

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

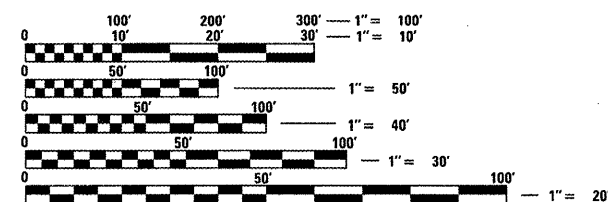
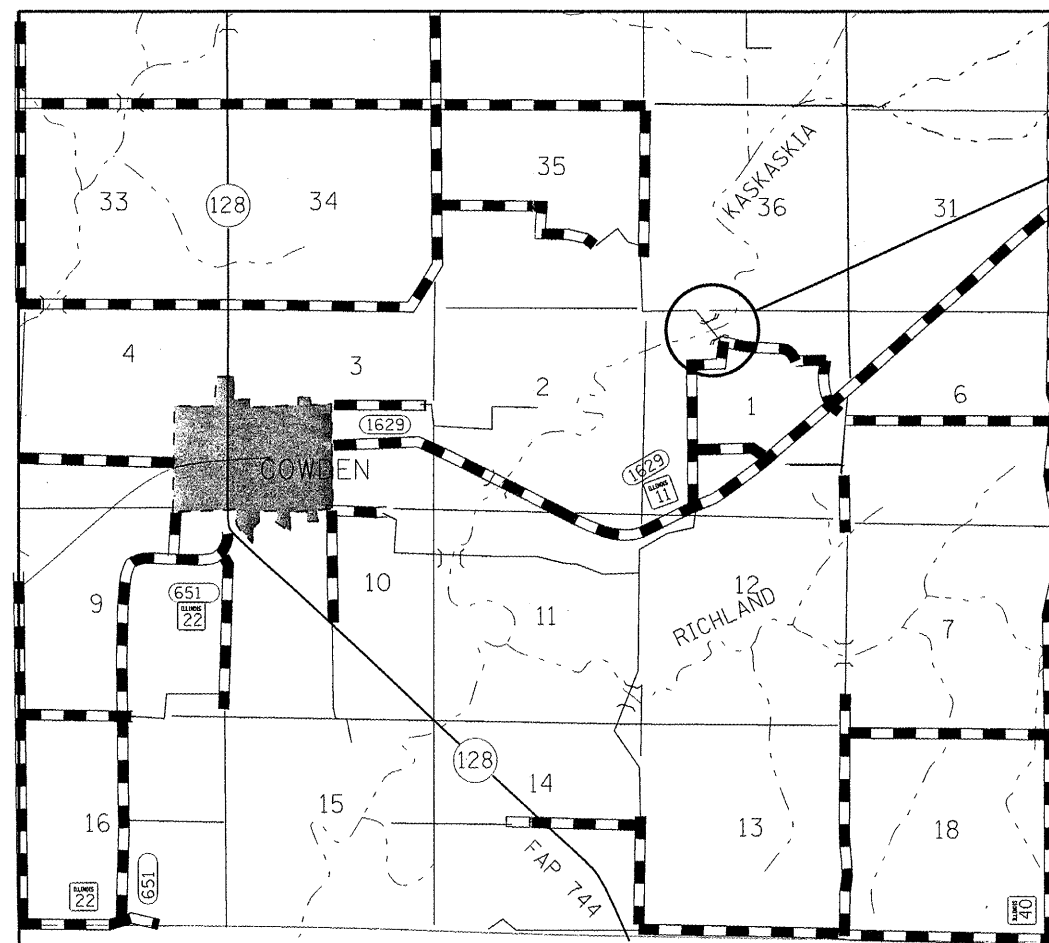
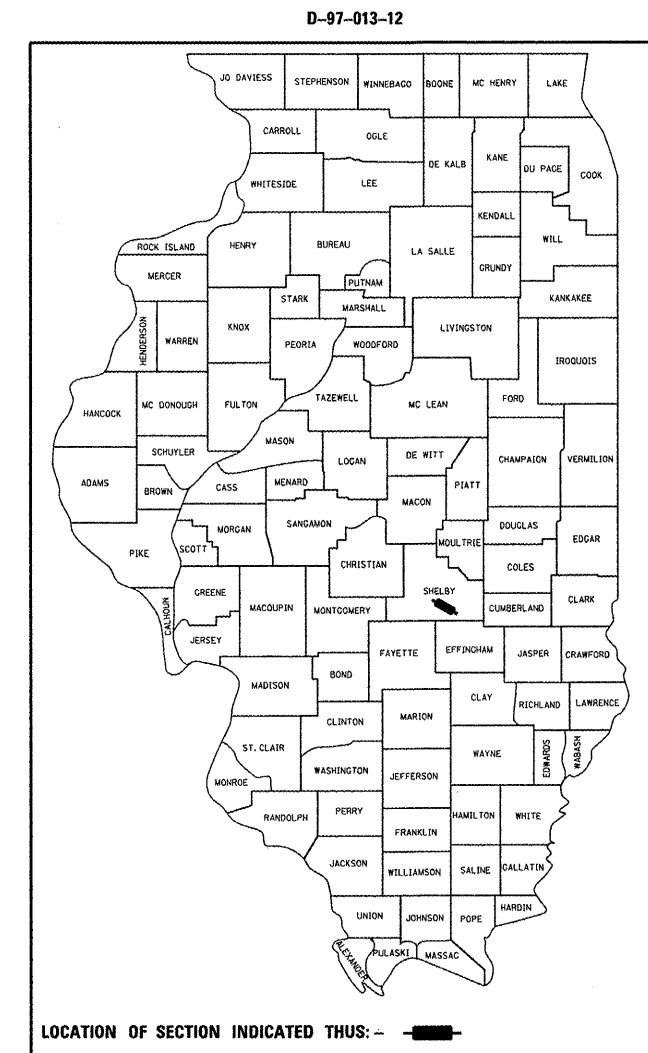
**PROPOSED
HIGHWAY PLANS**

TR ROUTE 389A
SECTION D7 ELECTRICAL 2012-1
PROJECT NHC B-F-0389(005)
FIRE DETECTION SYSTEM UPGRADE
SHELBY COUNTY
C-97-019-12

TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
389A	D7 ELECTRICAL 2012-1	SHELBY	7	1
		ILLINOIS	CONTRACT NO. 74551	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

ADT = 0



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: MARK DAUGHERTY
PROJECT MANAGER: BRIAN LEWIS
PHONE: (217)-342-8360
CONTRACT NO. 74551

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *Jan 27 2012*
Roger L. Dunkel
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 23 2012
John D. Baranzelli, P.E.
acting ENGINEER OF DESIGN AND ENVIRONMENT

March 23 2012
William R. Frey
acting DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

LE30 80/20 FED/ST | L25E 80/20 FED/ST

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT		NATL HIST COV BR	STP-RURAL
				0014	0014
67100100	MOBILIZATION	L SUM	1	0.2	0.8
X0323608	FIRE ALARM SYSTEM	L SUM	1	0.2	0.8
X0327372	ELECTRICAL ROOM VENTILATION FAN	L SUM	1	0.2	0.8

INDEX OF SHEETS

SHEET NO.	ITEM
1	COVER SHEET
2	INDEX OF SHEETS, GENERAL NOTES, SUMMARY OF QUANTITIES AND KEYED NOTES
3	GENERAL PLAN & ELEVATION
4	FIRE ALARM SYSTEM
5	SITE PLAN
6	MECHANICAL BUILDING STRUCTURE
7	ELECTRICAL DISTRIBUTION & FIRE ALARM SYSTEM

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NO. 7:

STD. NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701901-02	TRAFFIC CONTROL DEVICES

GENERAL NOTES

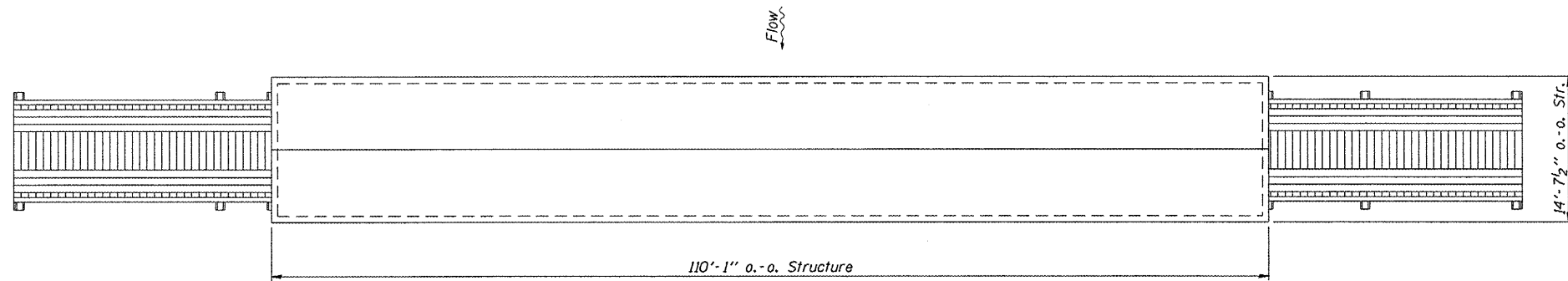
THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2012; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" INDICATED ON THE CHECK SHEET, AND THE SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL.

THE WORK INCLUDED IN THIS SECTION CONSISTS OF REMOVAL OF EXISTING FIRE DETECTION EQUIPMENT, INSTALLATION OF NEW EQUIPMENT AND ANY OTHER WORK NECESSARY TO COMPLETE THIS SECTION.

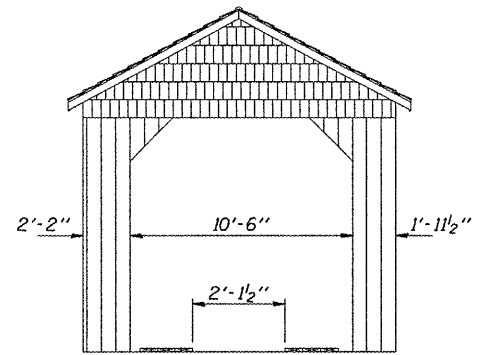
Keyed notes for sheet 7:

- ① Remove existing fire alarm control panel, wiring device and all associated conduit and wiring. Provide new fire alarm control panel by Protectowire or approved equal (fire system 2600HD1 industrial fire control panel) including all new wiring in new conduit as required. Make all final connection to existing panel PPI and circuiting serving. Synchronize all audio and strobe devices.
- ② Provide new exhaust fan EF-1, junction box and all new wiring in new conduit. Install new 20A-1P circuit breaker, 2#12, 1#12 ground in 3/4 inch conduit connected to existing panel PPI and circuit #7. Make all final connections. Provide engraved nameplates for all user switches.
- ③ Remove all existing heat detector wires, strobe/horns and strobe/horn wiring in mechanical room, underground and on bridge. Provide new system linear heat detector by Protectowire, or approved equal, and all new strobe/horns and wiring as required. Make all final connections.
- ④ Wiring for thermostats is not in a conduit.

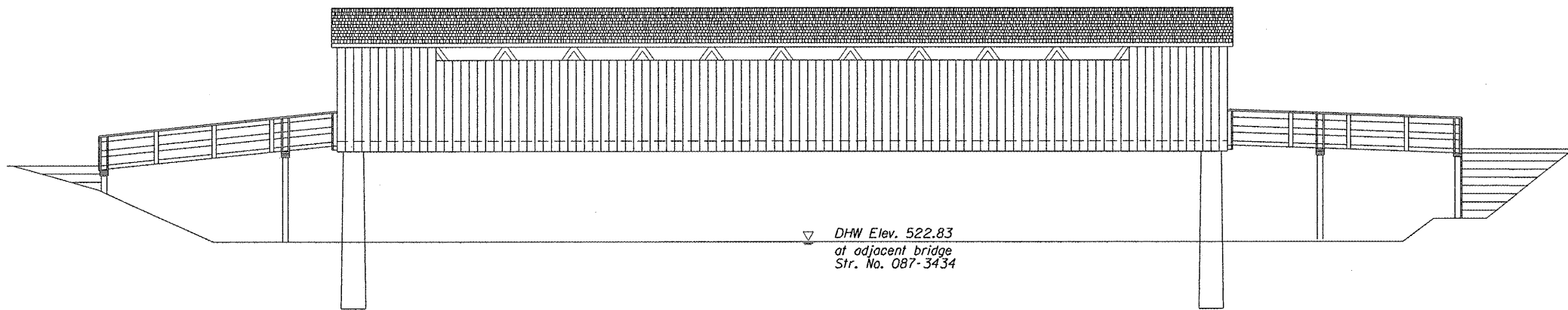
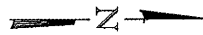
Benchmark: T.B.M. No. 2 - Railroad spike in timber pile @ Northwest corner adjacent bridge Structure No. 087-3434, Elev. 522.31.



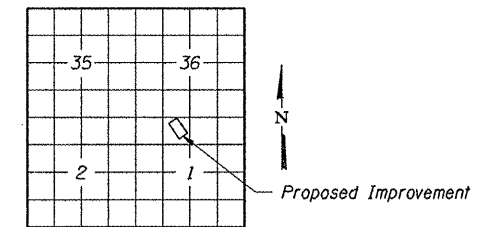
ROOF PLAN



END ELEVATION



SIDE ELEVATION



LOCATION SKETCH

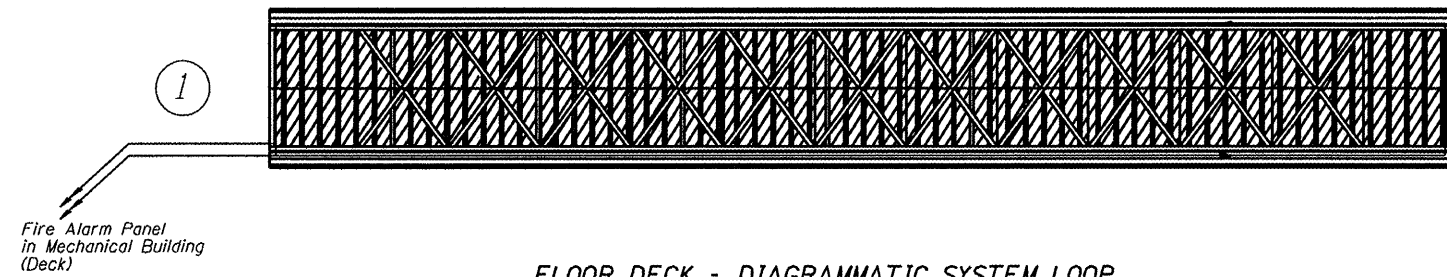


GENERAL NOTE

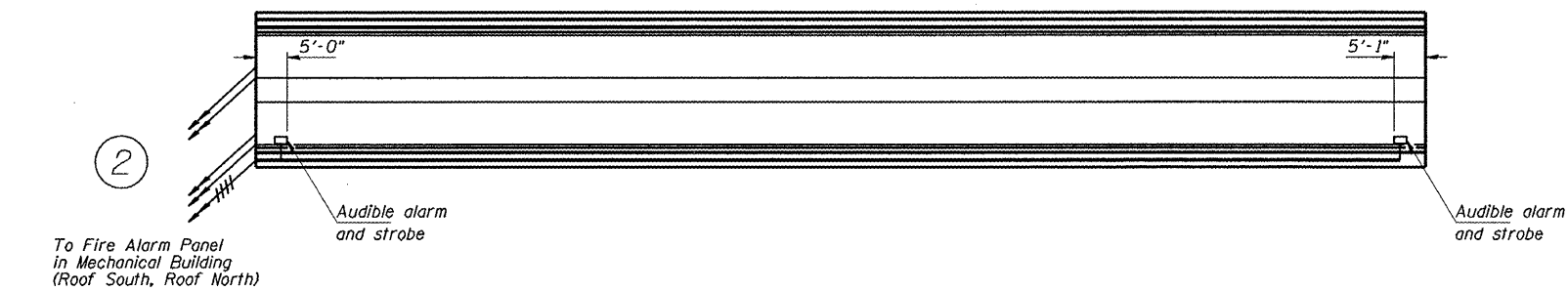
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

NOTE: DRAWINGS NOT TO SCALE

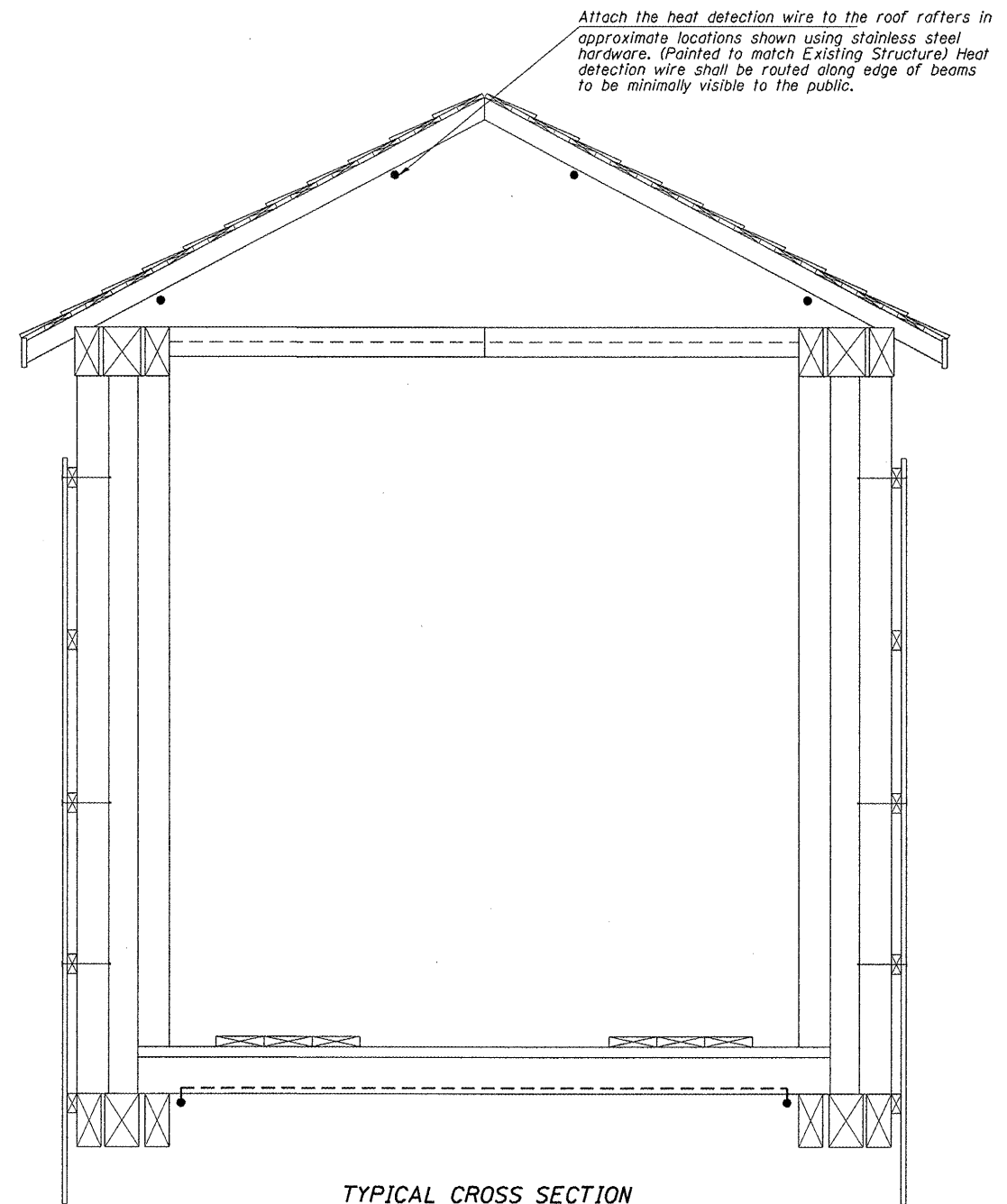
FILE NAME =	USER NAME = steffanmk	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION THOMPSON MILL COVERED BRIDGE		TR TR	SECTION	COUNTY	TOTAL	SHEET
c:\pwork\puidot\steffanmk\0278834\07	74551-shd-details.dgn	DRAWN -	REVISED -		389A	D7 ELECTRICAL 2012-1	SHELBY	7	3		
PLOT SCALE = 100.0000' / in.		CHECKED -	REVISED -		CONTRACT NO. 74551			ILLINOIS FED. AID PROJECT			
PLOT DATE = 1/30/2012		DATE -	REVISED -		SCALE: NA	SHEET 1 OF 1 SHEETS	STA. TO STA.				



FLOOR DECK - DIAGRAMMATIC SYSTEM LOOP



ROOF FRAMING - DIAGRAMMATIC SYSTEM LOOP



TYPICAL CROSS SECTION

Keyed notes:

- ① All fire alarm wiring shall be exposed on bridge and attached to structure under deck and connect to fire alarm control panel in mechanical building. Remove existing wiring and replace with new.
- ② All fire alarm wiring shall be exposed on bridge and attached to structure of the roof and connect to fire alarm control panel in mechanical building. Remove existing wiring and replace with new.

General notes:

- 1. All fire alarm wiring shall be exposed on bridge. Paint all fire alarm conduits and junction boxes to match bridge color.
- 2. All conduits routed on bridge or structures shall be in compliance with Standard specifications.
- 3. Contractor shall provide all conduit, wiring, etc. and make all final connections to equipment and devices as per manufacturer's instructions.

NOTE: DRAWINGS NOT TO SCALE

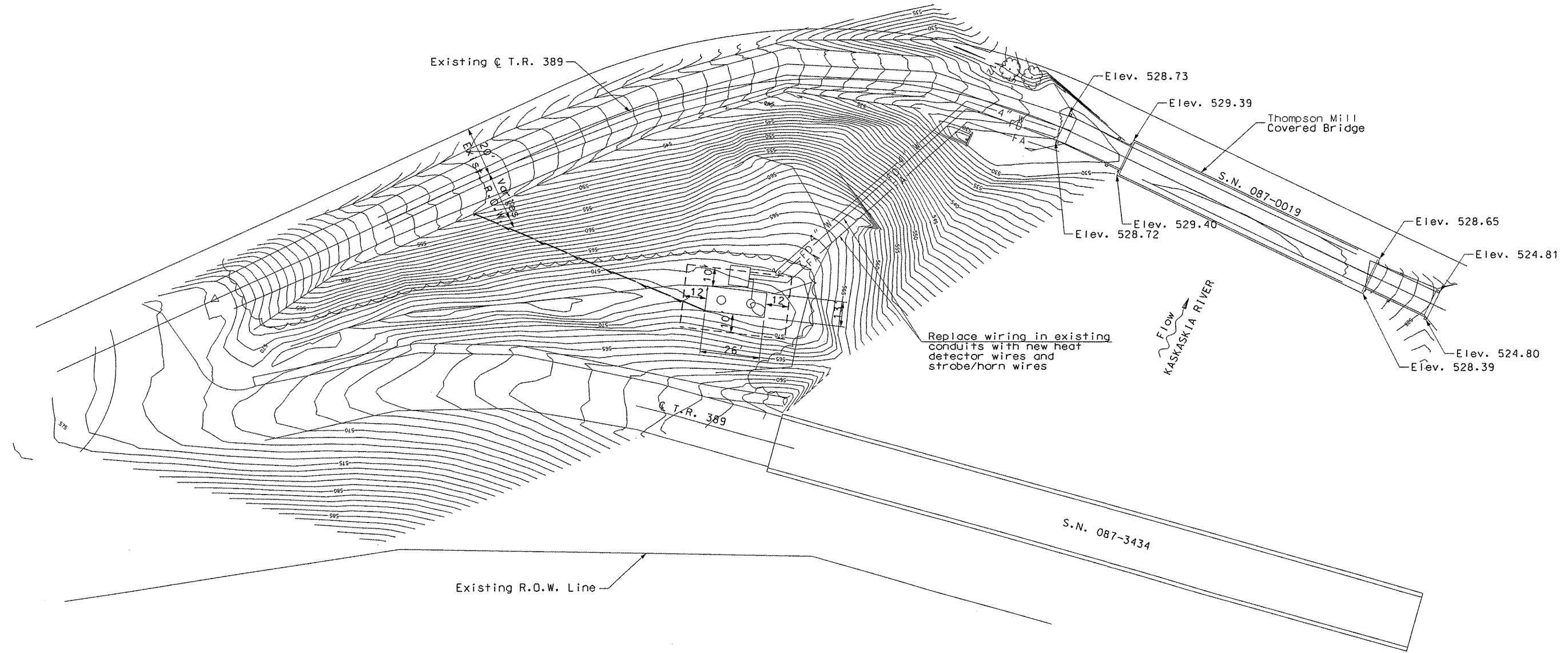
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FIRE ALARM SYSTEM
THOMPSON MILL COVERED BRIDGE**

SCALE: NA SHEET 1 OF 1 SHEETS STA. TO STA.

TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
389A	D7 ELECTRICAL 2012-1	SHELBY	7	4
CONTRACT NO. 74551			ILLINOIS FED. AID PROJECT	



SITE PLAN

NOTE: DRAWINGS NOT TO SCALE

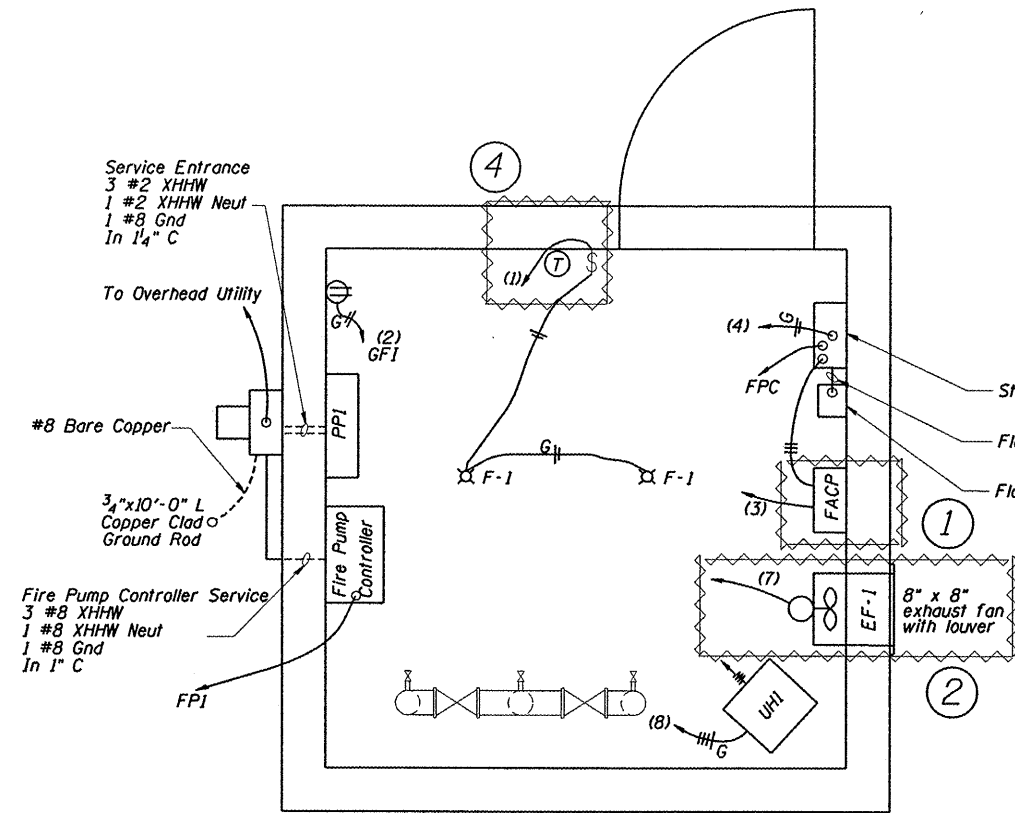
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		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

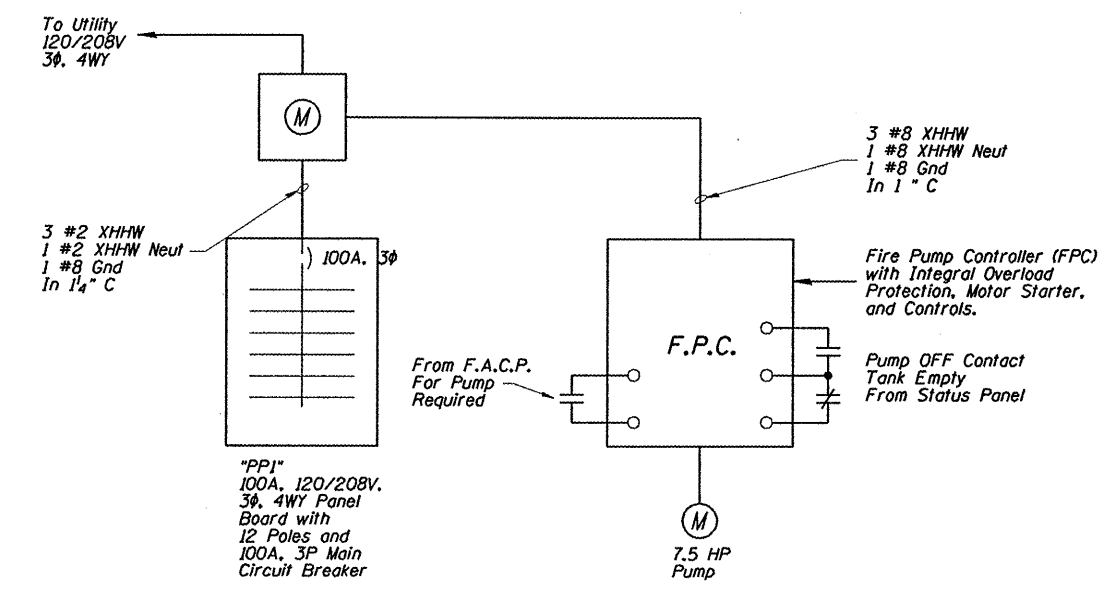
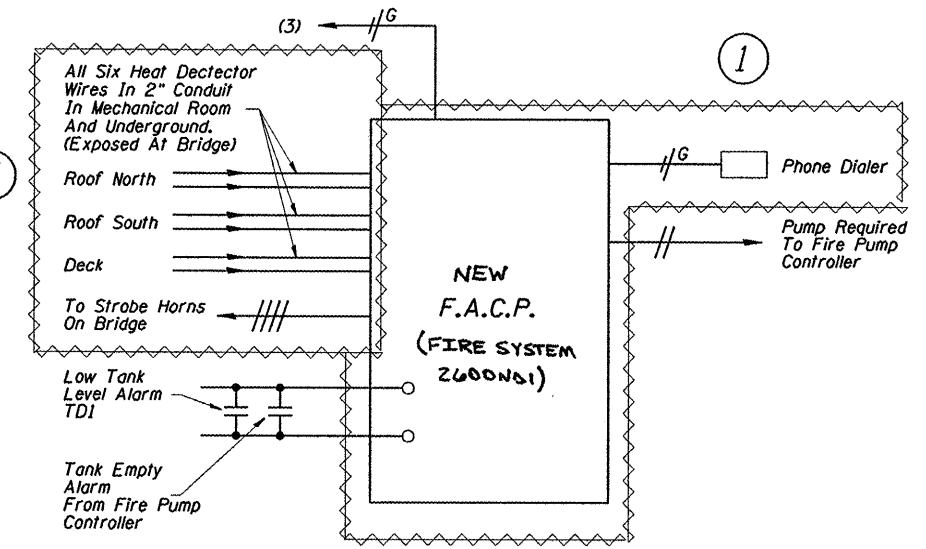
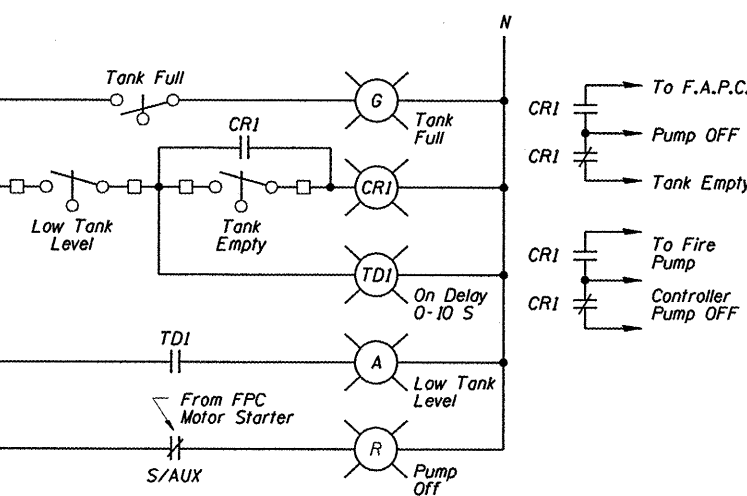
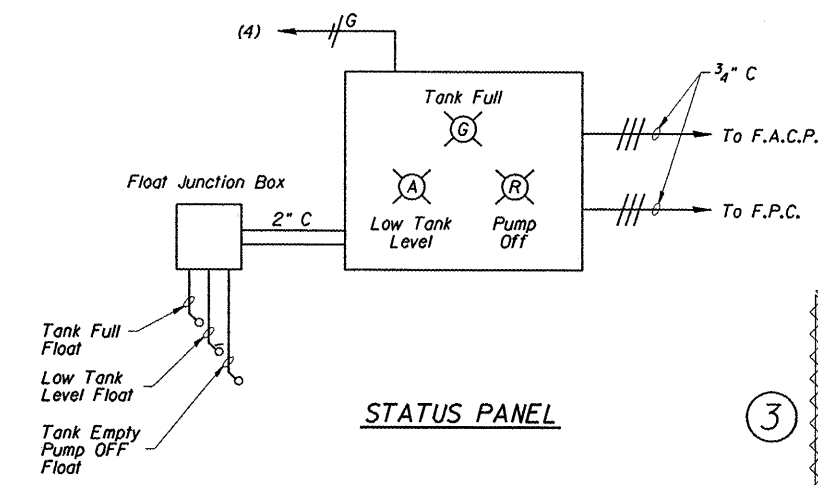
SITE PLAN
THOMPSON MILL COVERED BRIDGE

SCALE: NA SHEET 1 OF 1 SHEETS STA. TO STA.

TR	TR	SECTION	COUNTY	TOTAL	SHEET
RTE.				SHEETS	NO.
389A		D7 ELECTRICAL 2012-1	SHELBY	7	5
CONTRACT NO. 74551					
ILLINOIS FED. AID PROJECT					



SCHMATIC ELECTRICAL DISTRIBUTION



STATUS PANEL ONE-LINE DIAGRAM

PANEL BOARD SCHEDULE

MAINS: 100 AMP PANEL 100 AMP BREAKER VOLTAGE: 120/208 VOLTS. 3 PHASE: 4 WIRE ENCLOSURE: NEMA 3R

WIRE SIZE	GRD SIZE	C.	ITEM	POLE	AMP RAT.	CKT NO.	LEFT PHASE			CKT NO.	AMP RAT.	POLE	ITEM	C.	GRD SIZE	WIRE SIZE
							A	B	C							
#12	#12	3/4"	Fixtures (F-1)	1	20	1	X		X	2	20	1	Receptacle	3/4"	#12	#12
#12	#12	3/4"	Fire Alarm Control Panel (FACP)	1	20	3		X		4	20	1	Status Panel	3/4"	#12	#12
#12	#12	3/4"	Phone Dialer	1	20	5			X	6	-	-	Spare	-	-	-
#12	#12	3/4"	EF-1	1	20	7	X		X	8						
-	-	-	Spare	-	-	9		X		10	15	3	3.7 KW Heater (UH-1)	3/4"	#12	#12
-	-	-	Spare	-	-	11			X	12						

Notes: Proposed work shown enclosed in wavy lines. See sheet #2 for keyed notes.

NOTE: DRAWINGS NOT TO SCALE