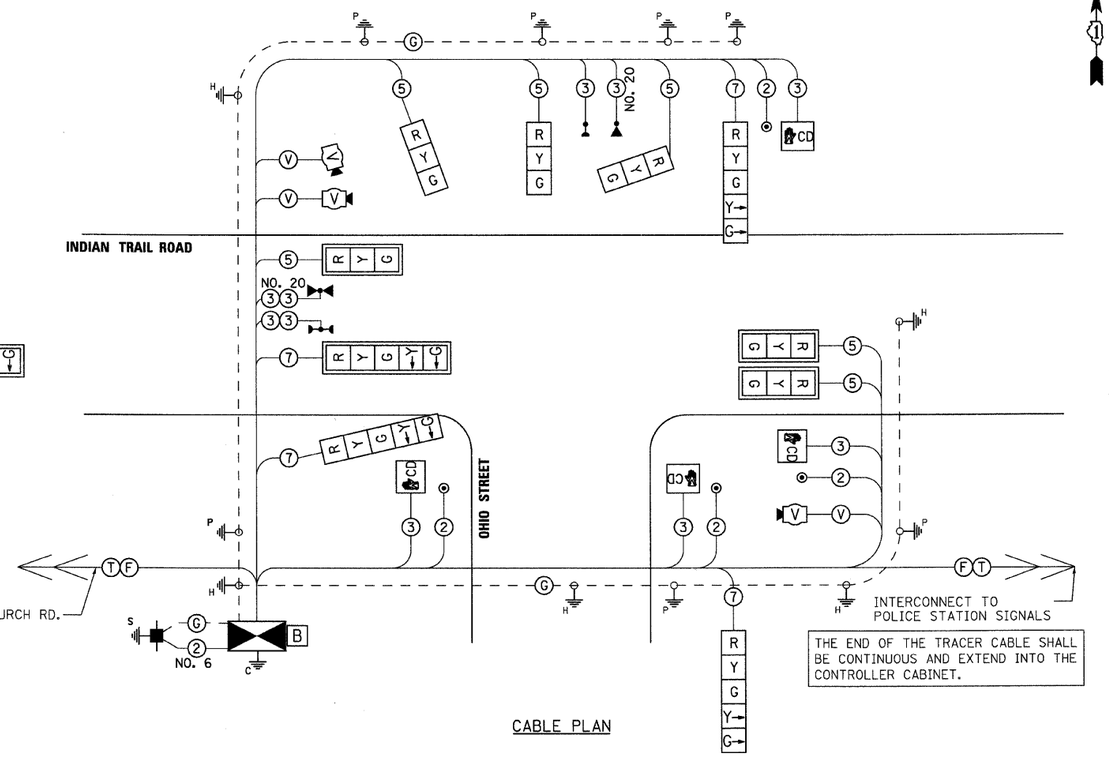
CONTRACT NO. 63095

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	08-00260-01-PV	KANE	176	90
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CABLE PLAN LEGEND

- CONTROLLER CABINET
- SERVICE INSTALLATION
- TELEPHONE SERVICE INSTALLATION
- VEHICLE DETECTION CAMERA
- EMERGENCY VEHICLE PRIORITY LIGHT DETECTOR
- EVPS CONFIRMATION BEACON
- DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP CABLE TO BE SHIELDED.
- FIBER OPTIC CABLE / TRACER CABLE (SEE INTERCONNECT PLAN)
- VIDEO CABLES (VENDOR SPECIFIED) (POWER AND SIGNAL)
- GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
- SIGNAL FACE WITH BACKPLATE
- SIGNAL FACE WITHOUT BACKPLATE
- PEDESTRIAN SIGNAL HEAD
- UNINTERRUPTABLE POWER SUPPLY (UPS), BATTERY BACK-UP SYSTEM
- GROUND ROD
  - C: CONTROLLER
  - H: HANDHOLE
  - P: SIGNAL POST OR MAST ARM POLE
  - S: ELECTRIC SERVICE INSTALLATION



THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

CABLE PLAN

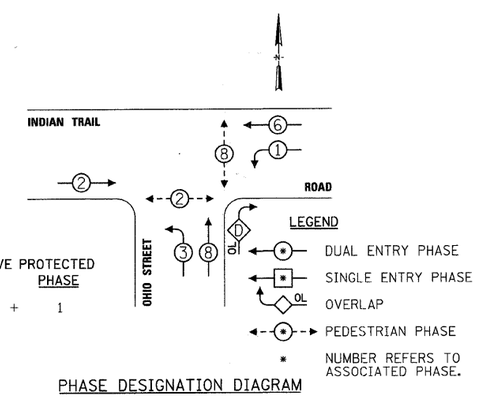
SCHEDULE OF QUANTITIES

	IDOT CODE	DESCRIPTION	UNITS	QUANTITY
*	72000200	SIGN PANEL, TYPE 2	SQ FT	12
*	80500100	SERVICE INSTALLATION, TYPE A	EACH	1
	81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	79
	81000700	CONDUIT IN TRENCH, 2-1/2" DIA., GALVANIZED STEEL	FOOT	203
	81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	3
	81000900	CONDUIT IN TRENCH, 3-1/2" DIA., GALVANIZED STEEL	FOOT	12
	81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	14
	81018900	CONDUIT, PUSHED 4" DIA., GALVANIZED STEEL	FOOT	165
*	81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	4
*	81400720	DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	1
	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	311
*	85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
*	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	600
*	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,100
*	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,000
*	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	600
*	87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	100
*	87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
*	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
*	87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
*	87700170	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 24 FT.	EACH	2
*	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	20
*	87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4
*	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
*	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	3
*	88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
*	88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
*	88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
*	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
*	88200110	TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	4
*	88700200	LIGHT DETECTOR	EACH	3
*	88700300	LIGHT DETECTOR AMPLIFIER	EACH	1
*	88800100	PEDESTRIAN PUSH-BUTTON	EACH	4
*	X0323777	VIDEO VEHICLE DETECTION, 3 CAMERAS	EACH	1
*	X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	600
*	XX005660	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C TWISTED SHIELDED	FOOT	500
*	XX006661	UNINTERRUPTABLE POWER SUPPLY	EACH	1

* SPECIAL PROVISION REQUIRED

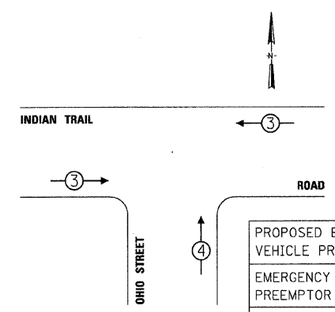
NOTES:

1. LIGHT DETECTOR CABLE SHALL BE 3/C NO. 20, TWISTED, SHIELDED.
2. CONFIRMATION BEACON CABLES SHALL BE 3/C NO. 14.
3. POWER AND SIGNAL CABLES FOR VIDEO DETECTION SHALL BE INCIDENTAL TO "VIDEO VEHICLE DETECTION" OF THE NUMBER OF CAMERAS SPECIFIED.
4. SEE LIGHTING PLANS FOR LUMINAIRE WIRING PLANS.



OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
D	=	8	+	1

PHASE DESIGNATION DIAGRAM



PROPOSED EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

EMERGENCY VEHICLE PREEMPTION SEQUENCE

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	X %OPERATION	
SIGNAL (RED)	9		17	0.50	76.5
(YELLOW)	9		25	0.25	56.3
(GREEN)	9		15	0.25	33.8
ARROW	4		12	0.10	4.8
PED. SIGNAL	4		25	1.00	100.0
CONTROLLER	1	100		1.00	100.0
VIDEO CAMERA	3	15		1.00	45.0
VIDEO BASE	1	26		1.00	26.0
UPS	1	50		1.00	50.0
ENERGY COSTS TO:				TOTAL =	492

ENERGY SUPPLY CONTACT: _____
PHONE: _____
COMPANY: _____

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONT. W/UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)		(6m+L-0.6m)=
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	VARIES	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	VARIES	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

RHA&A
Robert H. Anderson & Associates, Inc.
Consulting Engineers & Land Surveyors
License No. 184-005291
Phone No. 630-564-3530

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN
INDIAN TRAIL ROAD AND
OHIO STREET

SCALE: VERT. HORIZ. 1"=20'
DATE 1/7/09
DRAWN BY KMA
CHECKED BY TC/SBP

PLOT DATE = 1/5/2009
FILE NAME = H:\Aurora\120095_ITPhII\Civil\Sht\signal_Dh2.dgn
PLOT SCALE = 1'=20'
USER NAME = JJSER.