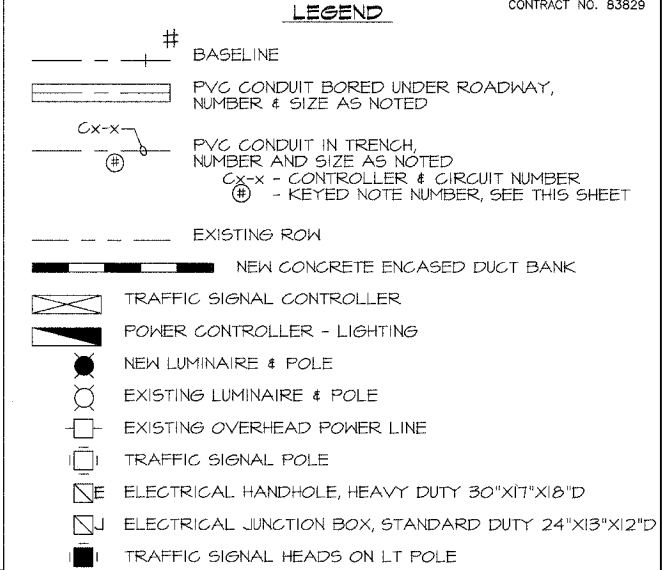


**KEYED NOTES @ REFER TO PLAN SHEETS E4 THROUGH E8**

- 1. NEW F3 POLE, LUMINAIRE WITH TRAFFIC SIGNAL HEAD - SEE TRAFFIC SIGNAL PLANS FOR ADDITIONAL INFORMATION.
- 2. 3 - 2" PVC (1 LIGHTS; 1 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GROUND (C1-2 or C1-1) RECEP - 2 #8THWN/1#12 GND (C1-7 or C1-5) SPARE - EMPTY
- 3. 4 - 2" PVC (1 LIGHTS; 2 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GROUND (C1-1 or C1-2) RECEP - 3 #8THWN/1#12 GND - EA OF 2 CIRCUITS (C1-7/B or C1-5/6) SPARE - EMPTY
- 4. 4 WAY CONCRETE ENCASED DUCT WITH 4 - 4" PVC CONDUITS. EXTEND 12" MINIMUM BEYOND BACK OF CURB.
- 5. 3 - 2" PVC (1 LIGHTS; 1 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GROUND C2-1 or C2-2/C2-4 RECEP - 2 #6THWN/1#8 GND (C2-9 or C2-12)/(C2-17) SPARE - EMPTY
- 6. 4 - 2" PVC (1 LIGHTS; 2 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GROUND (C2-1 or C2-2) RECEP - 2 #6THWN/1#8 GND - EA OF 2 CIRCUITS (C2-8/9 or C2-11/12) SPARE - EMPTY
- 7. 3 - 2" PVC (1 LIGHTS; 1 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GROUND (C1-1 or C1-2) RECEP - 3 #8THWN/1#12 GND (C1-6 or C1-8) SPARE - EMPTY
- 8. 5 - 2" PVC (1 LIGHTS; 3 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GROUND (C2-1 or C2-2) RECEP - 2 #8THWN/1#10 GND - EA OF 3 CIRCUITS (C2-7/8/9 or C2-10/11/12) SPARE - EMPTY
- 9. 5 - 2" PVC (1 LIGHTS; 3 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GROUND RECEP - 2 #8THWN/1#10 GND - EACH OF 3 CIRCUITS SPARE - EMPTY
- 10. 8 - 2" PVC, CONCRETE ENCASED - TWO 4 WAY BANKS
- 11. 5 - 2" PVC (1 LIGHTS; 3 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GROUND (C2-3) RECEP - 2 #6THWN/1#10 GND (C2 - 13) RECEP - 2 #4THWN/1#8 GND (C2-14/C2-15) SPARE - EMPTY
- 12. 5 - 2" PVC (2 LIGHTS; 2 RECP; 1 SPARE) LIGHTS - 2 #4 THWN/1 #8 GROUND (C2-3/C2-4) RECEP - 2 #4THWN/1#8 GND (C2-14/C2-15) SPARE - EMPTY
- 13. 3 - 2" PVC (1 LIGHTS; 1 RECP; 1 SPARE) LIGHTS - 2 #4 THWN/1 #8 GND (C3-1 or C3-2)/(C4-1 or C4-2) RECEP - 2 #4THWN/1#8 GND (C3-7 or C3-10)/(C4-11 or C4-10 or C4-6) SPARE - EMPTY
- 14. 4 - 2" PVC (1 LIGHTS; 2 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GND (C2-4) RECEP - 2 #8 THWN/1 #10 GND (C2-16) RECEP - 2 #6 THWN/1 #8 GND (C2-17) SPARE - EMPTY
- 15. 4 - 2" PVC (1 LIGHTS; 2 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GND RECEP - 2 #4 THWN/1 #10 GND (C2-14/C2-15) SPARE - EMPTY
- 16. 10 - 2" PVC (2 LIGHTS; 6 RECP; 2 SPARE) LIGHTS - 2 #4THWN/1#8 GND (C3-1/C3-2) RECEPS - 2 #6 THWN/1 #10 GND (C3-5/C3-8) RECEPS - 2 #4 THWN/1 #8 GND (C3-6,7,9,10) SPARE - 2 - EMPTY
- 17. 5 - 2" PVC (1 LIGHTS; 3 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GND (C3-1) RECEPS - 2 #6 THWN/1 #10 GND (C3-5) RECEPS - 2 #4 THWN/1 #8 GND (C3-6/C3-7) SPARE - EMPTY
- 18. 5 - 2" PVC (1 LIGHTS; 3 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GND (C3-2) RECEPS - 2 #6 THWN/1 #10 GND (C3-8) RECEPS - 2 #4 THWN/1 #8 GND (C3-9/C3-10) SPARE - EMPTY
- 19. 4 - 2" PVC (1 LIGHTS; 2 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GND (C3-1) RECEPS - 2 #4 THWN/1 #8 GND (C3-6/C3-7) SPARE - EMPTY
- 20. 4 - 2" PVC (1 LIGHTS; 2 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GND (C3-2) RECEPS - 2 #4 THWN/1 #8 GND (C3-9/C3-10) SPARE - EMPTY
- 21. 11 - 2" PVC (2 LIGHTS; 7 RECP; 2 SPARE) LIGHTS - 2 #4THWN/1#8 GND (C4-1/C4-2) RECEPS - 2 #6 THWN/1 #10 GND (C4-5/C4-8) RECPs - 2 #4THWN/1#8 GND (C4-6,7,9,10,11) SPARE - EMPTY
- 22. 5 - 2" PVC (1 LIGHTS; 3 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GND (C4-4) RECEPS - 2 #6 THWN/1 #10 GND (C4-8) RECEPS - 2 #4 THWN/1 #8 GND (C4-9/C4-10) SPARE - EMPTY
- 23. 6 - 2" PVC (2 LIGHTS; 4 RECP; 1 SPARE) LIGHTS - 2 #4 THWN/1 #8 GROUND (C4-1) RECEP - 2 #6THWN/1#10 GND (C4-5) RECEP - 2 #4THWN/1#8 GND (C4-6,7,11) SPARE - EMPTY
- 24. 4 - 2" PVC (1 LIGHTS; 2 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GND (C4-2) RECEPS - 2 #4 THWN/1 #8 GND (C4-9/C4-10) SPARE - EMPTY
- 25. 5 - 2" PVC (2 LIGHTS; 2 RECP; 1 SPARE) LIGHTS - 2 #4 THWN/1 #8 GROUND (C4-1) RECEP - 2 #4THWN/1#8 GND (C4-6,7,11) SPARE - EMPTY
- 26. 4 - 2" PVC (1 LIGHTS; 2 RECP; 1 SPARE) LIGHTS - 2 #4THWN/1#8 GND (C4-1) RECEPS - 2 #4 THWN/1 #8 GND (C4-7/11) SPARE - EMPTY
- 27. 6 - 2" PVC (2 LIGHTS; 2 RECP; 2 SPARE) LIGHTS - 2 #4THWN/1#8 GND (C1-1/C1-2) RECEPS - 3#8 THWN/1 #12 GND (C1-6/C1-8) SPARE - EMPTY



LIGHT FIXTURE SCHEDULE (LUMINAIRE DESCRIPTIONS)				
TYPE	MANUFACTURER	EQUIPMENT	ALTERNATE MANFR	ALTERNATE EQUIPMENT
F1	HOLOPHANE POLE - NORTH YORKSHIRE SERIES	CAST IRON BASE/ STEEL POST/ BLACK 30'-0" TALL/ 24" CLAMHELL BASE - WITH RECEPTACLE @ 8'-0" MTG, WEATHERPROOF CAT #FGIUS-SBKX-QTY 1 PER POLE - WITH BANNER ARMS-ONE SET AT 10'-0" AND ONE SET AT 13'-0" MTG. HT. CAT #4)BBA18A/1B0-CA/BK - WITH POST TOP FITTING - BOSTON HARBOUR STYLE CAT #BHLF/200/5CA/BK - WITH 15' ARMS @ 15'-0" MTG HT CAT #AMB-CA/BK-MOD, QTY 2 PER POLE - WITH 6'-0" ARM CAT #BHC2/1-CA/BK, QTY 1 PER POLE	HADCO POLE - APPROVED EQUAL	CAST IRON BASE/ STEEL POST/ BLACK 30'-0" TALL/ 24" CLAMHELL BASE - WITH RECEPTACLE @ 12'-0" MTG, WEATHERPROOF CAT #M0006A - WITH BANNER ARMS-ONE SET AT 10'-0" AND ONE SET AT 13'-0" MTG. HT. CAT #BA**2A18BA - WITH POST TOP FITTING CAT # APPROVED EQUAL - WITH CROSSARMS CAT # PTH2520**A, QTY 2 PER POLE - WITH 6'-0" ARM CAT # APPROVED EQUAL, QTY 1 PER POLE
	HOLOPHANE POLE TOP LUMINAIRE - MEMPHIS, TEARDROP	CAST ALUMINUM/ TEARDROP STYLE/ 250W MH CAT #MFU250MHMB4-IES TYPE IV QTY. 1 PER POLE	HADCO POLE TOP LUMINAIRE - TRADITIONAL TEARDROP	CAST ALUMINUM/ TEARDROP STYLE/ 250W MH CAT #TF41NAGL3NG250H*/TFHAM2A TYPE III QTY. 1 PER POLE
	HOLOPHANE POLE TOP LUMINAIRE - WASHINGTON POST LITE W/ ACRYLIC LENS	CAST ALUMINUM/ ACORN STYLE WITH FINIAL, BAND AND MEDALLIONS/100W MH CAT #AEIODMHMB3MSB - IES TYPE III QTY. 2 PER POLE	HADCO POLE TOP LUMINAIRE - REFRACTIVE GLOBE W/ ACRYLIC LENS	CAST ALUMINUM/ ACORN STYLE WITH FINIAL, BAND AND MEDALLIONS/100W MH CAT #R34BABA1ANNIDIOOH* - IES TYPE III QTY. 2 PER POLE
F2	HOLOPHANE POLE - NORTH YORKSHIRE SERIES	CAST ALUMINUM/BLACK/14'-5" TALL/20" BASE CAT #NY14C/20-CA/BK - WITH RECEPTACLE @ 8'-0" MTG HT, WEATHERPROOF CAT #FGIUS-SBKX-QTY 1 PER POLE - WITH BANNER ARMS-ONE SET AT 10'-0" AND ONE SET AT 13'-0" MTG. HT. CAT #4)BBA18A/1B0-CA/BK	HADCO POLE - APPROVED EQUAL	CAST ALUMINUM/BLACK/14'-5" TALL/20" BASE CAT # APPROVED EQUAL - WITH RECEPTACLE @ 12'-0" MTG HT, WEATHERPROOF CAT #M0006A, 1 PER POLE - WITH BANNER ARMS-ONE SET AT 10'-0" AND ONE SET AT 13'-0" MTG. HT. CAT #BA**2A18BA
	HOLOPHANE POLE TOP LUMINAIRE - WASHINGTON POST LITE W/ ACRYLIC LENS	CAST ALUMINUM/ ACORN STYLE WITH FINIAL, BAND AND MEDALLIONS/100W MH CAT #AEIODMHMB3MSB - IES TYPE III QTY. 1 PER POLE	HADCO POLE TOP LUMINAIRE - REFRACTIVE GLOBE W/ ACRYLIC LENS	CAST ALUMINUM/ ACORN STYLE WITH FINIAL, BAND AND MEDALLIONS/100W MH CAT #R34BABA1ANNIDIOOH* - IES TYPE III QTY. 1 PER POLE
F3	HOLOPHANE POLE - NORTH YORKSHIRE SERIES	CAST IRON BASE/ STEEL POST/ BLACK 30'-0" TALL/ 24" CLAMHELL BASE - WITH RECEPTACLE @ 8'-0" MTG, WEATHERPROOF CAT #FGIUS-SBKX-QTY 1 PER POLE - WITH BANNER ARMS-ONE SET AT 10'-0" AND ONE SET AT 13'-0" MTG. HT. CAT #4)BBA18A/1B0-CA/BK - WITH POST TOP FITTING - BOSTON HARBOUR STYLE CAT #BHLF/200/5CA/BK - WITH 6'-0" ARM CAT #BHC2/1-CA/BK, QTY 1 PER POLE	HADCO POLE - APPROVED EQUAL	CAST IRON BASE/ STEEL POST/ BLACK 30'-0" TALL/ 24" CLAMHELL BASE - WITH RECEPTACLE @ 12'-0" MTG, WEATHERPROOF CAT #M0006A - WITH BANNER ARMS-ONE SET AT 10'-0" AND ONE SET AT 13'-0" MTG. HT. CAT #BA**2A18BA - WITH POST TOP FITTING CAT # APPROVED EQUAL - WITH 6'-0" ARM CAT # APPROVED EQUAL, QTY 1 PER POLE
	HOLOPHANE POLE TOP LUMINAIRE - MEMPHIS, TEARDROP	CAST ALUMINUM/ TEARDROP STYLE/ 250W MH CAT #MFU250MHMB4-IES TYPE IV QTY. 1 PER POLE	HADCO POLE TOP LUMINAIRE - TRADITIONAL TEARDROP	CAST ALUMINUM/ TEARDROP STYLE/ 250W MH CAT #TF41NAGL3NG250H*/TFHAM2A TYPE III QTY. 1 PER POLE
F4	LITHONIA LIGHTING - COBRA HEAD	400W MH/FLAT GLASS LENS/IES TYPE III CAT #HMLRFL3400MT	COOPER LIGHTING - LUMARK COBRA HEAD	400W MH/FLAT GLASS LENS/IES TYPE III CAT #HMLRFL3400MT

\* - ALL HADCO BALLASTS TO BE MULTI-TAP, OR CONTROLLERS C1, C2, C4 - 240V AND C3 - 208V.  
 \*\* - SIZE TO MATCH TAPER OF POLE.

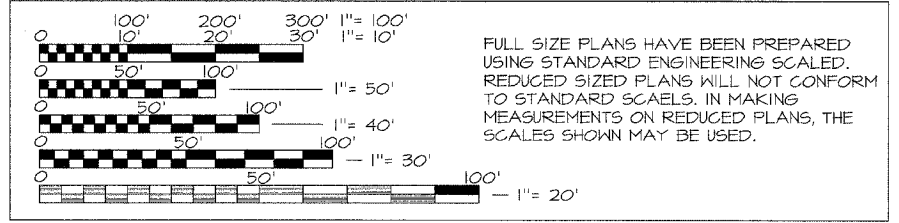
SUMMARY OF QUANTITIES			
	ITEM	UNIT	QUANTITY
CODED PAY ITEM	BASE BID		
	STREET LIGHTING ASSEMBLY COMPLETE, TYPE F1	ea	47
	STREET LIGHTING ASSEMBLY COMPLETE, TYPE F2	ea	46
	STREET LIGHTING ASSEMBLY COMPLETE, TYPE F3	ea	10
	STREET LIGHTS, TYPE F4, 400W MH	ea	8
	ELEC. UTILITY SERVICE CONNECT (COMED)	sum	1
82500505	LIGHT CONTROLLER SPL (LIGHTING CONTROLLERS C1&C2)	ea	2
81012600	CONDUIT, IN TRENCH, 2" DIA., PVC	lf	41373
81023500	CON ENC C 2 PVC 2X2	lf	350
81023300	CON ENC C 2 PVC 2X1	lf	50
81024300	CON ENC C 4 PVC 2X2	lf	865
81100125	EC C EPR RHW IC 4	lf	40512
81100120	EC C EPR RHW IC 6	lf	4554
81100115	EC C EPR RHW IC 8	lf	38274
81100110	EC C EPR RHW IC 10	lf	7152
81100105	EC C EPR RHW IC 12	lf	2345
81500200	TR & BKFIL F ELEC WK	lf	11000
81301370	JUNCTION BOX, STAINLESS STEEL, EMBEDDED IN STRUCTURE, 18"x12"x8"	ea	103
81400200	HD HANDHOLE	ea	34
80400100	ELECT SERV INSTALL	ea	2
84502200	MOD EX CONTR (CONTROLLER-C3&C4)	ea	2
83600200	LIGHT POLE FDN, 24D	lf	230
83600300	LIGHT POLE FDN 30D	lf	510
84200500	REM EX LT UNIT SALV	ea	43
84200700	LIGHTING FDN REM	ea	23
84500110	REMOVE LIGHTING CONTR	ea	2
84500130	REMOVE LTS CONTR FDN (CONTROLLER C1)	ea	2

**DEMOLITION KEYED NOTES @ SEE SHEETS E2 AND E3**

- CONCRETE POLE, BASE MOUNTED
- CONCRETE POLE, BUTT MOUNTED
- WOOD POLE
- POLE & LUMINAIRE TO REMAIN
- REMOVE CONCRETE TO 12" BELOW FINISHED GRADE.
- REMOVE OVERHEAD CONDUCTOR.
- REMOVE SIGNAGE AND TURN OVER TO CITY WORKS DEPARTMENT.
- METAL BASE MOUNTED POLE
- METAL BUTT MOUNTED POLE
- REMOVE LUMINAIRE, MAST ARM AND LIGHTING WIRING. LEAVE ELECTRIC POLE.
- REMOVE MAST ARM AND COBRA HEAD.

**ELECTRICAL NOTES**

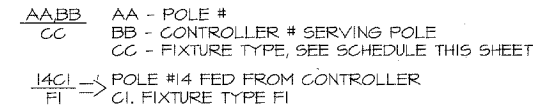
- IT SHALL BE NECESSARY TO UPGRADE OR REPLACE FOUR EXISTING LIGHTING CONTROLLERS. CONTRACTOR TO COORDINATE WORK WITH CECCO.
- CONNECT NEW LIGHTS TO NEW POLE LIGHTING CIRCUIT. FUSE LIGHTS SEPARATE FROM RECEPS. SEE POLE WIRING DETAIL. USE IN-LINE WEATHERPROOF FUSE HOLDERS WITH FUSES SIZED AS NOTED. ALL CONNECTIONS AND SPLICES SHALL BE MADE IN POLES, NOT IN PULL BOXES.
- CONNECT RECEPTACLES TO NEW RECEPTACLE CIRCUIT. ALL RECEPTACLES TO BE GFCI-TYPE (POLES AND CONTROLLERS). OUTDOOR AND POLE MOUNTED RECEPTACLES TO COMPLY WITH NEC PARAGRAPHS 406.8(B)(1) AND 406.8(B)(2)(a) AND BE UL LISTED.
- RECEPTACLE AND LIGHTING CIRCUITS TO BE IN SEPARATE 2" SCH 80 PVC CONDUITS.
- LIGHT POLE FOUNDATIONS TO BE REINFORCED. REINFORCING TO COMPLY WITH IDOT STANDARDS.
- ALL JUNCTION BOXES USED ON THIS PROJECT SHALL BE STAINLESS STEEL, SIZE 18"x12"x8"D. OPEN BOTTOM, WITH LID LABELED "STREET LIGHTING". THEY SHALL COMPLY WITH IDOT STANDARDS FOR STAINLESS STEEL JUNCTION BOXES EMBEDDED IN STRUCTURE. HEAVY-DUTY JUNCTION BOXES SHALL BE SIZE 30"x17"x18"D. SEE CODED PAY ITEMS 81400100 AND 81400200.



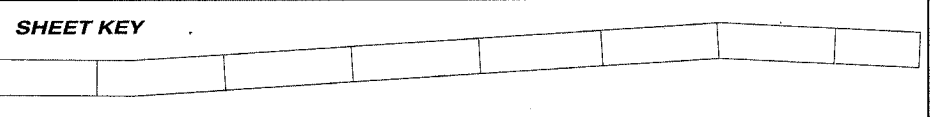
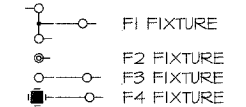
**GENERAL NOTES**

- ELECTRICAL WORK SHALL COMPLY WITH THE NEC, 2005
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST IDOT STANDARDS.
- SEE "SUMMARY OF QUANTITIES" THIS SHEET.

**POLE NUMBERING**



**LUMINAIRE LEGEND**



REVISIONS		
NO.	ITEM	DATE

SCALE:	NTS
DRAWN BY:	KEH
CHECKED BY:	AMH
DATE:	3-3-06

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 EMAIL: wk@mcclureengineering.com McClure Engineering Associates, Inc.

**NOTES & LEGENDS**  
**SHERIDAN ROAD IMPROVEMENTS**  
 CITY OF WAUKEGAN JOB NUMBER: 02-28-03-251 LAKE COUNTY, ILLINOIS  
 W:\dwg\WK\SHERIDAN-RD\Lighting\LightingFinal\LegendNotes.dwg 3/9/2006 8:04:14 PM CST