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**THE IMPORTANCE OF HYDRAULIC STUDY IN
COASTAL AREA CONSTRUCTION**

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ABSTRACT

Land at the water edge is different; it is where two worlds meet, where whether systems collide, where views are longer, and where we can almost feel as though as we own a little piece of infinity. Just as building on a neighborhood street has its obligations, constructing a building on the water especially in tact with coastal environment requires respect for the public space that surrounds it. A big part of designing building or structure with coastal area is coping with unique construction that come with being on the margin – sloping site, high winds, lots of moisture in the air, corrosion from salt, and different impacts from the sun than are experienced on inland sites. Thus, it is quite challenging and a completely new set of issues come into play.

There have been several periods of development of coastal works in Malaysia over the past century. The value to attempting to retain beach material, whether for sea defense, coast protection or recreational use has been recognized for some time. This is to some extent demonstrated by the extensive lengths of coastline that have been groyned in the past. However,

the responsible authorities have, quite naturally dealt with these matters in which lead to some rather undesirable consequences in planning terms.

There are a number of other factors that should be taken into account before coming to any recommendation. These includes the constraints that have, in effect, been imposed by interpretation of Government legislation and the nature of the responsibilities that fall upon the various authorities involved in implementing coastal works. These have primarily been to protect people and property from the effects of erosion or flooding in situations where economic justification can be established.

The planning and design of construction structure includes all studies such as hydraulic study, feasibility study, environmental impact assessment, valuation etc is important especially when it located at coastal area. Some consequences do not suit only with soil investigation. The best practice was hydraulic studies that play an important role not only to the project but also to the coastal environment itself.

Moreover, the different between the soil inland and at the water edge having their own characteristics and the construction may need special intention and dictation from beginning to the end. All these became a protection to prevent the building from falling into the water or otherwise damage the structure in long-term affect. In other words, constructing a waterside building especially in coastal area gives great rewards, but it demands care in return.

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