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COVER LETTER

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[*November 22nd 2022*]

Dear,
I/We wish to submit an original research article entitled ***"[Spatial Analysis in Assessing the Level of Damage and Changes in the Amal Baru Beach Tarakan City North Kalimantan Indonesia]"*** for consideration by SINERGI.

I/We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere.

In this paper, I/we report on/show that:

Field	:	Port and coastal engineering, infrastructure of transportation
Topic	:	Coatal protection and coastal transportation infrastructure
Brief Background	:	To anticipate more extreme shoreline damage towards the mainland, researcher conducts this research to to analyze shoreline changes. The results of the study are expected to produce recommendations to the authority of decision makers for the manufacture of coastal protection buildings according to the typology of the *Amal Baru* Beach
Research Problem	:	The Amal Baru Beach as coastal area also contributes to the cultivation of seaweed commodities in North Kalimantan. If it is not protected by a coastal guard building, a large number of negative impacts will result, for examples: 1) The reduction of area used by the public for seedling seaweed. Not only a mixture is performed directly on the ground but also a drying-up that is done with a drying-up structure. 2) The declining volume of seaweed commodity produced by Tarakan city has affected the plan to export seaweed by Government of North

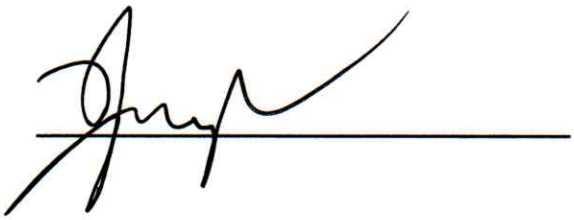
		Kalimantan. 3) The building was damaged by the shifting of coastlines towards the land, resulting in the relocation of the settlements. 4) The potential for flooding will occur in a part of the land as the accretion phenomenon resulting from post-abrasion sediment shifts occurs. 5) It will threat the construction of the outer ringroad which crosses the land side of the beach.
Overview of Method	:	The research was conducted in the form of an analysis of the level of damage and its changes by using the spatial analysis method from satellite image processing provided by Google Earth (GE). The expected results from this research are: 1) understanding the level of damage that occurs in 2001 to 2022, including prediction change of the level of damage that occurs in 2030. 2) understanding the change of the coastal area of *Amal Baru* Beach in 2001 to 2022, including prediction change of the coastal area in 2030. 3) understanding the potential problems for abrasion and accretion to the coastline as recommendation whether or not to build a coastal protection construction along the coast.
Significant finding	:	Based on the analysis that has been conducted, the following conclusions were revealed: 1) The extent of damage to the coastline resulting from abrasion in the Amal Baru Beach reviewed of the analysis of section was 66.67% heavily damaged and 33.33% moderately damaged. The increasing of change of the coastline was in the classification 2 - 5 m/Year. It is estimated that in 2030 the coastline distance up to the outer ringroad had only 27.34 meters of coastline left. 2) The coast of Amal Baru Beach decreases in every year. The increasing of reduction was 0.297 Ha/Year. It is estimated that in 2030 the total coastal area was 4,464 ha, from its present area in 2022 to 6,763 ha. 3) A phenomenon of damage was 72% along the

		coastline due to abrasion. Therefore, it requires to construct coastal shelters along research sites. The recommended types of beach buildings are Groin and Offshore Tidebreakers. 4) Construction details of the beach structure or building can be done in the next research.

We have no conflicts of interest to disclose.

Thank you for your consideration of this manuscript.

Sincerely,
[*Muhammad Djaya Bakri*]



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AUTHORSHIP STATEMENT

I/We wish to submit an original research article entitled ***"[Spatial Analysis in Assessing the Level of Damage and Changes in the Amal Baru Beach Tarakan City North Kalimantan Indonesia]"*** for consideration by SINERGI.

All persons who meet authorship criteria are listed as authors, and all authors certify that they have participated sufficiently in work to take public responsibility for the content, including participation in the concept, design, analysis, writing, or revision of the manuscript.

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POTENTIAL REVIEWERS

Please submit 3 (three) potential reviewers (*that have not listed in SINERGI*) to speed up the review process that competent for the topic and has a good reputation in that area.

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