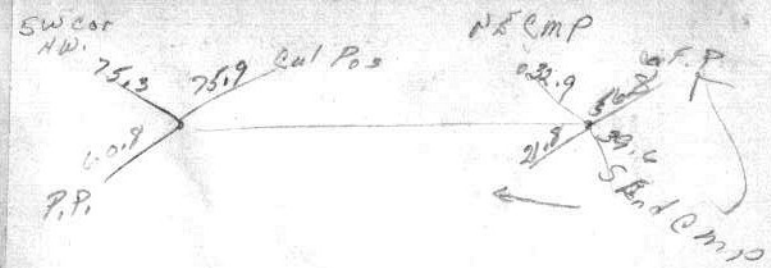
Richardson County

Section Line Ties

Field notes in the Nebraska State Surveyor’s Office from a project intended to tie U.S. Corps of Engineers Missouri River control to the PLSS. The field work was executed between 1960 and 1970.

Pages from the original books that were either blank or contained irrelevant information have not been included in this document.



The paper in this book **No. 364A** is made of **50%** high grade rag stock with a **WATER RESISTING** surface sizing.

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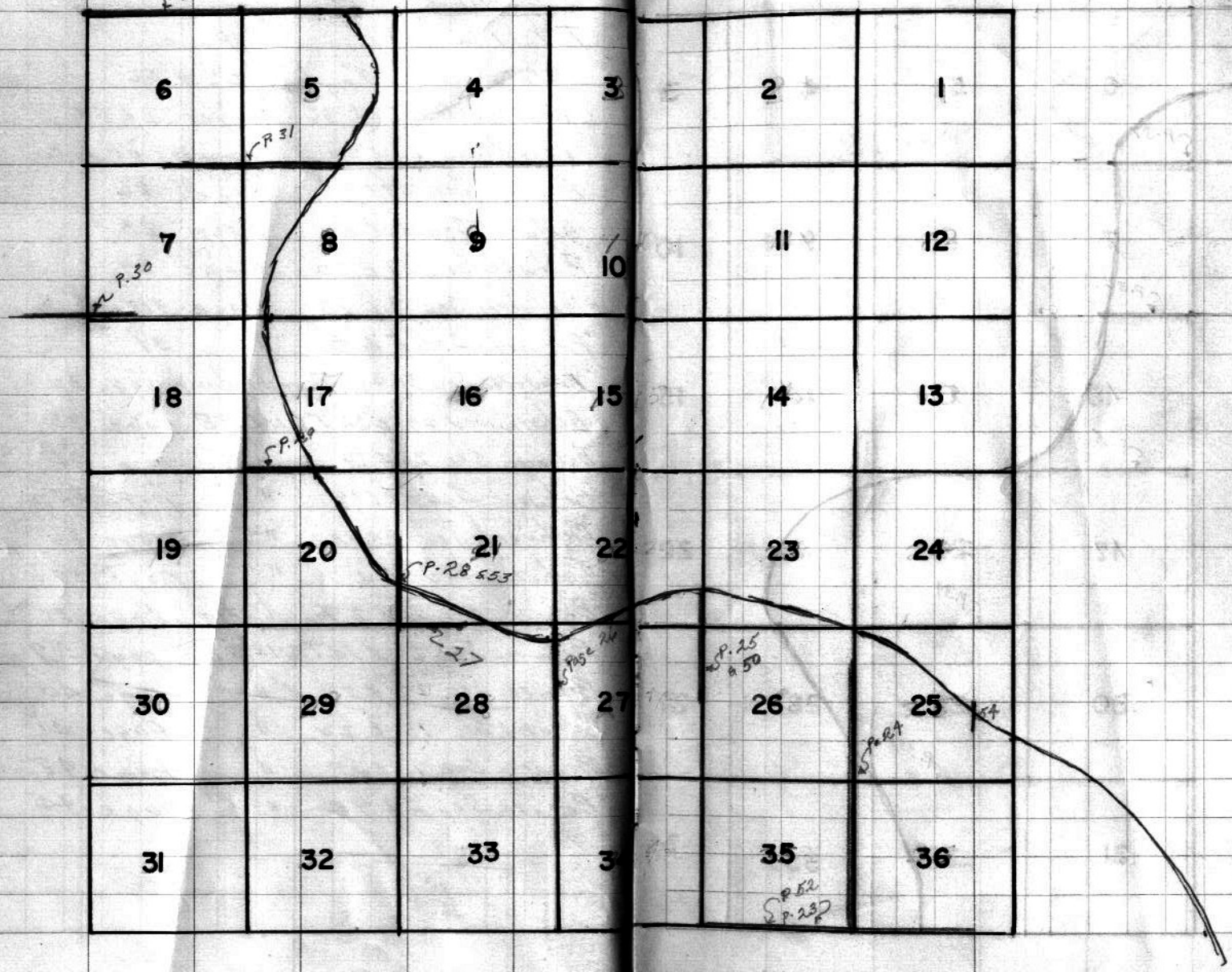
T 1 N R 18 E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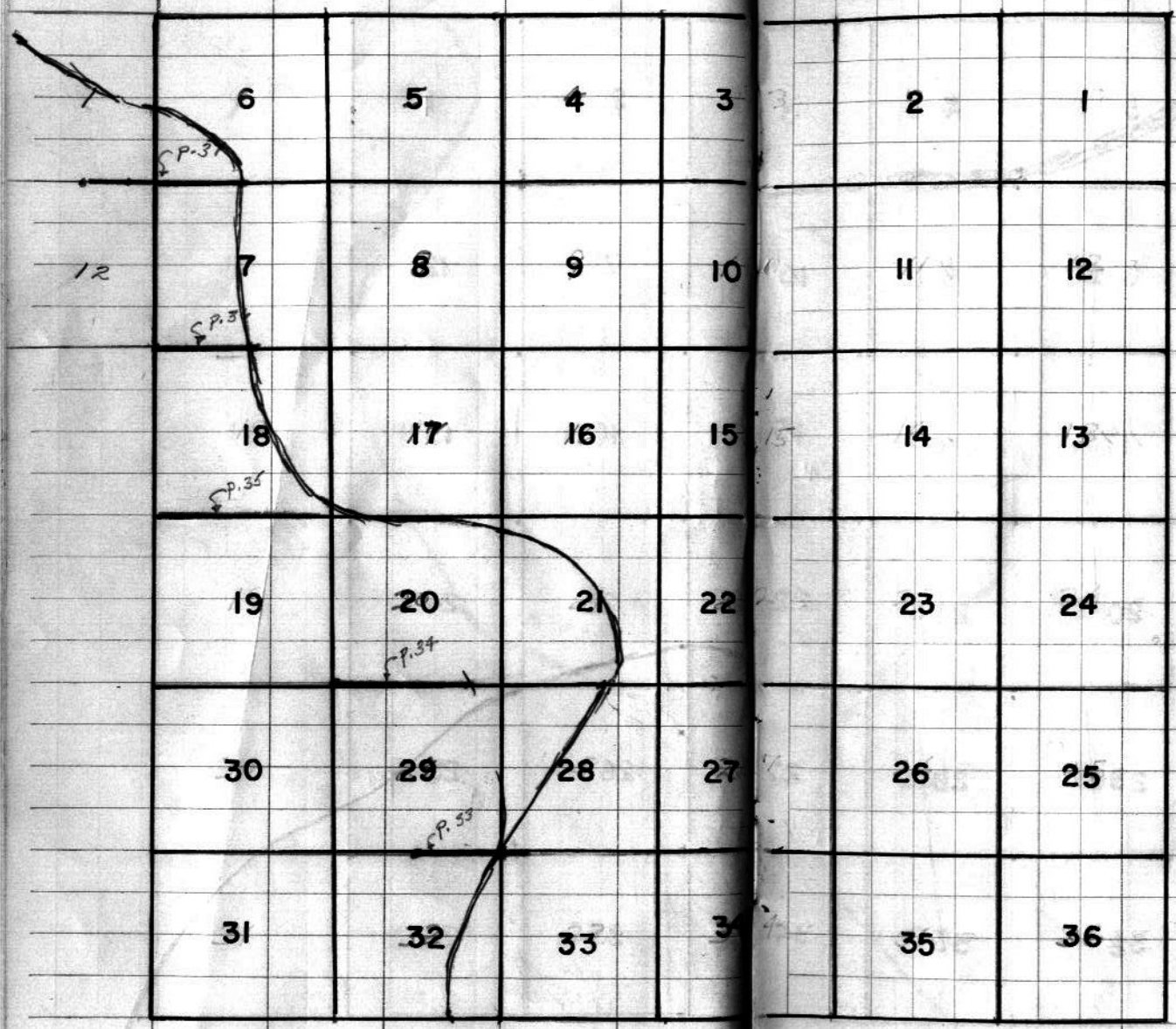
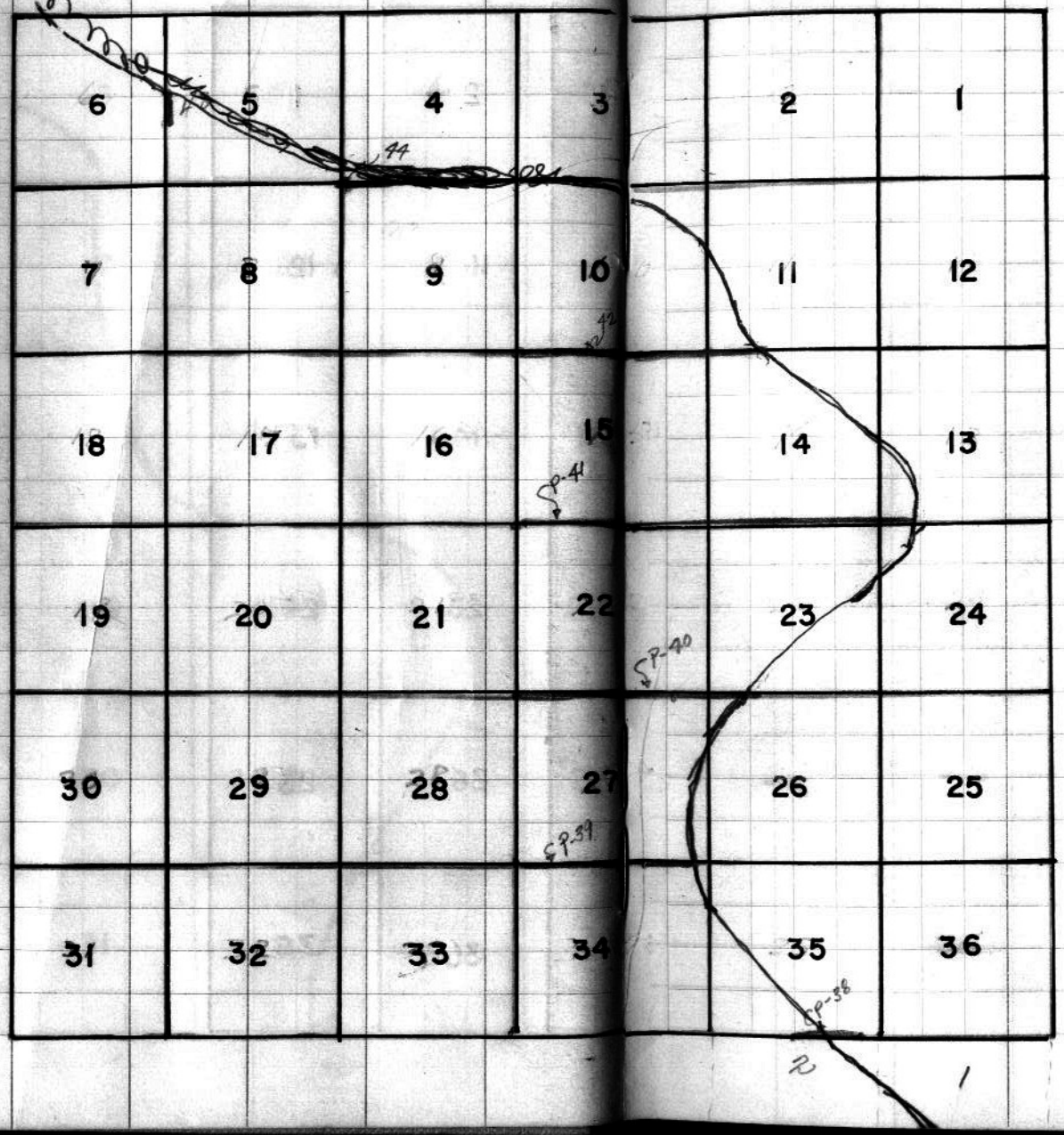
T2N R17E

T 2 N R18E



T 3N R17E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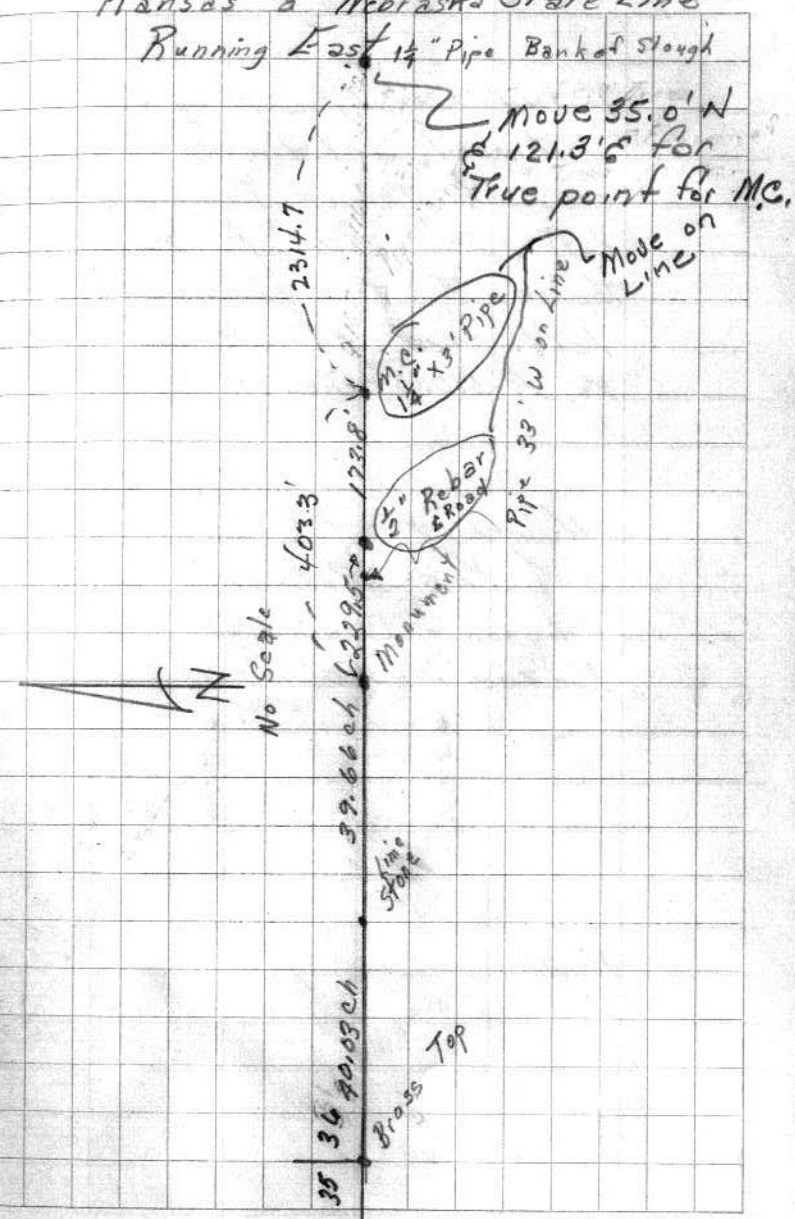
Retied 12 Aug 63

See Page 52
For Tie

Harold
Jim
Wayne
Gary
Bill
Roger

Completed
July 27, 1962

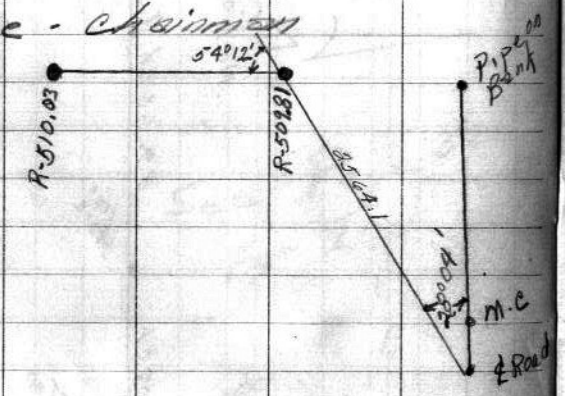
Kansas & Nebraska State Line
Running East



Retried Line by Setting on Rebar in ℄ road. and foresitting on Pipe on Bank. Thence Turning ∠ 28°09' Left. I run 2564.1' to R-509.81 Conc. Thence I turn ∠ of 54°12' Left. and run without measuring to R-510.03 Conc.

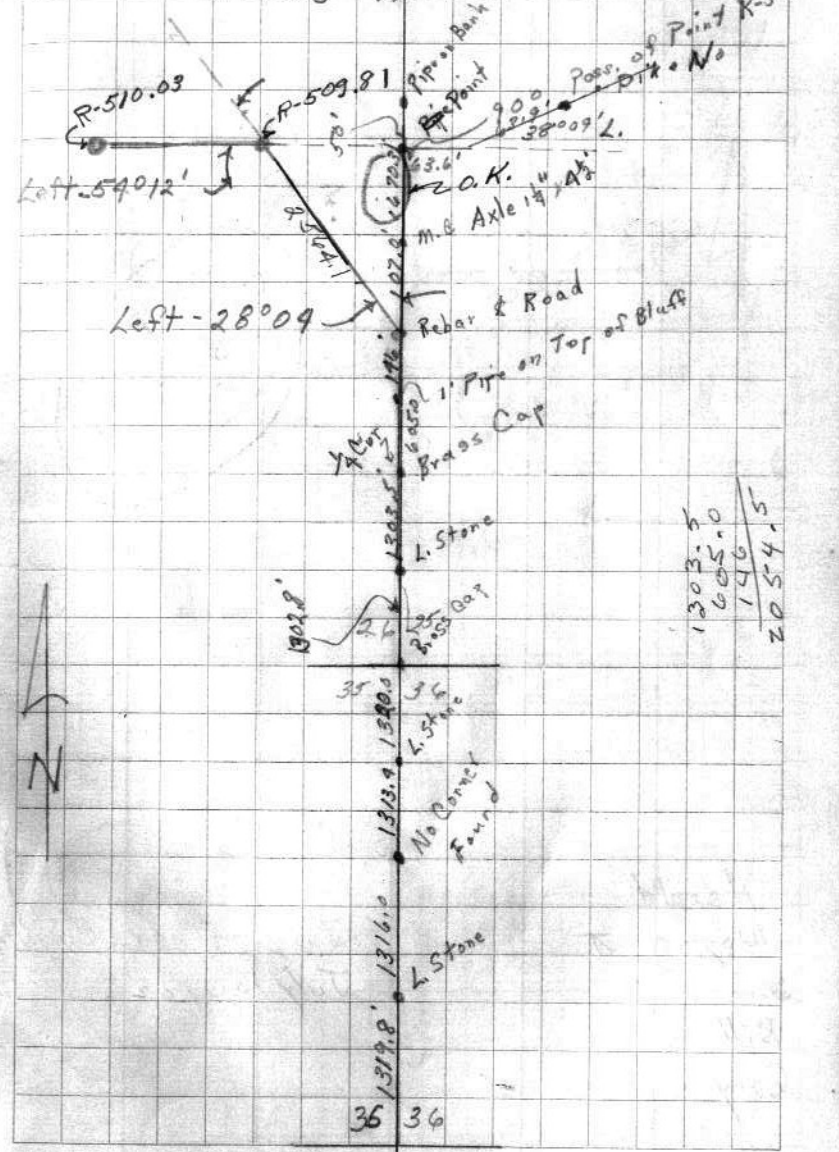
2 April 1964

Humphrey - ⊼
Sabatke - Rodman
Johnson - Chainman
Beane - Chainman



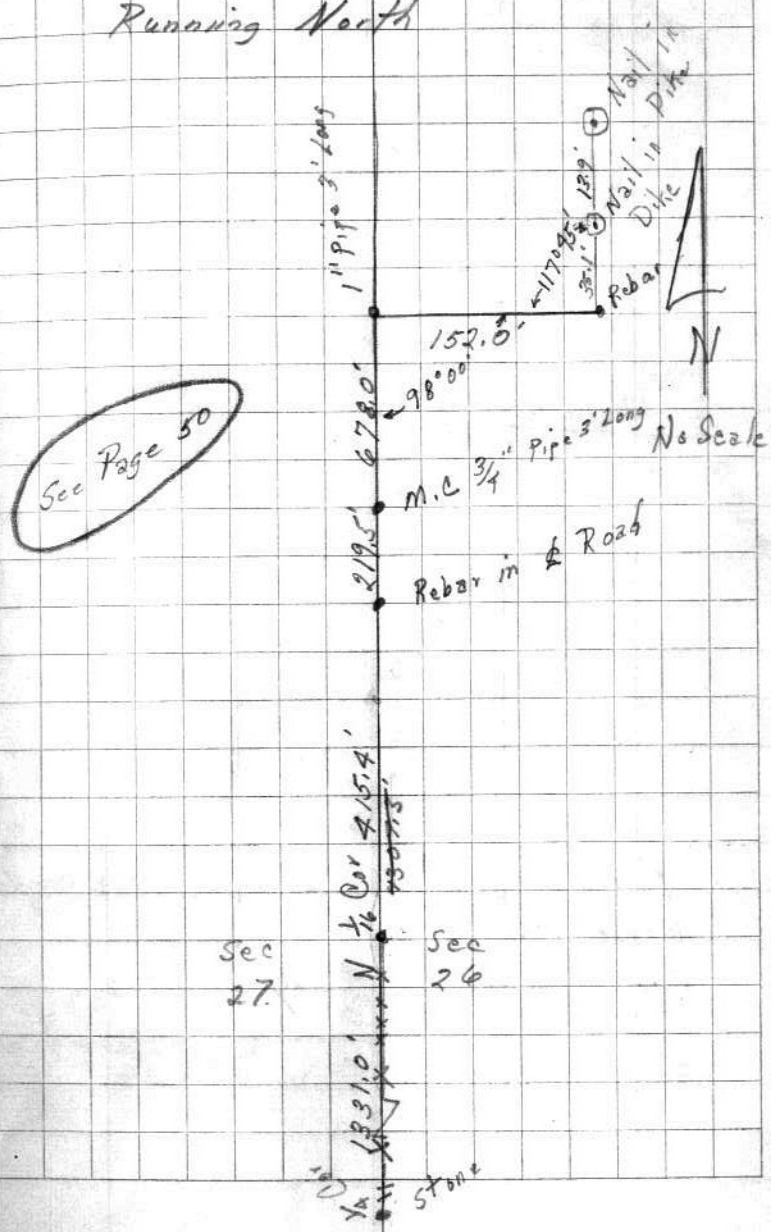
Hadd
Jim
Bill
Wayne

Line Between 25 & 26 T1N R18E
Running North



Line Between 26 & 27 T7N R18E

Running North



See Page 50

Harold
Wayne
Jim
Bill
Gary

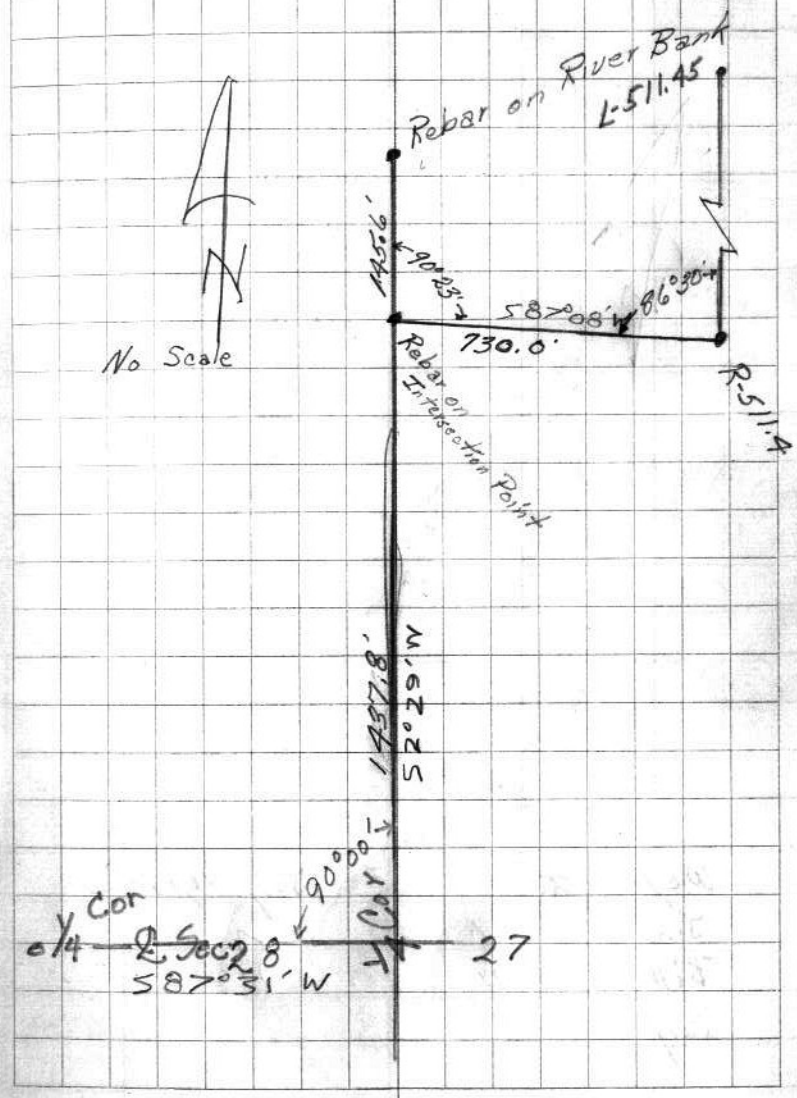
July 27, 1962 Completed
July 10, 1962

Harold
Wayne
Jim
Bill
Gary

July 27, 1962 Completed

July 10, 1962

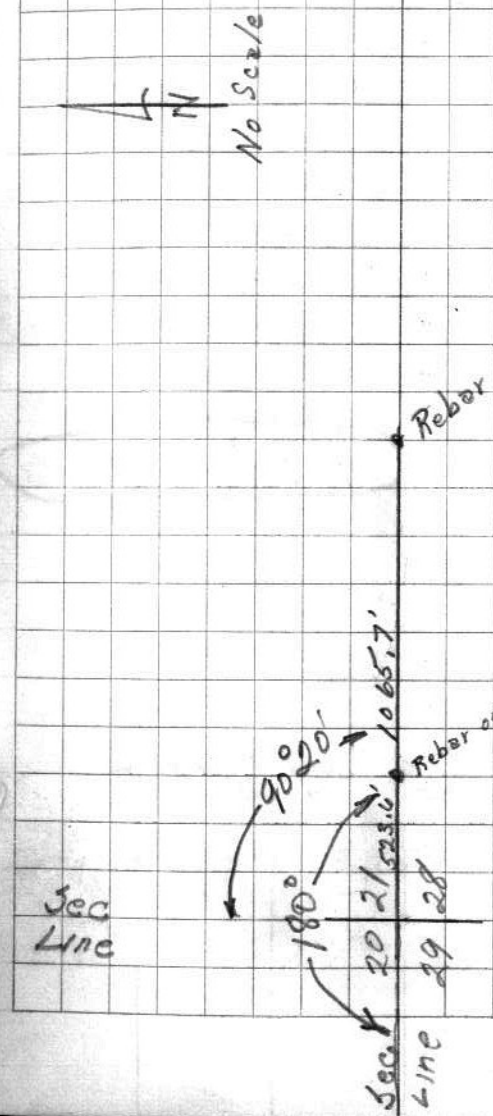
Line Between Sec 27 & 28
T1N R18E Running North



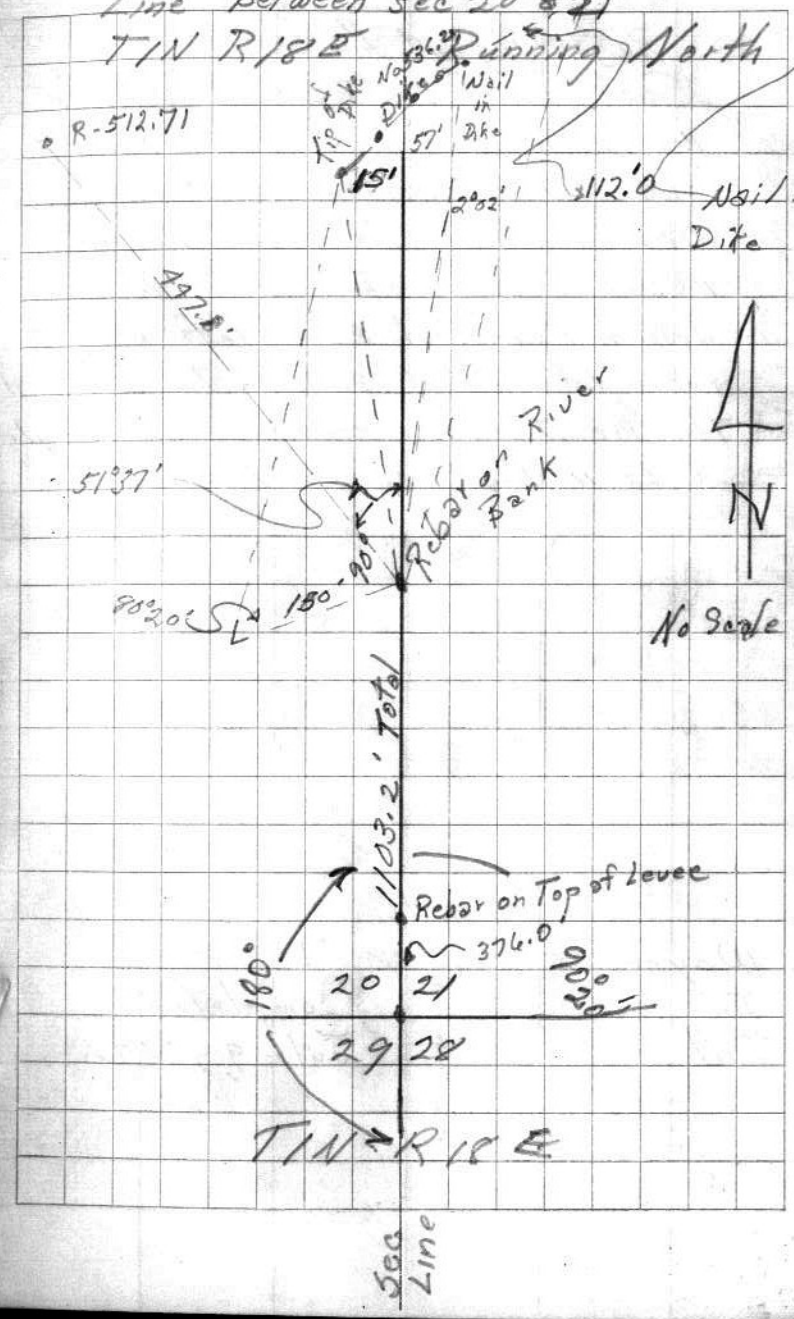
Wayne
Jim
Bill
Gary

July 10, 1962

Line Between Sec 21 & 28 T1N R18E
Running East



Line Between Sec 20 & 21
T1N R18E Running North



Retied - See Page 53

Harold
Wayne
Jim
Bill
Gary

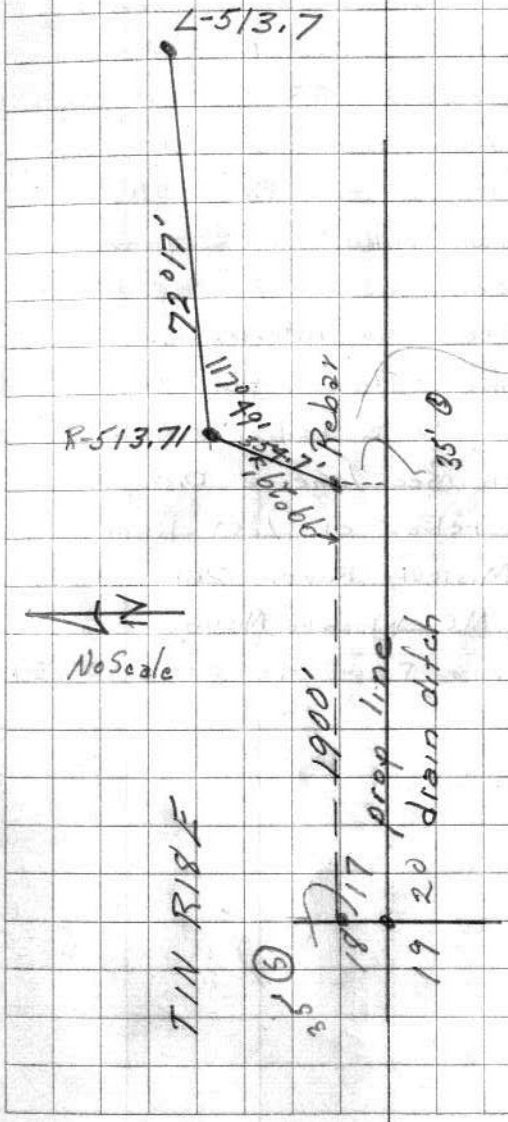
July 10, 1962

Beginning at the Sec Cor of Sec's 17, 18, 19 & 20 T1NR18E We run East using a 35' off-Set and Approx center of drain-ditch a distance of 1900' To a rebar we set. Then with a deflection Angle of 80°31' Left we run a distance of 854.7' To R-513.71 The we turn a deflection Angle of 62°11 Right To L-513.7

Wayne
Jim
Bill

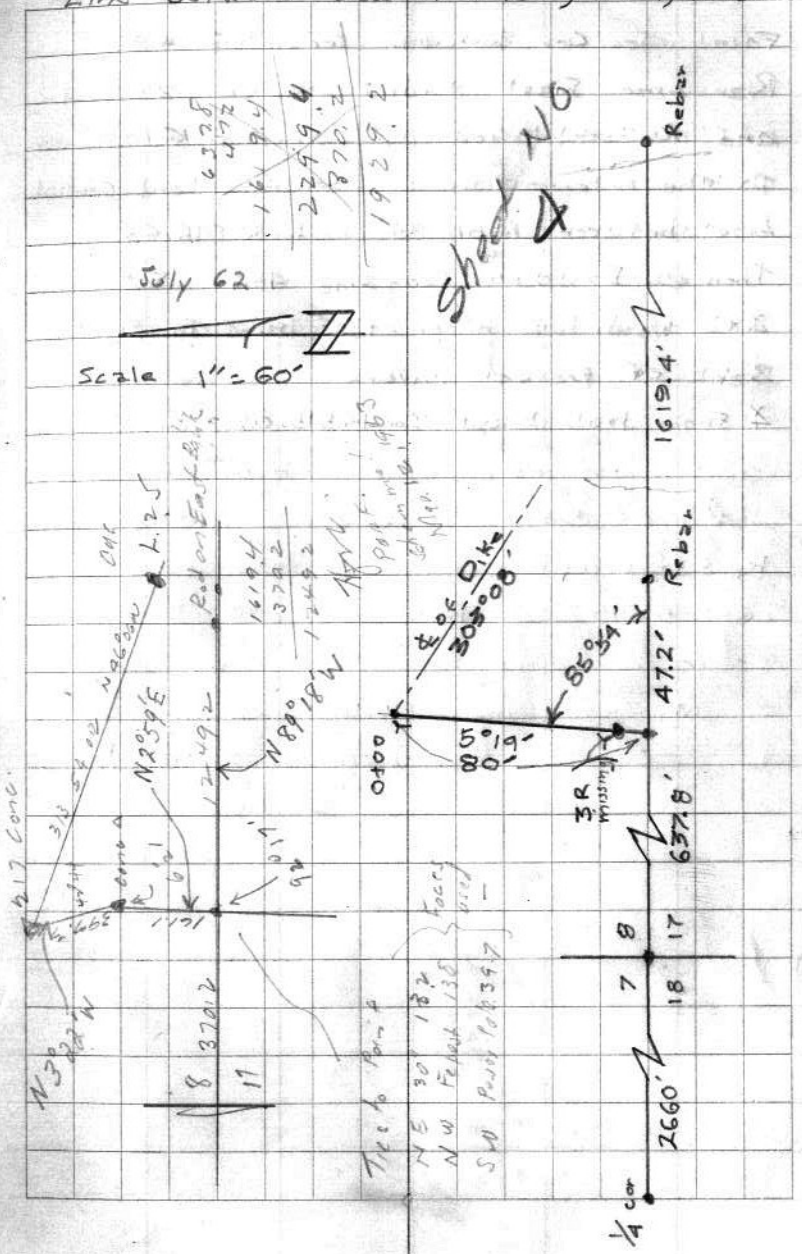
Completed
July 9, 1962

Line Between Sec 17 & 20
T 1N Range 18E



Found ¼ Cor between Sec's 7 & 18
Ran Line East, 2660' Found Sec
Cor between Sec's 7, 8, 17 & 18.
Extended Line East 637.8' hit
extension of Line from 0+00 of
Dike 538.3 over Control Point 3R.
Az. taken from Dike 538.3 point
3R Missing continue on Az of 5°19'
80' from 0+00 to intersection
with Sec Line, then again on
Sec Line 47.2 to a rebar set by
Us thence on Sec Line a Dist. of
1619.4' to a rebar on Left bank
of Present Missouri River. 261.6' short
of old gov. M.C. which is missing
∡ from Rebar East to 0+00 = 85°54'

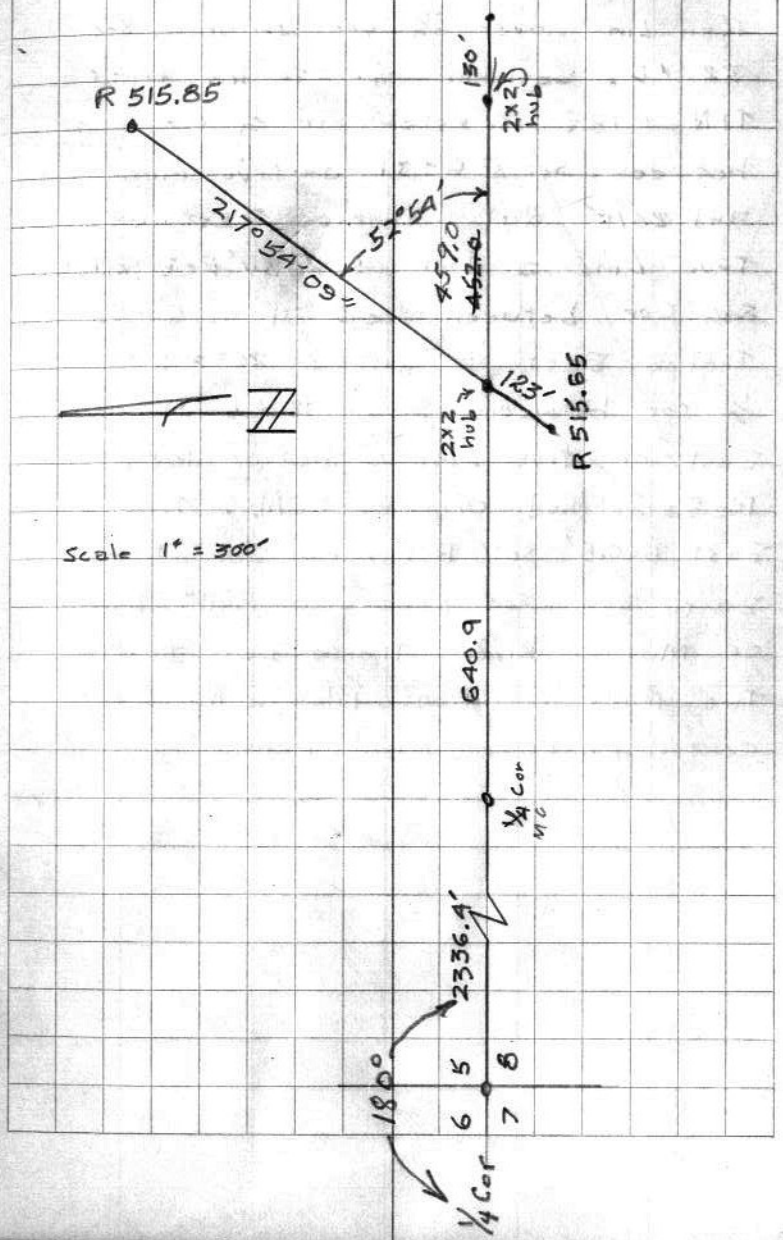
Line Between Sec's ~~7 & 18~~ 8-17, T1N, R18E



Found Sec Cor between sec's 5,6,7 & 8.
Ran Line East a distance of 2336.4
and ReEstablished M.C. Thence 640.9' on
To the intersection of Sec Line and Control
Line between R 515.85 and R 515.65.
Thence East on sec Line ~~452.0~~ 459.0 Set
2x2 Wood hub Then 130' more To Right
Bank of present River.
∡ From hub East To R 515.85 = 52°54'

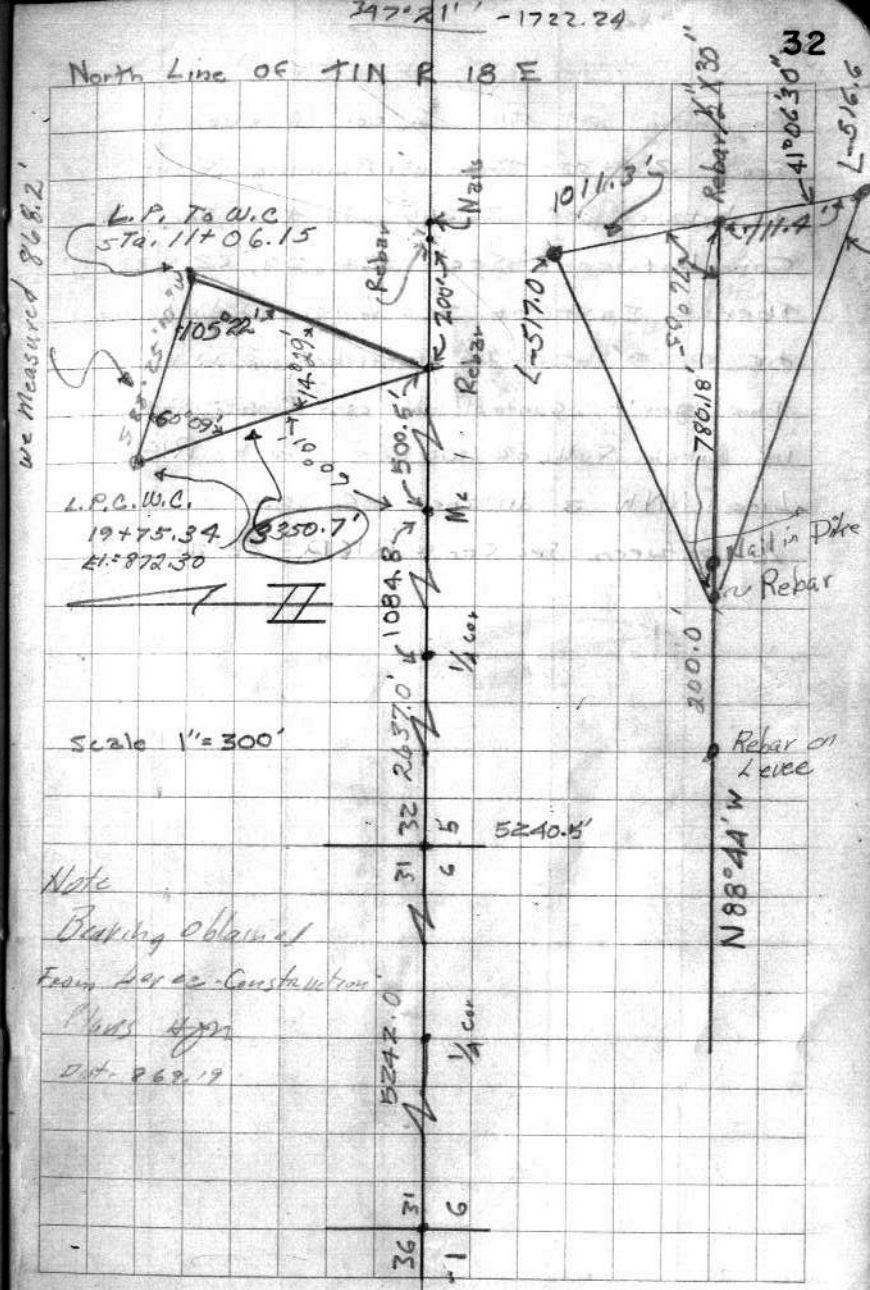
April 8, 1964

Line Between Secs 5 & 8 T1N R18E



Beginning at The NW cor of T1N R18E Ran Line over 1/4 cor Between Sec's 32 & 5. Beginning at The NW cor of T1N R18E ReEstablished Temp 1/4 cor between Sec's 6 & 31 on ~~true Line~~ Not on line and 2610' dist. Thence East on True Line a dist of 2632' ReEstablished Sec Cor between Sec's 31, 32, 6 & 5. Thence East a dist of 2637 hit 1/4 cor between Sec's 32 & 5 Thence East on True Line a dist of 1084.8' ReEstablished Orig Gov't M.C. Thence East 500.5' set Rebar on Dike Thence East 200' Set Rebar on Right bank of Missouri River. Thence East ~~13~~ to Two Nails in Top of Piling. No Gov't Control points on Right bank.

June 11, 1962 &
July 8, 1963



Beginning at the 1/4 cor Between Sec's 29 & 32 Thence Running East a distance of 2621.5' to the Sec Cor between Sec's 28, 29, 32 & 33 Thence East on Sec Line a distance of 90.9' to the intersection with The gov't Control Lines. Point Falls in ditch Full of Water. Point R16D Lies NNW a distance of 38.4'

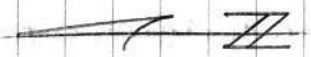
∡ between Sec Cor & R16D = 82°45'

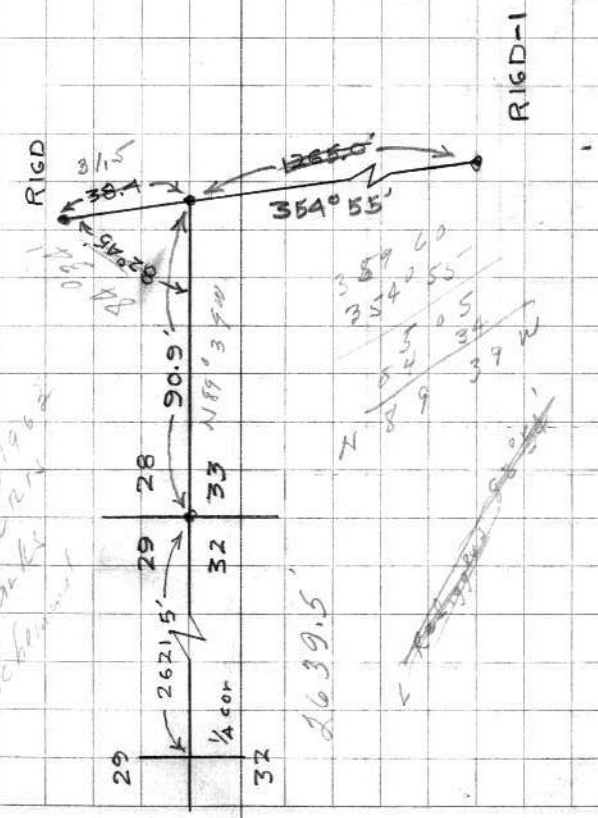
Line Between Sec's 29 & 32 T2N R18E

April 19, 1962

See Page 47 for New Tie

Scale 1" = 60'

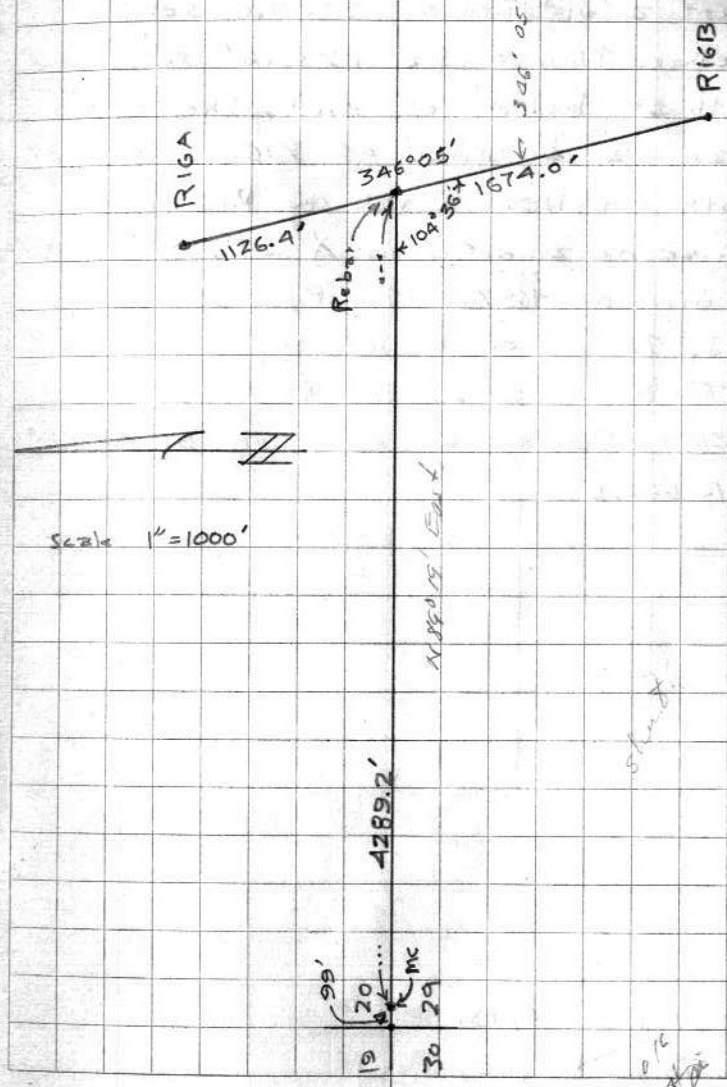




Beginning at the Sec Cor Between Sec's 19, 20, 29, & 30 thence East a Distance of 99.0' To the MC. Thence East on Sec Line a distance of 4289.2' To the intersection with the gov't control Line Between R16A & R16B set Rebar Point Lies 1674.0' NNW of R16B, & Between MC & R16B = 104°36'

Line Between Sec's 20 & 29 T2N R18E

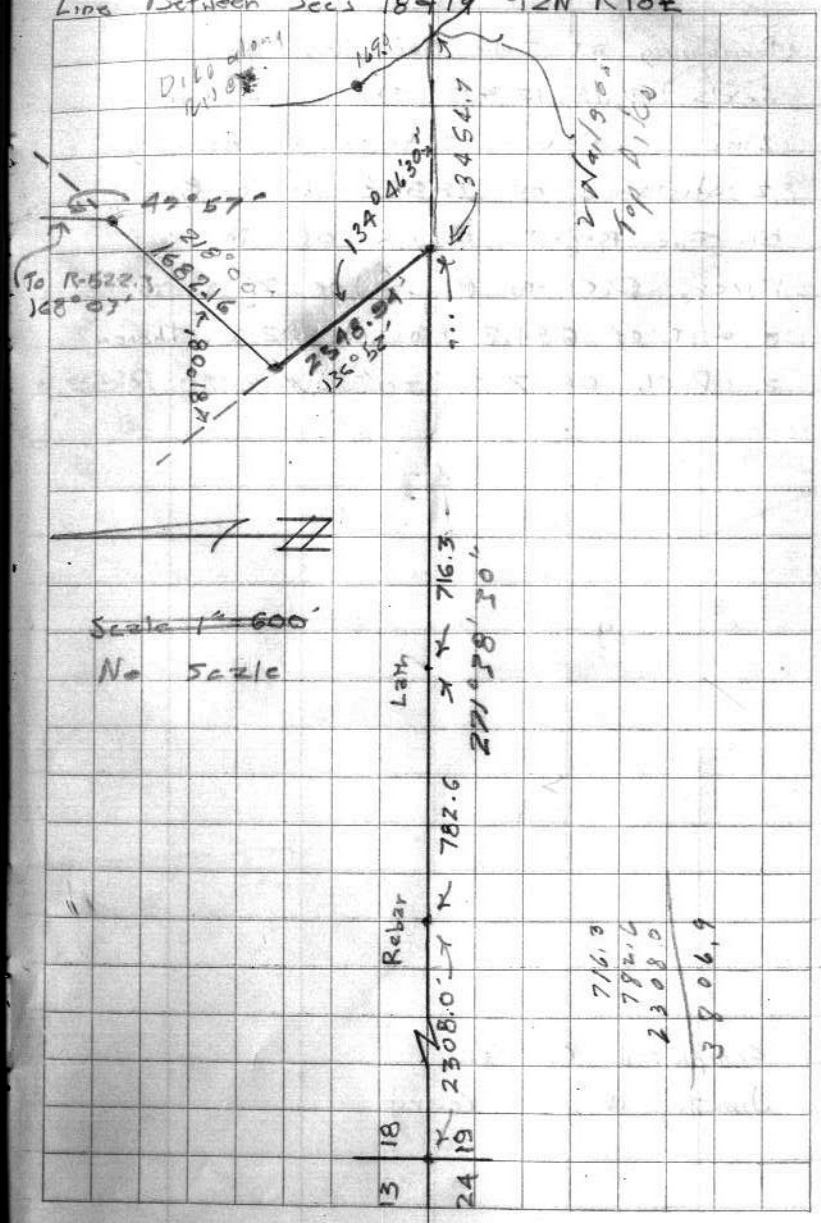
april 10, 1962



Beginning at The Sec Cor Between Sec's 13, 18, 19, & 24 Run Random Line East a distance of 2308.0' set Rebar. Thence East 782.6' set Lath at bottom of Bluff, Thence East a distance of 716.3 set Lath on West Bank of Mud Slough. Thence on a deflection ∡ of 134°46'30" Lt a dist of ~~1682.16~~ 2548.94 to Pipe set beside Road, Thence on a deflection ∡ of 81°08' Right a dist of ~~2548.94~~ 1682.16 to R-522.0 Thence a deflection of 49°57' to R-522.3

Completed 6/13/62
Jim T, Wayne, Gary

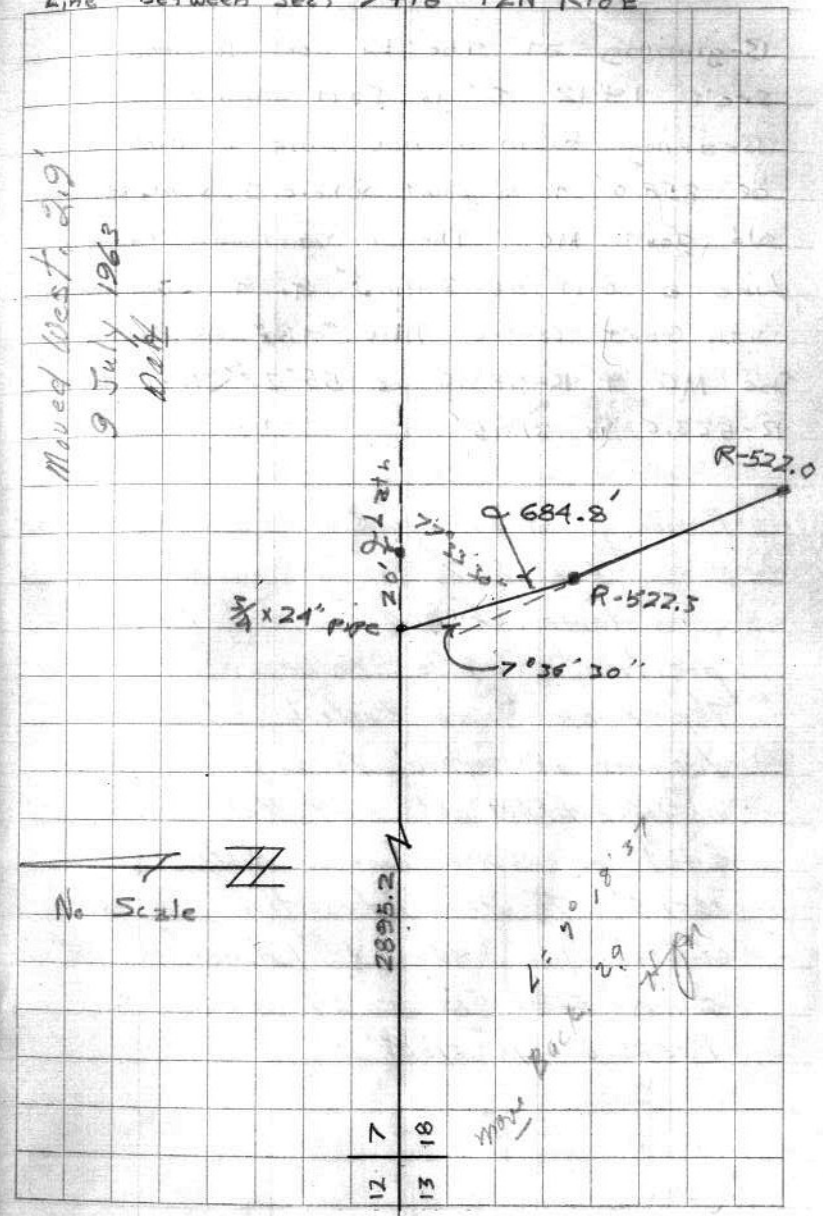
Line Between Sec's 18 & 19 T2N R18E



Beginning at The Sec Cor. Between Sec's 7, 18, 12 & 13 Thence a random Line East using a fence for Bearing a distance of 2895.2' to a Pipe on The Right Bank of Missouri River. Defl to Right of 77°33'30" a dist of 684.8' To R-522.3. Thence a Defl. of 7°36'30" Left to R-522.0

Completed 6/13/62
Jim ⊼ Wayne Gary

Line Between Sec's 7 & 18 T2N R18E



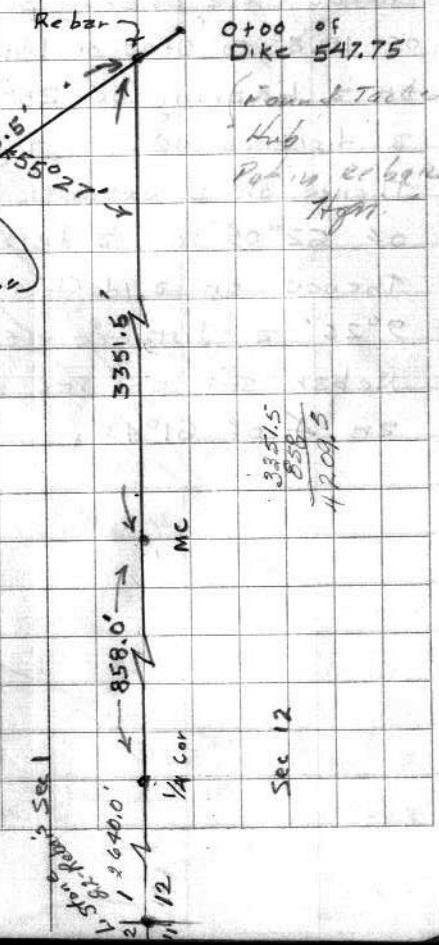
Beginning at The 1/4 cor Between Sec's 1 & 12 I go East using Bearing from fence line a dist of 858.0' To a point where I re-establish old gov't MC., Thence East on Same Line a dist of 3351.5' To The intersection with Gov't control line. The ∡ Between The MC & R-523.6 is 55°27' Dist to R-523.6 is 313.5'

Beginning at The SW Sec Cor of Sec 1 T2N R17E We go East using Bearing from Fence Line a distance of 2640 & set Rebar for position of 1/4 Cor Between Sec 1 & 12 Thence on Same Easterly direction a distance of 858.0' to a point where we re-establish old Gov't M.C. Thence East on same line a distance of 3351.5' To the intersection with gov't control line. the ∡ between the M.C. & R-523.6 is 55°27' distance to R-523.6 is 313.5'

Line Between Sec's 1 & 12 T2N R17E

april 24, 1962

Scale 1" = 200'

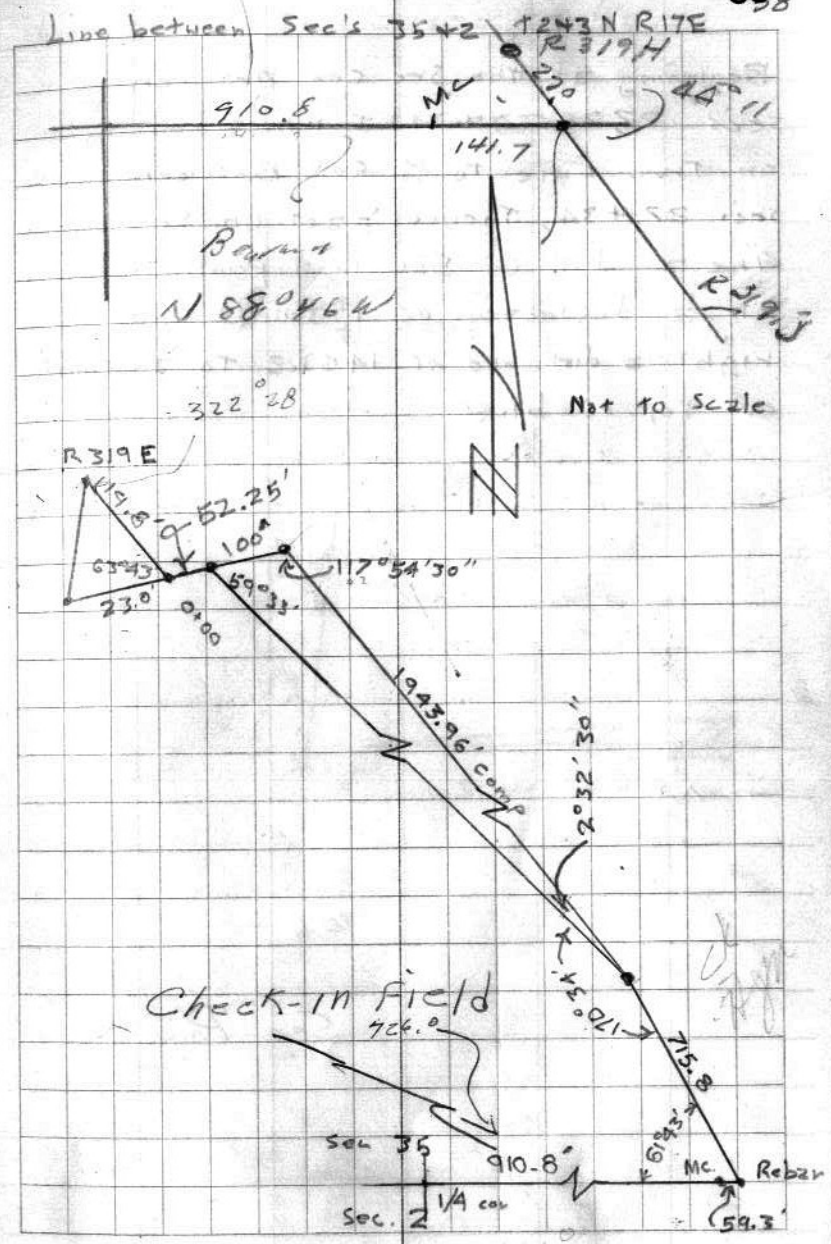


Beginning at The 1/4 cor Between Secs 35 & 2 Thence East a distance of 910.8' To M.C. Thence East on Sec Line a dist of 59.3' set a rebar.

Tie to Control.

Beginning at Gov't control point R319E Thence on a bearing of 322°28' a dist. of 19.8' to 0+00 of Dike 551.1, Thence on a bearing of 258°07'17" (along Dike) a distance of To a point on dike Thence on a deflection ∡ to the right of 62°05'30" a distance of 1943.96' Thence on a deflection ∡ to the right of 9°26' a distance of 715.8 to the Rebar set on Sec Line. And making an ∡ of 61°43'

May 4, 1962

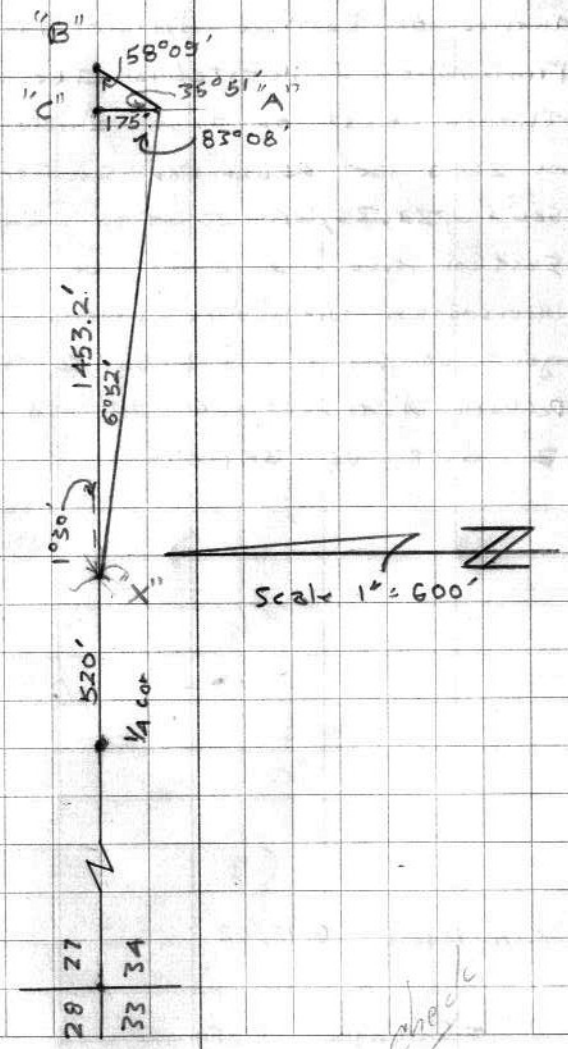


Beginning at the Sec Cor Between Sec's 27, 28, 33 & 34 I run East on True Line to ½ Cor Between Sec's 27 & 34, Thence East on Sec line a dist. of 520' to a point. Thence on a deflection of 1°30' to the right a distance of 1453.2 to a point on top of bluff.

See Page 80

Line between Sec's 27 & 34 T3N R17E

April 19, 1962

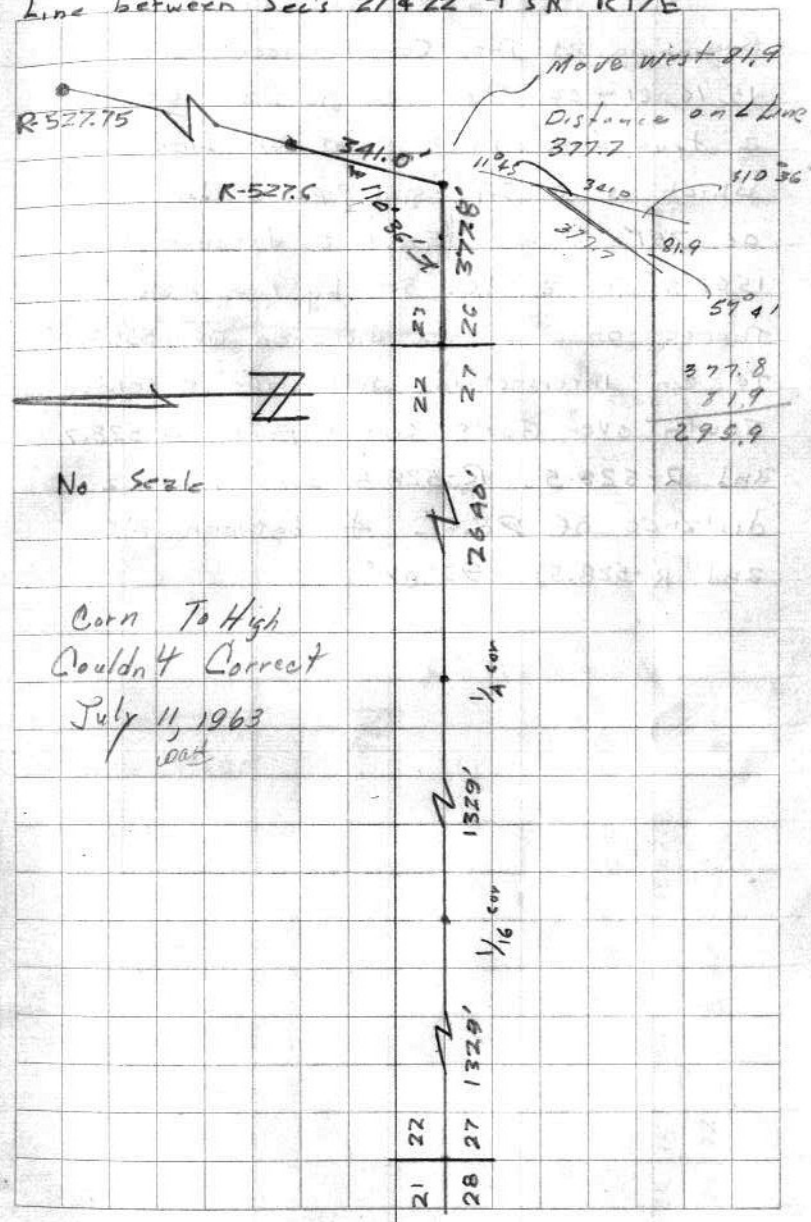


Beginning at The Sec. Cor. Between Sec's 21, 22, 27 + 28 I go East on True Line a dist of 1329' To The 1/16 Cor Thence on East a dist of 1329' To a Point where I reestablish The 1/4 cor. Thence East on True Line, a dist of 2640 set Rebar for Sec Cor Between Sec's 22, 23, 26 + 27 T3N R17E thence East on true line a dist of 377.8' To intersection with Line Extended over gov't control points R-527.75 + R-527.6 Deflection ∡ to left = 69°24' To R-527.6 a dist of 341.0'

Completed 6/12/62

Jim + Wayne Gary

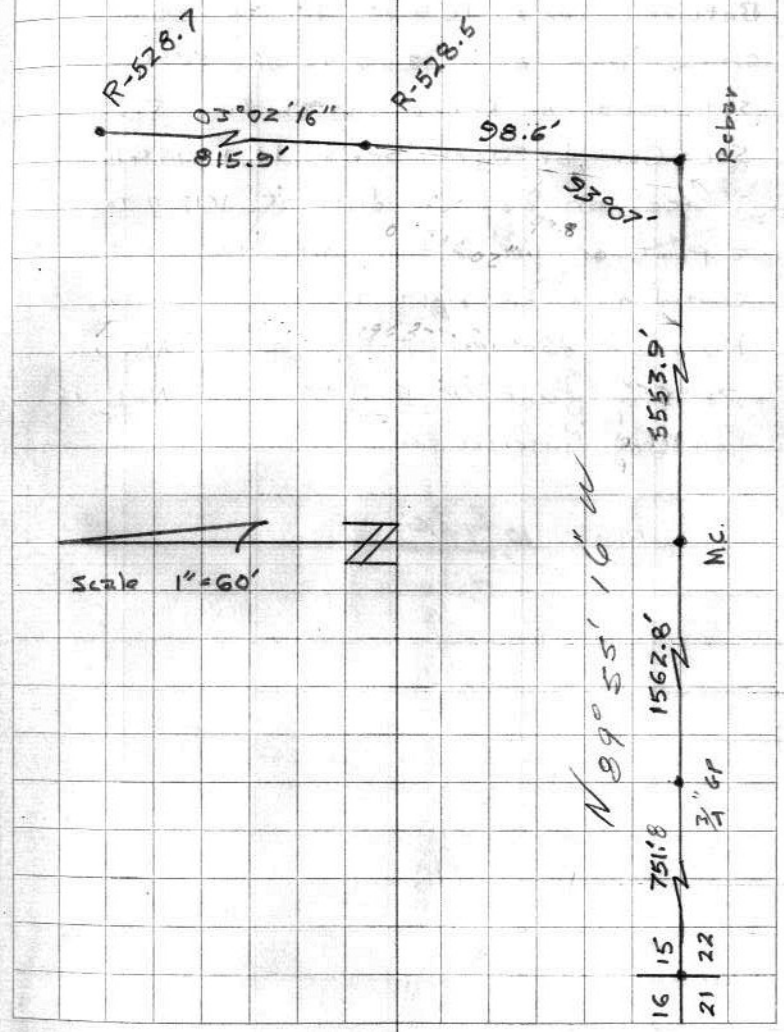
Line between Sec's 27 + 22 T3N R17E



Beginning at The Cor between Sec's 15, 16, 21 + 22 Thence I go East on a true Line to a point on Line which is a 3/4" gas pipe a dist of 751' thence East a distance of 1562.8' To a M.C. Set by Ben Dale Thence on East a distance of 5553.9' To an intersection with Line extended South over Gov't control points R-528.7 and R-528.5. R-528.5 Lies North a distance of 98.6'. ∡ between M.C. and R-528.5 = 93°07"

May 10, 1962

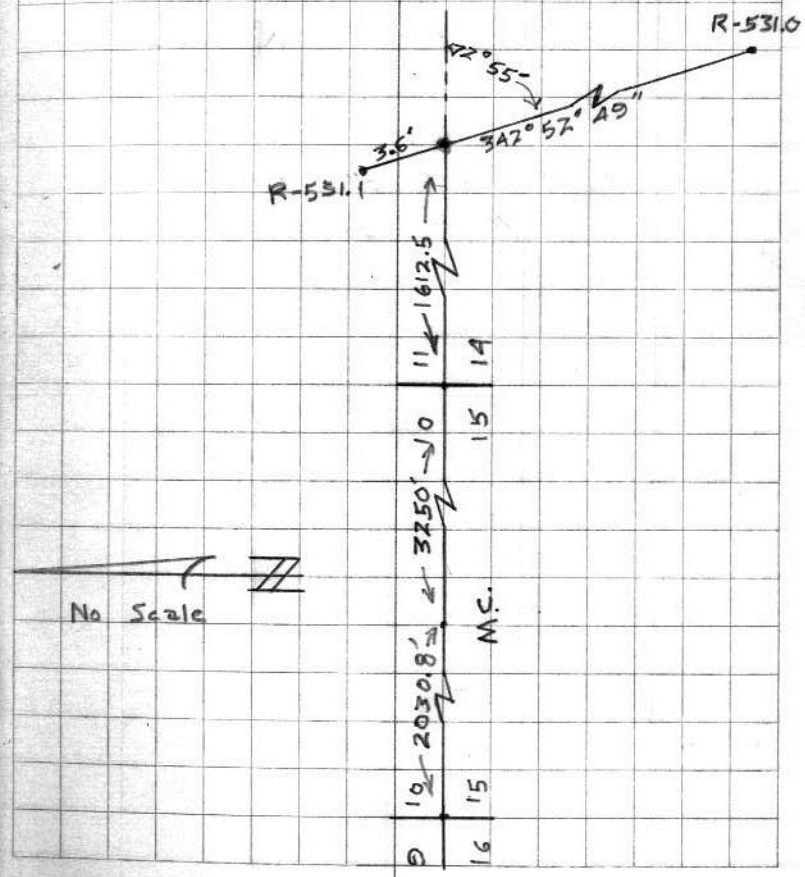
Line between Sec's 15 & 22 T3N R17E



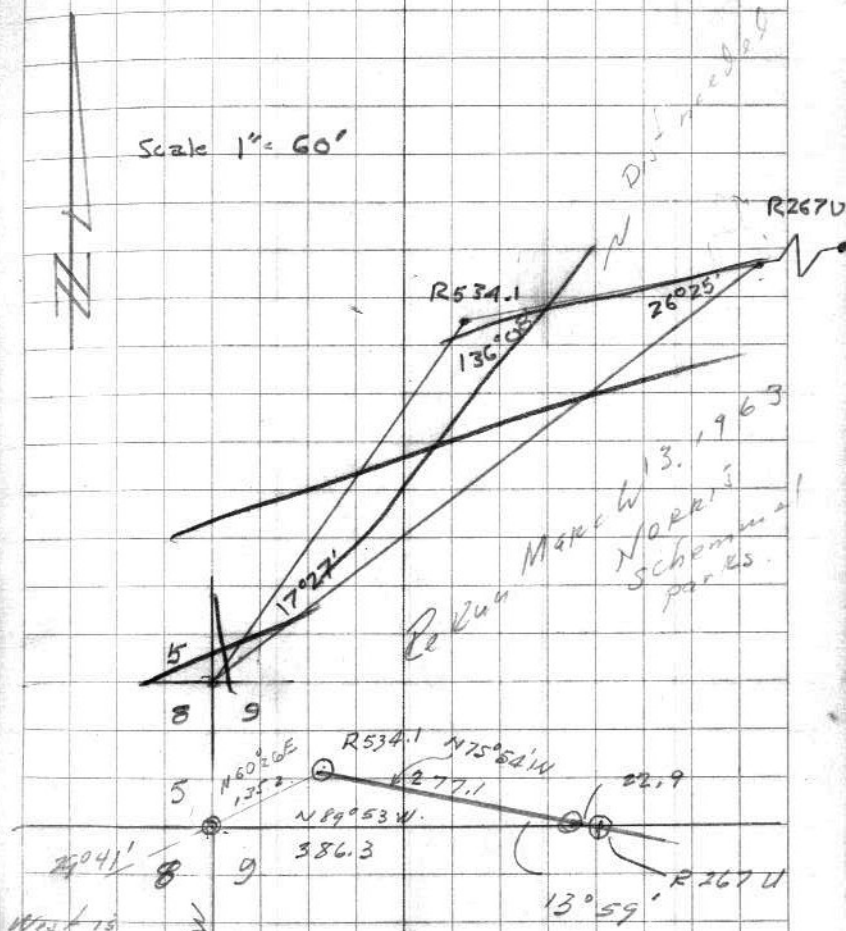
Beginning at Sec Cor between Sec's 9, 10, 15, & 16 Thence East a distance of 2030.8 To gov't Mc Between Sec's 10 & 15 Thence East on a True Line a dist. of 3250 set rebar in fence not on line for Sec Cor between Sec's 10, 11, 14 & 15 Thence on East a dist. of 1612.5 To a Point of intersection with The U.S. Gov't Control Line on right bank of Missouri River. ∡ Between R-531.1 and M.C. is 72°55'. Point R-531.1 is 3.6' North of Point of intersection

May 10, 1962

Line between Sec's 10 & 15 T 3 N R 17 E



Line Between Sec's 5 + 8 T3N R17E

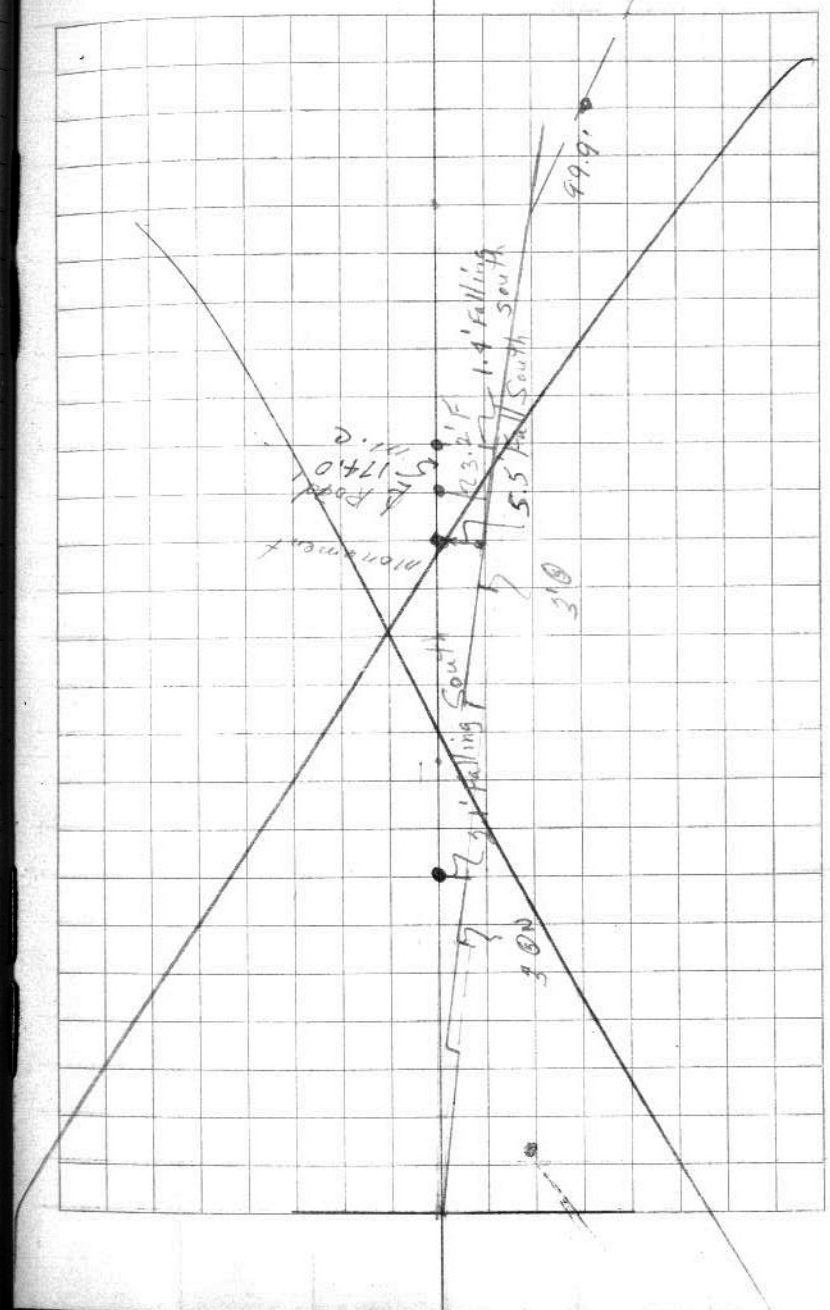


Rerun Mark W 13, 1963 Norris Schemmel parks.

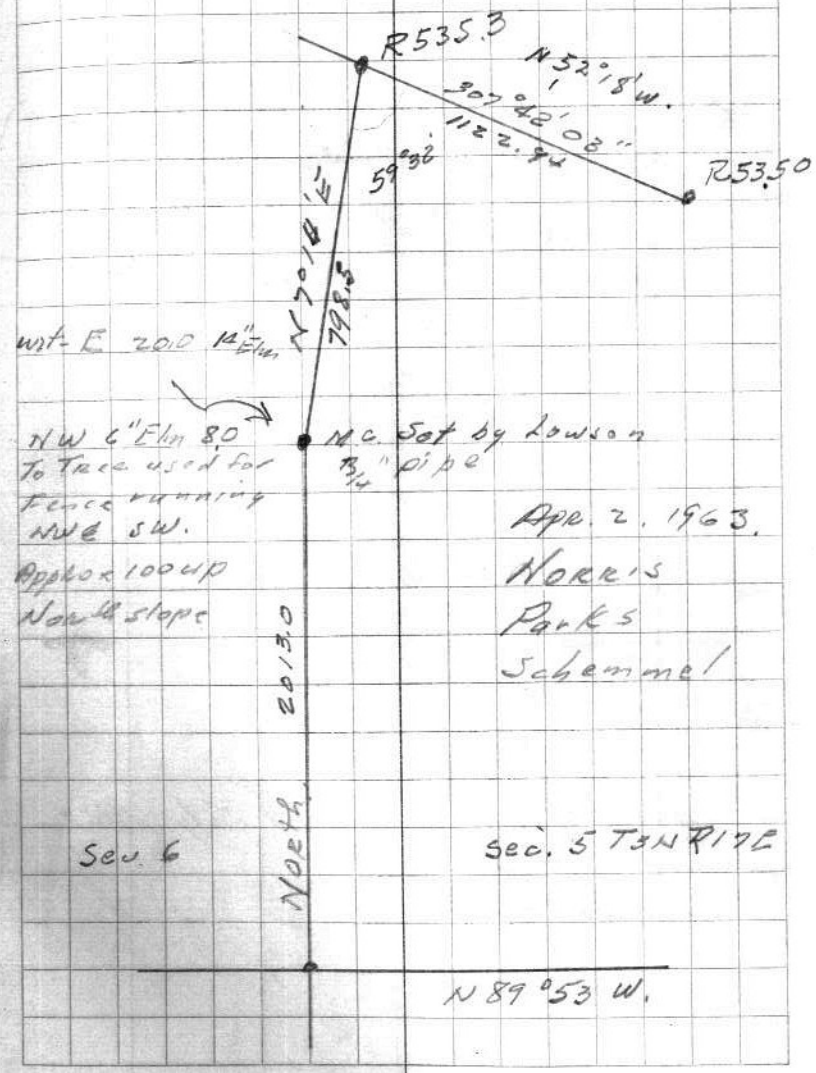
West is very Rough and Timber

Didn't put in Rod as intersection point fall in Wash. To use offset would be necessary But 22.9 NW. on Line between Conc. Markers.

HPM.

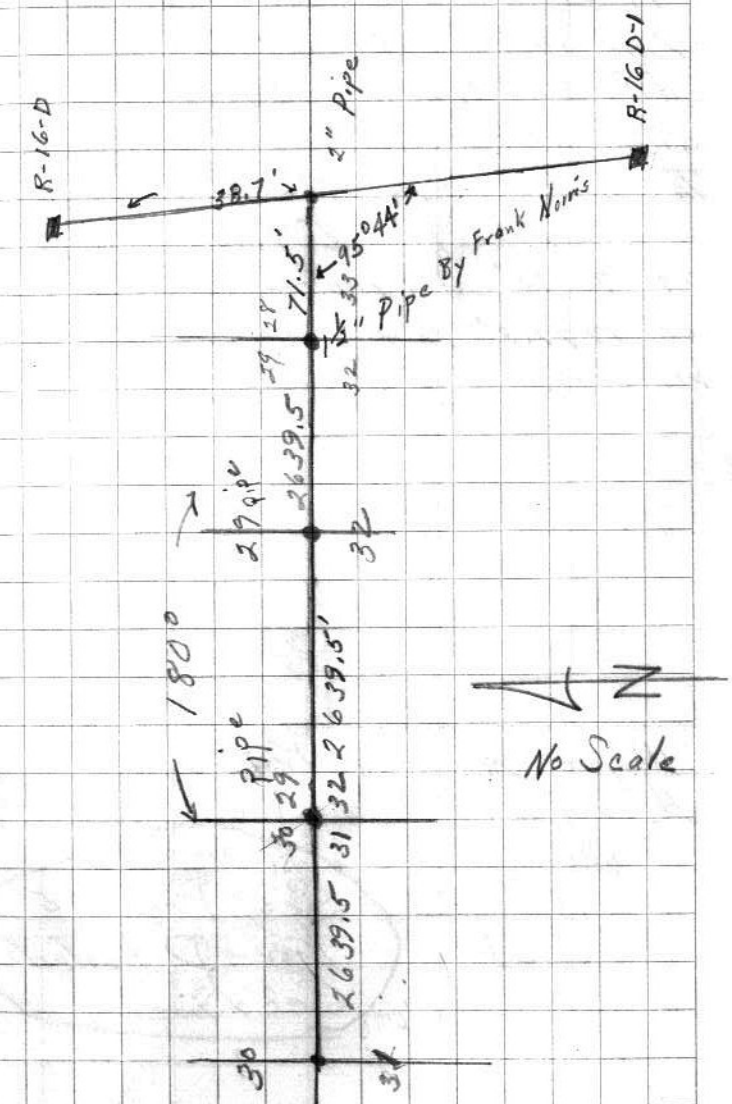

49.9'
1.4' Falling South
5.5' Fall South
3.2' F
174.0 m.c
Monument
3' Ⓢ
3.1' Falling South
3 ⊗N

North of Sec. 5 & 6.
T3N R17E



Humphrey ⊼ 9 July 1963
Shaw - chainman
Schemmel - chainman

Line Between Sec's 29 & 32 T2N R18E



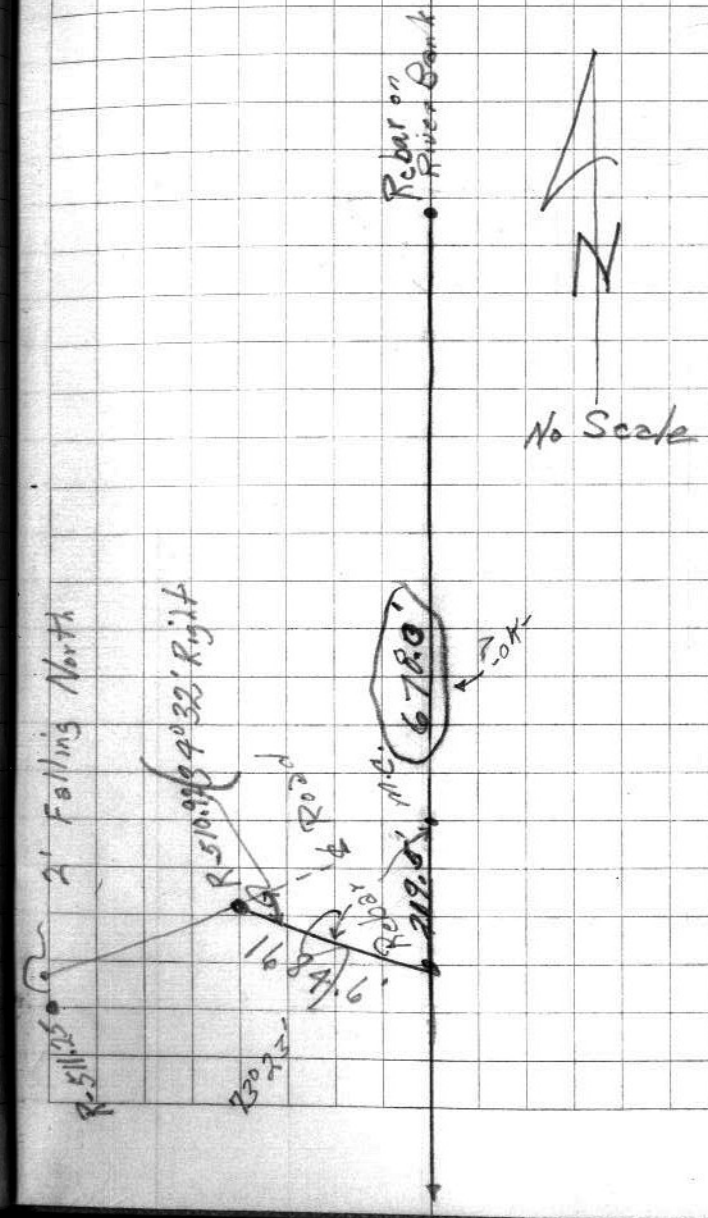
Retied Sec Line By using R-511.25 & Running a ~~straight~~ line over R-510.95 (R-510.92). I Turn a defliction Angle of 34°32' Right and run a distance of 1684.6' To a Rebar in The ℄ of Road & Sec Line the I Turn an Angle of 73°23' and running a distance of 1777.3' To a rebar on the river Bank & Sec Line

Wayne ⊼
Harold
Drake
Parks
Shemmel

Retied
Nov 30 1962

See Page 25
For Detailed
Sec Line

Line Between Sec ~~25 & 26~~ 26 & 27
T1N R18E Running North
To River



Set All Points on Line

Beginning at R-507.1 we run a Line to R-506.81. Then with a defliction Angle of 12°14' Right we measure a distance of 1464.6' to a rebar we set on the Kanas & Nebraska state Line. Thence with a defliction angle of 98°28' to the Right we measure a distance of 3779.8' the a pipe we set for the 1927 M.C.

See Page 77

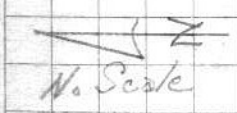
See Page 23 For Detail on Line

Completed 4 Dec 1962

Norris
Humphrey
Parks
Shemmel

State Line Between Kansas & Nebr.

3369.7
~~3777.8'~~
~~121.3~~
~~3658.5~~



M.C. 1927

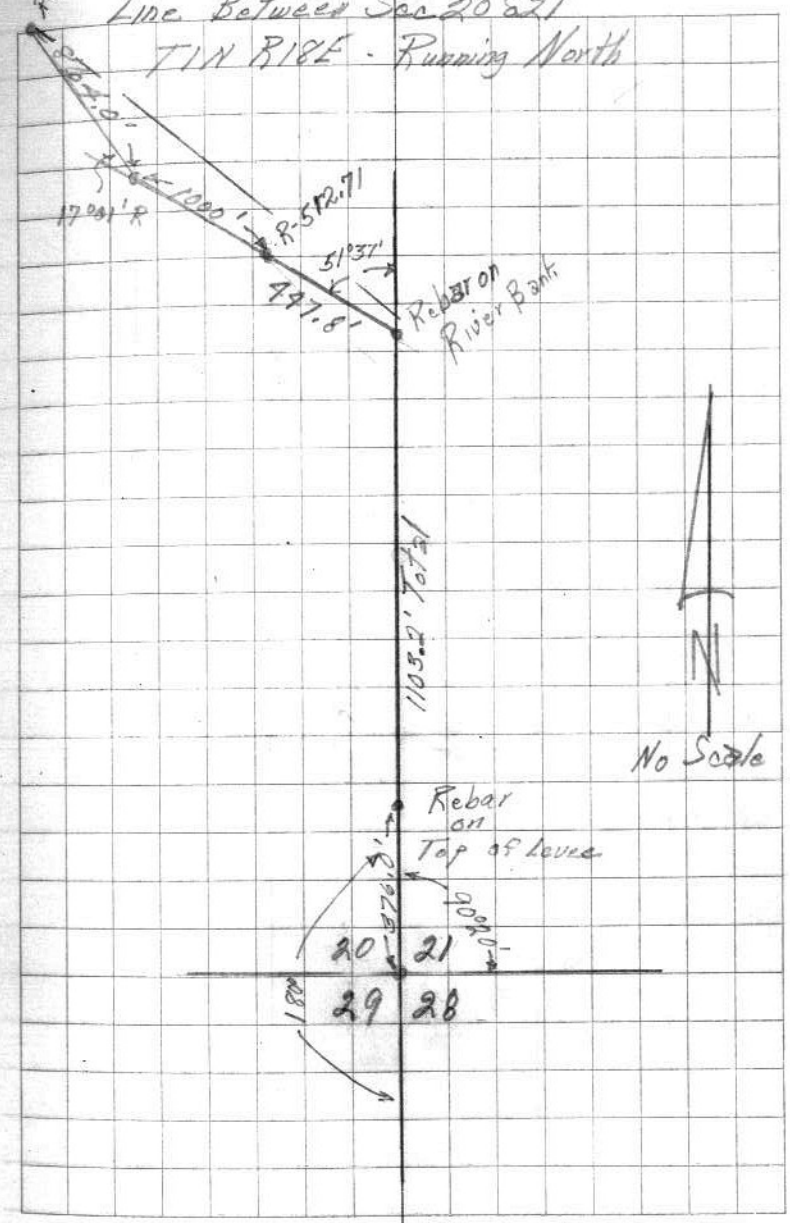
To Complete Le move 121.3 from Iron on Back This put post in creek So put L Iron at 33.0 west for Witness

Old Tie
See Page 28

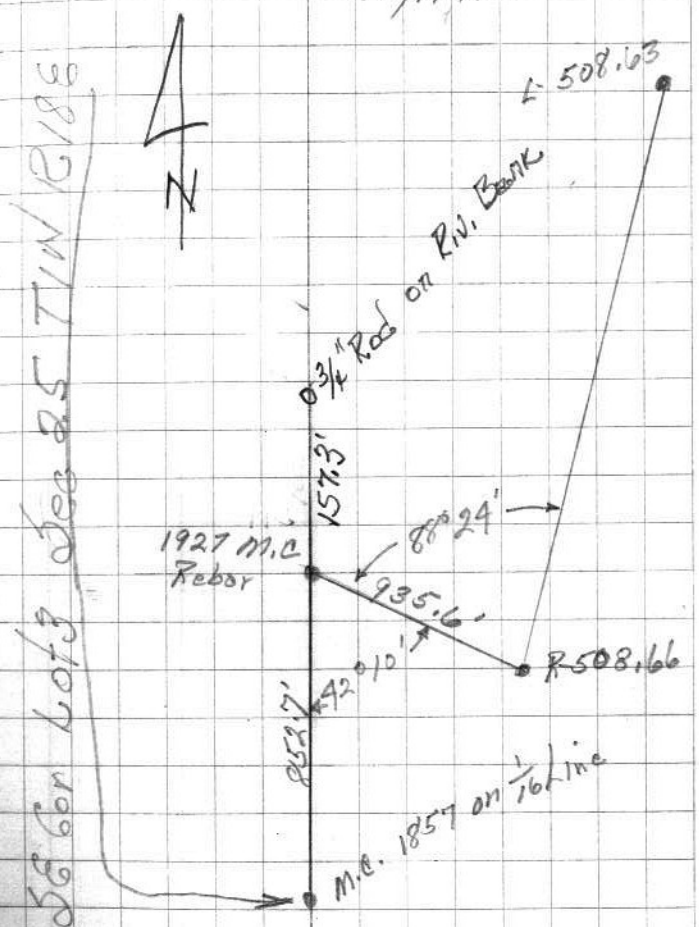
Humphrey
Shemmel
Norris
Parks

Retied
4 Dec '62

Line Between Sec 20 & 21
T1N R18E - Running North

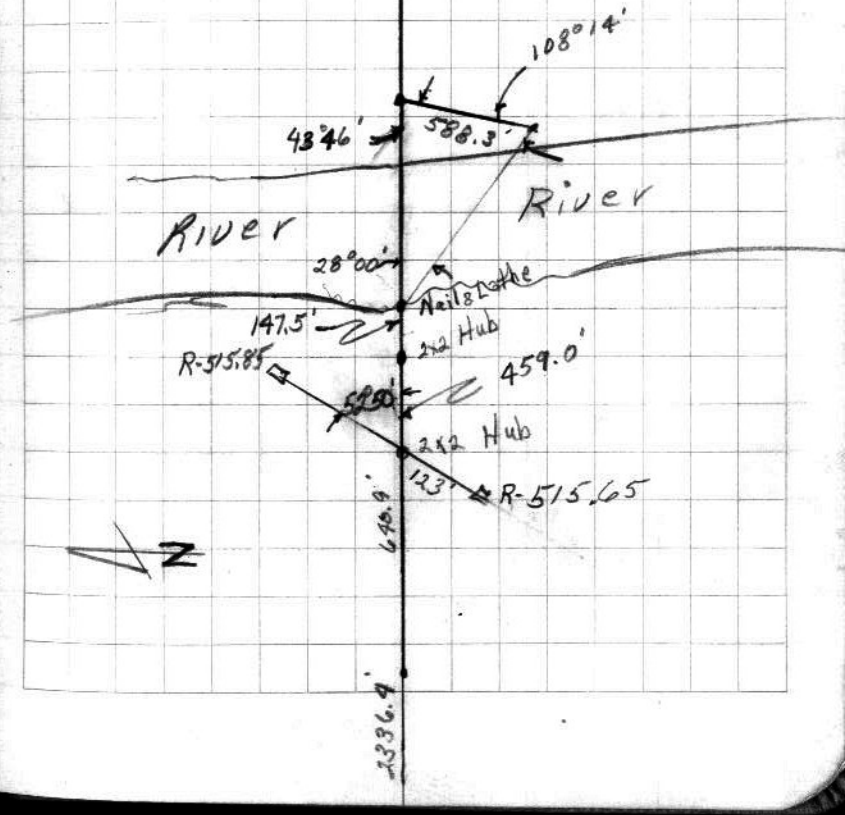


July 19, 1962


SE Cor Lot 3 Sec 25 T1N R18E
N
L 508.63
3/4" Rod on Riv. Bank
157.3'
88°24'
1927 M.C
Rebar
935.6'
R 508.66
42°10'
852.7'
M.C. 1857 on 1/16 Line

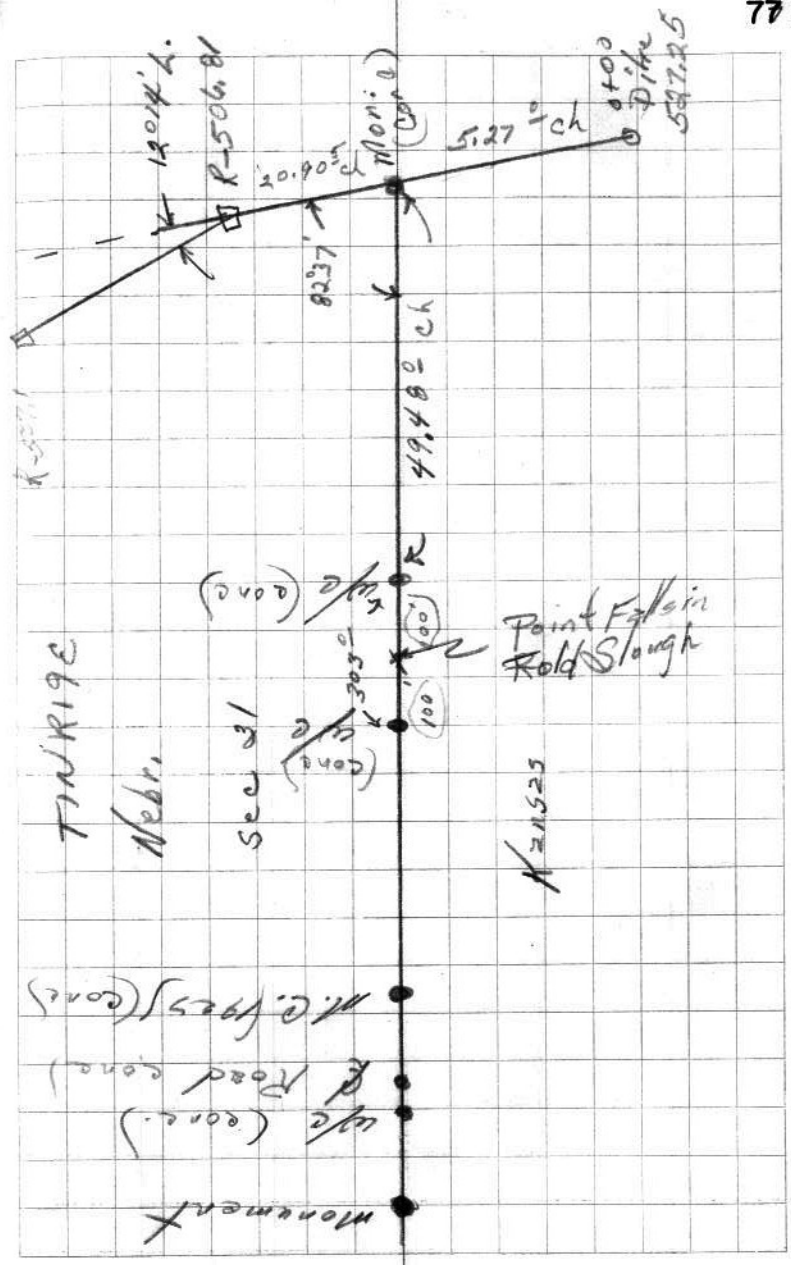
2' (S) South

∡ = 52°50' from R-515.85 - Intersect Point - 2x2 Hubon Bank & Across River



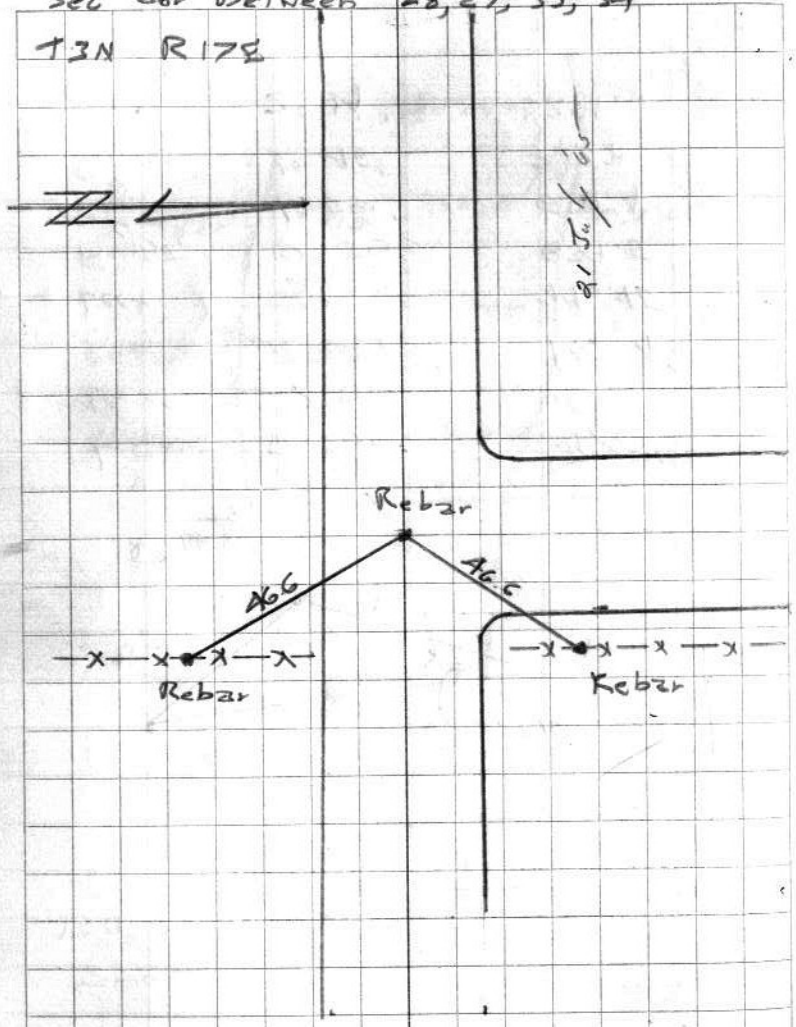
Humphrey
Larson - chairmen
Cunningham chairman

April 18-19-20, 1966



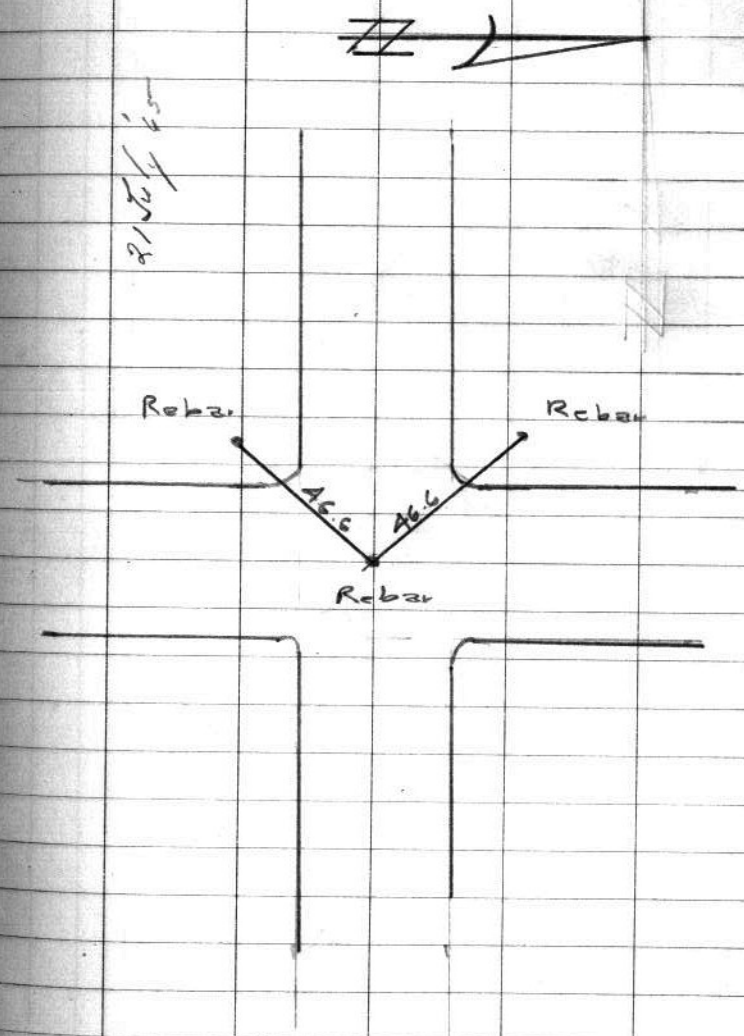
Sec Cor Between 28, 27, 33, 34

T3N R17E



Sec Cor Between 28, 29, 32, & 33

T3N R17E



40° 37'

From page 39

Line A, B Defl 40° 37' Lt. To gov't point.

27° 15'
130° 03'

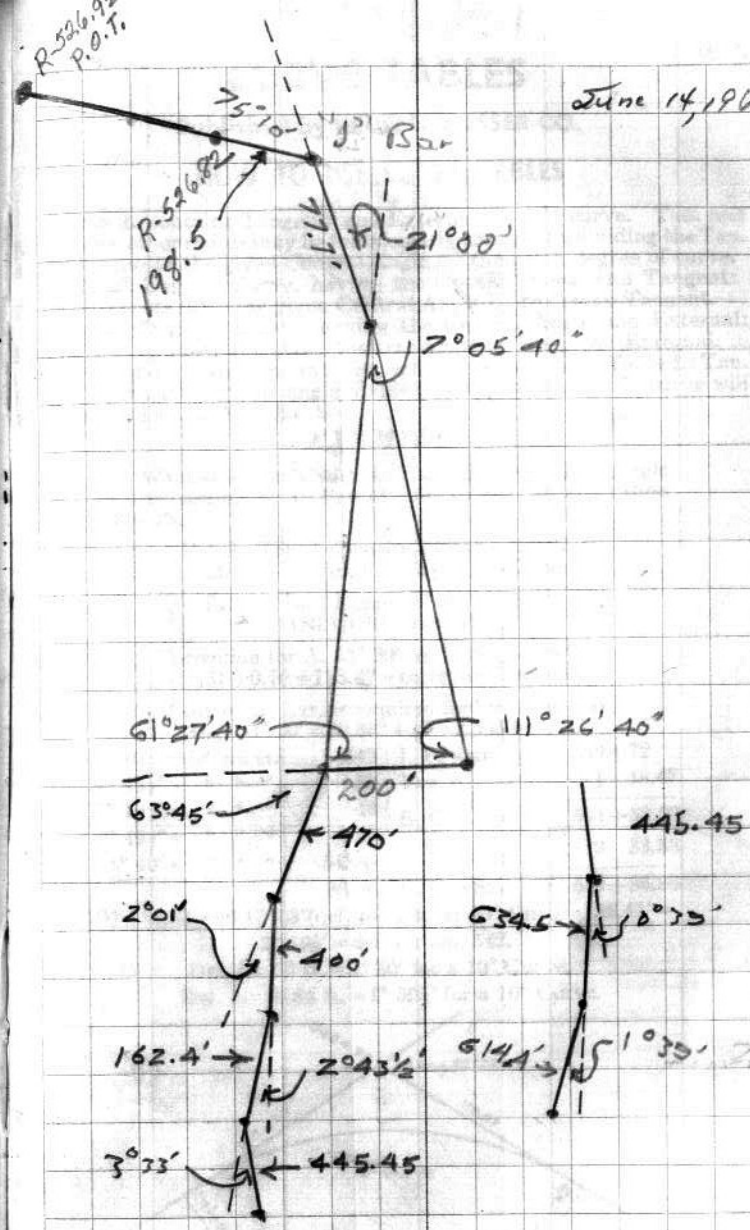
Sin 22° 42' : 100 :: Sin 130° 03' : x
385906 .765483

$$\frac{765483 \times 100}{385906} = 198.3$$

Deflection ∡		Dist	
Left	63° 45'	470'	
Left	2° 01'	400'	
Rt	2° 43½'	162.4'	
Left	3° 33'	445.45	
Right	0° 39'	634.5	
Right	1° 39'	614.4	28/33 27/34 Sec Cor
Right	1° 46'	327.3	
Left	2° 14'	5281.0	Sec Cor 24/32 28/33

T3N., R17E

June 14, 1962



+ 2.5

211 2c
165°14'

347°21
76 05
271°16'

355 60
271°16'
188°44'W

CURVE TABLES

Published by KEUFFEL & ESSER CO.

HOW TO USE CURVE TABLES

Table I. contains Tangents and Externals to a 1° curve. Tan. and Ext. to any other radius may be found nearly enough, by dividing the Tan. or Ext. opposite the given Central Angle by the given degree of curve.

To find Deg. of Curve, having the Central Angle and Tangent: Divide Tan. opposite the given Central Angle by the given Tangent.

To find Deg. of Curve, having the Central Angle and External: Divide Ext. opposite the given Central Angle by the given External.

To find Nat. Tan. and Nat. Ex. Sec. for any angle by Table I.: Tan. or Ext. of twice the given angle divided by the radius of a 1° curve will be the Nat. Tan. or Nat. Ex. Sec.

EXAMPLE

Wanted a Curve with an Ext. of about 12 ft. Angle of Intersection or I. P. = 23° 20′ to the R. at Station 542+72.

Ext. in Tab. I opposite 23° 20′ = 120.87
120.87 ÷ 12 = 10.07. Say a 10° Curve.

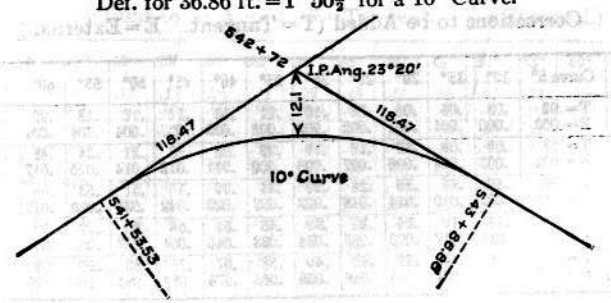
Tan. in Tab. I opp. 23° 20′ = 1183.1
1183.1 ÷ 10 = 118.31.

Correction for A. 23° 20′ for a 10° Cur. = 0.16
118.31 + 0.16 = 118.47 = corrected Tangent.

(If corrected Ext. is required find in same way)
Ang. 23° 20′ = 23.33° ÷ 10 = 2.3333 = L. C.

2° 19½′ = def. for sta.	542	I. P. = sta.	542+72
4° 49½′ = " " "	+50	Tan. =	1 .18.47
7° 19½′ = " " "	543	B. C. = sta.	541+53.53
9° 49½′ = " " "	+50	L. C. =	2 .33.33
11° 40′ = " " "	543+		
	86.86	E. C. = Sta.	543+86.86

100 − 53.53 = 46.47 × 3′(def. for 1 ft. of 10° Cur.) = 139.41′ = 2° 19½′ = def. for sta. 542.

Def. for 50 ft. = 2° 30′ for a 10° Curve.

Def. for 36.86 ft. = 1° 50½′ for a 10° Curve.