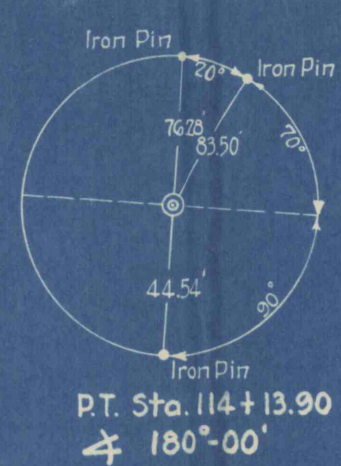
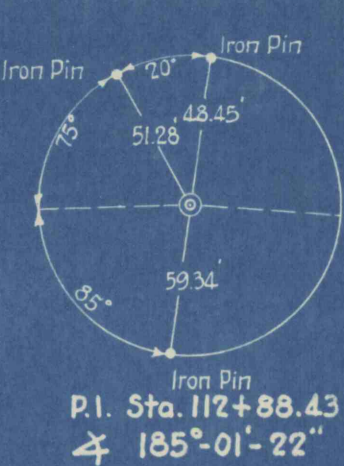
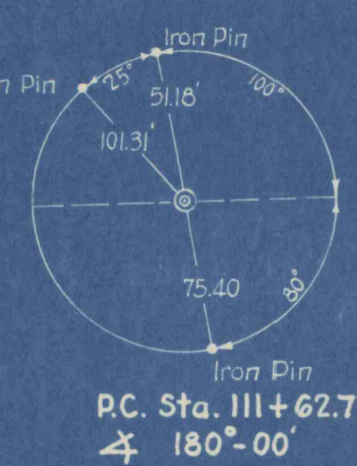
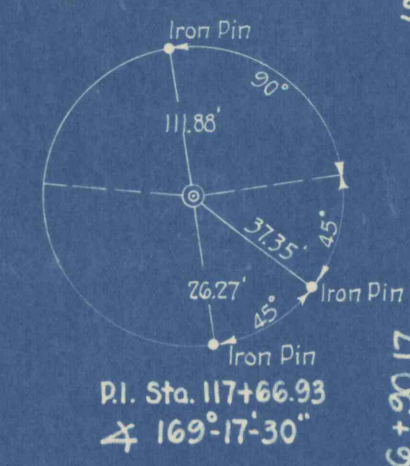
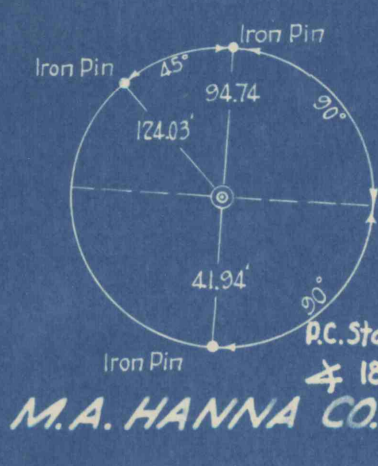


M.A. HANNA



M.A. HANNA CO.



SURVEY & RIGHT OF WAY DATA
 P.I. Sta. 117+66.93
 $\Delta = 10^\circ 42' 30''$, Lt.
 $D = 7^\circ 00'$
 $T = 76.76'$
 $L = 152.98'$
 $R = 819.02'$
 $S.E. = \frac{3}{4}$ per Ft.
 Hold Normal Outside
 Edge Super-elevate
 Down to inside Edge
 Beg. Super. Sta. 115+90.17
 End Super. Sta. 119+43.15
 P.C. Sta. 116+90.17

DISTRICT	COUNTY	ROUTE	SEC	SHEET
4	LUZERNE	40031	5	11 of 15

NEWPORT TWP.

REQUIRED LIST

Sta. 106+00
 132 L.F. 24" A.C.C.M. Pipe Fully Coated
 0.7 C.Y. Cl. B Conc. Type "D" Edw. Rt.
 64 C.Y. Cl. 2 Exc., (Pipe & Edw.)

Sta. 112+90
 74 L.F. 18" R.C.C. Pipe
 1.0 C.Y. Cl. B Conc. Type "DE" Edw. Rt.
 25 C.Y. Cl. 2 Exc., (Pipe & Edw.)

Sta. 114+58 to Sta. 116+03, Rt.
 93 S.Y. 5" Pl. Cem. Conc. Gutter, Type "A"
 9 C.Y. Cl. 1 Exc.

Sta. 116+00
 52 L.F. 18" R.C.C. Pipe
 1 Type 4 Ft. Special Inlet, Rt.
 23 C.Y. Cl. 2 Exc., (Pipe)

Sta. 116+03 to Sta. 117+80, Rt.
 177 L.F. Pl. Cem. Conc. Curb, Type "B"

Sta. 116+50 to Sta. 117+80, Rt.
 Standard Retaining Wall, Type "I"
 143 C.Y. Cl. B Conc.
 828 lbs. Reinf. Bars
 87 C.Y. Cl. 2 Exc.
 32 C.Y. Stone Backfill for Structure
 128 C.Y. Cl. 1 Exc.

Sta. 117+10 to Sta. 119+43.15, Approach, Rt.
 246 L.F. Pl. Cem. Conc. Curb, Type "B"

Sta. 117+63.15 to Sta. 119+43.15, Lt.
 180 L.F. Pl. Cem. Conc. Curb, Type "B"

Sta. 116+80 to Sta. 118+64
 48 L.F. 8" Vit. Clay Pipe
 17 C.Y. Cl. 2 Exc. (Pipe)
 Replace existing connections as directed.

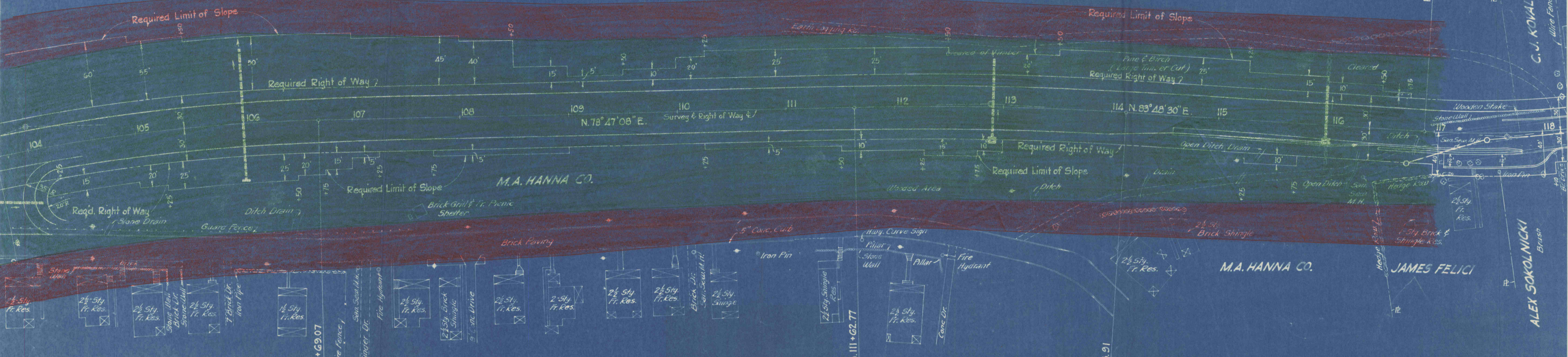
Sta. 111+80 to Sta. 113+05, Rt.
 45 C.Y. Emb. (Pocket Fill)

Sta. 116+03 to Sta. 116+50, Rt.
 Pavt. Widening
 14 S.Y. 2 1/4" Bit. Surface Crse., 1D-2
 14 S.Y. 10" Cr. Aggr. Base Crse., Type "A"
 14 S.Y. Subgrade

Sta. 116+75 to Sta. 118+64, Rt.
 Sanitary Sewer
 Sta. 116+75
 1 Type "B" Manhole
 Sta. 116+75 to Sta. 117+48
 74 L.F. 8" Vit. Clay Pipe
 34 C.Y. Cl. 2 Exc.

Sta. 117+48
 1 Type "A" Manhole
 Sta. 117+48 to Sta. 118+64
 112 L.F. 8" Vit. Clay Pipe
 39 C.Y. Cl. 2 Exc. (Pipe)

Sta. 117+10 to Sta. 118+10, Approach Rt.
 140 S.Y. 2 1/4" Bit. Surface Course 1D-2
 140 S.Y. 10" Cr. Aggr. Base Course Type "A"
 140 S.Y. Subgrade
 44 L.F. Shoulders
 3 C.Y. Emb.
 57 C.Y. Cl. 1 Exc.



SURVEY & RIGHT OF WAY DATA
 P.I. Sta. 104+03.90
 $\Delta = 18^\circ 44' 00''$, Rt.
 $D = 3^\circ 30'$
 $T = 270.07'$
 $L = 535.24'$
 $R = 1,637.28'$
 $S.E. = \frac{5}{8}$ per Ft.

Spiral Curve Data
 $D_c = 3^\circ 30'$
 $T_s = 370.19'$
 $L_s = 200.00'$
 $p = 1.02$

SCALE
 Highway Plan - 1" = 50'
 Color Scheme - 1" = 100'

LEGEND

- Denotes Area Necessary for Lateral and Vertical Support for Vains Within 300 Feet of Surface.
- Denotes Area Necessary for Lateral and Vertical Support for All Vains.

SURVEY & RIGHT OF WAY DATA
 P.I. Sta. 112+88.43
 $\Delta = 5^\circ 01' 22''$ Rt.
 $D = 2^\circ 00'$
 $T = 125.66'$
 $L = 251.14'$
 $R = 2,864.93'$
 $S.E. = \frac{3}{8}$ per Ft.

Spiral Curve Data
 $D_c = 2^\circ 00'$
 $T_s = 200.66'$
 $L_s = 150.00'$
 $p = 0.33'$

Test Hole No. 1 16' Rt. of Sta. 116+50		Test Hole No. 2 30' Rt. of Sta. 117+15		Test Hole No. 3 22' Rt. of Sta. 117+80	
Ft.	Elev.	Ft.	Elev.	Ft.	Elev.
0.70	725.27		716.77		707.88
0.70	722.90		706.77		702.85
0.98	722.20	1.23	705.54	1.18	701.65
0.86	721.50	1.85	703.96	0.90	700.75
1.30	721.50	1.48	702.21	0.96	699.79
1.10	719.66	0.90	701.31	0.76	699.03
1.16	718.36	0.79	700.52	0.54	698.49
1.52	717.26	0.82	699.70	0.45	698.04
1.24	716.10	0.67	699.03	0.19	697.85
0.68	714.58	0.54	698.49	0.18	697.67
0.80	713.34	0.36	698.13	0.10	697.48
1.29	712.66	0.42	697.71	0.20	697.28
1.12	711.86	0.44	697.27	0.34	696.94
0.81	710.57	0.30	696.97	0.31	696.63
0.63	709.45	0.32	696.65	0.35	696.28
0.52	708.30	0.33	696.32	0.36	695.92
0.40	707.49	0.36	695.96	0.38	695.54
0.36	706.80	0.28	695.68	0.39	695.15
0.27	706.28	0.24	695.44	0.46	694.69
0.25	705.88	0.22	695.22	0.46	694.23
0.18	705.52	1.17	694.05	0.45	693.78
0.13	705.25	1.18	692.87	0.39	693.39
0.83	705.00	2.30	690.57	0.30	693.09
1.82	704.82	1.98	688.59	0.27	692.82
0.96	704.69	1.36	687.23	0.26	692.56
1.06	702.94	0.50	686.73	0.24	692.32
1.47	701.08			1.03	691.29
1.03	700.02			0.80	690.49
0.87	698.55			1.34	689.15
1.02	696.65			1.18	687.97
0.85	695.63			0.46	687.51
0.70	694.78				
0.49	694.08				
	693.53-Rock				

These Tests were made with P.D.H. Standard Test Sounding Device #3 K. 301 Weight of Ram 50 Lbs. Average Drop 30" Rod used 3/4 φ

DATUM