# SDA approval – conditions

# Material change of use

Condition 1 – approved plans and documents	Timing
1.1 Carry out the approved development generally in accordance with the approved plans and documents as referenced in Table 1 (including any amendments marked in red), except insofar as modified by any of the conditions of this approval.	

# Table 1 – approved plans and documents

Title	Prepared By	Plan reference / Document ID	lssue / Rev	Date Approved
Bowen Orbital Space Port Access Road Layout Plan Launch Facility	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-006-01	E	09/02/2022
Bowen Orbital	Gilmour Space	BOS-PADS-LAY, Sheet 1 of 3	5	12/12/2022
Spaceport Site Layout Design	Gilmour Space	BOS-PADS-LAY, Sheet 2 of 3	5	12/12/2022
	Gilmour Space	BOS-PADS-VAB, Sheet 3 of 3	5	12/12/2022
Bowen Orbital Space Port Access Road Locality Plan and Drawing Index, as amended in red by the Department of Environment and Science	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-001-01	E	09/02/2022
Bowen Orbital Space Port Access Road Sediment and Erosion	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-002-01	D	08/02/2022
Control Typical Details				
Bowen Orbital Space Port Access Road Typical Notes and Details – Sheet 1 of 3	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-003-01	D	08/02/2022
Bowen Orbital Space Port Access Road Typical Notes and Details – Sheet 2 of 3	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-003-02	D	12/12/2022
Bowen Orbital Space Port Access Road Typical Notes and Details – Sheet 3 of 3	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-003-03	D	12/12/2022
Bowen Orbital Space Port Access Road Layout and Long section – Sheet 1 of 4	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-005-01	D	08/02/2022
Bowen Orbital Space Port Access Road	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-005-02	D	08/02/2022

Title	Prepared By	Plan reference / Document ID	Issue / Rev	Date Approved
Layout and Long section – Sheet 2 of 4				
Bowen Orbital Space Port Access Road Layout and Long section – Sheet 3 of 4	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-005-03	D	08/02/2022
Bowen Orbital Space Port Access Road	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-005-04	D	08/02/2022
Layout and Long section – Sheet 4 of 4				
Bowen Orbital Space Port Access Road	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-007-01	D	08/02/2022
Floodway Layout Plan				
Bowen Orbital Space Port Access Road	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-007-02	D	08/02/2022
Floodway Details Plan				
Bowen Orbital Space Port Access Road	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-008-01	D	08/02/2022
Cross Sections – Sheet 1 of 3				
Bowen Orbital Space Port Access Road	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-008-02	D	08/02/2022
Cross Sections – Sheet 2 of 3				
Bowen Orbital Space Port Access Road	i <sup>3</sup> Consulting Pty Ltd	GSLF-I3C-CV-DWG-008-03	D	08/02/2022
Cross Sections – Sheet 3 of 3				
Bowen Orbital Spaceport Water Deluge System Proposed Pad Layout	Gilmour Space	BOS-PADS-LAY	A	18/01/2022
Cover Page	i <sup>3</sup> Consulting Pty Ltd	S00	0	12/12/2022
Project Notes	i <sup>3</sup> Consulting Pty Ltd	S01	0	12/12/2022
General Arrangement and Elevation	i <sup>3</sup> Consulting Pty Ltd	S50	0	12/12/2022
Flooring Details	i <sup>3</sup> Consulting Pty Ltd	S100	0	12/12/2022

	i <sup>3</sup> Consulting Pty Ltd	S400	0	12/12/2022	
	i <sup>3</sup> Consulting Pty Ltd	S401	0	12/12/2022	
LRE Launch Pad Earthworks Plan	i <sup>3</sup> Consulting Pty Ltd	21-307-C00	A	03/03/2023	
SIRIUS Launch Pad Earthworks Plan	i <sup>3</sup> Consulting Pty Ltd	21-307-C01	1	29/02/2024	
SIRIUS Test Pad Slab Plan	i <sup>3</sup> Consulting Pty Ltd	21-307-S130	1	26/02/2024	
SIRIUS Test Pad Concrete Details	i <sup>3</sup> Consulting Pty Ltd	21-307-S131	A	10/03/2024	
LRE Test Pad Slab Plan	i <sup>3</sup> Consulting Pty Ltd	21-307-S140	A	10/03/2024	
LRE Test Pad Concrete Details	i <sup>3</sup> Consulting Pty Ltd	21-307-S141	A	10/03/2024	
Approved Report					
STRUCTURAL COMPUTATION REPORT 22-055- 24 COMMUNICATION TOWER AT BOWEN ORBITAL SPACEPORT	i <sup>3</sup> Consulting Pty Ltd	Structural Computation Report	2/1	12/12/2022	

Con	dition 2 – land tenure	Timing		
2.1	Obtain appropriate tenure for the land the subject of the application as shown on the plans referenced in condition 1.	Prior to commencement of site works.		
	Condition 2 limit of development environal Timing			

Condition 3 – limit of development approval		dition 3 – limit of development approval	Timing
	3.1	The approved use must cease to be carried out ten (10) years from the date of obtaining the Commonwealth Minister's approval, in accordance with the <i>Space (Launches and Returns) Act 2018</i> , for a	
		launch facility licence to operate a launch facility on the land, the subject of this approval.	

Con	dition 4 – limit of use	Timing
4.1	<ul> <li>Only the three-stage ERIS small class orbital launch vehicle that comprises:</li> <li>(a) a hybrid propulsion system for the first and second stages fuelled by a stabilised high concentration hydrogen peroxide in combination with an inert polymer solid fuel grain, and a</li> </ul>	At all times.
	(b) third stage that is fuelled by a traditional liquid oxygen and kerosene propulsion system,	
	forms part of the approval.	
4.2	The maximum number of launch events in any calendar year shall not exceed twelve.	At all times.
4.3	The development is not approved for a 'return' activity as defined by the <i>Space (Launches and Returns) Act 2018</i> (Cth).	At all times.
4.4	Provide a copy of landowner's consent obtained to authorise the implementation and enforcement of an exclusion zone, required to satisfy the public safety provisions under the Flight Safety Code 2019, ten (10) business days prior to each launch event.	As indicated.
4.5	Provide a copy of each launch permit to the Coordinator-General, 10 business days before a launch event.	As indicated.
4.6	The construction and operation of the Launch Control Centre does not form part of this development approval.	At all times.

Cond	lition 5 – launch scheduling	Timing
5.1	The operator of the development must consult with North Queensland Bulk Ports Corporation Pty Ltd regarding launch schedules and coordinate, as far as practicable, with port infrastructure operators.	Forward schedule to be provided 12 months prior to launch dates, unless otherwise agreed to in writing by North Queensland Bulk Ports Corporation Pty Ltd .
5.2	The operator of the development is required to work with the Aurizon Network to coordinate with its Critical Asset Availability Calendar, and Train Plans for the period relevant to each proposed launch date.	Prior to finalisation of forward schedule identified in Condition 5.1.

Cond	ition 6 – dilapidation surveys	Timing
6.1	Prior to and following each permitted launch, RPEQ certified dilapidation survey is to be conducted of:	As indicated.
	<ul> <li>(a) Abbot Point Road to be conducted from Nulla Bridge (north) to NQBP Security Gate (south), and</li> </ul>	
	(b) rail transport infrastructure and other rail infrastructure, as agreed to by the railway manager.	

6.2	Should the comparison of the pre- and post-launch surveys identify that rectification works, if attributable to launch operations, are required to that part of Abbot Point Road identified under condition 6.1 or to rail transport infrastructure and other rail infrastructure:	
	(a) the operator is required to undertake all necessary rectification works at the operator's expense, to ensure the road and/or rail transport infrastructure or other rail infrastructure is reinstated post-launch to its pre-launch condition or better, to the satisfaction of NQBP, railway manager and	(a) Prior to the next permitted launch.
	(b) provide RPEQ certification to the Coordinator-General, North Queensland Bulk Ports for Abbot Point Road via <u>approvals@nqbp.com.au</u> , or the railway manager for rail transport infrastructure or other rail infrastructure confirming that the rectification works have been designed and constructed in accordance with part (a) of this condition.	(b) Within two (2) weeks of completion of all rectification works.

Cond	lition 7 – Abbot Point Road – access	Timing
7.1	The operator of the development is required to provide a plan, that covers the 12-week period prior to each launch. The plan must ensure access along Abbot Point road is not adversely impacted during that period, and that the safe and efficient operation of the Port of Abbot Point is maintained. The plan is required to be developed in consultation with NQBP and provided for review via Approvals@nqbp.com.au.	12 weeks prior to each launch.
7.2	The operator of the development must ensure that access for emergency service vehicles, along Abbot Point Road, is maintained, including during the periods of implementation of exclusion zones.	At all times.

Con	dition 8 – notification	Timing
8.1	Notify the Coordinator-General, in writing, of the date of commencement of construction.	Within 10 business days after commencement of construction.
8.2	Notify the Coordinator-General, in writing, of the date of commencement of use.	Within 10 business days after the commencement of use.
8.3	Notify the Coordinator-General, in writing, of the date of date of the inaugural launch.	Within 10 business days prior to launch.
8.4	Notify the Coordinator-General and Whitsunday Regional Council, in writing, of each permitted launch.	A minimum of 10 business days prior to the permitted launch.

8.5	Notify the Coordinator-General, in writing, of the transfer of the launch facility licence.	Within 5 business days of the Minister transferring the launch facility licence.
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Cor	dition 9 – auditing	Timing
9.1	Prepare and submit an audit report to the Coordinator-General. The audit report must be prepared by an independent suitably qualified person to determine whether the conditions of this approval have been complied with.	As indicated.
	<ul> <li>Audit reports are required for both temporary and permanent infrastructure within 30 business days of the following:</li> <li>(a) commencement of site works</li> <li>(b) commencement of the use</li> <li>(c) every three months from the commencement of use</li> <li>(d) rehabilitation.</li> </ul>	
	An audit report will contain detail consistent with the information provided in <b>Enclosure 1</b> .	

Cond	lition 10 – inspection	Timing
10.1	Permit the Coordinator-General, or any person authorised by the	At all times.
	Coordinator-General, to inspect any aspect of the development.	
10.2		At all times.
	of this approval or as described in the Environmental Management	
	Plan:	
	(a) are kept at the premises for a period of not less than 5 years,	
	(b) can be made available for inspection by the Coordinator-	
	General or a delegate of the Coordinator-General.	
	Note: Where practicable, at least forty-eight (48) hours' notice will be provided.	

Con	dition 11 – detailed plans	Timing	
11.1	<ul> <li>Submit to the Coordinator-General and Whitsunday Regional Council the detailed design plans certified by a Registered Professional Engineer of Queensland (RPEQ) that identify the following: <ul> <li>(a) the final location of all structures, pads, tank farms, hardstand and laydown areas as well as the on-site utilities of the development</li> <li>(b) the final location of drainage structures and waterway crossing(s)</li> <li>(c) the final location of access road, internal circulation and manoeuvring area and any maintenance tracks.</li> </ul> </li> </ul>		

11.2	Submit to the Coordinator-General and Whitsunday Regional	Prior	to	the
	Council final layout plans and building plans (to scale and	comme	nceme	ent
	dimensioned) for the development, including at a minimum:	of cons	tructio	n.
	(a) cross sections and elevations			
	(b) setback distances			
	(c) building heights			
	(d) pavement treatment.			

Cond	ition 12 – environmental management plan	Timing
12.1	Prepare and submit to the Coordinator-General and Whitsunday Regional Council, a detailed project specific Environmental Management Plan (EMP) addressing both the construction and operational phases of the project.	Prior to the
	<ul> <li>The EMP must be certified by an independent suitably qualified third-party confirming the adequacy of the EMP in accordance with current best practice. The EMP must include the following matters: <ul> <li>(a) air quality and dust management (refer to enclosure 2)</li> <li>(b) flora and fauna management (refer to enclosure 3)</li> <li>(c) soils, erosion and sediment control (refer to enclosure 4)</li> <li>(d) general and hazardous waste management (refer to enclosure 5)</li> <li>(e) surface water and groundwater management</li> <li>(f) stormwater management (refer to enclosure 6)</li> <li>(g) lighting management (refer to condition 30)</li> </ul> </li> </ul>	
	<ul> <li>(h) traffic management (refer to enclosure 7)</li> <li>(i) noise and vibration management (refer to enclosure 8)</li> <li>(j) cultural heritage management</li> <li>(k) safety and emergency management (refer to enclosure 9)</li> <li>(l) bushfire hazard assessment and management (refer to enclosure 10)</li> <li>(m) acid sulfate soils management (refer to condition 13 and enclosure 11)</li> <li>(n) site-based land management (refer to enclosure 12)</li> <li>(o) risk management (refer to condition 33)</li> <li>(p) decommissioning and rehabilitation management (refer to enclosure 13)</li> <li>(q) operational management strategy to limit the impacts on the outstanding values of the Great Barrier Reef Marine Park</li> <li>(r) a monitoring program to identify issues of non-compliance, actions for correcting any non-compliance and who is responsible for undertaking those actions</li> <li>(s) a timetable and process for review of the EMP to assess its effectiveness and to implement amendments as required.</li> </ul>	
	The EMP(s), for the construction and operational phases, are to account for any impacts outside the Abbot Point State Development Area and the EMPs are to contain detail consistent with the information provided in <b>enclosures 2 – 13</b> .	
12.2	Implement and undertake the development in accordance with the certified EMP(s) submitted under condition 12.1	At all times.
12.3	The EMP(s) must be current and available on-site, with staff being made aware of the location of the EMP and being appropriately informed of their relevant obligations under the EMP.	At all times.

12.4	If any part of the EMP(s) is inconsistent with the conditions of this	At all times.
	approval, the conditions prevail.	

Conc	lition 13 – acid sulfate soils	Timing
13.1	Acid sulfate soil sampling and testing should be undertaken prior to earthworks to determine the presence of acid sulfate soils.	At all times
13.2	In the event that the works cause disturbance or oxidisation of acid sulfate soil, the affected soil must be treated and thereafter managed (until the affected soil has been neutralised or contained) in accordance with the current Queensland Acid Sulfate Soil Technical Manual: Soil management guidelines, prepared by the Department of Science, Information Technology, Innovation and the Arts, 2014.	Upon disturbance or oxidisation until the affected soil has been neutralised or contained.
13.3	Certification by an appropriately qualified person, confirming that the affected soil has been neutralised or contained, in accordance with condition 13.2 above is to be provided to palm@des.qld.gov.au or mailed to:	At the time the soils have been neutralised or contained.
	Department of Environment and Science Permit and Licence Management Implementation and Support Unit GPO Box 2454 Brisbane Qld 4001	
	Note: Appropriately qualified person means a person or persons who has professional qualifications, training, skills and experience relevant to soil chemistry or acid sulfate soil management and can give authoritative assessment, advice and analysis in relation to acid sulfate soil management using the relevant protocols, standards, methods or literature.	

Condition 14 – earthworks and construction timing		Timing
14.1	Earthworks and construction must only occur during April to	As indicated
	October of the dry season.	

Conc	Timing	
15.1	Only clean and uncontaminated fill is to be used on site.	At all times
15.2	A record of the clean fill's originating site, in conjunction with a record of that site's historical activities is to be retained.	At all times.
15.3	A copy of the record required by condition 15.2 must be provided to the Coordinator-General upon request.	Within 48 hours of the request being made.

Cond	ition 16 – services and utilities	Timing
16.1	Obtain the necessary approvals for all required services and utilities (power, potable water, sewer, gas, wastewater, communications etc) for both construction and operation.	Prior to commencement of site works.
16.2	Provide and maintain to the relevant standards all services and utilities (power, potable water, sewer, gas, wastewater, communications etc) necessary to the development.	At all times.
16.3	Submit to the Coordinator-General and Whitsunday Regional Council approval for the on-site sewerage treatment facility.	Prior to commencement of use.

16.4	Prepare and submit to the Coordinator-General and Whitsunday Regional Council a construction and operational water supply strategy demonstrating how the development will be adequately serviced by a water supply.	Prior comme site wo		the ent
	The water supply strategy must clearly identify any expectation of Whitsunday Regional Council to supply water.			
16.5	Any required provision, relocation and/or alteration to any public service, utility or facility installation must be carried out at no cost to Whitsunday Regional Council or the Coordinator-General.	Prior comme of use mainta	and t	

Cond	ition 17 – 'As constructed' plans	Timing
17.1	Prepare and submit to the Coordinator-General, Whitsunday Regional Council and palm@des.qld.gov.au 'As constructed' plans certified by an RPEQ or other independent suitably qualified person.	Within two (2) weeks of the completion of works and prior to commencement
	The plans must show all relevant elements of the development, including drainage structures and the access road.	of use.
	Plans must be submitted in electronic pdf and shape files.	

Cond	ition 18 – repair of damage	Timing
18.1	Repair any damage to infrastructure, services, property, assets, utilities, fencing, roads damaged during any works carried out in association with the construction or during the operation of the development.	Prior to commencement of use and ongoing.
18.2	Re-instate existing signage and pavement markings that have been removed during any works carried out in association with the development.	Prior to commencement of use and ongoing.
18.3	Where damage occurs from either the construction or the operation of the launch facility occurs, rectification must be undertaken at the developer's own cost, and be to the satisfaction of the Office of the Coordinator-General and the relevant service provider.	At all times.

Cond	tion 19 – complaints and incidents	Timing
19.1	Record all complaints received relating to the development in a register that includes, as a minimum:	At all times.
	<ul> <li>(a) date and time when complaint was received</li> <li>(b) complainant's details including name and contact information</li> <li>(c) reasons for the complaint</li> <li>(d) investigations undertaken and conclusions formed</li> <li>(e) actions taken to resolve this complaint, including the time taken to implement these actions include a notation in the register as to the satisfaction (or dissatisfaction) of the complainant with the outcome.</li> </ul>	
19.2	Prepare and provide a response to the complainant within 48 hours of receipt of the complaint.	As indicated.

19.3	Keep an up-to-date copy of the complaints register and provide it to the Coordinator-General, when requested.	<i>Within 48 hours of the request being made.</i>
19.4	Keep an up-to-date incident register at the premises, including information about any explosions, launch failures, damage to property, fires at the premises, any release, spills or leakages, and the actions taken and timeframes to undertake those actions in response to the incident and any penalties incurred as a result of the incident.	At all times.
19.5	Provide an up-to-date copy of the incident register if requested by the Coordinator-General.	<i>Within 48 hours of the request being made.</i>

Cond	lition 20 – site security	Timing
20.1	Install and maintain the operation of a security gate at the point of the new access road.	Prior to commencement of use and to be maintained at all times.
20.2	Install security fencing around the perimeter of the vehicle assembly building, internal road and launch pad operations area so as to prevent public access to all operational areas of the development as illustrated in the plan entitled, Bowen Orbital Spaceport Site Layout, prepared by Gilmour Space, plan reference BOS-PADS- LAY, Sheet 1 of 3, revision 1, dated 08/03/2022.	Prior to commencement of use and to be maintained at all times.
20.3	Install adequate signage to warn the public of operations and safety hazards.	Prior to commencement of use and to be maintained at all times.

Cond	ition 21 – site management	Timing
21.1	The construction and operation of the development must not adversely impact the effective and efficient operation of the Port of Abbot Point.	At all times.
21.2	The construction and operation of the development must not adversely impact access to, or along Abbot Point Road except during a launch, as managed by the plan required in condition 7.1.	At all times.
21.3	The construction and operation of the development must not result in damage to infrastructure, services, property, assets or utilities during the construction or operation of the development.	At all times.
21.4	If any damage results to infrastructure, services, property, assets or utilities during the construction or operation of the development, rectification must be undertaken at no cost to, and to the satisfaction of North Queensland Bulk Ports or the relevant service provider.	At all times.

Con	Timing	
22.1	A Traffic Management Plan, certified by a RPEQ, must be given to	Prior to the
	the Program Delivery and Operations Unit, Mackay Whitsunday	commencement
	Region (Mackay.Whitsunday.IDAS@tmr.qld.gov.au) within the	of construction.
	Department of Transport and Main Roads.	

22.2	The Traffic Management Plan must ensure that there is no disruption to the safety and operational integrity of railway level crossings impacted on by development generated traffic, including but not limited to railway level crossings: ID: 5159 on the North Coast Line at Abbot Point Road and ID: 843 at Abbot Point Road on the Abbot Point Branch Railway. In particular, the maximum design vehicle for the construction and operation of the development must not exceed 19m in length. The Traffic Management Plan must detail at least the communication and safety controls to be implemented to manage short stacking.	Prior to the commencement of construction and ongoing.
22.3	The development must be undertaken in accordance with the Traffic Management Plan.	At all times.

	lition 2 Igemen	3 – railway corridor safety and integrity – Rocket t Plan	Timing
23.1	safety	evelopment must ensure that there is no disruption to the and operational integrity of the railway corridor from rocket ing and similar and associated activities.	At all times.
23.2	Manag Macka Main addres of the mecha Manag Depart	perator of the development must provide a Rocket Launch gement Plan to the Program Delivery and Operations Unit, by Whitsunday Region within the Department of Transport and Roads (Mackay.Whitsunday.IDAS@tmr.qld.gov.au), which esses potential impacts on the safety and operational integrity arailway corridor and the management and monitoring anisms to mitigate these impacts. The Rocket Launch gement Plan is to address, to the satisfaction of the tment of Transport and Main Roads, the following relevant erations:	Prior to the commencement of use.
	(a) (b)	Pre and post launch dilapidation surveys of rail transport infrastructure and other rail infrastructure Flight paths, trajectories, exclusion zones, launch vehicles,	
	(c)	frequency, timing and scheduling of launches and the like Details on the pre, during and post procedures for rocket launches in relation to the railway corridor	
	(d)	Railway operational requirements and scheduled railway closures	
	(e)	The requirement for the operator of the development to engage a RPEQ to establish the baseline structural and ground movement and vibration readings on the railway corridor	
	(f)	The requirement to agree with the Department of Transport and Main Roads and the railway manager as to the level of acceptable movement and trigger levels and monitoring instrumentation	
	(g)	Protocols to be complied with when the movement and trigger levels are breached, including specific actions to be undertaken and who is responsible for each, the notification process, lines of communication, and stop work procedure	
	(h)	The requirement to provide the overall monitoring results to the Department of Transport and Main Roads and the railway manager	
	(i)	A risk assessment in accordance with Attachment 1: Risk Assessment Guide of the Guide for Development in a Transport Environment: Rail	
	(j)	Details of the mitigation measures, management measures and protocols to minimise any identified risks to the railway	

	<ul> <li>corridor, including but not limited to: <ul> <li>(i) minimising or controlling the outbreak of fire</li> <li>(ii) controlling smoke and/or gas release and dispersion</li> <li>(iii) limiting the possibility of the railway corridor being blast damaged</li> <li>(iv) providing stability or contingency measures in the proposed development and its operations</li> <li>(v) providing safe emergency access and egress; and</li> <li>(k) ensuring effective containment and clean-up of hazards and incidents.</li> </ul> </li> <li>Emergency protocols and notification procedures to be complied with in any emergencies such as fire, explosion, catastrophic failure and the like</li> </ul>	
23.3	The operation of the development must be carried out in accordance with the Rocket Launch Management Plan required under condition 23.2.	At all times.
23.4	The minimum setback of the launch pad from the railway corridor must be generally in accordance with the Bowen Orbital Space Port Access Road Locality Plan and Drawing Index, as amended in red by the Department of Environment and Science, prepared by i3 Consulting Pty Ltd, plan reference GSLF-I3C-CV-DWG-001-01, revision E, dated 09/02/2022.	Prior to the commencement of use and to be maintained at all times
Cond	ition 24 – stormwater and drainage	Timing
24.1	Drainage from the development works/building shall not adversely impact upon adjacent properties. No ponding, concentration or redirection of stormwater shall occur on adjoining land.	At all times.
24.2	Provide the discharge of stormwater drainage flows to a legal point of discharge.	At all times.
24.3	Drainage works shall be designed and constructed in accordance with the Queensland Urban Drainage Manual.	Prior to the commencement of construction.
24.4	Stormwater and flooding management of the development must ensure no worsening or actionable nuisance to adjoining land or the Newlands System/Abbot Point Branch railway corridor.	At all times.
24.5	<ul> <li>Any works on the land must not:</li> <li>(a) create any new discharge points for stormwater runoff onto the Newlands System/Abbot Point Branch railway corridor</li> <li>(b) interfere with and/or cause damage to the existing stormwater drainage on the Newlands System/Abbot Point Branch railway corridor</li> <li>(c) surcharge any existing culvert or drain on the Newlands System/Abbot Point Branch railway corridor</li> <li>(d) reduce the quality of stormwater discharge onto the Newlands System/Abbot Point Branch railway corridor</li> <li>(e) impede or otherwise interfere with hydraulic conveyance or overland flow paths on the site</li> <li>(f) reduce the floodplain storage capacity of the site.</li> </ul>	At all times.
	Untreated stormwater from the works must be diverted or	At all times.

Cor	ndition 25 – air qu	ality			Timing		
25.1	An Ambient A developed and impacts of the outlined in " <i>Tab</i>	ir Quality Monitorin i implemented to s project will be moni ble 1 – Maximum grou gram" below must ir	pecify how tored. The A und level cond	the ambient dust AQM Program as centration limit and	Prior to the commencement of use.		
	potentia	ns, frequencies and al air contaminants fo ne proposed activity	r determining	the actual impacts			
	(CO, C of mo	on for the use of at I O2 and NO2) and one nitoring wind spe- ature and precipitatio	emeteorologi ed and dir	cal station capable			
	the Que	lity sampling must be eensland Air Quality S ian Standards and					
	propon to exclu reason	an alternative sample ent must seek appro- ude this requirement. s for the exclusion sh <b>n ground level concentr</b>	val from adm In seeking s all be provide	inistering authority such exclusion, the ed and be justified.			
	Contaminant	Limit Type	Air Quality Limit	Monitoring frequency <sup>2</sup>			
	Carbon monoxide (CO)	Maximum as one hour average	31 mg/m <sup>3</sup>	At least for 24- hour period			
	Carbon monoxide (CO)	Maximum as 8- hour average	11 mg/m <sup>3</sup>	covering the rocket launching			
	Carbon Dioxide (CO2)	Maximum as one hour average	60 µg/m <sup>3</sup>	event			
	Nitrogen Dioxide	Maximum as one hour average	250 µg/m <sup>3</sup>				
		- irection, humidity, temperatu					
	for ambient air quality	2011: Methods for sampling and analysis of ambient air – Part 14: Meteorological monitoring for ambient air quality monitoring applications.					
	. , =	means milligram per cub pric pressure of 1.	ic metre at 0 d	egrees Celsius and an			
25.2	limits specified limit and monit	at the development n in <i>"Table 1 – Maxim</i> <i>oring program</i> " to co he development.	num ground l	evel concentration	At all times.		

nd	lition 26 – launch facility noise li	mits		Timing
1	The operator of the development by launch and testing activities do <i>1 - Noise limits for launch activitie</i> place or commercial premises. Table 1 – Noise limits for launch and testin	bes not cause the criteria in <i>"Ta</i> es", to be exceeded at a sensit	able	For all launch and testing activities.
	Sensitive Place			
	Noise level dB(A) measured as:	All launch and testing activities		
	LAmax	96		
	SEL	110		
	Day Night Average Sound Level (DNL)	70		
	Vibration	10mm/s		
	Commercial Place			
	Noise level dB(A) measured as:	All launch and testing activities		
	LAmax	115		
	SEL	115		
	Day Night Average Sound Level (DNL)	80		
	Vibration	15mm/s		

	ition 27 – matters of state environmental significance - ways providing for fish passage	Timing
27.1	<ul> <li>Development authorised under this approval is limited as follows:</li> <li>(a) the operational works to raise or construct a waterway barrier works that is a culvert crossing within un-named waterway, and marked on plans as causeway 1 and shown in Bowen Orbital Space Port – Access Road – Floodway Layout Plan, prepared by i3 consulting, plan reference GSLF-13C-CV-DWG-007-001, revision D, dated 08/02/2022, and</li> <li>(b) Bowen Orbital Space Port – Access Road – Floodway Details Plan, prepared by i3 consulting, plan reference GSLF-13C-CV-DWG-007-002, revision D, dated 08/02/2022.</li> </ul>	At all times.
27.2	The maintenance of the culvert crossing must be undertaken generally in accordance with Chapter 7 - Maintenance Schedule of Bowen Orbital Spaceport (BOS) Development Erosion and Sediment Control Management Plan prepared by FYFE reference 43076-1-ENV-REP_1, revision 1, dated 24/08/2021.	At all times.
27.3	<ul> <li>Provide written notice to notifications@daf.qld.gov.au, when the development authorised under this approval:</li> <li>(a) will start, and</li> <li>(b) when it has been completed.</li> <li>These notices must state this permit number AP2021/007.</li> </ul>	Within 15 business days of the completion of the fisheries development works and prior to the commencement use.

27.4	This fisheries development (as defined by the <i>Fisheries Act 1994</i> ) constitutes a place that is required to be open for inspection by an inspector at all times, pursuant to section 145 of the <i>Fisheries Act 1994</i> .	At all times.
27.5	In-stream works are to be completed as quickly as possible, but must be avoided during times of elevated flows, namely - 63% AEP or greater flows.	As indicated.
27.6	Spoil is not disposed of on tidal lands or within waterways and spoil must be managed to prevent acid soil development.	At all times.
27.7	Land profiles that are temporarily disturbed by the development works (other than those within the permanent development footprint, as shown on Bowen Orbital Space Port – Access Road – Floodway Layout Plan, prepared by i3 consulting, dated 08/02/2022, plan reference GSLF-13C-CV-DWG-007-001 and revision D), must be promptly restored to pre-work profiles as shown on the same plan.	Upon completion of the works and prior to commencement of use.

Cond	ition 28 – wetland buffer	Timing
28.1	Provide a 50-metre wide buffer for the purpose of protecting the adjacent wetlands shown as the '50m buffer zone' on Locality Plan and Drawing Index as amended in red by the Department of Environment and Science, prepared by i3 Consulting Pty Ltd, plan reference GSLF-I3C-CV-DWG-001-01, revision E, dated 09/02/2022.	Prior to commencement of use and to be maintained at all times
28.2	Provide buffer elements in the location shown as the '50m buffer zone' on Locality Plan and Drawing Index as amended in red by the Department of Environment and Science, prepared by i3 Consulting Pty Ltd, plan reference GSLF-I3C-CV-DWG-001-01 revision E, dated 09/02/2022, designed to achieve the purposes set out in the Queensland Wetland Buffer Planning Guidelines 2011.	Prior to commencement of use.
28.3	Written evidence from a suitably qualified person that (a) and (b) have been fulfilled is to be provided palm@des.qld.gov.au or mailed to: Department of Environment and Science Permit and Licence Management GPO Box 2454 Brisbane Qld 4001	Prior to commencement of use.
	<b>Note:</b> Suitably qualified person means a person or persons who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.	

Conc	lition 29 – environmental nuisance or harm	Timing
29.1	The construction and operation of the development must not cause environmental nuisance or harm at a nuisance sensitive place unless specifically authorised by a condition of this approval or where alternative lawful arrangements are in place. Nuisance sensitive places include, but not limited to, the:	At all times
	<ul> <li>(a) Caley Valley Wetlands</li> <li>(b) Coral Sea Marine Park</li> <li>(c) Eastern Beach</li> <li>(d) Euri Creek residential dwellings</li> <li>(e) Great Barrier Reef Marine Park and World Heritage Area</li> <li>(f) Saltwater Creek.</li> </ul>	

Cond	ition 30 – lighting	Timing
30.1	Ensure outdoor lighting installed within the development (excluding the telecommunications tower) minimises light spill in the adjacent properties and sensitive places in accordance with AS4282:1997 Control of obtrusive effects of outdoor lighting. Sensitive places include, but are not limited to, the: (a) Caley Valley Wetlands (b) Eastern beach (c) Great Barrier Reef Marine Park and World Heritage Area.	To be maintained
30.2	Ensure lighting is not installed on the telecommunications tower to avoid light impacts on sensitive places identified in condition 30.1 and vessel navigation.	At all times

Cond	ition 31 – waste management	Timing
31.1	Reuse, recycle or lawfully dispose of all waste (other than treated wastewater released to land) generated by the development.	At all times.
31.2	Solid waste is to be stored on site in vermin-proof facilities until it is transferred to a licensed refuse facility.	At all times.
31.3	Prepare and implement a refuse management strategy which outlines the method and frequency of refuse collection for the development.	Prior to commencement of use and ongoing.
31.4	All vehicles involved in the excavation and/or building or operational waste and are departing the property with waste materials, spoil or loose matter must have their loads fully covered before entering the public roadway.	At all times.

Cond	ition 32 – hazardous materials / dangerous goods	Timing
32.1	All flammable and combustible liquids (including hazardous waste materials) must be contained within an on-site containment system, controlled in a manner that prevents environmental harm and must be maintained in accordance with the current edition of <i>AS1940—Storage and Handling of Flammable and Combustible Liquids</i> and in accordance with any other relevant Australian Standard.	At all times.
32.2	All containers must be secured to prevent movement during a flood event.	At all times.

32.3	All hazardous and dangerous goods must be transported, receipted, stored, used, handled and disposed of in accordance with the Hazardous and Dangerous Goods Management Plan (HDGMP).	At all times.
32.4	Development involving dangerous goods must not adversely impact on the safety or operation of the railway corridor.	At all times.

Condi	tion 33 – chemical and fuel storage	Timing
33.1	<ul> <li>Prepare and implement a Risk Management Plan (RMP) to specify how the risk will be managed from the storage of hazardous chemicals, testing operations and catastrophic failure of rocket launch. The RMP must include, but not necessarily be limited to: <ul> <li>(a) identification of potential effects of accidental release of hazardous chemicals</li> <li>(b) identification of potential causes that will lead to the incident identified for each accident</li> <li>(c) documentation of appropriate steps that must be taken to prevent accidental spills as well as the control measures that can be implemented to reduce the risk to an acceptable residual risk level</li> <li>(d) identification of chemical spills that may occur over the marine environment and how this impact will be mitigated</li> <li>(e) description of emergency response procedures should an accident occur, emergency response program includes emergency health care and procedures for informing the public and response agencies (e.g., the fire department) should an accident occur, and</li> </ul> </li> <li>(f) development of prevention program that must include safety precautions and maintenance, monitoring, and employee training.</li> </ul>	Prior to the commencement of launch activities.
33.2	<ul> <li>Any facilities on the site involving the storage of chemicals and/or fuel are sited and constructed to ensure contaminants do not enter surface and/or ground waters. Such facilities, including the vehicle assembly building, are to be:</li> <li>(a) located above the 1% AEP flood event</li> <li>(b) undercover in a building or similar structure</li> <li>(c) in or on a dedicated impervious secondary containment store or device that permits full recovery of spills</li> <li>(d) in a manner that prevents the movement of packages/containers from their place of storage during a flood event</li> <li>(e) in accordance with AS1940-2004: The storage and handling of flammable and combustible liquids and/or AS1692: Steel tanks for flammable and combustible liquids.</li> </ul>	At all times.
33.3	Chemical and fuel storage is conducted in accordance with relevant Australian legislation, standards and codes.	At all times.
33.4	No spent or empty or fuel storage containers are to be burned or otherwise disposed of on the site.	At all times.

Cond	lition 34 – fire fighting	Timing
34.1	The development must be provided with an adequate and accessible supply of water for firefighting purposes in accordance with AS2419.1-2005.	Prior to commencement of use and to be maintained at all times.
34.2	Provide adequate and safe access for firefighting/other emergency vehicles and for safe evacuation.	At all times.

Cond	lition 35 – land contamination	Timing
35.1	Contaminants must not:	At all times.
	<ul> <li>(a) be buried on site</li> <li>(b) be in contact with the soil at the site</li> <li>(c) directly or indirectly seep or penetrate into the soil or groundwater at the site.</li> </ul>	
35.2	Contamination of land arising from the operation of the rail maintenance and provisioning facility shall be lawfully remediated by the operator, at the operator's cost.	At all times.

Cond	ition 36 – vehicle parking and manoeuvring	Timing
36.1	A minimum of 48 car parking spaces shall be provided.	At all times.
36.2	All parking is to occur on site.	At all times.
36.3	The design, layout, signage, line marking, lighting, physical controls, internal roadways, on-site circulation and manoeuvring areas for vehicles on site shall be in accordance with AS2890.1: 2004 Parking facilities: Part 1 and AS2890.2:2002: Part 2.	Prior to commencement of works and to be maintained.
36.4	Provide disabled car parking in accordance with AS2890.6.	Prior to commencement of the use and to be maintained.
36.5	The car parking area is to be line marked.	Prior to commencement of the use and to be maintained.
36.6	Ensure all vehicle movements to and from the property are conducted in forward gear.	At all times.
36.7	Completed works are certified by an RPEQ as having been constructed in accordance with good engineering practice to the relevant standard reasonable for commercial purposes.	Prior to commencement of the use.

Cond	lition 37 – temporary uses	Timing
37.1	All temporary uses are to remain no longer than twelve months from the completion of construction, unless otherwise agreed to in writing by the Coordinator-General.	As indicated
37.2	Remove all temporary works once the temporary use has ceased and rehabilitate the site/s to their original condition, or as otherwise agreed to with the landowner, in accordance with the EMP outlined in condition 12.1.	Within twelve months from the completion of construction.

Cond	lition 38 – rehabilitation plan	Timing
38.1	Should the use cease for a period of more than twelve months, the subject land must be decommissioned and rehabilitated in accordance with the detailed rehabilitation plan required by condition 12.1	As indicated
38.2	Provide a notice to the Coordinator-General stating the rehabilitation of land has been completed in accordance with the rehabilitation plan together with photographic evidence of decommissioning activities and rehabilitation outcomes.	

Cond	Condition 39 – maritime safety Tim		
39.1	<ul> <li>The operator of the development must notify the Regional Harbour Master, (Townsville Region), Maritime Safety Queensland of the sea areas affected by the flight path and range safety exclusion zones required each launch event, that will cross over any portion of:</li> <li>(a) the Abbot Point Pilotage Area</li> <li>(b) State waters extending into the two-way route for Abbot Point</li> <li>(c) Australian waters comprising of a section of the Great Barrier Reef inner route extending to the edge of the Reef Vessel Traffic Services area.</li> </ul>	As indicated.	
39.2	The request for the Maritime Exclusion Zones, notified under condition 39.1 of this condition, must be made 60 days prior to each launch, unless otherwise agreed to in writing by the Regional Harbour Master, Marine Operations (Townsville Region).	As indicated.	
39.3	<ul> <li>The request for the Maritime Exclusion Zones, required under condition 39.1 of this condition, must include:</li> <li>(a) coordinates for items 39.1(a), 39.1(b) and 39.1(c),</li> <li>(b) date, time and duration of the exclusion zone(s)</li> <li>(c) a Marine Traffic Management Plan, prepared in consultation with maritime authorities (Maritime Safety Queensland, Australian Maritime Safety Authority, Queensland Water Police), detailing strategies and measures to be implemented to ensure, but not be limited to: <ul> <li>(i) the hazard area is clear of marine traffic</li> <li>(ii) waterway users are aware of the exclusion zone</li> <li>(iii) exclusion zone compliance by mariners.</li> </ul> </li> <li>Note: Depending on the area to be monitored, the operator of the development should commence monitoring maritime exclusion zones at <i>T</i>-4 hours or earlier, noting speed of watercrafts in the area may require considerable time to clear the hazard area.</li> </ul>	At all times.	

		,
39.4	<ul> <li>Prepare and provide written evidence to the Regional Harbour Master (Townsville Region), Maritime Safety Queensland, Department of Transport and Main Roads, 60 Ross Street, Townsville Qld 4810   GPO Box 1921, Townsville Qld 4810, P: (07) 4421 8100, F: (07) 4721 2028, E: RHMTownsville@msq.qld.gov.au, 60 days prior to launch unless agreed to in writing by the Regional Harbour Master (Townsville Region), detailing:</li> <li>(a) the management measures to be implemented to ensure maritime users are notified of each launch event, and</li> <li>(b) the required maritime exclusion zone, to enable publishing of the same in the government gazette.</li> </ul>	As indicated.
39.5	The operator of the development must notify Regional Harbour Master, (Townsville Region), of	
	<ul> <li>(a) any debris, obstruction or hazard to safe vessel navigation resulting from a failure of a launch - immediately; and</li> </ul>	(a) Immediately.
	(b) remove and dispose of the debris, obstruction or hazard of at the operator's cost within a timeframe agreed with the relevant authority.	(b) As agreed with the relevant authority.
	Note: Relevant authorities include Maritime Safety Queensland, Australian Maritime Safety Authority, Great Barrier Reef Marine Park Authority.	

Cond	lition 40 – land management plan	Timing
40.1	Landscape all disturbed areas during construction, through the planting of native trees, bushes and scrubs, to allow the root network to stabilise the underlying soils.	Prior to commencement of use.
40.2	Maintain landscaping and replace any failed or failing trees or shrubs.	At all times.
40.3	Implement the pest management plan prepared in accordance with condition 12.1 of this condition document.	At all times.

# SDA self-assessable development authorised by this SDA approval

The following operational work is authorised by this SDA approval as SDA self-assessable development. SDA self-assessable development must comply with the conditions stipulated below and with Schedule 3 of the Abbot Point Basin SDA Development Scheme.

For operational work not authorised by this SDA approval, the proponent must obtain the relevant approvals or authorisations as per the relevant authorising process.

-	ational work condition 41 – excavation or filling that materially s premises or their use	Timing
41.1	<ul> <li>Submit to the Coordinator-General detailed earthworks plans prepared by an RPEQ and certified by a suitably qualified independent third party, generally in accordance with AS3798 – 1996 Guidelines on Earthworks for Commercial and Residential Developments. The plans shall:</li> <li>(a) include a geotechnical soils assessment of the site</li> <li>(b) include an assessment that confirms that all cut/fill batters, retaining structures and embankments associated with the development achieve a minimum long-term factor of safety (FoS) of 1.5 and a short term (during construction) FoS of 1.3, unless otherwise certified by an RPEQ</li> <li>(c) include details of any associated retaining structures which are to be designed in accordance with AS4678 – 2002 Earth Retaining Structures</li> <li>(d) be consistent with the Erosion and Sediment Control plans required by condition 12.1 and enclosure 4 of this approval.</li> <li>(e) where appropriate, provide full details of areas where dispersive soils will be disturbed, treatment of dispersive soils and their rehabilitation</li> <li>(f) provide full details of any areas where surplus soils are to be stockpiled</li> <li>(g) include an appropriate monitoring program for the period the site works are being undertaken, identify actions for correcting any failings in management and who is responsible for undertaking those actions.</li> </ul>	Prior to commencement of site works.
41.2	Carry out the earthworks generally in accordance with the certified plans required under condition 41.1.	Prior to the commencement of use.
41.3	Submit to the Coordinator-General certification by an RPEQ that all earthworks have been carried out generally in accordance with the certified plans required under condition 41.1 and any unsuitable material encountered has been treated or replaced with suitable material.	Prior to the commencement of use.

-	rational work condition 42 – undertaking work, in, on, over or er premises that materially affects premises or their use	Timing
42.1	Limit works to the area(s) shown on the plans specified in Table 1 to condition 1 of this approval.	At all times

-	ational work condition 43 – performing work in wetland ction area	Timing
43.1	Limit all works performed in a wetland area to the location shown on plan titled Bowen Orbital Space Port Access Road Locality Plan and Drawing Index, as amended in red by the Department of Environment and Science, prepared by i3 Consulting Pty Ltd, plan reference GSLF-I3C-CV-DWG-001-01, revision E, dated 09/02/2022 and detailed in Table 1 to condition 1 of this approval.	At all times
43.2	<ul> <li>Prepare and implement a wetland protection management plan (by a suitably qualified person in accordance with current best practise) that:</li> <li>(a) is consistent with the plan showing the proposed work in the wetland protection area</li> <li>(b) identifies all impacts associated with the identified operations</li> <li>(c) contains management actions that address the impacts associated with performing work in a wetland protection area in accordance with current best practices, and</li> <li>(d) contains an appropriate monitoring program, identifies actions for correcting any failings in management and who is responsible for undertaking those actions.</li> </ul>	

# Advice

# Currency period

This SDA approval is valid until the end of the currency period, four years after the date of approval, unless the approval states a different period. For the SDA approval to remain valid the proponent must have, before the end of the currency period:

- substantially started the development; or
- made an application to the Coordinator-General to extend the currency period.

# Other approvals

This approval relates solely to the material change of use for a high impact industry (launch facility) in the Abbot Point State Development Area. All other approvals and/or permits required under local, state and/or commonwealth legislation must be obtained prior to the commencement of the use.

If a development does not comply with the conditions of this material change of use approval, a new SDA application may be required to be lodged with the Coordinator-General in accordance with the Abbot SDA Development Scheme.

# Department of Agriculture and Fisheries

If an exclusion area for the launch period or longer is required, this may affect commercial fishing operations in the vicinity. For guidance on identifying potential impacts to commercial fishing operations, contact the fisheries managers (fisheriesmanagers@daf.qld.gov.au) with details of any proposed marine exclusions and the timing and geographic areas of exclusion. Advice should also be sought on how to negotiate a suitable fisheries adjustment package with the impacted commercial fishers where applicable.

#### **Department of Transport and Main Roads**

#### Works on a railway

Pursuant to section 255 of the *Transport Infrastructure Act 1994*, the railway manager's written approval is required to carry out works in or on a railway corridor or otherwise interfere with the railway or its operations.

Prior to the commencement of works, the applicant should contact the railway manager (Aurizon) regarding the following:

(a) the requirement for relevant approvals/agreements from Aurizon such as a licence to enter or wayleave agreement, to address any procedures required pre, post and during the rocket launching. Please refer to the following weblink for more information:

https://www.aurizon.com.au/what-we-deliver/network/accessing-the-rail-corridor

(b) the conditioned requirement for a Traffic Management Plan and to notify of changes to vehicular traffic over railway level crossings: ID: 5159 on the North Coast Line at Abbot Point Road and ID: 843 at Abbot Point Road on the Abbot Point Branch Railway.

This development approval does not constitute an approval under section 255 of the *Transport Infrastructure Act 1994* and that such approvals need to be separately obtained from the relevant railway manager.

The applicant should contact the Aurizon at CorridorEnquiries@aurizon.com.au in relation to this matter.

#### **Emergencies**

The facility operator should establish emergency procedures with the railway manager (Aurizon) and include them within the required contacts for landowners' consent for Lot 1 on RP748626 and in the Rocket Launch Management Plan.

Early notification of any situation will be required so that operations can be managed. The Emergency Response Plan (ERP) for the facility should include protocols for contacting Train Control so that appropriate emergency actions can be put in place. Aurizon should be contacted immediately via the metropolitan control centre for Queensland Rail on telephone number 1800 079 303 in relation to any dangerous goods or rocket launch events impacting on the railway corridor.

#### Cultural heritage – duty of care

Where items of archaeological importance are identified during construction of the project, the proponent must comply with its duty of care under the *Aboriginal Cultural Heritage Act 2003* and the Department of Environment and Heritage Protection 2014 guideline: archaeological investigations. All work must cease, and the relevant State agency must be notified. Work can resume only after State agency clearance is obtained.

#### Office of Industrial Relations | Major Hazardous Facilities Unit (OIR|MHFU)

This high impact industry (launch facility) development, commonly referred to as the Bowen Orbital Spaceport, is now required to notify hazardous chemicals as per:

https://www.worksafe.qld.gov.au/safety-and-prevention/incidents-and-notifications/hazardouschemical-notifications.

#### Queensland Fire and Emergency Services

The contact for consultation on both the Bushfire Management Plan (with Rural Fire Service) and the Safety and Management Plan (Fire and Rescue Service) for this development is:

Office of The Assistant Commissioner, Northern Region (NR) Queensland Fire and Emergency Service PO Box 5845, Townsville, Qld, 4810 E: NR.AC@qfes.qld.gov.au

#### Resources Health and Safety Queensland (RSHQ)

Any future development involving materials and processes administered by the *Explosives Act 1999* and Explosives Regulation 2017 are notified to the Explosives Inspectorate for consideration, comment and review. This includes the use of solid rocket motors, black powder or other authorised primary and initiating explosives.

# Enclosure 1 – audit report

To demonstrate compliance with **condition 9** of this development approval, the following information will be required in an audit report:

- (a) details of the development approval, including the SDA approval number, the date of approval and a summary of the audit reporting requirements. This should include a schedule of the dates by which audit reporting is to be provided to the Coordinator-General.
- (b) details of the independent, suitably qualified person(s) (see Schedule 1 in the Abbot Point SDA Development Scheme) (the auditor) responsible for preparing the audit report, including the auditor(s):
  - (i) name, position, company and contact details
  - (ii) qualifications and experience
  - (iii) proof that the auditor is an independent third party unaffiliated with the proponent.
- (c) details of any external suitably qualified person(s) used to supplement reports/plans outside of the auditor's expertise.
- (d) an audit evaluation matrix including but not limited to:
  - (i) each condition of the SDA approval, and the status of the condition at the end of the relevant audit period
  - (ii) where a condition is current or complete, (to be activated, activated, complete), whether compliance has been achieved (compliant, non-compliant or not applicable), how compliance has been achieved (description of works, tasks or actions undertaken) and how the evaluation of the audit has been undertaken
  - (iii) a full description of the relevant standards, practices etc. against which works have been assessed together with evidence (reports, site photographs, certification documentation) to support the evaluation of the works against the compliance standards
  - (iv) the title, date, location and holder of any documentation referred to in the compliance evaluation matrix but not provided with the audit to allow the Coordinator-General to call upon these documents as required
  - (v) details of any non-compliances identified by any party during the current audit period and a methodology specifying how compliance has been/will be achieved and by when it will be achieved, and
  - (vi) details of previous audit reports (if relevant) with an update on any non-compliance, corrective actions and revised practices (as relevant) undertaken and the current status of any corrective actions.
- (e) additional evidence to support the compliance evaluation, including the date and locations of any site inspection/s conducted during the preparation of the audit report and details of any employees of the proponent interviewed for the audit.
- (f) the auditor's declaration whereby the auditor:
  - (i) certifies the conditions contained in the SDA approval have been satisfactorily complied with, subject to any qualifications which the author has outlined in the audit report
  - (ii) certifies that to the best of the auditor's knowledge, all information provided in the audit report is true, correct and complete, and
  - (iii) acknowledges it is an offence under section 1570 of the *State Development and Public Works Organisation Act 1971*, to give the Coordinator-General a document containing information the auditor knows is false or misleading in any material particular.
- (g) any further attachments the auditor considers relevant to the audit report.

An audit report guideline has been prepared to provide guidance to proponents and auditors in compiling audit reports. The guideline is available on the Department of State Development, Manufacturing, Infrastructure and Planning website at:

https://www.statedevelopment.qld.gov.au/coordinator-general/state-developmentareas/development-schemes-applications-and-requests or by contacting the SDA Division on 1800 001 048 or via <u>sdainfo@coordinatorgeneral.qld.gov.au</u>.

# Enclosure 2 – air quality and dust management plan

To demonstrate compliance with **condition 12.1** and **condition 25** of this development approval, prepare a site-based air quality and dust management plan (by a suitably qualified person) that addresses, but is not necessarily limited to, the following matters:

- (a) An 'Ambient Air Quality Monitoring Program'
- (b) mitigation and measures proposed to prevent spray drift, odour, noise, dust, smoke, or ash emission on nuisance sensitive places
- (c) mitigation and measures proposed to ensure dust deposition attributable to project activities, when measured at a nuisance sensitive place must not exceed 120 milligrams per square metre per day, averaged over 1 month
- (d) mitigation and measures proposed to ensure other indicators that a measured at any nuisance sensitive place must not exceed the air quality objectives specified in Schedule 1 of the *Environmental Protection (Air) Policy 2019*
- (e) site clearance and soil stockpiles must be maintained using all reasonable and practicable measures using water sprays or alternative dust suppression and/or mitigation measures
- (f) ensure all access roadways, material storage areas and vehicle entry points have appropriate dust mitigation
- (g) restrict vehicle movements to specifically defined areas and adhere to onsite speed limits
- (h) ambient dust monitoring program that includes parameters such as dust deposition (insoluble matter) and suspended particulate concentrations of PM10 and PM2.5.
- (i) undertake visual monitoring for fugitive dust during construction and implement appropriate controls to contain fugitive dust
- (j) ensure that all plant and equipment are maintained and operated in accordance with Australian Design Rules and manufacturers specifications.

# Enclosure 3 - flora and fauna management plan

To demonstrate compliance with **condition 12.1** of this development approval, prepare a sitebased flora and fauna management plan (by a suitably qualified person) that addresses, at a minimum, the following matters:

- (a) the location, extent, condition and significance of native terrestrial and marine fauna populations, including individual endangered, threatened (or near threatened) and vulnerable species and communities in the surrounding area, including on land, wetlands (Caley Valley Wetland), waterways and the marine environment
- (b) inclusion of a monitoring and recording program for populations of endangered, threatened (or near threatened) and vulnerable species of state significance, inclusive of a count of the relevant species, prior to the commencement of the use (a launch event) and monitored on regular annual intervals, during both dry and wet seasons, for the duration of the approval period
- (c) detail the ability of populations or individuals to recover
- (d) the mitigation and management measures required to protect threatened species, including among other things:
  - (i) actions and procedures to be followed during the pre-construction, construction, operational and (if appropriate) rehabilitation phases of the project
  - (ii) a program of monitoring, reporting and review to facilitate adaptive management of the actions and measures, should it be required
  - (iii) the developments compliance with all relevant provisions of the *Nature Conservation Act 1992 (Qld).*
- (e) provision for the relocation of fauna prior to each launch event
- (f) measures to prevent bird strike
- (g) measures to prevent fauna being harmed from noise and heat exposure must be implemented during operational activities and immediately before a launch event
- (h) monitoring and management of flora and fauna pest species, including prevention of pest animals accessing putrescible waste at facilities.

# Enclosure 4 – soils, erosion and sediment control plan

To demonstrate compliance with **condition 12.1** of this development approval, prepare and implement a site-specific soils, erosion and sediment control plan (by a suitably qualified person) in accordance with Best Practice Erosion and Sediment Control (BPESC) guidelines for Australia (International Erosion Control Association) that addresses the following:

- (a) erosion and sediment control plans (minimum A3 size to scale) for the use, with the following attributes:
  - (i) property boundaries
  - (ii) general soil types on block
  - (iii) contours existing and final
  - (iv) location of existing improvements and final building and infrastructure
  - (v) location of stormwater discharge points
  - (vi) location of all final impervious areas
  - (vii) location and description of existing vegetation
  - (viii) location of all drainage lines, creeks, wetlands, tidal waters and other water bodies potentially affected by the development
  - (ix) catchment area boundaries
  - (x) limits of clearing
  - (xi) location of vegetation buffer strip
  - (xii) location of entry/exit
  - (xiii) location of stockpile areas
  - (xiv) location of roads, stormwater drainage areas, underground services
  - (xv) location of temporary drainage control measures
  - (xvi) location of proposed sediment control measures
  - (xvii) permanent site stabilisation measures.
- (b) an erosion and sediment control plan report that addresses the following information:
  - (i) description of development and staging
  - (ii) description of adjoining land
  - (iii) description of soil materials to be exposed or disturbed
  - (iv) description and location of existing vegetation
  - (v) location and assessment of any critical areas
  - (vi) measures to prevent the release of sediment to all drainage lines, creeks, wetlands, tidal waters and other water bodies potentially affected by the development
  - (vii) confirmation of sodic (clay) soils capture and containment. It is noted that stormwater containing sodic sediment can have detrimental impact upon adjacent wetland areas.
- (c) an erosion prevention and sediment control strategy that addresses the following information:
  - (i) details of timing of erosion works and project staging
  - (ii) site access controls and treatment
  - (iii) diversion of runoff around work sites
  - (iv) location and design of temporary and permanent erosion and sediment control structures. This should include calculations to support the sizing of sediment detention basins, catch drains and catch dams etc.
  - (v) descriptions of onsite dust control measures
  - (vi) proposed vegetated buffer strips
  - (vii) revegetation program including stream bank rehabilitation near permanent roads and temporary crossings
  - (viii) final landscaping proposals
  - (ix) maintenance program
  - (x) monitoring program
  - (xi) corrective action strategies and procedures and who is responsible.
- (d) a risk assessment analysis of conducting earthworks during the wet season (unless written confirmation that no earthworks will take place within the wet season)
- (e) prepare an acid sulphate soils management plan for any earthworks in areas below 5m AHD or areas of probable acid sulphate soils.

#### Enclosure 5 – general and hazardous waste management plan

To demonstrate compliance with **condition 12.1** of this development approval, prepare a general and hazardous waste management plan (by a suitably qualified person) based on the following criteria:

- (a) reuse, recycle or lawfully dispose of all waste (other than treated wastewater released to land) generated by the development
- (b) prepare a refuse management strategy which outlines the method and frequency of refuse collection
- (c) hazardous materials (including hazardous waste materials) must be contained within an onsite containment system and controlled in a manner that prevents environmental harm and must be maintained in accordance with the current edition of AS1940 Storage and Handling of Flammable and Combustible Liquids
- (d) ensure pest animals are prevented from accessing putrescible waste around the development.

# Enclosure 6 – stormwater management plan

To demonstrate compliance with **condition 12.1** of this development approval, prepare a sitebased stormwater management plan (by a suitably qualified person) that addresses the following:

- (a) topsoil stripping phase
- (b) development phase
- (c) post-development and rehabilitation phase
- (d) confirmation of measures to be put in place during high rainfall events (minimum Cyclone Category 3) that will require pump out
- (e) the release criteria for controlled runoff events or pumped discharges from the construction site
- (f) prevention of ponding or other significant effect on other properties, watercourses, creeks or lakes to ensure stormwater does not adversely affect the values of the receiving environment
- (g) the location and number of stormwater monitoring points
- (h) confirmation of the number and location of meteorological monitoring stations and flow gauging stations on key watercourses that would affect flooding in proximity to the site
- (i) confirmation of destination of water collected in the sediment basin where proposed and monitoring measures to be established to ensure any overflows are addressed
- (j) confirmation of measures to be implemented to prevent sediment and pollutants from entering the waterways and groundwater supply
- (k) monitoring of stormwater management devices
- (I) final stormwater discharge from the detention basin/s, if used, must not cause ponding of stormwater on adjacent site/s and any significant on adjacent water courses/creeks/lakes
   (m) contaminants must not be directly or indirectly released to waters
- (m) contaminants must not be directly or indirectly released to waters
- (n) be prepared having regard to <u>Module 18.2 Stormwater and Drainage Impacts on State</u> <u>Transport Infrastructure State Code of the State Development Assessment Provisions</u> (available at https://dsdmipprd.blob.core.windows.net/general/sdap-1-10-module-18.pdf).
- (o) demonstrate that the management of stormwater (quantity and quality) post development can achieve a no worsening impact (on the pre-development condition) for all flood and stormwater events that exist prior to development and up to a 1% Annual Exceedance Probability (AEP) (equivalent to 1/100 year Average Recurrence Interval ARI)). Stormwater management for the proposed development must ensure no worsening to the railway, including rail transport infrastructure, caused by peak discharges, flood levels, frequency/duration of flooding, flow velocities, water quality, sedimentation and scour effects
- (p) incorporate appropriate hydraulic and hydrological analysis demonstrating:
  - design flood peak discharges for the site and surrounding area which exist prior to the development for all flood and stormwater events up to a 1% Annual Exceedance Probability (AEP) (equivalent to 1/100-year Average Recurrence Interval (ARI)). This should include at least the following flood and stormwater events: 50%, 20%, 10%, 5%, 2% and 1% AEP (equivalent to 2, 5, 10, 20, 50 and 100-year ARI events)
  - (ii) design flood peak discharges for the site after the development has occurred for all flood and stormwater events up to a 1% Annual Exceedance Probability (AEP) (equivalent to 1/100-year Average Recurrence Interval (ARI)). This should include at least the following flood and stormwater events: 50%, 20%, 10%, 5%, 2% and 1% AEP (equivalent to 2, 5, 10, 20, 50 and 100-year ARI events).
- (q) ensure the following are addressed, where applicable:
  - (i) all relevant legal points of discharge for the development site are identified.
  - (ii) overland flow paths are identified, and hydraulic conveyance is maintained on the site as part of the proposed development
  - (iii) flood storage capacity is maintained on the site as part of the proposed development
  - (iv) the adverse impacts from sheet flow on the railway are prevented
  - (v) the proposed development does not cause a concentration of stormwater (including floodwater) flows discharging on the railway during construction or thereafter

- (vi) retaining structures, filling/excavation, landscaping, construction activities or any other works to the land have been designed to include provision for drainage so as not to adversely impact on the railway
- (vii) the proposed development does not impede or interfere with any drainage, stormwater or floodwater flows from the railway
- (viii) stormwater or floodwater flows have been designed to maintain the structural integrity of the rail transport infrastructure
- (ix) existing stormwater drainage infrastructure on the railway is not interfered with or damaged by the proposed development such as through concentrated flows, surcharging, scour or deposition
- (x) the quality of stormwater discharging onto the railway is not reduced through erosion and sedimentation.
- (r) include details of the mitigation measures proposed to address any potential stormwater impacts (including flooding impacts) of the proposed development. The design flood peak discharges should be shown for the mitigated case to demonstrate there is no worsening impact on the railway.

#### Enclosure 7 – traffic management plan

To demonstrate compliance with **condition 12.1** of this development approval, prepare a traffic management plan (TMP) (by a suitably qualified person) that addresses all aspects of access to and from the development.

The TMP must ensure that there is no disruption to the safety and operational integrity of railway level crossings impacted on by development generated traffic, including but not limited to railway level crossings: ID: 5159 on the North Coast Line at Abbot Point Road and ID: 843 at Abbot Point Road on the Abbot Point Branch Railway.

In particular, the maximum design vehicle for the construction and operation of the development must not exceed 19m in length. The Traffic Management Plan must detail at least the communication and safety controls to be implemented to manage short stacking.

This TMP, certified by a RPEQ, must be given to the Program Delivery and Operations Unit, Mackay Whitsunday Region (Mackay.Whitsunday.IDAS@tmr.qld.gov.au) within the Department of Transport and Main Roads.

# Enclosure 8 – noise and vibration management plan

To demonstrate compliance with **condition 12.1** and **condition 26** of this development approval, a noise and vibration management plan (prepared by a suitably qualified person) must be implemented at the site of the development and must include the following as a minimum:

- (a) identification of all potential sensitive and commercial locations which may be affected by noise and vibration impacts from launch activities and quantify the cumulative noise impact at those commercial locations that accounts for launch activities occurring simultaneously (that is the existing noise levels at the commercial location plus the noise impact of a launch event)
- (b) identification of all major sources of noise and vibration emissions that may occur as result of the operation of the launch facility
- (c) description of the procedures to manage the noise and vibration emissions from the sources identified
- (d) collection and recording of noise and vibration data to compile empirical data for each launch event for the duration of the approval period
- (e) identifying adverse meteorological conditions likely to produce elevated levels of noise and vibration at a sensitive or commercial place due to launch activities
- (f) protocols to minimise the potential for noise and vibration emissions, and
- (g) description of procedures to be undertaken if any exceedance is detected.

#### Enclosure 9 – safety and emergency/disaster management plan

To demonstrate compliance with **condition 12.1** of this development approval, the operator of the development must prepare and operate a safety and emergency/disaster management plan in consultation with the state and regional emergency service providers, to ensure the safety and well-being of all occupants of the facility. The plan must be for both the construction and operational phases of the project and must provide details of the following:

- (a) a hazard analysis and risk assessment undertaken in accordance with AS/NZ ISO31000:2018 Risk Management Principles and Guidelines and the Whitsunday Regional Council Local Disaster Management Plan
- (b) potential natural and manmade hazards and emergency events
- (c) strategies for the protection of life and property in a disaster/emergency event
- (d) workforce numbers (including general breakdown of site access arrangements during both construction and operation)
- (e) response procedures to incidents/events including injuries, medical evacuations, road accidents, spills, fire, floors, launch vehicle explosions, and cyclones
- (f) evacuation plans and procedures, including evacuation routes and assembly areas for both the construction and operational phases of the development
- (g) demonstration that resources required for the implementation of the plan will be provided independent of resources allocated to towns in the Whitsunday region
- (h) demonstration of long-time resilience in distressed conditions in the event an evacuation cannot be achieved, including details of access to food, water, and medical supplies
- (i) training for staff who will be tasked with emergency management activities.
- (j) safety management plans and emergency response procedures prepared in consultation with the state and regional emergency service providers and provide an adequate level of training to staff who will be tasked with emergency management activities.

#### Enclosure 10 – bushfire hazard assessment and management plan

To demonstrate compliance with **condition 12.1** of this development approval, prepare a bushfire hazard assessment and management plan. The bushfire hazard assessment and management plan must be prepared in accordance with all relevant state and federal guidelines, policies and regulations, certified by a suitably qualified person and prepared in consultation with all landholders, Queensland Fire and Emergency Services and the Local Disaster Management Groups for Whitsunday Regional Council.

The bushfire hazard assessment and management plan must provide a bushfire hazard assessment as well as mitigation strategies to achieve the development outcomes in Part E of the State Planning Policy July 2017 – Natural Hazards, Risk and Resilience including:

- (a) identification and quantification of fire risk
- (b) strategies for the prevention and minimisation of fire hazard including details of the proposed ongoing management of fuel loads across the subject site and the management of the asset protection zone around on-site infrastructure.
- (c) strategies for the protection of life and property in the event of a bushfire
- (d) details on how the above will be implemented, including sourcing of required materials and services independent of the allocation of such materials and services to towns within the Whitsunday region.

The QFES document *Bushfire Resilient Communities: Technical Reference Guide for the State Planning Policy State Interest 'Natural Hazards, Risk and Resilience - Bushfire'*, (QFES 2019) provides specific advice on:

- (a) The process for undertaking a bushfire hazard assessment (Chapter 5)
- (b) The process for calculating asset protection zones (Chapter 7), and
- (c) The process for preparing a bushfire management, vegetation management or landscape maintenance plans (Chapter 8).

The bushfire hazard assessment and management plan shall be provided to the Queensland Fire and Emergency Services Sustainable Development Unit for review prior to commencement of use and is to be referred to:

Sustainable Development Unit L2 85 Hudson Road Albion sdu@qfes.qld.gov.au

# Enclosure 11 – acid sulfate soils management plan

To demonstrate compliance with **condition 12.1** and **condition 13** of this development approval, prepare an acid sulfate soils management plan (by a suitably qualified person) in accordance with the current *Queensland Acid Sulfate Soils Technical Manual: Soil management guidelines,* prepared by the Department of Science, Information Technology, Innovation and the Arts, 2014.

# Enclosure 12 – site-based land management plan

To demonstrate compliance within **condition 21.1** of this development approval:

- (a) Prepare a site-based land management plan that includes a site-based pest management plan in accordance with the Department of Agriculture and Fisheries '*Pest Management Planning*' guidance material that includes, but is not limited to, the following:
  - (i) a pre-works inspection of the property to locate, map and identify existing pest flora and fauna species.
  - (ii) training of site personnel in the identification of local pest species likely to occur at the site.
  - (iii) no vehicles enter the wetland protection area 50m buffer zone
- (b) Implement the procedures/requirements contained in the site-based pest management plan, prepared in accordance with (a).

**Note**: The applicable guidance material is available at <u>http://www.daf.qld.gov.au/business-</u>priorities/biosecurity/invasive-plants-animals/pest-management-planning

# Enclosure 13 – decommissioning and rehabilitation management plan

To demonstrate compliance with **condition 21.1** of this development approval, prepare a detailed site-specific decommissioning and rehabilitation management plan (by a suitably qualified person). The plan is to include:

- (a) details of how the area will be rehabilitated, including the removal of all temporary and permanent infrastructure and facilities
- (b) details of self-sustaining species (groundcover and vegetation) to be planted within six months of site decommissioning, including proposed numbers and location
- (c) a monitoring programme, including timeframes to ensure the revegetation species will survive (including during the dry period)
- (d) details of measures to be implemented to prevent weed control and erosion of the site
- (e) identification of the proposed topography of this site after rehabilitation.

After decommissioning or abandonment for any reason, all significant disturbed land caused by the carrying out of the activity(ies) must be rehabilitated to meet the following final acceptance criteria:

- (a) any contaminated land (e.g., contaminated soils) is remediated and rehabilitated
- (b) for land that is not being cultivated by the landholder:
  - i. groundcover, that is not a declared pest species, is established and selfsustaining
  - ii. vegetation of similar species richness and species diversity to preselected analogue sites is established and self-sustaining.
- (c) for land that is to be cultivated by the landholder, cover crop is revegetated, unless the landholder will be preparing the site for cropping within three months of activities being completed.