

F.A.P. RTE. 389	SECTION 2009-031 TS	COUNTY COOK	TOTAL SHEETS 13	SHEET NO. 1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 60G31	

D-91-364-09

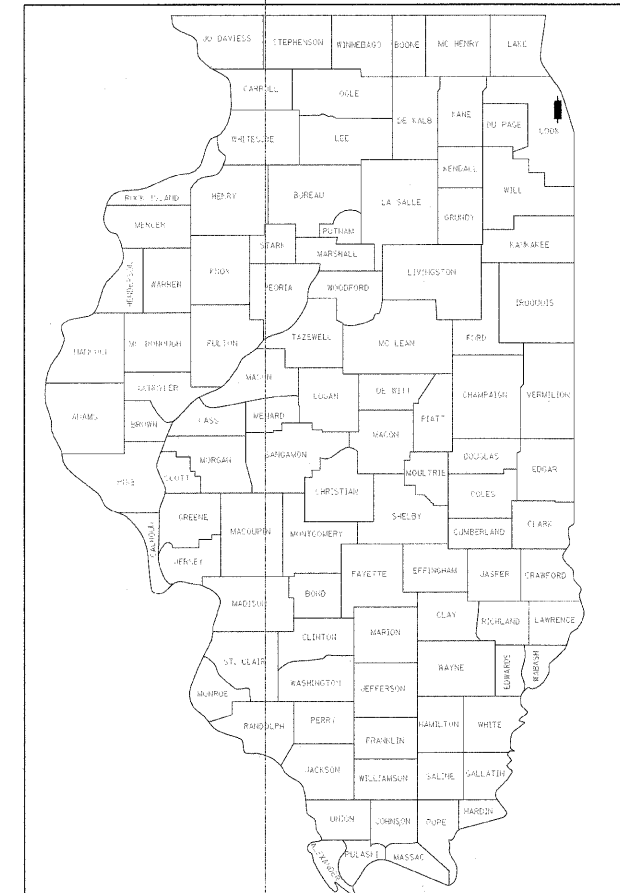
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
NON-FEDERAL AID HIGHWAY

DISTRICT 1
HIGHWAY SAFETY IMPROVEMENT PROJECT
TRAFFIC SIGNAL IMPROVEMENT
FAP 389 / CONGRESS PARKWAY
WACKER DRIVE AT MONROE STREET & ADAMS STREET
CHICAGO, ILLINOIS

F.A.P. ROUTE 389/CONGRESS PARKWAY
SECTION 2009-031 TS
PROJECT NO. C-91-364-09
COOK COUNTY



LOCATION OF SECTION INDICATED THUS: - -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 23 20 09
Denis M. O'Keefe
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 20 09
Charles J. Ingersoll
 ENGINEER OF DESIGN AND ENVIRONMENT

May 8, 20 09
Christine M. Reed
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER



Signed James P. Sturrock
 JAMES P. STURROCK, P.E. IL Lic. No. 062-051471
 Expires 11-30-2009
 Date 03/27/09

PROFESSIONAL DESIGN FIRM No. 184-002342
 Expires 4-30-2011

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OF THE STATE OF ILLINOIS

RWA
 Regina Webster & Associates, Inc.
 REGINA WEBSTER AND ASSOC. INC.
 CIVIL ENGINEERING CONSULTANTS
 540 North Dearborn Street, Suite 500
 Chicago, Illinois 60610-3169

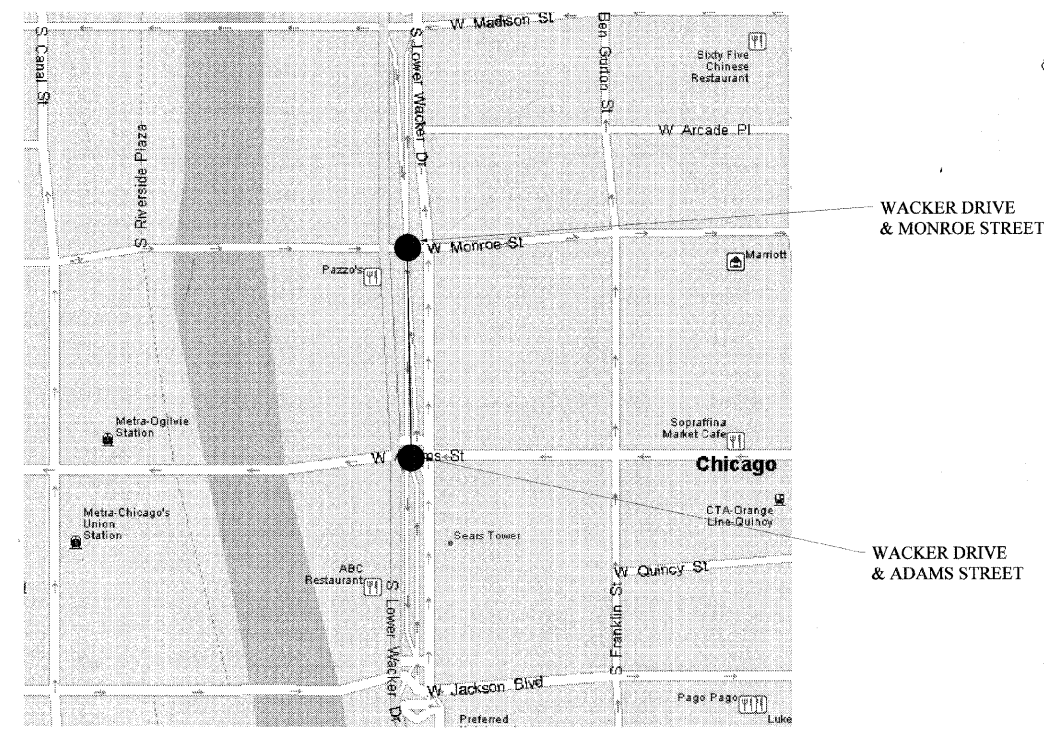
DISTRICT 1 - BUREAU OF TRAFFIC: STEPHEN TRAVIA / DARYLE DREW (847)-705-4420

- STANDARDS**
- STANDARD 701501-05
 - STANDARD 701601-06
 - STANDARD 701701-06
 - STANDARD 701801-04
 - STANDARD 701901-01

PREPARED BY: Steve Travia 3/23/09
 TRAFFIC ENGINEER DATE

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

CONTRACT NO. 60G31



SUMMARY OF QUANTITIES

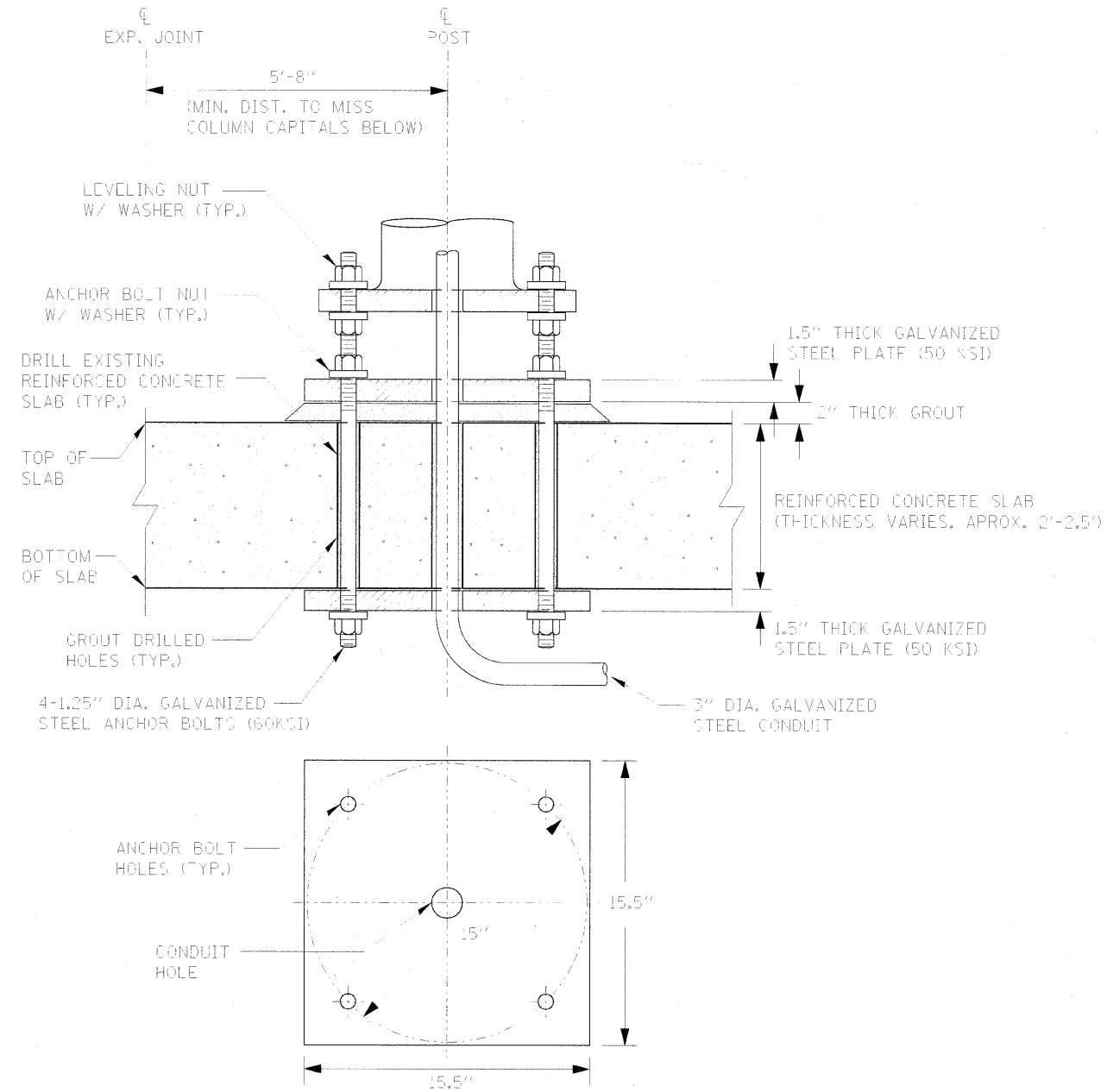
PERCENTAGES					
LOCATION OF WORK			<i>URBAN</i>	WACKER DRIVE @	
			<i>100% STATE</i>	<i>Y031-1F</i>	<i>Y031-1F</i>
SUMMARY OF QUANTITIES			CONSTRUCTION CODE	ADAMS STREET	MONROE STREET
CODE NO.	ITEM	UNIT	GRAND TOTAL		
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70102620	TRAFFIC CONTROL AND PROTECTION, <i>STANDARD 701501</i>	L SUM	1	0.5	0.5
70102630	TRAFFIC CONTROL AND PROTECTION, <i>STANDARD 701601</i>	L SUM	1	0.5	0.5
70102635	TRAFFIC CONTROL AND PROTECTION, <i>STANDARD 701701</i>	L SUM	1	0.5	0.5
70102640	TRAFFIC CONTROL AND PROTECTION, <i>STANDARD 701801</i>	L SUM	1	0.5	0.5
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	2.0	1.0	1.0
Z0018940	DRILL EXISTING MANHOLE OR HANDHOLE	EACH	2.0	1.0	1.0
X0326363	CLEAN AND RACK EXISTING ELECTRICAL MANHOLE OR HANDHOLE	EACH	2	1.0	1.0
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2	1.0	1.0
81100805	CONDUIT ATTACHED TO STRUCTURE, 3" DIA., PVC COATED GALVANIZED STEEL	FOOT	290	80.0	210.0
X8730185	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 19 C	FOOT	400	90.0	310.0
X8808030	OPTICALLY PROGRAMMED SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	10	4.0	6.0
88024130	OPTICALLY PROGRAMMED SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2		2.0
X8810280	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, 1-FACE, <u>LED</u> BRACKET MOUNTED, WITH COUNTDOWN DISPLAY	EACH	16	8.0	8.0
X0966700	JUNCTION BOX, POLE OR POST MOUNTED	EACH	6	2.0	4.0
X0326457	MAST ARM, STEEL, MONOTUBE, 16 FOOT	EACH	2.0		2.0
X0326451	VIDEO SYSTEM DETECTION CAMERA	EACH	3.0	1.0	2.0
X0326452	VIDEO SYSTEM DETECTION PROCESSOR	EACH	2	1.0	1.0
X0326453	VIDEO DETECTION, TWO CARD RACK	EACH	2	1.0	1.0
X8730570	ELECTRIC CABLE IN CONDUIT, COAXIAL VIDEO, RG 59/U	FOOT	400	90.0	310.0
X0326473	<i>ELECTRIC CABLE IN CONDUIT, NO. 14 3C FOR VIDEO</i>	FOOT	400	90.0	310.0
X0322689	POLE, STEEL, ANCHOR BASE, 10" DIA., 7-GAUGE, 34'-6"	EACH	1	1.0	
X0322690	POLE, STEEL, ANCHOR BASE, 10" DIA., 3-GAUGE, 34'-6"	EACH	2		2.0
89502200	MODIFY EXISTING CONTROLLER	EACH	2	1.0	1.0
X0326455	MOUNTING BRACKET - TRAFFIC SIGNAL POLE TO EXISTING STRUCTURE	EACH	3	1.0	2.0
81300550	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	8	2.0	6.0
X0326456	BREAK DOWN EXISTING FOUNDATION SPECIAL	EACH	2		2.0

REGINA WEBSTER AND ASSOC. INC. ENGINEERING CONSULTANTS
 5101 North Dearborn Street, Suite 500
 Chicago, Illinois 60630-1559



REGINA WEBSTER
AND ASSOC. INC.
CIVIL ENGINEERING CONSULTANTS
1000 North Dearborn Street, Suite 500
Chicago, Illinois 60610-3869

RWA
Regina Webster & Associates, Inc.



CONSTRUCTION NOTES:

- 1) THICKNESS OF EXISTING REINFORCED CONCRETE SLAB SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
- 2) CONTRACTOR TO LOCATE CENTERLINE OF POST TO MISS COLUMN CAPITALS BELOW AND VARIOUS CONDUIT RUNS.

TRAFFIC SIGNAL POLE ATTACHED
TO EXISTING STRUCTURE DETAIL Y-Y

N.T.S.

FILE NAME = 9FILEL4	USER NAME = RUSER1	DESIGNED - JS	REVISED - ---
		DRAWN - DW	REVISED - ---
		CHECKED - JD	REVISED - ---
		DATE - 03/27/09	REVISED - ---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL POLE ATTACHED TO EXIST. STRUCTURE DETAIL Y-Y
TRAFFIC SIGNAL IMPROVEMENT PLAN

SCALE: NONE SHEET NO. 3 OF 13 SHEETS STA. TO STA.

F.A.P. RTE. 389	SECTION 2009-031-TS	COUNTY COOK	TOTAL SHEETS 13	SHEET NO. 3
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60631	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	TOTAL SHEETS	SHEET NO.
389	2009-031 TS	COOK	13	4	13	4
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 60G31				

D-91-364-09

GENERAL NOTES:

1. TRAFFIC SIGNAL CONTRACTOR SHALL CONTACT BOE INSPECTION SERVICES AT 312-746-5048 FOR A WALK THROUGH PRIOR TO STARTING ANY ELECTRICAL CONSTRUCTION
2. CONTRACTOR SHALL CONTACT UTILITIES FOR LOCATE PRIOR TO WORK.
3. ALL FOUNDATIONS IN CONCRETE SIDEWALK TO BE INSTALLED PER B.O.E. DRAWING #828.
4. SEE B.O.E. DRAWING #826 FOR CODE.
5. SEE STANDARD DRAWINGS FOR MOUNTING DETAILS.
6. ALL SIGNAL SECTIONS TO BE STANDARD 12" SIZE L.E.D. TYPE.
7. ALL VEHICULAR SIGNALS TO BE 3 SECTION, UNLESS OTHERWISE NOTED.
8. PEDESTRIAN SIGNALS TO BE 2 SECTION WITH I.T.E. SYMBOLIC LENSES L.E.D. TYPE, AND COUNT DOWN DISPLAY
9. PEDESTRIAN SIGNALS TO BE MOUNTED BELOW VEHICULAR SIGNALS.
10. ALL MAST ARMS TO BE STEEL MONOTUBE TYPE, SIZE AS NOTED.
11. TRAFFIC SIGNAL EQUIPMENT SHALL BE PAINTED BLACK.

CONSTRUCTION NOTES:

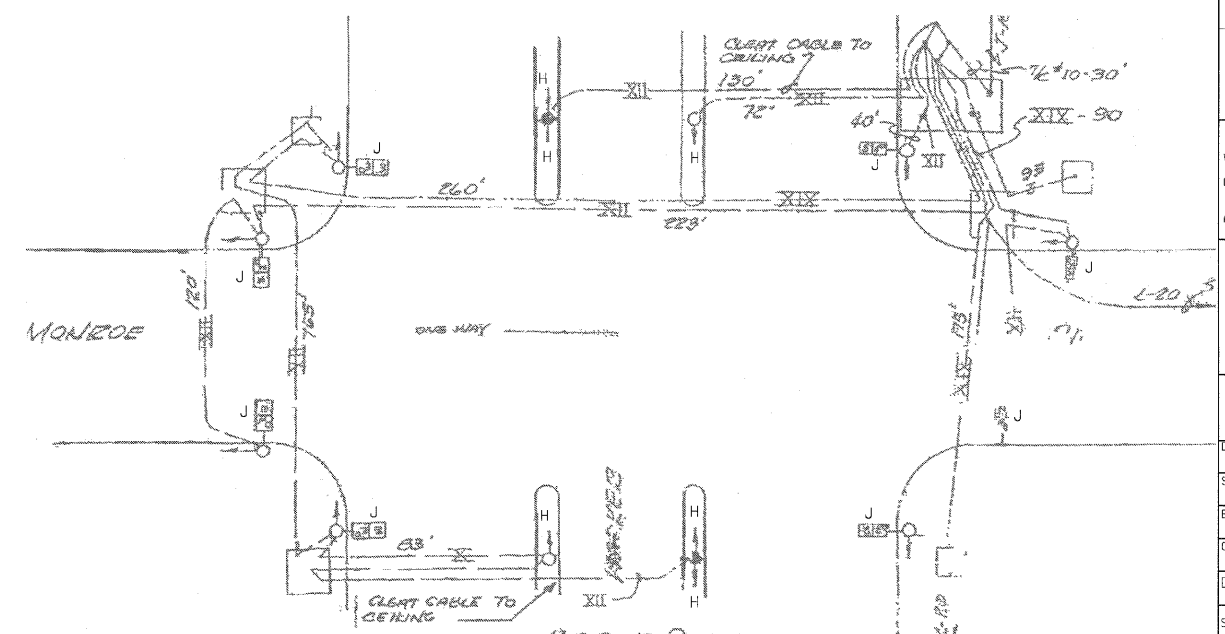
- A - 3-27-09-MODIFICATIONS TO 5-24-74 PLANS SET
- B - MODIFY EXISTING CONTROLLER
- C - INSTALL VIDEO DETECTION SYSTEM WITH RACK MOUNT
- D - INSTALL VIDEO DETECTION CAMERA TO VERTICAL POLE
- E - REMOVE POST AND REPLACE WITH MAST ARM AND POLE PRIOR TO ANY OTHER TRAFFIC SIGNAL HEAD REMOVAL AND REPLACEMENT

REMOVAL NOTES:

- F - REMOVE POST
- G - BREAK DOWN EXISTING FOUNDATION SPECIAL
- H - REMOVE TRAFFIC SIGNAL HEAD
- J - REMOVE PEDESTRIAN SIGNAL HEAD

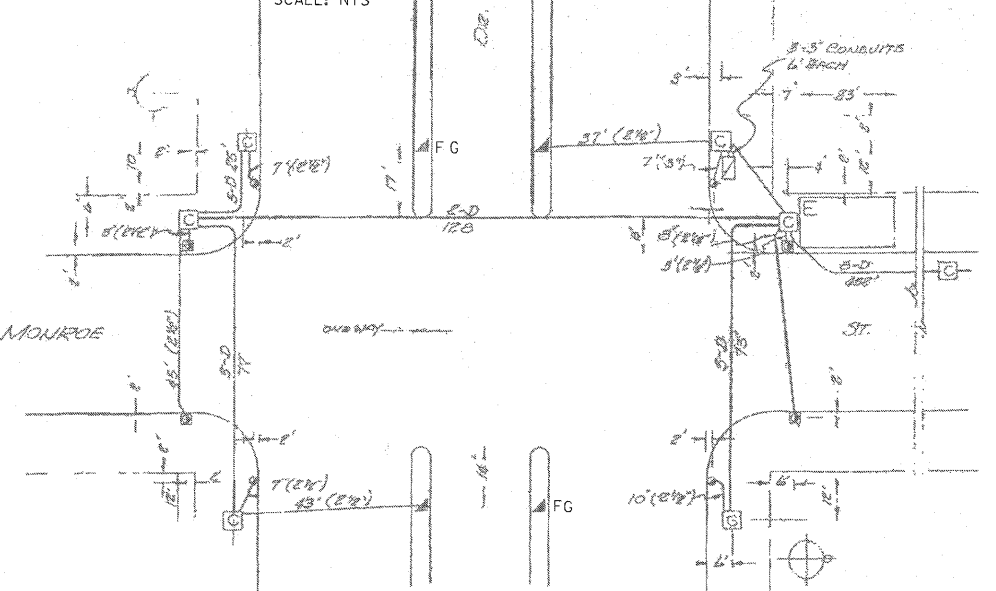
SIGNAL AND CABLE REMOVAL PLAN

SCALE: NTS



FOUNDATION REMOVAL PLAN

SCALE: NTS



C.S.D. COMPUTER SYSTEM
COMM. CABLE DRG # 22935 S-W.
DETECTOR DRG # 22944

W.O. # 31316 ACCT. 25

TRAFFIC CONTROL SIGNALS
WACKER DR. + MONROE ST.

REVISED	DATE	BY	CHKD.	APP'D.	REASON
A	11-4-74				
B	1-2-75	R. BRIGAS	M.S.	R. BRIGAS	
C	2-5-75				
D					
E					
F					
G					

12170

DATE		REVISION	
CITY OF CHICAGO			
DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING			
CONSULTANT:		RWA Regina Webster & Associates, Inc.	
WORK ORDER NO.	0000000	DATE	
COST ALLOCATION ACCOUNT			
APPROPRIATION ACCOUNT (MATERIAL _____ LABOR _____)			
SUPERSEDES DWG# 12170 DATED 6-14-74			
TRAFFIC CONTROL SIGNALS			
WACKER DRIVE AND MONROE STREET			
CITY OF CHICAGO			
DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING			
DRAFTSMAN:	T.F.	CHIEF DRAFTSMAN:	J.K.
SUPERVISING ENGINEER:	ELEC. DESIGN ENGR.	ENGINEER:	J.S.
ENGINEER OF ELECTRICITY:		DWG. NO.	
GEN'L Supt. OF ELECTRICITY:		12170	
DEPUTY COMMISSIONER:			
SIZE: 22" 36"	SCALE:	DATE: 3/27/09	SHEET NO.:
C.O.D.T. PROJECT NO.: XXXXXX			

D-91-364-09

GENERAL NOTES:

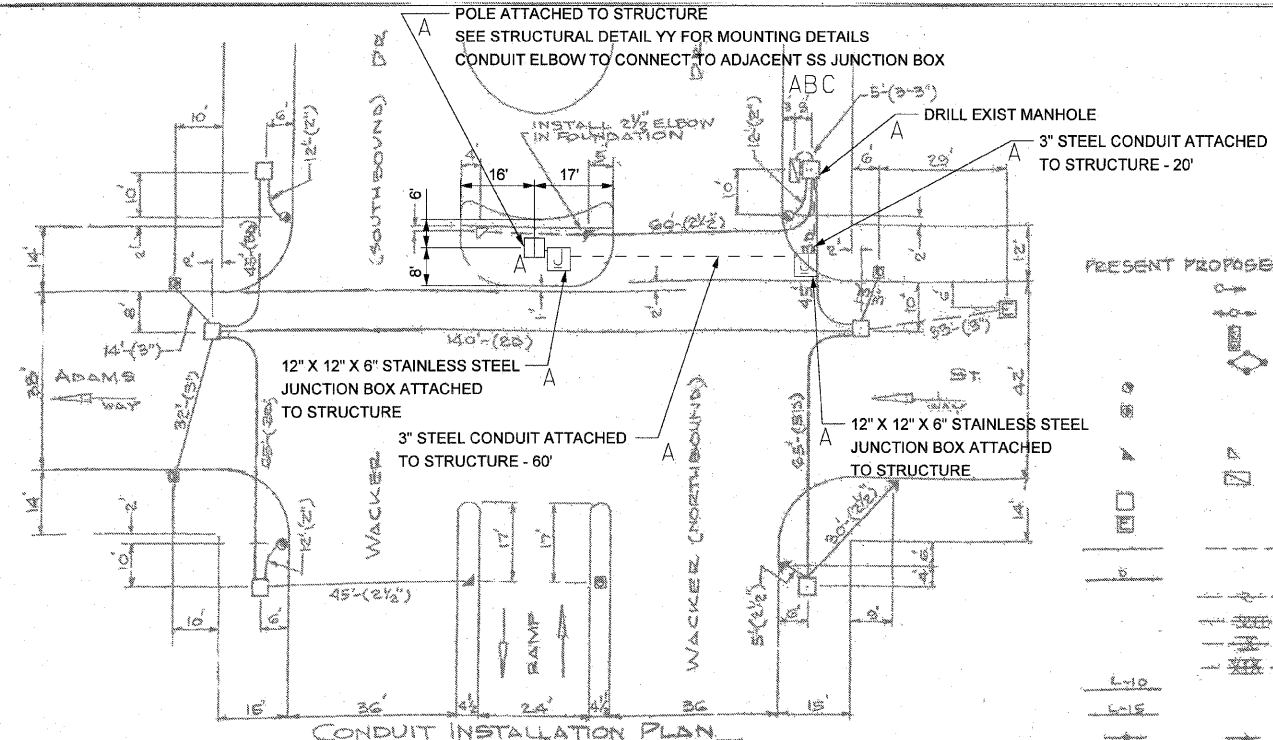
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3. ALL FOUNDATIONS IN CONCRETE SIDEWALK TO BE INSTALLED PER B.O.E. DRAWING #828.
4. SEE B.O.E. DRAWING #826 FOR CODE.
5. SEE STANDARD DRAWINGS FOR MOUNTING DETAILS.
6. ALL SIGNAL SECTIONS TO BE STANDARD 12" SIZE L.E.D.. TYPE.
7. ALL VEHICULAR SIGNALS TO BE 3 SECTION, UNLESS OTHERWISE NOTED.
8. PEDESTRIAN SIGNALS TO BE 2 SECTION WITH I.T.E. SYMBOLIC LENSES L.E.D. TYPE. AND COUNT DOWN DISPLAY
9. PEDESTRIAN SIGNALS TO BE MOUNTED BELOW VEHICULAR SIGNALS.
10. ALL MAST ARMS TO BE STEEL MONOTUBE TYPE, SIZE AS NOTED.
11. TRAFFIC SIGNAL EQUIPMENT SHALL BE PAINTED BLACK.

CONSTRUCTION NOTES:

- A - 3-27-09-MODIFICATIONS TO 5-24-74 PLANS SET
- B - MODIFY EXISTING CONTROLLER
- C - INSTALL VIDEO DETECTION SYSTEM WITH RACK MOUNT
- D - INSTALL VIDEO DETECTION CAMERA TO VERTICAL POLE

REMOVAL NOTES:

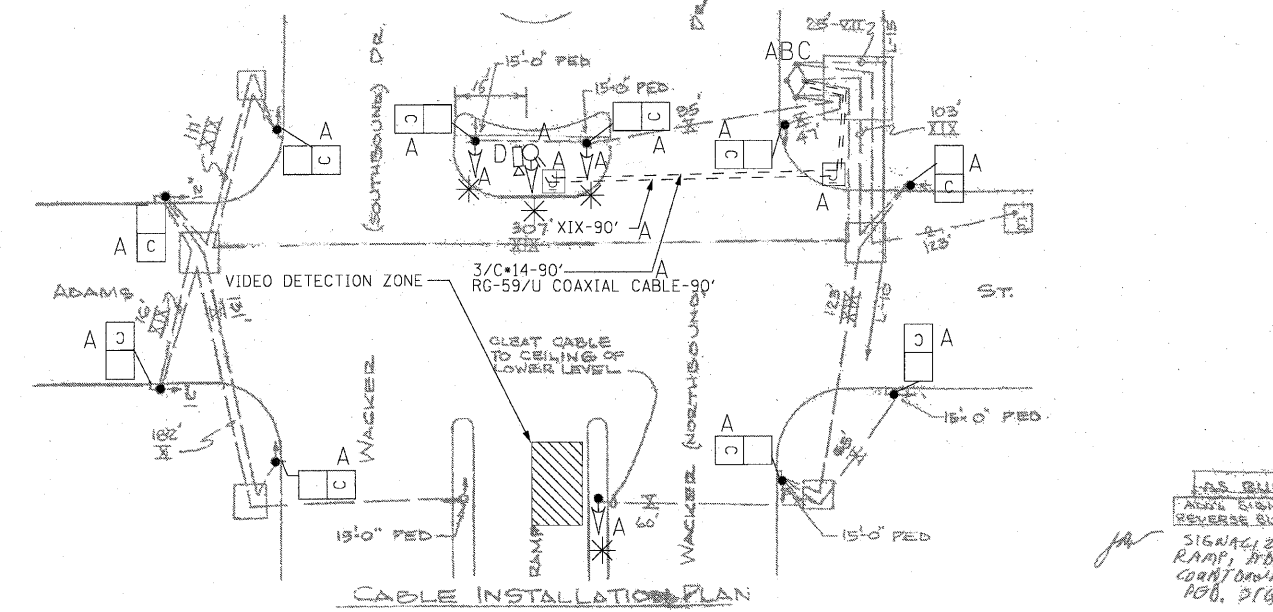
- E - REMOVE TRAFFIC SIGNAL HEAD
- F - REMOVE PEDESTRIAN SIGNAL HEAD



PRESENT PROPOSED

CODE

- TRAFFIC SIGNAL - HWAY ADJ - 8" OR AS NOTED
- TRAFFIC SIGNAL - 2-WAY ADJUSTABLE - 8"
- SIGNAL, WALK/DONT WALK - 2 SEC. SIZE AS NOTED
- CONTROLLER, TRAFFIC SIGNAL - BASE MTD. CABINET
- POLE, DAVIT
- POLE 2 1/2" - 7GA. ANCHOR BASE W/ BALL HEG. BASE & FOUNDATION
- FOUNDATION, TRAFFIC SIGNAL
- FOUNDATION, T.S. CONTROLLER - SPECIAL
- MANHOLE, CITY
- MANHOLE, COMMONWEALTH EDISON CO.
- CONDUIT, RIGID GALV. STEEL - SIZE AS NOTED
- CONDUIT, MULT. DUCT - NO. OF DUCTS AS NOTED
- CABLE, 1/2" #6, 600V. NED. IN CONDUIT
- CABLE, 7/8" #10, 600V. NED. IN CONDUIT
- CABLE, 1" (#10 & 9#14), 600V. NED. IN CONDUIT
- CABLE, 1 1/2" (2#10 & 1#14), 600V. NED. IN CONDUIT
- CABLE, INTERCONNECT - 1 1/2" #10
- SPLICE



CBD. COMPUTER SYSTEM
 COMM. CABLE DES # 22935 SW
 DETECTOR DES # 22944

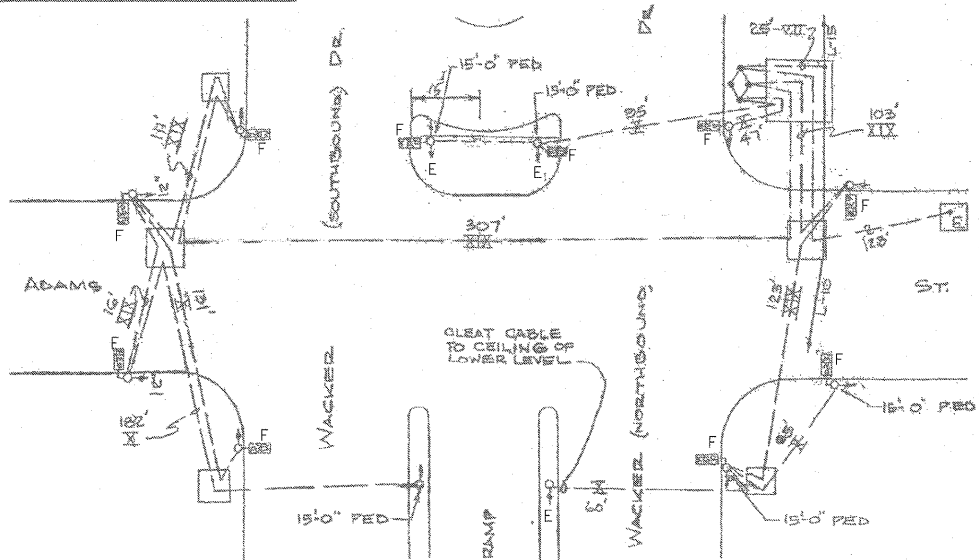
**TRAFFIC CONTROL SIGNALS
 WACKER DR. & ADAMS ST.**

REVISED	A	12-26-74	AS BUILT
REVISED	B	5-18-80	ADD SIGNALS REVERSE BUS LANE
REVISED	C	2-4-2009	SIGNALIZE RAMP, ADD COUNTDOWN ROB. PROGRAMS
REVISED	D		
REVISED	E		
REVISED	F		
REVISED	G		

CITY OF CHICAGO
 DEPT. OF STREETS AND SANITATION
 BUREAU OF ELECTRICITY
 DIVISION OF ELECTRICAL ENGINEERING

DESIGNED BY: J. ROWE D.C./M.S. ENGINEER
 DRAWN BY: [Signature] ENGINEER
 CHECKED BY: [Signature] ENGINEER
 SCALE: 1" = 25'

**SIGNAL AND CABLE REMOVAL PLAN
 SCALE: NTS**



DATE	REVISION

CITY OF CHICAGO

DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING



WORK ORDER NO. 00000000 DATE
 COST ALLOCATION ACCOUNT
 APPROPRIATION ACCOUNT MATERIAL LABOR

**SUPERSEDES DWG# 12169 DATED 5-24-74
 TRAFFIC CONTROL SIGNALS
 WACKER DRIVE AND ADAMS STREET**

CITY OF CHICAGO
 DEPT. OF STREETS AND SANITATION
 BUREAU OF ELECTRICITY
 DIVISION OF ELECTRICAL ENGINEERING

DRAFTSMAN: T.F.	CHIEF DRAFTSMAN: J.K.	ENGINEER: J.S.
SUPERVISING ENGINEER:	ELEC. DESIGN ENGR.	
ENGINEER OF ELECTRICITY:		DWG. NO. 12169
GEN'L SUPT. OF ELECTRICITY:		
DEPUTY COMMISSIONER:		
SIZE: 22" x 36"	SCALE:	DATE: 3/27/09
DATE: 3/27/09	SHEET NO.:	
C.D.O.T. PROJECT NO.: XXXXXX		

REGINA WEBSTER AND ASSOC. INC. CIVIL ENGINEERING CONSULTANTS 610 North Clearview Avenue, Suite 500 Chicago, Illinois 60623-1989

RWA Regina Webster & Associates, Inc.

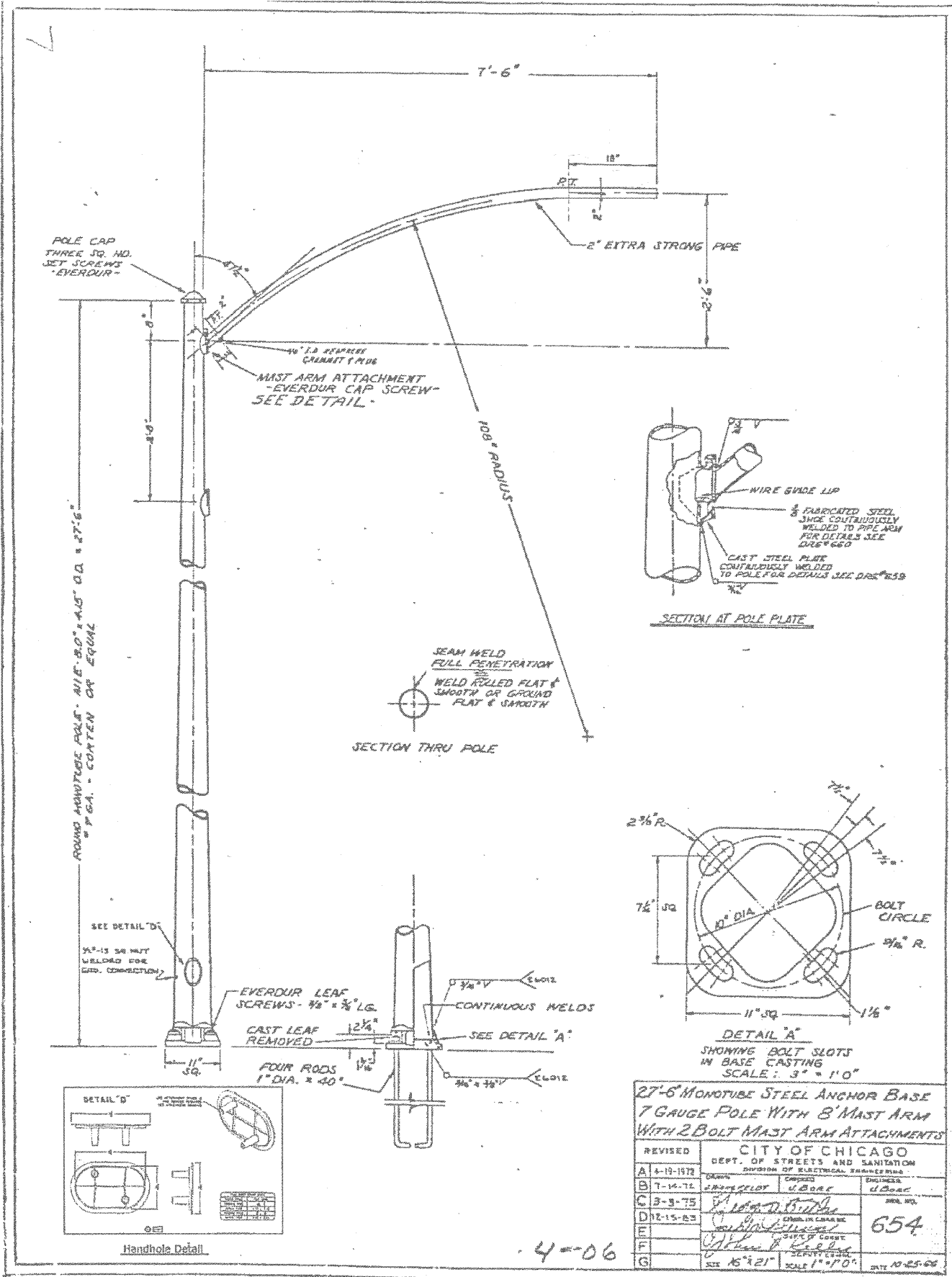
PROPOSED	PRESENT	
		SIGNAL, TRAFFIC 3 SECTION 1-WAY ADJUSTABLE, 12" OR AS NOTED
		SIGNAL, TRAFFIC 3 SECTION 2-WAY ADJUSTABLE, 12" OR AS NOTED
		SIGNAL OPTICALLY PROGRAMMED
		SIGNAL, PEDESTRIAN, DON'T WALK/WALK
		SIGNAL FACE ARROW, 12" COLOR AS NOTED
		SIGNAL FACE, 1 SECTION YELLOW/GREEN ARROW DUAL INDICATION
		PUSH BUTTON, PEDESTRIAN
		SIGN, ILLUMINATED, WITH MESSAGE OR SYMBOL AS INDICATED
		MAST ARM, MONOTUBE, STEEL, SIZE AS INDICATED (SEE DWG. #870)
		MAST ARM, TRUSS, ALUMINUM, SIZE AS INDICATED
		CONTROLLER, TRAFFIC SIGNAL, PEDESTAL OR BASE MOUNTED AS INDICATED
		CONTROLLER, STREET LIGHTING, PEDESTAL OR BASE MOUNTED. (DWG. 876 or 880)
		CONTROLLER, STREET LIGHTING, POLE MOUNTED (DWG. #11940)
		POLE, WOOD, COMMONWEALTH EDISON COMPANY, SERVICE
		POLE, CITY STEEL, ANCHOR BASE, 34'-6", 7 GA., 10" DI A. AND 15" B.C. 24"X7' FND. W/1 1/4" ANCHOR RODS DRG. #818.
		POLE, CITY STEEL, ANCHOR BASE, 34'-6", 3 GA., 10" DIA. AND 15" B.C. 24"X9' FND. W/1 1/4" ANCHOR RODS DRG. #818 (16', 20' or 26' M.A.)
		POLE, CITY STEEL, ANCHOR BASE, 34'-6", 3 GA., 11" DIA. AND 17 1/4" B.C. 30"X9' FND. W/1 1/4" ANCHOR RODS DRG. #816. (30' M.A.)
		POLE, CITY STEEL, ANCHOR BASE 34'-6", 3 GA., 12 1/2" DIA. AND 16 1/2" B.C. 30"X11' FND. W/1 1/2" ANCHOR RODS DRG. #817. (35', 40' or 44' M.A.)
		POLE, CITY STEEL, ANCHOR BASE, 32'-6", 3 GA., 10" DIA., WITH 3 GA. BAL. HSG. BASE AND 17 1/4" B. C. ON 30"X9' FND. W/ 1 1/4" ANCHOR RODS DRG. #816.
		POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6", 7 GA. WITH STEEL BAL. HSG. BASE AND FND. W/10" D. B.C. AND 1" ANCHOR RODS DRG. #716.
		POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6", 3 GA., WITH STEEL BAL. HSG. BASE AND FND. W/10" D. B.C. AND 1" ANCHOR RODS DRG. #719.
		POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6" 7 GA., AND FND. WITH 10" B.C. AND 1" ANCHOR RODS DRG. #11408B.
		POLE, CITY STEEL, ANCHOR BASE, 20', 27'-6", 29'-6" 3 GA., AND FND. WITH 10" B.C. AND 1" ANCHOR RODS DRG. #11408B.
		POLE, CITY STEEL, ANCHOR BASE, 32'-6", 7 GA., AND FND. WITH 11 1/2" B.C. AND 1" ANCHOR RODS DRG. #753.
		POLE, CITY STEEL, ANCHOR BASE, 32'-6", 3 GA., AND FND. WITH 11 1/2" B.C. AND 1" ANCHOR RODS DRG. #753.
		POLE, CITY STEEL, ANCHOR BASE, 32'-6" 7 GA., ALUM. BHB AND FND. WITH 15" B.C.-24"X7' WITH 1" ANCHOR RODS DRG. #691.
		POLE, CITY STEEL, ANCHOR BASE, 32'-6", 3 GA., ALUM. BHB AND FND. WITH 15" B.C. 24"X7' WITH 1" ANCHOR RODS DRG. #691.
		POLE, CITY ALUMINUM, WITH ROUND BAL. HSG. BASE, 25', 28', or 30' ON FND. WITH 14" B.C., ACQUIRED FROM CHICAGO PARK DISTRICT.
		POLE, CITY STEEL, EMBEDDED, 4"X 9"X 35' 7 GA., TAPERED TUBULAR. (DWG. #658)
		POLE, CITY STEEL, EMBEDDED, 4"X 9"X 35' 3 GA., TAPERED TUBULAR. (DWG. #658)
		POLE, CITY STEEL, EMBEDDED. (ACQUIRED FROM CTA)
		COLUMN, ELEVATED STRUCTURE
		POLE, WOOD. (SIZE AS NOTED)
		POLE, FOUNDATION WITH ELBOWS AS INDICATED. (SIZE AS NOTED)
		POLE, ORNAMENTAL OR OTHER, AS INDICATED ON THE PLANS

PROPOSED	PRESENT	
		HANDHOLE, HEAVY DUTY, 36" I.D. (DWG.#866)
		HANDHOLE, CIRCULAR WITH 24" FRAME & COVER, 30" I.D. (#867)
		MANHOLE, CITY 3'X4'X4' DWG. #729 or 730; 4'X6'X6' DWG. #732 or 733.
		FOUNDATION, CONTROLLER OR PEDESTAL, 13" B.C., 20"X5' (DWG. #709)
		FOUNDATION, TRAFFIC CONTROLLER DWG. #854, F.A. TERMINAL FND. DWG. #11972
		FOUNDATION, TRAFFIC TYPE "P", BASE MOUNT. (DWG. #888)
		FOUNDATION, CONTROLLER STREET LIGHT, SPECIAL, 100A & 200A. (DWG.#876 & # 880)
		FOUNDATION, TRANSCLOSURE; TRANSCLOSURE HOUSING. (DWG.# 583 & #891)
		CONTROLLER, UNDERPASS LIGHTING 120V. & 240V. (DWG. #860 & #861)
		MANHOLE, UTILITY, E=COMMONWEALTH EDISON; T=ILL. BELL TEL.; G=PEOPLES GAS; W=CITY WATER; P=CHGO PARK DISTRICT; CTA=C.T.A; S= SEWER
		JUNCTION BOX, IN PAVEMENT (DWG. #815)
		DETECTOR LOOP IN PAVEMENT
		CONDUIT or P.V.C., NUMBER, SIZE & TYPE. (AS NOTED)
		CONDUIT or P.V.C. ENCASED IN CONCRETE. (SECTION OR NUMBER OF CONDUIT INDICATED)
		LUMINAIRE, H.P.S.V. 400W LAMP, 240V, SEMI-CUTOFF
		LUMINAIRE, H.P.S.V. 400W LAMP, 240V, CUTOFF
		LUMINAIRE, H.P.S.V. 310W LAMP, 240V
		LUMINAIRE, H.P.S.V. 310W LAMP 240V, CUTOFF
		LUMINAIRE, H.P.S.V. 150W LAMP, 240V
		LUMINAIRE, H.P.S.V. 150W LAMP, 120V
		LUMINAIRE, H.P.S.V. 250W LAMP, 120V, (ALLEY LIGHT)
		LUMINAIRE, H.P.S.V. 250W LAMP, 120V
		TERMINAL, CABINET F.A. & P.C.
		FIRE ALARM BOX, MOUNTED
		FIRE ALARM BOX, POLE MOUNTED
		CABLE, TRAFFIC SIGNAL, COMMUNICATION, 1-PAIR #14 SHIELDED, IN CONDUIT
		CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2/C-#4, 600 V. EPR. IN CONDUIT
		CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2 1/C-#2 or #1/0 600V. EPR IN CONDUIT
		CABLE, TRAFFIC SIGNAL POWER SUPPLY, 2/C-#10 or #6, 600V NSRI, IN CONDUIT
		CABLE, TRAFFIC SIGNAL, 7/C-#12 or #14, 600V. EPR IN CONDUIT
		CABLE, TRAFFIC SIGNAL, 10/C-#12 600V. EPR IN CONDUIT
		CABLE, TRAFFIC SIGNAL, 14/C-#14, 600V. EPR IN CONDUIT
		CABLE, TRAFFIC SIGNAL, 19/C-#12 600V. EPR IN CONDUIT
		CABLE, STREET LIGHT, 2 1/C-#6, 600V. RINS IN PARKWAY
		CABLE, STREET LIGHT, 2 1/C-#6, 600V. RINS IN CONDUIT
		CABLE, STREET LIGHT, 2 1/C-#6 EPRN 600V. & 1 1/C-#8 GREEN, TRIPLEXED, IN CONDUIT
		CABLE, STREET LIGHT, 3 1/C-#1/0, or #2/0, or #4, 600V. EPR IN CONDUIT
		WIRE, STREET LIGHT, 2 1/C-#6, HDNS. AERIAL
		WIRE, STREET LIGHT, 2 1/C-#6 & 1 1/C #8, HDNS. AERIAL
		CABLE, STREET LIGHT AERIAL, 3 1/C-#4 or #2 SELF SUPPORTING, 600V EPR
		WIRE, F.A. & P.C. AERIAL, 1/C-#10, NUMERAL DENOTES QUANTITY
		CABLE, F.A. & P.C. AERIAL, W/ MESSENGER #19-(NUMBER OF PAIRS AS INDICATED)
		CABLE, F.A. & P.C. AERIAL, SELF SUPPORTING, #19-(NUMBER OF PAIRS AS INDICATED)
		CABLE, F.A. & P.C., IN CONDUIT, #19-(NUMBER OF PAIRS AS INDICATED).
		DOWNLIGHT ASSEMBLY. (DWG. #850)
		LIGHT, TRAFFIC SAFETY ISLAND
		FLASHING BEACON & DOWNLIGHT

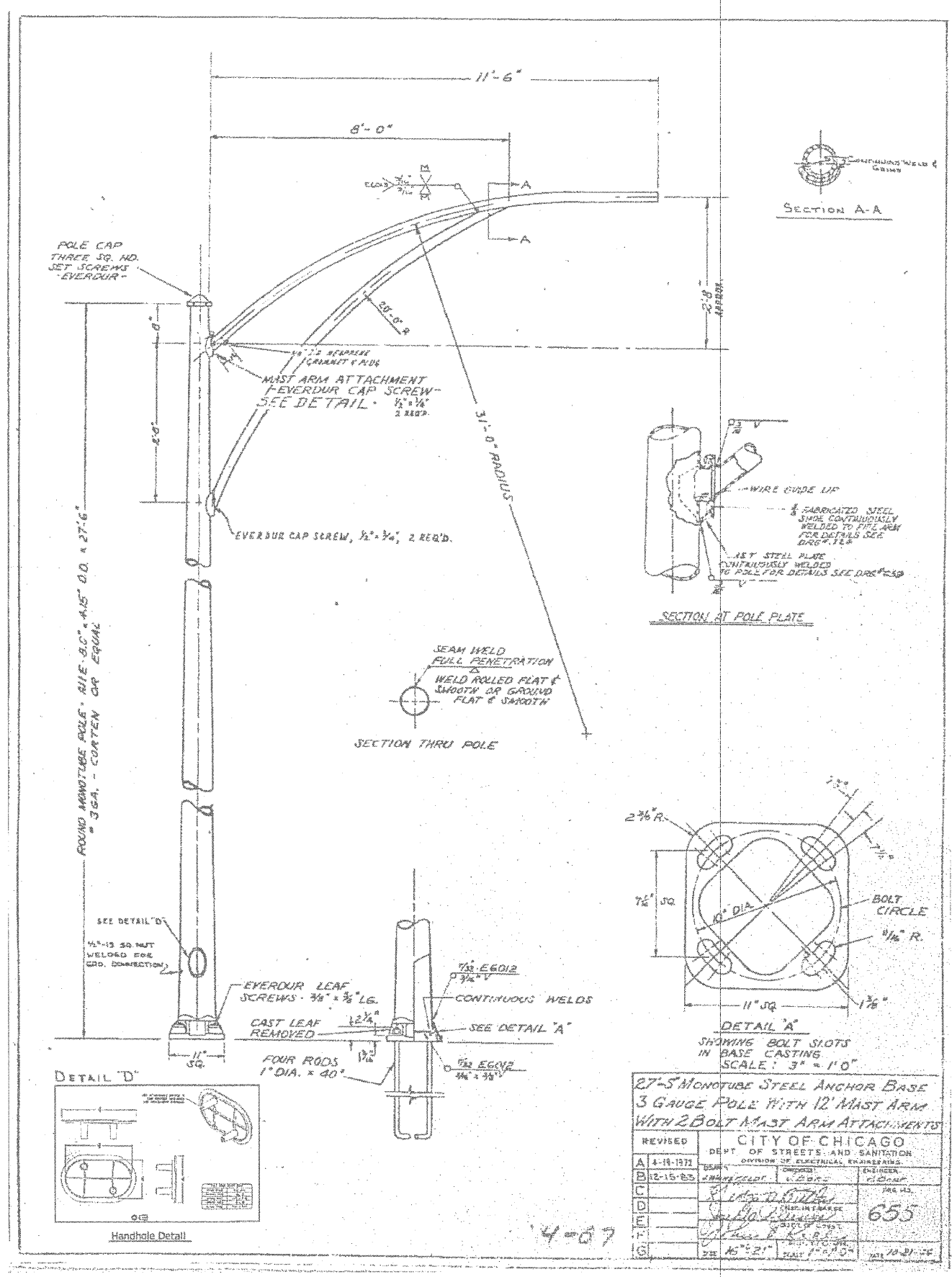
ORNAMENTAL LUMINAIRES		
PROPOSED	EXISTING	
		310W PENDANT (240V)
		400W PENDANT (240V)
		250W PENDANT (240V)
		150W ACORN (120V)
		150W ACORN (240V)
		50W ACORN (240V)
		100W ACORN (240V)
		150W GLOBE (240V)
		100W GLOBE (240V)
		50W GLOBE (240V)

C 04-01-02	REVISED/REDRAW	R. POOL/B.I.
B 12-4-01	ADDED ORNAMENTAL SYMBOLS	
A 8-6-96	REDRAWN	
DATE	REVISION	
STANDARD CODE FOR TRAFFIC SIGNALS/ STREET LIGHTING		
CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING		
DRAFTSMAN R. IVY	CHIEF DRAFTSMAN R. CARTER	ENGINEER R. POOL/R.C./W.T.
SUPERVISING ENGINEER	ELEC. DESIGN ENGR	DWG. NO.
ENGINEER OF ELECTRICITY		826
GENL. Supt. OF CONSTRUCTION		
DEPUTY COMMISSIONER		
SIZE: 22" X 36"	SCALE: 1" = 36"	DATE:

REGINA WEBSTER
AND ASSOC. INC.
CIVIL ENGINEERING CONSULTANTS
600 North Dearborn Avenue, Suite 500
Chicago, Illinois 60625-3565

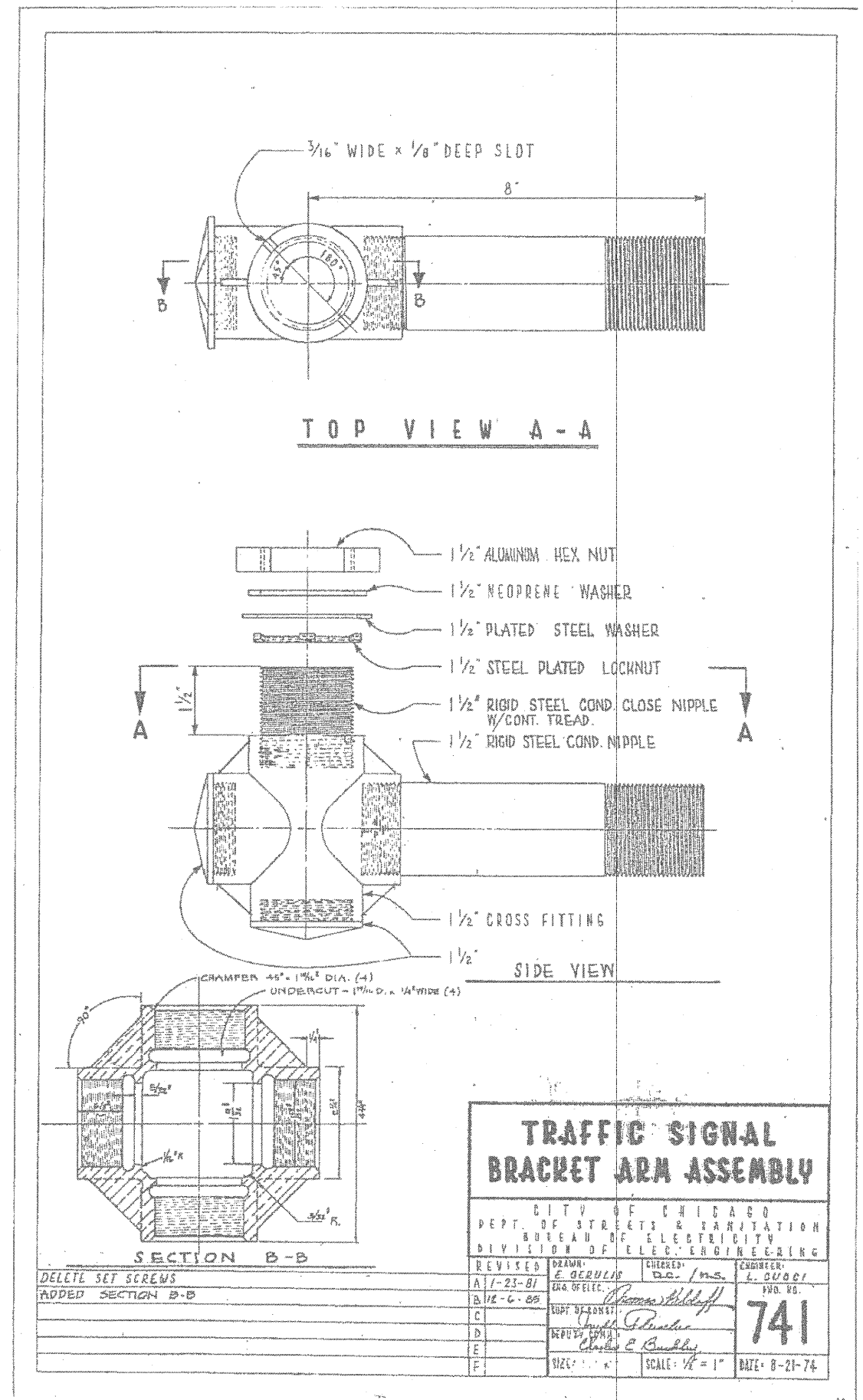
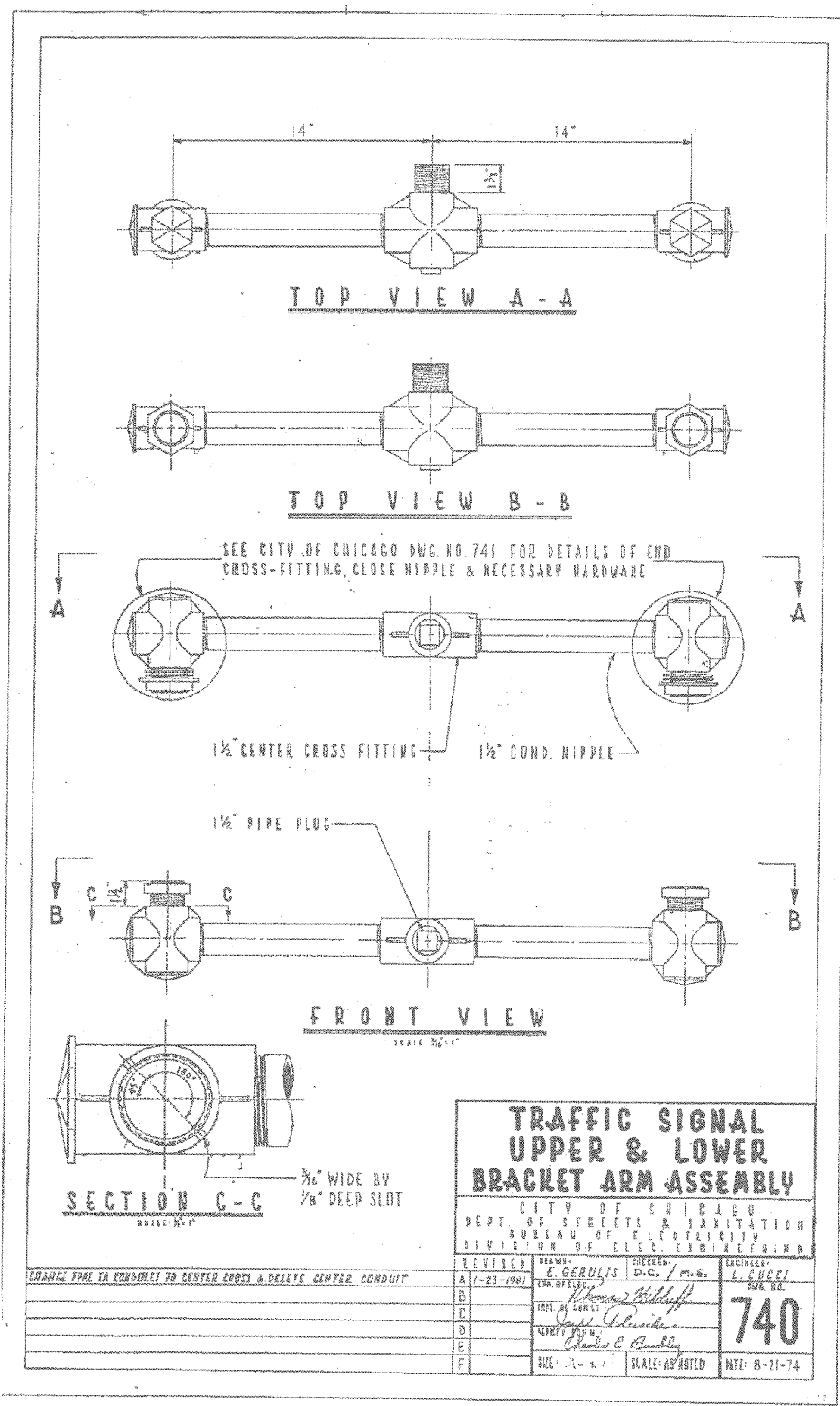


27'-6" MONOTUBE STEEL ANCHOR BASE 7 GAUGE POLE WITH 8' MAST ARM WITH 2 BOLT MAST ARM ATTACHMENTS			
CITY OF CHICAGO DEPT. OF STREETS AND SANITATION DIVISION OF ELECTRICAL ENGINEERING			
REVISED	DATE	BY	CHKD.
A	4-19-1972	W. J. B. / J. B. B.	U. B. C.
B	7-14-74	W. J. B. / J. B. B.	U. B. C.
C	3-3-75	W. J. B. / J. B. B.	U. B. C.
D	12-15-83	W. J. B. / J. B. B.	U. B. C.
E		W. J. B. / J. B. B.	U. B. C.
F		W. J. B. / J. B. B.	U. B. C.
G		W. J. B. / J. B. B.	U. B. C.



27'-5" MONOTUBE STEEL ANCHOR BASE 3 GAUGE POLE WITH 12' MAST ARM WITH 2 BOLT MAST ARM ATTACHMENTS			
CITY OF CHICAGO DEPT. OF STREETS AND SANITATION DIVISION OF ELECTRICAL ENGINEERING			
REVISED	DATE	BY	CHKD.
A	4-19-1972	W. J. B. / J. B. B.	U. B. C.
B	12-15-83	W. J. B. / J. B. B.	U. B. C.
C		W. J. B. / J. B. B.	U. B. C.
D		W. J. B. / J. B. B.	U. B. C.
E		W. J. B. / J. B. B.	U. B. C.
F		W. J. B. / J. B. B.	U. B. C.
G		W. J. B. / J. B. B.	U. B. C.

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 REGINA WEBSTER
 AND ASSOC. INC.
 CIVIL ENGINEERING CONSULTANTS
 610 North Dearborn Avenue, Suite 500
 Chicago, Illinois 60623-1569



FILE NAME: #F3LEL6	USER NAME: #USERS	DESIGNED: JS	REVISED: ---
		DRAWN: DW	REVISED: ---
		CHECKED: JD	REVISED: ---
		DATE: 03/27/09	REVISED: ---

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

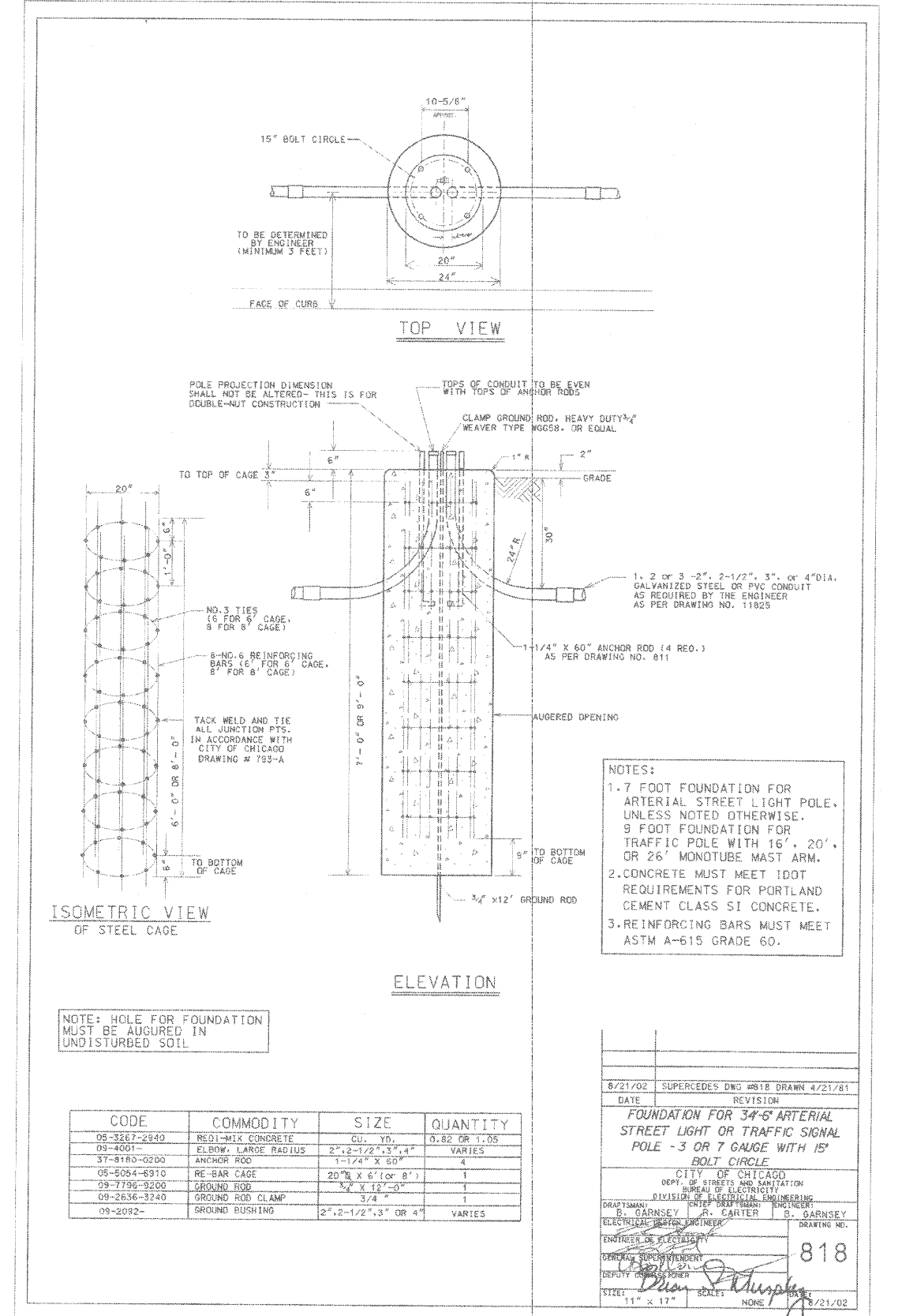
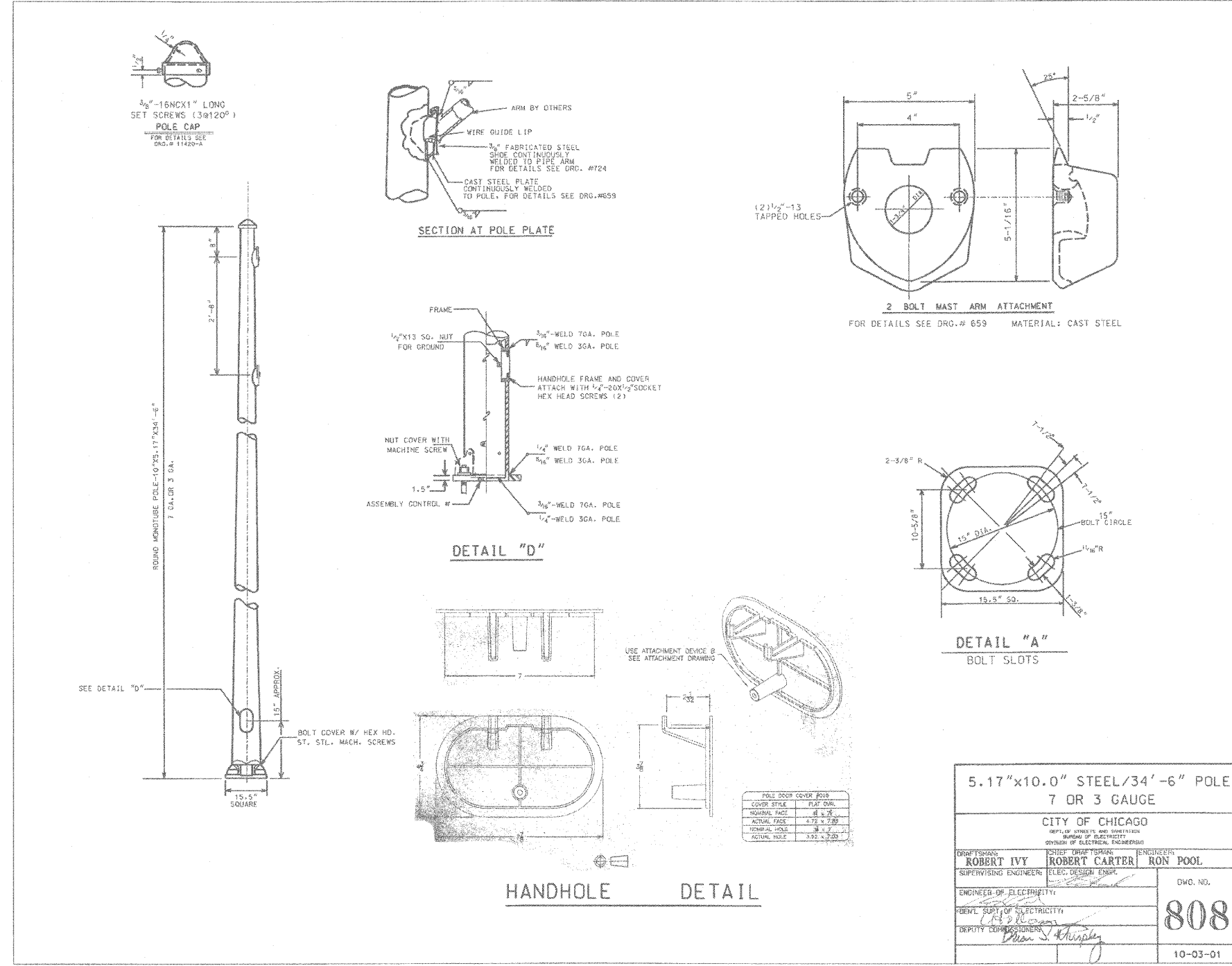
BUREAU OF ELECTRICITY STANDARD DETAILS
 TRAFFIC SIGNAL IMPROVEMENT PLAN

SCALE: NONE SHEET NO. 8 OF 13 SHEETS STA. _____ TO STA. _____

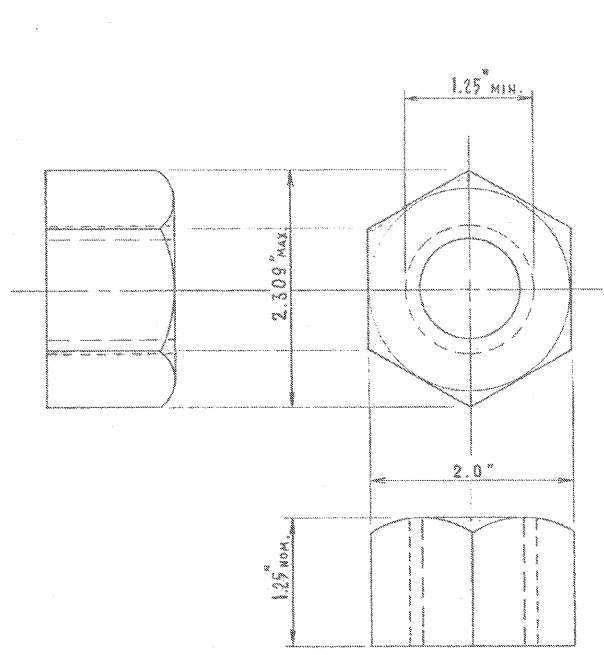
F.A.P. RTE. 389	SECTION 2009-031-TS	COUNTY COOK	TOTAL SHEETS 13	SHEET NO. 8
FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT			CONTRACT NO. 60G31	

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 CIVIL ENGINEERING CONSULTANTS
 510 North Cicero Avenue, Suite 500
 Chicago, Illinois 60623-1869

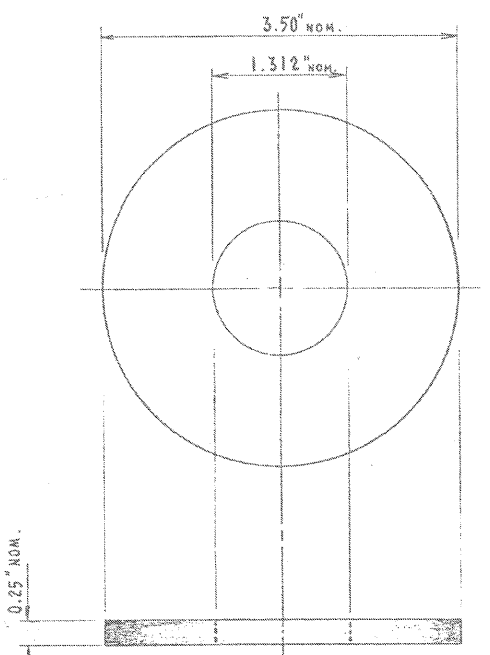
RWA
 Regina Webster & Associates, Inc.



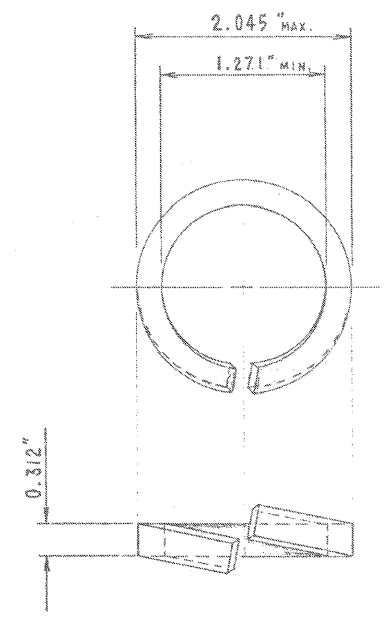
RWA
Regina Webster & Associates, Inc.
 REGINA WEBSTER
 AND ASSOC. INC.
 CIVIL ENGINEERING CONSULTANTS
 660 North Cicero Avenue, Suite 500
 Chicago, Illinois 60631-5695



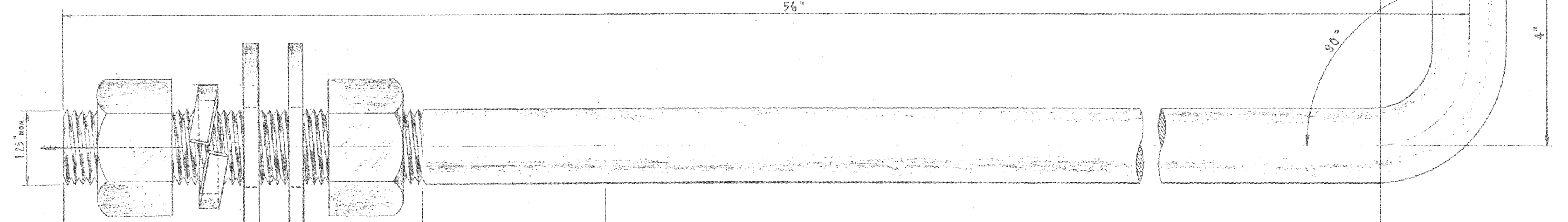
HEXAGON NUT
 AMER. NAT'L. STD. HEAVY HEX. FLAT NUT
 (ANSI B 18.2.2 - 1972)



FLAT WASHER
 AMER. NAT'L. STD. TYPE "B"
 SERIES "W"
 (ANSI B 18.22.1-1965, R1975)



LOCK WASHER
 AMER. NAT'L. STD. HELICAL SPRING LOCK WASHER
 (ANSI B 18.21.1 - 1972)



U. S. STANDARD 1/4" - 7 N. C. ROLLED THREAD

A ZINC COATING, 0.0021 INCH IN THICKNESS SHALL BE APPLIED OVER THIS LENGTH AND COVERED WITH HEAVY NO-OX-ID, OR EQUAL, RUST INHIBITING COMPOUND

MATERIAL:

ASTM A400, CLASS R-2 MODIFIED STEEL, 55 000 LBS. MINIMUM YIELD.

HARDWARE TO BE FURNISHED & ATTACHED IN PLACE ON ROD FOR SHIPPING:
 2 HEX. NUTS, HEAVY, GALV., 1/4"
 2 WASHERS, STEEL, ROUND, GALV., TYPE "B", SERIES "W", 1/4"
 1 WASHER, LOCK, STEEL, GALV., HELICAL SPRING, REGULAR, 1/4"

BOLT & NUTS SHALL HAVE AN AMERICAN STANDARD CLASS 2 OR 3 FIT.
 (NUT IS TAPPED OVERSIZE BY 1/32")

1/4" x 60"
STEEL ANCHOR ROD
 COMMODITY CODE 37-8180-0236

REVISED	A	JULY 29, 1982	RE D R A W N
DRAWN	EUGENE GERULIS	CHECKED	A. DURLIN
ELCC DESIGN ENGINEER:	<i>M. Shine</i>	ENGINEER	M. SHINE
ENGINEER OF ELECTRICAL	<i>Thomas J. Blalock</i>	DRG. NO.	811
DEPT. OF TRANSPORTATION	<i>Charles E. Blalock</i>	DATE	JUL 3, 1982
SIZE 17" x 28"	SCALE		

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	PLOT DATE = #DATE#	DATE - 03/27/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

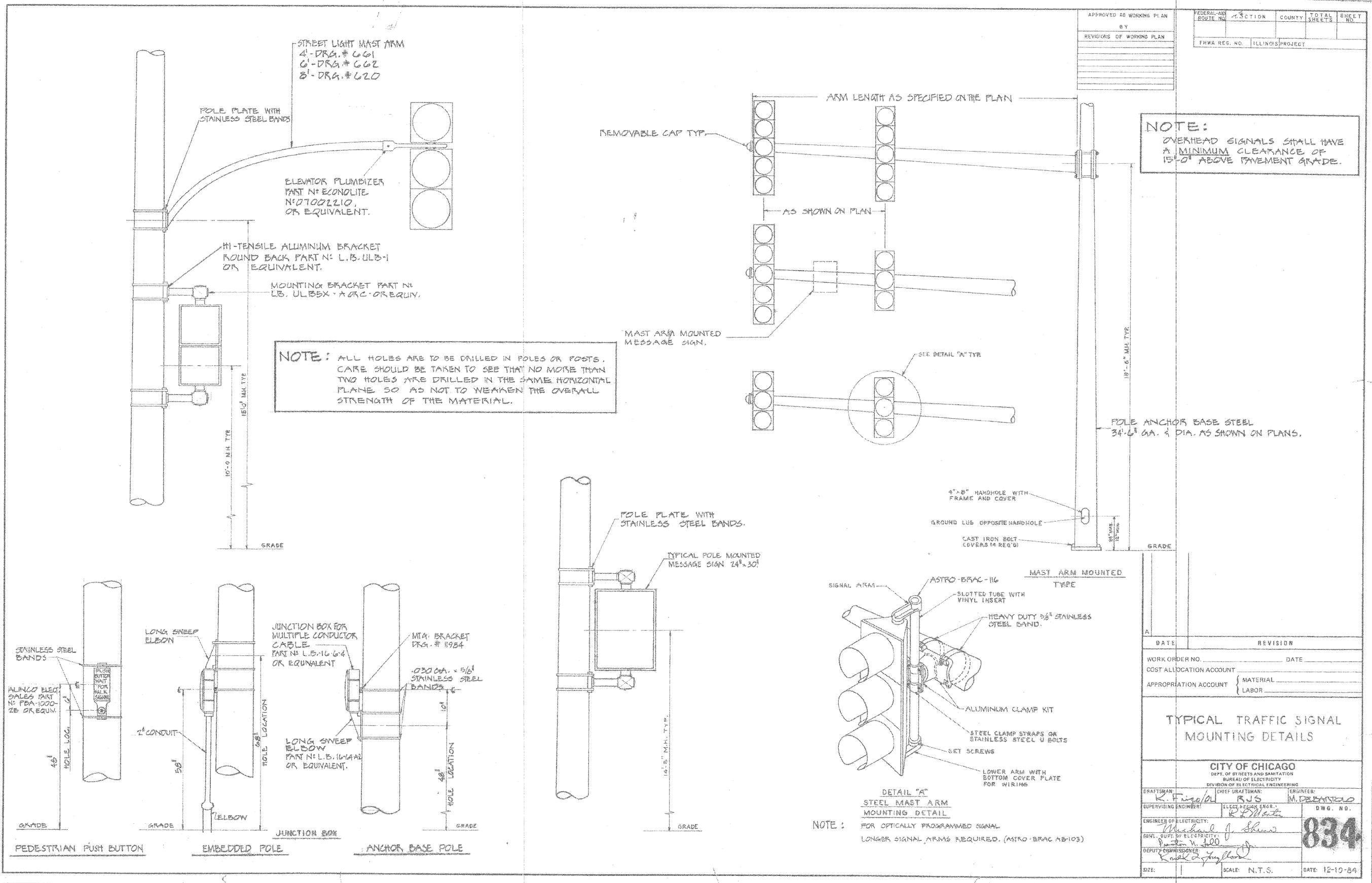
BUREAU OF ELECTRICITY STANDARD DETAILS
TRAFFIC SIGNAL IMPROVEMENT PLAN

SCALE: NONE SHEET NO. 10 OF 13 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
389	2009-031-TS	COOK	13	10
FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT				

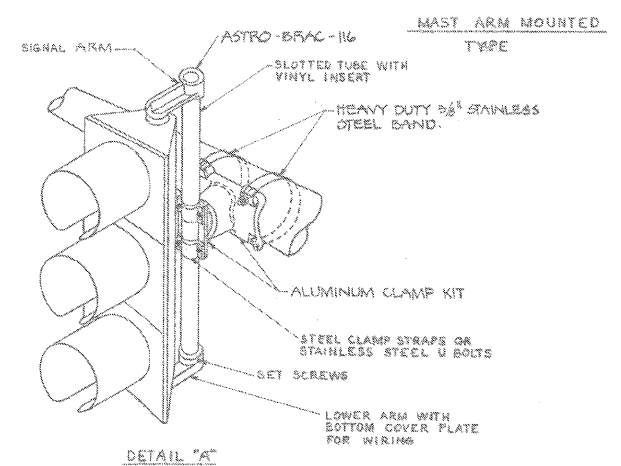
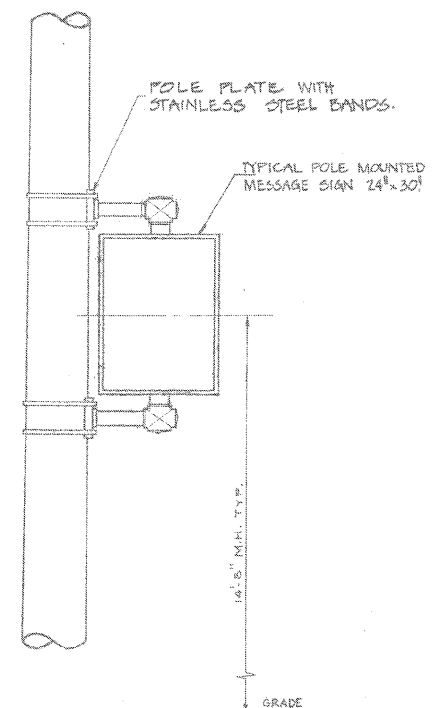
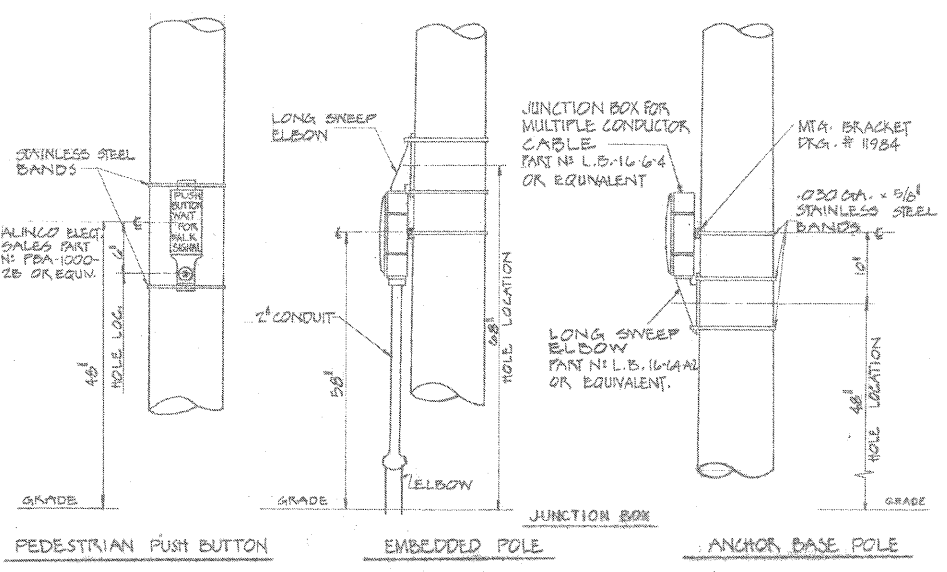
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AND ASSOC. INC.
CIVIL ENGINEERING CONSULTANTS
6160 North Cicero Avenue, Suite 500
Chicago, Illinois 60631-3689



NOTE:
OVERHEAD SIGNALS SHALL HAVE A MINIMUM CLEARANCE OF 15'-0" ABOVE PAVEMENT GRADE.

NOTE: ALL HOLES ARE TO BE DRILLED IN POLES OR POSTS. CARE SHOULD BE TAKEN TO SEE THAT NO MORE THAN TWO HOLES ARE DRILLED IN THE SAME HORIZONTAL PLANE SO AS NOT TO WEAKEN THE OVERALL STRENGTH OF THE MATERIAL.



NOTE: FOR OPTICALLY PROGRAMMED SIGNAL LONGER SIGNAL ARMS REQUIRED. (ASTRO-BRAC AB-103)

APPROVED AS WORKING PLAN	FEDERAL-AID ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
BY	ILLINOIS PROJECT				
REVISIONS OF WORKING PLAN					

DATE	REVISION
WORK ORDER NO.	DATE
COST ALLOCATION ACCOUNT	
APPROPRIATION ACCOUNT	MATERIAL
	LABOR
TYPICAL TRAFFIC SIGNAL MOUNTING DETAILS	
CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING	
DRAWN BY: <i>R. Figolet</i>	ENGINEER: <i>M. DEANISIO</i>
SUPERVISING ENGINEER: <i>R. P. Mat...</i>	DWG. NO. 834
ENGINEER OF ELECTRICITY: <i>Michael J. Sh...</i>	
GENL. SUPT. OF ELECTRICITY: <i>...</i>	
DEPUTY COMMISSIONER: <i>...</i>	
SIZE: 1	SCALE: N.T.S. DATE: 12-10-84

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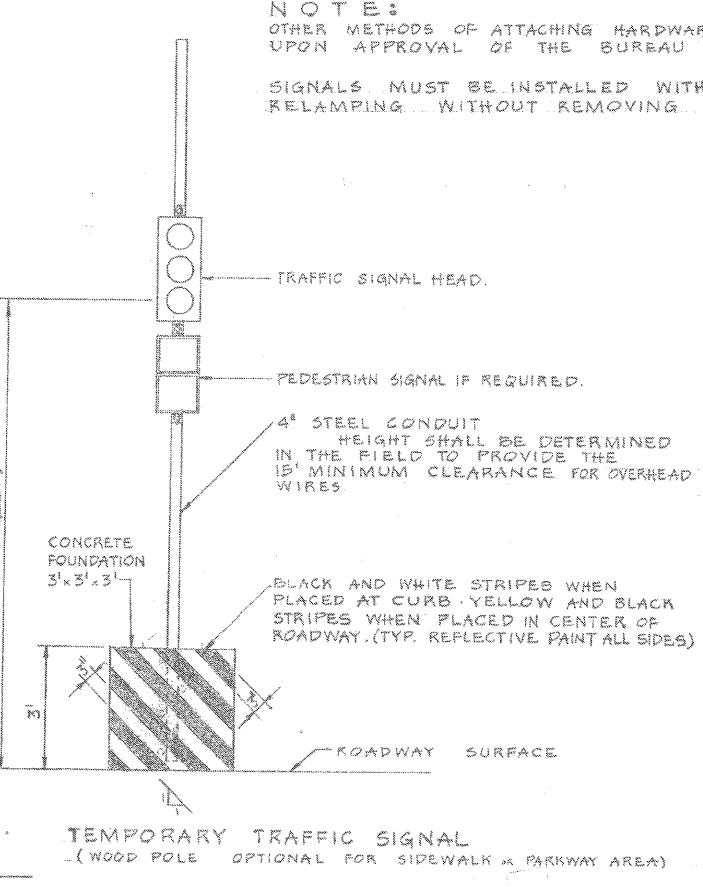
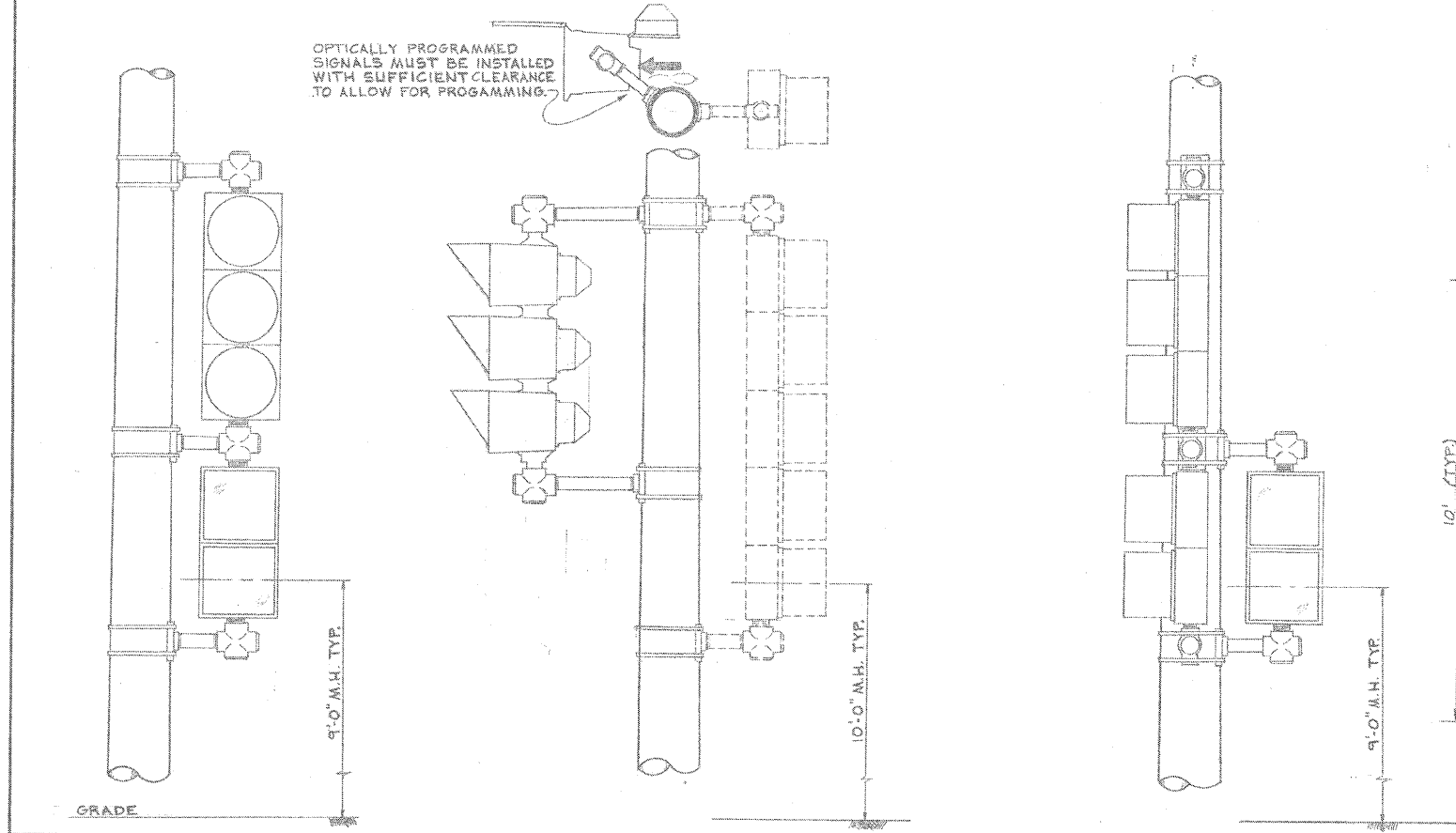
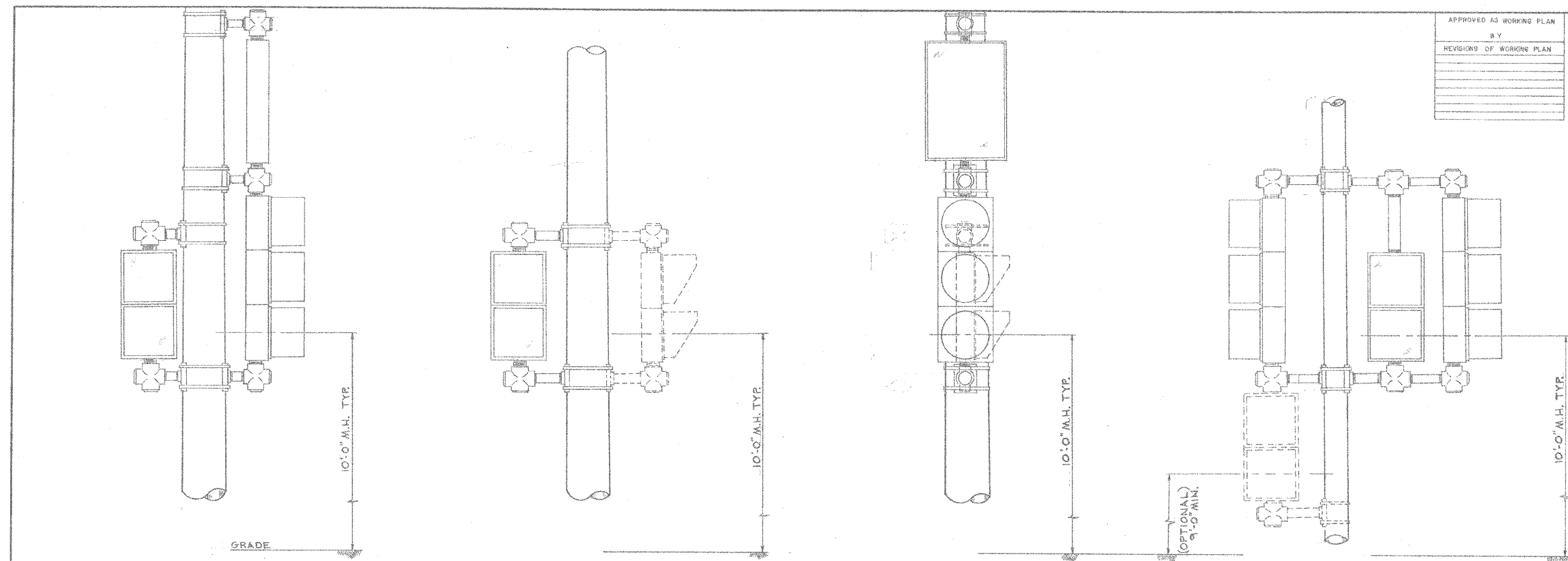
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUREAU OF ELECTRICITY STANDARD DETAILS
TRAFFIC SIGNAL IMPROVEMENT PLAN**

SCALE: NONE SHEET NO. 11 OF 13 SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
389	2009-031-TS	COOK	13	11
FED. ROAD DIST. NO. [] ILLINOIS FED. AID PROJECT			CONTRACT NO. 60G31	

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6160 North Cicero Avenue, Suite 500
Chicago, Illinois 60631-1669



NOTE:
OTHER METHODS OF ATTACHING HARDWARE FOR SIGNAL HEADS MAY BE USED UPON APPROVAL OF THE BUREAU OF ELECTRICITY.
SIGNALS MUST BE INSTALLED WITH ADEQUATE CLEARANCE FOR RELAMPING WITHOUT REMOVING VISOR OR ROTATING SIGNAL.

APPROVED AS WORKING PLAN	BY
REVISIONS OF WORKING PLAN	

FEDERAL-AID ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FHWA REG. NO.	ILLINOIS PROJECT			

A 3-5-93 ADDED TEMP. SIGNAL DETAIL	
DATE	REVISION
WORK ORDER NO.	DATE
COST ALLOCATION ACCOUNT	
APPROPRIATION ACCOUNT	MATERIAL
	LABOR

TYPICAL TRAFFIC SIGNAL MOUNTING DETAILS

CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING		
DRAFTSMAN: W. TROAPKA	CHIEF DRAFTSMAN: R. S.	ENGINEER: M. DeBARTOLO
SUPERVISING ENGINEER: R. M.	ELECTRICAL ENGR. R. M.	DWG. NO. 835
ENGINEER OF ELECTRICITY: M. J. Shive	DEPT. Supt. of Electricity: R. J. Shive	DATE: 12-10-94
DEPUTY COMMISSIONER: R. J. Shive		SCALE: NONE
SIZE: 22	36	

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		CHECKED = JD	REVISED
		DATE = 03/27/09	REVISED

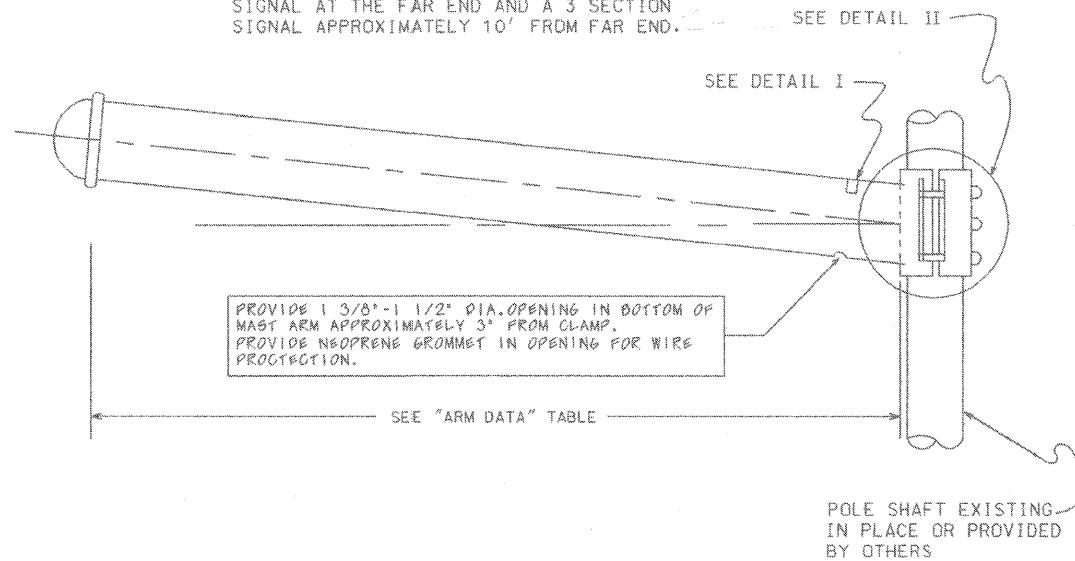
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUREAU OF ELECTRICITY STANDARD DETAILS
TRAFFIC SIGNAL IMPROVEMENT PLAN**

SCALE: NONE SHEET NO. 12 OF 13 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
389	2009-031-TS	COOK	13	12
CONTRACT NO. 60G31				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

PROVIDE SUFFICIENT MAST ARM RISE (3' MIN.) SO THAT MAST ARM REMAINS SLIGHTLY ABOVE HORIZONTAL WHEN LOADED WITH A 5 SECTION SIGNAL AT THE FAR END AND A 3 SECTION SIGNAL APPROXIMATELY 10' FROM FAR END.



PROVIDE 1 3/8" - 1 1/2" DIA. OPENING IN BOTTOM OF MAST ARM APPROXIMATELY 3" FROM CLAMP. PROVIDE NEOPRENE GROMMET IN OPENING FOR WIRE PROTECTION.



I. D. TAG TO BE MOUNTED ON THE TOP OF THE POLE AS INDICATED, USING 2 "GRIP-NAIL" FASTENERS.

DETAIL I
 I. D. TAG

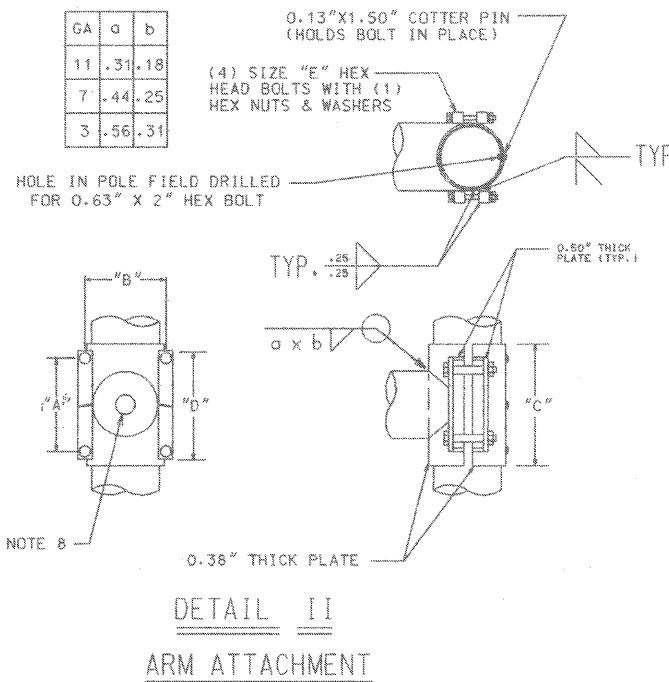
SIGNAL ARM ATTACHMENT DATA					
CLAMP RANGE	"A"	"B"	"C"	"D"	"E"
7.45" - 7.95"	7.25"	9.92"	10.80"	10.32"	1.00" X 7.50"
8.45" - 8.95"	9.00"	10.66"	13.06"	12.50"	1.00" X 8.00"
9.95" - 10.45"	10.25"	12.66"	15.30"	13.50"	1.25" X 8.50"

ARM DATA

CLAMP RANGE (INCHES)	POLE END (INCHES)	SIGNAL END (INCHES)	LENGTH (FEET)	GAUGE	WEIGHT (POUNDS)	TEST LOAD (POUNDS)	MAX. DEFLECTION (INCHES)
7.45-7.95	7.0	4.76	16	7	241	1700	6.5
7.45-7.95	7.0	4.20	20	7	274	1300	12.0
7.45-7.95	7.0	3.36	26	7	315	1000	24.0
8.45-8.95	8.0	3.80	30	7	409	1100	29.0
9.95-10.45	9.0	4.10	35	7	529	1200	36.0
9.95-10.45	9.0	3.40	40	7	559	1000	52.0
9.95-10.45	10.0	3.84	44	7		1200	57.0

NOTES:

- TRAFFIC SIGNAL ARM SHAFT ASTM DESIGNATION: A595 GRADE C, 60,000 PSI MINIMUM YIELD STRENGTH WITH A LINEAR TAPER -0.14"/FT.
- TRAFFIC SIGNAL ARM END CAP SECURED IN PLACE WITH 3 SET SCREWS AND 1 THRU ARM END BOLT. (PLATED HARDWARE)
- ALL THREADED FASTENERS TO BE GALVANIZED TO ASTM DESIGNATION: A153
- ALL VEHICULAR AND/OR PEDESTRIAN SIGNAL LIGHTS AND NECESSARY HARDWARE FOR ATTACHMENT TO BE FIELD LOCATED AND FURNISHED BY OTHERS.
- ALL ARM END CAPS AND ARM CLAMPS TO BE FULLY ASSEMBLED AND ATTACHED TO THE ARM PRIOR TO SHIPPING.
- ARM ASSEMBLY TO BE DEGREASED; CLEANED; CHEMICALLY PRETREATED; GIVEN AN EXTERIOR THERMOSETTING POLYESTER POWDER COAT; AND AN INTERIOR THERMOPLASTIC HYDROCARBON RESIN POWDER COAT. ALL PAINTING TO BE IN ACCORDANCE WITH SPECIFICATION 1454, SECTION 8, "PAINTING".
- MAST ARM SHALL BE TESTED IN ACCORDANCE WITH SPECIFICATION 1454, SECTION 9 WITH TEST VALUES AS SHOWN ON THE "ARM DATA" TABLE.
- HOLE IN CLAMP TO BE 4.0" (MIN.). HOLE TO BE GROUND SMOOTH AND DEBURRED TO PROVIDE A SMOOTH WIRE ENTRY FROM POLE TO MAST ARM.



DETAIL II
 ARM ATTACHMENT

B	10-29-02	REFERENCES SPEC. 1454
A	8-6-93	WIDE OPENING ON MAST ARM
GATE	REVISION	
SUPERSEDES DWG. DATED DEC. 1991		
STEEL TRAFFIC SIGNAL MAST ARM-MONOTUBE		
CITY OF CHICAGO DEPT. OF STREETS AND SANITATION BUREAU OF ELECTRICITY DIVISION OF ELECTRICAL ENGINEERING		
DRAFTSMAN: R. IVY	CHIEF DRAFTSMAN: ROBERT CARTER	ENGINEER: RON POOL
870		
SIZE: 1/8"	SCALE: 3/8"	DATE: DEC. 1991