

EPBC Act referral



Australian Government

Department of Agriculture, Water and the Environment

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Title of proposal	2021/9095 - Hanson Tweed Sand Plant Expansion
Section 1	
Summary of your proposed action	
1.1 Project industry type	Mining
1.2 Provide a detailed description of the proposed action, including all proposed activities	
<p>PROJECT OVERVIEW</p> <p>The proposed action ('the Project') is the expansion of the existing Hanson Tweed Sand Plant (HTSP). The sand plant has operated on part of the subject site since 1983, with Hanson acquiring and operating the sand plant since 2007. The existing HTSP operation has a total extraction footprint of approximately 46ha. Under existing approvals HTSP is authorised to produce and transport up to 500,000 tonnes of quarry products from the site per financial year. HTSP currently operates a single dredge unit which is linked to an onshore wash plant via a floating flow line. Sand product is processed through the wash plant, stockpiled and loaded via a front-end loader into standard highway trucks.</p> <p>To meet ongoing demand for sand, Hanson is proposing to expand its existing operations into lands to the north and west of the HTSP site over a thirty (30) year period (market driven). The footprint of the expansion area is approximately 190 ha, giving a total combined footprint of 236 ha for the existing and future extraction areas. This expansion will be carried out progressively over seven (7) extraction phases. The proposed expansion would access a sand resource of 30-35 million tonnes and provide production and transport of a maximum 950,000 tonnes per annum (market driven). ATTACHMENT 1 (Att 1-Extraction Phases.pdf) shows the proposed extraction phases and extent.</p> <p>The sand resource will continue to be extracted via dredge to a variable depth (20m below ground level nominal). Onsite processing will continue. The Project would initially utilise the existing wash plant and stockpile area currently located on the eastern boundary of Lot 22 DP1082435 during Phases 5 and 6. As extraction phases progress the site buildings and wash plant will be relocated to an alternative position onsite at the northern end of Lot 2 DP1192506 from Phase 7 onwards. More details on the proposed action are provided in the Hanson Tweed Sand Plant Expansion (Phase 5 to Phase 11) Environmental Impact Statement (Zone Planning Group 2021).</p> <p>EXTRACTION PHASING</p> <p>Seven (7) extraction phases (Phases 5 to 11) are proposed. Extraction across the phases may be completed in a non-sequential manner depending on Hanson operational requirements and market demand.</p> <p>Phases 1 to 4 of the HTSP have either been completed or currently under extraction. Phase 4 is estimated to have 6 to 10 years of resource remaining (depending on market conditions). Phase 5 of the Project will include completing any Phase 4 extraction that is yet to be completed and the re-extraction of the Phase 1 to 4 areas to ensure project depth (20m below ground level nominal) has been achieved and to establish the proposed final lake bank profiles throughout these locations.</p> <p>ACCESS</p> <p>Access to the Project will be via a new private haulage road connected to the Tweed Valley Way / M1 Interchange. The existing HTSP Phase 1 to 4 haulage route of Altona Road / Crescent Street / Tweed Coast Road will be abandoned, removing all HTSP vehicles from the local Council road network. The new internal haulage road will be a private road with no public access. There is to be no through connection facilitated from Altona Road to the Tweed Valley Way / M1 interchange as part of the Project. To facilitate access the proposal includes upgrade works (enabling works) to the adjoining road network in the form of:</p> <ul style="list-style-type: none">• Construction of a new eastern roundabout on the Tweed Valley Way off ramp, linking to the new internal haulage road.• Upgrades to the existing western Tweed Valley Way roundabout including lane widening. <p>OPERATING HOURS</p> <p>Operating hours for the Project including extraction, processing, loading and dispatch of trucks, and maintenance are proposed to be 24 hours, seven days a week.</p> <p>LIGHTING</p> <p>The Project seeks approval for 24 hours, seven days per week operations and as a result lighting will be required. The site would only be illuminated to the extent required to facilitate operational requirements. Lighting will be designed in accord with AS4282:2019 - Control of the obtrusive effects of outdoor lighting. Site lighting will be confined to the site buildings and wash plant area.</p> <p>MATERIAL IMPORT</p>	



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The Project will import 60,000 tonnes per annum of Virgin Excavated Natural Material (VENM) including rock for the purposes of backfilling, armouring lake edges and rehabilitation works. This material would be imported via incoming truck movements.

OVERBURDEN

The extraction areas are topped with material containing organic matter to a depth varying between 300mm and 500mm. This overburden material would be progressively stripped from the active extraction phase as required to allow sand extraction. This material would be utilised as part of site rehabilitation and habitat creation. Any overburden material that cannot be utilised would be removed from the Project site.

INTERIM AGRICULTURAL USE / AGISTMENT

Until an extraction phase comes online, the Project would maintain existing agricultural use on the property. This use currently comprises predominately cattle grazing plus a small area of tea tree cultivation in the part of the Project site identified as Phase 5. The land will be leased back for agistment as appropriate. This agistment process would require ongoing adjustment to site fencing as phases of extraction progress.

FINAL LANDFORM / REHABILITATION

Rehabilitation and establishment of a final naturalised landform is to occur progressively as extraction progresses. Total rehabilitation area is approximately 38 ha (over 16% of the site area). The rehabilitation works will deliver three (3) types of rehabilitation areas as follows:

- Wetland rehabilitation areas – primarily assisted natural regeneration of water plants/macrophytes around the fringes of the lake.
- Riparian rehabilitation areas – providing a variable width (minimum 10m wide) vegetated buffer around the perimeter of the subject site; and
- Open space areas – consisting of landscaped and grassed areas.

Following the completion of sand extraction in each phase, banks of the extraction lake will be graded to the appropriate levels and stabilised where necessary. The banks and batters within and adjacent to the extraction lakes are to be non-uniform and exhibit an undulating surface (including areas of deep water) to maximise habitat diversity and mimic natural landform variance. The final form of lake banks will vary from gently inclined sandy 'beach' areas and wetlands to steeper banks reinforced with vegetation, floating wetlands and/or placed rock (or similar).

END USE

Hanson would retain ownership of the site following completion of sand extraction and any proposed subsequent use of the site would be decided via the appropriate consultative, application and regulatory processes in place at that time.

1.3 What is the extent and location of your proposed action?

See Appendix B

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland)

The Project site is located at Cudgen NSW within the Tweed LGA. The site is located 8.5km south of the NSW/QLD state border; 1.5km west of Kingscliff; 14km north east of Murwillumbah. The Project site is positioned between the Pacific Highway (M1) and Tweed Valley Way interchange to the north and west; Tweed Coast Road to the east and Cudgen Road/Cudgen Plateau to the south. The site is located approximately 2km from the Stotts Island Nature Reserve and 3km from the Cudgen Nature Reserve.

HTSP currently operates existing sand extraction lake in the eastern portion of the site. A small area to the north of the lake is used for tea tree cultivation. The remaining portions of the site are used for cattle grazing. The site is a flat floodplain and consists of cleared grazing paddocks intersected by constructed agricultural drains. Native vegetation on site is mainly limited to linear patches along the drainage lines and rehabilitation works on the southern boundary of the lake.

1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

The proposed development footprint (Project site) covers a total area of approximately 236 ha (Att 1-Extraction Phases.pdf). The disturbance area (footprint of the expansion area) is approximately 190 ha (Att 1-Extraction Phases.pdf). The avoidance area is approximately 46 ha (Att 1-Extraction Phases.pdf).

1.7 Proposed action location

Address - Altona Road, Cudgen, NSW, 2487, Australia



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1.8 Primary jurisdiction		New South Wales
1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
1.10 Is the proposed action subject to local government planning approval?		
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
1.10.1 Is there a local government area and council contact for the proposal?		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
1.11 Provide an estimated start and estimated end date for the proposed action	Start Date	01/01/2022
	End Date	01/01/2052
1.12 Provide details of the context, planning framework and state and/or local Government requirements		
<p>The Project is the expansion of the existing Hanson Tweed Sand Plant (HTSP). Consent for the proposed expansion has been sought from New South Wales Department of Planning, Industry and Environment (DPIE).</p> <p>The Project requires development consent under the Environmental Planning and Assessment Act 1979. The Project, defined as an 'extractive industry', is identified as 'State Significant Development' under State Environmental Planning Policy (State and Regional Development) 2011. The Project is permissible with consent under State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 and the Tweed Local Environmental Plan 2014.</p> <p>The existing HTSP has operated on the site since 1983 with Phases 1 to 4 either completed or currently under extraction. HTSP Phases 1 to 4 have been facilitated by the following development approvals:</p> <ul style="list-style-type: none">• Phase 1 - T4/2562;• Phase 2 - DA0041/2001; and• Phases 3 & 4 - DA 152-6-2005. <p>Approvals T4/2562 and DA0041/2001 have been surrendered and HTSP is currently operating under DA152-6-2005 MOD 1 which was issued by DPIE on 20 August 2018.</p> <p>In addition to the MOD1 approval issued by DPIE, HTSP also currently operates under Environmental Protection License (EPL) 11453 issued by the NSW Environment Protection Agency. This EPL authorises sand extraction activities at the site. The EPL contains provisions that govern:</p> <ul style="list-style-type: none">• The scale and nature of activities that are permitted on the subject site.• Discharges to air, water, and application to land.• Limit conditions for pollution of waters, load limits and concentration limits.• Monitoring and recording conditions.• Reporting conditions. <p>HSTP holds several Water Access Licenses (WAL) and holds a 109ML water allocation within the Tweed-Brunswick Coastal Sands Groundwater Source Water Sharing Plan (WSP).</p> <p>The DPIE issued the Secretary's Environmental Assessment Requirements (SEARs) for the Project in December 2019, with an Environmental Impact Statement subsequently prepared and submitted to DPIE in March 2021.</p>		
1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders		
<p>The Project has been subject to a range of initial engagements including 'scoping consultation', post SEAR's public authority consultation and post SEAR's community consultation. Details of public consultation completed are outlined in the Hanson Tweed Sand Plant Expansion (Phase 5 to Phase 11) Environmental Impact Statement (Zone Planning Group 2021). These activities are summarised below:</p> <p>DA 152-6-2005 MOD 1</p> <p>As part of the DA 152-6-2005 MOD 1 application and approval process, relevant government agencies and stakeholders were consulted to determine the key issues and how these maybe avoided or mitigated. Primary issues raised related to the proposed truck numbers, access via Altona Road and the intersection at Crescent Street and Tweed Coast Road. These consultations, the assessment undertaken by DPIE and public submissions received and addressed as part of DA 152-6-2005</p>		



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MOD 1 have informed the early Project scope and development. The issues identified (particularly those contained within the public submissions) in DA 152-6-2005 MOD 1 have been utilised as a start point to incorporate impact avoidance within the Project's design.

SCOPING CONSULTATION

As part of project scoping and in preparation for seeking the Project SEAR's, consultation with relevant public authorities occurred, as follows:

- 16th August 2019 - Meeting (virtual) with DPIE;
- 23rd September 2019 - Meeting (virtual) with Transport for NSW;
- 21st October 2019 - Meeting (virtual) with EPA; and
- 1st November 2019 – Written communication with Tweed Shire Council.

POST SEAR'S CONSULTATION

An EIS has been prepared as part of the HTSP expansion application. In preparing the EIS, ongoing consultation with public authorities occurred including:

- 2nd December 2020 - Pre-Lodgement Meeting (virtual) with Tweed Shire Council;
- 11th December 2020 - Meeting (in person) with Tweed Shire Council Councillor Mr. Warren Polglaze; and
- 20th January 2021 - Meeting (virtual) with DPIE.

COMMUNITY CONSULTATION

As the potential impacts associated with the Project are localised and the Project site has limited interface with residents, the project team elected to carry out targeted local communications, with considerable effort undertaken to inform and involve a broad range of local stakeholders. Communication was distributed through a targeted letterbox drop across the Project catchment. In total, over 400 letters were dropped into local letterboxes by the community engagement team. This information was supplemented with phone calls and emails. The team dropped a second round of letters to immediate neighbours to further advise of opportunities to discuss the Project.

In addition to the letter box drop, email and phone communication; a notice was included in the Cudgen Public School newsletter promoting the opportunity to be involved, and the Project was discussed at the school P&C. This was initiated following a briefing given to the Principal and P&C President (parent and local resident) by Project representatives.

The HTSP Community Consultative Committee (CCC) was also informed about the Project and encouraged to make comment, including completing the community survey.

In response to this proactive communication, the Project team subsequently held discussions with 12 local stakeholders. In total, the Project held 2 meetings, 5 phone conversations, received 5 surveys and 4 emails.

CONTINUATION OF STAKEHOLDER ENGAGEMENT

The EIS was placed on public exhibition to allow for government agencies, organisations, interest groups, stakeholders, and community members to review the Project, seek clarification from the applicant and Project team on the content of the EIS and provide written submissions if required.

All communication channels utilised during community consultation remain open and can be utilised to contact the Project team at any time. In addition, the existing HTSP Community Consultative Committee will continue to operate.

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project

Secretary's Environmental Assessment Requirements (SEARs) were issued for the project in Dec 2019. An Environmental Impact Statement (EIS) (Zone Planning Group 2021) was prepared in April 2021 and included the following reports:

- Surface Water Assessment
- Ground Water Assessment
- Flood & Stormwater Report
- Flood Response Plan
- Soil & d Water Management Plan
- Operational Noise Impact Assessment
- Construction Noise Assessment
- Air Quality Assessment
- Biodiversity Development Assessment Report
- Concept Rehabilitation & Landscape Management Plan
- Aboriginal Cultural Heritage Assessment



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- Traffic Impact Assessment
- Acid Sulfate Soils Assessment
- Preliminary Site Investigation
- Agricultural Land Assessment
- Geotechnical Report
- Landform Sections
- Visual Impact Assessment
- Social Impact Assessment
- Economic Impact Assessment

1.15 Is this action part of a staged development (or a component of a larger project)?

☐ Yes ☒ No

1.16 Is the proposed action related to other actions or proposals in the region?

☐ Yes ☒ No



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Section 2

Matters of national environmental significance

2.1 Is the proposed action likely to have any direct or indirect impact on the values of any World Heritage properties?

☐ Yes ☒ No

2.2 Is the proposed action likely to have any direct or indirect impact on the values of any National Heritage places?

☐ Yes ☒ No

2.3 Is the proposed action likely to have any direct or indirect impact on the ecological character of a Ramsar wetland?

☐ Yes ☒ No

2.4 Is the proposed action likely to have any direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

☒ Yes ☐ No

Species or threatened ecological community

Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland

Impact

Hanson Construction Materials Pty Ltd (Hanson) engaged JWA Pty Ltd (JWA) to prepare a Swamp Oak Forest Endangered Ecological Community (EEC) Assessment Report (ATTACHMENT 2, Att 2-EEC Assessment.pdf) for the proposed expansion of their Tweed Sand Plant (TSP) operation located in Cudgen, New South Wales (the 'Project'). Specifically, this report was prepared to assess the presence of the Swamp Oak Forest of New South Wales and Southeast Queensland EEC, as listed within schedules of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), and whether the Project will have any significant impact on the community.

A number of linear patches and small clumps of Swamp oak (*Casuarina glauca*) occur within the cleared grazing paddocks that comprise the subject site (ATTACHMENT 2, Att 2-EEC Assessment.pdf, Section 2.3.3, pages 9-11 and figure 5). The Swamp oaks have generally regrown in associated with constructed drains. It is noted that approximately 98% of the proposed expansion area is devoid of native vegetation.

Key diagnostic characteristics and condition thresholds are included within the Conservation Advice for Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland (Department of Environment and Energy 2018) and have been used to:

1. identify a patch of native vegetation as being the threatened ecological community;
2. determine whether the referral, assessment, approval and compliance provisions under national environmental law are likely to apply to a patch; and
3. distinguish between patches of different quality (to aid environmental management decisions).

The national listing focuses legal protection on patches of the ecological community that are the most functional, relatively natural and in comparatively good condition. Because the ecological community exhibits various degrees of disturbance and degradation, condition thresholds, classes and categories have been developed. These provide guidance on whether a patch retains sufficient conservation values to be considered as a Matter of National Environmental Significance (MNES), as currently defined under the EPBC Act.

In order to be considered a MNES, areas of the ecological community must meet both:

- the key diagnostic characteristics; AND



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- at least the minimum condition thresholds for Category C.

One (1) small contiguous patch of good quality Swamp oak forest has been identified on the subject site and therefore meets the criteria of Category C (ATTACHMENT 2, Att 2-EEC Assessment.pdf, Section 2.4, pages 16 and figure 6). Approximately 1.20 ha (77%) of this vegetation will be cleared as part of the proposed development (ATTACHMENT 2, Att 2-EEC Assessment.pdf, Section 3, pages 17-18 and figures 7-13). The proposal has therefore been considered against relevant EPBC Act Policy Statements, including the Matters of National Environmental Significance - Significant Impact Guidelines 1.1 (DotE 2013) which provides a self-assessment process to assist in determining whether an action should be referred to the Commonwealth for a decision on whether assessment and approval is required under the Act (ATTACHMENT 2, Att 2-EEC Assessment.pdf, Section 5, pages 22-24).

With consideration of the sensitivity, value, and quality of the Swamp oak forest EEC which is to be impacted, and the intensity, duration, magnitude and geographic extent of the impacts, the assessment has determined that the proposal would not be likely to result in a significant impact on the Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland. Regardless, Hanson has elected to refer the proposed action to the Federal Minister for the Environment (ATTACHMENT 2, Att 2-EEC Assessment.pdf, Section 6, pages 25-26).

2.4.2 Do you consider this impact to be significant?

☐ Yes ☒ No

2.5 Is the proposed action likely to have any direct or indirect impact on the members of any listed migratory species or their habitat?

☐ Yes ☒ No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

☐ Yes ☒ No

2.7 Is the proposed action likely to be taken on or near Commonwealth land?

☐ Yes ☒ No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

☐ Yes ☒ No

2.9 Is the proposed action likely to have any direct or indirect impact on a water resource from coal seam gas or large coal mining development?

☐ Yes ☒ No

2.10 Is the proposed action a nuclear action?

☐ Yes ☒ No

2.11 Is the proposed action to be taken by a Commonwealth agency?

☐ Yes ☒ No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage place overseas?

☐ Yes ☒ No



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2.13 Is the proposed action likely to have any direct or indirect impact on any part of the environment in the Commonwealth marine area?

☐ Yes ☒ No



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Section 3

Description of the project area

3.1 Describe the flora and fauna relevant to the project area

Site vegetation and fauna surveys were completed over the Project site as part of the preparation of a Biodiversity Development Assessment Report (ATTACHMENT 3, Att 3-BDAR.pdf).

Vegetation on the site ranges from moderate to poor condition due to a history of vegetation clearing, cropping and cattle grazing activities. Surveys of the subject site recorded six (6) distinct native vegetation zones (ATTACHMENT 3, Att 3-BDAR.pdf, Section 3.3.1, pages 18-19 and figure 8):

- Vegetation Zone 1: Mid-high swamp sclerophyll forest (*Casuarina glauca*) to 18m.

This zone occurs along drainage lines throughout the subject site and comprised almost entirely of a sub-mature Swamp oak (*Casuarina glauca*) to a height of 18m. The mapped extent of this vegetation zone on the subject site covers a total area of approximately 4.9 ha of which 1.89 ha occurs within the proposed expansion footprint.

- Vegetation Zone 2: Mid-high regenerating swamp sclerophyll forest (*Casuarina glauca*) +/- Mangroves (*Avicennia marina*) to 5-10m.

This zone occurs along drainage lines throughout the subject site and comprised a mixture of a sub-mature Swamp oak and Grey mangrove (*Avicennia marina*) to a height of 5-10m. The mapped extent of this vegetation zone on the subject site covers a total area of approximately 2.07 ha of which 1.10 ha occurs within the proposed expansion footprint.

- Vegetation Zone 3: Tall swamp sclerophyll forest (*Melaleuca quinquenervia*, *Cinnamomum camphora*) to 22m.

This zone occurs in the northern portion of the site and is comprised of a mixture of Broad-leaved paperbark (*Melaleuca quinquenervia*) and the introduced Camphor laurel (*Cinnamomum camphora*). The mapped extent of this vegetation zone on the subject site covers a total area of approximately 0.86 ha of which 0.57 ha occurs within the proposed expansion footprint.

- Vegetation Zone 4: Tall rushland/reedland (*Typha orientalis*) to 2m.

This zone occurs along drainage lines in the southern portion of the subject site and is comprised almost entirely of Broadleaf cumbungi (*Typha orientalis*) to a height of up to 2m. The mapped extent of this vegetation zone on the subject site covers a total area of approximately 0.09 ha, all of which occurs within the proposed expansion footprint.

- Vegetation Zone 5: Riparian rehabilitation areas.

This zone occurs along the margins of the existing HTSP operation and is comprised of areas that are currently proposed to be rehabilitated to be representative of Swamp oak forest. The mapped extent of this vegetation zone on the subject site covers a total area of approximately 2.85 ha of which 0.47 ha occurs within the proposed expansion footprint.

- Vegetation Zone 6: Wetland rehabilitation areas.

This zone occurs within the margins of the existing HTSP operation and is comprised of areas that are currently proposed to be rehabilitated to wetland vegetation. The mapped extent of this vegetation zone on the subject site covers a total area of approximately 2.85 ha of which 1.59 ha occurs within the proposed expansion footprint.

Two (2) additional non-native vegetation zones were identified on the subject site and are comprised entirely of exotic or planted species:

- Vegetation Zone 7: Tea tree plantation.
- Vegetation Zone 8: Pasture grass.

Site vegetation as it relates to the presence of the Swamp Oak Forest of New South Wales and Southeast Queensland EEC, as listed within schedules of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), was further refined during the preparation of the Swamp Oak Forest Endangered Ecological Community (EEC) Assessment Report (ATTACHMENT 2, Att 2-EEC Assessment.pdf). One (1) small contiguous patch of good quality Swamp oak forest covering a total of 1.56 ha has been identified on the subject site and therefore meets the EPBC Act criteria of Category C (ATTACHMENT 2, Att 2-EEC Assessment.pdf, Section 2.4, pages 16 and figure 6).

3.2 Describe the hydrology relevant to the project area (including water flows)

The site is located within the lower reaches of the Tweed River Floodplain. The headwaters of the Tweed River begin near Kunghur NSW 2484, approximately 50 km southwest of Chinderah NSW 2487 and generally flow in a north-easterly direction. Numerous rivers, creeks and tributaries feed into the Tweed River, including the Oxley River approximately 5 km southwest of Murwillumbah NSW 2484, and the Rouse River west of Tumbulgum NSW 2490. The Tweed River discharges into the Pacific Ocean at the Tweed River mouth, immediately east of Tweed Heads NSW 2485. The tidal influence of the Pacific Ocean extends just upstream of Murwillumbah NSW 2484.



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Most runoff from the site passively infiltrates through the highly permeable sandy soils. Any remaining runoff is currently diverted towards the existing on-site extraction areas or conveyed to a network of agricultural drains present on the site. Runoff that is produced over the existing sand extraction area is generally contained within the existing on site lake and prevented from over-topping into external drainage lines (Att 4-Flood Stormwater Assessment-Part1.pdf, Section 3.2.1, page 6). During high intensity rainfall events, the site becomes inundated and peak discharges may potentially flow toward the agricultural drainage lines constructed along the northern, southern and western property boundaries. These drains convey runoff from the surrounding agricultural properties through flood gates to the Tweed River. The floodplain is crisscrossed by a network of interconnecting agricultural drains and flood gates which convey water from the floodplain to the Tweed River. The main drain through the catchment flows westwards from Tweed Coast Road parallel to Altona Road. The drain then turns northwards adjacent to the HTSP site before discharging into the Tweed River through culverts under the M1 and Chinderah Bay Drive (Att 4-Flood Stormwater Assessment-Part1.pdf, Section 3.2.1, page 6).

These culverts have flood gates installed on the River side, under Chinderah Bay Drive. Other minor drains run east-west and north-south across the floodplain and generally discharge into the western drain. The floodplain is subject to inundation from both local catchment floods as well as Tweed River overbank floods.

The subject site is completely flat and only drains once sufficient rain has fallen to create a hydraulic grade towards the outlets (Att 4-Flood Stormwater Assessment-Part1.pdf, Section 3.2.1, page 6). The system is brackish and tidal water prevents the existing drainage lines from being completely free from water.

A Flood and Stormwater Assessment has been prepared by Burchill Engineers and is provided in ATTACHMENT 4 (Att 4-Flood Stormwater Assessment-Part1.pdf), ATTACHMENT 5 (Att 5-Flood Stormwater Assessment-Part2.pdf) and ATTACHMENT 6 (Att 6-Flood Stormwater Assessment-Part3.pdf).

3.3 Describe the soil and vegetation characteristics relevant to the project area

Soils consist of a natural thin layer of soft clay overlying a very loose to dense sand profile to depths of between 17.8m and 19.0m (Zone Planning Group 2021).

Vegetation on the site is described in Section 3.1.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area

There are no natural features or any other important or unique values relevant to the Project area.

3.5 Describe the status of native vegetation relevant to the project area

The majority of the subject site is cleared and highly disturbed due to past and current land practices. The land has been previously used for cattle grazing, tea tree cultivation and sand extraction. As a result, vegetation on the subject site is considered to be in moderate to poor condition.

Details of the status of native vegetation on the subject site is provided in the Biodiversity Development Assessment Report (ATTACHMENT 3, Att 3-BDAR.pdf, Section 3.3.2, pages 19-21):

Vegetation Zones 1 & 2 are considered to be best represented by Plant Community Type (PCT) 1235 (Swamp Oak swamp forest of the coastal lowlands of the NSW North Coast Bioregion) as described within the BioNet Vegetation Classification (OEH 2021). PCT 1235 is considered to be representative of the TEC Swamp Oak Floodplain Forest of the NSW North Coast, Sydney Basin and South East Corner bioregions as listed within schedules of the BC Act (2016) and by definition has a high conservation status.

Vegetation Zone 3 is considered to be best represented by Plant Community Type (PCT) PCT 1064 (Paperbark swamp forest of the coastal lowlands of the NSW North Coast Bioregion and Sydney Basin Bioregion) as described within the BioNet Vegetation Classification (OEH 2021). PCT 1064 is considered to be representative of the TEC Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions as listed within schedules of the BC Act (2016) and by definition has a high conservation status.

Vegetation Zone 4 is highly disturbed but is considered to have been derived from Plant Community Type (PCT) 780 (Coastal floodplain sedgeland, rushlands, and forblands of the North Coast) as described within the BioNet Vegetation Classification (OEH 2021). PCT 780 is considered to be representative of the TEC Freshwater Wetlands on Coastal Floodplains of the NSW North Coast, Sydney Basin and South-east Corner Bioregions as listed within schedules of the BC Act (2016). The conservation status of this highly disturbed vegetation on the subject site is considered to be significantly lowered.



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Vegetation Zone 5 is currently proposed to be rehabilitated to be representative of PCT 1235 (Swamp Oak swamp forest of the coastal lowlands of the NSW North Coast Bioregion) after completion of the current sand extraction operations, in accordance with the approved Rehabilitation and Landscape Management Plan (JWA 2021).

Vegetation Zone 6 is currently proposed to be rehabilitated to wetland vegetation, in accordance with the approved Rehabilitation and Landscape Management Plan (JWA 2021). Vegetation Zone 6 has been allocated to PCT 1808 (Estuarine reedland). PCT 1808 is not considered to be representative of any TECs listed within schedules of the BC Act (2016).

Vegetation Zones 7 & 8 are comprised of exotic or planted species and have no conservation status.

Site vegetation as it relates to the presence of the Swamp Oak Forest of New South Wales and Southeast Queensland EEC, as listed within schedules of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), was further refined during the preparation of the Swamp Oak Forest Endangered Ecological Community (EEC) Assessment Report (ATTACHMENT 2, Att 2-EEC Assessment). One (1) small contiguous patch of good quality Swamp oak forest covering a total of 1.56 ha has been identified on the subject site and therefore meets the EPBC Act criteria of Category C (ATTACHMENT 2, Att 2-EEC Assessment.pdf, Section 2.4, pages 16 and figure 6).

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area

Local topographic mapping indicates that the elevation of the property is uniform, with an average Relative Level (RL) of 1.0 metre Australian Height Datum (AHD). The site slope is level (<1%) to very gently inclined (1-3%). The Project site abuts the Cudgen Plateau to the south, where elevations rise steeply to approximately 38m AHD.

3.7 Describe the current condition of the environment relevant to the project area

Vegetation on the site ranges from moderate to poor condition due to a history of vegetation clearing, cropping and cattle grazing activities. Native vegetation is predominately limited to patches along agricultural drainage lines and rehabilitation works on the southern boundary of the existing extraction lake (ATTACHMENT 2, Att 2-EEC Assessment.pdf, Section 1.2, page 4).

3.8 Describe any Commonwealth Heritage places or other places recognised as having heritage values relevant to the project

There are no Commonwealth heritage places within 10km of the site. Three items of local heritage are identified within proximity of the project site as mapped under the Tweed Local Environmental Plan 2014. These items are identified as the Chinderah Cemetery, Cudgen Dry Stone Walls, and Cudgen War Memorial cenotaph. These areas are not located on or adjacent to the subject site and will not be impacted by the proposed works. Details of heritage values are provided in the EIS (Zone Planning Group 2021).

3.9 Describe any Indigenous heritage values relevant to the project area

Tweed Shire Council's Aboriginal Cultural Heritage Management Plan (ACHMP) (Tweed Shire Council 2018) indicates an area within the project site as an 'Aboriginal Place of Heritage Significance', comprising the extraction lake in the eastern portion of Lot 22 DP1082435. This mapping applies to the Crescent Street Aboriginal site (#04-2-0109) which has previously been removed under a care and control order. The southern extent of the Project Area (Lot 1 DP1250570) adjoins an area of hill slopes identified as an area of 'Predictive Aboriginal Cultural Heritage'. This area is outside the site extents and will not be impacted by the proposed works. Details of heritage values are provided in the EIS (Zone Planning Group 2021).

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area

The site is freehold land.

3.11 Describe any existing or any proposed uses relevant to the project area

HTSP is currently operating on part of the Project site with Phases 1 to 4 either completed or currently under extraction. The existing HTSP operation has a total extraction footprint of approximately 46ha. HTSP operates under Development Application (DA) DA 152-6-2006 issued on 31st July 2006, as modified on 20th August 2018 (Notice of Modification MOD 1). The current MOD 1 approval remains valid until 1st July 2036 and authorises HTSP to produce and transport from the site up to 500,000 tonnes of quarry products per financial year. HTSP currently operates a single dredge unit which is linked to an onshore wash plant via a floating flow line. Sand product is processed through the wash plant, stockpiled and loaded via a front-end loader into standard highway trucks.

A small area to the north of the existing extraction lake is currently used for tea tree cultivation. The remaining portions of the site are currently used for cattle grazing.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 4

Measures to avoid or reduce impacts

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action

Details of measures to avoid and mitigation potential impacts of the Proposed action are detailed in ATTACHMENT 2 (Att 2-EEC Assessment.pdf, Section 4, pages 19-21).

LOCATING THE PROJECT

The Project will generally be located in areas which have historically been cleared or otherwise disturbed by clearing impacts.

PROJECT DESIGN

The Project will be constructed in a manner sensitive to areas of retained habitat on adjoining land and designed in a manner that reduces associated indirect impacts.

EDUCATION OF SITE PERSONNEL

A construction personnel induction program shall be developed by the Proponent to highlight the presence of significant vegetation and habitat values adjacent to the site. The general induction of all construction personnel will cover such matters as:

- Areas adjacent to the site in which significant vegetation and habitat values occur;
- Threats to significant vegetation and habitat values associated with construction activities;
- Requirement to report any incidents within the significant vegetation and habitat areas, and actions required; and
- Requirements of any relevant Management Plans, particularly protocols for vegetation clearing and measures to protect all other native vegetation.

VEGETATION PROTECTION MEASURES

During construction activities, temporary high visibility fencing will be erected to assist in the protection of vegetation to be retained from all construction activities by restricting access from machinery and contractors. This fencing will be erected in accordance with Australian Standard 4970-2009 Protection of Trees and any additional requirements of a Vegetation Management Plan to be prepared by a suitably qualified ecologist. Temporary signage will be provided along all temporary fencing during the construction phase stating "Environmental Protection Zone – No Unauthorised Entry".

No machinery, rubbish or spoil will be stored within retained vegetation during the construction phase of the Project. Vehicle/equipment wash-down areas or access tracks will not be located in or immediately adjacent to retained vegetation.

FAUNA PROTECTION MEASURES

Vegetation will be inspected for fauna by a suitably qualified ecologist immediately prior to the commencement of clearing/earthworks. Any fauna detected within proposed clearing areas will be relocated to suitable habitat outside of the subject site. Consideration will be given to appropriate release times and locations for specific fauna groups and a record kept of all species encountered/relocated.

WATER QUALITY PROTECTION MEASURES

In relation to surface water quality, the Surface Water Assessment (G&S 2021b) has determined that the water quality recorded at the existing HTSP site has remained largely stable over time. The soil and water management practices implemented at the site to date have proven successful in maintaining and in some instances improving water quality within the extraction lake. With continued implementation of existing soil and water management practices it is anticipated that existing water quality at the site will be maintained in the long-term.

In relation to groundwater quality, the Groundwater Assessment (G&S 2021a) notes that an ongoing program of groundwater quality compliance monitoring has been undertaken at the HTSP site since 2001, resulting in a comprehensive data set for the site. Groundwater will be managed in accordance with the measures prescribed in the Soil and Water Management Plan (G&S 2021c). This management plan outlines monitoring regimes and mitigation measures for the management of impacts to surface and groundwaters.

REHABILITATION WORKS AND APPROPRIATE LANDSCAPING

Rehabilitation works on the site will be completed on a stage-by-stage basis following completion of sand extraction works within each phase. A Concept Rehabilitation and Landscape Management Plan (RLMP) (JWA 2021) has been prepared for the subject site. Rehabilitation works will be carried out progressively over eleven (11) phases following the completion of sand extraction works. Three (3) Rehabilitation Areas are proposed (ATTACHMENT 2 (Att 2-EEC Assessment.pdf, Section 4.2.3, pages 20-21 and Figure 14):

- Wetland rehabilitation areas – approx. 10.65 ha primarily consisting of assisted natural regeneration of water plants/macrophytes around the fringes of the lake;



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

- Riparian rehabilitation areas – approx. 24.85 ha (over 10% of the site area) providing a minimum 10m wide vegetated buffer around the perimeter of the subject site; and
- Open space areas – (in the vicinity of beach areas) consisting of landscaped and grassed areas.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved

In addition to the measures described above, offsets for the unavoidable loss of native vegetation have been calculated in accordance with the requirements of the NSW Biodiversity Offset Scheme (BOS) (ATTACHMENT 3, Att 3-BDAR.pdf, Section 7, pages 51-52).

In addition to satisfying offset obligations in accordance with the BOS, a Concept Rehabilitation and Landscape Management Plan (CRLMP) (JWA, Nov 2021) has been prepared and submitted as part of the EIS (ATTACHMENT 7, Att 7-Concept RLMP.pdf). In accordance with the CRLMP, riparian rehabilitation works proposed on the site will cover approximately 24.85 ha (over 10% of the site area) and will be completed on a stage-by-stage basis following the completion of sand extraction works within each phase (ATTACHMENT 7, Att 7-Concept RLMP.pdf, Section 1.4, page 5 and Figure 4). The majority of the 24.85 ha of riparian rehabilitation works will utilise species consistent with the Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland community (ATTACHMENT 7, Att 7-Concept RLMP.pdf, Section 2.7.3.3, pages 17-18 and Figure 4).



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 5

Conclusion on the likelihood of significant impacts

5.1 You indicated the below ticked items to be of significant impact and therefore you consider the action to be a controlled action

- ☐ World Heritage properties
- ☐ National Heritage places
- ☐ Wetlands of international importance (declared Ramsar wetlands)
- ☐ Listed threatened species or any threatened ecological community
- ☐ Listed migratory species
- ☐ Marine environment outside Commonwealth marine areas
- ☐ Protection of the environment from actions involving Commonwealth land
- ☐ Great Barrier Reef Marine Park
- ☐ A water resource, in relation to coal seam gas development and large coal mining development
- ☐ Protection of the environment from nuclear actions
- ☐ Protection of the environment from Commonwealth actions
- ☐ Commonwealth Heritage places overseas
- ☐ Commonwealth marine areas

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action

The proposal has been considered against relevant EPBC Act Policy Statements, including the Matters of National Environmental Significance - Significant Impact Guidelines 1.1 (DotE 2013) which provides a self-assessment process to assist in determining whether an action should be referred to the Commonwealth for a decision on whether assessment and approval is required under the Act. The assessment has determined that the proposal would be highly unlikely to result in a significant impact on the Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland (ATTACHMENT 2, Att 2-EEC Assessment.pdf, Section 6, page 25-26).

Regardless, Hanson has elected to refer the proposed action to the Federal Minister for the Environment.



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 6

Environmental record of the person proposing to take the action

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Explain in further detail

Yes, Hanson has a long standing history of responsible environment management, having operated in Australia for over 50 years. To date, Hanson has not been subject to any known prosecution for environmental breaches. Approximately 240 of Hanson's 300 sites have third party certification to ISO14001 and the remainder operate to 14001 but are yet to be certified.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application

To date, Hanson has not been subject to any known proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources.

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

☒ Yes ☐ No

6.3.1 If the person taking the action is a corporation, provide details of the corporation's environmental policy and planning framework

The Project will be completed in accordance with Hanson Construction Materials Pty Ltd Environmental Policy provided in ATTACHMENT 8 (Att 8-Hanson Group Environmental Policy.pdf).

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

☒ Yes ☐ No

6.4.1 EPBC Act No and/or Name of Proposal

2018/8226 - Sand quarry, Lot 8 Seereys Road, Coimadai, Vic
2016/7738 - Clearing and development of 220 and 234 Wattleup Rd, Wattleup, WA
2015/7593 - Hanson Fine Sand Quarry extension, Cape Cleveland, Cunggulla, QLD
2015/7574 - Garfield North Rock Quarry, Bunyip North, Vic
2015/7453 - Brandy Hill rock quarry extension, Seaham, Port Stephens, NSW
2015/7438 - Sand Mining 70/915 Banksia Road, Wellard, WA
2014/7384 - Wolffdene Quarry Extension, Luscombe, QLD
2012/6664 - Hanson Fine Sand Quarry, Cunggulla
2010/5622 - Extraction of sand from Lot 6 Banksia Road & lots 300 & 301 Boomerang Road, WA
2010/5347 - Werribee Stone Extraction Project
2009/4984 - Extension to existing Extractive Industry, Roseneath Quarry
2009/4747 - Construction of Haulage Road
2009/4700 - Extension of the Gidgegannup Granite Quarry
2008/4210 - Extension of Flagstaff Quarry
2007/3433 - Extension of Red Hill hard rock quarry, Lot 11 Toodyay Road



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 7

Information sources

Reference source

Department of the Environment (DotE) (2013) Significant Impact Guidelines 1.1 - Matters of National Environmental Significance, Australian Government, Canberra.

Reliability

High

Uncertainties

None

Reference source

OEH (2021) BioNet Vegetation Classification. Accessed online: <https://www.environment.nsw.gov.au/NSWVCA20PRapp/default.aspx>

Reliability

High

Uncertainties

None

Reference source

JWA (2021) Revised Rehabilitation and Landscape Management Plan, Tweed Sand Plant, Lot 22 on DP1082435, Lot 23 on DP1077509 and Lot 494 on DP720450; Altona Road, Cudgen. Report prepared for Hanson Construction Materials Pty Ltd.

Reliability

High

Uncertainties

None

Reference source

Gilbert & Sutherland (2021a) Groundwater Assessment, Tweed Sand Plant Expansion, Cudgen New South Wales. Report prepared for Hanson Construction Materials Pty Ltd.

Reliability

High

Uncertainties

None

Reference source

Gilbert & Sutherland (2021b) Surface Water Assessment, Tweed Sand Plant Expansion, Cudgen New South Wales. Report prepared for Hanson Construction Materials Pty Ltd.

Reliability

High

Uncertainties

None



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Reference source
Gilbert & Sutherland (2021c) Soil and Water Management Plan, Tweed Sand Plant Expansion, Cudgen New South Wales. Report prepared for Hanson Construction Materials Pty Ltd.
Reliability
High
Uncertainties
None

Reference source
Zone Planning Group Pty Ltd (2021) Hanson Tweed Sand Plant Expansion (Phase 5 to Phase 11) Environmental Impact Statement. Report prepared for Hanson Construction Materials Pty Ltd.
Reliability
High
Uncertainties
None

Reference source
Department of the Environment and Energy (2018). Conservation advice (incorporating listing advice) for the Coastal Swamp Oak (<i>Casuarina glauca</i>) Forest of New South Wales and South East Queensland ecological community. Canberra: Department of the Environment and Energy. Available from: http://www.environment.gov.au/biodiversity/threatened/communities/pubs/141-conservation-advice.pdf .
Reliability
High
Uncertainties
None

Reference source
Tweed Shire Council (2018) Tweed Shire Council Aboriginal Cultural Heritage Management Plan 2018. Tweed Shire Council, Murwillumbah, NSW.
Reliability
High
Uncertainties
None



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 8
Proposed alternatives
Do you have any feasible alternatives to taking the proposed action? Yes <input checked="" type="checkbox"/> No



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 9

Person proposing the action

9.1.1 Is the person proposing the action an organisation or business?

☒ Yes ☐ No

Organisation

Organisation name (as registered for ABN/ACN)	HANSON CONSTRUCTION MATERIALS PTY LTD
Business name	
ABN	90009679734
ACN	009679734
Business address	10 The Boulevard, Brisbane Airport, 4008, Queensland, Australia
Postal address	
Main Phone number	07 3246 5500
Fax	
Primary email address	murray.graham@hanson.com.au
Secondary email address	

9.1.2 I qualify for exemption from fees under Regulation 5.23(1)(ii) of the EPBC Regulations because I am:

☐ Small business
☒ Not applicable

9.1.2.2 I would like to apply for a waiver of full or partial fees under Regulation 5.21A of the EPBC Regulations

☐ Yes ☒ No

9.1.3 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)

First name	Murray
Last name	Graham
Job title	Development Manager
Phone	07 3246 5554
Mobile	0417 641 012
Fax	
Email	murray.graham@hanson.com.au
Primary address	PO Box 1636, Toombul, 4012, Queensland, Australia
Address	

Declaration: Person proposing the action (To be signed by the person at 9.1.3)

I, MURRAY GRAHAM, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity.

Signature: [Signature] Date: 26/11/21

I, MURRAY GRAHAM DEVELOPMENT MANAGER @ HANSON CONSTRUCTION MATERIALS PTY LTD, the person proposing the action, consent to the designation of MURRAY GRAHAM as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature: [Signature] Date: 26/11/21



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Proposed designated proponent

9.2.1 Is the proposed designated proponent an organisation or business?

☒ Yes ☐ No

Organisation

Organisation name (as registered for ABN/ACN)

HANSON CONSTRUCTION MATERIALS PTY LTD

Business name

ABN

90009679734

ACN

009679734

Business address

10 The Boulevard, Brisbane Airport, 4008, Queensland, Australia

Postal address

Main Phone number

07 3246 5500

Fax

Primary email address

murray.graham@hanson.com.au

Secondary email address

9.2.2 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)

First name

Murray

Last name

Graham

Job title

Development Manager

Phone

07 3246 5554

Mobile

0417 641 012

Fax

Email

murray.graham@hanson.com.au

Primary address

PO Box 1636, Toombul, 4012, Queensland, Australia

Address

Declaration: Proposed Designated Proponent

I, MURRAY GRAHAM, DEVELOPMENT MANAGER @ HANSON CONSTRUCTION MATERIALS P/L, the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature: [Signature] Date: 26/11/21



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Referring party (person preparing the information)**9.3.1 Is the referring party an organisation or a business?**

☒ Yes ☐ No

Organisation**Organisation name (as registered for ABN/ACN)**

JWA PTY LTD

Business name**ABN**

56066448879

ACN**Business address**

Suite 21C, 2404 Logan Road, Eight Mile Plains, 4113, QLD, Australia

Postal address**Main Phone number**

07 3219 9436

Fax**Primary email address**

adam@jwaec.com.au

Secondary email address**9.3.2 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)****First name**

Adam

Last name

McArthur

Job title

Director / Principal Ecologist

Phone

07 3219 9436

Mobile**Fax****Email**

adam@jwaec.com.au

Primary address

Suite 21C, 2404 Logan Road, Eight Mile Plains, 4113, QLD, Australia

Address**Declaration: Referring party (person preparing the information)**

I, Adam McArthur, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.

Signature: ..**Date: ..** 26/11/21



Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Appendix A	
Attachment	
Document Type	File Name
action_area_images	Att 1-Extraction Phases.pdf
supporting_tech_reports	Att 2-EEC Assessment.pdf
flora_fauna_investigation	Att 3-BDAR.pdf
hydro_investigation_files	Att 4-Flood Stormwater Assessment-Part1.pdf
hydro_investigation_files	Att 5-Flood Stormwater Assessment-Part2.pdf
hydro_investigation_files	Att 6-Flood Stormwater Assessment-Part3.pdf
impact_reduction_docs	Att 7-Concept RLMP.pdf
corp_env_policy_docs	Att 8-Hanson Group Environmental Policy.pdf

Appendix B
Coordinates
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