



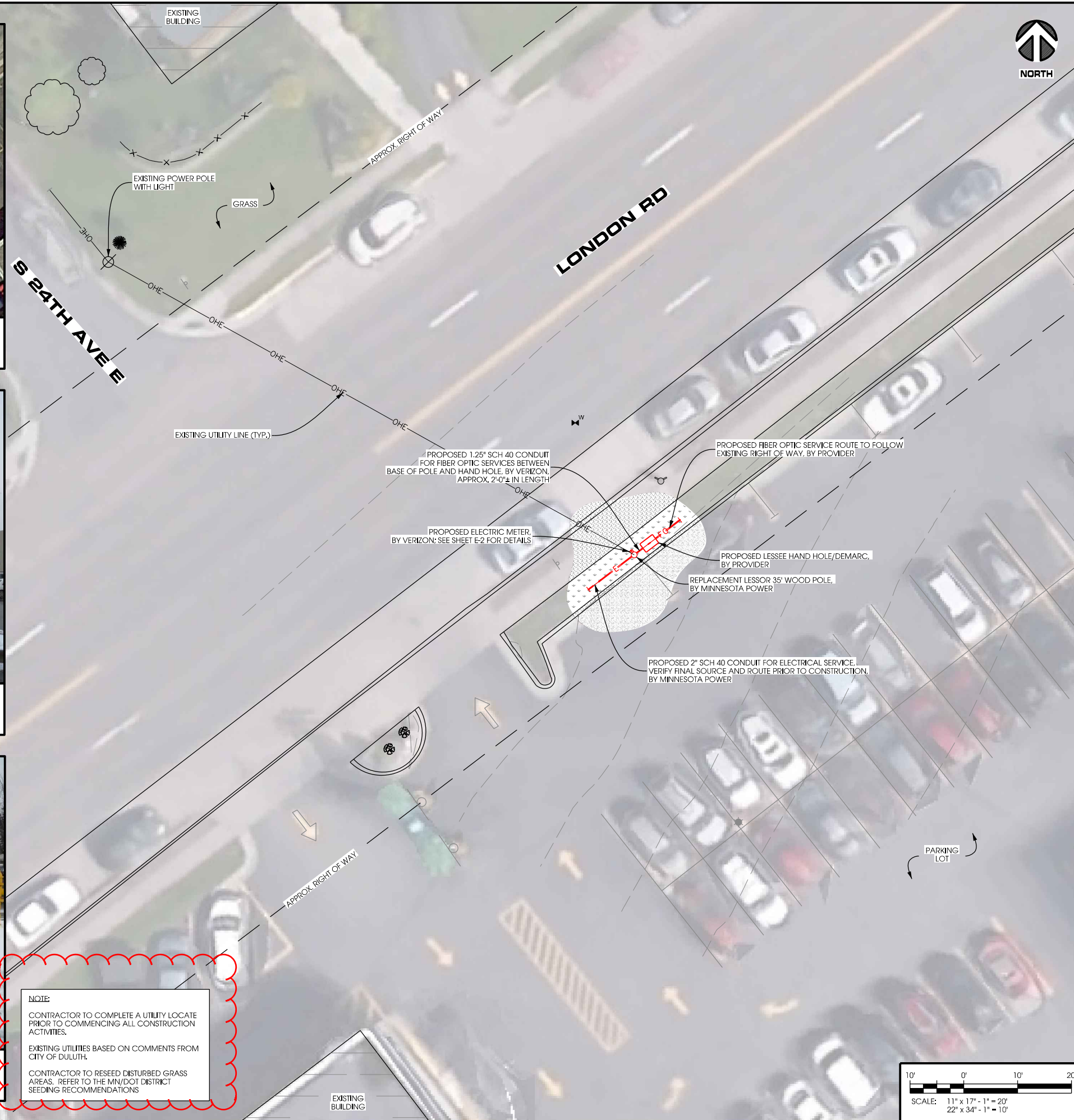
**AERIAL OVERVIEW**



**SITE OVERVIEW  
[LOOKING NORTHEAST]**



**REPLACEMENT POLE LOCATION  
[LOOKING NORTHWEST]**



NORTH



Jacobs Engineering Group, Inc  
2727 Patton Road  
Roseville, Minnesota 55113  
www.jacobs.com



2101 Highway 13 W  
Burnsville, MN 55337  
608.644.1449 voice  
608.644.1549 fax  
www.edgeconsult.com

PROJECT NO:	20151309625
EDGE PROJECT NO:	13795
DRAWN BY:	NBT
CHECKED BY:	OGD

REV.	DATE	DESCRIPTION	
A	03/18/2016	PRELIM SMALL CELL DWGs	PER
B	03/31/2016	PRELIM SMALL CELL DWGs	PER
C	05/06/2016	PRELIM SMALL CELL DWGs	TKB
D	09/28/2016	PRELIM SMALL CELL DWGs	KJG
0	10/10/2016	FINAL DWGS	NBT
1	10/09/2016	FINAL DWGS	MJM

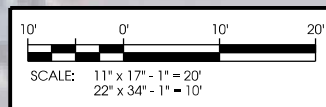
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DUL RED TIDE SC  
DULUTH, MINNESOTA  
REPLACEMENT WOOD POLE  
SMALL CELL DRAWINGS

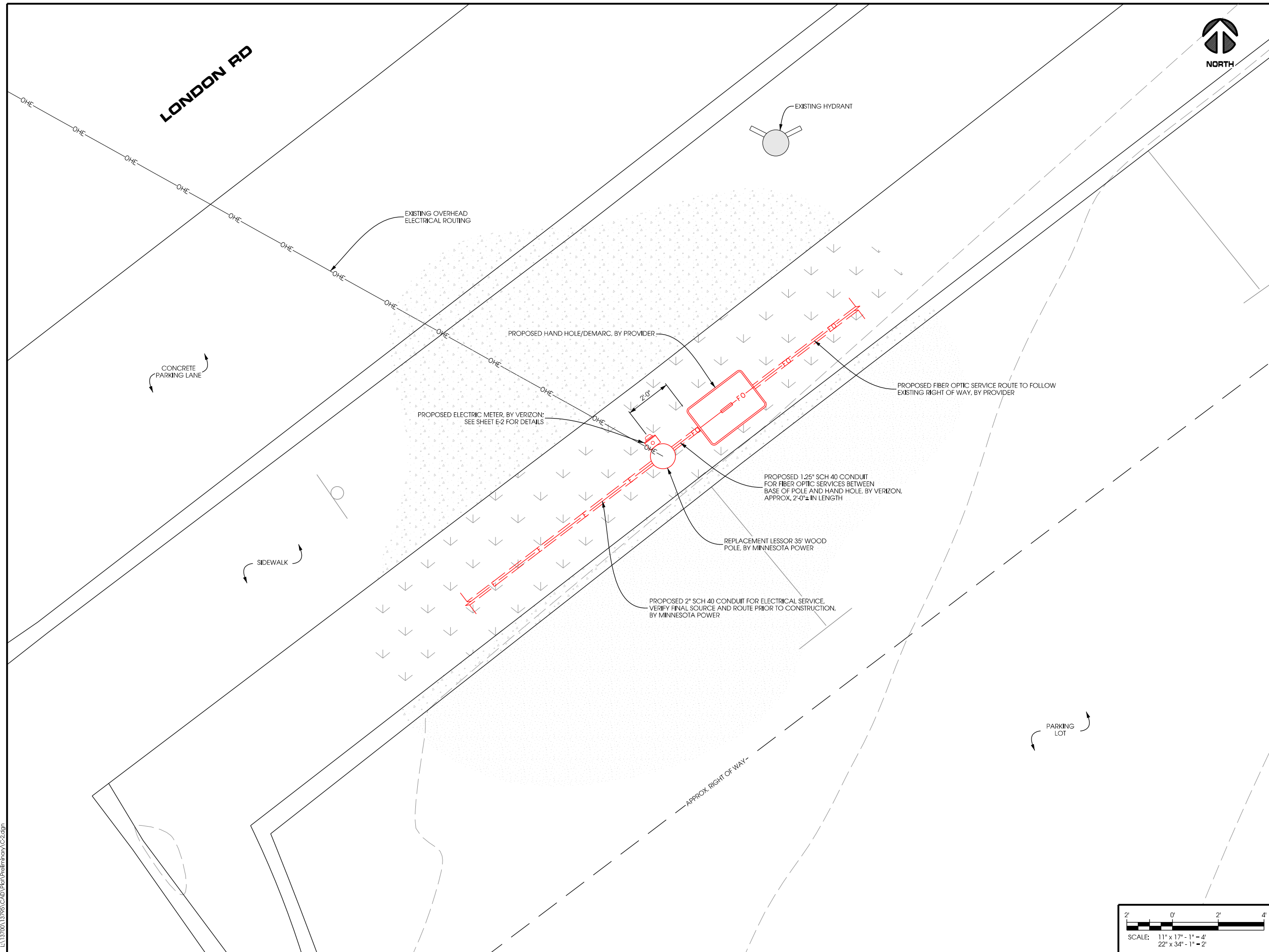
SHEET TITLE  
**SITE PLAN**

SHEET NUMBER  
**C-1**

**NOTE:**  
CONTRACTOR TO COMPLETE A UTILITY LOCATE PRIOR TO COMMENCING ALL CONSTRUCTION ACTIVITIES.  
EXISTING UTILITIES BASED ON COMMENTS FROM CITY OF DULUTH.  
CONTRACTOR TO RESEED DISTURBED GRASS AREAS. REFER TO THE MN/DOT DISTRICT SEEDING RECOMMENDATIONS



LA:13700\13795\CAD\Plot\ Preliminary C-1.dgn



Jacobs Engineering Group, Inc  
2727 Patton Road  
Roseville, Minnesota 55113  
www.jacobs.com



2101 Highway 13 W  
Burnsville, MN 55337  
608.644.1449 voice  
608.644.1549 fax  
www.edgeconsult.com

PROJECT NO:	20151309625
EDGE PROJECT NO:	13795
DRAWN BY:	NBT
CHECKED BY:	OGD

REV.	DATE	DESCRIPTION	
A	03/18/2016	PRELIM SMALL CELL DWGs	PER
B	03/31/2016	PRELIM SMALL CELL DWGs	PER
C	05/06/2016	PRELIM SMALL CELL DWGs	TKB
D	09/28/2016	PRELIM SMALL CELL DWGs	KJG
0	10/10/2016	FINAL DWGS	NBT
1	10/09/2016	FINAL DWGS	MJM

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT 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.

DUL RED TIDE SC  
DULUTH, MINNESOTA  
REPLACEMENT WOOD POLE  
SMALL CELL DRAWINGS

SHEET TITLE  
**ENLARGED SITE PLAN**

SHEET NUMBER  
**C-2**

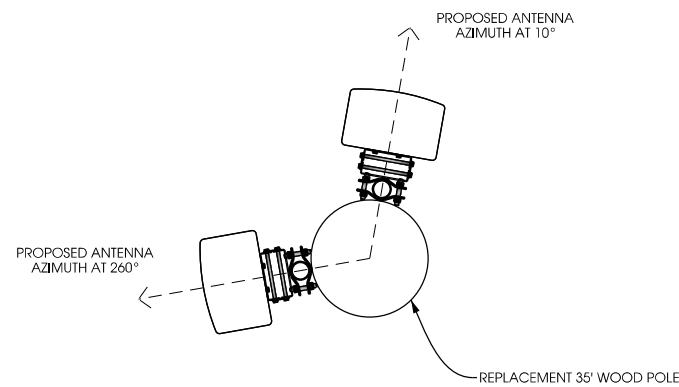
LA:13795\CAD\Plot\Preliminary\C2.dgn

RADIO					ANTENNA								
Band	eNB ID	Model	DU#	DU Port#	AZIMUTH	POSITION	QTY	MFR.	MODEL	PORT	C/L	ADJ ELEC TILT	MECH TILT
LTE	189858	RRUS-B13	1	A	10	1.1	1	CSS	X7CAP-265-B	+45	34	0	0
AWS	189858	RRUS12	2	A		1.2				-45			
LTE	189858	RRUS-B13	1	A	260	1.1	1	CSS	X7CAP-265-B	+45	34	0	0
AWS	189858	RRUS12	2	A		1.2				-45			

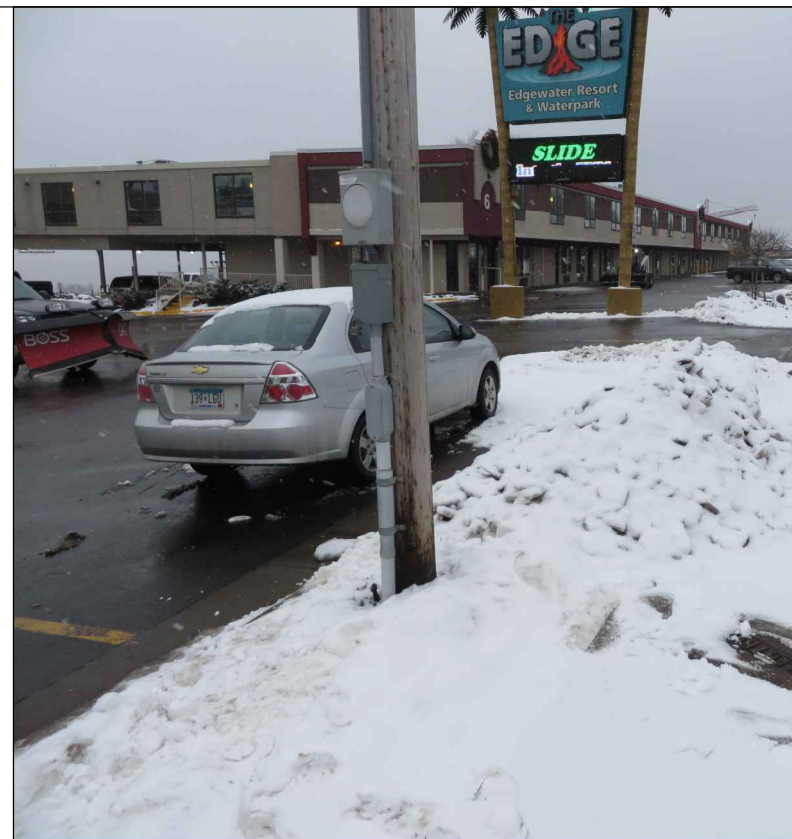
COAX						
QTY	TYPE	MFR.	MODEL	DIELECTRIC	DIA.	RUN
1	Jumper	Commscope	LFD4-50	Foam	1/2"	TBD
1	Jumper	Commscope	LFD4-50	Foam	1/2"	TBD
1	Jumper	Commscope	LFD4-50	Foam	1/2"	TBD
1	Jumper	Commscope	LFD4-50	Foam	1/2"	TBD

MACRO eNB/SHELTER BASEBAND EQUIPMENT REQUIRED			
eNB ID	Quantity	Model	Comments
189319	2	RBS6601	
	3	DUS41	DU#3 is first DU in 2nd RBS6601

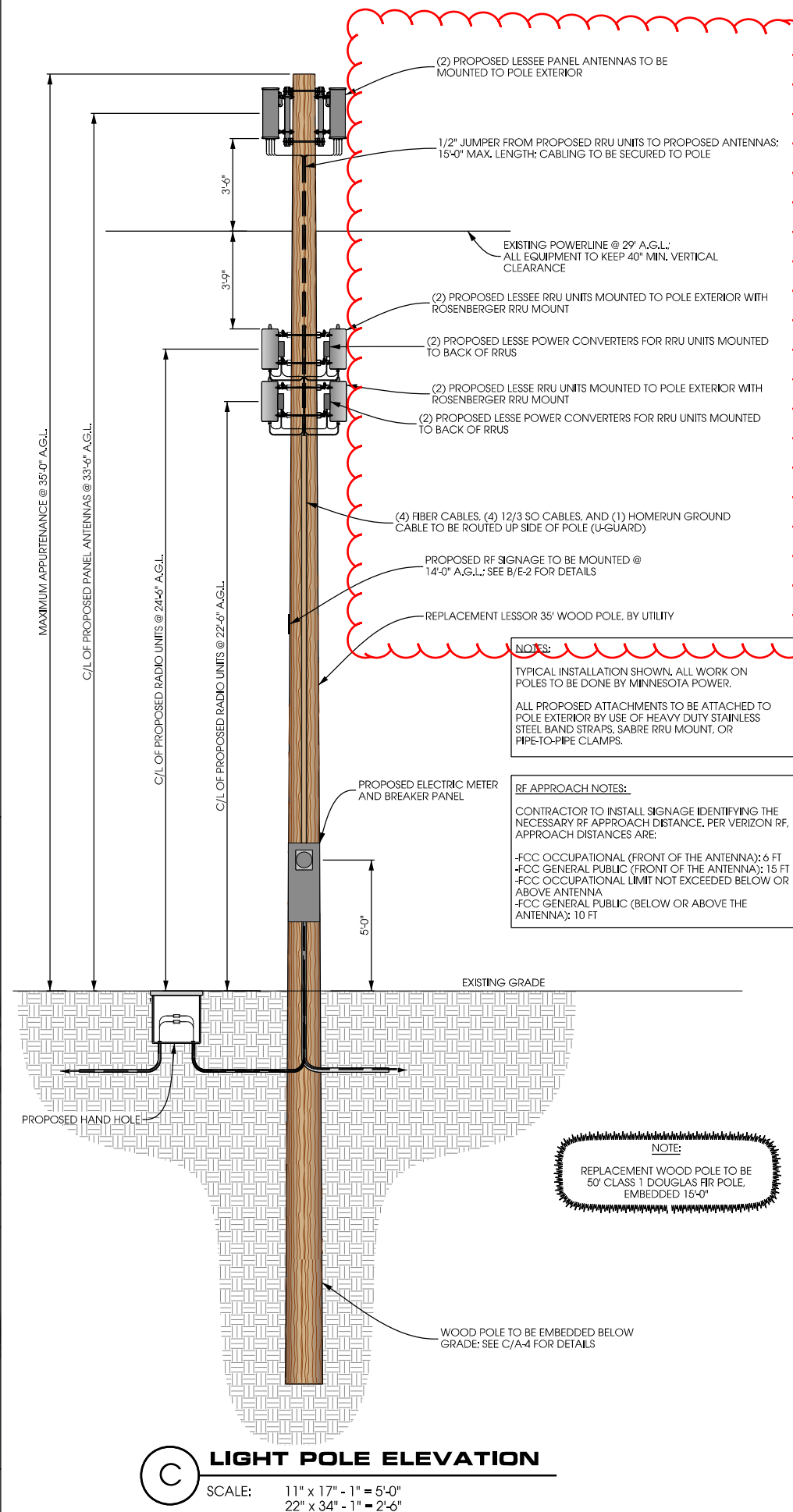
**A ANTENNA AND COAX**  
SCALE: NTS



**B ANTENNA ORIENTATION**  
SCALE: NTS



**REPLACEMENT WOOD POLE LOCATION**



**C LIGHT POLE ELEVATION**  
SCALE: 11" x 17" - 1" = 5'-0"  
22" x 34" - 1" = 2'-6"



Jacobs Engineering Group, Inc.  
2727 Patton Road  
Roseville, Minnesota 55113  
www.jacobs.com



2101 Highway 13 W  
Burnsville, MN 55337  
608.644.1449 voice  
608.644.1549 fax  
www.edgeconsult.com

PROJECT NO: 20151309625  
EDGE PROJECT NO: 13795  
DRAWN BY: NBT  
CHECKED BY: OGD

REV.	DATE	DESCRIPTION	
A	03/18/2016	PRELIM SMALL CELL DWGS	PER
B	03/31/2016	PRELIM SMALL CELL DWGS	PER
C	05/06/2016	PRELIM SMALL CELL DWGS	TKB
D	09/28/2016	PRELIM SMALL CELL DWGS	KJG
0	10/10/2016	FINAL DWGS	NBT
1	10/09/2016	FINAL DWGS	MJM

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT 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.

DUL RED TIDE SC  
DULUTH, MINNESOTA  
REPLACEMENT WOOD POLE  
SMALL CELL DRAWINGS

SHEET TITLE  
**POLE ELEVATION**

SHEET NUMBER  
**A-1**