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**DISTRICT DETAILS**

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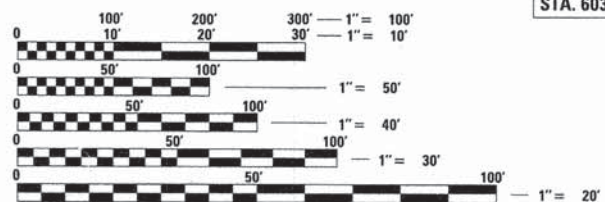
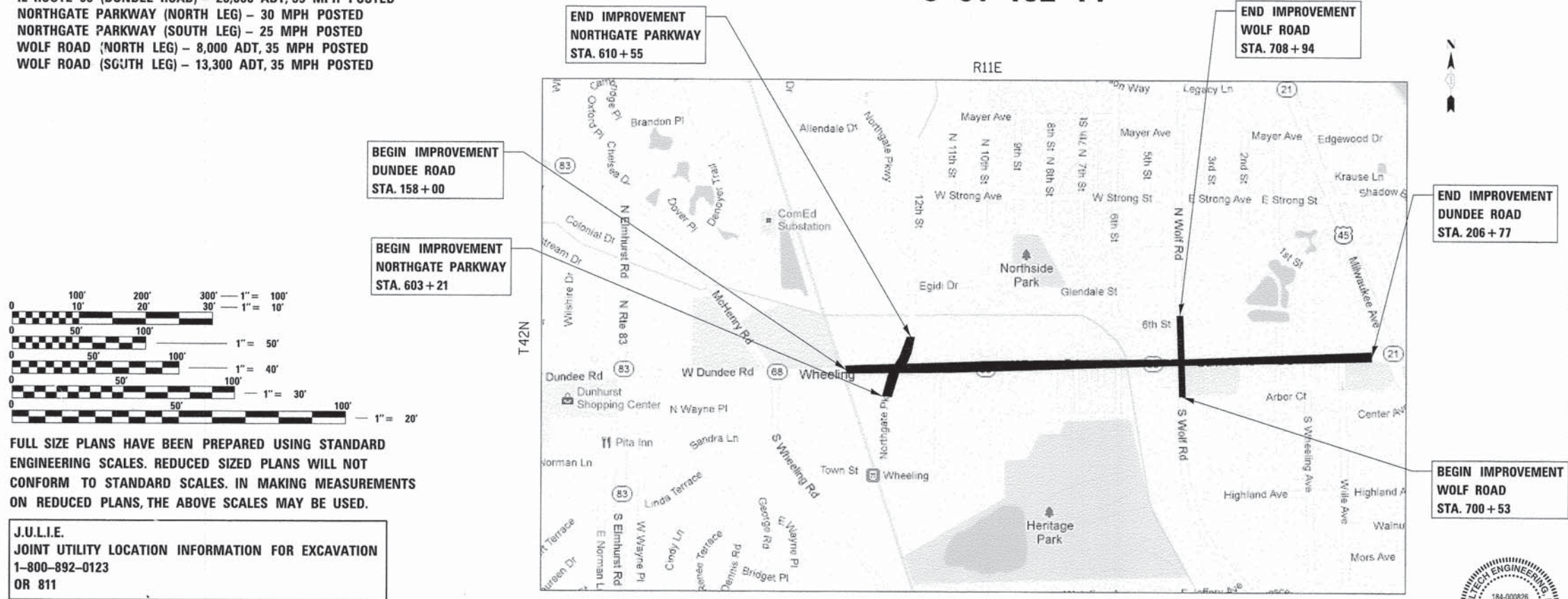
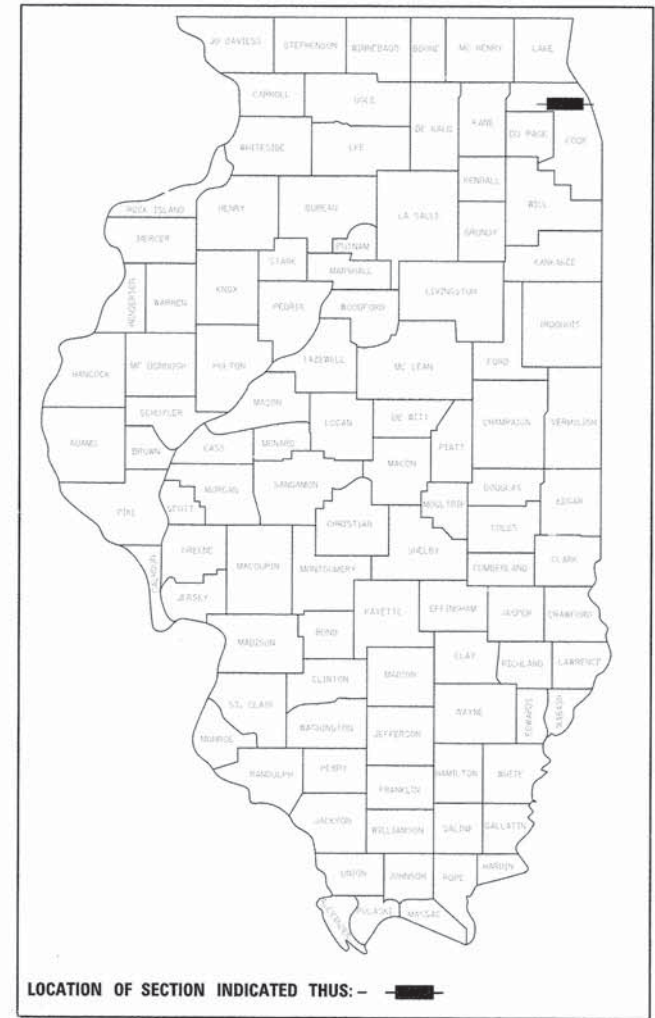
**IDOT STANDARDS**

424026-01	ENTRANCE /ALLEY PEDESTRIAN CROSSINGS
701006-05	OFF-RD OPERATIONS - 2L 2W - 15FT TO 24" FROM PAVEMENT EDGE
701101-04	OFF-RD OPERATIONS MULTI-LANE, 15FT TO 24" FROM EDGE OF PAVEMENT
701301-04	LANE CLOSURE 2L 2W SHORT TIME OPERATIONS
701502-06	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701602-07	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701701-09	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-05	SIDEWALK CORNER OR CROSSWALK CLOSURE
701901-04	TRAFFIC CONTROL DEVICES

**ROADWAY DATA**

IL ROUTE 68 (DUNDEE ROAD) - 28,000 ADT, 35 MPH POSTED  
 NORTHGATE PARKWAY (NORTH LEG) - 30 MPH POSTED  
 NORTHGATE PARKWAY (SOUTH LEG) - 25 MPH POSTED  
 WOLF ROAD (NORTH LEG) - 8,000 ADT, 35 MPH POSTED  
 WOLF ROAD (SOUTH LEG) - 13,300 ADT, 35 MPH POSTED

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**  
**PROPOSED HIGHWAY PLANS**  
**FAP 0343 (IL ROUTE 68 - DUNDEE ROAD)**  
**NORTHGATE PARKWAY TO US45 /IL 21 (MILWAUKEE AVENUE)**  
**SECTION 13-00080-00-LT**  
**PROJECT M-4003(271)**  
**ROADWAY LIGHTING**  
**VILLAGE OF WHEELING**  
**COOK COUNTY**  
**C-91-182-14**



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

**PROJECT LENGTH (NET AND GROSS):**  
 IL ROUTE 68 (DUNDEE ROAD) - 4,877.0 FT. (0.924 MILE)  
 NORTHGATE PARKWAY - 734.0 FT. (0.139 MILE)  
 WOLF ROAD - 841 FT. (0.159 MILE)  
**TOTAL - 6,452.0 FT. (1.222 MILE)**

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

APPROVED *April 8 2014* **J.M. Jacobs** VILLAGE ENGINEER

PASSED *April 11 2014* **Christopher Hoar** DISTRICT ONE ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW *April 14 2014* **John Fortmann** DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

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PLANS PREPARED BY:

450 E. Devon Ave, Suite 300 - Itasca, Illinois 60143  
 Tel: 630.773.3900 - Fax: 630.773.3975  
 www.civiltechinc.com

FEDERAL AID ENGINEER: **FAWAD AG-VEEL** P.E. (847) 705-4921  
 CONSULTANT ENGINEER: **DEREK N. MALL, P.E.** CIVILTECH ENGINEERING, INC.

**DEREK N. MALL**  
 062-051308  
 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS  
*Derek N. Mall 4/8/2014*  
 REGISTERED P.E., STATE OF ILLINOIS  
 NO. 062-051308; EXPIRES 11-30-2015  
 FOR DRAWINGS 1 TO 19

**GREGORY J. MATLACK**  
 081-005562  
 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS  
*Greg Hall 4/08/2014*  
 REGISTERED P.E., STATE OF ILLINOIS  
 NO. 081-005562; EXPIRES 11-30-2014  
 FOR DRAWINGS 20 TO 22

**CONTRACT NO. 61A41**

**SPECIFICATIONS, STANDARDS AND SPECIAL PROVISIONS**

1. ALL REFERENCES TO "STANDARD SPECIFICATIONS" IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION ON JANUARY 1, 2012.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS"; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY 1, 2014; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"; AND THE "SPECIAL PROVISIONS AND IDOT STANDARD DRAWINGS" INCLUDED IN THE CONTRACT DOCUMENTS.
3. ANY REFERENCE TO "STANDARD" THROUGHOUT THE PLANS, SPECIAL PROVISIONS OR THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN THE LATEST VERSION OF THAT IDOT STANDARD DRAWING.
4. ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 700 OF THE "STANDARD SPECIFICATIONS".
5. ALL REFERENCES TO "ENGINEER" SHALL BE INTERPRETED TO MEAN THE RESIDENT ENGINEER. ALL REFERENCES TO "VILLAGE" SHALL BE INTERPRETED TO MEAN THE VILLAGE OF WHEELING.

**MISCELLANEOUS**

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND CONTRACT OR PERMIT BONDS FROM THE VILLAGE OF WHEELING OR ANY OTHER AGENCY THAT REQUIRES IT. ANY COSTS INCURRED BY THE CONTRACTOR WILL BE INCIDENTAL TO THIS CONTRACT.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES FOR EXAMINATION AND CONFIRMATION WITH THE ENGINEER PRIOR TO INSTALLATION OF LIGHTING FOUNDATIONS.
4. ANY DAMAGE TO PAVEMENT, SIDEWALK, CURB, OR ANY OTHER PORTION OF THE ROADWAY NOT SPECIFICALLY TO BE REMOVED AND REPLACED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST AND REPLACEMENT SHALL MEET THE APPROVAL OF THE ENGINEER.
5. OFFSET CALL-OFFS ARE FROM THE CENTER OF POLES TO FACE OF CURB (F.O.C.).
6. THE CONTRACTOR SHALL PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT, EXCEPT FOR PERIODS OF SHORT DURATION (4 HOURS OR LESS). THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF MOBILIZATION.
7. THE CONTRACTOR SHALL CONTACT THE IDOT TRAFFIC CONTROL SUPERVISOR AT 1-847-705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
8. PAY ITEMS IN THE SUMMARY OF QUANTITIES HAVE BEEN ESTIMATED. IF, IN THE ENGINEER'S OPINION, ANY WORK IS NOT REQUIRED, THAT ITEM WILL BE DEDUCTED FROM THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
9. ALL WASTE MATERIAL SHALL BE LEGALLY DISPOSED OF OUTSIDE THE LIMITS OF THE R.O.W. AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROMPT CLEANUP AND DISPOSAL OF ANY AND ALL DEBRIS GENERATED BY OR INCIDENTAL TO WORK COVERED BY THIS CONTRACT.
10. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES, ORDINANCES AND REGULATIONS CONCERNING MAINTENANCE OF TRAFFIC.
11. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE ANY LIGHT STANDARD IS ERECTED.
12. THE INSTALLATION OF BURIED WARNING TAPE SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER.
13. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY ENGINEER.

**LANDSCAPING**

1. WHEN DIRECTED BY THE ENGINEER, SUPPLEMENTAL WATERING SHALL BE APPLIED TO ALL SODDED AREAS PRIOR TO FINAL ACCEPTANCE, AT A RATE SPECIFIED BY THE ENGINEER AND IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS" AND SPECIAL PROVISIONS.










**UTILITIES**

1. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES. THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE, AND THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR WILL BE REQUIRED TO ASCERTAIN THE EXACT LOCATIONS OF SUCH UTILITIES AND EXERCISE CARE DURING HIS CONSTRUCTION OPERATIONS SO AS NOT TO DAMAGE THEM, IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND ARTICLE 107.31 OF THE "STANDARD SPECIFICATIONS". THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING UTILITIES SO THAT THEIR FACILITIES MAY BE LOCATED AND ADJUSTED OR MOVED, IN NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AND THE VILLAGE. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.
3. COORDINATION OF ANY UTILITY WORK INVOLVED IN THE CONSTRUCTION AREA WILL BE DISCUSSED AT THE PRECONSTRUCTION CONFERENCE.
4. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS, WATER, SEWER AND CABLE TELEVISION FACILITIES (48 HOUR NOTIFICATION IS REQUIRED).
5. THE CONTRACTOR SHALL RECEIVE NO ADDITIONAL COMPENSATION FOR CONSTRUCTION STAGING NECESSARY TO ACCOMMODATE UTILITY RELOCATION OR ADJUSTMENT, AND/OR FOR DELAYS CAUSED BY UTILITY RELOCATION OR ADJUSTMENT.

**MAINTENANCE OF TRAFFIC**

1. ALL TRAFFIC CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE STANDARDS AND AS DIRECTED BY THE ENGINEER.
2. LANE CLOSURE WILL BE PERMITTED WHILE WORK IS BEING PERFORMED. EASTBOUND LANE CLOSURE ON DUNDEE ROAD WILL NOT BE PERMITTED BEFORE 9:00 A.M. AND WESTBOUND LANE CLOSURE WILL NOT BE PERMITTED AFTER 3:00 P.M., MONDAY THROUGH FRIDAY.

**LEGEND**

-  EXISTING LIGHTING UNIT
-  PROPOSED LIGHTING UNIT  
250 WATT HPS, 240V (PHASE TO PHASE), 35' MH
-  PROPOSED LIGHTING UNIT  
310 WATT HPS, 240V (PHASE TO PHASE), 40' MH
-  PROPOSED LIGHTING UNIT  
310 WATT HPS, 240V (PHASE TO PHASE), 30' MH
-  EXISTING COMBINATION TRAFFIC SIGNAL AND LIGHTING
-  UNDERGROUND CONDUIT, GALVANIZED STEEL (SIZE AS SPECIFIED)
-  UNIT DUCT (SIZE AND TYPE AS SPECIFIED IN THE PLANS)
-  PROPOSED LIGHTING CONTROLLER,  
BASE MOUNTED, 240 VOLT, 200 AMP
-  SIDEWALK REMOVAL AND PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

PLOT CENTER = 48.100000  
 PLOT TABLE = 48.100000  
 PLOT SCALE = 1/8" = 1'-0"  
 PLOT DATE = 3/24/2014



USER NAME = sjc	DESIGNED = SJC	REVISED =
PILOT SCALE = 28.0000 1/8" = 1'-0"	DRAWN = SJC	REVISED =
PILOT DATE = 3/24/2014	CHECKED = DNM	REVISED =
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**VILLAGE OF WHEELING  
DUNDEE ROAD LIGHTING GENERAL NOTES AND LEGEND**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0343	13-00080-00-LT	COOK	22	2
CONTRACT NO. 61A41				
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				0021	0031	0042
				SAFETY (LIGHTING, SIDEWALKS)	LANDSCAPING AND OTHER SCENIC BEAUTIFICATION	TRAINEES
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	420		420	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	6		6	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	6		6	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	6		6	
25200100	SODDING	SQ YD	420		420	
25200200	SUPPLEMENTAL WATERING	UNIT	7		7	
* 42001300	PROTECTIVE COAT	SQ YD	149	149		
* 42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1345	1345		
* 42400800	DETECTABLE WARNINGS	SQ FT	22	22		
* 44000600	SIDEWALK REMOVAL	SQ FT	1345	1345		
* 50102400	CONCRETE REMOVAL	CU YD	3	3		
* 50300225	CONCRETE STRUCTURES	CU YD	4	4		
* 50800205	REINFORCEMENT BARS EPOXY COATED	POUND	310	310		
* 66400105	CHAIN LINK FENCE, 4'	FOOT	30	30		
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	30	30		
67100100	MOBILIZATION	L SUM	1	1		
* 66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1		
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1		
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1		
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1		
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1		
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1		
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	4	4		
80400100	ELECTRIC SERVICE INSTALLATION	EACH	2	2		
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	1		
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	4001	4001		
81702460	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 3/0	FOOT	255	255		
82104500	LUMINAIRE, SODIUM VAPOR, RECTILINEAR TYPE, 250 WATT	EACH	21	21		
82104550	LUMINAIRE, SODIUM VAPOR, RECTILINEAR TYPE, 310 WATT	EACH	56	56		
82500370	LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 200AMP	EACH	2	2		

\* SPECIALTY ITEM

PLOT DRIVER: J. M. WILSON  
 PER TABLE: M. WILSON  
 FILE NAME: J:\2014\61A41.dwg



USER NAME: J. M. WILSON  
 PLOT SCALE: 1/8" = 1'-0"  
 PLOT DATE: 2/24/2014

DESIGNED: SJC  
 DRAWN: SJC  
 CHECKED: DNM  
 DATE: 3/24/2014

REVISED: \_\_\_\_\_  
 REVISED: \_\_\_\_\_  
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 REVISED: \_\_\_\_\_

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

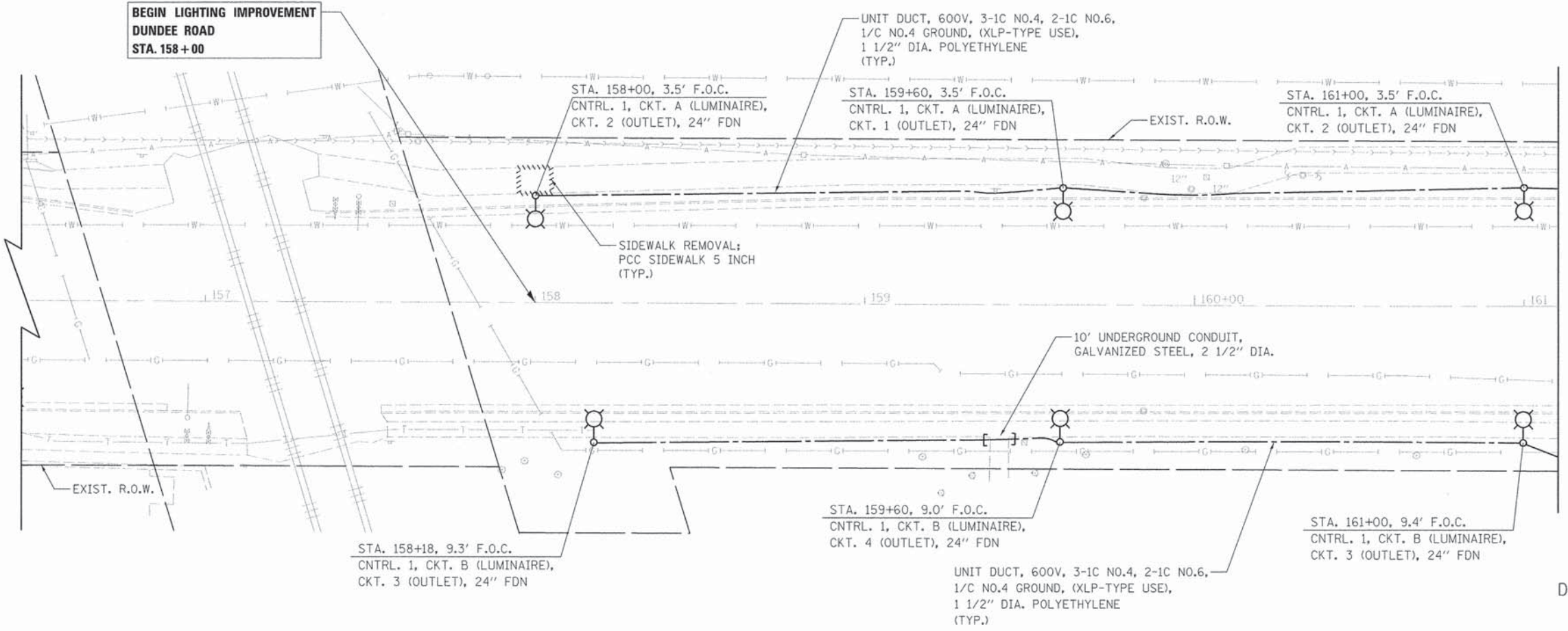
**VILLAGE OF WHEELING**  
**DUNDEE ROAD LIGHTING SUMMARY OF QUANTITIES**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0343	13-00080-00-LT	COOK	22	3
CONTRACT NO. 61A41			ILLINOIS FED. AID PROJECT	



**BEGIN LIGHTING IMPROVEMENT  
DUNDEE ROAD  
STA. 158+00**

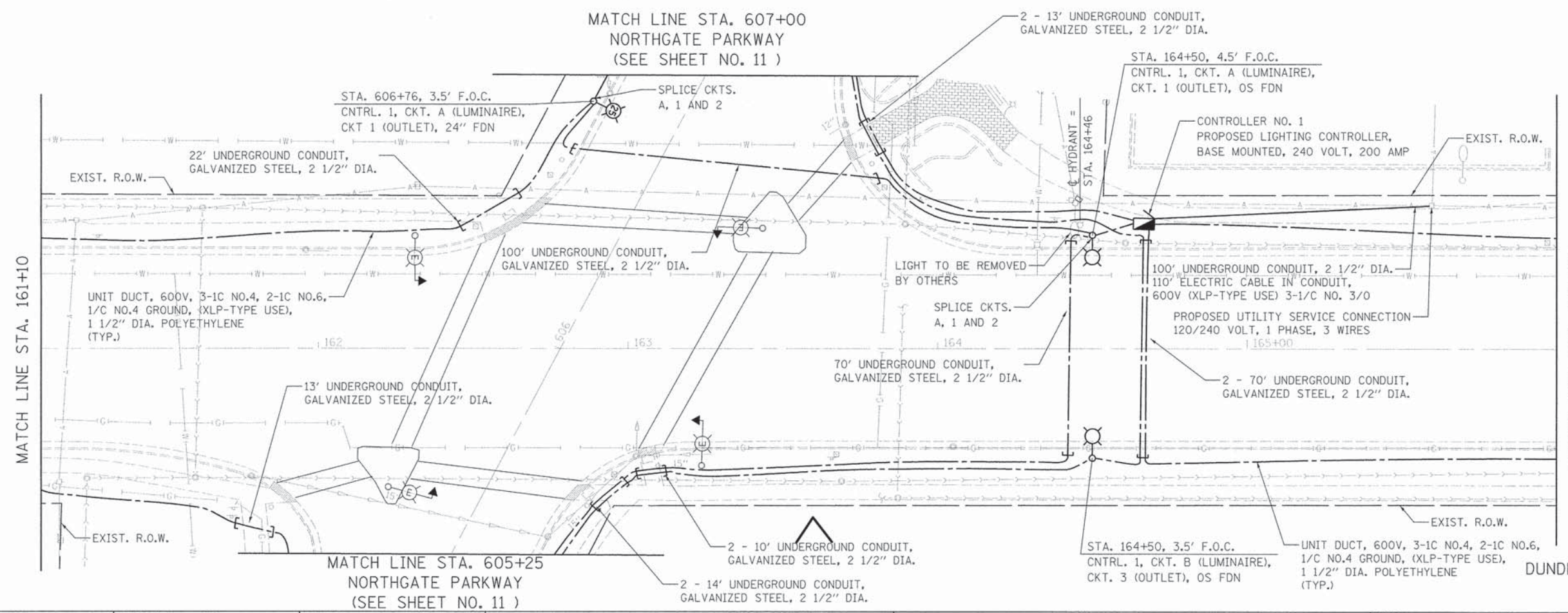


MATCH LINE STA. 161+10

DUNDEE ROAD



**MATCH LINE STA. 607+00  
NORTHGATE PARKWAY  
(SEE SHEET NO. 11)**



MATCH LINE STA. 161+10

MATCH LINE STA. 166+00  
(SEE SHEET NO. 6)

DUNDEE ROAD



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PEN TABLE = #PENFILL  
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DATE - 3/24/2014

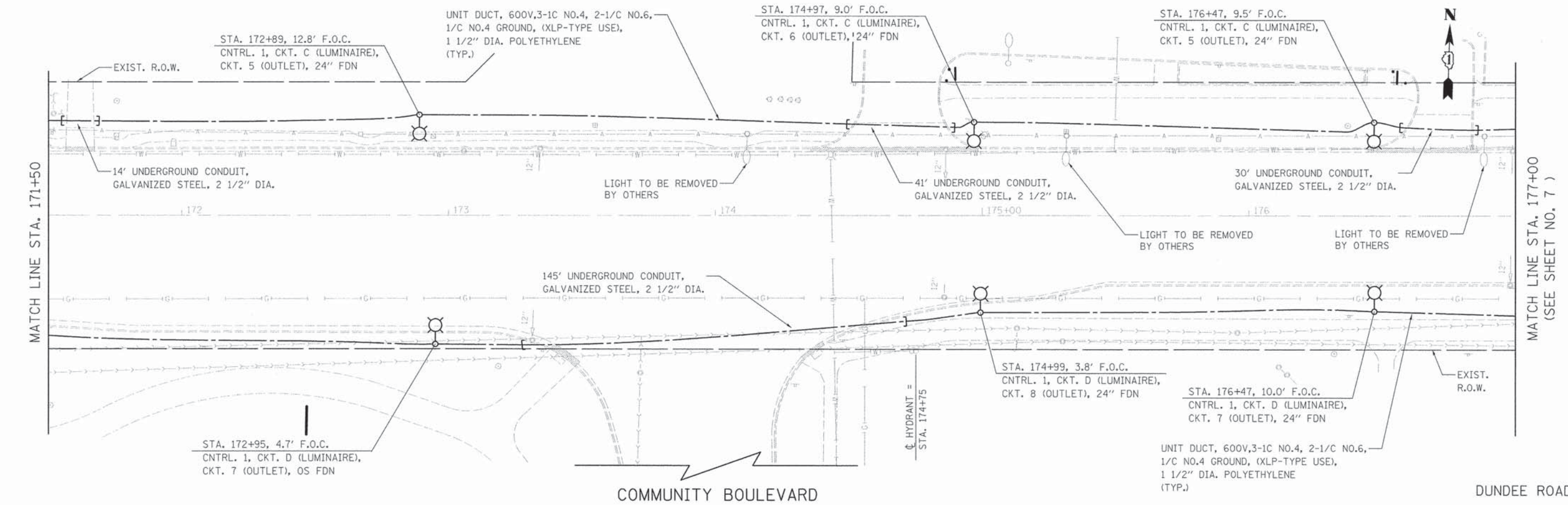
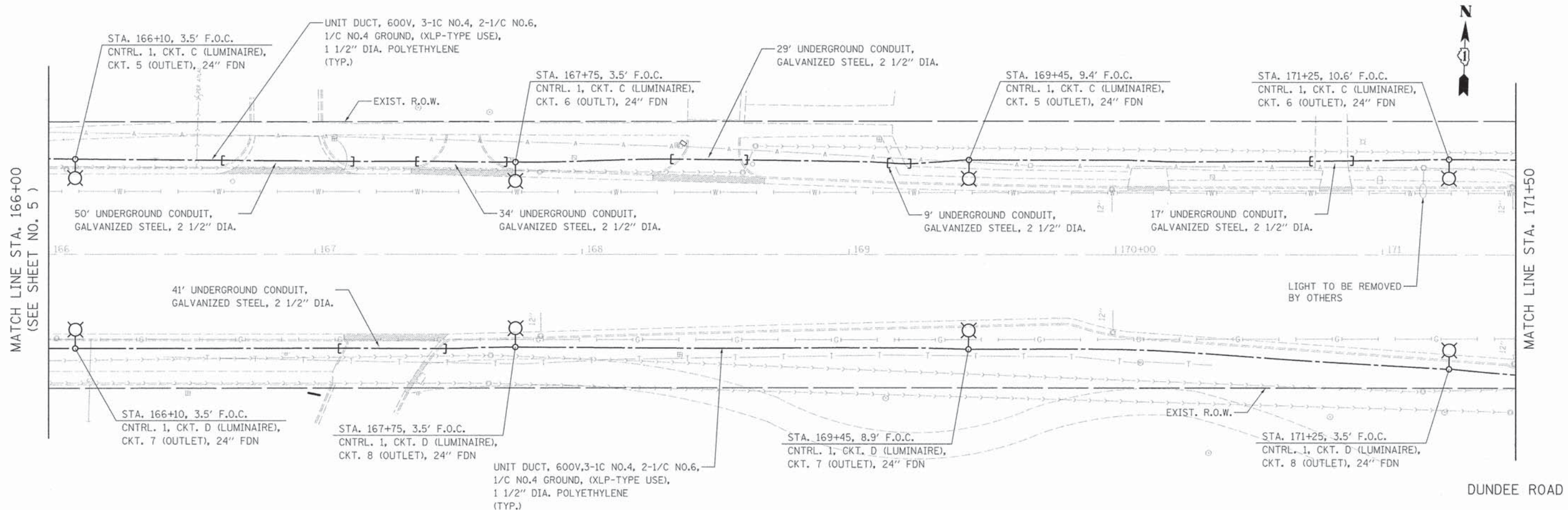
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REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**VILLAGE OF WHEELING  
DUNDEE ROAD LIGHTING PLANS**

SCALE: 1" = 20' SHEET 1 OF 8 SHEETS STA. 158+00 TO STA. 166+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0343	13-00080-00-LT	COOK	22	5
CONTRACT NO. 61A41			ILLINOIS FED. AID PROJECT	



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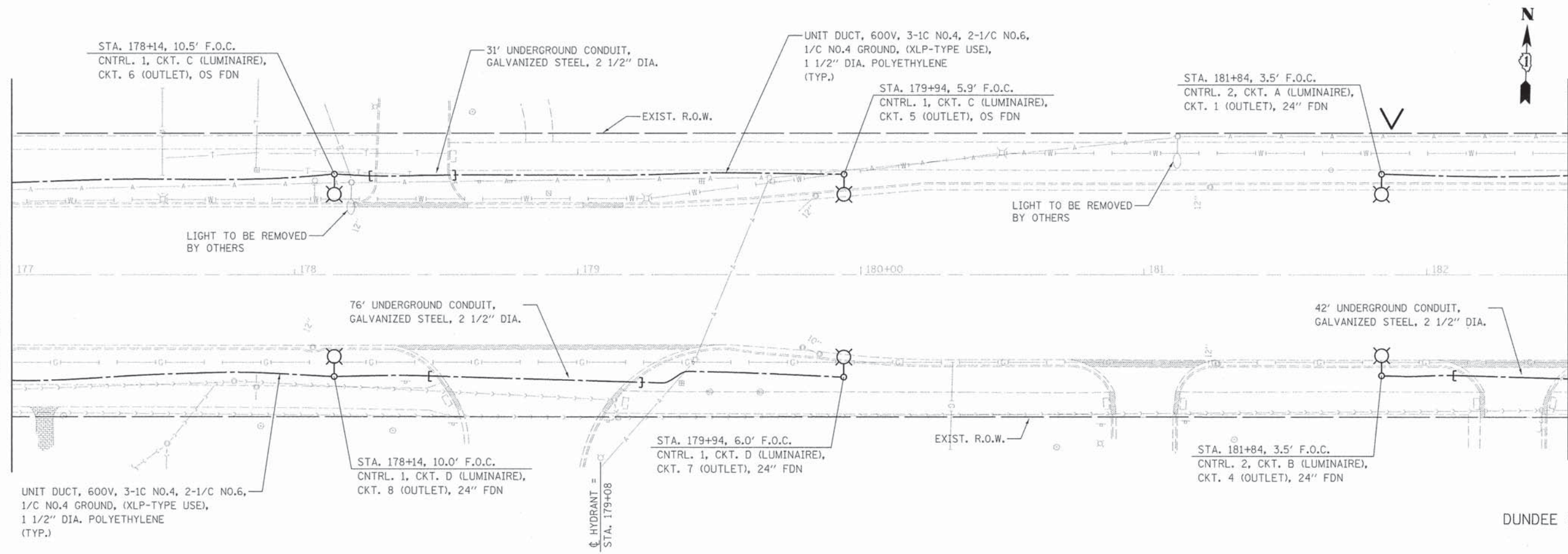
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	DATE = 3/24/2014	REVISED =

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>VILLAGE OF WHEELING</b> <b>DUNDEE ROAD LIGHTING PLANS</b>	
SCALE: 1" = 20'	SHEET 2 OF 8 SHEETS STA. 166+00 TO STA. 177+00

F.A.P. RTE. 0343	SECTION 13-00080-00-LT	COUNTY COOK	TOTAL SHEETS 22	SHEET NO. 6
CONTRACT NO. 61A41			ILLINOIS FED. AID PROJECT	

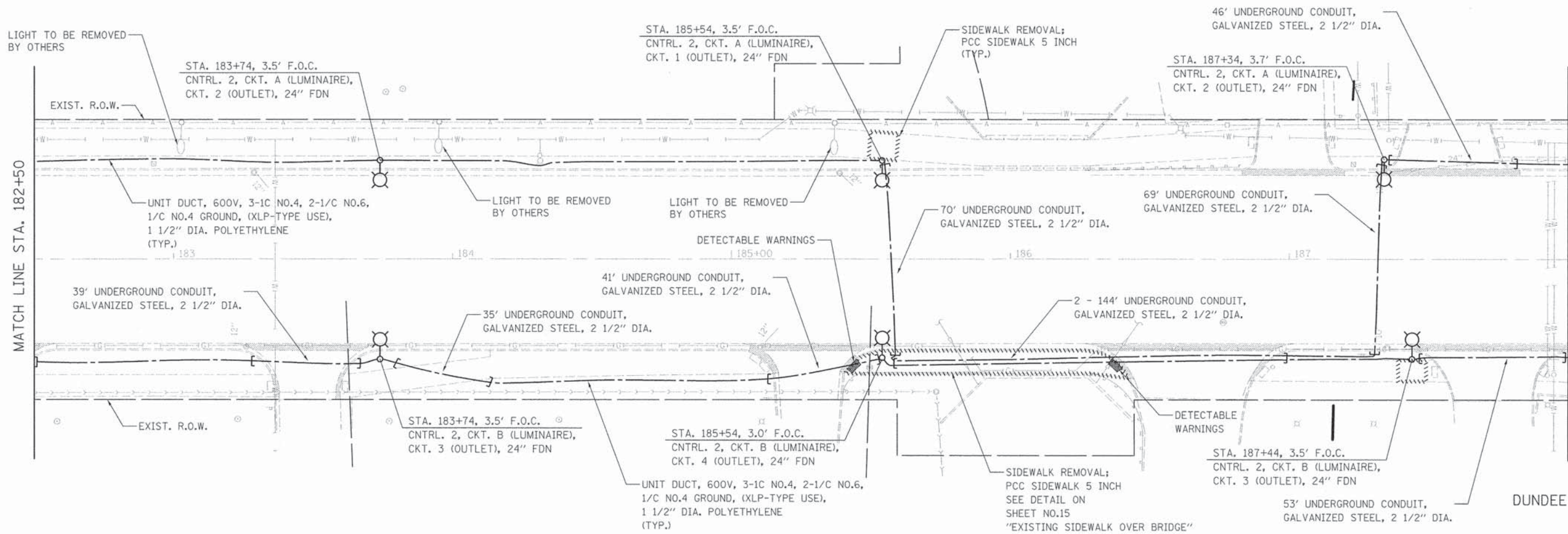
MATCH LINE STA. 177+00  
(SEE SHEET NO. 6)



MATCH LINE STA. 182+50

DUNDEE ROAD

LIGHT TO BE REMOVED BY OTHERS



MATCH LINE STA. 182+50

MATCH LINE STA. 188+00  
(SEE SHEET NO. 8)

DUNDEE ROAD



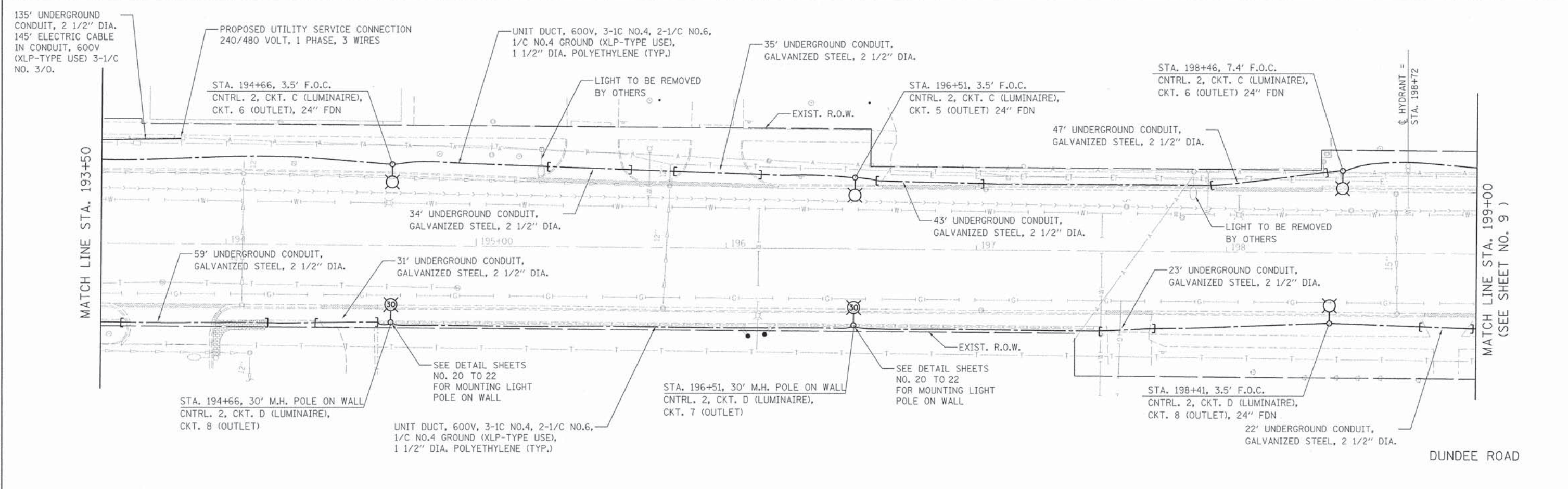
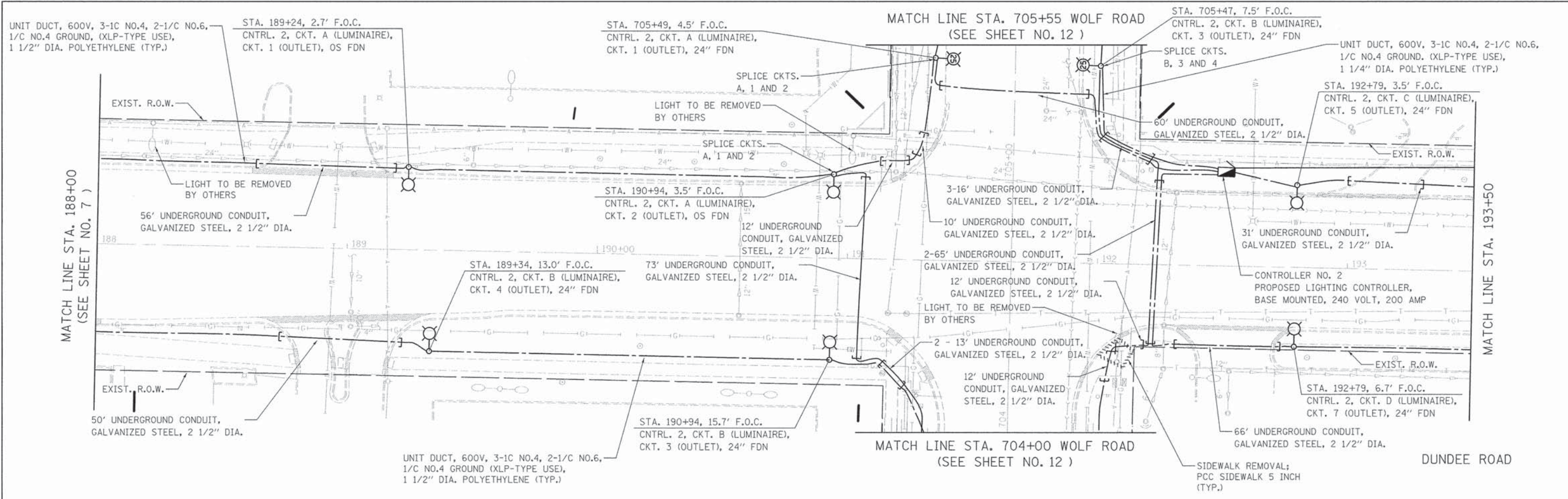
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	DATE - 3/24/2014	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

VILLAGE OF WHEELING	
DUNDEE ROAD LIGHTING PLANS	
SCALE: 1" = 20'	SHEET 3 OF 8 SHEETS
STA. 177+00	TO STA. 188+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0343	13-00080-00-LT	COOK	22	7
CONTRACT NO. 61A41			ILLINOIS FED. AID PROJECT	

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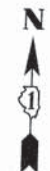
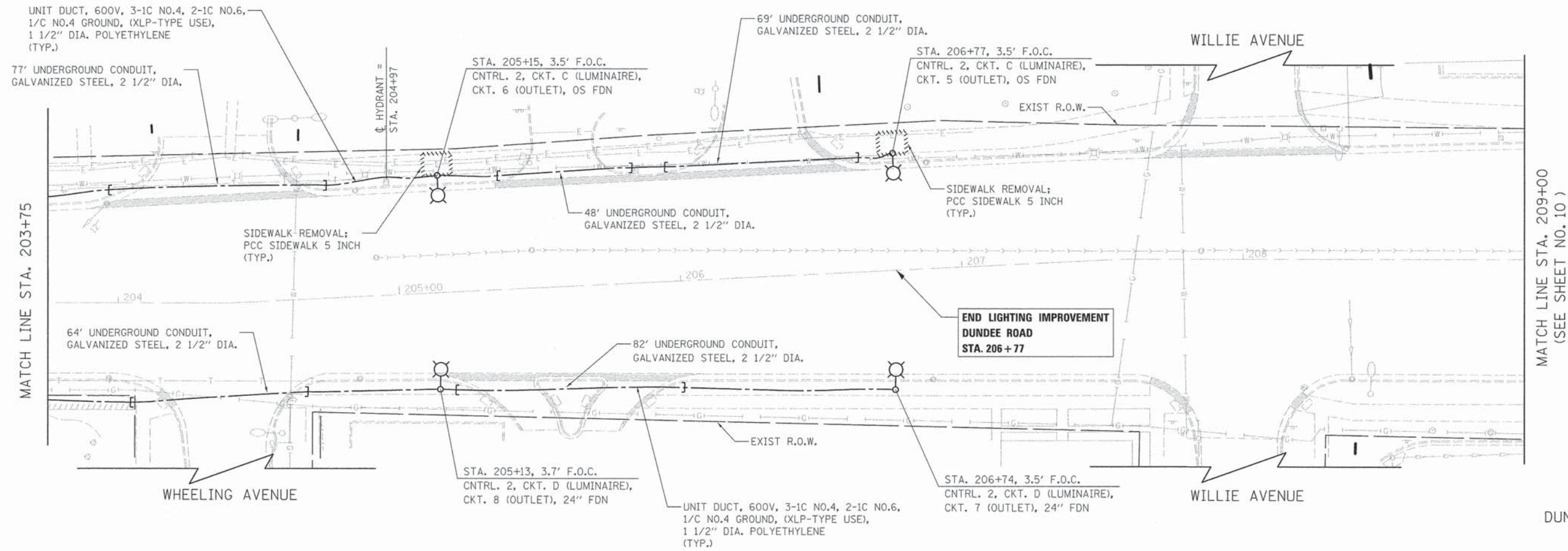
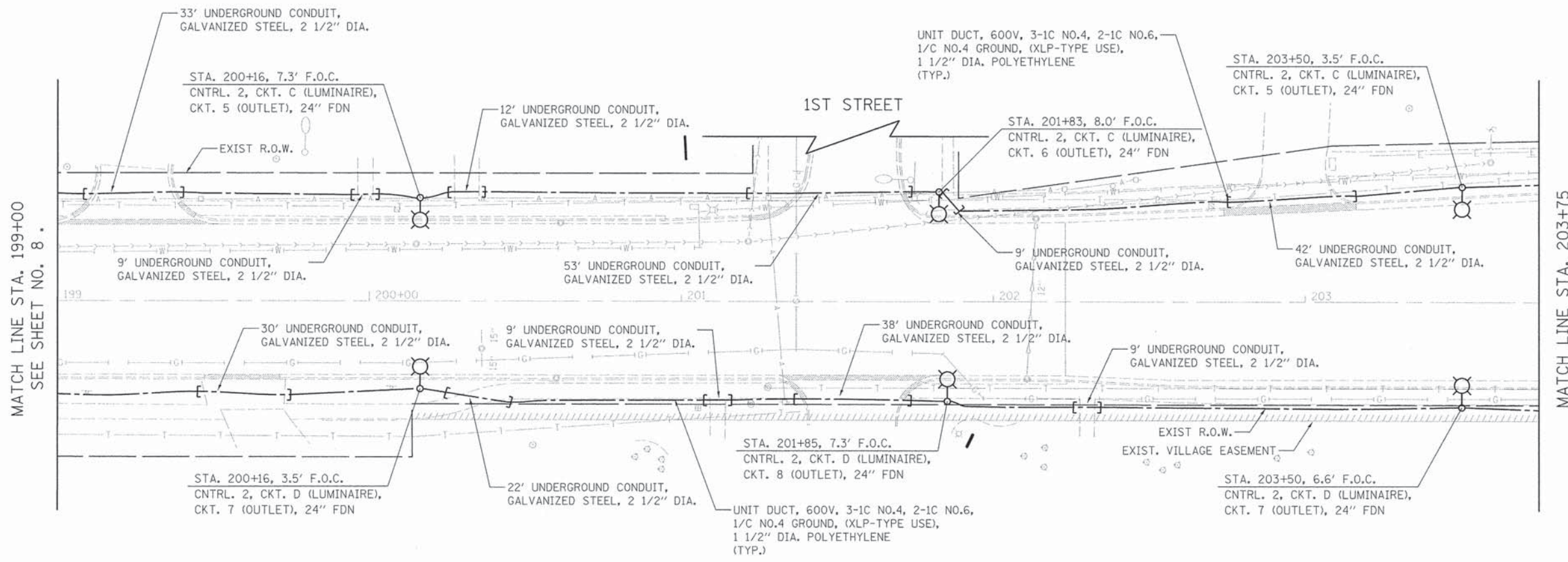
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	DATE - 3/24/2014	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

<b>VILLAGE OF WHEELING</b>	
<b>DUNDEE ROAD LIGHTING PLANS</b>	
SCALE: 1" = 20'	SHEET 4 OF 8 SHEETS STA. 188+00 TO STA. 199+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0343	13-00080-00-LT	COOK	22	8
CONTRACT NO. 61A41			ILLINOIS FED. AID PROJECT	





PLOT DRIVER: R. S. TORRES  
 PEN TABLE: PENTABLE  
 FILE NAME: ...



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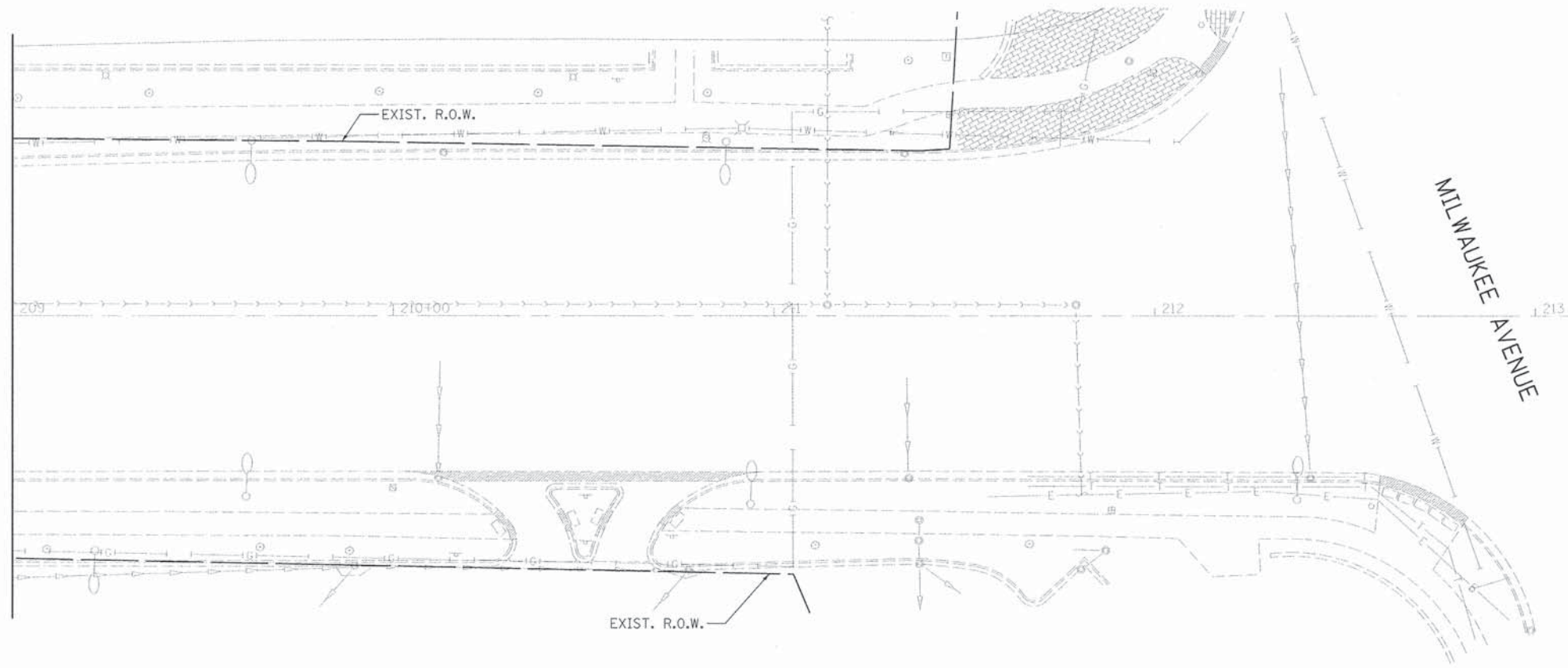
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**VILLAGE OF WHEELING  
DUNDEE ROAD LIGHTING PLANS**

SCALE: 1" = 20' SHEET 5 OF 8 SHEETS STA. 199+00 TO STA. 209+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0343	13-00080-00-LT	COOK	22	9
CONTRACT NO. 61A41				
ILLINOIS FED. AID PROJECT				

MATCH LINE STA. 209+00  
(SEE SHEET NO. 9 )



DUNDEE ROAD

PLOT DRIVER = PPLTDPSL4  
PEN TABLE = \$RENTBALL3  
FILE NAME = ...2074117.dwg



USER NAME = sjc  
PLOT SCALE = 20,000 / 1" = 200'  
PLOT DATE = 3/24/2014

DESIGNED - SJC  
DRAWN - SJC  
CHECKED - DNM  
DATE - 3/24/2014

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

VILLAGE OF WHEELING  
DUNDEE ROAD LIGHTING PLANS

SCALE: 1" = 20' SHEET 5 OF 8 SHEETS STA. 209+00 TO STA. 213+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0343	13-00080-00-LT	COOK	22	10
				CONTRACT NO. 61A41
ILLINOIS FED. AID PROJECT				

**BEGIN LIGHTING IMPROVEMENT  
NORTHGATE PARKWAY  
STA. 603+21**

STA. 603+21, 3.5' F.O.C.  
CNTRL. 1, CKT. A (LUMINAIRE),  
CKT. 2 (OUTLET), 24" FDN

35' UNDERGROUND CONDUIT,  
GALVANIZED STEEL, 2 1/2" DIA.

UNIT DUCT, 600V, 3-1C NO.4, 2-1C NO.6,  
1/C NO.4 GROUND, (XLP-TYPE USE),  
1 1/2" DIA. POLYETHYLENE  
(TYP.)

STA. 604+80, 3.5' F.O.C.  
CNTRL. 1, CKT. A (LUMINAIRE),  
CKT. 1 (OUTLET), 24" FDN

34' UNDERGROUND CONDUIT,  
GALVANIZED STEEL, 2 1/2" DIA.

2-61' UNDERGROUND CONDUIT,  
GALVANIZED STEEL, 2 1/2" DIA.

34' UNDERGROUND CONDUIT,  
GALVANIZED STEEL, 2 1/2" DIA.

MATCH LINE STA. 605+25  
(SEE SHEET NO. 5)

EXIST R.O.W.

HYDRANT =  
STA. 602+88

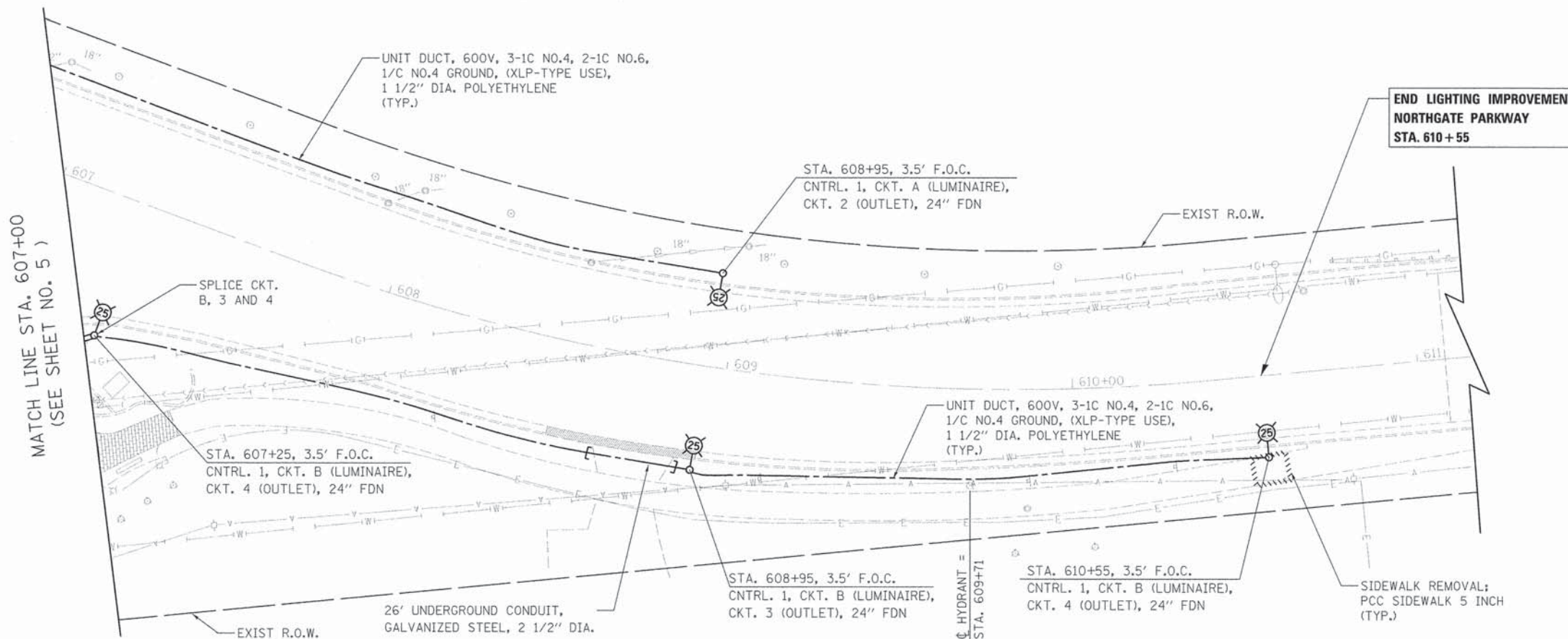
STA. 603+21, 3.5' F.O.C.  
CNTRL. 1, CKT. B (LUMINAIRE),  
CKT. 3 (OUTLET), 24" FDN

UNIT DUCT, 600V, 3-1C NO.4, 2-1C NO.6,  
1/C NO.4 GROUND, (XLP-TYPE USE),  
1 1/2" DIA. POLYETHYLENE  
(TYP.)

STA. 605+04, 3.5' F.O.C.  
CNTRL. 1, CKT. B (LUMINAIRE),  
CKT. 4 (OUTLET), 24" FDN



NORTHGATE PARKWAY



**END LIGHTING IMPROVEMENT  
NORTHGATE PARKWAY  
STA. 610+55**

MATCH LINE STA. 607+00  
(SEE SHEET NO. 5)

UNIT DUCT, 600V, 3-1C NO.4, 2-1C NO.6,  
1/C NO.4 GROUND, (XLP-TYPE USE),  
1 1/2" DIA. POLYETHYLENE  
(TYP.)

STA. 608+95, 3.5' F.O.C.  
CNTRL. 1, CKT. A (LUMINAIRE),  
CKT. 2 (OUTLET), 24" FDN

EXIST R.O.W.

SPLICE CKT.  
B, 3 AND 4

STA. 607+25, 3.5' F.O.C.  
CNTRL. 1, CKT. B (LUMINAIRE),  
CKT. 4 (OUTLET), 24" FDN

UNIT DUCT, 600V, 3-1C NO.4, 2-1C NO.6,  
1/C NO.4 GROUND, (XLP-TYPE USE),  
1 1/2" DIA. POLYETHYLENE  
(TYP.)

26' UNDERGROUND CONDUIT,  
GALVANIZED STEEL, 2 1/2" DIA.

STA. 608+95, 3.5' F.O.C.  
CNTRL. 1, CKT. B (LUMINAIRE),  
CKT. 3 (OUTLET), 24" FDN

STA. 610+55, 3.5' F.O.C.  
CNTRL. 1, CKT. B (LUMINAIRE),  
CKT. 4 (OUTLET), 24" FDN

SIDEWALK REMOVAL;  
PCC SIDEWALK 5 INCH  
(TYP.)

HYDRANT =  
STA. 609+71



NORTHGATE PARKWAY

PLT DRIVER = WPT/TPA/LB  
REV TABLE = SFE/ITL/LB  
FILE NUMBER = 130874.LT.07.dgn



USER NAME = sjc  
PLOT SCALE = 20,000 / 1" = 20'  
PLOT DATE = 3/24/2014

DESIGNED - SJC  
DRAWN - SJC  
CHECKED - DNM  
DATE - 3/24/2014

REVISED -  
REVISED -  
REVISED -  
REVISED -

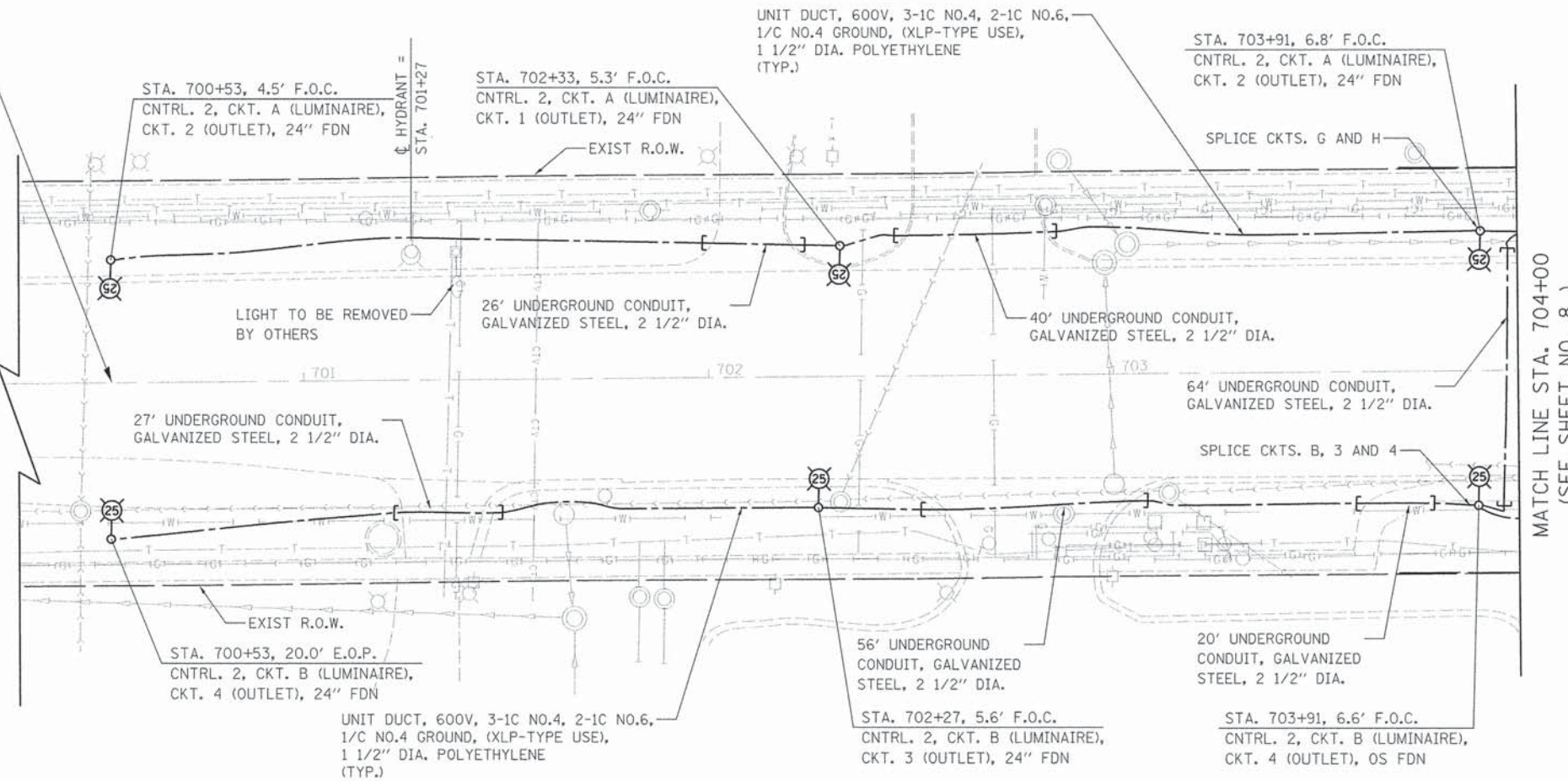
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**VILLAGE OF WHEELING  
DUNDEE ROAD LIGHTING PLANS**

SCALE: 1" = 20' SHEET 7 OF 8 SHEETS STA. 603+21 TO STA. 610+55

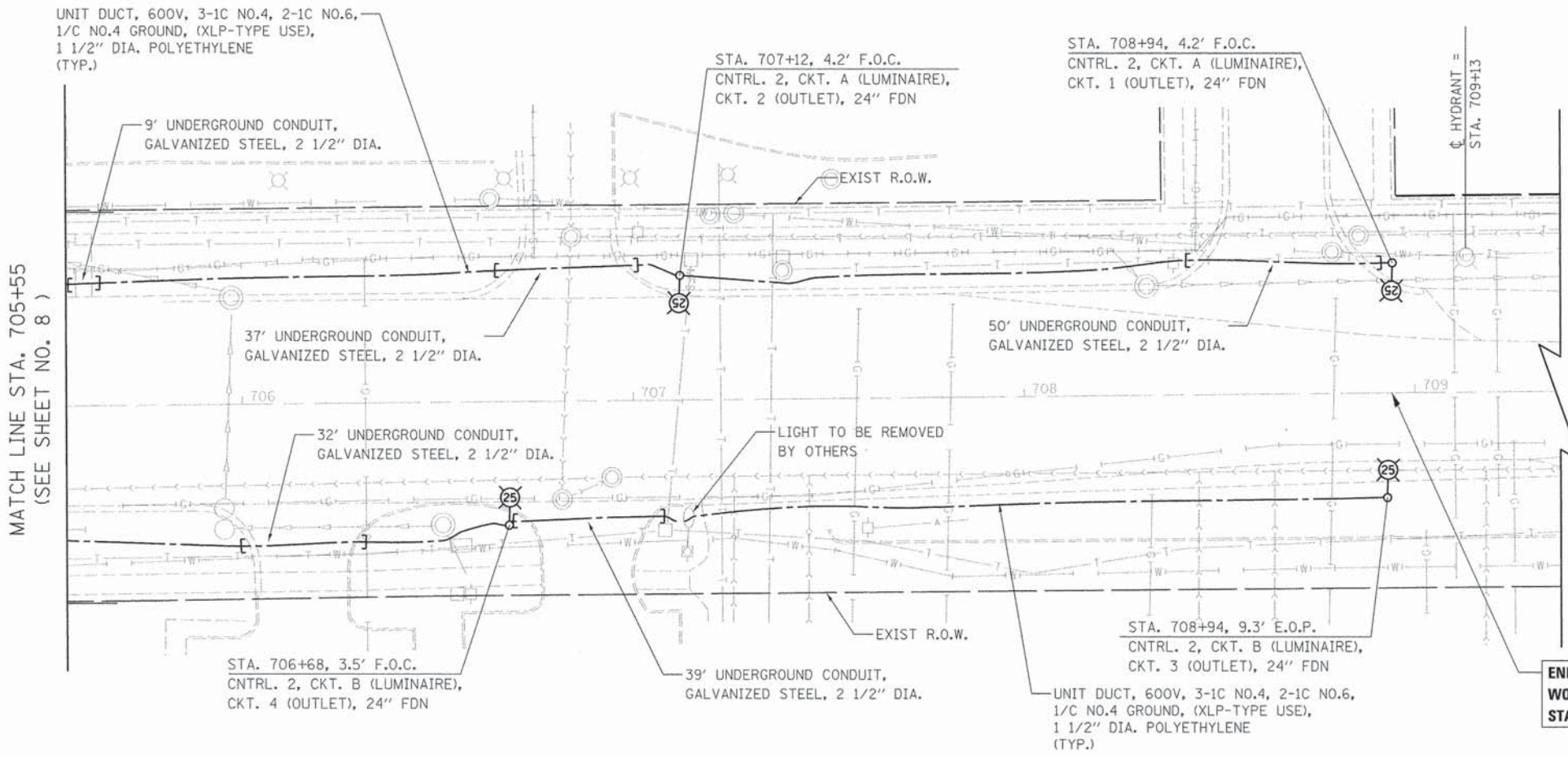
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0343	13-00080-00-LT	COOK	22	11
CONTRACT NO. 61A41			ILLINOIS FED. AID PROJECT	

BEGIN LIGHTING IMPROVEMENT  
WOLF ROAD  
STA. 700+53



MATCH LINE STA. 704+00  
(SEE SHEET NO. 8 )

WOLF ROAD



MATCH LINE STA. 705+55  
(SEE SHEET NO. 8 )

END LIGHTING IMPROVEMENT  
WOLF ROAD  
STA. 708+94

WOLF ROAD

PLOT DRIVER = MATTHEW  
PEN TABLE = #PENTABLE  
FILE NAME = ...2874.LT.DWG

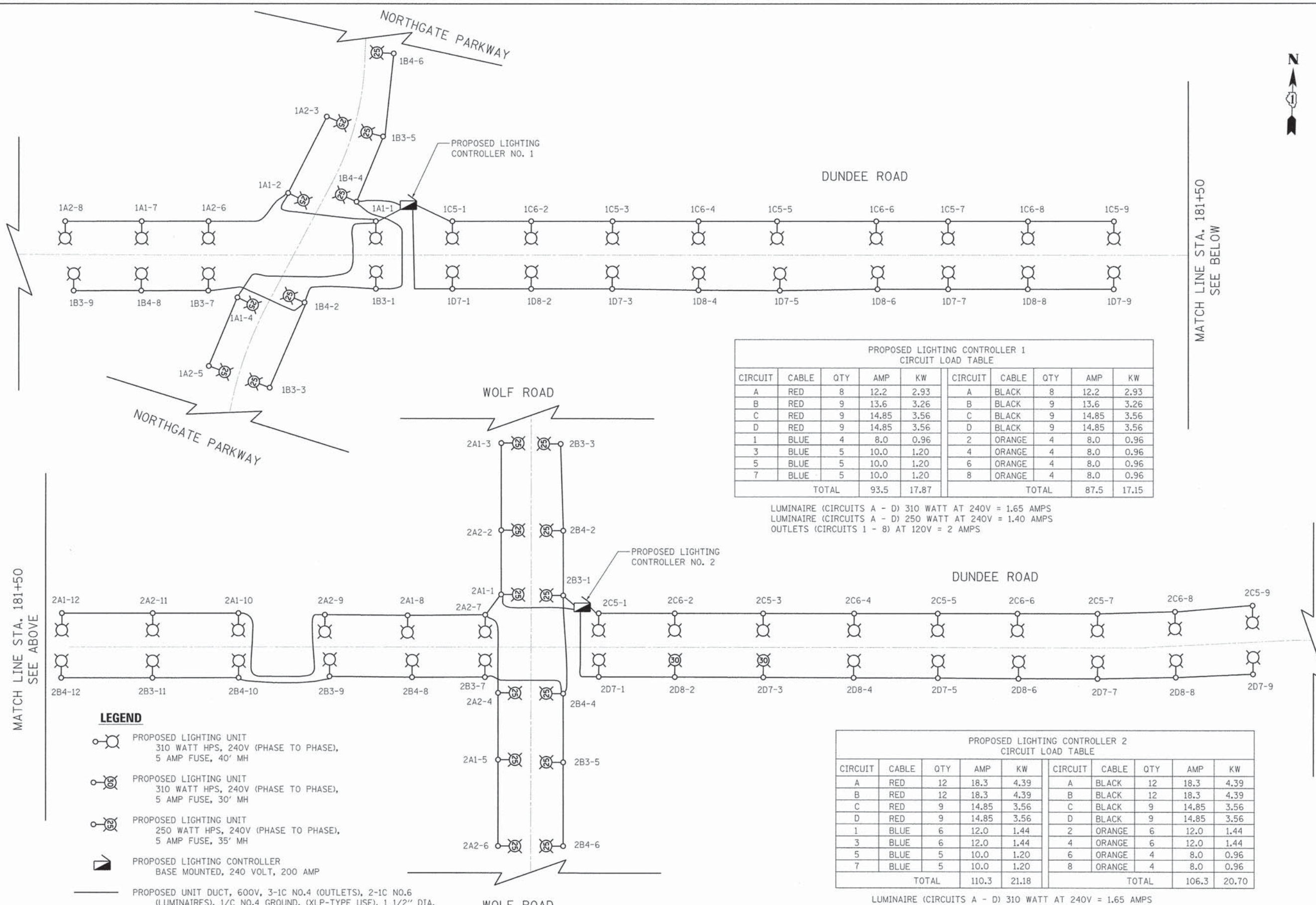


USER NAME	- sjc	DESIGNED	- SJC	REVISED	-
PLOT SCALE	- 20.0000' = 1"	DRAWN	- SJC	REVISED	-
PLOT DATE	- 3/24/2014	CHECKED	- DNM	REVISED	-
		DATE	- 3/24/2014	REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

VILLAGE OF WHEELING  
DUNDEE ROAD LIGHTING PLANS  
SCALE: 1" = 20' SHEET 8 OF 8 SHEETS STA. 700+53 TO STA. 708+94

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0343	13-00080-00-LT	COOK	22	12
CONTRACT NO. 61A41			ILLINOIS FED. AID PROJECT	



**PROPOSED LIGHTING CONTROLLER 1  
CIRCUIT LOAD TABLE**

CIRCUIT	CABLE	QTY	AMP	KW	CIRCUIT	CABLE	QTY	AMP	KW		
A	RED	8	12.2	2.93	A	BLACK	8	12.2	2.93		
B	RED	9	13.6	3.26	B	BLACK	9	13.6	3.26		
C	RED	9	14.85	3.56	C	BLACK	9	14.85	3.56		
D	RED	9	14.85	3.56	D	BLACK	9	14.85	3.56		
1	BLUE	4	8.0	0.96	2	ORANGE	4	8.0	0.96		
3	BLUE	5	10.0	1.20	4	ORANGE	4	8.0	0.96		
5	BLUE	5	10.0	1.20	6	ORANGE	4	8.0	0.96		
7	BLUE	5	10.0	1.20	8	ORANGE	4	8.0	0.96		
<b>TOTAL</b>				<b>93.5</b>	<b>17.87</b>	<b>TOTAL</b>				<b>87.5</b>	<b>17.15</b>

LUMINAIRE (CIRCUITS A - D) 310 WATT AT 240V = 1.65 AMPS  
 LUMINAIRE (CIRCUITS A - D) 250 WATT AT 240V = 1.40 AMPS  
 OUTLETS (CIRCUITS 1 - 8) AT 120V = 2 AMPS

**PROPOSED LIGHTING CONTROLLER 2  
CIRCUIT LOAD TABLE**

CIRCUIT	CABLE	QTY	AMP	KW	CIRCUIT	CABLE	QTY	AMP	KW		
A	RED	12	18.3	4.39	A	BLACK	12	18.3	4.39		
B	RED	12	18.3	4.39	B	BLACK	12	18.3	4.39		
C	RED	9	14.85	3.56	C	BLACK	9	14.85	3.56		
D	RED	9	14.85	3.56	D	BLACK	9	14.85	3.56		
1	BLUE	6	12.0	1.44	2	ORANGE	6	12.0	1.44		
3	BLUE	6	12.0	1.44	4	ORANGE	6	12.0	1.44		
5	BLUE	5	10.0	1.20	6	ORANGE	4	8.0	0.96		
7	BLUE	5	10.0	1.20	8	ORANGE	4	8.0	0.96		
<b>TOTAL</b>				<b>110.3</b>	<b>21.18</b>	<b>TOTAL</b>				<b>106.3</b>	<b>20.70</b>

LUMINAIRE (CIRCUITS A - D) 310 WATT AT 240V = 1.65 AMPS  
 LUMINAIRE (CIRCUITS A - D) 250 WATT AT 240V = 1.40 AMPS  
 OUTLETS (CIRCUITS 1 - 8) AT 120V = 2 AMPS

MATCH LINE STA. 181+50  
SEE ABOVE

MATCH LINE STA. 181+50  
SEE BELOW

**LEGEND**

- PROPOSED LIGHTING UNIT  
310 WATT HPS, 240V (PHASE TO PHASE),  
5 AMP FUSE, 40' MH
- PROPOSED LIGHTING UNIT  
310 WATT HPS, 240V (PHASE TO PHASE),  
5 AMP FUSE, 30' MH
- PROPOSED LIGHTING UNIT  
250 WATT HPS, 240V (PHASE TO PHASE),  
5 AMP FUSE, 35' MH
- PROPOSED LIGHTING CONTROLLER  
BASE MOUNTED, 240 VOLT, 200 AMP
- PROPOSED UNIT DUCT, 600V, 3-1C NO.4 (OUTLETS), 2-1C NO.6  
(LUMINAIRES), 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA.

CONTROLLER NUMBER — POLE NUMBER  
 LUMINAIRE CIRCUIT — OUTLET CIRCUIT

USER NAME = sjc	DESIGNED - SJC	REVISED -
PLOT SCALE = 20,000% 1" = 100'	DRAWN - SJC	REVISED -
PLOT DATE = 3/24/2014	CHECKED - DNM	REVISED -
	DATE - 3/24/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

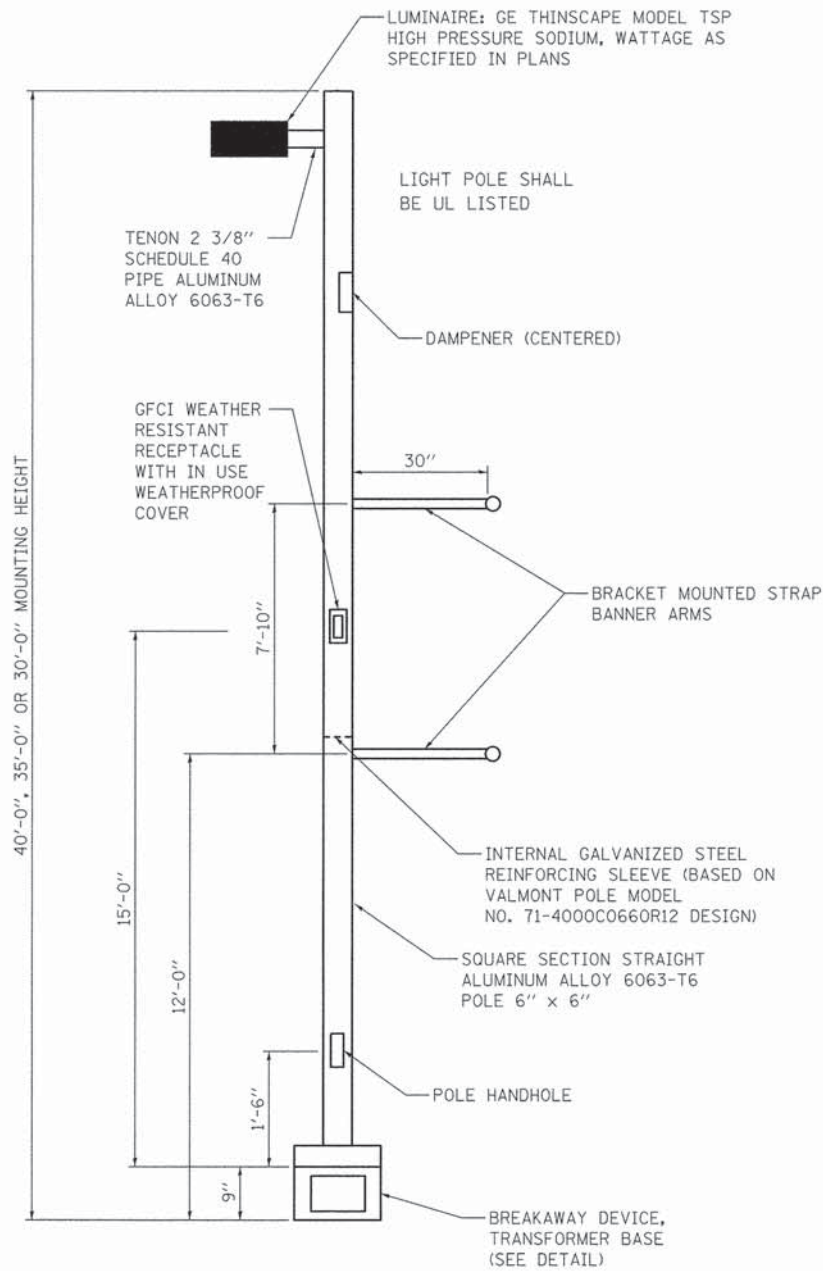
**VILLAGE OF WHEELING  
DUNDEE ROAD LIGHTING PROPOSED WIRING DIAGRAM**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

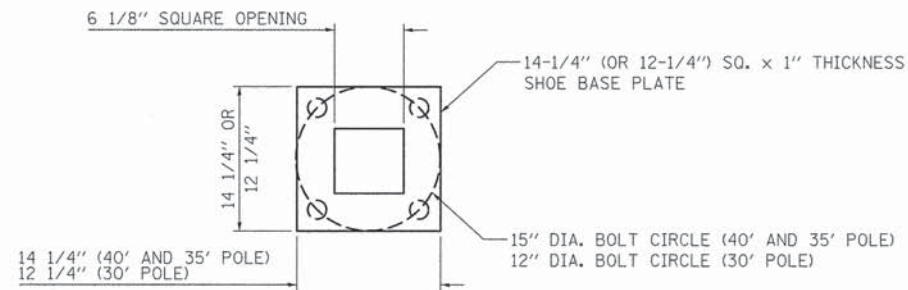
F.A.P. RTE. 0343	SECTION 13-00080-00-LT	COUNTY COOK	TOTAL SHEETS 22	SHEET NO. 13
CONTRACT NO. 61A41			ILLINOIS FED. AID PROJECT	

PLOT DRIVER = MULTIPLOT  
 PLOT TABLE = PRINTABLE  
 FILE NAME = ...3274.Dwg.plt

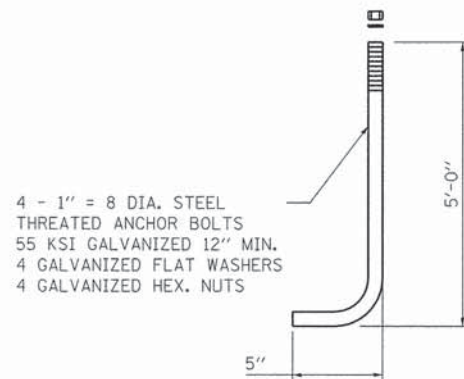




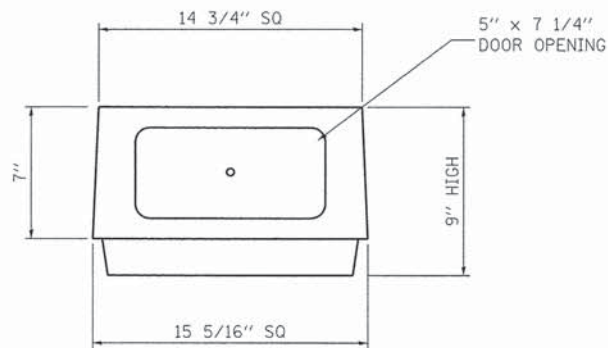
**LIGHT POLE, ALUMINUM**



**BASEPLATE**



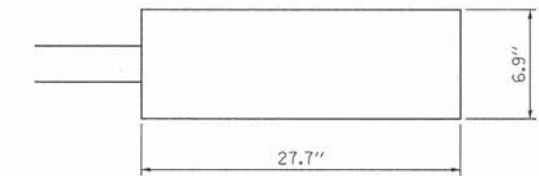
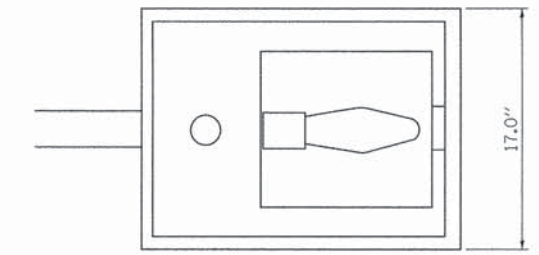
**ANCHOR BOLT**



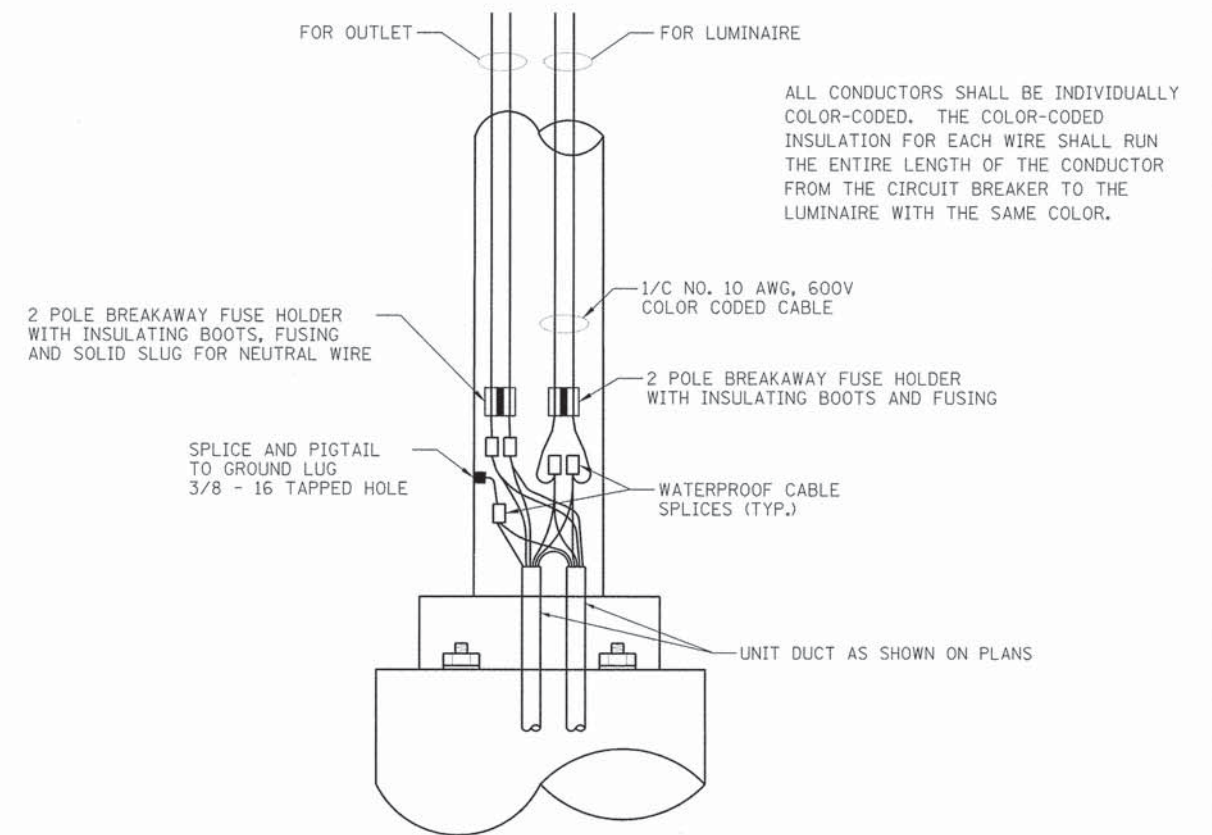
**BREAKAWAY DEVICE, TRANSFORMER BASE**

MATERIAL SHALL CONFORM TO ASTM DESIGNATION: B108 ALLOY 356-T6

BASE CONFORMS TO BREAKAWAY CRITERIA OF AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (1985)



**LUMINAIRE, SODIUM VAPOR, RECTILINEAR TYPE**



**ROADWAY POLE HANDHOLE WIRING DIAGRAM**

PLOT DRIVER = W:\LTD\PLS  
PEN TABLE = A:\PENTABLES  
FILE NAME = ...3574\_Det.dgn



USER NAME = sjc	DESIGNED = SJC	REVISED =
PLOT SCALE = 20/1000 1/2" = 1'	DRAWN = SJC	REVISED =
PLOT DATE = 3/24/2014	CHECKED = DNM	REVISED =
	DATE = 3/24/2014	REVISED =

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

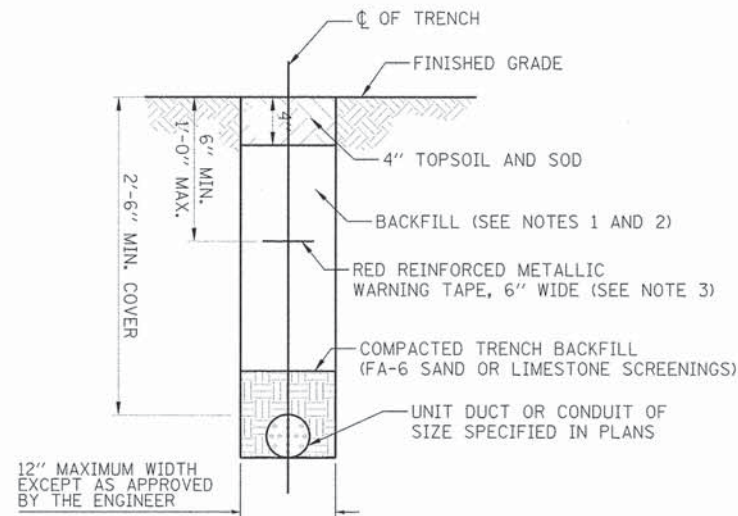
VILLAGE OF WHEELING  
DUNDEE ROAD LIGHTING DETAILS

SCALE: NONE SHEET . OF . SHEETS STA. TO STA.

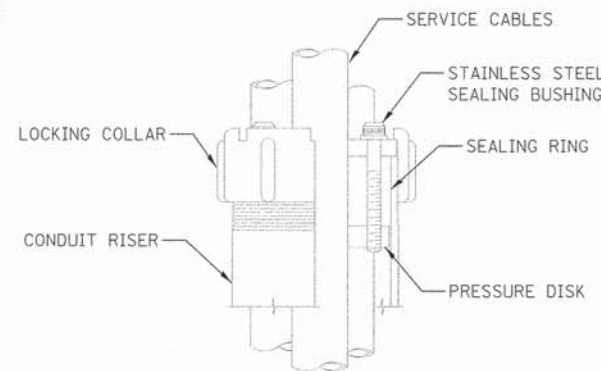
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0343	13-00080-00-LT	COOK	22	14
CONTRACT NO. 61A41				
ILLINOIS FED. AID PROJECT				

**NOTES:**

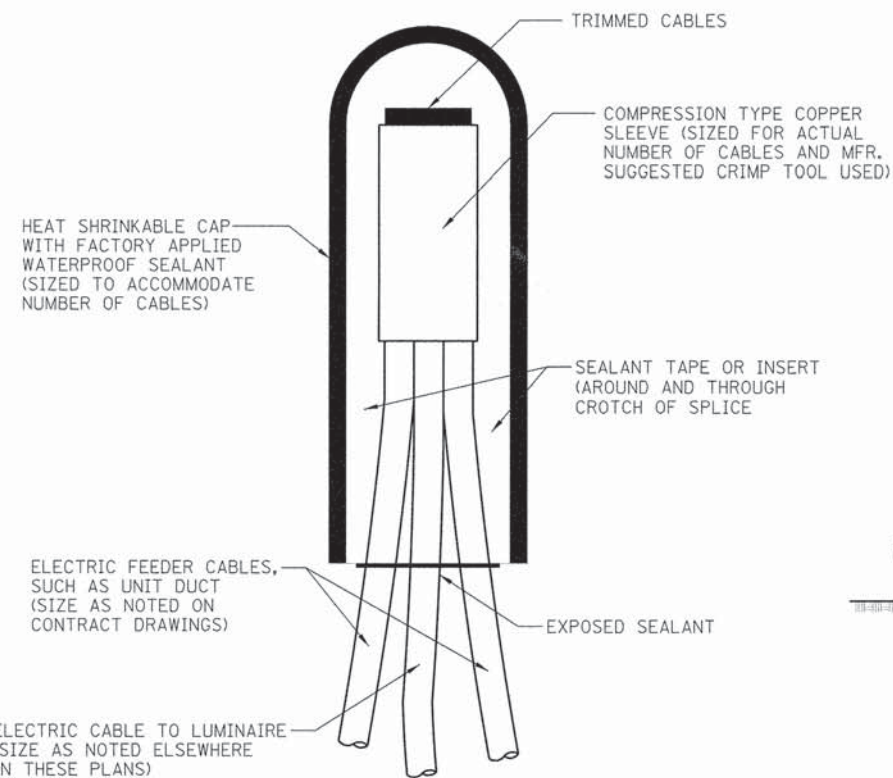
1. IN GRASS COVERED AREAS, THE BACKFILL MAY BE COMPACTED EARTH.
2. TRENCHES WITHIN 2' OF PROPOSED OR EXISTING STREETS, DRIVEWAYS, OR SIDEWALKS WILL BE BACKFILLED WITH COMPACTED FA-6 SAND OR LIMESTONE SCREENINGS.
3. WARNING TAPE WILL BE RED WITH BLACK LETTERING TO READ "CAUTION - ELECTRIC LINE BURIED BELOW".
4. ALL GRASS COVERED AREAS DISTURBED DURING CONSTRUCTION WILL BE RESTORED WITH 4" OF TOPSOIL AND SOD.



**TYPICAL TRENCH CROSS SECTION**

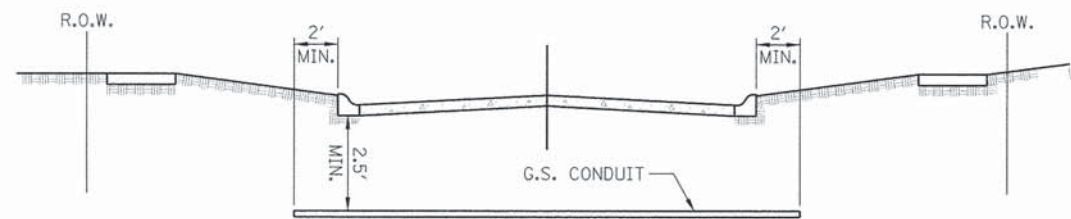


**SEALING BUSHING DETAIL**



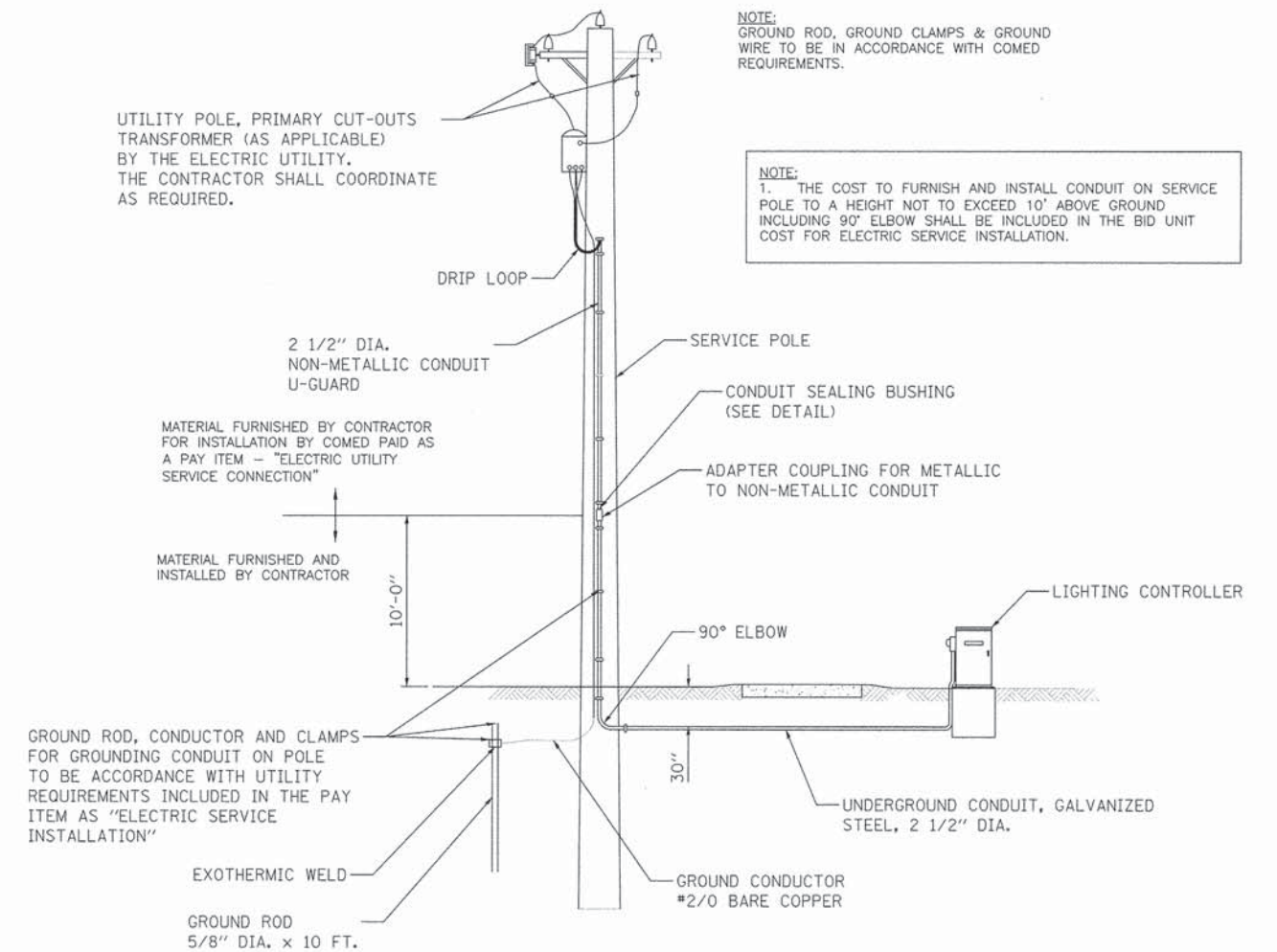
**SPlicing ELECTRIC CABLES  
BASIC MATERIALS AND METHODS**

NOTE: NUMBER OF CABLES IN SPLICE MAY VARY



- ① CONDUIT SHALL BE HEAVY WALL RIGID G.S. CONDUIT.
- ② CONDUIT SHALL EXTEND A MINIMUM OF 2 FT. BEYOND BACK OF CURB.
- ③ CONDUIT SHALL BE A MINIMUM OF 2.5 FT. BELOW BOTTOM OF CURB.

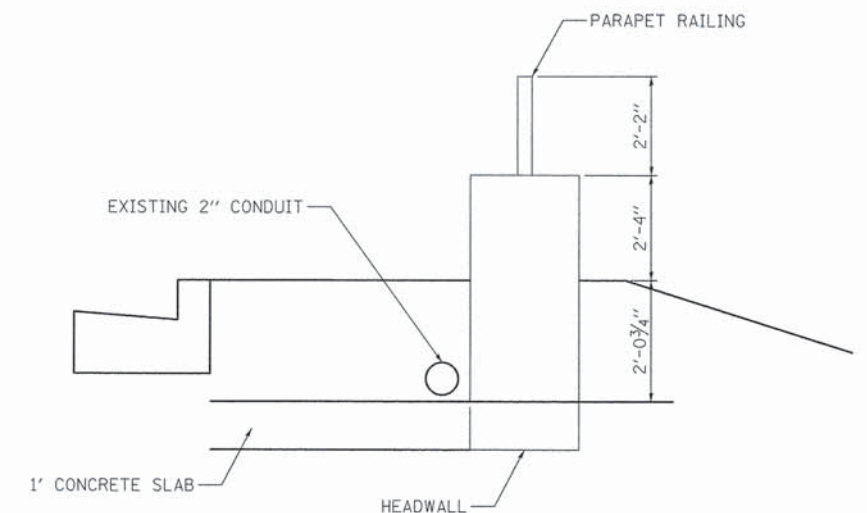
**ELECTRICAL CONDUIT UNDER PAVEMENT**



**ELECTRIC SERVICE INSTALLATION**

NOTE: GROUND ROD, GROUND CLAMPS & GROUND WIRE TO BE IN ACCORDANCE WITH COMED REQUIREMENTS.

NOTE: 1. THE COST TO FURNISH AND INSTALL CONDUIT ON SERVICE POLE TO A HEIGHT NOT TO EXCEED 10' ABOVE GROUND INCLUDING 90° ELBOW SHALL BE INCLUDED IN THE BID UNIT COST FOR ELECTRIC SERVICE INSTALLATION.



**EXISTING SIDEWALK OVER BRIDGE  
(SOUTH SIDE STA. 185+40 TO 186+42)**

PLOT DRIVER: WALTERS  
PEN TABLE: WALTERS  
FILE NAME: ...2874\_001.dgn



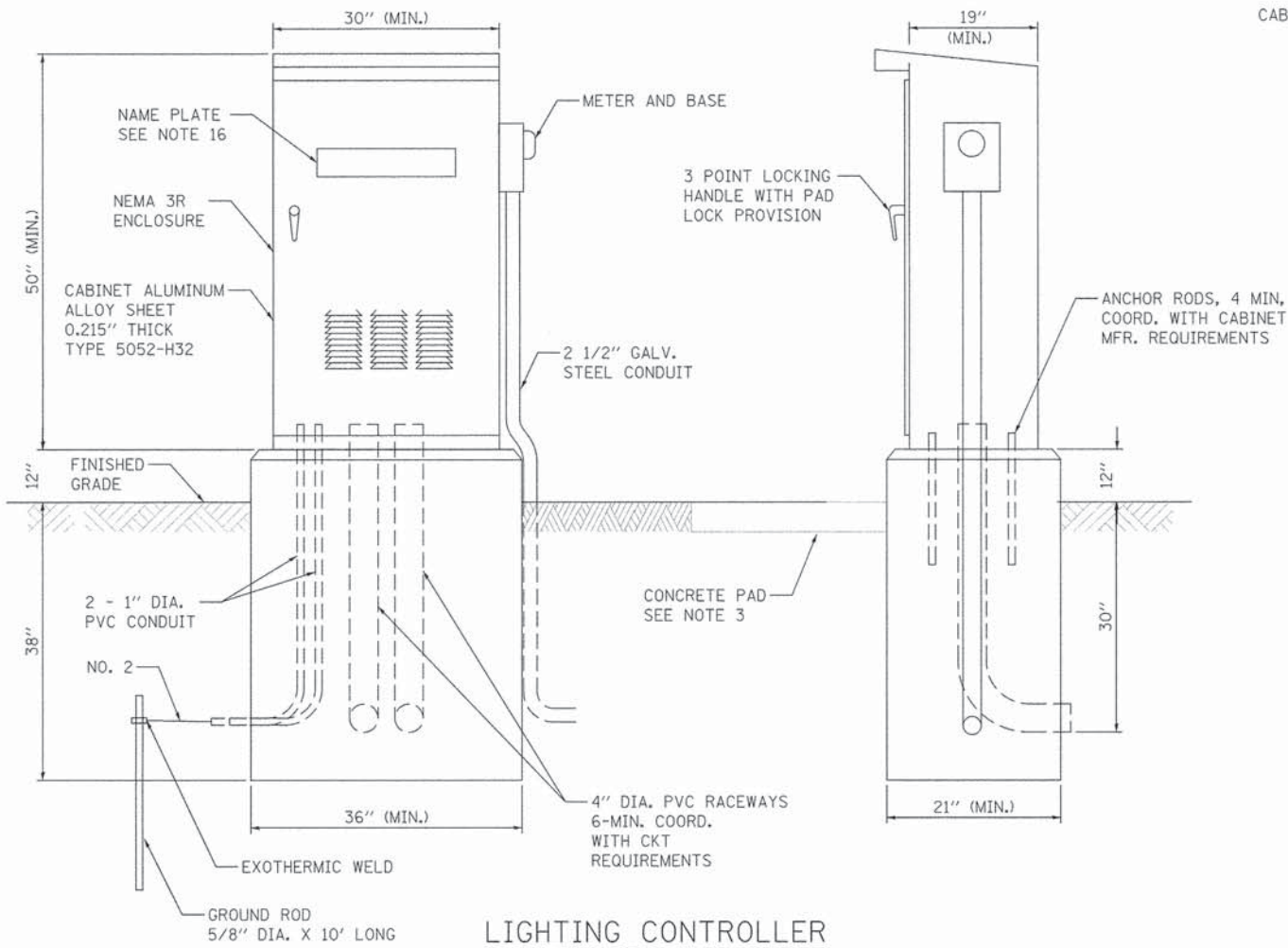
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PLOT SCALE: 28.8888" = 1'	DRAWN: SJC	REVISED: -
PLOT DATE: 3/24/2014	CHECKED: DNM	REVISED: -
	DATE: 3/24/2014	REVISED: -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**VILLAGE OF WHEELING  
DUNDEE ROAD LIGHTING DETAILS**

F.A.P. RTE. 0343	SECTION 13-00080-00-LT	COUNTY COOK	TOTAL SHEETS 22	SHEET NO. 15
CONTRACT NO. 61A41				
ILLINOIS FED. AID PROJECT				

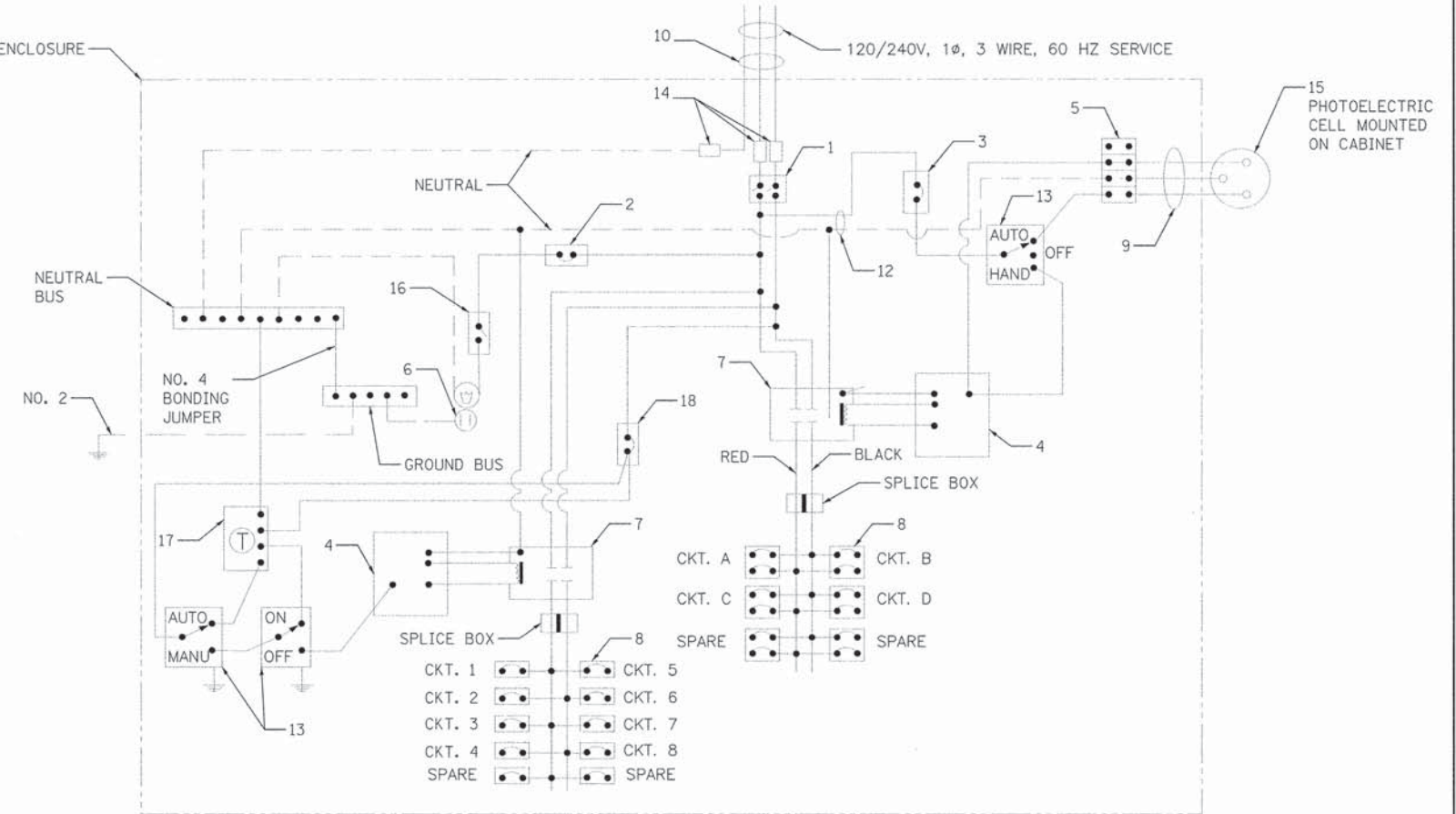
SCALE: NONE SHEET . OF . SHEETS STA. TO STA.



**LIGHTING CONTROLLER  
BASE MOUNTED, 240 VOLT, 200 AMP**

**NOTES:**

- THE CABINET SHALL BE FABRICATED FROM 0.125" THICK ALUMINUM ALLOY SHEET AND SHALL BE REINFORCED WITH ALUMINUM ANGLES. THE CABINET DOOR SHALL BE NEMA TYPE 3 CONSTRUCTION WITH NEOPRENE GASKET.
- FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
- IN FRONT OF THE CONTROLLER CABINET DOOR, REMOVE VEGETATION AND 2" TOP SOIL. LEVEL THE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD 36" X 60" X 4" MIN. SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
- DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
- DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
- DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 1/4" DIA. STAINLESS STEEL HINGE PIN.
- ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
- CONTROL WIRING SHALL BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED COPPER. THE ENDS OF ALL CONTROL WIRES SHALL BE IDENTIFIED.
- METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.
- CABINET SHALL BE ALUMINUM FINISH.
- THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
- ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.  
R = RED      BL = BLUE      W = WHITE  
B = BLACK    Y = YELLOW      G = GREEN
- PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICE IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
- ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.
- THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
- 12" X 16" STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "VILLAGE OF WHEELING LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.



**LIGHTING CONTROLLER WIRING DIAGRAM**

**LIGHTING CONTROLLER COMPONENT SCHEDULE**

ITEM	SPECIFICATION OR EQUAL
① MAIN CIRCUIT BREAKER	200 AMPERE, 2 POLE, 240 VOLT RATING INTERRUPTING CAPACITY NOT LESS THAN 25,000 RMS SYMMETRICAL AMPS AT 600V
② LAMPHOLDER CIRCUIT BREAKER	15 AMPERE, 1 POLE, 120 VOLT RATING INTERRUPTING CAPACITY NOT LESS THAN 14,000 RMS SYMMETRICAL AMPS AT 277V
③ PHOTOELECTRIC CELL CONTROL CIRCUIT BREAKER	15 AMPERE, 1 POLE, 120 VOLT RATING INTERRUPTING CAPACITY NOT LESS THAN 14,000 RMS SYMMETRICAL AMPS AT 277V
④ AUXILIARY RELAY	120 VOLT SPST 60 HZ COIL
⑤ FOUR POINT TERMINAL BLOCK	600 VOLT
⑥ LAMPHOLDER AND OUTLET	120 VOLT SWITCHED LAMPHOLDER AND 20 AMP GFI DUPLEX RECEPTACLE. WEATHERPROOF SINGLE GANG CAST ALUMINUM BOX AND WEATHERPROOF COVER.
⑦ REMOTE CONTROL SWITCH - CONTACTOR	100 AMPERE, 2 POLE, 240 VOLT RATING, 120V COIL. ELECTRICALLY OPERATED, MECHANICALLY HELD.
⑧ BRANCH LINE CIRCUIT BREAKERS	CKTS. A - D = 30 AMP, 2 POLE, 240 VOLT RATING CKTS. 1 - 8 = 20 AMP, 1 POLE, 120 VOLT ALL CIRCUITS SHALL BE INTERRUPTING CAPACITY NOT LESS THAN 10,000 RMS SYMMETRICAL AMPS AT 277V
⑨ PHOTOELECTRIC CELL CONTROL WIRE	3-600V XLP NO. 10
⑩ SERVICE CABLES	3-600V (XLP-TYPE USE) NO. 3/0
⑪ BRANCH LINE CABLES	SEE PLANS FOR SIZE
⑫ CONTROL WIRE	2-600V XLP NO. 10
⑬ HAND-AUTO-OFF CONTROL SWITCH	10 AMPERE, 3 POLE, 120 VOLT.
⑭ LIGHTING ARRESTOR	BRACKET MOUNTED SURGE ARRESTOR FOR 120/240V 3W SERVICE
⑮ PHOTOELECTRIC CELL	120 SECONDS OFF TIME DELAY, 120V
⑯ MICRO SWITCH	MOUNT WITH ACTUATOR TO SWITCH WHEN DOOR IS OPEN
⑰ TIME CLOCK	ASTRONOMICAL TIME CLOCK
⑱ TIME CLOCK CONTROL CIRCUIT BREAKER	15 AMPERE, 1 POLE, 120 VOLT RATING INTERRUPTING CAPACITY NOT LESS THAN 14,000 RMS SYMMETRICAL AMPS AT 277V

PLOT CENTER - 4875 SHELBY  
 PEN - HUBBLE - 4875 SHELBY  
 FILE NAME - 13-03074-00-24.dwg



USER NAME - sjc	DESIGNED - SJC	REVISED -
PLOT SCALE - 288,0000 1/16"	DRAWN - SJC	REVISED -
PLOT DATE - 3/24/2014	CHECKED - DNM	REVISED -
	DATE - 3/24/2014	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**VILLAGE OF WHEELING  
DUNDEE ROAD LIGHTING DETAILS**

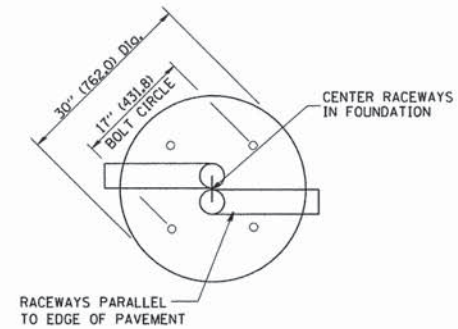
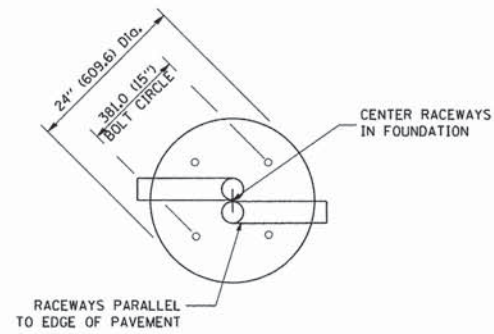
SCALE: NONE SHEET . OF . SHEETS STA. TO STA.

F.A.P. RTE. 0343	SECTION 13-00080-00-LT	COUNTY COOK	TOTAL SHEETS 22	SHEET NO. 16
CONTRACT NO. 61A41			ILLINOIS FED. AID PROJECT	



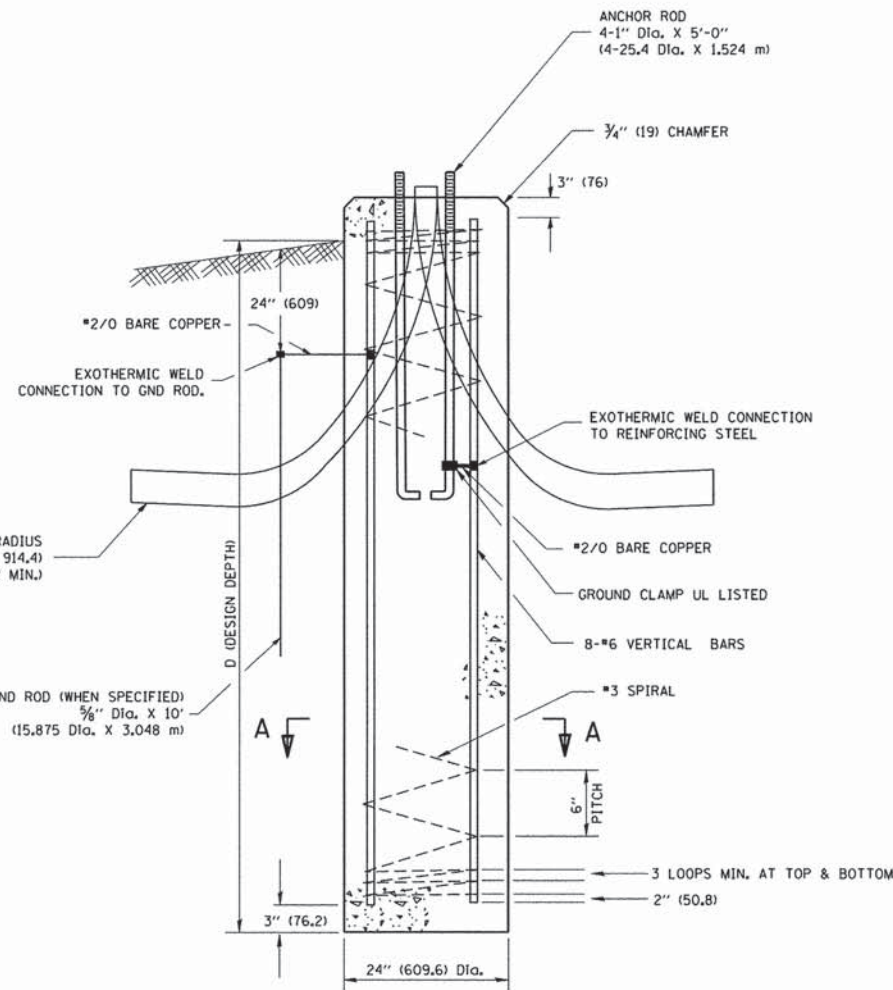
**LIGHT POLE FOUNDATION DEPTH TABLE**  
35 FT. TO 40 FT. MOUNTING HEIGHT

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SO. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY Qu = 0.75 TON/SO. FT.	9'-6" (2.93 m)	10'-9" (3.23 m)
STIFF CLAY Qu = 1.50 TON/SO. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND φ = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND φ = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND φ = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)

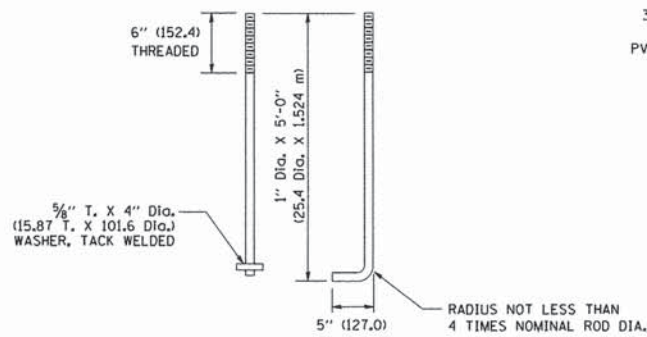


**TOP VIEW**

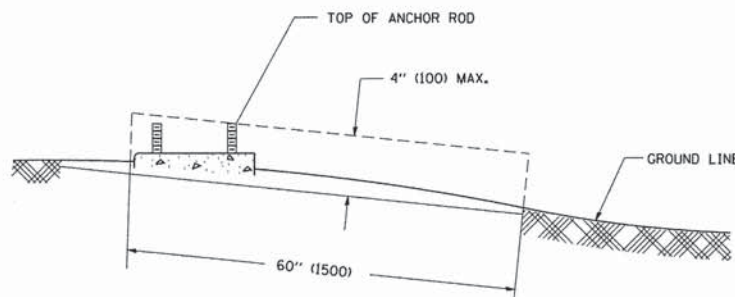
**TOP VIEW**



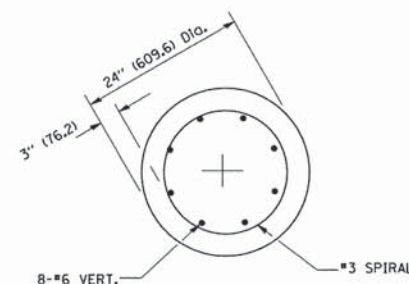
**FOUNDATION DETAIL**



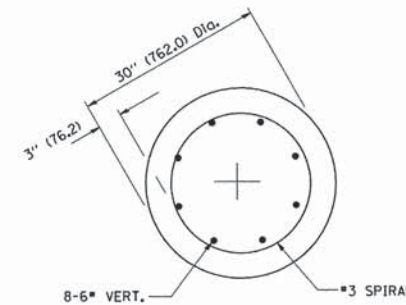
**ANCHOR ROD DETAIL**



**FOUNDATION EXTENSION DETAIL**



**SECTION A-A**



**SECTION A-A**

**NOTES**

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED. IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS S1. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

PLOT: C:\WORK\1111\1111.dwg  
 PEN: TABLE  
 FILE NAME: 1111.dwg

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PLOT DATE = 3/24/2014	CHECKED = DNM	REVISED =
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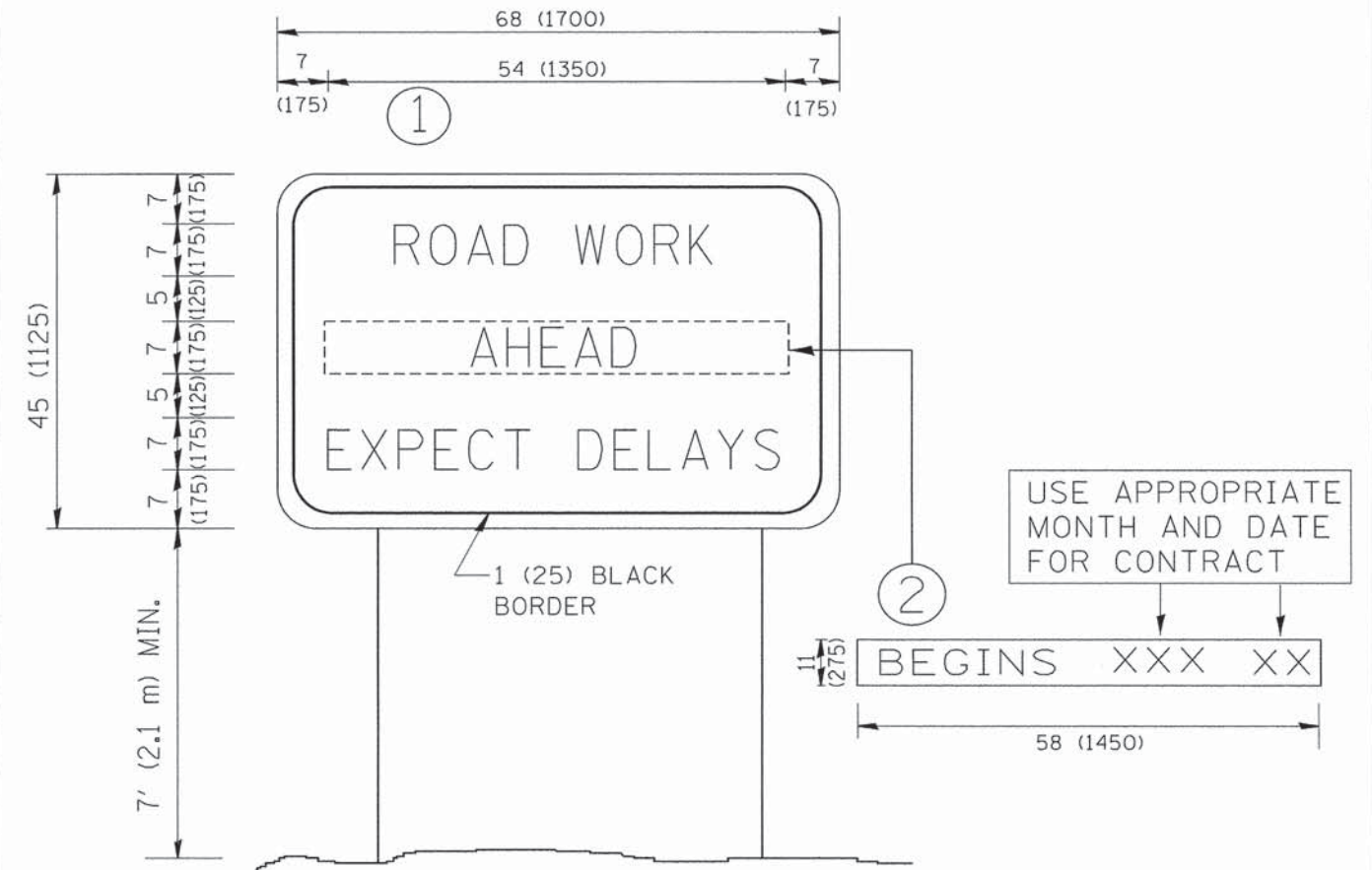
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**VILLAGE OF WHEELING**  
**LIGHT POLE FOUNDATION DETAIL - 35' TO 40' M.H., 15" B.C.**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 0343	SECTION 13-00080-00-LT	COUNTY COOK	TOTAL SHEETS 22	SHEET NO. 17
				CONTRACT NO. 61A41
ILLINOIS FED. AID PROJECT				





**NOTES:**

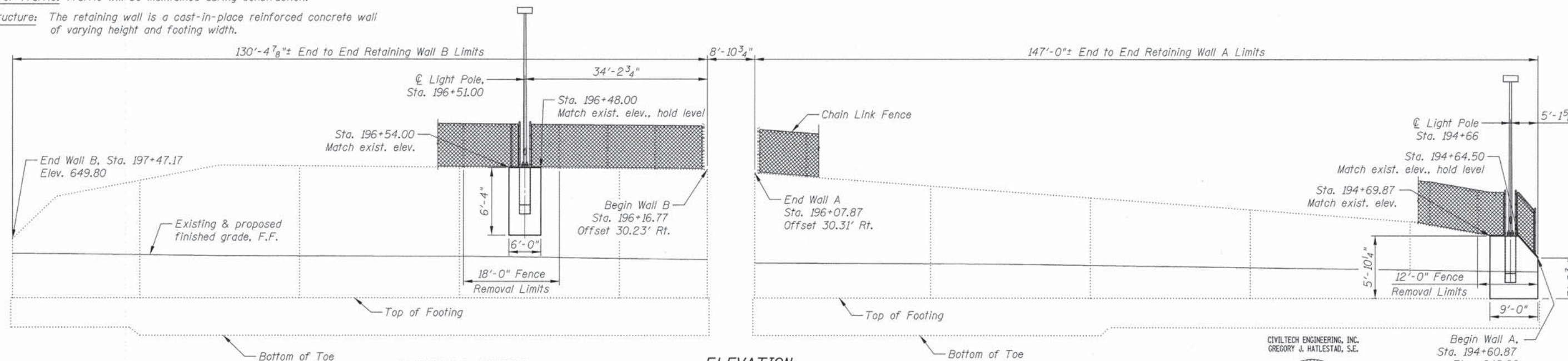
1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.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

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

FILE NAME = W:\diststd\22x34\to22.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD INFORMATION SIGN</b>		F.A.P. RTE. 0343	SECTION 13-00080-00-LT	COUNTY COOK	TOTAL SHEETS 22	SHEET NO. 19	
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED - R. MIRS 12-11-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TC-22		CONTRACT NO. 61A41		
	PLOT DATE = 1/4/2008	CHECKED -	REVISED - T. RAMMACHER 02-02-99				FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT	
		DATE -	REVISED - C. JUCIUS 01-31-07									

Maintenance of Traffic: Traffic will be maintained during construction.

Existing Structure: The retaining wall is a cast-in-place reinforced concrete wall of varying height and footing width.



**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	3.2
Concrete Structures	Cu. Yd.	3.7
Reinforcement Bars, Epoxy Coated	Pound	310
Chain Link Fence, 4'	Foot	30
Braced Excavation	Cu. Yd.	7.9
Chain Link Fence Removal	Foot	30

**GENERAL NOTES:**

1. Reinforcement bars designated (E) shall be Epoxy Coated.
2. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

**ELEVATION**

(Looking at front face of wall)

**DESIGN STRESSES**

**FIELD UNITS**

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)

**EXISTING UNITS**

$f'_c = 3,500$  psi  
 $f_y = 40,000$  psi (Reinforcement)

CIVILTECH ENGINEERING, INC.  
 GREGORY J. HATLESTAD, S.E.



GREGORY J. HATLESTAD, S.E.  
 081-005562

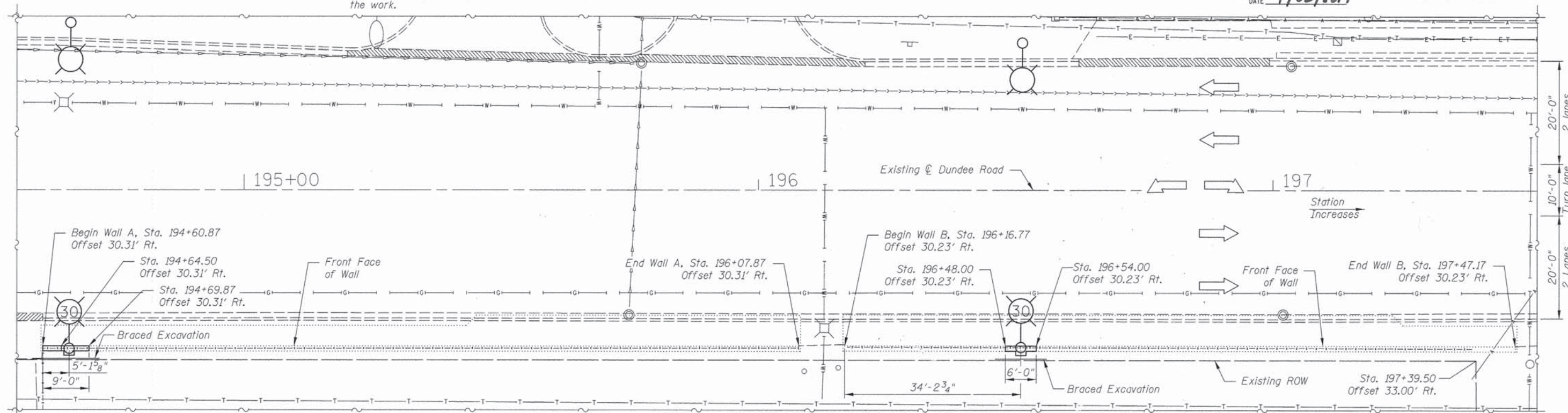
EXP 11/30/2014  
 DATE 4/08/2014

**INDEX OF SHEETS**

- S1 General Plan & Elevation
- S2 Wall Details I
- S3 Wall Details II

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications for Highway Bridges, 17th Ed.



**PLAN**

Notes:  
 Offsets are measured from existing @ Dundee Road to the front face of existing wall.  
 F.F. = Front face

**GENERAL PLAN & ELEVATION  
 WALL A & B; DUNDEE ROAD  
 SECTION 13-00080-01-LT**

**COOK COUNTY**

**STA. 194+60.87 TO STA. 197+47.17**

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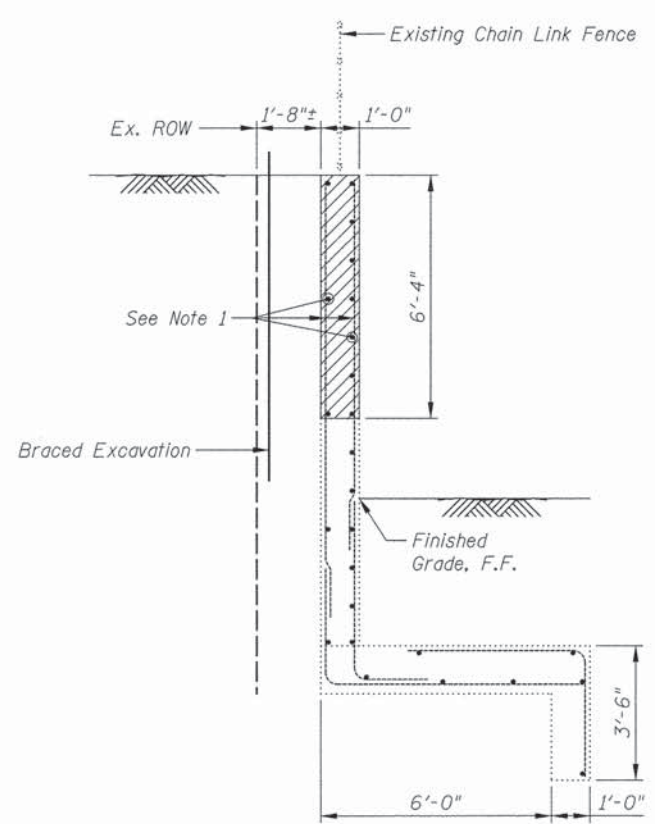
450 E Devon Ave, Suite 300  
 Itasca, Illinois 60143  
 Tel: 630.773.3900 Fax: 630.773.3975  
 www.civiltechinc.com

DRAWN - J. SCHROEDER	REVISED -
DESIGNED - J. SCHROEDER	REVISED -
CHECKED - M. LANGE	REVISED -
DATE - 3-24-2014	REVISED -

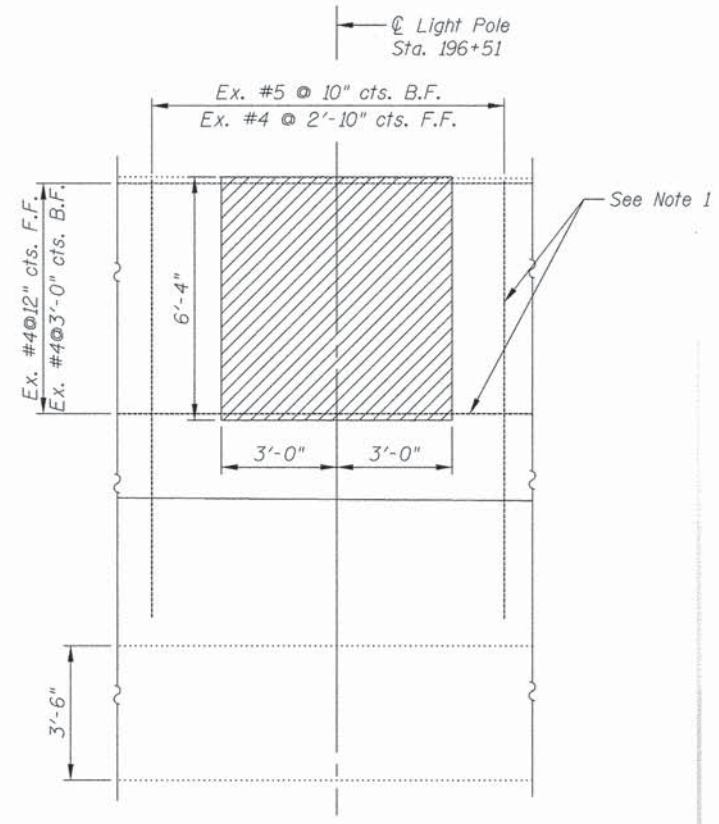
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN & ELEVATION  
 VILLAGE OF WHEELING  
 DUNDEE LIGHTING PLANS**

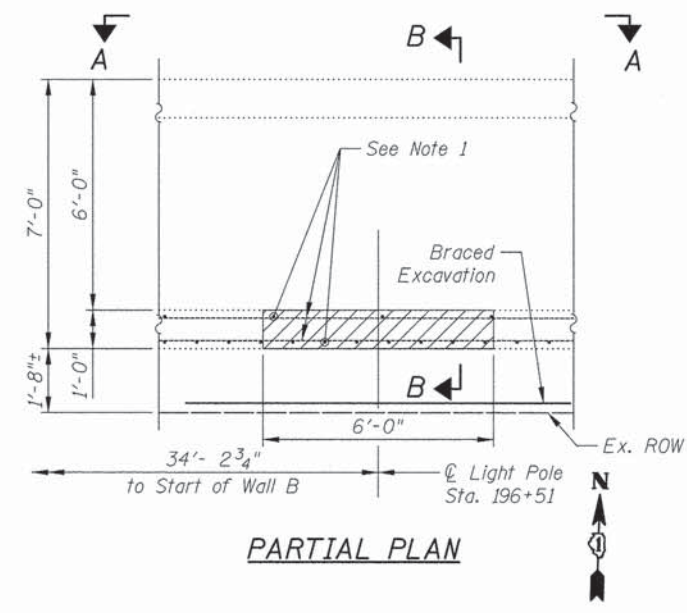
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			CONTRACT NO. 61A41	
ILLINOIS FED. AID PROJECT				



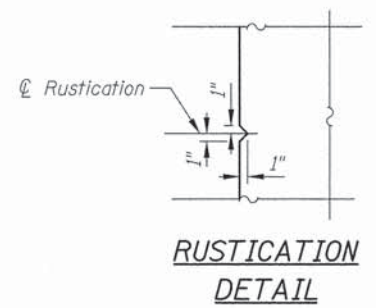
**SECTION B-B**



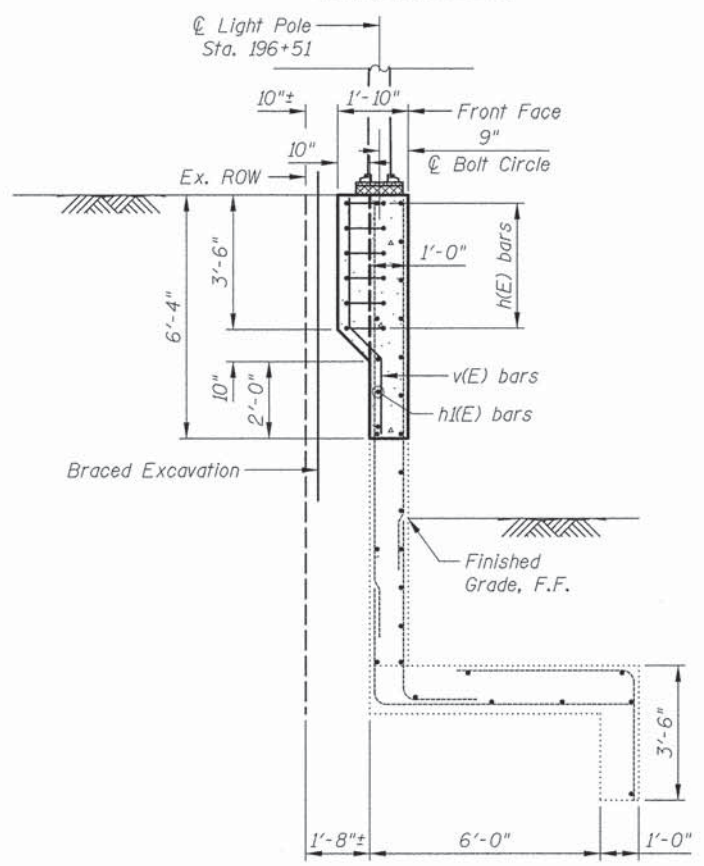
**ELEVATION A-A**



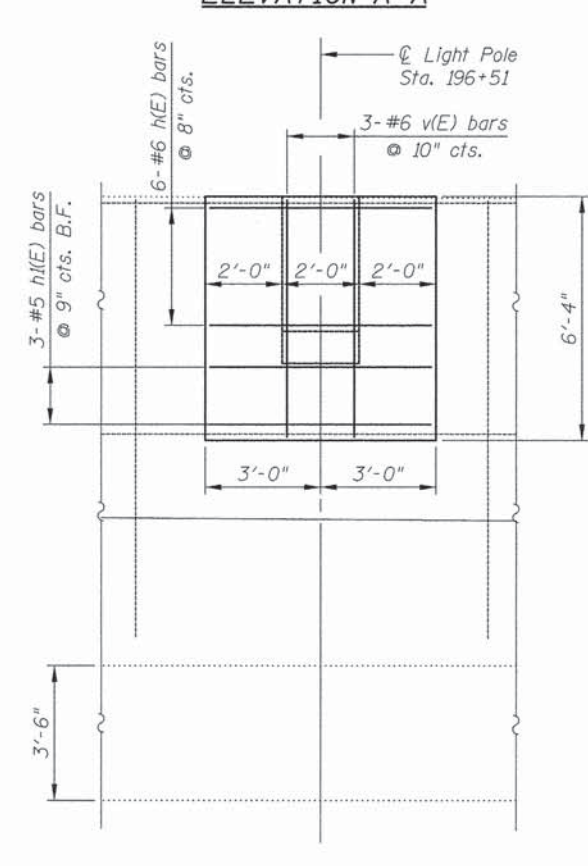
**PARTIAL PLAN**



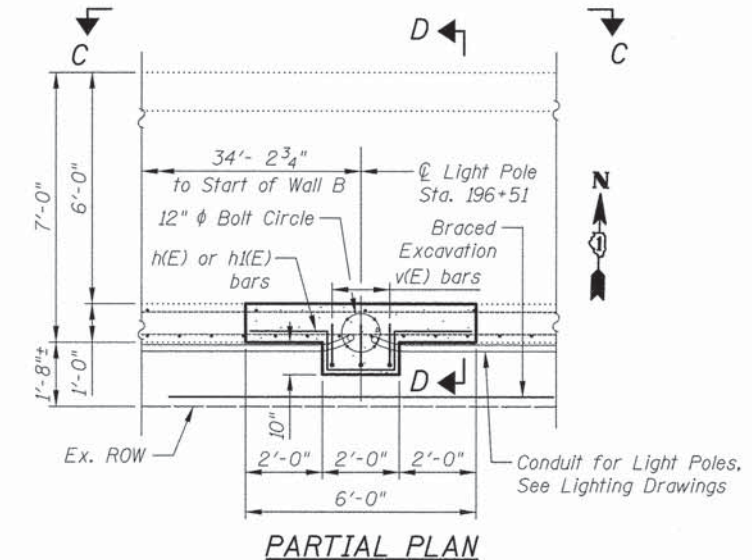
**RUSTICATION DETAIL**



**SECTION D-D**



**ELEVATION C-C**



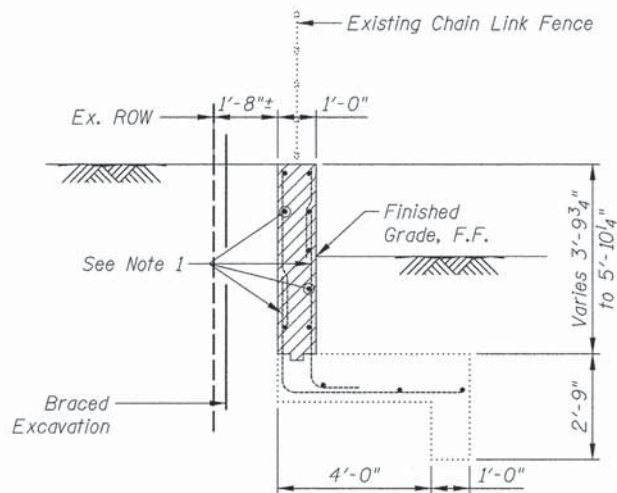
**PARTIAL PLAN**

- Notes:
- Existing reinforcement shall be cleaned, straightened and incorporated into the new construction. Cost included with Concrete Removal.
  - All work and excavation must be done within the existing ROW. Cost included with Braced Excavation.
  - Existing chain link fence to be removed to install new light poles. See sheet S1 for Chain Link Fence Removal limits.
  - See Sheet S3 for quantities.
  - Wall rustication shall match existing.
  - See Lighting Plans for anchor bolt details.
  - F.F. = Front face, B.F. = Back face.
- LEGEND**
- Concrete Removal

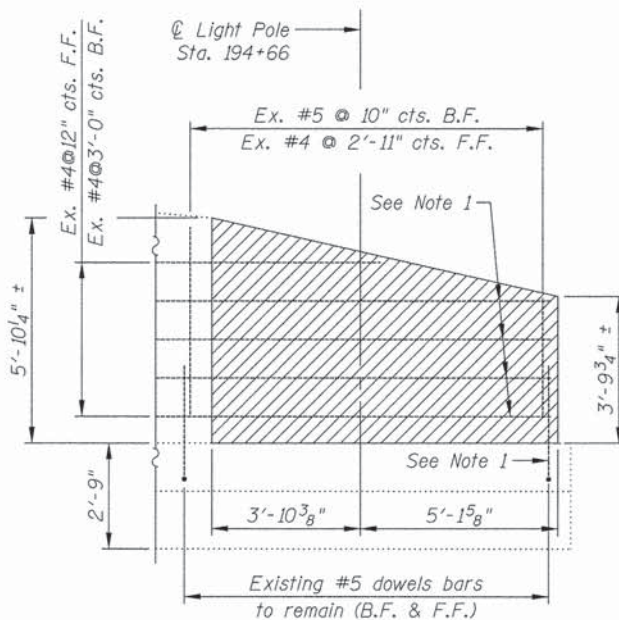
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DRAWN - J. SCHROEDER	REVISED -
DESIGNED - J. SCHROEDER	REVISED -
CHECKED - M. LANGE	REVISED -
DATE - 3-24-2014	REVISED -

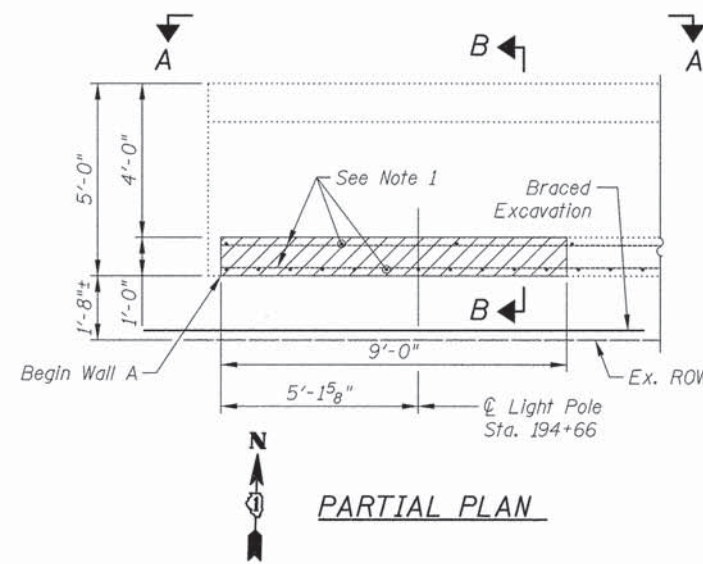
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0343	13-00080-01-LT	COOK	22	21
CONTRACT NO. 61A41				



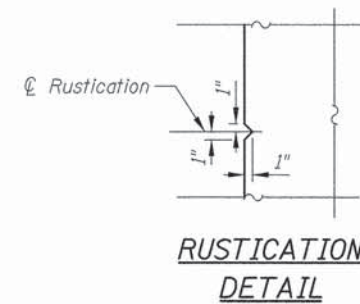
SECTION B-B



ELEVATION A-A



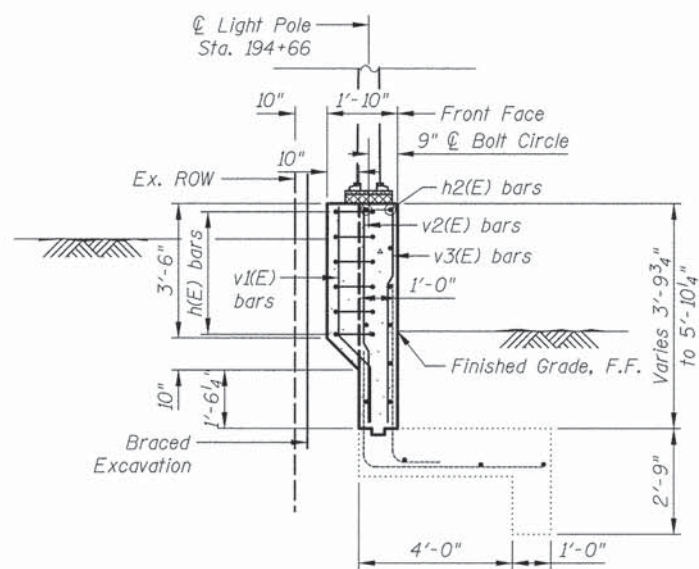
PARTIAL PLAN



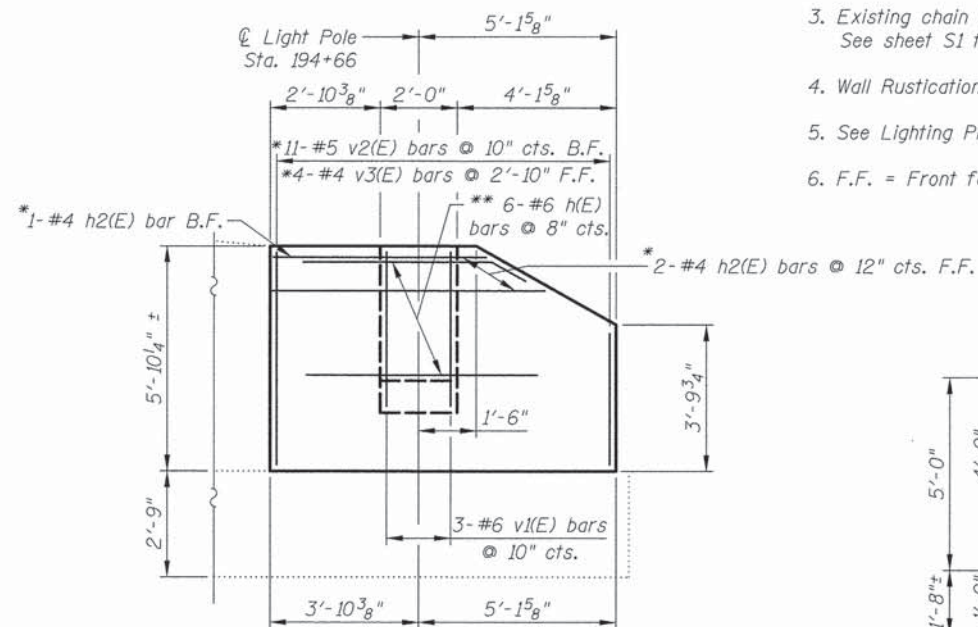
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	12	#6	7'-9"	
h1(E)	3	#5	5'-8"	
h2(E)	3	#4	7'-2"	
v(E)	3	#6	6'-6"	
v1(E)	3	#6	5'-11"	
v2(E)	11	#5	5'-6"	
v3(E)	4	#4	5'-6"	
Item	Unit	Quantity		
Concrete Removal	Cu. Yd.	3.2		
Concrete Structures	Cu. Yd.	3.7		
Reinforcement Bars, Epoxy Coated	Pound	310		
Chain Link Fence, 4'	Foot	30		
Braced Excavation	Cu. Yd.	7.9		
Chain Link Fence Removal	Foot	30		

- Notes:
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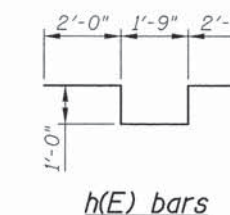
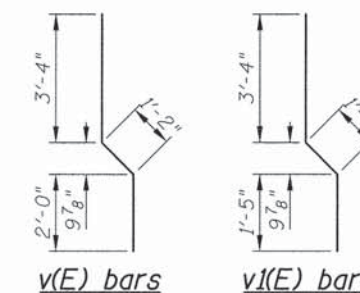
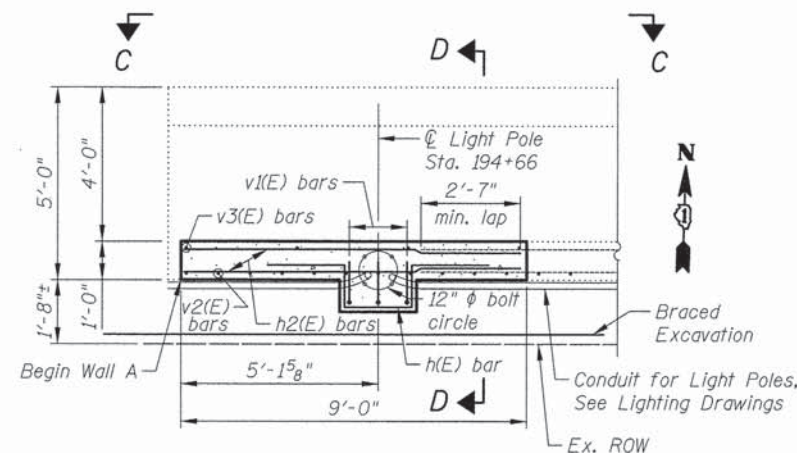


SECTION D-D



ELEVATION C-C

\* Field cut as required  
\*\* Field bend top bars



LEGEND

Concrete Removal

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450 E Devon Ave, Suite 300  
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DRAWN - J. SCHROEDER  
DESIGNED - J. SCHROEDER  
CHECKED - M. LANGE  
DATE - 3-24-2014

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

WALL DETAILS II  
VILLAGE OF WHEELING  
DUNDEE LIGHTING PLAN  
SHEET NO. S3 OF S3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0343	13-00080-01-LT	COOK	22	22
CONTRACT NO. 61A41				
ILLINOIS FED. AID PROJECT				