

Summary of Response to Feedback on Environmental Impact Assessment for Yishun Chencharu (Site 2)

I. Site context & milestones

Chencharu has been occupied for various brownfield uses such as farms and plantations since the late 1800s and has been zoned for residential use in URA's Master Plan since 2019. In March 2024, Chencharu was announced as a new housing area in Yishun Town with new amenities for existing and future residents. The first phase of developments was launched from June 2024, starting with the BTO project, Chencharu Hills.

Agencies are currently studying the detailed plans for the subsequent phases of Chencharu south of Yishun Walk, which spans about 33 hectares (see Figure 1).

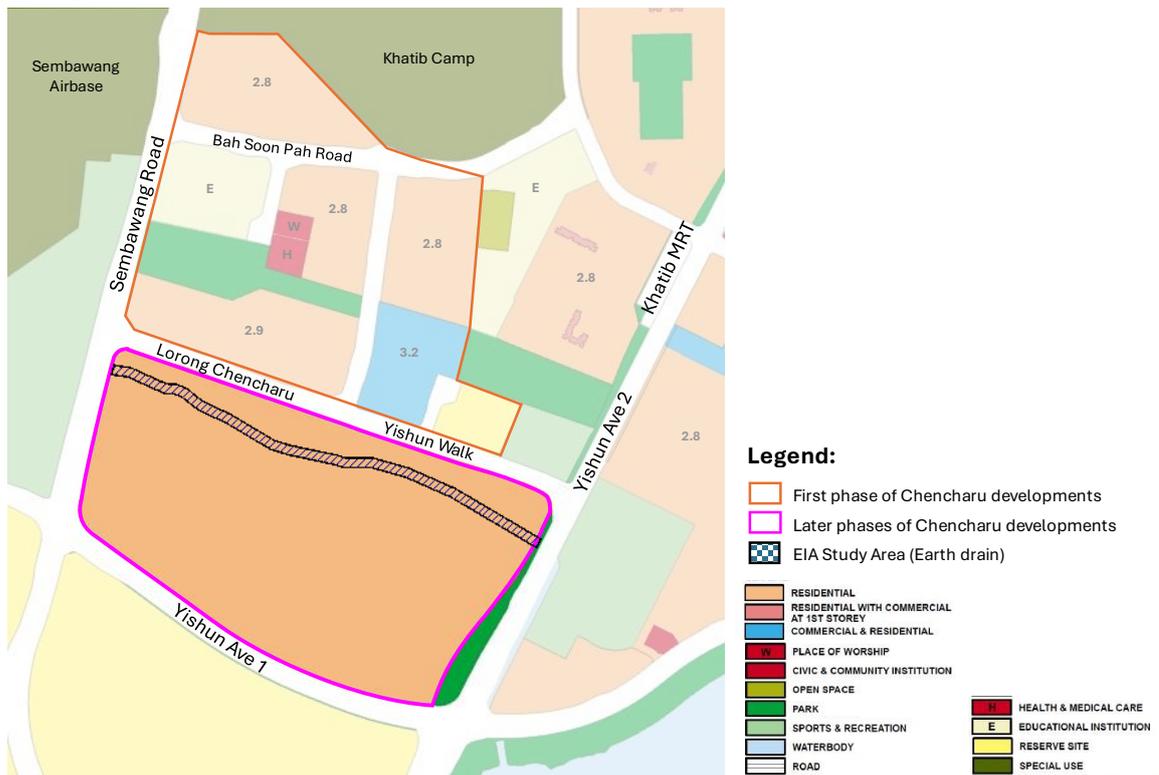


Figure 1: Zoning of Chencharu on URA's gazetted Master Plan 2019

As part of our comprehensive, science-based approach in planning our developments, an Environmental Impact Assessment (EIA) was carried out in 2024 to assess the environmental impact of proposed diversion works for an existing earth drain. The earth drain was constructed in the 1980s to drain discharge from surrounding low-rise agricultural uses. Drain diversion works would need to be carried out to serve the increased drainage needs of upcoming developments.

The key EIA findings are summarised below. Please refer to the full report available on [HDB InfoWEB](#) for more details.

a) Water Quality:

- Water samples mostly did not exceed prevailing limits for trade effluent, with the exception of some indicators (e.g. arsenic, pH, iron, etc.) during certain sampling events. These exceedances are likely due to drainage from surrounding brownfield uses, given the site's primary function as a drain.
- National Water Agency PUB has reviewed the results and ascertained that the water quality of Lower Seletar Reservoir, which the earth drain discharges into, had not been adversely impacted and there are no associated public health concerns for the treated water from Lower Seletar Reservoir.
- Mitigation measures were proposed to minimise the impact of diversion works on water quality by ensuring sufficient erosion and sediment control as well as proper treatment of wastewater discharge.

b) Ecology and Biodiversity:

- No aquatic species of conservation significance were recorded during the faunal surveys. More than 70% of the fish species recorded were non-native, exotic species which were likely introduced via the ornamental pet trade. The native species observed were mostly widespread and common species which can be found in areas with disturbed habitat conditions.
- The earth drain was assessed to be of low ecological value, as it contained mostly exotic fauna species with no unique species observed, and habitat conditions were not pristine.
- Mitigation measures were proposed to minimise accidental injury or mortality of fauna during the diversion works, such as relocating fauna upstream or downstream prior to commencing works. Biophilic features will be planned within the future developments to attract local biodiversity.

II. Engagement with stakeholders

HDB engaged various Nature Group (NG) representatives and biodiversity experts in November 2024 on the EIA findings and the proposed mitigation measures prior to the public disclosure of the EIA report, with NParks and URA representatives in attendance. These representatives shared their ideas and perspectives on solutions that agencies could explore to mitigate the environmental impact.

The EIA report was also published online for public feedback from 15 Jan 2025 to 11 Feb 2025. No additional feedback was received via HDB's feedback channels.

III. Feedback received

We value the feedback from our partners and stakeholders, and have considered all suggestions received.

Most stakeholders recognised the need for drain upgrading works to reduce flood risk and noted the low ecological value and the lack of aquatic species of conservation significance recorded in the earth drain. They have also expressed their support for the comprehensive list of mitigation measures proposed to minimise fauna mortality during the drain diversion process, and the biophilic features proposed within the future developments to promote native biodiversity.

Others asked about the possibility of retaining a portion of the existing earth drain to preserve the rustic nature of Chencharu, despite its low ecological value.

At the same time, some stakeholders noted the rich history of Chencharu and suggested for HDB to explore strategies to conserve and celebrate the heritage of the area.

IV. Responses to feedback

HDB remains mindful of the need to develop housing areas sensitively, to mitigate potential environmental impact and incorporate the heritage and history of these areas in our development plans. This is part of our commitment to adopt a holistic, long-term and science-based approach of stewarding Singapore's limited land resources to meet the various aspirations and needs of Singaporeans while balancing trade-offs across a wide variety of land use needs, and to engage the relevant stakeholders for ideas and feedback to improve our plans.

Based on the EIA report's recommendations and stakeholder feedback, we will implement the following strategies and safeguards for water quality and biodiversity:

a) **Safeguards for water quality during drain diversion:** HDB will ensure that the relevant control measures and additional safeguards are adopted to minimise any potential impact on water quality in the channel. These measures include:

1. **Erosion control:** Reducing the sediment volume generated or washed off during rainfall events by minimising the extent of erodible areas on-site and protecting any unavoidable bare earth surfaces.
2. **Sediment control:** Capturing sediments and treating surface runoff before discharging it into the watercourse.
3. **Trade effluent management:** Controlling and treating wastewater produced from on-site activities before discharging it into the watercourse.
4. **Proper management of pollutive substances:** Controlling the storage, use and disposal of hazardous substances on-site to avoid accidental leakage.

b) **Safeguards for aquatic fauna during drain diversion:** While there were no aquatic species of conservation significance recorded in the faunal surveys, HDB will implement mitigation measures to minimise accidental injury or mortality of fauna. These measures include:

1. **Wildlife Management Plan:** Rescuing trapped aquatic species and relocating them downstream or upstream where suitable, with inspections by an ecologist to ensure that there is no trapped fauna in the emptied earth train (especially turtles and terrapins) prior to any backfilling works.

2. **Wildlife Response Plan:** Developing a response plan with NParks to establish protocols for encounters with any trapped, injured or dead wildlife.
3. **Biodiversity Awareness Training:** Ensuring that on-site staff are briefed on the above plans, as well as proper waste and food management, to minimise human-wildlife conflict.

c) **Biophilic features in future developments:** Given the low ecological value of the existing earth drain, HDB will incorporate biophilic Active, Beautiful, Clean (ABC) Waters features such as rain gardens and vegetated swales in the landscape design of future precincts to enhance the area's ecological and biodiversity value (see Figure 2). These features will help manage surface runoff and filter pollutants, and will also be planted with native foliage to create habitats for native wildlife, such as butterflies and birds. Additionally, HDB will explore incorporating interpretive panels into the precinct design to educate residents on these biophilic features, promoting environmental awareness and stewardship.



Figure 2: Examples of biophilic ABC Waters features (Left: Rain gardens; Right: Vegetated swales) that can be incorporated in future developments

On the suggestion to retain a portion of the existing earth drain as a feature in future developments, agencies have studied this option thoroughly and assessed that there are significant technical challenges and limited ecological value in doing so for the following reasons:

- I) **Diverted water flow:** The earth drain's water flow will be diverted to the new box drain with a higher drainage capacity. Hence, the existing earth drain will not have water to support an aquatic habitat.
- II) **Platform differences:** Based on platform and drainage requirements for Chencharu developed in consultation with PUB to minimise flood risk, there will be a significant 3-storey level difference between future developments and the current earth drain. Retaining the earth drain will require the construction of high retaining walls along the banks, which limits the scope for any naturalisation features or public access to the earth drain while incurring significant construction effort.
- III) **Low conservation value:** The EIA findings showed that the earth drain had low ecological value with no aquatic species of conservation significance.

While the earth drain will not be retained, HDB will pursue other strategies to retain the rustic charm of Chencharu and celebrate its rich heritage and history, which contributes to our master plan vision to develop Chencharu into a **Vibrant Village, Connecting Communities and Heritage**. These include:

- 1. Retaining the colonial-era bungalow:** The approximately 100-year-old two-storey bungalow along 50 Bah Soon Pah Road, which was a plantation house likely built in the early 1910s by the Bukit Sembawang Rubber Company, will be adapted for community uses within the new neighbourhood park next to the first BTO project (Chencharu Hills) (see Figure 3).
- 2. Future park facilities:** The new neighbourhood park will feature a heritage trail with a series of gardens and storyboards, for residents to learn about the area's rich history. The park will be easily accessible from surrounding BTO projects, and will house a therapeutic garden, open lawns and various sports facilities to encourage social connectedness and mental wellness among residents (see Figure 3).
- 3. Precinct designs inspired by Chencharu's history:** Precinct and building designs will incorporate elements from the retained bungalow, such as its red, black and white façade of the bungalow. Wayfinding motifs used in the design, such as pineapple and mackerel, are also chosen to celebrate the area's agricultural history (see Figure 3).



Figure 3: Artist's impression of the new park in Chencharu incorporating the colonial-era bungalow with new park facilities, and the first BTO project (Chencharu Hills) launched in June 2024 with designs inspired by the bungalow's façade

4. **Community Avenue connecting different amenities:** This main east-west thoroughfare in the heart of Chencharu will connect various facilities such as the new bus interchange, hawker centre, shops, and new and existing parks. This creates a lively public space where residents can gather and mingle.
5. **Future spaces for existing community uses:** Ground-Up Initiative – a non-profit initiative known for its focus on sustainability and community building – as well as the Live Turtle and Tortoise Museum will be relocated from their current locations in Lorong Chencharu, to a nearby site adjacent to HomeTeamNS Khatib. This enables existing community activities in these unique recreational spaces to continue, thereby enhancing the identity of Chencharu as a vibrant contemporary *kampung*.

The full Chencharu Master Plan press release is available [here](#).

As land use and development plans are not static, the Government regularly reviews our plans to ensure that they remain relevant to the changing needs of Singaporeans. We continue to see strong demand for public housing across Singapore. This is due to larger cohorts of Singaporeans born in the late 1980s to 1990s reaching marriageable age, and an emerging trend of smaller households as more young couples, singles, and seniors are choosing to have their own flats. To meet this demand, agencies adopt a range of development options such as increasing the density of developments while ensuring liveability, prioritising the development of brownfield sites such as Chencharu, where feasible and undertaking necessary studies to guide sensitive development. Agencies will continue to assess our various land use needs, engage stakeholders, and adopt a science-based approach when we review the plans for other sites in the future.

The EIA for Chencharu also includes a 7-hectare forested patch along Yishun Avenue 1, which is under study. A separate report will be published when ready.