



Works Approval Number	W6280/2019/1
Works Approval Holder	BHP Billiton Nickel West Pty Ltd
ACN	004 184 598
Registered business address	125 St Georges Terrace PERTH WA 6000
File Number	DER2019/000419
Duration	29/11/2019 to 27/11/2024
Date of issue	29/11/2019
Prescribed Premises	Category 5: Processing or beneficiation of metallic or non-metallic ore
Premises	Nickel West Leinster Nickel Operations Mining tenements ML255SA, M36/230, L36/93, M36/4, M36/389, G36/49 and G36/50 LEINSTER WA 6437 (as shown in Schedule 1)

This Works Approval is granted to the Works Approval Holder, subject to the following conditions, on 29 November 2019, by:

Tim Gentle

Manager Resource Industries
Regulatory Services

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Explanatory notes

These explanatory notes do not form part of this Works Approval.

Defined terms

Definition of terms used in this Works Approval can be found at the start of this Works Approval. Terms which are defined have the first letter of each word capitalised throughout this Works Approval.

Department of Water and Environmental Regulation

The Department of Water and Environmental Regulation (DWER) is established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V, Division 3 of the *Environmental Protection Act 1986 (WA)* (EP Act). The Department also monitors and audits compliance with licences and works approvals, takes enforcement action and develops and implements licensing and industry regulation policy.

Works Approval

Section 52 of the EP Act provides that an occupier of any premises commits an offence if any work is undertaken on, or in relation to, the premises which causes the premises to become, or to become capable of being, Prescribed Premises, except in accordance with a works approval.

Section 56 of the EP Act provides that an occupier of Prescribed Premises commits an offence if Emissions are caused or increased or permitted to be caused or increased, or Waste, noise, odour or electromagnetic radiation is altered or permitted to be altered from Prescribed Premises, except in accordance with a works approval or licence.

Categories of Prescribed Premises are defined in Schedule 1 of the *Environment Protection Regulations 1987 (WA)* (EP Regulations).

This Works Approval does not authorise any activity which may be a breach of the requirements of another statutory authority including, but not limited to, the following:

- conditions imposed by the Minister for Environment under Part IV of the EP Act;
- conditions imposed by DWER for the clearing of native vegetation under Part V, Division 2 of the EP Act;
- any requirements under the *Waste Avoidance and Resource Recovery Act 2007*;
- any requirements under the *Environmental Protection (Controlled Waste) Regulations 2004*; and
- any other requirements specified through State legislation.

It is the responsibility of the Works Approval Holder to ensure that any action or activity referred to in this Works Approval is permitted by, and is carried out in compliance with, statutory requirements.

The Works Approval Holder must comply with the Works Approval. Contravening a Works Approval Condition is an offence under s.55 of the EP Act.

Responsibilities of Works Approval Holder

Separate to the requirements of this Works Approval, general obligations of Works Approval Holders are set out in the EP Act and the regulations made under the EP Act. For example, the Works Approval Holder must comply with the following provisions of the EP Act:

- the duties of an occupier under s.61; and

- restrictions on making certain changes to Prescribed Premises unless the changes are in accordance with a Works Approval, Licence, closure notice or environmental protection notice (s.53).

Strict penalties apply for offences under the EP Act.

Reporting of incidents

The Works Approval Holder has a duty to report to the Department all Discharges of Waste that have caused or are likely to cause Pollution, Material Environmental Harm or Serious Environmental Harm, in accordance with s.72 of the EP Act.

Offences and defences

The EP Act and its regulations set out a number of offences including:

- Offence of emitting an Unreasonable Emission from any Premises under s.49.
- Offence of causing Pollution under s.49.
- Offence of dumping Waste under s.49A.
- Offence of discharging Waste in circumstances likely to cause Pollution under s.50.
- Offence of causing Serious Environmental Harm (s.50A) or Material Environmental Harm (s.50B).
- Offence of causing Emissions which do not comply with prescribed standards (s.51).
- Offences relating to Emissions or Discharges under regulations prescribed under the EP Act, including materials discharged under the *Environmental Protection (Unauthorised Discharges) Regulations 2004 (WA)*.
- Offences relating to noise under the *Environmental Protection (Noise) Regulations 1997 (WA)*.

Section 53 of the EP Act provides that a Works Approval Holder commits an offence if Emissions are caused, or altered, from a Prescribed Premises unless done in accordance with a Works Approval, Licence or the requirements of a closure notice or an environmental protection notice.

Defences to certain offences may be available to a Works Approval Holder and these are set out in the EP Act. Section 74A(b)(iii) provides that it is a defence to an offence for causing Pollution, in respect of an Emission, or for causing Serious Environmental Harm or Material Environmental Harm, or for discharging or abandoning Waste in water to which the public has access, if the Works Approval Holder can prove that an Emission or Discharge occurred in accordance with a Works Approval.

This Works Approval specifies the Emissions and Discharges, and the limits and Conditions which must be satisfied in respect of specified Emissions and Discharges, in order for the defence to offence provision to be available.

Authorised Emissions and Discharges

The specified and general Emissions and Discharges from the Works authorised through this Works Approval are authorised to be conducted in accordance with the Conditions of this Works Approval.

Amendment of Works Approval

The Works Approval Holder can apply to amend the Conditions of this Works Approval under s.59 of the EP Act. An application form for this purpose is available from DWER.

The CEO may also amend the Conditions of this Works Approval at any time on the initiative of the CEO without an application being made.

Duration of Works Approval

The Works Approval will remain in force for the duration set out on the first page of this Works Approval or until it is surrendered, suspended or revoked in accordance with s.59A of the EP Act.

Suspension or revocation

The CEO may suspend or revoke this Works Approval in accordance with s.59A of the EP Act.

Definitions and interpretation

Definitions

In this Works Approval, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
Books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Condition	means a condition to which this Works Approval is subject under s.62 of the EP Act.
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
Department Request	means a request for Books or other sources of information to be produced, made by an Inspector or the CEO to the Works Approval Holder in writing and sent to the Works Approval's address for notifications, as described at the front of this Works Approval, in relation to: (a) compliance with the EP Act or this Works Approval; (b) the Books or other sources of information maintained in accordance with this Works Approval; or (c) the Books or other sources of information relating to Emissions from the Premises.
Discharge	has the same meaning given to that term under the EP Act.
DWER	Department of Water and Environmental Regulation
Emission	has the same meaning given to that term under the EP Act.
Environmental Harm	has the same meaning given to that term under the EP Act.
EP Act	means the <i>Environmental Protection Act 1986</i> (WA).
EP Regulations	means the <i>Environmental Protection Regulations 1987</i> (WA).

Implementation Agreement or Decision	has the same meaning given to that term under the EP Act.
Inspector	means an inspector appointed by the CEO in accordance with s.88 of the EP Act.
Licence	refers to this document, which evidences the grant of a licence by the CEO under s.57 of the EP Act, subject to the conditions.
Material Environmental Harm	has the same meaning given to that term under the EP Act.
Pollution	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Works Approval applies, as specified at the front of this Works Approval and as shown on the map in Schedule 1 to this Works Approval.
Prescribed Premises	has the same meaning given to that term under the EP Act.
RL	height relative to the NLN Mine Reference Grid
Serious Environmental Harm	has the same meaning given to that term under the EP Act.
Unreasonable Emission	has the same meaning given to that term under the EP Act.
Waste	has the same meaning given to that term under the EP Act.
Works	refers to the Works described in Schedule 2, at the locations shown in Schedule 1 of this Works Approval to be carried out at the Premises, subject to the Conditions.
Works Approval	refers to this document, which evidences the grant of the works approval by the CEO under s.54 of the EP Act, subject to the Conditions.
Works Approval Holder	refers to the occupier of the Premises being the person to whom this Works Approval has been granted, as specified at the front of this Works Approval.

Interpretation

In this Works Approval:

- (a) the words 'including', 'includes' and 'include' will be read as if followed by the words 'without limitation';
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

- (c) where tables are used in a Condition, each row in a table constitutes a separate Condition;
- (d) any reference to an Australian or other standard, guideline or code of practice in this Works Approval means the version of the standard, guideline or code of practice in force at the time of granting of this Works Approval and includes any amendments to the standard, guideline or code of practice which may occur from time to time during the course of the Works Approval; and
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act.

Conditions

Infrastructure and equipment

1. The Works Approval Holder must install and undertake the Works for the infrastructure and equipment:
 - (a) specified in Column 1;
 - (b) to the requirements specified in Column 2; of Table 2 below.
2. The Works Approval Holder must not depart from the requirements specified in Column 2 of Table 2 except:
 - (a) where such departure does not increase risks to public health, public amenity or the environment; and
 - (b) all other Conditions in this Works Approval are still satisfied.
3. Subject to Condition 2, within 60 days of the completion of the Works specified for each stage (stage 1a, 1b, 2, 3, 4, 5, 6, 7 and 8) in Column 1 of Table 2, the Works Approval Holder must provide to the CEO a compliance document from the TSF3 designer or their geotechnical engineering representative (Cell F construction) and from the Engineering Project Manager (tailings and decant pipeline and associated infrastructure) confirming each item of infrastructure or component of infrastructure specified in Column 1 of Table 2 below has been constructed with no material defects and to the requirements specified in Column 2.
4. Where a departure from the requirements specified in Column 2 of Table 2 occurs and is of a type allowed by Condition 2, the Works Approval Holder must provide to the CEO a description of, and explanation for, the departure along with the certification required by Condition 2(b).

Table 2: Infrastructure and equipment requirements table

Column 1	Column 2
Infrastructure/ Equipment	Requirements (design and construction)
Stage 1a	
Northern and eastern TSF embankments	Constructed to RL 10516m as per Figure 3 , including a cut-off trench down to caprock.
Seepage interception system	Constructed as per Figure 4 with underdrainage pipeline (internal toe drain), drainage pipes through the embankment and an external pipeline corridor to collect any seepage through the embankment.
Stormwater diversion drains and temporary stormwater bund	Constructed to divert stormwater away from the TSF 3 Cell F as shown in Figure 5 .
Temporary access causeway with skid mounted pump	Within TSF3 Cell F.
Underdrainage outlet pipes, TSF 3 Cell F decant outlet pipe, and extension pipes for TSFs 3AB, 3CD and 3E outfall pipes	Installed in trenches and covered. Will be commissioned prior to the operation of stage 1b
Puddle flanges	Installed on all pipes penetrating the embankments.
Permanent decant structure	Initial stages constructed at Stage 1a, in the centre of TSF3 Cell F.
New groundwater monitoring bores	Installation of 4 to the north of TSF3 Cell F, and 2 to the east of TSF3 Cell F.
Seepage recovery bore	Installation of 1 to the north of TSF3 Cell F.
Piezometers	Installation of piezometers consistent with designs approved under the Mines Safety and Inspection Act 1994 (approval pending for ID 82020)
Tailings and return water pipelines	Contained within bunded open trenches to contain leaks and spillages from pipe burst events Will be fitted with automatic leak detection and shut off systems to minimise discharge and allow for maintenance and recovery of materials
Tailings deposition	Embankment perimeter wall fitted with a tailings deposition main ring that contains multiple spigot attachment valves located at nominal 40m intervals
Stage 1b	
Southern and western TSF embankments	Constructed to RL10520m as per Figure 3 .

Column 1	Column 2
Infrastructure/ Equipment	Requirements (design and construction)
Northern and eastern TSF embankments	Downstream raised to RL10520m as per Figure 3 .
Decant structure	Constructed from precast concrete rings. Coarse rock placed surrounding tower to reduce turbidity of return water. Located in centre of TSF3 Cell F.
Decant pipeline	Installed to gravity feed decant water to the new return water pond, with a valve so water can be retained on the TSF in case of emergency.
Extension of gravity outfalls from existing TSFs through Cell F	Puddle flanges installed on all pipes penetrating the embankments.
Piezometers	Installation of piezometers consistent with designs approved under the Mines Safety and Inspection Act 1994 (approval pending for ID 82020)
Tailings and return water pipelines	Contained within bunded open trenches to contain leaks and spillages from pipe burst events. Will be fitted with automatic leak detection and shut off systems to minimise discharge and allow for maintenance and recovery of materials.
Tailings deposition	Embankment perimeter wall fitted with a tailings deposition main ring that contains multiple spigot attachment valves located at nominal 40m intervals
Return water pond	Constructed as per Figure 6; lined with at least 2mm thick HDPE geomembrane. Return water pond to be operational prior to the decommissioning of the existing return water pond to the north of TSF3 Cell AB.
Stages 2-8	
TSF embankments	Raised upstream as per Figure 3 . Stages 2-7 will each be 2.5m raises; stage 8 will either be a 2.8m raise giving a final crest height of RL 10537.8m; or two 2.5m raises giving a final crest height of RL 10540m. Installation of piezometers consistent with designs approved under the Mines Safety and Inspection Act 1994 (approval pending for ID 82020)
Tailings and return water pipelines	Contained within bunded open trenches to contain leaks and spillages from pipe burst events. Will be fitted with automatic leak detection and shut off systems to minimise discharge and allow for maintenance and recovery of materials.
Tailings deposition	Embankment perimeter wall fitted with a tailings deposition main ring that contains multiple spigot attachment valves located at nominal 40m intervals.

Emissions

- The Works Approval Holder must not cause any Emissions from the Works authorised through this Works Approval except for specified Emissions and general Emissions described in Column 1 of Table 3, subject to the exclusions, limitations or requirements specified in Column 2, of Table 3.

Table 3: Authorised Emissions table

Column 1	Column 2
Emission type	Exclusions/Limitations/Requirements
General Emissions	
Emissions which arise from undertaking the Works set out in Schedule 2.	<p>Emissions excluded from General Emissions are:</p> <ul style="list-style-type: none"> • Unreasonable Emissions; or • Emissions that result in, or are likely to result in, Pollution, Material Environmental Harm or Serious Environmental Harm; or • Discharges of Waste in circumstances likely to cause Pollution; or • Emissions that result, or are likely to result in, the Discharge or abandonment of Waste in water to which the public has access; or • Emissions or Discharges which do not comply with an Approved Policy; or • Emissions or Discharges which do not comply with prescribed standard; or • Emissions or Discharges which do not comply with the conditions in an Implementation Agreement or Decision; or • Emissions or Discharges the subject of offences under regulations prescribed under the EP Act, including materials discharged under the Environmental Protection (<i>Unauthorised Discharges</i>) Regulations 2004.

Record-keeping

6. The Works Approval Holder must maintain accurate Books including information, reports and data in relation to the Works and the Books must:
 - (a) be legible;
 - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
 - (c) be retained for at least 3 years from the date the Books were made;
 - (d) be available to be produced to an Inspector or the CEO.

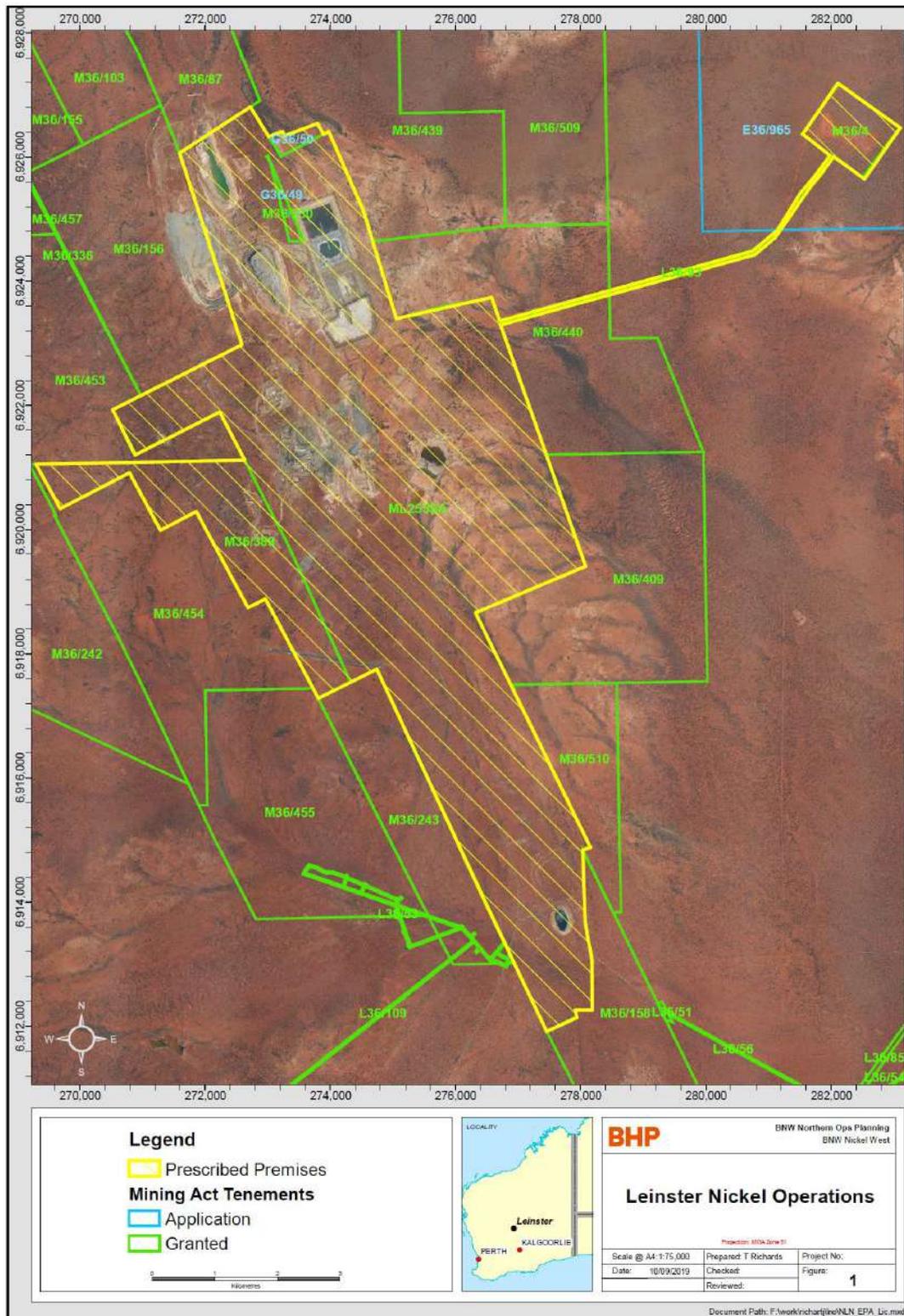
7. The Works Approval Holder must comply with a Department Request within 14 days from the date of the Department Request or such other period as agreed to by the Inspector or the CEO.

Schedule 1: Maps

Premises map

The Premises is shown in **Figure 1**. The yellow line depicts the premises boundary

Figure 1: Premises Map



Source: Email from NiW dated 12/9/2019; DWER record A1825347

Figure 2: Location of proposed TSF3 Cell F



Source: Provided my Applicant in comments on Draft W6280/2019/1; DWER record A1845089

Schedule 2: Works

At the time of assessment, Emissions and Discharges from the Works listed in **Table 4** were considered in the determination of the risk and related Conditions for the Works Approval.

Table 4: Authorised Works

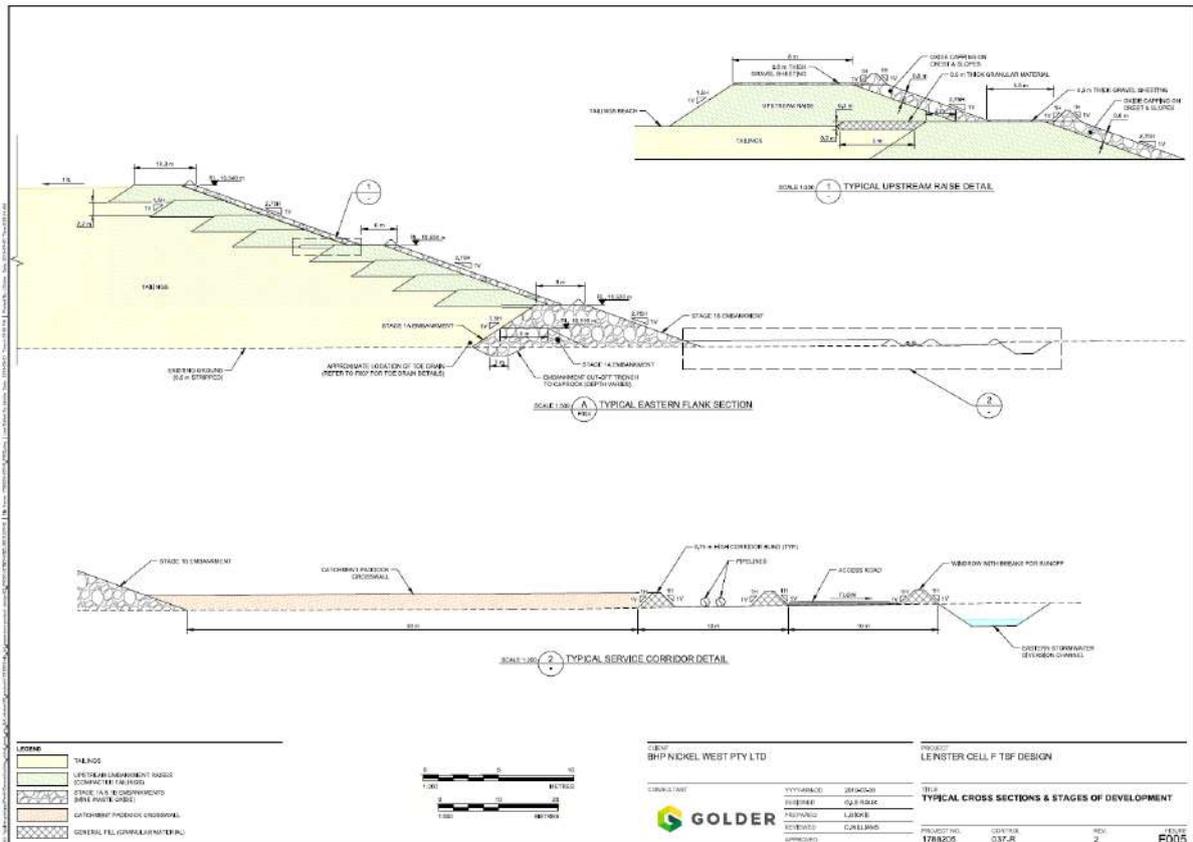
Works	Specifications/Drawings
TSF3 Cell F	Schedule 2, Figure 3 to Figure 5
TSF3 Cell F return water pond	Schedule 2, Figure 6
Groundwater monitoring bores and groundwater recovery bores	Locations shown in Figure 7

Infrastructure specifications

The infrastructure and equipment are set out on the Premises in accordance with the site layout specified on the Premises map in Schedule 1.

Figure 3 to **Figure 6** are sourced from the supporting documents submitted in the application for this Works Approval (DWER record A1812145)

Figure 3: TSF3 Cell F embankment construction



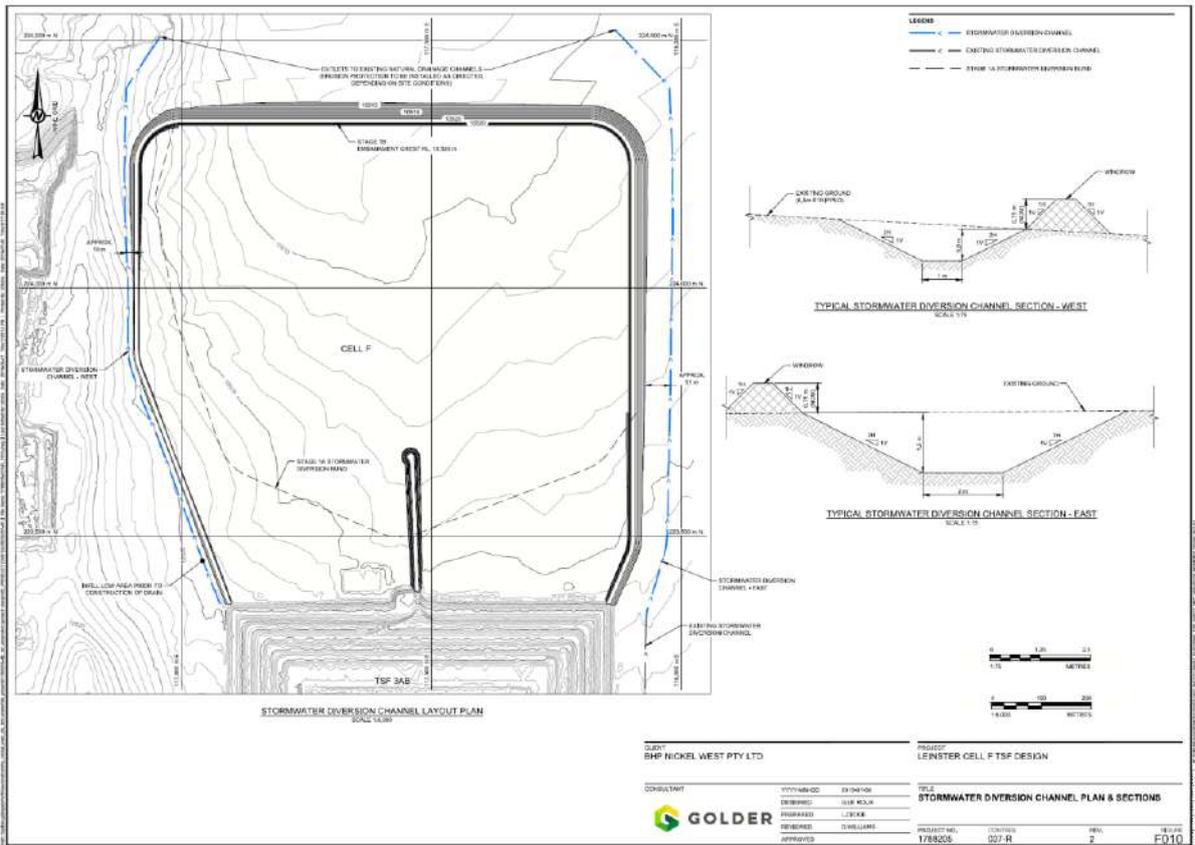


Figure 6: Return Water Pond

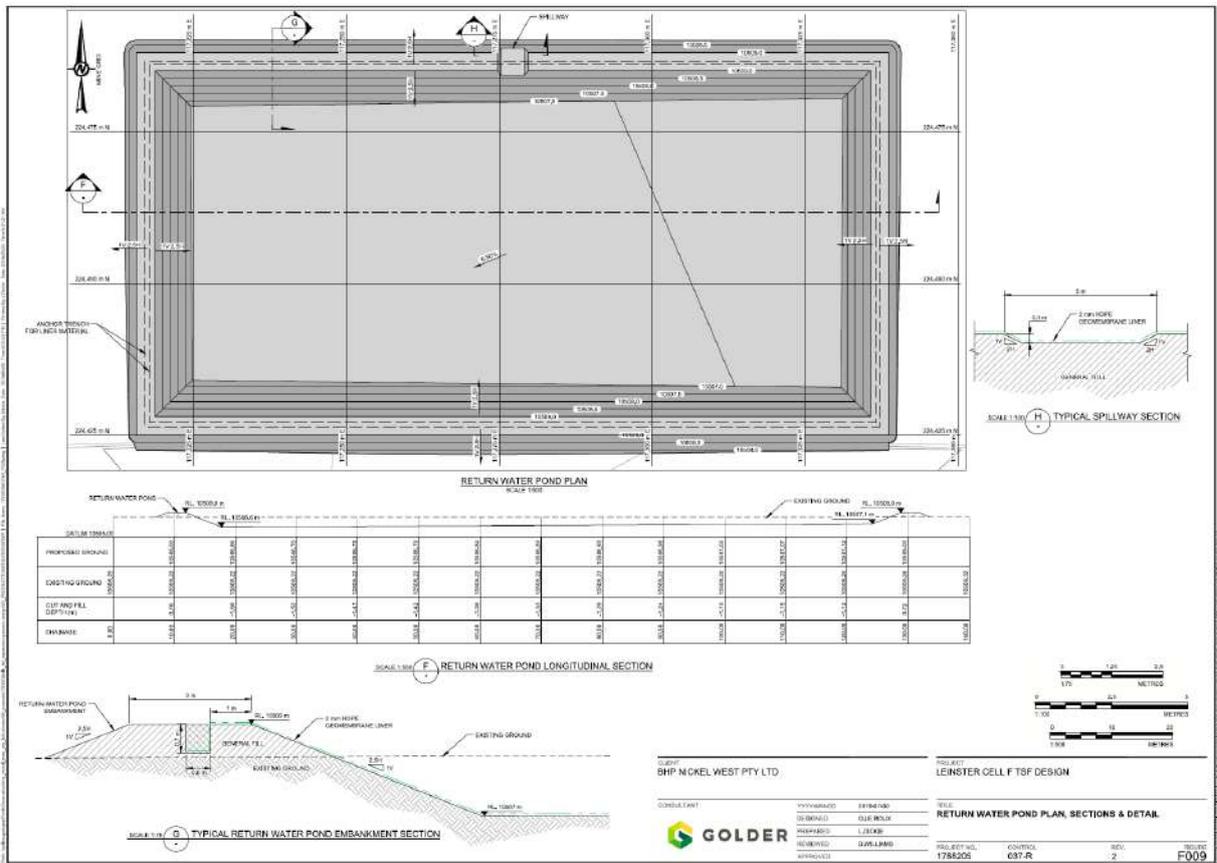


Figure 7: Groundwater recovery and monitoring bore locations

