

Dr. 9 Bk. 8

OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY, MINN.

Stadia Survey

Stadia - Western & Co. Rd. C.

From _____ To _____

Road Acc't. No. _____

Date Filed 2-6-59

File Dr 9 Bk 8

1

Stadia

Western & Co. Rd. "C"

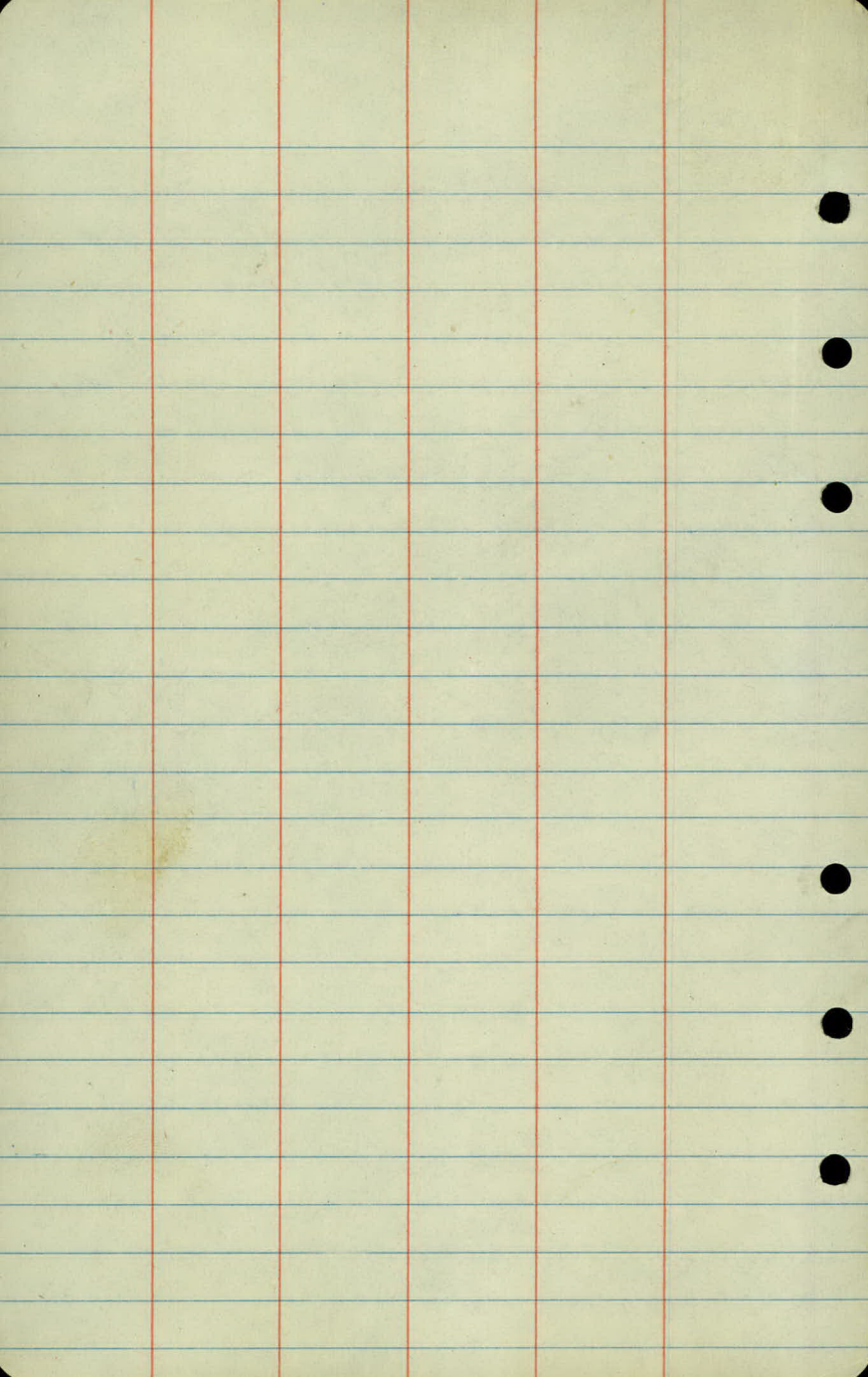
15 Aug. 1952

Kridera

Clark

Banister

Rec'd Notes
9/4/52 W.J.B.

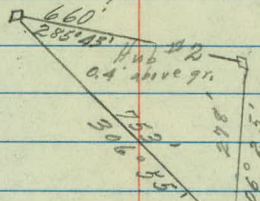


DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
-------	----------------	---------------	-----	-------	-------

Corrected Azimuths

0.4 above ground 439 269° 18.5' Hub #3

Hub #5
0.2' above ground



Hub #1 479' 270° 00'

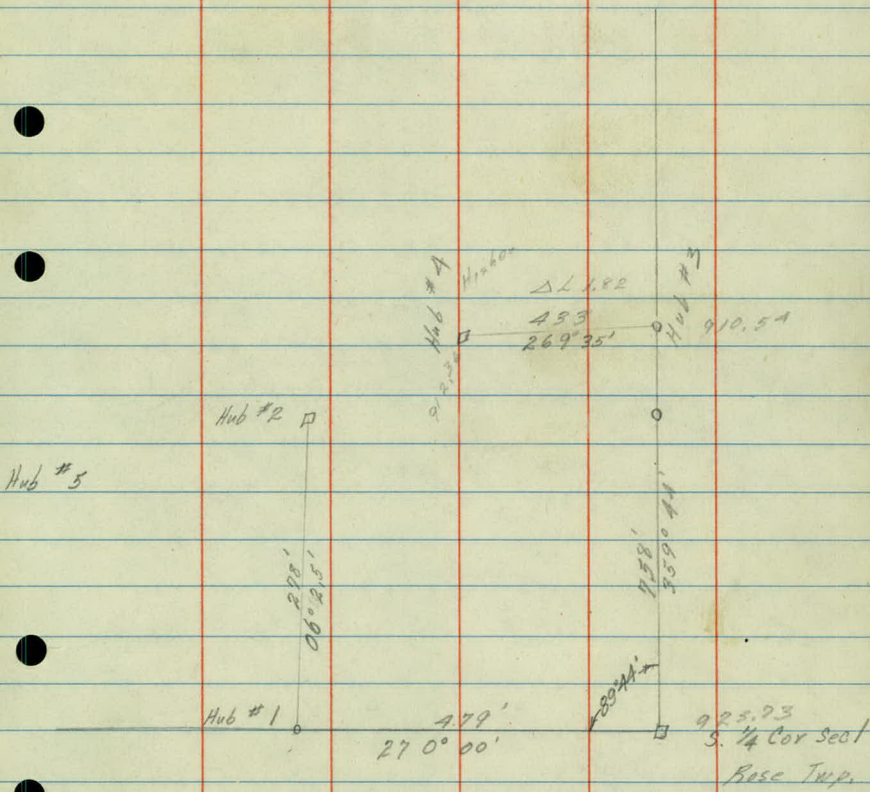
89° 14'

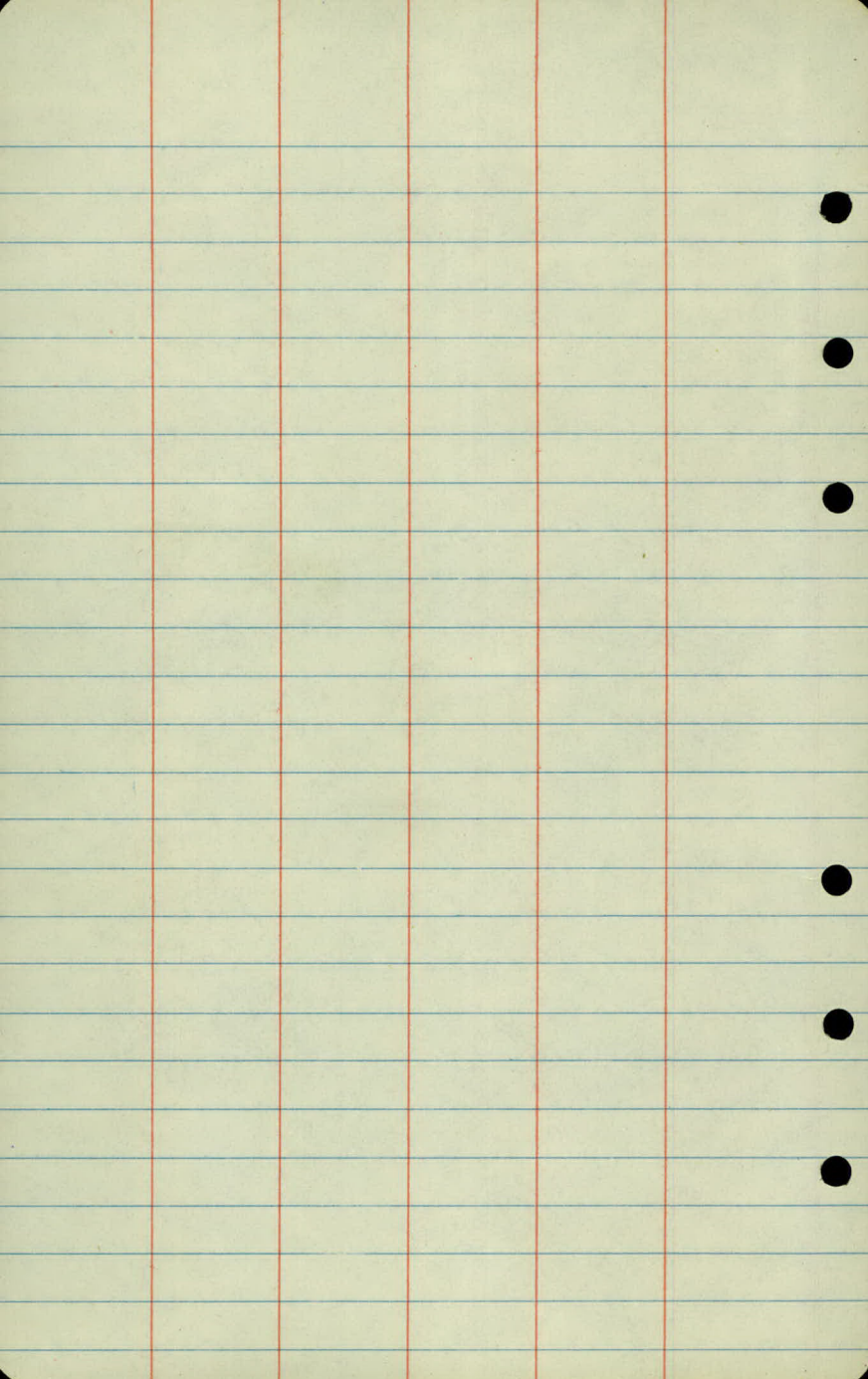
OBJECT

AZI

STADIA

5.25
3.43
1.82





Sta	+	Σ	-	Elev
BM	4.60	928.33		923.73
BM	7.05	929.24	6.14	922.19
26			5.8	23.44
25			10.3	18.94
24			14.3	14.94
BM	0.95	923.14		922.19
BM	1.88	912.10	12.92	910.22
Hub #1			5.04	907.06
Hub #2			12.24	899.86
Hub #3				910.54
Hub #4				912.36

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
-------	----------------	---------------	-----	-------	-------

Top Mont. at Western & Co. Rd "C"

Top West end 24" CM culv. SW Cor Western & C

Top West end 24" CM culv SW Cor Western & C

Top Grey Rock East Edge driveway 396 W Co Rd "C"

@ 0

OBJECT

AZI

STADIA

B/M

705

7 @ 0 to #1 92924

0°00'

beg Radi

282°00'

Mid of Rad

313°40'

End Radi

343°00'

Ditch

290°10'

shoulder

274°40'

Ditch

278°30'

281°40'

313°40'

62

310°20'

90

shoulder

274°40'

230

Ditch

275°20'

230

290°40'

112

shoulder

272°40'

320

Ditch

273°20'

321

319°30'

160

304°

155

300°

185

shoulder

271°30'

410

Ditch

272°30'

410

280°20'

210

Gully

337°20'

130

Hub #1

270°00'

480'

332°50'

180'

Ditch

352°30'

170'

DIST	VERT. ANGLE	ROD EQUIV.	ROD	DIFF	ELEV
Top West End 24" CM calk. SW Cor Western 4 C					
65'			8.5		20.7 ✓
70'			2.7		21.5 ✓
60'			6.9		22.3 ✓
68'			10.1		19.1 ✓
132'			11.2		18.0 ✓
135'			12.4		16.8 ✓
140'			11.7		17.5 ✓
	-5°	-5.4	2.9	-15.3	13.9 ✓
	-5°	-7.8	6.3	-14.1	15.1 ✓
	-3°30'	-14.0	2.1	-16.1	13.1 ✓
	-3°30'	-14.0	3.4	-17.4	11.8 ✓
	-3°30'	-6.8	4.6	-11.4	17.8 ✓
	-3°30'	-19.5	0.3	-19.8	09.4 ✓
	-3°30'	-19.5	1.3	-20.8	08.4 ✓
			10.4	-10.4	18.8 ✓
			14.4	-14.4	14.8 ✓
	-3°23'	-10.9	6.0	-16.9	12.3 ✓
	-2°40'	-19.1	3.0	-22.1	07.1 ✓
	-2°40'	-19.1	4.0	-23.1	06.1 ✓
			9.8	-9.8	19.4 ✓
	-5°00'	-11.3	9.0	-20.3	08.9 ✓
	-4°10'	13.1	9.0	-22.1	07.1 ✓
			9.4	-9.4	19.8 ✓

@ 0 + 3

	OBJECT	AZI	STADIA
At 0	929.24		
	Ditch	356° 10'	168'
	Shoulder	356° 40'	200'
	Ditch	353° 50'	200
		353° 00'	200
	Shoulder ?	356° 20'	130
	Ditch	352° 00'	130
		349° 50'	204
	Shoulder	357° 20'	270
	Ditch	356° 00'	270
		358° 20'	320
		353° 10'	280
	Ditch	356° 30'	335
		354° 40'	330
	Shoulder	358° 00'	390
	Ditch	357° 10'	390
		355° 20'	380
	Shoulder	358° 40'	532
	Ditch	357° 40'	530
		356° 00'	520
	Hub # 3		760
5.3	915.84	910.54	
At Hub # 3 to # 0		180° 00'	
	House	141° 30'	132
	House	136° 45'	122

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
			8.3		20.9 ✓
			8.9		20.3 ✓
			10.4		18.8 ✓
			8.9		20.3 ✓
			7.8		21.4 ✓
			9.1		20.1 ✓
			9.1		20.1 ✓
			10.1		19.1 ✓
			11.6		17.6 ✓
			10.5		18.7 ✓
	- 1°55'	- 9.4	11.0	- 20.4	08.8 ✓
			12.4		16.8 ✓
	- 1°35'	- 9.1	4.0	- 13.1	16.1 ✓
			11.4	- 11.4	17.8 ✓
			12.6	- 12.6	16.6 ✓
			5.2	- 5.2	24.0 ✓
	- 0°30'	- 4.6	9.0	- 13.6	15.6 ✓
	- 0°30'	- 4.6	7.9	- 12.5	16.7 ✓
			3.7	- 5.7	23.5 ✓
			18.70		910.54 1.22 30
	+ 1°36'	+ 3.7	2.0	+ 1.7	17.5 ✓
	+ 0°11'	+ 1.5	1.0	+ 0.5	16.3 ✓

23

OBJECT		AZI	STADIA
Nat Hub #3	915.84	130° 00'	136
	ditch	136° 20'	38
		106° 50'	108
		74° 20'	145
		00° 00'	110
		00° 00'	240
		92° 00'	122
		75° 00'	218
		52° 00'	50
		63° 00'	244
		35° 10'	100
		48° 20'	270
		96° 40'	230
		47° 20'	340
		54° 00'	390
Cor House		86° 20'	350
		87° 00'	260
		73° 00'	310
		68° 40'	450
	" "	62° 40'	475
	" "	64° 00'	500
	Yard Pole	66° 20'	530
		53° 30'	440
		56° 20'	512
		51° 10'	540

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
	$+0^{\circ}41'$	+1.6	1.0	+0.6	16.4 ✓
			6.6		09.2 ✓
			3.7		12.1 ✓
			3.9		11.9 ✓
			8.9		06.9 ✓
			9.6		06.2 ✓
			3.1		10.7 ✓
			2.7		13.1 ✓
			10.4		05.4 ✓
			4.3		11.5 ✓
			10.7		05.1 ✓
			10.1		05.7 ✓
			2.3		13.5 ✓
			11.3		04.5 ✓
			9.3		06.5 ✓
	$+1^{\circ}10'$	+7.1	9.0	-1.9	13.9 ✓
	$+1^{\circ}10'$	+5.3	1.0	+4.3	20.1 ✓
	$+0^{\circ}58'$	+5.2	8.0	-2.8	13.0 ✓
			+1.0	+1.0	16.8 ✓
	$+0^{\circ}58'$	+8.0	7.0	+1.0	16.8 ✓
	$+0^{\circ}58'$	+8.5	7.3	+1.2	17.0 ✓
	$+1^{\circ}00'$	+9.2	8.2	+1.0	16.8 ✓
			8.5		07.3 ✓
			2.5		13.3 ✓
			6.6		09.2 ✓

@ 3

OBJECT

AZI

STADIA

π at Hub #3 915.84

53° 00' 590

51° 00' 550

49° 40' 625

53° 40' 700

47° 10' 860

46° 20' 730

40° 20' 850

33° 50' 790

30° 00' 730

27° 20' 680

41° 30' 730

24° 20' 660

34° 00' 630

17° 40' 590

27° 20' 560

6° 40' 500

17° 00' 485

3° 40' 440

7° 20' 3.65

6° 30' 2.60

Slough

39° — 390

Bottom

38° — 470

27° 40' 420

shallow

2° 20' 360

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
			1.5		14.3 ✓
			8.8		07.0 ✓
			9.0		06.8 ✓
			2.6		13.2 ✓
			+ 2.8		18.6 ✓
			8.3		07.5 ✓
			+ 2.4		18.2
			+ 1.0		16.8 ✓
			0.0		15.8 ✓
			+ 0.4		16.2 ✓
			8.9		06.9 ✓
			0.0		15.8 ✓
			9.7		06.1 ✓
			+ 0.9		16.7 ✓
			10.2		05.6 ✓
			+ 1.3		17.1 ✓
			10.3		05.5 ✓
			3.0		12.8 ✓
			11.2		04.6 ✓
			12.5		03.3 ✓
			10.6		05.2 ✓
			10.5		05.3 ✓
			10.6		05.2 ✓
			6.9		06.9 ✓

@ 3

OBJECT

AZI

STADIA

1 at Hub #3 915.84

Ditch 4° 00' 360

Shoulder 2° 00' 335

Ditch 4° 20' 330

Shoulder 3° 00' 210

" 5° 20' 210

Shoulder 5° 40' 110

Ditch 11° 20' 104

Shoulder 52° — 15

" 168° — 52

184° 40' 130

188° 20' 130

194° 20' 130

189° — 85

203° 40' 60

193° 30' 85

26 Aug 1952

1 at Hub #3 5.2 915.74

910.54

216° 40' 64

274° 40' 12

243° 20' 48

270° 20' 35

314° 20' 68

342° — 44

326° — 58

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
			10.8		05.0 ✓
			7.9		07.9 ✓
			11.5		04.3 ✓
			10.0		05.8 ✓
			12.4		03.4 ✓
			9.5		06.3 ✓
			11.6		04.2 ✓
			6.3		09.5 ✓
			3.1		12.7 ✓
			1.3		14.5 ✓
			2.5		13.3 ✓
	+2°40'	+6.0	4.0	+2.0	17.8 ✓
			2.6		13.2 ✓
			5.1		10.7 ✓
			3.6		12.2 ✓
Hub #3					
			6.3		09.4 ✓
			5.5		10.2 ✓
			10.0		05.7 ✓
			11.0		04.7 ✓
			12.0		03.7 ✓
			8.0		07.7 ✓
			13.4		02.3 ✓

② 3

OBJECT

AZ

STADIA

π at Hub #3

915.74

352° — 90

341° 20' 115

354° 40' 140

335° 40' 110

350° 40' 170

346° 30' 164

336° 20' 160

356° 10' 200

332° 20' 215

351° 15' 209

353° 00' 242

357° — 270

356° 40' 294

354° 30' 278

351° 20' 358

358° — 364

352° — 394

355 — 370

352° 20' 422

shoulder

358° 40' 500

353° 30' 410

shoulder

1° 30' 500

214° 40' 120

229° 40' 160

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
			8.9		06.8 ✓
			13.4		02.3 ✓
			9.6		06.1 ✓
			9.8		05.9 ✓
			12.4		03.3 ✓
			9.7		06.0 ✓
			11.7		04.0 ✓
			10.0		05.7 ✓
			12.2		03.5 ✓
			12.3		03.4 ✓
			11.9		03.8 ✓
			10.3		05.4 ✓
			11.6		04.1 ✓
			12.4		03.3 ✓
			8.4		07.3 ✓
			6.5		09.2 ✓
			2.9		12.8 ✓
			7.3		08.4 ✓
			4.3		11.4 ✓
			0.2		15.5 ✓
			+0.7		16.4 ✓
			0.0		15.7 ✓
	+1°33	+3.2	3.0	+0.2	15.9 ✓
	+6°—	+16.6	6.0	+10.6	26.3 ✓

@ 3 + 4

	OBJECT	AZ	STATION
Start Hub #3	915.74		
	Edge	266°40'	73
		240°—	135
		226°—	134
		253°40'	150
		281°30'	162
		273°—	210
		252°20'	215
	Edge	254°20'	280
		276°40'	270
		262°40'	274
		275°—	315
	± 2' Ditch	260°20'	310
No. End Ditch 1		271°40'	272
		271°30'	395'
	± 2' Ditch	265°40'	289'
		257°20'	350'
		272°40'	450'
to Hub #4	3.36	912.38	431'
Start Hub #4 to Hub #3		89°35'	431'
		45°—	138'
		137°30'	130'
	Edge Lowland	48°—	190'

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
-------	----------------	---------------	-----	-------	-------

			10.6		05.1 ✓
--	--	--	------	--	--------

			2.2		13.5 ✓
--	--	--	-----	--	--------

			6.5		09.2 ✓
--	--	--	-----	--	--------

			9.4		06.3 ✓
--	--	--	-----	--	--------

			11.3		04.4 ✓
--	--	--	------	--	--------

			11.3		04.4 ✓
--	--	--	------	--	--------

			9.4		06.3 ✓
--	--	--	-----	--	--------

			10.4		05.3 ✓
--	--	--	------	--	--------

			11.5		04.2 ✓
--	--	--	------	--	--------

			11.3		04.4 ✓
--	--	--	------	--	--------

			11.4		04.3 ✓
--	--	--	------	--	--------

			13.6		02.1 ✓
--	--	--	------	--	--------

			12.3		02.4 ✓
--	--	--	------	--	--------

			9.7		06.0 ✓
--	--	--	-----	--	--------

			13.3		02.4 ✓
--	--	--	------	--	--------

			10.1		05.6 ✓
--	--	--	------	--	--------

			7.8		07.9 ✓
--	--	--	-----	--	--------

H.I. = 916.90

			4.54		912.36
--	--	--	------	--	--------

			10.9		06.0 ✓
--	--	--	------	--	--------

			7.3		09.6 ✓
--	--	--	-----	--	--------

			12.0		04.9 ✓
--	--	--	------	--	--------

@ 4

OBJECT

AZI

STADIA

916.90 ✓

E Ditch

138° — 154

137° 40' 140'

Edge Lowland

48° 40' 270'

137° 40' 180'

E Ditch

118° 20' 130'

150° — 160'

150° — 152

Edge Lowland

47° 20' 354'

" "

46° 40' 432'

65° 20' 182

15° — 133

59° 40' 206

42° 30' 417

41° 00' 464

172° — 100

181° — 74

178° — 22

60° — 247

40° 30' 240

55° 20' 260

41° 30' 268

52° 40' 295

40° — 234

27° 40' 63

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
			13.7		03.2 ✓
			7.8		09.1 ✓
			11.3		05.6 .
			5.2		11.7 .
			14.0		02.9 .
			9.1		07.8 .
			15.1		01.8 .
			11.9		05.0 .
			11.9		05.0 .
			13.2		03.7 .
			6.9		10.0 .
			12.6		04.3 .
			7.7		09.2 .
			2.0		14.9 .
	+2° 18'	+4.0	3.0	-1.0	15.9 .
	+2° 18'	+3.0	3.5	-0.5	16.4 .
			1.9		15.0 !
			13.5		03.4 .
			7.3		09.6 .
			13.5		03.4 .
			6.4		10.5 .
			13.2		03.7 .
			3.6		13.3 .
			1.2		15.7 .

② 4 + 1

OBJECT

AZI

STAVE

At Hub #4 916.90 ✓

37° — 172'

48° 40' 327'

14° 40' 122'

49° 15' 374'

344° 30' 104'

275° 20' 113'

316° — 114'

Belt Gully

348° 40' 72'

" "

280° — 159'

297° 20' 148'

356° 30' 27'

Box Gully

295° 50' 92'

326° 00' 72'

289° 20' 120'

182° 00' 126'

H.I. 912.36

165° 40' 146'

AT H4B #1

To MONT WESTERN & Co. RD-C

90° 00'

SHLDR

92° 50' 208'

DITCH

95° 30' 210'

"

99° 30' 120'

SHLDR

98° 100'

"

121° 20' 22'

DITCH

123° 50' 28'

DIST	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
			4.1		12.8 -
			13.2		03.7 -
			2.7		14.2 -
			12.8		04.1 -
			2.1		14.8 -
			3.0		13.9 -
			1.7		15.2 -
			9.7		07.2 -
			4.4		12.5 -
			1.7		15.2 -
			10.0		06.9 -
			2.0		09.9 -
			9.0		07.9 -
	+3°30'	+7.3	11.0	-3.7	13.2 -
	+1°05'	+2.4	11.0	-8.6	08.3 -
	+1°05'	+2.8	11.6	-8.8	08.1 -
			5.30		907.06
			0.5		11.9 -
			2.1		10.3 -
			4.5		07.9 -
			4.3		08.1 -
			5.4		07.0 -
			7.5		04.9 -

21

H.I = 912.36'

OBJECT	AZI	STADIA
G.E	117° 40'	109
SHLDR	260° 20'	72
ToE	246°	80
"	258°	155
G.E	149° 40'	75
"	155° 40'	103
"	157° 10'	125
"	178° 10'	130
SHLDR	265°	150
"	267° 20'	238
DITCH	264° 10'	230
G.E	177°	110
"	187°	65
"	255° 40'	220
"	2.9' 248° 40'	170
"	241° 50'	150
ToE	211° 20'	34
G.E	212° 40'	106
"	239°	118
"	212° 40'	130
"	234° 40'	160
"	216°	150
"	225° 40'	110
So-END 24" C.M	244° 36'	84'
No " " "	298° 51'	87'

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
			5.0		07.4 >
			5.2		07.2 -
			11.0		01.4 -
			7.7		04.7 -
			8.5		03.9 -
			5.6		06.8 -
			1.1		11.3 -
			1.6		10.8 -
			3.5		08.9 -
			0.0		12.4 -
			1.4		11.0 -
			7.3		05.1 -
			10.7		01.7 -
			2.1		10.3 -
			2.0		10.4 -
			5.1		07.3 -
			9.8		02.6 -
			10.9		01.5 -
			10.6		01.8 -
			5.7		06.7 -
			1.6		10.8 -
	+1 ⁰	+2.6	3.0	-0.4	12.0 -
			11.6		00.8 -
			12.4		00.0 -
			14.6		97.8 -

@142

H.1 = 912.36

DETENT

427

START

SHLDR

81° 20' 115

"

69° 30' 45

"

85° 40' 300

"

297° 35' 30

"

278° 20' 110

DITCII

83° 40' 300

SHLDR

275° 20' 170

"

273° 45' 210

G.E.

73° 50' 230

"

11.21

71° 50' 200

T.O.E.

12.1

70° 20' 140

"

62° 20' 90

G.E.

47° 55' 130

T.O.E.

4° 45' 40

"

276° 30' 250

G.E.

11.8

284° 30' 240

"

278° 20' 270

H.1 = 904.41

AT HUB #2

TO HUB #1

G.E.

186° 25' 278

201° 05' 190

26 Aug 1952 W.S. SWP.

232° 55' 193

G.E.

201° 20' 115

"

239° 50' 70

SWP

238° 20' 175

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
			4.7		07.7 -
			5.8		06.6 -
			1.3		11.1 -
			6.0		06.4 -
			5.5		06.9 -
			2.5		09.9 -
			3.5		08.9 -
			1.4		11.0 -
			5.9		06.5 -
			12.2		00.2 -
			12.8		99.6 -
	-0° 10'	-0.3	12.0	-12.3	00.1 -
	-0° 55'	-2.1	12.0	-14.1	98.3 -
	-1° 10'	-0.8	12.0	-12.8	99.6 -
			7.2		05.2 -
			13.0		99.4 -
			1.3		11.1 -
			4.55		899.86
			4.9		99.5 -
			8.9		95.5 -
			6.8		97.6 -
			4.2		00.2 -
			8.9		95.5 -

@2

H.I = 904.41

OBJECT	AZI	STADIA
--------	-----	--------

G. E	166° 45'	38
------	----------	----

"	140° 50'	85
---	----------	----

"	87° 20'	34
---	---------	----

"	280°	52
---	------	----

SWP	250° 20'	195
-----	----------	-----

"	261°	220
---	------	-----

"	265° 50'	205
---	----------	-----

"	286° 20'	95
---	----------	----

"	19° 10'	37
---	---------	----

"	93°	73
---	-----	----

"	143° 20'	130
---	----------	-----

"	146° 40'	210
---	----------	-----

"	122° 20'	270
---	----------	-----

"	110° 40'	280
---	----------	-----

"	95° 40'	270
---	---------	-----

"	81° 30'	265
---	---------	-----

"	165° 10'	210
---	----------	-----

G. E	157°	172
------	------	-----

"	132° 40'	270
---	----------	-----

"	131° 50'	290
---	----------	-----

"	118°	410
---	------	-----

"	111° 50'	290
---	----------	-----

"	111° 50'	310
---	----------	-----

"	90° 10'	310
---	---------	-----

"	90° 10'	410
---	---------	-----

"	82° 30'	334
---	---------	-----

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
			4.9		99.5 -
			7.0		97.4 -
			6.5		97.9 -
			5.8		98.6 -
			8.9		95.5 -
			8.9		95.5 -
			8.9		95.5 -
			8.9		95.5 -
			8.9		-
			8.9		-
			8.9		-
			8.9		95.5 -
			8.9		-
			8.9		-
			8.9		-
			8.9		-
			8.9		95.5 -
			6.6		97.8 -
			6.0		98.4 -
	+ 0° 49'	+ 4.1	3.0	+ 1.1	05.5 -
	+ 0° 15'	+ 1.8	0.0	+ 1.8	06.2 -
			6.5		97.9 -
			0.5		03.9 ✓
			7.0		97.4 -
			5.0		99.4 -
			5.1		99.3 -

@ 2

H.1 = 904.41

OBJECT

ALT

STATION

G. E. 78° 30' 345

" 62° 40' 280

" 28° 50' 390

" 14° 50' 325

" 10° 40' 338

"

SWP 351° 20' 315

SWP 44° 50' 195

" 30° 20' 210

" 14° 50' 265

BEG- DITCH 3° 10' 285

4 " 5' BOTTOM 12° 20' 330

G. E. 238° — 380

" " 241° — 475

Edge SWP. 241° 40' 350

G. E. 253° 20' 640

Edge SWP. 259° 40' 490

G. E. 259° 40' 590

Edge SWP. 268° — 620

" " 270° — 820

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
	$+0^{\circ}55'$	+5.5	3.0	+2.5	06.9 —
	$+1^{\circ}29'$	+7.3	1.0	+6.3	10.7 —
	$+2^{\circ}55'$	+19.8	3.0	+16.8	21.2 —
	$+0^{\circ}27'$	+2.6	3.0	-0.4	04.0 —
	$+1^{\circ}21'$	+8.0	6.0	+2.0	06.4 —
			8.9		95.5 —
			8.9		95.5 —
			8.9		95.5 —
			8.9		95.5 —
	$+0^{\circ}52'$	+5.0	9.0	-4.0	00.4 —
	$+1^{\circ}35'$	+10.5	8.9	+1.6	06.0 —
	$+1^{\circ}35'$	+13.1	8.0	+5.1	09.5 —
			8.9		95.5 —
	$+4^{\circ}40'$	+51.9	3.0	+48.9	53.3 —
			8.9		95.5 —
			+20.0		24.4 —
			8.9		95.5 —
			8.9		95.5 —

@ 2

H.I. = 904.41

OBJECT

AZI

STADIA

G. E.	270° 10'	846
Edge swp.	272° 10'	820
G. E.	276° 40'	904
Edge swp.	283° —	740
" "	285° 45'	630
G. E.	285° 45'	780
Edge swp.	292° 15'	550
G. E.	295° 50'	700
Edge swp.	300° 10'	550
" "	305° 35'	490
G. E.	311° 50'	490
" "	323° 30'	470
Edge swp.	320° 20'	430
G. E.	337° 30'	420
Edge swp.	329° 35'	390

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
	$+1^{\circ}35'$	$+23.3$	10.0	$+13.3$	17.7 -
			8.9	-8.9	95.5 -
	$+1^{\circ}05'$	$+17.1$	6.0	$+11.1$	15.5 -
			8.9	-8.9	95.5 -
			8.9	-8.9	95.5 -
	$+1^{\circ}22'$	$+18.6$	6.0	$+12.6$	17.0 -
			8.9	-8.9	95.5 -
	$+1^{\circ}25'$	$+17.3$	3.0	$+14.3$	18.7 -
			8.9	-8.9	95.5 -
			8.9	-8.9	95.5 -
	$+1^{\circ}25'$	$+12.1$	3.0	$+9.1$	13.5 -
	$+1^{\circ}50'$	$+15.0$	3.0	$+12.0$	16.4 -
			8.9	-8.9	95.5 -
	$+1^{\circ}57'$	$+14.3$	3.0	$+11.3$	15.7 -
			8.9	-8.9	95.5 -

OBJECT

AZI

STADIA

$$H.I. = 902.54$$

At Hub #1

to Hub #2

6° 25' 278

to Hub #5

306° 55' 753

$$H.I. = 904.60$$

At Hub #2

to Hub #1

186° 25' 218

to Hub #5

285° 43' 660

Ground End Culv

204° 11' 255

Idg Swamp

256° 20' 430

GE "

249° 48' 400

GE

210° 57' 245

GE

221° 40' 270

GE

233° 40' 335

GE

229° 30' 235

Swamp

240° 40' 310

GE

240° 40' 230

GE

240° 40' 160

Swamp

250° 30' 304

GE

221° 20' 195

19 Dec 1952

FK
AM
LC DIST.VERT.
ANGLEROD
EQUIV.

ROD

DIFF.

ELEV.

5.48

907.06 ✓

14.00

898.34 ✓

4.74

899.86 ✓

6.0

898.60 ✓

5.8

98.8 ✓

10.1

94.5 ✓

10.0

94.6 ✓

5.8

98.8 ✓

7.6

97.0 ✓

8.3

96.3 ✓

8.3

96.3 ✓

10.5

94.1 ✓

9.9

94.7 ✓

8.2

96.4 ✓

10.2

94.4 ✓

6.7

97.9 ✓

OBJECT

H1

904.60

AZI

STADIA

X at Hub #2

GE	257°05'	200
Swamp	260°46'	290
Edge Swamp	271°32'	210
In Swamp	278°10'	290
" "	292°13'	220
" "	286°20'	300
" "	316°25'	280
" "	296°15'	330
" "	313°—	330
" "	305°30'	355
" "	317°05'	395
Edge Swamp	318°55'	418
Swamp	310°35'	450
Hill side	323°15'	465
" "	225°25'	510
" "	313°42'	570
" "	311°35'	540
Swamp	304°47'	490
Edge Swamp	297°30'	550
Hill side	335°33'	660
Edge Swamp	292°05'	550
GE	295°08'	600
Hill side	297°23'	620
" "	295°30'	700

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
			8.5		96.1 ✓
			10.2		94.4 ✓
			9.9		94.7 ✓
			12.2		92.4 ✓
			10.8		93.8 ✓
			11.8		92.8 ✓
			10.4		94.2 ✓
			11.6		93.0 ✓
			10.6		94.0 ✓
			11.8		92.8 ✓
			11.5		93.1 ✓
			10.3		94.6 ✓
			10.5		94.1 ✓
	+1° 28'	+11.9	3.0	+8.9	13.5 ✓
	+2° 32'	+22.5	3.0	+19.5	24.1 ✓
	+2° 45'	+27.3	3.0	+24.3	28.9 ✓
	+1° 49'	+17.1	3.0	+14.1	18.7 ✓
			11.0		93.6 ✓
			10.3		94.3 ✓
	+2° 24'	+27.6	3.0	+24.6	29.2 ✓
			10.3		94.3 ✓
			5.9		98.7 ✓
	+0° 29'	+5.2	3.0	+2.2	06.8 ✓
	+1° 38'	+20.0	3.0	+17.0	+21.6 ✓

OBJECT

H I = 904.60

AZI

STADIA

Lat Hub #2

Hill Side

16° 22' 320

" "

16° 22' 280

" "

22° 35' 330

" "

28° 25' 255

" "

28° 25' 310

" "

44° 55' 240

" "

38° 28' 295

" "

56° 07' 300

" "

56° 55' 254

" "

65° 20' 275

" "

66° 50' 340

" "

74° 15' 255

" "

74° 25' 400

" "

80° 10' 350

" "

82° 10' 400

" "

88° — 410

" "

87° 25' 360

" "

99° 10' 355

" "

99° 40' 410

" "

101° — 360

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
	+ 1° 19'	+ 7.4	3.0	+ 4.4	09.0 ✓
			2.7		01.9 ✓
	+ 2° 47'	+ 16.0	3.0	+ 13.0	17.6 ✓
	+ 1° 01'	+ 4.5	3.0	+ 1.5	06.1 ✓
	+ 3° 24'	+ 18.4	3.0	+ 15.4	20.0 ✓
	+ 1° 32'	+ 6.4	3.0	+ 3.4	08.0 ✓
	+ 4° 18'	+ 22.1	3.0	+ 19.1	23.7 ✓
	+ 3° 25'	+ 17.9	3.0	+ 14.9	18.7 ✓
	+ 1° 18'	+ 5.8	3.0	+ 2.8	07.4 ✓
	+ 1° —		3.0		01.6 ✓
	+ 3° —		4.0		00.6 ✓
	+ 0° 39'	+ 2.9	3.0	- 0.1	04.5 ✓
	+ 2° 42'	+ 18.8	3.0	+ 15.8	20.4 ✓
	+ 0° 20'	+ 2.0	3.0	- 1.0	03.6 ✓
	+ 1° 21'	+ 9.4	3.0	+ 6.4	11.0 ✓
	+ 0° 59'	+ 7.1	3.0	+ 4.1	08.7 ✓
			5.0		99.6 ✓
	+ 0° 10'	+ 1.0	5.0	- 4.0	900.6 ✓
	+ 2° 05'	+ 14.9	3.0	+ 11.9	16.5 ✓
			1.8		02.8 ✓

OBJECT

HI = 903.5

AZI

STADIA

Lat #5

At Hub #1

126° 55' 758

to Hub #2

105° 41½' 660

Side Hill

137° 510

"

139° 508

"

139° 30' 448

142° 30' 460

144° 30' 380

149° 380

149° 30' 327

153° 367

157° 273

162° 324

167° 300

167° 30' 230

175° 30' 285

187° 273

180° 200

192° 297

198° 207

203° 353

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
-------	----------------	---------------	-----	-------	-------

903.56
H.I. = 903.46 H.I. = 903.5

-3.6

907.06

3.7

899.86

6.6

96.9 ✓

0.0

03.5 ✓

2.1

96.4 ✓

+10° 57'

+7.6

3.0

+4.6

08.1 ✓

6.3

97.2 ✓

+1° 27'

+9.6

3.0

+6.6

10.1 ✓

6.9

96.6 ✓

+2° 05'

+13.3

3.0

+10.3

13.8 ✓

7.0

96.5 ✓

+3° 28'

+19.6

5.0

+14.6

18.1 ✓

+3° 28'

+18.1

3.3

+14.8

18.3 ✓

6.8

96.7 ✓

+4° 06'

+20.3

3.0

+17.3

20.8 ✓

+4° 06'

+19.5

3.0

+16.5

20.0 ✓

~~+4° 17'~~

7.9

95.6 ✓

+4° 17'

+22.4

3.0

+19.1

22.6 ✓

7.3

96.2 ✓

+4° 12'

+25.8

3.0

+22.8

26.3 ✓

OBJECT. $H_1 = 903.5$ AZI

STADIA

π at Hub #5

206°30' 232

206°30' 400

272

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
-------	----------------	---------------	-----	-------	-------

			7.9		95.6
	+ 4° 06'	+ 28.5	3.0	+ 255	29.0
			7.0		96.5

OBJECT

AZI

STADIA

1
Western Ave Northward

4

Co Rd "C" Westward

PROFILES

19 Dec 1952

FK

AM

LC

4 pages

Western Ave

Sta	+	π	-	Elev
B.M.	1.11	923.30		922.19
0+00	E. Co. Rd "C"			23.9
1'				22.3
2				20.9
3				19.4
4				18.2
5				16.7
6				15.4
7				13.4
	7.57	918.20	12.67	910.63

£

Top West end 24" CM Culvert S.W. Cor Western & C

+0.6

1.0

2.4

3.9

5.1

6.6

7.9

9.9

Sta	+	π	-	Elev
8		918.20		08.5

9				06.9
---	--	--	--	------

10				06.3
----	--	--	--	------

11				09.0
----	--	--	--	------

12				14.4
----	--	--	--	------

Hub #3		7.65		10.55
--------	--	------	--	-------

13				
----	--	--	--	--

TP	2.42	913.05		910.63
----	------	--------	--	--------

24" X 56' SCP

38' N of Hub #3

BM	4.98	927.17		922.19
----	------	--------	--	--------

0+92	24" X			
------	-------	--	--	--

ϕ

9.7

11.3

11.9

9.2

3.8

for check

00.58

12.47
28'

10.83

16.34
31

02.72

10.33
28'

15.60

11.57
27

Co Rd "C"

Sta	+	π	-	Elev.
BM	2.90	925.09		922.19

0+00		2 Western Ave		23.9
------	--	---------------	--	------

1				19.8
---	--	--	--	------

2				15.2
---	--	--	--	------

	4.55	916.31	13.33	911.76
--	------	--------	-------	--------

3				10.9
---	--	--	--	------

4				07.6
---	--	--	--	------

5				07.1
---	--	--	--	------

X Drain	So End	16.4		01.9
---------	--------	------	--	------

6				08.3
---	--	--	--	------

7				12.2
---	--	--	--	------

8				16.2
---	--	--	--	------

Σ

Top West End 24" CM Culvert S.W. Cor. Western & "C"

1.2

5.3

9.9

5.4

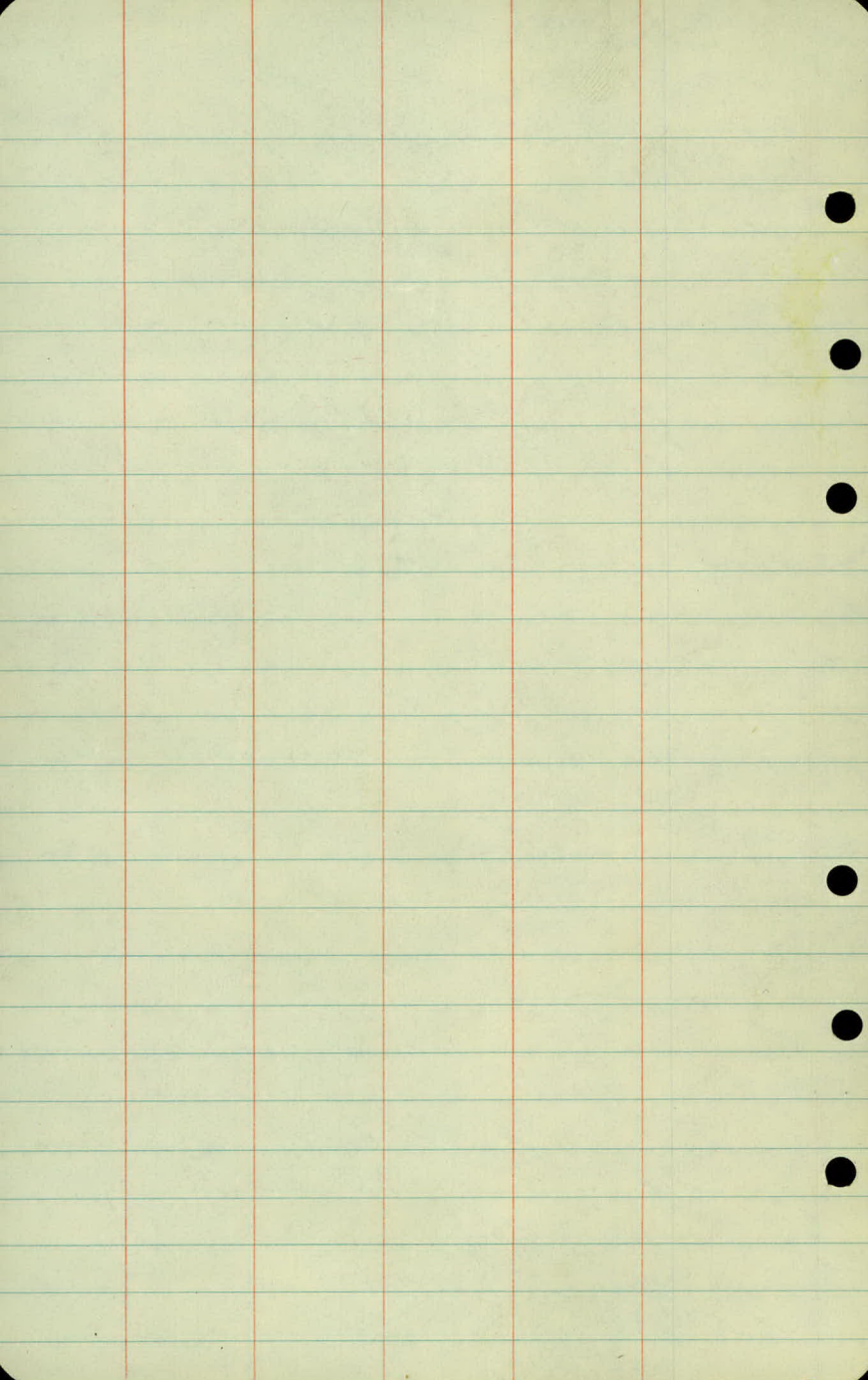
8.7

9.2

8.0

4.1

0.1



Western & C. Rd "C"

Stadia Checks

29 Dec. 1952

FX

AM

LC

MB

Rec. 12/29/52

Sta	+	π	-	Elev
BM	4.32	914.86		910.54
43' N of Hub #3				

38' N of Hub #3

33' N of Hub #3

Note: Distances out
are from West end
of Culvert

Object

AZI STADIA

π at Hub #1

to Hub #0 or Mont. Intersection of Western & C

90° 00' 479

276° 57' 360

275° 20' 420

Hub #3 on E Western Ave.

042				
10.7				02.13
28				
023	028	035	02.72	
12.6	12.1	11.4	12.14	12.13
45	28	15'	FL	FL
			W. End	E. End

04.2
10.7
28

VERT ROD

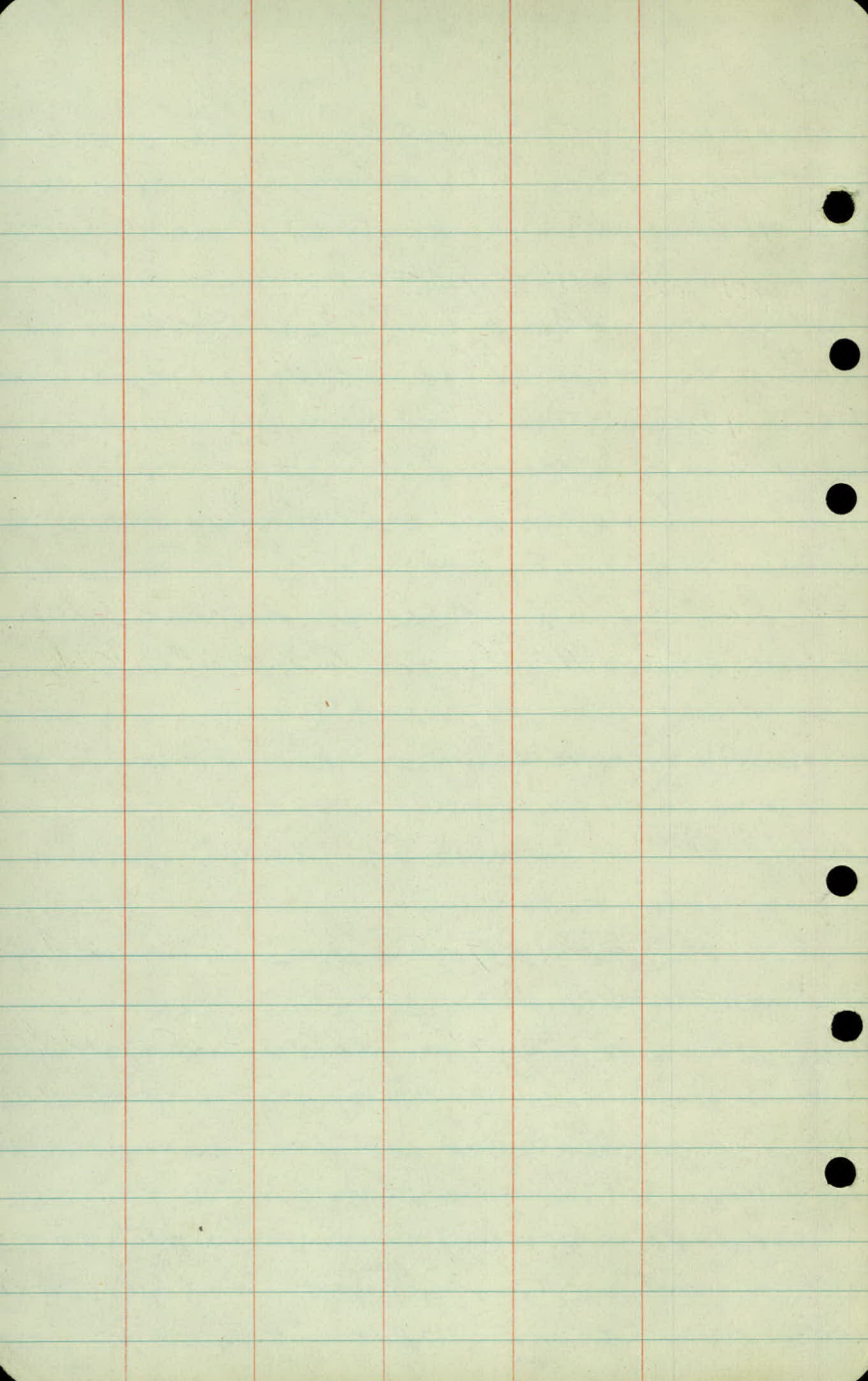
DIST ANGLE EQUIV. ROD DIFF. Elev.

H.I. = 912.40

5.3 on Hub #1 907.1

4.45 2° 33' +16.0 3.0 +13.0 25.4

3.34 1° 55' +14.0 7.0 + 7.0 19.4



WESTERN

C. Rd. "C" to North

Profile

Sta	+	π	-	Elev
BM	2.81	925.00		922.19

0+00			1.0	24.0
------	--	--	-----	------

+50			1.7	23.3
-----	--	--	-----	------

1			2.7	22.3
---	--	--	-----	------

+50			3.3	21.7
-----	--	--	-----	------

2			4.0	21.0
---	--	--	-----	------

+50			4.8	20.2
-----	--	--	-----	------

3			5.7	19.3
---	--	--	-----	------

+50			6.1	18.9
-----	--	--	-----	------

4			6.8	18.2
---	--	--	-----	------

FX
JL
WM
LB

May 8, 1961

2

Top 24" Culvert SW. Cor Western & C

4 Co Rd "C"

Sta	+	π	-	Elev
		925.00		

4+50			7.6	17.4
------	--	--	-----	------

5			8.3	16.7
---	--	--	-----	------

+50			8.9	16.1
-----	--	--	-----	------

6			9.6	15.4
---	--	--	-----	------

TP	0.69	916.14	9.55	915.45
----	------	--------	------	--------

+50			1.6	14.5
-----	--	--	-----	------

7			2.8	13.3
---	--	--	-----	------

+50			5.0	11.1
-----	--	--	-----	------

8			2.9	08.2
---	--	--	-----	------

+50			9.0	07.1
-----	--	--	-----	------

£ May 8, 1961

3

LT

RT

Sta	+	π	-	Elev
-----	---	-------	---	------

916.14

9			9.5	06.6
---	--	--	-----	------

+50			9.6	06.5
-----	--	--	-----	------

10			10.1	06.0
----	--	--	------	------

+50			9.7	06.4
-----	--	--	-----	------

11			7.5	08.6
----	--	--	-----	------

+50			4.7	11.4
-----	--	--	-----	------

12			2.1	14.0
----	--	--	-----	------

Virginia North to South
from π 916.14

0400			4.7	11.4
------	--	--	-----	------

+50			6.1	10.0
-----	--	--	-----	------

May 8, 1961

4

Sta	+	π	-	Elev
		916.14		
1+00			7.0	09.1
+50			7.5	08.6
2			7.8	08.3
+50			7.5	08.6
			9.00	07.14
			7.90	08.24
3			6.9	09.2
+38			6.5	09.6
Conc Ent slab			8.10	08.04
BM			6.89	09.25

May 8, 1961

5

Top 18" Culvert West End
 East End

back of Ho Facing Virginia

N. Rim MH NE Cor Lot 2708 Western

John Liewer Called to Jk.

Ent 5/ab 908.02

FL W. End Culvert 906.80

" " E. End " 907.18