3/21/2007

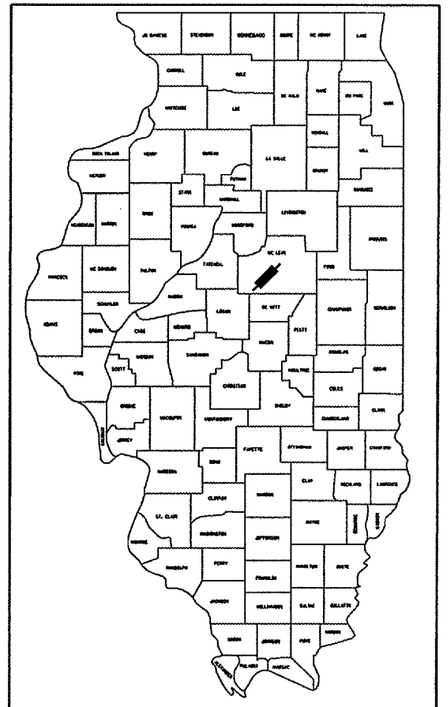
6-15-07 Letting, Item 300

FAI ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	57(RA-L)	MCLEAN	12.	1
F.A.I.N.A. NO.	ILLINOIS	PROJECT		

CONTRACT NO. 70626
D-95-140-06

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED HIGHWAY IMPROVEMENT



LOCATION OF SECTION INDICATED THUS:- ▬

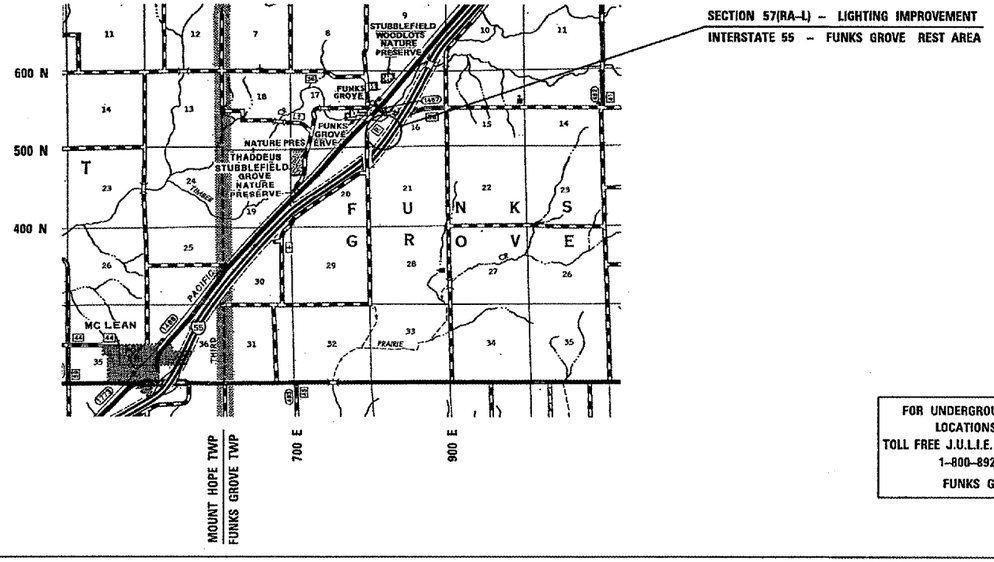
FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3

SCALES { PLAN; PROFILE HORIZ. – N.A.; PROFILE VERT. – N.A.; CROSS SECTIONS – N.A. HORIZONTAL VERTICAL

F.A.I. ROUTE 55 (INTERSTATE 55)
SECTION 57(RA-L)
MCLEAN COUNTY

C-95-140-06

REST AREA LIGHTING IMPROVEMENT



SECTION 57(RA-L) – LIGHTING IMPROVEMENT
INTERSTATE 55 – FUNKS GROVE REST AREA

N

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED May 22, 20 07

DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER

May 11, 20 07
Eric E. Harm P.E.
Interim ENGINEER OF DESIGN AND ENVIRONMENT

May 11, 20 07
Milton R. Sees P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

DESIGN DESIGNATION
N.A. LIGHTING

FOR UNDERGROUND UTILITY LOCATIONS CALL
TOLL FREE J.U.L.I.E. TELEPHONE NO.
1-800-892-0123
FUNKS GROVE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ADMINISTRATOR DATE

DESIGNER: ROGER BIGGS (217)465-4181

CONTRACT NO. 70626

PRINTED BY AUTHORITY OF THE STATE OF ILLINOIS

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CONTRACT NO. 70626

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	57(RA-L	MCLEAN	12	2
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

G.N.-100
ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

G.N.-105.07
EXISTING STATE-OWNED AND MAINTAINED UTILITY LINES ARE SHOWN ON THE PLANS TO INDICATE THEIR PRESENCE AND APPROXIMATE LOCATION. THE CONTRACTOR SHALL NOTIFY THE DISTRICT OPERATIONS ENGINEER TWO WEEKS PRIOR TO COMMENCING ANY EXCAVATION IN THE VICINITY OF THESE LINES. THE STATE WILL THEN LOCATE AND MARK THE HORIZONTAL LOCATIONS OF THE LINES AND PROVIDE ANY AVAILABLE INFORMATION AS TO THEIR DEPTH. SHOULD ANY OF THE LINES BE DAMAGED BY THE CONTRACTOR'S OPERATION, THE CONTRACTOR SHALL REPAIR THEM TO THE SATISFACTION OF THE ENGINEER AND AT NO COST TO THE STATE.

ALSO THERE MAY BE UTILITIES PRESENT WHICH WERE INSTALLED BY THE STATE BUT ARE MAINTAINED BY OTHERS (CITY, TOWN, ETC.) THE APPROXIMATE LOCATIONS OF THESE LINES ARE ALSO SHOWN ON THE PLANS ALONG WITH THE NAME OF THE MAINTAINING AGENCY. THE CONTRACTOR SHALL COORDINATE THE LOCATING OF THESE LINES WITH THE LOCAL AGENCY PRIOR TO COMMENCING ANY EXCAVATION OR BORING IN THEIR VICINITY. SHOULD THESE LINES BE DAMAGED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL REPAIR THEM TO THE SATISFACTION OF, AND AT NO COST TO, THE LOCAL AGENCY AND THE STATE.

G.N.-105.09A
ALL ELEVATIONS SHOWN IN THE PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. (NAVD 88)

G.N.-107.31
UTILITY LINES WERE PLOTTED FROM INFORMATION FURNISHED BY THE VARIOUS UTILITY COMPANIES INVOLVED (QUALITY LEVEL C &/OR QUALITY LEVEL D) AND THE ACCURACY SHOULD BE CONSIDERED APPROXIMATE ONLY.

UTLILITY COMPANIES MAY BE ADJUSTING THEIR FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH THESE ORGANIZATIONS WHILE THESE ADJUSTMENTS ARE BEING PERFORMED. J.U.L.I.E. - JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS SYSTEM (800)892-0123.
THE FOLLOWING UTILITY OWNERS MARKED WITH AN '*' BELONG TO J.U.L.I.E.:

Mr. Rick Welton
* Ameren-IP
501 East Lafayette Street
Mail Code P-15
Bloomington, IL 61701
(309) 823-9276

Ms Christine Glawe
* Verizon North Central, Inc
Engineer - Network Engineering
1312 E Empire Street
Mailcode: ILLLAON
Bloomington, IL 61701
(309) 663-3142

Mr. Dave Burkybile
Illinois Department of Transportation
13473 IL Hwy 133
Paris, IL 61944-0610
(217)465-4181

G.N.-1004.01
COARSE AGGREGATE GRADATION CA-10 MAY BE USED WHENEVER COARSE AGGREGATE CA-6 IS SPECIFIED IN THE STANDARD SPECIFICATIONS.

INDEX OF SHEETS

LIST OF STANDARDS

STANDARD NO.	DESCRIPTION
000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-01	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
702001-06	TRAFFIC CONTROL DEVICES

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

PLOT DATE = 3/29/2007
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PLOT SCALE = 4.0000 '/ IN.
USER NAME = bigard

CONTRACT NO. 70626

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	57(RA-L)	MCLEAN	12	3
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

70626

SUMMARY OF QUANTITIES

LOCATION OF WORK: Interstate 55
Funks Grove Rest Area

McLean County
Highway Lighting
100% State

CONSTRUCTION TYPE CODE: Y030-1E

CODE NO	ITEM	UNIT	TOTAL QUANTITY
67100100	MOBILIZATION	L SUM	1.0
70103710	TRAFFIC CONTROL FOR RAMPS	L SUM	1.0
81018700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	197.0
81603070	UNIT DUCT, 600V, 2-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	1,990.0
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1,833.0
82103900	LUMINAIRE, SODIUM VAPOR, MULTI-MOUNT, 250 WATT	EACH	1.0
82105400	LUMINAIRE, SODIUM VAPOR, HIGH MAST, MULTI-MOUNT, 400 WATT	EACH	16.0
83062730	LIGHT POLE, WEATHERING STEEL, 45 FT. M.H., TENON MOUNT	EACH	1.0
83501500	LIGHT TOWER, 90 FT. MOUNTING HEIGHT, LUMINAIRE MT. - 8	EACH	2.0
83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	7.0
83700300	LIGHT TOWER FOUNDATION, 48" DIAMETER	FOOT	35.0
83800650	BREAKAWAY DEVICE, COUPLING, WITH STAINLESS STEEL SCREEN	EACH	4.0
84200600	REMOVAL OF EXISTING LIGHTING UNIT, NO SALVAGE	EACH	2.0
84200700	LIGHTING FOUNDATION REMOVAL	EACH	2.0

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

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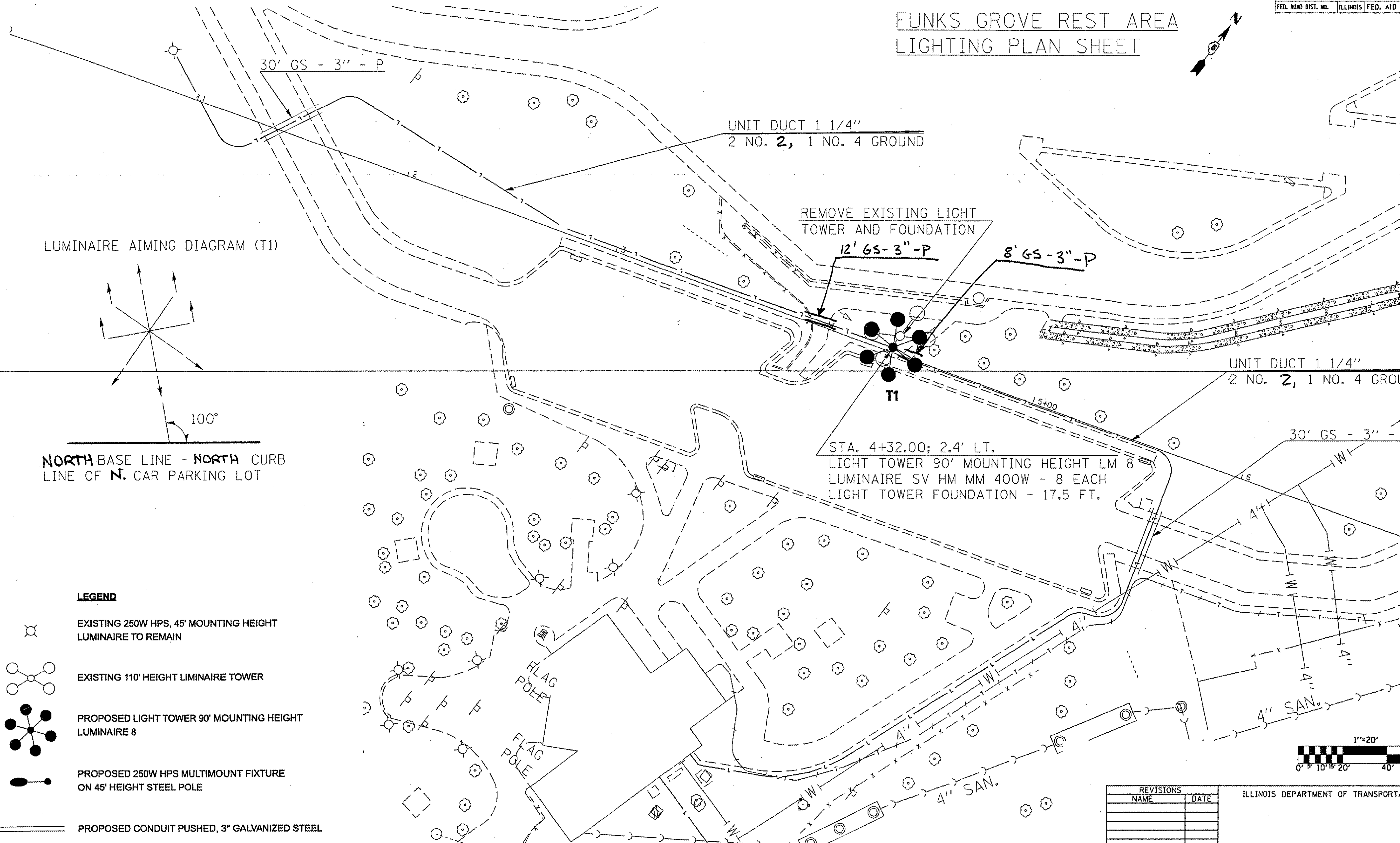
USER NAME = bsgard

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	57(RA-L)	MCLEAN	12	4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 70626

FUNKS GROVE REST AREA
LIGHTING PLAN SHEET



LEGEND

- EXISTING 250W HPS, 45' MOUNTING HEIGHT LUMINAIRE TO REMAIN
- EXISTING 110' HEIGHT LIMINAIRE TOWER
- PROPOSED LIGHT TOWER 90' MOUNTING HEIGHT LUMINAIRE 8
- PROPOSED 250W HPS MULTIMOUNT FIXTURE ON 45' HEIGHT STEEL POLE
- PROPOSED CONDUIT PUSHED, 3" GALVANIZED STEEL
- PROPOSED UNIT DUCT

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: VERT. HORIZ.
DATE

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CHECKED BY

PLOT DATE : 3/29/2007
FILE NAME : c:\projects\d5140006 (x8)\plan sheets.dgn
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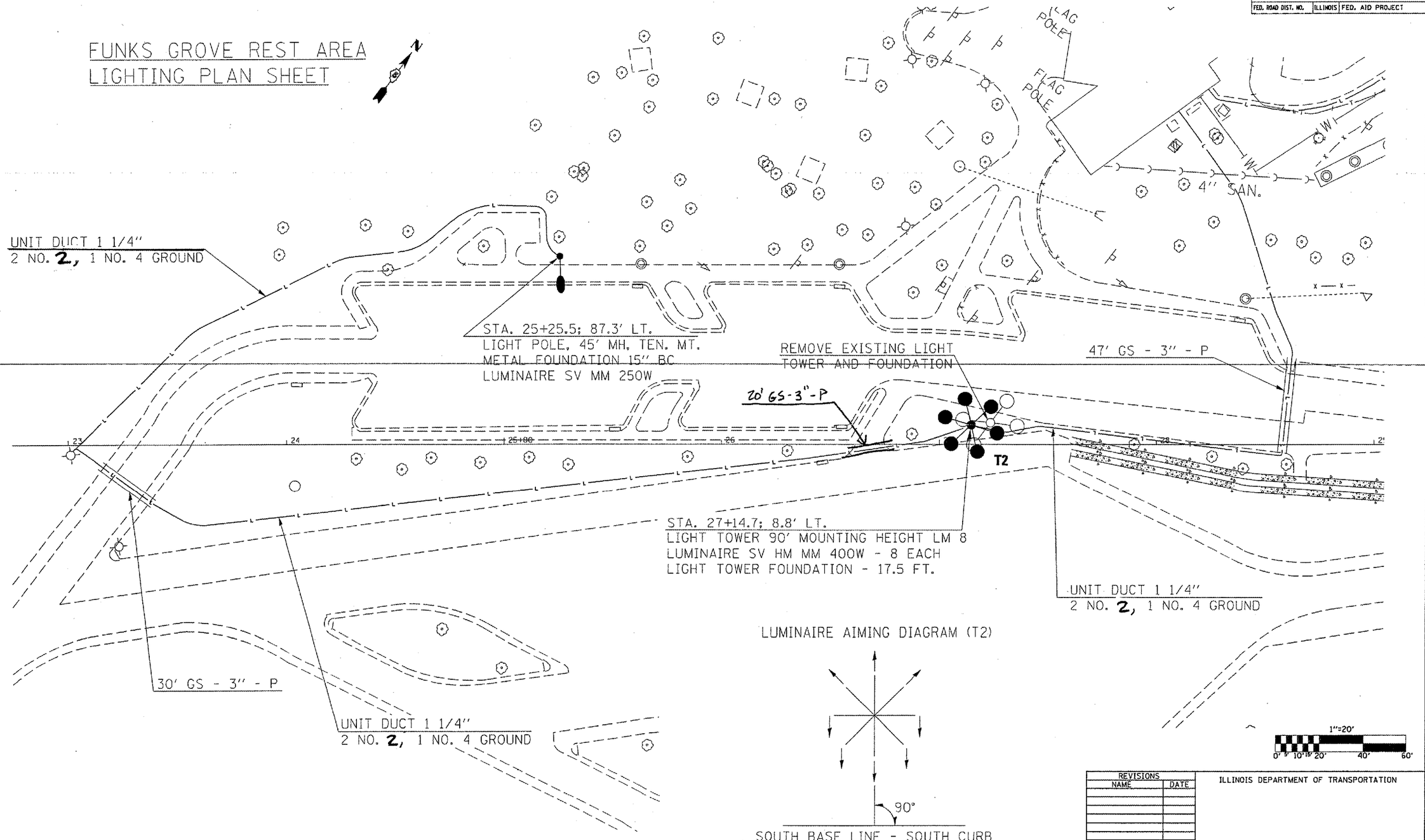
CONTRACT NO. 70626

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	57(RA-L)	MCLEAN	12	5
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FUNKS GROVE REST AREA
LIGHTING PLAN SHEET



LUMINAIRE AIMING DIAGRAM (T2)

SOUTH BASE LINE - SOUTH CURB
LINE OF S. CAR PARKING LOT

1"=20'
0' 5' 10' 15' 20' 40' 60'

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: VERT.
HORIZ.
DATE

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CHECKED BY

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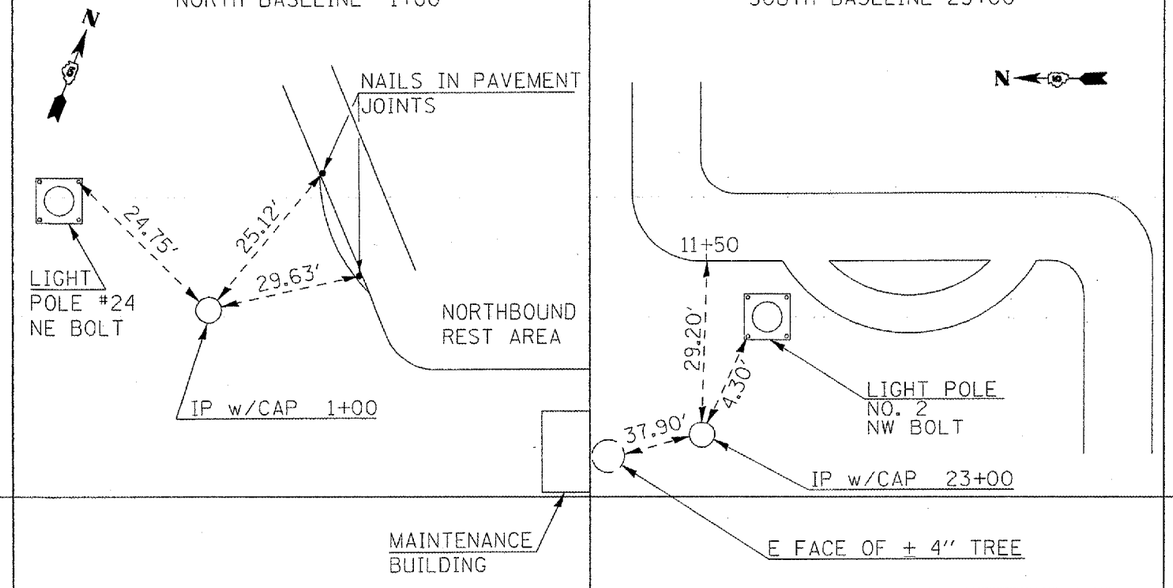
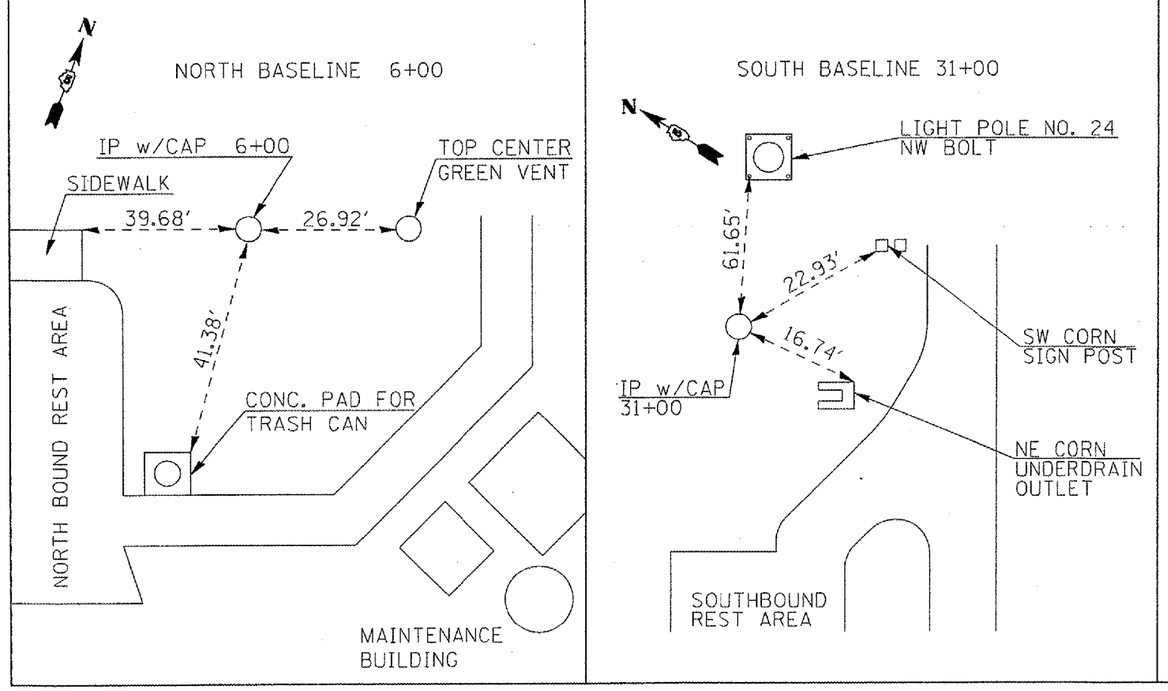
USER NAME = bigpard

CONTRACT NO. 70626

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	57(RA-L)	MCLEAN	12	6
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TIE POINTS





BILL OF MATERIALS

FUNKS GROVE REST AREA LIGHTING

ITEM	UNIT	QUANTITY
CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	137
UNIT DUCT, 600V, 2-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	1990
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1833
LUMINAIRE, SODIUM VAPOR, MULTI-MOUNT, 250 WATT	EACH	1
LUMINAIRE, SODIUM VAPOR, HIGH MAST, MULTI-MOUNT, 400 WATT	EACH	16
LIGHT POLE, WEATHERING STEEL, 45 FT. M.H., TENON MOUNT	EACH	1
LIGHT TOWER, 90 FT. MOUNTING HEIGHT, LUMINAIRE MT. - 8	EACH	2
LIGHT POLE FOUNDATION METAL, 15" BOLT CIRCLE, 8" X 6'	EACH	1
LIGHT TOWER FOUNDATION, 48" DIAMETER	FOOT	35
REMOVAL OF EXISTING LIGHTING UNIT, NO SALVAGE	EACH	2
LIGHTING FOUNDATION REMOVAL	EACH	2

PLAN NOTES

1. LOCKNUTS WITH NYLON OR METAL INSTERTS SHALL BE USED ON TOWERS TO DETER THE REMOVAL OF NUTS BY VANDALISM. THE ANCHOR RODS SHALL NOT BE PEENED UNLESS SPECIFICALLY APPROVED BY THE ENGINEER. LOCKNUTS SHALL NOT BE REQUIRED FOR FLAIR TYPE BASES.
2. PROVIDE NEW CONDUCTORS TO EXISTING CONTROLLER AND CONNECT TO EXISTING FEEDER BREAKER. THE INSTALLATION OF CONDUCTORS INSIDE THE BUILDING AND CONNECTION TO FEEDER BREAKERS SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT COST FOR THE UNIT DUCT SPECIFIED.
3. RECONNECT EXISTING LIGHTING CIRCUIT AT POLE #2 AND POLE #38.
4. IN LIEU OF INSTALLING NEW UNIT DUCT AND/OR PUSHING NEW STEEL CONDUIT, THE CONTRACTOR MAY PULL NEW CONDUCTORS INTO THE EXISTING UNIT DUCT WITH THE APPROVAL OF THE ENGINEER.

5 PROVIDE AND INSTALL POLE IDENTIFICATION AS DIRECTED BY THE ENGINEER

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

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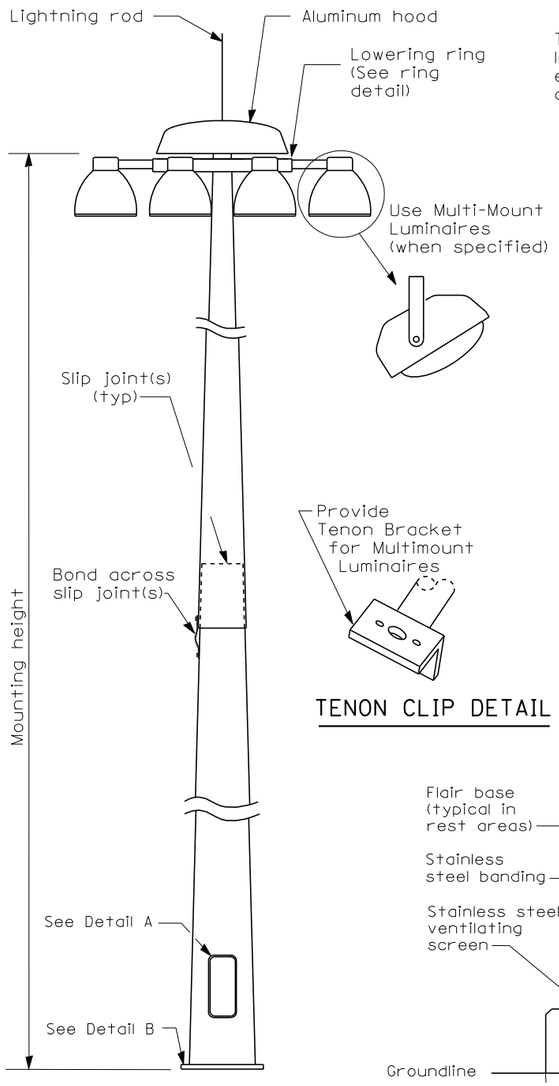
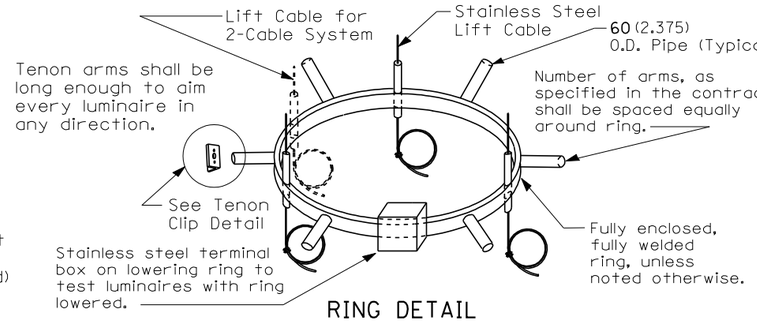
CONTRACT NO. 70626

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	57(RA-L)	MCLEAN	12	7

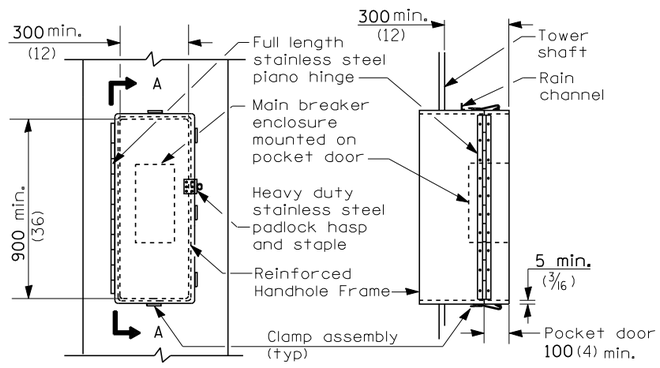


HIGH MAST POLE

TENON CLIP DETAIL

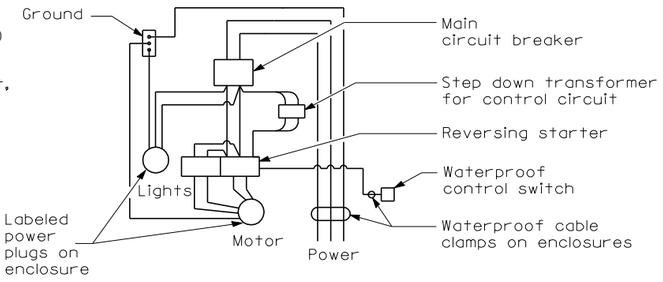


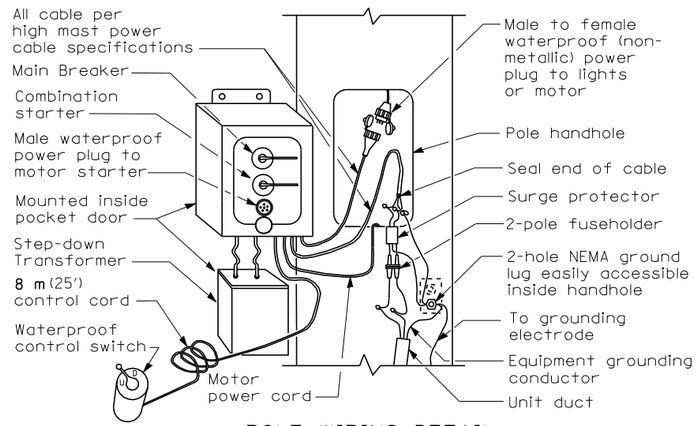
RING DETAIL



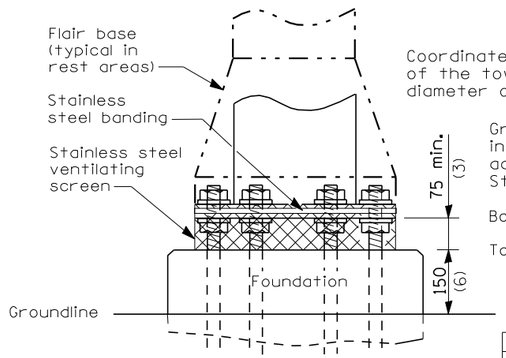
DETAIL A

SECTION A-A





POLE WIRING DETAIL



DETAIL B

Not to scale

HIGH MAST TOWER SCHEDULE

TOWER*	LOCATION	STATION	OFFSET	HEIGHT	TYPE	* LUMS	WATTAGE	REMARKS

GENERAL NOTES

1) Luminaires shall be aimed as shown on the aiming schedule in the plans and as directed by the Engineer.
2) Handhole door shall have a minimum of one clamp assembly on top and bottom and a minimum of three clamp assemblies on the non-hinged side of the door.
3) Provide racks to house all wiring so cables are neatly stored and the handhole door is not closing against a random lay of cables.
4) Verify adequate clearance exists to open and close the handhole door with no conflict of the main breaker panel which is mounted to the inside of the door.
5) The luminaire ring shall be balanced so it lowers evenly.
6) Manufacturer of lowering device shall factory wire the winch drive electrical control system. Cable attachment to plugs and polarity must be observed to prevent faults to ground when plugs are changed between lights and motor circuits. Alternate schemes shall be approved by the Engineer.

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

DATE	REVISIONS
	Corrected 4/4/06

HIGH MAST LIGHT TOWER

LGT010

PLOT DATE = 3/29/2007
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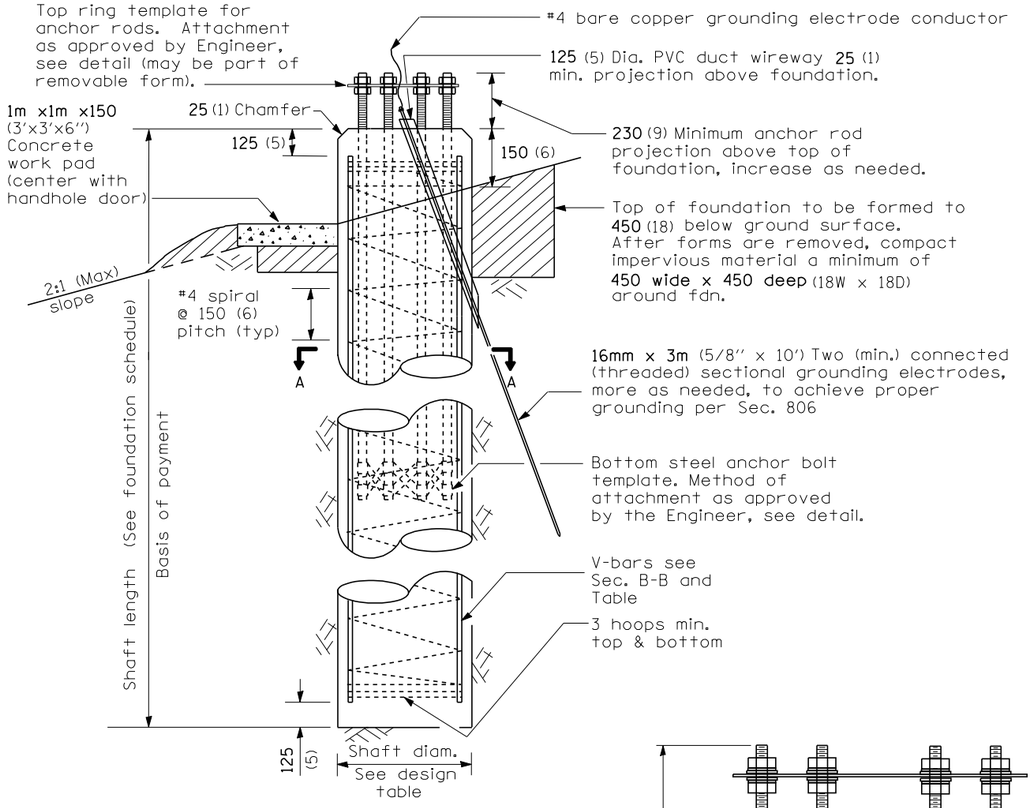
PLOT SCALE = 642.353 m / IN.
USER NAME = bggard

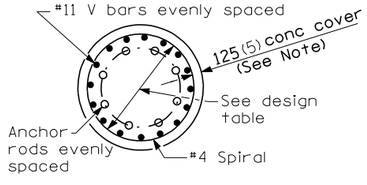
CONTRACT NO. 70626

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	57(RA-L)	MCLEAN	12	8



FOUNDATION ELEVATION

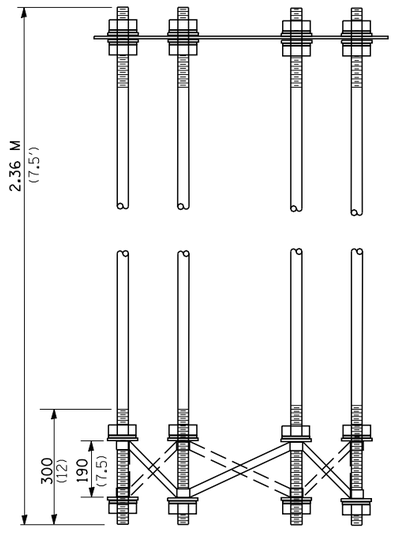
FOUNDATION SCHEDULE			
TOWER NUMBER	STATION	OFFSET	SHAFT LENGTH



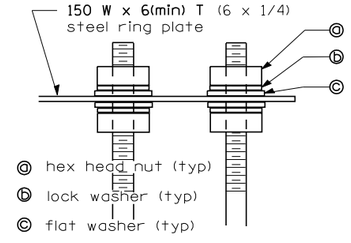
SECTION A-A

ANCHOR ROD & SHAFT REINFORCEMENT DESIGN TABLE (METRIC)					
TOWER HEIGHT	ANCHOR ROD DIAM. (MIN)	ROD CIRCLE DIAM. (MIN)	TOWER BASE DIAM. (MIN)	DRILLED SHAFT	V Bar # 11
				DIAM.	NUMBER
(m)	(mm)	(mm)	(mm)	(m)	(each)
25	450	760	610	1.2	14
27	450	760	610	1.2	14
30	450	760	610	1.2	14
34	450	760	610	1.2	14
37	525	915	660	1.4	18
40	525	915	710	1.4	18
43	525	915	710	1.4	18
46	675	965	760	1.5	22
49	675	965	810	1.5	22

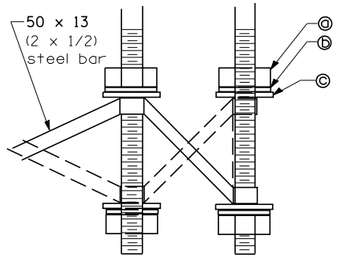
ANCHOR ROD & SHAFT REINFORCEMENT DESIGN TABLE (ENGLISH)					
TOWER HEIGHT	ANCHOR ROD DIAM. (MIN)	ROD CIRCLE DIAM. (MIN)	TOWER BASE DIAM. (MIN)	DRILLED SHAFT	V Bar # 11
				DIAM.	NUMBER
(ft)	(in)	(in)	(in)	(in)	(each)
80	1.5	30	24	48	14
90	1.5	30	24	48	14
100	1.5	30	24	48	14
110	1.5	30	24	48	14
120	1.75	36	26	54	18
130	1.75	36	28	54	18
140	1.75	36	28	54	18
150	2.25	38	30	60	22
160	2.25	38	32	60	22



ANCHOR ROD CAGE



ANCHOR ROD CAGE TOP



ANCHOR ROD CAGE BOTTOM

SHAFT LENGTH DESIGN TABLE (METRIC) (LENGTH IN METERS)										
	SOIL CONSISTENCY	AVERAGE STRENGTH (Qu in kPa)	LIGHT TOWER HEIGHT (meters)							
			24	27	30	34	37	40	43	46	49
Cohesive	SOFT	< 50	6.2	6.5	6.9	7.2	7.6	8.0	8.3	8.7	9.1
	MEDIUM	50 to 100	5.1	5.3	5.6	5.8	6.2	6.4	6.7	7.0	7.3
	STIFF	100 to 200	4.4	4.5	4.7	4.8	5.2	5.4	5.5	5.9	6.1
	VERY STIFF	200 to 400	3.8	3.9	4.1	4.2	4.5	4.6	4.7	5.1	5.2
	HARD	> 400	3.5	3.5	3.6	3.7	4.0	4.1	4.2	4.5	4.6
Granular		(N in BLOWS/0.3M)									
	VERY LOOSE	< 5	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.3	6.5
	LOOSE	5 to 10	4.6	4.8	4.9	5.1	5.3	5.5	5.6	5.7	5.9
	MEDIUM	10 to 25	4.4	4.5	4.7	4.9	5.0	5.2	5.3	5.5	5.6
	DENSE	25 to 50	4.1	4.3	4.5	4.6	4.7	4.9	5.0	5.2	5.3
	VERY DENSE	> 50	3.9	4.1	4.2	4.4	4.5	4.7	4.8	4.9	5.1

SHAFT LENGTH DESIGN TABLE (ENGLISH) (LENGTH IN FEET)										
	SOIL CONSISTENCY	AVERAGE STRENGTH (Qu in tsf)	LIGHT TOWER HEIGHT (feet)							
			80	90	100	110	120	130	140	150	160
Cohesive	SOFT	< 0.5	20.4	21.5	22.5	23.6	25.0	26.1	27.2	28.5	29.8
	MEDIUM	0.5 to 1	16.8	17.5	18.3	19.0	20.3	21.1	21.8	23.1	24.0
	STIFF	1 to 2	14.3	14.8	15.4	15.9	17.1	17.6	18.1	19.3	19.9
	VERY STIFF	2 to 4	12.6	13.0	13.3	13.7	14.8	15.2	15.6	16.7	17.1
	HARD	> 4	11.4	11.6	11.9	12.2	13.2	13.5	13.8	14.9	15.2
Granular		(N in BLOWS/FT.)									
	VERY LOOSE	< 5	16.4	17.1	17.8	18.5	18.9	19.6	20.2	20.7	21.4
	LOOSE	5 to 10	15.0	15.6	16.2	16.8	17.3	17.9	18.4	18.9	19.5
	MEDIUM	10 to 25	14.3	14.9	15.5	16.0	16.4	17.0	17.5	17.9	18.5
	DENSE	25 to 50	13.6	14.1	14.6	15.1	15.5	16.1	16.5	16.9	17.5
	VERY DENSE	> 50	12.9	13.4	13.9	14.4	14.8	15.3	15.7	16.1	16.6

GENERAL NOTES

1) The shaft length(s) provided in the foundation schedule are based on the soil borings included in the plans. If different soils are encountered, the engineer shall be notified to provide a revised length.
2) Use 8 rods min., see design table for minimum anchor rod diameter. Anchor rod quantity, diameter, and length shall be determined by the approved drawings furnished by pole manufacturer.
3) All foundation reinforcement steel to be epoxy coated. Use #11 vertical bars and #4 spiral reinforcement - see design table.
4) The cost of reinforcing is incidental to the foundation.
5) Steel anchor bolt forms shall not be removed for a minimum of 3 days after concrete is poured and the tower shall not be set for a minimum of 7 days or as approved by the Engineer.
6) Coordinate bolt circle diameter of the tower with the bolt circle diameter of the anchor bolt cage.
7) Foundation shall be in accordance with applicable portions of Section 516 and 837 of the Standard Specifications.
8) Foundation shall be poured monolithically with no construction joints allowed.
9) Place grounding electrodes in an access well, if there is a conflict in using the wireway window.
10)

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

DATE	REVISIONS
	Corrected 4/12/06

LIGHT TOWER FOUNDATION

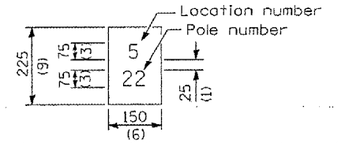
PLOT DATE = 3/29/2007
FILE NAME = c:\projects\d514008 (d8\lg809.dgn
PLOT SCALE = 64.2253 ms / IN.
USER NAME = bigger4

CONTRACT NO. 70626

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	57(RA-L)	MCLEAN	12	9

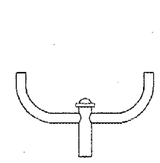
"Install and orient arm bracket over pole tenon and firmly hand tighten the two set screws. Use third hole in arm bracket as a guide to drill a 8.3 (21/64) diameter hole through tenon. Install and tighten self-tapping screw. Tighten set screws an additional (1/4 to 3/8) turn with hex key (not provided). Install locknuts on set screws if threaded projection allows."

Pole shall meet AASHTO Standard Specifications for 128.72 km (80 mph) wind loading and 40.82 kg (90 lb.), .37 m² (4.0 sq. ft.) E.P.A. luminaire.

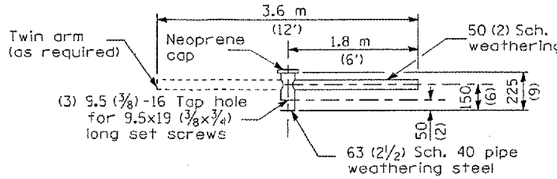


The contractor shall furnish and install a light pole identification of each new light pole, as shown above, incidental to the respective light pole pay item. The numerals shall be 75 (3) series "D", black, screened on silver-white type B pressure sensitive reflective sheeting conforming to the requirements of section T602.01 of the Standard Specifications for Traffic Control Items. The numerals shall conform to the FHWA "Standard Alphabets for Highway Signs".

The light pole identification shall be applied to sign base material as specified in section 1085.05 of the Standard Specifications, approximatey 180 (7) above the adjacent pavement grade visible to approaching traffic in accordance with Highway Standard 2319.

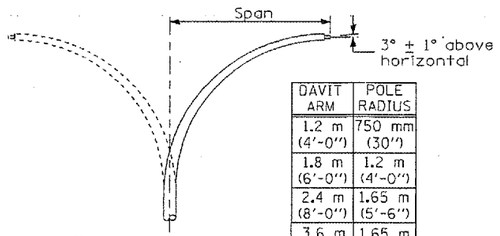


☐ TWIN TENON



☐ TENON MOUNT BRACKET ARM

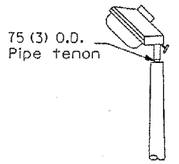
NOTE: Single or twin arm assembly shall be tilted 3° above horizontal.



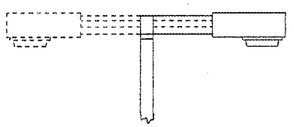
DAVIT ARM	POLE RADIUS
1.2 m (4'-0")	750 mm (30")
1.8 m (6'-0")	1.2 m (4'-0")
2.4 m (8'-0")	1.65 m (5'-6")
3.6 m (12'-0")	1.65 m (5'-6")

☐ DAVIT ARM

☐ DAVIT ARM-TWIN

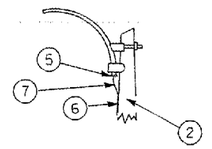


☒ TENON

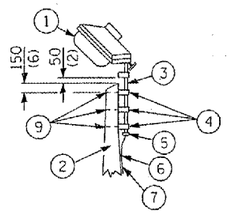


☐ SHORT BRACKET

☐ SHORT BRACKET - TWIN

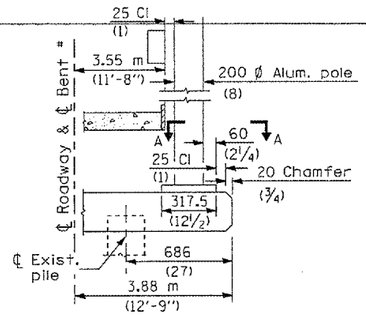


☐ MAST ARM

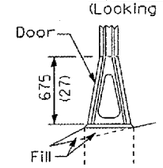


☐ TENON

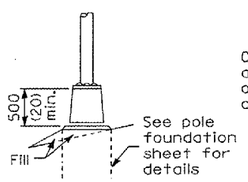
① Luminaire
② Wood pole, class 3 or better
③ 63 (2½) Galv. steel conduit
④ Single offset pole band
⑤ Conduit bushing
⑥ Cable clamps on 600 (24) centers
⑦ 2/c #12 Type use cable
⑧ 25 (1) Galv. steel conduit 3.0 m (10') in length
⑨ 16 (5/8) Ø hot dipped galvanized bolt with flat washer & locknut (3 req'd)
⑩ Conduit clamps on 900 (36) centers
⑪ Unit duct
⑫ Threaded reducer
⑬ "C" Condulet, threaded
⑭ 40 (1½) Galv. steel conduit for 1 unit duct or 75 (3) galv. steel conduit for 2 or 3 unit ducts.



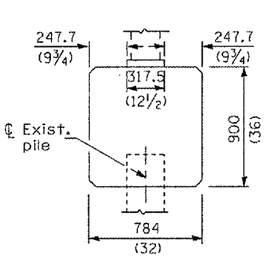
BENT # (Looking)



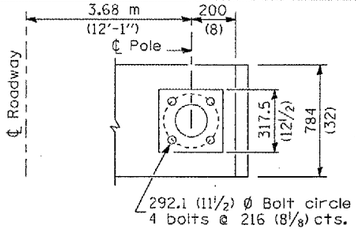
☐ STAINLESS STEEL FLAIR BASE



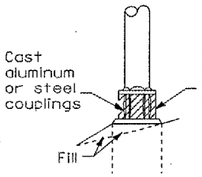
☐ TRANSFORMER BASE



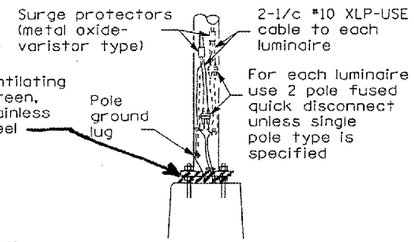
☐ BRIDGE PIER MOUNT



SECTION A-A

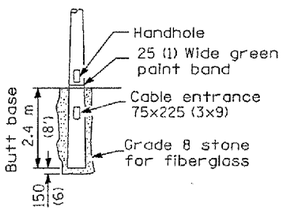


☐ BREAKAWAY COUPLING

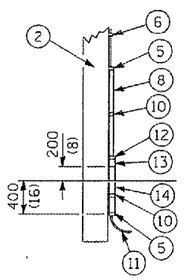


☒ ANCHOR

☐ FRANGIBLE



☐ BUTT BASE



☐ POLE, WOOD

POLE LENGTH	DEPTH IN GROUND
19.8 m (65')	3.6 m (12')
18.0 m (60')	3.0 m (10')
16.8 m (55')	2.7 m (9')
16.0 m (50')	2.4 m (8')
13.7 m (45')	2.1 m (7')
12.0 m (40')	2.0 m (6.5')
10.7 m (35')	1.8 m (6')
9.0 m (30')	1.7 m (5.5')

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

☒ METAL OR ☐ CONCRETE

Details for underground distribution if required

POLE STANDARDS

LGT008.M32

DATE	REVISIONS

POLE STANDARDS

LGT008.M32

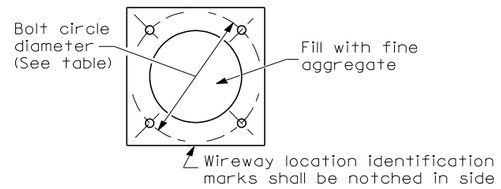
PLOT DATE = 3/29/2007
FILE NAME = e:\projects\d514086 lv8\lgt808.dgn
PLOT SCALE = 84.253 ' / IN.
USER NAME = baggard

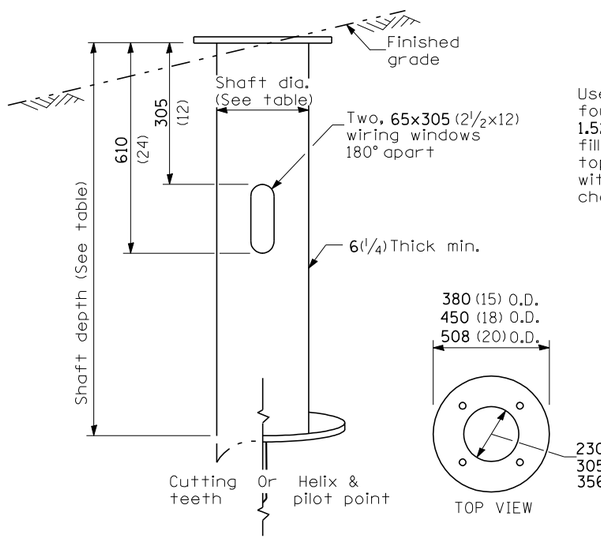
CONTRACT NO. 70626

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	57(RA-L)	MCLEAN	12	10

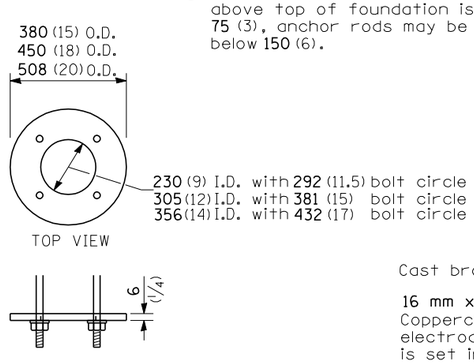
		STEEL FOUNDATION			CONCRETE FOUNDATION		
LIGHT POLE MOUNTING HEIGHT	BOLT CIRCLE DIAMETER	SHAFT DIAMETER	SHAFT DEPTH	TOP PLATE (min)	SHAFT DIAMETER	SHAFT DEPTH	ANCHOR ROD LENGTH ①
≤9.1 m (30′)	292 (11.5)	220 (8⅝)	1.83 m (6′)	300 x 300 x 25 12 x 12 x 1	610 (24)	1.52 m (5′-0″)	1.45 m (4′-9″)
9.4 m - 10.7 m (31′-35′)	292 (11.5)	220 (8⅝)	1.83 m (6′)	300 x 300 x 25 12 x 12 x 1	610 (24)	1.67 m (5′-6″)	1.60 m (5′-3″)
10.9 m - 12.2 m (36′-40′)	381 (15) ③	220 (8⅝)	1.83 m (6′) ②	375 x 375 x 31 15 x 15 x 1 1/4	762 (30)	1.83 m (6′-0″)	1.75 m (5′-9″)
12.5 m - 13.7 m (41′-45′)	381 (15) ③	220 (8⅝)	1.83 m (6′) ②	375 x 375 x 31 15 x 15 x 1 1/4	762 (30)	1.98 m (6′-6″)	1.90 m (6′-3″)
14.0 m - 15.2 m (46′-50′)	381 (15) ③	220 (8⅝)	2.44 m (8′)	375 x 375 x 31 15 x 15 x 1¼	762 (30)	2.13m (7′-0″)	2.00 m (6′-9″)

① Length does not include 100 (4) hook
② 220 mm x 2.44 m (8⅝″ x 8′-0″) for Twin luminaires
③ Bolt circle diam. shall be 430 (17) when a TB3-17 transformer base is used



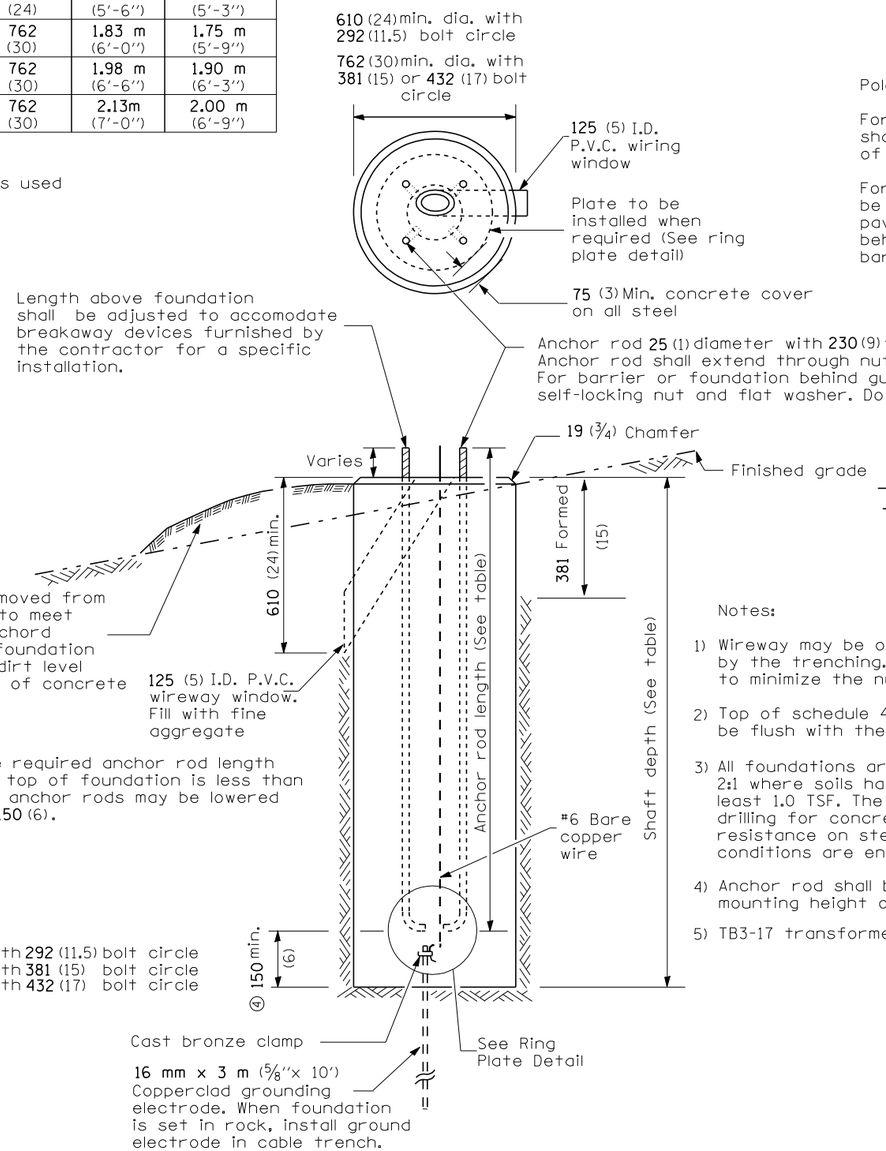


STEEL FOUNDATION



RING PLATE DETAIL

(When rock is encountered and foundation is shallower)

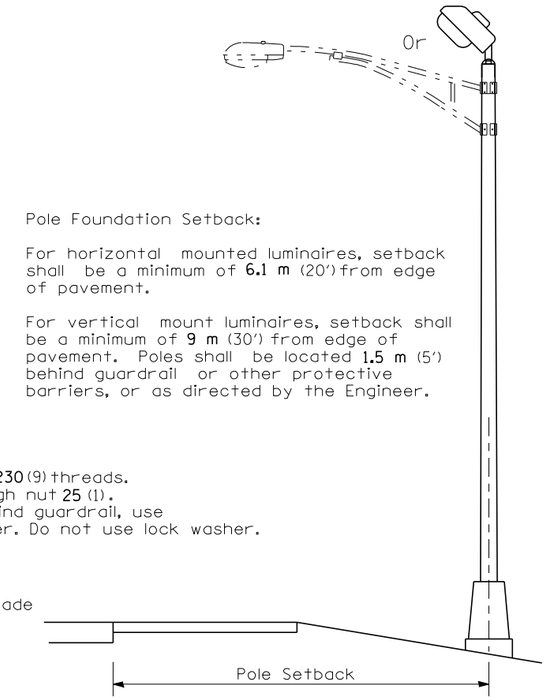


CONCRETE FOUNDATION

Pole Foundation Setback:

For horizontal mounted luminaires, setback shall be a minimum of 6.1 m (20′) from edge of pavement.

For vertical mount luminaires, setback shall be a minimum of 9 m (30′) from edge of pavement. Poles shall be located 1.5 m (5′) behind guardrail or other protective barriers, or as directed by the Engineer.



Notes:

1) Wireway may be on front, back or side of foundation as required by the trenching. Place door of transformer base on wireway side to minimize the number of unit duct bends.

2) Top of schedule 40 125 (5) I.D. PVC wiring window, shall be flush with the top of foundation for drainage.

3) All foundations are designed to be located on slopes not exceeding 2:1 where soils have an unconfined compressive strength of at least 1.0 TSF. The contractor shall verify the soil strength during drilling for concrete foundations or by monitoring installation resistance on steel foundations and notify the engineer if other conditions are encountered.

4) Anchor rod shall be increased to 31 (1¼) diameter for 15.24 (50′) mounting height or above.

5) TB3-17 transformer base is not to be used on metal foundation

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

DATE	REVISIONS
10/7/02	Bridge Office depth calc.

LIGHT POLE FOUNDATION

LGT007-836

PLOT DATE = 3/29/2007
FILE NAME = c:\projects\d5140806 i:\dist07-836.dgn
PLOT SCALE = 64.253 m / IN.
USER NAME = bigard

CONTRACT NO. 70626

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	57(RA-L)	MCLEAN	12	11

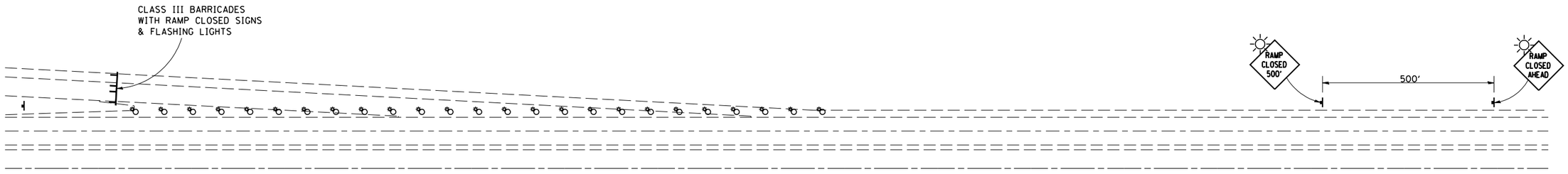
SYMBOLS

TYPE I OR II BARRICADES OR DRUMS @ 25' (7.5 m) CTS. W/STEADY BURNING LIGHTS

SIGN ON PORTABLE OR PERMANENT SUPPORT

Traffic Control for all ramps shall be in accordance with the appropriate application of plan detail TRAFFIC CONTROL FOR RAMPS and shall be paid for at the contract lump sum price for Traffic Control for Ramps.

RAMP CLOSURE



GENERAL NOTES

STEADY BURN LIGHTS ARE NOT REQUIRED FOR DAYTIME OPERATIONS.

CONTACT THE DISTRICT TRAFFIC OPERATIONS ENGINEER AT 217-465-4181, TWO WEEKS PRIOR TO CLOSING THE RAMP.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DATE	REVISIONS	NAME

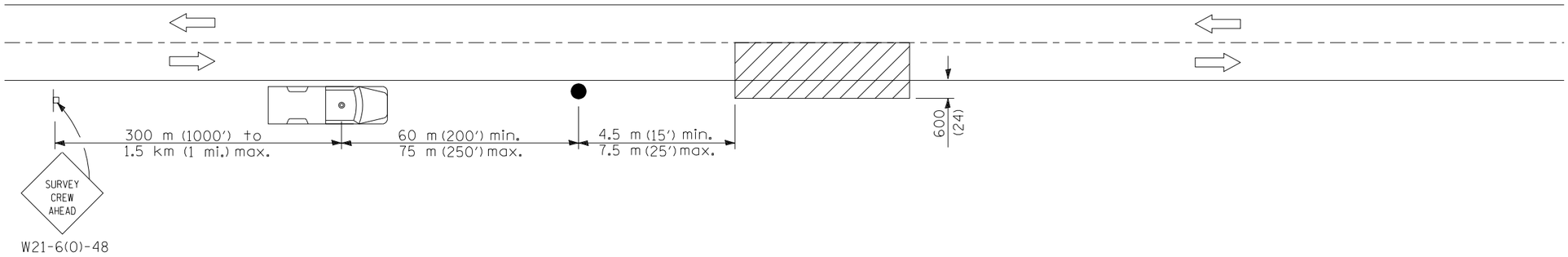
ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL FOR RAMPS

PLOT DATE = 3/29/2007
FILE NAME = c:\projects\d5140806 (d)\plan sheets.dgn
PLOT SCALE = 42.3529 ' / IN.
USER NAME = bigard

CONTRACT NO. 70626

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	57(RA-L)	MCLEAN	12	12



SYMBOLS

Work area

Sign on portable or permanent support

Truck with flashing amber light and dual emergency flashers

Flagger with traffic control sign

TYPICAL APPLICATIONS

Utility operations

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

DATE	REVISIONS

DETAIL FOR NIGHTTIME LIGHTING INSPECTION

PLOT DATE = 3/29/2007
FILE NAME = c:\projects\d514006 (v8)\lg1d17.dgn
PLOT SCALE = 84.2353 m / IN.
USER NAME = bigard