



# Sancrox Quarry

IPC Submission 10<sup>th</sup> September 2024

# Overview

- **Need for Sancrox Quarry**
- **Development Application Timeline**
- **Project Changes**
- **Biodiversity**
- **Other impacts, water, air, noise**
- **Sustainability, rehabilitation and end of quarry life**
- **The next 12 months**
- **Final Comments**

# Need for Sancrox quarry

- Port Macquarie has relied on the Sancrox quarry since 1981 and has grown significantly over the past 43 years. The footprint of the quarry has remained largely unchanged since 1989 whilst the town has grown well beyond the red line in the photos below.

Port Macquarie- 1981



Port Macquarie- 2024



Red lines show the extent of urban development in 1981.

## Need for Sancrox Quarry

- Over the past 35 years the existing quarry material has been consumed in Port Macquarie and Mid-North Coast
  - Houses, roads, bridges, hospital, hotels, schools, etc
- There is only 120,000 tonnes of rock left under the current DA, that's just over 6 months worth
- “Acute quarry shortages loom in Melbourne, NSW's Mid North Coast and Southeast Queensland”, *Adam COPP*, Infrastructure Australia, CEO
- *“limited access to local steel and cement, as well as localised shortages of quarry products is contributing to price uncertainty in the supply chain, leading to delays and cost overruns”* Cement Concrete & Aggregates Australia (CCAA)

## Need for Sancrox Quarry

- Second only to water, **concrete is the most consumed material**, with three tonnes per year used for every person in the world
- Every Australian needs 8 tonnes of quarry materials every year, year-after-year
- Average new home uses 220 tonnes of quarry products (aggregates and concrete), CCAA

Quarry products are **NOT** part of discretionary spending



*"Today I think I'll buy that cubic metre of concrete and that tonne of blue metal; I've had my eye on for months now", Nobody Ever*

# Need for Sancrox Quarry

## ■ Current Customer Projects

- Ditchfield- Ocean Drive duplication
  - 140,000 tonnes supplied 2023-2024 => 60,000 tonnes to complete
  - 1,600m<sup>3</sup> concrete 2023-2023 => 1,800m<sup>3</sup> to complete
- Charterpac- Bushland Dve Units
  - 1,200m<sup>3</sup> concrete, September 2024
- Matrix constructions– High St Apartments
  - 1,200m<sup>3</sup> concrete, September 2024
- Single Builders– Clifton retirement Village
  - 4,000m<sup>3</sup> concrete, February 2025

# Need for Sancrox Quarry

## ■ Regional Infrastructure Projects

- Cowarra Water Treatment & Reservoir, Wauchope
  - 60,000 tonnes of aggregate
  - 5,000m<sup>3</sup> of concrete
- Lorne Rd Upgrade, Comboyne
  - 15,000 tonnes of aggregates
  - 1,000m<sup>3</sup> of concrete
- Port Macquarie Aquatic Centre
  - 20,000 tonnes of aggregates
  - 5,000m<sup>3</sup> of concrete

## ■ Government's Ongoing Maintenance Works (yearly)

- Port Macquarie Council
  - 20,000 tonnes of aggregates for local roads, parks, stormwater, etc
- TfNSW
  - 5,000 tonnes of aggregates for state road maintenance
  - 1,500m<sup>3</sup> of concrete for state road maintenance

## Need for Sancrox Quarry

- People directedly reliant on the quarry:
  - 12 current quarry employees and their families
  - 5,000+ local people working in construction and trades
    - Around 1,200 of these are working for Hanson's direct customers



## Development Timeline



- **2 years to prepare an EIS- 1,331 pages**
- **2 years to prepare RTS- 930 pages**
- **3 years spent dealing with RFIs- 55 additional pieces of information**
- **7 years in the planning approvals pathway to expand an existing quarry**
- **If NOT Sancrox, a Greenfield quarry will take 10+ years (2034)**

## Project Changes, Concessions (Amended RTS)

	Original Proposal	Final Project	Reductions
<b>Total quarry footprint</b>	60.60 ha	47.38 ha	↓ Total reduction of 13.22 ha (22%)
<b>Total area of vegetation removal</b>	43.10 ha	29.89 ha	↓ Total reduction of 13.21 ha (22%)
<b>Production limits</b>	750,000 tpa	530,000 tpa	↓ Total reduction of 220,000 tpa (29%)
<b>Blasting</b>	8 am – 5 pm Monday to Friday	9am – 3pm Monday to Friday	↓ Reduced by 3 hours on blasting days
<b>Quarry Operations and Dispatch</b>	24/7	5 am – 10 pm 20 nights per year – 10 pm – 5 am (Processing and loading activities)	↓ Reduced by 7 hours a day
<b>Truck movements</b>	396 laden truck movements per day	200 laden truck movements per day	↓ Reduced by 196 trucks per day
<b>Revegetation</b>	Nil	25.6Ha of farm paddocks to be replanted	↓ 85% of vegetation removed to be replaced with revegetated areas

## Biodiversity- Koala

- Approximately 29.89 hectares (ha) of native vegetation would be cleared for the Project, comprising two Plant Community Types (PCTs), both are NOT threatened ecological communities (TECs)
- **Avoid:**
  - footprint of the proposed extraction area reduced to avoid a total of 13.21 ha of Koala habitat
  - EEC retained
- **Mitigate:**
  - staged vegetation clearing over the period of consent
  - revegetating existing cleared areas (paddocks), 25.6Ha
  - using existing quarry infrastructure and road network
- **Offset:** Hanson currently has the required 777 Koala species credits. Hanson will also establish a Biodiversity Stewardship site of at least 49Ha within its land holdings.
  
- Expert assessment by Biolink Ecological Consultants concluded that:
  - the site's vegetation constituted secondary Koala habitat
  - at worst, 1-2 individual Koalas would be affected
  
- Therefore, the NSW Framework for Biodiversity Assessment provides that the impacts of the project must be offset

## Biodiversity- Black Summer Fires

- Black Summer Fires, about two-thirds of critical koala habitat was destroyed in the South of Port Macquarie. The critical habitat for the Koalas was within Lake Innes which is where the fires impacted most biodiversity, swept about 2,000 hectares of koala habitat
- DPHI commissioned Alex Cockerill of WSP to peer review => concluded that the Project is not likely to significantly reduce the viability of the local Koala population => proportion of habitat that would be impacted by the Project is small compared to the extent of available habitat within the locality and taking into consideration the 2019-2020 bushfires
- Hanson suggests adopting land management practices such as Cultural Burns to assist in reducing the ongoing risk of bushfires to the local biodiversity

# Biodiversity- Habitat Corridor

APPENDIX 7: BIODIVERSITY CORRIDOR

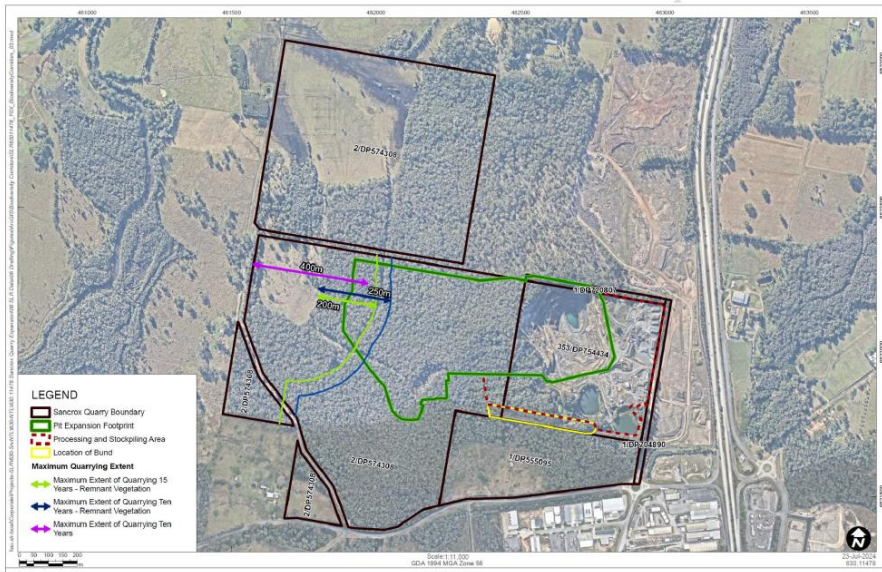
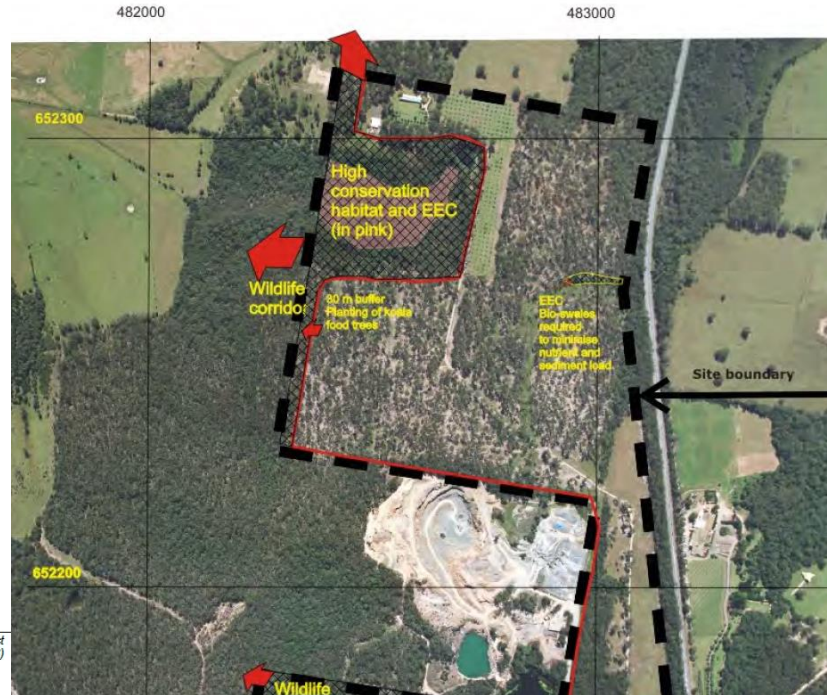


Figure 7: Biodiversity corridors

- A wildlife corridor will be maintained and preserved throughout the staged development of the project



**Neighbouring industrial development is reliant on the wildlife corridor being located on Hanson's property.**

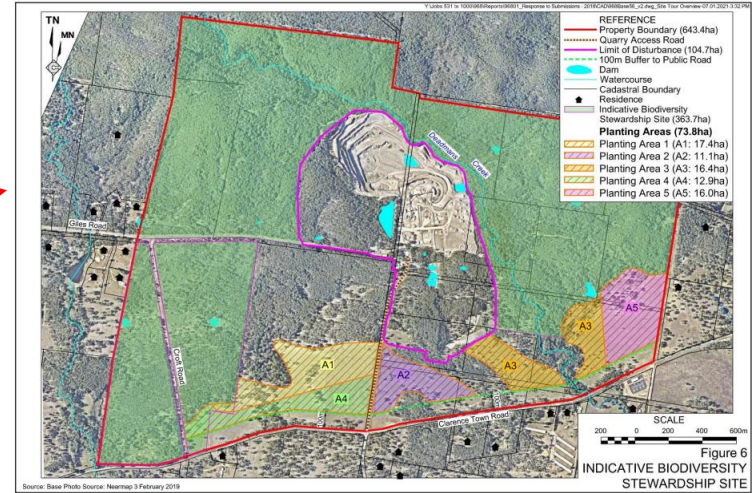
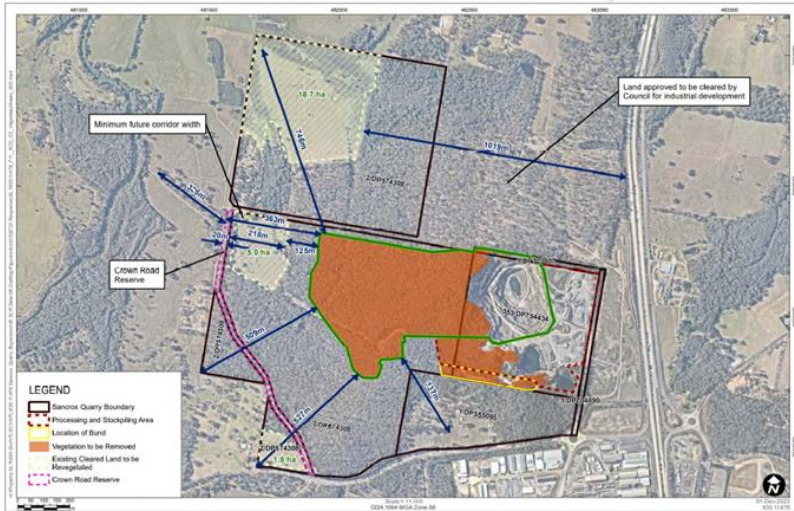
Source: Flora & Fauna Survey, 2009, PACIFIC HIGHWAY EMPLOYMENT PRECINCT, SANCROX ROAD AND PACIFIC HIGHWAY, SANCROX



# Biodiversity- Revegetation of Farm Paddocks

- Revegetating existing cleared areas (paddocks), 25.6Ha
- Hanson is currently revegetating 74Ha of paddocks at the Brandy Hill Quarry (BHQ)

APPENDIX 8: REVEGETATION PLAN



BHQ replanting with drone seeding

## Other Impacts

### ■ Air Quality

- Annual production volume of 750kt has been reduced to 530kt reducing overall air emissions and Greenhouse Gas Emissions (GHG)
- Operating hours have been reduced from 24/7 to 5am-10pm reducing the 24-hr period emissions
- Area of disturbance has significantly reduced by 13.21Ha
- Future industrial area to the north and east will have the occasional exceedances during strong southwest winds even without the quarry. However, the exceedances apply over a 24-hour period and represent a low risk for people working during the daytime
- There are no exceedances predicted at existing and possible future residents

### ■ Noise

- The quarry is in an industrial area adjacent to the M1 Pacific Highway. The noise environment for the quarry is compatible
- Receiver R13 (closet) identified in EIS AQIA has been acquired by Hanson, Note:
  - For 24/7hr ops, R13 would have 3x small exceedance based on relatively high background levels (Wyong Stn)
  - No exceedance when operating 5am-10pm
- Commitment to manage blasts along northern boundary (90m buffer)

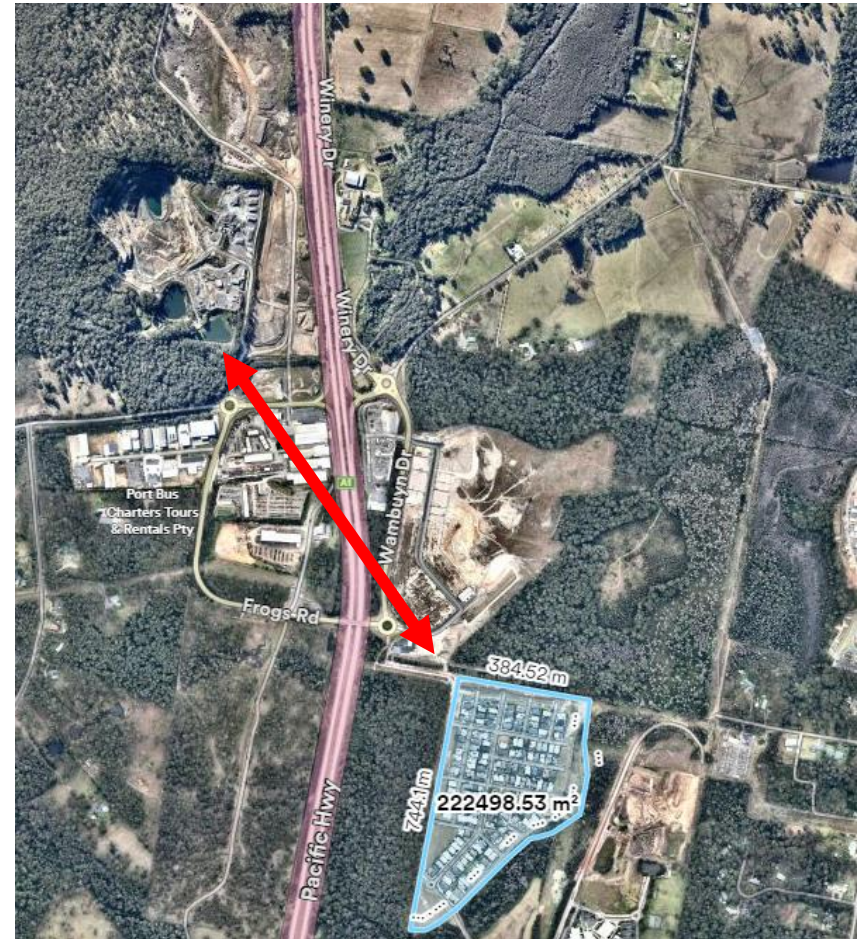
### ■ Water

- Hanson has the required water licence to account for seepage and run-off quantities



# Sustainability- Footprint

- Sancrox quarry has a relatively low footprint impact compared to other developments
  - A typical housing subdivision requires around 1,100m<sup>2</sup> per dwelling (550m<sup>2</sup> house, 550m<sup>2</sup> for supporting infrastructure, roads, footpaths, parks, stormwater systems => GFA ~50%)
  - Example, subdivision 1.2km SE of the quarry 200 houses
  - Quarry footprint for materials required per house is 2m<sup>2</sup> => 1.4m x 1.4m (assuming 50m deep pit)
  - To build 200 houses = 400m<sup>2</sup> of quarry resource vs 222,000m<sup>2</sup> of subdivision land
- Sancrox quarry expansion can provide for:
  - 127,000+ new homes
  - Yearly needs of 42,168 people for their entire life span (50% of Port Macquarie LGA)
- Unlike a Greenfield, a quarry expansion utilises existing systems and infrastructure





## Sustainability- Circular Economy

- *“Concrete is 100% recyclable and uses recycled materials in manufacture. It naturally absorbs carbon from the atmosphere throughout its life, with Global studies demonstrating up to one third of the original CO2 emissions re-absorbed.” CCAA*
- Concrete waste from Hanson’s concrete batch plants will be able to be received at the quarry for blending in with aggregates to make roadbase products and stabilised fill
- Bitumen waste from road maintenance work will also be able to be received for blending into quarry products
- Having a concrete batch plant and asphalt plant at the source of quarry aggregates will reduce double-handling and transportation resulting in CO2 reduction

# Rehabilitation and End of Quarry Life

- Examples of successful end of quarry life: Eastern Creek, Greystanes, Hornsby
- Repurposed useful assets



Greystanes



Eastern Creek



Hornsby

## Next 12 Months

- **EPBC Act referral**
- **Survey the expansion pit**
- **Prepare Environmental Management Plans**
  - Air, noise, water, biodiversity, rehabilitation & landscape, transport, blasting
- **Retire offset credits**
- **Commence revegetation of cleared paddocks**
- **Surrender existing Council consent**
- **Commence environmental monitoring programs**
- **Hold regular CCC meetings**
- **Set up an information portal on the Hanson website**
- **Carry out annual reviews**

## Final Comments

Hanson appeal to the IPC that:

- **The Department's recommended conditions of consent have limited the quarry to the threshold of what is economically viable**
- **From experience, amending recommended conditions of consent has had unintended consequences resulting in many years of delay due to conditions precedent, and in one instance amended conditions have completely rendered a project unviable**
- **The Sancrox quarry has undergone a thorough planning and environmental assessment including significant reductions, concessions and mitigation measures over the past 7 years**
- **Based on merit, it should be approved as recommended by the Department**

**Thank You**