06-16-2023 LETTING ITEM 087

INDEX OF SHEETS

- 2 ELECTRICAL NOTES AND SYMBOLS AND LOCATION MAPS AND HIGHWAY STANDARDS
- 3 SUMMARY OF QUANTITIES
- EXISTING MONITOR NO. 2 1-64 REST AREA E/B
- 5 EXISTING MONITOR NO. 3 I-64 REST AREA W/8 EXISTING MONITOR NO. 4 COLLINSVILLE #1
- 7 EXISTING MONITOR NO. 5 McCAMBRIDGE
- B EXISTING MONITOR NO. 6 1-70 REST AREA W/B
- 9 EXISTING MONITOR NO. 7 MISSOURI AVENUE
- 10 EXISTING MONITOR NO. 8 FUN & SUN
- 11 EXISTING MONITOR NO. 9 42ND STREET
- 12 EXISTING MONITOR NO. 10 VENICE
- 13 EXISTING MONITOR NO. 11 25TH STREET 14 EXISTING MONITOR NO. 12 1-55 REST AREA N/B
- 15 EXISTING MONITOR NO. 13 1-55 REST AREA 5/8
- 16 EXISTING MONITOR NO. 14 9TH STREET 17 EXISTING MONITOR NO. 17 25TH STREET WELLS
- 18 EXISTING MONITOR NO. 18 TRI-LEVEL SOUTH WELLS 19 EXISTING MONITOR NO. 19 TRI-LEVEL NORTH WELLS
- 20 EXISTING MONITOR NO. 20 10TH STREET WELLS
- 21 EXISTING MONITGR NO. 21 15TH STREET WELLS
- 22 EXISTING MONITOR NO. 34 BOWMAN
- 23 PROPOSED MONITOR NO. 36 MARY'S RIVER COVERED BRIDGE

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

VARIOUS ROUTES SECTION D8 PUMP STATIONS 2023-1 DISTRICT 8 PUMP STATION SECURITY PROJECT VARIOUS COUNTIES

C-98-071-23

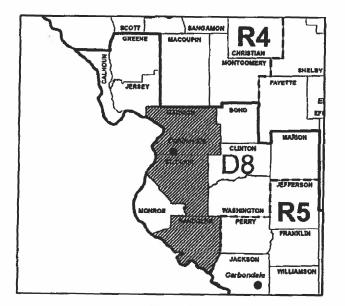


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

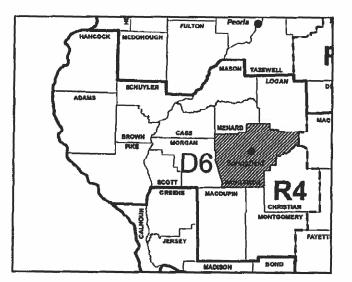
J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

PROJECT ENGINEER: CHERYL KEPLAR **SQUAD LEADER:** PHILLIP SAWYER

GROSS LENGTH = N/A NET LENGTH = N/A

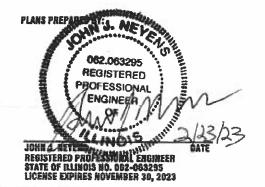


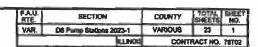
DISTRICT 8 SEE SHEET 2 FOR DETAILED PUMP STATION LOCATIONS



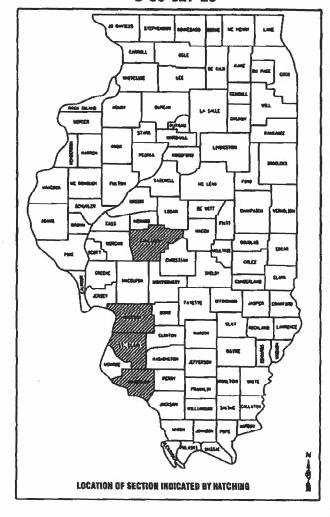
DISTRICT 6

SEE SHEET 2 FOR DETAILED PUMP STATION LOCATIONS





D-98-027-23

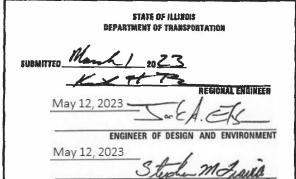


KLINGNEF

Engineers • Architects • Surveyors

Quincy, Illinois

STATE OF ILLINOIS DESIGN FIRM # 1842738



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

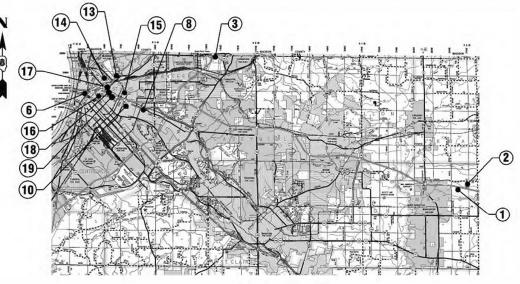
CONTRACT NO. 76T02

GENERAL ELECTRICAL NOTES:

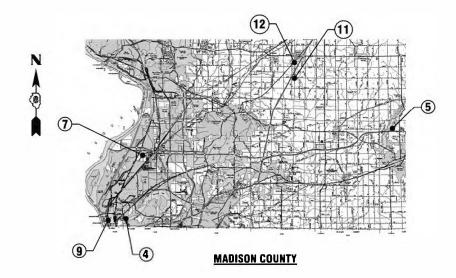
- 1. APPLICABLE STANDARDS: NFPA-70 AND THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) OF 1971 AND ALL AMENDMENTS THERETO: EQUIPMENT. DEVICES, APPARATUS, SYSTEMS. AND INSTALLATIONS SHALL BE ENTIRELY SUITABLE AND SAFE FOR EACH INTENDED APPLICATION AND BE IN FULL COMPLIANCE WITH APPLICABLE STANDARDS, REQUIREMENTS, RULES, REGULATIONS, CODES, STATUTES, ORDINANCES, ETC., OF MUNICIPAL COUNTY, AND STATE GOVERNMENTS, OWNER'S INSURANCE COMPANY, LOCAL UTILITIES, AND LABOR REGULATIONS, NOTHING CONTAINED IN THESE PLANS AND SPECIFICATIONS SHALL BE CONSTRUED TO CONFLICT WITH THESE LAWS, CODES, AND ORDINANCES.
- 2. DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF SYSTEMS. INSTALL SYSTEMS AS INDICATED UNLESS DEVIATIONS TO LAYOUT ARE APPROVED ON COORDINATION DRAWINGS.
- 3. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ARRANGE FOR ALL INSPECTIONS REQUIRED BY LOCAL AUTHORITIES.
- 4. CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS, ACCESSORIES, TOOLS, EQUIPMENT. TRANSPORTATION, LABOR, SERVICES AND OPERATIONS NECESSARY FOR A COMPLETE ELECTRICAL SYSTEM.
- 5. CONTRACTOR SHALL REMOVE AND SALVAGE EXISTING DIALER AND PROVIDE TO OWNER.
- 6. EXISTING 120V POWER SUPPLY TO CURRENT DIALER UNIT TO BE REUSED TO PROVIDE POWER FOR PROPOSED WIRELESS MONITORING AND REMOTE-CONTROL TERMINAL UNIT.
- 7. INPUT POINTS AND ASSOCIATED CONDUCTORS FOR CURRENT DIALER ARE TO BE REUSED UNLESS NOTED OTHERWISE. DISCONNECT CONDUCTORS FOR EACH INPUT POINT FROM EXISTING DIALER UNIT AND RECONNECT TO PROPOSED WIRELESS MONITORING AND REMOTE-CONTROL TERMINAL UNIT
- 8. PROPOSED WIRELESS MONITORING AND REMOTE-CONTROL TERMINAL UNIT SHALL BE PROVIDED WITH APPROPRIATE MOUNTING BRACKETS AND HARDWARE TO ALLOW INSTALLATION IN THE SAME LOCATION AND IN THE SAME GENERAL CONFIGURATION AS THE CURRENT DIALER UNIT. INFILL PANELS AND OTHER MODIFICATIONS NECESSARY TO ACCOMMODATE THE INSTALLATION SHALL BE PROVIDED. STANDALONE TERMINAL UNITS SHALL BE INSTALLED WITHIN A NEW WALL-MOUNTED ENCLOSURE (CABINET)
- 9. EXISTING TELEPHONE CABLES SERVING THE EXISTING DIALER UNIT SHALL BE REMOVED BACK TO THEIR SOURCE.
- 10. PHOTOS OF EXISTING PUMP STATIONS AND ENCLOSURES WERE TAKEN IN OCTOBER 2021 AND ARE INCLUDED IN THE DRAWING SET ONLY AS A REFERENCE. CONTRACTOR SHALL VERIFY CURRENT SITE CONDITIONS.
- 11. CONTRACTOR TO NOTIFY CENTRAL OFFICE TO COORDINATE INSTALLATION AT STATION ONE IN DISTRICT 6.
 - * RANDY NEAL RANDY.NEAL@ILLINOIS.GOV
 - * JEREMY SELLERS JEREMY.SELLERS@ILLINOIS.GOV
- 12. 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 HCTP COORDINATOR AT 618-874-6528 TO LEARN MORE ABOUT THE PROGRAM AND FOR ASSISTANCE IN MEETING WORKFORCE AND TRAINEE GOALS.

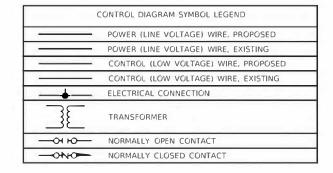
PUMP STATION LOCATIONS

- INTERSTATE 64 REST AREA E/B PUMP STATION 2 INTERSTATE 64 REST AREA W/B PUMP STATION
- ③ COLLINSVILLE #1 PUMP STATION
- McCAMBRIDGE PUMP STATION
- INTERSTATE 70 REST AREA W/B PUMP STATION
- MISSOURI AVENUE PUMP STATION
- 0 FUN AND SUN PUMP STATION (8) 42ND STREET PUMP STATION
- 9 VENICE PUMP STATION
- 10 25TH STREET PUMP STATION
- INTERSTATE 55 REST AREA N/B PUMP STATION
- INTERSTATE 55 REST AREA S/B PUMP STATION
- 9TH STREET PUMP STATION BOWMAN PUMP STATION
- 25TH STREET WELLS
- TRI-LEVEL SOUTH WELLS
- TRI-LEVEL NORTH WELLS
- 10TH STREET WELLS
- 99999 15TH STREET WELLS
- STATION ONE
- MARY'S RIVER COVERED BRIDGE



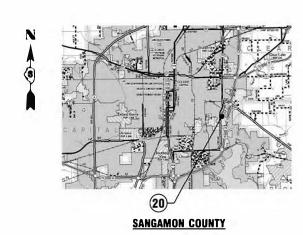
ST. CLAIR COUNTY



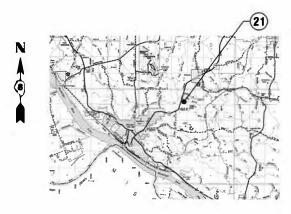


HIGHWAY STANDARDS

000001-08 001006



SCALE NONE



RANDOLPH COUNTY

REV. - MS

KLINGNER	-
& ASSECIATES, P.C.	
Engineers · Architects · Surveyors	1
616 N 24TH ST OWNCY ILLINOIS 6230 I 217, 223 3670 STATE OF ILLINOIS DESIGN FIRM NO 184-2279	

USER NAME in aschafer	DESIGNED -	REVISED	
	DRAWN _	REVISED -	
PLOT SCALE = 2.1 1/16 " / In	CHECKED	REVISED	1
PLOT DATE = 2/ '2/2023	DATE	REVISED	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

ELECTRICAL NOTES AND SYMBOLS	
AND LOCATION MAPS	

TO STA

SHEET 1 OF 1 SHEETS STA.

F.AU. RTE	SECTION	COUNTY	SHEETS	SHEET
VAR	D8 Pump Stations 2023-1	VARIOUS	23	2
		CONTRAC	T NO. 7	6T02

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

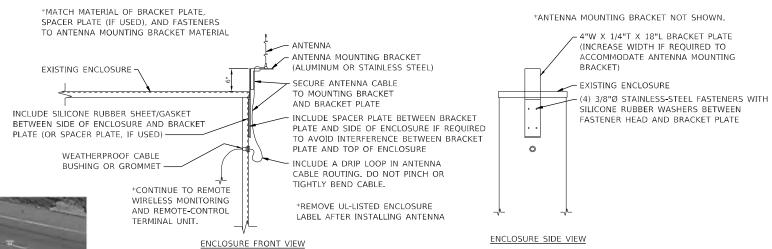
				* MADISON, ST. CLAIR, SANGAMON, AND RANDOLPH COUNTIES			
			100% STATE				
CODE NO.	ITEM	UNIT	TOTAL	*			
			QUANTITY	0044			
67100100	MOBILIZATION L	SUM	1	1			
X0783300	PUMP STATION ELECTRICAL WORK L	SUM	1	1			

REV. - MS

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

USER NAME = aschafer	DESIGNED -	AMS	REVISED -
	DRAWN -	AMS	REVISED -
PLOT SCALE = 2:1 1/8 '-:" / in.	CHECKED -	EBB	REVISED -
PLOT DATE = 3/28/2023	DATE -	12/5/2022	REVISED -

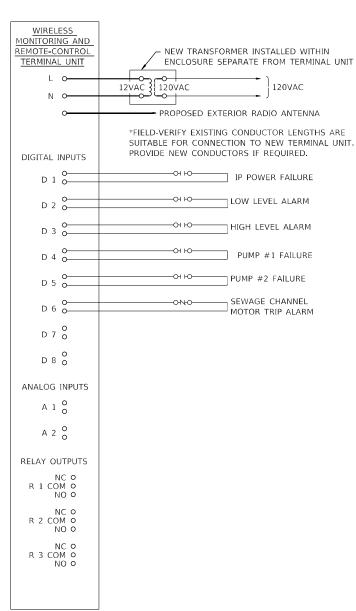
	SI	JMI	MAF	Υ	OF QL	JANTITIES	
SCALE: NONE	SHEET	1	OF	1	SHEETS	STA.	TO STA.

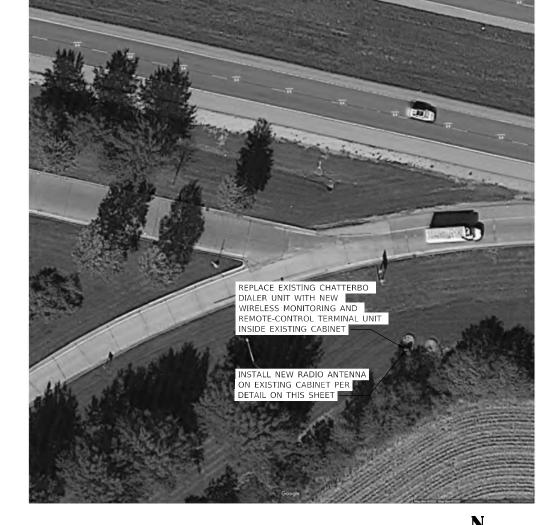


ENCLOSURE ANTENNA MOUNTING DETAIL



I-64 REST AREA E/B PUMP STATION EXISTING DIALER PHOTO





I-64 REST AREA E/B PUMP STATION PLAN PHOTO



?	USER NAME = aschafer	DESIGNED -	REVISED -
1		DRAWN -	REVISED -
5	PLOT SCALE = 2:1 1/16 '." / in.	CHECKED -	REVISED -
	PLOT DATE = 1/3/2023	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

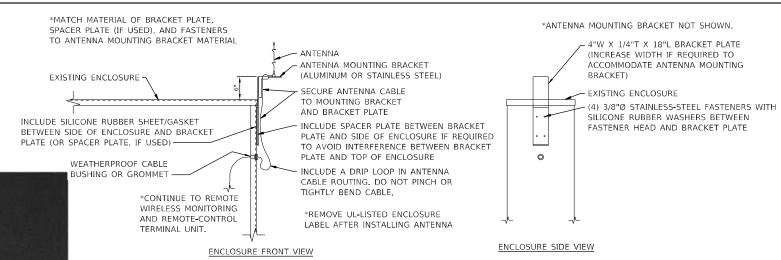
EXISTING MONITOR NO. 2						F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-64 REST AREA E/B					VAR	D8 Pump Stations 2023-1	VARIOUS	23	4	
I-04 INLOT AINLA L/D							CONTRAC	ΓNO.	76T02	
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.					ILLINOIS FED.	AID PROJECT				

I-64 REST AREA E/B PUMP STATION CONTROL DIAGRAM

64\Work Order 05 - District 8 Communications

& A S S O C I A T E S, P. C.
Engineers • Architects • Surveyors
616 N.24TH 8T. QUINCY, ILLINGIS 62301 217.223.3670

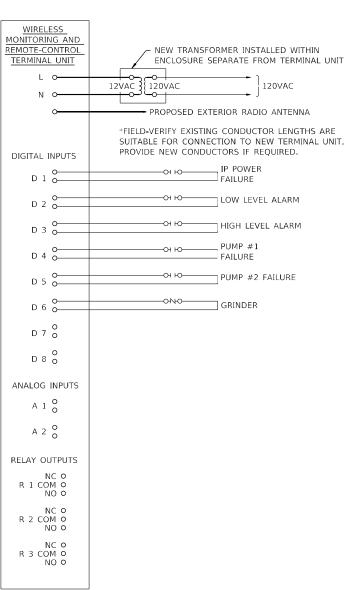
ST DEPARTME



ENCLOSURE ANTENNA MOUNTING DETAIL



I-64 REST AREA W/B PUMP STATION EXISTING DIALER PHOTO



COUNTY TOTAL SHEE NO.

VARIOUS 23 5

CONTRACT NO. 76T02

I-64 REST AREA W/B PUMP STATION PLAN PHOTO

REPLACE EXISTING CHATTERBOX DIALER UNIT WITH NEW WIRELESS MONITORING AND REMOTE-CONTROL

TERMINAL UNIT INSIDE EXISTING CABINET



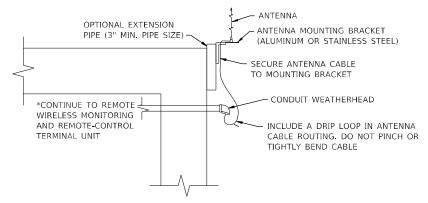
INSTALL NEW RADIO ANTENNA ON EXISTING CABINET PER DETAIL ON THIS SHEET

۱/ه ا	KLINGNER	USER NAME = aschafer	DESIGNED -	REVISED -
es	& ASSOCIATES, P.C.		DRAWN -	REVISED -
	Engineers · Architects · Surveyors		CHECKED -	REVISED -
ۃ	616 N.24TH ST. QUINCY, ILLINOIS 62301 217 223 3670 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738	PLOT DATE = 1/3/2023	DATE -	REVISED -

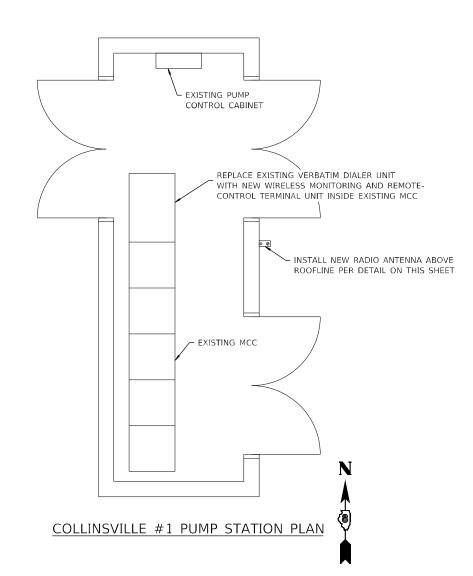
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING MONITOR NO. 3									SECT	ION		
I-64 REST AREA W/B								VAR	D8 Pump Stat	tions 20	23-1	Ī
		1-1	יו דיכ) I \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\							Γ
SCALE: NONE	SHEET	1	OF	1	SHEETS	STA.	TO STA.			ILLINOIS	FED. A	ĬΙ

iilfiles/170264/Work Order 05 - District 8 Communications/CADD Simman = ==



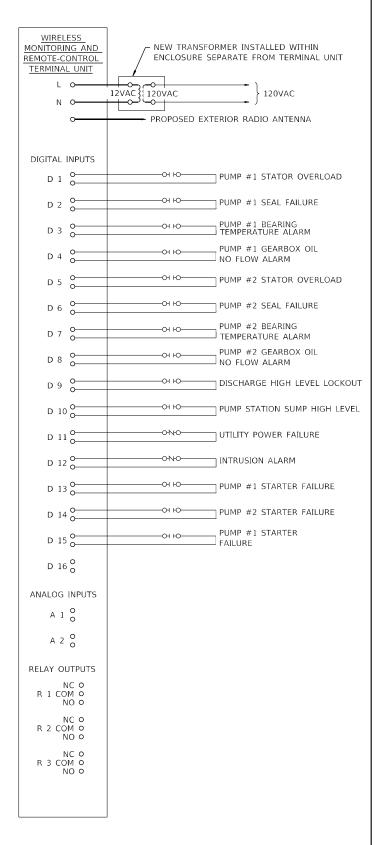
BUILDING ANTENNA MOUNTING DETAIL





COLLINSVILLE #1 PUMP STATION EXISTING DIALER PHOTO

SCALE: NONE



COLLINSVILLE #1 PUMP STATION CONTROL DIAGRAM

170	KLINGNER	U.
les	& ASSOCIATES, P.C.	
17f	Engineers · Architects · Surveyors	PI
0:	616 N.24TH ST. QUINCY, ILLINOIS 62301 217 223 3670 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738	PL

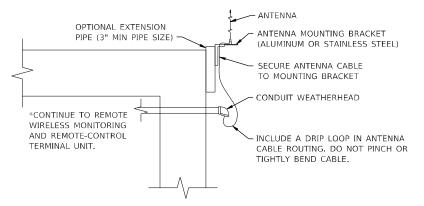
2	USER NAME = aschafer	DESIGNED -	REVISED -
Ī		DRAWN -	REVISED -
S	PLOT SCALE = 2:1 1/16 '." / in.	CHECKED -	REVISED -
	PLOT DATE = 1/3/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Ε	EXISTING MONITOR NO. 4											
	COLLINSVILLE #1											
HEET	1	ΩE	1	SHEETS	STA	TO STA						

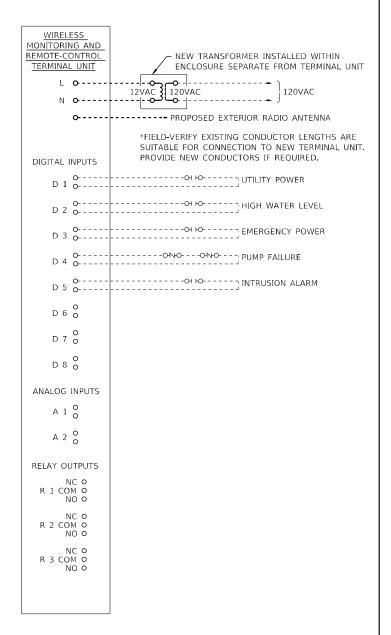
RTE.	SECTION	COUNTY	SHEETS	NO.
VAR	D8 Pump Stations 2023-1	VARIOUS	23	6
		CONTRACT	NO. 7	76T02
	ILLINOIS FED. A	ID PROJECT		

Vork Order 05 - District 8 Communications\CADD Sheet;



BUILDING ANTENNA MOUNTING DETAIL





MCCAMBRIDGE PUMP STATION EXISTING DIALER PHOTO

170	KLINGNER	Ľ
les	& ASSOCIATES, P.C.	L
.17f	Engineers · Architects · Surveyors	L
ö	616 N.24TH ST. QUINCY, ILLINOIS 62301 217 223 3670 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738	

EXISTING

120/240V

PANELBOARD

EXISTING FLOAT CONTROL PANEL

DISTRIBUTION

PANELBOARD

REPLACE EXISTING VERBATIM DIALER

MCCAMBRIDGE PUMP STATION PLAN

INSIDE EXISTING CABINET

UNIT WITH NEW WIRELESS MONITORING AND REMOTE-CONTROL TERMINAL UNIT

- EXISTING

TRANSFER SWITCH

- INSTALL NEW RADIO ANTENNA ABOVE ROOFLINE

PER DETAIL ON THIS SHEET

USER NAME = aschafer	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 2:1 1/16 '/" / in.	CHECKED -	REVISED -
PLOT DATE = 1/3/2023	DATE -	REVISED -

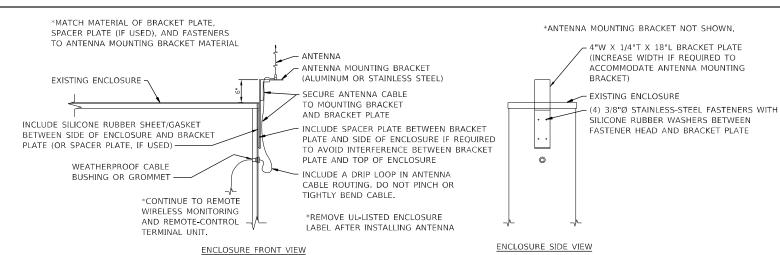
EXISTING MONITOR NO. 5									SECTION	COUNTY	TOTAL SHEETS	
	MCCAMBRIDGE									VARIOUS	23	7
WICCAMBRIDGE										CONTRACT	NO.	76T02
SCALE: NONE	SHEET	1	OF	1	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				

MCCAMBRIDGE PUMP STATION CONTROL DIAGRAM



I-70 REST AREA W/B PUMP STATION PLAN PHOTO

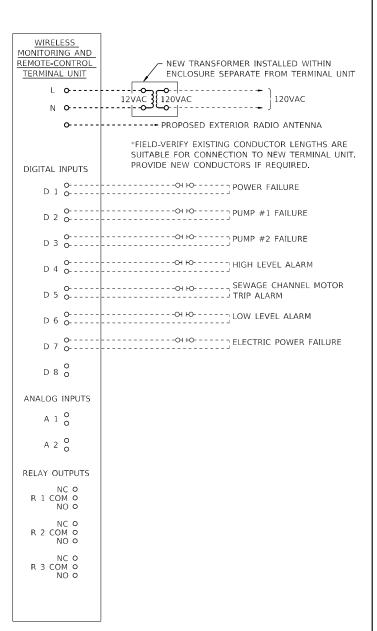




ENCLOSURE ANTENNA MOUNTING DETAIL



I-70 REST AREA W/B PUMP STATION EXISTING DIALER PHOTO



I-70 REST AREA W/B PUMP STATION CONTROL DIAGRAM

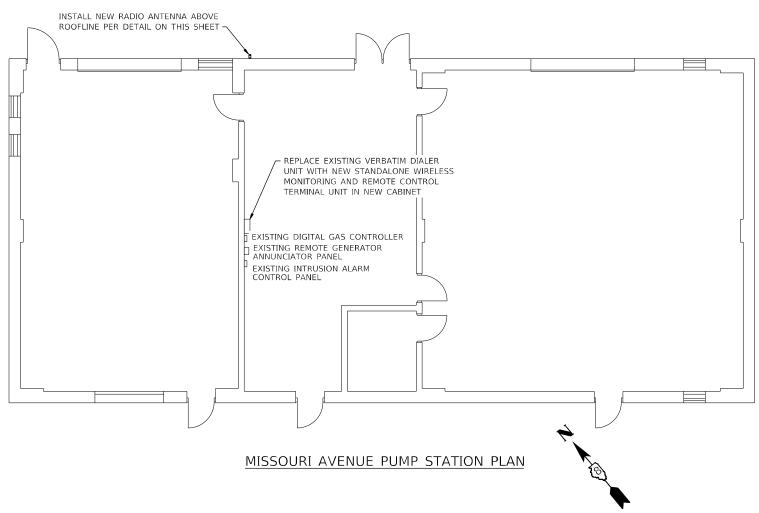
V				
9/1/	KLINGNER	USER NAME = aschafer	DESIGNED -	REVISED -
n	& ASSOCIATES, P.C.		DRAWN -	REVISED -
1/11	Engineers • Architects • Surveyors 616 N.24TH ST. QUINCY, ILLINOIS 62301 217.223.3670 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738	PLOT SCALE = 2:1 1/16 '." / in.	CHECKED -	REVISED -
5		PLOT DATE = 1/3/2023	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

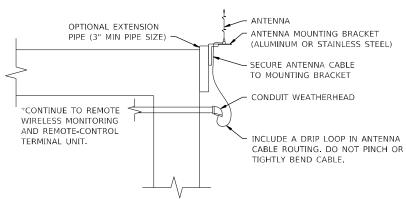
EXISTING MONITOR NO. 6 I-70 REST AREA W/B									
	SHEET	1	OF	1	SHEETS	STA.			

COUNTY TOTAL SHEETS NO.

VARIOUS 23 8 VAR D8 Pump Stations 2023-1 CONTRACT NO. 76T02







BUILDING ANTENNA MOUNTING DETAIL

MISSOURI AVENUE PUMP STATION EXISTING DIALER PHOTO

KLINGNER	USER NAME = aschafer	DESIGNED -	REVISED -
& ASSOCIATES, P.C.		DRAWN -	REVISED -
Engineers · Architects · Surveyors	PLOT SCALE = 2:1 1/16 '." / in.	CHECKED -	REVISED -
616 N.24TH ST. QUINCY, ILLINOIS 62301 217 223 3670 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738	PLOT DATE = 1/3/2023	DATE -	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

EXISTING MONITOR NO. 7 MISSOURI AVENUE SHEET 1 OF 1 SHEETS STA.

WIRELESS MONITORING AND REMOTE-CONTROL

DIGITAL INPUTS

ANALOG INPUTS

A 2 O

RELAY OUTPUTS NC O R 1 COM O NO O

NC O R 2 COM O NO O

NC O R 3 COM O

D 1

12VAC 3 { 2120VAC

<u>—0N0</u>

NEW TRANSFORMER INSTALLED WITHIN ENCLOSURE SEPARATE FROM TERMINAL UNIT

PROPOSED EXTERIOR RADIO ANTENNA

*FIELD-VERIFY EXISTING CONDUCTOR LENGTHS ARE SUITABLE FOR CONNECTION TO NEW TERMINAL UNIT. PROVIDE NEW CONDUCTORS IF REQUIRED.

INTRUSION ALARM

≻ 120VAC

PUMP STATION GAS MONITORING ALARM

SEAL WATER TANK LOW LEVEL

SEAL WATER TANK HIGH LEVEL

UTILITY POWER NOT AVAILABLE

COMMON GENERATOR ALARM

STORMWATER FLOAT SWITCH: LOW WATER ALARM

STORMWATER FLOAT SWITCH: HIGH WATER ALARM

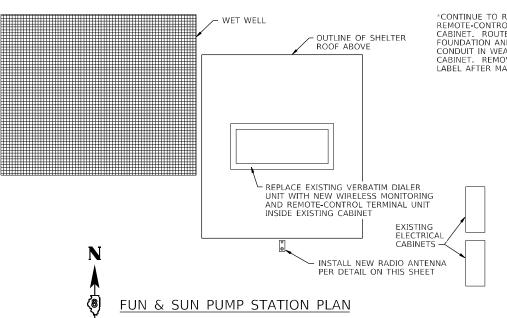
MISSOURI AVENUE PUMP STATION CONTROL DIAGRAM

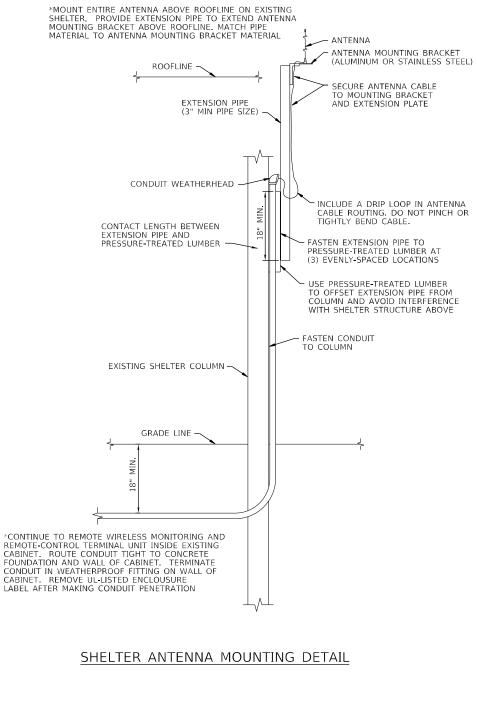
 NATE
 SECTION
 COUNTY
 TOTAL SHEETS NO.

 VAR
 D8 Pump Stations 2023-1
 VARIOUS
 23
 9
 CONTRACT NO. 76T02



FUN & SUN PUMP STATION EXISTING DIALER PHOTO





WIRELESS MONITORING AND REMOTE-CONTROL NEW TRANSFORMER INSTALLED WITHIN TERMINAL UNIT ENCLOSURE SEPARATE FROM TERMINAL UNIT 12VAC 120VAC 120VAC ----- PROPOSED EXTERIOR RADIO ANTENNA *FIELD-VERIFY EXISTING CONDUCTOR LENGTHS ARE SUITABLE FOR CONNECTION TO NEW TERMINAL UNIT. PROVIDE NEW CONDUCTORS IF REQUIRED. DIGITAL INPUTS D 1 0----- ENCLOSURE INTRUSION D 2 0-----PHASE MONITOR D 3 0----- PUMP #1 FAULT ------PUMP #2 FAULT D 5 O----- LOW WET WELL D 6 0----- HIGH WET WELL D 7 0----- HIGH DISCHARGE D 8 O----- CONTROLLER POWER FAILURE ANALOG INPUTS A 1 0 A 2 0 RELAY OUTPUTS R 1 COM O NO O NC O R 2 COM O NO O NC O R 3 COM O NO O

FUN & SUN PUMP STATION CONTROL DIAGRAM

2		
17026	KLINGNER	ŧ
files	& ASSOCIATES, P.C.	
^	Engineers • Architects • Surveyors	1
0:	616 N.24TH ST. QUINCY, ILLINOIS 62301 217 223 3670 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738	1

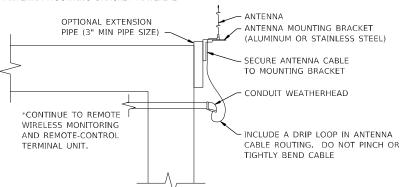
3	USER NAME = aschafer	DESIGNED -	REVISED -
c. I		DRAWN -	REVISED -
ors	PLOT SCALE = 2:1 1/16 '." / in.	CHECKED -	REVISED -
70	PLOT DATE = 1/3/2023	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING MONITOR NO. 8 FUN & SUN								
SHEET	1	OF	1	SHEETS	STA.	TO STA.		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D8 Pump Stations 2023-1	VARIOUS	23	10
		CONTRACT	NO. 7	76T02
	ILLINOIS FED. A.	ID PROJECT		

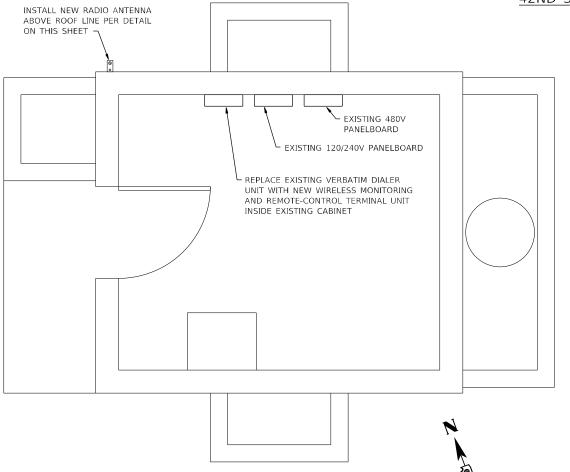
0264\Work Order 05 - District 8 Communications\CADD Sheets\



BUILDING ANTENNA MOUNTING DETAIL



42ND ST P.S. EXISTING DIALER PHOTO



- NEW TRANSFORMER INSTALLED WITHIN REMOTE-CONTROL ENCLOSURE SEPARATE FROM TERMINAL UNIT TERMINAL UNIT 12VAC 120VAC O----- PROPOSED EXTERIOR RADIO ANTENNA *FIELD-VERIFY EXISTING CONDUCTOR LENGTHS ARE SUITABLE FOR CONNECTION TO NEW TERMINAL UNIT. PROVIDE NEW CONDUCTORS IF REQUIRED. DIGITAL INPUTS D 1 0----- PHASE MONITOR D 2 O----- HIGH WATER LEVEL D 3 O----- EMERGENCY POWER D 4 0----- MOTOR STARTER #1 FAULT D 5 O----- MOTOR STARTER #2 FAULT D 7 O----- GENERATOR FAILURE D 8 0----- LOW WATER LEVEL ANALOG INPUTS A 1 0 A 2 0 RELAY OUTPUTS R 1 COM O NO O NC O R 2 COM O NO O R 3 COM O NO O

42ND STREET PUMP STATION CONTROL DIAGRAM

MONITORING AND

2		
170	KLINGNER	U.S
les	& ASSOCIATES, P.C.	
17 f	Engineers · Architects · Surveyors	PL
ä	616 N.24TH ST. QUINCY, ILLINOIS 62301 217 223 3670	PL

J	USER NAME = aschafer	DESIGNED -	REVISED -
c. T		DRAWN -	REVISED -
ors	PLOT SCALE = 2:1 1/16 '." / in.	CHECKED -	REVISED -
70	PLOT DATE = 1/3/2023	DATE -	REVISED -

42ND STREET PUMP STATION PLAN

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE

EXISTING MONITOR NO. 9							F.A.U. RTE.	
42ND STREET						VAR		
42ND STREET								_
SHEET	1	OF	1	SHEETS	STA.	TO STA.		_

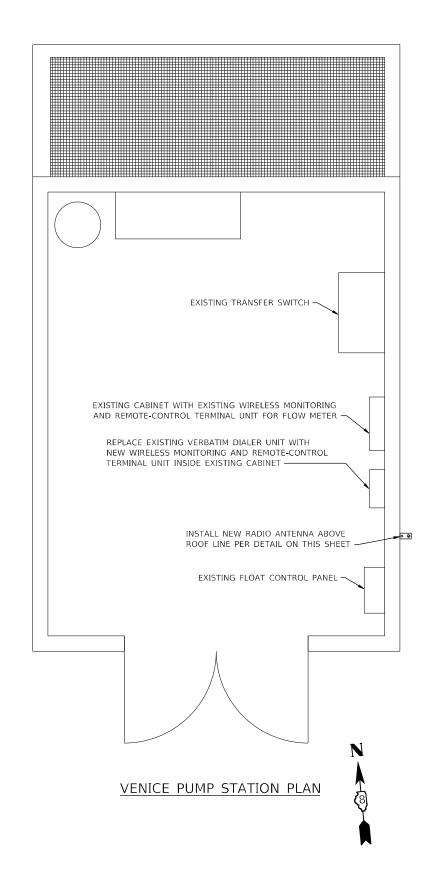
 F.A.U. RTE.
 SECTION
 COUNTY SHEETS NO.
 TOTAL SHEET NO.

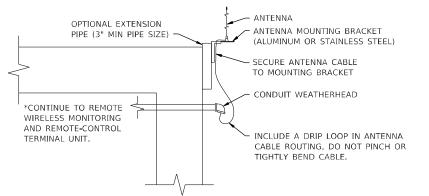
 VAR
 D8 Pump Stations 2023-1
 VARIOUS
 23
 11

 CONTRACT NO. 76T02

 ILLINOIS FED. AID PROJECT

יייי ביייי ביייי

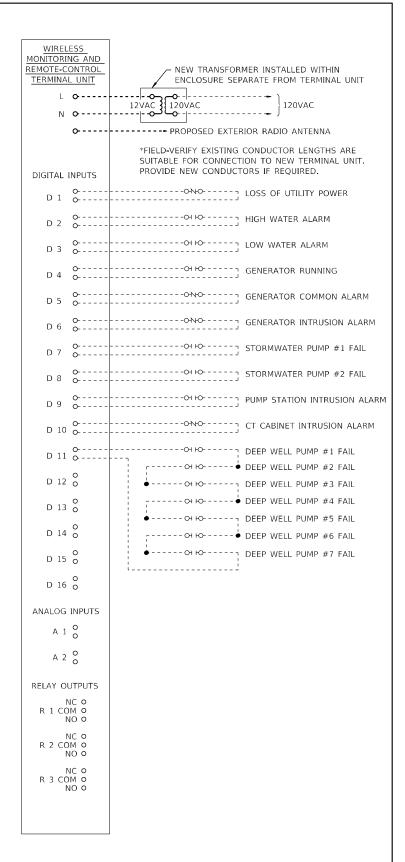




BUILDING ANTENNA MOUNTING DETAIL



VENICE PUMP STATION EXISTING DIALER PHOTO



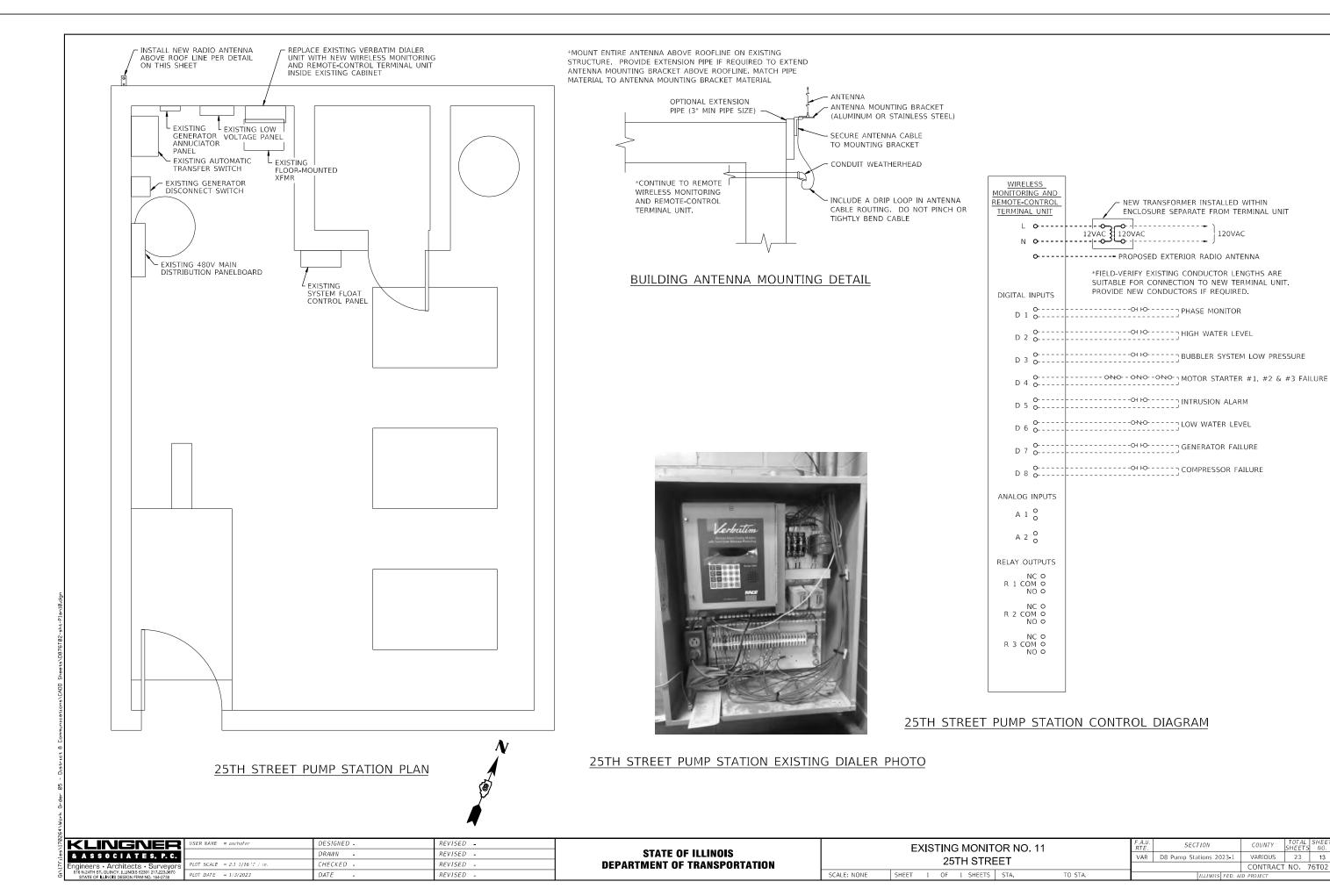
VENICE PUMP STATION CONTROL DIAGRAM

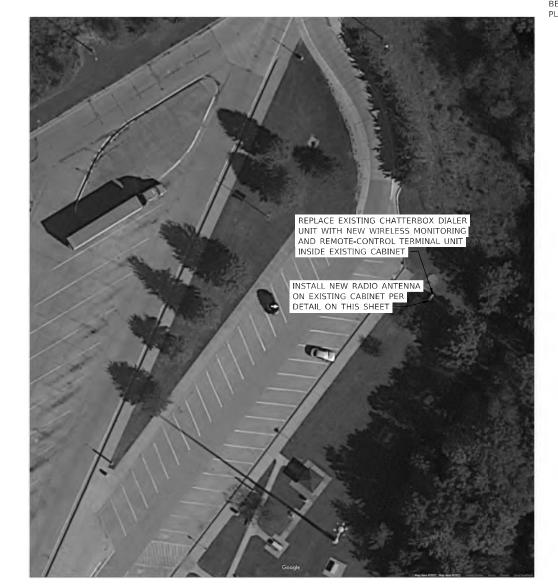
2						
170	KLINGNER	USER NAME = aschafer	DESIGNED -	REVISED -		
<u> </u>	& ASSOCIATES, P.C.		DRAWN -	REVISED -	STATE OF ILLINOIS	
17.5	Lingingers - Architects - Our veyors	PLOT SCALE = 2:1 1/16 '." / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	
ć	616 N.24TH ST. QUINCY, ILLINOIS 62301 217.223.3670 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738	PLOT DATE = 1/3/2023	DATE -	REVISED -		SCALE: NO

EXISTING MONITOR NO. 10 VENICE SHEET 1 OF 1 SHEETS STA.

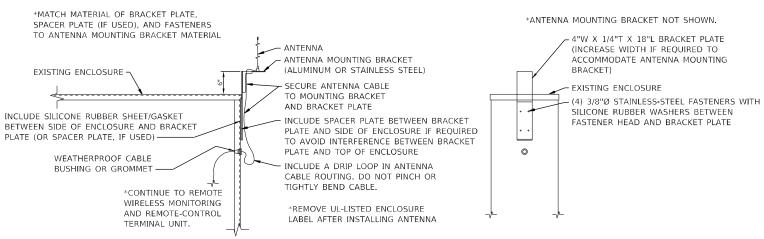
COUNTY TOTAL SHEETS NO.

VARIOUS 23 12 SECTION VAR D8 Pump Stations 2023-1 CONTRACT NO. 76T02





I-55 REST AREA N/B PUMP STATION PLAN PHOTO



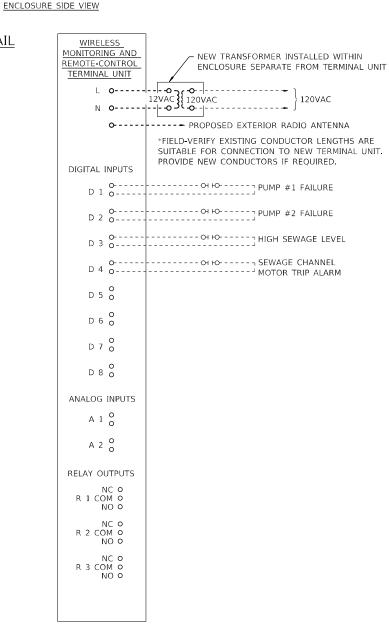
ENCLOSURE ANTENNA MOUNTING DETAIL



ENCLOSURE FRONT VIEW

I-55 REST AREA N/B PUMP STATION EXISTING DIALER PHOTO

SCALE: NONE



I-55 REST AREA N/B PUMP STATION CONTROL DIAGRAM

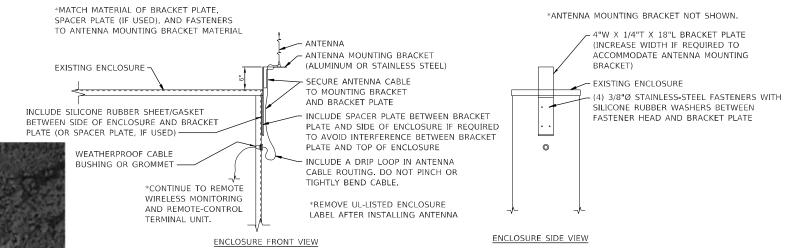


STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING MONITOR NO. 12 I-55 REST AREA N/B SHEET 1 OF 1 SHEETS STA.

COUNTY TOTAL SHEETS NO.

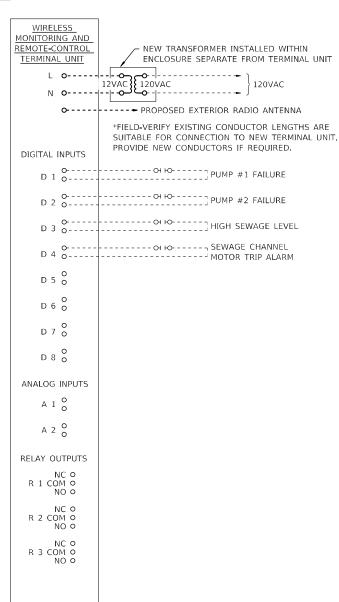
VARIOUS 23 14 VAR D8 Pump Stations 2023-1 CONTRACT NO. 76T02



ENCLOSURE ANTENNA MOUNTING DETAIL



I-55 REST AREA S/B/ P.S. EXISTING DIALER PHOTO





REVISED -

REVISED

REVISED

1

REPLACE EXISTING CHATTERBOX DIALER UNIT WITH

TERMINAL UNIT INSIDE EXISTING CABINET

NEW WIRELESS MONITORING AND REMOTE-CONTROL

I-55 REST AREA S/B/ P.S. PLAN PHOTO

I-55 REST AREA S/B/ P.S. CONTROL DIAGRAM

USER NAME = aschafer	DESIGNED -
	DRAWN -
PLOT SCALE = 2:1 1/16 '." / in.	CHECKED -
PLOT DATE = 1/3/2023	DATE -
	PLOT SCALE = 2:1 1/16 'F' / in.

INSTALL NEW RADIO ANTENNA

ON EXISTING CABINET PER DETAIL ON THIS SHEET

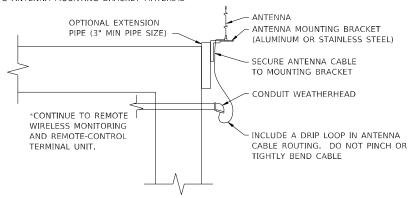
> STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

EXISTING MONITOR NO. 13 I-55 REST AREA S/B SHEET 1 OF 1 SHEETS STA.								
	SHEET	1	OF	1	SHEETS	STA.		

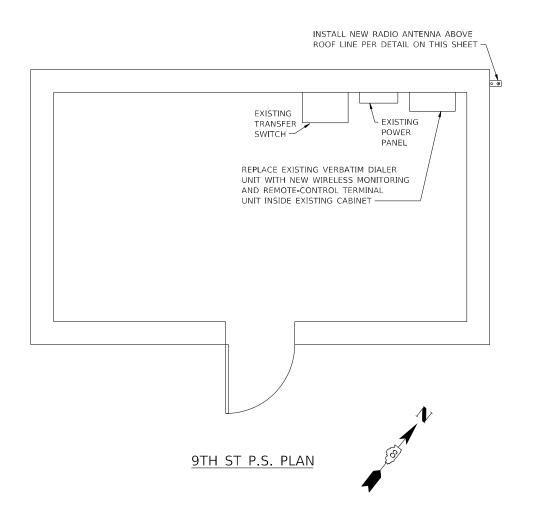
COUNTY TOTAL SHEET NO.

VARIOUS 23 15 VAR D8 Pump Stations 2023-1 CONTRACT NO. 76T02

REVISED -



BUILDING ANTENNA MOUNTING DETAIL





9TH ST P.S. EXISTING DIALER PHOTO

WIRELESS	
MONITORING AND	
REMOTE-CONTROL	NEW TRANSFORMER INSTALLED WITHIN
TERMINAL UNIT	ENCLOSURE SEPARATE FROM TERMINAL UNIT
L 0	120VAC 120VAC
N O	12VAC } 120VAC
IN O	
0	PROPOSED EXTERIOR RADIO ANTENNA
	*FIELD-VERIFY EXISTING CONDUCTOR LENGTHS ARE
	SUITABLE FOR CONNECTION TO NEW TERMINAL UNIT.
DIGITAL INPUTS	PROVIDE NEW CONDUCTORS IF REQUIRED.
	0.110
O D 1 _O	PHASE MONITOR
D 2 0	HIGH WATER LEVEL
D 3 0	GENERATOR FAULT
D 4 0	MOTOR STARTER #1 FAULT
D 5 O	MOTOR STARTER #2 FAULT
D 6 0	LOW WATER LEVEL
D 7 O	BUILDING INTRUSION
D 8 O	ELECTRICAL EQPT. INTRUSION
ANALOG INPUTS	
۸ 1 0	
A 1 0	
0	
A 2 0	
RELAY OUTPUTS	
NC O	
R 1 COM O NO O	
NC O R 2 COM O	
NO O	
NC O	
R 3 COM ○	
NO O	
	I.

9TH ST P.S. CONTROL DIAGRAM

70	KLINGNER	Γ
es	& ASSOCIATES, P.C.	H
7f.1	Engineers · Architects · Surveyors	H
ö	616 N.24TH ST. QUINCY, ILLINOIS 62301 217.223.3670 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738	r

2	USER NAME = aschafer	DESIGNED -	REVISED -
Ī		DRAWN -	REVISED -
S	PLOT SCALE = 2:1 1/16 '." / in.	CHECKED -	REVISED -
	PLOT DATE = 1/3/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING MONITOR NO. 14 9TH STREET						
SCALE: NONE	SHEET	1	OF	1 SHEETS	STA.	TO STA.

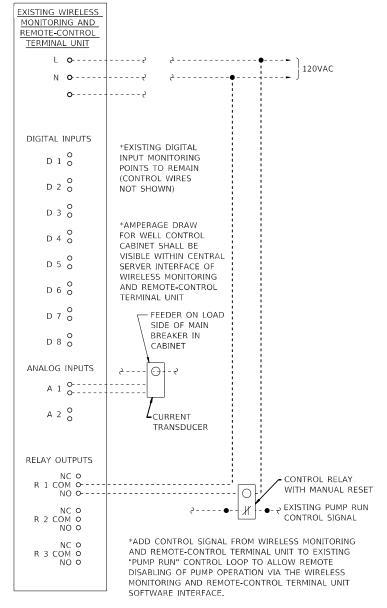
RTE.	SECTION	COUNTY	SHEETS	NO.
VAR	D8 Pump Stations 2023-1	VARIOUS	23	16
		CONTRACT	NO.	76T02
	ILLINOIS FED. A.	ID PROJECT		

Vork Order 05 - District 8 Communications/CADD Sheets/D87



25TH STREET PLAN PHOTO





*DISABLING OF PUMP OPERATIONS SHALL BE EITHER BY MANUAL INPUT WITHIN THE CENTRAL SERVER INTERFACE OF THE WIRELESS MONITORING AND REMOTE-CONTROL TERMINAL UNIT OR AUTOMATICALLY BASED ON BOWMAN PUMP STATION SUMP WATER LEVEL. SEE BOWMAN PUMP STATION CONTROL DIAGRAM FOR ADDITIONAL INFORMATION.

25TH STREET WELLS CONTROL DIAGRAM

3				
2	KLINGNER	USER NAME = aschafer	DESIGNED -	REVISED -
o١	& ASSOCIATES, P.C.		DRAWN -	REVISED -
	Engineers · Architects · Surveyors	PLOT SCALE = 2:1 1/16 '." / in.	CHECKED -	REVISED -
5	616 N.24TH ST. QUINCY, ILLINOIS 62301 217 223 3670 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738	PLOT DATE = 1/3/2023	DATE -	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

	E		-	3 MONITO STREET	OR NO. 17 WELLS	
: NONE	SHEET	1	OF	1 SHEETS	STA.	

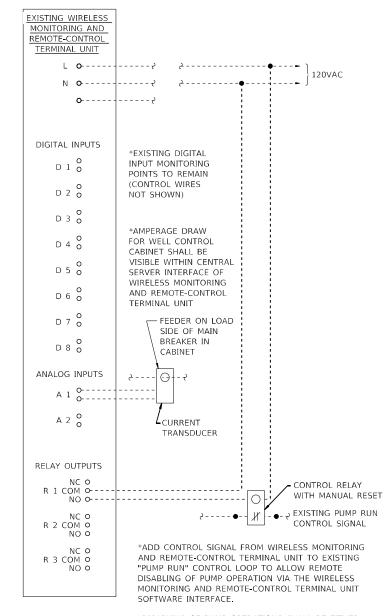
COUNTY TOTAL SHEET NO.

VARIOUS 23 17 SECTION VAR D8 Pump Stations 2023-1 CONTRACT NO. 76T02



TRI-LEVEL SOUTH WELLS PLAN PHOTO





*DISABLING OF PUMP OPERATIONS SHALL BE EITHER BY MANUAL INPUT WITHIN THE CENTRAL SERVER INTERFACE OF THE WIRELESS MONITORING AND REMOTE-CONTROL TERMINAL UNIT OR AUTOMATICALLY BASED ON BOWMAN PUMP STATION SUMP WATER LEVEL. SEE BOWMAN PUMP STATION CONTROL DIAGRAM FOR ADDITIONAL INFORMATION.

TRI-LEVEL SOUTH WELLS CONTROL DIAGRAM

TO STA.

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

3	USER NAME = aschafer	DESIGNED -	REVISED -
χĪ		DRAWN -	REVISED -
ors	PLOT SCALE = 2:1 1/16 " / in.	CHECKED -	REVISED -
0	PLOT DATE = 1/3/2023	DATE -	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

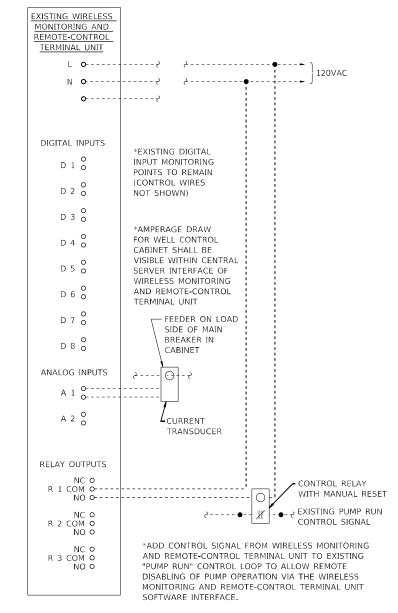
EXISTING MONITOR NO. 18 TRI-LEVEL SOUTH WELLS						
SCALE: NONE	SHEET	1	OF	1	SHEETS	STA.

F.A.U. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D8 Pump Stations 2023-1		VARIOUS	23	18
			CONTRACT	NO. 7	76T02
	ILLINOIS FED.	Α.	ID PROJECT		



TRI-LEVEL NORTH WELLS PLAN PHOTO





*DISABLING OF PUMP OPERATIONS SHALL BE EITHER BY MANUAL INPUT WITHIN THE CENTRAL SERVER INTERFACE OF THE WIRELESS MONITORING AND REMOTE-CONTROL TERMINAL UNIT OR AUTOMATICALLY BASED ON BOWMAN PUMP STATION SUMP WATER LEVEL. SEE BOWMAN PUMP STATION CONTROL DIAGRAM FOR ADDITIONAL INFORMATION.

TRI-LEVEL NORTH WELLS CONTROL DIAGRAM

\170	KLINGNER
files\L	& ASSOCIATES, P.C.
_	Engineers • Architects • Surveyors
0:\1	616 N.24TH ST. QUINCY, ILLINOIS 62301 217 223 3670 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738

ļ	USER NAME = aschafer	DESIGNED -	REVISED -
i		DRAWN -	REVISED -
3	PLOT SCALE = 2:1 1/16 " / in.	CHECKED -	REVISED -
	PLOT DATE = 1/3/2023	DATE -	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

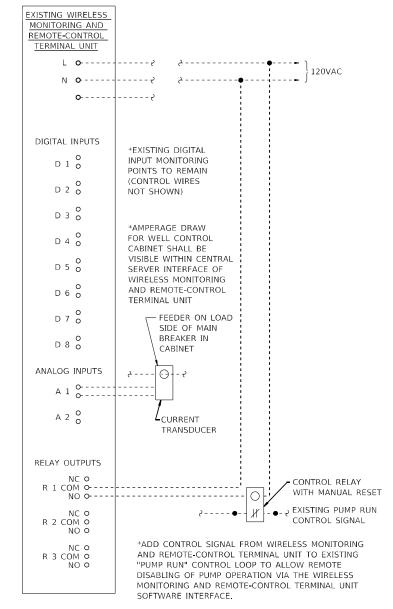
		-	-		OR NO. 19 TH WELLS	
SCALE: NONE	SHEET	1	OF	1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D8 Pump Stations 202	3-1	VARIOUS	23	19
			CONTRACT	NO. 7	76T02
	ILLINOIS F	ED. Al	D PROJECT		



10TH STREET WELLS PLAN PHOTO





*DISABLING OF PUMP OPERATIONS SHALL BE EITHER BY MANUAL INPUT WITHIN THE CENTRAL SERVER INTERFACE OF THE WIRELESS MONITORING AND REMOTE-CONTROL TERMINAL UNIT OR AUTOMATICALLY BASED ON BOWMAN PUMP STATION SUMP WATER LEVEL. SEE BOWMAN PUMP STATION CONTROL DIAGRAM FOR ADDITIONAL INFORMATION.

10TH STREET WELLS CONTROL DIAGRAM

170	KLINGNER	U
les	& ASSOCIATES, P.C.	L
175	Engineers · Architects · Surveyors	-
ö	616 N.24TH ST. QUINCY, ILLINOIS 62301 217 223 3670 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738	1

2	USER NAME = aschafer	DESIGNED -	REVISED -
Ī		DRAWN -	REVISED -
S	PLOT SCALE = 2:1 1/16 '." / in.	CHECKED -	REVISED -
	PLOT DATE = 1/3/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	E	-	_	3 MONIT STREET	OR NO. 20 WELLS	
SCALE: NONE	SHEET	1	OF	1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D8 Pump Stations 2023-1	VARIOUS	23	20
		CONTRACT	NO. 7	76T02
	ILLINOIS FED. A	ID PROJECT		

Urder 05 - District 8 Communications\CADD Sheets\D8/6102

Vork Order 05 - District 8 Comm



15TH STREET WELLS PLAN PHOTO



EXISTING WIRELESS
MONITORING AND REMOTE-CONTROL N •-----0-----DIGITAL INPUTS *EXISTING DIGITAL INPUT MONITORING POINTS TO REMAIN (CONTROL WIRES D 1 0 D 2 0 NOT SHOWN) D 3 0 *AMPERAGE DRAW D 4 0 FOR WELL CONTROL CABINET SHALL BE
VISIBLE WITHIN CENTRAL
SERVER INTERFACE OF
WIRELESS MONITORING
AND REMOTE-CONTROL D 5 0 D 6 0 TERMINAL UNIT D 7 0 - FEEDER ON LOAD SIDE OF MAIN BREAKER IN D 8 0 CABINET ANALOG INPUTS A 1 0----A 2 0 L_{CURRENT} TRANSDUCER RELAY OUTPUTS CONTROL RELAY R 1 COM 0---NO 0---EXISTING PUMP RUN NC O R 2 COM O NO O CONTROL SIGNAL *ADD CONTROL SIGNAL FROM WIRELESS MONITORING AND REMOTE-CONTROL TERMINAL UNIT TO EXISTING "PUMP RUN" CONTROL LOOP TO ALLOW REMOTE DISABLING OF PUMP OPERATION VIA THE WIRELESS NC O R 3 COM O NO O MONITORING AND REMOTE-CONTROL TERMINAL UNIT SOFTWARE INTERFACE.

> *DISABLING OF PUMP OPERATIONS SHALL BE EITHER BY MANUAL INPUT WITHIN THE CENTRAL SERVER INTERFACE OF THE WIRELESS MONITORING AND REMOTE-CONTROL TERMINAL UNIT OR AUTOMATICALLY BASED ON BOWMAN PUMP STATION SUMP WATER LEVEL. SEE BOWMAN PUMP STATION CONTROL DIAGRAM FOR ADDITIONAL INFORMATION.

15TH STREET WELLS CONTROL DIAGRAM

\170	KLINGNER	L
les	& ASSOCIATES, P.C.	ŀ
17	Engineers · Architects · Surveyors	L
ë	616 N.24TH ST. QUINCY, ILLINOIS 62301 217 223 3670 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738	I

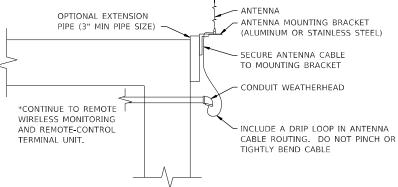
2	USER NAME = aschafer	DESIGNED -	REVISED -
Ī		DRAWN -	REVISED -
S	PLOT SCALE = 2:1 1/16 '." / in.	CHECKED -	REVISED -
	PLOT DATE = 1/3/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

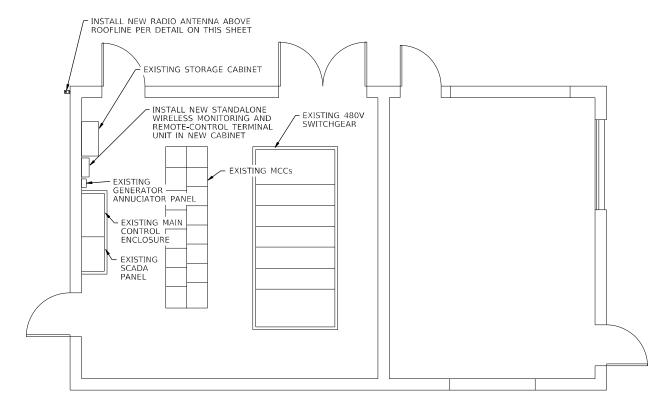
EXISTING MONITOR NO. 21 15TH STREET WELLS							
SCALE: NONE	SHEET	1	OF	1 SHEETS	STA.	TO STA.	

	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	VAR	D8 Pump Stations 2023-1	VARIOUS	23	21		
_			CONTRACT	NO. 7	76T02		
	ILLINOIS FED. AID PROJECT						

)264\Work Order 05 - District 8 Communications\CADD Sheets\D876T0

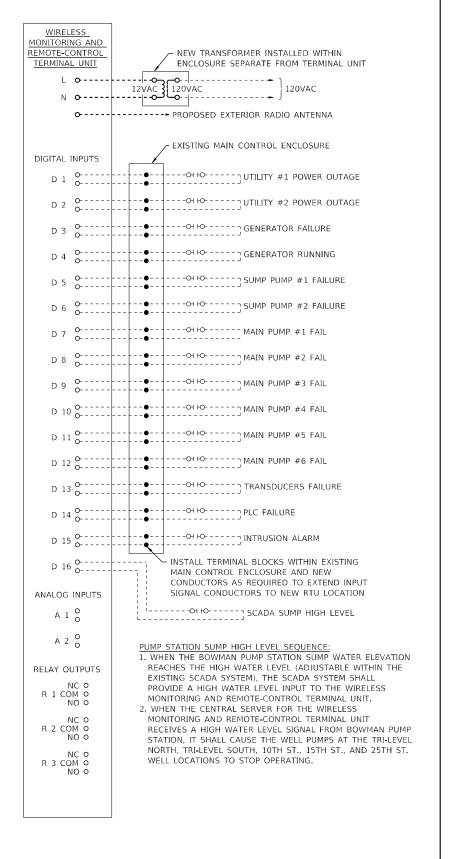


BUILDING ANTENNA MOUNTING DETAIL



BOWMAN PUMP STATION PLAN





BOWMAN PUMP STATION CONTROL DIAGRAM

TO STA.

26				
170	KLINGNER & ASSOCIATES, P.C.	USER NAME = aschafer	DESIGNED -	REVISED -
es	& ASSOCIATES, P.C.		DRAWN -	REVISED -
17,	Engineers · Architects · Surveyors		CHECKED -	REVISED -
ë	616 N.24TH ST. QUINCY, ILLINOIS 62301 217.223.3670 STATE OF ILLINOIS DESIGN FIRM NO. 184-2738	PLOT DATE = 1/3/2023	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING MONITOR NO. 34 BOWMAN								
	SHEET	1	OF	1	SHEETS	STA.		

COUNTY TOTAL SHEET NO.

VARIOUS 23 22 SECTION VAR D8 Pump Stations 2023-1 CONTRACT NO. 76T02

