

GEOTECHNICAL DESIGN OF DRIVEN PILES UNDER AXIAL LOADS

Sakib Bin Rafi Tonmoy, Jakaria Pervez

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1 Introduction

3(Three) Methods shall be discussed with example.

1. API: American Petroleum Institute Procedure
2. FHWA: U.S. Federal Highway Administration Procedure
3. U.S. Army Corps Method

API gives lowest Capacity. It is conservative. So It shall be used in this note in detailed.

2 API Procedure

$$= mc^2$$

soil	$\delta, \text{degrees}$	Limiting f,kips/ft ² (<i>kPa</i>)
Very loose	15	1.0 (47.8)
Loose	20	1.4 (67.0)
Medium	25	1.7 (83.1)
Dense	30	2.0 (95.5)

Table 1: uideline for Side Friction in Siliceous Soil