INTERFACE DEVELOPMENT INTERVENTIONS (IDIS) INC.
Clean Water. Healthy Watersheds.

IDIS POSITION PAPER ON THE COMPREHENSIVE LAND USE PLAN (CLUP) AND ZONING ORDINANCE (2013-2022)

A Zoning Ordinance is an important piece of regulatory measure that would ensure proper administration, management, and control of the various land zone classifications and to ensure that only allowable uses are permitted providing physical and performance standards and restrictions based on the approved land use plans as reflected in the Comprehensive Land Use Plan of the City [1].

On January 2016 the 17 Sustainable Development Goals (SDG) of the 2030 Agenda for Sustainable Development was adopted by our world leaders. Under the 11th sustainable goal is the Sustainable Cities and Communities which aims to "*make cities, and human settlements inclusive, safe, resilient and sustainable*."

In ensuring a more sustainable development, a ridge-to-reef approach to development is one of the key approaches wherein development is viewed holistically. The protection of our wetlands, ponds and marshes, and the regulation of non-metallic quarrying zones/areas are also as crucial for a more sustainable development as requiring Socialized Housing and other Residential Zones to integrate designs in Settlement Clustering Method. These all should be integrated in the zoning ordinance as well as their limitations and allowable uses.

Thus, a more SDG-based CLUP and Zoning Ordinance must be in place. More importantly, a religious and strict implementation of the Zoning Ordinance must be observed in consonance with the spirit and intent of the law to avoid compromising environmental protection and management against economic development.

As we are gearing towards a more sustainable Davao City, We, at IDIS, believe that assessing the current CLUP and Zoning Ordinance is important to have a better and a more sustainable approach in formulating a new plan for Davao City.

With this, we would like to provide you with the following observations regarding the implementation of the Zoning Ordinance and to provide recommendations to further develop and improve the future plans of the City, to wit;

ESTABLISHMENT AND REDEFINING OF GREEN ZONES

Green Zones are urban areas which are covered with naturally grown trees or an area planted with trees and other environmentally valuable plants where biodiversity can survive and thrive. It also includes patches of green spaces, parks, and buffer zones strategically located adjacently from each other which, if combined, can measure to a hectare and above.

The lack of public parks and open green spaces are a recurring problem of the City since 1996. In fact, the City is below the World Health Organization (WHO) recommendation of at least nine (9) square meter per person of green space. Ironically, the Housing and Land Use Regulatory Board (HLURB) only requires 500 square meters of open space per 1000 population or 0.5 square meters per person.

- **GREEN AND OPEN SPACES IN OUR CITY**

  The inclusion of Article XI, Section 13 in the Zoning Ordinance is a laudable initiative by the City wherein it requires project proponents for projects with socio-economic and environmental significance and/or national interest with project area of one (1) hectare and above to allocate ten (10%) percent of the total area for more green spaces. However, this is not enough to meet the WHO standard for open green spaces.

Green spaces are not just for aesthetic purpose as they play an important role in maintaining urban biodiversity and the improvement of the quality of life of the people. A study conducted by Aarhus University in Denmark showed that green spaces or parks are important in one's mental health. The results showed that greater exposure to green spaces during childhood lowered the risk of psychiatric disorders in adulthood by between 15% and 55%, depending on the type of disorder [2]. Further, having access to green spaces can reduce health inequalities, improve well-being, and aid in treatment of mental illness. Some analysis suggests that physical activity in a natural environment can help remedy mild depression and reduce physiological stress indicators [3].

Moreso, green spaces do not only serve to promote healthy living, but they also aid in disaster issues and concerns particularly urban flooding. Most of green spaces incorporates permeable pavement, hence, ground permeability helps in mitigating rainwater runoffs to pool and drain directly to the canals causing massive flooding. Also, green spaces help in reducing urban heat island (UHI) effect.

Hence, we recommend that: 1.) The City Government should establish more green and open spaces (Public Green Parks) per barangay, if not, per administrative district to bring green spaces closer to the residents; 2.) The City Government to require ALL location permit applicants to integrate the 10% green space, intended for permeable surfaces and vegetable landscaping, and not only for applicants with development areas 10,000 square meters and above; 3.) The City Government should require these green spaces allotted by project proponents to be converted into Privately-Owned Public Open Spaces (POPOS) to make these green spaces more accessible to the public; and 4.) The City Government to come up with a specific plan on how to achieve the WHO standard requirement of 9sqm per person, i.e targets to be achieved (in square meters). In effect, this helps in promoting and maintaining urban biodiversity, reducing carbon footprints as people will be spared from travelling downtown just to enjoy and relax in public parks and promote walkability, and helps in carbon sequestration as these green spaces will be planted with trees and other plants.

- **PERMEABLE PAVEMENT**

Currently, a permeable pavement system ordinance has been passed by the Sangguniang Panlungsod last December 2018. Permeable pavement system is eyed to solve environmental problems caused by conventional concrete causing flooding in urban centers. It can reduce volume of water run-off, as it can reduce up to 95% of water runoff and improve water quality of stormwater runoff by allowing water to infiltrate on its structure, easily integrating with other water control strategies in sustainable urban drainage systems [4].

Moreover, permeable pavement system reduces urban island heat index as it produces surface cooling as compared to conventional concrete. It also helps in channeling vital air and water which are beneficial for urban trees to grow [5].

However, the ordinance that was passed only encourages establishments to incorporate permeable pavement in their building designs which also provides for incentives to those who will do so.

As we aim for sustainable development, we recommend that the permeable pavement system be required for new projects, especially in parking areas and open spaces, to be incorporated in their building designs before a building permit will be issued. We further recommend that the City Government should require the integration of Sustainable Urban Drainage System (SUDS) designs such as permeable trenches, detention/retention ponds, and bioswales in residential developments, establishments/buildings, shopping malls, schools, hospitals, cemetery, and etc.

- **URBAN ECOLOGICAL ENHANCEMENT SUB-ZONES AND OTHER URBAN CONSERVATION ZONES**

In 2018, the amendment to Article XI, Section 3 of the Zoning Ordinance or the provision on the Urban Ecological Enhancement Sub-Zone (UEESZ) is a welcome development as it provides for a clearer guidelines and mechanisms in the management and development of the Shrine Hills. This measure also supports the implementation for the establishment of more green spaces in the City.

Very crucial is the implementation of the amendment. IDIS urge the City to strictly observe and implement the amendments introduce to the provisions of the UEESZ.

Currently, only the Shrine Hills has been identified as an Urban Ecological Enhancement Sub-Zone. However, there are areas in the urban district that are classified as Conservation Zones in Urban Major Zones in Magtuod, Buhangin at Francisco Bangoy International Airport, and Bunawan Proper.

We recommend that the guidelines introduced for UEESZ be applied to the identified Conservation Zones in Major Urban Zones. We also recommend that a further study be conducted to identify other areas that can be declared and developed as Green Zones. Lastly, we recommend that the City should implement a massive greening in these areas.

- **BUFFER ZONES**

The buffer zone requirement [6] is a commendable measure as it mitigates impacts to environment and minimize potential harm of projects existing near residential areas or other conflicting areas.

However, we recommend that this requirement be strictly implemented and ensure that project proponents are compliant. Also, we recommend that the 20-meter buffer zone in two conflicting uses be increased.

RECLASSIFICATION

- **Agricultural to non-agricultural conversion**

The City through the Comprehensive Land Use Plan and Zoning Ordinance should restrict land conversions especially agricultural areas to non-agricultural. These land conversions also affect our food security as many agricultural areas are converted into non-agricultural use. One concrete example would be the existing Gaisano Grand Mall in Calinan. The building has affected farmlands which could have a better use in ensuring rice and food supply.

As the City is gearing towards new development thrusts – agroforestry and tourism development, the City should ensure that agricultural lands shall be protected to ensure food supply and food security for Dabawenyos.

We further recommend that the City should: 1.) conduct a mapping/listing of productive and non-productive agricultural areas in Davao City and should strictly prohibit reclassification of productive agricultural areas. For non-productive areas, a recommendation for its reclassification can only be made if there is proof for a need to reclassify the same. This is to protect agricultural lands in the City; 2.) aspire to increase the production of food crops such as rice for local consumption; 3.) identify more areas to be declared as organic agricultural (OA) zones, provide appropriate support for organic farmers to increase production and market opportunities, and establish more buffer zones in these zones to protect them from contamination; and 4.) Due to the rise of demand of

reclassification appeals from homeowners' associations applying for socialized housing; encourage settlement build up only in existing Rural Settlement Zones (RSZ) to protect prime agricultural areas to be reclassified. The government should survey lands/prepare clustered areas for socialized housing and relocation, rather than scattered separate sites.

- **WATER RESOURCE ZONE (Water Security)**

Water Resource Zone are areas on top of identified location of principal source of drinking water of Davao City containing huge volume of water available for appropriation where Davao City Water District has existing planned/proposed production wells with 350-meter buffer areas provision [8]. As such, granting of additional allowable use is a prohibited act in Water Resource Zone [9]. However, application for additional allowable uses within and/or near water resource zones are sometimes being approved, most especially, for project applications on High Density Residential Zones (R-3).

Thus, we recommend that: 1.) The definition of a Water resource Zone be broadened to include other areas which may be outside or do not have an existing planned or proposed production wells by the DCWD so as to really protect the City's water resource zones from being depleted and harmed; 2.) We also recommend that the 350-meter buffer area provision be stretched/increased; and 3.) The Local Zoning Board of Adjustment and Appeals to refrain from recommending to the City Council application for additional allowable use which are clearly within or near a water resource zone.

SEPTAGE AND SEWERAGE SYSTEM

The implementation of the septage and sewerage system is long overdue. The lack of a functional centralized septage and sewerage treatment system continues to pose a threat to our water quality as untreated wastewater are continually being discharged to bodies of water.

Moreover, as the City continues to grow and develop, it is important that the existing ordinance on septage and sewerage system must be strictly implemented.

With all these observations and recommendations, IDIS, as an active partner of the City in sustainable development, hopes that these be adopted and considered by the City in preparing the 2019-2027 Comprehensive Land Use Plan and Zoning Ordinance.

While we support the effort to decongest urban districts, the City should ensure that the Environmental Critical Areas and Green Zones are not compromised.

Thank you.

Respectfully,

MARY ANN V. FUERTES
Managing Trustee

[1] Article 1, Section 4. General Principle, Zoning Ordinance
[2] https://www.weforum.org/agenda/2019/03/growing-up-near-green-space-is-good-for-adult-mental-health/
[3] https://www.who.int/sustainable-development/cities/health-risks/urban-green-space/en/
[4] A Study by IDIS on: "*Assessment of Permeable Paving Systems in selected establishments in Davao City's Central business district.*"
[5] Ibid.
[6] Article IV, Section7(7.1), Zoning Ordinance
[7] Article IV, Section 6, Zoning Ordinance