TRANSIT NOTES

SEWERAGE.

9

TRANSIT

F.B. 715

715

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	2⅓	21	49	41	95⅔
2	4⅔	22	51⅓	42	98
3	7	23	53⅔	43	100⅓
4	9⅓	24	56	44	102⅔
5	11⅔	25	58⅓	45	105
6	14	26	60⅔	46	107⅓
7	16⅓	27	63	47	109⅔
8	18⅔	28	65⅓	48	112
9	21	29	67⅔	49	114⅓
10	23⅓	30	70	50	116⅔
11	25⅔	31	72⅓	51	119
12	28	32	74⅔	52	121⅓
13	30⅓	33	77	53	123⅔
14	32⅔	34	79⅓	54	126
15	35	35	81⅔	55	128⅓
16	37⅓	36	84	56	130⅓
17	39⅔	37	86⅓	57	133
18	42	38	88⅔	58	135⅓
19	44⅓	39	91	59	137⅔
20	46⅔	40	93⅓	60	140

PTA
MICROFILMED
DEC 2 1904

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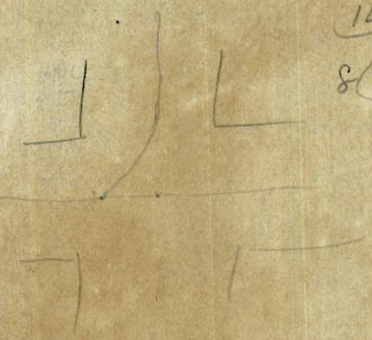
Table for Running on Slopes.

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

Angle.	Cor. in links	Angle.	Cor. in links.	Angle.	Cor. in links.	Angle.	Cor. in links.
°		°		°		°	
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



35
1414
8(1.41.42
17.68
3
53.04

7

PTA

DRAWING

ST

In the
links to be add

Angle.	Cor. i
°	
4	0·
5	0·
6	0·
7	0·
8	0·
9	1·
10	1·

Index

F.M. Shaw Asst.	Transit	11th St.		Pages	1 to	12 –
McClain	Head-chain	12th St		"	13 "	26 –
Donovan "	Rear "	13th St	E to A.	"	27 "	29 –
H. Stokes	Axman	13th St	N to L	"	33 "	34 –
G. Ickey		13th "	L to F.	"	35 "	39 –
		14th "	N. " H.	"	41 "	45
		14th "	G. to H	"	47	——
		14th "	G to A	"	47 "	

		Elev.	Grade
8 0			
8 + 20	Centre line of "L" St.		3'
+ 80	South line of L. St		
+ 50			
7			
+ 50			
6			
+ 50			
5			
+ 80	North line of M. St		
+ 50			
4	South line of "M" St.		
+ 50			
3			
+ 50			
2			
+ 50			
1			
0 40	Int. "N" + 11th		3'
	Eleventh St running North from N.		

Centre line 11th St.

+ 20.8	Centre line J. St.	3'
8		
+ 80	South line J. St.	
+ 50		
7		
+ 50		
6		
+ 50		
5		
+ 80	North line K. St.	
+ 50		
4	South line "K" St.	
+ 50		
3		
+ 50		
2		
+ 50		
1	North line L. St.	
0 40	Centre line "L" St.	3'
	Running North on Elwerth from "L" St.	

Centre line 11th St.

+50														
+41	North line H St													
16														
+50														
+41	S line H St													
15														
+50														
14														
+50														
13														
+50														
+01	Centre line J St													
12														
+60	South line J St													
+50														
11														
+50														
10														
+50														
9														
+60	North line J St													
8+50														

Centre line 11th St

3'

7)

25	
+ 50	
+ 01	North line F. St
24	
+ 50	
+ 21	South line F. St
23	
+ 50	
22	
+ 50	
21	
+ 21^{d}	North line G. St.
20	
+ 81^{d}	Centre line G. St.
+ 50	
+ 41	South line G. St.
19	
+ 50	
18	
+ 50	
17	

Centre line 11th St.

3'

9

34	
+ 50	
33	
+ 50	
32	
+ 62	North line D. St
+ 50	
31	
+ 82	South line D. St
+ 50	
30	
+ 50	
29	
+ 50	
28	
+ 82	North line E. St
+ 50	
+ 01	South line E. St
27	
+ 50	
26	

Centre line 11th St

3

+64	centre a St
+24	South line A. St
42	
+50	
41	
+50	
40	
+50	
+24	North line B St
39	
+50	
+44	South line B St
38	
+50	
37	
+50	
36	
+50	
+43	North line C St
35+05	Centre line C St
+62	South line C St
34+50	

0	centre line L St.
8	
+ 80	South line of L. St.
+ 50	
7	
+ 50	
6	
+ 50	
5	
+ 80	North line M. St.
+ 50	
4	South line of M St.
+ 50	
3	
+ 50	
2	
+ 50	
1	North line "N" St.
0 40	Int 12th & N.
	Running North on Twelfth St
	from N. St.

+ 80	South line J. St.
+ 50	
7	
+ 50	
6	
+ 50	
5	
+ 80	North line K St.
+ 50	
4	South line K St.
+ 50	
3	
+ 50	
2	
+ 50	
1 ^	North line of L. St.
40	
0 "	Int 12th & L. St.

Running North on 12th St from L

17

+40	South line of H St.	
15		
+50		
14		
+56		
13		
+50		
+41	North line I. St	
+01	Centre line I. St.	
12		
+61	South line I. St.	
+50		
11		
+50		
10		
+50		
9		
+61	North line J. St.	
+50		
+20 3/4	centre line J. St.	
8		

Centre line 13th St.

3'

3'

19/

+ 22	South line F. St.
23	
+ 50	
22	
+ 50	
21	
+ 50	
+ 22	North line G.
20	
+ 81.8	Centre line G. St
+ 50	
+ 41	South line G. St.
19	
+ 50	
18	
+ 50	
17	
+ 50	
+ 40	North line of H. St.
16	
15 + 50	

Centre line 12th St.

3

21

+ 50

31

+ 82 South line A. St.

+ 50

30

+ 50

29

+ 50

28

+ 82 North line E. St.

+ 50

+ 42 Centre line E. St.

27 South line E. St.

+ 50

26

+ 50

25

+ 50

+ 02 North line A. St.

24

23 + 50

Centre line 12th St.

(33)

+ 23	North line P. St.
39	
+ 50	
+ 42	South line P. St.
38	
+ 50	
37	
+ 50	
36	
+ 50	
+ 43	North line G St.
+ 028	Centre line G St.
35	
+ 62	South line G St.
+ 50	
34	
+ 50	
33	
+ 50	
32	
31 + 62	North line H. St.

Centre line 12th St.

+ 64
+ 24 South line A. St.
42
+ 50
41
+ 50
40
39 + 50

Centre line 12th St.

3'

+ 80	South line C		
+ 50			
7			
+ 50			
6			
+ 50			
5			
+ 80	North line D. St.		
+ 50			
+ 40	Centre line D. St.		3'
4	South line D. St.		
+ 50			
3			
+ 50			
2			
+ 50			
1 ^	North line E. St.		
40'			
0 v	Centre line E. St.		3'
	Running North on 13th St. from "E" St.		

Centre line 13th St.

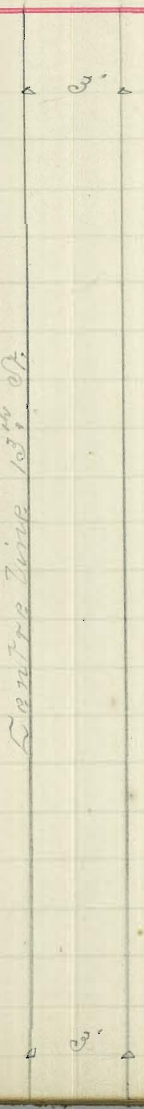
+81	Centre line A St.							
+50								
+41	South line of A. St.							
15								
+50								
14								
+50								
13								
+50								
+41	North line B. St.							
12								
+61	South line B. St.							
+50								
11								
+50								
10								
+50								
9								
+60	North line C St.							
+50								
+20	Centre line C. St							
8								

Centre Line 13th St.

3'

0	
+ 20	Centre line Lo St.
8	
+ 80	South line Lo St.
+ 50	
7	
+ 50	
6	
+ 50	
5	
+ 80	North line Mo. St.
+ 50	
4	South line Mo. St.
+ 50	
3	
+ 50	
2	
+ 50	
1	North line M. St.
0 40	Centre line M. St.

Running North on 13th St
from M.



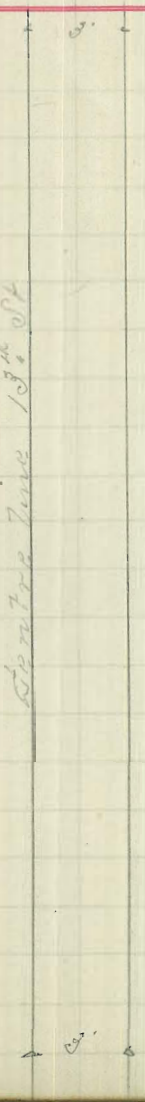
8	
+ 80	South line J St
+ 50	
7	
+ 50	
6	
+ 50	
5	
+ 80	North line K St
+ 50	
4	South line K St
+ 50	
3	
+ 50	
2	
+ 50	
1	
0 40	Centre line L St

Running North on 13th St.
from L

Centre line 13th St.

3

+40	North line H. St.
16	
+50	
+40	South line H St.
15	
+50	
14	
+50	
13	
+50	
+40	North line G. St.
12	
+60	South line G. St.
+50	
11	
+50	
10	
+50	
9	
+60	North line J. St
+50	
8+70	Centre line J. St.



+20	South line F.
23	
+50	
22	
+50	
21	
+50	
+21	North line G. St.
20	
+80 8/	Centre line G. St.
+50	
+41	South line G. St.
19	
+50	
18	
+50	
17	
16 +50	

Centre line 13th St.

5'

41)

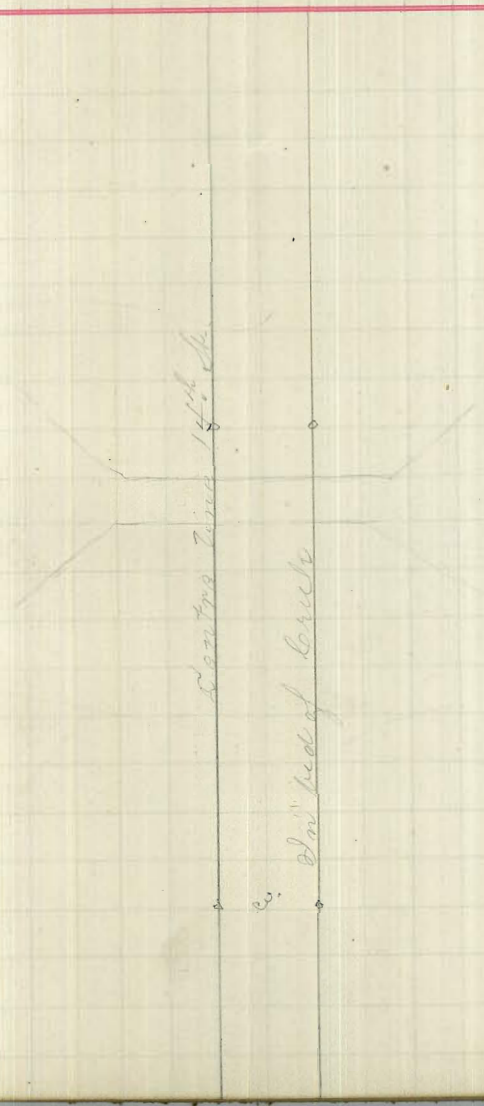
0	
+ 20	Centre line of L. St.
+ 13	Centre of R.R. Track
8	
+ 50	
7	
+ 50	
6	
+ 50	
5	
+ 80	North line M. St.
+ 50	
4	South Line M. St.
+ 50	
3	
+ 50	
2	
+ 50	
1	North line N. St.
0 40	Centre N. St.

Running North on 14th St.
from N. St.

491

8	
+ 80	South line J. St.
+ 50	
7	
+ 50	
6	
+ 50	
5	
+ 80	North line K. St.
+ 50	
4	South line K St.
+ 50	
3	
+ 50	
2	
+ 50	
1	North line of L St.
0 40	Centre Line of L St.

Running North on 14th St.
from L St.



+ 44	South line "H" St.
15	
+ 50	
14	
+ 50	
13	
+ 50	
+ 40	North line "H" St.
12	
+ 50	
11	
+ 50	
10	
+ 50	
9	
+ 60	North line "H" St.
8 + 50	

+ 50			
4	South line F. St.		
+ 50			
3			
+ 50			
2			
+ 50			
1	North line G. St.		
0 40	Centre line G. St.	3'	

Running North on 14th St. from G. St.

4	North line H. St.	3'	Spk.
+ 50			
3			
+ 50			
2			
+ 50			
1	South line G. St.		
0 40	Centre line G. St.	3'	

Running South on 14th St. from G. St.

3	East line 13th St at E.		
+ 50			
2			
+ 50			
1	West line of 14th S at E St.		
43			
= { 0			
8 + 18.5		3	
	Running West on E St. bet 14th & 13th		
+ 21.5	Centre line E. { see next page for continuation of line on 14th St	3	
+ 18.5			Angle 90° Left F. S on C. St.
8			
+ 81	South line E.		
+ 50			
7			
+ 50			
6			
+ 50			
5			
4 + 80	North line F. St.		

51)

+22 north line G St.
16.
+82 centre line G St.
+50
+42 South line G St
15
+50
14
+50
13
+50
+42 north line H.St
12
+62 South line H.
+50
11
+50
10
+50
9
+61. north line E. St.
8 +50

5'

+46	Fence				
23	South line H. St. (approx)				So
+50					
22					
+50					
21					
+50					
20					
+64	Centre line R. St			3'	
+50					
19					
+50					
18					
+58					
17					
167+50					

8			
+ 80	South line L. St.		
+ 50			
7			
+ 50			
6			
+ 50			
5			
+ 80	North line M. St.		
+ 50			
+ 40.5	Centre line M. St.		
4	South line M. St.		
+ 50			
3			
+ 50			
2			
+ 50.			
1	North line N. St.		
0 40	Centre line N. St.		
	Running North on 15th St. from N St.		

Centre line 15th St.

3'

3'

3'

8	
+ 80	South line J. St.
+ 50	
7	
+ 50	
6	
+ 50	
5	
+ 80	North line K. St.
+ 50	
4	South line K. St.
+ 50	
3	
+ 50	
2	
+ 50	
1	North line L. St.
0 40	Centre line L. St.

Running North on 15 St. from L. St.

Centre line 15th St.

3

3

59

+ 30	
16	
+ 50	
+ 40	South line W. St.
15	
+ 50	
14	
+ 50	
13	
+ 50	
+ 40	North line S. St.
12	Centre line S. St.
+ 60	South line S. St.
+ 50	
11	
+ 50	
10	
+ 50	
9	
+ 60	North line S. St.
8 + 50	

26
+50
25
+50
24
+50
23
+50
22
+50
21
+50
20
+50
19
+50
18
+50
17
+50
16+40 North Line H St.

Centre of Street runs along
Creek bottom from Sta 20+50 to 29+10

Property lines not defined North of H St.

Centre Line 15th St.

3'

63)

36									
+ 50									
+ 11 7	Centre line C St.								
35									
+ 50									
34									
+ 50									
33									
+ 50									
32									
+ 50									
31									
+ 50									
30									
+ 50									
29									
+ 50									
28									
+ 50									
27									
26 + 50									

3

Centre line 15th St.

+50
42
+50
41
+50
40
+50
39
+50
38
+50
37
36+50

Centre line 15th St.

3'

(69) N ST

0	W line gtr
+17	Y branch
+20	
+40	
+60	
+80	E line gtr
1+05	
+30	
+55	
~~+80~~	
2+05	
+30	
+55	
+80	W line gtr
+97	Y Branch
3	
+20	
+40	
+60	E line gtr
+85	
4+10	

4+35					
+60					
+85					
5+10					
+35					
+60	W line 10th				
+77	Y branch				
+80					
6					
+20					
+40	E line 10th				
+65					
+90					
7+15					
+40					
+65					
+90					
8+15					
+40	W line 11th				
+57	Y Branch				
+60					

	E line 11th			11–12	
+45					
+70					
+95					
11+20	W line 12th				
+37	Y Branch				
+40					
+60					
+80					
12	E line 12th				
+25					
+50					
+75					
13					
+25					

75

13 +50					
+75					
14	W line L3				
+17	Y Branch				
+20					
+40					
+60					
+80	E line				

Timber for Caps

Received of M. McDonald

July	26	5 pcs.	8"x8"x14'	
"	"	6 "	" " 20	
"	28	10	1"x3"x12	

(81)

Boards for Boxes

Received of Mr McDonald

July 26	4000 ft of Redwood				

(85)

Nails, Bolts etc

85)

Crushed Rock

July	26	7 loads			On hand at date

87

Gravel

July	26	10 loads				On hand at date

Sand

July	26	"	Loads			On hand ab date

Cement

July 28	10	bbls			

Date	Piles	Piers	Men			
July 9	9	2	7			1 load of gravel received

95)

Memorandum

July 31

No of piles driven to day 9 from Station 5+28 to station 4+80

No of piers built today two, Stations 10+44 & +56

No of men employed seven

One load of gravel received and measured about 23 cu ft.

The pumps borrowed on the 30th were returned.

Aug 1

No of piles driven today is 7 ; from Stn 4+80 to station 4+44 one pile.

No piers built today

Raised the pipe and made boxes, also raised the wharf where it had settled.

No of men employed 7

Received from Macdonald

5	pieces	O.P.	8"x12"x16'
2	"	"	8"x12"x18'
8	"	"	1½"x12"x16'
3	"	"	8"x12"x16'
1	"	"	1"x18"x20'
2	"	"	1½"x12"x20'
1	"	"	1½"x12"x24'
1	"	"	1½"x12"x28'
1	"	"	1½"x10"x24'
1	"	"	1½"x10"x28'

Aug 2

No. of piers built 1

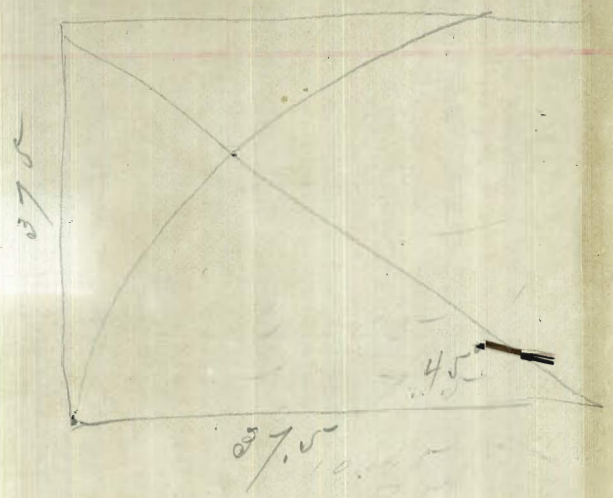
No. of piles driven 4

No of men employed 6

97)

Aug 3rd
Above 7 piles
Built 2 piers
Seven men employed

Rad.	Deg. Angle	Chord	Arc
75'	4°00'	10.46	10.47
70'	4°15'	10.37	10.385
65'	4°30'	10.20	10.21
60'	5°00'	10.46	10.47
55'	5°15'	10.07	10.08
50'	6°00'	10.45	10.47
45'	6°30'	10.19	10.21
40'	7°30'	10.44	10.47
35'	8°15'	10.04	10.08
30'	10°00'	10.42	10.47
25'	12°00'	10.40	10.47



Degrees

89 88 87 86 85 84 83 82 81 80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45

Degrees.

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	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19.51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.68	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	67
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91 18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78.26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67 88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
	DEGREES.		¾ DEGREE.		½ DEGREE.		¼ DEGREE.		

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