SRI RAAJA RAAJAN
COLLEGE OF ENGINEERING AND TECHNOLOGY
(Approved by AICTE, New Delhi & Affiliated to Anna University)

146 /4B1, Amaravathi Village,
Amaravathipudur (Po.),
Karaikudi – 630 301.
Ph : 04565 – 234230 / 326132

Fax : 04565 – 234430
Mobile : 73737 11322, 73737 11333
E-mail : srrcet2010@gmail.com
Website : www.raajaraajan.org

DEPARTMENT OF CIVIL ENGINEERING

FIELD PROJECT (2021-2022)

REPORT

SRI RAAJA RAAJAN COLLEGE OF ENGINEERING AND TECHNOLOGY
KARAIKUDI

PRINCIPAL
Sri Raaja Raajan College of Engg. & Tech.,
Amaravathipudur, Karaikudi - 630 301
Sivagangai Dist. Tamil Nadu

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Ref: SRRCET/CED/FP/22/005

Date: 05.12.2021

From

Raseed Kkan I,
Head of the Department,
Department of Civil Engineering,
Sri Raaja Raajan College of Engineering and Technology,
Amaravathipudhur

To
V.R Pandi (Prop),
No.9.4.320 Nachiyar Street,
Pari Nagar,
Karaikudi-630003
Sivagangai District
Through

The Principal
Sri Raaja Raajan College of Engineering and Technology
Amaravathipudhur

Respected sir,

Sub: Requisition to get permission to conduct Field Project in V R PANDI for Civil Engineering students – reg.

For this academic year, we are having Field PROJECT for IV-year civil students. In this regard, I request you to kindly give permission to conduct Field Visit for three months. I also request you to give permission to visit your Construction Site for a period of three month.

Thanks, with regards

Raseed Khan I

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PRINCIPAL
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Amaravathipudur, Karaikudi - 630 301
Sivagangai Dist. Tamil Nadu

PRETHIVI & Co

Prop :VR.PANDI

GSTIN: 33ANBPP5979R1Z2

To

Raseed Khan I,

Head of the Department,

Department of civil Engineering,

Sri Raaja Raajan College of Engineering and technology,

Amaravathi pudhur

Subject: Approval Letter for Field Project

Dear Sir/Madam

I am writing this letter to approve your request that you made on 15.03.2022 for Field Project to our Construction site .

I am pleased that you are interested in visiting our Construction Site. I would like to schedule a 03.01.2022 to 12.04.2022 at 10.00 Am and time for you. It will generally take around Project for 3 months our Construction Site.

I can assure you that our industry will give Mr.Raseed Khan I(Head of the Department, Department of Civil Engineering) and his Student significant knowledge during this visit. I hope this Field Project will give you to know things practically through interaction and working methods. It will lessen the gap between lessons and the practical working environment.

Regards

V.R Pandi

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No.2-4-320, Periyar Street, Pari Nagar, Karaikudi - 630003, Sivagangai - District.
Cell : 9364472456

SRI RAAJA RAAJAN COLLEGE OF ENGINEERING AND TECHNOLOGY
AMARAVATHIPUTHUR, KARAIKUDI
Department of Civil Engineering

FIELD PROJECT REPORT

Start date	End date	Duration	Number of students involved
03.01.2022	12.04.2022	3 months	4

FIELD DENSITY TEST OF SOIL BY SAND REPLACEMENT METHOD FOR SOIL COMPACTION

Submitted by

Client Detail:

Introduction

The sand replacement test method is used to determine in situ dry density of soil. The procedures, materials, equipment, and specifications of this test is based on the Indian Standard (IS 2720 part 28). This test is of significant importance and it has been widely used in various construction project sites.

The field density of natural soil is required for the estimation of soil bearing capacity for the purpose of evaluation of pressures on underlying strata for computation of settlement, and stability analysis of natural slope.

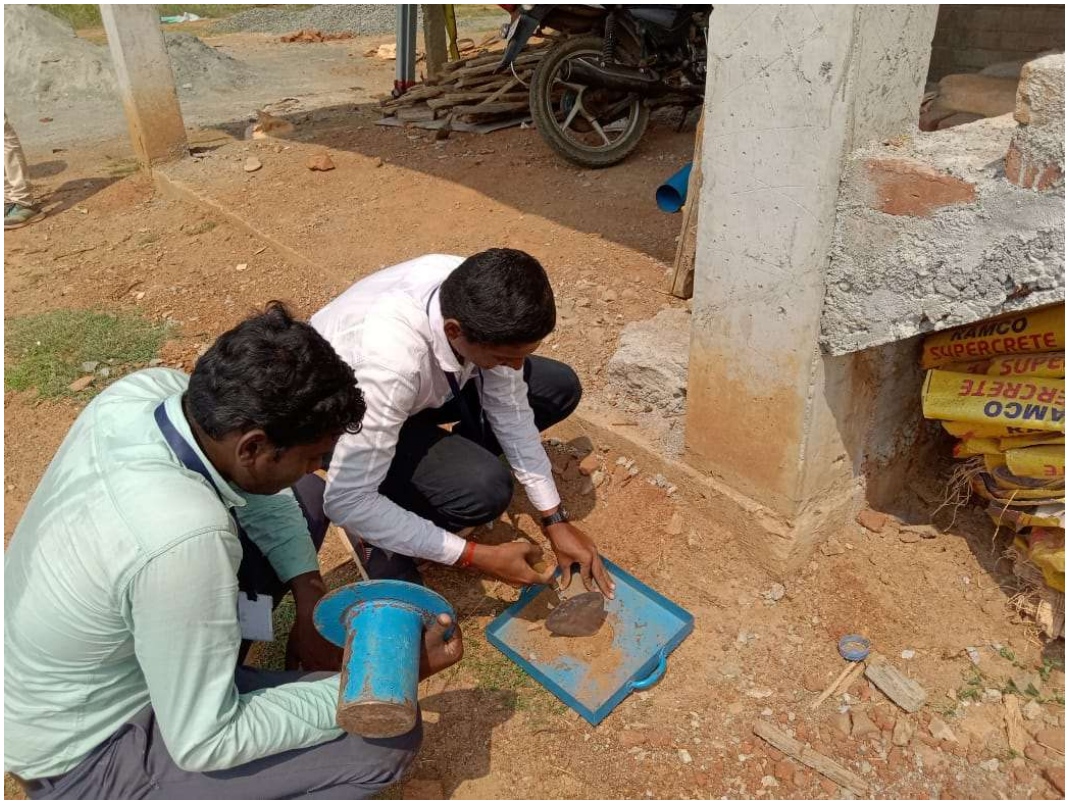
The sand replacement test method is also used to determine the in-place density of compacted soil in order to compare it with the designated compaction degree, hence it specifies how much the compaction of the soil is close to the designated compaction degree.

Apparatus

1. Sand – pouring cylinder
2. Calibrating container, 100mm diameter and 150mm height
3. Soil cutting and excavating tools, such as scrapper tool, bent spoon
4. Plane surface: Glass or Perspex Plate or Other Plane Surface, 450mm square, 9mm thick or larger
5. Metal container to collect excavated soil
6. Metal tray, 300mm square and 40mm deep with a hole of 100mm in diameter at the center
7. Weighing balance accurate to 1 gram
8. Moisture content cans
9. Oven
10. Desiccator

Calibrations

1. Measure the internal dimensions of the calibrating container and then calculate its volume.
2. Fill the sand-pouring cylinder with sand, within about 10mm of its top. Determine the weight of the filled cylinder (M_1).
3. Place the sand-pouring cylinder vertically on the calibrating container. Open the shutter to allow the sand run out from the cylinder. When there is no further movement of the sand in the cylinder, close the shutter.
4. Lift the pouring cylinder from the calibrating container and weigh it to the nearest gram (M_2).
5. Place the sand pouring cylinder on the glass plate. Open the shutter and allow the sand to run out of the cylinder until no further movement of the sand is noticed (sand fills the cone of the cylinder), and then close the shutter and remove the sand pouring cylinder carefully.
6. Take the sand on the glass plate and determine its weight (M3)
7. Repeat step 3 to step 6 two more times and record mean weight (mean M2 and M3)



FIELD DENSITY TEST OF SOIL BY SAND REPLACEMENT METHOD FOR SOIL COMPACTION

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FIELD PROJECT (2021-2022)

NAME LIST

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DEPARTMENT OF CIVIL ENGINEERING
FIELD PROJECT

S.NO	NAME	REGISTER NUMBER	SIGN
1	Senthil Kumar	912519103005	
2	Sudhan	912519103006	
3	Vignesh G	912519103007	
4	Yasin	912519103008	

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