

34+6-40

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2009-002 TS	KANE	34	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 60F99	

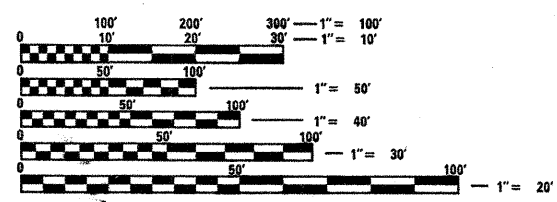
D-91-313-09

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IDOT STANDARDS:

STD. NO.	DESCRIPTION
424001-05	CURB RAMPS FOR SIDEWALKS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
701101-02	OFF-ROAD OPERATIONS, MULTILANE, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, 2L, 2W, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701502-03	URBAN LANE CLOSURE, 2L, 2W, BIDIRECTIONAL LEFT TURN LANE
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTIBLE POWER SUPPLY (UPS)
877001-03	STEEL MAST ARM ASSEMBLY AND POLE 16" THROUGH 55"
877006-03	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS
877011-04	STEEL COMB. MAST ARM ASSEMBLY AND POLE 16" THROUGH 55"
878001-06	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS



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 LOCATING INFORMATION FOR EXCAVATORS
1-800-892-0123
OR 811

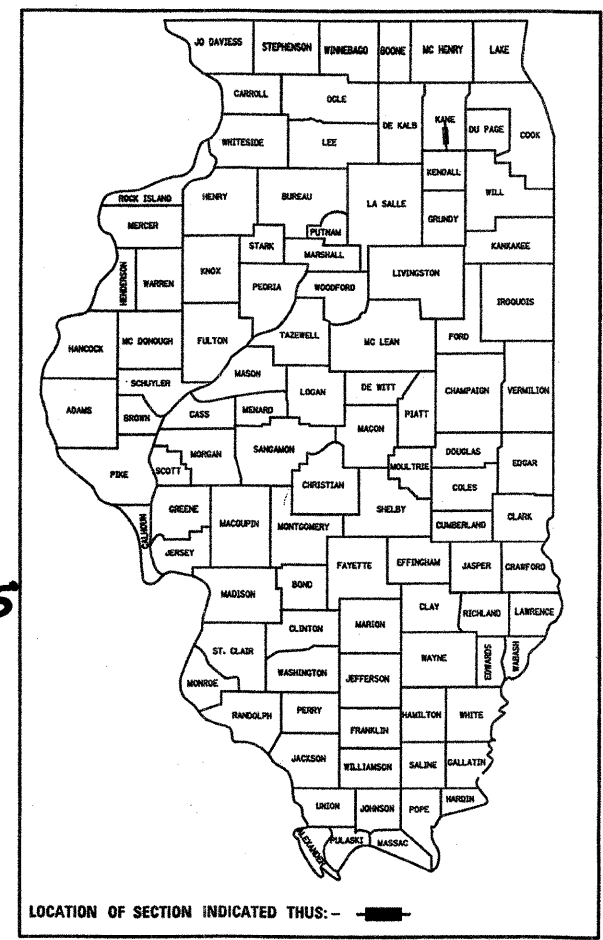
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

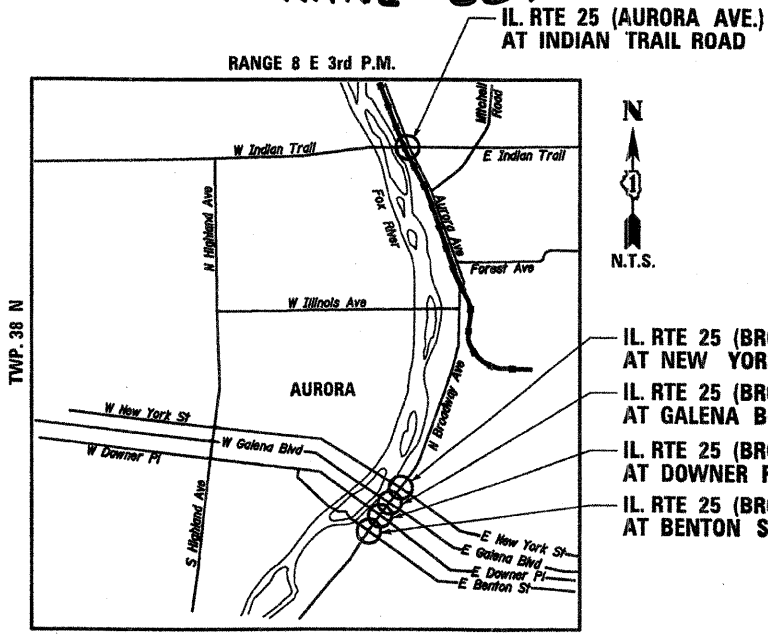
DISTRICT 1
HIGHWAY SAFETY IMPROVEMENT PROJECT
F.A.U. 2503 IL. ROUTE 25 (BROADWAY AVE.)
FROM INDIAN TRAIL ROAD TO BENTON STREET
SECTION 2009-002 TS

C-91-313-09
KANE CO.

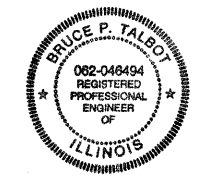
PROJECT: HSIP-002TS



LOCATION OF SECTION INDICATED THUS: -



LOCATION MAP



DATE: 2/11/2009
Expires 11-30-09
Applies To Sheets 1-7, 24-27, 33-34



DATE: 2/11/2009
Expires 11-30-09
Applies To Sheets 8-23, 28-32

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Feb 27 2009
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March 27, 2009
Charles A. Ingersoll
ENGINEER OF DESIGN AND ENVIRONMENT

March 27, 2009
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

BUREAU OF TRAFFIC, DISTRICT ONE: STEPHEN TRAVIA / DARYLE DREW (847) 705-4420

CONTRACT NO. 60F99

GENERAL NOTES:


1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007 (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS"); THE LATEST "SUPPLEMENTAL SPECIFICATIONS" AND "RECURRING SPECIAL PROVISIONS"; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"; THE DETAILS IN THE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
2. ANY REFERENCE TO THE STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST STANDARD OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.
3. THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. (1-800-892-0123) AT LEAST 10 DAYS PRIOR TO CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. ALL UTILITIES MUST BE NOTIFIED AND STAKED PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS AND SHALL NOTIFY THE ENGINEER AT ONCE OF ANY DISCREPANCIES.
5. THE CONTRACTOR IS REQUIRED TO ATTEND AN ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) PRECONSTRUCTION MEETING AND SHALL INFORM THE IDOT TRAFFIC ENGINEER BEFORE WORK COMMENCES.
6. THE CONTRACTOR SHALL KEEP PUBLIC STREET PAVEMENTS CLEAN OF DIRT AND DEBRIS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE IN PROVIDING SAFE AND HEALTHFUL CONDITIONS THROUGHOUT THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION EQUAL TO THAT EXISTING BEFORE THE DAMAGE INCURRED. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.
9. THE TRAFFIC CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.
10. RESTORATION OF THE WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEMS AND SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS 252 AND 250, RESPECTIVELY.
11. CONTROLLER CABINETS SHALL BE PLACED SO THAT a) THE DOORS OPEN AWAY FROM THE CURB OR TRAVEL WAY., b) AND THE TRAFFIC MOVEMENTS AT THE INTERSECTION ARE VISIBLE FROM THE CONTROLLER.

FILE NAME =	USER NAME = JGC	DESIGNED - KK	REVISED -
\\MICROST\352058\02-GENNOTES.DGN		DRAWN - JGC	REVISED -
		CHECKED - BPT	REVISED -
		DATE - 01-23-09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES
IL. ROUTE 25 (BROADWAY AVE.)**

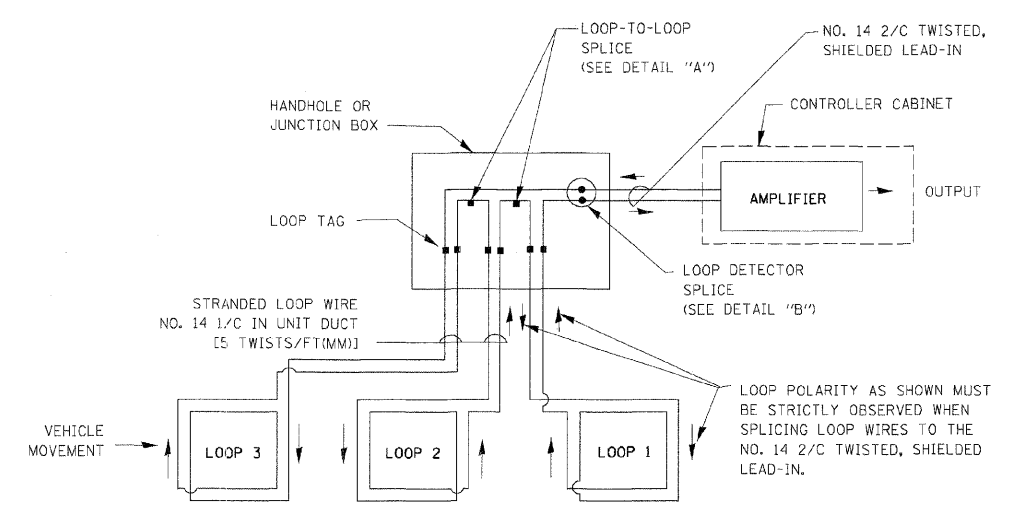
SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

 <p align="center">PREPARED BY: CEMCON, Ltd. Consulting Engineers, Land Surveyors & Planners 2200 White Oak Circle, Suite 100 Aurora, Illinois 60504-5675 Ph: 630.862.2100 Fax: 630.862.2199 E-Mail: cadd@cemcon.com Website: www.cemcon.com</p>				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2009-002 TS	KANE	34	2
CONTRACT NO. 60F99				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LOOP DETECTOR NOTES

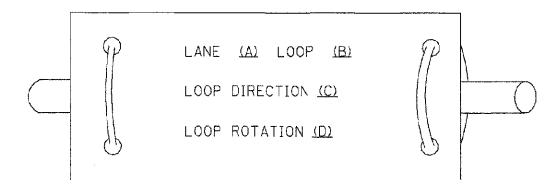
1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.



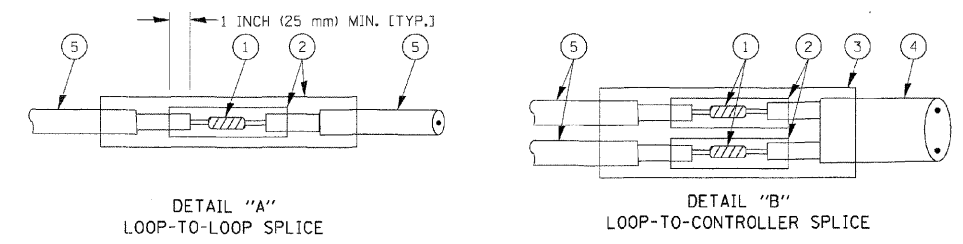
DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

LOOP LEAD-IN CABLE TAG



- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS	
NAME	DATE
CADD	5/30/00
ADD NOTE NO. 8	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION
**DISTRICT ONE
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS**

SCALE: VERT. NONE
 HORIZ. DATE 10/18/2002

DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 3 OF 4

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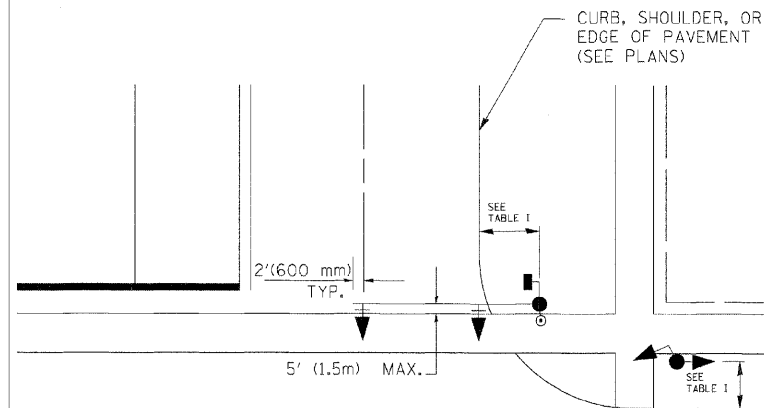
10/18/2002
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PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -	SCALE: N.T.S.			SHEET NO. OF SHEETS STA.	TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	CONTRACT NO. 60F99			
PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -	REVISION DATE: 01/01/02									

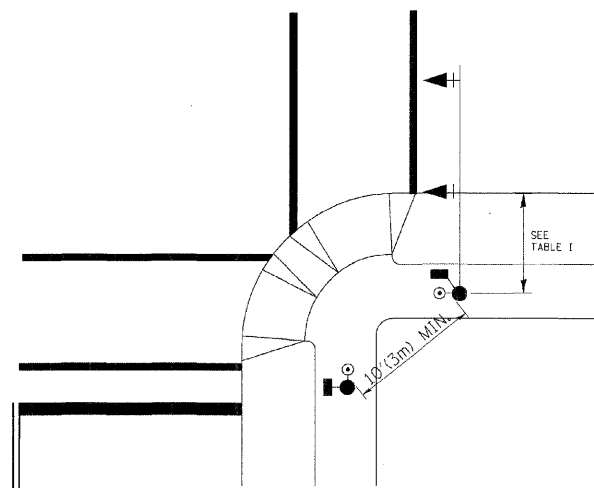
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

NOTES:

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.
 AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.
 PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:
 A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
 B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
 C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
 D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
 E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

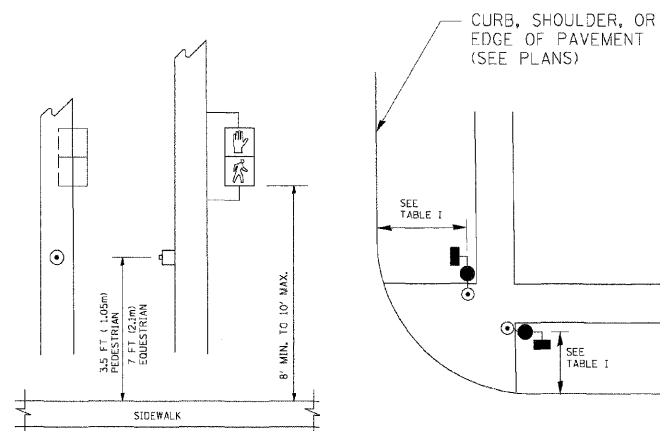


TABLE I

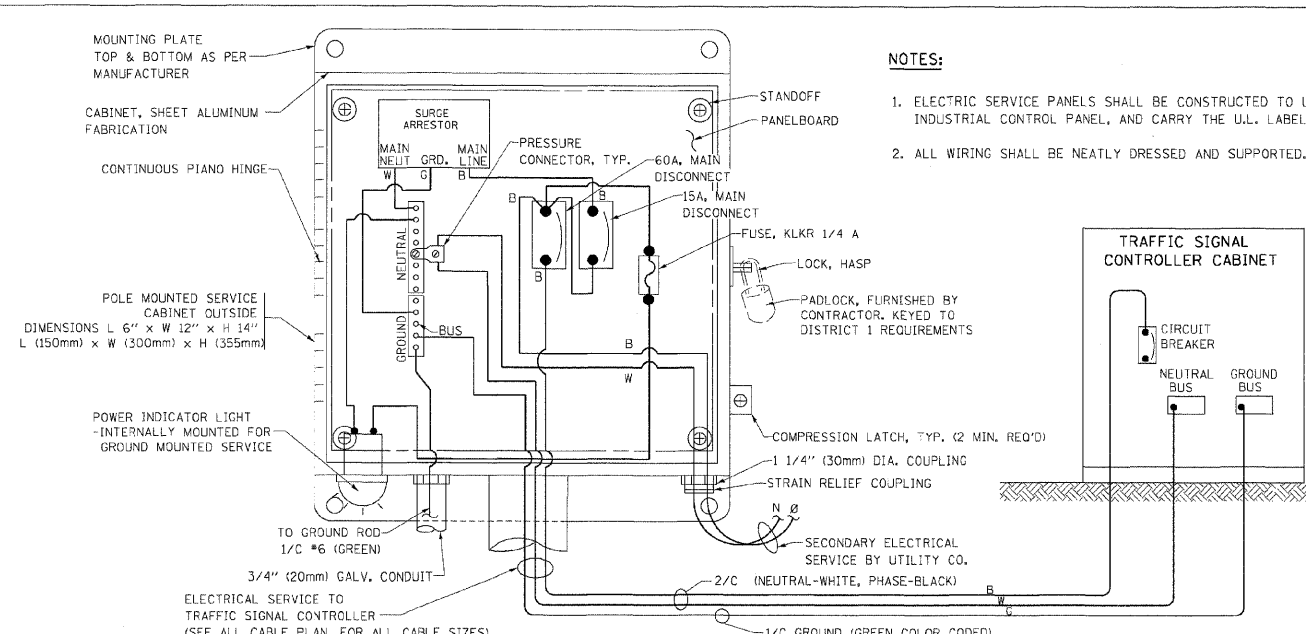
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND CUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	1/01/02

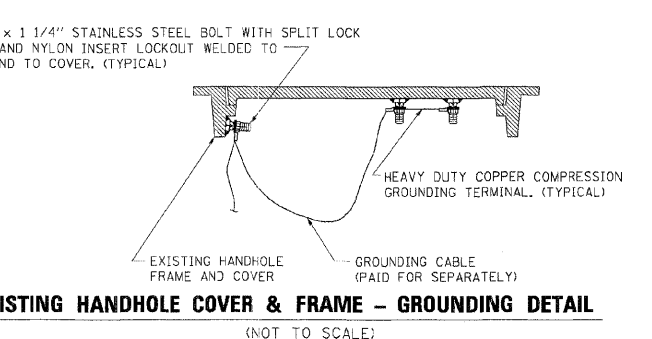
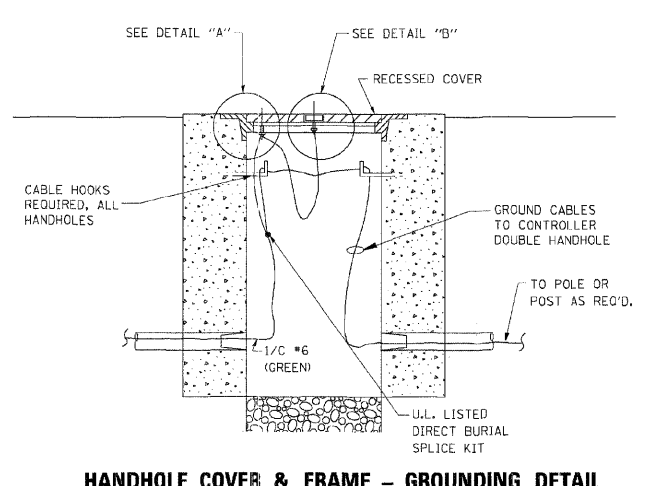
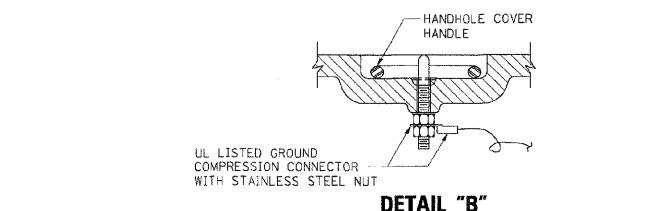
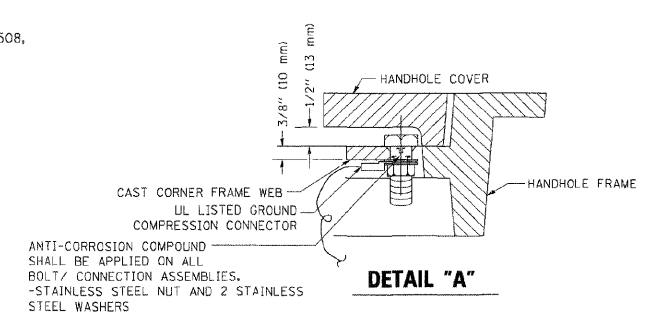
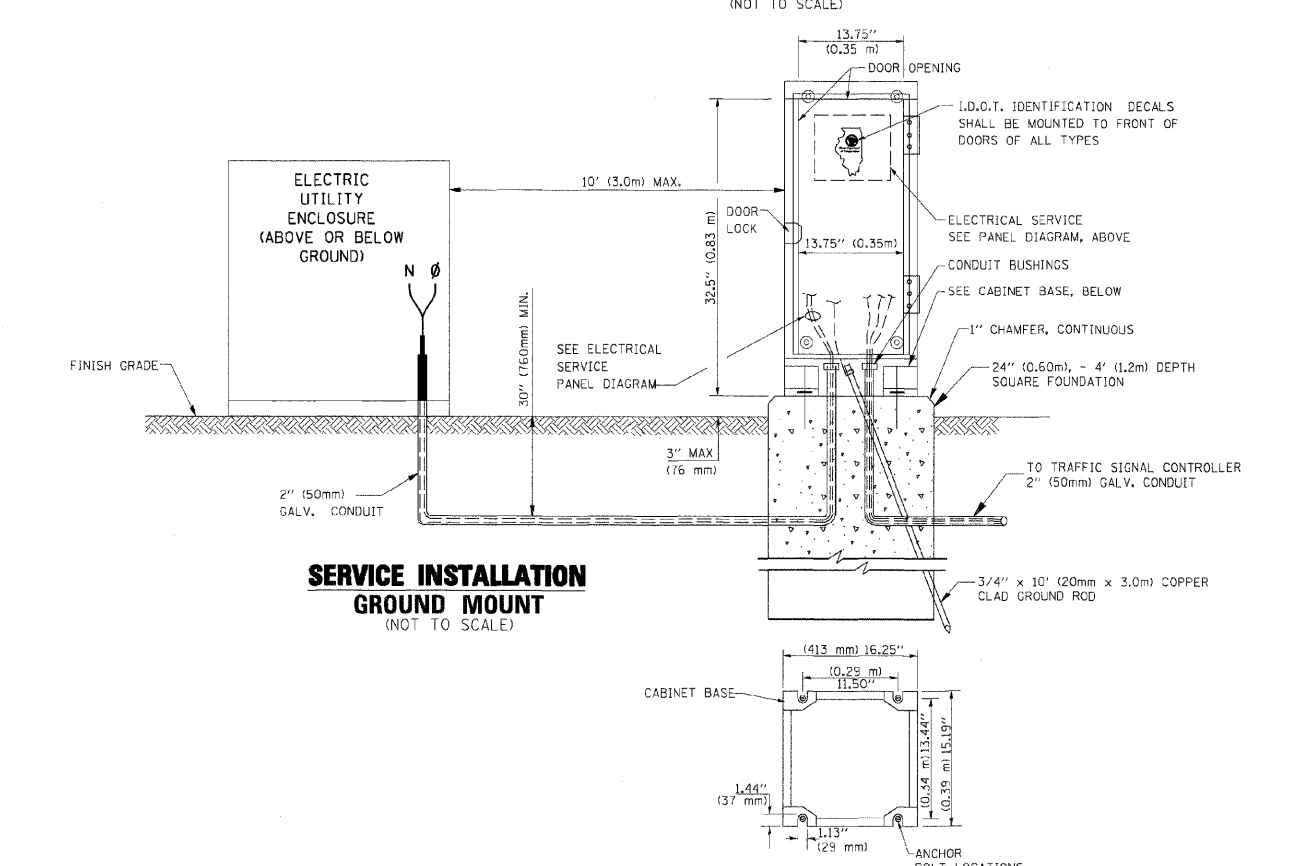
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 E-Mail: cadd@cemcon.com Website: www.cemcon.com

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS
 VERT. SCALE: NONE
 HORIZ. SCALE: NONE
 DATE: 10/18/2002
 DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 2 OF 4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

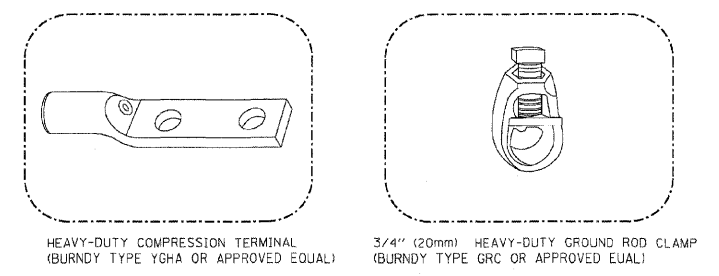


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)

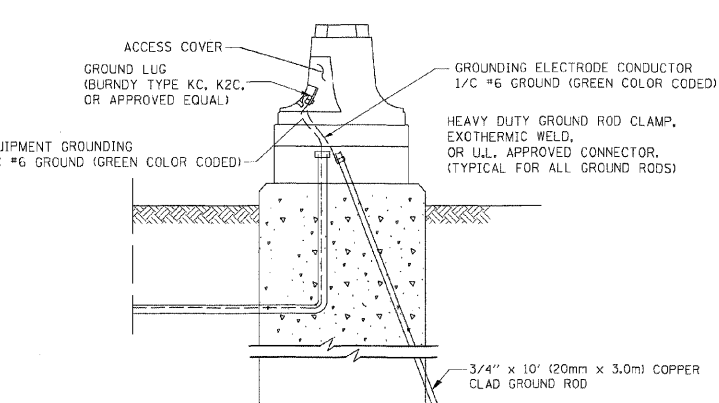


NOTES:

- GROUNDING SYSTEM**
- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD, ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (647) 705-4139.
 - THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
 - ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
 - THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



REVISIONS	
NAME	DATE
CADD	5/30/00
CADD	3/15/01
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT 1
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS

SCALE: VERT. NONE
 HORIZ. DATE 10/18/2002

DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 3 OF 4

TS05

PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Grove, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: cadd@cemcon.com Website: www.cemcon.com

10/18/2002
 c:\proj\std\std\std05.dgn
 VHT:595

FILE NAME =	USER NAME = JGC	DESIGNED - KK	REVISED -
\\MICROST\352068\04-TS05C.DGN		DRAWN - JGC	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

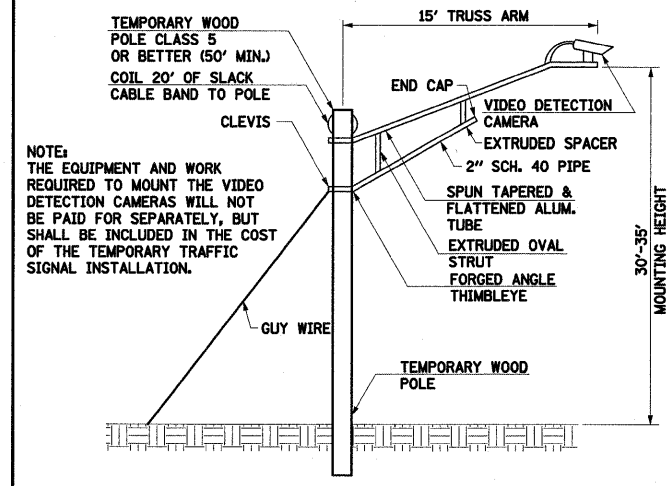
DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS
IL. ROUTE 25 (BROADWAY AVE.)

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2009-002 TS	KANE	34	6
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 60F99	

PLAN	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	DATE	

PROFILE	SURVEYED	DATE
	PLOTTED	
	CHECKED	
	BY	
	NO.	
	DATE	

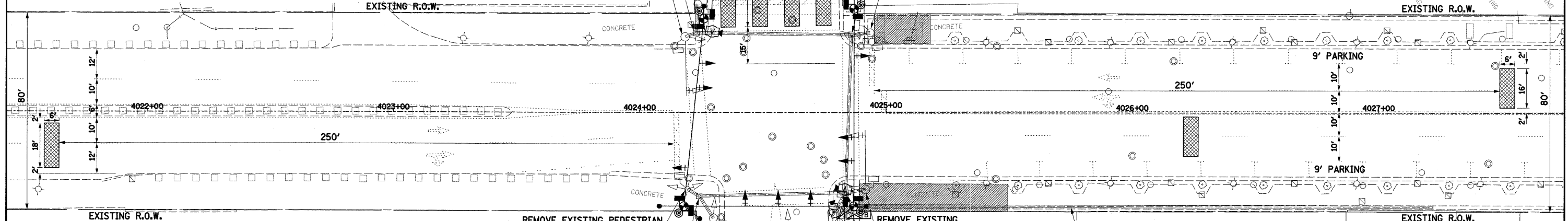


TEMPORARY VIDEO DETECTION CAMERA MOUNTING DETAIL

BROADWAY AVENUE (ILLINOIS ROUTE 25)

BENTON STREET

BROADWAY AVENUE (ILLINOIS ROUTE 25)



NOTES FOR TEMPORARY TRAFFIC SIGNALS

- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
- THE WOOD POLES FOR THE TEMPORARY TRAFFIC SIGNALS SHALL BE LONG ENOUGH TO ACCOMMODATE THE LUMINAIRE MOUNTING HEIGHT AS SPECIFIED ON THE TEMPORARY LIGHTING PLANS.
- ALL LABOR AND MATERIAL REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR TEMPORARY TRAFFIC SIGNAL INSTALLATION.

THE EXISTING CONDUITS AND VEHICLE DETECTORS (WHERE APPLICABLE) SHALL BE ABANDONED.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM OUTSIDE THE RIGHT-OF-WAY AT HIS EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (SEE SCHEDULE OF QUANTITIES FOR REMOVAL ITEMS TO BE PAID FOR SEPERATELY).

1	EACH	TRAFFIC SIGNAL CONTROLLER AND CABINET (COMPLETE)
3	EACH	STEEL MAST ARM ASSEMBLY AND POLE
3	EACH	TRAFFIC SIGNAL POST
12	EACH	TRAFFIC SIGNAL HEADS
3	EACH	TRAFFIC SIGNAL BACKPLATES
8	EACH	PEDESTRIAN SIGNAL HEADS

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- EXISTING SIGNAL HEAD TO BE REMOVED
- EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- EXISTING HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- CONFIRMATION BEACON TO BE REMOVED
- EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

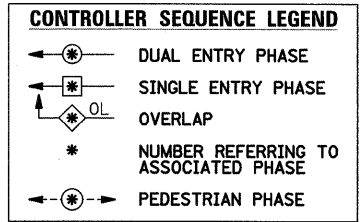
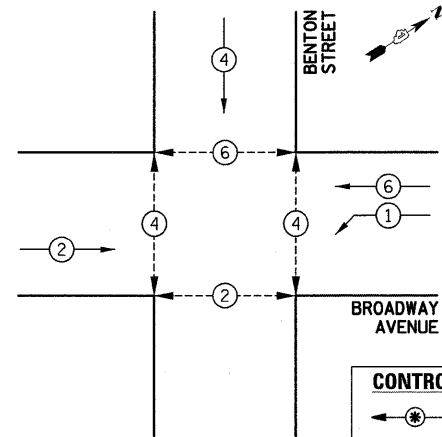
TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7M) MINIMUM
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- VIDEO DETECTION CAMERA
- VIDEO DETECTION AREA
- PEDESTRIAN PUSHBUTTON DETECTOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- UNIT DUCT
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- HANDHOLE
- HEAVY DUTY HANDHOLE
- COMMON TRENCH
- UNINTERRUPTIBLE POWER SUPPLY

PLAN	SURVEYED	DATE
	PLOTTED	
	NOTED	
	BY	
	NO. OF WAY CHECKED	
	PAID FILE NAME	

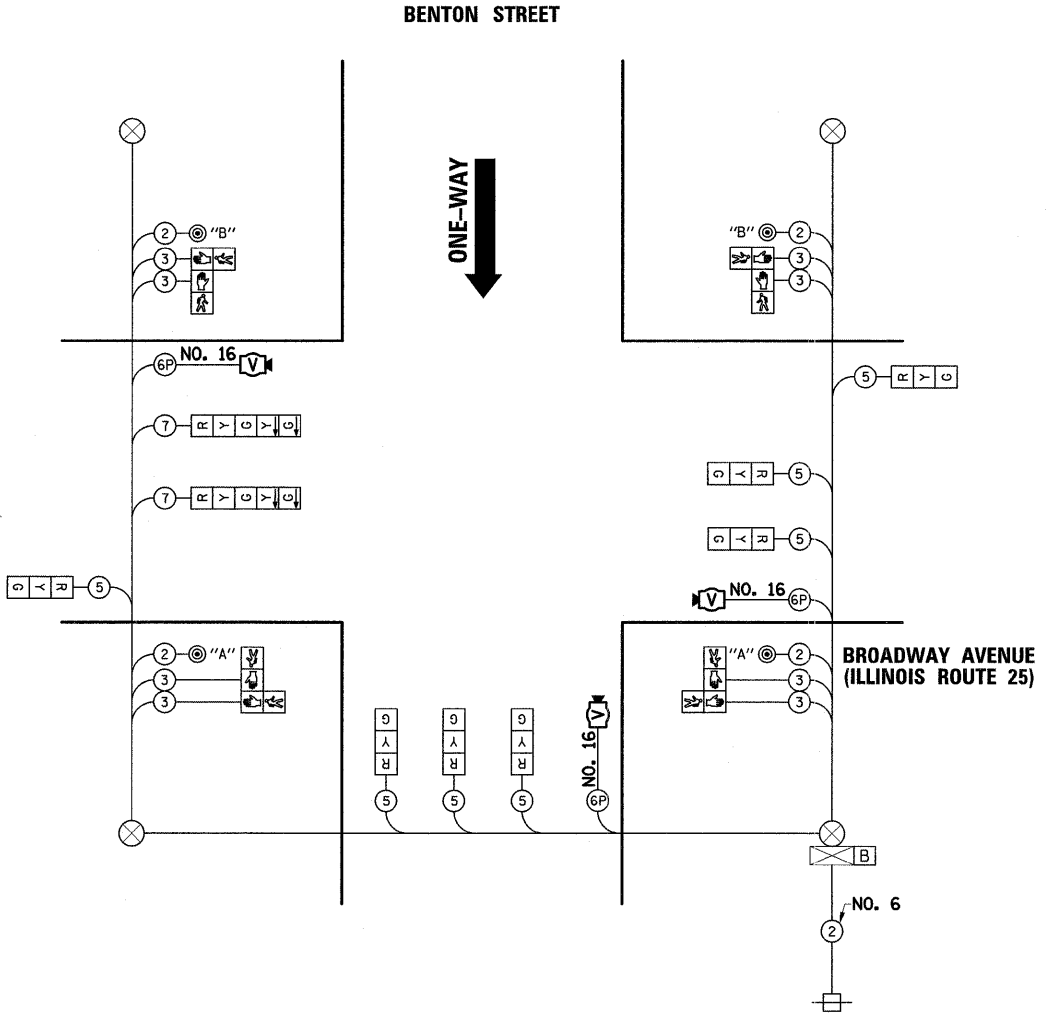
PROFILE	SURVEYED	DATE
	PLOTTED	
	NOTED	
	BY	
	NO. OF WAY CHECKED	
	PAID FILE NAME	

TEMPORARY CONTROLLER SEQUENCE



TEMPORARY PHASE DESIGNATION DIAGRAM

PUSHBUTTONS "A" SHALL PLACE A CALL IN PHASES 2 AND 4
 PUSHBUTTONS "B" SHALL PLACE A CALL IN PHASES 4 AND 6



TEMPORARY CABLE DIAGRAM LEGEND

- ⊠ TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- ⊠ TEMPORARY CONTROLLER CABINET
- ⊠ TEMPORARY SERVICE INSTALLATION
- ⊕ INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NO. 14 AWG WIRE UNLESS OTHERWISE NOTED.
- ⊠ EMERGENCY VEHICLE LIGHT DETECTOR
- ⊠ CONFIRMATION BEACON
- ⊠ VEHICLE DETECTOR, INDUCTION LOOP
- ⊠ PEDESTRIAN PUSHBUTTON DETECTOR
- ⊠ 12" (300mm) PEDESTRIAN SIGNAL SECTION
- ⊠ VIDEO DETECTION CAMERA
- ⊠ UNINTERRUPTABLE POWER SUPPLY

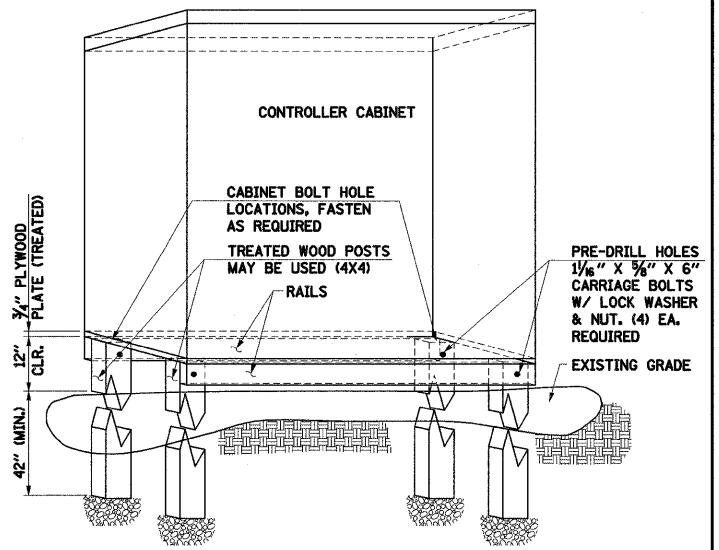
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	9		17	0.50	76.5
(YELLOW)	9		25	0.25	56.3
(GREEN)	9		15	0.25	33.8
ARROW	4		12	0.10	4.8
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
VIDEO SYSTEM	1		15	1.00	15
UPS	1		25	1.00	25
TOTAL =					511.4

ENERGY COSTS TO: CITY OF AURORA
 44 E. DOWNER PLACE
 AURORA, ILLINOIS 60507-2067

ENERGY SUPPLY CONTACT: MARK SCHERIBEL
 PHONE: (630) 723-2128
 COMPANY: COMMONWEALTH EDISON

CONTROLLER CABINET TYPE AND DIMENSIONS VARY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECT CABINET DIMENSIONS PRIOR TO THE CONSTRUCTION OF THE CABINET MOUNTING PLATFORM SHOWN BELOW.

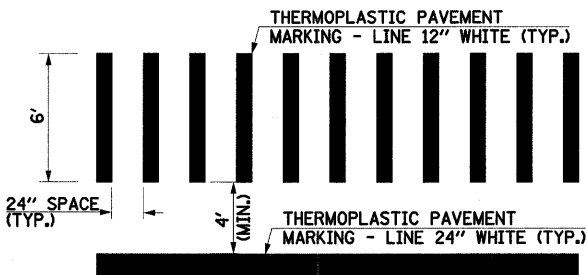
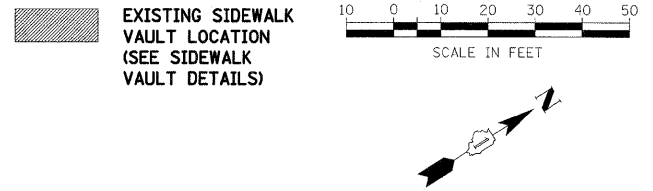
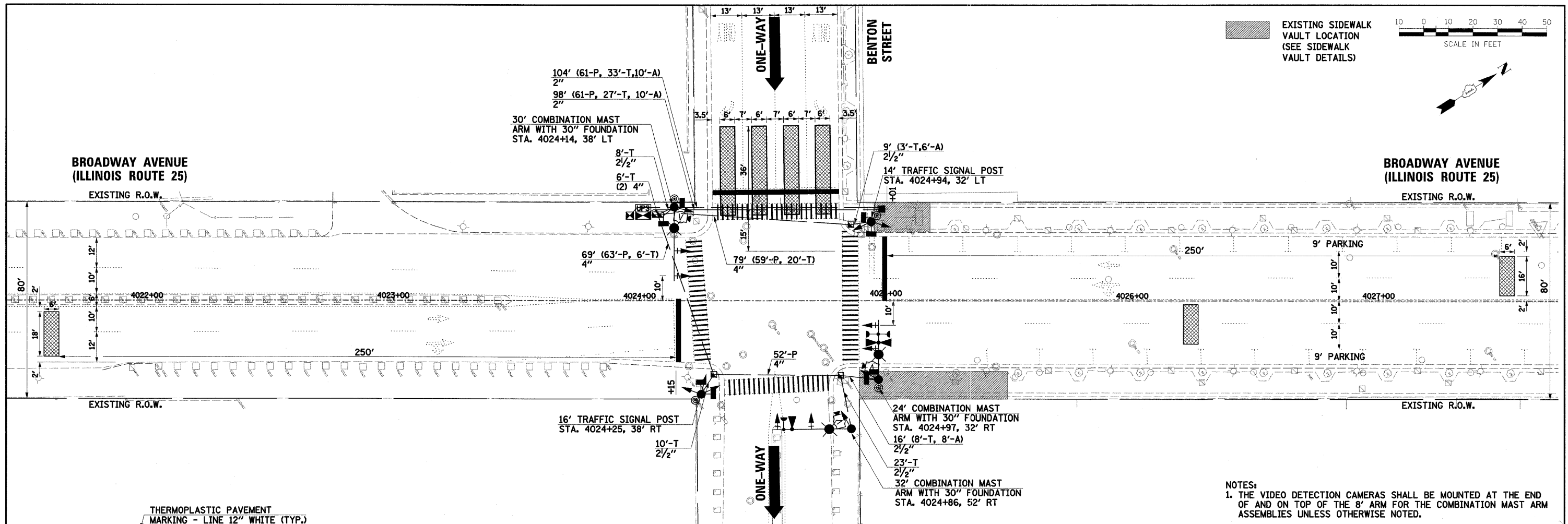
CABINET PLATFORM LEGS AND RAILS SHALL BE CONSTRUCTED OF 2" X 6" TREATED WOOD TO RESIST WEATHERING.



TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM DETAIL
 (NOT TO SCALE)

PLAN SURVEYED BY DATE
 PLOTTED BY DATE
 CHECKED BY DATE
 NOTE BOOK NO. OF WAY CHECKED
 CAD FILE NAME

PROFILE SURVEYED BY DATE
 PLOTTED BY DATE
 CHECKED BY DATE
 NOTE BOOK NO. OF WAY CHECKED
 STRUCTURE NOTATIONS CPND



TYPICAL STRIPING DETAIL AT CROSSWALKS

- NOTES:
1. THE VIDEO DETECTION CAMERAS SHALL BE MOUNTED AT THE END OF AND ON TOP OF THE 8' ARM FOR THE COMBINATION MAST ARM ASSEMBLIES UNLESS OTHERWISE NOTED.
 2. PHOTOCELL SHALL BE MOUNTED ON THE LIGHTING CONTROLLER CABINET AWAY FROM DIRECT SUNLIGHT. THIS WORK AND THE COST OF THE LIGHTING CONTROLLER CABINET AND FOUNDATION SHALL BE INCLUDED IN THE COST OF THE LIGHTING CONTROLLER.
 3. THE CONTRACTOR SHALL VERIFY NEW SERVICE LOCATIONS WITH COM-ED PRIOR TO CONSTRUCTION.

- PROPOSED TRAFFIC SIGNS**
- R6-2-2430 (2 EACH)**

 LOCATIONS:
 1. NORTHBOUND MAST ARM, 3' EAST OF THE OUTER 3-SECTION SIGNAL HEAD.
 2. TRAFFIC SIGNAL POST IN THE SOUTHEAST CORNER FACING SOUTH.
 - R6-2-2430 (2 EACH)**

 LOCATIONS:
 1. SOUTHBOUND MAST ARM, 3' WEST OF THE OUTER 5-SECTION SIGNAL HEAD.
 2. TRAFFIC SIGNAL POST IN NORTHWEST CORNER FACING NORTH.
 - M-1100-2424 (1 EACH)**

 LOCATION:
 1. EASTBOUND MAST ARM, 6' NORTH OF THE OUTER 3-SECTION SIGNAL HEAD
 - M6-4-2115 (1 EACH)**

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE COORDINATED BY THE CONTRACTOR WITH THE CITY OF AURORA.

RESTORATION OF WORK AREA:
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED UNLESS OTHERWISE NOTED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			DETECTOR LOOP		
SERVICE INSTALLATION			CAST IRON JUNCTION BOX		
SIGNAL HEAD			EMERGENCY VEHICLE LIGHT DETECTOR		
SIGNAL HEAD WITH BACKPLATE			CONFIRMATION BEACON		
SIGNAL HEAD, PEDESTRIAN			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL POST			CONDUIT SPLICE		
MAST ARM ASSEMBLY AND POLE, STEEL			WOOD POLE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
UNIT DUCT	UD		RAILROAD CONTROL CABINET		
COMMON TRENCH	CT		TELEPHONE CONNECTION		
HANDHOLE			ILLUMINATED SIGN "NO LEFT TURN"		
HEAVY DUTY HANDHOLE			ILLUMINATED SIGN "NO RIGHT TURN"		
DOUBLE HANDHOLE			VIDEO DETECTION CAMERA		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			VIDEO DETECTION AREA		
PEDESTRIAN PUSHBUTTON DETECTOR			WIRELESS ANTENNA		

CABLE PLAN LEGEND

- | | | |
|-----------------|-----------------|---|
| EXISTING | PROPOSED | |
| | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | TELEPHONE INSTALLATION |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | LUMINAIRE |
| | | DENOTES NUMBER OF CONDUCTORS.
ALL CABLE NO. 14 EXCEPT AS INDICATED.
ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | GROUND CABLE IN CONDUIT
NO. 6 SOLID COPPER (GREEN) |
| | | FIBER OPTIC CABLE IN CONDUIT
NO. 62.5/125 2-MM12F SMI2F |
| | | SIGNAL FACE WITH BACKPLATE.
"P" INDICATES PROGRAMMED HEAD. |
| | | RAILROAD CONTROL CABINET |
| | | ILLUMINATED SIGN
"NO LEFT TURN" |
| | | ILLUMINATED SIGN
"NO RIGHT TURN" |
| | | WIRELESS ANTENNA |
| | | GROUND ROD AT HANDHOLE (H),
DOUBLE HANDHOLE (HH), OR CONTROLLER (C) |
| | | GROUND ROD AT POST (P)
OR MAST ARM POLE (MA) |
| | | GROUND ROD AT ELECTRIC
SERVICE INSTALLATION |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | LED STREET NAME SIGN |
| | | VIDEO DETECTION CAMERA |

DATE	BY	DATE	BY

DATE	BY	DATE	BY

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14		17	0.50	119
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	4		12	0.10	4.8
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
LED SIGN	3		60	0.50	90
LUMINAIRE	3		310	0.50	465
VIDEO SYSTEM	1		15	1.00	15
TOTAL =					1158.8

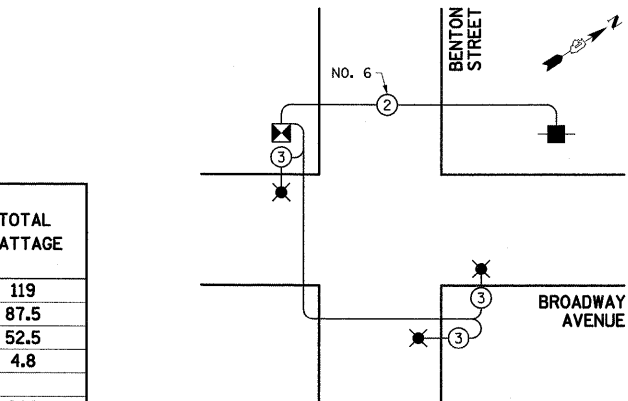
ENERGY COSTS TO: CITY OF AURORA
44 E. DOWNER PLACE
AURORA, ILLINOIS 60507-2067

ENERGY SUPPLY CONTACT: MARK SCHERIBEL
PHONE: (630) 723-2128
COMPANY: COMMONWEALTH EDISON

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL FOUNDATIONS	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONTROLLER	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.A. LENGTH		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
<30'	30" (900mm)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
<40'	30" (750mm)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
<40'	36" (900mm)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
<50'	36" (900mm)			POST MOUNTED	6 (1.8)
>50'	36" (900mm)				

PUSHBUTTONS "A" AND "D" SHALL PLACE A CALL IN PHASES 2 AND 4

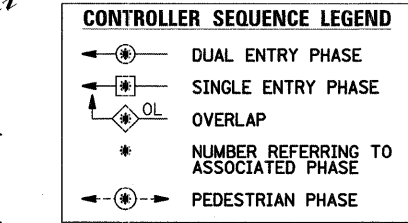
PUSHBUTTONS "B" AND "C" SHALL PLACE A CALL IN PHASES 4 AND 6



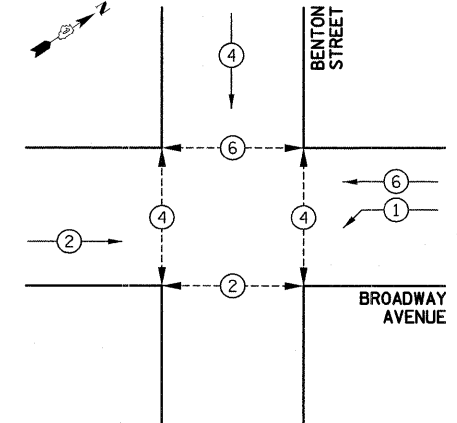
LIGHTING CABLE PLAN

EMERGENCY VEHICLE PREEMPTION SEQUENCE

PROPOSED EMERGENCY VEHICLE PREEMPTORS	
3	4
MOVEMENT	
←	↓



CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

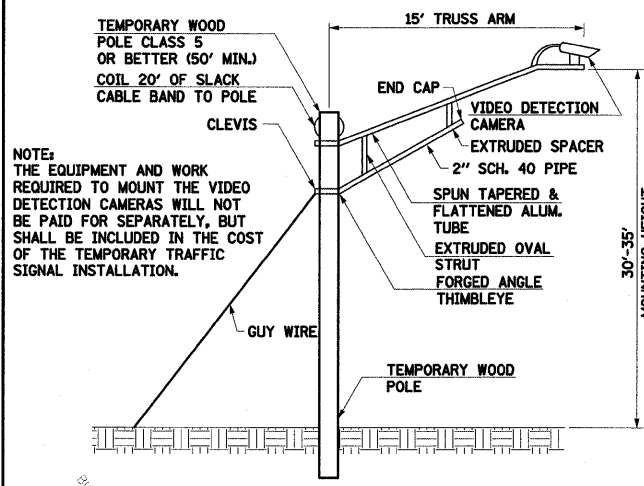
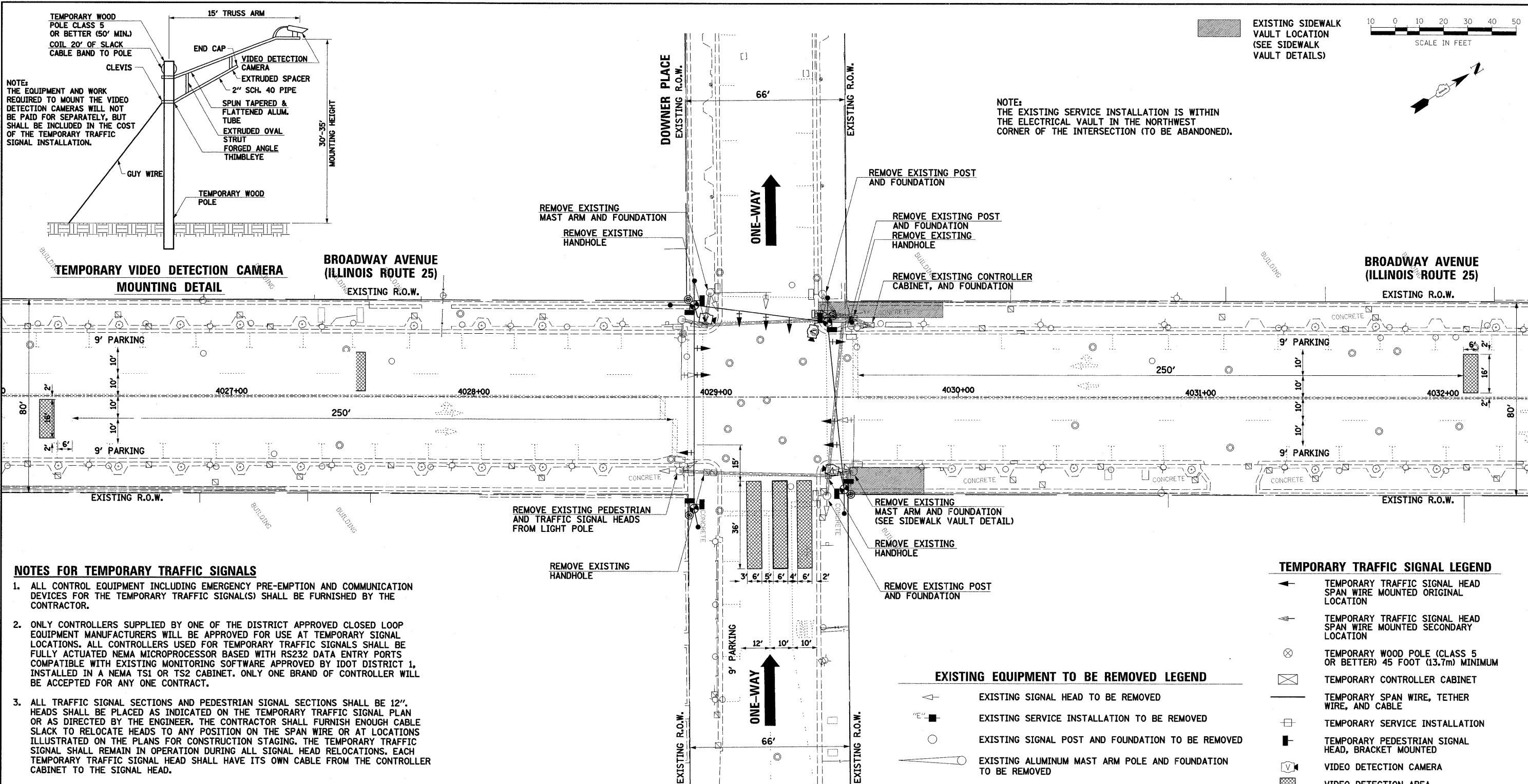
SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	BENTON STREET
TRENCH BACKFILL	CU YD	0.5
PORTLAND CEMENT CONCRETE SIDEWALK, SPECIAL	SQ FT	62
SIDEWALK REMOVAL	SQ FT	62
CONTROLLED LOW STRENGTH MATERIAL	CU YD	14.5
SIGN PANEL - TYPE 1	SQ FT	26.2
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	583.5
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	112
PAVEMENT MARKING REMOVAL	SQ FT	400
** ELECTRICAL SERVICE INSTALLATION, SPECIAL	EACH	1
SERVICE INSTALLATION (SPECIAL)	EACH	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	60
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	52
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	38
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	122
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	174
CONDUIT ATTACHED IN STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT ATTACHED TO STRUCTURE, 2 1/2" DIA., GALVANIZED STEEL	FOOT	14
HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
** ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	495
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	144
** LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 310 WATT	EACH	3
LIGHTING CONTROLLER TYPE CB-RCS 60 AMP - 240 VOLT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	462
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2115
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1862
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	199.5
ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16 6 PAIR	FOOT	465
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	234
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
** STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 24 FT. (SPECIAL)	EACH	1
** STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 30 FT. (SPECIAL)	EACH	1
** STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 32 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	37
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	6
* LIGHT DETECTOR	EACH	3
* LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2398.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
* PAINT TRAFFIC SIGNAL POST	EACH	2
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	433.5
EXPLORATORY EXCAVATION	EACH	1
VIDEO DETECTION SYSTEM	EACH	1
* LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	3
MASONRY WALL CONSTRUCTION	SQ FT	113
REMOVE EXISTING CONCRETE FOUNDATIONS (SPECIAL)	EACH	1

* 100% COST TO THE CITY OF AURORA.
** PARTIAL COST TO CITY OF AURORA (SEE SUMMARY OF QUANTITIES).

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE COORDINATED BY THE CONTRACTOR WITH THE CITY OF AURORA.



TEMPORARY VIDEO DETECTION CAMERA MOUNTING DETAIL

NOTE: THE EXISTING SERVICE INSTALLATION IS WITHIN THE ELECTRICAL VAULT IN THE NORTHWEST CORNER OF THE INTERSECTION (TO BE ABANDONED).

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. THE WOOD POLES FOR THE TEMPORARY TRAFFIC SIGNALS SHALL BE LONG ENOUGH TO ACCOMMODATE THE LUMINAIRE MOUNTING HEIGHT AS SPECIFIED ON THE TEMPORARY LIGHTING PLANS.
8. ALL LABOR AND MATERIAL REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR TEMPORARY TRAFFIC SIGNAL INSTALLATION.

THE EXISTING CONDUITS AND VEHICLE DETECTORS (WHERE APPLICABLE) SHALL BE ABANDONED.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM OUTSIDE THE RIGHT-OF-WAY AT HIS EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (SEE SCHEDULE OF QUANTITIES FOR REMOVAL ITEMS TO BE PAID FOR SEPERATELY).

1	EACH	TRAFFIC SIGNAL CONTROLLER AND CABINET (COMPLETE)
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE
3	EACH	TRAFFIC SIGNAL POST
10	EACH	TRAFFIC SIGNAL HEADS
1	EACH	TRAFFIC SIGNAL BACKPLATES
8	EACH	PEDESTRIAN SIGNAL HEADS

TEMPORARY TRAFFIC SIGNAL LEGEND

- ← TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- ⊗ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- ⊠ TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- ⊕ TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- 📹 VIDEO DETECTION CAMERA
- ▨ VIDEO DETECTION AREA
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ▶ EMERGENCY VEHICLE LIGHT DETECTOR
- ⚡ CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- UD UNIT DUCT
- - - G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- ◻ HANDHOLE
- ⊞ HEAVY DUTY HANDHOLE
- CT COMMON TRENCH
- ⊞ UNINTERRUPTIBLE POWER SUPPLY

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- ⊞ EXISTING SIGNAL HEAD TO BE REMOVED
- "E" ■ EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- 📹 EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" ⊠ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" ◻ EXISTING HANDHOLE TO BE REMOVED
- ⊞ EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- ⊙ EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- ▶ EXISTING EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- ⚡ EXISTING CONFIRMATION BEACON TO BE REMOVED
- "E" ⊞ EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

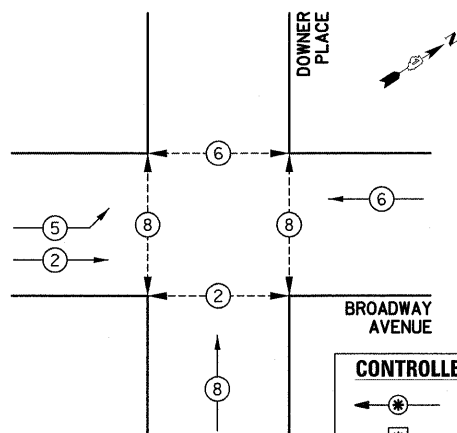
PLAN	DATE
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NO. 20	

TEMPORARY CONTROLLER SEQUENCE

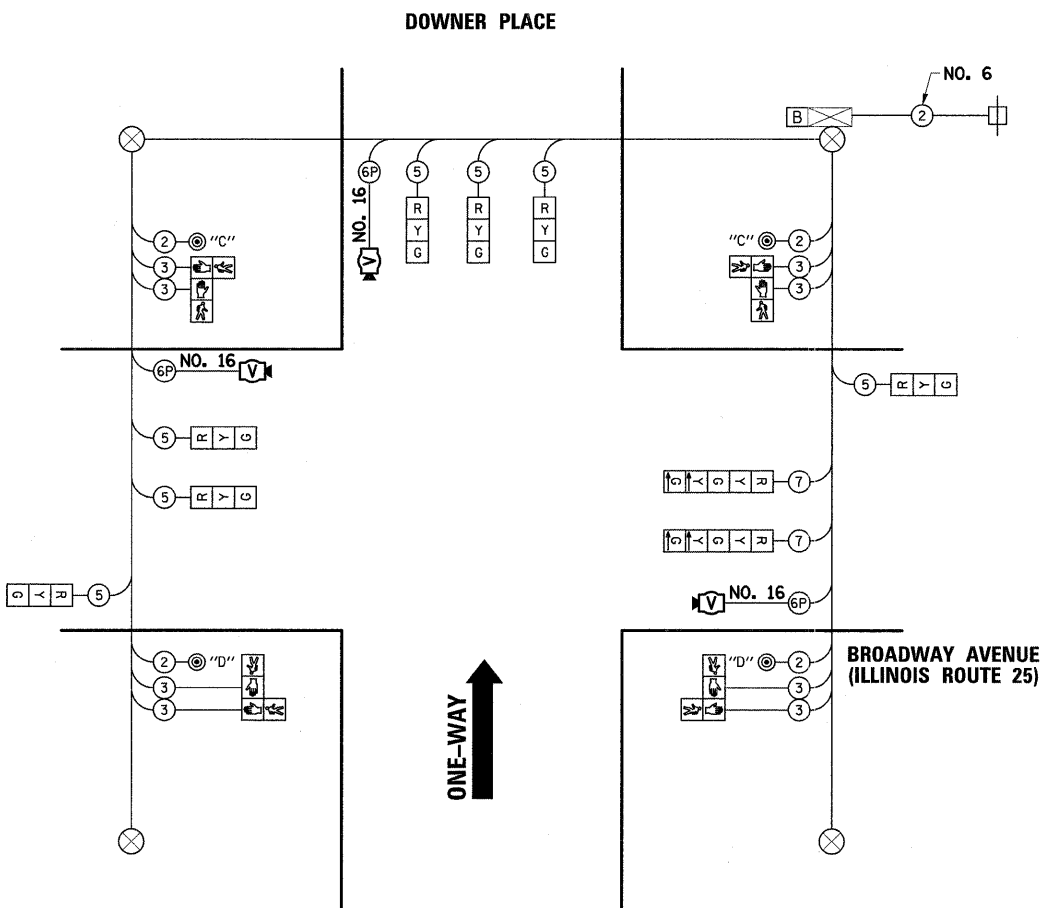


CONTROLLER SEQUENCE LEGEND

- ← ⊙ → DUAL ENTRY PHASE
- ← ⊙ → SINGLE ENTRY PHASE
- ← ⊙ OL → OVERLAP
- * NUMBER REFERRING TO ASSOCIATED PHASE
- ← ⊙ → PEDESTRIAN PHASE

TEMPORARY PHASE DESIGNATION DIAGRAM

PUSHBUTTONS "C" SHALL PLACE A CALL IN PHASES 6 AND 8
 PUSHBUTTONS "D" SHALL PLACE A CALL IN PHASES 8 AND 2



TEMPORARY CABLE DIAGRAM LEGEND

- ⊠ TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- ⊠ TEMPORARY CONTROLLER CABINET
- ⊠ TEMPORARY SERVICE INSTALLATION
- ⊙ INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NO. 14 AWG WIRE UNLESS OTHERWISE NOTED.
- ⊠ EMERGENCY VEHICLE LIGHT DETECTOR
- ⊠ CONFIRMATION BEACON
- ⊠ VEHICLE DETECTOR, INDUCTION LOOP
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ⊠ 12" (300mm) PEDESTRIAN SIGNAL SECTION
- ⊠ VIDEO DETECTION CAMERA
- ⊠ UNINTERRUPTIBLE POWER SUPPLY

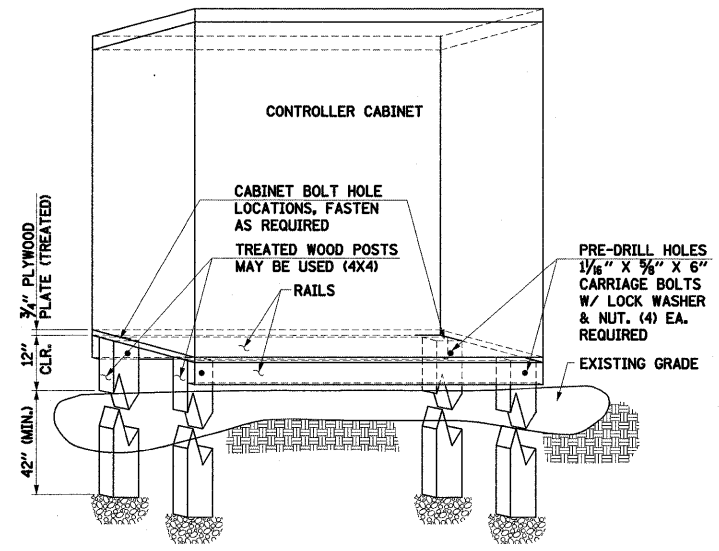
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	9		17	0.50	76.5
(YELLOW)	9		25	0.25	56.3
(GREEN)	9		15	0.25	33.8
ARROW	4		12	0.10	4.8
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
VIDEO SYSTEM	1		15	1.00	15
UPS	1		25	1.00	25
TOTAL =					511.4

ENERGY COSTS TO: CITY OF AURORA
 44 E. DOWNER PLACE
 AURORA, ILLINOIS 60507-2067

ENERGY SUPPLY CONTACT: MARK SCHERIBEL
 PHONE: (630) 723-2128
 COMPANY: COMMONWEALTH EDISON

CONTROLLER CABINET TYPE AND DIMENSIONS VARY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECT CABINET DIMENSIONS PRIOR TO THE CONSTRUCTION OF THE CABINET MOUNTING PLATFORM SHOWN BELOW.

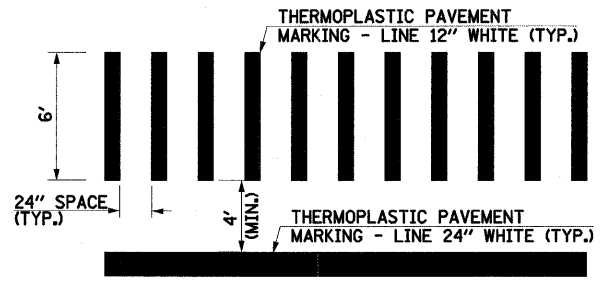
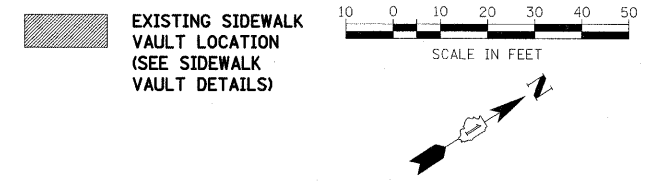
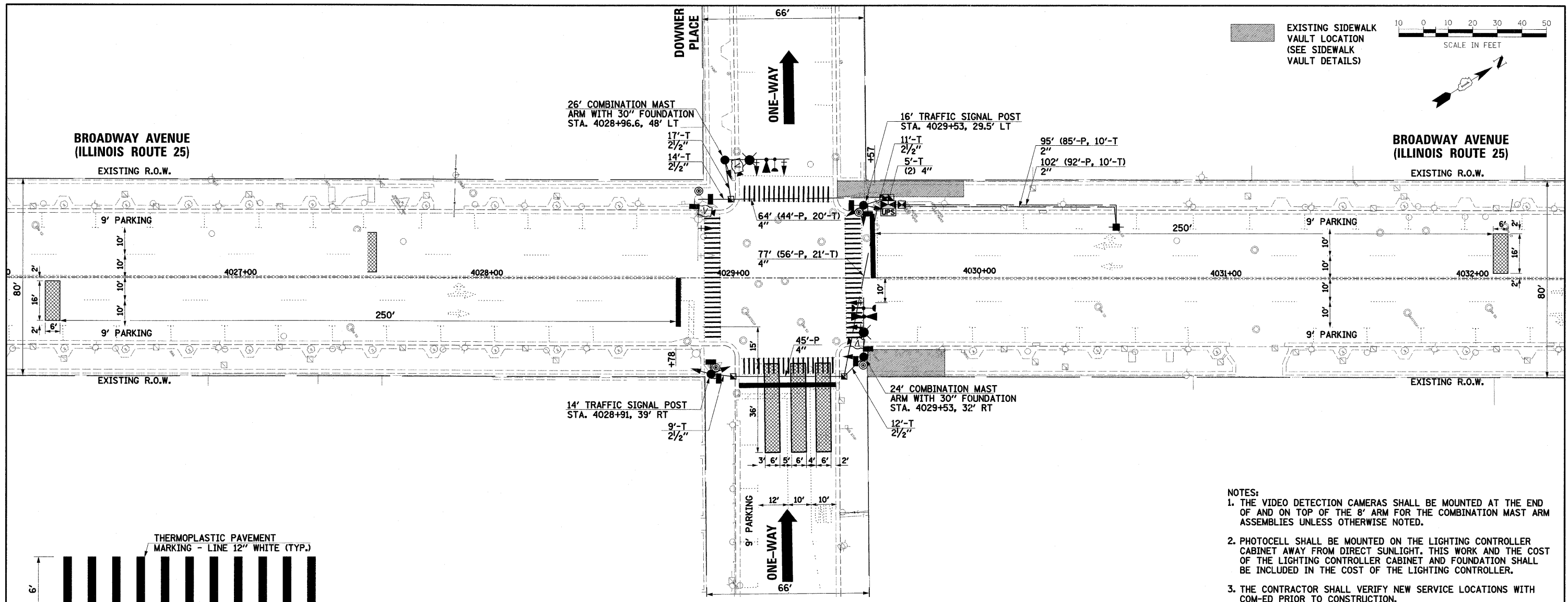
CABINET PLATFORM LEGS AND RAILS SHALL BE CONSTRUCTED OF 2" X 6" TREATED WOOD TO RESIST WEATHERING.



TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM DETAIL
(NOT TO SCALE)

PLAN	SURVEYED	DATE
	DESIGNED	BY
	PLOTTED	DATE
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	BY	
	NO.	
	STRUCTURE	
	NOTATION	
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PROFILE	SURVEYED	DATE
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	PLOTTED	DATE
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	NO.	
	STRUCTURE	
	NOTATION	
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TYPICAL STRIPING DETAIL AT CROSSWALKS

- PROPOSED TRAFFIC SIGNS**
- R6-2-2430 (2 EACH)** ONE WAY (Right Arrow)
 - LOCATIONS:
 - SOUTHBOUND MAST ARM, 3' WEST OF THE OUTER 3-SECTION SIGNAL HEAD.
 - TRAFFIC SIGNAL POST IN NORTHWEST CORNER FACING NORTH.
 - R6-2-2430 (2 EACH)** ONE WAY (Left Arrow)
 - LOCATIONS:
 - NORTHBOUND MAST ARM, 3' EAST OF THE OUTER 5-SECTION SIGNAL HEAD.
 - TRAFFIC SIGNAL POST IN SOUTHEAST CORNER FACING SOUTH.
 - M-1100-2424 (1 EACH)** ILLINOIS 25 (Double Arrow)
 - LOCATION:
 - WESTBOUND MAST ARM, 6' SOUTH OF THE OUTER 3-SECTION SIGNAL HEAD.
 - M6-4-2115 (1 EACH)** ILLINOIS 25 (Double Arrow)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE COORDINATED BY THE CONTRACTOR WITH THE CITY OF AURORA.

RESTORATION OF WORK AREA:
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED UNLESS OTHERWISE NOTED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

- NOTES:**
- THE VIDEO DETECTION CAMERAS SHALL BE MOUNTED AT THE END OF AND ON TOP OF THE 8' ARM FOR THE COMBINATION MAST ARM ASSEMBLIES UNLESS OTHERWISE NOTED.
 - PHOTOCELL SHALL BE MOUNTED ON THE LIGHTING CONTROLLER CABINET AWAY FROM DIRECT SUNLIGHT. THIS WORK AND THE COST OF THE LIGHTING CONTROLLER CABINET AND FOUNDATION SHALL BE INCLUDED IN THE COST OF THE LIGHTING CONTROLLER.
 - THE CONTRACTOR SHALL VERIFY NEW SERVICE LOCATIONS WITH COM-ED PRIOR TO CONSTRUCTION.

TRAFFIC SIGNAL LEGEND

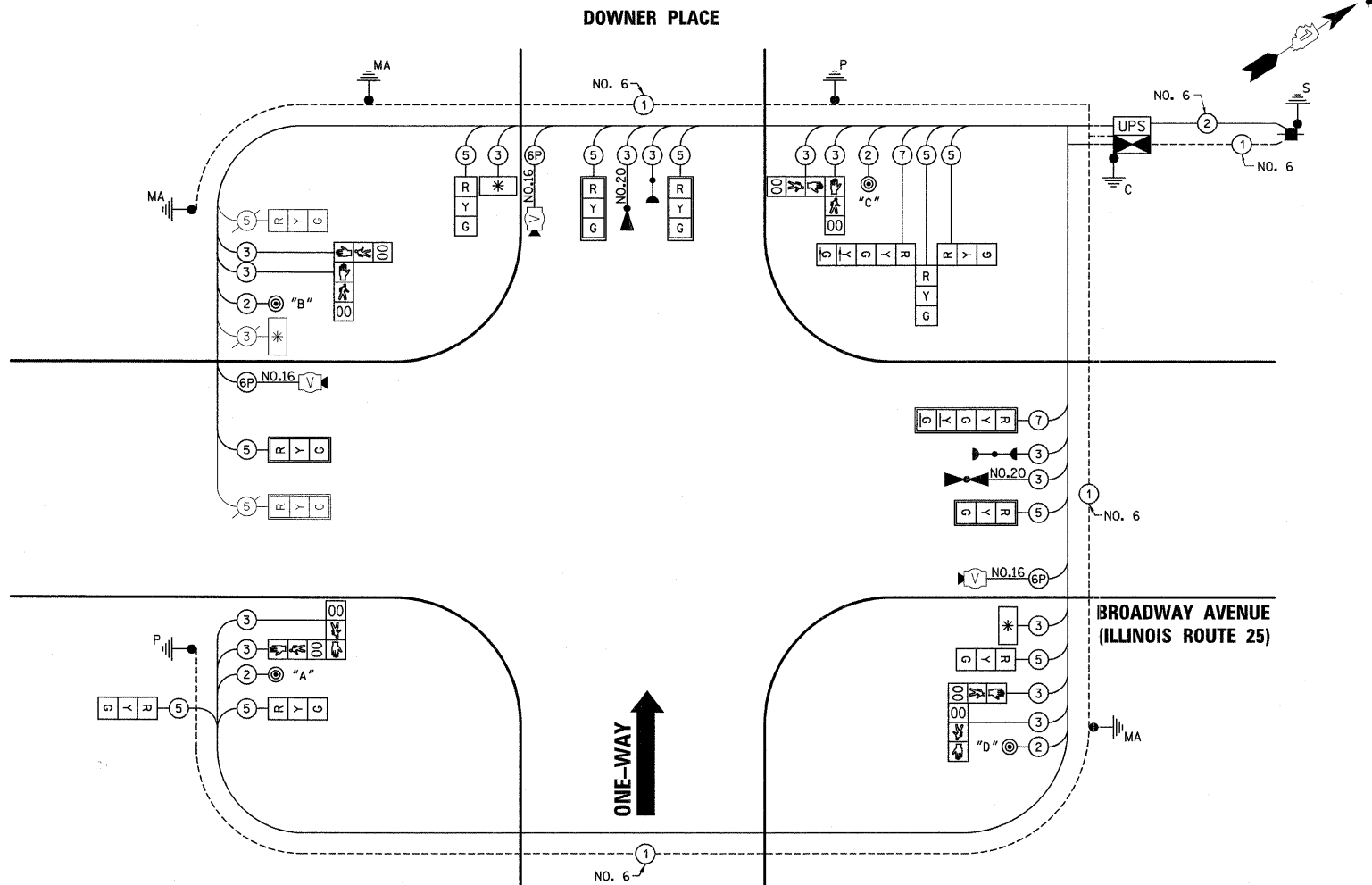
	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			DETECTOR LOOP		
SERVICE INSTALLATION			CAST IRON JUNCTION BOX		
SIGNAL HEAD			EMERGENCY VEHICLE LIGHT DETECTOR		
SIGNAL HEAD WITH BACKPLATE			CONFIRMATION BEACON		
SIGNAL HEAD, PEDESTRIAN			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL POST			CONDUIT SPLICE		
MAST ARM ASSEMBLY AND POLE, STEEL			WOOD POLE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
UNIT DUCT	UD		RAILROAD CONTROL CABINET		
COMMON TRENCH	CT		TELEPHONE CONNECTION		
HANDHOLE			ILLUMINATED SIGN "NO LEFT TURN"		
HEAVY DUTY HANDHOLE			ILLUMINATED SIGN "NO RIGHT TURN"		
DOUBLE HANDHOLE			VIDEO DETECTION CAMERA		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			VIDEO DETECTION AREA		
PEDESTRIAN PUSHBUTTON DETECTOR			WIRELESS ANTENNA		

CABLE PLAN LEGEND

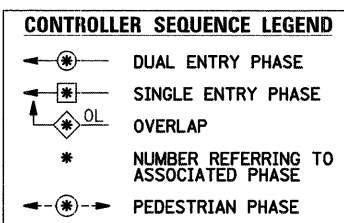
- | | | |
|-----------------|-----------------|---|
| EXISTING | PROPOSED | |
| | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | TELEPHONE INSTALLATION |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | LUMINAIRE |
| | | DENOTES NUMBER OF CONDUCTORS.
ALL CABLE NO. 14 EXCEPT AS INDICATED.
ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | GROUND CABLE IN CONDUIT
NO. 6 SOLID COPPER (GREEN) |
| | | FIBER OPTIC CABLE IN CONDUIT
NO. 62.5/125 2-MM12F SMI2F |
| | | SIGNAL FACE WITH BACKPLATE.
"P" INDICATES PROGRAMMED HEAD. |
| | | RAILROAD CONTROL CABINET |
| | | ILLUMINATED SIGN
"NO LEFT TURN" |
| | | ILLUMINATED SIGN
"NO RIGHT TURN" |
| | | WIRELESS ANTENNA |
| | | GROUND ROD AT HANDHOLE (H),
DOUBLE HANDHOLE (H), OR CONTROLLER (C) |
| | | GROUND ROD AT POST (P)
OR MAST ARM POLE (MA) |
| | | GROUND ROD AT ELECTRIC
SERVICE INSTALLATION |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | LED STREET NAME SIGN |
| | | VIDEO DETECTION CAMERA |

PLAN	SURVEYED	DATE
NOTE BOOK	DESIGNED	BY
NO.	CHECKED	
	BY	
	DATE	

PROFILE	DESIGNED	DATE
NOTE BOOK	CHECKED	BY
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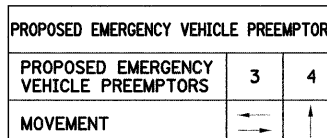


PUSHBUTTONS "A" AND "D" SHALL PLACE A CALL IN PHASES 8 AND 2
PUSHBUTTONS "B" AND "C" SHALL PLACE A CALL IN PHASES 6 AND 8



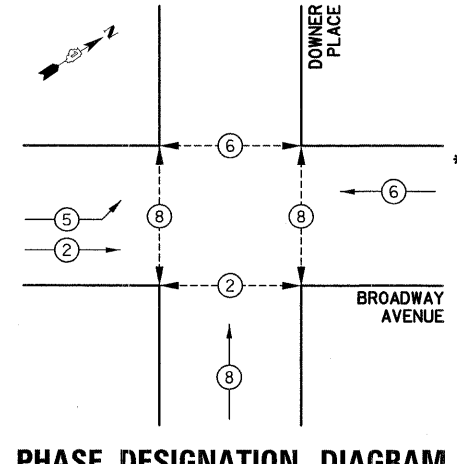
CONTROLLER SEQUENCE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



LIGHTING CABLE PLAN

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 - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+HL-2=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	(6m+L-0.6m)	
E - M.A. LENGTH		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
<30'	30" (900mm)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
<40'	30" (750mm)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
<40'	36" (900mm)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
<50'	36" (900mm)			POST MOUNTED	6 (1.8)
>50'	36" (900mm)				



SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	DOWNER PLACE
TRENCH BACKFILL	CU YD	4.4
PORTLAND CEMENT CONCRETE SIDEWALK, SPECIAL	SQ FT	80
SIDEWALK REMOVAL	SQ FT	80
CONTROLLED LOW STRENGTH MATERIAL	CU YD	21.1
SIGN PANEL - TYPE 1	SQ FT	26.2
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	522
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	100
PAVEMENT MARKING REMOVAL	SQ FT	354
** ELECTRICAL SERVICE INSTALLATION, SPECIAL	EACH	1
SERVICE INSTALLATION (SPECIAL)	EACH	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	63
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	51
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	177
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	145
HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
** ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	301
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	129
** LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 310 WATT	EACH	2
LIGHTING CONTROLLER TYPE CB-RCS 80 AMP - 240 VOLT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	455
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1720.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1427.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	204.5
ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16 6 PAIR	FOOT	414.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	229
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
** STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 24 FT. (SPECIAL)	EACH	1
** STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 26 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	20
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	5
* LIGHT DETECTOR	EACH	3
* LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1975
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	2
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	424.5
EXPLORATORY EXCAVATION	EACH	1
VIDEO DETECTION SYSTEM	EACH	1
* LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	2
MASONRY WALL CONSTRUCTION	SQ FT	42
REMOVE EXISTING CONCRETE FOUNDATIONS (SPECIAL)	EACH	1

* 100% COST TO THE CITY OF AURORA.
** PARTIAL COST TO CITY OF AURORA (SEE SUMMARY OF QUANTITIES).

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE COORDINATED BY THE CONTRACTOR WITH THE CITY OF AURORA.

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14		17	0.50	119
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	4		12	0.10	4.8
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
LED SIGN	3		60	0.50	90
LUMINAIRE	3		310	0.50	465
VIDEO SYSTEM	1		15	1.00	15
TOTAL =					1158.8

ENERGY COSTS TO: CITY OF AURORA
44 E. DOWNER PLACE
AURORA, ILLINOIS 60507-2067

ENERGY SUPPLY CONTACT: MARK SCHERIBEL
PHONE: (630) 723-2128
COMPANY: COMMONWEALTH EDISON

FILE NAME =	USER NAME = .USER.	DESIGNED -	REVISED -
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		CHECKED APS	REVISED -
		DATE JAN 23 2009	REVISED -

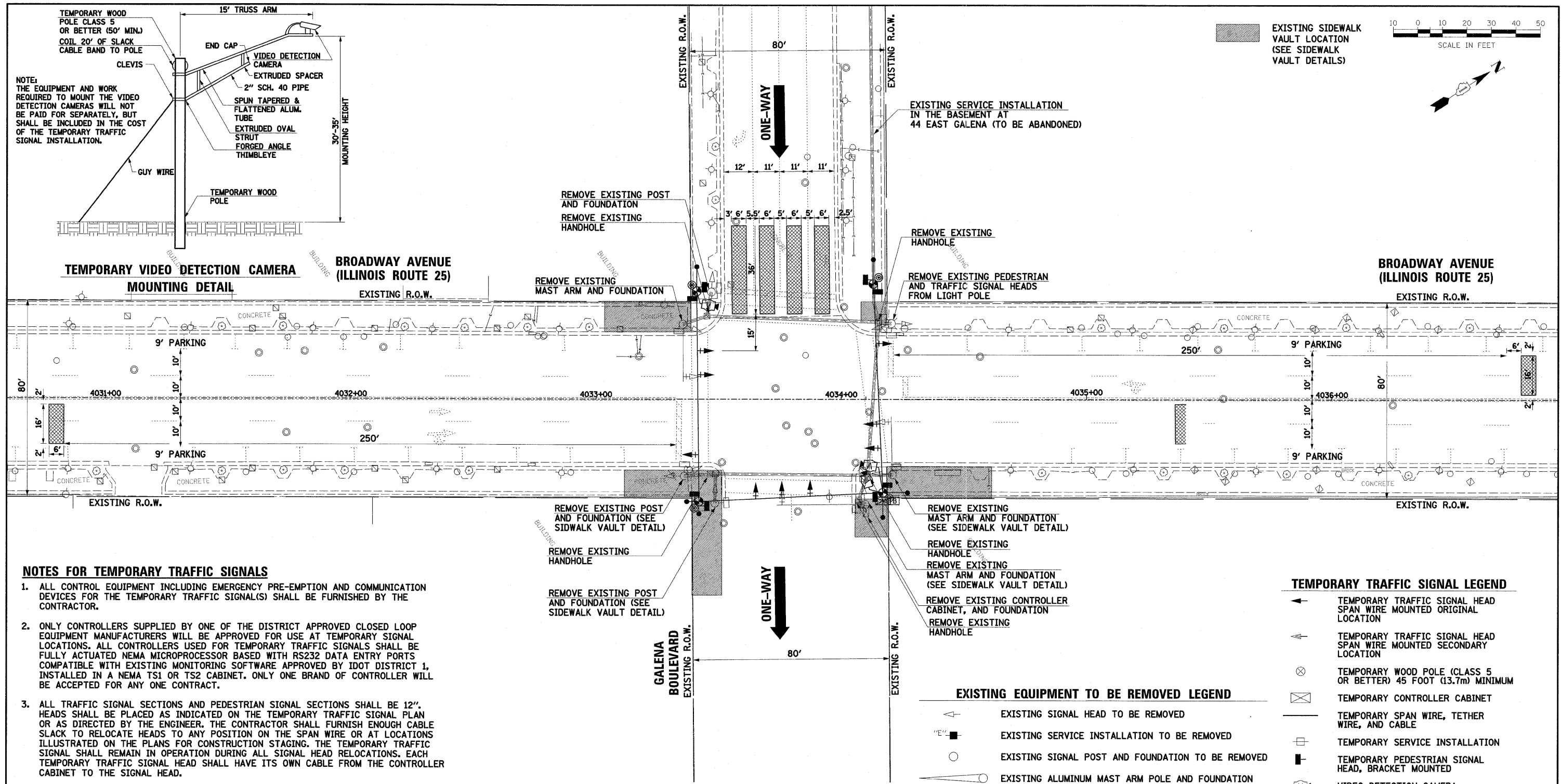
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2009-002 TS	KANE	34	15
CONTRACT NO. 60F99				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

PLAN	SURVEYED	DATE
	PLOTTED	BY
	NOTED	
	REVIEWED	
	CHECKED	
	NO. OF WAY CHECKED	
	NO. CAD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	NOTED	
	REVIEWED	
	CHECKED	
	NO. OF WAY CHECKED	
	NO. STRUCTURE NOTATIONS CIPED	



NOTES FOR TEMPORARY TRAFFIC SIGNALS

- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
- THE WOOD POLES FOR THE TEMPORARY TRAFFIC SIGNALS SHALL BE LONG ENOUGH TO ACCOMMODATE THE LUMINAIRE MOUNTING HEIGHT AS SPECIFIED ON THE TEMPORARY LIGHTING PLANS.
- ALL LABOR AND MATERIAL REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR TEMPORARY TRAFFIC SIGNAL INSTALLATION.

THE EXISTING CONDUITS AND VEHICLE DETECTORS (WHERE APPLICABLE) SHALL BE ABANDONED.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM OUTSIDE THE RIGHT-OF-WAY AT HIS EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (SEE SCHEDULE OF QUANTITIES FOR REMOVAL ITEMS TO BE PAID FOR SEPERATELY).

1	EACH	TRAFFIC SIGNAL CONTROLLER AND CABINET (COMPLETE)
3	EACH	STEEL MAST ARM ASSEMBLY AND POLE
3	EACH	TRAFFIC SIGNAL POST
12	EACH	TRAFFIC SIGNAL HEADS
3	EACH	TRAFFIC SIGNAL BACKPLATES
8	EACH	PEDESTRIAN SIGNAL HEADS

FILE NAME =	USER NAME = .USER.	DESIGNED -	REVISED -
...\\690.3.sjg@4a.galena.1DOT.dgn		DRAWN BAH	REVISED -
		CHECKED APS	REVISED -
		DATE JAN 23 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**TEMPORARY TRAFFIC SIGNAL INSTALLATION AND EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED
IL ROUTE 25 AT GALENA BOULEVARD**

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.
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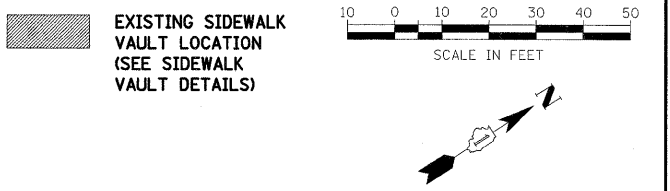
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2009-002 TS	KANE	34	16
CONTRACT NO. 60F99				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

TEMPORARY TRAFFIC SIGNAL LEGEND

- ← TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- ← TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- ⊗ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- ⊠ TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- ⊞ TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- ◻ VIDEO DETECTION CAMERA
- ▨ VIDEO DETECTION AREA
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ▶ EMERGENCY VEHICLE LIGHT DETECTOR
- ⊞ CONFIRMATION BEACON
- ◻ VEHICLE DETECTOR, INDUCTION LOOP
- UD UNIT DUCT
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- ⊞ HANDHOLE
- ⊞ HEAVY DUTY HANDHOLE
- CT COMMON TRENCH
- ⊞ UNINTERRUPTIBLE POWER SUPPLY

EXISTING EQUIPMENT TO BE REMOVED LEGEND

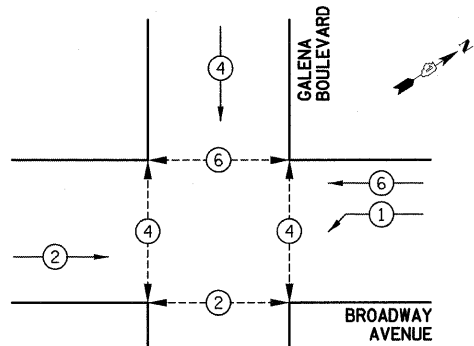
- ← EXISTING SIGNAL HEAD TO BE REMOVED
- "E" ■ EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- ▶ EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" ⊠ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" ⊞ EXISTING HANDHOLE TO BE REMOVED
- ⊞ EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- ⊙ EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- ▶ EXISTING VEHICLE LIGHT DETECTOR TO BE REMOVED
- ⊞ CONFIRMATION BEACON TO BE REMOVED
- "E" ⊞ EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED



PLAN	SUBMITTED	DATE
NOTE BOOK	PLOTTED	BY
NO.	CHECKED	
	RT. OF WAY CHECKED	
	PAID FILE NAME	

PROFILE	SUBMITTED	DATE
NOTE BOOK	PLOTTED	BY
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	RT. OF WAY CHECKED	
	STRUCTURE NOTATIONS CHECKED	

TEMPORARY CONTROLLER SEQUENCE

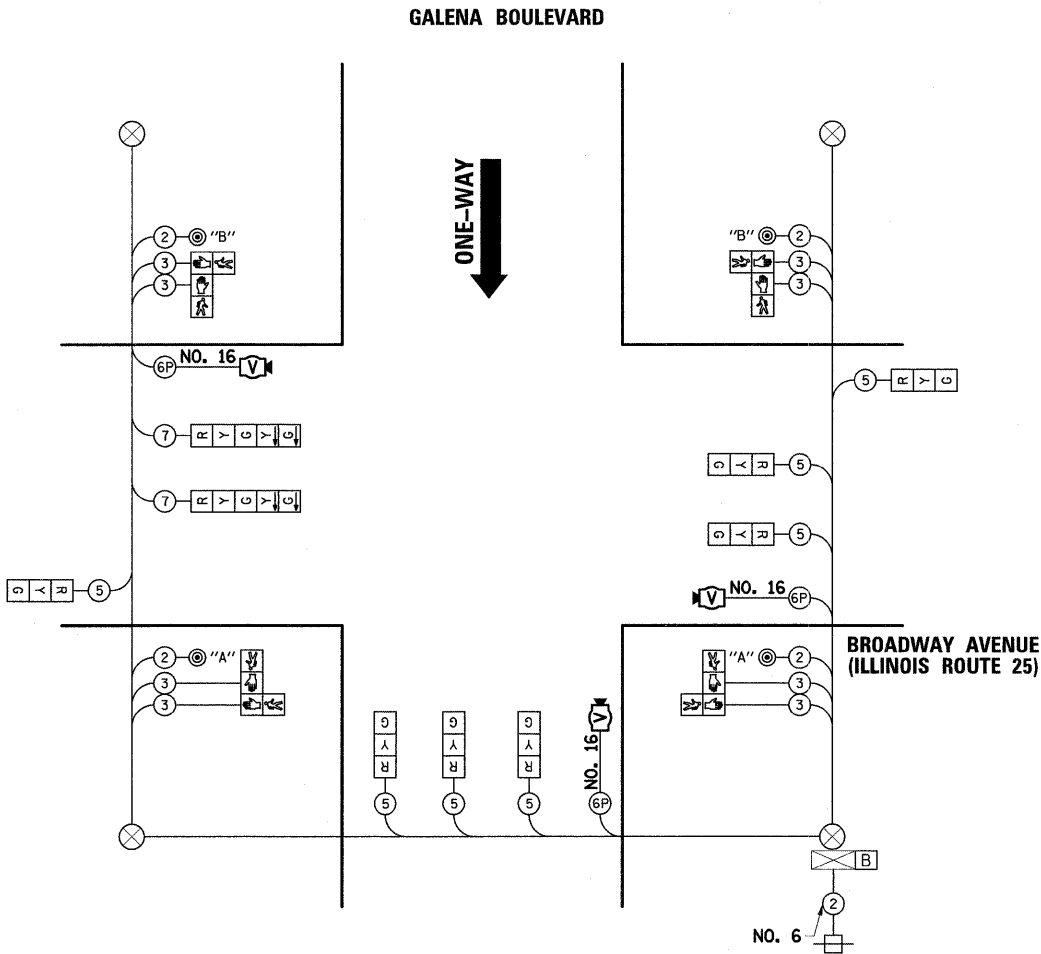


CONTROLLER SEQUENCE LEGEND

- ← ⊙ → DUAL ENTRY PHASE
- ← ⊙ → SINGLE ENTRY PHASE
- ← ⊙ → OVERLAP
- * NUMBER REFERRING TO ASSOCIATED PHASE
- ← ⊙ → PEDESTRIAN PHASE

TEMPORARY PHASE DESIGNATION DIAGRAM

PUSHBUTTONS "A" SHALL PLACE A CALL IN PHASES 2 AND 4
 PUSHBUTTONS "B" SHALL PLACE A CALL IN PHASES 4 AND 6

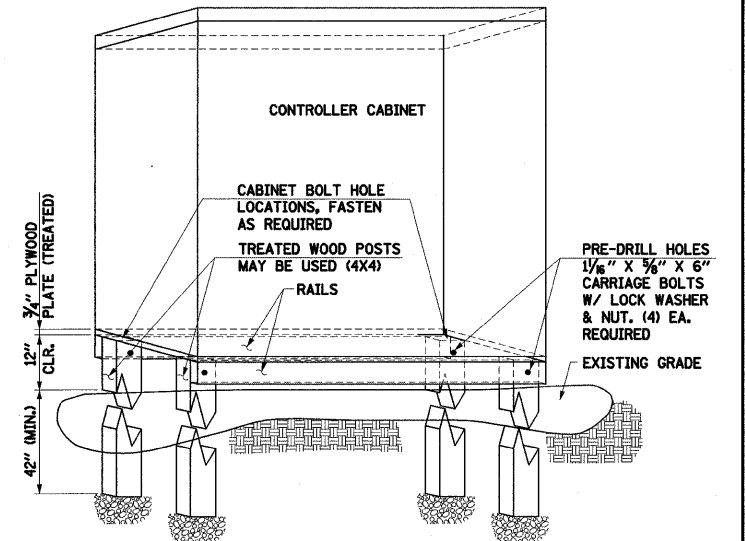


TEMPORARY CABLE DIAGRAM LEGEND

- ⊠ TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- ⊠ TEMPORARY CONTROLLER CABINET
- ⊠ TEMPORARY SERVICE INSTALLATION
- ⊙ INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NO. 14 AWG WIRE UNLESS OTHERWISE NOTED.
- ⊠ EMERGENCY VEHICLE LIGHT DETECTOR
- ⊠ CONFIRMATION BEACON
- ⊠ VEHICLE DETECTOR, INDUCTION LOOP
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ⊠ 12" (300mm) PEDESTRIAN SIGNAL SECTION
- ⊠ VIDEO DETECTION CAMERA
- ⊠ UNINTERRUPTIBLE POWER SUPPLY

CONTROLLER CABINET TYPE AND DIMENSIONS VARY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECT CABINET DIMENSIONS PRIOR TO THE CONSTRUCTION OF THE CABINET MOUNTING PLATFORM SHOWN BELOW.

CABINET PLATFORM LEGS AND RAILS SHALL BE CONSTRUCTED OF 2" X 6" TREATED WOOD TO RESIST WEATHERING.



TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM DETAIL

(NOT TO SCALE)

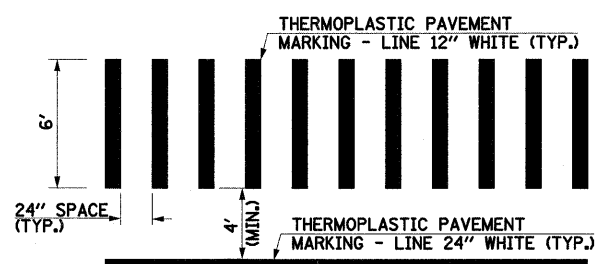
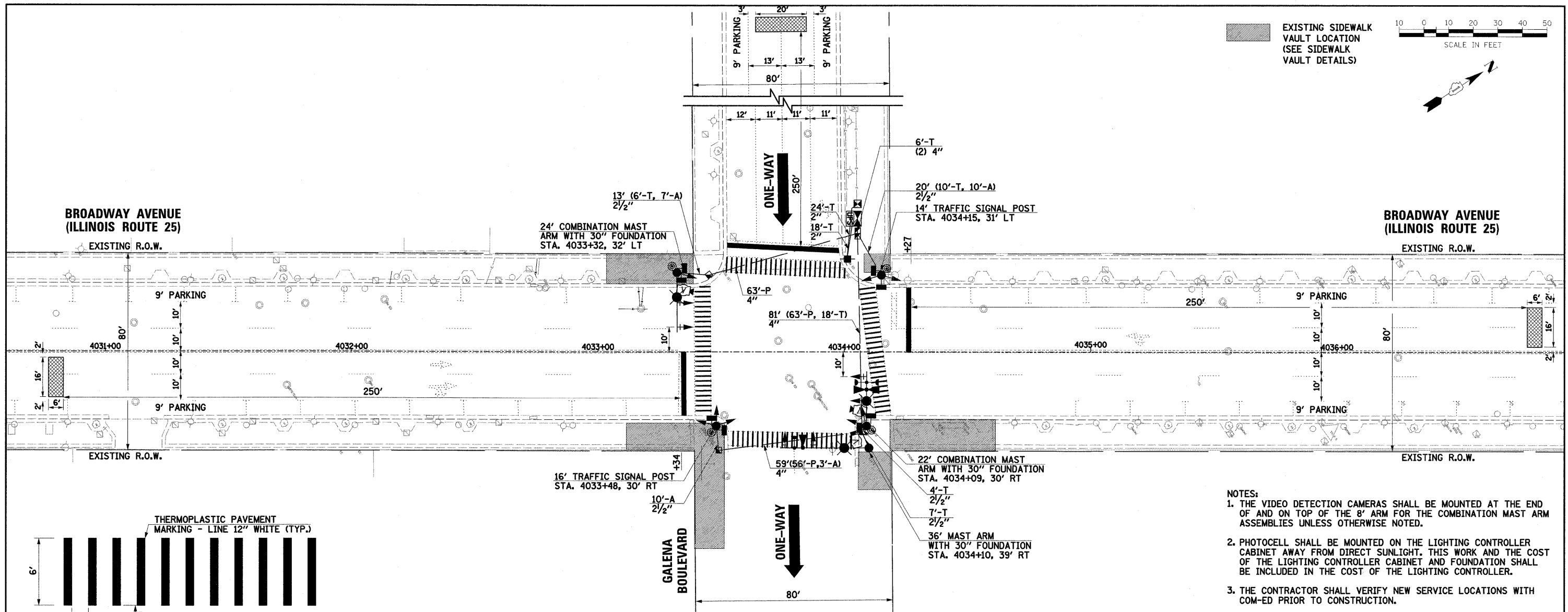
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	9		17	0.50	76.5
(YELLOW)	9		25	0.25	56.3
(GREEN)	9		15	0.25	33.8
ARROW	4		12	0.10	4.8
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
VIDEO SYSTEM	1		15	1.00	15
UPS	1		25	1.00	25
TOTAL =					511.4

ENERGY COSTS TO: CITY OF AURORA
 44 E. DOWNER PLACE
 AURORA, ILLINOIS 60507-2067

ENERGY SUPPLY CONTACT: MARK SCHERIBEL
 PHONE: (630) 723-2128
 COMPANY: COMMONWEALTH EDISON

PLAN	SURVEYED	DATE
	ALIGNED	BY
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	NO. OF WAY CHECKED	
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	NO.	

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	STRUCTURE NOTATIONS CHKD	
	NO.	



TYPICAL STRIPING DETAIL AT CROSSWALKS

PROPOSED TRAFFIC SIGNS

- R6-2-2430 (2 EACH)**

LOCATIONS:
 1. NORTHBOUND MAST ARM, 3' EAST OF THE OUTER 3-SECTION SIGNAL HEAD.
 2. TRAFFIC SIGNAL POST IN THE SOUTHEAST CORNER FACING SOUTH.
- R6-2-2430 (2 EACH)**

LOCATIONS:
 1. SOUTHBOUND MAST ARM, 3' WEST OF THE OUTER 5-SECTION SIGNAL HEAD.
 2. TRAFFIC SIGNAL POST IN NORTHWEST CORNER FACING NORTH.
- M-1100-2424 (1 EACH)**

LOCATION:
 1. EASTBOUND MAST ARM, 6' NORTH OF THE OUTER 3-SECTION SIGNAL HEAD.
- M6-4-2115 (1 EACH)**

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE COORDINATED BY THE CONTRACTOR WITH THE CITY OF AURORA.

RESTORATION OF WORK AREA:
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED UNLESS OTHERWISE NOTED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			DETECTOR LOOP		
SERVICE INSTALLATION			CAST IRON JUNCTION BOX		
SIGNAL HEAD			EMERGENCY VEHICLE LIGHT DETECTOR		
SIGNAL HEAD WITH BACKPLATE			CONFIRMATION BEACON		
SIGNAL HEAD, PEDESTRIAN			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL POST			CONDUIT SPLICE		
MAST ARM ASSEMBLY AND POLE, STEEL			WOOD POLE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
UNIT DUCT	UD		RAILROAD CONTROL CABINET		
COMMON TRENCH	CT		TELEPHONE CONNECTION		
HANDHOLE			ILLUMINATED SIGN "NO LEFT TURN"		
HEAVY DUTY HANDHOLE			ILLUMINATED SIGN "NO RIGHT TURN"		
DOUBLE HANDHOLE			VIDEO DETECTION CAMERA		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			VIDEO DETECTION AREA		
PEDESTRIAN PUSHBUTTON DETECTOR			WIRELESS ANTENNA		

CABLE PLAN LEGEND

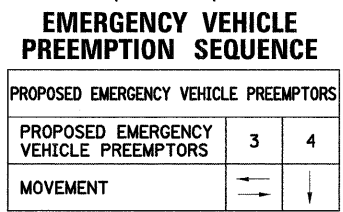
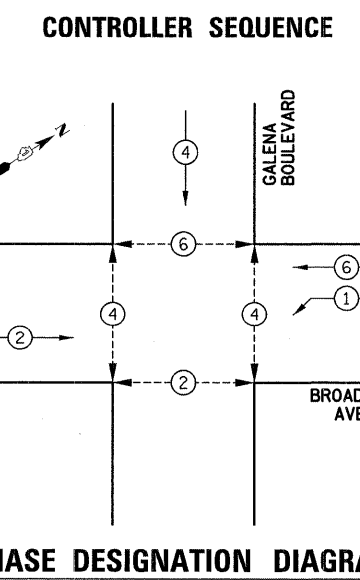
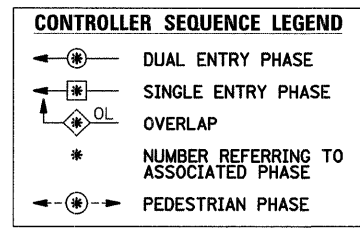
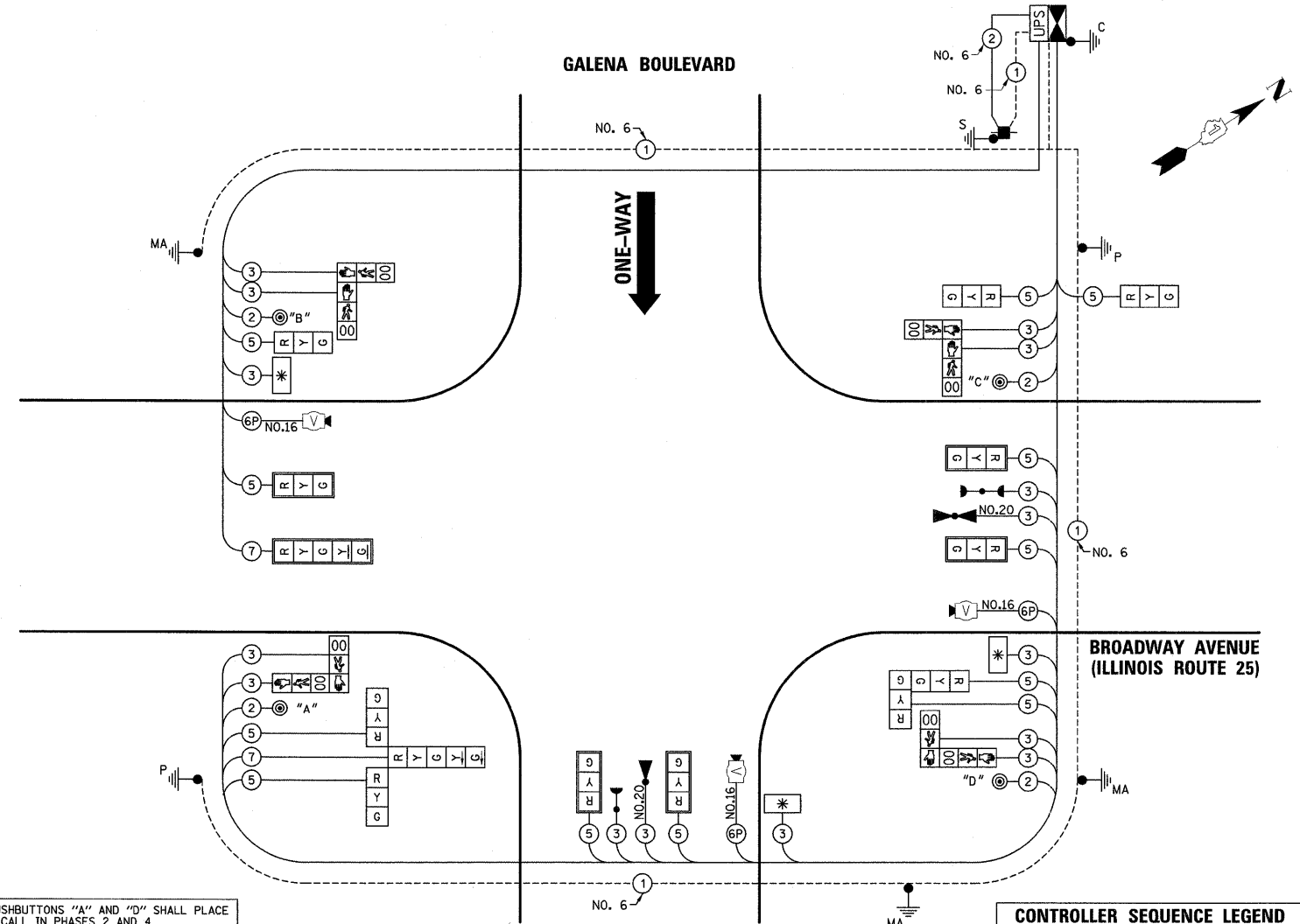
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|-----------------|-----------------|---|
| EXISTING | PROPOSED | |
| | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | TELEPHONE INSTALLATION |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | LUMINAIRE |
| | | DENOTES NUMBER OF CONDUCTORS.
ALL CABLE NO. 14 EXCEPT AS INDICATED.
ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | GROUND CABLE IN CONDUIT
NO. 6 SOLID COPPER (GREEN) |
| | | FIBER OPTIC CABLE IN CONDUIT
NO. 62.5/125 2-MM12F SM12F |
| | | SIGNAL FACE WITH BACKPLATE.
"P" INDICATES PROGRAMMED HEAD. |
| | | RAILROAD CONTROL CABINET |
| | | ILLUMINATED SIGN
"NO LEFT TURN" |
| | | ILLUMINATED SIGN
"NO RIGHT TURN" |
| | | WIRELESS ANTENNA |
| | | GROUND ROD AT HANDHOLE (H),
DOUBLE HANDHOLE (HH), OR CONTROLLER (C) |
| | | GROUND ROD AT POST (P)
OR MAST ARM POLE (MA) |
| | | GROUND ROD AT ELECTRIC
SERVICE INSTALLATION |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | LED STREET NAME SIGN |
| | | VIDEO DETECTION CAMERA |

PLAN	DATE
BY	
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PROFILE	DATE
BY	
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DATE	
NO.	

PUSHBUTTONS "A" AND "D" SHALL PLACE
A CALL IN PHASES 2 AND 4

PUSHBUTTONS "B" AND "C" SHALL PLACE
A CALL IN PHASES 4 AND 6



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 - CONTROLLER	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.A. LENGTH		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
<30'	30" (900mm)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
<40'	30" (750mm)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
<40'	36" (900mm)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
<50'	36" (900mm)			POST MOUNTED	6 (1.8)
>50'	36" (900mm)				

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14		17	0.50	119
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	4		12	0.10	4.8
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
UPS	1		25	1.00	25
LED SIGN	3		60	0.50	90
LUMINAIRE	3		310	0.50	465
VIDEO SYSTEM	1		15	1.00	15
TOTAL =					1158.8

ENERGY COSTS TO: CITY OF AURORA
44 E. DOWNER PLACE
AURORA, ILLINOIS 60507-2067

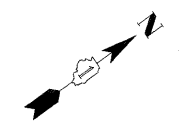
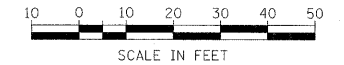
ENERGY SUPPLY CONTACT: MARK SCHERIBEL
PHONE: (630) 723-2128
COMPANY: COMMONWEALTH EDISON

SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	GALENA BOULEVARD
TRENCH BACKFILL	CU YD	4.5
PORTLAND CEMENT CONCRETE SIDEWALK, SPECIAL	SQ FT	94
SIDEWALK REMOVAL	SQ FT	94
CONTROLLED LOW STRENGTH MATERIAL	CU YD	27
SIGN PANEL - TYPE 1	SQ FT	26.2
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	608
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	98
PAVEMENT MARKING REMOVAL	SQ FT	396
ELECTRICAL SERVICE INSTALLATION, SPECIAL	EACH	1
SERVICE INSTALLATION (SPECIAL)	EACH	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	42
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	27
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	30
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	182
CONDUIT ATTACHED TO STRUCTURE, 2 1/2" DIA., GALVANIZED STEEL	FOOT	27
CONDUIT ATTACHED TO STRUCTURE, 4" DIA., GALVANIZED STEEL	FOOT	3
HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	448.5
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	93
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 310 WATT	EACH	3
LIGHTING CONTROLLER TYPE CB-RCS 60 AMP - 240 VOLT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	481
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1927
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1651
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	345.5
ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16 6 PAIR	FOOT	418.5
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	74
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 22 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 24 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 36 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE A (SPECIAL)	FOOT	21
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	33.5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	5
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2567
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING CONCRETE FOUNDATION	EACH	3
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
PAINT TRAFFIC SIGNAL POST	EACH	2
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	418.5
EXPLORATORY EXCAVATION	EACH	2
VIDEO DETECTION SYSTEM	EACH	1
LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	3
MASONRY WALL CONSTRUCTION	SQ FT	181
REMOVE EXISTING CONCRETE FOUNDATIONS (SPECIAL)	EACH	4

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

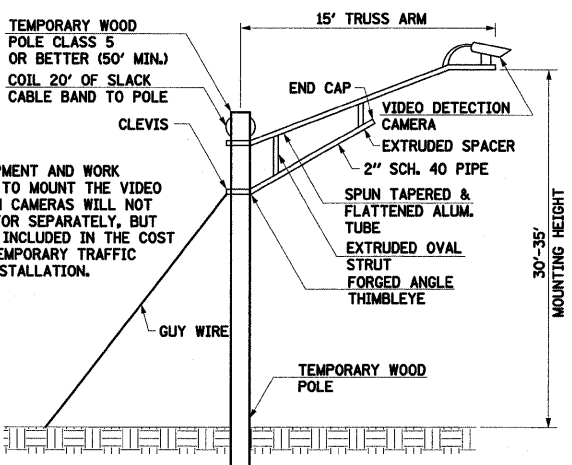
THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE COORDINATED BY THE CONTRACTOR WITH THE CITY OF AURORA.



EXISTING SIDEWALK VAULT LOCATION (SEE SIDEWALK VAULT DETAILS)

THIS LOCATION IS CURRENTLY PART OF A CITY OF AURORA CONTRACT, COORDINATION WITH THAT CONTRACT WILL BE REQUIRED.

NOTE: THE EXISTING SERVICE INSTALLATION IS WITHIN THE ELECTRICAL VAULT IN THE SOUTHEAST CORNER OF THE INTERSECTION (TO BE ABANDONED).



NOTE: THE EQUIPMENT AND WORK REQUIRED TO MOUNT THE VIDEO DETECTION CAMERAS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

TEMPORARY VIDEO DETECTION CAMERA MOUNTING DETAIL
BROADWAY AVENUE (ILLINOIS ROUTE 25)
EXISTING R.O.W.

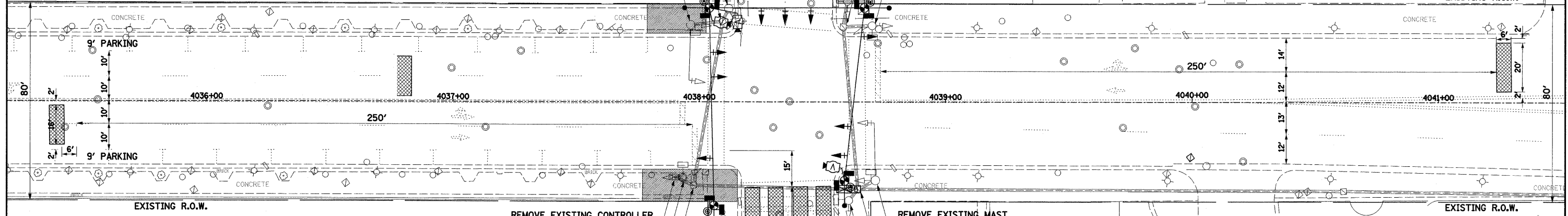
REMOVE EXISTING MAST ARM AND FOUNDATION
REMOVE EXISTING HANDHOLE

REMOVE EXISTING POST AND FOUNDATION
REMOVE EXISTING HANDHOLE
REMOVE EXISTING PEDESTRIAN AND TRAFFIC SIGNAL HEADS FROM LIGHT POLE

REMOVE EXISTING MAST ARM AND FOUNDATION

REMOVE EXISTING MAST ARM AND FOUNDATION
REMOVE EXISTING HANDHOLE
REMOVE EXISTING POST AND FOUNDATION

REMOVE EXISTING CONTROLLER, CABINET, AND FOUNDATION
REMOVE EXISTING PEDESTRIAN AND TRAFFIC SIGNAL HEADS FROM LIGHT POLE
REMOVE EXISTING HANDHOLE



NOTES FOR TEMPORARY TRAFFIC SIGNALS

- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
- THE WOOD POLES FOR THE TEMPORARY TRAFFIC SIGNALS SHALL BE LONG ENOUGH TO ACCOMMODATE THE LUMINAIRE MOUNTING HEIGHT AS SPECIFIED ON THE TEMPORARY LIGHTING PLANS.
- ALL LABOR AND MATERIAL REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR TEMPORARY TRAFFIC SIGNAL INSTALLATION.

THE EXISTING CONDUITS AND VEHICLE DETECTORS (WHERE APPLICABLE) SHALL BE ABANDONED.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM OUTSIDE THE RIGHT-OF-WAY AT HIS EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT (SEE SCHEDULE OF QUANTITIES FOR REMOVAL ITEMS TO BE PAID FOR SEPERATELY).

1	EACH	TRAFFIC SIGNAL CONTROLLER AND CABINET (COMPLETE)
3	EACH	STEEL MAST ARM ASSEMBLY AND POLE
2	EACH	TRAFFIC SIGNAL POST
12	EACH	TRAFFIC SIGNAL HEADS
3	EACH	TRAFFIC SIGNAL BACKPLATES
8	EACH	PEDESTRIAN SIGNAL HEADS

TEMPORARY TRAFFIC SIGNAL LEGEND

- ◀ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- ◀ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- ⊗ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- ⊠ TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- ⊞ TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- 📹 VIDEO DETECTION CAMERA
- ▨ VIDEO DETECTION AREA
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- 🚗 EMERGENCY VEHICLE LIGHT DETECTOR
- 📡 CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- UD UNIT DUCT
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- Ⓜ HANDHOLE
- Ⓜ HEAVY DUTY HANDHOLE
- CT COMMON TRENCH
- Ⓜ UNINTERRUPTIBLE POWER SUPPLY

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- ◀ EXISTING SIGNAL HEAD TO BE REMOVED
- Ⓜ EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- ◀ EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- Ⓜ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- Ⓜ EXISTING HANDHOLE TO BE REMOVED
- ◀ EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- ⊙ EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- 🚗 EXISTING VEHICLE LIGHT DETECTOR TO BE REMOVED
- 📡 EXISTING CONFIRMATION BEACON TO BE REMOVED
- Ⓜ EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION AND EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED IL ROUTE 25 AT NEW YORK STREET

FILE NAME =	USER NAME = .USER.	DESIGNED -	REVISED -
...\\698.3.ssg@sa-newyork-illdot.dgn		DRAWN BAH	REVISED -
		CHECKED APS	REVISED -
		DATE JAN 23 2009	REVISED -

PLDT SCALE = #SCALE#	
PLDT DATE = 2/11/2009	

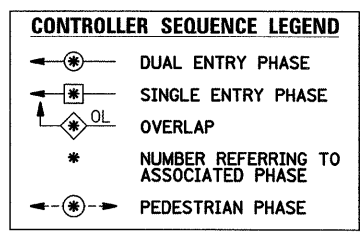
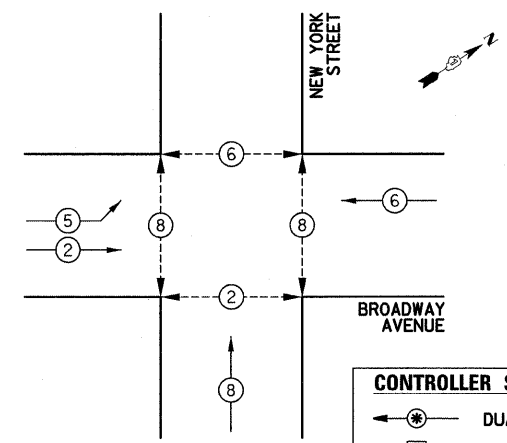
SCALE:	SHEET NO. OF SHEETS	STA. TO STA.
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2009-002 TS	KANE	34	20
CONTRACT NO. 60F99				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	NOTED	
	RT. OF WAY CHECKED	
	NO. FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	NOTED	
	RT. OF WAY CHECKED	
	NO. FILE NAME	

TEMPORARY CONTROLLER SEQUENCE

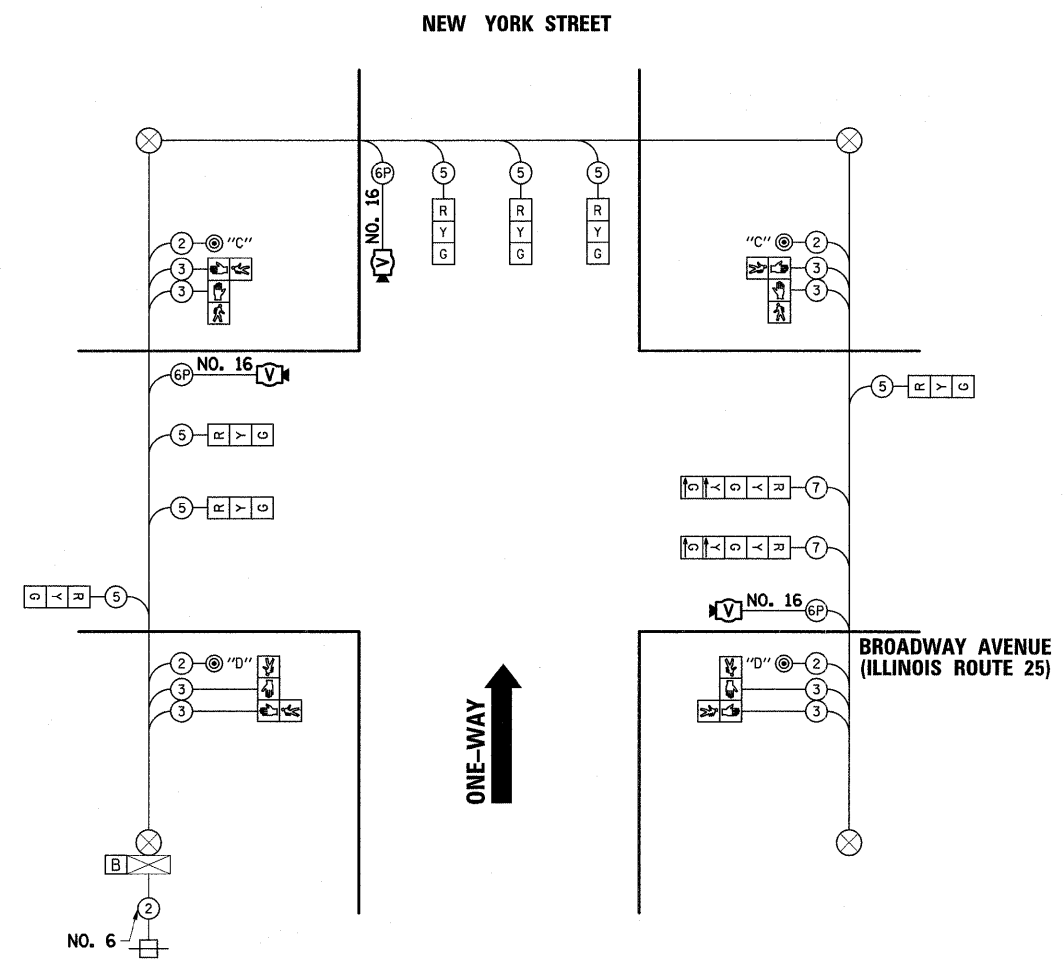


TEMPORARY PHASE DESIGNATION DIAGRAM

PUSHBUTTONS "C" SHALL PLACE A CALL IN PHASES 6 AND 8
 PUSHBUTTONS "D" SHALL PLACE A CALL IN PHASES 8 AND 2

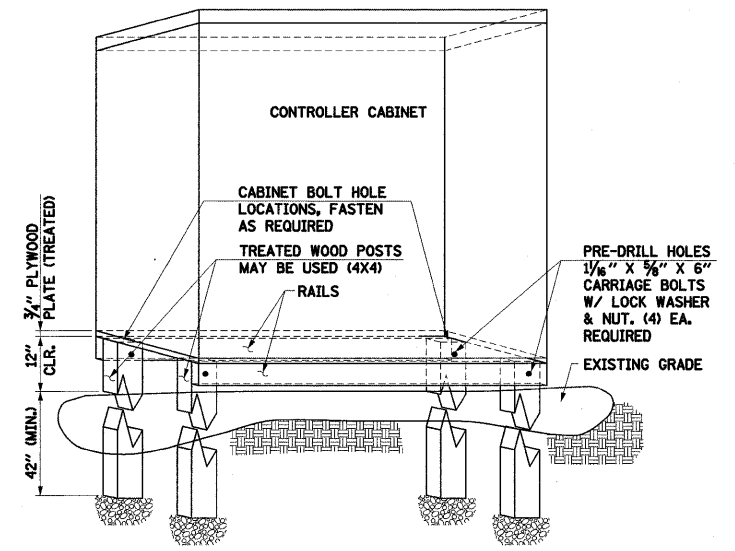
TEMPORARY CABLE DIAGRAM LEGEND

- ⊠ TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- ⊠ TEMPORARY CONTROLLER CABINET
- ⊠ TEMPORARY SERVICE INSTALLATION
- ⊙ INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NO. 14 AWG WIRE UNLESS OTHERWISE NOTED.
- ⊠ EMERGENCY VEHICLE LIGHT DETECTOR
- ⊠ CONFIRMATION BEACON
- ⊠ VEHICLE DETECTOR, INDUCTION LOOP
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ⊠ 12" (300mm) PEDESTRIAN SIGNAL SECTION
- ⊠ VIDEO DETECTION CAMERA
- ⊠ UNINTERRUPTIBLE POWER SUPPLY



CONTROLLER CABINET TYPE AND DIMENSIONS VARY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECT CABINET DIMENSIONS PRIOR TO THE CONSTRUCTION OF THE CABINET MOUNTING PLATFORM SHOWN BELOW.

CABINET PLATFORM LEGS AND RAILS SHALL BE CONSTRUCTED OF 2" X 6" TREATED WOOD TO RESIST WEATHERING.



TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM DETAIL
(NOT TO SCALE)

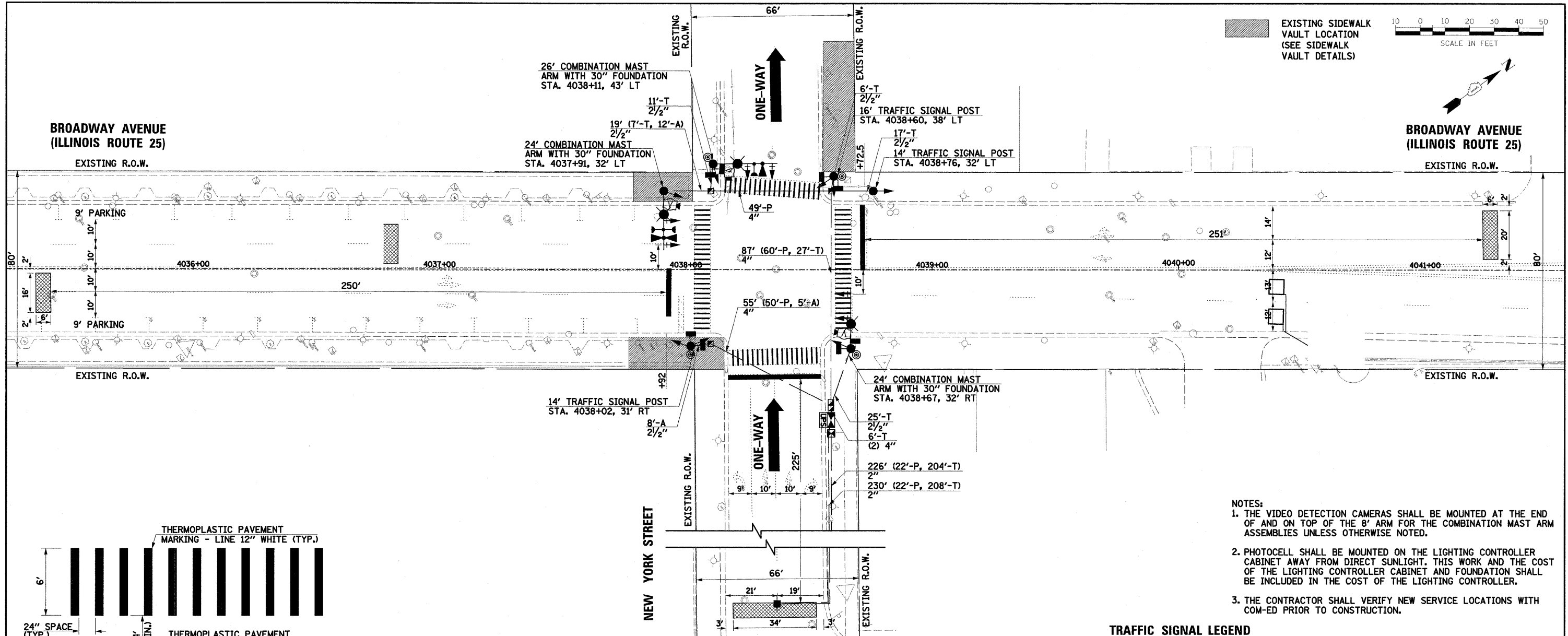
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE		% OPERATION	
		INCAND.	LED		
SIGNAL (RED)	9		17	0.50	76.5
(YELLOW)	9		25	0.25	56.3
(GREEN)	9		15	0.25	33.8
ARROW	4		12	0.10	4.8
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1		100	1.00	100
VIDEO SYSTEM	1		15	1.00	15
UPS	1		25	1.00	25
TOTAL =					511.4

ENERGY COSTS TO: CITY OF AURORA
44 E. DOWNER PLACE
AURORA, ILLINOIS 60507-2067

ENERGY SUPPLY CONTACT: MARK SCHERIBEL
PHONE: (630) 723-2128
COMPANY: COMMONWEALTH EDISON

PLAN	SURVEYED	DATE
	PLANNED	BY
	DESIGNED	NO.
	CHECKED	DATE
	NOTED	
	STRUCTURE	
	NOTATION	
	CHKD	

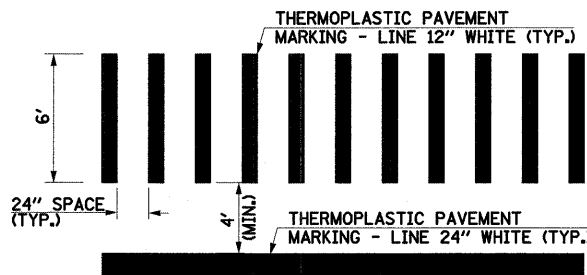
PROFILE	SURVEYED	DATE
	PLANNED	BY
	DESIGNED	NO.
	CHECKED	DATE
	NOTED	
	STRUCTURE	
	NOTATION	
	CHKD	



EXISTING SIDEWALK VAULT LOCATION (SEE SIDEWALK VAULT DETAILS)

SCALE IN FEET

- NOTES:**
1. THE VIDEO DETECTION CAMERAS SHALL BE MOUNTED AT THE END OF AND ON TOP OF THE 8' ARM FOR THE COMBINATION MAST ASSEMBLIES UNLESS OTHERWISE NOTED.
 2. PHOTOCCELL SHALL BE MOUNTED ON THE LIGHTING CONTROLLER CABINET AWAY FROM DIRECT SUNLIGHT. THIS WORK AND THE COST OF THE LIGHTING CONTROLLER CABINET AND FOUNDATION SHALL BE INCLUDED IN THE COST OF THE LIGHTING CONTROLLER.
 3. THE CONTRACTOR SHALL VERIFY NEW SERVICE LOCATIONS WITH COM-ED PRIOR TO CONSTRUCTION.



TYPICAL STRIPING DETAIL AT CROSSWALKS

PROPOSED TRAFFIC SIGNS

- R6-2-2430 (2 EACH)** **ONE WAY** (Right Arrow)
 - LOCATIONS:
 1. NORTHBOUND MAST ARM, 3' WEST OF THE OUTER 3-SECTION SIGNAL HEAD.
 2. NORTHERN TRAFFIC SIGNAL POST IN THE NORTHWEST CORNER FACING NORTH
- R6-2-2430 (2 EACH)** **ONE WAY** (Left Arrow)
 - LOCATIONS:
 1. NORTHBOUND MAST ARM, 3' EAST OF THE OUTER 5-SECTION SIGNAL HEAD.
 2. TRAFFIC SIGNAL POST IN SOUTHEAST CORNER FACING SOUTH.
- M-1100-2424 (1 EACH)** **ILLINOIS 25** (Double Arrow)
 - LOCATION:
 1. WESTBOUND MAST ARM, 6' SOUTH OF THE OUTER 3-SECTION SIGNAL HEAD.
- M6-4-2115 (1 EACH)** (Left Arrow)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE COORDINATED BY THE CONTRACTOR WITH THE CITY OF AURORA.

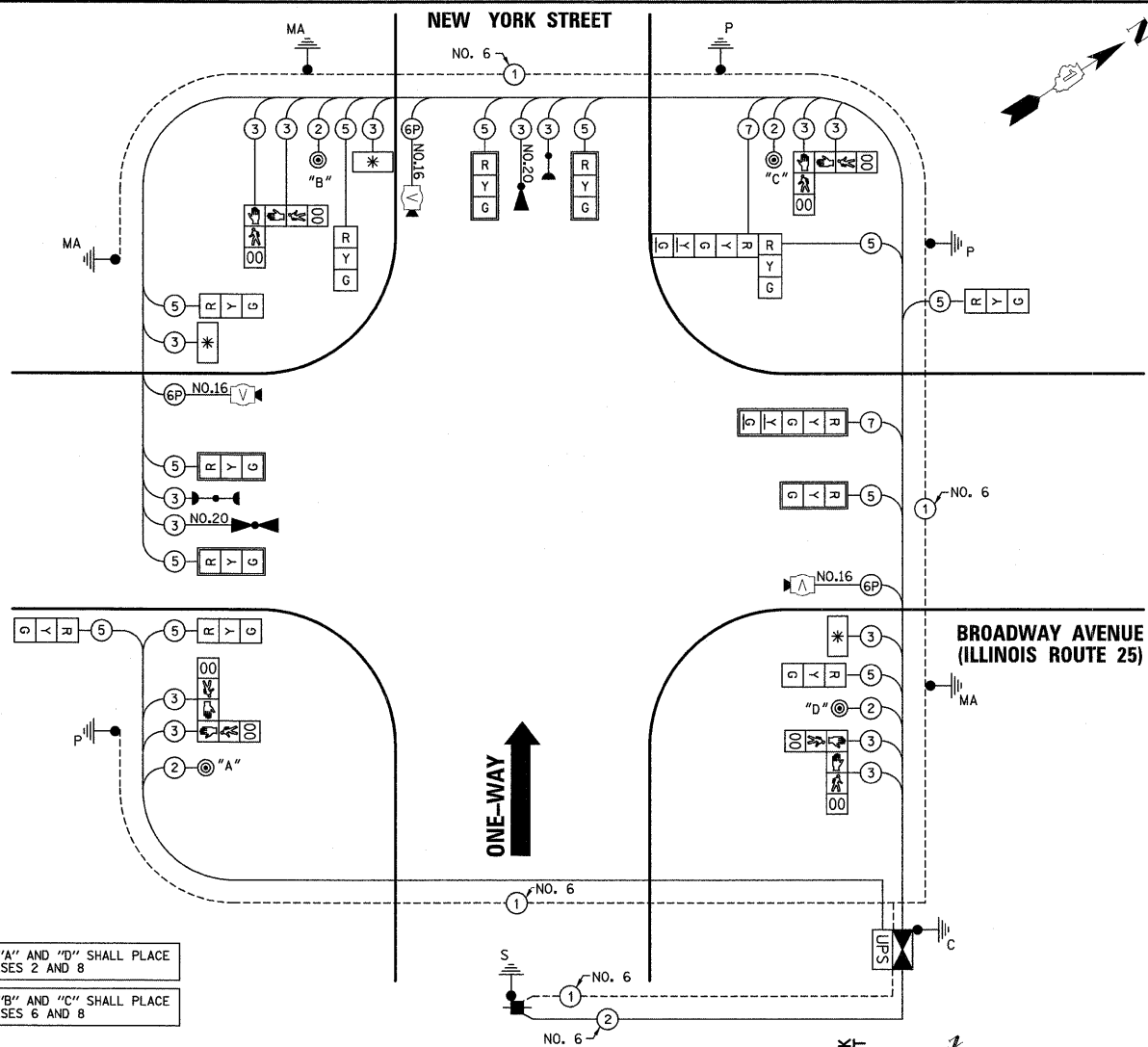
RESTORATION OF WORK AREA:
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED UNLESS OTHERWISE NOTED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

TRAFFIC SIGNAL LEGEND

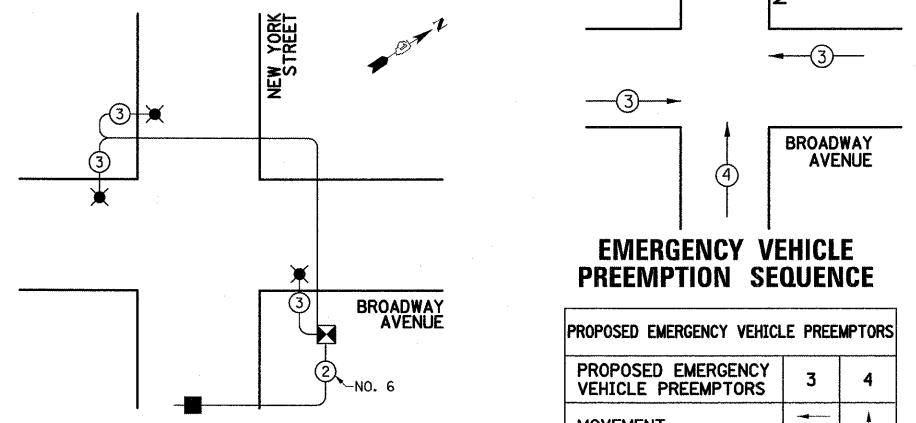
	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			DETECTOR LOOP		
SERVICE INSTALLATION			CAST IRON JUNCTION BOX		
SIGNAL HEAD			EMERGENCY VEHICLE LIGHT DETECTOR		
SIGNAL HEAD WITH BACKPLATE			CONFIRMATION BEACON		
SIGNAL HEAD, PEDESTRIAN			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL POST			CONDUIT SPLICE		
MAST ARM ASSEMBLY AND POLE, STEEL			WOOD POLE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
UNIT DUCT	UD		RAILROAD CONTROL CABINET		
COMMON TRENCH	CT		TELEPHONE CONNECTION		
HANDHOLE			ILLUMINATED SIGN "NO LEFT TURN"		
HEAVY DUTY HANDHOLE			ILLUMINATED SIGN "NO RIGHT TURN"		
DOUBLE HANDHOLE			VIDEO DETECTION CAMERA		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)			VIDEO DETECTION AREA		
PEDESTRIAN PUSHBUTTON DETECTOR			WIRELESS ANTENNA		

CABLE PLAN LEGEND

- | | | |
|-----------------|-----------------|---|
| EXISTING | PROPOSED | |
| | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | TELEPHONE INSTALLATION |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | LUMINAIRE |
| | | DENOTES NUMBER OF CONDUCTORS.
ALL CABLE NO. 14 EXCEPT AS INDICATED.
ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | GROUND CABLE IN CONDUIT
NO. 6 SOLID COPPER (GREEN) |
| | | FIBER OPTIC CABLE IN CONDUIT
NO. 62.5/125 2-MM12F SM12F |
| | | SIGNAL FACE WITH BACKPLATE.
"P" INDICATES PROGRAMMED HEAD. |
| | | RAILROAD CONTROL CABINET |
| | | ILLUMINATED SIGN
"NO LEFT TURN" |
| | | ILLUMINATED SIGN
"NO RIGHT TURN" |
| | | WIRELESS ANTENNA |
| | | GROUND ROD AT HANDHOLE (H),
DOUBLE HANDHOLE (H), OR CONTROLLER (C) |
| | | GROUND ROD AT POST (P)
OR MAST ARM POLE (MA) |
| | | GROUND ROD AT ELECTRIC
SERVICE INSTALLATION |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | LED STREET NAME SIGN |
| | | VIDEO DETECTION CAMERA |
| | | LIGHTING CONTROLLER |

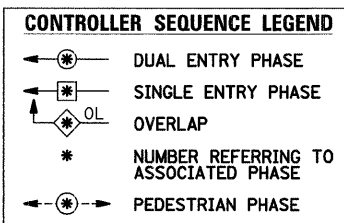


PUSHBUTTONS "A" AND "D" SHALL PLACE A CALL IN PHASES 2 AND 8
PUSHBUTTONS "B" AND "C" SHALL PLACE A CALL IN PHASES 6 AND 8

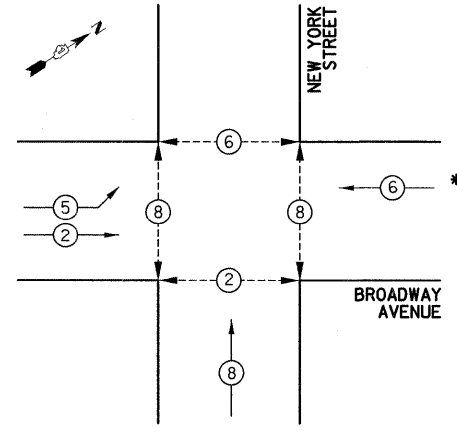


LIGHTING CABLE PLAN

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 - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2= (6m+L-0.6m)
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
E - M.A. LENGTH		CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
<30'	30" (900mm)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
<40'	30" (750mm)	ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
<40'	36" (900mm)	GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)
<50'	36" (900mm)				
>50'	36" (900mm)				
TOTAL =					1158.8



CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	NEW YORK STREET
TRENCH BACKFILL	CU YD	9.1
PORTLAND CEMENT CONCRETE SIDEWALK, SPECIAL	SQ FT	167
SIDEWALK REMOVAL	SQ FT	167
CONTROLLED LOW STRENGTH MATERIAL	CU YD	41.8
SIGN PANEL - TYPE 1	SQ FT	26.2
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	528
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	90
PAVEMENT MARKING REMOVAL	SQ FT	358
** ELECTRICAL SERVICE INSTALLATION, SPECIAL	EACH	1
SERVICE INSTALLATION (SPECIAL)	EACH	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	412
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	66
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	39
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	44
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	159
CONDUIT ATTACHED TO STRUCTURE, 2 1/2" DIA., GALVANIZED STEEL	FOOT	20
CONDUIT ATTACHED TO STRUCTURE, 4" DIA., GALVANIZED STEEL	FOOT	5
HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
** ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	533
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	511
** LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 310 WATT	EACH	3
LIGHTING CONTROLLER TYPE CB-RCS 60 AMP - 240 VOLT	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	478
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2210
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1930
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	224.5
ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16 6 PAIR	FOOT	503
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	488
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
** STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 24 FT. (SPECIAL)	EACH	2
** STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 26 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	6
* LIGHT DETECTOR	EACH	3
* LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2497.5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
* PAINT TRAFFIC SIGNAL POST	EACH	3
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	579.5
VIDEO DETECTION SYSTEM	EACH	1
* LED INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	3
MASONRY WALL CONSTRUCTION	SQ FT	215

* 100% COST TO THE CITY OF AURORA.
** PARTIAL COST TO CITY OF AURORA (SEE SUMMARY OF QUANTITIES).

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE COORDINATED BY THE CONTRACTOR WITH THE CITY OF AURORA.

DATE	BY	REVISION

DATE	BY	REVISION

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	14	17		0.50	119
(YELLOW)	14		25	0.25	87.5
(GREEN)	14	15		0.25	52.5
ARROW	4	12		0.10	4.8
PED. SIGNAL	8		25	1.00	200
CONTROLLER	1	100		1.00	100
UPS	1	25		1.00	25
LED SIGN	3	60		0.50	90
VIDEO SYSTEM	1	15		1.00	15
LUMINAIRE	3	310		0.50	465
TOTAL =					1158.8

ENERGY COSTS TO: CITY OF AURORA
44 E. DOWNER PLACE
AURORA, ILLINOIS 60507-2067

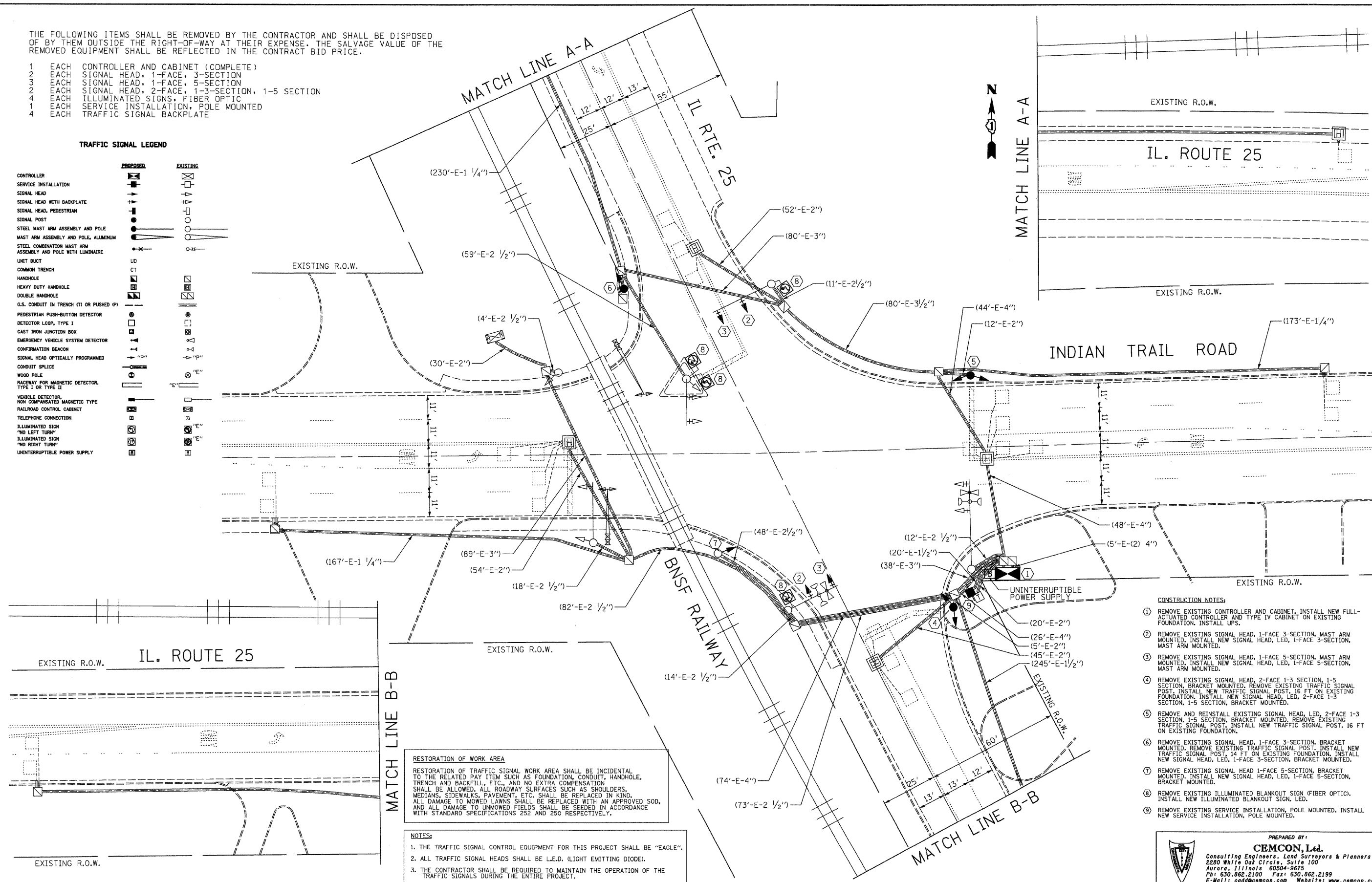
ENERGY SUPPLY CONTACT: MARK SCHERIBEL
PHONE: (630) 723-2128
COMPANY: COMMONWEALTH EDISON

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 2 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 3 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 1-3-SECTION, 1-5 SECTION
- 4 EACH ILLUMINATED SIGNS, FIBER OPTIC
- 1 EACH SERVICE INSTALLATION, POLE MOUNTED
- 4 EACH TRAFFIC SIGNAL BACKPLATE

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD, PEDESTRIAN		
SIGNAL POST		
STEEL MAST ARM ASSEMBLY AND POLE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LIMBAIRE		
UNIT DUCT		
COMMON TRENCH		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
PEDESTRIAN PUSH-BUTTON DETECTOR		
DETECTOR LOOP, TYPE I		
CAST IRON JUNCTION BOX		
EMERGENCY VEHICLE SYSTEM DETECTOR		
CONFIRMATION BEACON		
SIGNAL HEAD OPTICALLY PROGRAMMED		
CONDUIT SPLICE		
WOOD POLE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RAILROAD CONTROL CABINET		
TELEPHONE CONNECTION		
ILLUMINATED SIGN "NO LEFT TURN"		
ILLUMINATED SIGN "NO RIGHT TURN"		
UNINTERRUPTIBLE POWER SUPPLY		



RESTORATION OF WORK AREA
 RESTORATION OF TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

- NOTES:**
1. THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".
 2. ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE).
 3. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

- CONSTRUCTION NOTES:**
- 1 REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW FULL-ACTUATED CONTROLLER AND TYPE IV CABINET ON EXISTING FOUNDATION. INSTALL UPS.
 - 2 REMOVE EXISTING SIGNAL HEAD, 1-FACE 3-SECTION. MAST ARM MOUNTED. INSTALL NEW SIGNAL HEAD, LED, 1-FACE 3-SECTION, MAST ARM MOUNTED.
 - 3 REMOVE EXISTING SIGNAL HEAD, 1-FACE 5-SECTION. MAST ARM MOUNTED. INSTALL NEW SIGNAL HEAD, LED, 1-FACE 5-SECTION, MAST ARM MOUNTED.
 - 4 REMOVE EXISTING SIGNAL HEAD, 2-FACE 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED. REMOVE EXISTING TRAFFIC SIGNAL POST. INSTALL NEW TRAFFIC SIGNAL POST, 16 FT ON EXISTING FOUNDATION. INSTALL NEW SIGNAL HEAD, LED, 2-FACE 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED.
 - 5 REMOVE AND REINSTALL EXISTING SIGNAL HEAD, LED, 2-FACE 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED. REMOVE EXISTING TRAFFIC SIGNAL POST. INSTALL NEW TRAFFIC SIGNAL POST, 16 FT ON EXISTING FOUNDATION.
 - 6 REMOVE EXISTING SIGNAL HEAD, 1-FACE 3-SECTION, BRACKET MOUNTED. REMOVE EXISTING TRAFFIC SIGNAL POST. INSTALL NEW TRAFFIC SIGNAL POST, 14 FT ON EXISTING FOUNDATION. INSTALL NEW SIGNAL HEAD, LED, 1-FACE 3-SECTION, BRACKET MOUNTED.
 - 7 REMOVE EXISTING SIGNAL HEAD 1-FACE 5-SECTION, BRACKET MOUNTED. INSTALL NEW SIGNAL HEAD, LED, 1-FACE 5-SECTION, BRACKET MOUNTED.
 - 8 REMOVE EXISTING ILLUMINATED BLANKOUT SIGN (FIBER OPTIC). INSTALL NEW ILLUMINATED BLANKOUT SIGN, LED.
 - 9 REMOVE EXISTING SERVICE INSTALLATION, POLE MOUNTED. INSTALL NEW SERVICE INSTALLATION, POLE MOUNTED.

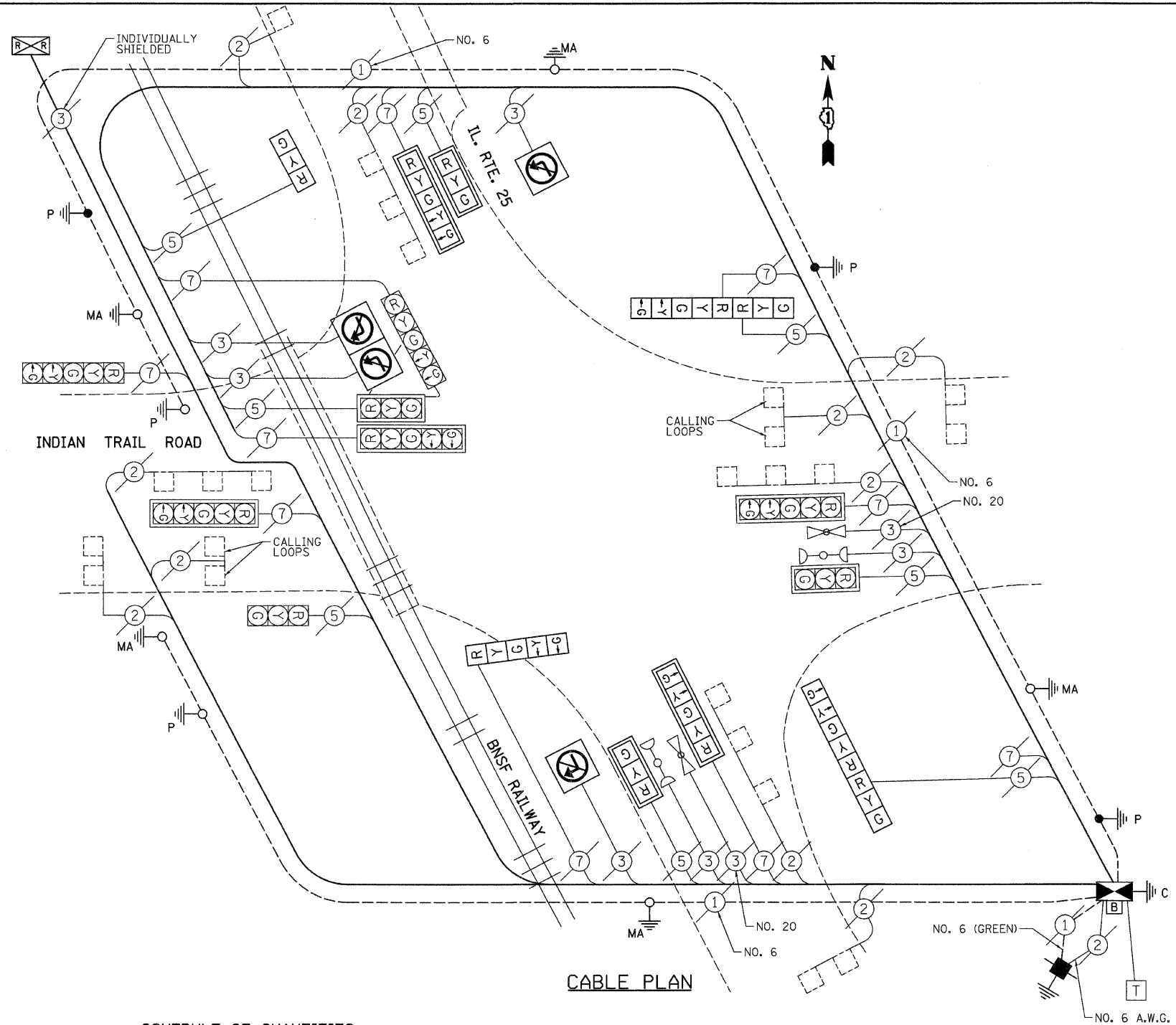
PREPARED BY:
CEMCON, Ltd.
 Consulting Engineers, Land Surveyors & Planners
 2280 White Oak Circle, Suite 100
 Aurora, Illinois 60504-9675
 Ph: 630.862.2100 Fax: 630.862.2199
 E-Mail: codd@cemcon.com Website: www.cemcon.com

FILE NAME = \MICROST\352088\ IL 25 @ IND TR SIG.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODIFICATION PLAN IL. ROUTE 25 (AURORA AVE.) AT INDIAN TRAIL ROAD			F.A.U. RTE. 2503	SECTION 2009-002 TS	COUNTY KANE	TOTAL SHEETS 34	SHEET NO. 24
PLOT SCALE = 1"=20'	DRAWN - JGC	CHECKED - BPT	REVISED -		SCALE: 1"=20'	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 60F99		
PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							

CABLE PLAN LEGEND

- | | | |
|-----------------|-----------------|---|
| EXISTING | PROPOSED | |
| | | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | | CONTROLLER CABINET |
| | | SERVICE INSTALLATION |
| | | TELEPHONE CONNECTION |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSH-BUTTON DETECTOR |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F |
| | | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| | | RAILROAD CONTROL CABINET |
| | | ILLUMINATED SIGN "NO LEFT TURN" |
| | | ILLUMINATED SIGN "NO RIGHT TURN" |
| | | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C) |
| | | GROUND ROD AT POST (P), OR MAST ARM POLE (MA) |
| | | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | | UNINTERRUPTIBLE POWER SUPPLY |

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".



CABLE PLAN

SCHEDULE OF QUANTITIES

- MOBILIZATION
- TRAFFIC CONTROL AND PROTECTION, STANDARD 701701
- RELOCATE SIGN PANEL, TYPE 1
- FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
- TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
- TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
- SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
- SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
- SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
- SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
- SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
- TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
- ILLUMINATED SIGN, LED
- RELOCATE EXISTING SIGNAL HEAD
- REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
- TEMPORARY INFORMATION SIGNING
- REMOVE EXISTING SERVICE INSTALLATION
- RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM 1/2 LEVEL II (per Intersection)
- SERVICE INSTALLATION, POLE MOUNT
- ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
- UNINTERRUPTIBLE POWER SUPPLY

L SUM	0.2
L SUM	0.2
SQ FT	10
EACH	1
EACH	1
EACH	2
EACH	2
EACH	1
EACH	1
EACH	1
EACH	2
EACH	2
EACH	4
EACH	1
EACH	1
EACH	1
SQ FT	1
EACH	1
EACH	1
EACH	1
EACH	1
FOOT	294
EACH	1

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. LED	%OPERATION	
SIGNAL (RED)	18	135 17	0.50	153
(YELLOW)	18	135 25	0.25	112.5
(GREEN)	18	135 15	0.25	67.5
ARROW	20	135 12	0.10	24
PED. SIGNAL		90 25	1.00	
CONTROLLER	1	100 100	1.00	100
ILLUM. SIGN	4	84	0.05	16.8
FLASHER			0.50	
ENERGY COSTS TO:			TOTAL =	473.8
ENERGY SUPPLY CONTACT:		MARK SCHEIBEL (630) 723-2128 COMED		

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.0 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20.0 (6.0)
E - M. ARM POLE		SIGNAL POST	0 (0.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	0 (0.0)	PED. PUSH-BUTTON	6 (2.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	13 (4.0)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**SCHEDULE OF QUANTITIES AND CABLE PLAN
IL. ROUTE 25 (AURORA AVE.) AT INDIAN TRAIL ROAD**

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2503	2009-002 TS	KANE	34	25
CONTRACT NO. 60F99				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

FILE NAME =	USER NAME = JGC	DESIGNED - KK	REVISED -
\\MICROST\352069\IL 25 @ IND TR CAB.DGN		DRAWN - JGC	REVISED -
	PLOT SCALE = N.T.S.	CHECKED - BPT	REVISED -
	PLOT DATE = 01-23-09	DATE - 1-23-09	REVISED -

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER	PREEMPTION SEQUENCE																					PREEMPTION NUMBER 3	PREEMPTION NUMBER 4	CLEAR TO NORMAL SEQUENCE								
	1	5	5	7	7	9	9	11			15	15	18			18	21			21	2	3										
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	1Q	1R	1S	1T	1U	1V	1W	1X	1Y	1Z	1AA	1BB	1CC	1DD	2	3	◇	
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	2 OR 3	2	1D	3	2	1G	3	2	1K	3	1M	1N	2 OR 3	1Q	2	3	1T	1U	1V	2	1X	1Y	3	1AA	1BB	1CC	2	3			◇	
ILL. RTE. 25 NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS	N/B R	R	R	R	G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◇	
ILL. RTE. 25 END MAST ARM AND FAR LEFT SIGNALS	N/B R	R	R	R	G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◇	
ILL. RTE. 25 NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS	S/B R	G	Y	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◇	
ILL. RTE. 25 END MAST ARM AND FAR LEFT SIGNALS	S/B R	G	Y	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◇	
INDIAN TRAIL ROAD (WEST OF TRACKS) NEAR RIGHT SIGNAL	E/B R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◇
INDIAN TRAIL ROAD (WEST OF TRACKS) END MAST ARM AND NEAR LEFT SIGNALS	E/B R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◇
INDIAN TRAIL ROAD (EAST OF TRACKS) FAR RIGHT MAST ARM SIGNAL	E/B R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◇
INDIAN TRAIL ROAD (EAST OF TRACKS) END MAST ARM AND FAR LEFT SIGNALS	E/B R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◇
INDIAN TRAIL ROAD NEAR RIGHT AND FAR RIGHT MAST ARM SIGNALS	W/B R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◇
INDIAN TRAIL ROAD END MAST ARM AND FAR LEFT SIGNALS	W/B R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	R	◇

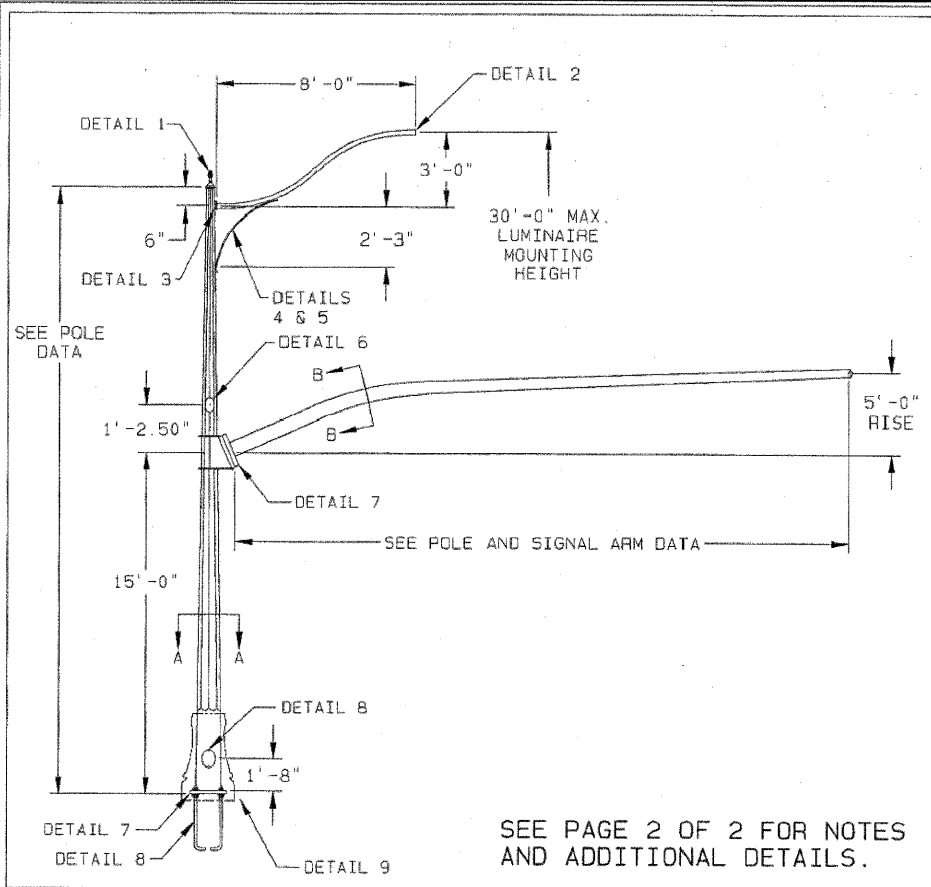
◇ EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY INTERVAL AFTER EMERGENCY VEHICLE INTERVAL 2 OR 3 IS TERMINATED.

FILE NAME = \MICROST\352068\INDTR EMER VEH PRE.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION IL. ROUTE 25 (AURORA AVE.) AT INDIAN TRAIL ROAD	F.A.U. RTE. 2503	SECTION 2009-002 TS	COUNTY KANE	TOTAL SHEETS 34	SHEET NO. 27		
PLOT SCALE = N.T.S.	CHECKED - BPT	REVISED -	SCALE: N.T.S.			SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60F99		
PLOT DATE = 01-23-09	DATE - 01-23-09	REVISED -										

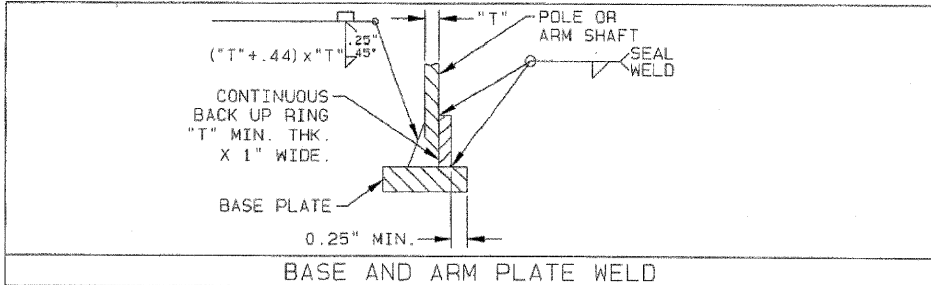
PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2230 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

DATE: _____ BY: _____
 SURVEYED _____ PLOTTED _____ CHECKED _____
 PLAN NOTE BOOK NO. _____
 FILE NAME: _____

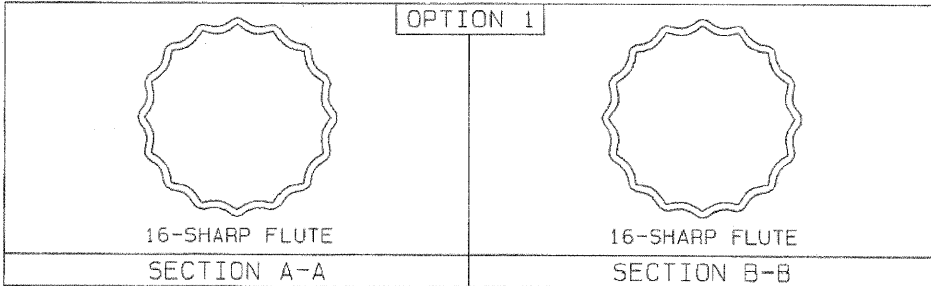
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 PROFILE NOTE BOOK NO. _____
 FILE NAME: _____



SEE PAGE 2 OF 2 FOR NOTES AND ADDITIONAL DETAILS.

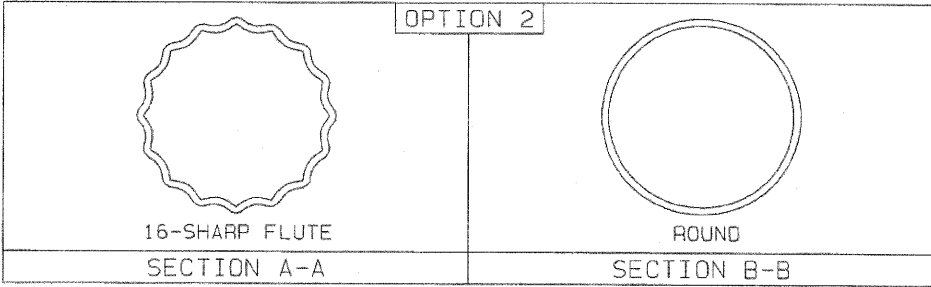


BASE AND ARM PLATE WELD



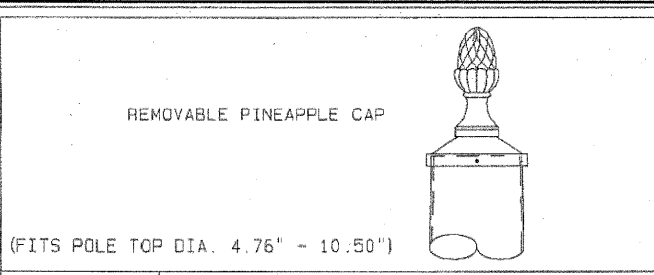
16-SHARP FLUTE SECTION A-A

16-SHARP FLUTE SECTION B-B

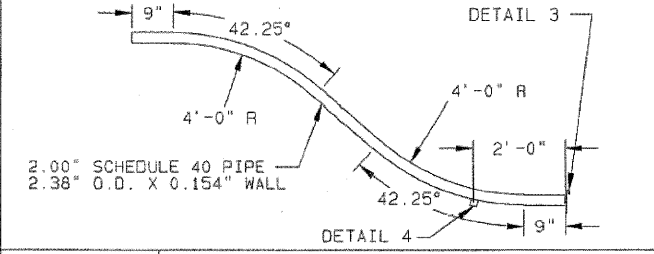


16-SHARP FLUTE SECTION A-A

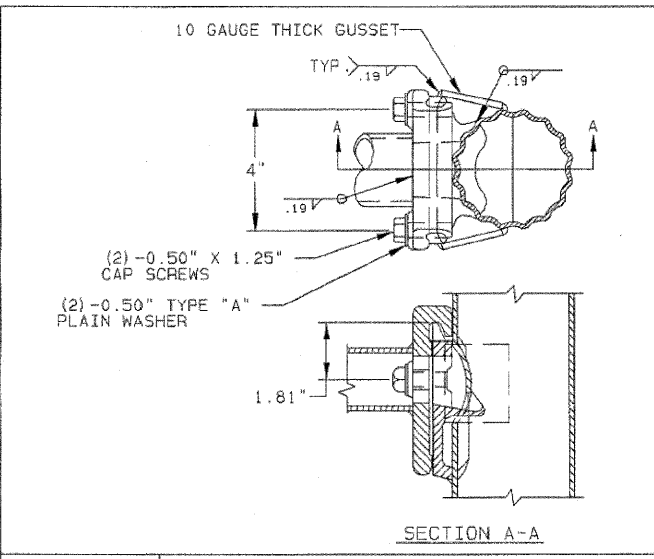
ROUND SECTION B-B



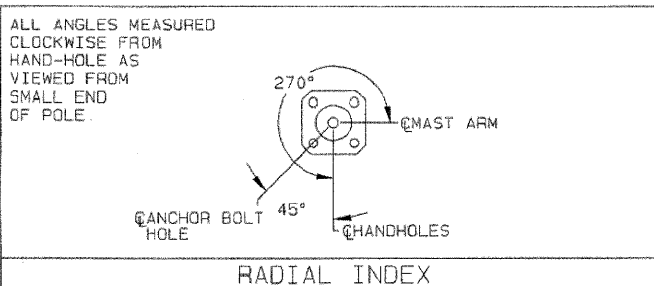
DETAIL 1 PINEAPPLE CAP ASSEMBLY



DETAIL 3 LUMINAIRE ARM



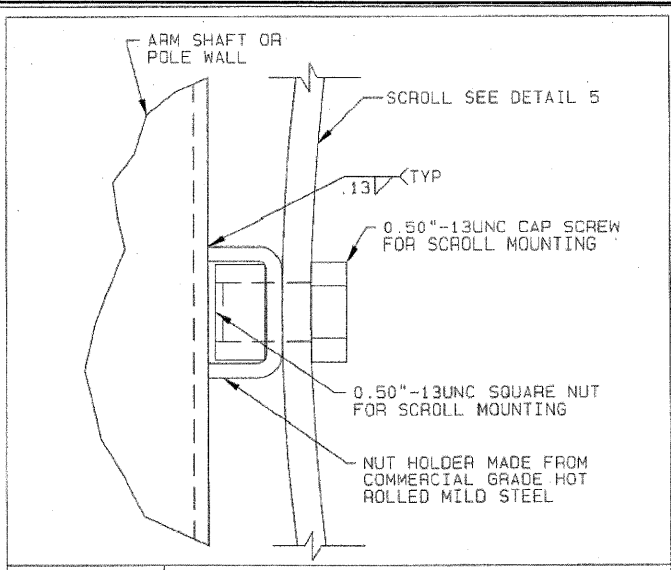
DETAIL 3 LUMINAIRE ARM ATTACHMENT



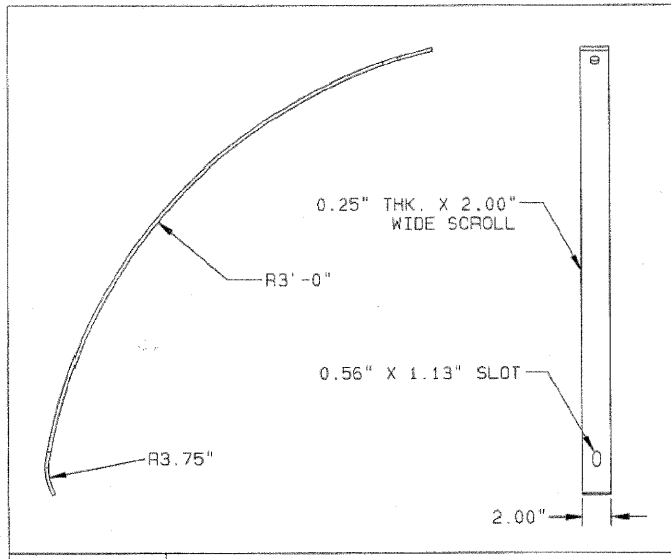
RADIAL INDEX

BASE COAT: HOT DIP GALVANIZE
 TOP COAT: TGIC OR URETHANE POLYESTER POWDER
 COLOR: BLACK
 VALMONT SPEC: F283A

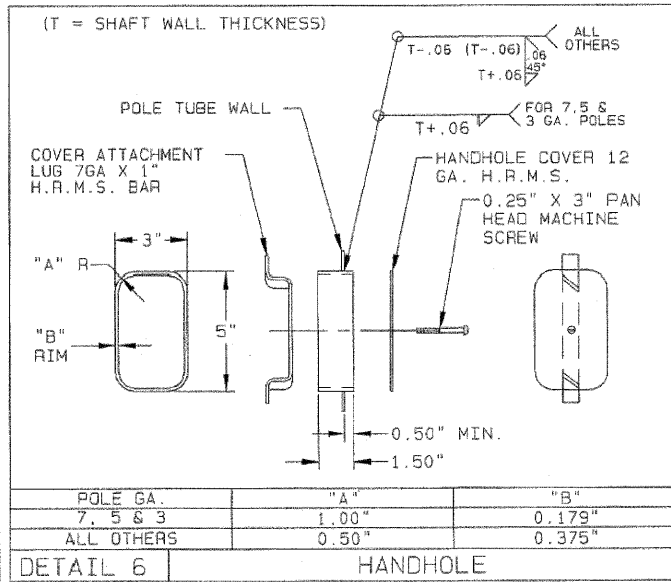
FINISH NOTE



DETAIL 4 SCROLL ATTACHMENT

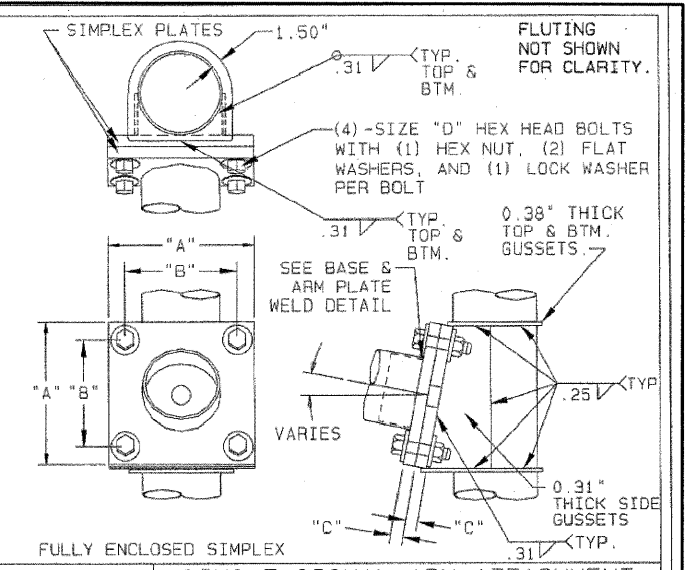


DETAIL 5 SCROLL ARM



DETAIL 6 HANDHOLE

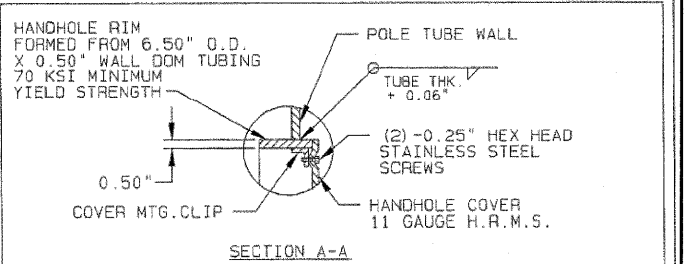
POLE GA.	"A"	"B"
7.5 & 3	1.00"	0.179"
ALL OTHERS	0.50"	0.375"



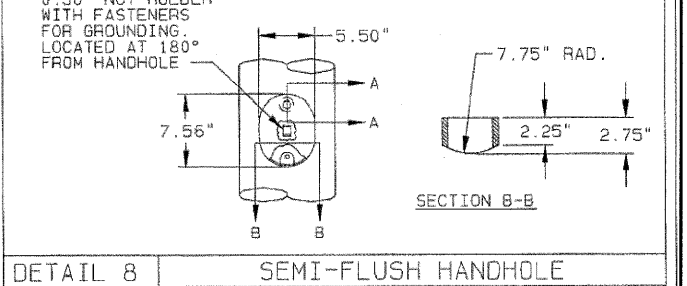
DETAIL 7 SINGLE SIGNAL ARM ATTACHMENT

SIGNAL ARM ATTACHMENT DATA

ARM SPAN (FT)	"A" (IN)	"B" (IN)	"C" (IN)	"D"
20.00	17.25	14.00	1.75	1.25" X 5.25"



SECTION A-A



DETAIL 8 SEMI-FLUSH HANDHOLE

REV	DATE	BY	DESCRIPTION

SOLD TO:	JOB:
SHIP TO:	
P.O. #:	
AGENT: LIGHTING SOLUTIONS	TITLE: TRAFFIC SIGNAL STRUCTURES

VALMONT INDUSTRIES, INC. RESERVES THE RIGHT TO INSTALL VARIOUS, ENGINEER APPROVED, MATERIAL HANGING ACCOMMODATIONS TO FACILITATE THE MANUFACTURING PROCESS.

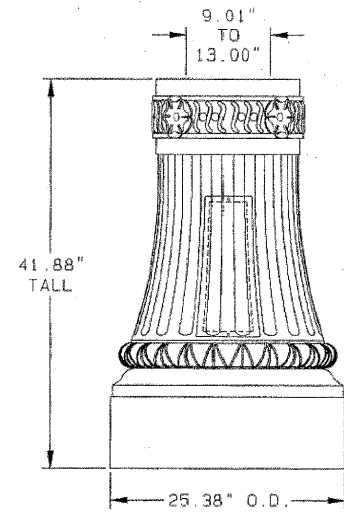
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

valmont
 Valley, NE 68064
 (402) 359-2201

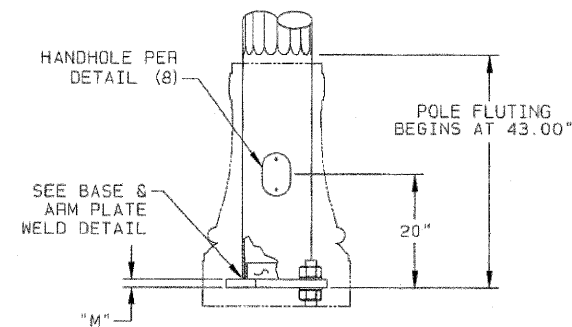
ORDER NUMBER: 42203-07	PAGE NUMBER: 1 OF 2
DRAWING NUMBER: IL4220307	REV: _____

FILE NAME: ...dot\690...3...dot\01...DOT.dgn	USER NAME: .USER.	DESIGNED: BAH	REVISIONS:	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MISCELLANEOUS DETAILS	F.A.U. RTE. 2503	SECTION 2009-002 TS	COUNTY KANE	TOTAL SHEETS 34	SHEET NO. 28	CONTRACT NO. 60F99
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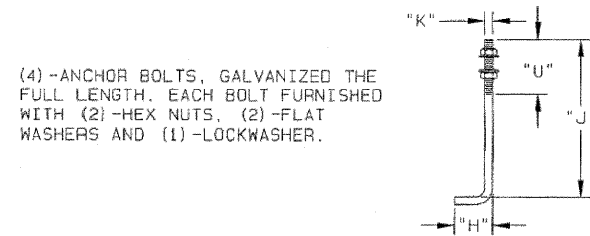
DATE: _____ BY: _____
 SURVEYED _____ PLOTTED _____
 CHECKED _____ RT. OF WAY CHECKED _____
 NOTE BOOK _____
 NO. _____
 PLAN _____
 NO. _____
 FILE NAME _____



DETAIL 9 HN25AB DECORATIVE BASE



DETAIL 10 HN25AB POLE BASE



DETAIL 11 ANCHOR BOLT

NOTES:

- POLE AND ARM SHAFTS 13.00" AND SMALLER-CONFORMS TO ASTM DESIGNATION: A595 GR. A WITH 55,000 P.S.I. MINIMUM YIELD STRENGTH. LINEAR TAPER-0.14"/FT. POLE AND ARM SHAFTS LARGER THAN 13.00"-CONFORMS TO ASTM DESIGNATION: M-223 A572 GR. 65 WITH A 65,000 P.S.I. MINIMUM YIELD STRENGTH. LINEAR TAPER-0.14"/FT.
- BASE PLATE AND SIMPLEX PLATES-CONFORM TO AASHTO M-183 (ASTM: A36).
- ANCHOR BOLTS-ALL STRUCTURES: ASTM F1554 GR. 55 55,000 P.S.I. MINIMUM YIELD STRENGTH. (AASHTO M314)
- TRAFFIC SIGNAL ARM END CAP SECURED IN PLACE WITH 3 STAINLESS STEEL SET SCREWS. (TRAFFIC SIGNAL ARM END CAP PROVIDED WITH (2) ADDITIONAL STAINLESS STEEL HEX BOLTS)
- ALL NON-STAINLESS THREADED FASTENERS TO BE HOT DIP GALVANIZED TO ASTM DESIGNATION: A153 (AASHTO M232).
- SIMPLEX CONNECTING BOLTS-ASTM DESIGNATION: A325 (M164) GALVANIZED TO ASTM DESIGNATION: A153 LUBRICATE THREADS IN FIELD IF NECESSARY BEFORE INSTALLATION.
- ALL VEHICULAR AND/OR PEDESTRIAN SIGNAL LIGHTS AND NECESSARY HARDWARE FOR ATTACHMENT TO BE FIELD LOCATED AND FURNISHED BY OTHERS.
- POLES AND ARMS TO BE GALVANIZED TO ASTM DESIGNATION: A123 (AASHTO M111). ACCESSORIES TO BE HOT DIP GALVANIZED TO ASTM DESIGNATION: A153 (AASHTO M232).
- ACCESS HOLES IN ARMS AT SIGNALS TO BE FIELD DRILLED BY CONTRACTOR-LOCATED AS SHOWN IN PLANS.
- LUMINAIRE ARM SHAFT CONFORMS TO 2" SCHEDULE 40 PIPE W/ 36,000 PSI MIN. YIELD STRENGTH.
- SHAFT GAUGE OR THICKNESS ARE AS FOLLOWS: 11 GA. = 0.1196", 7 GA. = 0.1793", 5 GA. = 0.2092", 3 GA. = 0.2391", AND 2" SCHED. 40 PIPE = 0.154".

LOADING AND ALLOWABLE STRESS CRITERIA: 1994 AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR SIGNS, LUMINAIRES AND TRAFFIC SIGNALS".

STATE OF ILLINOIS
GENERAL NOTES

POLE AND SIGNAL ARM DATA - OPTION 1

POLE TUBE			POLE BASE				ANCHOR BOLT			SIGNAL ARM TUBE			MAXIMUM LUMINAIRE ARM SPAN (FT)		
BASE DIA. (IN)	TOP DIA. (IN)	LENGTH (FT)	GAUGE OR THK. (IN)	SQUARE "S" (IN)	BOLT CIRCLE "Y" (IN)	THK. "M" (IN)	HOLE / SLOT "Z" (IN)	DIA. "K" (IN)	LENGTH "J" (IN)	HOOK "H" (IN)	THREAD LENGTH "U" (IN)	FIXED END DIA. (IN)		GAUGE OR THICK (IN)	SPAN (FT)
12.50	8.65	27.50	5	17.00	17.00	1.50	1.75	1.50	54.00	6.00	8.00	9.00	7	20.00	8.00

POLE AND SIGNAL ARM DATA - OPTION 2

POLE TUBE			POLE BASE				ANCHOR BOLT			SIGNAL ARM TUBE			MAXIMUM LUMINAIRE ARM SPAN (FT)		
BASE DIA. (IN)	TOP DIA. (IN)	LENGTH (FT)	GAUGE OR THK. (IN)	SQUARE "S" (IN)	BOLT CIRCLE "Y" (IN)	THK. "M" (IN)	HOLE / SLOT "Z" (IN)	DIA. "K" (IN)	LENGTH "J" (IN)	HOOK "H" (IN)	THREAD LENGTH "U" (IN)	FIXED END DIA. (IN)		GAUGE OR THICK (IN)	SPAN (FT)
12.50	8.65	27.50	5	17.00	17.00	1.50	1.75	1.50	54.00	6.00	8.00	8.00	7	20.00	8.00

DATE: _____ BY: _____
 SURVEYED _____ PLOTTED _____
 CHECKED _____ RT. OF WAY CHECKED _____
 NOTE BOOK _____
 NO. _____
 PROFILE _____
 NO. _____
 FILE NAME _____

JOB: VALMONT INDUSTRIES, INC. RESERVES THE RIGHT TO INSTALL VARIOUS ENGINEER APPROVED, MATERIAL HANGING ACCOMMODATIONS TO FACILITATE THE MANUFACTURING PROCESS.
 TITLE: TRAFFIC SIGNAL STRUCTURES

valmont
 Valley, NE 68064
 (402) 359-2201

ORDER NUMBER: 42203-07
 PAGE NUMBER: 2 OF 2
 DRAWING NUMBER: IL4220307
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 CHECKED: APS
 DATE: JAN 23 2009
 REVISED: _____
 PLOT SCALE: =SCALE*
 PLOT DATE: = 2/11/2009

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 MISCELLANEOUS DETAILS
 SCALE: _____ SHEET NO. _____ OF _____ SHEETS STA. _____ TO STA. _____
 F.A.U. RTE. 2503 SECTION 2009-002 TS COUNTY KANE TOTAL SHEETS 34 SHEET NO. 29
 CONTRACT NO. 60F99
 FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT

PLAN SURVEYED BY DATE
 PLOTTED BY DATE
 PLANT CHECKED BY DATE
 RT. OF WAY CHECKED BY DATE
 NOTE BOOK NO. CAD FILE NAME

PROFILE SURVEYED BY DATE
 PLOTTED BY DATE
 BAL. NOTED BY DATE
 STRUCTURE NOTATION CHFD



* PER MANUFACTURERS SPECIFICATIONS FOR THE CITY OF AURORA.
LED STREET NAME SIGNS (CLEARVIEW FONT - DESIGN SERIES "D")
 NOTE:
 THESE SIGNS SHALL BE INSTALLED AT THE LOCATIONS INDICATED IN THE PLANS.
 SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

UPPER CASE TO LOWER CASE SPACING CHART 8-6 INCH SERIES "C & D"

FIRST LETTER	SECOND LETTER															
	acde		bhikl		fw		j		st		vy		x		z	
	g	o	q	m	n	p	r	u								
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ²	1 ²	1 ⁴
B	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁶	1 ⁷
C E G	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵
D O Q R	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ⁴	1 ⁵	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵
F	0 ⁵	0 ⁶	1 ⁴	1 ⁵	0 ⁶	1 ⁰	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²
H I M N	2 ⁰	2 ¹	2 ²	2 ⁴	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹	2 ⁰	2 ¹
J U	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹
K L	1 ¹	1 ²	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
P	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
S	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴
T	1 ¹	1 ²	1 ⁶	1 ⁷	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
V	0 ⁶	1 ⁰	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴
Y	0 ⁵	0 ⁶	1 ⁴	1 ⁵	0 ⁶	1 ⁰	0 ⁵	0 ⁶	0 ⁵	0 ⁷	0 ⁵	0 ⁶	0 ⁶	1 ⁰	1 ¹	1 ²
Z	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹

LOWER CASE TO LOWER CASE SPACING CHART 6 INCH SERIES "C & D"

FIRST LETTER	SECOND LETTER															
	acde		bhikl		fw		j		st		vy		x		z	
	g	o	q	m	n	p	r	u								
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
ad h g l j	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷
l m n q u	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
b f k o p s	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
ce	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴
r	0 ⁶	1 ⁰	1 ²	1 ⁴	0 ⁶	1 ⁰	0 ³	0 ³	0 ⁵	0 ⁶	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰
t z	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
vy	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²
w	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
x	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴

NUMBER TO NUMBER SPACING CHART 8 INCH SERIES "C & D"

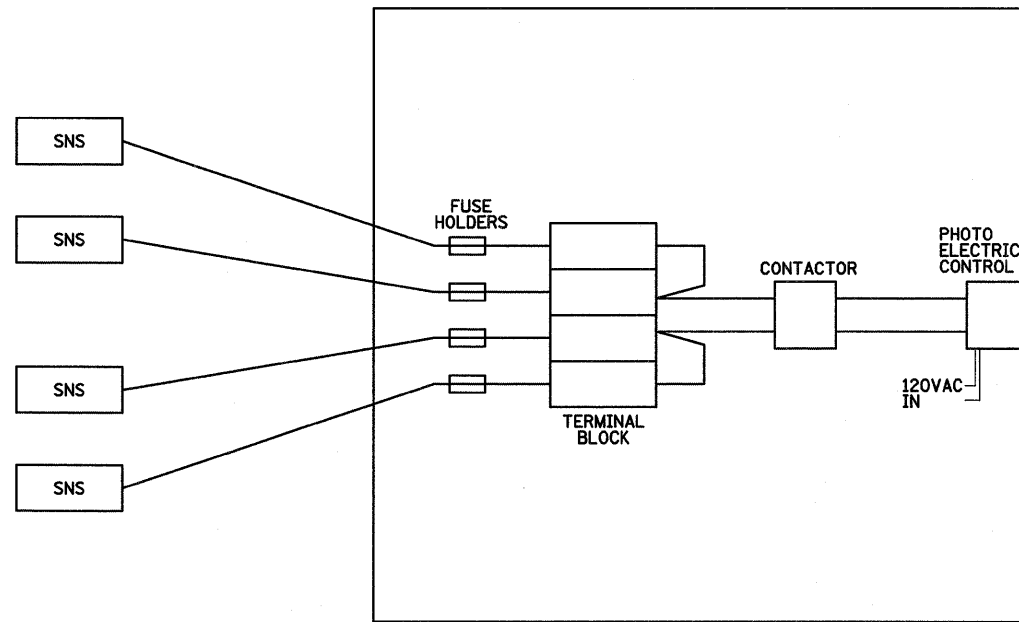
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	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁶	1 ⁷
1	2 ⁰	2 ¹	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹
2 3 4	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁶	1 ⁷	1 ⁴	1 ⁵
5	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵
6	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ²	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵
7	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁵	0 ⁵	0 ⁶	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ²	1 ⁴
8	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁴	1 ⁵

LETTERS	6 INCH UPPER CASE LETTERS		8 INCH UPPER CASE LETTERS		LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES			SERIES	
	C	D	C	D		C	D
A	3 ⁶	5 ⁰	5 ⁰	6 ⁵	a	3 ⁵	4 ²
B	3 ²	4 ⁰	4 ³	5 ³	b	3 ⁵	4 ²
C	3 ²	4 ⁰	4 ³	5 ³	c	3 ⁵	4 ¹
D	3 ²	4 ⁰	4 ³	5 ³	d	3 ⁵	4 ²
E	3 ⁰	3 ⁵	4 ⁰	4 ⁷	e	3 ⁵	4 ²
F	3 ⁰	3 ⁵	4 ⁰	4 ⁷	f	2 ³	2 ⁶
G	3 ²	4 ⁰	4 ³	5 ³	g	3 ⁵	4 ²
H	3 ²	4 ⁰	4 ³	5 ³	h	3 ⁵	4 ²
I	0 ⁷	0 ⁷	1 ¹	1 ²	i	1 ¹	1 ¹
J	3 ⁰	3 ⁶	4 ⁰	5 ⁰	j	2 ⁰	2 ²
K	3 ²	4 ¹	4 ³	5 ⁴	k	3 ⁵	4 ²
L	3 ⁰	3 ⁵	4 ⁰	4 ⁷	l	1 ¹	1 ¹
M	3 ⁷	4 ⁵	5 ¹	6 ¹	m	6 ⁰	7 ⁰
N	3 ²	4 ⁰	4 ³	5 ³	n	3 ⁵	4 ²
O	3 ⁴	4 ²	4 ⁵	5 ⁵	o	3 ⁶	4 ³
P	3 ²	4 ⁰	4 ³	5 ³	p	3 ⁵	4 ²
Q	3 ⁴	4 ²	4 ⁵	5 ⁵	q	3 ⁵	4 ²
R	3 ²	4 ⁰	4 ³	5 ³	r	2 ⁶	3 ²
S	3 ²	4 ⁰	4 ³	5 ³	s	3 ⁶	4 ²
T	3 ⁰	3 ⁵	4 ⁰	4 ⁷	t	2 ⁷	3 ²
U	3 ²	4 ⁰	4 ³	5 ³	u	3 ⁵	4 ²
V	3 ⁵	4 ⁴	4 ⁷	6 ⁰	v	4 ²	4 ⁷
W	4 ⁴	5 ²	6 ⁰	7 ⁰	w	5 ⁵	6 ⁴
X	3 ⁴	4 ⁰	4 ⁵	5 ³	x	4 ⁴	5 ¹
Y	3 ⁶	5 ⁰	5 ⁰	6 ⁶	y	4 ⁶	5 ³
Z	3 ²	4 ⁰	4 ³	5 ³	z	3 ⁶	4 ³

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
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2	3 ²	4 ⁰	4 ³	5 ³
3	3 ²	4 ⁰	4 ³	5 ³
4	3 ⁵	4 ³	4 ⁷	5 ⁷
5	3 ²	4 ⁰	4 ³	5 ³
6	3 ²	4 ⁰	4 ³	5 ³
7	3 ²	4 ⁰	4 ³	5 ³
8	3 ²	4 ⁰	4 ³	5 ³
9	3 ²	4 ⁰	4 ³	5 ³
0	3 ⁴	4 ²	4 ⁵	5 ⁵

PLAN	SURVEYED	DATE
NOTE BOOK NO.	PLANNED	BY
	DESIGNED	
	CHECKED	
	DATE	
	FILE NAME	

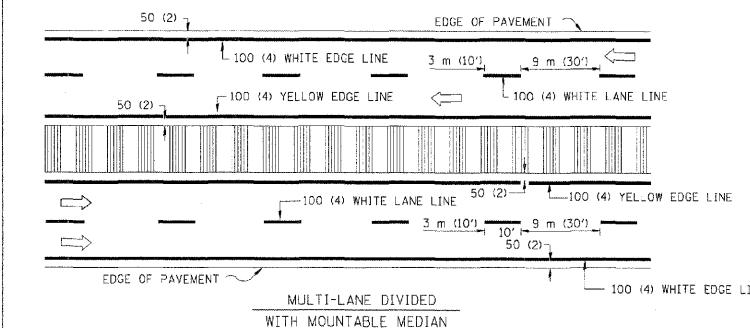
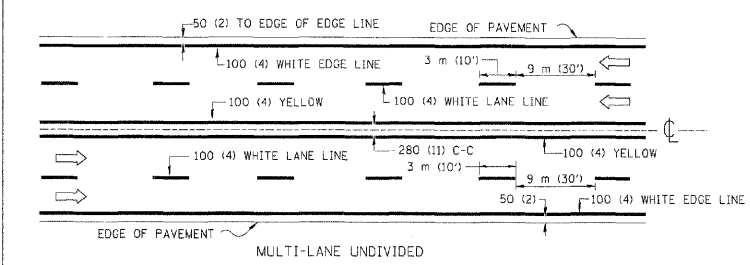
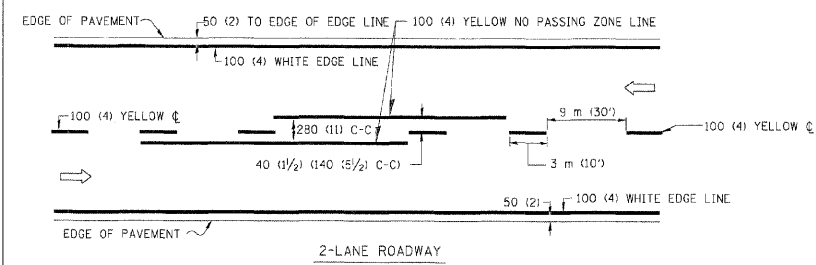
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NOTE BOOK NO.	PLANNED	BY
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	CHECKED	
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	FILE NAME	



LED STREET NAME SIGNS – PHOTOCCELL WIRING DETAIL

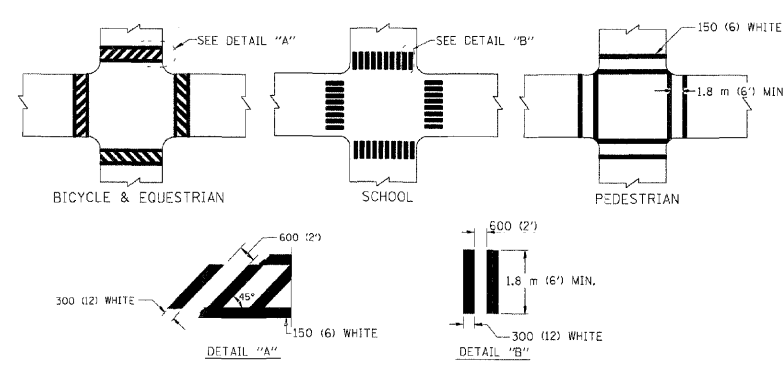
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		DRAWN <i>BAH</i>	REVISED -			2503	2009-002 TS	KANE	34	31	
		CHECKED <i>APS</i>	REVISED -			CONTRACT NO. 60F99					
		DATE <i>JAN 23 2009</i>	REVISED -			SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. AID PROJ. NO.	CLINCH	FED. AID PROJECT		

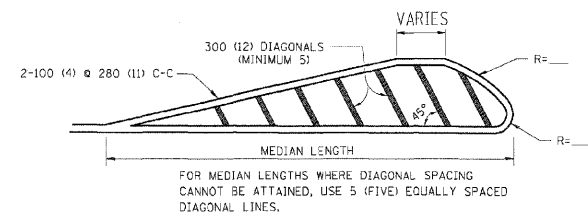
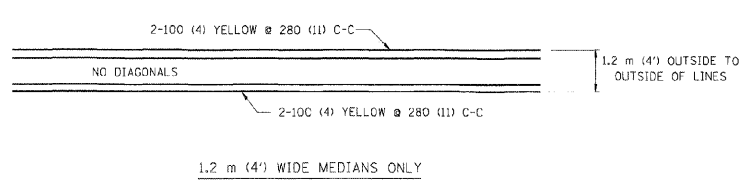


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

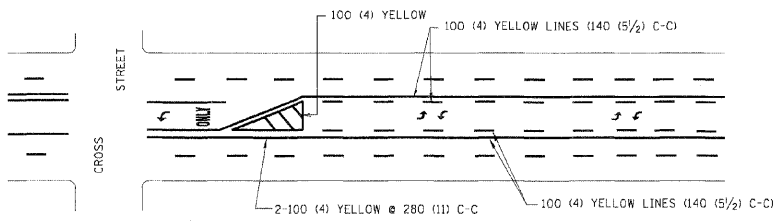


TYPICAL CROSSWALK MARKING

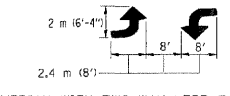


FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
DIAGONAL LINE SPACING: 15 m (50') C-C (LESS THAN 50 km/h (30 MPH))
25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH))
45 m (150') C-C (MORE THAN 70 km/h (45 MPH))

MEDIANS OVER 1.2 m (4') WIDE

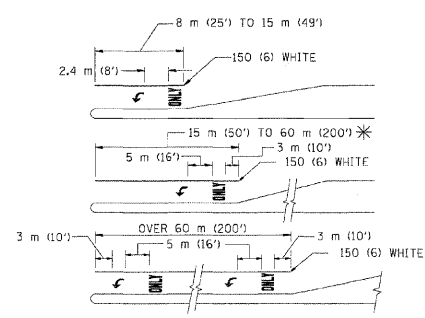


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



TYPICAL LEFT (OR RIGHT) TURN LANE

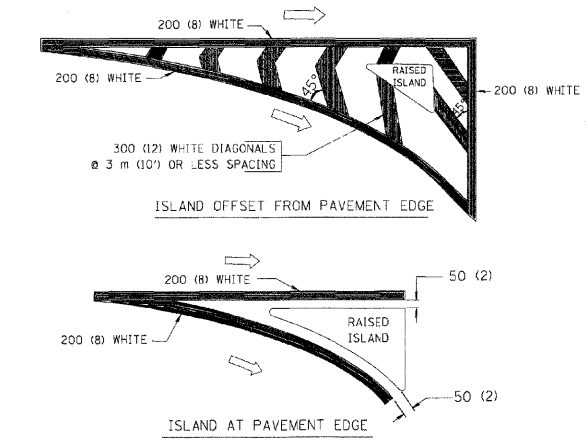
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.
AREA = 1.5 m² (15.6 SQ. FT.) ONLY AREA = 1.9 m² (20.8 SQ. FT.)
* TURN LANES IN EXCESS OF 120 m (400') IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	100 (4)	SOLID	YELLOW	140 (5 1/2) C-C FROM SKIP-DASH CENTERLINE
FOR BOTH DIRECTIONS	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4) 125 (5) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	3 m (10') LINE WITH 9 m (30') SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION 2.4 m (8') LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5 1/2) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 150 (6) 300 (12) @ 45° 300 (12) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 1.8 m (6') APART 600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45° NO DIAGONALS USED FOR 1.2 m (4') WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R" = 0.33 m ² (3.6 SQ. FT.) EACH "X" = 5.0 m ² (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (OVER 70 km/h (45 MPH))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

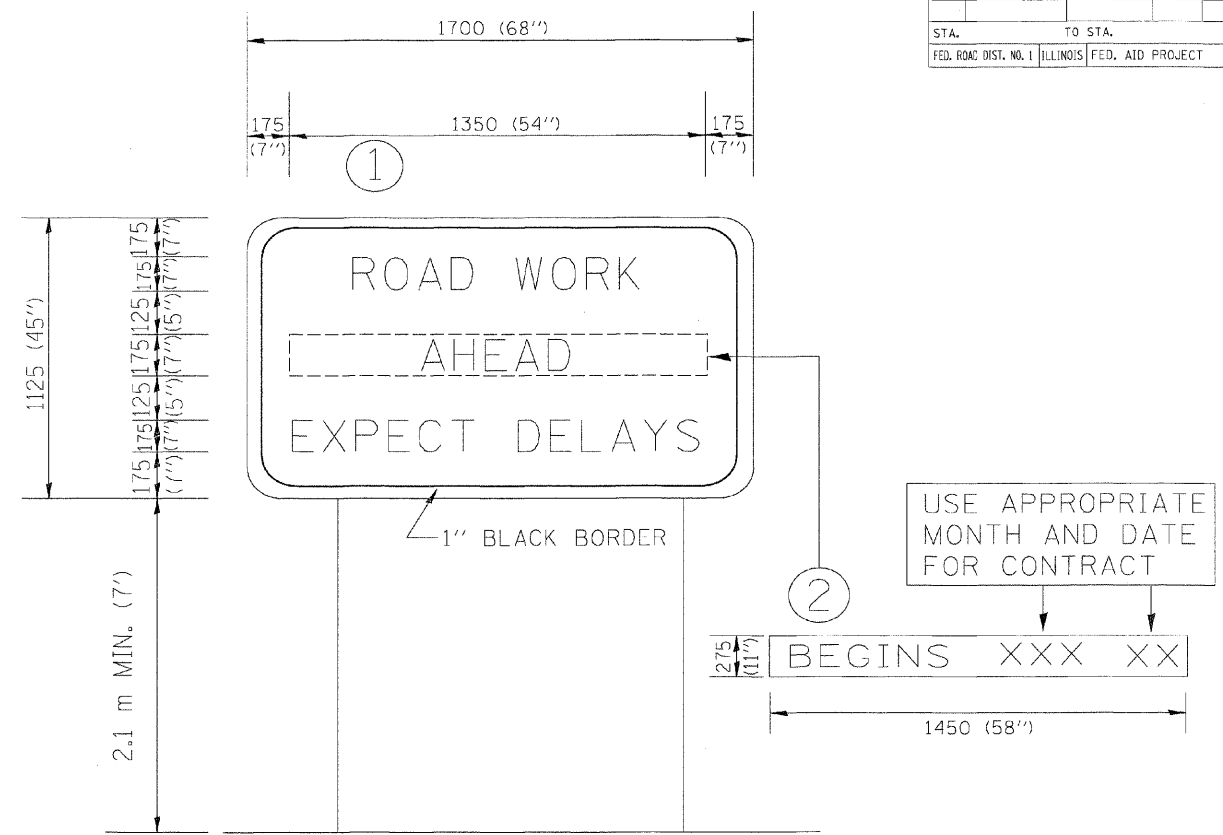
All dimensions are in millimeters (inches) unless otherwise shown.

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS
SCALE: NONE
DATE: 10/18/2002
DRAWN BY: CADD
CHECKED BY: TC-13
REVISION DATE: 01/06/00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 2.3 SQ. M. (25.70 SQ. FT.)

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY INFORMATION SIGNING

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60504-9675
Ph: 630.862.2100 Fax: 630.862.2199
E-Mail: cadd@cemcon.com Website: www.cemcon.com

SCALE: DATE 10/18/2002
DRAWN BY: BUR. OF DESIGN
CHECKED BY:

TC22
REVISION DATE: 02/02/99

Friday, October 18, 2002 @ 10:25:17 AM
c:\pre_jobs\diststd\to22.dgn LV=35,63
VI=TC22

FILE NAME = MICROSTV352068V 04-TS050.DGN	USER NAME = JGC	DESIGNED - KK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ILLINOIS DEPARTMENT OF TRANSPORTATION DETAILS IL. ROUTE 25 (BROADWAY AVE.)	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = 1"=20'	CHECKED - BPT	DRAWN - JGC	REVISED -			2503	2009-002 TS	KANE	34	34	
PLOT DATE = 01-23-09	DATE - 01-23-09	CHECKED - BPT	REVISED -			CONTRACT NO. 60F99					
						SCALE: N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

GENERAL NOTES

- Plan dimensions and details relative to existing structure have been taken from field measurements of visible portions of each vault and building. 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 for the work.
- The prospective bidder shall, before submitting a bid, carefully examine the proposal form, plans, Specifications, Special Provisions and form of contract and bond. The bidder shall inspect in detail the streets, the site of the proposed work and the local conditions that affect the detailed requirements of construction. This shall include, but not be limited to, the various pavement cross sections, the condition of the pavements, utilities that are known, unknown or abandoned, unidentified vaults or cavities within the right-of-way and items buried within the right-of-way including railroad tracks and utility structures. The City of Aurora will not accept requests for contract cost increases including compensation for conditions that affect the progress of work.
- It is the contractor's responsibility to field verify all existing conditions regarding state, city, and privately owned utilities. The contractor shall be responsible for ensuring that active utilities (including lighting) remain in-service throughout work operations.
- All active lighting and traffic signal wiring shall be enclosed and protected prior to drilling. Wiring shall be protected with a "Split-duct" conduit system extending through the limits of the vaults as directed by the Engineer.
- Water service lines and meters, sanitary sewer service lines and cleanouts, gas service lines and meters and signal / lighting conduits may be present in the vaults and are shown on the drawings as observed in the field. Contractor shall retain responsibility for protection and location of utilities in accordance with Article 107.31 of the Standard Specifications. Utilities noted on the drawings and others not observed during design are to be adjusted or relocated in accordance with Article 105.07 of the Standard Specifications. Work by the Contractor may include (but is not limited to):
 - Extending sanitary sewer cleanouts (currently located in sidewalk vaults) to the building basement or relocation of same into the building basement;
 - Water supply plumbing work as required to connect the water meter and service relocated within the building basement;
 - Cutoff and removal of wiring for vault lighting (if necessary) in accordance with the local electrical code requirements; and
 - Shift and support existing or proposed signal and street lighting conduit to clear the work area.
 - Any interruption to building services shall be scheduled with input from the City and building Owner, and authorized by the Engineer. Interruptions shall be limited to a maximum of two (2) hours.
- The back face of masonry retaining walls shall be waterproofed according to Article 503.18 of the Standard Specifications unless otherwise noted. Cost shall be included under the unit price bid for Masonry Wall Construction.
- Concrete masonry units (where indicated on plan) shall conform to the Special Provisions.
- All gaps/open joints shall be sealed with a polyurethane sealant that is a one-component high-performance gun-grade moisture-curing polyurethane sealant designed for a wide range of sealing and caulking applications in active exterior joints, including steel, concrete and masonry. The sealant material shall be approved by the Engineer prior to use.
- The final sidewalk grades shall match into the existing sidewalk, and shall slope away from the existing buildings. The proposed sidewalk jointing shall be located in coordination with the vaults to remain, and the existing sidewalk jointing. If sidewalks with brick in-lays are required to be removed to complete the work, the brick in-lays shall be replaced in-kind in the proposed sidewalk. The cost of the brick in-lays shall be included in the item PCC Sidewalk, 5".
- No motorized equipment will be permitted on the existing and proposed vault slabs without written authorization from the Engineer.
- The Contractor shall provide temporary bracing of existing vault walls and ceilings, if needed, prior to removing the concrete sidewalks/vault tops. The Contractor shall also provide protection for the adjacent structure from water/seepage.
- The Contractor shall remove and dispose of all debris and out-of-service utility boxes, conduits, wires, miscellaneous timber, etc. in vaults prior to beginning filling operations. It shall be the Contractor's responsibility to determine which equipment is out-of-service and available to be removed (See Note 3).

- Controlled Low Strength Material (CLSM) work shall conform to applicable portions of Section 593 of the Standard Specifications with the following additional requirements:

Where CLSM is poured against an existing wall not retaining soil Masonry Wall Construction, the CLSM shall be poured in lifts not exceeding 24" deep. Each lift shall be allowed to cure for a minimum of 4 hours before the next lift is poured.

The contractor may, instead, provide bracing and/or cross ties to carry the pressure from the fluid CLSM.

If cross ties are used, wales shall be placed on the interior wall surface to prevent pullout. All wale and tie material shall be removed from the basement and damage to the existing wall shall be patched to the satisfaction of the Engineer when the forms are removed.

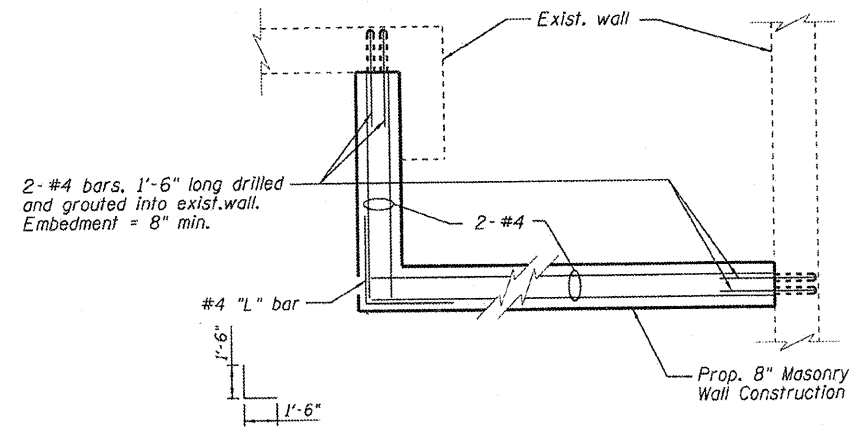
- The Contractor shall contact the property owner prior to beginning work on the respective vaults and coordinate the work. In order to complete the work indicated, the Contractor may need to temporarily access private property. In addition to coordinating access with the owner, the Contractor shall be responsible for obtaining appropriate building permits and approvals from the local building official with jurisdiction.
- In addition to requirements set forth in Article 107.09, pedestrian traffic shall be protected during construction in accordance with Section 3306 of the most recent version of the International Building Code.
- The cost for Reinforcement Bars, drilling and grouting bars and grout provided for the wall/bond beam detail shall be included with the item Masonry Wall Construction.
- Reinforcement bars shall conform to the requirements of ASTM A 706 GR 60. See Special Provisions.
- The cost of all utility removal, relocation, maintenance, and protection required to complete the vault filling work as shown shall be included in the cost of the associated pay items.
- Masonry Wall Construction

The Contractor may construct a reinforced concrete wall as a substitution for Masonry Wall Construction. If the Contractor chooses this alternative, the following requirements apply:

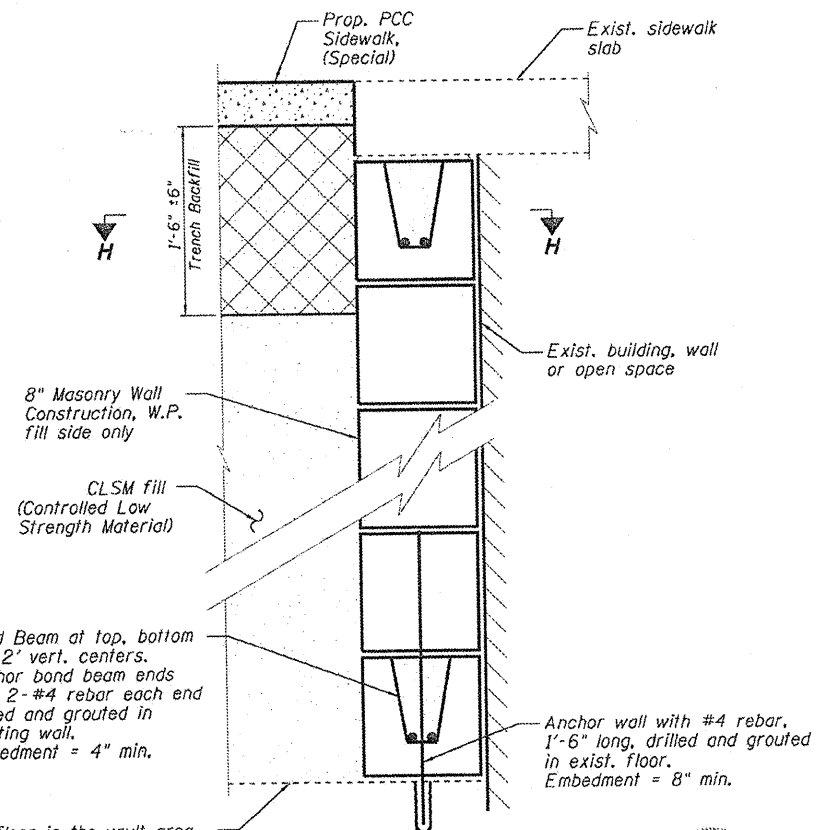
- Wall shall be 7 1/2" to 8" thick.
- The dowels, corner bars and reinforcing bars shown for the Masonry Wall Construction shall be used. Horizontal #4 bars at 24" on center (each face with 2" clear cover) and corner bars.
- Additional #4 vertical bars shall be included at 48" on center, centered in the wall and at each corner and end.
- Class SI concrete shall be utilized in accordance with Section 503 of the Standard Specifications.
- Completed wall shall be measured and paid for at the per square foot unit price bid for Masonry Wall Construction

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Trench Backfill	Cu. Yds.	17.8
Portland Cement Concrete Sidewalk, Special	Sq. Ft.	390
Sidewalk Removal	Sq. Ft.	390
Controlled Low Strength Material	Cu. Yds.	101.1
Concrete Foundation, Type A (Special)	Foot	21
Exploratory Borehole Investigation	Each	4
Masonry Wall Construction	Sq. Ft.	534
Remove Existing Concrete Foundations (Special)	Each	6



**SECTION H-H
TYPICAL WALL SECTION
AT EACH BOND BEAM**



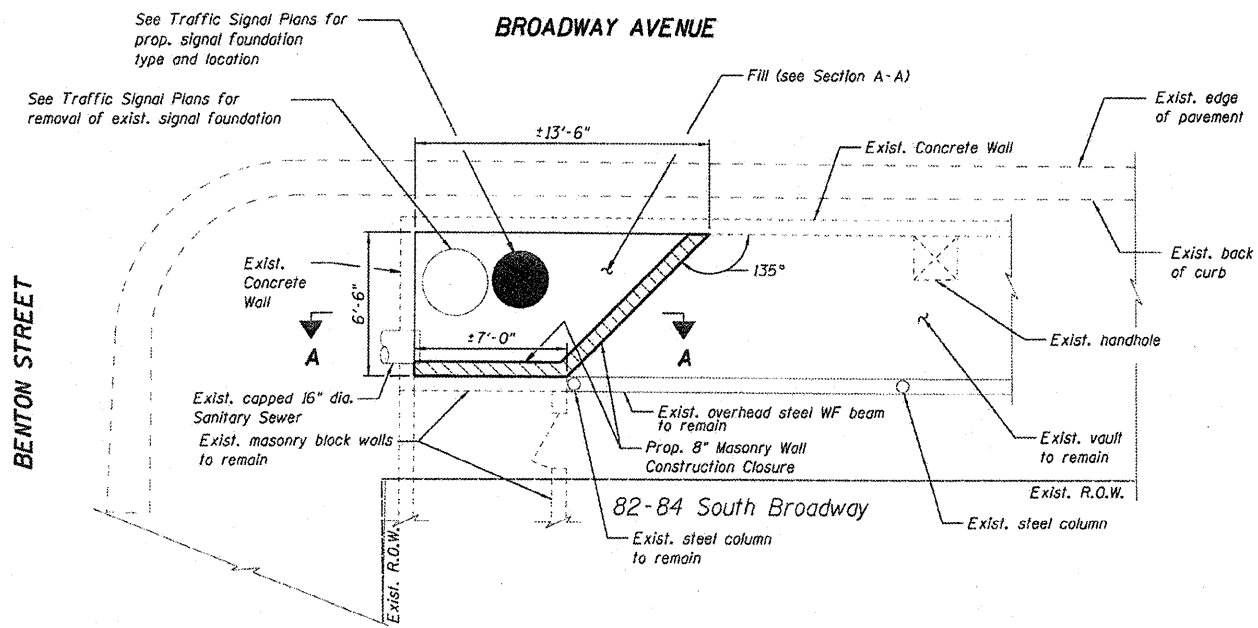
Exist. concrete floor in the vault area to be filled shall be broken to promote drainage prior to fill. Cost for this work shall be included under the unit price bid for Controlled Low Strength Material.

TYPICAL WALL/BOND BEAM DETAIL

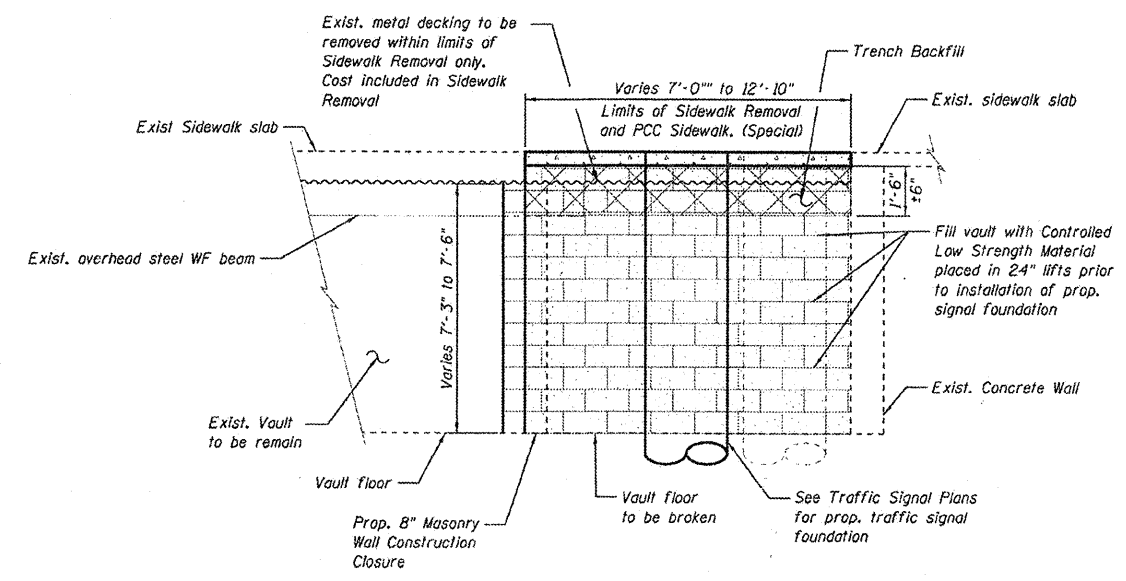


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DESIGNED		
DRAWN		
CHECKED		
DATE		

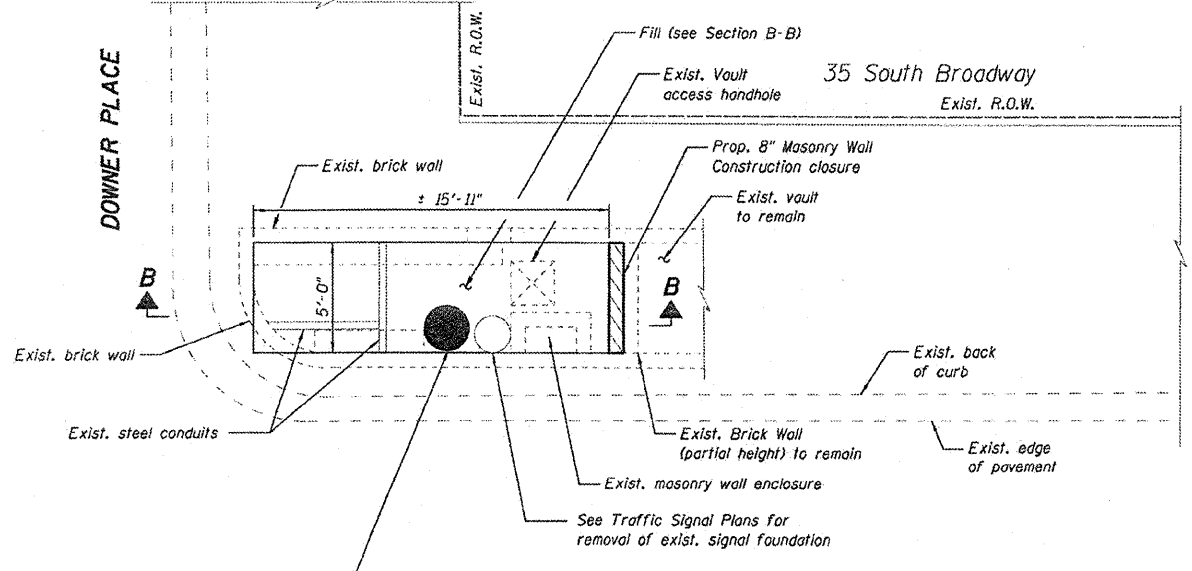
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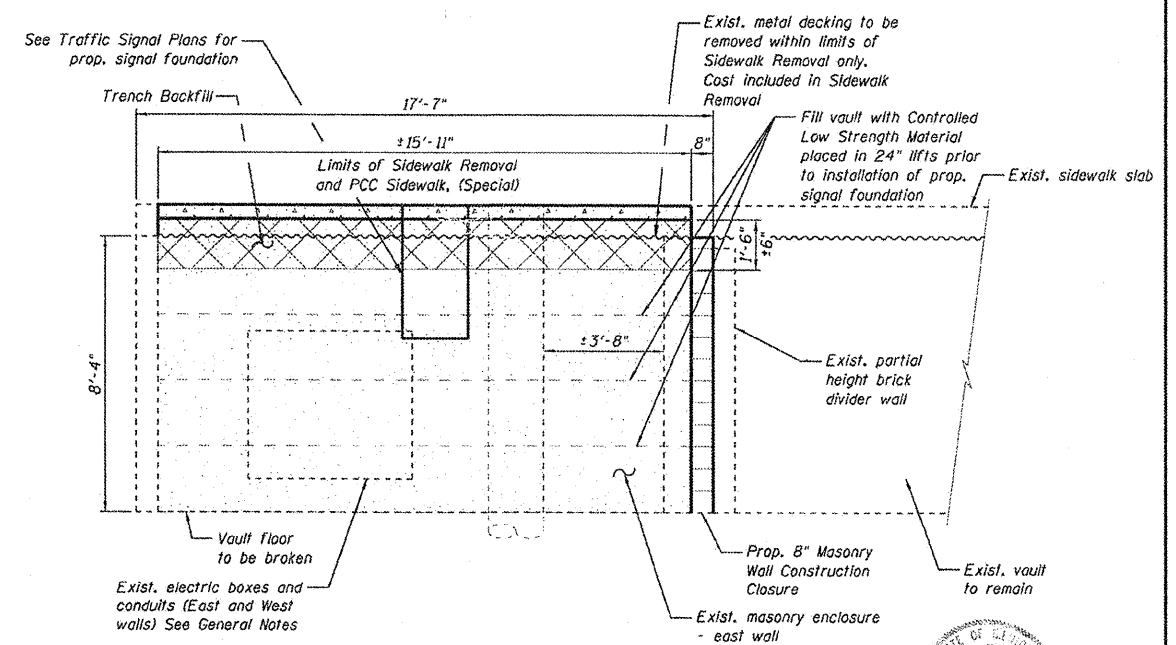
PLAN
82-84 South Broadway



SECTION A-A



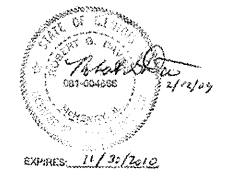
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35 South Broadway



SECTION B-B

LEGEND

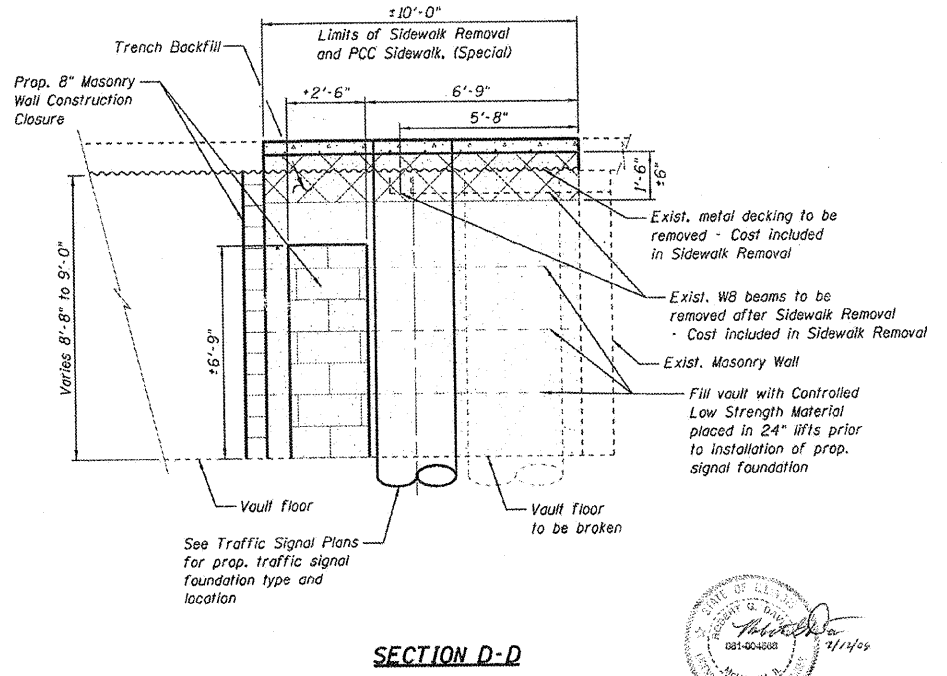
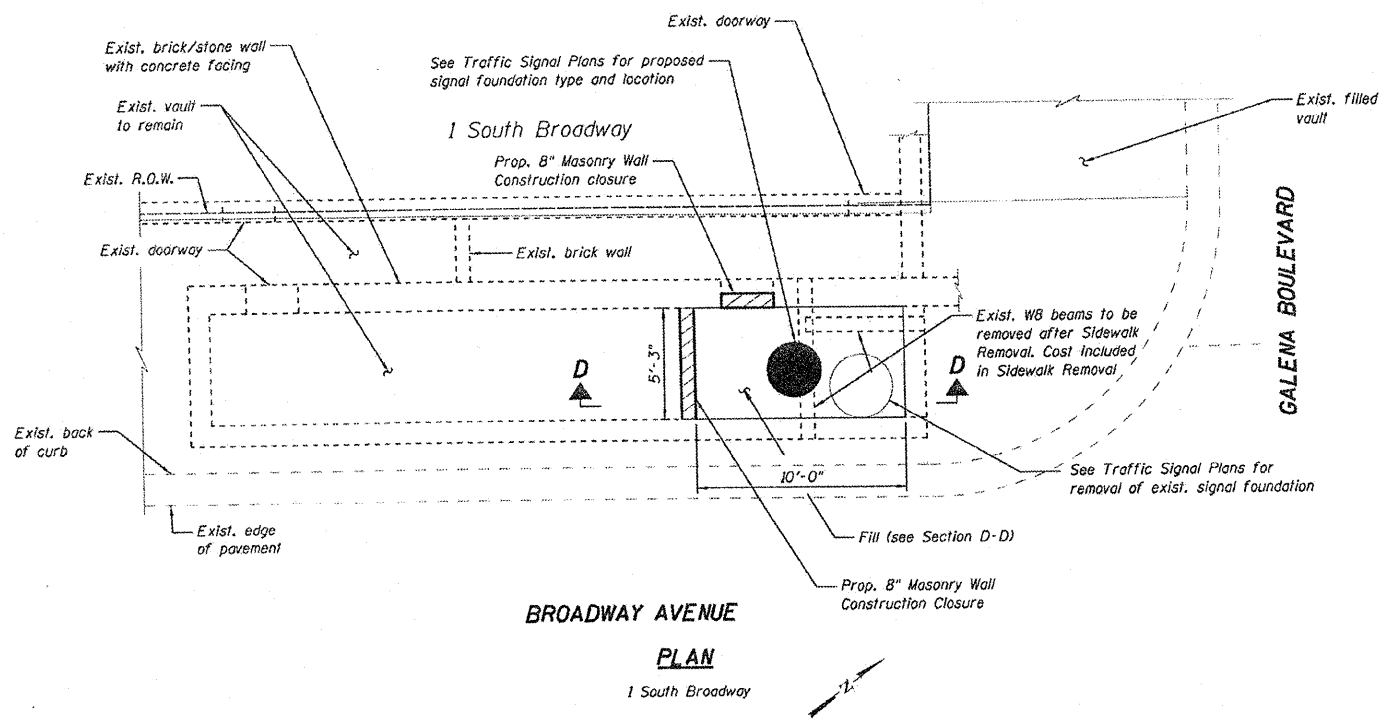
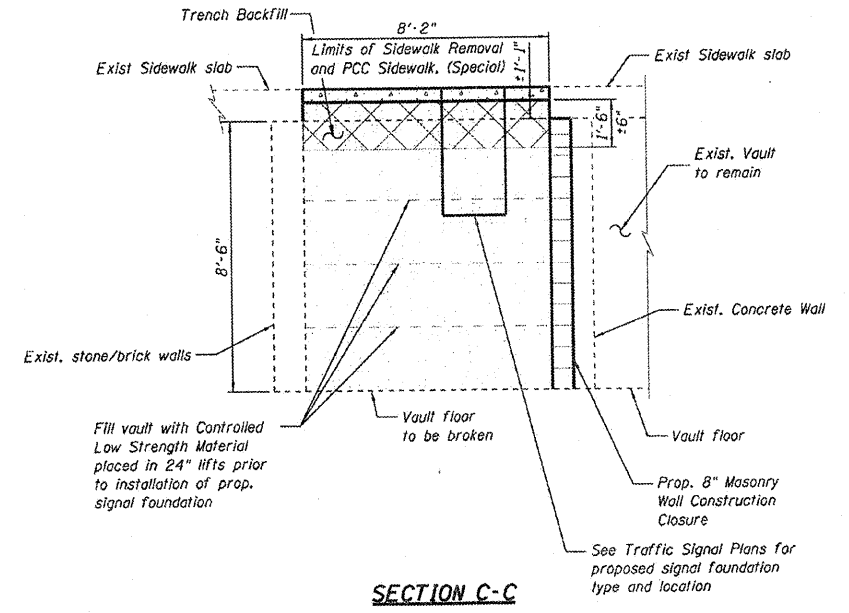
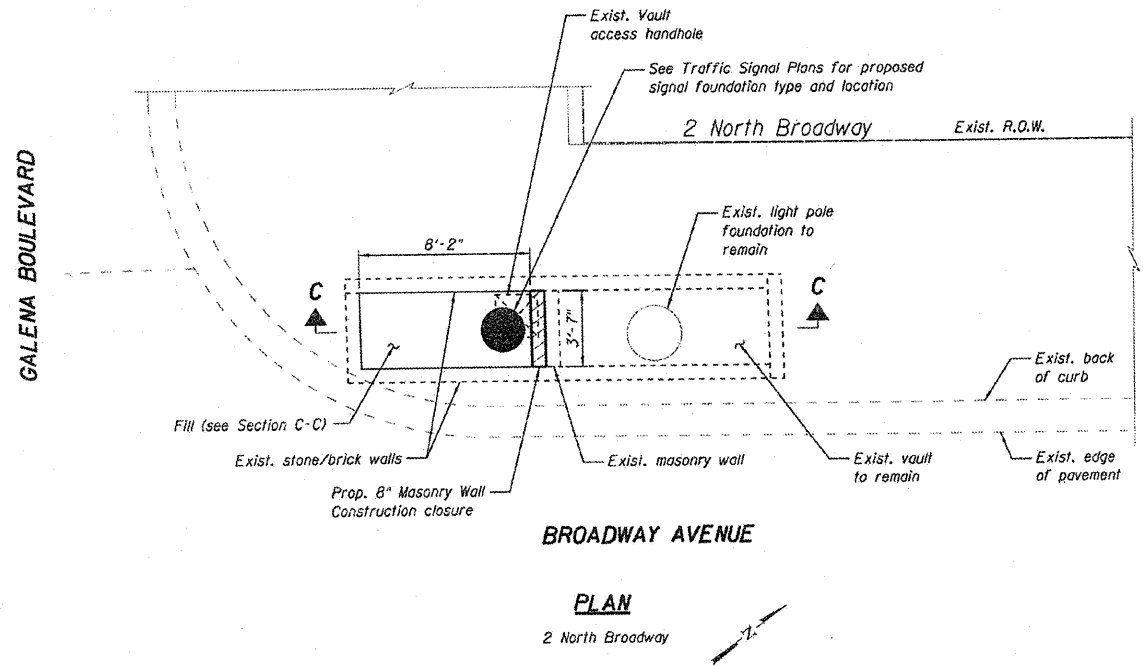
[Cross-hatched box]	Controlled Low Strength Material
[Dotted box]	Trench Backfill



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PLLOT SCALE: N.T.S.	DRAWN: WJH	CHECKED: RGD	REVISED: -			2009-002 TS, 091-313-09 & 091-313-09	KANE	34	34B	
PLLOT DATE: 2/11/2009	DATE: JAN 15 2009	REVISED: -	REVISED: -			CONTRACT NO. 60F99				
						FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

PLAN	3/11/09
DESIGNED	KMA
DRAWN	WJH
CHECKED	RCD
DATE	JAN 16 2009

PROF. FILE	3/11/09
DATE	3/11/09
REVISIONS	
NO.	
DESCRIPTION	



LEGEND

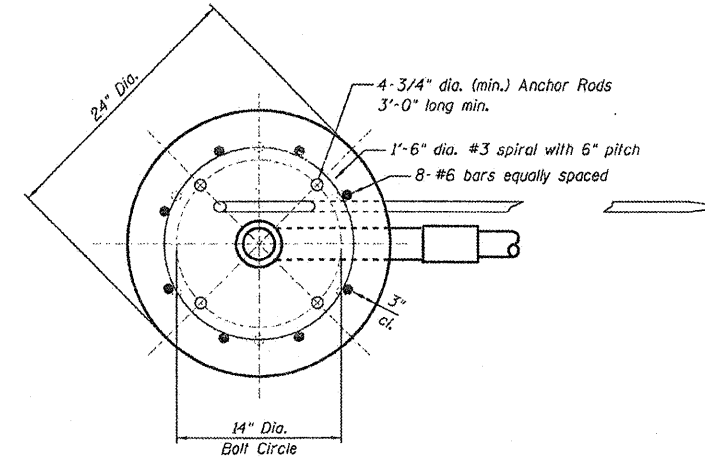
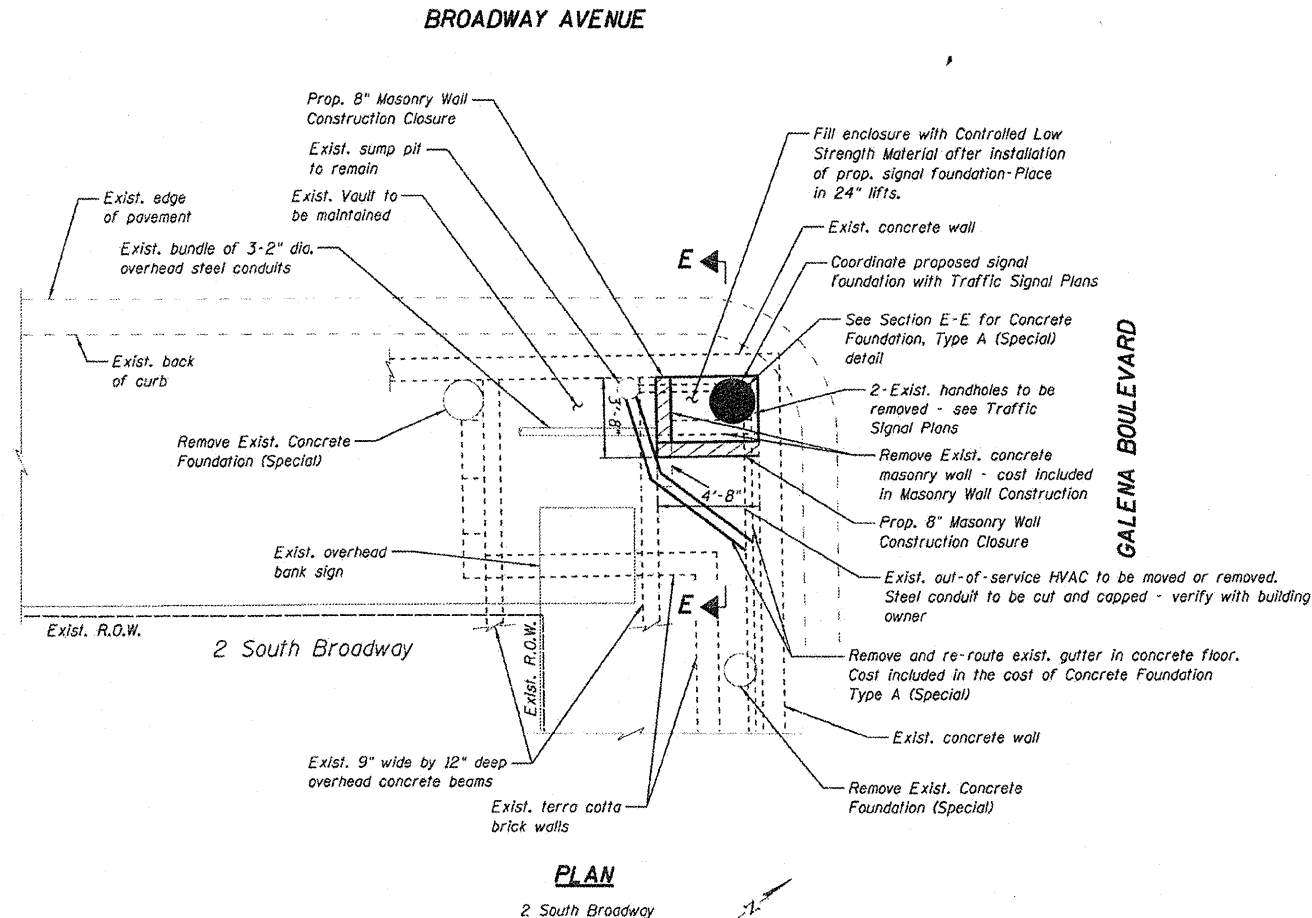
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	Trench Backfill



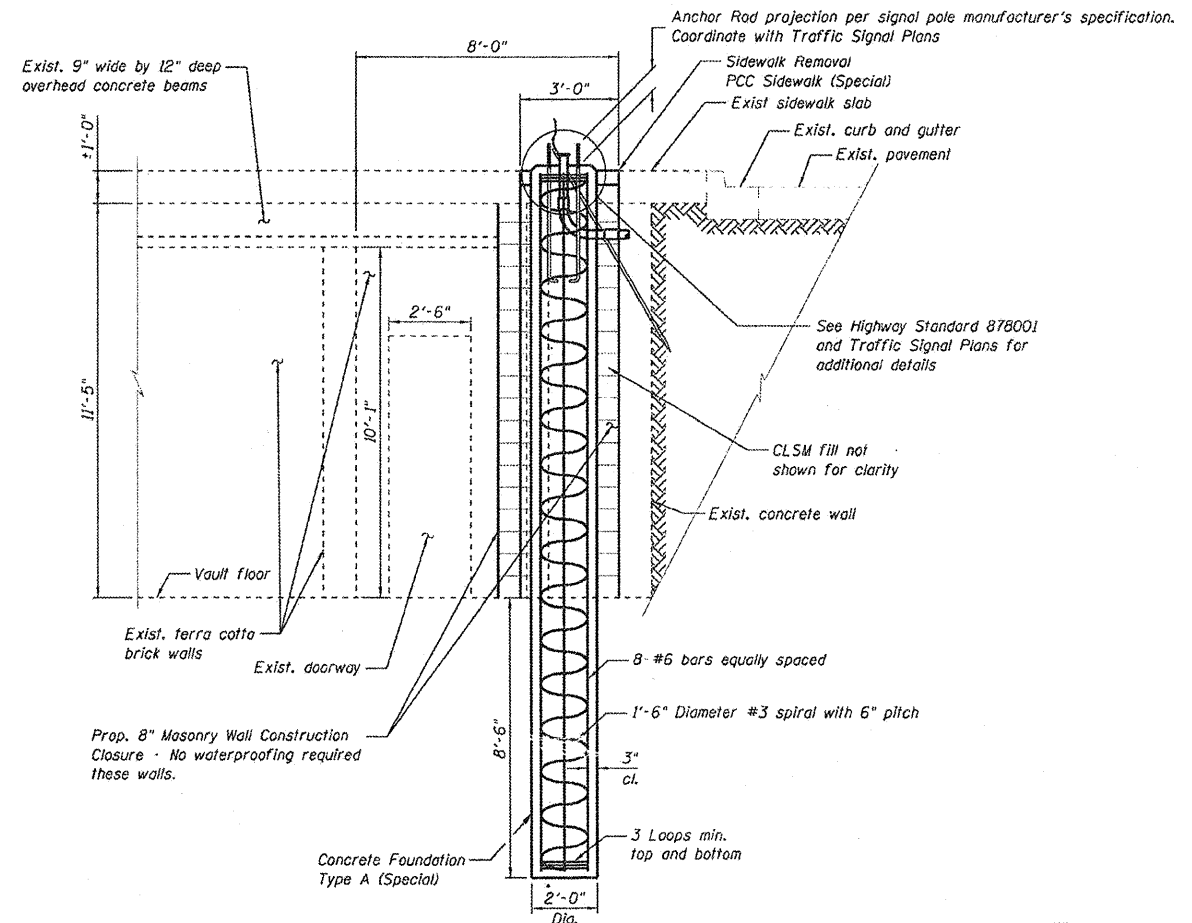
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		DRAWN: WJH	REVISIONS:		SCALE:	SHEET NO. OF SHEETS:	STA. TO STA.:	2009-002 TS, DS1-313-09 & CS1-313-09	KANE	34	340
		CHECKED: RCD	REVISIONS:								
		DATE: JAN 16 2009	REVISIONS:								
							CONTRACT NO. 60F99				

PLAN	DATE
BY	
CHECKED	
DATE	
NO.	

PROFILE	DATE
BY	
CHECKED	
DATE	
NO.	



**TOP PLAN
CONCRETE FOUNDATION TYPE A (SPECIAL)**



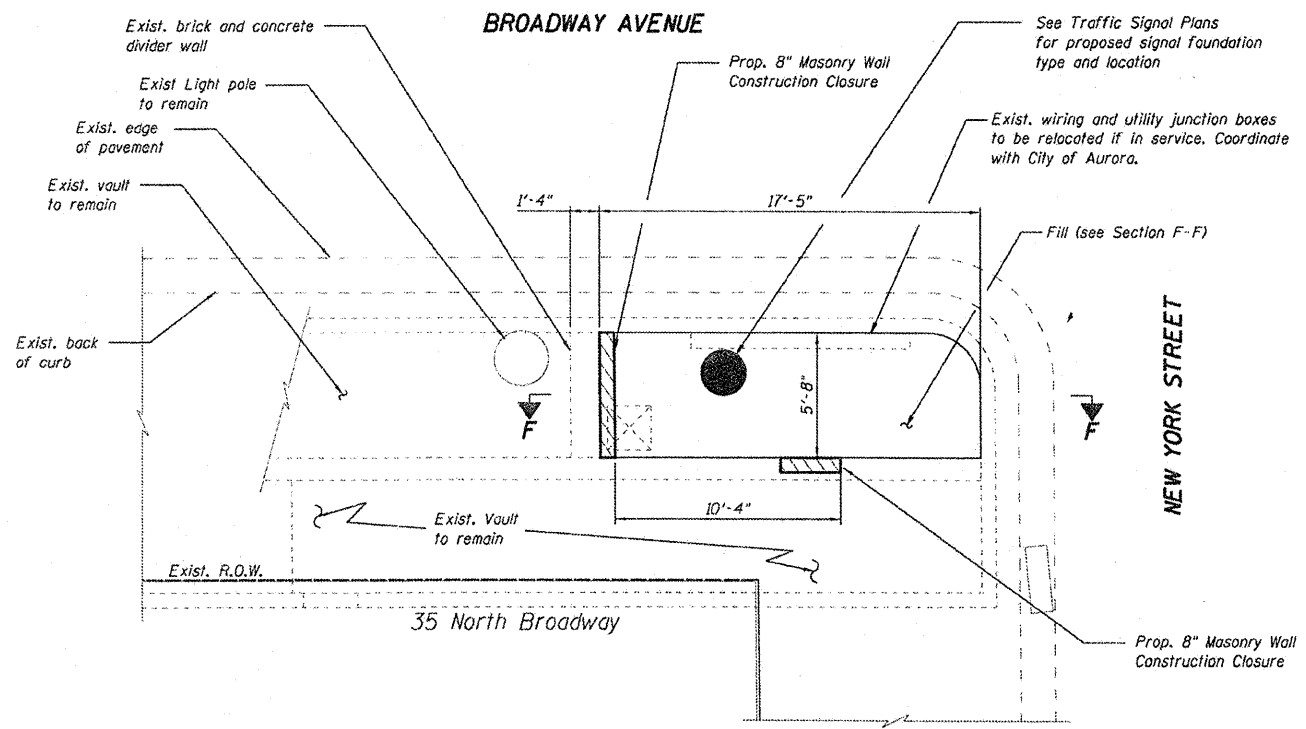
SECTION E-E



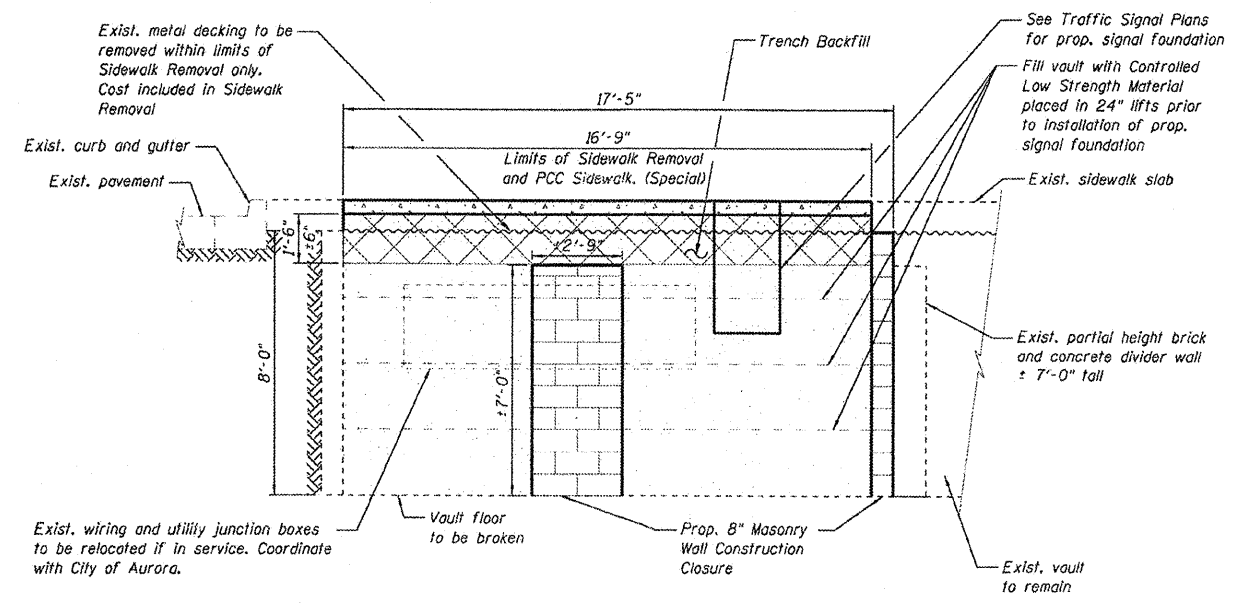
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		DATE <i>JAN 16 2009</i>	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

PLAN	BY	DATE
PROFILES		
NOTES		
REVISIONS		
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NO. 2		
NO. 3		
NO. 4		
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NO. 10		

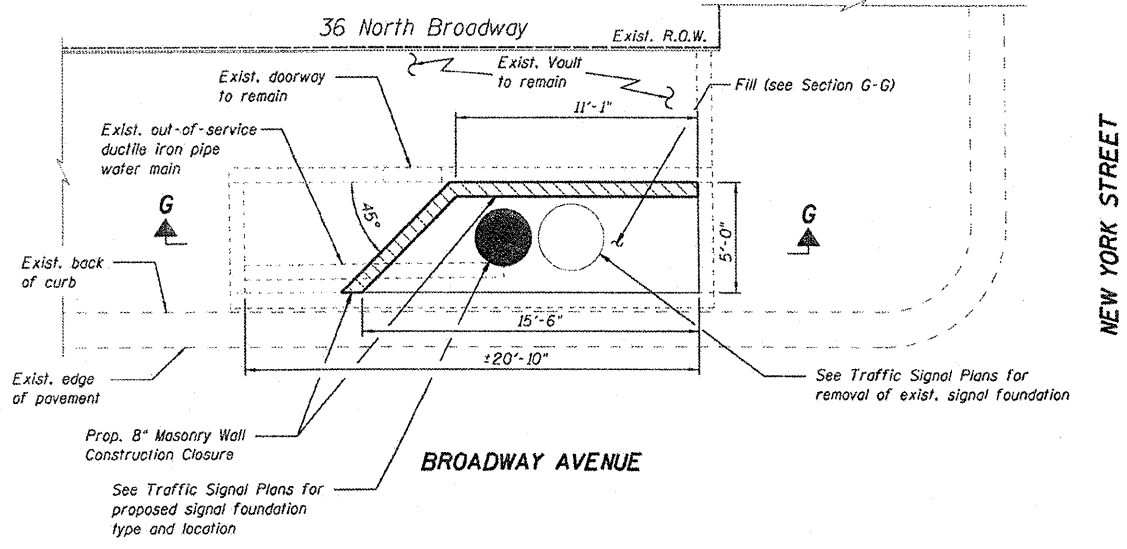
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REVISIONS		
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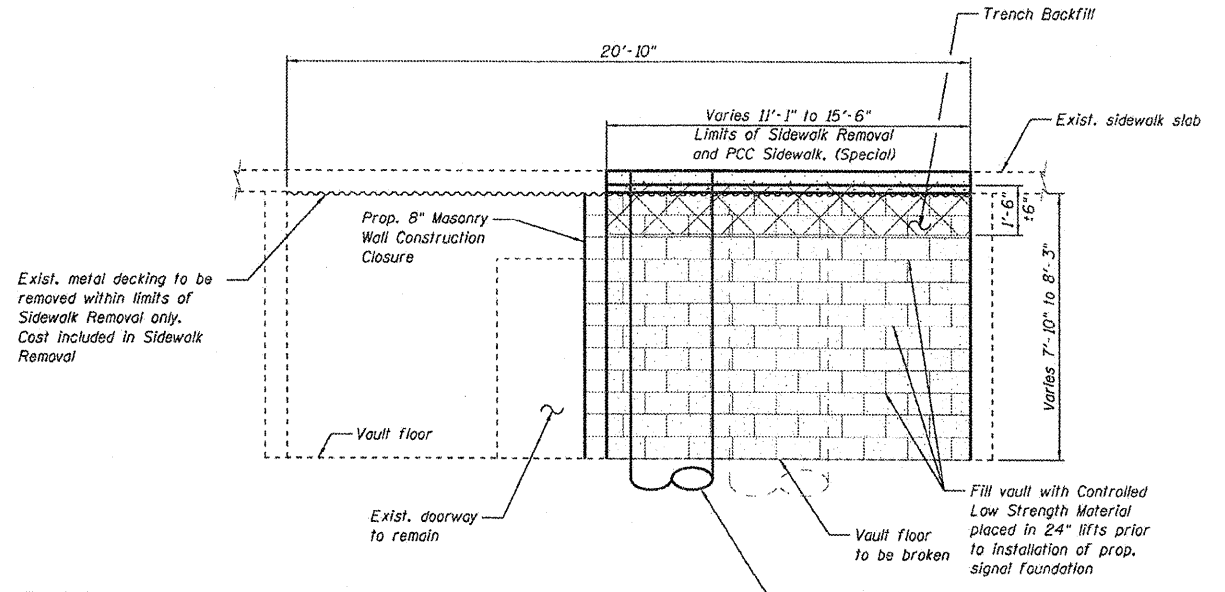
PLAN
35 North Broadway



SECTION F-F



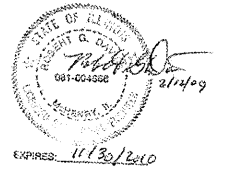
PLAN
36 North Broadway



SECTION G-G
36 N. Broadway

LEGEND

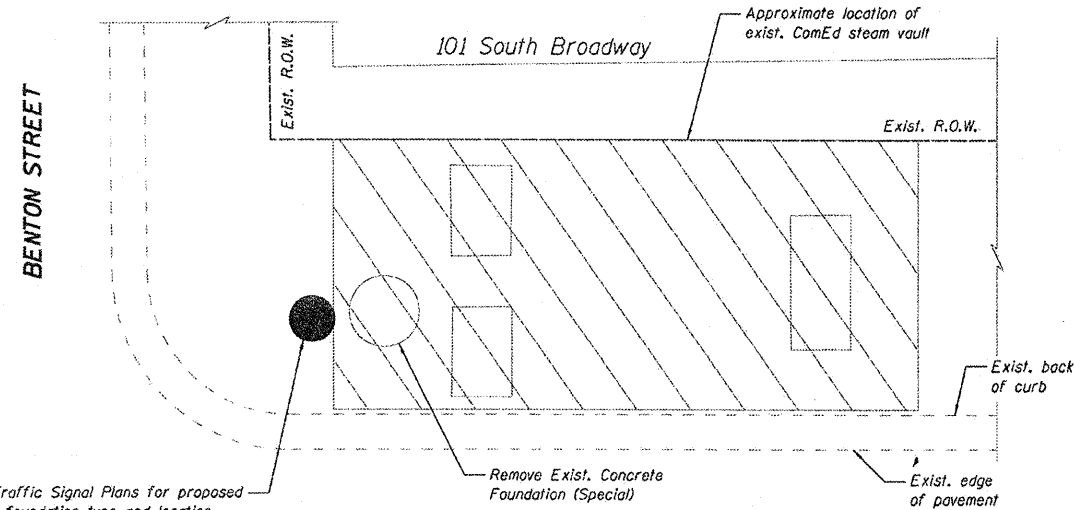
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	Trench Backfill



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		DATE: JAN 16 2009	REVISIONS:			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PLAN	DATE
APPROVED	
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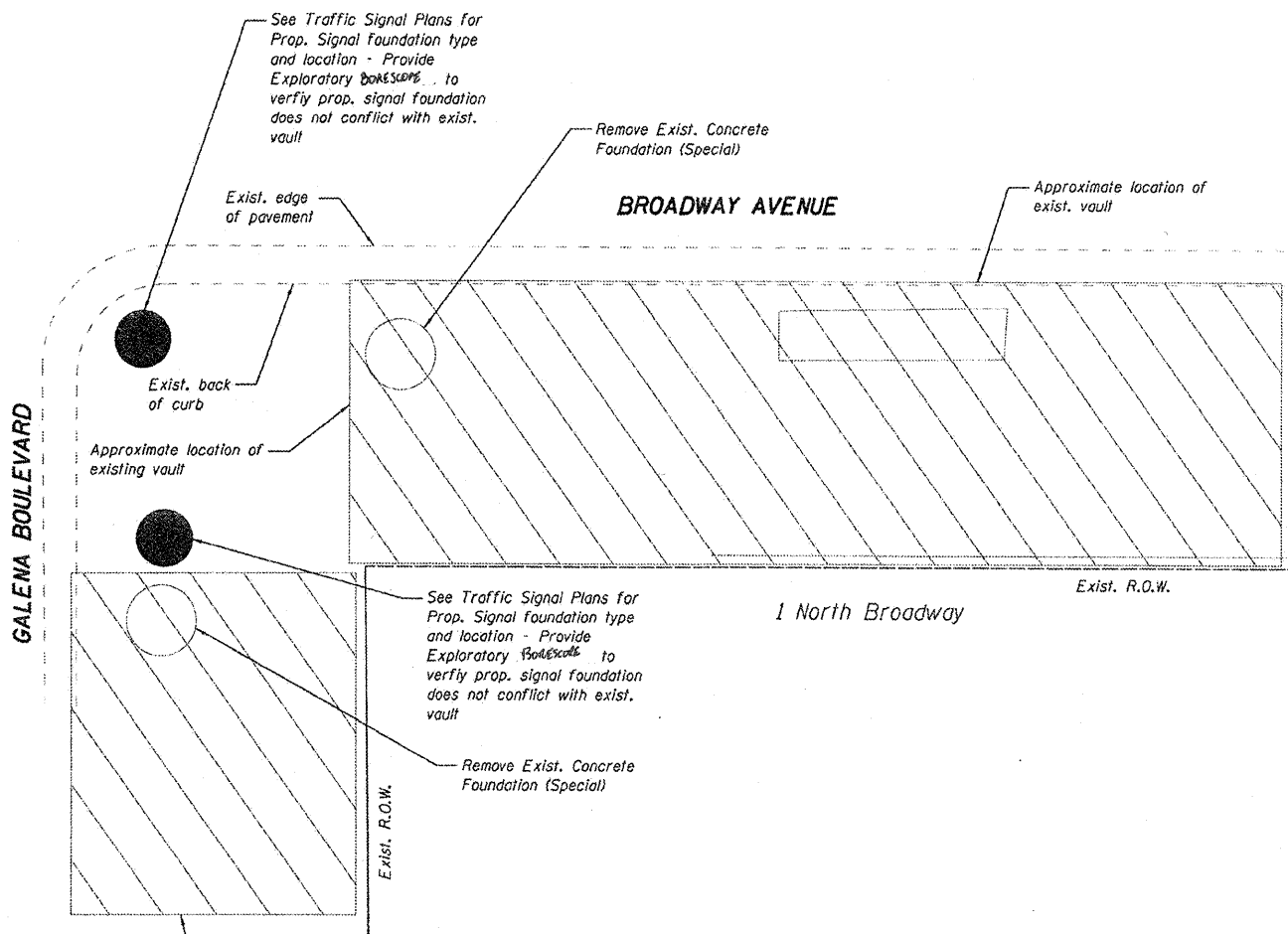
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BROADWAY AVENUE

PLAN

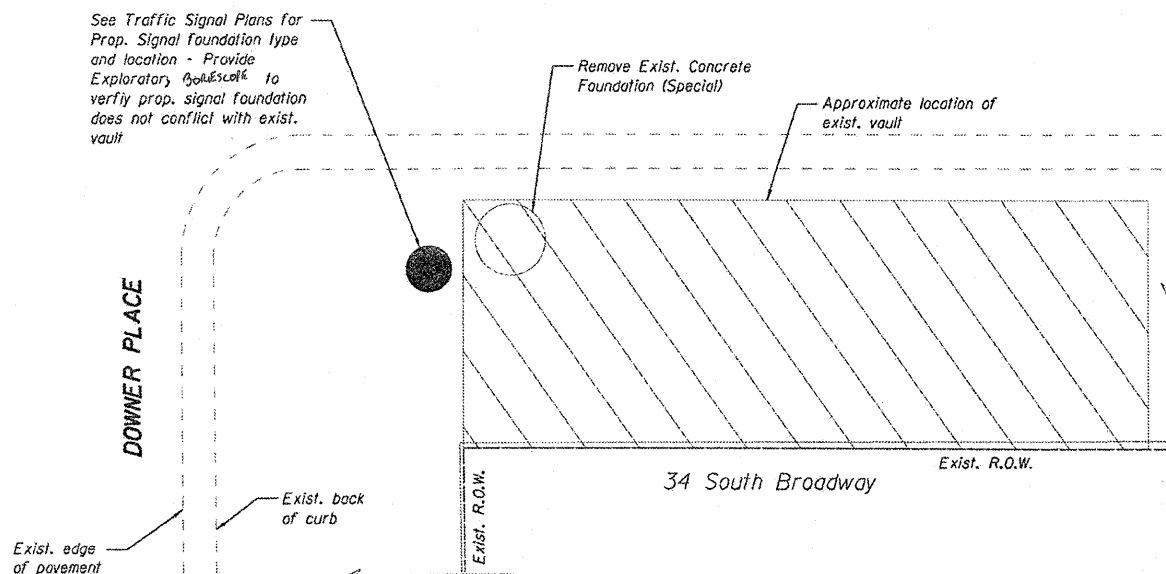
101 South Broadway



BROADWAY AVENUE

PLAN

1 North Broadway



BROADWAY AVENUE

PLAN

34 South Broadway



FILE NAME 270610.3.vault.dwg	USER NAME 9USER	DESIGNED KMA	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIDWALK VAULT DETAILS IL ROUTE 25 (BROADWAY AVENUE) AT DOWNER PLACE, BENTON STREET, AND GALENA BOULEVARD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN WJH	CHECKED ROD	REVISED			2005-002 TS, 091-313-09 & C91-313-09	KANE	34	34	
	DATE JAN 16 2009					CONTRACT NO. 60F99				
						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				