

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

VARIOUS ROUTES  
SECTION FY2014 ITS-1  
CHANGEABLE MESSAGE SIGNS SURVEILLANCE  
CHAMPAIGN COUNTY

C-95-012-13

FOR INDEX OF SHEETS, SEE SHEET NO. 2  
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3-6

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	FY2014 ITS-1	CHAMPAIGN	74	1
ILLINOIS			CONTRACT NO. 70A26	

\* 74 + 4 = 78 TOTAL SHEETS

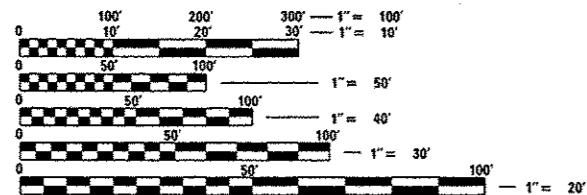


I-74 EASTBOUND  
STA. 1572+00 MM 172.83  
STR. NO. 5 S 010 0174 R172.83

I-57 SOUTHBOUND  
STA. 890+96 MM 242.78  
STR. NO. 5 S 010 1057 L242.78

I-72 EASTBOUND  
STA. 1778+15 MM 178.29  
STR. NO. 5 S 010 1072 R178.29

I-74 WESTBOUND  
STA. 593+12 MM 189.05  
STR. NO. 5 S 010 1074L189.05



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.

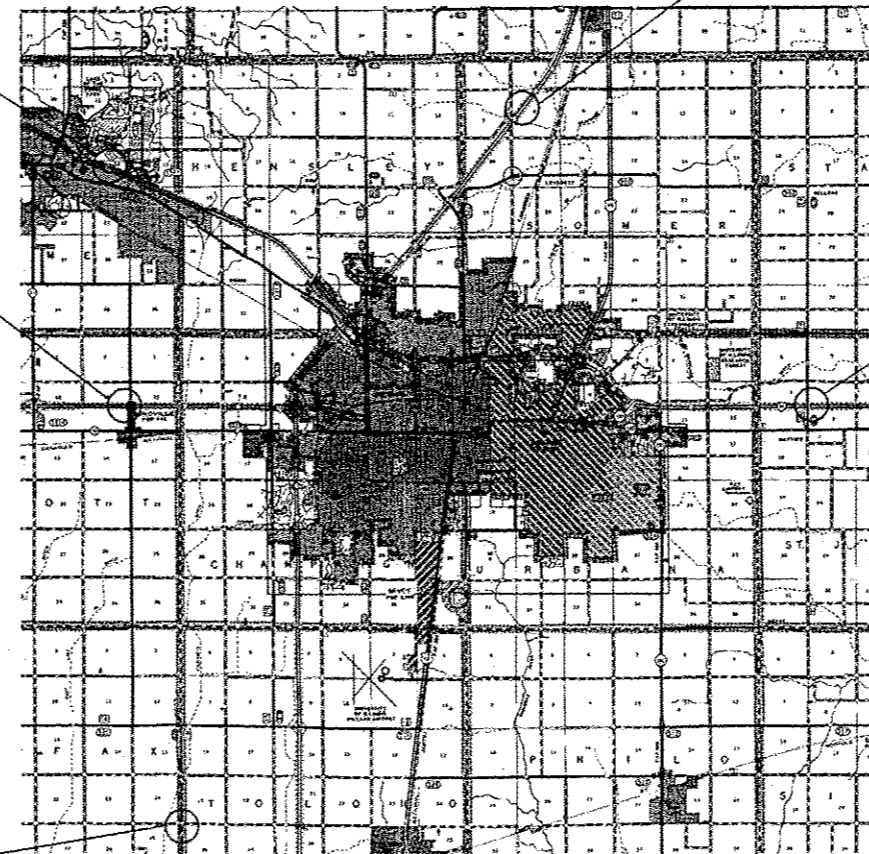
J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

PROJECT ENGINEER JEFF ALLEN  
DESIGNED BY: ROGER BIGGS  
PHONE NUMBER: (217) 465-4181

CONTRACT NO. 70A26

I-57 NORTHBOUND  
STA. 475+50 MM226.45  
STR. NO. 5 S 010 R226.45

CHAMPAIGN COUNTY



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED FEBRUARY 7 2014  
Joseph E. Gause  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
March 21 2014  
Don D. Baranzelli, P.E.  
ENGINEER OF DESIGN AND ENVIRONMENT  
March 21 2014  
Omer Osman, P.E.  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

REV. 4-10-14

## GENERAL NOTES

G.N. - 100 ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

G.N.-100A ELECTRONIC FILES AND/OR ELECTRONIC SURVEY INFORMATION INCLUDING CADD FILES WILL NOT BE AVAILABLE TO THE CONTRACTOR.

### PLAN SHEET GENERAL NOTES

1. CONNECTIONS TO FIBER OPTIC NETWORKS AT LOCATIONS SHOWN IN THE PLANS SHALL BE DONE BY OTHERS. A MINIMUM OF 50' OF FIBER OPTIC CABLE SLACK SHALL BE COILED IN THE HANDHOLE INDICATED FOR FUTURE CONNECTION.
2. ALL PROPOSED HANDHOLES SHALL BE LOCATED BY THE ENGINEER

## HIGHWAY STANDARDS

Standard	Description
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
630001-10	STEEL PLATE BEAM GUARDRAIL
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-09	TRAFFIC BARRIER TERMINAL, TYPE 2
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15'(4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701101-04	OFF-RD OPERATIONS, MULTILANE, 15'(4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS $\geq$ 45 MPH
701400-07	APPROACH TO LANE CLOSURE, FREEWAY / EXPRESSWAY
701401-08	LANE CLOSURE, FREEWAY / EXPRESSWAY
701502-06	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL TURN LANE
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-09	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-03	TRAFFIC CONTROL DEVICES
805001-01	ELECTRIC SERVICE INSTALLATION DETAILS
814001-02	HANDHOLES

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\* ADD 36A-36C SOIL BORING LOGS

\*\* ADD 70A DISTRICT 5 IDOT HEADQUARTERS

FILE NAME : c:\p\work\p\p\d\biggsr\d\0340463\VP12	USER NAME : biggsrd ama a plans.dgn	DESIGNED : DRAWN : CHECKED : DATE :	REVISED : REVISED : REVISED : REVISED :	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS, HIGHWAY STANDARDS &amp; GENERAL NOTES</b>	F.A.P. RTE. VAR.	SECTION FY2011 INTERCONNECT	COUNTY Champaign	TOTAL SHEETS 74	SHEET NO. 2	CONTRACT NO. 70A26
PLOT SCALE : 1574.0031 ' / m				SCALE: SHEET NO. OF SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT					

△ REVISED SHEET 4-10-14

# SUMMARY OF QUANTITIES

LOCATION OF WORK:

CHAMPAIGN CO. VARIOUS ROUTES CHAMPAIGN URBANA 100% STATE	CHAMPAIGN CO. VARIOUS ROUTES CHAMPAIGN URBANA 100% STATE URBAN 0021	CHAMPAIGN CO. VARIOUS ROUTES CHAMPAIGN URBANA 100% STATE RURAL 0021
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CONSTRUCTION TYPE CODE:

TOTAL QUANTITY	URBAN QUANTITY	RURAL QUANTITY
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CODE NO	ITEM	UNIT	TOTAL QUANTITY	URBAN QUANTITY	RURAL QUANTITY
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1.0	1.0	
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1.0	1.0	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1.0	1.0	
70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1.0		1.0
73300300	OVERHEAD SIGN STRUCTURE - SPAN, TYPE III-A (5'-0" X 7'-0")	FOOT	371.0		371.0
73301810	OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	FOOT	100.0		100.0
73400200	DRILLED SHAFT CONCRETE FOUNDATIONS	CU YD	110.5		110.5
78200410	GUARDRAIL MARKERS, TYPE A	EACH	56.0		56.0
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	27.0		27.0
80500100	SERVICE INSTALLATION, TYPE A	EACH	5.0		5.0
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	17,179.0	12,241.0	5,538.0
81300830	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" X 18" X 8"	EACH	7.0	7.0	
81400100	HANDHOLE	EACH	23.0	20.0	3.0
81500130	GULFBOX JUNCTION REMOVAL	EACH	1.0	1.0	

REV. 4-10-14



# SUMMARY OF QUANTITIES

LOCATION OF WORK: CHAMPAIGN CO. CHAMPAIGN CO. CHAMPAIGN CO.  
 VARIOUS VARIOUS VARIOUS  
 ROUTES ROUTES ROUTES  
 CHAMPAIGN CHAMPAIGN CHAMPAIGN  
 URBANA URBANA URBANA  
 100% STATE 100% STATE 100% STATE  
 CONSTRUCTION TYPE CODE: 0021 0021 0021  
 URBAN URBAN RURAL  
 0021 0021 0021

CODE NO	ITEM	UNIT	TOTAL QUANTITY	URBAN QUANTITY	RURAL QUANTITY
X0326263	EQUIPMENT CABINET	EACH	1.0	1.0	
X0326266	ETHERNET SWITCH	EACH	40.0	35.0	5.0
X0326452	VIDEO SYSTEM DETECTION PROCESSOR	EACH	5.0	5.0	
X0326617	PAINTING LIGHT POLE UNIT	EACH	1.0	1.0	
X0327216	CLOSED CIRCUIT TELEVISION CAMERA	EACH	29.0	29.0	
X0327459	POLE AND CABLE REMOVAL	EACH	1.0	1.0	
X6340205	GUARD POSTS REMOVAL	EACH	15.0		15.0
X6430120	REMOVE IMPACT ATTENUATORS, NO SALVAGE	EACH	1.0		1.0
X7010410	SPEED DISPLAY TRAILER	CAL MD	1.0	0.5	0.5
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	30.0		30.0
X8710028	FIBER OPTIC CABLE 6 FIBERS, SINGLE MODE	FOOT	6,271.0	4,764.0	1,507.0
X8710036	FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	9818.0	9818.0	
X8710054	FIBER OPTIC TERMINATION PANEL, 12 F OR 24F	EACH	5.0	5.0	
Z0010688	CAMERA MOUNTING ASSEMBLY	EACH	11.0	6.0	5.0
Z10013798	CONSTRUCTION LAYOUT	L SUM	1.0		1.0
Z0033070	VIDEO VEHICLE DETECTION, 4 CAMERAS	EACH	5.0	5.0	
Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	hour	500.0	250.0	250.0

∅

∅ 0042

△ REV. 4-10-14



# SOIL BORING LOG

ROUTE FAI Rt 57 DESCRIPTION Digital Message Sign at 800N over I-57 LOGGED BY Woods

SECTION DTS Structure LOCATION SE, SEC. 21, TWP. 18N, RNG. 8E, 3rd PM GPS:

COUNTY Champaign DRILLING METHOD Hollow Stem Auger HAMMER TYPE Manual

STRUCT. NO. 5 S 010 1057  
Station R226.40  
473+60.46

BORING NO. 1 Pier  
Station 473+52  
Offset 0.0 ft CL  
Ground Surface Elev. 687.0 ft

Surface Water Elev. \_\_\_\_\_ ft  
Stream Bed Elev. \_\_\_\_\_ ft

Groundwater Elev.:  
First Encounter \_\_\_\_\_ ft  
Upon Completion \_\_\_\_\_ ft  
After 2 Hrs. 681.0 ft

DEPTH (ft)	SOIL DESCRIPTION	D	B	U	M	D	B	U	M		
(ft)	(/6")	(tsf)	(%)	(ft)	(/6")	(tsf)	(%)	(ft)	(/6")	(tsf)	(%)
0	Black Silty Clay (Firm)					18	3.9	14			
685.0	Brown Mottled Clay Loam (Firm)										
681.0	Brown Mottled Clay Loam (Soft)										
680.0	Brown Mottled Clay Till (Very Stiff)					12	1.7	14			
676.0	Gray Clay Till (Very Stiff)										

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.  
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer E-Estimate)  
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



# SOIL BORING LOG

ROUTE FAI Rt 57 DESCRIPTION Digital Message Sign 1/4 mile North of 010-0172 LOGGED BY CNA

SECTION DTS Structure LOCATION NW, SEC. 8, TWP. 20N, RNG. 9E, 3rd PM GPS: 40.20868N, 88.21786W

COUNTY Champaign DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 5 S 010 1057  
Station L242.75  
891+04

BORING NO. 1 Sign Truss  
Station 891+04  
Offset 18.0 ft West of SBCL  
Ground Surface Elev. 734.9 ft

Surface Water Elev. \_\_\_\_\_ ft  
Stream Bed Elev. \_\_\_\_\_ ft

Groundwater Elev.:  
First Encounter 722.9 ft  
Upon Completion Plugged ft  
After \_\_\_\_\_ Hrs. \_\_\_\_\_ ft

DEPTH (ft)	SOIL DESCRIPTION	D	B	U	M	D	B	U	M		
(ft)	(/6")	(tsf)	(%)	(ft)	(/6")	(tsf)	(%)	(ft)	(/6")	(tsf)	(%)
0	Asphalt Shoulder (Boring taken through shoulder of SBDL)										
733.4	Gravel (CA 6)					5	2.6	13			
732.9	Brown/Gray Clay Loam (Embankment)										
728.9	Brown/Gray Mottled Silty Clay					5	4.2	10			
726.4	Brown/Gray Mottled Silty Clay with Silt Seams					3	1.0	26			
722.4	Brown Dirty Coarse Sand to Sand Loam Mixed (Soft/Wet)					2		17			
719.9	Gray Soft Clay Loam Till (Qu = 0.2)					4					
718.4	Brown Clay Loam Till					5	1.7	14			
715.9	Gray Clay Loam Till					5	1.8	13			

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.  
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer E-Estimate)  
The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

5/13/2013 7:42:39 AM C:\MATERIALS\SOILS\2013 SOILS WORK\MESAGE BOARDS I-57,74,72\DIS010-0172.GPJ

7/26/2013 11:10:59 AM S:\SOILS\2013 SOILS WORK\MESAGE BOARDS I-57,74,72\DIS010-0172.GPJ

FILE NAME : c:\p\work\p\d\biggsrd\0348463\PTZ	USER NAME : biggsrd	DESIGNED : -	REVISED : -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SOIL BORING LOGS</b>	F.A.P. / RTE. / VAR.	SECTION FY2014 [TS-1]	COUNTY CHAMPAIGN	TOTAL SHEETS 73	SHEET NO. 36A		
PLOT SCALE : 1/8" = 1' / 8"	CHECKED : -	REVISED : -	SCALE:			SHEET OF	SHEETS STA.	TO STA.	CONTRACT NO. 70A26			
PLOT DATE : 4/7/2014	DATE : -	REVISED : -	ILLINOIS FED. AID PROJECT									
BBS, from 137 (Rev. 8-99)												

▲ SHEET ADDED 4-10-14







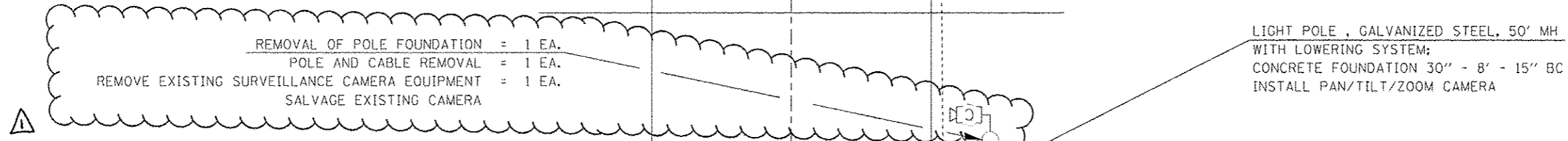


# PTZ CAMERA INSTALLATION

NEIL ST.  
&  
I-74

(NOT TO SCALE)

## CAMERA & CONDUIT /CABLE LAYOUT



### BILL OF MATERIALS

NEIL ST. & I-74

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	247
LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	7
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	348
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 12 3C	FOOT	383
DRILL EXISTING HANDHOLE	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	3
CLOSED CIRCUIT TELEVISION CABINET	EACH	1
LIGHT POLE, STEEL 50 FT. WITH CAMERA LOWERING SYSTEM	EACH	1
ETHERNET SWITCH	EACH	2
CLOSED CIRCUIT TELEVISION CAMERA	EACH	1
FIBER OPTIC CABLE 6 FIBERS, SINGLE MODE	FOOT	429
REMOVAL OF POLE FOUNDATION	EACH	1
POLE AND CABLE REMOVAL	EACH	1
REMOVE EXISTING SURVEILLANCE CAMERA EQUIPMENT	EACH	1

NEIL ST.

2" PVC CONDUIT - 247'  
1 FO 62.5/125 SM6F; 1 NO. 12 1C, TRACER;  
1 NO. 12 3C, SIG.  
DRILL EXIST. HANDHOLE = 1 EA.

EXIST. GS CONDUIT - 2 1/2" - 87'  
ADD: 1 FO 62.5/125 SM6F; 1 NO. 12 1C, TRACER  
1 NO. 12 3C, SIG.

(2) EXIST. GS CONDUIT - 4" - 14'  
ADD: 1 FO 62.5/125 SM6F; 1 NO. 12 1C, TRACER;  
1 NO. 12 3C, SIG.

MODIFY EXIST. CONT. CABINET = 1 EA.  
RE-TERMINATE EXIST. SM12F MM12F &  
TERMINATE NEW SM6F IN NEW  
ENCLOSURE

NEIL ST. & I-74 WB OFF-RAMP

MODIFY EXIST. CONT. CABINET = 1 EA.  
RE-TERMINATE EXISTING FIBERS

NEIL ST. & KENYON RD.

MODIFY EXIST. CONT. CABINET = 1 EA.  
RE-TERMINATE EXISTING FIBERS  
INSTALL MANAGED ETHERNET SWITCH

FILE NAME *	USER NAME * biggard	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A.P. / RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\biggard\0348463\PTZ	mineer_010614.dgn	DRAWN -	REVISED -								VAR.	FY2014 ITS-1	CHAMPAIGN	74	38
*MODELNAME*	PLOT DATE * 4/5/2014	CHECKED -	REVISED -								CONTRACT NO. 70A26				
	DATE -	REVISED -	ILLINOIS FED. AID PROJECT												

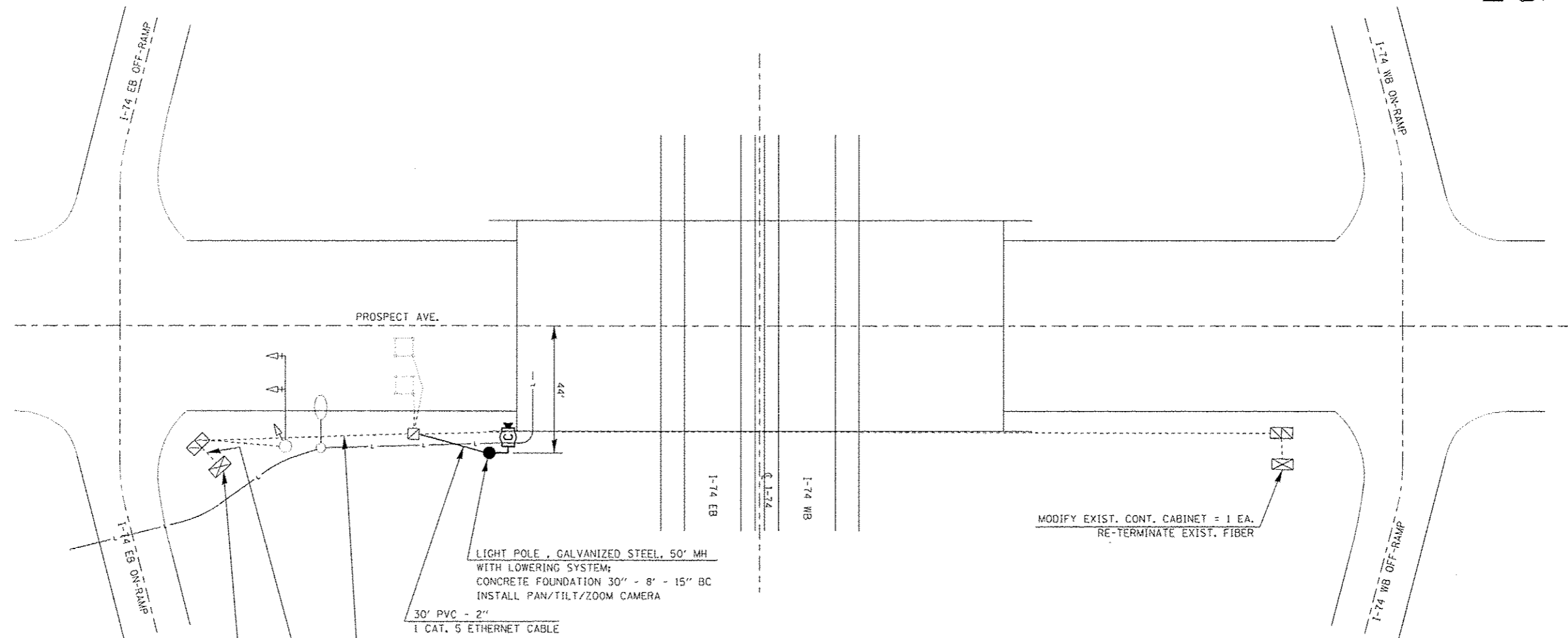
REV. 4-10-14

**PTZ CAMERA INSTALLATION**

**PROSPECT AVE.  
&  
I-74**

(NOT TO SCALE)

**CAMERA & CONDUIT /CABLE LAYOUT**



LIGHT POLE, GALVANIZED STEEL, 50' MH  
WITH LOWERING SYSTEM;  
CONCRETE FOUNDATION 30" - 8" - 15" BC  
INSTALL PAN/TILT/ZOOM CAMERA

30' PVC - 2"  
1 CAT. 5 ETHERNET CABLE  
DRILL EXIST. HANDHOLE = 1 EA.

EXIST. CONDUIT 1 1/2" - 113'  
ADD: 1 CAT. 5 ETHERNET CABLE

EXIST. CONDUIT 5" - 7'  
ADD: 1 CAT. 5 ETHERNET CABLE

MODIFY EXIST. CONT. CABINET = 1 EA.  
RE-TERMINATE ALL EXISTING FIBER  
TERMINATE NEW SM6F

INSTALL MANAGED ETHERNET SWITCH

MODIFY EXIST. CONT. CABINET = 1 EA.  
RE-TERMINATE EXIST. FIBER

**BILL OF MATERIALS**

PROSPECT AVE. & I-74

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	30
LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	8
DRILL EXISTING HANDHOLE	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	3
LIGHT POLE, STEEL 50 FT. WITH CAMERA LOWERING SYSTE	EACH	1
ETHERNET SWITCH	EACH	1
CLOSED CIRCUIT TELEVISION CAMERA	EACH	1

PROSPECT & BLOOMINGTON RD.

MODIFY EXIST. CONT. CABINET = 1 EA.  
RE-TERMINATE EXISTING FIBERS

FILE NAME *	USER NAME * biggard	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\biggard\08348463\PTZ	camera plans.dgn	DRAWN -	REVISED -								VAR.	FY2014 ITS-1	CHAMPAIGN	74	39
#MODELNAME*	PLOT SCALE * 3937.8879 * / *	CHECKED -	REVISED -								CONTRACT NO. 70A26				
	PLOT DATE * 4/5/2014	DATE -	REVISED -								ILLINOIS FED. AID PROJECT				

REV. 4-10-14

**PTZ CAMERA INSTALLATION & FIBER OPTIC CONNECTION**

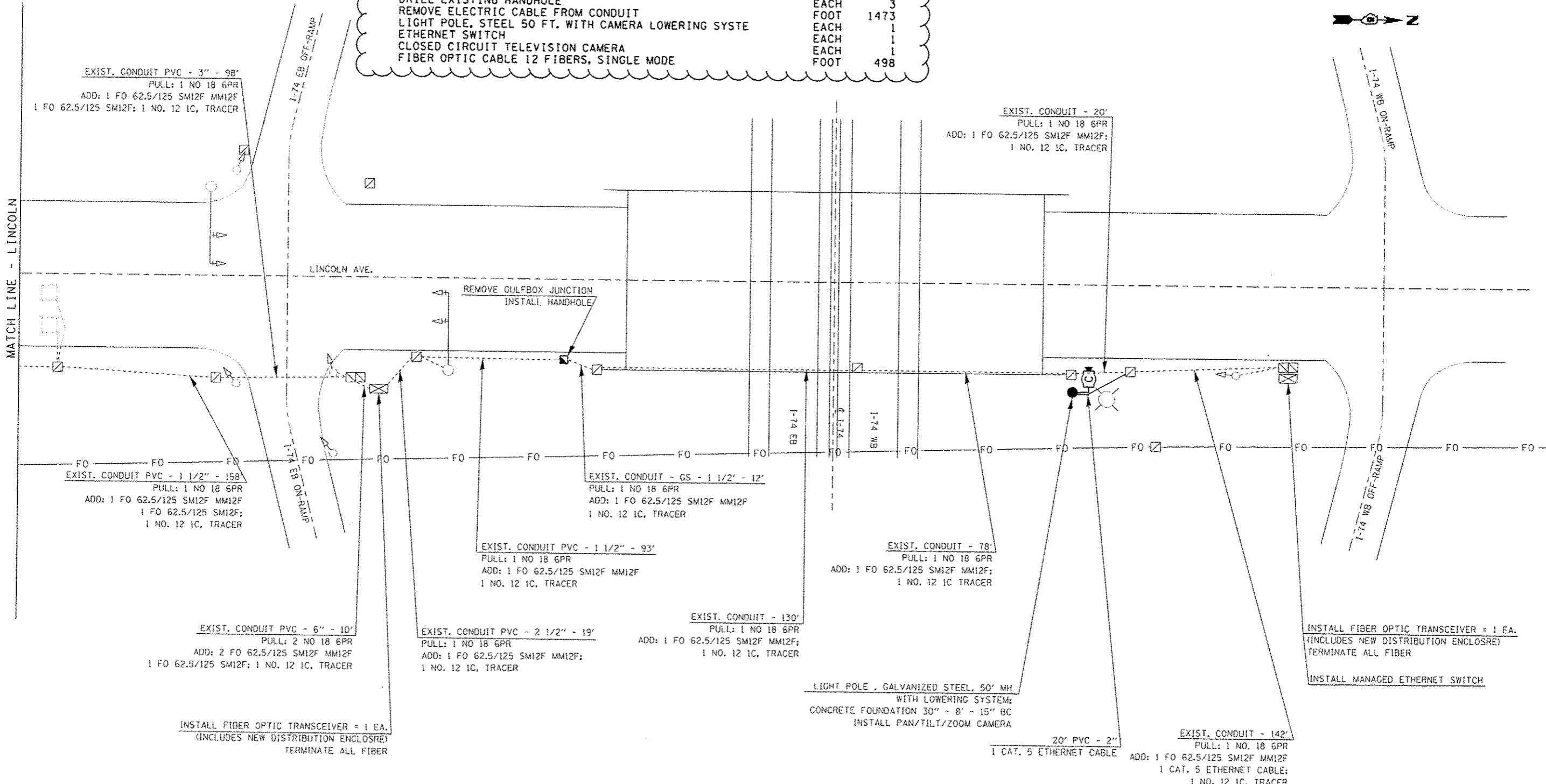
**LINCOLN AVE. & I-74**

(NOT TO SCALE)

**CAMERA & CONDUIT /CABLE LAYOUT**



BILL OF MATERIALS		
I-74 & LINCOLN AVE.		
ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	80
HANDHOLE	EACH	1
GULFBOX JUNCTION REMOVAL	EACH	1
LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	8
TRANSCEIVER - FIBER OPTIC	EACH	3
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	1495
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	1032
DRILL EXISTING HANDHOLE	EACH	3
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1473
LIGHT POLE, STEEL 50 FT. WITH CAMERA LOWERING SYSTE	EACH	1
ETHERNET SWITCH	EACH	1
CLOSED CIRCUIT TELEVISION CAMERA	EACH	1
FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	498



INSTALL FIBER OPTIC TRANSCEIVER = 1 EA.  
(INCLUDES NEW DISTRIBUTION ENCLOSURE)  
TERMINATE ALL FIBER

INSTALL MANAGED ETHERNET SWITCH

FILE NAME =	USER NAME = biggard	DESIGNED -	REVISED -
c:\pwork\pwork\biggard\102348463\PTZ	cameraplans.dgn	DRAWN -	REVISED -
MODELNAME =	PLOT SCALE = 3/32" = 1' / 32"	CHECKED -	REVISED -
	PLOT DATE = 4/5/2014	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	FY2014 ITS-1	CHAMPAIGN	74	41
CONTRACT NO. 70A26				
ILLINOIS FED. AID PROJECT				

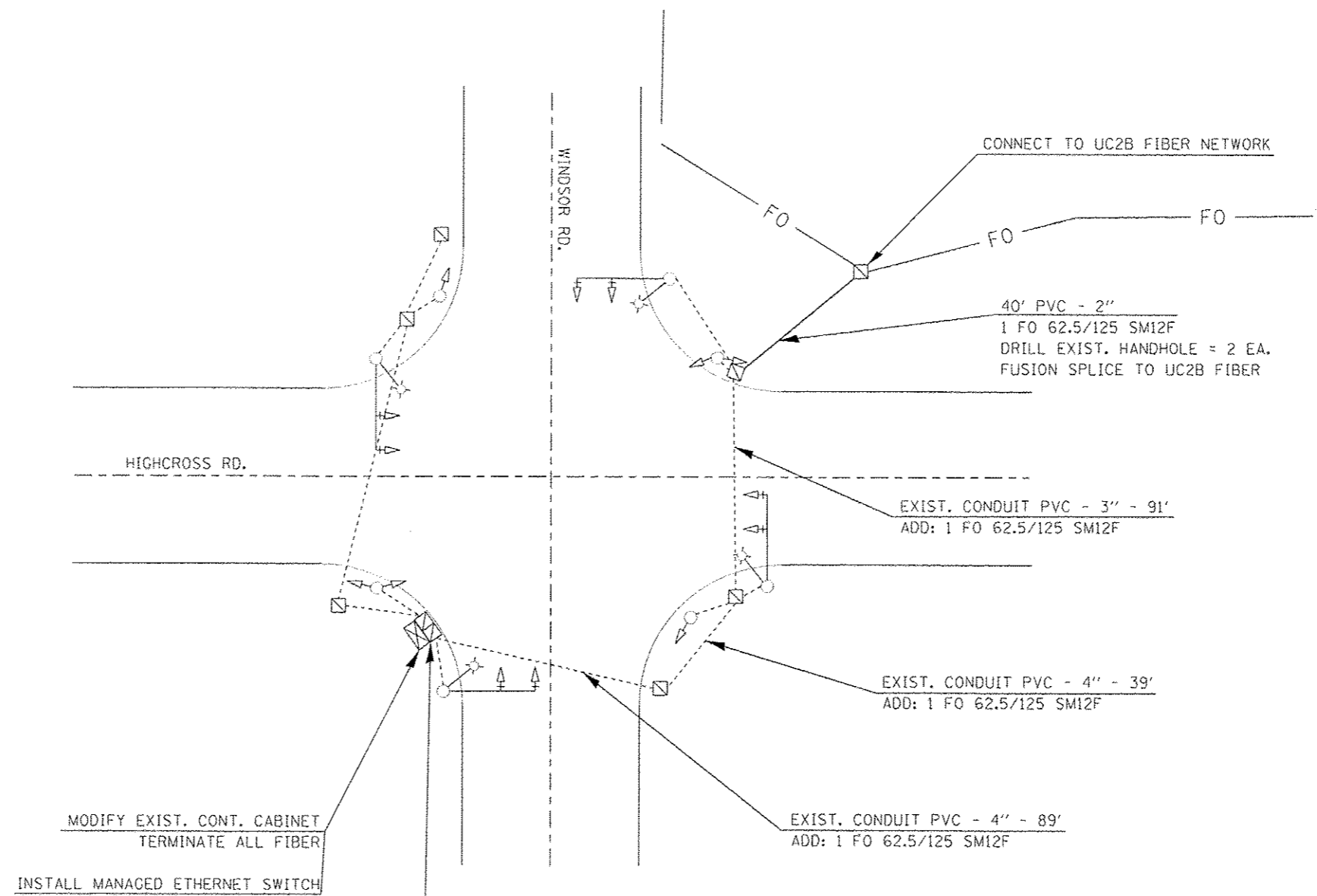
REV. 4-10-14

**FIBER OPTIC CONNECTION**

**WINDSOR RD.  
&  
HIGHCROSS RD. (IL. 130)**

(NOT TO SCALE)

**CONDUIT & CABLE LAYOUT**



**BILL OF MATERIALS**

WINDSOR RD. & HIGHCROSS RD. (IL. 130)

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	40
<del>FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F</del>	FOOT	306
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	259
MODIFY EXISTING CONTROLLER CABINET	EACH	1
ETHERNET SWITCH	EACH	1

FO ——— EXIST. UC2B FIBER OPTIC CABLE IN CONDUIT



FILE NAME =	USER NAME = biggard	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	SCALE:	SHEET OF SHEETS	STA. TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\p\work\p\dot\biggard\id0348463\PT2	ama-a plans.dgn	DRAWN -	REVISED -					VAR.	FY2014 ITS-1	CHMPCAIN	74	43
	PLOT SCALE = 1/8" = 1' / m	CHECKED -	REVISED -					CONTRACT NO. 70A26				
#MODELNAME#	PLOT DATE = 4/5/2014	DATE -	REVISED -					ILLINOIS FED. AID PROJECT				

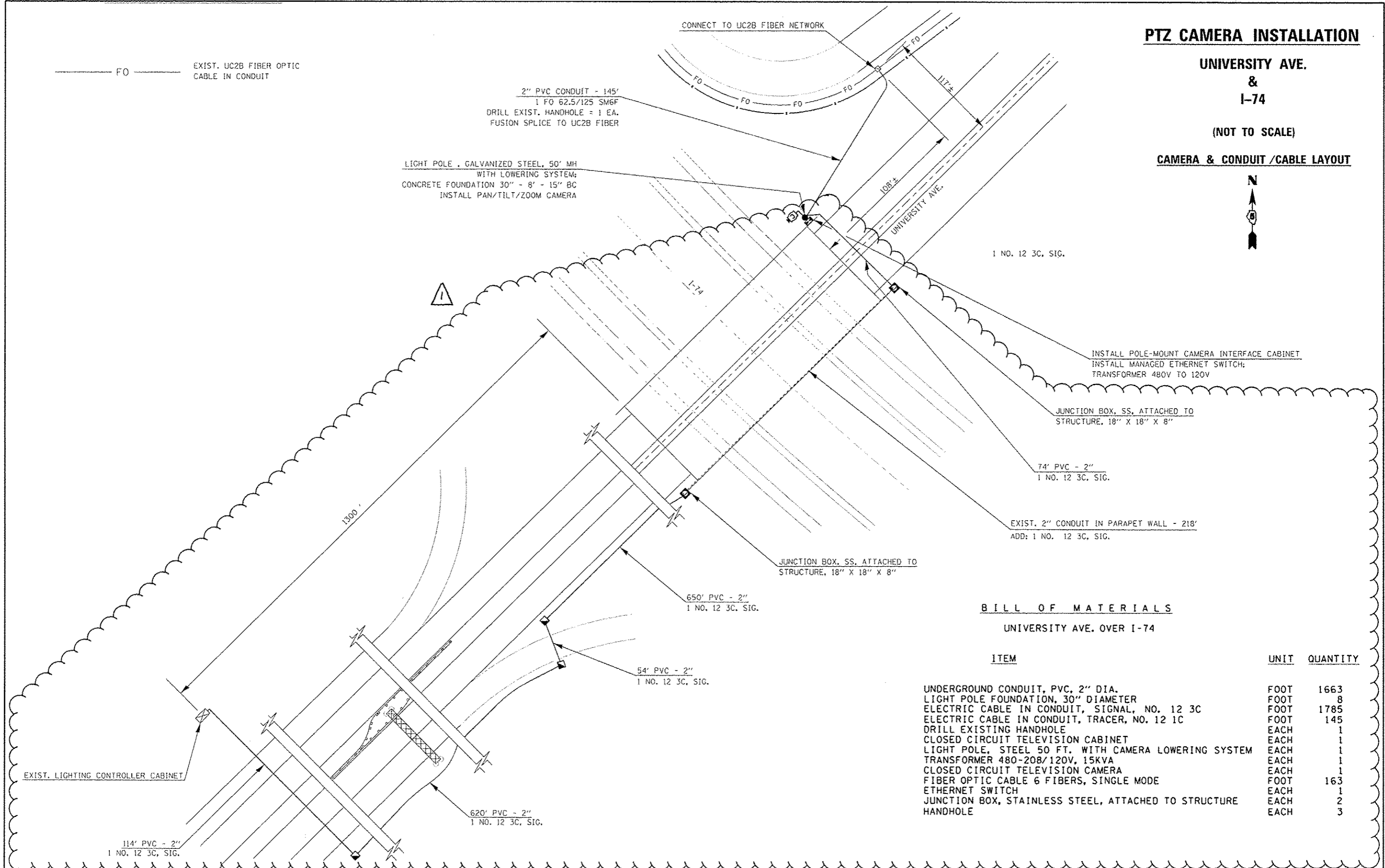
REV. 4-10-14

# PTZ CAMERA INSTALLATION

UNIVERSITY AVE.  
&  
I-74

(NOT TO SCALE)

## CAMERA & CONDUIT /CABLE LAYOUT



### BILL OF MATERIALS

UNIVERSITY AVE. OVER I-74

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	1663
LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	8
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 12 3C	FOOT	1785
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	145
DRILL EXISTING HANDHOLE	EACH	1
CLOSED CIRCUIT TELEVISION CABINET	EACH	1
LIGHT POLE, STEEL 50 FT. WITH CAMERA LOWERING SYSTEM	EACH	1
TRANSFORMER 480-208/120V, 15KVA	EACH	1
CLOSED CIRCUIT TELEVISION CAMERA	EACH	1
FIBER OPTIC CABLE 6 FIBERS, SINGLE MODE	FOOT	163
ETHERNET SWITCH	EACH	1
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE	EACH	2
HANDHOLE	EACH	3

FILE NAME : c:\p\work\p\dot\biggard\0348463\PTZ	USER NAME : biggard	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#MODELNAME#	camera plans.dgn	DRAWN -	REVISED -		VAR.	FY2014 [TS-1]	CHAMPAIGN	74	44	
	PLOT SCALE : 3/32"=1'	CHECKED -	REVISED -		SCALE:		SHEET OF SHEETS STA. TO STA.		CONTRACT NO. 70A26	
	PLOT DATE : 4/5/2014	DATE -	REVISED -		ILLINOIS FED. AID PROJECT					

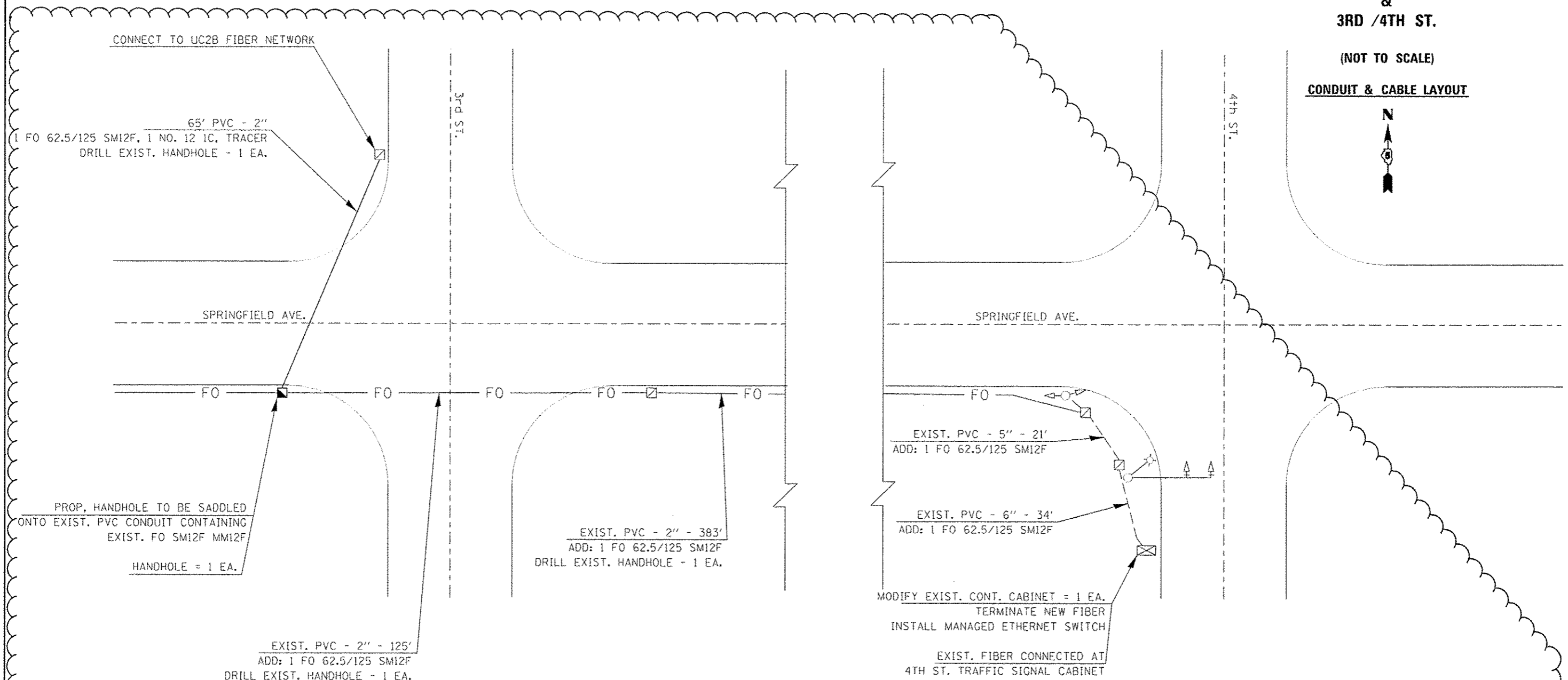
REV. 4-10-14

**FIBER OPTIC BACKBONE CONNECTION**

**SPRINGFIELD AVE.  
&  
3RD /4TH ST.**

(NOT TO SCALE)

**CONDUIT & CABLE LAYOUT**



**BILL OF MATERIALS**

SPRINGFIELD AVE. - 3RD. ST. TO 4TH ST.

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	65
HANDHOLE	EACH	1
DRILL EXISTING HANDHOLE	EACH	1
ETHERNET SWITCH	EACH	1
FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	667
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	65
MODIFY EXISTING CONTROLLER CABINET	EACH	1

FILE NAME =	USER NAME = biggard	DESIGNED =	REVISED =	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et\pv_work\pvidat\biggard\0348463\PTZ	camera_plans.dgn	DRAWN =	REVISED =		VAR.	FY2014 ITS-1	CHAMPAIGN	74	47
MODEL NAME =	PLOT SCALE = 1/8" = 1' / m	CHECKED =	REVISED =		SCALE:	CONTRACT NO. 70A26		ILLINOIS FED. AID PROJECT	
	PLOT DATE = 4/9/2014	DATE =	REVISED =		SHEET OF SHEETS	STA. TO STA.			

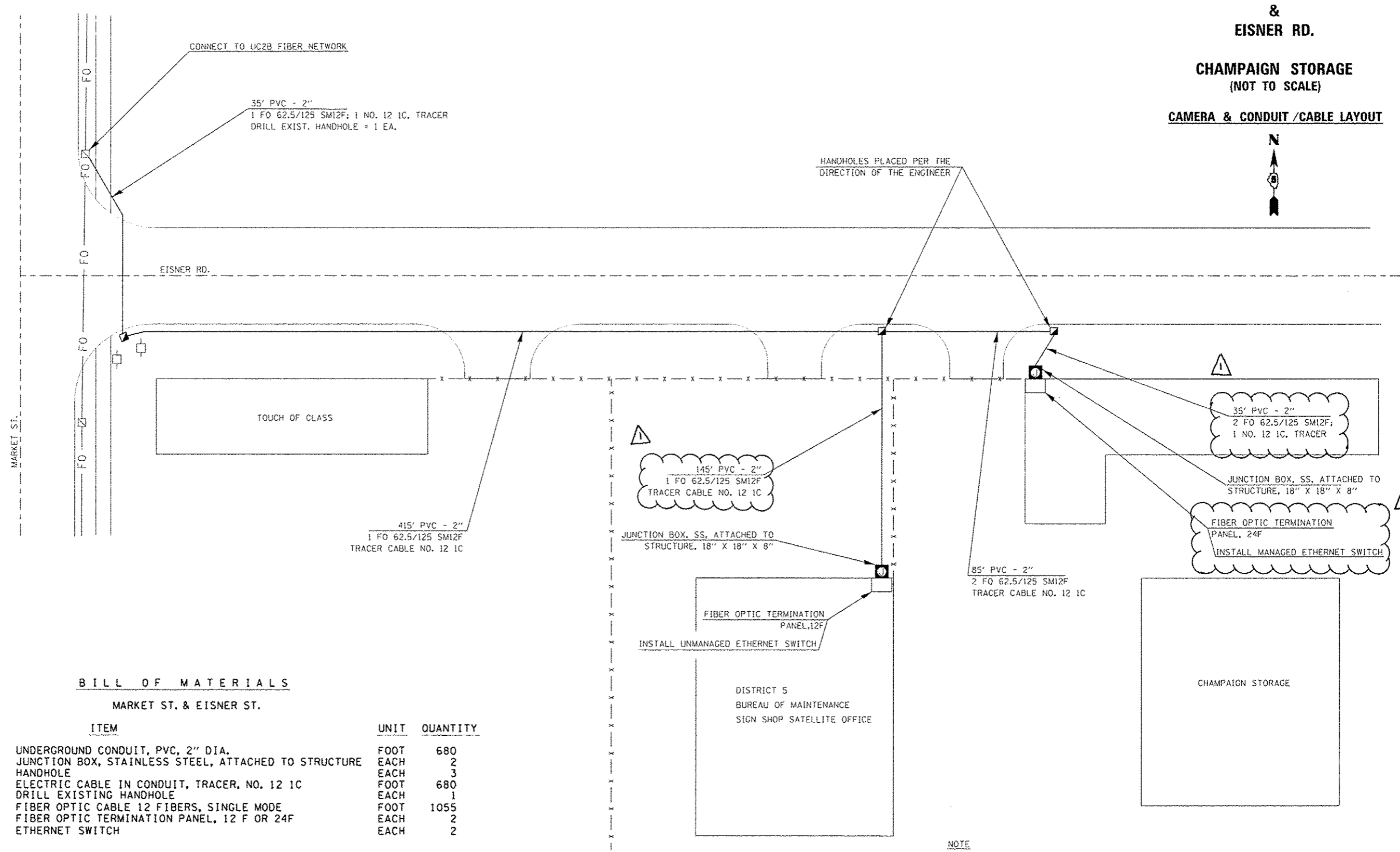
REV. 4-10-14

**FIBER OPTIC CONNECTION**

**MARKET ST.  
&  
EISNER RD.**

**CHAMPAIGN STORAGE  
(NOT TO SCALE)**

**CAMERA & CONDUIT /CABLE LAYOUT**



**BILL OF MATERIALS**

**MARKET ST. & EISNER ST.**

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	680
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE	EACH	2
HANDHOLE	EACH	3
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	680
DRILL EXISTING HANDHOLE	EACH	1
FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	1055
FIBER OPTIC TERMINATION PANEL, 12 F OR 24F	EACH	2
ETHERNET SWITCH	EACH	2

FO ——— EXIST. UC2B FIBER OPTIC CABLE IN CONDUIT

NOTE  
PROPOSED HANDHOLES SHALL BE PLACED PER THE DIRCTION OF THE ENGINEER

FILE NAME =	USER NAME = biggard	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pvidot\biggard\08342463\PTZ	camera plans.dgn	DRAWN -	REVISED -		VAR.	FY2014 ITS-1	CHAMPAIGN	74	50
#MODELNAME#	PLOT SCALE = 3/32" = 1' / m	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		CONTRACT NO. 70A26		
	PLOT DATE = 4/5/2014	DATE -	REVISED -		ILLINOIS FED. AID PROJECT				

REV. 4-10-14





### BILL OF MATERIALS

MARKET ST. & I-57

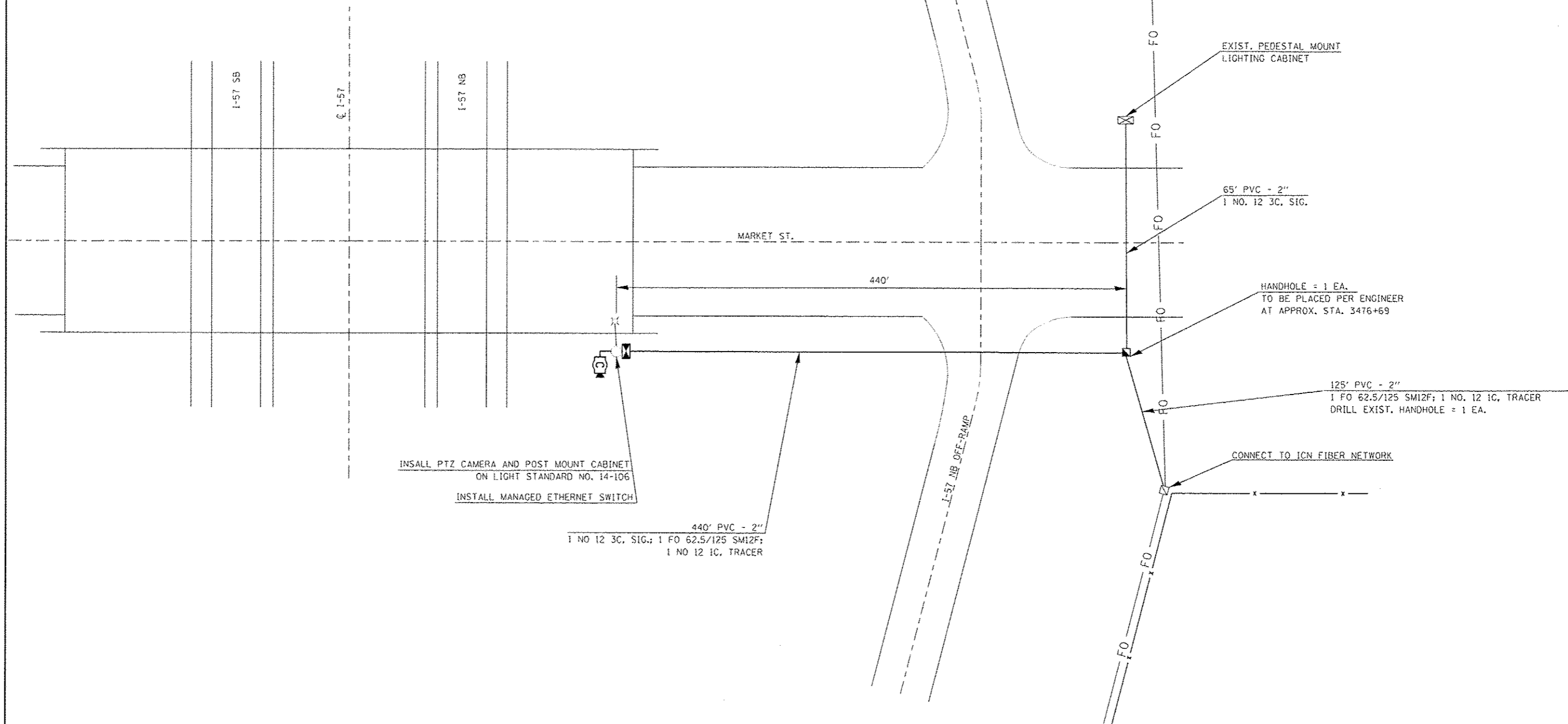
ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	630
HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	630
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 12 3C	FOOT	527
DRILL EXISTING HANDHOLE	EACH	1
CLOSED CIRCUIT TELEVISION CABINET	EACH	1
CLOSED CIRCUIT TELEVISION CAMERA	EACH	1
FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	587
ETHERNET SWITCH	EACH	1

## PTZ CAMERA INSTALLATION & FIBER OPTIC CONNECTION

MARKET ST. & I-57

(NOT TO SCALE)

### CAMERA & CONDUIT /CABLE LAYOUT



INSTALL PTZ CAMERA AND POST MOUNT CABINET ON LIGHT STANDARD NO. 14-106  
INSTALL MANAGED ETHERNET SWITCH

440' PVC - 2"  
1 NO 12 3C, SIG.; 1 FO 62.5/125 SM12F;  
1 NO 12 1C, TRACER

EXIST. PEDESTAL MOUNT LIGHTING CABINET

65' PVC - 2"  
1 NO. 12 3C, SIG.

HANDHOLE = 1 EA.  
TO BE PLACED PER ENGINEER AT APPROX. STA. 3476+69

125' PVC - 2"  
1 FO 62.5/125 SM12F; 1 NO. 12 1C, TRACER  
DRILL EXIST. HANDHOLE = 1 EA.

CONNECT TO ICN FIBER NETWORK

FILE NAME =	USER NAME = biggard	DESIGNED =	REVISED =
c:\p\work\p\dat\biggar-d\0348463\PTZ	camera plans.dgn	DRAWN =	REVISED =
	PLOT SCALE = 3937.8079 1/1 m	CHECKED =	REVISED =
MODEL NAME =	PLOT DATE = 4/9/2014	DATE =	REVISED =

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	FY2014 ITS-1	CHAMPAIGN	74	51
CONTRACT NO. 70A26			ILLINOIS FED. AID PROJECT	

REV. 4-10-14



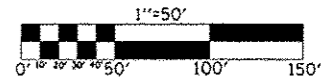
**BILL OF MATERIALS**

I-57 & I-74

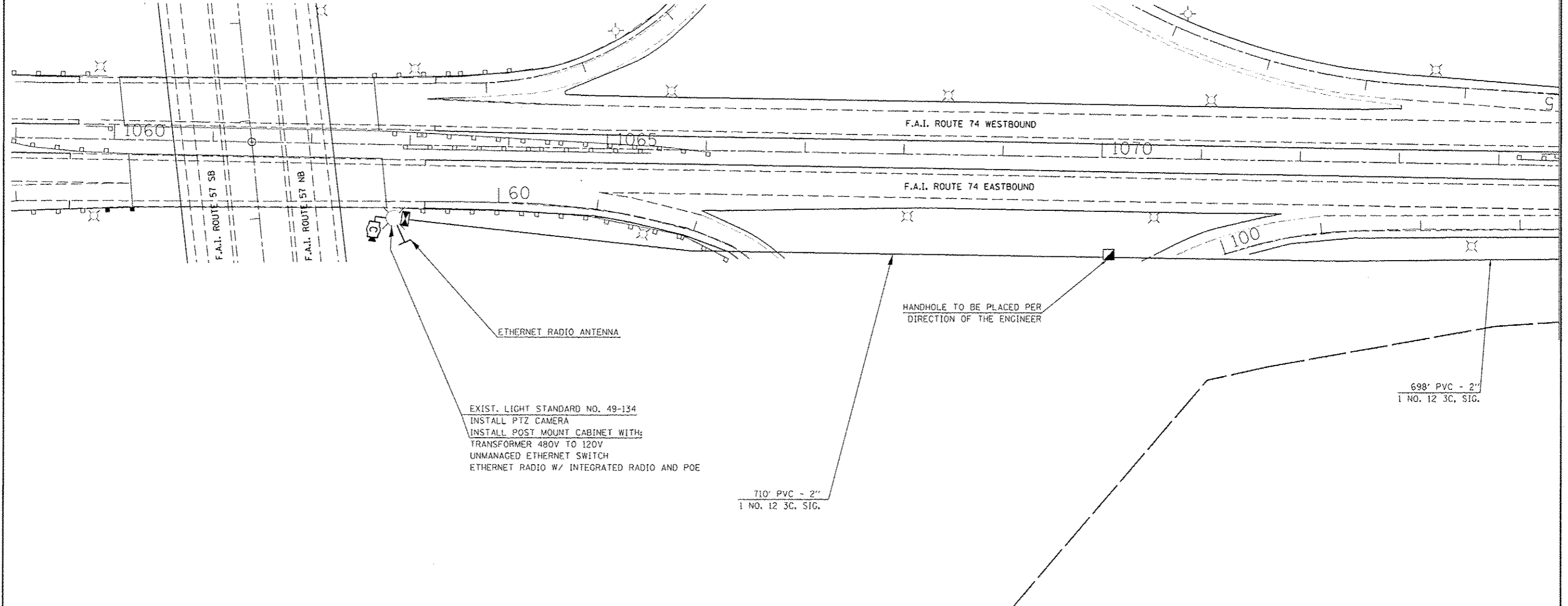
ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	2673
HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 12 3C	FOOT	2349
DRILL EXISTING HANDHOLE	EACH	1
CLOSED CIRCUIT TELEVISION CABINET	EACH	1
WIRELESS ETHERNET RADIO	EACH	1
ETHERNET SWITCH	EACH	1
TRANSFORMER 480-208/120V, 15KVA	EACH	1
CLOSED CIRCUIT TELEVISION CAMERA	EACH	1

**PTZ CAMERA INSTALLATION**

I-57  
&  
I-74



**CAMERA & CONDUIT /CABLE LAYOUT**



EXIST. LIGHT STANDARD NO. 49-134  
 INSTALL PTZ CAMERA  
 INSTALL POST MOUNT CABINET WITH:  
 TRANSFORMER 480V TO 120V  
 UNMANAGED ETHERNET SWITCH  
 ETHERNET RADIO W/ INTEGRATED RADIO AND POE

HANDHOLE TO BE PLACED PER  
 DIRECTION OF THE ENGINEER

710' PVC - 2"  
 1 NO. 12 3C, SIG.

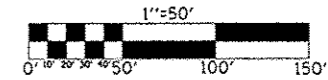
698' PVC - 2"  
 1 NO. 12 3C, SIG.

FILE NAME : c:\p\work\p\p\dot\biggsrd\0348463\PTZ	USER NAME : biggsrd camera_plans.dgn	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	F.A.P. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO. VAR. FY2014 ITS-1 CHAMPAIGN 74 53
*MODELNAME*	PLOT SCALE = 3/16" = 1' / 1" m PLOT DATE = 4/5/2014	CHECKED - DATE -	REVISED - REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
					ILLINOIS FED. AID PROJECT
					CONTRACT NO. 70A26

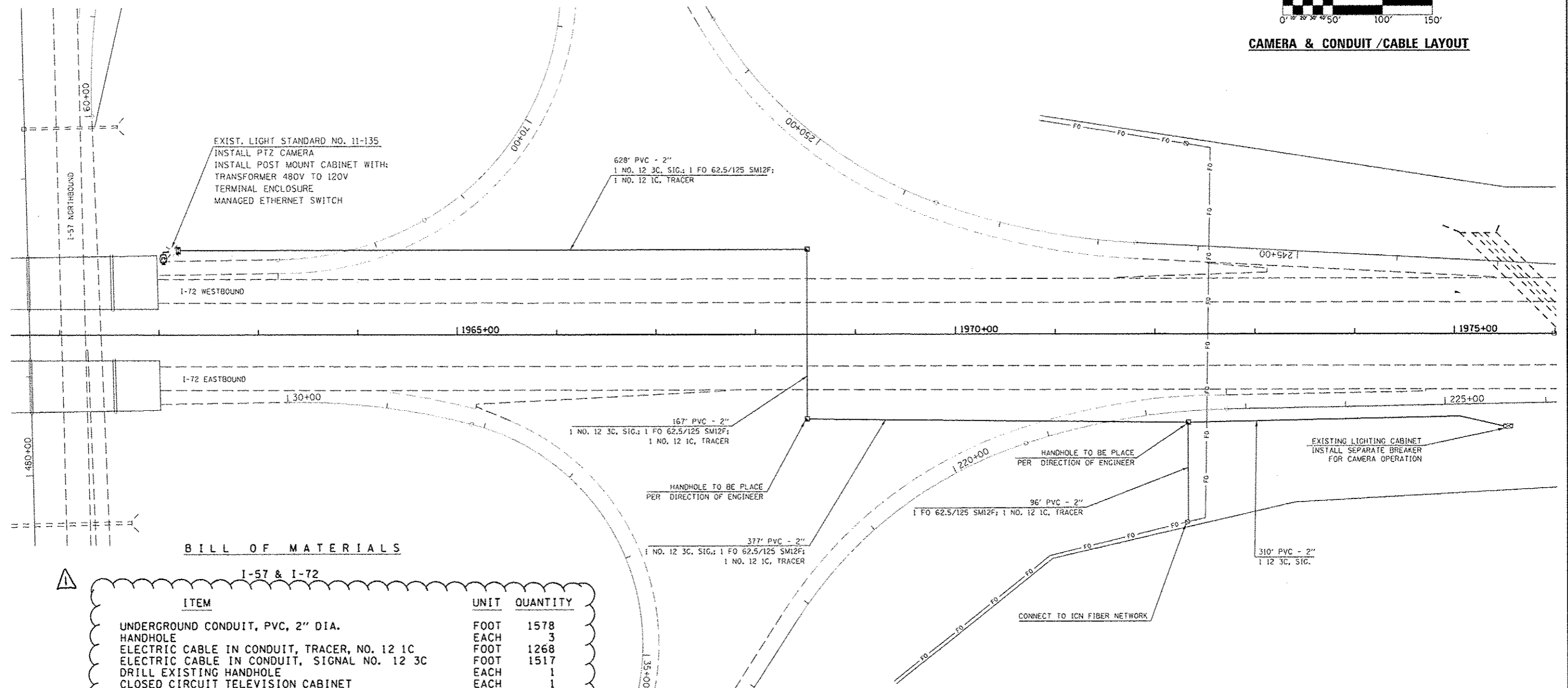
REV. 4-10-14

# PTZ CAMERA INSTALLATION & FIBER OPTIC CONNECTION

I-57  
&  
I-72



CAMERA & CONDUIT /CABLE LAYOUT



## BILL OF MATERIALS

I-57 & I-72

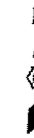
ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	1578
HANDHOLE	EACH	3
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	1268
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 12 3C	FOOT	1517
DRILL EXISTING HANDHOLE	EACH	1
CLOSED CIRCUIT TELEVISION CABINET	EACH	1
ETHERNET SWITCH	EACH	1
TRANSFORMER 480-208/120V, 15KVA	EACH	1
CLOSED CIRCUIT TELEVISION CAMERA	EACH	1
FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	1303

FILE NAME =	USER NAME = biggsd	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\pwwork\biggsd\10348463\PTZ	camara plans.dgn	DRAWN -	REVISED -		VAR.	FY2014 ITS-1	CHAMPAIGN	74	55
MODELNAME =	PLOT SCALE = 3/4" = 1' / m	CHECKED -	REVISED -		SCALE:				
	PLOT DATE = 4/5/2014	DATE -	REVISED -		SHEET OF SHEETS	STA.	TO STA.	[ILLINOIS] FED. AID PROJECT	

REV. 4-10-14

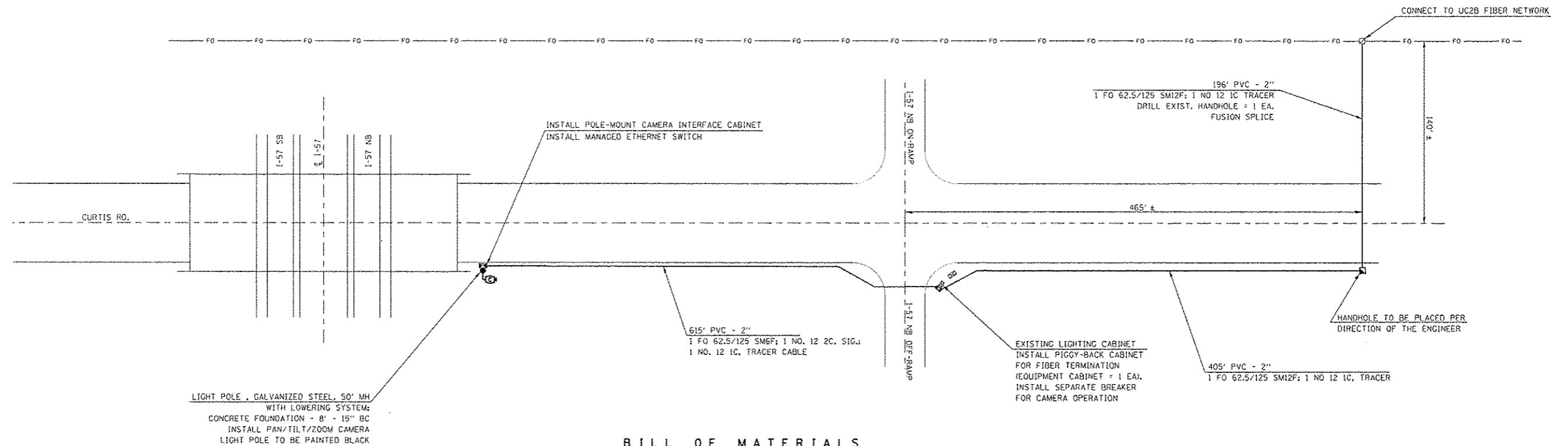
# PTZ CAMERA INSTALLATION & FIBER OPTIC CONNECTION

I-57 & CURTIS RD.



(NOT TO SCALE)

## CAMERA & CONDUIT /CABLE LAYOUT



### BILL OF MATERIALS

I-57 & CURTIS RD.



ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	1216
LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	8
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	1216
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 12 3C	FOOT	636
DRILL EXISTING HANDHOLE	EACH	1
CLOSED CIRCUIT TELEVISION CABINET	EACH	1
LIGHT POLE, STEEL 50 FT. WITH CAMERA LOWERING SYSTEM	EACH	1
EQUIPMENT CABINET	EACH	1
ETHERNET SWITCH	EACH	1
PAINTING LIGHT POLE UNIT	EACH	1
CLOSED CIRCUIT TELEVISION CAMERA	EACH	1
FIBER OPTIC CABLE 6 FIBERS, SINGLE MODE	FOOT	636
FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	620

FO ——— EXIST. UC2B FIBER OPTIC CABLE IN CONDUIT

FILE NAME =	USER NAME = biggard	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\lowidot\biggard\d8346463\PTZ	camera plans.dgn	DRAWN -	REVISED -		VAR.	FY2014 ITS-1	CHAMPAIGN	74	56
MODELNAME =	PLOT DATE = 4/5/2014	CHECKED -	REVISED -		SCALE:	SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT	
		DATE -	REVISED -					CONTRACT NO. 70A26	

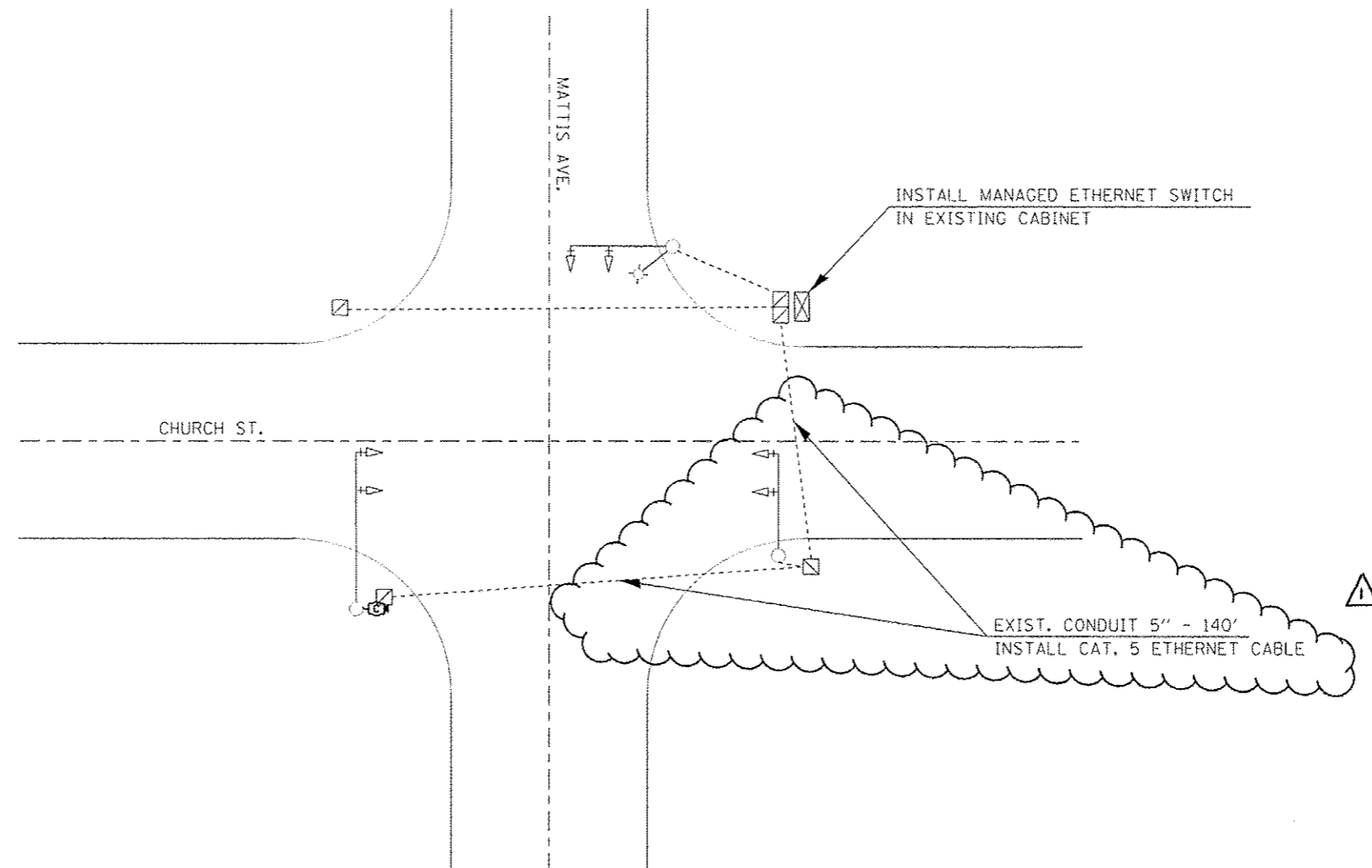
REV. 4-10-14

**PTZ CAMERA INSTALLATION**

**MATTIS AVE.  
&  
CHURCH ST.**

(NOT TO SCALE)

**CAMERA & CONDUIT /CABLE LAYOUT**



**BILL OF MATERIALS**

MATTIS AVE. & CHURCH RD.

ITEM	UNIT	QUANTITY
ETHERNET SWITCH	EACH	1
CLOSED CIRCUIT TELEVISION CAMERA	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1

FILE NAME =	USER NAME = biggard	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\p\work\p\widot\biggard\td8348463\PTZ	camera plans.dgn	DRAWN -	REVISED -								VAR.	FY2014 ITS-1	CHAMPAIGN	74	57
MODELNAME*	PLOT SCALE = 1/8" = 1' / 2" m	CHECKED -	REVISED -								CONTRACT NO. 70A26				
	PLOT DATE = 4/5/2014	DATE -	REVISED -								[ILLINOIS] FED. AID PROJECT				

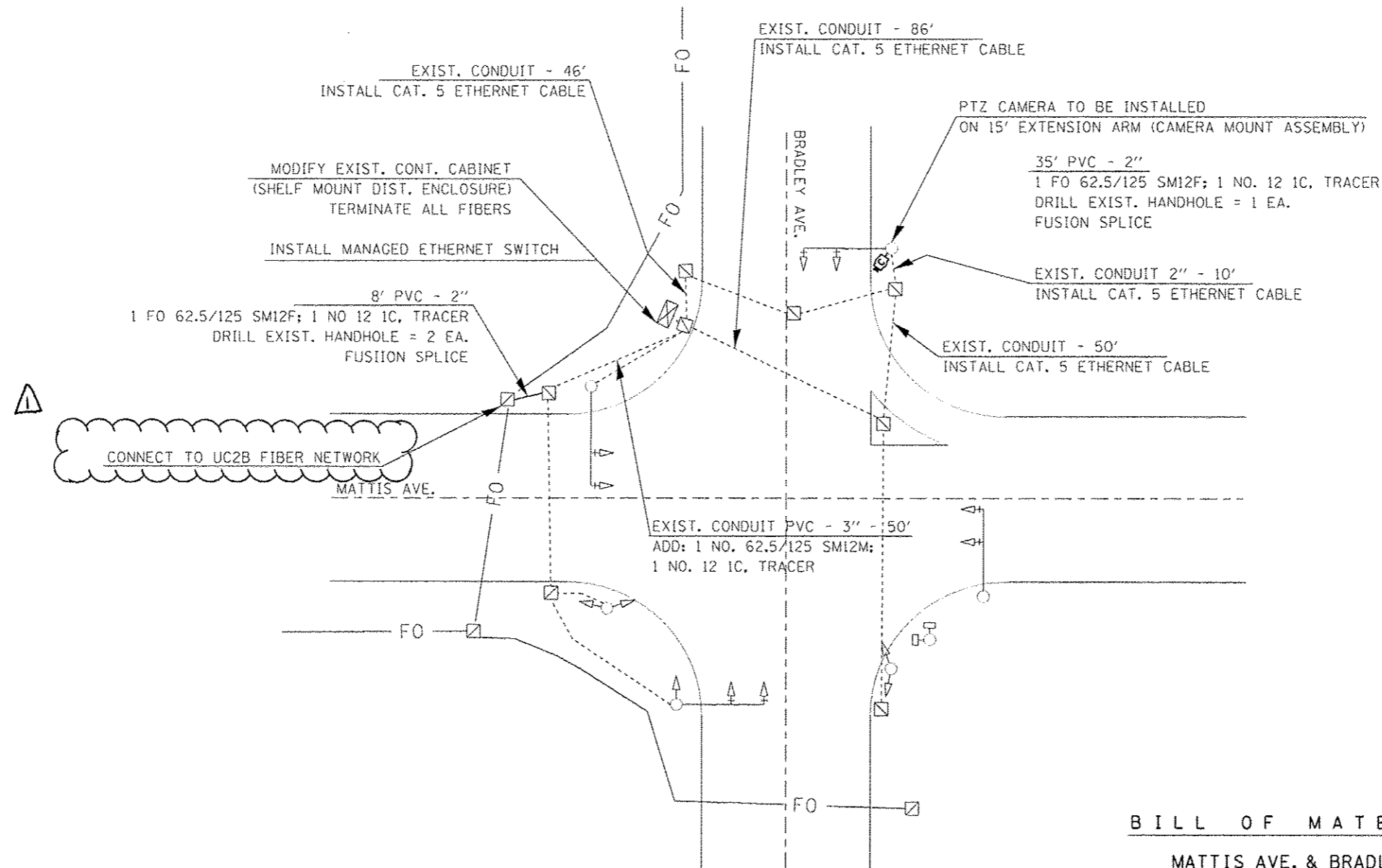
△ REV. 4-10-14

**PTZ CAMERA INSTALLATION & FIBER OPTIC CONNECTION**

**MATTIS AVE.  
&  
BRADLEY AVE.**

(NOT TO SCALE)

**CAMERA & CONDUIT /CABLE LAYOUT**



**BILL OF MATERIALS**

MATTIS AVE. & BRADLEY AVE.

ITEM	UNIT	QUANTITY
FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	88
CAMERA MOUNTING ASSEMBLY	EACH	1
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	8
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	58
DRILL EXISTING HANDHOLE	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
ETHERNET SWITCH	EACH	1
CLOSED CIRCUIT TELEVISION CAMERA	EACH	1

FO ———— EXIST. UC2B FIBER OPTIC CABLE IN CONDUIT

FILE NAME =	USER NAME = biggard	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pvc\work\pvc\biggard\0348463\PTZ	camera plans.dgn	DRAWN -	REVISED -		VAR.	FY2014 ITS-1	CHAMPAIGN	74	58
#MODELNAME#	PLOT SCALE = 1/8" = 1' / m	CHECKED -	REVISED -		SCALE:				CONTRACT NO. 70A26
	PLOT DATE = 4/5/2014	DATE -	REVISED -		SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT		

REV. 4-10-14

**PTZ CAMERA INSTALLATION & FIBER OPTIC CONNECTION**

**MATTIS AVE. & BLOOMINGTON RD.**

(NOT TO SCALE)

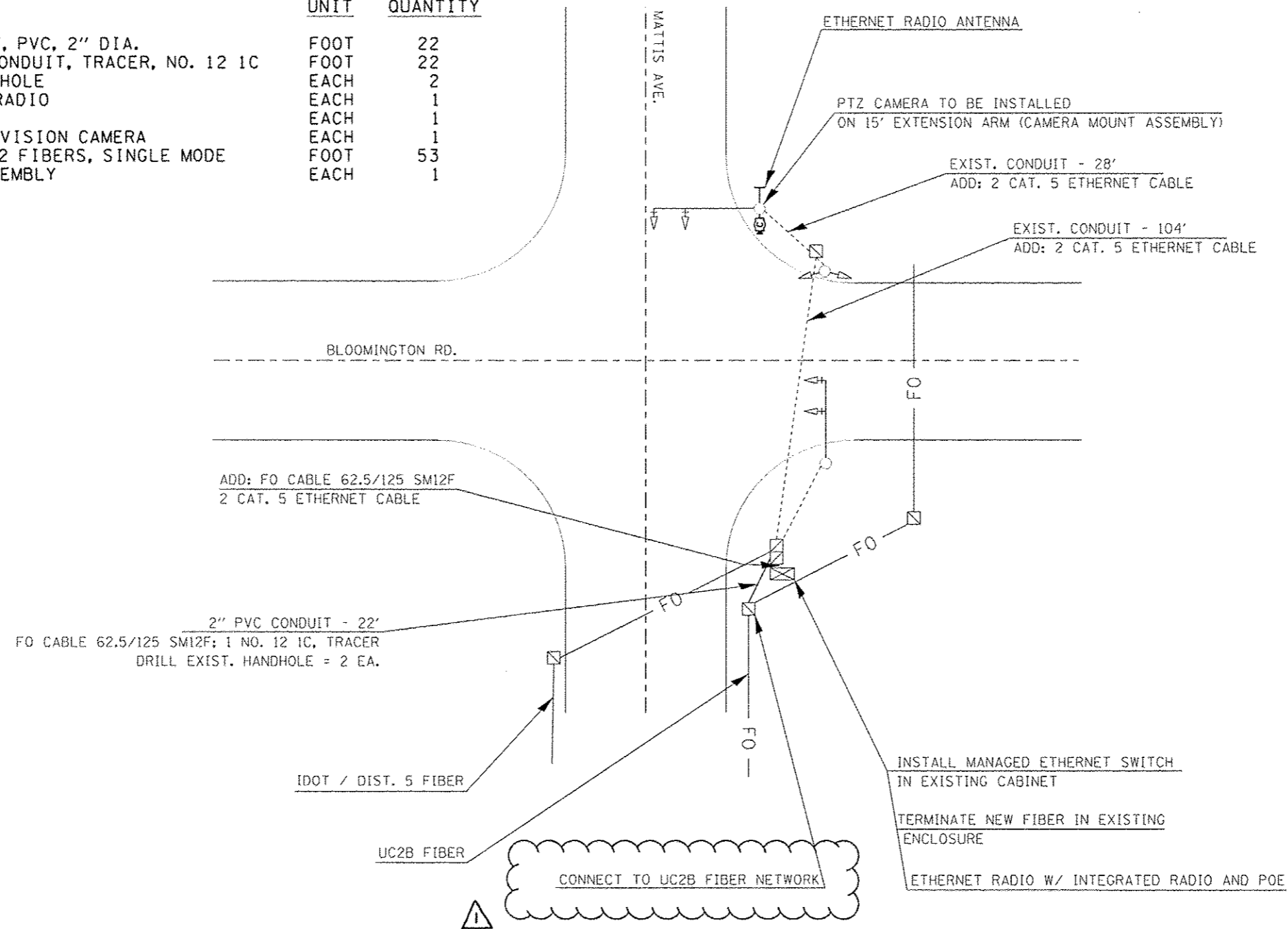
**CAMERA & CONDUIT /CABLE LAYOUT**



**BILL OF MATERIALS**

MATTIS AVE. & BLOOMINGTON RD.

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	22
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	22
DRILL EXISTING HANDHOLE	EACH	2
WIRELESS ETHERNET RADIO	EACH	1
ETHERNET SWITCH	EACH	1
CLOSED CIRCUIT TELEVISION CAMERA	EACH	1
FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	53
CAMERA MOUNTING ASSEMBLY	EACH	1



FILE NAME : c:\pwork\awid\biggand\0340463\PTZ	USER NAME : biggand	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*MODELNAME*	camera plans.dgn	DRAWN -	REVISED -		VAR.	FY2014 ITS-1	CHAMPAIGN	74	59
	PLOT SCALE = 1/8" = 1' / m	CHECKED -	REVISED -		SCALE:				CONTRACT NO. 70A26
	PLOT DATE = 4/5/2014	DATE -	REVISED -		SHEET OF SHEETS	STA.	TO STA.	[ILLINOIS] FED. AID PROJECT	

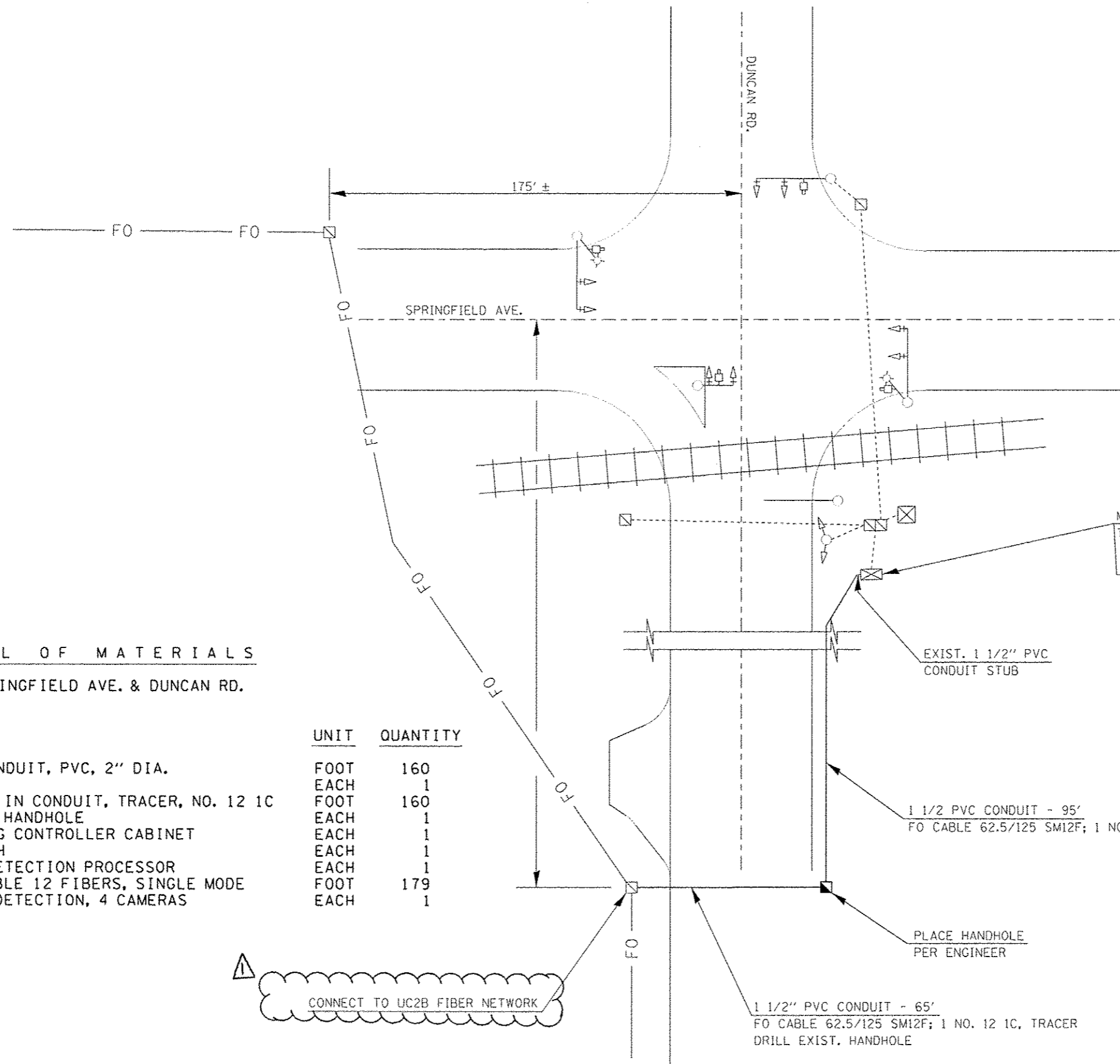
REV. 4-10-14

**FIBER OPTIC CONNECTION**

**SPRINGFIELD AVE.  
&  
DUNCAN RD.**

(NOT TO SCALE)

**CAMERA & CONDUIT /CABLE LAYOUT**



**BILL OF MATERIALS**

SPRINGFIELD AVE. & DUNCAN RD.

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	160
HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	160
DRILL EXISTING HANDHOLE	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
ETHERNET SWITCH	EACH	1
VIDEO SYSTEM DETECTION PROCESSOR	EACH	1
FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	179
VIDEO VEHICLE DETECTION, 4 CAMERAS	EACH	1

MODIFY EXIST. CONT. CABINET = 1 EA.  
TERMINATE NEW FIBER  
INSTALL MANAGED ETHERNET SWITCH

EXIST. 1 1/2" PVC  
CONDUIT STUB

1 1/2" PVC CONDUIT - 95'  
FO CABLE 62.5/125 SM12F; 1 NO. 12 1C, TRACER

PLACE HANDHOLE  
PER ENGINEER

1 1/2" PVC CONDUIT - 65'  
FO CABLE 62.5/125 SM12F; 1 NO. 12 1C, TRACER  
DRILL EXIST. HANDHOLE

**NOTE**

UPGRADE VIDEO DETECTION  
ETHERNET PROCESSOR, 4 NEW CAMERAS

EXIST. UC2B FIBER OPTIC  
CABLE IN CONDUIT

FILE NAME =	USER NAME = biggard	DESIGNED =	REVISED =
c:\pwork\spicdot\biggard\0348463\PTZ	ame-e plans.dgn	DRAWN =	REVISED =
#MODELNAME#	PLOT SCALE = 1574.8931' / m	CHECKED =	REVISED =
	PLOT DATE = 4/5/2014	DATE =	REVISED =

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A.P. RTE. VAR.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
							FY2014 ITS-1	CHAMPAIGN	74	60
ILLINOIS FED. AID PROJECT										

REV. 4-10-14

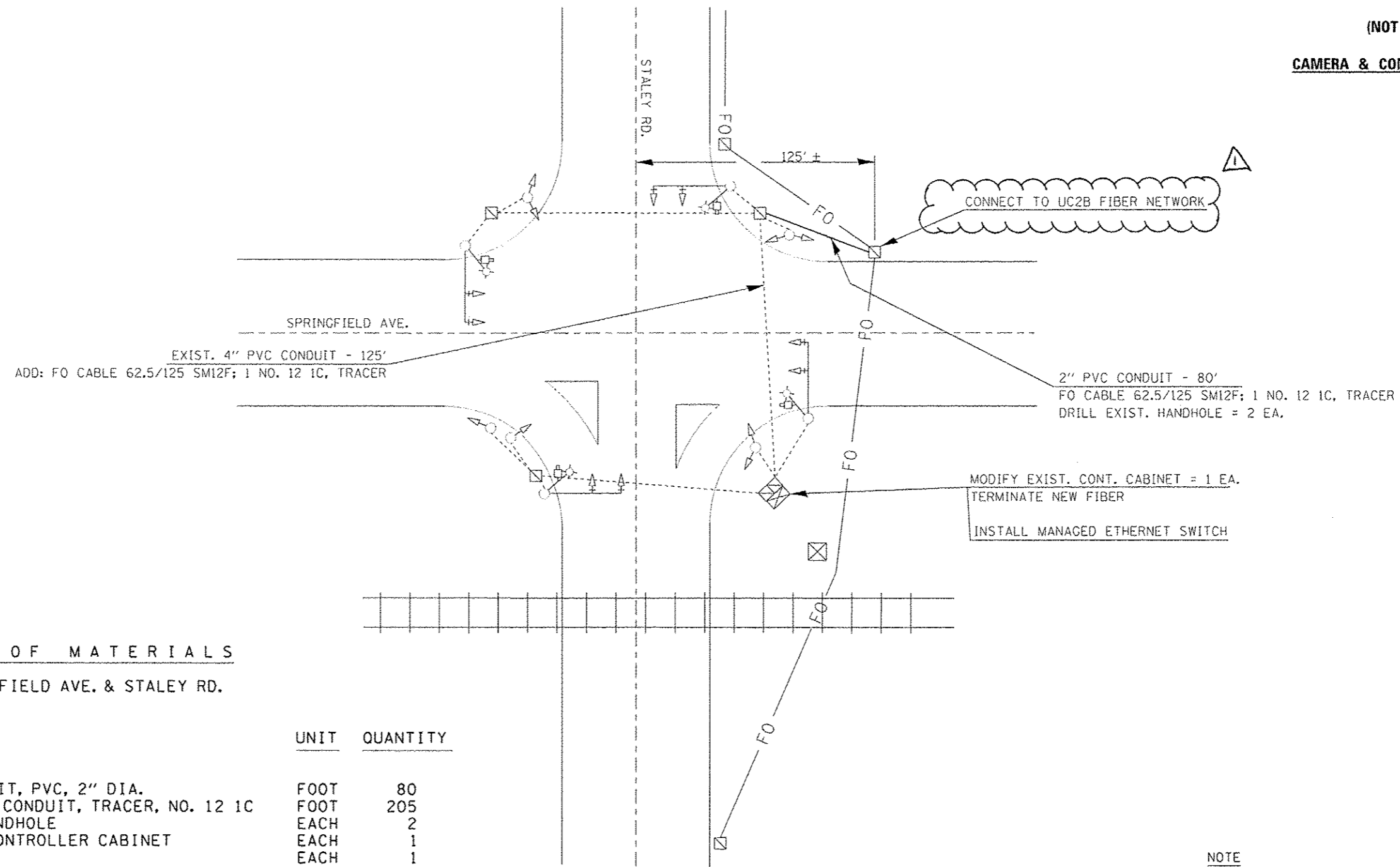


# FIBER OPTIC CONNECTION

SPRINGFIELD AVE.  
&  
STALEY RD.

(NOT TO SCALE)

CAMERA & CONDUIT /CABLE LAYOUT



## BILL OF MATERIALS

SPRINGFIELD AVE. & STALEY RD.

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	80
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	205
DRILL EXISTING HANDHOLE	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
ETHERNET SWITCH	EACH	1
VIDEO SYSTEM DETECTION PROCESSOR	EACH	1
FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	241
VIDEO VEHICLE DETECTION, 4 CAMERAS	EACH	1

**NOTE**  
UPGRADE VIDEO DETECTION  
ETHERNET PROCESSOR, 4 NEW CAMERAS

———— FO ———— EXIST. UC2B FIBER OPTIC  
CABLE IN CONDUIT

FILE NAME =	USER NAME = biggerd	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A.P.	SECTION	COUNTY	TOTAL	SHEET
c:\pw\work\pwsdet\biggerd\vd8348463\PTZ	camera_plans.dgn	DRAWN -	REVISED -								VAR.	FY2014 ITS-1	CHAMPAIGN	74	61
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	PLOT DATE = 4/5/2014	DATE -	REVISED -								ILLINOIS FED. AID PROJECT				

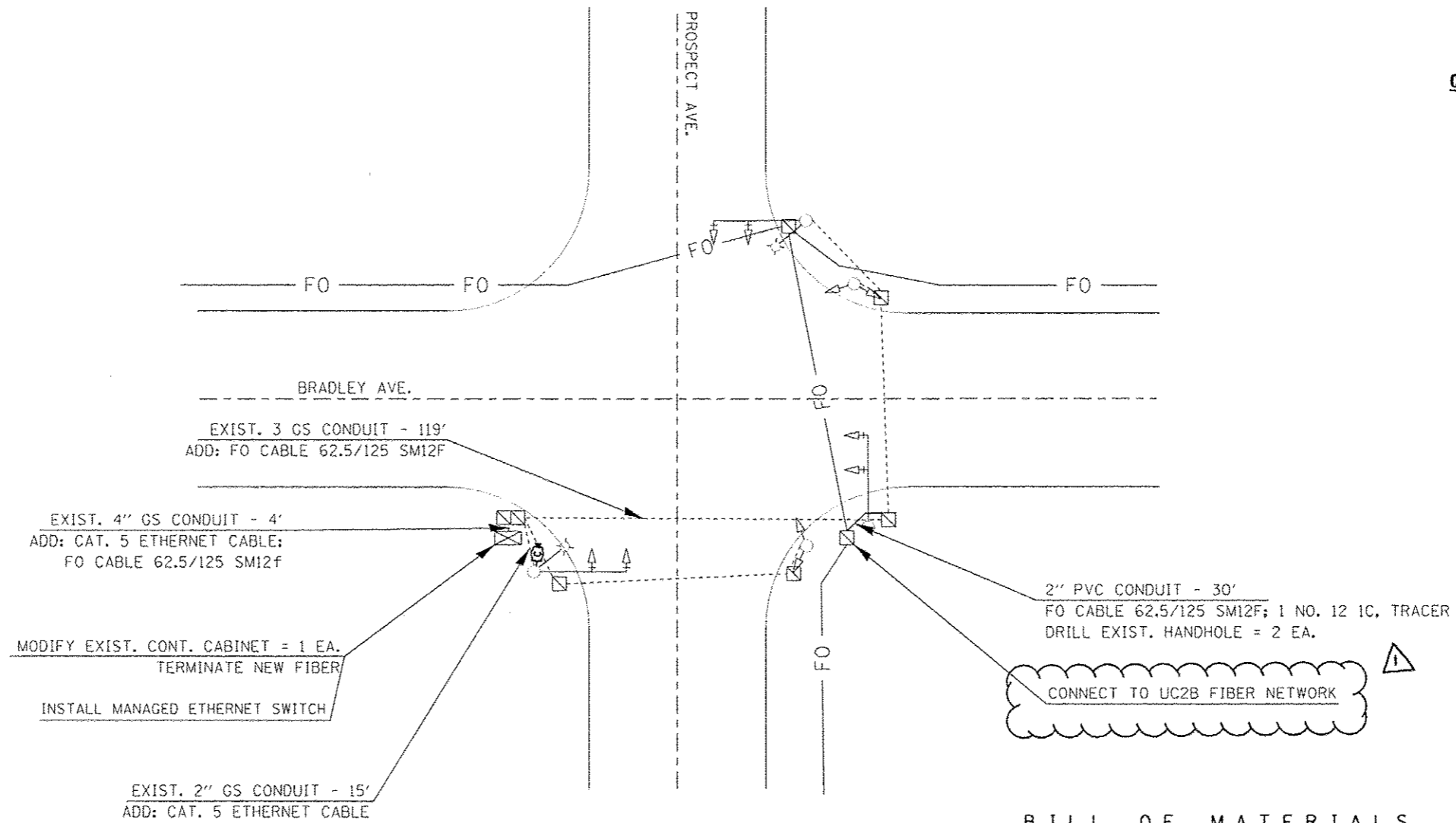
△ REV. 4-10-14

**PTZ CAMERA INSTALLATION**

**PROSPECT AVE.  
&  
BRADLEY AVE.**

(NOT TO SCALE)

**CAMERA & CONDUIT /CABLE LAYOUT**



**BILL OF MATERIALS**

**PROSPECT AVE. & BRADLEY AVE.**

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	30
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	149
DRILL EXISTING HANDHOLE	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
ETHERNET SWITCH	EACH	1
CLOSED CIRCUIT TELEVISION CAMERA	EACH	1
FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	185

FO ———— EXIST. UC2B FIBER OPTIC  
CABLE IN CONDUIT

FILE NAME *	USER NAME * biggard	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A.P. / RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pwwork\pwwork\biggard\10348463\PTZ	camera plans.dgn	DRAWN -	REVISED -								VAR.	FY2014 ITS-1	CHAMPAIGN	74	62
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	PLOT DATE * 4/5/2014	DATE -	REVISED -								ILLINOIS FED. AID PROJECT				

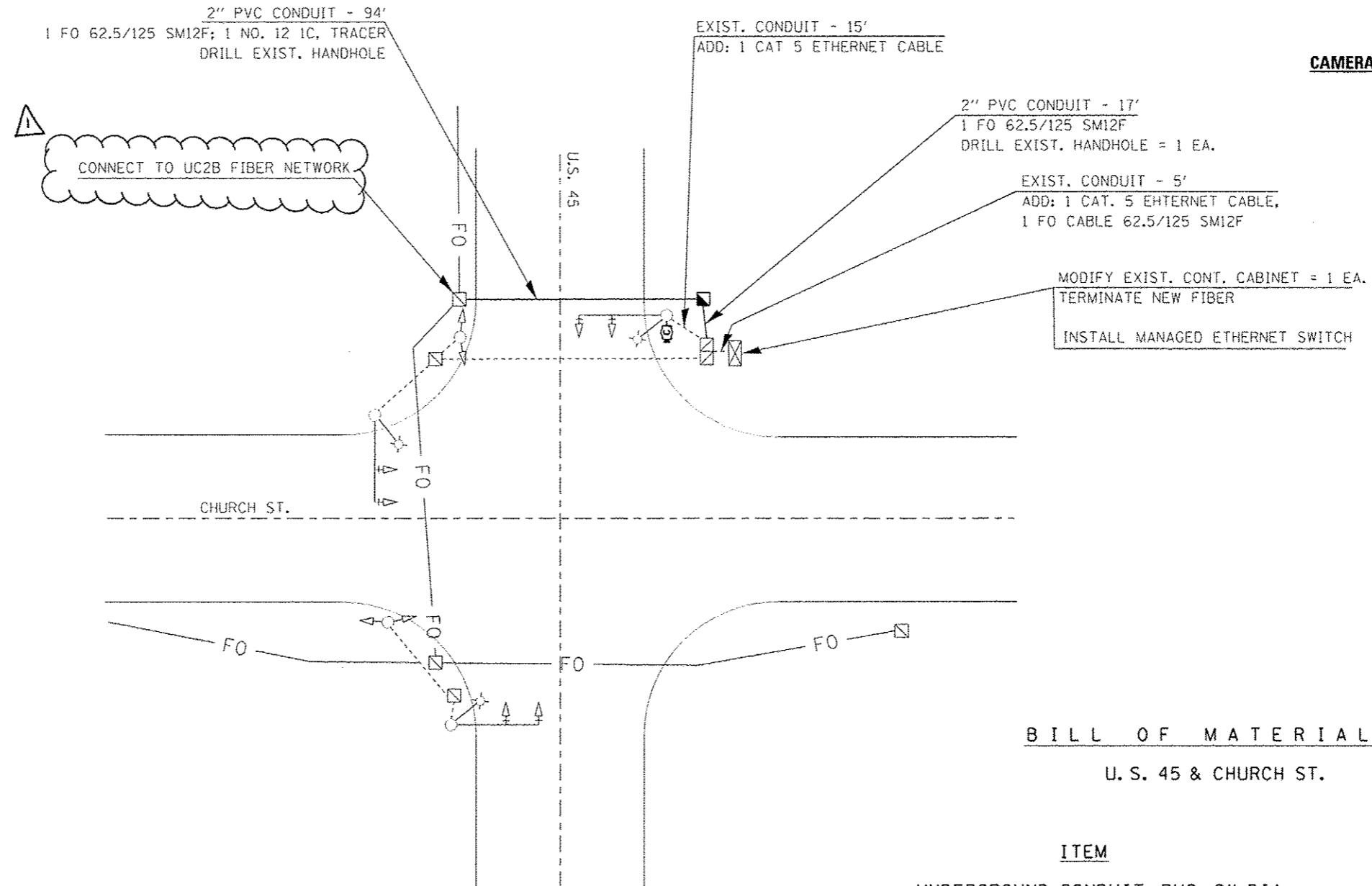
REV. 4-10-14

**PTZ CAMERA INSTALLATION & FIBER OPTIC CONNECTION**

**U.S. 45 (DUNLAP AVE.) & CHURCH ST.**

(NOT TO SCALE)

**CAMERA & CONDUIT /CABLE LAYOUT**



**BILL OF MATERIALS**

U. S. 45 & CHURCH ST.

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	111
HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	111
DRILL EXISTING HANDHOLE	EACH	2
MODIFY EXISTING CONTROLLER CABINET	EACH	1
ETHERNET SWITCH	EACH	1
CLOSED CIRCUIT TELEVISION CAMERA	EACH	1
FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	151

FO ———— EXIST. UC2B FIBER OPTIC CABLE IN CONDUIT

FILE NAME =	USER NAME = biggard	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT DATE = 4/5/2014	DATE -	REVISED -		CONTRACT NO. 70A26					

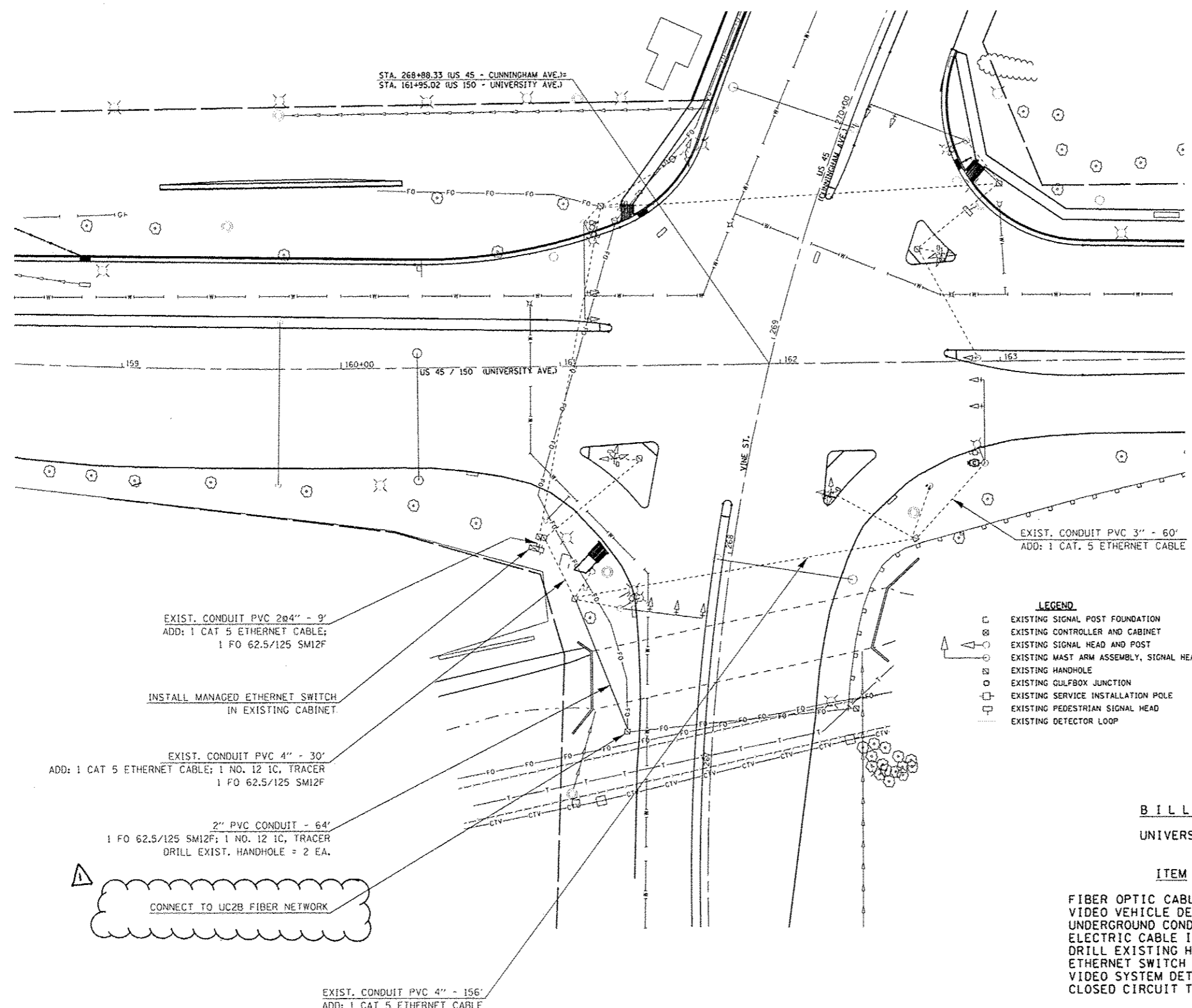
REV. 4-10-14

**PTZ CAMERA INSTALLATION &  
FIBER OPTIC CONNECTION**

**UNIVERSITY AVE.  
&  
CUNNINGHAM AVE.**

(NOT TO SCALE)

**CAMERA & CONDUIT /CABLE LAYOUT**



- LEGEND**
- ⊠ EXISTING SIGNAL POST FOUNDATION
  - ⊞ EXISTING CONTROLLER AND CABINET
  - ⊕ EXISTING SIGNAL HEAD AND POST
  - ⊡ EXISTING MAST ARM ASSEMBLY, SIGNAL HEAD
  - ⊞ EXISTING HANDHOLE
  - ⊞ EXISTING GULFBOX JUNCTION
  - ⊞ EXISTING SERVICE INSTALLATION POLE
  - ⊞ EXISTING PEDESTRIAN SIGNAL HEAD
  - ⊞ EXISTING DETECTOR LOOP

**BILL OF MATERIALS**

UNIVERSITY AVE. & CUNNINGHMA AVE.

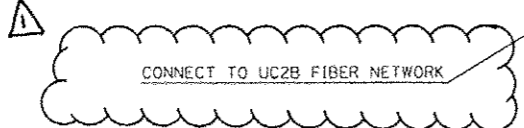
ITEM	UNIT	QUANTITY
FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	135
VIDEO VEHICLE DETECTION, 4 CAMERAS	EACH	1
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	64
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	94
DRILL EXISTING HANDHOLE	EACH	2
ETHERNET SWITCH	EACH	1
VIDEO SYSTEM DETECTION PROCESSOR	EACH	1
CLOSED CIRCUIT TELEVISION CAMERA	EACH	1

EXIST. CONDUIT PVC 2 1/4" - 9'  
ADD: 1 CAT 5 ETHERNET CABLE;  
1 FO 62.5/125 SM12F

INSTALL MANAGED ETHERNET SWITCH  
IN EXISTING CABINET.

EXIST. CONDUIT PVC 4" - 30'  
ADD: 1 CAT 5 ETHERNET CABLE; 1 NO. 12 1C, TRACER  
1 FO 62.5/125 SM12F

2" PVC CONDUIT - 64'  
1 FO 62.5/125 SM12F; 1 NO. 12 1C, TRACER  
DRILL EXIST. HANDHOLE = 2 EA.



EXIST. CONDUIT PVC 4" - 156'  
ADD: 1 CAT 5 ETHERNET CABLE

FO EXIST. UC2B FIBER OPTIC  
CABLE IN CONDUIT

FILE NAME =	USER NAME = biggsrd	DESIGNED -	REVISED -
c:\pwork\p1dot1\biggsrd\0340453\PTZ	camera plans.dgn	DRAWN -	REVISED -
	PLOT SCALE = 3/32"=1'-0"	CHECKED -	REVISED -
*MODELNAME*	PLOT DATE = 4/5/2014	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	FY2014 ITS-1	CHAMPAIGN	74	68
CONTRACT NO. 70A26			ILLINOIS FED. AID PROJECT	

REV. 4-10-14

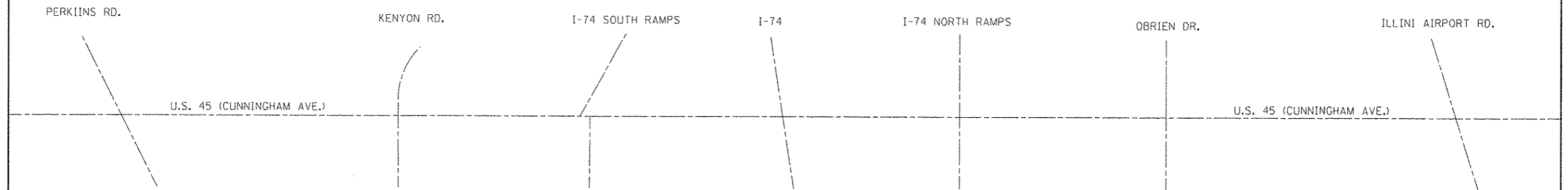


**CONTROLLER CABINET MODIFICATIONS**

**U.S. 45 (CUNNINGHAM AVE.)  
PERKINS RD. TO ILLINI AIRPORT DR.**

(NOT TO SCALE)

**BILL OF MATERIALS (PER LOCATION)**



**BILL OF MATERIALS**

<u>LOCATION</u>	<u>ITEM</u>	<u>UNIT</u>	<u>QUANTITY</u>
PERKINS AVE.	MODIFY EXISTING CONTROLLER CABINET	EACH	1
KENYON RD.	MODIFY EXISTING CONTROLLER CABINET	EACH	1
OBRIEN DR.	MODIFY EXISTING CONTROLLER CABINET	EACH	1
	VIDEO SYSTEM DETECTION PROCESSOR	EACH	1
	VIDEO VEHICLE DETECTION, 4 CAMERAS	EACH	1
	ETHERNET SWITCH (MANAGED)	EACH	1
ILLINI AIRPORT RD.	ETHERNET SWITCH (MANAGED)	EACH	1

1  
 MODIFY EXISTING CONTROLLER CABINET  
 VIDEO SYSTEM DETECTION PROCESSOR  
 VIDEO VEHICLE DETECTION, 4 CAMERAS  
 ETHERNET SWITCH (MANAGED)

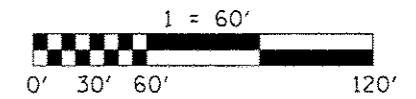
FILE NAME =	USER NAME = biggs	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pwork\pwidth\biggs-d\2340463\PTZ	camera plans.dgn	DRAWN -	REVISED -		VAR.	FY2014 ITS-1	CHAMPAIGN	74	70
MODELNAME\$	PLOT SCALE = 1574.8931' / m	CHECKED -	REVISED -		CONTRACT NO. 70A26				
	PLOT DATE = 4/5/2014	DATE -	REVISED -		ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

REV. 4-10-14

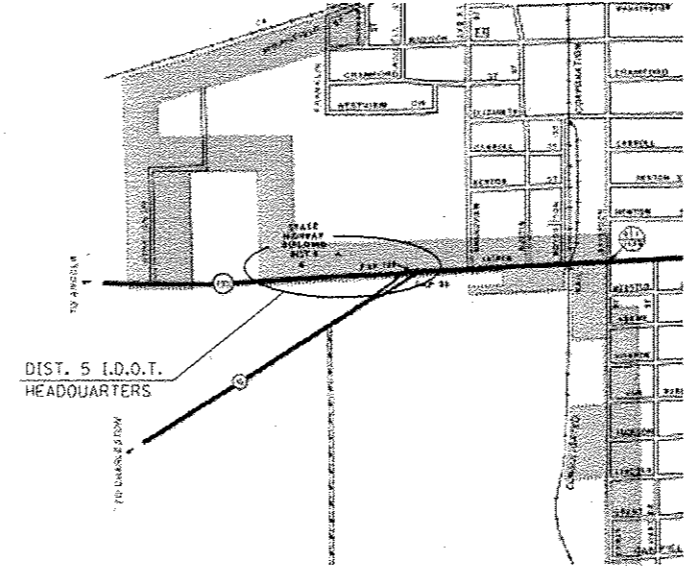
# CONDUIT & FIBER OPTIC INSTALLATION

DISTRICT 5 I.D.O.T. HEADQUARTERS  
PARIS, IL



CAMERA & CONDUIT /CABLE LAYOUT

## LOCATION MAP



CITY OF PARIS

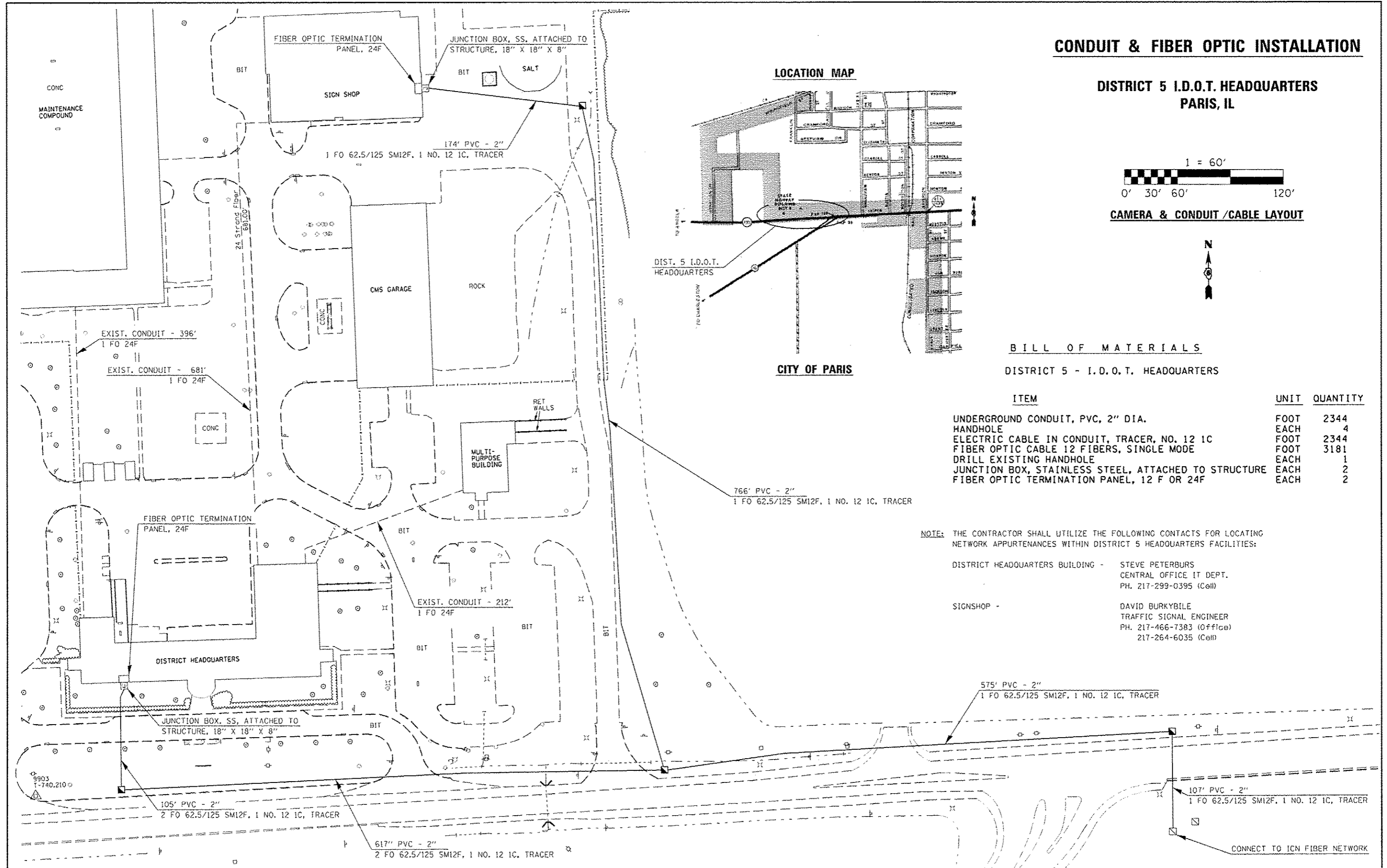
## BILL OF MATERIALS

DISTRICT 5 - I.D.O.T. HEADQUARTERS

ITEM	UNIT	QUANTITY
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	2344
HANDHOLE	EACH	4
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C	FOOT	2344
FIBER OPTIC CABLE 12 FIBERS, SINGLE MODE	FOOT	3181
DRILL EXISTING HANDHOLE	EACH	1
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE	EACH	2
FIBER OPTIC TERMINATION PANEL, 12 F OR 24F	EACH	2

**NOTE:** THE CONTRACTOR SHALL UTILIZE THE FOLLOWING CONTACTS FOR LOCATING NETWORK APPURTENANCES WITHIN DISTRICT 5 HEADQUARTERS FACILITIES:

- DISTRICT HEADQUARTERS BUILDING - STEVE PETERBURS  
CENTRAL OFFICE IT DEPT.  
PH. 217-299-0395 (Cell)
- SIGNSHOP - DAVID BURKYBILE  
TRAFFIC SIGNAL ENGINEER  
PH. 217-466-7383 (Office)  
217-264-6035 (Cell)



FILE NAME : c:\p\work\p\widot\biggard\08348463\PTZ	USER NAME : biggard camera_plans.dgn	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	F.A.P. R.T.E. VAR.	SECTION FY2014 ITS-1	COUNTY CHAMPAIGN	TOTAL SHEETS 74	SHEET NO. 70A	
SCALE : 3937.0079 * / m	PLOT DATE : 4/7/2014	CHECKED - DATE -	REVISED - REVISED -		SCALE:	SHEET OF SHEETS	STA.	TO STA.	CONTRACT NO. 70A26	ILLINOIS FED. AID PROJECT

△ SHEET ADDED 4-10-14



### ETHERNET SWITCHES

#### Managed Switches

Location		# SM SFP's	# MM SFP's
Neil & Kenyon	1	4	0
Prospect & I-74 S. Ramp	1	2	0
Lincoln & I-74 N. ramp	1	3	0
US 150 & Highcross	1	2	0
IL 130 & Windsor	1	2	0
I-74 & University	1	2	0
University & Lincoln	1	2	0
Springfield & Wright	1	2	0
Springfield & 4th	1	4	0
Springfield & Neil	1	3	0
Neil & Kirby	1	2	0
Market & Eisner (Storage)	1	3	0
I-57 & market	1	2	0
Leverett Storage	1	2	0
I-57 & I-72	1	2	0
I-57 & Curtis	1	2	0
Mattis & Church	1	0	2
Mattis & Bradley	1	4	1
Mattis & Bloomington	1	3	0
Springfield & Duncan	1	2	0
Springfield & Staley	1	2	0
Prospect & Bradley	1	4	0
Prospect & University	1	2	0
Neil & Green	1	2	0
Neil & Windsor	1	2	0
US 45 & Curtis	1	2	0
US 45 & Church	1	4	0
Cunningham & University	1	4	0
Cunningham & I-74 S. Ramp	1	2	1
Cunningham & O'Brien	1	0	2
Cunningham & Airport	1	0	1
I-57 NB Message Board	1	2	0
I-57 SB Message Board	1	2	0
I-72 EB Message Board	1	2	0
I-74 EB Message Board	1	2	0
I-74 WB Message Board	1	2	0
<b>Total Managed Switches =</b>	<b>36 Each</b>	<b>82</b>	<b>7</b>

#### Unmanaged Switched - SM

I-74 & Neil PTZ	1
Market & Eisner (Sign Shop)	1
I-74 & I-57 PTZ	1
I-74 & Cunningham PTZ	1
<b>Total Unmanaged Switches =</b>	<b>4 Each</b>

ETHERNET SWITCH = 40 Each

#### Cellular Modems

I-57 NB Message Board	1
I-57 SB Message Board	1
I-72 EB Message Board	1
I-74 EB Message Board	1
I-74 WB Message Board	1

Total = 5 Each

### CLOSED CIRCUIT PTZ DOME CAMERAS

Location	Each
I-74 & Neil	1
I-74 & Prospect	1
I-74 & Lincoln	1
US 150 & High Cross	1
I-74 & University	1
University & Lincoln	1
Springfield & Wright	1
Springfield & Neil	1
Neil & Kirby	1
I-57 & Market	1
I-57 & I-74	1
I-57 & I-72	1
I-57 & Curtis	1
Mattis & Church	1
Mattis & Bradley	1
Mattis & Bloomington	1
Prospect & Bradley	1
Prospect & University	1
Neil & Green	1
Neil & Windsor	1
US 45 & Curtis	1
US 45 & Church	1
University & Cunningham	1
I-74 & Cunningham	1
I-57 NB Message Board	1
I-57 SB Message Board	1
I-72 EB Message Board	1
I-74 EB Message Board	1
I-74 WB Message Board	1
<b>Total =</b>	<b>29 EACH</b>

#### Replace Iteris Video Detection

Springfield & Staley	1
Springfield & Duncan	1
Springfield & Wright	1
University & Cunningham	1
Cunningham & O'Brien	1

Total locations = 5

#### Splice Locations into UC2B Network

I-74 & Lincoln S. Ramp	1
US 150 & High Cross	1
IL 130 & Windsor	1
I-74 & University	1
Springfield & 3rd	1
Market St. & Eisner	1
I-57 & Curtis	1
Mattis & Bradley	1
Mattis & Bloomington	1
Springfield & Duncan	1
Springfield & Staley	1
Prospect & Bradley	1
US 45 & Church	1
University & Cunningham	1

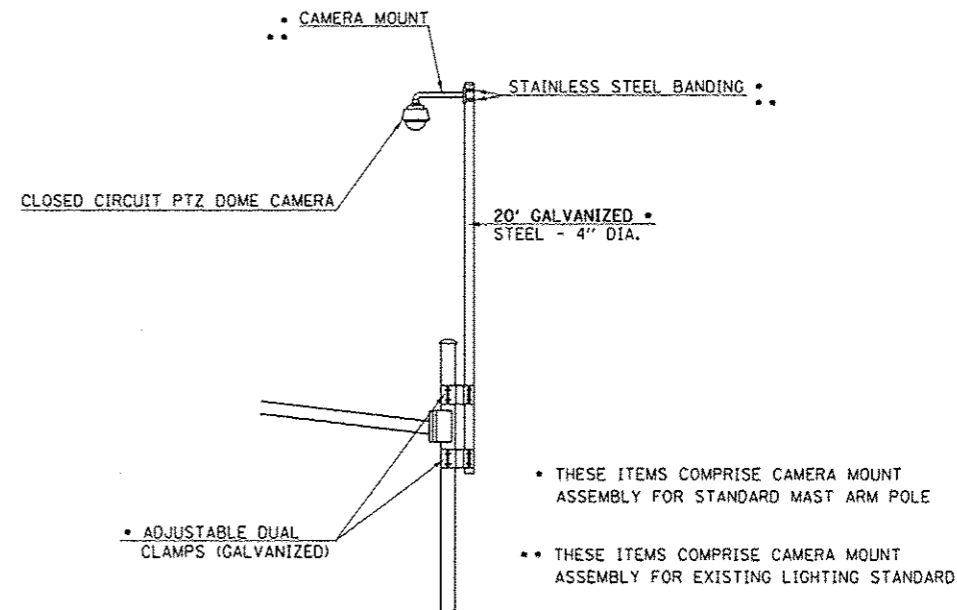
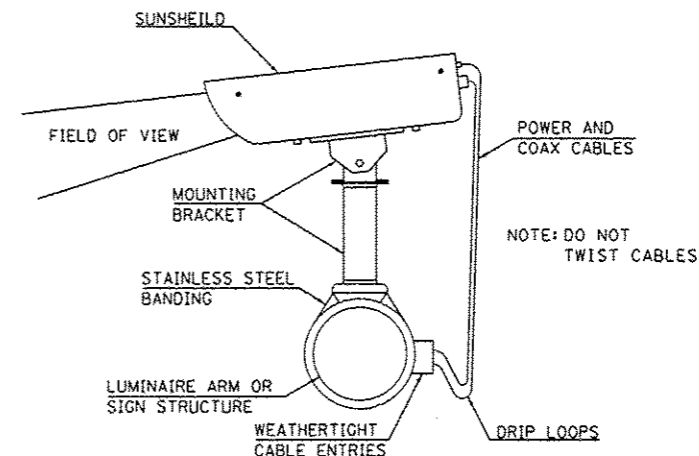
Total Locations = 14

#### Splice Locations into ICN Network

I-57 & Market	1
I-57 & Leverett Storage	1
I-57 & I-72	1
I-57 NB Message Board	1
I-57 SB Message Board	1
I-72 EB Message Board	1
I-74 EB Message Board	1

Total Locations = 7

### VIDEO CAMERA MOUNTING DETAIL



CAMERA MOUNTING ASSEMBLY DETAIL  
(FOR STANDARD MAST ARM POLE MOUNT, LIGHTING STANDARD & DMS STRUCTURE)

FILE NAME: c:\pwork\pvid\biggard\034863\PTZ	USER NAME: biggard	DESIGNED: -	REVISED: -
camera_plans.dgn		DRAWN: -	REVISED: -
PLOT SCALE: 1/8" = 1'-0"		CHECKED: -	REVISED: -
PLOT DATE: 4/9/2014		DATE: -	REVISED: -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	F.A.P. RTE. VAR.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
								FY2014 ITS-1	CHAMPAIGN	74	71
										CONTRACT NO. 70A26	
ILLINOIS FED. AID PROJECT											

REV. 4-10-14