

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4	DIST 8 DEEP WELLS 2022-1	ST. CLAIR	11	1
* = VARIOUS		ILLINOIS	CONTRACT NO. 76P31	

INDEX OF SHEETS

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- 7 LOCATION NO. 4: SITEPLAN 25TH STREET WELLS
- 8 LOCATION NO. 5: SITEPLAN MISSOURI AVENUE WELLS
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- 10 LOCATION NOS. 1, 2, 3: TYPICAL WELL DETAILS
- 11 LOCATION NO. 4: TYPICAL WELL DETAILS

HIGHWAY STANDARDS

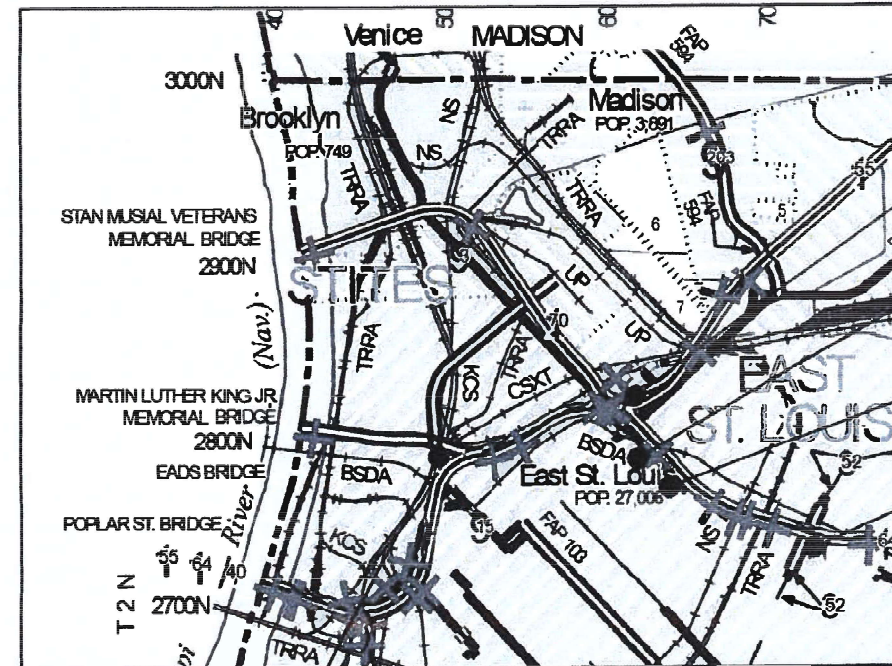
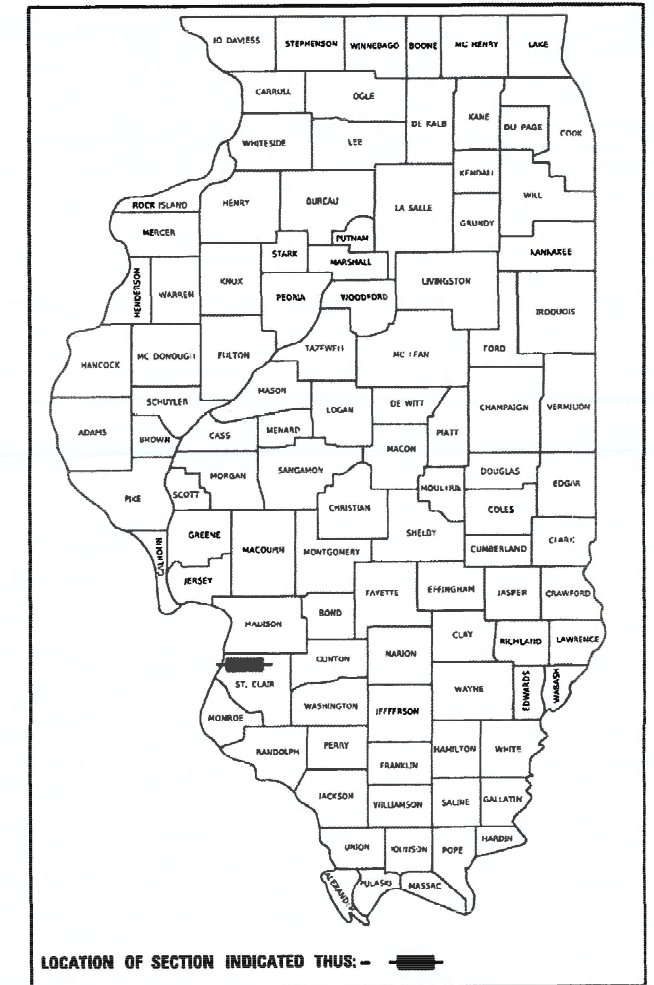
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- 001006
- 701101-05
- 701106-02
- 701400-10
- 701401-12
- 701428-01
- 701601-09
- 701901-08

PROPOSED
HIGHWAY PLANS

VARIOUS ROUTES
SECTION DIST 8 DEEP WELLS 2022-1
WELL TREATMENT
ST. CLAIR COUNTY

C-98-067-21

D-98-037-21



TRI-LEVEL WELLS

10TH STREET WELLS

15TH STREET WELLS

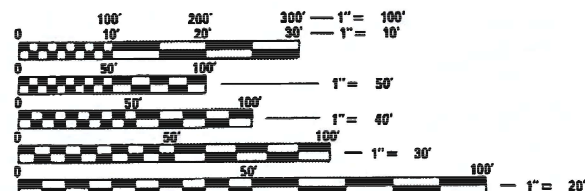
25TH STREET WELLS

MISSOURI AVENUE WELLS

ST. CLAIR COUNTY

PLANS PREPARED BY:

KLINGNER & ASSOCIATES, P.C.
Engineers • Architects • Surveyors
616 North 24th Street, Quincy, IL Ph (217)223-3670 • Fax (217)223-3603
4510 Paul's Gravel Road, Hannibal, MO Ph (573)221-0020 • Fax (573)221-0012
610 N. 4th Street, Suite 100, Burlington, IA Ph (319)753-1636 • Fax (319)752-3605
49 North Prairie Street, Galesburg, IL Ph (309)341-3781
604 Liberty Street, Suite 125, Peoria, IL Ph (309)612-7402
807 East Ash Street, Columbia, MO Ph (573)535-5969
Internet Address: www.klingner.com
STATE OF ILLINOIS DESIGN FIRM # 1842738



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER CHERYL KEPLAR 618-346-3175
PROJECT MANAGER PHILLIP SAWYER 618-346-3275

CONTRACT NO. 76P31

AARON M. SCHAFER
062-065354
REGISTERED PROFESSIONAL ENGINEER
OF ILLINOIS
AARON M. SCHAFER
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS NO. 062-065354
LICENSE EXPIRES NOVEMBER 30, 2021

5/19/2021
DATE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED June 23, 2021
Keith Roberts REGIONAL ENGINEER

August 13, 2021
Scott E. A. Etk
ENGINEER OF DESIGN AND ENVIRONMENT

August 13, 2021
James M. Jan
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS

GENERAL NOTES

1. WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THE LOCATION.
2. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE TO BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. (1-800-892-0123 OR 811) OR FOR NON-MEMBERS THE UTILITY COMPANY DIRECTLY.
3. ALL WELLS REQUIRE SEALING OF MISCELLANEOUS OPENINGS IN THE WELL HEAD TO PREVENT LEAKAGE DURING TREATMENT OPERATIONS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN COST OF THE SPECIFIED TREATMENT METHODS.
4. THE DEPARTMENT RESERVES THE RIGHT TO NOTIFY THE CONTRACTOR TO CHANGE THE SEQUENCE OF WELL CLEANING IF NEEDED TO ENSURE PROPER DEWATERING NEEDS FOR THE DEPARTMENT. THE CONTRACTOR SHALL ALLOW 24 HOURS BETWEEN WELL TREATMENTS. THE CONTRACTOR SHALL INSTALL THE TEMPORARY DISCHARGE PIPES BACK INTO THE WELL DISCHARGE PIPES. ALL DISCHARGE WATER SHALL BE DISCHARGED INTO THE WELL FORCE MAINS.
5. THE DEPARTMENT STRONGLY ENCOURAGES THE PRIME CONTRACTOR AND THEIR APPROVED SUB-CONTRACTORS TO HIRE MINORITY, WOMEN AND DISADVANTAGED INDIVIDUALS FROM ITS FEDERALLY FUNDED HIGHWAY CONSTRUCTION CAREERS TRAINING PROGRAM (HCCTP) TO HELP MEET WORKFORCE AND TRAINEE GOALS. THIS PROGRAM IS TRAINING MINORITIES, WOMEN AND DISADVANTAGED INDIVIDUALS IN HIGHWAY CONSTRUCTION-RELATED SKILLS, E.G., MATH FOR THE TRADES, JOB READINESS, TECHNICAL SKILLS COURSEWORK (CARPENTRY, CONCRETE FLATWORK, BLUEPRINT READING, SITE PLANS, SITE WORK, TOOLS USE, ETC.) AND OSHA 10 HOUR CERTIFICATION, TO PREPARE THEM FOR A CAREER IN THE HIGHWAY CONSTRUCTION TRADES. GRADUATES ARE WELL-TRAINED AND READY TO BECOME PRODUCTIVE ENTRY-LEVEL CONSTRUCTION WORKERS. CONTACT THE DISTRICT 8 EEO OFFICE AT 618-346-3360 AND/OR THE HCCTP COORDINATOR AT 618-874-6528 TO LEARN MORE ABOUT THE PROGRAM AND FOR ASSISTANCE IN MEETING WORKFORCE AND TRAINEE GOALS.

FUNCTIONAL CLASSIFICATION: URBAN MINOR ARTERIAL

<p>LOCATION 1 NB/SB: 2020 ADT = 6500 S.U.=13.0% M.U.=7.9%</p>	<p>LOCATION 2 SB: 2020 ADT = 34900 S.U.=3.7% M.U.=11.1% NB: 2020 ADT = 35400 S.U.=3.5% M.U.=10.4%</p>
<p>LOCATION 3 WB RAMP: 2020 ADT = 30000 S.U.=2.2% M.U.=7.3% EB RAMP: 2020 ADT = 30000 S.U.=2.2% M.U.=7.3%</p>	<p>LOCATION 4 NB/SB: 2020 ADT = 7400 S.U.=4.1% M.U.=2.9%</p>

COMMITMENTS
NONE

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USER NAME = ams	DESIGNED	REVISED -
	DRAWN	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED	REVISED -
PLOT DATE = 5/18/2021	DATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, COMMITMENTS AND ADT

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	DIST 8 DEEP WELLS 2022-1	ST. CLAIR	11	2
* VARIOUS			CONTRACT NO. 76P31	
ILLINOIS		FED. AID PROJECT		

100%
STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE					
				LOCATION 1	LOCATION 2	LOCATION 3	LOCATION 4	LOCATION 5	
				ST. CLAIR	ST. CLAIR	ST. CLAIR	ST. CLAIR	ST. CLAIR	
				ROADWAY	ROADWAY	ROADWAY	ROADWAY	ROADWAY	
				0044	0044	0044	0044	0044	
				URBAN	URBAN	URBAN	URBAN	URBAN	
67100100	MOBILIZATION	L SUM	1	0.20	0.20	0.20	0.20	0.20	
70100800	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	L SUM	1	0.25	0.25	0.25	0.25		
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1				1		
X0300358	ADDITIONAL TREATMENT NO. 1	EACH	10	3	2	3	2		
X0300359	ADDITIONAL TREATMENT NO. 2	EACH	10	3	2	3	2		
X0325850	SONAR-JET TREATMENT	EACH	2			1	1		
X0943700	WELL CHEMICAL TREATMENT	EACH	8	3	2	2	1		
X1200211	DEEP WELL VIDEO INSPECTION	L SUM	1					1	

* SPECIALTY ITEM

REV. - MS

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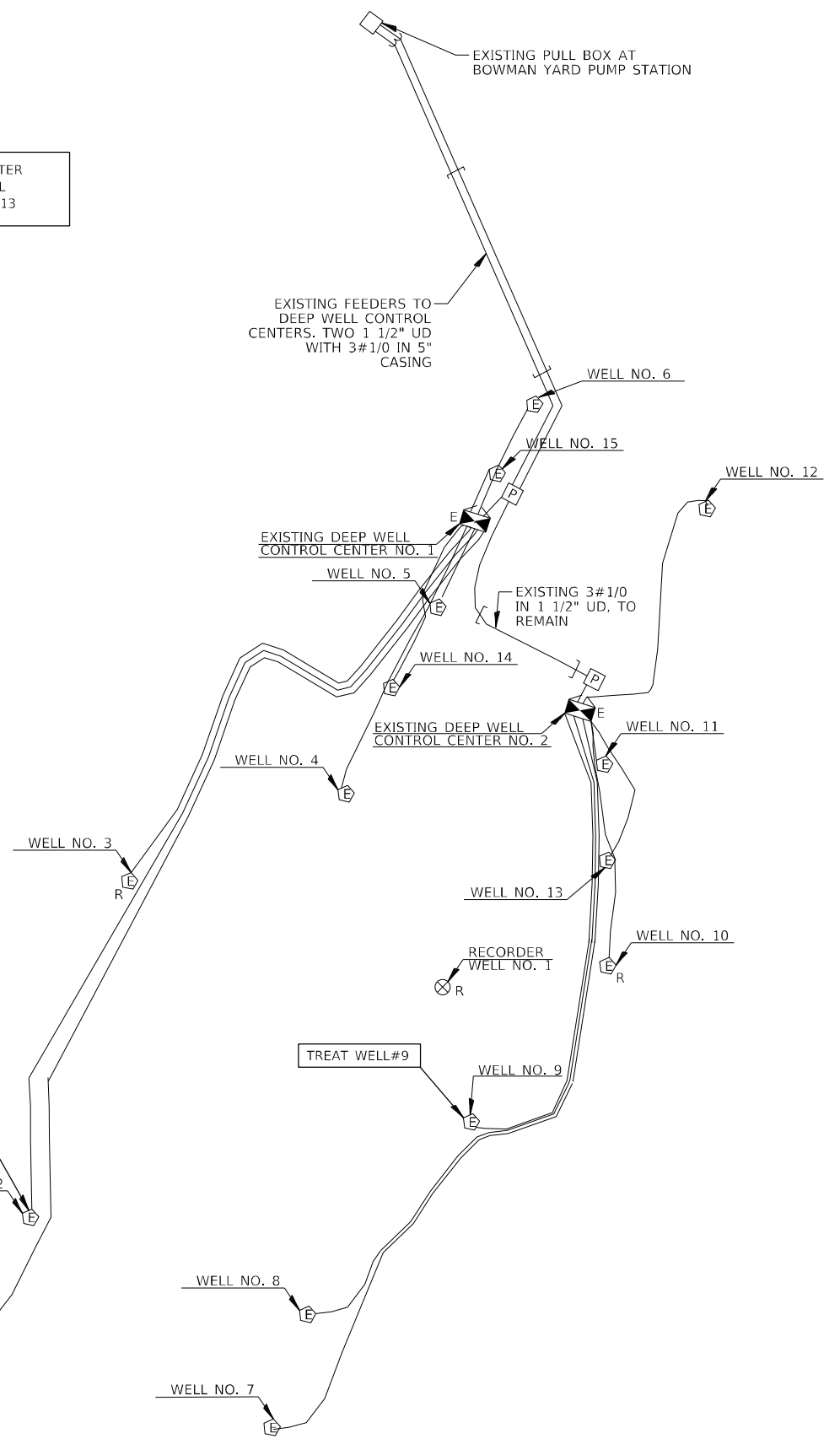
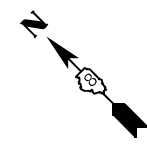
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PLOT DATE = 5/19/2021	DATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

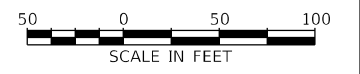
SUMMARY OF QUANTITIES	
SCALE:	SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	DIST 8 DEEP WELLS 2022-1	ST. CLAIR	11	3
* VARIOUS			CONTRACT NO. 76P31	
ILLINOIS		FED. AID PROJECT		

SUPPLY WATER
USE WELL
#3 AND #13



LOCATION	ADDITIONAL TREATMENT NO. 1	ADDITIONAL TREATMENT NO. 2	WELL CHEMICAL TREATMENT	SONAR JET TREATMENT	WELL CHEMICAL TREATMENT SPECIAL
WELL #1	X	X	X		
WELL #2	X	X	X		
WELL #9	X	X	X		



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KLINGNER & ASSOCIATES, P.C.
Engineers • Architects • Surveyors
616 N. 24TH ST. QUINCY, ILLINOIS 62301 217.223.3670
STATE OF ILLINOIS DESIGN FIRM NO. 184-2738

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PLOT DATE = 5/19/2021	CHECKED	REVISED -
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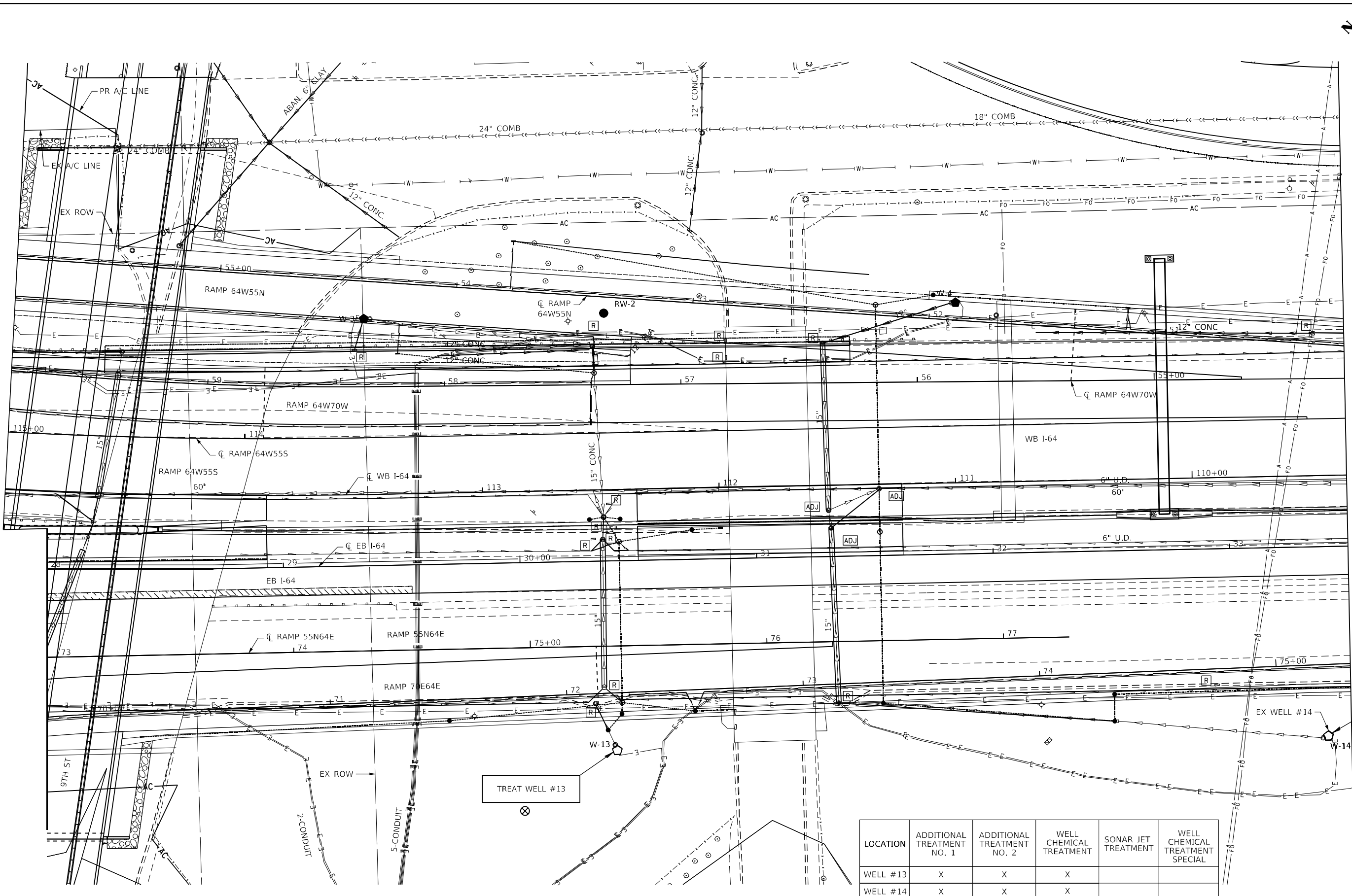
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION NO. 1: SITE PLAN
TRI-LEVEL WELLS

SCALE: 1" = 50' SHEET 1 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	DIST 8 DEEP WELLS 2022-1	ST. CLAIR	11	4
* VARIOUS			CONTRACT NO. 76P31	
ILLINOIS FED. AID PROJECT				

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TREAT WELL #14

LOCATION	ADDITIONAL TREATMENT NO. 1	ADDITIONAL TREATMENT NO. 2	WELL CHEMICAL TREATMENT	SONAR JET TREATMENT	WELL CHEMICAL TREATMENT SPECIAL
WELL #13	X	X	X		
WELL #14	X	X	X		



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Engineers • Architects • Surveyors
616 N. 24TH ST. QUINCY ILLINOIS 62301 217.223.3670
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DATE = 5/19/2021	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

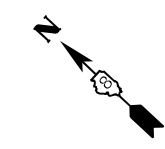
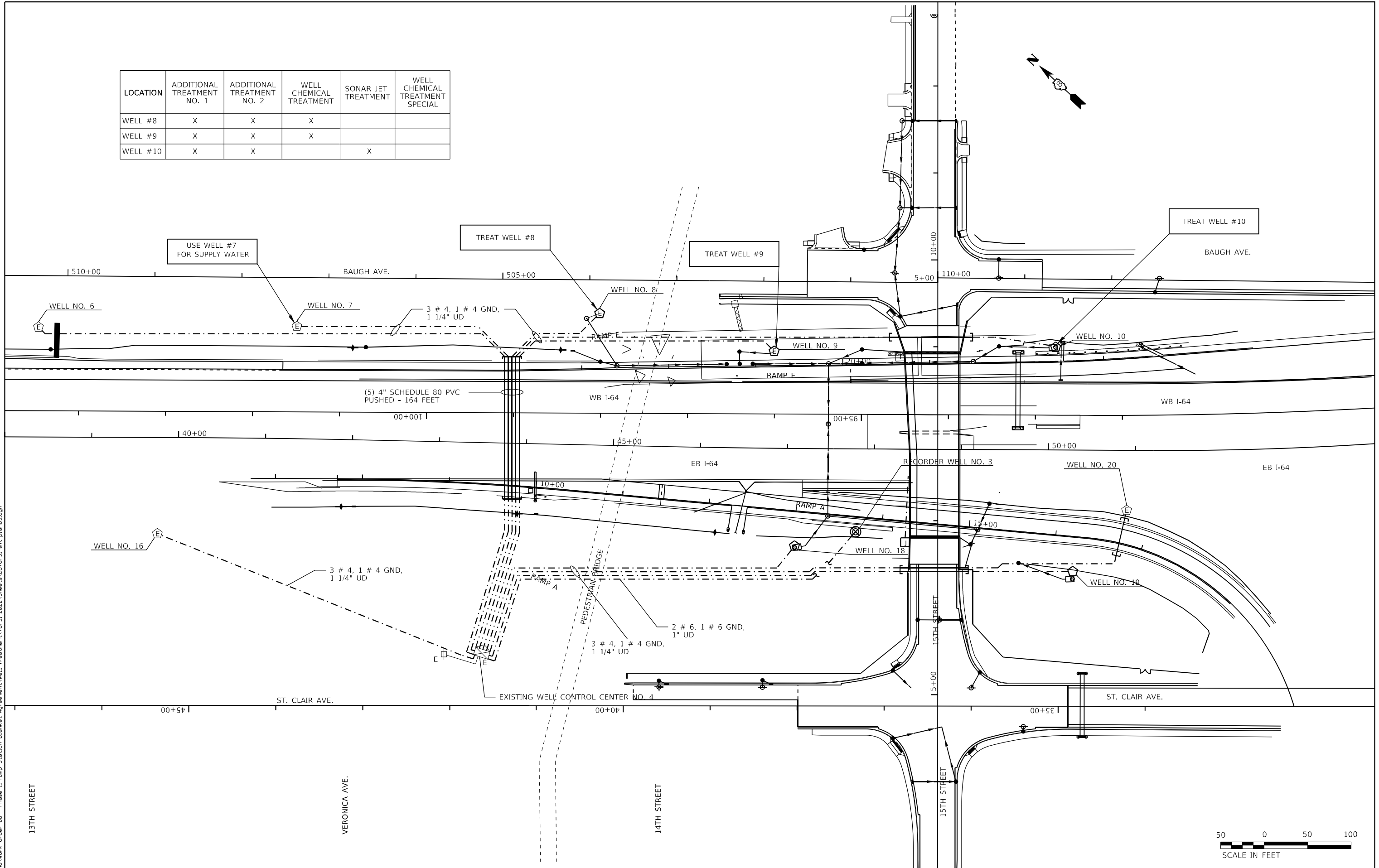
LOCATION 2: SITE PLAN
RAMPS 55N64E, 70E64E, 64W70W & 64W55N

SCALE: 1" = 50' SHEET 2 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DIST 8 DEEP WELLS 2022-1	ST. CLAIR	11	5
* VARIOUS				CONTRACT NO. 76P31

ILLINOIS FED. AID PROJECT

LOCATION	ADDITIONAL TREATMENT NO. 1	ADDITIONAL TREATMENT NO. 2	WELL CHEMICAL TREATMENT	SONAR JET TREATMENT	WELL CHEMICAL TREATMENT SPECIAL
WELL #8	X	X	X		
WELL #9	X	X	X		
WELL #10	X	X		X	



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KLINGNER & ASSOCIATES, P.C.
 Engineers • Architects • Surveyors
 616 N. 24TH ST. SUITE 200 LINCOLN, IL 62301-2112 233-3670
 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738

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PLOT DATE = 5/19/2021	CHECKED -	REVISED -
	DATE	REVISED -

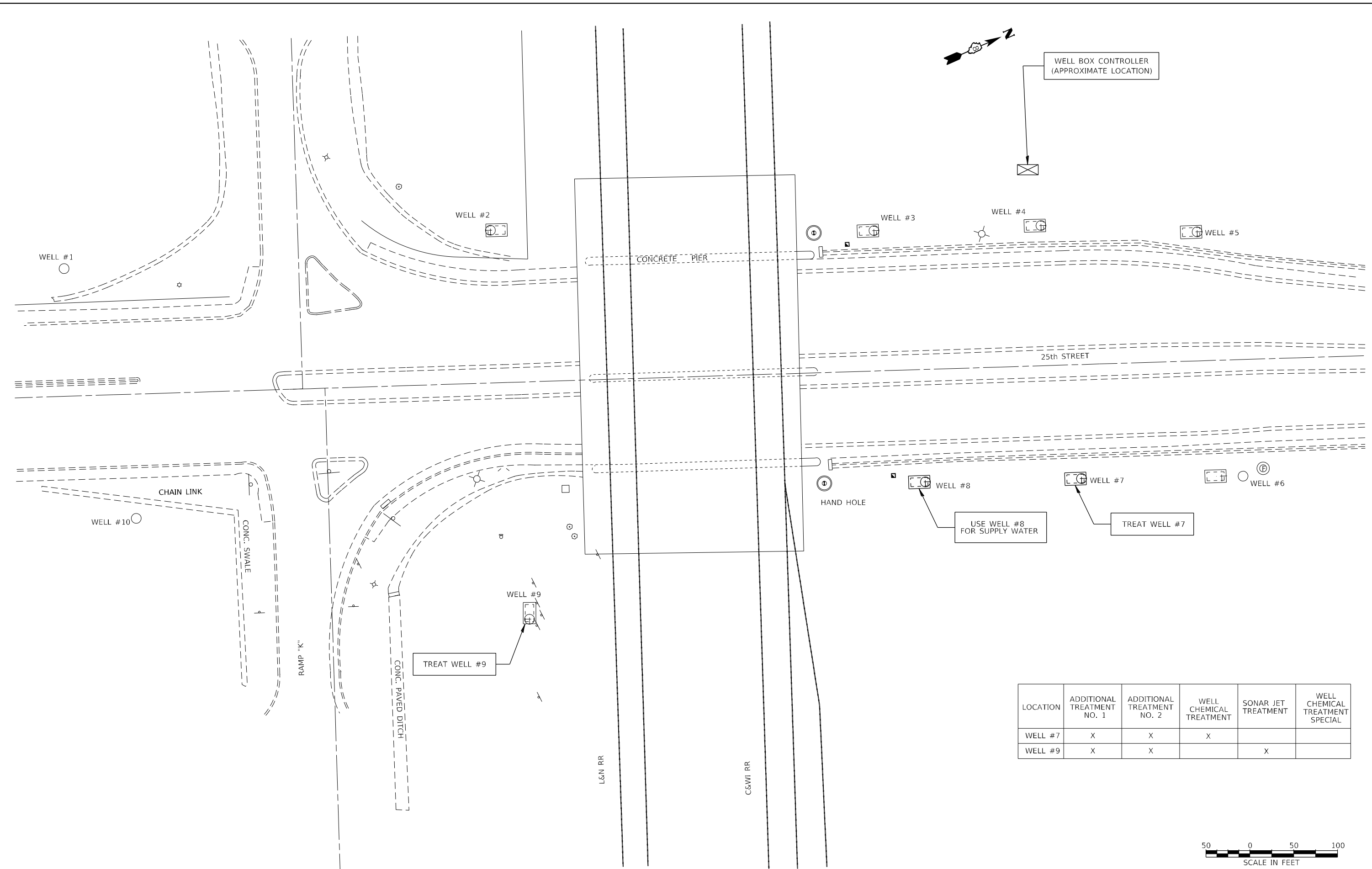
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

LOCATION NO. 3: SITE PLAN
 15TH STREET WELLS

SCALE: 1" = 50' SHEET 3 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	DIST 8 DEEP WELLS 2022-1	ST. CLAIR	11	6
* VARIOUS		CONTRACT NO. 76P31		
ILLINOIS FED. AID PROJECT				

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LOCATION	ADDITIONAL TREATMENT NO. 1	ADDITIONAL TREATMENT NO. 2	WELL CHEMICAL TREATMENT	SONAR JET TREATMENT	WELL CHEMICAL TREATMENT SPECIAL
WELL #7	X	X	X		
WELL #9	X	X		X	



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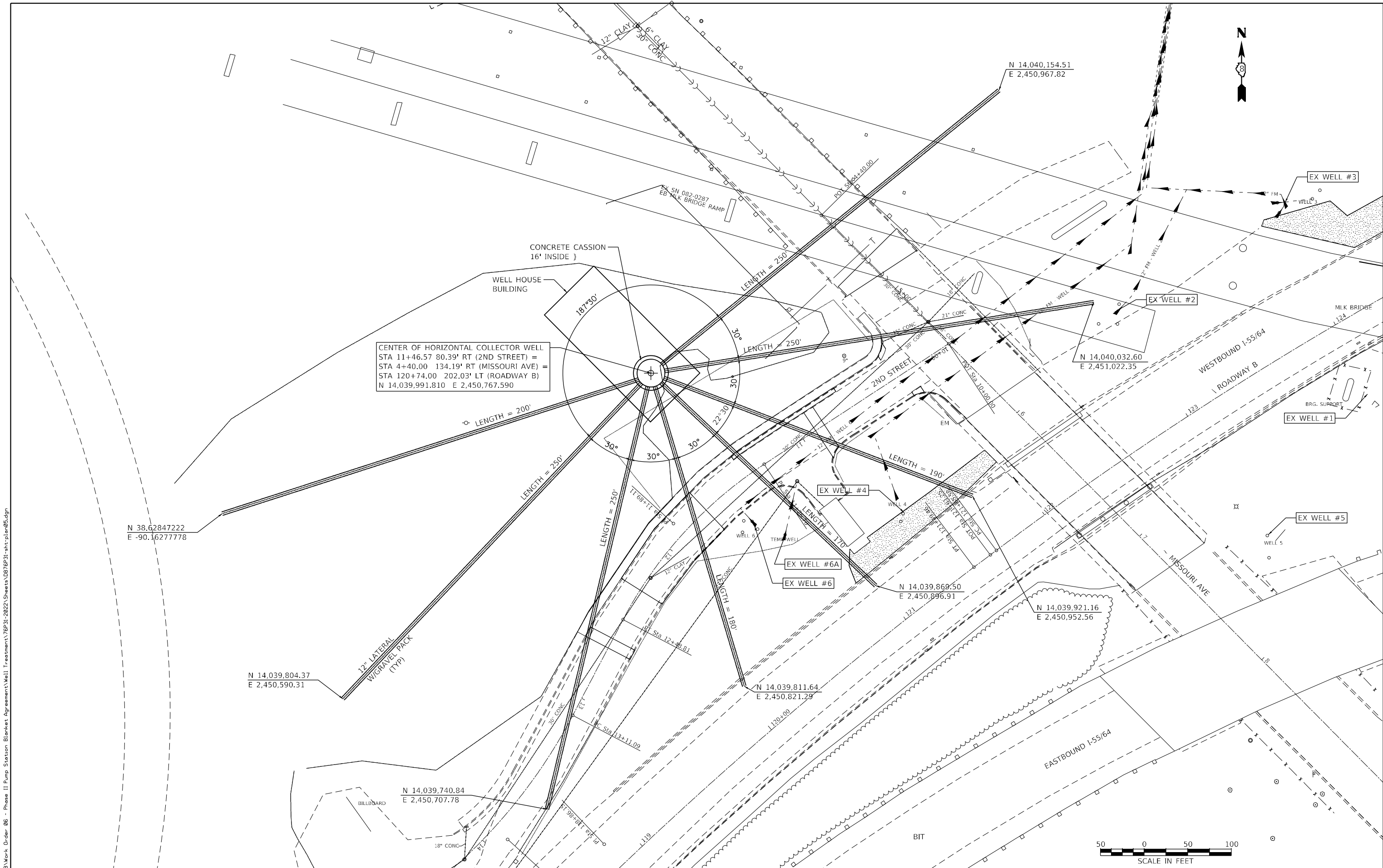
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PLOT DATE = 5/19/2021	CHECKED	REVISED -
	DATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION NO. 4: SITE PLAN
25TH ST. WELLS

SCALE: 1" = 50' SHEET 4 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	DIST 8 DEEP WELLS 2022-1	ST. CLAIR	11	7
* VARIOUS		CONTRACT NO. 76P31		
		ILLINOIS	FED. AID PROJECT	



CENTER OF HORIZONTAL COLLECTOR WELL
 STA 11+46.57 80.39' RT (2ND STREET) =
 STA 4+40.00 134.19' RT (MISSOURI AVE) =
 STA 120+74.00 202.03' LT (ROADWAY B) =
 N 14,039,991.810 E 2,450,767.590

N 38,628,472.22
 E -90,162,777.78

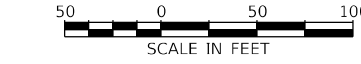
N 14,039,804.37
 E 2,450,590.31

N 14,039,740.84
 E 2,450,707.78

N 14,039,811.64
 E 2,450,821.29

N 14,039,869.50
 E 2,450,896.91

N 14,039,921.16
 E 2,450,952.56



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 Engineers • Architects • Surveyors
 616 N.24TH ST. QUINCY ILLINOIS 62301 217.223.3670
 STATE OF ILLINOIS DESIGN FIRM NO. 164-2738

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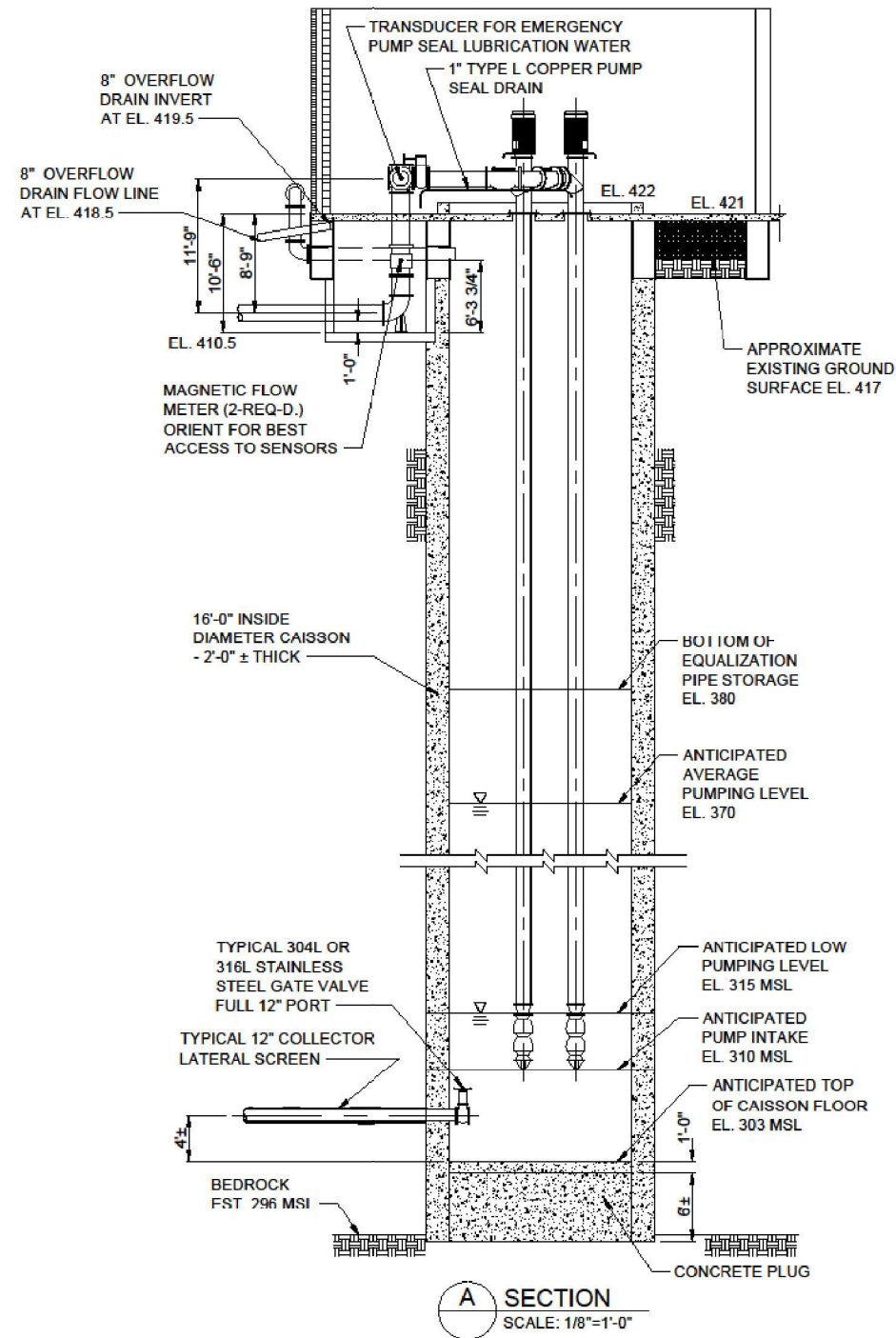
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

LOCATION NO. 5: SITE PLAN
 MISSOURI AVENUE WELLS

SCALE: 1" = 50'	SHEET 5 OF 8 SHEETS	STA.	TO STA.
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	DIST 8 DEEP WELLS 2022-1	ST. CLAIR	11	8
* VARIOUS			CONTRACT NO. 76P31	
ILLINOIS FED. AID PROJECT				

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A SECTION
SCALE: 1/8"=1'-0"

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Engineers • Architects • Surveyors
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STATE OF ILLINOIS DESIGN FIRM NO. 164-2738

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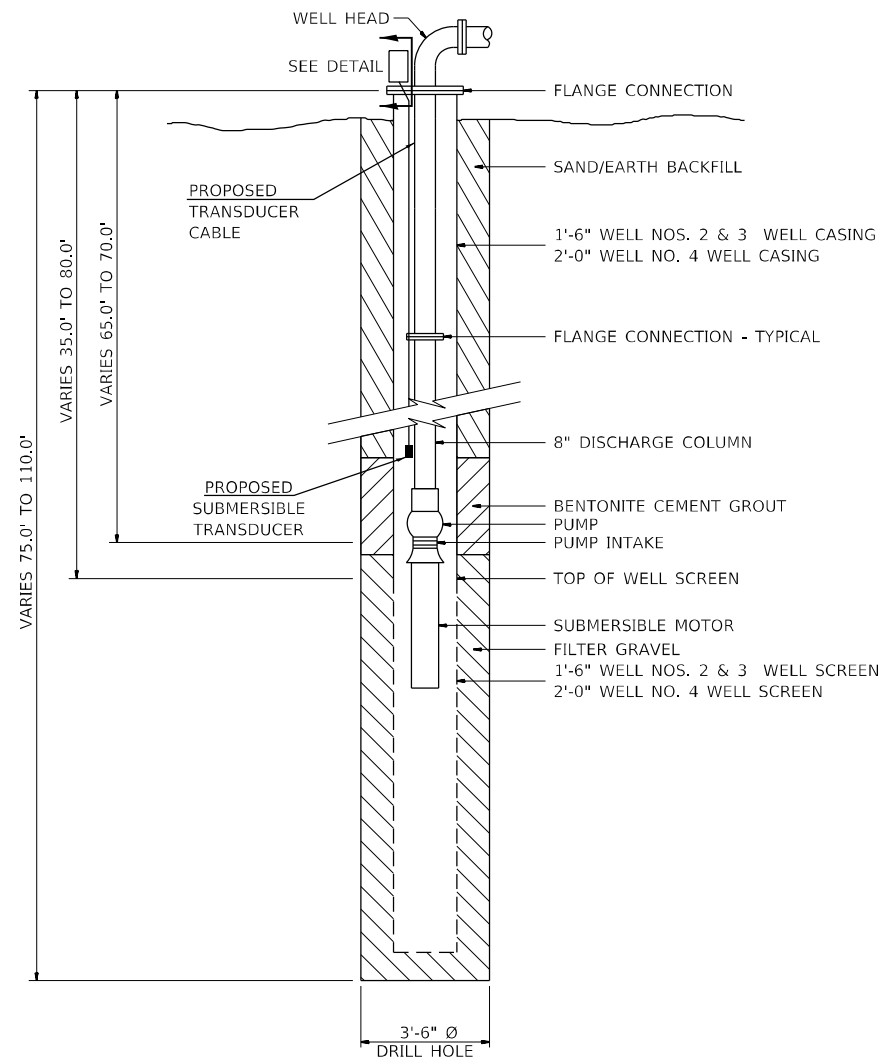
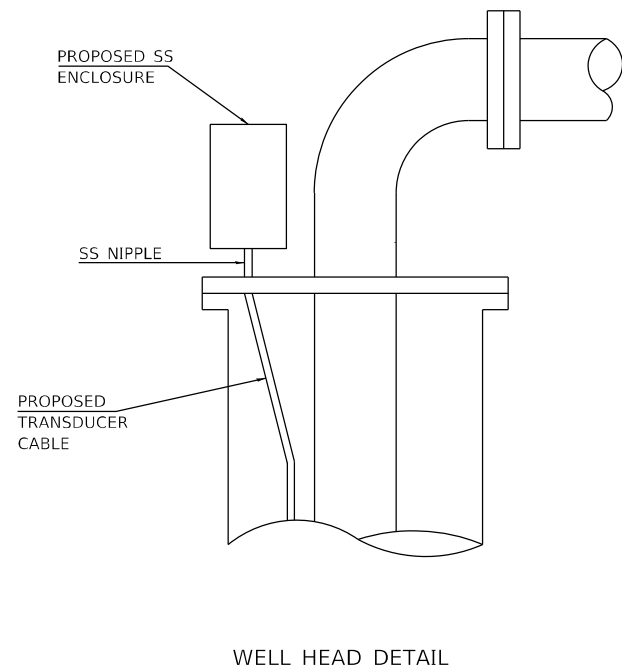
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION NO 5
WELL HOUSE BUILDING - CAISSON DETAILS

SCALE: NONE	SHEET 6 OF 8 SHEETS	STA. TO STA.
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	DIST 8 DEEP WELLS 2022-1	ST. CLAIR	11	9
* VARIOUS			CONTRACT NO. 76P31	
ILLINOIS		FED. AID PROJECT		

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EXISTING

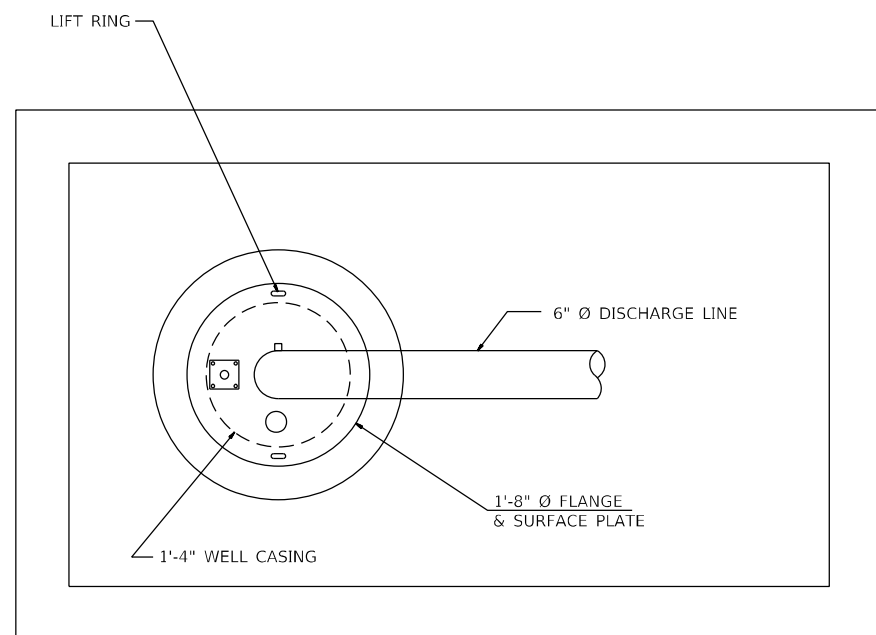
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Engineers • Architects • Surveyors
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STATE OF ILLINOIS DESIGN FIRM NO. 184-2738

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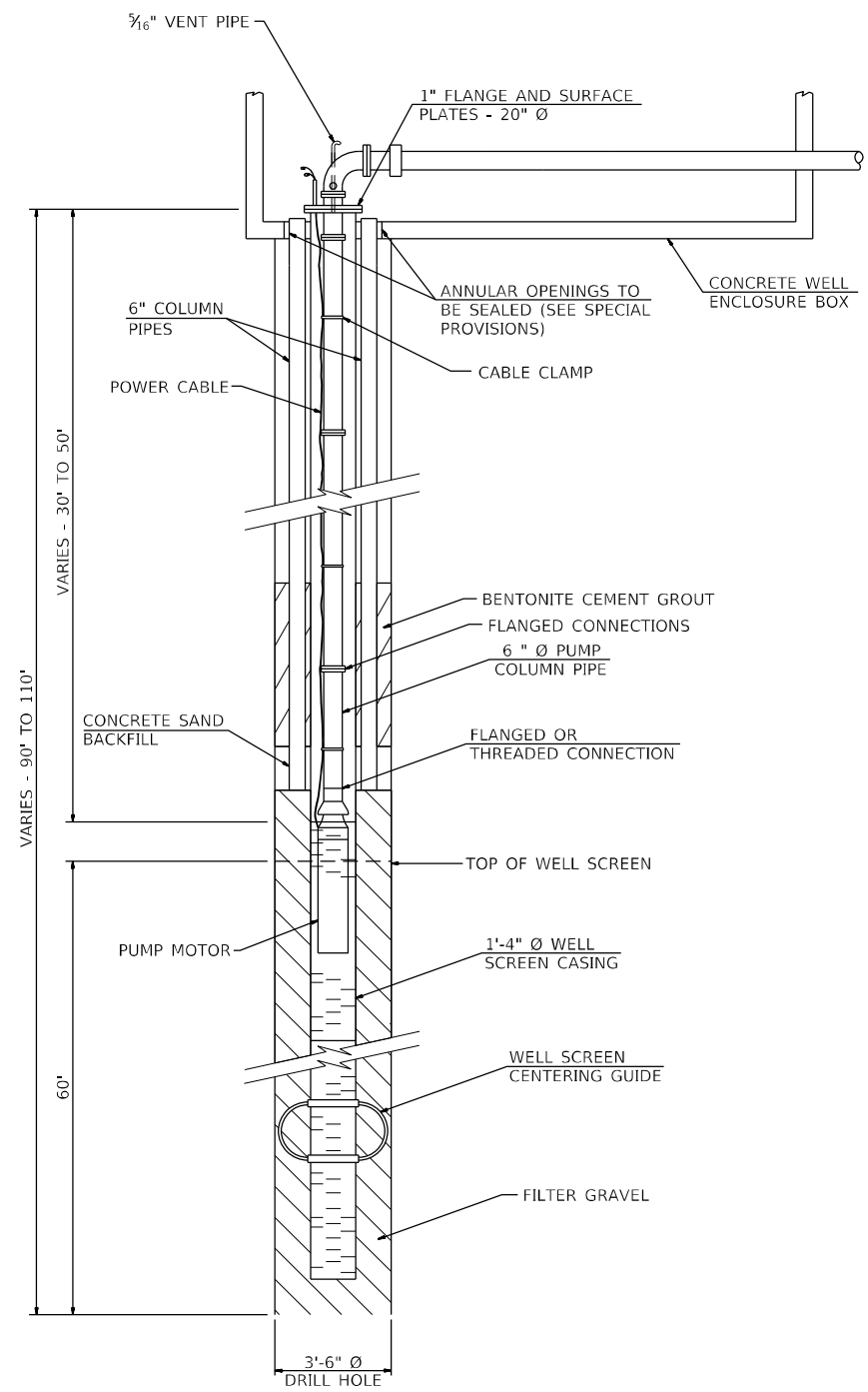
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

LOCATIONS NOS. 1,2,3 TYPICAL WELL DETAILS			
SCALE: NONE	SHEET 7 OF 8 SHEETS	STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	DIST 8 DEEP WELLS 2022-1	ST. CLAIR	11	10
* VARIOUS			CONTRACT NO. 76P31	
ILLINOIS			FED. AID PROJECT	



WELL HEAD DETAIL



EXISTING

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KLINGNER & ASSOCIATES, P.C.
 Engineers • Architects • Surveyors
 616 N. 24TH ST. QUINCY, ILLINOIS 62301 217.223.3670
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	DATE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION NO. 4
TYPICAL WELL DETAILS

SCALE: NONE SHEET 8 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
~	DIST 8 DEEP WELLS 2022-1	ST. CLAIR	11	11
* VARIOUS		CONTRACT NO. 76P31		
ILLINOIS		FED. AID PROJECT		