CITY OF DULUTH
Community Planning Division

411 W 1st St, Rm 208 * Duluth, Minnesota 55802-1197
Phone: 218/730.5580 Fax: 218/723-3559

File Number	PL 18-135, CUP	**Contact**	Steven Robertson, 218-730-5295	
Type	Concurrent Use Permit to Place Private Obstructions in Public Right of Way/Public Facilities (Utility/Light Pole)	**Planning Commission Date**		November 13, 2018
Deadline for Action	**Application Date**	October 9, 2018		
	Date Extension Letter Mailed	N/A	**90 Days* (237.163)**	January 7, 2019
Location of Subject	2247 Maple Grove Road			
Applicant	Verizon Wireless	**Contact**		
Agent	Amy Dresch, Jacobs Telecom	**Contact**		
Legal Description				
Site Visit Date	November 6, 2018	**Sign Notice Date**	October 30, 2018	
Neighbor Letter Date	N/A for Concurrent Use	**Number of Letters Sent**	N/A for Concurrent Use	

Proposal: The applicant is seeking a concurrent use permit to allow a private obstruction (utility pole mounted antennas and related equipment) in the public right of way.

Recommended Action: Recommend to the City Council to Approve With Conditions (Ordinance).

	Current Zoning	Existing Land Use	Future Land Use Map Designation
Subject	MU-C	Public Right of Way	Large-Scale Commercial
North	MU-C	Commercial	Large-Scale Commercial
South	MU-C	Commercial	Large-Scale Commercial
East	MU-C	Commercial	Preservation/Large Scale Commercial
West	MU-C	Commercial	Large-Scale Commercial

Summary of Code Requirements

UDC Section 50-37.7.C. The planning commission shall review the application, and council shall approve the application or approve it with modifications, if it determines that:

1) The proposed concurrent use will not harm or inconvenience the health, safety and general welfare of the city;
2) No portion of a public easement proposed of use is being physically occupied by the public.

Comprehensive Plan Governing Principle and/or Policies and Current History (if applicable):
Principle #4 - Support emerging economic growth sectors. Emerging economic sectors add economic, cultural and social diversity. These include higher education, medical, value-added manufacturing, commercial outdoor recreation, historic resources interpretation, arts and music, information technology and visitor services.

The installation falls with the provisions of Minnesota Statute 237.162 and 247.1643, as amended in 2017.

Future Land Use: Large Scale Commercial Mall, shopping center and big box retail development, with associated surrounding retail and service uses, but only ancillary office uses and no residential uses. Oriented primarily to the motorist, with planned internal circulation patterns while still accommodating pedestrian movement. Requires access to regional transportation routes. May include regional green infrastructure for watershed protection.

Review and Discussion Items
1) The applicant is seeking a concurrent use permit to allow a private obstruction (utility pole mounted antennas and equipment mount) in the public right of way. Maple Grove Road is a county maintained public right of way.

According to the application submitted, the "small wireless facility (will be installed) on a replacement City of Duluth metal light pole, which will remain the same height as the existing light pole (35 feet above ground level). The new equipment will be installed at least 27 feet above ground level and the new ancillary equipment will be installed at least 21 feet above ground level, with no associated ground equipment". The wireless facilities will not be stealthed or camouflaged; the equipment will be visibly attached to the exterior of the pole. The attachments will include 1 exterior mounted panel antenna and 2 radio units.

2) Granting a concurrent use permit would give the applicant the ability to use dedicated public rights-of-way, with conditions, while preserving other existing public uses in the same right-of-way corridors. Concurrent use permits require a public hearing and recommendation by the Planning Commission, and is approved by the City Council via ordinance. Unlike street right-of-way vacations, concurrent use permits are not recorded at the County as they are voidable permits issued by the City to applicants who are private users of public rights-of-way.

3) Ownership of the poles will remain with the City of Duluth, with the poles in dedicated public rights-of-way. Liability, maintenance, and operation of the small wireless facilities will remain the responsibility of the applicant. In the event of an accident, such as a vehicle hitting the utility pole, the city is not responsible for restoring or replacing any of the applicant's equipment.

4) The existing city utility pole will be replaced with a new pole, as specified and approved by the City engineer. The new poles will have a structural analysis by the manufacturer to ensure that they can support the weight of the private small cell facilities and required public infrastructure.

5) Granting the proposed concurrent use permits will not harm or inconvenience the health, safety and general welfare of the city. The area proposed for the concurrent use permit will not take away from the public's ability to use the public right-of-way. The city will own the poles and continue to use them for utility purposes (lighting).

6) The UDC generally requires that new wireless facilities follow a location standard: first they should be collocated on existing towers or other structures on city owned properties first, and then existing towers or other structures on other (private) property, and so forth down the location standard list. As these small wireless facilities would be located on existing infrastructure in public right of way, and as per the recent change in state statute, the city is processing these applications as concurrent use permits and not special use permits, and the UDC's use-specific standards do not apply in this specific situation.

7) The city has the ability to regulate land use, however, the Federal Communications Commission preempts local review on the potential environmental effects of radio frequency (RF) emissions, with the presumption that the applicant and service provider is in compliance with the Commission's RF rules. The applicant included an FCC checklist used to determine exemption from RF regulations (unlikely to cause exposure in excess of the FCC's guidelines).
8) At the time that this memo was written, no written comments was received. However, for a previous application in Maple Grove Road, Vic Lund, Traffic Engineering for St. Louis County, wrote that "Installation of facilities within the county road right-of-way must be approved by St. Louis County Public Works Department by way of the St. Louis County Right-of-Way (Utility) Permit".

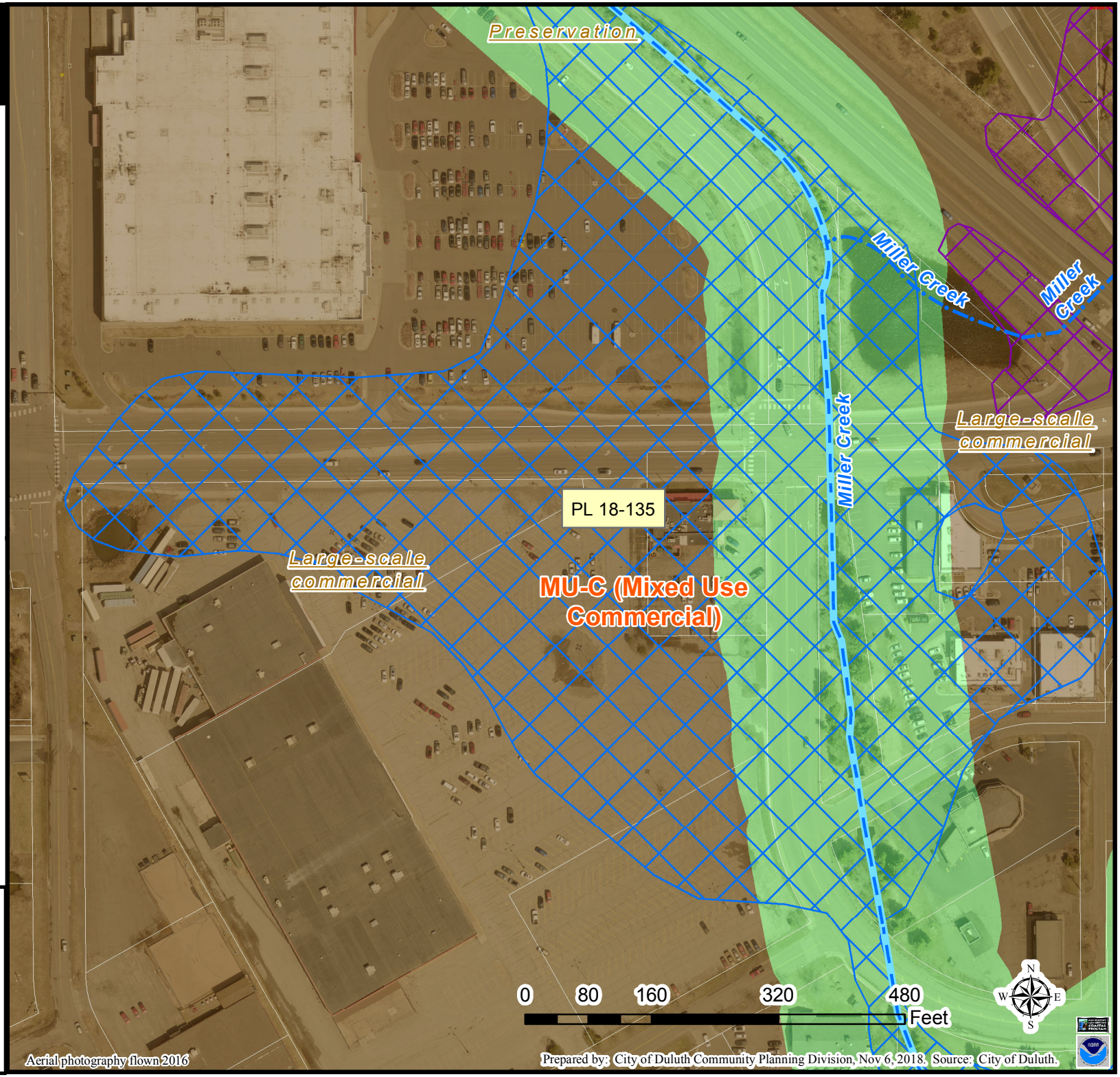
Staff Recommendation:
Based on the above findings, Staff recommends that the Planning Commission recommend approval of the two concurrent use permits subject to the following conditions:

1) The project be limited to, constructed, and maintained according to construction drawings submitted and included with this staff report (signed 10/9/2018)

2) Applicant, and/or successors, shall remove the proposed obstructions at applicant's expense if directed to do so by the City with appropriate notice, and shall adhere to other standards and obligations established in the approving document (ordinance).

3) Any alterations to the approved plans that do not alter major elements of the plan may be approved by the Land Use Supervisor without further Planning Commission approval; however, all other changes must be approved by amending the City Council's approved ordinance.

PL 18-135
CUP Small Cell Wireless Facility



Legend

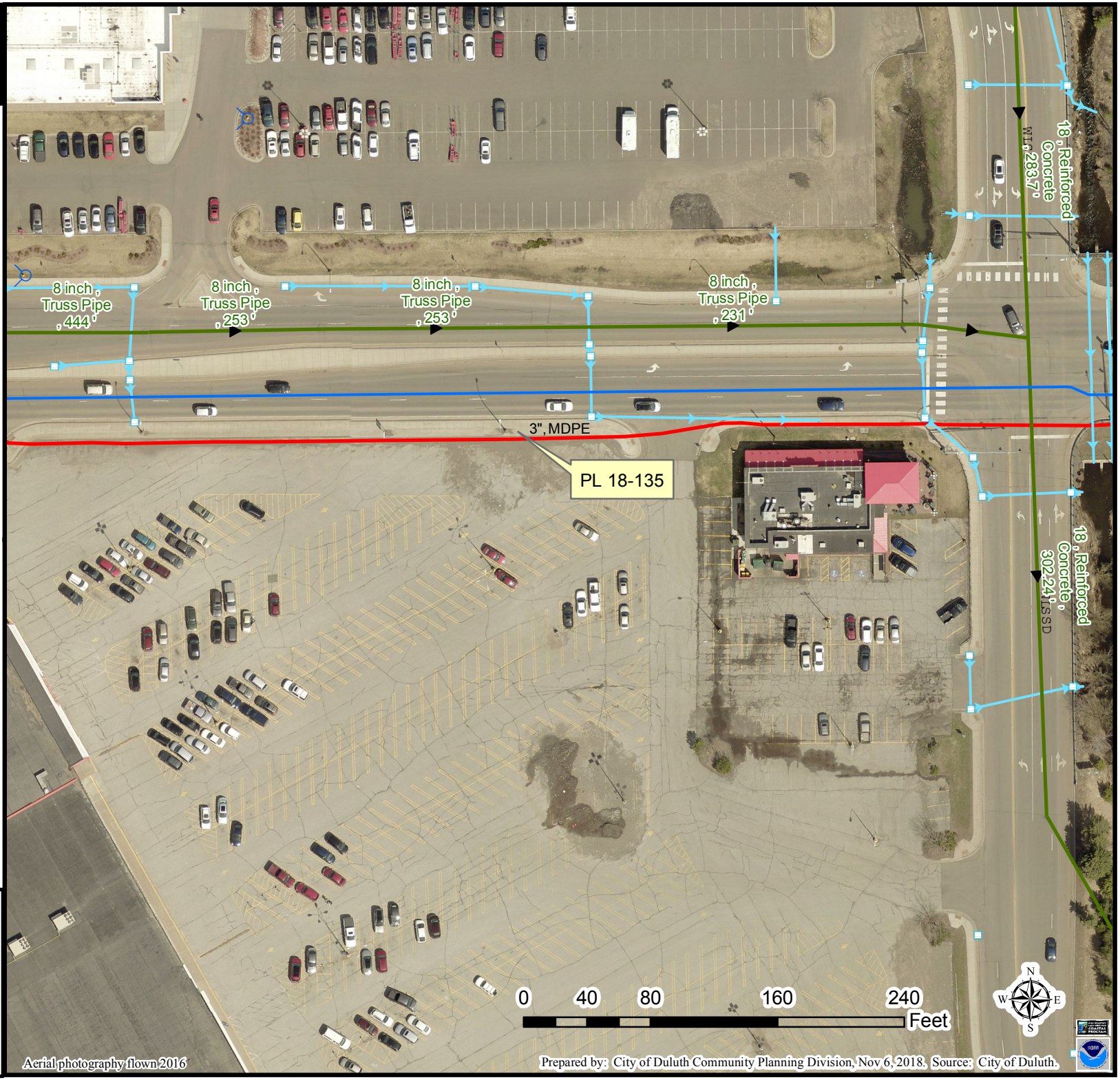
- Zoning Boundaries

Floodplain (UDC)

- General Flood Plain
- Flood Way
- Flood Fringe
- Trout Stream (GPS)
- Other Stream (GPS)

The City of Duluth has tried to ensure that the information contained in this map or electronic document is accurate. The City of Duluth makes no warranty or guarantee concerning the accuracy or reliability. This drawing/data is neither a legally recorded map nor a survey and is not intended to be used as one. The drawing/data is a compilation of records, information and data located in various City, County and State offices and other sources affecting the area shown and is to be used for reference purposes only. The City of Duluth shall not be liable for errors contained within this data provided or for any damages in connection with the use of this information contained within.

PL 18-135
CUP Small Cell Wireless Facility



Legend

- Gas Main
- Water Main
- Hydrant

Sanitary Sewer Mains

- CITY OF DULUTH
- WLSSD; PRIVATE
- Sanitary Sewer Forced Main
- Storage Basin
- Pump Station

Storm Sewer Mains

- Storm Sewer Pipe
- Storm Sewer Catch Basin

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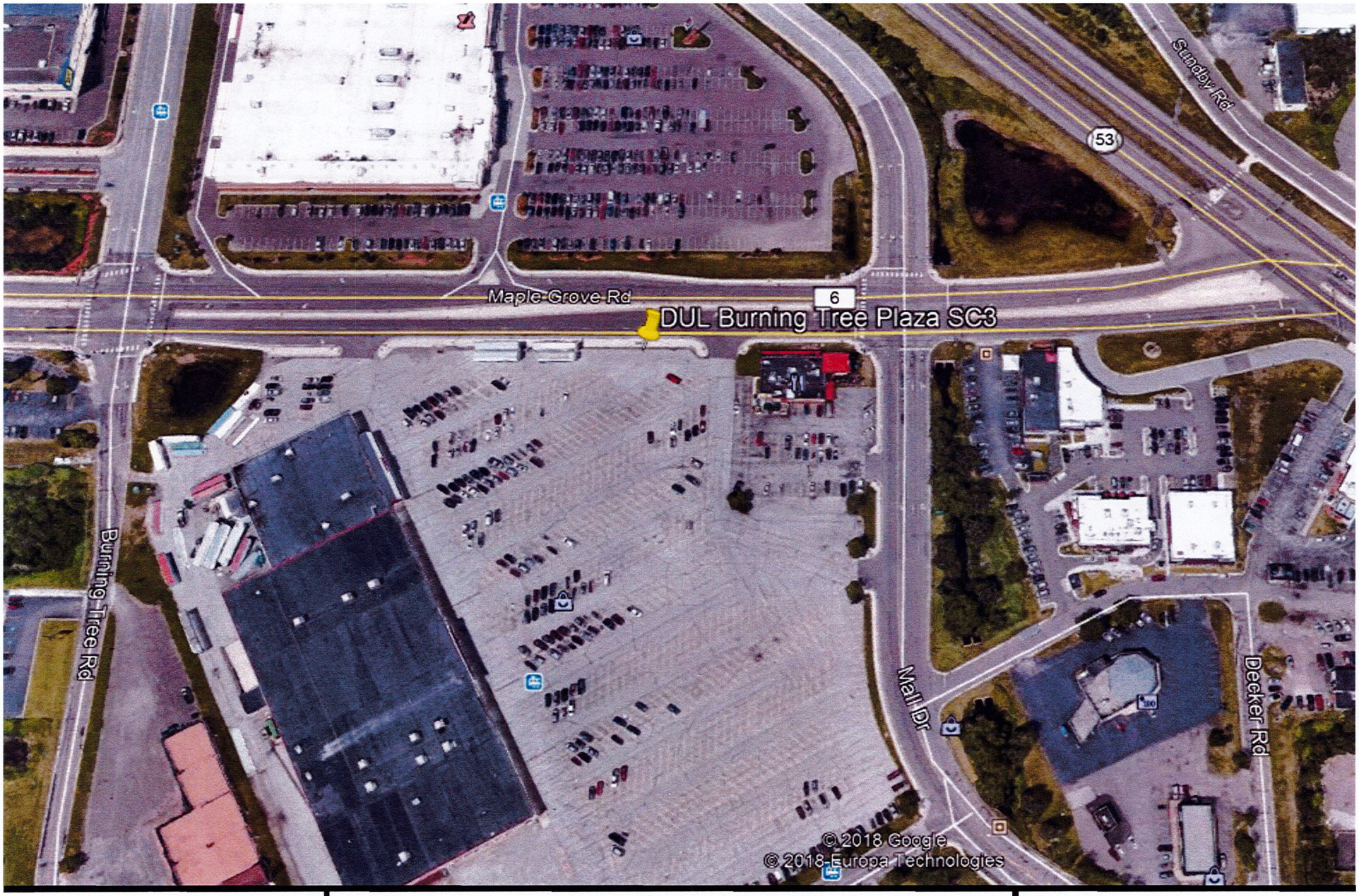

verizon

DUL Burning Tree Plaza SC3

Proposed Site Candidate Locations

Verizon Small Cell

JACOBS

verizon

SITE NAME: DUL BURNING TREE PLAZA SC3

SITE NUMBER: 20181847132

LOCATION CODE: 504066

SITE TYPE: SMALL CELL

INSTALLATION TYPE: REPLACEMENT LIGHT POLE

SITE INFORMATION

APPROXIMATE ADDRESS:
2247 MAPLE GROVE RD.
DULUTH, MN 55806
ST. LOUIS COUNTY

SITE COORDINATES:
LAT: 46°-48'-26.86"N
LONG: 92°-09'-59.89"W
GROUND ELEVATION: 1318.9' AMSL
(PER 1A CERTIFICATE)

REPLACEMENT POLE

PROJECT DESCRIPTION/SOW

WORK PRODUCT	INSTALLED BY
REPLACEMENT STEEL LIGHT POLE	VERIZON
CONCRETE POLE FOUNDATION	VERIZON
GROUND RING AROUND POLE FOUNDATION	VERIZON
ELECTRICAL CONDUIT, BETWEEN POLE BASE AND POWER SOURCE, TO BE TRENCHED/DIRECTIONALLY BORED BELOW GRADE	VERIZON
FIBER CONDUIT, BETWEEN HAND HOLE AND POLE BASE, TO BE TRENCHED/DIRECTIONALLY BORED BELOW GRADE	FIBER PROVIDER
FIBER CONDUIT, WITHIN RIGHT OF WAY, TO BE TRENCHED/DIRECTIONALLY BORED BELOW GRADE	FIBER PROVIDER
FIBER HAND HOLE AT POLE BASE	FIBER PROVIDER
DIPLEXERS	VERIZON
LOAD CENTER	VERIZON
ELECTRICAL METER	VERIZON
ERICSSON RRUS AND POWER CONVERTERS	VERIZON
PANEL ANTENNA	VERIZON

SHEET INDEX

NO:	SHEET TITLE
G-001	TITLE SHEET & PROJECT DATA
G-002	GENERAL SPECIFICATIONS
G-003	GENERAL SPECIFICATIONS
N/A	SURVEY
C-101	SITE PLAN
C-102	ENLARGED SITE PLAN
C-501	TRAFFIC CONTROL PLANS
T-201	SITE ELEVATION
T-501	ANTENNA DETAILS
T-502	EQUIPMENT DETAILS
S-001	STRUCTURAL NOTES **
S-501	STRUCTURAL DETAILS **
E-101	UTILITY PLAN
E-102	UTILITY PLAN
E-103	GROUNDING PLAN
E-501	UTILITY DETAILS
E-502	GROUNDING DETAILS

* COMPLETED BY OTHERS

** REVIEWED AND APPROVED BY STRUCTURAL ENGINEER

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

- 2012 INTERNATIONAL BUILDING CODE
- 2014 NATIONAL ELECTRIC CODE
- TIA/EIA-222-G OR LATEST EDITION

IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL

LOCATION MAP

LOCATION SCAN

PROJECT DIRECTORY

LESSEE:
VERIZON WIRELESS
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438
CONTACT: AMANDA TURNER
PHONE: 612.720.1657

LESSOR:
CITY OF DULUTH
411 W 1ST ST
DULUTH, MN 55802
PHONE: 218.730.5000

ENGINEERING COMPANY:
EDGE CONSULTING ENGINEERS, INC.
2101 HIGHWAY 13 W
BURNSVILLE, MN 55337
CONTACT: OTTO DINGFELDER III
PHONE: 952.683.1032

RF ENGINEER:
VERIZON WIRELESS
10801 BUSH LAKE RD
BLOOMINGTON, MN 55438
CONTACT: MICHAEL KOCH

SITE ACQUISITION:
JACOBS ENGINEERING GROUP, INC.
2727 PATTON ROAD
ROSEVILLE, MN 55113
CONTACT: AMY DRESCH
PHONE: 952.831.1043

11"x17" PLOT WILL BE HALF SCALE UNLESS OTHERWISE NOTED

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS/CONDITIONS ON SITE. IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY WORK OR BE RESPONSIBLE FOR THE SAME.

ENGINEER OF RECORD

EDGE CONSULTING ENGINEERS, INC.
CONTACT: OTTO DINGFELDER III (PE # 49720 (MN))
PHONE: 608.644.1449

STRUCTURAL REVIEW

STRUCTURAL ANALYSIS COMPLETED BY:
EDGE CONSULTING ENGINEERS, INC.
PROJECT #: 20096
DATE: 08/21/2018

CONTRACTOR TO REVIEW STRUCTURAL REPORT IN ITS ENTIRETY. ANY DISCREPANCIES OR DISAGREEMENTS BETWEEN THE REPORT AND THESE PLANS SHOULD BE RESOLVED PRIOR TO CONSTRUCTION.

verizon

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

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

PROJECT NO:	20181847132
LOCATION CODE:	504066
EDGE PROJECT NO:	20096
CHECKED BY:	OGD

REV.	DATE	DESCRIPTION	INT.
A	08/29/2018	PRELIM SMALL CELL DWGS	JMK
0	09/10/2018	FINAL SMALL CELL DWGS	JMK
1	10/08/2018	FINAL SMALL CELL DWGS	JMK

OTTO J. DINGFELDER III
LICENSED PROFESSIONAL ENGINEER
49720
MINNESOTA
10/9/2018

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 BURNING TREE PLAZA SC3
DULUTH, MN
REPLACEMENT LIGHT POLE
SMALL CELL DRAWINGS

SHEET TITLE
TITLE SHEET & PROJECT DATA

SHEET NUMBER
G-001

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© EDGE CONSULTING ENGINEERS, INC.

A AERIAL OVERVIEW

QUALIFICATION OF WORKERS NOTE:

ANY WORK ON EQUIPMENT WILL NEED TO BE DIRECTLY SUPERVISED OR PERFORMED BY A CONTRACTOR EMPLOYEE WHO IS MNDOT SIGNAL AND LIGHTING CERTIFIED.

MINNESOTA 2018 STANDARD SPECIFICATIONS
2545 LIGHTING SYSTEMS
2545.1 DESCRIPTION
B QUALIFICATION OF WORKERS

PARSONS ELECTRIC
CONTACT: TORY
PHONE: 218-591-1621
HUNT ELECTRIC
CONTACT: JEFF
PHONE: 218-628-3323

PERSUANT TO DIRECTION FROM DULUTH CITY ENGINEER, VERIZON ELECTRICAL SERVICE WILL BE ROUTED USING SEPARATE CONDUIT OUTSIDE OF CITY'S EXISTING CONDUIT, #10 AWG CONDUCTORS ARE NOT REQUIRED.

EXCAVATION NOTE:

THE CITY OF DULUTH GAS UTILITY MUST BE NOTIFIED 2 WORKING DAYS PRIOR TO ANY EXCAVATION OR DIRECTIONAL DRILLING WITHIN 6 FEET OF A 6 INCH OR LARGER NATURAL GAS MAIN. DEPARTMENT PERSONNEL WILL BE ON SITE TO MONITOR EXCAVATION AND INSPECT ANY EXPOSED STEEL MAIN 6 INCHES OR LARGER. NOTIFY THE ENGINEERING DIVISION AT 730-5200 TO COORDINATE THIS INSPECTION.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY ANY TIME A STEEL NATURAL GAS MAIN SMALLER THAN 6 INCHES IS EXPOSED WITHIN AN EXCAVATION. CONTACT THE ENGINEERING DIVISION AT 730-5200 TO COORDINATE AN INSPECTION OF THE EXPOSED MAIN.

NOTES:

CONTRACTOR TO COMPLETE A UTILITY LOCATE PRIOR TO COMMENCING ALL CONSTRUCTION ACTIVITIES.

CONTRACTOR TO RE-SEED ANY AND ALL DISTURBED GRASS AREAS. REFER TO THE LOCAL MUNICIPALITY FOR SEEDING SPECIFICATIONS.

NORTH

BURNING TREE RD

EXISTING BUILDING

PARKING LOT

PARKING LOT

EXISTING BUILDING

PARKING LOT

PARKING LOT

REMOVE EXISTING POLE FOUNDATION AND ADJACENT SIDEWALK. REPLACE EXISTING SIDEWALK IN KIND.

REPLACEMENT LIGHT POLE, BY VERIZON

PROPOSED HAND HOLE/DEMARC, BY PROVIDER

PROPOSED ELECTRIC METER TO BE INSTALLED AS PART OF DUL BURNING TREE PLAZA SC2 PROJECT

PROPOSED UNDERGROUND ELECTRIC SERVICE CONDUIT TO ROUTE FROM POLE BASE TO DUL BURNING TREE PLAZA SC2, BY VERIZON, APPROX. 1457' IN LENGTH, TO CONNECT TO PROPOSED SMALL CELL SERVICE CIRCUIT

MAPLE GROVE RD

APPROX. RIGHT OF WAY

APPROX. RIGHT OF WAY

PROPOSED DUL BURNING TREE PLAZA SC2, BY VERIZON, LOCATED AT 2510 MAPLE GROVE RD, TO CONNECT TO PROPOSED SMALL CELL SERVICE CIRCUIT

EXISTING UNDERGROUND UTILITY (TYP.)

EXISTING UNDERGROUND UTILITY (TYP.)

APPROX. RIGHT OF WAY

MATTERHORN DR

EXISTING BUILDING

EXISTING BUILDING

PARKING LOT

PARKING LOT

EXISTING BUILDING

60' 0 60' 120'

SCALE: 11" x 17" - 1" = 120'
22" x 34" - 1" = 60'

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EDGE PROJECT NO:	20096
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OTTO G. DINGFELDER III
LICENSED PROFESSIONAL ENGINEER
49720
STATE OF MINNESOTA
10/9/2018

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DUL BURNING TREE PLAZA SC3
DULUTH, MN
REPLACEMENT LIGHT POLE
SMALL CELL DRAWINGS

SHEET TITLE

SITE PLAN

SHEET NUMBER

C-101

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A AERIAL OVERVIEW

EXCAVATION NOTE:

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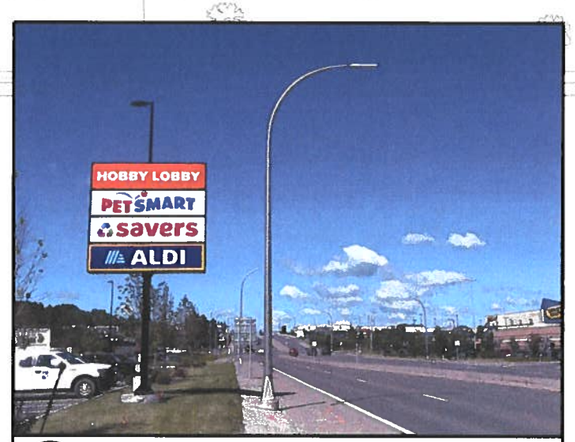
THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY ANY TIME A STEEL NATURAL GAS MAIN SMALLER THAN 6 INCHES IS EXPOSED WITHIN AN EXCAVATION. CONTACT THE ENGINEERING DIVISION AT 730-5200 TO COORDINATE AN INSPECTION OF THE EXPOSED MAIN.

NORTH

B SITE OVERVIEW [LOOKING EAST]



C SITE OVERVIEW [LOOKING WEST]

MAPLE GROVE RD

PROPOSED UNDERGROUND ELECTRIC SERVICE CONDUIT TO ROUTE FROM POLE BASE TO DUL BURNING TREE PLAZA SC2, BY VERIZON; APPROX. 1457' IN LENGTH; TO CONNECT TO PROPOSED SMALL CELL SERVICE CIRCUIT

EXISTING UNDERGROUND ELECTRIC SERVICE

E E E E E E E

FO

APPROX. RIGHT OF WAY

PROPOSED FIBER OPTIC SERVICE CONDUIT TO ROUTE WITHIN RIGHT OF WAY, BY PROVIDER; SEE SHEET E-101 FOR DETAILS

REPLACEMENT LIGHT POLE, BY VERIZON

PROPOSED FIBER OPTIC SERVICE CONDUIT TO ROUTE BETWEEN POLE BASE AND HAND HOLE, BY PROVIDER

PROPOSED HAND HOLE/DEMARC (2' x 6' OPEN BOTTOM HH), BY PROVIDER

EXISTING UNDERGROUND UTILITY (TYP.)

EXISTING UNDERGROUND UTILITY (TYP.)

GRASS

PARKING LOT

5' 0 5' 10'

SCALE: 11" x 17" - 1" = 10'
22" x 34" - 1" = 5'

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DUL BURNING TREE PLAZA SC3
DULUTH, MN
REPLACEMENT LIGHT POLE
SMALL CELL DRAWINGS

SHEET TITLE
ENLARGED SITE PLAN

SHEET NUMBER
C-102

© EDGE CONSULTING ENGINEERS, INC.

EXISTING POLE	
POLE HEIGHT:	34'-7" T.O.C.
MAXIMUM APPURTENANCE HEIGHT:	35'-1" A.G.L.

PROPOSED POLE	
POLE HEIGHT:	35'-0" T.O.C.
ANTENNA TIP HEIGHT:	29'-2" A.G.L.
MAXIMUM APPURTENANCE HEIGHT:	36'-7" A.G.L.

NOTES:

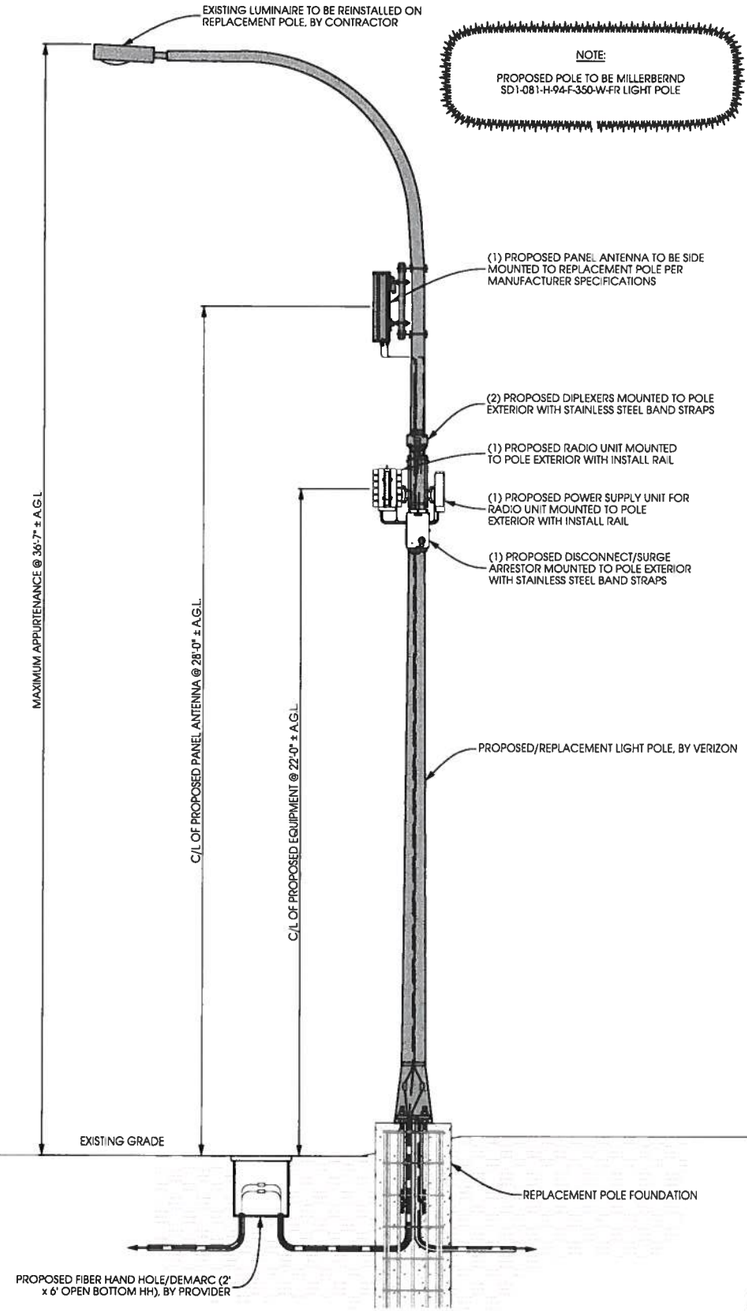
TYPICAL INSTALLATION SHOWN.

ALL ELEVATIONS ARE ASSUMED TO BE MEASURED FROM ABOVE GRADE LEVEL.

ALL PROPOSED POLE-MOUNTED EQUIPMENT TO BE PAINTED TO MATCH POLE.

NOTE:

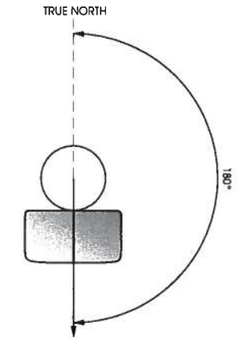
PROPOSED POLE TO BE MILLERBERND SD1-081-H-94-F-350-W-FR LIGHT POLE



A POLE ELEVATION

SCALE: 11" x 17" - 1" = 5'-0"
22" x 34" - 1" = 2'-6"

B SITE ELEVATION



C ANTENNA ORIENTATION

SCALE: NTS

ANTENNAS					
QUANTITY	MAKE	MODEL	CENTERLINE	TIP HEIGHT	AZIMUTH
1	ANDREW	HBXX-6513DS-A2M	28'-0"' AGL	29'-2" AGL	180°

EQUIPMENT			
QUANTITY	TYPE	MAKE	MODEL
1	RRU	ERICSSON	RRUS8843
1	PSU	ERICSSON	PSU 6302
2	DIPLEXER	COMMSCOPE	CBC1923T-4310 E11F13PO6

CABLING			
QUANTITY	TYPE	MAKE	MODEL
12	COAX	COMMSCOPE	F4-HMDM-1M-D

D ANTENNA AND CABLING

SCALE: NTS

E RF WARNING SIGNS

SCALE: NTS

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DULUTH, MN
REPLACEMENT LIGHT POLE
SMALL CELL DRAWINGS

SHEET TITLE

SITE ELEVATION

SHEET NUMBER

T-201

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NOTES:

-CONTRACTOR TO COMPLETE UTILITY LOCATE PRIOR TO COMPLETING ANY CONSTRUCTION ACTIVITIES.

-CONTRACTOR TO MAINTAIN A MINIMUM 48" OF COVER BETWEEN DIRECTIONAL CORE AND ROADWAY PAVEMENT TO THE EXTENT PRACTICAL.

-CONTRACTOR TO PROVIDE A MINIMUM OF 12" OF CLEARANCE BETWEEN PROPOSED CONDUIT AND EXISTING UTILITIES.

-ALL CONCRETE DAMAGED AS PART OF THIS WORK TO BE REPAIRED/REPLACED TO ITS ORIGINAL CONDITION.

-ALL ASPHALT REMOVED DURING CONSTRUCTION IS TO BE PATCHED AND REPAIRED TO ITS ORIGINAL CONDITION.

-TEMPORARY HARD SURFACE TO BE PROVIDED IMMEDIATELY UPON BACK FILL, UNTIL PERMANENT REPAIR IS MADE.

- NOTIFY CITY OF DULUTH, 218.730.4130, 2 WORKING DAYS PRIOR TO EXCAVATION OR DIRECTIONAL DRILLING WITHIN 6FT OF NATURAL GAS MAINS.

-OBTAIN PERMIT FROM ST. LOUIS COUNTY FOR ELECTRIC CONDUIT.

(A) UTILITY PLAN

60' 0 60' 120'

SCALE: 11" x 17" - 1" = 120'
22" x 34" - 1" = 60'

L:\20000\20096\CAD\Plan\Final\E-101.dgn

verizon

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

Edge
Consulting Engineers, Inc.
2101 Highway 13 W
Burnsville, MN 55337
608.644.1449 voice
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PROJECT NO:	20181847132
LOCATION CODE:	504066
EDGE PROJECT NO:	20096
CHECKED BY:	OGD

REV	DATE	DESCRIPTION	INT.
A	08/29/2018	PRELIM SMALL CELL DWGS	JMK
0	09/10/2018	FINAL SMALL CELL DWGS	JMK
1	10/08/2018	FINAL SMALL CELL DWGS	JMK

OTTO G. DINGFELDER III
LICENSED PROFESSIONAL ENGINEER
49720
MINNESOTA
10/9/2018

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 BURNING TREE PLAZA SC3
DULUTH, MN
REPLACEMENT LIGHT POLE
SMALL CELL DRAWINGS

SHEET TITLE
UTILITY PLAN

SHEET NUMBER
E-101

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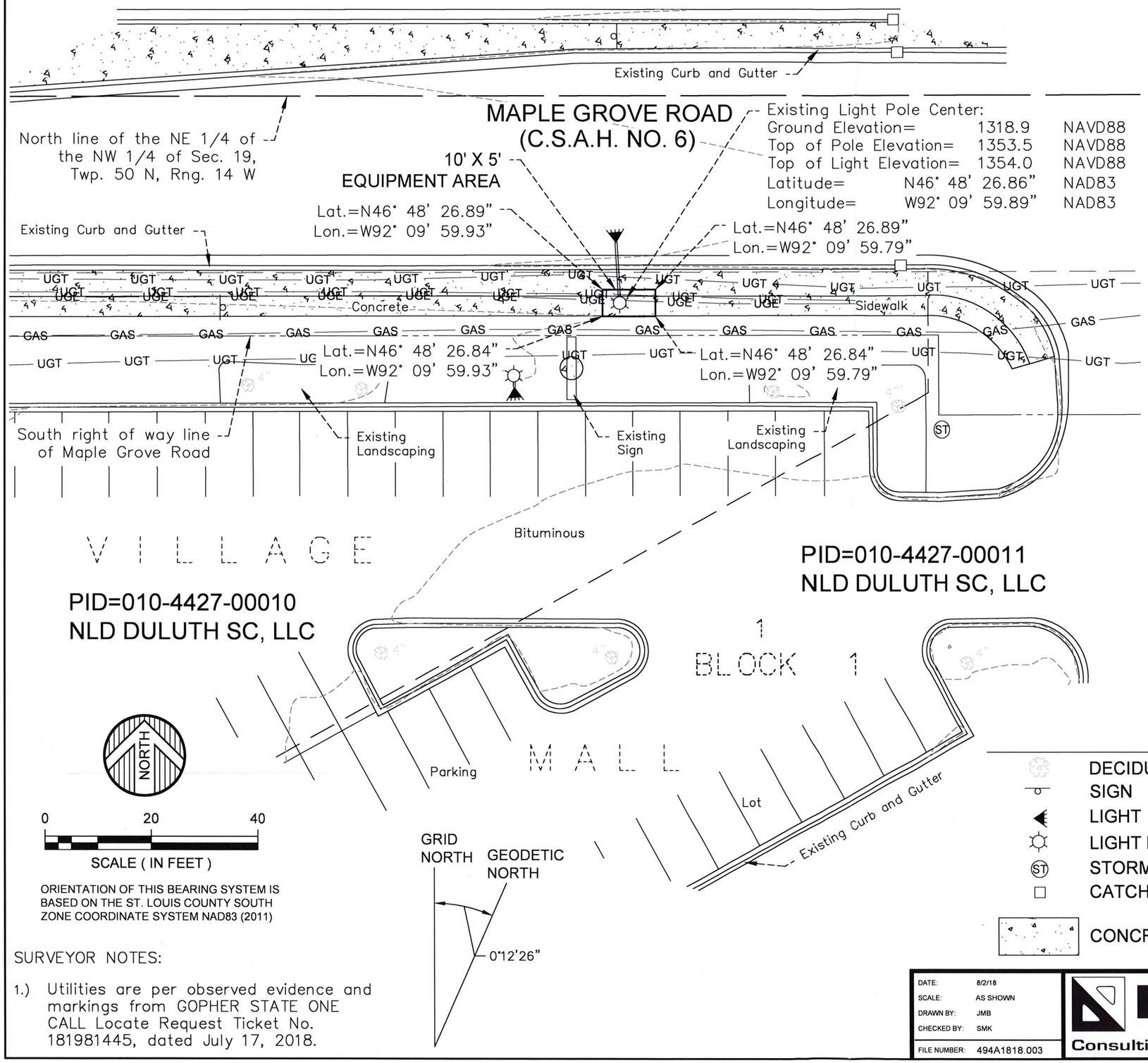
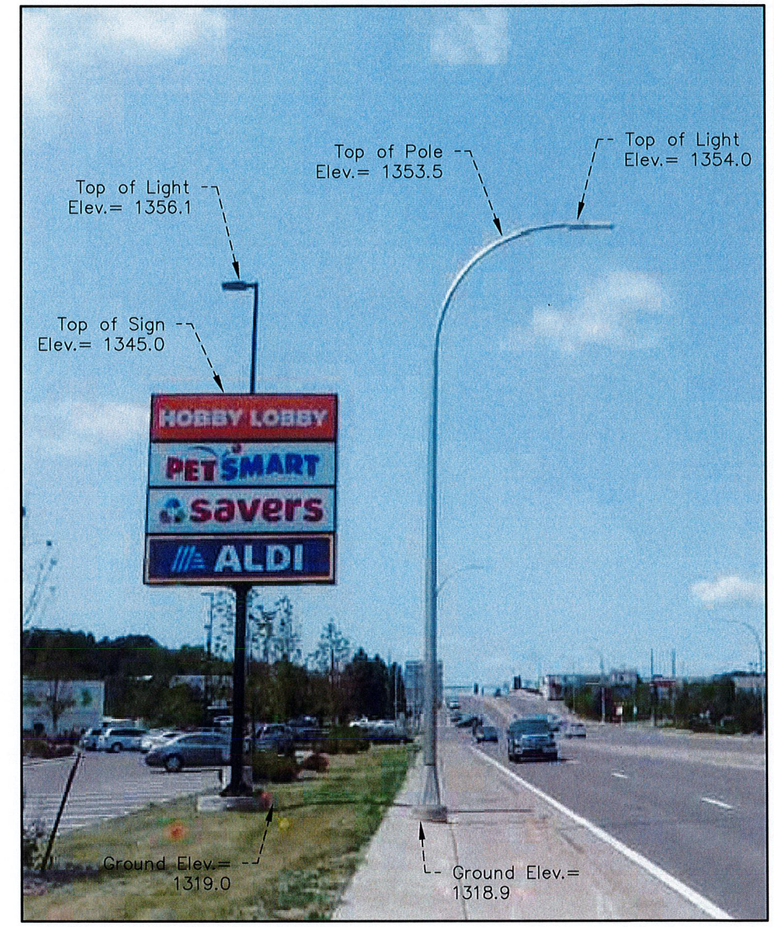
DUL BURNING TREE PLAZA SC3



Existing Light Pole Center:

Ground Elevation=	1318.9	NAVD88
Top of Pole Elevation=	1353.5	NAVD88
Top of Light Elevation=	1354.0	NAVD88
Latitude=	N46° 48' 26.86"	NAD83
Longitude=	W92° 09' 59.89"	NAD83



ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE ST. LOUIS COUNTY SOUTH ZONE COORDINATE SYSTEM NAD83 (2011)

SURVEYOR NOTES:

1.) Utilities are per observed evidence and markings from GOPHER STATE ONE CALL Locate Request Ticket No. 181981445, dated July 17, 2018.

LEGEND

	DECIDUOUS TREE	UGT	UNDERGROUND TELE
	SIGN	GAS	UNDERGROUND GAS
	LIGHT	UGE	UNDERGROUND ELEC
	LIGHT POLE		SECTION LINE
ST	STORM MANHOLE		RIGHT OF WAY LINE
	CATCH BASIN		LOT LINE
			PARCEL LINE
			LEASE AREA
	CONCRETE SURFACE		

DATE:	8/2/18
SCALE:	AS SHOWN
DRAWN BY:	JMB
CHECKED BY:	SMK
FILE NUMBER:	494A1818.003

Edge Consulting Engineers, Inc.

WIDSETH SMITH NOLTING
Engineering | Architecture | Surveying | Environmental