

SEWER GRADE

17th 18th 19th 20th 21 22+23rd

NORTH OF N. STREET

9

TRANSIT

⁵⁾
F.B. 655

655

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

Minutes.	Lks.	Minutes.	Lks.	Minutes.	Lks.
1	2½	21	49	41	95½
2	4½	22	51½	42	98
3	7	23	53½	43	100½
4	9½	24	56	44	102½
5	11½	25	58½	45	105
6	14	26	60½	46	107½
7	16½	27	63	47	109½
8	18½	28	65½	48	112
9	21	29	67½	49	114½
10	23½	30	70	50	116½
11	25½	31	72½	51	119
12	28	32	74½	52	121½
13	30½	33	77	53	123½
14	32½	34	79½	54	126
15	35	35	81½	55	128½
16	37½	36	84	56	130½
17	39½	37	86½	57	133
18	42	38	88½	58	135½
19	44½	39	91	59	137½
20	46½	40	93½	60	140

PUBLISHED BY

EDWARD DENNY & CO.

DRAWING PAPER & MATERIAL, MATHEMATICAL INSTRUMENTS, ETC.,
STATIONERS AND PRINTERS,

SAN FRANCISCO, CAL.

Table for Running on Slopes.

In the following table the first column shows the angle, the second, the number of links to be added to a chain on the slope, to make the one chain horizontal measurement.

Angle.	Cor. in links.	Angle.	Cor. in links.	Angle.	Cor. in links.	Angle.	Cor. in links.
0		0		0		0	
4	0.24	11	1.88	18	5.14	25	10.54
5	0.38	12	2.24	19	5.76	26	11.26
6	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1.24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

DEC 14 1964

1550 + 17.5.0

Book 16^A

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17th St. N. H. M.

Sta	Elev	Grade	Cut
0	33.48	18.00	
+10	33.82	20.00	
+20	34.02	22.00	
+30	34.68	24.00	
+40	34.96	26.00	
+50	35.40	28.00	
+56	34.85	28.04	
+66	35.00	28.11	
+91	35.68	28.28	
+116	35.15	28.45	
+111	35.51	28.63	
+66	35.73	28.80	
+91	35.38	28.97	
+116	35.17	29.14	
+111	34.99	29.31	
+66	34.50	29.48	
+91	34.59	29.66	
+116	34.93	29.83	
+111	34.70	30.00	
+66	36.71		

These same Grades in Book 17th

20.00

-6872
100

0+41 M M Y Lateral

0+66 Y Lateral

17th St.

Grade 36.00
Dump 35.50

17th St - Nov 10

Sta	Elev	Grade	Cur
3+81	35.85		
4+01	37.31		
+20	37.20		
+45	3		
+70			
+95			
4+20			
+115			
+70			
+95			
6+20			
+45			
+70			
+95			
7+20			
+40			
+60			
+80			
8	35.00		X
+25			

I M-

N I I M-

S I K M - Grade 41.50
Insp. 41.00

K M-

N I K M

17th N of M

Sta	Ele	Grade	cm-
8+50			
+ 75-			
9			
+ 25-			
+ 50			
+ 75-			
10			
+ 25-			
+ 50			
+ 75-		36.50	
11		38.00	

S. L. of M - E. L. of M = 43.00

M -

N. L. of M -

18th St - N 1/2 N

Sta	Elev	Grad	Dist	
0	24.32	20.60	3.72	3' 8 ⁵ / ₈ " x
+07	24.51	21.07	3.44	3' 5 ¹ / ₄ " x
+17	25.00	21.18	3.82	3' 9 ⁷ / ₈ "
+27	26.66	21.29	5.37	5' 4 ¹ / ₂ "
+37	27.34	21.39	5.95	5' 11 ³ / ₄ "
+47	28.29	21.50	6.79	6' 9 ¹ / ₂ " x
+57	29.25	22.00	7.25	7' 3"
+67	31.28	22.50	7.78	7' 9 ³ / ₈ "
+77	30.71	23.00	7.71	7' 8 ¹ / ₂ "
+87	31.62	23.49	8.13	8' 1 ⁵ / ₈ "
+98	33.29	24.04	9.25	9' 3"
1+23	35.69	25.29	10.40	10' 4 ⁷ / ₈ "
+48	37.25	26.53	10.72	10' 8 ⁷ / ₈ "
+73	38.46	27.78	10.68	10' 8 ¹ / ₈ "
+98	39.94	29.02	10.92	10' 11"
2+23	40.54	30.27	10.27	10' 3 ¹ / ₄ "
+48	40.69	31.52	9.17	9' 2"
+73	40.93	32.76	8.17	8' 2"
+98	41.40	34.01	7.39	7' 4 ³ / ₄ "
3+23	41.47	35.25	6.22	6' 2 ⁵ / ₈ "
+48	41.57	36.50	5.01	5' 0 ¹ / ₈ " x

Main Hole near 18th + N PC

+48 NZ N 1/2 N YS
P.T

+73 YS

+96.6 PT

5 1/2 N 1/2 N 2 N YS

43.00 ✓

L.L. M st - Grade 43.50

14th St - N of N

Sta	Elev	Grade	cm
3+68	42.28	36.83	5.45 5 5/8
+ 88	43.22	37.15	8.07 8 0/8
4+08	42.38	37.48	4.90 4 10/8
+ 28	43.05	37.50	5.25 5 3
+ 53	43.97	38.21	5.76 5 9/8
+ 78	43.44	38.62	4.82 4 9/8
5+03	45.23	39.03	6.20 6 2/8
+ 28	45.26	39.43	5.83 5 10
+ 53	45.14	39.84	5.30 5 3 7/8
+ 78	46.68	40.25	6.43 6 5/8
6+03	47.40	40.66	6.74 6 8 3/8
+ 28	48.50	41.06	7.44 7 5/4
+ 53	49.83	41.47	8.36 8 4 3/8
+ 78	50.19	41.88	8.31 8 9 3/4
7+03	51.02	42.29	8.73 8 8 1/4
+ 28	49.65	42.70	6.95 6 11 3/8
+ 48	49.72	43.02	6.70 6 8 3/8
+ 68	50.58	43.35	7.23 7 2 3/4
+ 88	51.09	43.67	7.42 7 5
8+08	51.94	44.00	7.94 7 11 1/4 x

M SI-

N S M SI-

12.2 St Grade 50.50 ✓
50.00

I SI-

N S I SI-

18th Nov N

Sta	Elev	Grade	cm
8+38	51.89	44.19	7.70 7' 8 ³ / ₈
+58	51.58	44.38	7.20 7' 2 ³ / ₈
+88	51.52	44.57	6.95 6' 11 ³ / ₈
9+08	51.66	44.76	6.40 6' 4 ⁷ / ₈
+33	51.06	44.95	6.11 6' 1 ⁷ / ₈
+58	51.22	45.14	6.08 6' 1
+83	52.04	45.34	6.70 6' 8 ³ / ₈
10+08	51.14	45.53	5.61 5' 7 ³ / ₈
+33	51.35	45.72	5.63 5' 7 ⁷ / ₈
+58	51.21	45.91	5.30 5' 3 ³ / ₈
+83	51.27	46.10	5.17 5' 2
11+08	52.55	46.29	6.26 6' 3 ³ / ₈
+28	53.28	46.44	6.84 6' 10 ³ / ₈
+48	53.36	46.60	6.76 6' 9 ¹ / ₈
+68	52.78	46.75	6.03 6' 0 ³ / ₈
+88	52.95	46.90	6.05 6' 0 ⁵ / ₈
12+18	53.68	47.09	6.59 6' 7 ¹ / ₈
+38	53.30	47.28	6.02 6' 0 ¹ / ₄
+63	53.59	47.47	6.12 6' 1 ¹ / ₂
+88	54.17	47.66	6.51 6' 6 ¹ / ₈

7.53 1.04

S L K M - Grade 53.60 ✓
53.00

R M -

N L K M

1944 St. Mary's

Sta.	Elev	Grade	Cut
13+13	54.23	47.85	6.38 6' 4 ⁵ / ₈
+38	54.59	48.05	6.54 6' 6 ¹ / ₂
+63	54.84	48.24	6.60 6' 7 ¹ / ₄
+88	55.10	48.43	6.67 6' 8
14+13	55.17	48.62	6.55 6' 6 ¹ / ₈
+38	54.99	48.81	6.18 6' 2 ¹ / ₈
+63	55.29	49.00	6.29 6' 3 ¹ / ₂
+88	54.90	50.50	4.40 4' 4 ¹ / ₂
Total length of pipe			14+93

7633' 00

521.00 250.

S.I. J. St. Mary's Tank Head 55.60
55.00

The image shows an open notebook with two pages. The left page is a ledger page with a grid of red lines. It has a header row at the top, followed by a row with a double red line, and then several rows of single red lines. The right page is a standard grid page with a uniform grid of light blue lines. The notebook is bound in the center, and the pages are off-white with some minor stains and wear.

19th N-N of N

Sta	Elev	Grad	Cor-	
0	27.99	23.50	4.49	4' 5 $\frac{1}{2}$ " x
+10	28.40	23.62	4.86	4' 10 $\frac{1}{2}$ "
+20	29.35	23.75	5.60	5' 7 $\frac{1}{4}$ "
+30	30.53	23.88	6.65	6' 7 $\frac{1}{8}$ "
+40	32.08	24.00	8.08	8' 1" x
+50	32.82	24.83	7.99	7' 11 $\frac{1}{2}$ "
+56	33.23	25.32	7.91	7' 10 $\frac{1}{2}$ "
+67	33.75	26.23	7.52	7' 6 $\frac{1}{4}$ "
+72	35.26	28.20	6.96	6' 11 $\frac{1}{2}$ "
+17	37.27	30.37	6.90	6' 10 $\frac{1}{8}$ "
+42	39.49	32.44	7.05	7' 0 $\frac{1}{2}$ "
+67	42.04	34.51	7.53	7' 6 $\frac{3}{8}$ "
+92	44.65	36.58	8.07	8' 0 $\frac{1}{2}$ "
+17	47.20	38.65	8.55	8' 6 $\frac{1}{2}$ "
+42	50.20	40.72	9.48	9' 5 $\frac{3}{8}$ "
+67	52.41	42.79	9.62	9' 7 $\frac{1}{2}$ "
+92	54.48	44.86	9.62	9' 7 $\frac{1}{2}$ "
+17	57.30	46.93	10.37	10' 4 $\frac{1}{2}$ "
+42	58.61	49.00	9.61	9' 7 $\frac{1}{8}$ " x
+62	59.36	49.29	10.07	10' 0 $\frac{1}{8}$ "
+82	56.27	49.58	6.69	6' 8 $\frac{1}{4}$ "

1.23-140

8.27811100

0+42 on Line N St. Y.

PT probably
0+67 Y

Gap. 55.00 ✓
Line N St. Grade 55.50

N St.

19th St - Mill N

Sta	Elev	Grad	Cur
4+02	59.50	49.87	9.63 9' 7 $\frac{1}{2}$ "
+22	59.25	50.16	9.09 9' 1 $\frac{1}{2}$ "
+47	59.51	50.52	8.99 8' 11 $\frac{1}{8}$ "
+72	58.55	50.88	7.67 7' 8"
+97	57.67	51.24	6.43 6' 5 $\frac{1}{2}$ "
+22	57.72	51.60	6.12 6' 1 $\frac{1}{2}$ "
+47	58.66	51.94	6.69 6' 8 $\frac{1}{4}$ "
+72	57.68	52.33	5.35 5' 4 $\frac{1}{4}$ "
+97	58.09	52.69	5.40 5' 4 $\frac{1}{4}$ "
+22	58.48	53.05	5.43 5' 5 $\frac{1}{4}$ "
+47	59.41	53.41	6.00 6' 0"
+72	59.25	53.78	5.47 5' 5 $\frac{1}{2}$ "
+97	60.21	54.14	6.07 6' 0 $\frac{1}{8}$ "
+22	60.72	54.50	6.22 6' 2 $\frac{1}{8}$ "
+42	61.82	54.79	7.03 7' 0 $\frac{3}{8}$ "
+62	62.58	55.08	7.50 7' 6"
+82	63.62	55.37	8.25 8' 3"
+02	64.21	55.66	8.55 8' 6 $\frac{1}{8}$ "
+27	65.03	56.02	9.01 9' 0 $\frac{1}{4}$ "
+52	65.98	56.38	9.60 9' 7 $\frac{1}{2}$ "
+77	65.77	56.74	9.03 9' 0 $\frac{3}{8}$ "

W. Line W. St.

S. Line S. St.

Jump 61.00 ✓
Grade 61.50

L. St.

N. Line N. St.

19th M-N of N

Sta Elev Grad Elev

9+02	65.93	57.10	8.83 8'10"
+27	65.78	57.47	8.31 8'3 $\frac{3}{8}$ "
+52	64.99	57.83	7.16 7'2"
+77	65.01	58.19	6.82 6'9 $\frac{1}{2}$ "
10+02	64.72	58.55	6.17 6'2"
+27	64.69	58.91	5.78 5'9 $\frac{3}{8}$ "
+52	64.90	59.27	5.63 5'7 $\frac{1}{2}$ "
+77	65.31	59.64	5.67 5'8"
11+02	65.68	60.00	5.68 5'8 $\frac{1}{2}$ " x
+22	66.56	60.11	6.45 6'5 $\frac{3}{8}$ "
+42	66.68	60.21	6.47 6'5 $\frac{1}{2}$ "
+62	66.49	60.32	6.17 6'2"
+82	66.42	60.42	6.00 6'0"
12+07	66.51	60.55	5.96 5'11 $\frac{1}{2}$ "
+32	66.92	60.68	6.24 6'2 $\frac{1}{2}$ "
+57	67.15	60.82	6.33 6'4"
+82	66.80	60.95	5.85 5'10 $\frac{1}{2}$ "
13+07	66.21	61.08	5.13 5'1 $\frac{1}{2}$ "
+32	67.32	61.21	6.11 6'1 $\frac{3}{8}$ "
+57	67.54	61.34	6.20 6'2 $\frac{3}{8}$ "
+82	68.02	61.47	6.55 6'6 $\frac{1}{8}$ "

vertical

5263 118

S. Line of St Inpt. 66.00 ✓
Grade 66.50

K. St

N. Line of St

19th St - Mt. N

Sta	Elev	Grade	Cur
14+07	68.24	61.60	6.64 6' 7 3/4"
+32	68.29	61.74	6.55 6' 6 5/8"
+57	68.28	61.87	6.41 6' 3 7/8"
+82	68.07	62.00	6.07 6' 0 7/8"
15+02	67.62	62.10	5.52 5' 6 1/4"
+22	68.49	62.21	6.28 6' 3 3/8"
+42	67.85	62.31	5.54 5' 6 1/2"
+62	68.10	62.42	5.68 5' 8 1/4"
+97	68.46	62.55	5.91 5' 10 1/2"
16+12	68.73	62.68	6.05 6' 0 7/8"
+37	69.35	62.81	6.54 6' 6 1/2"
+62	69.42	62.95	6.47 6' 5 1/8"
+87	69.63	63.08	6.55 6' 6 1/2"
17+12	69.93	63.21	6.72 6' 8 7/8"
+37	70.09	63.34	6.75 6' 9"
+62	70.27	63.47	6.80 6' 9 1/2"
+87	70.59	63.60	6.99 6' 11 1/4"
18+12	70.48	63.73	6.75 6' 9"
+37	70.24	63.87	6.37 6' 4 1/2"
+62	69.30	64.00	5.30 5' 3 5/8" x
Total length of pipe			18+67

5263.1000

SZ 5 M - Elev. 68.50 ✓
Grade 69.00

φ M-

NL 9 M

73.72 @ M

Grade 68.50
SZ 5 M - First Tank Set 68.80

20th S-N of N
Sta Elev Grad Cur-

20th Nov

Sta. Elev. Grade Cur.

21st N 1/2 N 1/2

Sta	Elev	Grad	cu-
0	42.87	37.10	5.47 5' 5 ⁵ / ₈ x
+10	43.02	37.64	5.34 5' 4 ¹ / ₈
+20	43.45	37.95	5.50 5' 6
+30	43.97	38.22	5.75 5' 9
+40	44.17	38.50	5.67 5' 8
+50	44.44	38.77	5.67 5' 8
+56	44.66	38.94	5.72 5' 8 ³ / ₈
+66	45.09	39.22	5.87 5' 10 ¹ / ₂
+91	45.98	39.91	6.07 6' 0 ³ / ₈
1+16	46.66	40.60	6.06 6' 0 ³ / ₄
+41	47.42	41.28	6.14 6' 1 ³ / ₄
+66	48.19	41.97	6.22 6' 2 ⁷ / ₈
+91	48.86	42.66	6.20 6' 2 ³ / ₈
2+16	49.66	43.35	6.31 6' 3 ³ / ₄
+41	50.41	44.04	6.37 6' 4 ¹ / ₂
+66	51.14	44.72	6.42 6' 5
+91	51.67	45.42	6.25 6' 3
3+16	52.52	46.11	6.41 6' 4 ⁷ / ₈
+41	53.30	46.79	6.51 6' 6 ¹ / ₈
+61	53.35	47.35	6.00 6' 00
+81	56.45	47.90	8.55 8' 6 ⁷ / ₈

2.706
1.100

1+41 N 1/2 N 1/2

P.I.

0+66 Y

Insk. 53.00 ✓
E. Line W. St. Grade 53.60

W. St.

2 1/4 N of N

Sta	Elev	Grad	cm
4+01	54.71	48.45	6.26 6 3/8
+21	55.93	49.00	6.93 6' 1 1/8 x
+46	57.02	50.67	6.35 6' 4 1/2
+71	58.96	62.38	6.63 6' 7 1/2
+96	60.78	54.00	6.78 6' 9 3/8
5+21	62.61	55.67	6.94 6' 11 1/2
+46	64.41	57.33	7.08 7' 1
+71	66.23	59.00	7.23 7' 2 3/4
+96	67.78	60.67	7.11 7' 1 3/8
6+21	69.42	62.33	7.09 7' 1 1/8
+46	71.16	64.00	7.16 7' 2
+71	72.73	65.67	7.06 7' 0 3/4
+96	74.76	67.33	7.43 7' 5 1/8
7+21	76.12	69.00	7.12 7' 1 1/2 x
+41	77.07	69.96	7.12 7' 1 1/2
+61	77.72	70.89	6.83 6' 10
+81	77.95	71.94	6.11 6' 1 3/8
8+01	78.31	72.79	5.52 5' 6 1/4
+26	79.47	73.97	5.50 5' 6
+51	80.72	75.16	5.56 5' 6 3/4
+76	81.85	76.34	5.51 5' 6 1/8

4.736
1000

N. Line W. St.

Grades 76.00 ✓
S. Line S. St. Grade 76.00

S. St.

N. Line S. St.

21st - N of N

Sta	Elv	Grade	Cut
9+01	83.38	77.52	5.86 5' 10 ³ / ₄
+26	84.65	79.70	5.95 5' 10 ³ / ₄
+51	86.07	79.89	6.18 6' 3 ¹ / ₈
+76	87.22	81.08	6.14 6' 1 ¹ / ₄
10+01	88.77	82.20	6.57 6' 6 ¹ / ₈
+26	90.23	83.44	6.79 6' 9 ¹ / ₂
+51	91.39	84.63	6.76 6' 9 ¹ / ₈
+76	92.52	85.81	6.71 6' 8 ¹ / ₂
11+01	93.63	87.00	6.63 6' 7 ¹ / ₈ x
+21	93.85	87.42	6.43 6' 5 ¹ / ₈
+41	94.92	87.84	7.08 7' 1
+61	94.89	88.26	6.63 6' 7 ¹ / ₈
+81	94.66	88.68	5.98 5' 11 ³ / ₄
12+06	95.52	89.21	6.31 6' 3 ³ / ₄
+31	95.91	89.74	6.17 6' 2
+56	96.49	90.26	6.23 6' 2 ³ / ₄
+81	97.15	90.79	6.36 6' 4 ³ / ₈
13+06	97.79	91.32	6.47 6' 5 ³ / ₈
+31	97.93	91.84	6.09 6' 1 ¹ / ₈
+56	98.31	92.37	5.94 5' 11 ¹ / ₄
+81	98.74	92.89	5.85 5' 10 ¹ / ₄

201
R

001105010

S. Lined St Inset 93.50 ✓
Grade 94.00

K. St

N. Lined St.

21st Nov. A

Sta.	Elv.	Grad	Dist.
14+06	99.10	93.42	5.68 5' 8 $\frac{1}{2}$ "
+ 31	99.33	93.95	5.38 5' 4 $\frac{7}{8}$ "
+ 32	99.81	94.47	5.34 5' 4 $\frac{1}{2}$ "
+ 51		95.00	
15+11	Total length of pipe 19+61		
+ 1			
+ 1			
+ 6			
+ 26			
+ 11			
+ 36			
+ 61			
+ 86			
17+11			
+ 36			
+ 61			
+ 86			
18+11			
+ 36			
+ 61			

Lynch-Jones Grade 100.50 ✓
 S. L. J. M. 100.00

J. M.

S. L. J. M.

S. L. J. M.

The image shows an open notebook with two pages. The left page is ruled with a grid of red lines, including a prominent vertical margin line on the left. The right page is ruled with a standard grid of red lines. The pages are cream-colored and show signs of use. The number '22' is printed in the top right corner of the right page.

22nd St - N of N

Sta	Elev	Grad	Cut-
0	47.74	42.40	5.34 5' 4 1/8
+10	48.19	42.62	5.57 5' 6 7/8
+20	49.08	42.83	6.25 6' 3
+30	49.72	43.05	6.67 6' 8
+40	49.91	43.27	6.64 6' 7 1/4
+50	50.34	43.48	6.86 6' 10 3/8
+55	50.72	43.59	7.13 7' 1 5/8
+80	51.35	44.13	7.22 7' 2 7/8
+106	52.43	44.67	7.76 7' 9 1/8
+80	53.30	45.22	8.08 8' 1
+53	54.23	45.74	8.47 8' 5 1/8
+58	54.74	46.30	8.44 8' 5 1/4
+106	55.28	46.84	8.44 8' 5 1/4
+80	55.35	47.38	7.97 7' 11 3/8
+53	54.97	47.92	7.05 7' 0 5/8
+80	55.40	48.46	6.94 6' 11 1/4
+106	54.11	49.01	5.10 5' 7 1/2
+30	55.88	49.55	6.33 6' 4
+40	55.73	49.76	5.97 5' 11 3/8
+60	54.39	50.20	4.19 4' 3 1/4

2160

PC

Y 1+41 N2 N 21-

P.T.

Y 0+66 25 N of N 21-

Y 0+91

Y 1+16

Y +41

Y +66

Y +91

Y 2+16

Y +41

Y +66

Y +91

Y 3+16

L. M. Co. ^{Intersecting} Elev 55.80
Grade 56.30

22nd St - Not N

Sta	Elev	Grade	cut-
3+80	56.28	50.63	5.65 5' 7 $\frac{1}{8}$
4	55.51	51.06	4.45 4' 5 $\frac{3}{8}$
+20	56.01	51.50	4.51 4' 6 $\frac{1}{8}$ x
+45	57.19	52.75	4.44 4' 5 $\frac{1}{4}$
+70	58.07	54.00	4.07 4' 0 $\frac{7}{8}$
+95	59.20	55.25	3.95 3' 11 $\frac{3}{8}$
5+20	60.07	56.50	3.57 3' 6 $\frac{1}{8}$
+45	61.31	57.75	3.56 3' 6 $\frac{3}{4}$
+70	62.28	59.00	3.28 3' 3 $\frac{3}{8}$
+95	62.51	60.25	2.26 2' 3 $\frac{1}{8}$
6+20	64.78	61.50	3.28 3' 3 $\frac{3}{8}$
+45	66.23	62.75	3.48 3' 5 $\frac{3}{4}$
+70	68.42	64.00	4.42 4' 5
+95	70.52	65.25	5.27 5' 3 $\frac{1}{4}$
7+20	72.37	66.50	5.87 5' 10 $\frac{1}{2}$
+40	74.40	67.50	6.90 6' 10 $\frac{7}{8}$
+60	76.83	68.50	8.33 8' 4
+80	77.94	69.50	8.44 8' 5 $\frac{1}{4}$
8	79.56	70.50	9.06 9' 0 $\frac{3}{4}$ x
+25	81.36	72.42	8.94 8' 11 $\frac{1}{4}$

5-100

M H-

M H-

12 L to Grade 74.50 ✓
Drops 74.00

L H-

M H-

92nd St. N. of N.

Sta	Ele	Grade	cut
8+50	83.75	74.33	9.42 9' 5"
+75	85.60	76.25	9.35 9' 4 1/4"
9	87.85	78.17	9.68 9' 8 1/8"
+75	90.57	80.08	10.49 10' 5 1/8"
+50	92.59	82.00	10.59 10' 7 1/8"
+75	93.49	83.92	9.57 9' 6 1/8"
10	94.99	85.83	9.16 9' 2"
+25	95.68	87.75	7.93 7' 11 1/8"
+80	96.73	89.67	7.06 7' 0 3/4"
+75	97.62	91.58	6.04 6' 0 1/2"
11	98.37	93.50	4.87 4' 10 1/2" x
+20	99.66	93.68	5.98 5' 11 3/4"
+40	100.04	93.87	6.17 6' 2"
+60	100.32	94.05	6.27 6' 3 1/4"
+80	100.46	94.24	6.22 6' 2 5/8"
12+05	100.89	94.47	6.42 6' 5"
+30	101.36	94.70	6.66 6' 8"
+55	103.07	94.93	8.14 8' 1 3/4"
+80	102.25	95.16	7.09 7' 1 1/8"
13+05	103.49	95.39	8.10 8' 1 1/4"

7.6666+100

921,100

N I K M 99.00 Grade
 98.50 Drip
 K M
 N I K M

22nd S-N of N

Sta	Elev	Grade	cm-
13+30	102.85	95.62	7.23 7' 2 ³ / ₄
+55	102.81	95.85	6.96 6' 11 ¹ / ₂
+80	102.97	96.08	6.89 6' 10 ³ / ₄
14+15	103.35	96.31	7.04 7' 0 ¹ / ₂
+30	104.78	96.54	8.24 8' 2 ⁷ / ₈
+55	104.54	96.77	7.77 7' 9 ¹ / ₄
+80	103.95	97.00	6.95 6' 11 ³ / ₈
15	103.82	97.11	6.71 6' 8 ¹ / ₂
+20	103.81	97.22	6.59 6' 7 ¹ / ₈
+40	103.06	97.33	5.73 5' 8 ³ / ₄
+60	103.00	97.43	5.57 5' 6 ⁷ / ₈
+85	101.96	97.57	4.39 4' 4 ³ / ₄
16+10	100.93	97.71	3.22 3' 2 ⁷ / ₈
+35	101.55	97.84	3.71 3' 8 ¹ / ₂
+60	101.92	97.98	3.94 3' 11 ¹ / ₄
+85	102.79	98.11	4.68 4' 8 ¹ / ₈
17+10	103.20	98.25	4.95 4' 11 ³ / ₈
+35	103.98	98.38	5.60 5' 7 ¹ / ₄
+60	103.67	98.52	5.15 5' 1 ¹ / ₈
+85	104.07	98.65	5.42 5' 5

5434, 100

Completed to 14+80 (March 31/68)

S. L. of S - Grade 103.50

Drops 103.00

S. L.

N. L. of S.

22nd St - N of N

Sta	Elev	Grade	cut-
18+10	104.19	98.79	5.40 5'3 $\frac{1}{8}$
+ 35	104.27	98.93	5.34 5'4 $\frac{1}{8}$
+ 60	104.77	99.06	5.71 5'8 $\frac{1}{2}$
+ 80	104.36	99.17	5.19 5'2 $\frac{1}{4}$
19	104.42	99.28	5.14 5'1 $\frac{3}{4}$
+ 20	104.65	99.39	5.26 5'3 $\frac{1}{2}$
+ 40	105.60	99.50	6.10 6'7 $\frac{1}{2}$ x
+ 65	107.04	100.21	6.83 6'10
+ 90	107.37	100.91	6.46 6'5 $\frac{1}{2}$
20+15	108.01	101.62	6.39 6'4 $\frac{3}{4}$
+ 40	108.55	102.33	6.22 6'2 $\frac{3}{4}$
+ 65	109.21	103.03	6.18 6'2 $\frac{1}{8}$
+ 90	110.02	103.74	6.28 6'3 $\frac{3}{8}$
21+15	110.74	104.44	6.30 6'3 $\frac{5}{8}$
+ 40	111.76	105.15	6.61 6'7 $\frac{3}{8}$
+ 65	112.77	105.86	6.91 6'10 $\frac{1}{8}$
+ 90	113.06	106.56	6.50 6'6
22+15	113.36	107.27	6.09 6'1 $\frac{1}{8}$
+ 40	113.90	107.98	5.92 5'11
+ 47	113.71	108.17	5.54 5'6 $\frac{1}{2}$

5434.100

2825.100

SI to grade 103.50 ✓
 18+78 8+6F Imp. 105.00

SI to -

SI to grade 114.00 ✓
 Imp 113.50

22nd St N of N
 Sta Elev Grad Cur-

22+72	114.32	108.88	5.44	5' 5 $\frac{1}{4}$
+ 97	114.99	109.59	5.40	5' 4 $\frac{3}{8}$
23+22	115.50	110.29	5.21	5' 2 $\frac{1}{2}$
+ 47	116.26	111.00	5.26	5' 3 $\frac{1}{8}$ x
+ 72	117.14	111.80	5.34	5' 4 $\frac{1}{8}$
+ 97	117.80	112.59	5.21	5' 2 $\frac{1}{2}$
24+22	118.66	113.39	5.27	5' 3 $\frac{1}{4}$
+ 47	119.34	114.18	5.16	5' 2
+ 72	119.82	114.68	5.14	5' 1 $\frac{3}{4}$
+ 97	120.09	115.77	4.32	4' 3 $\frac{1}{8}$
25+22	120.55	116.57	3.98	3' 11 $\frac{3}{4}$
+ 47	121.30	117.37	3.93	3' 11 $\frac{1}{8}$
+ 72	122.11	118.16	3.95	3' 11 $\frac{3}{8}$
+ 97	123.06	118.96	4.10	4' 1 $\frac{1}{4}$
26+22	124.03	119.75	4.28	4' 3 $\frac{3}{8}$
+ 47	125.71	120.55	5.16	5' 2
+ 60	126.43	120.96	5.47	5' 5 $\frac{1}{4}$
+ 80	127.41	121.60	5.81	5' 9 $\frac{1}{4}$
27+22	128.35	122.24	6.11	6' 1 $\frac{3}{8}$
+ 20	129.11	122.87	6.24	6' 2 $\frac{3}{8}$

3.1832/100

2+70 8+6 Y East for H.H.
 H.H.

K24 H

H.H. 26+79 8+6 Y in B.S.
 26+80 8+6 Reaner
 H.H. Grate 137.00 ✓
 Jwp 126.50

22⁰⁰ Si-N of N

Sta	Elev	Grade	cut
27+40	129.29	123.50	5.79 5' 9 ¹ / ₂ " x
+65	130.60	124.04	6.56 6' 6 ³ / ₄ "
+90	132.36	124.58	7.78 7' 9 ³ / ₈ "
28+15	133.50	125.12	8.38 8' 4 ⁵ / ₈ "
+40	135.42	125.67	9.75 9' 9"
+65	136.16	126.21	9.95 9' 11 ³ / ₈ "
+80	137.23	126.75	10.48 10' 5 ³ / ₄ "
29+15	138.18	127.29	10.89 10' 10 ³ / ₄ "
+40	139.08	127.83	11.25 11' 3"
+65	139.01	128.37	10.64 10' 7 ³ / ₄ "
+90	140.79	128.91	11.78 11' 9 ³ / ₈ "
30+15	140.12	129.46	11.66 11' 8"
31+00	141.28	130.00	11.28 11' 3 ³ / ₈ " x
+65	142.03	130.51	11.92 11' 11"
+90	147.24	130.21	12.03 12' 0 ³ / ₈ "
31+00	142.45	130.32	12.13 12' 1 ¹ / ₈ "
+20	141.15	130.42	10.73 10' 7 ¹ / ₈ "
+45	141.93	130.55	11.38 11' 4 ⁷ / ₈ "
+70	140.36	130.68	9.68 9' 8 ¹ / ₂ "
+95	140.24	130.82	9.42 9' 5"
32+20	139.52	130.95	8.57 8' 6 ¹ / ₂ "

N2 E St

216912

L F St - Grade 140.60 ✓
Drops - 140.00

F St

N L F

5926

22nd 11-104 N

Sta	Elev	Grade	Cm-
82+113	139.56	131.08	8.48 8' 5 ³ / ₈
+70	139.70	131.21	8.49 8' 5 ⁷ / ₈
+95	139.95	131.34	8.61 8' 7 ³ / ₈
83+20	139.62	131.47	8.15 8' 1 ¹ / ₈
+45	139.45	131.60	7.88 7' 10 ⁵ / ₈
+70	139.46	131.74	7.72 7' 8 ⁵ / ₈
+95	139.19	131.87	7.32 7' 3 ⁷ / ₈
84+20	139.83	132.00	6.83 6' 10" x
+40	138.24	132.26	5.98 5' 11 ³ / ₈
+65	137.28	132.53	4.75 4' 9"
+80	136.65	132.79	3.86 3' 10 ³ / ₈
85	136.48	133.05	3.43 3' 5 ¹ / ₈
+25	137.78	133.38	4.40 4' 4 ⁷ / ₈
+50	138.04	133.71	4.33 4' 4"
+75	137.65	134.04	3.61 3' 7 ³ / ₈
86	138.57	134.37	4.20 4' 2 ³ / ₈
+25	140.32	134.70	5.62 5' 7 ¹ / ₂
+50	140.55	135.03	5.52 5' 6 ¹ / ₂
+75	140.92	135.35	5.57 5' 6 ⁷ / ₈
87	141.68	135.68	6.00 6' 00"

6269

11/15/11

12 E 21-Grade 138.00 ✓
 12 E 21-Grade 137.50 ✓

N 2 E 8 T

22nd St - N of N

Sta	Elev	Grade	cut-
37+25	141.89	136.01	5.88 5'10 ⁵ / ₈
+50	142.18	136.34	5.84 5'10 ¹ / ₂
+75	142.64	136.67	5.97 5'11 ⁵ / ₈
88	142.88	137.00	5.88 5'10 ⁷ / ₈
Total length of pipe			38+05

S. L. D. St - Flush Tank Grade 142.00 ✓
 Flush Tank Grade 142.5

E. St East of 22nd

Sta	Elev	Grade	Cut
0	127.25	122.00	5.25 5' 3"
+10	127.68	122.35	5.33 5' 4"
+20	127.69	122.70	4.96 4' 11 1/2"
+30	128.59	123.05	5.54 5' 6 1/2"
+40	128.89	123.39	5.50 5' 6"
+50	129.14	123.74	5.40 5' 4 7/8"
+56	129.56	123.95	5.61 5' 7 3/8"
+81	130.43	124.82	5.61 5' 7 3/8"
+106	131.44	125.70	5.74 5' 8 7/8"
+81	132.64	126.57	6.07 6' 0 7/8"
+56	133.83	127.44	6.39 6' 4 3/4"
+81	134.93	128.31	6.62 6' 7 1/4"
+106	135.69	129.18	6.51 6' 6 7/8"
+19	136.24	129.64	6.60 6' 7 1/4"
+28	136.65	129.95	6.70 6' 8 3/8"
Total length of pipe			2+53

984.6
941.6

2' 2" of 1.0 x 9.0
at 22nd St

P.C. Sta 26+80 on 22nd St Line 8+6 Y

0+41 - 8 I 22nd St - Y Lateral

P.T.

Y Lateral

P.C. to 23rd St - 135.00

Imp? X
 22' W of N.P.K. 23rd St

23rd St - NW E
 Sta Elev Grade Cut

Sta	Elev	Grade	Cut
0	136.65	129.95	6.70 6' 8 3/4 x
+9	137.12	130.29	6.83 6' 10
+19	137.46	130.66	6.80 6' 9 3/8
+24	137.80	131.00	6.82 6' 9 3/8 x
+34	137.90	131.42	6.51 6' 6 1/8
+47	137.46	131.80	5.66 5' 8
+57	136.87	132.22	6.62 6' 7 1/2
+66	137.64	132.60	7.07 7' 0 7/8
+76	141.41	133.01	8.40 8' 4 7/8
+91	141.84	133.48	8.36 8' 4 3/8
+116	142.06	134.52	7.54 7' 6 1/2
+41	143.63	135.67	8.06 8' 0 3/4
+66	143.93	136.62	7.31 7' 3 3/8
+91	145.41	137.67	7.74 7' 8 1/8
+116	146.09	139.71	7.38 7' 4 3/8
+41	147.08	139.76	7.32 7' 3 3/8
+66	147.74	140.81	6.93 6' 11 1/8
+91	148.89	141.85	7.04 7' 0 1/2
+116	150.34	142.90	7.44 7' 5 1/4
+41	152.34	143.95	8.39 8' 4 3/8
+66	153.56	145.00	8.56 8' 6 3/4 x

4.1916
 1.00

pc Gr to 23rd 29' W of N.P.K. 23

0466 N.E. to Y Lateral

P.T. 14' N of N.P.K. 23rd St
 Y Lateral

Imp. 157.50
 N.E. FST Grade 162.00

Ham Beck

26.60
26.60

Drop - n of 5 @ L. of Get at 22

n of n - 22 at 4. by 4

2.19

22

2.41

23rd St - N of G

Sta	Elev	Grad	cut-
3+8.6	154.64	145.50	9.14 9' 1 ³ / ₄
4+0.6	155.50	146.00	9.50 9' 6
+ 2.6	156.17	146.50	9.67 9' 8
+ 4.6	156.72	147.00	9.92 9' 8 ⁵ / ₈ x
+ 7.1	157.93	147.39	10.54 10' 6 ¹ / ₂
+ 9.6	158.57	147.79	10.73 10' 8 ³ / ₄
5+2.1	159.31	148.18	11.13 11' 1 ⁷ / ₈
+ 4.6	159.66	148.58	11.08 11' 1
+ 7.1	159.93	148.97	10.96 10' 11 ¹ / ₄
+ 9.6	160.52	149.37	11.15 11' 1 ⁷ / ₈
6+2.1	160.43	149.76	10.67 10' 8
+ 4.6	160.92	150.16	10.76 10' 9 ¹ / ₂
+ 7.1	160.91	150.55	10.36 10' 4 ³ / ₈
+ 9.6	160.94	150.95	10.02 10' 0 ¹ / ₄
7+2.1	160.44	151.34	9.10 9' 1 ¹ / ₄
+ 4.6	159.46	151.74	7.74 7' 8 ⁷ / ₈
+ 6.6	158.83	152.05	6.28 6' 3 ³ / ₈
+ 8.6	158.51	152.37	4.14 4' 1 ³ / ₄
8+0.6	156.07	152.68	3.39 3' 4 ³ / ₄
+ 2.6	155.72	153.00	2.72 2' 8 ⁵ / ₈ x

251.00

157.87 1.00

FST

N I FST

S I E ST grade 158.80 ✓
 Insp 158.30

E ST

N I E ST

28th St - N of E

Sta	Elev	Grad	cm-	
8+51	152.03	153.14	- 1.11	1' 1 ³ / ₈ Fill
+76	152.81	153.29	- 0.48	0' 5 ³ / ₄ Fill
9+01	155.23	153.43	1.80	1' 9 ⁵ / ₈
+26	156.35	153.58	2.77	2' 9 ¹ / ₂
+51	157.68	153.72	3.96	3' 11 ¹ / ₂
+76	158.22	153.87	4.35	4' 4 ¹ / ₈
10+01	158.99	154.01	4.98	4' 11 ³ / ₄
+26	160.42	154.16	6.26	6' 3 ¹ / ₈
+51	160.81	154.30	6.51	6' 6 ¹ / ₈
+76	161.52	154.45	7.07	7' 0 ⁷ / ₈
11+01	162.40	154.59	7.81	7' 9 ³ / ₄
+26	162.80	154.74	8.06	8' 0 ³ / ₄
+46	163.31	154.85	8.46	8' 5 ¹ / ₂
+66	163.73	154.97	8.76	8' 9 ¹ / ₂
+86	163.92	155.09	8.83	8' 10
12+06	164.06	155.20	8.86	8' 10 ³ / ₈
+31	164.47	155.35	9.12	9' 1 ¹ / ₂
+56	164.64	155.49	9.15	9' 1 ⁷ / ₈
+81	164.56	155.64	8.92	8' 11 ¹ / ₄
13+06	164.42	155.78	8.64	8' 7 ³ / ₄

5797.100

12 DST Grade 162.50 ✓
Duff. 162.00

DST

N 2 DST

23⁵⁰ 21-

Sta	Elev	Grade	cm-
13+31	164.49	155.93	8.56 8' 6 ³ / ₄
+ 56	164.41	156.07	8.34 8' 4 ¹ / ₈
+ 81	164.57	156.22	8.35 8' 4 ¹ / ₂
14+06	164.26	156.36	7.90 7' 10 ³ / ₄
+ 31	164.04	156.51	7.53 7' 6 ³ / ₈
+ 56	163.62	156.65	6.97 6' 11 ⁷ / ₈
+ 81	163.71	156.80	6.91 6' 10 ⁵ / ₈
15+06	164.06	156.94	7.12 7' 1 ¹ / ₂
+ 26	163.55	157.06	6.49 6' 5 ⁵ / ₈
+ 46	163.42	157.17	6.25 6' 3
+ 66	163.05	157.29	5.76 5' 9 ¹ / ₈
+ 86	162.30	157.40	4.90 4' 10 ⁷ / ₈
16+11	163.26	157.55	5.71 5' 8 ¹ / ₂
+ 36	164.28	157.69	6.59 6' 7 ¹ / ₈
+ 61	164.98	157.84	7.14 7' 1 ³ / ₄
+ 86	165.38	157.98	7.40 7' 4 ⁷ / ₈
17+11	165.80	158.13	7.67 7' 8
+ 36	166.26	158.27	7.99 7' 11 ⁷ / ₈
+ 61	166.62	158.42	8.20 8' 2 ³ / ₈
+ 86	166.84	158.56	8.28 8' 3 ³ / ₈

157.97 11.00

X

S L C ST

Grade 164.00 ✓

Insp. 163.50

C ST

N L C ST

93rd St - 1st St

Sta	Elev	Grade	cut
18+11	167.38	158.71	8.67 8'8"
+ 36	166.05	158.95	7.20 7'3"
+ 61	165.40	159.00	6.40 6'4"
+ 86			
Total length of pipe 18+66			

5797.100

Flush tank.
S.L.R.H. (Completed April 30/88)

M. M. - W of 24th

Sta	Elev	Grade	cut	
0	53.64	50.20	3.44	3' 5 ¹ / ₄
+5	54.22	50.23	3.99	3' 11 ⁷ / ₈
+15	54.67	50.27	4.40	4' 4 ⁷ / ₈
+25	55.04	50.32	4.72	4' 8 ⁵ / ₈
+35	54.81	50.36	4.45	4' 5 ³ / ₈
+45	54.60	50.40	4.20	4' 2 ³ / ₈
+55	54.75	50.44	4.31	4' 3 ³ / ₄
+65	54.73	50.47	4.26	4' 3 ¹ / ₈
+83	54.76	50.54	4.22	4' 2 ⁷ / ₈
+108	55.18	50.65	4.53	4' 6 ³ / ₈
+89	55.12	50.75	4.37	4' 4 ¹ / ₂
+58	55.07	50.86	4.21	4' 2 ¹ / ₂
+83	55.33	50.96	4.37	4' 4 ¹ / ₂
2+08	55.38	51.06	4.32	4' 3 ⁷ / ₈
+83	55.61	51.17	4.44	4' 5 ¹ / ₄
+58	55.47	51.27	4.20	4' 2 ³ / ₈
+83	55.64	51.38	4.26	4' 3 ¹ / ₈
8+08	55.63	51.48	4.15	4' 1 ⁷ / ₈
+33	55.67	51.58	4.09	4' 1 ⁷ / ₈
+55	56.02	51.69	4.33	4' 4

2011/1/15

0+34 WZ 24th M. Y

+59 ° Y Lateral

° PT +

Y Lateral

+108 50 W & 100

M. S. - Wet 24th

Sta	Elev	Grad	cut
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3+83	56.31	51.79	4.52 4' 6/4
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4+08	55.76	57.90	3.86 3' 10 3/8
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+ 83	55.72	52.00	3.72 x 3' 8 5/8
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Length of line 438 ft -

Flush Tank 56.50
Grade 57.00

L S - W of 24th

Sta	Elev	Area	Cont
0	62.37	56.80	5.57 5' 6 ⁷ / ₈
+10	62.68	57.09	5.59 5' 7 ¹ / ₈
+20	62.86	57.38	5.48 5' 5 ³ / ₄
+30	62.80	57.67	5.13 5' 1 ⁷ / ₈
+40	63.16	57.96	5.20 5' 2 ³ / ₈
+50	64.18	58.25	5.93 5' 11 ¹ / ₈
+57	64.64	58.45	6.19 6' 2 ¹ / ₄
+72	65.04	58.88	6.16 6' 2
+97	65.59	59.60	5.99 5' 11 ⁷ / ₈
1+22	67.14	60.33	6.81 6' 9 ³ / ₄
+47	67.56	61.05	6.51 6' 6 ¹ / ₈
+72	68.69	61.77	6.92 6' 11
+97	70.57	62.49	8.08 8' 1
2+22	71.39	63.22	8.17 8' 2
+47	72.22	63.94	8.28 8' 3 ³ / ₈
+72	72.92	64.66	8.26 8' 3 ¹ / ₈
+97	74.34	65.39	8.95 8' 11 ³ / ₈
3+22	74.72	66.11	8.61 8' 7 ³ / ₈
+47	76.09	66.83	9.26 9' 3 ¹ / ₈
+72	76.72	67.55	9.17 9' 2

2.8909

-PC

0+47 W2 Y Lateral

P.I. 10' W of W 24th St

Y Lateral

I M - 90 of 24

Sta Elev Grad CW -

3+97 76.22 68.28 7.94 7'11 $\frac{1}{4}$ 4+22 76.52 69.00 7.52 7'6 $\frac{1}{4}$

+ 47

+

Length of line 427 ft.

4+27 High Tank 74.25 ✓
(4+22) Flush tank Grade 74.75E L 22 ^{old}

Completed July 29/88

K 11 - 91 of 24

Sta	Elev	Grad	cus
0	77.62	72.80	4.82 4' 9 ⁷ / ₈
+10	78.18	73.28	4.90 4' 10 ⁷ / ₈
+20	78.72	73.76	4.96 4' 11 ¹ / ₂
+30	79.71	74.24	5.47 5' 5 ⁵ / ₈
+40	80.80	74.71	6.09 6' 1 ¹ / ₈
+50	81.16	75.19	5.97 5' 11 ⁷ / ₈
+57	81.43	75.53	5.90 5' 10 ⁷ / ₈
+72	82.05	76.25	5.80 5' 9 ⁵ / ₈
+97	83.57	77.44	6.07 6' 0 ⁷ / ₈
1+22	84.73	78.64	6.09 6' 1 ¹ / ₈
+47	85.78	79.84	5.94 5' 11 ¹ / ₄
+72	87.02	81.03	5.99 5' 11 ⁷ / ₈
+97	88.21	82.23	5.98 5' 11 ³ / ₄
2+22	89.34	83.43	5.91 5' 10 ⁷ / ₈
+47	90.64	84.62	6.02 6' 0 ¹ / ₄
+72	92.00	85.82	6.18 6' 2 ¹ / ₈
+97	93.13	87.02	6.11 6' 1 ³ / ₈
3+22	94.42	88.21	6.21 6' 2 ¹ / ₂
+47	95.46	89.41	6.05 6' 0 ⁵ / ₈
+72	96.67	90.61	6.06 6' 0 ³ / ₄

4.7867.1100

- Pe

0+47 22 24

PT

K St-W of 24

Sta	Elv	Grad	ent
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3+97	97.32	91.80	5.52 5' 6 1/4
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4+22	98.70	93.00	5.70 5' 7 1/4
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+47

Total length of pipe 4+27

First tank grade 98.80 ✓

EL 22 ²⁹ 1 98.30

2 S - W of 24

Sta	Elev	Area	ew	
0	96.34	90.50	5.84	5' 10 ¹ / ₈
+10	96.45	90.66	5.79	5' 9 ¹ / ₂
+20	96.60	90.82	5.78	5' 9 ¹ / ₈
+30	96.84	90.98	5.86	5' 10 ¹ / ₈
+41	97.26	91.14	6.12	6' 1 ¹ / ₂
+50	97.46	91.30	6.16	6' 2
+56	97.54	91.39	6.15	6' 1 ¹ / ₈
+59	98.02	91.82	6.20	6' 2 ¹ / ₂
1+08	98.39	92.22	6.17	6' 2
+33	99.01	92.62	6.39	6' 4 ³ / ₄
+58	99.29	93.02	6.27	6' 3 ¹ / ₄
+83	99.64	93.41	6.23	6' 2 ³ / ₄
2+08	100.01	93.81	6.20	6' 2 ³ / ₈
+33	100.41	94.21	6.20	6' 2 ³ / ₈
+58	100.81	94.61	6.20	6' 2 ³ / ₈
+83	101.17	95.01	6.16	6' 2
3+08	101.53	95.41	6.12	6' 1 ¹ / ₂
+33	101.97	95.80	6.17	6' 2
+58	102.36	96.20	6.16	6' 2 ¹ / ₂
+83	102.88	96.60	6.28	6' 5 ³ / ₈
4+05	103.06	97.00	6.06	6' 0 ³ / ₄

0+33

0+47 St-Line

0+58 Y

PT

Y

20' 11' 5' 6" W

J. St West of 24th St
Sta Elev Grade Cont.

Sta	Elev	Grade	Cont.
4+38	103.76	98.50	5.26 5 ³ / ₈

Total length of pipe 4+43

47

East of 22nd St
First term grade 103.13
E L 22 St

36' longer.

H St East of 22nd

Sta	Elev	Grade	cut
0	114.76	109.11	5.65 5' 7 7/8
+10	114.80	109.74	5.06 5' 0 3/4
+20	115.24	109.88	5.36 5' 4 3/8
+30	115.50	110.02	5.48 5' 5 3/4
+40	115.68	110.16	5.52 5' 6 1/2
+50	115.77	110.30	5.47 5' 5 7/8
+56	115.92	110.39	5.53 5' 6 3/8
+67	116.05	110.54	5.51 5' 6 1/8
+92	116.38	110.89	5.49 5' 5 7/8
1+17	117.04	111.24	5.80 5' 9 5/8
+42	117.35	111.59	5.76 5' 9 1/8
+67	117.81	111.95	5.86 5' 10 3/8
+92	118.26	112.30	5.96 5' 11 1/2
2+17	118.76	112.65	6.11 6' 1 7/8
+42	119.39	113.00	6.39 6' 4 3/4
+67	120.03	113.57	6.46 6' 5 1/2
+92	120.80	114.14	6.66 6' 8"
3+17	121.56	114.71	6.85 6' 10 1/2
+42	122.38	115.29	7.09 7' 1 7/8
+67	122.95	115.85	7.10 7' 1 7/8
+92	123.86	116.42	7.44 7' 5 1/2
4+17	124.52	117.00	7.54 7' 6 1/2
+45	125.74	121.50	5.24 5' 3"

1.4049 1.00

2.1457 1.00

1+22 V E I 2 2

PT

Total length of pipe 47+50
Huskins - 98 2 1/2 11-

St East of 99th

Sta	Elev	Grade	cut
0	105.13	100.00	5.13 5' 1 7/8"
+10	105.46	100.10	5.30 5' 3 7/8"
+20	105.66	100.19	5.47 5' 5 7/8"
+30	105.84	100.29	5.55 5' 6 7/8"
+40	106.05	100.38	5.67 5' 8"
+50	106.25	100.48	5.77 5' 9 1/4"
+56	106.25	100.54	5.71 5' 8 1/2"
+67	106.57	100.64	5.93 5' 11 1/8"
+92	107.03	100.88	6.15 6' 1 7/8"
1+17	107.35	101.12	6.23 6' 2 3/4"
+42	107.92	101.36	6.56 6' 6 3/4"
+67	107.92	101.60	6.32 6' 3 7/8"
+92	108.19	101.84	6.35 6' 4 1/4"
2+17	108.73	102.08	6.65 6' 7 1/8"
+42	108.85	102.32	6.53 6' 6 3/8"
+67	109.18	102.56	6.62 6' 7 1/2"
+92	109.36	102.80	6.56 6' 6 3/4"
3+17	109.77	103.04	6.73 6' 8 3/4"
+42	110.20	103.28	6.92 6' 11 1/8"
+67	110.63	103.52	7.11 7' 1 3/8"
+92	110.82	103.75	7.07 7' 0 7/8"

9.572, 1.00

P. C. F 22' South of center.

0+42 E. Line 22nd St.

P. J.

Dist. East of 23rd St.

Sta	Elev.	Grade	Leat.	
447	111.13	104.00	7.13	7' 1 7/8"
+ 46	111.17	106.50	4.67	4' 8"
Total length of pipe				4457

37
W. Line 24th Flush Tank.

TRAVERSE TABLE FOR TRANSIT BOOK,
From 1° to 90° for a distance of 100.

Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	85
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	84
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	83
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	82
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	81
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	80
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	79
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	78
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	77
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	76
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	75
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	74
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	21.07	73
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	72
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	71
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	70
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	69
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.19	68
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	67
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	66
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	65
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	64
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	63
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	62
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	61
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	60
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	59
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	58
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	57
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	56
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	55
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	54
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	53
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	52
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	51
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	50
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	49
37	79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	48
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	47
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	46
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	45
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	44
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	43
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	42
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	41
45	70.71	70.71							
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.

Published by Edward Denny & Co., Stationers, Drawing Materials,
Mathematical Instruments, Etc., San Francisco.