

STREET IMPROVEMENT DISTRICT NO. 54 MANDAN, NORTH DAKOTA

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of North Dakota.
George J. Toman
Date 8-23-76 Reg. No. 185



AS BUILT

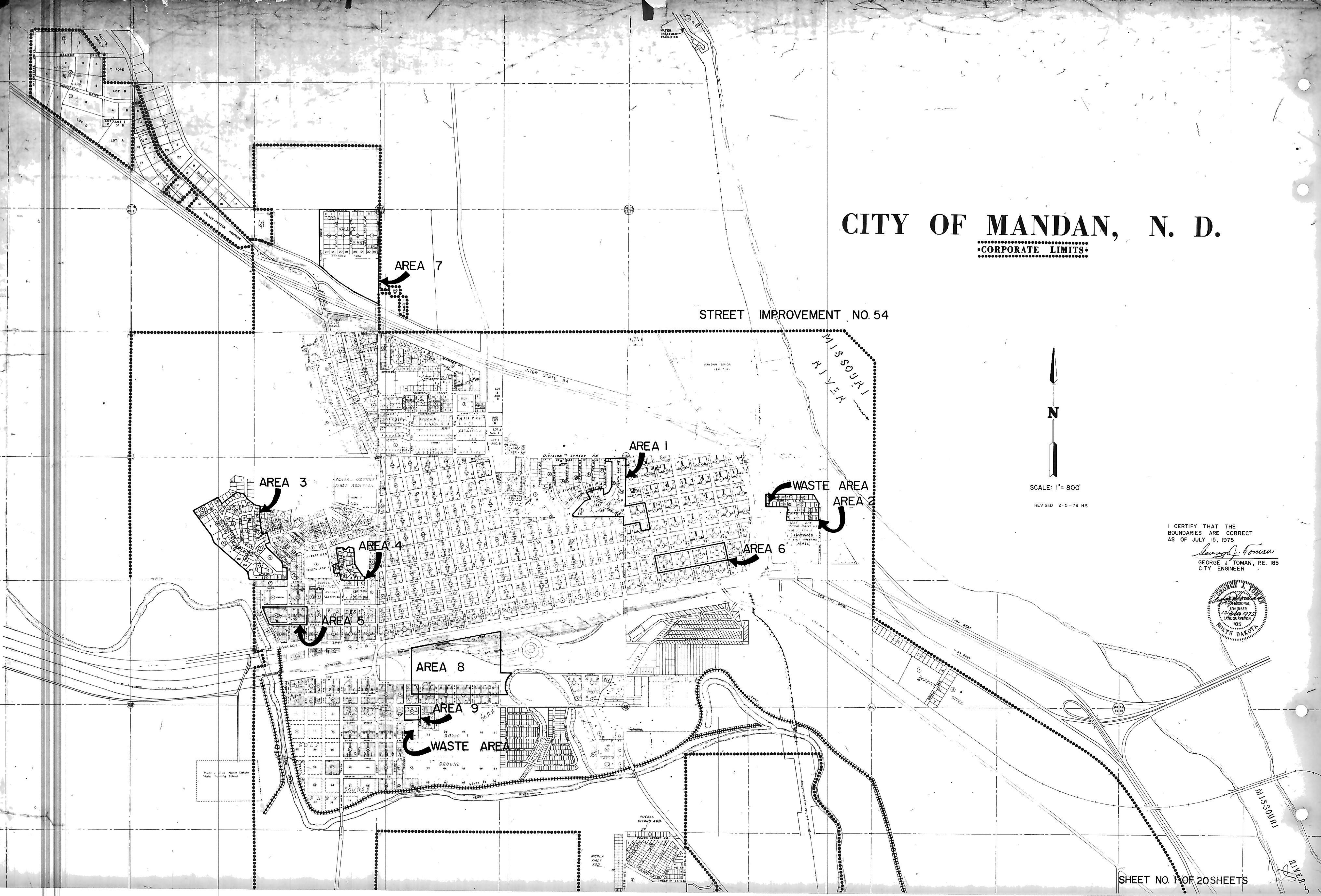
*TOMAN ENGINEERING CO.
CONSULTING ENGINEERS*

JUNE 1976

*MANDAN
NORTH DAKOTA*

CITY OF MANDAN, N. D.

•CORPORATE LIMITS•



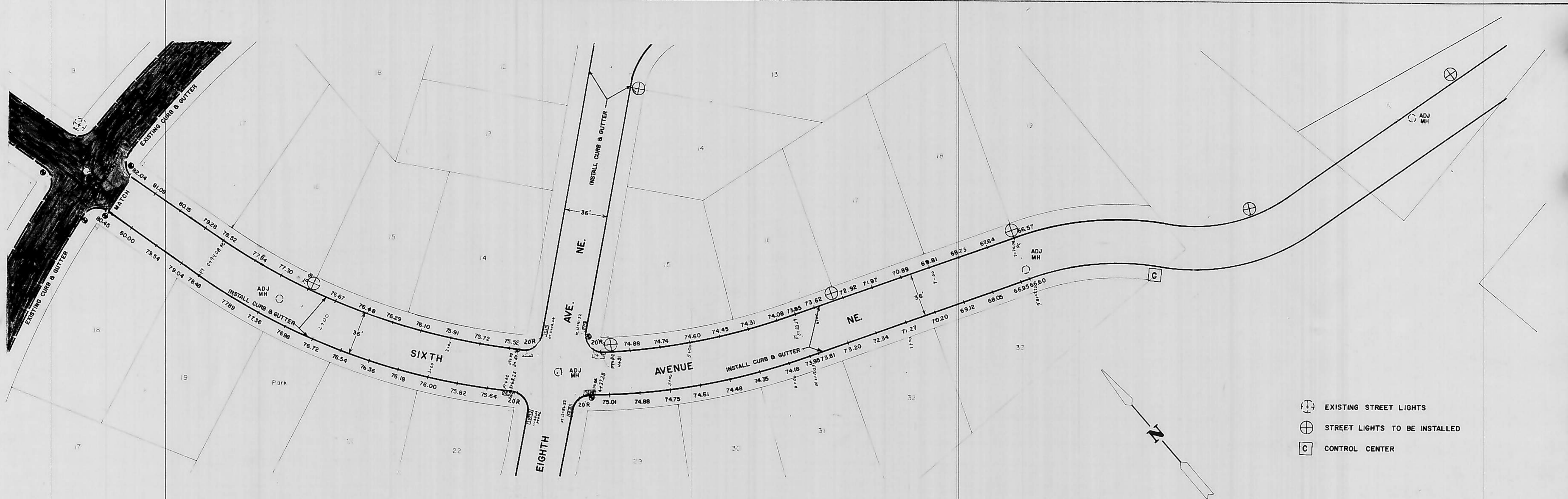
STREET IMPROVEMENT NO. 54



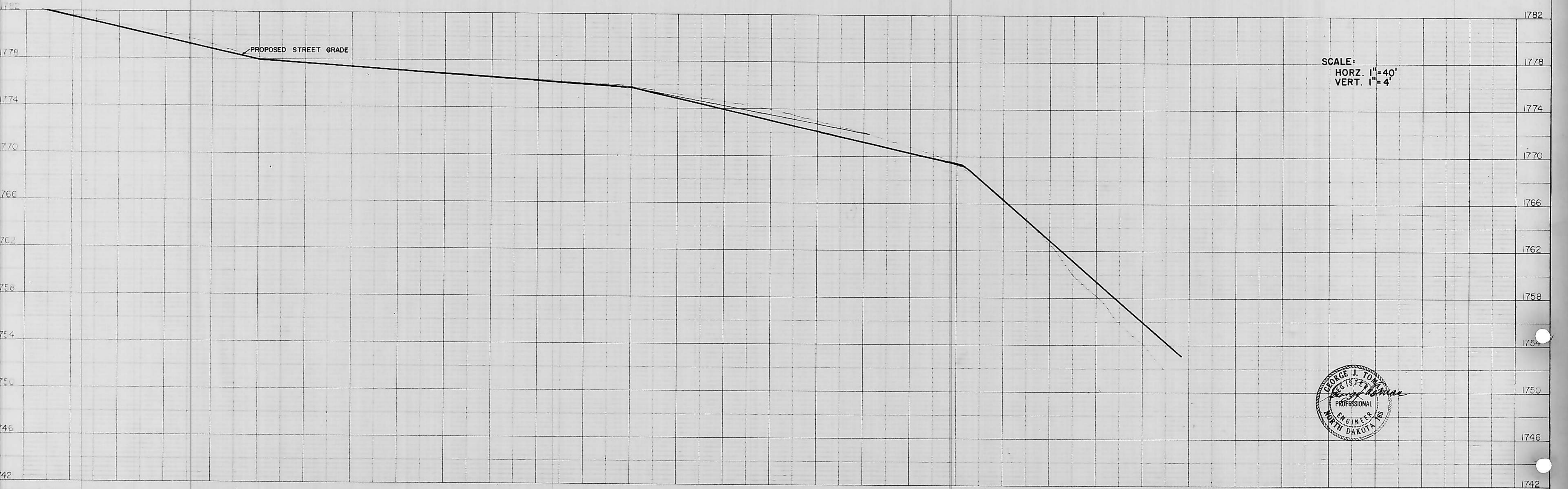
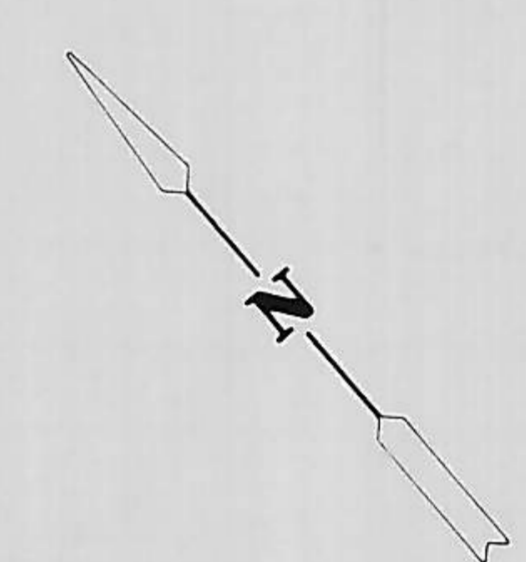
SCALE: 1" = 800'
REVISED 2-5-76 HS

I CERTIFY THAT THE BOUNDARIES ARE CORRECT AS OF JULY 15, 1975
George J. Toman
GEORGE J. TOMAN, P.E. 185
CITY ENGINEER





- ⊕ EXISTING STREET LIGHTS
- ⊕ STREET LIGHTS TO BE INSTALLED
- ⓐ CONTROL CENTER

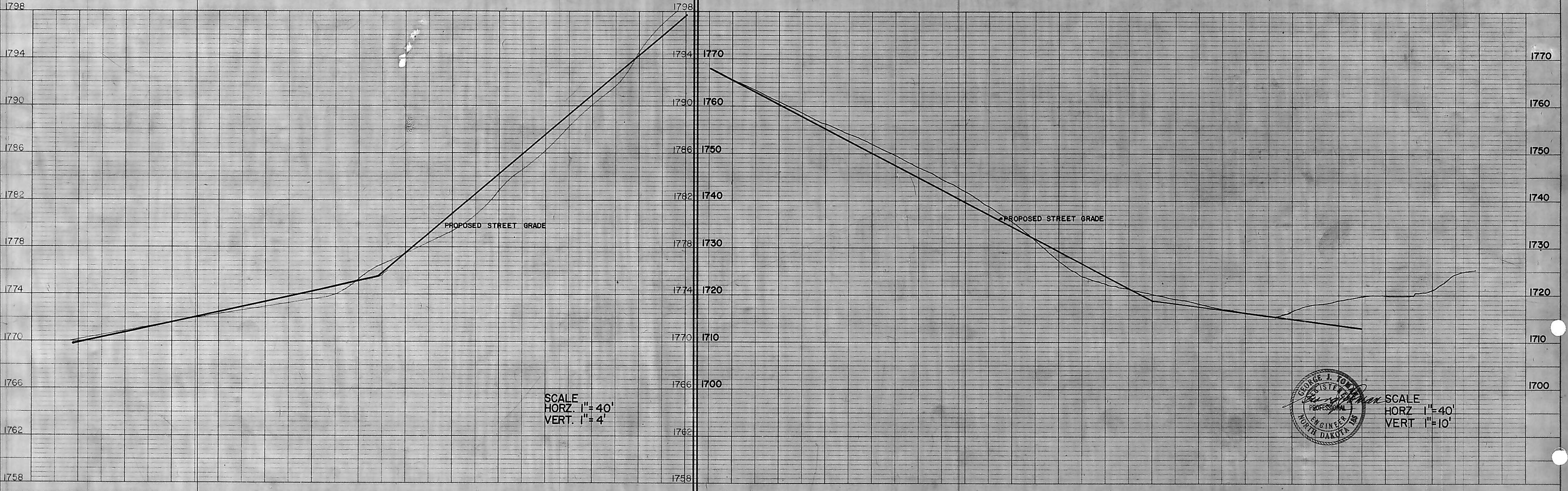
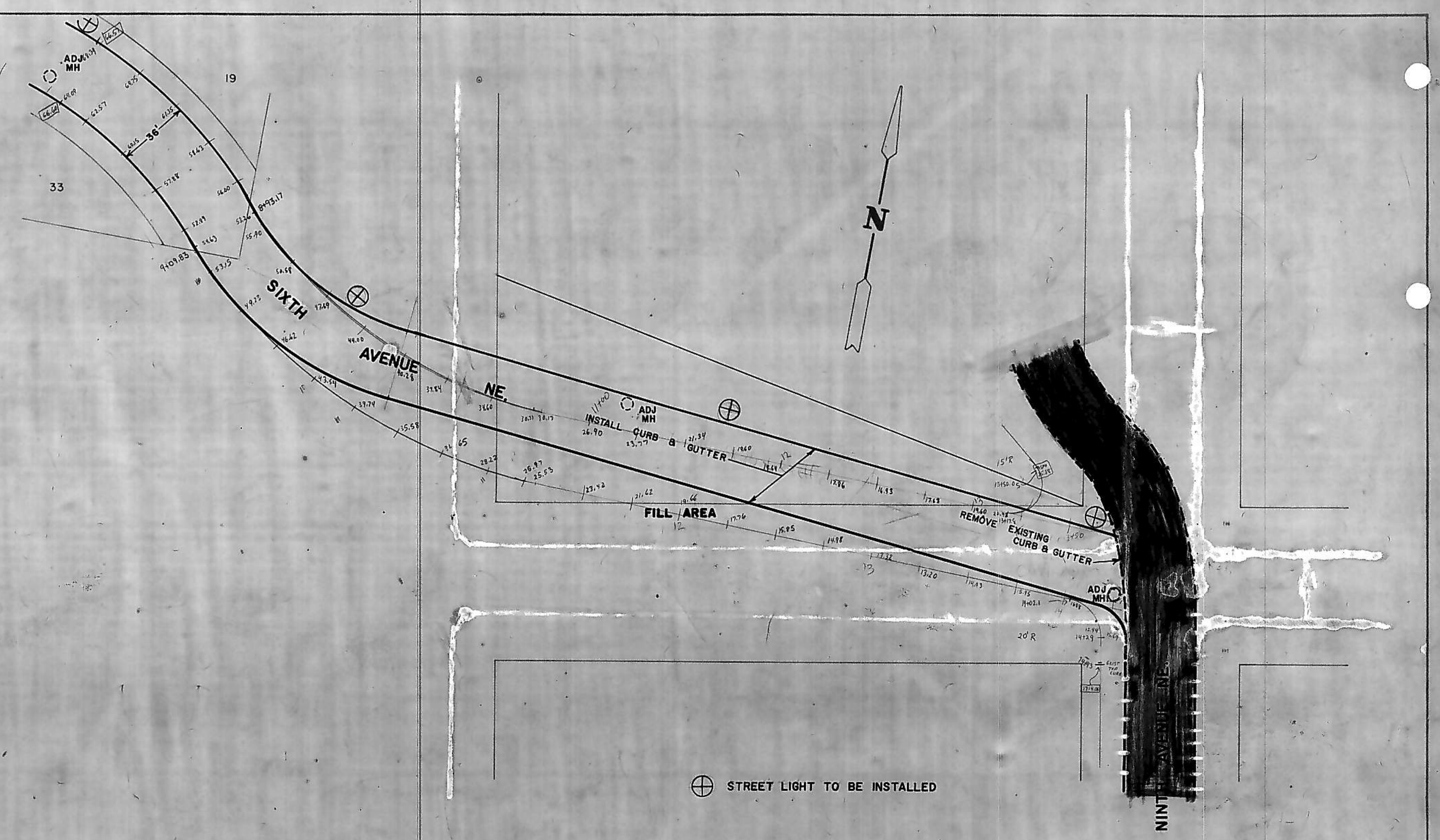
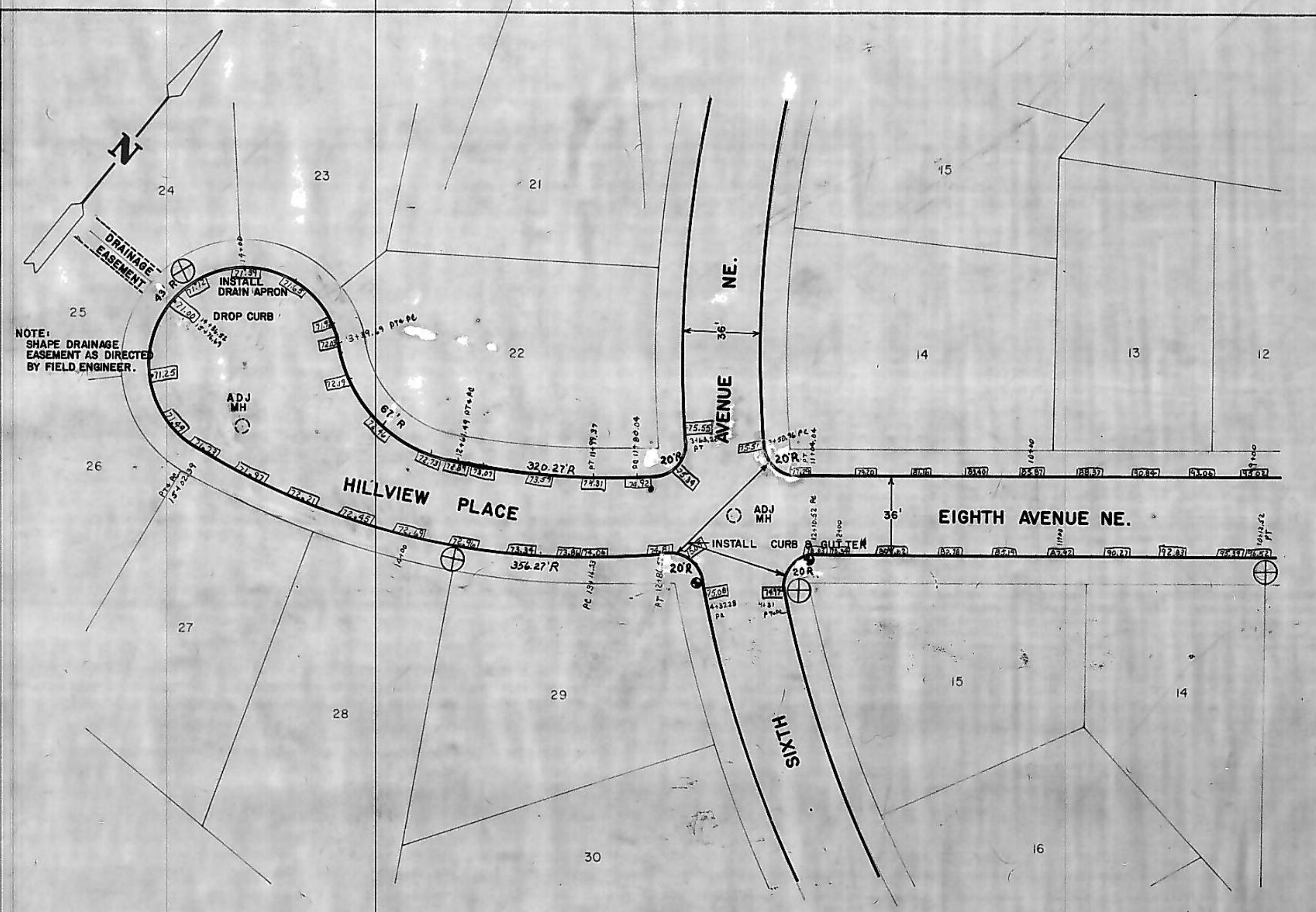


SCALE:
 HORZ. 1"=40'
 VERT. 1"=4'



PLAN
 SURVEYED
 PLOTTED
 NOTE BOOK ALIGNMENT CHECKED
 NO. OF WATER CHECKED

PROFILE
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 PLOTTED
 NOTE BOOK GRADES CHECKED
 NO. OF WATER CHECKED

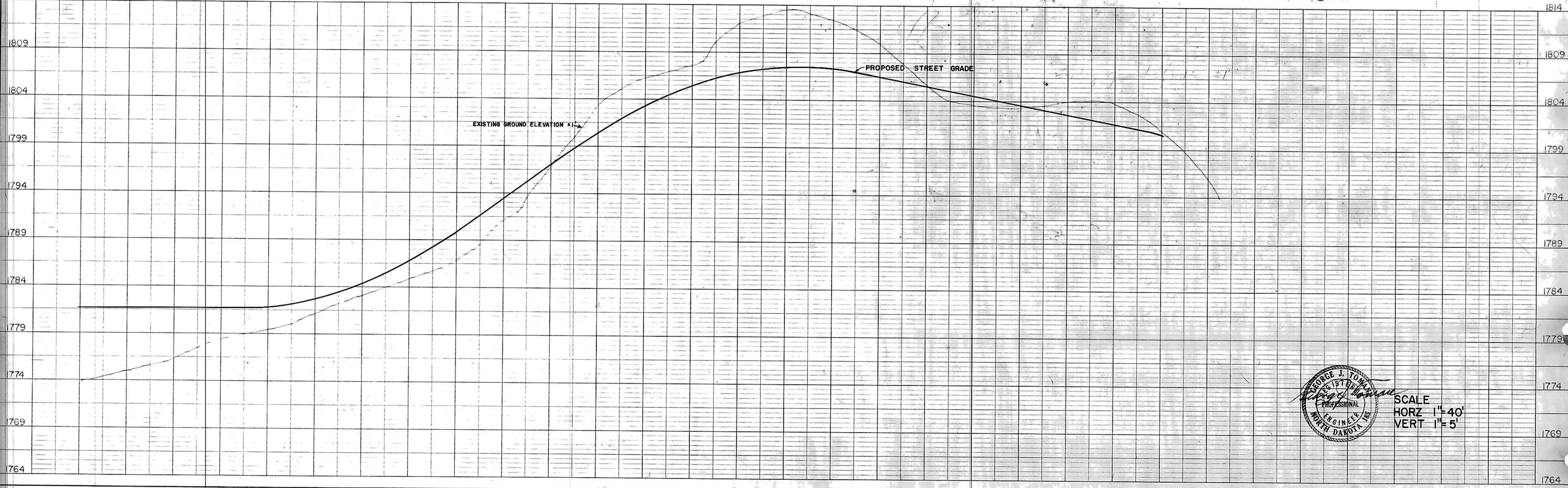
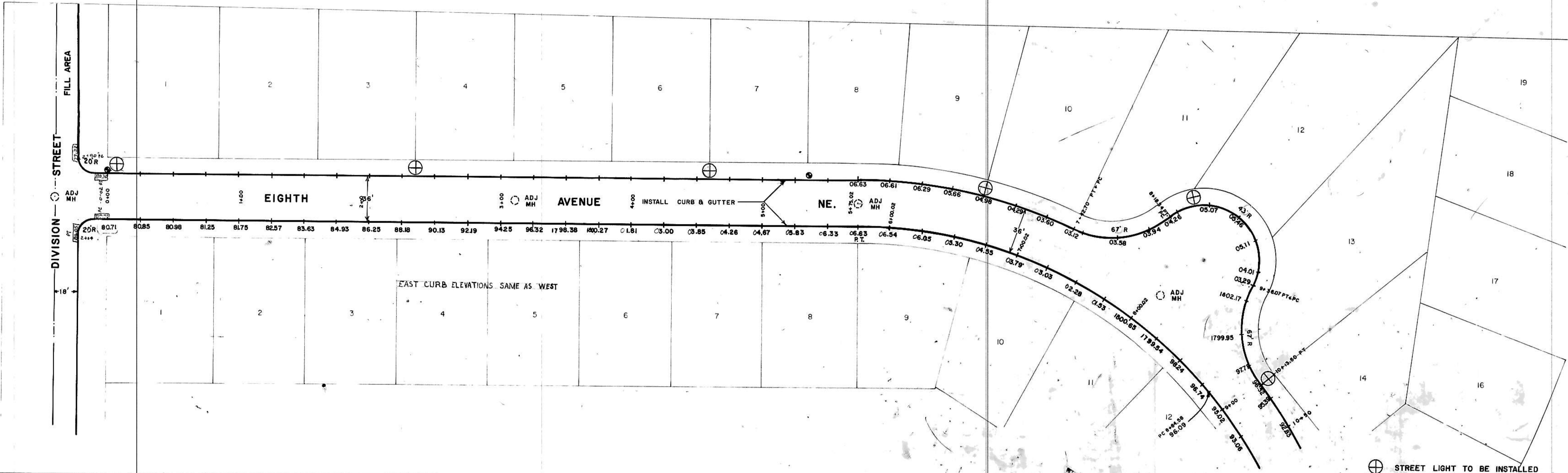
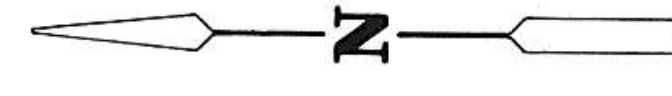


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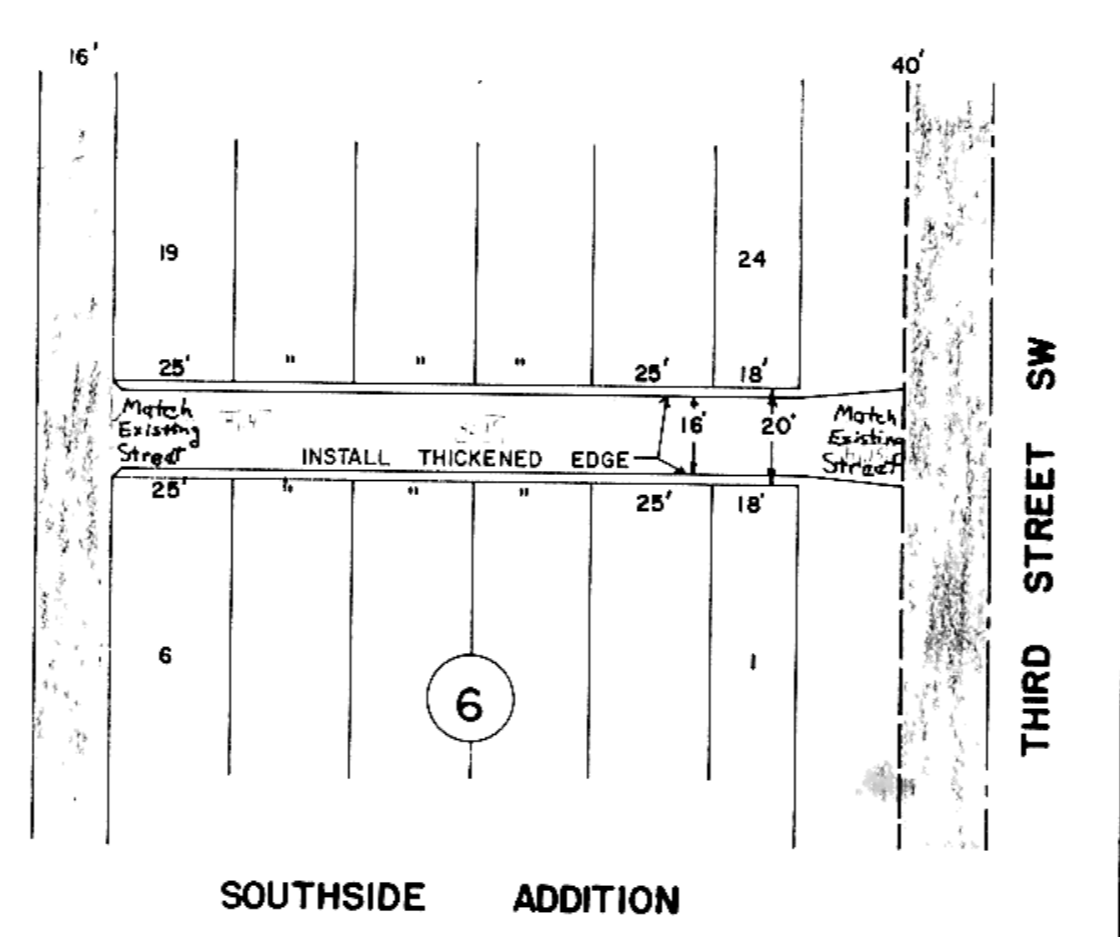
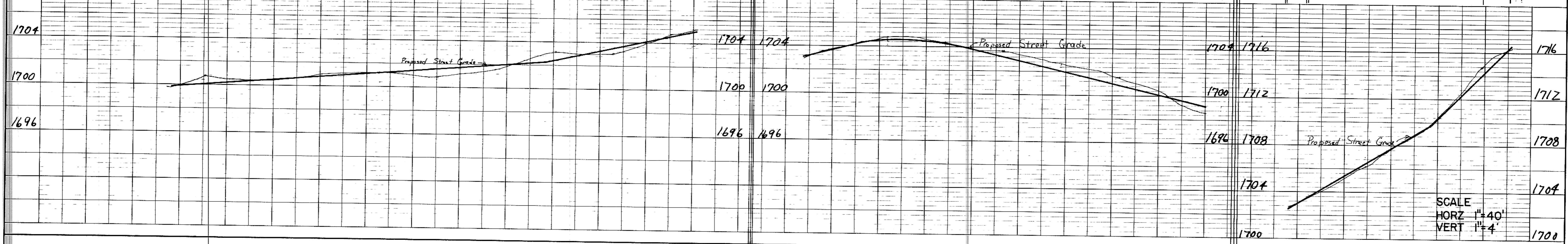
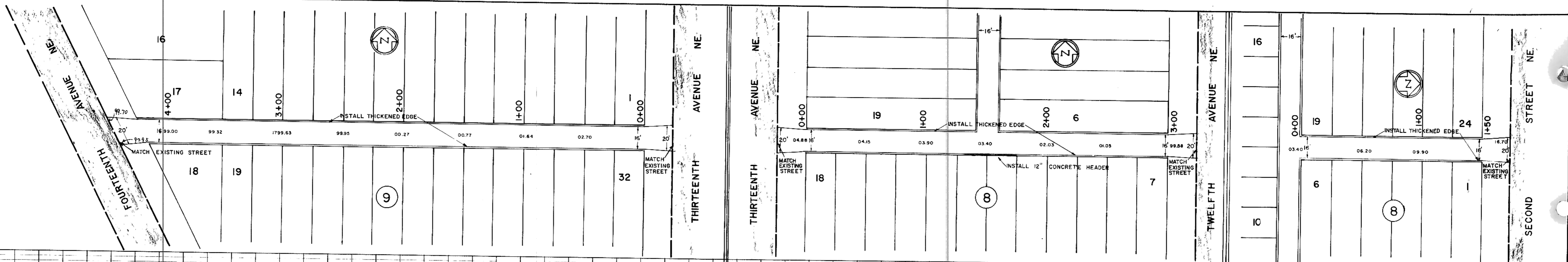
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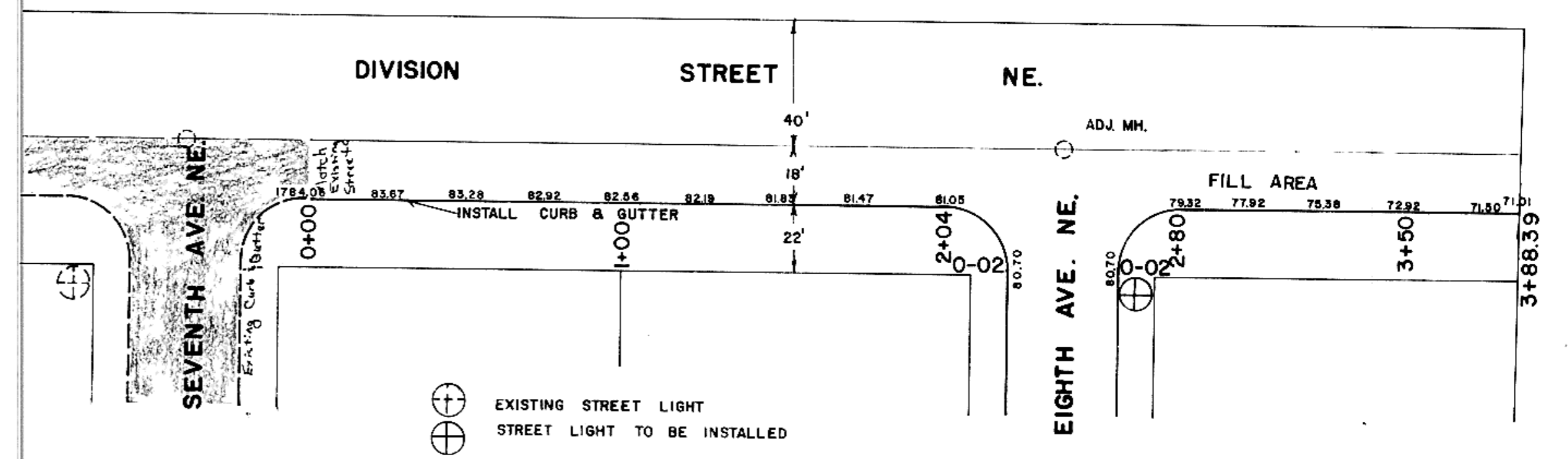
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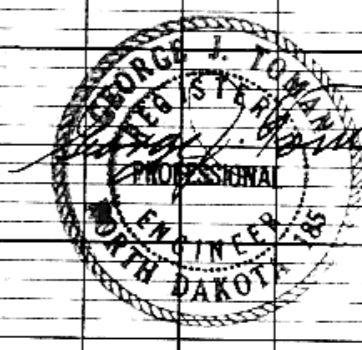
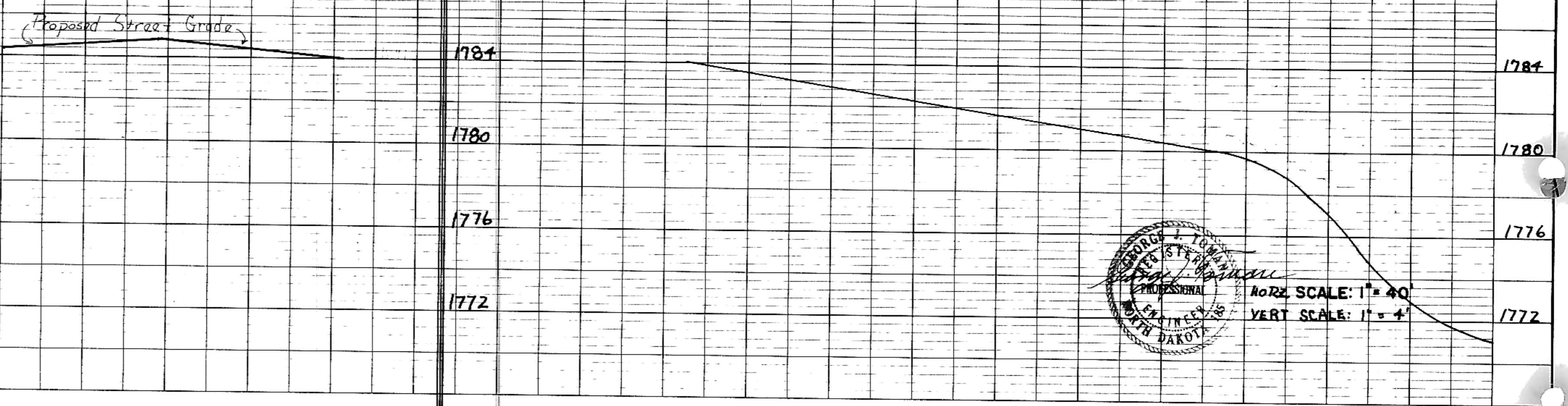
SCALE
 HORZ 1"=40'
 VERT 1"=5'



SOUTHSIDE ADDITION

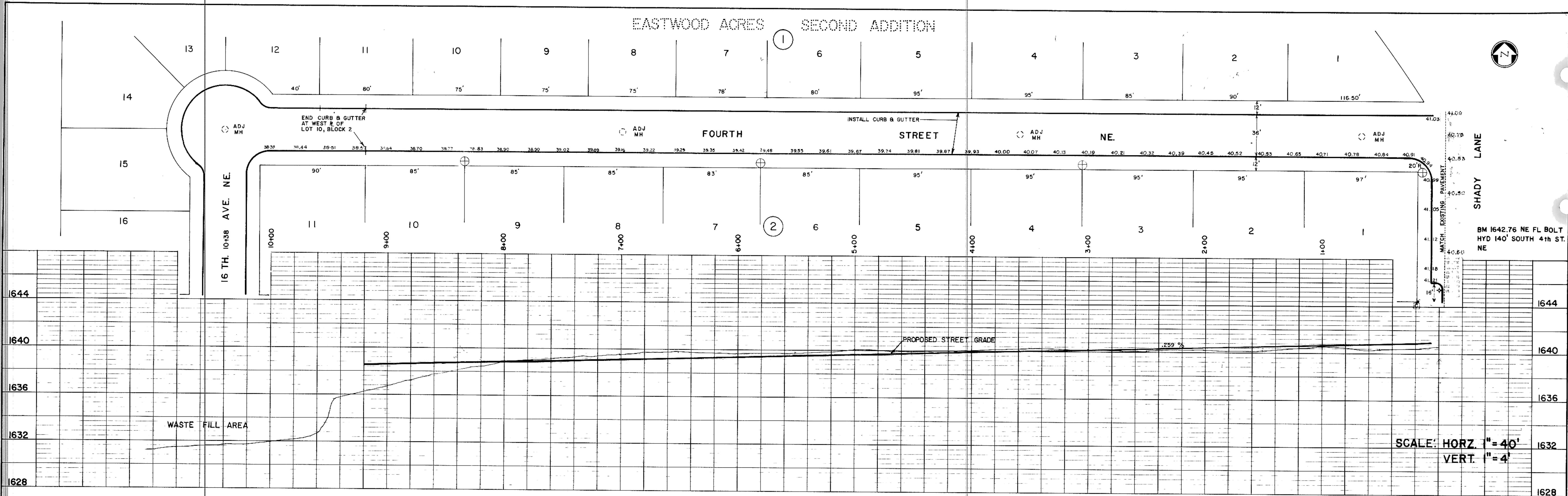


EXISTING STREET LIGHT
STREET LIGHT TO BE INSTALLED

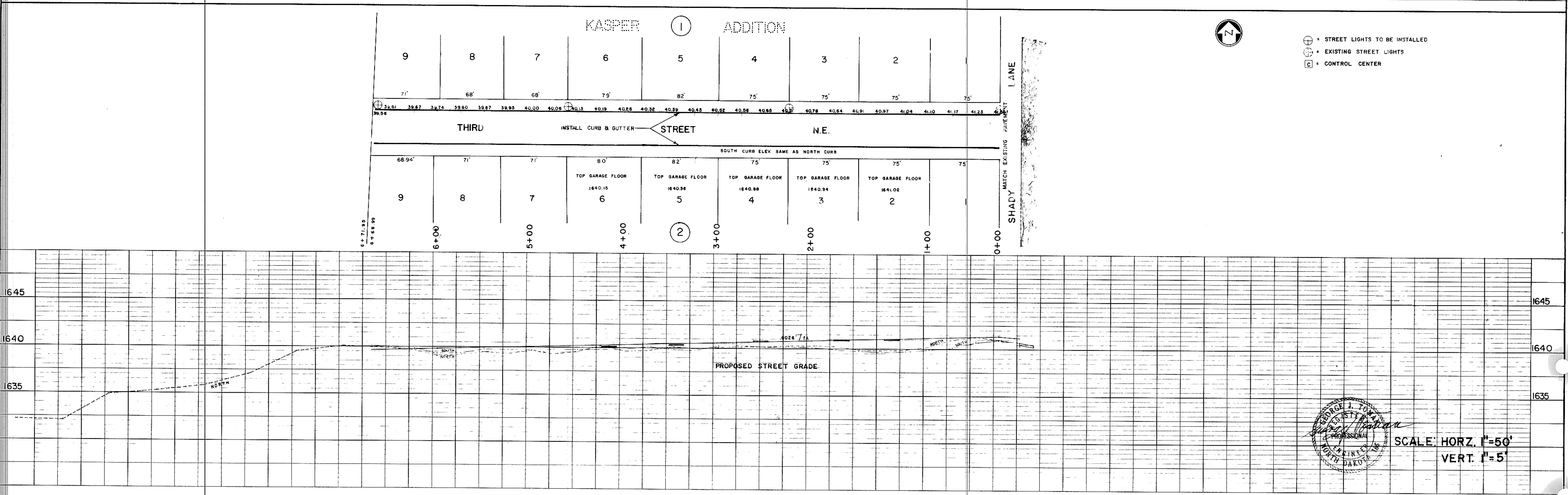


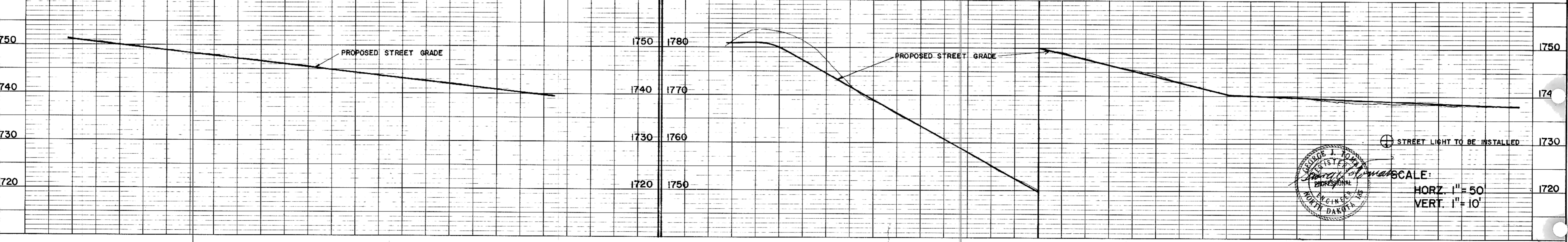
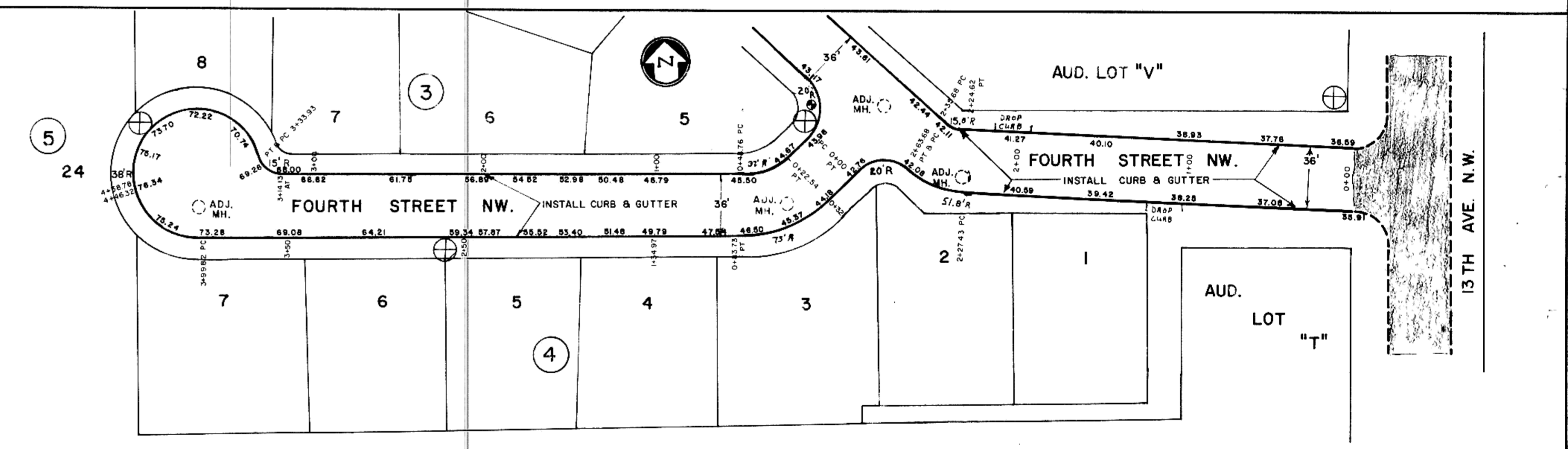
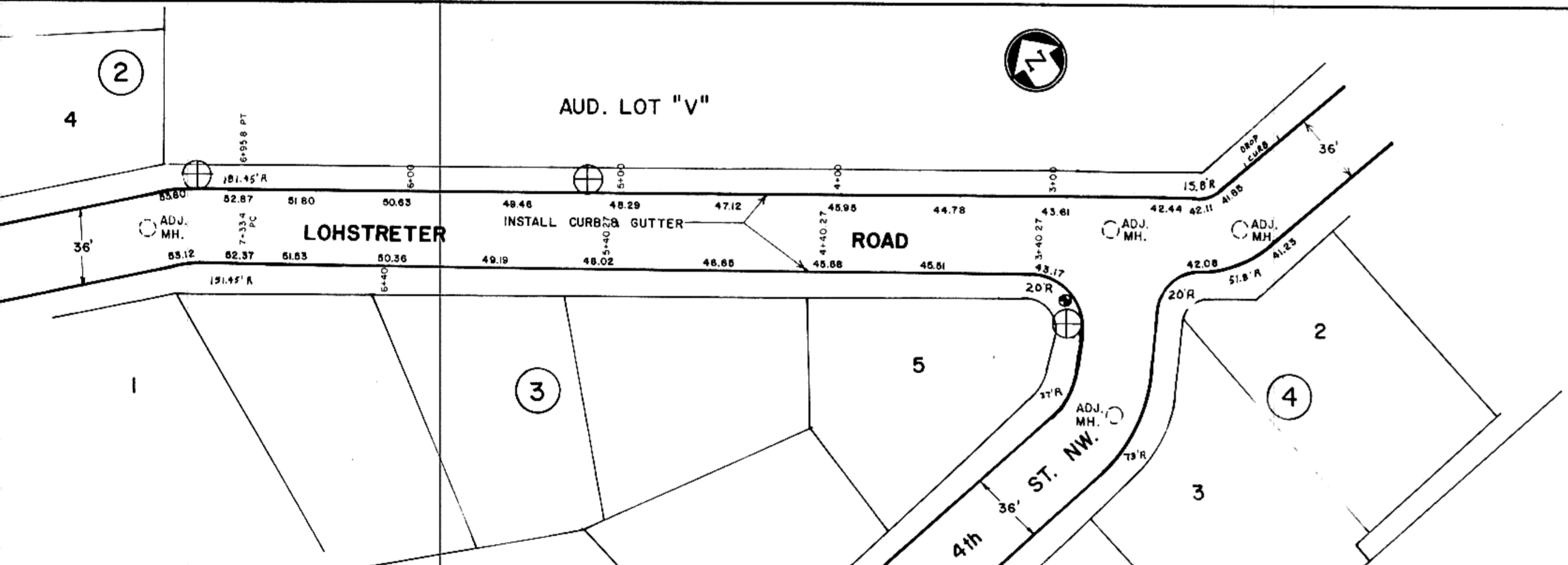
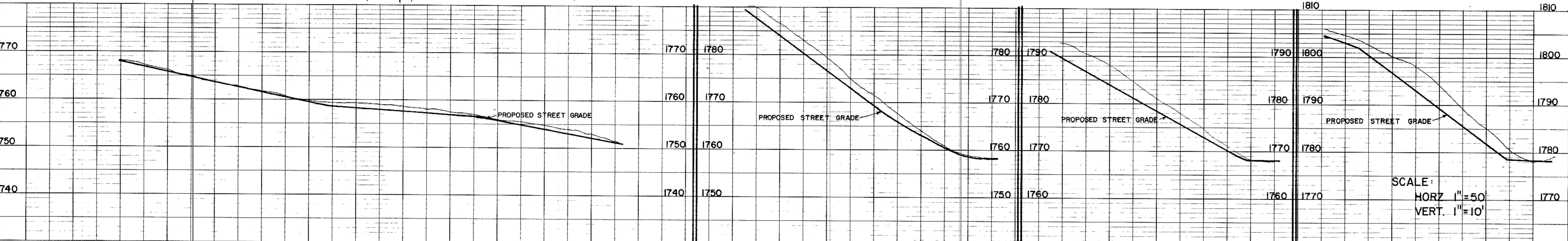
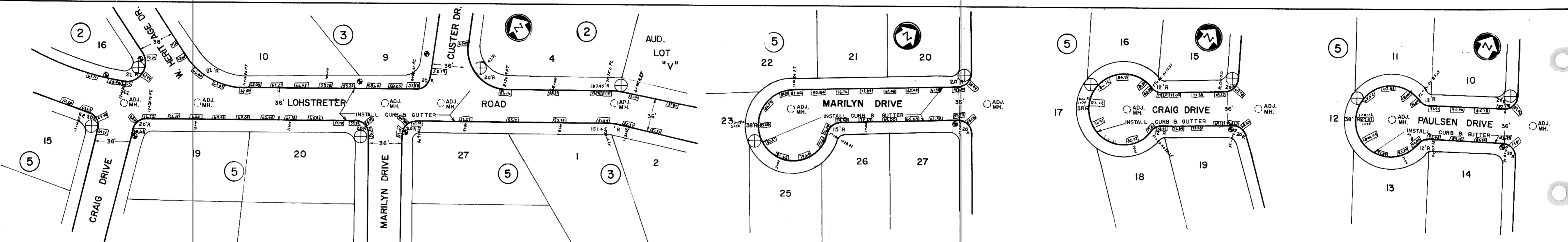
SCALE HORZ 1" = 40'
VERT SCALE: 1" = 4'

EASTWOOD ACRES SECOND ADDITION

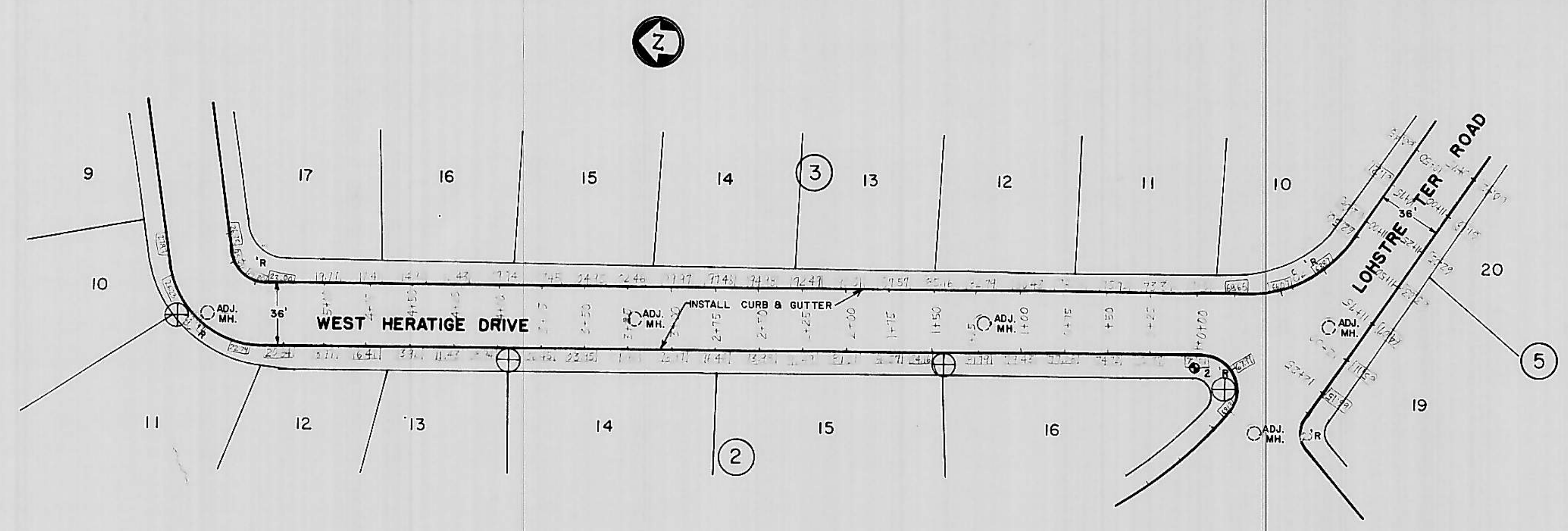


KASPER ADDITION

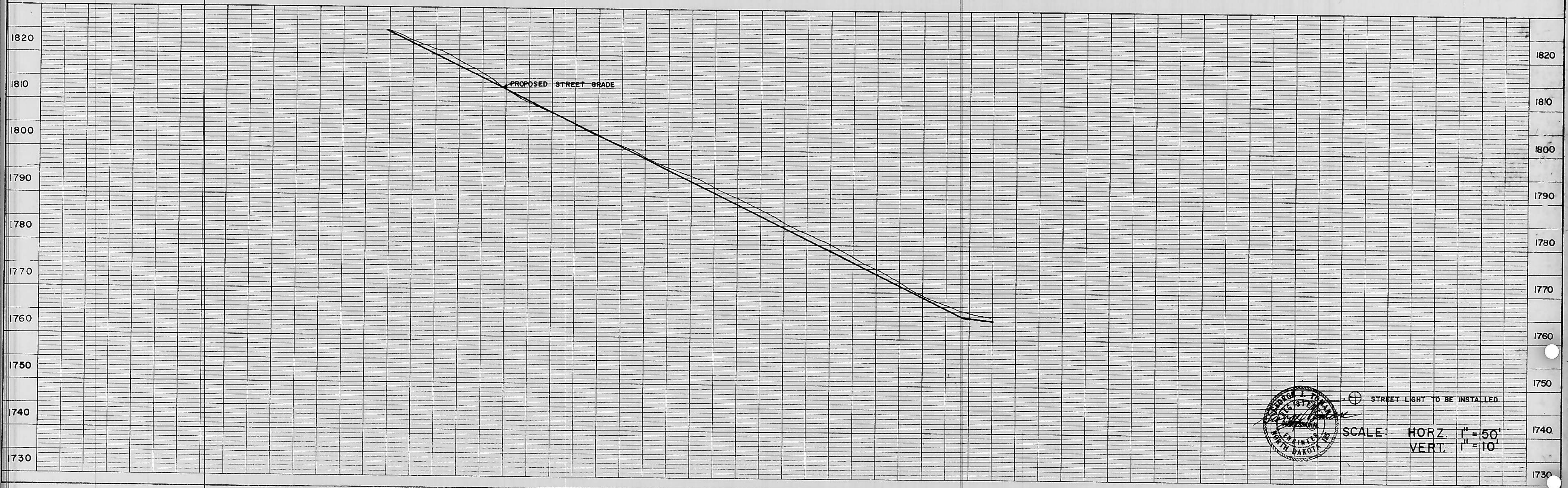




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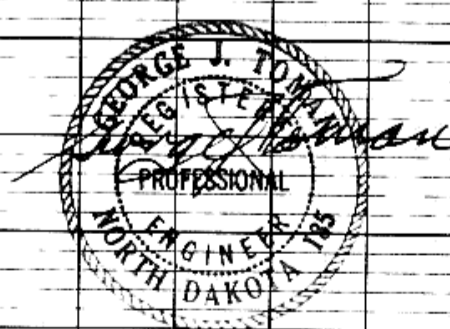
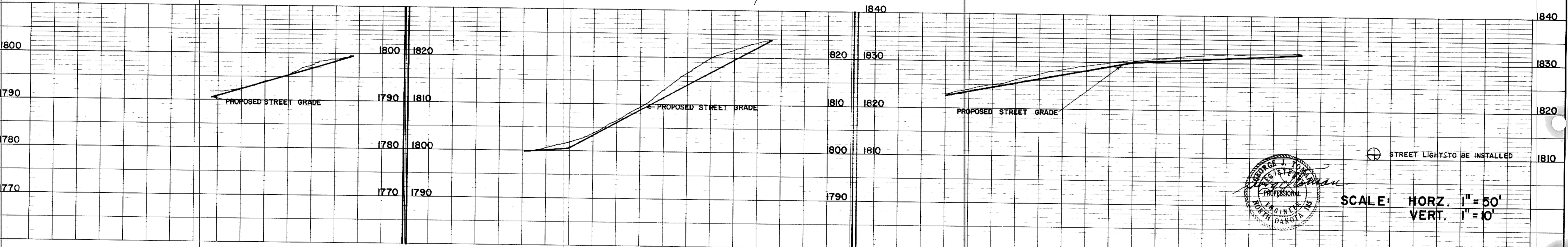
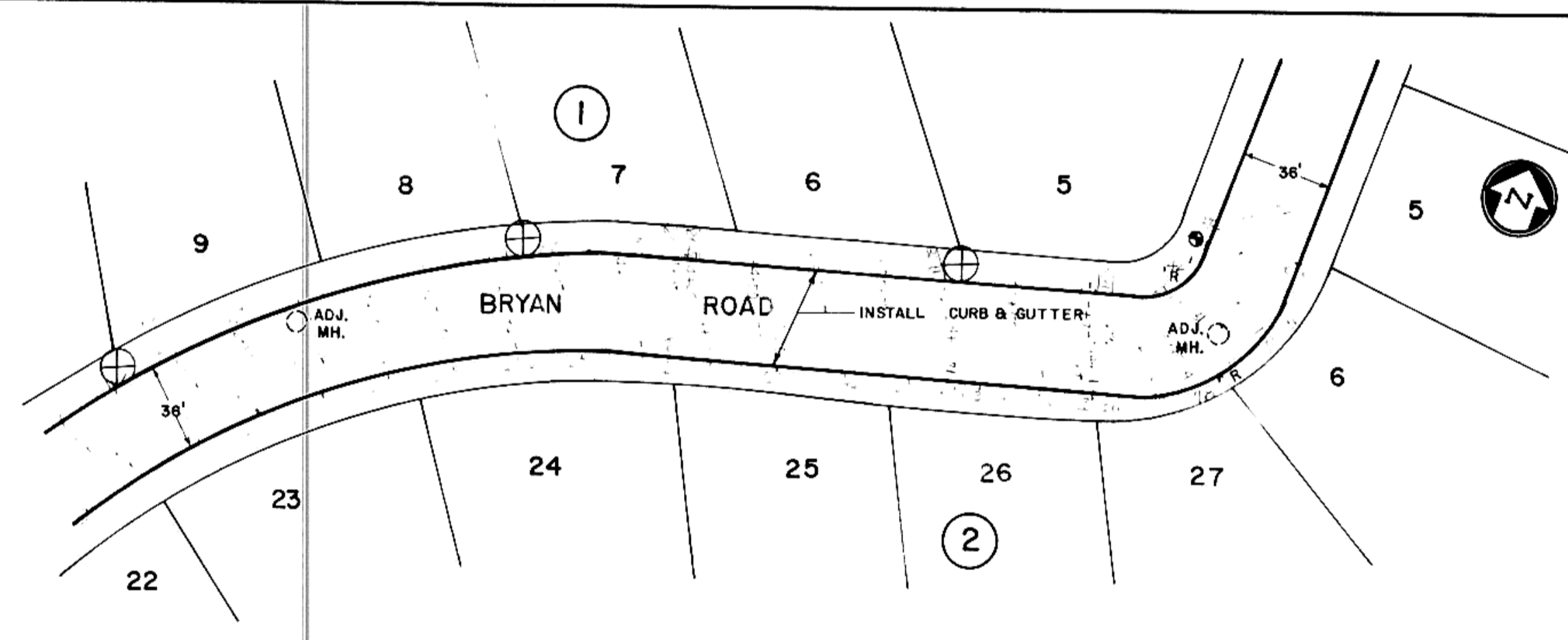
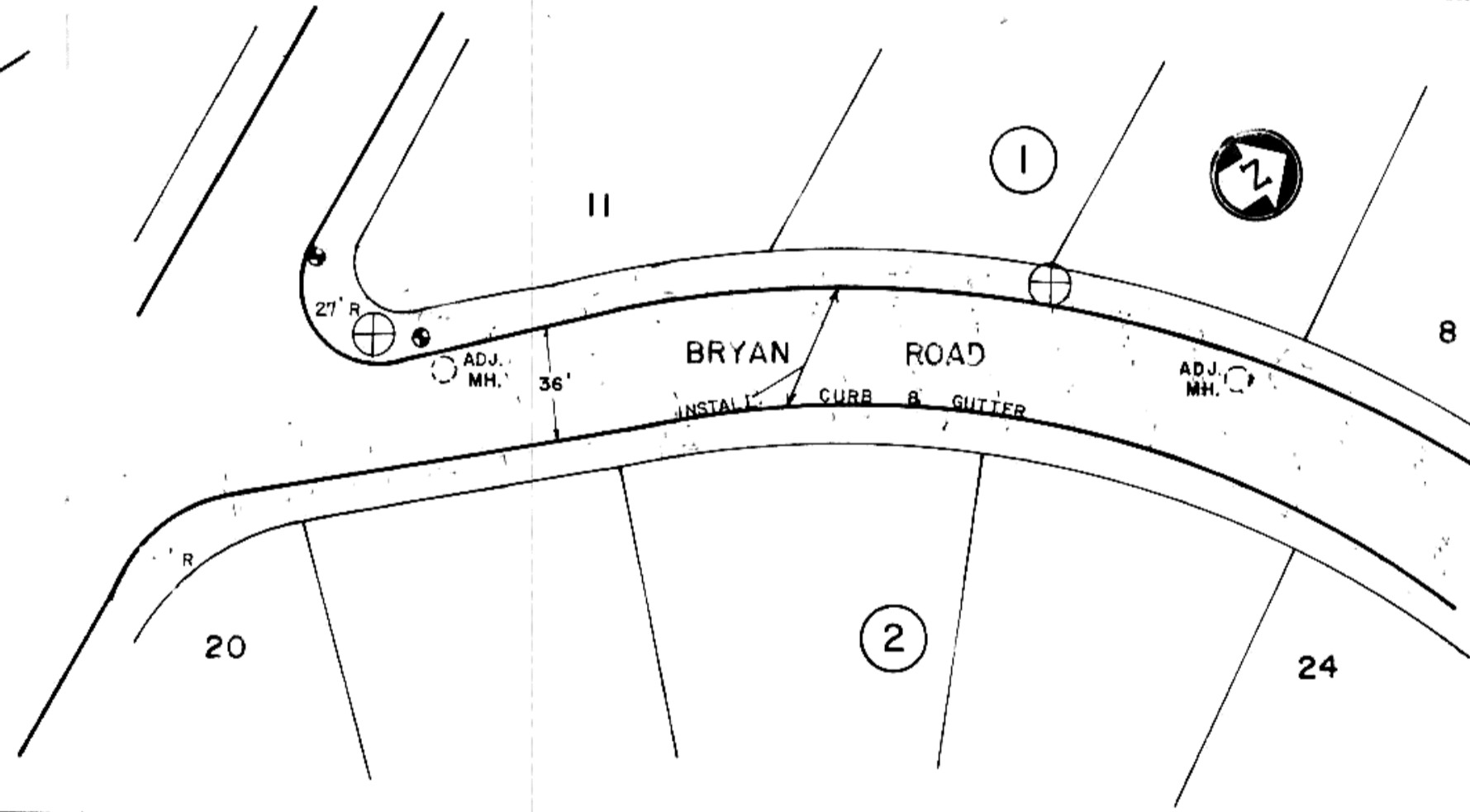
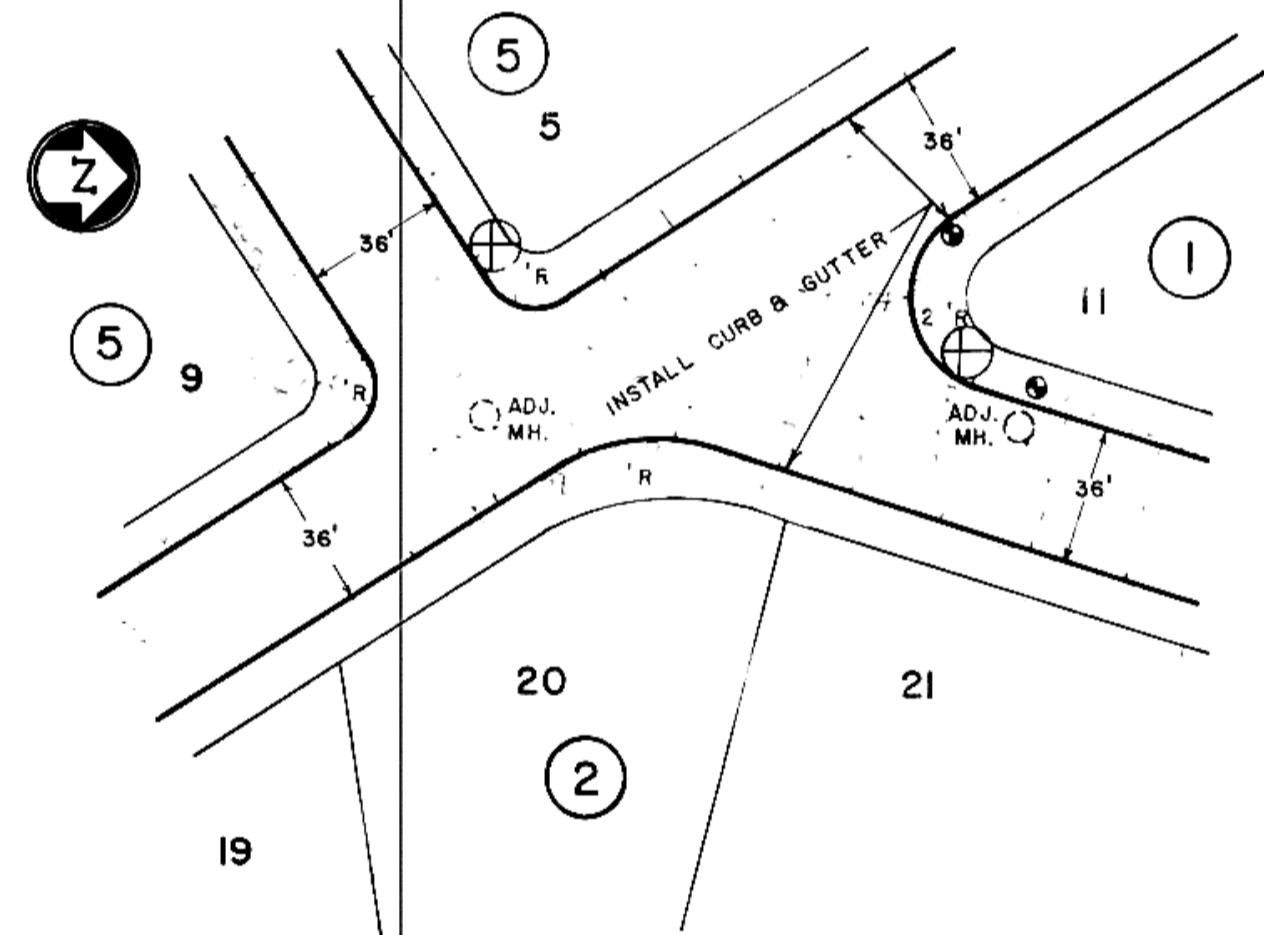
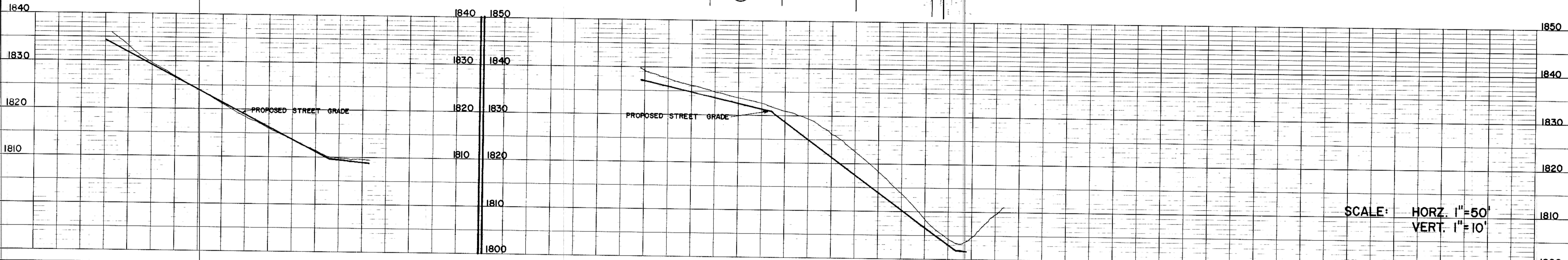
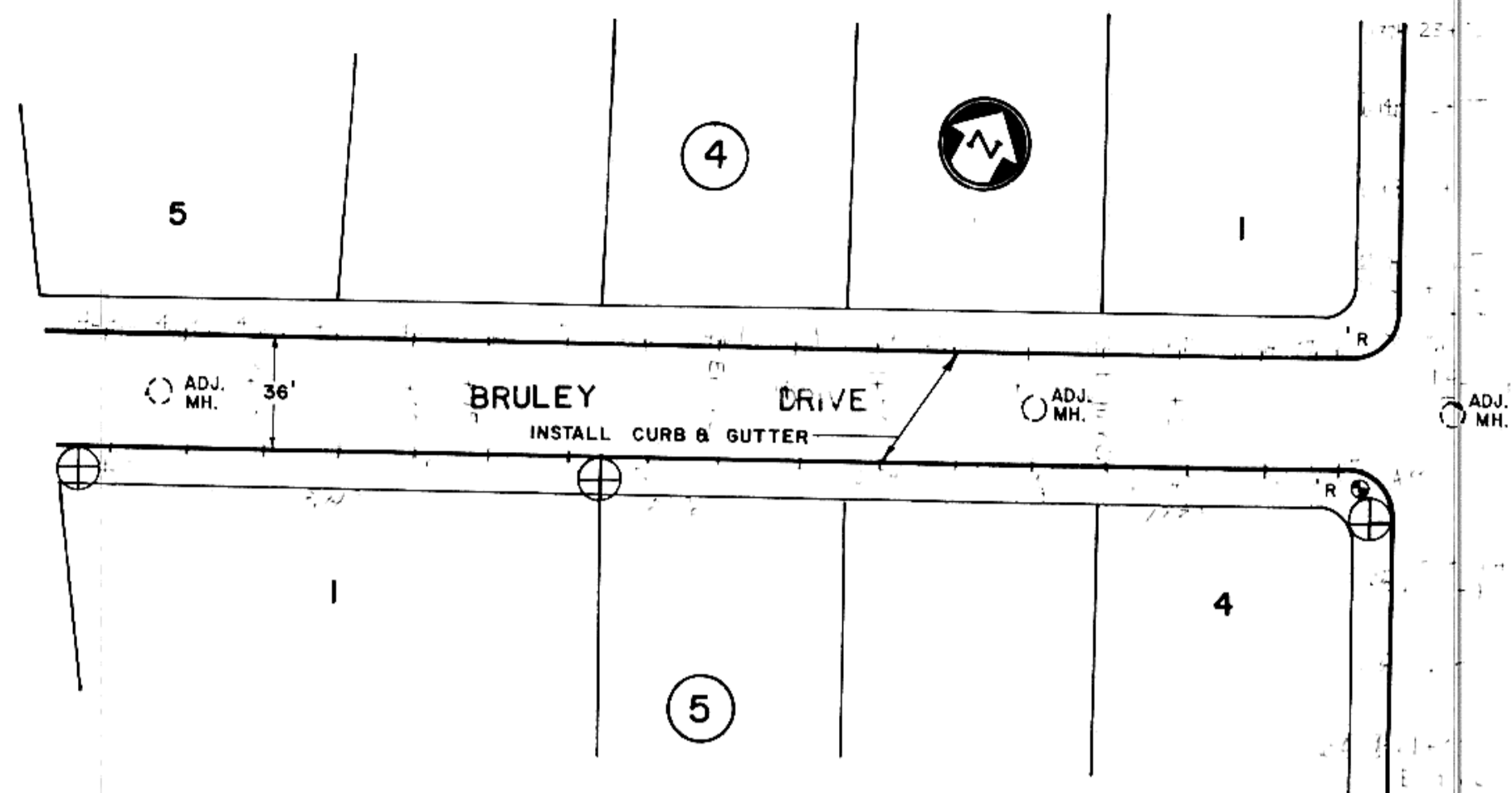
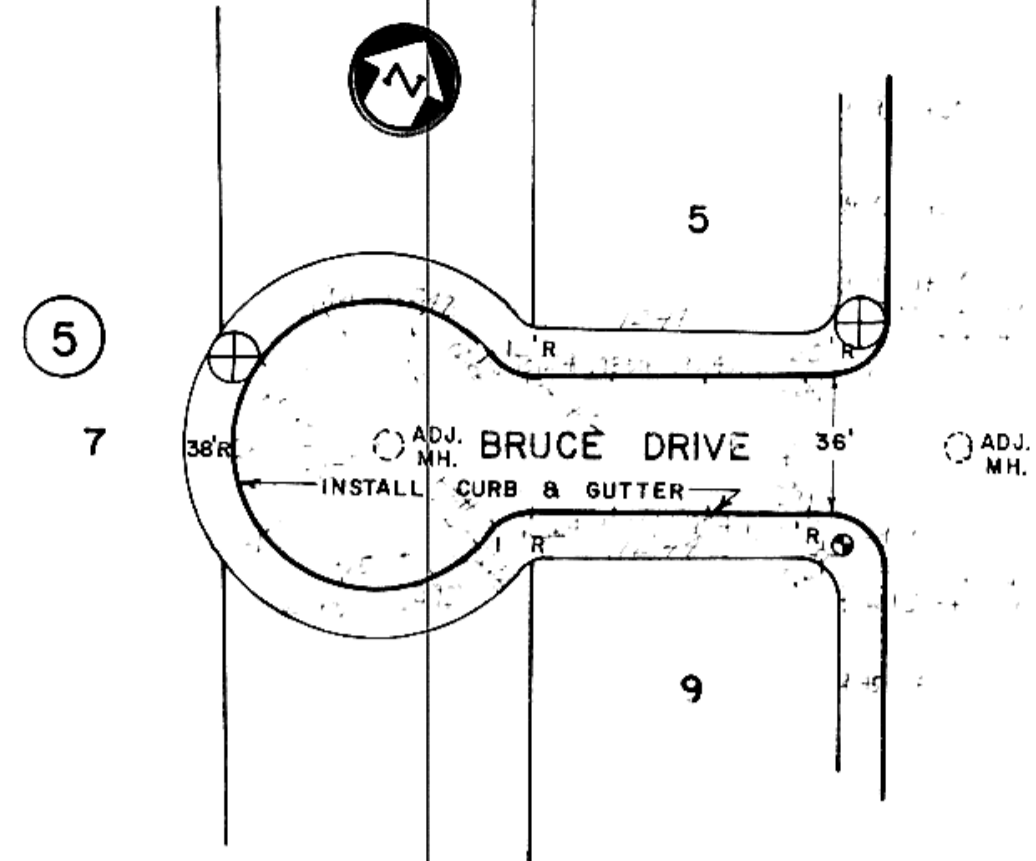
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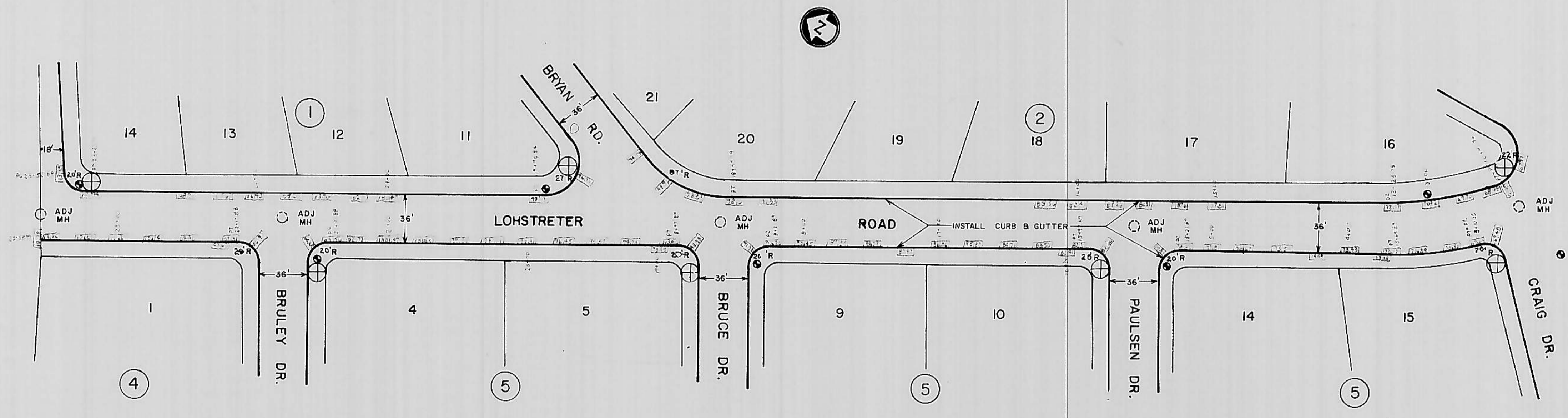


STREET LIGHT TO BE INSTALLED
 SCALE: HORZ. 1" = 50'
 VERT. 1" = 10'

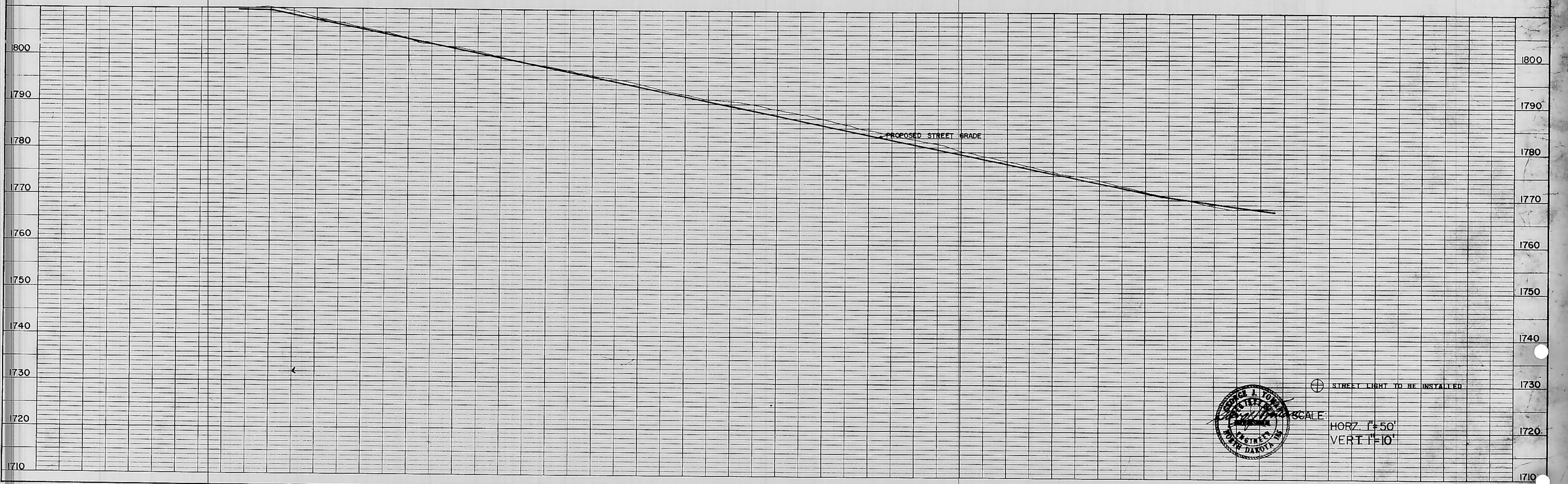
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PLAN
 DRAWING: _____
 NOTE BOOK: _____
 NO. OF WAY CHECKED: _____



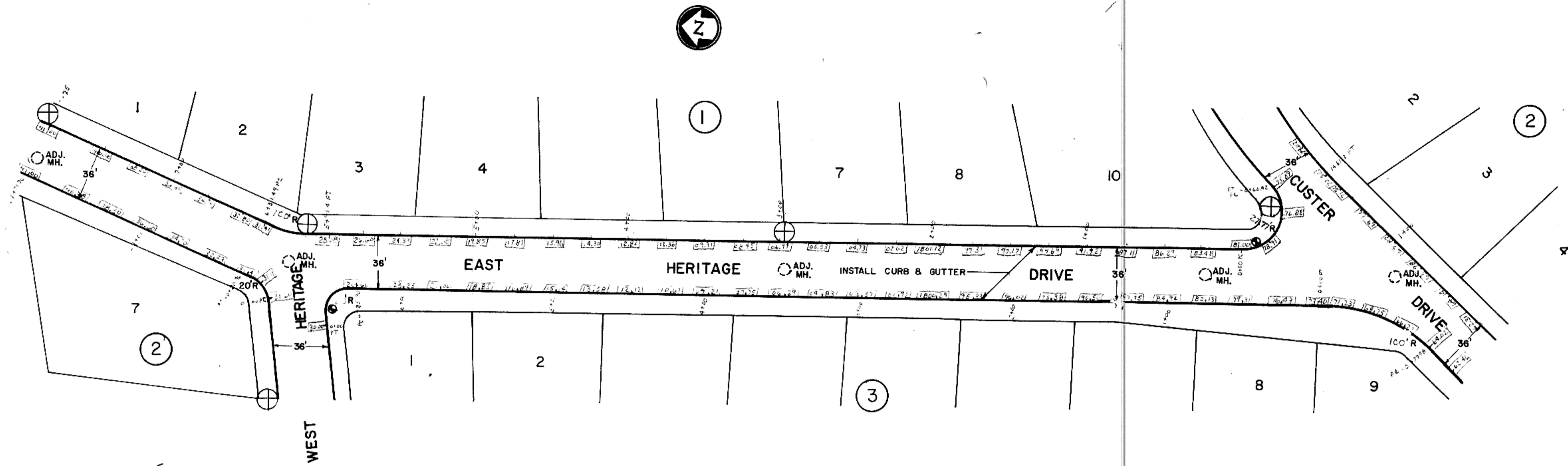


EAST CURB SHALL BE 36" IN HEIGHT WHEN NOT SHOWN

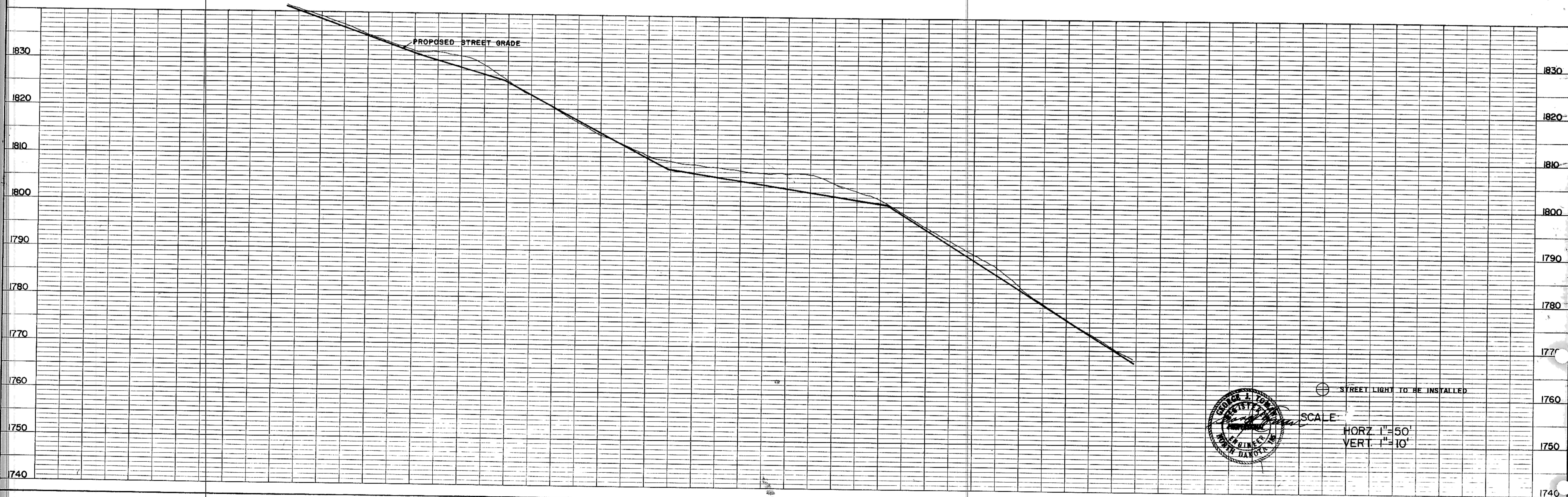


SCALE:
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 VERT 1"=10'

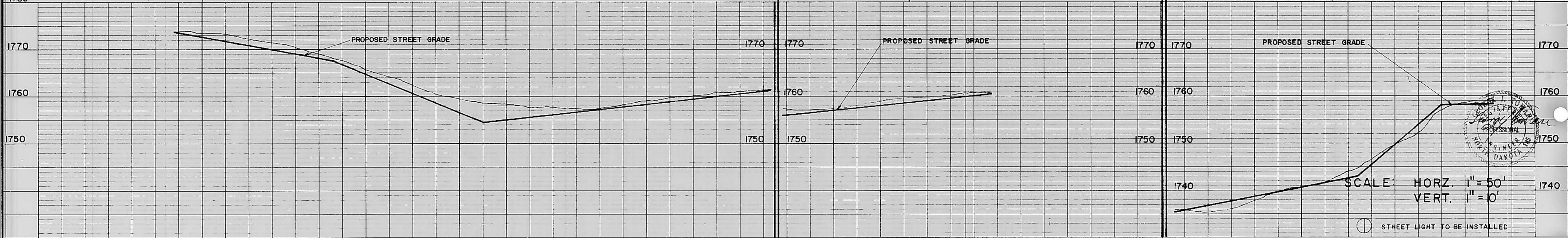
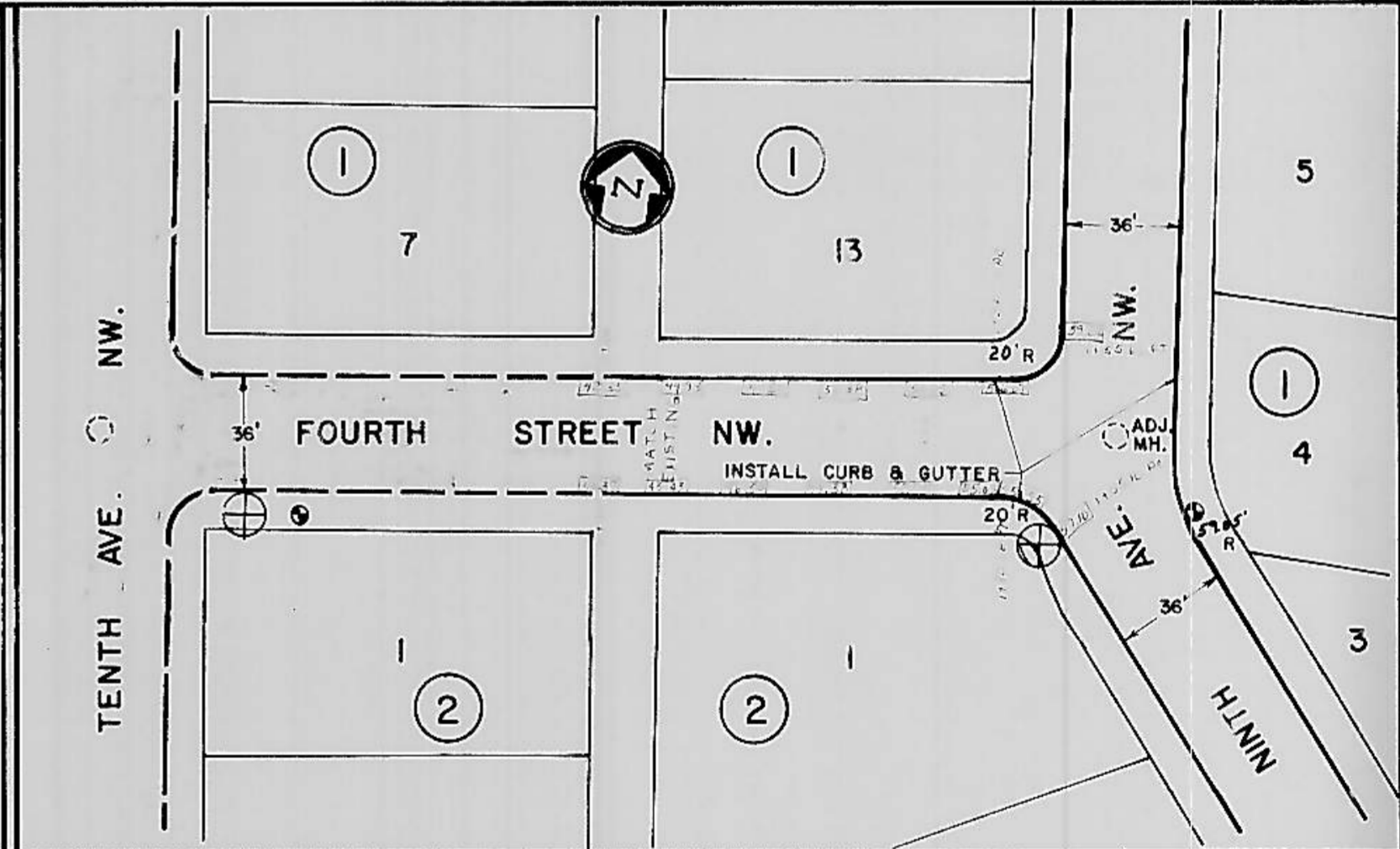
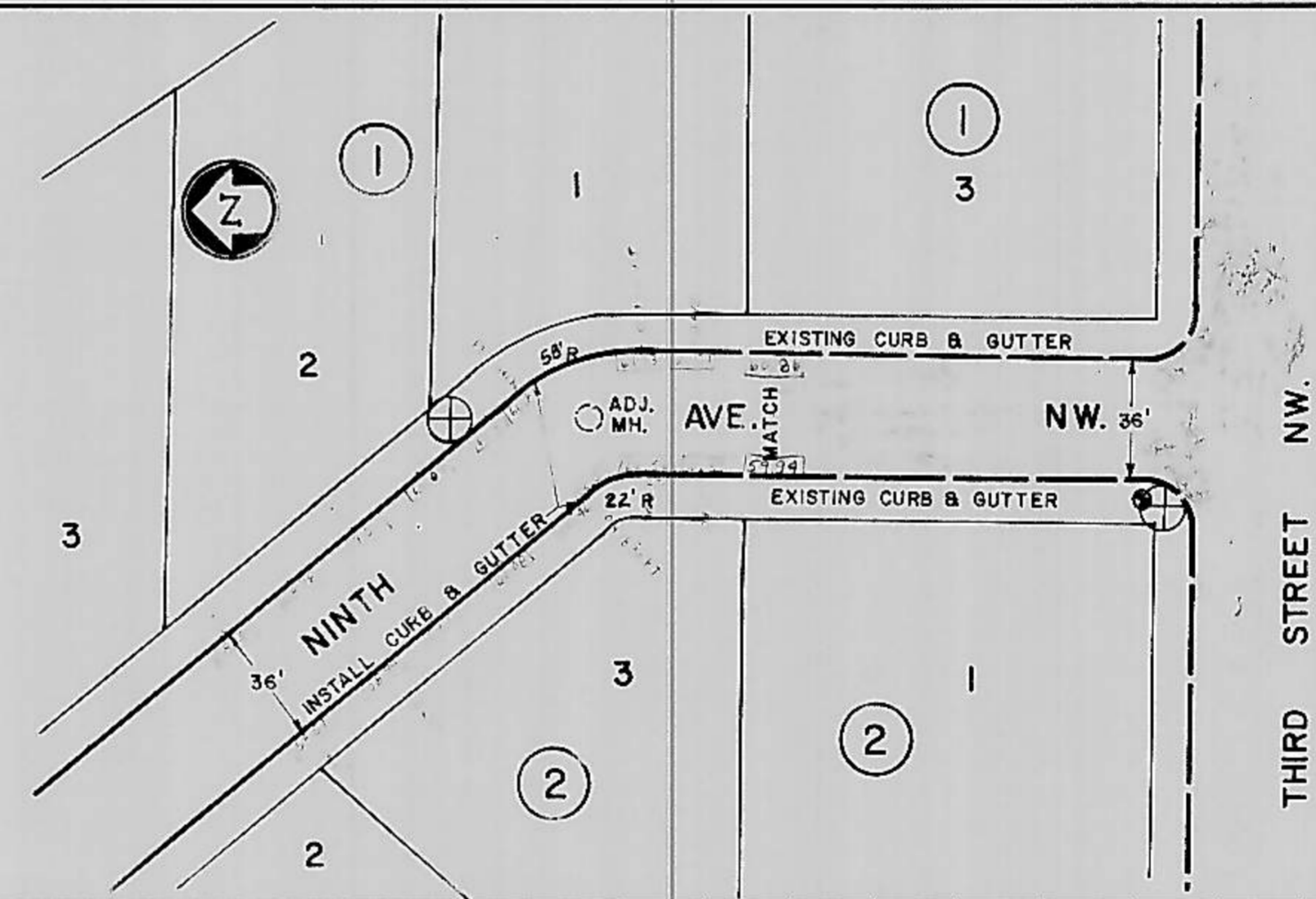
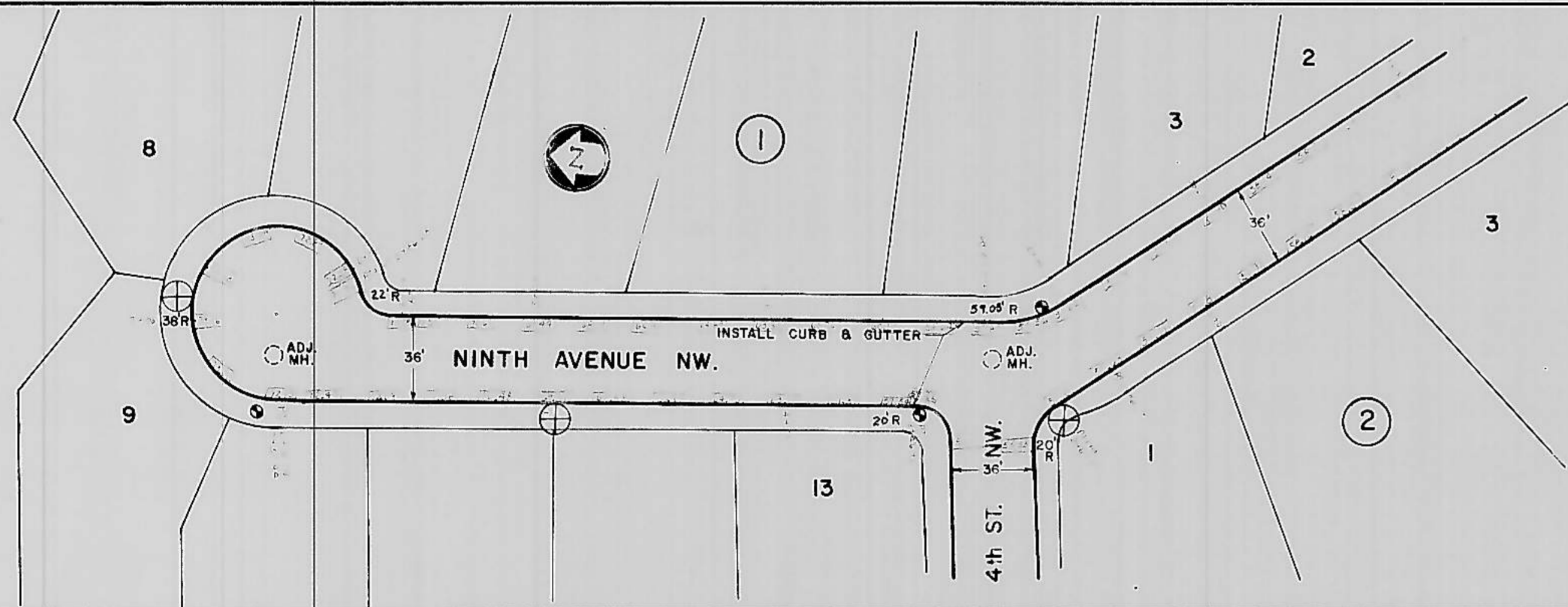
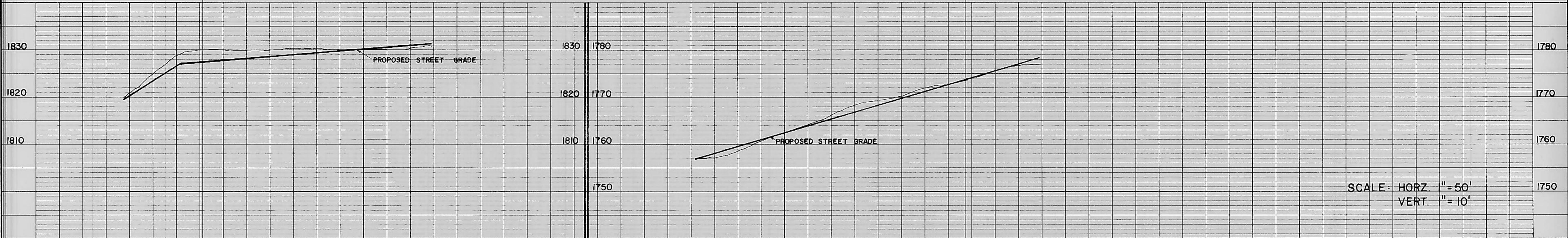
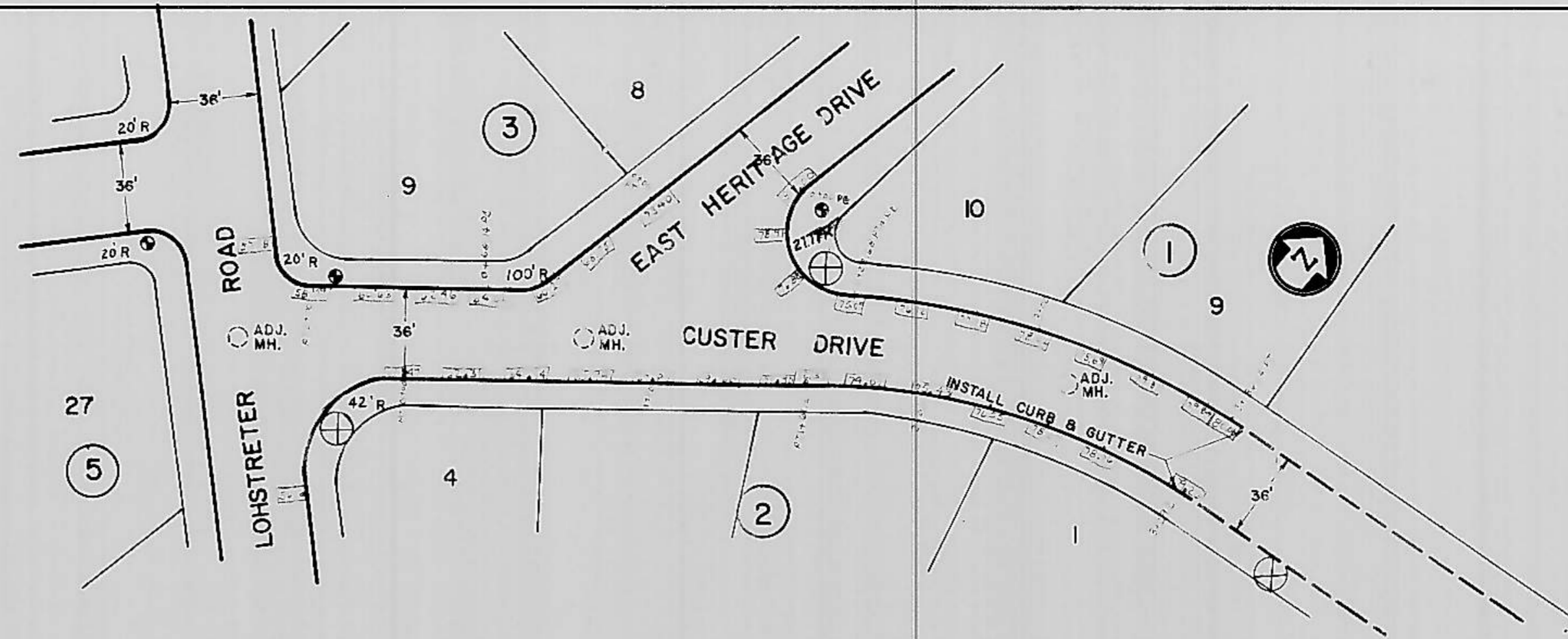
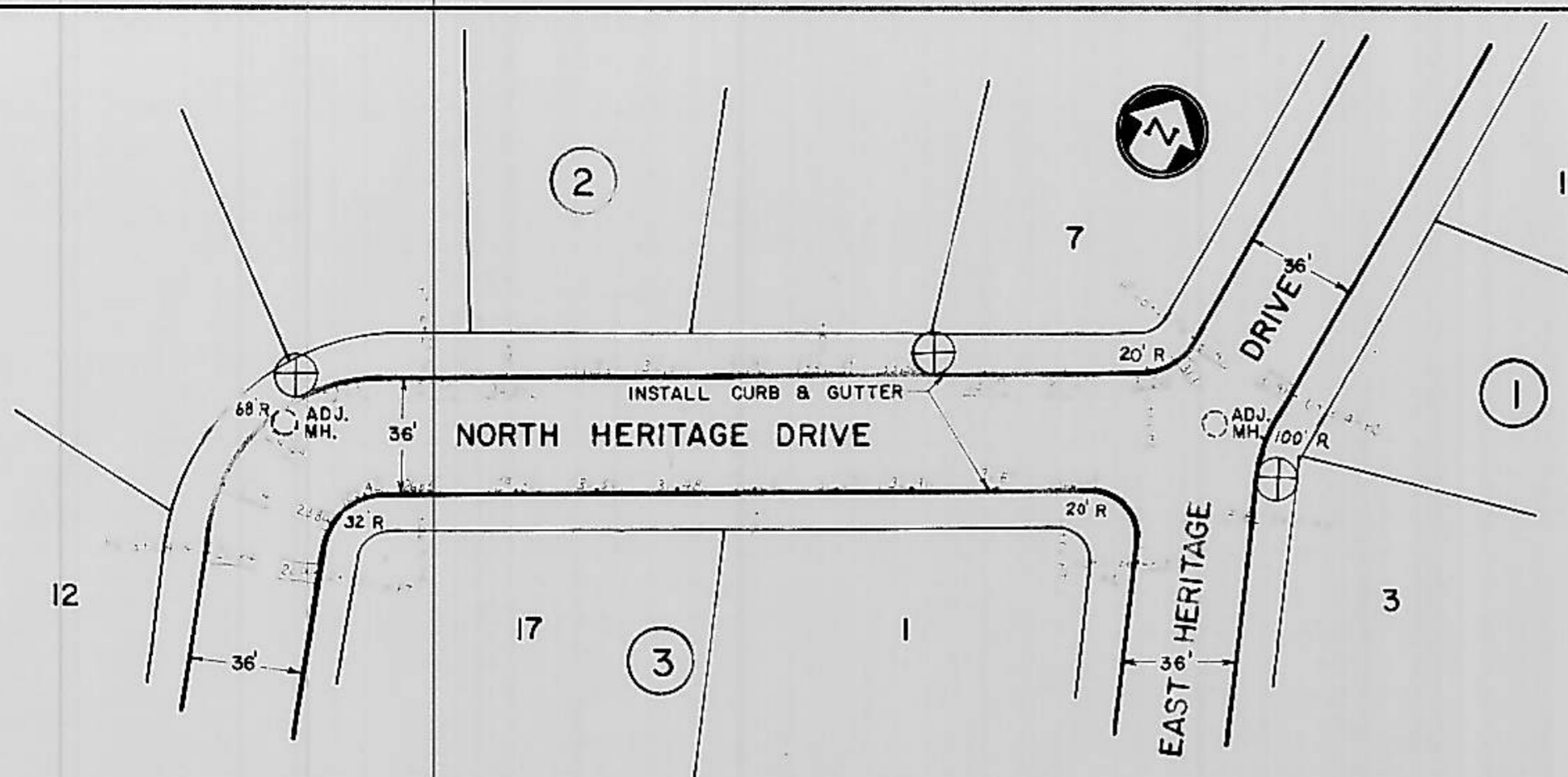
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 GRADINGS CHECKED BY
 NOTE BOOK NO. RT. OF WAY CHECKED BY

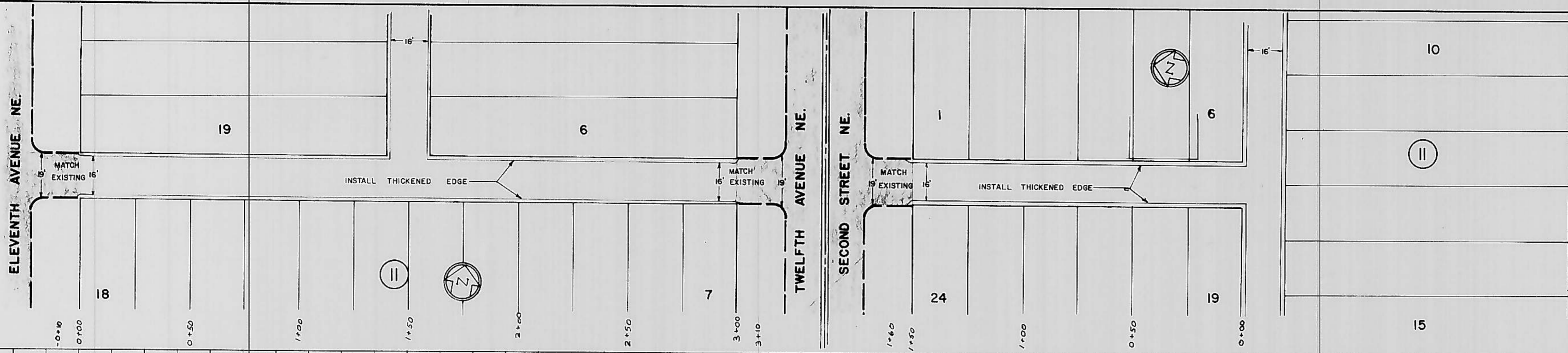


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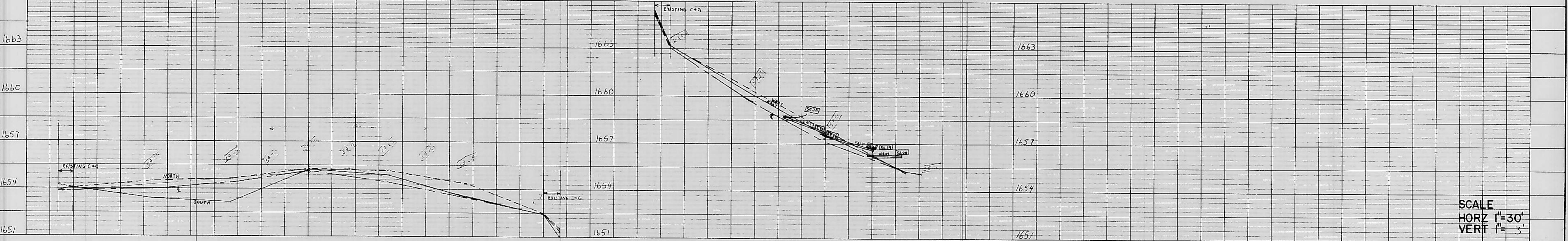


STREET LIGHT TO BE INSTALLED
 SCALE
 HORZ. 1" = 50'
 VERT. 1" = 10'

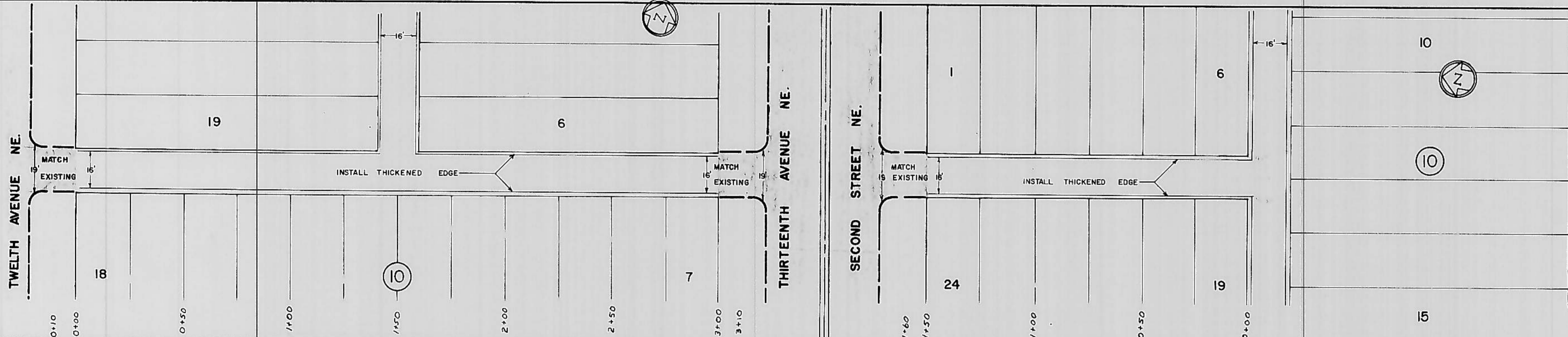




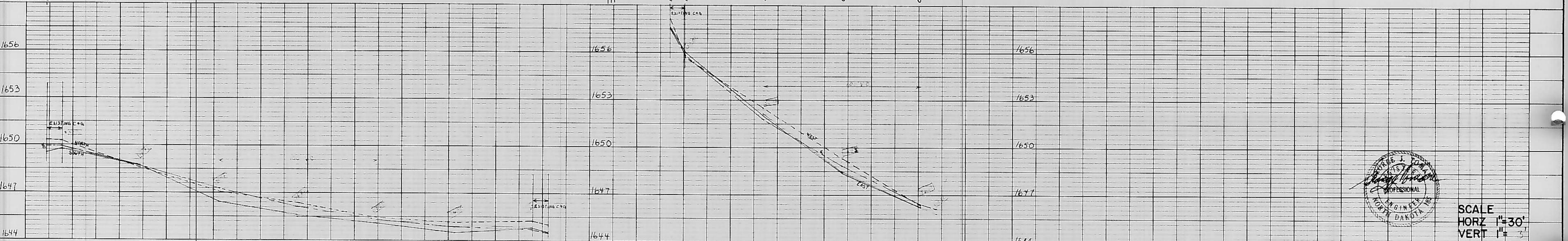
1686.61 TBM ON N, S.W. CORNER
DRIVEWAY IN ALLEY BY HOUSE
AT 207-12th AVE. N.E.



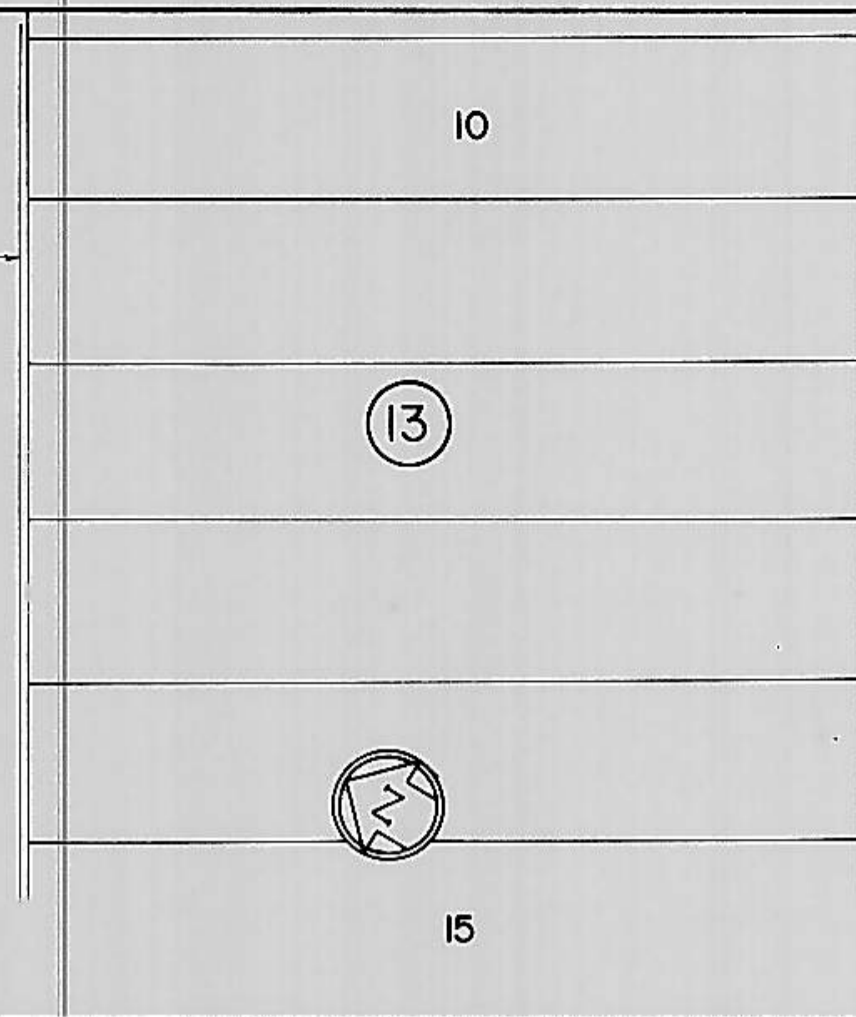
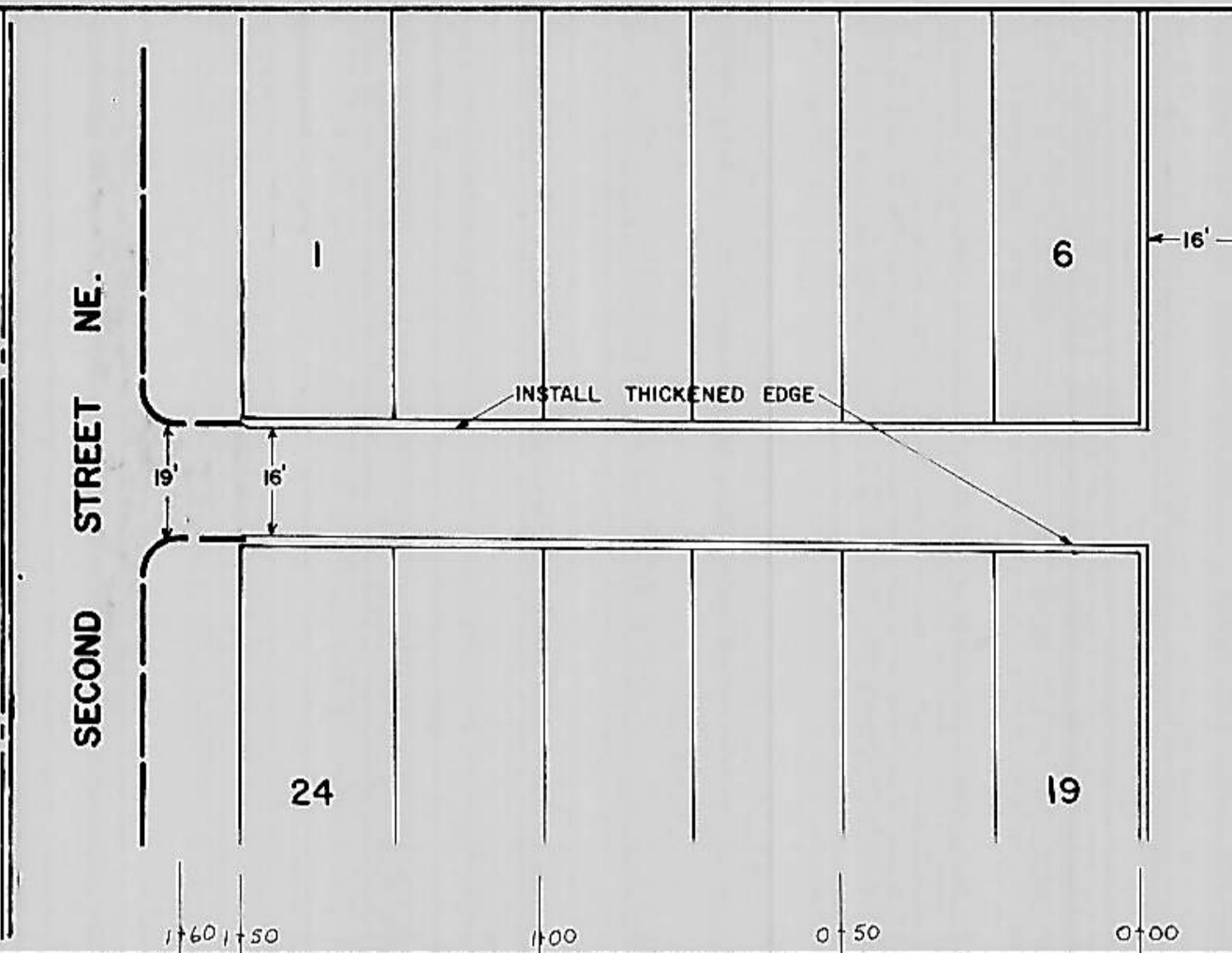
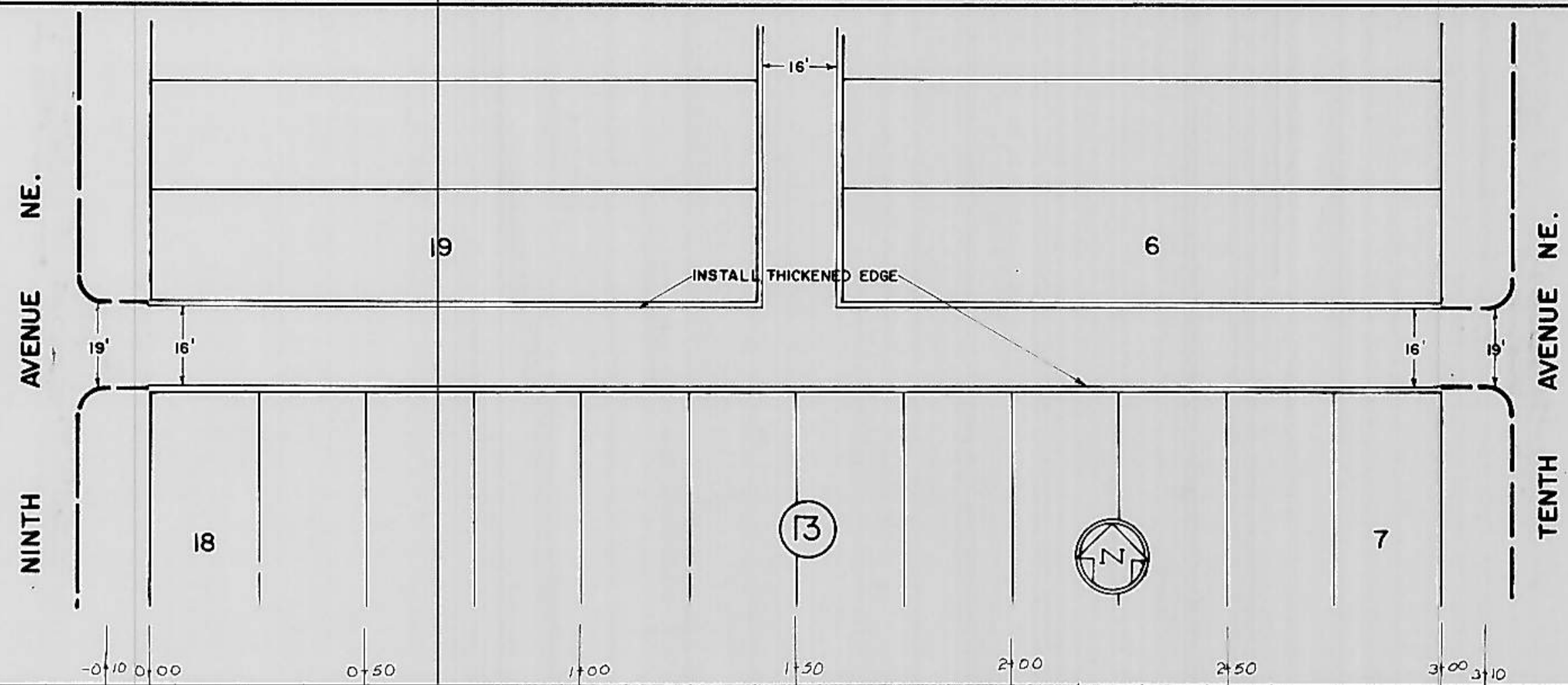
SCALE
HORZ 1"=30'
VERT 1"=5'



1647.95 TBM, PAINT SPOT TOP RETAINING
WALL BY NORTH E. OF ALLEY BY
HOUSE AT 206-12th AVE. N.E.

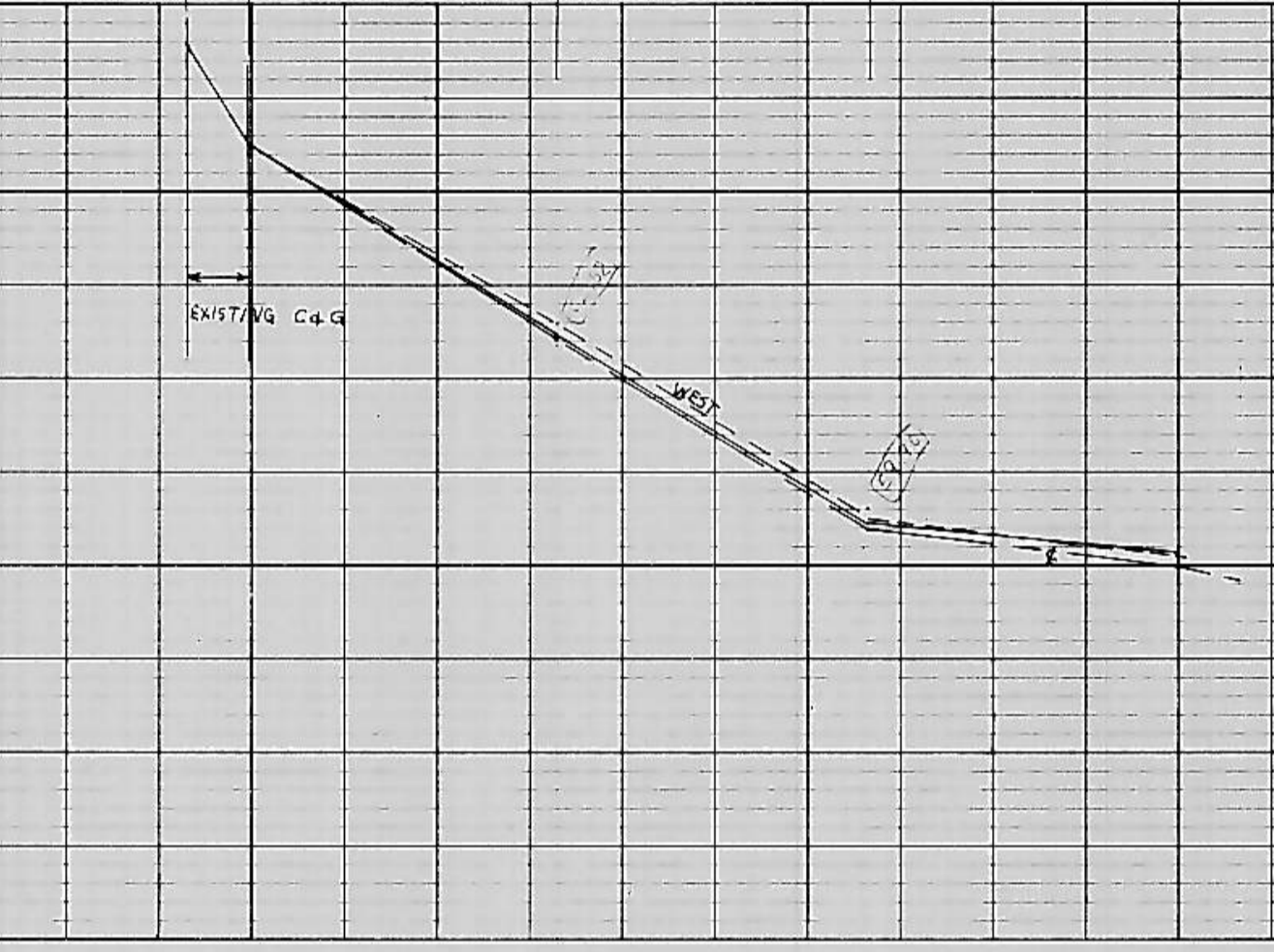
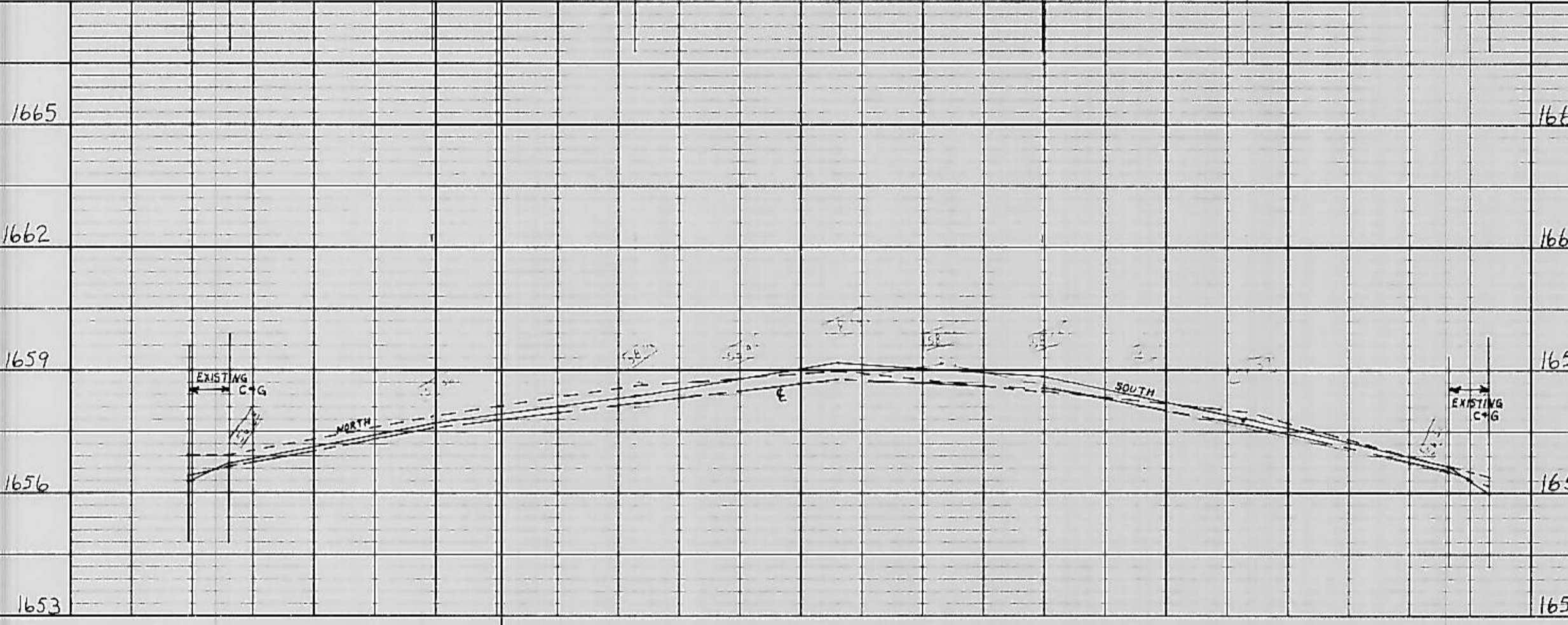


SCALE
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VERT 1"=5'

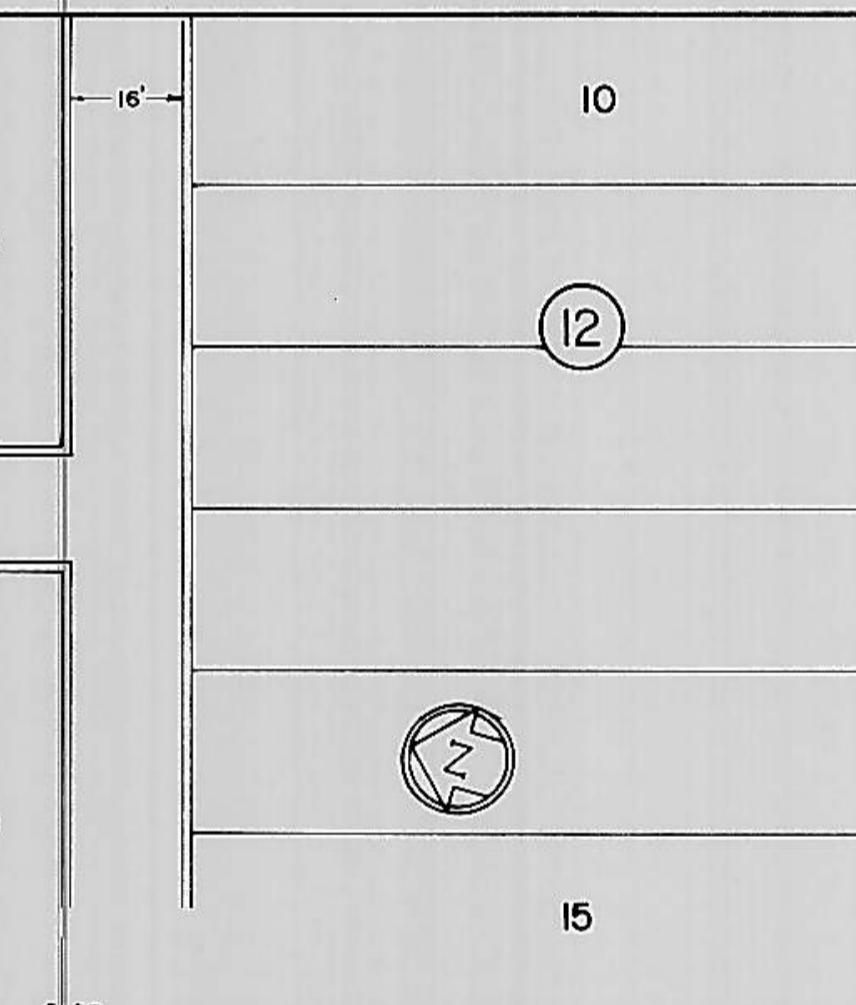
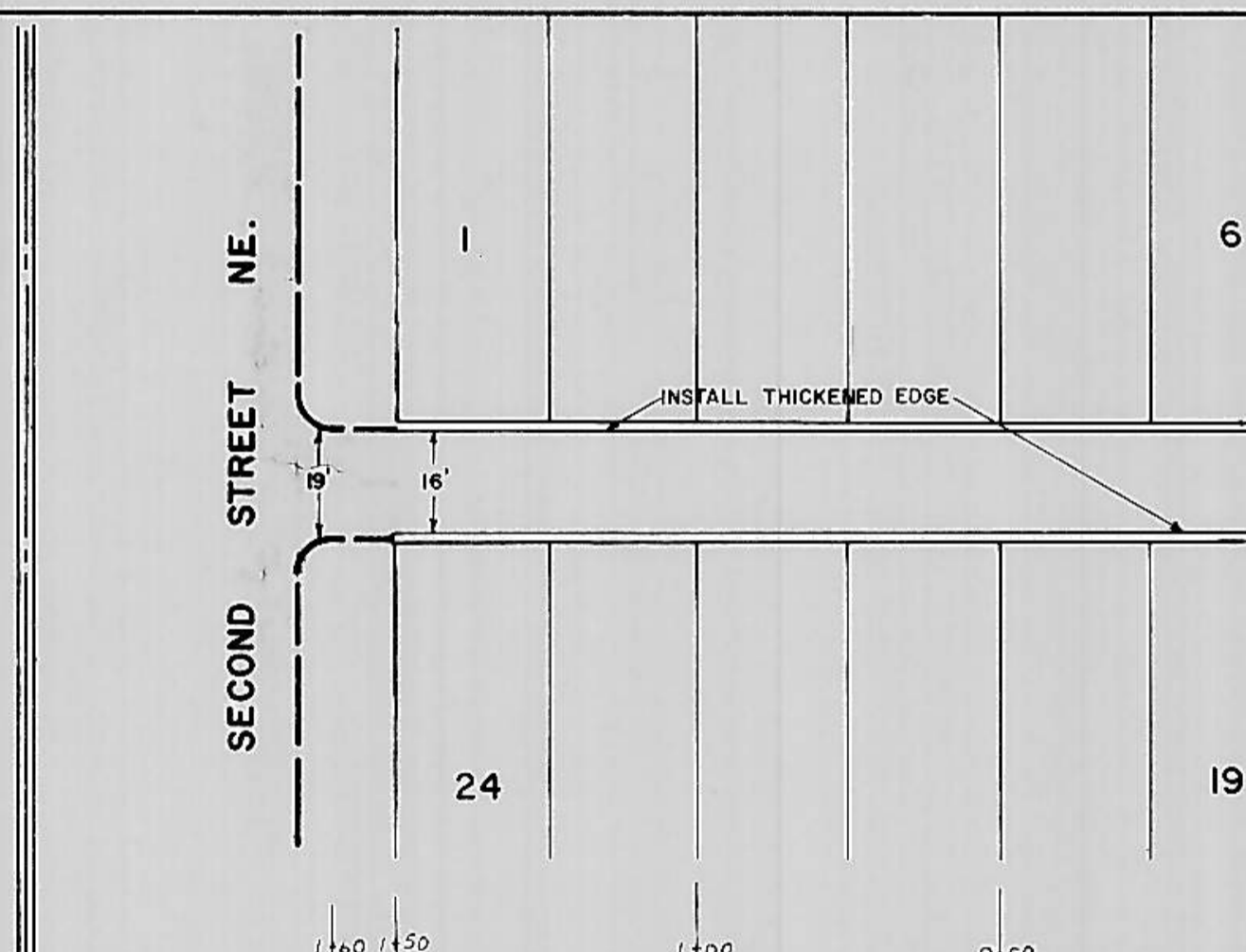
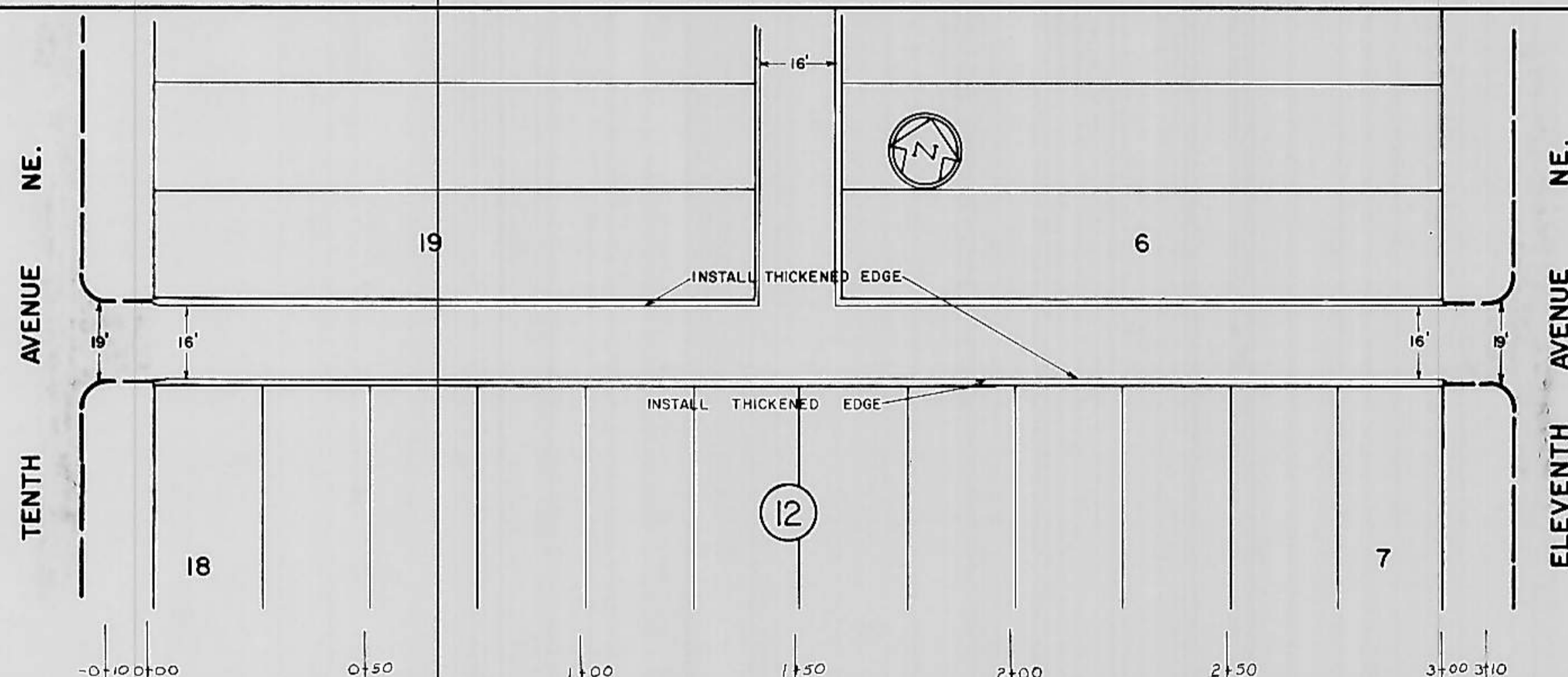


1659.61 TBM ON M, TOP RETAINING WALL
BY NORTH E OF ALLEY BY
HOUSE 207-10th AVE. N.E.

FIRST STREET NE.

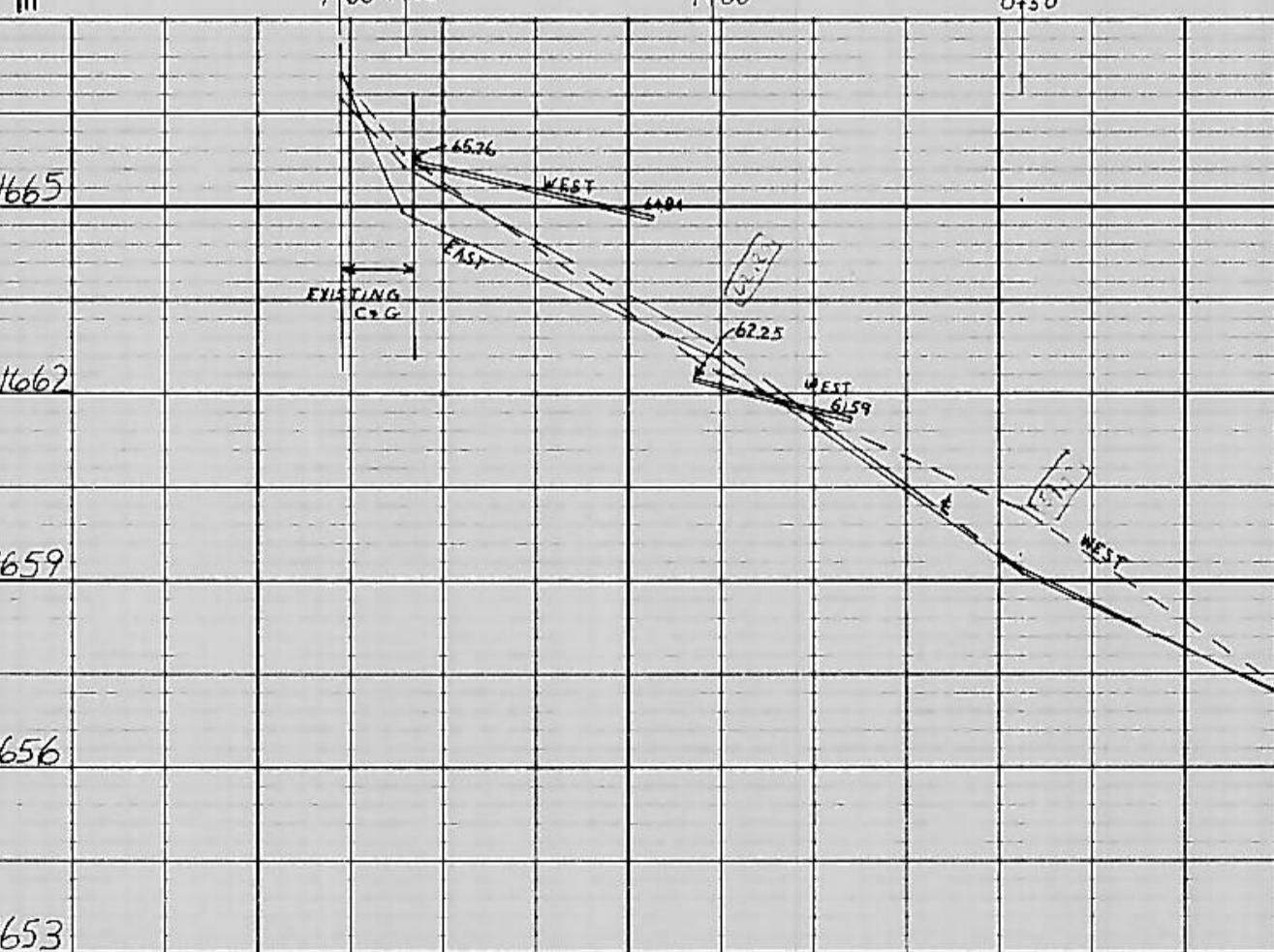
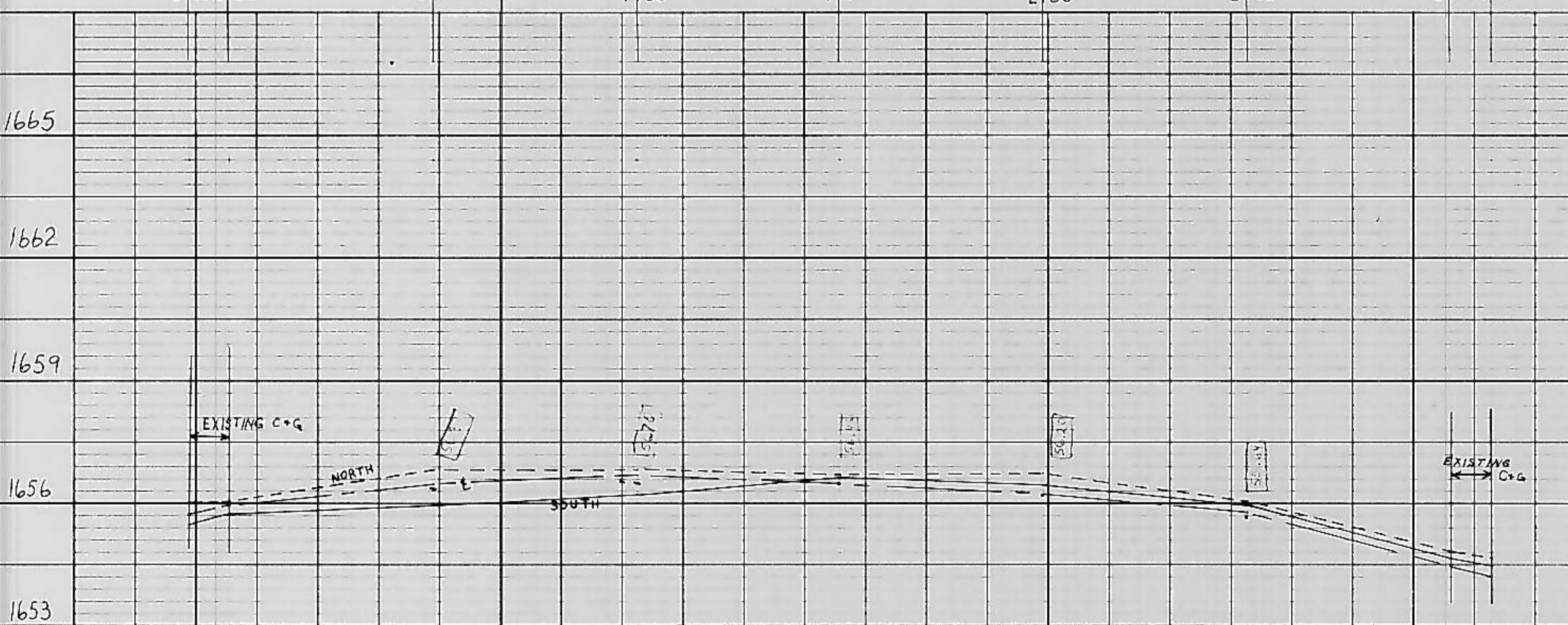


SCALE
HORZ 1"=30'
VERT 1"=1'



1657.64 TBM ON M, TOP RETAINING WALL
BY NORTH E OF ALLEY BY
HOUSE 204-10th AVE. N.E.

FIRST STREET NE.



SCALE
HORZ 1"=30'
VERT 1"=1'

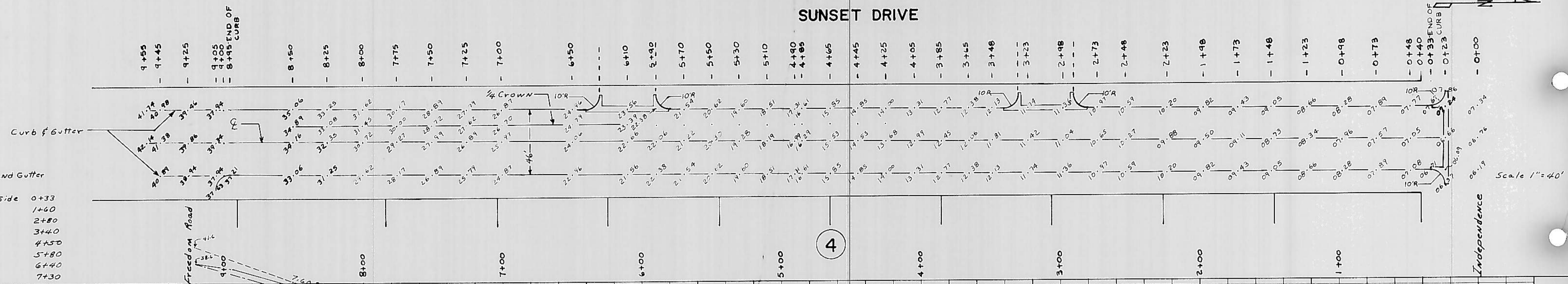


SUNSET DRIVE

Note: Street Width Shown is back to back of Curb

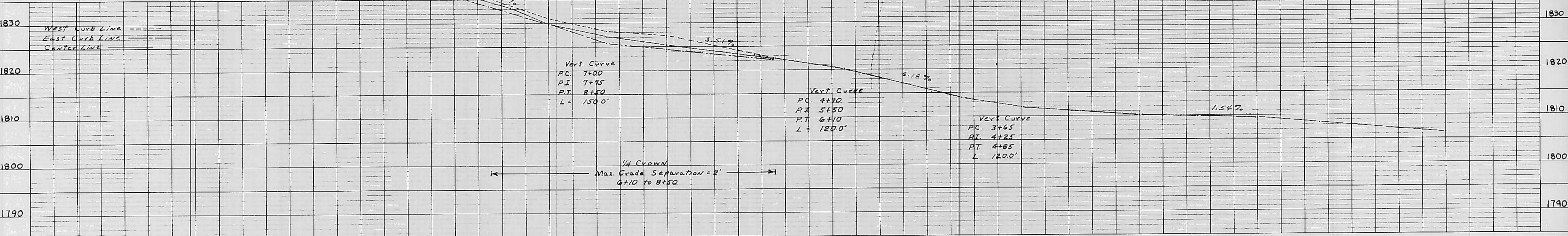
Note: Place expansion Joints in Curb and Gutter ON SUNSET as Follows:

East Side	West Side
0+33	0+33
1+46	1+40
3+06	2+80
4+66	3+40
6+26	4+50
7+86	5+80
8+95	6+40
	7+30



Scale 1"=40'

Independence

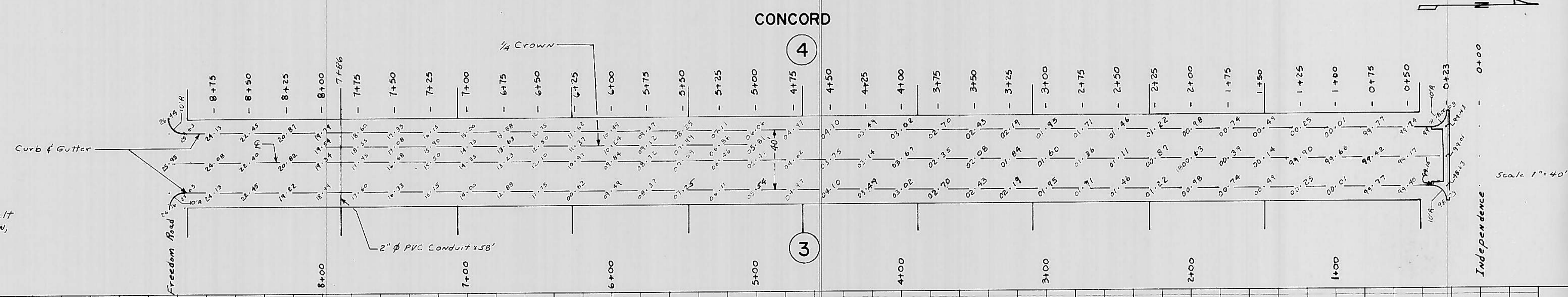


Note: Place expansion Joints in Curb and gutter on both sides of Concord, Lexington and Valley Forge at Stations:

0+33
1+46
3+06
4+66
6+26
7+86
8+95

Note: Place 3 1/2" thick Asphalt Concrete base ON Terra Valle, Independence and Sunset Streets, 2 1/2" thick Asphalt Concrete base ON Concord, Lexington, Valley Forge and Freedom Road.

CONCORD



Scale 1"=40'

Independence

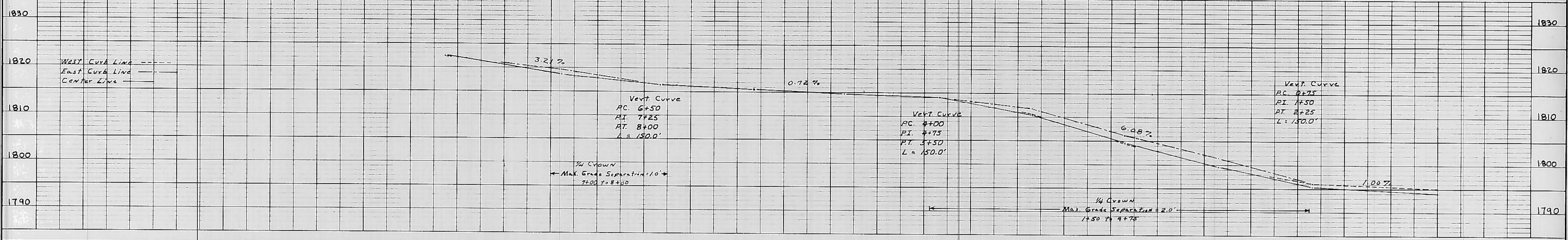
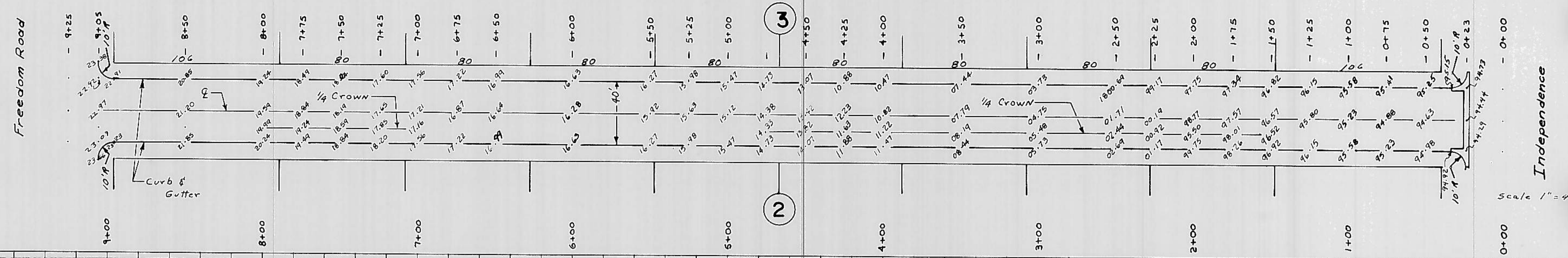


PLAN
 SURVIVAL
 PHOTO
 NOTE BOOK
 GRADES CHECKED
 ALIGNMENT CHECKED
 FIT OF WAY CHECKED
 No.

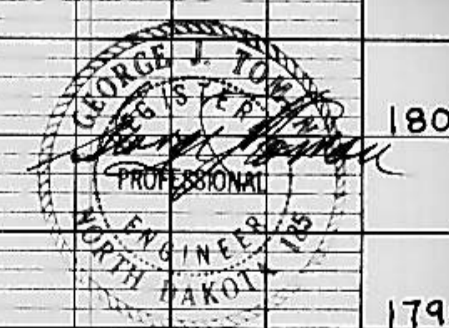
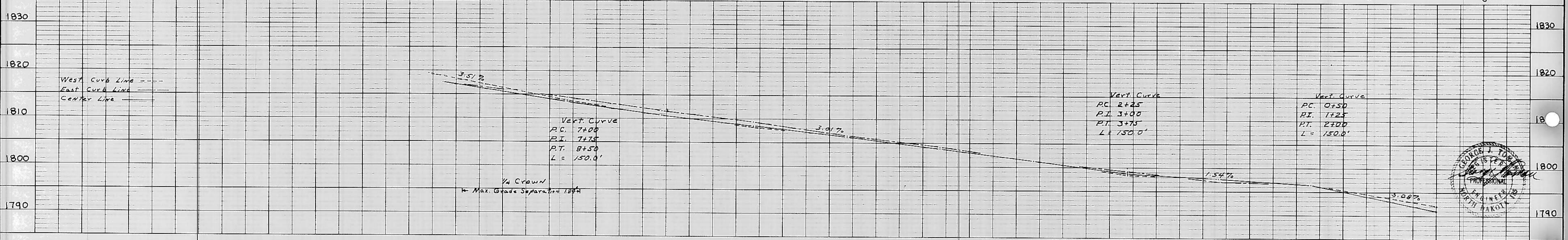
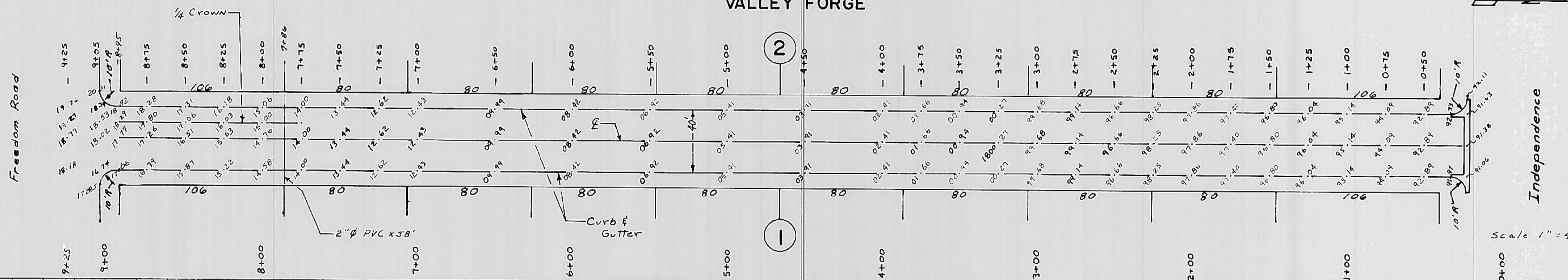
PROFILE
 SURVIVAL
 PHOTO
 NOTE BOOK
 GRADES CHECKED
 ALIGNMENT CHECKED
 FIT OF WAY CHECKED
 No.

LEXINGTON

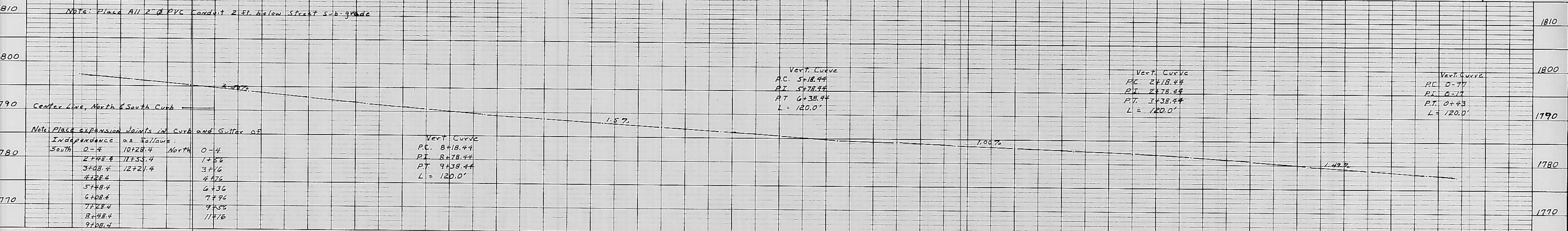
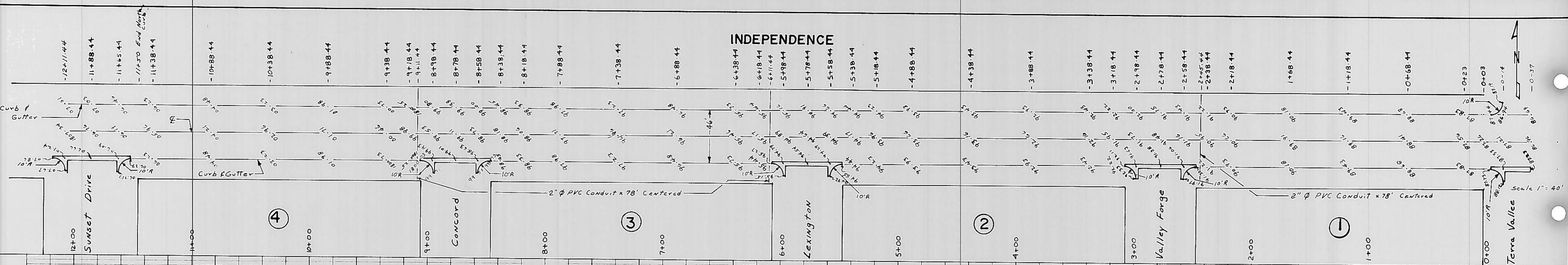
Note: Street Width Shown is
 back to back of Curb



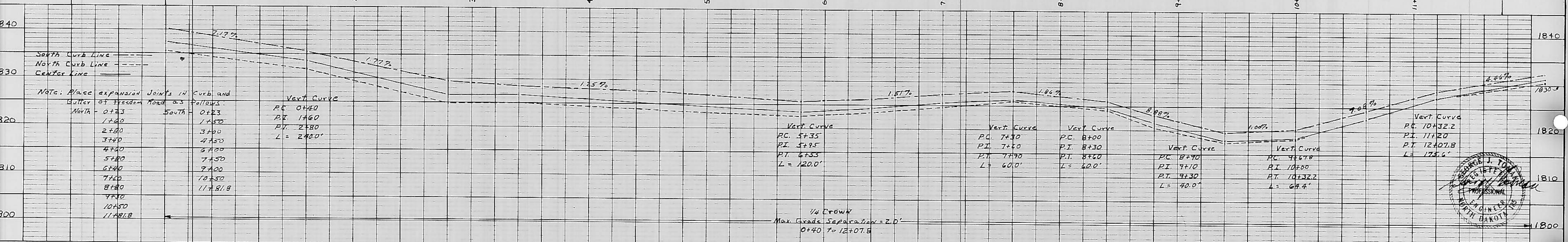
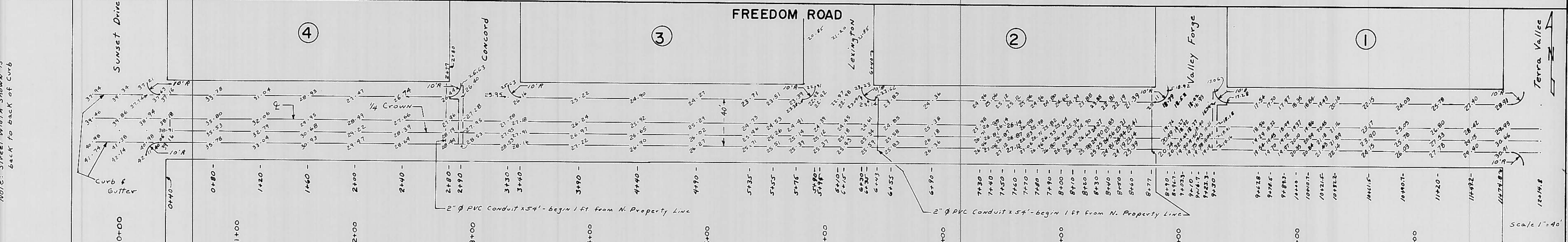
VALLEY FORGE



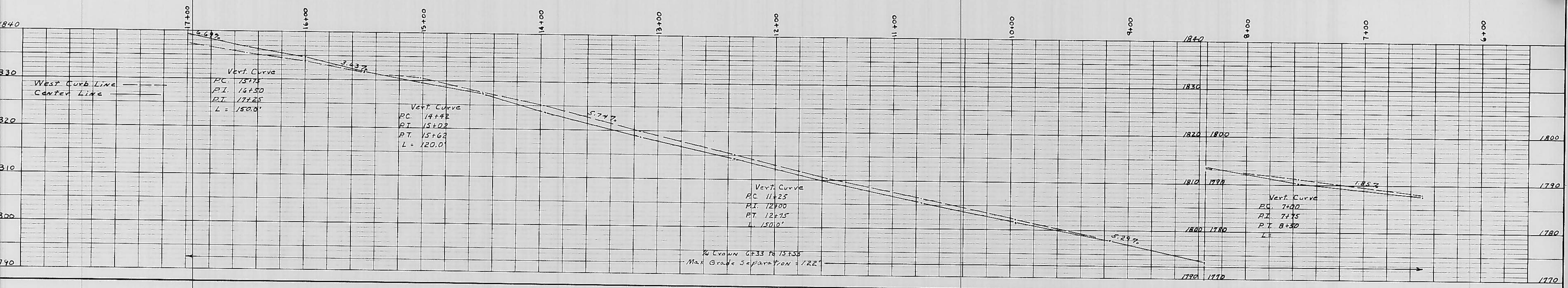
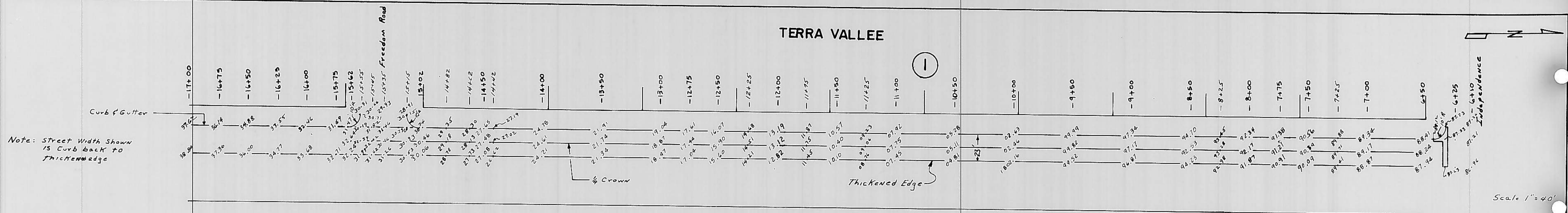
INDEPENDENCE



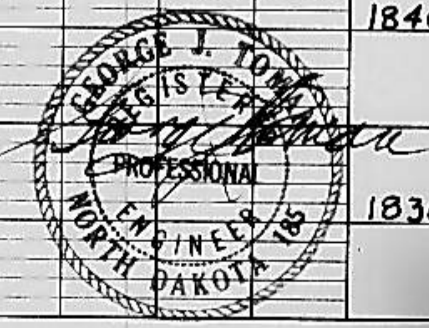
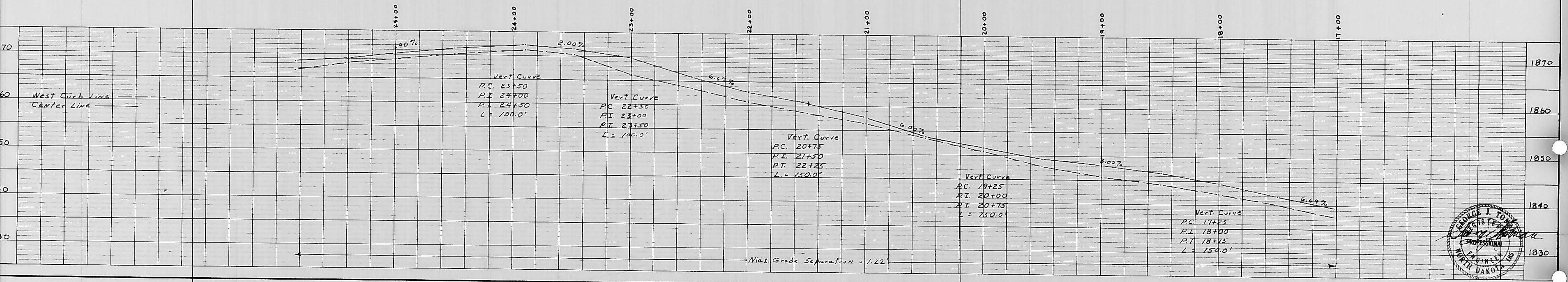
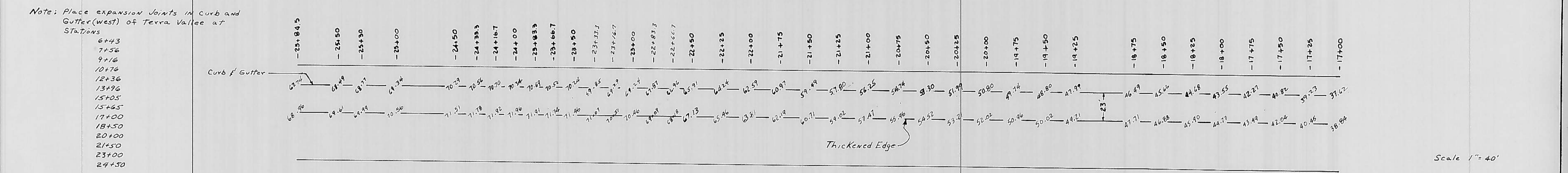
FREEDOM ROAD



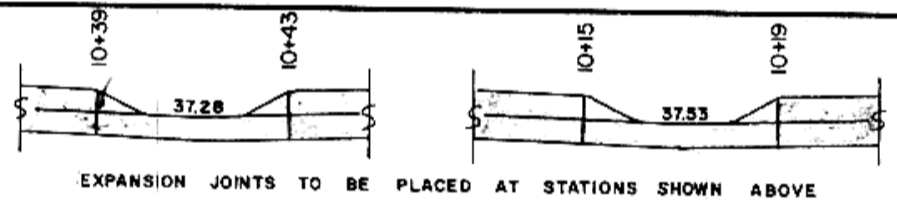
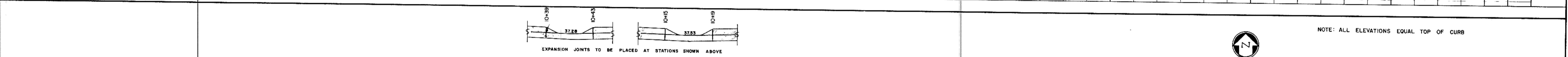
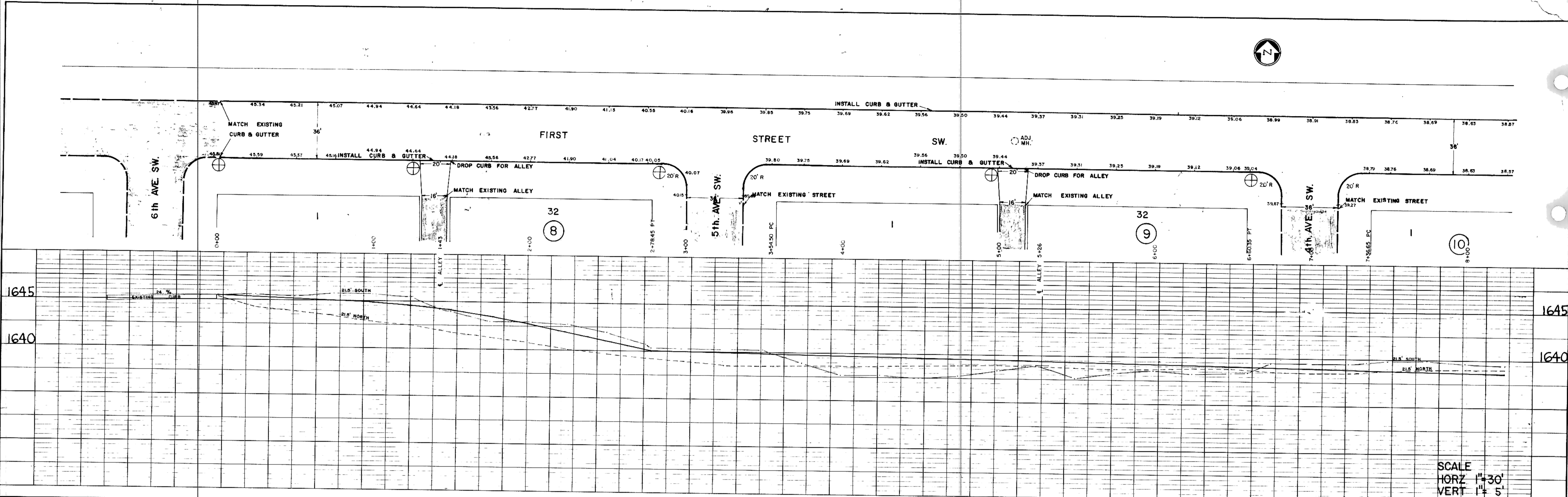
TERRA VALLEE



TERRA VALLEE

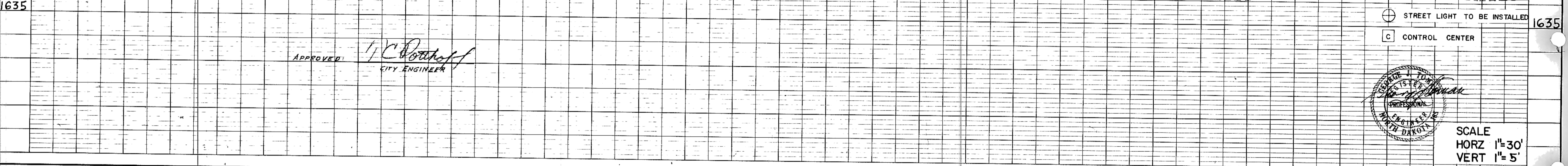
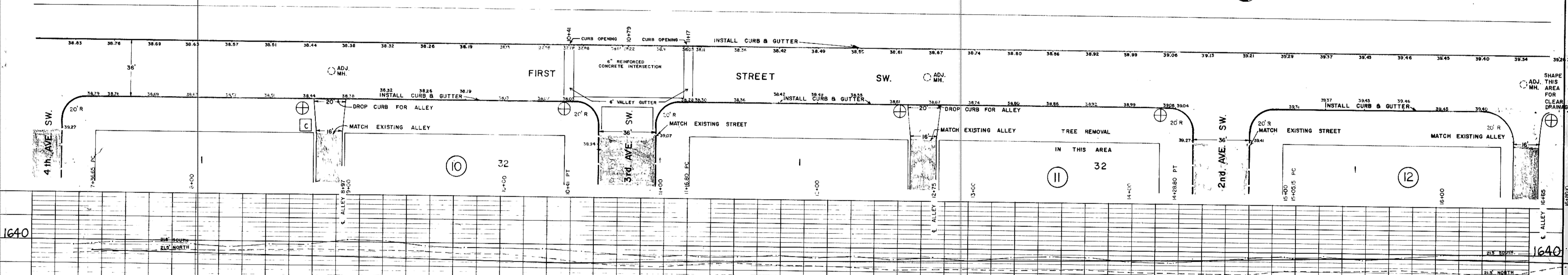


DATE: _____
 BY: _____
 SURVEYED: _____
 PLAN: _____
 NOTE BOOK: _____
 NO.: _____
 ALIGNMENT CHECKED: _____
 REVISIONS: _____



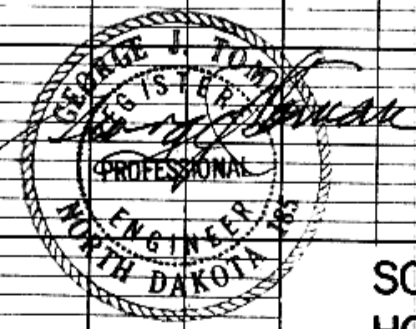
SCALE
 HORZ 1"=30'
 VERT 1"=5'

DATE: _____
 BY: _____
 SURVEYED: _____
 PROFILE: _____
 NOTE BOOK: _____
 NO.: _____
 ALIGNMENT CHECKED: _____
 REVISIONS: _____



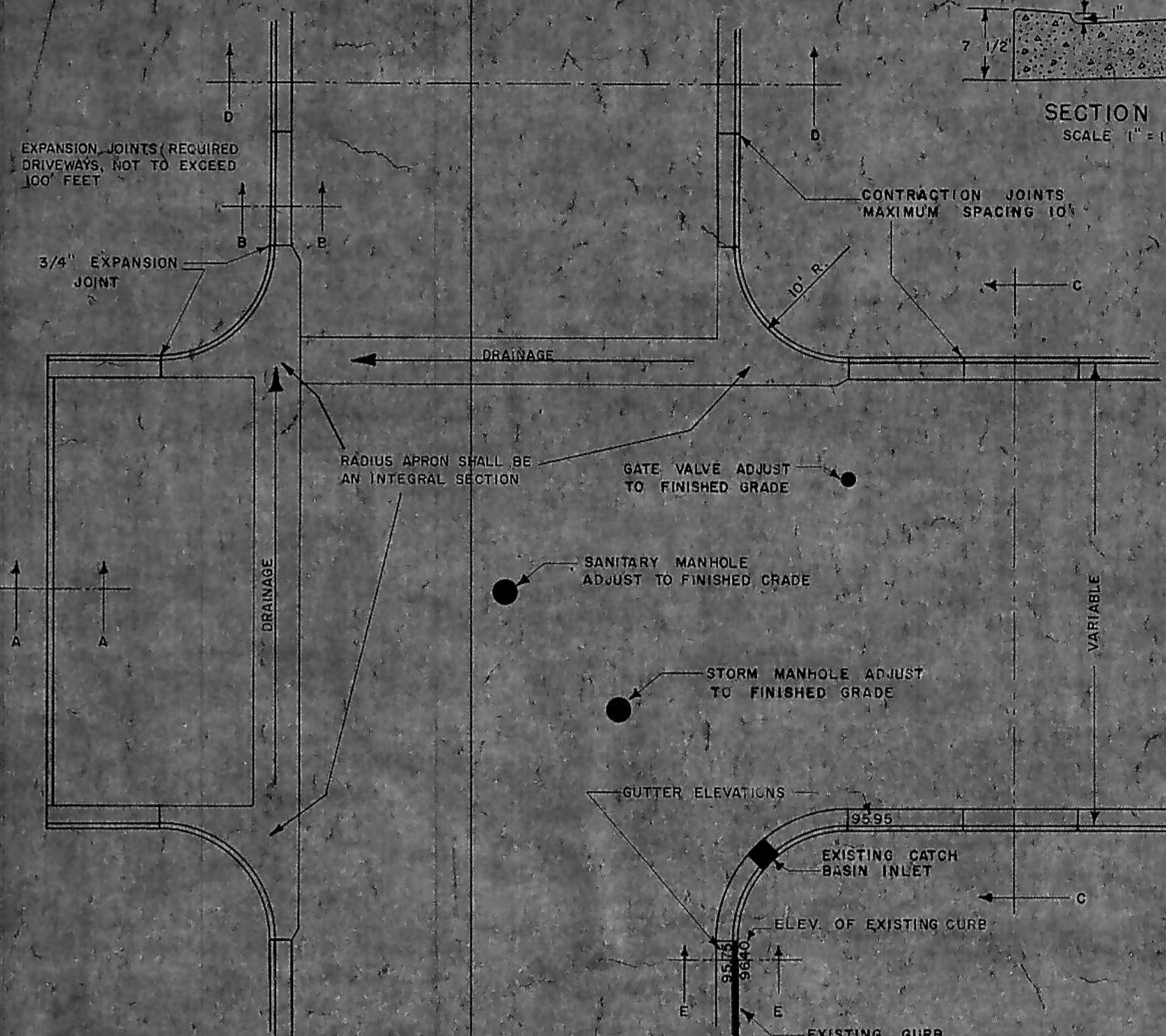
APPROVED: *H.C. Rothoff*
 CITY ENGINEER

- ⊕ STREET LIGHT TO BE INSTALLED
- ⓐ CONTROL CENTER

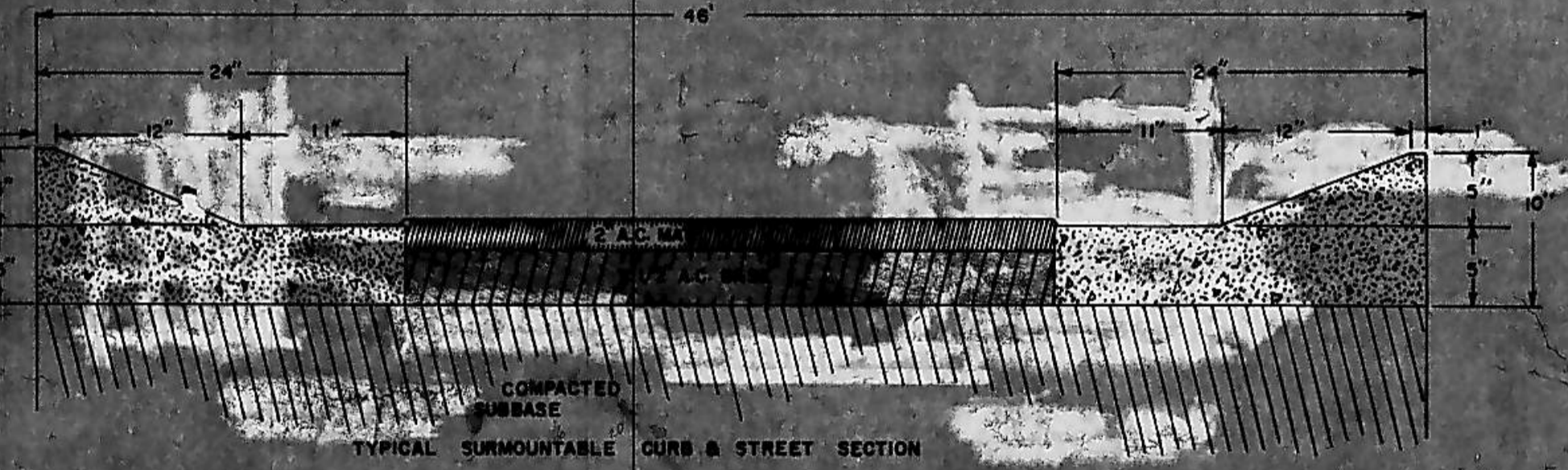


SCALE
 HORZ 1"=30'
 VERT 1"=5'

NOTE: INSTALL REINFORCED CONCRETE GUTTER AS SHOWN ON PLANS AND PROFILE. DRAINAGE MAY BE REQUIRED ACROSS ASPHALT SURFACING

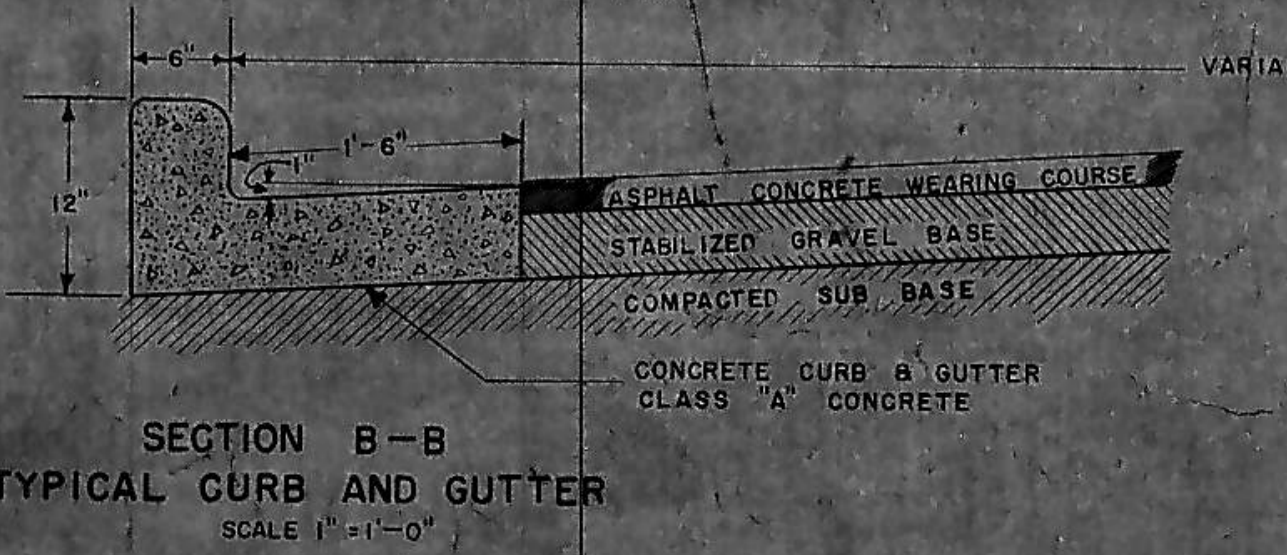
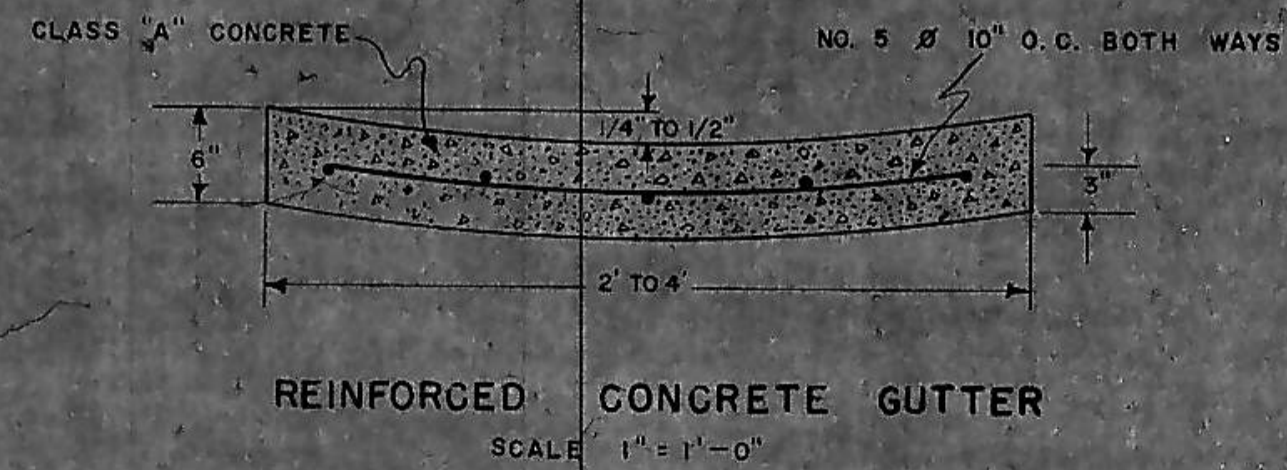


TYPICAL STREET INTERSECTION PLAN
SCALE 1" = 10'

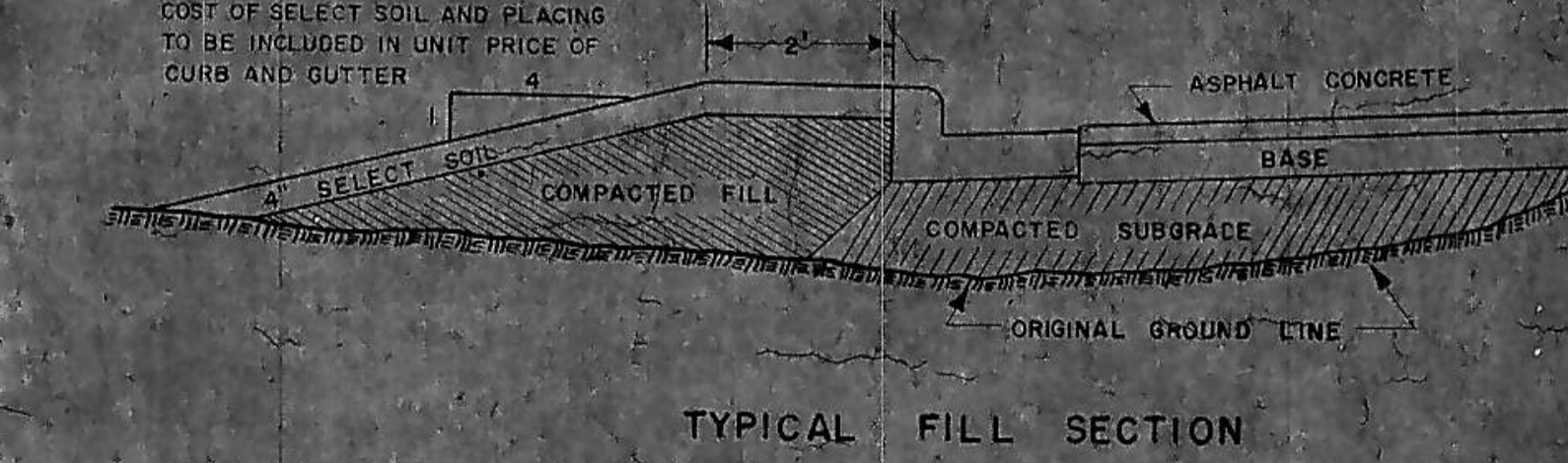
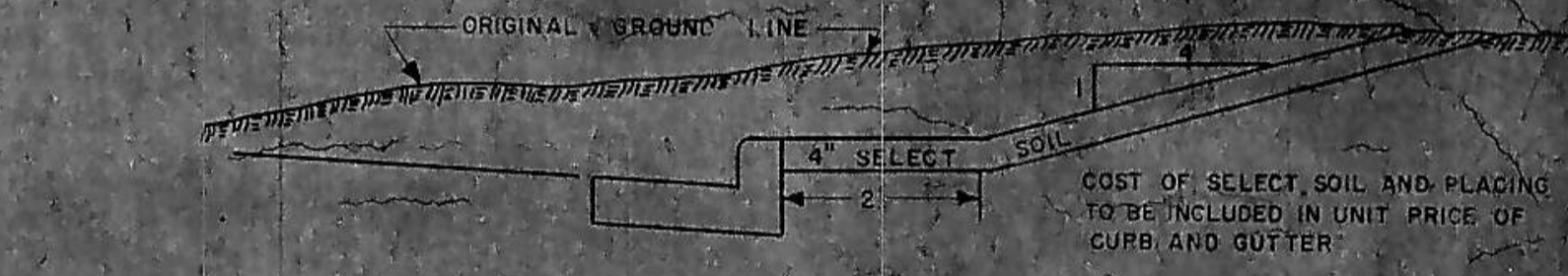
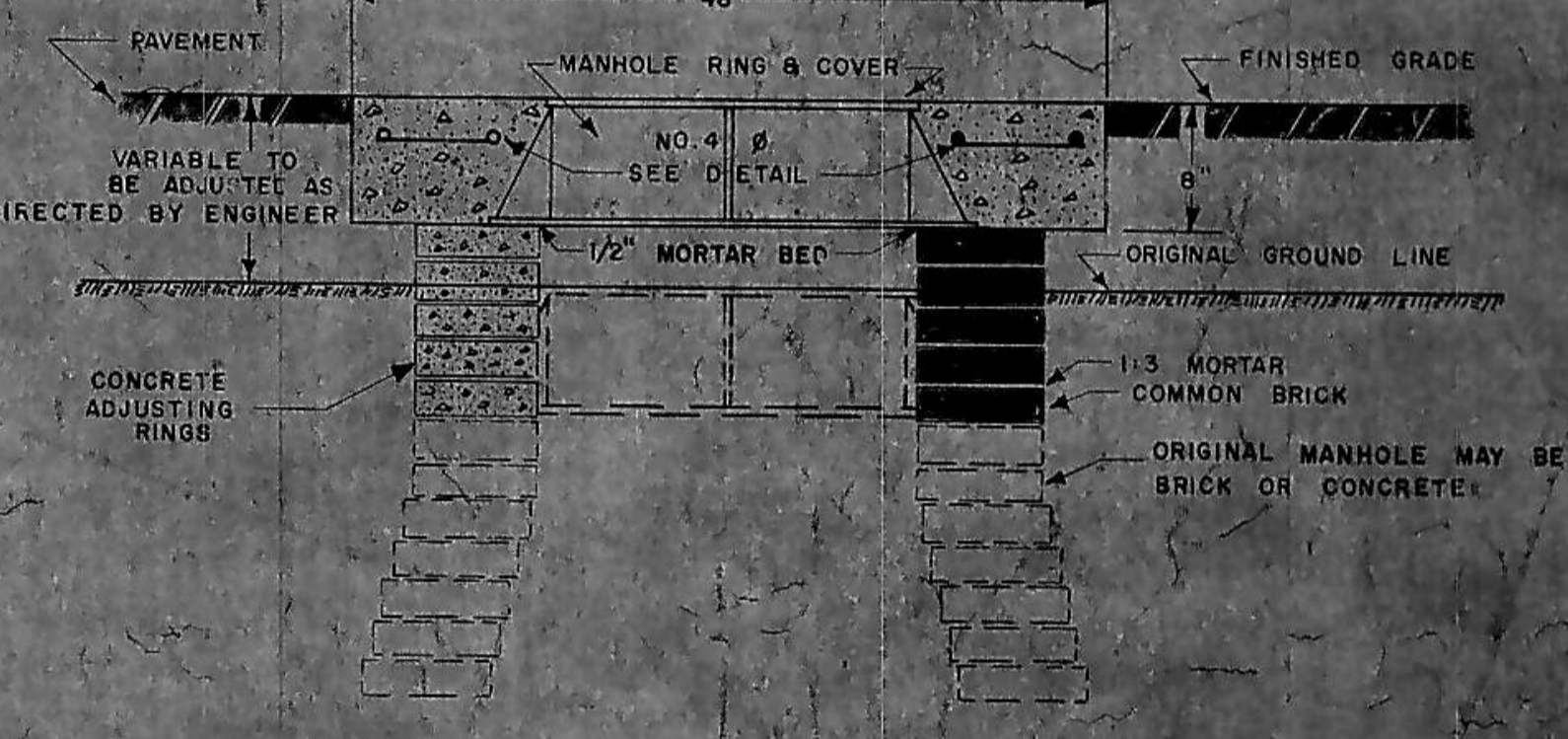
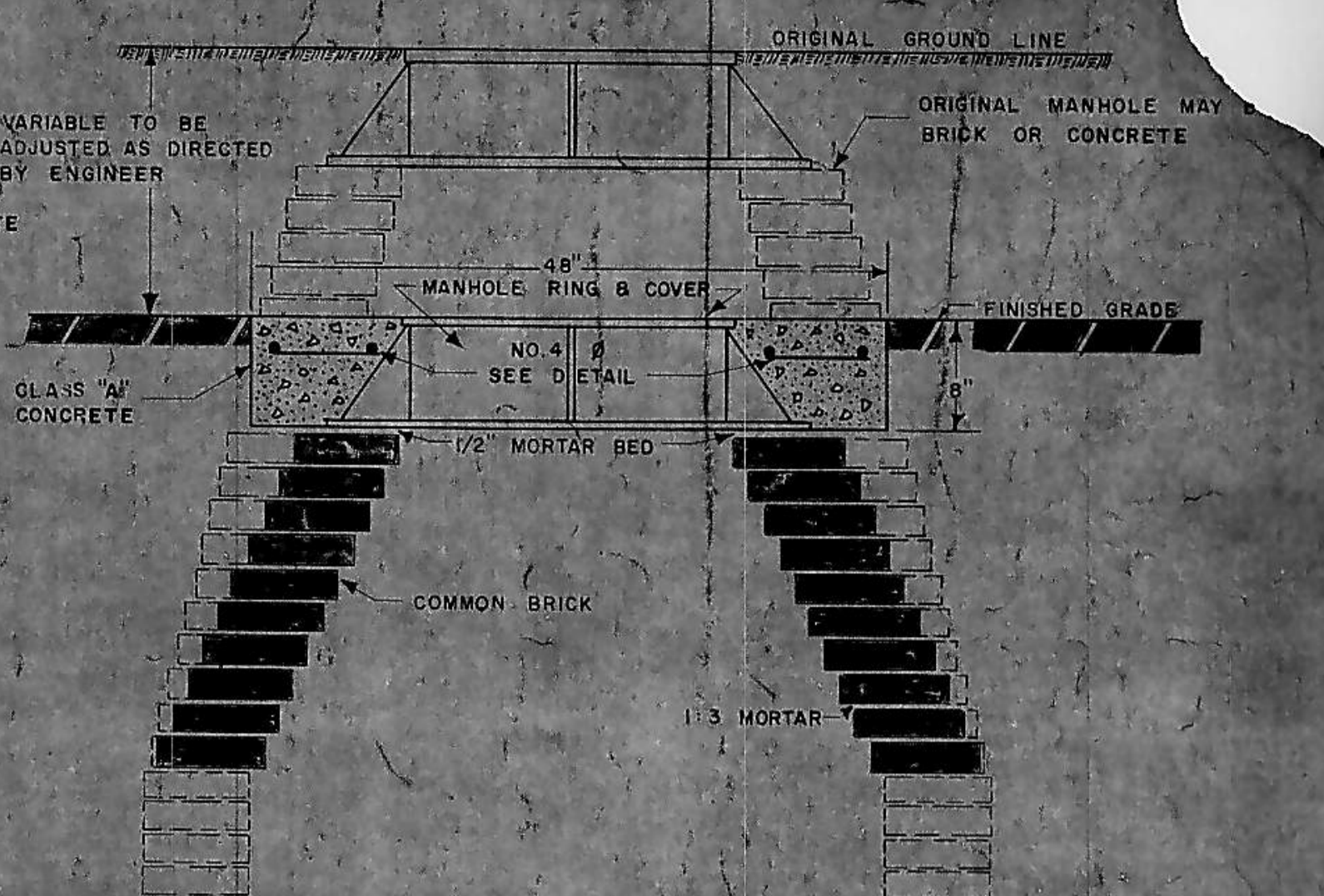
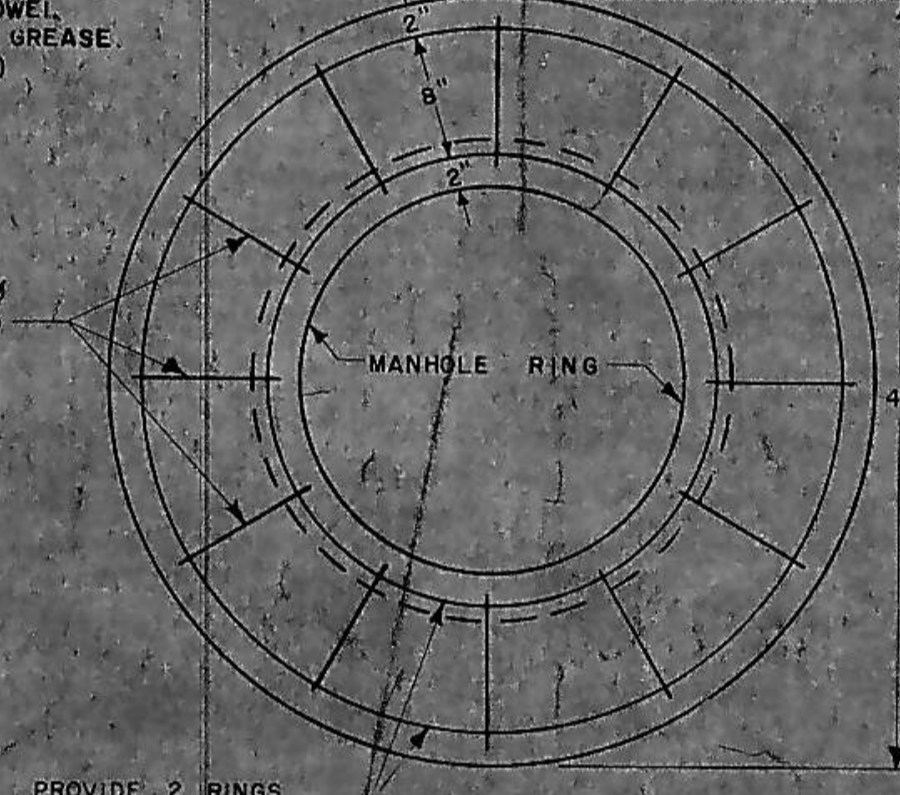
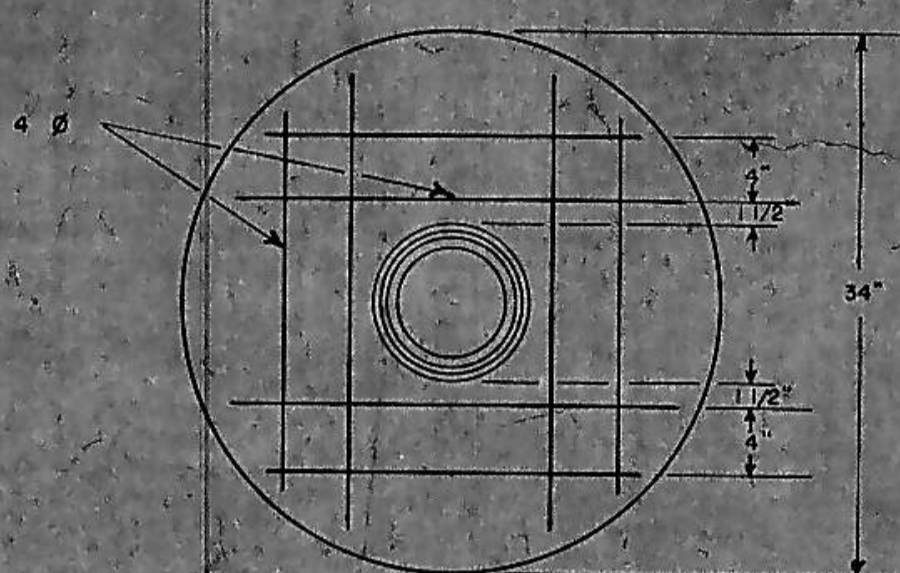
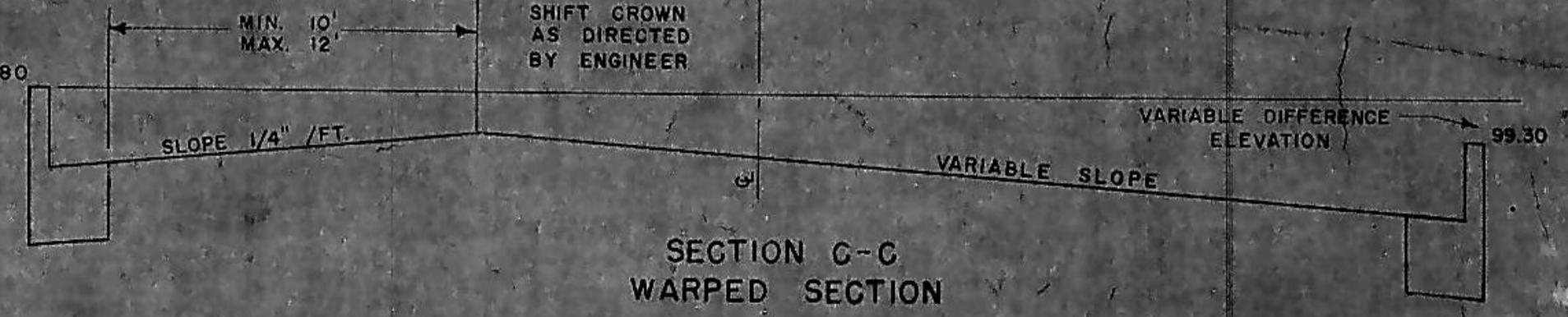
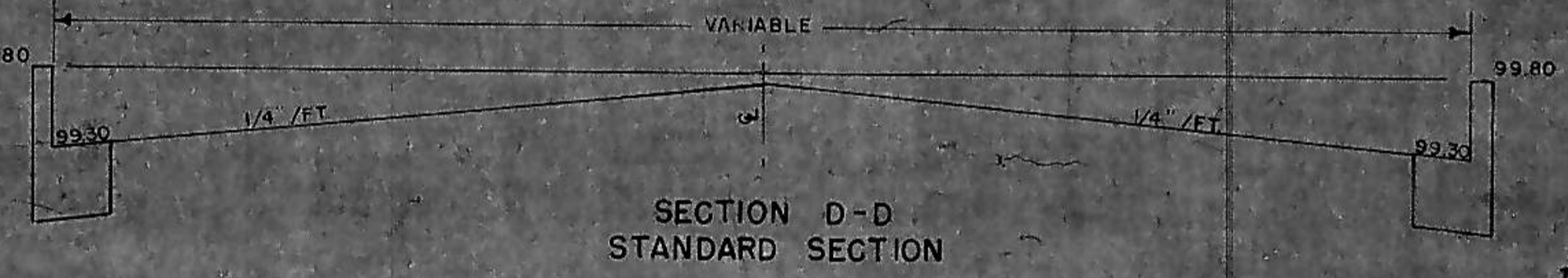
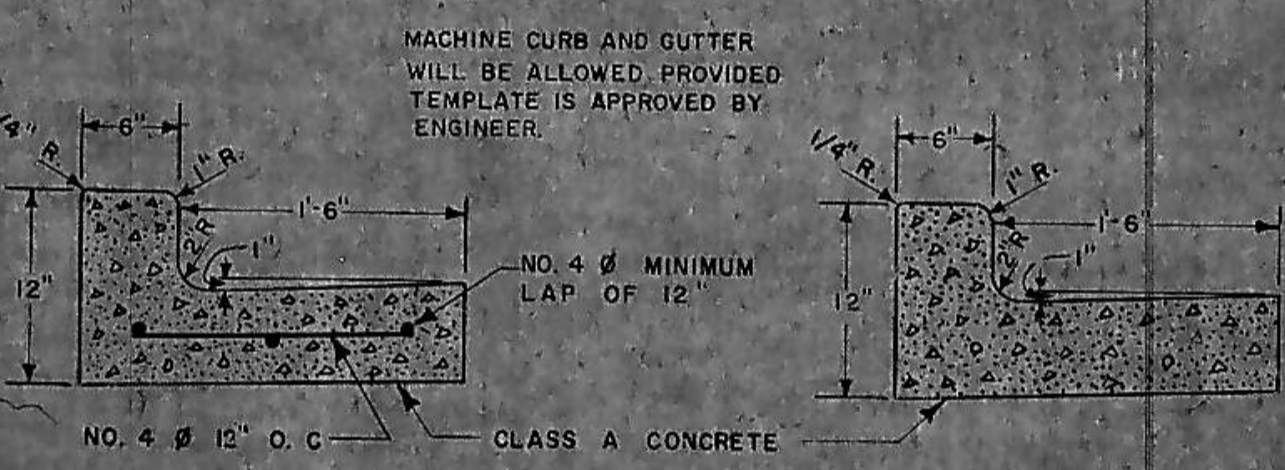
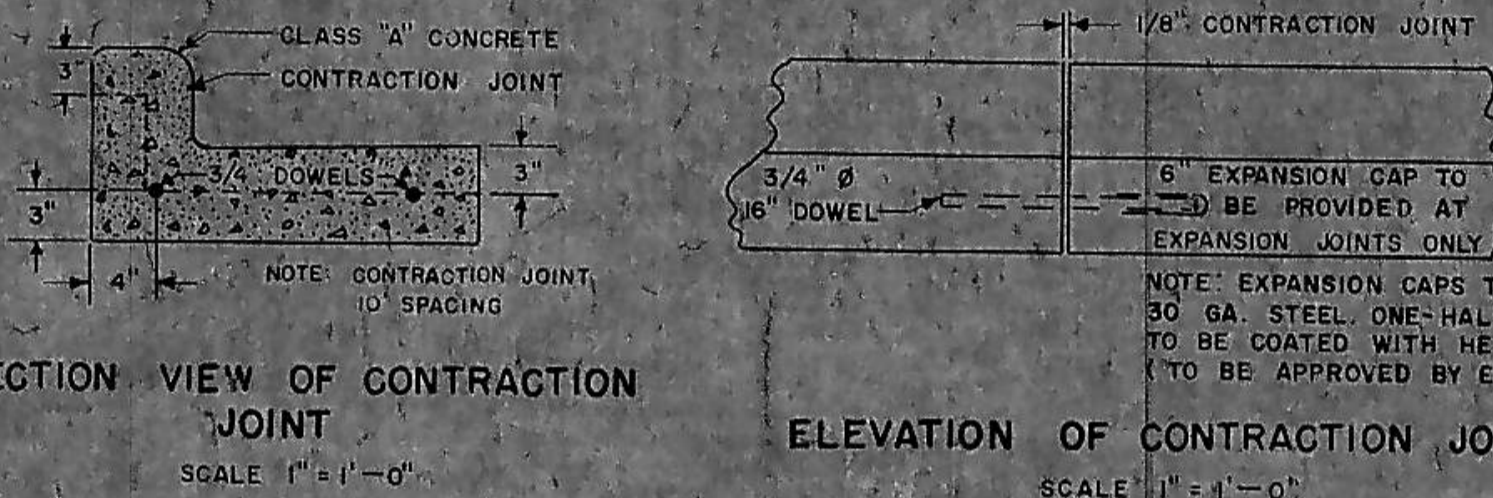
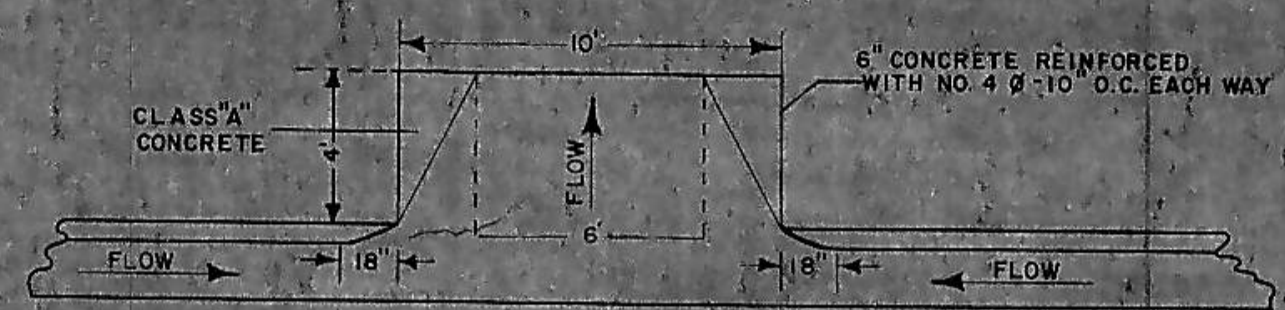
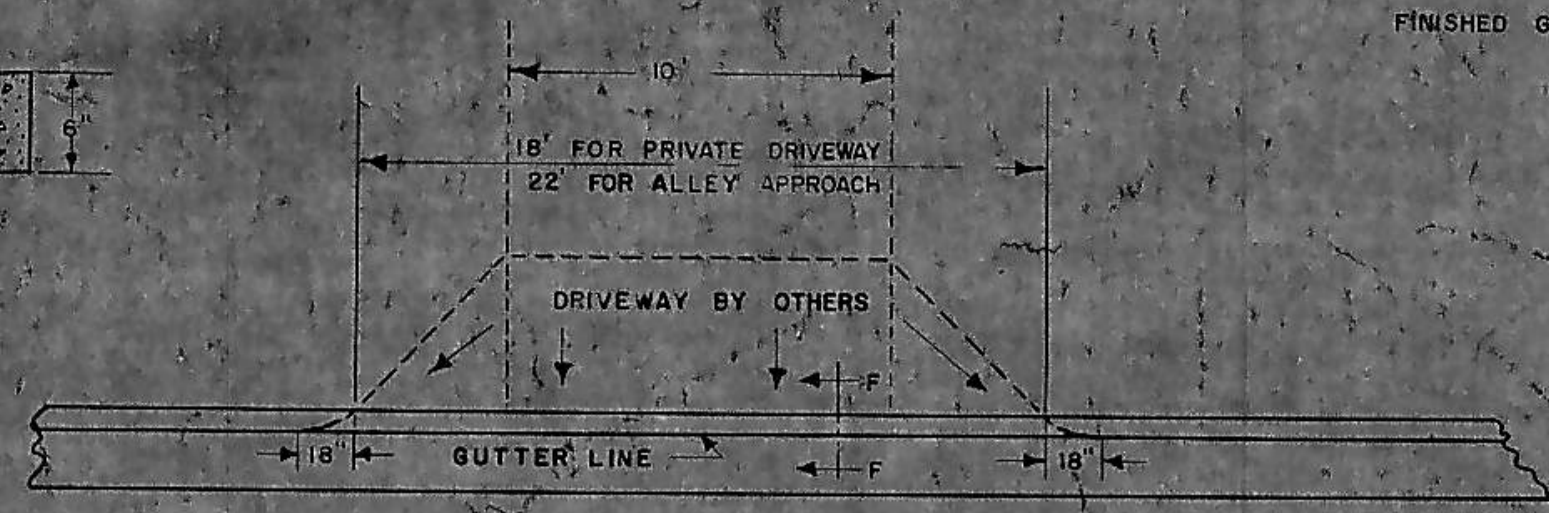
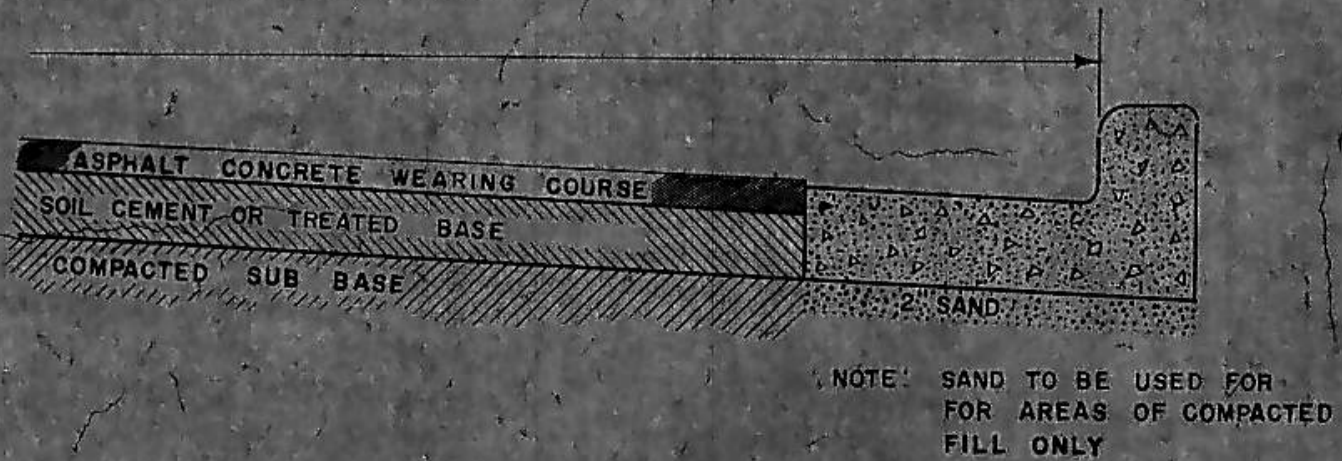


NOTE: A 3/2" BASE IS REQUIRED ON INDEPENDENCE, SUNSET, & TENA VALLEE
A 2 1/2" BASE IS REQUIRED ON CONCORD, LEXINGTON, VALLEY FORGE, & FREEDOM ROAD

NOTE: TEMPLATE FOR CONCRETE GUTTER SECTION MAY VARY AS DIRECTED BY THE ENGINEER. PROVIDE TEMPLATE TO CONSTRUCT CONTRACTION JOINT 1/8" WIDE AND 3/8" DEEP AS SHOWN ON CURB AND GUTTER DETAILS



NOTE: FINISHED PAVEMENT TO BE 1/4" ABOVE EDGE OF GUTTER



Job: ST. IMP. DIST. NO 54

File No. _____ Date: _____

Revised: _____

Scale: _____

DRAWN BY: _____ CHECKED BY: _____

PAVING DETAILS

George J. Toman
R. P. E. No. 185

CONSULTING ENGINEER
Mandan, N.D.

TERRA VALLEE

NOTE: Changes made as authorized by City Engineer Terrance C. Potthoff

Terrance C. Potthoff 27 May 1977

- All future hookup locations for the individual house lights shall be clearly marked as follows:
- #8 - green - ground
 - #6 - white - neutral
 - #6 - Red - hot wire

- Legend
- ⊙ 150 Watt High Pressure Sodium W/2 Foot Pole
 - ⊙ 100 Watt Mercury Vapor Service (light Not included)
 - ◇ Junction Box
 - Control Center

Table of Quantities

LINE	Wire	each	Length	Total
ML #1	#2 Al. or #3 USC	116.0'		232.0'
	#6 Cop.	116.0'		116.0'
ML #2, 3, 4	#2 Al. or #3 USC	422.0'		844.0'
	#6 Cop.	422.0'		422.0'
ML #1A	#2 Al. or #3 USC	118.0'		236.0'
	#6 Cop.	118.0'		118.0'
ML #2A, 3A, 4A	#2 Al. or #3 USC	424.0'		848.0'
	#6 Cop.	424.0'		424.0'
BC #3, 5, 7	#6 Al. or #4 USC	138.5'		277.0'
	#6 Cop.	138.5'		138.5'
BC #2, 4, 6	#4 Al. or #4 USC	884.5'		1769.0'
	#6 Cop.	884.5'		5307.0'
BC #8	#2 Al. or #3 USC	884.5'		1769.0'
	#6 Cop.	884.5'		1769.0'

- Note: 1. Wire lengths indicated do NOT include loops necessary for connections into Junction boxes and control centers.
2. Each 150 Watt HPS light shall have one frost loop 1.5 ft long (Wire inches away from and return to line) and a five foot extension to pole.
3. Each 100 Watt Mercury Vapor light shall have a 1.5 foot loop on each side of light location (Wire inch displacement away from and return to line) and a five foot loop (5 ft. displacement from line and return to line). All loops are to be laid parallel and adjacent to lines.
4. Provide one #8 (green) tap for each light Standard location connected to #6 bare ground.

THOMAS ENGINEERING COMPANY
CONSULTING ENGINEERS
P.O. BOX 708
WANDAN, NORTH DAKOTA 58554



Scale 1" = 50'

REVISIONS			DATE	BY
NO.	DATE	BY		
1	5-12-77	BTM		
2				
3				
4				
5				

