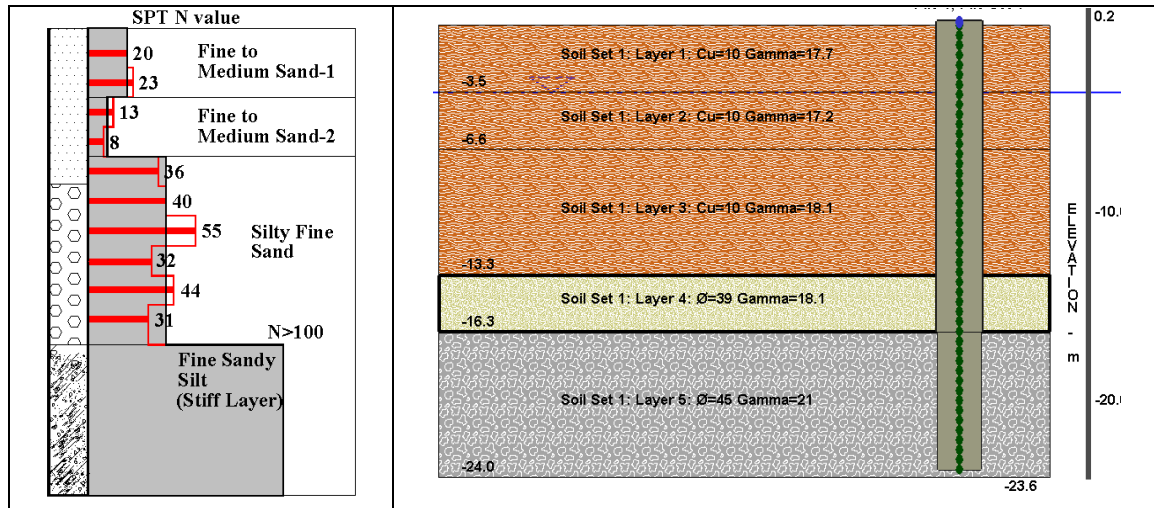
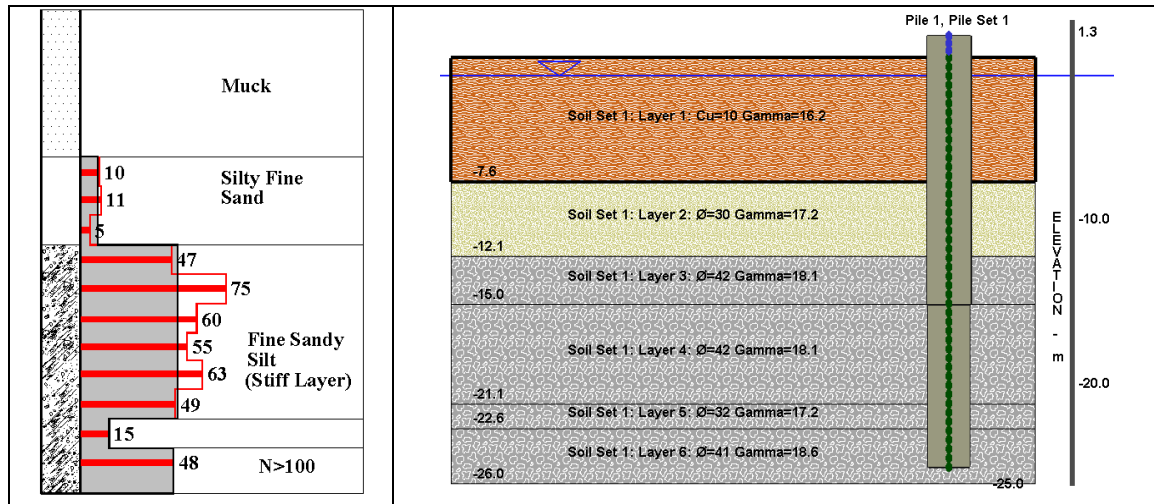


APPENDIX E. SOIL PROFILE OF AXIAL LOAD TESTS

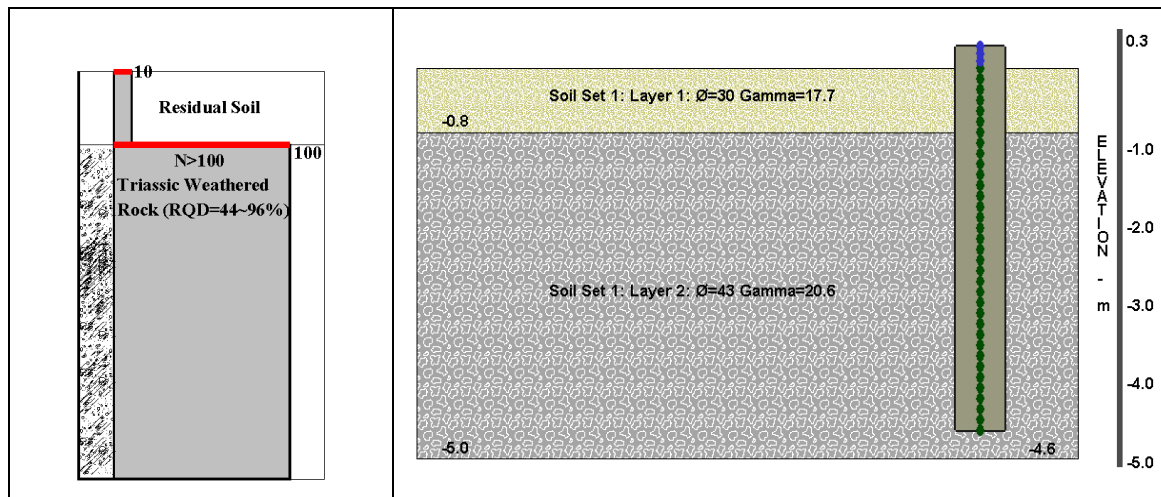
i. DDP-1 & DDP-2



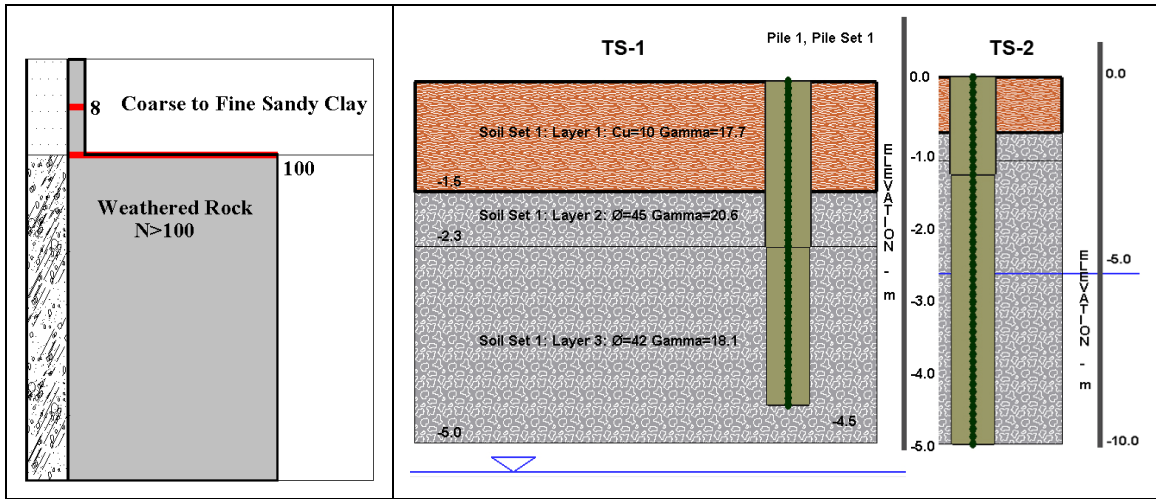
ii. Bent-8



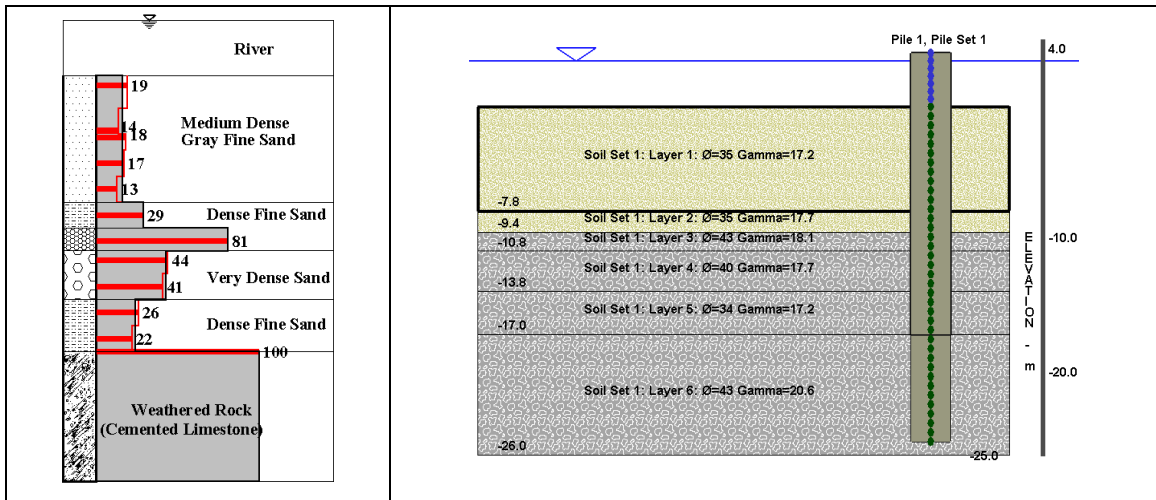
iii. DP-1 & 2



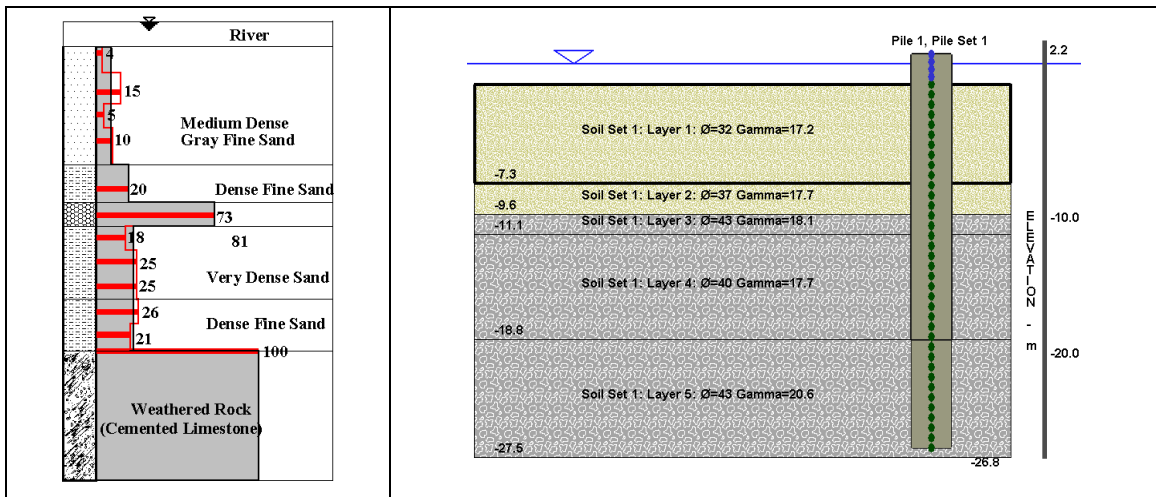
iv. TS-1 & TS-2



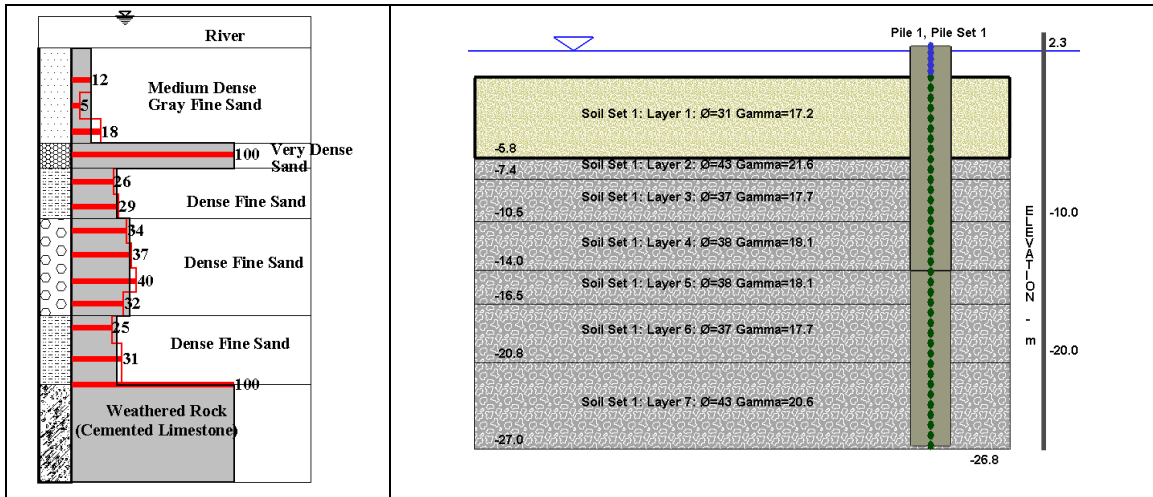
v. Pier-19



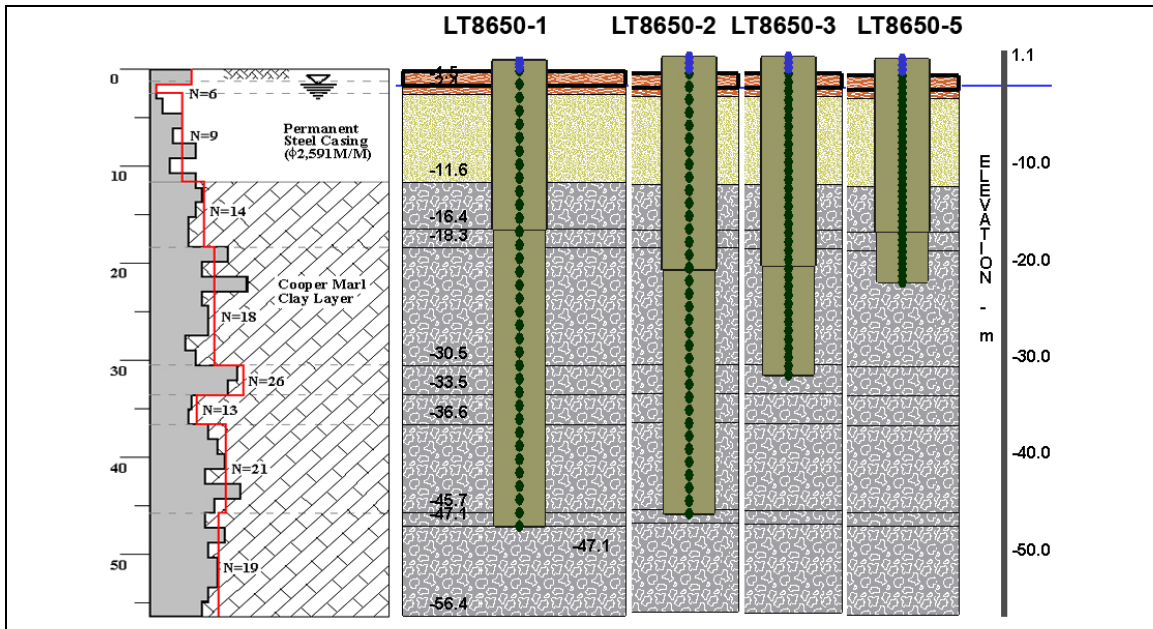
vi. Pier-34



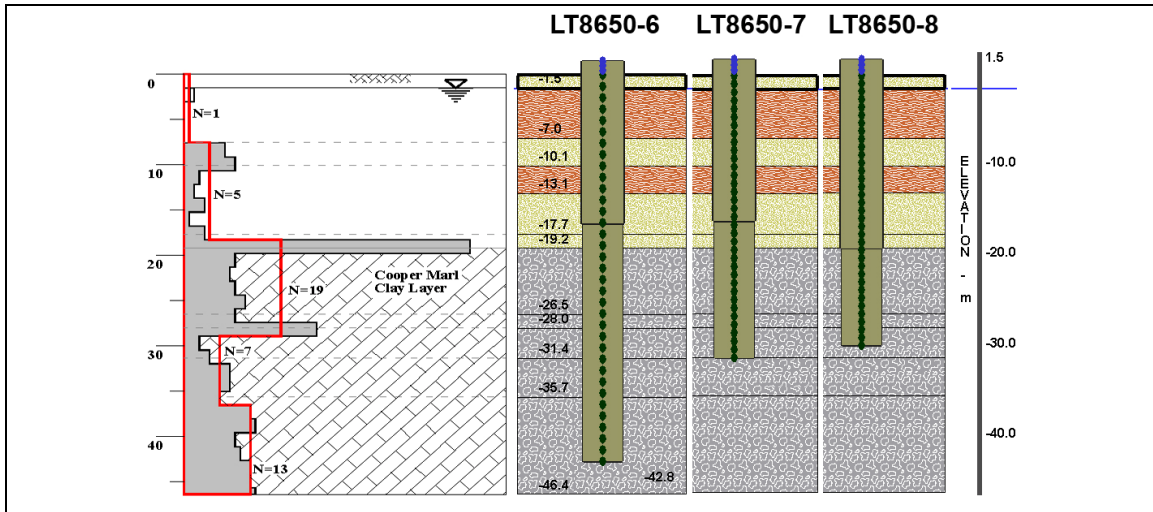
vii. Pier-48



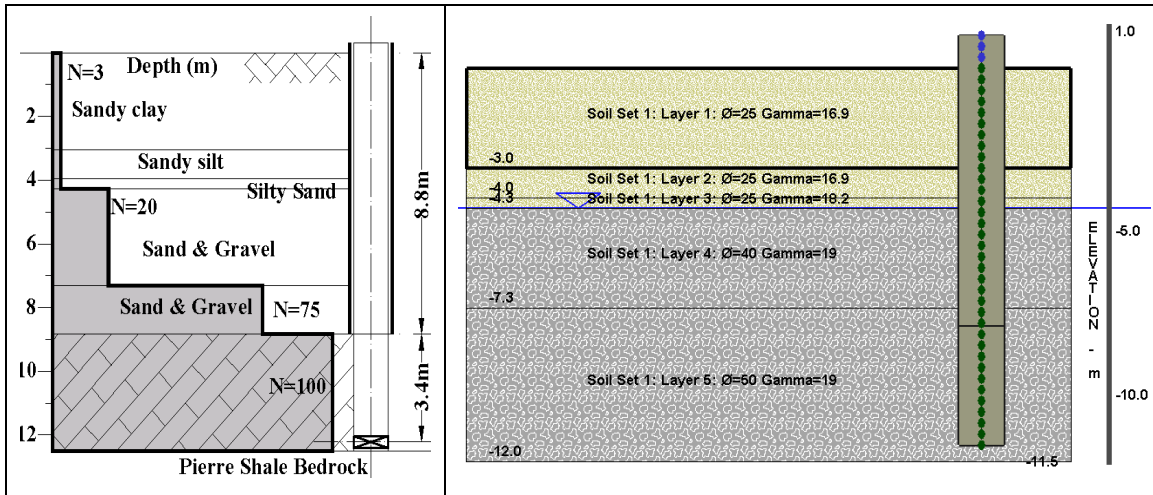
viii. LT8650-1, 2, 3, & 5



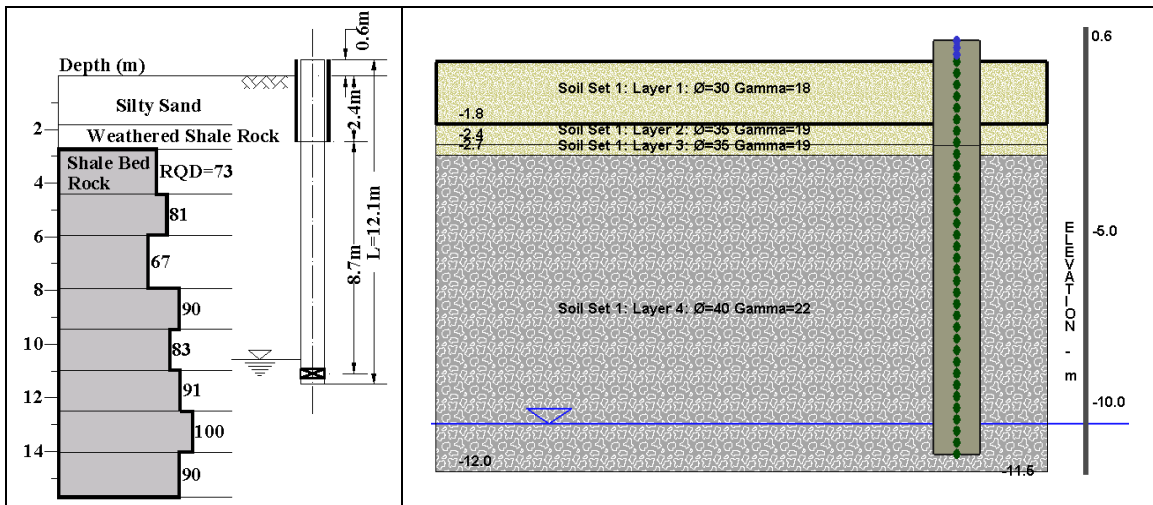
ix. LT-8650-6, 7, & 8



x. LT-8958-1 & 2

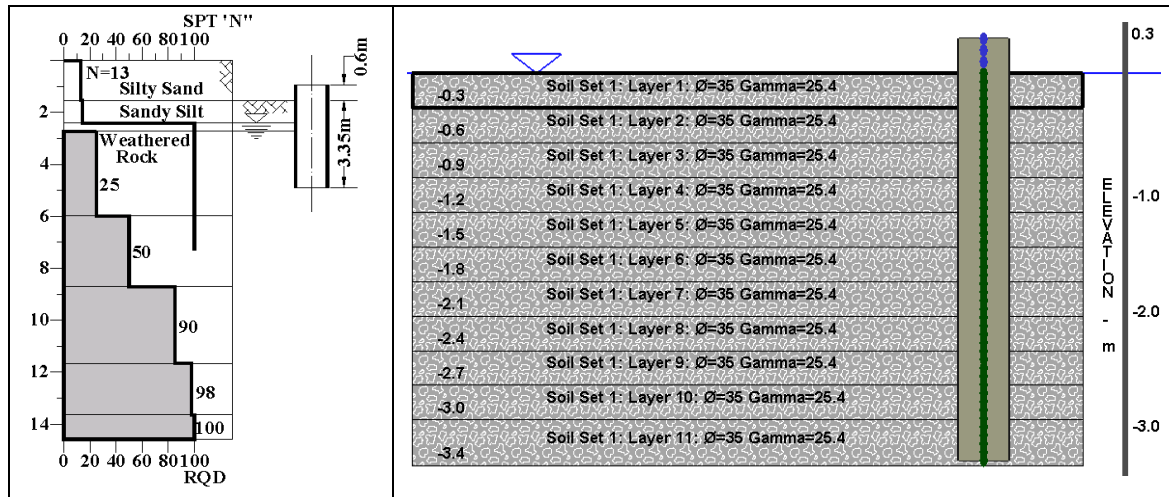


xi. LT-8402

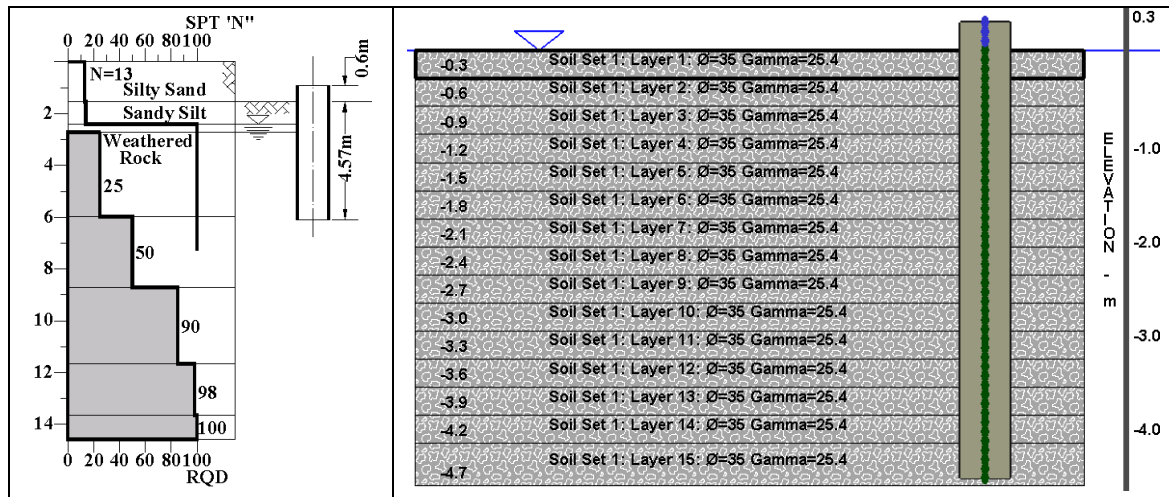


SOIL PROFILE OF LATERAL LOAD TESTS

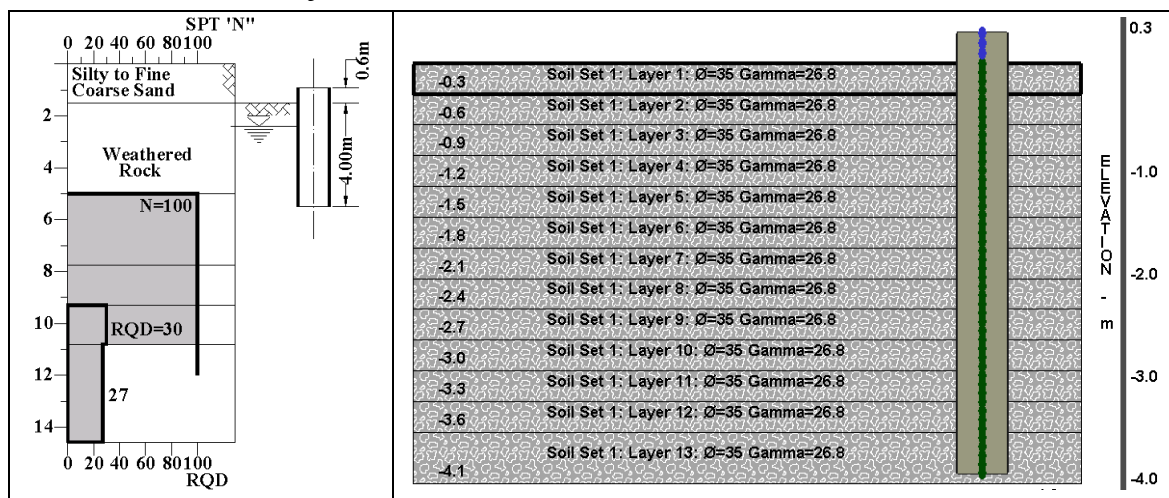
i. Nash Halifax Short Shaft



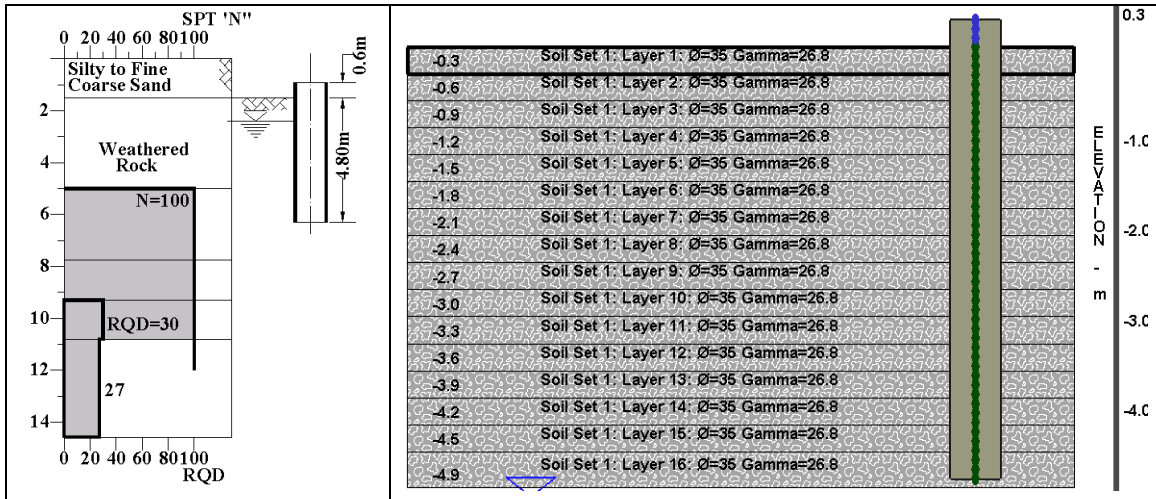
ii. Nash Halifax Long Shaft



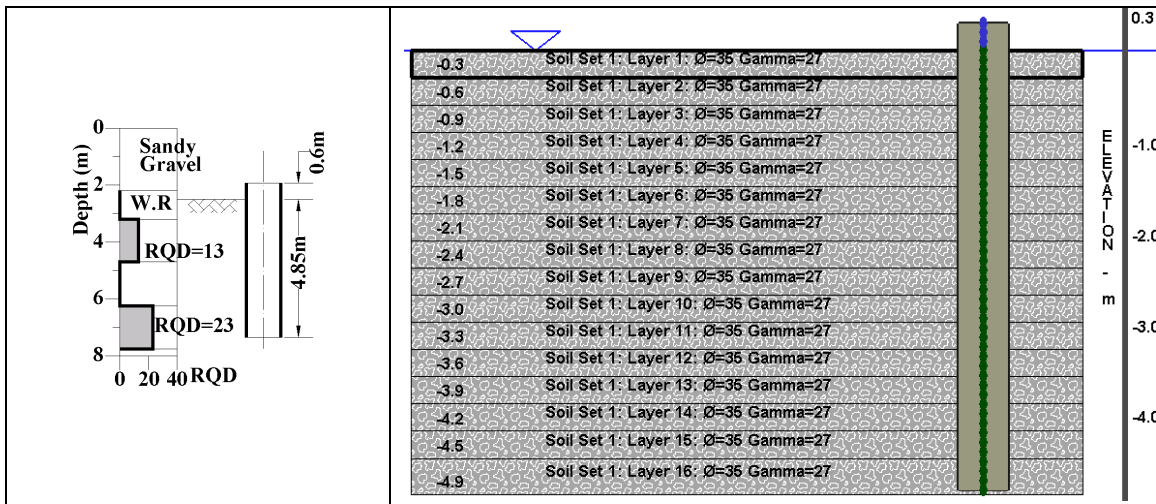
iii. Caldwell Short Shaft



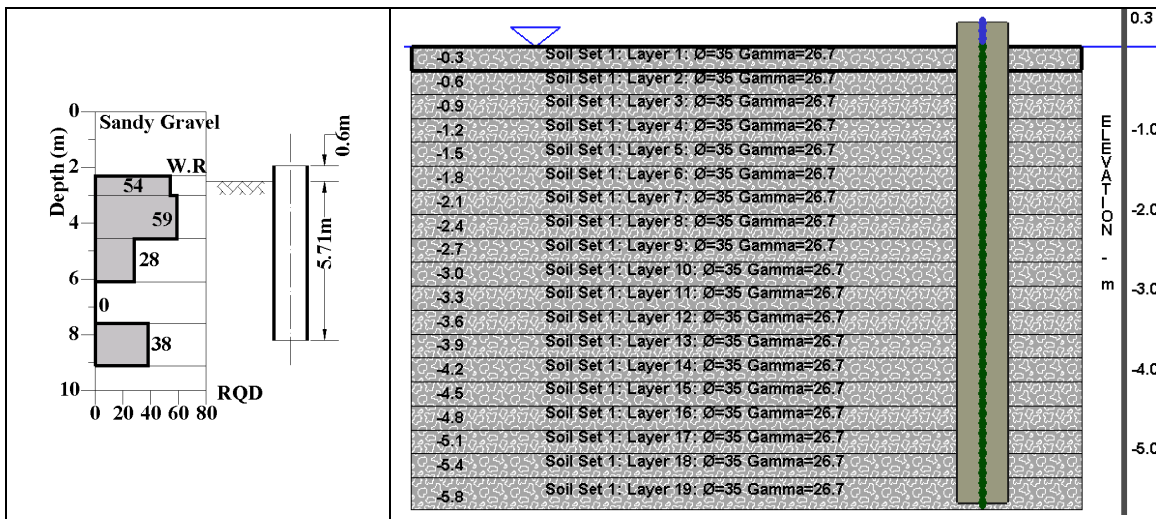
iv. Caldwell Long Shaft



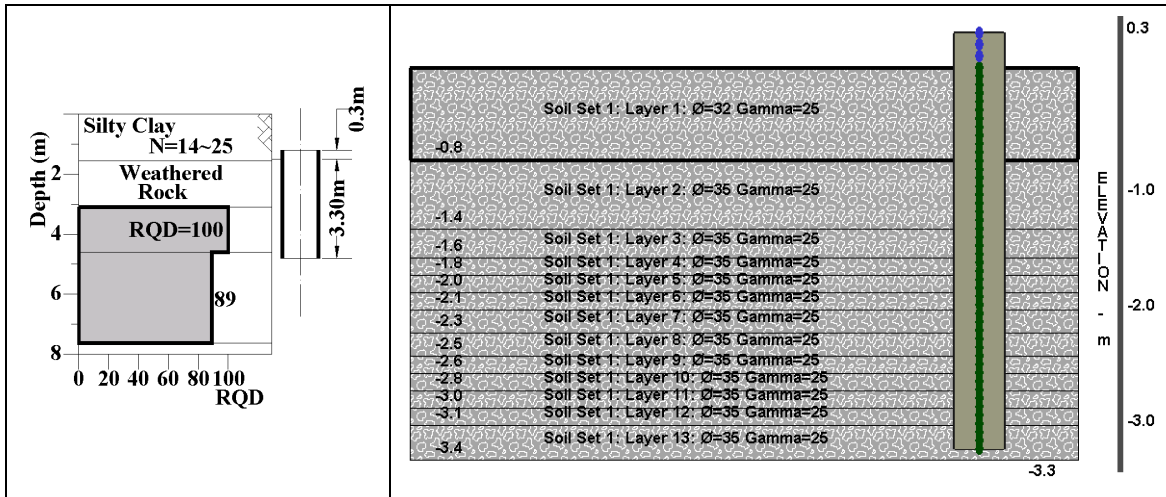
v. Wilson Short Shaft



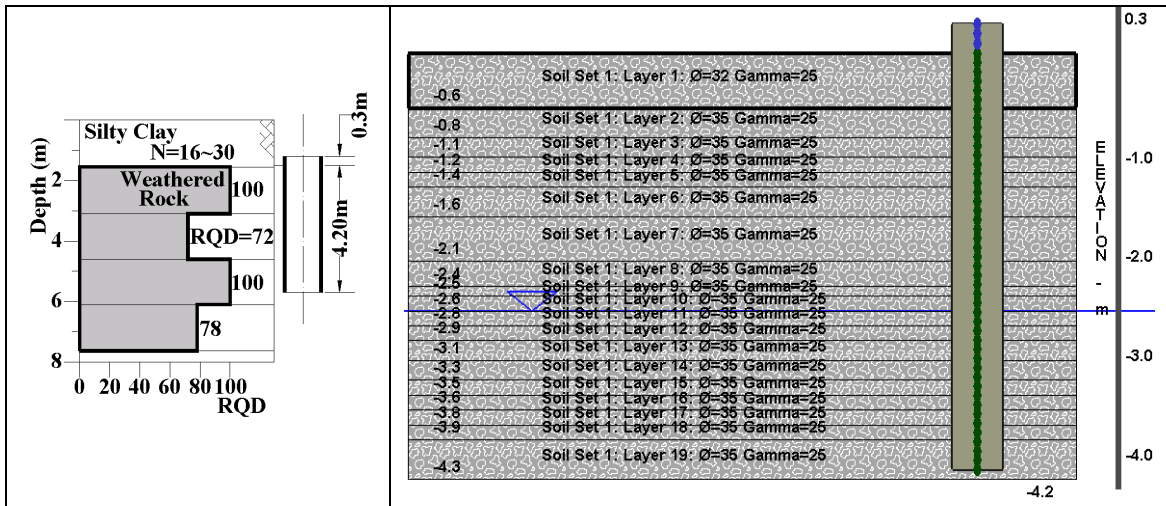
vi. Wilson Long Shaft



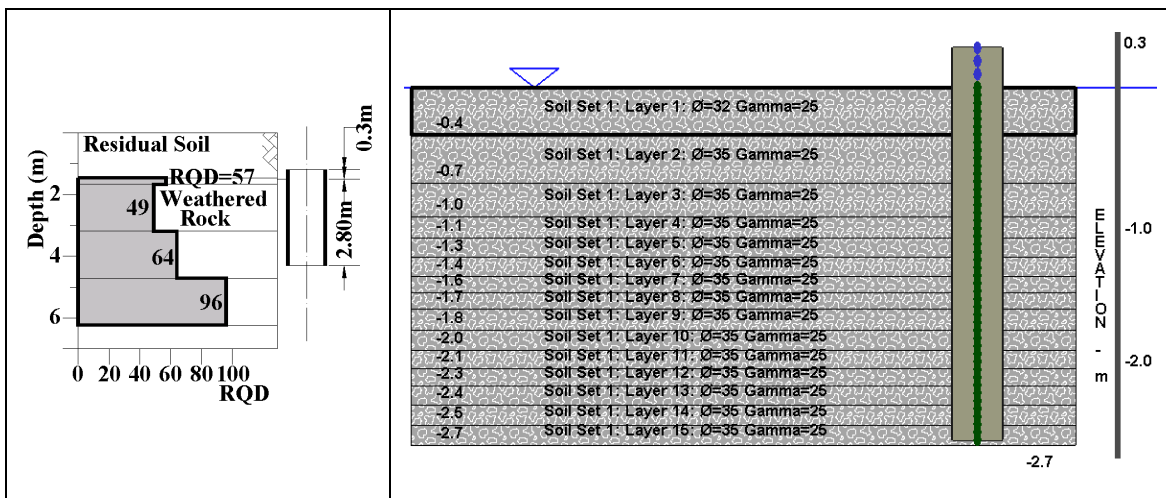
vii. I-40 Short Shaft



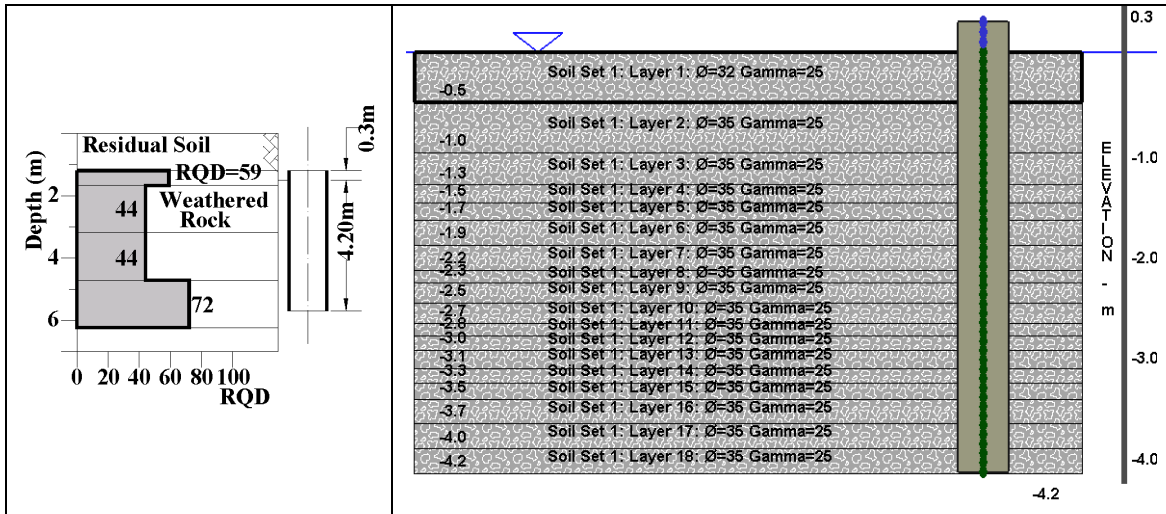
viii. I-40 Long Shaft



ix. I-85 Short Shaft



x. I-85 Long Shaft



MODELS FOR SOIL-PILE INTERACTION (a)

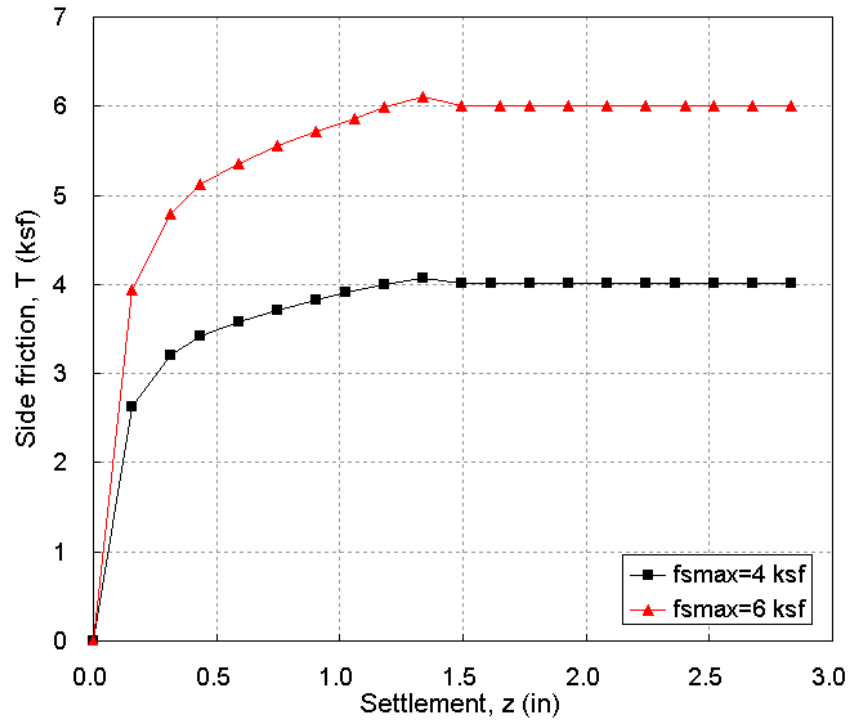
Test	Depth (ft)	GWT (ft)	γ (pci)	Model	C_u or f_{smax} (ksf)
DDP-1	0.0 - 11.6	-11.6	113	D.S.Clay	0.2
	11.6 - 21.6		109	D.S.Clay	0.2
	21.6 - 43.5		115	D.S.Clay	0.2
	43.5 - 53.3		115	McVay	6
	53.3 - 78.7		134	McVay	6
DDP-2	0.0 - 11.6	-11.6	113	D.S.Clay	0.2
	11.6 - 21.6		109	D.S.Clay	0.2
	21.6 - 43.5		115	D.S.Clay	0.2
	43.5 - 53.3		115	McVay	4
	53.3 - 78.7		134	McVay	4
DP-1 & 2	0.0 - 2.7	-2.7	113	D.S.Sand	-
	2.7 - 16.4		131	McVay	6
Pier-19	16.4 - 25.6	11.1	109	D.S.Sand	-
	25.6 - 30.8		113	D.S.Sand	-
	30.8 - 35.4		115	McVay	6
	35.4 - 45.3		113	McVay	6
	45.3 - 55.8		109	McVay	6
	55.8 - 85.3		131	McVay	6
Pier-34	0.0 - 23.9	5	109	D.S.Sand	-
	23.9 - 31.5		113	D.S.Sand	-
	31.5 - 36.4		115	McVay	6
	36.4 - 61.6		113	McVay	6
	61.6 - 90.2		131	McVay	6
Pier-48	0.0 - 19.2	6.4	109	D.S.Sand	-
	19.2 - 24.3		137	McVay	6
	24.3 - 34.4		113	McVay	6
	34.4 - 46		115	McVay	6
	46.0 - 54.1		115	McVay	6
	54.1 - 68.1		113	McVay	6
	68.1 - 88.6		131	McVay	6
LT8650-1 LT8650-2 LT8650-3 LT8650-5	0.0 - 4.9	-4.9	107	D.S.Clay	0.1
	4.9 - 8		105	D.S.Clay	0.1
	8.0 - 38		109	D.S.Sand	-
	38.0 - 53.8		109	McVay	6
	53.8 - 60		122	McVay	6
	60.0 - 100		115	McVay	6
	100.0 - 110		116	McVay	6
	110.0 - 120		118	McVay	6
	120.0 - 150		119	McVay	6
	150.0 - 154.6		116	McVay	6
	154.6 - 185		115	McVay	6

MODELS FOR SOIL-PILE INTERACTION (b)

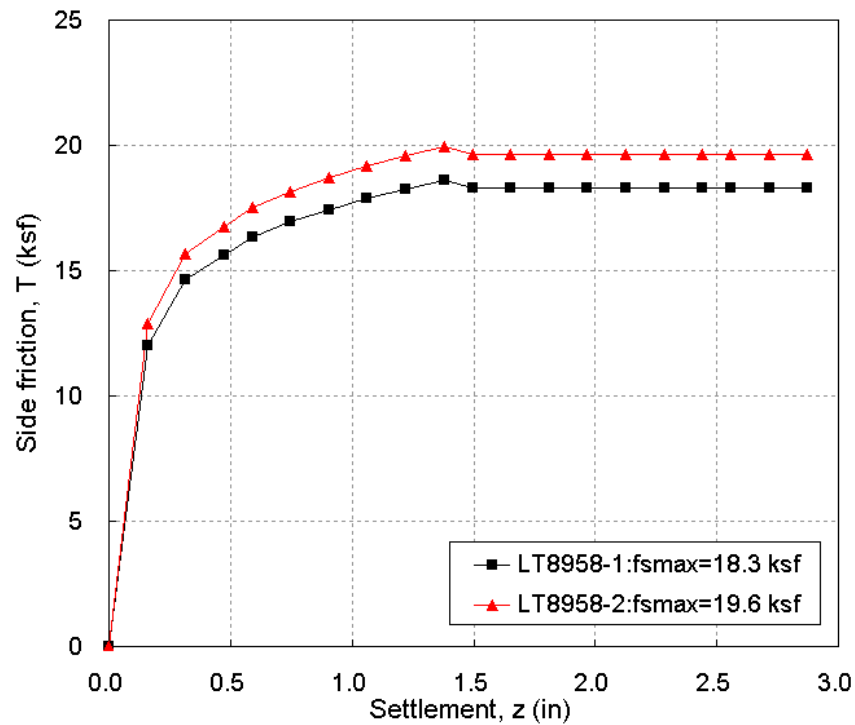
Test	Depth (ft)	GWT (ft)	γ (pci)	Model	C_u or f_{smax} (ksf)
LT8650-6 LT8650-7 LT8650-8	0.0 - 4.9	-4.9	99	D.S.Sand	-
	4.9 - 23		101	D.S.Clay	0.0
	23.0 - 33		108	D.S.Sand	-
	33.0 - 43		113	D.S.Clay	0.4
	43.0 - 58		109	D.S.Sand	-
	58.0 - 63		110	D.S.Sand	-
	63.0 - 87		122	McVay	6
	87.0 - 92		113	McVay	6
	92.0 - 103		132	McVay	6
	103.0 - 117		129	McVay	6
	117.0 - 152.3		127	McVay	6
LT8958-1	0.0 - 10	-14	107	D.S.Sand	-
	10.0 - 13		107	D.S.Sand	-
	13.0 - 14		116	D.S.Sand	-
	14.0 - 24		121	McVay	6
	24.0 - 29		121	McVay	6
LT8958-2	0.0 - 8	-14	116	D.S.Sand	-
	8.0 - 13		116	D.S.Sand	-
	13.0 - 14		121	D.S.Sand	-
	14.0 - 28		121	D.S.Sand	-
	28.0 - 60		127	McVay	6
LT8402	0.0 - 6	-34.8	114	D.S.Sand	-
	6.0 - 8		121	D.S.Sand	-
	8.0 - 9		121	D.S.Sand	-
	9.0 - 14.5		140	McVay	6
	14.5 - 19.5		140	McVay	6
	19.5 - 26		140	McVay	6
	26.0 - 31		140	McVay	6
	31.0 - 36		140	McVay	6
	36.0 - 41		140	McVay	6
Bent-8	0.0 - 24.9	-3.7	103	D.S.Clay	0.2
	24.9 - 39.8		109	D.S.Sand	-
	39.8 - 49.3		115	McVay	4
	49.3 - 69.3		115	McVay	4
	69.3 - 74.2		109	McVay	4
	74.2 - 85.3		118	McVay	4

T-Z CURVES FOR SIMULATION OF AXIAL LOAD

i. *T-z Curves of Weak Rock Model: Limestone (McVay)*

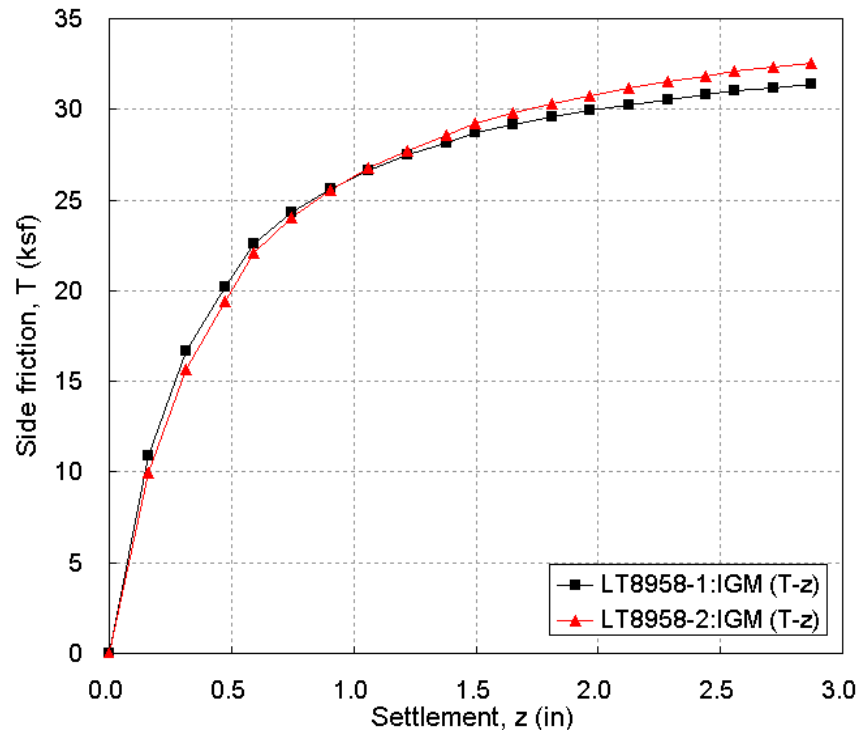


(a) $f_{smax} = 4$ ksf & 6 ksf



(b) $f_{smax} = 18.3$ ksf & 19.6 ksf

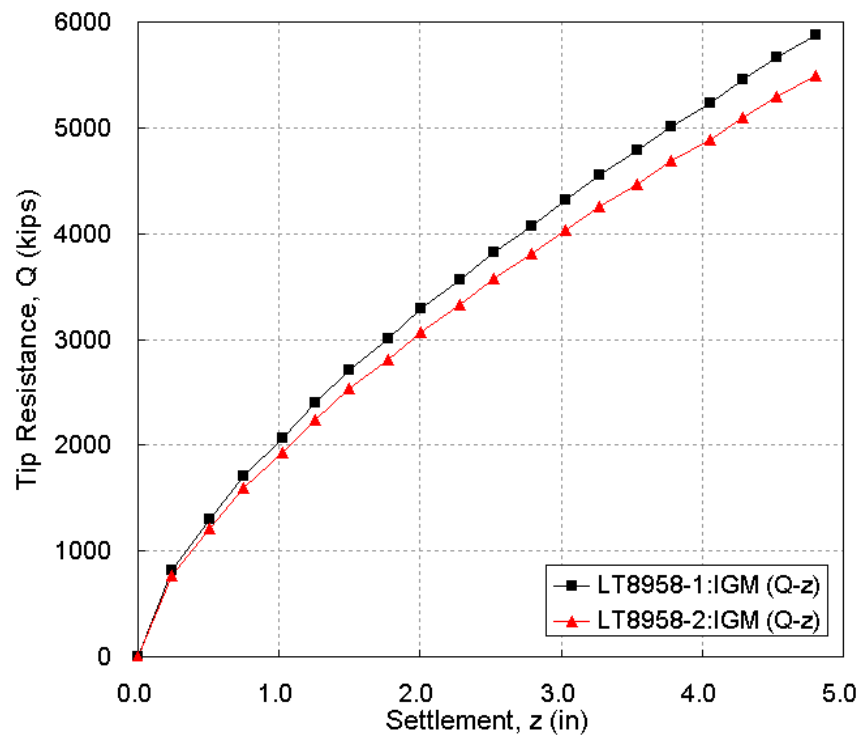
ii. *T-z Curves of Intermediate Geo-Material Model*



(a) LT 8958-1 & LT 8958-2

Q-Z CURVES FOR SIMULATION OF AXIAL LOAD

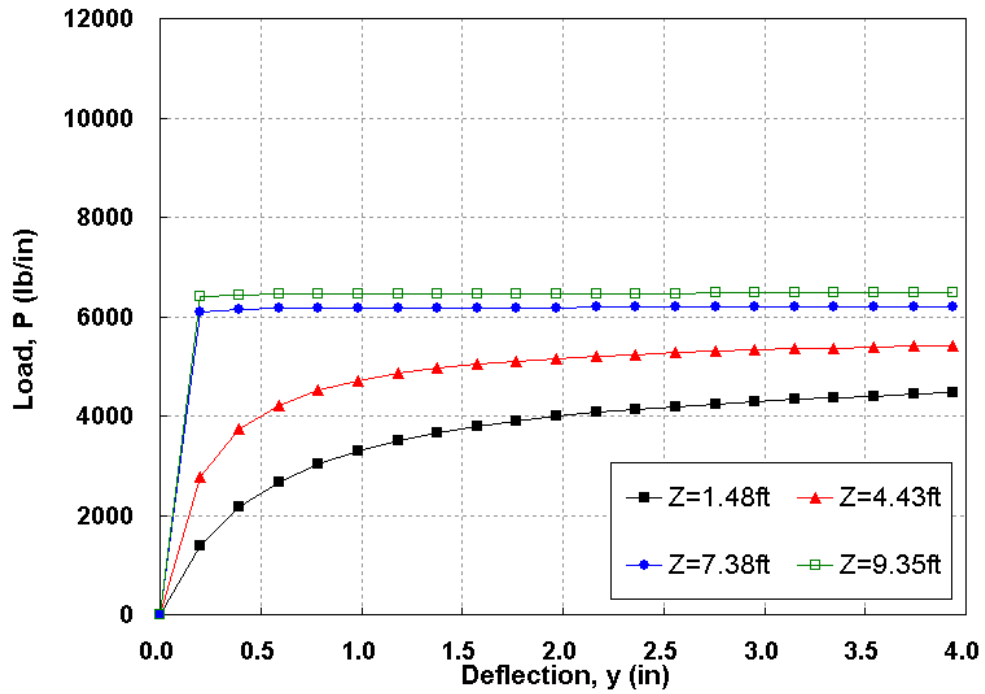
i. *Q-z Curves of Intermediate Geo-Material Model*



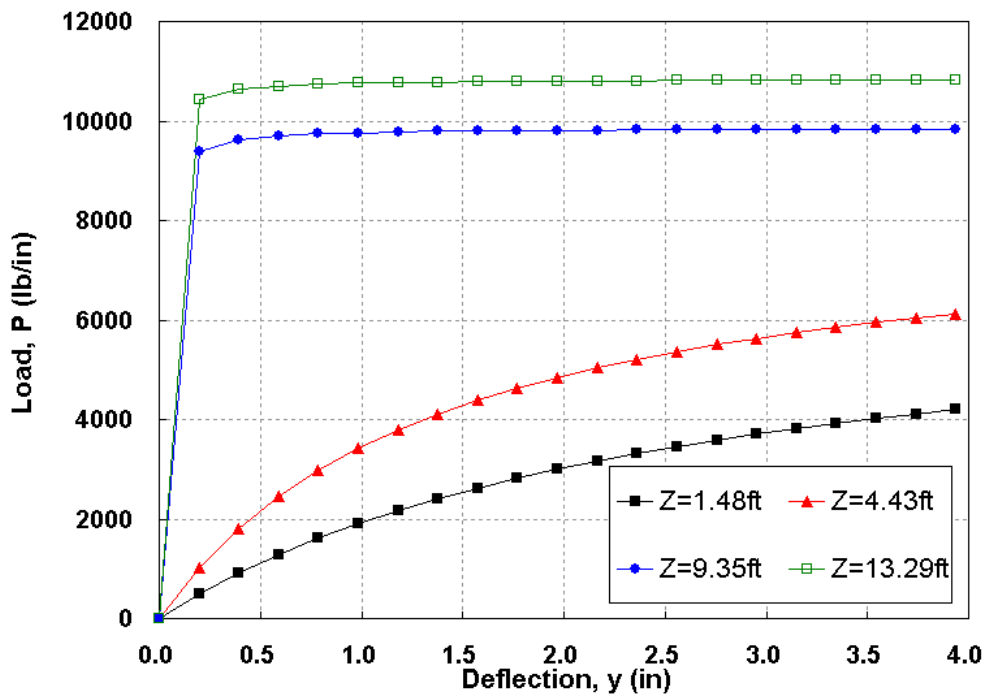
(a) LT 8958-1 & LT 8958-2

P-y CURVES FOR SIMULATION OF LATERAL LOAD

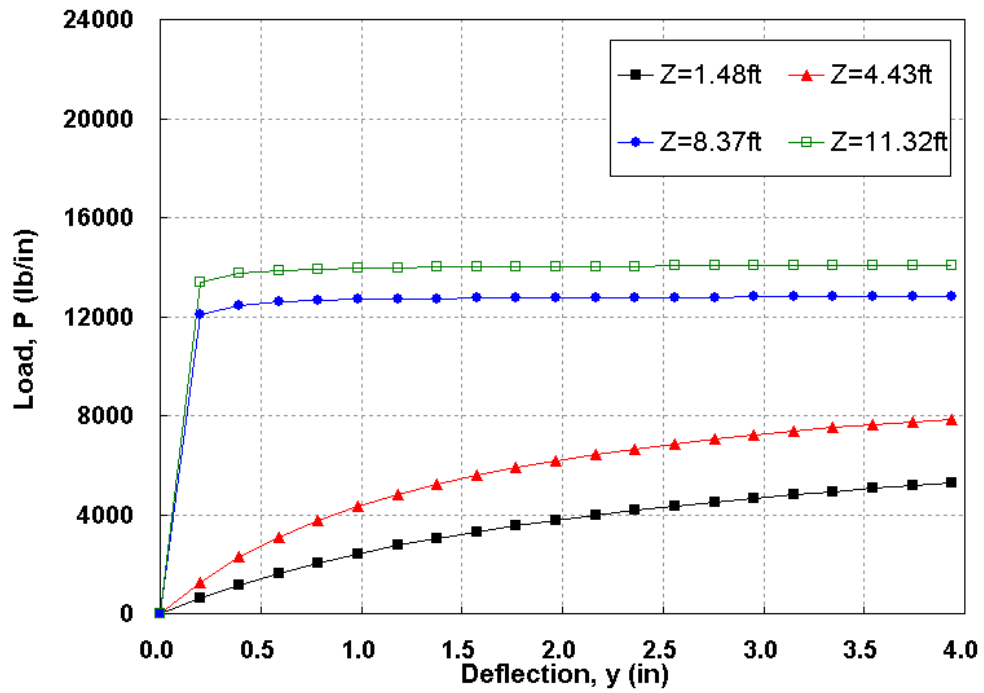
i. Geological Weak Rock Model



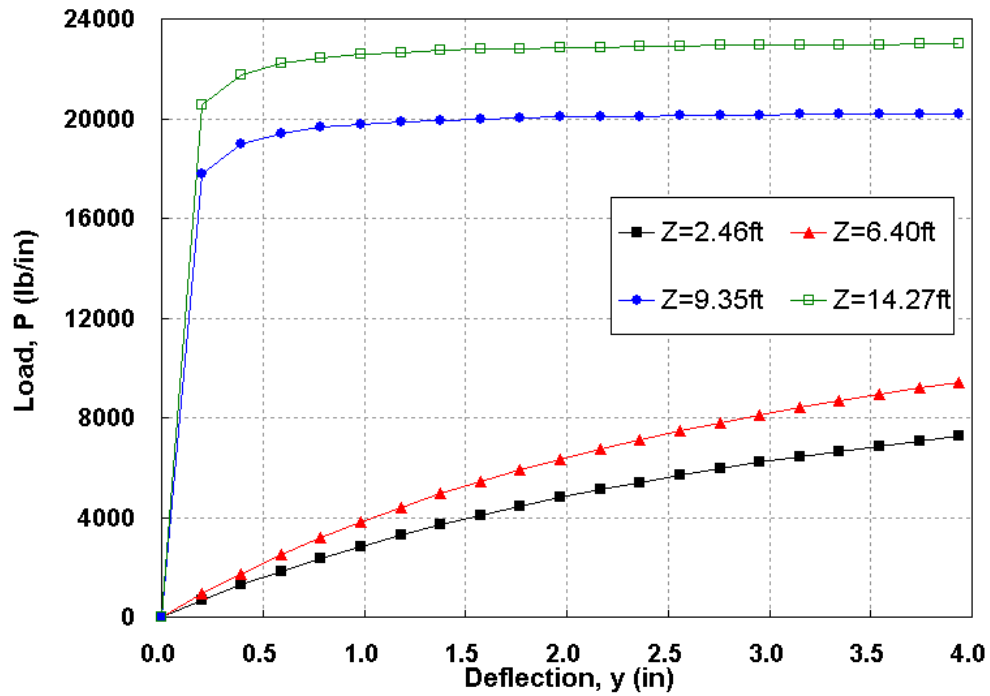
(a) Nash Halifax Short Shaft



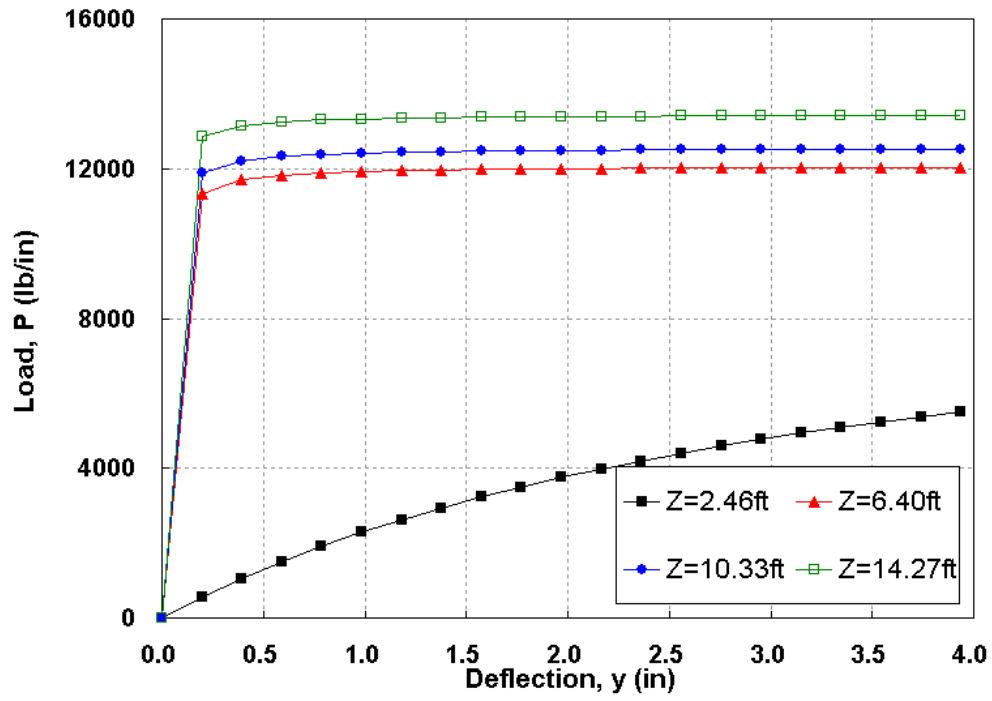
b) Nash Halifax Long Shaft



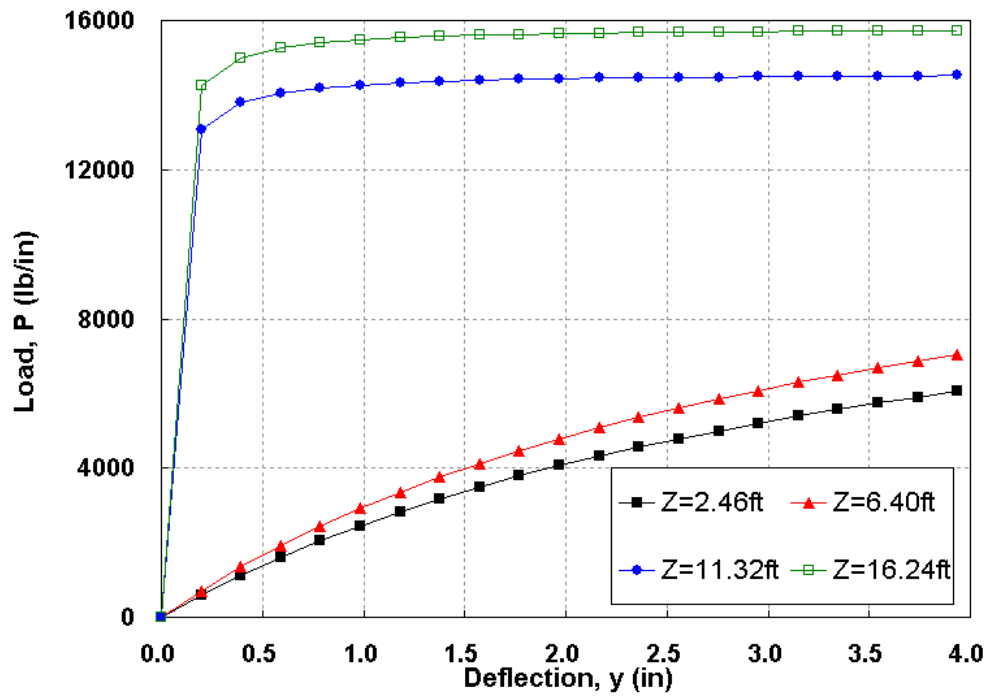
(c) Caldwell Short Shaft



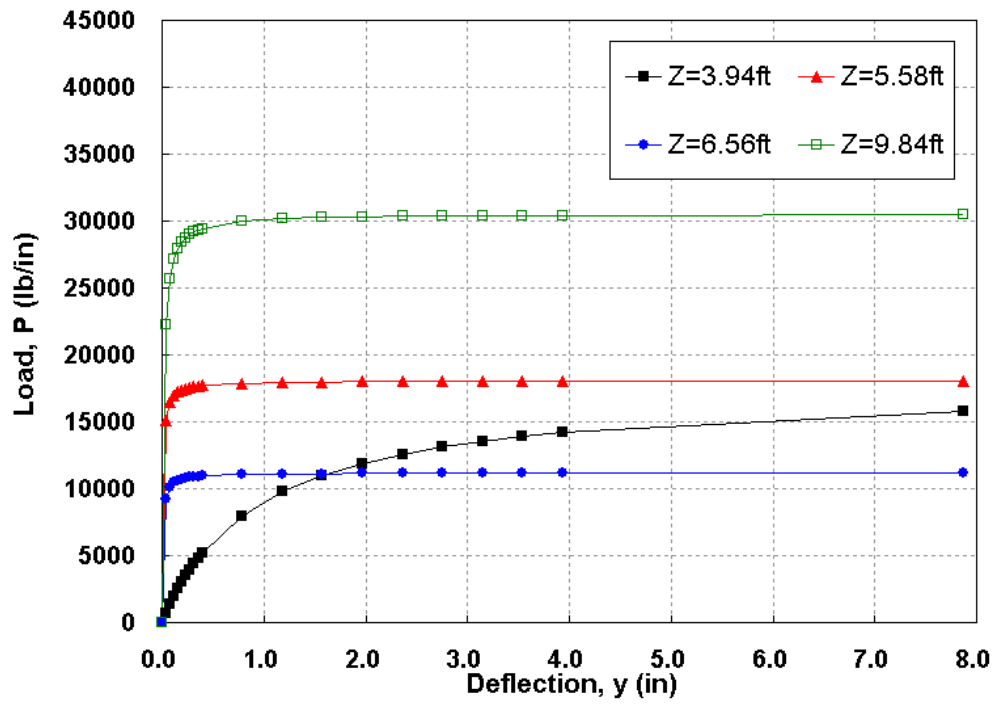
(d) Caldwell Long Shaft



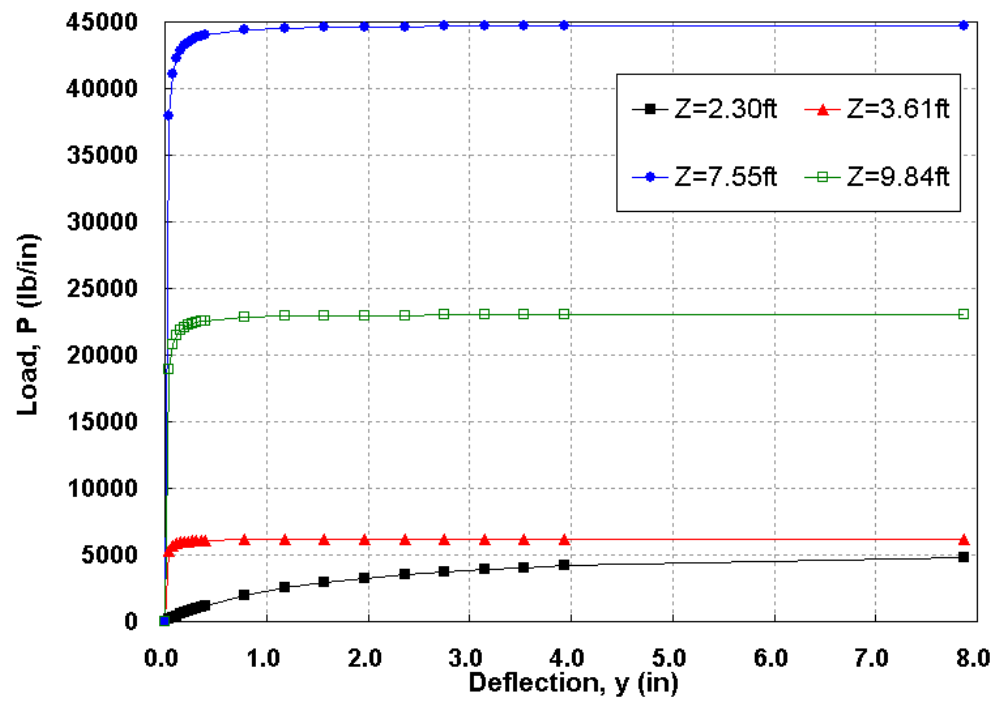
e) Wilson Short Shaft



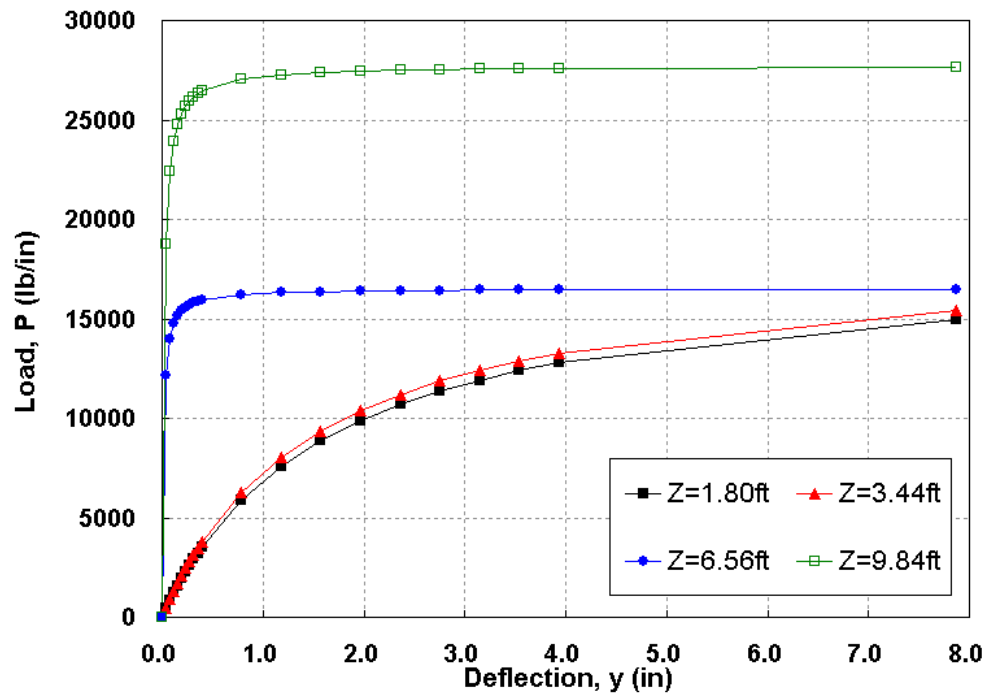
f) Wilson Long Shaft



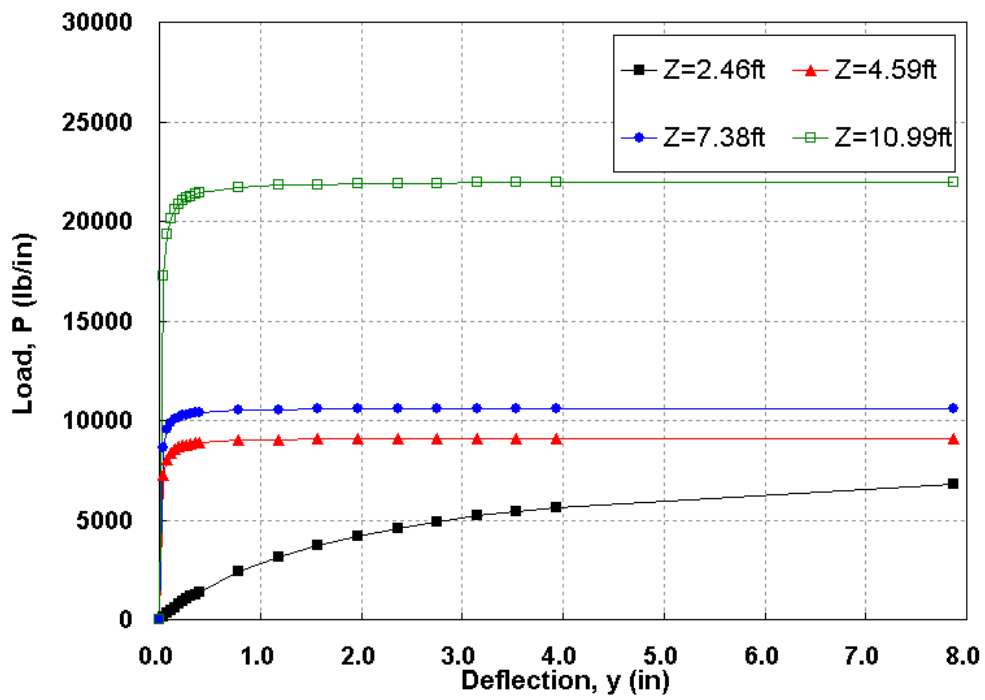
g) I-40 Short Shaft



h) I-40 Long Shaft

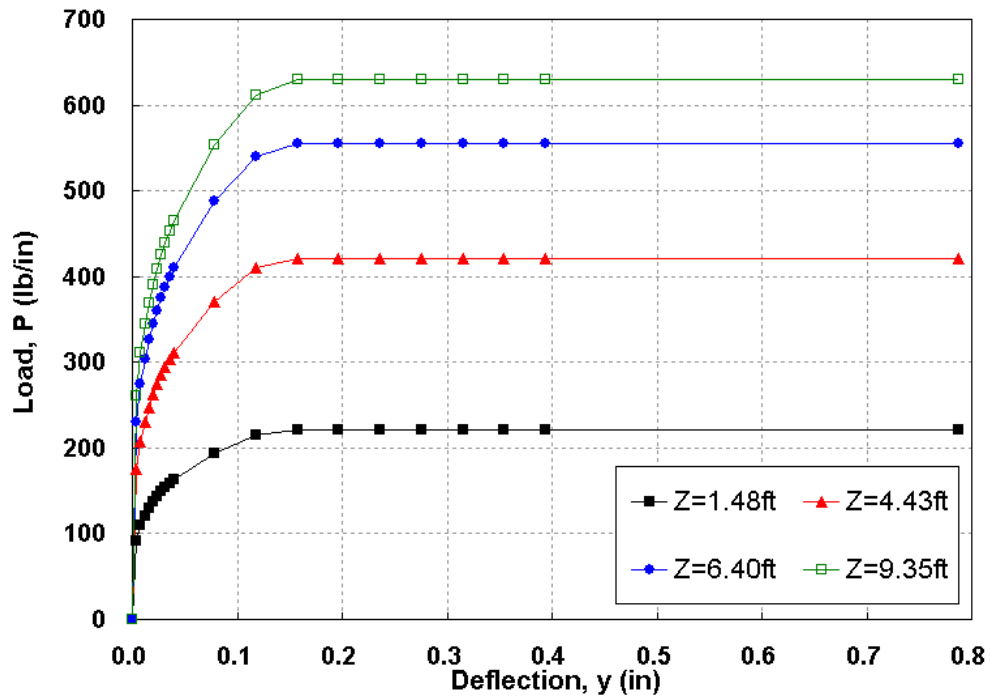


i) I-85 Short Shaft

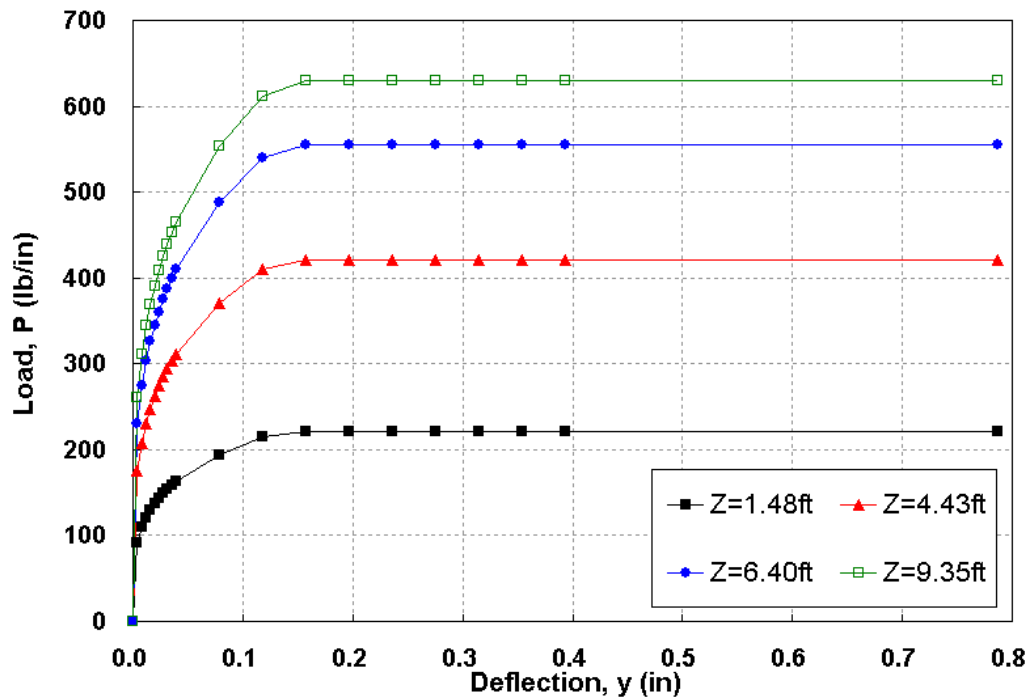


j) I-85 Long Shaft

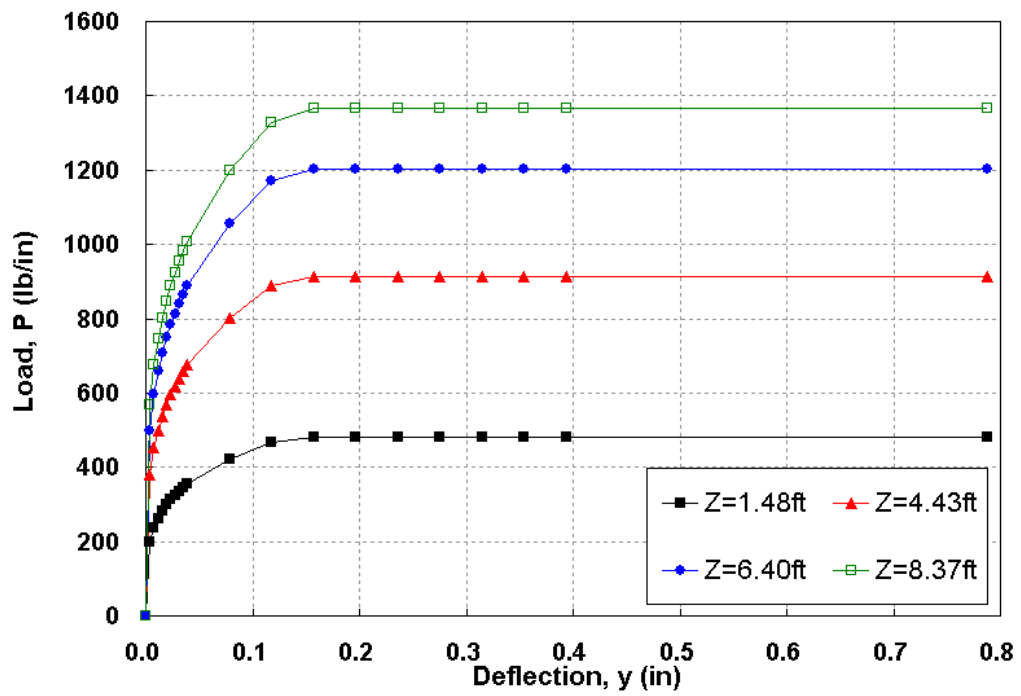
ii. Reese's Weak Rock Model



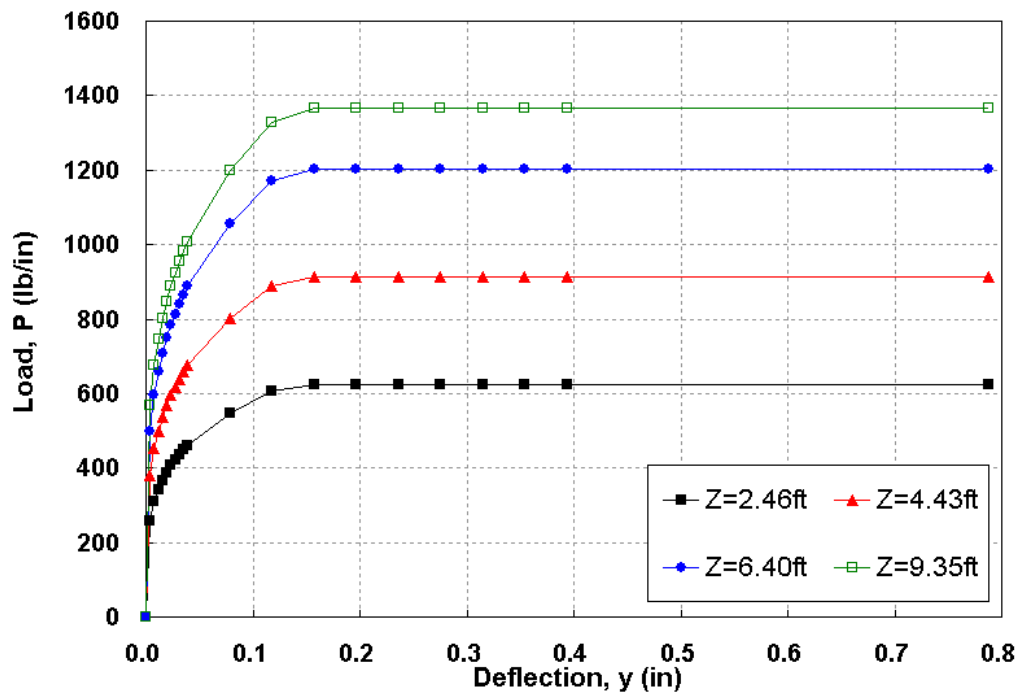
a) Nash Halifax Short



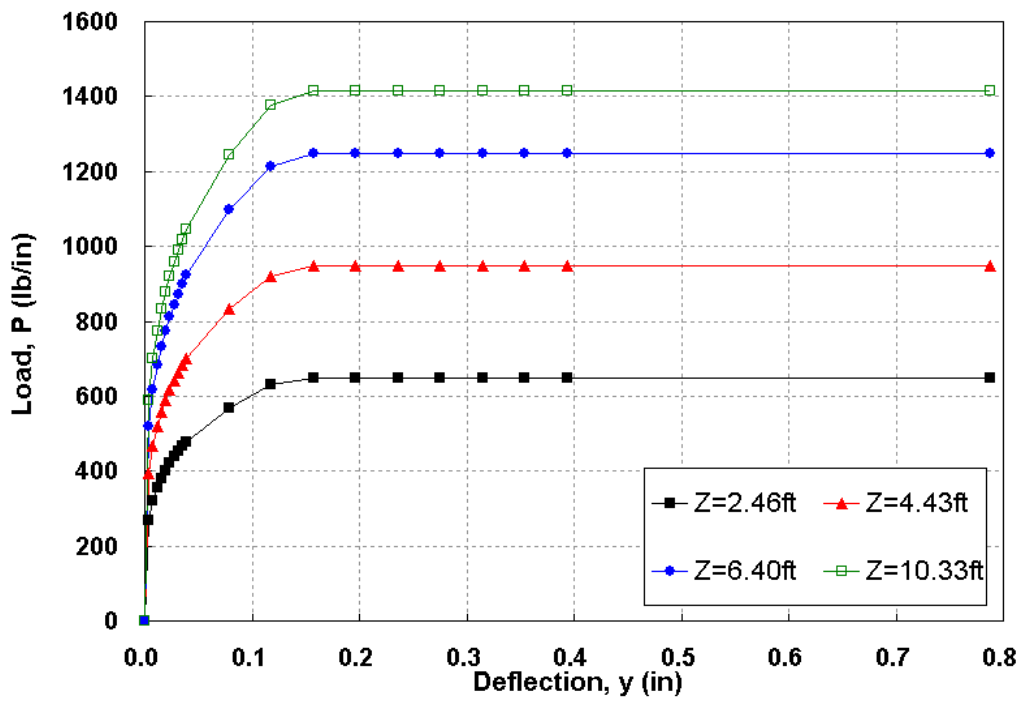
b) Nash Halifax Long



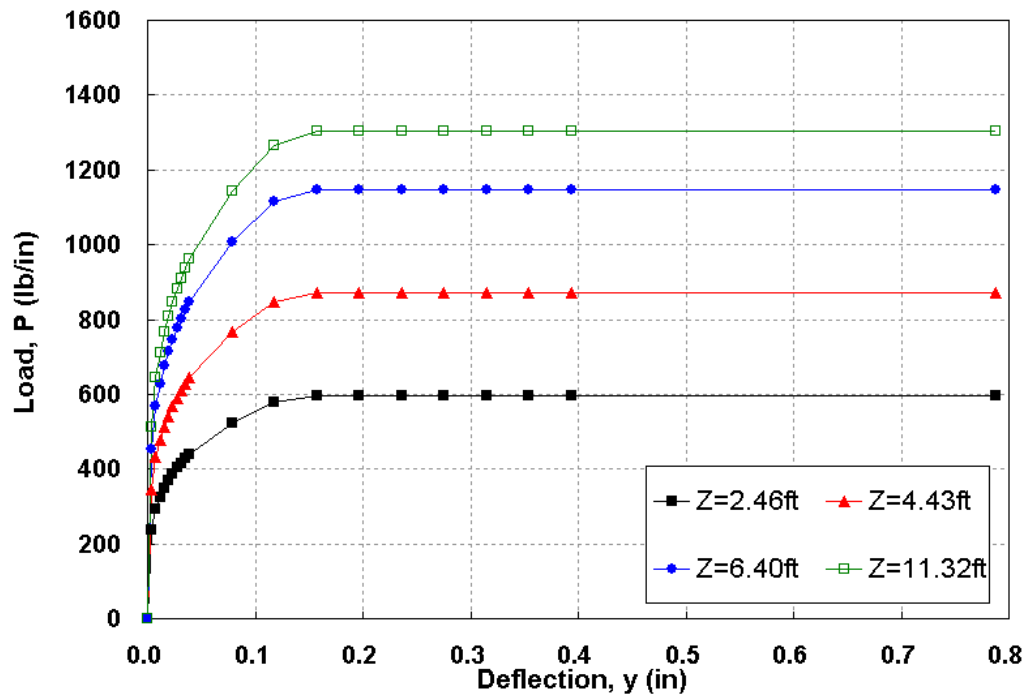
c) Caldwell Short Shaft



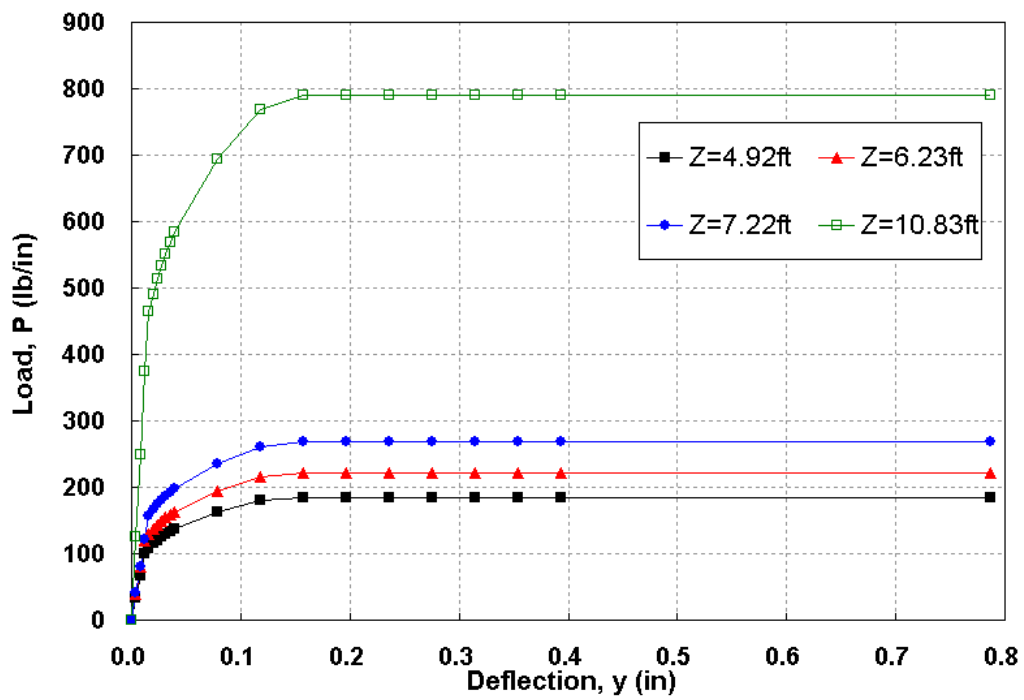
d) Caldwell Long Shaft



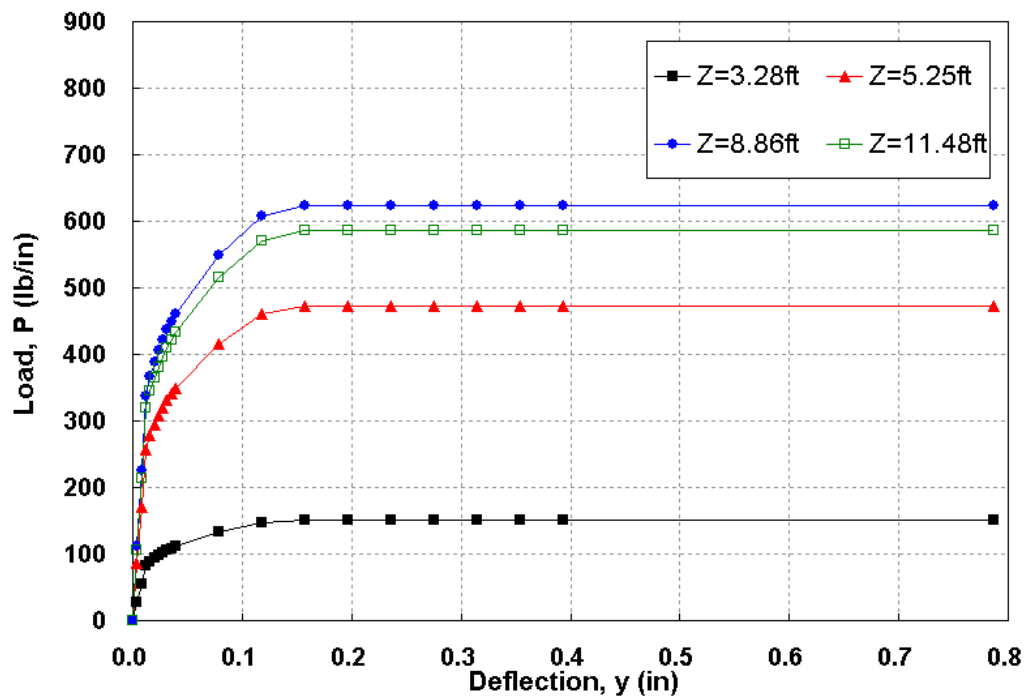
e) Wilson Short Shaft



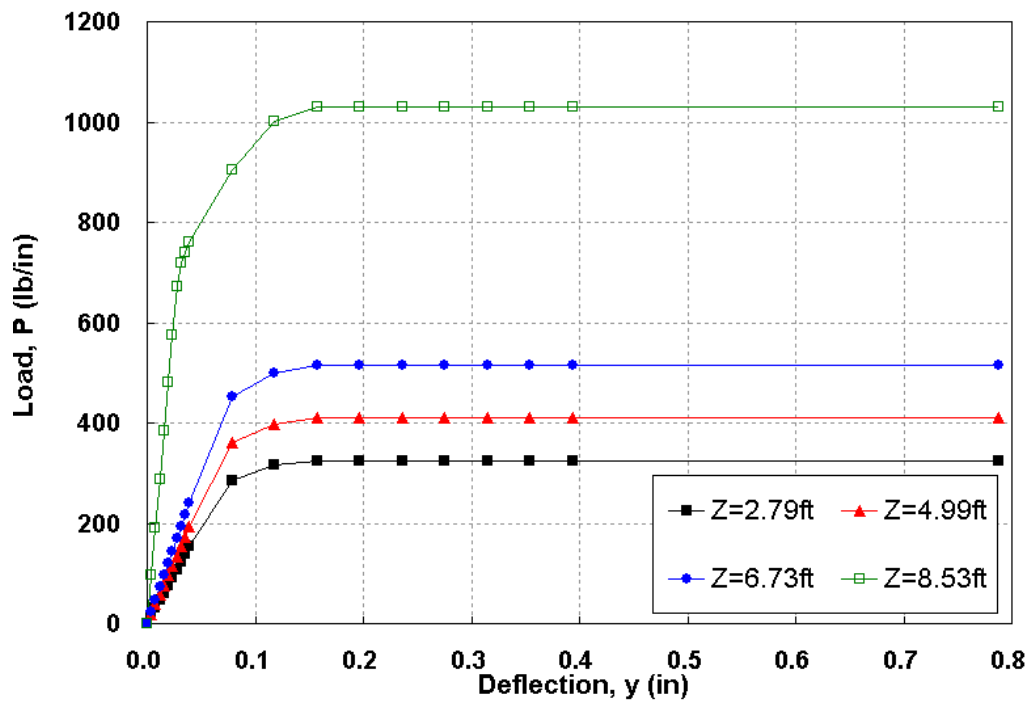
f) Wilson Long Shaft



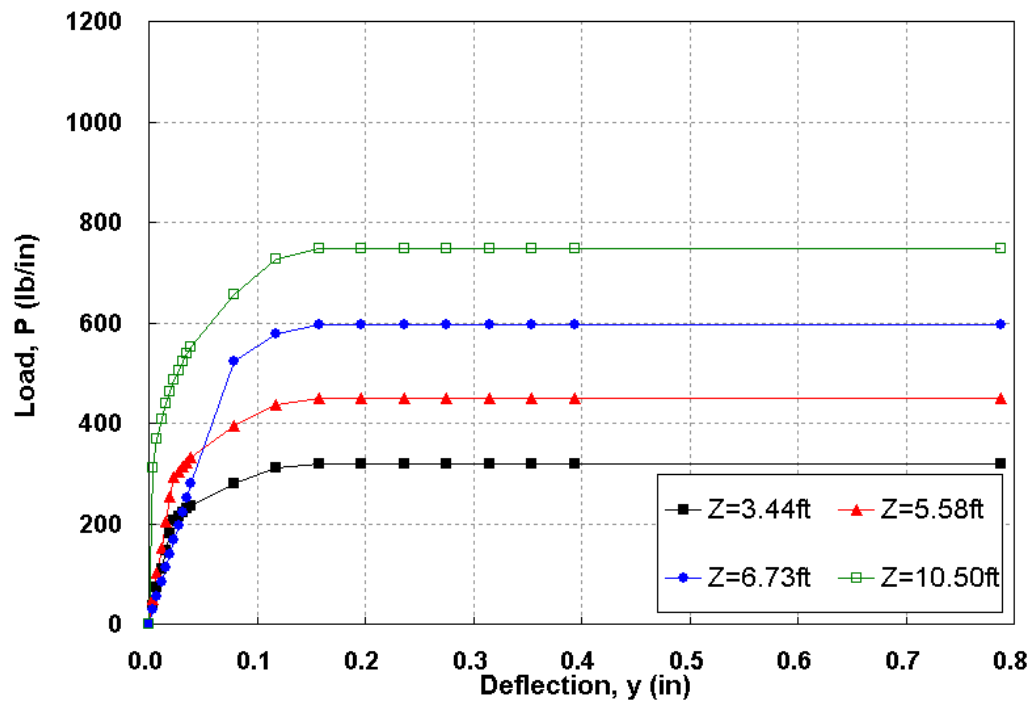
g) I-40 Short Shaft



h) I-40 Long Shaft



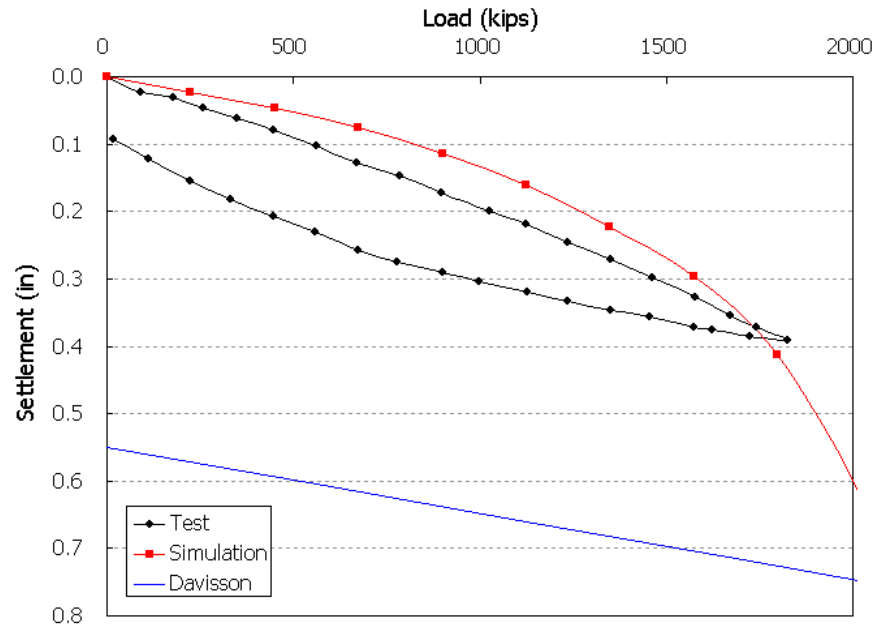
i) I-85 Short Shaft



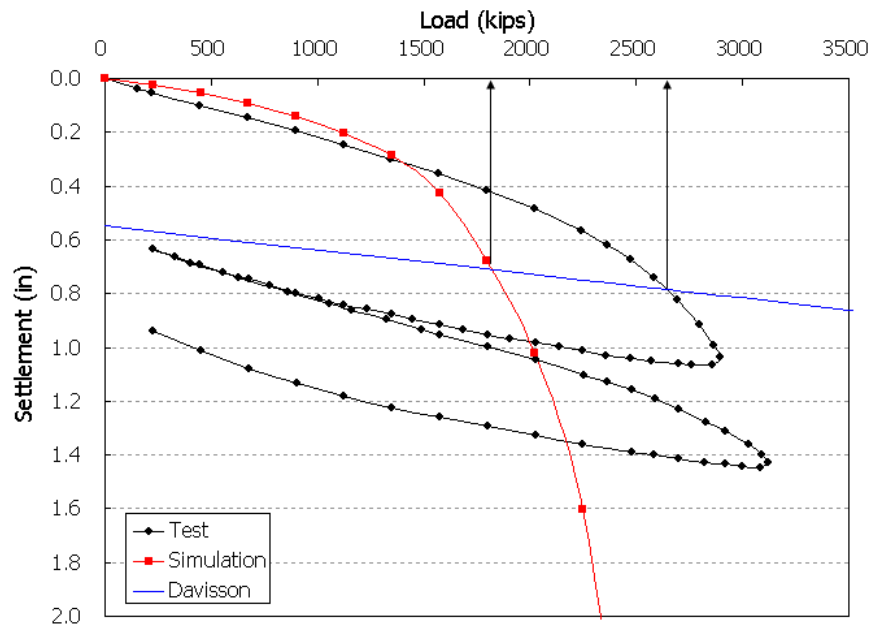
j) I-85 Long Shaft

ULTIMATE LOADS FOR AXIAL LOAD

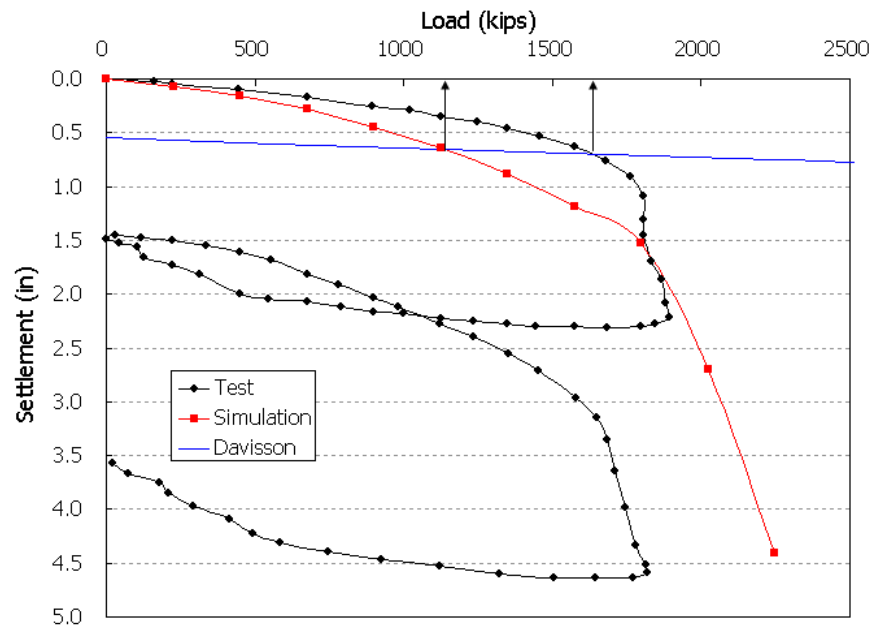
i. *Davisson's Method*



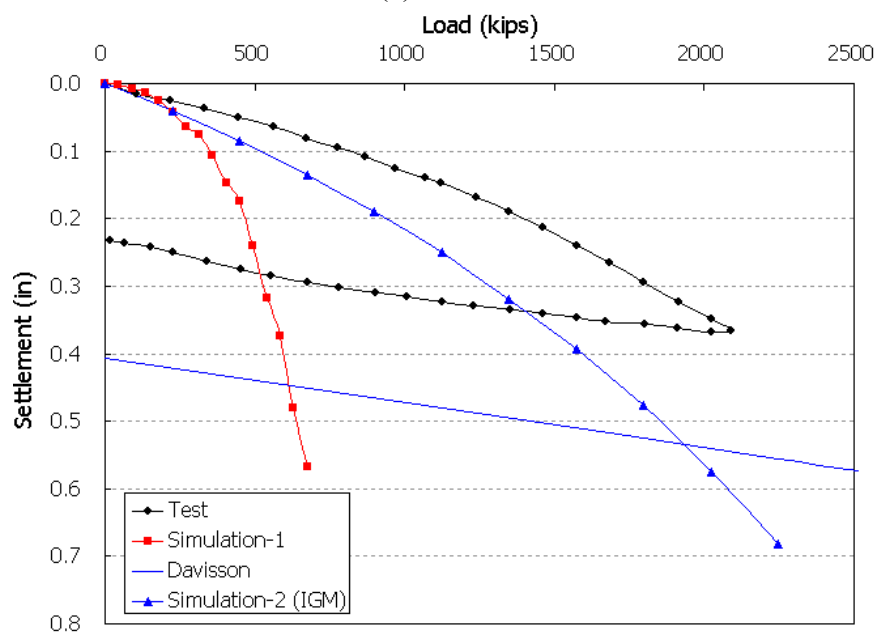
(a) Bent-8



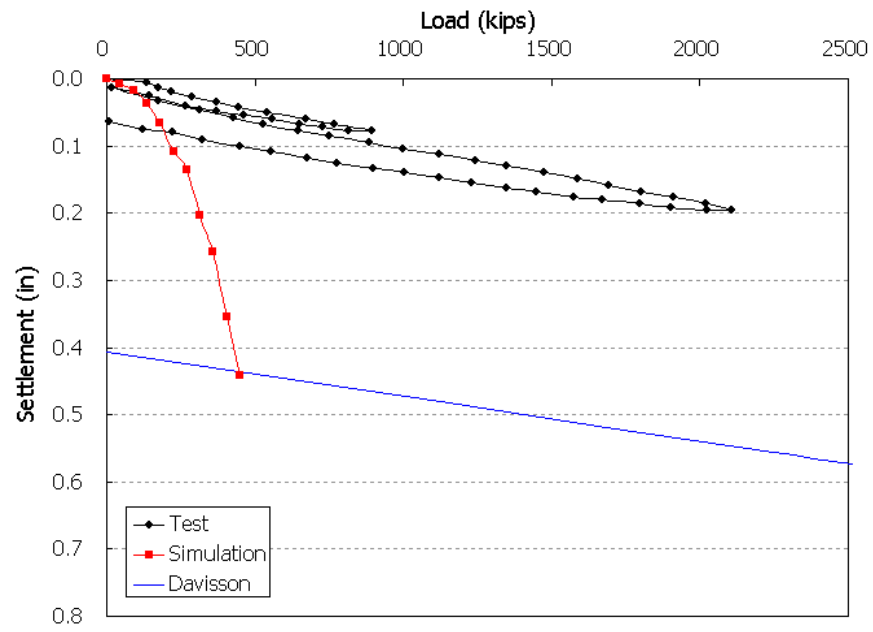
(b) DDP-1



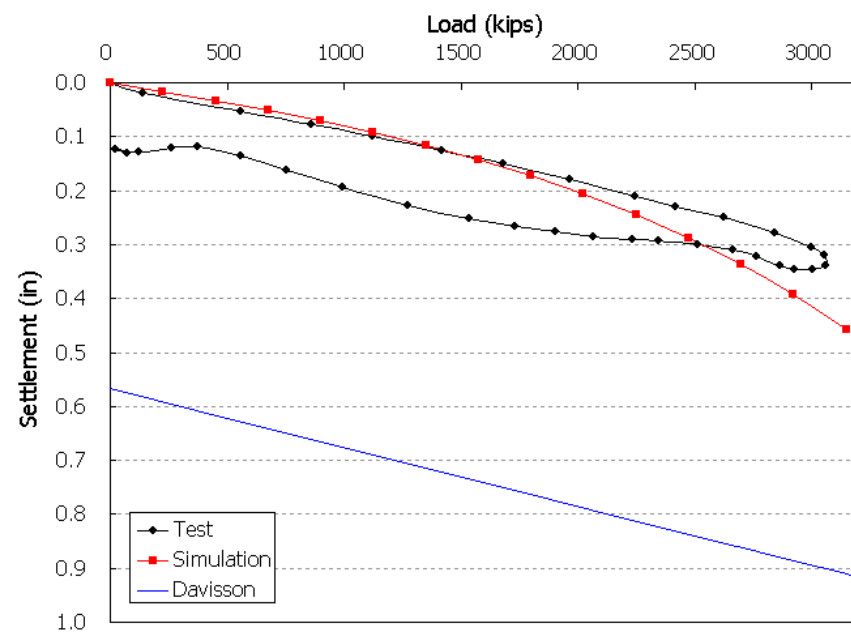
(c) DDP-2



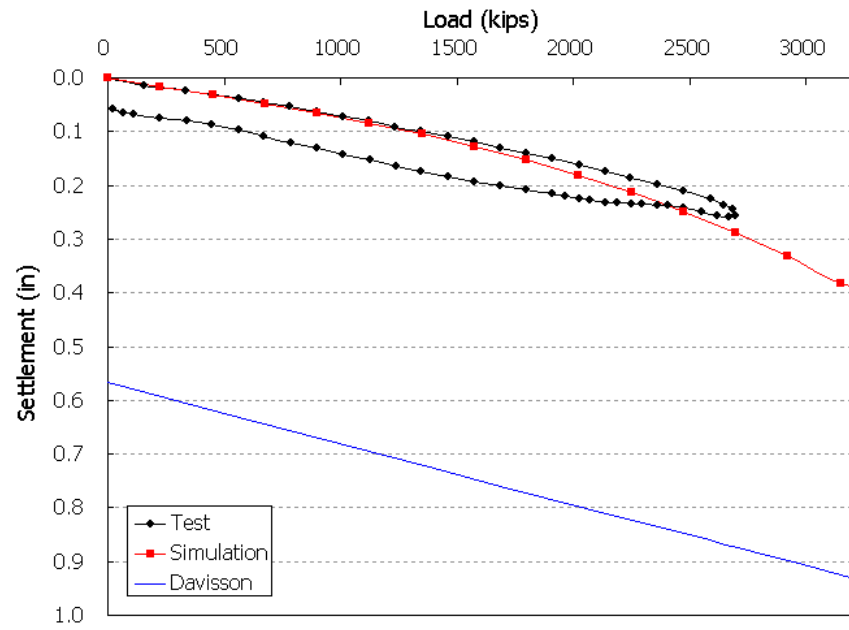
(d) DP-1



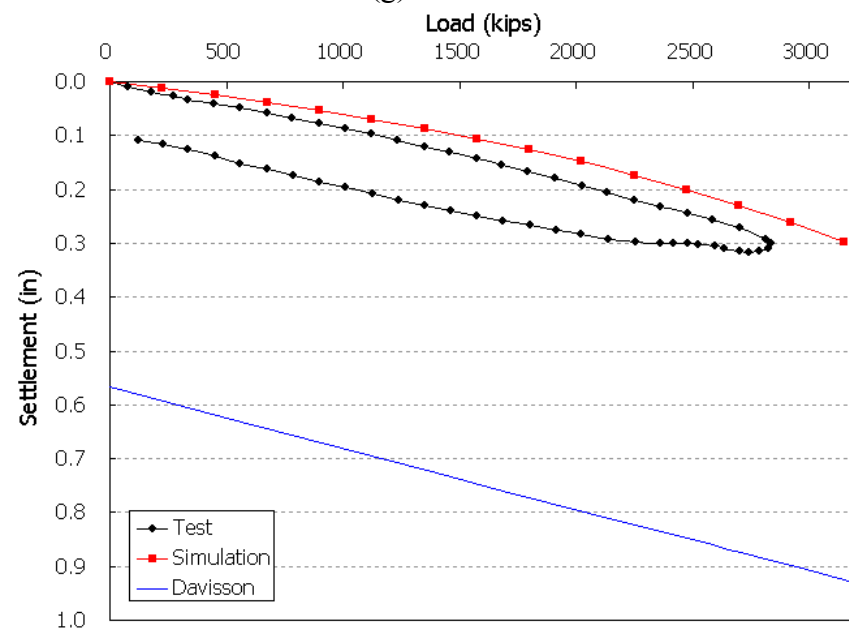
(e) DP-2



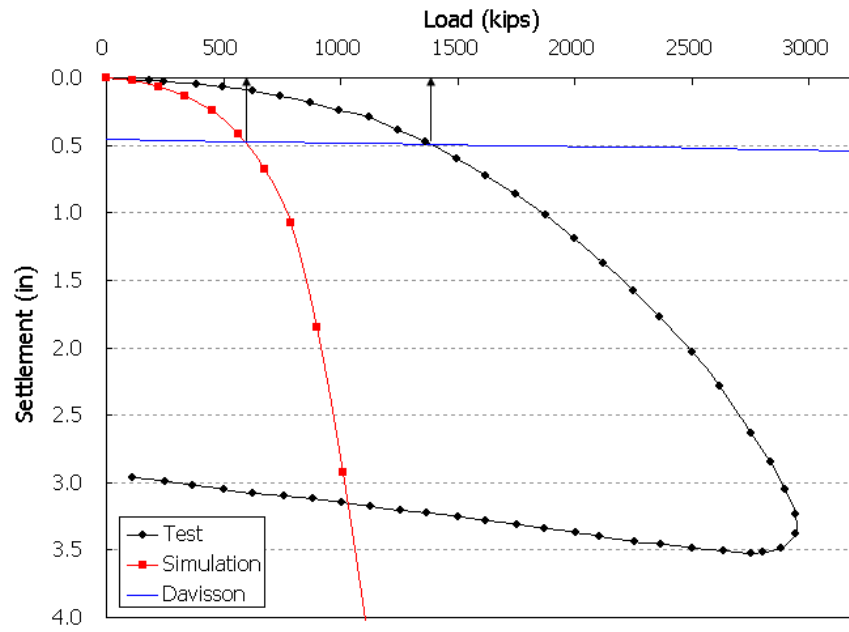
(f) Pier-19



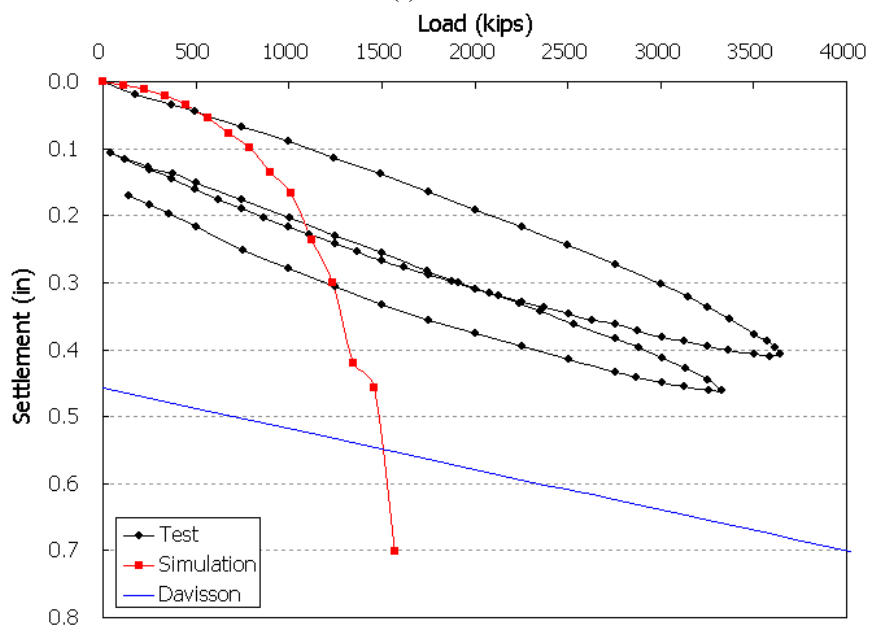
(g) Pier-34



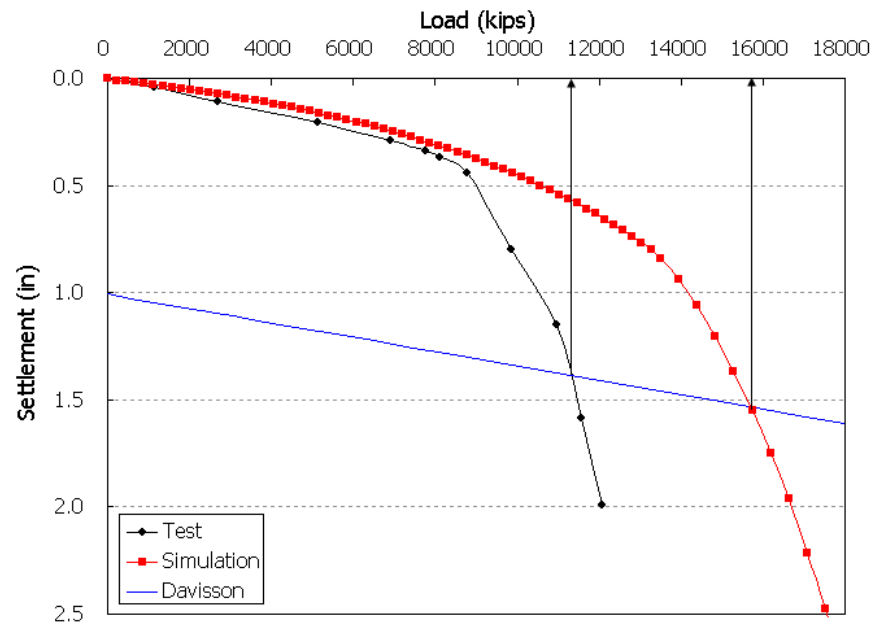
(h) Pier-48



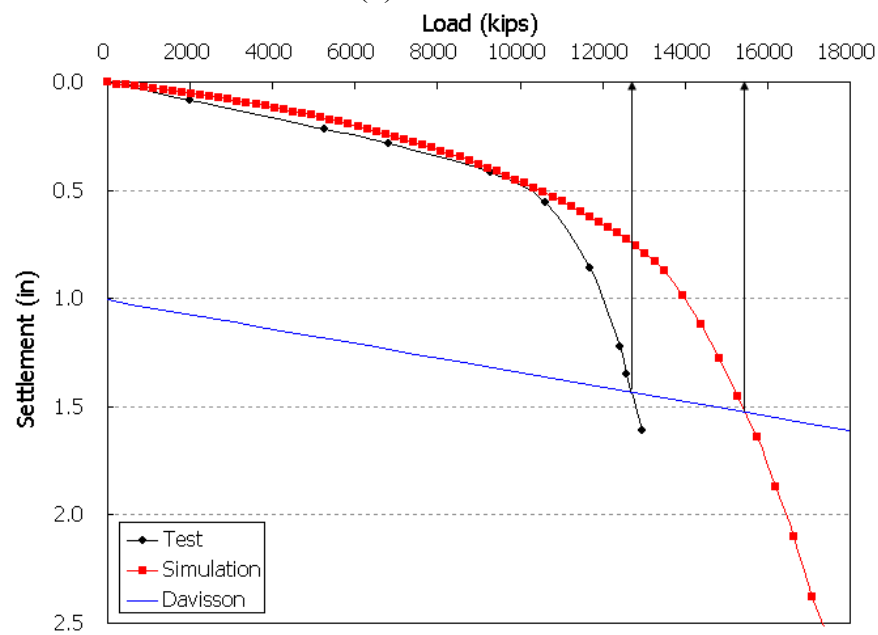
(i) TS-1



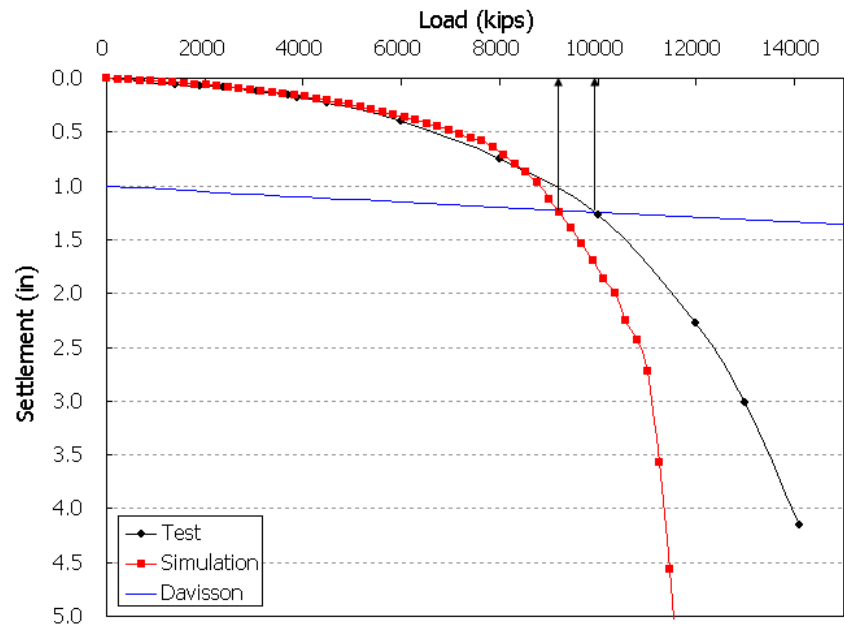
(j) TS-2



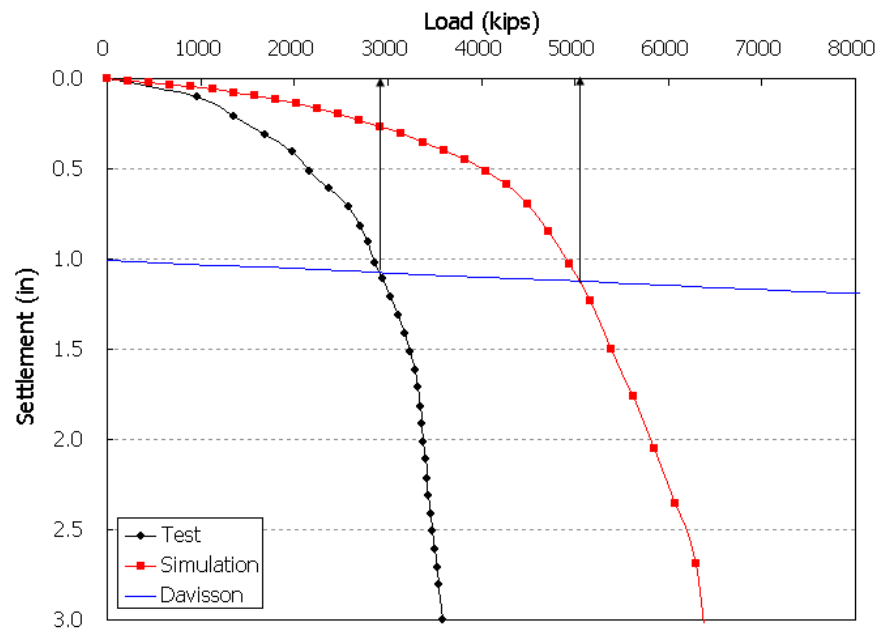
(k) LT8650-1



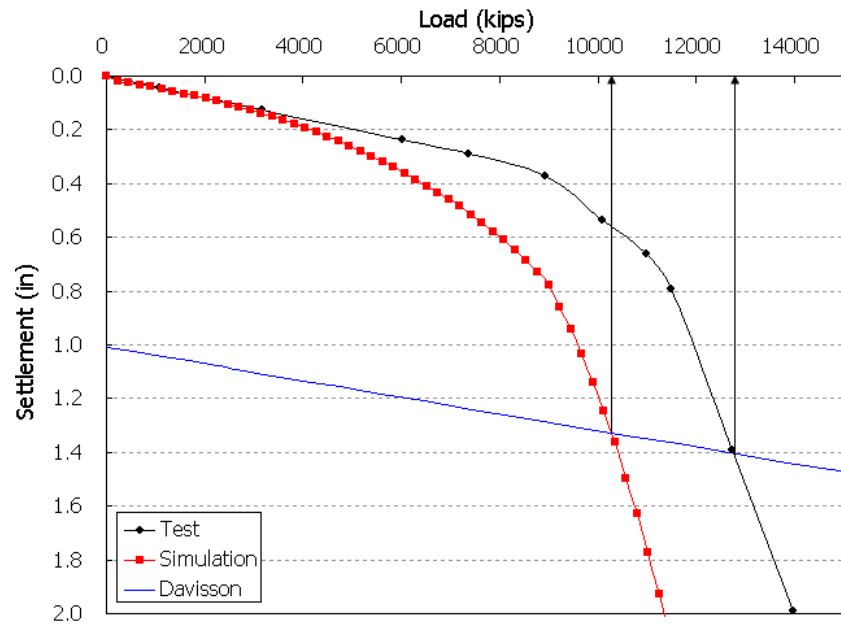
(l) LT8650-2



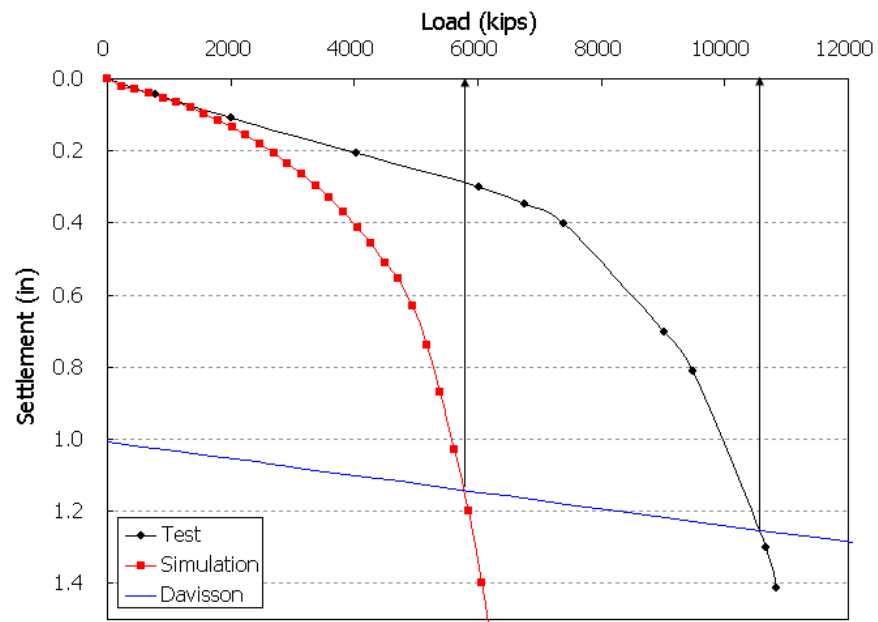
(m) LT8650-3



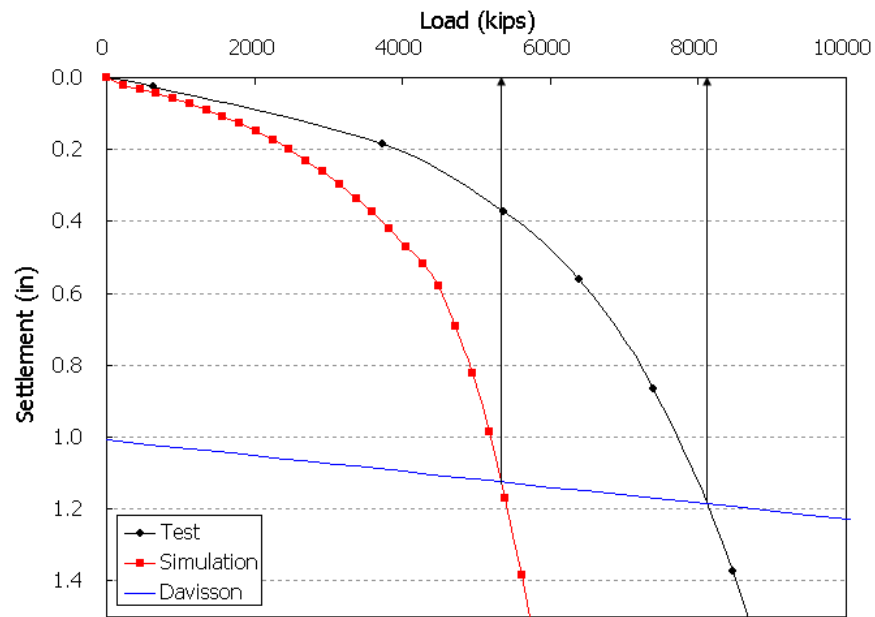
(n) LT8650-5



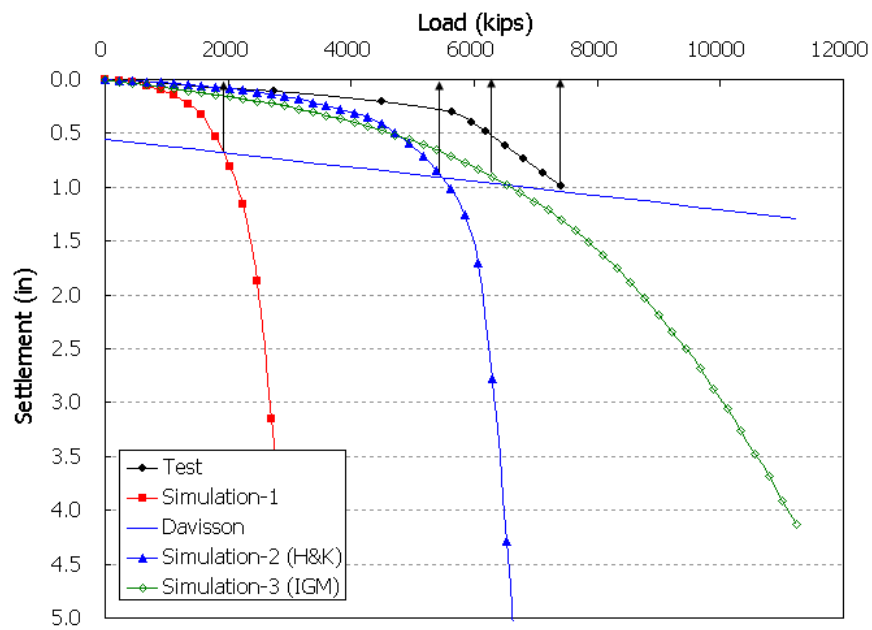
(o) LT8650-6



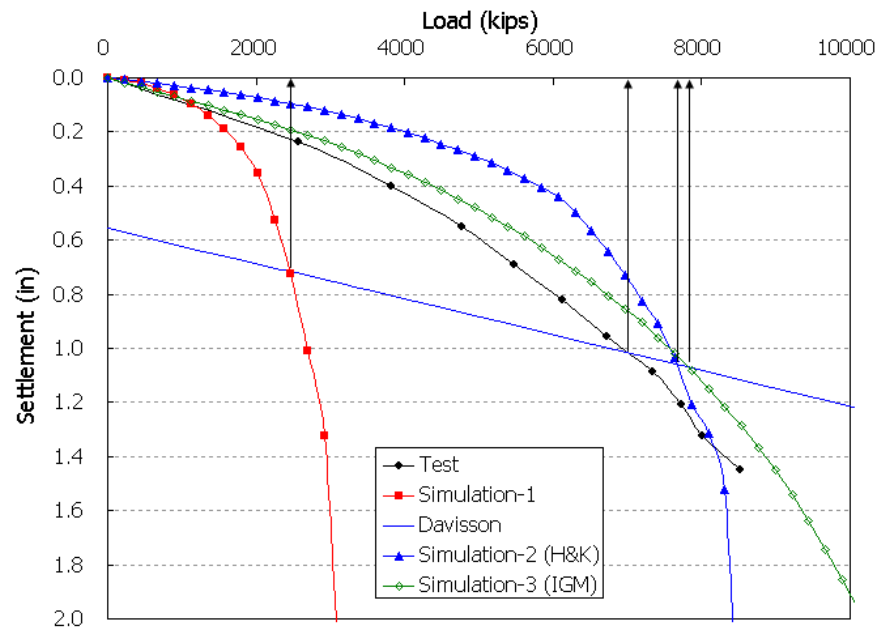
(p) LT8650-7



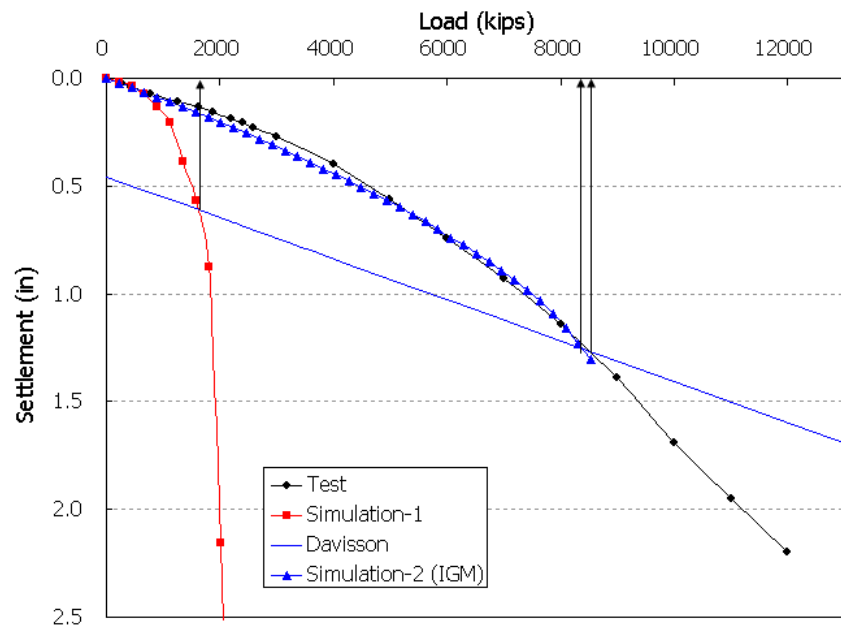
(q) LT8650-8



(r) LT8958-1

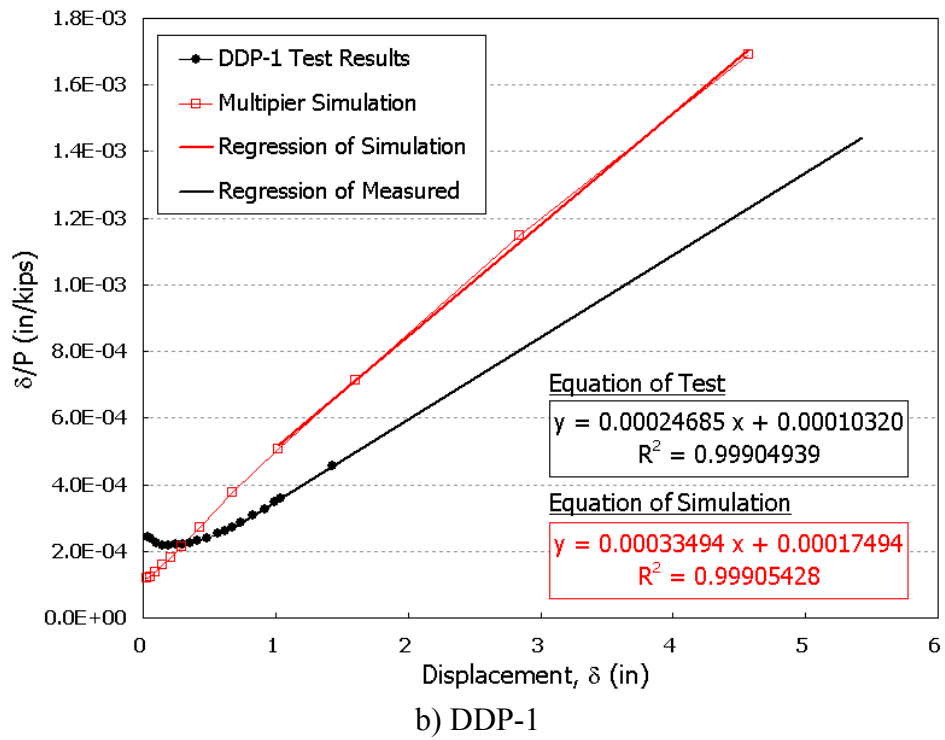
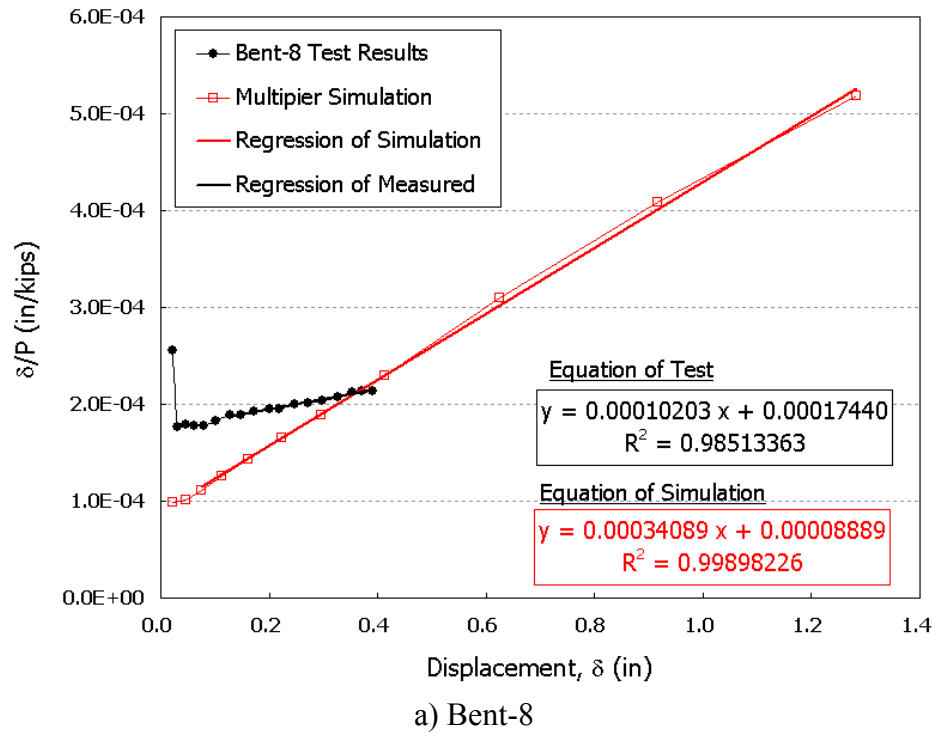


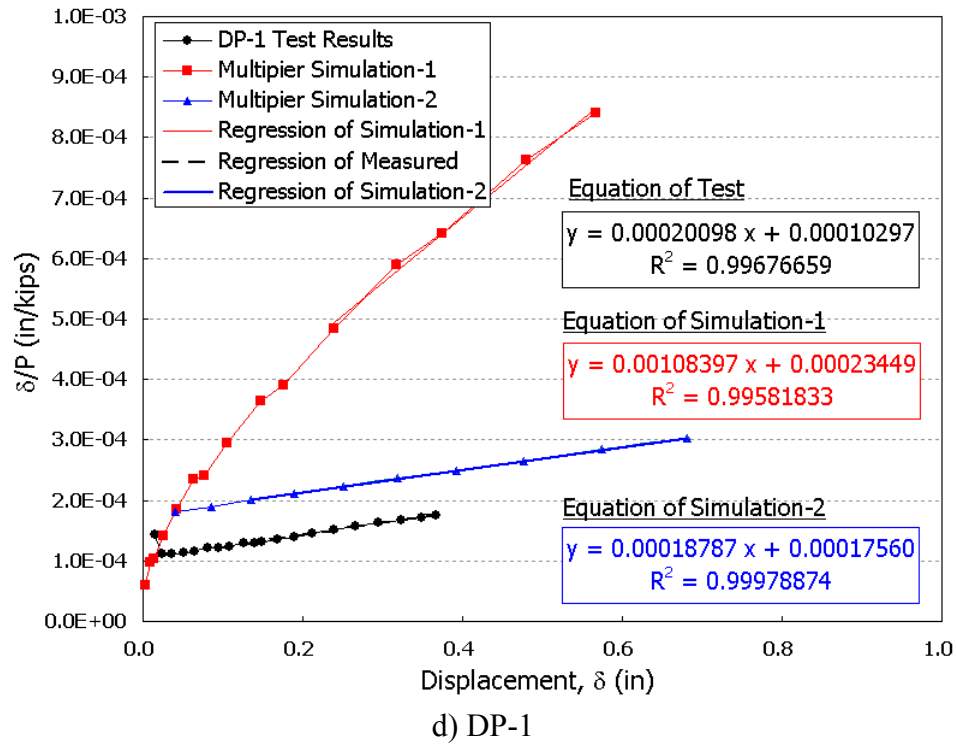
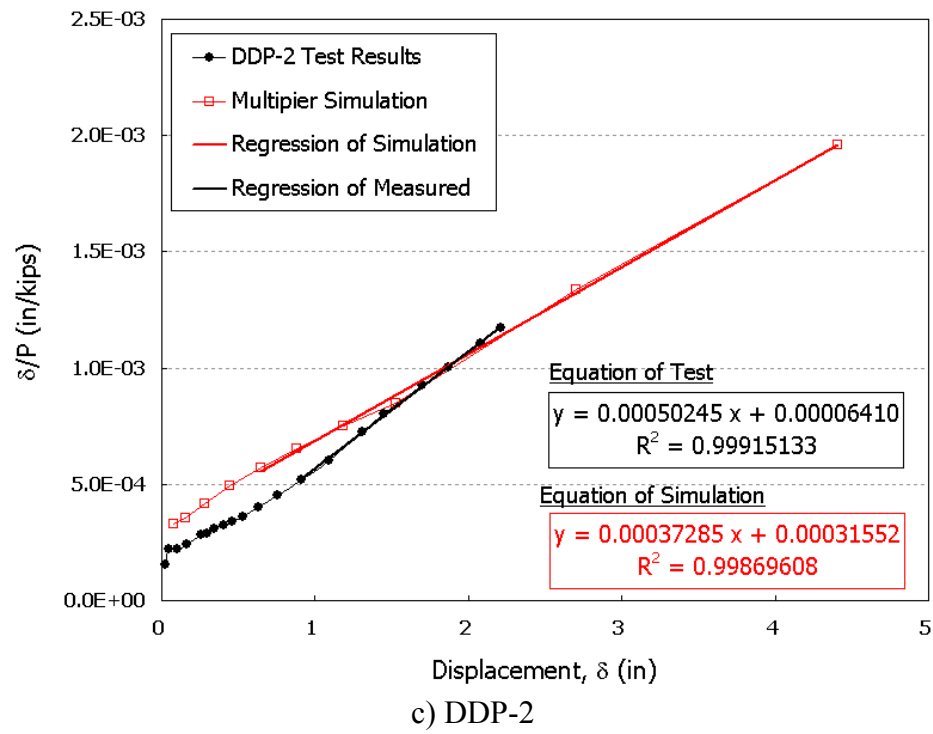
(s) LT8958-2

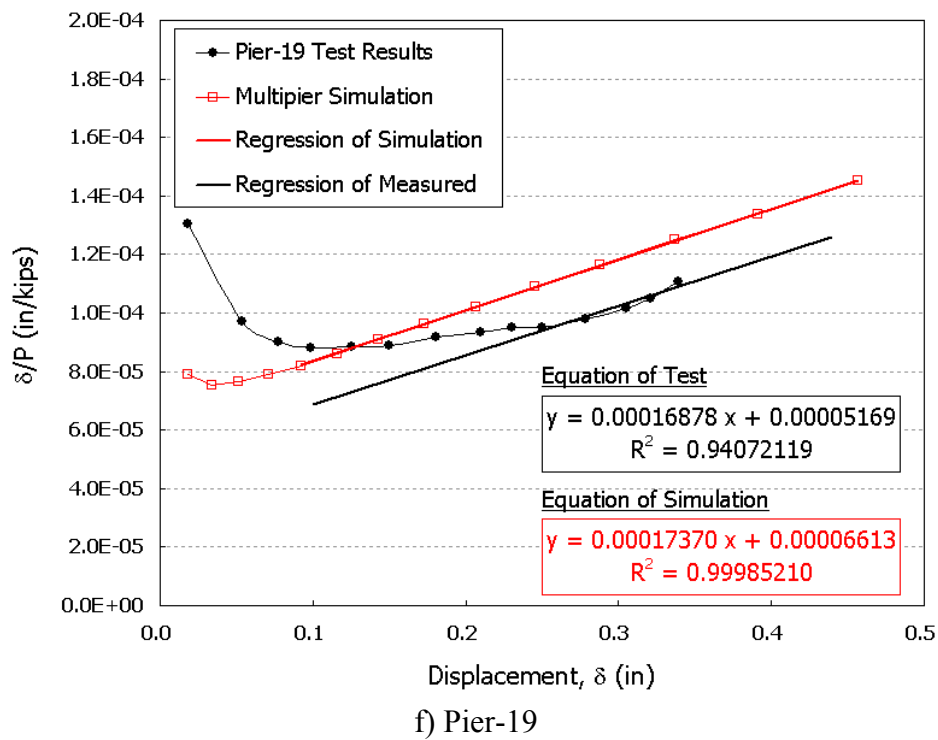
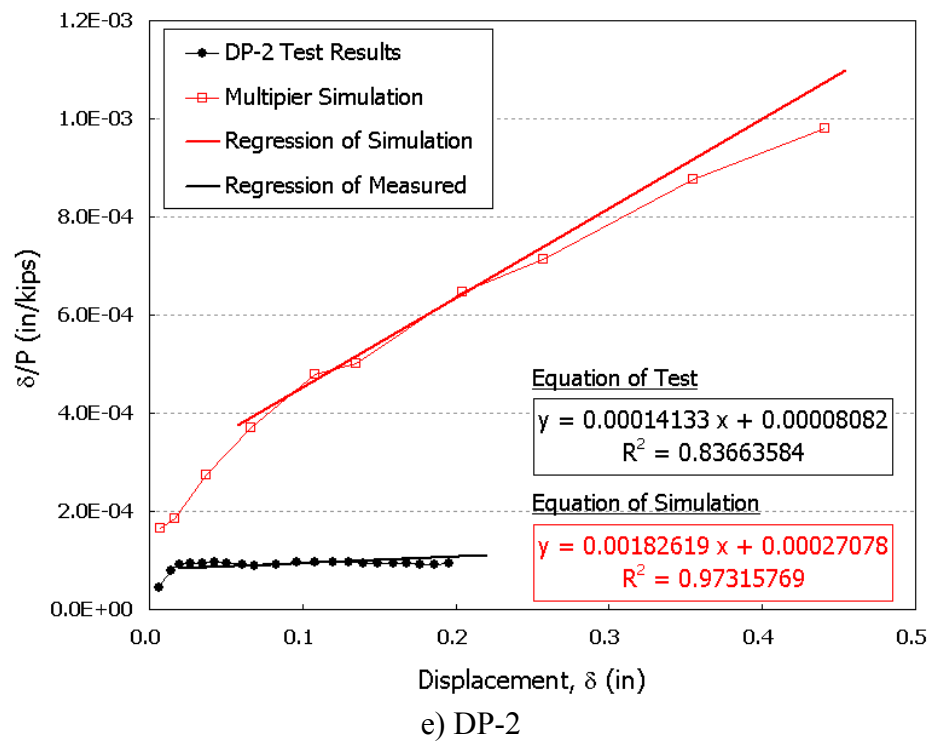


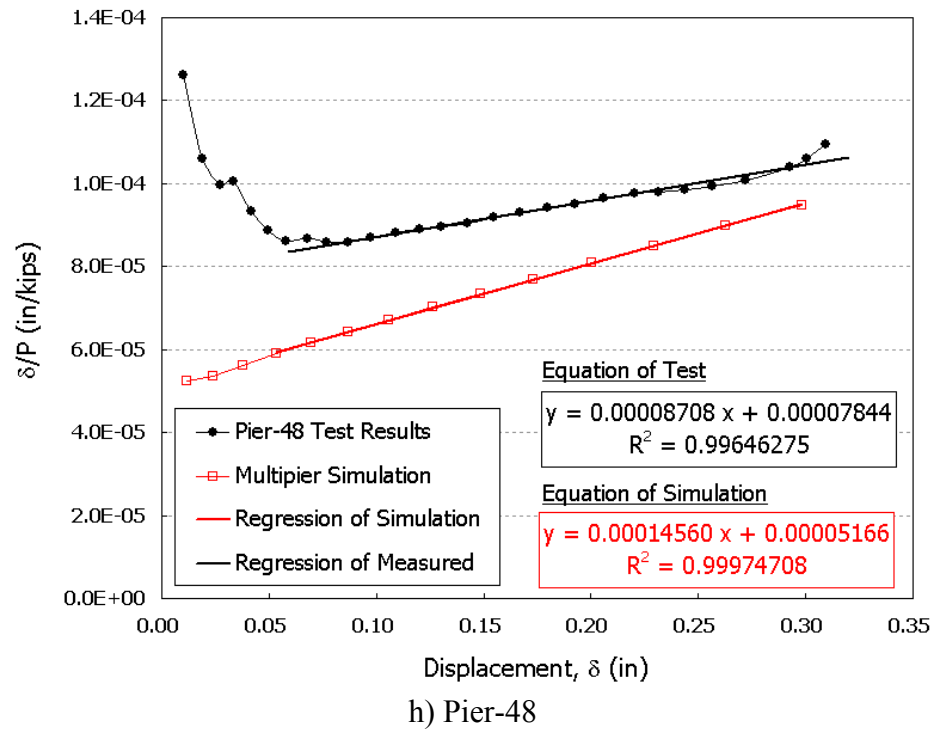
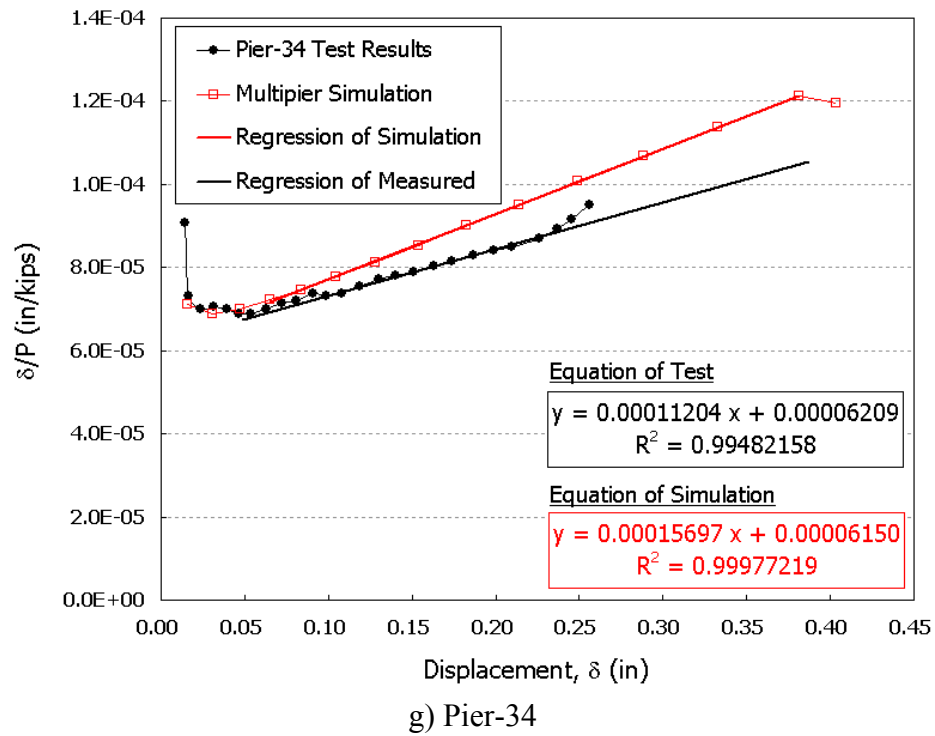
(t) LT8402

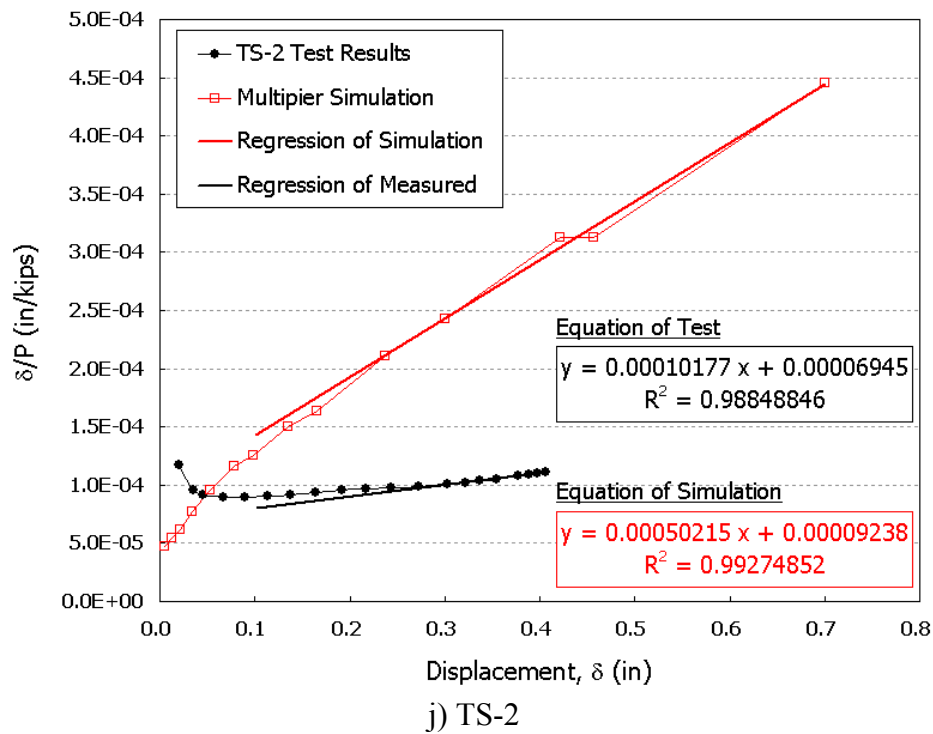
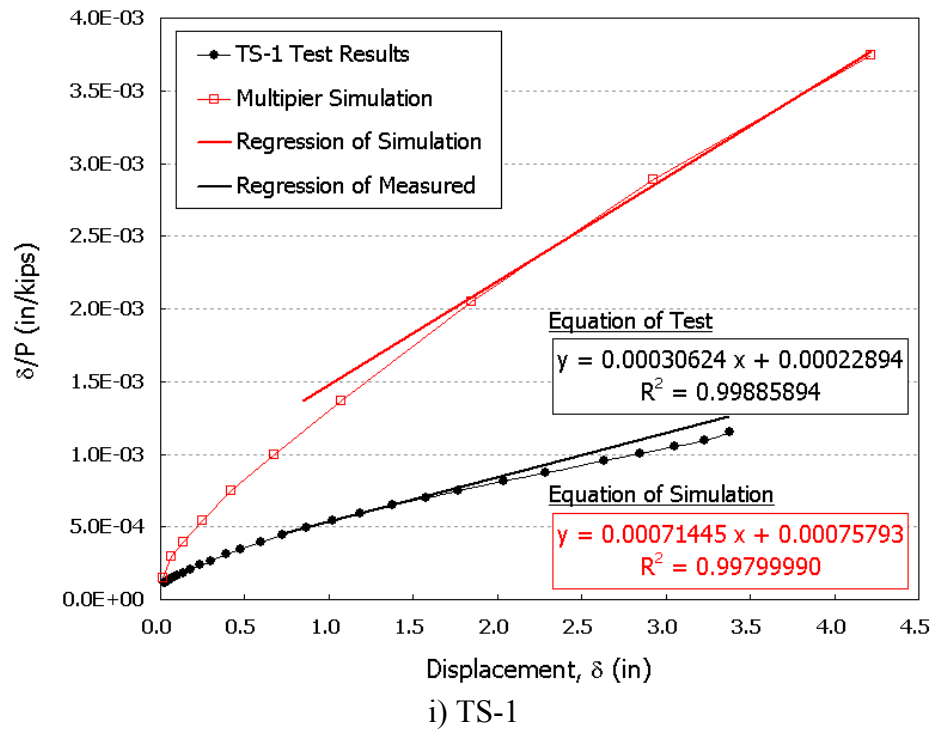
ii. Chin's Method

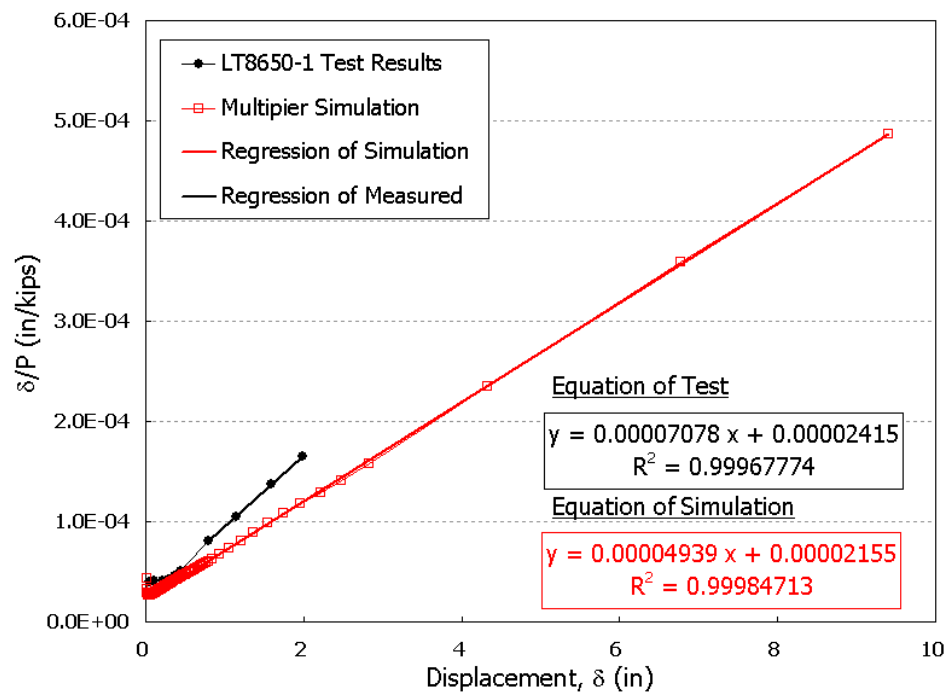




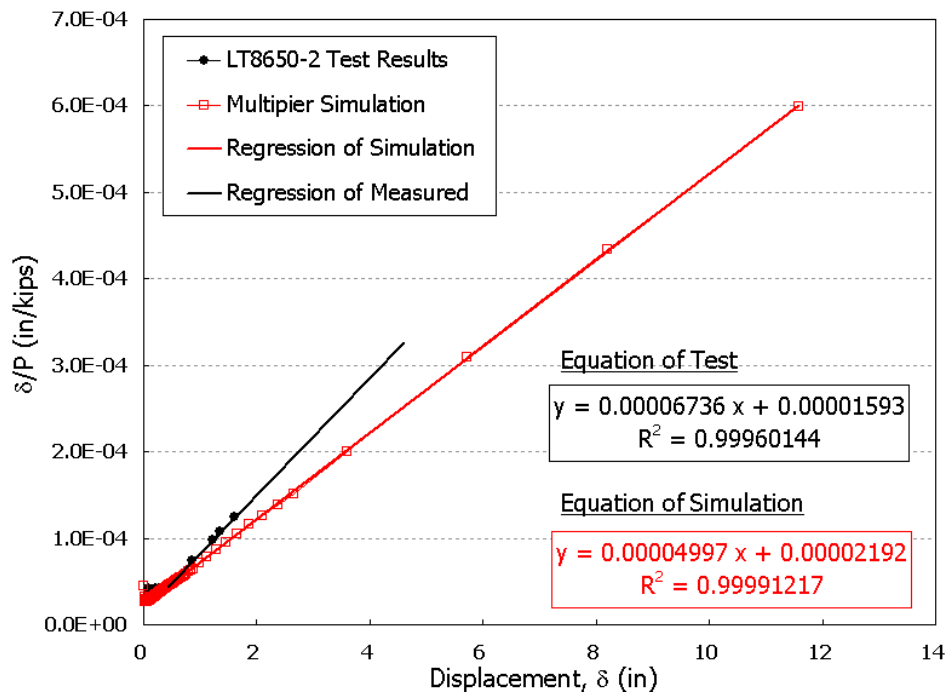




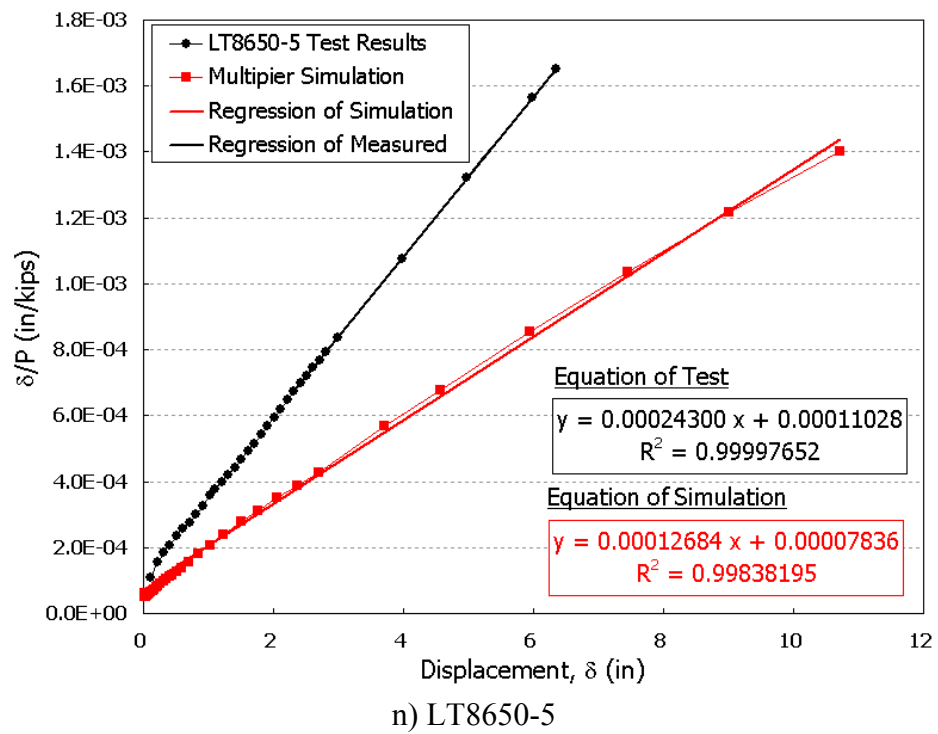
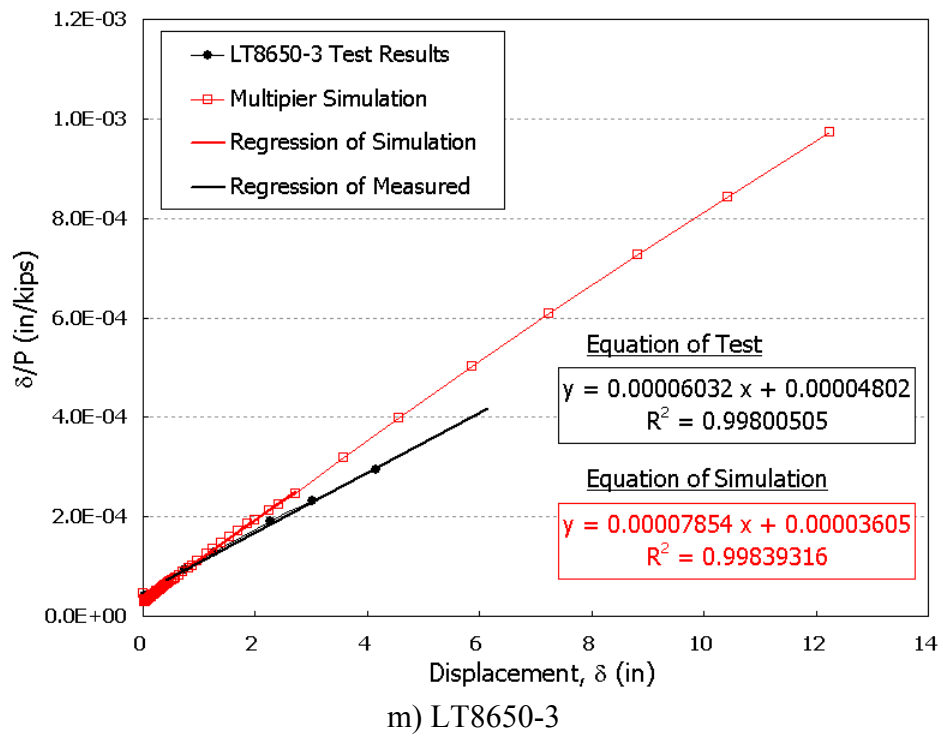


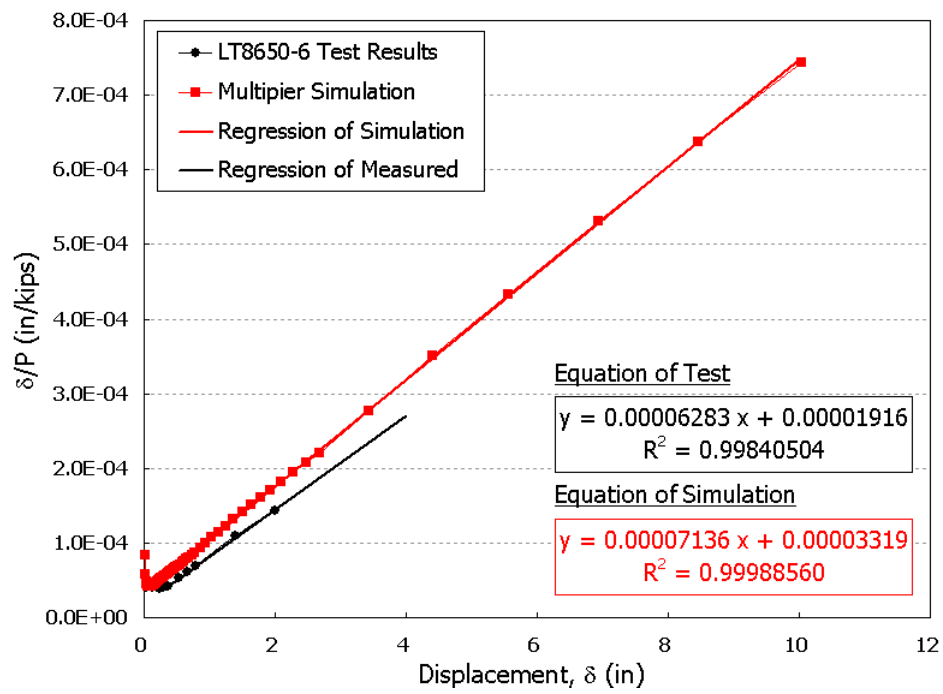


k) LT8650-1

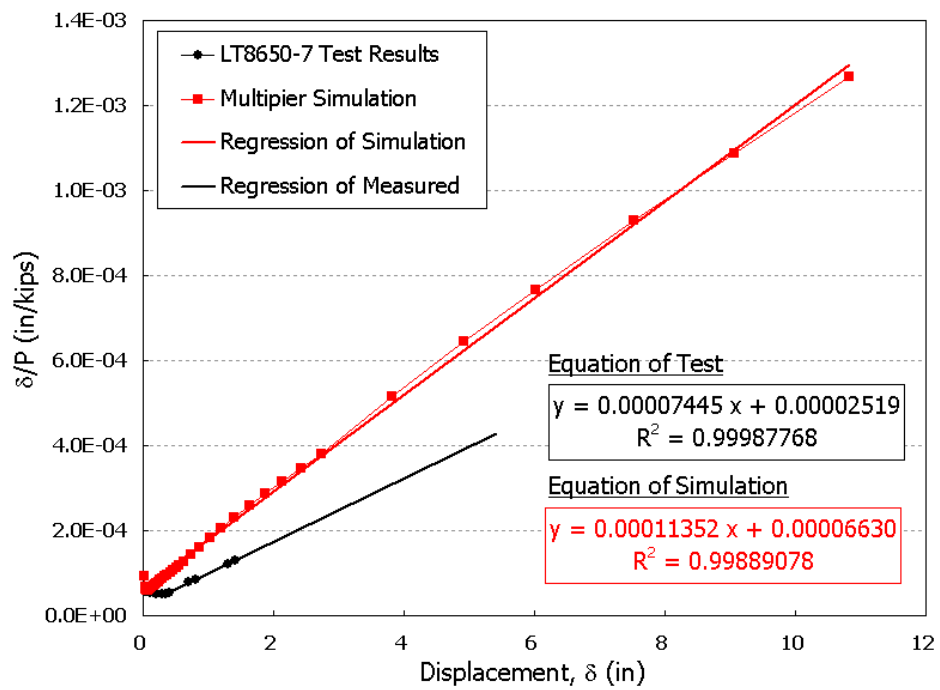


l) LT8650-1

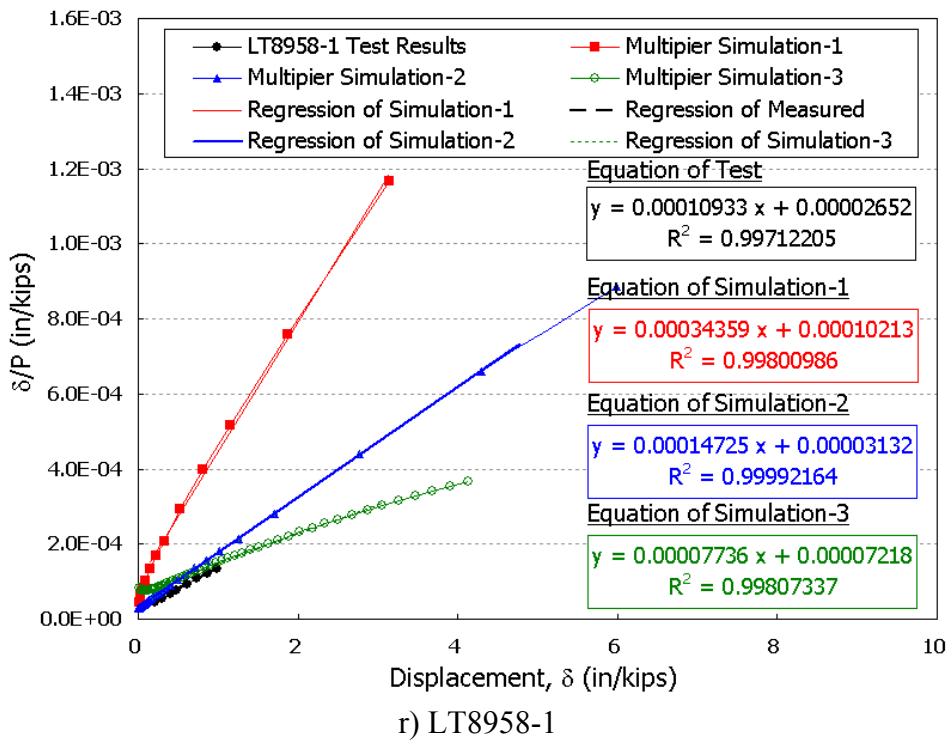
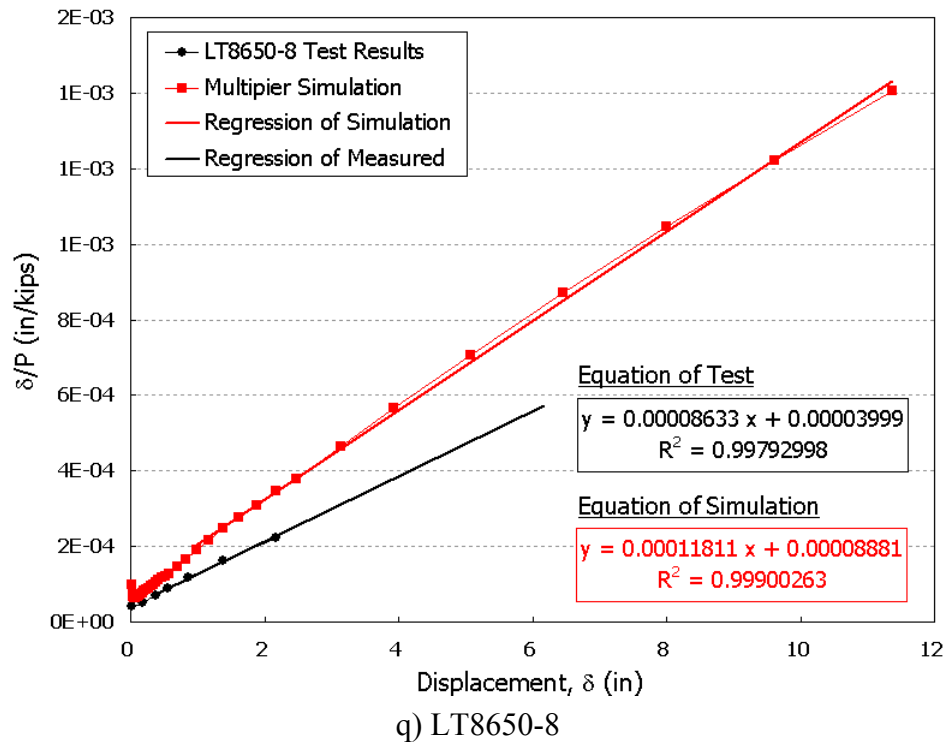


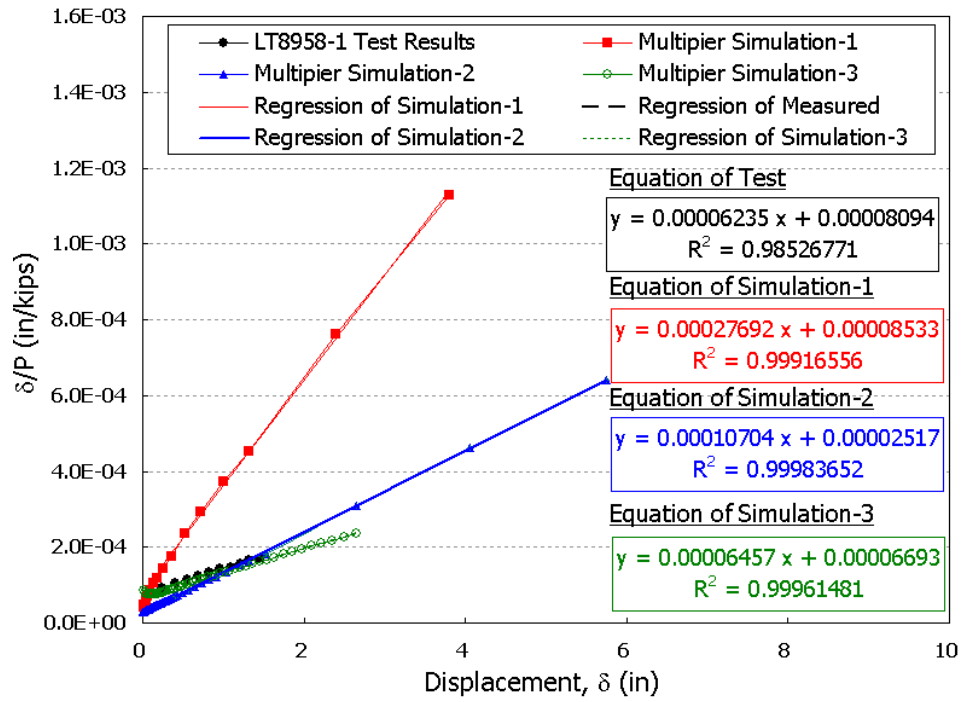


o) LT8650-6

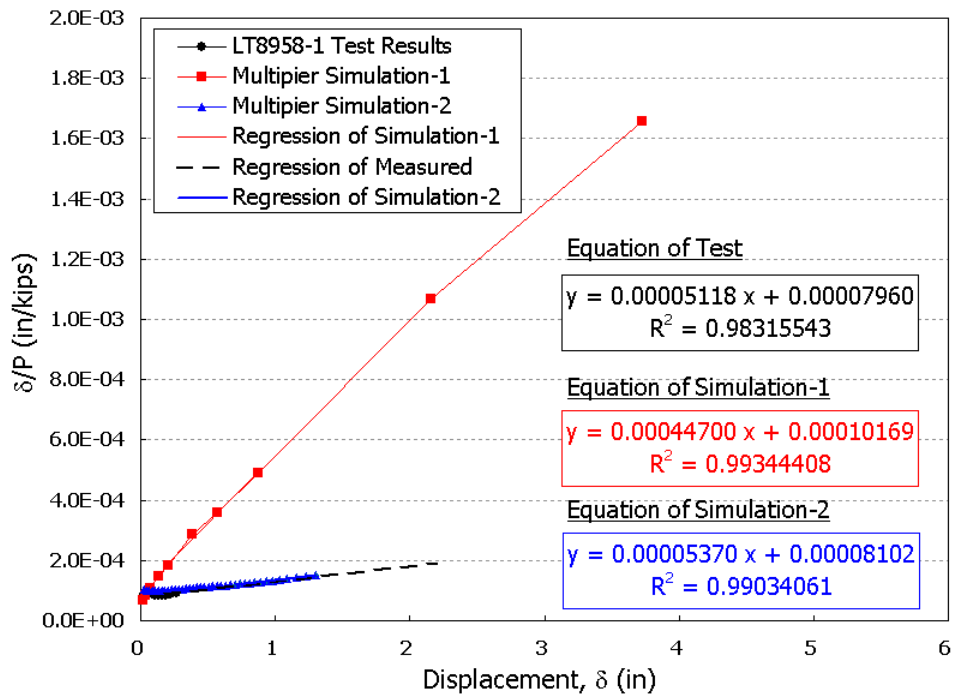


p) LT8650-7



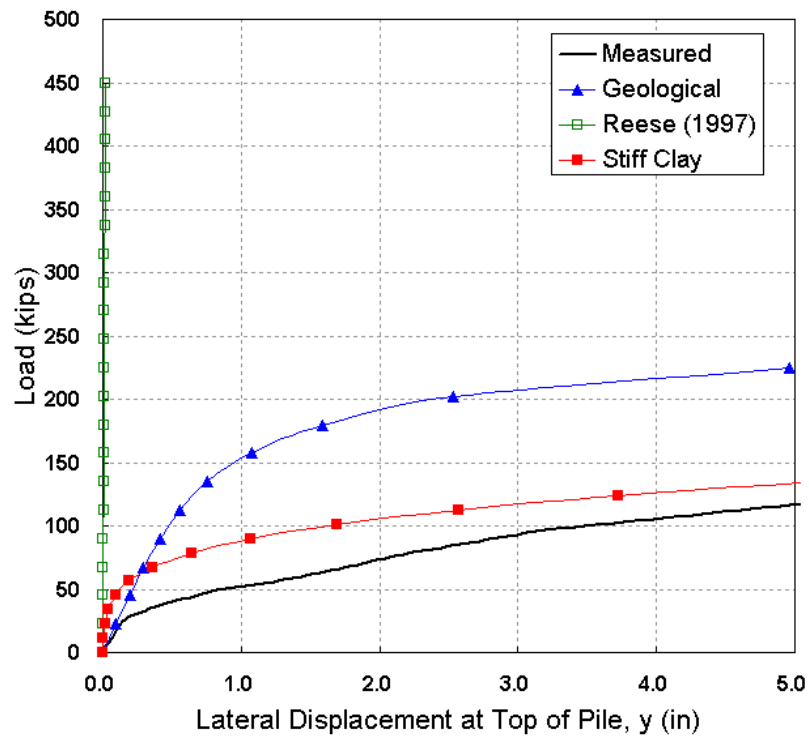


s) LT8958-2

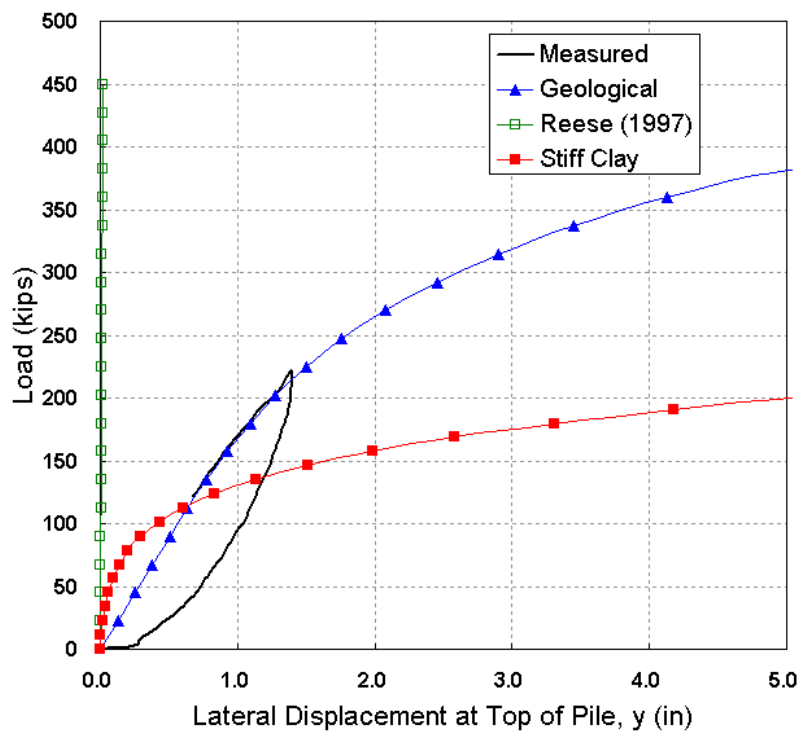


t) LT8402

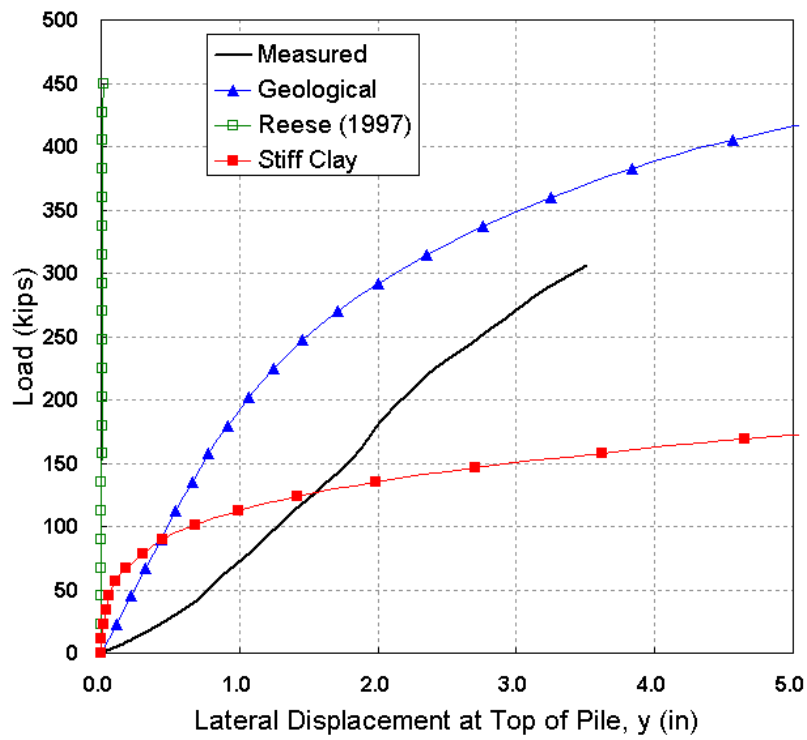
DESIGN LOADS FOR LATERAL LOAD



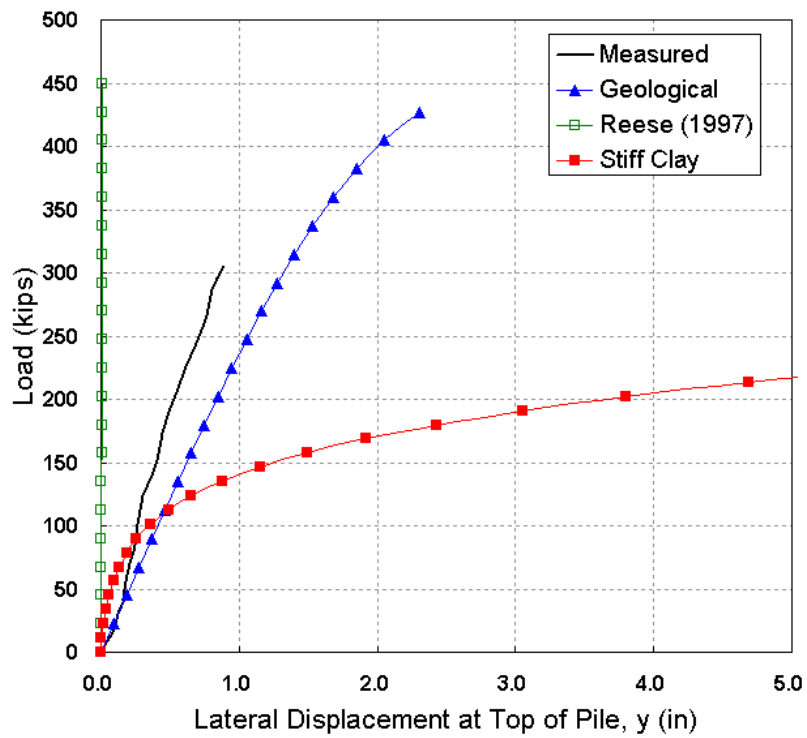
(a) Nash Halifax Short Shaft



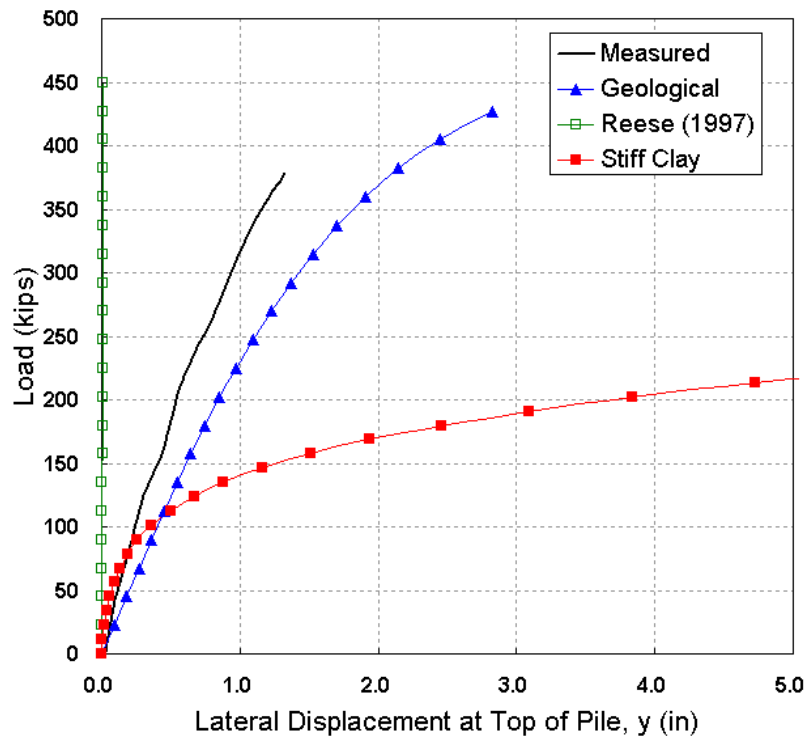
(b) Nash Halifax Long Shaft



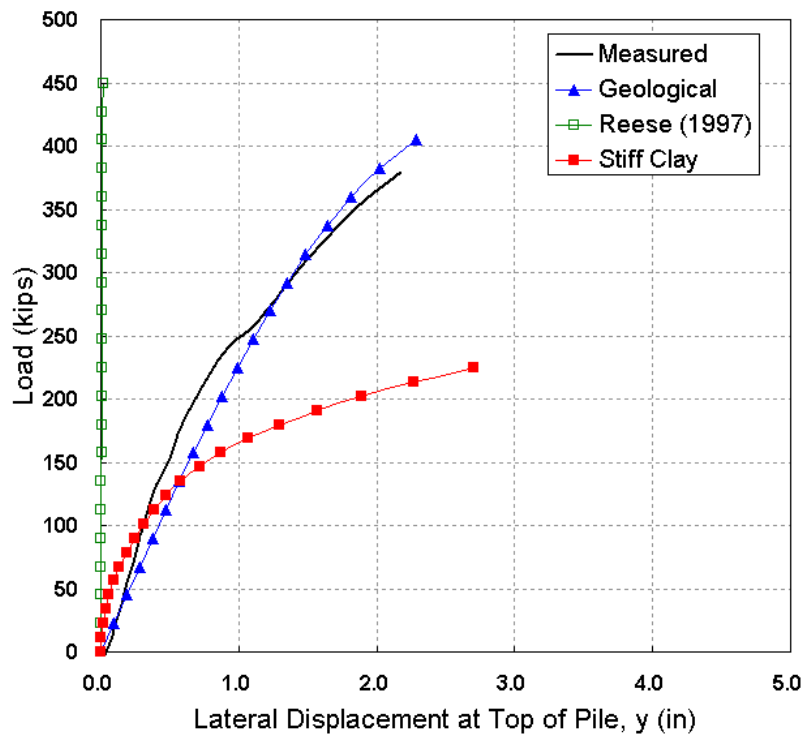
(c) Caldwell Short Shaft



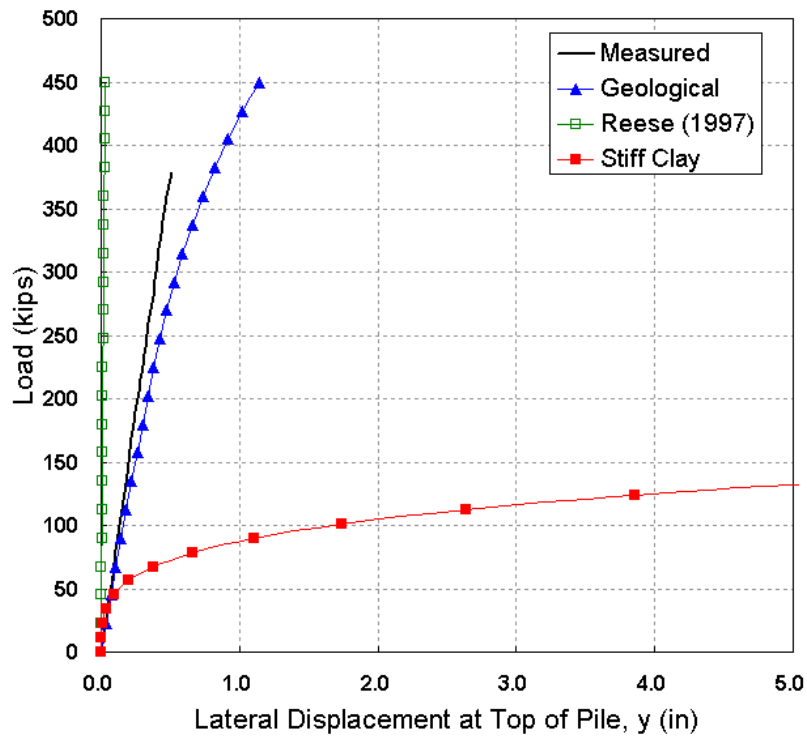
(d) Caldwell Long Shaft



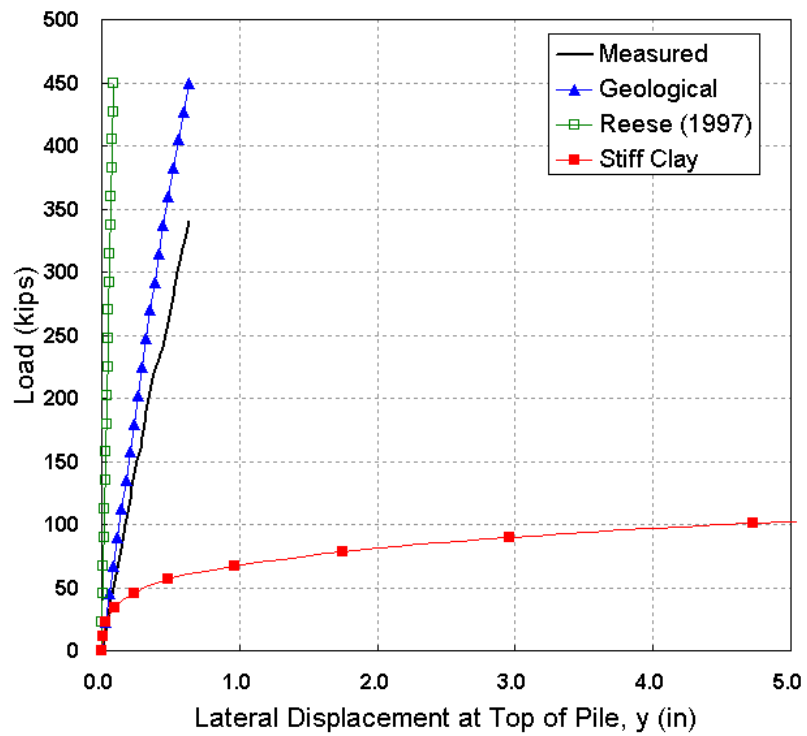
(e) Wilson Short Shaft



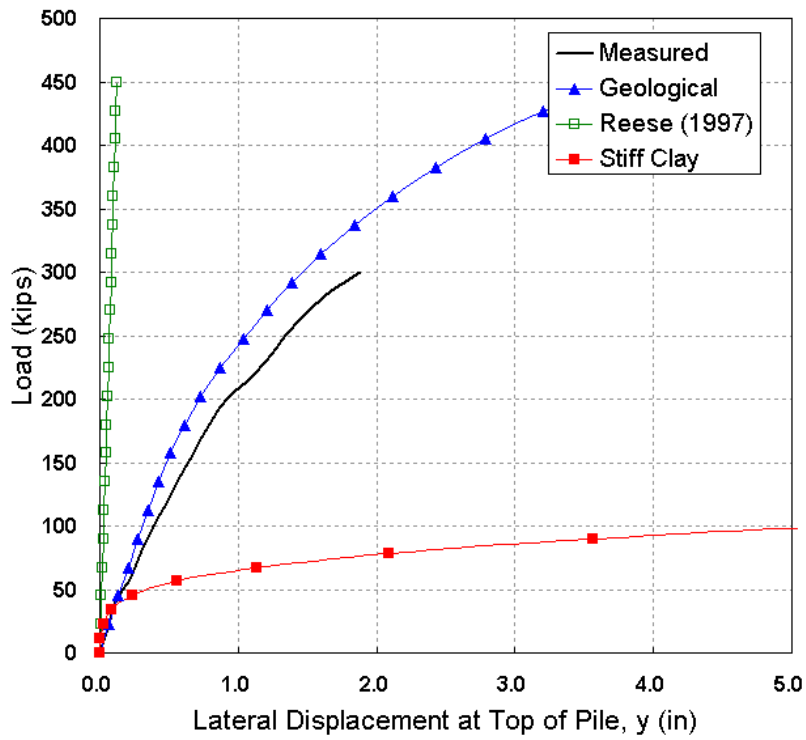
(f) Wilson Long Shaft



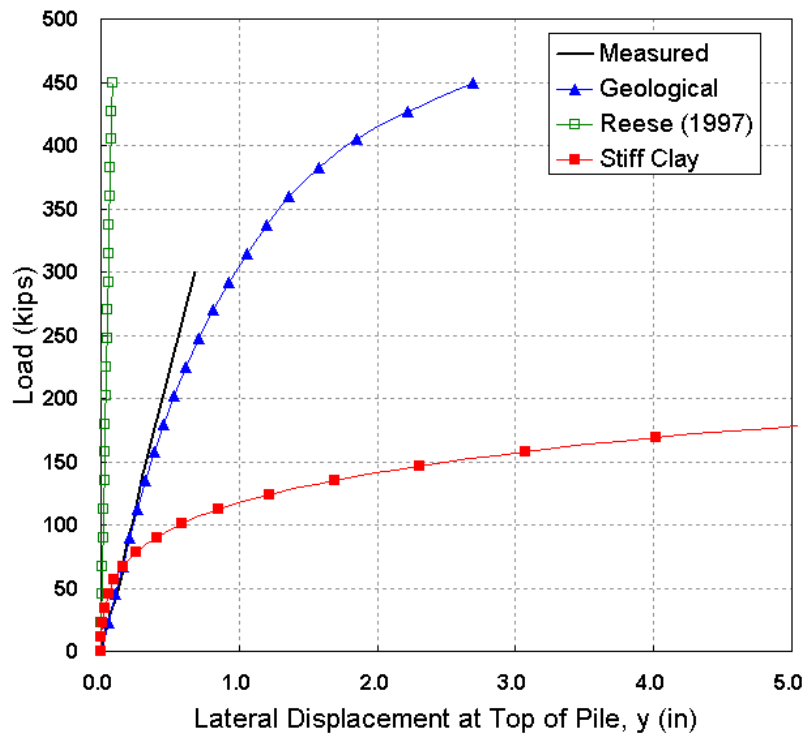
(g) I-40 Short Shaft



(h) I-40 Long Shaft



(i) I-85 Short Shaft



(j) I-85 Long Shaft