





รายละเอียดผลการวิจัย

ผลการดำเนินการจัดเรียงข้อมูลตามความลึก

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)	DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
1.95	CL-ML	12	1.95	CL	38
1.95	CL-ML	8	1.95	CL	24
1.95	CL-ML	1	1.95	CL	24
1.95	CL-ML	12	1.95	CL	22
1.95	CL-ML	25	1.95	CL	9
1.95	CL-ML	21	1.95	CL	32
1.95	CL-ML	44	1.95	CL	41
1.95	SM	23	1.95	CL	2
1.95	SM	23	1.95	CL	9
1.95	SM	12	1.95	CL	7
1.93	CL	8	1.95	CL	13
1.95	CL	13	1.95	CL	9
1.95	CL	39	1.95	CL	4
1.95	CL	32	1.95	CL	7
1.95	CL	32	1.95	CL	12
1.95	CL	8	1.95	CL	2
1.95	CL	7	1.95	CL	70
1.95	CL	15	1.95	ML	6
1.95	CL	25	1.95	ML	17
1.95	CL	20	1.95	ML	8
1.95	CL	10	1.95	SW-SM	7
1.95	CL	16	1.95	SC	9
1.95	CL	10	1.95	SC	8
1.95	CL	6	1.95	SC	12
1.95	CL	12	2.00	CL	10
1.95	CL	7			
1.95	CL	16			
1.95	CL	7			
1.95	CL	28			
1.95	CL	23			
1.95	CL	16			
1.95	CL	8			
1.95	CL	6			
1.95	CL	25			

DEPTH	SOIL GROUP	SPT N'
(m)	USCS	(Blows/ft)
3.45	CL-ML	6
3.45	CL-ML	3
3.45	CL-ML	3
3.45	CL-ML	23
3.45	CL-ML	18
3.45	CH	11
3.45	CH	8
3.45	CH	4
3.45	CH	15
3.45	SM	14
3.45	SM	13
3.45	SM	5
3.45	SM	7
3.45	SM	11
3.45	CL	12
3.45	CL	23
3.45	CL	25
3.45	CL	26
3.45	CL	9
3.45	CL	16
3.45	CL	14
3.45	CL	21
3.45	CL	19
3.45	CL	26
3.45	CL	19
3.45	CL	18
3.45	CL	11
3.45	CL	7
3.45	CL	6
3.45	CL	5
3.45	CL	22
3.45	CL	22
3.45	CL	22
3.45	CL	21
3.45	CL	3
3.45	CL	28
3.45	CL	3
3.45	CL	53
3.45	CL	18
3.45	CL	17
3.45	CL	18
3.45	CL	54
3.45	CL	6
3.45	CL	8

DEPTH	SOIL GROUP	SPT N'
(m)	USCS	(Blows/ft)
3.45	CL	5
3.45	CL	24
3.45	CL	7
3.45	CL	12
3.45	CL	17
3.45	CL	12
3.45	CL	3
3.50	CL	12
3.45	SP	5
3.45	ML	12
3.45	ML	16
3.45	ML	8
3.45	ML	51
3.45	SC	8

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
4.95	CL-ML	24
4.95	CL-ML	5
4.95	CL-ML	2
4.95	CL-ML	1
4.50	CH	6
4.95	CH	5
4.95	CH	17
4.95	CH	17
5.00	CH	3
5.00	CH	12
5.00	CH	2
4.95	SM	28
4.95	SM	19
4.95	SM	9
4.95	SM	12
4.95	SM	3
4.50	CL	25
4.95	CL	17
4.95	CL	15
4.95	CL	33
4.95	CL	27
4.95	CL	11
4.95	CL	34
4.95	CL	6
4.95	CL	17
4.95	CL	7
4.95	CL	7
4.95	CL	2
4.95	CL	24
4.95	CL	42
4.95	CL	12
4.95	CL	4
4.95	CL	8
4.95	CL	23
4.95	CL	23
4.95	CL	8
4.95	CL	2
4.95	CL	15
4.95	CL	9
4.95	CL	6
4.95	CL	5
4.95	CL	8
4.95	CL	31
4.95	CL	17

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
4.95	CL	13
4.95	CL	27
4.95	CL	15
4.95	CL	35
4.95	CL	22
4.95	CL	8
4.95	CL	4
4.95	CL	36
4.95	CL	19
4.95	CL	23
4.95	SP-SM	5
4.95	SP	7
4.95	ML	12
4.95	ML	12
4.95	SW-SM	34
4.95	SW-SM	15
4.95	SC	30
4.95	SC	31

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
6.45	CL-ML	37
6.45	CH	20.00
6.45	CH	29.00
6.45	CH	16.00
6.45	CH	6.00
6.45	CH	54.00
6.95	CH	9.00
6.95	CH	7.00
6.95	CH	19.00
6.45	SM	11
6.45	SM	21
6.45	SM	2
6.45	SM	18
6.45	SM	20
6.45	SM	14
6.45	SM	28
6.95	SM	17
6.95	SM	6
6.45	CL	40
6.45	CL	31
6.45	CL	31
6.45	CL	18
6.45	CL	27
6.45	CL	21
6.45	CL	8
6.45	CL	9
6.45	CL	16
6.45	CL	35
6.45	CL	35
6.45	CL	25
6.45	CL	14
6.45	CL	6
6.45	CL	5
6.45	CL	7
6.45	CL	8
6.45	CL	10
6.45	CL	23
6.45	CL	11
6.45	CL	9
6.45	CL	30
6.45	CL	11
6.45	CL	17
6.45	CL	34
6.45	CL	21

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
6.45	CL	25
6.45	CL	26
6.45	CL	29
6.45	CL	20
6.45	CL	23
6.95	CL	16
6.45	SP-SM	22
6.45	SP-SM	118
6.45	SP-SM	20
6.45	SP	6
6.45	SP	7
6.45	SP	22
6.45	ML	9
6.45	ML	23
6.45	ML	30
6.45	ML	9
6.45	ML	27
6.45	ML	11
6.45	ML	6
6.45	ML	20
6.95	SW-SM	4
6.45	SC	27
6.45	SC	33
6.45	SC	5
6.50	SC	9

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
7.95	CL-ML	9
7.95	CH	54.00
7.95	CH	19
7.95	CH	35.00
7.95	CH	32.00
7.95	CH	17.00
7.95	CH	21.00
7.95	CH	15.00
7.95	CH	60.00
7.67	SM	50
7.95	SM	29
7.95	SM	10
7.95	SM	28
7.95	SM	13
7.95	SM	29
7.95	SM	7
7.95	SM	20
7.95	SM	70
7.95	SM	24
7.95	CL	37
7.95	CL	50
7.95	CL	23
7.95	CL	31
7.95	CL	39
7.95	CL	39
7.95	CL	47
7.95	CL	39
7.95	CL	4
7.95	CL	36
7.95	CL	36
7.95	CL	50
7.95	CL	53
7.95	CL	25
7.95	CL	24
7.95	CL	14
7.95	CL	11
7.95	CL	19
7.95	CL	30
7.95	CL	22
7.95	CL	13
7.95	CL	22
7.95	CL	14
7.95	CL	25
7.95	CL	20

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
7.95	CL	12
7.95	CL	33
7.95	CL	40
7.95	CL	28
7.95	CL	20
7.95	CL	19
7.95	CL	18
7.95	CL	30
7.95	CL	47
7.95	CL	38
7.95	CL	39
7.95	SP-SM	23
7.95	SP-SM	11
7.95	SP	7
7.95	SP	28
7.95	SP	10
7.95	ML	11
7.95	ML	9
7.95	SW-SM	19
7.95	SW-SM	14
7.95	SW-SM	12
7.95	SC	18
7.95	SC	16
7.95	SC	45
7.95	SC	23
7.95	SC	12

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
9.45	CH	50
9.45	CH	50.00
9.45	CH	45.00
9.45	CH	21.00
9.45	CH	32.00
9.45	CH	29.00
9.45	CH	24.00
9.45	CH	17.00
9.45	CH	29.00
9.45	CH	12.00
9.45	CH	14.00
9.45	CH	75.00
9.45	CH	7.00
9.95	CH	3.00
9.25	SM	49
9.45	SM	29
9.45	SM	23
9.45	SM	30
9.45	SM	20
9.45	SM	36
9.45	SM	27
9.45	SM	16
9.45	SM	19
9.45	SM	11
9.45	SM	21
9.25	CL	50
9.37	CL	49
9.45	CL	39
9.45	CL	39
9.45	CL	26
9.45	CL	42
9.45	CL	36
9.45	CL	51
9.45	CL	50
9.45	CL	42
9.45	CL	35
9.45	CL	28
9.45	CL	50
9.45	CL	48
9.45	CL	10
9.45	CL	24
9.45	CL	33
9.45	CL	18
9.45	CL	38

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
9.45	CL	10
9.45	CL	21
9.45	CL	17
9.45	CL	20
9.45	CL	12
9.45	CL	12
9.45	CL	22
9.45	CL	27
9.45	CL	36
9.45	CL	50
9.40	SP-SM	32
9.45	SP-SM	21
9.45	SP-SM	37
9.45	SP	17
9.45	SP	18
9.45	SP	12
9.45	ML	13
9.45	SW-SM	13
9.45	SW-SM	27
9.45	SW-SM	23
9.45	SW-SM	22
9.45	SW-SM	18
9.40	SC	80
9.45	SC	21
9.45	SC	52
9.45	SC	43
9.45	SC	50
9.45	SC	44
9.95	CH	3.00

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
10.95	CL-ML	16
10.95	CH	47
10.95	CH	50
10.95	CH	30
10.95	CH	37
10.95	CH	4
10.95	CH	18
10.95	CH	14
10.95	CH	20
10.95	CH	18
10.95	CH	17
10.95	CH	40
10.95	SM	55
10.95	SM	50
10.95	SM	25
10.95	SM	25
10.95	SM	42
10.95	SM	17
10.95	SM	27
10.95	SM	23
10.95	SM	40
10.95	SM	51
10.95	SM	31
10.95	SM	50
10.95	SM	10
10.50	CL	47
10.80	CL	53
10.93	CL	47
10.95	CL	40
10.95	CL	63
10.95	CL	40
10.95	CL	47
10.95	CL	25
10.95	CL	47
10.95	CL	21
10.95	CL	30
10.95	CL	32
10.95	CL	23
10.95	CL	55
10.95	CL	20
10.95	CL	15
10.95	CL	50
10.95	CL	27
10.95	CL	31

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
10.95	CL	27
10.95	CL	26
10.95	CL	37
10.95	CL	50
10.95	CL	34
10.95	CL	36
10.95	CL	16
10.95	CL	16
10.95	CL	50
10.95	CL	13
10.95	SP-SM	21
10.95	SP-SM	5
10.95	SP-SM	16
10.95	SP-SM	20
10.95	SP	55
10.70	ML	49
10.95	ML	19
10.95	SW-SM	22
10.95	SW-SM	29
10.95	SW-SM	21
10.95	SC	63
10.95	SC	35
10.95	SC	46
10.95	SC	24

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
12.20	CH	46
12.25	CH	45
12.45	CH	63
12.45	CH	47
12.45	CH	49
12.45	CH	48
12.45	CH	37
12.45	CH	29
12.45	CH	44
12.45	CH	22
12.45	CH	24
12.20	SM	44
12.20	SM	47
12.40	SM	79
12.40	SM	20
12.45	SM	52
12.45	SM	26
12.45	SM	48
12.45	SM	30
12.45	SM	30
12.45	SM	32
12.45	SM	20
12.45	SM	12
12.45	SM	9
12.45	SM	50
12.38	CL	47
12.38	CL	50
12.38	CL	50
12.43	CL	48
12.45	CL	27
12.45	CL	55
12.45	CL	50
12.45	CL	45
12.45	CL	44
12.45	CL	44
12.45	CL	26
12.45	CL	19
12.45	CL	13
12.45	CL	24
12.45	CL	46
12.45	CL	50
12.45	CL	30
12.45	CL	30
12.45	CL	19

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
12.45	CL	28
12.45	CL	68
12.45	CL	58
12.45	CL	18
12.50	CL	52
12.40	SP-SM	21
12.45	SP-SM	13
12.45	SP-SM	11
12.45	SP-SM	34
12.40	SP	14
12.40	ML	80
12.40	ML	17
12.20	SW-SM	24
12.45	SW-SM	27
12.45	SW-SM	24
12.00	SC	44
12.17	SC	46
12.23	SC	47
12.23	SC	43
12.38	SC	50
12.45	SC	26
12.45	SC	41
12.45	SC	34
12.45	SC	19
12.45	SC	12

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
13.65	CH	44.00
13.75	CH	44.00
13.85	CH	74.00
13.95	CH	44.00
13.95	CH	37.00
13.95	CH	39.00
13.65	SM	43
13.95	SM	57
13.95	SM	45
13.95	SM	18
13.95	SM	29
13.95	SM	37
13.95	SM	65
13.95	SM	19
13.95	SM	28
13.95	SM	24
13.95	SM	50
13.95	SM	19
13.19	CL	50
13.65	CL	24
13.70	CL	49
13.75	CL	46
13.75	CL	42
13.90	CL	76
13.90	CL	49
13.95	CL	53
13.95	CL	42
13.95	CL	43
13.95	CL	46
13.95	CL	43
13.95	CL	19
13.95	CL	12
13.95	CL	44
13.95	CL	50
13.95	CL	48
13.95	CL	38
13.95	CL	38
13.95	CL	50
13.95	CL	37
13.95	CL	52
13.95	CL	29
13.95	CL	13
13.95	CL	49
13.95	CL	27

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
13.95	CL	49
13.95	CL	37
13.95	CL	36
13.95	SP-SM	21
13.95	SP-SM	35
13.95	SP-SM	8
13.95	SP-SM	28
13.95	SP-SM	41
13.95	SP-SM	27
13.95	SP-SM	27
13.95	SP	24
13.95	ML	12
13.95	SW-SM	26
13.95	SW-SM	53
13.95	SW-SM	12
13.95	SW-SM	12
13.00	SC	4
13.95	SC	48
13.95	SC	50
13.95	SC	38
13.95	SC	23

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
15.28	CH	43.00
15.45	CH	42.00
15.23	SM	41
15.23	SM	30
15.45	SM	23
15.45	SM	10
15.45	SM	22
15.45	SM	31
15.45	SM	44
15.45	SM	44
15.45	SM	13
15.45	SM	47
15.45	SM	19
15.45	SM	48
15.20	CL	44
15.23	CL	50
15.25	CL	47
15.30	CL	64
15.38	CL	47
15.40	CL	46
15.45	CL	48
15.45	CL	41
15.45	CL	18
15.45	CL	13
15.45	CL	42
15.45	CL	48
15.45	CL	46
15.45	CL	44
15.45	CL	46
15.45	CL	40
15.45	CL	16
15.45	CL	49
15.45	CL	31
15.95	CL	21
15.97	CL	68
15.45	SP-SM	12
15.45	SP-SM	18
15.45	SP-SM	45
15.45	SP-SM	43
15.45	SP-SM	32
15.45	SP-SM	28
15.45	SP	41
15.45	ML	40
15.45	ML	11

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
15.45	SW-SM	17
15.45	SW-SM	48
15.45	SW-SM	26
15.20	SC	40
15.43	SC	47
15.45	SC	44
15.45	SC	45
15.45	SC	22
15.45	SC	35

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
16.65	SM	44
16.95	SM	29
16.95	SM	42
16.95	SM	32
16.95	SM	22
16.95	SM	43
16.95	SM	26
16.95	SM	50
16.88	CL	44
16.94	CL	42
16.95	CL	47
16.95	CL	36
16.95	CL	32
16.95	CL	40
16.95	CL	9
16.95	CL	43
16.95	CL	45
16.95	CL	32
16.95	CL	44
16.95	CL	52
16.95	CH	28.00
16.95	CH	33.00
16.95	CH	55.00
16.95	CH	47.00
16.95	SP-SM	18
16.95	SP-SM	32
16.95	SP-SM	33
16.90	ML	39
16.95	ML	7
16.95	SW-SM	48
16.95	SW-SM	47
16.40	SC	40
16.95	SC	50
16.95	SC	30
16.95	SC	38

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
18.25	SM	59
18.38	SM	42
18.43	SM	39
18.45	SM	39
18.45	SM	44
18.45	SM	24
18.45	SM	39
18.45	SM	42
18.45	SM	36
18.20	CL	42
18.23	CL	40
18.25	CL	42
18.45	CL	35
18.45	CL	42
18.45	CL	43
18.45	CL	35
18.45	CL	53
18.45	CL	45
18.45	CL	64
18.45	CL	23
18.45	CL	10
18.45	CL	20
18.32	CH	44
18.45	CH	26
18.45	CH	27
18.45	CH	44
18.45	CH	48
18.45	CH	35
18.45	SP-SM	25
18.45	SP-SM	33
18.45	SP-SM	23
18.45	SW-SM	59
18.25	SC	38
18.45	SC	37
18.45	SC	7

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
19.45	CL	11
19.45	CL	18
19.45	CL	16
19.70	SM	56
19.75	SM	57
19.80	SM	40
19.95	SM	44
19.95	SM	24
19.95	SM	29
19.95	SM	41
19.73	CL	38
19.78	CL	42
19.95	CL	40
19.95	CL	43
19.95	CL	46
19.95	CL	39
19.95	CL	53
19.95	CL	60
19.95	CL	24
19.95	CL	15
19.95	CL	14
19.95	CL	22
19.95	CL	20
19.95	CL	18
19.88	CH	41.00
19.95	CH	40.00
19.95	CH	44.00
19.95	CH	43.00
19.95	CH	44.00
19.95	CH	35.00
19.95	ML	31
19.95	ML	19
19.95	SC	36

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
21.45	SM	25
21.20	CL	35
21.23	CL	37
21.23	CL	40
21.45	CL	49
21.45	CL	14
21.45	CL	26
21.45	CL	18
21.45	CL	31
21.45	CL	13
21.45	CL	23
21.45	CL	23
21.45	CH	45.00
21.45	CH	36.00
21.95	CH	41.00
21.33	SP-SM	60
21.08	ML	39
21.45	SW-SM	42
21.45	SC	46
21.45	SC	65
21.45	SC	50
21.45	SC	22
21.45	SC	17

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
22.45	CL	19
22.45	CL	17
22.45	CL	18
22.45	CL	19
22.45	CL	12
22.45	SC	26
22.45	SC	10
22.45	SC	33
22.73	SM	35
22.95	SM	37
22.67	CL	43
22.75	CL	39
22.90	CL	34
22.95	CL	46
22.95	CL	21
22.95	CL	18
22.95	CL	21
22.95	CL	14
22.95	CL	17
22.95	CH	46.00
22.95	CH	18.00
22.67	SP-SM	56
22.95	SW-SM	37
22.95	SC	63

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
24.45	SP	38
24.45	SM	38
24.21	CL	55
24.25	CL	33
24.45	CL	32
24.45	CL	33
24.45	CL	33
24.45	CL	39
24.45	CL	20
24.45	CL	15
24.45	CL	21
24.45	CL	49
24.45	CL	50
24.45	CL	32
24.45	CL	35
24.45	CL	30
24.45	CL	23
24.45	CL	28
24.45	CL	20
24.45	CL	30
24.45	CL	20
24.45	CH	37.00
24.45	SC	17
24.45	SC	19
24.45	SC	31
24.45	SC	19

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
23.45	CL	31
23.45	CL	40
23.45	CL	27
23.45	CL	33
23.45	CL	20
23.45	CL	22
23.45	CL	20
23.45	CL	20
23.45	CL	26
23.45	CL	20
23.45	SC	17
23.45	SC	33
23.45	SC	43
23.45	SC	22
23.45	SC	27

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
25.30	SP	51
25.45	SP	33
25.45	CL	16
25.45	CL	50
25.45	CL	37
25.45	CL	36
25.45	CL	30
25.45	CL	19
25.45	CL	29
25.45	CL	26
25.45	CL	36
25.45	CL	24
25.45	SP-SM	28
25.45	SP-SM	40
25.45	SC	33
25.45	SC	30
25.45	SC	23
25.45	SC	27
25.73	CL	42
25.95	CL	36
25.95	CL	33
25.95	CL	17
25.95	CL	29
25.95	CL	30
25.73	CH	33.00
25.95	CH	43.00
25.95	SP-SM	31
25.95	SP-SM	45

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
26.20	SP	50
26.45	SP	45
26.45	SP	48
26.45	SP	32
26.45	CL	22
26.45	CL	31
26.45	CL	20
26.45	CL	22
26.45	CL	51
26.45	CL	28
26.45	CL	29
26.45	SP-SM	34
26.45	SP-SM	32
26.45	SP-SM	42
26.45	SC	28
26.45	SC	39

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
27.45	SP	42
27.45	SP	43
27.45	SP	50
27.45	SP	35
27.45	SP	38
27.23	CL	50
27.45	CL	46
27.45	CL	33
27.45	CL	36
27.45	CL	19
27.45	CL	41
27.45	CL	28
27.45	CL	24
27.45	CL	45
27.45	CL	41
27.45	CH	50
27.45	SP-SM	36
27.45	SP-SM	31
27.45	SP-SM	50
27.45	SP-SM	20
27.45	SP-SM	55
27.45	SP-SM	28

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
28.45	SP	35
28.45	SP	36
28.45	SP	50
28.45	SP	35
28.45	SP	28
28.45	SP	40
28.45	CL	56
28.45	CL	50
28.40	SP-SM	60
28.45	SP-SM	50
28.45	SP-SM	37
28.45	SP-SM	37
28.45	SP-SM	52
28.95	CL	30
28.95	CL	47
28.95	CL	47
28.95	CH	52
28.95	SP-SM	43
28.95	SP-SM	46

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
29.45	SP	37
29.45	SP	34
29.45	SP	31
29.45	SP	53
29.45	SP	31
29.45	SP	46
29.45	SP	27
29.45	SP	27
29.45	CL	20
29.45	CL	13
29.38	SP-SM	67
29.45	SP-SM	42
29.45	SP-SM	48
29.45	SP-SM	35
29.45	SP-SM	42
29.45	SP-SM	46

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
30.45	SP	35
30.45	SP	19
30.45	SP	33
30.45	SP	55
30.45	SP	32
30.45	SP	44
30.45	SP	35
30.45	SP	39
30.45	CL	32
30.45	CL	51
30.45	CL	25
30.45	CL	25
30.45	CL	48
30.40	SP-SM	50
30.45	SP-SM	39
30.45	SP-SM	44
30.45	SP-SM	50
30.45	SP-SM	50
30.45	SP-SM	40
30.45	SP-SM	18
30.45	SP-SM	31
30.45	SP-SM	27

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
31.28	SP	50
31.30	SP	50
31.45	SP	29
31.45	SP	26
31.45	SP	34
31.45	SP	60
31.45	SP	54
31.45	SP	60
31.45	SP	31
31.95	SP	32
31.45	CL	32
31.45	CL	39
31.45	CL	31
31.45	SP-SM	33
31.45	SP-SM	34
31.45	SP-SM	32
31.45	SP-SM	25
31.95	SP-SM	42
31.95	SP-SM	50
31.95	SP-SM	21
31.95	SP-SM	44
31.45	SW-SM	36

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
32.30	SP	50
32.45	SP	37
32.45	SP	39
32.45	SP	30
32.45	SP	40
32.45	SP	54
32.45	SP	44
32.45	SP	48
32.45	SP	50
32.45	SP	38
32.45	CL	45
32.45	CL	32
32.45	SP-SM	28
32.45	SP-SM	54
32.45	SP-SM	41
32.45	SW-SM	35
32.45	SC	48

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
33.20	SP	50
33.30	SP	50
33.45	SP	33
33.45	SP	45
33.45	SP	43
33.45	SP	50
33.45	SP	27
33.45	SP	39
33.45	SP	35
33.45	SP	37
33.45	SP	49
33.45	SP	51
33.45	SP	46
33.45	SP	33
33.45	SP	60
33.45	SP	50
33.38	CL	50
33.45	CL	56
33.45	CL	41
33.23	SP-SM	50
33.35	SP-SM	75
33.45	SP-SM	44
33.45	SP-SM	33
33.45	SP-SM	22
33.45	SP-SM	50
33.45	SP-SM	50
33.45	SP-SM	27
33.45	SW-SM	34
33.45	SC	50

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
34.17	SP	50
34.30	SP	50
34.33	SP	50
34.35	SP	50
34.45	SP	43
34.45	SP	35
34.45	SP	29
34.45	SP	60
34.45	SP	50
34.45	SP	48
34.45	SP	50
34.45	SP	35
34.45	CL	50
34.45	CL	40
34.20	SP-SM	50
34.30	SP-SM	50
34.37	SP-SM	67
34.45	SP-SM	44
34.45	SP-SM	42
34.45	SP-SM	49
34.95	SP-SM	37
34.95	SP-SM	38
34.95	SP-SM	50
34.45	SW-SM	44
34.45	SC	50

DEPTH (m)	SOIL GROUP USCS	SPT N' (Blows/ft)
35.15	SP	50
35.28	SP	50
35.30	SP	50
35.35	SP	50
35.35	SP	50
35.45	SP	51
35.45	SP	50
35.45	SP	47
35.45	SP	30
35.45	SP	50
35.45	SP	50
35.45	SP	27
35.45	CL	57
35.45	CL	40
35.45	CL	33
35.15	SP-SM	50
35.20	SP-SM	50
35.20	SP-SM	50
35.35	SP-SM	75
35.45	SP-SM	45
35.45	SP-SM	51
35.45	SP-SM	50
35.45	SP-SM	33
35.45	SP-SM	46
35.45	SP-SM	67
35.45	SP-SM	54
35.45	SP-SM	45
35.50	SP-SM	50
35.50	SP-SM	50
35.50	SP-SM	35



ภาคผนวก ข

แสดงรายละเอียดการวิเคราะห์ความแปรปรวน

มหาวิทยาลัยสุรินทร์

ตาราง ข.1 แสดงค่าแรงต้านเนื่องจากผิวของเสาเข็มขนาด 0.20 x 0.20 เมตร ปลายเสาเข็มอยู่ที่ความลึก 24.45 เมตร

เสาเข็มขนาด 0.20 x 0.20 เมตร
 ค่าแรงต้านเนื่องจากผิวที่ความลึกที่เก็บ = 24.45 เมตร

ความลึก	1.95		3.45		4.45		6.95		7.95		9.45		10.95		12.45		13.95		15.45		16.95		18.45		19.95		22.95		23.45		24.45		$Q_b = \sum f_s \cdot A_s$ (KN)																
	f _s (kPa)	A _s (m ²)	N'	f _s (kPa)	A _s (m ²)	N'	f _s (kPa)	A _s (m ²)	N'	f _s (kPa)	A _s (m ²)	N'	f _s (kPa)	A _s (m ²)	N'	f _s (kPa)	A _s (m ²)	N'	f _s (kPa)	A _s (m ²)	N'	f _s (kPa)	A _s (m ²)	N'	f _s (kPa)	A _s (m ²)	N'	f _s (kPa)	A _s (m ²)	N'	f _s (kPa)	A _s (m ²)		N'	f _s (kPa)	A _s (m ²)													
1	44	88	1.6	22	44	1.20	37	73	0.80	46	93	2.00	60	100	0.80	39	79	1.20	59	100	1.20	67	100	1.20	62	100	1.20	53	100	1.20	61	100	1.20	57	100	1.20	60.0	100	2.4	66	100	0.40	52	100	0.80	1808.78			
2	9	18	1.6	13	27	1.20	8	16	0.80	12	25	2.00	18	35	0.80	33	66	1.20	22	43	1.20	28	57	1.20	30	60	1.20	29	58	1.20	32	64	1.20	30	59	1.20	22.2	44	2.4	16	31	0.40	22	45	0.80	871.41			
3	32	63	1.6	18	37	1.20	30	61	0.80	35	70	2.00	51	100	0.80	37	74	1.20	51	100	1.20	56	100	1.20	50	100	1.20	52	100	1.20	51	100	1.20	51	100	1.20	51.6	100	2.4	46	93	0.40	45	90	0.80	1689.05			
4	17	35	1.6	15	30	1.20	18	36	0.80	21	43	2.00	32	65	0.80	34	69	1.20	34	69	1.20	41	82	1.20	42	84	1.20	41	83	1.20	41	83	1.20	41	82	1.20	35.2	70	2.4	26	52	0.40	32	65	0.80	1257.95			
5	22	45	1.6	16	32	1.20	23	46	0.80	26	52	2.00	40	80	0.80	35	70	1.20	41	82	1.20	47	94	1.20	46	92	1.20	46	92	1.20	45	91	1.20	45	90	1.20	41.8	84	2.4	33	65	0.40	38	75	0.80	1447.15			
6	18	37	1.6	15	30	1.20	19	38	0.80	22	45	2.00	34	68	0.80	34	69	1.20	36	72	1.20	42	85	1.20	43	86	1.20	42	84	1.20	42	84	1.20	42	84	1.20	36.6	73	2.4	27	54	0.40	34	67	0.80	1297.36			
7	37	75	1.6	20	40	1.20	34	67	0.80	40	80	2.00	56	100	0.80	38	76	1.20	55	100	1.20	62	100	1.20	61	100	1.20	57	100	1.20	52	100	1.20	52	100	1.20	56.0	100	2.4	55	100	0.40	49	97	0.80	1748.27			
8	29	57	1.6	18	35	1.20	28	57	0.80	32	64	2.00	48	95	0.80	36	73	1.20	48	96	1.20	53	100	1.20	51	100	1.20	49	98	1.20	50	100	1.20	50	99	1.20	48.8	96	2.4	42	84	0.40	43	86	0.80	1637.97			
9	11	22	1.6	14	27	1.20	11	22	0.80	15	30	2.00	22	43	0.80	33	67	1.20	25	50	1.20	32	65	1.20	34	67	1.20	33	65	1.20	36	71	1.20	35	70	1.20	33	67	1.20	25.7	51	2.4	18	36	0.40	25	50	0.80	982.97
10	19	38	1.6	15	31	1.20	20	40	0.80	23	46	2.00	35	70	0.80	35	69	1.20	37	74	1.20	43	87	1.20	44	88	1.20	43	85	1.20	44	87	1.20	43	86	1.20	43	85	1.20	37.6	75	2.4	28	56	0.40	34	69	0.80	1327.51
11	19	38	1.6	15	31	1.20	19	39	0.80	23	45	2.00	35	69	0.80	35	69	1.20	36	73	1.20	43	86	1.20	43	87	1.20	42	85	1.20	43	87	1.20	42	85	1.20	37.1	74	2.4	28	55	0.40	34	68	0.80	1313.65			
12	10	20	1.6	13	27	1.20	9	18	0.80	13	27	2.00	19	39	0.80	33	66	1.20	23	46	1.20	30	60	1.20	31	63	1.20	31	61	1.20	34	67	1.20	33	67	1.20	31	62	1.20	23.6	47	2.4	17	33	0.40	23	47	0.80	917.13
13	27	54	1.6	17	35	1.20	27	54	0.80	30	61	2.00	46	91	0.80	36	72	1.20	46	92	1.20	52	100	1.20	51	100	1.20	50	99	1.20	48	96	1.20	49	97	1.20	48	97	1.20	46.9	94	2.4	39	78	0.40	42	83	0.80	1590.76
14	11	23	1.6	14	27	1.20	11	22	0.80	15	30	2.00	22	44	0.80	33	67	1.20	25	51	1.20	33	65	1.20	34	68	1.20	33	66	1.20	36	72	1.20	35	70	1.20	34	67	1.20	26.0	52	2.4	18	37	0.40	25	51	0.80	992.65
15	14	28	1.6	14	29	1.20	14	28	0.80	18	36	2.00	27	54	0.80	34	68	1.20	30	59	1.20	37	74	1.20	37	73	1.20	39	78	1.20	38	76	1.20	38	76	1.20	37	75	1.20	30.2	60	2.4	22	43	0.40	29	57	0.80	1118.37
16	6	11	1.6	13	25	1.20	5	9	0.80	8	17	2.00	12	25	0.80	33	65	1.20	16	32	1.20	20	41	1.20	23	45	1.20	22	45	1.20	25	51	1.20	26	53	1.20	22	45	1.20	17.5	35	2.4	13	25	0.40	19	37	0.80	685.15
17	2	4	1.6	12	25	1.20	1	3	0.80	1	2	2.00	6	12	0.80	32	65	1.20	7	14	1.20	-1	-2	1.20	2	5	1.20	7	15	1.20	10	21	1.20	11	22	1.20	10	20	1.20	11.3	23	2.4	10	20	0.40	15	31	0.80	327.62
18	7	15	1.6	13	26	1.20	7	13	0.80	11	21	2.00	15	31	0.80	33	66	1.20	19	39	1.20	25	51	1.20	27	54	1.20	26	53	1.20	29	59	1.20	30	60	1.20	27	53	1.20	20.0	40	2.4	14	28	0.40	21	41	0.80	793.22
19	13	27	1.6	14	28	1.20	14	27	0.80	17	35	2.00	26	52	0.80	34	67	1.20	29	57	1.20	36	72	1.20	37	74	1.20	36	72	1.20	38	77	1.20	38	75	1.20	37	74	1.20	29.3	59	2.4	21	42	0.40	28	56	0.80	1092.82
20	16	31	1.6	15	29	1.20	16	32	0.80	20	39	2.00	30	59	0.80	34	68	1.20	32	64	1.20	39	78	1.20	40	80	1.20	39	78	1.20	41	81	1.20	40	80	1.20	39	79	1.20	32.7	65	2.4	24	47	0.40	31	61	0.80	1190.07
21	51	100	1.6	24	47	1.20	39	78	0.80	53	100	2.00	64	100	0.80	41	82	1.20	62	100	1.20	75	100	1.20	73	100	1.20	66	100	1.20	54	100	1.20	65	100	1.20	59	100	1.20	62.9	100	2.4	76	100	0.40	54	100	0.80	1852.88
22	32	63	1.6	19	37	1.20	30	61	0.80	35	70	2.00	51	100	0.80	37	74	1.20	51	100	1.20	56	100	1.20	54	100	1.20	50	100	1.20	52	100	1.20	52	100	1.20	51	100	1.20	51.6	100	2.4	46	93	0.40	45	91	0.80	1689.71
23	23	46	1.6	16	33	1.20	24	48	0.80	27	54	2.00	41	82	0.80	35	71	1.20	42	84	1.20	48	96	1.20	47	93	1.20	46	92	1.20	46	92	1.20	46	92	1.20	46	92	1.20	42.8	86	2.4	34	68	0.40	38	77	0.80	1475.69
24	22	44	1.6	16	32	1.20	22	45	0.80	26	51	2.00	39	78	0.80	35	70	1.20	40	81	1.20	46	92	1.20	46	93	1.20	45	90	1.20	45	91	1.20	45	90	1.20	45	89	1.20	41.1	82	2.4	32	64	0.40	37	74	0.80	1424.83
25	10	21	1.6	14	27	1.20	10	20	0.80	14	28	2.00	20	41	0.80	33	67	1.20	24	48	1.20	31	62	1.20	32	65	1.20	32	63	1.20	34	69	1.20	34	68	1.20	32	64	1.20	24.5	49	2.4	17	34	0.40	24	46	0.80	947.49
26	4	8	1.6	12	25	1.20	3	6	0.80	5	11	2.00	10	19	0.80	33	65	1.20	12	24	1.20	13	26	1.20	16	32	1.20	17	33	1.20	20	39	1.20	21	42	1.20	17	34	1.20	14.7	29	2.4	11	22	0.40	17	34	0.80	544.95
27	2	4	1.6	12	25	1.20	1	3	0.80	1	3	2.00	6	12	0.80	32	65	1.20	7	14	1.20	0	0	1.20	4	7	1.20	8	16	1.20	11	22	1.20	12	23	1.20	10	21	1.20	11.5	23	2.4	10	20	0.40	15	31	0.80	342.69
28	15	30	1.6	14	29	1.20	15	30	0.80	19	38	2.00	28	56	0.80	34	68	1.20	31	62	1.20	38	76	1.20	39	78	1.20	38	76	1.20	40	80	1.20	39	78	1.20	38	77	1.20	31.5	63	2.4	23	45	0.40	30	59	0.80	1133.65

เสาเข็มขนาด 0.20 x 0.20							
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 24.45 เมตร							
ค่า N' ตัวที่	\overline{N}'_B	\overline{N}'_0	b (m)	D_B (m)	A_t (m ²)	q_t (kPa)	$Q_t = q_t \cdot A_t$ kN
1	52	66	0.2	1	0.04	20703.15	828.13
2	22	16	0.2	1	0.04	7600.98	304.04
3	45	46	0.2	1	0.04	18090.56	723.62
4	32	26	0.2	1	0.04	11658.08	466.32
5	38	33	0.2	1	0.04	14076.33	563.05
6	34	27	0.2	1	0.04	12144.82	485.79
7	49	55	0.2	1	0.04	19467.12	778.68
8	43	42	0.2	1	0.04	16973.53	678.94
9	25	18	0.2	1	0.04	8647.68	345.91
10	34	28	0.2	1	0.04	12520.86	500.83
11	34	28	0.2	1	0.04	12346.48	493.86
12	23	17	0.2	1	0.04	8003.11	320.12
13	42	39	0.2	1	0.04	16147.01	645.88
14	25	18	0.2	1	0.04	8712.37	348.49
15	29	22	0.2	1	0.04	10035.04	401.40
16	19	13	0.2	1	0.04	6251.88	250.08
17	15	10	0.2	1	0.04	5092.33	203.69
18	21	14	0.2	1	0.04	6974.11	278.96
19	28	21	0.2	1	0.04	9755.58	390.22
20	31	24	0.2	1	0.04	10848.98	433.96
21	54	76	0.2	1	0.04	21609.46	864.38
22	45	46	0.2	1	0.04	18105.22	724.21
23	38	34	0.2	1	0.04	14456.44	578.26
24	37	32	0.2	1	0.04	13777.68	551.11
25	24	17	0.2	1	0.04	8283.23	331.33
26	17	11	0.2	1	0.04	5586.04	223.44
27	15	10	0.2	1	0.04	5110.80	204.43
28	30	23	0.2	1	0.04	10430.53	417.22
29	18	12	0.2	1	0.04	5848.62	233.94
30	24	17	0.2	1	0.04	8194.66	327.79
31	30	23	0.2	1	0.04	10573.06	422.92
32	28	21	0.2	1	0.04	9904.41	396.18
33	21	15	0.2	1	0.04	7178.67	287.15
34	18	12	0.2	1	0.04	6042.25	241.69
35	29	22	0.2	1	0.04	10034.98	401.40
36	37	32	0.2	1	0.04	13737.14	549.49
37	29	22	0.2	1	0.04	10172.58	406.90
38	23	16	0.2	1	0.04	7894.07	315.76
39	35	29	0.2	1	0.04	12797.26	511.89
40	21	14	0.2	1	0.04	7107.42	284.30
41	19	13	0.2	1	0.04	6506.16	260.25
42	22	15	0.2	1	0.04	7484.92	299.40

เสาเข็มขนาด 0.20 x 0.20			
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 24.45 เมตร			
ลำดับที่	Q_s kN	Q_t kN	$Q_u = Q_s + Q_t$ kN
1	1808.78	828.13	
2	871.41	304.04	1175.45
3	1689.05	723.62	2412.67
4	1257.95	466.32	1724.28
5	1447.35	563.05	2010.40
6	1297.50	485.79	1783.29
7	1748.27	778.68	2526.95
8	1637.07	678.94	2316.01
9	985.47	345.91	1331.37
10	1327.51	500.83	1828.34
11	1313.65	493.86	1807.51
12	917.13	320.12	1237.25
13	1590.76	645.88	2236.64
14	992.05	348.49	1340.54
15	1118.37	401.40	1519.77
16	685.15	250.08	935.23
17	327.62	203.69	531.31
18	793.22	278.96	1072.18
19	1092.82	390.22	1483.04
20	1190.07	433.96	1624.03
21	1852.88	864.38	2717.26
22	1689.71	724.21	2413.91
23	1475.69	578.26	2053.95
24	1424.83	551.11	1975.94
25	947.49	331.33	1278.82
26	544.95	223.44	768.39
27	342.69	204.43	547.13
28	1153.68	417.22	1570.90
29	608.53	233.94	842.47
30	938.01	327.79	1265.79
31	1166.18	422.92	1589.11
32	1106.49	396.18	1502.67
33	819.90	287.15	1107.05
34	647.59	241.69	889.28
35	1118.37	401.40	1519.77
36	1421.76	549.49	1971.25
37	1130.76	406.90	1537.66
38	905.00	315.76	1220.76
39	1349.29	511.89	1861.18
40	810.76	284.30	1095.05
41	726.26	260.25	986.51
42	857.66	299.40	1157.06

No.	Q u = Q S + Q t kN	Qa				
		Safety of Factor				
		2	2.5	3	3.5	4
1	2636.90	1318.45	1054.76	878.97	753.40	659.23
2	1175.45	587.72	470.18	391.82	335.84	293.86
3	2412.67	1206.34	965.07	804.22	689.34	603.17
4	1724.28	862.14	689.71	574.76	492.65	431.07
5	2010.40	1005.20	804.16	670.13	574.40	502.60
6	1783.29	891.64	713.32	594.43	509.51	445.82
7	2526.95	1263.48	1010.78	842.32	721.99	631.74
8	2316.01	1158.00	926.40	772.00	661.72	579.00
9	1331.37	665.69	532.55	443.79	380.39	332.84
10	1828.34	914.17	731.34	609.45	522.38	457.09
11	1807.51	903.75	723.00	602.50	516.43	451.88
12	1237.25	618.63	494.90	412.42	353.50	309.31
13	2236.64	1118.32	894.65	745.55	639.04	559.16
14	1340.54	670.27	536.22	446.85	383.01	335.14
15	1519.77	759.89	607.91	506.59	434.22	379.94
16	935.23	467.61	374.09	311.74	267.21	233.81
17	531.31	265.66	212.53	177.10	151.80	132.83
18	1072.18	536.09	428.87	357.39	306.34	268.05
19	1483.04	741.52	593.22	494.35	423.73	370.76
20	1624.03	812.01	649.61	541.34	464.01	406.01
21	2717.26	1358.63	1086.90	905.75	776.36	679.31
22	2413.91	1206.96	965.57	804.64	689.69	603.48
23	2053.95	1026.98	821.58	684.65	586.84	513.49
24	1975.94	987.97	790.38	658.65	564.55	493.99
25	1278.82	639.41	511.53	426.27	365.38	319.70
26	768.39	384.19	307.36	256.13	219.54	192.10
27	547.13	273.56	218.85	182.38	156.32	136.78
28	1570.90	785.45	628.36	523.63	448.83	392.73
29	842.47	421.24	336.99	280.82	240.71	210.62
30	1265.79	632.90	506.32	421.93	361.65	316.45
31	1589.11	794.55	635.64	529.70	454.03	397.28
32	1502.67	751.34	601.07	500.89	429.33	375.67
33	1107.05	553.52	442.82	369.02	316.30	276.76
34	889.28	444.64	355.71	296.43	254.08	222.32
35	1519.77	759.88	607.91	506.59	434.22	379.94
36	1971.25	985.62	788.50	657.08	563.21	492.81
37	1537.66	768.83	615.07	512.55	439.33	384.42
38	1220.76	610.38	488.31	406.92	348.79	305.19
39	1861.18	930.59	744.47	620.39	531.77	465.30
40	1095.05	547.53	438.02	365.02	312.87	273.76
41	986.51	493.26	394.60	328.84	281.86	246.63
42	1157.06	578.53	462.82	385.69	330.59	289.26

ตาราง ข.2 แสดงค่าแรงต้านเนื่องจากผิวของเสาเข็มขนาด 0.30 x 0.30 เมตร ปลายเสาเข็มอยู่ที่ความลึก 24.45 เมตร

ความลึก	1.95		3.45		4.45		6.95		7.95		9.45		10.95		12.45		13.95		15.45		16.95		18.45		19.95		22.95		23.45		24.45		$Q_s = \sum f_s \cdot A_s$ (KN)				
	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)					
1	44	88	2.3	22	44	1.80	37	73	1.20	46	93	3.00	60	100	1.20	39	79	1.80	62	100	1.80	61	100	1.80	57	100	1.80	60	100	3.6	66	100	0.60	52	100	1.20	2713.17
2	9	18	2.3	13	27	1.80	8	16	1.20	12	25	3.00	18	38	1.20	33	66	1.80	30	60	1.80	32	64	1.80	30	59	1.80	22.2	44	3	16	31	0.60	22	45	1.20	1307.11
3	32	63	2.3	18	37	1.80	30	61	1.20	35	70	3.00	51	100	1.80	56	100	1.80	53	100	1.80	50	100	1.80	51	100	1.80	51.6	100	3	16	46	0.60	45	90	1.20	2533.58
4	17	35	2.3	15	30	1.80	18	36	1.20	21	43	3.00	32	65	1.20	34	69	1.80	41	82	1.80	42	84	1.80	41	82	1.80	35.2	70	3	16	52	0.60	32	65	1.20	1886.93
5	22	45	2.3	16	32	1.80	23	46	1.20	26	52	3.00	40	80	1.20	35	70	1.80	41	82	1.80	47	94	1.80	45	90	1.80	41.8	84	3	16	55	0.60	38	75	1.20	2171.02
6	18	37	2.3	15	30	1.80	19	38	1.20	22	45	3.00	34	68	1.20	34	69	1.80	43	86	1.80	42	84	1.80	42	84	1.80	36.6	73	3	16	54	0.60	34	67	1.20	1946.24
7	37	75	2.3	20	40	1.80	34	67	1.20	40	80	3.00	56	100	1.20	38	76	1.80	55	100	1.80	62	100	1.80	57	100	1.80	56.0	100	3	16	55	0.60	49	97	1.20	2632.40
8	29	57	2.3	18	35	1.80	28	57	1.20	32	64	3.00	48	96	1.20	36	72	1.80	53	100	1.80	51	100	1.80	50	99	1.80	48.8	98	3	16	56	0.60	43	86	1.20	2455.60
9	11	22	2.3	14	27	1.80	11	22	1.20	15	30	3.00	22	43	1.20	33	67	1.80	25	50	1.80	32	65	1.80	33	67	1.80	25.7	51	3	16	36	0.60	25	50	1.20	1478.20
10	19	38	2.3	15	31	1.80	20	40	1.20	23	46	3.00	35	70	1.20	35	69	1.80	37	74	1.80	43	85	1.80	43	85	1.80	37.6	75	3	16	56	0.60	34	69	1.20	1991.26
11	19	38	2.3	15	31	1.80	19	39	1.20	23	45	3.00	35	69	1.20	35	69	1.80	36	73	1.80	43	86	1.80	43	85	1.80	37.1	74	3	16	55	0.60	34	68	1.20	1970.47
12	10	20	2.3	13	27	1.80	9	18	1.20	13	27	3.00	19	39	1.20	33	66	1.80	23	46	1.80	31	63	1.80	31	63	1.80	23.6	47	3	16	33	0.60	23	47	1.20	1375.69
13	27	54	2.3	17	35	1.80	27	54	1.20	30	61	3.00	46	92	1.20	36	72	1.80	46	92	1.80	52	100	1.80	51	100	1.80	46.9	94	3	16	59	0.60	42	83	1.20	2386.13
14	11	23	2.3	14	27	1.80	11	22	1.20	15	30	3.00	22	44	1.20	33	67	1.80	25	51	1.80	33	65	1.80	33	68	1.80	26.0	52	3	16	37	0.60	25	51	1.20	1488.07
15	14	28	2.3	14	29	1.80	14	28	1.20	18	36	3.00	27	54	1.20	34	68	1.80	30	59	1.80	37	73	1.80	39	78	1.80	30.2	60	3	16	43	0.60	29	57	1.20	1677.56
16	6	11	2.3	13	25	1.80	5	9	1.20	8	17	3.00	12	25	1.20	33	65	1.80	16	32	1.80	20	41	1.80	23	45	1.80	17.5	35	3	16	25	0.60	19	37	1.20	1027.73
17	2	4	2.3	12	25	1.80	1	1	1.20	1	2	3.00	6	12	1.20	32	65	1.80	7	14	1.80	-1	-2	1.80	2	5	1.80	11.3	23	3	16	20	0.60	15	31	1.20	491.43
18	7	15	2.3	13	26	1.80	7	13	1.20	11	21	3.00	15	31	1.20	33	66	1.80	19	39	1.80	25	51	1.80	27	54	1.80	20.0	40	3	16	28	0.60	21	41	1.20	1189.82
19	13	27	2.3	14	28	1.80	14	27	1.20	17	35	3.00	26	52	1.20	34	67	1.80	29	57	1.80	36	72	1.80	37	74	1.80	29.3	59	3	16	42	0.60	28	56	1.20	1639.23
20	16	31	2.3	15	29	1.80	16	32	1.20	20	39	3.00	30	59	1.20	34	68	1.80	32	64	1.80	39	78	1.80	40	80	1.80	32.7	65	3	16	47	0.60	31	61	1.20	1785.10
21	51	100	2.3	24	47	1.80	39	78	1.20	53	100	3.00	64	100	1.20	41	82	1.80	62	100	1.80	75	100	1.80	73	100	1.80	62.9	100	3	16	100	0.60	54	100	1.20	2779.32
22	32	63	2.3	19	37	1.80	30	61	1.20	35	70	3.00	51	100	1.20	37	74	1.80	51	100	1.80	50	100	1.80	52	100	1.80	51.6	100	3	16	93	0.60	45	91	1.20	2534.56
23	23	46	2.3	16	33	1.80	24	48	1.20	27	54	3.00	41	82	1.20	35	71	1.80	48	96	1.80	47	93	1.80	46	92	1.80	42.8	86	3	16	68	0.60	38	77	1.20	2213.54
24	22	44	2.3	16	32	1.80	23	45	1.20	26	51	3.00	39	78	1.20	35	70	1.80	46	93	1.80	45	90	1.80	45	90	1.80	41.1	82	3	16	64	0.60	37	74	1.20	2137.25
25	10	21	2.3	14	27	1.80	10	20	1.20	14	28	3.00	20	41	1.20	33	67	1.80	24	48	1.80	31	62	1.80	32	65	1.80	24.5	49	3	16	34	0.60	24	48	1.20	1421.23
26	4	8	2.3	12	25	1.80	3	6	1.20	5	11	3.00	10	19	1.20	33	65	1.80	12	24	1.80	13	26	1.80	17	33	1.80	14.7	29	3	16	22	0.60	17	34	1.20	817.42
27	2	4	2.3	12	25	1.80	1	3	1.20	1	1	3.00	6	12	1.20	32	65	1.80	7	14	1.80	8	16	1.80	11	22	1.80	11.5	23	3	16	20	0.60	15	31	1.20	514.04
28	15	30	2.3	14	29	1.80	15	30	1.20	19	38	3.00	28	56	1.20	34	68	1.80	31	62	1.80	38	76	1.80	39	78	1.80	31.5	63	3	16	45	0.60	30	59	1.20	1730.52

เสาเข็มขนาด 0.3 x 0.3 เมตร								
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 24.45 เมตร								
ค่า N' ตัวที่	\overline{N}_B	\overline{N}_O	b (m)	D _B (m)	A _t (m ²)	q _t (kN/m ²)	Q _t = q _t · A _t (kN)	Q _t = q _t · A _t (ton)
1	52	66	0.3	1	0.09	20703.15	1863.28	190.13
2	22	16	0.3	1	0.09	7149.20	643.43	65.66
3	45	46	0.3	1	0.09	18090.56	1628.15	166.14
4	32	26	0.3	1	0.09	11216.40	1009.48	103.01
5	38	33	0.3	1	0.09	13746.23	1237.16	126.24
6	34	27	0.3	1	0.09	11718.96	1054.71	107.62
7	49	55	0.3	1	0.09	19467.12	1752.04	178.78
8	43	42	0.3	1	0.09	16889.67	1520.07	155.11
9	25	18	0.3	1	0.09	8178.56	736.07	75.11
10	34	28	0.3	1	0.09	12109.48	1089.85	111.21
11	34	28	0.3	1	0.09	11928.14	1073.53	109.54
12	23	17	0.3	1	0.09	7543.11	678.88	69.27
13	42	39	0.3	1	0.09	15980.10	1438.21	146.76
14	25	18	0.3	1	0.09	8242.62	741.84	75.70
15	29	22	0.3	1	0.09	9563.87	860.75	87.83
16	19	13	0.3	1	0.09	5841.44	525.73	53.65
17	15	10	0.3	1	0.09	4733.67	426.03	43.47
18	21	14	0.3	1	0.09	6538.95	588.51	60.05
19	28	21	0.3	1	0.09	9282.86	835.46	85.25
20	31	24	0.3	1	0.09	10388.19	934.94	95.40
21	54	76	0.3	1	0.09	21609.46	1944.85	198.45
22	45	46	0.3	1	0.09	18105.22	1629.47	166.27
23	38	34	0.3	1	0.09	14151.54	1273.64	129.96
24	37	32	0.3	1	0.09	13429.27	1208.63	123.33
25	24	17	0.3	1	0.09	7818.65	703.68	71.80
26	17	11	0.3	1	0.09	5203.56	468.32	47.79
27	15	10	0.3	1	0.09	4751.20	427.61	43.63
28	30	23	0.3	1	0.09	9963.32	896.70	91.50

เสาเข็มขนาด 0.30 x 0.30				
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 24.45 เมตร				
ลำดับที่	Q_s (kN)	Q_t (kN)	$Q_u = Q_s + Q_t$ (kN)	$Q_u = Q_s + Q_t$ (ton)
1	2713.17	1863.28	4576.45	466.98
2	1307.11	643.43	1950.54	199.03
3	2533.58	1628.15	4161.73	424.67
4	1886.93	1009.48	2896.40	295.55
5	2171.02	1237.16	3408.18	347.77
6	1946.24	1054.71	3000.95	306.22
7	2622.40	1752.04	4374.44	446.37
8	2455.60	1520.07	3975.67	405.68
9	1478.20	736.07	2214.27	225.95
10	1991.26	1089.85	3081.12	314.40
11	1970.47	1073.53	3044.00	310.61
12	1375.69	678.88	2054.57	209.65
13	2386.13	1438.21	3824.34	390.24
14	1488.07	741.84	2229.91	227.54
15	1677.56	860.75	2538.31	259.01
16	1027.73	525.73	1553.46	158.52
17	491.43	426.03	917.46	93.62
18	1189.82	588.51	1778.33	181.46
19	1639.23	835.46	2474.69	252.52
20	1785.10	934.94	2720.04	277.55
21	2779.32	1944.85	4724.17	482.06
22	2534.56	1629.47	4164.03	424.90
23	2213.54	1273.64	3487.18	355.83
24	2137.25	1208.63	3345.88	341.42
25	1421.23	703.68	2124.91	216.83
26	817.42	468.32	1285.74	131.20
27	514.04	427.61	941.65	96.09
28	1730.52	896.70	2627.22	268.08

No.	Q u = Q S + Q t (ton)	Qa				
		Safety of Factor				
		2	2.5	3	3.5	4
1	466.98	233.49	186.79	155.66	133.42	116.75
2	199.03	99.52	79.61	66.34	56.87	49.76
3	424.67	212.33	169.87	141.56	121.33	106.17
4	295.55	147.78	118.22	98.52	84.44	73.89
5	347.77	173.89	139.11	115.92	99.36	86.94
6	306.22	153.11	122.49	102.07	87.49	76.55
7	446.37	223.19	178.55	148.79	127.53	111.59
8	405.68	202.84	162.27	135.23	115.91	101.42
9	225.95	112.97	90.38	75.32	64.56	56.49
10	314.40	157.20	125.76	104.80	89.83	78.60
11	310.61	155.31	124.24	103.54	88.75	77.65
12	209.65	104.83	83.86	69.88	59.90	52.41
13	390.24	195.12	156.10	130.08	111.50	97.56
14	227.54	113.77	91.02	75.85	65.01	56.89
15	259.01	129.51	103.60	86.34	74.00	64.75
16	158.52	79.26	63.41	52.84	45.29	39.63
17	93.62	46.81	37.45	31.21	26.75	23.40
18	181.46	90.73	72.58	60.49	51.85	45.37
19	252.52	126.26	101.01	84.17	72.15	63.13
20	277.55	138.78	111.02	92.52	79.30	69.39
21	482.06	241.03	192.82	160.69	137.73	120.51
22	424.90	212.45	169.96	141.63	121.40	106.23
23	355.83	177.92	142.33	118.61	101.67	88.96
24	341.42	170.71	136.57	113.81	97.55	85.35
25	216.83	108.41	86.73	72.28	61.95	54.21
26	131.20	65.60	52.48	43.73	37.49	32.80
27	96.09	48.04	38.43	32.03	27.45	24.02
28	268.08	134.04	107.23	89.36	76.60	67.02

ตาราง ๗.3 แสดงค่าแรงดันด้านเมืองจากผิวของเสาเข็มขนาด 0.40 x 0.40 เมตร ปลายเสาเข็มอยู่ที่ความลึก 24.45 เมตร

ความลึก	1.95		3.45		4.45		6.95		7.95		9.45		10.95		12.45		13.95		15.45		16.95		18.45		19.95		22.95		23.45		24.45		$Q_s = \sum f_s \cdot A_s$ (kN)																
	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)																	
1	44	88	3.12	22	44	2.40	37	73	1.60	46	93	4.00	60	100	1.60	39	79	2.40	59	100	2.40	68	100	2.40	67	100	2.40	61	100	2.40	61	100	2.40	60	100	4.8	66	100	0.80	52	100	1.60	3617.56						
2	9	18	3.12	13	27	2.40	8	16	1.60	12	25	4.00	18	35	1.60	33	66	2.40	22	43	2.40	28	57	2.40	30	64	2.40	32	64	2.40	32	64	2.40	30	59	2.40	22.2	44	4.8	16	31	0.80	22	45	1.60	1742.81			
3	32	63	3.12	18	37	2.40	30	61	1.60	35	70	4.00	51	100	1.60	37	74	2.40	51	100	2.40	56	100	2.40	56	100	2.40	52	100	2.40	51	100	2.40	51.6	100	4.8	46	93	0.80	45	90	1.60	3378.10						
4	17	35	3.12	15	30	2.40	18	36	1.60	21	43	4.00	32	65	1.60	34	69	2.40	41	82	2.40	41	82	2.40	41	83	2.40	41	83	2.40	41	82	2.40	35.2	70	4.8	26	52	0.80	32	65	1.60	2515.90						
5	22	45	3.12	16	32	2.40	23	46	1.60	26	52	4.00	40	80	1.60	35	70	2.40	41	82	2.40	47	94	2.40	47	94	2.40	46	92	2.40	46	92	2.40	45	90	2.40	41.8	84	4.8	33	65	0.80	38	75	1.60	2894.70			
6	18	37	3.12	15	30	2.40	19	38	1.60	22	45	4.00	34	68	1.60	34	69	2.40	36	72	2.40	42	85	2.40	43	86	2.40	43	86	2.40	42	84	2.40	36.6	73	4.8	27	54	0.80	34	67	1.60	2594.99						
7	37	75	3.12	20	40	2.40	34	67	1.60	40	80	4.00	56	100	1.60	38	76	2.40	55	100	2.40	62	100	2.40	61	100	2.40	56	100	2.40	54	100	2.40	56.0	100	4.8	55	100	0.80	49	97	1.60	3496.54						
8	29	57	3.12	18	35	2.40	28	57	1.60	32	64	4.00	48	95	1.60	36	73	2.40	48	96	2.40	53	100	2.40	53	100	2.40	50	99	2.40	48.8	98	4.8	42	84	0.80	43	86	1.60	3274.13									
9	11	22	3.12	14	27	2.40	11	22	1.60	15	30	4.00	22	43	1.60	33	67	2.40	25	50	2.40	32	65	2.40	34	67	2.40	35	70	2.40	33	67	2.40	25.7	51	4.8	18	36	0.80	25	50	1.60	1970.93						
10	19	38	3.12	15	31	2.40	20	40	1.60	23	46	4.00	35	70	1.60	35	69	2.40	37	74	2.40	43	87	2.40	44	88	2.40	43	85	2.40	43	85	2.40	37.6	75	4.8	28	56	0.80	34	69	1.60	2655.02						
11	19	38	3.12	15	31	2.40	19	39	1.60	23	45	4.00	35	69	1.60	35	69	2.40	36	73	2.40	43	86	2.40	43	87	2.40	42	85	2.40	42	85	2.40	37.1	74	4.8	28	55	0.80	34	68	1.60	2627.29						
12	10	20	3.12	13	27	2.40	9	18	1.60	13	27	4.00	19	39	1.60	33	66	2.40	23	46	2.40	30	60	2.40	31	63	2.40	34	67	2.40	33	67	2.40	33.6	47	4.8	17	33	0.80	23	47	1.60	1834.26						
13	27	54	3.12	17	35	2.40	27	54	1.60	30	61	4.00	46	91	1.60	36	72	2.40	46	92	2.40	52	100	2.40	51	100	2.40	48	96	2.40	49	97	2.40	46.9	94	4.8	39	78	0.80	42	83	1.60	3181.51						
14	11	23	3.12	14	27	2.40	11	22	1.60	15	30	4.00	22	44	1.60	33	67	2.40	25	51	2.40	33	65	2.40	34	68	2.40	33	66	2.40	36	72	2.40	35	70	2.40	34	67	2.40	26.0	52	4.8	18	37	0.80	25	51	1.60	1984.10
15	14	28	3.12	14	29	2.40	14	28	1.60	18	36	4.00	27	54	1.60	34	68	2.40	30	59	2.40	37	74	2.40	38	76	2.40	39	78	2.40	39	78	2.40	38	76	2.40	37	75	2.40	30.2	60	4.8	22	43	0.80	29	57	1.60	2236.75
16	6	11	3.12	13	25	2.40	5	9	1.60	8	17	4.00	12	25	1.60	33	65	2.40	16	32	2.40	20	41	2.40	23	45	2.40	25	51	2.40	26	53	2.40	22	45	2.40	17.5	35	4.8	13	25	0.80	19	37	1.60	1370.30			
17	2	4	3.12	12	25	2.40	1	3	1.60	1	2	4.00	6	12	1.60	32	65	2.40	7	14	2.40	-1	-2	2.40	2	5	2.40	7	15	2.40	10	21	2.40	11	22	2.40	10	20	2.40	11.3	23	4.8	10	20	0.80	15	31	1.60	655.24
18	7	15	3.12	13	26	2.40	7	13	1.60	11	21	4.00	15	31	1.60	33	66	2.40	19	39	2.40	25	51	2.40	27	54	2.40	26	53	2.40	29	59	2.40	30	60	2.40	27	53	2.40	20.0	40	4.8	14	28	0.80	21	41	1.60	1586.43
19	13	27	3.12	14	28	2.40	14	27	1.60	17	35	4.00	26	52	1.60	34	67	2.40	29	57	2.40	36	72	2.40	37	74	2.40	38	77	2.40	38	77	2.40	38	75	2.40	37	74	2.40	29.3	59	4.8	21	42	0.80	28	56	1.60	2185.64
20	16	31	3.12	15	29	2.40	16	32	1.60	20	39	4.00	30	59	1.60	34	68	2.40	32	64	2.40	39	78	2.40	40	80	2.40	41	81	2.40	40	80	2.40	39	79	2.40	32.7	65	4.8	24	47	0.80	31	61	1.60	2380.13			
21	51	100	3.12	24	47	2.40	39	78	1.60	53	106	4.00	64	128	1.60	41	82	2.40	62	124	2.40	75	150	2.40	73	146	2.40	66	132	2.40	65	130	2.40	62.9	125	4.8	76	152	0.80	54	108	1.60	3705.76						
22	32	63	3.12	19	37	2.40	30	61	1.60	35	70	4.00	51	102	1.60	37	74	2.40	51	102	2.40	56	112	2.40	56	112	2.40	54	108	2.40	50	100	2.40	52	104	2.40	51	102	2.40	51.6	104	4.8	46	93	0.80	45	91	1.60	3379.41
23	23	46	3.12	16	33	2.40	24	48	1.60	27	54	4.00	41	82	1.60	35	71	2.40	42	84	2.40	48	96	2.40	48	96	2.40	46	92	2.40	46	92	2.40	46	92	2.40	42.8	86	4.8	34	68	0.80	38	77	1.60	2951.39			
24	22	44	3.12	16	32	2.40	22	45	1.60	26	51	4.00	39	78	1.60	35	70	2.40	40	81	2.40	46	92	2.40	46	93	2.40	45	90	2.40	45	90	2.40	45	89	2.40	41.1	82	4.8	32	64	0.80	37	74	1.60	2849.67			
25	10	21	3.12	14	27	2.40	10	20	1.60	14	28	4.00	20	41	1.60	33	67	2.40	24	48	2.40	31	62	2.40	32	65	2.40	34	69	2.40	34	68	2.40	34	64	2.40	24.5	49	4.8	17	34	0.80	24	48	1.60	1894.97			
26	4	8	3.12	12	25	2.40	3	6	1.60	5	11	4.00	10	19	1.60	33	65	2.40	12	24	2.40	13	26	2.40	16	32	2.40	17	33	2.40	20	39	2.40	21	42	2.40	17	34	2.40	14.7	29	4.8	11	22	0.80	17	34	1.60	1089.90
27	2	4	3.12	12	25	2.40	1	3	1.60	1	3	4.00	6	12	1.60	32	65	2.40	7	14	2.40	0	0	2.40	4	7	2.40	8	16	2.40	11	22	2.40	10	21	2.40	11.5	23	4.8	10	20	0.80	15	31	1.60	685.39			
28	15	30	3.12	14	29	2.40	15	30	1.60	19	38	4.00	28	56	1.60	34	68	2.40	31	62	2.40	38	76	2.40	39	78	2.40	38	76	2.40	38	76	2.40	38	77	2.40	31.5	63	4.8	23	45	0.80	30	59	1.60	2307.37			

เสาเข็มขนาด 0.40 x 0.40 เมตร								
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 24.45 เมตร								
ค่า N' ตัวที่	\overline{N}'_B	\overline{N}'_O	b (m)	D_B (m)	A_t (m ²)	q_t (kN/m ²)	$Q_t = q_t \cdot A_t$ (kN)	$Q_t = q_t \cdot A_t$ (ton)
1	52	66	0.4	1	0.16	20703.15	3312.50	338.01
2	22	16	0.4	1	0.16	6923.31	1107.73	113.03
3	45	46	0.4	1	0.16	18090.56	2894.49	295.36
4	32	26	0.4	1	0.16	10995.56	1759.29	179.52
5	38	33	0.4	1	0.16	13581.19	2172.99	221.73
6	34	27	0.4	1	0.16	11506.03	1840.96	187.85
7	49	55	0.4	1	0.16	19467.12	3114.74	317.83
8	43	42	0.4	1	0.16	16847.74	2695.64	275.07
9	25	18	0.4	1	0.16	7944.00	1271.04	129.70
10	34	28	0.4	1	0.16	11903.79	1904.61	194.35
11	34	28	0.4	1	0.16	11718.97	1875.03	191.33
12	23	17	0.4	1	0.16	7313.10	1170.10	119.40
13	42	39	0.4	1	0.16	15896.65	2543.46	259.54
14	25	18	0.4	1	0.16	8007.75	1281.24	130.74
15	29	22	0.4	1	0.16	9328.29	1492.53	152.30
16	19	13	0.4	1	0.16	5636.23	901.80	92.02
17	15	10	0.4	1	0.16	4554.34	728.69	74.36
18	21	14	0.4	1	0.16	6321.36	1011.42	103.21
19	28	21	0.4	1	0.16	9046.49	1447.44	147.70
20	31	24	0.4	1	0.16	10157.80	1625.25	165.84
21	54	76	0.4	1	0.16	21609.46	3457.51	352.81
22	45	46	0.4	1	0.16	18105.22	2896.84	295.60
23	38	34	0.4	1	0.16	13999.08	2239.85	228.56
24	37	32	0.4	1	0.16	13255.06	2120.81	216.41
25	24	17	0.4	1	0.16	7586.35	1213.82	123.86
26	17	11	0.4	1	0.16	5012.32	801.97	81.83
27	15	10	0.4	1	0.16	4571.40	731.42	74.64
28	30	23	0.4	1	0.16	9729.71	1556.75	158.85

เสาเข็มขนาด 0.40 x 0.40				
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 24.45 เมตร				
ลำดับที่	Q_s (kN)	Q_t (kN)	$Q_u = Q_s + Q_t$ (kN)	$Q_u = Q_s + Q_t$ (ton)
1	3617.56	3312.50	6930.06	707.15
2	1742.81	1107.73	2850.54	290.87
3	3378.10	2894.49	6272.59	640.06
4	2515.90	1759.29	4275.19	436.24
5	2894.70	2172.99	5067.69	517.11
6	2594.99	1840.96	4435.95	452.65
7	3496.54	3114.74	6611.28	674.62
8	3274.13	2695.64	5969.77	609.16
9	1970.93	1271.04	3241.97	330.81
10	2655.02	1904.61	4559.62	465.27
11	2627.29	1875.03	4502.33	459.42
12	1834.26	1170.10	3004.36	306.57
13	3181.51	2543.46	5724.97	584.18
14	1984.10	1281.24	3265.34	333.20
15	2236.75	1492.53	3729.27	380.54
16	1370.30	901.80	2272.10	231.85
17	655.24	728.69	1383.93	141.22
18	1586.43	1011.42	2597.85	265.09
19	2185.64	1447.44	3633.08	370.72
20	2380.13	1625.25	4005.38	408.71
21	3705.76	3457.51	7163.27	730.95
22	3379.41	2896.84	6276.25	640.43
23	2951.39	2239.85	5191.24	529.72
24	2849.67	2120.81	4970.48	507.19
25	1894.97	1213.82	3108.79	317.22
26	1089.90	801.97	1891.87	193.05
27	685.39	731.42	1416.81	144.57
28	2307.37	1556.75	3864.12	394.30

No.	Q u = Q S + Q t (ton)	Qa				
		Safety of Factor				
		2	2.5	3	3.5	4
1	707.15	353.57	282.86	235.72	202.04	176.79
2	290.87	145.44	116.35	96.96	83.11	72.72
3	640.06	320.03	256.02	213.35	182.87	160.02
4	436.24	218.12	174.50	145.41	124.64	109.06
5	517.11	258.56	206.84	172.37	147.75	129.28
6	452.65	226.32	181.06	150.88	129.33	113.16
7	674.62	337.31	269.85	224.87	192.75	168.66
8	609.16	304.58	243.66	203.05	174.05	152.29
9	330.81	165.41	132.33	110.27	94.52	82.70
10	465.27	232.63	186.11	155.09	132.93	116.32
11	459.42	229.71	183.77	153.14	131.26	114.86
12	306.57	153.28	122.63	102.19	87.59	76.64
13	584.18	292.09	233.67	194.73	166.91	146.05
14	333.20	166.60	133.28	111.07	95.20	83.30
15	380.54	190.27	152.22	126.85	108.73	95.13
16	231.85	115.92	92.74	77.28	66.24	57.96
17	141.22	70.61	56.49	47.07	40.35	35.30
18	265.09	132.54	106.03	88.36	75.74	66.27
19	370.72	185.36	148.29	123.57	105.92	92.68
20	408.71	204.36	163.48	136.24	116.77	102.18
21	730.95	365.47	292.38	243.65	208.84	182.74
22	640.43	320.22	256.17	213.48	182.98	160.11
23	529.72	264.86	211.89	176.57	151.35	132.43
24	507.19	253.60	202.88	169.06	144.91	126.80
25	317.22	158.61	126.89	105.74	90.64	79.31
26	193.05	96.52	77.22	64.35	55.16	48.26
27	144.57	72.29	57.83	48.19	41.31	36.14
28	394.30	197.15	157.72	131.43	112.66	98.57

ตาราง ข.4 แสดงค่าแรงต้านเนื่องจากผิวของเสาเข็มขนาด 0.20 x 0.20 เมตร ปลายเสาเข็มอยู่ที่ความลึก 22.95 เมตร

ความลึก	1.95		3.45		4.45		6.95		7.95		9.45		10.95		12.45		13.95		15.45		16.95		18.45		19.95		22.95		Q _s = ∑ f _s · A _s (KN)	Q _s = ∑ f _s · A _s (ton)					
	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)							
1	44	88	1.6	22	44	1.20	37	73	0.80	46	93	2.00	60	100	0.80	39	79	1.20	59	100	1.20	62	100	1.20	61	100	1.20	57	100	1.20	60.0	100	2.4	1688.78	172.32
2	9	18	1.6	13	27	1.20	8	16	0.80	12	25	2.00	18	35	0.80	33	66	1.20	22	43	1.20	28	57	1.20	32	64	1.20	30	59	1.20	22.2	44	2.4	823.09	83.99
3	32	63	1.6	18	37	1.20	30	61	0.80	35	70	2.00	51	100	0.80	37	74	1.20	51	100	1.20	56	100	1.20	52	100	1.20	51	100	1.20	51.6	100	2.4	1579.65	161.19
4	17	35	1.6	15	30	1.20	18	36	0.80	21	43	2.00	32	65	0.80	34	69	1.20	34	69	1.20	41	82	1.20	41	83	1.20	41	82	1.20	35.2	70	2.4	1185.35	120.95
5	22	45	1.6	16	32	1.20	23	46	0.80	26	52	2.00	40	80	0.80	35	70	1.20	41	82	1.20	47	94	1.20	46	92	1.20	45	91	1.20	45.8	84	2.4	1360.91	138.87
6	18	37	1.6	15	30	1.20	19	38	0.80	22	45	2.00	34	68	0.80	34	69	1.20	36	72	1.20	42	85	1.20	42	84	1.20	42	84	1.20	36.6	73	2.4	1222.07	124.70
7	37	75	1.6	20	40	1.20	34	67	0.80	40	80	2.00	56	100	0.80	38	76	1.20	55	100	1.20	62	100	1.20	56	100	1.20	54	100	1.20	56.0	100	2.4	1630.40	166.37
8	29	57	1.6	18	35	1.20	28	57	0.80	32	64	2.00	48	95	0.80	36	73	1.20	48	96	1.20	53	100	1.20	51	100	1.20	49	98	1.20	48.8	98	2.4	1534.72	156.60
9	11	22	1.6	14	27	1.20	11	22	0.80	15	30	2.00	22	43	0.80	33	67	1.20	25	50	1.20	32	65	1.20	34	67	1.20	35	70	1.20	25.7	51	2.4	930.77	94.98
10	19	38	1.6	15	31	1.20	20	40	0.80	23	46	2.00	35	70	0.80	35	69	1.20	37	74	1.20	43	87	1.20	43	86	1.20	43	86	1.20	37.6	75	2.4	1249.92	127.54
11	19	38	1.6	15	31	1.20	19	39	0.80	23	45	2.00	35	69	0.80	35	69	1.20	36	73	1.20	43	86	1.20	43	87	1.20	42	85	1.20	37.1	74	2.4	1237.06	126.23
12	10	20	1.6	13	27	1.20	9	18	0.80	13	27	2.00	19	39	0.80	33	66	1.20	23	46	1.20	30	60	1.20	31	63	1.20	31	62	1.20	23.6	47	2.4	866.35	88.40
13	27	54	1.6	17	35	1.20	27	54	0.80	30	61	2.00	46	91	0.80	36	72	1.20	46	92	1.20	52	100	1.20	51	100	1.20	49	96	1.20	46.9	94	2.4	1492.87	152.33
14	11	23	1.6	14	27	1.20	11	22	0.80	15	30	2.00	22	44	0.80	33	67	1.20	25	51	1.20	33	65	1.20	34	68	1.20	35	70	1.20	26.0	52	2.4	936.96	95.61
15	14	28	1.6	14	29	1.20	14	28	0.80	18	36	2.00	27	54	0.80	34	68	1.20	30	59	1.20	37	74	1.20	38	76	1.20	37	75	1.20	30.2	60	2.4	1055.34	107.69
16	6	11	1.6	13	25	1.20	5	9	0.80	8	17	2.00	12	25	0.80	33	65	1.20	16	32	1.20	20	41	1.20	23	45	1.20	22	45	1.20	17.5	35	2.4	645.18	65.83
17	2	4	1.6	12	25	1.20	1	3	0.80	1	2	2.00	6	12	0.80	32	65	1.20	7	14	1.20	1	2	1.20	2	5	1.20	11	22	1.20	10.3	23	2.4	294.91	30.09
18	7	15	1.6	13	26	1.20	7	13	0.80	11	21	2.00	15	31	0.80	33	66	1.20	19	39	1.20	25	51	1.20	27	54	1.20	29	59	1.20	20.0	40	2.4	748.76	76.40
19	13	27	1.6	14	28	1.20	14	27	0.80	17	35	2.00	26	52	0.80	34	67	1.20	29	57	1.20	36	72	1.20	37	74	1.20	38	75	1.20	29.3	59	2.4	1031.45	105.25
20	16	31	1.6	15	29	1.20	16	32	0.80	20	39	2.00	30	59	0.80	34	68	1.20	32	64	1.20	39	78	1.20	40	80	1.20	40	80	1.20	32.7	65	2.4	1122.21	114.51
21	51	100	1.6	24	47	1.20	39	78	0.80	53	100	2.00	64	100	0.80	41	82	1.20	62	100	1.20	75	100	1.20	73	100	1.20	65	100	1.20	62.9	100	2.4	1732.88	176.82
22	32	63	1.6	19	37	1.20	30	61	0.80	35	70	2.00	51	100	0.80	37	74	1.20	51	100	1.20	56	100	1.20	56	100	1.20	52	100	1.20	51.6	100	2.4	1580.18	161.24
23	23	46	1.6	16	32	1.20	24	48	0.80	27	54	2.00	41	82	0.80	35	71	1.20	42	84	1.20	48	96	1.20	48	96	1.20	46	92	1.20	42.8	86	2.4	1387.13	141.54
24	22	44	1.6	16	32	1.20	22	45	0.80	26	51	2.00	39	78	0.80	35	70	1.20	40	81	1.20	46	92	1.20	46	93	1.20	45	90	1.20	41.1	82	2.4	1340.08	136.74
25	10	21	1.6	14	27	1.20	10	20	0.80	14	28	2.00	20	41	0.80	33	67	1.20	24	48	1.20	31	62	1.20	32	65	1.20	34	69	1.20	24.5	49	2.4	895.00	91.33
26	4	8	1.6	12	25	1.20	3	6	0.80	5	11	2.00	10	19	0.80	33	65	1.20	12	24	1.20	13	26	1.20	16	32	1.20	17	33	1.20	14.7	29	2.4	509.14	51.95
27	2	4	1.6	12	25	1.20	1	3	0.80	1	3	2.00	6	12	0.80	32	65	1.20	7	14	1.20	7	14	1.20	7	14	1.20	8	16	1.20	11.5	23	2.4	309.87	31.62
28	15	30	1.6	14	29	1.20	15	30	0.80	19	38	2.00	28	56	0.80	34	68	1.20	31	62	1.20	38	76	1.20	39	78	1.20	40	80	1.20	31.5	63	2.4	1088.30	111.05

เสาเข็มขนาด 0.20 x 0.20 เมตร

เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 22.95 เมตร

เสาเข็มขนาด 0.20 x 0.20 เมตร								
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 22.95 เมตร								
ค่า N' ตัวที่	\bar{N}_B	\bar{N}_O	b (m)	D _B (m)	A _t (m ²)	q _t (kN/m ²)	Q _t = q _t · A _t (kN)	Q _t = q _t · A _t (ton)
1	60.0	57	0.2	3	0.04	23985.49	959.42	97.90
2	22.2	30	0.2	3	0.04	7422.46	296.90	30.30
3	51.6	51	0.2	3	0.04	20626.79	825.07	84.19
4	35.2	41	0.2	3	0.04	12892.62	515.70	52.62
5	41.8	45	0.2	3	0.04	16060.77	642.43	65.55
6	36.6	42	0.2	3	0.04	13560.60	542.42	55.35
7	56.0	54	0.2	3	0.04	22396.47	895.86	91.41
8	48.8	50	0.2	3	0.04	19342.87	773.71	78.95
9	25.7	33	0.2	3	0.04	8750.99	350.04	35.72
10	37.6	43	0.2	3	0.04	14066.34	562.65	57.41
11	37.1	42	0.2	3	0.04	13832.94	553.32	56.46
12	23.6	31	0.2	3	0.04	7917.90	316.72	32.32
13	46.9	48	0.2	3	0.04	18464.97	738.60	75.37
14	26.0	34	0.2	3	0.04	8836.62	353.46	36.07
15	30.2	37	0.2	3	0.04	10636.17	425.45	43.41
16	17.5	22	0.2	3	0.04	6021.52	240.86	24.58
17	11.3	10	0.2	3	0.04	4517.86	180.71	18.44
18	20.0	27	0.2	3	0.04	6706.46	268.26	27.37
19	29.3	37	0.2	3	0.04	10250.35	410.01	41.84
20	32.7	39	0.2	3	0.04	11767.17	470.69	48.03
21	62.9	59	0.2	3	0.04	25150.64	1006.03	102.66
22	51.6	51	0.2	3	0.04	20645.64	825.83	84.27
23	42.8	46	0.2	3	0.04	16523.81	660.95	67.44
24	41.1	45	0.2	3	0.04	15690.19	627.61	64.04
25	24.5	32	0.2	3	0.04	8274.98	331.00	33.78
26	14.7	17	0.2	3	0.04	5476.06	219.04	22.35
27	11.5	10	0.2	3	0.04	4596.55	183.86	18.76
28	31.5	38	0.2	3	0.04	11184.85	447.39	45.65

เสาเข็มขนาด 0.40 x 0.40				
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 22.95 เมตร				
ลำดับที่	Q_s (kN)	Q_t (kN)	$Q_u = Q_s + Q_t$ (kN)	$Q_u = Q_s + Q_t$ (ton)
1	1688.78	959.42	2648.20	270.22
2	823.09	296.90	1119.99	114.28
3	1579.65	825.07	2404.72	245.38
4	1185.35	515.70	1701.06	173.58
5	1360.91	642.43	2003.34	204.42
6	1222.07	542.42	1764.49	180.05
7	1630.40	895.86	2526.26	257.78
8	1534.72	773.71	2308.44	235.55
9	930.77	350.04	1280.81	130.69
10	1249.92	562.65	1812.57	184.96
11	1237.06	553.32	1790.38	182.69
12	866.35	316.72	1183.07	120.72
13	1492.87	738.60	2231.47	227.70
14	936.96	353.46	1290.42	131.68
15	1055.34	425.45	1480.78	151.10
16	645.18	240.86	886.04	90.41
17	294.91	180.71	475.63	48.53
18	748.76	268.26	1017.02	103.78
19	1031.45	410.01	1441.46	147.09
20	1122.21	470.69	1592.89	162.54
21	1732.88	1006.03	2738.90	279.48
22	1580.18	825.83	2406.00	245.51
23	1387.13	660.95	2048.08	208.99
24	1340.08	627.61	1967.68	200.78
25	895.00	331.00	1226.00	125.10
26	509.14	219.04	728.18	74.30
27	309.87	183.86	493.73	50.38
28	1088.30	447.39	1535.69	156.70

No.	$Q_u = Q_s + Q_t$ (ton)	Qa				
		Safety of Factor				
		2	2.5	3	3.5	4
1	270.22	135.11	108.09	90.07	77.21	67.56
2	114.28	57.14	45.71	38.09	32.65	28.57
3	245.38	122.69	98.15	81.79	70.11	61.34
4	173.58	86.79	69.43	57.86	49.59	43.39
5	204.42	102.21	81.77	68.14	58.41	51.11
6	180.05	90.03	72.02	60.02	51.44	45.01
7	257.78	128.89	103.11	85.93	73.65	64.45
8	235.55	117.78	94.22	78.52	67.30	58.89
9	130.69	65.35	52.28	43.56	37.34	32.67
10	184.96	92.48	73.98	61.65	52.84	46.24
11	182.69	91.35	73.08	60.90	52.20	45.67
12	120.72	60.36	48.29	40.24	34.49	30.18
13	227.70	113.85	91.08	75.90	65.06	56.93
14	131.68	65.84	52.67	43.89	37.62	32.92
15	151.10	75.55	60.44	50.37	43.17	37.78
16	90.41	45.21	36.16	30.14	25.83	22.60
17	48.53	24.27	19.41	16.18	13.87	12.13
18	103.78	51.89	41.51	34.59	29.65	25.94
19	147.09	73.54	58.84	49.03	42.03	36.77
20	162.54	81.27	65.02	54.18	46.44	40.64
21	279.48	139.74	111.79	93.16	79.85	69.87
22	245.51	122.76	98.20	81.84	70.15	61.38
23	208.99	104.49	83.60	69.66	59.71	52.25
24	200.78	100.39	80.31	66.93	57.37	50.20
25	125.10	62.55	50.04	41.70	35.74	31.28
26	74.30	37.15	29.72	24.77	21.23	18.58
27	50.38	25.19	20.15	16.79	14.39	12.60
28	156.70	78.35	62.68	52.23	44.77	39.18

ตาราง ข.5 แสดงค่าแรงต้านเนื่องจากผิวของเสาเข็มขนาด 0.30 x 0.30 เมตร ปลายเสาเข็มอยู่ที่ความลึก 22.95 เมตร

ความลึก	1.95		3.45		4.45		6.95		7.95		9.45		10.95		12.45		13.95		15.45		16.95		18.45		19.95		22.95		Q _s = ∑ f _s · A _s (KN)	Q _s = ∑ f _s · A _s (ton)														
	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)	f _s (kPa)	A _s (m ²)																
1	44	88	2.3	22	44	1.80	37	73	1.20	46	93	3.00	60	100	1.20	39	79	1.80	59	100	1.80	62	100	1.80	53	100	1.80	61	100	1.80	57	100	1.80	60.0	100	3.6	2533.17	258.49						
2	9	18	2.3	13	27	1.80	8	16	1.20	12	25	3.00	18	35	1.20	33	66	1.80	22	43	1.80	29	58	1.80	32	64	1.80	32	64	1.80	30	59	1.80	22.2	44	3.6	1234.64	125.98						
3	32	63	2.3	18	37	1.80	30	61	1.20	35	70	3.00	51	100	1.20	37	74	1.80	51	100	1.80	53	100	1.80	50	100	1.80	52	100	1.80	51	100	1.80	51.6	100	3.6	2369.47	241.78						
4	17	35	2.3	15	30	1.80	18	36	1.20	21	43	3.00	32	65	1.20	34	69	1.80	41	82	1.80	42	84	1.80	42	84	1.80	41	83	1.80	41	82	1.80	35.2	70	3.6	1778.03	181.43						
5	22	45	2.3	16	32	1.80	23	46	1.20	26	52	3.00	40	80	1.20	35	70	1.80	41	82	1.80	47	94	1.80	46	92	1.80	46	92	1.80	45	91	1.80	41.8	84	3.6	2041.36	208.30						
6	18	37	2.3	15	30	1.80	19	38	1.20	22	45	3.00	34	68	1.20	34	69	1.80	43	86	1.80	42	84	1.80	43	86	1.80	42	84	1.80	42	84	1.80	36.6	73	3.6	1833.11	187.05						
7	37	75	2.3	20	40	1.80	34	67	1.20	40	80	3.00	56	100	1.20	38	76	1.80	55	100	1.80	57	100	1.80	52	100	1.80	54	100	1.80	50	99	1.80	48.8	98	3.6	2445.60	249.55						
8	29	57	2.3	18	35	1.80	28	57	1.20	32	64	3.00	48	95	1.20	36	73	1.80	48	96	1.80	53	100	1.80	49	98	1.80	50	100	1.80	50	99	1.80	48.8	98	3.6	2302.08	234.91						
9	11	22	2.3	14	27	1.80	11	22	1.20	15	30	3.00	22	43	1.20	33	67	1.80	25	50	1.80	32	65	1.80	36	71	1.80	35	70	1.80	33	67	1.80	25.7	51	3.6	1396.15	142.46						
10	19	38	2.3	15	31	1.80	20	40	1.20	23	46	3.00	35	70	1.20	35	69	1.80	37	74	1.80	43	87	1.80	44	87	1.80	43	86	1.80	43	85	1.80	37.6	75	3.6	1874.87	191.31						
11	19	38	2.3	15	31	1.80	19	39	1.20	23	45	3.00	35	69	1.20	35	69	1.80	36	73	1.80	43	86	1.80	43	87	1.80	42	85	1.80	42	85	1.80	37.1	74	3.6	1855.59	189.35						
12	10	20	2.3	13	27	1.80	9	18	1.20	13	27	3.00	19	39	1.20	33	66	1.80	23	46	1.80	30	60	1.80	31	61	1.80	34	67	1.80	33	67	1.80	32.6	47	3.6	1299.53	132.80						
13	27	54	2.3	17	35	1.80	27	54	1.20	30	61	3.00	46	91	1.20	36	72	1.80	46	92	1.80	52	100	1.80	50	99	1.80	48	96	1.80	49	97	1.80	46.9	94	3.6	2239.31	228.50						
14	11	23	2.3	14	27	1.80	11	22	1.20	15	30	3.00	22	44	1.20	33	67	1.80	25	51	1.80	33	65	1.80	34	68	1.80	33	67	1.80	35	70	1.80	34	67	1.80	26.0	52	3.6	1405.44	143.41			
15	14	28	2.3	14	29	1.80	14	28	1.20	18	36	3.00	27	54	1.20	34	68	1.80	30	59	1.80	37	74	1.80	38	76	1.80	38	76	1.80	37	75	1.80	30.2	60	3.6	1583.00	161.53						
16	6	11	2.3	13	25	1.80	5	9	1.20	8	17	3.00	12	25	1.20	33	65	1.80	16	32	1.80	20	41	1.80	23	45	1.80	25	51	1.80	26	53	1.80	22	45	1.80	17.5	35	3.6	967.76	98.75			
17	2	4	2.3	12	25	1.80	1	3	1.20	1	2	3.00	6	12	1.20	32	65	1.80	7	14	1.80	-1	-2	1.80	2	5	1.80	7	15	1.80	10	22	1.80	10	20	1.80	11.3	23	3.6	442.37	45.14			
18	7	15	2.3	13	26	1.80	7	13	1.20	11	21	3.00	15	31	1.20	33	66	1.80	19	39	1.80	25	51	1.80	27	54	1.80	26	53	1.80	29	59	1.80	30	60	1.80	27	53	1.80	20.0	40	3.6	1123.14	114.61
19	13	27	2.3	14	28	1.80	14	27	1.20	17	35	3.00	26	52	1.20	34	67	1.80	29	57	1.80	36	72	1.80	37	74	1.80	36	72	1.80	38	77	1.80	38	75	1.80	29.3	59	3.6	1547.18	157.88			
20	16	31	2.3	15	29	1.80	16	32	1.20	20	39	3.00	30	59	1.20	34	68	1.80	32	64	1.80	39	78	1.80	40	80	1.80	40	80	1.80	39	79	1.80	32.7	65	3.6	1683.31	171.77						
21	51	100	2.3	24	47	1.80	39	78	1.20	53	100	3.00	64	100	1.20	41	82	1.80	62	100	1.80	75	100	1.80	73	100	1.80	73	100	1.80	73	100	1.80	65	100	1.80	62.9	100	3.6	2599.32	265.24			
22	32	63	2.3	19	37	1.80	30	61	1.20	35	70	3.00	51	100	1.20	37	74	1.80	51	100	1.80	56	100	1.80	54	100	1.80	54	100	1.80	52	100	1.80	51	100	1.80	51.6	100	3.6	2370.27	241.86			
23	23	46	2.3	16	33	1.80	24	48	1.20	27	54	3.00	41	82	1.20	35	71	1.80	42	84	1.80	48	96	1.80	47	93	1.80	46	92	1.80	46	92	1.80	46	92	1.80	42.8	86	3.6	2080.69	212.32			
24	22	44	2.3	16	32	1.80	22	45	1.20	26	51	3.00	39	78	1.20	35	70	1.80	40	81	1.80	46	92	1.80	45	90	1.80	45	90	1.80	45	90	1.80	45	89	1.80	41.1	82	3.6	2010.12	205.11			
25	10	21	2.3	14	27	1.80	10	20	1.20	14	28	3.00	20	41	1.20	33	67	1.80	24	48	1.80	31	62	1.80	32	63	1.80	34	69	1.80	34	68	1.80	32	64	1.80	24.5	49	3.6	1342.50	136.99			
26	4	8	2.3	12	25	1.80	3	6	1.20	5	11	3.00	10	19	1.20	33	65	1.80	12	24	1.80	13	26	1.80	16	32	1.80	17	33	1.80	20	39	1.80	21	42	1.80	17	34	1.80	14.7	29	3.6	763.71	77.93
27	2	4	2.3	12	25	1.80	1	3	1.20	1	3	3.00	6	12	1.20	32	65	1.80	7	14	1.80	0	0	1.80	4	7	1.80	8	16	1.80	11	22	1.80	12	23	1.80	10	21	1.80	11.5	23	3.6	464.81	47.43
28	15	30	2.3	14	29	1.80	15	30	1.20	19	38	3.00	28	56	1.20	34	68	1.80	31	62	1.80	38	76	1.80	39	78	1.80	40	80	1.80	39	78	1.80	38	77	1.80	31.5	63	3.6	1632.45	166.58			

เสาเข็มขนาด 0.30 x 0.30 เมตร

เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 22.95 เมตร

เสาเข็มขนาด 0.30 x 0.30 เมตร								
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 22.95 เมตร								
ค่า N' ตัวที่	\overline{N}_B	\overline{N}_O	b (m)	D _B (m)	A _t (m ²)	q _t (kN/m ²)	Q _t = q _t · A _t (kN)	Q _t = q _t · A _t (ton)
1	60.0	57	0.3	3	0.09	23985.49	2158.69	220.27
2	22.2	30	0.3	3	0.09	8883.95	799.56	81.59
3	51.6	51	0.3	3	0.09	20626.79	1856.41	189.43
4	35.2	41	0.3	3	0.09	14060.72	1265.47	129.13
5	41.8	45	0.3	3	0.09	16739.27	1506.53	153.73
6	36.6	42	0.3	3	0.09	14625.47	1316.29	134.32
7	56.0	54	0.3	3	0.09	22396.47	2015.68	205.68
8	48.8	50	0.3	3	0.09	19514.16	1756.27	179.21
9	25.7	33	0.3	3	0.09	10296.42	926.68	94.56
10	37.6	43	0.3	3	0.09	15053.06	1354.78	138.24
11	37.1	42	0.3	3	0.09	14855.73	1337.02	136.43
12	23.6	31	0.3	3	0.09	9432.63	848.94	86.63
13	46.9	48	0.3	3	0.09	18771.93	1689.47	172.40
14	26.0	34	0.3	3	0.09	10382.04	934.38	95.35
15	30.2	37	0.3	3	0.09	12087.89	1087.91	111.01
16	17.5	22	0.3	3	0.09	6990.08	629.11	64.19
17	11.3	10	0.3	3	0.09	4517.86	406.61	41.49
18	20.0	27	0.3	3	0.09	8013.98	721.26	73.60
19	29.3	37	0.3	3	0.09	11734.65	1056.12	107.77
20	32.7	39	0.3	3	0.09	13094.26	1178.48	120.25
21	62.9	59	0.3	3	0.09	25150.64	2263.56	230.98
22	51.6	51	0.3	3	0.09	20645.64	1858.11	189.60
23	42.8	46	0.3	3	0.09	17130.76	1541.77	157.32
24	41.1	45	0.3	3	0.09	16425.96	1478.34	150.85
25	24.5	32	0.3	3	0.09	9810.42	882.94	90.10
26	14.7	17	0.3	3	0.09	5898.51	530.87	54.17
27	11.5	10	0.3	3	0.09	4596.55	413.69	42.21
28	31.5	38	0.3	3	0.09	12581.10	1132.30	115.54

เสาเข็มขนาด 0.40 x 0.40				
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 22.95 เมตร				
ลำดับที่	Q_s (kN)	Q_t (kN)	$Q_u = Q_s + Q_t$ (kN)	$Q_u = Q_s + Q_t$ (ton)
1	2533.17	2158.69	4691.86	478.76
2	1234.64	799.56	2034.19	207.57
3	2369.47	1856.41	4225.88	431.21
4	1778.03	1265.47	3043.50	310.56
5	2041.36	1506.53	3547.90	362.03
6	1833.11	1316.29	3149.40	321.37
7	2445.60	2015.68	4461.28	455.23
8	2302.08	1756.27	4058.36	414.12
9	1396.15	926.68	2322.83	237.02
10	1874.87	1354.78	3229.65	329.56
11	1855.59	1337.02	3192.60	325.78
12	1299.53	848.94	2148.46	219.23
13	2239.31	1689.47	3928.78	400.90
14	1405.44	934.38	2339.82	238.76
15	1583.00	1087.91	2670.91	272.54
16	967.76	629.11	1596.87	162.95
17	442.37	406.61	848.98	86.63
18	1123.14	721.26	1844.40	188.20
19	1547.18	1056.12	2603.29	265.64
20	1683.31	1178.48	2861.80	292.02
21	2599.32	2263.56	4862.87	496.21
22	2370.27	1858.11	4228.37	431.47
23	2080.69	1541.77	3622.46	369.64
24	2010.12	1478.34	3488.45	355.96
25	1342.50	882.94	2225.44	227.09
26	763.71	530.87	1294.57	132.10
27	464.81	413.69	878.50	89.64
28	1632.45	1132.30	2764.74	282.12

No.	$Q_u = Q_s + Q_t$ (ton)	Qa				
		Safety of Factor				
		2	2.5	3	3.5	4
1	478.76	239.38	191.50	159.59	136.79	119.69
2	207.57	103.79	83.03	69.19	59.31	51.89
3	431.21	215.61	172.48	143.74	123.20	107.80
4	310.56	155.28	124.22	103.52	88.73	77.64
5	362.03	181.02	144.81	120.68	103.44	90.51
6	321.37	160.68	128.55	107.12	91.82	80.34
7	455.23	227.62	182.09	151.74	130.07	113.81
8	414.12	207.06	165.65	138.04	118.32	103.53
9	237.02	118.51	94.81	79.01	67.72	59.26
10	329.56	164.78	131.82	109.85	94.16	82.39
11	325.78	162.89	130.31	108.59	93.08	81.44
12	219.23	109.62	87.69	73.08	62.64	54.81
13	400.90	200.45	160.36	133.63	114.54	100.22
14	238.76	119.38	95.50	79.59	68.22	59.69
15	272.54	136.27	109.02	90.85	77.87	68.14
16	162.95	81.47	65.18	54.32	46.56	40.74
17	86.63	43.32	34.65	28.88	24.75	21.66
18	188.20	94.10	75.28	62.73	53.77	47.05
19	265.64	132.82	106.26	88.55	75.90	66.41
20	292.02	146.01	116.81	97.34	83.43	73.00
21	496.21	248.11	198.48	165.40	141.77	124.05
22	431.47	215.73	172.59	143.82	123.28	107.87
23	369.64	184.82	147.86	123.21	105.61	92.41
24	355.96	177.98	142.39	118.65	101.70	88.99
25	227.09	113.54	90.83	75.70	64.88	56.77
26	132.10	66.05	52.84	44.03	37.74	33.02
27	89.64	44.82	35.86	29.88	25.61	22.41
28	282.12	141.06	112.85	94.04	80.60	70.53

ตาราง ข.6 แสดงค่าแรงต้านเบื้องต้นจากผิวของเสาเข็มขนาด 0.40 x 0.40 เมตร ปลายเสาเข็มอยู่ที่ความลึก 22.95 เมตร

ความลึก	1.95		3.45		4.45		6.95		7.95		9.45		10.95		12.45		13.95		15.45		16.95		18.45		19.95		22.95		$Q_s = \sum f_s \cdot A_s$ (KN)	$Q_s = \sum f_s \cdot A_s$ (ton)								
	f_s (kPa)	A_s (m ²)	f_s (kPa)	A_s (m ²)	f_s (kPa)	A_s (m ²)	f_s (kPa)	A_s (m ²)	f_s (kPa)	A_s (m ²)	f_s (kPa)	A_s (m ²)	f_s (kPa)	A_s (m ²)	f_s (kPa)	A_s (m ²)	f_s (kPa)	A_s (m ²)	f_s (kPa)	A_s (m ²)	f_s (kPa)	A_s (m ²)	f_s (kPa)	A_s (m ²)	f_s (kPa)	A_s (m ²)	f_s (kPa)	A_s (m ²)										
1	44	88	3.1	22	44	2.40	37	73	1.60	46	93	4.00	60	100	1.60	39	79	2.40	59	100	2.40	53	100	2.40	61	100	2.40	57	100	2.40	60.0	100	4.8	3377.56	344.65			
2	9	18	3.1	13	27	2.40	8	16	1.60	12	25	4.00	18	35	1.60	33	66	2.40	22	43	2.40	29	58	2.40	32	64	2.40	30	59	2.40	22.2	44	4.8	1646.18	167.98			
3	32	63	3.1	18	37	2.40	30	61	1.60	35	70	4.00	51	100	1.60	37	74	2.40	51	100	2.40	53	100	2.40	50	100	2.40	52	100	2.40	51.6	100	4.8	3159.29	322.38			
4	17	35	3.1	15	30	2.40	18	36	1.60	21	43	4.00	32	65	1.60	34	69	2.40	41	82	2.40	41	81	2.40	42	84	2.40	41	82	2.40	35.2	70	4.8	2370.71	241.91			
5	22	45	3.1	16	32	2.40	23	46	1.60	26	52	4.00	40	80	1.60	35	70	2.40	41	82	2.40	46	92	2.40	46	92	2.40	45	91	2.40	41.8	84	4.8	2721.82	277.74			
6	18	37	3.1	15	30	2.40	19	38	1.60	22	45	4.00	34	68	1.60	34	69	2.40	36	72	2.40	42	84	2.40	42	84	2.40	42	84	2.40	36.6	73	4.8	2444.14	249.40			
7	37	75	3.1	20	40	2.40	34	67	1.60	40	80	4.00	56	100	1.60	38	76	2.40	55	100	2.40	62	100	2.40	61	100	2.40	56	100	2.40	56.0	100	4.8	3260.80	332.73			
8	29	57	3.1	18	35	2.40	28	57	1.60	32	64	4.00	48	95	1.60	36	73	2.40	48	96	2.40	53	100	2.40	53	100	2.40	49	98	2.40	50	100	2.40	48.8	98	4.8	3069.44	313.21
9	11	22	3.1	14	27	2.40	11	22	1.60	15	30	4.00	22	43	1.60	33	67	2.40	25	50	2.40	32	65	2.40	34	67	2.40	33	67	2.40	25.7	51	4.8	1861.53	189.95			
10	19	38	3.1	15	31	2.40	20	40	1.60	23	46	4.00	35	70	1.60	35	69	2.40	37	74	2.40	43	88	2.40	44	88	2.40	43	86	2.40	37.6	75	4.8	2499.83	255.08			
11	19	38	3.1	15	31	2.40	19	39	1.60	23	45	4.00	35	69	1.60	35	69	2.40	36	73	2.40	43	87	2.40	43	87	2.40	42	85	2.40	37.1	74	4.8	2474.11	252.46			
12	10	20	3.1	13	27	2.40	9	18	1.60	13	27	4.00	19	39	1.60	33	66	2.40	23	46	2.40	30	60	2.40	31	63	2.40	33	67	2.40	23.6	47	4.8	1732.70	176.81			
13	27	54	3.1	17	35	2.40	27	54	1.60	30	61	4.00	46	91	1.60	36	72	2.40	46	92	2.40	52	100	2.40	51	100	2.40	48	96	2.40	46.9	94	4.8	2985.74	304.67			
14	11	23	3.1	14	27	2.40	11	22	1.60	15	30	4.00	22	44	1.60	33	67	2.40	25	51	2.40	33	66	2.40	33	66	2.40	35	70	2.40	26.0	52	4.8	1873.91	191.22			
15	14	28	3.1	14	29	2.40	14	28	1.60	18	36	4.00	27	54	1.60	34	68	2.40	30	59	2.40	37	73	2.40	39	78	2.40	38	76	2.40	30.2	60	4.8	2110.67	215.37			
16	6	11	3.1	13	25	2.40	5	9	1.60	8	17	4.00	12	25	1.60	33	65	2.40	16	32	2.40	20	41	2.40	23	45	2.40	22	45	2.40	17.5	35	4.8	1290.35	131.67			
17	2	4	3.1	12	25	2.40	1	3	1.60	1	2	4.00	6	12	1.60	32	65	2.40	7	14	2.40	-1	-2	2.40	2	5	2.40	7	15	2.40	11.3	23	4.8	589.83	60.19			
18	7	15	3.1	13	26	2.40	7	13	1.60	11	21	4.00	15	31	1.60	33	66	2.40	19	39	2.40	25	51	2.40	27	54	2.40	26	53	2.40	20.0	40	4.8	1497.52	152.81			
19	13	27	3.1	14	28	2.40	14	27	1.60	17	35	4.00	26	52	1.60	34	67	2.40	29	57	2.40	36	72	2.40	37	74	2.40	38	75	2.40	29.3	59	4.8	2062.90	210.50			
20	16	31	3.1	15	29	2.40	16	32	1.60	20	39	4.00	30	59	1.60	34	68	2.40	32	64	2.40	39	78	2.40	41	81	2.40	40	80	2.40	32.7	65	4.8	2244.42	229.02			
21	51	100	3.1	24	47	2.40	39	78	1.60	53	100	4.00	64	100	1.60	41	82	2.40	62	100	2.40	75	100	2.40	73	100	2.40	65	100	2.40	62.9	100	4.8	3465.76	353.65			
22	32	63	3.1	19	37	2.40	30	61	1.60	35	70	4.00	51	100	1.60	37	74	2.40	51	100	2.40	56	100	2.40	54	100	2.40	50	100	2.40	51.6	100	4.8	3160.35	322.49			
23	23	46	3.1	16	33	2.40	24	48	1.60	27	54	4.00	41	82	1.60	35	71	2.40	42	84	2.40	48	96	2.40	48	96	2.40	46	92	2.40	42.8	86	4.8	2774.25	283.09			
24	22	44	3.1	16	32	2.40	22	45	1.60	26	51	4.00	39	78	1.60	35	70	2.40	40	81	2.40	46	93	2.40	45	90	2.40	45	90	2.40	41.1	82	4.8	2680.15	273.49			
25	10	21	3.1	14	27	2.40	10	20	1.60	14	28	4.00	20	41	1.60	33	67	2.40	24	48	2.40	31	62	2.40	32	63	2.40	34	69	2.40	24.5	49	4.8	1790.00	182.65			
26	4	8	3.1	12	25	2.40	3	6	1.60	5	11	4.00	10	19	1.60	33	65	2.40	12	24	2.40	13	26	2.40	16	32	2.40	17	33	2.40	14.7	29	4.8	1018.27	103.91			
27	2	4	3.1	12	25	2.40	1	3	1.60	1	3	4.00	6	12	1.60	32	65	2.40	7	14	2.40	0	0	2.40	4	7	2.40	8	16	2.40	11.5	23	4.8	619.74	63.24			
28	15	30	3.1	14	29	2.40	15	30	1.60	19	38	4.00	28	56	1.60	34	68	2.40	31	62	2.40	38	76	2.40	39	78	2.40	39	78	2.40	31.5	63	4.8	2176.59	222.10			

เสาเข็มขนาด 0.40 x 0.40 เมตร
 เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 22.95 เมตร

เสาเข็มขนาด 0.40 x 0.40 เมตร								
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 22.95 เมตร								
ค่า N' ตัวที่	\overline{N}_B	\overline{N}_O	b (m)	D _B (m)	A _t (m ²)	q _t (kN/m ²)	Q _t = q _t · A _t (kN)	Q _t = q _t · A _t (ton)
1	60.0	57	0.4	3	0.16	23662.49	3786.00	386.33
2	22.2	30	0.4	3	0.16	8883.95	1421.43	145.04
3	51.6	51	0.4	3	0.16	20610.75	3297.72	336.50
4	35.2	41	0.4	3	0.16	14060.72	2249.72	229.56
5	41.8	45	0.4	3	0.16	16739.27	2678.28	273.29
6	36.6	42	0.4	3	0.16	14625.47	2340.08	238.78
7	56.0	54	0.4	3	0.16	22218.70	3554.99	362.75
8	48.8	50	0.4	3	0.16	19514.16	3122.27	318.60
9	25.7	33	0.4	3	0.16	10296.42	1647.43	168.10
10	37.6	43	0.4	3	0.16	15053.06	2408.49	245.76
11	37.1	42	0.4	3	0.16	14855.73	2376.92	242.54
12	23.6	31	0.4	3	0.16	9432.63	1509.22	154.00
13	46.9	48	0.4	3	0.16	18771.93	3003.51	306.48
14	26.0	34	0.4	3	0.16	10382.04	1661.13	169.50
15	30.2	37	0.4	3	0.16	12087.89	1934.06	197.35
16	17.5	22	0.4	3	0.16	6990.08	1118.41	114.12
17	11.3	10	0.4	3	0.16	4380.15	700.82	71.51
18	20.0	27	0.4	3	0.16	8013.98	1282.24	130.84
19	29.3	37	0.4	3	0.16	11734.65	1877.54	191.59
20	32.7	39	0.4	3	0.16	13094.26	2095.08	213.78
21	62.9	59	0.4	3	0.16	24721.15	3955.38	403.61
22	51.6	51	0.4	3	0.16	20627.88	3300.46	336.78
23	42.8	46	0.4	3	0.16	17130.76	2740.92	279.69
24	41.1	45	0.4	3	0.16	16425.96	2628.15	268.18
25	24.5	32	0.4	3	0.16	9810.42	1569.67	160.17
26	14.7	17	0.4	3	0.16	5898.51	943.76	96.30
27	11.5	10	0.4	3	0.16	4478.72	716.60	73.12
28	31.5	38	0.4	3	0.16	12581.10	2012.98	205.41

เสาเข็มขนาด 0.40 x 0.40				
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 22.95 เมตร				
ลำดับที่	Q_s (kN)	Q_t (kN)	$Q_u = Q_s + Q_t$ (kN)	$Q_u = Q_s + Q_t$ (ton)
1	3377.56	3786.00	7163.55	730.97
2	1646.18	1421.43	3067.61	313.02
3	3159.29	3297.72	6457.01	658.88
4	2370.71	2249.72	4620.42	471.47
5	2721.82	2678.28	5400.10	551.03
6	2444.14	2340.08	4784.22	488.19
7	3260.80	3554.99	6815.79	695.49
8	3069.44	3122.27	6191.71	631.81
9	1861.53	1647.43	3508.96	358.06
10	2499.83	2408.49	4908.32	500.85
11	2474.11	2376.92	4851.03	495.00
12	1732.70	1509.22	3241.92	330.81
13	2985.74	3003.51	5989.25	611.15
14	1873.91	1661.13	3535.04	360.72
15	2110.67	1934.06	4044.73	412.73
16	1290.35	1118.41	2408.77	245.79
17	589.83	700.82	1290.65	131.70
18	1497.52	1282.24	2779.76	283.65
19	2062.90	1877.54	3940.45	402.09
20	2244.42	2095.08	4339.50	442.81
21	3465.76	3955.38	7421.14	757.26
22	3160.35	3300.46	6460.82	659.27
23	2774.25	2740.92	5515.17	562.77
24	2680.15	2628.15	5308.31	541.66
25	1790.00	1569.67	3359.67	342.82
26	1018.27	943.76	1962.04	200.21
27	619.74	716.60	1336.34	136.36
28	2176.59	2012.98	4189.57	427.51

No.	$Q_u = Q_s + Q_t$ (ton)	Qa				
		Safety of Factor				
		2	2.5	3	3.5	4
1	730.97	365.49	292.39	243.66	208.85	182.74
2	313.02	156.51	125.21	104.34	89.43	78.26
3	658.88	329.44	263.55	219.63	188.25	164.72
4	471.47	235.74	188.59	157.16	134.71	117.87
5	551.03	275.52	220.41	183.68	157.44	137.76
6	488.19	244.09	195.27	162.73	139.48	122.05
7	695.49	347.74	278.20	231.83	198.71	173.87
8	631.81	315.90	252.72	210.60	180.52	157.95
9	358.06	179.03	143.22	119.35	102.30	89.51
10	500.85	250.42	200.34	166.95	143.10	125.21
11	495.00	247.50	198.00	165.00	141.43	123.75
12	330.81	165.40	132.32	110.27	94.52	82.70
13	611.15	305.57	244.46	203.72	174.61	152.79
14	360.72	180.36	144.29	120.24	103.06	90.18
15	412.73	206.36	165.09	137.58	117.92	103.18
16	245.79	122.90	98.32	81.93	70.23	61.45
17	131.70	65.85	52.68	43.90	37.63	32.92
18	283.65	141.82	113.46	94.55	81.04	70.91
19	402.09	201.04	160.83	134.03	114.88	100.52
20	442.81	221.40	177.12	147.60	126.52	110.70
21	757.26	378.63	302.90	252.42	216.36	189.31
22	659.27	329.63	263.71	219.76	188.36	164.82
23	562.77	281.39	225.11	187.59	160.79	140.69
24	541.66	270.83	216.67	180.55	154.76	135.42
25	342.82	171.41	137.13	114.27	97.95	85.71
26	200.21	100.10	80.08	66.74	57.20	50.05
27	136.36	68.18	54.54	45.45	38.96	34.09
28	427.51	213.75	171.00	142.50	122.14	106.88

ตาราง ข.7 แสดงค่าแรงดันน้ำเนื่องจากความสูงของเสาเข็มขนาด 0.20 x 0.20 เมตร ปลายเสาเข็มอยู่ที่ความลึก 19.95 เมตร

ความลึก		1.95		3.45		4.45		6.95		7.95		9.45		10.95		12.45		13.95		15.45		16.95		18.45		19.95		$Q_s = \sum f_s \cdot A_s$ (kN)	$Q_s = \sum f_s \cdot A_s$ (ton)			
ลำดับ	พื้นที่ (m ²)	f _s	A _s	f _s	A _s	f _s	A _s	f _s	A _s	f _s	A _s	f _s	A _s	f _s	A _s	f _s	A _s	f _s	A _s	f _s	A _s	f _s	A _s	f _s	A _s	f _s	A _s					
1	44	88	1.56	22	44	1.20	37	73	0.80	46	93	2.00	60	100	0.80	39	79	1.20	59	100	1.20	67	100	1.20	61	100	1.20	57	100	1.20	1448.78	147.83
2	9	18	1.56	13	27	1.20	18	36	0.80	12	25	2.00	18	35	0.80	33	66	1.20	22	43	1.20	28	57	1.20	32	64	1.20	30	59	1.20	716.48	73.11
3	32	63	1.56	18	37	1.20	30	61	0.80	35	70	2.00	51	100	0.80	37	74	1.20	51	100	1.20	56	100	1.20	52	100	1.20	51	100	1.20	1339.65	136.70
4	17	35	1.56	15	30	1.20	18	36	0.80	21	43	2.00	32	65	0.80	34	69	1.20	34	69	1.20	41	82	1.20	41	83	1.20	41	82	1.20	1016.63	103.74
5	22	45	1.56	16	32	1.20	23	46	0.80	26	52	2.00	40	80	0.80	35	70	1.20	41	82	1.20	47	94	1.20	46	92	1.20	45	90	1.20	1160.04	118.37
6	18	37	1.56	15	30	1.20	19	38	0.80	22	45	2.00	34	68	0.80	34	69	1.20	36	72	1.20	42	85	1.20	42	84	1.20	42	84	1.20	1046.57	106.79
7	37	75	1.56	20	40	1.20	34	67	0.80	40	80	2.00	56	100	0.80	38	76	1.20	55	100	1.20	62	100	1.20	57	100	1.20	54	100	1.20	1390.40	141.88
8	29	57	1.56	18	35	1.20	28	57	0.80	32	64	2.00	48	95	0.80	36	73	1.20	48	96	1.20	53	100	1.20	51	100	1.20	49	98	1.20	1300.55	132.71
9	11	22	1.56	14	27	1.20	11	22	0.80	15	30	2.00	22	43	0.80	33	67	1.20	25	50	1.20	32	65	1.20	33	65	1.20	33	67	1.20	807.21	82.37
10	19	38	1.56	15	31	1.20	20	40	0.80	23	46	2.00	35	70	0.80	35	69	1.20	37	74	1.20	43	87	1.20	44	88	1.20	43	85	1.20	1069.28	109.11
11	19	38	1.56	15	31	1.20	19	39	0.80	23	45	2.00	35	69	0.80	35	69	1.20	36	73	1.20	43	86	1.20	43	84	1.20	42	85	1.20	1038.79	108.04
12	10	20	1.56	13	27	1.20	9	18	0.80	13	27	2.00	19	39	0.80	33	66	1.20	23	46	1.20	30	60	1.20	31	61	1.20	34	67	1.20	753.16	76.85
13	27	54	1.56	17	35	1.20	27	54	0.80	30	61	2.00	46	91	0.80	36	72	1.20	46	92	1.20	52	100	1.20	51	100	1.20	49	97	1.20	1267.61	129.35
14	11	23	1.56	14	27	1.20	11	22	0.80	15	30	2.00	22	44	0.80	33	67	1.20	25	51	1.20	33	65	1.20	36	68	1.20	37	73	1.20	812.37	82.90
15	14	28	1.56	14	29	1.20	14	28	0.80	18	36	2.00	27	54	0.80	34	68	1.20	30	59	1.20	37	74	1.20	38	76	1.20	37	75	1.20	910.28	92.89
16	6	11	1.56	13	25	1.20	5	9	0.80	8	17	2.00	12	25	0.80	33	65	1.20	16	32	1.20	20	41	1.20	23	45	1.20	22	45	1.20	561.30	57.28
17	2	4	1.56	12	25	1.20	1	3	0.80	1	2	2.00	6	12	0.80	32	65	1.20	7	14	1.20	-1	-2	1.20	2	5	1.20	2	5	1.20	240.70	24.56
18	7	15	1.56	13	26	1.20	7	13	0.80	11	21	2.00	15	31	0.80	33	66	1.20	19	39	1.20	25	51	1.20	27	54	1.20	26	53	1.20	652.59	66.59
19	13	27	1.56	14	28	1.20	14	27	0.80	17	35	2.00	26	52	0.80	34	67	1.20	29	57	1.20	36	72	1.20	37	74	1.20	38	75	1.20	890.64	90.88
20	16	31	1.56	15	29	1.20	16	32	0.80	20	39	2.00	30	59	0.80	34	68	1.20	32	64	1.20	39	78	1.20	41	81	1.20	40	80	1.20	965.08	98.48
21	51	100	1.56	24	47	1.20	39	78	0.80	53	100	2.00	64	100	0.80	41	82	1.20	62	100	1.20	75	100	1.20	73	100	1.20	66	100	1.20	1492.88	152.33
22	32	63	1.56	19	37	1.20	30	61	0.80	35	70	2.00	51	100	0.80	37	74	1.20	51	100	1.20	56	100	1.20	54	100	1.20	50	100	1.20	1340.18	136.75
23	23	46	1.56	16	33	1.20	24	48	0.80	27	54	2.00	41	82	0.80	35	71	1.20	42	84	1.20	48	96	1.20	48	96	1.20	46	92	1.20	1181.56	120.57
24	22	44	1.56	16	32	1.20	22	45	0.80	26	51	2.00	39	78	0.80	35	70	1.20	40	81	1.20	46	92	1.20	46	93	1.20	45	90	1.20	1102.97	116.63
25	10	21	1.56	14	27	1.20	10	20	0.80	14	28	2.00	20	41	0.80	33	67	1.20	24	48	1.20	31	62	1.20	32	65	1.20	34	69	1.20	777.27	79.31
26	4	8	1.56	12	25	1.20	3	6	0.80	5	11	2.00	10	19	0.80	33	65	1.20	12	24	1.20	13	26	1.20	16	32	1.20	17	33	1.20	438.35	44.73
27	2	4	1.56	12	25	1.20	1	3	0.80	1	3	2.00	6	12	0.80	32	65	1.20	7	14	1.20	0	0	1.20	4	7	1.20	8	16	1.20	254.71	25.99
28	15	30	1.56	14	29	1.20	15	30	0.80	19	38	2.00	28	56	0.80	34	68	1.20	31	62	1.20	38	76	1.20	39	78	1.20	38	77	1.20	937.32	95.65

เสาเข็มขนาด 0.20 x 0.20 เมตร								
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 19.95 เมตร								
ค่า N' ตัวที่	\bar{N}'_B	\bar{N}'_O	b (m)	D_B (m)	A_t (m ²)	q_t (kN/m ²)	$Q_t = q_t \cdot A_t$ (kN)	$Q_t = q_t \cdot A_t$ (ton)
1	57	61	0.2	1.5	0.04	22693.49	907.74	92.63
2	30	32	0.2	1.5	0.04	11806.93	472.28	48.19
3	51	52	0.2	1.5	0.04	20562.63	822.51	83.93
4	41	41	0.2	1.5	0.04	16396.93	655.88	66.93
5	45	45	0.2	1.5	0.04	18096.28	723.85	73.86
6	42	42	0.2	1.5	0.04	16755.22	670.21	68.39
7	54	56	0.2	1.5	0.04	21685.37	867.41	88.51
8	50	50	0.2	1.5	0.04	19856.75	794.27	81.05
9	33	35	0.2	1.5	0.04	13387.29	535.49	54.64
10	43	43	0.2	1.5	0.04	17026.50	681.06	69.50
11	42	42	0.2	1.5	0.04	16901.30	676.05	68.98
12	31	33	0.2	1.5	0.04	12462.10	498.48	50.87
13	48	49	0.2	1.5	0.04	19385.86	775.43	79.13
14	34	35	0.2	1.5	0.04	13472.87	538.91	54.99
15	37	38	0.2	1.5	0.04	14991.33	599.65	61.19
16	22	26	0.2	1.5	0.04	8927.21	357.09	36.44
17	10	11	0.2	1.5	0.04	3967.02	158.68	16.19
18	27	30	0.2	1.5	0.04	10629.02	425.16	43.38
19	37	38	0.2	1.5	0.04	14703.24	588.13	60.01
20	39	40	0.2	1.5	0.04	15748.44	629.94	64.28
21	59	65	0.2	1.5	0.04	23432.69	937.31	95.64
22	51	52	0.2	1.5	0.04	20574.59	822.98	83.98
23	46	46	0.2	1.5	0.04	18344.65	733.79	74.88
24	45	45	0.2	1.5	0.04	17897.50	715.90	73.05
25	32	34	0.2	1.5	0.04	12881.30	515.25	52.58
26	17	21	0.2	1.5	0.04	6743.41	269.74	27.52
27	10	12	0.2	1.5	0.04	4125.25	165.01	16.84
28	38	39	0.2	1.5	0.04	15373.61	614.94	62.75

เสาเข็มขนาด 0.20 x 0.20				
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 19.95 เมตร				
ลำดับที่	Q_s (kN)	Q_t (kN)	$Q_u = Q_s + Q_t$ (kN)	$Q_u = Q_s + Q_t$ (ton)
1	1448.78	907.74	2356.52	240.46
2	716.48	472.28	1188.76	121.30
3	1339.65	822.51	2162.15	220.63
4	1016.63	655.88	1672.50	170.66
5	1160.04	723.85	1883.89	192.23
6	1046.57	670.21	1716.77	175.18
7	1390.40	867.41	2257.82	230.39
8	1300.55	794.27	2094.82	213.76
9	807.21	535.49	1342.70	137.01
10	1069.28	681.06	1750.34	178.61
11	1058.79	676.05	1734.84	177.02
12	753.16	498.48	1251.64	127.72
13	1267.61	775.43	2043.04	208.47
14	812.37	538.91	1351.29	137.89
15	910.28	599.65	1509.93	154.07
16	561.30	357.09	918.38	93.71
17	240.70	158.68	399.38	40.75
18	652.59	425.16	1077.75	109.97
19	890.64	588.13	1478.76	150.89
20	965.08	629.94	1595.01	162.76
21	1492.88	937.31	2430.19	247.98
22	1340.18	822.98	2163.16	220.73
23	1181.56	733.79	1915.34	195.44
24	1142.97	715.90	1858.87	189.68
25	777.27	515.25	1292.53	131.89
26	438.35	269.74	708.09	72.25
27	254.71	165.01	419.72	42.83
28	937.32	614.94	1552.27	158.39

No.	Q _u = Q _s + Q _t (ton)	Q _a				
		Safety of Factor				
		2	2.5	3	3.5	4
1	240.46	120.23	96.18	80.15	68.70	60.12
2	121.30	60.65	48.52	40.43	34.66	30.33
3	220.63	110.31	88.25	73.54	63.04	55.16
4	170.66	85.33	68.27	56.89	48.76	42.67
5	192.23	96.12	76.89	64.08	54.92	48.06
6	175.18	87.59	70.07	58.39	50.05	43.80
7	230.39	115.19	92.16	76.80	65.83	57.60
8	213.76	106.88	85.50	71.25	61.07	53.44
9	137.01	68.51	54.80	45.67	39.15	34.25
10	178.61	89.30	71.44	59.54	51.03	44.65
11	177.02	88.51	70.81	59.01	50.58	44.26
12	127.72	63.86	51.09	42.57	36.49	31.93
13	208.47	104.24	83.39	69.49	59.56	52.12
14	137.89	68.94	55.15	45.96	39.40	34.47
15	154.07	77.04	61.63	51.36	44.02	38.52
16	93.71	46.86	37.49	31.24	26.78	23.43
17	40.75	20.38	16.30	13.58	11.64	10.19
18	109.97	54.99	43.99	36.66	31.42	27.49
19	150.89	75.45	60.36	50.30	43.11	37.72
20	162.76	81.38	65.10	54.25	46.50	40.69
21	247.98	123.99	99.19	82.66	70.85	61.99
22	220.73	110.37	88.29	73.58	63.07	55.18
23	195.44	97.72	78.18	65.15	55.84	48.86
24	189.68	94.84	75.87	63.23	54.19	47.42
25	131.89	65.95	52.76	43.96	37.68	32.97
26	72.25	36.13	28.90	24.08	20.64	18.06
27	42.83	21.41	17.13	14.28	12.24	10.71
28	158.39	79.20	63.36	52.80	45.26	39.60

เสาเข็มขนาด 0.30 x 0.30 เมตร								
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 19.95 เมตร								
ค่า N' ตัวที่	\overline{N}_B	\overline{N}_O	b (m)	D _B (m)	A _t (m ²)	q _t (kN/m ²)	Q _t = q _t · A _t (kN)	Q _t = q _t · A _t (ton)
1	57	61	0.3	1.5	0.09	22693.49	2042.41	208.41
2	30	32	0.3	1.5	0.09	11806.93	1062.62	108.43
3	51	52	0.3	1.5	0.09	20562.63	1850.64	188.84
4	41	41	0.3	1.5	0.09	16396.93	1475.72	150.58
5	45	45	0.3	1.5	0.09	18096.28	1628.67	166.19
6	42	42	0.3	1.5	0.09	16755.22	1507.97	153.87
7	54	56	0.3	1.5	0.09	21685.37	1951.68	199.15
8	50	50	0.3	1.5	0.09	19856.75	1787.11	182.36
9	33	35	0.3	1.5	0.09	13387.29	1204.86	122.94
10	43	43	0.3	1.5	0.09	17026.50	1532.38	156.37
11	42	42	0.3	1.5	0.09	16901.30	1521.12	155.22
12	31	33	0.3	1.5	0.09	12462.10	1121.59	114.45
13	48	49	0.3	1.5	0.09	19385.86	1744.73	178.03
14	34	35	0.3	1.5	0.09	13472.87	1212.56	123.73
15	37	38	0.3	1.5	0.09	14991.33	1349.22	137.68
16	22	26	0.3	1.5	0.09	8927.21	803.45	81.98
17	10	11	0.3	1.5	0.09	3967.02	357.03	36.43
18	27	30	0.3	1.5	0.09	10629.02	956.61	97.61
19	37	38	0.3	1.5	0.09	14703.24	1323.29	135.03
20	39	40	0.3	1.5	0.09	15748.44	1417.36	144.63
21	59	65	0.3	1.5	0.09	23432.69	2108.94	215.20
22	51	52	0.3	1.5	0.09	20574.59	1851.71	188.95
23	46	46	0.3	1.5	0.09	18344.65	1651.02	168.47
24	45	45	0.3	1.5	0.09	17897.50	1610.78	164.36
25	32	34	0.3	1.5	0.09	12881.30	1159.32	118.30
26	17	21	0.3	1.5	0.09	6743.41	606.91	61.93
27	10	12	0.3	1.5	0.09	4125.25	371.27	37.88
28	38	39	0.3	1.5	0.09	15373.61	1383.63	141.19

เสาเข็มขนาด 0.30 x 0.30				
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 19.95 เมตร				
ลำดับที่	Q_s (kN)	Q_t (kN)	$Q_u = Q_s + Q_t$ (kN)	$Q_u = Q_s + Q_t$ (ton)
1	2173.17	2042.41	4215.58	430.16
2	1074.73	1062.62	2137.35	218.10
3	2009.47	1850.64	3860.11	393.89
4	1524.94	1475.72	3000.66	306.19
5	1740.06	1628.67	3368.72	343.75
6	1569.85	1507.97	3077.82	314.06
7	2085.60	1951.68	4037.28	411.97
8	1950.83	1787.11	3737.94	381.42
9	1210.81	1204.86	2415.67	246.50
10	1603.92	1532.38	3136.30	320.03
11	1588.18	1521.12	3109.30	317.28
12	1129.74	1121.59	2251.33	229.73
13	1901.41	1744.73	3646.14	372.06
14	1218.56	1212.56	2431.12	248.07
15	1365.42	1349.22	2714.64	277.00
16	841.94	803.45	1645.39	167.90
17	361.05	357.03	718.08	73.27
18	978.89	956.61	1935.50	197.50
19	1335.95	1323.29	2659.24	271.35
20	1447.61	1417.36	2864.97	292.34
21	2239.32	2108.94	4348.26	443.70
22	2010.27	1851.71	3861.98	394.08
23	1772.34	1651.02	3423.35	349.32
24	1714.45	1610.78	3325.22	339.31
25	1165.91	1159.32	2325.23	237.27
26	657.53	606.91	1264.44	129.02
27	382.07	371.27	753.34	76.87
28	1405.99	1383.63	2789.61	284.65

No.	Q u = Q S + Q t (ton)	Qa				
		Safety of Factor				
		2	2.5	3	3.5	4
1	430.16	215.08	172.06	143.39	122.90	107.54
2	218.10	109.05	87.24	72.70	62.31	54.52
3	393.89	196.94	157.56	131.30	112.54	98.47
4	306.19	153.09	122.48	102.06	87.48	76.55
5	343.75	171.87	137.50	114.58	98.21	85.94
6	314.06	157.03	125.63	104.69	89.73	78.52
7	411.97	205.98	164.79	137.32	117.71	102.99
8	381.42	190.71	152.57	127.14	108.98	95.36
9	246.50	123.25	98.60	82.17	70.43	61.62
10	320.03	160.02	128.01	106.68	91.44	80.01
11	317.28	158.64	126.91	105.76	90.65	79.32
12	229.73	114.86	91.89	76.58	65.64	57.43
13	372.06	186.03	148.82	124.02	106.30	93.01
14	248.07	124.04	99.23	82.69	70.88	62.02
15	277.00	138.50	110.80	92.33	79.14	69.25
16	167.90	83.95	67.16	55.97	47.97	41.97
17	73.27	36.64	29.31	24.42	20.94	18.32
18	197.50	98.75	79.00	65.83	56.43	49.37
19	271.35	135.68	108.54	90.45	77.53	67.84
20	292.34	146.17	116.94	97.45	83.53	73.09
21	443.70	221.85	177.48	147.90	126.77	110.92
22	394.08	197.04	157.63	131.36	112.59	98.52
23	349.32	174.66	139.73	116.44	99.81	87.33
24	339.31	169.65	135.72	113.10	96.95	84.83
25	237.27	118.63	94.91	79.09	67.79	59.32
26	129.02	64.51	51.61	43.01	36.86	32.26
27	76.87	38.44	30.75	25.62	21.96	19.22
28	284.65	142.33	113.86	94.88	81.33	71.16

ตาราง ข.9 แสดงค่าแรงต้านเนื่องจากความกดอากาศของเสาเข็มขนาด 0.40 x 0.40 เมตร ปลายเสาเข็มอยู่ที่ความลึก 19.95 เมตร

ความลึก	1.95		3.45		4.45		6.95		7.95		9.45		10.95		12.45		13.95		15.45		16.95		18.45		19.95		Q _s = ∑ f _s · A _s (KN)	Q _s = ∑ f _s · A _s (ton)	
	fs	As	fs	As	fs	As	fs	As	fs	As	fs	As	fs	As	fs	As	fs	As	fs	As	fs	As	fs	As	fs	As			
1	44	88	32	22	44	240	37	73	160	46	93	400	60	100	160	39	79	240	59	100	240	62	100	240	62	100	240	2897.56	295.67
2	9	18	32	13	27	240	8	16	160	12	25	400	18	35	160	33	66	240	22	43	240	29	58	240	32	64	240	1432.97	146.22
3	32	63	32	18	37	240	30	61	160	35	70	400	51	100	160	37	74	240	51	100	240	53	100	240	50	100	240	2679.29	273.40
4	17	35	32	15	30	240	18	36	160	21	43	400	32	65	160	34	69	240	41	82	240	41	81	240	41	83	240	2033.25	207.47
5	22	45	32	16	32	240	23	46	160	26	52	400	40	80	160	35	70	240	41	82	240	46	92	240	45	91	240	2320.08	236.74
6	18	37	32	15	30	240	19	38	160	22	45	400	34	68	160	34	69	240	42	84	240	43	86	240	42	84	240	2093.13	213.58
7	37	75	32	20	40	240	34	67	160	40	80	400	56	100	160	38	76	240	55	100	240	61	100	240	52	100	240	2780.80	283.76
8	29	57	32	18	35	240	28	57	160	32	64	400	48	95	160	36	73	240	48	96	240	53	100	240	51	100	240	2601.10	265.42
9	11	22	32	14	27	240	11	22	160	15	30	400	22	43	160	33	67	240	25	50	240	34	67	240	33	65	240	1614.42	164.74
10	19	38	32	15	31	240	20	40	160	23	46	400	35	70	160	35	69	240	36	73	240	43	85	240	44	87	240	2138.56	218.22
11	19	38	32	15	31	240	19	39	160	23	45	400	35	69	160	35	69	240	36	73	240	43	86	240	43	87	240	2117.58	216.08
12	10	20	32	13	27	240	9	18	160	13	27	400	19	39	160	33	66	240	23	46	240	30	60	240	31	63	240	1506.32	153.71
13	27	54	32	17	35	240	27	54	160	30	61	400	46	91	160	36	72	240	46	92	240	52	100	240	50	99	240	2535.22	258.70
14	11	23	32	14	27	240	11	22	160	15	30	400	22	44	160	33	67	240	25	51	240	33	66	240	33	66	240	1624.75	165.79
15	14	28	32	14	29	240	14	28	160	18	36	400	27	54	160	34	68	240	30	59	240	37	74	240	38	76	240	1820.56	185.77
16	6	11	32	13	25	240	5	9	160	8	17	400	12	25	160	33	65	240	16	32	240	20	41	240	23	45	240	1122.59	114.55
17	2	4	32	12	25	240	1	3	160	1	2	400	6	12	160	32	65	240	7	14	240	1	2	240	2	5	240	481.40	49.12
18	7	15	32	13	26	240	7	13	160	11	21	400	15	31	160	33	66	240	19	39	240	25	51	240	27	54	240	1305.18	133.18
19	13	27	32	14	28	240	14	27	160	17	35	400	26	52	160	34	67	240	29	57	240	36	72	240	38	77	240	1781.27	181.76
20	16	31	32	15	29	240	16	32	160	20	39	400	30	59	160	34	68	240	32	64	240	39	78	240	40	80	240	1930.15	196.95
21	51	100	32	24	47	240	39	78	160	53	100	400	64	100	160	41	82	240	62	100	240	75	100	240	73	100	240	2985.76	304.67
22	32	63	32	19	37	240	30	61	160	35	70	400	51	100	160	37	74	240	51	100	240	56	100	240	54	100	240	2680.35	273.51
23	46	91	32	16	33	240	24	48	160	27	54	400	41	82	160	35	71	240	42	84	240	48	96	240	47	93	240	2363.11	241.13
24	44	88	32	16	32	240	22	45	160	26	51	400	39	78	160	35	70	240	40	81	240	46	92	240	45	91	240	2285.93	233.26
25	10	21	32	14	27	240	10	20	160	14	28	400	20	41	160	33	67	240	24	48	240	31	62	240	32	63	240	1554.55	158.63
26	4	8	32	12	25	240	3	6	160	5	11	400	10	19	160	33	65	240	12	24	240	13	26	240	16	32	240	876.71	89.46
27	2	4	32	12	25	240	1	3	160	1	3	400	6	12	160	32	65	240	7	14	240	0	0	240	4	7	240	509.43	51.98
28	15	30	32	14	29	240	15	30	160	19	38	400	28	56	160	34	68	240	31	62	240	38	76	240	40	80	240	1874.65	191.29

เสาเข็มขนาด 0.40 x 0.40 เมตร

ค่าเฉลี่ยของค่าความลึกที่ทับ = 19.95 เมตร

เสาเข็มขนาด 0.40 x 0.40 เมตร								
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 19.95 เมตร								
ค่า N' ตัวที่	\bar{N}'_B	\bar{N}'_O	b (m)	D _B (m)	A _t (m ²)	q _t (kN/m ²)	Q _t = q _t · A _t (kN)	Q _t = q _t · A _t (ton)
1	57	61	0.4	1.5	0.16	22693.49	3630.96	370.51
2	30	32	0.4	1.5	0.16	11806.93	1889.11	192.77
3	51	52	0.4	1.5	0.16	20562.63	3290.02	335.72
4	41	41	0.4	1.5	0.16	16396.93	2623.51	267.70
5	45	45	0.4	1.5	0.16	18096.28	2895.40	295.45
6	42	42	0.4	1.5	0.16	16755.22	2680.84	273.55
7	54	56	0.4	1.5	0.16	21685.37	3469.66	354.05
8	50	50	0.4	1.5	0.16	19856.75	3177.08	324.19
9	33	35	0.4	1.5	0.16	13387.29	2141.97	218.57
10	43	43	0.4	1.5	0.16	17026.50	2724.24	277.98
11	42	42	0.4	1.5	0.16	16901.30	2704.21	275.94
12	31	33	0.4	1.5	0.16	12462.10	1993.94	203.46
13	48	49	0.4	1.5	0.16	19385.86	3101.74	316.50
14	34	35	0.4	1.5	0.16	13472.87	2155.66	219.97
15	37	38	0.4	1.5	0.16	14991.33	2398.61	244.76
16	22	26	0.4	1.5	0.16	8927.21	1428.35	145.75
17	10	11	0.4	1.5	0.16	3967.02	634.72	64.77
18	27	30	0.4	1.5	0.16	10629.02	1700.64	173.54
19	37	38	0.4	1.5	0.16	14703.24	2352.52	240.05
20	39	40	0.4	1.5	0.16	15748.44	2519.75	257.12
21	59	65	0.4	1.5	0.16	23432.69	3749.23	382.57
22	51	52	0.4	1.5	0.16	20574.59	3291.93	335.91
23	46	46	0.4	1.5	0.16	18344.65	2935.14	299.50
24	45	45	0.4	1.5	0.16	17897.50	2863.60	292.20
25	32	34	0.4	1.5	0.16	12881.30	2061.01	210.31
26	17	21	0.4	1.5	0.16	6743.41	1078.95	110.10
27	10	12	0.4	1.5	0.16	4125.25	660.04	67.35
28	38	39	0.4	1.5	0.16	15373.61	2459.78	251.00

เสาเข็มขนาด 0.40 x 0.40				
เสาเข็มวางอยู่ที่ความลึกเท่ากับ = 19.95 เมตร				
ลำดับที่	Q_s (kN)	Q_t (kN)	$Q_u = Q_s + Q_t$ (kN)	$Q_u = Q_s + Q_t$ (ton)
1	2897.56	3630.96	6528.51	666.17
2	1432.97	1889.11	3322.08	338.99
3	2679.29	3290.02	5969.32	609.11
4	2033.25	2623.51	4656.76	475.18
5	2320.08	2895.40	5215.48	532.19
6	2093.13	2680.84	4773.97	487.14
7	2780.80	3469.66	6250.46	637.80
8	2601.10	3177.08	5778.18	589.61
9	1614.42	2141.97	3756.39	383.30
10	2138.56	2724.24	4862.80	496.20
11	2117.58	2704.21	4821.79	492.02
12	1506.32	1993.94	3500.26	357.17
13	2535.22	3101.74	5636.95	575.20
14	1624.75	2155.66	3780.40	385.76
15	1820.56	2398.61	4219.18	430.53
16	1122.59	1428.35	2550.94	260.30
17	481.40	634.72	1116.12	113.89
18	1305.18	1700.64	3005.83	306.72
19	1781.27	2352.52	4133.79	421.82
20	1930.15	2519.75	4449.90	454.07
21	2985.76	3749.23	6734.99	687.24
22	2680.35	3291.93	5972.29	609.42
23	2363.11	2935.14	5298.26	540.64
24	2285.93	2863.60	5149.53	525.46
25	1554.55	2061.01	3615.56	368.93
26	876.71	1078.95	1955.66	199.56
27	509.43	660.04	1169.46	119.33
28	1874.65	2459.78	4334.43	442.29

No.	Q _u = Q _s + Q _t (ton)	Q _a				
		Safety of Factor				
		2	2.5	3	3.5	4
1	666.17	333.09	266.47	222.06	190.34	166.54
2	338.99	169.49	135.59	113.00	96.85	84.75
3	609.11	304.56	243.65	203.04	174.03	152.28
4	475.18	237.59	190.07	158.39	135.77	118.79
5	532.19	266.10	212.88	177.40	152.05	133.05
6	487.14	243.57	194.86	162.38	139.18	121.78
7	637.80	318.90	255.12	212.60	182.23	159.45
8	589.61	294.81	235.84	196.54	168.46	147.40
9	383.30	191.65	153.32	127.77	109.52	95.83
10	496.20	248.10	198.48	165.40	141.77	124.05
11	492.02	246.01	196.81	164.01	140.58	123.00
12	357.17	178.58	142.87	119.06	102.05	89.29
13	575.20	287.60	230.08	191.73	164.34	143.80
14	385.76	192.88	154.30	128.59	110.22	96.44
15	430.53	215.26	172.21	143.51	123.01	107.63
16	260.30	130.15	104.12	86.77	74.37	65.08
17	113.89	56.95	45.56	37.96	32.54	28.47
18	306.72	153.36	122.69	102.24	87.63	76.68
19	421.82	210.91	168.73	140.61	120.52	105.45
20	454.07	227.04	181.63	151.36	129.73	113.52
21	687.24	343.62	274.90	229.08	196.36	171.81
22	609.42	304.71	243.77	203.14	174.12	152.35
23	540.64	270.32	216.26	180.21	154.47	135.16
24	525.46	262.73	210.18	175.15	150.13	131.37
25	368.93	184.47	147.57	122.98	105.41	92.23
26	199.56	99.78	79.82	66.52	57.02	49.89
27	119.33	59.67	47.73	39.78	34.10	29.83
28	442.29	221.14	176.92	147.43	126.37	110.57