

MINNESOTA DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLAN FOR LIGHTING
 LOCATED ON TH 694 FROM EAST RIVER ROAD TO 850 FEET WEST OF TH 65

FED. PROJ. NO. NHPP I694(006)

STATE PROJ. NO. 0285-69
 GROSS LENGTH.....7233.6 FEET.....1.37 MILES
 BRIDGES-LENGTH.....0.0 FEET.....0.00 MILES
 EXCEPTIONS-LENGTH.....0.0 FEET.....0.00 MILES
 NET LENGTH.....7233.6 FEET.....1.37 MILES
 REF. POINT. 036+00.139 ... TO REF. POINT. 037+00.513

NOTE: DESCRIPTION BASED ON MEDIAN ALIGNMENT (LMED694).

GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

INDEX

DESCRIPTION	SHEET NO.
TITLE SHEET	1
STATEMENT OF ESTIMATED QUANTITIES	2
DETAILS	3-4
REMOVAL PLAN	5-7
LIGHTING PLAN	8-11
UTILITIES INFORMATION	12-14

THIS PLAN CONTAINS 14 SHEETS

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAW OF THE STATE OF MINNESOTA.

PRINT NAME..... WILL D ZINE LICENSE # XXXXX

SIGNATURE:..... DATE.....

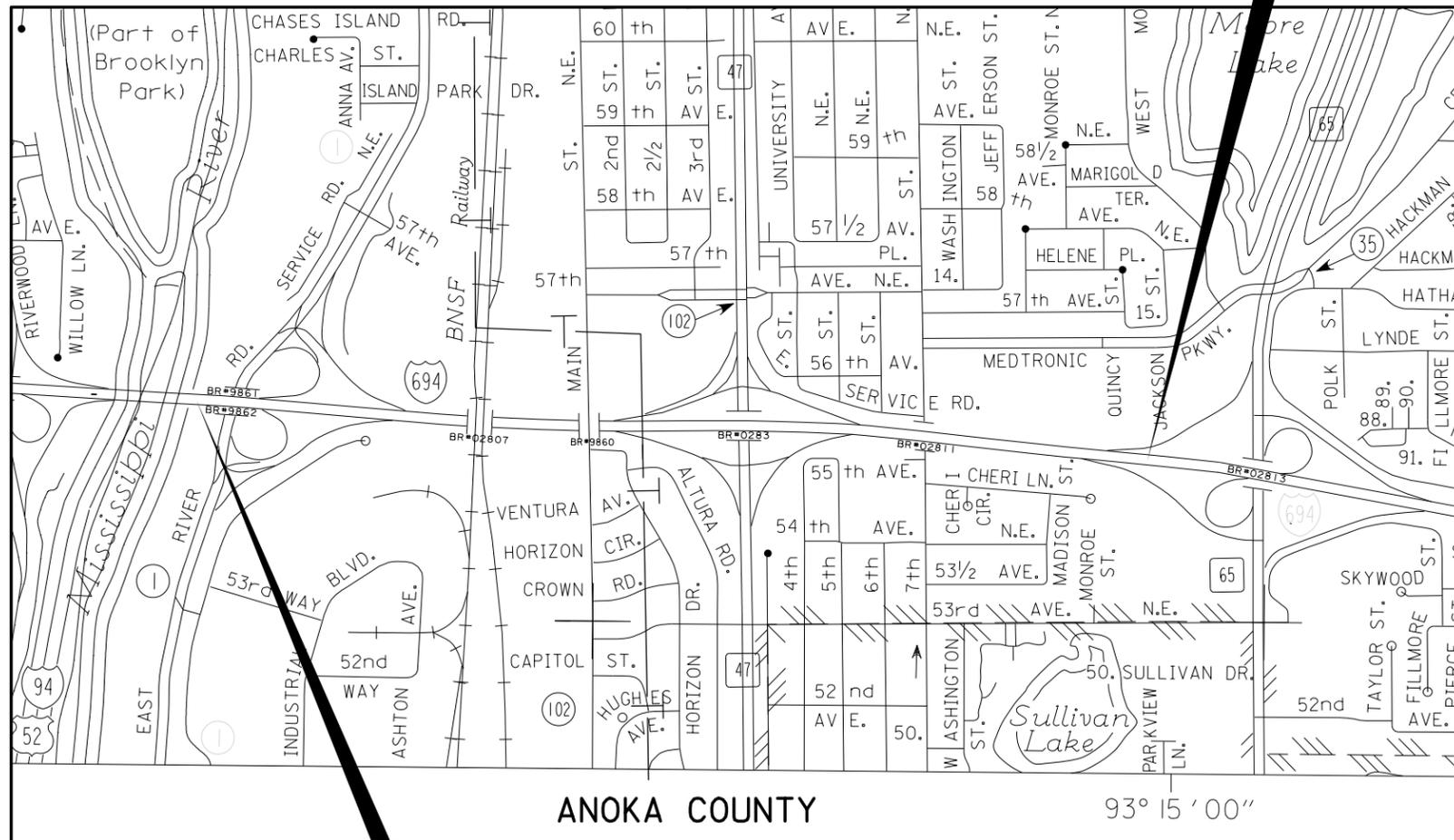
DESIGN SQUAD.....

OFFICE OF LAND MANAGEMENT APPROVAL..... DATE.....
 DIRECTOR, LAND MANAGEMENT

APPROVED..... STATE DESIGN ENGINEER DATE.....

CITY OF FRIDLEY

END SP 0285-69 (TH 694)
 RP 037+00.513



ANOKA COUNTY

93° 15' 00"

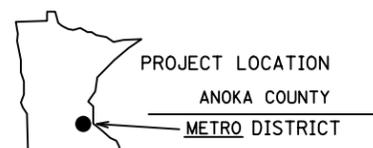
RP 036+00.139
 BEGIN SP 0285-69 (TH 694)

PLAN SCALE SCALE IN FEET

INDEX MAP NOT TO SCALE

FOR PLANS & UTILITIES SYMBOLS SEE TECHNICAL MANUAL

PROJ. NO..... CHARGE IDENTIFIER.....
 0285-69.....



PROJECT LOCATION
 ANOKA COUNTY
 METRO DISTRICT

TITLE SHEET

STATE PROJ. NO. 0285-69 (T.H. 694 = 393) SHEET NO. 1 OF 14 SHEETS

BY	DATE	REVISIONS

DRAWN BY: DDD CKD BY: PB

PLOTTED/REVISED: 27-JAN-2026

I/PLOT NAME: 10285-69_1.sh
 PATH & FILENAME: OTST\Lighting\TrainingManuals\Lighting Design Class Sample Plans\0285-69_1.sh.dgn

PLOTTED/REVISED: 27-JAN-2026

I/PLOT NAME: 10285-69_SEQ
PATH & FILENAME: OTST\Lighting\TrainingManuals\Lighting Design Class\Sample Plans\0285-69_SEQ.dgn

UTILITIES

NO UTILITIES WILL BE AFFECTED BY THIS PROJECT

ALL POWERLINES ARE DISTRIBUTION UNLESS NOTED OTHERWISE

THE FOLLOWING UTILITY OWNERS
ARE WITHIN THE PROJECT LIMITS

CENTERPOINT ENERGY MINNESOTA GAS

CENTURLINK

COMCAST CABLE

CITY OF FRIDLEY

METROPOLITAN COUNCIL
ENVIROMENTAL SERVICES

MINNESOTA DEPARTMENT OF TRANSPORTATION
LIGHTING, SIGNALS, TMC

XCEL ENERGY

NOTE:
THE SUBSURFACE UTILITY INFORMATION IS UTILITY QUALITY LEVEL D.
THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF
CI/ASCE 38-22, ENTITLED 'STANDARD GUIDELINES
FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES.'

THE FOLLOWING STANDARD PLATES APPROVED BY THE
FEDERAL HIGHWAY ADMINISTRATION SHALL APPLY ON THIS PROJECT.

STANDARD PLATES

PLATE NO.	DESCRIPTION
8000K	CHANNELIZER
8106D	EQUIPMENT PAD B
8127E	LIGHT FOUNDATION - DESIGN E PRECAST/CAST-IN-PLACE (40 FT. POLE OR LESS) (2 SHEETS)
8129A	SHIM AND WASHER

STATEMENT OF ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	SP 0285-69
			ESTIMATED QUANTITIES (A)
2011.601	AS BUILT	LUMP SUM	1
2021.501	MOBILIZATION	LUMP SUM	1
2545.501	LIGHTING SYSTEM	LUMP SUM	1
2563.601	TRAFFIC CONTROL	LUMP SUM	1
2563.613	TRUCK MOUNTED IMPACT ATTENUATOR	UNIT DAY	12

FUNDING NOTE:

(A) 90% FEDERAL/10% STATE FUNDS

THE LISTED STANDARD PLAN AND/OR PLATES ARE INCORPORATED BY REFERENCE INTO THE PLAN SET. THE CERTIFICATION ON THIS SHEET SIGNIFIES THE ENGINEER SELECTED THE STANDARD PLANS AND/OR PLATES AS APPROPRIATE FOR USE ON THIS PROJECT.

BY	DATE	REVISIONS

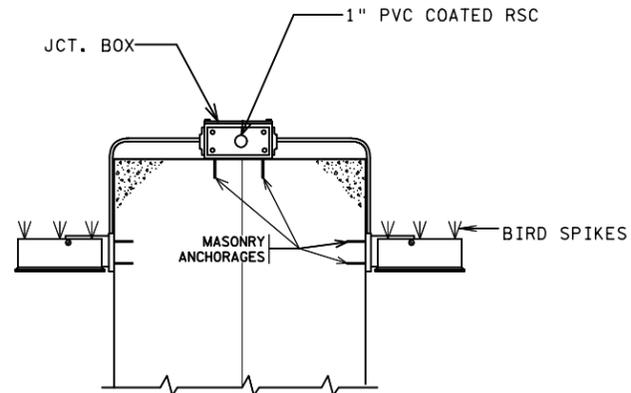
CERTIFIED BY _____ LIC. NO. XXXXX DATE: 27-JAN-2026
LICENSED PROFESSIONAL ENGINEER

LIGHTING QUANTITIES

STATE PROJ.NO. 0285-69 (T.H.694) SHEET NO. 2 OF 14 SHEETS

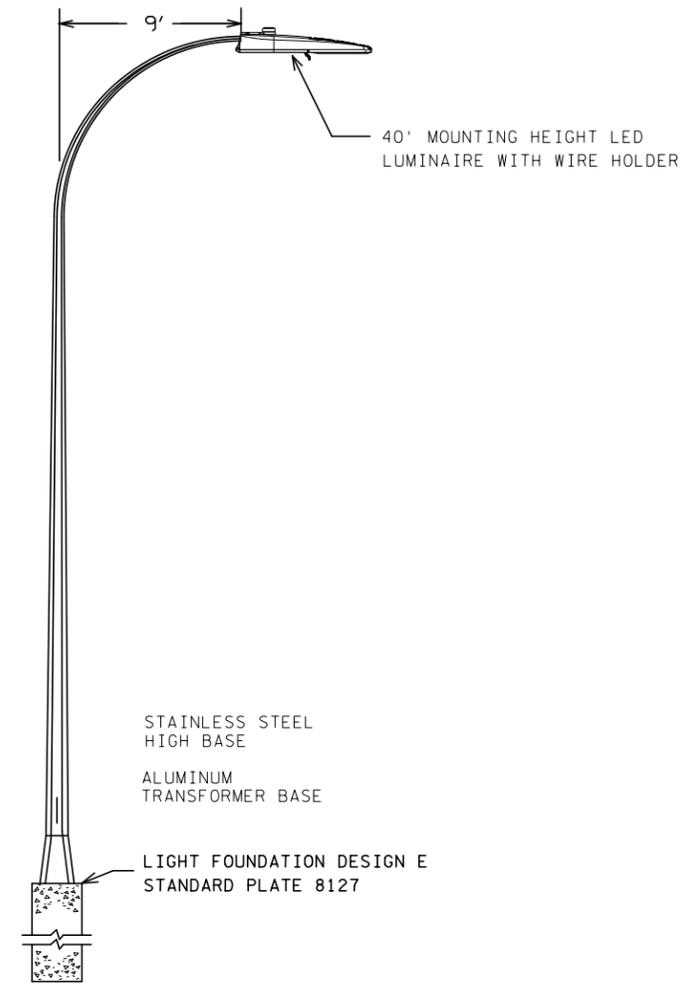
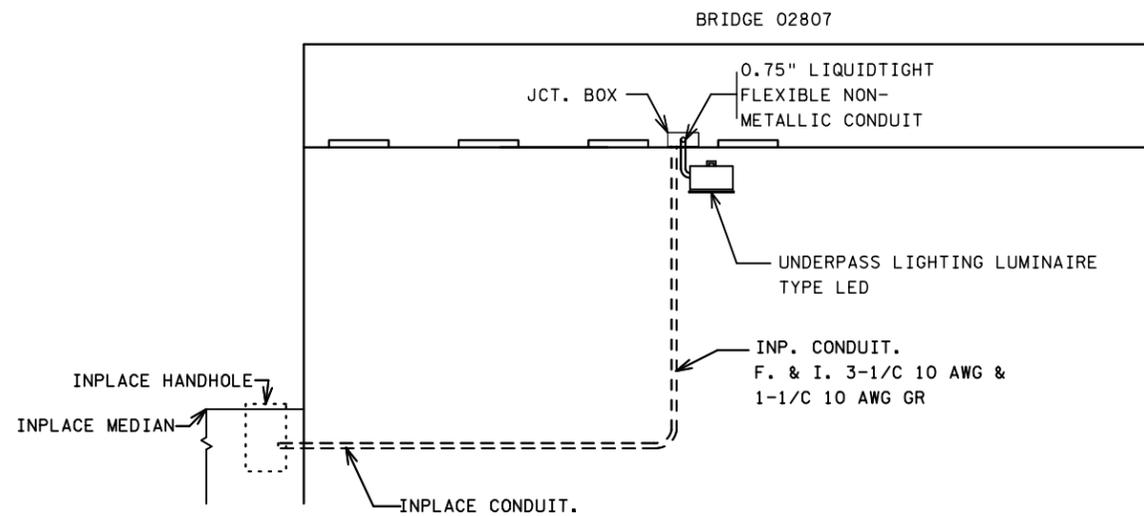
DRAWN BY: DDD CKD BY: PB

UNDERPASS LIGHT DETAILS

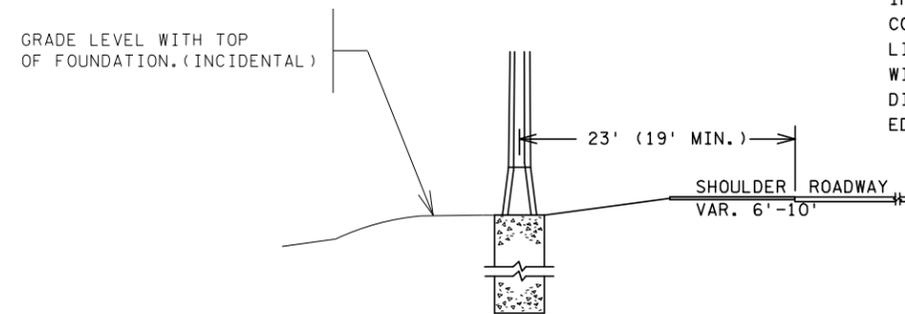


1. F&I JUNCTION BOXES IN ACCORDANCE WITH 3838.
2. FASTEN PVC COATED RIGID STEEL CONDUIT WITH STAINLESS STEEL TWO HOLE STRAPS APPROXIMATELY 5'-0" ON CENTER.
3. FASTEN STRAPS, UNDERPASS LUMINAIRES AND JUNCTION BOXES TO CONCRETE WITH STAINLESS STEEL MASONRY ANCHORAGES OR POWDER ACTIVATED STUDS.
4. F&I LUMINAIRE 17 FEET ABOVE THE PAVEMENT AND A MAXIMUM OF 20 FEET FROM THE EDGE OF THE DRIVING LANE.

NOTE: MOUNT STRAPS, UNDERPASS LUMINAIRES AND JUNCTION BOXES AT LEAST 10" FROM TOP OF PIER CAPS AND ABUTMENTS.



LIGHTING UNIT TYPE 9-40
(BREAKAWAY)



USE THE MAXIMUM DISTANCE WHENEVER POSSIBLE, IF THE MINIMUM DISTANCE CANNOT BE OBTAINED CONTACT THE DISTRICT TRAFFIC ENGINEER. LIGHT FOUNDATIONS SHALL BE PLACED IN ACCORDANCE WITH 2545.3F2. DISTANCES SHALL BE MEASURED FROM THE EDGE OF DRIVING LANE OR TURN LANE.

PLACEMENT LIGHTING UNIT TYPE 9-40

I/PLOT NAME: 10285-69_details PATH & FILENAME: OTST\Lighting\TrainingManuals\Lighting Design Class\Sample Plans\0285-69_details.dgn PLOTTED/REVISED: 27-JAN-2026

BY	DATE	REVISIONS
DRAWN BY: DDD		CKD BY: PB

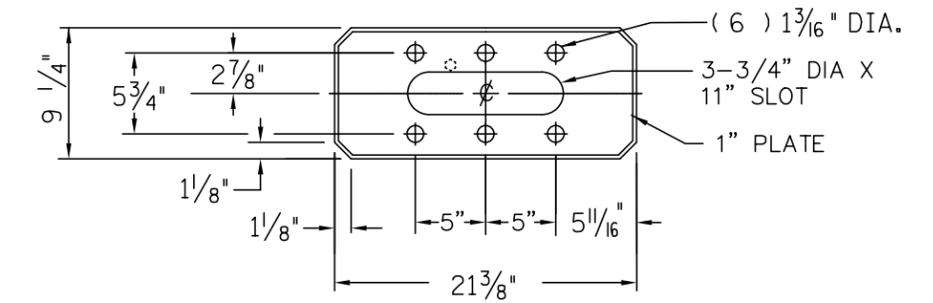
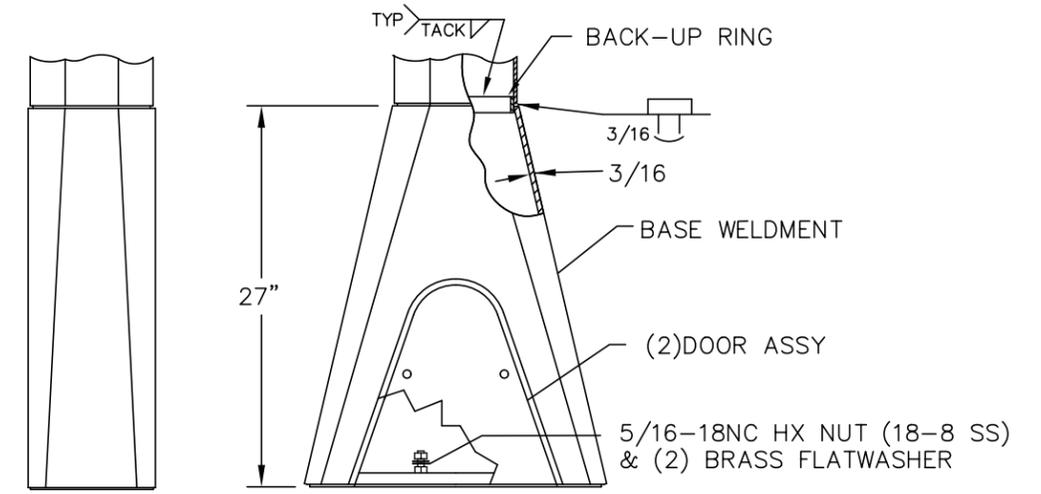
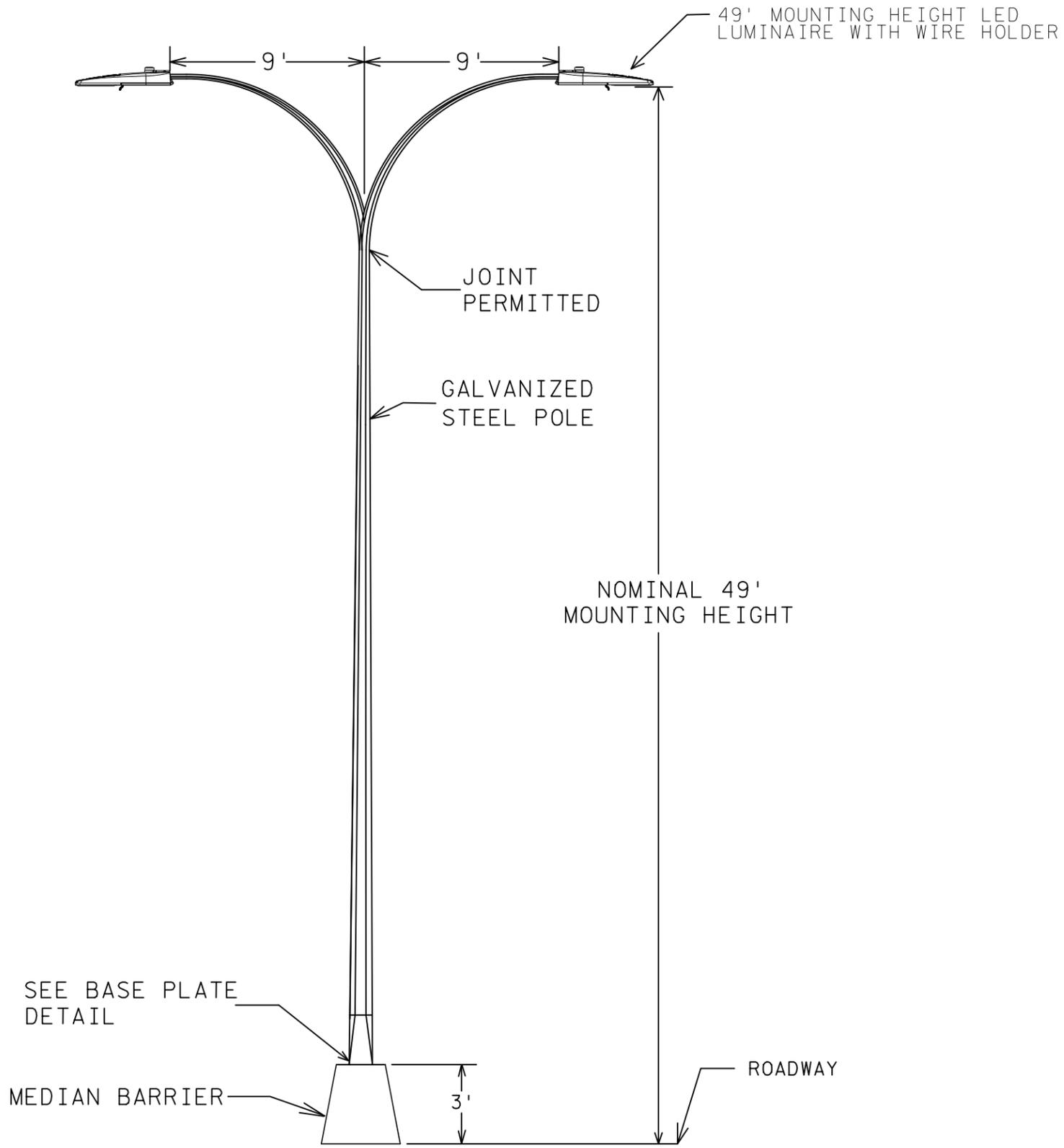
CERTIFIED BY _____ LIC. NO. XXXXX DATE: 27-JAN-2026
LICENSED PROFESSIONAL ENGINEER

LIGHTING DETAILS

STATE PROJ.NO.0285-69 (T.H.694) SHEET NO. 3 OF 14 SHEETS

PLOTTED/REVISED: 27-JAN-2026

I/PLOT NAME: t0285-69_details
 PATH & FILENAME: OTST\Lighting\TrainingManuals\Lighting Design Class\Sample Plans\0285-69_details.dgn



BASE PLATE DETAIL FOR BRIDGE POLES AND MEDIAN BARRIER POLES WITH 6 ANCHOR BOLTS

- NOTES:
- SKIRT MATERIAL-HIGH STRENGTH LOW ALLOY STEEL 50,000 PSI MIN YIELD PER ASTM A607 (A606 IF SELF WEATHERING) BASE PLATE MATERIAL 36,000 PSI MIN YIELD PER ASTM A36 (A588 IF SELF WEATHERING)
 - FINISH-TO MATCH POLE

LIGHTING UNIT TYPE 9BD-49

BY	DATE	REVISIONS

CERTIFIED BY _____ LIC. NO. XXXXX DATE: 27-JAN-2026
LICENSED PROFESSIONAL ENGINEER

LIGHTING DETAILS

STATE PROJ.NO.0285-69 (T.H.694) SHEET NO. 4 OF 14 SHEETS

DRAWN BY: DDD CKD BY: PB

PLOTTED/REVISED: 27-JAN-2026

I/PLOT NAME: 10285-69_rem
PATH & FILENAME: OTST\Lighting\TrainingManuals\Lighting Design Class Sample Plans\0285-69_rem.dgn

I/PLOT NAME: 10285-69_rem
PATH & FILENAME: OTST\Lighting\TrainingManuals\Lighting Design Class Sample Plans\0285-69_rem.dgn

LEGEND

-  REMOVE LIGHTING UNIT
REMOVE LIGHT FOUNDATION
-  REMOVE LIGHTING UNIT
-  REMOVE UNDERPASS LUMINAIRE
-  REMOVE LIGHT FOUNDATION
-  SALVAGE SERVICE CABINET
REMOVE EQUIPMENT PAD
-  SALVAGE SERVICE CABINET
-  REMOVE HANDHOLE(HH)
-  INPLACE LIGHTING UNIT
-  INPLACE DIRECT BURIED LIGHTING CABLE
-  INPLACE CONDUIT
-  INPLACE HANDHOLE(HH)
-  INPLACE UNDERPASS LUMINAIRE
-  LIGHTING UNIT IDENTIFIER
-  CITY LIGHT BASE/FOUNDATION

INPLACE FD. PT. NO1B
CITY FD PT 1
SERVICE CABINET TYPE - L1
120/240V (METERED)

INPLACE FD. PT. NO1C
SERVICE CABINET TYPE - L1
240/480V (METERED)

GENERAL NOTES:

-REMOVE INPLACE UNDERGROUND
(SINGLE CONDUCTORS) &
DIRECT BURIED CABLE TO
ALL AFFECTED LIGHTING
COMPONENTS AND SIGN
STRUCTURES
(WHERE APPLICABLE).

-SALVAGED CABINETS TO BE
PICKED UP BY MNDOT ELECTRICAL
SERVICES. SEE SPECIAL PROVISIONS
FOR MORE INFORMATION.

SPECIFIC NOTE:

① REMOVE INPLACE WIRE AND
CONDUIT TO UNDERPASS LIGHTS

CL L MED694

TH 694 WB 295

TH 694 EB

R.P. 036+00.139
BEGIN S.P. 0285-69 (TH 694)

INPLACE FD. PT. NO1E
CITY FD PT 2
SERVICE CABINET TYPE - L1
120/240V (METERED)

INPLACE FD. PT. NO1A
SERVICE CABINET TYPE - L1
240/480V (METERED)

CL LE2SB

CL LEGA

CL RAMPE

CL SELER

CL SERER

CL NERER

CL NETER

CL LE2NB

CL SBER

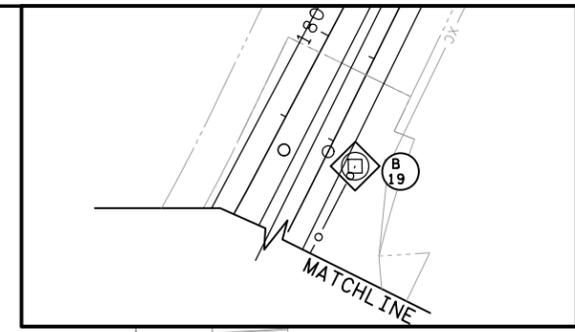
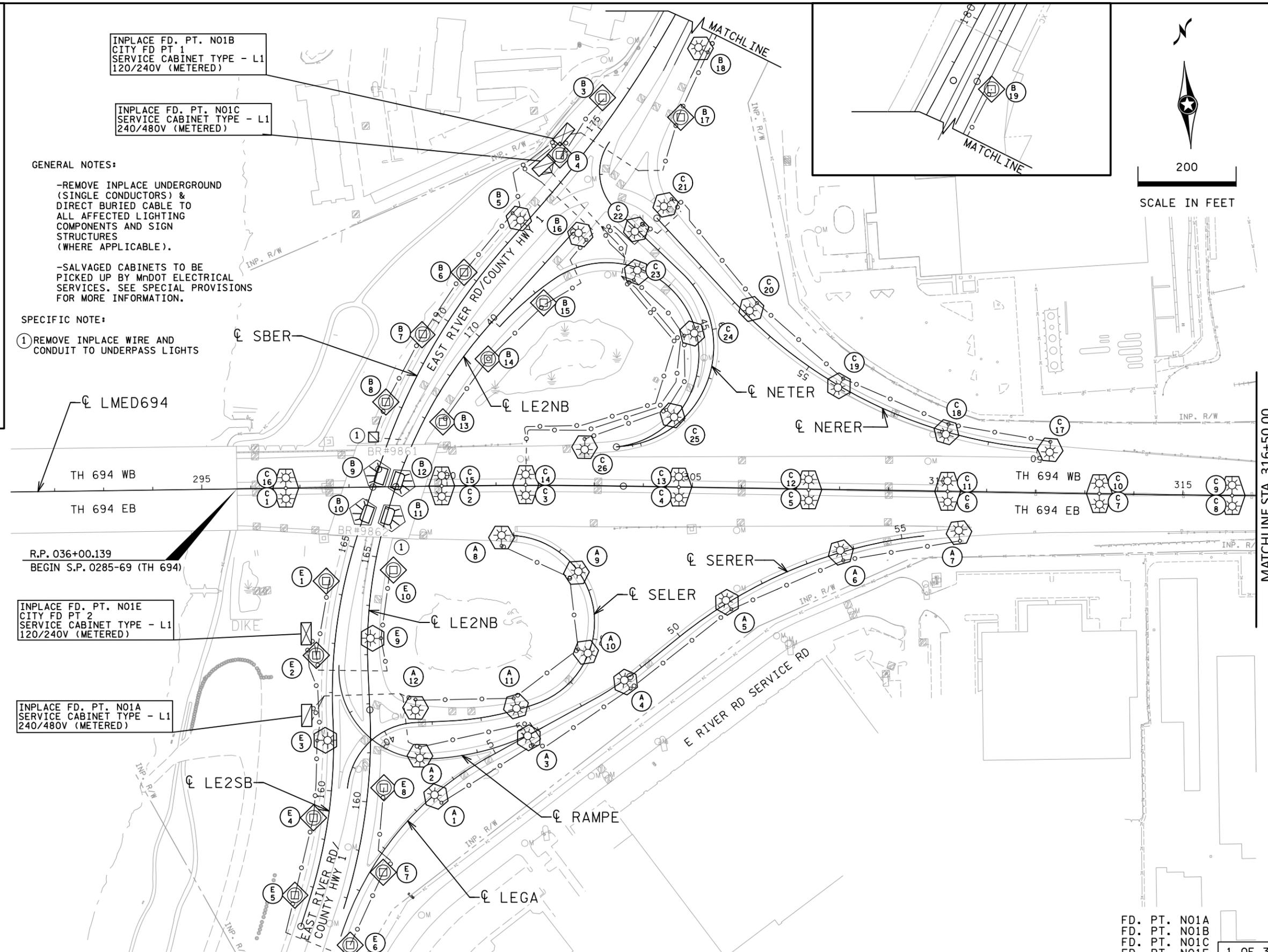
FD. PT. NO1A
FD. PT. NO1B
FD. PT. NO1C
FD. PT. NO1E

1 OF 3

BY	DATE	REVISIONS
DRAWN BY:	DDD	CKD BY: PB

CERTIFIED BY _____	LIC. NO. XXXXX	DATE: 27-JAN-2026
LICENSED PROFESSIONAL ENGINEER		

LIGHTING REMOVAL PLAN	
STATE PROJ.NO.0285-69 (T.H.694)	SHEET NO. 5 OF 14 SHEETS



MATCHLINE STA. 316+50.00

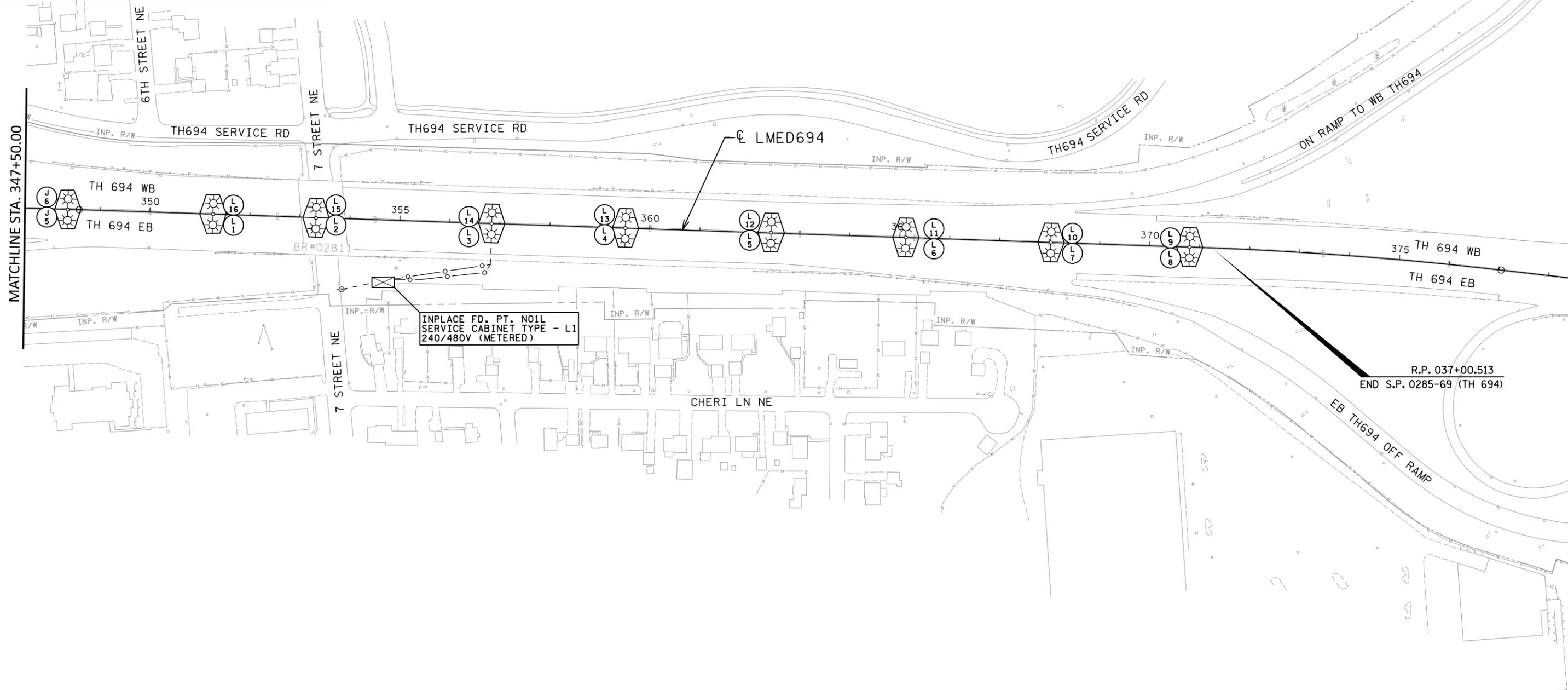
PLOTTED/REVISED: 27-JAN-2026

I/PLOT NAME: 10285-69_rem
 PATH & FILENAME: OTST\Lighting\TrainingManuals\Lighting Design Class\Sample Plans\0285-69_rem.dgn

LEGEND

-  REMOVE LIGHTING UNIT
-  SALVAGE SERVICE CABINET
REMOVE EQUIPMENT PAD
-  INPLACE LIGHTING UNIT
-  INPLACE DIRECT BURIED LIGHTING CABLE
-  INPLACE CONDUIT
-  LIGHTING UNIT IDENTIFIER

GENERAL NOTES:
 -REMOVE INPLACE UNDERGROUND (SINGLE CONDUCTORS) & DIRECT BURIED CABLE TO ALL AFFECTED LIGHTING COMPONENTS AND SIGN STRUCTURES (WHERE APPLICABLE).
 -SALVAGED CABINETS TO BE PICKED UP BY MNDOT ELECTRICAL SERVICES. SEE SPECIAL PROVISIONS FOR MORE INFORMATION.



FD. PT. N01L 3 OF 3

BY	DATE	REVISIONS
DRAWN BY: DDD		CKD BY: PB

CERTIFIED BY _____ LIC. NO. XXXXX DATE: 27-JAN-2026
LICENSED PROFESSIONAL ENGINEER

LIGHTING REMOVAL PLAN

STATE PROJ.NO.0285-69 (T.H.694) SHEET NO. 7 OF 14 SHEETS

27-JAN-2026

PLOTTED/REVISED:

PLOT NAME: t0285-69_lit_lo
PATH & FILENAME: OTST\Lighting\TrainingManuals\Lighting Design Class Sample Plans\t0285-69_lit_lo.dgn

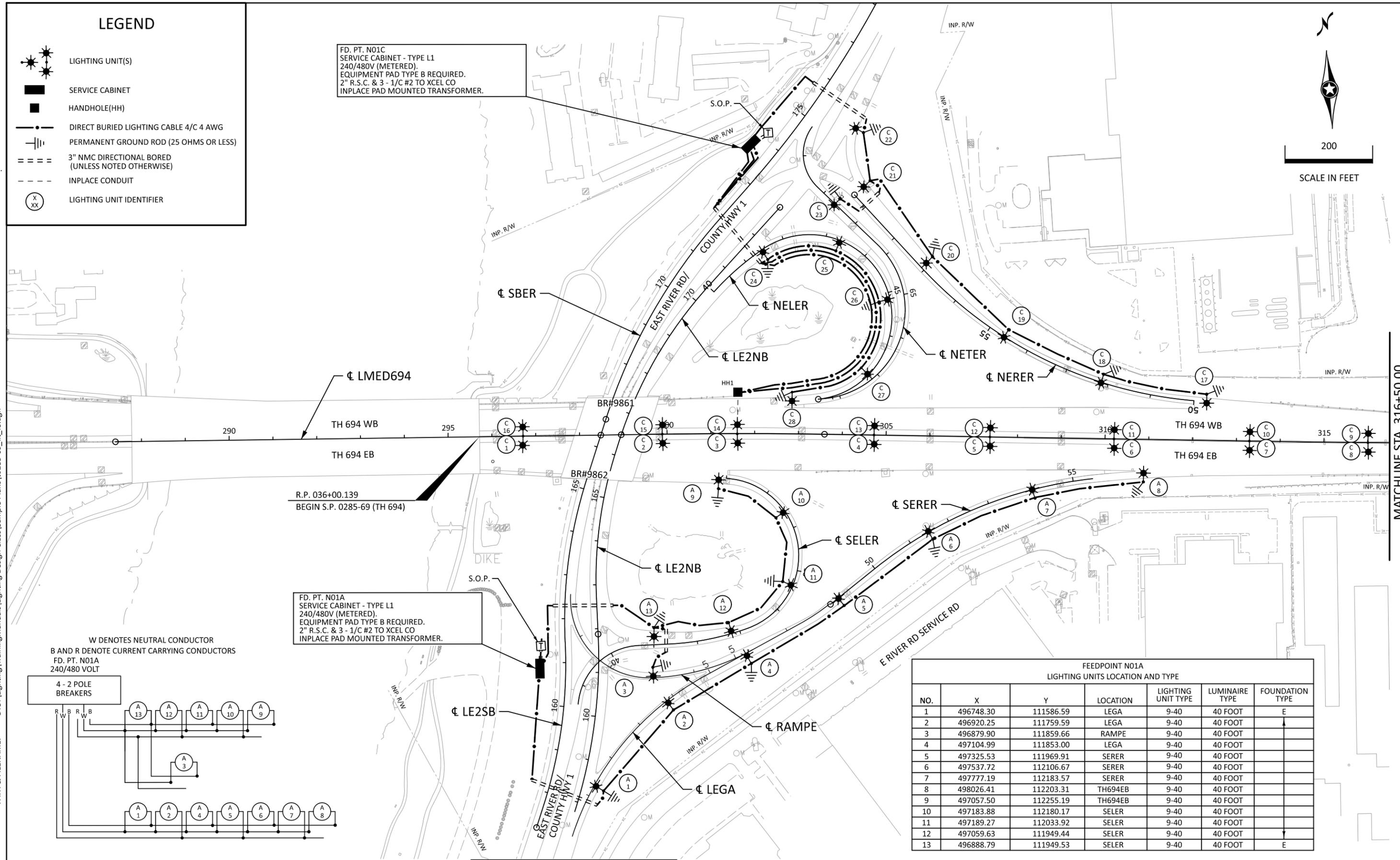
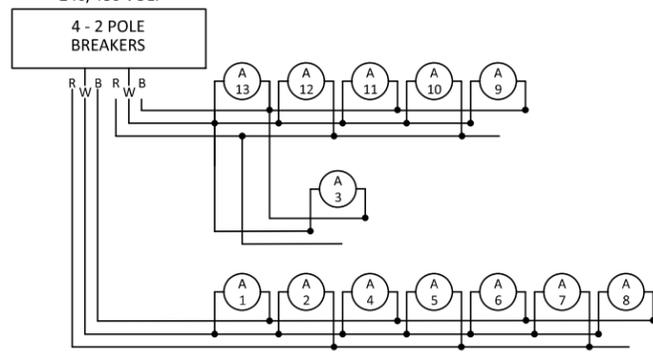
LEGEND

- LIGHTING UNIT(S)
- SERVICE CABINET
- HANDHOLE(HH)
- DIRECT BURIED LIGHTING CABLE 4/C 4 AWG
- PERMANENT GROUND ROD (25 OHMS OR LESS)
- 3" NMC DIRECTIONAL BORED (UNLESS NOTED OTHERWISE)
- INPLACE CONDUIT
- LIGHTING UNIT IDENTIFIER

FD. PT. N01C
SERVICE CABINET - TYPE L1
240/480V (METERED).
EQUIPMENT PAD TYPE B REQUIRED.
2" R.S.C. & 3 - 1/C #2 TO XCEL CO
INPLACE PAD MOUNTED TRANSFORMER.

FD. PT. N01A
SERVICE CABINET - TYPE L1
240/480V (METERED).
EQUIPMENT PAD TYPE B REQUIRED.
2" R.S.C. & 3 - 1/C #2 TO XCEL CO
INPLACE PAD MOUNTED TRANSFORMER.

W DENOTES NEUTRAL CONDUCTOR
B AND R DENOTE CURRENT CARRYING CONDUCTORS
FD. PT. N01A
240/480 VOLT



FEEDPOINT N01A LIGHTING UNITS LOCATION AND TYPE						
NO.	X	Y	LOCATION	LIGHTING UNIT TYPE	LUMINAIRE TYPE	FOUNDATION TYPE
1	496748.30	111586.59	LEGA	9-40	40 FOOT	E
2	496920.25	111759.59	LEGA	9-40	40 FOOT	
3	496879.90	111859.66	RAMPE	9-40	40 FOOT	
4	497104.99	111853.00	LEGA	9-40	40 FOOT	
5	497325.53	111969.91	SERER	9-40	40 FOOT	
6	497537.72	112106.67	SERER	9-40	40 FOOT	
7	497777.19	112183.57	SERER	9-40	40 FOOT	
8	498026.41	112203.31	TH694EB	9-40	40 FOOT	
9	497057.50	112255.19	TH694EB	9-40	40 FOOT	
10	497183.88	112180.17	SELER	9-40	40 FOOT	
11	497189.27	112033.92	SELER	9-40	40 FOOT	
12	497059.63	111949.44	SELER	9-40	40 FOOT	
13	496888.79	111949.53	SELER	9-40	40 FOOT	E

FEEDPOINT: N01A LOCATION: EAST RIVER RD S RAMP
METER ADDRESS: 5340 E. RIVER RD FRIDLEY 55432



Will D. Zine
LIC. NO. XXXXX
LICENSED PROFESSIONAL ENGINEER

I HEREBY CERTIFY THAT THIS PLAN SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

LIGHTING PLAN

SP 0285-69
T.H. 694

SHEET NO 8
TOTAL SHEETS 14

MATCHLINE STA. 316+50.00

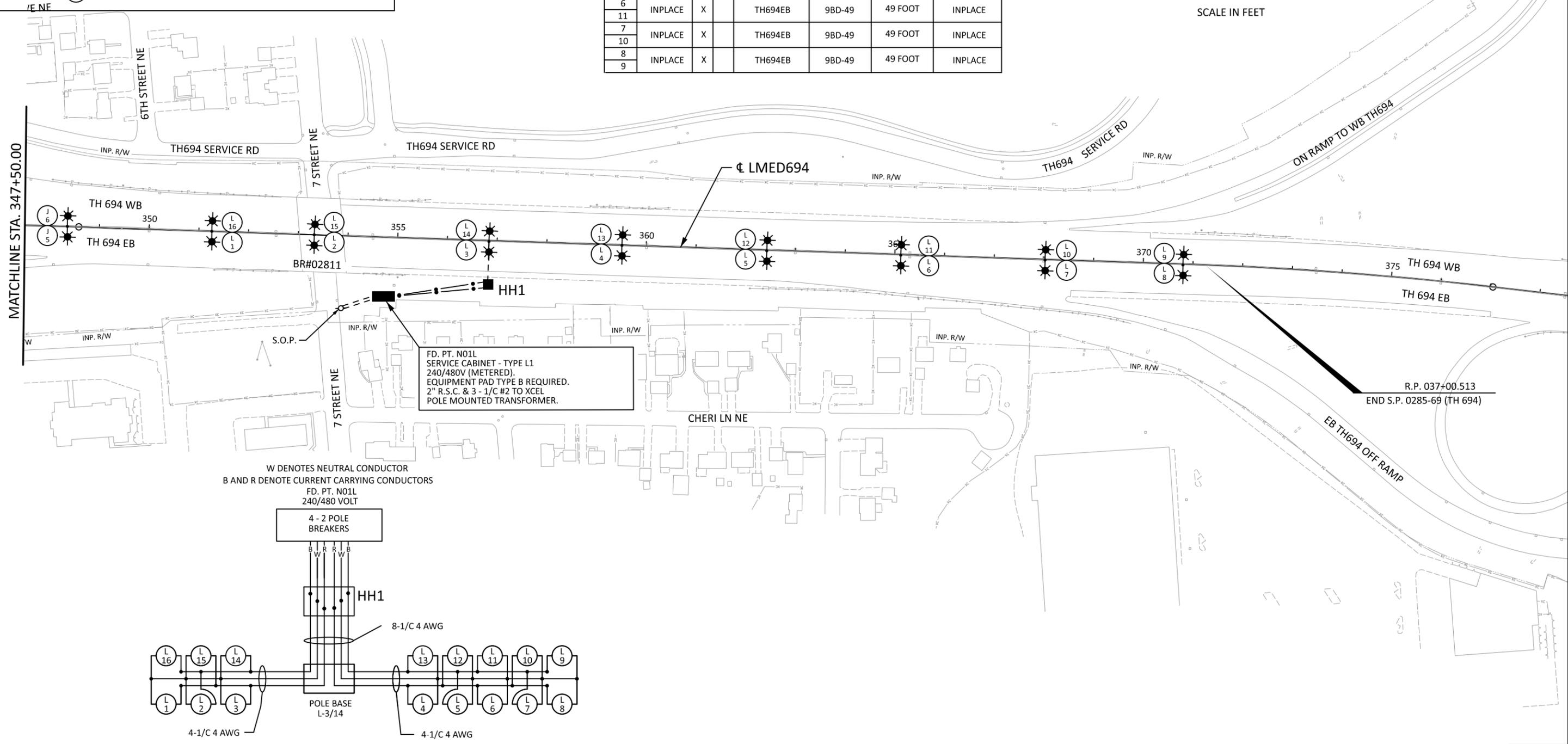
PLOTTED/REVISED: 27-JAN-2026

I/PLOT NAME: 10285-69_11_10
 PATH & FILENAME: OTST\Lighting\TrainingManuals\Lighting Design Class\Sample Plans\0285-69_11_10.dgn

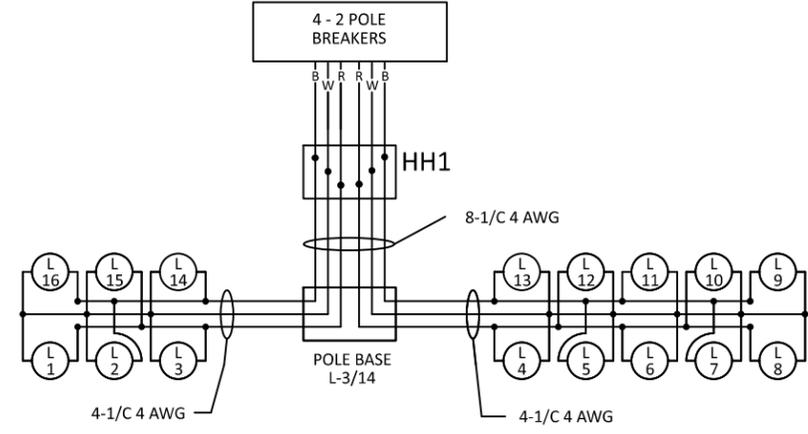
LEGEND

- LIGHTING UNIT(S)
- SERVICE CABINET
- HANDHOLE(HH)
- DIRECT BURIED LIGHTING CABLE 4/C 4 AWG
- PERMANENT GROUND ROD (25 OHMS OR LESS)
- 3" NMC DIRECTIONAL BORED (UNLESS NOTED OTHERWISE)
- INPLACE CONDUIT
- LIGHTING UNIT IDENTIFIER

FEEDPOINT N01L							
LIGHTING UNIT LOCATION, TYPE AND FOUNDATION							
NO.	STATION	LT.	RT.	LOCATION	LIGHTING UNIT TYPE	LUMINAIRE TYPE	FOUNDATION TYPE
1	INPLACE	X		TH694EB	9BD-49	49 FOOT	INPLACE
16							
2	INPLACE	X		TH694EB	9BD-49	49 FOOT	INPLACE
15							
3	INPLACE	X		TH694EB	9BD-49	49 FOOT	INPLACE
14							
4	INPLACE	X		TH694EB	9BD-49	49 FOOT	INPLACE
13							
5	INPLACE	X		TH694EB	9BD-49	49 FOOT	INPLACE
12							
6	INPLACE	X		TH694EB	9BD-49	49 FOOT	INPLACE
11							
7	INPLACE	X		TH694EB	9BD-49	49 FOOT	INPLACE
10							
8	INPLACE	X		TH694EB	9BD-49	49 FOOT	INPLACE
9							



W DENOTES NEUTRAL CONDUCTOR
 B AND R DENOTE CURRENT CARRYING CONDUCTORS
 FD. PT. N01L
 240/480 VOLT

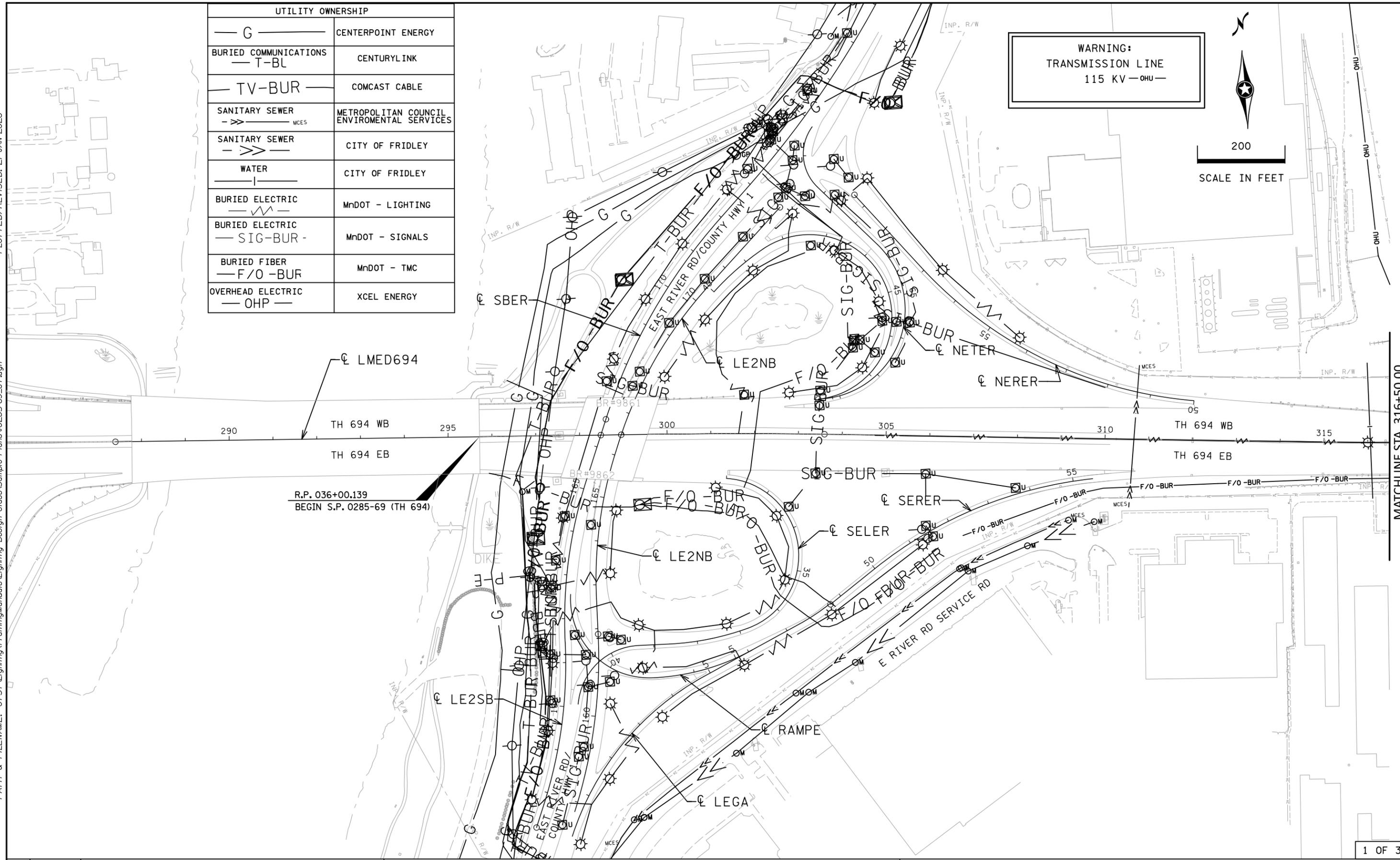
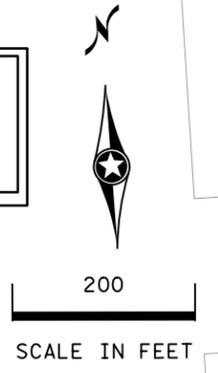


BY	DATE	REVISIONS	FEEDPOINT: N01L	LOCATION: 7TH ST NE	LIGHTING PLAN
			METER ADDRESS: 509 CHERI LN. NE. FRIDLEY 55421		
DRAWN BY: DDD CKD BY: PB			CERTIFIED BY _____	LIC. NO. XXXXX DATE: 27-JAN-2026	STATE PROJ.NO.0285-69 (T.H.694) SHEET NO. 11 OF 14 SHEETS
			LICENSED PROFESSIONAL ENGINEER		

I/PLOT NAME: 10285-69_UT
 PATH & FILENAME: OTST\Lighting\TrainingManuals\Lighting Design Class\Sample Plans\0285-69_UT.dgn
 PLOTTED/REVISED: 27-JAN-2026

UTILITY OWNERSHIP	
G	CENTERPOINT ENERGY
BURIED COMMUNICATIONS T-BL	CENTURYLINK
TV-BUR	COMCAST CABLE
SANITARY SEWER MCES	METROPOLITAN COUNCIL ENVIRONMENTAL SERVICES
SANITARY SEWER	CITY OF FRIDLEY
WATER	CITY OF FRIDLEY
BURIED ELECTRIC	MnDOT - LIGHTING
BURIED ELECTRIC SIG-BUR	MnDOT - SIGNALS
BURIED FIBER F/O-BUR	MnDOT - TMC
OVERHEAD ELECTRIC OHP	XCEL ENERGY

WARNING:
 TRANSMISSION LINE
 115 KV—OHU—



MATCHLINE STA. 316+50.00

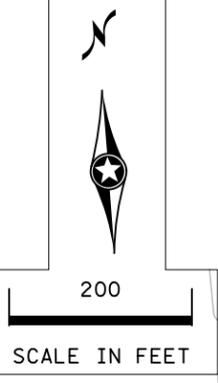
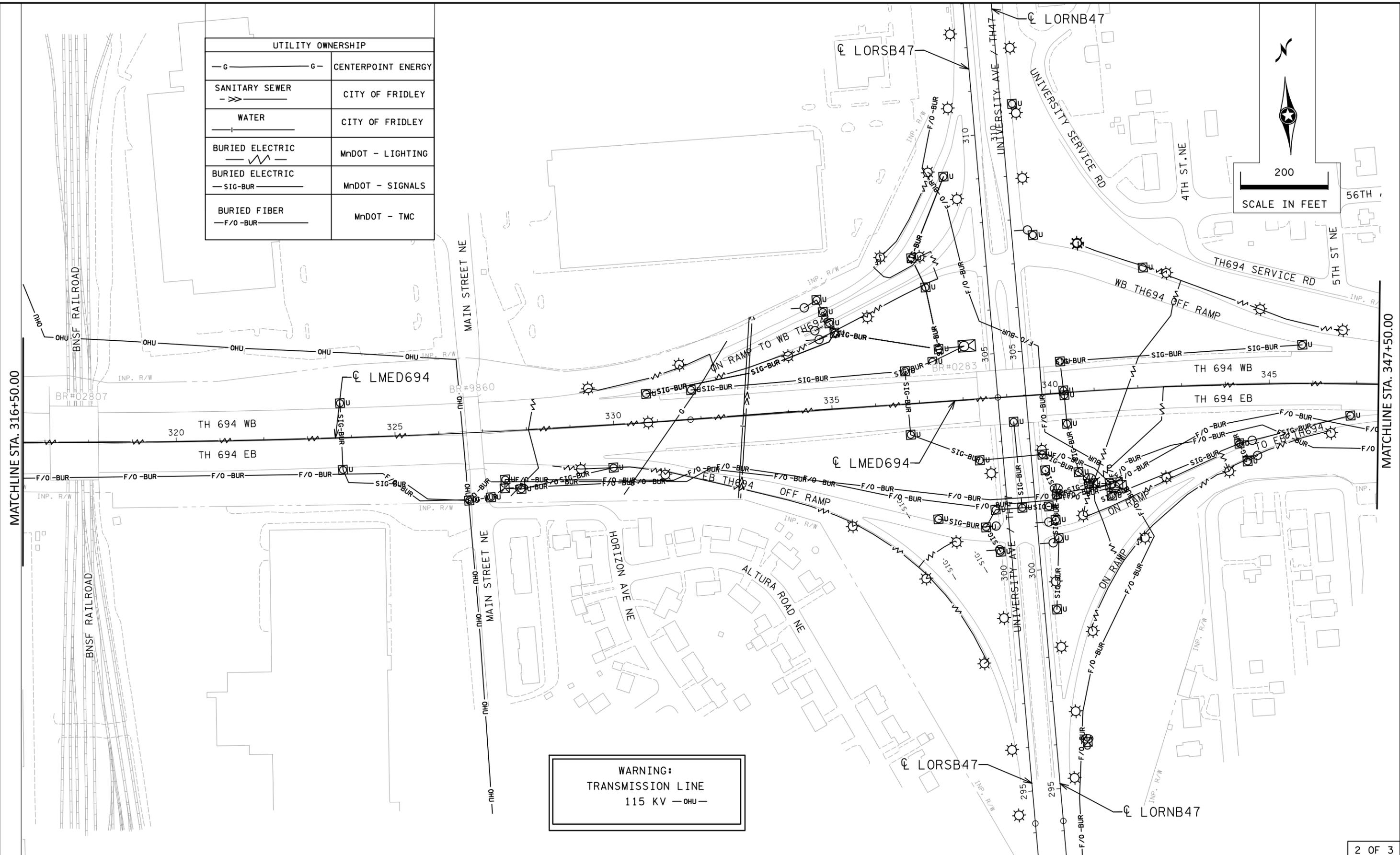
BY	DATE	REVISIONS
DRAWN BY: DDD		CKD BY: PB

CERTIFIED BY _____ LIC. NO. XXXXX DATE: 27-JAN-2026
LICENSED PROFESSIONAL ENGINEER

UTILITIES INFORMATION

STATE PROJ.NO.0285-69 (T.H.694) SHEET NO. 12 OF 14 SHEETS

I/PLOT NAME: 10285-69_UT
 PATH & FILENAME: OTST\Lighting\TrainingManuals\Lighting Design Class\Sample Plans\0285-69_UT.dgn
 PLOTTED/REVISED: 27-JAN-2026



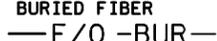
BY	DATE	REVISIONS

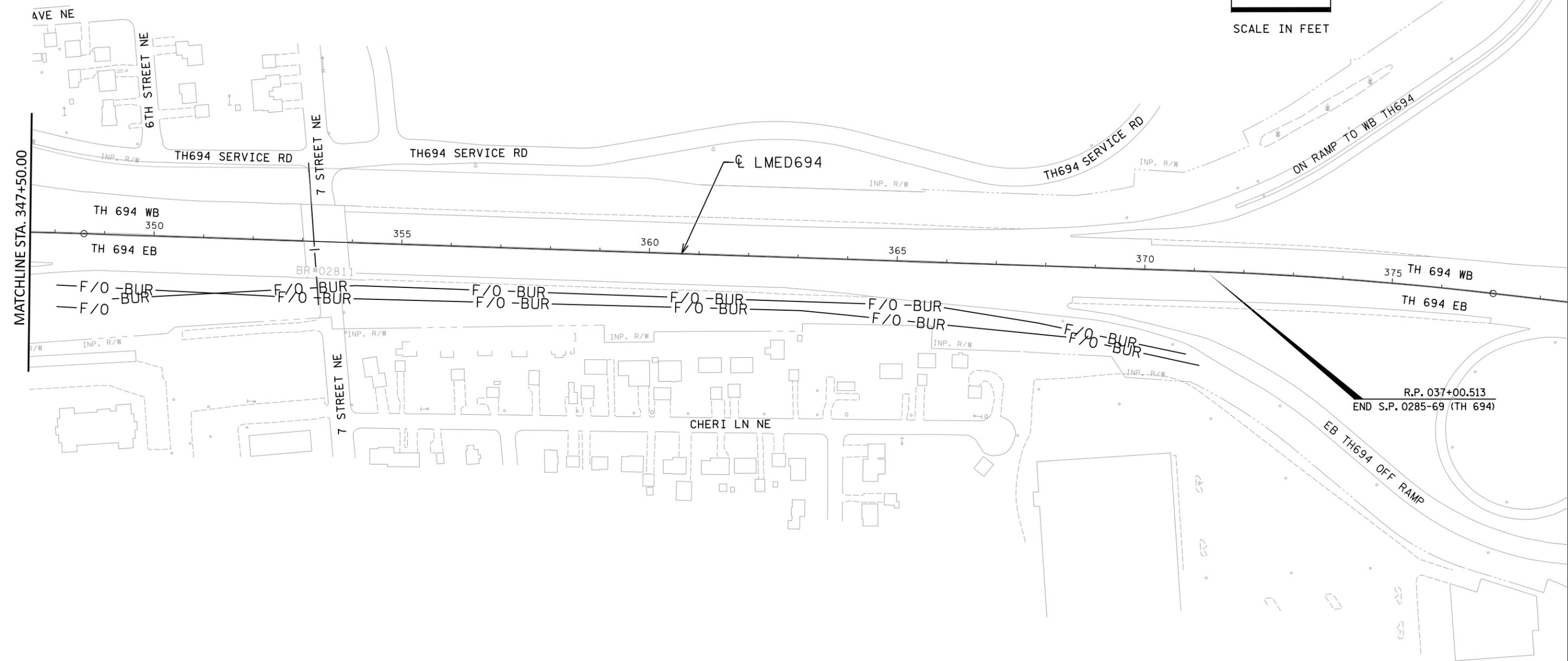
CERTIFIED BY _____ LIC. NO. XXXXX DATE: 27-JAN-2026
LICENSED PROFESSIONAL ENGINEER

UTILITIES INFORMATION

STATE PROJ.NO.0285-69 (T.H.694) SHEET NO. 13 OF 14 SHEETS

I/PLOT NAME: 10285-69_UT
 PATH & FILENAME: OTST\Lighting\TrainingManuals\Lighting Design Class\Sample Plans\0285-69_UT.dgn
 PLOTTED/REVISED: 27-JAN-2026

UTILITY OWNERSHIP	
 WATER	CITY OF FRIDLEY
 BURIED FIBER F/O -BUR-	MnDOT - TMC



BY	DATE	REVISIONS

CERTIFIED BY _____ LIC. NO. XXXXX DATE: 27-JAN-2026
LICENSED PROFESSIONAL ENGINEER

UTILITIES INFORMATION

STATE PROJ.NO.0285-69 (T.H.694) SHEET NO. 14 OF 14 SHEETS

DRAWN BY: DDD CKD BY: PB