



**SDI Review Form 1.6**

Journal Name:	<a href="#">Journal of Engineering Research and Reports</a>
Manuscript Number:	Ms_JERR_49135
Title of the Manuscript:	NUMERICAL STUDY OF STRIP FOOTINGS BEHAVIOUR ON COMPACTED SAND
Type of the Article	

**General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

**PART 1: Review Comments**

	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)
<b>Compulsory</b> REVISION comments	<p>Author presents the finite element results of parametric studies carried out to determine the effect of the width of the footing, depth of the embedment and inclusion of a compacted layer of sand of varying depth beneath the strip footing. The manuscript does not add to the present knowledge. This manuscript needs the major revision.</p> <p>Please address the following points.</p> <ol style="list-style-type: none"> <li>1. The mesh refinement studies are not included in the article.</li> <li>2. The literature review is not up to the mark. There have been many studies on the factors affecting the ultimate bearing capacity of strip footing (e.g Chavda and Dodagoudar, 2018), the effect of varying compacted layer beneath the strip footing. Please revise the literature review. <i>Chavda, J.T. &amp; Dodagoudar, G.R. Innov. Infrastruct. Solut. (2018) 3: 15. <a href="https://doi.org/10.1007/s41062-017-0121-4">https://doi.org/10.1007/s41062-017-0121-4</a></i></li> <li>3. The motivation behind doing this numerical exercise is not clearly visible in the "Introduction" section. Please add few lines on "why this exercise is carried out".</li> <li>4. The notations used need to be corrected. Example: <math>C_u</math>, <math>C_c</math>, MPa, etc.</li> <li>5. Why the experimental properties of the sand are included in this article. Where the values of Table 1 are used? Why "material used" section is added in the manuscript.</li> <li>6. The same word is presented in three ways: PLAXIS, Plaxis, plaxis. Please maintain uniformity. Similarly, with FEM, fem is also observed.</li> <li>7. Why 6-node triangular elements are used in the analysis? Why not 15-node. Does the type of elements affect the outcome?</li> <li>8. In section: "Effect of footing embedment depth": Fig. stands alone. Please correct it.</li> <li>9. Terzaghi and Vesic are not cited properly in the text.</li> </ol>	<p>First, I would like to thank you for your valued recommendations. Please consider the following modification I made to the manuscript:</p> <ol style="list-style-type: none"> <li>1- I added additional recent previous studies</li> <li>2- In section comparison between FEM results and analytical solution results I added the case for footings resting on compacted sand.</li> <li>3- I added reference for mesh refinement</li> <li>4- In section results and discussion I added more cases (footing width (1.5, 2m).</li> <li>5- In section introduction I added scope of research</li> <li>6- I used 6 node triangular element because it improves calculation time. The difference between 6 and 15 node element type was slight therefore, it did not affect the outcome</li> </ol>
<b>Minor</b> REVISION comments		
<b>Optional/General</b> comments		



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**PART 2:**

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	