



WELCOME

**CPS Energy
Quarterly Pole Attachment
Workshop**

Feb 7, 2019

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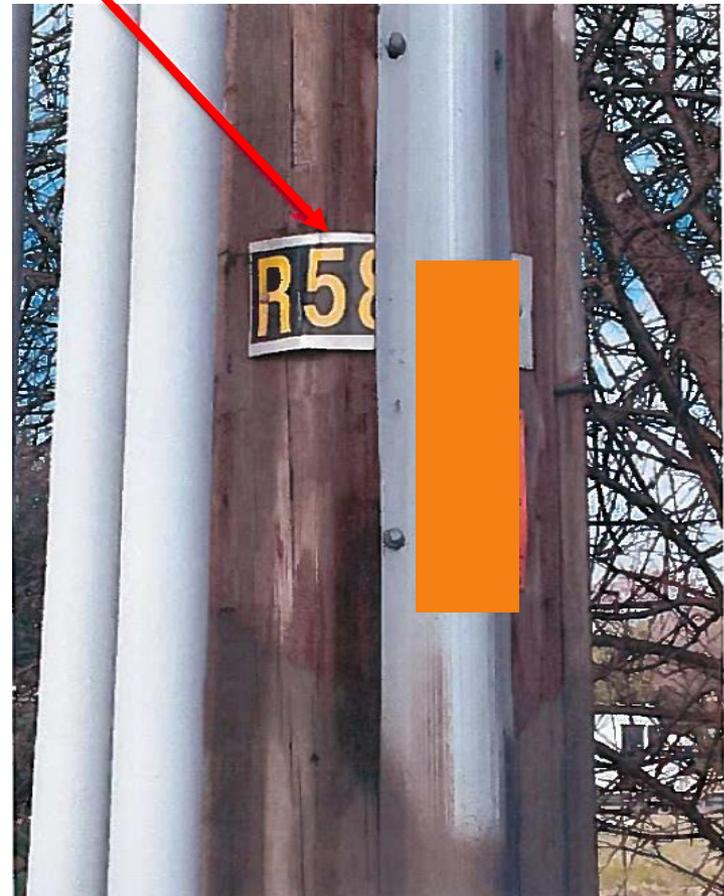
Housekeeping

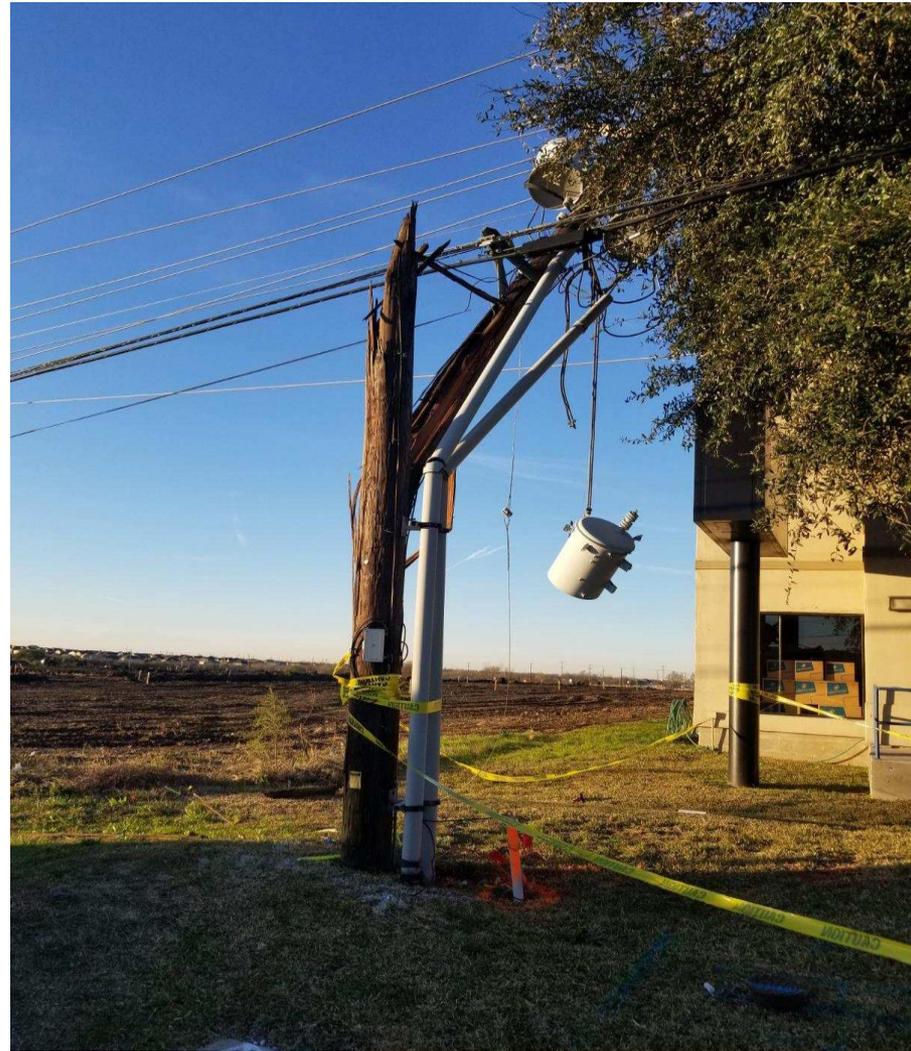
- **Sign-up Sheets**
- **Restrooms**
- **Evacuation / Staging**
- **Introductions in the room**



Safety

- **Date of occurrence – 12-18-18**
- **The Journeyman went to the R-switch pole and noticed the R-switch number was not clearly visible and assumed it was R-5847, the correct switch to operate for the procedure (when in fact this was R-5811)**
- **After the journeyman opened the R-switch he assumed was R-5847, he proceeded to verify that the transformers was de-energized**
- **At this point, the journeyman noticed that the circuit was still energized and realized the wrong switch was opened**
- **This caused an outage to 20 customers for approximately 15 minutes**





4 Total poles failed



Agenda

CPS Energy
Quarterly Pole Attachment Workshop – February 7, 2019

CPS Energy EMC Auditorium
4514 Frank Bryant – San Antonio

Agenda #	Item	Presenter	
1	Welcome & Introductions	Jesse Lopez	9:00 – 9:10 am
2	Safety & Agenda	Jesse Lopez	9:10 – 9:15 am
3	General Topics: <ul style="list-style-type: none"> • Engineering contractors GIS training update • Pole attachment application rejections • Pole Attachment Process • Work Manager Responsibilities • GIS Designs • Pole Attachment Standards Update • Pole attachment services dashboard update 	Jesse Lopez	9:15 – 10:20 am
4	Customer Engineering Web Portal <ul style="list-style-type: none"> • Web Portal overview 	Richard Rodriguez	10:20 – 10:35 am
5	Wireline Attachments <ul style="list-style-type: none"> • Temporary Attachment request • NJUNS update 	Jesse Lopez	10:35 – 10:50 am
6	Wireless Attachments <ul style="list-style-type: none"> • Applications update • GIS Design installations for Pole Top Antennas • Dashboard update • Attaching Entity Application Status • Pole Attachment Identification Dashboard • AT&T Owned Poles (Joint Use Poles) 	Jesse Lopez	10:50 – 11:30 am
7	Pilot Project status update	Jesse Lopez	11:30 – 11:40 am
8	Open Discussion / Questions	Attendees	11:40 – 12:00 pm
9	Final Wrap-up	Jesse Lopez	
10	Adjourn		

GENERAL TOPICS

Engineering Contractor GIS Training

- Successfully completed two training classes for GIS Electrical Make Ready Engineering
- 100 % pass rate
- New Approved Pole Attachment Contractors list is updated and posted in our website
- Pole Attachment Services will be requesting another class for August 2019 (If needed)
- For more information please email poleattach@cpsenergy.com

<i>Engineering</i>	
1. Actavo	★★★★
2. Binkley & Barfield	★★★★
3. Cobb Fendley?	★★★★
4. DeBauche Communications & Consulting Services, LLC	★
5. Fullerton	★★★
6. LJA Engineering	★★★★
7. PhaseLink Utility Solutions	★★★★
8. Precision Design & Drafting Inc.	★★★★
9. Telecom Staffing, LLC?	★★★★
10. TDC2, LLC	★
11. Texasutility Engineering, Inc.	★★★★
12. TRC, Inc.	★★★
13. Quanta Utility Engineering Services (QUES)	★★★★
14. Utilis Engineering	★★★

★ Option 1: Pole Loading Analysis (PLA) & Application submittal

★★ Option 2: Make ready engineering

★★★ Option 3: Pole Loading Analysis (PLA), Application submittal & Make ready engineering

Application Rejections

- **Application missing required information**
 - CPS Energy pole number (PL#) missing on application (New Attachments ONLY)
 - Make ready not called for on the application
 - Missing required attachments at submittal of application
- **Mistakes on Pole Loading Analysis**
 - All existing violations on pole are not fixed or new creates a new violation
 - Incorrect construction grades
 - Missing cables on pole
 - Incorrect cable tensions
 - Mid-Span clearance issues
- **21 Day application review will reset with every application rejection**
- **Contractors should NOT change the attaching entities application name**
 - Attaching Entities do not know what applications CPS Energy is referencing because the application name was changed by the engineering contractor when applying for attachment

WORK MANAGER TASK STRUCTURE

Pole Attachment Process



- Pole Attachment applications must be submitted to poleapplications@cpsenergy.com
- Electrical Make Ready GIS designs must be submitted with the pole attachment application
- All GIS designs submitted to CPS Energy will be reviewed by our contractors TRC Solutions and Quanta Utility Engineering Services (QUES)

Work Manager Responsibilities



- **Supervisor Reviewers**
 - **Margarita Garcia (TRC) GM6**
 - **Kyle Nealon (QUES) NK2**

LEGEND for Responsible Parties

Designer – Attachers/Contractors

Supervisor – QUES/TRC

Manager – Jesse/CPS

WR	XXXXXX	REQ, 06/25/2018, PALMR, CAPITAL, UNKNOWN	, , SAN ANTONIO, -, NONE, ,
Task 1000:	C, M, REQ, 04/24/2018, 04/24/2018, APDM,	Create Work Request, 0	
Task 1040:	W, M, REQ, 04/24/2018, , ,	Review WR Details / Assign Designer - Project - Grids, 0	
Task 2280:	P, M, DSGN, 04/24/2018, , ,	Perform Field Survey / Obtain Data, 0	
Task 2360:	P, M, DSGN, 04/24/2018, , ,	Design Job, 0	
Task 2400:	P, M, DSGN, 04/26/2018, , ,	Request ROW / Easement From Customer, 0	
Task 2445:	P, M, DSGN, 04/24/2018, , ,	Obtain Permit(s), 0	
Task 2460:	P, M, DSGN, 05/03/2018, , ,	Perform Supervisor Review of Design, 0	
Task 2550:	P, M, DSGN, 05/04/2018, , ,	Submit Design to Distribution Planning, 0	
Task 2570:	P, M, DSGN, 05/14/2018, , ,	DPLN, Obtain Distribution Planning Approval, 0	
Task 2605:	P, M, DSGN, 05/07/2018, , ,	Send Contribution Charges to Customer, 0	
Task 2670:	P, M, DSGN, 04/30/2018, , ,	Obtain ROW, 0	
Task 2680:	P, M, DSGN, 05/15/2018, , ,	Indicate Official Revision, 0	
Task 9200:	P, M, CIAC, 05/07/2018, , ,	Receive Customer Pre-Work Payment, 0	
Task 5000:	P, M, APPR, 05/16/2018, , ,	Perform Supervisor Approval, 0	
Task 5100:	P, M, APPR, 05/17/2018, , ,	Approve Work Request, 0	
Task 6000:	P, M, DESFN, 05/18/2018, , ,	Finalize and Lock Down Design, 0	
Task 11100:	P, M, REL, 05/21/2018, , ,	Accept Work Request for Construction, 0	
Task 12500:	P, M, SCH, 05/22/2018, , ,	Schedule Work, 0	
Task 16100:	P, M, CONST, 07/12/2018, , ,	Perform Field Work, 0	
Task 16500:	P, M, ABRPT, 07/17/2018, , ,	Perform Initial Material Reconciliation, 0	
Task 16900:	P, M, ABRPT, 06/19/2018, , ,	Receive Customer Post-Work Payment, 0	
Task 17000:	P, M, ABRPT, 07/24/2018, , ,	Enter As-Built, 0	
Task 18200:	P, M, CLOSE, 07/25/2018, , ,	Close Work Request, 0	

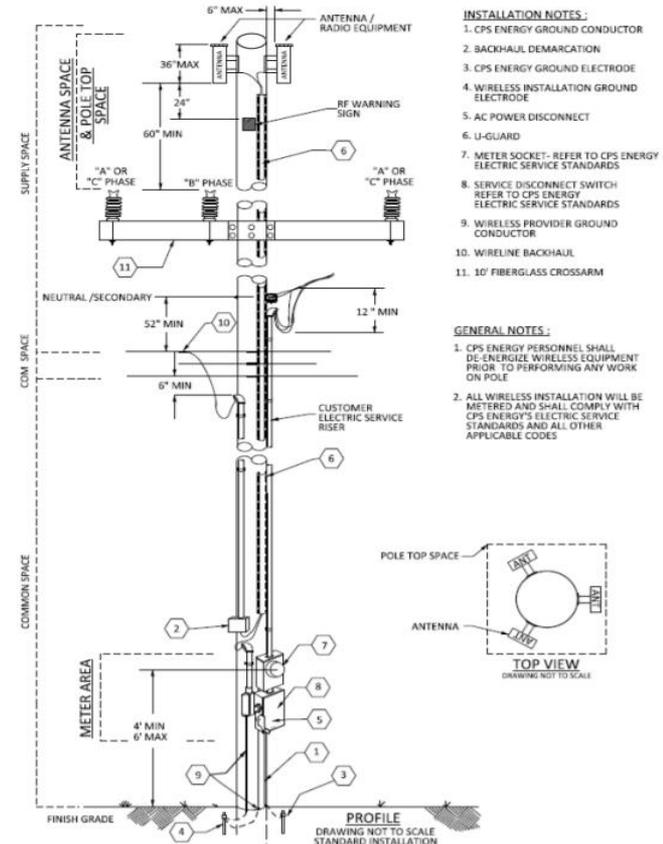
GIS Designs

- **All Work Request require an additional (5) NSLC to account for construction crew travel time at work location 1**
- **These will need the actual Compatible Unit at the work location**
 - Adding Sheath cover to the Streetlight
 - Raising Secondary risers
- **Other Electric Make Ready needing the (5) NSLC per operation**
 - Adding Sheath Streetlights
 - Raising/Lowering Neutrals & Secondary's
 - Raising/Lowering Streetlights
 - Raising Secondary Risers
- **Pole Attachment Services is working on a GIS commonly used Compatible Unit list and frequently asked questions guide**

Pole Attachment Standards Addendum Updates

- Pole Attachment Services is currently reviewing the comments submitted by our attaching entities
- Pole Attachment Standards to be effective March 1, 2019

18: CPS Energy Wireless Antenna Installation – Pole Top Space (Panel)



Annual Pole Attachment Invoice



- **CPS Energy invoiced the annual pole attachments to each attaching entity having permitted Wireline, Wireless and Banner Attachments**
- **The invoice shall set forth the total number of pole feet utilized by attachments as of December 1st of the current rental year multiplied by the attachment rate**



Customer Engineering Web Portal

CPS Energy Customer Engineering Portal Website



- Go to www.cpsenergy.com
- Click on Building & Renovation Svcs for Businesses/Developers

Business Customer Engineering

New Infrastructure

Distributed Generation

Safety on the Job

Business Customer Engineering

We can help with new service installations, service remodel requests, security lights or street lights.

Building & Renovation Svcs for Businesses/Developers

Building & Renovation Svcs for Homeowners/Builders

CSI

Pole Attachment Services

Manage My Account

Username

Password

Log In

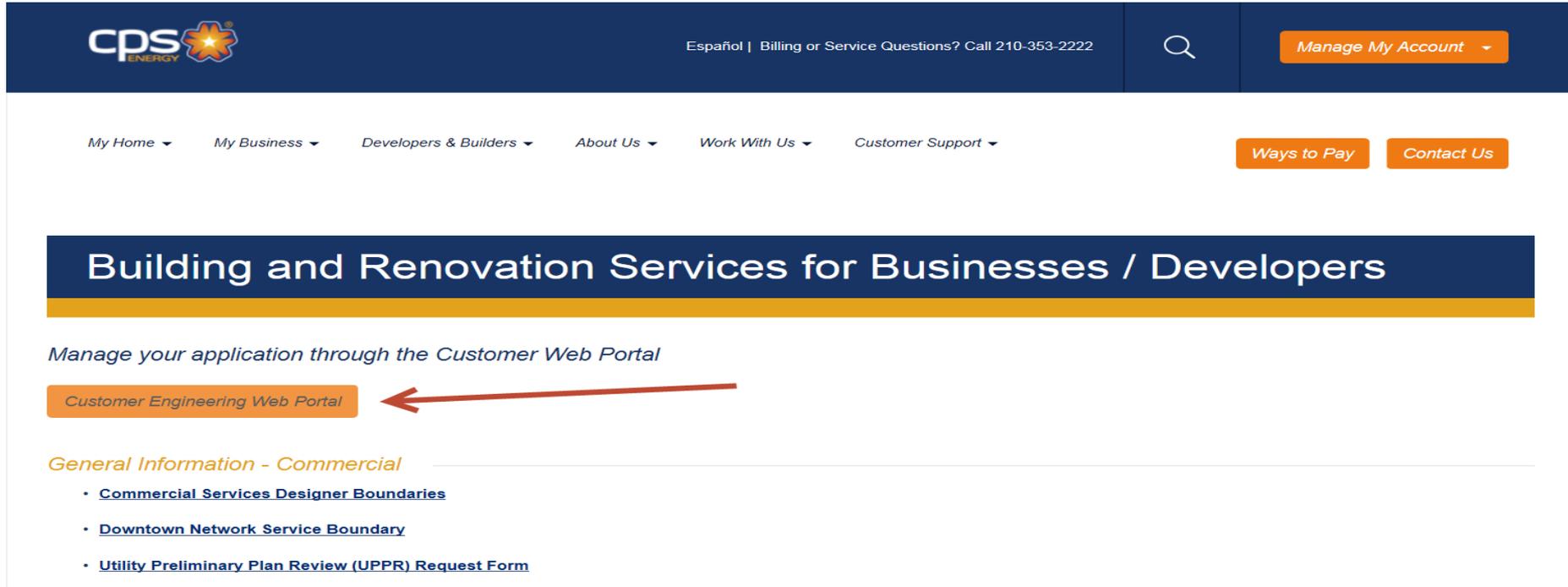
Enroll My Account Forgot Password?

THERMOSTAT REWARDS

for your Business or Home
Learn More

Web Portal Overview

- Click on Customer Engineering Web Portal



The screenshot shows the top navigation bar of the CPS Energy website. It features the CPS ENERGY logo on the left, a search icon, and a 'Manage My Account' dropdown menu. Below the navigation bar, there are several menu items: 'My Home', 'My Business', 'Developers & Builders', 'About Us', 'Work With Us', and 'Customer Support'. To the right of these items are two buttons: 'Ways to Pay' and 'Contact Us'. A dark blue banner with a yellow border contains the text 'Building and Renovation Services for Businesses / Developers'. Below this banner, the text 'Manage your application through the Customer Web Portal' is displayed. A red arrow points to a button labeled 'Customer Engineering Web Portal'. Underneath, there is a section titled 'General Information - Commercial' with a list of links: 'Commercial Services Designer Boundaries', 'Downtown Network Service Boundary', and 'Utility Preliminary Plan Review (UPPR) Request Form'.

Customer Engineering Web Portal

Manage your application through the Customer Web Portal

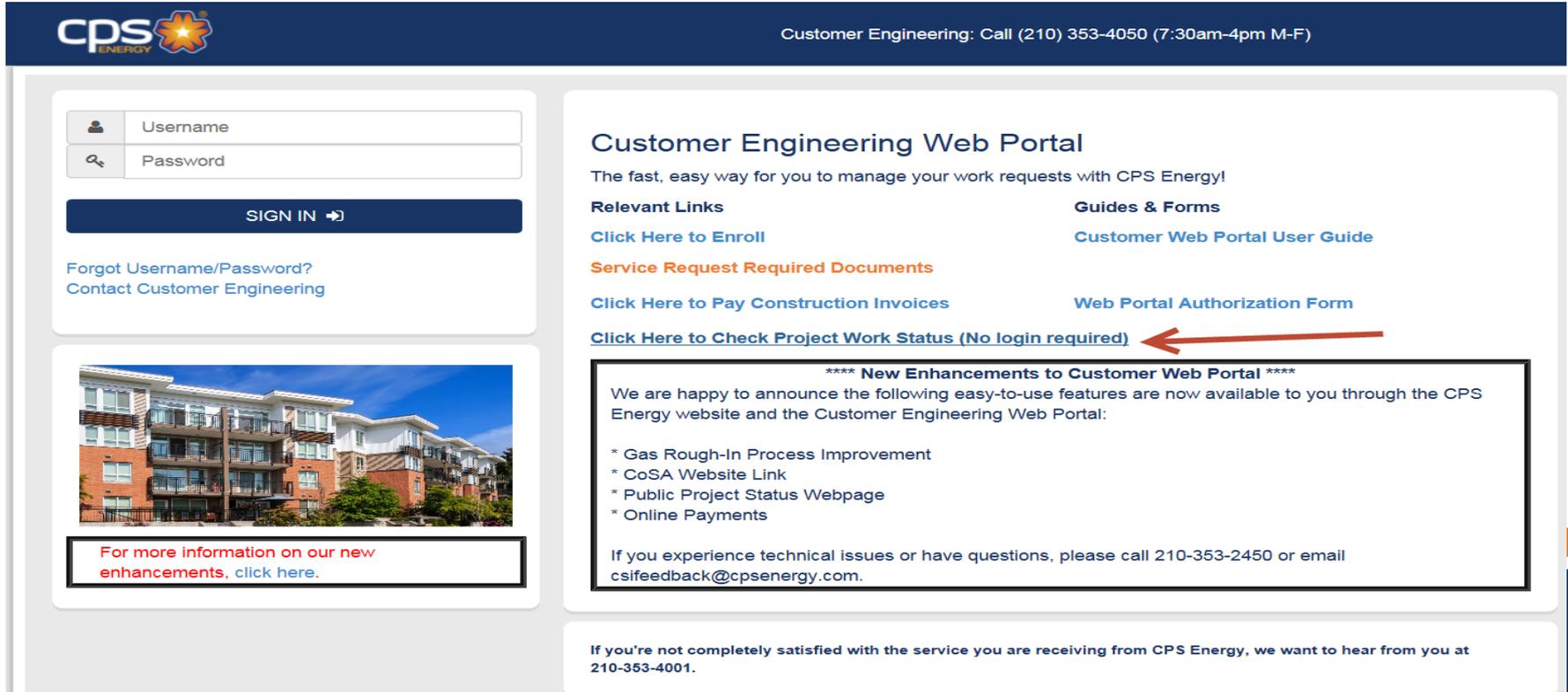
Customer Engineering Web Portal

General Information - Commercial

- [Commercial Services Designer Boundaries](#)
- [Downtown Network Service Boundary](#)
- [Utility Preliminary Plan Review \(UPPR\) Request Form](#)

Web Portal Overview

- Check Work Request Status (No login required)



The screenshot displays the CPS Energy Customer Engineering Web Portal interface. At the top left is the CPS ENERGY logo, and at the top right is the contact information: "Customer Engineering: Call (210) 353-4050 (7:30am-4pm M-F)". The main content area is divided into several sections:

- Login Section:** Includes input fields for "Username" and "Password", a "SIGN IN →" button, and links for "Forgot Username/Password?" and "Contact Customer Engineering".
- Customer Engineering Web Portal:** A central heading with the text "The fast, easy way for you to manage your work requests with CPS Energy!". Below this are "Relevant Links" and "Guides & Forms".
- Relevant Links:** Includes "Click Here to Enroll", "Service Request Required Documents", "Click Here to Pay Construction Invoices", and "Click Here to Check Project Work Status (No login required)".
- Guides & Forms:** Includes "Customer Web Portal User Guide" and "Web Portal Authorization Form".
- Announcement:** A boxed section titled "**** New Enhancements to Customer Web Portal ****" listing: "* Gas Rough-In Process Improvement", "* CoSA Website Link", "* Public Project Status Webpage", and "* Online Payments". It also provides contact information: "If you experience technical issues or have questions, please call 210-353-2450 or email csifedback@cpsenergy.com."
- Image:** A photograph of a modern multi-story residential building.
- Caption:** "For more information on our new enhancements, click here."

An orange arrow points to the link "Click Here to Check Project Work Status (No login required)".

CPS Energy: Customer Engineering Work Status

Please select how you would like to lookup your work details. You may use the project number, a specific work request number or the street address on the project.

Search Type

Project Number

Work Request Number

Address

CPS Energy: Customer Engineering

Development Checklists

Residential Development
 Residential Accelerated Services
 Residential Remodel
 Large Commercial
 Multi-Family Services

Standards

2012 Electric Service Standards (w/ amended Section 600)
 2012 Electric Service Standards - Section 600
 Summary of Gas Service Standards

Documentation

Customer Contact List
 Multi-Family Construction Options and Criteria
 Customer Engineering ACH Payment Option
 Plan Review Request

Maps & Boundaries

CPS Energy Gas Availability Map
 Downtown Network Service Boundary
 Commercial & Residential Services Designer Boundaries
 CPS Energy Gas Availability Map

Contact Us

Call
 (210) 353-4050 (7:30am-4pm M-F)
 Email
 customerengineering@cpsenergy.com
 Email
 ce@cpsenergy.com
 Mail
 P.O. Box 1771, San Antonio, TX 78296

Web Portal Overview



For assistance, please call: (210) 353-4050 (7:30am-4pm M-F)

CPS Energy: Customer Engineering Work Status

Please select how you would like to lookup your work details. You may use the project number, a specific work request number or the street address on the project.

Search Type

Project Number

Work Request Number

Address

Provide the number associated to the specific work request you would like to view.

Work Request Number *:

40092696



Search

CPS Energy: Customer Engineering

Web Portal Overview



For assistance, please call: (210) 353-4050 (7:30am-4pm M-F)

CPS Energy: Customer Engineering Work Status

← Back

+ Work Request (40092696) BOERNE STAGE RD SAN ANTONIO - In Design

CPS Energy: Customer Engineering

Web Portal Overview



For assistance, please call: (210) 353-4050 (7:30am-4pm M-F)

CPS Energy: Customer Engineering Work Status

← Back

— Work Request (40092696) BOERNE STAGE RD SAN ANTONIO - In Design

Address: BOERNE STAGE RD SAN ANTONIO

Status: In Design

Work Request Details:

Name: CONTERRA APP U03022-4XX-1 - MAKE-READY

Type: UPGDG - Upgrades Gas

CPS Energy Contact:

Name: CARDEN, JOSH

Phone:

Email: DVJUSTET@CPSENERGY.COM

Customer Tasks

Description

Receive Customer Pre-Work Payment

Status

Not Started

Date/Date Range

06/28/2017 - 06/28/2017

CPS Energy Tasks

Description

Approve Work Request

Schedule Work

Status

Not Started

Not Started

Date/Date Range

06/28/2017 - 06/28/2017

06/28/2017 - 06/28/2017

CPS Energy: Customer Engineering

Web Portal Overview



Customer Engineering: Call (210) 353-4050 (7:30am-4pm M-F)

	Username
	Password

SIGN IN →

Forgot Username/Password?
Contact Customer Engineering



For more information on our new enhancements, [click here](#).

Customer Engineering Web Portal

The fast, easy way for you to manage your work requests with CPS Energy!

Relevant Links

[Click Here to Enroll](#)

[Service Request Required Documents](#)

[Click Here to Pay Construction Invoices](#)

[Click Here to Check Project Work Status \(No login required\)](#)

Guides & Forms

[Customer Web Portal User Guide](#)

[Web Portal Authorization Form](#)

**** New Enhancements to Customer Web Portal ****

We are happy to announce the following easy-to-use features are now available to you through the CPS Energy website and the Customer Engineering Web Portal:

- * Gas Rough-In Process Improvement
- * CoSA Website Link
- * Public Project Status Webpage
- * Online Payments

If you experience technical issues or have questions, please call 210-353-2450 or email csifedback@cpsenergy.com.

If you're not completely satisfied with the service you are receiving from CPS Energy, we want to hear from you at 210-353-4001.

Web Portal Overview

CPS Energy: Customer Engineering Online Payments

Welcome to the fast, easy way to pay your construction invoices. As you go through the following screens, you will be asked to complete the necessary details in order to locate the invoice, then post a real-time ACH check payment from your bank account.

Please keep in mind the following important requirements:

- * Invoices must be paid in full.
- * Payments submitted before 7:00 p.m. CST are processed same day.
- * Payments submitted after 7:00 p.m. CST, on weekends or on CPS Energy holidays, will be scheduled next business day.
- * Please remember to NOT use your browser's navigation buttons (for e.g., Back, Refresh, etc.)



Invoice Number *:

Customer Number *:



Continue →

WIRELINER ATTACHMENTS

Temporary Attachment Request



- Attaching entities must submit the form B7 "Request for Temporary Attachment" to poleapplications@cpsenergy.com
- Pole application must also be submitted with the proposed attachment height for each temporary attachment for CPS Energy to review
- Poles with double red tags will not be allowed for temporary attachment due to safety reasons, these shall be done on a upgrade work order

B7: CPS Energy Request for Temporary Attachment

 Request for Temporary Attachment

Submit form to poleapplications@cpsenergy.com Subject Line: Request for Temporary Attachment

Attaching Entity		Application Number	
Date Temporary Attachment Required			

Requestor	
Name	
E-mail Address	
Company	
Phone Number	
Cell Number	

Work Request #	
<small>(WR# of the Make-Ready Electrical Construction required to completed for this Application)</small>	

Type of Temporary Attachment & Location (Pole #)	
<small>(Include Pole Number for Temporary Attachment requiring Make-Ready Electrical Construction)</small>	
New Attachment	PL#
Overlash	PL#
Wireless Installation	PL #
Other	*

Approval by CPS Energy	
By	
Printed Name	
Title	
Date	

NJUNS Update

- **Meeting with subject matter experts from CPS Energy and attaching entities was held on November 26, 2018**
- **Participants included Spectrum, AT&T and Phaselink**
- **Pole Attachment Services will resume the development of a best practice NJUNS document**
- **Next meeting will be held at the end of February**

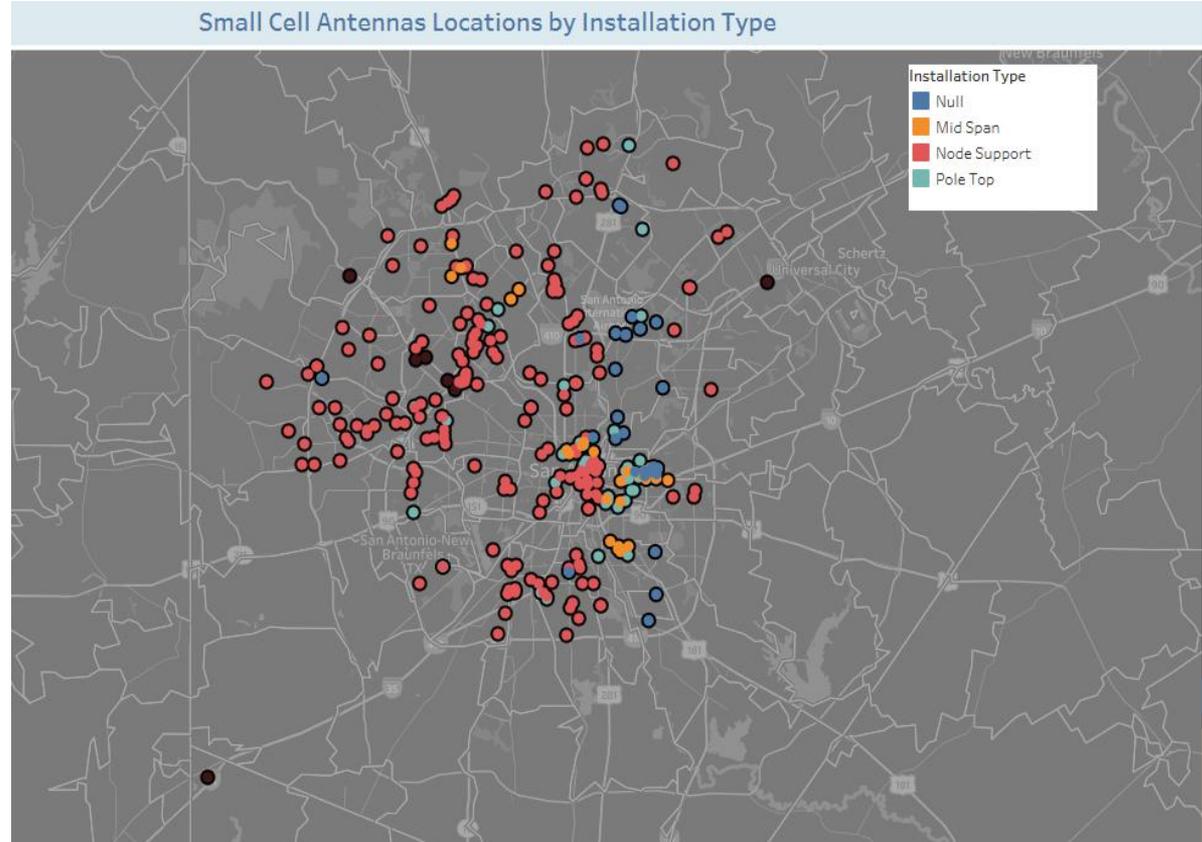


WIRELESS ATTACHMENTS

Small Cell Applications Update

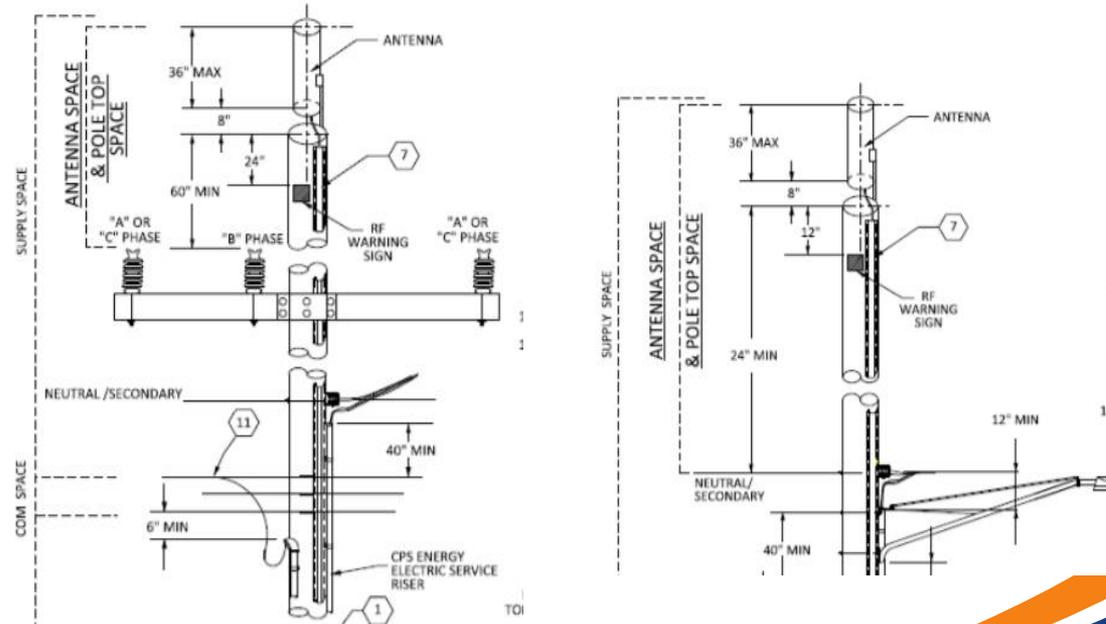


Pole Owner	City		
AT&T	San Antonio	21	
	Total	21	
	San Antonio	23	
	Total	23	
	San Antonio	43	
	Total	43	
	CPS	San Antonio	7
		Total	7
San Antonio		6	
Total		6	
	San Antonio	29	
	Total	29	
Level 3	San Antonio	1	
	Total	1	
Node Support	Helotes	1	
	Leon Valley	4	
	Live Oak	1	
	Lytle	1	
	San Antonio	202	
	Total	209	
Grand Total		339	

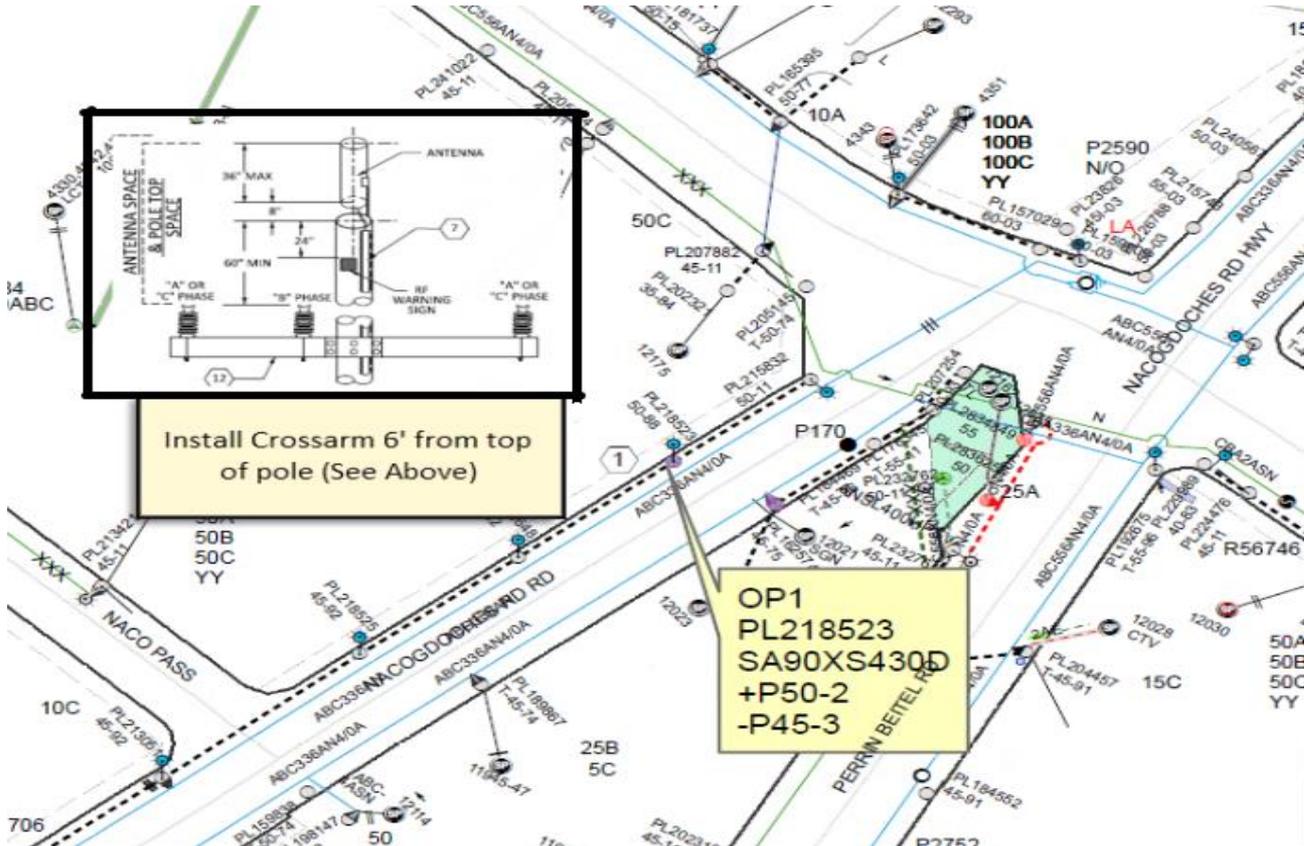


GIS Design for Pole Top Antenna Installations

- Designers will need to add a snippet to all pole top antenna GIS designs
- Snippet must be added just over the callout box with the antenna height
- Measurement from top of the pole must be included in the call out box



GIS Design 1



Dashboard Updates

Attaching Entity Application Status

- **Pole attachment application process dashboard completed**
 - Pilot with an engineering company (November 2018)
- **No changes were requested by the engineering company doing the pilot**
- **This will include wireline and wireless application status**
- **Next step: Third Party Attacher & Approved Engineering firm can make a request for their copy that will include their application status**
 - Email: poleattach@cpsenergy.com
 - Subject line "Third party attacher dashboard"

Attaching Entity Application Status

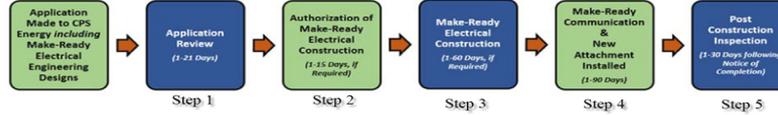


Progress 0% 100% Values in Range a...

Application Type (All) Year Received (All) Make-Ready (All) Application Number (All) MR-Work Requ.. (All) Upp-Work Re.. (All) Review Consultant (All) Attacher (All) Design Consultant (All)

Step 1 (All) Step 2 (All) Step 3 (All) Step 4 (All) Step 5 (All)

Step 1	Step 2
Completed 2,960	Completed 2,647
In Progress 22	In Progress 327
Not started 1	Not Started 9



Step 3	Step 4	Step 5
Completed 2,371	Completed 806	Comple.. 464
In Progress 276	In Progress 1,565	In Progre.. 362
Not Started 336	Not Started 612	Not Star.. 2,157

Responsible Party:



Review Consultant	Application Number	MR-Work Request	Upp-Work Request	Initial Permit Review Complete	Auth for MR Work Form to Applicant	Payment	Most Recent Comp Date	NTP Sent to Applicant	Notification of Completion Received from Applicant	Post Fiber Inspection	Step 1	Step 2	Step 3	Step 4	Step 5
Alpheus, QUES	17-0118-646 S Flores P1	40150070	Null	1/4/18	Null	Null	Null	Null	Null	Null	Completed	In Progress	Not Started	Not Started	Not Started
	17-0118-646 S Flores P2	Null	Null	2/1/18	Null	Null	Null	2/9/18	Null	Null	Completed	Completed	Completed	In Progress	Not Started
	17-0218-Shavano Fiber Park Ph 1-Part 3	40158533	40158534	2/19/18	3/23/18	5/7/18	10/16/18	10/25/18	Null	Null	Completed	Completed	Completed	In Progress	Not Started
	17-0218-Shavano Fiber Park Ph 1-Part 4	40159155	Null	2/15/18	3/13/18	5/7/18	6/15/18	10/25/18	Null	Null	Completed	Completed	Completed	In Progress	Not Started
	17-0218-Shavano Fiber Park Ph 1-Part 5	40159156	Null	2/13/18	2/23/18	5/7/18	8/29/18	10/25/18	Null	Null	Completed	Completed	Completed	In Progress	Not Started
	17-0618-Network Fiber Park P1	40187578	Null	6/19/18	Null	Null	Null	Null	Null	Null	Completed	In Progress	Not Started	Not Started	Not Started
	17-0718-Network Fiber Park P1 REV1	40187578	Null	7/4/18	7/20/18	Null	Null	Null	Null	Null	Completed	In Progress	Not Started	Not Started	Not Started
	17-0718-Tri County	40208075	Null	8/2/18	Null	Null	Null	Null	Null	Null	Completed	In Proaress	Not Started	Not Started	Not Started

234 nulls

20% 40% 60% 80% 100%

Status Progress ↗

Payment Status
■ No Payment Required ■ Good Standing ■ Not Paid

Pole Attachment Identification Dashboard

- **Link will be emailed to all engineering firms that have been approved by CPS Energy Pole Attachment Services. Please check your CPS Energy inbox in the next coming week.**

AT&T Owned Poles – (Joint Use Poles)



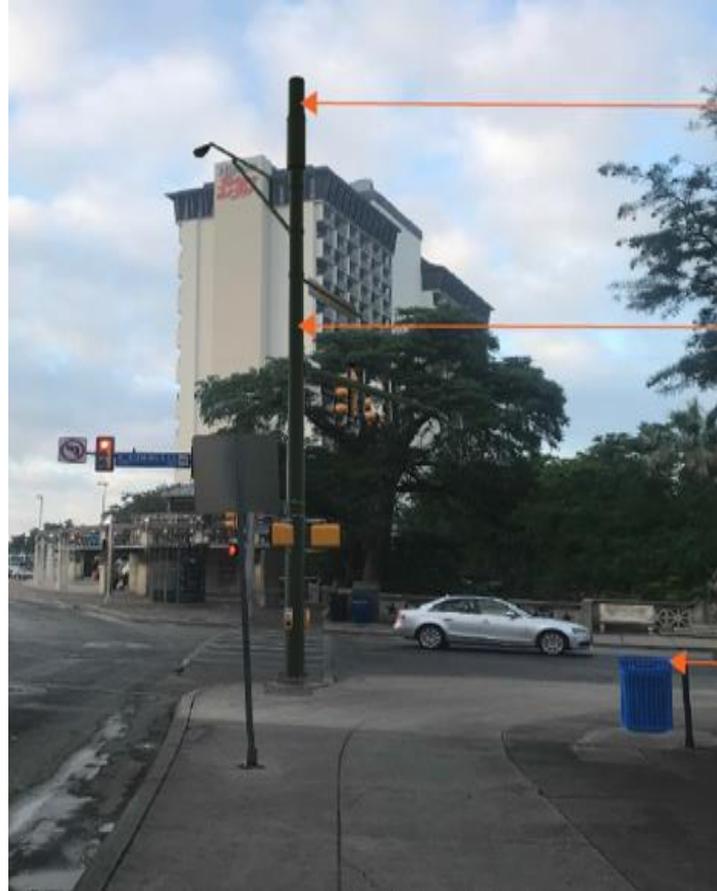
- **4 out of 5 poles are CPS Energy owned poles**
- **CPS Energy and AT&T are currently working together to streamline the pole application process for the attaching entities**
 - GIS Electrical Make Ready design
 - Electrical Make Ready invoice process
- **Wireline attachments**
- **Wireless attachments – AT&T is requesting to follow the CPS Energy preliminary site survey process and wireless attachment standards for AT&T owned poles to help streamline the application process**
- **Submit the “Preliminary Site Survey signed form” to AT&T along with the application**



PILOT PROJECT UPDATE

Pilot Project Status Update

- **Projected construction completion dates:**
 - Team 1 – March 30, 2019
 - Team 2 – March 30, 2019



Thanks for the 2018 Accomplishments

- **Dulia Rius and Guillermo Rico**
- **Attaching Entities and contractors**
- **Pole Attachment dashboard – identifies attachers, position and contact information**
- **Pole Attachment application process dashboard completed**
 - **Pilot with an engineering company (November 2018)**
- **Pole attachment services offered GIS electrical make ready class**
- **Three additional pole attachment contractors approved as make ready engineering**





Thank You