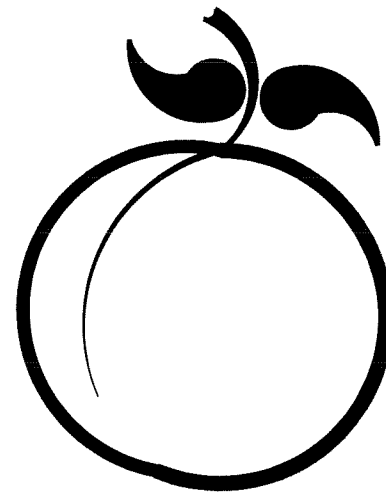


DRAWINGS FOR

2020 WATER SYSTEM IMPROVEMENTS



LEXINGTON, NEBRASKA

DRAWING INDEX	
SHT. NO.	DESCRIPTION
1	TITLE SHEET
2	LOCATION MAP & NOTES
3-5	13TH STREET WATER MAIN
6-10	AIRPORT ROAD WATER MAIN
11-13	CATTLEMENS DRIVE WATER MAIN
14-15	WATER DETAILS
16	PAVING DETAILS
17	HANDICAP RAMP & PANEL DETAILS

M&A PROJECT NO. 127-C1-065 - 13th STREET
M&A PROJECT NO. 127-C1-069 - AIRPORT ROAD
M&A PROJECT NO. 127-C1-070 - CATTLEMENS DRIVE



SET NO. _____
DRAWING NO. 37050

MA MILLER & ASSOCIATES Consulting Engineers P.C.
1111 Central Avenue - Kearney, NE 68847

UTILITIES

GENERAL DIGGERS HOT LINE
8-1-1



Miller & Associates
 Consulting Engineers, P.C.
 Kearney, NE (308) 234-6456
 McCook, NE (308) 345-3710

2020 WATER SYSTEM IMPROVEMENTS
LOCATION MAP & NOTES
 LEXINGTON, NEBRASKA

This document, and the ideas and designs incorporated herein, are an instrument of professional service, in the property of Miller & Associates and is not to be used in whole or in part for any other project without the written authorization of Miller & Associates.



VERIFY SCALES

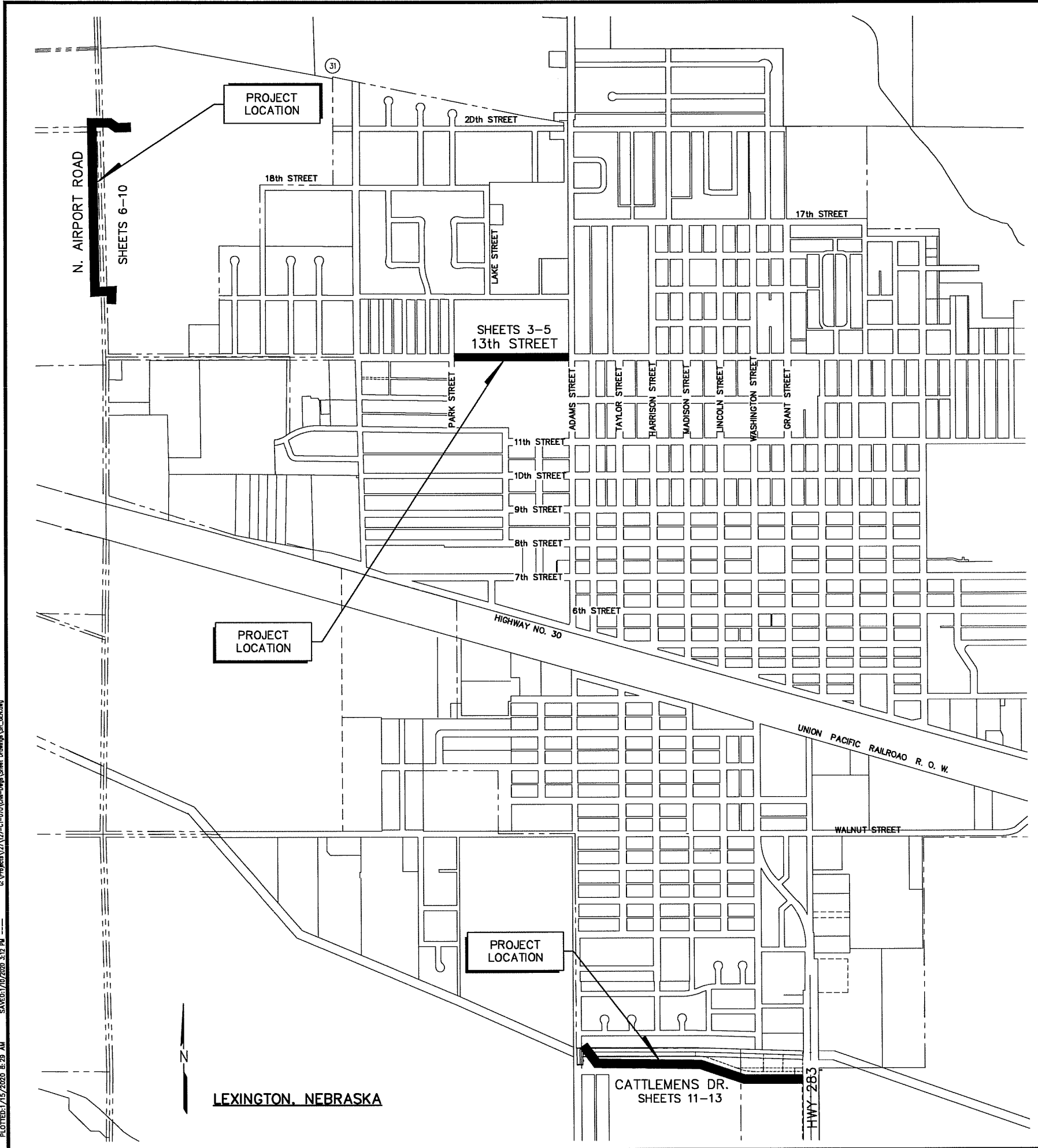
BAR IS ONE INCH ON ORIGINAL DRAWING
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

SCALE:	AS NOTED
PROJECT NO.:	127-C1-D69
DATE:	JANUARY, 2020
FIELD BOOK:	M&A DWG NO. 37049
DRAWN BY:	BSF
APPR'D BY:	TRH
SHEET:	2

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	HEDGES, BUSHES, SHRUBS OR WOODS		BASE LINE
	DECIDUOUS TREE		BASE LINE WITH POINT OF INTERSECTION
	CONIFEROUS TREE		PERMANENT EASEMENT
	TREE STUMP		TEMPORARY EASEMENT
	CONCRETE, ASPHALT STREETS, ROADS OR DRIVES		GAS METER OR REGULATOR
	GRAVEL STREETS, ROADS OR DRIVES		WATER METER
	CONCRETE WALKS OR SLABS		PROPOSED WATER VALVE
	CURB AND GUTTER		EXISTING WATER VALVE
	CATCH BASIN		FIRE HYDRANT
	POWER POLE		CURBSTOP
	LIGHT POLE		YARD HYDRANT
	GUY WIRE		PROPOSED-WATER SERVICE
	STREET SIGN		EXISTING-WATER SERVICE
	TELEPHONE RISER		EXISTING WATER MAIN
	FLAG POLE		EXISTING STORM SEWER
	EXISTING STRUCTURE		SAN- EXISTING SANITARY SEWER
	MAILBOX		MANHOLE
	FENCE-LIGHT WOOD OR WIRE		CLEANOUT
	CULVERT		UNDERGROUND ELECTRICAL LINE
	RAILROAD TRACKS		UNDERGROUND TELEPHONE LINE
	PROPERTY PIN		UNDERGROUND GAS LINE
	CENTERLINE		ORAINAGE COURSE OR FLOW LINE
	PROPERTY OR ROW LINE		EXISTING GROUND CONTOUR
	RECOVERY WELL/MONITORING WELL		NEW GROUND CONTOUR

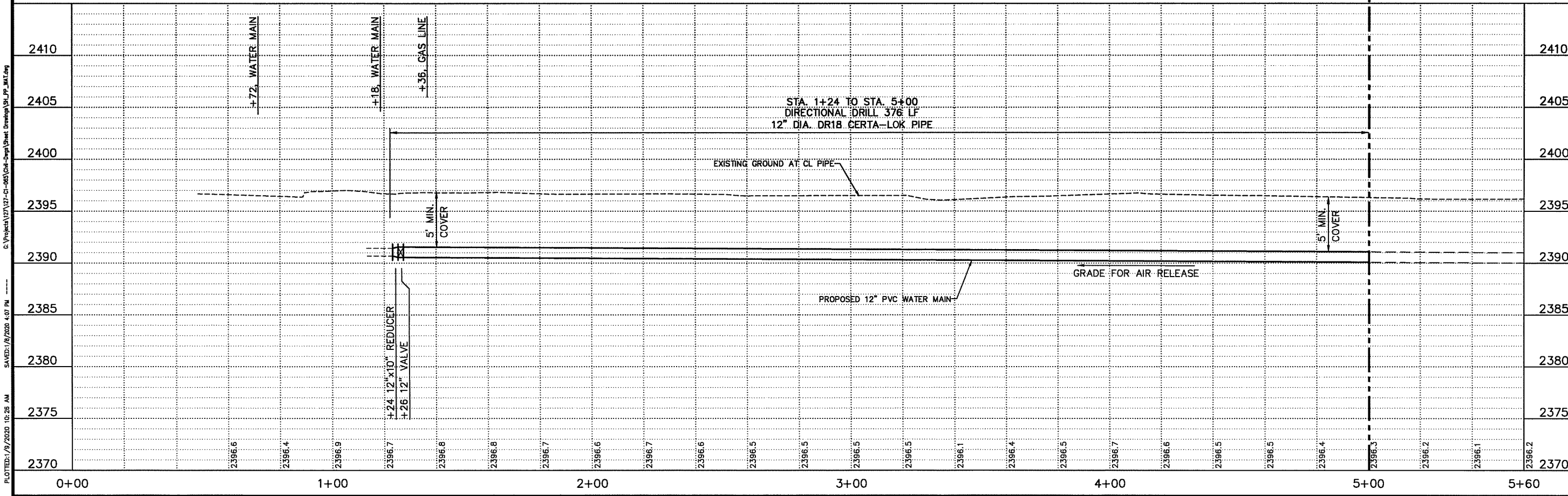
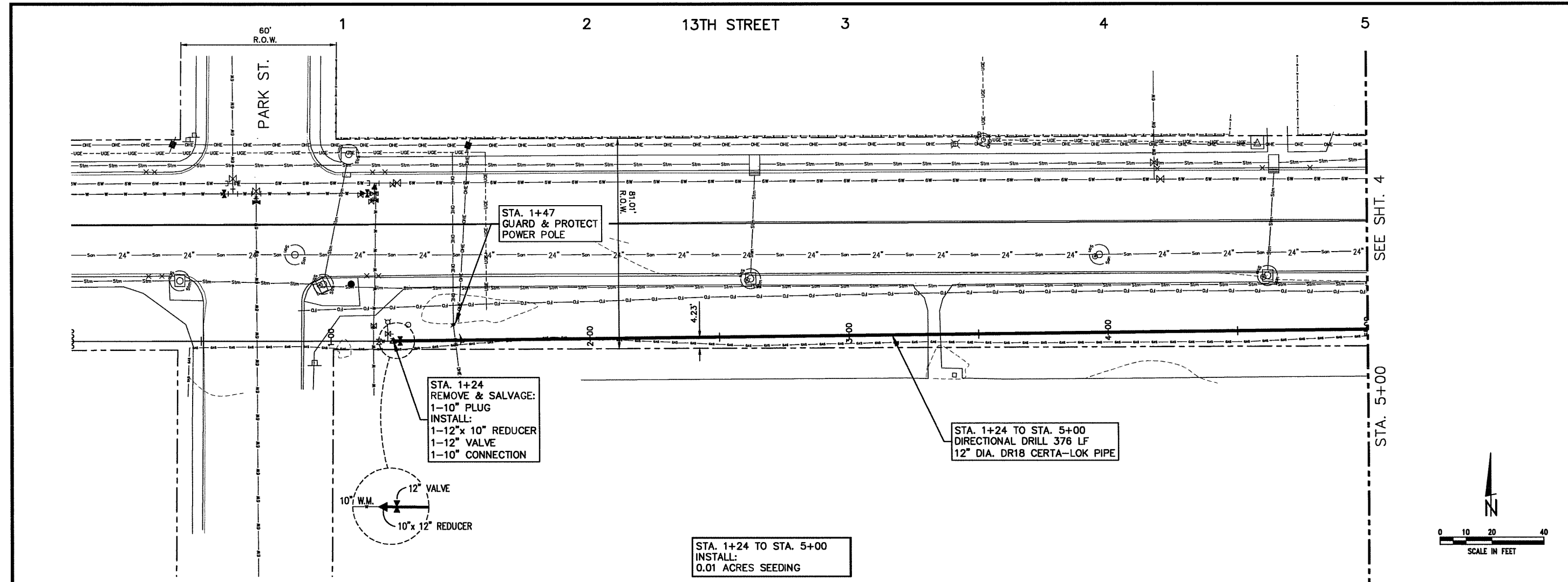
NOTES:

- CONTRACTOR IS TO COORDINATE ALL STREET CLOSINGS WITH THE CITY OF LEXINGTON. NOTIFY FIRE/RESCUE DEPARTMENT, AND ALL ADJOINING PROPERTY OWNERS 72 HOURS PRIOR TO CLOSING STREETS OR DRIVES, OR AS NOTED IN THE SPECIFICATIONS.
- THE LOCATION OF ALL AERIAL AND UNDERGROUND UTILITY FACILITIES MAY NOT BE INDICATED IN THESE DRAWINGS. UNDERGROUND UTILITIES, WHETHER INDICATED OR NOT, WILL BE LOCATED AND FLAGGED BY THE UTILITIES AT THE REQUEST OF THE CONTRACTOR.
- NO EXCAVATION WILL BE PERMITTED IN THE AREA OF UNDERGROUND UTILITY FACILITIES UNTIL ALL SUCH FACILITIES HAVE BEEN LOCATED AND IDENTIFIED TO THE SATISFACTION OF ALL PARTIES AND THEN ONLY WITH EXTREME CARE TO AVOID ANY POSSIBILITY OF DAMAGE TO THE UTILITY FACILITY.
- ALL SIGNS, MAILBOXES, CULVERTS, GUYWIRES, FENCES, AND PROPERTY PINS ENCOUNTERED DURING THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- THE QUANTITIES OF EACH ITEM LISTED ON THE BID SCHEDULE MAY VARY FROM THE TOTAL QUANTITIES. THE CITY MAY ADD OR DELETE FROM THE PROJECT, PORTIONS OF IMPROVEMENTS.
- SAW CUTTING OF PAVEMENT IS REQUIRED FOR REMOVAL AND IS INCIDENTAL TO THE PROJECT. ADDITIONAL SAW CUTTING BEYOND THAT WHICH IS INDICATED ON THE DRAWINGS MAY BE REQUIRED.
- TOPSOIL SHALL BE REMOVED, STOCKPILED AND REPLACED FOR ALL EXCAVATION AREAS.
- CONTRACTOR SHALL GUARD AND PROTECT ALL TREES, SHRUBS, FENCES, AND OTHER ITEMS NOT SPECIFICALLY MARKED FOR REMOVAL.
- THE CONTRACTOR MAY CLOSE THE ROAD TO ALL BUT LOCAL TRAFFIC SUBJECT TO THE CONDITIONS PRESCRIBED IN THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL FIND A SUITABLE LOCATION BEYOND THE LIMITS OF THE RIGHT-OF-WAY TO DISPOSE OF EXCESS MATERIAL.



PLOTTER: 1/15/2020 8:29 AM SAVE: 1/15/2020 3:12 PM C:\Projects\127-C1-D69\CAD-DWG\Sheet Drawings\SI_BEN.dwg

LEXINGTON, NEBRASKA



REVISIONS BY

M&A
Miller & Associates
Consulting Engineers, P.C.
Keamey, NE (308) 234-6456
McCook, NE (308) 345-3710

2020 WATER SYSTEM IMPROVEMENTS
13th STREET WATER MAIN
LEXINGTON, NEBRASKA

PROFESSIONAL CIVIL ENGINEER
HILLER R. HILLMER
E-16391
STATE OF NEBRASKA

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

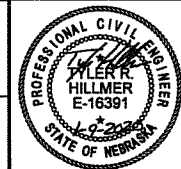
SCALE: 1"=20' HORIZ.
1"=5' VERT.

PROJECT NO. 127-C1-065
DATE: JANUARY, 2020
FIELD BOOK M&A DWG NO. 37048
DRAWN BY: BSF APRVD BY: TRH
SHEET 3

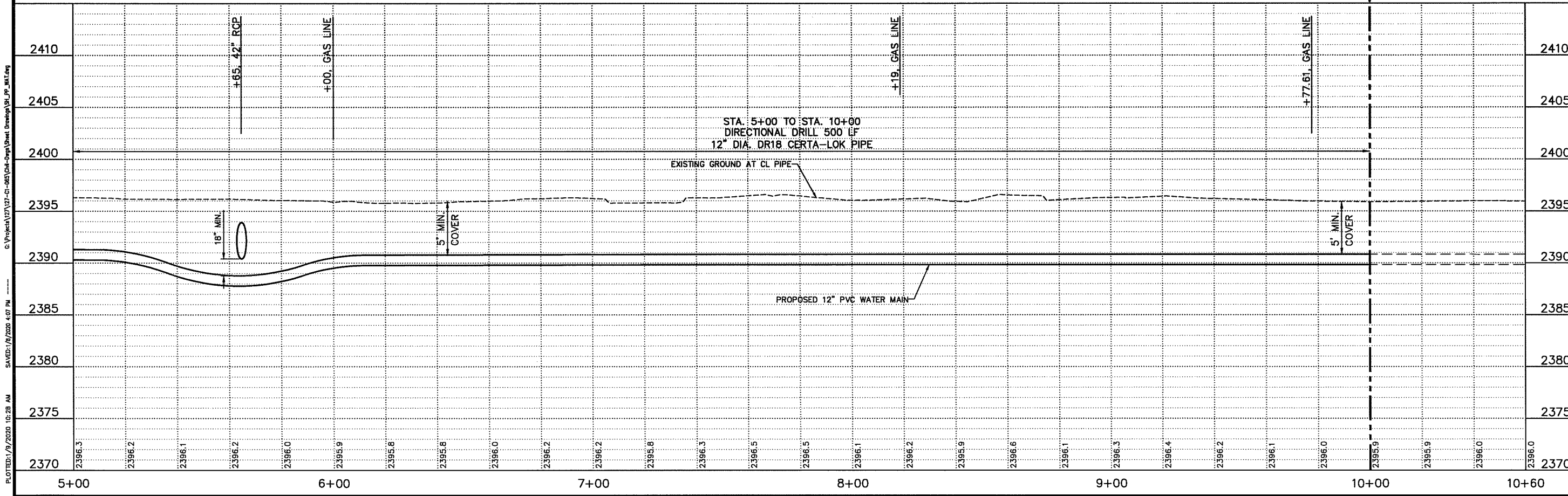
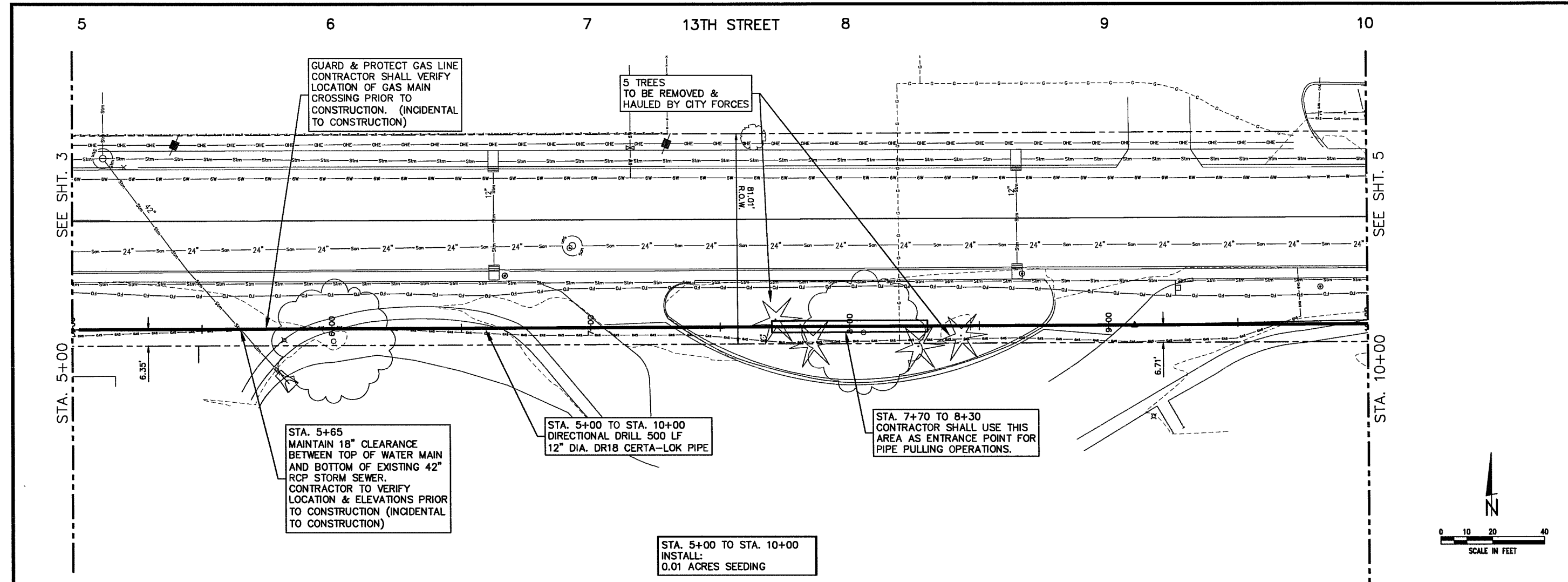
PLOTTED: 1/9/2020 10:25 AM
 SAVED: 1/9/2020 4:07 PM
 C:\Projects\127-C1-065\127-C1-065\127-C1-065.dwg



2020 WATER SYSTEM IMPROVEMENTS
13th STREET WATER MAIN
 LEXINGTON, NEBRASKA

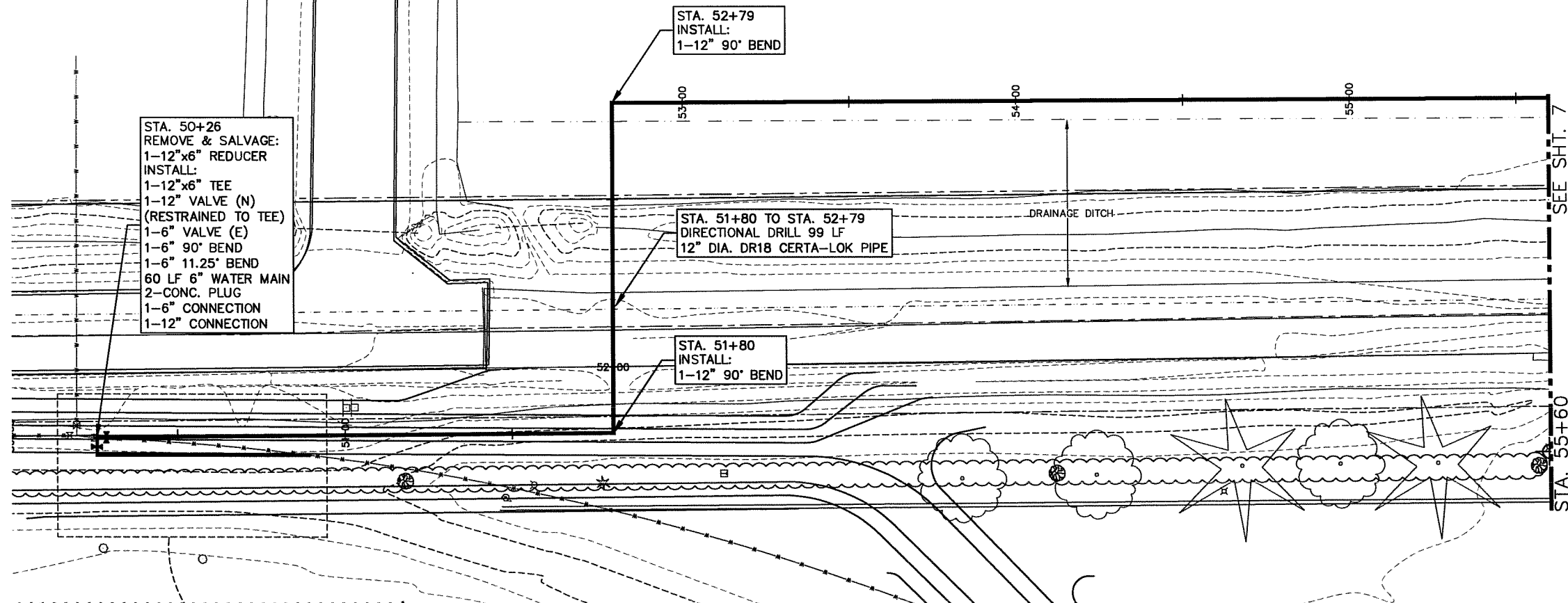


VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.
 SCALE: 1"=5' VERT. 1"=20' HORIZ.
 PROJECT NO. 127-CI-085
 DATE: JANUARY, 2020
 FIELD BOOK M&A DWG NO. 37047
 DRAWN BY: BSF APRVD BY: TRH
 SHEET 4

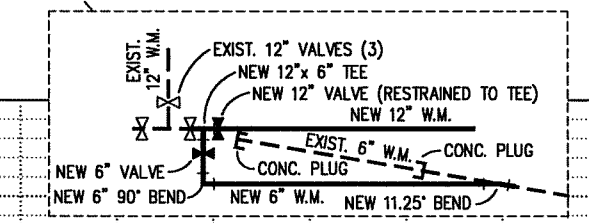


PLOTTED: 1/9/2020 10:28 AM
 SAVED: 1/9/2020 4:07 PM
 C:\Projects\127-CI-085\Drawings\Sheet Drawings\SI_LP_MW.dwg

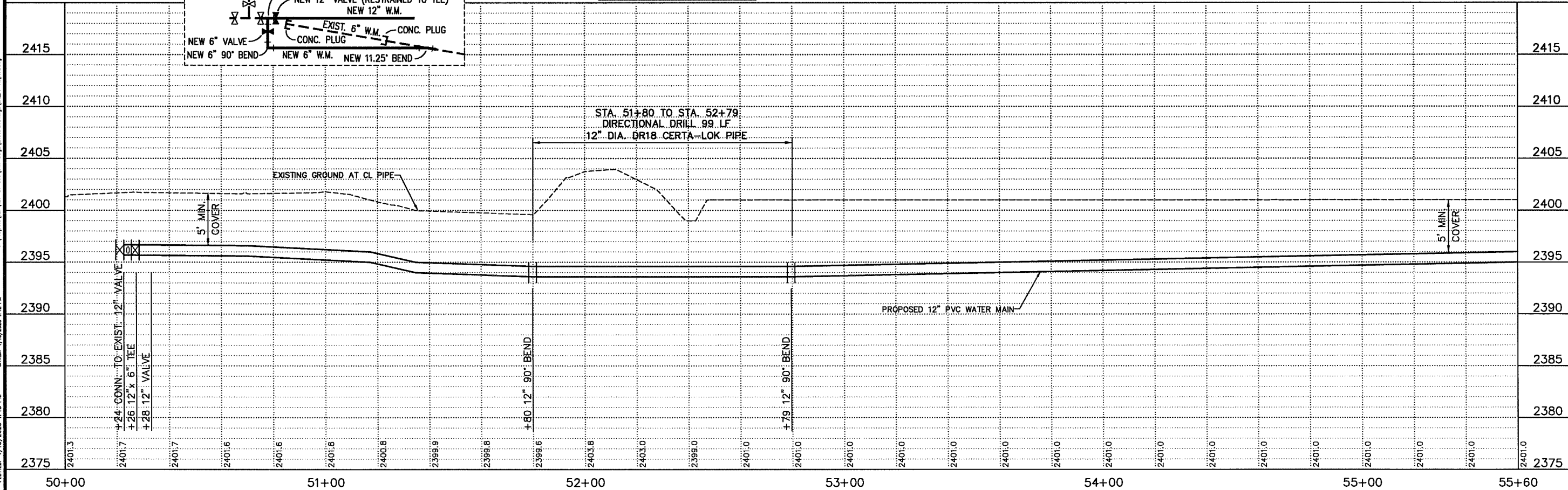
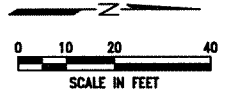
50 51 53 AIRPORT ROAD 54 55



NOTE:
THE 6" CONNECTION SHALL BE INSTALLED, DISINFECTED, AND PLACED INTO SERVICE IN A TIMELY MANNER TO LIMIT THE INTERRUPTION IN SERVICE TO THE FIELDHOUSE. THE WORK WILL NEED TO TAKE PLACE WHEN PEAK USAGE WILL NOT BE AFFECTED. WORK SHALL BE COORDINATED WITH THE CITY AND BE COMPLETED PRIOR TO THE 12" WATER MAIN INSTALLATION.



STA. 50+26 TO STA. 55+60
INSTALL:
435 L.F. 12" WATER MAIN
0.21 ACRES SEEDING



REVISIONS BY

M&A
Miller & Associates
Consulting Engineers, P.C.
Keamey, NE (308) 234-6456
McCook, NE (308) 345-3710

2020 WATER SYSTEM IMPROVEMENTS
AIRPORT ROAD WATER MAIN
LEXINGTON, NEBRASKA



VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.
SCALE: 1"=20' HORIZ.
1"=5' VERT.
PROJECT NO. 127-C1-069
DATE: JANUARY, 2020
FIELD BOOK M&A DWG NO. 37045
DRAWN BY: BSF APRVD BY: TRH
SHEET 6

PLOTTED: 1/10/2020 1:45 PM
 SWID: 1/10/2020 1:42 PM
 C:\Projects\127\127-C1-069\DWG\Sheet\Drawings\SLP_Airport.rvt

56

57

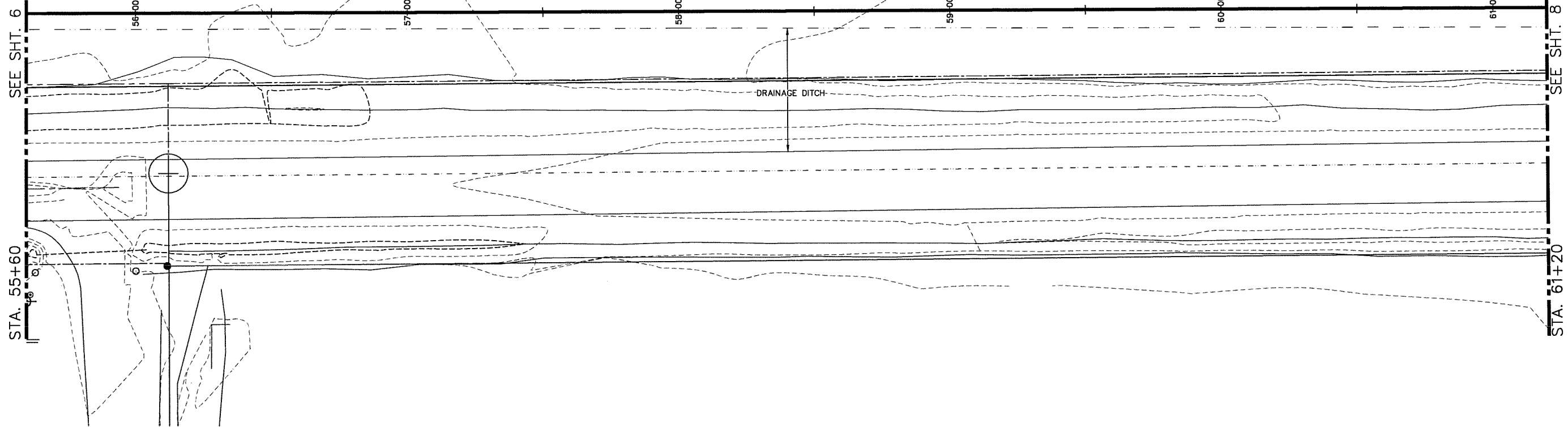
58

AIRPORT ROAD

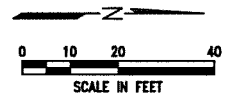
59

60

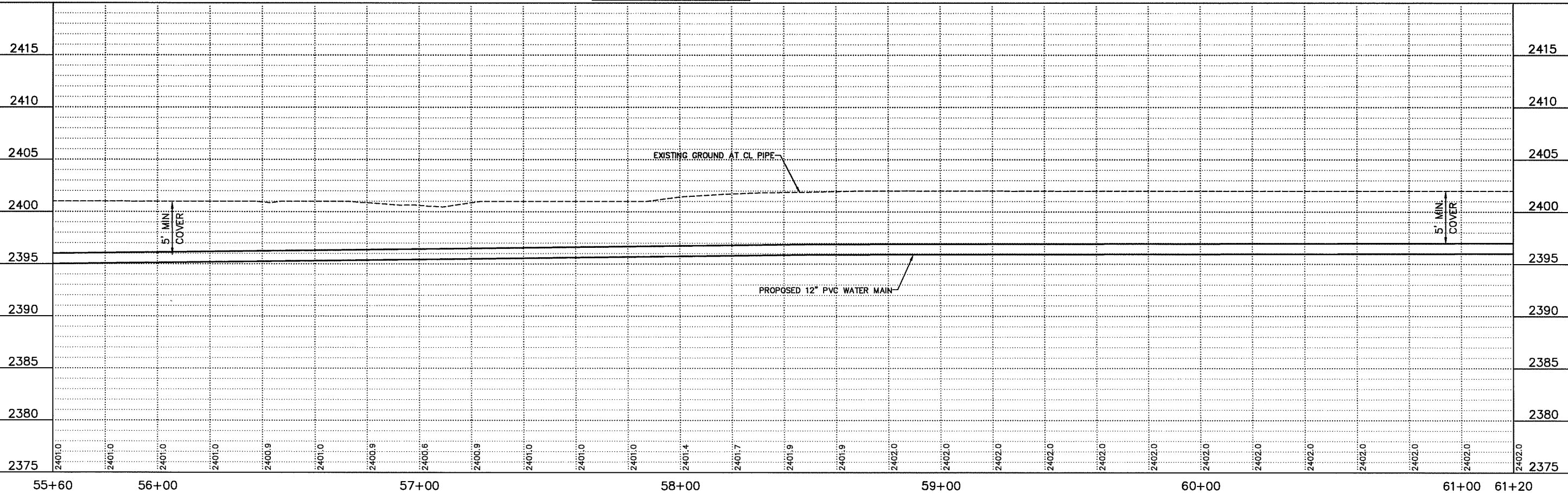
61



STA. 55+60 TO STA. 61+20
 INSTALL:
 560 L.F. 12" WATER MAIN
 0.25 ACRES SEEDING



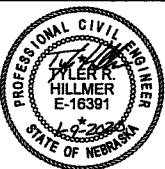
PLOTTER: 1/10/2020 1:45 PM
 SAVED: 1/10/2020 1:42 PM
 C:\Projects\127\127-C1-069\Out-Draw\Sheet_Drainage\SLP_Airport.dwg



REVISIONS BY

M&A
 Miller & Associates
 Consulting Engineers, P.C.
 Kearney, NE (308) 234-6456
 McCook, NE (308) 345-3710

2020 WATER SYSTEM IMPROVEMENTS
AIRPORT ROAD WATER MAIN
 LEXINGTON, NEBRASKA



VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

SCALE: 1"=20' HORIZ.
 1"=5' VERT.

PROJECT NO. 127-C1-069
 DATE: JANUARY, 2020
 FIELD BOOK M&A DWG NO. 37044
 DRAWN BY: BSF APRVD BY: TRH
 SHEET 7

This document, and the ideas and designs incorporated herein, is the property of Miller & Associates and is to be used in whole or in part, for any other project without the written authorization of Miller & Associates.

62

63

AIRPORT ROAD

64

65

66

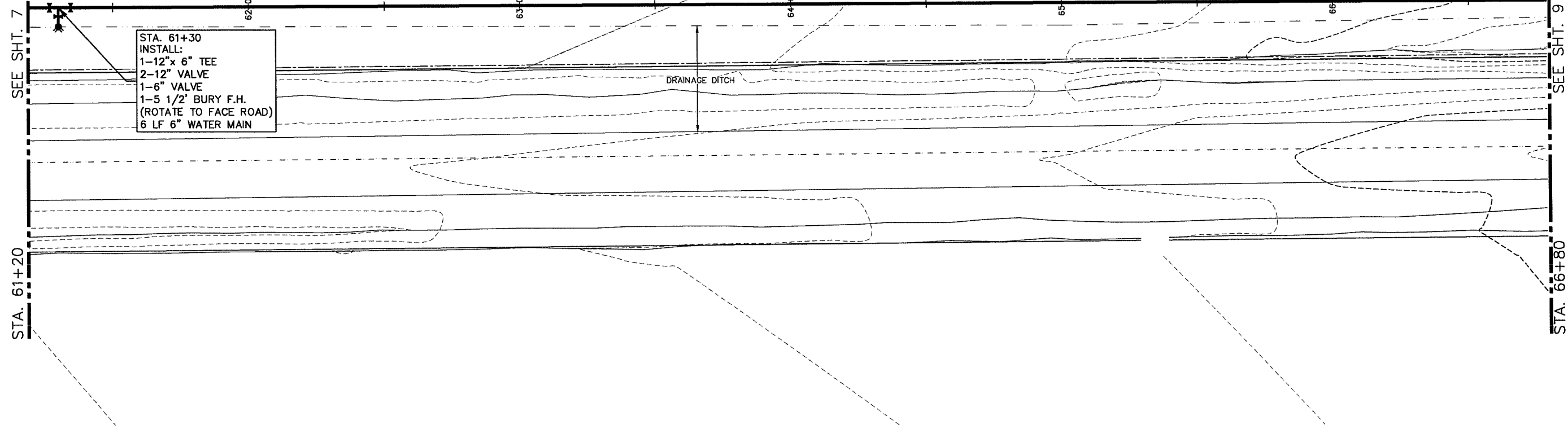
REVISIONS BY



Miller & Associates
Consulting Engineers, P.C.
Kearney, NE (308) 234-6456
McCook, NE (308) 345-3710

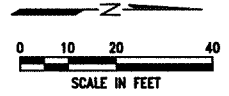
2020 WATER SYSTEM IMPROVEMENTS
AIRPORT ROAD WATER MAIN
LEXINGTON, NEBRASKA

This document, and the ideas and design incorporated herein, as an instrument of professional service, is the property of Miller & Associates and is not to be used in whole or in part, for any other project without the written authorization of Miller & Associates.

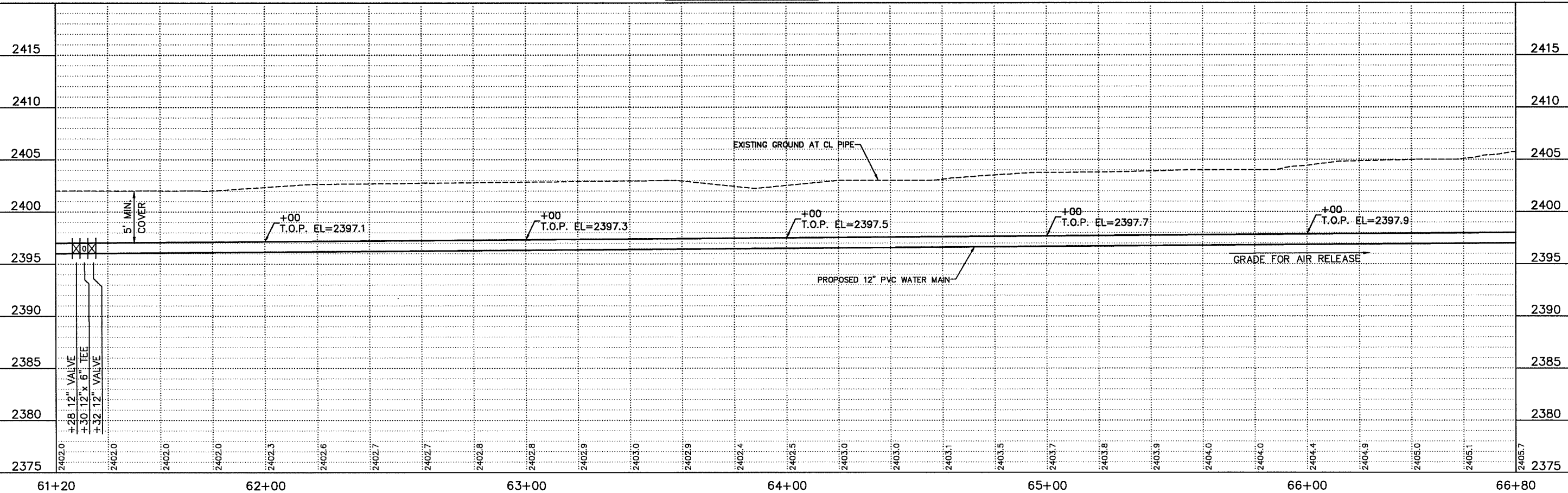


STA. 61+30
INSTALL:
1-12" x 6" TEE
2-12" VALVE
1-6" VALVE
1-5 1/2' BURY F.H.
(ROTATE TO FACE ROAD)
6 LF 6" WATER MAIN

STA. 61+20 TO STA. 66+80
INSTALL:
560 L.F. 12" WATER MAIN
0.26 ACRES SEEDING



PROJECT: 1/10/2020 1:44 PM
DRAWN: 1/10/2020 1:42 PM
C:\Projects\127-C1-069\Civil\Drawings\SI_LP_Airport.dwg



VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

SCALE: 1"=20' HORIZ.
1"=5' VERT.

PROJECT NO. 127-C1-069

DATE: JANUARY, 2020

FIELD BOOK M&A DWG NO. 37043

DRAWN BY: BSF APRVD BY: TRH
SHEET 8

67

68

AIRPORT ROAD

69

SEE SHT. 8

STA. 66+80

STA. 69+66
 INSTALL:
 1-12" x 12" TEE
 1-12" VALVE (S)
 1-12" PLUG (N)

STA. 70+66
 INSTALL:
 1-12" x 12" CROSS
 2-12" PLUGS
 1-12" x 8" REDUCER (E)

STA. 70+91
 INSTALL:
 1-8" 22 1/2' BEND

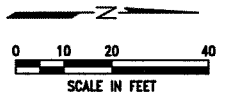
STA. 66+80 TO STA. 71+00
 INSTALL:
 386 L.F. 12" WATER MAIN
 34 L.F. 8" WATER MAIN
 0.17 ACRES SEEDING
 5 TONS GRAVEL SURFACING

W1/4 COR.
 SECTION 31, T10N, R21W
 GRAVEL

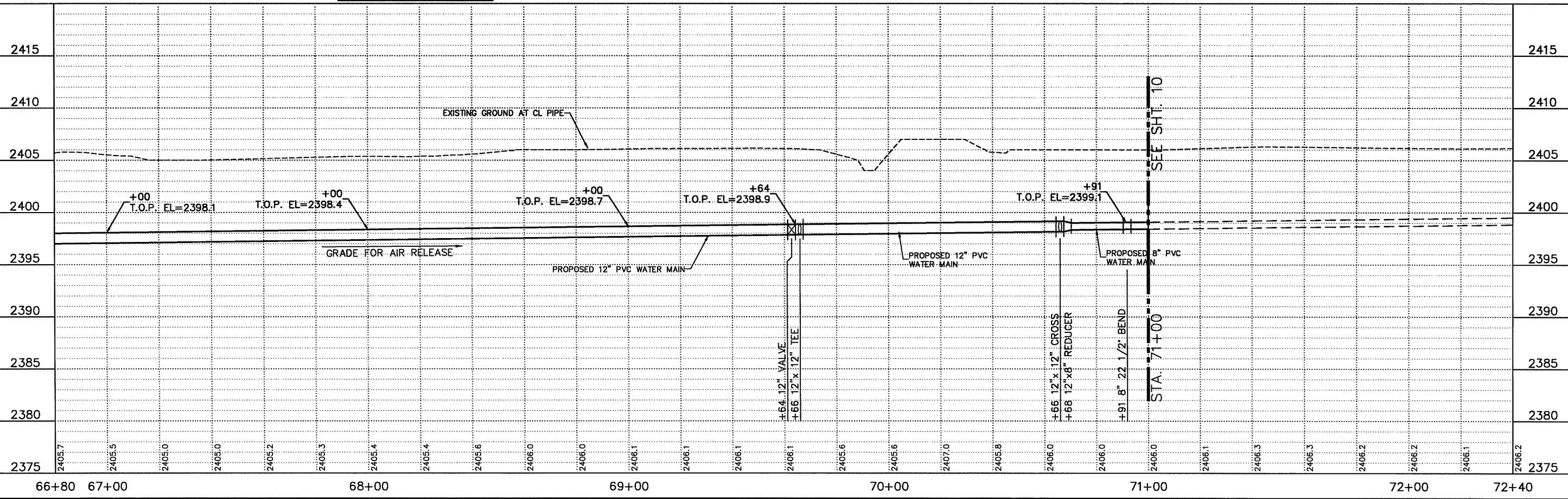
20th STREET

STA. 71+00

SEE SHT. 10



PLOTED: 1/10/2020 1:43 PM
 SWER: 1/10/2020 1:42 PM
 C:\Projects\127-C1-069\DWG\Sheet Drawings\SI_IP_Airport.dwg



REVISIONS BY

M&A
 Miller & Associates
 Consulting Engineers, P.C.
 Kearney, NE (308) 234-6456
 McCook, NE (308) 345-3710

2020 WATER SYSTEM IMPROVEMENTS
AIRPORT ROAD WATER MAIN
 LEXINGTON, NEBRASKA



VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

SCALE: 1"=20' HORIZ.
 1"=5' VERT.

PROJECT NO.
 127-C1-069

DATE:
 JANUARY, 2020

FIELD BOOK M&A DWG NO.
 37042

DRAWN BY: BSF APRVD BY: TRH

SHEET 9

This document, and the ideas and designs incorporated herein, is the property of Miller & Associates and is not to be used in whole or in part, for any other project without the written authorization of Miller & Associates.

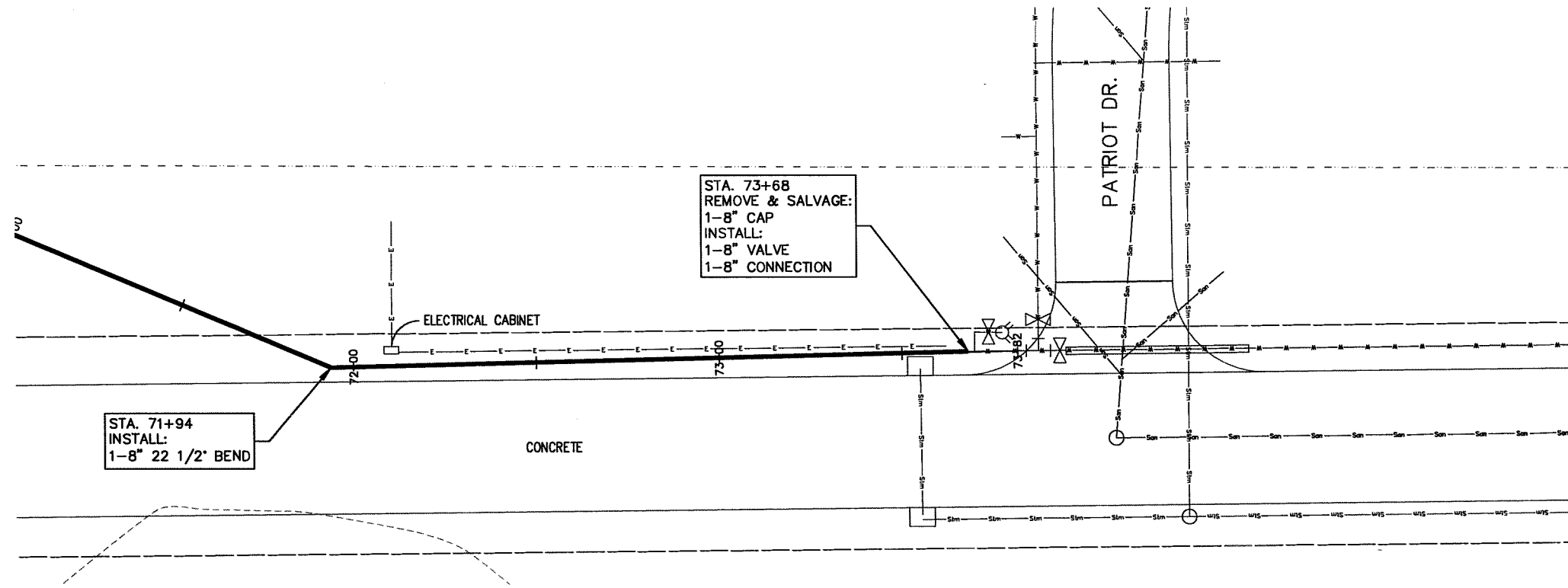
71

72

20th STREET

73

SEE SHT. 9
STA. 71+00



STA. 71+94
INSTALL:
1-8" 22 1/2' BEND

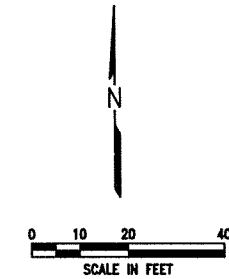
STA. 73+68
REMOVE & SALVAGE:
1-8" CAP
INSTALL:
1-8" VALVE
1-8" CONNECTION

ELECTRICAL CABINET

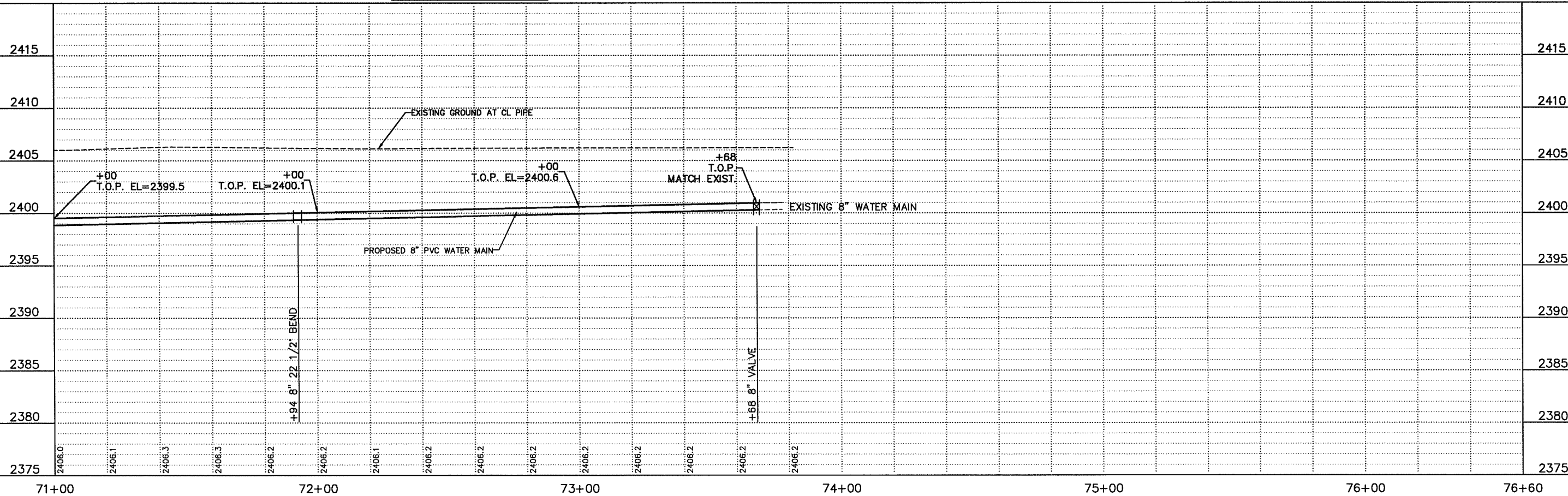
CONCRETE

PATRIOT DR.

STA. 71+00 TO STA. 73+68
INSTALL:
268 L.F. 8" WATER MAIN
0.12 ACRES SEEDING



PLOTTED: 1/9/2020 10:51 AM
 SWER: 1/9/2020 10:51 AM
 C:\Projects\127-01-069\DWG\Sheet Drawings\SI_LP_Airport.dwg



REVISIONS BY

M&A
 Miller & Associates
 Consulting Engineers, P.C.
 Kearney, NE (308) 234-6456
 McCook, NE (308) 345-3710

2020 WATER SYSTEM IMPROVEMENTS
AIRPORT ROAD WATER MAIN
 LEXINGTON, NEBRASKA

This document, and the ideas and designs incorporated herein, are an instrument of professional service, in the property of Miller & Associates and is not to be used in whole or in part, for any other project without the written authorization of Miller & Associates.

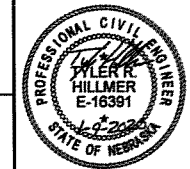
PROFESSIONAL CIVIL ENGINEER
 HILLMER
 E-16391
 STATE OF NEBRASKA

VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.
 SCALE: 1"=20' HORIZ.
 1"=5' VERT.

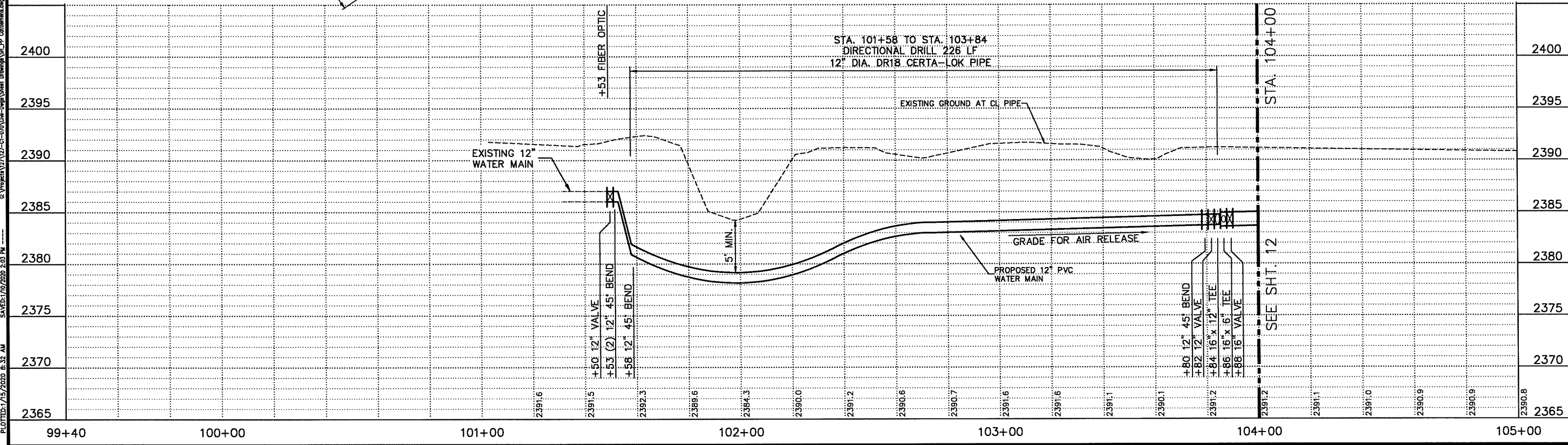
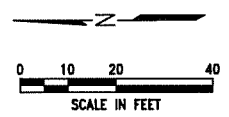
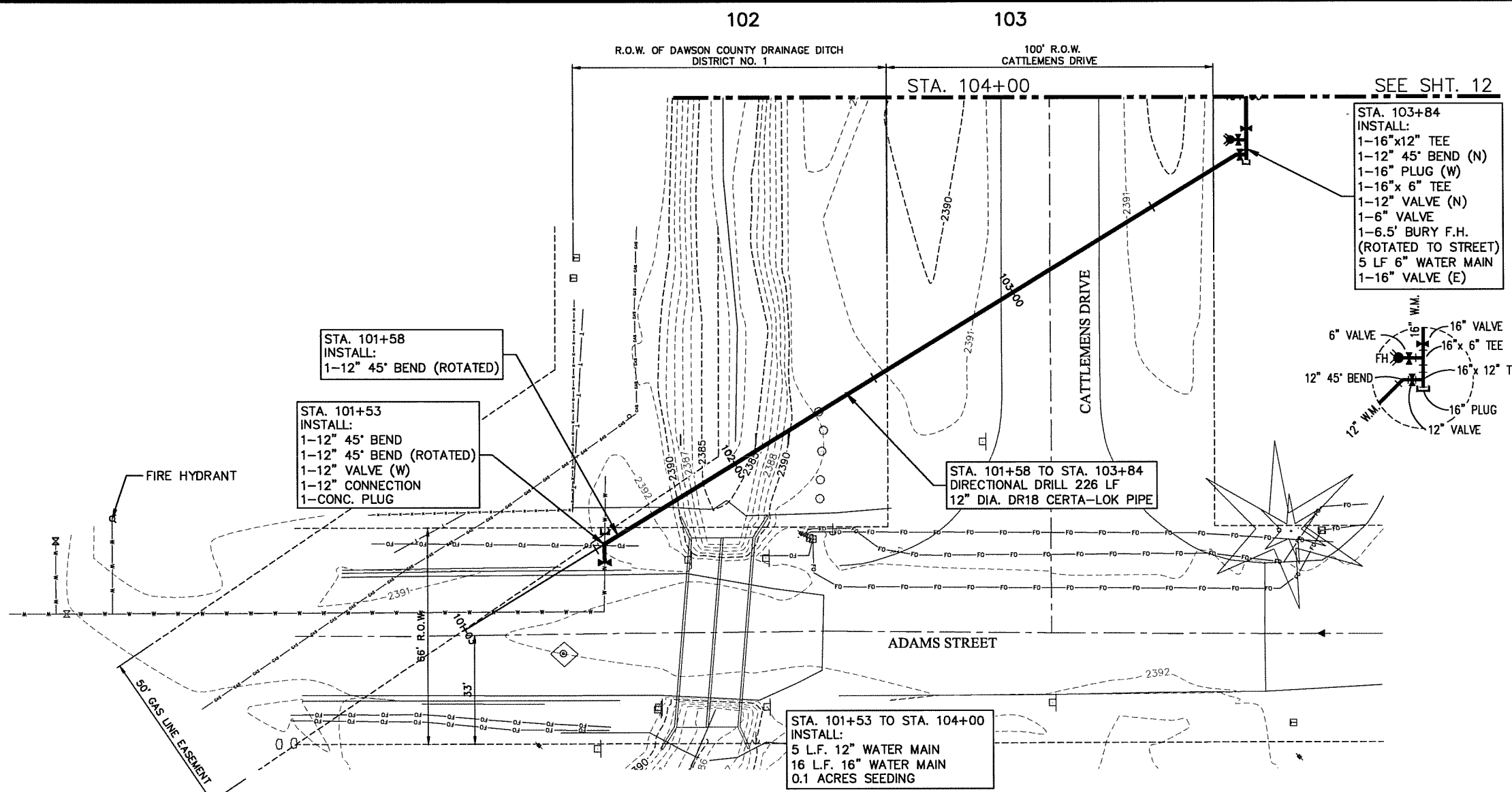
PROJECT NO. 127-C1-069
 DATE: JANUARY, 2020
 FIELD BOOK M&A DWG NO. 37041
 DRAWN BY: BSF APPROVD BY: TRH
 SHEET 10



2020 WATER SYSTEM IMPROVEMENTS
CATTLEMENS DRIVE WATER MAIN
 LEXINGTON, NEBRASKA



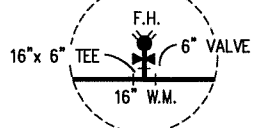
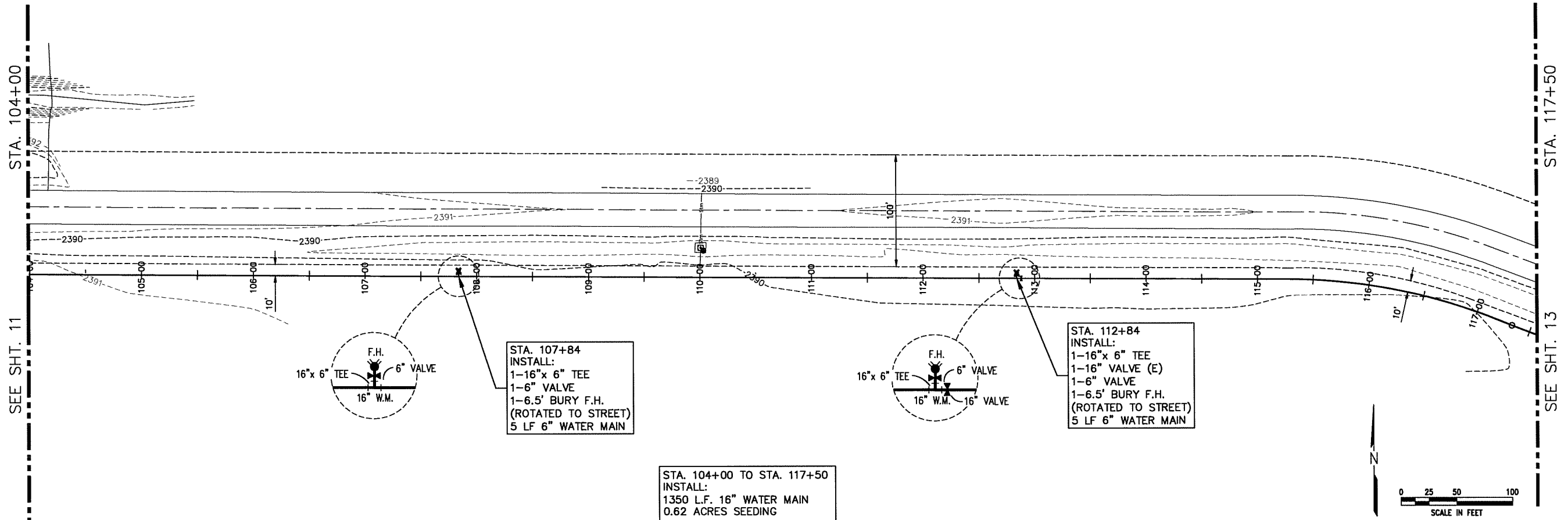
VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.
 SCALE: VERT. = 1" = 5'
 HORIZ. 1" = 20'
 PROJECT NO. 127-C1-070
 DATE: JANUARY, 2020
 FIELD BOOK: M&A DWG NO. 37040
 DRAWN BY: BSF APRVD BY: TRH
 SHEET 11



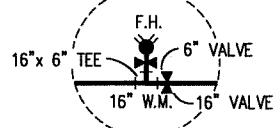
PLOTTER: 1/15/2020 8:32 AM SAVEN: 1/10/2020 2:03 PM © (Project) (V17) (7-C1-070) (Cadd-Draw) (Sheet-Drawings) (SU_PP_Collname.dwg)

REVISIONS BY

M&A
 Miller & Associates
 Consulting Engineers, P.C.
 Kearney, NE (308) 234-6456
 McCook, NE (308) 345-3710

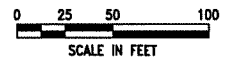


STA. 107+84
 INSTALL:
 1-16" x 6" TEE
 1-6" VALVE
 1-6.5' BURY F.H.
 (ROTATED TO STREET)
 5 LF 6" WATER MAIN

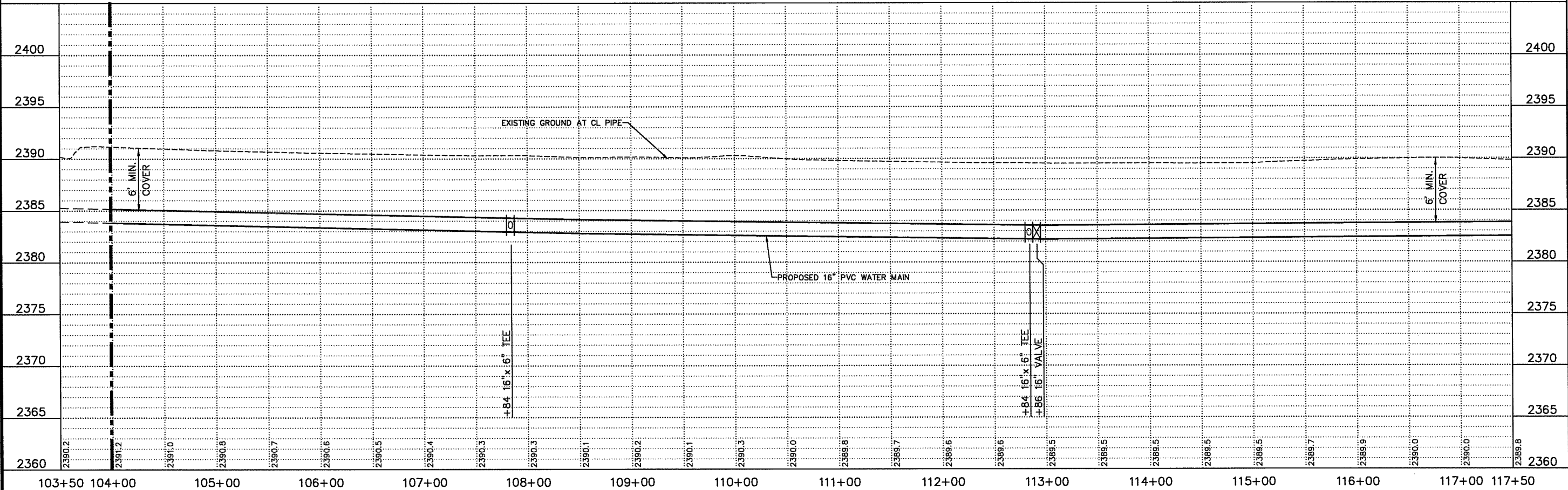


STA. 112+84
 INSTALL:
 1-16" x 6" TEE
 1-16" VALVE (E)
 1-6" VALVE
 1-6.5' BURY F.H.
 (ROTATED TO STREET)
 5 LF 6" WATER MAIN

STA. 104+00 TO STA. 117+50
 INSTALL:
 1350 L.F. 16" WATER MAIN
 0.62 ACRES SEEDING



PLOTTED: 1/15/2020 8:32 AM
 SAVED: 1/10/2020 2:03 PM
 C:\Projects\17\17-CI-070\Cad-Dwg\Sheet Drawings\SP-Cattlemens.dwg



2020 WATER SYSTEM IMPROVEMENTS
CATTEMENS DRIVE WATER MAIN
 LEXINGTON, NEBRASKA



VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 1" = 50'
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.
 SCALE: VERT. = 1" = 5' HORIZ. 1" = 50'
 PROJECT NO. 127-CI-070
 DATE: JANUARY, 2020
 FIELD BOOK M&A DWG NO. 37039
 DRAWN BY: BSF APRVD BY: TRH
 SHEET 12

This document, and the ideas and designs incorporated herein, are an instrument of professional service, and are not to be used in whole or in part, for any other project without the written authorization of ©2020 Miller & Associates.

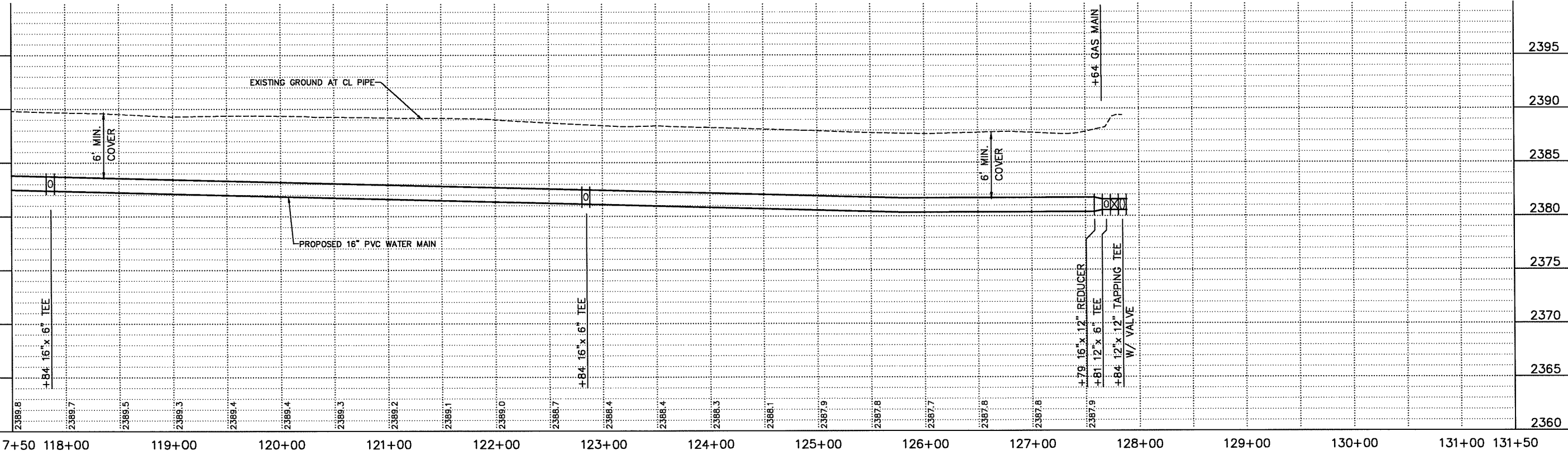
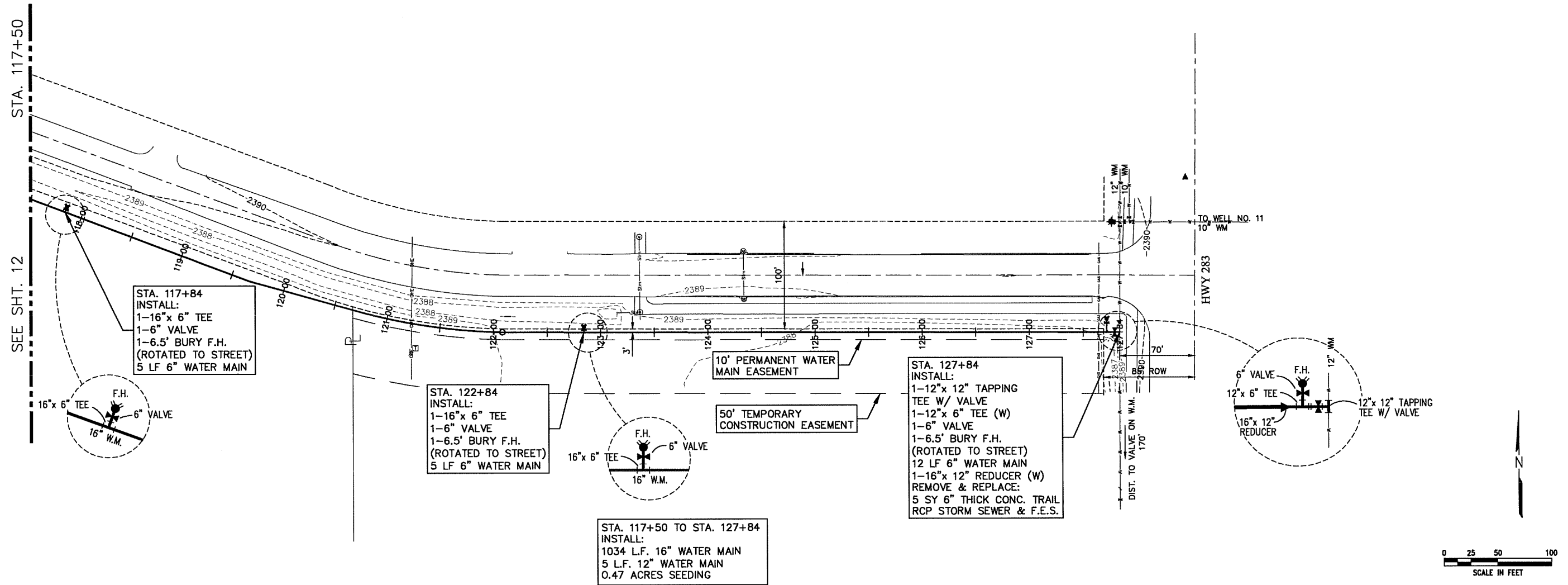


Miller & Associates
Consulting Engineers, P.C.
Kearney, NE (308) 234-6456
McCook, NE (308) 345-3710

2020 WATER SYSTEM IMPROVEMENTS
CATTEMENS DRIVE WATER MAIN
LEXINGTON, NEBRASKA



VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.
SCALE: VERT. = 1" = 5'
HORIZ. 1" = 50'
PROJECT NO. 127-CI-070
DATE: JANUARY, 2020
FIELD BOOK M&A DWG NO. 37038
DRAWN BY: BSF APRVD BY: TRH
SHEET 13



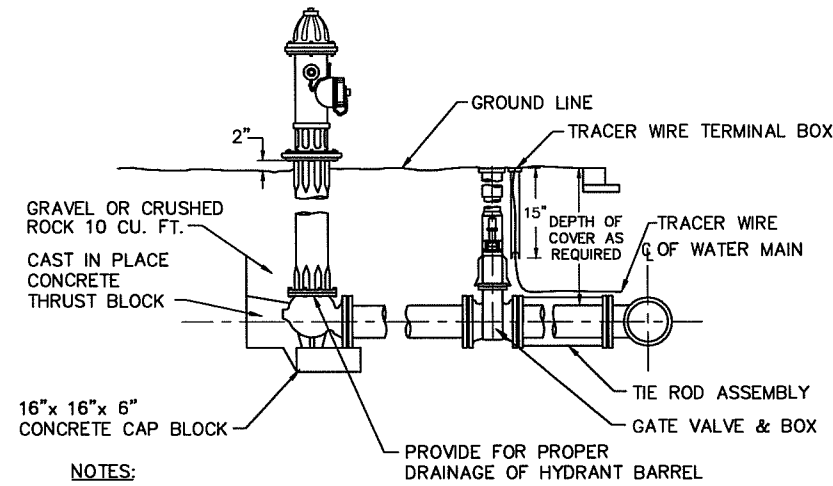
PLOTTED: 1/15/2020 8:33 AM
SAVED: 1/10/2020 2:03 PM
C:\Projects\127-CI-070\Cattemens Drive\Sheet Drawings\SI_PP_Cattemens.dwg



Miller & Associates
 Consulting Engineers, P.C.
 Kearney, NE (308) 234-6456
 McCook, NE (308) 345-3710

2020 WATER SYSTEM IMPROVEMENTS
WATER DETAILS
 LEXINGTON, NEBRASKA

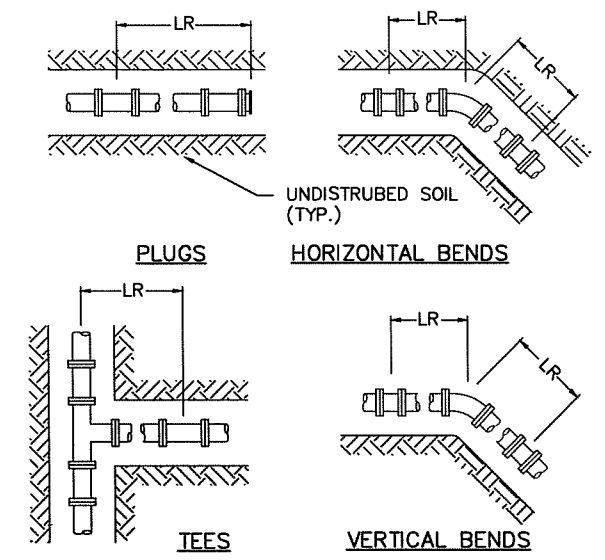
This document, and the ideas and designs incorporated herein, is an instrument of professional service, is the property of Miller & Associates and is not to be used in whole or in part, for any other project without the written authorization of Miller & Associates.



NOTES:

1. THE CONTRACTOR SHALL SET OR TURN ALL FIRE HYDRANTS SO THE PUMPER NOZZLE FACES THE DRIVEN ROADWAY OR AS DIRECTED BY THE ENGINEER.
2. WHEN FIRE HYDRANTS ARE LOCATED IN A HARD SURFACED AREA, AN 18" ROUND FORMED BLOCK OUT SHALL BE CENTERED AROUND HYDRANT BARREL. AREA BETWEEN HYDRANT BARREL AND FORM SHALL BE FILLED WITH COMPACTED SOIL.
3. ALL JOINTS FROM THE TEE TO THE FIRE HYDRANT SHALL BE RESTRAINED.

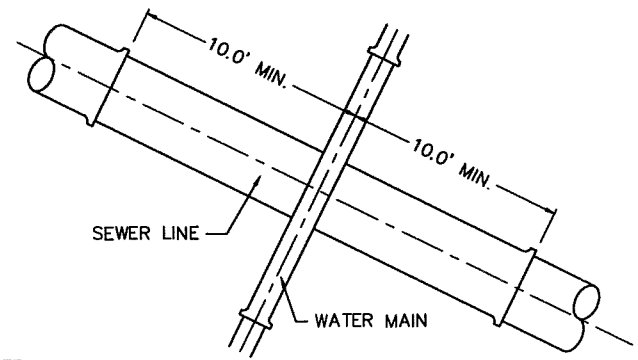
FIRE HYDRANT DETAIL
 NO SCALE



NOMINAL PIPE SIZE INCHES	HORIZONTAL BENDS			TEE BRANCH & PLUGS	VERTICAL BENDS	
	90 DEG.	45 DEG.	22.5 DEG.		45 DEG.	22.5 DEG.
6	42	18	18	109	45	22
8	54	22	18	142	59	28
10	66	27	18	172	71	34
12	77	32	18	202	84	40
14	88	37	18	232	96	46
16	99	41	20	261	108	52
18	109	45	22	290	120	58
20	120	50	24	318	132	63
24	139	58	28	373	155	74

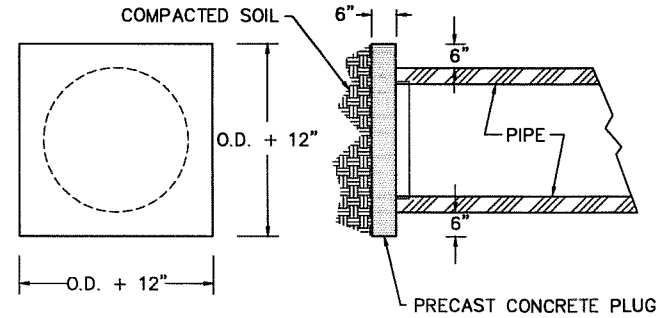
- NOTE:**
1. ALL JOINTS WITHIN THE SPECIFIED LENGTH "LR" MUST BE RESTRAINED.
 2. THE MINIMUM DEPTH OF BURY SHALL BE 4' TO TOP OF PIPE.

JOINT RESTRAINT REQUIRED FOR RESTRAINED FITTINGS

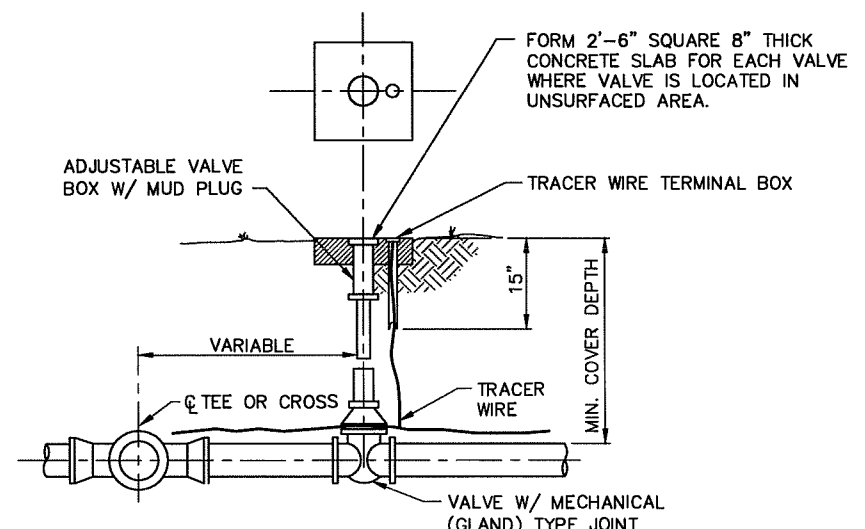


NOTE: WHERE A MINIMUM VERTICAL DISTANCE OF 18" (0.46M) BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER LINE CANNOT BE MAINTAINED, THE WATER MAIN SHALL BE RELOCATED OR THE SEWER LINE SHALL BE RECONSTRUCTED WITH A PRESSURE TYPE OF PIPE, EXTENDED 10' (3.0M) ON EACH SIDE OF THE WATER PIPE. ONE FULL LENGTH OF WATER MAIN SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR AS POSSIBLE FROM THE SEWER. SEWER LINE AND PRESSURE TYPE OF PIPE SHALL BE CONNECTED BY NEOPRENE ADAPTER COUPLING, AND CONCRETE COLLARS. ALL OTHER MATERIALS REQUIRED BY ENGINEER OR ALIGNMENT SHALL BE AN EXTRA PAID IN ACCORDANCE BY UNIT BID PRICES.

SEWER CROSSING DETAIL
 NO SCALE



CONCRETE PLUG FOR ABANDONMENT OF EXISTING PIPES
 NO SCALE



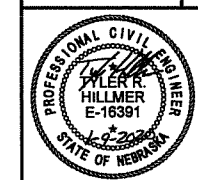
VALVE & BOX DETAIL
 NO SCALE



VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 0 1"
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

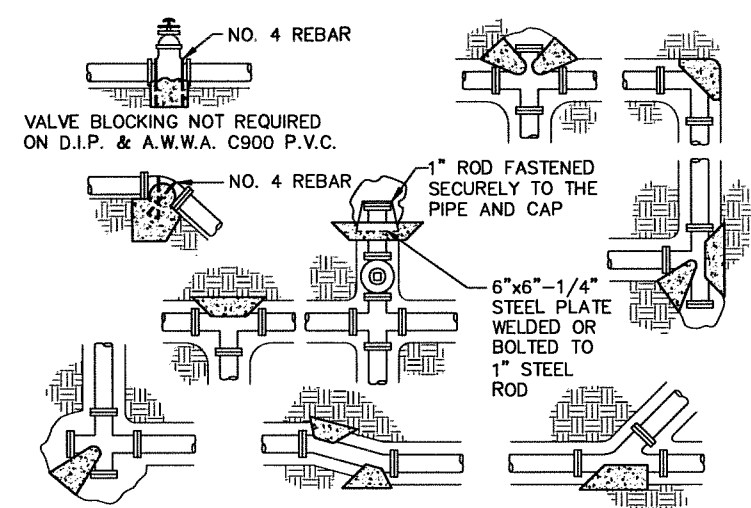
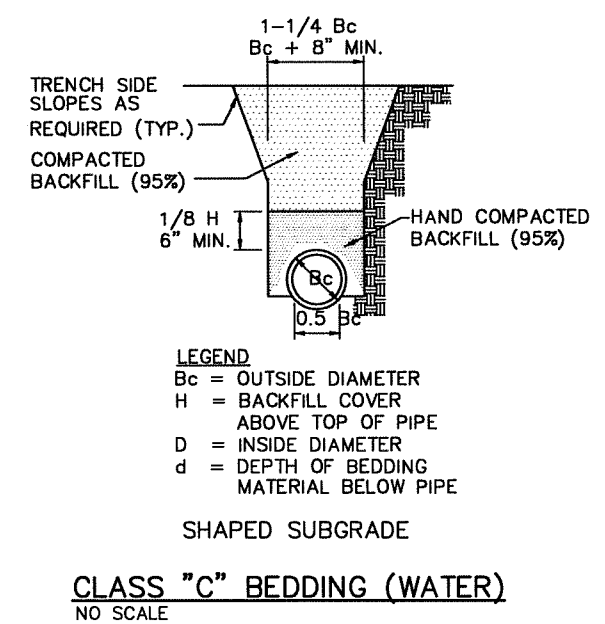
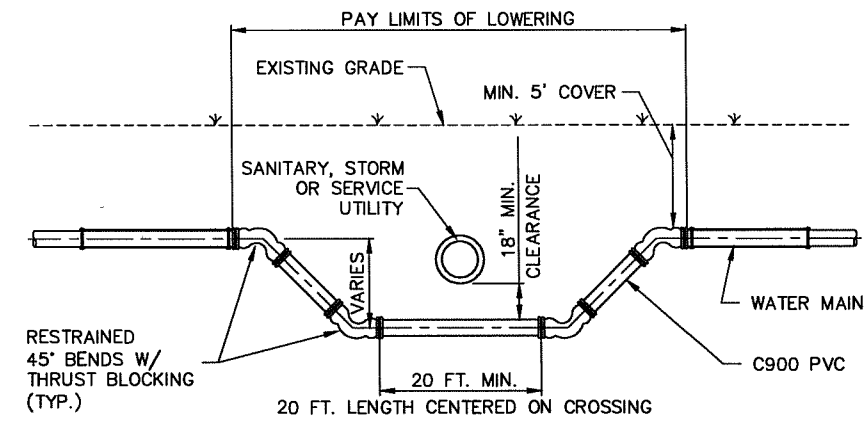
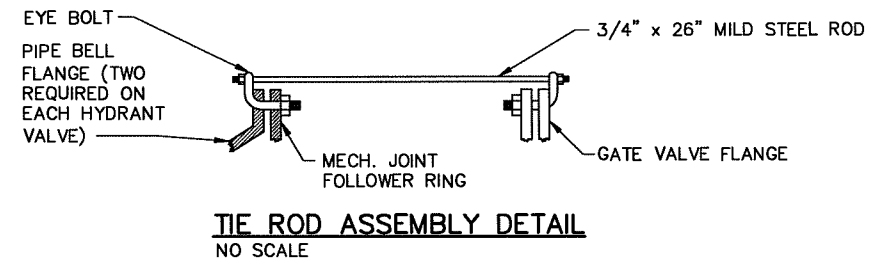
SCALE: AS NOTED
 PROJECT NO. 127-C1-069
 DATE: JANUARY, 2020
 FIELD BOOK M&A DWG NO. 37037
 DRAWN BY: BSF APPROVED BY: TRH
 SHEET

SAVED: 10/20/2020 2:03 PM PLOTTED: 10/20/2020 3:06 PM



VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

SCALE: AS NOTED
 PROJECT NO. 127-C1-069
 DATE: JANUARY, 2020
 FIELD BOOK M&A DWG NO. 37036
 DRAWN BY: BSF APRVD BY: TRH
 SHEET 15



NOTES:
 CARE SHALL BE EXERCISED TO ASSURE JOINT, INCLUDING BOLTS, WILL BE ACCESSIBLE

UNLESS OTHERWISE SPECIFIED CONC. MIX COMPRESSIVE STRENGTH SHALL BE 3,000 PSI AT 28 DAYS.

THIS DETAIL FOR BOTH VERT. AND HORIZ. PIPE

FITTING SIZES	BEARING AREA OF BLOCK IN SQ. FT.					
	VALVES & DEAD ENDS	TEES	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND
3" & SMALLER	0.7	1.0	0.5	0.3	0.2	0.2
4"	1.9	2.7	1.4	0.7	0.4	0.4
6"	4.2	6.0	3.2	1.7	0.8	0.8
8"	7.5	10.7	5.8	2.9	1.5	1.5
10"	11.8	16.7	9.0	4.6	2.3	2.3
12"	17.0	24.0	13.0	6.6	3.3	3.3
14"	23.1	32.7	17.7	9.0	4.5	4.5
16"	30.2	42.7	23.1	11.8	5.9	5.9
18"	38.2	54.0	29.2	14.9	7.5	7.5
20"	47.1	66.6	36.1	18.4	9.2	9.2
24"	67.9	96.0	51.9	26.5	13.3	13.3
30"	106.0	149.9	81.2	41.4	20.8	20.8
36"	152.7	215.9	116.9	59.6	29.9	29.9

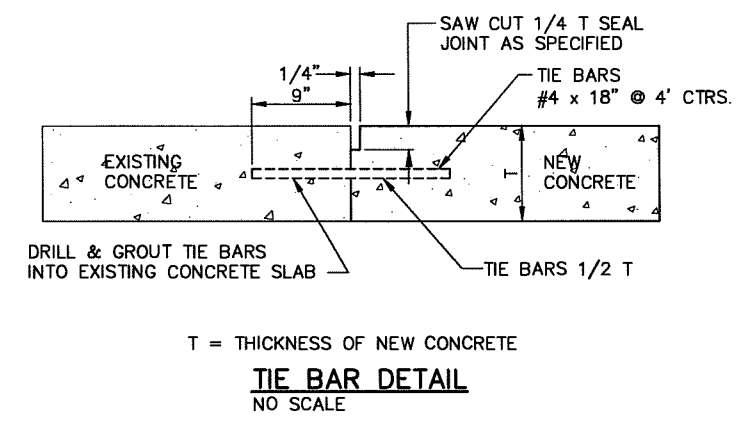
STANDARD BLOCKING DETAILS
 NO SCALE

REVISIONS	BY

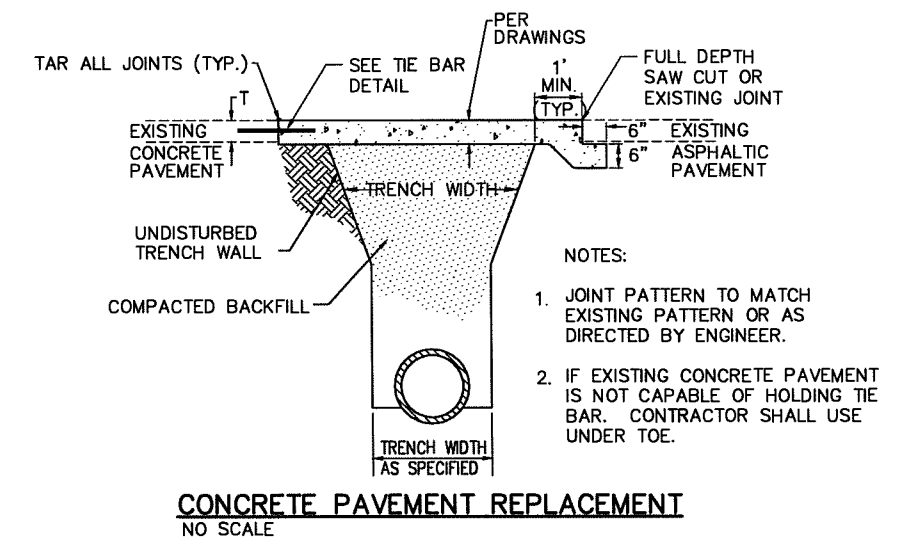
M&A
 Miller & Associates
 Consulting Engineers, P.C.
 Kearney, NE (308) 234-6456
 McCook, NE (308) 345-3710

2020 WATER SYSTEM IMPROVEMENTS
PAVING DETAILS
 LEXINGTON, NEBRASKA

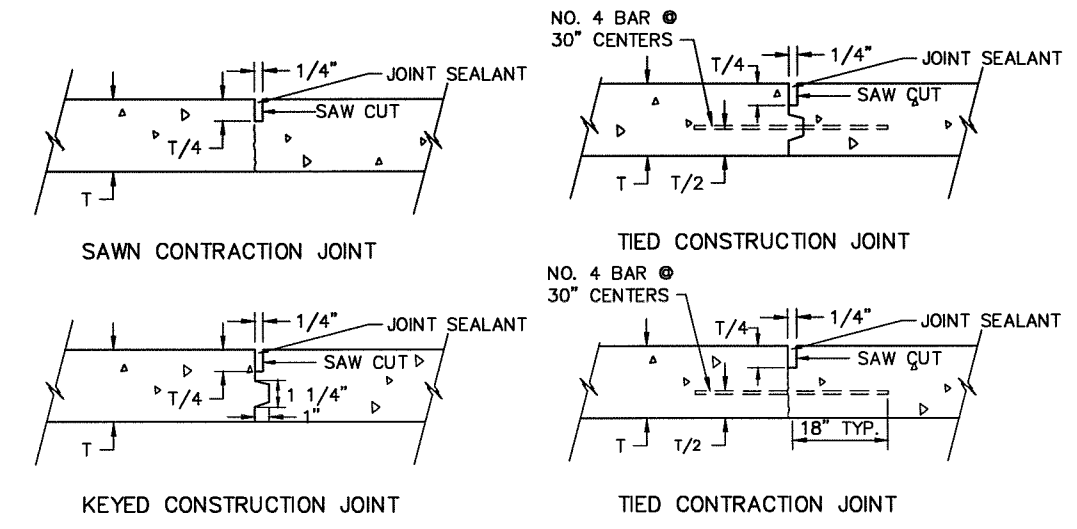
This document, and the ideas and designs incorporated herein, are an instrument of professional service, in the property of Miller & Associates and is not to be used in whole or in part, for any other project without the written authorization of © 2018 Miller & Associates.



T = THICKNESS OF NEW CONCRETE
TIE BAR DETAIL
 NO SCALE



CONCRETE PAVEMENT REPLACEMENT
 NO SCALE



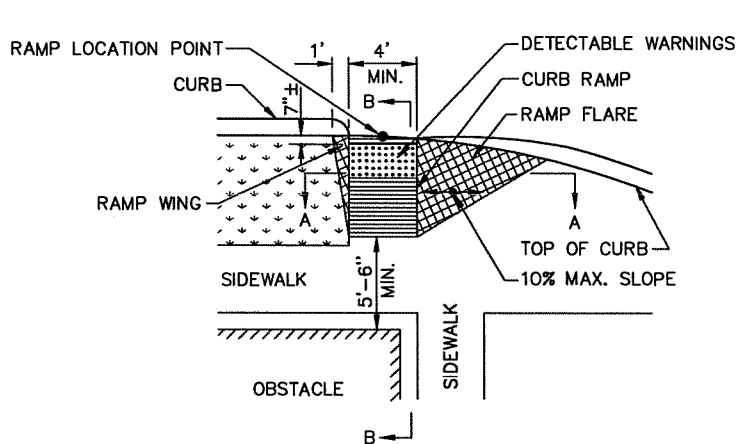
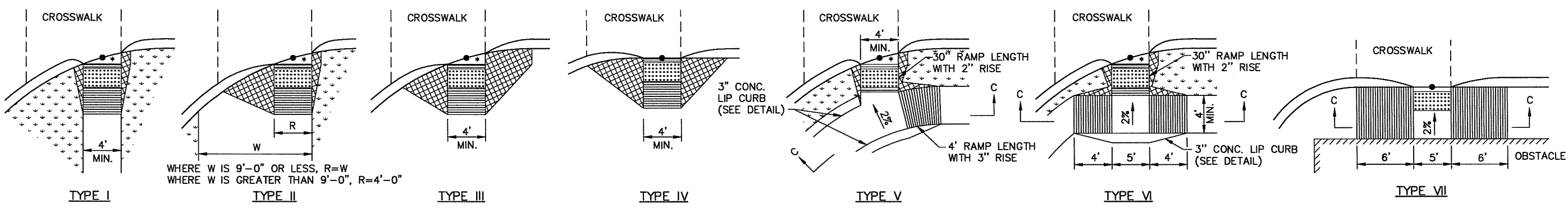
CONCRETE JOINT DETAIL
 NO SCALE



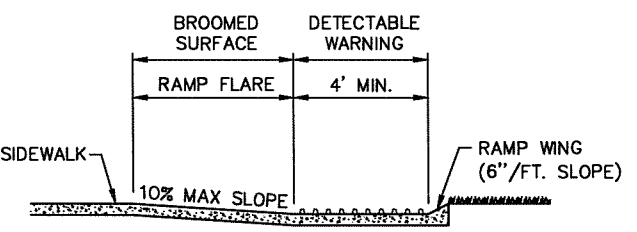
VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

SCALE:	AS NOTED
PROJECT NO.	127-C1-069
DATE:	JANUARY, 2020
FIELD BOOK	M&A DWG NO. 37035
DRAWN BY:	BSF
APPRVD BY:	TRH
SHEET	16

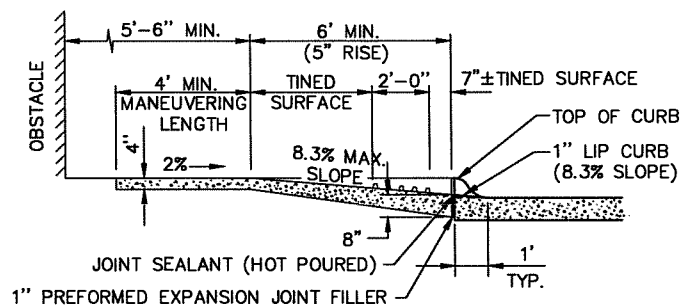
PLOTTED: 1/10/2020 3:07 PM
 C:\Projects\127127-C1-069\Sheet\Drawings\Sheet\Drawings\127127.dwg
 SAVED: 1/10/2020 2:03 PM



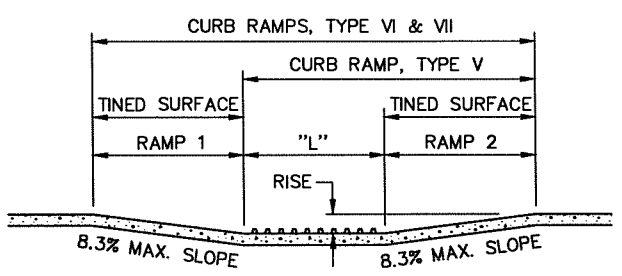
TYPICAL CURB RAMP DETAIL



SECTION A-A
TYPICAL RAMP CROSS SECTION

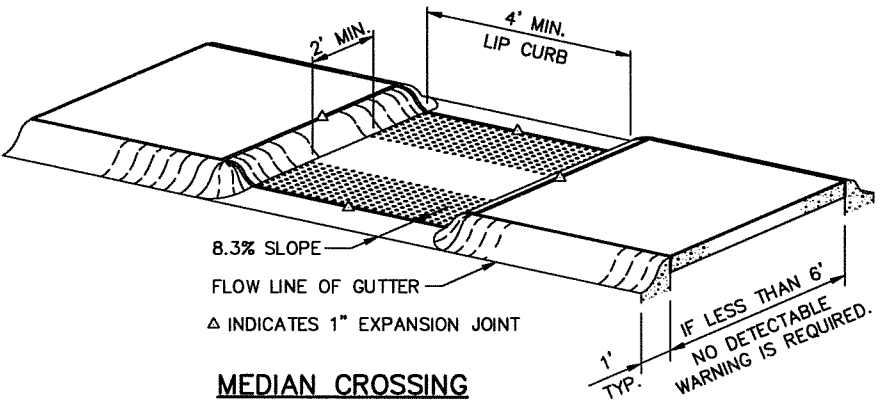


SECTION B-B
TYPICAL RAMP PROFILE

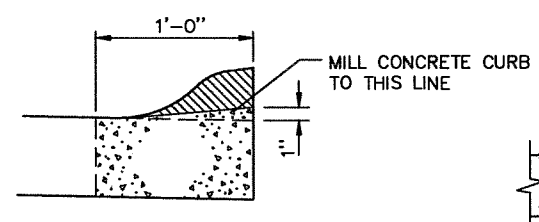


CURB RAMP	RISE	"L"	RAMP 1	RAMP 2
TYPE V	3"	VAR.	N/A	4'
TYPE VI	3"	5'	4'	4'
TYPE VII	5"	5'	6'	6'

SECTION C-C
TYPICAL RAMP CROSS SECTION

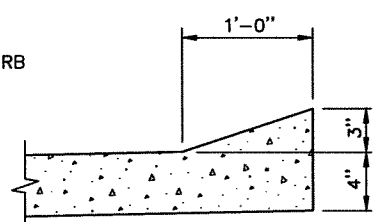


MEDIAN CROSSING



NOTE:
COMBINATION CONCRETE CURB AND GUTTER MAY BE REMOVED AND REPLACED IN LIEU OF MILLING.

CURB REMOVAL DETAIL



3" CONCRETE LIP CURB DETAIL

NOTES:

THE NORMAL GUTTER LINE PROFILE SHALL BE MAINTAINED THROUGH THE AREA OF THE CURB RAMP.

THE SURFACE OF ALL CURB RAMPS SHALL BE TINED TRANSVERSELY TO THE SLOPE OF THE CURB RAMP. THE TINES SHALL PRODUCE GROOVES APPROXIMATELY 1/8" WIDE AND 3/16" DEEP ON 1/2" CENTERS. ALL FLARES AND WINGS SHALL BE BROOMED.

CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON THE CURB RAMP, FREE OF SAGS AND SHORT GRADE CHANGES.

THE RAMP FLARES SHALL BE CONSTRUCTED WITH A 10% SLOPE AT RIGHT ANGLES TO THE SLOPE OF THE CURB RAMP, TYPES II, III & IV.

THE SLOPE OF SIDEWALKS APPROACHING CURB RAMPS (OR THEIR FLARES) SHALL BE FLAT ENOUGH TO PROVIDE RECOVERY AREAS FOR WHEELCHAIRS ENTERING OR EXITING THE RAMPS.

THE WORK OF CONSTRUCTING THESE RAMPS SHALL BE MEASURED AND PAID FOR AS A PART OF THE WORK FOR "CONCRETE SIDEWALKS", "CONCRETE MEDIAN SURFACING" OR "CONCRETE BIKEWAY". THE WORK OF MODIFICATION OF NEW OR EXISTING CURB WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS OF WORK FOR WHICH DIRECT PAYMENT IS MADE.

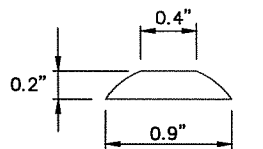
MAXIMUM PERCENT OF SLOPES ARE RELATIVE TO THE SLOPE OF THE ADJACENT SIDEWALK.

DETECTABLE WARNINGS SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP. THEY SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6" TO 8" FROM THE CURB LINE.

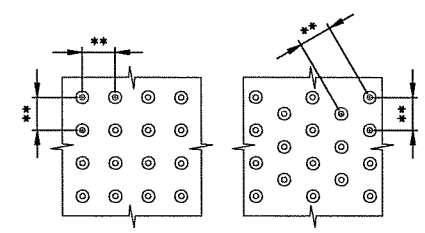
* INDICATES 2% SLOPE TOWARDS STREET.

LEGEND

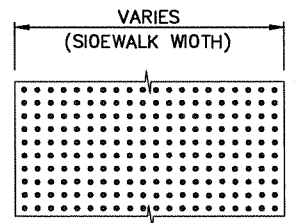
- DETECTABLE WARNINGS
- TINED CURB RAMPS
- BROOMED RAMP WINGS & FLARES
- MILLED CONCRETE
- GRASS OR NON WALKING SURFACE



DOME SECTION



DOME SPACING



DOME ALIGNMENT

DETECTABLE WARNING DETAILS