

SCALE - 1"=50'

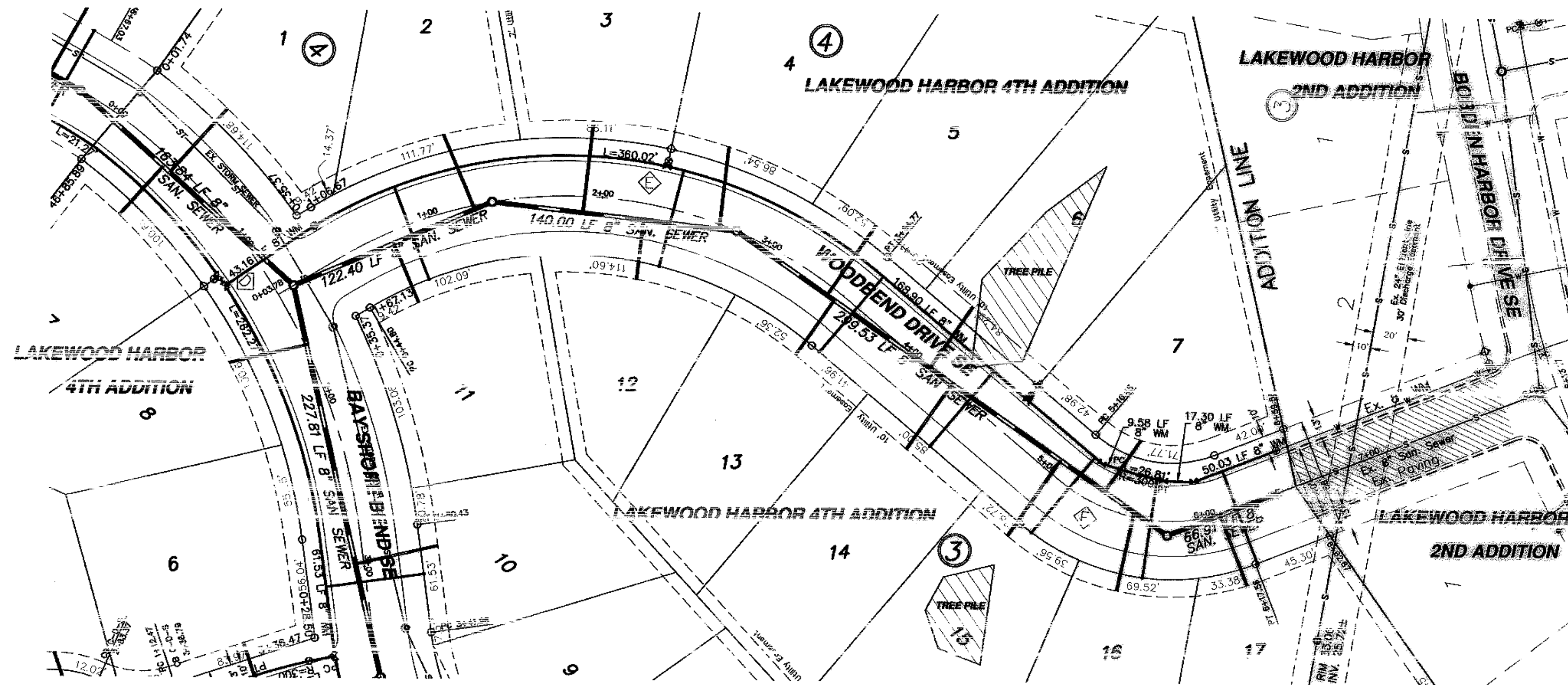
Sta. 0+13.78 CL 0+00 Ahd.
=San. Sewer Sta. 0+60 Ahd.
Manhole No. 2

Sta. 1+37.09 CL 0+00 Ahd.
=San. Sewer Sta. 1+22.40 Bk.
Manhole No. 9

Sta. 2+78.99 CL 0+00 Ahd.
=San. Sewer Sta. 1+40.00 Bk.
Manhole No. 10

Sta. 5+78.39 CL 8.19' Rt.
=San. Sewer Sta. 2+39.53 Bk. NE
=San. Sewer Sta. 0+66.51 Bk. SE
Manhole No. 11

Sta. 6+43.17 CL 0+00 Ahd.
=San. Sewer Sta. 0+00 Ahd.
Ex. 8" Cap



Lot	Block	4" Sewer Service	4" x 22 1/2" Bend	4" x 15" Bend	8" x 4" Wye Branch At The Cap	1" Water Serv. Connection	7" Ball Valve Curb Stop	1 1/2" Box
11	3	36.7	1	1	29.00	56.0	1	1
2	4	45.9	1	1	29.00	---	---	---
3	4	52.4	1	1	29.00	---	---	---
12	3	33.8	1	1	29.00	56.0	1	1
7	1	45.7	1	1	29.00	---	---	---
13	3	39.0	1	1	29.00	56.0	1	1
8	4	42.4	1	1	29.00	---	---	---
14	3	45.4	1	1	29.16	56.0	1	1
15	3	52.3	1	1	29.52	55.8	1	1
7	4	35.5	1	1	29.48	---	---	---
16	3	45.6	1	1	29.68	56.2	1	1
17	3	27.4	1	1	29.30	56.0	1	1
TOTAL		565.6	1	12	13	392.0	7	7

STATION	DIRECTION	LOT	GLUCK
APPROXIMATE WYE LOCATIONS			
FROM MANHOLE NO. 2 TO MANHOLE NO. 9			
0+62	SW	11	3
1+12	NE	2	4
FROM MANHOLE NO. 9 TO MANHOLE NO. 10			
0+52	NE	3	4
0+87	SW	12	3
1+30	NE	4	4
FROM MANHOLE 10 TO MANHOLE 11			
0+63	SE	5	4
0+66	NW	13	4
1+34	SE	6	4
1+50	NW	14	3
2+25	NW	15	3
2+56	SE	7	4
2+77	W	16	3
FROM EXISTING 8" CAP TO MANHOLE NO. 11			
0+35	SW	17	3

Manhole Number	9	10	11
Casting Elev.	38.60	39.35	38.94
Top P.C. Section	37.56	38.31	37.90
Invert Elev. (6)	27.04	27.70	28.01
Invert Elev. (10)	27.14	27.80	29.00
Invert Elev. (11)	---	---	---
Length P.C. Section	10.52	10.61	8.99

CURVE DATA				
CURVE	RADIUS	LENGTH	TANGENT	DELTA
E	250.00'	309.97'	178.45'	71°02'22"
F	100.00'	107.11'	59.34'	61°22'15"

Sta. 0+41.11 22.98' Lt.
8" Gate Valve & Box

Sta. -0+23.58 19.65' Lt.
8" x 6" Tee

Sta. 2+32.39
8" x 6" Tee
3.00 LF 6" WM
6" Gate Valve & Box
7.00 LF 6" WM
6" Hydrant

Sta. 4+67.47
8" x 6" Tee
3.00 LF 6" WM
6" Gate Valve & Box
7.00 LF 6" WM
6" Hydrant From Valve

Sta. 5+27.45 21.87' Lt
8" 22 1/2" Bend

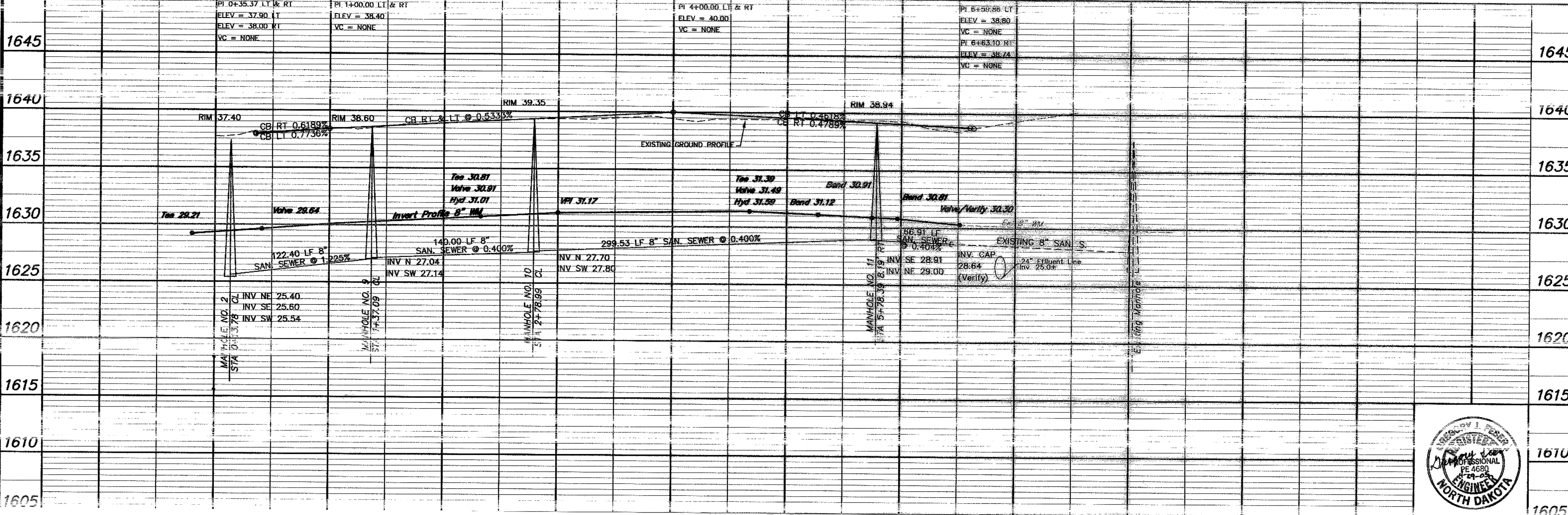
Sta. 5+74.66 22.61' Lt
8" 11 1/4" Bend

Sta. 6+51.37
Remove & Salvage
8" x 6" Reducer
1 LF 6" WM
6" Hydrant

Sta. 6+51.37
8" Gate Valve & Box

End Watermain Quantities
Sta. 6+51.37

End San. Sewer Quantities
Sta. 6+43.17



APPROXIMATE QUANTITIES	
San. Sewer Items	
8" Sanitary Sewer	Quantity
8" x 4" Wye Branch	629 LF
Concrete Manhole	3 EA
4" Sewer Service Pipe	566 LF
4" 45' Bend	12 EA
4" 22 1/2" Bend	1 EA
Move Trees	1 LS
Watermain Items	
6" PVC Watermain	20 LF
8" PVC Watermain	676 LF
6" Hydrant	1 EA
6" Hydrant From Salvage	1 EA
6" Gate Valve & Box	2 EA
8" Gate Valve & Box	2 EA
Ductile Iron Fittings	(incidental)
1" Water Copper Serv. Pipe	392 LF
1" Water Serv. Connection	7 EA
1" Ball Valve Curb Stop	7 EA
And 1 1/2" Box	---

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WOODBEND DRIVE SE
FROM BAY SHORE BEND SE SOUTH TO
130' NORTH OF BORDEN HARBOR DRIVE SE

1610 WATER AND SEWER IMPROVEMENT PROJECT 2005-19

1605 SHEET NO. 4 OF 5

MANDAN, ND APRIL 28, 2005