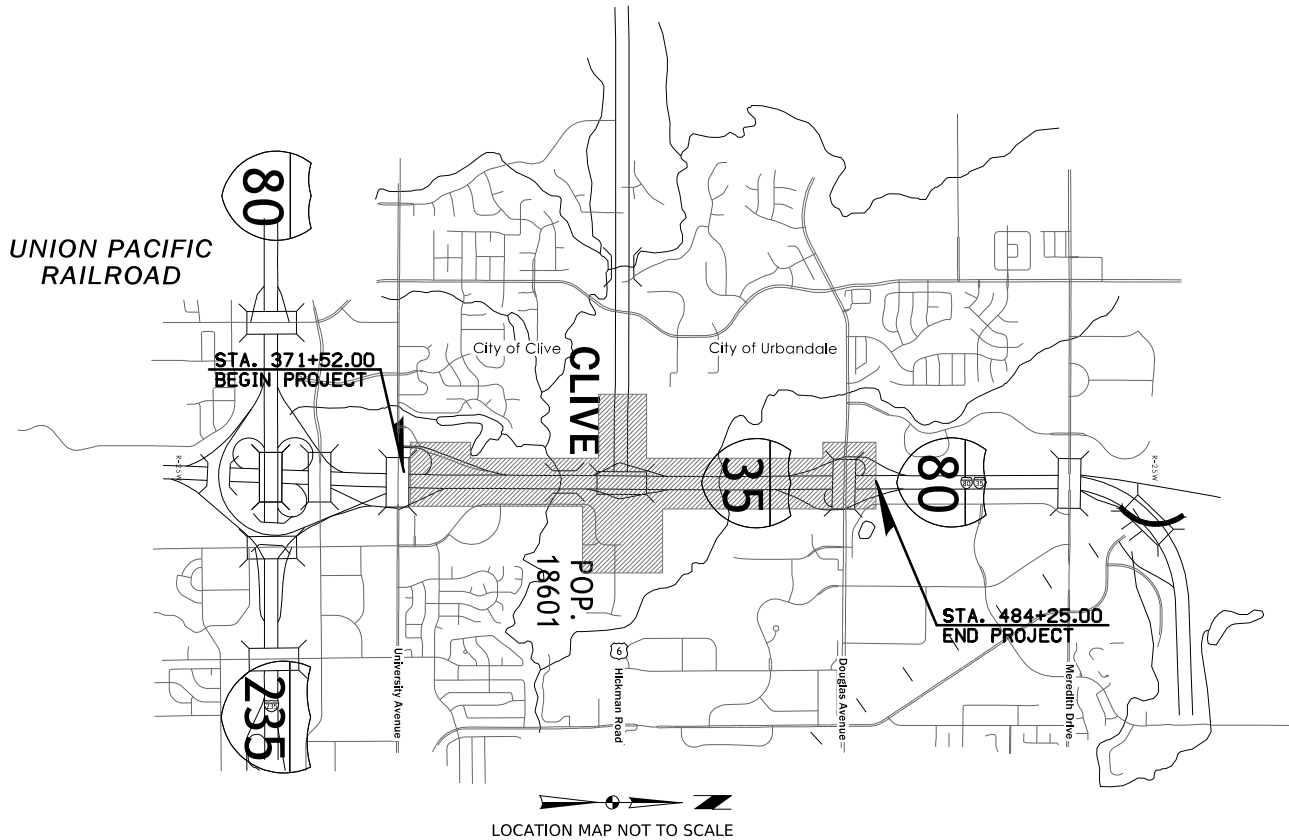


UNION PACIFIC
RAILROAD



INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	Title Sheets
* A.1	Title Sheet
C Sheets	Quantities and General Information
C.1	Project Description and Estimated Project Quantities
C.1 - 5	Estimate Reference Information and Tabulations
P Sheets	Lighting Layout Sheets
* P.1 - 11	Lighting Layout Sheets, I-80/I-35
U Sheets	Detail Sheets
U.1 - 5	Control Cabinet One Line Diagrams
	* Color Plan Sheets



PLANS OF PROPOSED IMPROVEMENT ON THE
INTERSTATE ROAD SYSTEM
POLK COUNTY
LIGHTING PLANS

U.S. HIGHWAY 6 (HICKMAN ROAD) AND
INTERSTATE 35 / INTERSTATE 80 (I-35/80)

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.14 of the Specifications.



REVISIONS

PROJECT IDENTIFICATION NUMBER	TOTAL
	22
15-77-080-060	
PROJECT NUMBER	
IM-080-3(276)125--13-77	
R.O.W. PROJECT NUMBER	

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

John M. Carter 7/6/2026
John Carter, P.E. Date

License Number P25259
My License Renewal Date is December 31, 2026

Pages or sheets covered by this seal:
A.1, C.1-5, P.1-11, U.1-5

		100-1D 10-18-05
PROJECT DESCRIPTION This project includes furnishing and installing conduit, handholes, steel light poles, conductors, control cabinets, and meter pedestals. Coordination with the utility power provider will be required. Post-installation, this project includes the ongoing maintenance, upkeep and necessary locating of the lighting infrastructure shown in the plans over the duration of the contract. Locating requirements shall be included in this project according to the Iowa One-Call provisions.		

[illegible][illegible][illegible]

FILE NO.	ENGLISH	DESIGN TEAM	Iowa DOT / HDR	POLK COUNTY	PROJECT NUMBER	IM-080-3(276)12--13-77	SHEET NUMBER	C.1
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[illegible]

LIGHTING INSTALLATIONS						108-1 10-21-14
Location		LI-101			LI-201	Remarks
No.	Station	Type	A	E FT	Type	
EB I-80/NB I-35						
50-15-IV-(NOTE 1)-A205	367+86 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A206	370+04 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A207	372+17 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A208	374+45 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A209	379+20 (ML080)	1	6	9.0	A	
50-15-IV-(NOTE 1)-A210	381+45 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A211	383+64 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A212	385+79 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A401	388+06 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A402	390+33 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A403	392+60 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A404	394+86 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A405	397+13 (ML080)	5				
50-15-IV-(NOTE 1)-A406	399+40 (ML080)	5				Wall blister [2]
50-15-IV-(NOTE 1)-A407	401+66 (ML080)	5				Wall blister [2]
50-15-IV-(NOTE 1)-A408	403+92 (ML080)	5				Wall blister [2]
50-15-III-(NOTE 1)-C103	413+63 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-C105	416+04 (ML080)	1	6	12.0	A	
50-6-III-(NOTE 1)-C106	418+42 (ML080)	5				Bridge blister [2]
50-6-III-(NOTE 1)-C108	420+69 (ML080)	5				Bridge blister [2]
50-15-III-(NOTE 1)-C109	422+80 (ML080)	5				Wall blister [2]
50-15-III-(NOTE 1)-C110	425+15 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-C205	427+47 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-C206	429+77 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-C207	432+07 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-C210	438+23 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-C211	440+14 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-C212	442+28 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-C213	444+46 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-C214	446+61 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-C215	448+75 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-E101	450+90 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-E201	461+14 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-E202	463+60 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-E203	466+11 (ML080)	1	6	12.0	A	
50-15-II-(NOTE 1)-E108	467+26 (ML080)	1	6	6.0	A	Douglas Ramp B
50-15-III-(NOTE 1)-E204	468+59 (ML080)	1	6	12.0	A	
50-15-II-(NOTE 1)-E109	470+28 (ML080)	1	6	6.0	A	Douglas Ramp B

FILE NO.	ENGLISH	DESIGN TEAM	Iowa DOT / HDR	POLK	COUNTY	PROJECT NUMBER	IM-080-3(276)12--13-77	SHEET NUMBER	C.2	
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108-11A
08-01-08

HIGHWAY LIGHTING DATA

ELECTRICAL SERVICE:

MidAmerican Energy (MAE) provides secondary service (120/240 Volts Single Phase) to the proposed meter pedestals "AA", "BB", "CC", "DD", and "EE". It shall be the contractors responsibility to contact and coordinate with MAE with regard to service construction.

Contact Information is:

Taylor Semple
MidAmerican Energy Company
3500 104th Street, Urbandale IA 50322
515-281-2593

ROADWAY LUMINAIRES:

Contractor shall be responsible for supplying and installing Light Emitting Diode (LED) luminaires as described. LED luminaires shall be the following:

Type II Distribution, 4000K CCT, gray finish: American Electric (AUTOBAHN 'ATB2-P601-MVOLT-R2'), GE/CURRENT (EVOLVE ERL2-0-27-A3-40-GRAY'), LUMEC (ROADFOCUS 'RPM-180W60LED-740-G1-R2M-UNV')

Type III Distribution, 4000K CCT, gray finish: American Electric (AUTOBAHN 'ATB2-P601-MVOLT-R3'), GE/CURRENT (EVOLVE ERL2-0-27-3-40-GRAY'), LUMEC (ROADFOCUS 'RPM-180W60LED-740-G1-R3S-UNV')

Type IV Distribution, 4000K CCT, gray finish: American Electric (AUTOBAHN 'ATB2-P03-MVOLT-R4'), GE/Current (Evolve 'ERL2-0-31-D5-40-GRAY'), Lumec (Roadfocus 'RPM-200W80LED-740-G1-4-UNV')

UNDERDECK LUMINAIRES:

Contractor shall be responsible for installing (4) Light Emitting Diode (LED) luminaires which will be procured in the tied traffic signals package. The externally mounted conduit and junction boxes will be installed by others.

CONTROL CABINETS:

Control Cabinets "A", "B", "C", "D", and "E": New control cabinets to be pad-mounted. Control cabinets shall be furnished with contactor, circuit breakers, transformer and controls as shown on the one-line diagrams.

ROUTINE MAINTENANCE REQUIREMENTS:

The contractor shall provide routine maintenance and minor repairs to new interchange lighting system components including control cabinets, and luminaires throughout the duration of the project. The routine maintenance/repair shall include tasks such as defective luminaire replacement, minor wiring replacement, circuit breaker replacement and other miscellaneous cabinet repair. The cost associated with maintaining the new interchange lighting system components shall be incidental to the cost of furnishing and installing the materials, as shown on the plans.

IOWA ONE-CALL REGISTRATION REQUIREMENT

The contractor is required to be registered with Iowa One-Call throughout the duration of the project. The contractor shall be responsible for all location and marking responsibilities for the existing lighting system and new lighting system components that are intercepted by the contractor or installed by the contractor, respectively. All new and existing intercepted lighting infrastructure shown on the P sheets will be subject to the contractor's Iowa One-Call registration requirements for locating and marking.

CONSTRUCTION SURVEY

Refer to IM-080-3(274)124--13-77 for construction survey bid item. All lighting and ITS infrastructure construction survey effort shown in this IM-080-3(276)125--13-77 project will be included in the construction survey bid item. Construction survey will not be bid separately in IM-080-3(276)125--13-77.

FIELD APPROVAL OF EQUIPMENT AND CONDUIT LOCATIONS

The contractor shall stake all handholes, cabinets, proposed conduit alignment, and light pole locations prior to construction and for approval by the engineer. The contractor shall expect some reasonable variation in location of the facilities shown due to unforeseen conflicts, right-of-way conflicts, changes in proposed work, installation difficulties or other circumstances. The engineer shall authorize any changes in location in writing before performing the installation. No additional compensation shall be provided for additional work associated with or resulting from unauthorized changes to the contract documents.

108-1 10-21-14						
LIGHTING INSTALLATIONS						
Location		LI-101			LI-201	Remarks
		Type	A	E FT	Type	
No.	Station					
50-15-II-(NOTE 1)-E208 SB I-80/WB I-35	471+12 (ML080)	1	6	5.0	A	Douglas Ramp F
50-15-IV-(NOTE 1)-A113	367+84 (ML080)	1	6	7.0	A	University Ramp E
50-15-IV-(NOTE 1)-A112	370+04 (ML080)	1	6	6.5	A	University Ramp E
50-15-II-(NOTE 1)-A111	371+76 (ML080)	1	6	5.5	A	University Ramp E
50-15-IV-(NOTE 1)-A114	372+17 (ML080)	1	6	12.0	A	
50-15-II-(NOTE 1)-A109	372+26 (ML080)	1	6	5.0	A	University Ramp E
50-15-II-(NOTE 1)-A110	373+21 (ML080)	1	6	4.0	A	University Ramp E
50-15-IV-(NOTE 1)-A115	374+42 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A116	376+77 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A117	379+20 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A302	390+33 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A303	392+60 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A304	394+86 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A305	397+13 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A306	399+40 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-A307	401+66 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-B105	409+04 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-B106	411+20 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-B107	413+63 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-B108	416+04 (ML080)	1	6	12.0	A	
50-6-III-(NOTE 1)-B109	418+36 (ML080)	5				Bridge blister [2]
50-6-III-(NOTE 1)-B110	420+63 (ML080)	5				Bridge blister [2]
50-15-III-(NOTE 1)-B111	422+79 (ML080)	5				
50-15-III-(NOTE 1)-B112	425+14 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-B213	427+47 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-B214	429+77 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-B208	440+14 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-B209	442+29 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-B210	444+48 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-B211	446+63 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-B212	448+77 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-D201	450+91 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-D202	453+05 (ML080)	1	6	12.0	A	
50-15-IV-(NOTE 1)-D203	455+19 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-D101	461+16 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-D102	463+62 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-D103	466+12 (ML080)	1	6	12.0	A	
50-15-II-(NOTE 1)-D209	468+46 (ML080)	1	6	5.0	A	Douglas Ramp C
50-15-III-(NOTE 1)-D104	468+61 (ML080)	1	6	12.0	A	
50-15-III-(NOTE 1)-D105	470+82 (ML080)	1	6	12.0	A	
50-15-II-(NOTE 1)-D210	470+84 (ML080)	1	6	4.0	A	Douglas Ramp C
University Ramp A						
50-15-III-(NOTE 1)-A108	1367+32 (RPAUNIV)	1	6	6.0	A	
50-15-III-(NOTE 1)-A101	1369+58 (RPAUNIV)	1	6	6.0	A	
50-15-II-(NOTE 1)-A102	1372+68 (RPAUNIV)	1	6	6.0	A	
50-15-II-(NOTE 1)-A103	1375+78 (RPAUNIV)	1	6	6.0	A	
50-15-II-(NOTE 1)-A104	1378+53 (RPAUNIV)	1	6	6.0	A	
50-15-IV-(NOTE 1)-A105	1381+41 (RPAUNIV)	1	6	6.0	A	
50-15-IV-(NOTE 1)-A106	1383+63 (RPAUNIV)	1	6	6.0	A	
50-15-IV-(NOTE 1)-A107	1385+78 (RPAUNIV)	1	6	6.0	A	
50-15-IV-(NOTE 1)-A301	1388+06 (RPAUNIV)	1	6	8.0	A	
University Ramp D						
50-15-II-(NOTE 1)-A201	2368+10 (RPDUNIV)	1	6	7.0	A	
50-15-II-(NOTE 1)-A202	2370+98 (RPDUNIV)	1	6	7.0	A	
50-15-II-(NOTE 1)-A203	2373+92 (RPDUNIV)	1	6	6.5	A	
50-15-IV-(NOTE 1)-A204	2376+86 (RPDUNIV)	1	6	6.0	A	
Hickman Ramp A						
50-15-III-(NOTE 1)-B201	3422+68 (RPA006)	1	6	6.0	A	
50-15-II-(NOTE 1)-B202	3425+47 (RPA006)	1	6	6.0	A	
50-15-II-(NOTE 1)-B203	3428+43 (RPA006)	2	0	6.0	A	
50-15-IV-(NOTE 1)-B204	3431+63 (RPA006)	1	6	6.0	A	
50-15-IV-(NOTE 1)-B205	3433+86 (RPA006)	1	6	6.0	A	
50-15-IV-(NOTE 1)-B207	3435+93 (RPA006)	1	6	6.0	A	
50-15-IV-(NOTE 1)-B208	3438+01 (RPA006)	1	6	6.0	A	
Hickman Ramp B						
50-6-IV-(NOTE 1)-A409	4405+45 (RPB006)	5				Bridge blister [2]
50-6-IV-(NOTE 1)-A410	4406+92 (RPB006)	5				Bridge Blister [2]
50-15-IV-(NOTE 1)-C101	4408+84 (RPB006)	5				Wall blister [2]
50-15-IV-(NOTE 1)-C102	4411+07 (RPB006)	5				Wall blister [2]
50-15-II-(NOTE 1)-C104	4413+67 (RPB006)	5				Wall blister [2]
50-15-III-(NOTE 1)-C107	4416+11 (RPB006)	5				Wall blister [2]
Hickman Ramp C						
50-15-IV-(NOTE 1)-A308	5403+92 (RPC006)	1	3	12.0	A	
50-6-IV-(NOTE 1)-A309	5405+44 (RPC006)	5				Bridge blister [2]
50-6-IV-(NOTE 1)-A310	5406+92 (RPC006)	5				Bridge blister [2]
50-15-II-(NOTE 1)-B101	5409+24 (RPC006)	5				Wall blister [2]
50-15-II-(NOTE 1)-B102	5411+73 (RPC006)	5				Wall blister [2]
50-15-II-(NOTE 1)-B103	5414+17 (RPC006)	5				Wall blister [2]
50-15-II-(NOTE 1)-B104	5416+62 (RPC006)	1	6	6.0	A	
Hickman Ramp D						
50-15-III-(NOTE 1)-C201	6422+86 (RPD006)	1	6	4.0	A	

FILE NO.	ENGLISH	DESIGN TEAM	Iowa DOT / HDR	POLK COUNTY	PROJECT NUMBER	IM-080-3(276)12--13-77	SHEET NUMBER	C.3
5/6/2024	5:58:34 PM	JCARTER	c:\pw_work\pmain\john.carter\d2217632\Lighting c02.xlsm					

108-2 08-01-08				
ELECTRICAL DUCTS				
Location	Conduit	Dia.	Length	Remarks
Control Cabinet A to HH #A1	Plastic	3.0	95.0	A-1, A-2, A-3, A-4
HH #A1 to A107	Plastic	2.0	95.0	A-1
A107 to A106	Plastic	2.0	220.0	A-1
A106 to A105	Plastic	2.0	220.0	A-1
A105 to A104	Plastic	2.0	285.0	A-1
A104 to A103	Plastic	2.0	275.0	A-1
A103 to A102	Plastic	2.0	310.0	A-1
A102 to A101	Plastic	2.0	315.0	A-1
A101 to HH #A4	Bored	3.0	85.0	A-1, roadway crossing
HH #A4 to A108	Plastic	2.0	210.0	A-1
HH #A4 to A109	Plastic	2.0	190.0	A-1
A105 to HH #A3	PVC	3.0	55.0	A-1, roadway crossing
HH #A3 to A117	Plastic	2.0	215.0	A-1
A117 to A116	Plastic	2.0	245.0	A-1
A116 to A115	Plastic	2.0	240.0	A-1
A115 to A114	Plastic	2.0	225.0	A-1
A114 to HH #A5	Plastic	2.0	25.0	A-1
HH #A5 to A110	Plastic	2.0	235.0	A-1
HH #A5 to A111	Bored	3.0	75.0	A-1, roadway crossing
A111 to A112	Plastic	2.0	175.0	A-1
A112 to A113	Plastic	2.0	220.0	A-1
HH #A1 to HH #A2	Bored	3.0	240.0	A-2, A-4, roadway crossing
HH #A2 to A212	Plastic	2.0	100.0	A-2
A212 to A211	Plastic	2.0	220.0	A-2
A211 to A210	Plastic	2.0	220.0	A-2
A210 to A209	Plastic	2.0	225.0	A-2
A209 to A204	Plastic	2.0	235.0	A-2
A204 to HH #A7	Plastic	2.0	145.0	A-2
HH #A7 to A203	Plastic	2.0	150.0	A-2
A203 to A202	Plastic	2.0	295.0	A-2
A202 to A201	Plastic	2.0	290.0	A-2
HH #A7 to HH #A6	PVC	3.0	70.0	A-2, roadway crossing
HH #A6 to A208	Plastic	2.0	90.0	A-2
A208 to A207	Plastic	2.0	230.0	A-2
A207 to A206	Plastic	2.0	215.0	A-2
A206 to A205	Plastic	2.0	220.0	A-2
HH #A1 to A301	Plastic	2.0	135.0	A-3
A301 to A302	Plastic	2.0	230.0	A-3
A302 to A303	Plastic	2.0	230.0	A-3
A303 to A304	Plastic	2.0	230.0	A-3
A304 to A305	Plastic	2.0	230.0	A-3
A305 to A306	Plastic	2.0	230.0	A-3
A306 to A307	Plastic	2.0	230.0	A-3
A307 to A308	Plastic	2.0	230.0	A-3
A308 to Barrier Conduit	Plastic	2.0	20.0	A-3
Barrier Conduit to A309	By others	1.5	160.0	A-3, barrier conduit
A309 to A310	By others	1.5	165.0	A-3, barrier conduit
A310 to B101	By others	1.5	225.0	Empty conduit, barrier conduit
HH #A2 to A401	Plastic	2.0	130.0	A-4
A401 to A402	Plastic	2.0	230.0	A-4
A402 to A403	Plastic	2.0	230.0	A-4
A403 to A404	Plastic	2.0	230.0	A-4
A404 to A405	Plastic	2.0	250.0	A-4
A405 to HH #A8[1]	Plastic	2.0	60.0	A-4
HH #A8[1] to A406	By others	1.5	150.0	A-4, barrier conduit
A406 to A407	By others	1.5	240.0	A-4, barrier conduit
A407 to A408	By others	1.5	220.0	A-4, barrier conduit
A408 to A409	By others	1.5	150.0	A-4, barrier conduit
A409 to A410	By others	1.5	150.0	A-4, barrier conduit
A410 to C101	By others	1.5	190.0	Empty conduit, barrier conduit
Control Cabinet B to HH #B1	Plastic	3.0	245.0	B-1, B-2
HH #B1 to B104	Plastic	2.0	60.0	B-1
B104 to HH #B7[1]	Plastic	2.0	210.0	B-1
HH #B7[1] to B103	By others	1.5	165.0	B-1, barrier conduit
B103 to B102	By others	1.5	245.0	B-1, barrier conduit
B102 to B101	By others	1.5	250.0	B-1, barrier conduit
HH #B1 HH #B8[1]	Bored	3.0	230.0	B-1, roadway crossing
HH #B8[1] to B108	Plastic	2.0	65.0	B-1
B108 to B107	Plastic	2.0	240.0	B-1
B107 to B106	Plastic	2.0	245.0	B-1
B106 to B105	Plastic	2.0	215.0	B-1
HH #B8[1] to B109	By others	1.5	310.0	B-1, barrier conduit
B109 to B110	By others	1.5	225.0	B-1, barrier conduit
B110 to B111	By others	1.5	220.0	B-1, barrier conduit
B111 to HH #B9[1]	By others	1.5	90.0	B-1, barrier conduit
HH #B9[1] to B112	Plastic	2.0	145.0	B-1
Underdeck lights	By others	1.5	200.0	B-1, bridge deck conduit
HH #B1 to HH #B2	Bored	3.0	320.0	B-2, roadway crossing

108-2 08-01-08				
ELECTRICAL DUCTS				
Location	Conduit	Dia.	Length	Remarks
HH #B2 to HH #B3	Bored	3.0	210.0	B-2, roadway crossing
HH #B3 to B201	Plastic	2.0	80.0	B-2
B201 to B202	Plastic	2.0	280.0	B-2
B202 to HH #B4	PVC	3.0	55.0	B-2, roadway crossing
HH #B4 to HH #B5	Plastic	2.0	300.0	B-2
HH #B5 to B203	PVC	3.0	55.0	B-2, roadway crossing
HH #B5 to B213	Plastic	2.0	105.0	B-2
B213 to B214	Plastic	2.0	230.0	B-2
HH #B5 to HH #B6	Plastic	2.0	320.0	B-2
HH #B6 to B204	PVC	3.0	55.0	B-2, roadway crossing
B204 to B205	Plastic	2.0	225.0	B-2
B205 to B206	Plastic	2.0	210.0	B-2
B206 to B207	Plastic	2.0	210.0	B-2
B207 to B208	Plastic	2.0	215.0	B-2
B208 to B209	Plastic	2.0	215.0	B-2
B209 to B210	Plastic	2.0	220.0	B-2
B210 to B211	Plastic	2.0	215.0	B-2
B211 to B212	Plastic	2.0	215.0	B-2
Control Cabinet C to HH #C6[1]	Plastic	3.0	170.0	C-1
HH #C6[1] to C107	By others	1.5	160.0	C-1, barrier conduit
C107 to C104	By others	1.5	245.0	C-1, barrier conduit
C104 to C102	By others	1.5	260.0	C-1, barrier conduit
C102 to C101	By others	1.5	225.0	C-1, barrier conduit
HH #C6[1] to HH #C7[1]	Bored	3.0	265.0	C-1, roadway crossing
HH #C7[1] to C105	Plastic	2.0	90.0	C-1
C105 to C103	Plastic	2.0	240.0	C-1
HH #C7[1] to C106	By others	1.5	160.0	C-1, barrier conduit
C106 to C108	By others	1.5	225.0	C-1, barrier conduit
C108 to C109	By others	1.5	215.0	C-1, barrier conduit
C109 to HH #C8[1]	By others	1.5	95.0	C-1, barrier conduit
HH #C8[1] to C110	Plastic	2.0	140.0	C-1
Underdeck lights	By others	1.5	200.0	C-1, bridge deck conduit
Control Cabinet C to HH #C1	Plastic	3.0	20.0	C-2
HH #C1 to HH #C2	Bored	3.0	260.0	C-2, roadway crossing
HH #C2 TO HH #C3	Bored	3.0	300.0	C-2, roadway crossing
HH #C3 to C201	Plastic	2.0	20.0	C-2
C201 to C202	Plastic	2.0	260.0	C-2
C202 to C203	Plastic	2.0	300.0	C-2
C203 to C204	Plastic	2.0	295.0	C-2
C204 to HH #C4	Plastic	2.0	165.0	C-2
HH #C4 to C207	Plastic	2.0	90.0	C-2
C207 to C206	Plastic	2.0	230.0	C-2
C206 to C205	Plastic	2.0	230.0	C-2
HH #C4 to HH #C5	PVC	3.0	45.0	C-2, roadway crossing
HH #C5 to C208	Plastic	2.0	100.0	C-2
C208 to C209	Plastic	2.0	200.0	C-2
C209 to C210	Plastic	2.0	230.0	C-2
C210 to C211	Plastic	2.0	195.0	C-2
C211 to C212	Plastic	2.0	215.0	C-2
C212 to C213	Plastic	2.0	220.0	C-2
C213 to C214	Plastic	2.0	215.0	C-2
C214 to C215	Plastic	2.0	215.0	C-2
Control Cabinet D to HH #D1	Plastic	3.0	85.0	D-1, D-2
HH #D1 to HH #D2	Bored	3.0	180.0	D-1, D-2, roadway crossing
HH #D2 to HH #D3	Bored	3.0	245.0	D-1, roadway crossing
HH #D3 to HH #D4	Plastic	2.0	180.0	D-1
HH #D4 to D105	Plastic	2.0	100.0	D-1
D105 to D104	Plastic	2.0	225.0	D-1
D104 to D103	Plastic	2.0	250.0	D-1
D103 to D102	Plastic	2.0	250.0	D-1
D102 to D101	Plastic	2.0	250.0	D-1
HH #D2 to D210	Plastic	2.0	120.0	D-2
D210 to D209	Plastic	2.0	260.0	D-2
D209 to D208	Plastic	2.0	260.0	D-2
D208 to D207	Plastic	2.0	265.0	D-2
D207 to D206	Plastic	2.0	245.0	D-2
D206 to D205	Plastic	2.0	220.0	D-2
D205 to D204	Plastic	2.0	170.0	D-2
D204 to D203	Plastic	2.0	210.0	D-2
D203 to D202	Plastic	2.0	215.0	D-2
D202 to D201	Plastic	2.0	215.0	D-2
Control Cabinet E to HH #E1	Plastic	3.0	135.0	E-1, E-2
HH #E1 to E109	Plastic	2.0	100.0	E-1
E109 to E108	Plastic	2.0	305.0	E-1
E108 to E107	Plastic	2.0	285.0	E-1
E107 to E106	Plastic	2.0	280.0	E-1
E106 to E105	Plastic	2.0	280.0	E-1
E105 to E104	Plastic	2.0	235.0	E-1
E104 to E103	Plastic	2.0	215.0	E-1
E103 to E102	Plastic	2.0	205.0	E-1

LAYOUT LEGEND

●

Lighting Unit

Station 000+00

50

15

III

M

A201

Lighting Unit No.

Vertical Light Distribution

Lateral Light Distribution

Mastarm Length (ft.)

Mounting Height (ft.)

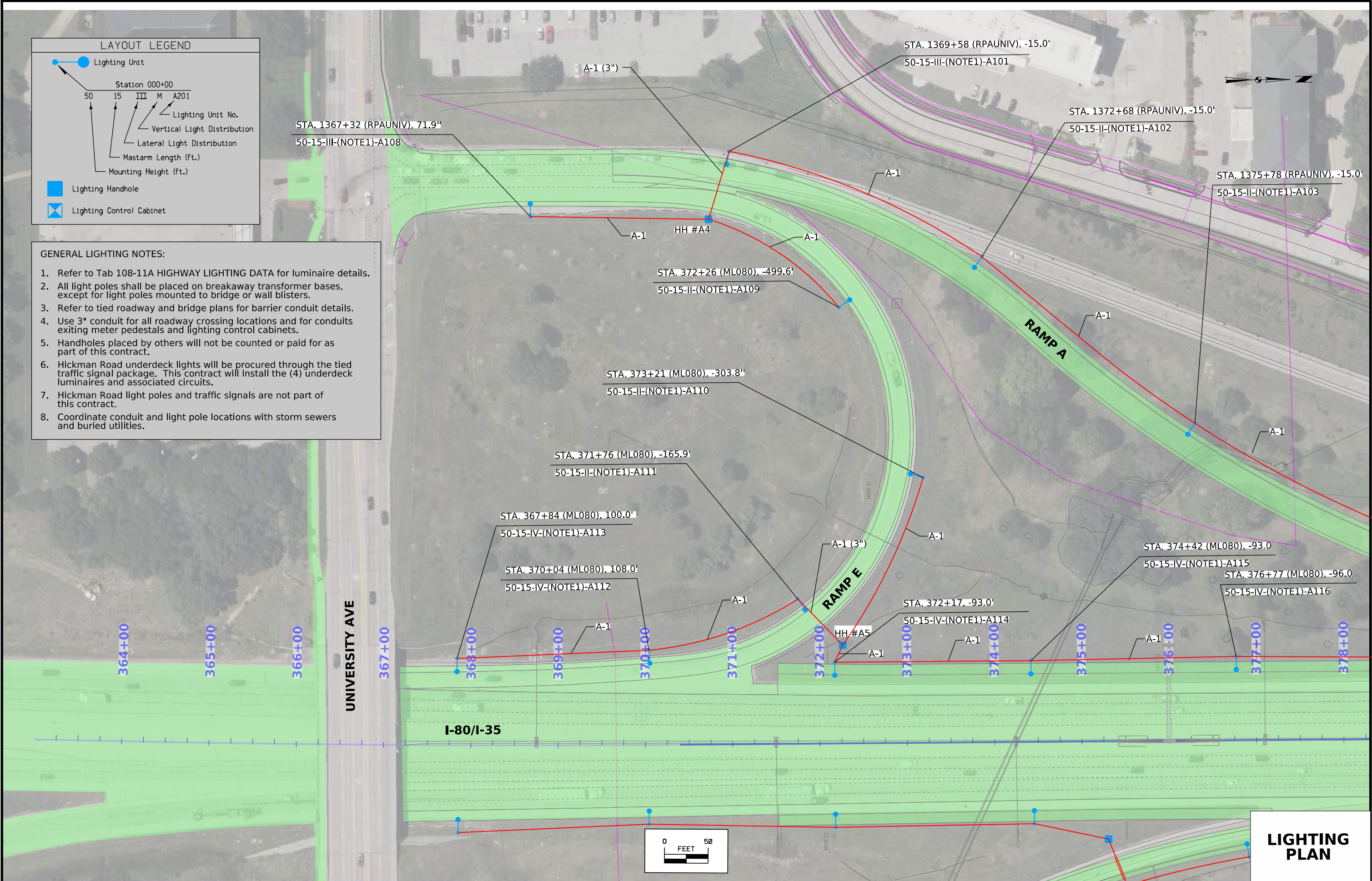
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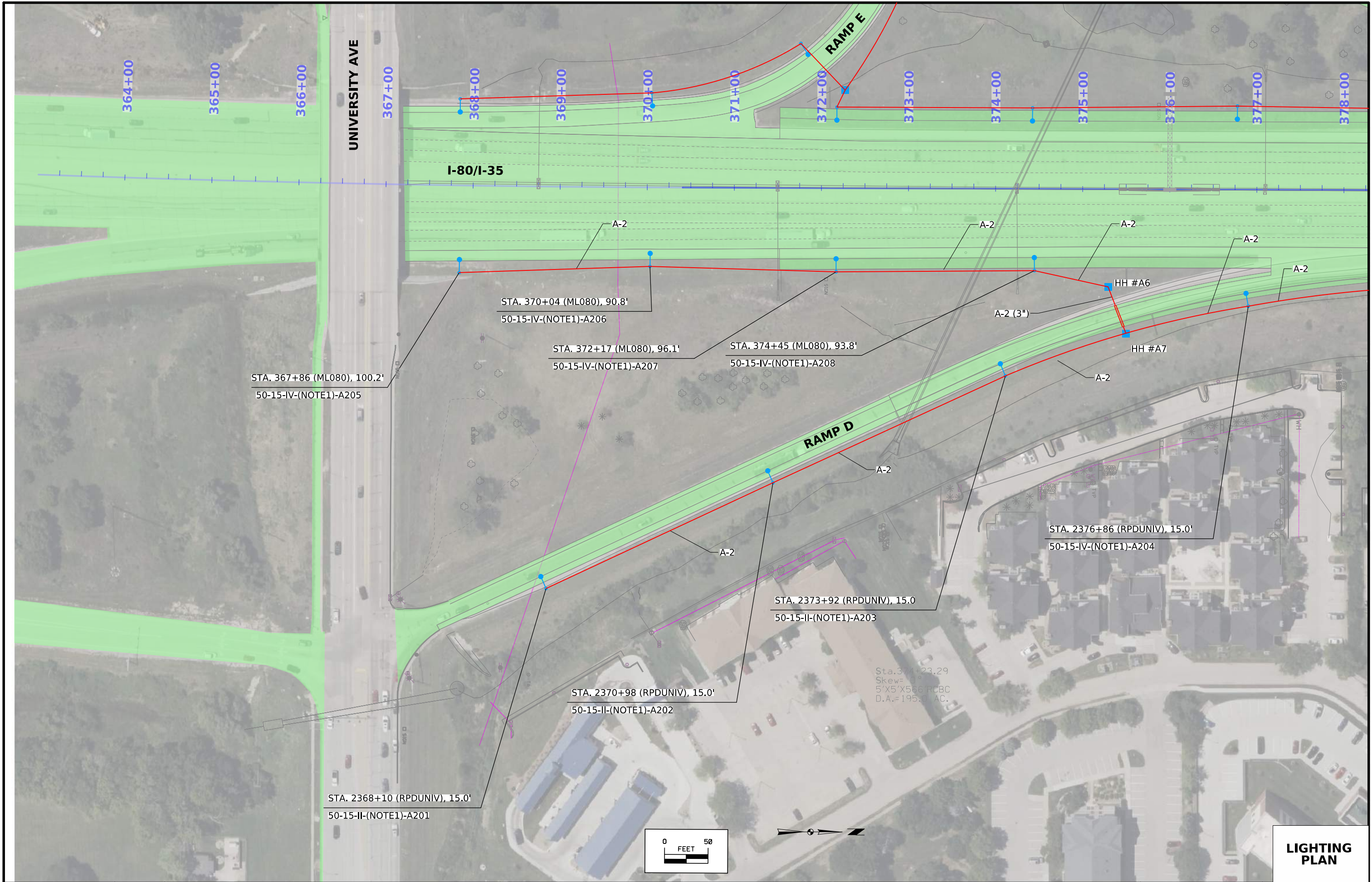
Lighting Handhole

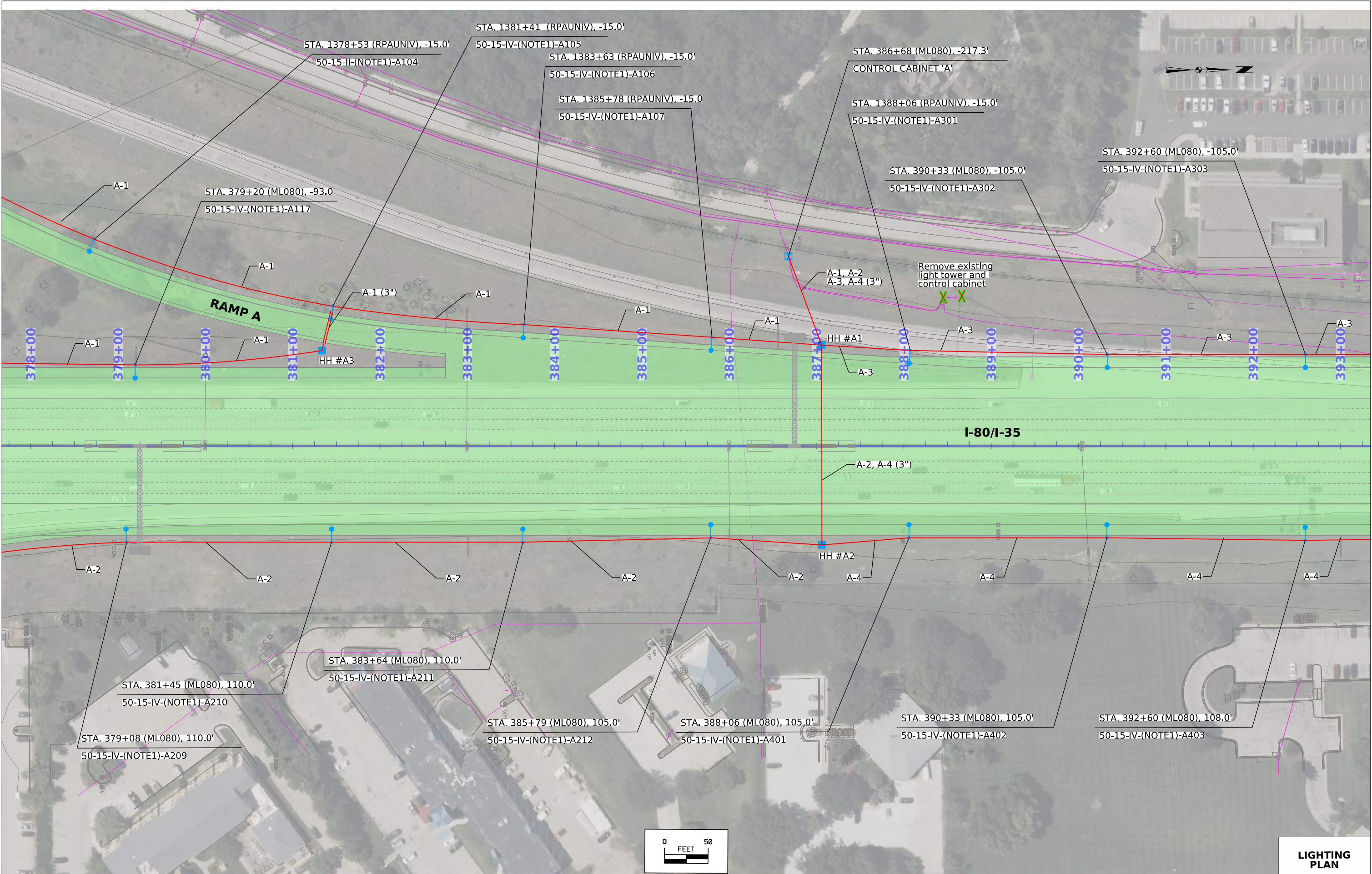
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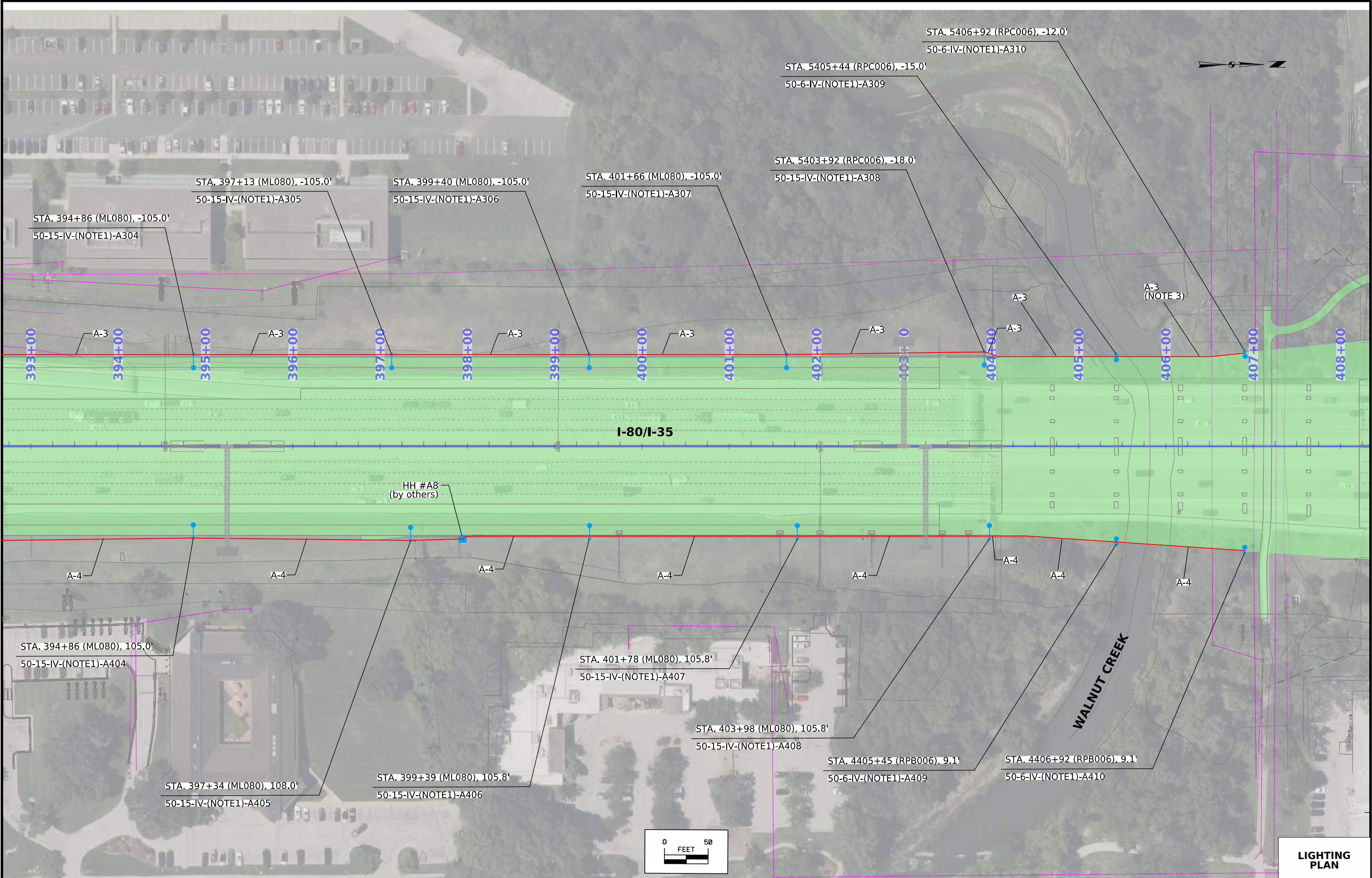
Lighting Control Cabinet

- GENERAL LIGHTING NOTES:
1. Refer to Tab 108-11A HIGHWAY LIGHTING DATA for luminaire details.
 2. All light poles shall be placed on breakaway transformer bases, except for light poles mounted to bridge or wall blisters.
 3. Refer to tied roadway and bridge plans for barrier conduit details.
 4. Use 3" conduit for all roadway crossing locations and for conduits exiting meter pedestals and lighting control cabinets.
 5. Handholes placed by others will not be counted or paid for as part of this contract.
 6. Hickman Road underdeck lights will be procured through the tied traffic signal package. This contract will install the (4) underdeck luminaires and associated circuits.
 7. Hickman Road light poles and traffic signals are not part of this contract.
 8. Coordinate conduit and light pole locations with storm sewers and buried utilities.



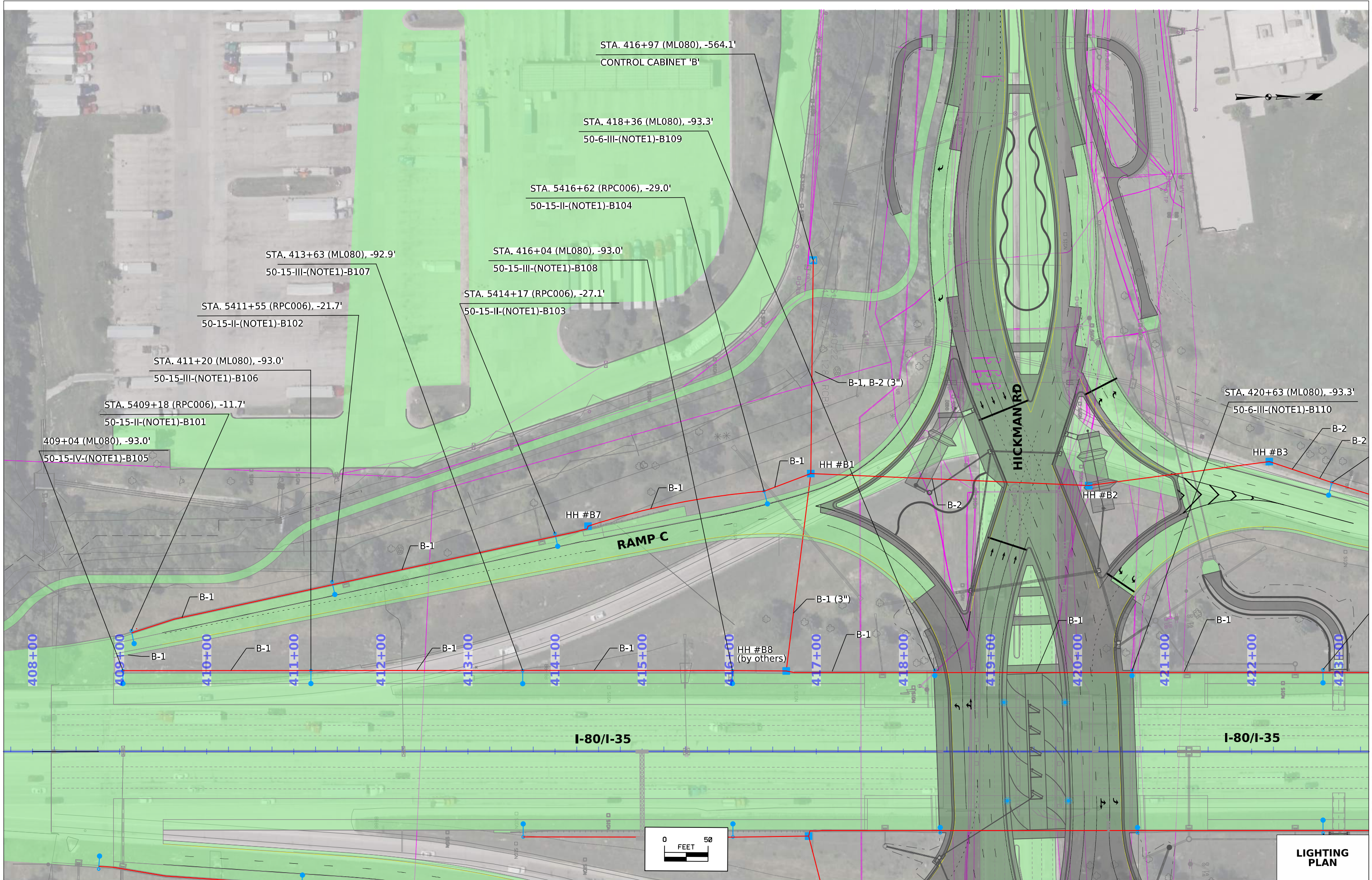


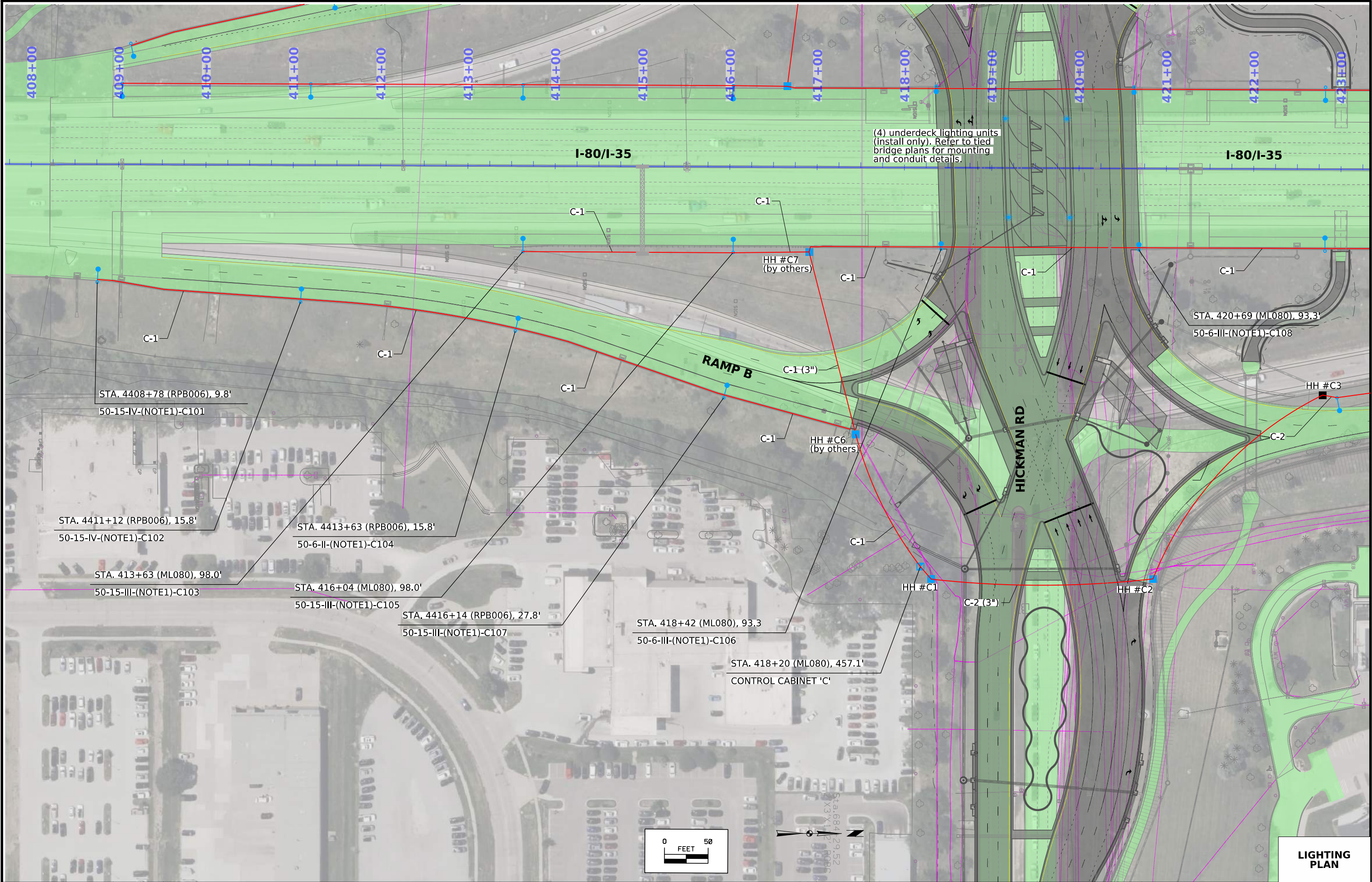


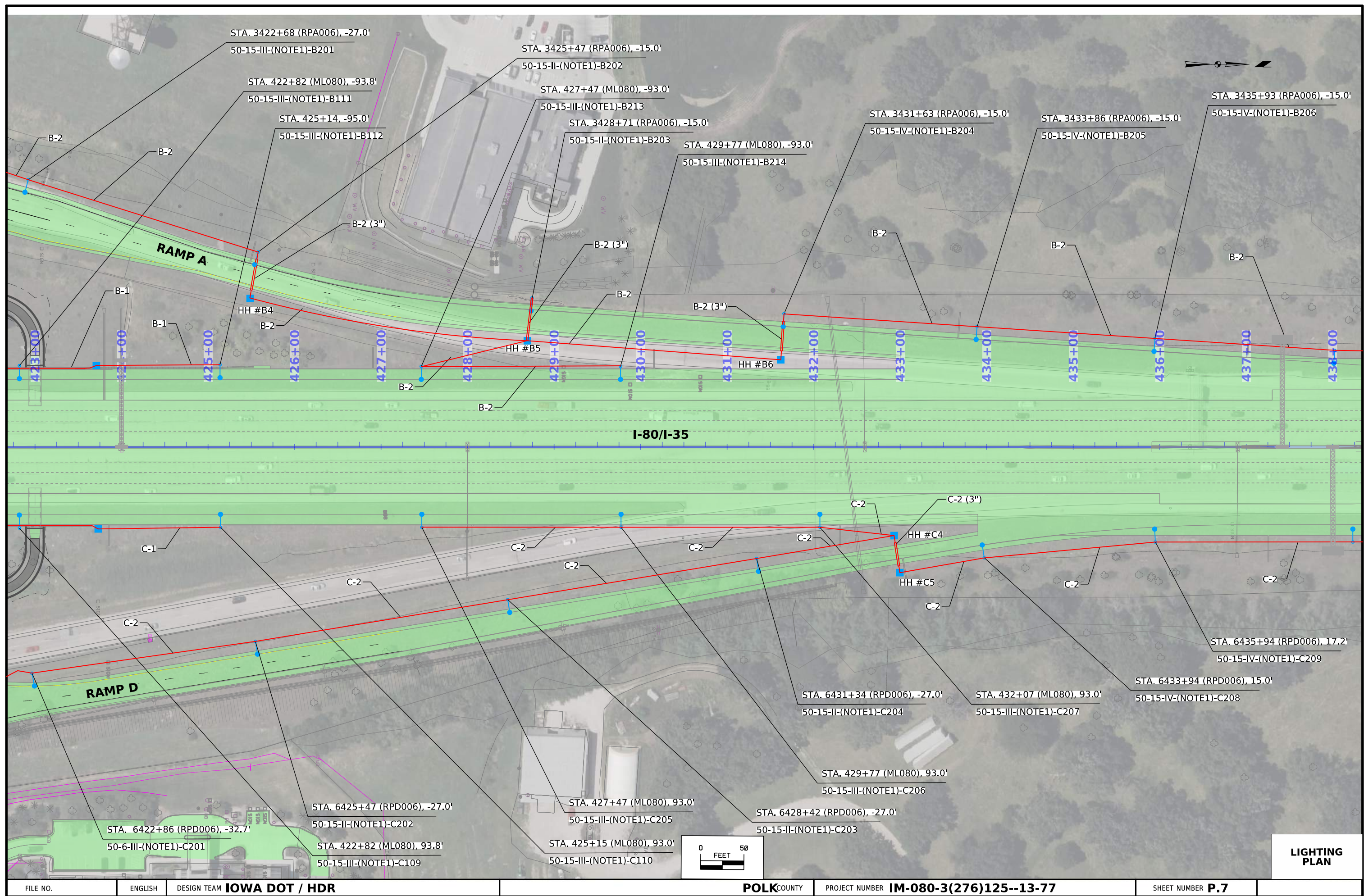


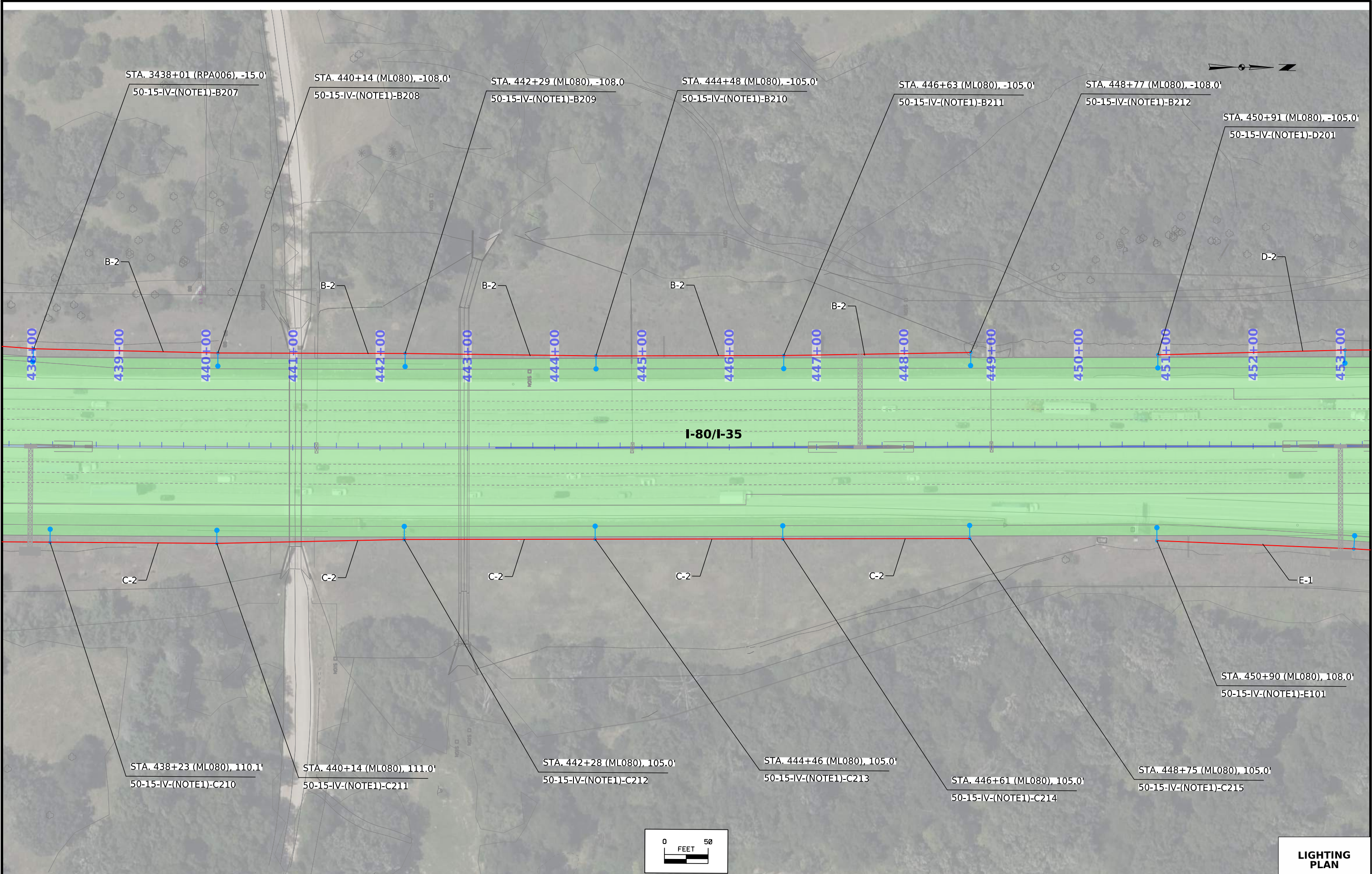
LIGHTING
PLAN

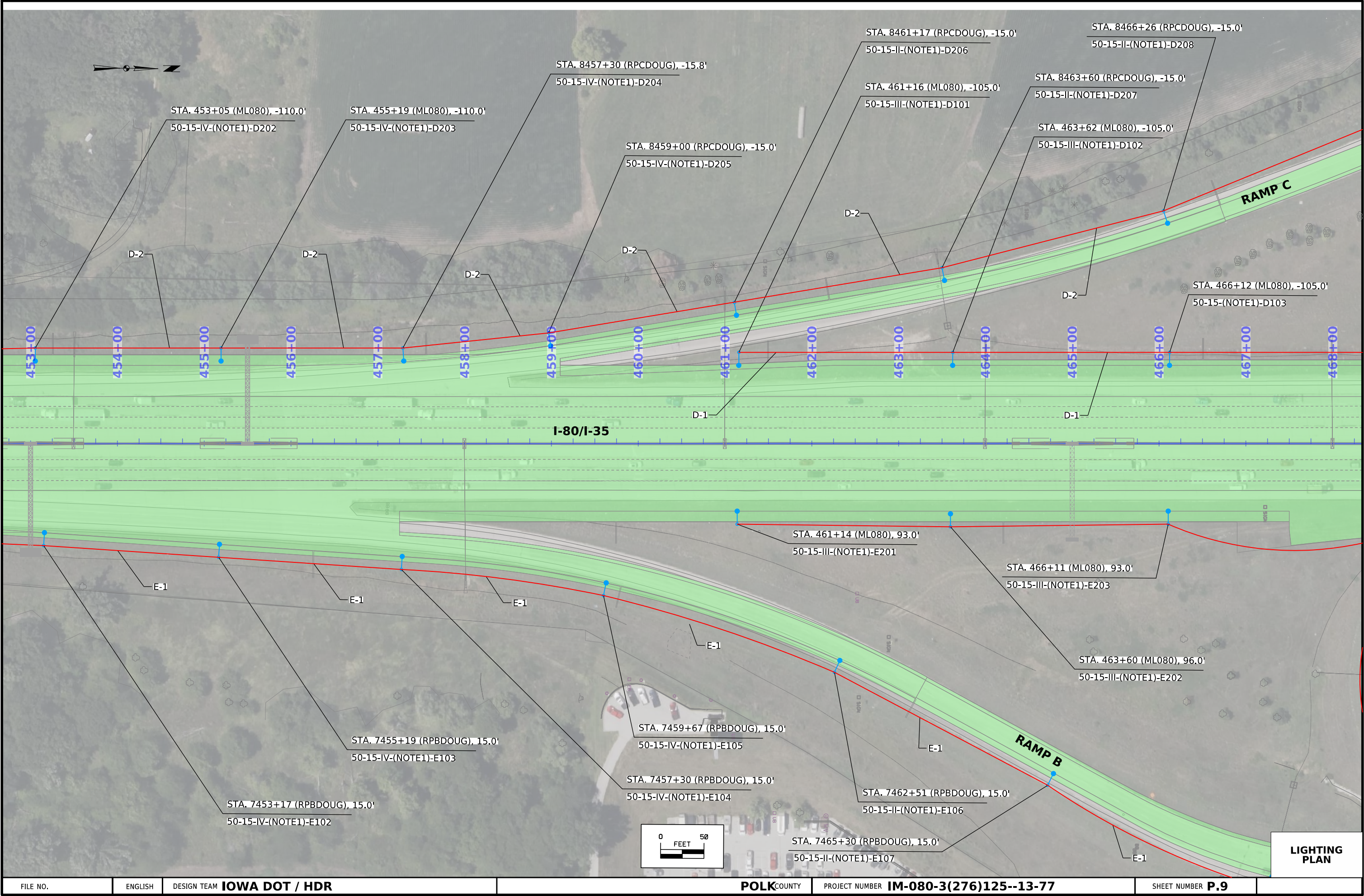
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SYSTEMTIME	SYSTEMDATE	USERNAME	DGNSPEC					

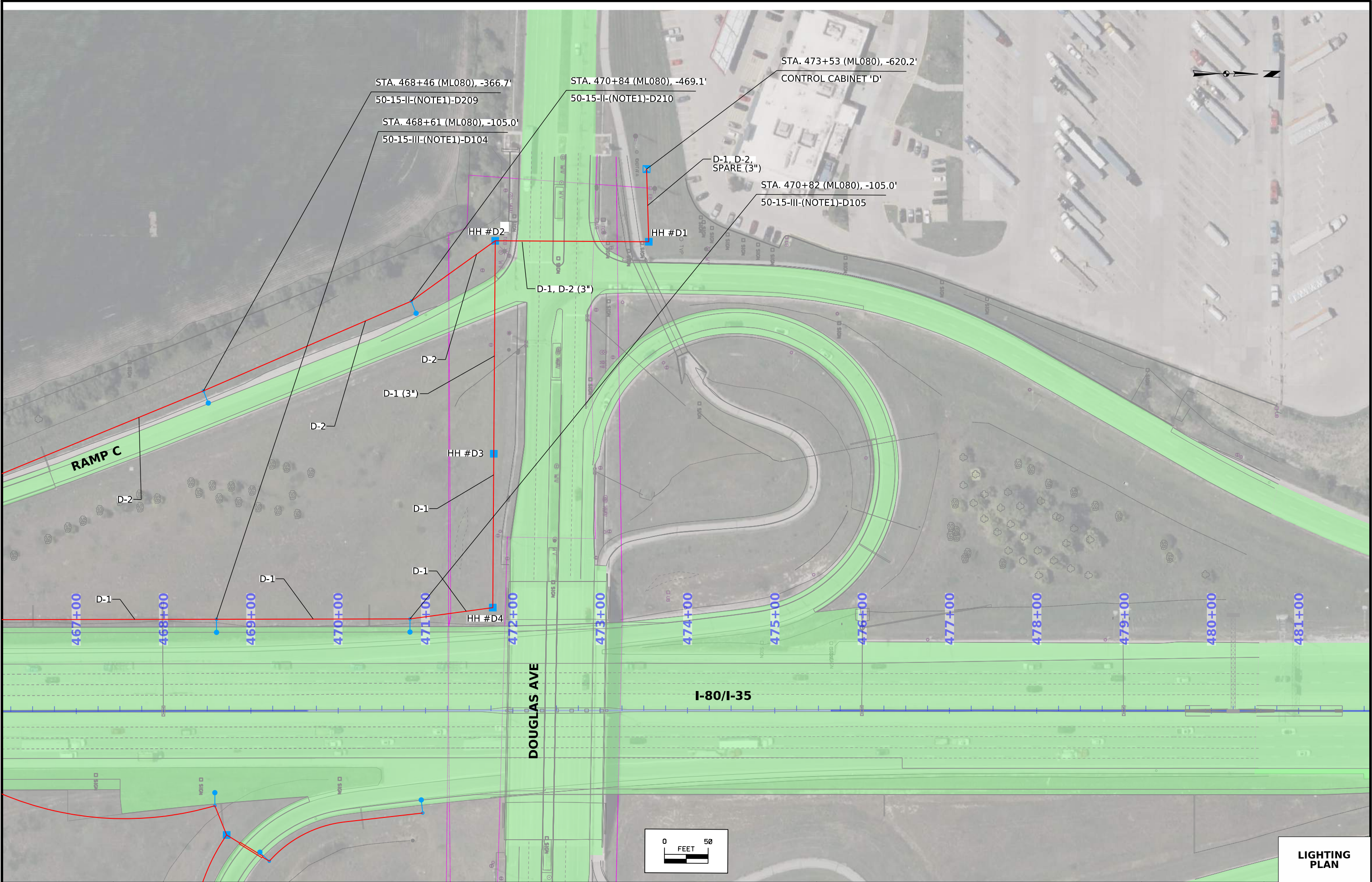








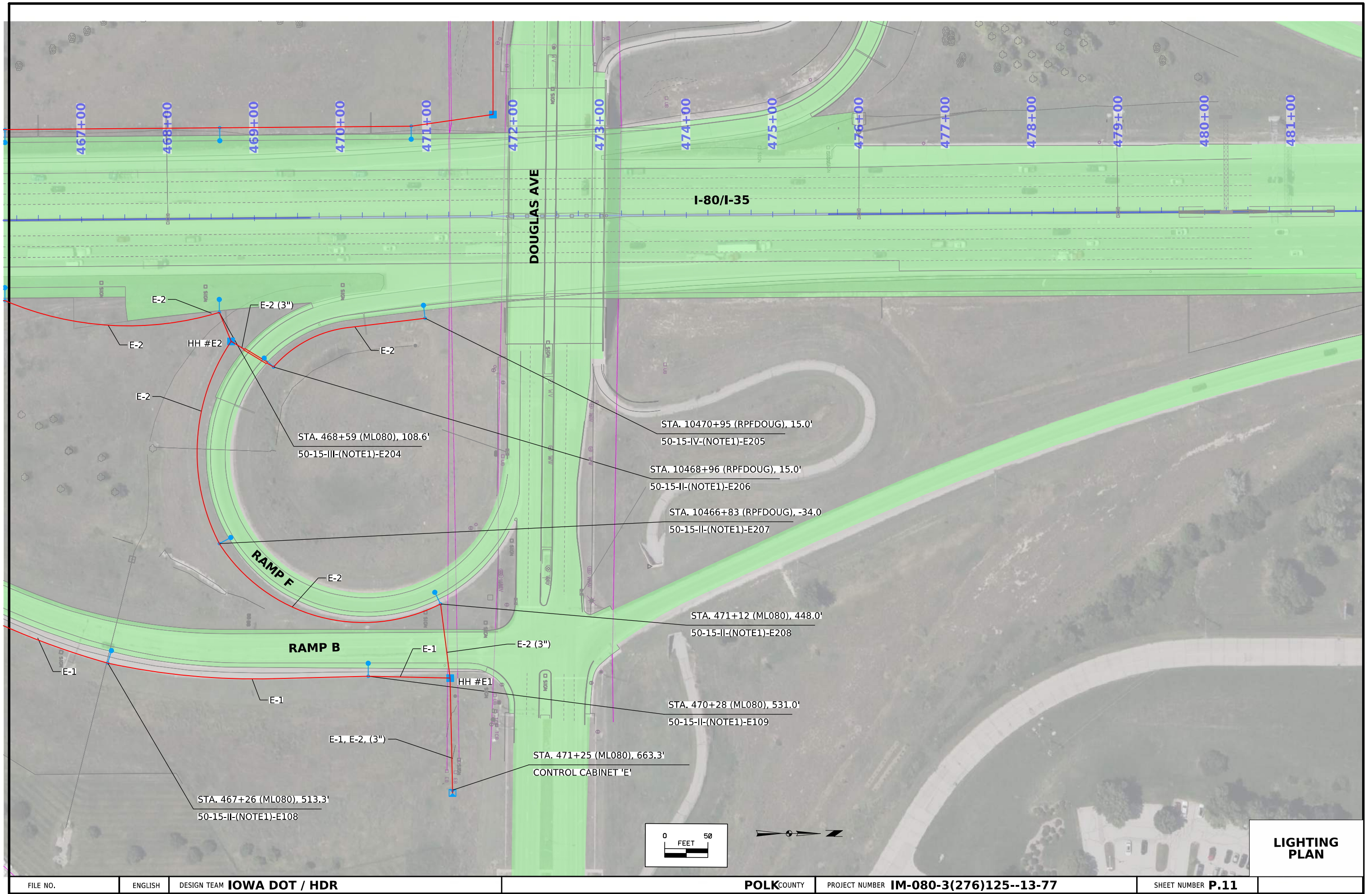




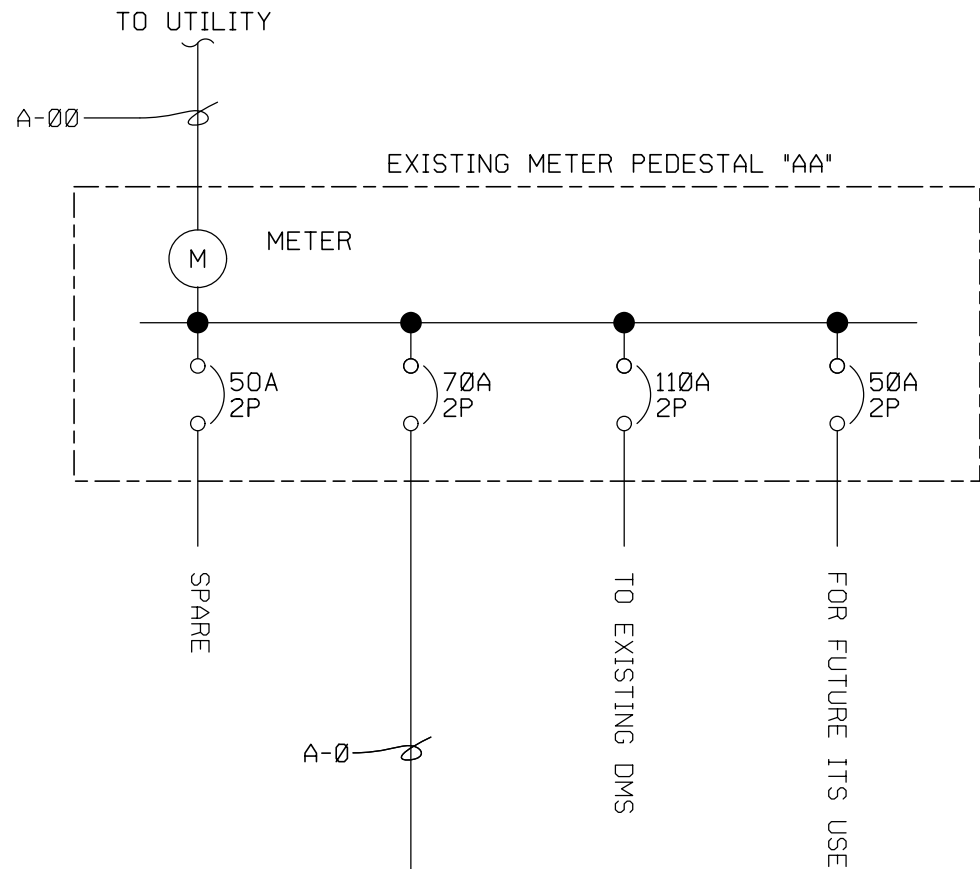
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SYSTEMTIME	SYSTEMDATE	USERNAME	DGNSPEC					
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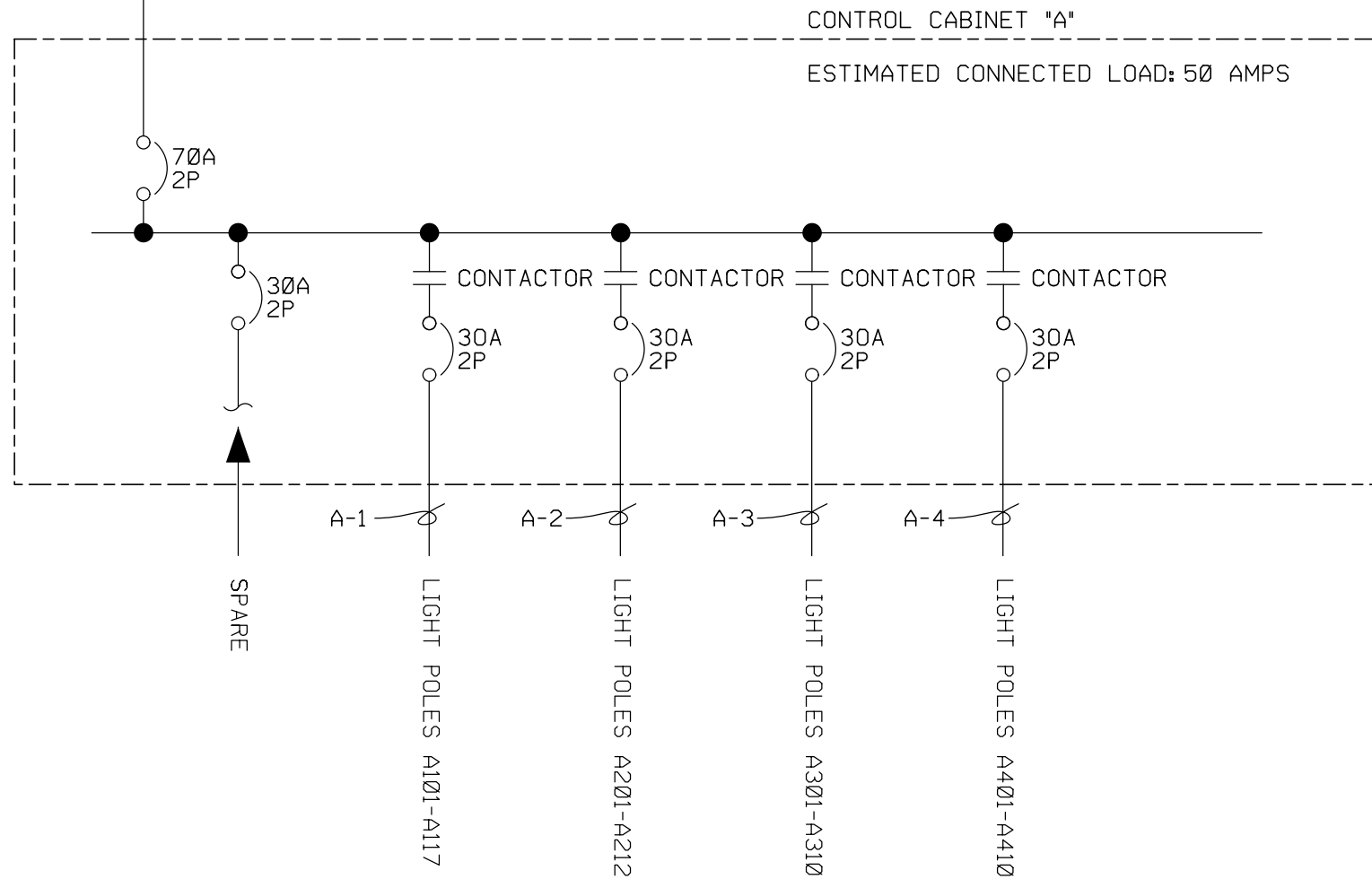
LIGHTING
PLAN



LIGHTING
PLAN

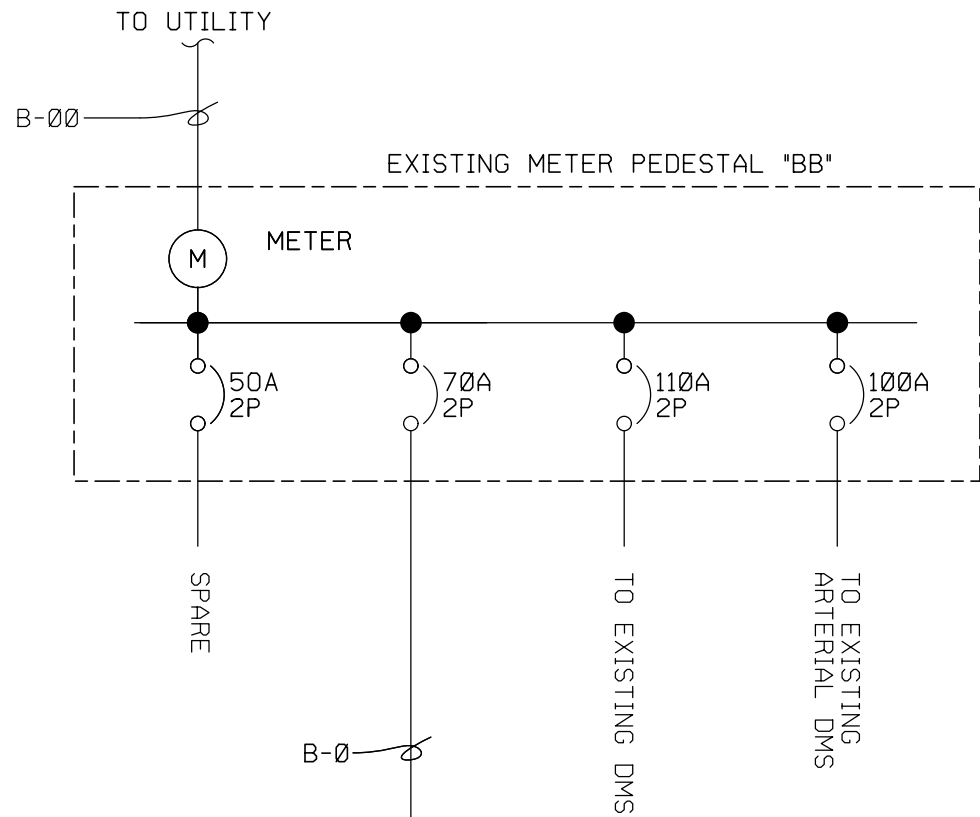


CABINET A ONE-LINE DIAGRAM



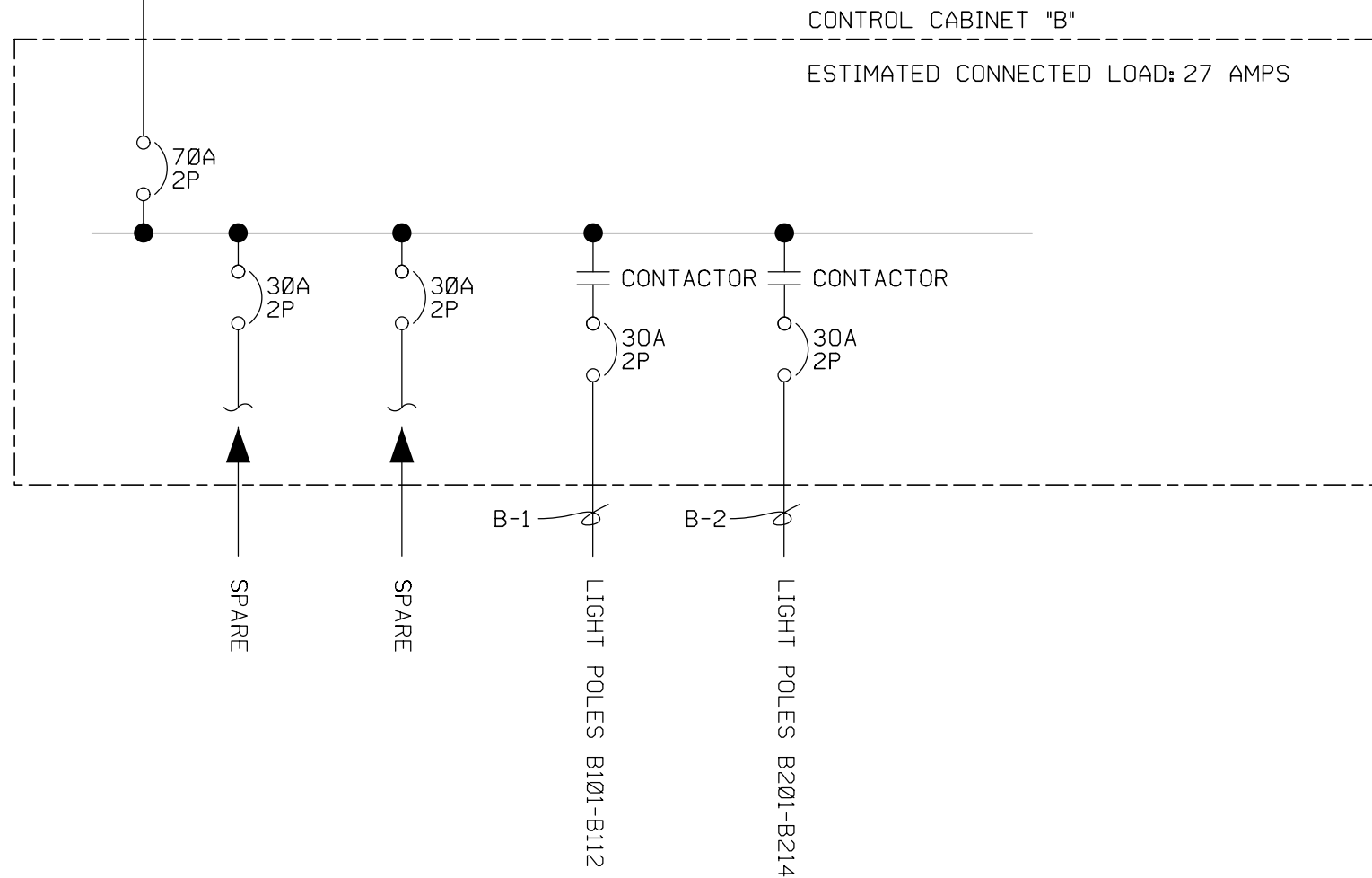
CKT	CABLE/CONDUIT DESCRIPTION	CONDUCTORS: COPPER (CU) OR ALUMINUM (AL)
A-00	Use existing	
A-0	3-#1, 1-#1G, 3"C	CU
A-1	2-#2, 1-#2G, 2"C	CU
A-2	2-#2, 1-#2G, 2"C	CU
A-3	2-#3, 1-#3G, 2"C	CU
A-4	2-#3, 1-#3G, 2"C	CU

CONTROL CABINET A
ONE-LINE DIAGRAM

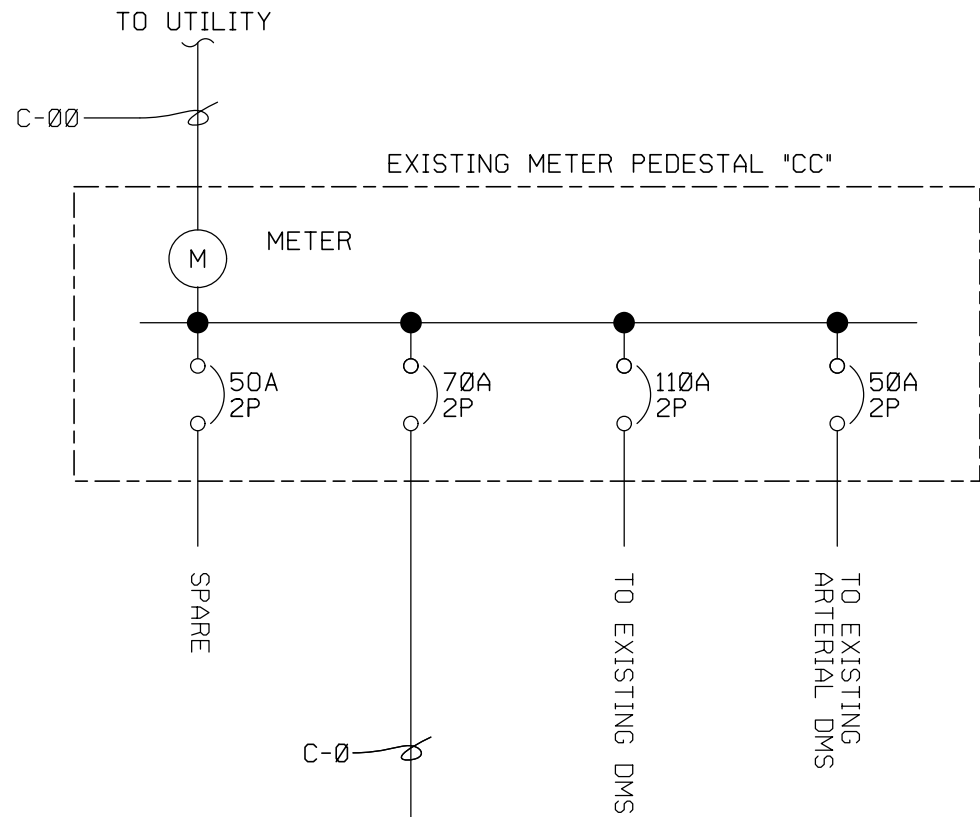


CABINET B ONE-LINE DIAGRAM

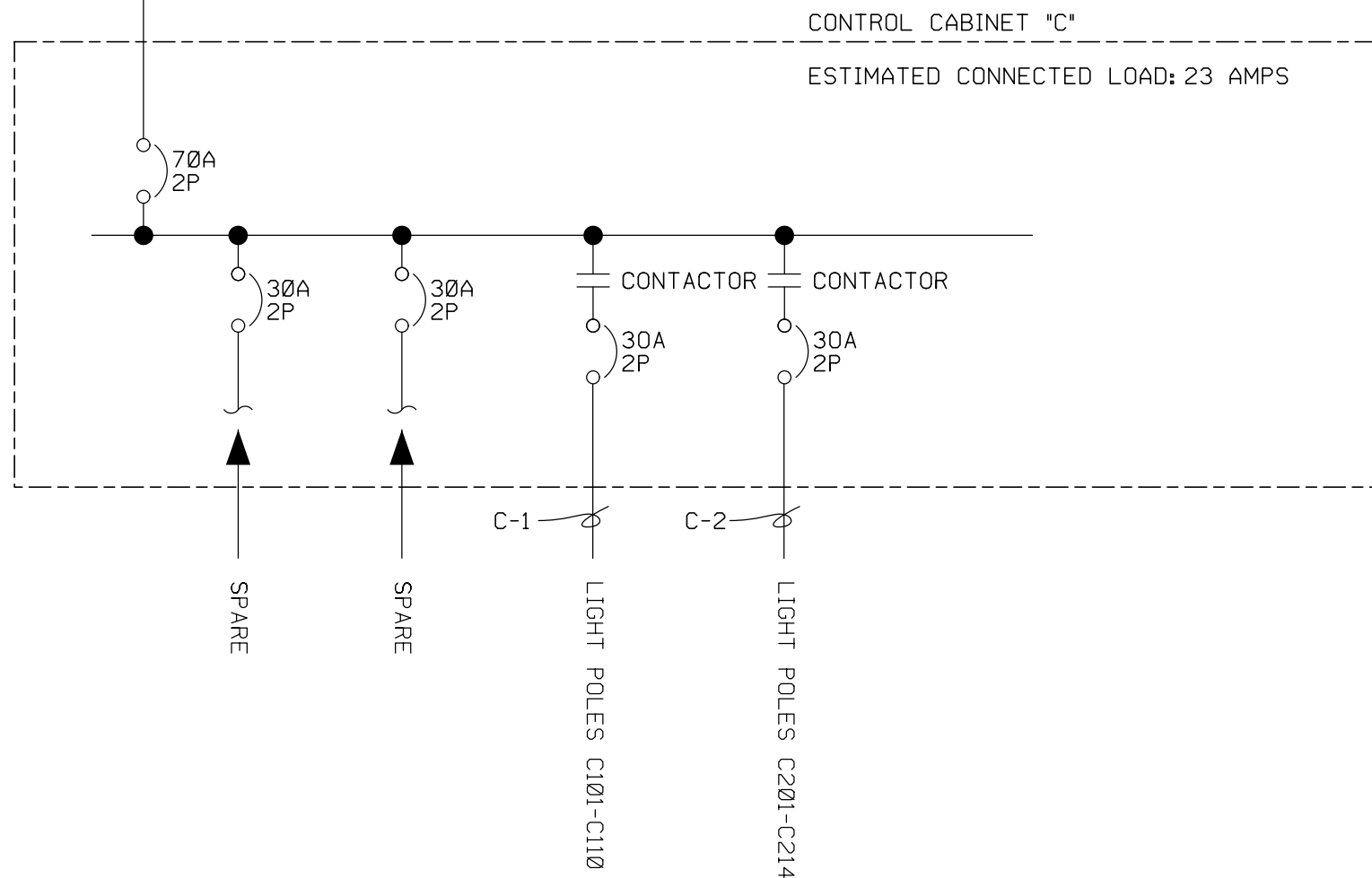
CKT	CABLE/CONDUIT DESCRIPTION	CONDUCTORS: COPPER (CU) OR ALUMINUM (AL)
B-00	Use existing	
B-0	3-#1, 1-#1G, 3"C	CU
B-1	2-#2, 1-#2G, 2"C	CU
B-2	2-#1, 1-#1G, 2"C	CU



CONTROL CABINET B
ONE-LINE DIAGRAM

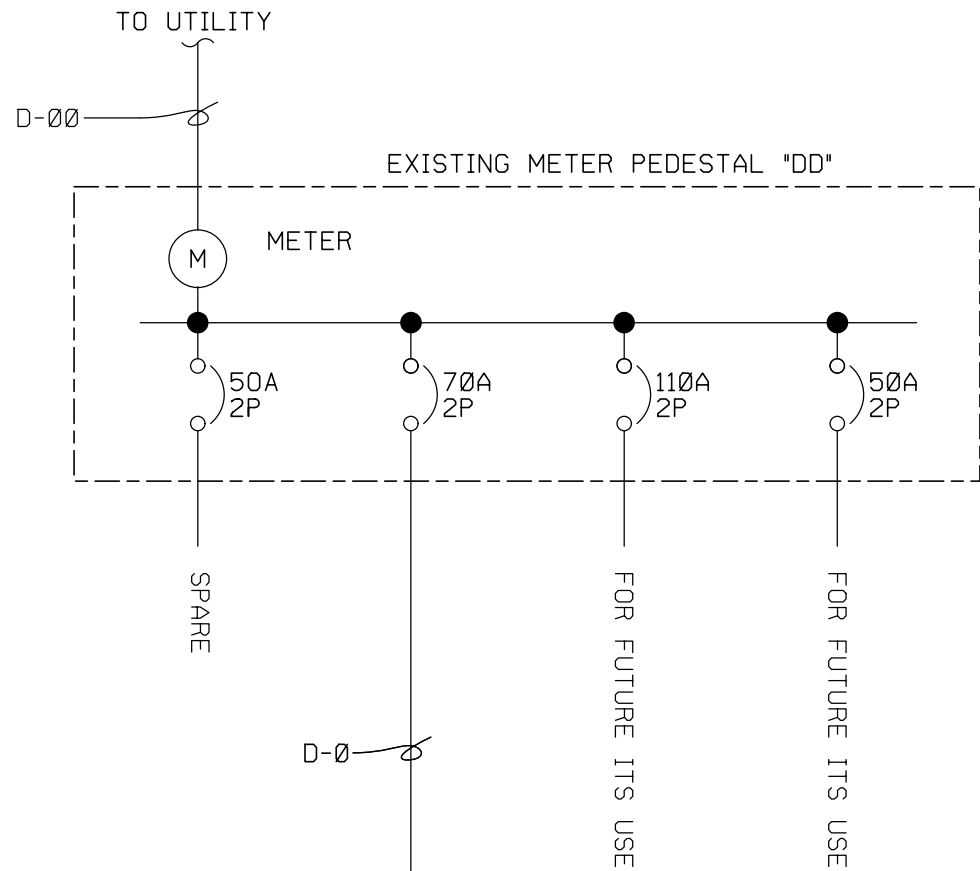


CABINET C ONE-LINE DIAGRAM

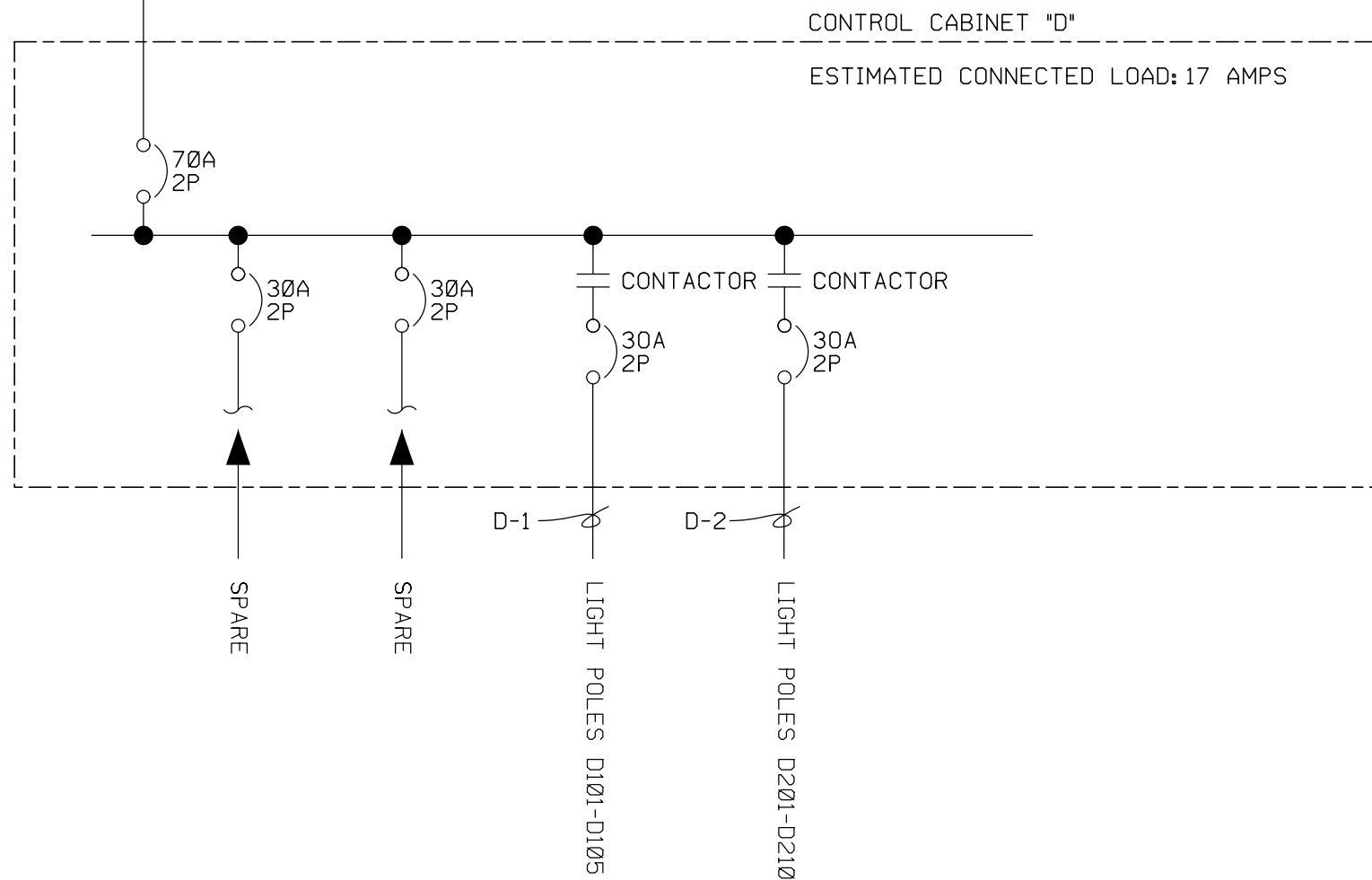


CKT	CABLE/CONDUIT DESCRIPTION	CONDUCTORS: COPPER (CU) OR ALUMINUM (AL)
C-00	Use existing	
C-0	3-#1, 1-#1G, 3"C	CU
C-1	2-#4, 1-#4G, 2"C	CU
C-2	2-#1, 1-#1G, 2"C	CU

CONTROL CABINET C
ONE-LINE DIAGRAM

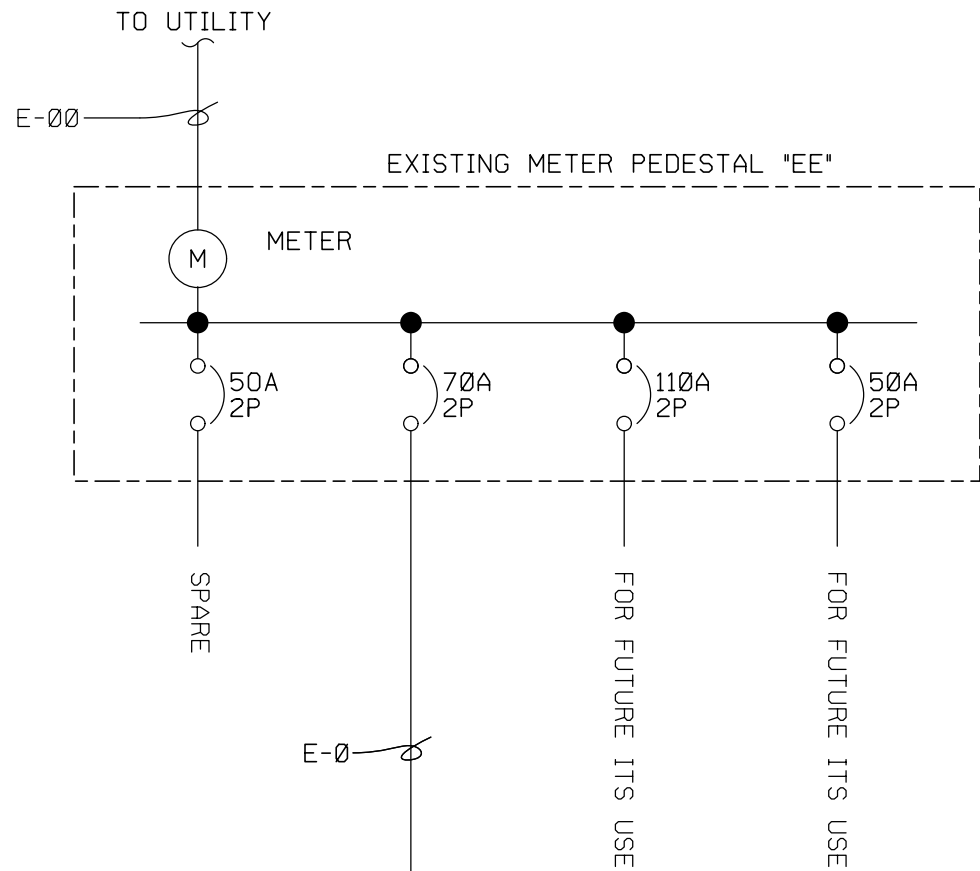


CABINET D ONE-LINE DIAGRAM

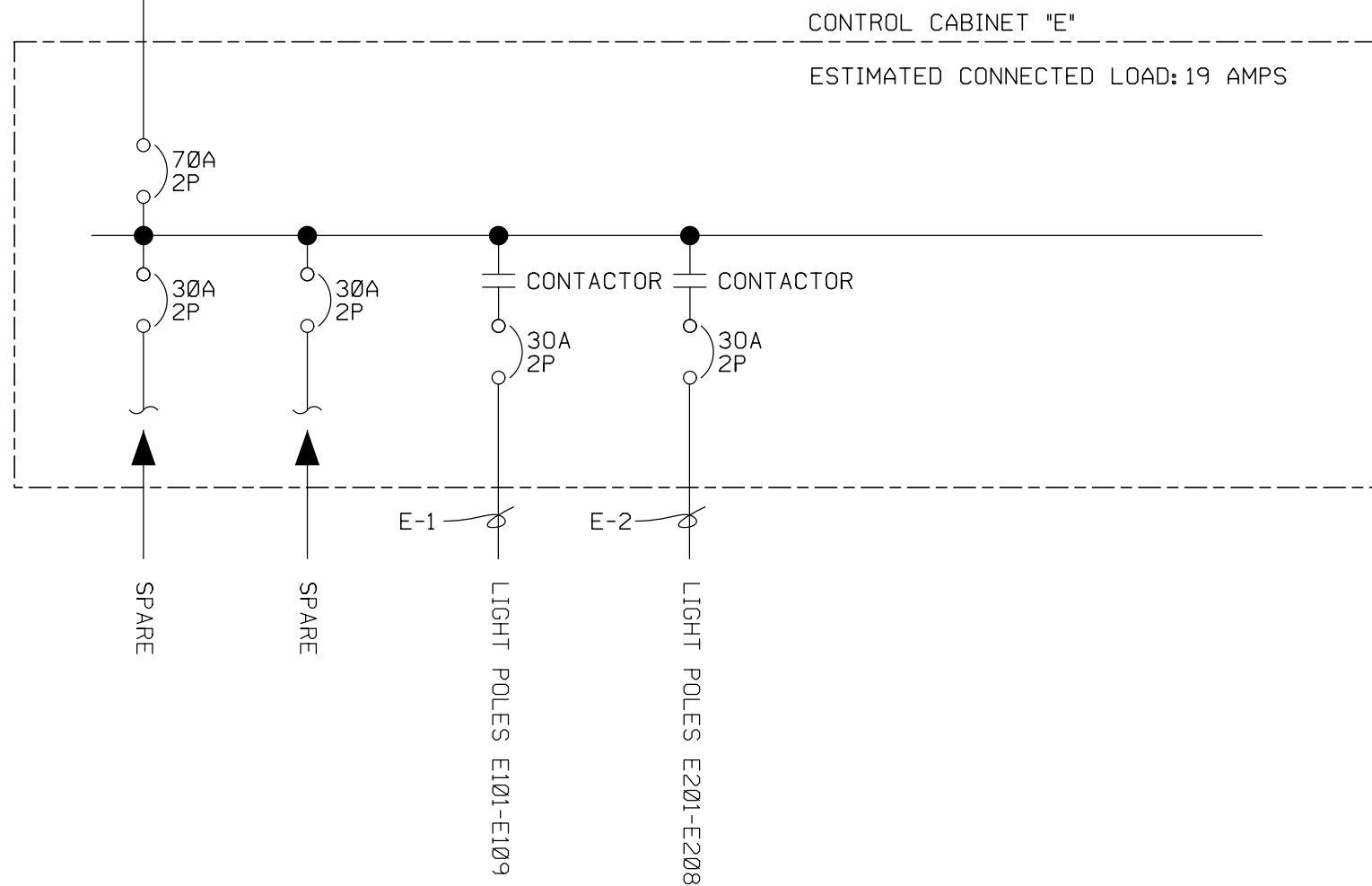


CKT	CABLE/CONDUIT DESCRIPTION	CONDUCTORS: COPPER (CU) OR ALUMINUM (AL)
D-00	Use existing	
D-0	3-#1, 1-#1G, 3"C	CU
D-1	2-#4, 1-#4G, 2"C	CU
D-2	2-#3, 1-#3G, 2"C	CU

CONTROL CABINET D
ONE-LINE DIAGRAM



CABINET E ONE-LINE DIAGRAM



CKT	CABLE/CONDUIT DESCRIPTION	CONDUCTORS: COPPER (CU) OR ALUMINUM (AL)
E-00	Use existing	
E-0	3-#1, 1-#1G, 3"C	CU
E-1	2-#4, 1-#4G, 2"C	CU
E-2	2-#4, 1-#4G, 2"C	CU

CONTROL CABINET E
ONE-LINE DIAGRAM