

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 788 (IL 3)
SECTION 27T-9

**PUMP STATION IMPROVEMENTS
MADISON COUNTY**

C-98-011-13

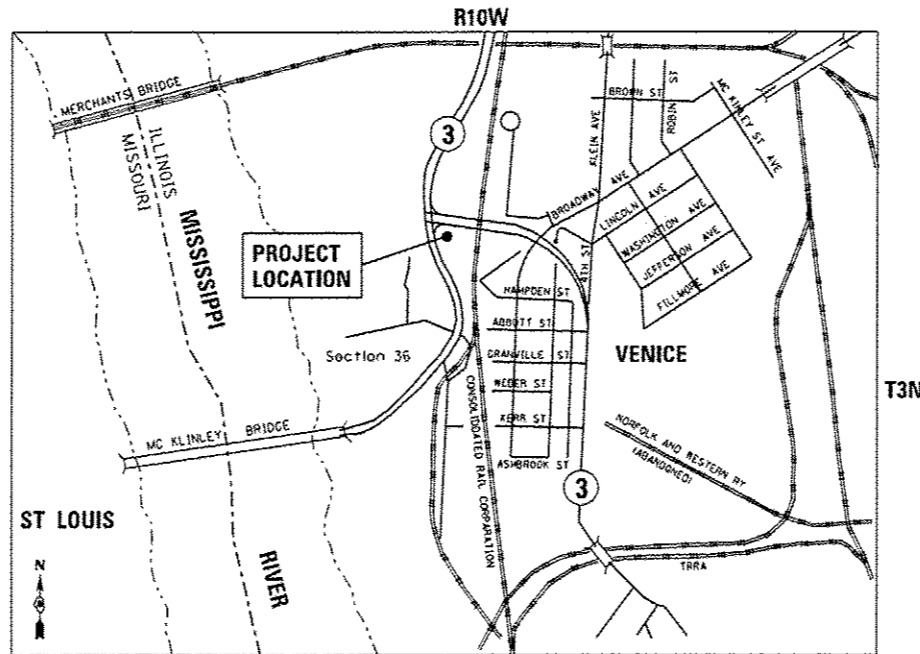
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
788	27T-9	MADISON	10	1
		ILLINOIS	CONTRACT NO. 76G12	

INDEX OF SHEETS

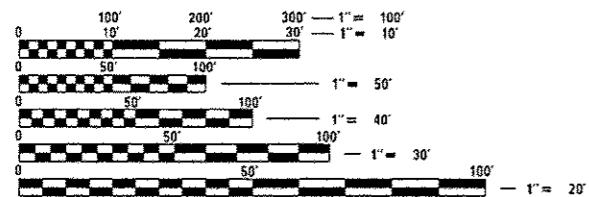
- 1 COVER SHEET
- 2 GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4 SITE PLAN
- 5 CHAIN LINK FENCE DETAILS
- 6 DEMOLITION ELECTRICAL PLAN
- 7 PROPOSED ELECTRICAL PLAN
- 8-9 ONE-LINE DIAGRAMS
- 10 CONTROLS DIAGRAM

HIGHWAY STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 664001-02 CHAIN LINK FENCE
- 830026 TEMPORARY ROADWAY LIGHTING



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

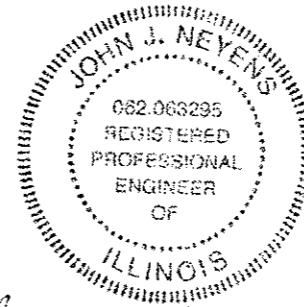


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: PATTI LEBEAU 618-346-3179
PROJECT MANAGER: PHILLIP SAWYER 618-346-3275
SQUAD LEADER: MICHAEL PRESTON 618-346-3143
CONTRACT NO. 76G12

PLANS PREPARED BY:
KLINGNER & ASSOCIATES, P.C.
Engineers • Architects • Surveyors
616 North 24th Street, Oakley, IL Ph (217)223-3610 - Fax (217)223-3693
4510 Paris Gravel Road, Harrisburg, MO Ph (573)221-0020 - Fax (573)221-0012
810 N. 4th Street, Suite 100, Burlington, IA Ph (319)753-1636 - Fax (319)752-3805
49 North Prairie Street, Galesburg, IL Ph (309)342-4042 - Fax (309)341-3781
Internet Address: www.klingner.com
STATE OF ILLINOIS DESIGN FIRM # 1842738



John J. Neyens
JOHN J. NEYENS DATE 1/10/14

REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS NO. 062-063295
LICENSE EXPIRES NOVEMBER 30, 2015

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED *March 30, 2015*
Jeffrey Zikan
DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER
Paul D. Baranzoli PE
ENGINEER OF DESIGN AND ENVIRONMENT
Cher Osman PE
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

GENERAL NOTES

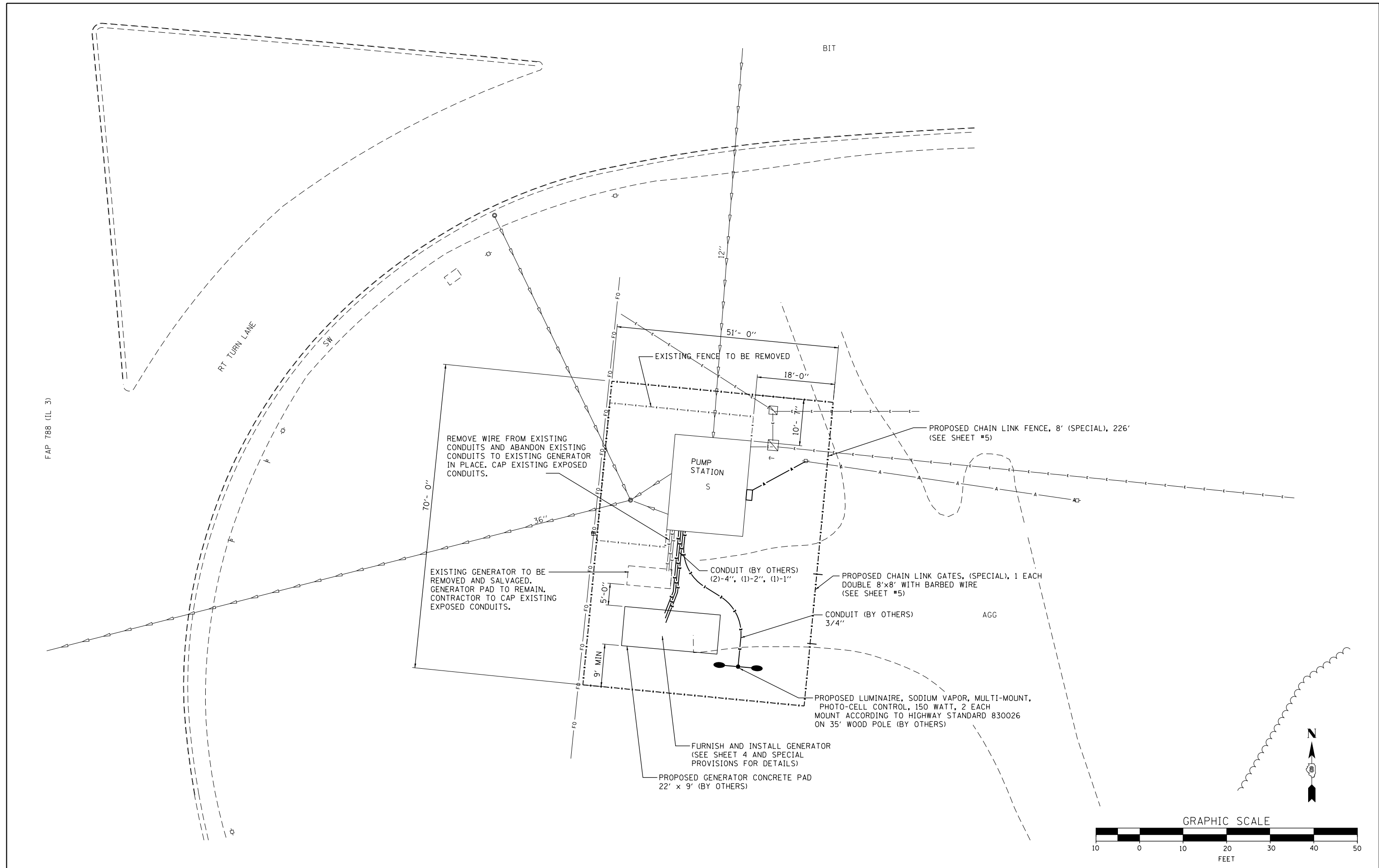
1. THE STANDARDS AND REVISION NUMBERS SHALL APPLY TO THIS PROJECT.
2. CONTRACTOR SHALL FIELD VERIFY ALL CABLE LENGTHS BEFORE ORDERING EQUIPMENT AND MATERIALS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE OPERATION OF THE PUMP STATION AND KEEPING WATER OFF OF THE PROTECTED PAVEMENT DURING CONSTRUCTION. THIS WORK SHALL NOT BE PAID FOR SEPERATELY BUT SHALL BE INCLUDED IN THE PUMP STATION ELECTRICAL WORK PAY ITEM.
4. THE CONTRACTOR SHALL HAVE A 150 KW GENERATOR ON SITE TO PROVIDE POWER FOR ONE OF THE WELLS DURING THE POWER OUTAGE FROM THE MCC SWITCHOVER. SEE SHEET #8 FOR ELECTRICAL SWITCHOVER NOTES.
5. THE CONTRACTOR SHALL SECURE ANY LOCAL, STATE, COUNTY PERMITS NEEDED FOR THIS PROJECT.
6. THE CONTRACTOR SHALL FOLLOW ALL NEC AND LOCAL ELECTRICAL CODES FOR ALL CONDUIT AND ELECTRICAL WIRES.
7. THE CONTRACTOR SHALL REMOVE ANY SEDIMENT/DEBRIS IN THE WET WELL PRIOR TO CONSTRUCTION ACTIVITIES, AT 6 MONTH INTERVALS, AND THE END OF CONSTRUCTION ACTIVITIES.
8. AN OPEN HOUSE FOR ALL CONTRACTORS TO VIEW THE PUMP STATION WILL BE HELD PER THE BULLETIN NOTICE.
9. THE CONTRACTOR WILL NOT PERFORM ANY EXCAVATION WORK. ALL REQUIRED EXCAVATION TO BE PERFORMED BY DISTRICT 8 STAFF. ALL EXCAVATION SHALL BE COORDINATED THROUGH THE RESIDENT ENGINEER.
10. UTILITIES - LOCATIONS / INFORMATION ON PLANS
 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. OFR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:
 - * AMEREN ILLINOIS (GAS & ELECTRIC)
 - * AT&T ILLINOIS (COMMUNICATIONS)
 - * CHARTER COMMUNICATIONS (CABLE TV)
 - * CLEARWAVE COMMUNICATIONS (COMMUNICATIONS)
 - * CONSOLIDATED COMMUNICATIONS (COMMUNICATIONS)
 - * ENABLE - MISSISSIPPI RIVER TRANSMISSION (PIPELINE)
 - * ILLINOIS AMERICAN WATER CO. (WATER)
 - * LACLEDE PIPELINE COMPANY (PIPELINE)
 - * LEVEL 3 COMMUNICATIONS (COMMUNICATIONS)
 - * SHO-ME TECHNOLOGIES (COMMUNICATIONS)
 - * QWEST SOLUTIONS CENTER (COMMUNICATIONS)
 - * SPRINT/NEXTEL (COMMUNICATIONS)
 - * VERIZON BUSINESS (COMMUNICATIONS)
 - * ZAYO FIBER SOLUTIONS (COMMUNICATIONS)
 - * CITY OF VENICE (SANITARY SEWER)
 (MEMBERS OF J.U.L.I.E. (800) 892-0123 ARE INDICATED BY *. NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED DIRECTLY.)
11. ALL MATERIALS THAT ARE TO BE SALVAGED SHALL BE THE PROPERTY OF THE STATE OF ILLINOIS AND DELIVERED BY THE CONTRACTOR TO:
 BOWMAN AVENUE PUMP STATION
 728 EXCHANGE AVE.
 EAST ST. LOUIS, IL
 CONTACT PETE SAWYER AT (618) 304-2082 TO SCHEDULE DELIVERY
12. THE DEPARTMENT RESERVES THE RIGHT TO NOTIFY THE CONTRACTOR TO CHANGE THE CONSTRUCTION SCHEDULE IF NEEDED TO ENSURE PROPER DEWATERING NEEDS FOR THE DEPARTMENT.

FILE NAME : Q:\11\11023\Work Order 2 Venice De	USER NAME : seb	DESIGNED - SEB	REVISED - 5-4-15	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	p:\11\11023\Shoets\0876G12-shr-gennoto.dgn	DRAWN - SEB	REVISED -		VENICE DEEP WELL PUMP STATION IMPROVEMENTS		788	277-9	MADISON	10	2
	PLOT SCALE : 20.0000' / 1"	CHECKED - SRW	REVISED -		SCALE: NONE	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT
	PLOT DATE : 5/4/2015	DATE - 04/03/12	REVISED -								

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

					CONSTRUCTION TYPE CODE		
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	100% STATE	0040	URBAN	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12			
67100100	MOBILIZATION	L SUM	1	1			
82104150	LUMINAIRE, SODIUM VAPOR, MULTI-MOUNT, PHOTO-CELL CONTROL, 150 WATT	EACH	2	2			
X0783300	PUMP STATION ELECTRICAL WORK	L SUM	1	1			
X6640308	CHAIN LINK GATES (SPECIAL)	EACH	1	1			
X6640570	CHAIN LINK FENCE, 8' (SPECIAL)	FOOT	226	226			
Z0022800	FENCE REMOVAL	FOOT	90	90			



FAP 788 (IL 3)

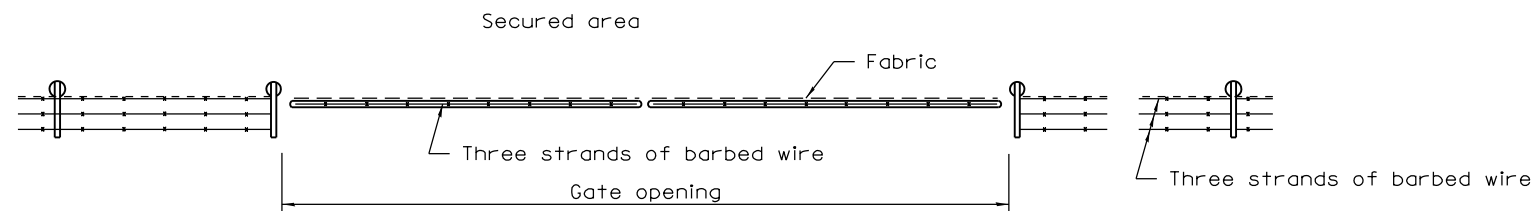
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PLOT DATE = 5/4/2015		DATE - 04/03/12	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

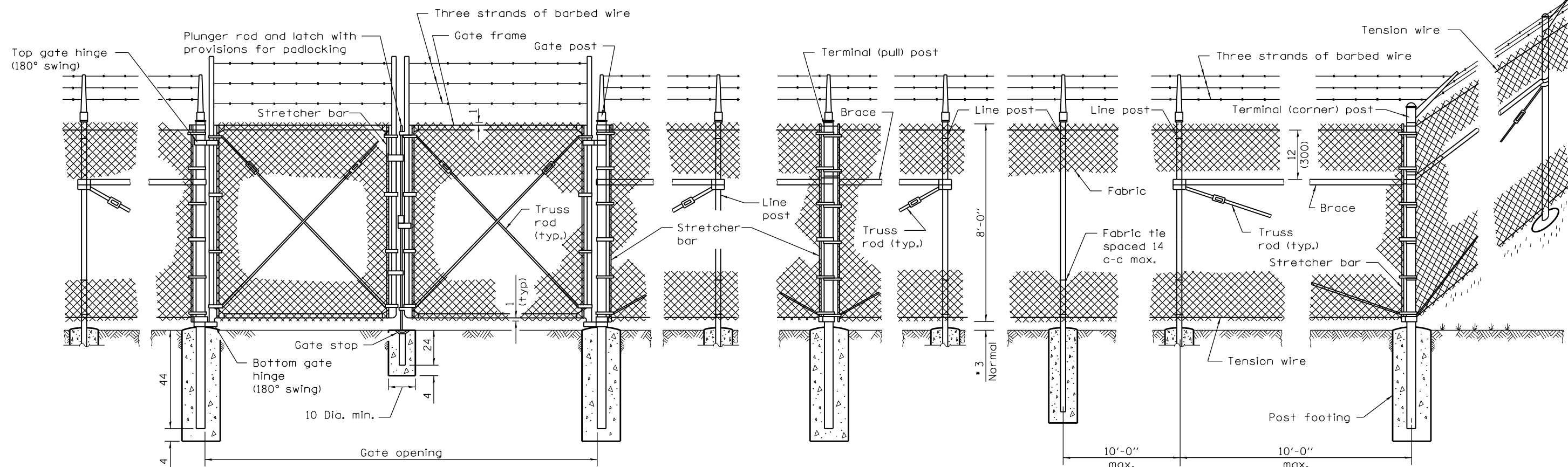
**SITE PLAN
VENICE DEEP WELL PUMP STATION IMPROVEMENTS**

SCALE: 1"=10' SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
788	27T-9	MADISON	10	4
CONTRACT NO. 76G12				
ILLINOIS FED. AID PROJECT				



PLAN
NTS



VEHICLE GATE ARRANGEMENT

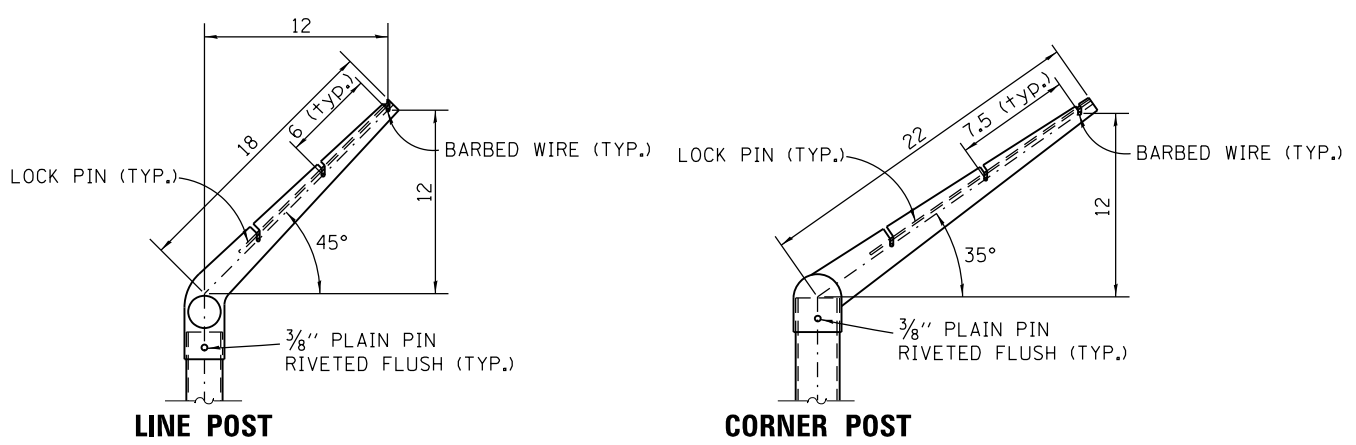
PULL POST ARRANGEMENT

LINE POST ARRANGEMENT

CORNER OR END POST ARRANGEMENT

ELEVATION
NTS

• On uneven ground this dimension may vary between 1 min. to 5 max. for a max. distance of 8'-0".



EXTENSION ARM DETAILS
NTS

GENERAL NOTES

All excavation shall be performed by IDOT personnel. The Contractor shall be responsible for furnishing all materials and installing the fencing.

See Highway Standard 664001-02 for additional chain link fence and gate details.

Fence shall be grounded per Article 664.11 of the Standard Specifications.

All dimensions are in inches unless otherwise shown.

FILE NAME =	USER NAME = seb	DESIGNED - SEB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CHAIN LINK FENCE DETAILS VENICE DEEP WELL PUMP STATION IMPROVEMENTS			F.A.P. RTE. = 788	SECTION = 27T-9	COUNTY = MADISON	TOTAL SHEETS = 10	SHEET NO. = 5
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		CHECKED - SRW	REVISED -		ILLINOIS FED. AID PROJECT							
		DATE - 01/07/14	REVISED -									

ELECTRICAL KEY NOTES - DEMOLITION

- ① CUMMINGS ONAN 12V BATTERY FLOAT CHARGER TO BE REMOVED AND SALVAGED.
- ② CUMMINGS ONAN AUTOMATIC TRANSFER SWITCH, 3Ø, 480V, 225AMP, TO BE REMOVED AND SALVAGED.
- ③ CUTLER HAMMER 3Ø MAIN BREAKER, 250AMP MAX. TO BE REMOVED.
- ④ GENERAL ELECTRIC BOOD WELL PUMPS 1-7 MOTOR CONTROL CENTER, TO BE REMOVED.
- ⑤ ELAPSED TIME METERS FOR PUMPS 1-7 AND ASSOCIATED WIRING TO BE REMOVED.
- ⑥ DIAL TIMER FOR EXHAUST FAN AND ASSOCIATED WIRING TO BE REMOVED.
- ⑦ SQUARE D HAND/OFF/AUTO CONTROL BOX FOR EXHAUST FAN AND ASSOCIATED WIRING TO BE REMOVED.
- ⑧ REMOVE EXISTING EXHAUST FAN AND DAMPER. EXISTING WEATHERHOOD TO REMAIN.
- ⑨ WESTINGHOUSE MOTOR CONTROL CENTER TO BE REMOVED. CUT CONDUITS FLUSH WITH FLOOR AND FILL WITH GROUT.
- ⑩ MARKEL CEILING MOUNTED HEATER, 3Ø, 480V, 15KW WITH WALL THERMOSTAT. HEATER AND THERMOSTAT TO BE REMOVED AND SALVAGED.
- ⑪ HEALY RUFF BUBBLER CONTROL CABINET AND ASSOCIATED BUBBLER SYSTEM COMPONENTS TO BE REMOVED AND SALVAGED.
- ⑫ CHATTERBOX DIALER PANEL TO BE REMOVED AND SALVAGED. CABINET TO REMAIN.
- ⑬ INTERIOR CEILING MOUNTED LIGHT FIXTURE TO BE REMOVED.
- ⑭ INTERIOR WALL MOUNTED LIGHT FIXTURE TO BE REMOVED.
- ⑮ EXISTING INTAKE LOUVER TO BE REMOVED, EXISTING WEATHERHOOD TO REMAIN.
- ⑯ WHERE EQUIPMENT IS INDICATED TO BE REMOVED, REMOVE ALL CONDUCTORS BACK TO SOURCE. REMOVE ALL EXPOSED CONDUIT INCLUDING HANGERS AND SUPPORTS THAT ARE NOT BEING RE-USED.
- ⑰ REMOVE EXISTING METERING EQUIPMENT AND SERVICE CONDUITS. COORDINATE REMOVAL OF EXISTING SERVICES WITH UTILITY.

FOR LOCATION SEE SITE PLAN

EXISTING GENERATOR
480V, 3Ø, 3W
TO BE REMOVED AND SALVAGED

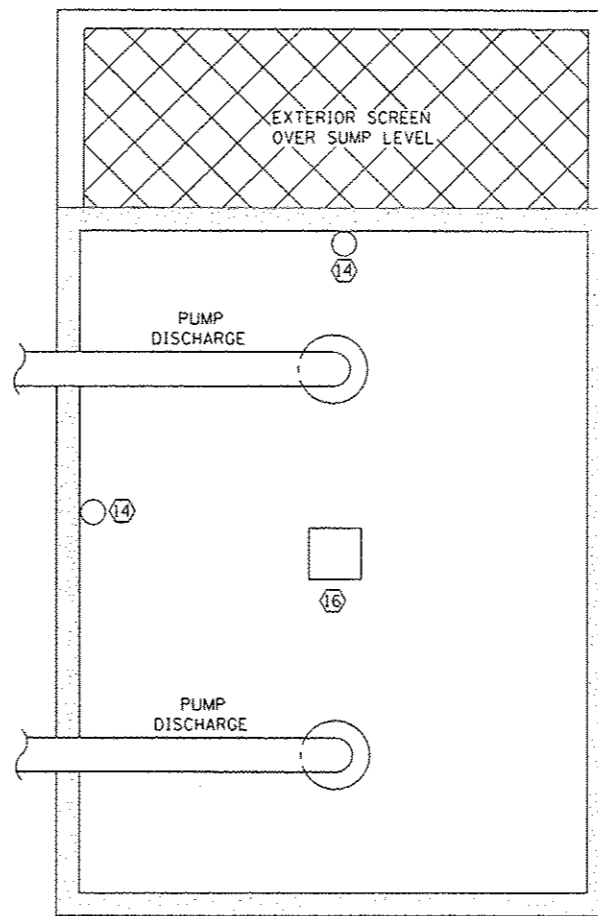
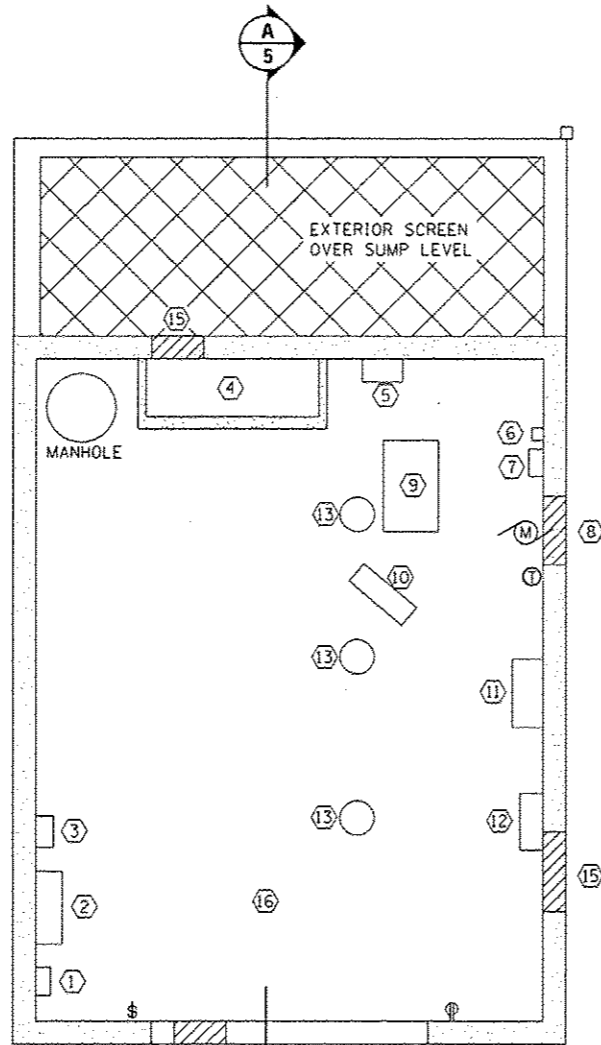
PUMP STATION DEMOLITION ELECTRICAL PLAN - CONTROL LEVEL

SCALE: 3/8" = 1'-0"

ELECTRICAL SYMBOLS		
EXISTING	TYPE/COMMENT	PROPOSED
Ⓢ	LIGHT SWITCH	Ⓢ
Ⓢ GFCI	GROUND FAULT CIRCUIT INTERRUPTER	Ⓢ GFCI
Ⓢ WP	WEATHER PROOF RECEPTACLE OUTLET	Ⓢ WP
✓ X-##	CIRCUITING NOTATION: X DENOTES PANEL AND ## DENOTES CIRCUIT NUMBER.	✓ X-##
—	DENOTES CIRCUITING FOR STANDARD ELECTRICAL DEVICES.	—
Ⓢ M	MOTOR LOAD	Ⓢ M



0 2 4
SCALE: 3/8" = 1'-0"



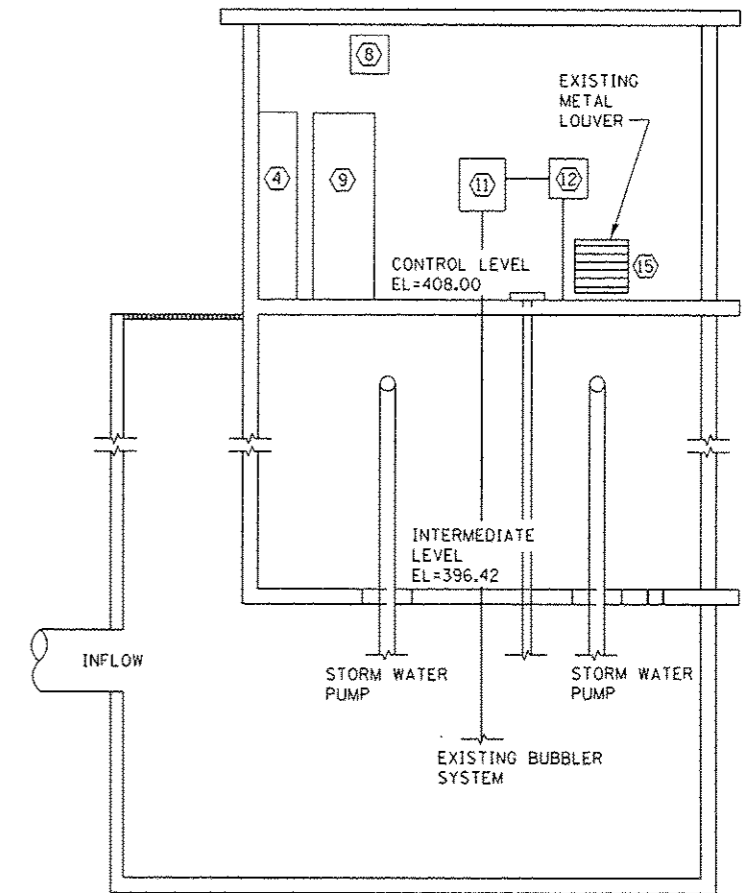
PUMP STATION DEMOLITION

ELECTRICAL PLAN - INTERMEDIATE LEVEL

SCALE: 3/8" = 1'-0"

ELECTRICAL NOTES:

1. ALL CONDUIT MOUNTED TO WALL WITH 5/8" METAL FRAMING TO PROVIDE AIR SPACE BETWEEN WALL AND CONDUIT.
2. MINIMUM WIRE SIZE #12 AWG UNLESS NOTED.
3. DRAWINGS ARE SCHEMATIC AND SHOW APPROXIMATE LOCATIONS OF ELECTRICAL EQUIPMENT. EXACT LOCATIONS SHALL BE COORDINATED BY THE CONTRACTOR AND VERIFIED IN THE FIELD PRIOR TO ROUGH-IN.
4. INSTALLATION OF ELECTRICAL DEVICES SHALL BE COORDINATED WITH OTHER TRADES AS NECESSARY TO PREVENT ANY CONFLICTS DURING CONSTRUCTION.



SECTION A-5

SCALE: 1/4" = 1'-0"

ELECTRICAL NOTES (CONT):

5. INSTALLATIONS WHICH INCLUDE ELECTRICAL FIXTURES, DEVICES, CONDUIT, SWITCHES, PANELS, HANGERS, WIRE, CABLE, STANDARDS, ETC., MUST BE ENTIRELY SUITABLE FOR TEMPERATURES, HUMIDITY, DAMP AREAS, VOLTAGE, FREQUENCY, AND ALL INSTALLATION CONDITIONS ENCOUNTERED.
6. INSTALLATION MUST BE ENTIRELY SAFE IN EVERY RESPECT, AND MUST NOT CREATE ANY CONDITIONS OF ANY KIND WHICH WILL BE HARMFUL TO ANY OCCUPANT OF THE BUILDING. IF CONTRACTOR BELIEVES THAT INSTALLATION WILL NOT BE SAFE FOR ALL PEOPLE, HE/SHE SHALL SO REPORT IN WRITING TO ENGINEER BEFORE ANY EQUIPMENT IS PURCHASED OR WORK IS INSTALLED, GIVING EXACT RECOMMENDATIONS, AND REASONS FOR THEM.
7. GROUNDING: ALL GROUNDING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC).
8. EQUIPMENT GROUNDING CONDUCTORS SHALL BE PULLED WITH ALL BRANCH CIRCUITS, CONDUIT SHALL NOT BE USED AS A GROUND UNLESS NOTED OTHERWISE.
9. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS, ACCESSORIES, TOOLS, EQUIPMENT, TRANSPORTATION, LABOR, SERVICES AND OPERATIONS NECESSARY FOR A COMPLETE ELECTRICAL SYSTEM.
10. ELECTRICAL CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ARRANGE FOR ALL INSPECTIONS REQUIRED BY STATE OR LOCAL AUTHORITIES.
11. MATERIALS MUST BE NEW, IN FIRST CLASS CONDITION.
12. CONDUIT SHALL BE SEPARATELY HUNG AND ANCHORED, FREE TO EXPAND AND CONTRACT QUIETLY, WITHOUT IMPOSING STRAINS ON STRUCTURE, DEVICES, AND EQUIPMENT. CONDUIT SHALL BE RUN PARALLEL OR PERPENDICULAR TO BUILDING LINES.
13. WET WELL IS CLASSIFIED AS A CLASS 1, DIVISION 1 LOCATION.

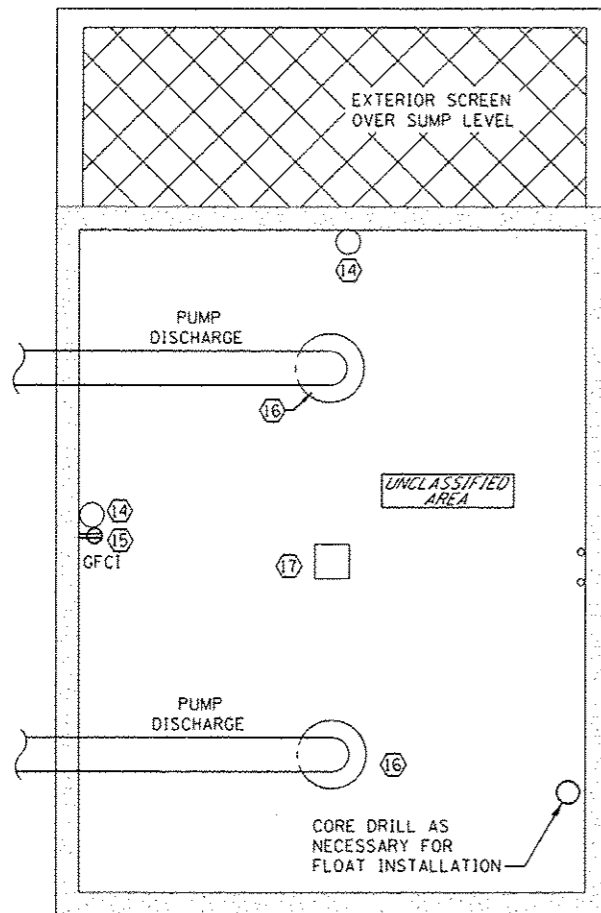
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		DRAWN - BGJ	REVISED - 5-11-15 JJJ
		CHECKED - SRW	REVISED -
		DATE - 04/03/12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

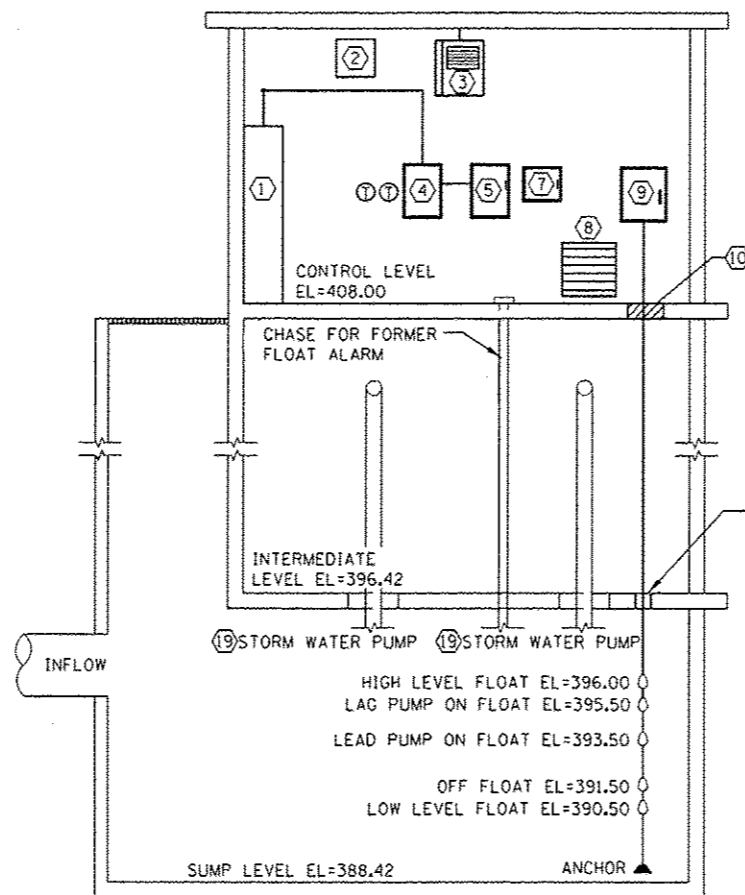
DEMOLITION ELECTRICAL PLAN
VENICE DEEP WELL PUMP STATION IMPROVEMENTS

SCALE: AS NOTED SHEET OF SHEETS STA. TO STA.

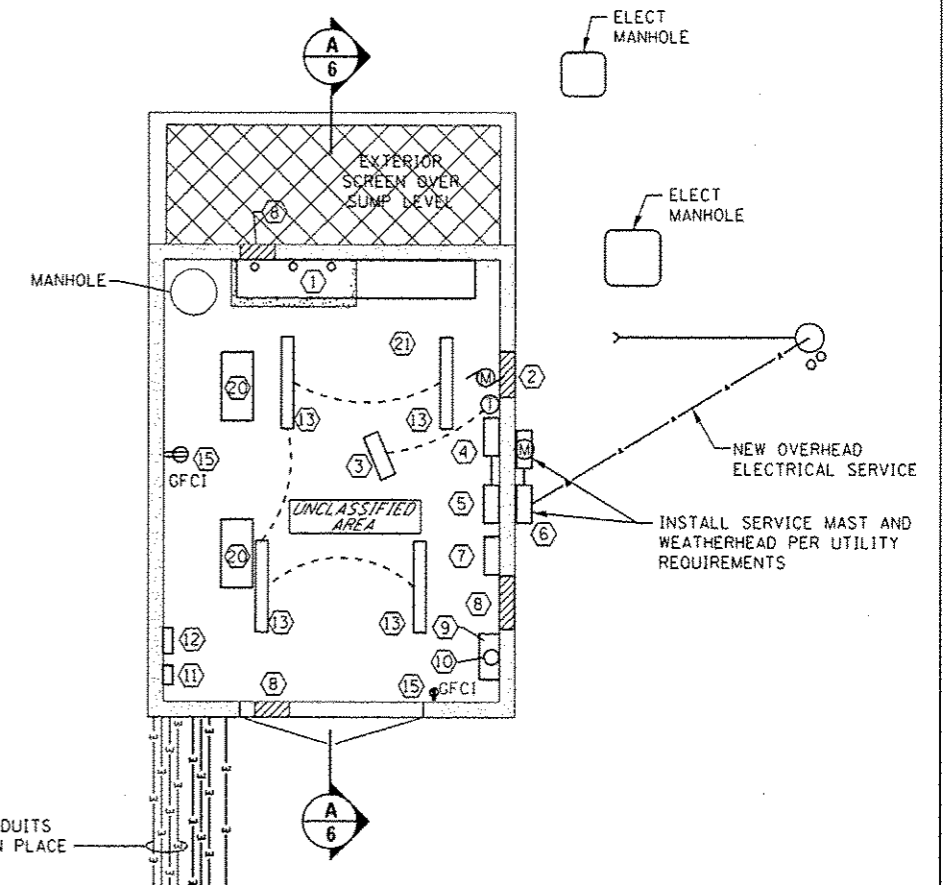
F.A.P. RTE. 788	SECTION 27T-9	COUNTY MADISON	TOTAL SHEETS 10	SHEET NO. 6
				CONTRACT NO. 76G12
ILLINOIS FED. AID PROJECT				



**PROPOSED PUMP STATION
ELECTRICAL PLAN - INTERMEDIATE LEVEL**
SCALE: 3/8" = 1'-0"



A SECTION
SCALE: 1/4" = 1'-0"



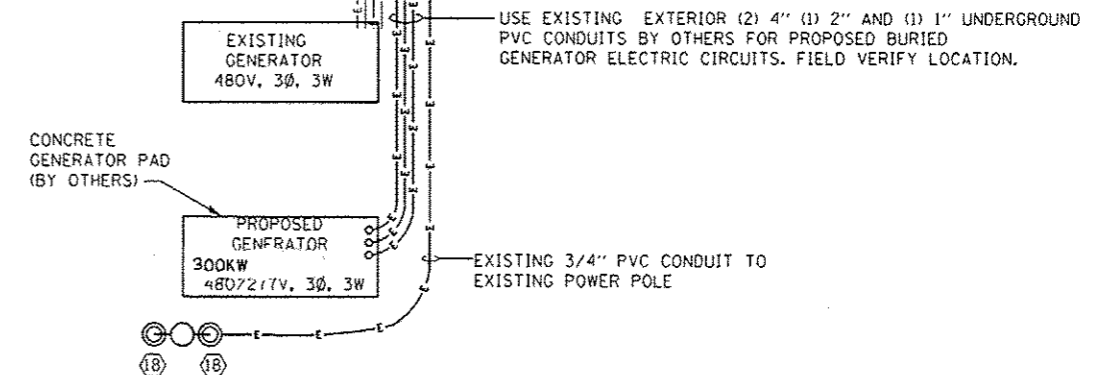
PROPOSED PUMP STATION ELECTRICAL PLAN - CONTROL LEVEL
SCALE: 1/4" = 1'-0"

ELECTRICAL KEY NOTES - PROPOSED EQUIPMENT

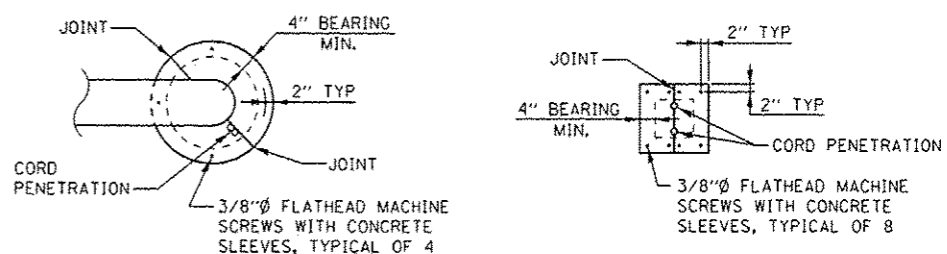
- 1 NEW MOTOR CONTROL CENTER 480V, 600A 3Ø, 4W, NEMA 12
EXTEND CONCRETE PAD EAST AS NECESSARY TO ACCOMMODATE NEW MCC.
- 2 NEW EXHAUST FAN WITH BACKDRAFT DAMPER. EXISTING WEATHERHOOD TO BE RE-USED. FAN TO BE INTERLOCKED WITH BACKDRAFT & AIR INTAKE DAMPERS TO PREVENT FAN FROM STARTING UNTIL ALL DAMPERS ARE OPEN. FAN TO OPERATE CONTINUOUSLY.
- 3 NEW CEILING MOUNTED 15KW, 480V UNIT HEATER WITH WALL MOUNTED THERMOSTAT. CONNECT TO EXISTING BRANCH CIRCUIT.
- 4 NEW 600A AUTOMATIC TRANSFER SWITCH 3-POLE W/ SOLID NEUTRAL.
- 5 NEW 800A FUSIBLE DISCONNECT NEMA 4
- 6 NEW CURRENT TRANSFORMER CABINET AND METER PER ELECTRICAL UTILITY REQUIREMENTS.
- 7 NEW DIALER PANEL. LOCATE IN EXISTING HEALY-RUFF ENCLOSURE. CONNECT TO EXISTING TELEPHONE LINE.
- 8 NEW AIR INTAKE LOUVER WITH ACTUATED DAMPER TO BE INTERLOCKED WITH EXHAUST FAN SO THAT DAMPER IS OPEN BEFORE FAN IN RUNNING. PROVIDE NEW BRANCH CIRCUIT. EXISTING WEATHERHOOD TO BE RE-USED.
- 9 NEW STORMWATER PUMP FLOAT CONTROL PANEL.
- 10 NEW FLOOR PENETRATION FOR FLEXIBLE CORD ACCESS TO FLOAT CONTROLS. FIELD VERIFY SIZE OF FLOOR PENETRATION NEEDED. COVER PENETRATION WITH 3/8" TREAD PLATE AND CUT PLATE AS NEEDED FOR CONTROL CORD PENETRATION. ANCHOR PLATE TO CONCRETE FLOOR WITH (8) EIGHT FLATHEAD MACHINE SCREWS AND CONCRETE SLEEVES. SEE DETAIL THIS SHEET.
- 11 NEW GENERATOR BATTERY CHARGER. CONNECT TO EXISTING BRANCH CIRCUIT.
- 12 NEW GENERATOR ANNUNCIATOR PANEL.
- 13 NEW LINEAR LIGHT FIXTURE. CONNECT TO EXISTING BRANCH CIRCUIT AND CONTROLLED BY EXISTING SWITCH.
- 14 NEW WALL MOUNT LIGHT FIXTURE. CONNECT TO EXISTING BRANCH CIRCUIT.

- 15 REPLACE EXISTING RECEPTACLE WITH GFCI RECEPTACLE.
- 16 EXISTING CIRCULAR INTERMEDIATE LEVEL FLOOR PENETRATION TO BE COVERED WITH 3/8" TREAD PLATE. FIELD VERIFY SIZE AND GEOMETRY OF PLATE TO ENSURE 4" OF BEARING ON ALL SIDES AND CORD PENETRATION(S). ANCHOR PLATE TO CONCRETE FLOOR WITH (4) FOUR FLATHEAD MACHINE SCREWS AND CONCRETE SLEEVES. SEE DETAIL THIS SHEET.
- 17 EXISTING RECTANGULAR INTERMEDIATE LEVEL FLOOR PENETRATION TO BE COVERED WITH 3/8" TREAD PLATE. FIELD VERIFY SIZE AND GEOMETRY OF PLATE TO ENSURE 4" OF BEARING ON ALL SIDES AND CORD PENETRATION(S). ANCHOR PLATE TO CONCRETE FLOOR WITH (8) EIGHT FLATHEAD MACHINE SCREWS AND CONCRETE SLEEVES. SEE DETAIL THIS SHEET.
- 18 PROPOSED LUMINAIRE, SODIUM VAPOR, MULTI-MOUNT, PHOTO-CELL CONTROL, 150 WATT, 2 EACH. MOUNT ACCORDING TO HIGHWAY STANDARD 830026 ON 35' WOOD POLE (BY OTHERS)
- 19 PUMPS SHALL BE REMOVED FOR MAINTENANCE AND INSPECTION PER THE SPECIAL PROVISIONS. FOLLOWING INSPECTION THE PUMP SHALL BE RE-INSTALLED. ONE PUMP SHALL BE IN OPERATION AT ALL TIMES DURING THE MAINTENANCE AND INSPECTION OF THE OTHER PUMP.
- 20 PROVIDE NEW FEEDERS FROM THE MCC TO THE FLYGT STORMWATER PUMP MOTOR CABINET.
- 21 CONDUITS AND BRANCH CIRCUITS PREVIOUSLY TERMINATED WITHIN THE STORMWATER MCC HOUSE PANEL SHALL BE RE-ROUTED AND EXTENDED AS NECESSARY TO TERMINATE AT THE NEW HOUSE PANEL LOCATION.

SEE SHEET #9 FOR ELECTRICAL SWITCH OVER NOTES



PROPOSED PUMP STATION ELECTRICAL PLAN - CONTROL LEVEL
SCALE: 1/4" = 1'-0"



- NOTES:**
- 1.) FIELD VERIFY SIZE AND GEOMETRY OF PLATE TO ENSURE 4" OF BEARING ON ALL SIDES AND CORD PENETRATION(S) AS NEEDED.
 - 2.) UTILIZE SEALANT AROUND ALL JOINTS, BEARING SURFACES, HOLES, ETC... OF TREAD PLATES TO MAKE GAS TIGHT.

**TYPICAL TREAD-PLATE ANCHOR DETAIL
CIRCULAR AND RECTANGULAR FLOOR PENETRATIONS**
SCALE: 1/2" = 1'-0"

FILE NAME: Q:\11\files\11823\Work Order 2 Venice Deep	USER NAME: j.sob	DESIGNED: KAE, RMV, JUN	REVISED: 5-4-15	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED ELECTRICAL PLAN VENICE DEEP WELL PUMP STATION				F.A.P. RTE. 788	SECTION 27T-9	COUNTY MADISON	TOTAL SHEETS 10	SHEET NO. 7
	W:\11\CA00 Sheets\0876012-shr-ElectProp.dgn	DRAWN: BGJ	REVISED: 6-11-16 JUN		SCALE: AS NOTED	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 76G12		
	PLOT SCALE: 3/4" = 1'-0"	CHECKED: SRW	REVISED:		[ILLINOIS] FED. AID PROJECT								
	PLOT DATE: 5/11/2015	DATE: 04/03/12	REVISED:										

ELECTRICAL SWITCH OVER NOTES

THE CONTACTOR SHALL NOTIFY AND RECEIVE WRITTEN APPROVAL FROM THE OWNER 48 HOURS PRIOR TO ANY POWER INTERRUPTION TO THE PUMP STATION.

CONTRACTOR SHALL HAVE A 150 KW GENERATOR ON SITE DURING ALL POWER OUTAGES IMPACTING THE WELLS. OWNER AND ENGINEER WILL PROVIDE CONTRACTOR WITH DETERMINATION OF WHETHER WELL OPERATION IS REQUIRED DURING THE POWER OUTAGE AND CONTRACTOR IS RESPONSIBLE FOR CONNECTING THE OWNER DESIGNATED WELL TO THE GENERATOR.

CONTRACTOR IS RESPONSIBLE FOR MOTOR STARTER, CONDUCTORS, AND OTHER ANCILLARY EQUIPMENT AS MAY BE REQUIRED TO CONNECT THE GENERATOR TO THE DESIGNATED PUMP.

THE INITIAL POWER OUTAGE IS LIMITED TO 72 HOURS DURING THIS TIME THE CONTRACTOR SHALL:

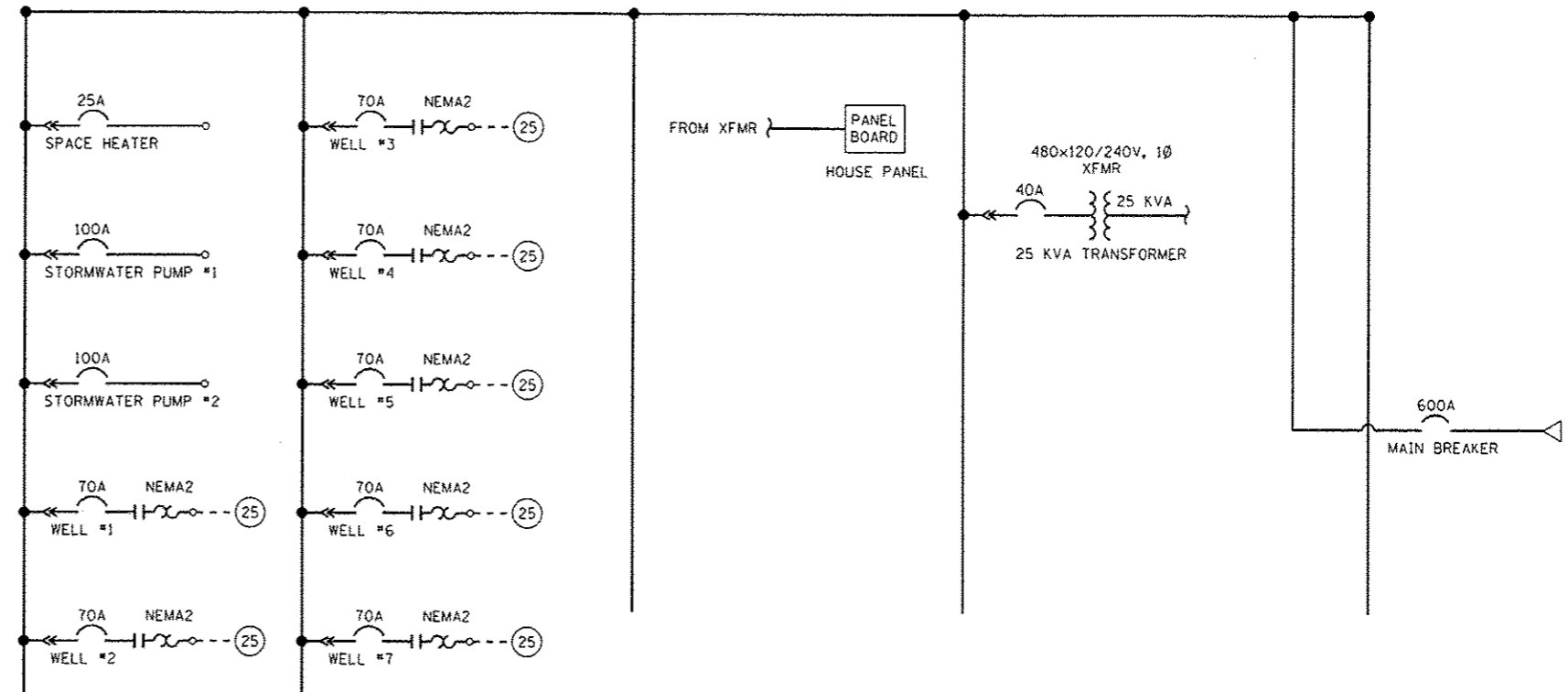
- 1) REMOVE EXISTING WELL PUMP MCC
- 2) COORDINATE WITH UTILITY TO INSTALL NEW METERING EQUIPMENT AND SERVICE NEUTRAL CONDUCTOR
- 3) INSTALL NEW MCC, TEST MCC AND CONNECT WELL PUMP FEEDERS TO NEW MCC
- 4) ENERGIZE NEW SERVICE

THE EXISTING GENERATOR SERVING THE STORM WATER PUMP SHALL REMAIN OPERATIONAL DURING INITIAL POWER OUTAGE. IF STORM WATER PUMP OPERATION IS REQUIRED DURING THE POWER OUTAGE, POWER SHALL BE SUPPLIED BY THE EXISTING GENERATOR.

THE STORM WATER PUMPS SHALL BE CONNECTED TO THE NEW MCC WITHIN 48 HOURS FOLLOWING ENERGIZING OF THE NEW ELECTRICAL SERVICE. IF RAIN IS FORECASTED DURING THE INITIAL 48 HOURS FOLLOWING ENERGIZING OF THE NEW ELECTRICAL SERVICE, THE STORM WATER PUMP SWITCHOVER MAY BE DELAYED WITH THE WRITTEN APPROVAL OF THE OWNER AND ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OPERATING THE STORM WATER PUMPS MANUALLY WHENEVER AUTOMATIC CONTROL OF THE PUMPS IS NOT AVAILABLE FROM EITHER THE EXISTING OR PROPOSED CONTROL SYSTEMS.

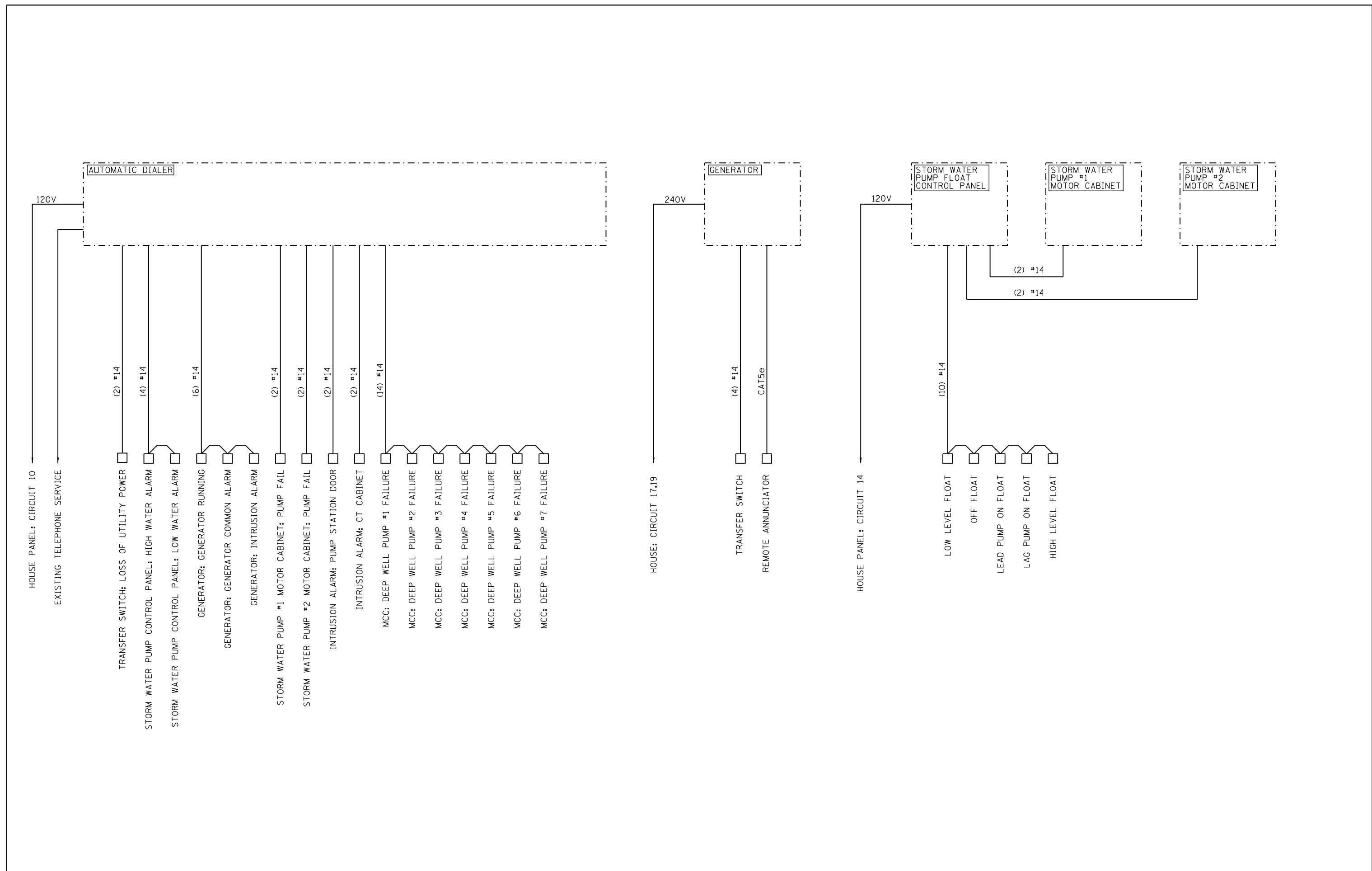
THE PROPOSED GENERATOR SHALL BE CONNECTED TO THE PROPOSED MCC AND MADE OPERATIONAL WITHIN ONE WEEK OF THE STORM WATER PUMP SWITCHOVER.



MCC ONE-LINE DIAGRAM
SCALE: N.T.S.

ELECTRICAL PANEL: Stormwater MCC House									
Location:					Area Served: HOUSE				
STORMWATER MCC					225 A 120/240 V 1 Ph 3 Wire Fault Rating 10,000				
No.	Description	Brkr. Amps	Load				Brkr. Amps	Description	No.
			A	B	B	A			
1	EXISTING LIGHTS (INT. AND SOUTH EXT.)	20					20	EXHAUST FAN/LOUVERS	2
3	EXISTING OUTLETS	20					20	SPARE	4
5	MCC SPACE HEATER	20					20	SPARE	6
7	SPARE	20					20	SPARE	8
9	SPARE	20					20	MONITOR PANEL (DIALER)	10
11	SPARE	20					20	EXISTING EXTERIOR LIGHTS E,W,N	12
13	SPARE	20					20	STORMWATER PUMP CONTROL	14
15	EXISTING BATTERY CHARGER	20					20	SPARE	16
17	GENERATOR	50					20	EXTERIOR POLE LIGHTS	18
19	SPARE	20					20	SPARE	20
21	SPARE	20					20	SPARE	22
23	SPARE	20					20	SPARE	24
Totals			Phase A	Phase B	Total Wattage(VA)		Capacity		
			0	0	0		54000		

* Contractor to verify load served matches existing circuit labels. Update labels as necessary. If circuit is not used, label as "Spare."



FILE NAME =	USER NAME = seb	DESIGNED - JJN	REVISED - 5-4-15
Q:\11files\110023\Work Order 2 Venice Deep Well\CADD Sheets\0876G12-sht-Diagram.dgn		DRAWN - SEB	REVISED -
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 5/4/2015	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CONTROLS DIAGRAM VENICE DEEP WELL PUMP STATION			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
788	27T-9	MADISON	10	10
CONTRACT NO. 76G12				
ILLINOIS FED. AID PROJECT				