Review Form 3

Journal Name:	**Journal of Engineering Research and Reports**
Manuscript Number:	**Ms_JERR_127388**
Title of the Manuscript:	**The influence of the presence or absence of subdivision plate on the horizontal bearing characteristics of suction pile dam**
Type of the Article	**Opinion Article**

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PART 1: Review Comments

Compulsory REVISION comments	**Reviewer's comment**	**Author's Feedback** *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	**This manuscript, which studies the influence of subdivision plates on the horizontal bearing characteristics of suction pile dams, is of great significance to the scientific community, especially in the field of geotechnical engineering. It provides valuable knowledge on the optimization of foundation structures, which can improve the design of engineering projects in harsh environments such as those encountered along the Yellow River. I appreciate this manuscript because it uses advanced numerical analysis methods to explore often overlooked concepts, such as the impact of subdivision plates on dam performance. In addition, the results obtained could potentially lead to safer and more economical design practices for coastal infrastructure.**	
Is the title of the article suitable? **(If not please suggest an alternative title)**	**The title of the article "The influence of the presence or absence of subdivision plate on the horizontal bearing characteristics of suction pile dam" is appropriate because it clearly reflects the main topic and objective of the study.**	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	**The abstract of the paper provides a good basis of information, but it could be improved to enhance clarity and precision. Here are some suggestions:** **1. Clarification of the objective of the study:** **Current sentence: To study the influence of the subdivision plate on the horizontal bearing characteristics of a suction pile dam...** **Improved suggestion: This study aims to analyze the influence of the subdivision plate on the horizontal bearing characteristics of a suction pile dam using the finite element analysis method.** **2. Simplification of the description of foundation types:** **Current sentence:...the horizontal bearing capacity characteristics of four types of suction pile dam bucket foundations, such as single bucket, 4-bucket, 6-bucket, and 8-bucket.** **Improved suggestion:...the horizontal bearing capacity characteristics of four bucket foundation configurations: single, 4 buckets, 6 buckets, and 8 buckets.** **3. Highlighting key results:** **Current sentence: The results show that the bearing mode of a suction pile dam with partitions is basically similar to that of a suction pile dam without partitions.** **Improved suggestion: The results reveal that the bearing mode is similar between suction pile dams with and without partitions, but the addition of partitions significantly improves the horizontal bearing capacity.** **4. Clarification on the impact of partitions:** **Current sentence: With the increase in the number of partitions, the effect of partitions on improving the horizontal bearing capacity gradually appears.** **Improved suggestion: The effect of partitions on improving the horizontal bearing capacity becomes significant with the increase in their number.** **5. Clarification of practical applications:** **Current sentence: indicating that the existence of the partition plate effectively shares the load transferred from the upper part of the bucket foundation...** **Improved suggestion: indicating that the subdivision plate plays a crucial role in distributing the load on the foundation, thereby improving the synergy between the bucket and the ground.**	
Are subsections and structure of the manuscript appropriate?	**The structure and subsections of the manuscript "Ms_JERR_127388.docx" are generally appropriate for a scientific article.**	

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Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	**The manuscript "Ms_JERR_127388.docx" presents a rigorous scientific approach using finite element analysis to evaluate the influence of subdivision plates on the horizontal bearing characteristics of suction pile dams. The results are supported by detailed numerical simulations and comparisons with previous works, which strengthen their validity. In addition, the study addresses practical and theoretical aspects, which gives it technical relevance in the field of geotechnical engineering. Finally, the methodology is clearly described, thus allowing reproducibility and verification by other researchers, which is essential for scientific soundness.**	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. **-**	**The references cited in the manuscript appear relevant and cover a variety of studies on pile dams and offshore foundations.**	
Minor REVISION comments **Is the language/English quality of the article suitable for scholarly communications?**	**The quality of the language and English of the article seems generally suitable for scientific communications.**	
Optional/General comments	**Here are some general comments on the paper:** **Clarity and Structure: The paper has a logical structure with an introduction, method, results, and conclusion. This makes it easy to understand the ideas and results.** **Data and Analysis: The numerical analyses and results are well detailed, which reinforces the validity of the conclusions. Figures and tables are useful to illustrate key points.** **Contributions to Research: The paper addresses a relevant topic in civil engineering, namely the impact of subdivision plates on the bearing capacity of suction pile dams. This may contribute to improvements in the design of similar structures.** **References: The references are relevant and provide a good context for previous research. However, it may be beneficial to include a discussion of the limitations of previous studies to better situate this research.** **Conclusion and Outlook: The conclusion summarizes the important points well, but it may be interesting to include recommendations for future research or practical applications based on the results obtained.**	

PART 2:

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

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