124 A

DIETZGEN

TRADE MARK

ENGINEERS' LEVEL BOOK

No. 410

124 A

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

Distances from Center of Roadway for Cross-Sectioning
Roadway 16 feet wide. Side Slopes 1 on 1.
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	0
1	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	1
2	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	2
3	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	3
4	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	4
5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	5
6	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	6
7	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	7
8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	8
9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	9
10	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	10
11	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	11
12	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	12
13	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	13
14	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	14
15	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	15
16	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	16
17	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	17
18	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	18
19	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	19
20	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	20
21	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	21
22	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	22
23	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	23
24	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	24
25	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	25
26	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	26
27	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	27
28	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	28
29	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	29
30	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	30
31	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	31
32	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	32
33	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	33
34	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	34
35	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	35
36	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	36
37	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	37
38	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	38
39	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	39
40	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be 30.6+(20—16)÷2 or 2 ft. added to 30.6 =32.6. For slopes of 1 on 1½ see inside of back cover.

124A

Chillecothe Rd

Sec D

Inspectors Record

Pgs 1 to 20 N.G.

GRADES FOR HILL REDUCTIONS ON BELL ST #10 SEC F Pg 21

Culvert drainage area Sta 179+24 } Book 161
(= 44+27 E. of Auburn Rd) } Pg 60

Bell St #10 Grade stks P. 21

Bell St.-Elev. at Leemars '59 Pg 14 Back of BK.

No 1 Yard Aug 141 — 147

Date	R R	Shipped	Car No	Weight
6/12	P R R	Tow Mx	140313	90 200 ✓
6/12	B & O	"	325192	88 800 ✓
				179 000
	From	89.	Wgt	1000

No 1 Yard Sta 191- 147

Date	R R	Shipper	Car Number	Weight	
6/13	B O	Cor McK	322 495	91 000	✓
6/13	B O	Clev Bldgs	434 708	142 500	✓
6/14	B O	Cor McK	324 794	97 700	✓
6/25	Nor	Cor McK	1 167	117 300	✓
6/26	C C O	Cor McK	44 253	122 600	✓
6/26	B O	Cor McK	426 302	117 300	✓
6/27	B O	Cor McK	320 161	123 900	✓
7/5	B O	Clev Bldgs	225 382	114 600	✓
7/5	B O	Cor McK	328 349	113 200	✓
7/5	C C O	Clev Bldgs	43 490	112 200	✓
7/8	B O	Cor McK	233 963	100 100	✓
7/8	B O	Cor McK	323 336	104 900	✓
7/10	P R R	Clev Bldgs	172 083	144 600	✓
7/10	P McK & Y	Clev Bldgs	54 391	142 700	✓
7/10	B O	" "	329 181	99 700	✓
7/10	S H S	Cor McK	4 041	98 100	✓
7/10	P & E	Clev Bldgs	57 329	158 600	✓
7/10	B O	Cor McK	330 304	99 900	✓
				2 101 000	

Tons 1050 Frgt 1.00

Sta 141-147

Date	R R	Shipper		Car Number			Weight		
7/11	B O	Cleve	Bldgs	326	462	74	108	500	✓
7/11	WLE	"	"	59	865		115	600	✓
7/12	B O	"	"	433	686		154	300	✓
7/12	Big 4	Am S & Wire		83	048		140	100	✓
7/13	B O	Cor	McK	125	113		112	700	✓
7/13	B O	"	"	325	740		119	600	✓
7/13	B O	"	"	326	890		121	000	✓
7/13	B O	"	"	325	785		111	200	✓
7/15	C C O	"	"	41	836		127	700	✓
[illegible]	[illegible]	[illegible]	[illegible]	324	975		108	600	✓
7/16	Big 4	"	"	74	103		106	600	✓
7/16	PRR	"	"	139	794		125	100	✓
7/17	B & O	"	"	327	539		104	500	✓
7/16	NYC	Cor	McK	414	412		119	100	✓
7/18	WLE	"	"	59	651		101	700	✓
7/18	Z U	"	"	84	377		98	500	✓
7/18	B O	"	"	225	710		111	300	✓
7/19	Pony	Std	Stg	63	116		124	500	✓
	Tons	948	Weight 1500			1	897	500	

Sta. 191-147

Date	R R	Shipper	Car	Number	Weight	
7/20	N W	Claire Bldg	20	775	138	700 ✓
7/20	L N	" "	180	150	107	300 ✓
7/20	B O	" "	623	272	102	800 ✓
					348	800

Tons 174

Hdwt 800

Gran Slag Used Sta 191-147.

Date	RR	Shipper		Car	No	Weight
6/17	PW&V	Clive	Bldgs	64	113	111 880 ✓
7/1	PLE	"	"	66	851	162 200 ✓
7/1	PennKy	"	"	64	044	163 860 ✓
7/1	Stock pile	Hdg	Supply			114 390
7/15	PRK	Clive	Bldgs	901	814	116 980 ✓
7/17	PLE	"	"	66	808	141 360 ✓
						809 870

Tons 404 Hdwt 1890

No 7 Used

Date	R R	Shipper	
6/12	B O	Geo	McK
6/12	"	"	"
6/13	"	"	"
6/13	C C B	"	"
6/26	Big 4	"	"
6/26	B B	"	"
6/27	L H S	"	"
6/29	B B	"	"
7/10	N Y C	Am S	Wire
7/29	B B	Geo	McK

Sta 191 - 147

Car	No	Weight		
325	323	109	180	✓
223	122	114	400	✓
330	609	109	200	✓
43	256	106	100	✓
74	775	116	800	✓
331	458	125	000	✓
4	108	121	700	✓
322	909	124	200	✓
409	006	123	760	✓
225	559	115	600	✓
		1 165	860	

Flour	Hdwt
582	1860

No 1 Slag Used — Sta 00 – 18 + 50 Top Course

Date	R R	Shipper		Car	No	Weight	
7/20	P McK Y	Stan	Slag	61	887	112	100 ✓
	"	"	"				
7/20	"	"	"	62	386	124	600 ✓
7/20	"	"	"	62	626	124	400 ✓
7/20	L N	Clev	Bldgs	87	743	115	200 ✓
7/20	B O	"	"	126	697	107	500 ✓
7/20	L N	"	"	180	079	115	400 ✓
						699	200
					Tons	349	Hwdt 1200

Tran Slag Used — Sta 00 – 18 + 50

Date	R R	Shipper		Car	No	Weight	
7/18	P L E	Clev	Bldgs	56	817	139	220 ✓
7/20	P W V	"	"	2	181	128	320 ✓
						267	540

No 7 " — " " Tons 133 Hdwt 1540

Date	R R	Shipper		Car	No	Weight	
7/25	N Y C	Am Service		410	104	113	800 ✓
7/29	B O	Cor	McK	425	857	110	700 ✓
						224	500
					Tons	112	Hdwt 500

Repair Work

No 1 Hdg Supply

No 2 X

"

"

"

Iron Stone

7/22 PWV

Sta 1850 - 79

13 280 ✓

Stone 61 Hdwt 1280

11 390

11 160

12 200

Hdwt 11 180

45 930

Stone 22 1930

Car No Weight

3 043 123 000 ✓

Stone 61 1/2

	No 1	Used	Sta 79 - 147		
Date	R R	Shipper	Car No		Weight
7/23	Erie	Standard	42 733		113 400 ✓
7/23	"	"	26 361		110 500 ✓
7/23	"	"	27 299		115 800 ✓
7/23	PRR	"	162 072		112 000 ✓
7/23	NYSO	"	11 140		124 600 ✓
7/23	"	"	5 468	?	121 500 ✓
7/31	LHS	Con McK	4 235		88 600 ✓
7/31	BQ	" "	325 259		95 200 ✓
8/1	"	" "	330 059		100 800 ✓
8/1	"	" "	421 039		101 000 ✓
8/1	"	" "	124 883		96 700 ✓
8/2	"	" "	323 707		101 500 ✓
8/2	LN	" "	87 038		101 800 ✓
8/2	BQ	" "	330 666		100 700 ✓
8/3	"	Clove Bldg	323 714		108 500.
8/3	Vgn	Con McK	12 817		105 900 ✓
				1	697 500
			848 Tons	1500	Avg't

No 1 Used | Sta 79 - 147

Date	RR	Shipper		Car	No	Weight	
8/5	CC&O	Clive Bldgs		45	090	113	900 ✓
8/5	"	"	"	43	679	112	100 ✓
8/5	LN	"	"	83	843	101	200 ✓
8/5	B&O	Cow	McK	224	926	112	400 ✓
8/5	LHS	"	"	4	084	120	800 ✓
8/7	B&O	"	"	426	202	119	000 ✓
8/7	"	"	"	523	468	116	400 ✓
8/7	Vgn	"	"	12	385	120	600 ✓
8/7	Big 4	"	"	88	147	136	100 ✓
8/8	"	"	"	73	927	113	100 ✓
8/9	B&O	"	"	421	723	101	400 ✓
8/9	PRR	"	"	140	423	99	000 ✓
8/10	B&O	"	"	325	990	102	900 ✓
8/12	LN	"	"	89	638	104	700 ✓
8/12	"	"	"	89	592	97	300 ✓
8/12	B&O	"	"	330	925	105	900 ✓
8/12	LN	"	"	184	280	104	600 ✓
						1 881	200

Tons 940 Avg 1200

No 1 Used

Date	R R	Shipper
8/14	L N	Carr Mc K
8/14	B & O	" "
8/14	B & O	" "
8/14	C C & O	" "
8/14	"	" "
8/15	B & O	" "
8/15	"	" "
8/15	"	" "
8/15	C & O	" "
8/15	"	" "
8/17	Big 4	" "
8/17	C Nw	" "
8/20	N Y C	" "
8/20	C & O	" "
	B & O	
	"	
	Erie	

Sta 79 - 147

Car	No		Weight	
27	727		99	400 L
124	010		90	800 L
320	252		104	300 L
40	082		92	900 L
42	557		95	000 L
325	254		89	700 L
421	466		97	900 L
224	706		91	100 L
114	240		97	400 L
60	088		103	400 L
73	235		102	500 L
1	534		102	900 L
420	527		117	900 L
212	153		107	500 L
320	073	+	109	600 L
331	088	+	106	500 L
30	500		118	000 L
Tons	Hwg 1		1 724	800
862	800			

	No	1	Used		Sta	79 – 147		
Date	B R		Shipper		Car	No		Weight
	Two	cars	Stock		59	658		93 700
6/13	WLE		Two McK		59	439		93 300
6/13	"		"	"				22 100
	Iron		A P Co					12 100
								221 200

Tons 110 Wgt 1200

	Gran Stag		Used			Sta	79-147		
Date	R R		Shipper			Car	No		Weight
6/15	PONY		Chic	Bldgs		3	304		126 600 ✓
7/12	PLE		"	"		57	218		142 760 ✓
7/15	PLE		"	"		66	350		122 840 ✓
7/24	Pncky		"	"		54	417		156 520 ✓
8/3	PLE		"	"		67	005		125 860 ✓
8/8	NYC		"	"		429	562		152 120 ✓
8/9	WLE		"	"		55	118		101 760 ✓
8/12	B O		"	"		532	870		165 660 ✓
8/13	"		"	"		533	863		156 480 ✓
8/13	"		"	"		532	224		134 640 ✓
									1 385 240

Tons 692 Wgt 1240

No 7 Used Sta 79 - 147

Date	R R	Shippers	Car	No	Weight
7/23	NYC	Am S & Wire	415	104	113 280
7/24	P R R	" "	148	722	122 100 ✓
7/25	P W V	" "	2	607	124 580 ✓
7/31	B & O	Carr McK	129	763	103 300 ✓
8/1	Pn Ky	Stan Stag	62	625	104 300 ✓
8/1	P L E	" "	52	281	109 600 ✓
8/10	B O	Carr McK	223	993	122 900 ✓
8/17	I N	" "	83	414	112 700 ✓
	NYC		423	351	134 220 ✓
	P L E		56	269	120 680 ✓
	W S S		1	857	107 640 ✓
	NYC		404	589	123 900 ✓
					1399 400

Floors 699 Height 1400

BELL ST C.H.# 10 SEC "F."

SIDE STAKES SET 30' from ℄ ON EACH SIDE FOR CHANGE IN GRADE

STA 134+96.93 = ℄ CH.'s #10 & #4

7-19-50	+	HI	−	ELEV.	N STAKE	N Ground	℄	S GROUND	S STAKE
140+00					(1204.76) 8.8	(1202.76) 10.8	(1202.86) 10.7	(1203.36) 10.2	(1206.26) 7.3
139+00					(1209.36) 4.2	(1206.56) 7.8	(1205.06) 8.5	(1205.46) 8.1	(1208.56) 5.3
⊼	5.39	1213.56							
T.D.			7.42	1208.17					
138+00					(1213.79) 1.8	(1210.69) 4.9	(1208.19) 7.4	(1209.59) 6.0	(1212.69) 2.9
137+00					(1215.09) 0.5	(1213.19) 2.4	(1211.69) 3.9	(1211.69) 3.9	(1214.09) 1.5
136+00					(1212.39) on root bench mk tree 3.2	(1209.99) 5.6	(1208.59) 7.0	(1209.59) 6.0	(1212.09) 3.5
135+50					(1210.99) 4.6	(1208.09) 7.5	(1206.99) 8.6	(1207.14) 8.45	(1210.14) 5.45
⊼	5.22	1215.59							
B.M.				1210.37					

Spk SW Root 24" Pine ± 104' East of CH #4 N. Side Bell
PER PAGE 24 F.BK. # 124

7-19-50

Bell St. CH.#10 Sec "F"

*For stake elev., see pg. 24

7-19-50	+	H.I.	−	Elev.	N STAKE	N Ground	℄	S Ground	S STAKE
~~T.P.~~			~~3.25~~						
190+00					1.9	4.9	(1254.41) 7.9	6.1	3.25
189+00					10.6	12.9	(1245.51) 16.8	13.4	10.3
⊼	13.74	1262.31✓							
T.P.			0.94	1248.57✓					
188+00					4.55	7.1	(1235.71) 13.8	12.8	9.8
⊼	13.21	1249.51✓							
T.P.			0.63	1236.30✓					
187+00					2.4	5.1	1228.83 8.1	10.0	7.6
186+00					7.0	9.8	(1224.53) 12.4	15.3	12.5
⊼	14.70	1236.93							
T.P.			1.90	1222.23					
185+00					1.8	4.85	(1221.73) 2.4	2.8	-0.2
⊼	8.55	1224.13							
B.M.				1215.58					

NE℄ N Hdwell ±179+25 or Spk N Root 20" Maple ±177+07 S, S10 ℄ Rd

7-19-50 + HI - Elev

Bell St CH II 10 - Sec H F

194+00

π 4.33 1271.98 ✓

T.P. 5.15 1267.65 ✓

193+00

192+50

192+00

π 7.60 1272.80 ✓

T.P. 0.41 1265.20 ✓

191+00

π 12.64 1265.61 ✓

T.P. 0.39 1252.97 ✓

π 12.00 1253.36

BM 1241.36

N E S

23

STAKE	Ground		Ground	STAKE
(1270.08) 1.9	(1267.28) 4.7			
		(1268.70) 4.1		
		(1269.20) 3.6		
		(1268.10) 4.7		
		(1262.51) 3.1		

Stone N. side rd. 188+?

7-19-50

Bell St. CH#10 Sec "F"

B.M.				1215.58
T.P.	9.00	1224.58 ✓	2.43	1222.15 ✓
+	10.17	1232.32 ✓		
185+00				
186+00				
T.P.			0.17	1232.15 ✓
+	7.38	1239.53 ✓		
187+00				
TP			6.38	1239.15 ✓
+	10.20	1249.35 ✓		
188+00				
T.P.			0.05	1249.30 ✓
+	11.48	1260.78 ✓		
189+00				
190+00				
T.P.			0.78	1260.00 ✓
+	10.35	1270.35 ✓		

24

stake N	Ground	Ground	stake S
(1259.28) 1.5	(1257.58) 3.2	(1256.38) 4.4	(1258.68) 2.1
(1251.68) 9.1	(1249.68) 11.1	(1248.98) 11.8	(1251.88) 8.9
(1239.65) 9.7	(1236.85) 12.5	(1242.55) 6.8	(1244.65) 4.7
(1229.03) 10.5	(1226.93) 12.6	(1231.93) 7.6	(1234.63) 5.5
(1224.32) 8.0	(1221.72) 10.6	(1227.12) 5.2	(1229.72) 2.6
(1214.82) 10.5	(1219.32) 13.0	(1221.42) 10.9	(1223.92) 8.4

NEXT H.H. wall at 179+25 or Spk N. root 20" maple 177+75 side Rt

7-19-50

Bell St. CH #10 Sec "F"

B. M			10.60	1260.56
195+00				
194+00				
193+64	Stake	on north		
193+50		" south		
R	5.37	1271.16 ✓		
T.P.			9.15	1265.79 ✓
193.00				
192+50				
192+00				
R	5.87	1274.94 ✓		
T.P.			1.28	1269.07 ✓
191+00				

1270.35

N 5 25

Stake Ground ℄ Ground Stake

Spk NE side 20" maple on S. side R.L. ± 196+38

(1268.66) 2.5	(1266.66) 4.5	(1264.06) 7.1	(1262.96) 8.2	(1265.36) 5.8
		(1266.36) 4.8	(1264.66) 6.5	(1267.26) 3.9
(1269.86) 1.3	(1268.16) 3.0	(1267.36) 3.8		
	(1268.86) 2.3	(1267.66) 3.5	(1264.56) 6.6	(1266.86) 4.3
(1273.14) 1.8	(1271.04) 3.9		(1265.44) 9.5	(1267.74) 7.2
(1274.44) 0.5	(1272.44) 2.5		(1265.94) 9.0	(1268.44) 6.5
(1274.44) 0.5	(1271.84) 3.1		(1264.94) 10.0	(1266.94) 8.0
(1268.06) 2.3	(1265.35) 5.0		(1261.65) 8.18	(1263.55) 6.8

7-19-50

Bell St CH# 10 Sec "F"

					Art N Stake	Ground	℄	Ground	Jerry S Stake
210+50					(1255.32) 0.2	(1253.02) 2.5	(1251.22) 4.3	(1257.22) 4.3	(1254.02) 1.5
210+00					(1254.02) 1.5	(1252.12) 3.4	(1250.12) 5.4	(1250.62) 4.9	(1252.72) 2.8
208+90					(1250.22) 5.3	(1247.52) 8.0	(1247.62) 7.9	(1248.92) 6.6	(1251.02) 4.5
⊼	7.30	1255.52 ✓							
T.P			0.78	1248.22 ✓					
207+90					(1248.20) 0.8	(1245.90) 3.1	(1243.10) 5.9	(1244.00) 5.0	(1246.50) 2.5
207+00					(1243.40) 5.6	(1240.60) 8.4	(1239.50) 9.5	(1241.40) 7.6	(1244.30) 4.7
⊼	9.68	1249.00 ✓							
T.P.			1.89	1239.32 ✓					
206+00					(1238.61) 2.6	(1236.51) 4.7	(1237.61) 3.6	(1238.91) 2.3	(1241.21) 0.0
205+00					(1236.01) 5.2	(1233.71) 7.5	(1236.41) 4.8	(1237.41) 3.8	(1240.01) 1.2
203+78 (culvert) (30' N. ℄)					(1234.96) 6.25	(1232.56) 8.65			
B.M.			3.71	1237.50 ✓	Top of Stake 17' feet N. ℄ at 203+50				
⊼	2.43	1241.21 ✓							
T.P.			10.97	12.38.78 ✓					
⊼	0.02	1249.75 ✓							
T.P			12.71	1249.73 ✓					
⊼	1.98	1262.44 ✓							
BM				1260.46	Spk NE side 20" maple on S. side Rd ± 196+38				

Bell St CH#10 Sec"F"

215+00				
℄	1.65	1241.78 ✓		
T.P.			12.74	1240.13 ✓
215+00				
214+50				
℄	6.07	1252.87 ✓		
T.P.			12.24	1246.80 ✓
214+00				
213+50				
July 20, 1950 ℄	12.70	1259.04 ✓		
B.M.			13.17	1246.34 ✓
213+00				
℄	5.44	1259.51 ✓		
T.P.			3.99	1254.07 ✓
212+00				
211+00				
℄	5.81	1258.06 ✓		
T.P.			3.27	1252.25 ✓
		1255.52		

Stake	N Ground	℄	Ground	S Stake
		3.3		
(1245.37)	(1243.27)		(1241.77)	(1243.97)
7.5	9.6		11.1	8.9
(1252.57)	(1250.67)	(1243.47)	(1244.57)	(1247.47)
0.3	2.2	9.4	8.3	5.4
(1256.54)	(1254.34)	(1247.84)	(1247.24)	(1249.44)
2.5	4.7	11.2	11.8	9.6
(1258.04)	(1256.84)	(1251.74)	(1249.04)	(1251.64)
0.8	2.7	7.4	10.0	7.4
Spk CEl. (567.73) ± 214+40				
(1258.51)	(1256.41)	(1254.01)	(1252.01)	(1254.51)
1.0	3.1	5.5	7.5	5.0
(1256.86)	(1254.96)	(1254.06)	(1254.37)	(1256.66)
1.2	3.1	4.0	3.7	1.4
(1256.46)	(1253.86)	(1252.16)	(1252.06)	(1254.56)
1.6	4.2	5.9	6.0	3.5

7-20-50

Bell St. CH #10. Sec "F"

B.M.		6.89	1213.15 ✓
↑	0.21	1220.04 ✓	
T.P.		12.84	1219.83 ✓
↑	1.34	1232.67 ✓	
T.P.		10.45	1231.33 ✓

216+00

215+60 E. side drive

215+50 Center of drive

215+40 W. side drive on bank

1241.78

N Stake Ground S Ground Stake

Spk S. root. 24" Ash N. side Rd.
E. of Frost's drive.

(1235.48)	(1232.88)	(1229.78)	(1235.08)	1237.48
6.3	8.9	12.0	6.7	4.3
(1238.98)	(1236.18)	(1233.08)		
2.8	5.6	8.7		
	(1235.58)	(1234.18)	(1237.78)	(1240.38)
	6.2	7.6	4.0	1.4
	(1240.18)			
	1.7			

No 2 X Slag used Penetration Sta 171-191 197-213

Date	Car No		RR		Weight
8/24	404	850	NYC		119 900
"	418	375	"		123 700
"	52	074	PLE		125 100
8/26	162	811	PRR		109 200
"	147	557	"		119 900
"	144	966	"		111 600
"	160	791	"		111 200
	162	877	"		113 100
	146	264			115 200
	160	570			109 700
			Truck Loads		12 350
				"	6 920
				"	11 340
					1189 210

Tons 594 Wgt 1210

Check with Platt

No 4 Slag used Sta 171 - 191 197 - 213

Date	Car No	R R	Weight
8/22	45 206	C C & B	114 200
"	223 407	B & B	112 200
"	223 399	"	116 600
"	330 036	"	78 100
			421 100

Tons 210 Wgt 1100

Check with Platt

Date	Car No	No 6 Yard No	Sta
	424	735	R R
	116	645	N of 6
	55	146	E of C
	408	952	S of E
	420	675	N of 6
	65	670	"
	892	580	Big 4
	50	493	P R R
	1	482	P L E
			N & R

Ester Woodworth.

Total for 1929 - 8132 - 1490

	Tons	Weight
F E Ashcraft	8124	5490

680 — 213

Weight
124 660
139 240
114 900
107 900
128 400
118 000
102 600
114 600
119 920
1070 220
16 700
1053 520

To Hinkley

Tons 526 Wgt 15-20

Check with Plants.

131 Tons on Penetration
395 Tons on Surface treatment
526

C F void Sta
10200 Gallons

M F 18500 Gallons

00 - 171 191 - 197

Surface Treatment

Sta. 191 To 282+24

CT 9360 gals.

MT 6104 "

Cat	No.	gals.
GATX	24137	CT 10016 gals.
ATPX	71	MT 61325 "

No. 6 chips.

N4C	407829	109	300
Erie	31370	116	000
"	27007	117	000
N4C	413709	115	300
	10/19 hauled	10	080
		470	470
	Tons	235	23

Extra Work

Sta. 179+ draining Spring, 126'
4" sewer pipe. 2 Ts. Slag. Work.
1 team, 1 day. 3 men 2 da's.

Sta. 201

Draining Spring 2½ cu. yds. for 2 basin and covering 4" pipe across rd. 1½ cu. yds. Slag placed in 2 basin. Tile furnished by Mr. Sheldon. Work + concrete by contractor.

Sta. 235

Cleaning ditch on State highway. N. & S. side 450' N. side 350' S. side

Quinn 15 men 10 hr.
Platt 19 men 10 hr.

4

1928

Date	Car	No.		Weight		
6/30/28	P.R.R.	719	716	121	160	Grain.
"	PWV	A	669	86	660	"
"	B+O	323	620	95	180	"
"	PRR	744	764	112	600	"
"	PRR	256	853	119	400	"
"	PRR	174	294	111	860	"
"	PWV	2	178	117	800	"
"	PWV	3	728	83	680	"
7/21/28	C.C.O	45	391	129	800	No. 7
"	PWV	2	667	110	060	Gram.
"	PWV	3	636	96	200	"
7/23/28	C.C.O	41	753	109	400	No. 7
"	N.Y.C.	407	564	120	000	No. 7
7/24/28	B+O	223	565	121	900	"
"	B+O	331	722	124	200	"
"	B+O	125	008	119	400	"
"	B+O	323	586	104	200	"
"	B+O	327	054	107	500	"

2.

Date	Car	No.	Weight	
7/24/28	PRR	209 113	112	100
"	PMcK4	602 37	100	400
"	PRR	704 060	113	500
"	N4C	401 497	108	800
"	N4C	401 514	114	600
"	N4C	406 461	99	200
"	N4C	420 838	119	200
"	N4C	408 424	109	500
"	N4C	405 467	109	400
"	N4C	409 327	117	800
"	N4C	409 327	117	800
"	P2E	51 514	118	300
"	PMcK4	62 572	123	000
8/8/28	N4C	402 106	101	400
"	N4C	423 277	116	600
"	P2E	51 083	112	500
8/7/28	CC&O	43 934	128	500
"	"	42 967	122	700
"	B&O	330 480	123	600

No. 7
"
"
No. 1
"
"
"
"
"
"
"
"
"
"
"
"
"
"
"
"

3.

Date	Car	No.	Weight	
8/8/28	PRR	167302	106	800
"	B+O	223777	101	500
"	CC+O	41021	128	800
"	CC+O	40088	102	900
8/10/28	CC+O	45419	119	500
"	B+O	424865	108	500
"	NKP	99242	106	400
"	B+O	322708	124	400
"	N.Y.C.	406288	117	000
"	B+O	124627	121	500
8/13/28	PLE	151601	124	660
8/14/28	NYSW	10445	117	000
"	Erie	28772	110	000
"	NYSW	10350	120	800
8/15/28	CC+O	43850	105	300
"	"	41720	102	400
"	Erie	325350	125	500
8/16/28	Erie	30320	122	000
"	Erie	32460	119	000

No. 1.

" "

" "

" "

" "

" "

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Date	Car	No.	Weight	
8/16/28	CC+O	43 967	101 000	No. 1
"	NYC	409 169	117 520	"
8/17/28	Erie	31 774	120 500	"
"	"	26458	126 500	"
8/18/28	PLE	67 238	139 480	grgn
"	Erie	42 121	130 000	No. 1
"	Erie	26 258	121 000	"
"	"	30 795	119 000	"
"	"	27 507	124 500	"
"	"	28 889	116 000	"
8/21/28	NYC	427 293	153 580	grgn.
"	PLE	57 696	141 380	"
"	"	56 953	144 800	"
"	"	57 543	157 400	"
8/23/28	B+O	323 599	108 900	No. 7
"	B+O	325 670	111 400	"
"	CC+O	40 451	117 700	"
"	B+O	425 672	106 700	"
8/24/28	CCC+StL.	66 453	108 700	"

Date	Car	No.		Weight		
8/24/28	CCC+StL.	75	489	113	800	No. 7
8/25/28	B+O	327	029	114	100	"
8/27/28	PM+K4	54	170	146	420	9 gm
"	P+WV	3	542	117	140	"
"	PWV	2	789	106	140	"
8/29/28	Erie	37	216	111	000	No. 1
"	Erie	42	182	116	600	"
"	"	42	166	114	200	"
"	"	31	528	116	800	"
8/30/28	B+O	322	739	123	320	"
9/4/28	CCC+StL	83	352	129	600	No. 7
"	"	82	004	113	500	"
"	CC+O	40	301	100	300	No. 1
"	CC+O	40	367	122	900	"
"	B+O	425	497	124	300	"
9/5/28	CCC+StL	83	497	99	900	"
"	CC+O	43	015	114	300	"
"	CC+O	40	936	109	500	"
9/7/28	CC+O	45	093	97	100	"

Date	Car	No.	Weight	
9/7/28	LHS	4083	105 800	No. 1
"	N.Y.C.	408 569	89 400	"
9/8/28	B+O	330 953	102 000	"
"	W+L E	55 184	98 600	"
"	CC+O	40 869	102 400	"
"	CC+O	44 305	103 100	"
9/10/28	Big 4	81 957	100 000	"
"	N+W	6 589	143 200	"
9/11/28	CC+O	45 197	104 600	"
"	N+W	16730	144. 400	"
9/13/28	Big 4	65 238	98 800	"
"	CC+O	44737	104 400	"
9/14/28	Big 4	79253	129 500	"
"	B+O	426261	118 800	"
"	CC+O	40287	108 400	"
9/15/28	B+O	134 391	132 200	"
"	"	532 817	159 000	"
9/17/28	"	333 089	155 600	"
"	CC+O	43 182	109 800	"

2

Date	Car	No.	Weight	
9/17/28	B+O	330136	110 000	No. 1
"	"	533747	152 200	"
9/18/28	PRR	167172	106 800	"
"	B+O	320779	112 100	"
10/3/28	Big4	81440	109 700	No. 7
"	CC+O	44576	115 200	"
10/4/28	PRR	191741	158 200	grain
10/3/28	PRR	179413	136 020	"
"	PWB	4249	180 820	"
"	PRR	139682	158 460	"
"	PWB	2536	99 320	"
"	"	4902	107 400	"
"	CC+O	46630	106 300	No. 7
"	Big4	81234	124 700	No. 7 or No. 1
"	CC+O	41392	112 600	"
"	Big4	72996	117 000	"
10/8/28	CC+O	44295	122 900	No. 1
"	CC+C	41236	103 600	"
"	"	82224	116 100	"

Date	Car	No.	Weight	
10/10/28	PM&K4	60 771	100 500	No.1
"	PRR	187 455	121 600	"
10/11/28	N&E	59 408	106 700	"
"	CC+O	44 697	111 100	"
"	"	65 896	123 300	"
"	PWV	3571	95 400	"
10/12/28	B+O	532 394	142 400	"
"	P&E	50 678	80 000	"
10/13/28	NYC	416 072	94 200	"
10/15/28	N&E	60 467	89 600	"
"	NYC	412 231	101 000	"
10/25/28	B+O	533 492	170 060	grain
10/18/28	PWV	7415	128 260	"
"	PWV	4139	119 720	"
10/25/28	B+O	532 725	163 960	"
10/13/28	NW	11 378	124 600	No 1
10/17/28	NYC	417 925	101 400	"
"	NYC	407 344	103 600	"
"	CC+O	43 803	106 300	"

Date	Car	No.		Weight		
10/18/28	WLE	590	730	98	000	No. 1
10/20/28	NYC	431	560	132	300	No. 7
10/19/28	B&O	327	611	116	800	"
"	NYC	424	586	119	000	"
10/18/28	PLE	57	323	139	500	No. 1
"	NYC	420	061	109	100	"
10/20/28	PMcK	54	249	137	100	"
"	NYC	414	911	96	600	"
"	CCC	88	377	122	200	"
10/19/28	LC	211	635	115	700	"
10/20/28	BigA	82	366	101	700	"
10/24/28	CC&O	43	004	119	600	No. 7
10/20/28	CC&O	42	850	108	700	No. 1
10/24/28	PRR	146	093	115	500	No. 7
10/22/28	PMcK	60	697	101	400	No. 1
10/24/28	NYC	411	857	87	000	"
"	NYC	414	420	102	800	"
10/22/28	WLE	51	00	104	900	"
"	PLE	57	267	153	800	"

Date	Car	No.	Weight	
10/22/28	LHS	41 46	106 000	No. 1
10/22/28	NLE	59 287	100 700	"
"	N4C	410 342	95 000	"
10/25/28	PRR	188 566	151 000	"
10/19/28	N4C	413 418	100 200	"
10/25/28	WLE	55 017	123 900	No. 7
10/26/28	WLE	5191	101 800	No. 7
10/27/28	B&O	532 791	145 120	grain
10/19/28	N4C.	403 537	92 400	No. 1
11/2/28	N4C	40 443	113 800	"
"	PMcK	53 770	139 500	"
11/3/28	PLE	56 308	135 700	"
"	PRR	719 684	122 100	"
"	PRR	179 007	120 700	"
11/7/28	PMcK	53 997	148 900	"
11/19/28	CC+C	83591	108 600	"
"	CC+O	42 678	98 900	"
"	CC+C	66 198	105 900	"
"	PLE	56 749	135 300	

Date	Co-	No.	Weight
11/19/28	B&O	79 326	108 600
	N4C	42 7979	127 800
	N+W	6198	122 200
10/[illegible]	[illegible]	Mahoning	[illegible]
10/15/28	PRR	218641	106 800
	Erie	31025	107 000
	"	31623	109 000
	PRR	42924	115 000
	"	989783	130 000
		747777	144 000
	In Bin		48 700

20531. T's.
5-2½ T's No. 1 Rejected.
20478½ T's = Total.
20080 = Proposal Est.
418 = Ton's over Est.

Rock Exc. Sta 205 to 215
Aug 23 to Sept 13 - 274 yds.
Oct 12 to 20 - 47 yds.
Grading Pittsburg Rd.
Sect 1 100 cu. yds. Exc.

Culverts

No..	Sta.	Cement	
1	0+00	45	Sacks.
2	0+79	64	"
3	22+20	109	"
4	47+31	65	"
5	52+48	61	"
6	63+16	84	"
7	68+58	100	"
8	74+91	82	"
9	79+51	70	"
10	82+43	52	"
11	94+02	56	"
12	100+40	59	"
13	102+66	232	"
14	123+26	51	"
15	134+84	171	"
16	142+16		No Record
16	146+48	64	"
17	147+15	89	"

No.	Sta.	Cement	
18	180+00	176	Sacks.
19	187+92	720	" .
20	195+80	51	" .
21	198+26	218	" .
22	208+07	60	" .
23	239+00	47	" .
24	235+25	50	" .
25	248+76	34	" .
26	253+59	32	" .
27	257+37	31	" .
28	268+04	78	" .

Cement delivered for culverts
3145 bags. 786.25 lbs.
Sand bought from May 9-28 to
June 6-28 - 284 cu. yds.
from Perley Sand Co.
April 26 to May 3 bought 59.42
Tons Sand from Hardware supply Co.
Chagrin Falls.

Bought April 16-28 to
June 12-28 - 349.47 Tons #34
from Hardware Supply Co.
Bought 8/18-89.6 Tons. #34
Hardware Supply Co.
Chagrin Falls.
Ohio.

14

H. Patterson
P. Young
J. Amendola

9-14-59

Lamar Prop.
Bell Rd.

BM = 6	1.47	1188.50		1187.03	Bent
TP	5.16	1185.36	8.30	1180.20	
112+11					Culv ⊥
+61					
113+11					
+61					
114+11					
+61					
+86					
115+11					
+61					
T.P.	6.35	1188.85	2.86	1182.50	

SPK NW Root 18" Maple (2th. Tree W. of Button Drive
26' S. of Sta. 115+75

	Rd ℄	Ditch	50' off ℄
112+11	4.45	8.31	7.25
+61			7.25
113+11	4.25		7.05
+61			6.97
114+11	4.85		7.01
+61			
+86			6.98
115+11	4.02		
+61			
T.P.	3.30	5.97	

	1188.85		
116+11			
+61			
117+11			
+61			
118+11			
+61			
119+11			
BM #6		1.51	1187.04

RL	Ditch	Slotted
6.35	8.51	6.92
5.99	7.66	7.12
5.64	7.96	6.44
4.78	out 7.49 | 5.32 | in 6.95 18" X 21" C.I.P. Drive Pipe	4.27
4.11	6.35	4.76
		Outlet Pond
2.97	4.68	5.63
1.78	3.80	

2000 / 122900 | 61
12000
2900
2000
900

2000 / 121100 | 60
12000
1100

2000 / 117600 | 58
16000
1760
1600

2000 / 111900 | 55
10010
11900
10000
1900

Sta 189+ To Sta 191+ Nicholls
105 12 inch Vit pipe Right

Sta 140+ Church
50 12 inch Vit pipe Right

Sta 140 Store
34 12 inch Vit pipe Left

Sta School House
87 12 inch Vit pipe Left

Sta 131 Hall
16 12 inch Vit pipe Left

Sta 101 Collister
44 12 inch Vit pipe Left

Sta 140+75 Stirpe
40 12 inch Vit pipe Right

Sta 123+ Scott
50 12 inch Vit pipe Left

Sta 18+ Patterson
40 18 inch Vit pipe Left
1 Catch basin

Sta 106 Spears
17 - 18 inch Vit pipe Right
1 Headwall
13 Sacks Cement

Colvert Sta 164+

17 18" inch Vit pipe incased
33 Cement
16 Steel

Colvert Sta 186

20. 18 inch Vit pipe incased
30 Cement
8 Steel. One Headwall

Sta 186+

76. 18 inch Vit pipe
17 18 " " "
14 Cement Box Headwall
8 Steel

Table IX.—Calculation of Earthwork.

Width	HEIGHT														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	.02	.04	.06	.07	.09	.11	.13	.15	.17	.18	.20	.22	.24	.26	.28
2	.04	.07	.11	.15	.18	.22	.26	.30	.33	.37	.41	.44	.48	.52	.56
3	.06	.11	.17	.22	.28	.33	.39	.44	.50	.56	.61	.67	.72	.78	.83
4	.07	.15	.22	.30	.37	.44	.52	.59	.67	.74	.81	.89	.96	1.04	1.11
5	.09	.19	.28	.37	.46	.56	.65	.74	.83	.93	1.02	1.11	1.20	1.30	1.39
6	.11	.22	.33	.44	.56	.67	.78	.89	1.00	1.11	1.22	1.33	1.44	1.55	1.67
7	.13	.26	.39	.52	.65	.78	.91	1.04	1.16	1.30	1.42	1.55	1.68	1.81	1.94
8	.15	.30	.44	.59	.74	.89	1.04	1.19	1.33	1.48	1.63	1.78	1.92	2.08	2.22
9	.17	.33	.50	.67	83	1.00	1.17	1.33	1.50	1.67	1.83	2.00	2.17	2.33	2.50
10	.18	.37	.56	.74	.93	1.11	1.30	1.48	1.67	1.85	2.04	2.22	2.41	2.59	2.78
11	.20	.41	.61	.82	1.02	1.22	1.43	1.63	1.83	2.04	2.24	2.44	2.65	2.85	3.06
12	.22	.44	.67	.89	1.11	1.33	1.56	1.78	2.00	2.22	2.44	2.67	2.89	3.11	3.33
13	.24	.48	.72	.96	1.20	1.44	1.68	1.92	2.16	2.41	2.65	2.89	3.13	3.37	3.61
14	.26	.52	.78	1.04	1.30	1.55	1.81	2.08	2.33	2.59	2.85	3.11	3.37	3.63	3.89
15	.28	.56	.83	1.11	1.39	1.67	1.94	2.22	2.50	2.78	3.06	3.33	3.61	3.89	4.17
16	.30	.59	.89	1.18	1.48	1.78	2.07	2.37	2.67	2.96	3.26	3.56	3.85	4.15	4.44
17	.31	.63	.94	1.26	1.57	1.89	2.20	2.52	2.83	3.15	3.46	3.78	4.09	4.41	4.72
18	.33	.67	1.00	1.33	1.67	2.00	2.33	2.67	3.00	3.33	3.67	4.00	4.33	4.67	5.00
19	.35	.70	1.06	1.41	1.76	2.11	2.46	2.82	3.17	3.52	3.87	4.22	4.57	4.92	5.28
20	.37	.74	1.11	1.48	1.85	2.22	2.59	2.96	3.33	3.70	4.07	4.44	4.81	5.18	5.56
21	.39	.78	1.17	1.55	1.94	2.33	2.72	3.11	3.50	3.89	4.28	4.67	5.06	5.44	5.83
22	.41	.81	1.22	1.63	2.04	2.44	2.85	3.26	3.67	4.07	4.48	4.89	5.30	5.70	6.11
23	.43	.85	1.28	1.70	2.13	2.56	2.98	3.41	3.83	4.26	4.68	5.11	5.54	5.96	6.39
24	.44	.89	1.33	1.78	2.22	2.67	3.11	3.56	4.00	4.44	4.89	5.33	5.78	6.22	6.67
25	.46	.92	1.39	1.85	2.31	2.78	3.24	3.70	4.17	4.63	5.09	5.56	6.02	6.48	6.94
26	.48	.96	1.44	1.92	2.41	2.89	3.37	3.85	4.33	4.82	5.30	5.78	6.26	6.74	7.24
27	.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50
28	.52	1.04	1.55	2.07	2.59	3.11	3.63	4.15	4.67	5.18	5.70	6.22	6.74	7.26	7.78
29	.54	1.07	1.61	2.15	2.68	3.22	3.76	4.30	4.83	5.37	5.91	6.44	6.98	7.52	8.06
30	.56	1.11	1.67	2.22	2.78	3.33	3.89	4.44	5.00	5.55	6.11	6.67	7.22	7.78	8.33
31	.57	1.15	1.72	2.30	2.87	3.44	4.02	4.59	5.17	5.74	6.32	6.89	7.46	8.04	8.61
32	.59	1.18	1.78	2.37	2.96	3.56	4.15	4.74	5.33	5.92	6.52	7.11	7.70	8.30	8.89
33	.61	1.22	1.83	2.44	3.05	3.67	4.28	4.89	5.50	6.11	6.72	7.33	7.94	8.55	9.17
34	.63	1.26	1.89	2.52	3.15	3.78	4.40	5.04	5.67	6.29	6.93	7.56	8.18	8.81	9.44
35	.65	1.30	1.94	2.59	3.24	3.89	4.53	5.18	5.83	6.48	7.13	7.78	8.42	9.08	9.72
36	.67	1.33	2.00	2.67	3.33	4.00	4.66	5.33	6.00	6.67	7.33	8.00	8.67	9.33	10.00
37	.68	1.37	2.06	2.74	3.42	4.11	4.79	5.48	6.17	6.85	7.54	8.22	8.91	9.59	10.28
38	.70	1.41	2.11	2.82	3.52	4.22	4.92	5.63	6.33	7.03	7.74	8.44	9.15	9.85	10.56
39	.72	1.44	2.17	2.89	3.61	4.33	5.05	5.78	6.50	7.22	7.95	8.67	9.39	10.11	10.83
40	.74	1.48	2.22	2.96	3.70	4.44	5.18	5.92	6.67	7.41	8.15	8.89	9.63	10.37	11.11

Table gives cu. yds. in 1 ft. of a triangle of given width and height. Corrections for tenths of width are one tenth the values found under each height considering the widths from 1 to 9 as tenths and similarly the corrections for tenths of height are one tenth the figures opposite width considering the heights from 1 to 9 as tenths. Thus if w =16.2 and h =5.3, cu. yds. =1.48+.028+.089 =1.597 cu. yds. or practically 160 cu. yds. per 100 ft. If w exceeds 40 ft., use one half and multiply result by 2, if both w and h are large use one half of each and multiply result by 4. Any cross-section may be divided into triangles by the following rule. To the triangle of the sum of the outside cuts (or fills) =h, and ½ the roadbed =w, add the triangles formed by taking the distance out to each break in turn (=w's) by the difference between the cuts (or fills) on each side of it (=h's) always subtracting the outer from the inner.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1½.

For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.4	0
1	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.6	10.7	10.9	1
2	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.2	12.4	2
3	12.5	12.7	12.8	13.0	13.1	13.3	13.4	13.6	13.7	13.9	3
4	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	4
5	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	5
6	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4	6
7	18.5	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	7
8	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	21.4	8
9	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	9
10	23.0	23.2	23.3	23.5	23.6	23.8	23.9	24.1	24.2	24.4	10
11	24.5	24.7	24.8	25.0	25.1	25.3	25.4	25.6	25.7	25.9	11
12	26.0	25.2	26.3	26.5	26.6	26.8	26.9	27.1	27 2	27.4	12
13	27.5	27.7	27.8	28.0	28.1	28.3	28.4	28.6	28.7	28.9	13
14	29.0	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.4	14
15	30.5	30.7	30.8	31.0	31.1	31.3	31.4	31.6	31.7	31.9	15
16	32.0	32.2	32.3	32.5	32.6	32.8	32.9	33.1	33.2	33.4	16
17	33.5	33.7	33.8	34.0	34.1	34.3	34.4	34.6	34.7	34.9	17
18	35.0	35.2	35.3	35.5	35.6	35.8	35.9	36.1	36.2	36.4	18
19	36.5	36.7	36.8	37.0	37.1	37.3	37.4	37.6	37.7	37.9	19
20	38.0	38.2	38.3	38.5	38.6	38.8	38.9	39.1	39.2	39.4	20
21	39.5	39.7	39.8	40.0	40.1	40.3	40.4	40.6	40.7	40.9	21
22	41.0	41.2	41.3	41.5	41.6	41.8	41.9	42.1	42.2	42.4	22
23	42.5	42.7	42.8	43.0	43.1	43.3	43.4	43.6	43.7	43.9	23
24	44.0	44.2	44.3	44.5	44.6	44.8	44.9	45.1	45.2	45.4	24
25	45.5	45.7	45.8	46.0	46.1	46.3	46.4	46.6	46.7	46.9	25
26	47.0	47.2	47.3	47.5	47.6	47.8	47.9	48.1	48.2	48.4	26
27	48.5	48.7	48.8	49.0	49.1	49.3	49.4	49.6	49.7	49.9	27
28	50.0	50.2	50.3	50.5	50.6	50.8	50.9	51.1	51.2	51.4	28
29	51.5	51.7	51.8	52.0	52.1	52.3	52.4	52.6	52.7	52.9	29
30	53.0	53.2	53.3	53.5	53.6	53.8	53.9	54.1	54 2	54.4	30
31	54.5	54.7	54.8	55.0	55.1	55.3	55.4	55.6	55.7	55.9	31
32	56.0	56.2	56.3	56.5	56.6	56.8	56.9	57.1	57.2	57.4	32
33	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6	58.7	58.9	33
34	59.0	59.2	59.3	59.5	59.6	59.8	59.9	60.1	60.2	60.4	34
35	60.5	60.7	60.8	61.0	61.1	61.3	61.4	61.6	61.7	61.9	35
36	62.0	62.2	62.3	62.5	62.6	62.8	62.9	63.1	63.2	63.4	36
37	63.5	63.7	63.8	64.0	64.1	64.3	64.4	64.6	64.7	64.9	37
38	65.0	65.2	65.3	65.5	65.6	65.8	65.9	66.1	66.2	66.4	38
39	66.5	66.7	66.8	67.0	67.1	67.3	67.4	67.6	67.7	67.9	39
40	68.0	68.2	68.3	68.5	68.6	68.8	68.9	69.1	69.2	69.4	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example above for 20 ft. roadbed distance will be 41.9+(20—16)÷2 or 2 ft. added to 41.9 =43.9. For slopes of 1 on 1 see inside of front cover.

Made in Germany.