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NOMENCLATURE

ε - axial strain

ρ - Bulk mass density

η - Porosity

υ - Poisson’s ratio

λ - Wavelength

μ - Micron

γ_d - Dry unit weight

f - Frequency

CO_2 - Carbon dioxide

C_u - Coefficient of uniformity

C_c - Coefficient of curvature

MDD - Maximum dry density

OMC - Optimum moisture content

UCS - Unconfined compressive strength

UU - Unconsolidated undrained

CU – Consolidated undrained

LL - Liquid limit

PL - Plastic limit

PI - Plasticity index

SL - Shrinkage limit

CH - Clay with high plasticity

c - Cohesion

ϕ - Angle of internal friction

CSH - Calcium silicate hydrate

CASH - Calcium aluminate silicate hydrate

FA - Fly ash

NS - Nano silica

EDX - Energy Dispersive X-Ray

SEM - Scanning Electron Microscope

XRD - X-Ray Diffraction

XRF - X-Ray Fluorescence

FTIR - Fourier Transform Infrared Spectroscopy

CaO - Calcium oxide

$CaCO_3$ - Calcium carbonate

Al_2O_3 - Aluminium oxide

SiO_2 - Silicon oxide

CBR - California bearing ratio

IS - Indian standard

IRC - Indian road congress

ASTM - American Society for Testing and Materials

G - Dynamic shear modulus

D - Damping ratio

E - Young's modulus

B - Skempton's pore pressure parameter

r_u - Excess Pore pressure ratio

G_{max} - Maximum shear modulus

V_s - Shear wave velocity

L_{tt} - Travel distance

t - Time

G/G_{max} - Normalized shear modulus

γ - Shear strain

CP - Confining pressure

σ'_c - Effective confining pressure

σ_d - Deviator stress

Hz - Hertz

kHz - Kilohertz

kPa – Kilopascal

kN- Kilonewton

MPa - Megapascal

CTX - Cyclic triaxial test

K_T - Coefficient of permeability

L - length

A - area

kg - Kilogram

mm - Millimetre

G_s - Specific gravity