



SITE OVERVIEW

Alcoy Municipality is one of the municipalities of Cebu Province in the central Philippines. Based on the 2015 census, the municipality has over 16 thousand residents. The town is approximately 93 kilometers or 58 miles from Cebu City, the province's capital of this Visayan province. Alcoy is bounded to the North by Dalaguete Municipality (a tourist destination), to the south by Boljoon (famous for whale shark watching, among other water activities), to the west by Badian and Alegria Municipalities, and the east by Cebu Strait.

The site is 9.4 hectares in size. The main deposits of the dolomite minerals are found in Alcoy, together with the areas in Dalaguete.

The Alcoy dolomite processing site is connected to road links which lead to urban sites and the household community. The terrain is relatively flat which makes it easy to manipulate. In terms of livelihood, Cebu is known for farming, especially in nag-as for root crops, backyard farming, and of course, marine-dependent livelihoods. In the legal sense, the mining company has a Mineral Production Sharing Agreement or MPSA with the government to mine for 25 years or until 2030 and the PMSC-Alcoy Plant has been issued a Mineral Processing Permit or MPP by the Mines and Geosciences Bureau (MGB) and presently on its second 5-year term which will expire in 2023. The MPP has a maximum term of 25 years, thus the plan for rehabilitating this land is timewise near and plausible.

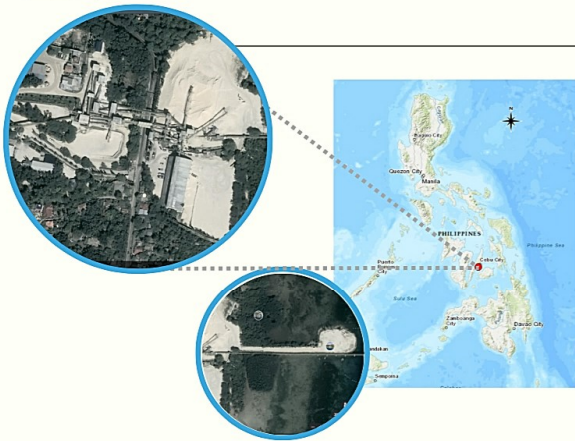
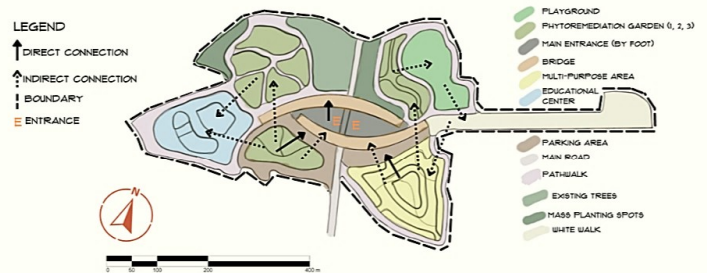
Dolomite contains Respirable Crystalline Silica (RCS) which may cause cancer. It is a naturally occurring mineral complex that contains varying quantities of quartz (crystalline silica). Dolomite may be subjected to various natural or mechanical forces that produce small particles (dust) which may contain respirable crystalline silica (particles less than 10 micrometers in aerodynamic diameter). Dolomite also contains Pb, Zinc, Ca, Mg, Mn, Fe, and Ba. Some of these elements are deemed detrimental to both the environment and in human health.

Source: https://www.lehighhanson.com/docs/default-source/safety-data-sheets/sds-dolomite.pdf?sfvrsn=66124d22_4

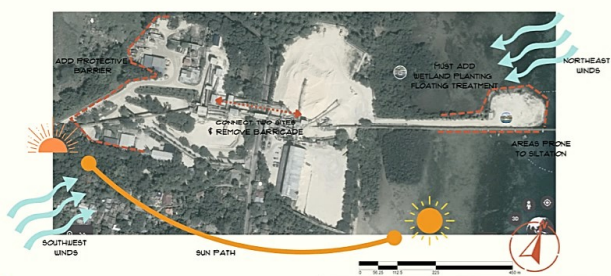
To reconnect is to restore. **SULOG**

The concept "Sulog" is derived from the famous festival in Cebu; the Sinulog Festival. This is known for its dance that depicts "like water current movement," or forward-backward step or sulog. This creates a wavy form with which the Indayog park was derived from. The festival symbolizes hope which is appropriate for the goal of bringing the site back to life or restoring it.

SPACE PROGRAMMING



SITE ANALYSIS



THEORETICAL FRAMEWORK

Phytoremediation Approach

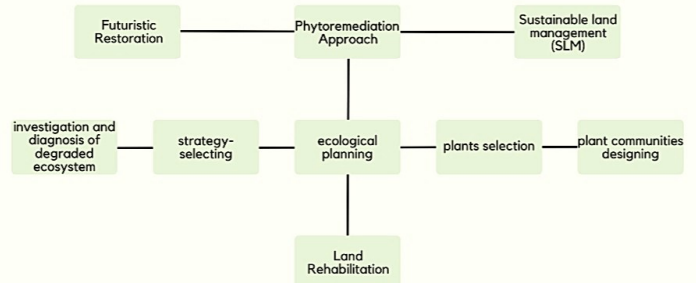
The approach uses plants to rehabilitate degraded lands by extracting and removing the contaminants either from being harvested, degraded, or volatilized.

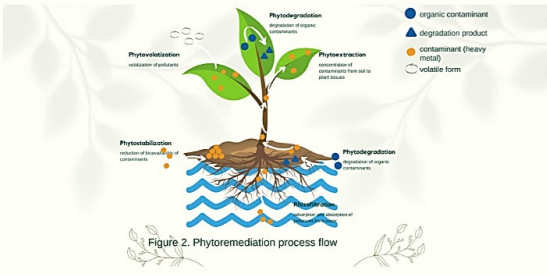
Sustainable land management (SLM)

SLM is a unifying framework for addressing land degradation and can be defined as the stewardship and use of land resources, including soils, water, animals and plants, to meet changing human needs, while simultaneously ensuring the long-term productive potential of these resources and the maintenance of their environmental functions. It is a comprehensive approach comprising technologies combined with social, economic and political enabling conditions (Nkonya et al. 2011).

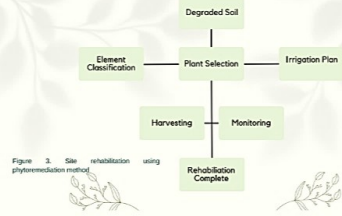
Futuristic Restoration

This concept entails setting realistic and dynamic (instead of static) goals for future, instead of past, environment; to assume multiple trajectories acknowledging the unpredictable nature of ecological communities and ecosystems; to take an ecosystem or landscape approach, instead of ad-hoc planning, for both function and structure; to evaluate the restoration progress with explicit criteria, based on quantitative inference; and (v) to maintain long-term monitoring of restoration outcomes.

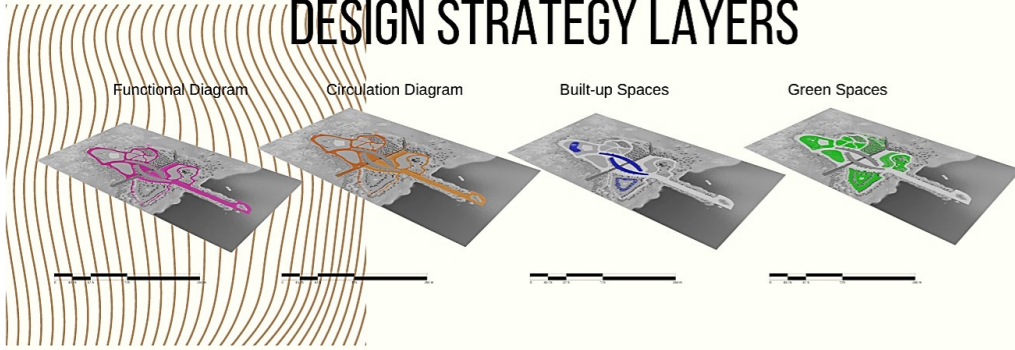




CONCEPTUAL FRAMEWORK



DESIGN STRATEGY LAYERS



S Flat terrain, near the coast, close to the village and their industry, wide area

W Dolomite sand, at the foot of the dolomite mining site, slightly sloped

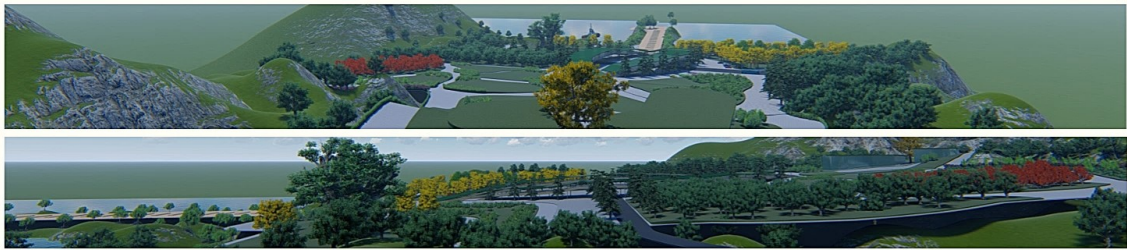
O Livelihood promotion, accessible to visitors, good circulation, perfect for a scenic place

T siltation, water and soil contamination, health risks, imbalance in the ecosystem (ruining of the marine ecosystem).

Architectural drawings including: TREE PLANTING PLAN, AQUATIC PLANTING PLAN, CONSOLIDATED PLANT LIST, IRRIGATION PLAN, LANDSCAPE DESIGN, FURNITURE DESIGN, and various site plans.

SECTION-ELEVATION





EDUCATIONAL CENTER



PHYTOREMEDIATION GARDEN - FIRE TREE



MULTI-PURPOSE AREA



AERIAL PERSPECTIVE



PHYTOREMEDIATION GARDEN - SUNFLOWER



PLAYGROUND

