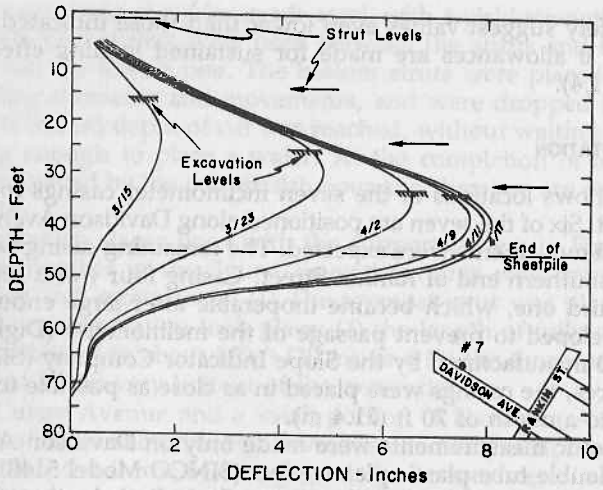

FIG. 9.—Typical Measured Lateral Movements for Deepening Excavation on Davidson Avenue—Inclinometer No. 7 (1 ft = 0.305 m; 1 in. = 25.4 mm)

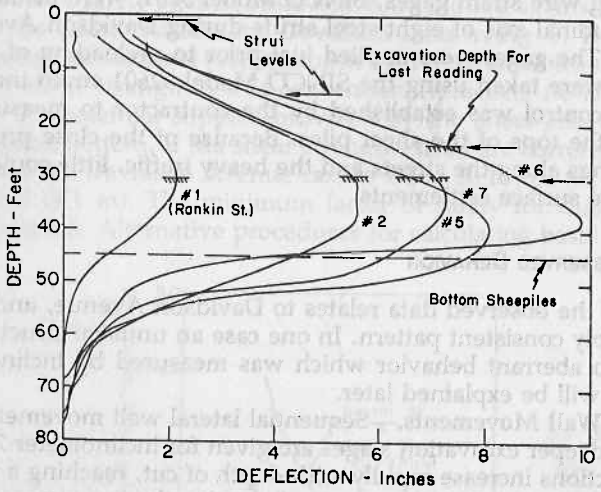

FIG. 10.—Maximum Measured Lateral Movements in All Inclinometers except Nos. 3 and 4 (1 ft = 0.305 m; 1 in. = 25.4 mm)

for such a small excavation, reflecting the unusually weak and sensitive clay conditions along Davidson Avenue.

The lateral movements measured in inclinometer 1 on Rankin Street reached a maximum of only 2 in. (51 mm). This contrasts sharply with the behavior observed for Davidson Avenue, reflecting the significantly weaker and slightly more sensitive clay at that location. No other direct measurements of lateral movements were made on Rankin or Custer.

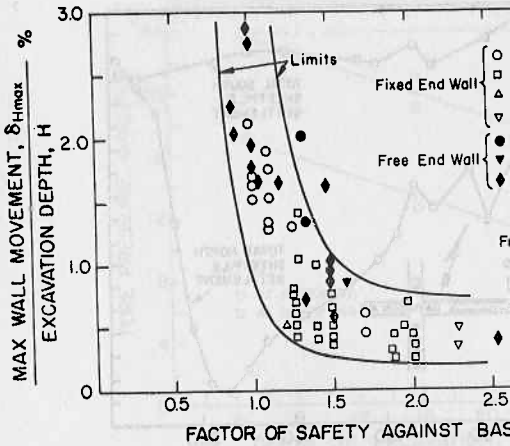

FIG. 11.—Nondimensionalized Lateral Movements Plott against Basal Heave for Davidson Avenue and Rankir

The relative level of the lateral movements ob and Davidson Avenue can be best judged by pl dimensional form shown in Fig. 11, after the meth Hansen, and Mana (2). Maximum lateral move excavation depth at which the measurement was factor of safety against basal heave, as define nondimensional movements typically increase safety of 1.5 since yielding of the subsoil begin

In addition to the points from the present sheet-pile wall projects in clay soils, including shown. Almost all of the Davidson Avenue an within the bands defining general response fo lowest factors of safety, the Davidson Avenue m parable to, or greater than, those reported for th I and III excavations (7,8).

Sheet-Pile Wall Settlements: Wracking of S sheet-pile walls were monitored by survey nately, most of the records were lost, but one Davidson Avenue remains available. This inv m) segment of excavation at the westernmost e ments for the north and south walls reached north side but only 3 in. (76 mm) on the soutl stantial differential settlements led to wracking tem. Fig. 13 gives a schematic of the total deflec

The reason for the differential settlements i fact that the Bay Mud supporting the walls ha and (2) traffic routing patterns. As shown in the narrow confines of Davidson Avenue wa side of the wall. Haul trucks, cranes, and n close to the wall. This loading plus the soft so