289

Final Cross Sections.

W289

Our Leather Bound Engineers Note Books are carried in the following rulings:

No. 380 LEVEL BOOK. Left and Right Hand Page the same as Left Hand Page of this Book.

No. 382 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 4 x 4 to the inch, Center Line Red.

No. 384 MINING TRANSIT BOOK. Left Hand Page as in this Book, Right Hand Page 8x8 to the inch, Center Line Red.

No. 385 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 8 vertical and 4 horizontal lines to the inch, Center Line Red.

We also carry the Note Books listed above, bound in extra strong Fabri-Hide (otherwise the same quality of book), which can be furnished at a somewhat lower price.

In ordering Fabri-Hide covered books, add the letter *"F"* to catalog number.

THE FREDERICK POST CO.

ENGINEERING and DRAFTING SUPPLIES

IRVING PARK STATION

CHICAGO, ILL.

J.R.-S.D. 2nd Main Pipe Line.
U.S.G.S. Datum.

INDEX.

Final Cross Sections - Trench Excavation - Schedule I.

Page	Description
1-78	Sta. 430+50 – Sta. 536+05. Standard 4.50 Trench.

O.R.-S.D. 2nd. Main Pipe Line.
Final Cross Sections - Schedule I.
Sta. 430+50 to Sta. 536+05
Cont'd from Book # 288 - Page #

Feb. 12. 1930. Converse - Notes
Clear + Cool. Hill - Grades
Elliott - ↑
Simpson - Rod.

Sta	Grade Elev.	Dist.	L.C.	&
	Sta. 430+50 = Start of 4.50 Trench.			
430+50	359.3	368.4		9.1
+65	358.6	368.2		9.6
+80	357.9	366.9		9.0
431	357.0	365.4		8.4
+15	356.3	363.8		7.5

R.C.	End Area	Av. End	Excavation Cu. Yds.	Pipe Contr. Cu. Yds	Backfill Exc. Contr. Cu. Yds.
	43.37				
		44.90	24.95		
	46.44				
		44.59 ~~44.50~~	24.77 ~~24.72~~		
	42.75				
		40.98	30.36		
	39.24				
		36.78	20.43		
	34.32				
		36.78	31.33		

Computed. T.M.M. M.M.B.
Chd. A.C.L.

Sta	Grade	Elev.	Dist	L.C.	℄
+38	355.3	363.7			8.4
+50	354.7	362.0			7.3
+75	352.4	357.9			5.5
432	350.1	356.5			6.4
+25	347.8	353.3			5.5
+50	345.5	351.4			5.9

R.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
	39.24				
		36.26	16.11		
	33.28				
		29.02	26.87		
	24.75				
		26.80	24.81		
	28.84				
		26.80	24.81		
	24.75				
		25.65	23.75		
	26.55				
		25.43	23.55		

Compted. T.M.M. mmm mmm
Chd. P.C.L.

Sta	Grade	Elev.	Dist.	L.C.	℄	P.C.	End Area	Av. Area	Cu. Yds	Cu. Yds	Cu. Yds
+75	343.2	348.6			5.4		24.30				
								21.60	20.00		
433	340.9	345.1			4.2		18.90				
								20.03	18.55		
+25	338.6	343.3			4.7		21.15				
								21.83	20.21		
+50	336.3	341.3			5.0		22.50				
								23.85	13.25		
+65	334.9	340.5			5.6		25.20				
								24.53	13.81		
+80.2	333.5	338.8			5.3		23.85				
								25.65	18.81		

Computed T.M.M. N.M.B. N.M.B.
Chd. A.C.L.

Sta	Grade	Elev.	Dist.	L.C.	Δ	P.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
434	332.0	338.1			6.1		27.45				
								27.68	10.36		
+10.1	331.2	337.4			6.2		27.91				
								24.08	26.67		
+40	329.9	334.4			4.5		20.25				
								18.45	20.50		
+70	329.4	333.1			3.7		16.65				
								15.08	16.76		
435	329.4	332.4			3.0		13.50				
								15.53	12.65		
+77	329.4	333.3			3.9		17.55	20.93	21.70 ~~22.48~~		

Comptd. TM.M. RMM RMM.
Chd. & R.C.L.

A36+75

Sta	Grade	Elev.	Dist.	L.C.	℄	P.C.	End Area	Av. Area	Cu. Yds	Cu. Yds.	Cu. Yds.
+50	329.4	334.8			5.4		24.30 ✓				
								27.29 ✓	50.54 ✓		
436	329.4	336.1			6.7		30.28 ✓				
								30.28 ✓	28.04 ✓		
+25	329.4	336.1			6.7		30.28 ✓				
								29.10 ✓	26.94 ✓		
+50	329.4	335.6			6.2		27.91 ✓				
								25.66 ✓	23.76 ✓		
+75	329.4	334.6			5.2		23.40 ✓				
								23.63 ✓	21.88 ✓		
437	327.6	332.9			5.3		23.85 ✓	25.65 ✓	23.75 ✓		

Computed. T.M.M. [illegible] [illegible]
Chd. ✓ A.C.L.

Sta	Grade	Elev.	Dist	L.C.	Ch
+25	325.8	331.9			6.1
+50	324.0	329.4			5.4
+80	321.8	326.7			4.9
438	320.4	325.2			4.8
+30	318.2	321.3			3.1
+50	316.8	319.9			3.1

R.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds
	27.45				
		25.88	23.96		
	24.30				
		23.18	25.76		
	22.05				
		21.83	16.17		
	21.60				
		17.78	19.76		
	13.95				
		13.95	10.33		
	13.95				
		13.73	25.43		

Computed. MMB MMB
Chd. ✓ R.C.L.

Sta	Grade	Elev.	Dist	L.C.	℄
439	313.2	316.2			3.0
+50	309.6	313.3			3.7
+75	307.8	313.3			5.5
440	306.0	311.3			5.3
+25	304.2	309.2			5.0
+50	302.4	307.1			4.7

R.C.	End Area	Av. Area	Cu. Yds	Cu. Yds.	Cu. Yds.
	13.50 ✓				
		15.08 ✓	27.93 ✓		
	16.65 ✓				
		20.70 ✓	19.17 ✓		
	24.75 ✓				
		24.30 ✓	22.50 ✓		
	23.85 ✓				
		23.18 ✓	21.46 ✓		
	22.50 ✓				
		21.83 ✓	20.21 ✓		
	21.15 ✓				
		22.05 ✓	20.42 ✓		

Compld. TM.M. NMB NMB
Chd. ✓ R.C.L.

Sta	Grade	Elev.	Dist.	L.C.	%
+75	300.6	305.7			5.1
441	298.8	303.3			4.5
+25	297.0	302.0			5.0
+50	297.0	300.4			3.4
+90	297.0	298.0			1.0
442	297.0	300.0			3.0

R.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds	Cu. Yds.
	22.95 ✓				
		21.60 ✓	20.00 ✓		
	20.25 ✓				
		21.38 ✓	19.80 ✓		
	22.50 ✓				
		18.90 ✓	17.50 ✓		
	15.30 ✓				
		9.90 ✓	14.67 ✓		
	4.50 ✓				
		9.00 ✓	3.33 ✓		
	13.50 ✓	17.33 ✓	16.05 ✓		

Computed, Mem. [illegible] [illegible]
Chd. ✓ A.C.L.

Sta	Grade	Elev.	Dist	L.C.	℄	R.C.	End Area	Av. Area	Cu. Yds	Cu. Yds.	Cu. Yds.
+25	297.0	301.7			4.7		21.15				
								22.28	20.63		
+50	297.0	302.2			5.2		23.40				
								27.83	25.77		
+75	297.0	304.1			7.1		32.26				
								34.08	31.55		
443	297.0	304.8			7.8		35.91				
								34.60	19.22		
+15	297.0	304.3			7.3		33.28				
								35.42	13.12		
+25	297.0	305.1			8.1		37.56	35.68	39.51		

Computd. T.M.M. T.M.M. T.M.M.
Chd. A.C.L.

Sta	Grade	Elev.	Dist.	L.C.	℄	R.C.	End Area	Av. Area	Cu. Yds	Cu. Yds.	Cu. Yds.
+54.9	297.0	304.4			7.4		33.79 ✓				
								31.79 ✓	35.32 ✓		
+84.9	296.2	302.8			6.6		29.79 ✓				
								28.40 ✓	31.45 ✓		
444 +14.8	293.7	299.7			6.0		27.00 ✓				
								28.40 ✓	31.24 ✓		
+44.5	289.6	296.2			6.6		29.79 ✓				
								30.04 ✓	17.25 ✓		
+60	287.1	293.8			6.7		30.28 ✓				
								26.62 ✓	39.44 ✓		
445	280.5	285.6			5.1		22.95 ✓	24.75 ✓	18.33 ✓		

Compt'd. T.M.M. mmm mmm
Ch'd. ✓ R.C.L.

Subtotal this book 1327.20 ✓ A.L.L. 10/10/30.

Sta.	Grade	Elev.	Dist.	L.C.	℄	P.C.	End Area	Av. Area	Cu. Yds	Cu. Yds.	Cu. Yds.
120	277.2	282.7			5.9		26.55 ✓				
								26.33 ✓	29.26 ✓		
150	272.2	278.0			5.8		26.10 ✓				
								24.30 ✓	9.00 ✓		
160	270.6	275.6			5.0		22.50 ✓				
								23.40 ✓	34.67 ✓		
446	264.0	269.4			5.4		24.30 ✓				
								25.43 ✓	14.13 ✓		
115	262.2	268.1			5.9		26.55 ✓				
								24.08 ✓	31.21 ✓		
150	258.1	262.9			4.8		21.60 ✓	21.15 ✓	19.58 ✓		

Compld. T.M.M. 11 mm3 11 mm6
Chd. ✓ A.C.L

Sta	Grade	Elev.	Dist	L.C.	℄	R.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds	Cu. Yds.
+75	255.9	260.5			4.6		20.70				
								21.83	20.21		
447	253.0	258.1			5.1		22.95				
								24.08	17.84		
+20	252.2	257.8			5.6		25.20				
								24.08	26.76		
+50	251.0	256.1			5.1		22.95				
								22.28	41.26		
448	249.0	253.8			4.8		21.60				
								27.96	25.89		
+25	246.2	253.7			7.5		34.32				
								30.88	28.59		

Comptd. TM.M. MMB MMB
Chd. ✓ A.C.L.

Sta	Grade	Elev.	Dist	U.C.	℄
+50	243.5	249.6			6.1
+70	241.3	246.8			5.5
449	238.0	244.3			6.3
+20	234.4	239.7			5.3
+50	229.0	333.9			4.9
450	220.0	225.7			5.7

R.C.	End Area	Av. Area	Cu. Yds	Cu. Yds.	Cu. Yds
	27.45				
		26.10	19.33		
	24.75				
		26.56	29.51		
	28.37				
		26.11	19.34		
	23.85				
		22.95	25.50		
	22.05				
		22.73	42.09		
	23.40				
		23.18	17.17		
Computed. TM.M.					
Chd. A.C.L.					

Sta	Grade	Elev.	Dist	L.C.	Q	R.C.	End Area	Av. Area	Cu. Yds	Cu. Yds.	Cu. Yds.
+20	216.4	221.5			5.1		22.95				
								22.95	8.50		
+30	214.6	219.7			5.1		22.95				
								22.50	16.67		
+50	211.0	215.9			4.9		22.05				
								20.70	19.17		
+75	206.5	210.8			4.3		19.35				
								22.95	12.75		
+90	203.8	209.7			5.9		26.55				
								27.93	10.35		
451	201.0	208.5			6.5		29.31				
								25.00	23.15		
							Comptd. TM.M. Chd. RCL	mmb	mmb		

Sta.	Grade	Elev.	Dist.	L.C.	℄	P.C.	End. Area	Av. Area	Cu. Yds	Cu. Yds	Cu. Yds.
75	197.0	201.6			4.6		20.70 ✓				
								21.38 ✓	19.80 ✓		
50	197.0	196.9			4.9		22.05 ✓				
								24.98 ✓	23.13 ✓		
75	187.0	193.2			6.2		27.91 ✓				
								25.88 ✓	23.96 ✓		
45 ✓	182.0	187.3			5.3		23.85 ✓				
								26.82 ✓ ~~27.32~~	34.77 ✓ ~~35.41~~		
35	175.0	181.6			6.6		29.79 ✓				
								31.03 ✓	17.24 ✓		
50	172.0	179.1			7.1		32.26 ✓	28.06 ✓ ~~58.06~~	21.41 ✓ ~~44.30~~		

Computed. T.M.M. nmb nmb
Chd. ✓ A.C.L.

Sta.	Grade	Elev.	Dist.	L.C.	D
+70.6	167.1	172.4			5.3
+85.3	164.1	168.3			3.9
453	162.4	166.8			4.4
+15.7	161.8	167.9			6.1
+30.7	162.4	168.3			5.9
+40	163.7	169.3			6.1

P.C.	End Area	Ave. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
	23.85				
		20.70	11.27		
	17.55				
		18.68	10.17		
	19.80				
		23.63	13.30		
	27.45				
		27.00	15.00		
	26.55				
		27.00	9.80		
	27.45				
		29.10	21.56		

Computed, T.M.M.
Chd. & A.C.L.

Sta	Grade	Elev.	Dist.	L.C.	℄	T.C.	End Area	Av. Area	Cu. Yds	Cu. Yds	Cu. Yds.
+60	164.8	171.6			6.8		30.76				
								28.88	28.88		
+87	167.0	173.0			6.0		27.00				
								23.63	33.26		
454+25	170.0	174.5			4.5		20.25				
								20.48	18.96		
+50	172.0	176.6			4.6		20.70				
								21.60	20.00		
+75	174.0	179.0			5.0		22.50				
								23.85	22.08		
455	176.0	181.6			5.6		25.20				
								23.85	22.08		

Computed. MMM
Chkd. ✓ A.C.L.

Sta	Grade	Elev.	Dist	L.C.	¢	R.C.	End Area	Av. End Area	Cu Yds	Cu yds	Cu yds
+50	180.0	185.0			5.0		22.50✓				
								22.95	21.25✓ ~~20.83~~		
+75	180.0	185.2			5.2		23.40✓				
								25.43✓	23.55✓		
456	180.0	186.1			6.1		27.45✓				
								28.15✓	12.51✓		
+12	180.0	186.4			6.4		28.84✓				
								26.80✓	17.87✓		
+30	180.0	185.5			5.5		24.75✓				
								25.20✓	18.67✓		
+50	180.0	185.7			5.7		25.65✓				
								27.01✓	20.01✓		
							Compd. T.M.M.	N.M.B.	N.M.B.		
							Chd. ✓ A.C.L.				

				End Areas	Cu. Yds
+70	180.0	186.3	6.3	28.37	
				25.89	28.77
457	180.0	185.2	5.2	23.40	
				23.30	21.57
+25	179.1	184.7	5.6	25.20	
				23.63	21.88
+50	178.3	183.2	4.9	22.05	
				23.85	30.92 ~~+3.25~~
+85	177.0	182.7	5.7	25.65	
				25.88	14.38
458	175.7	181.5	5.8	26.10	
				24.98	13.78

Computed TMM NMM NMM B

Chkd. ✓ R.C.L.

Backfill

Sta	Grade	Elev.	Dist	L.C.	℄	P.C.	End Area	Av. Area	Excavation Cu. Yds	Pipe Contr. Cu Yds	Exc. Contr. Cu Yds
+14.9	174.6	180.9			5.3		23.85				
								27.80	18.64 ~~17.56~~		
+33	172.2	179.2			7.0		31.75				
								30.30	19.08		
+50	170.0	176.4			6.4		28.84				
								28.15	20.85		
+70	167.4	173.5			6.1		27.45				
								25.65	28.50		
459	163.5	168.8			5.3		23.85				
								25.20	23.33		
+75	159.4	165.3			5.9		26.55	24.53	22.71		

Computed T.M.M.
Chd. A.C.L.

Subtotal this book 2614.07

A.C.L. 10/10/30.

Sta	Grade	Elev.	Dist	L.C.	℄	P.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
+50	155.3	160.3			5.0		22.50				
								22.73	42.09		
460	147.0	152.1			5.1		22.95				
								20.70	26.83		
+35	142.6	146.7			4.1		18.45				
								19.58	18.13		
+60	139.5	144.1			4.6		20.70				
								21.83	32.34		
461	134.5	139.6			5.1		22.95				
								22.05	40.83		
+50	129.5	134.2			4.7		21.15				
								22.28	20.63		
							Computed T.M.M.				
							Chd. A.C.L.				

Sta.	Grade	Elev.	Dist.	L.C.	℄	R.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
+75	127.0	132.2			5.2		23.40				
								23.85	22.08		
								~~23.90~~	~~22.13~~		
462	124.5	129.9			5.4		24.30				
								24.98	18.60		
+20.1	122.5	128.2			5.7		25.65				
								25.65	14.15		
									~~13.68~~		
+35	121.4	127.1			5.7		25.65				
								23.18	12.88		
+50	120.2	124.8			4.6		20.70				
								14.85	8.25		
+65	119.9	121.9			2.0		9.00				
								8.55	4.75		
							Computed. TM.M.	MMB	MMB		
							Chd. & A.C.L.				

Sta.	Grade	Elev.	Dist.	L.C.	℄	P.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
+80	119.5	121.3			1.8		8.10				
								7.88	5.84		
463	119.5	121.1			1.7		7.65				
								6.75	5.00		
+20	119.5	120.8			1.3		5.85				
								11.70	13.00		
+50	119.5	123.4			3.9		17.55				
								22.28	12.38		
+65	119.5	125.6			6.0		27.00				
								32.84	42.57		
464	119.5	127.8			8.3		38.68				
								37.84	28.03		

Computed TMM MMB MMB

Chd. ✓ R.C.L.

Sta	Grade	Elev.	Dist	L.C.	℄	P.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
+20	119.5	127.5			8.0		37.00				
								35.66	39.62		
+50	118.7	126.2			7.5		34.32				
								34.58	38.29		
+79.9	116.5	124.1			7.6		34.84				
								34.58	25.74		
465	114.5	122.0			7.5		34.32				
								29.99	33.32		
+30	111.5	117.2			5.7		25.65				
								25.20	18.67		
+50	109.5	115.0			5.5		24.75				
								17.83	16.05		

Computd. TM.M. NMB NMB

Chd. ✓ A.C.L.

Sta.	Grade	Elev.	Dist.	L.C.	℄	R.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
+75	108.7	110.9			2.2		9.90				
								12.38	13.76		
466+05	107.7	111.0			3.3		14.85				
								18.00	10.00		
+20	107.4	112.1			4.7		21.15				
								26.45	29.39		
+50	106.3	113.3			7.0		31.75				
								35.79	33.14		
+75	105.5	114.0			8.5		39.82				
								38.69	35.82		
467	104.7	112.8			8.1		37.56				
								36.20	26.82		

Compld. TM. M 92 M 13 92 M 13

Chd. ✓ R.C.L.

Sta	Grade	Elev.	Dist.	L.C.	Σ	R.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
+20	104.1	111.7			7.6		34.84				
			10					29.80	22.08		
+40	103.4	108.9			5.5		24.75				
			10.					21.38	7.92		
+50	103.1	107.1			4.0		18.00				
			13					9.00	4.33		
+63	102.7	102.7			0.0		0				
								0.0	0		
+75	102.3	102.3			0.0		0				
								1.35	1.25		
468	101.5	102.1			0.6		2.70	9.90	7.33		

Computed T.M.M. MMB MMB

Chkd. ✓ A.C.L.

Sta.	Grade	Elev.	Dist.	L.C.	℄	P.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
+20	100.9	104.7			3.8		17.10				
								26.79	25.80		
							~~26.89~~		~~25.90~~		
+46	100.0	107.9			7.9		36.47				
								40.83	13.61		
+55	99.7	109.1			9.4		45.19				
								43.97	40.71		
+80	98.9	107.9			9.0		42.75				
								41.57	30.80		
469	98.2	106.8			8.6		40.39				
								39.54	36.61		
+25	97.5	105.8			8.3		38.68				
								31.04	11.50		
							Computd. M.M.				
							Chd. P.C.L.				

Sta.	Grade	Elev.	Dist.	L.C.	℄
+35	97.2	102.4			5.2
+50	86.1	95.6			9.5
+65	75.0	87.0			12.0
+80	63.9	80.3			16.4

R.C.	End. Area	Av. Area	Cu. Yds	Cu Yds	Cu Yds
	23.40 ✓				
		34.62 ✓	19.23 ✓		
	45.83 ✓				
		54.42 ✓	30.24 ✓		
	63.00 ✓				
		81.92 ✓	45.51 ✓		
	100.84 ✓				
		126.44 ✓	70.25 ✓		
	Computed TMM	MMB	MMB		
	Chd. ✓ A.C.L.				

Sta	Grade	Elev.	Dist.	L.C.	℄	P.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
+95	52.7	73.8			21.1		152.03				
								138.29	25.61		
470	52.7	71.4			18.7		124.54				
								101.77	15.07		
+04	52.7	66.7			14.0		79.00				
								60.28	13.39		
+10	52.7	61.5			8.8		41.56				
								40.98	6.07		
								~~46.98~~	~~6.81~~		
+14	52.7	61.3			8.6		40.39				
								38.43	29.89		
+35	52.7	60.6	← Pavement →		7.9		36.47				
								35.93	13.31		

Compld. [illegible]
Chd. A.C.L.

Sta	Grade	Elev.	Dist.	L.C.	℄	R.C.	End Area	Av. Area	Excavation Cu Yds	Backfill Pipe Contr. Cu Yds	Exc. Contr. Cu Yds
+45	52.7	60.4			7.7		35.38				
								30.74	5.69		

Continued in Book #289A Page 3

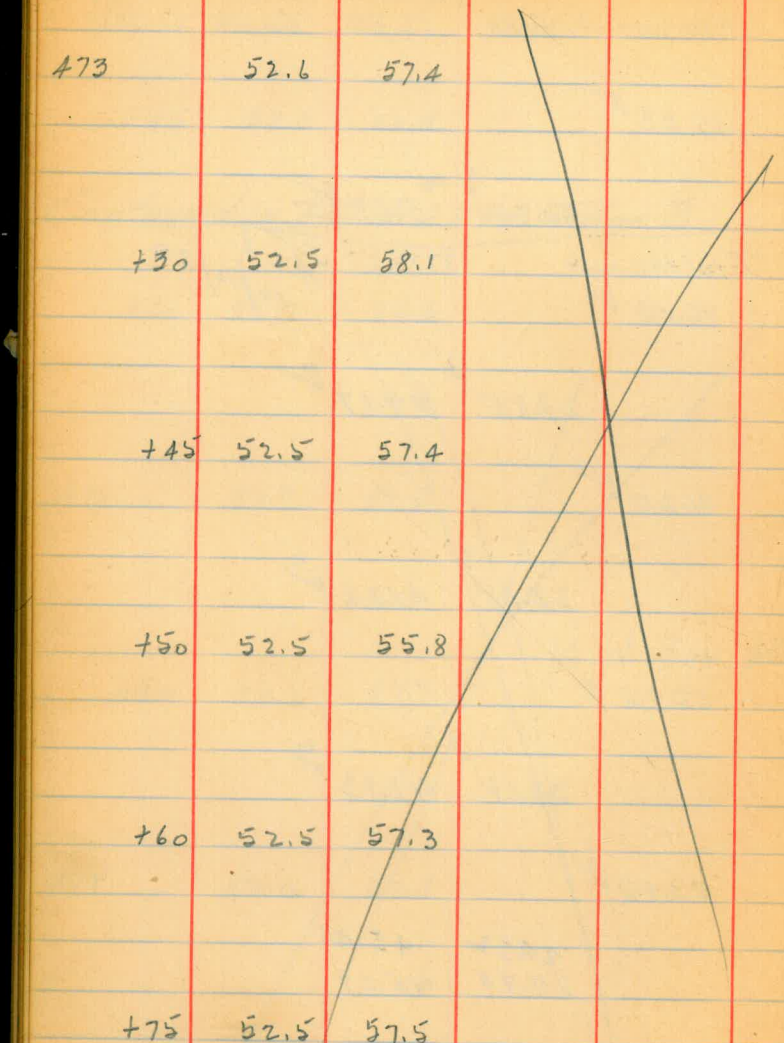
Total this book 3779.27 A.C.L. 10/10/30.

Sta	Grade	Elev.	Dist.	L.C.	℄	R.C.	End Area	Av. Area	Excavation Cu Yds	Backfill Pipe Contr. Cu Yds	Exc. Contr. Cu Yds
+50	52.7	58.5			5.8		26.10				
								23.85	44.17		
471	52.7	57.5			4.8		21.60				
								22.28	41.26		
+50	52.6	57.7			5.1		22.95				
								23.18	42.93		
472	52.6	57.8			5.2		23.40				
								24.52 24.93	45.41 45.27		
+50	52.6	58.3			5.7		25.65				
								23.63	43.76		

Void. See Book #289A

Comptd. T.M.M. N.M.B. N.M.B.
Chd. A.C.L.

Sta.	Grade	Elev.	Dist.	A.C.	C.
473	52.6	57.4			4.8
+30	52.5	58.1			5.6
+45	52.5	57.4			4.9
+50	52.5	55.8			3.3
+60	52.5	57.3			4.8
+75	52.5	57.5			5.0



R.C	End Area	Av. Area	Cu yds	Cu yds	Cu yds.
	21.60				
		23.40	26.00		
	25.20				
		23.63	13.13		
	22.05				
		18.45	3.42		
	14.85				
		18.23	4.75		
		18.43	6.83		
	21.60				
		22.05	12.25		
	22.50				
		20.93	19.38		

Compta. MM NM MM

Chd. R.C.

Sta	Grade	Elev.	Dist	L.C.	℄	R.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
474	52.5	56.8			4.3		19.35				
								17.78	16.46		
+25	52.5	56.1			3.6		16.20				
								17.78	19.76		
+55	52.5	56.8			4.3		19.35				
								17.33	12.84		
+75	52.4	55.8			3.4		15.30				
								18.00	16.67		
475	52.4	57.0			4.6		20.70				
								21.38	7.92		
+10	52.4	57.3			4.9		22.05				
								18.45	13.67		

Void See Book # 289 A

Compld. Thim. W M B — W M B

Chd. ✓ A.C.L.

Sta	Grade	Elev.	Dist.	L.C.	℄
+30	52.5	55.8			3.3
+40	52.5	57.1			4.6
+50	52.4	56.9			4.5
+70	52.4	56.2			3.8
476	52.4	57.2			4.8
+15	52.4	58.4		6.0 / 2.25	6.0

R.C.	End Area	Av. Area	Cu yds	Cu yds	Cu yds
	14.85 ✓				
		17.78 ✓	6.59 ✓		
	20.70 ✓				
		20.48 ✓	7.59 ✓		
	20.25 ✓				
		18.68 ✓	13.84 ✓		
	17.10 ✓				
		19.35 ✓	21.50 ✓		
	21.60 ✓				
		24.30 ✓	13.50 ✓		
6.0 / 2.25	27.00 ✓				
		29.25 ✓	5.42 ✓		
	Comptd. M.M.	nnn B	nnn B		
	Chd. ✓ R.C.L.				

Sta	Grade	Elev.	Dist	L.C.	℄	R.C	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
+20	52.4	59.2		6.8 / 2.45	6.8	7.4 / 2.6	31.50 ✓				
								32.64 ✓	36.27 ✓		
+50	52.4	59.6		6.8 / 2.45	7.2	8.4 / 2.85	33.78 ✓				
								37.52 ✓	27.79 ✓		
+70	52.4	61.4		8.0 / 2.75	9.0	9.0 / 3.0	41.25 ✓				
								43.85 ✓	48.72 ✓		
477	52.4	62.0		9.2 / 3.05	9.6	10.0 / 3.25	46.44 ✓				
								47.72 ✓	17.68 ✓		
+10	52.4	62.4		9.8 / 3.2 ✓	10.0	10.2 / 3.3	49.00 ✓				
								48.33 ✓	28.64 ✓		
+26	52.3	62.6		7.8 / 2.7	10.3	10.8 / 3.45	47.66 ✓				
								35.08 ✓	6.50 ✓		

Void See Book # 289 A

Comptd. TM.M WMB WMB
Chkd. ✓ A.C.L.

Sta	Grade	Elev.	Dist.	U.C.	℄	R.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
+31	52.3	57.3		$\frac{5.0}{2.25}$	5.0	$\frac{5.0}{2.25}$	22.50				
								24.30	17.10		
+50	52.3	58.1			5.8		26.10				
								23.63	17.51		
+70	52.3	57.0			4.7		21.15				
								22.57	25.00 16.67		
478	52.3	57.6			5.3		23.85				
								24.53	13.63		
+15	52.3	57.9			5.6		25.20				
								21.60	28.00		
+50	57.3	56.3			4.0		18.00				
								17.33	32.09		
						Computed. T.M.M.		NMB	NMB		
						Chd.					

Sta	Grade	Elev.	Dist	L.C.	℄
479	52.3	56.0			3.7
+35	52.2	57.0			4.8
+50	52.2	57.0			4.8
	Void See Book # 289A				
480	52.2	56.0			3.8
+05	52.2	57.9			5.7
+20	52.2	59.3			7.1

R.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
	16.65				
		19.13	24.80		
	21.60				
		21.60	12.00		
	21.60				
		19.33	35.83		
	17.10				
		26.38	4.89		
	25.65				
		28.96	16.09		
	32.26				
		30.55	22.63		
Comptd. Thm.					
Chd.					

Sta	Grade	Elev.	Dist.	L.C.	℄
+40	52.2	58.6			6.4
+50	52.2	59.4			7.2
+75	52.2	56.5			4.3
481	52.2	56.6			4.4
+50	52.1	56.9			4.8
+90	52.1	57.2			5.1

R.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
	28.84				
		30.80	11.41		
	32.76				
		26.06	24.13		
	19.35				
		19.58	18.13		
	19.80				
		20.70	38.33		
	21.60				
		22.28	33.01		
	22.95				
		40.93	15.16		

Computed. J.M.M. 12-30-13 12-30-13
Chd. A.C.L.

Sta	Grade	Elev.	Dist.	L.C.	Ct
482	52.1	56.3			4.2
+10	52.1	56.1			4.0
+27	52.1	56.8			4.7
	Void, See Book #			289 A	
+50	52.1	55.9			3.8
+75	52.8	55.8			3.0
483	53.5	55.7			2.2

R.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
	18.90 ✓				
		18.45 ✓	6.83 ✓		
	18.00 ✓				
		19.58 ✓	12.33 ✓		
	21.15 ✓				
		19.13 ✓	16.30 ✓		
	17.10 ✓				
		15.30 ✓	14.17 ✓		
	13.50 ✓				
		11.70 ✓	10.83 ✓		
	9.90 ✓				
		4.45 ✓	1.98 ✓		

Compld. TM M. 92 MB 92 MB
Chd. ✓ R.C.L.

Sta	Grade	Elev.	Dist.	L.C.	℄	R.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
	Continued from Book #289 A Page 10							Yd to page 30 = 3779.27		A.L.L.	
483 +12	53.8	53.8			0.0		0				
								0	0		
+64	55.7	55.2			0.0		0				
								2.25	0.08		
								2.03	0.08		
+65	55.7	56.1			1.0		4.50				
					0.9		4.05				
								11.03	4.09		
								10.35	3.83		
+75	55.3	59.2			3.9		17.55				
					3.7		16.65				
								13.73	3.56		
								12.83	3.33		
+82	55.5	57.7			2.2		9.90				
					2.0		9.00				
								19.85	13.23		
								18.92	12.61		
484	56.0	62.6			6.6		29.79				
					6.4		28.84	27.95	51.76		
								26.80	49.63		

Recomptd M.D.E.
Comp. M.M. W.M.B. W.M.B.
Chd. A.C.L.

Grade Change

Backfill

Sta	Grade	Elev.	Dist.	L.C.	℄	R.C.	End Area	Av. Area	Excavation Cu. Yds	Pipe Contr. Cu Yds	Exc. Contr. Cu Yds
							26.10				
+50	57.8	63.1			5.8		24.75				
								25.43	47.09		
								23.85	44.17		
							24.75				
485	58.6	64.1			5.5		22.95				
								23.85	22.08		
								21.83	20.21		
							22.95				
+25	60.32	65.4			5.1		20.70				
								23.62	21.87		
			NS					22.95	21.25		
								21.15	19.57		
							24.30				
							22.95				
+50	62.00	67.4			5.4		21.60				
	62.8				4.8			24.75	22.92		
								24.08	22.30		
			NS					22.05	20.42		
							25.20				
+75	63.8	69.4			5.6		22.50				
	64.4				5.0			24.30	22.50		
								21.38	19.80		
							23.40				
486	65.5	70.7			5.2		20.25	24.08	22.30		
	66.2				4.5			20.70	19.17		
							Comp. m.m.	m.m.	m.m.		
							Chd. A.L.L.				
							Compld. m.m.e.		4009.51	4010.75	A.L.L.

Grade change

Sta	Grade	Elev.	Dist.	L.C.	℄
+25	67.2 ~~68.0~~	72.7			5.5 ~~4.7~~
+50	69.2 ~~69.8~~	74.4			5.2 ~~4.6~~
+75	71.3 ~~71.6~~	77.2			5.9 ~~5.6~~
487	73.3 ~~73.4~~	78.9			5.6 ~~5.5~~
+20	74.9 ~~74.8~~	81.0			6.1 ~~6.7~~
+35	76.2 ~~75.4~~	81.4			5.2 ~~5.5~~

P.C.	End Area	Av. Area	Cu yds	Cu yds	Cu yds
	24.75 ~~21.15~~				
		24.07 ~~20.92~~	22.29 ~~19.38~~		
	23.40 ~~20.70~~				
		24.98 ~~22.95~~	23.13 ~~21.25~~		
	26.55 ~~25.20~~				
		25.88 ~~24.98~~	23.96 ~~23.13~~		
	25.20 ~~24.75~~				
		26.33	19.50 19.51		
	27.45 ~~27.91~~				
		25.43 ~~26.33~~	14.13 ~~14.63~~		
	23.40 24.75	24.75 ~~24.98~~	27.32 ~~27.57~~		

Grade change

Comp. [illegible]

Chd. [illegible]

Sta.	Grade	Elev.	Dist.	L.C.	E.C.
764.8	79.3	85.1			5.8 / 5.6
488	84.6 / 85.3	90.2			5.6 / 4.9
75	88.7 / 89.5	94.1			5.4 / 4.6
50	93.2	99.1			5.4 / 5.5
75	99.6 / 99.6	105.7			6.1
489	105.6	117.4			6.8

R.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
	26.10 / 25.20				
		25.65 / 23.63	33.44 / 34.74 / 30.84		
	25.20 / 22.05				
		24.75 / 21.38	22.92 / 19.80		
	24.30 / 20.70				
		24.30 / 22.73	22.50 / 21.05		
	24.30 / 24.75				
		25.88 / 26.10	23.96 / 24.17		
	27.45				
		29.11	26.95		
	30.76	31.01	28.71		

Comp. TM M N m B N m B

Chd. V A.C.L.

Grade change

Sta	Grade	Elev.	Dist.	L.C.	E.C.
+25	111.5	118.4			6.9
+50	117.5	122.8			5.3
+75	121.6	127.3			5.9 ~~5.7~~
490	125.8	130.9			5.7 ~~5.1~~
+25	128.0 ~~128.9~~	134.5			6.5 ~~5.6~~
+50	130.8 ~~132.1~~	136.2			5.4 ~~4.1~~

R.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
	31.26 ✓				
		27.55 ~~23.56~~ ✓	25.51 ~~21.81~~ ✓		
	23.85 ✓				
		25.20 ~~24.75~~ ✓	23.33 ~~22.92~~ ✓		
	26.55 ~~25.65~~ ✓				
		26.10 ~~24.30~~ ✓	24.17 ~~22.50~~ ✓		
	25.65 ~~22.95~~ ✓				
		27.48 ~~24.08~~ ✓	25.44 ~~22.30~~ ✓		
	29.31 ~~25.20~~ ✓				
		26.81 ~~21.83~~ ✓	24.82 ~~20.21~~ ✓		
	24.30 ~~18.45~~ ✓	26.81 ~~20.48~~ ✓	20.06 ~~15.32~~ ✓		
	Compt. MMM	MMB	MMB		
	Chd. ✓ A.C.L.				

Grade change

Sta.	Grade	Elev.	Dist.	L.C.	& C.
+70.2	133.1 ~~134.6~~	139.6			6.5 ~~5.0~~
491+00.1	136.2 ~~137.6~~	141.9			5.7 ~~4.3~~
+30	138.4 ~~138.9~~	144.0			5.6 ~~5.1~~
+50	139.2	145.0			5.8
+75	139.6	145.9			6.3
492	140.0	145.6			5.6

R.C.	End Area	Av. Area	Cu. Yd.	Cu. Yds.	Cu. Yds.
	29.31 ~~22.50~~				
		27.48 ~~20.93~~	30.43 ~~23.18~~		
	25.65 19.35				
		25.43 ~~21.15~~	28.16 ~~23.42~~		
	25.20 ~~22.95~~				
		25.65 ~~24.53~~	19.00 ~~18.17~~		
	26.10				
		27.24	25.22		
	28.37				
		26.79	24.80		
	25.20				
		24.30	27.00		

Grade Change

Compld. M.M. NMB NMB
Chd. A.C.L.
Recompted M.R.E.

Sta.	Grade	Elev.	Dist.	L.C.	D.C.	R.C.	End Area	Av. Area	Cu.Yds.	Cu.Yds.	Cu.Yds.
492 +30	140.5	145.7			5.2		23.40				
								25.20	5.60 / 6.00		
+36	140.6	146.6			6.0		27.00				
								21.83	4.04		
+41	140.7	144.4			3.7		16.65				
								8.33	0.46		
+42.5	140.7	140.7	← SW Cas. Pipe Crossing		0.0		0				
								0	0		
+51	140.8	140.8			0.0		0				
								11.03	1.63		
492 +55	140.9	145.8			4.9		22.05				
								23.40	2.60 / 2.17		

Computd. TM.M. MMB MMB
Chd. ✓ A.C.L.

Sta.	Grade	Elev.	Dist.	L.C.	℄ C.	R.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
+58	140.9	146.4			5.5		24.75				
								20.48	5.31		
+65	141.0	144.6			3.6		16.20				
								17.33	6.42		
+75	141.2	145.3			4.1		18.45				
								16.43	12.78		
+96	141.6	144.8			3.2		14.40				
								12.15	13.05		
493 +25	142.0	144.2			2.2		9.90				
								4.45	2.64		
+41	142.3	142.3			0.0		0				
								0.0	0.2		

Computd. MM MM MM MM

Chd. AC.L.

Sta.	Grade	Elev.	Dist.	L.C.	C.C.	R.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
493+67	143.6	143.6			0.0		0				
								0.45	0.05		
+69.6	143.7	143.9			0.2		0.90				
								4.50	1.07		
+76	144.5	146.3			1.8		8.10				
								15.53	13.46		
+99.4	147.3	152.4			5.1		22.95				
								26.37	28.71		
494+28.8	157.9	159.5			6.6		29.79				
								30.28	32.52		
+57.8	160.5	167.3			6.8		30.76				
								31.26	14.12		

Comp'd. M.M. NMB NMB

Chd. A.C.L.

Sta.	Grade	Elev.	Dist.	L.C.	℄ C.	R.C.	End Area	Av. Area	Cu Yds	Cu Yds.	Cu Yds.
+70	164.2	171.2			7.0		31.75				
								29.60	17.10		
								~~31.26~~	~~18.06~~		
+85.6	168.9	175.0			6.1		27.45				
								27.68	14.76		
								~~29.83~~	~~15.91~~		
A95	172.4	178.6			6.2		27.91				
								26.56	14.52		
+14.8	176.0	181.6			5.6		25.20				
								26.33	19.70		
+35	179.8	185.9			6.1		27.45				
								27.91	15.51		
+50	182.6	188.9			6.3		28.37				
								28.14	26.05		

Cmptd. TM.M. none none

Chd. R.C.L.

Sta	Grade	Elev.	Dist.	L.C.	℄ C.	P.C.	End Area	Av. Area	Cu/Yds	Cu/Yds	Cu. Yds.
+75	187.3	193.5			6.2		27.91				
								25.43	23.55		
								~~50.43~~	~~46.69~~		
496	192.0	197.1			5.1		22.95				
								23.18	21.46		
								~~22.05~~	~~20.42~~		
+25	195.1 ~~195.6~~	200.3			5.2 ~~4.7~~		23.40 ~~21.15~~				
								24.30	22.50		
								~~21.60~~	~~20.00~~		
+50	198.1 ~~198.8~~	203.7			5.6 ~~4.9~~		25.20 22.05				
								23.90	35.01		
								~~19.35~~	~~28.95~~		
+90.4	203.1 ~~204.7~~	207.9			4.8 ~~3.7~~		21.60 ~~16.65~~				
								22.73	25.09		
								~~17.55~~	~~19.37~~		
497 +20	206.5 ~~207.7~~	211.8			5.3 ~~4.1~~		23.85 ~~18.45~~				
								24.97	27.65 ~~22.18~~		
								~~20.63~~	22.11		
							Computed. MM	MMB	MMB		
							Chd. ✓ P.C.L.				

Grade Change

– 103% – 50+00 – 212.1

Sta	Grade	Elev.	Dist.	V.C.	V.C.	P.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
497+50.1	209.2 210.2	215.0			5.8 ~~4.8~~		26.10 ~~21.60~~				
								~~27.24~~ ~~23.40~~	~~9.99~~ ~~8.58~~		
+60	210.7	216.3			6.3 ~~5.6~~		28.37 ~~25.20~~				
								~~28.84~~ ~~25.65~~	~~21.47~~ ~~19.10~~		
+80.1	211.7	217.5			6.5 ~~5.8~~		29.31 ~~26.10~~				
								32.08 ~~32.28~~ ~~29.43~~	35.64 ~~35.87~~ ~~32.70~~		
498+10.1	211.8 ~~212.25~~	219.4			7.6 ~~7.2~~		34.84 ~~32.76~~				
								~~34.84~~ ~~33.28~~	~~29.55~~ ~~28.22~~		
+33	212.0 ~~212.2~~	219.6			7.6 ~~7.4~~		34.84 ~~33.79~~				
								~~32.32~~ ~~31.32~~	~~20.35~~ ~~19.72~~		
+50	212.8	218.6			6.6 ~~6.4~~		29.79 ~~28.84~~				
								~~29.55~~ ~~28.15~~	~~21.89~~ ~~20.85~~		
							Comptd. ~~M.M.~~ W.M.B		W.M.B		
							Chd. A.C.L.		~~5163.50~~	5143.79	A.C.L.

Grade Change

Sta	Grade	Elev.	Dist.	L.C.	℄ C.	R.C.	End Area	Av. Area	Cu. Yds	Cu. Yds	Cu. Yds
	211.8				6.5		29.31				
+70	~~212.2~~	218.3			~~6.1~~		~~27.45~~				
								27.48	30.53		
								~~24.75~~	~~29.50~~		
									~~18.33~~		
	211.9				5.7		25.65				
499	~~212.2~~	217.1			~~4.9~~		~~22.05~~				
								25.88	47.93		
								~~21.60~~	~~40.00~~		
	211.1				5.8		26.10				
+50	~~212.2~~	216.9			~~4.7~~		~~21.15~~				
								29.43	54.50		
								~~24.08~~	~~44.59~~		
	211.0				7.2		32.76				
500	~~212.2~~	218.2			~~6.0~~		~~27.00~~				
								34.88	64.59		
								~~28.64~~	~~53.04~~		
	210.9				8.0		37.00				
+50	~~212.2~~	218.9			~~6.7~~		~~30.28~~				
								35.14	65.07		
								~~28.19~~	~~52.21~~		
	210.7				7.3		33.28				
501	~~212.2~~	218.0			~~5.8~~		~~26.10~~				
								30.14	55.81		
								~~22.73~~	~~42.09~~		

Compld. M. M. MMD MMD

Chd. ✓ A. C. L.

Recompld. M. D. C.

Grade Changes

Sta.	Grade	Elev.	Dist.	L.C.	℄ C.
501+50	210.5 ~~212.2~~	216.5			6.0 ~~4.3~~
502	210.4 ~~212.2~~	215.9			5.5 ~~3.7~~
+50	210.2 ~~212.1~~	217.0			6.8 ~~4.9~~
503	210.1 ~~212.1~~	218.2			8.1 ~~6.1~~
+25	210.1 ~~212.1~~	219.2			9.1 ~~7.1~~
+50	210.0 ~~212.1~~	219.5			9.5 ~~7.4~~

P.C.	End Area	Av. Area	Cu Yds	Cu. Yds.	Cu. Yds.
	27.00 ~~19.35~~				
		25.88 ~~18.62~~	47.93 ~~33.33~~		
	24.75 ~~16.65~~				
		27.76 ~~19.35~~	51.41 ~~35.83~~		
	30.76 ~~22.05~~				
		34.16 ~~24.75~~	63.26 ~~45.83~~		
	37.56 ~~27.45~~				
		40.47 ~~29.81~~	37.47 ~~27.65~~		
	43.37 ~~32.26~~				
		44.60 ~~33.03~~	41.30 ~~30.58~~		
	45.83 ~~33.79~~				
		45.83 ~~33.79~~	42.44 ~~31.29~~		

Compd. TM.M. WMB WMB

Chd. ✓ A.C.L.

Grade Change

Sta.	Grade	Elev.	Dist.	L.C.	℄ C.	R.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
	210.0				9.5		45.83				
+75	~~212.1~~	219.5			~~7.4~~		~~33.79~~				
								43.11	39.92		
								~~31.32~~	~~29.00~~		
	209.9				8.6		40.39				
504	~~212.1~~	218.5			~~6.4~~		~~28.84~~				
								36.33	33.64		
								~~27.92~~	~~25.85~~		
	209.8				7.1		32.26				
+25	~~210.9~~	216.9			~~6.0~~		~~27.00~~				
								27.16	25.15		
								~~24.30~~	~~22.50~~		
	209.5				4.9		22.05				
+50	~~209.6~~	214.4			~~4.8~~		~~21.60~~				
								24.53	45.43		
								~~23.18~~	~~21.46~~		
	206.6				6.0		27.00				
505	~~207.1~~	212.6			~~5.5~~		~~24.75~~				
								27.00	27.00		
								~~24.53~~	~~24.53~~		
	205.0				6.0		27.00				
+27	~~205.6~~	211.0			~~5.4~~		~~24.30~~				
								24.98	23.13		
								~~21.60~~	~~20.60~~		
							Computd. M.M.	MMB	MMB		
							Chd. A.C.L.				

Grade Change

Sta.	Grade	Elev.	Dist.	L.C.	℄ C.	R.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
+52	203.6 ~~204.5~~	208.7			5.1 ~~4.2~~		22.95 ~~18.90~~				
								24.75 ~~20.25~~	22.00 ~~18.60~~		
+76	202.2 ~~203.3~~	208.1			5.9 ~~4.8~~		26.55 ~~21.60~~				
								27.23 ~~22.95~~	27.49 ~~23.17~~ 20.40		
505+79.57 505+76.31 =			27.26								
506	201.3 ~~202.1~~	207.5			6.2 ~~5.4~~		27.91 ~~24.30~~				
								28.85 ~~25.20~~	16.03 ~~14.06~~		
+15	201.4 ~~202.2~~	208.0			6.6 ~~5.8~~		29.79 ~~26.10~~				
								31.03 ~~26.78~~	44.36 ~~38.28~~		
+53.6	201.6 ~~202.6~~	208.7			7.1 ~~6.1~~		32.26 ~~27.45~~				
								32.77 ~~27.91~~	13.84 ~~14.08~~ 11.78		
+65	201.7 ~~202.7~~	209.0			7.3 ~~6.3~~		33.28 ~~28.37~~				
								32.27 ~~27.01~~	24.74 ~~20.71~~		

Grade Change

Computd. TM. Mann
Chd. A.C.L

Sta.	Grade	Elev.	Dist.	L.C.	t. c.
+85.7	201.8 ~~203.0~~	208.7			6.9 ~~5.7~~
50.7+21.8	202.1 ~~203.3~~	208.4			6.3 ~~5.1~~
+35	202.2 ~~203.4~~	208.4			6.2 ~~5.0~~
+56	202.3 ~~203.7~~	208.1			5.8 ~~4.4~~
+75	202.4 ~~203.8~~	208.9			6.5 ~~5.1~~
508+07.3	202.7 ~~204.1~~	208.5			5.8 ~~4.3~~

R.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
	31.26 ~~25.65~~				
		29.82 ~~24.30~~	39.87 ~~32.49~~		
	28.37 ~~22.95~~				
		28.14 ~~22.73~~	13.76 ~~11.11~~		
	27.91 ~~22.50~~				
		27.00 ~~21.15~~	21.00 ~~16.45~~		
	26.10 ~~19.80~~				
		27.71 ~~21.38~~	19.50 ~~15.05~~		
	29.31 ~~22.95~~				
		27.71 ~~21.45~~	33.15 ~~25.80~~		
	26.10 ~~19.35~~				
		27.01 ~~20.70~~	18.51 ~~14.18~~		

Compld. M.M. 9mm 8mm

Chd. ✓ R.C. L.

Recompld. M.D.E.

Grade Change

Sta.	Grade	Elev.	Dist.	U.C.	C.C.
+25.8	203.1 ~~204.4~~	209.3			6.2 ~~4.9~~
+47	203.4 ~~204.6~~	210.0			6.6 ~~5.4~~
+65	203.8 ~~204.7~~	210.3			6.5 5.6
+93.7	204.3 ~~205.0~~	211.4			8.1 ~~7.4~~
509+20	204.8 ~~205.3~~	212.1			7.3 ~~6.8~~
+50	205.3 ~~205.6~~	211.9			7.6 ~~4.3~~

P.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds	Cu. Yds.
	27.91 ~~22.05~~				
		28.85 ~~23.18~~	22.65 ~~18.20~~		
	29.79 ~~24.30~~				
		29.55 ~~24.75~~	19.70 ~~16.50~~		
	29.31 ~~25.20~~				
		33.44 ~~29.50~~	34.93 ~~30.81~~		
	37.56 ~~33.79~~				
		35.42 ~~32.28~~	35.16 ~~32.04~~		
	33.28 ~~30.76~~				
		34.06 ~~32.02~~	37.84 ~~35.58~~		
	34.84 ~~33.28~~	35.66 ~~32.77~~ ~~23.77~~	19.81 ~~36.41~~ ~~13.21~~		

Compld. T.M.M. W.M.B. W.M.B.
Chd. ~~W~~ A.C.L.

Grade Changes

Sta.	Grade	Elev.	Dist.	L.C.	℄ C.	T.C.	End. Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
	205.6										
+65	~~206.4~~	213.5			7.9 ~~7.1~~		36.47 ~~32.26~~				
								33.62 ~~28.51~~	24.90 ~~21.12~~		
	206.2										
+85	~~207.5~~	213.0			6.8 ~~5.5~~		30.76 ~~24.75~~		16.43		
								29.57 ~~24.57~~ 24.53	~~15.32~~ ~~13.62~~ 13.63		
	207.4										
510	~~208.3~~	213.7			6.3 ~~5.4~~		28.37 ~~24.30~~				
								28.14 ~~24.98~~	26.06 ~~23.13~~		
	209.2										
+25	~~209.7~~	215.4			6.2 ~~5.7~~		27.91 25.65				
								26.56 ~~25.43~~	21.38 ~~20.47~~		
510+46.73 510+36.49 =	210.9	216.5			5.6		25.20				
								25.43 ~~26.10~~	12.72 ~~13.06~~ ~~13.15~~		
	211.9										
510+50	~~211.6~~	217.6			5.7 ~~6.0~~		25.65 ~~27.00~~		19.67		
								~~27.10~~ 26.55	~~26.00~~		

Compld. M.M. WmB WmB

Chd. A.C.L

Recompld. M.D.E.

Grade Change

March 1. 1930
Cloudy + Cool

Converse – Notes
Hill – Grades
Elliott – π
Simpson – Rod

Sta.	Grade	Elev.	Dist.	L.C.	℄ C.	R.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
							°				
+70	213.5	219.5			6.1 / 6.0		27.45 / 27.00 ✓				
								° ✓ 27.45 / 25.43	° ✓ 30.50 / 25.26 / 6033		
511	215.7 / 2+6.5	221.8			6.1 / 5.3		° 27.45 ✓ / 23.85				
								° ✓ 27.23 / 22.05	° ✓ 30.26 / 24.50		
+30	217.9 / 2+9.4	223.9			6.0 / 4.5		° 27.00 ✓ / 20.25				
								° ✓ 26.10 / 18.45	° ✓ 33.74 / 23.85		
+64.9	220.6 / 222.8	226.2			5.6 / 3.7		° 25.20 ✓ / 16.65				
								° ✓ 23.85	° ✓ 26.59		
+95.0	222.3	227.3			5.0		° ✓ 22.50				
								° ✓ 22.72	° ✓ 15.15		
512+13	222.7	228.8			5.1		° ✓ 22.95				
								° ✓ 22.72	° ✓ 10.01		
							Comptd. T.M.M.	N m B	N m B		
							Chd. ✓ R.C.L.				
							Recomptd. T.M.O.E.				

Grade Changes

Sta.	Grade	Elev.	Dist.	L.C.	t. C.	R.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
512 +24.9	222.7	227.7			5.0		22.50				
								22.72	25.16		
+54.8	221.1	226.2									
					5.1		22.95				
								24.07	26.57		
+84.6	218.5	224.1									
					5.6		25.20				
								27.74	15.82		
513	216.50	223.2			6.7		30.28				
								29.80	27.59		
+25	212.9	219.4			6.5		29.31				
								29.80	27.59		
+50	209.3	216.0			6.7		30.28				
								29.80	22.07		
						Compt'd	M.D.E.				

Sta.	Grade	Elev.	Dist.	L.C.	E.C.	P.C.	End Area	Av. Area	Excavation Cu. yds.	Backfill Pipe Contr. Cu. yds.	Backfill Exc. Contr. Cu. yds.
+70	206.5	213.0			6.5		29.31				
								27.03	30.03		
514	202.2	207.7			5.5		24.75				
								21.38	15.84		
+20	199.3	203.3			4.0		18.00				
								18.68	20.76		
+50	195.1	199.4			4.3		19.35				
								21.60	20.00		
+75	191.5	196.8			5.3		23.85				
								25.20	23.33		
515	187.9	193.8			5.9		26.55				
								26.55	14.75		
							Comptd. N.M.E.		6940.95		A.C.L.
									6958.73		

Sta.	Grade	Elev.	Dist.	L.C.	E.C.	R.C.	End Area	Av. Area	Cu. Yds	Cu Yds	Cu Yds
+15	185.8	191.7			5.9		26.55 ✓				
								29.15 ✓	16.19 ✓		
+30	183.6	190.6			7.0		31.75 ✓				
								29.83 ✓	22.10 ✓		
+50	180.7	186.9			6.2		27.91 ✓				
								36.25 ✓	40.28 ✓		
+80	176.5	185.8			9.3		44.59 ✓				
								37.19 ✓	21.07 ✓		
+95.3	174.3	180.9			6.6		29.79 ✓ ✓				Comptd M.D.E.
								26.15 ✓ ✓	14.24 ✓		
516+10	172.7	177.7			5.0		22.50 ✓				
						Compton Ckd ✓ M.C.L.		17.33 ✓ ✓	9.69 ✓ ✓		

Sta.	Grade	Elev.	Dist.	L.C.	℄ C.	R.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
+25.1	171.1	173.8			2.7		12.15				
								8.33	4.60		
+40	170.5	171.5			1.0		4.50				
								2.25	0.42		
+45	170.4	170.4			0.0		0				
								0	0		
+9	170.3	170.3			0.0		0				
								4.50	2.98		
517+09.9	170.8	172.8			2.0		9.00				
								9.23	5.16		
+25	171.1	174.1			2.1		9.45	12.83	7.03		

Computd. T.M.M. W.M.B. W.M.B.
Chd. A.C.C.

Sta.	Grade	Elev.	Dist.	L.C.	E.C.	R.C.	End Area	Av. Area	Cu. Yds	Cu. Yds	Cu. Yds
+39.8	173.4	177.0			3.6		16.20				
								18.90	10.64		
+55	175.5	180.3			4.8		21.60				
								23.40	12.57		
+69.5	177.7	183.3			5.6		25.20				
								27.26	20.70		
+90	181.2	187.7			6.5		29.31				
								29.80	11.04		
5.8	182.9	189.6			6.7		30.28				
								29.56	32.84		
+30	188.1	194.5			6.4		28.84				
								28.84	21.36		
							Compld. M.M.	M M B	M M B		
							Chd. A.C. L.				

Sta.	Grade	Elev.	Dist.	L.C.	Σ C.	P.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
+50	191.5	197.9			6.4		28.84				
								27.70	25.65		
+75	195.9	201.8			5.9		26.55				
								25.20	23.33		
519	200.2	205.5			5.3		23.85				
								21.60	20.00		
+25	204.5	208.8			4.3		19.35				
								20.70	19.17		
+50	207.2	212.1			4.9		22.05				
								22.95	21.25		
+75	209.7	215.0			5.3		23.85				
								23.63	21.88		
									~~43.13~~		
							Compld. TM.M.		NMB	NMB	
							Chd. AC				

Sta.	Grade	Elev.	Dist.	L.C.	C & C.	P.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
520	212.4	217.6			5.2		23.40				
								21.60	24.00		
+30	215.6	220.0			4.4		19.80				
								19.58	14.50		
+50	217.7	222.0			4.3		19.35				
								19.13	17.71		
+75	220.1	224.3			4.2		18.90				
								18.90	17.50		
521	222.9	227.1			4.2		18.90				
								21.15	19.58		
+25	225.6	230.8			5.2		23.40				
								23.63	21.88		

Computed. M.M. MMB MMB
Chd. A.C.L.

Sta.	Grade	Elev.	Dist.	L.C.	E. C.	T.C.	End Area	Av. Area	Cu. Yds	Cu. Yds	Cu. Yds.
+50	228.2	233.5			5.3		23.85				
								24.53	22.71		
+75	230.8	236.4			5.6		25.20				
								25.88	14.47		
+90.1	232.4	238.3			5.9		26.55				
								27.93	15.41		
522+05	233.3	239.8			6.5		29.31				
								28.38	16.77		
+20	234.0	240.1			6.1		27.45				
								29.11	7.55		
+27	234.0	240.8			6.8		30.76				
								29.57	8.76		

Cmptd. TM.M WMB WMB
Chd. A.C.L.

Sta.	Grade	Elev.	Dist.	L.C.	℄ C.	R.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
+35	234.0	240.3			6.3		28.37				
								36.78	13.62		
+45	229.6	239.0			9.4		45.19				
								49.45	21.98		
+57	225.2	235.9			10.7		53.70				
								50.07	14.84		
+65	222.0	231.6			9.6		46.44				
								49.04 ~~54.04~~	18.16 ~~20.02~~		
+75	218.0	228.4			10.4		51.64				
								51.99	9.63		
+80	216.0	226.5			10.5		52.33				
								38.77	28.72		
							Computed TM.M.	WMB	WMB		
							Chd. A.C.L.				

Sta.	Grade	Elev.	Dist.	L.C.	E.C.
523	208.0	213.6			5.6
+50	176.0	184.1			8.1
+60	172.5	180.2			7.7
+72.8	168.1	173.5			5.4
+85	164.4	169.8			5.4
524+01.5	159.4	163.9			4.5

R.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
	25.20				
		31.38	58.11		
	37.56				
		36.47	13.51		
	35.38				
		29.84	14.15		
	24.30				
		24.30	10.98		
	24.30				
		22.28	13.62		
		~~22.18~~	~~13.54~~		
	20.25				
		21.60	10.00		
		~~21.50~~	~~9.96~~		

Computed, T.M.M. NMB NMB

Chd. ✓ R.C.L.

Sta.	Grade	Elev.	Dist.	U.C.	D.C.	T.C.	End Area	Av. Area	Cu. Yds	Cu. Yds	Cu. Yds.
+14	156.0	161.1			5.1		22.95				
								24.53	15.27		
+30.8	152.9	158.7			5.8		26.10				
								26.33	8.97		
+40	151.6	157.5			5.9		26.55				
								26.78	20.33		
+60.5	148.6	154.6			6.0		27.00				
								26.78	29.76		
+90.5	146.7	152.6			5.9		26.55				
								26.33	9.27		
Sta	146.4	152.4			5.8		26.10				
								28.19	52.21		

Computd. TM.M. MMB MMB

Chd. ✓ A.C.L.

Sta.	Grade	Elev.	Dist.	L.C.	℄ C.	R.C.	End Area	Av. Area	Excavation Cu. Yds.	Back fill Pipe Contr. Cu. Yds.	Back fill Exc. Contr. Cu. Yds.
+50	145.1	151.8			6.7		30.28				
								33.10	49.04		
+90	144.0	151.8			7.8		35.91				
								33.83	20.05		
526+06	144.0	151.0			7.0		31.75				
								22.63	13.41		
+22	144.0	147.0			3.0		13.50				
								16.20	4.62		
+79.7	144.0	148.7			4.7		18.90				
								24.59	6.65		
+37	144.7	150.9			6.7		30.28				
								31.27	26.29		
							Compld. M.M.				
							Chd. A.L.L.		8025.95	(8007.67)	A.L.L.

Sta.	Grade	Elev.	Dist.	L. C.	E. C.	R. C.	End Area	Av. Area	Cu. Yds	Cu. Yds	Cu. Yds.
+59.7	144.9	152.0			7.1		32.26				
								27.83	20.93		
+80	146.8	152.0			5.2		23.40				
								27.08	9.53		
+89.5	147.7	154.5			6.8		30.76				
								33.07	18.99		
527+05	150.1	157.8			7.7		35.38				
								37.89	19.93		
+19.2	152.3	160.9			8.6		40.39				
								41.51	18.17		
								~~40.57~~	~~17.73~~		
+31	154.9	163.9			9.0		42.75				
								35.56	15.40		
								~~34.56~~	~~15.36~~		
							Computd. TM.M.	MMB	MMB		
							Chd. A. C. L.				

Sta.	Grade	Elev.	Dist.	L.C.	E. C.	R.C.	End Area	Av. Area	Cu. Yds	Cu. Yds.	Cu. Yds.
+43	157.6	163.9			6.3		28.37				
								32.69	6.66		
+48.5	158.8	166.8			8.0		37.00				
								33.40	63.71		
528	171.6	178.2			6.6		29.79				
								31.28	23.17		
+20	176.6	183.8			7.2		32.76				
								33.54	24.84		
+40	181.6	189.1			7.5		34.32				
								32.79	12.15		
+50	184.1	191.0			6.9		31.26				
								29.59	27.40		

Compld. TM.M. WMB WMB
Chd. AC.L.

Sta.	Grade	Elev.	Dist.	L.C.	to C.	R.C.	End Area	Av. Area	Cu Yds	Cu Yds	Cu Yds
+75	190.4	196.6			6.2		27.91				
								25.88 D	23.96 C		
529	196.6	201.9			5.3		23.85				
								26.11 D	14.51 C		
+15	199.7	206.0			6.3		28.37				
								30.83	11.42 C		
+25	200.7	208.0			7.3		33.28				
								30.83 D	28.55 C		
+50	206.9	213.2			6.3		28.37				
								26.33	24.38		
								~~26.39~~	~~24.43~~		
+75	214.0	217.4			5.4		24.30				
								23.63 D	21.88 C		
							Computed TM.M.	WMB	WMB		
							Chd. RCL				

Sta.	Grade	Elev.	Dist.	L.C.	℄ C.	P.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
530	217.1	222.2			5.1		22.95				
								25.20	14.00		
+15	219.5	225.6			6.1		27.45				
								26.33	14.63		
+30	222.0	227.6			5.6		25.20				
								27.98	20.73		
+50	225.2	232.0			6.8		30.76				
								29.11	82.34		
+80	230.1	236.2			6.1		27.45				
								25.87	19.16		
								~~25.93~~	~~19.21~~		
531	233.4	238.8			5.4		24.30				
								24.53	45.43		
									~~22.71~~		

Computed. TM.TM. WMB WMB

Chd. V A. C. L

Sta.	Grade	Elev.	Dist.	U.C.	Σ C.	P.C.	End Area	Av. Area	Cu. Yds.	Cu. Yds.	Cu. Yds.
+50	241.6	247.1			5.5		24.75				
								24.53	22.71		
+75	245.6	251.0			5.4		24.30				
								23.63	21.88		
532	249.7	254.8			5.1		22.95				
								23.40	21.67		
+25	253.8	259.1			5.3		23.85				
								23.85	22.08		
+50	257.8	263.1			5.3		23.85				
								23.85	22.08		
+75	261.9	267.1			5.3		23.85				
								23.63	21.88		

Compted. M.M. WMB WMB

Chd. H.C.L.

Sta.	Grade	Elev.	Dist.	U.C.	C.C.	P.C.	End Area	Av. Area	Cu. Yds	Cu. Yds	Cu. Yds.
533	266.0	271.2			5.2		23.40				
								23.85	22.08		
+25	270.8	276.2			5.4		24.30				
								23.18	21.46		
+50	275.6	280.5			4.9		22.05				
								21.38	19.80		
+75	280.4	285.0			4.6		20.70				
								22.05	20.42		
534	285.2	290.4			5.2		23.40				
								24.30	22.50		
+25	289.3	294.9			5.6		25.20				
								24.98	23.13		

Compld. M.M. N.M.B N.M.B

Chd. ✓ R.C.L

Sta.	Grade	Elev.	Dist.	L.C.	E. C.	R.C.	End Area	Av. Area	Cu Yds	Cu Yds.	Cu Yds.
+50	293.4	298.9			5.5		24.75				
								26.33	29.26		
+80	297.4	303.6			6.2		27.91				
								25.43	18.84		
535	301.5	306.6			5.1		22.95				
								21.38	12.12		
+15.3	304.1	308.5			4.4		19.80				
								21.60	11.76		
+30	305.8	311.0			5.2		23.40				
								21.60	12.08		
									~~12.04~~		
+45.1	307.8	312.2			4.4		19.80				
								22.28	12.29		
							Computed. TM. M.	NMB	NMB		
							Chd.				

Sta.	Grade	Elev.	Dist.	L.C.	℄ C.
+60	308.6	314.1			5.5
+75	309.3	314.8			5.5
+90	308.8	315.6			6.8
536+05	308.4	314.8			6.4

Contd. in Book #290. Page #1.

P.C.	End Area	Av. Area	Cu Yds.	Cu. Yds.	Cu. Yds.
	24.75				
		24.75	13.75		
	24.75				
		27.75	15.42		
		~~27.86~~	~~15.48~~		
	30.76				
		34.80	19.33		
	28.84				

Compld. M.M. Wm B Wm B

Chd.

Total this book → ~~8964.76~~ 8946.48 A.C.L

(Does not include Sta. 470+50 to 483+12
See Book # 289 A / Compld M. D.E.)

IMPROVED TABLES

AND

INFORMATION