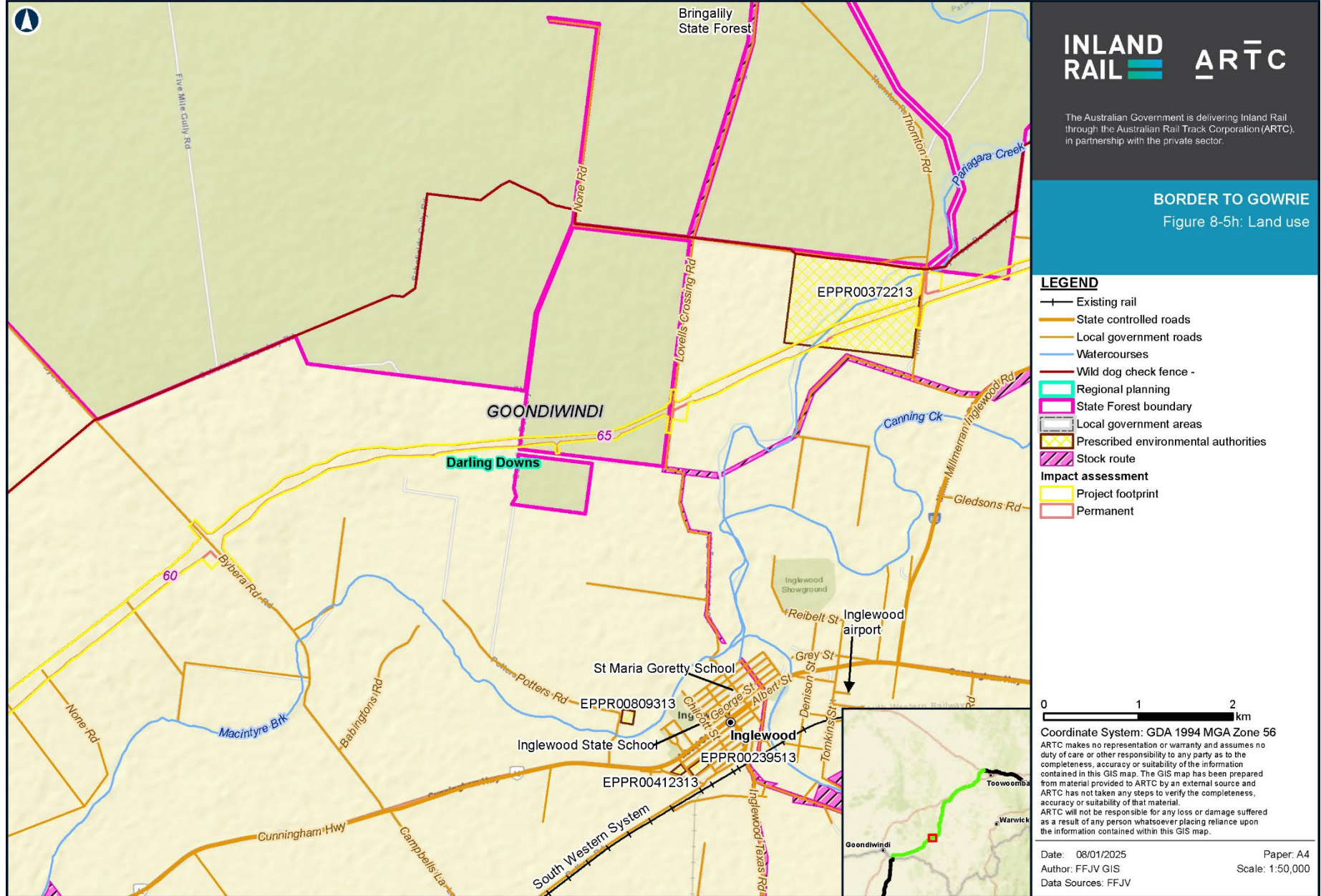
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

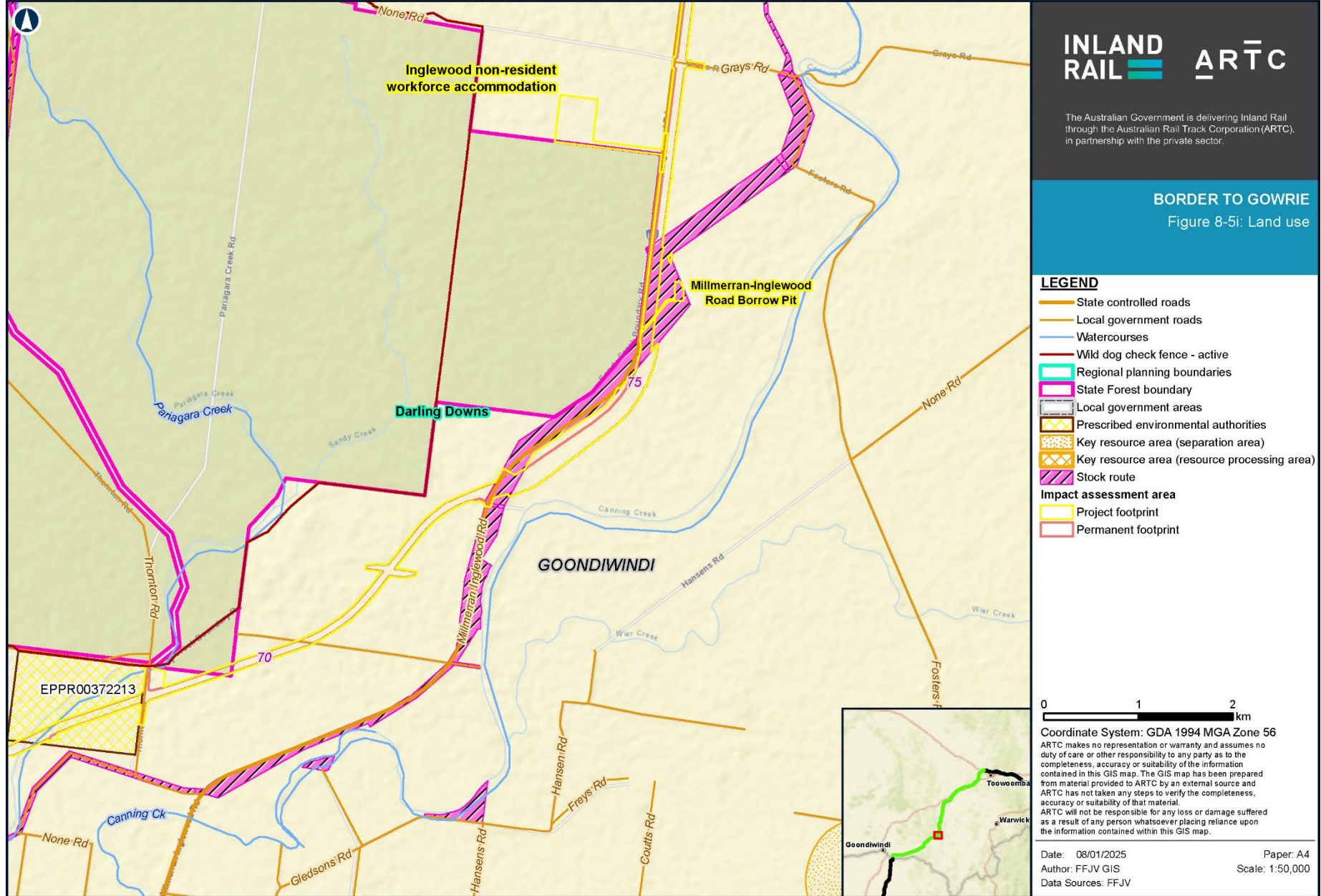
Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-5_Land_use_v5.mxd Date: 15/01/2025 12:01

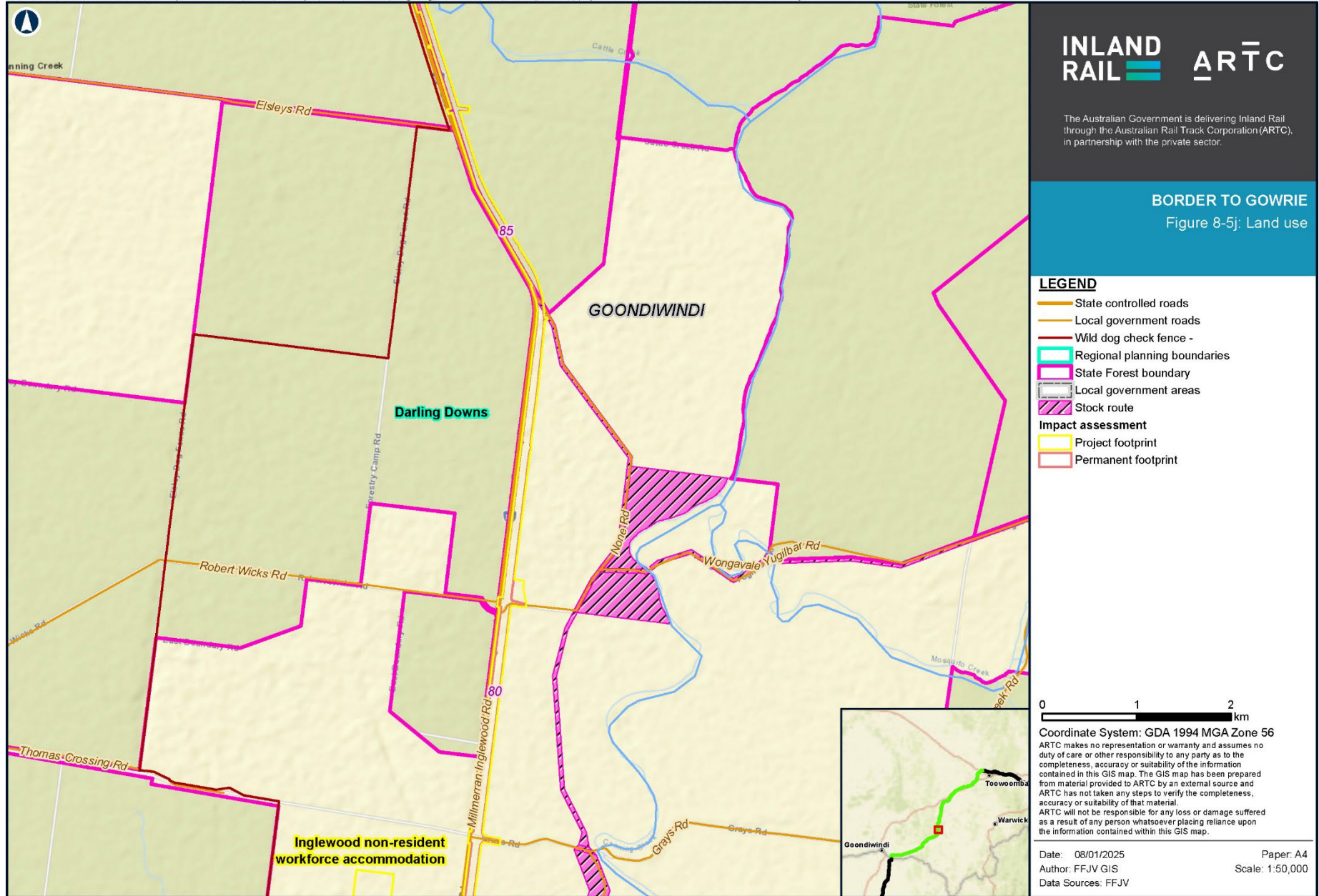
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

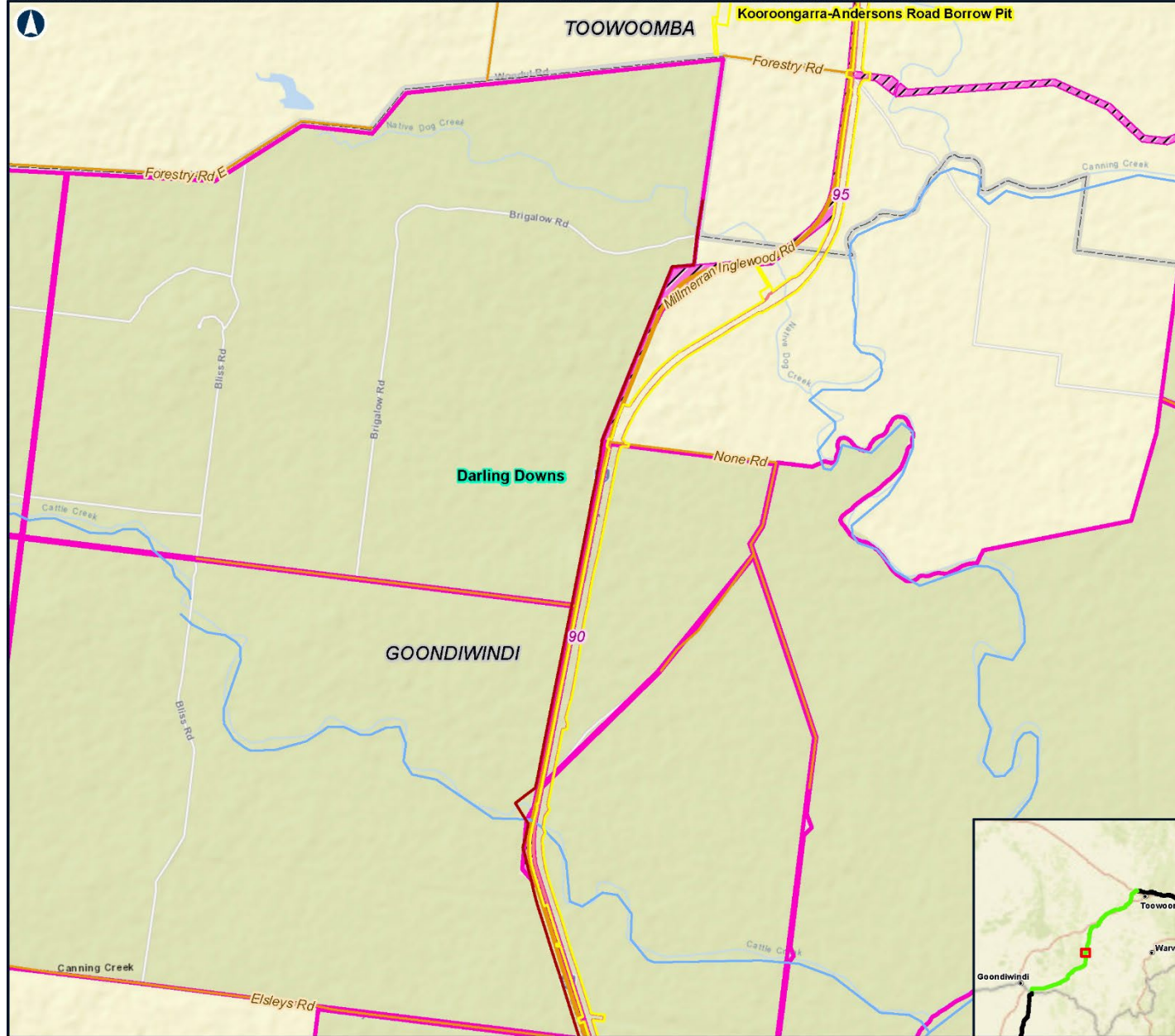


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-5_Land_use_v5.mxd Date: 15/01/2025 12:01

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-5k: Land use

LEGEND

- State controlled roads
- Local government roads
- Wild dog check fence -
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Stock route
- Impact assessment
- Project footprint
- Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

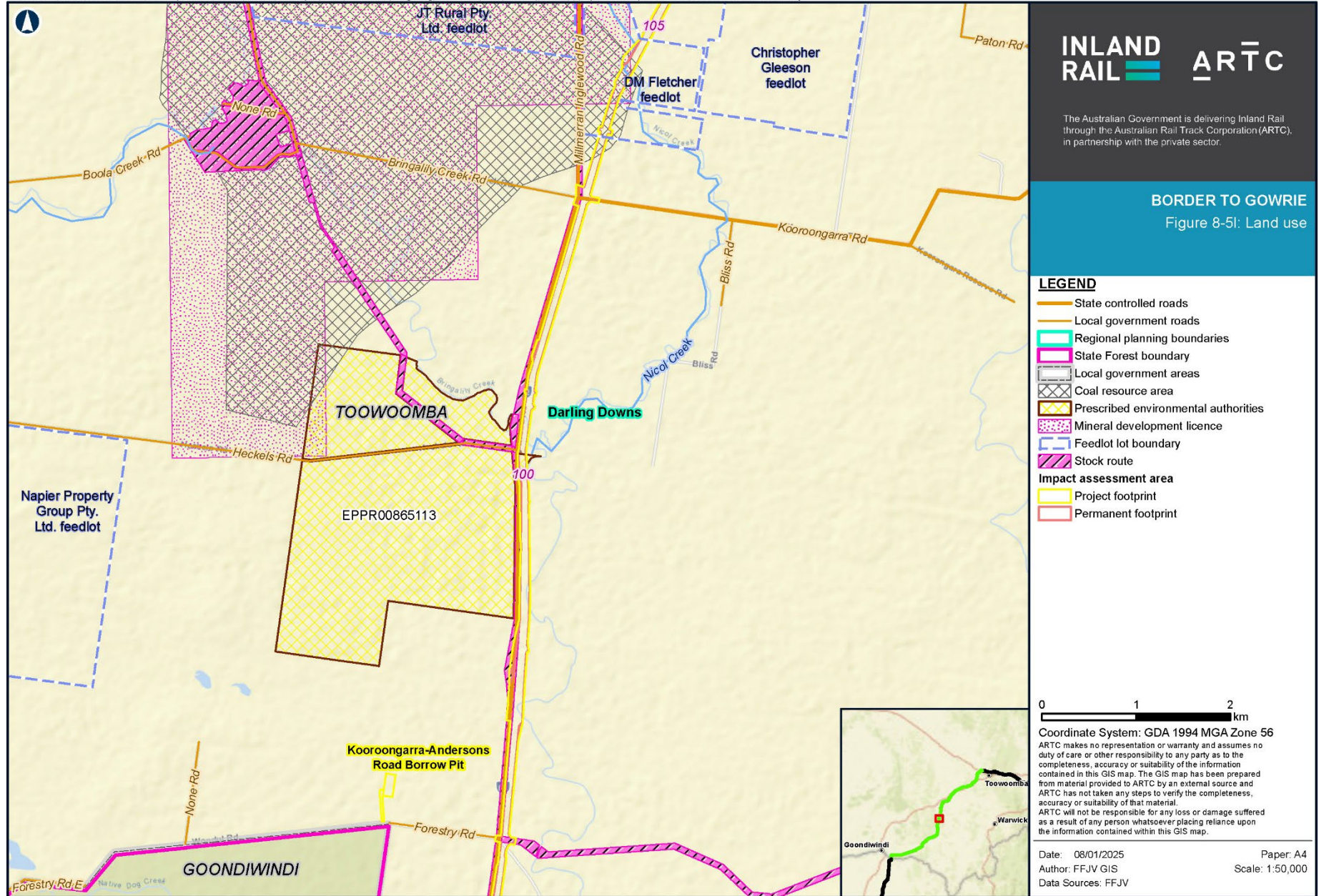
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

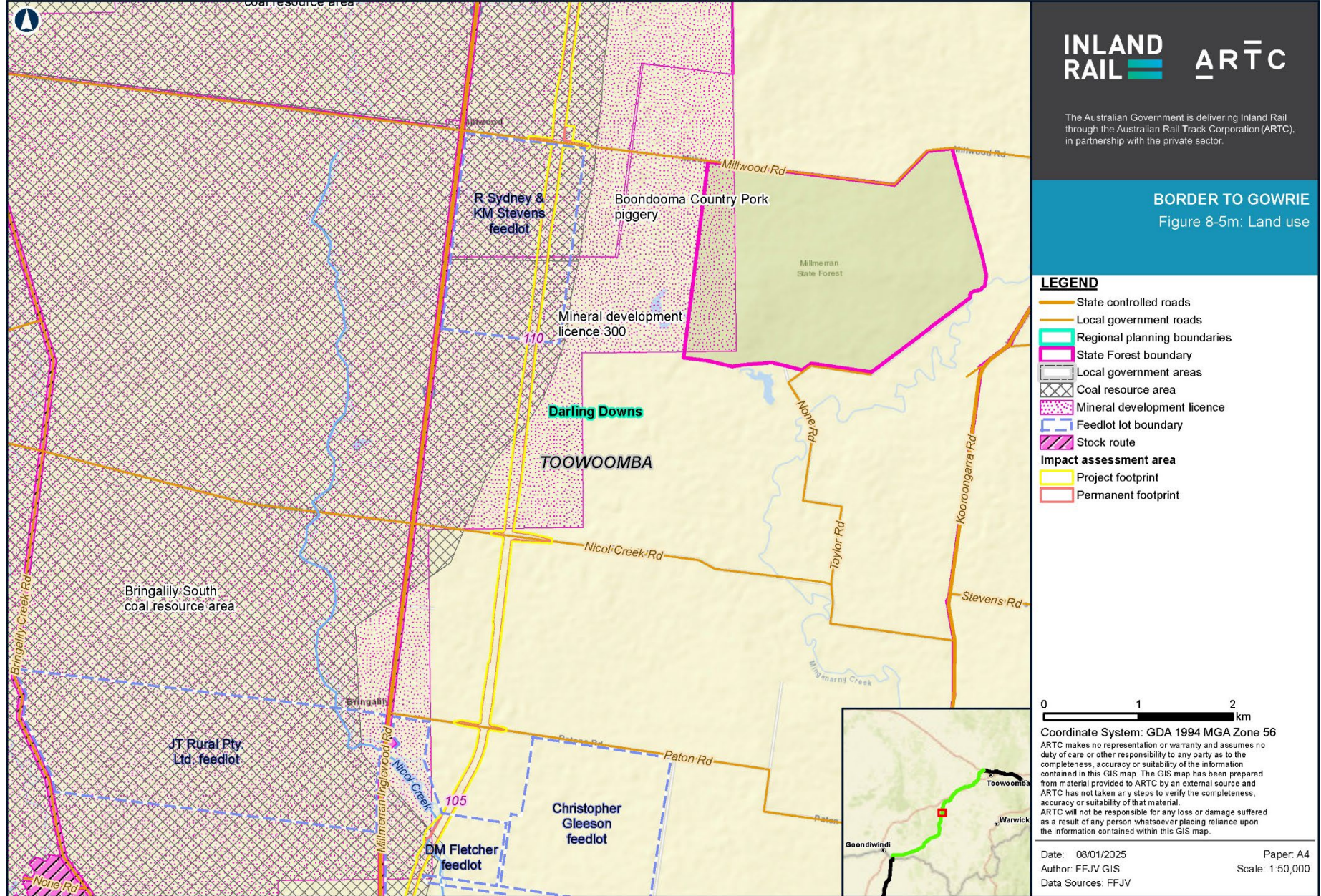
Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-5_Land_use_v5.mxd Date: 15/01/2025 12:01

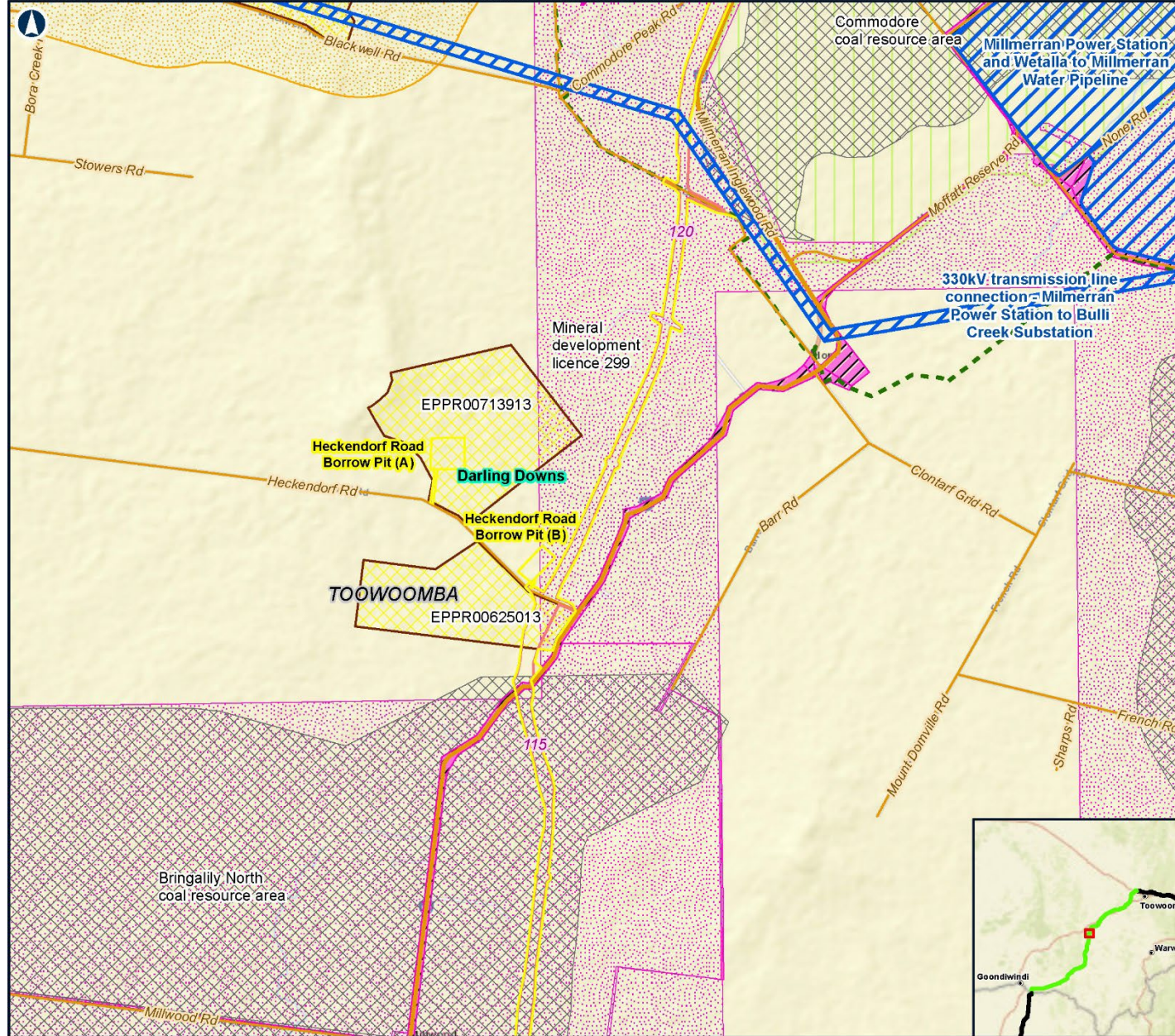
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-5n: Land use

LEGEND

- State controlled roads
- Local government roads
- Rabbit fence
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Coal resource area
- Prescribed environmental authorities
- Key resource area (separation area)
- Mineral development licence
- Mining leases
- Stock route
- Infrastructure designation
- Impact assessment area
 - Project footprint
 - Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025

Author: FFJV GIS

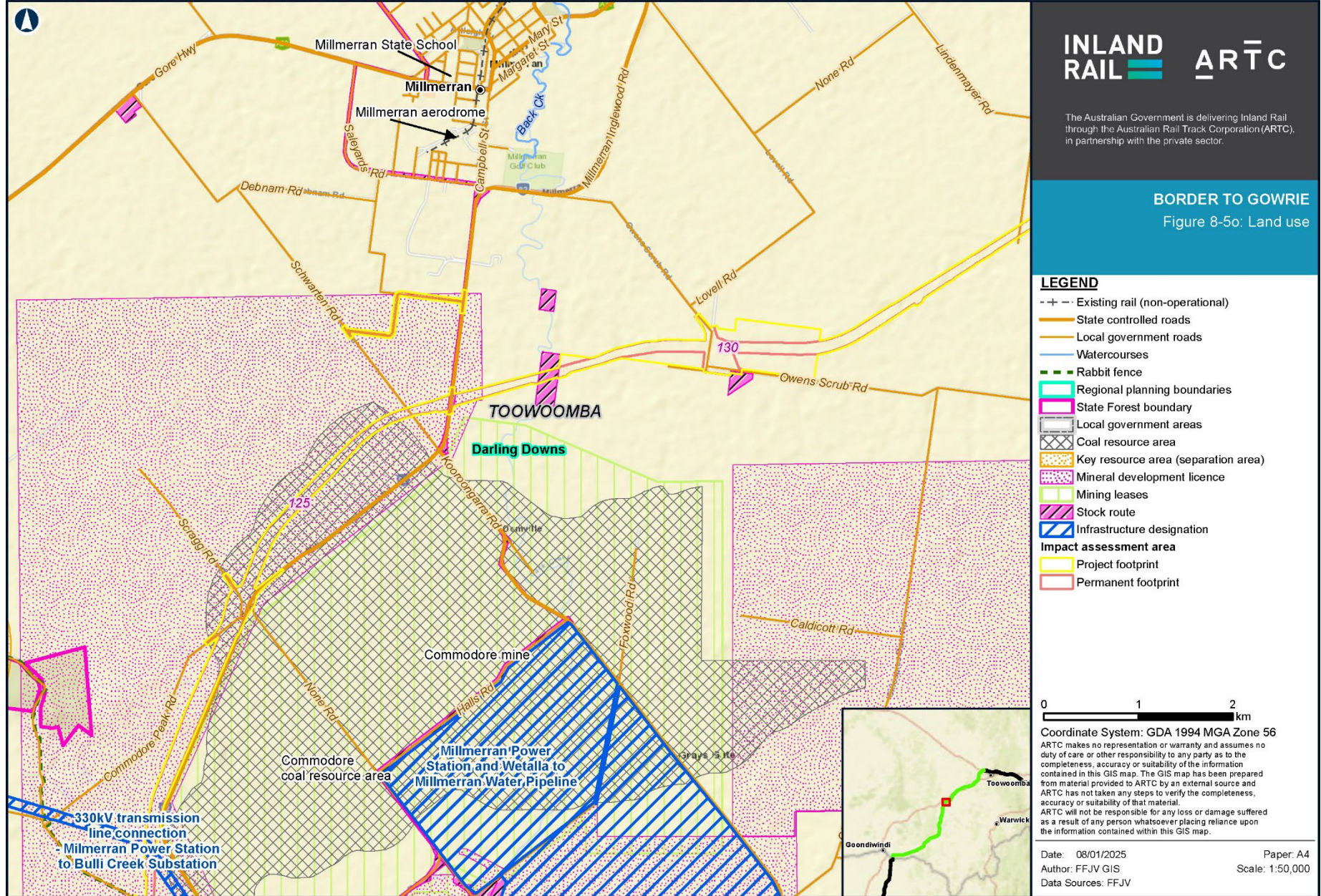
Data Sources: FFJV

Paper: A4

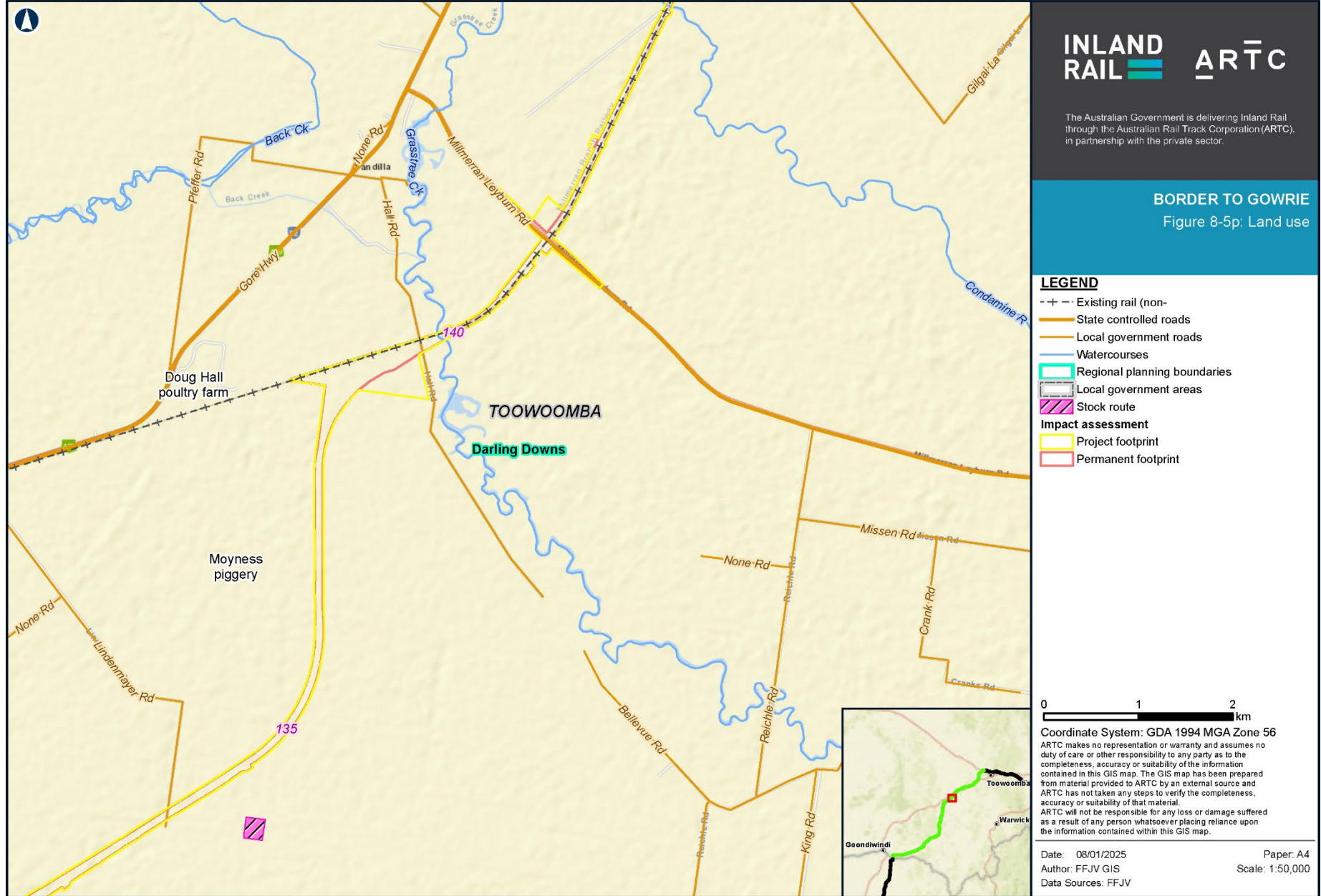
Scale: 1:50,000

Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-5_Land_use_v5.mxd Date: 15/01/2025 12:01

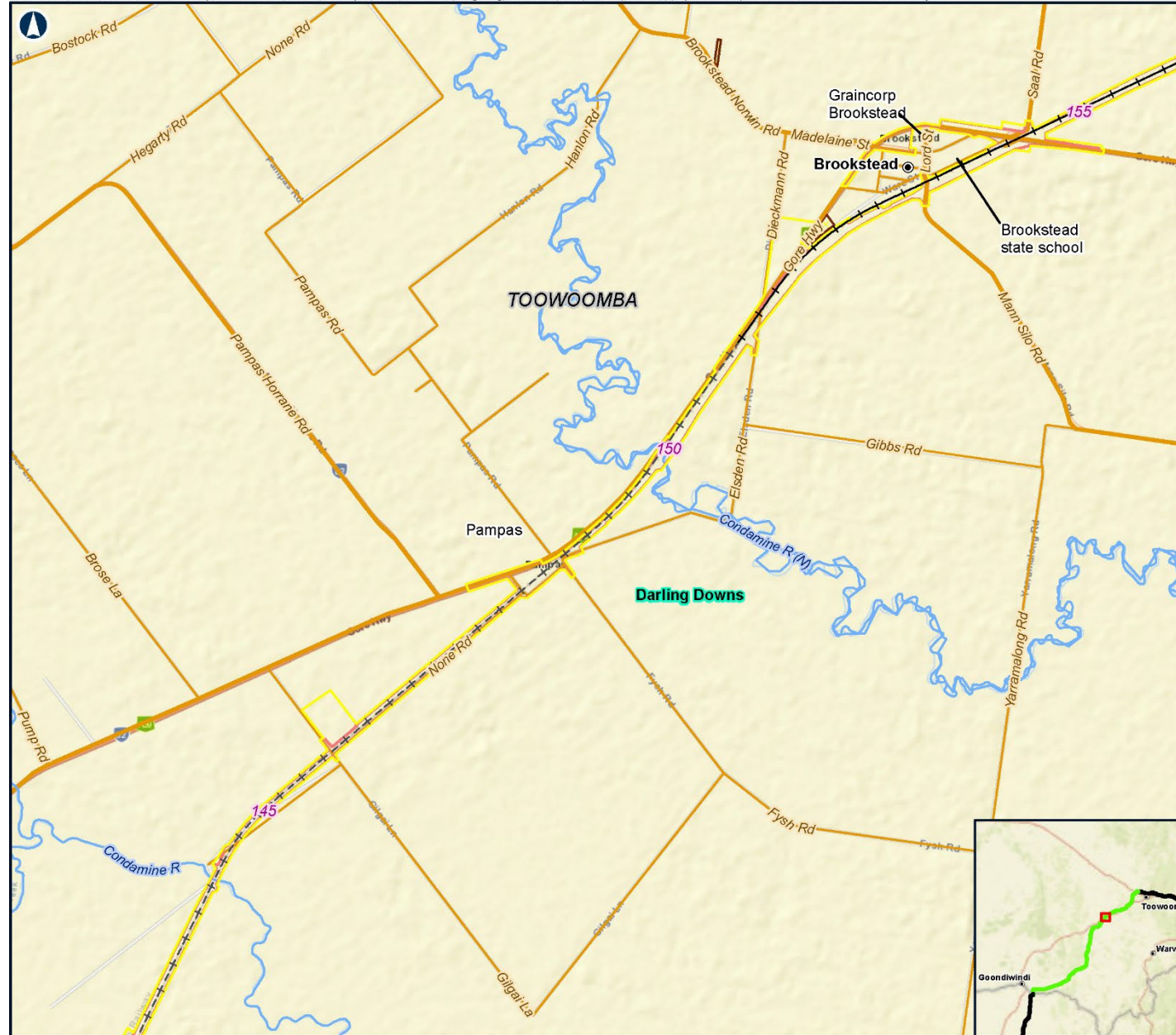
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-5q: Land use

LEGEND

-  Existing rail (operational)
-  Existing rail (non-operational)
-  State controlled roads
-  Local government roads
-  Watercourses
-  Regional planning boundaries
-  Local government areas
-  Prescribed environmental authorities
- Impact assessment area**
-  Project footprint
-  Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material.

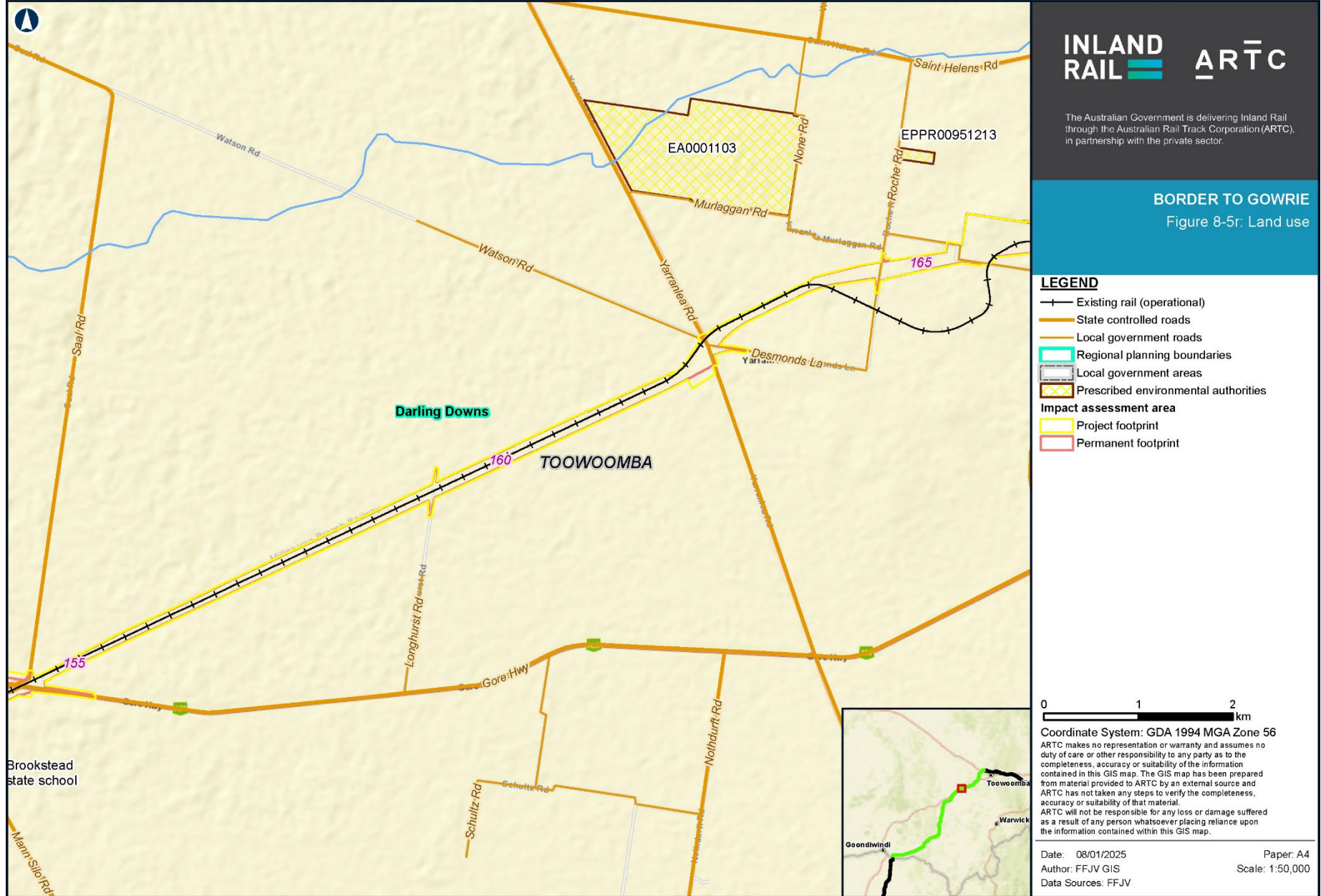
ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-5_Land_use_v5.mxd Date: 15/01/2025 12:01

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

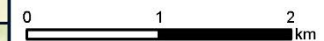


The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

Figure 8-5s: Land use

- Existing rail (operational)
- State controlled roads
- Local government roads
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Prescribed environmental authorities
- Stock route

Impact assessment area
 Project footprint
 Permanent footprint

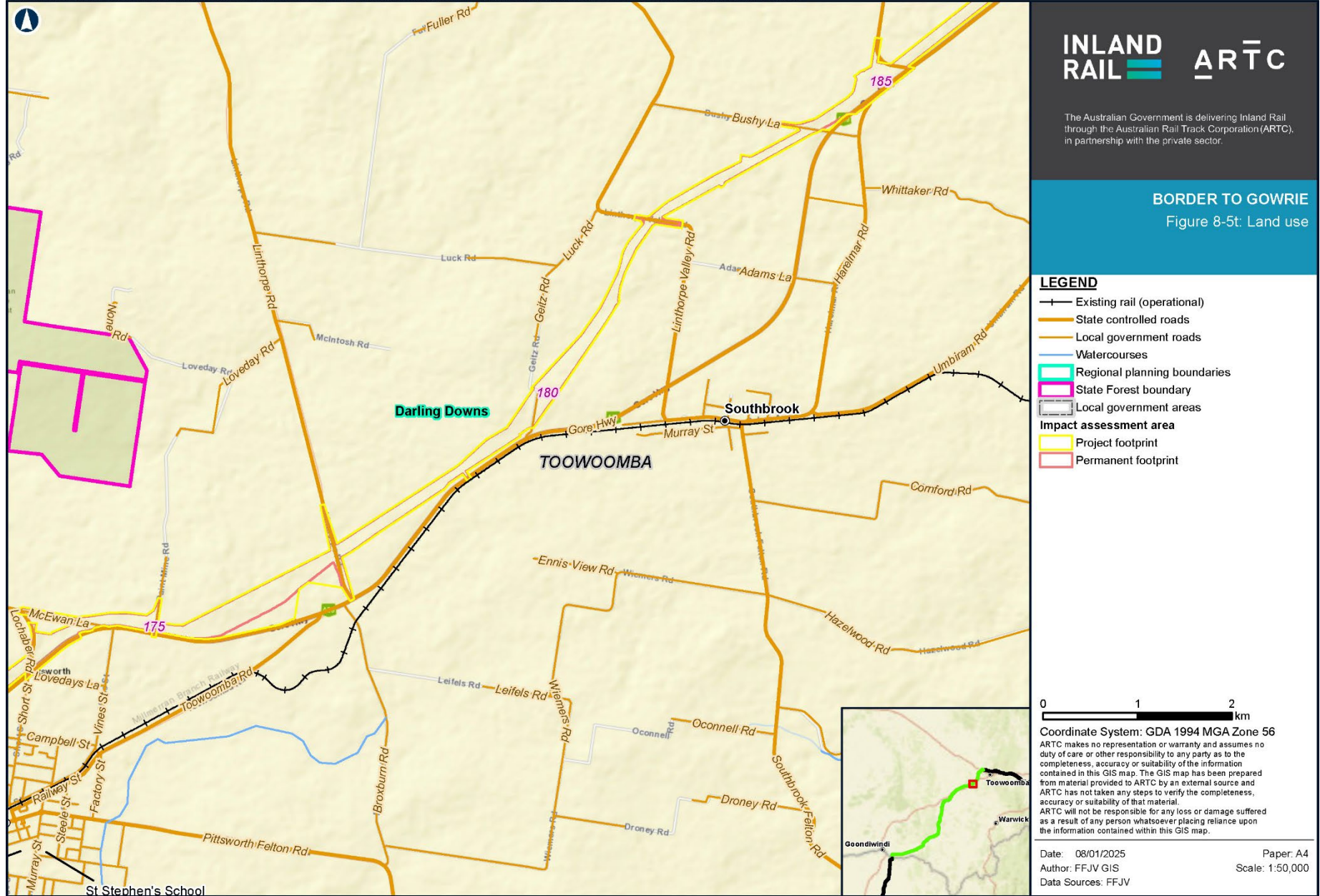


ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material.

ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Paper: A4
Scale: 1:50,000

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-5u: Land use

LEGEND

- Existing rail (operational)
- State controlled roads
- Local government roads
- Watercourses
- Regional planning boundaries
- Local government areas
- Prescribed environmental authorities
- Feedlot lot boundary
- Impact assessment area
- Project footprint
- Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

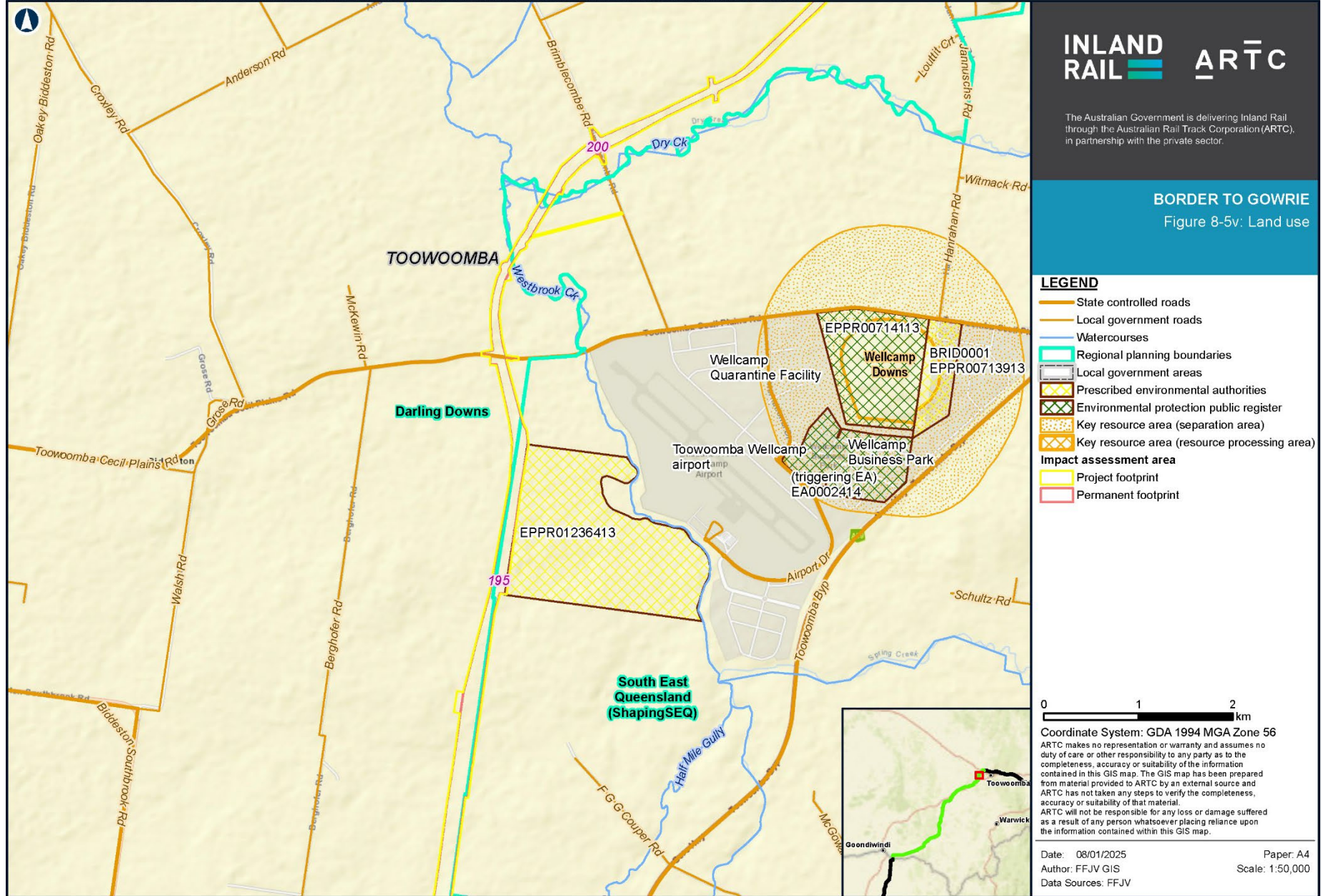
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

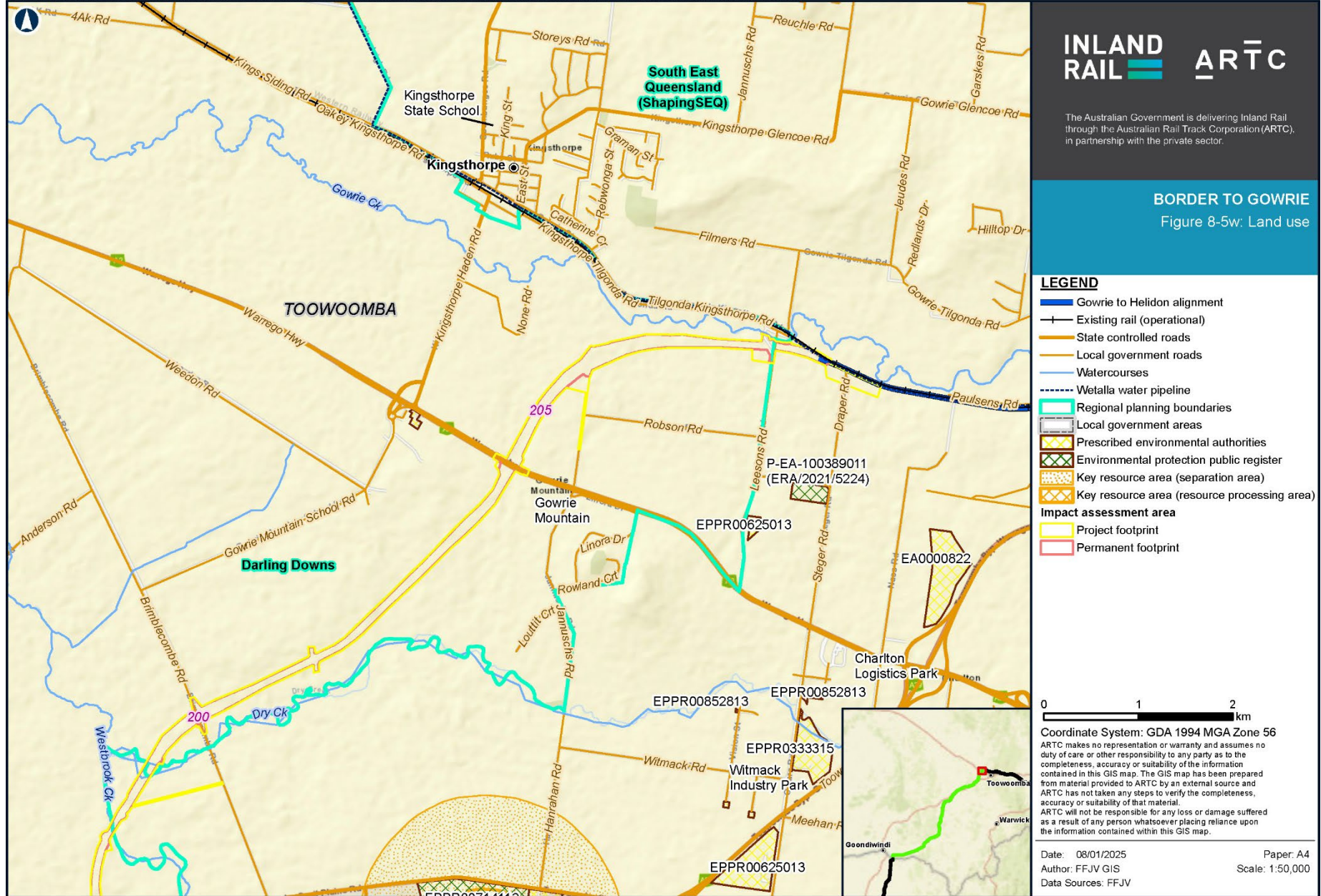
Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-5_Land_use_v5.mxd Date: 15/01/2025 12:01

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-5_Land_use_v5.mxd Date: 15/01/2025 12:01

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Whetstone to Millmerran (Ch 44.5 km to Ch 140.0 km)

The Project deviates from the existing QR South Western Line at Whetstone Ch 44.5 km, traversing land uses that are characterised by grazing land, cropping, forestry and linear infrastructure (e.g. Cunningham Highway and QR South Western Line) northeast to the locality of Inglewood from Ch 44.5 km to Ch 140.0 km.

From Inglewood, the Project generally follows Millmerran–Inglewood Road for approximately 95.5 km, while traversing north through Bringalily State Forest and the localities of Canning Creek, Bringalily, Millwood, Clontarf and Domville. The Bringalily State Forest is a defined native forest timber production area, protected under the provisions of the Forestry Act.

The Project deviates from Millmerran–Inglewood Road, traversing northeast through the Millmerran and Yandilla localities, before joining the Millmerran Branch Line rail corridor at Ch 140.0 km.

TABLE 8-4 LAND USE—WHETSTONE TO MILLMERRAN (CH 44.5 KM TO CH 140.0 KM)

Locality	Land use ¹ within Project footprint	Land use within the study area	Figure reference
Whetstone (southeast area)	Land uses at Whetstone consist of grazing land, and land used for irrigated cropping and horticultural uses.	Land use consists of large parcels of grazing land, with some smaller parcels of irrigated cropping and intensive animal production (the Yarranbrook Feedlot).	Figure 8-4f–g Figure 8-5f–g
Inglewood	The land use is predominately grazing land, with some parcels of production forestry when traversing the Bringalily State Forest. The Project traverses land occupied by Johnstone Concrete and Quarries Pty Ltd. This facility operates under an EA for Extractive and Screening Activities (Permit number: EPPR00372213). North-east of Inglewood, the Project traverses the Millmerran–Inglewood Road stock route in two places.	Land use at Inglewood includes grazing land, cropping and production forestry associated with the Bringalily State Forest. There is also an organic farm (The Willowglen Farm).	Figure 8-4h–i Figure 8-5h–i
Canning Creek	The Project predominately traverses production forestry within the Bringalily State Forest and grazing native vegetation.	Land use at Canning Creek includes production forestry associated with Bringalily State Forest and large parcels of grazing native vegetation. The Project predominately follows alongside Millmerran–Inglewood Road. Canning Creek is located to the south and east of the Project.	Figure 8-4i–l Figure 8-5i–l
Bringalily	The Project traverses land uses adjacent to the Millmerran–Inglewood Road corridor, which predominately consists of cropping and grazing uses. The Project also crosses Nicol Creek when traversing through Bringalily.	The Project follows alongside Millmerran–Inglewood Road. Land use at Bringalily consists of cropping, intensive animal production, grazing land and irrigated cropping.	Figure 8-4i–m Figure 8-5i–m
Millwood	Land uses within the Millwood locality consist of large parcels of grazing and cropping land. The Project traverses land occupied by a TRC waste disposal facility. This facility operates under an EA for waste disposal (Permit number: EPPR00625013).	Land use at Millwood includes cropping, grazing native vegetation and intensive animal production, associated with a number of cattle feedlots.	Figure 8-4m–n Figure 8-5m–n
Clontarf	Land uses within Clontarf predominately consist of cropping land with some smaller parcels of grazing land. The Project also traverses a mapped stock route at approximately Ch 115.6 km.	Land use at Clontarf includes cropping and grazing land as well as mining uses associated with the Commodore Mine.	Figure 8-4n–o Figure 8-5n–o

Locality	Land use ¹ within Project footprint	Land use within the study area	Figure reference
Domville	Land use within Domville consists of grazing.	Land use at Domville includes cropping, intensive animal production and the Commodore Mine. The Commodore Mine is an open pit coal mine, which supplies coal to the Millmerran Power Station. The Project traverses along the north-western boundary of land associated with the Commodore Mine at Domville.	Figure 8-4o Figure 8-5o
Millmerran	Land uses within Millmerran predominately consists of cropping and grazing land.	Land use at Millmerran consists of cropping and grazing land, and a small water reservoir/dam located adjacent to Ch 130 km. The Cameron Pastoral Co. Pty Ltd piggery and the Doug Hall Poultry Pty Ltd poultry farm are located adjacent to the Project between Ch 135 km and Ch 140 km.	Figure 8-4o–p Figure 8-5o–p

Table note:

1 Land use as per the QLUMP.

Millmerran to Yarranlea (Ch 140.0 km to Ch 154.65 km)

From Yandilla, the Project remains within the existing rail corridor for approximately 24.1 km, traversing in a northeast direction through the localities of Pampas, Brookstead and Yarranlea. Land use within this section of the Project is characterised by cropping, with grazing, production forestry, intensive animal husbandry and mining (Commodore Mine). The Gore Highway, Millmerran–Inglewood Road and the QR Millmerran Branch Line are key linear infrastructure features in this section of the Project.

The Project passes through the township of Brookstead. Land uses within the Brookstead township predominately consist of residential and commercial services, as well as Brookstead State School and infrastructure associated with GrainCorp's Brookstead operations.

TABLE 8-5 LAND USE—MILLMERRAN TO YARRANLEA (CH 140.0 KM TO CH 154.65 KM)

Locality	Land use ¹ within Project footprint	Land use within the study area	Figure reference
Yandilla	The existing Millmerran Branch Line rail corridor is mapped as cropping and grazing land when traversing through Yandilla. Adjoining the existing rail corridor, land use predominately consists of cropping and grazing land. The Project traverses Grasstree Creek and the Condamine River when traversing through Yandilla.	Land use at Yandilla consists of cropping and grazing land as well as intensive animal production (associated with a poultry farming operation, Doug Hall Poultry Pty Ltd).	Figure 8-4p Figure 8-5p
Pampas	The existing Millmerran Branch Line rail corridor is mapped as irrigated cropping and cropping land when traversing through Pampas. Adjoining the existing rail corridor, land use consists of irrigated cropping and cropping land. The Project traverses the Condamine River within the Pampas locality.	The Project follows alongside the Gore Highway at Pampas. Land use includes cropping, irrigated cropping and some rural residential uses.	Figure 8-4p–q Figure 8-5p–q
Brookstead	The existing Millmerran Branch Line rail corridor is mapped as cropping and grazing land uses through the Brookstead locality. When traversing through the Brookstead township, adjoining the existing rail corridor, land use is mapped as services and cropping land.	The Project follows alongside the Gore Highway, where land use includes cropping land with some reservoirs and dams used for agricultural purposes. The Project deviates from the Gore Highway near the Brookstead township. Land use includes residential land uses and services, such as transport infrastructure, commercial businesses (including GrainCorp's Brookstead operations) and Brookstead State School.	Figure 8-4q–r Figure 8-5q–r

Table note:

1 Land use as per the QLUMP.

Yarranlea to Gowrie Junction (Ch 154.65 km to Ch 208.22 km)

At Yarranlea, the Project deviates from the existing rail corridor, traversing primarily within agricultural land for approximately 53.5 km through the localities of Pittsworth, Linthorpe, Southbrook, Athol, Biddeston, Wellcamp and Kingsthorpe. The Project then connects into the Gowrie to Helidon section of the Inland Rail at Ch 208.22 km to the west of Gowrie Junction. Land use in this section of the Project is characterised by cropping and grazing, with rural residential, and light commercial and industrial operations. The Project traverses through the Pittsworth township. Land uses within the Pittsworth township predominately consist of residential and commercial services.

This north-eastern portion of the Project also traverses land developed or intended for industrial development as part of the Toowoomba Enterprise Hub. The Toowoomba Wellcamp Airport is located immediately adjacent to the Toowoomba Enterprise Hub, the airport service closest to Toowoomba. This hub promotes interstate, intrastate and international connections for the Darling Downs, Granite Belt, Surat Basin and Southern Downs regions. A 500-bed quarantine facility is also located near the Toowoomba Wellcamp Airport.

TABLE 8-6 LAND USE—YARRANLEA TO GOWRIE JUNCTION (CH 154.65 KM TO CH 208.22 KM)

Locality	Land use ¹ within Project footprint	Land use within the study area	Figure reference
Yarranlea	The existing Millmerran Branch Line rail corridor is mapped as grazing and cropping land when traversing through Yarranlea. Adjoining the existing rail corridor, land use is predominately grazing and cropping land.	Land use at Yarranlea predominately consists of large parcels of cropping and grazing land.	Figure 8-4r–s Figure 8-5r–s
Pittsworth	The Project deviates from the existing Millmerran Branch Line rail corridor and traverses cropping and grazing land and some residential land uses.	When traversing through Pittsworth, the Project follows alongside the Gore Highway. Land use consists of cropping and grazing land as well as residential and service land uses, which are located within the Pittsworth township.	Figure 8-4s–t Figure 8-5s–t
Linthorpe	When traversing through Linthorpe, the Project predominately traverses grazing and cropping land use, and some smaller parcels of residential land use, grazing modified pastures and intensive animal production.	Land use consists of the Gore Highway, grazing, irrigated cropping and cropping	Figure 8-4t Figure 8-5t
Southbrook	The Project traverses large parcels of cropping and grazing land.	Land use consists of cropping, grazing land and some rural residential uses. The Project predominately follows the Gore Highway.	Figure 8-4t–u Figure 8-5t–u
Athol	The Project at Athol traverses grazing and cropping land uses.	Land use consists of cropping, grazing land and some rural residential uses	Figure 8-4u–v Figure 8-5u–v
Biddeston	The Project at Biddeston traverses grazing and cropping land use.	Land use consists of cropping and grazing land	Figure 8-4v Figure 8-5v
Wellcamp	At Wellcamp, the Project traverses grazing and cropping land use. The Project also traverses land developed or intended for industrial development as part of Toowoomba Enterprise Hub.	Land use includes the Toowoomba Wellcamp Airport and other uses the associated with the Toowoomba Enterprise Hub (including the Wellcamp Business Park currently under construction). Other land use includes grazing, cropping land and small patches of intensive animal production.	Figure 8-4v Figure 8-5v
Kingsthorpe	The Project traverses grazing and cropping land use. The Project also traverses Westbrook Creek and Dry Creek through Kingsthorpe.	Land use consists of grazing and cropping land, as well as residential land uses located within the adjacent Gowrie Mountain locality.	Figure 8-4v–w Figure 8-5v–w
Gowrie Junction	The Project adjoins the West Moreton System rail corridor to the west of Gowrie Junction. The Project traverses land mapped as irrigated cropping and perennial horticulture, cropping, grazing, and other minimal uses.	Land use consists of grazing, irrigated cropping and cropping. The Project runs parallel to Gowrie Creek to the west of Gowrie Junction.	Figure 8-4w Figure 8-5w

1 Land use as per the QLUMP.

Summary of land uses in the Project footprint

Table 8-7 provides an approximate area of the different land uses within the Project footprint (including where it interacts with existing rail and road corridors), separated into the permanent and temporary footprints. Notably, the temporary footprint calculation is area requirements in addition to the permanent footprint, measured against each land use. Land uses, as mapped by QLUMP, are depicted on Figure 8-4. The Project will use the existing QR South Western Line and Millmerran Branch Line rail corridors for approximately 32 per cent of its total length. Although land use within this existing rail corridor is mapped as the adjoining land uses of grazing, agricultural, residential or other non-infrastructure related uses under QLUMP, it is not used for these purposes.

TABLE 8-7 EXISTING LAND USES WITHIN THE PROJECT FOOTPRINT

Land use ¹	Permanent footprint		Temporary footprint	
	Area (hectares (ha))	% of permanent footprint	Area (ha)	% of temporary footprint
Grazing native vegetation	1,273.85	50.06	359.96	42.99
Cropping	853.14	33.55	235.64	28.14
Irrigated cropping	114.48	4.50	167.09	19.96
Production native forests	109.74	4.30	18.39	2.20
Other minimal use	86.39	3.39	26.40	3.15
Transport and communication	32.19	1.26	10.77	1.29
Residential and farm infrastructure	24.81	0.97	3.84	0.46
Nature conservation	18.11	0.71	0.85	0.10
Intensive animal production	8.14	0.32	0.58	0.07
Irrigated perennial horticulture	7.98	0.31	0.87	0.10
Services	4.93	0.19	2.32	0.28
Grazing modified pastures	4.09	0.16	0.33	0.04
Land in transition	3.02	0.12	0.46	0.05
Manufacturing and industrial	1.52	0.06	1.09	0.13
Mining	1.40	0.06	1.92	0.23
Reservoir/dam	0.80	0.03	6.44	0.77
Waste treatment and disposal	0.05	0.00	0.11	0.01
River	0.22	0.01	0.26	0.03
Total²	2,544.86	100.00	837.31	100.00

Table notes:

1. Land use as per the QLUMP. This dataset has not been modified where localised inaccuracies are known to occur.
2. Minor rounding has been undertaken to present the QLUMP data to two decimal places whilst ensuring footprint totals equal 100 per cent.

Table 8-8 provides a summary of land use within the permanent and temporary footprints that are located outside of the existing rail and road corridors.

TABLE 8-8 EXISTING LAND USES WITHIN THE PROJECT FOOTPRINT EXCLUDING EXISTING RAIL AND ROAD CORRIDORS

Land use ¹	Permanent footprint		Temporary footprint	
	Area (ha)	% of permanent footprint	Area (ha)	% of temporary footprint
Grazing native vegetation	942.76	48.35	296.62	41.20
Cropping	749.25	38.42	221.82	30.81
Irrigated cropping	97.87	5.02	159.07	22.09
Production native forests	97.27	4.99	11.36	1.58
Other minimal use	7.40	0.38	14.50	2.01
Transport and communication ²	2.90	0.15	2.98	0.41
Residential and farm infrastructure	15.71	0.81	2.43	0.34
Nature conservation	12.63	0.65	0.57	0.08
Intensive animal production	7.74	0.40	0.53	0.07

Land use ¹	Permanent footprint		Temporary footprint	
	Area (ha)	% of permanent footprint	Area (ha)	% of temporary footprint
Irrigated perennial horticulture	7.98	0.41	0.87	0.12
Services	3.17	0.16	1.51	0.21
Grazing modified pastures	4.09	0.21	0.33	0.05
Land in transition	0.00	0.00	0.00	0.00
Manufacturing and industrial	0.18	0.01	0.71	0.10
Mining	0.00	0.00	0.00	0.00
Reservoir/dam	0.75	0.04	6.38	0.89
Waste treatment and disposal	0.00	0.00	0.05	0.01
River	0.22	0.01	0.26	0.04
Total³	1,949.92	100.00	718.77	100.00

Table notes:

1. Land use as per the QLUMP. This dataset has not been modified where localised inaccuracies are known to occur.
2. Transport and communication as a land use is as per the data available as per the QLUMP. The above area and percentages of disturbance are only relevant for communication infrastructure.
3. Minor rounding has been undertaken to present the QLUMP data to two decimal places whilst ensuring footprint totals equal 100 per cent.

For the areas of the permanent footprint outside of the existing rail corridors, land use is mapped as being predominately grazing native vegetation (48.35 per cent) or cropping land (38.42 per cent). The temporary footprint outside of existing rail corridors is also primarily mapped as grazing native vegetation (41.20 per cent) or cropping land (30.81 per cent). Other land use includes production forestry, other minimal use, irrigated cropping, and transport and communication.

8.4.1.2 Project-wide land-use considerations

The following sections provide a description of land use that are relevant at a regional level.

Aviation land uses

In addition to the Toowoomba Wellcamp Airport identified in Section 8.4.1.1, other aviation land uses throughout the region include:

- ▶ Army Aviation Centre Oakey—11.4 km from the Project
- ▶ Inglewood airfield (not certified or registered)—4 km from the Project
- ▶ Millmerran airfield (not certified or registered)—3.9 km from the Project
- ▶ Pittsworth airfield (not certified or registered)—2.5 km from the Project
- ▶ Southbrook airfield (not certified or registered)—2.4 km from the Project
- ▶ Wyreema airfield (not certified or registered)—10 km from the Project
- ▶ Cambooya airfield (not certified or registered)—13.5 km from the Project
- ▶ Colanya airfield (not certified or registered)—6 km from the Project.

Areas of regional interest

Areas of regional interest are governed by the RPI Act, and are:

- ▶ Priority agricultural area (PAA)
- ▶ Priority living area (PLA)
- ▶ Strategic cropping area (SCA)
- ▶ Strategic environmental area (SEA).

The RPI Act, including its purpose, is described in Chapter 3: Legislation and Project Approvals Process. As the Project is not a resource activity nor a regulated activity under the RPI Act, the Act does not apply. Notwithstanding this, the Project's impact on areas of regional interest protected under the RPI Act has been assessed to provide a comprehensive assessment of the Project's impact on agricultural, environmental and societal values.

The Project intersects PAA land mapped throughout the Darling Downs, particularly between Yelarbon and Inglewood, and between Millwood and Gowrie. There are patches of mapped priority living areas which are affected by the Project footprint located in Yelarbon, Inglewood, Millmerran, Pittsworth, and Gowrie. Part of the Project footprint is mapped within SCA. The Project does not traverse any SEA.

Areas of regional interest located within the Project footprint are summarised in Table 8-9 and shown in Figure 8-7.

TABLE 8-9 AREA OF REGIONAL PLANNING INTERESTS TRAVERSED BY THE PROJECT

Areas of regional interest	Permanent footprint (ha)	% of permanent footprint	Temporary footprint (ha)	% of temporary footprint
Darling Downs region				
PAA	1,596.62	62.74	603.85	72.12
SCA	2,506.16	98.48	823.07	98.31
PLA	240.62	9.45	45.26	5.41
SEA	0.00	0.00	0.00	0.00
South East Queensland region				
PAA	32.80	1.29	5.36	0.64
SCA	38.69	1.52	14.25	1.70
PLA	36.66	1.44	14.20	1.70
SEA	0.00	0.00	0.00	0.00

Agricultural land

As detailed in previous sections, agricultural land uses are the predominant land use along the Project. Chapter 9: Land Resources provides a detailed assessment of the agricultural land quality and its interface with the Project. The assessment in Chapter 9: Land Resources includes an appraisal of the *Queensland Agricultural Land Audit* (DAF, 2018b) and its relevance to the Project. Of relevance to land use, the *Queensland Agricultural Land Audit* seeks to provide information on the location, extent and character of land currently used for agriculture and to identify areas with potential for future agricultural development.

The *Queensland Agricultural Land Audit* assesses current and potential agricultural land uses based on the following agricultural land use categories:

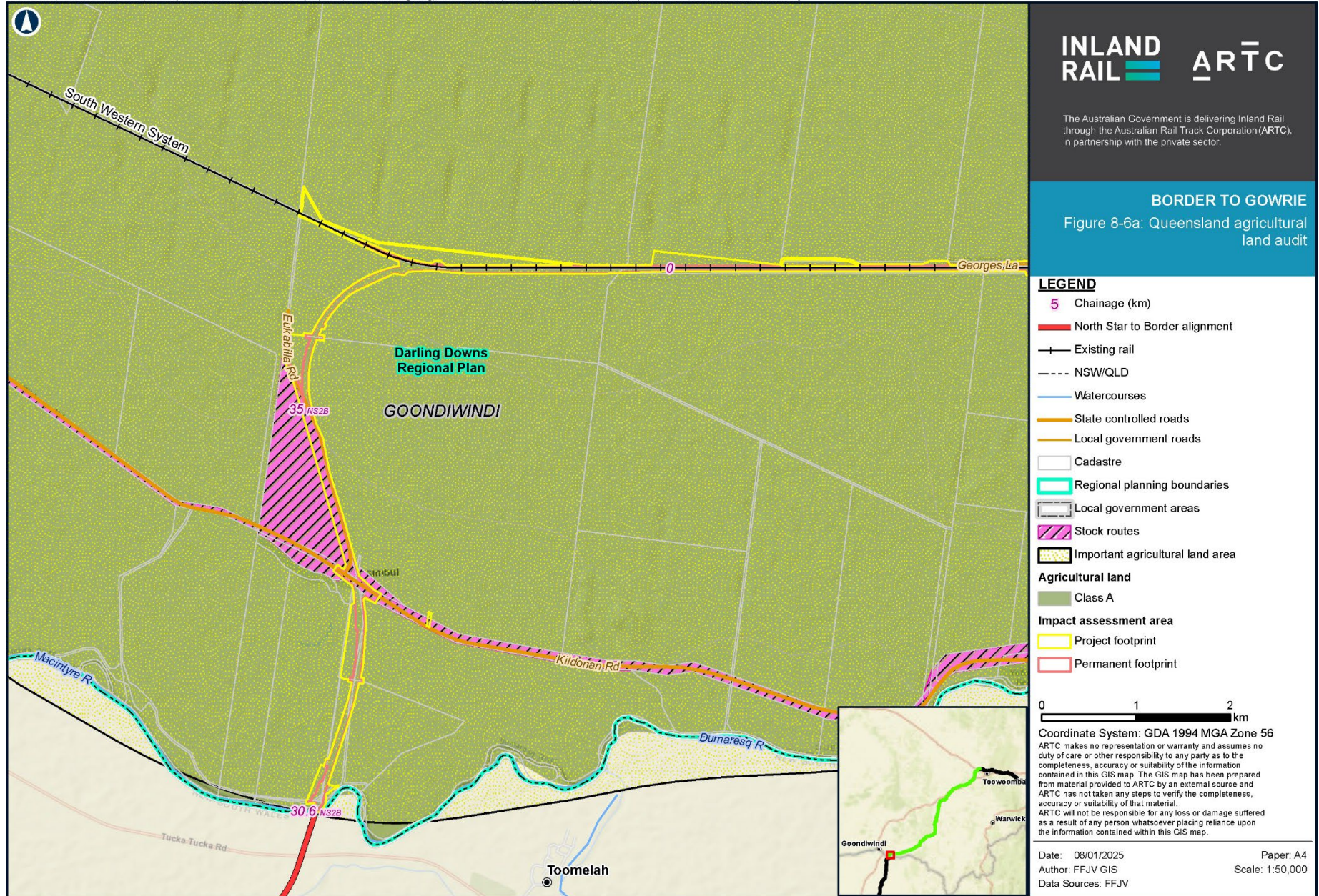
- ▶ Broadacre cropping (rainfed/irrigated)
- ▶ Annual horticulture (irrigated)
- ▶ Perennial horticulture (assumed to be irrigated)
- ▶ Intensive animal industries (i.e. cattle feedlots and piggeries State-wide, and poultry in South East Queensland only, eggs and aquaculture)
- ▶ Grazing—sown pasture
- ▶ Grazing—native pasture
- ▶ Plantation forestry
- ▶ Native forestry
- ▶ Sugarcane.

Current agricultural land use is mapped across the State, predominantly using data from QLUMP, while also including data from the Queensland Government maintained registers of the Intensive Livestock Environmental Regulation Unit database for intensive animal industries, and the Safe Food Queensland Egg Register.

Land classified by *Queensland Agricultural Land Audit* located within the Project footprint is summarised within Table 8-10, and shown on Figure 8-6. Further information can be found in Chapter 9: Land Resources.

TABLE 8-10 AGRICULTURAL LAND IDENTIFIED BY THE QUEENSLAND AGRICULTURAL LAND AUDIT WITHIN THE PROJECT FOOTPRINT

Agricultural land audit theme	Permanent footprint		Temporary footprint	
	Area (ha)	% of permanent footprint	Area (ha)	% of temporary footprint
Land Class A	1,909.48	75.03	671.00	80.14
Land Class B	80.32	3.16	15.24	1.82
Border Region important agricultural areas (IAA)	338.02	13.28	126.65	15.13
Eastern Darling Downs IAA	1,469.25	57.73	317.97	37.98



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-6b: Queensland agricultural land audit

LEGEND

-  Chainage (km)
-  Existing rail (operational)
-  NSW/QLD border
-  Watercourses
-  State controlled roads
-  Local government roads
-  Cadastral
-  Regional planning boundaries
-  Local government areas
-  Stock routes
-  Important agricultural land area
- Agricultural land**
 -  Class A
- Impact assessment area**
 -  Project footprint
 -  Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL = ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-6c: Queensland agricultural land audit

LEGEND

- 5 Chainage (km)
- Existing rail (operational)
- State controlled roads
- Local government roads
- Cadastral
- Regional planning boundaries
- Local government areas
- Stock routes
- Important agricultural land area
- Agricultural land**
 - Class A
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

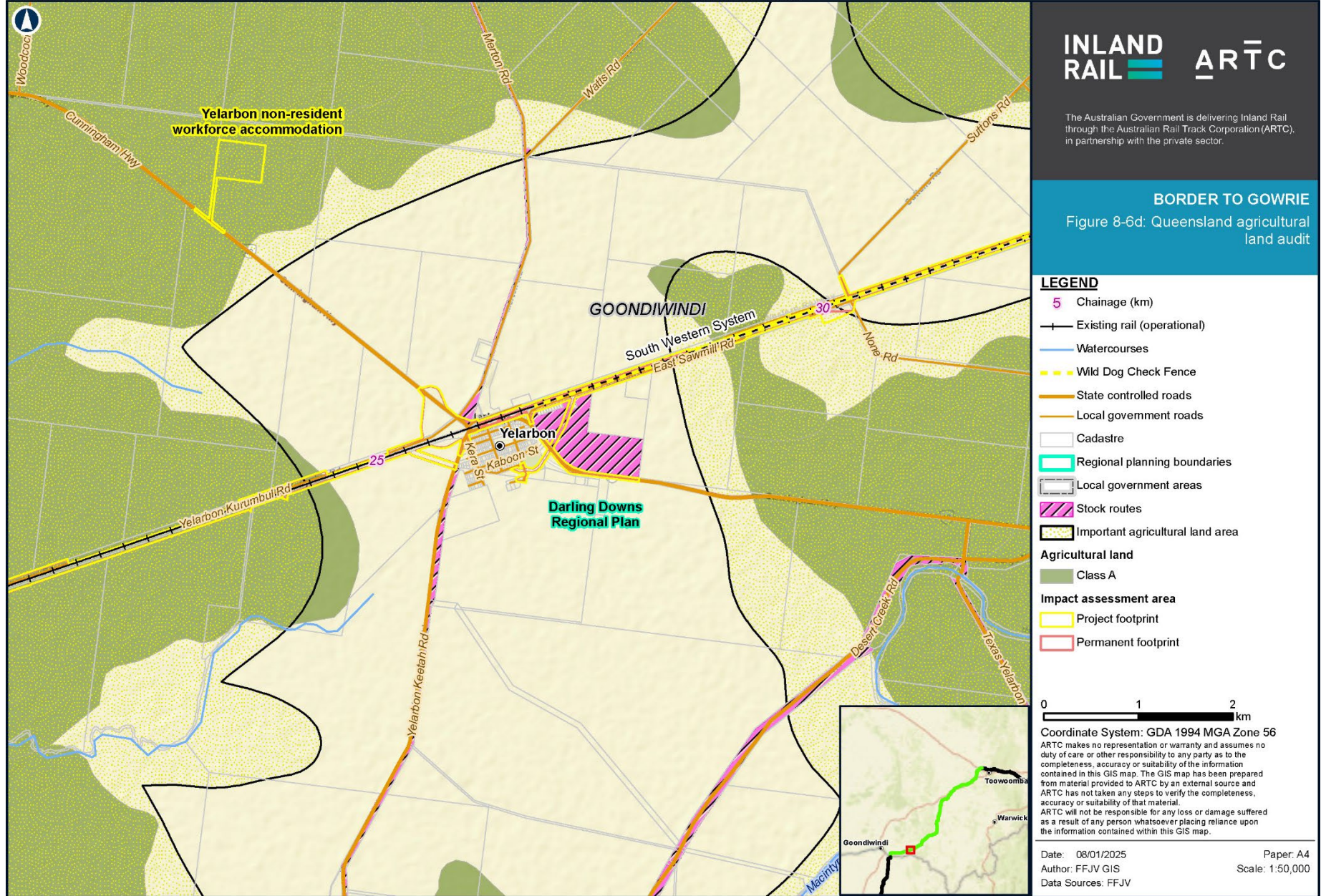
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

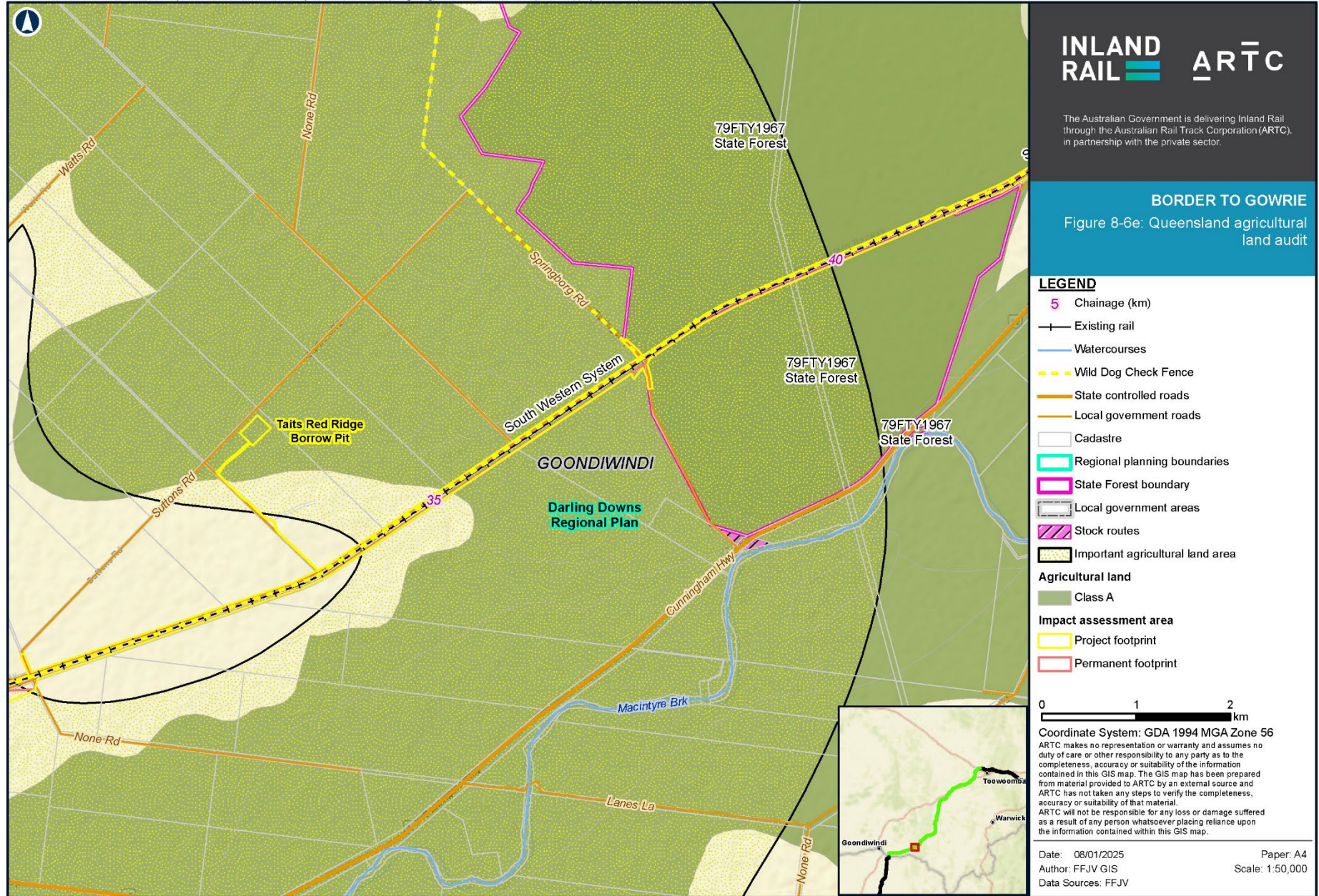
Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



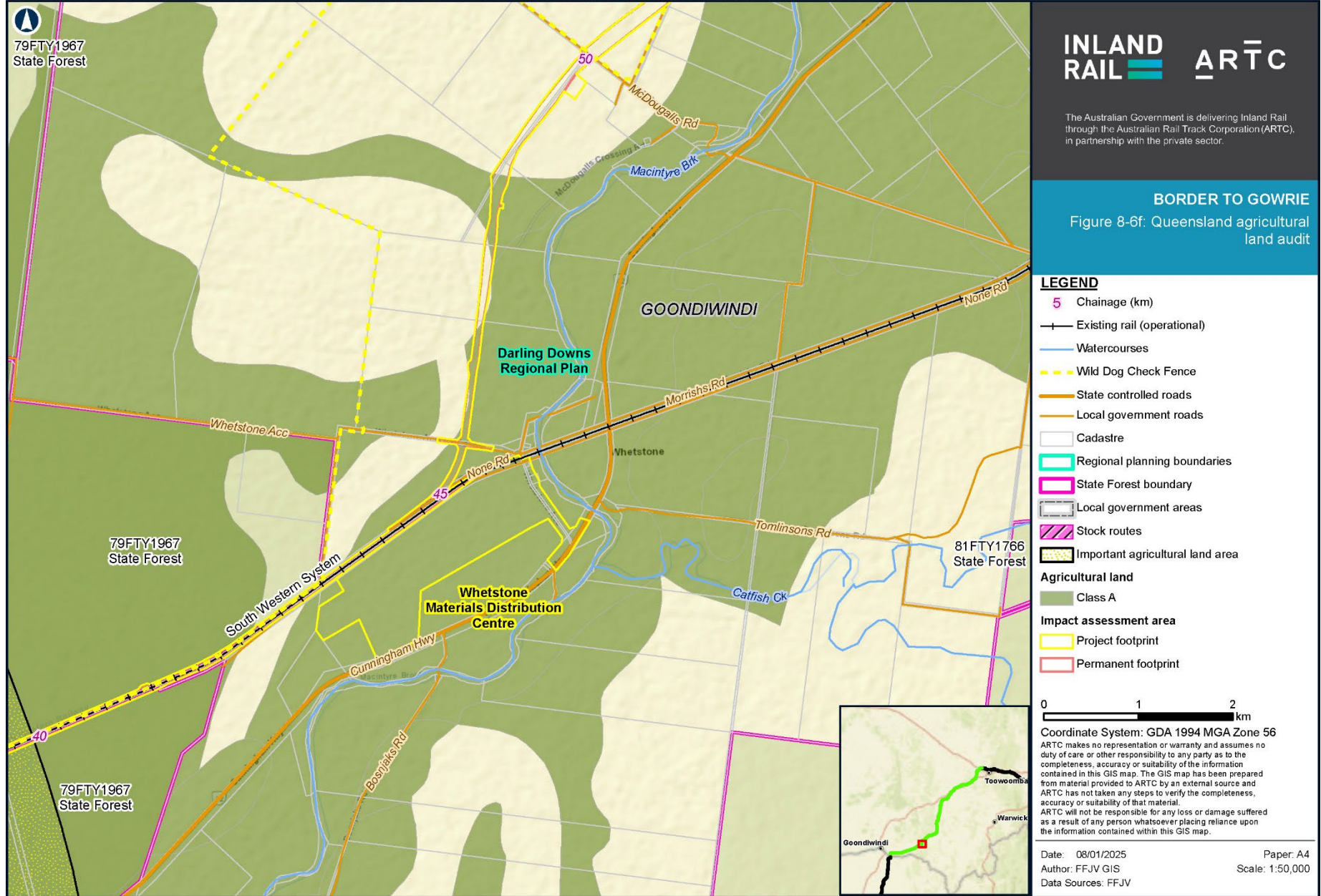
Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2GITasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-6g: Queensland agricultural land audit

LEGEND

- 5 Chainage (km)
- Existing rail (operational)
- Watercourses
- Wild Dog Check Fence
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Stock routes
- Agricultural land**
 - Class A
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

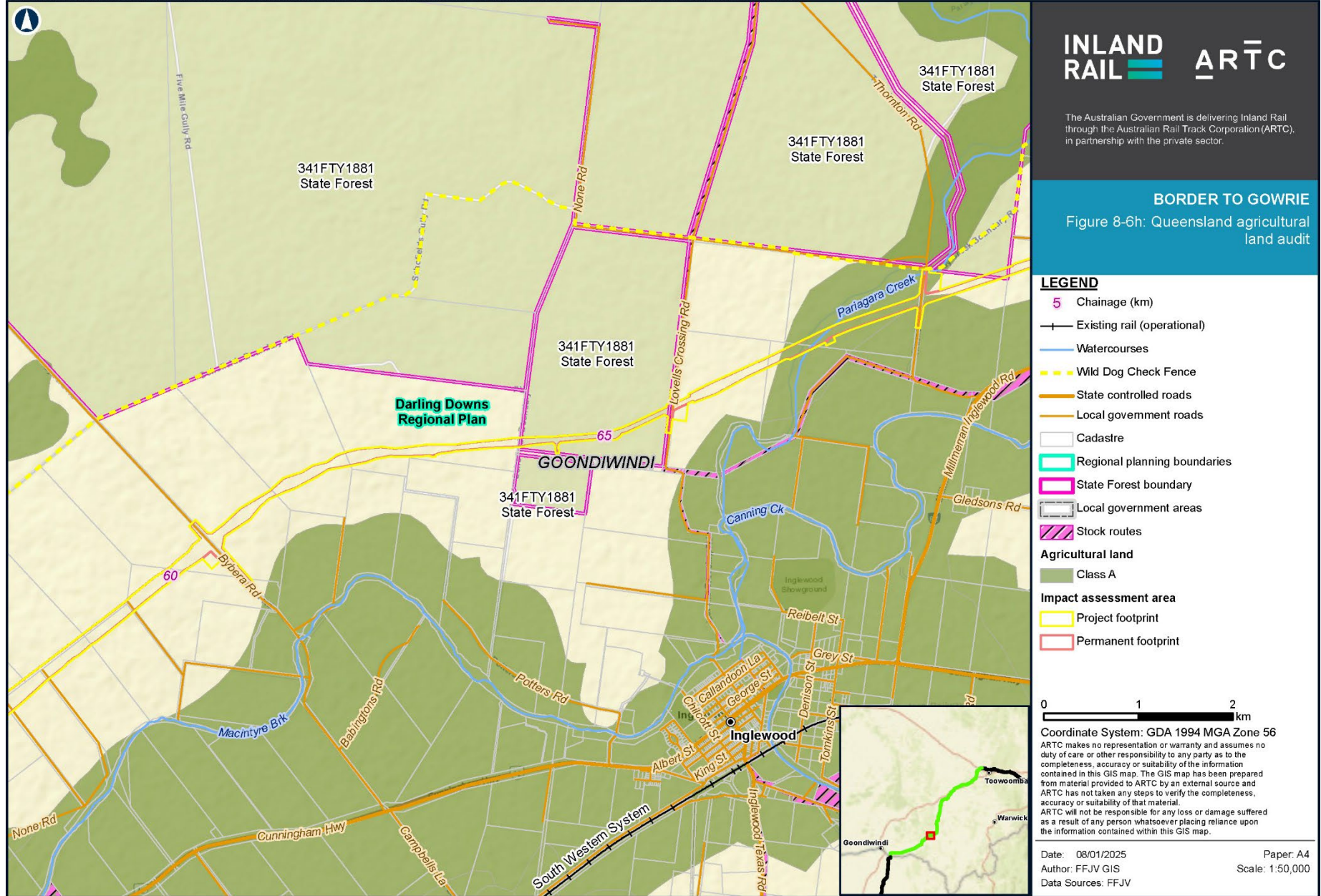
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-6i: Queensland agricultural land audit

LEGEND

- 5 Chainage (km)
- Watercourses
- Wild Dog Check Fence
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Stock routes
- Agricultural land**
 - Class A
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025

Author: FFJV GIS

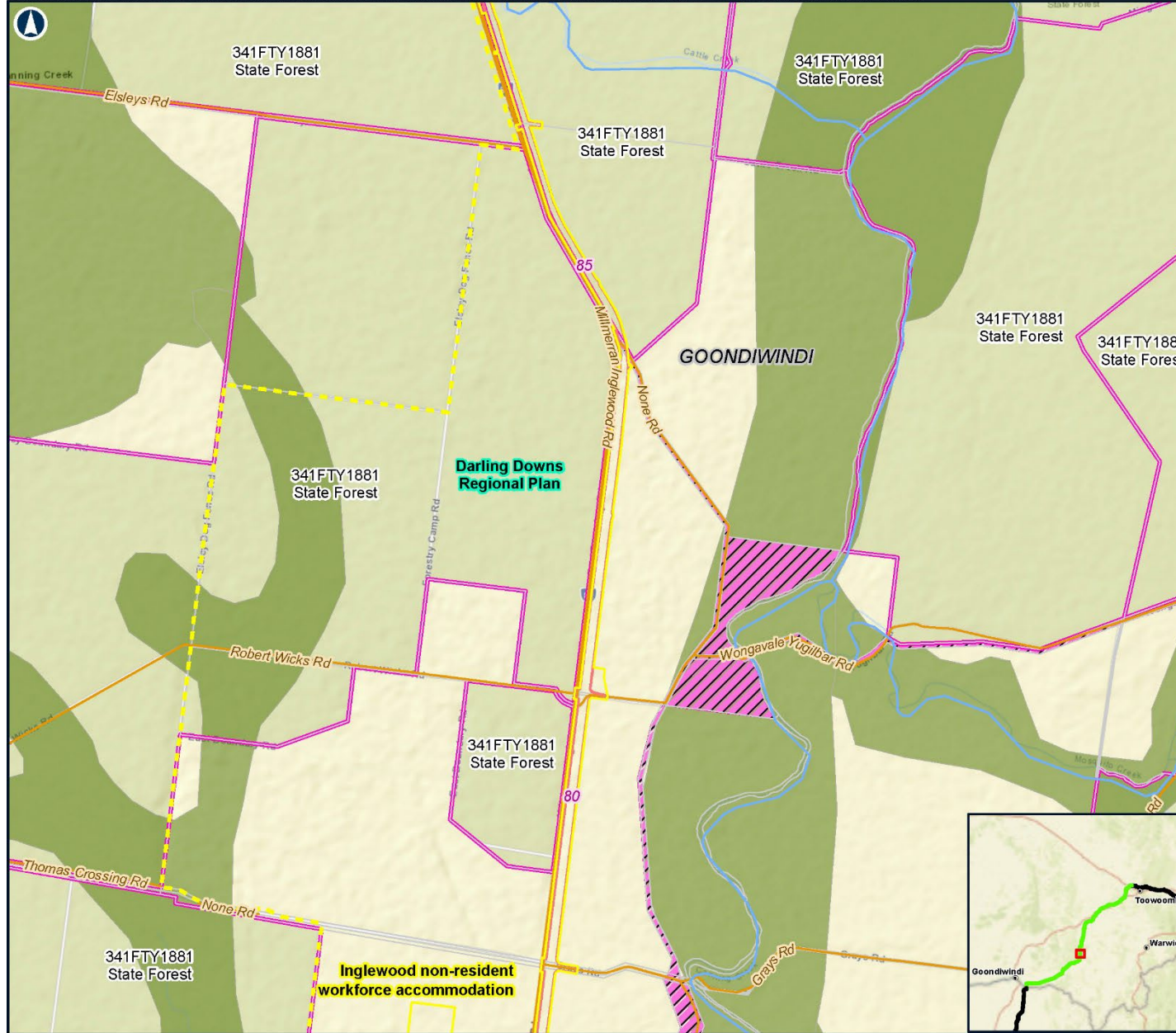
Data Sources: FFJV

Paper: A4

Scale: 1:50,000

Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-6j: Queensland agricultural land audit

LEGEND

-  Chainage (km)
-  Wild Dog Check Fence
-  State controlled roads
-  Local government roads
-  Cadastral
-  Regional planning boundaries
-  State Forest boundary
-  Local government areas
-  Stock routes
- Agricultural land**
 -  Class A
- Impact assessment area**
 -  Project footprint
 -  Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

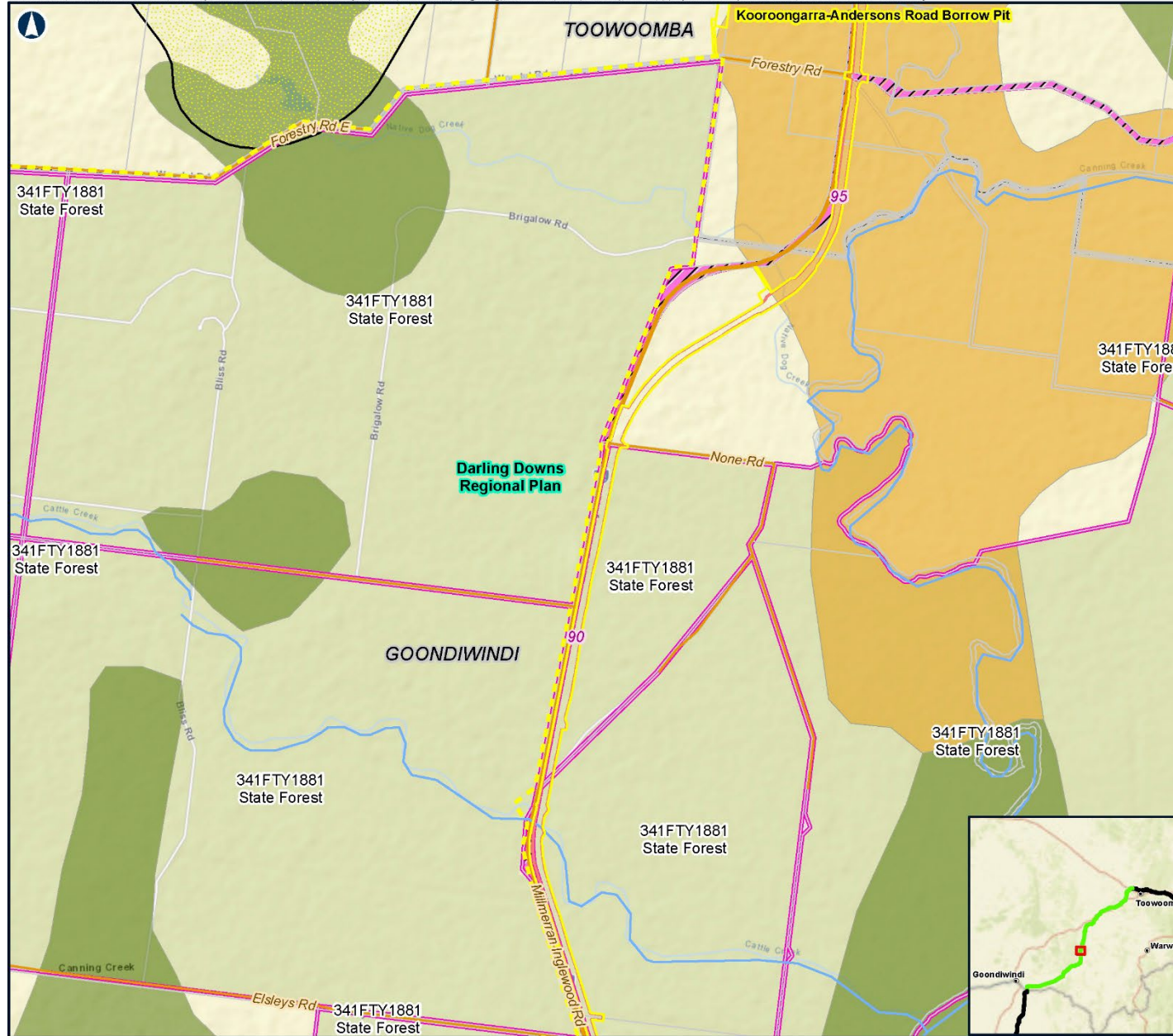
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-6k: Queensland agricultural land audit

LEGEND

- 5 Chainage (km)
- Wild Dog Check Fence
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Stock routes
- Important agricultural land area
- Agricultural land**
 - Class A
 - Class B
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025

Author: FFJV GIS

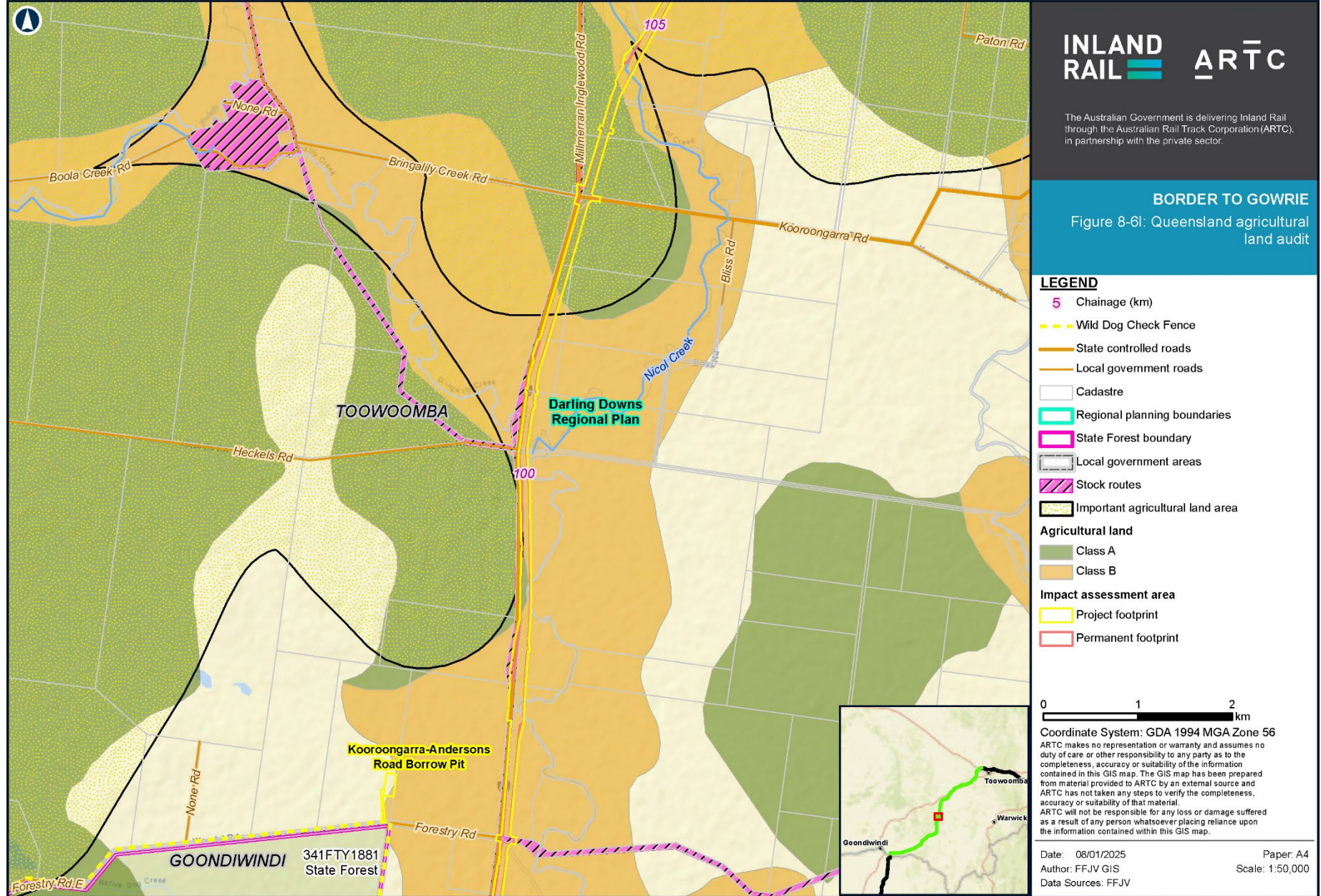
Data Sources: FFJV

Paper: A4

Scale: 1:50,000

Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\GIS_310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-6m: Queensland agricultural land audit

LEGEND

- 5 Chainage (km)
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Stock routes
- Important agricultural land area
- Agricultural land
 - Class A
 - Class B
- Impact assessment area
 - Project footprint
 - Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material.

ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025

Author: FFJV GIS

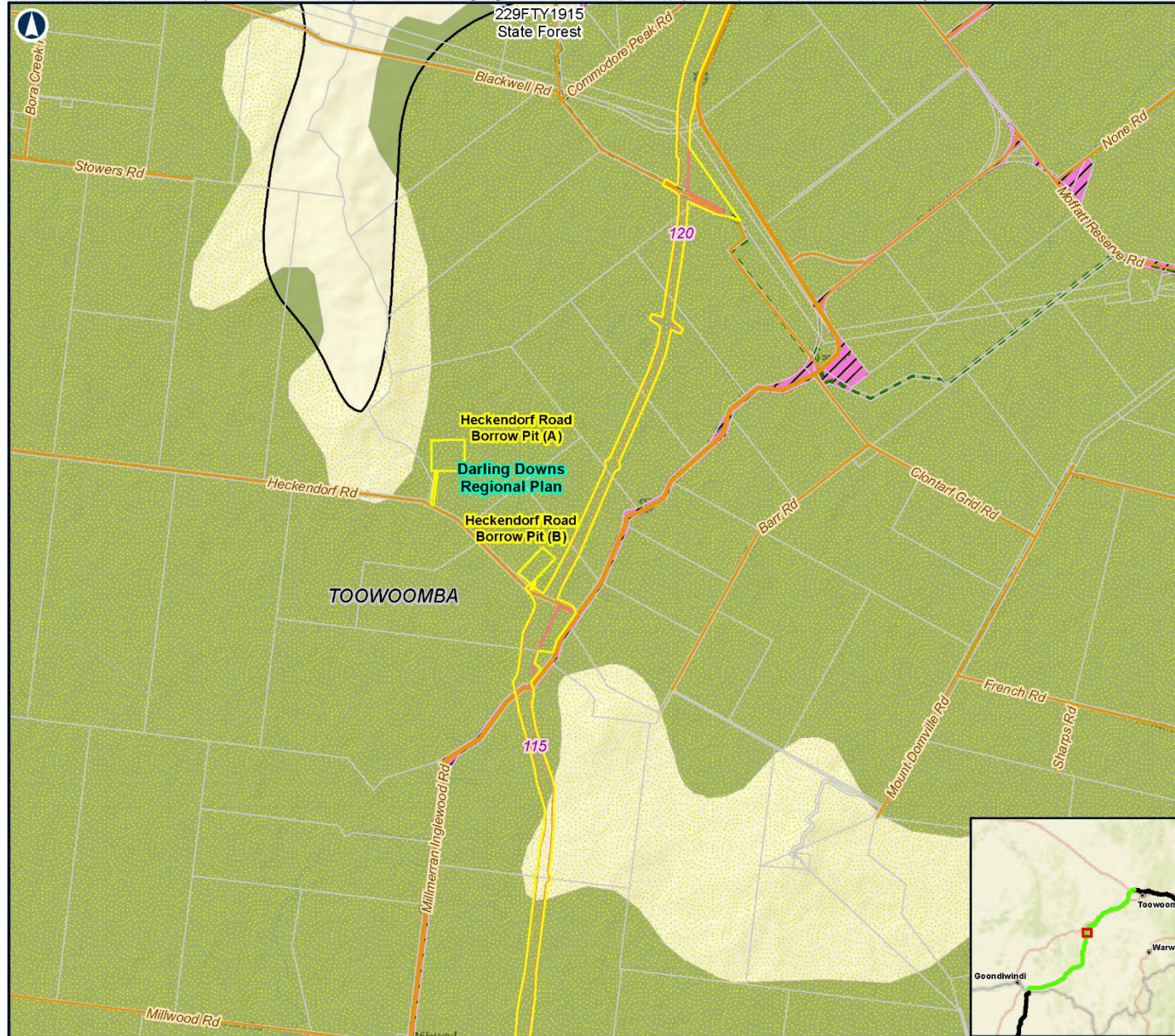
Data Sources: FFJV

Paper: A4

Scale: 1:50,000

Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-6n: Queensland agricultural land audit

LEGEND

- 5 Chainage (km)
- Rabbit fence
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Stock routes
- Important agricultural land area
- Agricultural land**
 - Class A
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

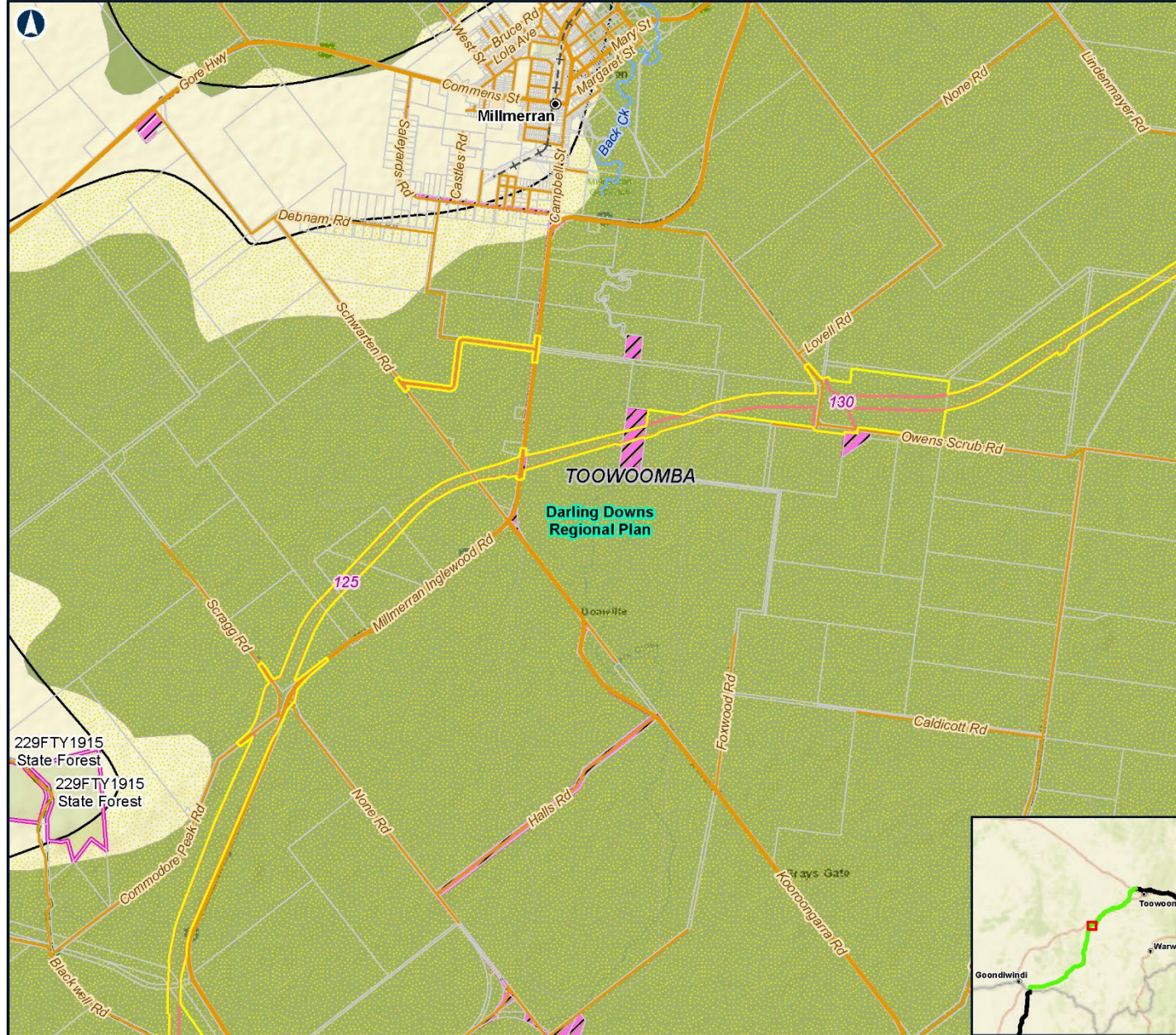
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\GIS_310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL = ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-60: Queensland agricultural land audit

LEGEND

- 5 Chainage (km)
- + - Existing rail (non-)
- Watercourses
- Rabbit fence
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Stock routes
- Important agricultural land area
- Agricultural land**
- Class A
- Impact assessment area**
- Project footprint
- Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

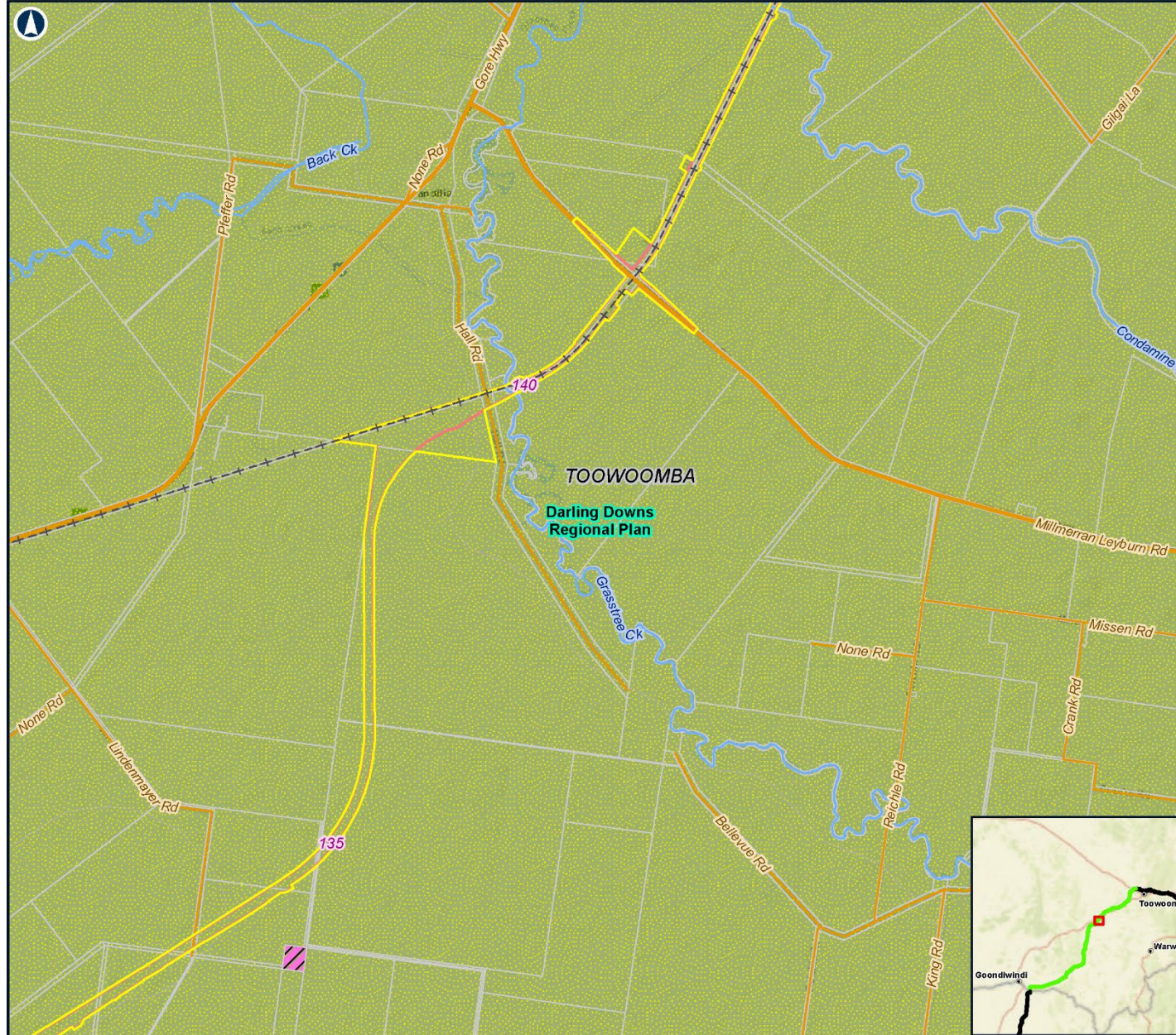
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-6p: Queensland agricultural land audit

LEGEND

- Chainage (km)
- Existing rail (non-operational)
- Watercourses
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- Local government areas
- Stock routes
- Important agricultural land area
- Agricultural land**
 - Class A
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

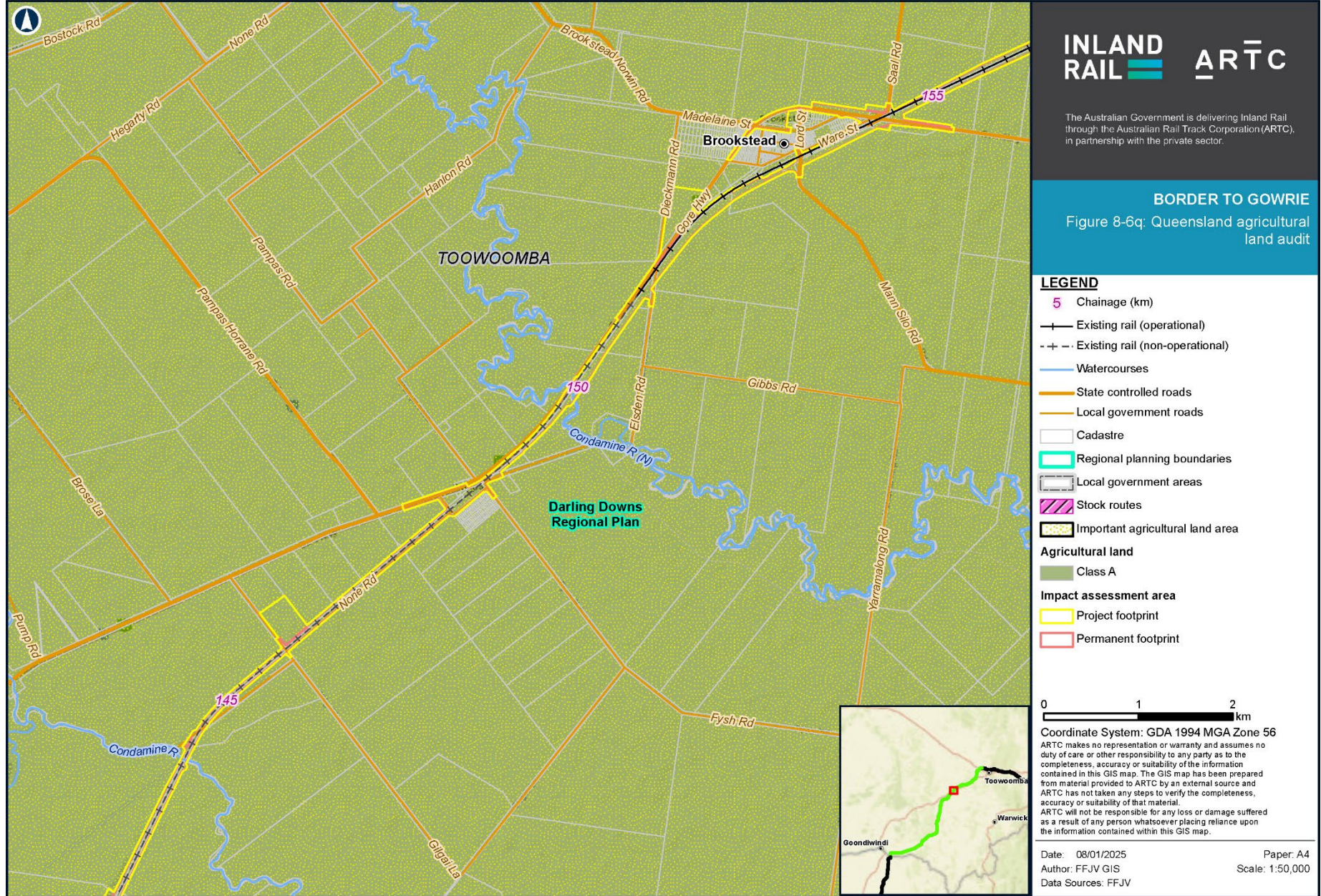
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-20190109112_Land_Use_and_Tenure\310-ESV-20190109112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-6r: Queensland agricultural land audit

LEGEND

-  Chainage (km)
-  Existing rail (operational)
-  State controlled roads
-  Local government roads
-  Cadastre
-  Regional planning boundaries
-  Local government areas
-  Stock routes
-  Important agricultural land area
- Agricultural land**
 -  Class A
- Impact assessment area**
 -  Project footprint
 -  Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-6s: Queensland agricultural land audit

LEGEND

-  Chainage (km)
-  Existing rail
-  State controlled roads
-  Local government roads
-  Cadastral
-  Regional planning boundaries
-  State Forest boundary
-  Local government areas
-  Stock routes
-  Important agricultural land area
- Agricultural land**
 -  Class A
- Impact assessment area**
 -  Project footprint
 -  Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material.

ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025

Author: FFJV GIS

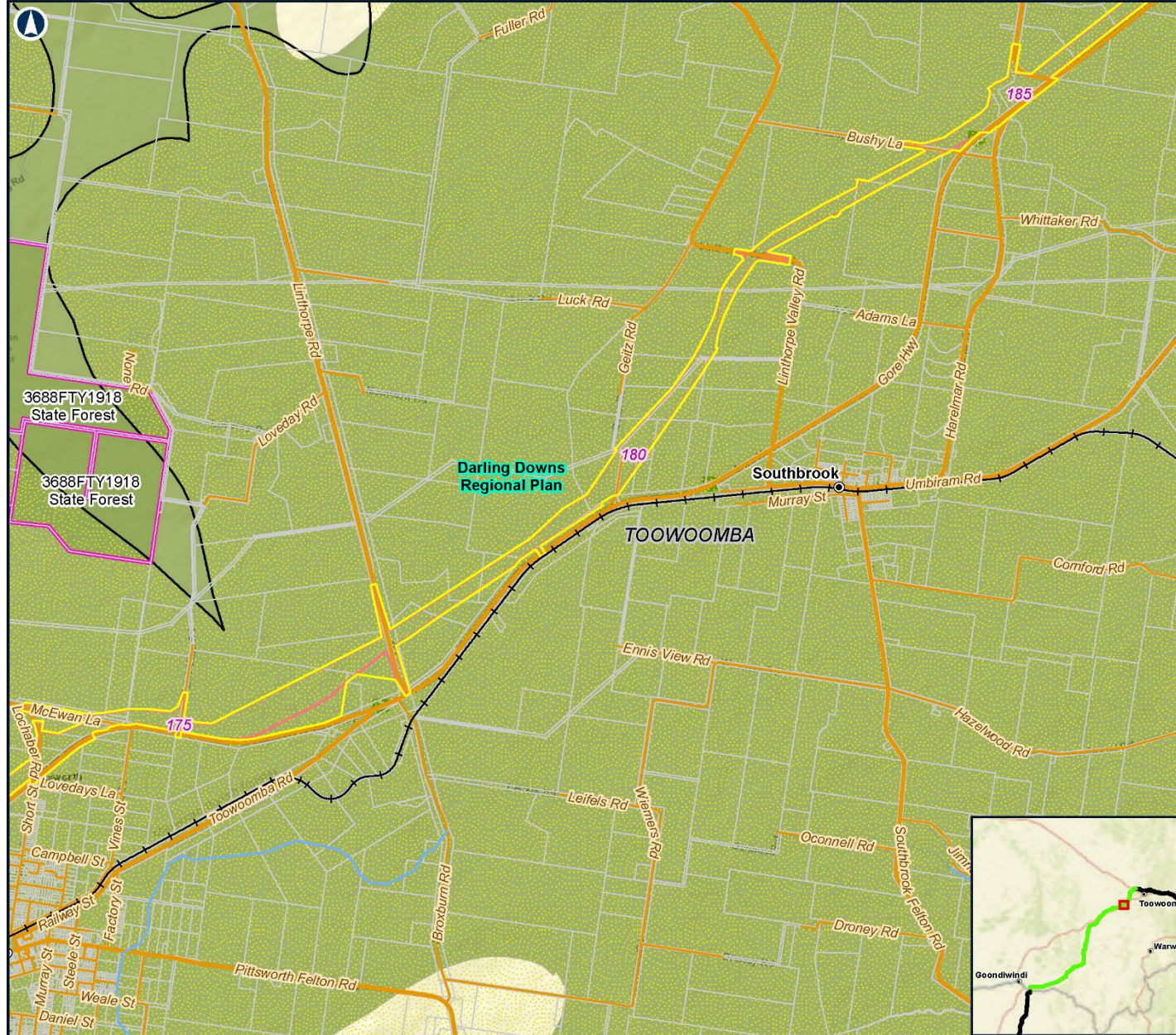
Data Sources: FFJV

Paper: A4

Scale: 1:50,000

Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-20190109112_Land_Use_and_Tenure\310-ESV-20190109112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-6t: Queensland agricultural land audit

LEGEND

-  Chainage (km)
-  Existing rail (operational)
-  Watercourses
-  State controlled roads
-  Local government roads
-  Cadastre
-  Regional planning boundaries
-  State Forest boundary
-  Local government areas
-  Stock routes
-  Important agricultural land area
- Agricultural land**
 -  Class A
- Impact assessment area**
 -  Project footprint
 -  Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

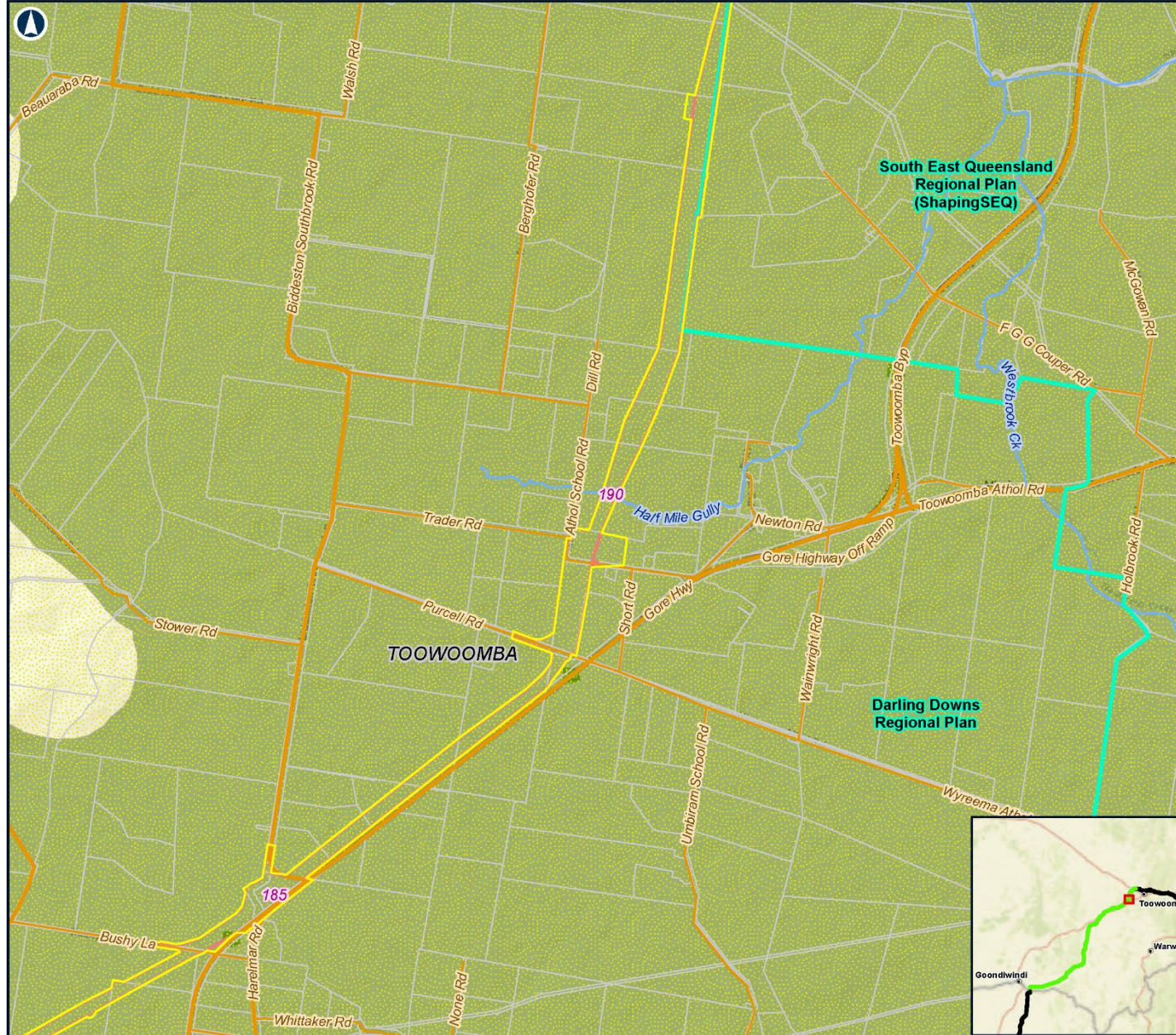
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-20190109112_Land_Use_and_Tenure\310-ESV-20190109112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL = ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-6u: Queensland agricultural land audit

LEGEND

- 5 Chainage (km)
- Existing rail (operational)
- Watercourses
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- Local government areas
- Stock routes
- Important agricultural land area
- Agricultural land
 - Class A
- Impact assessment area
 - Project footprint
 - Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

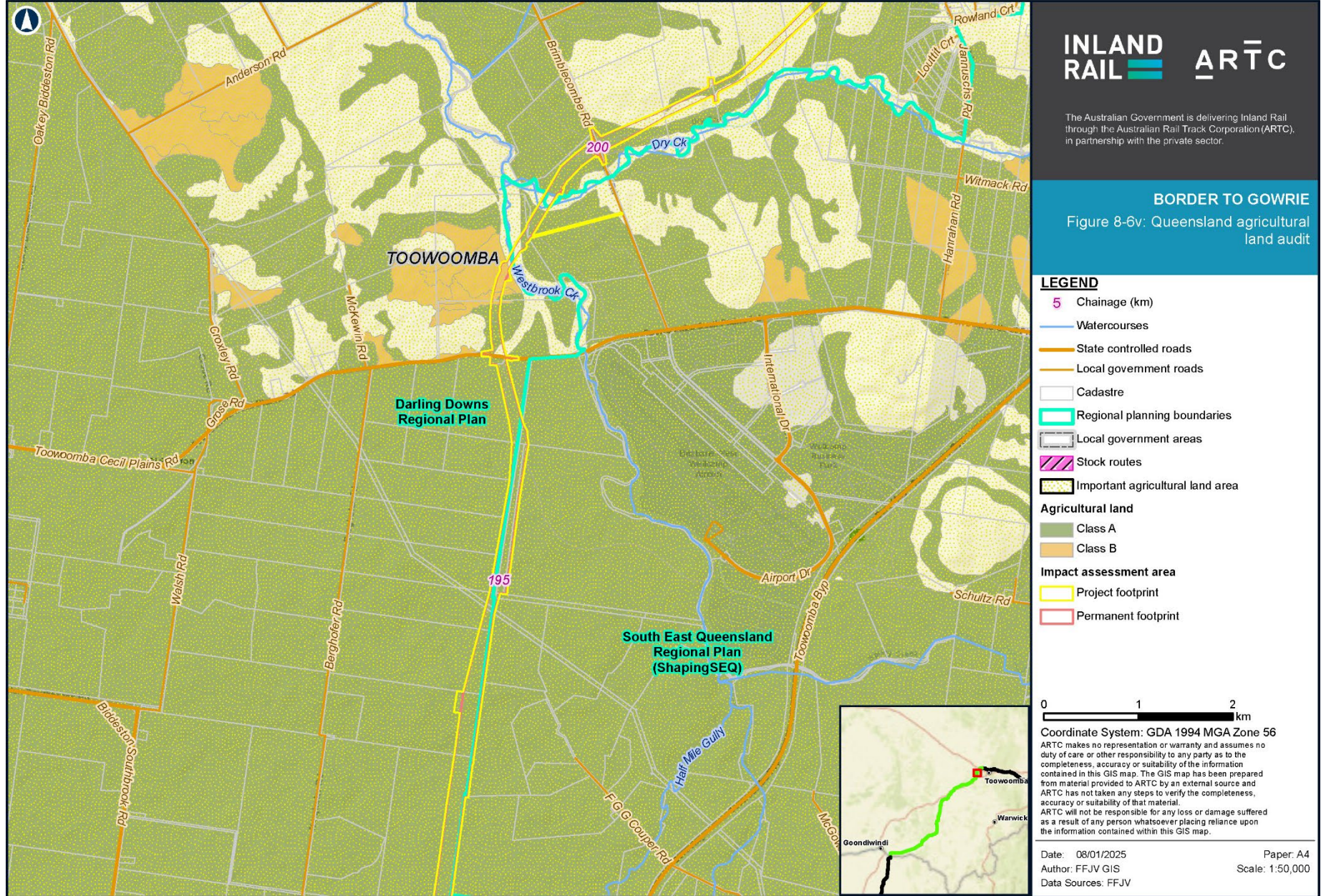
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

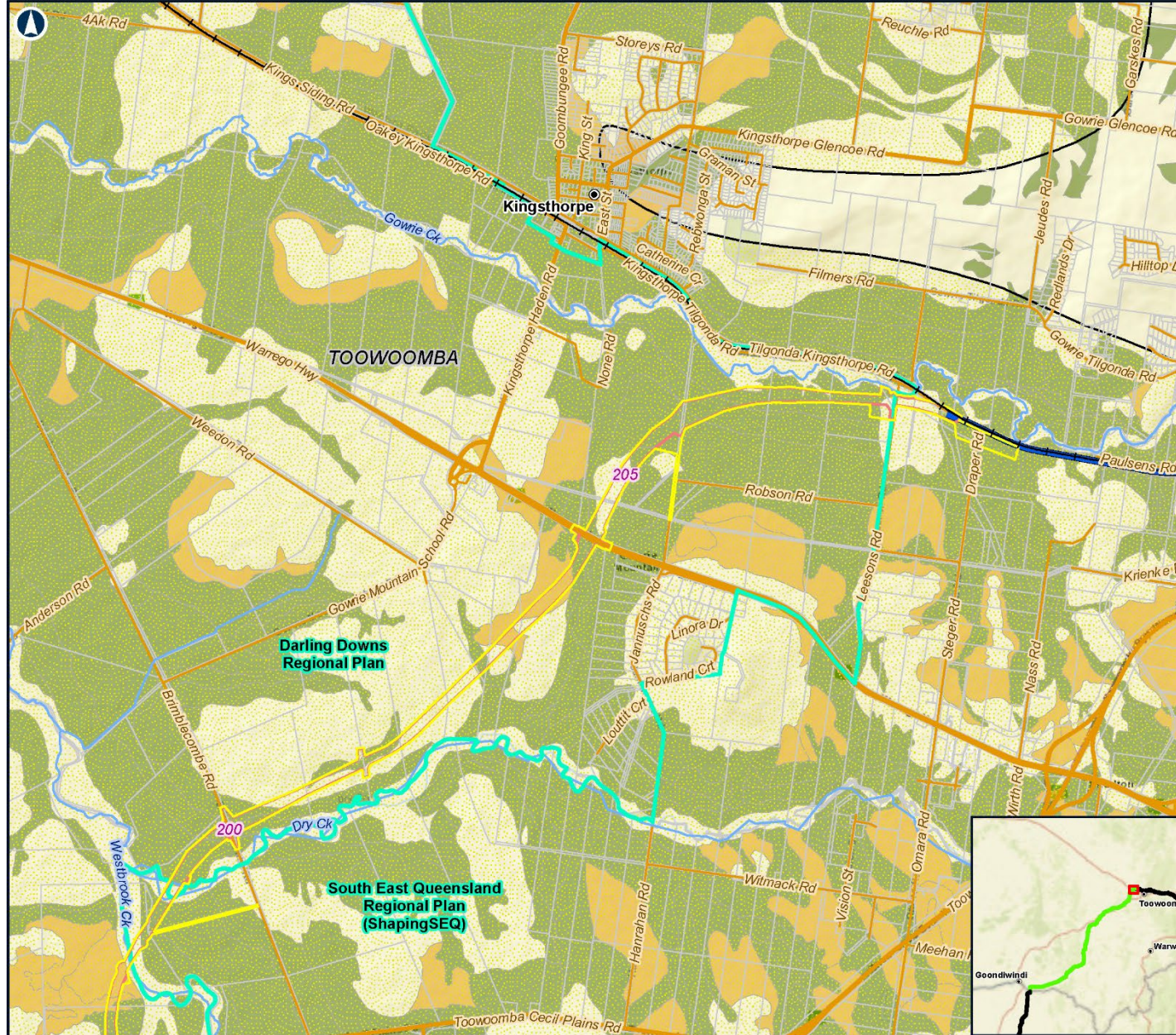
Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-6w: Queensland agricultural land audit

LEGEND

- 5 Chainage (km)
- Gowrie to Helidon alignment
- Existing rail
- Watercourses
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- Local government areas
- Stock routes
- Important agricultural land area
- Agricultural land
 - Class A
 - Class B
- Impact assessment area
 - Project footprint
 - Permanent footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material.

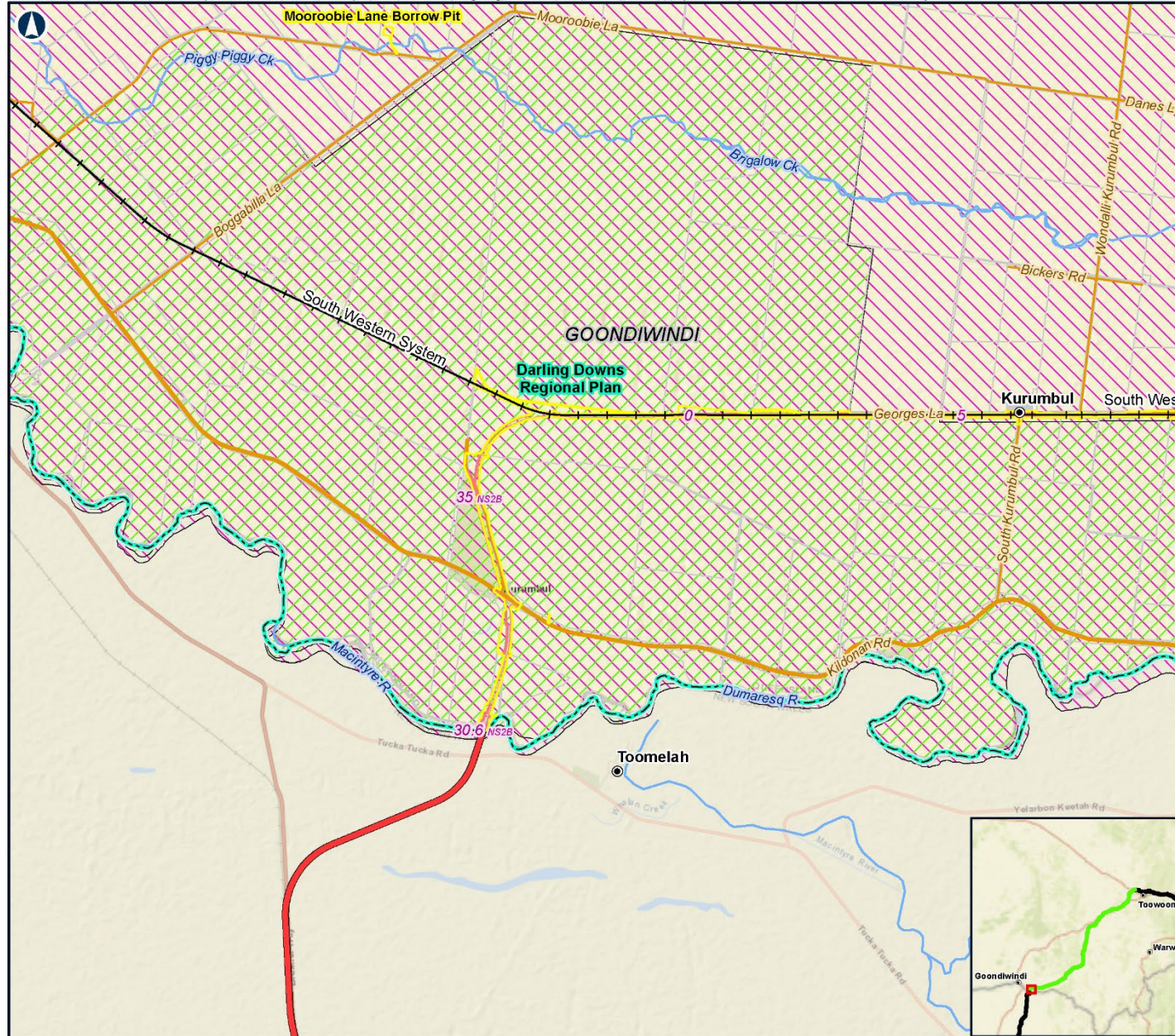
ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/GN/TM/ASC/DTH Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-6_Queensland_agricultural_land_audit_v2.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL = ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7a: Areas of regional interest

LEGEND

- 5 Chainage (km)
- North Star to Border alignment
- Existing rail (operational)
- NSW/QLD border
- Watercourses
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

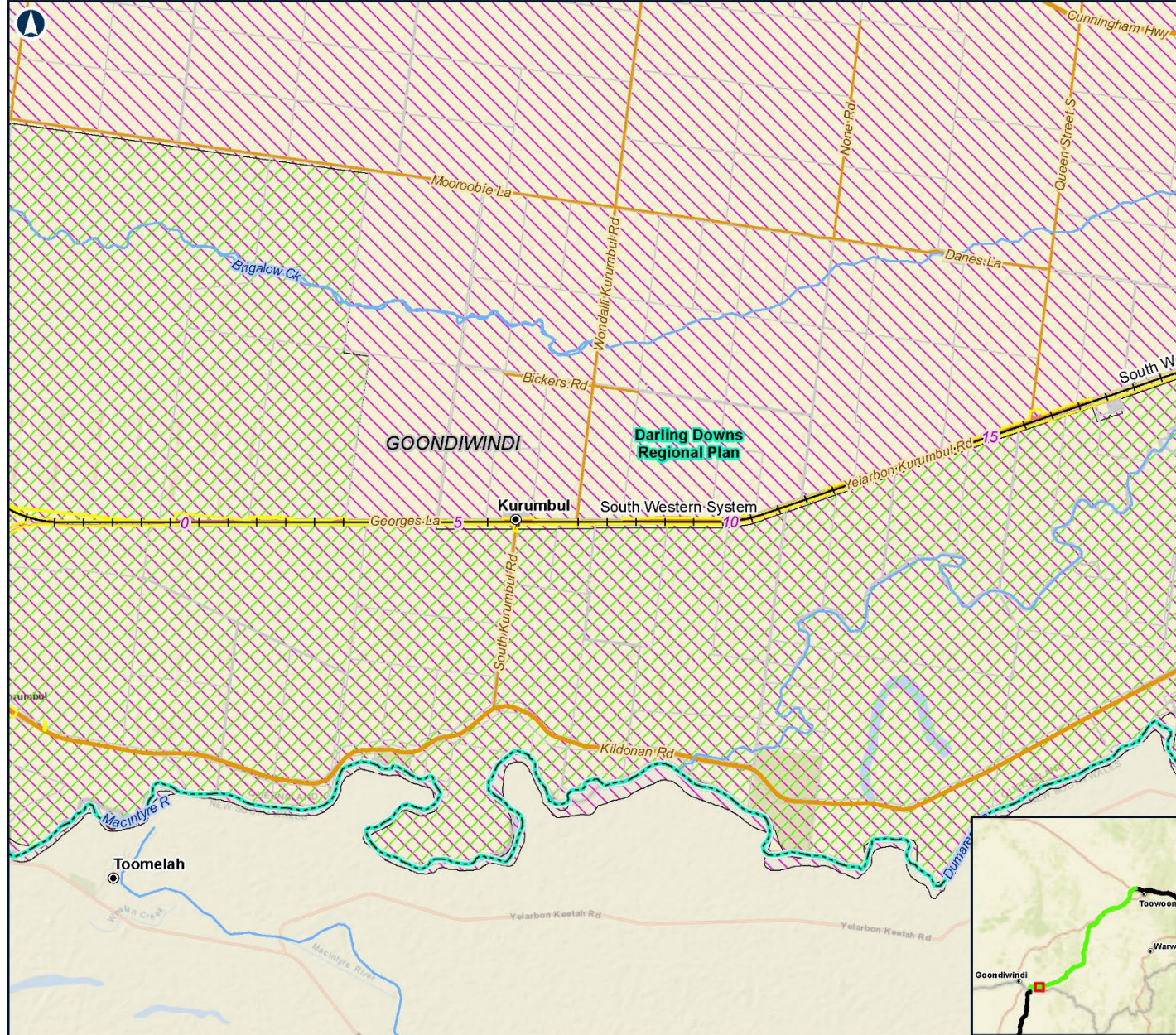
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL = ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7b: Areas of regional interest

LEGEND

- 5 Chainage (km)
- Existing rail (operational)
- NSW/QLD border
- Watercourses
- State controlled roads
- Local government roads
- Cadastral
- Regional planning boundaries
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

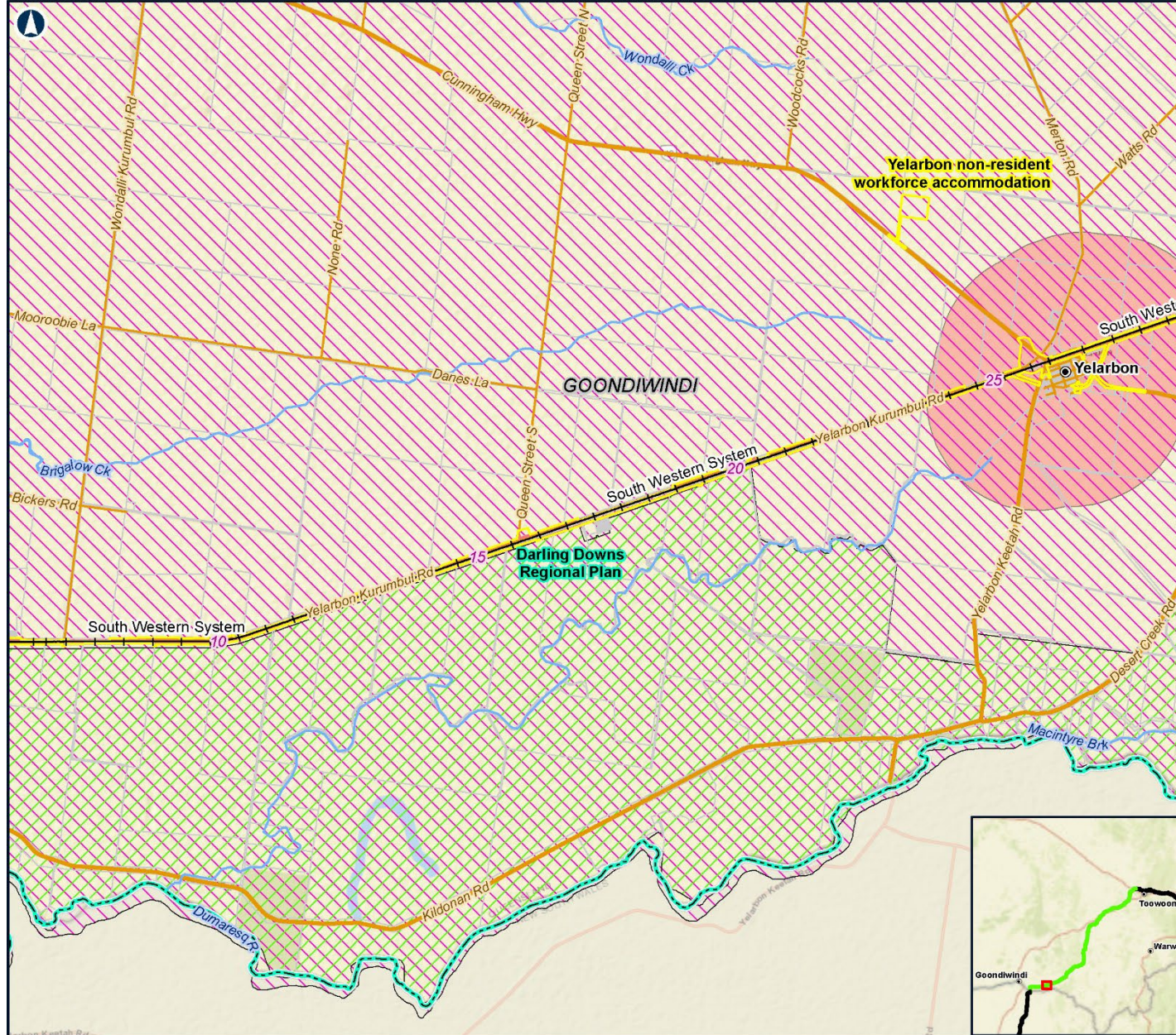
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL = ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7c: Areas of regional interest

LEGEND

- 5 Chainage (km)
- Existing rail (operational)
- NSW/QLD border
- Watercourses
- State controlled roads
- Local government roads
- Cadastral
- Regional planning boundaries
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
 - Priority living area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025

Author: FFJV GIS

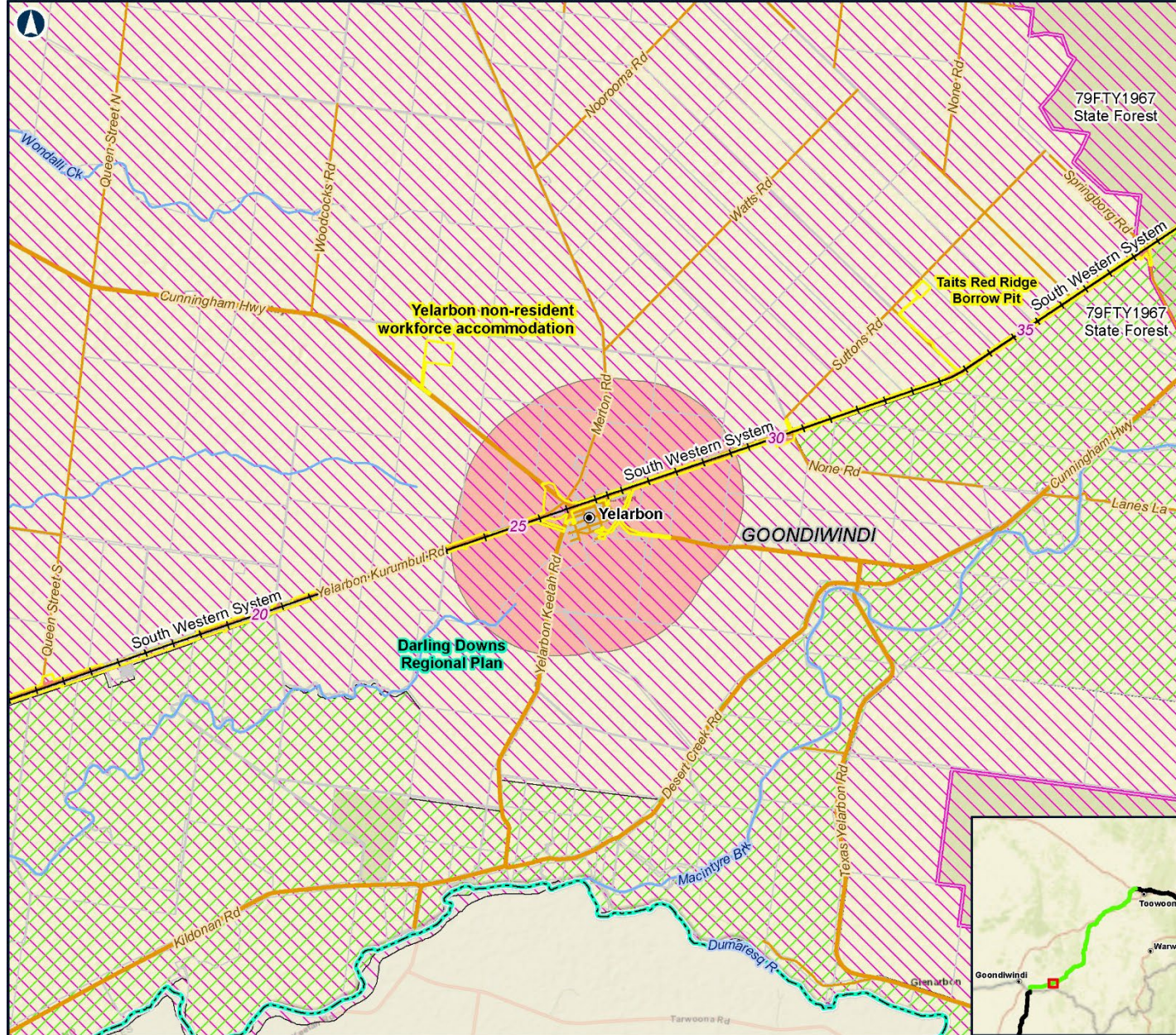
Data Sources: FFJV

Paper: A4

Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-2019\01091112_Land_Use_and_Tenure\310-ESV-2019\01091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7d: Areas of regional interest

LEGEND

- 5 Chainage (km)
- Existing rail (operational)
- NSW/QLD border
- Watercourses
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
 - Priority living area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025

Author: FFJV GIS

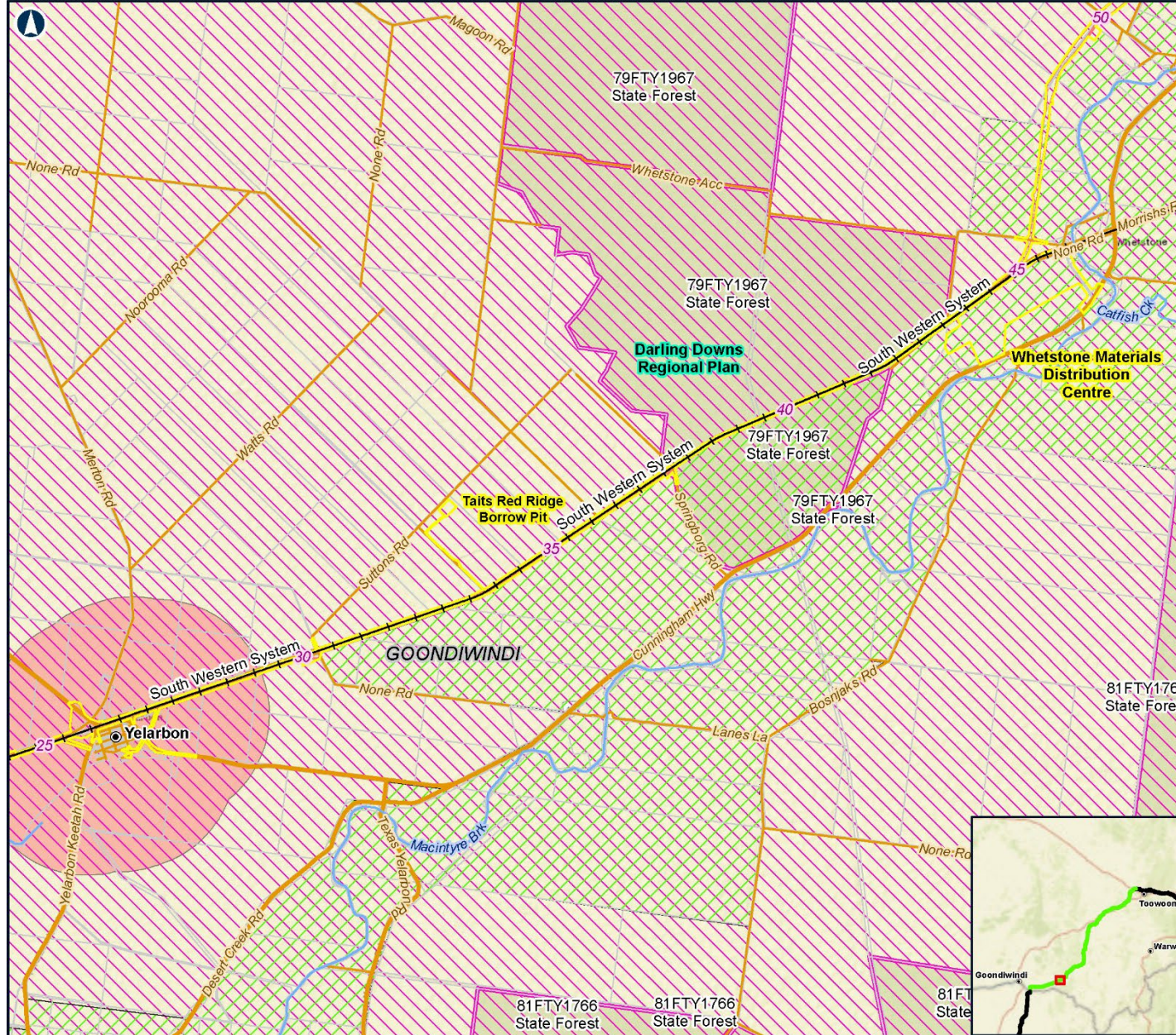
Data Sources: FFJV

Paper: A4

Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL = ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7e: Areas of regional interest

LEGEND

- 5 Chainage (km)
- Existing rail (operational)
- Watercourses
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
 - Priority living area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025

Author: FFJV GIS

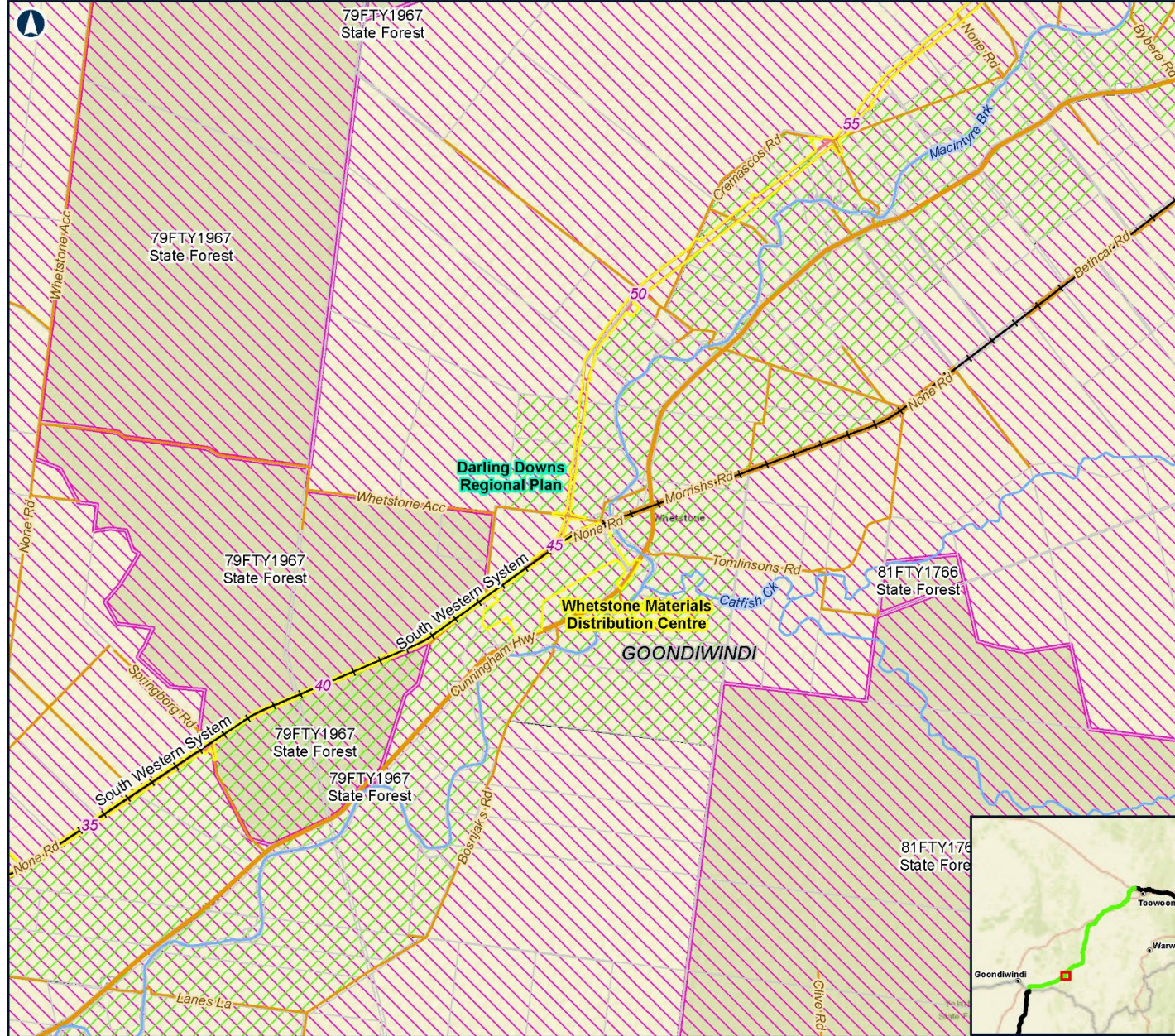
Data Sources: FFJV

Paper: A4

Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7f: Areas of regional interest

LEGEND

- 5 Chainage (km)
- Existing rail (operational)
- Watercourses
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

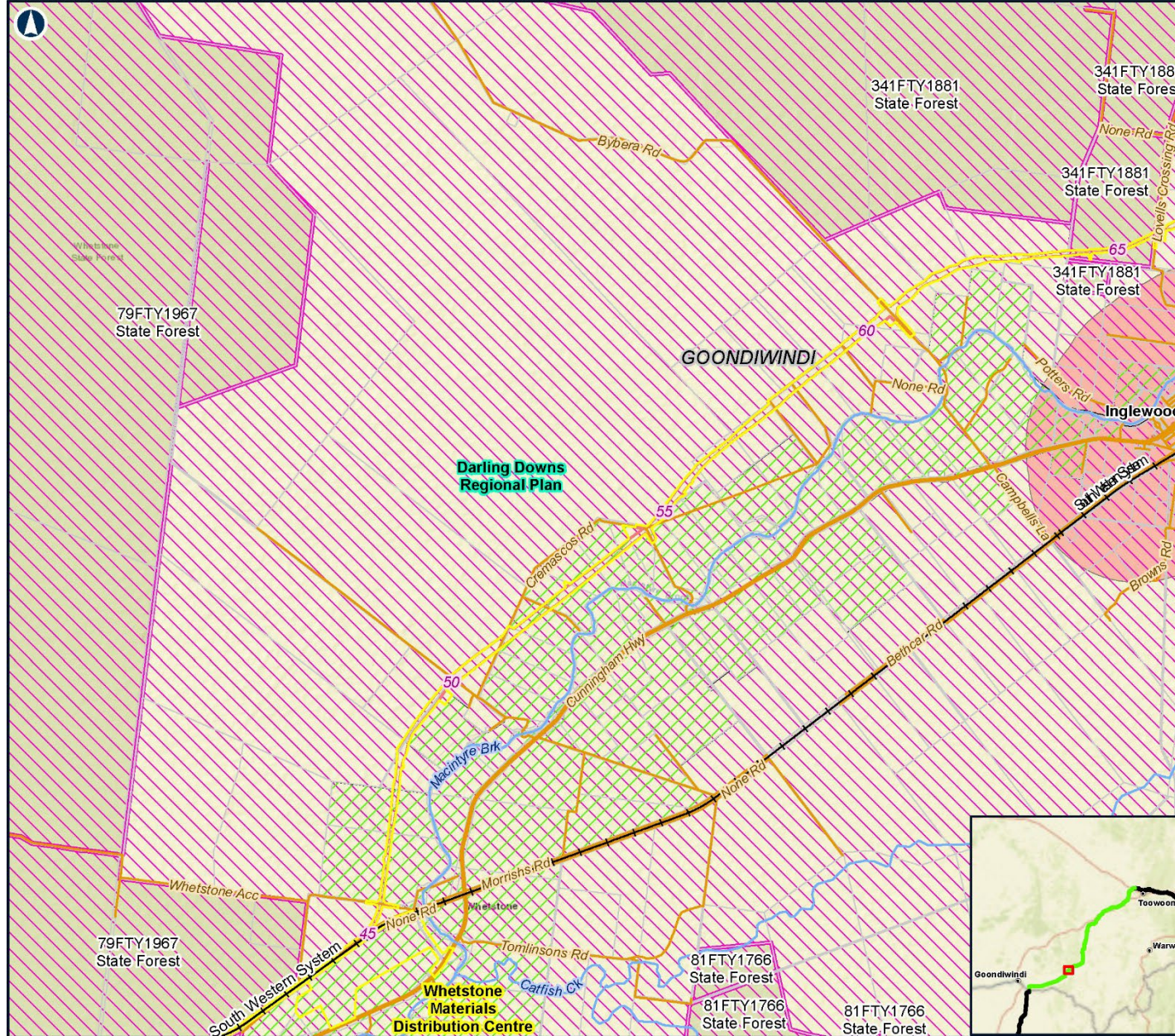
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-2019\01091112_Land_Use_and_Tenure\310-ESV-2019\01091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7g: Areas of regional interest

LEGEND

-  Chainage (km)
-  Existing rail
-  Watercourses
-  State controlled roads
-  Local government roads
-  Cadastral
-  Regional planning boundaries
-  State Forest boundary
-  Local government areas
- Regional planning interests**
 -  Strategic cropping land zones
 -  Priority agricultural area
 -  Priority living area
- Impact assessment area**
 -  Project footprint
 -  Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025

Author: FFJV GIS

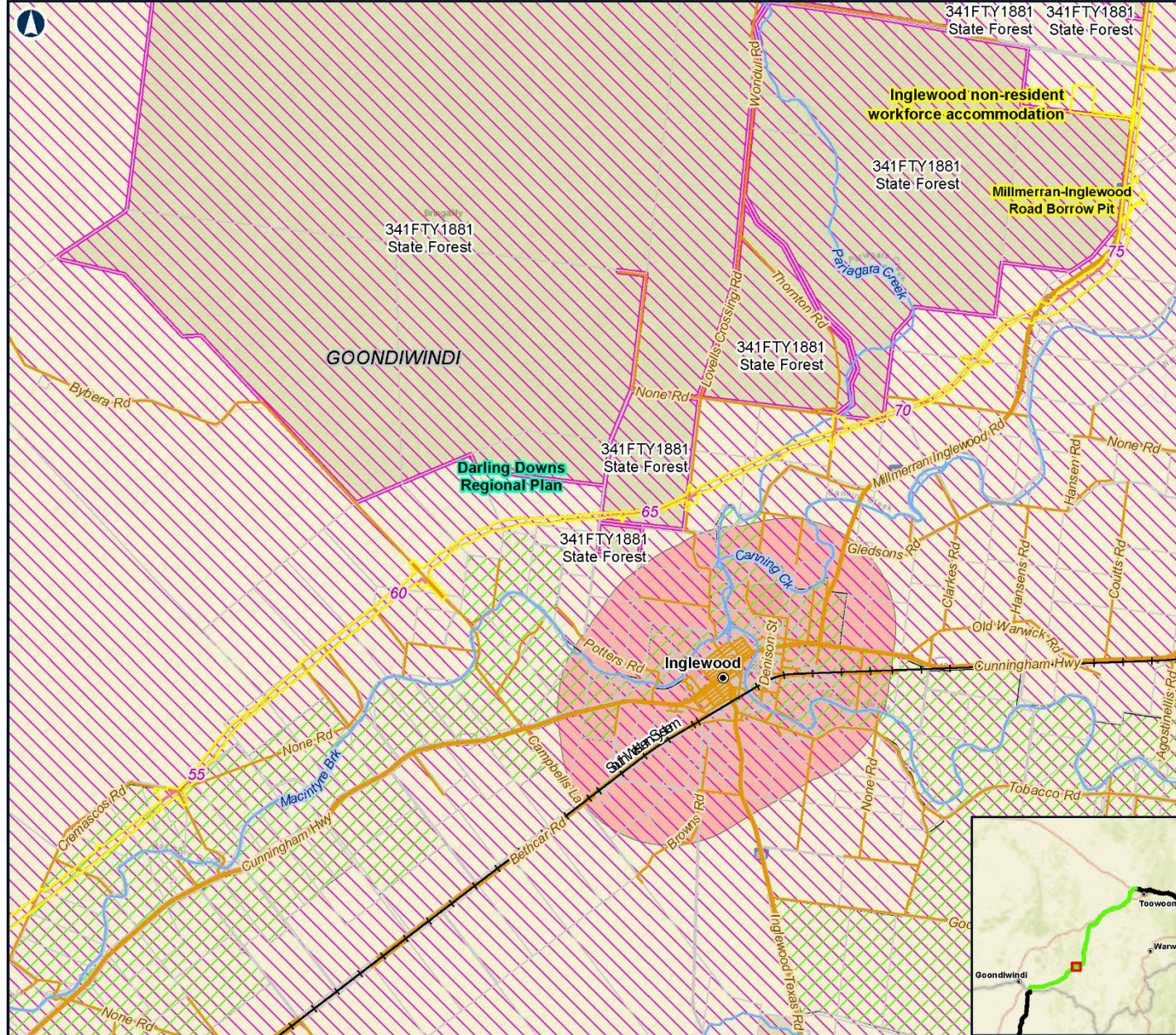
Data Sources: FFJV

Paper: A4

Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL = ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7h: Areas of regional interest

LEGEND

- 5 Chainage (km)
- Existing rail (operational)
- Watercourses
- State controlled roads
- Local government roads
- Cadastral
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
 - Priority living area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

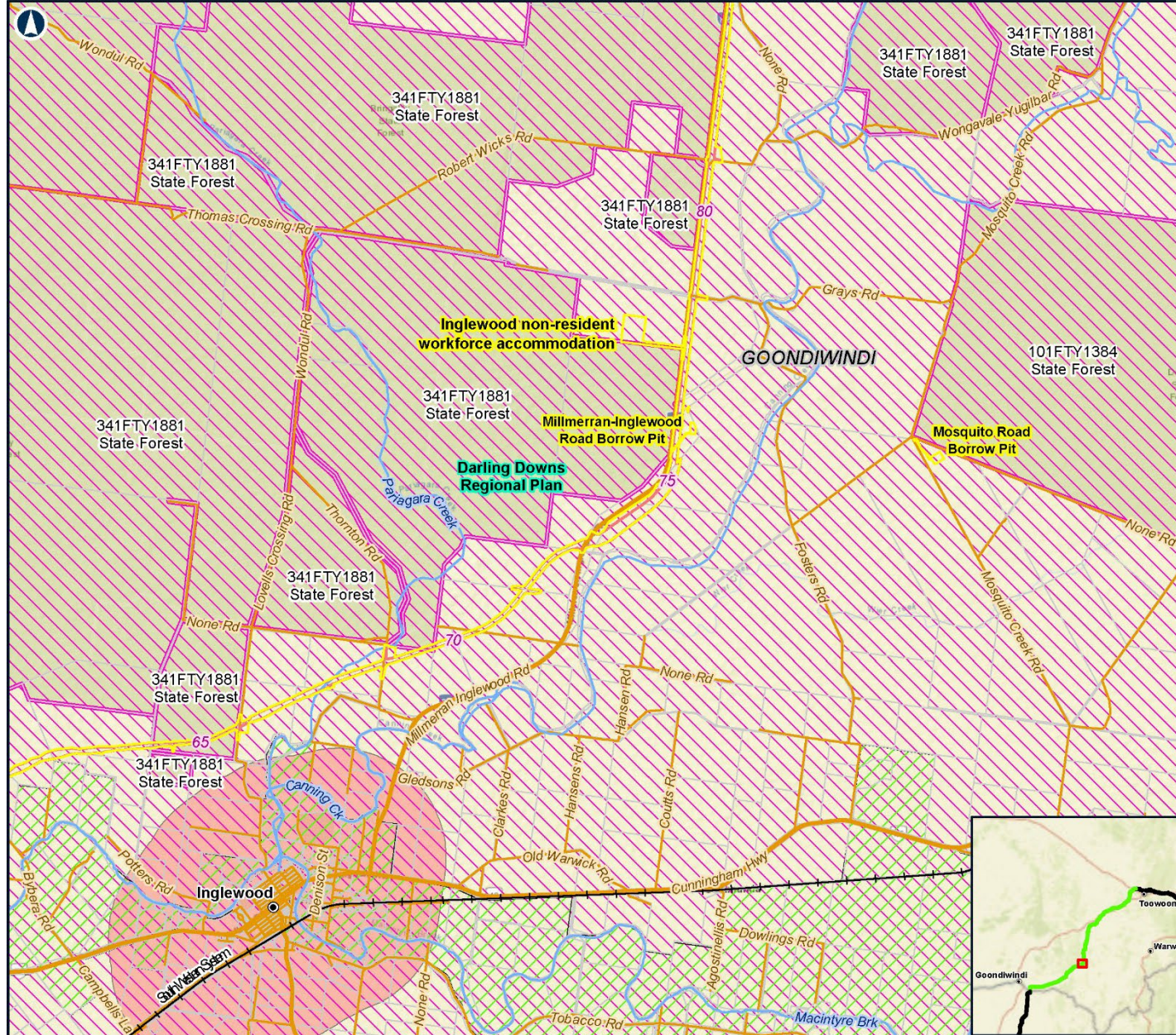
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL = ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7i: Areas of regional interest

LEGEND

- 5 Chainage (km)
- Existing rail (operational)
- Watercourses
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
 - Priority living area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025

Author: FFJV GIS

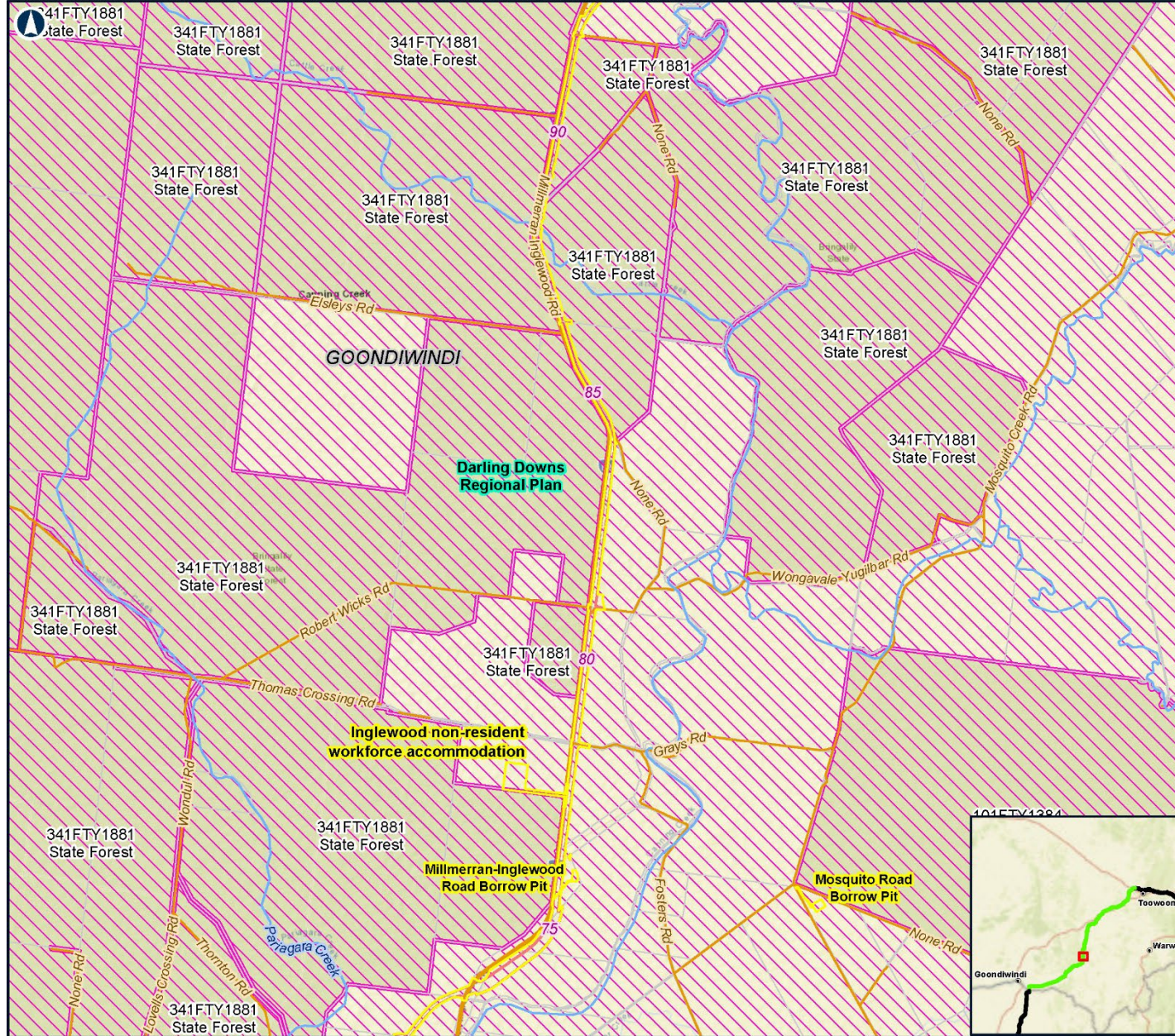
Data Sources: FFJV

Paper: A4

Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_82\GIS\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7j: Areas of regional interest

LEGEND

- 5 Chainage (km)
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025

Author: FFJV GIS

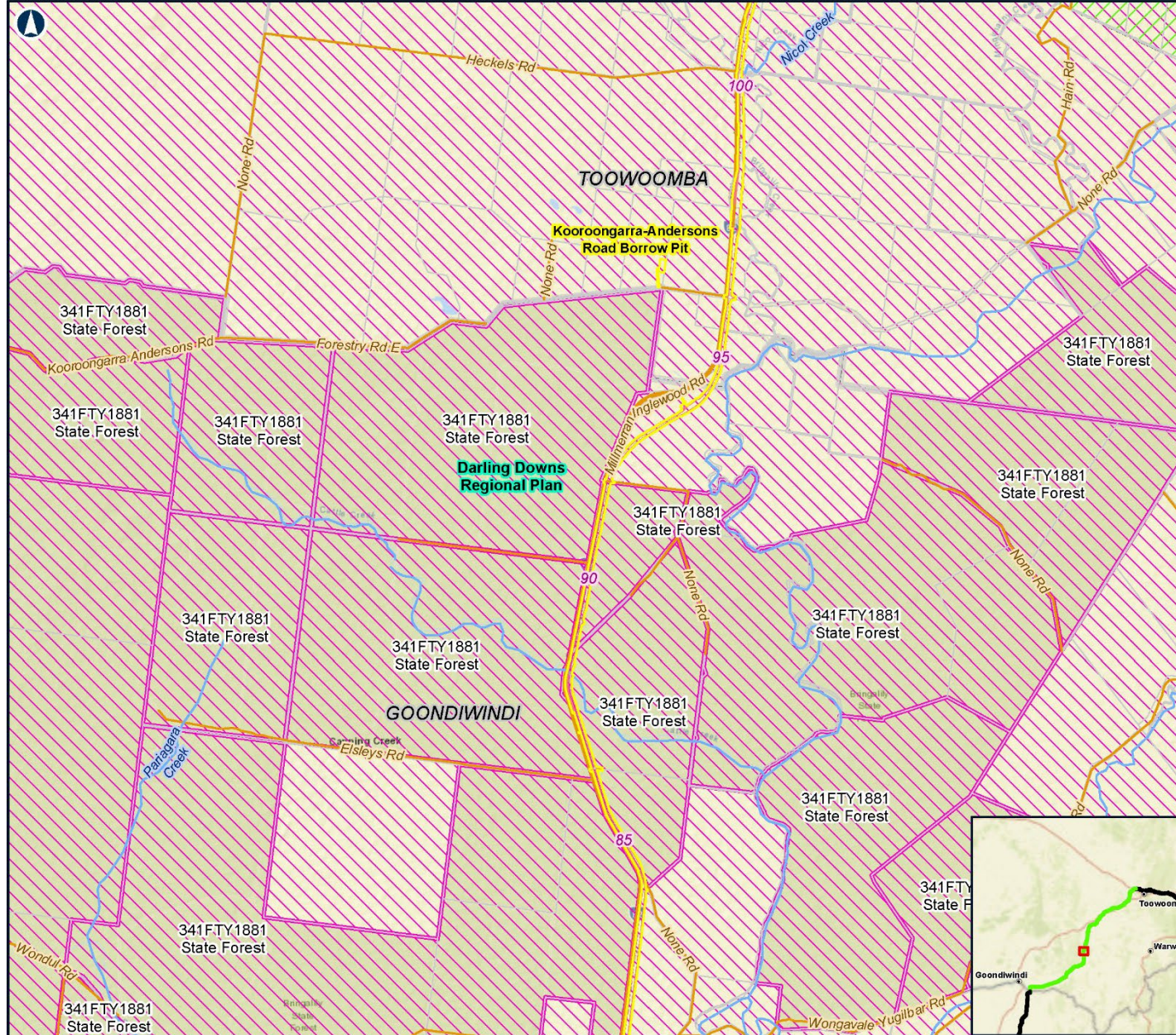
Data Sources: FFJV

Paper: A4

Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\310-ESV-20190109112_Land_Use_and_Tenure\310-ESV-20190109112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7k: Areas of regional interest

LEGEND

- 5 Chainage (km)
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

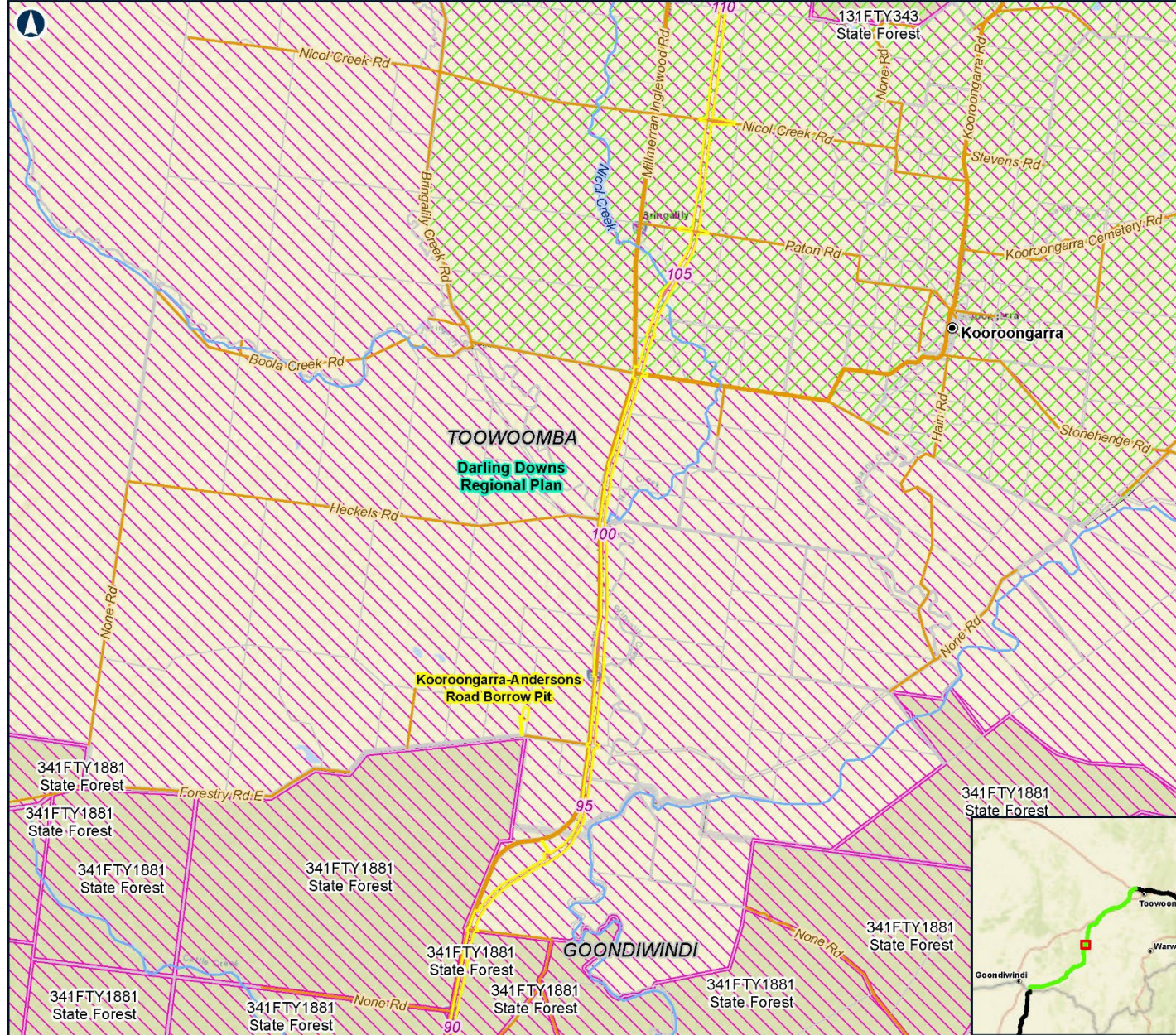
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-71: Areas of regional interest

LEGEND

- 5 Chainage (km)
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

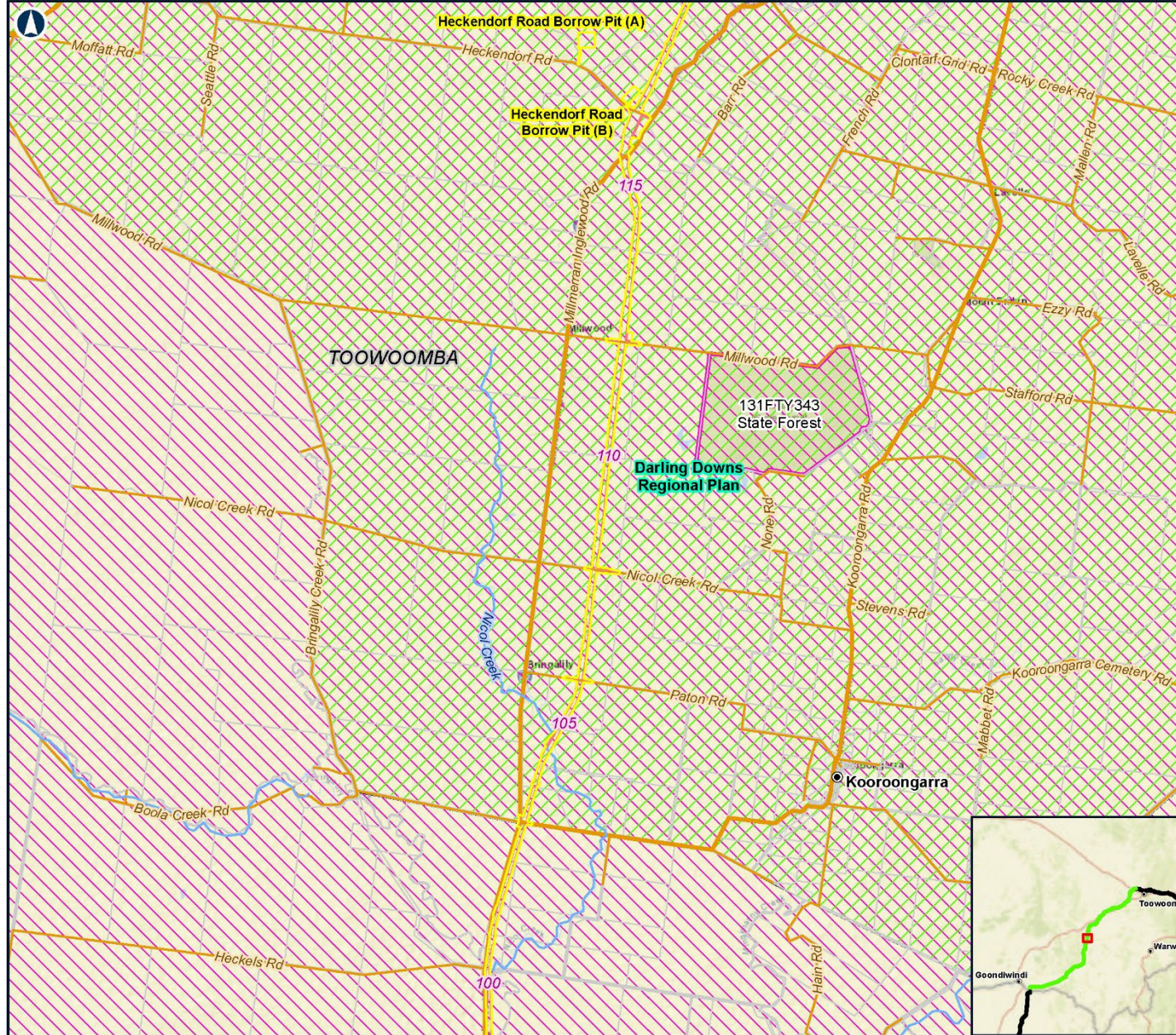
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7m: Areas of regional interest

LEGEND

- 5 Chainage (km)
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

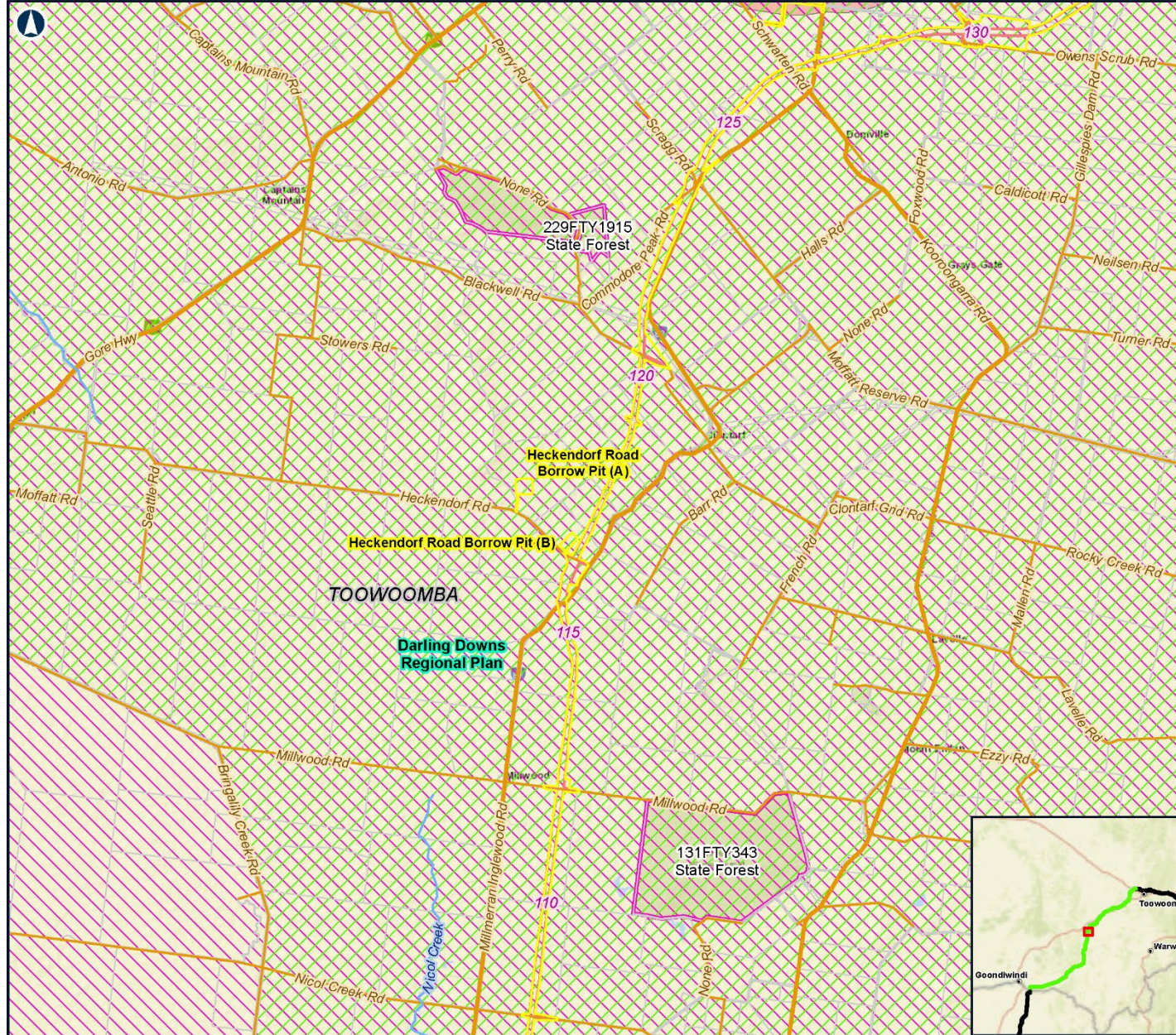
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7n: Areas of regional interest

LEGEND

- 5 Chainage (km)
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
 - Priority living area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

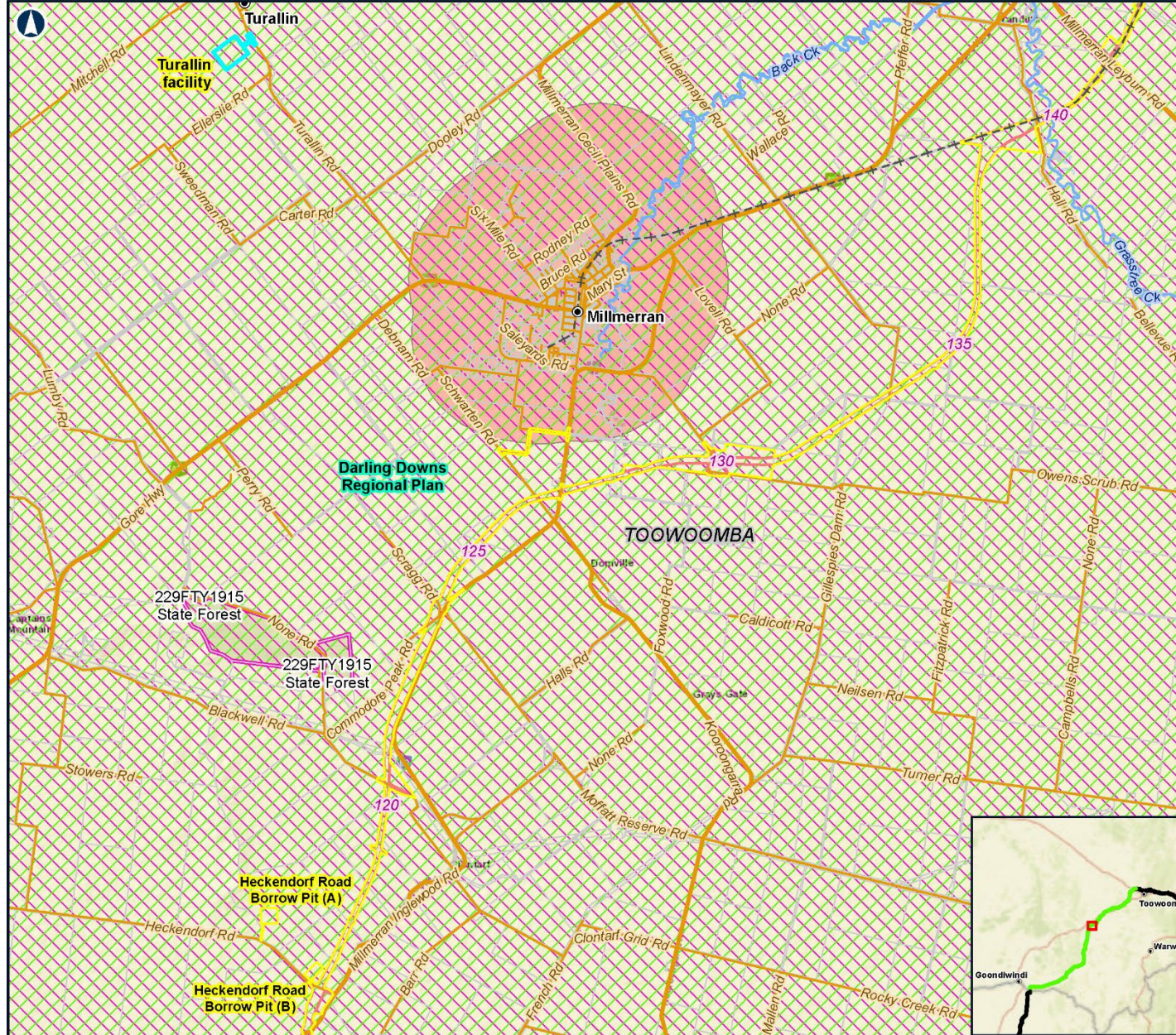
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7o: Areas of regional interest

LEGEND

-  Chainage (km)
-  Existing rail (non-operational)
-  Watercourses
-  State controlled roads
-  Local government roads
-  Cadastre
-  Regional planning boundaries
-  State Forest boundary
-  Local government areas
- Regional planning interests**
 -  Strategic cropping land zones
 -  Priority agricultural area
 -  Priority living area
- Impact assessment area**
 -  Project footprint
 -  Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025

Author: FFJV GIS

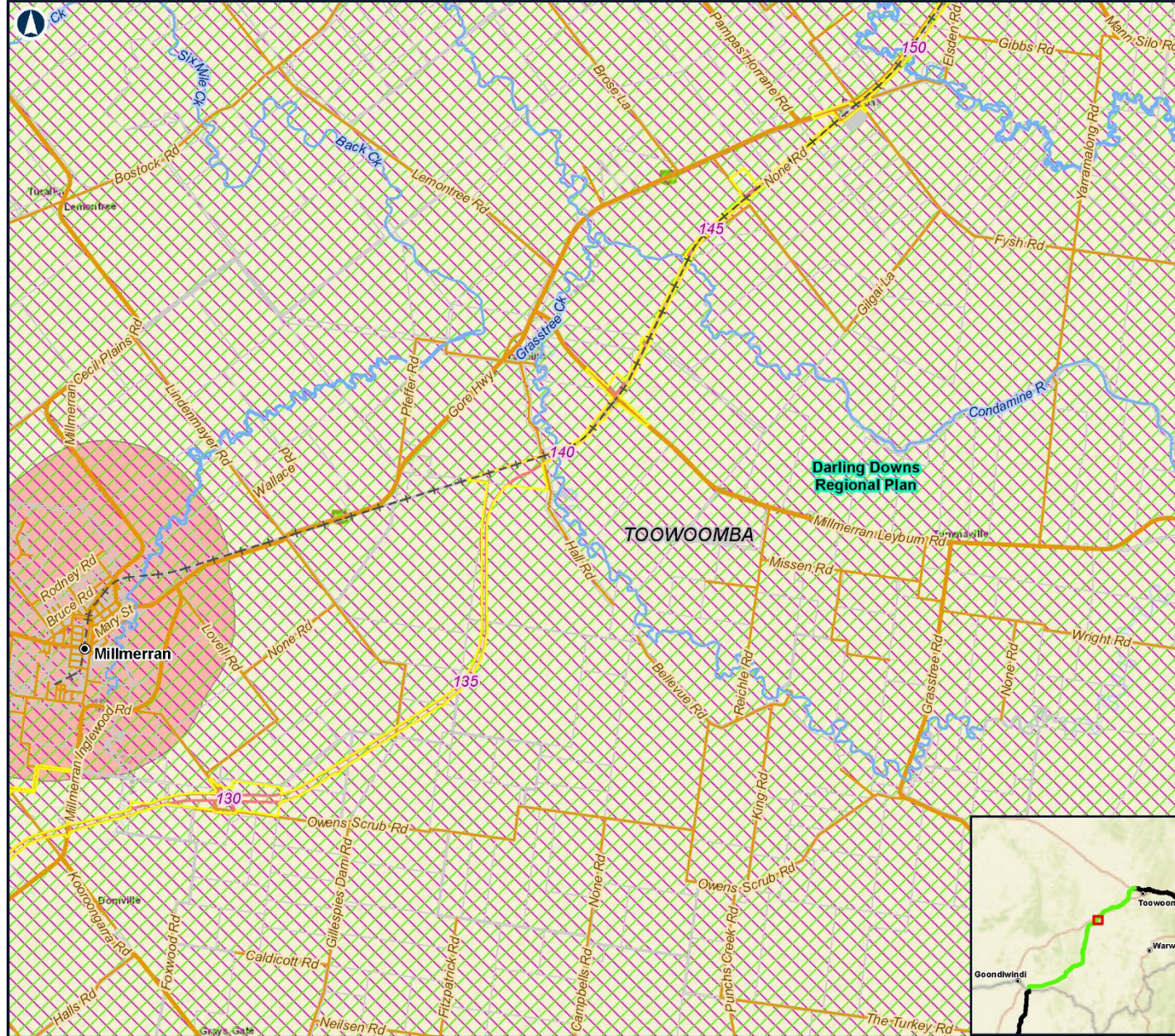
Data Sources: FFJV

Paper: A4

Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-2019\01091112_Land_Use_and_Tenure\310-ESV-2019\01091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7p: Areas of regional interest

LEGEND

- 5 Chainage (km)
- - - Existing rail (non-operational)
- Watercourses
- State controlled roads
- Local government roads
- Cadastral
- Regional planning boundaries
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
 - Priority living area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material.

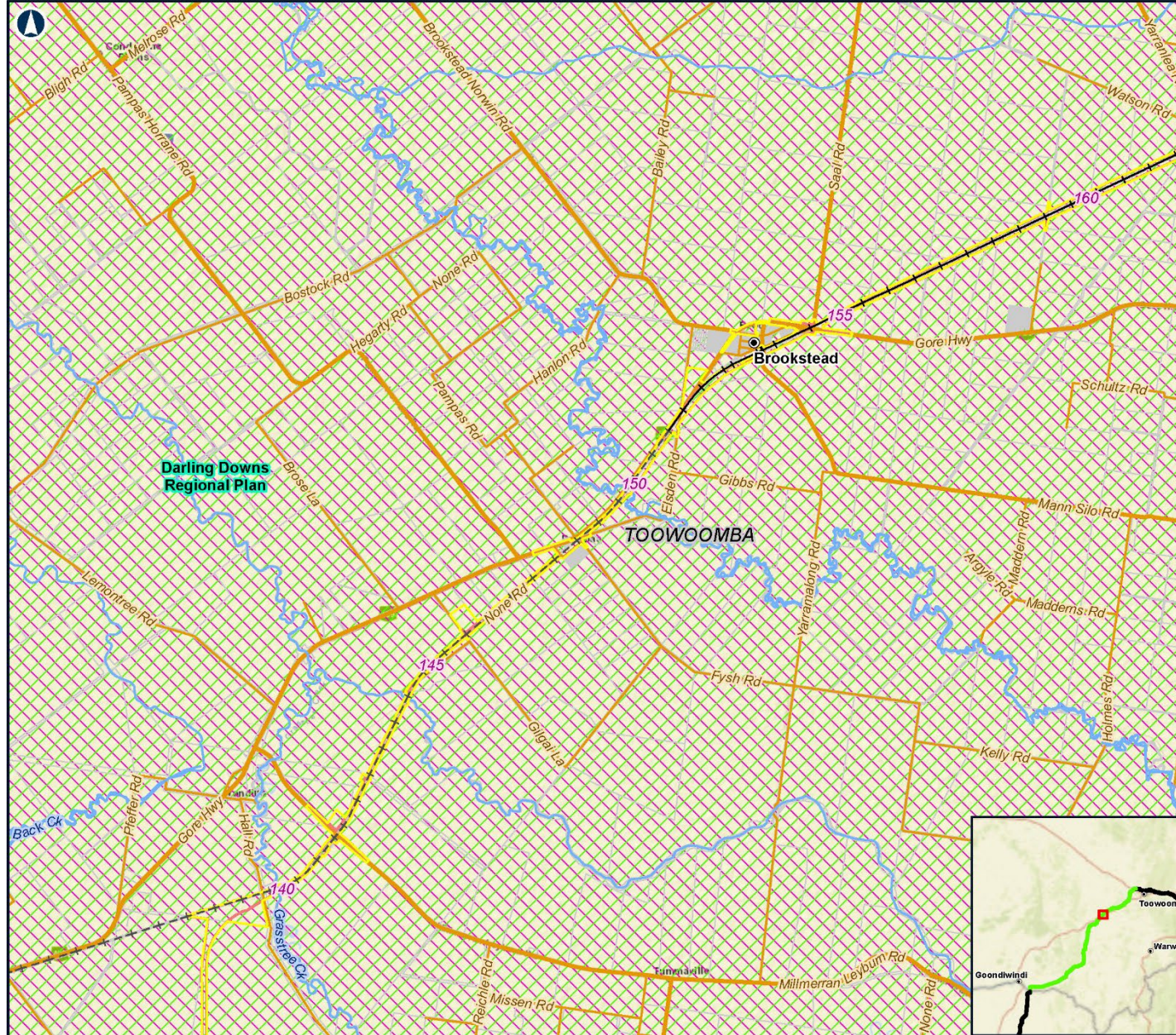
ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7q: Areas of regional interest

LEGEND

-  Chainage (km)
-  Existing rail (operational)
-  Existing rail (non-operational)
-  Watercourses
-  State controlled roads
-  Local government roads
-  Cadastre
-  Regional planning boundaries
-  Local government areas
- Regional planning interests**
 -  Strategic cropping land zones
 -  Priority agricultural area
- Impact assessment area**
 -  Project footprint
 -  Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

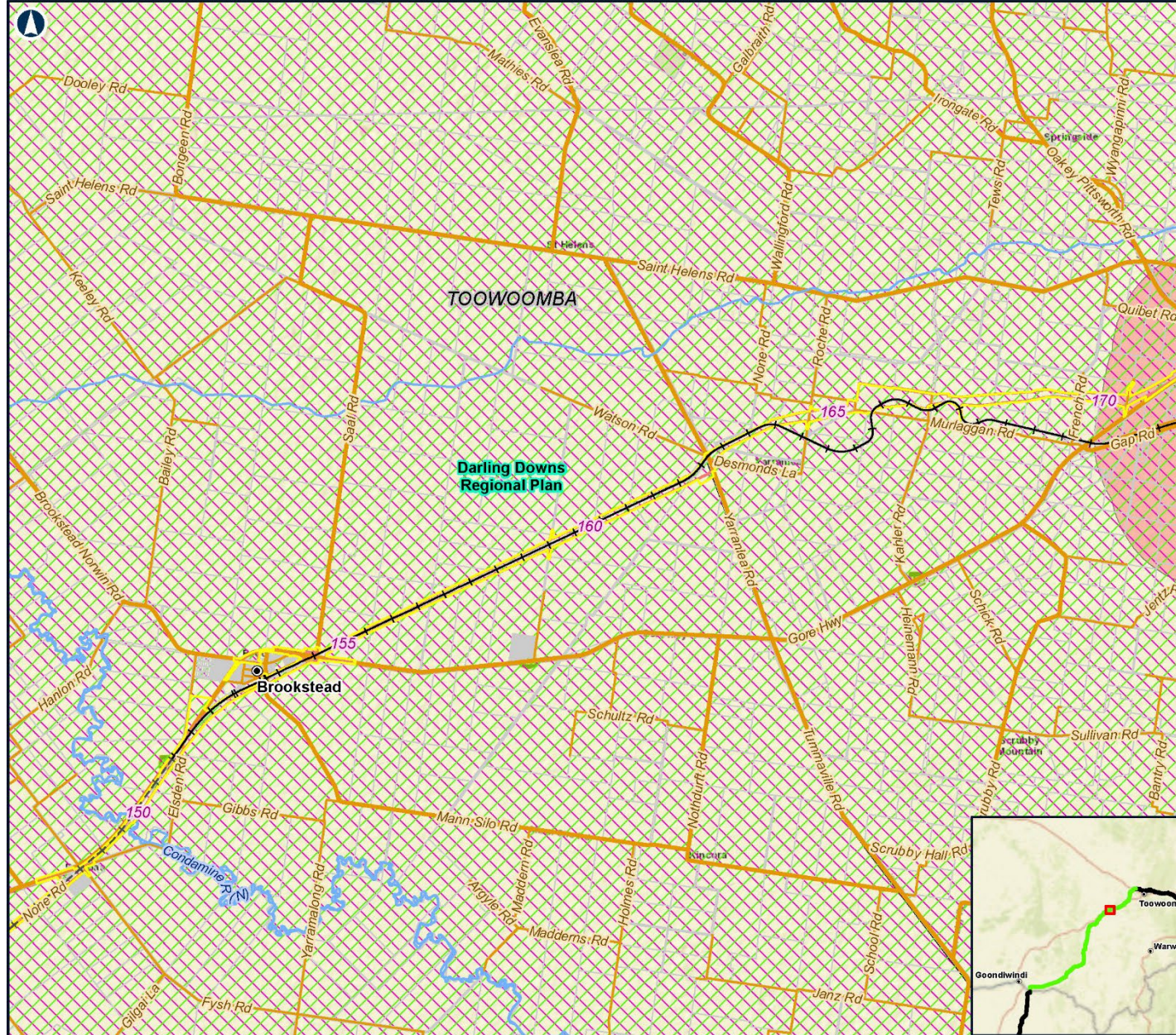
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL = ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7r: Areas of regional interest

LEGEND

- 5 Chainage (km)
- Existing rail (operational)
- Existing rail (non-operational)
- Watercourses
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
 - Priority living area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025

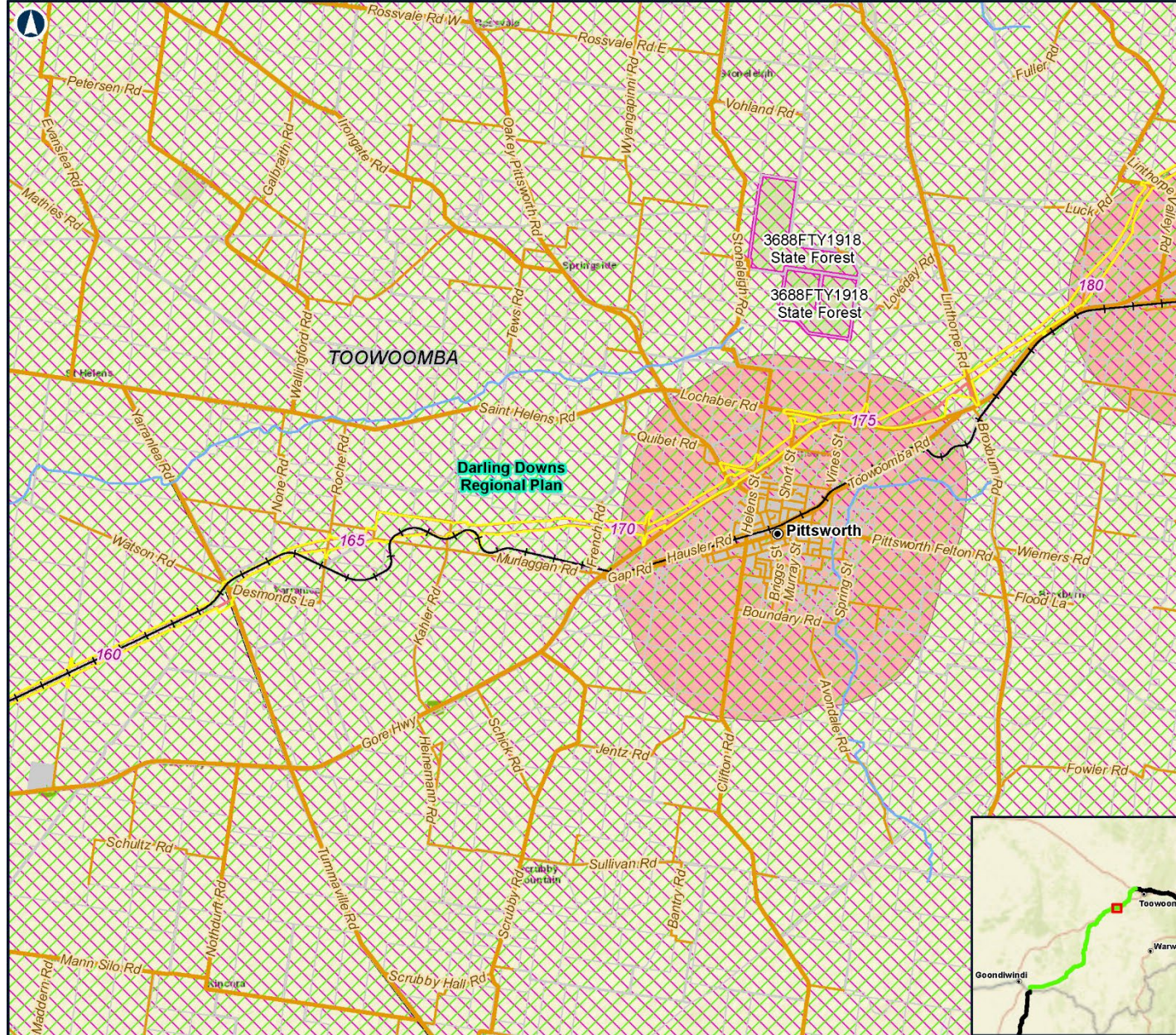
Author: FFJV GIS

Data Sources: FFJV

Paper: A4

Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7s: Areas of regional interest

LEGEND

-  Chainage (km)
-  Existing rail (operational)
-  State controlled roads
-  Local government roads
-  Cadastre
-  Regional planning boundaries
-  State Forest boundary
-  Local government areas
- Regional planning interests**
 -  Strategic cropping land zones
 -  Priority agricultural area
 -  Priority living area
- Impact assessment area**
 -  Project footprint
 -  Permanent footprint

0 2.5 5 km

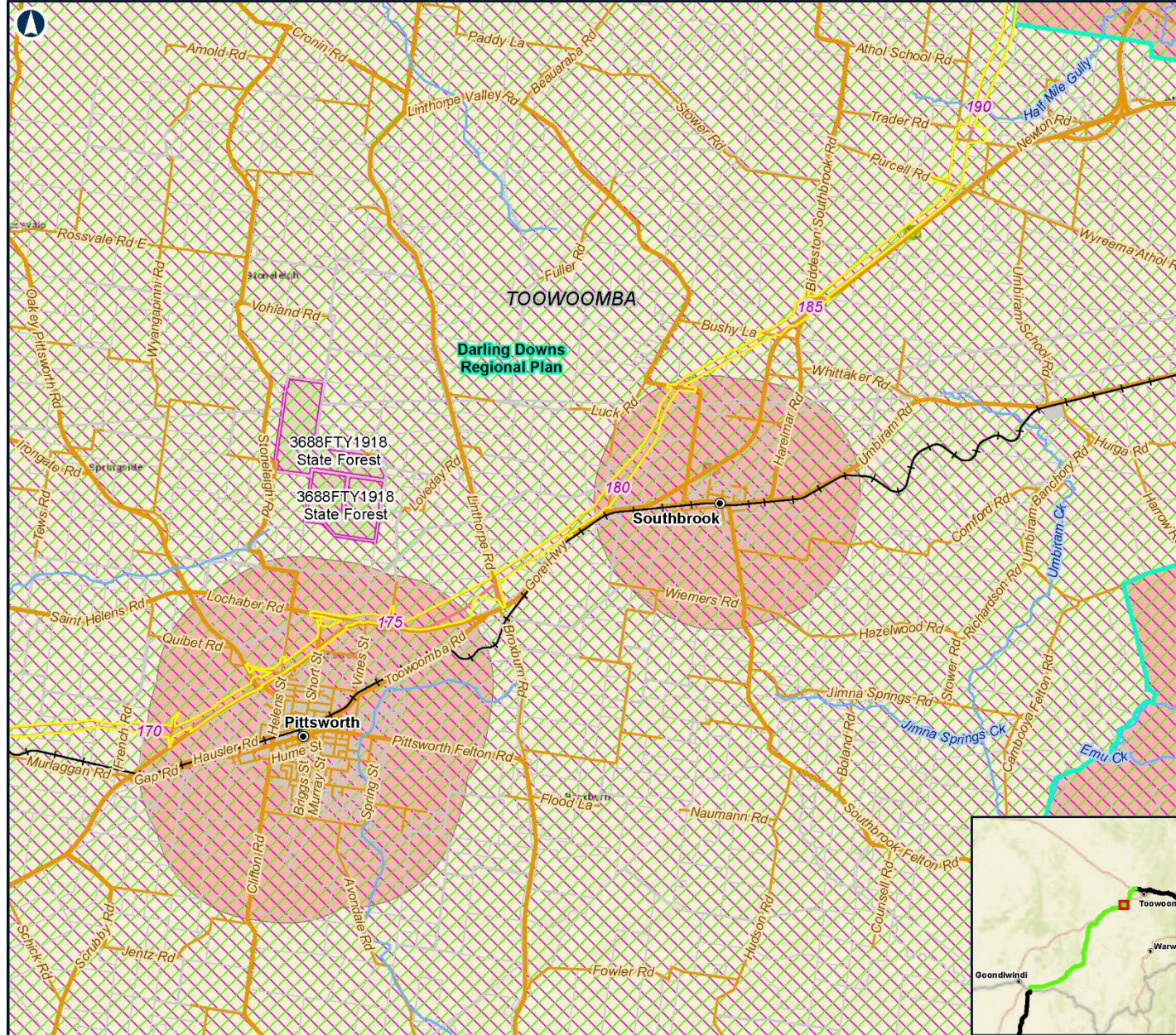
Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:99,931

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL = ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7t: Areas of regional interest

LEGEND

- 5 Chainage (km)
- Existing rail (operational)
- Watercourses
- State controlled roads
- Local government roads
- Cadastral
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
 - Priority living area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

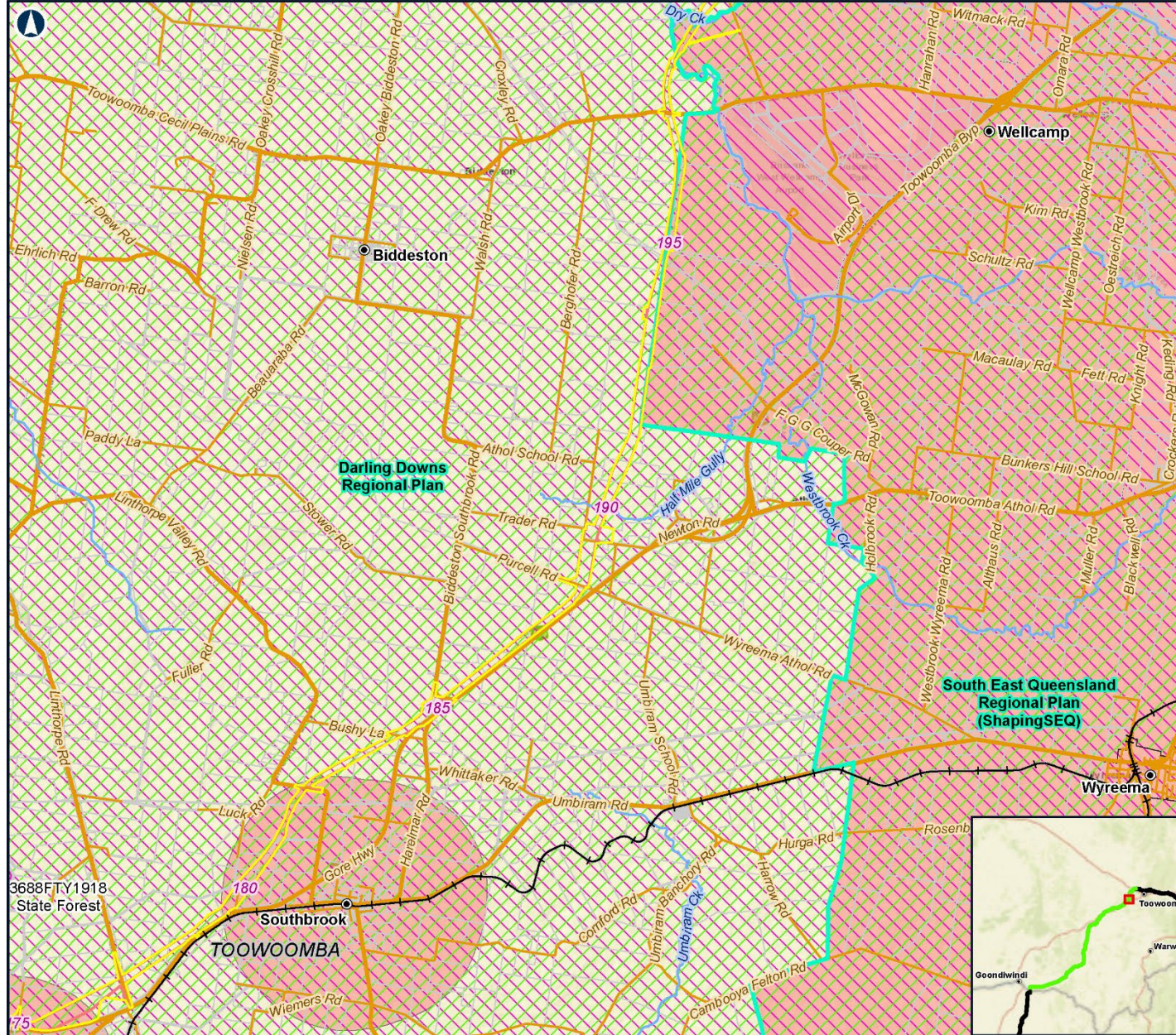
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:99,931

Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL = ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-7u: Areas of regional interest

LEGEND

- 5 Chainage (km)
- Existing rail (operational)
- Watercourses
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Regional planning interests**
 - Strategic cropping land zones
 - Priority agricultural area
 - Priority living area
- Impact assessment area**
 - Project footprint
 - Permanent footprint

0 2.5 5 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material.

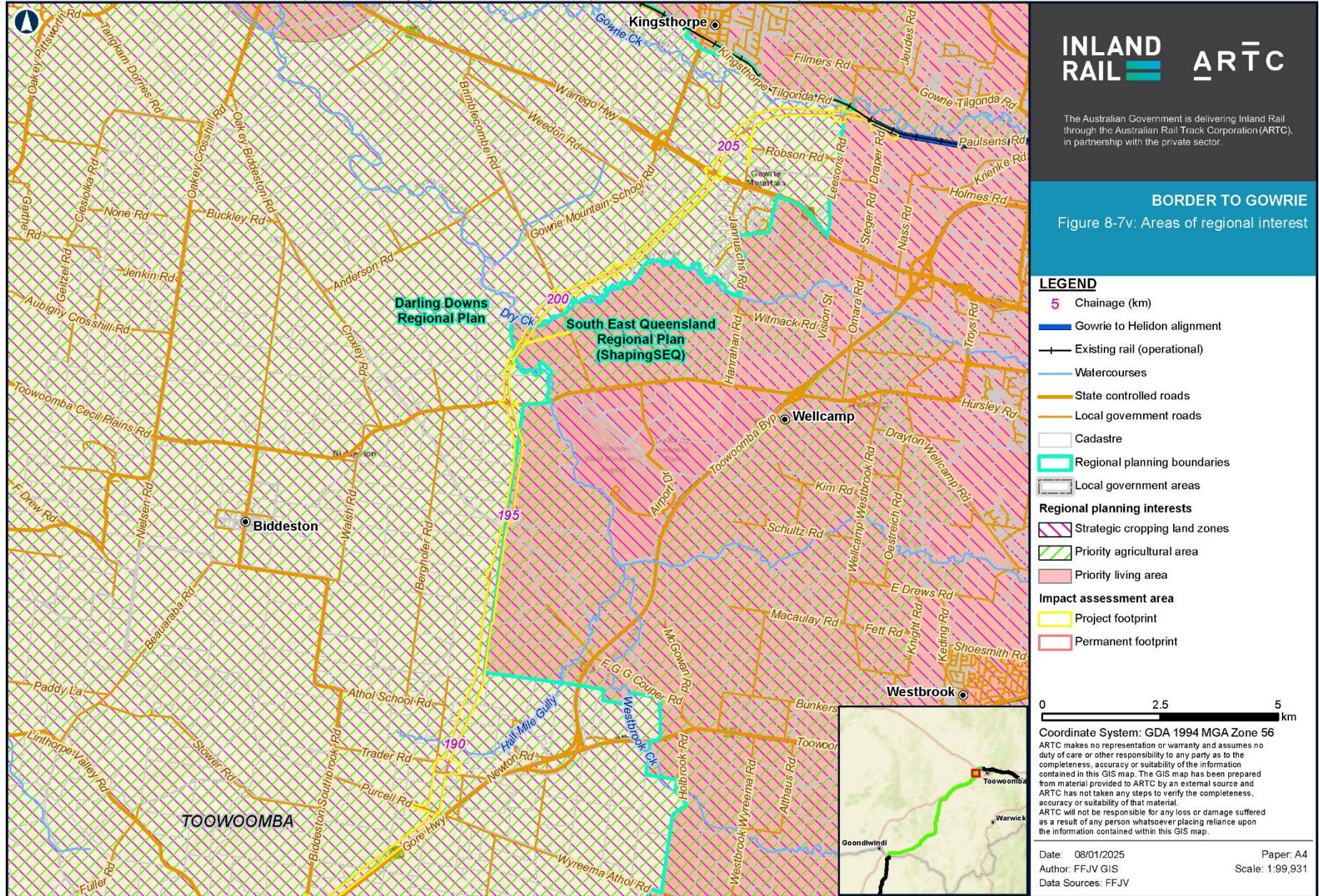
ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:99,931

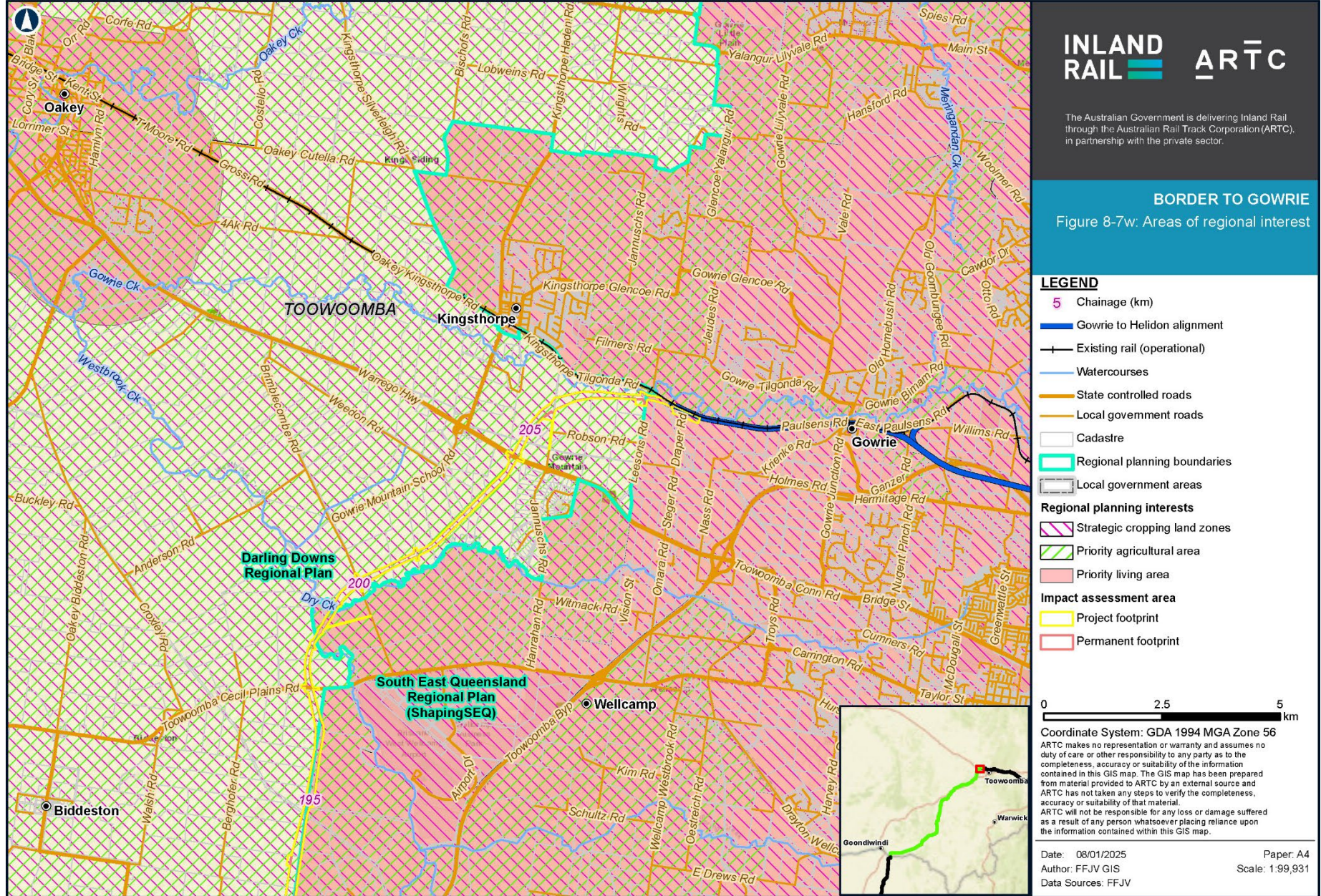
Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Map by: TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-7_Areas_of_regional_interest_v3.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



The existing rail and road corridors are mapped as containing Class A land, Class B land and IAAs but no agricultural activities are undertaken, and infrastructure is already established. The permanent footprint will use existing rail and road corridors covering approximately 594.94 ha, within which no agricultural activities are undertaken despite it being mapped for these uses. On this basis, it is important to assess land proposed within the permanent footprint where located outside of the existing rail and road corridors.

A total of 1,949.90 ha of the permanent footprint is located outside of the existing QR South Western Line and Millmerran Branch Line rail corridors and existing road corridors (Table 8-11).

TABLE 8-11 AGRICULTURAL LAND IDENTIFIED BY THE QUEENSLAND AGRICULTURAL LAND AUDIT WITHIN THE PROJECT FOOTPRINT EXCLUDING EXISTING RAIL AND ROAD CORRIDORS

Agricultural Land Audit	Area (ha)	Percentage of footprint (%)
Permanent footprint located outside of existing rail and road corridors		
Land Class A	1,449.86	56.97
Land Class B	73.71	2.90
Border Region IAA	105.79	4.16
Eastern Darling Downs IAA	1,255.19	49.32
Temporary footprint located outside of existing rail and road corridors		
Land Class A	597.79	71.40
Land Class B	8.37	1.00
Border Region IAA	101.00	12.06
Eastern Darling Downs IAA	289.93	34.63

Table note:

For all land use identified as impacted for the Project, may or may not have overlap with other identified spatial layers i.e. Land Classes. This means that the percentage totals calculated will exceed 100 per cent.

The characteristics of land/soil resources are a fundamental determinant of potential for most agricultural land uses. Soils are classified using a four-tier hierarchy ranging from Class A (arable land) through to Class D (land that is unsuitable for agriculture). These are described in Table 8-12.

TABLE 8-12 DEFINITION OF AGRICULTURAL LAND CLASSES

Agricultural land class	Description
Land Class A— Crop land	Land that is suitable for a wide range ¹ of current and potential crops with nil to moderate limitations to production: ▶ A1—Land that is suitable for a wide range of current and potential broad acre and horticulture crops with limitations to production that range from non to moderate levels ▶ A2—Land that is suitable for a wide range of current and potential horticulture crops only, with limitations to production that range from none to moderate levels.
Land Class B—Limited crop land	Land that is suitable for a narrow range ² of current and potential crops. Land that is marginal for current and potential crops due to severe limitations but is highly suitable for pastures. Land may be suitable for cropping with engineering and/or agronomic improvements.
Land Class C— Pasture land	Land that is suitable only for improved or native pastures due to limitations that preclude continuous cultivation for crop production. Some areas may tolerate a short period of ground disturbance for pasture establishment: ▶ C1—Suitable for grazing sown pastures (with ground disturbance for establishment) or has native pastures on higher fertility soils ▶ C2—Suitable for grazing native pastures with or without the introduction of pasture species—not suitable for ground disturbance to establish pastures ▶ C3—Suitable for light grazing of native pastures in accessible areas and includes steep land more suited to forestry or catchment protection.
Land Class D— Non-agricultural land	Land not suitable for agricultural uses due to extreme limitations. This may be undisturbed land with significant conservation and/or catchment values; land that may be unsuitable because of very steep slopes, shallow soils, rock outcrop, poor drainage, salinity, acidic drainage; or an urbanised area.

Source: *Queensland Agricultural Land Audit Method Technical Report* (Department of Agriculture, Fisheries and Forestry (DAFF), 2013a)

Table notes:

1. A 'wide range' is defined as four or more existing crops of local commercial significance. In areas where specialised infrastructure to support an agricultural industry is present, the land may only be currently suitable for two or more crops, providing at least one is regionally significant.
2. A 'narrow range' is defined as three or less crops of local commercial significance (or less than two where specialised infrastructure is present).

Agricultural land classified as being Class A or Class B land is the most productive agricultural land in Queensland, with soil and land characteristics that may allow successful crop and pasture production. Other characteristics, such as slope, climate, and socio-economic criteria, also impact on the potential for land to be used for agricultural land uses; nonetheless, Class A and B land is the key component of the State's interest in agriculture under the SPP.

The Audit also identifies IAAs. Important agricultural areas are defined by the *Queensland Agricultural Land Audit* as land that has all the requirements for agriculture to be successful and sustainable, is part of a critical mass of land with similar characteristics and is strategically significant to the region or the State. Determination of the significance of the land is based on consideration of a range of criteria that reflect the current or potential contribution that the land can make to the region and State economically and socially (DAFF, 2013). These criteria include:

- ▶ Current or potential contribution of agricultural development of the area to economic activity and employment (and other social factors) in the locality, region or State
- ▶ Strategic importance of the area for continuity and consistency of supply of particular products or markets locally, nationally or internationally
- ▶ Extent of investment required to develop the land for agriculture (e.g. through construction of irrigation schemes, grain storage facilities or sale yards).

The Audit recognises the Darling Downs region to have some of Queensland's best agricultural land. The region supports intensive horticulture and many intensive animal production businesses. The Audit identifies broadacre cropping to be the predominate activity undertaken in the southeast area of the Darling Downs (DAFF, 2013).

The Audit identifies the following strengths for the Darling Downs region:

- ▶ The region contains some of Queensland's most diverse and productive agricultural land, with a climate able to sustain a strong and diverse agricultural supply chain
- ▶ The alluvial deposits of the Condamine River form what are probably the most arable soils in Australia
- ▶ The importance of the Darling Downs cropping zones is enhanced because they are geographically and climatically separate from the Central Queensland region, and offer alternative production zones when conditions in the Central Queensland region are unfavourable (and vice versa)
- ▶ Linked to South East Queensland, with access to markets and ports by major road, rail and airport infrastructure
- ▶ Strong, established centres in some areas (i.e. towns along the Warrego Highway).

There are four areas identified as IAAs in the Darling Downs region, two of which are traversed by the Project, being the Border Region IAA and the Eastern Darling Downs IAA.

The Border Region IAA is located in the southern area of the Darling Downs (near the NSW border). The Project traverses the IAA between Kurumbul and Yelarbon. The Border Region IAA supports a variety of broadacre cropping and grazing land. The combination of biophysical attributes exhibited in this area (including slope and water-holding capacity) enables this region to support large areas of broadacre cropping.

The Project traverses the Eastern Darling Downs IAA between Canning Creek and Gowrie Junction. The Eastern Darling Downs IAA supports some of Queensland's best cropping lands, producing over 30 per cent of the State's cropping commodity value. The area supports extensive broadacre cropping, horticulture and significant intensive livestock businesses. Cropping in the Eastern Darling Downs IAA is dependent on the high-quality vertosol soils unique to the area. Established infrastructure in the area, including water and further processing facilities, support irrigation and industry needs.

Intensive animal husbandry

The Audit also identifies current intensive livestock operations of piggeries, cattle feedlots and poultry farms. Piggeries, cattle feedlots and poultry farms are included in the *Queensland Agricultural Land Audit* where there is a current EA for the activity under the EP Act.

Nine current intensive livestock operations are within the Project footprint. These are summarised in Table 8-13.

TABLE 8-13 CURRENT INTENSIVE LIVESTOCK OPERATIONS WITHIN THE PROJECT FOOTPRINT

Type	Name	EA No.	Development approval capacity (maximum standard animal units)	Location (approximate chainage)	Relation to the Project
Current intensive livestock operations within the Project footprint					
Cattle feedlot	Aqualark Pty Ltd (Yarranbrook Feedlot)	FL-087	15,000	Whetstone (Ch 54.0 km)	The Project footprint traverses through multiple lots associated with the Yarranbrook Feedlot, before crossing the access point, Cremascos Road, and traversing along the southeast corner of Lot 511 on RP226715.
Cattle feedlot	D M Fletcher	F1-0153	250	Bringalily (Ch 103.5 km)	The Project footprint traverses north to south through the centre of the land parcel associated with this feedlot (Lot 2 on RP197967) at Bringalily.
Cattle feedlot	Russell Sydney and Kim Maree Stevens (R Sydney and KM Stevens Feedlot)	F1-0026	999	Millwood (Ch 111.2 km)	The Project footprint traverses north to south through the east extent of the land parcel associated with this feedlot (Lot 6 on MH364) at Millwood.
Piggery	Cameron Pastoral Co. Pty Ltd (Moyness Piggery)	P1-0019	12,500	Yandilla (Ch 136.0 km)	The Project footprint traverses through the west corner of Lot 3 on RP16081 and through the centre of Lot 3683 on DER34116 associated with the Moyness Piggery at Yandilla.
Current intensive livestock operations within proximity to the Project footprint					
Cattle feedlot	Smithfield Service Pty Ltd (Sapphire Feedlot)	2017-05	20,000	Yelarbon (Ch 10.0 km)	The Sapphire Feedlot is located to the south of the Project footprint, adjoining the Project footprint and existing QR South Western Line rail corridor.
Cattle feedlot	F J and F E Verdon	51-0150	999	Whetstone (Ch 35.0 km)	The land parcel associated with this feedlot is located to the southeast of the Project footprint, adjoining the Project footprint and the existing QR South Western Line rail corridor. The Project footprint does not traverse this feedlot.
Cattle feedlot	Fiona Elder and Simmon Booth	FL-192	150 to 1,000	Kooroongarra (Ch 105.0 km)	The land parcel associated with this feedlot is located approximately 400 m to the east of the Project footprint. The Project footprint does not traverse the land parcel associated with this feedlot.
Piggery	Boondooma Country Pork Pty Ltd	P2-0210	4,700	Millwood (Ch 112.0 km)	The land parcel associated with this piggery is located approximately 250 m to the east of the Project footprint at Millwood. The Project footprint does not traverse this piggery.
Poultry Farm	Doug Hall Poultry Pty Ltd	RSO000291	>20,000	Yandilla (Ch 137.0 km)	The Project footprint traverses approximately 1 km east of the lots (Lot 2 on RP898480 and Lot 4 on SP153098) associated with the Doug Hall Poultry Farm at Yandilla.

Stock routes

Stock routes are corridors on roads, reserves, pastoral leases and USL along which stock is driven on foot and are designated for travelling stock purposes under the relevant State legislation. Currently, the stock route network in Queensland is administered under the following Acts:

- ▶ *Stock Route Management Act 2002* (Qld)
- ▶ Land Act
- ▶ TI Act.

The Project interfaces with the State stock route network in 11 locations. The State stock route network is primarily used by the pastoral industry as:

- ▶ An alternative to transporting stock by rail or road
- ▶ Pasture for emergency agistment
- ▶ Long-term grazing.

Locations of stock routes that intersect with the Project footprint are identified in Table 8-14 and shown on Figure 8-5.

TABLE 8-14 STOCK ROUTES TRAVERSED BY THE PROJECT

Location and Project interface point (approximate chainage)	Stock route ID, type, status and class	Description
Kildonan Road Ch 33.1 km (NS2B)	ID: 005GWND Type: Road Status: Open Class: Primary	This stock route follows Kildonan Road. The Project footprint crosses this stock route at Kurumbul.
Rainbow Reserve and Eukabilla Road Ch 33.4 km (NS2B)	ID: RAINBOW RESERVE Type: Reserve Status: Open Class: Primary	This stock reserve encompasses the Rainbow Reserve camping area and Eukabilla Road. The majority of the Rainbow Reserve is outside the temporary construction footprint. The Project footprint enters into this stock reserve at Ch 33.15 km (NS2B) and crosses Eukabilla Road at Ch 33.4 km (NS2B). The Project footprint continues to run parallel to the western edge of the existing Eukabilla Road, within the stock reserve, to Ch 35 km (NS2B). At this point it exits the stock reserve.
South Kurumbul Road Ch 6.1 km Wondalli-Kurumbul Road and Yelarbon-Kurumbul Road Ch 7.2 km	ID: 081GWND Type: Road Status: Open Class: Secondary	This stock route connects Wondalli-Kurumbul Road and South Kurumbul Road, running parallel and adjacent to the existing QR South Western Line rail corridor. This stock route is aligned along Wondalli-Kurumbul Road and parallel to Yelarbon-Kurumbul Road, which runs adjacent to the existing QR South Western Line rail corridor. The Project footprint crosses this stock route at the intersection of Wondalli-Kurumbul Road and Yelarbon-Kurumbul Road.
Yelarbon Ch 25.4 km	ID: 811GWND Type: Road Status: Open Class: Tertiary - Minor and unused	This stock route is aligned with Merton Road, the Cunningham Highway and Yelarbon-Keetah Road. The stock route crosses the existing QR South Western Line at an active level crossing on the Cunningham Highway. The Project will require the closure of the existing active level crossing, to be replaced by a road-over-rail crossing approximately 400 m to the west of the existing crossing point. This road reconfiguration will result in the severance of the current stock route.
East of Sawmill Road Ch 27.0 km	ID: RESERVE Type: Reserve Status: Open Class: Tertiary - Minor and unused	This is an isolated stock reserve, with no mapped stock route linkages. The stock reserve is bound by the Cunningham Highway to the west and East Sawmill Road to the north. The Project involves curve easing of East Sawmill Road, which will encroach by up to 15 m into the north-west corner of the stock reserve. The existing Yelarbon levee extends diagonally across this stock reserve. Modifications to the existing Yelarbon levee, if they are to occur, will temporarily require works within the stock reserve.

Location and Project interface point (approximate chainage)	Stock route ID, type, status and class	Description
Lovells Crossing Road Ch 65.8 km	ID: 813GWD Type: Road Status: Open Class: Tertiary - Minor and unused	This stock route follows Lovells Crossing Road. The Project footprint crosses this stock route approximately 3 km north of Inglewood.
Millmerran–Inglewood Road (Inglewood) Intermittently between Ch 73.1 km to Ch 76.5 km	ID: 820GWD Type: Road Status: Open Class: Tertiary - Minor and unused	This stock route follows Millmerran–Inglewood Road. The Project footprint crosses this stock route between Ch 73.1 km to Ch 76.5 km.
Millmerran–Inglewood Road (Inglewood) Ch 84.2 km	ID: 820GWD Type: Road Status: Open Class: Tertiary - Minor and unused	This stock route runs parallel to the east of Millmerran–Inglewood Road. The Project footprint crosses this stock route at the point of the stock route re-joining Millmerran–Inglewood Road.
Kooroongarra–Anderson Road Ch 96.1 km	ID: 856TOOW Type: Road Status: Open Class: Tertiary - Minor and unused	This stock route branches off 820TOOW and provides an east–west connection to Stonehenge Road. The Project footprint crosses this stock route at the intersection of Kooroongarra–Anderson Road and Millmerran–Inglewood Road. Investigations are underway to potentially remove this interface. DoR have indicated that this stock route may not be required and will progress discussions with TRC on this matter.
Millmerran–Inglewood Road (near Heckendorf Road) Ch 115.5 km	ID: 820TOOW Type: Road Status: Open Class: Tertiary - Minor and unused	This stock route follows Millmerran–Inglewood Road. The Project footprint crosses this stock route approximately 900 m south of the intersection of Heckendorf Road and Millmerran–Inglewood Road.
Millmerran Inglewood Road (near Commodore Mine) Ch 127.2 km	ID: 820TOOW Type: Road Status: Open Class: Tertiary - Minor and unused	The stock route follows Millmerran Inglewood Road and Millmerran-Kooroongarra Road. This Project footprint crosses this stock route approximately 550 m north of the intersection between Millmerran–Inglewood Road, Millmerran-Kooroongarra Road and Schwartens Road.

Barrier fences

There are three types of barrier fences identified in the Biosecurity Act. These are the wild dog barrier fence, WDCF and the rabbit fence.

The WDCF and the DDMRB rabbit fence are both traversed by the Project. Further information can be found in Chapter 5: Project Description.

Wild dog check fences

The WDCF protects areas of grazing and cropping land in southern Queensland from wild dogs. The WDCF does not physically link up to the wild dog barrier fence; however, plays an important role in wild dog control in southern Queensland (DAF, 2016). GRC is responsible for the ongoing maintenance of approximately 283 km of the WDCF.

The Project footprint affects the existing WDCF from Yelarbon to Whetstone (Ch 28.9 km to Ch 43.5 km (DAF, 2016) and at two additional locations within the Goondiwindi LGA. The section of the WDCF from Yelarbon to Springborg Road (Ch 28.9 km to Ch 37.7 km) is unmaintained and proposed for decommissioning. This section of the fence provides no functional or strategic benefit to the broader fencing network in wild dog control, nor provides additional protection to animals in the adjacent cropping and grazing lands.

The Project traverses operational sections of the WDCF at three locations including:

- ▶ Between Springborg Road and Whetstone (Ch 37.7 km to Ch 43.5 km)
- ▶ Between McDougalls Road and Cremascos Road (Ch 50.2 km to Ch 51.2 km)
- ▶ At Cremascos Road (Ch 54.6 km to Ch 56.0 km).

Rabbit fence

The DDMRB rabbit fence is a 555 km long rabbit-proof fence. The fence is managed and maintained by the DDMRB, stretching from Lamington National Park in the east, to Goombi in the southwest, where it connects to the wild dog barrier fence (DAF, 2016).

The Project footprint traverses the DDMRB rabbit fence when traversing through the locality of Clontarf, at approximate chainage Ch 120.2 km (DAF, 2023b).

State forests including apiary sites

The Queensland Government manages native forest timber production in State forests under the Forestry Act. A State forest is an area of Crown land that has been set apart and declared or deemed to be set apart and declared as a State forest under the Forestry Act. Licences and permits for activities other than production forestry, such as quarry reserves and apiary sites, may be granted for land within State forests.

The Project footprint traverses through two declared State forest areas; Whetstone State Forest and Bringalily State Forest. The Project footprint encroaches on Whetstone State Forest where the Project uses and widens the existing QR South Western Line rail corridor between Ch 37.7 km and Ch 43.4 km. The Project footprint traverses Bringalily State Forest where new rail corridor is required between Inglewood and Canning Creek at Ch 64.10 km and Ch 65.75 km, Ch 69 km, and Ch 84.25 km and Ch 91.75 km (Figure 8-8). The total area of affected State forest is 108.4 ha, comprising 97 ha of impact from the permanent footprint and 11.4 ha of impact from the temporary footprint. Within the surrounding State forest areas, two apiary sites have been identified near the Project's temporary footprint. A description of these apiary sites is provided in Table 8-16.

ARTC has identified, through consultation with DAF and the Queensland Beekeepers' Association, that there are apiary licences and permits within the State forests that allow for beekeeping to occur (Table 8-15). Each apiary site is 600 m² or less, and contains no more than 150 hives (Queensland Government, 2020b). The apiaries located in the State forest are understood to be used as bee resting areas and not for honey production.

TABLE 8-15 APIARY PERMITS IN BRINGALILY AND WHETSTONE STATE FORESTS

Lot/Plan	Land tenure	Permit number
Bringalily State Forest		
Lot 54 on SP129536	Lands lease	AS451
Lot 341 on FTY1881 SEGPART* 45718009	State forest	AS154*
Whetstone State Forest		
Lot 79 on FTY1967	State forest leasehold	AS526**

Table notes:

* Location appears to be in a road reserve.

** Permit is vacant/unavailable

TABLE 8-16 APIARY SITES LOCATED NEAR THE PROJECT FOOTPRINT

Apiary Site ID	Location	Lot/Plan	Project footprint chainage (km)	Status
451	Bringalily State Forest	Lot 54 on SP129536	86.4	Site is within the 50 m buffer and was under permit until 31 July 2022. After this date, the site was decommissioned by DAF and no longer available for use.
AS154	Bringalily State Forest	Lot 341 on FTY1881	AS154	Bringalily State Forest

ARTC has identified a number of grazing leases within the Bringalily and Whetstone State forests that are within the Project footprint. The Project footprint does not traverse any quarry reserves located within the State forests.

Resource areas

Key resource areas

Key resource areas are designated locations containing important extractive resources of State or regional significance worthy of protection to support productive use of resources, a strong mining and resource industry, economic supply of construction materials, and avoid land use conflicts where possible (DSDILGP, 2021c). KRAs are included in the SPP and are supported by the *Integrating state interests in a planning scheme – Guidance for local governments* (DSDILGP, 2021b).

A KRA is made up of four components:

- ▶ The resource/processing area—the extent of the extractive resource and any operational areas associated with the extraction and processing of the resource
- ▶ A separation area—to maintain separation from people who might be affected by impacts such as noise, dust and ground vibrations from existing or future operations
- ▶ A transport route—from the boundary of the resource area to a major road or railway
- ▶ A transport route separation area—to minimise impacts on people who might be affected by noise, dust and ground vibration along the route.

The Kildonan KRA (KRA No. 120) is located approximately 18 km southeast of Goondiwindi on Kildonan–Old Warwick Road. The Kildonan KRA is mapped as containing alluvium and lacustrine deposits and is located near an alluvial terrace along the Macintyre River. The deposits are large in volume and significant for the region, as deposits of sand are sparse in the region. The KRA is identified as having the potential to supply a considerable portion of the Goondiwindi and surrounding area's demand for material (DSDILGP, 2021). Kildonan KRA 120 is shown on Figure 8-5.

At its closest point, the temporary footprint and permanent footprint are located approximately 300 m and 355 m west of the resource/processing area, respectively, and approximately 100 m and 170 m, respectively, to the west of the southeast corner of the separation area for KRA 120, avoiding land within the separation and processing areas.

Other KRAs are located within the general vicinity of the Project; however, these are located outside of the study area for the Project.

Coal resource areas

Coal resource areas depict the extent of identified coal resource estimates in Queensland as presented in the publication *Queensland Coals—Physical and Chemical Properties Colliery and Company Information* (Mutton, A. J., 2003).

The Project footprint traverses the Bringalily South and Bringalily North coal resource areas when within Bringalily and Millwood, and the Commodore coal resource area when near to the Commodore Mine at Domville.

The Bringalily North and Bringalily South coal resource areas are undeveloped coal deposits that are identified as having a large resource of thermal coal. The Commodore coal resource area is an operating mine, which produces high volatility, low sulphur bituminous thermal coal (Mutton, A. J., 2003).

Coal resource areas traversed by the Project footprint are detailed in Table 8-17 and shown on Figure 8-5.

TABLE 8-17 COAL RESOURCE AREA WITHIN THE PROJECT FOOTPRINT

Coal resource area	Total above ground area of coal resource area (ha)	Area within permanent footprint (ha)	Area within temporary footprint (ha)
Bringalily North	62.69 ha	55.54 ha	7.15 ha
Bringalily South	31.53 ha	28.01 ha	3.52 ha
Commodore	50.88 ha	47.00 ha	3.88 ha

Infrastructure

Roads

The Project traverses seven State-controlled roads declared under the TI Act that are under the management and control of DTMR. The following seven State-controlled roads are traversed in nine locations:

- ▶ Cunningham Highway (Wondalli Street)
- ▶ Millmerran–Inglewood Road (three separate interfaces)
- ▶ Millmerran–Leyburn Road
- ▶ Gore Highway
- ▶ Oakey–Pittsworth Road
- ▶ Toowoomba–Cecil Plains Road
- ▶ Warrego Highway.

The Project also intersects local roads managed and controlled by GRC and TRC. The Project has 16 road–rail interface points with GRC-managed roads and 25 road–rail interface points with TRC-managed roads.

The Project also intersects the following occupational and private roads:

- ▶ 168 private, unformed access roads or tracks
- ▶ 74 private, formed access roads or tracks.

Further discussion on road–rail interfaces is provided in Chapter 5: Project Description and Chapter 20: Traffic, Transport and Access.

Railway

The Project footprint will use approximately 68.00 km of existing rail corridor. This existing rail corridor is leased by the State to QR for the South Western Line (46.81 km) and Millmerran Branch Line (21.20 km).

There are 12 existing QR road–rail crossings on public roads within the Project footprint. Two of these existing crossings, on the Cunningham Highway (Wondalli Street) and Fysh Road, will be relocated for the Project. The remaining 10 will either retain their existing crossing treatment or will have an upgrade in crossing treatment (Chapter 5: Project Description).

Services and utilities

The Moonie to Brisbane Pipeline, a high-pressure oil pipeline (PPL 1) owned by Moonie Pipeline Company Pty Ltd, a subsidiary of Santos Limited, is located within the Project footprint at Southbrook, at approximately Ch 181.75 km. This pipeline is not currently in operation but the easement relating to the pipeline remains in place and is held by Moonie Pipeline Company Pty Ltd.

The Roma to Brisbane Pipeline, a gas pipeline (PPL 2) owned by APT Petroleum Pipelines Pty Ltd, is located within the Project footprint at Kingsthorpe, at approximately Ch 204.7 km. This pipeline is a gas transmission pipeline that transports natural gas between Wallumbilla gas hub, near Roma, to Brisbane.

To the west of Gowrie Junction, the Project footprint traverses the Wetalla Water Pipeline, a 45 km underground water pipeline that supplies treated wastewater from the Wetalla Wastewater Reclamation Facility in Toowoomba to the New Acland Coal Mine.

In total, the Project footprint traverses 723 utilities including communication, electrical, water, gas and oil utilities. Utilities identified to be located within the Project footprint are summarised in Table 8-18 and are shown on Figure 8-4.

Consultation with respective infrastructure providers and pipeline licensees has occurred to establish potential interface impacts and to identify initial design solutions. Utility owners who have been consulted to date include APA Gas, Energy Queensland (Ergon), Essential Energy, Millmerran Operating Company, Powerlink Queensland, Santos, TPG/PowerTel/AAPT, Nextgen, Telstra, GRC and TRC. Consultation will continue throughout the detailed design stage of the Project to further verify interface impacts and to confirm appropriate interface treatments.

TABLE 8-18 UTILITIES WITHIN THE PROJECT FOOTPRINT

Utility/service	Total
Communication	545
Electricity	156
Gas	3
Oil	1
Potable water	5
Raw water	3
Recycled water	7
Sewer gravity main	1
Sewer rising main	2
Total	723

8.4.2 Existing land tenure

8.4.2.1 Land tenure

In Queensland, tenure types are generally defined as:

- ▶ Freehold—land is alienated from the state and the ownership rests with the individual owner for an estate in fee simple, and is dealt with under the Land Title Act
- ▶ Lands lease—State land subject to a lease granted under the Land Act for a particular purpose, such as pastoral, grazing and commercial or industrial purposes, or where land is leased to the state for a rail-transport purpose, which may be held for a specific term or in perpetuity Land lease tenure may also be dedicated as State forests.
- ▶ State land—land that is USL
- ▶ Reserve land—land that has been set aside under the Land Act as a reserve or deeds of grant in trust for community or public purposes, managed by the trustee.

Where there is no tenure within the cadastral boundary, land may also be identified as:

- ▶ Road type parcel—land that has been designated as road
- ▶ Unlinked parcel—land with no tenure type under the DCDB mapping usually associated with intersections of roads
- ▶ Unallocated state land, which may include watercourses.

Tenure and interests in non-freehold land in Queensland are primarily administered by the DoR under the provisions of the Land Act. For freehold land, land and interests are held by way of an indefeasible title recorded in the Freehold Land Register under the provisions of the Land Title Act.

The tenure of lots within the permanent footprint is predominately freehold (71.53 per cent). The permanent footprint also includes small pockets of lands lease, reserve and State land tenure.

Where the Project footprint is positioned within the existing QR South Western Line rail corridor and the Millmerran Branch Line rail corridor, the tenure of that existing rail corridor is estate in perpetuity, leased by the State of Queensland (represented by DTMR) to Queensland Rail Limited ACN 132181090 (lands lease). Where the Project footprint deviates from, or extends outside of, the existing rail corridors, the tenure of land is predominately freehold, traversing some lots of reserve and State land tenure.

Tenure within the Project footprint is summarised within Table 8-19.

TABLE 8-19 TENURE WITHIN THE PROJECT FOOTPRINT

Type of tenure	Permanent footprint			Temporary footprint		
	Number	Area (ha) ¹	% of permanent footprint ¹	Number	Area (ha) ¹	% of temporary footprint ¹
Freehold	403	1,820.39	71.53	460	704.67	84.16
Lands lease (other than State forest)	69	205.11	8.06	27	5.58	0.67
Reserve	8	22.79	0.90	7	2.51	0.30
State forest	2	97.75	3.84	2	11.04	1.32
State land	13	6.18	0.24	2	0.26	0.03
Road type parcel	281	372.79	14.65	269	108.10	12.91
Unlinked parcel	100	17.01	0.67	91	4.51	0.53
Watercourse	23	2.84	0.11	20	0.64	0.08
Total	899	2,544.86	100	878	837.31	100

Table note:

1. Minor rounding has been undertaken to present the DCDB tenure data to two decimal places whilst ensuring footprint totals equal 100 per cent.

8.4.2.2 Easements

The permanent footprint traverses or encroaches on 33 easements. In addition, the temporary footprint traverses or encroaches on an additional 9 easements. An easement is a right registered on land to utilise other land for a specific easement purpose. For example, for right of way (access) to other usually adjoining land. The easements traversed or encroached on by the Project footprint have been established for the following purposes:

- ▶ Right of way for access
- ▶ Drainage or sewerage reticulation
- ▶ Water storage/supply
- ▶ Electricity transmission.

Easements traversed by the Project footprint are detailed in Appendix F: Impacted Properties.

8.4.2.3 Mineral and coal resource interests

The *Mineral Resources Act 1989* (Qld) provides the framework for exploration, development and mining tenure.

There are four mineral or coal resource authorities and four applications for mineral or coal resource authorities within the Project footprint, as well as one mineral or resource authority within the study area.

The exploration permits include one for coal and one for minerals other than coal near Canning Creek, and three applications for geothermal permits near Yelarbon (lodged in May 2022), and between Southbrook and Gowrie (lodged in August 2022).

One mineral development licence (MDL 299) for coal is near Bringalily and Domville and expired in December 2022 but a renewal has been lodged. A second mineral development licence (MDL 301) in the same vicinity expired in July 2022; however, was granted an extension until July 2024.

The mining lease ML 50151 and mining lease application (ML 700072) are associated with Commodore open cut mine near Clontarf and Domville. The mining lease (ML 700072) application was lodged in December 2021 and facilitates the proposed expansion of the mine through the conversion of MDL 301 and MDL 299.

The mineral and coal resource interests within the impact assessment area are summarised in Table 8-20 and shown on Figure 8-5.

TABLE 8-20 MINERAL AND COAL RESOURCE INTERESTS TRAVERSED BY THE PROJECT FOOTPRINT

Permit type	Permit name	Permit No.	Permit ID	Holder name	Permit status	Location (approximate chainage)	Area within permanent footprint (ha)	Area within temporary footprint (ha)	Area within the Project footprint (ha)
Exploration permit coal	EPC 970	970	100186	New Hope Exploration Pty Ltd	Granted	Ch 86.16 km to Ch 96.51 km	86.07	15.41	101.48
Exploration permit minerals other than coal	EPM 27546	27546	221407	Fiddler's Creek Mining Company Pty Ltd	Granted	Ch 86.17 km to Ch 96.51 km	86.07	15.41	101.48
Exploration permit geothermal	EPG 2026	2026	224067	Within Energy Pty Ltd	Application	Ch 206.66 km to Ch 208.23 km	17.65	12.09	29.73
Exploration permit geothermal	EPG 2031	2031	224421	Within Energy Pty Ltd	Application	Ch 181.39 km to Ch 206.66 km	375.87	43.71	419.58
Mineral development licence	MDL 299	299	107092	Queensland Power Company Pty Ltd	Granted	Ch 115.42 km to Ch 127.31 km	147.82	37.88	178.71
Mining lease	ML 700072	700072	223417	Queensland Power Company Pty Ltd	Application	Ch 123.8 km to Ch 126.5 km	31.98	3.20	35.12

8.4.2.4 Petroleum and gas resource interests

Several different authorities for petroleum and gas exploration and production activities in Queensland are granted under the P&G Act and the *Petroleum Act 1923* (Qld). Petroleum and gas authorities are granted for:

- ▶ Exploration—authority to prospect, potential commercial area
- ▶ Production—petroleum lease (PL)
- ▶ Infrastructure development—petroleum facility licence and petroleum pipeline licence (PPL)
- ▶ Information gathering—petroleum survey licence, water monitoring authority and data acquisition authority.

There are two pipeline licences within the Project footprint. These licences are associated with the Moonie to Brisbane pipeline (PPL 1) at Southbrook and the Roma to Brisbane Pipeline (PPL 2) at Kingsthorpe.

The proposed site for the Turallin Facility, a 20 ha site in the temporary footprint to be utilised for a laydown area, a training facility or native plants nursery and traditional land management training facility (Chapter 5: Project Description), is mapped within a granted petroleum lease held by Arrow CSG (Australia) Pty Ltd. The petroleum lease was granted in February 2019.

Pipeline licences and petroleum leases within the Project footprint are detailed in Table 8-21. Infrastructure and utilities within the Project footprint are further discussed in Section 8.4.1.2.

TABLE 8-21 PIPELINE LICENCES AND PETROLEUM LEASES TRAVERSED BY THE PROJECT FOOTPRINT

Permit type	Permit No.	Permit purpose	Holder name	Location (approximate chainage)
Petroleum pipeline Licence	PPL 1	Oil	Moonie Pipeline Company Pty Ltd	Ch 180.50 km
Petroleum pipeline licence	PPL 2	Gas	APT Petroleum Pipelines Pty Ltd	Ch 203.40 km
Petroleum lease	PL 1041	Petroleum Production	Arrow CSG (Australia) Pty Ltd	Turallin Facility

8.4.2.5 Native title

As identified in Section 8.4.2.1, tenure within the Project footprint is predominately freehold and, in these areas, provided the grant of freehold was valid, native title rights and interests have been extinguished.

Further, where the Project footprint uses existing rail corridors that were constructed or established on or before 23 December 1996, native title rights have been extinguished through the establishment of public works. In accordance with Section 253 of the NT Act, 'public works' includes a 'road, railway or bridge that is constructed or established by or on behalf of the Crown, or a local government body or other statutory authority of the Crown, in any of its capacities'. The construction or establishment of public works on or before 23 December 1996 extinguished native title in relation to the area on which the works were situated.

Elsewhere, the Project footprint traverses land and waters in respect of which native title rights and interests may continue to exist.

The locations where native title may, or is known to, exist are detailed in Table 8-22 Figure 8-8 illustrates where the Project traverses land that has been determined to have native title over it and land where native title has not been extinguished.

TABLE 8-22 PROPERTIES WHERE NATIVE TITLE HAS NOT BEEN EXTINGUISHED

Tenure	Property lot/lease details
Reserves (8)	Lot 110 on SP171826
	Lot 140 on DER34129
	Lot 37 on MH878 Rainbow reserve at Segpars 45911092, 45911093 and 45911097 (partially extinguished at Segpar 45911092)
	Lot 118 on DY648 Part of Lot located between Lot 8 on USL46404 & Lot 10 on USL46404
	Lot 1 on Y5698
	Lot 2 on Y56916
	Lot 1 on SP150781
	Lot 41 on MH778 (partially extinguished)
Watercourses (9)	Bringalily Creek Segpar 45724020 adjacent to Lot 152 on MA3432
	Bringalily Creek Segpar 45725082 adjacent to Lot 107 on MH808
	Condamine River (North Branch) Segpar 39671087 & 39670055 adjacent to Lot 1 on RP37132 & Lot 1 on RP14242
	Condamine River (The Broadwater) Segpars 39669189, 39669190, 39669160 & 39669161
	Adj. to Lot 41 on SP177895 (Excluding Rail Crossing)
	Dry Creek Segpar 42714052 & 42714008 Adj. to Lot 2 on RP48191
	Grass Tree Creek Segpar 46409227 & 46409038 adjacent to Lot 4 on RP16058 (Excluding rail crossing)
	Westbrook Creek Segpar 42714051 & 42714009 adjacent to Lot 5 on RP47487
	Macintyre River Segpar 45911104 adjacent to 1RP49163
	Gowrie Creek Segpars 42716241 and 43832005

Tenure	Property lot/lease details
State forests (2)	Lot 79 on FTY1967 comprising two rolling term leases: ▶ Lot 84 on SP137254 (Rolling Term Lease) ▶ Lot 86 on MH675 (Rolling Term Lease) Lot 341 on FTY1881 comprising five rolling term leases: ▶ Lot 93 on MH819 (Rolling Term Lease) ▶ Lot 54 on SP129536 (Rolling Term Lease) ▶ Lot A on MH842 (Rolling Term Lease) ▶ Lot A on SP274206 (Rolling Term Lease) ▶ Lot 6 on MH643 (Rolling Term Lease)
State Land (14)	Lot 251 on SP260538 (USL) Lot 10 on USL46404 (USL) Lot 87 on MH689 (Rolling Term Lease) Lot 96 on Y56918 (USL) Lot 21 on G6771 (USL) Lot 22 on G6771 (USL) Lot 23 on G6771 (USL) Lot 24 on G6771 (USL) Lot 25 on G6771 (USL) Lot 26 on G6771 (USL) Lot 27 on G6771 (USL) Lot 28 on G6771 (USL) Lot 29 on G6771 (USL) Lot 30 on G6771 (USL)

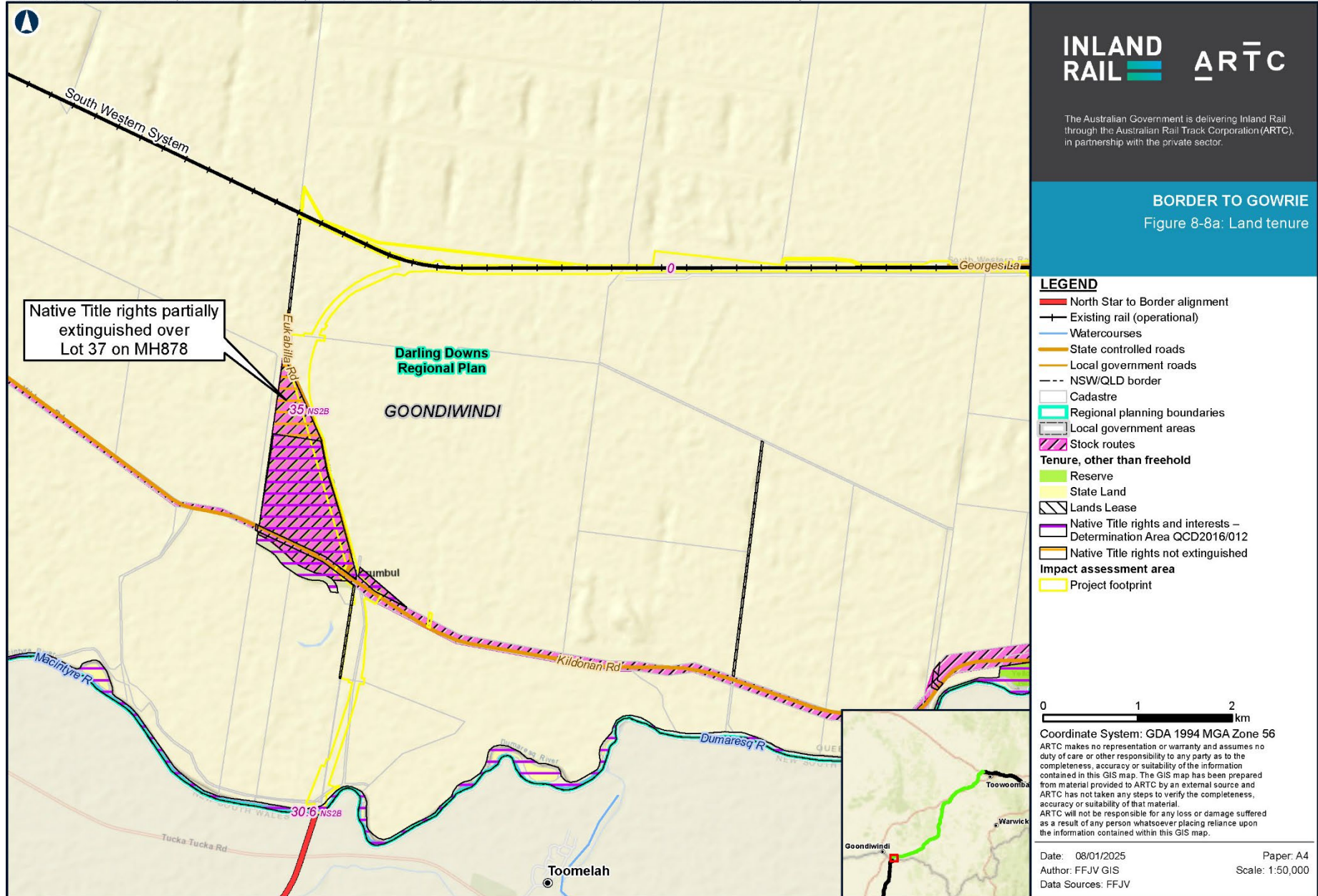
To identify the native title status of Project impact areas, native title assessments were undertaken including:

- ▶ Conducting searches of the National Native Title Register and Register of Native Title Claims, administered by the National Native Title Tribunal. Searches were undertaken in August 2021 and October 2024. The searches identified that the Project footprint falls within the external boundaries of a native title determination area (QCD2016/012) held by the Bigambul People. The Project footprint also falls within areas previously subject to a native title claim application (QC2022/005), but which has not been approved for registration by the Federal Court of Australia. The search findings are summarised in Table 8-23 below. Summaries of each of the native title determination application are provided in Section 8.5.2.2.
- ▶ Completion of native title assessments by the Department of Transport and Main Roads in accordance with the Queensland Government Native Title Work Procedures.

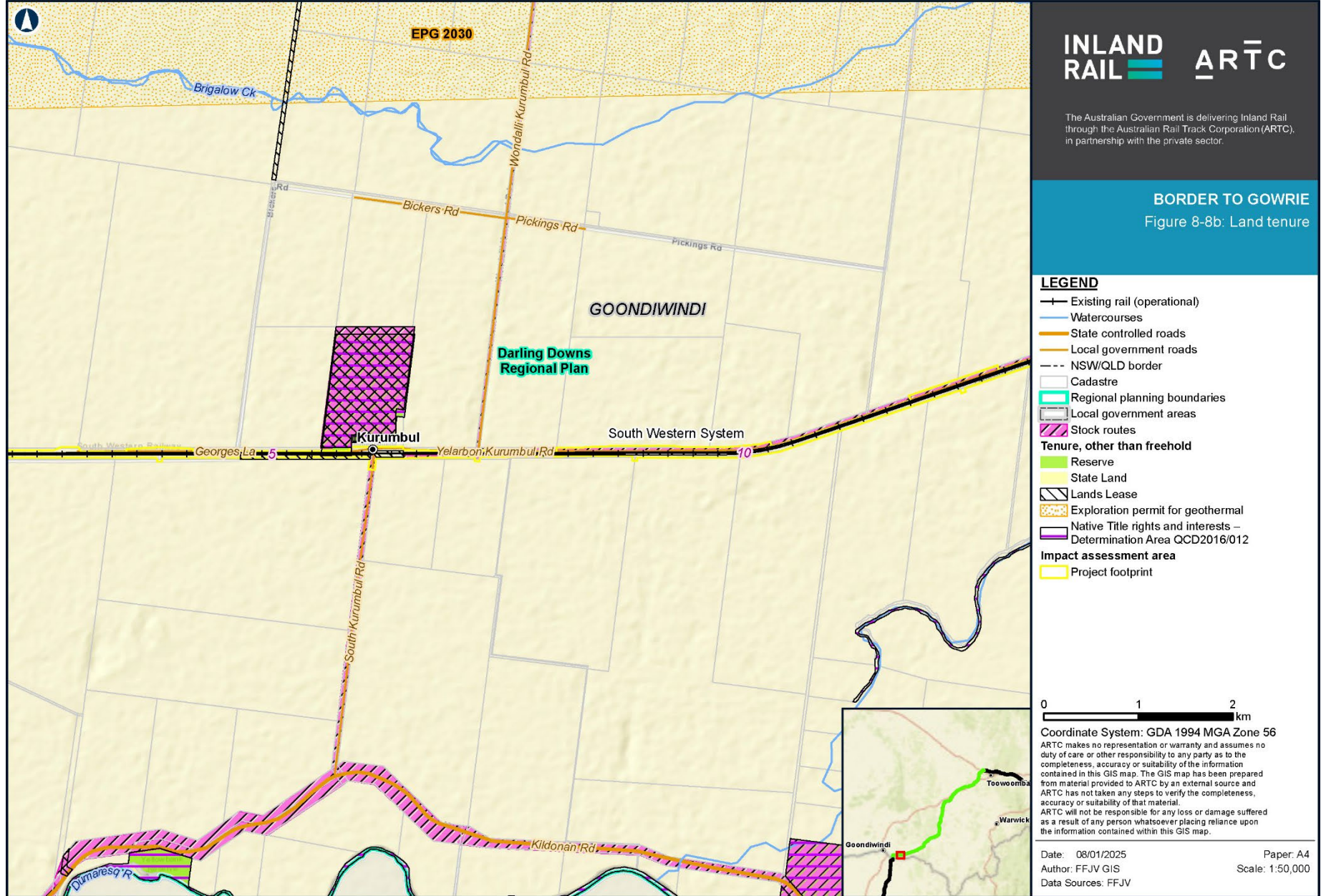
It is anticipated that further assessments may be required as Project design progresses and should further impact areas be identified.

TABLE 8-23 NATIVE TITLE CLAIMS AND DETERMINATIONS RELEVANT TO THE PROJECT FOOTPRINT

Status	Name	Tribunal file no.	Summary
In effect — finalised	Bigambul People Part A	QCD2016/012	Native title was determined to exist (exclusive and non-exclusive) within the entire determination area on 1 December 2016, with effect from 5 June 2017. The determination is current within the Project footprint at: ▶ Lot 37 on MH878 (partially extinguished) ▶ Lot 79 on FTY1967 (in lease lots 86 on MH675 and 84 on SP137254) ▶ Lot 110 on SP171826 ▶ Lot 1 on SP150781 (exclusive native title) ▶ Lot 1 on Y5698 ▶ Lots 21 – 30 on G6771 ▶ Lot 2 on Y6916 ▶ Lot 41 on MH778 ▶ Lot 87 on MH689Lot 96 on Y56918 (exclusive native title) Macintyre River at Segpar 45911104.
Active – not accepted for registration	Bigambul People #4	QC2022/005	This native title application encompasses areas surrounding Goondiwindi. The Project footprint traverses approximately 85 ha of this claim area. On 14 December 2022, the Federal Court of Australia did not accept the application for registration. As such, in the absence of registration, the parts of the Project footprint which fall within this claim area, and which have not been extinguished of native title, is characterised as forming part of the 'Gap Area'.

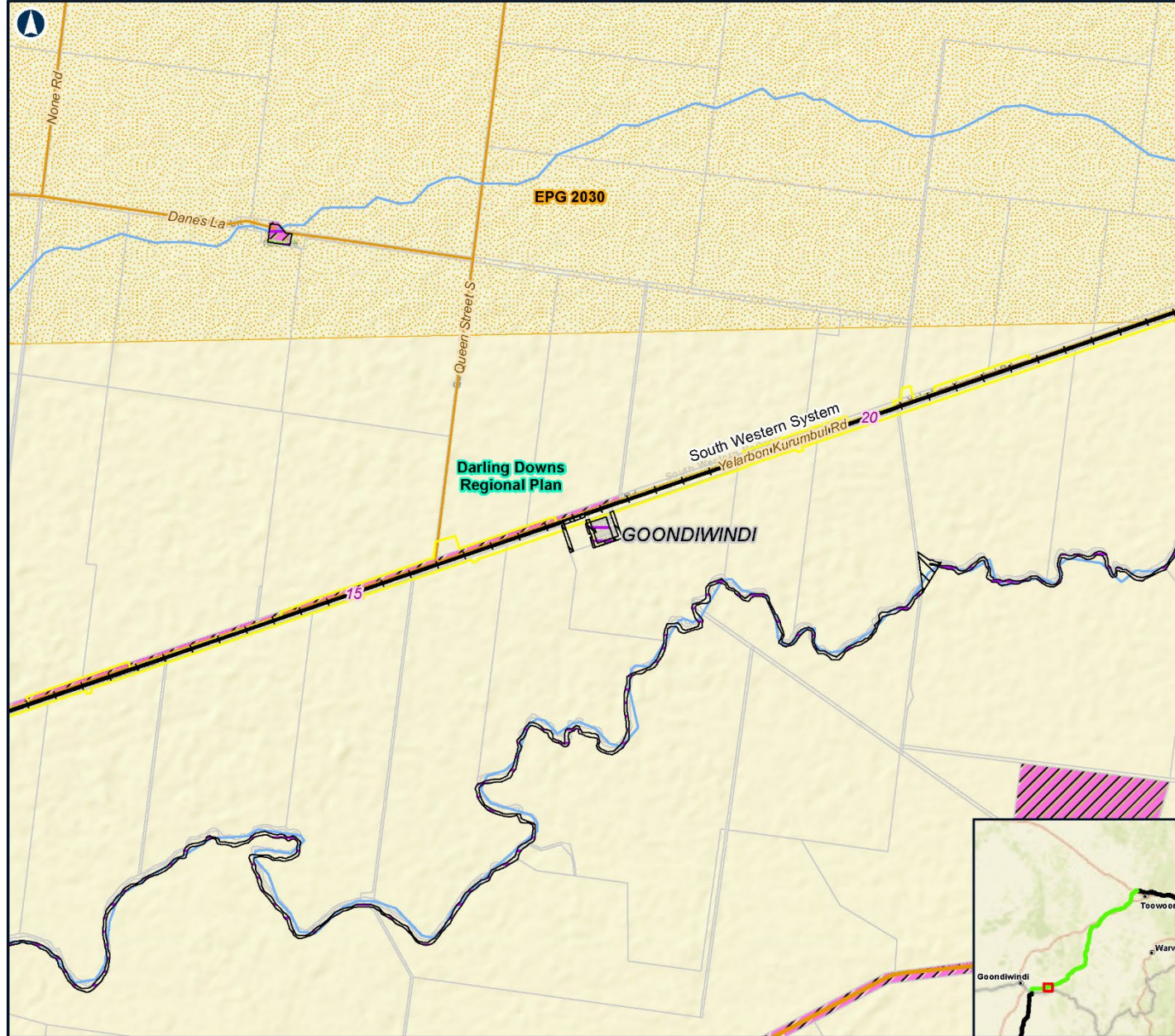


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-8_Land_Tenure_v13.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-8c: Land tenure

LEGEND

- Existing rail (operational)
- State controlled roads
- Local government roads
- Cadastral
- Regional planning boundaries
- Local government areas
- Stock routes
- Tenure, other than freehold**
 - Reserve
 - State Land
 - Lands Lease
 - Exploration permit for geothermal
 - Native Title rights and interests – Determination Area QCD2016/012
- Impact assessment area**
 - Project footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-8_Land_Tenure_v13.mxd Date: 8/01/2025 09:28

The map displays the Yelarbon area with various roads and land parcels. Key features include:

- Roads:** Cunningham Hwy, Yelarbon Kurumbuli Rd, Yelarbon Keelah Rd, Desert Creek Rd, Texas Yelarbon Rd, Suttons Rd, Watts Rd, Merton Rd, and None Rd.
- Landmarks and Areas:** Yelarbon non-resident workforce accommodation, EPG 2030, GOONDIWINDI, South Western System, East Sawmill Rd, Yelarbon, Kaboon St, Merton St, Darling Downs Regional Plan, and Native Title rights partially extinguished over Lot 41 on MH778.
- Infrastructure:** The South Western System pipeline is shown running through the area, with a section marked 'EPG 2030'.
- Inset Map:** A small map in the bottom right corner shows the location of the area within the Goondiwindi region, with labels for Goondiwindi, Toowoomba, and Warwick.

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE
Figure 8-8d: Land tenure

LEGEND

-  Existing rail (operational)
 -  Watercourses
 -  State controlled roads
 -  Local government roads
 -  Wild dog check fence - inactive
 -  Cadastre
 -  Regional planning boundaries
 -  Local government areas
 -  Stock routes
- Tenure, other than freehold**
-  Reserve
 -  State Land
 -  Lands Lease
 -  Lands Lease over State Forest
 -  Exploration permit for geothermal
 -  Native Title rights and interests – Determination Area QCD2016/012
 -  Native Title rights not
- Impact assessment area**
-  Project footprint

Coordinate System: GDA 1994 MGA Zone 56

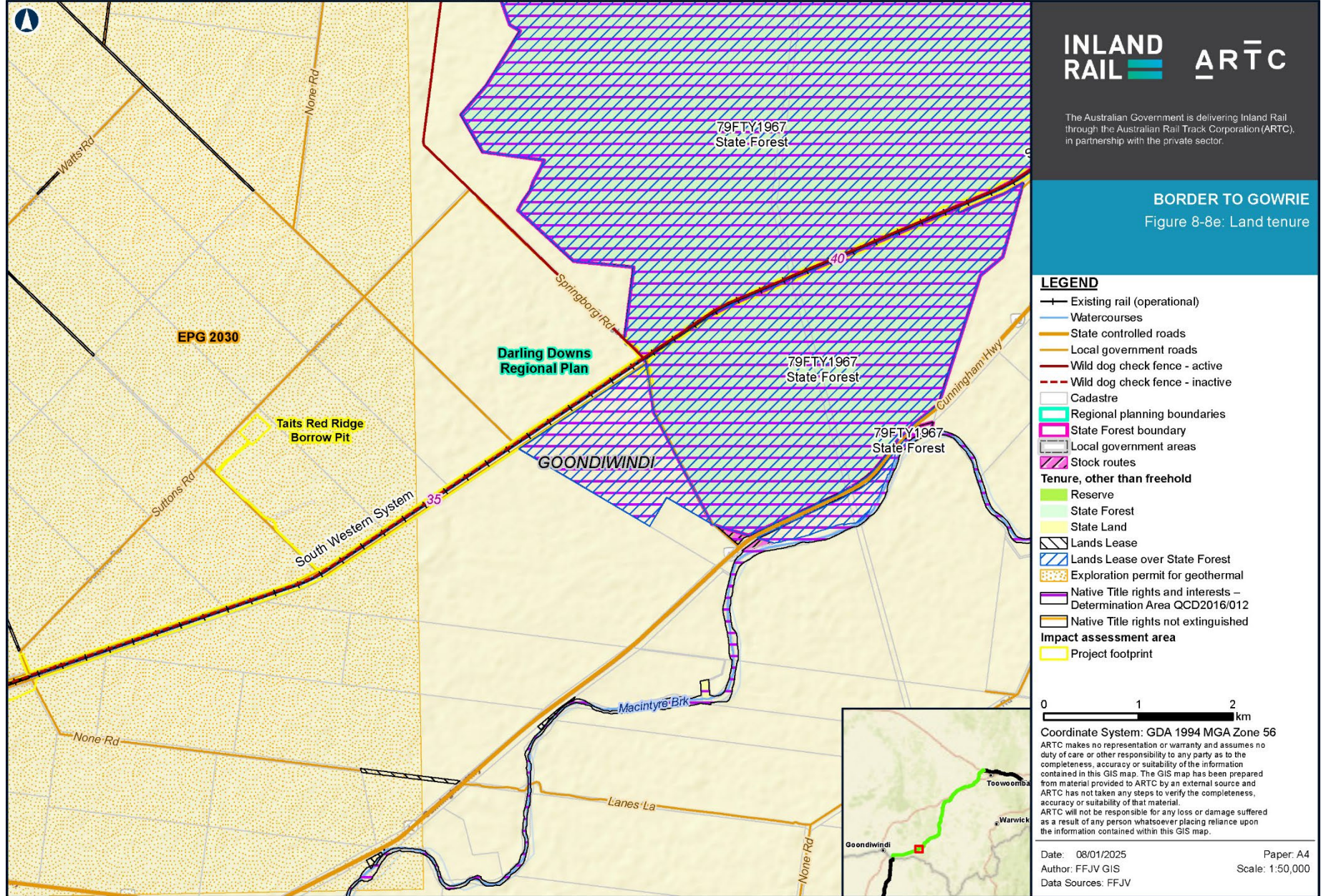
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material.

ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

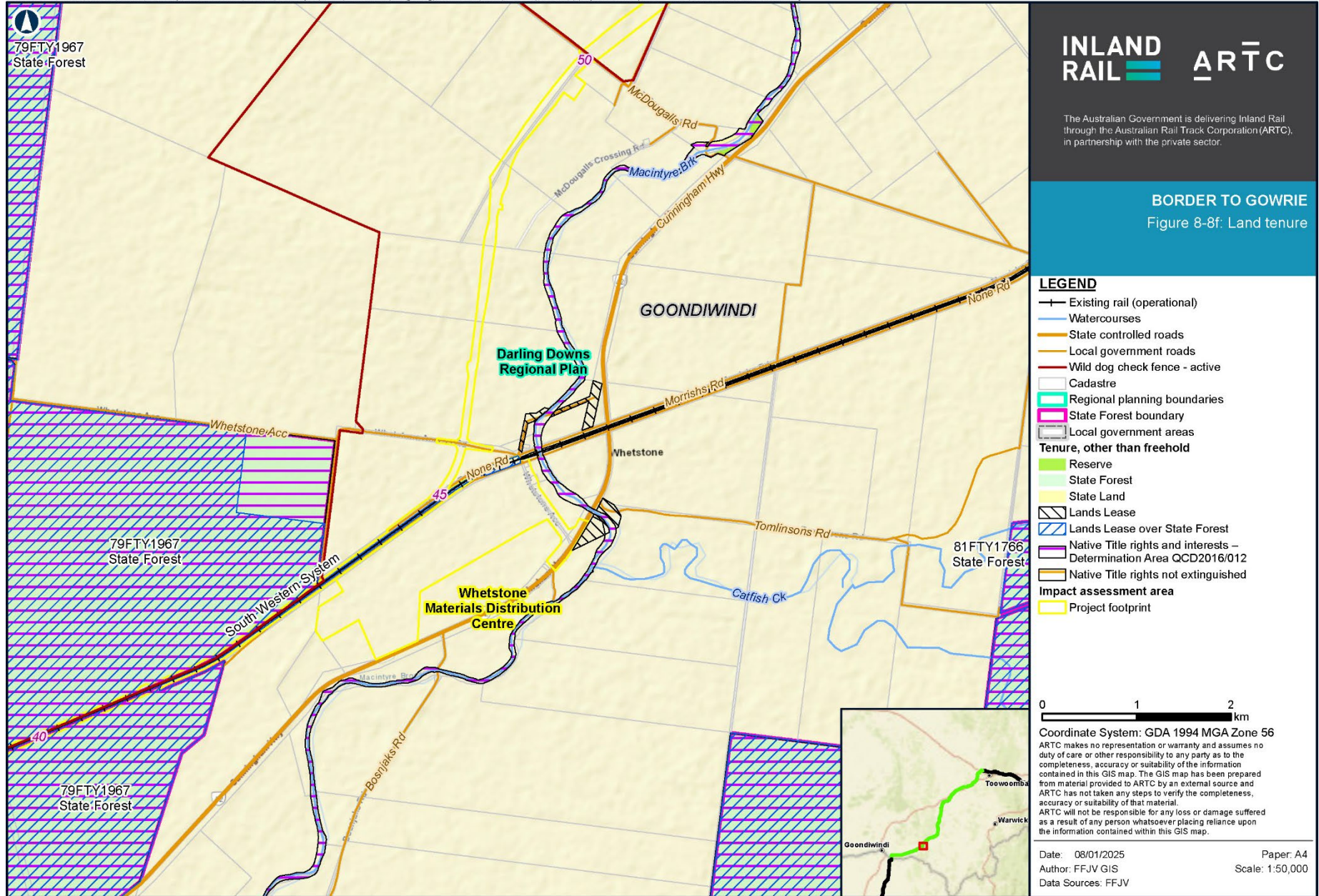
Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

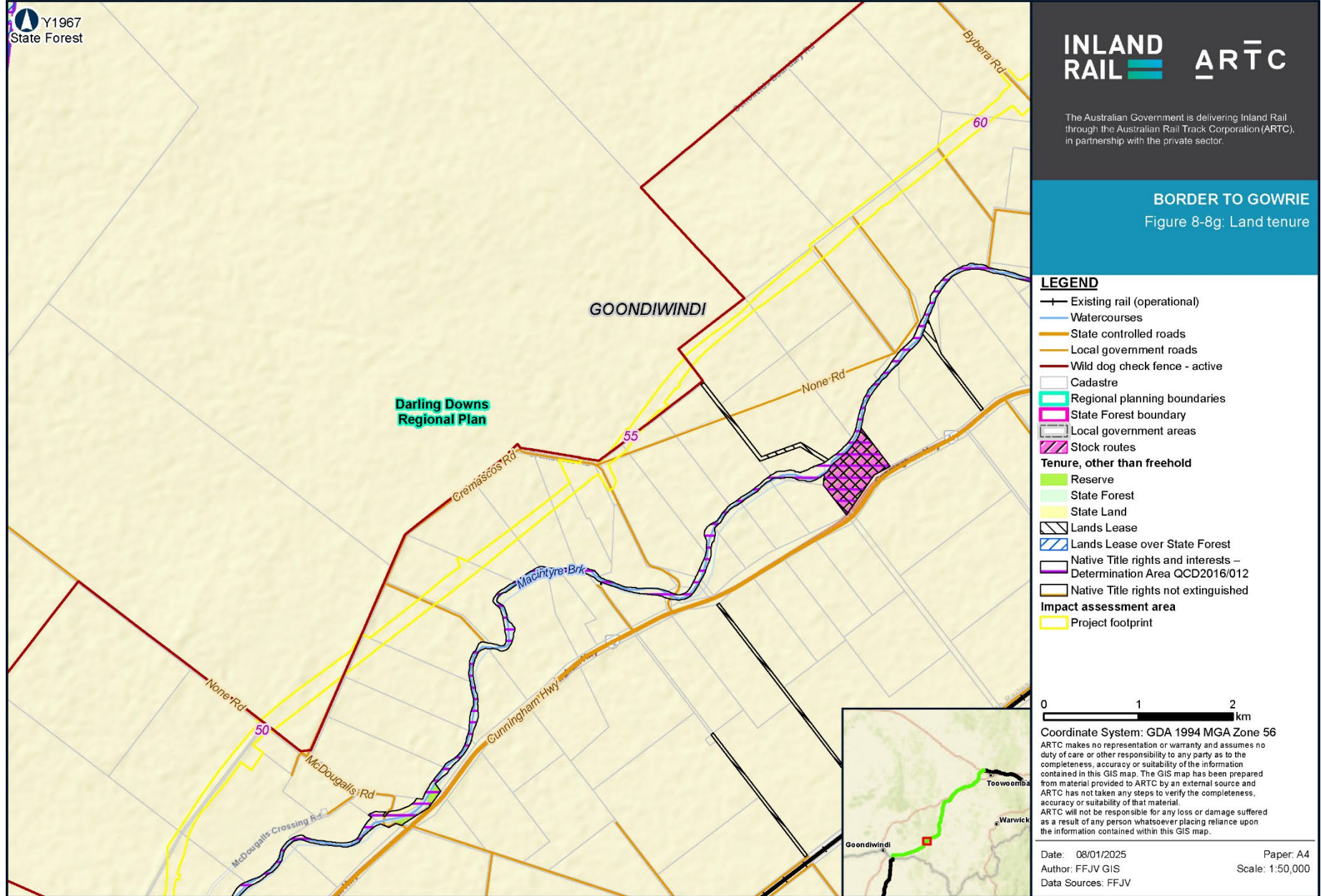
Paper: A4
Scale: 1:50,000

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

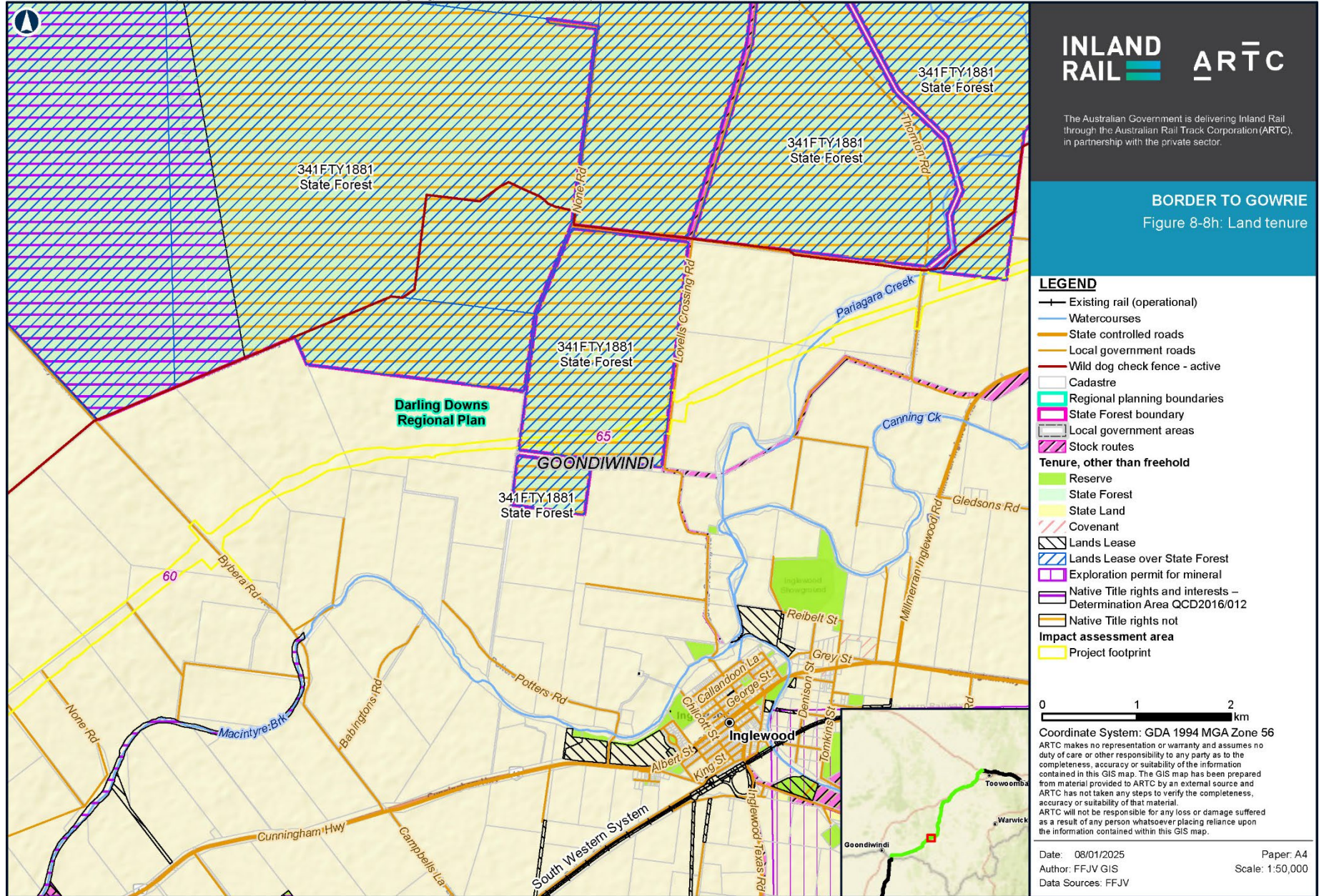


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

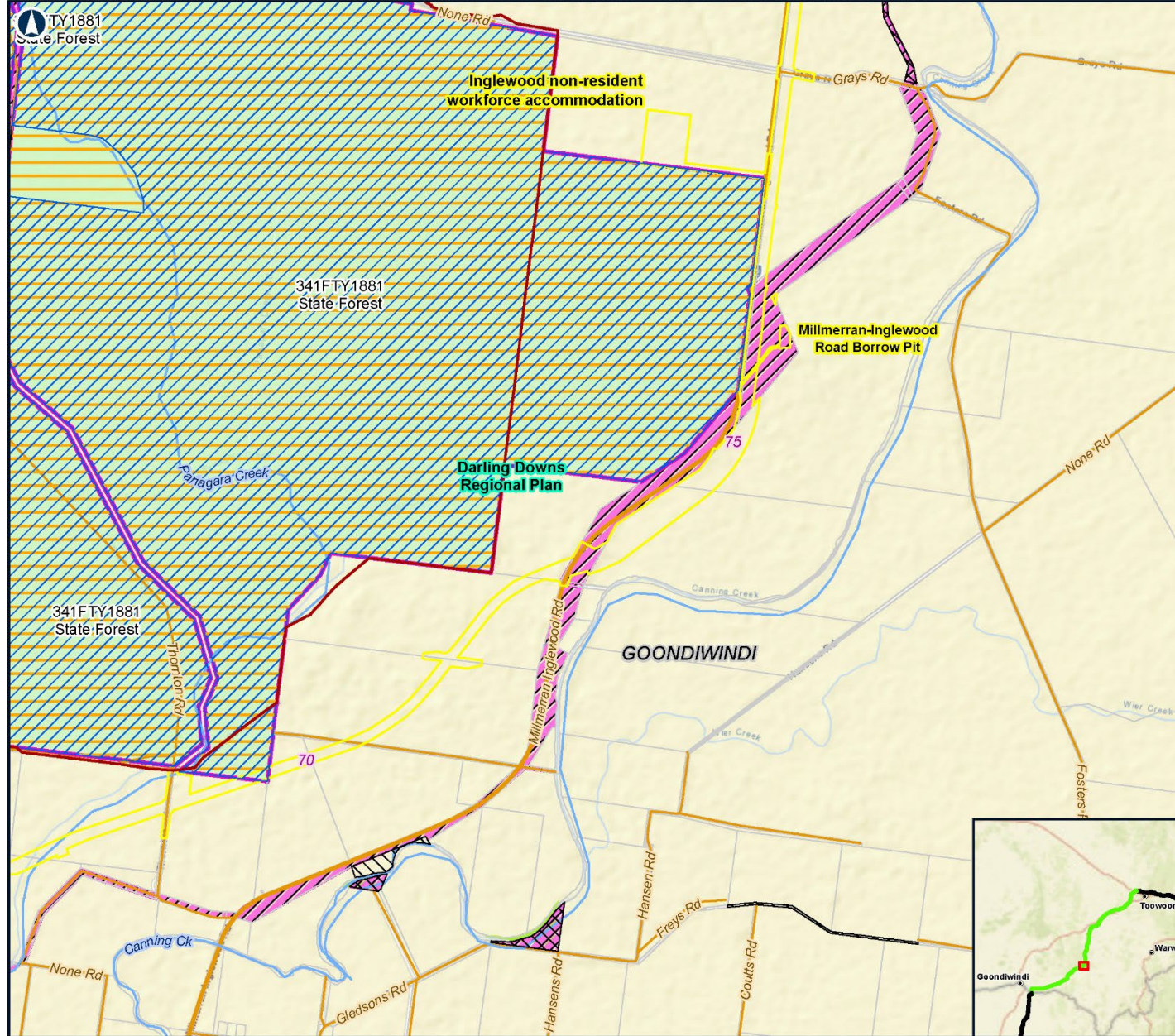




Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-8i: Land tenure

LEGEND

-  Watercourses
-  State controlled roads
-  Local government roads
-  Wild dog check fence - active
-  Cadastre
-  Regional planning boundaries
-  State Forest boundary
-  Local government areas
-  Stock routes
- Tenure, other than freehold**
-  Reserve
-  State Forest
-  Lands Lease
-  Lands Lease over State Forest
-  Native Title rights not extinguished
- Impact assessment area**
-  Project footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025

Author: FFJV GIS

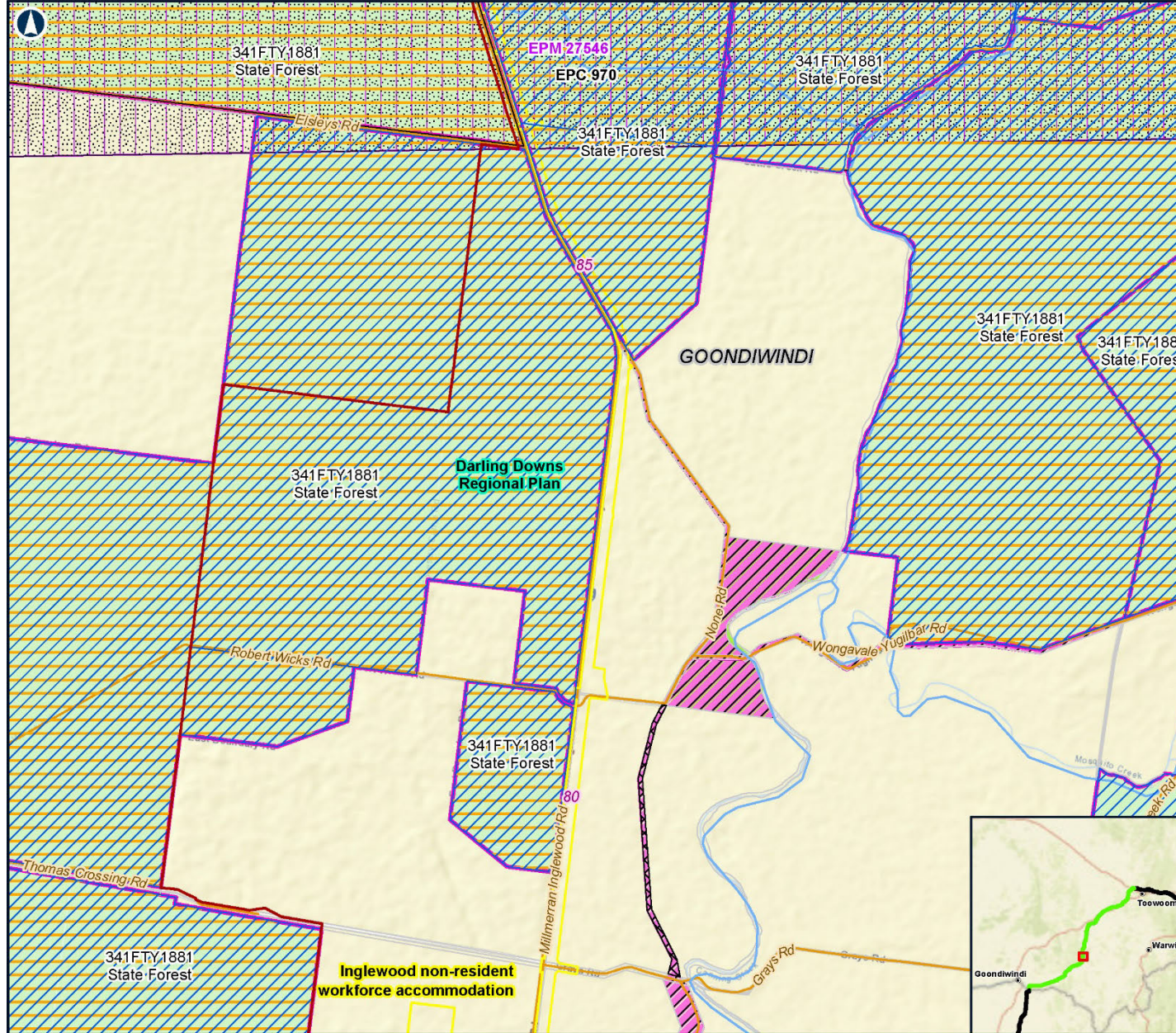
Data Sources: FFJV

Paper: A4

Scale: 1:50,000

Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GISTasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-8_Land_Tenure_v13.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-8j: Land tenure

LEGEND

- State controlled roads
- Local government roads
- Wild dog check fence - active
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Stock routes
- Tenure, other than freehold**
 - Reserve
 - State Forest
 - Lands Lease
 - Lands Lease over State Forest
 - Exploration permit for coal
 - Exploration permit for mineral
 - Native Title rights not extinguished
- Impact assessment area**
 - Project footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GISTasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-8_Land_Tenure_v13.mxd Date: 8/01/2025 09:28

The map displays the 341FTY1881 State Forest area, which is outlined in red. The forest is divided into several sections, some of which are labeled with their respective plans or zones: EPC 970 (yellow), EPM 27546 (green), and EPM 27547 (blue). The map also shows the Darling Downs Regional Plan (yellow) and the Goondiwindi Regional Plan (blue). Key roads include Kooroongarra-Andersons Road, Foresty Rd, Milnesen/Inglewood Rd, Nore Rd, and Eiseys Rd. The map includes a north arrow and a scale bar. An inset map in the bottom right corner shows the location of the forest within Queensland, with Toowoomba and Goondiwindi marked.

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE
Figure 8-8k: Land tenure

LEGEND

-  State controlled roads
 -  Local government roads
 -  Wild dog check fence - active
 -  Cadastre
 -  Regional planning boundaries
 -  State Forest boundary
 -  Local government areas
 -  Stock routes
- Tenure, other than freehold**
-  State Forest
 -  Lands Lease over State Forest
 -  Exploration permit for coal
 -  Exploration permit for mineral
 -  Native Title rights not extinguished
- Impact assessment area**
-  Project footprint

Coordinate System: GDA 1994 MGA Zone 56

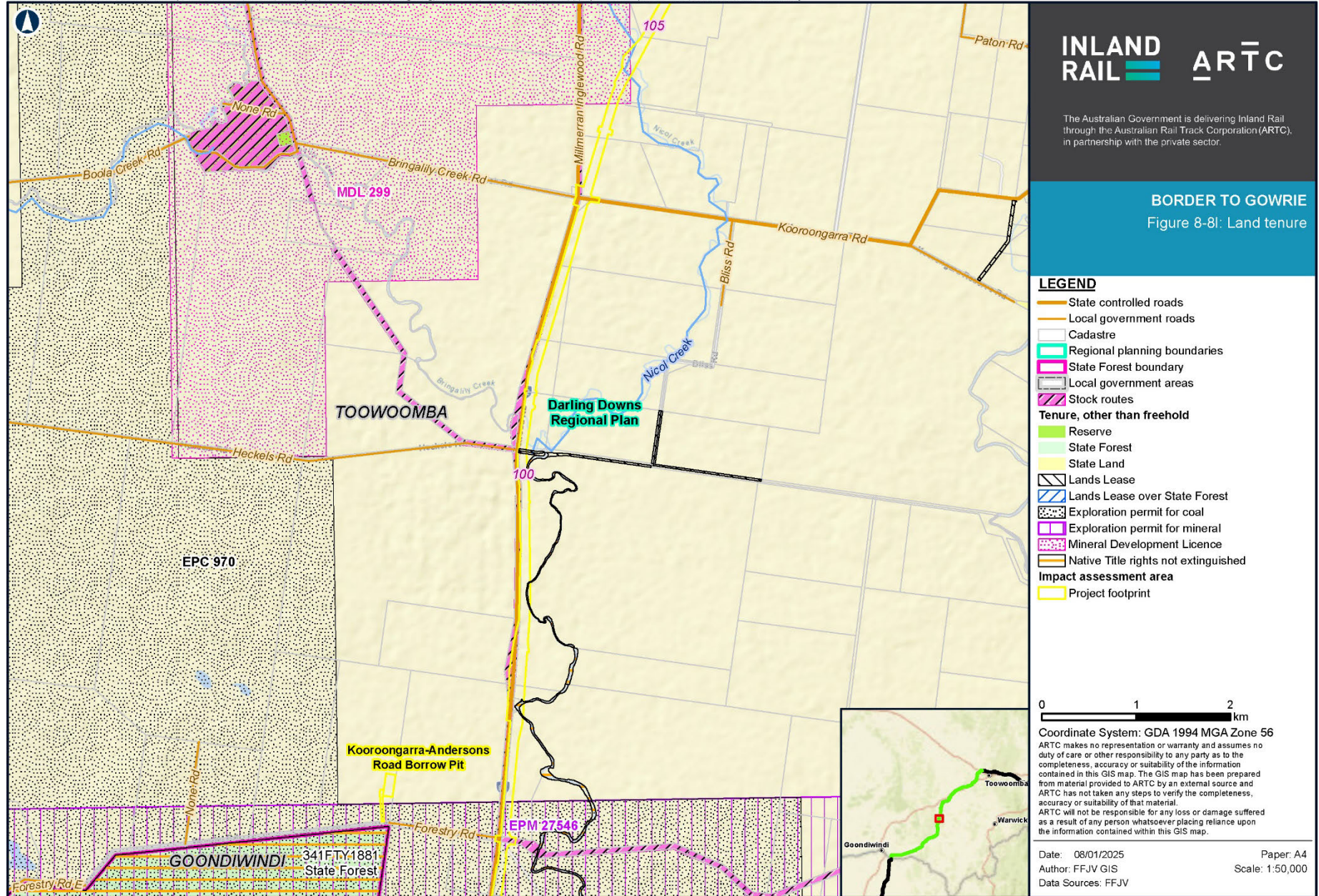
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material.

ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

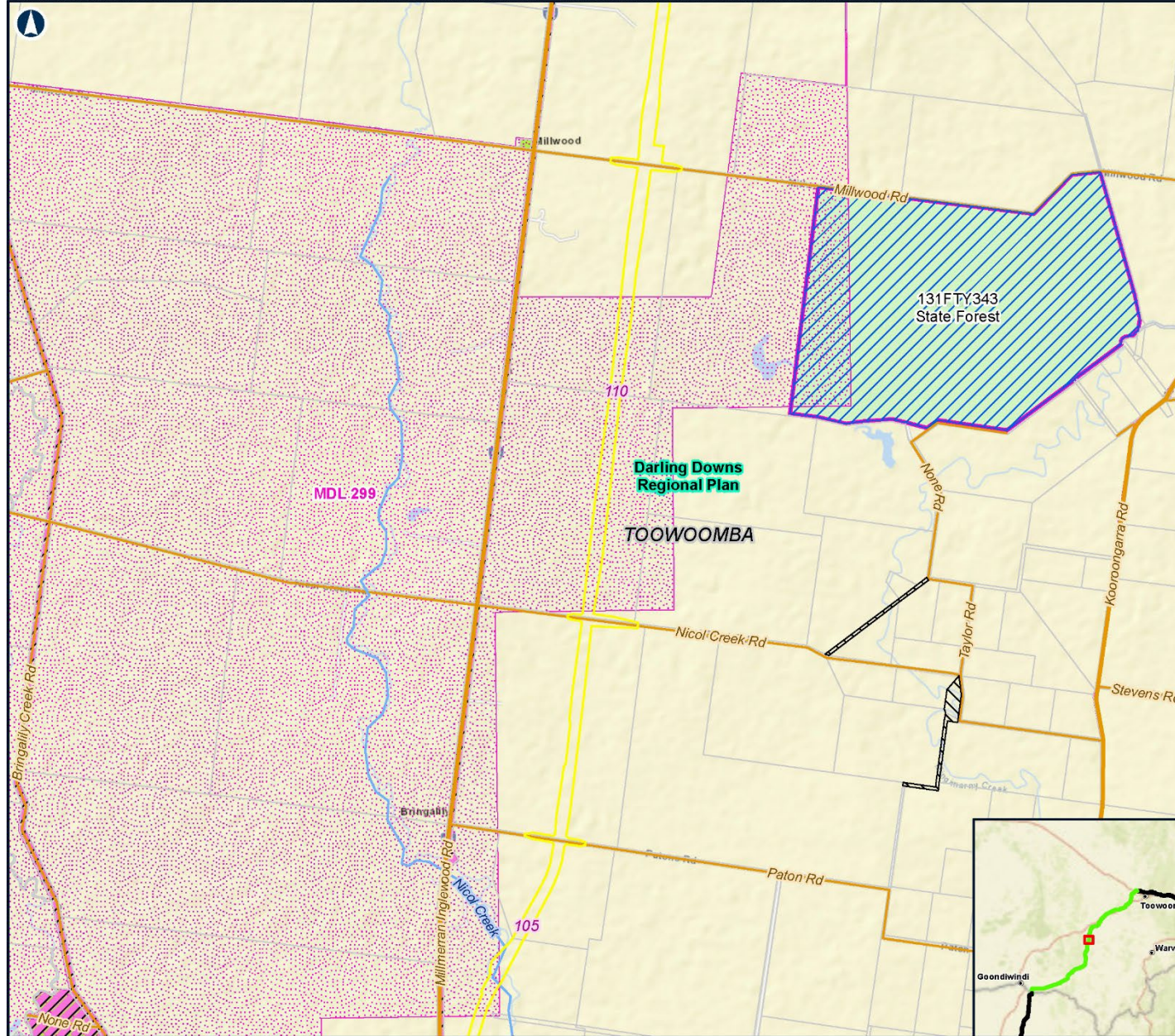
Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-8m: Land tenure

LEGEND

- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Stock routes
- Tenure, other than freehold**
 - Reserve
 - State Forest
 - Lands Lease
 - Lands Lease over State Forest
 - Mineral Development Licence
- Impact assessment area**
 - Project footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

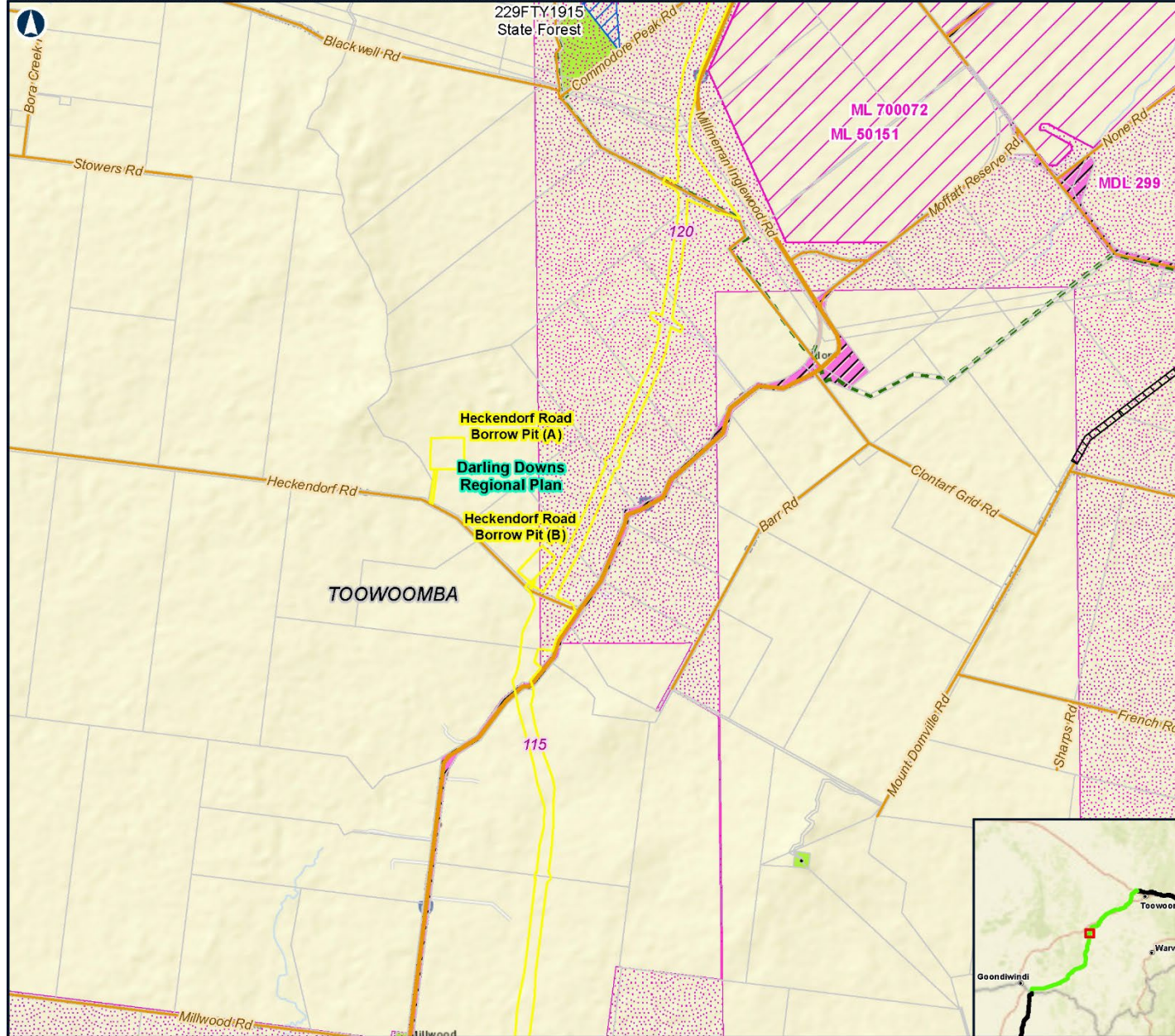
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GISTasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-8_Land_Tenure_v13.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-8n: Land tenure

LEGEND

- State controlled roads
- Local government roads
- Rabbit fence
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Stock routes
- Tenure, other than freehold
 - Reserve
 - State Forest
 - Lands Lease
 - Lands Lease over State Forest
 - Mineral Development Licence
 - Mining Lease
- Impact assessment area
 - Project footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

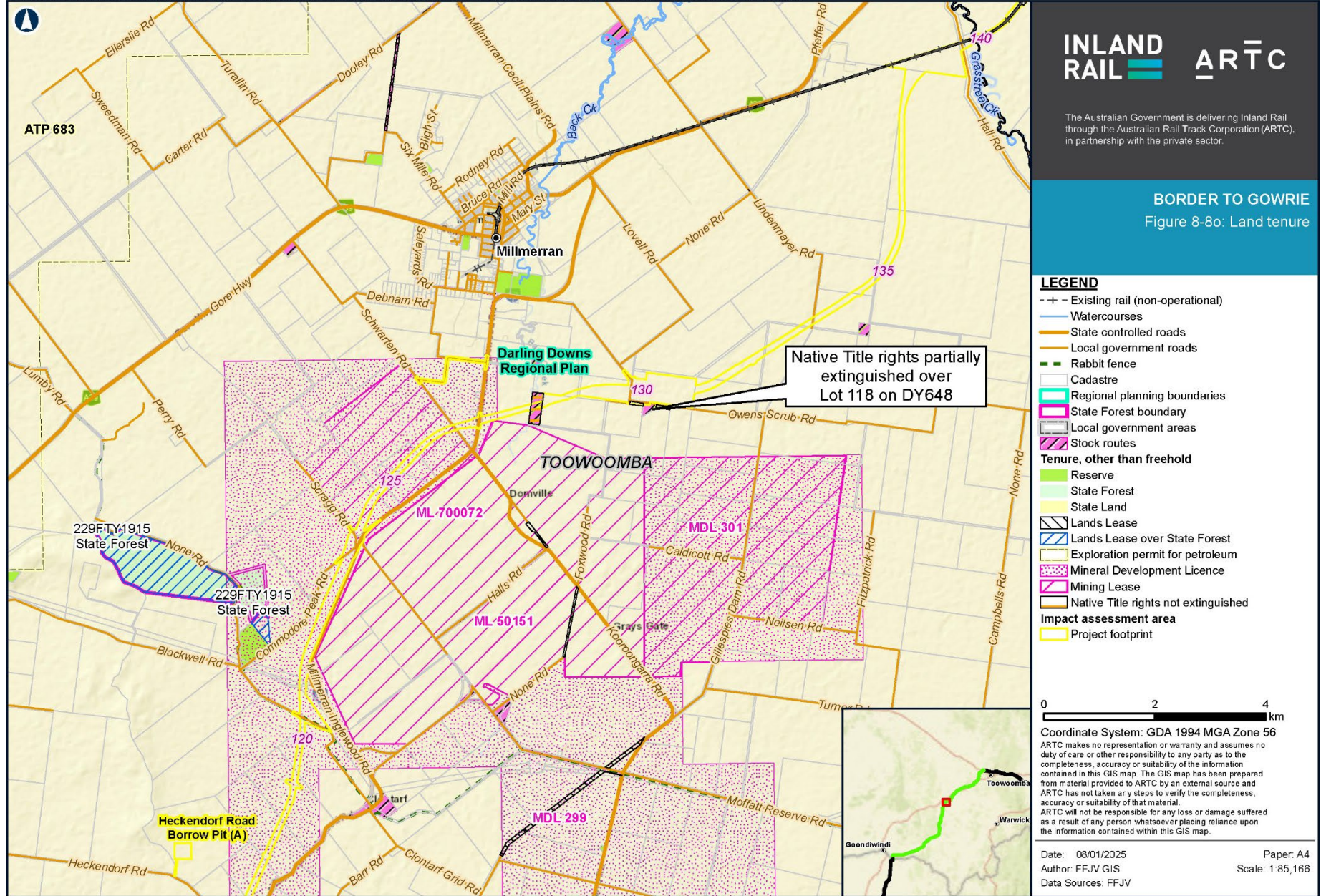
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

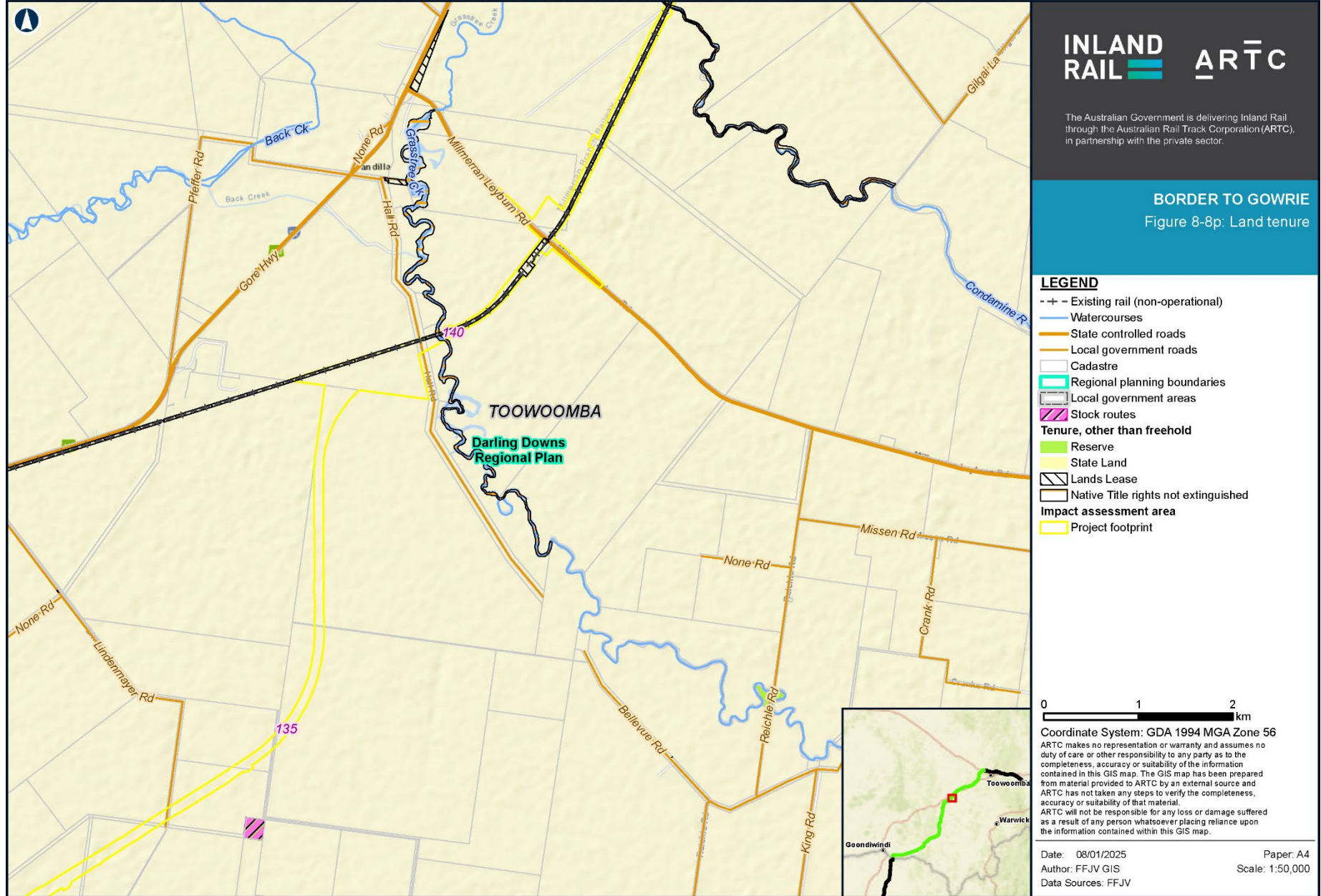
Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-8_Land_Tenure_v13.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-8q: Land tenure

LEGEND

- Existing rail (operational)
- - - Existing rail (non-operational)
- Watercourses
- State controlled roads
- Local government roads
- Cadastral
- Regional planning boundaries
- Local government areas
- Tenure, other than freehold**
 - Reserve
 - State Land
 - Lands Lease
 - Native Title rights not extinguished
- Impact assessment area**
- Project footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material.

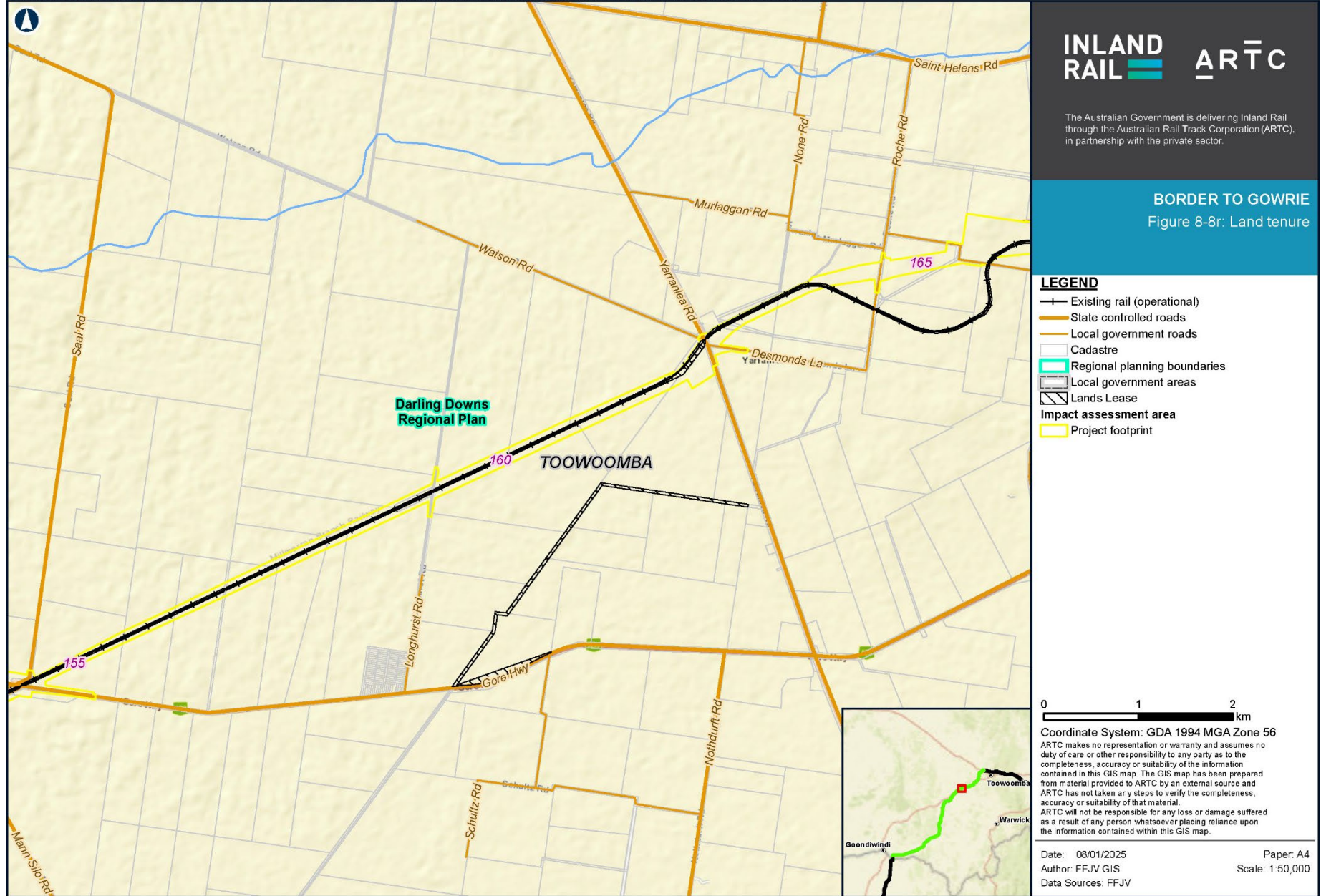
ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-8_Land_Tenure_v13.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GISTasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-8_Land_Tenure_v13.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-8s: Land tenure

LEGEND

- Existing rail (operational)
- State controlled roads
- Local government roads
- Cadastre
- Regional planning boundaries
- State Forest boundary
- Local government areas
- Stock routes
- Tenure, other than freehold
 - Reserve
 - State Forest
 - State Land
 - Lands Lease
- Impact assessment area
- Project footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material.

ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-8_Land_Tenure_v13.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE Figure 8-8t: Land tenure

LEGEND

-  Existing rail (operational)
-  Watercourses
-  State controlled roads
-  Local government roads
-  Petroleum Pipeline Licence
-  Cadastre
-  Regional planning boundaries
-  State Forest boundary
-  Local government areas
- Tenure, other than freehold**
-  Reserve
-  State Forest
-  State Land
-  Lands Lease
-  Exploration permit for geothermal
- Impact assessment area**
-  Project footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

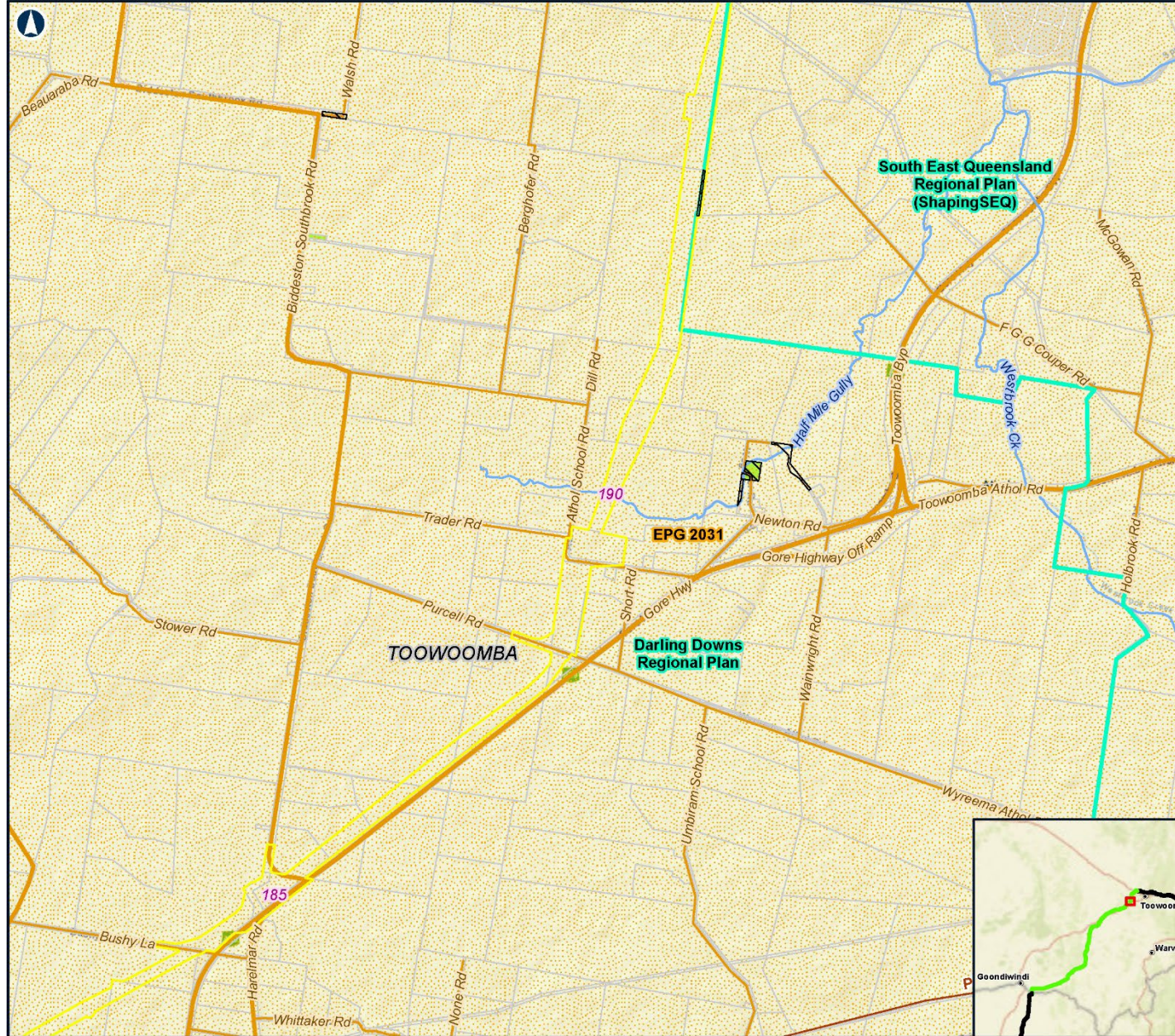
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-8_Land_Tenure_v13.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE

Figure 8-8u: Land tenure

LEGEND

- Existing rail (operational)
- Watercourses
- State controlled roads
- Local government roads
- Petroleum Pipeline Licence
- Cadastral
- Regional planning boundaries
- Local government areas
- Tenure, other than freehold
 - Reserve
 - Lands Lease
 - Exploration permit for geothermal
- Impact assessment area
- Project footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

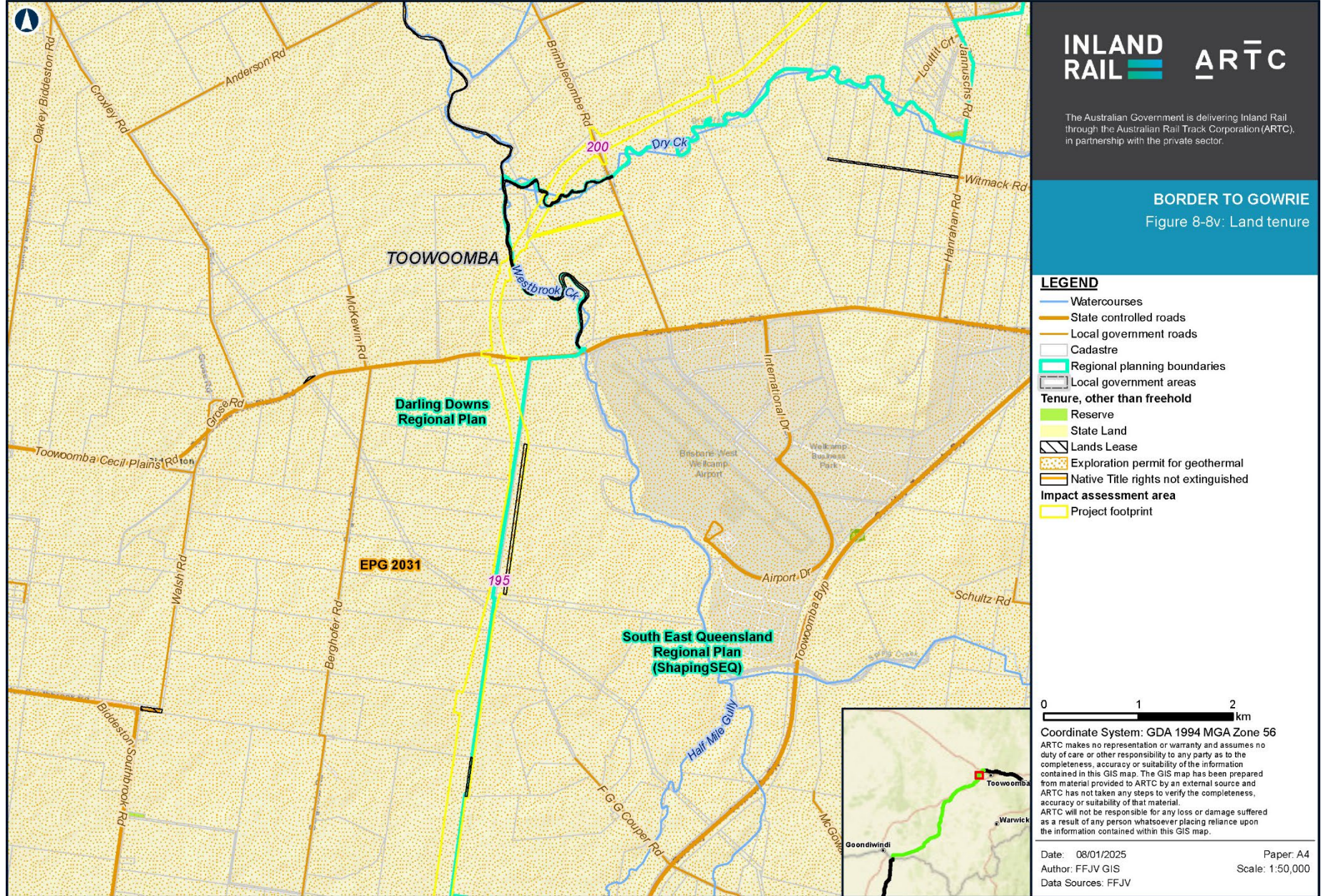
ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material. ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

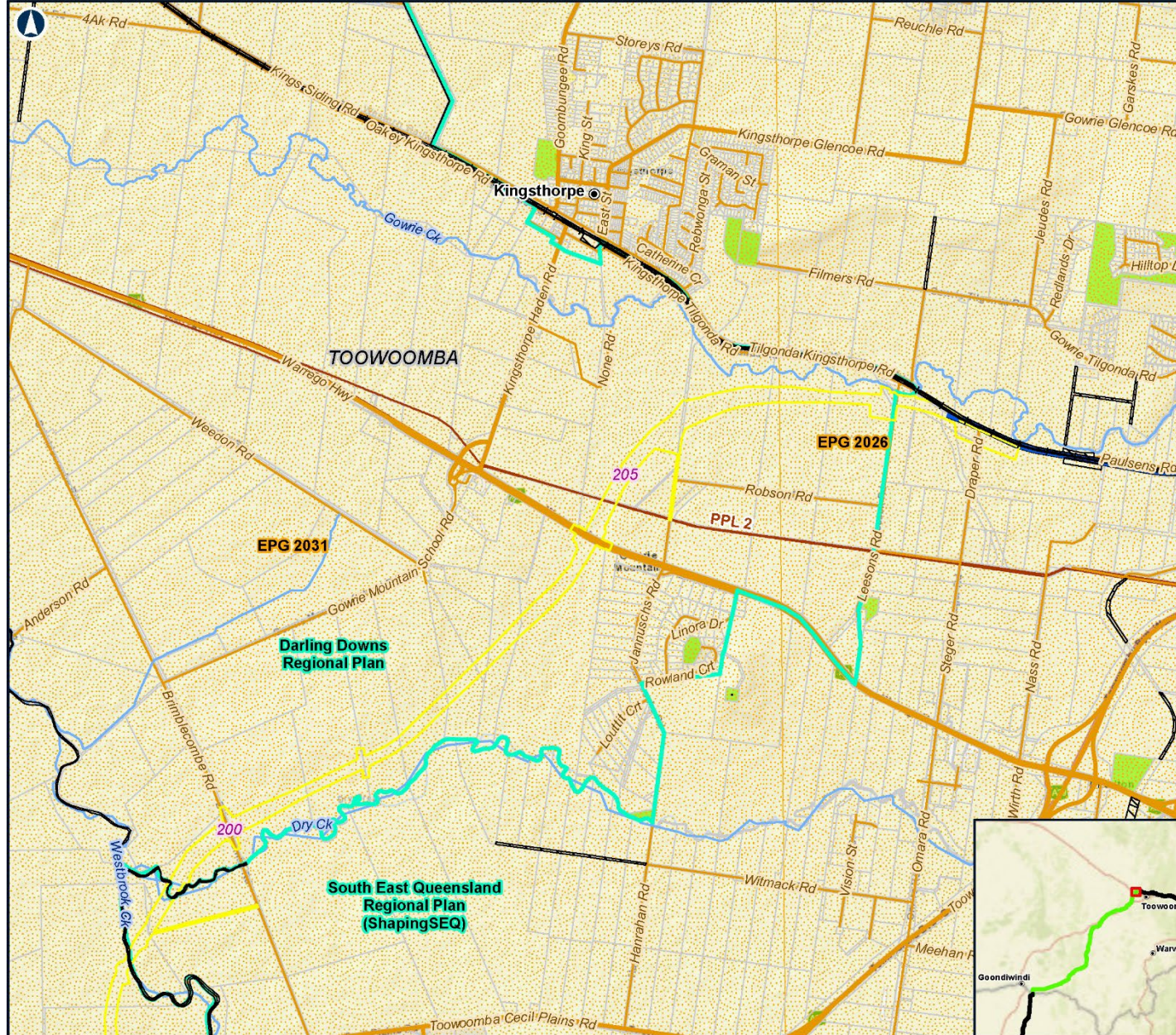
Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-8_Land_Tenure_v13.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-8_Land_Tenure_v13.mxd Date: 8/01/2025 09:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



INLAND RAIL **ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

BORDER TO GOWRIE
Figure 8-8w: Land tenure

LEGEND

- Gowrie to Helidon alignment
- Existing rail (operational)
- Watercourses
- State controlled roads
- Local government roads
- Petroleum Pipeline Licence
- Cadastre
- Regional planning boundaries
- Local government areas
- Tenure, other than freehold**
- Railway
- Reserve
- State Land
- Covenant
- Lands Lease
- Exploration permit for geothermal
- Native Title rights and interests – Determination Area QCD2016/012
- Native Title rights not extinguished
- Impact assessment area
- Project footprint

0 1 2 km

Coordinate System: GDA 1994 MGA Zone 56

ARTC makes no representation or warranty and assumes no duty of care or other responsibility to any party as to the completeness, accuracy or suitability of the information contained in this GIS map. The GIS map has been prepared from material provided to ARTC by an external source and ARTC has not taken any steps to verify the completeness, accuracy or suitability of that material.

ARTC will not be responsible for any loss or damage suffered as a result of any person whatsoever placing reliance upon the information contained within this GIS map.

Date: 08/01/2025
Author: FFJV GIS
Data Sources: FFJV

Paper: A4
Scale: 1:50,000

Map by: LUC/RB/CB/KG/TM/ASC/DTH Z:\GIS\GIS_310_B2\GIS\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-8_Land_Tenure_v13.mxd Date: 8/01/2025 09:28

8.4.3 Offset areas

A review of Queensland Globe mapping in November 2023 has shown that no legally secured offset areas under the EO Act considered MSES are within the permanent or temporary footprints. Additionally, no legally secured offset areas are within the study area for the Project.

A vegetation offset area under the VM Act is a secured spatial area with the purpose of mitigating environmental losses from a development. Vegetation offset areas are legally secured offset areas under the EO Act. There are no vegetation offset areas within either the permanent or temporary footprints.

8.4.4 Future land use intent and development activity

8.4.4.1 Future land use intent

A review of the relevant statutory land use planning instruments has been undertaken to identify the planned future land use intent, and preferred pattern of development within the study area. The relevant instruments are the:

- ▶ *State Planning Policy* (Department of Infrastructure, Local Government and Planning, 2017a)
- ▶ *Darling Downs Regional Plan* (DSDIP, 2013a)
- ▶ *ShapingSEQ 2023* (DSDILGP, 2023a)
- ▶ *Goondiwindi Region Planning Scheme 2018* (GRC, 2018a)
- ▶ *Toowoomba Regional Planning Scheme* (TRC, 2012).

State Planning Policy

The SPP identifies 17 State interests in land use planning and development across the following five key themes:

- ▶ Liveable communities and housing
- ▶ Economic growth
- ▶ Environment and heritage
- ▶ Safety and resilience to hazards
- ▶ Infrastructure.

A summary of each State interest and its relevance to the Project is provided in Table 8-24. With the exception of two State interests; 'Coastal Environment' and 'Strategic Ports', all of the State interests (i.e. 15 of the 17 State interests) are relevant to the Project.

TABLE 8-24 STATE PLANNING POLICY STATE INTERESTS RELEVANT TO THE PROJECT

State interest	State interest summary statement		Relevance to Project
Liveable communities and housing			
Housing supply and diversity	Diverse, accessible and well-served housing, and land for housing, is provided and supports affordable housing outcomes.	✓	The Project traverses residential land use when located within or nearby the townships of Yelarbon, Inglewood, Millmerran, Pampas, Brookstead, Pittsworth, Southbrook, Athol, Gowrie Mountain and Kingsthorpe.
Liveable communities	Liveable, well-designed and serviced communities are delivered to support wellbeing and enhanced quality of life.	✓	The Project traverses or is nearby the localities of Kurumbul, Yelarbon, Inglewood, Pampas, Brookstead, Pittsworth, Linthorpe, Southbrook, Athol, and Gowrie Mountain and Kingsthorpe where there is residential land use.
Economic growth			
Agriculture	The resources on which agriculture depends are protected to support the long-term viability and growth of the agricultural sectors. Audit information has been used to support the various policy elements of the state's interest in agriculture; in particular, the identification and mapping of IAA, and agricultural land Class A and B.	✓	Land use around the Project predominantly consists of open grazing land with cropping, irrigated cropping and other agricultural land uses. The Project traverses the Border Region and Eastern Darling Downs IAAs and land classified as both Class A and Class B agricultural land. The Project encroaches on the Whetstone State Forest and traverses the Bringalily State Forest, which are protected for native timber production.

State interest	State interest summary statement		Relevance to Project
Development and construction	Employment needs, economic growth, and a strong development and construction sector are supported by facilitating a range of residential, commercial, retail, industrial, and mixed-use development opportunities.	✓	The Project will generate significant employment and economic growth, and support for the construction sector. The Project is part of a larger Inland Rail Program of works. Nationally, the Inland Rail Program is expected to deliver an additional 16,000 jobs at the peak of construction, with an average of 700 additional jobs per annum during operation. At a local level, the Project also has the potential to catalyse the development and growth of regional intermodal hubs, such as InterLinkSQ, Toowoomba Wellcamp Airport and Toowoomba Enterprise Hub.
Mining and extractive resources	Extractive resources are protected, and mineral, coal, petroleum and gas resources are appropriately considered to support the productive use of resources, a strong mining and resource industry, economical supply of construction materials, and avoid land use conflicts where possible.	✓	The Project traverses one mining lease, three exploration permits for coal and one mineral development licence for coal. The Project also traverses three coal resource areas. A referral was submitted in August 2022 for Millmerran Mining Lease Conversion Project (reference number EPBC 2022/09294). The status of the Project is that it is a controlled action requiring assessment and approval under the EPBC Act. The controlled action is still under assessment by the Department of Climate Change, Energy, the Environment and Water. At its closest point, the Project is located approximately 355 m west of the resource/processing area and 170 m to the west of the southeast corner of the separation area for KRA 120, avoiding land within the separation and processing areas. Other KRAs located in the vicinity of the Project but outside the study area include KRA 2 (approximately 4.8 km to the southeast, in the Inglewood locality), KRA 3 (approximately 1.9 km to the southeast, in the Wellcamp locality) and KRA 163 (approximately 2 km to the west, in the Millmerran locality).
Tourism	Tourism planning and development opportunities that are appropriate and sustainable are supported and the social, cultural and natural values underpinning tourism developments are protected.	✓	The Project encroaches on the Whetstone State Forest and traverses the Bringalily State Forest, which are popular tourist destinations for visitors to the area. The area is also a popular location for tourist drives and visitors passing through the region.
Environment and heritage			
Biodiversity	MSES are valued and protected, and the health and resilience of biodiversity is maintained or enhanced to support ecological processes. The State seeks to ensure that development is located in areas that avoid significant impacts on MSES and, where adverse impacts cannot be reasonably avoided, that they are minimised. This State interest also requires that ecological processes and connectivity are maintained or enhanced by avoiding fragmentation of MSES.	✓	The Project is located within mapped areas of matters of national environmental significance (MNES) and MSES.
Coastal environment	The coastal environment is protected and enhanced while supporting opportunities for coastal-dependent development, compatible urban form, and maintaining appropriate public use of, and access to, long, State coastal land.	x	The Project is not in the coastal area.

State interest	State interest summary statement	Relevance to Project
Cultural heritage	The cultural heritage significance of heritage places and heritage areas, including places of Aboriginal and Torres Strait Islander cultural heritage, is conserved for the benefit of the community and future generations. This State interest seeks to ensure matters of Aboriginal cultural heritage and Torres Strait Islander cultural heritage, and world, national, State, and local heritage are appropriately identified, conserved and considered.	✓ Indigenous cultural heritage will be identified, assessed and managed under an approved Cultural Heritage Management Plan developed with the relevant Aboriginal Party for the Project footprint and in accordance with the Indigenous cultural heritage duty of care requirements under the <i>Aboriginal Cultural Heritage Act 2003</i> (Qld). Non-Indigenous heritage values are addressed in Chapter 19: Cultural Heritage.
Water quality	The environmental values and quality of Queensland waters are protected and enhanced. This State interest seeks to ensure that development facilitates the protection or enhancement of environmental values and the achievement of water quality objectives for Queensland waters.	✓ The Project is located within the Condamine–Balonne Rivers catchment and the Queensland section of the Border Rivers catchment. The Project crosses 19 major waterways (stream order ≥ 3) and 81 minor waterways (stream order < 3). The study area is subject to periods of inundation.
Safety and resilience to hazards		
Emissions and hazardous activities	Community health and safety, and the natural and built environment, are protected from potential adverse impacts of emissions and hazardous activities. The operation of appropriately established industrial development, major infrastructure, and sport and recreation activities is ensured.	✓ The Project involves the construction and operation of major infrastructure. Hazards and risk to human health, safety, environment and property imposed by the Project throughout the design, construction, operation and decommissioning stages are addressed in Chapter 21: Hazard and Risk.
Natural hazardous, risk and resilience	The risks associated with natural hazards, including the projected impacts of climate change, are avoided or mitigated to protect people and property, and enhance the community's resilience to natural hazards.	✓ The Project is located within natural hazard areas identified from local government planning schemes, including bushfire-prone and flood-hazard areas.
Infrastructure		
Energy and water supply	The timely, safe, affordable, and reliable provision and operation of electricity and water supply infrastructure is supported, and renewable energy development is enabled.	✓ The Project traverses, and/or is within proximity to, existing and approved major electricity infrastructure corridors and water utilities.
Infrastructure integration	The benefits of past and ongoing investment in infrastructure and facilities are maximised through integrated land use planning. This State interest seeks to ensure that development achieves a high level of integration with infrastructure planning, that it optimises the location of future infrastructure and that development occurs in areas currently serviced by infrastructure or are located in a logical and orderly location, form and sequence to enable the cost-effective delivery of State and local infrastructure.	✓ The Project will involve the expansion of existing infrastructure, involving the integration of the Inland Rail Program within the existing QR South Western and Millmerran Branch Line rail corridors. The Project has been strategically co-located with existing road and rail corridors where possible.

State interest	State interest summary statement		Relevance to Project
Transport infrastructure	The safe and efficient movement of people and goods is enabled, and land use patterns that encourage sustainable transport are supported.	✓	The intent of the Inland Rail Program is to establish a rail link between Melbourne to Brisbane, to serve future rail freight demand and stimulate growth for inter-capital and regional/bulk rail freight. The Project also has potential to catalyse development and growth of nearby regional intermodal hubs associated with InterLinkSQ, and the Toowoomba Wellcamp Airport and Toowoomba Enterprise Hub.
Strategic airports and aviation facilities	The operation of strategic airports and aviation facilities is protected and the growth and development of Queensland's aviation industry is supported.	✓	No strategic airports or aviation facilities are traversed by the Project. The closest strategic airport is the Toowoomba Wellcamp Airport. At its closest point, the Project footprint is approximately 1 km and the Project footprint is approximately 865 m to the west of the northern limit of the runway for Toowoomba Wellcamp Airport. The only other strategic airport located within the general vicinity of the Project is the Army Aviation Centre Oakey. This airbase is located approximately 11.4 km from the Project. Regional airfields include: ▶ Inglewood airfield (not certified or registered)—4.0 km from the Project ▶ Millmerran airfield (not certified or registered)—4.3 km from the Project ▶ Pittsworth airfield (not certified or registered)—2.3 km south of the Project ▶ Southbrook airfield (not certified or registered)—2.4 km from the Project ▶ Wyreema airfield (not certified or registered)—10.0 km from the Project ▶ Cambooya airfield (not certified or registered)—13.5 km from the Project ▶ Colanya airfield (not certified or registered)—6.0 km from the Project.
Strategic ports	The operation of strategic ports and priority ports is protected and their growth and development are supported. This State interest recognises Queensland ports as a major component of both the natural and State supply chain and the defence system.	x	The Project is not located within proximity to the Port of Brisbane, which is a strategic port. The Project will not impact on the safety or efficient operation of any strategic or priority ports.

Darling Downs Regional Plan

The *Darling Downs Regional Plan* (DSDIP, 2013a) is the statutory regional plan for the Darling Downs region. The *Darling Downs Regional Plan* establishes outcomes for the region and policies to achieve them. As one of Queensland's most important agricultural assets, the *Darling Downs Regional Plan's* policies aim to protect the Darling Downs' priority agricultural land uses while supporting the co-existence of opportunities for the resources sector.

The Project is located within the southern and eastern areas of the Darling Downs region. The southern area is the 'interstate connection' of the region, with traditional industries of forestry and agriculture playing an important role within the region's economy. These industries, and the area's proximity to and connection with northern NSW, present opportunities to strengthen interstate economic relationships. The area has access to several strategic highways, including the Gore, Warrego and Cunningham highways, which connect the southwest and the southeast. The QR South Western Line is also of importance to the area, supporting the transportation of agricultural and resource commodities to domestic and international export markets.

The eastern area of the Darling Downs region is identified to serve as 'the gateway' to the region, supporting an extensive network of freight routes into and out of the region. The eastern Darling Downs area is the major transport and service hub of the region as it is the location of the junction of several strategic highways and railway lines. The area facilitates the movement of goods and resources between Queensland's southeast and west, enabling access to domestic and international markets through the strategic port facilities along the east coast.

The *Darling Downs Regional Plan* also identifies priority outcomes sought for the region's transport network. These include the prioritisation of transport programs to improve freight movement and reduce conflicts in urban areas and with other network users. Further freight tasks, including supply chains for coal, petroleum products, grains, cereals, and meat and livestock from the Darling Downs to the Port of Brisbane, are expected to drive the demand for rail transport and infrastructure in the region.

The *Darling Downs Regional Plan* outlines numerous opportunities for leveraging rail infrastructure to boost economic development in the region. This includes the long-term aspiration of a modal shift towards increased rail usage to increase capacity while alleviating some of the constraints on the region's road network. A modal shift towards increased rail usage is identified within the Regional Plan as having the potential to alleviate constraints on the region's road network, reducing maintenance costs and improving safety through a reduction in heavy vehicles.

The *Darling Downs Regional Plan* also identifies that increased rail capacity in the region could provide opportunities for intermodal facilities, including hubs east of Goondiwindi and the Toowoomba Enterprise Hub. Additional rail capacity may also improve the productivity of under-used grain-handling facilities located on the existing rail network.

ShapingSEQ 2023

ShapingSEQ 2023 (DSDILGP, 2023a) is the statutory regional plan for the South East Queensland region. Relevant to the Project, ShapingSEQ 2023 identifies Inland Rail as a region-shaping infrastructure priority for the State. ShapingSEQ 2023 also identifies agricultural land (Class A and Class B) and IAAs as regionally significant natural resources to be protected from loss and fragmentation.

The Project is located within the western sub-region of South East Queensland as identified within ShapingSEQ 2023. The Western sub-region encompasses Ipswich, Somerset, Lockyer Valley and Scenic Rim LGAs, and Toowoomba City, and contains South East Queensland's major rural production and regional landscape areas. The sub-region is identified to be characterised by a predominantly regional and rural lifestyle, with a reputation as being one of the most fertile farmlands in the world.

ShapingSEQ 2023 outlines the western sub-region's role as the western gateway, connecting South East Queensland to the rural areas of Darling Downs and South Burnett and providing critical freight connections between northern NSW and the southern states. The sub-region is identified as an emerging national and global-oriented economy leveraging major investments in airport, logistics and freight infrastructure.

Within ShapingSEQ 2023, the Western Gateway is identified as a regional economic cluster supporting significant agricultural and resource activities and priority sectors of manufacturing, transport and logistics, and health and knowledge. The Western Gateway regional economic cluster is strategically located as the gateway to the west and at the intersection of three national highways (Warrego Highway, Gore Highway and New England Highway). The ongoing development of the Toowoomba Wellcamp Airport, Toowoomba Enterprise Hub, Toowoomba Second Range Crossing (now part of the Warrego Highway), as well as long-term investments, such as the Inland Rail Program, will further strengthen this regional hub.

Local government planning schemes

The Project footprint is located within the Goondiwindi and Toowoomba LGAs. The planning schemes relevant to the Project are the *Goondiwindi Region Planning Scheme 2018* (GRC, 2018a) and the *Toowoomba Regional Planning Scheme* (TRC, 2012).

The Project cannot be made assessable development under either planning scheme as the Project is 'government-supported transport infrastructure' in accordance with Schedule 6, Part 5, Section 26(2) of the Planning Regulation 2017. Further information is provided in Chapter 3: Legislation and Project Approvals Process.

Although the provisions of the planning schemes do not apply, the zoning intent for the area as determined by the planning schemes has been taken into consideration when determining the current and future land use context in the area. Table 8-26 and Table 8-26 discuss the Project in the context of the Goondiwindi and Toowoomba planning schemes.

Goondiwindi Region Planning Scheme 2018

The *Goondiwindi Region Planning Scheme 2018* (GRC, 2018a) outlines the purpose and intent for each zone and identifies the preferred development to be achieved. Zones traversed by the Project footprint within Goondiwindi LGA and their relevance to the Project are outlined in Table 8-25.

TABLE 8-25 GOONDIWINDI REGION PLANNING SCHEME ZONES RELEVANT TO THE PROJECT

Zone	Purpose/Intent	Relevance to Project
Rural Precincts traversed: ▶ Alluvial Plains Precinct ▶ Kumbarilla Rises Precinct ▶ Horticulture 1 Precinct ▶ Horticulture 2 Precinct ▶ Horticulture 3 Precinct	The purpose of the rural zone is to provide for rural uses, including cropping, intensive horticulture and intensive animal industries. Within the rural zone, opportunities are provided for non-rural uses that are compatible with agriculture, the environmental features and landscape character of the rural area and where the uses do not compromise the long-term use of the land for rural purposes. The purpose of the rural zone includes providing for the establishment of a limited range of complementary non-rural uses that promote sustainable economic diversification, or which provide a service to rural areas of the Goondiwindi Region. All land within the rural zone is subject to a Rural Zone precinct, which determines the minimum lot size and frontages for development within the rural zone.	The Project is predominately located within the rural zone when traversing through the Goondiwindi LGA. The Project traverses through the following precincts of the rural zone: ▶ Alluvial Plains precinct when traversing from the NSW/QLD border to Yelarbon ▶ Kumbarilla Rises precinct when traversing within the existing QR South Western Line rail corridor from Yelarbon to Whetstone and when traversing through Canning Creek ▶ Horticulture 1, 2 and 3 precincts when traversing through the Inglewood locality.
Township	The purpose of the township zone is to provide for small to medium size urban settlements located within an urban area. Development within the township zone is to provide for a mix of uses that support the needs of the local community. The purpose of the township zone is to accommodate an appropriate mix of low intensity uses in small townships, including Yelarbon, and maintaining the amenity and character of these small townships.	At Yelarbon, the Project is located within the existing QR South Western Line rail corridor. Where the existing rail corridor requires widening for the Project, the Project footprint traverses adjacent land lots within the township zone.

Toowoomba Region Planning Scheme

The *Toowoomba Regional Planning Scheme* (TRC, 2012) sets out the purpose and intent for each zone and identifies the preferred development to be achieved. Zones traversed by the Project within Toowoomba LGA and their relevance to the Project are outlined in Table 8-26.

TABLE 8-26 TOOWOOMBA REGIONAL PLANNING SCHEME ZONES RELEVANT TO THE PROJECT

Zone	Purpose/Intent	Relevance to Project
Rural	The purpose of the rural zone is to provide for a wide range of rural uses including cropping, intensive horticulture, intensive animal industries, animal husbandry, animal keeping and other primary production activities.	Land within the Project is predominately within the rural zone when traversing through the Toowoomba LGA.
Community facilities	The purpose of the community facilities zone is to provide for community related activities and facilities, whether under public or private ownership. These may include provision of municipal services, public utilities, government installations, hospitals and schools, transport and telecommunication networks and community infrastructure of an artistic, social or cultural nature. The zone facilitates the effective operation and optimum accessibility of community-related activities.	The Project traverses land within the community facilities zone when using the existing Millmerran Branch Line rail corridor.
Open space	The purpose of the open space zone is to provide for local, district and regional scale parks that serve the recreational needs of a wide range of residents and visitors.	The Project traverses one parcel within the open space zone when traversing through the locality of Pampas. This parcel is used for cropping.

Zone	Purpose/Intent	Relevance to Project
Township	The purpose of the township zone is to provide for small-to-medium size service centres located within a rural area. Development within the township zone provides for a mix of uses, including residential, retail, business, education, industrial, community purpose, recreation and open space, which support the needs of the local rural community.	At Brookstead, the Project is located within the existing QR Millmerran Branch Line rail corridor but expands wider than the existing corridor, traversing adjacent lots within the township zone.
Medium-impact industry	The purpose of the medium-impact industry zone is to provide for medium-impact industry uses. Such uses within the medium-impact industry zone may include, spray painting and surface coating, wooden and laminated product manufacturing.	The Project traverses land within the medium impact industry zone to the west of Charlton/Gowrie Junction. This medium impact industry zone is associated with the Toowoomba Enterprise Hub.

Development activity

An assessment of approved future development activity has been undertaken to identify recent development approvals (from 2018 to 2023) and applications undergoing development assessment within the study area. A desktop investigation of the status of major projects within the region was also undertaken. The scope of the assessment accounts for developments approved under the repealed *Sustainable Planning Act 2009* (Qld), which had a standard currency period of four years and captures development approvals issued under the current Planning Act, which have a currency period of six years.

The assessment of future development activity has included a review of the following:

- ▶ Local council planning and development online records for applications assessed under the TRC and GRC planning schemes
- ▶ Declared Coordinated projects declared under the SDPWO Act
- ▶ NSW Department of Planning and Environment records
- ▶ Economic Development Queensland current and approved development applications
- ▶ Current and approved private infrastructure facilities under the SDPWO Act
- ▶ Infrastructure Australia Infrastructure Priority List (2023)
- ▶ *State Infrastructure Strategy* (DSDILGP, 2022a)
- ▶ Queensland *Building our Regions* (DSDILGP, 2021d) funded projects
- ▶ Community infrastructure designations
- ▶ Ministerial infrastructure designations
- ▶ Local government infrastructure designations
- ▶ *Queensland Transport and Roads Investment Program 2023–24 to 2026–27* (DTMR, 2022a)
- ▶ Local government infrastructure plans.

A summary of development activity relevant to the Project is provided in Table 8-27.

TABLE 8-27 DEVELOPMENT ACTIVITY RELEVANT TO THE PROJECT

Project name and proponent	Locality	Description	Development stage	Relevance to Project
Goondiwindi LGA				
Rural Activities—Intensive Animal Industry Smithfield Cattle Co.	'Sapphire' Kildonan Road, Goondiwindi (Ch 8.8 km to Ch 10.4 km)	A development permit for a material change of use (MCU) for the expansion of the feedlot	Original approval by GRC on 18 May 2018. Change application approved on 13 August 2019	The Project adjoins the northern boundary
		Development permit for a MCU for a machinery shed and a mechanical workshop within a mapped flood hazard area	Approved by GRC on 29 October 2020	

Project name and proponent	Locality	Description	Development stage	Relevance to Project
Industry Activities—Medium impact industry Wagners Quarries Pty Ltd	Lot 14 on SP127017 (Ch 32.1 km (NS2B) to Ch 33.1 km (NS2B))	Development permit for a MCU for 'Industry Activities' – 'Medium Impact Industry' for a concrete batching plant and concrete product manufacturing facility.	Approved by GRC on 12 October 2021	The Project bisects Lot 14 on SP127017 on the western side of the parcel
Business Activities—Service Station Private application	Lot 1 on SP327036	Development permit for a MCU for 'Business Activities' – 'Service Station'	Approved by GRC on 23 September 2021	The Project traverses Lot 1 on SP327036 on the northern side of the parcel
Industry Activities—Extractive Industries Johnstone Quarries Pty Ltd	Lot 1 on SP214649 (Ch 78.5 km to Ch 79.4 km)	Development permit for a MCU for 'Industry Activities' – 'Extractive Industry' (up to 500,000 tonnes per year) associated with an application for an environmental authority to undertake ERA 16(3)(b) – screening more than 100,000 tonnes, but less than 1,000,000 tonnes of extracted materials. (Council reference: 21/48I)	Approved by GRC on 7 March 2022	The Project is located along Inglewood-Millmerran Road, and adjoins Lot 1 on SP214649 on its eastern boundary
Toowoomba LGA				
Renewable Energy Facility Solar Farm and subdivision by lease Yarranlea Solar Pty Ltd	752 Murlaggan Road, Yarranlea (Ch 164 km)	Development permit for a MCU for a 100 MW solar farm, to be completed over four stages (Council reference: MCUI/2016/3225)	Approved by TRC on 12 December 2016	The Project is located to the south of this approved development
Intensive Horticulture and Rural Industry Asterion (Australia) Pty Ltd	147 Gowrie Mountain Road, Kingsthorpe (Ch 195.0 to Ch 196.5 km)	Development permit for a MCU for a medicinal cannabis propagation and processing facility, comprised of four greenhouse modules, a new Powerlink substation and generators and associated buildings and infrastructure. (Council reference: MCUC/2019/1740)	Approved by TRC on 4 November 2019	The Project slightly traverses along the western boundary of the property
Warehouse Interlink Global Logistics Pty Ltd ATF InterLink Global Logistics Centre Trust	167 Draper Road, Charlton	Development permit for a MCU for a warehouse for the InterlinkSQ intermodal freight terminal (Council reference: MCUC/2018/5960)	Approved by TRC on 24 May 2016, with approval to extend the currency period until 2024 approved on 9 January 2020	The Project traverses the boundary of the property

Project name and proponent	Locality	Description	Development stage	Relevance to Project
NSW Department of Planning and Environment				
North Star to Border—Inland Rail (ARTC)	Gwydir and Moree Plains LGAs	Construction and operation of the North Star to NSW/Queensland border section of Inland Rail. The North Star to NSW/Queensland Border Project is generally located in the existing, non-operational Boggabilla rail corridor north of the village of North Star	Approved	The project is the adjoining alignment from the North Star to NSW/Queensland border alignment
'Coordinated Projects' under the SDPWO Act				
Gowrie to Helidon Project – Inland Rail (ARTC)	Toowoomba LGA, Lockyer Valley LGA	ARTC is seeking approval to construct and operate the Gowrie to Helidon section of Inland Rail	Final Terms of Reference for EIS were issued 9 August 2017. Draft EIS is being prepared by ARTC	The Project connects to the Gowrie to Helidon Project
Economic Development Queensland—Development Projects				
There are no Priority Development Areas located within the study area.				
State Development Areas and Private infrastructure facilities under the SDPWO Act				
There are no State Development Areas or approved private infrastructure facilities traversed by study area.				
Infrastructure Australia Infrastructure Priority List				
There are no projects on the Infrastructure Priority List traversed by the study area.				
State Infrastructure Strategy				
European Train Control System (ETCS)	QR, DTMR and Cross River Rail	Progressive delivery of the ETCS to improve safety, capacity and efficiency of the rail network	Continual	During operations, the Project will be controlled by ARTC using Centralised Train Control (CTC). The CTC is comprised of a Human Machine Interfaces at the centralised operational control centre. The Human Machine Interface within the rail vehicle can be either via lineside signals, or the use of in cab signalling following the fitment of appropriate levels of the ETCS.
Queensland <i>Building our Regions</i> funded Projects				
No completed or shortlisted <i>Building our Regions</i> funded projects are within the study area.				
Infrastructure designations (community, ministerial) under the repealed <i>Integrated Planning Act 1997</i> (Qld), <i>Sustainable Planning Act 2009</i> (Qld) and now <i>Planning Act</i>				
The Project traverses the following historical infrastructure designation made under the repealed <i>Integrated Planning Act 1997</i> (Qld):				
- Interconnection to the National Grid, Bulli Creek 500 kV Substation and Braemar 500 V Substation (ID reference 40) at Whetstone 330 kV transmission line connection—Millmerran power station to Bulli Creek substation (ID reference 41) at Clontarf.				
The study area contains the following infrastructure designation made under the <i>Planning Act</i> :				
Millmerran Power Station and Wetalla to Millmerran Water Pipeline (ID reference AID-0422-0599).				

Project name and proponent	Locality	Description	Development stage	Relevance to Project
Infrastructure designations under local government planning schemes				
No infrastructure designations made by GRC under the Planning Act are within the study area. The study area contains the following property designated for community infrastructure by TRC under the Planning Act: ▶ Pittsworth Emergency Services Precinct comprising a new ambulance station, and fire station and associated facilities at Pittsworth (Lot 2 on SP216658).				
Queensland Transport and Roads Investment Program 2023–24 to 2026–27				
No significant commitments within the <i>Queensland Transport and Roads Investment Program</i> are identified within the study area. Network planning for the Inland Rail Program is identified as a 'State Network' commitment.				
GRC local government infrastructure plans				
No significant schedule of works within the plan are identified to be traversed by the Project. Consultation with GRC during the detailed design stage will be required to confirm the extent of impacts to infrastructure within the LGA. If new impacts are identified through this process, appropriate mitigation measures will be agreed with GRC for implementation during detailed design, construction works and/or operations stages.				
TRC local government infrastructure plans				
No significant schedule of works within the plan were identified to be traversed by the Project. Consultation with TRC during the detailed design stage will be required to confirm the extent of impacts to infrastructure within the LGA. If new impacts are identified through this process, appropriate mitigation measures will be agreed with TRC for implementation during detailed design, construction works and/or operations stages.				

8.5 Potential impacts

This section provides an assessment of the Project's potential land use and tenure impacts.

The construction and operation stages of the Project have the potential to result in direct and permanent impacts to land use and tenure within the Project footprint, with the majority of impacts occurring immediately on commencement of land acquisition and construction of the Project.

Potential impacts to land use and tenure associated with the Project relate to:

- ▶ Property acquisition
- ▶ Change in tenure including:
 - ▶ land within the permanent footprint
 - ▶ impacts to native title
 - ▶ partial revocation of Whetstone State Forest and Bringalily State Forest
- ▶ Change in land uses including:
 - ▶ impacts on agricultural uses and activities:
 - loss of agricultural land
 - loss of State forest
 - land fragmentation and disruption to access and infrastructure
 - alterations to stock routes
 - alterations to biosecurity fences
 - other indirect impacts on agricultural land
 - opportunities to support the agricultural industry
 - ▶ changes to hydrological conditions
 - ▶ impacts on Areas of Regional Interest
 - ▶ change to notable land uses
 - ▶ sterilisation of mineral resources
 - ▶ activities that are incompatible with adjoining development activity
- ▶ Accessibility:
 - ▶ impacts on road network
 - ▶ impacts to property access.
- ▶ Impacts on services and utilities
- ▶ Opportunities to support future industry development.

8.5.1 Land-use impacts

The Project footprint has been positioned to use the existing QR South Western and Millmerran Branch rail corridors and has been located adjoining existing road corridors, where possible, in order to minimise potential for change in land use. This section outlines impacts associated with potential land-use changes where the Project footprint is located outside of existing rail corridors.

The predominant land use within the Project footprint is grazing land. Other land uses within or nearby the Project footprint are identified and described in Section 8.4.1.

The overarching impact of the permanent footprint will be a cumulative shift from a primarily rural and agricultural land use to rail corridor.

Where the Project uses land for construction purposes only, the Project will temporarily disrupt existing operations on and surrounding these properties for the duration of construction and rehabilitation.

8.5.1.1 Impacts to prominent land uses

Potential direct impacts to prominent land uses within the Project footprint are discussed in Table 8-28.

TABLE 8-28 POTENTIAL IMPACTS TO PROMINENT LAND USES WITHIN OR NEAR THE PROJECT FOOTPRINT

Prominent existing land uses	Potential impacts
KRA 120—Kildonan	The permanent footprint does not encroach into the resource processing area, separation area or the identified transport route of the Kildonan KRA. The Project will not result in a permanent impact on this land use. The Kildonan KRA is further discussed in Section 8.5.1.8.
Rainbow Reserve (stock route network reserve)	The temporary footprint impacts a small portion of the reserve, with the majority of the reserve still able to be used during construction. The permanent footprint traverses the eastern boundary of the reserve. Partial acquisition of land within the reserve will be required for the Project to facilitate the realignment of Eukabilla Road. The road relocation extends for a length of approximately 2.5 km along the eastern boundary of the reserve parcel. The purpose for the realignment of Eukabilla Road is to minimise agricultural land to be acquired on the adjoining properties to the north and east of the reserve. Acquisition of land within Rainbow Reserve will reduce available space for recreational and stock route activities to be undertaken within the reserve. Potential impacts to the visual amenity of Rainbow Reserve are discussed in Chapter 10: Landscape and Visual Impact Assessment.
Kurumbul township	As the Project is located within the existing QR South Western Line rail corridor at this location, the number of properties required for the permanent footprint are minimised. The permanent footprint traverses South Kurumbul Road when traversing through the Kurumbul township, where an active level crossing is proposed. Where this crossing is proposed, accessibility impacts such as disruption to local traffic and increased travel and waiting times may occur. Accessibility impacts are further discussed in Section 8.5.1.12.
Yelarbon township	As the Project is located within the existing QR South Western Line rail corridor at this location, the number of properties required for the permanent footprint are minimised. Laydown areas within the temporary footprint are proposed within the Yelarbon township to accommodate bridges required for grade separations. Where the Project requires land temporarily for construction, the Project has the potential to disrupt existing operations on, and surrounding, these properties for the duration of construction and rehabilitation. The impacts from the temporary change in land use are further discussed in Section 8.5.4. The permanent footprint traverses the Cunningham Highway within the Yelarbon township. Grade separation is proposed at this road–rail interface point. As grade separation is proposed, impacts on the surrounding road network are minimised.
Whetstone State Forest	The Project will affect land located within the Whetstone State Forest. The revocation of the area required for the permanent footprint will only have a relatively minor adverse impact to the production of the State forest.
Bringalily State Forest	The permanent footprint will require land located within the Bringalily State Forest. The area required for the permanent footprint will only have a minor adverse impact to production within the State forest. The permanent footprint predominately follows and is adjacent to the Millmerran–Inglewood road corridor, reducing fragmentation within the State forest.

Prominent existing land uses	Potential impacts
Commodore Mine	The Project's permanent footprint adjoins the boundary of the Commodore Mine. As the permanent footprint is located outside the boundary of the land parcel, the Project will not impact on the operations of the mine. The permanent footprint traverses two private roads, which provide access to Commodore Mine Road. Grade separation and level crossings are proposed at these interface points. Where the grade separation is proposed, impacts are minimised. Where the level crossing is proposed, accessibility impacts such as disruption to local traffic and increased travel and waiting times may occur. Accessibility impacts are further discussed in Section 8.5.1.12 and Chapter 20: Traffic, Transport and Access. The permanent and temporary Project footprints traverse land within the mining lease application (ML 700072), and EPBC Act referral number: 2022/09294 being for supporting continuation of mining and processing, and rehabilitation and the Millmerran Mining Lease Conversion Project.
Brookstead township	The Project footprint deviates from the existing QR Millmerran Branch Line rail corridor at this location to provide greater separation from the Brookstead township and GrainCorp operations. Laydown areas within the temporary footprint are proposed within the Brookstead township. Where the Project requires land temporarily for construction, the Project has the potential to disrupt existing operations on, and surrounding, these properties for the duration of construction and rehabilitation. The impacts from the temporary change in land use are further discussed in Section 8.5.1. The permanent footprint traverses the Gore Highway at the Brookstead township, where grade separation is proposed. As grade separation is proposed, impacts on the surrounding road network are minimised.
Pittsworth township	The permanent footprint is adjacent to the Gore Highway to the north of the Pittsworth township, and land use and tenure impacts within the township are avoided.
Toowoomba Wellcamp Airport	The Project footprint does not encroach on land within the current airport precinct. The Project has been aligned to ensure that a double-stacked train will not extend vertically into the Obstacle Limitation Surface (OLS) for the Toowoomba Wellcamp Airport.

The Project may also have the potential to indirectly impact on these prominent land uses due to the loss of amenity. Indirect impacts and mitigation measures associated with amenity on land uses, including from noise, vibration, dust, light and scenic amenity and traffic are discussed in the following chapters:

- ▶ Chapter 10: Landscape and Visual Impact Assessment
- ▶ Chapter 12: Air Quality
- ▶ Chapter 16: Noise and Vibration
- ▶ Chapter 17: Social.

8.5.1.2 Impacts on industrial land

The Project has the potential to create or be the catalyst for beneficial land use impacts. The Inland Rail Program is a nationally significant transport initiative and will provide a high-capacity freight link between Melbourne and Brisbane through regional Australia to better connect cities, farms and mines via ports to domestic and international markets. It is anticipated that the Project will act as an enabler for regional economic development along the Inland Rail corridor.

The Project is likely to support future industrial land use associated with regional hubs such as the Toowoomba Enterprise Hub, which is an area of strategic importance in supporting industrial growth in the Toowoomba region. The enterprise area will host major supplies of engineering services and logistics for the resource industry, and is comprised of the Toowoomba Wellcamp Airport, Wellcamp Business Park, InterLinkSQ, Witmack Industry Park and Charlton Logistics Park. Furthermore, the proposed access to the Inland Rail network from existing GrainCorp facilities (e.g. Yelarbon, Brookstead) will facilitate transport of grain to market.

The Project will improve access to and from regional markets by providing direct connectivity to the existing QR South Western Line, Millmerran Branch Line and West Moreton Line. The Darling Downs will have improved access to key local and international markets and ability to move greater volumes of grain via rail. The Project may also act as a significant catalyst for development within the region, particularly in relation to rail-dependent industrial land use and support industries associated with transport, freight handling, warehousing and logistics.

Further discussion on the beneficial impacts of the Project on the facilitation of industrial development and resulting social and economic impacts associated with this is provided in Chapter 2: Project Rationale, Chapter 17: Social and Chapter 18: Economics.

8.5.1.3 Impacts to Areas of Regional Interest

As discussed in Section 8.4.1.2 and depicted in Figure 8-7, the Project will have an impact on mapped PAAs, SCAs and PLAs identified under the RPI Act.

The area of impact that the Project will have on areas of regional interest in both the Darling Downs and South East Queensland regions has been calculated and is described in Table 8-29.

TABLE 8-29 IMPACTS TO AREAS OF REGIONAL INTEREST

Area of Regional Interest	Potential impacts
PAAs	The acquisition and development of land that is mapped as PAAs under the RPI Act will have an impact on the productivity of the land. The Project footprint will impact approximately 2,200.47 ha of PAAs within the Darling Downs region, which represents 0.075 per cent of PAAs within the region and will impact 38.16 ha of PAAs within the South East Queensland region, which is 0.013 per cent of the PAAs within the region. The permanent footprint will impact 1,596.62 ha of PAAs within the Darling Downs region, which represents 0.05 per cent of PAA's within the region. The permanent footprint will impact 32.80 ha of PAAs within the South East Queensland region, which represents of 0.01 per cent of PAAs within the region. <i>RPI Act Statutory Guideline 02/14—Carrying out resource activities in a Priority Agricultural Area</i> (DSDILGP, 2023b) prescribes a 2 per cent threshold of impact on individual properties mapped as priority agricultural land to determine whether the land on the property is used for a priority agricultural land use and therefore whether the productive capacity of any priority agricultural land use on the property will be considered impacted. The Project is not a resource activity under the RPI Act <i>Statutory Guideline 02/14</i>; however, the extent of the Project's impact on PAAs will not exceed this threshold within the Darling Downs region or the South East Queensland region. Notwithstanding, ARTC recognises the Project will have an impact on PAAs, and accordingly ARTC has proposed mitigation measures for this impact in Section 8.6.2.
SCAs	The acquisition and development of land for the Project that is mapped as strategic cropping areas will have an impact on the potential productivity of the land. The Project footprint will impact 3,329.23 ha of land mapped as SCA within the Darling Downs region, which represents 0.027 per cent of mapped SCAs within the region. The Project footprint will also impact 52.94 ha of mapped SCAs within the South East Queensland region, which represents less than 0.01 per cent of SCAs within the region. The permanent footprint will impact 2,506.62ha of mapped strategic cropping areas within the Darling Downs regional planning area, which represents 0.02 per cent of SCAs within the region. The permanent footprint will also impact 38.69 ha of SCAs within the South East Queensland region, which represents less than 0.01 per cent of SCAs within the region. While not applicable to the Project, <i>RPI Act Statutory Guideline 03/14—Carrying out resource activities in the strategic cropping area</i> prescribes a 2 per cent threshold of permanent impact to SCA on an individual property to determine whether a resource activity will result in a material impact. As has been demonstrated in Table 8-9, the Project will impact less than 2 per cent of mapped SCAs within each of the relevant regional planning areas. Notwithstanding, ARTC recognises the Project will have an impact on SCAs, and accordingly ARTC has proposed mitigation measures for this impact in Section 8.6.2.
PLAs	The acquisition and development of land for the Project that is mapped within PLAs may have an impact on potential residential growth areas. The Project footprint will impact 285.88 ha of PLAs within the Darling Downs region, which accounts for 0.22 per cent of mapped PLAs within the region. The permanent footprint will impact 240.62 ha of PLA within the region, accounting for 0.19 per cent of PLAs within the region. In South East Queensland region, the Project footprint will affect 50.86 ha of PLAs, accounting for 0.04 percent of PLAs within the region. The permanent footprint will impact 36.66 ha of mapped PLAs within the region, accounting for 0.03 per cent of PLAs within the region. The Project impacts PLAs mapped in the vicinity of the townships of Yelarbon, Millmerran, Pittsworth, Southbrook, and mapped areas associated with Toowoomba. Regarding the impact to PLAs mapped surrounding the Yelarbon, Millmerran and Pittsworth, the Project footprint is generally aligned with existing infrastructure, such as road and rail infrastructure, or is located along property boundaries or road corridors. This substantially minimises the impact that the Project will have on areas that are planned for future residential development. In mapped PLAs surrounding Southbrook and Toowoomba, future residential development and urban growth will occur in these locations.
SEAs	The project does not impact any mapped SEAs.

8.5.1.4 Impacts to agricultural activities

Direct impacts to agricultural land

The Project will result in the reduction of productive agricultural land located within the Project footprint.

Approximately 1,449.86 ha of land within the permanent footprint (outside of existing rail and road corridors) is classified as Class A agricultural land, with a further 73.71 ha classified as Class B agricultural land. This equates to a total of 1,523.57 ha of Class A/Class B agricultural land within the permanent footprint (outside of existing rail and road corridors) that will no longer be available for agricultural land uses. These areas are primarily used for grazing and cropping, as well as some irrigated cropping and irrigated perennial horticulture uses. Approximately 1,360.98 ha of land within the permanent footprint is also within an IAA.

Approximately 597.79 ha of land within the temporary footprint (outside of existing rail and road corridors) is classified as Class A agricultural land and 8.37 ha classified as Class B agricultural land. This equates to a total of 606.16 ha of Class A/Class B agricultural land within the temporary footprint (outside of existing rail and road corridors), which will be temporarily used for construction of the Project. These areas are primarily used for grazing activities. Approximately 390.94 ha of land within the temporary footprint is also within an IAA.

Impacts on agricultural land at a local government level have been assessed and details provided in Table 8-30.

TABLE 8-30 LAND USES WITHIN THE PROJECT FOOTPRINT (OUTSIDE OF EXISTING RAIL AND ROAD CORRIDORS) BY LGA

Land classification	Goondiwindi LGA	Toowoomba LGA	Total % of footprint
	Area of land (ha)	Area of land (ha)	
Permanent footprint			
Class A	212.11	1,237.75	56.97
Class B	5.62	68.09	2.90
Border Region IAA	105.79	0.00	4.16
Eastern Darling Downs IAA	0.00	1,255.19	49.32
Temporary footprint			
Class A	311.06	286.73	71.40
Class B	1.08	7.28	1.00
Border Region IAA	101.00	0.00	12.06
Eastern Darling Downs IAA	0.00	289.93	34.63

To assist in identifying the significance of the impact on agricultural land within the region, Table 8-31 and Table 8-32 identify the percentage of Class A and Class B agricultural land and IAA that the Project footprint traverses relative to the total area of these land classes within each of the LGAs.

TABLE 8-31 PERCENTAGE OF LAND TYPE WITHIN GOONDIWINDI LGA TRAVERSED BY THE PROJECT FOOTPRINT (OUTSIDE OF EXISTING RAIL AND ROAD CORRIDORS)

Land classification	Area within footprint (ha)	Total area within LGA (ha)	% of land traversed by footprint within LGA
Permanent footprint			
Class A	212.11	1,331,897.61	0.02
Class B	5.62	31,670.03	0.02
Border Region IAA	105.79	1,308,577.55	0.01
Eastern Darling Downs IAA	0.00	4.51	0.00
Temporary footprint			
Class A	311.06	1,331,897.61	0.02
Class B	1.08	31,670.03	0.00
Border Region IAA	101.00	1,308,577.55	0.01
Eastern Darling Downs IAA	0.00	4.51	0.00

TABLE 8-32 PERCENTAGE OF LAND TYPE WITHIN TOOWOOMBA LGA TRAVERSED BY THE PROJECT FOOTPRINT (OUTSIDE OF EXISTING RAIL AND ROAD CORRIDORS)

Land classification	Area within footprint (ha)	Total area within LGA (ha)	% of land traversed by footprint within LGA
Permanent footprint			
Class A	1,237.75	732,719.84	0.17
Class B	68.09	30,672.51	0.22
Border Region IAA	0.00	12,944.89	0.00
Eastern Darling Downs IAA	1,255.19	673,858.22	0.19
Temporary footprint			
Class A	286.73	732,719.84	0.04
Class B	7.28	30,672.94	0.02
Border Region IAA	0.00	12,944.89	0.00
Eastern Darling Downs IAA	289.93	673,858.22	0.04

As identified in Table 8-31, the permanent and temporary footprints will traverse less than 0.1 per cent of Class A, Class B agricultural land and land within an IAA within the Goondiwindi LGA.

Table 8-32 identifies that the permanent footprint will traverse 0.17 per cent of Class A agricultural land, 0.22 per cent of Class B agricultural land and 0.19 per cent of land within an IAA within the Toowoomba LGA. The temporary footprint will traverse less than 0.1 per cent of Class A, Class B and land within an IAA within the Toowoomba LGA.

Land fragmentation and disruption to agricultural operations

The Project may result in indirect impacts to agricultural land outside of the Project footprint. Where the Project does not use or align with existing rail and road corridors, the Project may result in the fragmentation of agricultural land leading to reduction in internal movements and loss of access to agricultural land.

The fragmentation of properties may cause a disruption in farm operations and enterprises due to impacts to essential farming infrastructure, services or access routes. In particular, the Project may impede the movement of livestock and machinery, to essential access to water through impacts to groundwater bores, drainage lines, diversions, and to cutting off water input to and from dams. This potential fragmentation of properties may impact on the economic viability of farming operations and enterprises associated with agricultural land directly impacted by the permanent and temporary footprints.

Impacts of the Project on farming operations and enterprises on impacted properties will be assessed on an individual case-by-case basis in consultation with landowners during detailed design.

Impacts to intensive animal husbandry

The Project footprint traverses, or is in proximity to, several current intensive animal husbandry operations. Details of potential impacts to these feedlots, piggeries and poultry farm are provided in Table 8-33. Consultation undertaken for the Project, including with operators of intensive animal husbandry operations, is detailed in Appendix E: Consultation Report. Discussion on the selection and development of the revised reference design in minimising impacts to these operations is included in Chapter 2: Project Rationale.

TABLE 8-33 POTENTIAL IMPACTS TO INTENSIVE LIVESTOCK OPERATIONS

Type	Name	Relation to the Project	Potential impact
Current intensive livestock operations traversed by the Project footprint			
Cattle feedlot	Aqualark Pty Ltd (Yarranbrook Feedlot)	The Project footprint traverses through multiple lots associated with the Yarranbrook Feedlot, before crossing the access point, Cremascos Road, and traversing along the southeast corner of Lot 511 on RP226715.	As the permanent footprint traverses through the Yarranbrook Feedlot's pivot fields, partial acquisition will be required for the property. Impacts of the loss in property may affect the operations of the feedlot. The permanent footprint also traverses Cremascos Road, which is the main access road to the feedlot, crucial for the transportation of livestock and grain to/from the feedlot. An active level crossing is proposed at the Cremascos Road interface point. Accessibility impacts, such as disruption to local traffic and increased travel and waiting times, may occur. Accessibility impacts are further discussed in Section 8.5.1.12. Land within the temporary footprint for a laydown area proposed at the Cremascos Road intersection will be required temporarily for the duration of construction.
Cattle feedlot	D M Fletcher	The Project footprint traverses north to south through the centre of the land parcel associated with this feedlot (Lot 2 on RP197967) at Bringalily.	As the permanent footprint traverses through the land parcel associated with this feedlot, partial or full acquisition will be required for the property. Impacts of the loss in property may affect the operations of the feedlot due to the severance of the land parcel and potential fragmentation of infrastructure and services.
Cattle feedlot	Russell Sydney and Kim Maree Stevens (R Sydney and KM Stevens Feedlot)	The Project footprint traverses north to south through the eastern extent of the land parcel associated with this feedlot (Lot 6 on MH364) at Millwood.	As the permanent footprint traverses through the land parcel associated with this feedlot, partial or full acquisition will be required for the property. Impacts of the loss in property may affect the operations of the feedlot due to the severance of the land parcel and potential fragmentation of infrastructure and services.
Current intensive livestock operations within proximity to the Project footprint			
Cattle feedlot	Smithfield Service Pty Ltd (Sapphire Feedlot)	The Sapphire Feedlot is located to the south of the Project footprint on Lot 54 on SP169191, adjoining the Project footprint and existing QR South Western Line rail corridor. The Project footprint does not traverse this feedlot.	The Project footprint does not encroach on the feedlot operations of this property. Access is obtained to the feedlot via an access track from Yelarbon–Kurumbul Road, where a level crossing is proposed. Accessibility impacts to local traffic and increased travel time due to waiting time at the proposed level crossing at this road–rail interface point may occur. Accessibility impacts are further discussed in Section 8.5.1.12.
Cattle feedlot	F J and F E Verdon	The land parcel associated with this feedlot is located to the southeast of the Project footprint, Lot 56 on RP884730, adjoining the Project footprint and the existing QR South Western Line rail corridor. The Project footprint does not traverse this feedlot.	The Project will not impact on this land use as the Project footprint does not cross the feedlot. Access is obtained to the feedlot via an access track where a level crossing is proposed. Accessibility impacts to local traffic and increased travel time due to waiting time at the proposed level crossing at this road–rail interface point may occur. Accessibility impacts are further discussed in Section 8.5.1.12.
Cattle feedlot	Christopher Gleeson	The land parcel associated with this feedlot is located approximately 400 m to the east of the Project footprint, Lot 15 on MH421. The Project footprint does not traverse the land parcel associated with this feedlot.	The Project will not impact on this land use as the Project footprint does not traverse the feedlot.

Type	Name	Relation to the Project	Potential impact
Piggery	Boondooma Country Pork Pty Ltd	The land parcel associated with this piggery is located approximately 250 m to the east of the Project footprint at Millwood, Lot 7 on MH364. The Project footprint does not traverse this piggery.	The Project will not impact on this land use as the Project footprint does not traverse the piggery.
Piggery	Cameron Pastoral Co. Pty Ltd (Moyness Piggery)	The Project footprint traverses east of Lot 3 on RP16081 and through the centre of Lot 3683 on DER34116 associated with the Moyness Piggery at Yandilla.	The Project will not impact on this land use as the Project footprint does not traverse the piggery.
Poultry Farm	Doug Hall Poultry Pty Ltd	The Project footprint traverses just east of the lots (Lot 2 on RP898480 and Lot 4 on SP153098) associated with the Doug Hall Poultry Farm at Yandilla.	The Project will not impact on this land use as the Project footprint does not traverse the poultry farm.

Impacts to apiary sites

There are no direct impacts to apiaries by the Project.

Access to apiary sites may be temporarily or permanently modified. Bee behaviour may be temporarily affected by construction activities and ARTC will consult with apiary site owners to manage any potential impacts.

ARTC has undertaken consultation with DAF and the Queensland Beekeeper's Association to confirm the potential impacts of the Project on apiary sites within the Whetstone and Bringalily State forests, and requirements for construction and operation of the Project. Apiary sites are listed in Table 8-34.

TABLE 8-34 APIARY SITES LOCATED WITHIN THE PROJECT FOOTPRINT

Apiary Site ID	Location	Lot/Plan	Project footprint chainage (km)	Status
451	Bringalily State Forest	Lot 54 on SP129536	86.4	Site is within the 50 m buffer and was under permit until 31 July 2022. To accommodate the Project, DAF have not renewed the permit following its expiry and the site has been decommissioned.
AS154	Bringalily State Forest	Lot 341 on FTY1881 *SEGPART* 45718009	88	Site is more than 100 m from the edge of the temporary footprint and therefore unlikely to be affected by the construction works.

Alterations to stock routes

The Project impacts the stock route network in 11 locations. Details of these stock routes and the potential impacts are outlined in Table 8-35.

Connectivity of the local stock route network, with and without the Project, is shown in the figures included in Chapter 5: Project Description.

TABLE 8-35 POTENTIAL IMPACTS TO STOCK ROUTES WITHIN THE PROJECT FOOTPRINT

Location and Project interface point (approximate chainage)	Stock route ID, type, status and class	Proposed treatment
Kildonan Road Ch 33.1 km (NS2B)	ID: 005GWND Type: Road Status: Open Class: Primary	▶ A dedicated stock level crossing, adjacent to Kildonan road level crossing will be provided, allowing stock to continue to move east west via the reserve to the south, which has a 40 m clear zone from the trafficable road service to the edge of the corridor, avoiding vehicular traffic interaction. The road level crossing will have flashing lights and boom barriers ▶ Holding yards ▶ Funnel fencing ▶ Barrier across tracks* ▶ Call train control process for controlled movement of stock
Rainbow Reserve and Eukabilla Road Ch 33.4 km (NS2B)	ID: RAINBOW RESERVE Type: Reserve Status: Open Class: Primary	Eukabilla Road will be realigned to run parallel to the western edge of the new rail corridor, allowing for uninterrupted stock movement from Kildonan Road onto Eukabilla Road. The stock reserve will be otherwise unaffected.
South Kurumbul Road Ch 6.1 km Wondalli–Kurumbul Road and Yelarbon–Kurumbul Road Ch 7.2 km	ID: 081GWND Type: Road Status: Open Class: Secondary	▶ A dedicated stock level crossing, adjacent to the upgraded active level crossing at South Kurumbul Road, allowing stock movement across the railway that avoids vehicular traffic interaction ▶ Holding yards ▶ Funnel fencing ▶ Barrier across tracks* ▶ Call train control process for controlled movement of stock No crossing provided at Wondalli Kurumbul Road, noting there is no existing crossing on the QR line at this location. The stock will utilise the existing drover movements via South Kurumbul Road.
Yelarbon Ch 25.4 km	ID: 811GWND Type: Road Status: Open Class: Tertiary - Minor and unused	Realignment of the stock route to provide continued connectivity between Merton Road and Yelarbon–Keetah Road, via a passive level crossing off Yelarbon–Kurumbul Road. The new rail crossing point would be approximately 640 m west of the existing rail level crossing. ▶ Holding yards ▶ Funnel fencing ▶ Barrier across tracks* ▶ Call train control process for controlled movement of stock.
East of Sawmill Road Ch 27.0 km	ID: RESERVE Type: Reserve Status: Open Class: Tertiary - Minor and unused	The usability of this stock reserve is not expected to be impacted by the Project; therefore, no treatment is proposed.
Lovells Crossing Road Ch 65.8 km	ID: 813GWD Type: Road Status: Open Class: Tertiary - Minor and unused	A rail-over-road crossing of Lovells Crossing Road will be provided, allowing stock movement to pass under the railway at the same location. ▶ Holding yards ▶ Funnel fencing ▶ Barrier across tracks* ▶ Call train control process for controlled movement of stock.
Millmerran–Inglewood Road (Inglewood) Ch 73.1 km to Ch 76.5 km	ID: 820GWD Type: Road Status: Open Class: Tertiary - Minor and unused	Realignment of the stock route to enable it to remain on the eastern side of the rail alignment, thus avoiding the need to provide two separate stock route crossing treatments in close proximity. This treatment approach would provide continued connectivity for stock movement in parallel to Millmerran–Inglewood Road in this area. DoR require the new stock route corridor at this location to be 100 m wide.

Location and Project interface point (approximate chainage)	Stock route ID, type, status and class	Proposed treatment
Millmerran–Inglewood Road (Inglewood) Ch 84.2 km	ID: 820GWD Type: Road Status: Open Class: Tertiary - Minor and unused	A 3 m by 3 m culvert underpass through the railway embankment will be provided to ensure continued connectivity for stock movement along Millmerran–Inglewood Road.
Kooroongarra–Anderson Road Ch 96.1 km	ID: 856TOOW Type: Road Status: Open Class: Tertiary - Minor and unused	▶ A passive level crossing will be provided, allowing stock movement across the railway at the same location. ▶ Funnel fencing ▶ Barrier across tracks*
Millmerran–Inglewood Road (near Heckendorf Road) Ch 115.5 km	ID: 820TOOW Type: Road Status: Open Class: Tertiary - Minor and unused	A rail-over-road grade-separated crossing will be provided, allowing continuation of existing stock movements along Millmerran–Inglewood Road at this location.
Millmerran Inglewood Road (near Commodore Mine) Ch 127.2 km	ID: 820TOOW Type: Road Status: Open Class: Tertiary - Minor and unused	A rail-over-road grade-separated crossing will be provided, allowing continuation of existing stock movements along Millmerran–Inglewood Road and Millmerran–Kooroongarra Road at this location.

Table note:

* Barrier option assessment will be conducted during detailed design in consultation with DoR to determine if there is an option that is acceptable to both road and rail managers, which adequately manages their respective risks.

The Project has endeavoured to maintain the integrity (connectivity and functionality) of the stock route network. In circumstances where the Project has the potential to impact on existing stock routes, ARTC has consulted with DoR, GRC and TRC to identify potential solutions for the treatment of rail and stock route interfaces.

This consultation will continue through the detailed design stage and the development of the construction methodology to continually identify and address potential impact as they arise. For example, construction activities for the Project may result in temporary disruption to the connectivity of the stock route network, particularly in and around the rail–road interface locations. Outcomes of stock route consultation are described in Appendix E: Consultation Report.

In addition to the State stock route network, there may also be private stock routes that are used to transfer stock to various grazing paddocks and holding yards within or across the Project footprint. Consultation is ongoing with individual landowners within the Project footprint to identify property-specific impacts, if any, to private stock routes.

Alterations to barrier fences

The Project impacts operational sections of the WDCF at three interfaces:

- ▶ From Springborg Road to Whetstone (Ch 37.7 km to Ch 43.5 km) the rail corridor runs parallel to the existing WDCF and is impacted by the necessary corridor widening works of the existing QR South Western Line.
- ▶ Direct severance from McDougalls Road and Cremascos Road (Ch 50.2 km to Ch 51.2 km) requiring a realignment along the rail corridor boundary fence.
- ▶ Direct severance from Cremascos Road heading northeast (Ch 54.6 km to Ch 56.0 km) requiring a realignment along the rail corridor boundary fence.

The Project's fencing strategy by chainage and land use is detailed in Chapter 5: Project Description (Section 5.4.12). ARTC will reinstate the WDCF at the three locations of impact on a like-for-like basis in consultation and agreement with the relevant stakeholders (i.e. Department of Environment, Science and Innovation (DESI), impacted landowners and lessees, DAF and GRC). Under Section 91(3) of the Biosecurity Act, consultation with DAF is required prior to any amendments to the WDCF. There may be potential for increased biosecurity risk due to the severance of the fencing. Further detail on impacted fauna movement is discussed in Chapter 5: Project Description.

The Project intersecting the DDMRB fence when traversing through the locality of Clontarf, at approximately Ch 120.2 km, may cause potential impacts. Further detail regarding reinstatement of the rabbit-proof fence is discussed in Section 8.6.2. In addition, a rabbit trap will be set up in this location.

Consultation with GRC, for the WDCF, and the DDMRB, for the rabbit fence, has been undertaken and will continue through the detailed design stage to determine the appropriate fencing replacement design and staging of severance and reinstatement works for these locations.

Other indirect impacts on agricultural land

Productive agricultural land within proximity to the Project may also be indirectly impacted from:

- ▶ Land contamination
- ▶ Biosecurity risks
- ▶ Unmitigated changes to overland flow and flooding conditions causing residual scour, erosion and sedimentation.

Land contamination, biosecurity risks, and changed conditions to flooding and overland flow have the potential to impact on agricultural land. Potential effects include reduced soil quality, reduced productivity, and increased costs for agricultural property operation and maintenance. These potential impacts are discussed in the following chapters:

- ▶ Chapter 9: Land Resources
- ▶ Chapter 11: Flora and Fauna
- ▶ Chapter 14: Flooding and Geomorphology.

Opportunities to support the agricultural industry

Whilst the Project has the potential to impact on current agricultural land and land that may have the potential for agricultural use; the *Queensland Agricultural Land Audit* (DAF, 2018b) has identified opportunities where delivery of the Project has the potential to provide improved rail transport, address issues and support the agricultural sector within the Darling Downs and South East Queensland regions.

Darling Downs region

- ▶ There are currently issues surrounding the quality and capacity of transport networks to be able to meet current and future requirements. The delivery of the Project has the potential to lead to improvements through direct and indirect benefits, including increased load limits on bridges, increased competition for access to rail freight, reduction in bottlenecks in the transport network, and competition for access to rail freight.
- ▶ Processing industries tend to be located on the eastern side of the Great Dividing Range whereas production in the Darling Downs region is on the western side. Through the delivery of the Project, improved freight transportation infrastructure between the two regions would improve connection between these interconnected land uses.
- ▶ There is the potential for partnerships between private and public companies to enable the construction of infrastructure and delivery services, including funded infrastructure projects to expand the road and rail network that can support agriculture currently and into the future.

South East Queensland region

- ▶ Issues of traffic congestion and deteriorating road infrastructure delays resulting in access issues to markets and processors are currently being experienced on South East Queensland transport networks. Through the delivery of a new freight rail network and upgrades to interfacing road networks, the Project presents an opportunity to improve on these existing issues.
- ▶ Due to the proximity of agricultural production to areas of urban growth in the region, there is an opportunity to expand manufacturing, processing, transport, logistics and knowledge industries (including biotech industries) in South East Queensland. The Project will support the development of these co-located uses through improvements to the rail freight network and new or improved interfaces with land uses.

The audit identifies the transportation of goods and services as being vital to South East Queensland's economic development and growth. The freight task in Queensland has accelerated, with expected demand driven by strong population growth and economic activity placing increasing pressure on key road and rail corridors. Specific to the Project footprint, the audit identifies the Warrego Highway as being over capacity. The Project, and the Inland Rail Program, will increase the capacity for freight services to accommodate existing and future freight demand in the region.

The Project has the potential to result in beneficial impacts to the agriculture sector within South East Queensland. The Project, and the Inland Rail Program, will improve connections with the Darling Downs and South East Queensland regions to domestic and international markets, and will support the growth of associated industries.

Further discussion on the beneficial impacts of the Project is provided in Chapter 2: Project Rationale and Chapter 5: Project Description.

8.5.1.5 Impacts to residential dwellings

The Project has the potential to result in amenity impacts on rural residential and residential dwellings adjacent to the Project footprint. The closest residential settlements are located within the townships of Kurumbul, Yelarbon, Pampas, Brookstead and Pittsworth.

During construction, there is the potential for noise, dust and other construction-related amenity impacts on residential dwellings within these areas. There may also be a need to make temporary changes to the access for these dwellings during construction activities.

Details of impacts due to dust, noise and vibration, and temporary or permanent alterations to access, are discussed in Chapter 12: Air Quality; Chapter 16: Noise and Vibration; and Chapter 20: Traffic, Transport and Access, respectively.

8.5.1.6 Impacts to land use and properties

The Project alignment uses the existing QR South Western Line and Millmerran Branch Line rail corridors where possible, minimising the land acquisition requirement. The Project footprint requires the acquisition of whole or part of a number of lots and easements. The permanent footprint for the Project traverses, in whole or in part, 495 lots (67 of which, are within the existing QR South Western Line and Millmerran Branch Line rail corridors) and 33 easements. The temporary footprint traverses an additional 86 lots and 9 easements, in whole or in part.

Ongoing consultation with affected landowners, and the wider communities, will be undertaken in accordance with ARTC's consultation plan, as discussed in Chapter 6: Stakeholder Engagement. Negotiations to facilitate land acquisition will be undertaken by private treaty or in the case of compulsory acquisition, in accordance with the AL Act, which sets out the process for acquisition and the assessment of compensation by a constructing authority (DTMR).

A summary of land within the permanent footprint that will potentially be subject to full or partial acquisition is provided in Table 8-36 and a detailed record of all impacted lots is in Appendix F: Impacted Properties. The extent of land acquisition will be confirmed following completion of the detailed design stage.

TABLE 8-36 LOT IMPACTS WITHIN THE PERMANENT FOOTPRINT

Tenure	No. of lots within the permanent footprint
Properties within permanent footprint, intersecting with existing QR South Western Line and Millmerran Branch Line rail corridors	
QR lands lease	67
All properties within permanent footprint	
Freehold	403
Lands lease	69
Lands lease (State forest)	2
Reserve	8
State land	13

Potential impacts as a result of land acquisitions include:

- ▶ Loss of property
- ▶ Relocation of residents
- ▶ Severance of lots, and potential fragmentation of agricultural land, infrastructure and services
- ▶ Disruption to access and use of property where temporarily acquired.

Further discussion on potential social impacts as a result of land acquisitions, including impacts to community cohesion has a result of relocation of residents, is provided in Chapter 17: Social.

Consultation with affected landowners and communities was instrumental in developing an understanding of individual property/lot operational arrangements in proximity to the Project. The Project footprint has been positioned to align with existing rail corridors, roads and property/lot boundaries, where possible, to reduce the severance of lots and potential severance to private access, services or operational arrangements. Detail on consultation undertaken with landowners within the Project footprint is provided in Appendix E: Consultation Report.

In some instances, appropriate tenure or interest in State land that supports the proposed development will be secured under the Land Act. In these cases, contact will be made as soon as reasonably practicable with the DoR Land Administration and Acquisition Team to discuss options and to begin proceedings under the Land Act.

8.5.1.7 Impacts to State forests

The following sections discuss the potential impacts on the Bringalily and Whetstone State forests that are likely to occur as a result of the Project. The delivery of the Project within these State forests will be enabled by a partial revocation of each under the Forestry Act. The areas proposed for partial revocation, and the land uses and tenures within the Bringalily and Whetstone State forests that are impacted by the Project are illustrated in Figure 8-9 and Figure 8-10.

Alignment options analysis

During development of the Project, four alignment options were investigated in the vicinity of Whetstone and Inglewood, with the purpose being to minimise impacts and severance to properties along the banks of Macintyre Brook and Canning Creek. The assessment evaluated the alignments against the following criteria:

- ▶ The ability of the alignment to enhance the Inland Rail service offering
- ▶ The construction and operational costs associated with the alignment
- ▶ A multi-criteria analysis incorporating the following inputs:
 - ▶ Environmental impacts
 - ▶ Community impacts
 - ▶ Approvals and stakeholder engagement
 - ▶ Technical viability
 - ▶ Safety
 - ▶ Constructability
 - ▶ Operations.

The other proposed alignments that avoided the Bringalily and Whetstone State forests were discounted as they encroached into the existing floodplain associated with the Macintyre Brook, which would have resulted in additional hydrological impacts during a flooding event. Additionally, alternative alignments represented a significant increase in the length of the alignment, resulting in additional construction requirements (more culverts, bridges, and drainage works), an increase in freehold and road reserve land acquisition, and an increase in impacts to mapped strategic cropping land. Accordingly, an alignment that included the revocation of the Bringalily and Whetstone State forests was selected.

Details of the alignment options assessment process during development of the reference design are presented in Chapter 2: Project Rationale.

Partial revocation of State forest

Where the Project requires land to be acquired for the permanent footprint within a State forest, partial revocation of the State forests in accordance with the Forestry Act will be required to enable the future gazettal of rail corridor over the same land.

A request for partial revocation of a State forest triggers the need for an application for Protected Area Estate Revocation under the Forestry Act and requires a compensation ratio of 5:1 for tree removal.

The statutory application process for seeking the revocation of part of each State forest is discussed in Section 8.6.2.4

Compensation is payable to DESI for the market value of the land at the relevant ratio, as set out in *Operational Policy: Revocation of QPWS managed areas* (QPW/2016/1877 v1.04).

A number of term leases under the Land Act (known as special leases) have been granted over land in the Bringalily and Whetstone State forests. If ARTC is unable to negotiate a surrender of the leases, it will require a constructing authority to make a request to the DoR to progress the resumption of the special leases by way of order in council under the Land Act.

The total area of State forest proposed to be revoked to make way for the Project footprint is presented in Table 8-37. The total impact to State forest has been reduced by 18.99 ha as a result of the revised reference design.

TABLE 8-37 PARTIAL AREA OF STATE FOREST TO BE REVOKED

State forest	Proposed partial revocation area (ha)
Bringalily State Forest	80.46
Whetstone State Forest	26.13

Where within the Whetstone State Forest, the Project footprint has been collocated with existing rail infrastructure. While the Project footprint cannot be collocated with existing infrastructure within the Bringalily State Forest, the Project footprint has been optimised to run alongside an existing minor road that bisects the State forest.

Impacts to management of State forests

The Project will have impacts on the operation and management of the State forests by Queensland Parks and Wildlife Service and Partnerships (QPWS&P) and Queensland Fire and Emergency Service (QFES), specifically related to the severance of existing access tracks throughout the State forests, and through bushfire risks associated with construction works. The risks that have been identified include:

- ▶ Delayed response to emergency situations during the construction stage, driven by potential closure of access tracks, additional traffic on public roads, and temporary alterations to driving conditions (e.g. reduced speed limits and traffic controls)
- ▶ Hot works conducted as part of the construction works in State forest areas has the potential to cause ignition.
- ▶ Delayed response to emergency situations during the operation stage driven by severance of access roads

The Project's management of these risk is detailed further in Chapter 21: Hazard and Risk.

Impacts to land uses within State forests

The Project footprint traverses areas within the Bringalily and Whetstone State forests under grazing leases and apiary permits. ARTC plans to negotiate the full or partial surrender of these leases with lessees. If unsuccessful, ARTC will request DTMR, as the constructing authority, to make a request to DoR to progress the resumption of these leases by way of order in Council under the Land Act. Under the AL Act, every person who has a lawful interest in a resumed lease (or part of a resumed lease) has a right to claim compensation.

Table 8-38 provides the lots that have been identified within the Bringalily or Whetstone State forests, which currently have leases over them and will be affected by the Project footprint.

TABLE 8-38 LEASES OVER LAND WITHIN THE BRINGALILY AND WHETSTONE STATE FORESTS

Lot/Plan	Land tenure	Lease expiry
Bringalily State Forest		
Lot A on MH842	State forest leasehold	30/09/2035
Lot 54 on SP129536	State forest leasehold	31/12/2074
Lot A on SP274206	State forest leasehold	31/03/2033
Lot 6 on MH643	State forest leasehold	08/12/2033
Lot 93 on MH819	State forest leasehold	08/12/2033
Whetstone State Forest		
Lot 86 on MH675	State forest leasehold	17/06/2038
Lot 84 on SP137254	State forest leasehold	30/06/2040

The potential for impacts to apiary sites are discussed in Section 8.5.1.4.

Drainage, erosion and sedimentation impacts

Construction of the Project has the potential to cause adverse impacts associated with ground disturbance and changed conditions related to drainage and overland flow, if appropriate mitigation and management measures are not implemented. Chapter 14: Flooding and Geomorphology details the Project's approach for the management of flooding, drainage and geomorphology for the reduction of avoidable and adverse erosion and elimination and/or sedimentation.

8.5.1.8 Impacts on mineral, coal and petroleum resources

Linear infrastructure such as the Project has the potential to sterilise mineral and coal resources, as it restricts the potential for the resource to be mined.

The permanent footprint traverses the Bringalily North, Bringalily South and Commodore coal deposits. The permanent footprint traverses approximately:

- ▶ 62.69 ha (3.0 per cent) of the total 2,063 ha area of the Bringalily North coal resource area
- ▶ 31.53 ha (0.6 per cent) of the total 5,066 ha of the Bringalily South coal resource area
- ▶ 50.88 ha (2.4 per cent) of the total 2,130 ha of the Commodore coal resource area.

Where the permanent footprint traverses these coal resource areas, the Project may potentially impact on future coal extraction.

The permanent footprint also traverses through one exploration permit for coal, one exploration permit for minerals other than coal, three exploration permits for geothermal, and one mineral development licence for coal. The Project may affect access to mineral, coal and petroleum resources within these tenements as the area of land that is available for production will be reduced. Additionally, the Project may limit the ability of the permit or licence holders for the sale of resources from land affected by the Project within the permit or licence areas. Access to the permit or licence sites may also be impacted by the Project.

The temporary footprint traverses through one petroleum lease at Turallin where a temporary facility is proposed. The Project has the potential to affect existing operations on and surrounding this site for the duration of construction and rehabilitation.

Commodore Mine

The location of the Project footprint has been refined through ongoing consultation with the holder of the Commodore mining lease, to ensure that adverse impacts on the operations of the mine, including the footprint of future mining operations, are minimised. Both the permanent and temporary footprints have been intentionally located to avoid land within the current mining lease (ML50151). The permanent and temporary footprint traverse land within the mining lease application (MLA 700072), being for supporting continuation of mining and processing, and rehabilitation.

The current and future landforms and operations of the Commodore Mine will continue to be considered during the detailed design stage, through consultation with the holder of the mining lease, to ensure future expansion plans and potential impacts are understood.

Key resource areas

The permanent and temporary footprints do not traverse the KRAs along the proposed Project alignment.

Kildonan KRA 120

The permanent and temporary footprints do not traverse the resource processing area, or the separation area associated with the Kildonan KRA 120.

In regard to ground stability surrounding the KRA, the maximum excavation depth for a single bench pit in the KRA is typically less than 10 m, as groundwater has been encountered in boreholes completed to support the reference design for the Project, at depths of between 8 m and 14 m (Chapter 15: Groundwater). Depending on the actual material type, a safe long-term batter slope for such an excavation is commonly 1:2 to 1:3 (vertical:horizontal). Consequently, a safe and stable landform is estimated to be reached approximately 30 m set back from the edge of the working pit. The permanent footprint is located approximately 355 m west of the resource/processing area; therefore, the Project will not impact the ground stability of the operations of KRA 120.

The Project will not impact the designated transport route for KRA 120, a private road to the sealed Kildonan–Old Warwick Road. Where the permanent footprint intersects Kildonan–Old Warwick Road, an active level crossing is proposed. Further information is provided in Chapter 20: Traffic, Transport and Access.

8.5.1.9 Impacts on current environmental authorities for prescribed environmentally relevant activities

Potential impacts to land with EAs for prescribed ERAs located within the Project footprint are outlined in Table 8-39.

TABLE 8-39 IMPACT OF PROJECT ON EXISTING ENVIRONMENTAL AUTHORITY FOR PRESCRIBED ENVIRONMENTALLY RELEVANT ACTIVITIES

Permit number and primary holder	Relationship to Project	Impact to Project
Permit number: EPPR00372213—Primary holder is Ron Johnstone Pty Ltd	This EA is located within the Project footprint at Inglewood	The permanent footprint traverses land subject to this EA and may require partial or full acquisition of the property.
Permit number: EPPR00625013—Primary holder is TRC	This EA is located within the Project footprint at Millwood	The permanent footprint traverses land subject to this EA and may require partial or full acquisition of the property.
Permit number: EPPR00713913—Primary holder is Wagners Quarries Pty Ltd	This EA is located near the Project footprint at Millwood	This EA is located within the study area but is not intercepted by the Project footprint. This location is one of six selected borrow pit/quarry locations. Detailed description of land use is in Chapter 5: Project Description and Appendix AD: Borrow Pits Supporting Technical Information.

Permit number and primary holder	Relationship to Project	Impact to Project
Permit number: EPPR00471713—Primary holder is Incitec Pivot Limited	This EA is located near the Project footprint at Brookstead	This EA is located within the study area but is not intercepted by the Project footprint. This EA is unlikely to be impacted.
Permit number EPPR00809313— Primary holder is GRC	This EA is located within the Project footprint at Whetstone	The permanent footprint traverses land subject to this EA and may require partial or full acquisition of the property. See Figure 8-9 and Sections 8.5.2 and 8.6.2.2.

8.5.1.10 Impacts on development activities

Potential impacts on development activity located within the Project footprint are outlined in Table 8-40. The Project will not impact developments that are not listed in this table.

TABLE 8-40 FUTURE DEVELOPMENT WITHIN, OR WITHIN PROXIMITY TO, THE PROJECT FOOTPRINT

Project name and proponent	Relationship to the Project	Impact to the Project
Goondiwindi LGA		
Rural Activities—Intensive Animal Industry Smithfield Cattle Co.	The Project footprint adjoins the northern boundary	Access to the site is via Yelarbon—Kurumbul Road, across the existing railway corridor. Further detail on the Project's potential impact to the Smithfield Cattle Co. is provided in Table 8-48.
Sapphire Feedlot expansion Smithfield Service Pty Ltd	The proximity of the Project to the Sapphire Feedlot is described in Section 8.4.1.2	The Project does not encroach on the feedlot operations of Lot 54 on SP169191; however, potential impacts are discussed in Table 8-33.
Renewable Energy Facility Solar Farm and Subdivision by lease Yarranlea Solar Pty Ltd	The Project footprint slightly encroaches the solar farm.	The Project has been strategically designed to avoid the solar farm where possible. Consultation with Yarranlea Solar has occurred and is ongoing. Mitigation measures associated with the solar farm are detailed in Table 8-48.
Intensive Horticulture and Rural Industry Asterion (Australia) Pty Ltd (Permit number: EPPR01236413)	The Project footprint traverses the property along the western boundary	Upon review of the current development plans submitted to TRC, it does not appear as though the Project will impact on the development footprint. Access to the site is proposed via the east. Mitigation measures associated with the horticulture and rural industry are detailed in Table 8-48.

8.5.1.11 Indirect impacts on land use

There may be indirect impacts on the use of land beyond the boundaries of the permanent and temporary footprints due to unmanaged land contamination, biosecurity risks and changed conditions relating to flooding and overland flow.

Flooding and geomorphology

Changes to flooding and geomorphology as a result of the Inland Rail Project, along with the Project's approach to management and mitigation of identified impacts, including the target quantifiable FIOs developed to provide guidance and consideration to indirect impacts on particular land uses, are provided in Chapter 14: Flooding and Geomorphology and Appendix T1: Hydrology and Flooding Technical Report. This assessment also addresses potential velocity exceedances that may lead to an increased risk of erosion and scouring.

The areas likely to be susceptible to erosion and scouring are identified in Chapter 14: Flooding and Geomorphology in terms of potential Project-related velocity changes assessed as part of the FIO checks. The FIOs applied to assess the Project impacts, including erosion and scouring potentials, are presented in Chapter 14: Flooding and Geomorphology (Section 14.5.1.3, Table 14-4). The velocity changes on each catchment are summarised in Chapter 14: Flooding and Geomorphology (Section 14.9.1) and are identifiable from the velocity change figures provided in the same chapter. A full quantification of catchment specific impacts is documented in Appendix T1: Hydrology and Flooding Technical Report - Volume 1.

The total areas potentially impacted by changes to flood flow velocities that exceed the nominated FIOs are presented in Table 8-41.

TABLE 8-41 TOTAL AREAS POTENTIALLY IMPACTED BY VELOCITY FIO EXCEEDANCES OUTSIDE THE PERMANENT FOOTPRINT (UNMITIGATED)

Tenure	Velocity impacts (ha)	Land use Class A agricultural land velocity impacts (ha)	Land use Class B agricultural land velocity impacts (ha)
Easement	0.95	0.95	0.00
Freehold	135.17	84.94	12.19
Lands lease	12.12	5.55	1.82
Reserve	4.74	3.59	0.00
State forest	31.06	24.50	0.00
Other	13.41	6.28	1.59
Total	197.45	125.81	15.60

Table note:

Areas calculated are based on the maximum area of impact for an individual AEP event. Events analysed are those modelled up to the 1% AEP.

Areas of Class A and Class B agricultural land that are potentially impacted by scouring and erosion as indicated by the FIO velocity metric summarised Table 8-41 represent the unmitigated situation (i.e. pre-application of mitigations to be actioned in detailed design). The total area of disturbance, including the areas potentially impacted by scouring and erosion, is expected to be significantly reduced post-application of appropriate mitigation and management measures for erosion and scouring. These mitigation measures will be determined on a case-by-case basis, including through consultation with stakeholders and landowners. Chapter 14: Flooding and Geomorphology and Appendix T1: Flooding and Hydrology include discussion regarding potential mitigation measures, including a mitigation framework for detailed design. It is recognised that further refinement and confirmation of site-specific mitigation measures will be undertaken during detailed design when detailed survey and local soils and vegetation information becomes available.

Property value

Where the Project traverses, or is in close proximity to, landowners' properties, concerns have been raised regarding impacts on visual amenity, noise, severance impacts, diminishment of agricultural properties' carrying capacity or productivity, disruption to water supplies, or perceived or actual increase in flooding risk. These factors may lead to impacts on property value. Property value may vary due to individual perception of potential and actual impacts from the Project. External factors, such as supply and demand and agricultural commodity prices, may also influence property value.

Landowners' concerns regarding the Project's potential to change property values are acknowledged; however, assessment of likelihood and magnitude of change is not possible given the individual circumstances of particular properties, other market drivers, the variability of Project impacts, and payment of compensation according to individual agreements with landowners.

Potential impacts to property value are discussed in Appendix X: Social Impact Assessment.

8.5.1.12 Impacts on accessibility to land uses

Impacts on road network

Where the Project footprint crosses an existing public road, a treatment has been included in the revised reference design. Treatments for public road–rail interfaces can be categorised as:

- ▶ Grade-separated crossings—road and rail cross each other at different heights so that traffic flow is not affected. Grade separations are either road over rail, or rail over road
- ▶ Level crossings—road and rail cross each other at the same level. Level crossings have either passive or active controls to guide road users
- ▶ Crossing consolidation, relocation, diversion or realignment—existing road–rail interfaces may be closed, consolidated into fewer crossing points, relocated or diverted. Roads will only be closed where the impact of diversions or consolidations is considered acceptable, or the existing location is not considered safe and cannot reasonably be made safe. Approval for closures, where required, will be progressed in accordance with the requirements of the relevant legislation.

The appropriate design solution at each of the road–rail interfaces has been considered to avoid or minimise impacts to the surrounding road network. The design treatment at each of these interfaces has been determined based on multiple factors, including:

- ▶ Existing road–rail interface points
- ▶ Access to properties, potential traffic levels
- ▶ Land use
- ▶ Nearby crossings
- ▶ Adjoining properties
- ▶ The vertical geometry of the rail alignment.

The revised reference design for the Project includes 50 proposed road rail treatments detailed in Chapter 5: Project Description. In total, this includes 16 rail-over-road bridges, 5 road-over-rail bridges, 22 active level crossings (inclusive of 1 pedestrian crossing at Yelarbon) and 7 passive level crossings.

Road–rail interface treatments included in the revised reference design are summarised in Table 8-42. Detail regarding road network impacts and proposed treatments are in Chapter 20: Traffic, Transport and Access. A summary of proposed treatments is included in Section 8.6.2.2.

TABLE 8-42 ROAD–RAIL INTERFACES IN THE REVISED REFERENCE DESIGN, BY TREATMENT TYPE AND ROAD MANAGER

Proposed treatment in the revised reference design	State-controlled roads	GRC	TRC	Total
Passive level crossing	0	6	1	7
Active level crossing	2	8	12	22
Grade separation—rail-over-road	5	2	9	16
Grade separation—road-over-rail	2	0	3	5
Totals	9	16	25	50

Where the Project interfaces with public roads, potential impacts include a disruption to traffic and emergency services access, an increase in travel time, and a decrease in accessibility to community services, facilities and key destinations within the Project footprint through changes to access road arrangements.

Where level crossings are proposed, disruption to traffic can be expected with each passing train movement. Once operational, the Project will involve an annual average of 14 train services per day during the initial years of operation. This is likely to increase to an average of 20 trains per day after 15 years, and up to 25 per day during peak operational periods. Information on the level crossings and their associated wait times are detailed in Appendix AA: Traffic Impact Assessment (Section 5.9). Surrounding land uses, including farming operations, will be subject to minor vehicle delay times at level crossings. This will potentially have a minor level of disruption to the commercial operations of agricultural activities due to the delay in vehicular movements to and from these land uses.

Where roads will be diverted or crossings relocated/consolidated, surrounding land uses, including industrial and farming operations, will likely be impacted by potentially extended travel times along alternative access roads. Longer journey times may result in a minor level of disruption to the commercial operations of agricultural activities due to the potentially extended transportation time to and from these land uses.

Disruption to traffic can be expected during construction as equipment, materials, and people are transported to and along the permanent footprint.

Further discussion on road–rail interfaces and potential impacts is provided in Chapter 20: Traffic, Transport and Access.

Impacts to existing rail corridors

The QR South Western Line and the Millmerran Branch Line are a critical link in agricultural export supply chains (particularly grain), supporting the movement of commodities to the Port of Brisbane. Planning of exports to international markets involves significant lead times to coordinate landside logistics, shipping schedules and client demand. Supply chain stakeholders will need sufficient time to develop contingencies to mitigate potential disruption.

Poorly timed track closures and inadequate consultation and communication could have significant adverse impacts (cost and potentially reputational) for Queensland stakeholders in international supply chains currently reliant on the QR South Western Line.

The staging of the works within existing rail corridors, and their associated impacts, will be the subject of an interface agreement between ARTC and QR. It is currently assumed that sections of the existing rail corridor can be occupied to avoid the need for constrained, short-term possession works. The suitable timing of such works will be determined in consultation with QR and key supply chain stakeholders in order to identify a period of minimum disruption.

In accordance with Section 255 of the TI Act, works cannot commence within the existing rail corridor without QR's written approval. If the construction of Project components within the existing rail corridor is completed during a temporary possession of the rail corridor, then works will be completed in accordance with the conditions of the temporary possession and/or wayleave agreement granted to ARTC by QR.

Impacts to property access

The Project will result in the severance of driveways and private access roads to individual properties. The Project footprint intersects the following crossings within the bounds of private properties:

- ▶ 168 private, unformed access roads or tracks
- ▶ 74 private, formed access roads or tracks.

The final number of occupational crossings on private property will be determined during detailed design. ARTC has consulted with impacted landowners to obtain an understanding of property access requirements and to present potential private access solutions based on the reference design. Legal access to properties will be retained in all instances. Each property solution will be designed on a case-by-case basis through ongoing consultation with landowners and further design refinement. Consultation to identify potential occupational crossing solutions is described in Appendix E: Consultation Report.

Where level crossings are required, ARTC will consult with landowners to determine the design that best fits their requirements. For example, in areas where landowners use large machinery, the design of the level crossing, including gate widths, crossing surface and approach grades, will need to accommodate this. Alternatively, where there is stock on a property, the focus will be on installing appropriate fencing and gates to keep the stock out of the rail corridor.

ARTC will work with each landowner to find access solutions that minimise the number of level crossings for the Project, consistent with the safety objectives of the Office of the National Rail Safety Regulator guidelines and policies.

Design and layout of occupational crossing solutions will be determined based on the following considerations:

- ▶ Feedback from consultation with landowners on specific property requirements
- ▶ Safety standards, including criteria for minimum sight distances for trains and vehicles
- ▶ Alternative access arrangements
- ▶ Rail design and landform
- ▶ Stock movements
- ▶ Vehicle access requirements (e.g. farm machinery, frequency of use).

Typical treatments include:

- ▶ Underpass for stock passage or vehicle and machinery use. This will be subject to topography.
- ▶ At-grade level crossing
- ▶ Diversion to adjacent public road/public road crossing.

During construction, private access to individual properties may be temporarily disrupted and restricted where land is required within the temporary footprint for construction.

Further details on impacts to property access are provided in Chapter 20: Traffic, Transport and Access.

8.5.1.13 Impacts on services and utilities

Of the 723 utilities located within the permanent footprint, 356 are proposed to be relocated, 36 will require additional protection to be provided and 328 will be unaffected. Consultation has commenced with utility providers and engineering asset owners regarding their specific asset interface requirements. ARTC has held 71 meetings to provide Project updates and discuss reference design development with a number of separate utility asset owners, including consultation with pipeline licence holders of PPL1 and PPL2.

Between October 2018 and October 2020 ARTC had more than 10 meetings with APA regarding their pipeline licence PPL 2. In addition, one risk workshop followed by regular monthly meetings with APA Gas (APA) was conducted to discuss the management of interface treatments between the Project and APA's Roma–Brisbane gas pipeline and access protocols for APA pipeline easements during construction. Risk-management strategies for construction and operations were agreed between APA and ARTC, and are detailed in the Project Interaction Report, which demonstrates that the Project will not inhibit the safe and efficient operation of the pipelines and it has been agreed that ARTC and APA will enter into an agreement for the purposes of enabling APA to access, relocate, remove or protect APA's affected utility infrastructure during the Inland Rail Program. Consultation is continuing around easement terms and conditions for operational requirements and continue during the detailed design and construction works stages. Details of consultation to support development of the revised reference design and revised draft EIS are included in Appendix E: Consultation Report. Consultation completed to date has informed the requirements for proposed utility interface treatments provided in Table 8-43.

Similarly, ARTC has an agreement in principle with Santos for the Moonie to Brisbane pipeline PPL1, which details risk management strategies for construction and operation of the Project. These strategies will ensure the Project will not inhibit safe and efficient operation of the pipeline, which is currently not in operation.

TABLE 8-43 SUMMARY OF UTILITY INTERFACE TREATMENTS BY SERVICE TYPE

Utility/service	Protection	Relocation	No treatment	Abandoned	Total
Communication	28	249	265	3	545
Electricity		99	57		156
Gas	3				3
Oil	1				1
Potable water	1	4			5
Raw water			3		3
Recycled water	3	1	3		7
Sewer gravity main		1			1
Sewer rising main		2			2
Total	36	356	328	3	723

During construction, surrounding residences and businesses may experience temporary disruption to services from time to time as these services are relocated or upgraded.

Once operational, the Project will not impact on services and utilities within the area.

8.5.1.14 Temporary land use impacts

Land required temporarily for construction will be acquired in accordance with the requirements of the AL Act, or leased from landowners, subject to agreement. This includes the temporary acquisition of land for the establishment of non-resident workforce accommodation facilities to house the construction workforce that will be unable to reside within local towns along the length of the Project. Locations for two non-resident workforce accommodation facilities have been identified with a third location to be identified during detailed design. The location, capacity and layout of the accommodation facility will be confirmed and finalised during the detailed design stage of the Project. A request for project change under the SDPWO Act will be required for the third location.

Land-use and tenure impacts associated with the establishment of these non-resident workforce accommodation facilities are expected to be similar to those associated with the temporary acquisition of properties for construction laydown areas. The locations of two of the three workforce accommodation facilities have been identified and have been contained to rural land uses. The proposed locations are detailed in Table 8-44.

TABLE 8-44 LOCATIONS FOR NON-RESIDENT WORKFORCE ACCOMMODATION FACILITIES

Lot and Plan	Real property address	QLUMP	Local Planning Scheme Zones
Lot 30 on MH721	Cunningham Highway, Yelarbon	Grazing native vegetation/ Cropping	Rural – Alluvial Plains Precinct
Lot 5 on MH75	Millmerran-Inglewood Road, Inglewood	Grazing native vegetation	Rural – Kumbarilla Rises Precinct

Additionally, 78 locations have been nominated for the purpose of temporary construction facilities and laydown areas. Some of these nominated laydown areas are situated wholly or partly outside of the permanent footprint. These properties are predominantly freehold tenure and are identified in Table 8-45.

TABLE 8-45 LAYDOWN AREAS AND THEIR USE¹

ID	Approximate chainage (km)	Size (m ²)	Lot/plan	Tenure	Existing land use	Proposed use
NS2B-LDN031.0	31.0 (NS2B)	33,000	Lot 1 on RP49163	Freehold	Grazing native vegetation	General purpose
NS2B-LDN032.5	32.5 (NS2B)	161,000	Lot 14 on SP127017	Freehold	Grazing native vegetation	Bridge
NS2B-LDN033.2	33.2 (NS2B)	7,000	Lot 37 on MH878	Reserve	Nature conservation	General purpose
NS2B-LDN035.6	35.6 (NS2B)	88,000	Lot 2 on SP142352	Freehold	Nature conservation	Major construction laydown: Fuel storage Site office
B2G-LDN000.9	0.4	126,000	Lot 34 on CP884737	Freehold	Other minimal use	General purpose
B2G-LDN006.3	6.2	10,000	Road	Road	Land in transition	General purpose Fuel storage
B2G-LDN016.0	16.0	26,000	Lot 44 on MH141	Freehold	Grazing native vegetation	General purpose
B2G-LDN020.3	20.4	8,000	Lot 110 on MH150	Freehold	Grazing native vegetation	General purpose
B2G-LDN025.9 (north)	25.9	12,000	Lot 109 on MH650	Freehold	Grazing native vegetation	General purpose Bridge Fuel storage Site office
B2G-LDN025.9 (south)	25.8	21,000	Road	Road	Grazing native vegetation	General purpose Fuel storage Site office
B2G-LDN030.0	30.0	11,000	Lot 14 on MH160	Freehold	Grazing native vegetation	General purpose
B2G-LDN037.6	37.6	12,000	Road	Road	Grazing native vegetation	General purpose
Whetstone Material Distribution Centre	44.8	2,126,200	Lot 2 on MH784	Freehold	Grazing native vegetation	Material Distribution Centre Major site office Fuel storage
B2G-LDN049.8	49.7	30,000	Lot 90 on SP169187	Freehold	Grazing native vegetation	General purpose
B2G-LDN052.8	52.8	11,000	Lot 1 on MH171	Freehold	Grazing native vegetation	Bridge
B2G-LDN054.2	54.3	54,000	Lot 1 on RP147969	Freehold	Grazing native vegetation	General purpose Fuel storage, Site office
B2G-LDN055.4	55.4	33,000	Lot 511 on RP226715	Freehold	Grazing native vegetation	Bridge
B2G-LDN060.4	60.5	27,000	Lot 144 on MH194	Freehold	Grazing native vegetation	General purpose
B2G-LDN065.8	65.8	25,000	Lot 87 on MH16	Freehold	Grazing native vegetation	General purpose
B2G-LDN067.6	67.6	10,000	Lot 97 on MH38	Freehold	Grazing native vegetation	Bridge
B2G-LDN069.0	68.8	41,000	Lot 1 on RP156957	Freehold	Grazing native vegetation	General purpose
B2G-LDN073.0	72.9	8,000	Lot 171 on MH75	Freehold	Grazing native vegetation	Bridge

ID	Approximate chainage (km)	Size (m ²)	Lot/plan	Tenure	Existing land use	Proposed use
B2G-LDN074.0	74.2	148,000	Lot 4 on MH75	Freehold	Grazing native vegetation	General purpose Fuel storage Site office
B2G-LDN081.0	81.0	27,000	Lot 2 on SP214649	Freehold	Grazing native vegetation	General purpose Fuel storage
B2G-LDN088.0	88.1	29,000	Road	Road	Production forestry	Bridge
B2G-LDN091.8	91.9	15,000	Lot 10 on MH737	Freehold	Grazing native vegetation	General purpose
B2G-LDN093.8	93.8	13,000	Lot 10 on MH737	Freehold	Grazing native vegetation	Bridge
B2G-LDN098.0	97.9	31,000	Road	Road	Grazing native vegetation	Bridge
B2G-LDN100.6	100.7	3,000	Lot 51 on MH562	Freehold	Grazing native vegetation	Bridge
B2G-LDN104.5	104.6	26,000	Lot 2 on RP197967	Freehold	Grazing native vegetation	General purpose Bridge Fuel storage
B2G-LDN112.1	112.1	26,000	Lot 5 on SP194159	Freehold	Grazing native vegetation	General purpose
B2G-LDN115.6	115.6	14,000	Lot 64 on DY198	Freehold	Grazing native vegetation	Bridge
B2G-LDN116.0	116.2	94,000	Lot 127 on DY303	Freehold	Grazing native vegetation	General purpose Site office Fuel storage,
B2G-LDN120.2	120.2	104,000	Lot 5 on SP166689	Freehold	Grazing native vegetation	General purpose
B2G-LDN123.6	123.7	220,000	Lot 5 on SP126840	Freehold	Grazing native vegetation	General purpose
B2G-LDN123.8	123.8	11,000	Road	Road	Grazing native vegetation	General purpose
B2G-LDN126.9	126.9	7,000	Lot 3 on RP233820	Freehold	Grazing native vegetation	Bridge
Turallin Facility	127.0	218,000	Lot 135 on DY1033	Freehold	Grazing native vegetation	General purpose Fuel storage
B2G-LDN128.2	128.4	27,000	Lot 3761 on DER34129	Freehold	Grazing native vegetation	Bridge
B2G-LDN129.5	129.4	119,000	Lot 3 on SP136970	Freehold	Grazing native vegetation	General purpose
B2G-LDN130.0	130.0	27,000	Lot 1 on SP136971	Freehold	Grazing native vegetation	Bridge
B2G-LDN130.4	130.7	89,000	Lot 1 on SP136971	Freehold	Grazing native vegetation	General purpose
B2G-LDN130.6	130.6	168,000	Lot 1 on SP136971	Freehold	Grazing native vegetation	General purpose
B2G-LDN138.5	138.6	116,000	Lot 3307 on DER3493	Freehold	Grazing native vegetation	General purpose Precast concrete facility Concrete batch plant
B2G-LDN139.0	139.2	304,000	Lot 3 on RP16058	Freehold	Grazing native vegetation	Bridge
B2G-LDN140.2	141.6	76,000	Lot 3 on RP53023	Freehold	Other minimal use	General purpose

ID	Approximate chainage (km)	Size (m ²)	Lot/plan	Tenure	Existing land use	Proposed use
B2G-LDN141.3	142.6	12,000	Lot 2 on RP53023	Freehold	Cropping	Bridge
B2G-LDN143.0	144.4	9,000	Lot 11 on SP254028	Freehold	Grazing native vegetation	Bridge
B2G-LDN144.6	146.0	142,000	Lot 15 on RP37110	Freehold	Cropping	Bridge
B2G-LDN147.1	148.4	4,000	Lot 22 on SP124720	Lands Lease	Other minimal use	General purpose
B2G-LDN149.0	150.1	47,000	Lot 2 on RP14242	Lands Lease	Cropping	Bridge
B2G-LDN150.5	152.1	132,000	Lot 1 on RP907313	Freehold	Cropping	Potential precast concrete facility and batch plant
B2G-LDN150.9	152.1	5,000	Road	Road	Transport and communication	General purpose
B2G-LDN152.9	153.3	6,000	Lot 5 on RP896416	Freehold	Cropping	General purpose
B2G-LDN153.1	154.6	91,000	Lot 4 on RP838169	Freehold	Cropping	Bridge
B2G-LDN161.0	162.3	63,000	Lot 1 on RP7474	Freehold	Cropping	Major construction laydown Bridge Fuel storage Site office
B2G-LDN163.3	164.7	5,000	Lot 3829 on A342007	Freehold	Grazing native vegetation	Bridge
B2G-LDN164.3	165.6	24,000	Lot 3 on RP7480	Freehold	Grazing native vegetation	General purpose
B2G-LDN165.6	166.9	7,000	Lot 3 on A341936	Freehold	Grazing native vegetation	General purpose
B2G-LDN169.6	171.0	30,000	Lot 2 on RP212352	Freehold	Grazing native vegetation	General purpose
B2G-LDN171.0	172.3	7,000	Lot 61 on SP146089	Freehold	Cropping	Bridge
B2G-LDN172.0	173.3	16,000	Lot 3 on RP212365	Freehold	Cropping	General purpose
B2G-LDN172.6	173.8	19,000	Lot 12 on RP212366	Freehold	Cropping	Bridge
B2G-LDN173.5	174.8	17,000	Lot 2437 on A341136	Freehold	Grazing native vegetation	General purpose
B2G-LDN175.5	176.9	69,000	Lot 2 on RP142680	Freehold	Grazing native vegetation	Bridge, Fuel storage, Site office
B2G-LDN179.0	180.2	22,000	Lot 5 on RP841180	Freehold	Grazing native vegetation	General purpose
B2G-LDN183.0	184.3	20,000	Lot 2 on RP215348	Freehold	Grazing native vegetation	General purpose
B2G-LDN183.8	185.1	16,000	Lot 1 on AG4150	Freehold	Grazing native vegetation	Bridge
B2G-LDN185.0	186.5	30,000	Lot 1 on RP215319	Freehold	Grazing native vegetation	General purpose
B2G-LDN188.2	189.5	76,000	Lot 6 on SP158473	Freehold	Cropping	Bridge, Fuel storage, Site office
B2G-LDN192.3	193.6	30,000	Lot 12 on SP228312	Freehold	Grazing native vegetation	General purpose Fuel storage
B2G-LDN196.2	197.4	4,000	Road	Road	Grazing native vegetation	Bridge
B2G-LDN197.0	198.3	4,000	Lot 5 on RP47487	Freehold	Grazing native vegetation	Bridge

ID	Approximate chainage (km)	Size (m ²)	Lot/plan	Tenure	Existing land use	Proposed use
B2G-LDN198.1	199.4	4,000	Lot 1 on RP155674	Freehold	Cropping	Bridge
B2G-LDN198.7	200.0	3,000	Lot 1 on RP155674	Freehold	Cropping	Bridge
B2G-LDN203.0	204.3	4,000	Lot 3 on AG3669	Freehold	Grazing native vegetation	Bridge
B2G-LDN204.2	205.5	35,000	Lot 11 on SP285307	Freehold	Grazing native vegetation	Bridge
B2G-LDN206.3	207.6	30,000	Lot 2 on RP55460	Freehold	Grazing native vegetation	General construction laydown Fuel storage Site office
B2G-LDN206.3	208.2	81,000	Lot 33 on SP312428	Freehold	Grazing native vegetation	General purpose

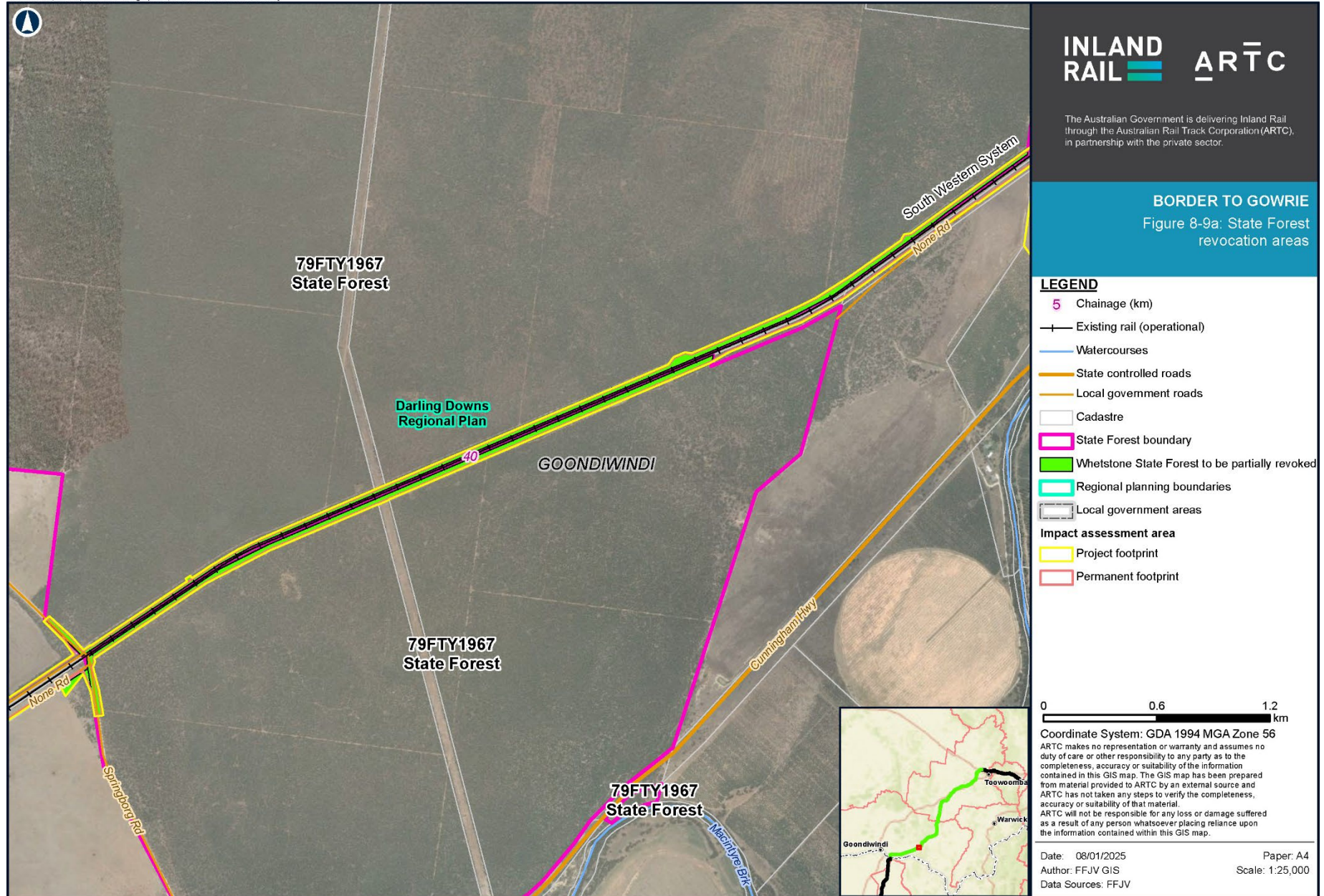
Table note:

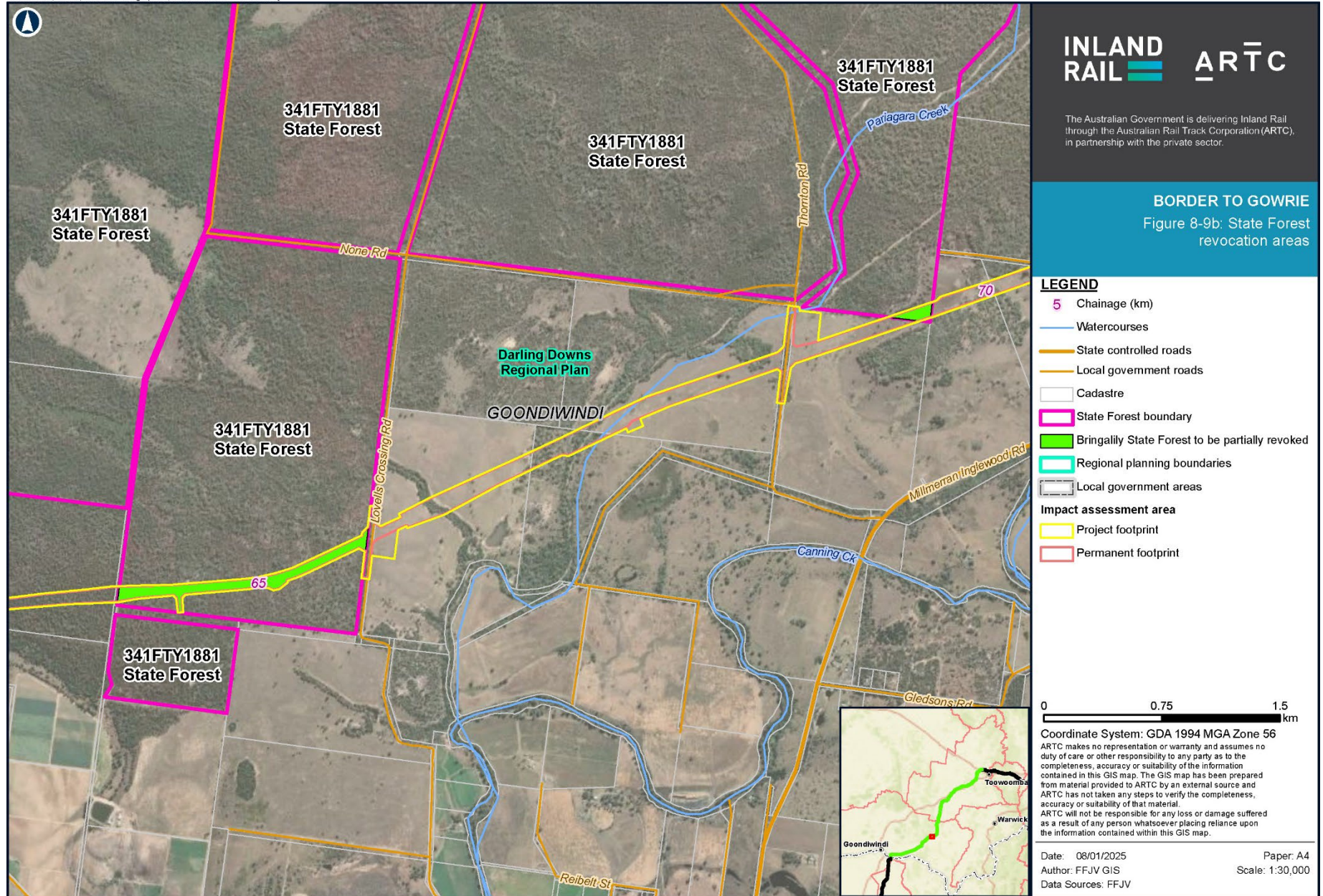
1. Locations shown in revised reference design drawings in Appendix B1: Design Drawings.

Where the temporary use of land for construction is proposed, the Project has the potential to disrupt existing operations on and surrounding these properties for the duration of construction and rehabilitation. In identifying the properties to be used for activities associated with the construction of the Project, consideration was given to several factors, including:

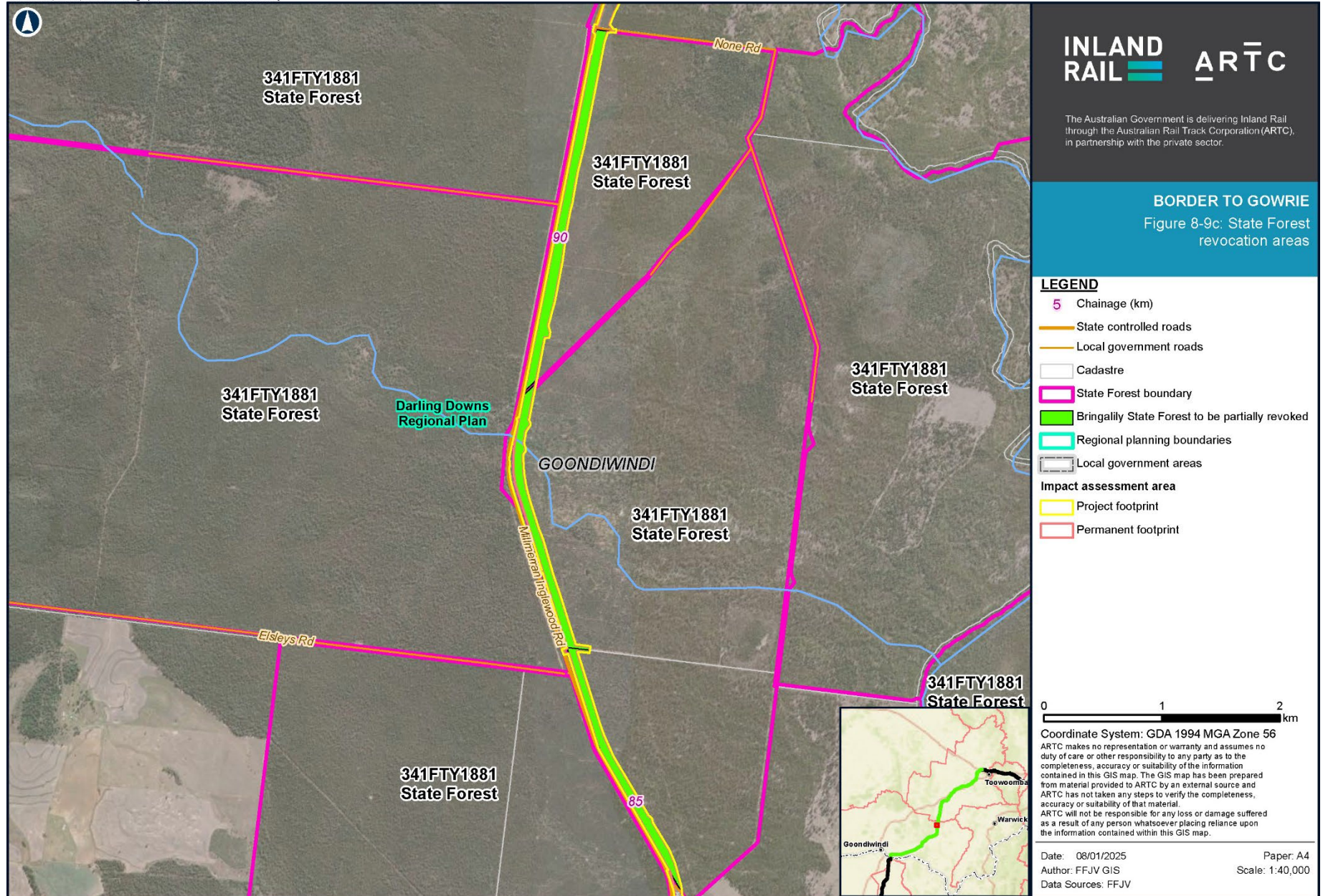
- ▶ Properties owned by the Queensland Government, specifically DTMR or QR, were preferentially selected
- ▶ Use of properties that will already be severed or alienated within the permanent footprint
- ▶ Alignment with property boundaries
- ▶ Access to the existing public road network
- ▶ Avoidance of stock routes, intensive livestock or cropping land uses
- ▶ Avoidance of environmentally sensitive areas
- ▶ Appropriate separation distance between social receptors, e.g. dwellings.

As impacts to tenure relate to the direct acquisition or use of land, there are unlikely to be any impacts outside of the permanent and temporary footprints.



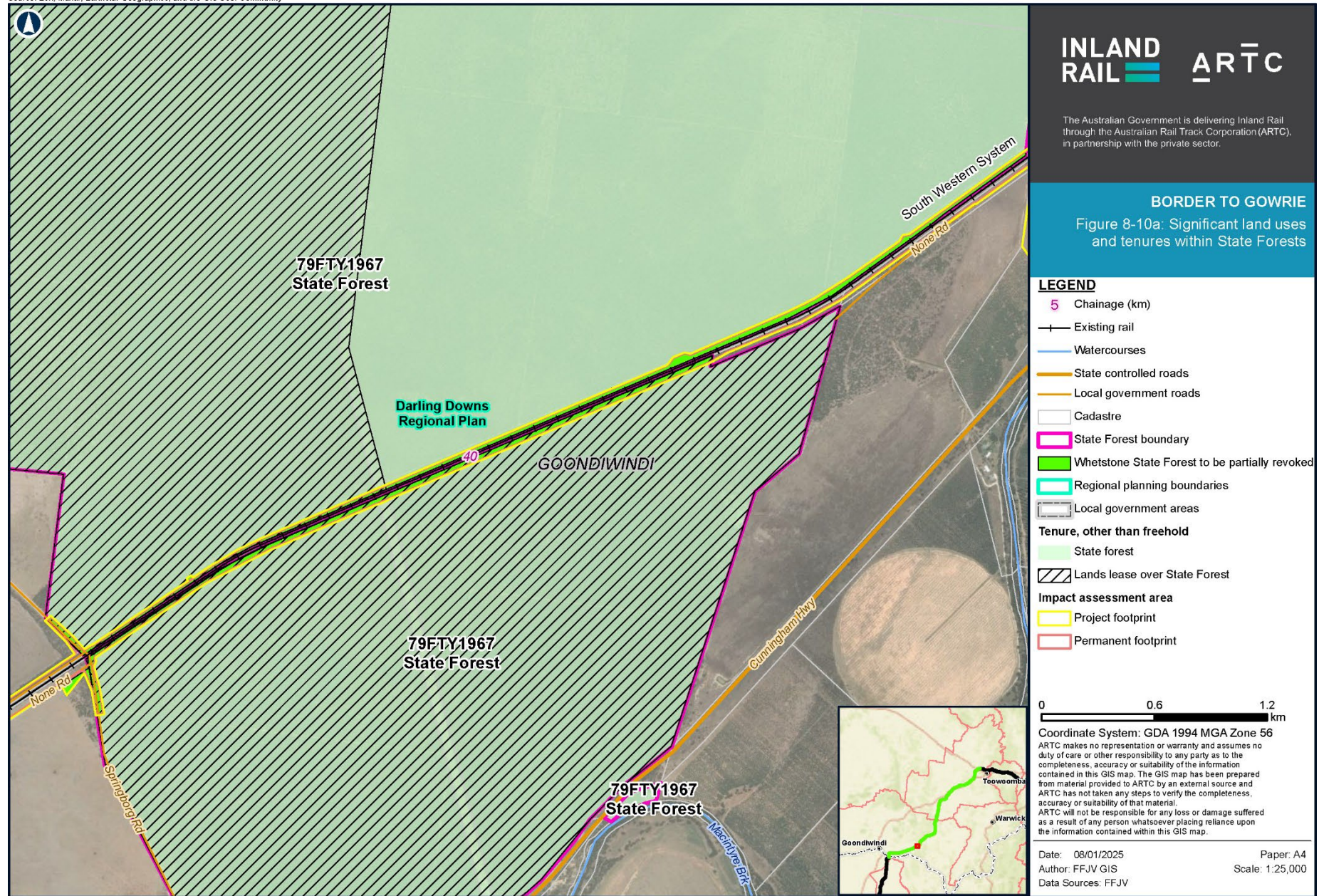


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



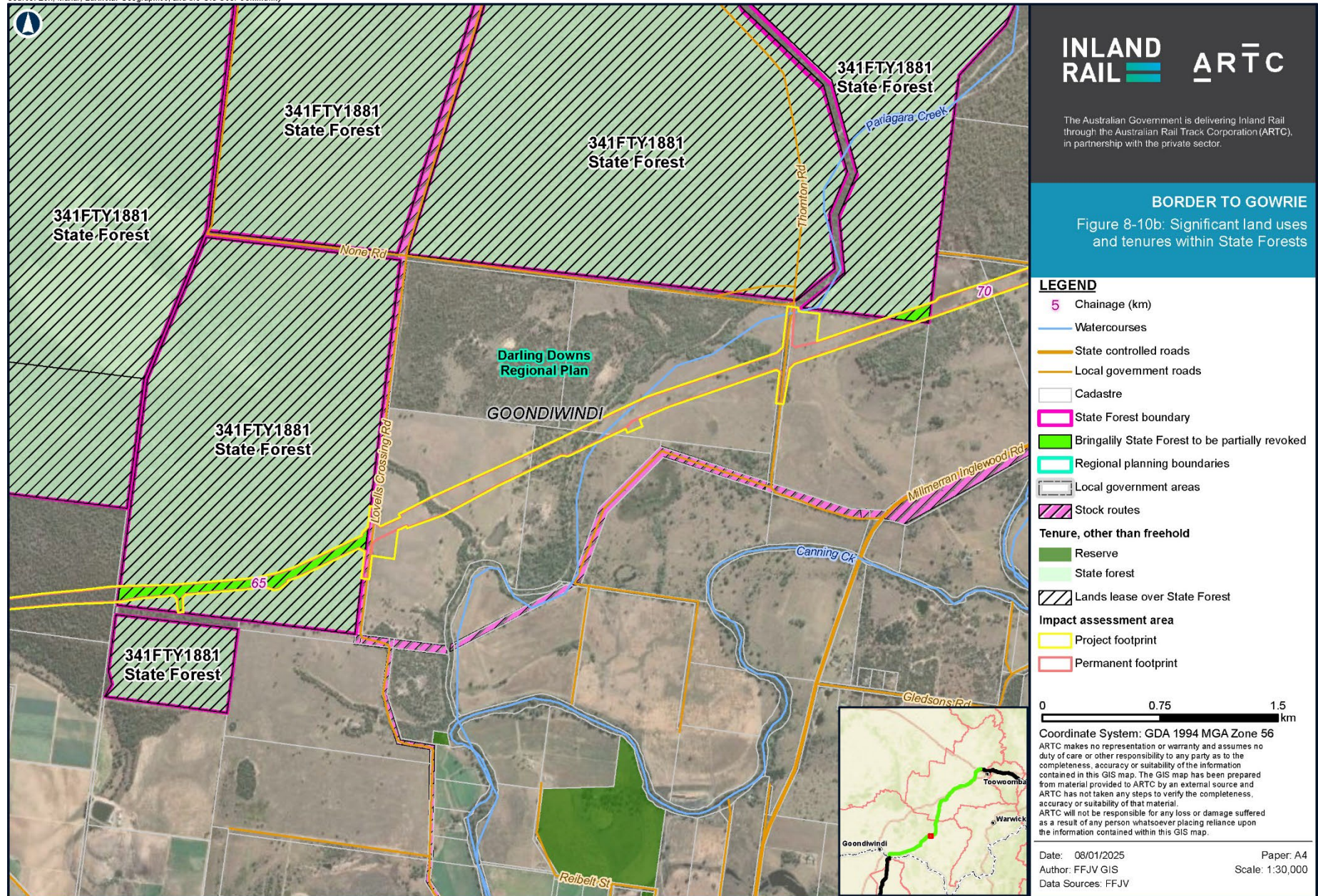
Map by: TM\AWS Z:\GIS\GIS_310_B2G\Tasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-9_State_Forest_revocation_areas_v3.mxd Date: 8/01/2025 09:28

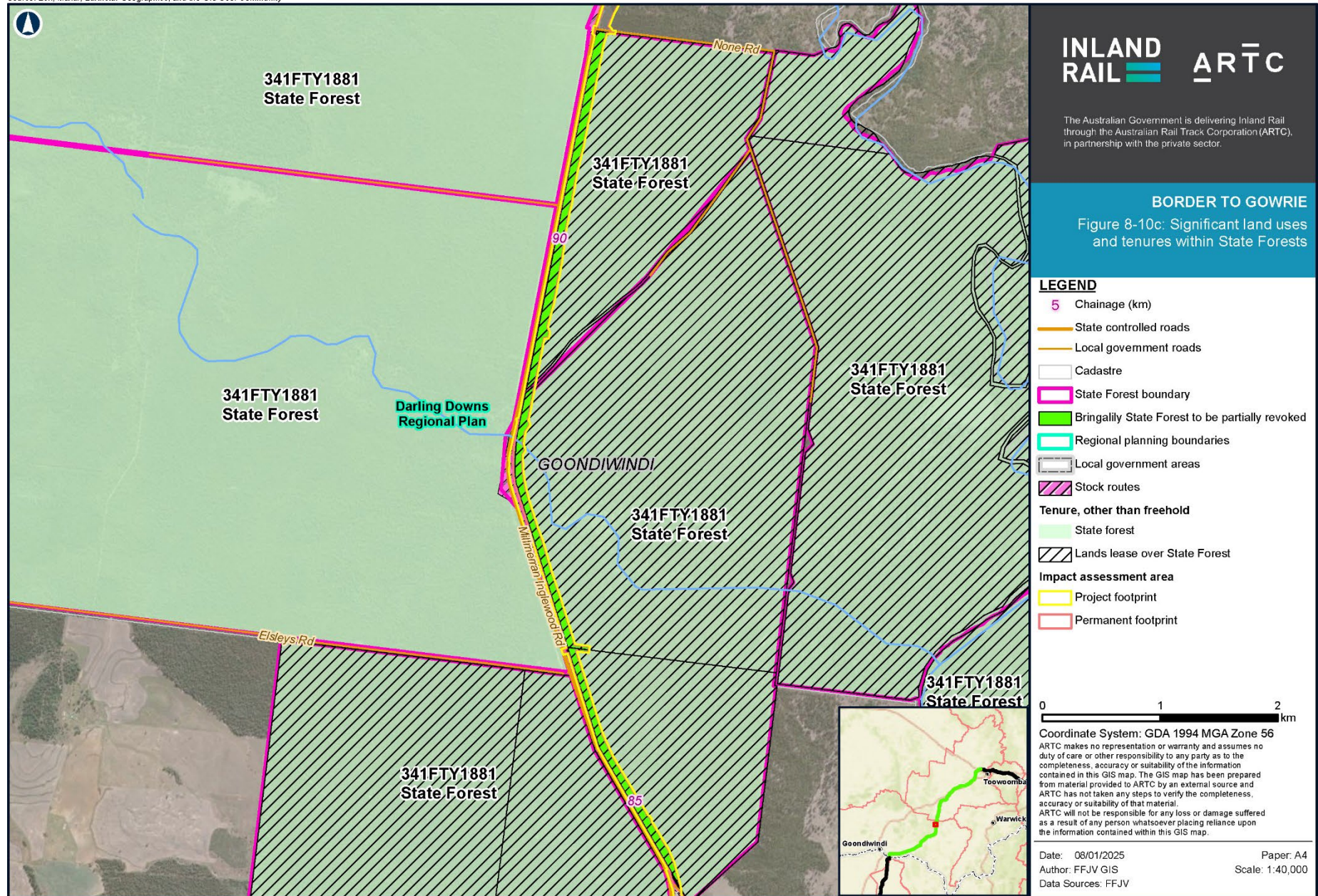
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Map by: TM\AWS Z\GIS\GIS_310_B2GITasks\310-ESV-201901091112_Land_Use_and_Tenure\310-ESV-201901091112_ARTC_Fig8-10_Significant_landuses_and_tenures_within_State_Forest_v3.mxd Date: 15/01/2025 10:28

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community





8.5.2 Land tenure and land acquisition

8.5.2.1 Changes to land tenure

The Project footprint will require changes to the tenure of land parcels within the permanent footprint. Acquisition of the majority of properties within the Project footprint, and subsequent tenure arrangements, will occur following the Project being evaluated by the Coordinator-General and approved by the Australian Government Minister for the Environment. Existing land tenure types that are subject to change as a result of the Project are included in Table 8-36.

Where the permanent footprint traverses state land and local roads, the following tenure dealings will likely occur in accordance with the Land Act:

- ▶ Goondiwindi LGA:
 - ▶ reserve parcel (Lot 1 on SP150781) for parks and gardens will have permanent impacts on infrastructure and footpaths
 - ▶ reserve parcel (Lot 1 on Y5698) for recreation will have permanent impacts to the southern access road and a small part of the cricket oval
 - ▶ reserve parcel (Lot 37 on MH878) for camping and water (stock route reserve—primary and open with water facility) will be permanently impacted on the eastern boundary of the reserve and adjacent access road
 - ▶ reserve parcel (Lot 2 on Y56916) for local government use will have a small area temporarily impacted (0.03 ha identified in Appendix F: Impacted Properties)
 - ▶ reserve parcel (Lot 41 on MH778) for local government use will have a small area along the northern boundary temporarily impacted (0.05 ha identified in Appendix F: Impacted Properties)
 - ▶ reserve parcel (Lot 110 on SP171826) for pasturage (stock route reserve—minor and unused, open) will be permanently impacted and possibly experience fragmentation
- ▶ Toowoomba LGA:
 - ▶ Reserve parcel (Lot 84 on SP109985) for recreation will have 100 per cent of the lot impacted by the permanent footprint
 - ▶ Reserve parcel (Lot 140 on DER34129) for water and grazing native vegetation will be permanently and temporarily impacted.

Details of the impacted areas for all properties, including reserve properties, are detailed in Appendix F: Impacted Properties. The list contains the complete and inclusive description of all parcels of State land proposed to be impacted by the Project.

8.5.2.2 Native title

The Project footprint impacts approximately 140 ha of property where native title exists. Approximately 47 ha is within the Bigambul Native Title Determination Area (QCD2016/012), with approximately 93 ha in an area with no current native title claims or determinations, known as the 'Gap Area'. (Note that the Project construction footprint will have a lesser impact than that which applies to the Project EIS footprint). The Project EIS footprint traverses approximately 50 locations where it is likely that native title continues to exist. This includes the areas specified in Table 8-22.

Exclusive native title rights have been determined to exist upon Reserve tenure land on Lot 1 on 150781 and on State Land tenure on Lot 96 on Y56918. Figure 8-8 illustrates the areas where native title exists, or may exist, or may likely exist within the Project footprint.

ARTC understands that the following options under the NT Act are available to achieve native title compliance for the Project:

- 1) ARTC and Bigambul Native Title Aboriginal Corporation (BNTAC) (the registered native title body corporate for the Bigambul People Part A determination) could enter into an Indigenous Land Use Agreement to provide for the future acts for the Project
- 2) Section 24KA of the NT Act would also apply to future acts that permit or require, or that consist of the construction of a railway
- 3) If native title is required to be extinguished for the operations stage of the railway, Section 24MD of the NTA would apply.

BNTAC is the registered native title body corporate for the Bigambul People Part A determination (QCD2016/012). ARTC is committed to working with BNTAC to ensure the Bigambul People have an opportunity to provide their free, prior and informed consent to the Inland Rail Project as it relates to impacts on their native title.

As such, ARTC has commenced consultations and negotiations with BNTAC to agree an Indigenous Land Use Agreement to facilitate the construction and operation of the Inland Rail B2G Project. ARTC will aim to reach agreement through the Indigenous Land Use Agreement prior to the commencement of construction for the B2G Project.

Should agreement not be reached in time for the construction or operation of the Project, ARTC will consult with BNTAC and the State Government in relation to other pathways for validity, in compliance with the NT Act, so that the Project can proceed.

For the part of the Project footprint outside the Bigambul People Part A determination area, where there are no current native title claims or determinations, referred to as the 'Gap Area', the Project will proceed in compliance with the 'Future Act Regime' under the NT Act. If any obligation to provide procedural rights to the native title holders arises, it will be satisfied by notifying Queensland South Native Title Services Ltd (the relevant representative body) under the NT Act and, if applicable, giving it an opportunity to comment on the doing of the NT Act.

8.5.3 Offset areas

No legally secured offset areas were found within the permanent or temporary footprints and, as such, no impacts will arise.

The Project itself, however, will generate environmental offset obligations due to unavoidable significant residual impacts on MNES and MSES, which are detailed in Appendix Q: Environmental Offsets Delivery Strategy. The overarching offset strategy for the Inland Rail Program is to deliver a strategic, primarily land-based, offset portfolio that will seek to deliver a conservation outcome that improves the viability of impacted MNES and MSES. This, in turn, may have implications on future land use, including agricultural land, where the land is required to be managed under an approved Offset Area Management Plan, which will be subject to a legal mechanism to protect the land in perpetuity.

Biodiversity offsets will be delivered in accordance with Commonwealth and State offset policy, and legislative requirements. Accordingly, ARTC's Queensland Offset Program typically targets land that holds inherent biodiversity value or land that can be managed to restore biodiversity values that reflects those MNES and MSES likely to be impacted by the Project. Offset site selection is undertaken on a hierarchical basis, which preferentially targets land that contains biodiversity values generally associated with intact remnant and regrowth ecological communities (habitat) that may be in varying condition states and, in doing so, avoids or minimises, to the greatest extent possible, impacts to highly modified agricultural land. There may be exceptions where the conservation objectives for a particular matter (MNES/MSES), under offset management, requires restoration of agricultural land to meet Commonwealth and State government biodiversity offset requirements.

The B2G offset portfolio includes some areas of highly modified agricultural land that will be restored for biodiversity conservation objectives, but this will not represent the bulk of the portfolio. Offset sites are not yet finalised and, as such, the quantum of impacts on highly modified agricultural land are not yet known; however, impacts on Class A and Class B agricultural land will be considered as part of offset site selection, and ARTC will consult with DAF during the development of the final Environmental Offset Delivery Strategy.

8.5.4 Land use and planning instruments

This compliance impact assessment considers the consistency of the Project with the land-use and planning instruments relevant to the Project footprint and Project activities, being the:

- ▶ *State Planning Policy* (Department of Infrastructure, Local Government and Planning, 2017a)
- ▶ *Darling Downs Regional Plan* (DSDIP, 2013a)
- ▶ *ShapingSEQ 2023* (DSDILGP, 2023a)
- ▶ *Goondiwindi Region Planning Scheme 2018* (GRC, 2018a)
- ▶ *Toowoomba Regional Planning Scheme* (TRC, 2012).

As the Project is government-supported transport infrastructure, the Project cannot be made assessable under a local government planning scheme. As a result, the provisions of local government planning schemes do not apply and assessment of the Project against the planning schemes will not be required for secondary approvals.

8.5.4.1 State Planning Policy

An assessment of the Project's consistency with each relevant SPP State interest is provided in Table 8-46. Where these State interests relate to aspects considered in other sections of this revised draft EIS, reference has been made to the relevant chapter for further detail.

TABLE 8-46 PROJECT'S CONSISTENCY WITH THE RELEVANT SPP STATE INTERESTS

State interest	Project consistency	EIS reference
Liveable communities and housing		
Housing supply and diversity	Provision of non-resident workforce accommodation and implementation of the Housing and Accommodation Management Plan in the Social Impact Management Plan (SIMP) will avoid the potential for impact to accommodation supply and diversity of housing within the townships within the Project footprint.	Chapter 17: Social
Liveable communities	The Project has committed to a range of measures to mitigate and manage impacts on those community and urban infrastructure that make a community 'liveable', through the implementation of relevant management plans, including the SIMP, which includes a Health and Community Wellbeing Management sub-plan. The Community Wellbeing Plan will provide a framework for cooperation with key stakeholders to implement mitigation measures addressing impacts on quality of life as the result of Project impacts on amenity, character, cohesion or connectivity.	Chapter 17: Social
Economic growth		
Agriculture	Consistent with the agricultural State interest, the Project has considered and assessed potential impacts and risks to agricultural land and resources. The revised reference design is the result of several iterations of option assessment, including consideration of the impact on agricultural land uses, and consultation with community and stakeholder groups and relevant regulatory agencies. The Project will use the existing QR South Western Line and Millmerran Branch Line rail corridors, where possible, to minimise adverse impacts to agricultural land uses including the loss of agricultural land (including strategic cropping land, and land mapped to be within IAA, Class A and Class B agricultural land), land fragmentation and disruption to access and infrastructure. The Project footprint is limited to that necessary to safely construct, operate and maintain the rail corridor. Further refinement of the horizontal alignment during detailed design and alignment of the permanent footprint will occur such that it traverses along, or as close as possible to, property boundaries, to reduce potential fragmentation and sterilisation of Class A and Class B agricultural land. Impacts such as severance or loss of land that may have the potential to impact operations of agricultural businesses will be considered by the constructing authority in the terms of the acquisition agreements. The Project footprint encroaches on the Whetstone State Forest and traverses the Bringalily State Forest, which are protected for native timber production. Although the Project's permanent footprint traverses areas of the Whetstone and Bringalily State forests, fragmentation of the forests is minimised, as the Project predominately follows road corridors and property boundaries, where possible. State forest revocation approvals will be required to facilitate this.	Sections 8.5.1.1, 8.5.1.4 and 8.6.2
Development and construction	The Project will generate significant employment and economic growth, and support for the construction sector. The Project is part of the larger Inland Rail Program. It is anticipated that 16,000 jobs will be required Program-wide at the peak of construction, with an average of 700 jobs per annum over the 10-year construction period. At a local level, the Project also has the potential to catalyse the development and growth of regional intermodal hubs, such as InterLinkSQ, Toowoomba Wellcamp Airport and Toowoomba Enterprise Hub.	Chapter 2: Project Rationale
Mining and extractive resources	Consistent with the mining and extractive resources State interest, the Project has considered and assessed potential impacts to extractive resources. The Project has been positioned to avoid the main operations of Kildonan KRA and Commodore Mine, reducing permanent adverse impacts to these existing mining and extractive resource sites.	Sections 8.5.1.1, 8.5.1.8 and 8.6.2
Tourism	The Project has considered and assessed potential impacts to the region's natural values. These areas would support tourism. Although the Project's permanent footprint traverses areas of the Whetstone and Bringalily State forests, fragmentation of the forests is minimised, as the Project predominately follows road corridors and property boundaries, where possible. Furthermore, the Project does not intersect any other environmentally sensitive areas (national parks or conservation parks), which contribute to the State's natural values. In this way, the intent of the SPP is supported.	Table 8-24 and Chapter 17: Social

State interest	Project consistency	EIS reference
Environment and heritage		
Biodiversity	Consistent with the provisions of the biodiversity State interest, the Project has considered and assessed potential impacts and risks to biodiversity, including MNES and MSES, and matters of local environmental significance.	Chapter 11: Flora and Fauna
Cultural heritage	Consistent with the requirements of this State interest, the Project has considered and assessed potential impacts to cultural heritage, including international, national, State and local heritage, and Aboriginal and Torres Strait Islander cultural heritage.	Chapter 19: Cultural Heritage
Water quality	Consistent with the requirements of this State interest, the Project has considered and assessed potential impacts to water quality.	Chapter 13: Surface Water
Safety and resilience to hazards		
Emissions and hazardous activities	Consistent with the requirements of this State interest, the Project has considered and assessed potential impacts and risks associated with emissions and hazardous activities.	Chapter 21: Hazard and Risk
Natural hazards, risk and resilience	Consistent with the requirements of this State interest, the Project has considered and assessed potential impacts and risks associated with natural hazards, risk and resilience.	Chapter 21: Hazard and Risk
Infrastructure		
Energy and water supply	The Project will include the provision of its energy and water supply requirements in a safe and reliable manner. With respect to power, opportunities to connect to existing sources will be explored with relevant service providers, and where connections are not available, power will be provided by generators. Water supply and storage will be needed for construction activities, dust suppression, vehicle wash down, and operations and maintenance activities.	Chapter 5: Project Description
Infrastructure integration	The Project supports the expansion of existing infrastructure associated with the introduction of a heavy freight rail between Melbourne and Brisbane. The Project is likely to support current and future industries associated with the Toowoomba Enterprise Hub, which is an area of strategic importance in supporting industrial growth in the Toowoomba region.	Table 8-24, Section 8.6.2 and Chapter 17: Social
Transport infrastructure	The Project supports this State interest by using the existing QR South Western Line and Millmerran Branch rail corridors where possible. Furthermore, the Project has considered and assessed potential impacts to State-controlled roads, local government roads and stock routes within the Project footprint.	Chapter 20: Traffic, Transport and Access
Strategic airports and aviation facilities	No strategic airports or aviation facilities are directly traversed by the Project footprint. The closest strategic airport is the Toowoomba Wellcamp Airport. At its closest point, the Project footprint is approximately 1 km and the Project footprint is approximately 865 m to the west of the northern limit of the runway for Toowoomba Wellcamp Airport. The Project footprint does not intersect the public safety area of Toowoomba Wellcamp Airport. At its closest point, the Project footprint encroaches into the 470 m OLS contour that extends from north-western end of the runway. Through consultation with the operator of Toowoomba Wellcamp Airport, the Project has been aligned to ensure that a double-stacked train will not extend vertically into the OLS.	

State interest	Project consistency	EIS reference
	While the Project footprint is located 11.4 km southeast of the Army Aviation Centre Oakey, the Project footprint does extend across properties on which the 45 m height-restriction zone applies. The Project has been aligned to ensure that a double-stacked train will not extend vertically into this height restriction zone. At its closest point, the Project footprint extends into light restriction Zone B for Toowoomba Wellcamp Airport. As detailed within the <i>Strategic airports and aviation facilities State interest – example planning scheme assessment benchmarks</i> configurations of lights in straight parallel lines 500 to 1,000 m long, particularly in the vicinity of large unlit areas, can replicate the appearance of airport runways at night (DSDILGP, 2021a). In addition, occasional glare or flashes can distract pilots at critical moments. Construction works stage lighting requirements for the Project are minimal as the majority of works will occur during daylight hours. Some security lighting will be required around construction laydown areas and site offices; however, lighting in these instances will be directed and screened to prevent light spill beyond the extent of the Project footprint. Once operational, lighting will be restricted to the headlamps on rollingstock and the safety lighting requirements at road–rail interfaces. Neither of these sources are expected to have an adverse effect on the operational airspace. Construction and operation of the Project will not result in airborne particulates or gaseous plumes that may otherwise impair pilot or air-traffic control visibility. The Project will not result in the introduction of new wildlife hazards that may otherwise increase the risk of aircraft strike. Australian Noise Exposure Forecast contours are not available for Toowoomba Wellcamp Airport. However, construction or operation activities for the Project do not constitute a sensitive receptor to aircraft noise. Based on the above, the Project is considered to be consistent with the intent of this State interest. In fact, the Project complements the role of a strategic airport as an economic, freight and logistics hub, and will enhance the economic opportunities that are available in proximity to a strategic airport.	Chapter 20: Traffic, Transport and Access

8.5.4.2 ShapingSEQ 2023

The Project is consistent with the intent of ShapingSEQ 2023 (DSDILGP, 2023a), given the Inland Rail Program is identified within the regional plan as key region-shaping infrastructure that supports the vision for South East Queensland.

ShapingSEQ 2023 acknowledges the importance of infrastructure investments such as the Inland Rail Program to enable future connection of ports, such as the Port of Brisbane and the Toowoomba Wellcamp Airport, to an extensive freight network of major interstate rail and road connections, reinforcing South East Queensland as the apex of Australia's strategic freight network. These ports are significant economic assets that provide unrivalled access to a growing global market for our goods and services, in traditionally strong areas, such as agriculture and tourism, and emerging sectors such as knowledge and service-based activities. Furthermore, this presents significant opportunities for the regional economy by providing a competitive rail freight network connecting to existing and future distribution hubs and intermodal terminals presenting a viable alternative to road transport.

ShapingSEQ 2023 identifies the Inland Rail Program as being able to support increased capacity to manage freight through South East Queensland generally, and provides specific opportunities in major enterprise and industrial areas in the Toowoomba LGA, such as the Toowoomba Enterprise Hub. Furthermore, the Inland Rail Program has the potential to enhance the Western Gateway Regional Economic Cluster. This regional economic cluster supports significant agricultural and resource activities, and priority sectors of manufacturing, transport and logistics, and health and knowledge. The Project provides for the movement of freight by rail connecting Toowoomba Wellcamp Airport, Toowoomba Bypass, Warrego, Gore and New England highways, InterLinkSQ and the city of Toowoomba.

8.5.4.3 Darling Downs Regional Plan

The *Darling Downs Regional Plan* (DSDIP, 2013a) identifies a priority outcome for the region's transport network related to the prioritisation of transport programs that improve freight movement. The Project will assist with the region's longer-term aspiration for a modal shift towards increased rail usage. Increased rail capacity will particularly benefit the region for the movement of agricultural commodities and improving the inward logistics for the mining sector.

The *Darling Downs Regional Plan* identifies the eastern area of the Darling Downs Region as being 'the gateway' to the region, supporting an extensive network of freight routes into and out of the Darling Downs region. The Project is consistent with the intent of the eastern Darling Downs area as being the major transport and service hub of the region. The Project will improve access to and from regional markets and may act as a significant catalyst for development, particularly in relation to rail-dependent industries and support industries associated with transport, freight handling, warehousing and logistics.

Intermodal facilities, including hubs east of Goondiwindi and the Toowoomba Enterprise Hub, would also be supported by the proposed intent to construct a freight railway network of national significance in the region.

The Project will improve road safety, ease congestion, and reduce environmental impacts by moving freight from road to rail.

The Project is consistent with the intent of *Darling Downs Regional Plan*.

8.5.4.4 Planning schemes

As 'government supported transport infrastructure', the Project cannot be made assessable under a local government planning scheme however, the strategic framework, zones, and overlays have been reviewed to provide a local understanding of the area and assessment of the Project's compatibility with each local government's plans and vision for their regions.

Goondiwindi Region Planning Scheme 2018

The Inland Rail project is mentioned in the *Access, mobility, and transport* element—Rail Network. It is noted that the Inland Rail may 'provide a key interstate freight transport service in the future' and is congruent with the preferred alignment outlined within the framework.

The Project does not affect urban and rural residential expansion zones.

The Project traverses through two zones, being 'rural' and 'township'.

The Project traverses through agricultural land categorised as class A and B identified in the Natural Resources Overlay. Impacts to agricultural land are addressed in Section 8.5.1.4.

Toowoomba Region Planning Scheme 2012

The Inland Rail is discussed in the strategic framework, where it is noted the Project will enhance market access and facilitate development within the Toowoomba LGA.

With regard to future urban and rural development, the strategic framework outlines areas that will be expanded to facilitate population growth, particularly in the towns of Highfields, Drayton, Westbrook and Toowoomba City. It is not anticipated that the Inland Rail will encroach on these expansion areas, thus mitigating potential conflicts.

The Project traverses through five zones; 'community facilities', 'medium impact industry', 'open space', 'rural', and 'township'. Of these zones, the Project mostly impacts the rural zone, with 2,052.44 ha of rural land being impacted by the permanent footprint, and 709.91 ha being impacted by the temporary footprint.

The Project traverses the agricultural land overlay code.

Planning scheme zone assessment

Table 8-47 provides a summary of the zones traversed by both the permanent and temporary footprints across both planning scheme areas.

TABLE 8-47 LOCAL PLANNING SCHEME ZONING IMPACTED BY THE PROJECT

Zone	Permanent footprint (ha)	Permanent footprint (%)	Temporary footprint (ha)	Temporary footprint (%)
Goondiwindi Region Planning Scheme 2018				
Rural	751.55	29.53	402.69	48.10
Township	1.77	0.07	2.62	0.31
Toowoomba Region Planning Scheme 2012				
Community facilities	89.59	3.52	1.49	0.18
High impact industry	0.36	0.01	0.19	0.02
Medium impact industry	4.39	0.17	8.55	1.02
Open space	1.53	0.06	0.00	0.00
Limited development	0.06	0.00	0.24	0.03
Rural	1300.88	51.12	307.22	36.69
Township	2.04	0.08	1.04	0.12
Total	2152.16	84.57	724.04	86.48

The majority of the Project will be located within land zoned as 'rural' under both planning schemes, and is expected to impact rural land uses. The Project footprint will affect approximately 1.77 ha of land that is located within the 'township' zone under the *Goondiwindi Region Planning Scheme 2018* (GRC, 2018a). The portion of the Project footprint that impacts the 'township' zone is associated with the colocation of the Inland Rail alignment with the existing QR South Western Line railway that runs through the Yelarbon township, and will not result in the taking of land within this zone.

In the Toowoomba LGA, the Project footprint will impact approximately 89 ha of land mapped within the 'community facilities' zone. This is associated with existing rail infrastructure that is mapped under the planning scheme, and the Project footprint will be collocated with it and will not result in the taking of land within this zone. Additionally, the Project footprint will impact approximately 2 ha of land mapped within the 'Township' zone under the *Toowoomba Regional Planning Scheme* (TRC, 2012). This is associated with a small amount of an undeveloped lot of land located on the outskirts of the Brookstead township, which is proposed to be used as a laydown area for the Project.

Approximately 80 per cent of the Project footprint is zoned under either the *Goondiwindi Region Planning Scheme 2018* (GRC, 2018a) or *Toowoomba Regional Planning Scheme* (TRC, 2012). The remaining land is comprised of road reserves and watercourses.

8.6 Mitigation measures

8.6.1 Mitigation through the revised reference design

Development of the reference design for the Project has progressed in parallel with the impact assessment process. As a result, design solutions for avoiding, minimising or mitigating impacts have been incorporated into the revised reference design as appropriate and where possible.

Mitigation measures and controls for land use and tenure that have been factored into the revised reference design, or otherwise implemented for the Project, include:

- ▶ The Project is co-located with existing rail and road infrastructure where possible, minimising the need to develop land that has not previously been subject to disturbance for transport infrastructure purposes
- ▶ Where possible the Project footprint is located adjacent to property boundaries to reduce potential fragmentation and sterilisation of agricultural land
- ▶ The Project footprint has been established to provide the minimum area required to construct, maintain and operate the Project safely and efficiently
- ▶ Intensive livestock operations, including feedlots and poultry farms, have been avoided where possible
- ▶ The Project footprint has been aligned to avoid the approved current and future operational footprint of the Commodore Mine. This has been achieved through consultation with the mine owner
- ▶ The Project footprint avoids KRA 120 and potential adverse impacts on the operations of the KRA
- ▶ The Project has been aligned so that a double-stacked train will not extend vertically into the OLS for the Toowoomba Wellcamp Airport
- ▶ The Project utilises the existing QR South Western Line and Millmerran Branch Line rail corridors, where feasible, thereby reducing property impacts
- ▶ Consultation has been undertaken with GRC and with DDMRB regarding the severance and realignment of the WDCF and the rabbit fence. This consultation will continue through the detailed design process to ensure that the detailed design for the Project includes fencing replacement solutions that are acceptable to the asset managers.
- ▶ Where stock routes have been intersected by the Project footprint, design solutions have been proposed that allow for the continuity of stock movement. Consultation has been undertaken with DoR, GRC and TRC to determine the acceptability of the design solution at each stock route interface. This consultation will continue through the detailed design process to ensure that the detailed design for the Project achieves continued useability of existing stock routes.
- ▶ Discussions are ongoing for Applications for Revocation for parts of the Whetstone and Bringalily State forests, previously lodged in accordance with the provisions of the Forestry Act.

8.6.2 Proposed mitigation measures

In order to manage and mitigate potential Project impacts, mitigation measures have been proposed for implementation in future delivery stages of the Project. The proposed mitigation measures discussed in this section have been identified to address Project-specific issues. These proposed mitigation measures incorporate legislative requirements, ARTC's land acquisition protocols and ARTC's *Land Access Guidelines* (ARTC, 2019b).

The mitigation measures proposed in this section should be considered in conjunction with those proposed in the Social Impact Management Plan, as presented in Chapter 17: Social.

Chapter 24: Draft Outline Environmental Management Plan provides further context and the framework for implementation of these proposed mitigation and management measures.

8.6.2.1 Change in land use

Land use impacts will be confirmed during detailed design. Where land use impacts are confirmed, individual property management measures will be developed in consultation with the landowner to reduce impacts to an acceptable and agreeable level. Management measures will include:

- ▶ Individual property mitigation measures developed in consultation with landowners/occupants with respect to the development of detailed design and/or the management of construction on, or immediately adjacent to, private properties. The property mitigation measures will detail required adjustments to fencing, access, farm infrastructure, and relocation of any impacted structures, as required.
- ▶ Consultation with landowners will be undertaken to ensure that owners and occupiers are informed about the timing and scope of activities in their area, particularly in relation to potential impacts to access, services, or farm operational arrangements. This consultation will be ongoing throughout construction.
- ▶ Feedback from landowner consultation, including agreed property mitigation measures, will be incorporated into property agreements (or similar), as appropriate.

Development activity

Potential impacts to known development activities have been identified in Sections 8.5.1.9 and 8.5.1.10. Mitigation measures for development activities which the Project may have an impact on are provided in Table 8-48.

TABLE 8-48 MITIGATION MEASURES OF POTENTIAL IMPACTS ON DEVELOPMENTS

Project name and proponent	Impact associated with the Project	Mitigation measures
Goondiwindi LGA		
Rural Activities—Intensive Animal Industry Smithfield Cattle Co. (including Smithfield Service Sapphire Feedlot)	The Project footprint adjoins the northern boundary. Access to the site is via Yelarbon–Kurumbul Road.	A level crossing is proposed to ensure access is maintained to the property.
Toowoomba LGA		
Renewable Energy Facility Solar Farm and Subdivision by lease Yarranlea Solar Pty Ltd	The Project footprint traverses land subject to this development application. The Project has been strategically designed to avoid the solar farm where possible. Consultation with Yarranlea Solar has occurred and is ongoing.	A grade-separation is proposed at Yarranlea Road, ensuring uninterrupted access to the solar farm is maintained.
Intensive Horticulture and Rural Industry Asterion (Australia) Pty Ltd (Permit number: EPPR01236413)	The Project footprint traverses the property along the western boundary. Upon review of the current development plans submitted to TRC, it does not appear as though the Project will impact on the development footprint. Access to the site is proposed via the east.	Consultation with Asterion (Australia) Pty Ltd will occur through the detailed design and pre-construction activities and early works stages to ensure that the Project and its construction activities are developed in a manner to minimise the extent of impacts on this development. Where necessary, appropriate mitigation measures will be negotiated with Asterion prior to the commencement of construction.
Current EAs for ERAs		
EA (Permit number: EPPR00372213)— Primary holder is Ron Johnstone Pty Ltd	The permanent footprint traverses land subject to this EA and may require partial or full acquisition of the property.	Consultation with the holder of the ERA (TRC) has commenced and will be ongoing through detailed design. If full or partial land acquisition is required, appropriate acquisition and compensation measures will be undertaken in accordance with Section 8.6.2.2 and Table 8-49.

Project name and proponent	Impact associated with the Project	Mitigation measures
EA (Permit number: EPPR00625013)— Primary holder is TRC	The permanent footprint traverses land subject to this EA and may require partial or full acquisition of the property.	Consultation with the holder of the ERA (TRC) has commenced and will be ongoing through detailed design. If full or partial land acquisition is required, appropriate acquisition and compensation measures will be undertaken in accordance with Section 8.6.2.2 and Table 8-49.

Non-resident workforce accommodation facilities

Following the construction of the Project, opportunities for the beneficial re-use of the non-resident workforce accommodation facilities will be investigated through consultation with local government and relevant stakeholders. If beneficial re-use cannot be identified, the non-resident workforce accommodation facilities will be decommissioned, and the land will be subject to approved and final Border to Gowrie Rehabilitation and Landscaping Management Plan (as part of the Construction Environmental Management Plan (CEMP)).

8.6.2.2 Land access

For future land access where the land has not been acquired for the Project, ARTC's *Land Access Guidelines* (2019b) require a Land Access Agreement to be signed with each affected property owner. The Land Access Agreement includes conditions or requirements owners may have for accessing a property, e.g. the locking of gates, livestock interactions, biosecurity requirements and times of access. The Land Access Agreement provides in-principle agreement for a property to be accessed by ARTC, or its contractors, subject to prior notification (time period agreed with each property owner).

8.6.2.3 Property acquisition

To facilitate the change to an appropriate tenure for the Project, the land acquisition approaches described in Table 8-49 will be adopted.

TABLE 8-49 LAND ACQUISITION APPROACHES

Acquisition approach	Description
ARTC acquisition	Where possible and preferable to do so, ARTC, as a corporation, acquires land in its own right by private treaty. ARTC has purchased some land for the Project under its early acquisition policies.
DTMR acquisition	Land required for the Project's operation will mostly be acquired through a compulsory land acquisition process, also known as land resumption. Compulsory land acquisition processes in Queensland are undertaken by constructing authorities in accordance with the AL Act, which sets out the process for acquisition and the assessment of compensation. DTMR is the constructing authority for land for the Project in Queensland. DTMR has power to acquire or resume property for the purposes of transport, for an incidental purpose, for the purpose of a transport associated development or for a combination of these purposes. DTMR will manage the compulsory land acquisition process under the AL Act.
Land Act acquisition	In some instances, appropriate tenure or interest in State land that supports the proposed development will be secured under the Land Act. In these cases, contact will be made as soon as reasonably practicable with the DoR Land Administration and Acquisition Team to discuss options and to begin proceedings under the Land Act.

Where the Project requires the permanent acquisition of properties, it will be undertaken in accordance with the requirements of the AL Act.

Assessment of compensation is undertaken in accordance with Section 20 of the AL Act. Compensation is based on the value of land at the date of the resumption, plus damage caused by severance and/or injurious affection to other land, and costs attributable to disturbance. Compensation is assessed on an individual basis, based on the highest and best use market value of the land at the date of resumption.

Costs attributable to compensation for disturbance caused by the resumption may include:

- ▶ Reasonable legal costs, valuation or other professional fees for preparing and filing a claim for compensation
- ▶ Costs related to the purchase of replacement comparable land
- ▶ Storage and removal costs
- ▶ Other reasonable financial costs incurred that are a direct consequence of the resumption of the land.

For construction, land will be acquired temporarily in accordance with the AL Act. Purchasing or leasing arrangements for these properties will be investigated in consultation with relevant landowners.

Where the Project will be co-located with the existing QR South Western Line and Millmerran Branch Line rail corridors, consultation with QR will be undertaken to confirm the mitigation requirements, and construction and operation interface agreements.

ARTC is consulting with directly affected landowners to develop an understanding of each household's circumstances, including those who may need support to adjust to changes brought about by the Project. ARTC has initiated an early acquisition process with landowners who are experiencing hardship in relation to land acquisition.

These steps will be implemented prior to the commencement of construction of the Project.

It is anticipated that some land will become surplus to the operational requirements of the Project once the construction activities on the land within the rail corridor has been finalised. Should land be determined as surplus within seven years of the date of taking then it must be offered back to the former owner in accordance with the AL Act and the TPC Act. If the former owner does not want to purchase back the land, DTMR will dispose of the land in accordance with the Queensland Government Land Transaction Policy. ARTC, in conjunction with DTMR, will facilitate any necessary disposal and rationalisation activities, in accordance with State legislation and policy.

Further social impact mitigation measures are provided in Chapter 17: Social.

8.6.2.4 State forests

The following sections discuss mitigation measures proposed to be implemented to manage the Project impacts caused by the revocation of portions of the Bringalily and Whetstone State forests.

Application process and change in tenure

Applications for State forest partial revocation under the Forestry Act for the Whetstone and Bringalily State forests were submitted to the then Department of Environment and Science (DES) (now DESI) on 4 December 2019 and then subsequently updated revocation letters submitted to then DES in May 2022. Consultation with QPWS&P, DESI, DAF (Forestry), and DoR will continue through the detailed design stage.

The State forest revocation application will be supported by finalised land acquisition plans for the Project. Following submission of these revocation applications, the further stages, in accordance with Section 26(2) of the Forestry Act, are likely to consist of the following:

- ▶ DESI interagency consultation
- ▶ Minister in-principle approval
- ▶ ARTC to address revocation requirements, including native title, cultural heritage, third-party consent, survey plan and compensation. This is to occur during detailed design of the Project
- ▶ Minister requests Governor-in-Council approval
- ▶ Parliamentary consideration
- ▶ Governor-in-Council assent
- ▶ Register of title.

Ministerial in-principle approval for the State forest partial revocation will be required to be obtained prior to the Coordinator-General accepting the final EIS.

To ensure that no areas of State forest are alienated as a result of the Project, ARTC will revoke any areas that may be 'left-over' after the severance. Any cases where this was to occur based on the current alignment have been integrated into the State forest partial revocation application.

Tenure arrangements, including compensation as offset requirements for the revocation of State forest land, will continue to be progressed through the constructing authority during and following the completion of the EIS process and in continued consultation with DAF, DESI, DoR, leaseholders and the Bigambul Native Title Aboriginal Corporation. Offsets for the partial revocation of State forest areas will be provided through financial compensation to DESI, via DTMR as constructing authority, in accordance with the *Operational Policy: Revocation of QPWS managed areas*.

A special lease over State forest may be resumed by way of an order in Council under the Land Act. Every person who has a lawful interest in a resumed lease (or part of a resumed lease) has a right to claim compensation as prescribed under the AL Act.

A cultural heritage survey report will be prepared in accordance with DESI requirements to support the State revocation process.

Accessibility

ARTC proposes to mitigate the impacts to all formed public roads with level crossings or grade separations so as to maintain the continuity of access throughout the State forests as much as reasonably possible.

Level crossings are proposed to be installed to allow for large vehicles to cross the alignment safely. Where necessary, ARTC will construct new roads to ensure continuity of the network.

From potential impacts discussed in Section 8.5.1.12, Table 8-50 summarises the mitigation measures for access arrangements throughout both Bringalily and Whetstone State forests.

TABLE 8-50 SUMMARY OF STATE FOREST ACCESS MITIGATION MEASURES

Location	Road name	Mitigation measures	Outcome post mitigation
Bringalily State Forest			
Location 1 Ch 58.00 km to Ch 63.00 km	Bybera Road	Rail bridge over road	Access maintained
Location 2 Ch 64.10 km to Ch 65.75 km	Schofields Boundary Road	Nil	No impact—location is well serviced by alternate routes
	Lovells Road	Active Level Crossing	Access maintained
Location 3 Ch 69.43 km to Ch 69.64 km	Thornton Road	Active Level Crossing	Access maintained
Location 4 Ch 81.00 km to Ch 84.00 km	Wongavale-Yugilbar Road	Passive Level Crossing	Access maintained
Location 5 Ch 84.00 km to Ch 92.00 km	Unformed road reserve (connects to forestry access track and stock route)	3 m x 3 m box culvert	600 m to 1,300 m increase in travel distance for large vehicles depending on direction (Access maintained for light vehicles and stock movements)
	Forestry access track	Passive Level Crossing	Access maintained
	Forestry access track	Nil	Consolidated to rail bridge location
	Forestry access track	Rail bridge over road	Access maintained
	Unformed road reserve	Nil	Consolidated to rail bridge location
	Forestry access track	Nil	Consolidated to rail bridge location or active level crossing
	Unnamed Road	Active level crossing	Access maintained
Whetstone State Forest			
Location 1 Ch 37.68 km to Ch 43.37 km	Springborg Road	Passive Level Crossing	Access maintained
	Powerline Easement	Nil	No impact—no crossing currently exists at this location
Location 2 Ch 45.00 km to Ch 54.50 km	Whetstone Access Road	Active level crossing	Access maintained
	McDougalls Road	Diversion to Cremascos Road	700 m to 900 m increase in travel distance depending on direction.
	Cremascos Road	Active level crossing	Access maintained

Emergency management of State forest

Impacts to QPWS&P and QFES emergency response times may occur as a result of the severing of existing access roads throughout the State forests. To mitigate and manage these impacts, appropriate access and egress solutions throughout the Bringalily State Forest will be incorporated into the detailed design of the Project to support emergency access. Additionally, all rail maintenance access roads incorporated into the rail corridor will be designed to meet emergency response vehicle specifications.

To mitigate bushfire risks associated with the construction of the rail corridor, all 'hot-works' will only be undertaken in periods where the Bureau of Meteorology's fire risk is less than 'extreme'. In the case that 'hot-works' are required to be carried out during 'extreme' fire risk periods, all works will be undertaken in accordance with ARTC's Total Fire Bans Procedure, and in accordance with relevant QFES permits. Bushfire management and response measures will be implemented into the Project CEMP.

Once constructed, the rail corridor will be kept free of woody vegetation to provide a firebreak between the severed areas of the State forests. Additionally, management policies, including communications strategies with QPWS&P and QFES, and existing ARTC management plans will be adopted to manage risk associated with the operation of the Project.

Leases over State forest

All leaseholders who have interests in the State forest for forestry activities, will be compensated accordingly for acquisition of the leased land. The amount that each leaseholder will be compensated will be decided through negotiations between leaseholders and DTMR. Additionally, DTMR is committing to ongoing consultation with affected leaseholders in relation to locked gates policies, related to WDCF in the State forests to avoid biosecurity matters.

Drainage overflow, and erosion and sedimentation controls

To mitigate impacts that the revocation of the State forest and the construction of the Project will have on drainage overflow and erosion and sedimentation, ARTC is committing to resolving any erosion or sedimentation issues created on State forest land due to the installation of the Project footprint, via a series of mitigation measures that will be implemented at various stages of the Project. The mitigation measures for each subsequent stage of the Project are provided below.

Detailed design stage

Soil management measures will be developed in regard to:

1. Locations for specific temporary/permanent erosion and sediment-control measures, such as:
 - a. Sediment retention basins
 - b. Scour protection (included in the reference design)
 - c. Sediment fencing
 - d. Berms and other surface-flow diversions
2. Nomination of location-specific erosion controls will include consideration of site conditions, proximity to environmental receptors, adjoining land uses, climatic and seasonal factors, and will be based on an erosion risk assessment
3. Minimising the area of disturbance during each stage to that required to enable the safe construction, operation and maintenance of the rail corridor
4. Scheduling of works with consideration to periods of higher rainfall (summer months)
5. Establishing and specifying the monitoring and performance objectives for handover on completion of construction.

Where practical, ARTC plans to use existing access tracks. ARTC will design new access tracks (permanent and temporary) with the aim of minimising disturbance of substrate and vegetation.

Construction works stage

During the construction works stage, ARTC will:

1. Install permanent erosion-control measures, such as sediment retention basins and scour protection, in accordance with the detailed design
2. Undertake excavation in a manner to prevent erosion or landslip, working faces shall be limited to safe height and slopes, with surfaces drained to avoid ponding and erosion
3. Monitor the effectiveness of erosion controls installed as part of the environmental inspection schedule for the Project, as prescribed in the CEMP
4. Ensure that controls that are found to be failing or not performing as intended will either be modified or replaced, as required.

Operations stage

Once the rail corridor is constructed, the operational sediment and erosion management measures will be implemented.

ARTC will continue to liaise with QPWS&P to ensure coordination of these mitigation and management measures.

The effectiveness of permanent erosion controls (e.g. scour protection or vegetated swales) will be monitored as part of the maintenance inspection schedule for the Project. Controls that are found to be failing or not performing as intended will either be modified or replaced, as required.

Rail embankment slopes will be maintained to prevent slope-face degradation.

Maintenance of surface and subsurface drains will be required to ensure continued effectiveness and to minimise risk of impact to surrounding and downstream environments and structures.

The final tenure for the purpose of railway operations will be via a perpetual lease with DTMR as the head lessee and ARTC as the sub-lessee.

Where part of a lease is resumed, the balance of the lease will continue over the slightly smaller area with a new lot on plan description. The same will occur if part of a lease is surrendered by negotiation.

8.6.2.5 Other State land

Where the Project requires the acquisition of State land, appropriate tenure or interest will be secured under the Land Act. The constructing authority and ARTC will consult with the DoR Land Administration and Acquisitions Unit) about options for obtaining tenure or interest for the land required, and to begin proceedings under the Land Act.

Where State land is required for the Project that contains existing infrastructure used for public uses, land use impacts to these properties will be managed in accordance with the measures outlined in Table 8-51, with individual management measures to be developed with the trustees of the land.

Where the Project will be co-located with the existing QR South Western Line and Millmerran Branch Line rail corridors, consultation with QR will be undertaken to confirm the mitigation requirements and construction and operation interface agreements.

Where grade-separated level crossings are not installed to avoid impacts to state-controlled roads, active or passive at-grade level crossings will be installed. While there are expected impacts to travel time as a result of vehicles having to wait for trains to pass, the level crossings will ensure that all vehicles, including forestry-related plant and equipment, will be able to cross rail-affected roads safely (Chapter 20: Traffic, Transport and Access).

8.6.2.6 Native title

As discussed in Section 8.5.2.2, where native title has not been extinguished, ARTC will engage with Aboriginal Parties regarding impacted properties and resolution of native title interests.

8.6.3 Summary

Table 8-51 identifies the relevant Project stage, the aspect to be managed and the proposed mitigation measure.

TABLE 8-51 LAND USE AND TENURE MITIGATION AND MANAGEMENT MEASURES

Delivery stage	Potential impacts	Proposed mitigation measures
Detailed design	Property impacts and acquisition	▶ Detailed design to further refine the Project footprint to that which is required to safely construct, operate and maintain the Project including to minimise property acquisition requirements, property severance and disruption to land use and transport networks ▶ Individual property treatments will be developed in consultation with landowners/occupants, with respect to the management of construction on, or adjacent to, private properties. These will detail any required adjustments to fencing, access, farm infrastructure or relocation of impacted structures, as required. Measures, where agreed, will be documented in individual property agreements ▶ ARTC will consult directly with directly impacted landowners whose property would be partially or fully acquired for the Project regarding land acquisition ▶ With the commencement of the acquisition of land process, ARTC will continue to work with all directly impacted landowners to ensure the Project impacts are minimised or mitigated where possible ▶ ARTC's strategy to reduce the impacts of property acquisition on landowners, tenants and their families include: ▶ meeting with all directly affected landowners and tenants who would need to relocate as the result of the Project's land acquisitions, to identify their specific needs and concerns, and refer them to services that can support them in the relocation process if required ▶ based on detailed design, meeting with directly affected landowners to confirm property-specific management measures including, as relevant: – property access arrangements – avoiding/minimising impacts on property uses – access and egress solutions across the rail corridor – noise mitigation where triggered by noise exceedances ▶ provision of a relocation support team who will provide information, liaison and if necessary, service referrals to residents who need to relocate ▶ ARTC will consult with the resource holders of authorities to prospect, pipeline licences and potential commercial areas within the Project footprint ▶ ARTC will consult with DAF in the development of the final Environmental Offsets Delivery Strategy and delivery plans. ▶ ARTC will continue to consult with the tenure holder of the Commodore Mine regarding future development of the mine.
	Landowner/occupier access to and use of property	▶ ARTC will engage in ongoing consultation with adjoining landowners to identify and resolve access requirements to property identified as being potentially affected by either the Project works or the completed Project infrastructure. ▶ Where legal access to a property is permanently affected and a property has no other legal means of access, alternative access to and from a public road will be provided to an equivalent standard, where feasible and practicable. ▶ The suitable design treatment for interfaces between the Project and private accesses will be developed in consultation with the relevant landowner, on a case-by case basis. ARTC will consult directly with adjacent landowners to inform detailed design and construction planning to identify their requirements for continued use of their land, having regard to: ▶ their needs for practical access to their land ▶ access to existing on-farm infrastructure including water supplies ▶ existing arrangements for stock movements and the movement of farm machinery ▶ possible changes to boundary fencing ▶ established farm or property management practices.

Delivery stage	Potential impacts	Proposed mitigation measures
	Interface with State land and State forests	▶ ARTC will consult with DAF and DoR regarding Project interface issues that have the potential to impact the management and use of State forests, and provide suitable buffers for both the construction works and operations stages of the Project, where Project works have the potential to affect the use, operation and management of State land and State forests. Suitable buffers may include spatial and structural design responses, where relevant and practical. ▶ Other interfaces with State-owned infrastructure (e.g. roads) will be resolved through consultation and agreements with the appropriate agency.
	Design interface with stock routes	▶ Consultation with DoR, GRC and TRC will continue through the detailed design process to maintain the utility of existing public stock routes. ▶ Where stock fencing is required, fencing will be designed in accordance with the Project's general fencing strategy (Chapter 5: Project Description), unless an alternative approach is agreed with landowners, DoR, GRC or TRC. This will occur prior to the removal or realignment of existing fencing and prior to any works being carried out on the subject land, unless otherwise agreed with the landowner. ▶ ARTC will develop a system for the communication of train movements through level crossings to facilitate safe movement of livestock and agricultural machinery. The system will be developed in consultation with landowners, stock operators, DoR, GRC and TRC. ▶ Continued connectivity for private stock movement will be provided through detailed design. Where disruption to private stock movements may occur during construction, appropriate temporary connectivity solutions will be agreed in advance with the relevant landowner and documented in a property agreement.
	Design interface with barrier fences	▶ Detailed design drawings of ARTC's nominated fencing solution for reinstatement of biosecurity fences will be submitted to GRC, DAF, DESI (WDCF) and DDMRB (rabbit fence) for acceptance.
	Design interface with utilities	▶ The methodology for utility modification, upgrade, diversion or realignment will be confirmed through detailed design and consultation with the affected utility owners. ▶ Disturbance of existing utilities will occur under access arrangements and approval with the relevant asset manager, obtained prior to commencing work. ▶ Where permanent utility protection is required, this will be designed based on further geotechnical and soil condition data and will be subject to acceptance by the relevant utility owner ▶ Designs for utility protection, where necessary, will be developed in consultation with the relevant utility owner.
Pre-construction activities and early works and construction works	Design interface with utilities	▶ Utilities within the Project footprint will be surveyed and marked prior to the commencement of construction. ▶ Where protection or relocation of a utility is required as an outcome of consultation with asset owners and detailed design, these works will be undertaken prior to the commencement of construction to reduce the likelihood of impacts to those services. ▶ Protection or relocation of utilities will be conducted in accordance with relevant legislation, Australian Standards and guidelines.

Delivery stage	Potential impacts	Proposed mitigation measures
	Design interface with barrier fences	▶ Where severance of the WDCF or DDMRB rabbit fence is required, fence realignment and reconstruction will be undertaken prior to the commencement of construction of rail infrastructure. Replacement fencing will be in accordance with detailed design, in consultation and agreement with the with relevant stakeholders, including DESI/QPWS&P, impacted landowners and lessees, DAF and GRC. ▶ DAF consultation is required before any amendments to the WDCF are undertaken under Section 91(3) of the Biosecurity Act.
	Access to private property	▶ Property owners, occupants and businesses will be advised in advance, of the timing and scope of activities in their area and potential impacts or interruptions to access, services, or property operational arrangements.
	Interface with stock routes	▶ ARTC will coordinate with GRC and DoR regarding the permitted use of the South Kurumbul Road stock route. ARTC will ensure traffic management is in place to assist in managing stock movement around the proposed construction laydown area in a safe and efficient manner.
	Interface with utilities	▶ Construction activities will be planned and executed to not inhibit the safe and efficient operation of utilities that remain located within the Project footprint. ▶ Affected businesses and residences will be notified in advance of any planned interruptions (including durations). ▶ Disturbance of existing utilities will occur under access arrangements and approval with the relevant asset manager, obtained prior to commencing work. ▶ In the event that previously unidentified underground utilities are encountered during construction, work will cease in proximity to the utility until the type and status of the services (operational/disused) can be confirmed, in accordance with AS 1345 <i>Identification of the contents of pipes, conduits and ducts</i> (Standards Australia, 1995).
Operations	Land use	▶ If maintenance activities require access to private properties outside of the rail corridor, landowner approval will be obtained in advance of commencing the activities in accordance with ARTC land access protocols and procedures.

8.7 Conclusions

This chapter has assessed the Project through the identification of existing and proposed land use and tenure, including agricultural land, resource interests, native title, State forests and future development activity. It also provides an impact assessment to identify potential impacts on existing and proposed land uses that may arise as a result of the Project and identifies management measures used to avoid or mitigate potential impacts.

Through this process, it has been identified that the Project has the potential to result in the following impacts of relevance to land use and tenure:

- ▶ Acquisition of land
- ▶ Partial revocation of Whetstone and Bringalily State forests
- ▶ Change in tenure including impacts to native title
- ▶ Change in land use:
 - ▶ impacts on agricultural uses and activities
 - loss of agricultural land
 - land fragmentation and disruption to access and infrastructure
 - alterations to stock routes
 - alterations to biosecurity fences
 - other indirect impacts on agricultural land
 - opportunities to support the agricultural industry
 - ▶ changes to hydrological conditions
 - ▶ change to notable land uses
 - ▶ sterilisation of mineral resources
 - ▶ activities that are incompatible with adjoining development activity
- ▶ Accessibility
 - ▶ impacts on road network
 - ▶ impacts to property access
- ▶ Impacts on services and utilities.

Where possible, potential impacts have been avoided or minimised through measures that have been factored into the revised reference design or otherwise implemented during the reference design stage for the Project (Section 8.6.1). Where impacts cannot be avoided, mitigation measures have been proposed for implementation during future stages of the Project to further reduce and manage the potential impacts (Section 8.6.2).

In addition to the potential adverse impacts identified, the Project has the potential to result in beneficial impacts. Beneficial impacts of the Inland Rail Program, and this Project, include:

- ▶ Improved access to and from regional markets
- ▶ Reduced inter-capital freight costs
- ▶ Improved reliability and certainty of transit time
- ▶ Increased capacity of the freight transport network
- ▶ Reduces freight transportation distances
- ▶ Improved safety
- ▶ Improved sustainability.

In support of these benefits, Inland Rail is recognised by the *Darling Downs Regional Transport Plan* (DTMR, 2019b) as a national program with potential to support economic growth in the region through opportunities for connection into regional freight hubs and improving rail network efficiency.