CITY OF ELK GROVE
SMUD SERVICES REQUEST
FOR TELECOMMUNICATIONS
SERVICE PROVIDER

Date of Request:

Approximate Date Service Connection is Needed:

START  X  DISCONNECT  _____  TRANSFER OF SERVICE  _____
OTHER  ___________________________

Telecommunications Service Provider (TSP) Name: AT&T
TSP Billing Address: AT&T Mobility c/o Engie Insight MS 7372 P.O. Box 2241 Spokane, WA 99210
TSP Tax ID: ___________________________
Contact Person and Number: Engie Insight (866) 322-4547

Point of Connection (POC): City Service#: 1400

SMUD POC to City Conductor:

1. Descriptive Address: Measurements must be from the street center line and must
be listed as x feet, the side of the street, and include north/south and east/west
directions. For example: 50 feet of East Street and 10 feet South of J Street.

2. California State, Zone 2, NAD83 in Feet: X,Y coordinate of the connection point:

   NAD83: 0402, 8719988.227RUSE1916509.412RUSN
   Decimal: 38.423436, -121.447378

3. Attach City Map with SMUD POC to City Conductor with an X or highlight on the
map. (Note: please only submit the drawing with this location. Do not submit all
drawing pages.)
City Pole Number: Pole #: SLT-26918

Location of TSP Devices on City Street lights:

1. Descriptive Address: Measurements must be from the street center line and must be listed as x feet, the side of the street, and include north/south and east/west directions. For example: 50 feet of East Street and 10 feet South of J Street.
   Address: 5001 Laguna Blvd
   Description: South 70 Feet from the centerline of Laguna Blvd; 180 Feet East from the centerline of Franklin Blvd

2. California State, Zone 2, NAD83 in Feet: X,Y coordinate of the connection point:
   NAD 83: Zone 0402 6720002.411fUSE 1916485.462fUSN
   Decimal: 38.42337, -121.447329

3. California State, Zone 2, NAD83 in Feet: X,Y coordinate of the connection point where the antenna is being powered from:
   NAD 83: 0402 6719981.013fUSE 1916470.764fUSN
   Decimal: 38.423330, -121.447404

4. Attach City Map with locations of 1) TSP devices on City Street light with an X or highlight on the map and 2) where the device is getting power from. (Note: please only submit the drawing with these locations. Do not submit all drawing pages.)

Number/Type of Devices: (How many transmitters, antennae, etc.)
2 Transmitters (RRU's), 2 Power Supply Units (PSU) and 1 antenna

Make and Model of Devices:
Ericsson RRU 4415, Ericsson RRU 4426, PSU AC 08, JPAK-1M 600-04LS-2.5

Maximum Nameplate AC Wattage of each Device:
Ericsson RRU 4415 = 1100W, Ericsson RRU 4426 = 1100W

Small cell attachment equipment specification sheet attached X

This area reserved for SMUD use only
# SMALL CELL LOAD SUMMARY – Elk Grove

**Vendor Name:** Vinculums  
**City Project Number:**  
**Date:** 11/4/19

| Project: |  
|---|---|---|---|---|
| Location Address: | 5001 Laguna Blvd. | City Service Coordinates: | 38.423330, -121.447404 |  
| Pole Coordinates: | 38.423379, -121.447329 | City Service Number: | 1400 |  
| Node Number: | SAC01_022 | RF Config: | MICRO |  
| Street Light Pole Number: | SLT-28918 [MA-LED] | Radio Load: | 2200W |  
| City Service Address: | 5001 Laguna Blvd. | Future Radio Load: |  
| SMUD Point of Connect: | Inground Box 5’ Behind City Service 38.423436, -121.447378 |  

| Circuit Breaker: | Position #1, Lighting 2; 30 AMP |
| Voltage: | ☑ 120 V  ☑ 240 V  ☑ 277 V  ☑ 480 V |

### Number of Existing Loads:

<table>
<thead>
<tr>
<th>Existing Load</th>
<th>MA-LED:</th>
<th>ORN-LED:</th>
<th>PT-LED:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA-LED:</td>
<td>1</td>
<td>ORN-LED:</td>
<td>PT-LED:</td>
</tr>
<tr>
<td>MA-HPS:</td>
<td>ORN-HPS:</td>
<td>PT-HPS:</td>
<td></td>
</tr>
</tbody>
</table>

### Description of Existing Loads (Street Light Numbers):

- 28918

### Total Existing Loads:

<table>
<thead>
<tr>
<th>Load Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA-LED</td>
<td>110 W</td>
</tr>
<tr>
<td>MA-HPS</td>
<td>W</td>
</tr>
<tr>
<td>ORN-LED</td>
<td>W</td>
</tr>
<tr>
<td>ORN-HPS</td>
<td>W</td>
</tr>
<tr>
<td>PT-LED</td>
<td>W</td>
</tr>
<tr>
<td>PT-HPS</td>
<td>W</td>
</tr>
<tr>
<td>Radio Load</td>
<td>2200 W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New Load Total (RP):</th>
<th>2310 W</th>
</tr>
</thead>
</table>

### Recirulting Required:  
- ☑ Yes  ☑ No

- **Existing Circuit Breaker:** 30 AMPS  
- **Percentage Overcurrent Protection Used:** 64%

### Difficulty Level:  
- 1. No Constructability Issues  
- 2. Difficult  
- 3. Very Difficult

### Pass or Fail:  
- ☑ Pass  ☑ Fail

### Notes:

- *Per NEC Regulation, the Real Power (RP) will not exceed 80% of the Overcurrent Protection.*

<table>
<thead>
<tr>
<th>Load Type</th>
<th>Total Load on Circuit: 2.89 KVA</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Minimum Circuit Overcurrent Protection Required:</em></td>
<td>24.06 AMP</td>
</tr>
<tr>
<td>Radio Load Pico kWh/Yr.:</td>
<td>19,272</td>
</tr>
</tbody>
</table>
Date: 11/20/2019

To Whom It May Concern:

In coordination with RLS-CMC & Vinculum/AT&T drawings for node SAC01_022. I have reviewed the OEM specifications for the proposed equipment listed below. Based on the data sheets for the equipment listed, I have calculated the power consumption, apparent power, and yearly usage listed for the typical radio equipment configuration powered solely by this equipment. This calculation is based on a single power supply powered by a 120V 2-wire service and all proposed radio loads will be powered only by this single supply.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Description</th>
<th>Max Power (Watts)</th>
<th>Max Current (Amps)</th>
<th>KVA</th>
<th>KWh/Yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSU AC 08</td>
<td>Rectifier Power Supply</td>
<td>2200</td>
<td>18.34</td>
<td>2.2</td>
<td>19272</td>
</tr>
</tbody>
</table>

I, Joshua Penso, affirm that the design presented in this document meets the 2016 California Electric Code, the 2014 NEC and the 2014 National Electric Safety Code (NESC).

Sincerely,

Joshua Penso, PE-EE
California License E-16741
Expiration Date: 9/30/2020
SITE ID: CRAN_RSFR_SAC01_022
NODE FA: 14807753 NODE USID: 187852
PACE: MRSFR044146
IN THE PUBLIC R.O.W.
ADJACENT TO 5001 LAGUNA BLVD
ELK GROVE, CA 95758
STREET LIGHT ID #: 28918
PROJECT TYPE: MICRO CONFIGURATION

PROJECT DESCRIPTION
This is a unmanned wireless telecommunication facility for AT&T Mobility consisting of the installation and operation of an antenna and associated equipment on an (E) street light pole in the public right of way. Scope of work & site completion checklist:

- Install a (O) telecommunications antenna & equipment boxes on an (E) street light pole. Installation consists of (1) cylindrical antenna in a 10-1/2" x 72" fiberglass should with a (1) 4,423 EWH (1) 4415 EWH. (1) 4415 EWH.
- Antenna is verified by non-destructive testing by a professional if inspection if of lesser dimensions that shown on structural analysis. It is to be replaced with (X) caisson for type 15 street light pole for caltrans standard plans. Latest revision shown on pole foundation detail sheet in this plan set.
- Cabling - Cable spooling, cabling & fiber should be spliced to match (E) street light pole using a durable spooling wire (e.g., shepherd's wire) and (E) fiber optic cable. (E) Fiber optic cable should be placed without excess cable loops.
- Spacing of support elements - Support equipment (e.g., RCU) should be clustered as close as technically feasible on pole.
- Logo removal - All equipment logo, other than those required by regulation (e.g., impedance identification or s-tion logos) shall be painted over or removed.
- Utility lines - Proposed utility lines between (E) pole of connection to be underground.
- If a Skycam or banner brackets are present, remove and replace (E) brackets with (X) breakaway brackets.
- Note: (E) fiber optic and cable for associated power and fiber.
- Install (X) fiber optic and cable for associated power and fiber.

CONTRACTOR NOTES
Contractor shall verify all plans, existing dimensions and conditions on the job site and shall immediately notify the architect and/or engineers in writing of any discrepancies before proceeding with the work or be responsible for same.

APPLICATION CODES
All work and material shall be performed and installed in accordance with the current edition of the following codes as adopted by the local governing authorities:
- CALIFORNIA ADMINISTRATIVE CODE (WEL 11:47:2 & 725)
- 2016 CALIFORNIA MECHANICAL CODE
- 2016 CALIFORNIA ELECTRICAL CODE
- 2016 CALIFORNIA COLORS
- GENERAL ORDER NO. 73 (JUNE 2000 EDITION)
- CURRENT SACRAMENTO CITY CODE AMENDMENTS

DRIVING DIRECTIONS
Directions from Sacramento International Airport:
1. Merge onto I-55 S.
2. Take Exit 2 for Laguna Blvd
3. Make U-Turn at Wells Fargo Bank
4. Destination will be on the right

PROJECT INFORMATION
OWNER: CITY OF Elk Grove
APPLICATION: AT&T MOBILITY
ADDRESS: 3021 EXECUTIVE PARKWAY
SAN RAMON, CA 94583
ADJACENT AMPL:
110-1310-152
LATITUDE:
38.44329° N
LONGITUDE:
121.44729° W
JURISDICTION:
CITY OF Elk Grove
ZONING:
PUBLIC RIGHT OF WAY
PROPOSED USE:
UNMANNED TELECOMMUNICATIONS FACILITY
POWER COMPANY: SWG

SHEET INDEX
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<td>SITE PLAN</td>
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<tr>
<td>A-2</td>
<td>ENLARGED SITE PLAN</td>
</tr>
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<td>EQUIPMENT DETAILS</td>
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<td>B-2</td>
<td>BANNER BRACKETS</td>
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<td>C-1</td>
<td>ELECTRICAL</td>
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<td>T-2</td>
<td>TRAFFIC CONTROL PLAN NOTES</td>
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<td>T-3</td>
<td>TRAFFIC CONTROL PLAN</td>
</tr>
</tbody>
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USA NORTH
Call Toll Free Days Before You Dig
811/800-227-2600
usanorth.org

CONSULTING TEAM
ENGINEERING COMPANY: W SQUARED WIRELESS SERVICES 1307 CALLA AVENUE SAN CLEMENTE, CA 92673 CONTACT: MICHAEL MONTEAU PHONE: (949) 391-6824 EMAIL: STANDIT@WACOMULUS.COM
PLANNING CONSULTANT: USAC NORTH SERVICES 1307 CALLA AVENUE SAN CLEMENTE, CA 92673 CONTACT: ROBERT FLYNN PHONE: (916) 766-9939 EMAIL: RBL@USACnorth.com
CONSTRUCTION MANAGER: VINCULUMS SERVICES 2201 CALA AVENUE SACRAMENTO, CA 95833 CONTACT: DOUG MCCLURE PHONE: (916) 347-3473 EMAIL: DMCCLURE@VINCULUMS.COM

DO NOT SCALE DRAWINGS
Please scale any drawings that do not appear to scale with the dimensions shown. Call us at 1-800-949-7282 or contact your local office.

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KBW BANNERFLEX D3 BANNER BRACKET
13/16" ROUND FIBERGLASS ARM 31" LONG
STAINLESS STEEL BANDING
STAINLESS STEEL BUCKLE
NOTE: ALL TRAFFIC CONTROL SHALL COMPLY WITH ALL CITY OF ELK GROVE REQUIREMENTS. SEE ATTACHED WSC'S REFERENCE GUIDE FOR INFORMATION ON SIGNS, SPACING, LOCATION OF CONSTRUCTION SIGNAGE, FLAGGERS, AND CHANNELING DEVICES.

ALLOWABLE WORKING HOURS:
MON - FRI: 7:00AM - 3:30PM
SAT: 7:00AM - 9:00PM

NOTE: MAINTAIN ACCESS TO R/T BUS STOPS OR COORDINATE WITH R/T TO RELOCATE BUS STOP LOCATIONS. CONTRACTOR SHALL COORDINATE THE BUS STOP WITH R/T REPRESENTATIVE. (916) 387-2800

*POST* TEMPORARY NO PARKING SIGN ON TYPE B BARRICADE 72 HRS IN ADVANCE. TRAFFIC CONTROL TO BE ARRANGED 72 HRS IN ADVANCE OF CONSTRUCTION.