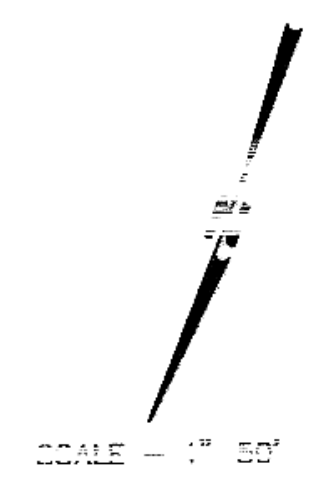


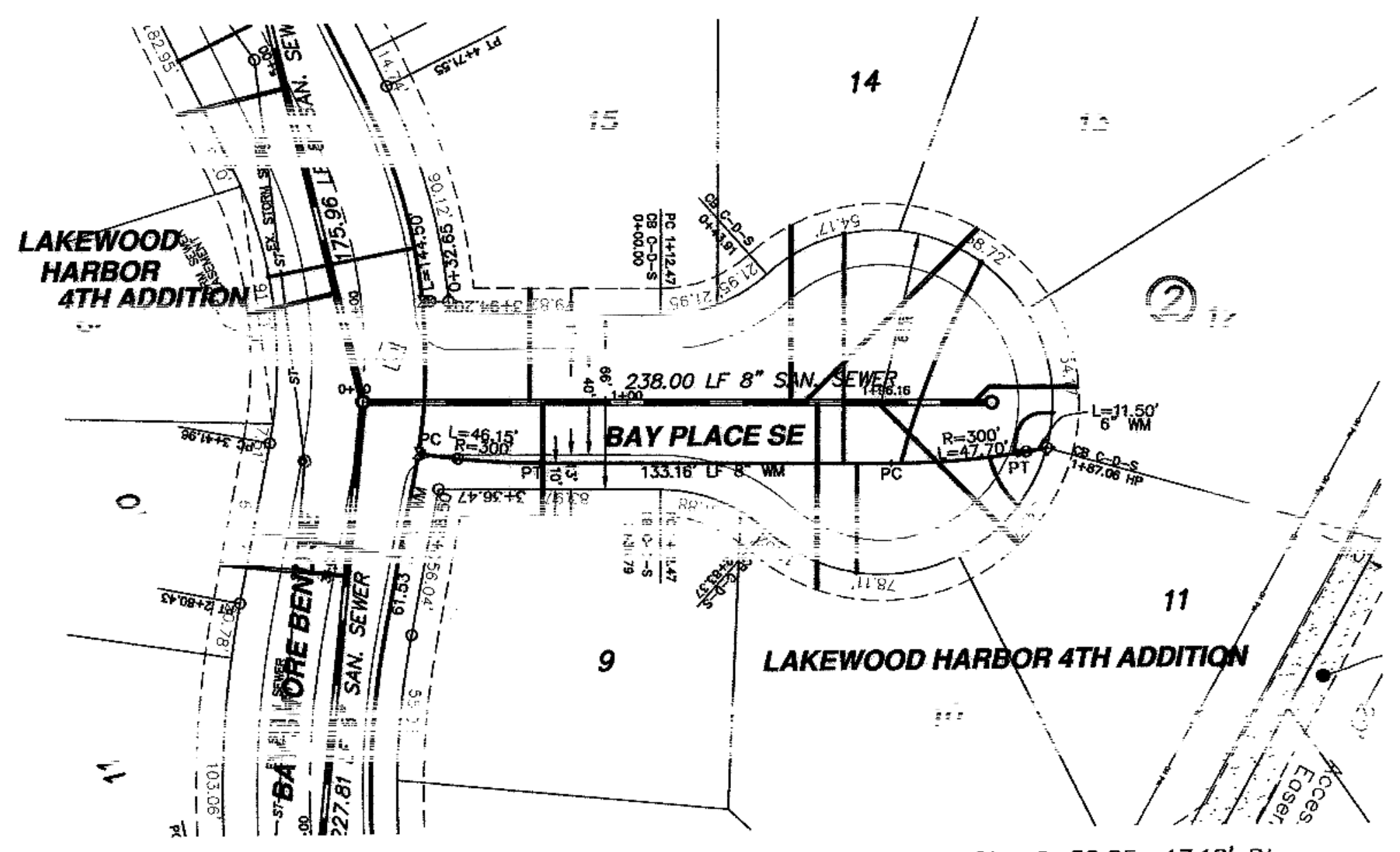
CONSTRUCTION NOTES (THIS SHEET)

1. BACKFILL SHALL BE CLASS 'A'.
2. THE PROFILE SHOWS THE EXISTING GROUND CENTERLINE OF THE STREETS. THIS WILL BE THE CONDITION AT THE TIME OF CONSTRUCTION.
3. THE CONTRACTOR SHALL VERIFY THE ELEVATION OF THE GROUND WATER AT THE TIME OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DEWATERING OR SOIL STABILIZATION (OTHER THAN USING SUBCUT GRAVEL) OF THE CONSTRUCTION SITE AS REQUIRED TO INSTALL THE PROPOSED UTILITIES.
4. PROTECT ALL SURVEY MONUMENTS. MONUMENTS DISTURBED OR DESTROYED SHALL BE REPLACED BY THE OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
5. ALL HYDRANTS SHALL HAVE 8.5' BURY DEPTH AND THE HYDRANT NOZZLE SHALL BE 18" ABOVE THE FINAL FINISHED GROUND ELEVATION.



Sta. 0+00.00 Cl. 0+00
=San. Sewer Sta. 0+00
Manhole No. 3

Sta. 2+38.00 Cl. 2+38.00
=San. Sewer Sta. 2+38.00
Manhole No. 12



Sta. 0+20.91 19.46 Rt. Sta. 0+35.89 21.40 Rt.
6" Gate Valve & Box

Sta. 2+58.85 17.18' Rt.
6" Gate Valve & Box

Sta. 2+48.15 20.12' Rt.
8" x 6" Reducer

Sta. 2+38.00
Manhole No. 12

Begin Watermain Quantities
Sta. 0+20.91

End Watermain Quantities
Sta. 2+58.85

Begin San. Sewer Quantities
Sta. 0+00.00

End San. Sewer Quantities
Sta. 2+38.00

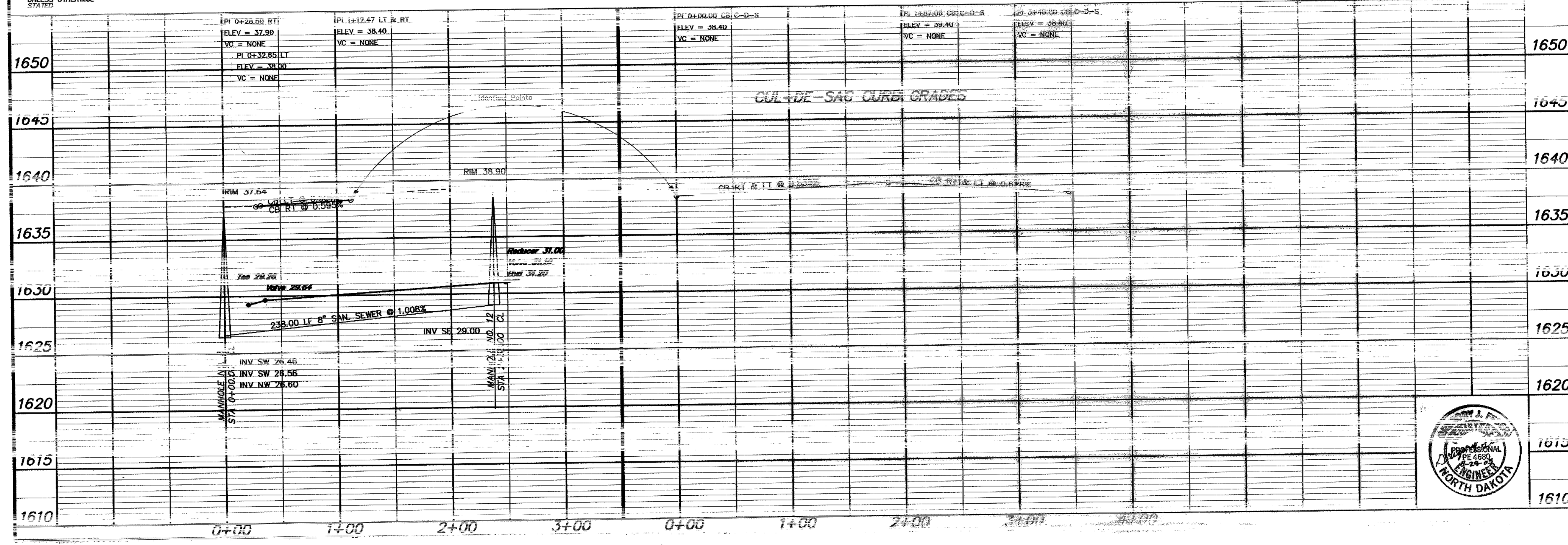
Station	Direction	Lot	Block
15	2	43.0	---
9	2	43.0	---
14	2	66.7	---
13	2	92.8	---
10	2	174.0	---
11	2	174.0	---

APPROXIMATE WYE LOCATIONS

Station	Direction	Lot	Block
15	2	43.0	---
9	2	43.0	---
14	2	66.7	---
13	2	92.8	---
10	2	174.0	---
11	2	174.0	---

Manhole Number	12
Top P.C. Section	37.86
Invert Elev. (a)	29.00
Length P.C. Section	8.86

NOTE:
ALL WATER MAIN IS 2'100' RIGHT OF CENTERLINE UNLESS OTHERWISE STATED



APPROXIMATE QUANTITIES

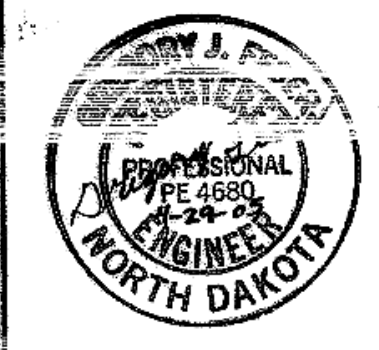
San. Sewer Items	Quantity
8" Sanitary Sewer	238 LF
4" x 4" Manhole	7 EA
Concrete Manhole	1 EA
4" Sewer Service Pipe	435 LF
4" 45° Bend	5 EA

Watermain Items	Quantity
6" PVC Watermain	12 LF
8" PVC Watermain	227 LF
6" Hydrant	1 EA
6" Gate Valve & Box	1 EA
8" Gate Valve & Box	1 EA
Ductile Iron Fittings (incidental)	
1" Water Copper Serv. Pipe	250 LF
1" Water Serv. Connection	5 EA
1" Ball Valve Curb Stop And 1 1/2" Box	5 EA

SWENSON, HAGEN & COMPANY P.C.

Surveying
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Land Planning
Civil Engineering
Landscape & Site Design
Construction Management

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Phone (701) 223-3600
Fax (701) 223-3606



BAY PLACE SE
FROM BAY SHORE BEND SE NORTHWEST TO THE CUL-DE-SAC

WATER AND SEWER IMPROVEMENT PROJECT 2005-19
SHEET NO. 5 OF 5
MANDAN, ND APRIL 28, 2005