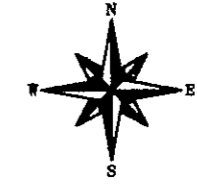
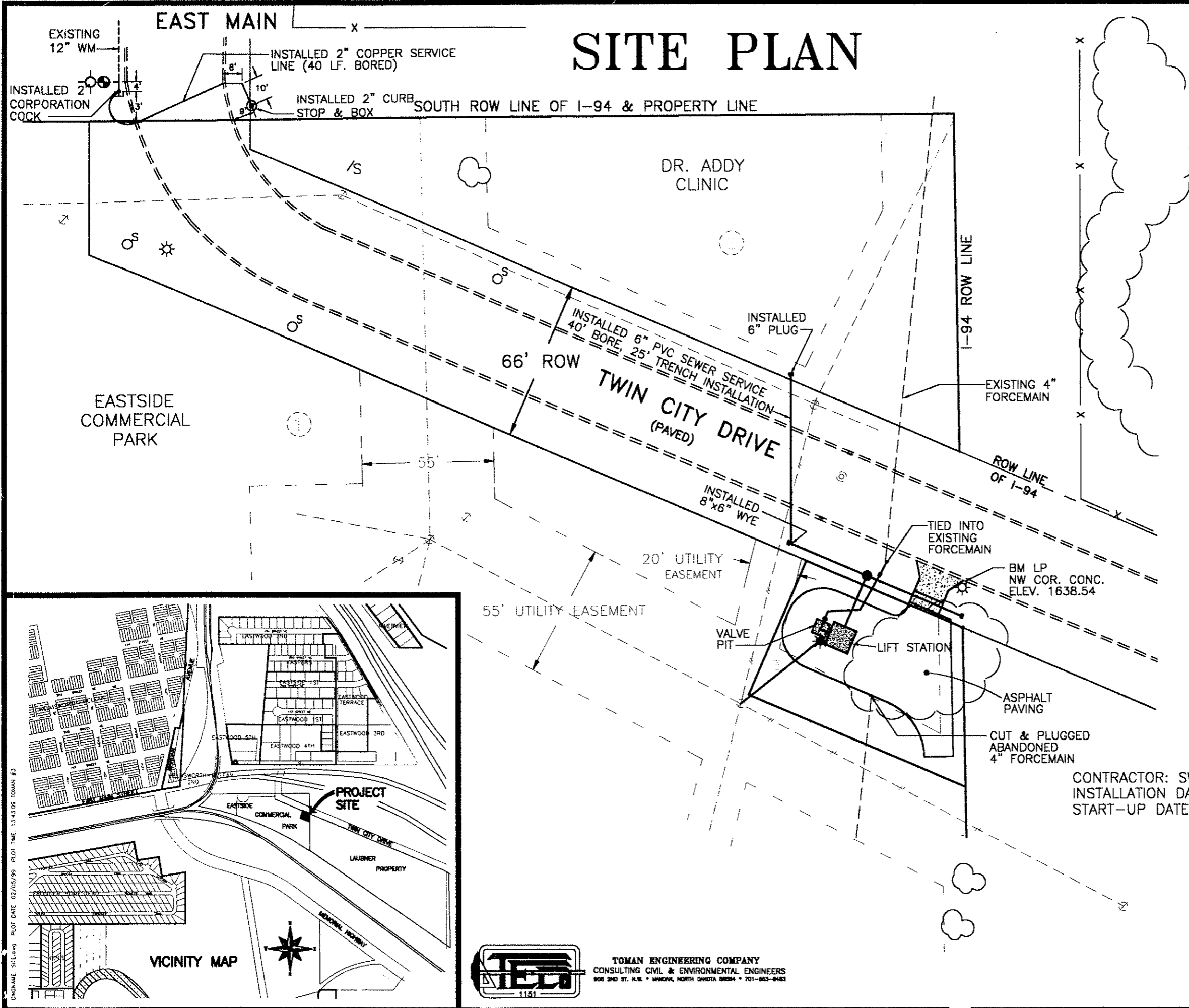


SITE PLAN



1"=40'

APRIL 1998

LEGEND

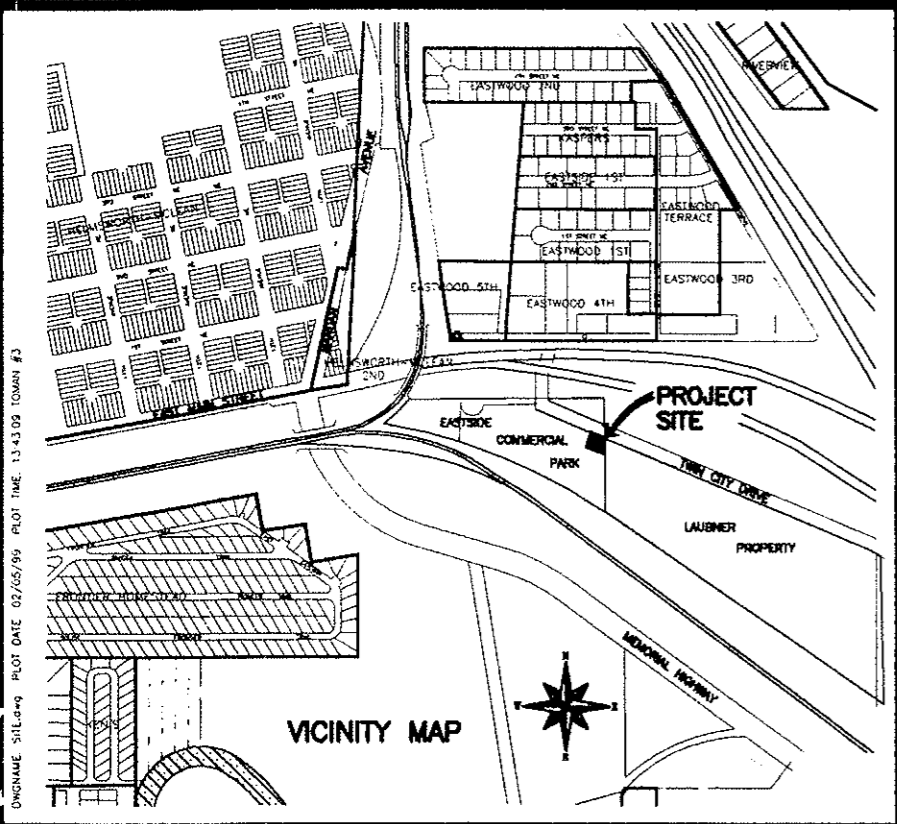
	CURB AND GUTTER
	UNPAVED ROAD
	CULVERT
	BUILDING
	FIELD LINE
	FENCE LINE
	OBSCURED AREA PERIMETER
	TREE EDGE
	SHRUB EDGE
	SINGLE TREES
	INDEX CONTOUR
	INTERMEDIATE CONTOURS
	DEPRESSED INDEX CONTOUR
	DEPRESSED INTERMEDIATE CONTOURS
	UTILITY POLE
	LIGHT POLE
	MANHOLE, CATCH BASIN
	EASEMENT
	OVERHEAD POWER LINES
	GATE VALVE
	HYDRANT

AVOID CUTTING UNDERGROUND UTILITY LINES IN YOUR AREA

TWO WORKING DAYS BEFORE YOU DIG-DRILL-BLAST IN NORTH DAKOTA - CALL TOLL FREE 1-800-795-0555

UTILITIES UNDERGROUND LOCATION CENTER

CONTRACTOR: SWANBERG CONSTRUCTION
 INSTALLATION DATE: 6/98
 START-UP DATE: 9/21/98



DWGNAME: 311L-98-00 PLOT DATE: 02/05/99 PLOT TIME: 11:43:09 TOWN: #3

TOMAN ENGINEERING COMPANY
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS
 801 3RD ST. N.W. • MANICAN, NORTH DAKOTA 58554 • 701-863-8483

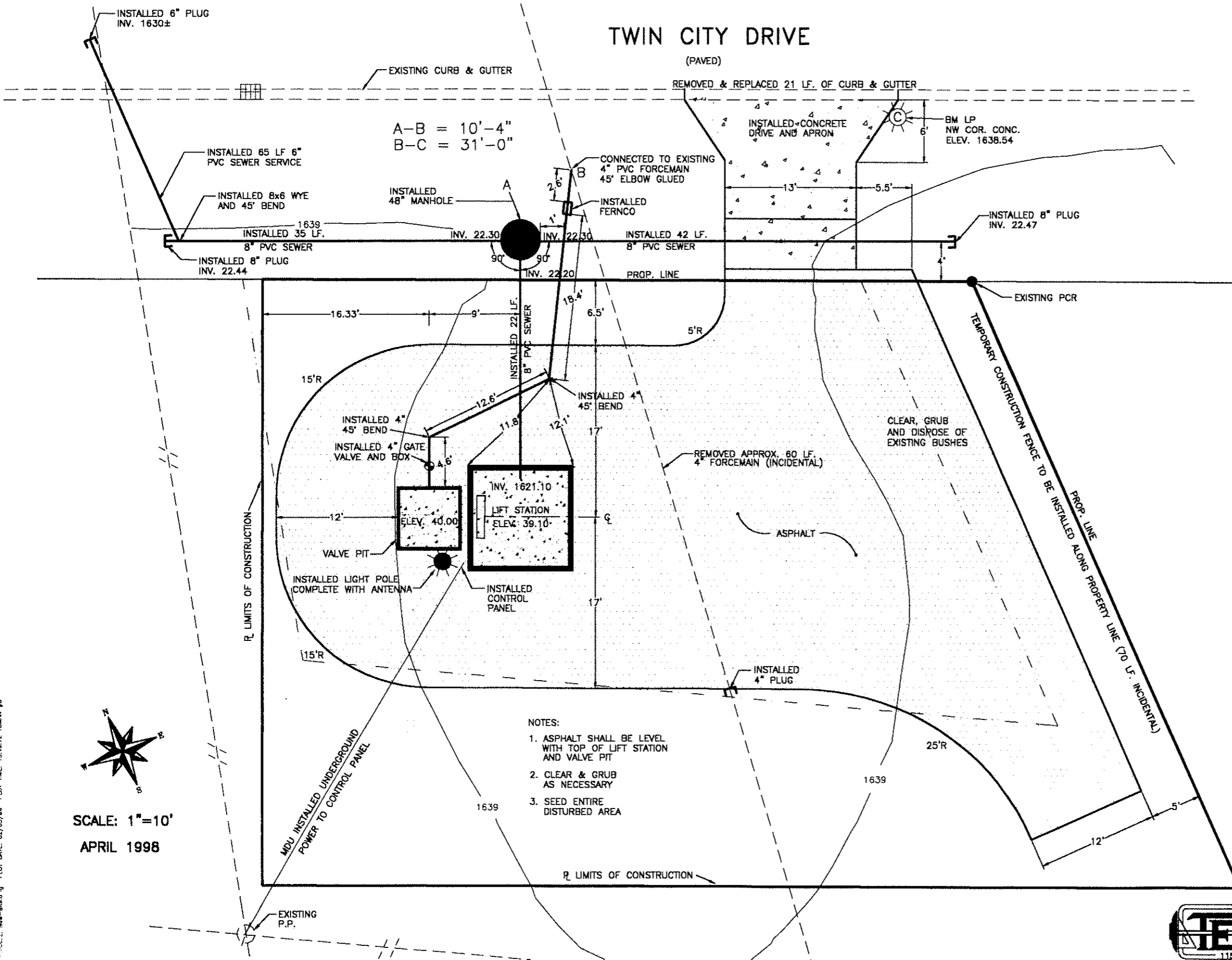
TOMAN ENGINEERING COMPANY
 CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS
 APRIL 1998
 SITE PLAN
 SEWER DISTRICT No. 23
 CITY PROJECT No. 98-12
 PROJECT: SANITARY LIFT STATION EASTSIDE COMMERCIAL PARK
 NO. 1
 DATE: 4/13/98
 BY: [Signature]
 REVISIONS: [Table]
 RECORD DRAWINGS: [Table]
 SHEET NUMBER: 1
 OF 4 SHEETS

8

PROPOSED LAYOUT

TWIN CITY DRIVE

(PAVED)



A-B = 10'-4"
B-C = 31'-0"

LEGEND

- EXISTING**
- ===== CURB AND GUTTER
 - UNPAVED ROAD
 - >---> CULVERT
 - BUILDING
 - FIELD LINE
 - FENCE LINE
 - OBSCURED AREA PERIMETER
 - TREE EDGE
 - SHRUB EDGE
 - SINGLE TREES
 - 1639 --- INTERMEDIATE CONTOUR
 - UTILITY POLE
 - LIGHT POLE
 - MANHOLE, CATCH BASIN
 - EASEMENT
 - OVERHEAD POWER LINES
 - EXISTING ELEVATIONS
- PROPOSED**
- PROPOSED GRADES

AVOID CUTTING UNDERGROUND UTILITY LINES IN YOUR AREA

TWO WORKING DAYS BEFORE YOU DIG-DRILL-BLAST IN NORTH DAKOTA - CALL TOLL FREE **1-800-795-0555** UTILITIES UNDERGROUND LOCATION CENTER



- NOTES:
1. ASPHALT SHALL BE LEVEL WITH TOP OF LIFT STATION AND VALVE PIT
 2. CLEAR & GRUB AS NECESSARY
 3. SEED ENTIRE DISTURBED AREA

SCALE: 1"=10'
APRIL 1998

TOMAN ENGINEERING COMPANY
CONSULTING CML & ENVIRONMENTAL ENGINEERS



PROPOSED LAYOUT
SEWER DISTRICT No. 23
CITY PROJECT No. 98-12

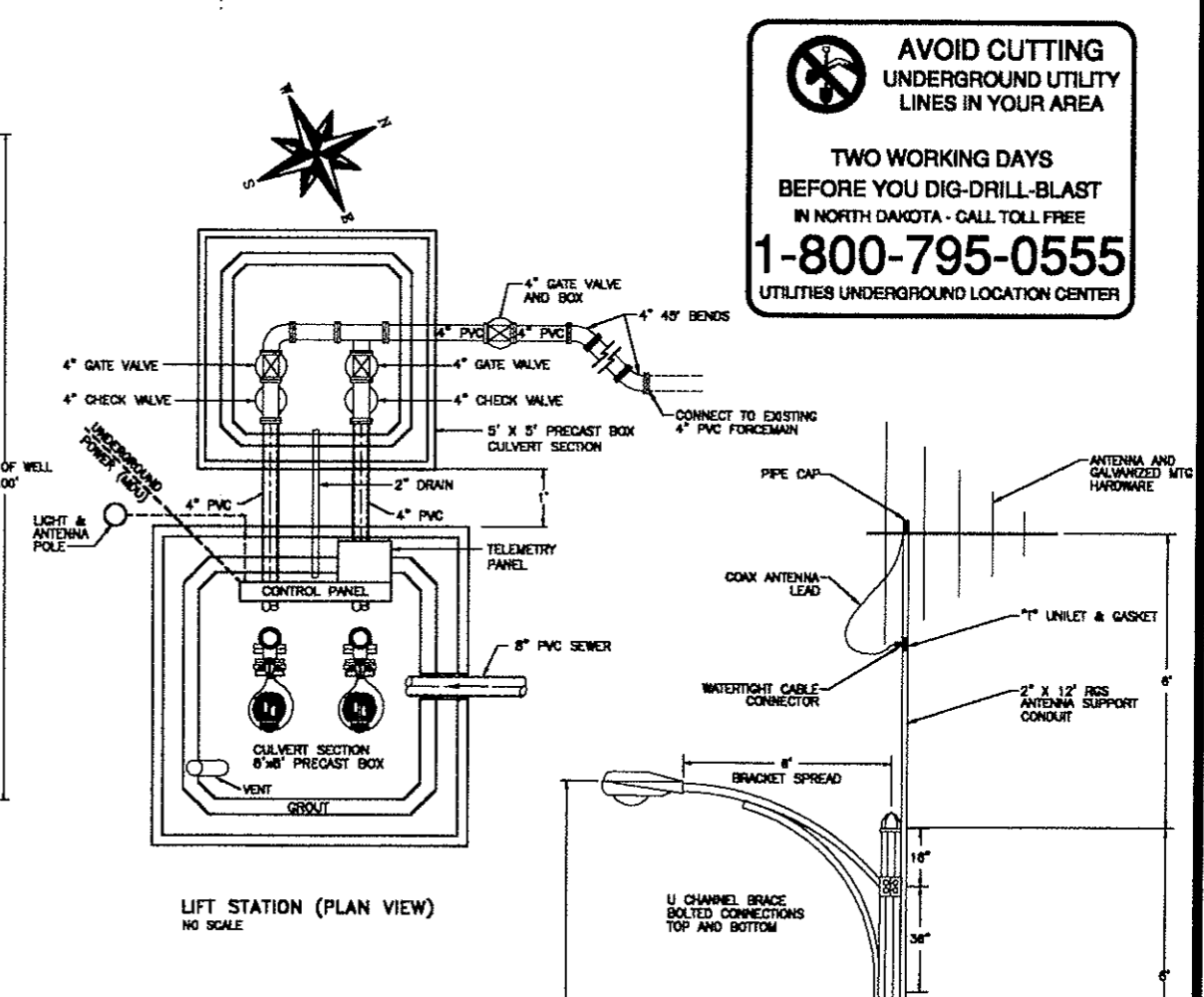
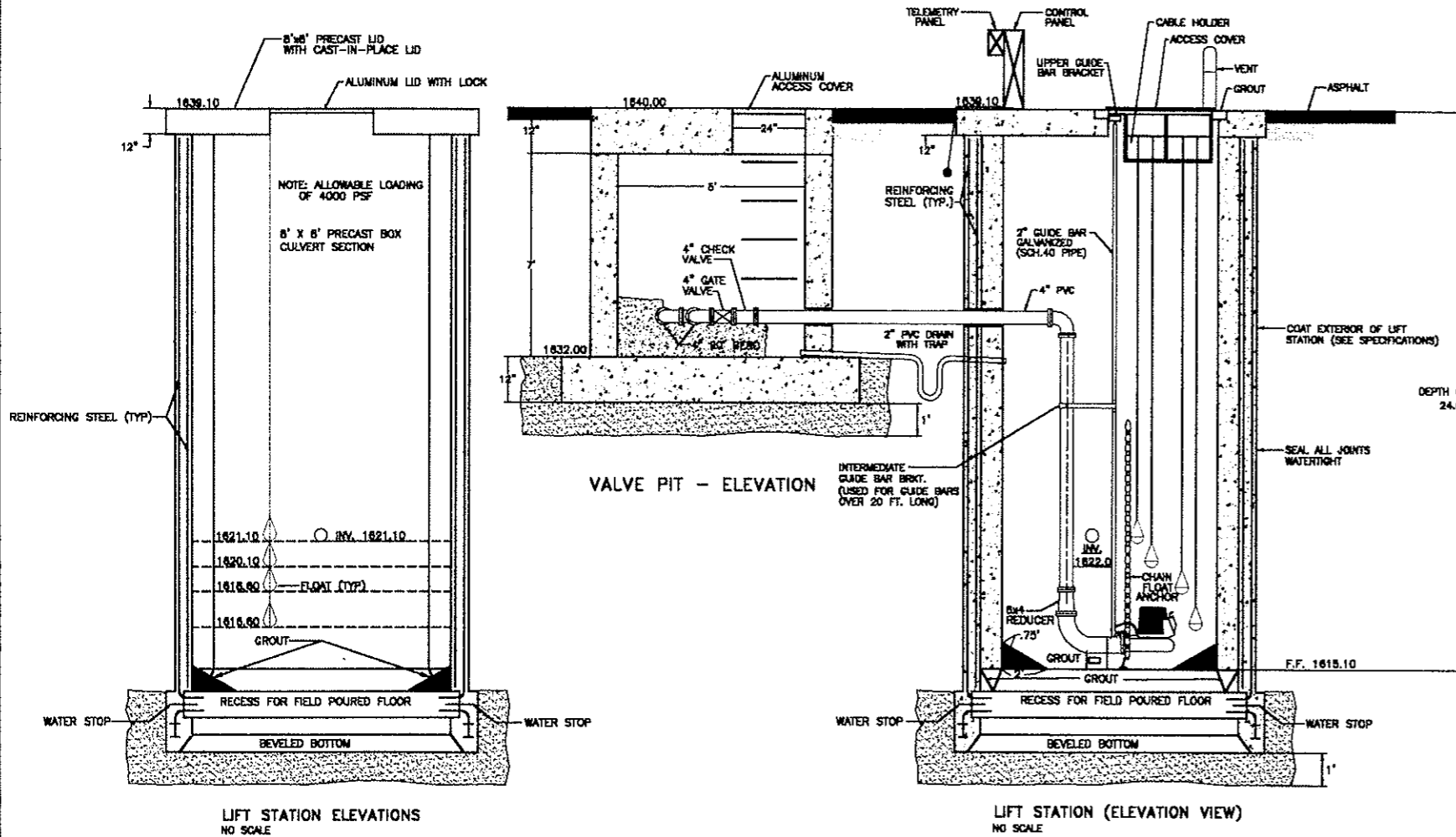
PROJECT: SANITARY LIFT STATION EASTSIDE COMMERCIAL PARK

NO.	REVISIONS	BY	DATE
1	RECORD DRAWINGS	AR	2/98

SHEET NUMBER
2
OF 4 SHEETS

PLOT DATE: 02/05/98 PLOT TIME: 13:46:12 TOMAN #3

SANITARY LIFT STATION



AVOID CUTTING UNDERGROUND UTILITY LINES IN YOUR AREA

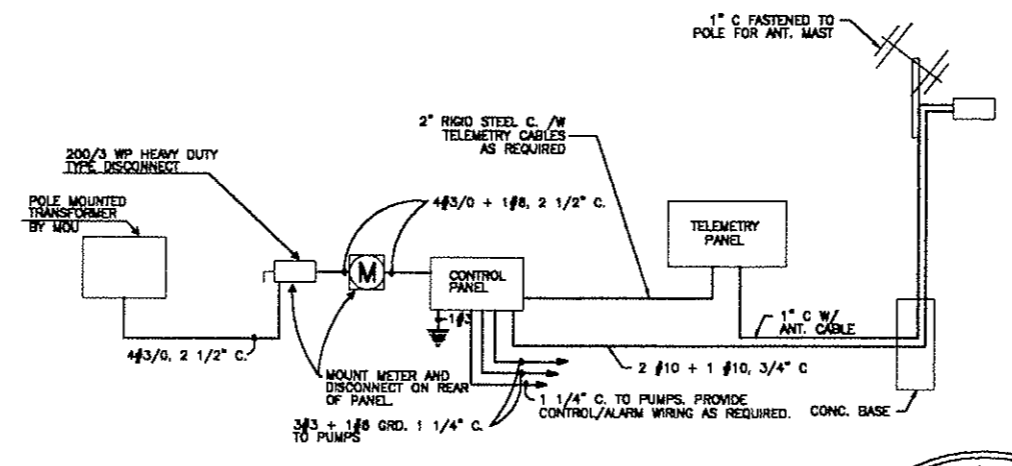
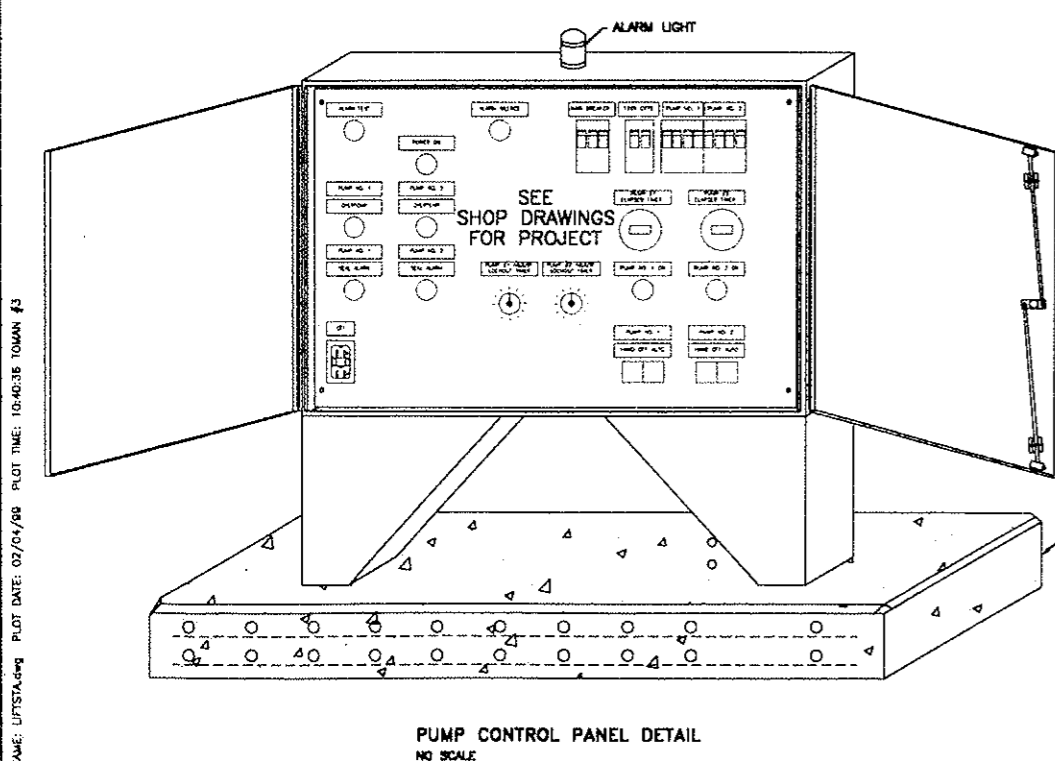
TWO WORKING DAYS BEFORE YOU DIG-DRILL-BLAST IN NORTH DAKOTA - CALL TOLL FREE

1-800-795-0555

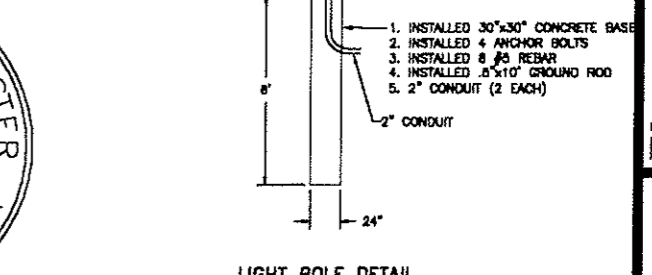
UTILITIES UNDERGROUND LOCATION CENTER

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CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS
908 2ND ST. N.W., MANDAN, NORTH DAKOTA 58554
(701) 663-6665

SANITARY LIFT STATION
SEWER DISTRICT No. 23
CITY PROJECT No. 98-12



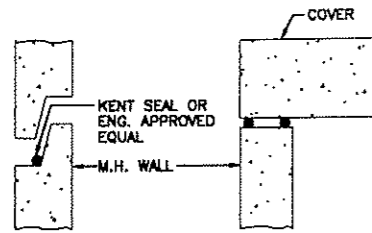
- POLE & LUMINAIRE PROVIDED BY THE CITY OF MANDAN
- CONTRACTOR TO INSTALL STREET LIGHT STANDARD
- CONTRACTOR TO CONSTRUCT CONCRETE POLE BASE
- STREET LIGHT TO BE COMPLETE AND OPERATIONAL



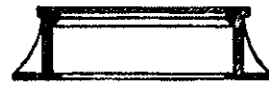
NO.	REVISIONS	BY	DATE	REASON
1		AR	2/89	ISSUE FOR RECORD

DRAWING: LIFTSTATION.PLOT DATE: 07/04/98 PLOT TIME: 10:40:36 TOMAN #3

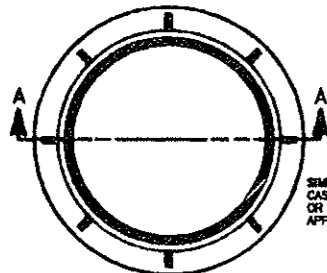
MISCELLANEOUS DETAILS



JOINT SEALS
NO SCALE

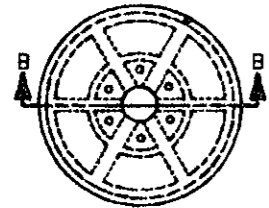


SECTION A-A
NO SCALE



SIMILAR TO
CASTING NO. R1733
OR ENGINEER
APPROVED EQUAL

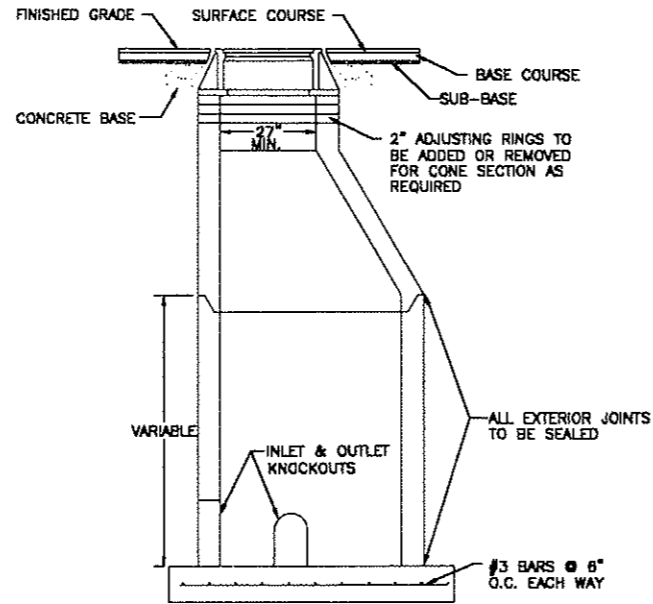
STANDARD MANHOLE RING
NO SCALE



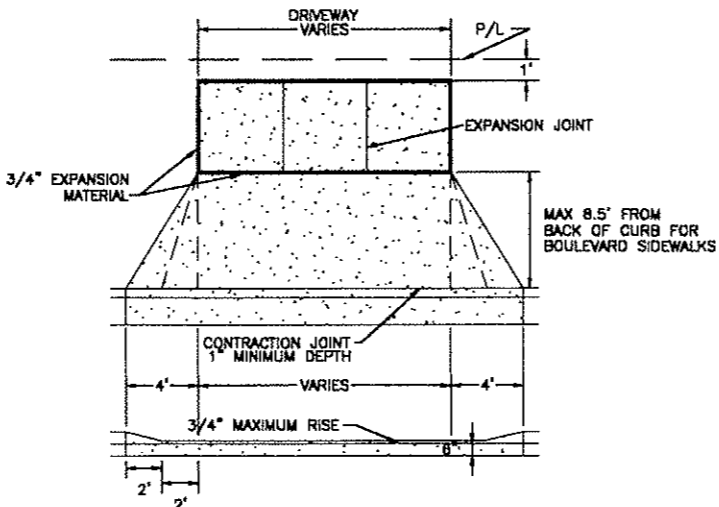
STANDARD MANHOLE COVER
NO SCALE



SECTION B-B
NO SCALE

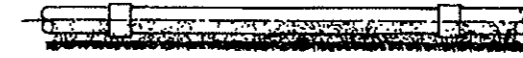


TYPICAL MANHOLE ELEVATION
VIEW & STANDARD MANHOLE RING
NO SCALE

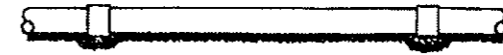


NOTE: 4" WASHED SAND BASE NEEDED UNDER CONCRETE.

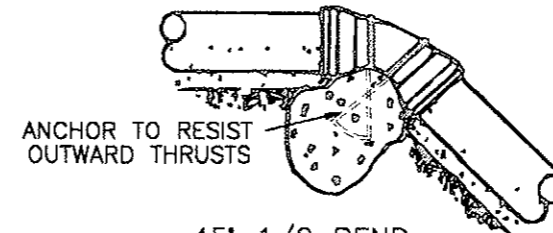
SIDEWALK & DRIVEWAY DETAIL



SAND OR ROCK CUSHION BEDDING—SUPPORT ENTIRE LENGTH OF PIPE SPECIAL COMPACTION REQUIRED TO PIPE SPRING LINE

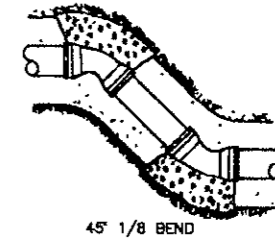


TYPICAL BEDDING TREATMENT USING APPROVED OR SITE MATERIAL SHAPED FOR PIPE



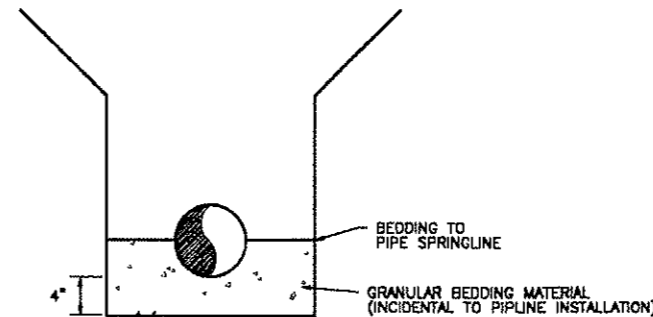
ANCHOR TO RESIST
OUTWARD THRUSTS

45° 1/8 BEND
22 1/2° 1/16 BEND



45° 1/8 BEND

THRUST BLOCK DETAILS



WATERMAIN & SEWERMAIN
BEDDING DETAIL

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UTILITIES UNDERGROUND LOCATION CENTER



TOMAN ENGINEERING COMPANY
CONSULTING CIVIL & ENVIRONMENTAL ENGINEERS
1151



MISCELLANEOUS DETAILS
SEWER DISTRICT No. 23
CITY PROJECT No. 98-12

PROJECT:	SANITARY LIFT STATION EASTSIDE COMMERCIAL PARK
NO.:	1
REVISIONS:	BY DATE
RECORD DRAWINGS:	AR 2/88
DATE:	11/83
SCALE:	AS SHOWN
DRAWN BY:	
CHECKED BY:	
PROJECT NO.:	

SHEET NUMBER
4
OF 4 SHEETS

DRAWN: S. C. 11-15-83 PLOT DATE: 02-25-99 PLOT TIME: 14:10:38 TOMAN #3



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