PROPERTY OWNER

Jorge Manuel Campodonico Bustios 1200 West Ave, PH 26, Miami Beach FL 33139 703.963.4438 _ jc@citylendinginc.com

OWNER'S REPRESENTATIVE AND ARCHIECTURAL DESIGNER

Gaia Sonzogni / Principal at GAIA/S DESIGN INC. 1200 West Ave, #514, Miami Beach FL 33139 786.777.8716 _ gaia@gaiasdesign.com

PLANNING DEPARTMENT/DESIGN REVIEW BOARD/CITY LAND USE BOARD

Fernanda Sotelo Chotel / Principal Planner 1700 Convention Center Drive, Miami Beach, FL 33139

SUBJECT: DRB20-0564, 4354 Michigan

August 10th, 2020 Final Submittal

LETTER OF INTENT

We are submitting this letter to outline the details of application DRB20-0564, for the new construction of a single-family residency, at address 4354 N Michigan Ave, Miami Beach FL 33140.

The scope of work includes the demolition of existing 1940 CMU single-family home, the removal of existing hardscape, the remodeling and improvement of the landscape and the new construction of a sustainable, zero-emission, steel-framed, single-family home. Proposed lot coverage, proposed setbacks and unit size comply with the RS-4 Zoning requirements.

The demolition of the existing home will be carried out by a deconstruction company in the first stage, to properly salvage and reuse, as much as possible, the existing features and elements of the 1940 house. Anything that will be identified as reusable and recyclable, will be saved from final demolition, while the rest will be properly disposed of.

Most of the surrounding houses at 4354 N Michigan Ave, are oriented and shaped based on lot shape and way of passage: we want to promote a conscious design, that integrates with the neighborhood architecture and massing **while** taking advantage of the natural environment and climate factors. Shape and orientation of the building are essential and inseparable factors in sustainable architecture, to minimize the amount of energy needed and to maximize the contribute of the natural environment: after analyzing the macro and microclimate of Miami Beach and the surrounding architecture, we reached the conclusion that the small courtyard, with most of the opening facing North, is the best model to achieve our zero-emission goal in this project.

The courtyard is an excellent thermal regulator: high walls cut off the sun, except for around midday, and large areas of the inner surfaces and of the floor are shaded during the day, preventing excessive heating and allowing a pool of cool night-air to be retained, as it is heavier than the surrounding warm air, cooling the surfaces of the envelope and working as resource of cool air for natural indoor ventilation.

The scattered volume of the proposed project also favor the natural flow and circulation of air, while the thin "U" shaped floorplan, with operable impact windows on opposite sides, will allow cross ventilation and natural cooling of the interior of the house. The two loggias, where covered parking space and summer bar are located, being two covered spaces in consequent direction, will create with the East prevalent wind, a Venturi effect, which will amplify the breezes through the spaces and will cool down the overheated East and West facades.

The house will be solar powered with thin film photovoltaic cells mounted on the roof, hurricane proof and completely integrated with the roof design.

The new landscape design maximizes the contribute of plants and trees to the energy efficiency of the house, through shading and wind mitigation: trees and plants have been selected and located to create shades on facades, to improve natural circulation of air and to lower the overall temperature around the house. The proposed landscape also minimizes the need of water and energy to maintain itself, by the use of salt tolerant, highly water-absorbent, native and Florida-friendly plants, and through the installation of a rainwater recycling system. Hardscape will be paved with porous and draining pavement material.

The new house has been designed to be built at two feet over the Flood Base Elevation required (+9.00 Ft NGDV). The new covered parking space is located at +9.00 Ft NGDV and the whole lot will be elevated at +6.56 Ft NGDV. All critical mechanical and electrical systems will be located above base flood elevation and a stormwater retention system will be designed and in place.

Elements that are common of Miami Beach contemporary architecture, such as shading wood elements, Coral Rock tiles on facades and glass opening on double height areas, have been added to the front façade to improve the integration between the existing and the new. While the architectural design of the facades shows a connection with many other contemporary projects in Miami Beach, the structure of the proposed project will be different: light gauge steel systems are a prefab product, in many ways are similar to wood stud framing, but they provide distinct cost, safety, construction time, and environmental impact advantages. Light gauge steel structures are rated to resist to earthquakes and hurricane-strength winds, with a minimum of material. The product is made from 75% recycled steel, it minimalizes onsite waste down to 1%, and it is unaffected by pests or mold. The aesthetic result can be identical to a common concrete blocks house, but with a thickness of the wall system reduced to five-inch thick walls, including insulation, and a carbon footprint highly reduced thanks to the recycled nature of the material and the minimum waste.

The application includes a Design Waiver to waive the 70% Volume Ratio of Second Floor when lot coverage is over 25%: we kindly request for this requirement to be waived, considering that the lot coverage exceeds the 25% only because it has to take into account the part of the courtyard that exceeds the 5% of the lot area. For the reasons explained above and detailed in page DRB 5.0, the Courtyard shape is the optimal shape to achieve energy efficiency and to take advantage of natural elements such as local winds, shades and natural light.

In conclusion, the new construction project is compatible with the zoning requirements and with the city's sea level rise mitigation and resiliency efforts, while also being innovative in terms of construction techniques and sustainability.

Sincerely,

PROPERTY OWNER

Jorge Manuel Campodonico 1200 West Ave, PH 26, Miami Beach FL 33139

OWNER'S REPRESENTATIVE AND DESIGNER Gaia Sonzogni _ GAIA/S DESIGN INC. 1200 West Ave, #514, Miami Beach FL 33139