



REITZ & JENS, INC.
CONSULTING ENGINEERS

PROJECT

LABADIE UWL

SUBJECT

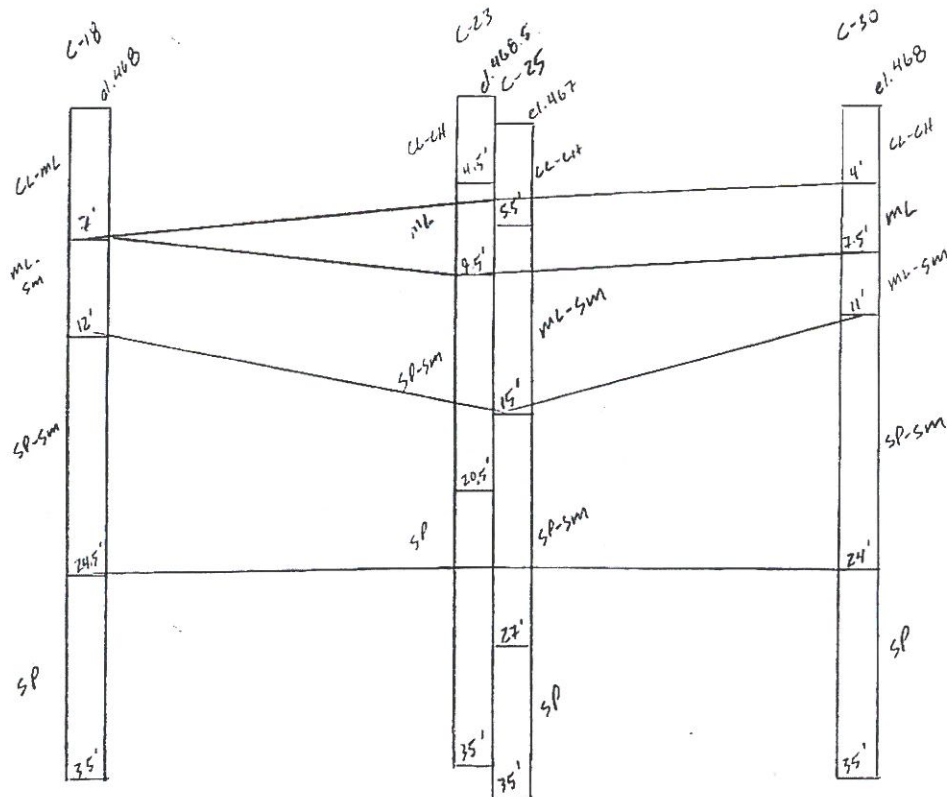
DATE 3-25-2011 BY JDB

Proj. Number

SHEET 01 OF

SECTION ~~B-B~~ **A-A'**

CIRCLE 7



SETTLEMENT PROFILE

0-5.5'	CLAY	$\gamma_T = 113 \text{ PCF}$		
		$C_c = 0.30$	$C_s = 0.05$	$\theta_o = 0.917$
5.5-9.5'	SILT	$\gamma_T = 117 \text{ PCF}$	$E_{s \text{ top}} = 180 \text{ KSF}$	$E_{s \text{ bot.}} = 350 \text{ KSF}$
9.5-20.5'	SILT & SAND	$\gamma_T = 120 \text{ PCF}$	$E_s = 600 \text{ KSF}$	
20.5-24.5'	SAND & SILT	$\gamma_T = 120 \text{ PCF}$	$E_s = 800 \text{ KSF}$	
24.5-35'	SAND	$\gamma_T = 122 \text{ PCF}$	$E_s = 1200 \text{ KSF}$	
35-103'	SAND & GRAVEL	$\gamma_T = 124 \text{ PCF}$	$E_s = 1400 \text{ KSF}$	* ASSUMED FROM P-1

CHIEF ENGINEER C. CASE 4/20/11



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DATE 3-25-2011

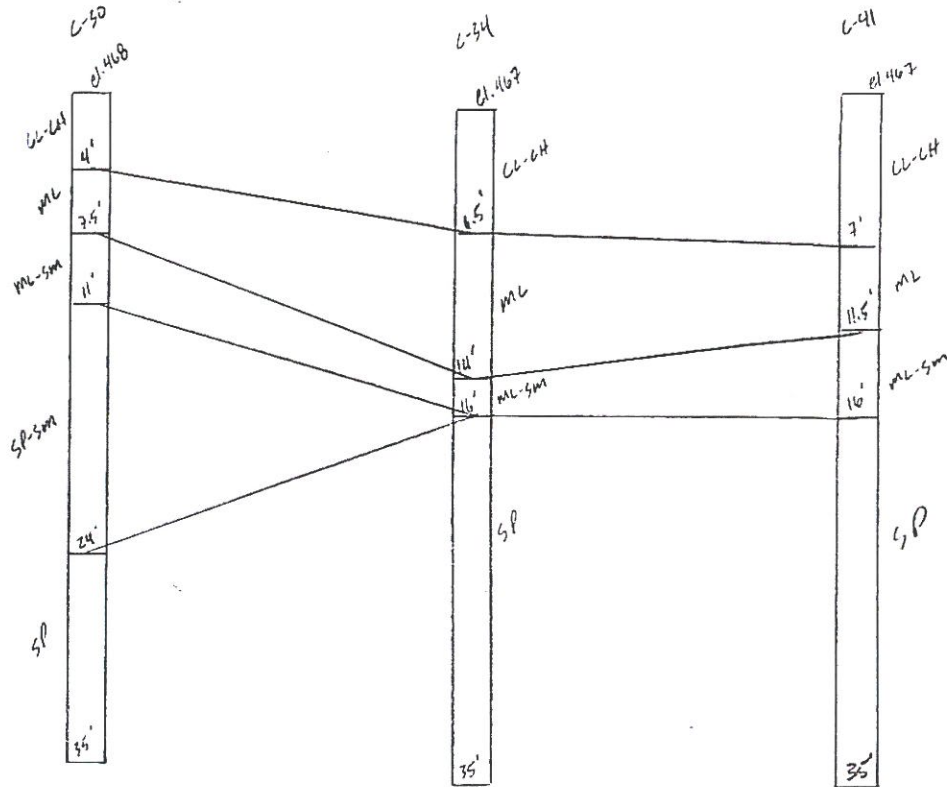
BY JDB

Proj. Number

SHEET OF

SECTION ~~B-B~~ A-A'

CIRCLE 8



SETTLEMENT PROFILE

0-7' CLAY

$$\gamma_T = 113 \text{ PCF}$$

$$C_c = 0.30 \quad C_s = 0.05 \quad e_0 = 0.917$$

7-14' SILT

$$\gamma_T = 117 \text{ PCF}$$

$$E_s = 250 \text{ KSF}$$

14-24' SILT & SAND

$$\gamma_T = 120 \text{ PCF}$$

$$E_{s \text{ top}} = 600 \text{ KSF}$$

$$E_{s \text{ bot.}} = 900 \text{ KSF}$$

24-35' SAND

$$\gamma_T = 122 \text{ PCF}$$

$$E_s = 1100 \text{ KSF}$$

35-103' SAND & GRAVEL

$$\gamma_T = 124 \text{ PCF}$$

$$E_s = 1400 \text{ KSF}$$

CHECKED C.G.W. 4/12/11



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DATE 3-25-2011

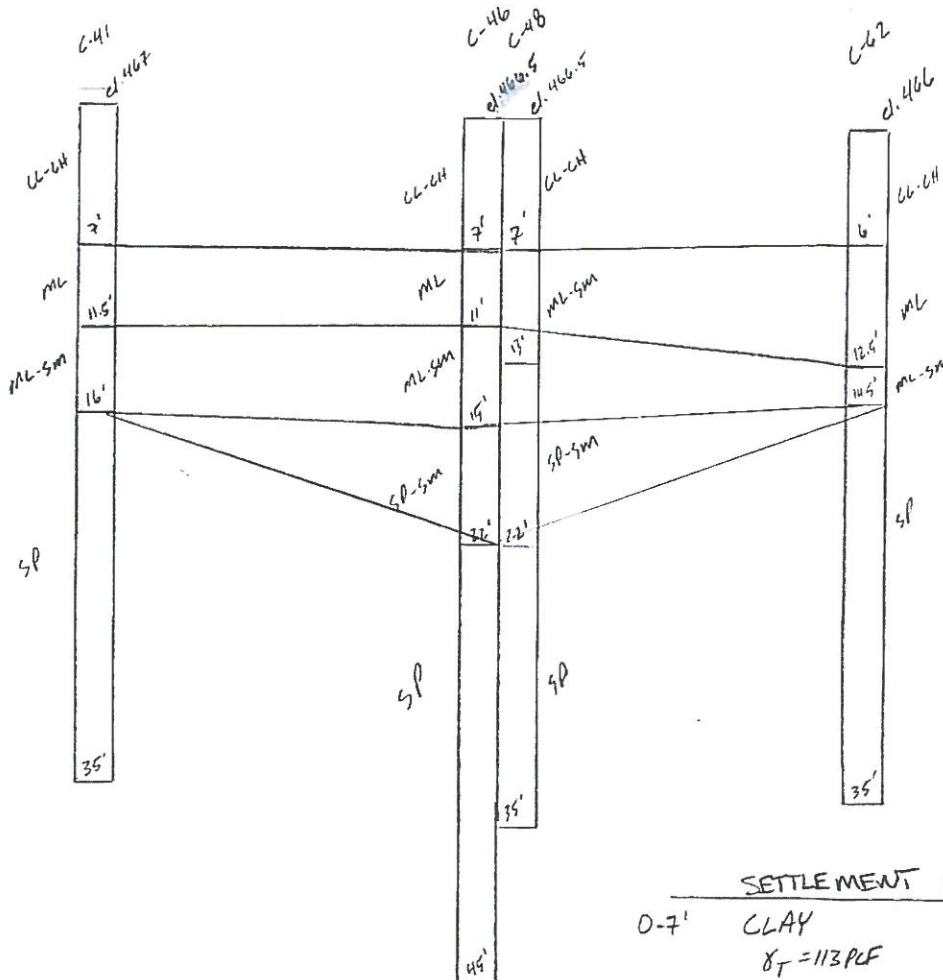
BY JDB

Proj. Number

SHEET OF

SECTION ~~B-B'~~ A-A'

CIRCLE 9



SETTLEMENT PROFILE

0-7' CLAY

$$\gamma_T = 113 \text{ PCF}$$

$$C_L = 0.30 \quad C_S = 0.05 \quad e_0 = 0.917$$

7-16' SILT

$$\gamma_T = 117 \text{ PCF} \quad E_s = 300 \text{ KSF}$$

16-22' SILT + SAND

$$\gamma_T = 120 \text{ PCF} \quad E_s = 400 \text{ KSF}$$

22-35' SAND

$$\gamma_T = 122 \text{ PCF} \quad E_s = 1100 \text{ KSF}$$

35-45' LOWER SAND

$$\gamma_T = 124 \text{ PCF} \quad E_s = 1300 \text{ KSF}$$

45-103' SAND + GRAVEL

$$\gamma_T = 124 \text{ PCF} \quad E_s = 1400 \text{ KSF}$$

* ASSUMED FROM P-1

(LIFE CYCLE): C, 100K 4/12/11



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LABADIE UWL

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DATE 3-25-2011 BY JDB

Proj. Number

SHEET OF

SECTION ~~B-B'~~ A-A'

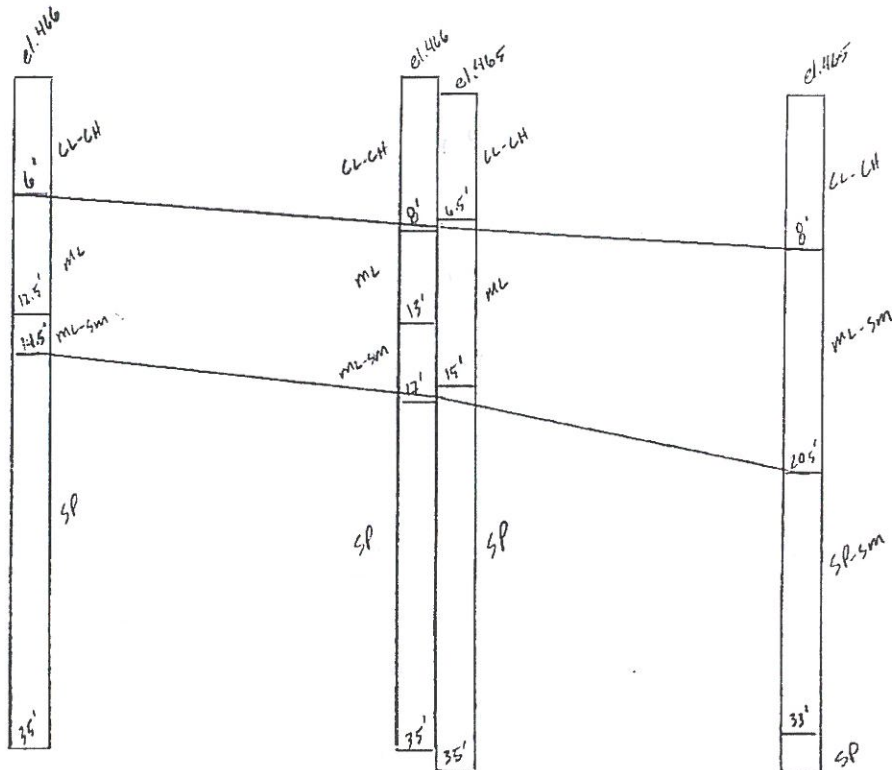
CIRCLE 10

C-62

C-76

C-78

C-91



SETTLEMENT PROFILE

0-8' CLAY

$$\gamma_T = 118 \text{ PCF}$$

$$C_c = 0.32 \quad C_s = 0.04 \quad e_0 = 0.862$$

8-14.5' SILT

$$\gamma_T = 115 \text{ PCF} \quad E_s = 200 \text{ KSF}$$

14.5-33' SILT & SAND

$$\gamma_T = 117 \text{ PCF} \quad E_s = 550 \text{ KSF}$$

33-35' SAND

$$\gamma_T = 122 \text{ PCF} \quad E_s = 1300 \text{ KSF}$$

45-103' SAND & GRAVEL

$$\gamma_T = 124 \text{ PCF} \quad E_s = 1400 \text{ KSF}$$

* ASSUME FROM P-1

CHECKED: C. FOWLES 4/18/11



REITZ & JENS, INC.
CONSULTING ENGINEERS

PROJECT LABADIE UWL

SUBJECT _____

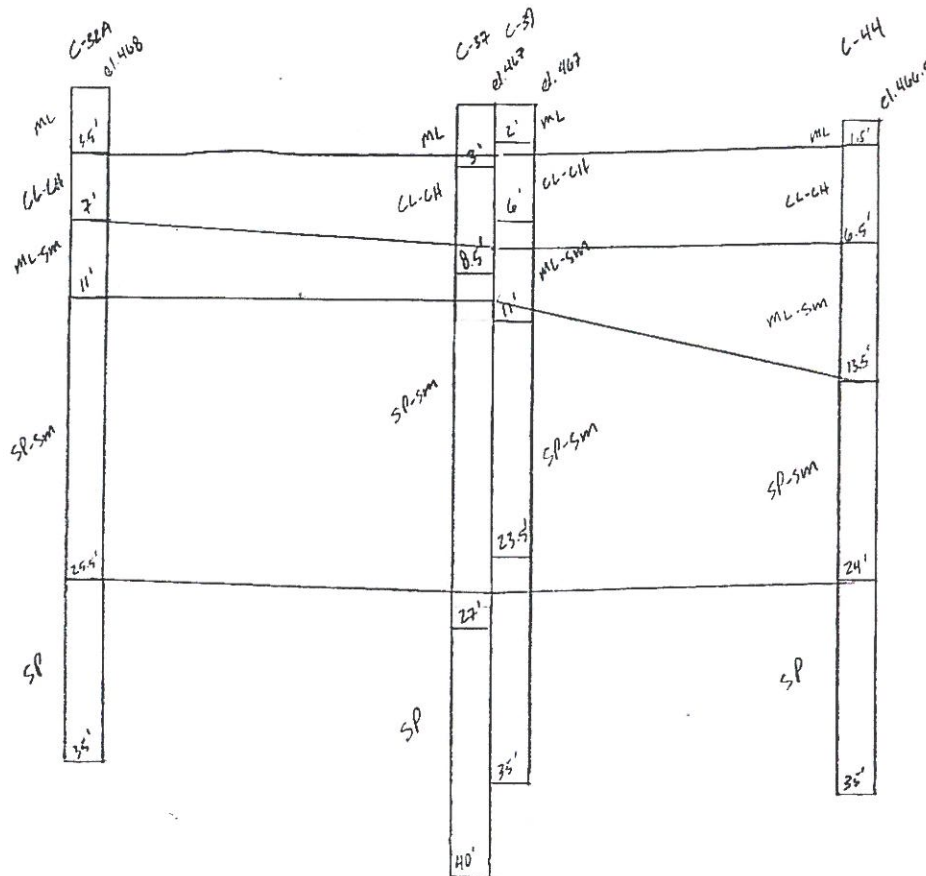
DATE 3-15-2011

BY JDB

Proj. Number _____

SHEET _____ OF _____

SECTION ~~A-A'~~ **B-B'**
CIRCLE 3



SETTLEMENT PROFILE

- 0 - 3.5' SILT
 $\gamma_T = 115$ PCF $E_s = 150$ KSF
- 3.5' - 8.5' CLAY
 $\gamma_T = 113$ PCF
 $C_L = 0.30$ $C_s = 0.05$ $c_0 = 0.917$
- 8.5' - 13.5' SILT & SAND
 $\gamma_T = 120$ PCF $E_{s\ top} = 300$ KSF
 $E_{s\ bot} = 500$ KSF
- 13.5' - 27' SAND & SILT
 $\gamma_T = 122$ PCF $E_s = 700$ KSF
- 27' - 40' SAND
 $\gamma_T = 124$ PCF $E_s = 1200$ KSF
- 40 - 103 SAND & GRAVEL +
 $\gamma_T = 125$ PCF $E_s = 1400$ KSF

* ASSUMED FROM P-1

CHECKED: C. COOK 4/12/11



REITZ & JENS, INC.
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PROJECT

LABADIE UWL

SUBJECT

DATE 4-1-2011

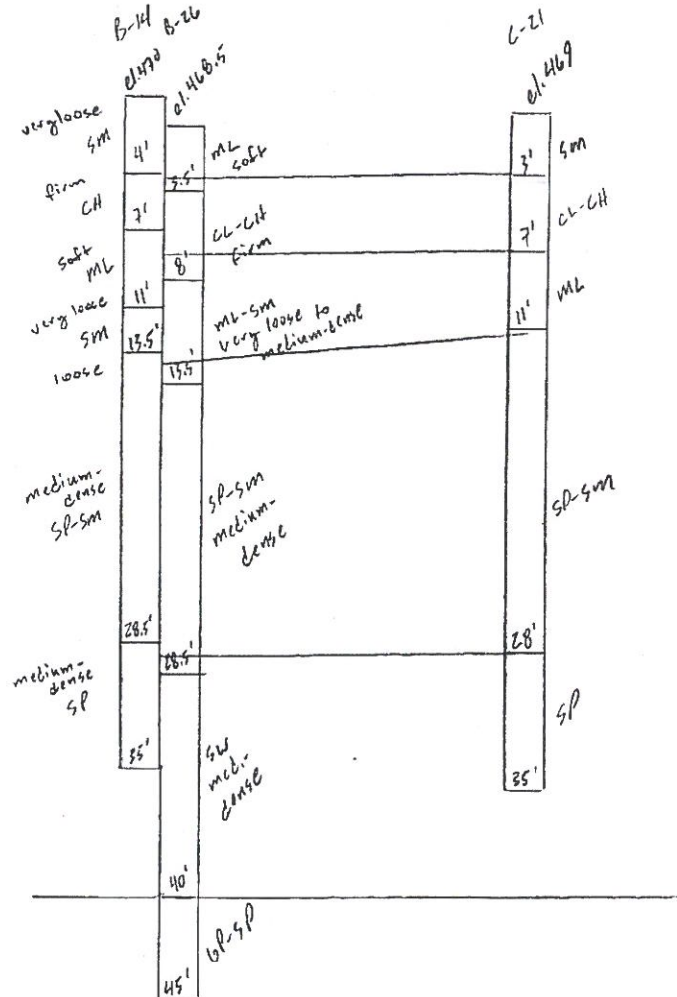
BY JDB

Proj. Number

SHEET 01 OF

SECTION ~~E-E~~ B-B'

CIRCLE 47



SETTLEMENT PROFILE

0-4' SILT

$\gamma_T = 116 \text{ PCF}$

$E_s = 150 \text{ KSF}$

4-8' CLAY

$\gamma_T = 113 \text{ PCF}$

$C_L = 0.30$ $C_s = 0.05$ $e_0 = 0.917$

8-13.5' SILT

$\gamma_T = 119 \text{ PCF}$

$E_{s_{top}} = 200 \text{ KSF}$ $E_{s_{bot}} = 400 \text{ KSF}$

13.5-28.5' SAND + SILT

$\gamma_T = 122 \text{ PCF}$

$E_s = 800 \text{ KSF}$

28.5-40' SAND

$\gamma_T = 122 \text{ PCF}$

$E_s = 950 \text{ KSF}$

40-103' SAND + GRAVEL

$\gamma_T = 124 \text{ PCF}$

$E_s = 1400 \text{ KSF}$

CHECKED: C. FOWK 4/12/11



REITZ & JENS, INC.
CONSULTING ENGINEERS

PROJECT
SUBJECT

LABADIE UWL

DATE 3-25-2011

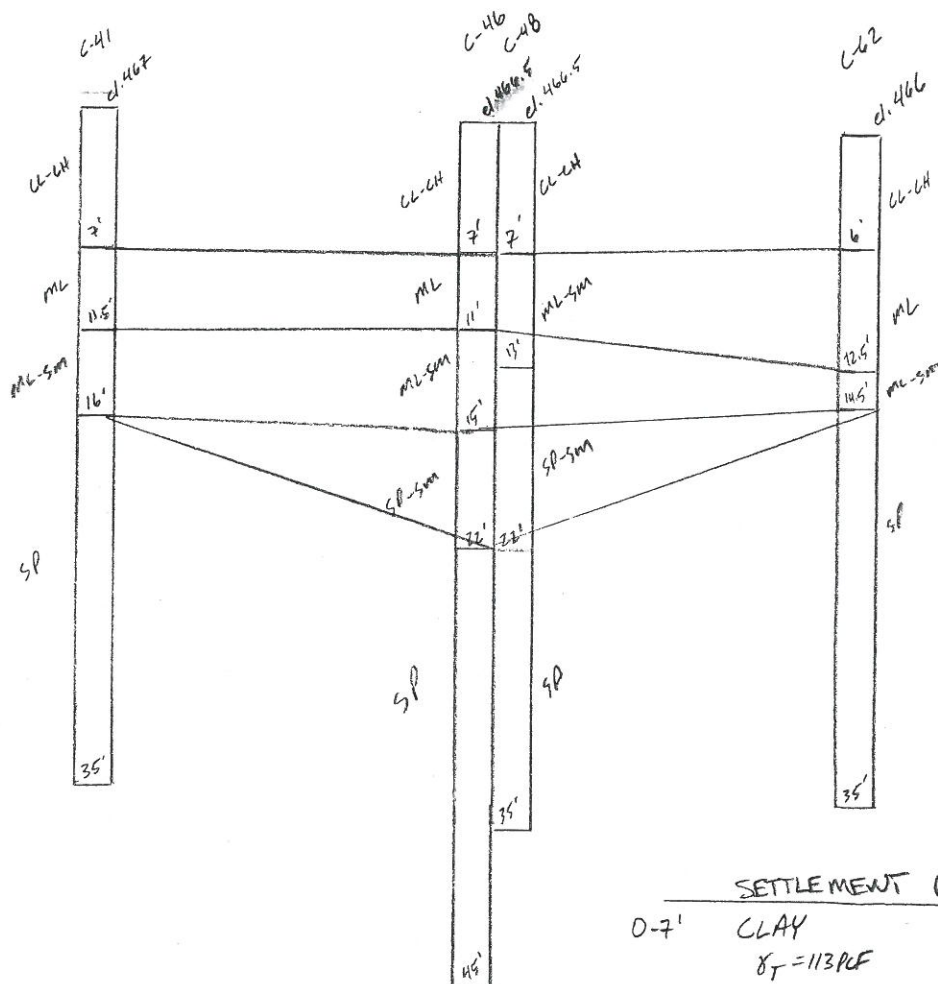
BY JOB

Proj. Number

SHEET OF

SECTION B-B'

CIRCLE 89



SETTLEMENT PROFILE

0-7' CLAY

$$\gamma_T = 113 \text{ PCF}$$

$$C_L = 0.30 \quad C_s = 0.05 \quad e_0 = 0.917$$

7-16' SILT

$$\gamma_T = 117 \text{ PCF} \quad E_s = 300 \text{ KSF}$$

16-22' SILT & SAND

$$\gamma_T = 120 \text{ PCF} \quad E_s = 400 \text{ KSF}$$

22-35' SAND

$$\gamma_T = 122 \text{ PCF} \quad E_s = 1100 \text{ KSF}$$

35-45' LOWER SAND

$$\gamma_T = 124 \text{ PCF} \quad E_s = 1300 \text{ KSF}$$

45-103' SAND & GRAVEL

$$\gamma_T = 124 \text{ PCF} \quad E_s = 1400 \text{ KSF}$$

* ASSUMED FROM P-1

CHECKED: C. G. K. 6/12/11



REITZ & JENS, INC.
CONSULTING ENGINEERS

PROJECT

LABADIE IWL

SUBJECT

DATE 4-5-2011

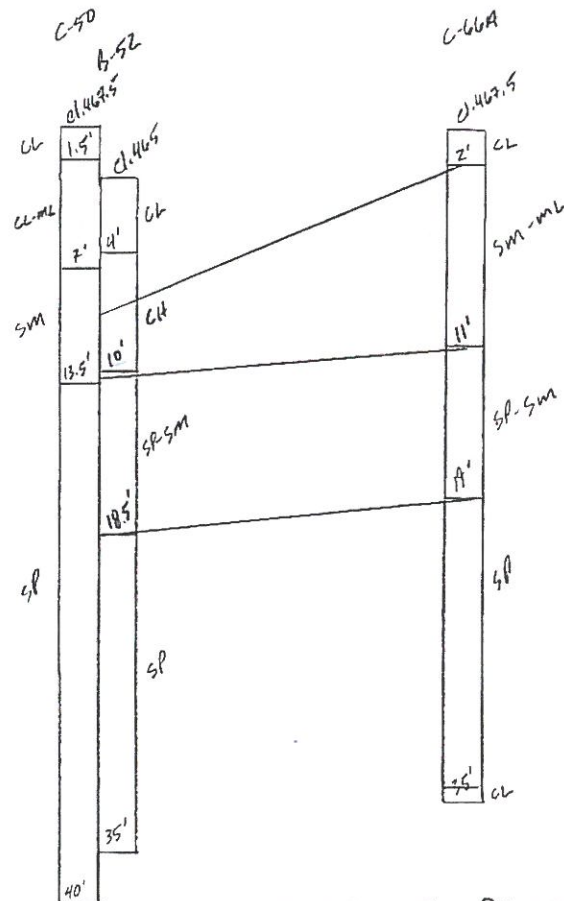
BY JDB

Proj. Number

SHEET OF

SECTION C-C'

CIRCLE 40



SETTLEMENT PROFILE

0-10'	CLAY	$\gamma_T = 118 \text{ PCF}$	$C_c = 0.32$	$C_s = 0.04$	$e_0 = 0.862$
10-18.5'	SILT & SAND	$\gamma_T = 119 \text{ PCF}$	$E_{sL} = 200 \text{ KSF}$	$E_{sD} = 600 \text{ KSF}$	
18.5-32'	SAND & SILT	$\gamma_T = 120 \text{ PCF}$	$E_s = 850 \text{ KSF}$		
32-35'	SILT & CLAY	$\gamma_T = 120 \text{ PCF}$	$E_s = 200 \text{ KSF}$		
35-42'	SAND	$\gamma_T = 122 \text{ PCF}$	$E_s = 1000 \text{ KSF}$		
42-77'	SAND & GRAVEL	$\gamma_T = 124 \text{ PCF}$	$E_s = 1000 \text{ KSF}$		*
77-105'	SAND (Z)	$\gamma_T = 125 \text{ PCF}$	$E_s = 1200 \text{ KSF}$		*

* ASSUMED FROM B-100

CHIEF: C. FOX 4/12/11

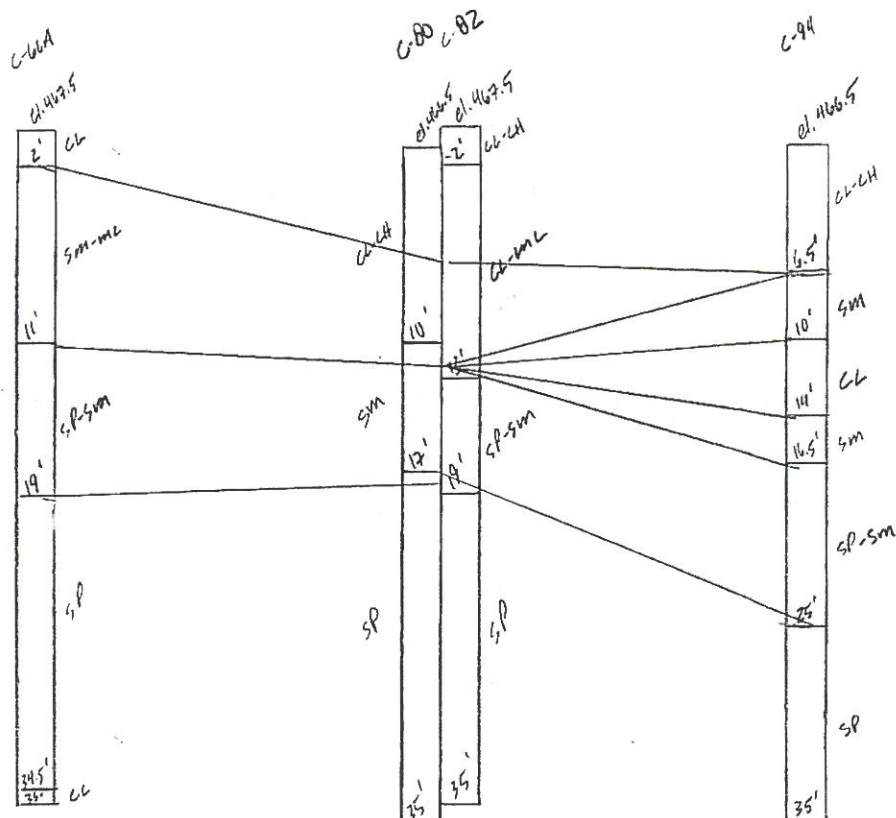


SUBJECT

Proj. Number

SHEET ____ OF ____

CIRCLE 41



SETTLEMENT PROFILE

CLAY

$$\gamma_T = 118 \text{ PCF}$$

$$C_2 = 0.32 \quad C_3 = 0.04 \quad e_o = 0.862$$

SILT

$$\gamma_T = 119 \text{ PCF} \quad E_s = 500 \text{ KSF}$$

SAND

$$\gamma_T = 120 \text{ pcf} \quad E_s = 1000 \text{ ksf}$$

SILT & CLAY

$$\gamma_s = 120 \text{ PCF} \quad E_s = 200 \text{ KSF}$$

SAND & GRAVEL *

$$\gamma_T = 124 \text{ PCF} \quad E_s = 1000 \text{ KSF}$$

SAND (2)

$$X_T = 125 \text{ pCF} \quad E_s = 1200 \text{ ksf}$$

* ASSUMED FROM B-100

1. LF = CLK F! CLK 4/12/11



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PROJECT

LABADIE UWL

SUBJECT

DATE 4-5-2011 BY JDB

Proj. Number

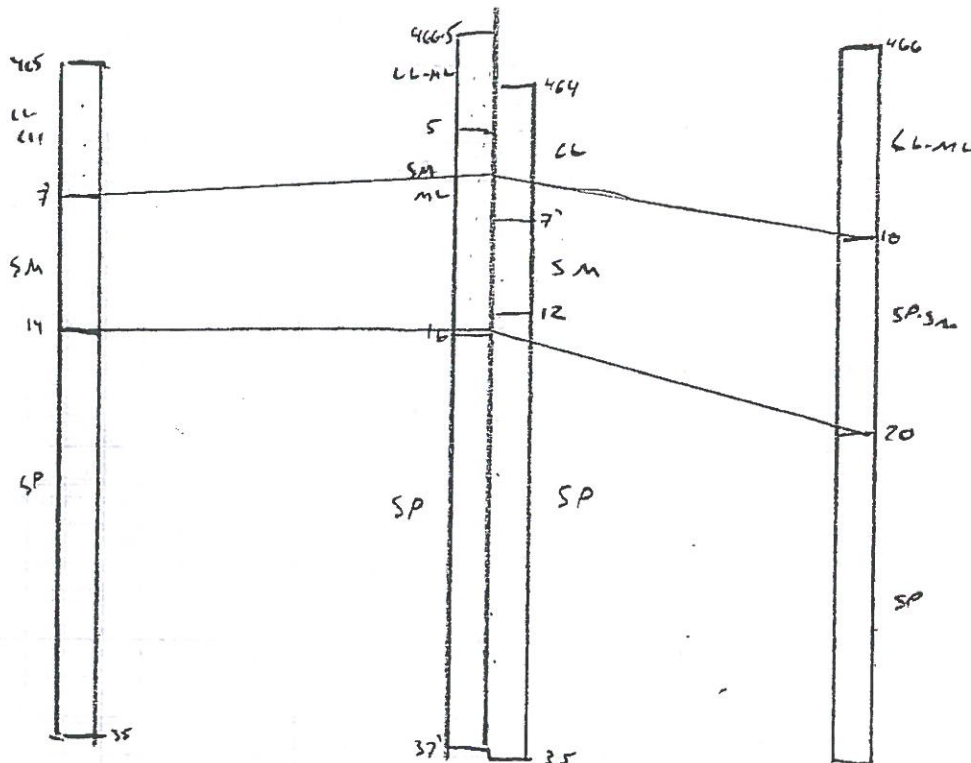
SHEET OF

SECTION ~~G-G~~ C-C'
CRUCE 24

C-107A

C-94 C-121

C-109



SETTLEMENT PROFILE

- 0-10' CLAY
 $\gamma_T = 118 \text{ PCF}$
 $C_L = 0.32 \quad C_S = 0.04 \quad e_0 = 0.862$
- 10-20' SILT & SAND
 $\gamma_T = 120 \text{ PCF} \quad E_{St} = 300 \text{ KSF} \quad E_S = 675 \text{ KSF}$
- 20-32' SAND
 $\gamma_T = 122 \text{ PCF} \quad E_S = 800 \text{ KSF}$
- 32-37' SAND (2)
 $\gamma_T = 122 \text{ PCF} \quad E_S = 1000 \text{ KSF}$
- 37-103' SAND & GRAVEL
 $\gamma_T = 124 \text{ PCF} \quad E_S = 1400 \text{ KSF} \quad *$

* ASSUMED FROM B-7

CHECKED: C. GOK 4/12/11



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LABADIE UWL

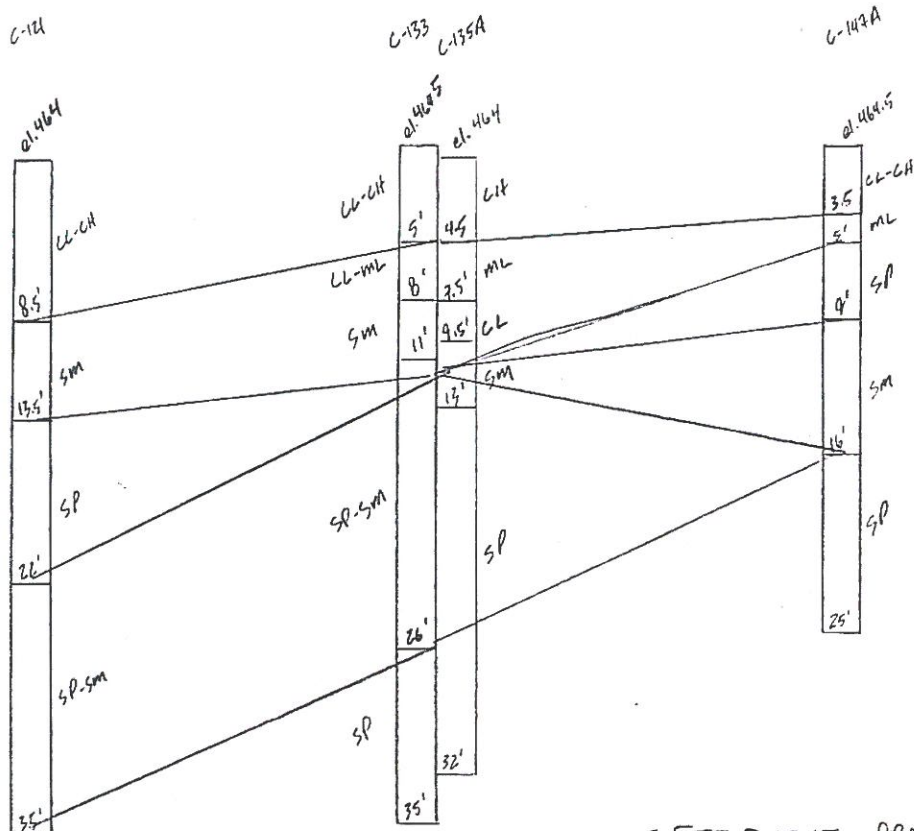
SUBJECT

DATE 4-5-2011 BY JDB

Proj. Number

SHEET OF

SECTION C-C'
CIRCLE 42



SETTLEMENT PROFILE

- 0-8.5' CLAY
 $\gamma_T = 118 \text{ PCF}$
 $C_L = 0.32 \quad C_S = 0.04 \quad C_0 = 0.862$
- 8.5-13.5' SILT
 $\gamma_T = 117 \text{ PCF} \quad E_{st} = 100 \text{ KSF} \quad E_{sb} = 450 \text{ KSF}$
- 13.5-22' SILT + SAND
 $\gamma_T = 120 \text{ PCF} \quad E_s = 800 \text{ KSF}$
- 22-32' SAND
 $\gamma_T = 122 \text{ PCF} \quad E_s = 650 \text{ KSF}$
- 32-37' SAND (2)
 $\gamma_T = 122 \text{ PCF} \quad E_s = 1200 \text{ KSF}$
- 37-77' SAND & GRAVEL
 $\gamma_T = 124 \text{ PCF} \quad E_s = 1000 \text{ KSF} \times$
- 77-105' SAND (3)
 $\gamma_T = 125 \text{ PCF} \quad E_s = 1200 \text{ KSF} \times$

* ASSUMED FROM B-100

CLARKEN C (OK) 4/12/11



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LABADIE UWL

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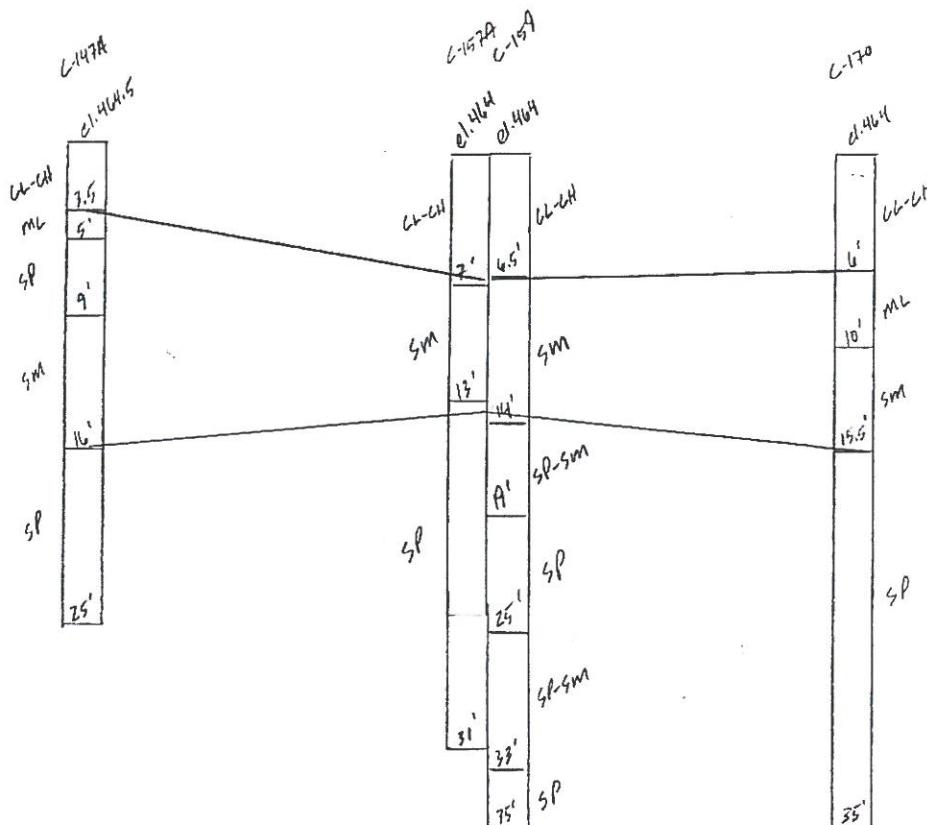
DATE 4-5-2011 BY JDB

Proj. Number

SHEET OF

SECTION C-C'

CIRCLE 43



SETTLEMENT PROFILE

0-7' CLAY

$\gamma_T = 110 \text{ PCF}$

$C_c = 0.37$ $C_s = 0.07$ $e_0 = 1.092$

7-16' SILT

$\gamma_T = 117 \text{ PCF}$ $E_{stop} = 150 \text{ KSF}$ $E_{bot.} = 550 \text{ KSF}$

16-37' SILT & SAND

$\gamma_T = 120 \text{ PCF}$ $E_s = 750 \text{ KSF}$

37-77' SAND & GRAVEL

$\gamma_T = 124 \text{ PCF}$ $E_s = 1000 \text{ KSF}$ *

77-105' SAND

$\gamma_T = 125 \text{ PCF}$ $E_s = 1200 \text{ KSF}$ *

* ASSUMED FROM B-100



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LABADIE UWL

SUBJECT

DATE 4-5-2011

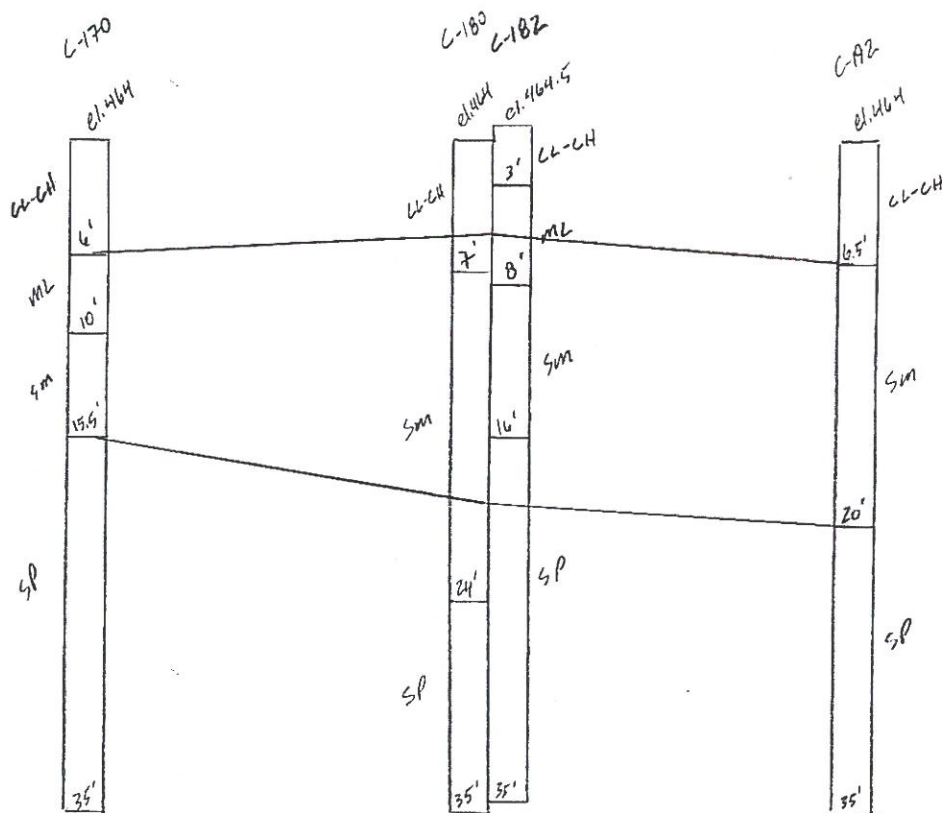
BY JDB

Proj. Number

SHEET OF

SECTION C-C'

CIRCLE 35



SETTLEMENT PROFILE

0-7' CLAY

$$\gamma_T = 110 \text{ PCF}$$

$$C_c = 0.37 \quad C_s = 0.07 \quad e_0 = 1.092$$

7-22' SILT & SAND

$$\gamma_T = 114 \text{ PCF} \quad E_s = 300 \text{ KSF}$$

22-37' SAND

$$\gamma_T = 122 \text{ PCF} \quad E_s = 1000 \text{ KSF}$$

37-77' SAND & GRAVEL

$$\gamma_T = 124 \text{ PCF} \quad E_s = 1000 \text{ KSF} \quad *$$

77-105' SAND (2)

$$\gamma_T = 125 \text{ PCF} \quad E_s = 1200 \text{ KSF} \quad *$$

* ASSUMED FROM B-100

CHKD G.R.P.: C. Cook 4/12/11



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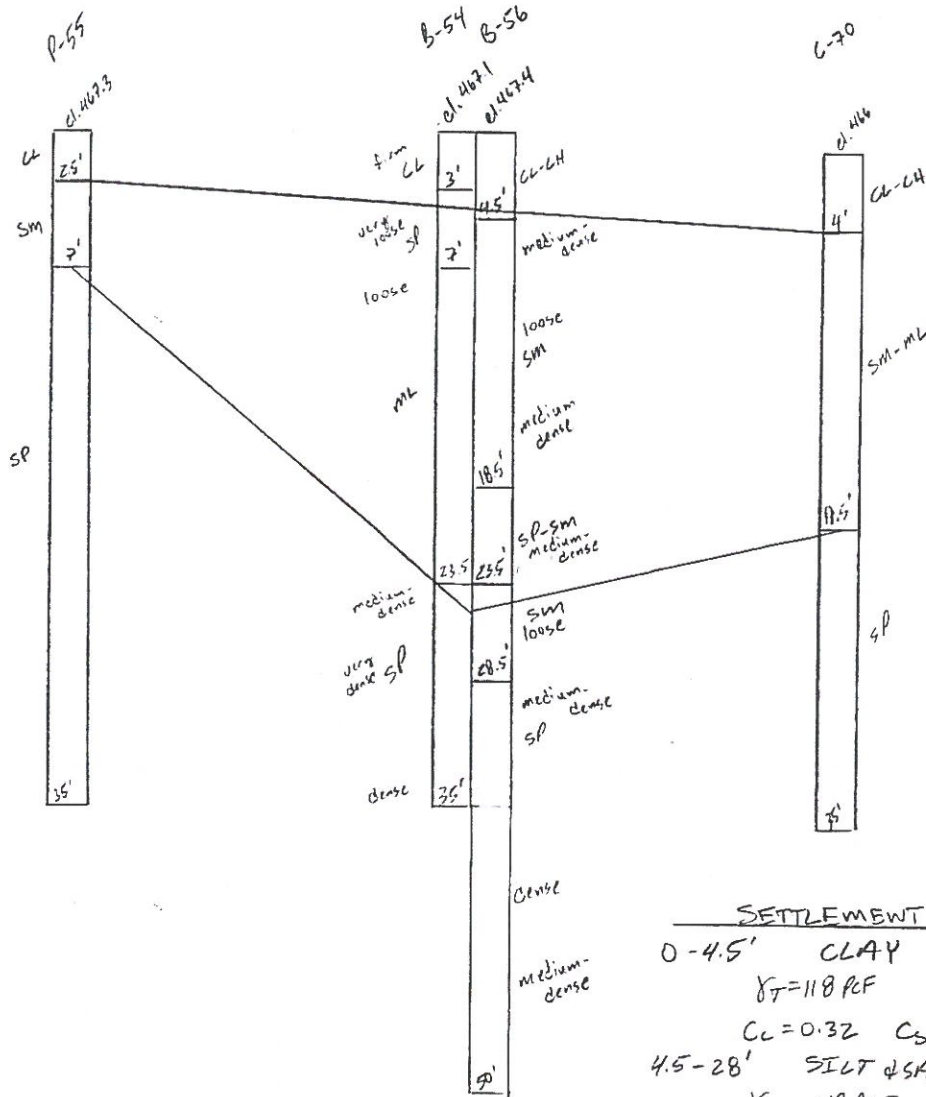
LABADIE UWL

DATE 4-8-2011 BY JOB

Proj. Number

SHEET OF

SECTION D-D'
CIRCLE 48



SETTLEMENT PROFILE

0-4.5' CLAY

$\gamma_T = 118 \text{ PCF}$

$C_L = 0.32 \quad C_S = 0.04 \quad C_0 = 0.862$

4.5-28' SILT & SAND

$\gamma_T = 119 \text{ PCF} \quad E_s = 2500 \text{ KSF}$

28-50' SAND

$\gamma_T = 120 \text{ PCF} \quad E_s = 6000 \text{ KSF}$

50-77' SAND & GRAVEL

$\gamma_T = 124 \text{ PCF} \quad E_s = 10000 \text{ KSF} \quad *$

77-105' SAND (2)

$\gamma_T = 125 \text{ PCF} \quad E_s = 1200 \text{ KSF} \quad *$

* ASSUMED FROM B-100

CHIEF/CLERK: C. COOK 4/12/11



REITZ & JENS, INC.
CONSULTING ENGINEERS

PROJECT

LABADIE UWL

SUBJECT

DATE 4-4-2011

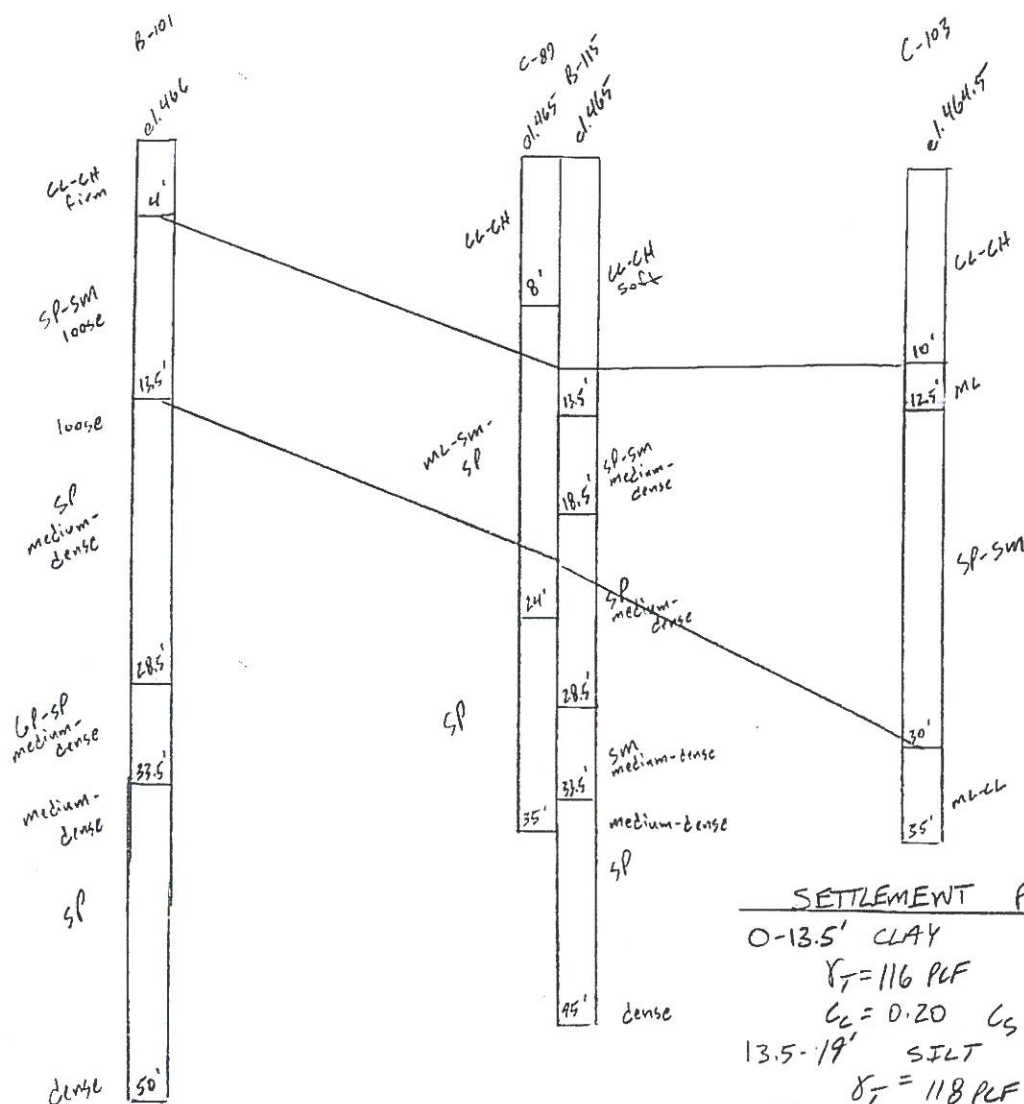
BY JOB

Proj. Number

SHEET OF

SECTION ~~6-6'~~ D-D'

CIRCLE 49



SETTLEMENT PROFILE

0-13.5' CLAY

$\gamma_T = 116 \text{ PCF}$

$C_c = 0.20 \quad C_s = 0.02 \quad e_0 = 0.900$

13.5-19' SILT

$\gamma_T = 118 \text{ PCF} \quad E_s = 350 \text{ KSF}$

19'-28.5' SAND & SILT

$\gamma_T = 120 \text{ PCF} \quad E_{st} = 450 \text{ KSF} \quad E_{sb} = 650 \text{ Ks.}$

28.5-36' SILT & SAND

$\gamma_T = 119 \text{ PCF} \quad E_s = 250 \text{ KSF}$

36-45' SAND

$\gamma_T = 122 \text{ PCF} \quad E_s = 600 \text{ KSF}$

45-103' SAND & GRAVEL

$\gamma_T = 124 \text{ PCF} \quad E_s = 1400 \text{ KSF}$

* ASSUMED FROM
B-7

CHECKED: C. COOK 1/12/11



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PROJECT

LABADIE UWL

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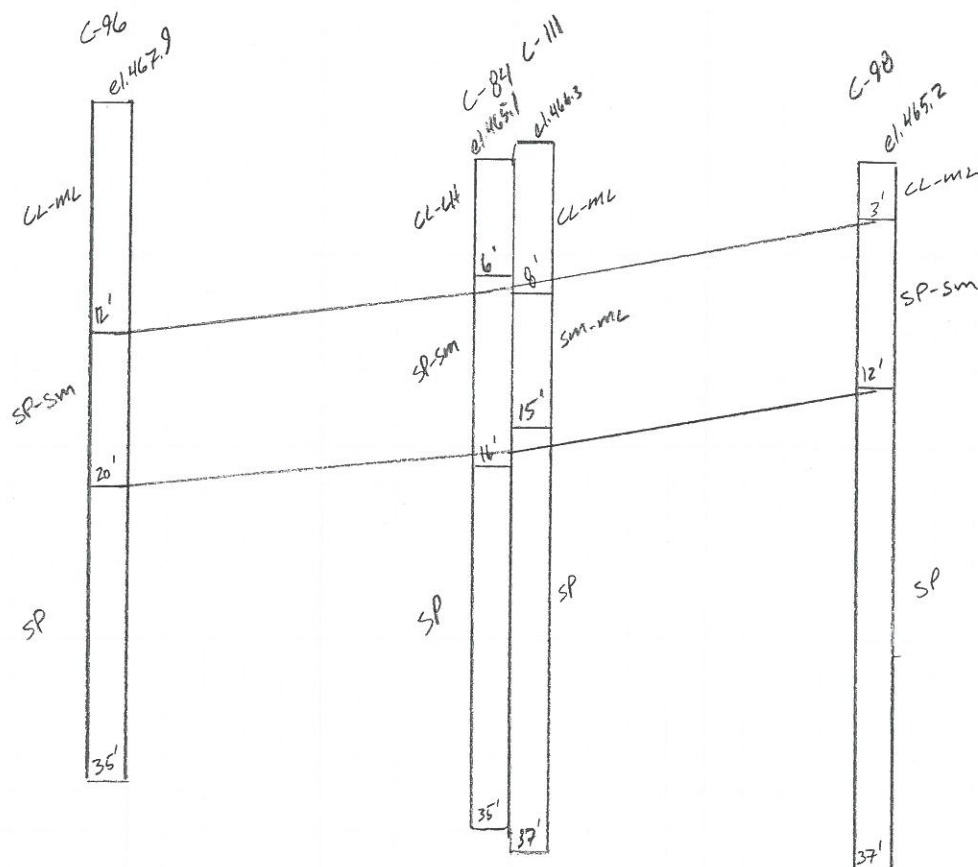
DATE 6/11/2012

BY JDB

Proj. Number

SHEET OF

SECTION ~~E-E'~~ D-D'
CIRCLE 50



SETTLEMENT PROFILE

0-12' CLAY

$\gamma_f = 118 \text{ PCF}$

$C_c = 0.32$

$C_s = 0.04$

$e_o = 0.862$

12-20' SILT & SAND

$\gamma_f = 120 \text{ PCF}$

$E_s = 300 \text{ KSF (TOP)}$

$E_s = 500 \text{ KSF (BOTTOM)}$

20-37' SAND

$\gamma_f = 122 \text{ PCF}$

$E_s = 900 \text{ KSF}$

37-77' SAND & GRAVEL

$\gamma_f = 124 \text{ PCF}$

$E_s = 1000 \text{ KSF}$

77-105' SAND (2)

$\gamma_f = 125 \text{ PCF}$

$E_s = 1200 \text{ KSF}$

Settle3D Analysis Information

Labadie UWL

Project Settings

Document Name: circle 3.s3z
 Project Title: Labadie UWL
 Analysis: Settlement
 Author: Christopher Cook
 Company: Reitz & Jens, Inc
 Date Created: 10/17/2012, 11:48:36 AM
 Stress Computation Method: Boussinesq
 Use average properties to calculate layered stresses
 Groundwater method: Water Table
 Water Unit Weight: 0.0624 kips/ft³
 Depth to water table: 1 [ft]

Stage Settings

Stage #	Name
1	Stage 1

Results

Time taken to compute: 0 seconds

Stage: Stage 1

Data Type	Minimum	Maximum
Total Settlement [in]	0	18.586
Consolidation Settlement [in]	0	5.1702
Immediate Settlement [in]	0	13.4187
Loading Stress [ksf]	0	10.3292
Effective Stress [ksf]	0	16.4779
Total Stress [ksf]	0	22.8427
Total Strain	0	0.0883972
Pore Water Pressure [ksf]	0	6.3648
Degree of Consolidation [%]	0	100
Pre-consolidation Stress [ksf]	0.0503125	16.4464
Over-consolidation Ratio	1	15.2292
Void Ratio	0	0.916999
Hydroconsolidation Settlement [in]	0	0

Loads

1. Polygonal Load

Load Type: Flexible
Area of Load: 183389 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1929.25	862.473	0
-1332.07	-407.189	0
-210.328	-424.303	0
-270.312	-363.597	2.9
-1293.01	-349.297	2.9
-1870.41	874.203	2.9
-1852.31	1508.1	2.9
-1908.21	1557.97	0

2. Polygonal Load

Load Type: Flexible
Area of Load: 234768 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-221.212	1808.9	2.9
-270.312	-363.597	2.9
-210.328	-424.303	0
-162.623	1880.73	0
-1908.21	1557.97	0

3. Polygonal Load

Load Type: Flexible
Area of Load: 156632 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1870.41	874.203	2.9
-1293.01	-349.297	2.9
-270.312	-363.597	2.9
-317.264	-315.23	5
-1259.26	-297.655	5
-1809.13	885.67	5
-1806.79	1469.02	5
-1852.31	1508.1	2.9

4. Polygonal Load

Load Type: Flexible
Area of Load: 171981 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-1806.79	1469.02	5
-267.217	1755.15	5
-317.264	-315.23	5
-270.312	-363.597	2.9
-221.212	1808.9	2.9

5. Polygonal Load

Load Type: Flexible
Area of Load: 244557 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-102.643	-2757.4	0
1076.16	-2794.88	0
1109.25	-1637.87	0
3035.41	-1668.34	0
2874.5	-1608.34	2.9
1048.12	-1576.89	2.9
1016.65	-2734.4	2.9
-39.0646	-2705.7	2.9

6. Polygonal Load

Load Type: Flexible
Area of Load: 433982 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0604	-2705.58	2.9
88.9461	776.742	2.9
2874.5	-1608.34	2.9
3035.41	-1668.34	0
35.4746	897.295	0
-102.643	-2757.4	0

7. Polygonal Load

Load Type: Flexible
Area of Load: 451309 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
27.8223	-2642.81	5
153.042	647.667	5
2690.18	-1545.21	5
2874.5	-1608.34	2.9
88.9461	776.742	2.9
-39.0604	-2705.58	2.9

8. Polygonal Load

Load Type: Flexible
Area of Load: 238713 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0644	-2705.7	2.9
1018.23	-2734.44	2.9
1048.12	-1576.89	2.9
2874.5	-1608.34	2.9
2690.18	-1545.21	5
989.752	-1516.32	5
956.638	-2672.65	5
27.8223	-2642.81	5

9. Polygonal Load

Load Type: Flexible
Area of Load: 567821 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1637.57	1323.75	10.2
-447.535	1544.49	10.2
-485.349	-142.076	10.2
-317.264	-315.23	10.2
-267.217	1755.15	5
-1806.56	1468.98	5

10. Polygonal Load

Load Type: Flexible
Area of Load: 1.5903e+006 ft²

Load: 10.2 ksf
Depth: 0 ft
Installation Stage: Stage 1

Coordinates

X [ft]	Y [ft]
-1649.21	915.592
-1153.62	-131.529
-485.349	-142.076
-447.535	1544.49
-1637.57	1323.75

11. Polygonal Load

Load Type: Flexible
Area of Load: 417396 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-485.349	-142.076	10.2
-1153.62	-131.529	10.2
-1649.21	915.592	10.2
-1637.57	1323.75	10.2
-1806.56	1468.98	5
-1809.13	885.67	5
-1259.26	-297.655	5
-317.264	-315.23	5

12. Polygonal Load

Load Type: Flexible
Area of Load: 941302 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
188.83	-2491.7	10.2
293.799	364.216	10.2
2201.69	-1376.73	10.2
2690.18	-1545.21	5
153.042	647.667	5
27.7015	-2645.99	5

13. Polygonal Load

Load Type: Flexible
Area of Load: 551990 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
952.602	-2672.52	5
989.748	-1516.48	5
2690.18	-1545.21	5
2201.69	-1376.73	10.2
832.524	-1353.16	10.2
802.744	-2507.54	10.2
188.83	-2491.7	10.2
27.7015	-2645.99	5

14. Polygonal Load

Load Type: Flexible

Area of Load: 2.38333e+006 ft²

Depth: 0 ft

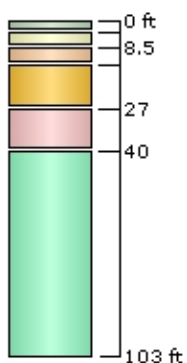
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
832.524	-1353.16	10.2
2201.69	-1376.73	10.2
293.799	364.216	10.2
188.83	-2491.7	10.2
802.744	-2507.54	10.2

Soil Layers

Layer #	Type	Thickness [ft]	Depth [ft]
1	SILT	3.5	0
2	CLAY	5	3.5
3	SILT & SAND	5	8.5
4	SAND & SILT	13.5	13.5
5	SAND	13	27
6	SAND & GRAVEL	63	40



Soil Properties

Property	CLAY	SILT	SILT & SAND	SAND & SILT	SAND	SAND & GRAVEL
Color						
Unit Weight [kips/ft ³]	0.115	0.115	0.12	0.122	0.125	0.124
Saturated Unit Weight [kips/ft ³]	0.115	0.115	0.12	0.122	0.125	0.124
Immediate Settlement	Disabled	Enabled	Enabled	Enabled	Enabled	Enabled
Es [ksf]		150	300	700	1400	1400
Es bottom [ksf]			500			
E _{sur} [ksf]		150	300	700	1400	1400
E _{sur} bottom [ksf]			500			
Primary Consolidation	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled
Material Type	Non-Linear					
C _c	0.3					
C _r	0.05					
e ₀	0.917					
P _c [ksf]	4.52					
OCR		1	1	1	1	1
Secondary Consolidation	Standard	Disabled	Disabled	Disabled	Disabled	Disabled
C _{ae} /C _a	0.005					
C _{ar} /C _{ae}	0.005					

Query Lines

Line #	Start Location	End Location	Horizontal Divisions	Vertical Divisions
1	-2058.82, 801.176	-110.756, 801.176	100	101

Settle3D Analysis Information

Labadie UWL

Project Settings

Document Name: circle 7.s3z
 Project Title: Labadie UWL
 Analysis: Settlement
 Author: Christopher Cook
 Company: Reitz & Jens, Inc
 Date Created: 10/17/2012, 11:48:36 AM
 Stress Computation Method: Boussinesq
 Use average properties to calculate layered stresses
 Groundwater method: Water Table
 Water Unit Weight: 0.0624 kips/ft³
 Depth to water table: 1 [ft]

Stage Settings

Stage #	Name
1	Stage 1

Results

Time taken to compute: 0 seconds

Stage: Stage 1

Data Type	Minimum	Maximum
Total Settlement [in]	0	17.9701
Consolidation Settlement [in]	0	6.20633
Immediate Settlement [in]	0	11.7765
Loading Stress [ksf]	0	10.3777
Effective Stress [ksf]	0	15.7989
Total Stress [ksf]	0	22.1637
Total Strain	1.6997e-008	0.107355
Pore Water Pressure [ksf]	0	6.3648
Degree of Consolidation [%]	0	100
Pre-consolidation Stress [ksf]	0.395357	15.7722
Over-consolidation Ratio	1	87.2726
Void Ratio	0	0.917
Hydroconsolidation Settlement [in]	0	0

Loads

1. Polygonal Load

Load Type: Flexible
Area of Load: 183389 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1929.25	862.473	0
-1332.07	-407.189	0
-210.328	-424.303	0
-270.312	-363.597	2.9
-1293.01	-349.297	2.9
-1870.41	874.203	2.9
-1852.31	1508.1	2.9
-1908.21	1557.97	0

2. Polygonal Load

Load Type: Flexible
Area of Load: 234768 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-221.212	1808.9	2.9
-270.312	-363.597	2.9
-210.328	-424.303	0
-162.623	1880.73	0
-1908.21	1557.97	0

3. Polygonal Load

Load Type: Flexible
Area of Load: 156632 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1870.41	874.203	2.9
-1293.01	-349.297	2.9
-270.312	-363.597	2.9
-317.264	-315.23	5
-1259.26	-297.655	5
-1809.13	885.67	5
-1806.79	1469.02	5
-1852.31	1508.1	2.9

4. Polygonal Load

Load Type: Flexible
Area of Load: 171981 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-1806.79	1469.02	5
-267.217	1755.15	5
-317.264	-315.23	5
-270.312	-363.597	2.9
-221.212	1808.9	2.9

5. Polygonal Load

Load Type: Flexible
Area of Load: 244557 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-102.643	-2757.4	0
1076.16	-2794.88	0
1109.25	-1637.87	0
3035.41	-1668.34	0
2874.5	-1608.34	2.9
1048.12	-1576.89	2.9
1016.65	-2734.4	2.9
-39.0646	-2705.7	2.9

6. Polygonal Load

Load Type: Flexible
Area of Load: 433982 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0604	-2705.58	2.9
88.9461	776.742	2.9
2874.5	-1608.34	2.9
3035.41	-1668.34	0
35.4746	897.295	0
-102.643	-2757.4	0

7. Polygonal Load

Load Type: Flexible
Area of Load: 451309 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
27.8223	-2642.81	5
153.042	647.667	5
2690.18	-1545.21	5
2874.5	-1608.34	2.9
88.9461	776.742	2.9
-39.0604	-2705.58	2.9

8. Polygonal Load

Load Type: Flexible
Area of Load: 238713 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0644	-2705.7	2.9
1018.23	-2734.44	2.9
1048.12	-1576.89	2.9
2874.5	-1608.34	2.9
2690.18	-1545.21	5
989.752	-1516.32	5
956.638	-2672.65	5
27.8223	-2642.81	5

9. Polygonal Load

Load Type: Flexible
Area of Load: 567821 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1637.57	1323.75	10.2
-447.535	1544.49	10.2
-485.349	-142.076	10.2
-317.264	-315.23	10.2
-267.217	1755.15	5
-1806.56	1468.98	5

10. Polygonal Load

Load Type: Flexible
Area of Load: 1.5903e+006 ft²

Load: 10.2 ksf
Depth: 0 ft
Installation Stage: Stage 1

Coordinates

X [ft]	Y [ft]
-1649.21	915.592
-1153.62	-131.529
-485.349	-142.076
-447.535	1544.49
-1637.57	1323.75

11. Polygonal Load

Load Type: Flexible
Area of Load: 417396 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-485.349	-142.076	10.2
-1153.62	-131.529	10.2
-1649.21	915.592	10.2
-1637.57	1323.75	10.2
-1806.56	1468.98	5
-1809.13	885.67	5
-1259.26	-297.655	5
-317.264	-315.23	5

12. Polygonal Load

Load Type: Flexible
Area of Load: 941302 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
188.83	-2491.7	10.2
293.799	364.216	10.2
2201.69	-1376.73	10.2
2690.18	-1545.21	5
153.042	647.667	5
27.7015	-2645.99	5

13. Polygonal Load

Load Type: Flexible
Area of Load: 551990 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
952.602	-2672.52	5
989.748	-1516.48	5
2690.18	-1545.21	5
2201.69	-1376.73	10.2
832.524	-1353.16	10.2
802.744	-2507.54	10.2
188.83	-2491.7	10.2
27.7015	-2645.99	5

14. Polygonal Load

Load Type: Flexible

Area of Load: 2.38333e+006 ft²

Depth: 0 ft

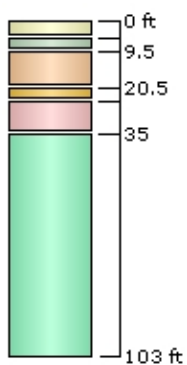
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
832.524	-1353.16	10.2
2201.69	-1376.73	10.2
293.799	364.216	10.2
188.83	-2491.7	10.2
802.744	-2507.54	10.2

Soil Layers

Layer #	Type	Thickness [ft]	Depth [ft]
1	CLAY	5.5	0
2	SILT	4	5.5
3	SILT & SAND	11	9.5
4	SAND & SILT	4	20.5
5	SAND	10.5	24.5
6	SAND & GRAVEL	68	35



Soil Properties

Property	CLAY	SILT	SILT & SAND	SAND & SILT	SAND	SAND & GRAVEL
Color						
Unit Weight [kips/ft ³]	0.113	0.117	0.12	0.12	0.122	0.115
Saturated Unit Weight [kips/ft ³]	0.113	0.117	0.12	0.12	0.122	0.115
Immediate Settlement	Disabled	Enabled	Enabled	Enabled	Enabled	Enabled
Es [ksf]		180	600	800	1200	1400
Es bottom [ksf]		350				
E _{sur} [ksf]		180	600	800	1200	1400
E _{sur} bottom [ksf]		350				
Primary Consolidation	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled
Material Type	Non-Linear					
C _c	0.3					
C _r	0.05					
e ₀	0.917					
P _c [ksf]	4.52					
OCR		1	1	1	1	1
Secondary Consolidation	Standard	Disabled	Disabled	Disabled	Disabled	Disabled
C _{ae} /C _a	0.005					
C _{ar} /C _{are}	0.005					

Query Lines

Line #	Start Location	End Location	Horizontal Divisions	Vertical Divisions
1	-767.609, 1911.57	-767.609, -555.741	100	101

Settle3D Analysis Information

Labadie UWL

Project Settings

Document Name: circle 8.s3z
Project Title: Labadie UWL
Analysis: Settlement
Author: Christopher Cook
Company: Reitz & Jens, Inc
Date Created: 10/17/2012, 11:48:36 AM
Stress Computation Method: Boussinesq
Use average properties to calculate layered stresses
Groundwater method: Water Table
Water Unit Weight: 0.0624 kips/ft³
Depth to water table: 1 [ft]

Stage Settings

Stage #	Name
1	Stage 1

Results

Time taken to compute: 0 seconds

Stage: Stage 1

Data Type	Minimum	Maximum
Total Settlement [in]	0	19.9785
Consolidation Settlement [in]	0	7.74089
Immediate Settlement [in]	0	12.2445
Loading Stress [ksf]	0	10.3777
Effective Stress [ksf]	0	16.3924
Total Stress [ksf]	0	22.7572
Total Strain	2.02229e-008	0.106378
Pore Water Pressure [ksf]	0	6.3648
Degree of Consolidation [%]	0	100
Pre-consolidation Stress [ksf]	0.471306	16.3611
Over-consolidation Ratio	1	79.9999
Void Ratio	0	0.917
Hydroconsolidation Settlement [in]	0	0

Loads

1. Polygonal Load

Load Type: Flexible
Area of Load: 183389 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1929.25	862.473	0
-1332.07	-407.189	0
-210.328	-424.303	0
-270.312	-363.597	2.9
-1293.01	-349.297	2.9
-1870.41	874.203	2.9
-1852.31	1508.1	2.9
-1908.21	1557.97	0

2. Polygonal Load

Load Type: Flexible
Area of Load: 234768 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-221.212	1808.9	2.9
-270.312	-363.597	2.9
-210.328	-424.303	0
-162.623	1880.73	0
-1908.21	1557.97	0

3. Polygonal Load

Load Type: Flexible
Area of Load: 156632 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1870.41	874.203	2.9
-1293.01	-349.297	2.9
-270.312	-363.597	2.9
-317.264	-315.23	5
-1259.26	-297.655	5
-1809.13	885.67	5
-1806.79	1469.02	5
-1852.31	1508.1	2.9

4. Polygonal Load

Load Type: Flexible
Area of Load: 171981 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-1806.79	1469.02	5
-267.217	1755.15	5
-317.264	-315.23	5
-270.312	-363.597	2.9
-221.212	1808.9	2.9

5. Polygonal Load

Load Type: Flexible
Area of Load: 244557 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-102.643	-2757.4	0
1076.16	-2794.88	0
1109.25	-1637.87	0
3035.41	-1668.34	0
2874.5	-1608.34	2.9
1048.12	-1576.89	2.9
1016.65	-2734.4	2.9
-39.0646	-2705.7	2.9

6. Polygonal Load

Load Type: Flexible
Area of Load: 433982 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0604	-2705.58	2.9
88.9461	776.742	2.9
2874.5	-1608.34	2.9
3035.41	-1668.34	0
35.4746	897.295	0
-102.643	-2757.4	0

7. Polygonal Load

Load Type: Flexible
Area of Load: 451309 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
27.8223	-2642.81	5
153.042	647.667	5
2690.18	-1545.21	5
2874.5	-1608.34	2.9
88.9461	776.742	2.9
-39.0604	-2705.58	2.9

8. Polygonal Load

Load Type: Flexible
Area of Load: 238713 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0644	-2705.7	2.9
1018.23	-2734.44	2.9
1048.12	-1576.89	2.9
2874.5	-1608.34	2.9
2690.18	-1545.21	5
989.752	-1516.32	5
956.638	-2672.65	5
27.8223	-2642.81	5

9. Polygonal Load

Load Type: Flexible
Area of Load: 567821 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1637.57	1323.75	10.2
-447.535	1544.49	10.2
-485.349	-142.076	10.2
-317.264	-315.23	10.2
-267.217	1755.15	5
-1806.56	1468.98	5

10. Polygonal Load

Load Type: Flexible
Area of Load: 1.5903e+006 ft²

Load: 10.2 ksf
Depth: 0 ft
Installation Stage: Stage 1

Coordinates

X [ft]	Y [ft]
-1649.21	915.592
-1153.62	-131.529
-485.349	-142.076
-447.535	1544.49
-1637.57	1323.75

11. Polygonal Load

Load Type: Flexible
Area of Load: 417396 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-485.349	-142.076	10.2
-1153.62	-131.529	10.2
-1649.21	915.592	10.2
-1637.57	1323.75	10.2
-1806.56	1468.98	5
-1809.13	885.67	5
-1259.26	-297.655	5
-317.264	-315.23	5

12. Polygonal Load

Load Type: Flexible
Area of Load: 941302 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
188.83	-2491.7	10.2
293.799	364.216	10.2
2201.69	-1376.73	10.2
2690.18	-1545.21	5
153.042	647.667	5
27.7015	-2645.99	5

13. Polygonal Load

Load Type: Flexible
Area of Load: 551990 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
952.602	-2672.52	5
989.748	-1516.48	5
2690.18	-1545.21	5
2201.69	-1376.73	10.2
832.524	-1353.16	10.2
802.744	-2507.54	10.2
188.83	-2491.7	10.2
27.7015	-2645.99	5

14. Polygonal Load

Load Type: Flexible

Area of Load: 2.38333e+006 ft²

Depth: 0 ft

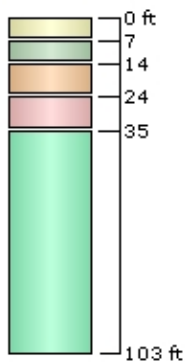
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
832.524	-1353.16	10.2
2201.69	-1376.73	10.2
293.799	364.216	10.2
188.83	-2491.7	10.2
802.744	-2507.54	10.2

Soil Layers

Layer #	Type	Thickness [ft]	Depth [ft]
1	CLAY	7	0
2	SILT	7	7
3	SILT & SAND	10	14
4	SAND	11	24
5	SAND & GRAVEL	68	35



Soil Properties

Property	CLAY	SILT	SILT & SAND	SAND	SAND & GRAVEL
Color					
Unit Weight [kips/ft ³]	0.113	0.117	0.12	0.122	0.124
Saturated Unit Weight [kips/ft ³]	0.113	0.117	0.12	0.122	0.124
Immediate Settlement	Disabled	Enabled	Enabled	Enabled	Enabled
Es [ksf]		250	600	1100	1400
Es bottom [ksf]			900		
Esur [ksf]		250	600	1100	1400
Esur bottom [ksf]			900		
Primary Consolidation	Enabled	Disabled	Disabled	Disabled	Disabled
Material Type	Non-Linear				
Cc	0.3				
Cr	0.05				
e0	0.917				
Pc [ksf]	4.52				
OCR		1	1	1	1
Secondary Consolidation	Standard	Disabled	Disabled	Disabled	Disabled
Cae/Ca	0.005				
Car/Care	0.005				

Query Lines

Line #	Start Location	End Location	Horizontal Divisions	Vertical Divisions
1	-767.609, 1911.57	-767.609, -555.741	100	101

Settle3D Analysis Information

Labadie UWL

Project Settings

Document Name: circle 8&9.s3z
Project Title: Labadie UWL
Analysis: Settlement
Author: Christopher Cook
Company: Reitz & Jens, Inc
Date Created: 10/17/2012, 11:48:36 AM
Stress Computation Method: Boussinesq
Use average properties to calculate layered stresses
Groundwater method: Water Table
Water Unit Weight: 0.0624 kips/ft³
Depth to water table: 1 [ft]

Stage Settings

Stage #	Name
1	Stage 1

Results

Time taken to compute: 0 seconds

Stage: Stage 1

Data Type	Minimum	Maximum
Total Settlement [in]	0	20.7832
Consolidation Settlement [in]	0	7.77249
Immediate Settlement [in]	0	13.0492
Loading Stress [ksf]	0	10.3292
Effective Stress [ksf]	0	16.3944
Total Stress [ksf]	0	22.7592
Total Strain	1.24418e-008	0.106171
Pore Water Pressure [ksf]	0	6.3648
Degree of Consolidation [%]	0	100
Pre-consolidation Stress [ksf]	0.471273	16.3625
Over-consolidation Ratio	1	79.9999
Void Ratio	0	0.917
Hydroconsolidation Settlement [in]	0	0

Loads

1. Polygonal Load

Load Type: Flexible
Area of Load: 183389 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1929.25	862.473	0
-1332.07	-407.189	0
-210.328	-424.303	0
-270.312	-363.597	2.9
-1293.01	-349.297	2.9
-1870.41	874.203	2.9
-1852.31	1508.1	2.9
-1908.21	1557.97	0

2. Polygonal Load

Load Type: Flexible
Area of Load: 234768 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-221.212	1808.9	2.9
-270.312	-363.597	2.9
-210.328	-424.303	0
-162.623	1880.73	0
-1908.21	1557.97	0

3. Polygonal Load

Load Type: Flexible
Area of Load: 156632 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1870.41	874.203	2.9
-1293.01	-349.297	2.9
-270.312	-363.597	2.9
-317.264	-315.23	5
-1259.26	-297.655	5
-1809.13	885.67	5
-1806.79	1469.02	5
-1852.31	1508.1	2.9

4. Polygonal Load

Load Type: Flexible
Area of Load: 171981 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-1806.79	1469.02	5
-267.217	1755.15	5
-317.264	-315.23	5
-270.312	-363.597	2.9
-221.212	1808.9	2.9

5. Polygonal Load

Load Type: Flexible
Area of Load: 244557 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-102.643	-2757.4	0
1076.16	-2794.88	0
1109.25	-1637.87	0
3035.41	-1668.34	0
2874.5	-1608.34	2.9
1048.12	-1576.89	2.9
1016.65	-2734.4	2.9
-39.0646	-2705.7	2.9

6. Polygonal Load

Load Type: Flexible
Area of Load: 433982 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0604	-2705.58	2.9
88.9461	776.742	2.9
2874.5	-1608.34	2.9
3035.41	-1668.34	0
35.4746	897.295	0
-102.643	-2757.4	0

7. Polygonal Load

Load Type: Flexible
Area of Load: 451309 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
27.8223	-2642.81	5
153.042	647.667	5
2690.18	-1545.21	5
2874.5	-1608.34	2.9
88.9461	776.742	2.9
-39.0604	-2705.58	2.9

8. Polygonal Load

Load Type: Flexible
Area of Load: 238713 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0644	-2705.7	2.9
1018.23	-2734.44	2.9
1048.12	-1576.89	2.9
2874.5	-1608.34	2.9
2690.18	-1545.21	5
989.752	-1516.32	5
956.638	-2672.65	5
27.8223	-2642.81	5

9. Polygonal Load

Load Type: Flexible
Area of Load: 567821 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1637.57	1323.75	10.2
-447.535	1544.49	10.2
-485.349	-142.076	10.2
-317.264	-315.23	10.2
-267.217	1755.15	5
-1806.56	1468.98	5

10. Polygonal Load

Load Type: Flexible
Area of Load: 1.5903e+006 ft²

Load: 10.2 ksf
Depth: 0 ft
Installation Stage: Stage 1

Coordinates

X [ft]	Y [ft]
-1649.21	915.592
-1153.62	-131.529
-485.349	-142.076
-447.535	1544.49
-1637.57	1323.75

11. Polygonal Load

Load Type: Flexible
Area of Load: 417396 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-485.349	-142.076	10.2
-1153.62	-131.529	10.2
-1649.21	915.592	10.2
-1637.57	1323.75	10.2
-1806.56	1468.98	5
-1809.13	885.67	5
-1259.26	-297.655	5
-317.264	-315.23	5

12. Polygonal Load

Load Type: Flexible
Area of Load: 941302 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
188.83	-2491.7	10.2
293.799	364.216	10.2
2201.69	-1376.73	10.2
2690.18	-1545.21	5
153.042	647.667	5
27.7015	-2645.99	5

13. Polygonal Load

Load Type: Flexible
Area of Load: 551990 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
952.602	-2672.52	5
989.748	-1516.48	5
2690.18	-1545.21	5
2201.69	-1376.73	10.2
832.524	-1353.16	10.2
802.744	-2507.54	10.2
188.83	-2491.7	10.2
27.7015	-2645.99	5

14. Polygonal Load

Load Type: Flexible

Area of Load: 2.38333e+006 ft²

Depth: 0 ft

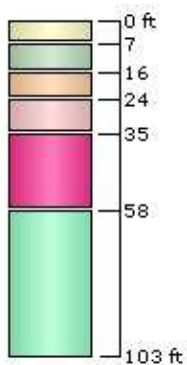
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
832.524	-1353.16	10.2
2201.69	-1376.73	10.2
293.799	364.216	10.2
188.83	-2491.7	10.2
802.744	-2507.54	10.2

Soil Layers

Layer #	Type	Thickness [ft]	Depth [ft]
1	CLAY	7	0
2	SILT	9	7
3	SILT & SAND	8	16
4	SAND	11	24
5	LOWER SAND	23	35
6	SAND & GRAVEL	45	58



Soil Properties

Property	CLAY	SILT	SILT & SAND	SAND	SAND & GRAVEL	LOWER SAND
Color						
Unit Weight [kips/ft ³]	0.113	0.117	0.12	0.122	0.124	0.124
Saturated Unit Weight [kips/ft ³]	0.113	0.117	0.12	0.122	0.124	0.124
Immediate Settlement	Disabled	Enabled	Enabled	Enabled	Enabled	Enabled
Es [ksf]		250	600	1100	1400	1300
Es bottom [ksf]			900			
Esur [ksf]		250	600	1100	1400	1300
Esur bottom [ksf]			900			
Primary Consolidation	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled
Material Type	Non-Linear					
Cc	0.3					
Cr	0.05					
e0	0.917					
Pc [ksf]	4.52					
OCR		1	1	1	1	1
Secondary Consolidation	Standard	Disabled	Disabled	Disabled	Disabled	Disabled
Cae/Ca	0.005					
Car/Care	0.005					

Query Lines

Line #	Start Location	End Location	Horizontal Divisions	Vertical Divisions
1	-2058.82, 801.176	-110.756, 801.176	100	101

Settle3D Analysis Information

Labadie UWL

Project Settings

Document Name: circle 9.s3z
 Project Title: Labadie UWL
 Analysis: Settlement
 Author: Christopher Cook
 Company: Reitz & Jens, Inc
 Date Created: 10/17/2012, 11:48:36 AM
 Stress Computation Method: Boussinesq
 Use average properties to calculate layered stresses
 Groundwater method: Water Table
 Water Unit Weight: 0.0624 kips/ft³
 Depth to water table: 1 [ft]

Stage Settings

Stage #	Name
1	Stage 1

Results

Time taken to compute: 0 seconds

Stage: Stage 1

Data Type	Minimum	Maximum
Total Settlement [in]	0	19.675
Consolidation Settlement [in]	0	7.74089
Immediate Settlement [in]	0	11.941
Loading Stress [ksf]	0	10.3777
Effective Stress [ksf]	0	16.3904
Total Stress [ksf]	0	22.7552
Total Strain	2.02229e-008	0.106378
Pore Water Pressure [ksf]	0	6.3648
Degree of Consolidation [%]	0	100
Pre-consolidation Stress [ksf]	0.471306	16.3589
Over-consolidation Ratio	1	79.9999
Void Ratio	0	0.917
Hydroconsolidation Settlement [in]	0	0

Loads

1. Polygonal Load

Load Type: Flexible
Area of Load: 183389 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1929.25	862.473	0
-1332.07	-407.189	0
-210.328	-424.303	0
-270.312	-363.597	2.9
-1293.01	-349.297	2.9
-1870.41	874.203	2.9
-1852.31	1508.1	2.9
-1908.21	1557.97	0

2. Polygonal Load

Load Type: Flexible
Area of Load: 234768 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-221.212	1808.9	2.9
-270.312	-363.597	2.9
-210.328	-424.303	0
-162.623	1880.73	0
-1908.21	1557.97	0

3. Polygonal Load

Load Type: Flexible
Area of Load: 156632 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1870.41	874.203	2.9
-1293.01	-349.297	2.9
-270.312	-363.597	2.9
-317.264	-315.23	5
-1259.26	-297.655	5
-1809.13	885.67	5
-1806.79	1469.02	5
-1852.31	1508.1	2.9

4. Polygonal Load

Load Type: Flexible
Area of Load: 171981 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-1806.79	1469.02	5
-267.217	1755.15	5
-317.264	-315.23	5
-270.312	-363.597	2.9
-221.212	1808.9	2.9

5. Polygonal Load

Load Type: Flexible
Area of Load: 244557 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-102.643	-2757.4	0
1076.16	-2794.88	0
1109.25	-1637.87	0
3035.41	-1668.34	0
2874.5	-1608.34	2.9
1048.12	-1576.89	2.9
1016.65	-2734.4	2.9
-39.0646	-2705.7	2.9

6. Polygonal Load

Load Type: Flexible
Area of Load: 433982 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0604	-2705.58	2.9
88.9461	776.742	2.9
2874.5	-1608.34	2.9
3035.41	-1668.34	0
35.4746	897.295	0
-102.643	-2757.4	0

7. Polygonal Load

Load Type: Flexible
Area of Load: 451309 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
27.8223	-2642.81	5
153.042	647.667	5
2690.18	-1545.21	5
2874.5	-1608.34	2.9
88.9461	776.742	2.9
-39.0604	-2705.58	2.9

8. Polygonal Load

Load Type: Flexible
Area of Load: 238713 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0644	-2705.7	2.9
1018.23	-2734.44	2.9
1048.12	-1576.89	2.9
2874.5	-1608.34	2.9
2690.18	-1545.21	5
989.752	-1516.32	5
956.638	-2672.65	5
27.8223	-2642.81	5

9. Polygonal Load

Load Type: Flexible
Area of Load: 567821 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1637.57	1323.75	10.2
-447.535	1544.49	10.2
-485.349	-142.076	10.2
-317.264	-315.23	10.2
-267.217	1755.15	5
-1806.56	1468.98	5

10. Polygonal Load

Load Type: Flexible
Area of Load: 1.5903e+006 ft²

Load: 10.2 ksf
Depth: 0 ft
Installation Stage: Stage 1

Coordinates

X [ft]	Y [ft]
-1649.21	915.592
-1153.62	-131.529
-485.349	-142.076
-447.535	1544.49
-1637.57	1323.75

11. Polygonal Load

Load Type: Flexible
Area of Load: 417396 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-485.349	-142.076	10.2
-1153.62	-131.529	10.2
-1649.21	915.592	10.2
-1637.57	1323.75	10.2
-1806.56	1468.98	5
-1809.13	885.67	5
-1259.26	-297.655	5
-317.264	-315.23	5

12. Polygonal Load

Load Type: Flexible
Area of Load: 941302 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
188.83	-2491.7	10.2
293.799	364.216	10.2
2201.69	-1376.73	10.2
2690.18	-1545.21	5
153.042	647.667	5
27.7015	-2645.99	5

13. Polygonal Load

Load Type: Flexible
Area of Load: 551990 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
952.602	-2672.52	5
989.748	-1516.48	5
2690.18	-1545.21	5
2201.69	-1376.73	10.2
832.524	-1353.16	10.2
802.744	-2507.54	10.2
188.83	-2491.7	10.2
27.7015	-2645.99	5

14. Polygonal Load

Load Type: Flexible

Area of Load: 2.38333e+006 ft²

Depth: 0 ft

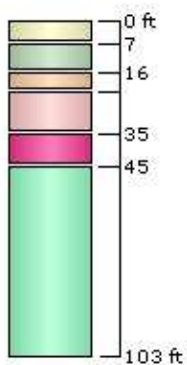
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
832.524	-1353.16	10.2
2201.69	-1376.73	10.2
293.799	364.216	10.2
188.83	-2491.7	10.2
802.744	-2507.54	10.2

Soil Layers

Layer #	Type	Thickness [ft]	Depth [ft]
1	CLAY	7	0
2	SILT	9	7
3	SILT & SAND	6	16
4	SAND	13	22
5	LOWER SAND	10	35
6	SAND & GRAVEL	58	45



Soil Properties

Property	CLAY	SILT	SILT & SAND	SAND	SAND & GRAVEL	LOWER SAND
Color						
Unit Weight [kips/ft ³]	0.113	0.117	0.12	0.122	0.124	0.124
Saturated Unit Weight [kips/ft ³]	0.113	0.117	0.12	0.122	0.124	0.124
Immediate Settlement	Disabled	Enabled	Enabled	Enabled	Enabled	Enabled
Es [ksf]		300	900	1100	1400	1300
Esur [ksf]		300	900	1100	1400	1300
Primary Consolidation	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled
Material Type	Non-Linear					
Cc	0.3					
Cr	0.05					
e0	0.917					
Pc [ksf]	4.52					
OCR		1	1	1	1	1
Secondary Consolidation	Standard	Disabled	Disabled	Disabled	Disabled	Disabled
Cae/Ca	0.005					
Car/Care	0.005					

Query Lines

Line #	Start Location	End Location	Horizontal Divisions	Vertical Divisions
1	-767.609, 1911.57	-767.609, -555.741	100	101

Settle3D Analysis Information

Labadie UWL

Project Settings

Document Name: circle 10.s3z
 Project Title: Labadie UWL
 Analysis: Settlement
 Author: Christopher Cook
 Company: Reitz & Jens, Inc
 Date Created: 10/17/2012, 11:48:36 AM
 Stress Computation Method: Boussinesq
 Use average properties to calculate layered stresses
 Groundwater method: Water Table
 Water Unit Weight: 0.0624 kips/ft³
 Depth to water table: 1 [ft]

Stage Settings

Stage #	Name
1	Stage 1

Results

Time taken to compute: 0 seconds

Stage: Stage 1

Data Type	Minimum	Maximum
Total Settlement [in]	0	22.5594
Consolidation Settlement [in]	0	8.33957
Immediate Settlement [in]	0	14.2226
Loading Stress [ksf]	0	10.3777
Effective Stress [ksf]	0	16.3404
Total Stress [ksf]	0	22.7052
Total Strain	1.59504e-008	0.0994291
Pore Water Pressure [ksf]	0	6.3648
Degree of Consolidation [%]	0	100
Pre-consolidation Stress [ksf]	0.556189	16.3091
Over-consolidation Ratio	1	80.6778
Void Ratio	0	0.862
Hydroconsolidation Settlement [in]	0	0

Loads

1. Polygonal Load

Load Type: Flexible
Area of Load: 183389 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1929.25	862.473	0
-1332.07	-407.189	0
-210.328	-424.303	0
-270.312	-363.597	2.9
-1293.01	-349.297	2.9
-1870.41	874.203	2.9
-1852.31	1508.1	2.9
-1908.21	1557.97	0

2. Polygonal Load

Load Type: Flexible
Area of Load: 234768 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-221.212	1808.9	2.9
-270.312	-363.597	2.9
-210.328	-424.303	0
-162.623	1880.73	0
-1908.21	1557.97	0

3. Polygonal Load

Load Type: Flexible
Area of Load: 156632 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1870.41	874.203	2.9
-1293.01	-349.297	2.9
-270.312	-363.597	2.9
-317.264	-315.23	5
-1259.26	-297.655	5
-1809.13	885.67	5
-1806.79	1469.02	5
-1852.31	1508.1	2.9

4. Polygonal Load

Load Type: Flexible
Area of Load: 171981 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-1806.79	1469.02	5
-267.217	1755.15	5
-317.264	-315.23	5
-270.312	-363.597	2.9
-221.212	1808.9	2.9

5. Polygonal Load

Load Type: Flexible
Area of Load: 244557 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-102.643	-2757.4	0
1076.16	-2794.88	0
1109.25	-1637.87	0
3035.41	-1668.34	0
2874.5	-1608.34	2.9
1048.12	-1576.89	2.9
1016.65	-2734.4	2.9
-39.0646	-2705.7	2.9

6. Polygonal Load

Load Type: Flexible
Area of Load: 433982 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0604	-2705.58	2.9
88.9461	776.742	2.9
2874.5	-1608.34	2.9
3035.41	-1668.34	0
35.4746	897.295	0
-102.643	-2757.4	0

7. Polygonal Load

Load Type: Flexible
Area of Load: 451309 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
27.8223	-2642.81	5
153.042	647.667	5
2690.18	-1545.21	5
2874.5	-1608.34	2.9
88.9461	776.742	2.9
-39.0604	-2705.58	2.9

8. Polygonal Load

Load Type: Flexible
Area of Load: 238713 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0644	-2705.7	2.9
1018.23	-2734.44	2.9
1048.12	-1576.89	2.9
2874.5	-1608.34	2.9
2690.18	-1545.21	5
989.752	-1516.32	5
956.638	-2672.65	5
27.8223	-2642.81	5

9. Polygonal Load

Load Type: Flexible
Area of Load: 567821 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1637.57	1323.75	10.2
-447.535	1544.49	10.2
-485.349	-142.076	10.2
-317.264	-315.23	10.2
-267.217	1755.15	5
-1806.56	1468.98	5

10. Polygonal Load

Load Type: Flexible
Area of Load: 1.5903e+006 ft²

Load: 10.2 ksf
Depth: 0 ft
Installation Stage: Stage 1

Coordinates

X [ft]	Y [ft]
-1649.21	915.592
-1153.62	-131.529
-485.349	-142.076
-447.535	1544.49
-1637.57	1323.75

11. Polygonal Load

Load Type: Flexible
Area of Load: 417396 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-485.349	-142.076	10.2
-1153.62	-131.529	10.2
-1649.21	915.592	10.2
-1637.57	1323.75	10.2
-1806.56	1468.98	5
-1809.13	885.67	5
-1259.26	-297.655	5
-317.264	-315.23	5

12. Polygonal Load

Load Type: Flexible
Area of Load: 941302 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
188.83	-2491.7	10.2
293.799	364.216	10.2
2201.69	-1376.73	10.2
2690.18	-1545.21	5
153.042	647.667	5
27.7015	-2645.99	5

13. Polygonal Load

Load Type: Flexible
Area of Load: 551990 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
952.602	-2672.52	5
989.748	-1516.48	5
2690.18	-1545.21	5
2201.69	-1376.73	10.2
832.524	-1353.16	10.2
802.744	-2507.54	10.2
188.83	-2491.7	10.2
27.7015	-2645.99	5

14. Polygonal Load

Load Type: Flexible

Area of Load: 2.38333e+006 ft²

Depth: 0 ft

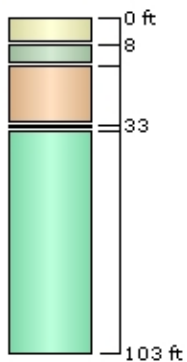
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
832.524	-1353.16	10.2
2201.69	-1376.73	10.2
293.799	364.216	10.2
188.83	-2491.7	10.2
802.744	-2507.54	10.2

Soil Layers

Layer #	Type	Thickness [ft]	Depth [ft]
1	CLAY	8	0
2	SILT	6.5	8
3	SILT & SAND	18.5	14.5
4	SAND	2	33
5	SAND & GRAVEL	68	35



Soil Properties

Property	CLAY	SILT	SILT & SAND	SAND	SAND & GRAVEL
Color					
Unit Weight [kips/ft ³]	0.118	0.115	0.117	0.122	0.124
Saturated Unit Weight [kips/ft ³]	0.118	0.115	0.117	0.122	0.124
Immediate Settlement	Disabled	Enabled	Enabled	Enabled	Enabled
Es [ksf]		200	550	1300	1400
E _{sur} [ksf]		200	550	1300	1400
Primary Consolidation	Enabled	Disabled	Disabled	Disabled	Disabled
Material Type	Non-Linear				
Cc	0.32				
Cr	0.04				
e ₀	0.862				
Pc [ksf]	4.76				
OCR		1	1	1	1
Secondary Consolidation	Standard	Disabled	Disabled	Disabled	Disabled
C _{ae} /C _a	0.004				
C _{ar} /C _{are}	0.004				

Query Lines

Line #	Start Location	End Location	Horizontal Divisions	Vertical Divisions
1	-767.609, 1911.57	-767.609, -555.741	100	101

Settle3D Analysis Information

Labadie UWL

Project Settings

Document Name: circle 24.s3z
Project Title: Labadie UWL
Analysis: Settlement
Author: Christopher Cook
Company: Reitz & Jens, Inc
Date Created: 10/17/2012, 11:48:36 AM
Stress Computation Method: Boussinesq
Use average properties to calculate layered stresses
Groundwater method: Water Table
Water Unit Weight: 0.0624 kips/ft³
Depth to water table: 1 [ft]

Stage Settings

Stage #	Name
1	Stage 1

Results

Time taken to compute: 0 seconds

Stage: Stage 1

Data Type	Minimum	Maximum
Total Settlement [in]	0	21.1299
Consolidation Settlement [in]	0	10.2799
Immediate Settlement [in]	0	10.8534
Loading Stress [ksf]	0	10.2108
Effective Stress [ksf]	0	16.4296
Total Stress [ksf]	0	22.7944
Total Strain	5.83503e-008	0.0983151
Pore Water Pressure [ksf]	0	6.3648
Degree of Consolidation [%]	0	100
Pre-consolidation Stress [ksf]	0.676898	16.3985
Over-consolidation Ratio	1	80.6775
Void Ratio	0	0.862
Hydroconsolidation Settlement [in]	0	0

Loads

1. Polygonal Load

Load Type: Flexible
Area of Load: 183389 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1929.25	862.473	0
-1332.07	-407.189	0
-210.328	-424.303	0
-270.312	-363.597	2.9
-1293.01	-349.297	2.9
-1870.41	874.203	2.9
-1852.31	1508.1	2.9
-1908.21	1557.97	0

2. Polygonal Load

Load Type: Flexible
Area of Load: 234768 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-221.212	1808.9	2.9
-270.312	-363.597	2.9
-210.328	-424.303	0
-162.623	1880.73	0
-1908.21	1557.97	0

3. Polygonal Load

Load Type: Flexible
Area of Load: 156632 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1870.41	874.203	2.9
-1293.01	-349.297	2.9
-270.312	-363.597	2.9
-317.264	-315.23	5
-1259.26	-297.655	5
-1809.13	885.67	5
-1806.79	1469.02	5
-1852.31	1508.1	2.9

4. Polygonal Load

Load Type: Flexible
Area of Load: 171981 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-1806.79	1469.02	5
-267.217	1755.15	5
-317.264	-315.23	5
-270.312	-363.597	2.9
-221.212	1808.9	2.9

5. Polygonal Load

Load Type: Flexible
Area of Load: 244557 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-102.643	-2757.4	0
1076.16	-2794.88	0
1109.25	-1637.87	0
3035.41	-1668.34	0
2874.5	-1608.34	2.9
1048.12	-1576.89	2.9
1016.65	-2734.4	2.9
-39.0646	-2705.7	2.9

6. Polygonal Load

Load Type: Flexible
Area of Load: 433982 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0604	-2705.58	2.9
88.9461	776.742	2.9
2874.5	-1608.34	2.9
3035.41	-1668.34	0
35.4746	897.295	0
-102.643	-2757.4	0

7. Polygonal Load

Load Type: Flexible
Area of Load: 451309 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
27.8223	-2642.81	5
153.042	647.667	5
2690.18	-1545.21	5
2874.5	-1608.34	2.9
88.9461	776.742	2.9
-39.0604	-2705.58	2.9

8. Polygonal Load

Load Type: Flexible
Area of Load: 238713 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0644	-2705.7	2.9
1018.23	-2734.44	2.9
1048.12	-1576.89	2.9
2874.5	-1608.34	2.9
2690.18	-1545.21	5
989.752	-1516.32	5
956.638	-2672.65	5
27.8223	-2642.81	5

9. Polygonal Load

Load Type: Flexible
Area of Load: 567821 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1637.57	1323.75	10.2
-447.535	1544.49	10.2
-485.349	-142.076	10.2
-317.264	-315.23	10.2
-267.217	1755.15	5
-1806.56	1468.98	5

10. Polygonal Load

Load Type: Flexible
Area of Load: 1.5903e+006 ft²

Load: 10.2 ksf
Depth: 0 ft
Installation Stage: Stage 1

Coordinates

X [ft]	Y [ft]
-1649.21	915.592
-1153.62	-131.529
-485.349	-142.076
-447.535	1544.49
-1637.57	1323.75

11. Polygonal Load

Load Type: Flexible
Area of Load: 417396 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-485.349	-142.076	10.2
-1153.62	-131.529	10.2
-1649.21	915.592	10.2
-1637.57	1323.75	10.2
-1806.56	1468.98	5
-1809.13	885.67	5
-1259.26	-297.655	5
-317.264	-315.23	5

12. Polygonal Load

Load Type: Flexible
Area of Load: 941302 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
188.83	-2491.7	10.2
293.799	364.216	10.2
2201.69	-1376.73	10.2
2690.18	-1545.21	5
153.042	647.667	5
27.7015	-2645.99	5

13. Polygonal Load

Load Type: Flexible
Area of Load: 551990 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
952.602	-2672.52	5
989.748	-1516.48	5
2690.18	-1545.21	5
2201.69	-1376.73	10.2
832.524	-1353.16	10.2
802.744	-2507.54	10.2
188.83	-2491.7	10.2
27.7015	-2645.99	5

14. Polygonal Load

Load Type: Flexible

Area of Load: 2.38333e+006 ft²

Depth: 0 ft

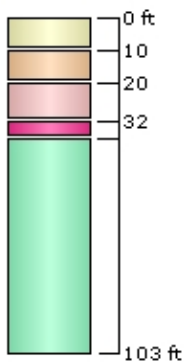
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
832.524	-1353.16	10.2
2201.69	-1376.73	10.2
293.799	364.216	10.2
188.83	-2491.7	10.2
802.744	-2507.54	10.2

Soil Layers

Layer #	Type	Thickness [ft]	Depth [ft]
1	CLAY	10	0
2	SILT & SAND	10	10
3	SAND	12	20
4	SAND (2)	5	32
5	SAND & GRAVEL	66	37



Soil Properties

Property	CLAY	SILT & SAND	SAND	SAND & GRAVEL	SAND (2)
Color					
Unit Weight [kips/ft ³]	0.118	0.12	0.122	0.124	0.122
Saturated Unit Weight [kips/ft ³]	0.118	0.12	0.122	0.124	0.122
Immediate Settlement	Disabled	Enabled	Enabled	Enabled	Enabled
Es [ksf]		300	800	1400	1000
Es bottom [ksf]		675			
Esur [ksf]		300	800	1400	1000
Esur bottom [ksf]		675			
Primary Consolidation	Enabled	Disabled	Disabled	Disabled	Disabled
Material Type	Non-Linear				
Cc	0.32				
Cr	0.04				
e0	0.862				
Pc [ksf]	4.76				
OCR		1	1	1	1
Secondary Consolidation	Standard	Disabled	Disabled	Disabled	Disabled
Cae/Ca	0.004				
Car/Care	0.004				

Query Lines

Line #	Start Location	End Location	Horizontal Divisions	Vertical Divisions
1	559.525, 509.589	447.919, -2857.73	100	101

Settle3D Analysis Information

Labadie UWL

Project Settings

Document Name: CIRCLE 35.s3z
 Project Title: Labadie UWL
 Analysis: Settlement
 Author: Christopher Cook
 Company: Reitz & Jens, Inc
 Date Created: 10/17/2012, 11:48:36 AM
 Stress Computation Method: Boussinesq
 Use average properties to calculate layered stresses
 Groundwater method: Water Table
 Water Unit Weight: 0.0624 kips/ft³
 Depth to water table: 1 [ft]

Stage Settings

Stage #	Name
1	Stage 1

Results

Time taken to compute: 0 seconds

Stage: Stage 1

Data Type	Minimum	Maximum
Total Settlement [in]	0	26.4523
Consolidation Settlement [in]	0	10.7611
Immediate Settlement [in]	0	15.6947
Loading Stress [ksf]	0	10.2108
Effective Stress [ksf]	0	16.5094
Total Stress [ksf]	0	22.999
Total Strain	9.74964e-008	0.145139
Pore Water Pressure [ksf]	0	6.4896
Degree of Consolidation [%]	0	100
Pre-consolidation Stress [ksf]	0.452551	16.4764
Over-consolidation Ratio	1	61.4541
Void Ratio	0	1.092
Hydroconsolidation Settlement [in]	0	0

Loads

1. Polygonal Load

Load Type: Flexible
Area of Load: 183389 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1929.25	862.473	0
-1332.07	-407.189	0
-210.328	-424.303	0
-270.312	-363.597	2.9
-1293.01	-349.297	2.9
-1870.41	874.203	2.9
-1852.31	1508.1	2.9
-1908.21	1557.97	0

2. Polygonal Load

Load Type: Flexible
Area of Load: 234768 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-221.212	1808.9	2.9
-270.312	-363.597	2.9
-210.328	-424.303	0
-162.623	1880.73	0
-1908.21	1557.97	0

3. Polygonal Load

Load Type: Flexible
Area of Load: 156632 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1870.41	874.203	2.9
-1293.01	-349.297	2.9
-270.312	-363.597	2.9
-317.264	-315.23	5
-1259.26	-297.655	5
-1809.13	885.67	5
-1806.79	1469.02	5
-1852.31	1508.1	2.9

4. Polygonal Load

Load Type: Flexible
Area of Load: 171981 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-1806.79	1469.02	5
-267.217	1755.15	5
-317.264	-315.23	5
-270.312	-363.597	2.9
-221.212	1808.9	2.9

5. Polygonal Load

Load Type: Flexible
Area of Load: 244557 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-102.643	-2757.4	0
1076.16	-2794.88	0
1109.25	-1637.87	0
3035.41	-1668.34	0
2874.5	-1608.34	2.9
1048.12	-1576.89	2.9
1016.65	-2734.4	2.9
-39.0646	-2705.7	2.9

6. Polygonal Load

Load Type: Flexible
Area of Load: 433982 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0604	-2705.58	2.9
88.9461	776.742	2.9
2874.5	-1608.34	2.9
3035.41	-1668.34	0
35.4746	897.295	0
-102.643	-2757.4	0

7. Polygonal Load

Load Type: Flexible
Area of Load: 451309 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
27.8223	-2642.81	5
153.042	647.667	5
2690.18	-1545.21	5
2874.5	-1608.34	2.9
88.9461	776.742	2.9
-39.0604	-2705.58	2.9

8. Polygonal Load

Load Type: Flexible
Area of Load: 238713 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0644	-2705.7	2.9
1018.23	-2734.44	2.9
1048.12	-1576.89	2.9
2874.5	-1608.34	2.9
2690.18	-1545.21	5
989.752	-1516.32	5
956.638	-2672.65	5
27.8223	-2642.81	5

9. Polygonal Load

Load Type: Flexible
Area of Load: 567821 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1637.57	1323.75	10.2
-447.535	1544.49	10.2
-485.349	-142.076	10.2
-317.264	-315.23	10.2
-267.217	1755.15	5
-1806.56	1468.98	5

10. Polygonal Load

Load Type: Flexible
Area of Load: 1.5903e+006 ft²

Load: 10.2 ksf
Depth: 0 ft
Installation Stage: Stage 1

Coordinates

X [ft]	Y [ft]
-1649.21	915.592
-1153.62	-131.529
-485.349	-142.076
-447.535	1544.49
-1637.57	1323.75

11. Polygonal Load

Load Type: Flexible
Area of Load: 417396 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-485.349	-142.076	10.2
-1153.62	-131.529	10.2
-1649.21	915.592	10.2
-1637.57	1323.75	10.2
-1806.56	1468.98	5
-1809.13	885.67	5
-1259.26	-297.655	5
-317.264	-315.23	5

12. Polygonal Load

Load Type: Flexible
Area of Load: 941302 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
188.83	-2491.7	10.2
293.799	364.216	10.2
2201.69	-1376.73	10.2
2690.18	-1545.21	5
153.042	647.667	5
27.7015	-2645.99	5

13. Polygonal Load

Load Type: Flexible
Area of Load: 551990 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
952.602	-2672.52	5
989.748	-1516.48	5
2690.18	-1545.21	5
2201.69	-1376.73	10.2
832.524	-1353.16	10.2
802.744	-2507.54	10.2
188.83	-2491.7	10.2
27.7015	-2645.99	5

14. Polygonal Load

Load Type: Flexible

Area of Load: 2.38333e+006 ft²

Depth: 0 ft

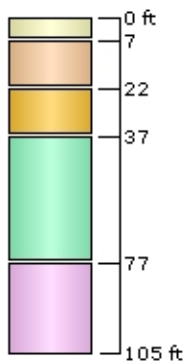
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
832.524	-1353.16	10.2
2201.69	-1376.73	10.2
293.799	364.216	10.2
188.83	-2491.7	10.2
802.744	-2507.54	10.2

Soil Layers

Layer #	Type	Thickness [ft]	Depth [ft]
1	CLAY	7	0
2	SILT & SAND	15	7
3	SAND	15	22
4	SAND & GRAVEL	40	37
5	SAND (3)	28	77



Soil Properties

Property	CLAY	SILT & SAND	SAND	SAND & GRAVEL	SAND (3)
Color					
Unit Weight [kips/ft ³]	0.11	0.119	0.122	0.124	0.125
Saturated Unit Weight [kips/ft ³]	0.11	0.119	0.122	0.124	0.125
Immediate Settlement	Disabled	Enabled	Enabled	Enabled	Enabled
Es [ksf]		300	1000	1000	1200
E _{sur} [ksf]		300	1000	1000	1200
Primary Consolidation	Enabled	Disabled	Disabled	Disabled	Disabled
Material Type	Non-Linear				
C _c	0.37				
C _r	0.07				
e ₀	1.092				
P _c [ksf]	3.38				
OCR		1	1	1	1
Secondary Consolidation	Standard	Disabled	Disabled	Disabled	Disabled
C _{ae} /C _a	0.009				
C _{ar} /C _{are}	0.009				

Query Lines

Line #	Start Location	End Location	Horizontal Divisions	Vertical Divisions
1	559.525, 509.589	447.919, -2857.73	100	101

Settle3D Analysis Information

Labadie UWL

Project Settings

Document Name: circle 40.s3z
Project Title: Labadie UWL
Analysis: Settlement
Author: Christopher Cook
Company: Reitz & Jens, Inc
Date Created: 10/17/2012, 11:48:36 AM
Stress Computation Method: Boussinesq
Use average properties to calculate layered stresses
Groundwater method: Water Table
Water Unit Weight: 0.0624 kips/ft³
Depth to water table: 1 [ft]

Stage Settings

Stage #	Name
1	Stage 1

Results

Time taken to compute: 0 seconds

Stage: Stage 1

Data Type	Minimum	Maximum
Total Settlement [in]	0	24.8926
Consolidation Settlement [in]	0	10.2799
Immediate Settlement [in]	0	14.6161
Loading Stress [ksf]	0	10.2108
Effective Stress [ksf]	0	16.5299
Total Stress [ksf]	0	23.0195
Total Strain	5.83503e-008	0.0983151
Pore Water Pressure [ksf]	0	6.4896
Degree of Consolidation [%]	0	100
Pre-consolidation Stress [ksf]	0.672739	16.4969
Over-consolidation Ratio	1	80.6775
Void Ratio	0	0.862
Hydroconsolidation Settlement [in]	0	0

Loads

1. Polygonal Load

Load Type: Flexible
Area of Load: 183389 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1929.25	862.473	0
-1332.07	-407.189	0
-210.328	-424.303	0
-270.312	-363.597	2.9
-1293.01	-349.297	2.9
-1870.41	874.203	2.9
-1852.31	1508.1	2.9
-1908.21	1557.97	0

2. Polygonal Load

Load Type: Flexible
Area of Load: 234768 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-221.212	1808.9	2.9
-270.312	-363.597	2.9
-210.328	-424.303	0
-162.623	1880.73	0
-1908.21	1557.97	0

3. Polygonal Load

Load Type: Flexible
Area of Load: 156632 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1870.41	874.203	2.9
-1293.01	-349.297	2.9
-270.312	-363.597	2.9
-317.264	-315.23	5
-1259.26	-297.655	5
-1809.13	885.67	5
-1806.79	1469.02	5
-1852.31	1508.1	2.9

4. Polygonal Load

Load Type: Flexible
Area of Load: 171981 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-1806.79	1469.02	5
-267.217	1755.15	5
-317.264	-315.23	5
-270.312	-363.597	2.9
-221.212	1808.9	2.9

5. Polygonal Load

Load Type: Flexible
Area of Load: 244557 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-102.643	-2757.4	0
1076.16	-2794.88	0
1109.25	-1637.87	0
3035.41	-1668.34	0
2874.5	-1608.34	2.9
1048.12	-1576.89	2.9
1016.65	-2734.4	2.9
-39.0646	-2705.7	2.9

6. Polygonal Load

Load Type: Flexible
Area of Load: 433982 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0604	-2705.58	2.9
88.9461	776.742	2.9
2874.5	-1608.34	2.9
3035.41	-1668.34	0
35.4746	897.295	0
-102.643	-2757.4	0

7. Polygonal Load

Load Type: Flexible
Area of Load: 451309 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
27.8223	-2642.81	5
153.042	647.667	5
2690.18	-1545.21	5
2874.5	-1608.34	2.9
88.9461	776.742	2.9
-39.0604	-2705.58	2.9

8. Polygonal Load

Load Type: Flexible
Area of Load: 238713 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0644	-2705.7	2.9
1018.23	-2734.44	2.9
1048.12	-1576.89	2.9
2874.5	-1608.34	2.9
2690.18	-1545.21	5
989.752	-1516.32	5
956.638	-2672.65	5
27.8223	-2642.81	5

9. Polygonal Load

Load Type: Flexible
Area of Load: 567821 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1637.57	1323.75	10.2
-447.535	1544.49	10.2
-485.349	-142.076	10.2
-317.264	-315.23	10.2
-267.217	1755.15	5
-1806.56	1468.98	5

10. Polygonal Load

Load Type: Flexible
Area of Load: 1.5903e+006 ft²

Load: 10.2 ksf
Depth: 0 ft
Installation Stage: Stage 1

Coordinates

X [ft]	Y [ft]
-1649.21	915.592
-1153.62	-131.529
-485.349	-142.076
-447.535	1544.49
-1637.57	1323.75

11. Polygonal Load

Load Type: Flexible
Area of Load: 417396 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-485.349	-142.076	10.2
-1153.62	-131.529	10.2
-1649.21	915.592	10.2
-1637.57	1323.75	10.2
-1806.56	1468.98	5
-1809.13	885.67	5
-1259.26	-297.655	5
-317.264	-315.23	5

12. Polygonal Load

Load Type: Flexible
Area of Load: 941302 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
188.83	-2491.7	10.2
293.799	364.216	10.2
2201.69	-1376.73	10.2
2690.18	-1545.21	5
153.042	647.667	5
27.7015	-2645.99	5

13. Polygonal Load

Load Type: Flexible
Area of Load: 551990 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
952.602	-2672.52	5
989.748	-1516.48	5
2690.18	-1545.21	5
2201.69	-1376.73	10.2
832.524	-1353.16	10.2
802.744	-2507.54	10.2
188.83	-2491.7	10.2
27.7015	-2645.99	5

14. Polygonal Load

Load Type: Flexible

Area of Load: 2.38333e+006 ft²

Depth: 0 ft

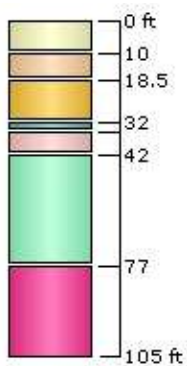
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
832.524	-1353.16	10.2
2201.69	-1376.73	10.2
293.799	364.216	10.2
188.83	-2491.7	10.2
802.744	-2507.54	10.2

Soil Layers

Layer #	Type	Thickness [ft]	Depth [ft]
1	CLAY	10	0
2	SILT & SAND	8.5	10
3	SAND & SILT	13.5	18.5
4	SILT & CLAY	3	32
5	SAND	7	35
6	SAND & GRAVEL	35	42
7	SAND (2)	28	77



Soil Properties

Property	CLAY	SILT & SAND	SAND & SILT	SAND	SAND & GRAVEL	SAND (2)	SILT & CLAY
Color							
Unit Weight [kips/ft ³]	0.118	0.119	0.12	0.122	0.124	0.125	0.12
Saturated Unit Weight [kips/ft ³]	0.118	0.119	0.12	0.122	0.124	0.125	0.12
Immediate Settlement	Disabled	Enabled	Enabled	Enabled	Enabled	Enabled	Enabled
Es [ksf]		200	850	1000	1000	1200	200
Es bottom [ksf]		600					
Esur [ksf]		200	850	1000	1000	1200	200
Esur bottom [ksf]		600					
Primary Consolidation	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Material Type	Non-Linear						
Cc	0.32						
Cr	0.04						
e0	0.862						
Pc [ksf]	4.76						
OCR		1	1	1	1	1	1
Secondary Consolidation	Standard	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Cae/Ca	0.004						
Car/Care	0.004						

Query Lines

Line #	Start Location	End Location	Horizontal Divisions	Vertical Divisions
1	559.525, 509.589	447.919, -2857.73	100	101

Settle3D Analysis Information

Labadie UWL

Project Settings

Document Name: circle 41.s3z
Project Title: Labadie UWL
Analysis: Settlement
Author: Christopher Cook
Company: Reitz & Jens, Inc
Date Created: 10/17/2012, 11:48:36 AM
Stress Computation Method: Boussinesq
Use average properties to calculate layered stresses
Groundwater method: Water Table
Water Unit Weight: 0.0624 kips/ft³
Depth to water table: 1 [ft]

Stage Settings

Stage #	Name
1	Stage 1

Results

Time taken to compute: 0 seconds

Stage: Stage 1

Data Type	Minimum	Maximum
Total Settlement [in]	0	25.4632
Consolidation Settlement [in]	0	11.241
Immediate Settlement [in]	0	14.2255
Loading Stress [ksf]	0	10.2108
Effective Stress [ksf]	0	16.5354
Total Stress [ksf]	0	23.025
Total Strain	5.83503e-008	0.0983151
Pore Water Pressure [ksf]	0	6.4896
Degree of Consolidation [%]	0	100
Pre-consolidation Stress [ksf]	0.73176	16.5024
Over-consolidation Ratio	1	80.6775
Void Ratio	0	0.862
Hydroconsolidation Settlement [in]	0	0

Loads

1. Polygonal Load

Load Type: Flexible
Area of Load: 183389 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1929.25	862.473	0
-1332.07	-407.189	0
-210.328	-424.303	0
-270.312	-363.597	2.9
-1293.01	-349.297	2.9
-1870.41	874.203	2.9
-1852.31	1508.1	2.9
-1908.21	1557.97	0

2. Polygonal Load

Load Type: Flexible
Area of Load: 234768 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-221.212	1808.9	2.9
-270.312	-363.597	2.9
-210.328	-424.303	0
-162.623	1880.73	0
-1908.21	1557.97	0

3. Polygonal Load

Load Type: Flexible
Area of Load: 156632 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1870.41	874.203	2.9
-1293.01	-349.297	2.9
-270.312	-363.597	2.9
-317.264	-315.23	5
-1259.26	-297.655	5
-1809.13	885.67	5
-1806.79	1469.02	5
-1852.31	1508.1	2.9

4. Polygonal Load

Load Type: Flexible
Area of Load: 171981 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-1806.79	1469.02	5
-267.217	1755.15	5
-317.264	-315.23	5
-270.312	-363.597	2.9
-221.212	1808.9	2.9

5. Polygonal Load

Load Type: Flexible
Area of Load: 244557 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-102.643	-2757.4	0
1076.16	-2794.88	0
1109.25	-1637.87	0
3035.41	-1668.34	0
2874.5	-1608.34	2.9
1048.12	-1576.89	2.9
1016.65	-2734.4	2.9
-39.0646	-2705.7	2.9

6. Polygonal Load

Load Type: Flexible
Area of Load: 433982 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0604	-2705.58	2.9
88.9461	776.742	2.9
2874.5	-1608.34	2.9
3035.41	-1668.34	0
35.4746	897.295	0
-102.643	-2757.4	0

7. Polygonal Load

Load Type: Flexible
Area of Load: 451309 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
27.8223	-2642.81	5
153.042	647.667	5
2690.18	-1545.21	5
2874.5	-1608.34	2.9
88.9461	776.742	2.9
-39.0604	-2705.58	2.9

8. Polygonal Load

Load Type: Flexible
Area of Load: 238713 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0644	-2705.7	2.9
1018.23	-2734.44	2.9
1048.12	-1576.89	2.9
2874.5	-1608.34	2.9
2690.18	-1545.21	5
989.752	-1516.32	5
956.638	-2672.65	5
27.8223	-2642.81	5

9. Polygonal Load

Load Type: Flexible
Area of Load: 567821 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1637.57	1323.75	10.2
-447.535	1544.49	10.2
-485.349	-142.076	10.2
-317.264	-315.23	10.2
-267.217	1755.15	5
-1806.56	1468.98	5

10. Polygonal Load

Load Type: Flexible
Area of Load: 1.5903e+006 ft²

Load: 10.2 ksf
Depth: 0 ft
Installation Stage: Stage 1

Coordinates

X [ft]	Y [ft]
-1649.21	915.592
-1153.62	-131.529
-485.349	-142.076
-447.535	1544.49
-1637.57	1323.75

11. Polygonal Load

Load Type: Flexible
Area of Load: 417396 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-485.349	-142.076	10.2
-1153.62	-131.529	10.2
-1649.21	915.592	10.2
-1637.57	1323.75	10.2
-1806.56	1468.98	5
-1809.13	885.67	5
-1259.26	-297.655	5
-317.264	-315.23	5

12. Polygonal Load

Load Type: Flexible
Area of Load: 941302 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
188.83	-2491.7	10.2
293.799	364.216	10.2
2201.69	-1376.73	10.2
2690.18	-1545.21	5
153.042	647.667	5
27.7015	-2645.99	5

13. Polygonal Load

Load Type: Flexible
Area of Load: 551990 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
952.602	-2672.52	5
989.748	-1516.48	5
2690.18	-1545.21	5
2201.69	-1376.73	10.2
832.524	-1353.16	10.2
802.744	-2507.54	10.2
188.83	-2491.7	10.2
27.7015	-2645.99	5

14. Polygonal Load

Load Type: Flexible

Area of Load: 2.38333e+006 ft²

Depth: 0 ft

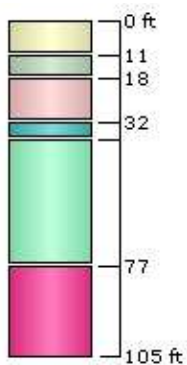
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
832.524	-1353.16	10.2
2201.69	-1376.73	10.2
293.799	364.216	10.2
188.83	-2491.7	10.2
802.744	-2507.54	10.2

Soil Layers

Layer #	Type	Thickness [ft]	Depth [ft]
1	CLAY	11	0
2	SILT	7	11
3	SAND	14	18
4	SILT & CLAY	5	32
5	SAND & GRAVEL	40	37
6	SAND (2)	28	77



Soil Properties

Property	CLAY	.SILT	SAND	SAND & GRAVEL	SAND (2)	SILT & CLAY
Color						
Unit Weight [kips/ft ³]	0.118	0.119	0.12	0.124	0.125	0.12
Saturated Unit Weight [kips/ft ³]	0.118	0.119	0.12	0.124	0.125	0.12
Immediate Settlement	Disabled	Enabled	Enabled	Enabled	Enabled	Enabled
Es [ksf]		500	1000	1000	1200	200
Esur [ksf]		500	1000	1000	1200	200
Primary Consolidation	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled
Material Type	Non-Linear					
Cc	0.32					
Cr	0.04					
e0	0.862					
Pc [ksf]	4.76					
OCR		1	1	1	1	1
Secondary Consolidation	Standard	Disabled	Disabled	Disabled	Disabled	Disabled
Cae/Ca	0.004					
Car/Care	0.004					

Query Lines

Line #	Start Location	End Location	Horizontal Divisions	Vertical Divisions
1	559.525, 509.589	447.919, -2857.73	100	101

Settle3D Analysis Information

Labadie UWL

Project Settings

Document Name: circle 42.s3z
 Project Title: Labadie UWL
 Analysis: Settlement
 Author: Christopher Cook
 Company: Reitz & Jens, Inc
 Date Created: 10/17/2012, 11:48:36 AM
 Stress Computation Method: Boussinesq
 Use average properties to calculate layered stresses
 Groundwater method: Water Table
 Water Unit Weight: 0.0624 kips/ft³
 Depth to water table: 1 [ft]

Stage Settings

Stage #	Name
1	Stage 1

Results

Time taken to compute: 0 seconds

Stage: Stage 1

Data Type	Minimum	Maximum
Total Settlement [in]	0	22.8582
Consolidation Settlement [in]	0	8.83069
Immediate Settlement [in]	0	14.0309
Loading Stress [ksf]	0	10.2108
Effective Stress [ksf]	0	16.5624
Total Stress [ksf]	0	23.052
Total Strain	5.29238e-008	0.0988246
Pore Water Pressure [ksf]	0	6.4896
Degree of Consolidation [%]	0	100
Pre-consolidation Stress [ksf]	0.590182	16.5294
Over-consolidation Ratio	1	85.4232
Void Ratio	0	0.862
Hydroconsolidation Settlement [in]	0	0

Loads

1. Polygonal Load

Load Type: Flexible
Area of Load: 183389 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1929.25	862.473	0
-1332.07	-407.189	0
-210.328	-424.303	0
-270.312	-363.597	2.9
-1293.01	-349.297	2.9
-1870.41	874.203	2.9
-1852.31	1508.1	2.9
-1908.21	1557.97	0

2. Polygonal Load

Load Type: Flexible
Area of Load: 234768 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-221.212	1808.9	2.9
-270.312	-363.597	2.9
-210.328	-424.303	0
-162.623	1880.73	0
-1908.21	1557.97	0

3. Polygonal Load

Load Type: Flexible
Area of Load: 156632 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1870.41	874.203	2.9
-1293.01	-349.297	2.9
-270.312	-363.597	2.9
-317.264	-315.23	5
-1259.26	-297.655	5
-1809.13	885.67	5
-1806.79	1469.02	5
-1852.31	1508.1	2.9

4. Polygonal Load

Load Type: Flexible
Area of Load: 171981 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-1806.79	1469.02	5
-267.217	1755.15	5
-317.264	-315.23	5
-270.312	-363.597	2.9
-221.212	1808.9	2.9

5. Polygonal Load

Load Type: Flexible
Area of Load: 244557 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-102.643	-2757.4	0
1076.16	-2794.88	0
1109.25	-1637.87	0
3035.41	-1668.34	0
2874.5	-1608.34	2.9
1048.12	-1576.89	2.9
1016.65	-2734.4	2.9
-39.0646	-2705.7	2.9

6. Polygonal Load

Load Type: Flexible
Area of Load: 433982 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0604	-2705.58	2.9
88.9461	776.742	2.9
2874.5	-1608.34	2.9
3035.41	-1668.34	0
35.4746	897.295	0
-102.643	-2757.4	0

7. Polygonal Load

Load Type: Flexible
Area of Load: 451309 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
27.8223	-2642.81	5
153.042	647.667	5
2690.18	-1545.21	5
2874.5	-1608.34	2.9
88.9461	776.742	2.9
-39.0604	-2705.58	2.9

8. Polygonal Load

Load Type: Flexible
Area of Load: 238713 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0644	-2705.7	2.9
1018.23	-2734.44	2.9
1048.12	-1576.89	2.9
2874.5	-1608.34	2.9
2690.18	-1545.21	5
989.752	-1516.32	5
956.638	-2672.65	5
27.8223	-2642.81	5

9. Polygonal Load

Load Type: Flexible
Area of Load: 567821 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1637.57	1323.75	10.2
-447.535	1544.49	10.2
-485.349	-142.076	10.2
-317.264	-315.23	10.2
-267.217	1755.15	5
-1806.56	1468.98	5

10. Polygonal Load

Load Type: Flexible
Area of Load: 1.5903e+006 ft²

Load: 10.2 ksf
Depth: 0 ft
Installation Stage: Stage 1

Coordinates

X [ft]	Y [ft]
-1649.21	915.592
-1153.62	-131.529
-485.349	-142.076
-447.535	1544.49
-1637.57	1323.75

11. Polygonal Load

Load Type: Flexible
Area of Load: 417396 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-485.349	-142.076	10.2
-1153.62	-131.529	10.2
-1649.21	915.592	10.2
-1637.57	1323.75	10.2
-1806.56	1468.98	5
-1809.13	885.67	5
-1259.26	-297.655	5
-317.264	-315.23	5

12. Polygonal Load

Load Type: Flexible
Area of Load: 941302 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
188.83	-2491.7	10.2
293.799	364.216	10.2
2201.69	-1376.73	10.2
2690.18	-1545.21	5
153.042	647.667	5
27.7015	-2645.99	5

13. Polygonal Load

Load Type: Flexible
Area of Load: 551990 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
952.602	-2672.52	5
989.748	-1516.48	5
2690.18	-1545.21	5
2201.69	-1376.73	10.2
832.524	-1353.16	10.2
802.744	-2507.54	10.2
188.83	-2491.7	10.2
27.7015	-2645.99	5

14. Polygonal Load

Load Type: Flexible

Area of Load: 2.38333e+006 ft²

Depth: 0 ft

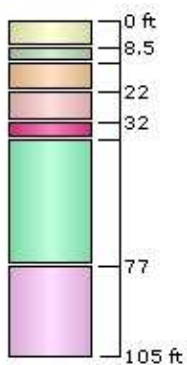
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
832.524	-1353.16	10.2
2201.69	-1376.73	10.2
293.799	364.216	10.2
188.83	-2491.7	10.2
802.744	-2507.54	10.2

Soil Layers

Layer #	Type	Thickness [ft]	Depth [ft]
1	CLAY	8.5	0
2	SILT	5	8.5
3	SILT & SAND	8.5	13.5
4	SAND	10	22
5	SAND (2)	5	32
6	SAND & GRAVEL	40	37
7	SAND (3)	28	77



Soil Properties

Property	CLAY	SILT	SILT & SAND	SAND	SAND & GRAVEL	SAND (2)	SAND (3)
Color							
Unit Weight [kips/ft ³]	0.118	0.117	0.12	0.122	0.124	0.122	0.125
Saturated Unit Weight [kips/ft ³]	0.118	0.117	0.12	0.122	0.124	0.122	0.125
Immediate Settlement	Disabled	Enabled	Enabled	Enabled	Enabled	Enabled	Enabled
Es [ksf]		100	800	650	1000	1200	1200
Es bottom [ksf]		450					
Esur [ksf]		100	800	650	1000	1200	1200
Esur bottom [ksf]		450					
Primary Consolidation	Enabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Material Type	Non-Linear						
Cc	0.32						
Cr	0.04						
e0	0.862						
Pc [ksf]	4.76						
OCR		1	1	1	1	1	1
Secondary Consolidation	Standard	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Cae/Ca	0.004						
Car/Care	0.004						

Query Lines

Line #	Start Location	End Location	Horizontal Divisions	Vertical Divisions
1	559.525, 509.589	447.919, -2857.73	100	101

Settle3D Analysis Information

Labadie UWL

Project Settings

Document Name: circle 43.s3z
Project Title: Labadie UWL
Analysis: Settlement
Author: Christopher Cook
Company: Reitz & Jens, Inc
Date Created: 10/17/2012, 11:48:36 AM
Stress Computation Method: Boussinesq
Use average properties to calculate layered stresses
Groundwater method: Water Table
Water Unit Weight: 0.0624 kips/ft³
Depth to water table: 1 [ft]

Stage Settings

Stage #	Name
1	Stage 1

Results

Time taken to compute: 0 seconds

Stage: Stage 1

Data Type	Minimum	Maximum
Total Settlement [in]	0	26.0731
Consolidation Settlement [in]	0	10.7611
Immediate Settlement [in]	0	15.3154
Loading Stress [ksf]	0	10.2108
Effective Stress [ksf]	0	16.4674
Total Stress [ksf]	0	22.957
Total Strain	9.74964e-008	0.145139
Pore Water Pressure [ksf]	0	6.4896
Degree of Consolidation [%]	0	100
Pre-consolidation Stress [ksf]	0.450551	16.4344
Over-consolidation Ratio	1	61.4541
Void Ratio	0	1.092
Hydroconsolidation Settlement [in]	0	0

Loads

1. Polygonal Load

Load Type: Flexible
Area of Load: 183389 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1929.25	862.473	0
-1332.07	-407.189	0
-210.328	-424.303	0
-270.312	-363.597	2.9
-1293.01	-349.297	2.9
-1870.41	874.203	2.9
-1852.31	1508.1	2.9
-1908.21	1557.97	0

2. Polygonal Load

Load Type: Flexible
Area of Load: 234768 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-221.212	1808.9	2.9
-270.312	-363.597	2.9
-210.328	-424.303	0
-162.623	1880.73	0
-1908.21	1557.97	0

3. Polygonal Load

Load Type: Flexible
Area of Load: 156632 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1870.41	874.203	2.9
-1293.01	-349.297	2.9
-270.312	-363.597	2.9
-317.264	-315.23	5
-1259.26	-297.655	5
-1809.13	885.67	5
-1806.79	1469.02	5
-1852.31	1508.1	2.9

4. Polygonal Load

Load Type: Flexible
Area of Load: 171981 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1852.31	1508.1	2.9
-1806.79	1469.02	5
-267.217	1755.15	5
-317.264	-315.23	5
-270.312	-363.597	2.9
-221.212	1808.9	2.9

5. Polygonal Load

Load Type: Flexible
Area of Load: 244557 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-102.643	-2757.4	0
1076.16	-2794.88	0
1109.25	-1637.87	0
3035.41	-1668.34	0
2874.5	-1608.34	2.9
1048.12	-1576.89	2.9
1016.65	-2734.4	2.9
-39.0646	-2705.7	2.9

6. Polygonal Load

Load Type: Flexible
Area of Load: 433982 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0604	-2705.58	2.9
88.9461	776.742	2.9
2874.5	-1608.34	2.9
3035.41	-1668.34	0
35.4746	897.295	0
-102.643	-2757.4	0

7. Polygonal Load

Load Type: Flexible
Area of Load: 451309 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
27.8223	-2642.81	5
153.042	647.667	5
2690.18	-1545.21	5
2874.5	-1608.34	2.9
88.9461	776.742	2.9
-39.0604	-2705.58	2.9

8. Polygonal Load

Load Type: Flexible
Area of Load: 238713 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-39.0644	-2705.7	2.9
1018.23	-2734.44	2.9
1048.12	-1576.89	2.9
2874.5	-1608.34	2.9
2690.18	-1545.21	5
989.752	-1516.32	5
956.638	-2672.65	5
27.8223	-2642.81	5

9. Polygonal Load

Load Type: Flexible
Area of Load: 567821 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-1637.57	1323.75	10.2
-447.535	1544.49	10.2
-485.349	-142.076	10.2
-317.264	-315.23	10.2
-267.217	1755.15	5
-1806.56	1468.98	5

10. Polygonal Load

Load Type: Flexible
Area of Load: 1.5903e+006 ft²

Load: 10.2 ksf
Depth: 0 ft
Installation Stage: Stage 1

Coordinates

X [ft]	Y [ft]
-1649.21	915.592
-1153.62	-131.529
-485.349	-142.076
-447.535	1544.49
-1637.57	1323.75

11. Polygonal Load

Load Type: Flexible
Area of Load: 417396 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
-485.349	-142.076	10.2
-1153.62	-131.529	10.2
-1649.21	915.592	10.2
-1637.57	1323.75	10.2
-1806.56	1468.98	5
-1809.13	885.67	5
-1259.26	-297.655	5
-317.264	-315.23	5

12. Polygonal Load

Load Type: Flexible
Area of Load: 941302 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
188.83	-2491.7	10.2
293.799	364.216	10.2
2201.69	-1376.73	10.2
2690.18	-1545.21	5
153.042	647.667	5
27.7015	-2645.99	5

13. Polygonal Load

Load Type: Flexible
Area of Load: 551990 ft²
Depth: 0 ft
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
952.602	-2672.52	5
989.748	-1516.48	5
2690.18	-1545.21	5
2201.69	-1376.73	10.2
832.524	-1353.16	10.2
802.744	-2507.54	10.2
188.83	-2491.7	10.2
27.7015	-2645.99	5

14. Polygonal Load

Load Type: Flexible

Area of Load: 2.38333e+006 ft²

Depth: 0 ft

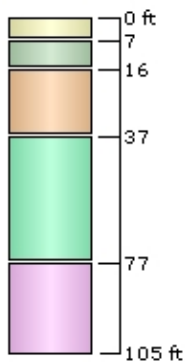
Installation Stage: Stage 1

Coordinates and Load

X [ft]	Y [ft]	Load Magnitude [ksf]
832.524	-1353.16	10.2
2201.69	-1376.73	10.2
293.799	364.216	10.2
188.83	-2491.7	10.2
802.744	-2507.54	10.2

Soil Layers

Layer #	Type	Thickness [ft]	Depth [ft]
1	CLAY	7	0
2	SILT	9	7
3	SILT & SAND	21	16
4	SAND & GRAVEL	40	37
5	SAND (3)	28	77



Soil Properties

Property	CLAY	SILT	SILT & SAND	SAND & GRAVEL	SAND (3)
Color					
Unit Weight [kips/ft ³]	0.11	0.117	0.12	0.124	0.125
Saturated Unit Weight [kips/ft ³]	0.11	0.117	0.12	0.124	0.125
Immediate Settlement	Disabled	Enabled	Enabled	Enabled	Enabled
Es [ksf]		100	750	1000	1200
Es bottom [ksf]		550			
Esur [ksf]		100	750	1000	1200
Esur bottom [ksf]		550			
Primary Consolidation	Enabled	Disabled	Disabled	Disabled	Disabled
Material Type	Non-Linear				
Cc	0.37				
Cr	0.07				
e0	1.092				
Pc [ksf]	3.38				
OCR		1	1	1	1
Secondary Consolidation	Standard	Disabled	Disabled	Disabled	Disabled
Cae/Ca	0.009				
Car/Care	0.009				

Query Lines

Line #	Start Location	End Location	Horizontal Divisions	Vertical Divisions
1	559.525, 509.589	447.919, -2857.73	100	101