



37° 53' 30.26 N
122° 26' 53.95 W

Within Aestus, interpreted as undulating wave, solutions grow from place to provide a site specific project that engages the inherent bioclimatic pattern language of the site and reflects the spirit and priorities of the Romberg Tiburon Center for Environmental Studies (RTC).

The design parti for the larger campus and subsequent project site takes on a fractured language to achieve a nuanced approach to shifting natural flows and landscapes and blurs the boundary between the bay and hill. The approach of breaking down the scale of aggregate space helps take advantage of the passive qualities of the natural flows of the site and establish a regenerative campus development strategy which celebrates and enhances the critical connections between the ocean, humans and science.

Utilizing technical and biological materials that tie into local ecology, the visitor center and related science on the bay building incorporate living building systems to move towards net positive energy, water and waste solutions which contribute to ecological and human health. These unique building system characteristics are synthesized with broader criteria for habitat protection, campus food production, renewable energy production, visitor education and, ultimately, research success.

Additionally, in order to meet net zero energy goals and because heating is the dominant energy load for this project, we took the approach of using passive autonomy design as the primary building systems strategy with rooftop solar panels to fulfill the project's renewable energy profile. For the larger science campus, we anticipate using micro-tidal turbines to create a shared, 100% renewable energy district.

Additionally, by employing the unique, passive HVAC concept of Indoor Weather, the building saves in additional energy consumption by mimicking the outdoor, natural atmospheric conditions inside while still maintaining interior conditions within an acceptable comfort profile.

Ultimately, the project embodies influential, iconic, replicable biomimetic forms which strongly reflect the changing nature of the relationship between human society and coastal ecosystems and setup practical education with science on display.

