EXECUTIVE SUMMARY

STANMORE ID EXTENSION PTY LTD
ISAAC DOWNS EXTENSION PROJECT
JULY 2026

TABLE OF CONTENTS

Figures

ES1. EXECUTIVE SUMMARY

ES1.1 Project Overview and Proponent

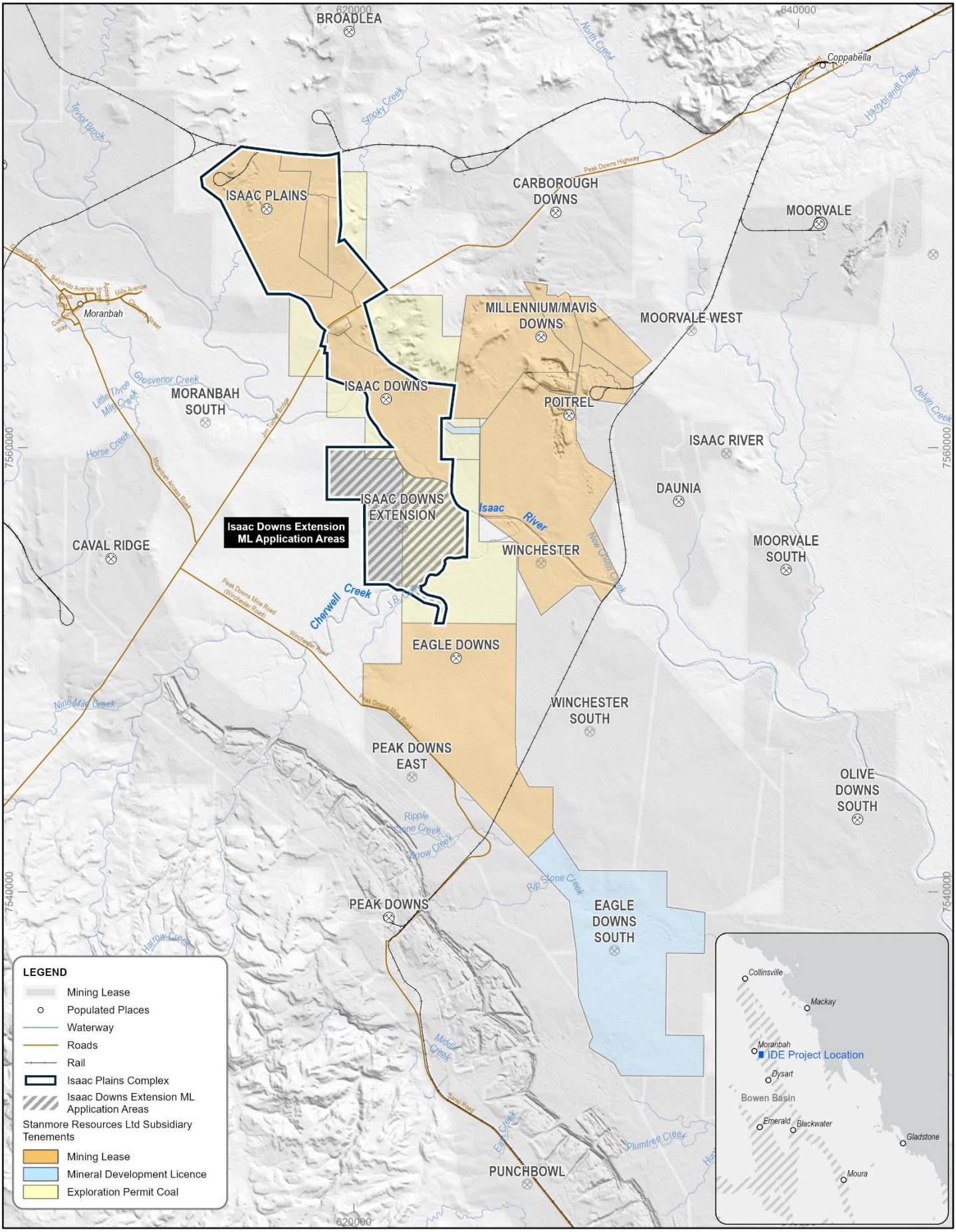
Stanmore ID Extension Pty Ltd (ID Extension), a wholly owned subsidiary of Stanmore Resources Ltd (Stanmore), proposes to develop the Isaac Downs Extension (IDE) Project (the Project). The Project will extend the life of mining operations at Isaac Plains Complex (IPC) through the development of an open cut coal mine pit and associated infrastructure, primarily mining metallurgical (steel making) coal. Approximately 46 million tonnes (Mt) of run of mine (ROM) coal will be mined over 15 years at a rate of approximately 2 – 4.5 million tonnes per annum (Mtpa).

IPC comprises Isaac Downs Mine (IDM) and Isaac Plains Mine (IPM), operated by wholly owned subsidiaries of Stanmore (refer to Figure ES1-1).

The Project adjoins IDM and will be integrated into IPC (refer to Figure ES1-1) with ROM coal washed at the IPM coal handling and preparation plant (CHPP), shared mine infrastructure area (MIA) at IDM, and connecting infrastructure such as water management infrastructure and power supply.

The Project is located in the Bowen Basin of central Queensland approximately 15 km southeast of Moranbah and 150 km southwest of Mackay, with the Project's mining lease (ML) application areas shown in Figure ES1-1.

Mining of ROM coal at IDM is expected to ramp down between 2026 and 2028, with Project construction commencing late 2027 / early 2028 and ROM coal extraction in 2029. The IPC workforce will transition to IDE as mining ramps down at IDM and IPM, and ramps up at IDE. The Project, being an extension of mining activities at IPC, is therefore important to ensure a near steady state workforce across IPC beyond 2027 and 2028.



Datum:	GDA2020 Zone 55
Scale:	See Scale Bar
Date:	2/06/2026 7:26 AM
Drawn:	Minserve
Source:	Minserve/Stanmore
File:	20260223 Project Location.aprx

stanmore

ISAAC DOWNS EXTENSION

Project Location

Figure | **ES1-1**

ES1.2 Approvals Process

The primary Project approvals required to commence the Project are:

- State:
  - MLs under the *Mineral Resources Act 1989* (MR Act)
  - an environmental authority (EA) under the *Environmental Protection Act 1994* (EP Act)
  - a progressive rehabilitation and closure plan (PRCP) schedule under the EP Act
  - estimated rehabilitation cost (ERC) decision under the EP Act.
- Commonwealth:
  - Approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The proponent applied to Queensland Department of Natural Resources and Mines, Manufacturing, and Regional and Rural Development (DNRMMRRD), under the MR Act, for four MLs for the Project on 24/06/2025; ML application (MLA) 700081, MLA 700082, MLA 700083 and MLA 700084.

On 17/06/2025 the Queensland Department of the Environment, Tourism, Science and Innovation (DETSI) approved an application by the proponent under the EP Act to prepare a voluntary environmental impact statement (EIS) for the Project. ID Extension will apply, under the EP Act, for an EA and PRCP (inclusive of PRCP schedule) for the Project.

The Project was referred under the Commonwealth's EPBC Act on 28/04/2025 (EPBC 2025/10183). On 06/06/2025 the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) determined that the Project was a controlled action under the EPBC Act subject to the following controlling provisions for matters of national environmental significance (MNES):

- listed threatened species and ecological communities
- water resources that relate to a large coal mining development.

The voluntary EIS for the Project will support the EA and PRCP applications. On 23/06/2025 DCCEEW decided that the Project would be assessed by an accredited assessment process under the bilateral agreements between the State and Commonwealth, being the voluntary EIS required under the under EP Act.

ID Extension applied for the draft terms of reference (ToR) for the EIS on 06/08/2025, supported by an initial advice statement (IAS) for the Project. Following ID Extension's responses to the comments received on the draft ToR, the final ToR was issued on 11/12/2025.

The Project does not require approvals for activities that are not on a ML.

ES1.3 Purpose of the Environmental Impact Statement

The purposes of this EIS are to:

- Assess the potential adverse and beneficial environmental, economic and social impacts of the Project; and describe management, monitoring, planning and other measures proposed to minimise adverse impacts of the Project.
- Address the ToR for the Project, and demonstrate that the environmental objectives and performance outcomes of the *Environmental Protection Regulation 2019* (EP Regulation) have been met by the Project.
- Consider feasible alternative ways to carry out the Project.
- Provide information about the above matters to the Commonwealth and State authorities and the public.
- Inform the EA and PRCP application.

- Provide information to other Commonwealth and State authorities to help them make informed decisions.
- Meet any assessment requirements under the EPBC Act as the Project is a controlled action under a bilateral agreement, and allow the State to meet its obligations under a bilateral agreement.

ES1.4 Consultation

The consultation program for the Project has been comprehensive, transparent and responsive, ensuring that stakeholders were informed, engaged and able to contribute meaningfully throughout the EIS process. Engagement commenced early and continued throughout Project development, including with directly affected and adjoining landholders, the native title holder, neighbouring and overlapping resource tenure holders, infrastructure and service providers, government agencies and community groups. This process enabled stakeholders to raise issues relevant to their interests and ensured their feedback was incorporated into technical studies and Project planning.

The consultation objectives were met by maintaining open communication channels, addressing stakeholder concerns and integrating their input into the EIS and the social impact assessment. This engagement has refined Project design, informed mitigation measures and strengthened the alignment between Project planning, social values and community expectations. Consultation will continue in the construction, operations and closure phases to ensure on-going transparency and responsiveness across the life of the Project.

ES1.5 Project Description

The proposed Project layout, MLA areas (i.e. the Project area) and proposed disturbance area are shown in Figure ES1-2. The proposed disturbance allows for sufficient working and construction areas within and around proposed Project activities and infrastructure. The disturbance area has been refined to minimise and / or avoid sensitive ecological features (e.g. habitat for listed threatened species, and riparian areas). The Project is located in the Isaac River catchment of the Fitzroy Basin and is bounded by the Isaac River and Cherwell Creek (see Figure ES1-1 and Figure ES1-2).

The open cut mining methods for the Project will be similar to those at IDM, including:

- clearing of vegetation, stripping and stockpiling of topsoil
- drilling and blasting of pre-strip overburden
- removing the pre-strip overburden using mining equipment at IDM being a dragline and / or truck and shovel fleets and / or dozers
- drilling and blasting of overburden
- drilling and blasting of pit floor for geotechnical stability to allow for in-pit dumping
- overburden removal using the dragline at IDM and / or truck and shovel fleets
- coal mining using excavators
- formation of out of pit and in-pit overburden dumps as mining progresses
- progressive rehabilitation of overburden dump areas.

ROM coal will be transported from the Project's ROM coal pads to the CHPP at IPM for washing, utilising existing haul roads at IPC and new haul roads, including a bridge across the Isaac River, constructed in the Project area. The dragline will be walked from IDM to the Project via a temporary crossing of the Isaac River.

Product coal from the IPM CHPP will be railed along the Goonyella rail line to Dalrymple Bay Coal Terminal (DBCT) for export with a small percentage railed via the Newlands rail system to the Port of Abbot Point. No changes are required at the CHPP to allow washing of the Project's ROM coal. Rejects and tailings from

the IPM CHPP will be transferred to existing voids at IPM authorised, and with sufficient capacity, for the storage of rejects and tailings.

A satellite go line and crib area will be constructed at the Project, with the existing MIA at IDM continuing to service Project activities.

The primary access to the Project for workers and deliveries will be via IDM's existing access road to the Peak Downs Highway and new access roads connecting with the Project, utilising the bridge to be constructed across the Isaac River. There is potential for a secondary access route to the Project between the Project and Stanmore's Eagle Downs project, utilising new and existing roads to connect with the Peak Downs Mine Road.

During operations, levees will be constructed to protect the open cut pit area from flooding of the Isaac River, Cherwell Creek and Conrock Gully up to a 0.1% annual exceedance probability (AEP) (1:1,000 year) flood event. Conrock Gully will be diverted around the active mining areas into the Isaac River, with the diversion remaining post mining.

A mine affected water dam will store water from the pit, ROM pad, go line and crib area, with the ability to transfer mine affected water to and from IDM and IPM within IPC's integrated water management system, thereby enabling the balancing of water supply and demand. Sediment water drains and dams will be constructed to capture runoff from overburden dumps. Clean water drains and dams will be constructed to separate clean water from mine affected water and sediment water.

IPC has access to external raw water supplied from Sunwater and has excess storage capacity for water within existing mined voids and dams. As the Project's water management systems will be integrated into the rest of IPC, water supply will be available during dry periods, and storage capacity will be able to receive any excess water during wet periods. Therefore no new sources of water supply will be required.

Topsoil stockpile areas will be used for storage of topsoil that has been stripped from mining and infrastructure areas, for future use in rehabilitation.

Power for the dragline will be supplied to the Project via powerline connections with the existing power supply at IDM. The Project may require additional linear infrastructure at IDM to facilitate the extension of IDM mining activities to the Project, however this will be within areas authorised for disturbance.

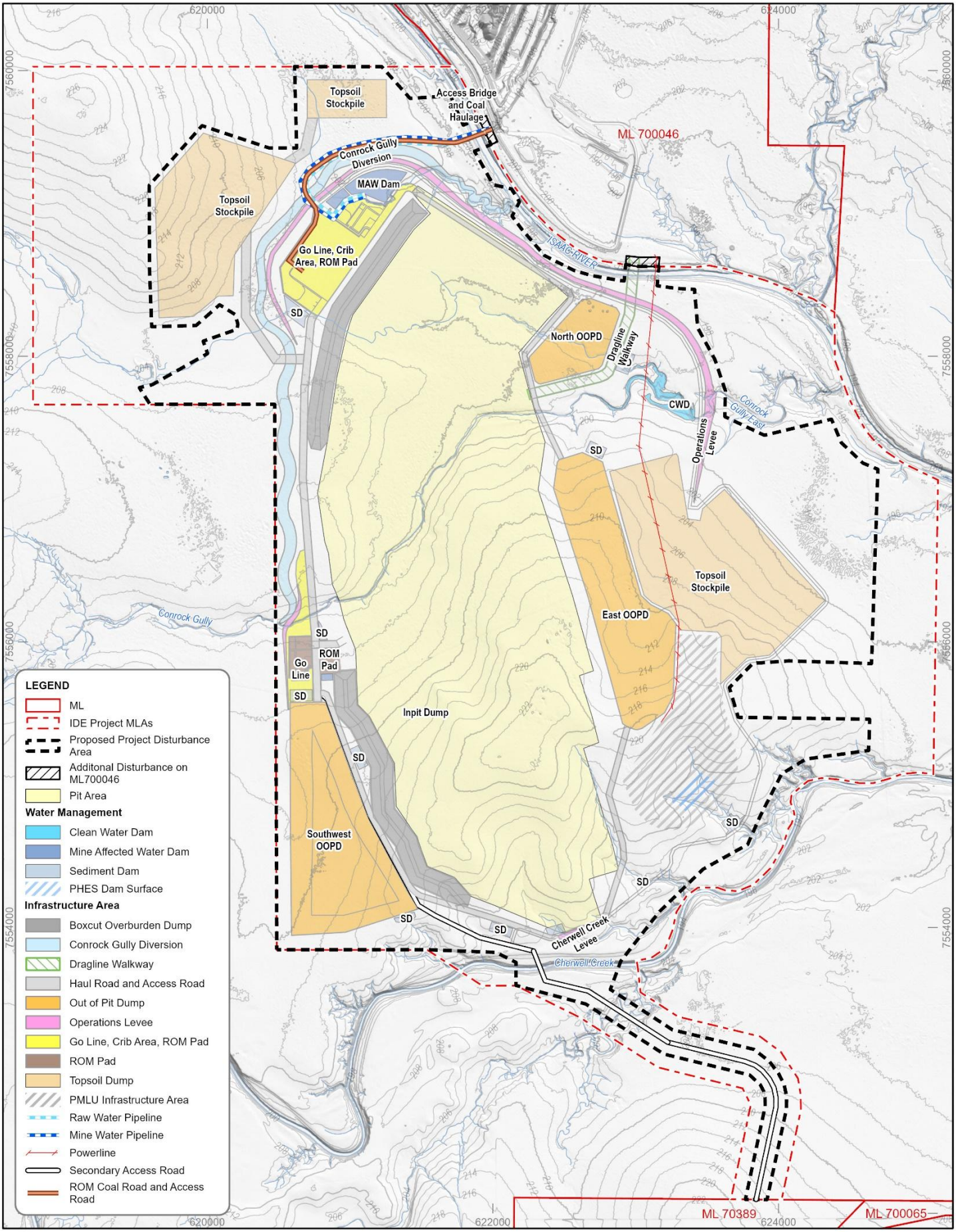
The area of the four MLAs is 2,707 ha and the proposed disturbance area is 2,080 ha. There are an additional 2.5 ha of disturbance on IDM ML 700046 (see Figure ES1-2) for Project linear infrastructure in areas not already authorised for mining activities.

The Project operational workforce will be similar to, but lower than that for current operations at IPC, with around 300 - 400 workers, compared to around 400 - 450 workers. Approximately 100 – 150 workers will be engaged at the Project for infrastructure construction. The Project, being an extension of mining activities at IPC, is therefore important to ensure a near steady state workforce across IPC beyond 2027 and 2028.

Workforce accommodation arrangements will continue in a similar manner to those for the current IPC workforce, being a mix of residences in Moranbah and other local or regional towns, and mine accommodation villages in the region. Through the Project, Stanmore will continue to support local and regional suppliers and contractors, providing additional economic benefits and employment in the region.

The Project is not proposing any novel or unproven resource extraction process, technology or activity.

Feasible alternatives and constraints were assessed for the Project's proposed activities. The Project has avoided impacts to the Isaac River and Cherwell Creek by not seeking to divert, and mine beneath, these watercourses despite there being economic resources in these areas. Alternative mining methods were assessed, with the preferred method including a dragline (increased efficiency and lower greenhouse gas emissions) and maximising in-pit dumping. By utilising existing infrastructure at IPM and IDM, the Project's disturbance and impacts will be reduced.



Datum:	GDA2020 Zone 55
Scale:	See Scale Bar
Date:	30/05/2026 8:04 AM
Drawn:	Minserve
Source:	Minserve/Stanmore
File:	20260223 Project Layout.aprx

stanmore

ISAAC DOWNS EXTENSION

Project Layout and Disturbance Area

Figure | **ES 1-2**

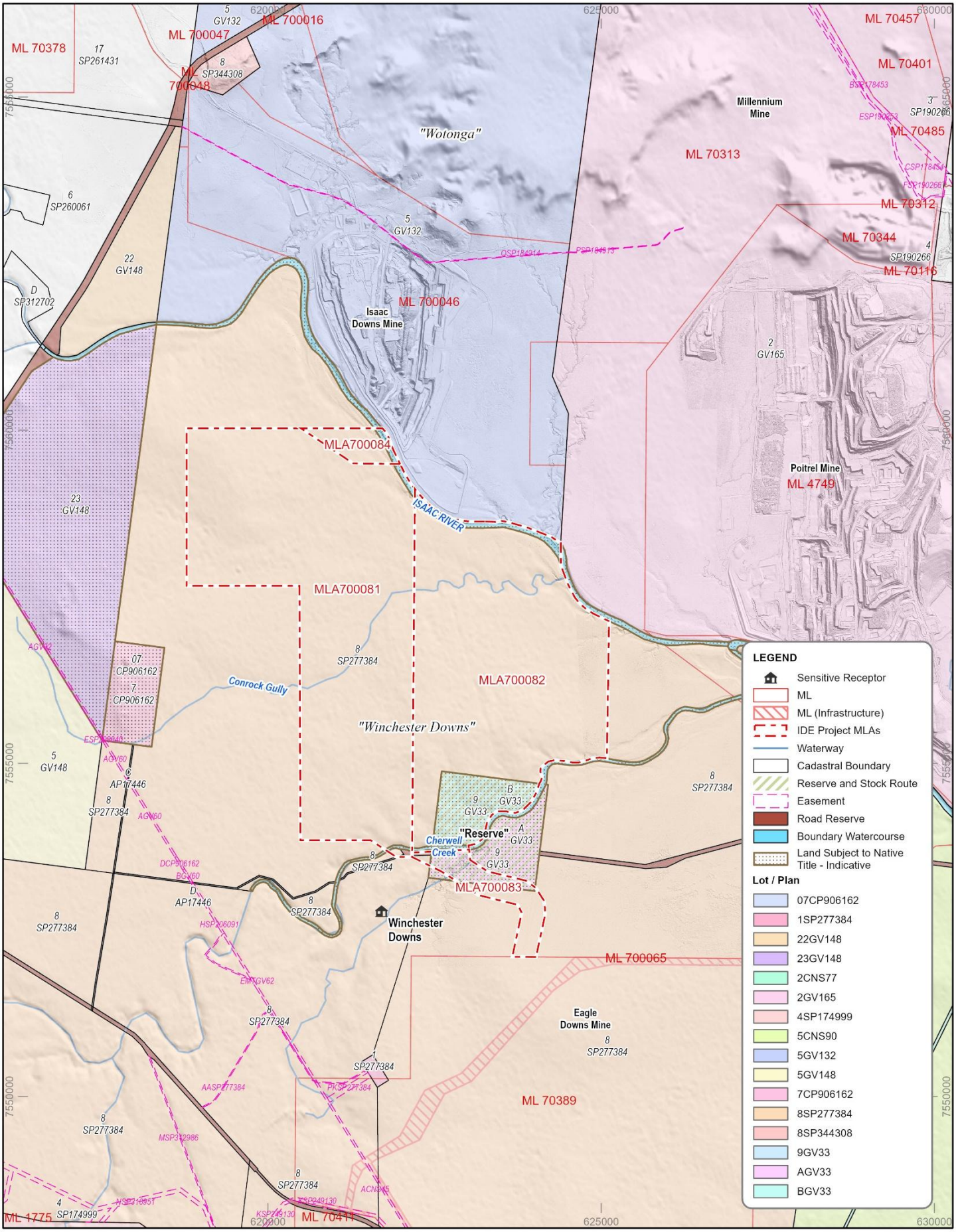
ES1.6 Land and Geology

The properties within and surrounding the Project area are shown in Figure ES1-3. The properties intersecting the Project's MLAs are Winchester Downs (pastoral holding), a State Reserve (a stock route for grazing purposes) and cadastral boundaries for watercourses and unformed roads. Prior to the grant of the Project's MLs, the proponent will enter into a compensation agreement with Winchester Downs, and seek consent from the State for access to Reserve land.

The primary land use within the Project area is grazing on native and modified pastures. In addition, in the vicinity of the Project, coal mining and pastoral activities are the predominant land uses. The Project's planned coal mining activities are consistent and compatible with the surrounding land uses. No areas of regional interest, key resource areas or protected areas are within or in close proximity to the Project area.

An assessment to evaluate potential for existing (pre-mining) contamination within and surrounding the Project area was completed and concluded that there was a low risk of contamination. Should potential contamination sources be encountered during Project activities, further investigations will undertaken in compliance with the applicable legislation, standards and guidelines for contaminated land management.

The Project's regional and local geology, including coal seams have been described based on geological studies. The Project's coal deposit is located in the northern part of the Permo-Triassic Bowen Basin. The Leichhardt Seam and the Vermont Seam form the principal economic coal resources in the Project area and are located in the Rangal Coal Measures. The coal seams will be mined to a depth of around 100 m. The Rangal Coal Measures are underlain by the Fort Cooper Coal Measures and overlain by the Late Permian to Early Triassic Rewan Group. Non-coal Permian sediments consist of moderately weak to strong sandstones, siltstones and minor mudstones. The Project area and surrounds contains Quaternary sediments that range in thickness from 2 to 20 m, which are present along the banks of the Isaac River and, to a lesser extent, along Cherwell Creek.



Datum:	GDA2020 Zone 55
Scale:	See Scale Bar
Date:	2/06/2026 7:31 AM
Drawn:	Minserve
Source:	Minserve/Stanmore
File:	20260223 Landownership Plan.aprx

stanmore

ISAAC DOWNS EXTENSION

Properties

Figure | **ES 1-3**

ES1.7 Rehabilitation and Closure

ES1.7.1 Progressive Rehabilitation and Closure Plan

A PRCP and draft PRCP schedule have been prepared for the Project as part of the EIS, in accordance with State regulatory requirements. The draft PRCP schedule defines rehabilitation areas, rehabilitation milestones and the schedule for achievement of each of the rehabilitation milestones for each rehabilitation area. Rehabilitation milestone criteria have been developed to assess whether rehabilitation milestones have been achieved. Achievement of rehabilitation milestone criteria will result in a safe, stable and non-polluting rehabilitated closure landform that can support the planned post-mining land uses (PMLUs). Rehabilitation will occur progressively as land becomes available for rehabilitation.

The PRCP includes rehabilitation monitoring and maintenance activities, and an assessment of the potential risks associated with the planned rehabilitation not achieving a stable condition. With the implementation of proposed management and mitigation measures, residual risks were assessed as low to medium (i.e. acceptable).

ES1.7.2 Final Landform Design to Achieve Post Mining Land Uses

Options for the final landform were assessed, based on identified constraints and achieving a PMLU for all rehabilitation areas. Non-use management areas (NUMAs) are not proposed for the Project. The proposed final landform is shown in Figure ES1-4, and the design includes:

- a permanent, hydraulically stable diversion of Conrock Gully to access resources in the central mining area
- a residual void, with the void size minimised
- rehabilitating the Isaac River levee and reinstating the floodplain
- locating the residual void outside of the 0.1% AEP (1,1000 year) flood event, requiring backfilling of the northern pit area to pre-mining topographical levels
- consideration of landholder and stakeholder preferences for PMLUs supporting pastoral activities and future economic, non-mining activities.

The majority of disturbance areas are proposed to be returned to a grazing PMLU, similar to pre-mining. Native vegetation PMLUs have been proposed for Conrock Gully diversion (riparian woodland), crossings of watercourses (riparian ecosystems) and a small portion of the internally draining low wall slope (woodland). Beneficial uses have been identified for the residual void lake.

A lake will form in the residual void post mine life as a result of the balance between sources of water inflow and outflow (e.g. rainfall, evaporation, groundwater inflows). An iterative process was used in the design of the residual void and associated modelling of lake levels and water quality to achieve beneficial uses for the residual void. Options considered for the residual void included a maximum void size and partial backfill of the void. Void lake water quality modelling demonstrated that these options did not result in a lake with long term water quality suitable for livestock, and would therefore potentially result in the void being a NUMA. The partial backfill of the void would have significant costs with no improvement in environmental or social outcomes. The preferred option is to minimise the void size, whilst maximising the catchment to the void from the in-pit dump, which resulted in modelled long term water quality being suitable for livestock. The southern portion of the mine pit will be partially backfilled to create a low angle ramp for stock access to the void lake.

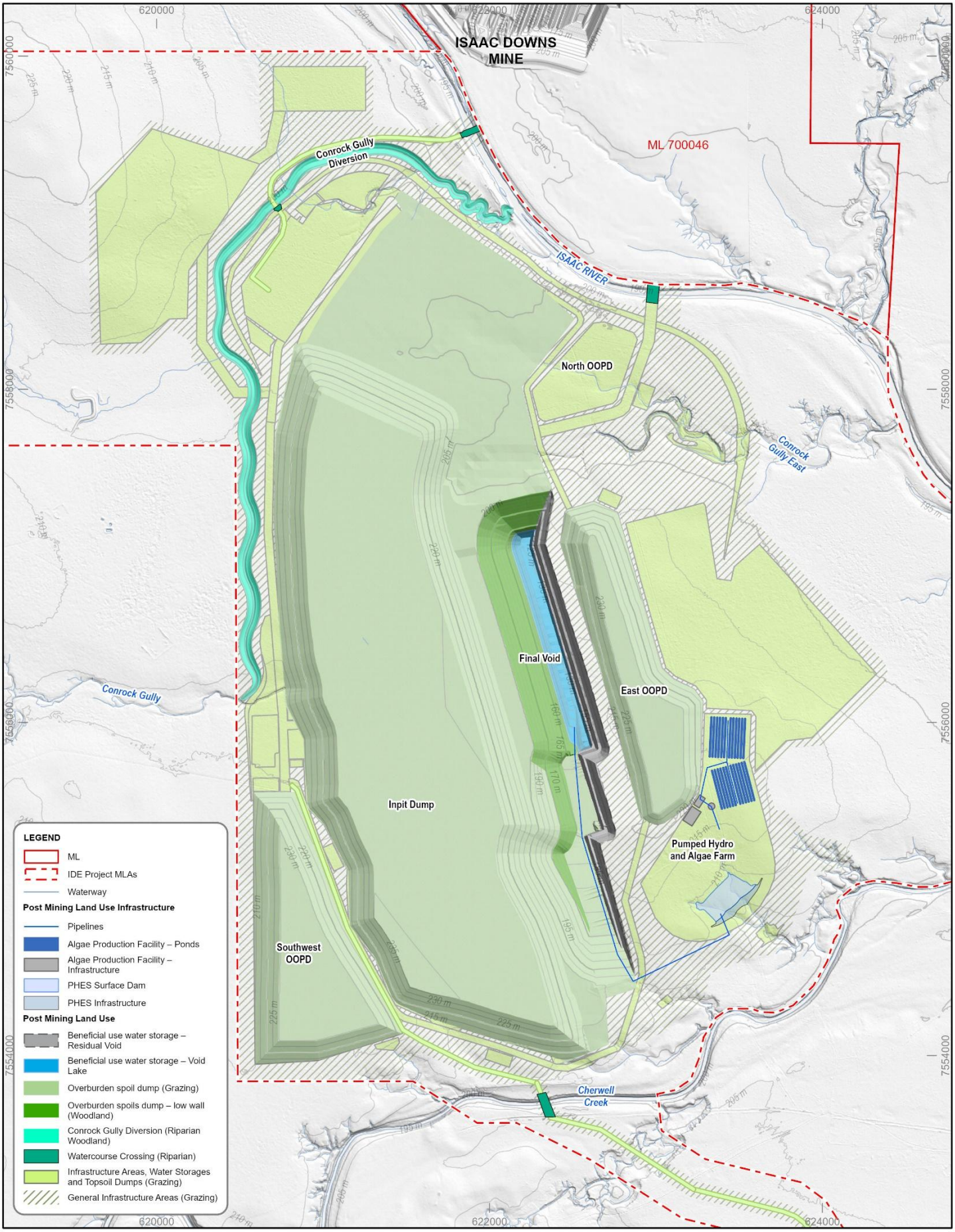
In addition to the beneficial use of void water as a livestock drinking water supply, the commercial and technical feasibility of other potential PMLUs for the void lake were assessed. Based on years of research from the University of Queensland and associates, use of void water to supply an algae production facility was found to be commercially and technically feasibility, with markets for algae products in existence, and algae suited to growing in water sourced from the void. The potential for a small scale pumped

hydroelectricity energy scheme (PHES) ('pumped hydro') was investigated, and was found to be commercially and technically feasibility based on the utilisation of water storages, infrastructure and power supply developed for mining activities.

The residual void design was found to be geotechnically stable. The residual void lake will be a long term groundwater sink (see Section ES1.11). Complete backfill of the residual void was assessed and found not to be economically viable for operation of the Project.

Out of pit dump locations were selected to avoid interactions with the Isaac River and Cherwell Creek floodplains, stay within the ML boundaries and avoid remnant vegetation as far as reasonably practical. The design of overburden dumps was based on achieving long-term erosional and geotechnical stability, with a non-polluting and sustainable PMLU, and was supported by:

- slope angles (≤ 15% on all dump slopes other than a small portion of internally draining low wall slope which is ≤ 25% and will be rock armoured)
- recovered soils proposed for use as the primary growth media
- geochemistry of overburden and interburden (spoil)
- vegetation cover (≥ 65% on all slopes, other than the rock armoured portion of the internally draining low wall slope, with ≥ 30%)
- landform erosion modelling
- ability to support the proposed PMLU, primarily grazing
- geotechnical modelling.



Datum:	GDA2020 Zone 55
Scale:	See Scale Bar
Date:	25/05/2026 12:38 PM
Drawn:	Minserve
Source:	Minserve/Stanmore
File:	20260525 Final Landform and PMLU.aprx

stanmore

ISAAC DOWNS EXTENSION

Final Landform

Figure | **ES 1-4**

ES1.7.3 Final Landform Studies

Soils sampling and analysis enabled characterisation of the soil resources of the Project area for future use in rehabilitation, and informed the proposed management and handling of soils. Sufficient volumes of good quality topsoil (unlikely to require amelioration) and marginal topsoil (requiring limited amelioration) can be recovered for use as a growth medium in rehabilitation, with a 0.3 m depth of placement.

The Project's soils assessment included a classification of the pre-mining land suitability for grazing purposes, with the majority (93%) of the land being Class 4 (suitable with management) and a small proportion (6%) being Class 3 (suitable) for grazing on improved pastures. The Project's soils study area was largely unsuitable for cropping. Therefore, achievement of a land suitability of Class 4 is proposed for rehabilitation areas with a grazing PMLU.

An assessment of erosion potential for the rehabilitated final landform was informed by soils data, geochemical and geophysical properties of spoil, rainfall simulation, vegetation cover estimates and landform evolution modelling. The assessment was used to predict maximum erosionally stable slope lengths for the Project's spoil dumps and demonstrated that the final landform slopes are expected to erode at an acceptable annual average erosion rates of less than 5 tonnes per hectare per year.

The geochemical assessment involved laboratory analysis of spoil and coal samples taken from core holes in the Project's pit area, a geochemical hazard assessment and a post-closure source-pathway-receptor (SPR) assessment for seepage from spoil. The Project's spoil has a very low potential to generate acid mine drainage, low metals concentrations and low salinity, and therefore poses a low hazard potential. The SPR assessment concluded that the overall risk rating for seepage from the Project's closure landforms was low based on the low geochemical hazard rating and inward hydraulic gradient towards to the pit during mining and closure (i.e. the pit will be a groundwater sink).

Geotechnical modelling was undertaken for the proposed residual void slopes, out-of-pit spoil dump slopes and in-pit spoil dump slopes. This modelling demonstrated that the final landform slopes should be geotechnically stable in the long-term because they meet or exceed the design acceptance criteria of a factor of safety of ≥ 1.5.

Ecological studies and information were used to develop proposed species for use in rehabilitation and seeding rates.

These studies demonstrate that the rehabilitated closure landform is predicted to be safe, stable, non-polluting and able to sustain the planned PMLUs.

ES1.8 Climate

The local and regional climatic conditions likely to be experienced by the Project were assessed based on existing climate data and future predictions of climate change. The expected influence of the key climate conditions has been incorporated into assessments of Project impacts and the development of mitigation measures. Climate change predictions were based on conservative (worst case) predictions for the Isaac region to assess the Project's vulnerabilities to climate change. Climate change predictions were incorporated into flood modelling, water management system modelling, residual void lake modelling, and landform evolution modelling.

The potential impacts associated with the combination of climate extremes and change over the life of the Project were identified and mitigation strategies were developed to appropriately manage these impacts. The residual risk (i.e. with proposed management measures) of climate extremes and change on the Project was assessed as low to medium (i.e. an acceptable outcome).

ES1.9 Surface Water and Water Management

The Project is located within the Isaac River sub-catchment of the greater Fitzroy Basin (Figure ES1-5). The Isaac River is the main watercourse in the vicinity of the Project area, and flows in a northwest to southeast direction to the east of the Project. The southern extent of the Project area is bordered by Cherwell Creek which is a major tributary of the Isaac River. The small catchment of Conrock Gully intersects the Project area.

The environmental values of surface waters within and surrounding the Project area, including catchments, watercourses, drainage features, regional and local water quality and stream flows, were identified through field based monitoring and studies and desktop information. Water quality objectives for surface waters were developed through regulatory guidelines, and regional and local water quality sampling.

A water management system was developed for all water types for the Project, and is the primary management measure to mitigate potential impacts to surface waters. The water management system involves separation of mine-affected water, sediment water and clean water. Raw water will be imported to site under existing allocations from Sunwater for IPC. The Project's water management system has been integrated into IPC's water management system, which allows for balancing of mine-affected water flows, transfers of raw water, and hence a reduction in storage requirements at the Project.

Mine-affected water dams and sediment dams have been designed to achieve the objective of the water management system to protect downstream environmental values. A preliminary consequence category assessment has been completed for all water storages which, based on the low consequence of failure, were not assessed as 'regulated structures' in accordance with the States regulatory framework.

A comprehensive numerical water balance model was developed to test the performance of the water management system. The model simulated water inflows and outflows through the various stages of mine development with different climatic sequences. The model maximises the recycling of water from water storages to meet Project water demands. The system assessment found the following:

- There would be no uncontrolled releases of mine-affected water.
- Controlled releases of mine-affected water would be undertaken in accordance with flow and water quality criteria designed to protect downstream environmental values and water quality objectives, including negligible change in the salinity of receiving waters.
- Sediment dam overflows would occur in accordance with their engineered design standard during wet or very wet climatic conditions, but these overflows would result in a negligible change in salinity of receiving waters.
- The Project's mine pit would continue to operate in all but very wet climatic conditions.
- The Project would be a net importer of water from the rest of IPC.
- Void water storages at IPC would remain well below their capacity, including storage of any excess water from the Project.
- The whole of IPC, inclusive of the Project would not require an external raw water supply in excess of the existing allocations with Sunwater.
- During the period of operations, changes in climate would lower the risk of pit inundation, controlled release volumes and sediment dam overflow volumes.

During operations the water management system will capture water that would otherwise report to the watercourses. The final landform, which includes a residual void, will capture runoff that would otherwise report to the watercourses, but to a lesser extent than during operations. This loss of streamflow is expected to be negligible for the Isaac River and Cherwell Creek. There will be a loss of flows to the downstream reach of Conrock Gully. However, this area will continue to be flooded by backwater flood flows from the Isaac River for flood events greater than 1 in 2 years.

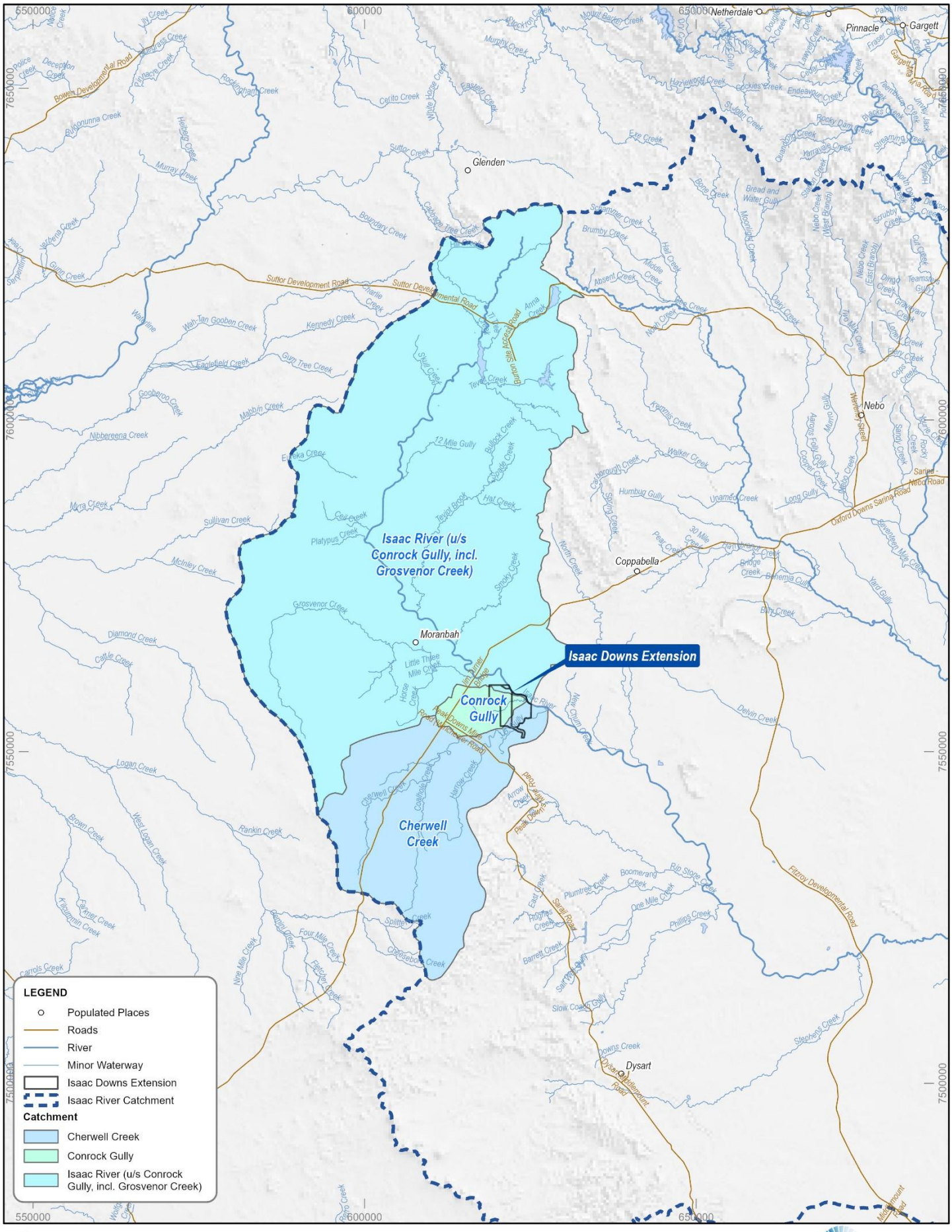
The Project will not result in a net decline in water quality to surface water basins that feed into the Great Barrier Reef (GBR).

In areas with potential contaminants such as hydrocarbons or chemicals (e.g. go-line area), additional controls will be implemented to prevent the release of contaminants, capture any contaminants in management systems and remediate spills if they occur.

An erosion and sediment control plan has been developed to manage sediment releases during construction and operations, through the design and installation of erosion and sediment control structures including strategically located sediment dams.

A surface water monitoring program has been developed to monitor releases from the Project, including the development of release limits based on variable flows and water quality, release contaminant trigger investigation levels, and receiving water contaminant trigger levels for mine-affected water. The proponent proposes to join the Fitzroy Regional Receiving Environment Monitoring Program (FRREMP) (as supported by DETSI), as a regional industry participant, to monitor any changes to the receiving environment. The surface water monitoring program and FRREMP will be implemented to monitor potential environmental impacts and ensure that the site water management system is meeting its objectives.

Potential impacts of the Project on surface water resources were assessed with reference to Commonwealth's Significant impact guidelines 1.3: Coal seam gas and large coal mining developments – impacts on water resources. The assessment demonstrates that residual impacts of the Project on surface water resource values are either low or moderate; and hence are unlikely to result in a significant impact to surface water resources.



Datum:	GDA2020 Zone 55
Scale:	See Scale Bar
Date:	21/05/2026 11:16 AM
Drawn:	Minserve
Source:	Hydrobalance
File:	20260223 Upper Isaac River Drainage.aprx

stanmore

ISAAC DOWNS EXTENSION

Upper Isaac River Catchments

Figure | **ES 1-5**

ES1.10 Hydrology and Geomorphology

Detailed hydraulic and geomorphic modelling for a range of flood events has been completed for the Project for the operational and closure periods, inclusive of all Project structures and landforms with the potential to alter hydrology and geomorphology. The model results were used to assess the potential impacts of the Project's mining and post-closure landforms on flood levels and velocities, and the geomorphic behaviour of watercourses and floodplains.

The design of infrastructure with the potential to alter hydrology and geomorphology has been undertaken to minimise impacts (e.g. locating the Isaac River levee approximately 100–400 m from the high bank, bridge designs with minimal interference with flows, and a temporary dragline crossing during the dry season). Following operations, infrastructure will be decommissioned and rehabilitated, further reducing hydrological impacts, primarily by allowing for the return of the floodplain into areas previously protected by the Isaac River levee.

In addition, modelling has been completed for five cross sections through the Isaac River and adjoining floodplain upstream, adjacent and downstream of the Project, with the five cross sections representing areas of potential ecological value. Modelling has identified, in the context of the regional, rural landscape:

- The Project will have negligible impact on hydrology and geomorphology (e.g. flood levels, velocity, bed shear stress and stream power) for more frequent flood events (e.g. 10% AEP or 1:10 year flood event)
- The Project will have negligible to minor impact on hydrology and geomorphology for less frequent flood events (e.g. 1% AEP or 1:100 year flood event) during operations.
- Post mining, with the decommissioning and rehabilitation of the crossing infrastructure and the Isaac River levee, and restoration of the associated floodplain, the Project will have negligible impact on hydrology and geomorphology.
- The Project will result in almost no change in the duration for which flood events will occur, with less than 1 hour change in duration for all AEP events, as measured at the nominated cross section locations.
- The proposed design of Conrock Gully diversion will be hydraulically and geomorphically stable, with revegetation to a native ecosystem, and will be similar to the existing Gully. The remnant Conrock Gully channel downstream of the Project will continue to be flooded by the Isaac River backwaters, with lower velocities than pre-mining.
- There are no material flood change impacts to upstream and downstream property infrastructure, flood management infrastructure at other mines, or at the Peak Downs Highway bridge or the Goonyella Railway bridge, for all of the modelled events.

A functional design report was developed for the Conrock Gully diversion to address the objectives, design criteria and required outcomes of the relevant State guidelines. A hydraulic assessment of the Conrock Gully diversion demonstrates that the diversion design reasonably matches the existing Conrock Gully geometry and the design hydraulic conditions are similar, and generally improved, to those in the existing Conrock Gully channel, and are consistent with the guidelines for channel-averaged shear stress, stream power and velocity.

A preliminary consequence category assessment determined that the Project's levees would be 'regulated structures' in accordance with the States regulatory framework, and hence be subject to specific design, construction and operational requirements, including protecting the Project's mining operations from a 0.1% AEP flood event. Rock protection is proposed along a 2.5 km section of the Isaac River levee to mitigate potential scour risk.

ES1.11 Groundwater

The groundwater assessment included identifying groundwater environmental values of the Project area and surrounds, undertaking groundwater fieldwork investigations, developing conceptual groundwater and ecohydrological models, assessing impacts on groundwater values through the development of a numerical groundwater model, and determining management measures and mitigation strategies to protect groundwater values.

Groundwater values were determined through a comprehensive fieldwork program, supported by geological and desktop data from other local and regional resource projects. The field program included 60 monitoring bores, landholder bore census, routine groundwater level and quality monitoring, fault drilling and geophysical testing, and electrical resistivity imaging along the Isaac River and Cherwell Creek to determine the extent and thickness of the alluvium.

Based on the understanding of the fieldwork, desktop data and geological setting, the hydrogeological regime of the Project area comprises the following key hydrogeological units, as shown in Figure ES1-6:

- Cenozoic sediments:
  - Quaternary alluvium – forms the unconfined alluvial aquifer localised to major ephemeral drainage lines (i.e. Isaac River and Cherwell Creek).
  - Perched groundwater systems are likely to occur within the alluvium. These are discrete groundwater units sitting above the alluvial aquifer / water table, and are separated by an unsaturated zone.
  - Quaternary to Tertiary non-alluvial sediments and weathered units (collectively termed 'regolith') – unconfined unit with variable but limited saturation and generally present at the surface within the Project area.
- Triassic Rewan Group – considered a regional scale aquitard.
- Permian coal measures with:
  - low permeability interburden and overburden units with aquitard properties.
  - coal seam aquifers, identified as the main aquifers for the Project and surrounding area.

Groundwater data allowed for the characterisation of hydraulic properties, recharge, flow, discharge and quality. Water quality in the Cenozoic sediments (including alluvium) ranges from brackish to highly saline and is likely to be unsuitable for aquatic ecosystem protection however is considered suitable for stock watering and irrigation in some areas. Water quality in the Permian units ranges from brackish to highly saline and is generally unsuitable to be used for stock watering, irrigation, and aquatic ecosystem protection. Water quality objectives were defined for the various groundwater units based on State and Commonwealth guidelines.

The potential groundwater receptors in the vicinity of the Project are landholder bores, groundwater dependent ecosystems (GDEs) and stygofauna.

Multiple lines of scientific field data were applied to assess the groundwater dependence of vegetation across assessment areas within and surrounding the Project area. This data was complemented by data on site-specific geology, geomorphology, soil physical properties, and groundwater.

A conceptual hydrogeological model of the groundwater regime was developed based on hydrogeological information obtained for the Project area and surrounds (see Figure ES1-6).

Where present, the alluvial aquifer is disconnected from the riverbed elevation. Spatially, the alluvial aquifer is locally variably saturated and is dry and/or comprised only of clay in several locations. Shallow perched groundwater systems occur locally within recent channel sands and bank deposits, typically within 1–2 m of the ground surface. These perched systems are transient, seasonally recharged during flow and flood events, and are hydraulically disconnected from the deeper alluvial aquifer.

In the Permian coal measures, groundwater is encountered mainly in the coal seams. The Permian coal measures at and surrounding the Project have undergone extensive deformation. The main northwest-southeast trending fault is the Isaac Thrust Fault to the east of the Project area, with testing confirming that the fault does not provide a higher permeability pathway for groundwater flow in the Permian coal measures.

An ecohydrological model was developed based on fieldwork and an understanding of groundwater and surface water environments, which resulted in the identification of GDEs along the Isaac River, lower portions of Cherwell Creek near its confluence with the Isaac River, and a State mapped 'high ecological significance (HES)' wetland (1.5 km east of the Project area). Riparian vegetation fringing the Isaac River and lower reaches of Cherwell Creek utilises a discontinuous and seasonally variable perched groundwater system that is associated with active alluvial deposits, including fluvial sands, riverbanks, and river terraces, extending laterally from the main river channel underneath the riverbanks in some locations to support riparian terrestrial GDEs. Field data indicates that GDEs rely on this perched groundwater system rather than deeper alluvial aquifer. Recharge of the perched groundwater unit occurs through surface flows fed by seasonal rainfall events, which leak into the alluvial aquifer via a weak unsaturated hydraulic connection. The HES wetland is maintained by infiltration of seasonally ponded wetland surface water, with perched groundwater discharge driven by transpiration. The HES wetland is not connected with the deeper alluvial aquifer.

A stygofauna pilot survey was completed across bores in all aquifer units in accordance with relevant State and Commonwealth guidelines. The alluvial aquifer in the vicinity of the Isaac River is considered to be the primary location for stygofauna assemblages within and surrounding the Project area. At a taxonomic level, comparable with historical reporting and studies across the region, the identified stygofauna are the same taxonomic groups that are most commonly recorded across Queensland.

During mining, excavation of open cut pits and depressurisation of the coal seams will create localised hydraulic sinks, resulting in a change of natural hydraulic gradients in the vicinity of the mining area. Groundwater flow will be directed toward the pit from the surrounding coal seams, and regolith. This inward flow regime causes localised drawdown and depressurisation; however, the extent of these changes is constrained by the low permeability interburden. The discontinuous nature of the alluvial aquifer, combined with its weak hydraulic connectivity to deeper units, means that regional flow directions, aligned to drainage, will be largely maintained.

A numerical groundwater model was developed for the Project. An existing regional scale groundwater model informs and underpins the Project's numerical groundwater model, with the core model architecture remaining consistent, with targeted refinements and scenario applications for the Project. Groundwater modelling included model calibration, model predictions, and sensitivity and uncertainty analysis.

An independent technical peer review of the numerical groundwater modelling was undertaken. This review determined that the model is fit for purpose, which is to produce a calibrated groundwater model that predicts groundwater inflows, drawdown, flow changes and impacts from the Project.

Numerical modelling was used to predict Project only (incremental) impacts and cumulative impacts with other resource projects during and post mining.

No incremental drawdown impacts exceeding 1 m are predicted for the alluvium as a result of the Project. The predicted maximum incremental drawdown is less than 2 m within the regolith, and is confined to a small area directly south of the Project area. The coal seams of the Rangal Coal Measures experience drawdowns as a result of mining at the Project, with these occurring along the western margin of the pit area in both coal seams.

Cumulative drawdown increases with depth, with the most pronounced depressurisation occurring within the mined coal seams. Shallower units exhibit broader but lower-magnitude cumulative drawdown

patterns. The spatial extent of cumulative drawdown reflects the combined influence of long-term mining activities within the Project area and nearby resource operations.

Post mining drawdown magnitudes are substantially reduced compared to maximum drawdown, typically during mining. For the Project, residual incremental drawdown is largely confined to areas immediately surrounding the pit area, with no widespread drawdown persisting beyond the Project area. This indicates a high degree of groundwater recovery following cessation of mining.

The perched groundwater system is not subject to drawdown from the Project or other resource projects. As GDEs demonstrate a reliance on the perched groundwater system rather than the deeper alluvial aquifer, groundwater drawdown associated with the Project or other resource projects (i.e. cumulative drawdown) is unlikely to impacts GDEs. This conclusion is supported by GDE monitoring results for IDM since 2020 along the Isaac River, where there has been no decline in GDE health.

The Project has a negligible contribution to drawdown in the alluvium and therefore a negligible contribution to any potential impacts on stygofauna in the alluvium. At the taxonomic level available for other studies across the region, the stygofauna assemblages identified in the Project's assessment are not unique. Localised cumulative impacts to the alluvium represent a relatively small portion of the available habitat. Therefore, the Project is considered unlikely to impact the long term survival and persistence of stygofauna communities.

Modelling identified that the Project would result in a negligible loss of water from the alluvial aquifer during and post mining. A natural hydraulic gradient exists between the Isaac River and the associated alluvium that results in seepage from the Isaac River to the alluvium (i.e. a losing system). The change in alluvial aquifer groundwater levels induced by mining does not have the potential to increase the hydraulic gradient between the Isaac River and associated alluvium. Consequently, the model does not predict that the average rate of seepage from the Isaac River to the alluvium will increase over the life of the Project, and therefore the Project does not result in any loss of baseflow to the Isaac River, and there are no other predicted groundwater-related impacts to surface drainage as a result of the Project.

Model results demonstrate that the residual void remains a long-term groundwater sink, limiting the potential for off-site groundwater quality impacts.

Groundwater modelling at each landholder bore demonstrates that drawdown at all bores for the most likely model predictions will not exceed a 2 m drawdown threshold. Monitoring will be undertaken at landholder bores and the proponent will enter a make good agreement if drawdown at landholder bores exceeds the relevant threshold.

Based on the geochemical characteristics and assessed seepage behaviour of in-pit and out-of-pit spoil, seepage from spoil emplacements presents a low risk to groundwater quality during operations and post-closure. Further groundwater quality is unlikely to be impacted by the Project due to the inward hydraulic flow towards the pit area during mining, and the residual void post mining. Controls will be implemented to manage any localised spills of hydrocarbons or chemicals.

The design of the Project's surface water management systems will protect downstream environmental values and hence minimise any impact on GDEs. Changes to hydrology and geomorphology from the Project are expected to have negligible impact on GDEs. Approximately 6.8 ha of GDEs occur in the Project disturbance area; however the actual extent of clearing in these areas is likely to be less. In addition, all impacts to GDEs in the disturbance area have been assessed as part of the terrestrial ecology assessment, and therefore, will be subject to biodiversity offsets, and will be rehabilitated to a riparian ecosystem.

A groundwater monitoring and management (GMMP) has been developed to detect changes in groundwater levels and quality, and establish groundwater quality limits, groundwater level triggers and investigation procedures should limits or triggers be exceeded. The GMMP comprises a comprehensive bore network within and surrounding the Project area in all aquifer units, with bores for monitoring compliance and bores for interpretation of background conditions.

Despite the findings of low potential for impacts to GDEs, the proponent has developed a comprehensive GDE monitoring and management plan (GDEMMP), which is designed to monitor and detect changes in GDE health that may be attributable to Project activities. Should the Project impact GDE health then corrective actions are proposed, and if there is still a significant impact to GDEs, as measured by changes in habitat quality to listed species that utilise the identified GDEs, then biodiversity offsets will be provided. The GDE assessment determined that the residual (post mitigation) risk of the Project's potential impacts on GDEs was insignificant to low.

Potential impacts of the Project on groundwater resources were assessed with reference to Commonwealth's Significant impact guidelines 1.3: Coal seam gas and large coal mining developments – impacts on water resources. The assessment demonstrates that residual impacts of the Project on groundwater resource values are either low or moderate; and hence are unlikely to result in a significant impact to groundwater resources.

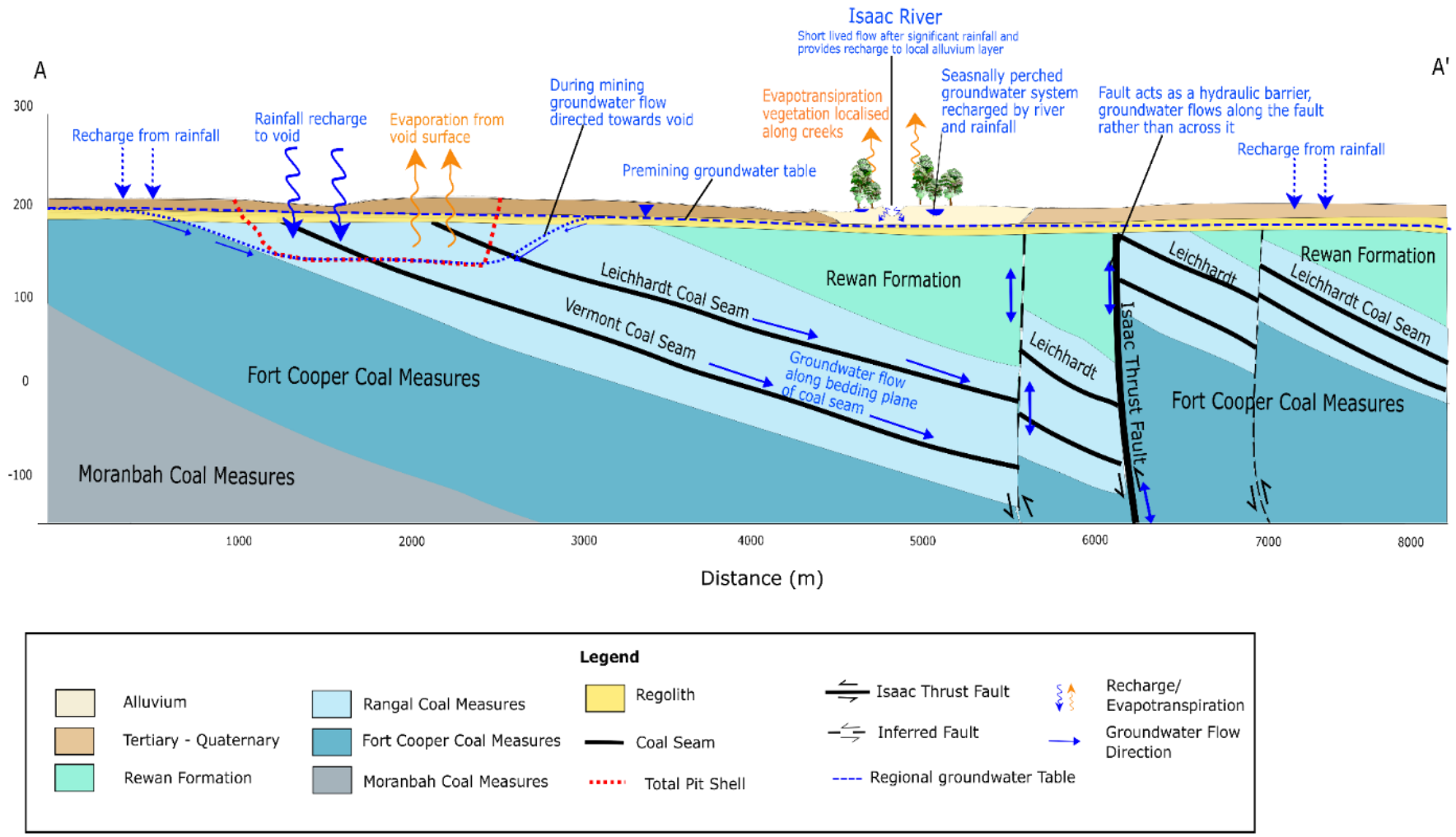


Figure ES1-6 Conceptual Hydrogeological Model of the Project Groundwater System

ES1.12 Terrestrial Ecology

A comprehensive evaluation of the terrestrial ecological values within and surrounding the Project area was undertaken. The assessment has been informed by an extensive program of desktop investigations, targeted wet and dry season field surveys, habitat suitability and quality assessments, and detailed ecological mapping by suitably qualified ecologists. Desktop assessments informed the likelihood of occurrence of Commonwealth and State listed threatened ecological communities (TECs) and species in a survey area within and surrounding the Project area. Ecology surveys were conducted in accordance with relevant Commonwealth and State guidelines.

The assessment confirmed that the survey area supports terrestrial ecological values shaped by a long history of pastoral land use, including remnant, regrowth and non-remnant vegetation communities. These communities occur within the Brigalow Belt North bioregion and include ecosystems of State and national conservation significance. Regional ecosystem (RE) mapping and species' habitat definitions were used to inform mapping of vegetation communities and habitat for Commonwealth and State listed threatened species. Field verified vegetation communities are shown in Figure ES1-7, showing the high proportion of non-remnant vegetation (cleared areas and exotic grasslands) in the proposed disturbance area.

The following MNES were identified in the survey area:

- Brigalow TEC, Natural Grasslands TEC, Poplar Box TEC and semi-evergreen vine thicket (SEVT) TEC
- habitat for listed threatened species, namely Squatter Pigeon, Koala, Greater Glider (southern and central), Ornamental Snake, Australian Painted Snipe, Sharp-tailed Sandpiper, Common Greenshank, King Bluegrass and Bluegrass
- habitat for two listed migratory species.

The following matters of state environmental significance (MSES), that are not also MNES, were identified in the survey area:

- endangered and of concern REs
- REs that intersect a wetland or a defined distance from a watercourse
- wildlife habitat for a special least concern species, the Short-beaked Echidna
- connectivity areas.

These ecological values represent the primary ecological values of conservation significance relevant to the Project, and informed the impact assessment and mitigation measures.

Consistent with the mitigation hierarchy, the Project has been designed to prioritise avoidance of sensitive ecological values where practicable. Where avoidance was not possible, mitigation and management measures have been developed to minimise impacts during construction, operation and rehabilitation.

The Project will result in direct impacts to terrestrial ecology values through vegetation clearing and loss of habitat. However, the disturbance area has been carefully designed to minimise impacts to areas of remnant vegetation that could contain MNES or MSES. Remnant vegetation represents 334 ha or 16% of the total disturbance area of 2,083 ha. By comparison the Project area contains 769 ha of remnant vegetation, and therefore 435 ha of remnant vegetation, that could potentially have been impacted, has been avoided. Where high-value habitats occur, particularly along riparian corridors and within ecologically significant wetlands, these areas have been clearly identified to inform impact avoidance and management measures. Some MNES or MSES that occur in the survey area and Project area have been avoided entirely, or have very small areas of occurrence (e.g. < 1.5 ha) in the disturbance area, including Natural Grasslands TEC, SEVT TEC and habitat for Australian Painted Snipe, Sharp-tailed Sandpiper, Common Greenshank, King Bluegrass and Bluegrass. In addition, management measures are proposed to mitigate direct impacts including vegetation clearing protocols, pre-clearance surveys and a species management plan.

The Project has potential for indirect impacts on terrestrial ecology values, including from changes to pests and weeds, fragmentation or edge effects, fauna mortality, hydrological changes, changes to air quality, noise or lighting, and bushfire risk. However, management measures are proposed to mitigate indirect impacts including vegetation management in non-disturbance areas, a weed and pest management plan, buffer zones in sensitive ecological areas, worker training, rehabilitation of riparian ecosystems, water infrastructure designed to minimise hydrological impacts, erosion and sediment control plan, dust, noise and light management, and a bushfire management plan. With these management measures in place, indirect impacts are unlikely to result in significant residual impacts to MNES and MSES.

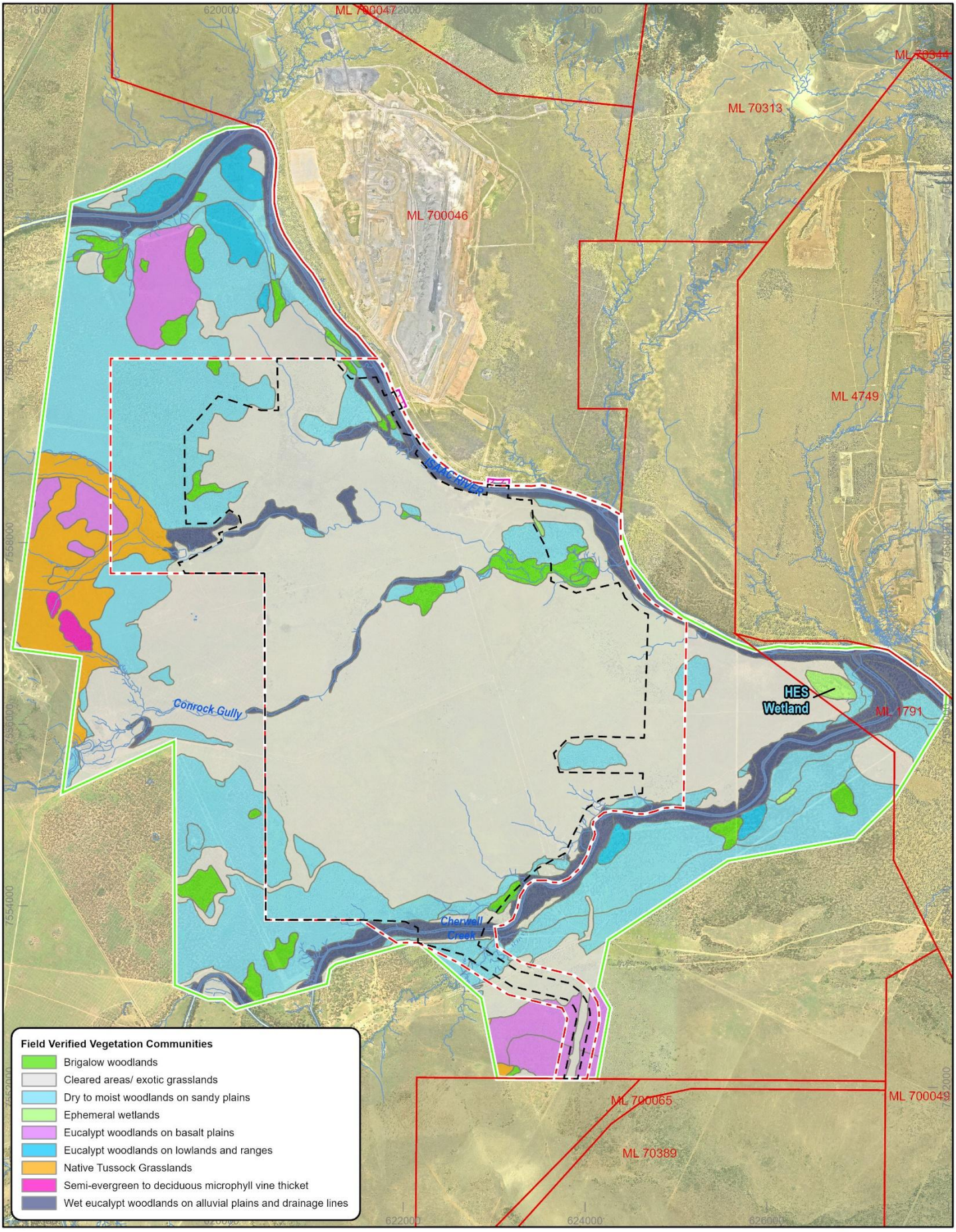
The potential for the Project to contribute to cumulative impacts to terrestrial ecology at the bioregional, sub-regional and local scales was found to be negligible to minor.

The significance of impacts, after implementation of the proposed management measures, was assessed in accordance with State and Commonwealth guidelines. The assessment determined that the Project was likely to result in the following significant impacts to MNES and MSES:

- Brigalow TEC – 53 ha
- Poplar Box TEC – 15.5 ha
- Squatter pigeon habitat – 334 ha
- Koala habitat – 318 ha
- Greater Glider habitat – 318 ha
- Ornamental Snake habitat – 76 ha
- Endangered and of concern REs – 70 ha
- REs that intersect a wetland or a defined distance from a watercourse – 11 ha
- connectivity areas – 347.5 ha.

The Project is unlikely to result in significant impacts to migratory species.

Biodiversity offsets are proposed to compensate for significant residual impacts to MNES and MSES (see Section ES1.14).



0 250 500 750 1000 1250

Metres

LEGEND

- ML
- Waterway
- IDE Project MLAs
- Disturbance Area on Project MLs
- Additonal Disturbance Area
- Survey Area

Datum:	GDA2020 Zone 55
Scale:	See Scale Bar
Date:	15/05/2026 9:04 AM
Drawn:	Minserve
Source:	Minserve/Stanmore
File:	20260421 RE Field Verified Veg Community.aprx

stanmore

ISAAC DOWNS EXTENSION

Field Verified Vegetation Communities

Figure | **ES 1-7**

ES1.13 Aquatic Ecology

The aquatic ecology assessment identified aquatic environments within and adjacent to the Project area that are predominantly ephemeral and strongly influenced by seasonal rainfall, surface flow conditions and water permanency. Aquatic habitats within the study area include the Isaac River, Cherwell Creek, Conrock Gully, JB Gully, unnamed tributaries, palustrine wetlands, gilgais and shallow depressions. The majority of sites were assessed as having low aquatic ecosystem values, with moderate values recorded along the Isaac River and at selected wetlands and gilgais, and high aquatic values recorded at a State mapped HES wetland located 1.5 km east of the Project area.

No Commonwealth and State listed threatened aquatic species were recorded during field surveys, and the identified MNES/MSES turtle species were considered unlikely to occur within the study area due to the absence of suitable habitat and the distance from known records. No threatened aquatic flora, threatened macroinvertebrates or aquatic weeds of national significance were recorded. The aquatic communities recorded, including macrophytes, macroinvertebrates, macrocrustaceans, fish, frogs and turtles, were generally characteristic of ephemeral systems in central Queensland.

Potential impacts to aquatic ecology were assessed in relation to aquatic habitat modification, changes to surface water hydrology, wetlands, fish passage, water management, aquatic pests, leaks and spills and biological diversity.

The Project layout and design have sought to avoid waterways where possible and minimise impacts where avoidance is not possible. The proposed Conrock Gully diversion has been designed to provide similar habitat characteristics to the existing channel and to remain as a revegetated, rehabilitated and stable landform post-mining. Hydrological and geomorphological modelling indicates that impacts to major waterways, floodplain vegetation and the mapped HES wetland are expected to be negligible to minor, with corresponding negligible impacts to aquatic ecology values.

Waterway crossings associated with the Project, including the Isaac River and Cherwell Creek bridges, the temporary dragline walk route, the JB Gully low-level crossing and the Conrock Gully diversion culvert crossing, have been designed to not create permanent barriers to fish passage. The water management system will separate mine affected water, sediment affected water and clean water, with no uncontrolled releases of mine affected water, and controlled releases to occur in accordance with receiving environment flow and quality limits. The water management system is therefore designed to protect downstream aquatic ecology values. The proponent proposes to participate in the FRREMP, with additional monitoring locations recommended to support assessment of potential Project-related impacts during Project activities.

With implementation of the proposed avoidance, mitigation, management, rehabilitation, and monitoring measures, the Project is unlikely to result in significant residual impacts to aquatic ecology values that are MNES or MSES. No aquatic ecology offsets are required under the applicable Commonwealth or State offset frameworks.

ES1.14 Biodiversity Offsets

In response to identified significant residual impacts to MNES and MSES, a comprehensive offset area management plan (OAMP) and offset delivery plan (ODP), respectively, have been developed. Offsets for MSES are required where the protected matters are not the same or substantially the same as MNES. The OAMP and ODP have been developed in accordance with relevant Commonwealth and State legislation, policies and guidelines for the provision of biodiversity offsets.

Suitable adjoining, Stanmore owned properties, within the same bioregion as the Project, have been identified for direct, land based offsets.

Comprehensive ecological surveys of the offset properties have been completed within and surrounding the proposed offset areas, with survey and habitat quality assessment methodologies in accordance with Commonwealth and State requirements. Habitat quality scoring methodologies were consistent across the proposed impact and offset areas.

A comprehensive set of management measures has been developed to improve the habitat quality within the offset areas for each of the protected matters. These management measures comprise restricting unauthorised access, preventing alternative land uses, preventing unauthorised vegetation clearing, controlling invasive weed species, minimising habitat degradation caused by feral animals, strategic fire management, and strategic management of grazing to achieve ecological outcomes.

Risk assessments have been completed demonstrating that residual risks associated with failing to achieve the offset area management objectives are low or medium (i.e. acceptable) for all identified risks. Legal security mechanisms are proposed to provide legal security for the offset areas.

The Commonwealth's and State's offset calculators has been completed for all MNES and MSES, with justification provided for all inputs into the calculators. The resultant offset areas for each MNES and MSES, some of which are co-located, and which fully acquit the offset requirements are:

- Brigalow TEC – 198 ha
- Poplar Box TEC – 48 ha
- Squatter Pigeon – 947 ha
- Greater Glider – 995 ha
- Koala – 1194 ha
- Ornamental Snake – 215 ha
- Regulated vegetation (RE 11.3.4, RE 11.3.25, RE 11.3.2, RE 11.4.9) – 325 ha
- Connectivity areas – 347 ha.

A comprehensive monitoring and reporting program is proposed to inform ongoing and adaptive management of the offset areas, so that the proposed completion criteria are achieved. The proposed OAMP and ODP for the Project demonstrate that offsets for all significant impacts to MNES and MSES can be acquitted.

ES1.15 Greenhouse Gas

A greenhouse gas (GHG) assessment and abatement plan has been prepared for the Project. The assessment shows the total life of mine (LOM) Scope 1, 2 and 3 GHG emissions are estimated to be 82.45 million tonnes carbon dioxide equivalent (Mt CO2-e), split as follows:

- Scope 1 emissions (i.e. direct mine site emissions) contribute 1.27 Mt CO2-e with average annual emissions of 0.049 Mt CO2-e, with stationery diesel combustion and fugitive methane emissions being the largest contributors to total LOM Scope 1 emissions at 0.75 Mt CO2-e and 0.38 Mt CO2-e, respectively.
- Scope 2 emissions (i.e. emissions from purchased electricity) contribute 0.18 Mt CO2-e, with average annual emissions of 0.007 Mt CO2-e.
- Scope 3 emissions (i.e. upstream and downstream emissions) contribute 80.99 Mt CO2-e, with average annual emissions of 3.12 Mt CO2-e (emissions within Australia of 0.89 Mt CO2-e and outside Australia of 80.10 Mt CO2-e).

The Project's combined total Scope 1 and 2 emissions are estimated to represent 0.087% and 0.020% of the remaining Queensland and Australian carbon budgets, respectively, under a pathway consistent with limiting warming to 1.5°C. Under a 2°C pathway, the corresponding contributions are 0.052% and 0.012%. The Project's total LOM emissions (Scopes 1, 2 and 3) are estimated to represent 0.016% of the remaining

global carbon budget for 1.5°C warming, and 0.009% for 2°C warming. The Project will therefore make an insignificant contribution to state, national and global GHG emissions budgets.

Stanmore acknowledges Australia's commitment to net zero emissions by 2050 and will continue aligning its decarbonisation efforts with the Australian Government's commitments to contribute to the goal of the Paris Agreement under the United Nations Framework Convention on Climate Change. Consequently, Stanmore has developed a GHG Abatement Plan for the Project, and more broadly is developing a decarbonisation strategy and is investing in decarbonisation projects for the company.

The Project will be a medium to high emitter under the State's GHG Guideline and has therefore prepared a GHG Abatement Plan. The option to avoid emissions production through not progressing with the Project is considered economically undesirable. Stanmore intends to meet the Commonwealth's 'Safeguard Mechanism' reduction requirements for the IPC facility, inclusive of the Project, through the following activities to avoid, reduce, substitute, and/or offset emissions where commercially and technically feasible:

- Avoid:
  - Minimising unnecessary clearance of vegetation to minimise emissions during land clearing activities.
- Reduce:
  - Mobile and stationary plant emissions are reduced from the base case through:
    - optimisation of mine layout and operations
    - optimisation of vehicles and processes for energy efficiency
    - replacement of diesel with premium diesel.
  - Staff are engaged in energy efficiency and emissions reduction.
- Substitute:
  - Use of an electrically powered dragline as preferred option for overburden removal, thereby reducing diesel consumption for equipment that would otherwise be used for overburden removal.
  - Emissions due to electricity usage will be minimised through:
    - purchase of renewably generated electricity through a power purchase agreement where this is cost effective
    - onsite renewable electricity generation.
- Offset:
  - Safeguard Mechanism Credits (SMCs) will be surrendered against Project emissions above baseline where this is the most economic use of them.
  - Purchase and surrender of Australian Carbon Credit Units (ACCUs) generated in Queensland where feasible and cost-effective, and in the rest of Australia.

The gas content of the Project's coal seams has been demonstrated to be very low, and therefore pre-drainage of coal seam gas, and flaring or combustion to produce electricity, is unlikely to be technically and commercially feasible.

The measures that Stanmore are undertaking to reduce diesel use through efficiency measures will be reflected in a reduction in both Scope 1 and Scope 3 emissions. Scope 3 GHG emissions associated with the transport of product coal are expected to reduce as contracted companies meet their published emission reduction goals.

Stanmore commits to a process of continuous improvement informed by engaged staff, monitoring, evaluation, and research. Stanmore will continue to build on its current commitments including electric dragline, use of premium diesel, replace light vehicles with battery electric vehicles (BEV) or hybrids, solar powered crib hut and power purchase agreement for supply of carbon neutral or renewably generated electricity. Potentially feasible decarbonisation initiatives requiring further assessment over the Project's

life include electric excavators, dual fuel technologies in haulage fleets and BEV haul trucks. New and emerging technologies will be considered as they evolve.

Stanmore will report on its emissions and emissions reduction targets through the annual *National Greenhouse and Energy Reporting Act 2007* (NGER Act) and Safeguard Mechanism process, and through Stanmore's annual Sustainability Report.

ES1.16 Receptors

Potential sensitive receptors within 5 km and 10 km of the Project area are shown on Figure ES1-8. There is a single sensitive receptor (Winchester Downs homestead, R1) within approximately 5 km of proposed mining activities. Modelling of the Project's impacts to air quality, noise, vibration and visual amenity was undertaken to assess potential impacts to sensitive receptors.

Air quality modelling was undertaken for the worst case mining scenario years (2029 and 2034) to:

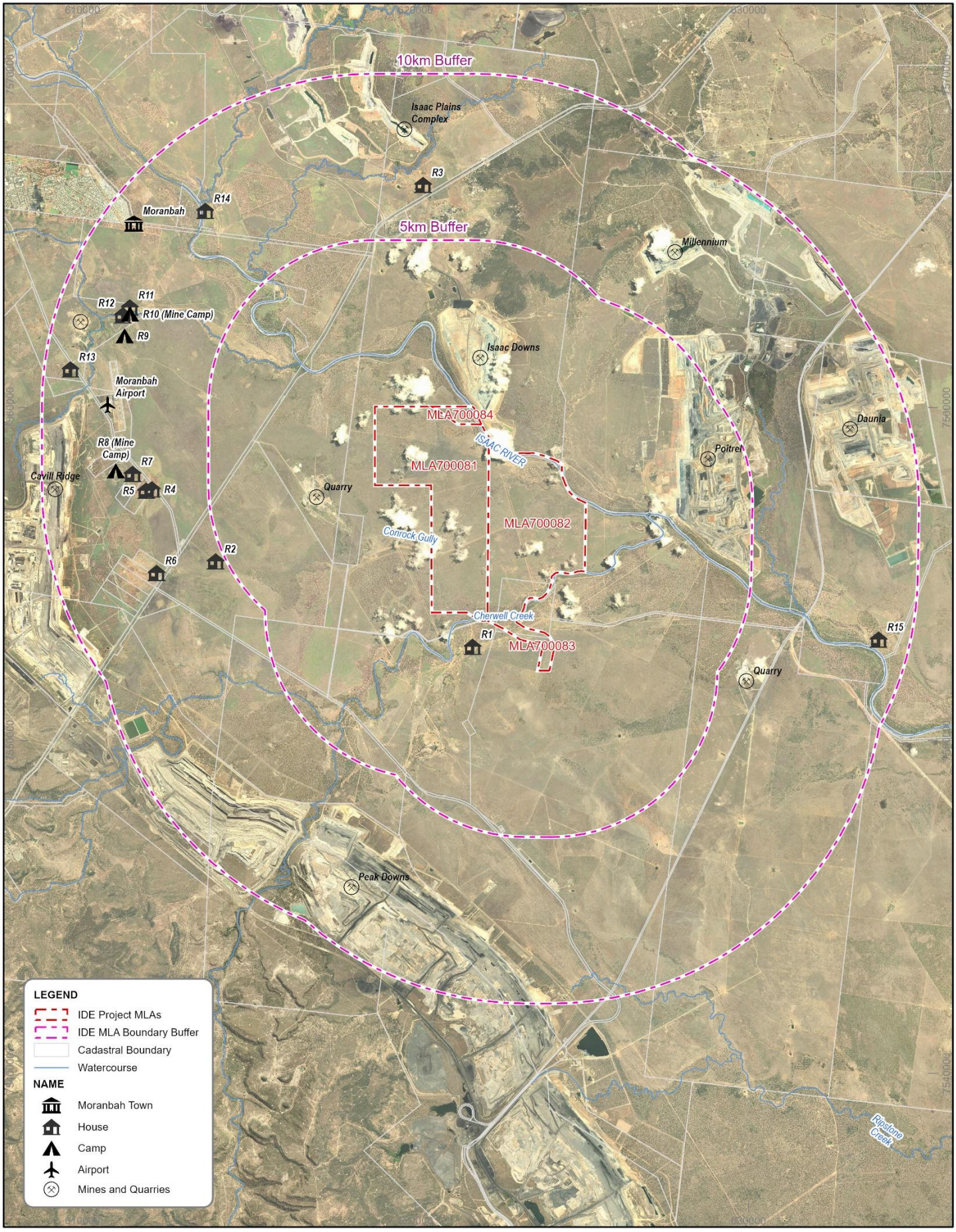
- identify the emissions to the atmosphere from mining operations
- identify potential impacts to sensitive receptors in relation to the air quality objectives for total suspended particles (TSP), particulate matter of an aerodynamic diameter of 10 and 2.5 microns or less (PM_{10}, $PM_{2.5}$) and dust deposition.
- if required, propose mitigation measures for potential adverse impacts to achieve compliance with the air quality objectives for TSP, PM_{10}, $PM_{2.5}$ and dust deposition.

Dispersion modelling was undertaken to assess the potential impacts of mining operations at the Project on nearby sensitive receptors both in isolation and cumulatively with ambient background levels. Modelling for the Project, in isolation and cumulatively with other emissions sources, demonstrates that the proposed air quality objectives (based on standards regulatory requirements) can be achieved at all sensitive receptors with proposed mitigation measures, including measures focussed on achieving objectives at R1. A dust management plan for the Project, building on the existing dust management plan for IPC, will enable the effective implementation of the planned mitigation measures.

Noise and vibration modelling was conducted to identify potential noise and vibration impacts from the proposed mining operations over the life of the Project at the nearest noise sensitive receptors and develop mitigation strategies, if required. Noise monitoring was undertaken at R1 to determine background noise levels and establish noise criteria. Modelling identified that only R1 has potential to experience noise above the proposed night time criteria. Potential noise mitigation measures include low noise equipment, bunding and homestead modifications. As a compensation agreement is required for the mining activities on Winchester Downs, the proponent proposes that this will include 'alternative arrangements' for amenity impacts, which could include property modifications.

Industry best practices will be applied through the blast design and execution processes to achieve compliance with the Project's airblast overpressure and ground vibration criteria. As required, airblast overpressure and ground vibration monitoring will be conducted during the Project's mining operations to demonstrate compliance, to assist blast management, and if required, to manage blasting complaints.

Winchester Downs homestead (R1) is the only receptor that could experience impacts to visual amenity. A view shed analysis was conducted, which determined that visual impacts at R1 would be minor during operations and negligible for the rehabilitated final landform.



0 1 2 3 4 5
Kilometers

Datum:	GDA2020 Zone 55
Scale:	See Scale Bar
Date:	30/05/2026 8:07 AM
Drawn:	Minserve
Source:	Minserve/Stanmore
File:	20260223 Sensitive Receptors.aprx

stanmore

ISAAC DOWNS EXTENSION

Sensitive Receptors

Figure | **ES 1-8**

ES1.17 Non-mining Waste

The sustainable management of non-mining waste for the Project is underpinned by a comprehensive framework that aligns with Queensland's legislative requirements, the waste and resource management hierarchy, and best practice environmental standards. The Project's approach to non-mining waste management is robust, with clear objectives to minimise waste generation, maximise recycling and reuse, and ensure all waste streams are managed to protect environmental values throughout the construction, operation, and closure phases.

Key strategies include:

- Integration of existing infrastructure and procurement policies to reduce packaging and promote recycled materials.
- Onsite segregation, reuse, and recycling of materials, supported by licensed contractors for regulated and hazardous waste streams.
- Regular monitoring, auditing, and reporting of waste volumes and management effectiveness, enabling continuous improvement and compliance with regulatory obligations.

With the proposed mitigation and management measures for non-mining waste, the residual risks to environmental values from non-mining waste are low. The Project's non-mining waste management plan will be regularly updated to reflect operational changes and regulatory developments, ensuring ongoing protection of land, water, ecological, and community health values.

ES1.18 Transport

As the Project will be a continuation and replacement of activities at IPC, no material changes are expected for local and regional air transport requirements or the demands on rail, port and shipping services. The Project's product coal will be transported to export market destinations using the existing rail, Port and shipping infrastructure.

A road transport impact assessment was undertaken for the Project in accordance with relevant State guidelines, manuals and standards. The assessment compared the forecast baseline road traffic with and without the Project, noting that as the Project is an extension of existing mining activities at IPC, current traffic volumes associated with IPC are expected to be similar to traffic volumes with the Project. A minor reduction is forecast in the size of the Project's future workforce compared to the current IPC workforce, and as a result, the Project is expected to result in an overall reduction in the number of workers travelling to and from the region each week, with those trips spread over several days of the week.

The major transport route in the vicinity of the Project is the Peak Downs Highway (a State controlled road), which will be used for the movement of materials, equipment and personnel to and from the Project site. The primary vehicular access to the Project for workers and deliveries will be via IDM's existing access road from the Peak Downs Highway.

The road transport impact assessment demonstrated that the Project does not require intersection upgrades, and will not result in any worsening of the 'level of service' on road links and intersections, with levels of service forecast to be satisfactory. A road safety impact assessment was undertaken for the Project and determined that the Project will not result in a worsening of road safety on State or local roads. Due to the extension in the duration of road traffic activity compared to a baseline without the Project, a pavement contribution was determined to mitigate impacts to road pavements.

ES1.19 Hazards and Safety

Potential hazards and risk to people and property were identified through a preliminary risk assessment for the Project. This hazard identification and risk assessment focused on abnormal hazardous events and

conditions that may affect site workers and visitors and near neighbours during normal, on site activities. Compliance with Queensland's coal mining safety and health legislation will manage the identified hazards and risks during the Project's construction, operation and decommissioning.

Potential public health and safety concerns, natural hazards and hazardous substances proposed for Project use were identified, including their likely cause and consequences. The hazard identification process also identified the non-routine hazards associated with Project construction, operation and decommissioning. Climate change factors were considered as part of the evaluation process. Risk treatment and management measures were proposed to mitigate these risks.

The risk assessment for each potential hazard further considered residual risk (i.e. risk after mitigation) with a view to identifying any residual high or extreme risks requiring additional mitigation. The residual risk assessments focussed on transport of people, equipment, materials and fuel; hydrocarbon storage; construction and installation; mining operations, including use of explosives and potential for geotechnical failure of mining areas; non-mining waste management; infrastructure areas; decommissioning; and external factors (e.g. bushfires, flooding).

To ensure compliance with Queensland's coal mining safety and health legislation, the Project will operate in accordance with the IPC safety and health management systems, which is a dynamic and structured safety and hazard management system designed to protect people and property.

With the implementation of proposed risk management measures, including an emergency response plan, all residual risks were assessed as low to medium (i.e. acceptable).

ES1.20 Native Title and Cultural Heritage

The Barada Barna People hold determined native title rights and interests in the proposed Project area, which are held on trust by the Barada Barna Aboriginal Corporation (BBAC). Native title is not extinguished on some of the properties within the Project's MLAs, and hence a native title agreement is required with the BBAC. A 'Right to Negotiate' process under *Native Title Act 1993* (NT Act) for the Project MLAs was commenced mid-October 2025, with Stanmore engaging and working with BBAC in good faith on a native title agreement.

Assessments of non-Indigenous and Indigenous cultural heritage values have been undertaken.

Desktop searches and surveys of the Project area did not identify any non-Indigenous cultural heritage sites. Never-the-less, an unexpected finds procedure will be implemented for the management of any non-Indigenous cultural heritage values identified during Project activities.

Indigenous cultural heritage will be managed in accordance with the cultural heritage management plan (CHMP) developed in consultation with the BBAC. Previous surveys within the Project area have not identified sites of tangible Indigenous cultural heritage, noting that any additional surveys undertaken under the CHMP may identify sites of tangible or intangible Indigenous cultural heritage, with these to be managed in accordance with the CHMP.

Stanmore recognises that cultural heritage management is an ongoing process and will implement a comprehensive framework to avoid, minimise and manage potential impacts, including workforce inductions and cultural heritage surveys. With the proposed management measures, cultural heritage values of the Project area will be protected.

ES1.21 Social

The Project's social impact assessment (SIA) and social impact management plan (SIMP) were prepared in accordance with the State Coordinator-General's SIA Guideline.

The SIA is underpinned by extensive and ongoing stakeholder engagement undertaken throughout the preparation of the EIS. Engagement has involved a broad range of stakeholders, including local and regional communities, landholders, government agencies, Traditional Owners, local businesses, service providers and industry representatives. Engagement outcomes have informed the identification of key matters, the assessment of potential impacts and benefits, and the development of targeted management and enhancement measures. Overall, there was positive sentiment for the Project in the community, recognising that it would allow for continuation of mining activities at IPC with associated benefits of workforce transition and stability.

A comprehensive assessment of the existing social environment was undertaken to establish a robust social baseline for the Project, with a particular focus on Moranbah, being the closest regional centre to the Project, and the wider Isaac local government area. This included consideration of population and demographic characteristics, workforce and labour market conditions, housing and accommodation, local business and industry, and health and community wellbeing. The baseline assessment provides the foundation for understanding community context, sensitivities and opportunities relevant to the Project. Key findings identified through consultation and baseline analysis included affordability of housing (despite increasing vacancy rates), encouragement for more workers living locally, desire for retention of youth in community with improved training and employment opportunities, mental health concerns for residents and non-resident workers, and affordability of short-term accommodation for visiting services and trades.

Potential social impacts and benefits were systematically identified and assessed in alignment with the SIA Guideline key matters. The assessment applied a structured impact significance methodology, resulting in the identification of low and moderate social impacts, and positive social benefits. No high or major residual social impacts were identified. Positive impacts were largely associated with employment stability, economic contribution, workforce participation and local procurement opportunities. The majority of residual social impacts were assessed as low, reflective of the Project being a transition from existing mining activities at IPC to the Project. Moderate residual impacts were assessed for the workforce decline and transition at Project closure, and psychosocial risks associated with non-resident work arrangements.

Project-specific management and benefit enhancement measures have been developed for each key matter and are documented in the SIMP. These measures directly address identified impacts and benefits and also respond to community concern issues raised through engagement, including matters not solely caused by the Project but relevant to cumulative and contextual community outcomes. The SIMP incorporates dedicated management plans covering community and stakeholder engagement, workforce management, housing and accommodation, local business and industry procurement, and health and community wellbeing. Key proposed management measures include housing and funding support for the Isaac Affordable Housing Trust, making surplus Stanmore worker accommodation village rooms available for short term accommodation needs for visiting services and trades, and annual contributions to organisations supporting youth and community education, youth support services, childcare resourcing and mental health. In addition, Stanmore will implement policies on subsidies to workers for living locally, local content and procurement strategies, apprenticeships and training, ongoing funding of an annual community grants program, and supporting workforce transition through various stages of Project life.

An ongoing process for monitoring, review and continual improvement is embedded within the SIMP and aligns with the Project's broader IPC framework. Management measures will be reviewed and updated over time to reflect monitoring outcomes, stakeholder feedback, changes in Project activities and evolving community expectations. This adaptive approach ensures social impact management remains effective throughout the Project lifecycle.

Overall, the SIA and SIMP demonstrate that social impacts and benefits associated with the Project have been comprehensively assessed, appropriately mitigated and constructively enhanced. Through robust assessment, targeted management measures and ongoing engagement and monitoring, the SIA and SIMP

are expected to achieve their intended outcomes and support positive social outcomes for local and regional communities over the life of the Project.

ES1.22 Economics

The Project's economic assessment was undertaken in accordance with the State Coordinator-General's economic impact assessment guideline including a regional impact assessment and a cost benefit analysis (CBA).

The regional impact assessment identifies the Project's beneficial and adverse economic impacts on the regional catchment (Isaac and Mackay regional council areas) and Queensland economies (where the majority of economic activity will occur) during construction and operations. The regional impact assessment identified that the Project would contribute to the regional catchment and Queensland economies by supporting business and industry output, gross product, employment, and employee incomes, both directly and indirectly.

The construction phase is estimated to contribute $17.7 M in gross regional product (GRP) for the regional catchment and $32.9 M in gross State product (GSP) for Queensland. The mining phase is estimated to support an average annual contribution of $106.6 M in GRP for the regional catchment and $198.5 M in GSP for Queensland.

The Project's economic modelling indicates a net increase in regional and State employment generated by the Project of 143 full time equivalent (FTE) jobs during construction (118 FTE jobs in the region plus 25 FTE jobs in the rest of the State) and 259 FTE jobs per annum on average (160 FTE jobs in the region plus 99 FTE jobs in the rest of the State), compared to what would be expected to occur without the Project.

Incomes supported by the Project are estimated to be around $180-220 M more per annum in Queensland relative to the base case (i.e. without the Project), with a peak year with $233 M more income, of which 49.7% ($115.7 M) would be captured in the regional catchment. The Project is anticipated to contribute an approximate 0.6% increase to real wages in the regional catchment at its peak year.

The Project will result in various taxation and royalty payments to the Commonwealth and the State. The Project is estimated to provide additional revenues of approximately $965 M over the life of Project operations to the Australian Government, equating to $60.3 M per annum. The Project is estimated to provide additional revenues of approximately $698 M over the life of Project operations to the Queensland Government, equating to $43.6 M per annum.

Over the Project life, the Project will result in a minor contribution to economic impacts associated with reduced agricultural production ($1.6 M) and environmental value of the land to be disturbed ($5.2 M). The Project will result in additional mining activities in the regional catchment to supplement and replace the activities of IDM as it winds down production. This supplementation and replacement of IDM's activities will provide an important retention of employment and economic activity within the regional catchment and Queensland economies that would otherwise be lost without the Project. The Project will also result in a continuation of support for local suppliers and contractors, providing additional security and longevity of business incomes and employment in the region.

The Project is expected to result in a minor net increase in the number of workers living locally, with incentivisation to live locally. As a result, the change in overall demand for local property, attributable to the Project, is expected to be negligible. Potential adverse impacts to businesses attributable to the Project from competition for resources, is expected to be negligible. The impact of the Project on exchange rates is anticipated to be negligible.

While the potential adverse economic impacts from the Project are assessed to be negligible to low, Stanmore will continue to monitor and employ strategies to ensure the benefits of the Project to the regional catchment and Queensland are maximised and any potential adverse impacts are minimised. This includes mitigating impacts on agricultural production through compensation, staged mining activities and rehabilitation of the majority of disturbed land to a grazing PMLU.

To maximise local benefits derived from the Project in a manner consistent with existing policies, Stanmore and its contractors will source labour locally where possible and practical, and provide training opportunities where practical. Stanmore possesses long-standing relationships with local business and an established supply chain for its existing mining activities in the regional catchment. To maximise local benefits derived from the Project, Stanmore and its contractors will continue to support local business by utilising established supply networks and providing sufficient opportunities and information for local business to secure new supply contracts.

While the Project is anticipated to have minimal impacts in terms of additional demand for accommodation and housing in the local area, Stanmore will monitor local accommodation and housing demands placed on the market by its workforce.

The CBA assessed the impacts of the Project compared to a scenario without the Project, to understand the net benefit of the Project. The CBA generates a net present value (NPV), with a positive NPV demonstrating that the Project is desirable.

The CBA considers all expected Project revenues and expenses, including capital expenditure. Furthermore, the CBA also includes a 'social cost of carbon' associated with GHG emissions, potential lost agricultural and ecosystem values of the land that will be disturbed, societal costs associated with Project traffic generation, and the increase in employee compensation resulting from additional jobs in the economy.

The CBA identified, across all discount rates examined, that the Project would be deemed economically desirable, with the benefits outweighing the costs. At a 7% discount rate, the Project's modelling delivers a NPV of $653.5 M over the assessment period.

A sensitivity analysis of the Project's CBA demonstrated that at a discount rate of 7%, there is a 90% probability that the Project will provide a NPV of between -$60.5 M and $1,294.2 M, with a positive NPV returned for 93% of modelled CBA iterations.

The Project's economic assessment demonstrates that the Project will provide a significant range of positive economic benefits to the regional catchment and Queensland, and is economically desirable, with economic benefits outweighing economic costs.

ES1.23 Conclusion

The EIS provides a comprehensive assessment of environmental and socio-economic impacts and benefits from the Project. Management measures have been proposed to mitigate potential impacts, with the inclusion of management plans with the EIS. Where there are residual significant impacts (i.e. after mitigations measures), biodiversity offsets have been proposed.

The Projects socio-economic benefits have been demonstrated in the social and economic impact assessments. The Project will employ approximately 100 - 150 people during the construction phase and approximately 300 – 400 people during operations. In addition, there will be opportunities for local employment in construction, transport and the supply of goods and services. The Project will require approximately $190 million in capital investment to bring it to full production, but will utilise existing infrastructure and activities located at IPC to reduce the Project's environmental impact.

The EIS demonstrates that the Project's socio-economic benefits outweigh the mitigated socio-economic and environmental impacts.