

1007 Elwell Court, Palo Alto, CA 94303 650-566-4500, 650-566-4501

Project Address (LEGAL ADDRESS INCLUDING SUITE # IF APPLICABLE):

Name of Applicant:

Company Name:

www.cityofpaloalto.org/Departments/Utilities

☐ Contractor

Utilities Department Application Number:

☐ Owner's Agent

UTILITY SERVICE APPLICATION PERMANENT COMMERCIAL & MULTI-FAMILY (4 or more Units) ELECTRIC, WATER, GAS, AND WASTEWATER FACILITIES INSTALLATION

☐ Consultant

E-mail:

Building Department Permit Application

☐ Tenant

TO AVOID DELAYS, PLEASE MAKE SURE THIS APPLICATION IS FILLED OUT COMPLETELY AND AS ACCURATE AS POSSIBLE
A separate application and load information is required for each meter requested
Upon completion of review and approval a copy of this form will be sent back to applicants requesting Electric Service.

Number:

☐ Owner

Phone:

Suite/Unit #:

Address:				City / State / Zip:					
	UTILITY SERVI	CE CONNEC	TION AND II	NSTALLATION CHARG	GES BIL	LING INFO	RMATION		
Contact Utilities E	ngineering for a cor	by of the invoice	e. It is the cus	ling permit plans or maile tomer's responsibility to l DF ANY WORK OR INSPE	be aware	of this billing	and to make	e prompt payment	lication. i.
Name on the invoice:				Phone:		E-mail:			
Address:				City / State / Zip:	•				
	☐ Electric Service	re			1				
Services Requested and Desired Date of Installation:	Electric Shutd (Without Panel	own		Water		Gas		☐ Wastewa	ter
Project Status:	☐ Planning/Des	ŭ		Bidding/Estimating		Demolition			tion
D	epending on Utilit	y Service Type	Requested,	Please Complete Appr	opriate l	Portions of t	this Applicat	ion	
Project Type	☐ New Service)		☐ Addition/Remodel		enant Improv	/ement	☐ Restaurant	
(check all boxes that apply)	☐ Service Upg	rade		Service Relocation	□F	ire Protection	n/Sprinkler	on this service application. In ALTO UTILITIES. Wastewater Construction Restaurant Electric Planned Sh Other, Total building area upo completion: WW Select Units) NG NEW U KW (KW (KW (KW p) ROF EV IG SPACES: In P: Horsepower Shery Horsepower Cocation:	nned Shutdown
	☐ PV System ((Photovoltaic)		VSE (Electric Vehicle)		SS (Energy	Storage)	☐ Other,	
Brief Description of Work								_	•
Gas, Electric Ser	vice Load	Informa	ation (II	NDICATE PEAK OR MAX	кімим R	RATES OF US	SE OR FLOW	')	
GAS (PER METER)	& ELECTRIC	LOADS (Sel	lect Units)		ELI	ECTRIC L	OADS (Se	elect Units)	
DESCRIPTION	EXISTING	NEW	UNITS	DESCR			EXISTING		UNITS
SPACE HEATING				LIGHTING					
HVAC (1 Phase electric)				RECEPTACLE, OT	THER				
HVAC (3 Phase electric)				PROCESS POWER	PROCESS POWER				
WATER HEATER/TANKLESS	;			ELEVATORS	ELEVATORS				
COOKING EQUIPMENT				LARGEST MOTOR	₹				
CLOTHES DRYER				OTHER MOTORS	(1 Phas	e)			
FIRE LOG/FIREPLACE				OTHER MOTORS	(3 Phas	e)			
OUTDOOR HEATING				PHOTOVOLTAIC S	SYSTEM	1 (PV)			kW (CEC-AC)
POOL/SPA HEATER				ENERGY STORAG		, ,			kW (AC)
POOL/SPA PUMP				ELECTRIC VEHICI SYSTEM (Load Per					kW per charger
OTHERS	_			NUMBER OF CHARGING STATI		,	NUMBER PARKING		•
BTUH: BTU (British Thermal Uni	,		vatts (=1000 W	,		s (= 1000 Volt			
ELECTRIC SERVICE (Inc				•			-	-	
SERVICE INFOR		5		STING					
Service Voltage & Main Switch Size (Amps)									
Service Type: (Select from list)		Select from list:			Select from list:				
Number of Meters and Location (NOTE: Only one service per parcel)		No. Meters:	Loc	ation:		No. Meters	s: Lo	cation:	
Applicant's Name:		Applicant's	Signature:			Applicati	ion Date:		
SEE NEXT PAGE FOR WATER AND	WASTEWATER LOAD	DS. ELECTRIC S	ERVICE REOL	IIREMENTS AND LITH ITV	PI AN SII	IBMITTAL CHE	ECKLIST —	· → -	→ →
Utility Service Application COMMER		•		Page 1 of 2					April 13, 2020

Water Service & Wastewater Load Information (Indicate Peak or Maximum Rates of Use or Flow)

WATER LOAD DEMANDS: REFER TO THE LATEST EDITION OF THE CITY ADOPTED UNIFORM PLUMBING CODE, WATER SUPPLY & DISTRIBUTION SECTION, FOR CALCULATING FIXTURE UNITS AND GALLONS PER MINUTE.

WATER (PER METER) LOADS:		UNITS	F.U.: Fixture Ur	nit G.P.M. : Gallo	ns per Minute					
DESCRIPTION	EXISTING	NEW	TOTAL	DESCRIF	NOIT	EXIS	TING	NEW		TOTAL
DOMESTIC USE	F.U.	F.U.	F.U.	FIRE SPRINKLE	R SYSTEM		G.P.M.	G	.P.M.	G.P.M.
IRRIGATION USE, MAX FLOW PER VALVE	G.P.M.	G.P.M.	G.P.M.	FIRE PROTECT SYSTEM	ION		G.P.M.	G	.P.M.	G.P.M.
WASTEWATER LOADS: UNITS F.U.: Fixture Unit D.U.: Dwelling Units S.F.: Square-Feet G.P.D.: Gallons per Day										
USE CATEGORY	EXISTING FIXTURE UNITS	PROPOSED FIXTURE UNITS	EXISTING UNITS	PROPOSED UNITS	TOTAL UN (EXISTING +			OW RATE ./UNIT) *	-	LOW RATE X FLOW RATE
MULTI-FAMILY	F.U.	F.U.	D.U.	D.U.		D.U.	1	60		G.P.D.
COMMERCIAL	F.U.	F.U.	S.F.	S.F.		S.F.	0	.15		G.P.D.
LIGHT INDUSTRIAL	F.U.	F.U.	S.F.	S.F.		S.F.	0	.10		G.P.D.

S.F

S.F.

S.F

S.F.

0.10

0.15

G.P.D

G.P.D.

S.F

S.F.

EL	ECTRIC SERVICE	INFORMATION - (CPA)	U OFFICE USE ONLY)						
 All work per CEC and CPA Electric Service Requirements and Standards. Includes "LIKE-FOR-LIKE" replacement work. More details, visit: www.cityofpaloalto.org/ElectricServiceRequirements 									
2. Additional fees may apply after permit approval. Payment of the final invoice must be received by the City of Palo Alto before any work will be scheduled.									
3. Electric service p	3. Electric service panel must meet the AIC rating indicated above for the requested service voltage.								
4. Service Panels 4	00 Amps or greater: Submit fac	tory drawings for approval. Panel les	s than 400 Amps: Catalog cutsheets are acceptable						
5. Only socket type	meters are allowed.								
6. Call Electric Oper	rations (650-496-6914) for serv	ice disconnect and reconnect, if requ	ired.						
 All work must be connection by Uti 		A utilities inspector (650-496-5934) 8	building Inspection (650-329-2496) prior to final						
			Additional Sheets are Attached: Yes No						
Electric Service In	formation (CPAU use ONLY)	Service Order Number							
Estimated Demand	kVA	Transformer kVA and Type							
Map Number		Transformer Number(s)							
Fees	\$	Minimum AIC rating of Electric Panel for requested service	A Symmetrical at V						
Electric Application A	Approved by:	Phone #:	Date:						

UTILITY PLAN SUBMITTAL CHECKLIST:

This checklist is intended to provide general guidance and minimum criteria for the design and construction requirements for utility facilities for any development located within the City of Palo Alto. The purpose of this plan submittal checklist is to clarify the minimum information Utilities Engineering requires for the review of the service application. Utilities Engineering will only review and provide written comments on a completed set of design plans that are submitted for review.

- □ COMPLETED AND SIGNED UTILITY SERVICE APPLICATION INCLUDING UTILITY DEMANDS FOR THE REQUIRED SERVICES
- ☐ FINAL AND LEGAL ADDRESS FOR THE SERVICE OR METER LOCATION. ADU'S MUST HAVE AN ADDRESS TO ESTABLISH SERVICE.
- □ SITE PLAN SHOWING EXISTING AND PROPOSED UTILITY SERVICES, METER LOCATIONS, BACKFLOWS, CLEANOUT, BACKWATER VALVE ETC.
- □ EASEMENT REQUIREMENTS

RESEARCH/OFFICE

MAJOR INSTITUTIONAL

- ☐ ARCHITECTURAL PLANS TO REVIEW METER LOCATIONS (ELEVATION PLANS, FLOOR PLANS, WINDOW SCHEDULES)
- □ ELEVATION PLANS SHOWING GAS/ELECTRIC METERS IN RELATION TO WINDOWS, VENTS, BUILDING EQUIPMENT OR SOURCES OF IGNITION
- ☐ PLUMBING, MECHANICAL PLANS INDICATING LOADS AND GAS PIPING DIAGRAM.

F.U.

F.U.

F.U

F.U.

- □ SITE OR PLUMBING PLANS SHOWING THE CITY SEWER CLEAN OUT AND PROPOSED SEWER DISCHARGE CONNECTION. ADU'S ARE INCLUDED
- □ LANDSCAPING PLANS SHOWING EXISTING AND PROPOSED TREES TO BE PLANTED NEAR UTILITY LINES
- $\ \square$ ELECTRICAL PLANS SHOWING UNDERGROUND AND OVERHEAD UTILITIES AND SERVICE POINT OF CONNECTIONS WITH METERS
- □ LOCATION OF ELECTRICAL MAIN SERVICE PANEL AND SUBPANELS IF RELOCATING THE ELECTRIC SERVICE MORE THAN 10 FEET.
- ☐ ELECTRIC SINGLE LINE DIAGRAM OF PROPOSED INSTALLATION (REQUIRED FOR 400 AMPS AND UP REQUESTS)
- ☐ FRONT VIEW PHOTOS OF EXISTING GAS AND ELECTRIC METERS (FOR SERVICE UPGRADES)
- □ ADDITIONAL UTILITY LOADS DETAILS BEYOND THOSE LISTED ON THE APPLICATION
- ☐ INTERCONNECTION AGREEMENT FOR NET ENERGY METERING GENERATING FACILITIES: PHOTOVOLTAIC, ENERGY STORAGE PROJECTS

^{*} WASTEWATER UNIT FLOW RATES: REFER TO SECTION 2730 IN THE CURRENT "UTILITY STANDARDS" FOR WASTEWATER DESIGN STANDARDS.

A GUIDE TO THE CITY OF PALO ALTO UTILITIES DEPARTMENT ELECTRIC SERVICE APPLICATION PROCESS

The following procedure is intended to help you understand how your Utility Service Application for an electric service connection at your electric panel is normally processed.

- Customer presents to BUILDING DEPARTMENT (BD) (Development Center 285 Hamilton Ave.) a
 completed "UTILITY SERVICE APPLICATION" for Commercial or Residential Electric Service including all
 service demands and SITE and ELEVATION PLANS SHOWING THE ELECTRIC PANEL AND THE
 PROPOSED SERVICE LOCATION. NO FULL-SET SUBMITTALS PLEASE. BD forwards the plans and
 application to UTILITIES ELECTRIC ENGINEERING ("UEE") for Utilities' review and approval.
- 2. UEE reviews plans and application. INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED AND WILL BE RETURNED TO THE APPLICANT. UEE assesses the work required to furnish service to meet customer's needs, as specified in the application, within 30 BUSINESS DAYS. UEE will either send an invoice for Advance Engineering Fees, to cover cost of preparing project estimate, or for standard connection fees, for simpler projects. You must have an approved electric application on file in UEE to schedule a disconnect / reconnect request.
- 3. For TEMPORARY ELECTRIC SERVICE APPLICATIONS, present the "TEMPORARY ELECTRIC SERVICE" application to BD. Application will be approved within 1 BUSINESS DAY and an invoice will be sent to the customer. TEMPORARY SERVICE WILL BE INSTALLED BY ELECTRIC UTILITY FIELD OPERATIONS WITHIN 1 2 BUSINESS DAYS FOLLOWING RECEIPT OF FULL PAYMENT AND PANEL APPROVAL, EVIDENCED BY INSPECTION METER RELEASE TAG. Customer is responsible for contacting BD for panel inspection.
- 4. After plans are approved, UEE prepares the utility connection charges (if applicable) for the installation of the service and meter(s). The utility connection charges will either be attached to the Building Permit Plans or mailed to the customer. It is the customer's responsibility to be aware of this billing and to make prompt payment. Utility connection charges must be paid prior to the scheduling of any work performed by the City of Palo Alto. PERMANENT UTILITY SERVICES WILL BE INSTALLED BY ELECTRIC UTILITY FIELD OPERATIONS BETWEEN 30 AND 40 DAYS FOLLOWING RECEIPT OF FULL PAYMENT AND COMPLETION BY ANY WORK REQUIRED OF APPLICANT.
- "yellow tag" the electric meter and send an electric meter set release tag to UTILITIES CUSTOMER SERVICE CENTER (SECOND FLOOR CITY HALL BUILDING) which will establish an account for billing purposes. Underground Trench inspection must have a "green tag" before final building inspection. The Utilities Customer Service Center will check that all fees are paid before sending the electric meter installation tag to ELECTRIC OPERATIONS DISPATCH for meter installation. ELECTRIC METER(S) WILL ONLY BE INSTALLED WITH FINAL INSPECTION TAGS IN PLACE. The Customer is responsible for coordinating ALL inspections with either the Building Department AND / OR Electric Operations Dispatch.
- 6. YOUR UTILITY SERVICE IS NOW COMPLETE THANK YOU FOR YOUR APPLICATION.

The following directory will assist you if you have any questions throughout the installation process.

ASSISTANCE

-	BUILDING DEPARTMENT (Development Center - 285 Hamilton Ave.) Development Center General Number	329-2496
-	BUILDING INSPECTION (Development Center - 285 Hamilton Ave.) Inspection Scheduling	329-2496
-	UTILITIES ELECTRIC ENGINEERING Contact - Electric Engineering, 1007 Elwell Ct. Office	566-4500
-	UTILITIES CUSTOMER SERVICE CENTER (2 nd Floor, City Hall) Customer Service Representatives	329-2161
-	ELECTRIC OPERATIONS DISPATCH (Municipal Service Center, MSC) For Disconnect / Reconnect and Meter Installation	496-6914
-	UNDERGROUND TRENCH INSPECTION (Municipal Service Center, MSC) Contact - Inspection Supervisor	496-6977



City of Palo Alto Summary of Installation Requirements

Commercial or Multifamily Electric Service

This document contains a summary of the City of Palo Alto Utilities (CPAU) requirements for the project. The Applicant has the responsibility to ensure that their final design and installation complies with <u>ALL</u> City of Palo Alto standards. *CPAU standards are detailed in the <u>Electric Service Requirements</u> manual, available on the internet at: www.cityofpaloalto.org/ElectricServiceRequirements*

SUMMARY OF GENERAL REQUIREMENTS

The Applicant (includes customer, customer's contractor, customer's consultant, developer, or others working on behalf the owner) is responsible <u>ALL</u> costs associated with the provision of electric service as required for their project, excluding the material cost of the transformer and electric meter.

- Applicant must provide a completed Utility Service Application and site plan submittal. The site
 plan will include at a minimum, an outline of the property lines showing streets; an outline of
 buildings on the property; a proposed meter location; location of pools or spas; identification of
 any other significant features on the property that will impact either overhead or underground
 service wires; and a description of work. FULL-SET SUBMITTALS NOT REQUIRED.
- CPAU may charge the Applicant a non-refundable Advance Engineering Fee prior to the start of
 engineering design, plan review, and development of the cost estimate. To initiate engineering
 design, the Applicant must submit payment at Revenue Collections, 1st Floor, City Hall, City of
 Palo Alto. If the project is cancelled by the Applicant, the fee is forfeited.
- CPAU will only provide a maximum service size of 1,600 Amperes at 208Y/120V, three-phase, 4-wire. Any service larger than 1,600 Amperes will be served at 480 Volts. Primary metering is also available.
- Service upgrades requiring 400 Amperes or larger will be underground and will require a padmount transformer and Easement grant.
- CPAU provides Fiber Optic service to City of Palo Alto customers. Please contact CPAU Fiber Optic Marketing Coordinator at (650) 329-2275 for inquiries.



City of Palo Alto Summary of Installation Requirements

Commercial or Multifamily Electric Service

SUMMARY OF TECHNICAL REQUIREMENTS

Applicant is responsible for ensuring that final installations meet all City of Palo Alto requirements. Every project is different, contact CPAU Engineering for specific design requirements for your project.

- To provide electric service to the proposed development, the following may be required: 1.
 - Underground primary distribution line extension
 - Underground secondary line extension
 - Transformer installation or replacement
 - Other primary equipment or replacement
- Applicant shall provide all necessary underground substructures which may include the 2. following: **Guard Posts**
 - Transformer Pad(s)

Loadbreak Junction Pad

- Primary Vault(s)
- Primary Pull Box(es)
- **Primary Feeder Conduits**

- Secondary Pull Box(es)
- Secondary Conduits
- Service Conduit & Cable
- CPAU will furnish and install (at customer's expense) all required: 3.
 - Switch(es)
- Transformer(s)
- Primary cables

- Secondary cables
- Overhead Service Wire
- The Applicant shall furnish and install service cables and conduit from each building to the 4. CPAU utility pull box or service point (as determined by CPAU).
- 5. The Applicant shall furnish and install EUSERC compliant service equipment for each building. Meter locations shall be subject to CPAU's approval.
- 6. All 480 Volt services and all other services 400 Amperes or larger shall have a single main disconnect. Service equipment shop drawing submittal will be required for CPAU approval BEFORE equipment is manufactured. A copy of the same drawing shall be submitted to the City's Development Services Center for approval by the Building Inspector.
- CPAU will take ownership and will be responsible for maintaining the new underground primary 7. and secondary distribution systems, and service cables.
- 8. The Property title-holder will retain ownership of service conduits and substructures and are fully responsible for any maintenance or replacement, as necessary.
- 9. The owner/developer shall provide, at no charge to CPAU, easements and access to all electrical utility facilities that are in the private property. At a minimum, a draft easement shall be submitted before any service can be energized.
- 10. Sockets with Test Bypass Facilities are required for all commercial and multifamily services/panel.



City of Palo Alto Summary of Service Equipment Requirements

Commercial or Multifamily Electric Service

This sheet outlines some of the requirements for services 400 Amps or greater.

SUMMARY OF SERVICE EQUIPMENT REQUIREMENTS

Applicant is responsible for ensuring that final installations meet <u>all</u> City of Palo Alto and City of Palo Alto Utilities (CPAU) requirements.

CPAU will furnish and install the necessary metering CT's, PT's, and test switch. For service equipment approval, applicant's equipment must comply with <u>all</u> CPAU and City of Palo Alto requirements including those summarized below. All service equipment will have provisions for sealing the meter per EUSERC requirements. Applicant shall provide service equipment shop drawings to CPAU for review, prior to manufacture, to avoid delays due to field modifications. Drawings should be sent to CPAU Electrical Engineering, 1007 Elwell Court, Palo Alto, 94303. The phone number for CPAU Electrical Engineering is 650-566-4500.

Final service equipment submittals must be provided to, and approved by CPAU prior to installation. Installation shall be inspected and approved by City of Palo Alto Building Department and CPAU before connection to CPAU's electrical system. The following information (where applicable) shall be shown on submittals:

1.	Service Equipment:	Indoor (NEMA 1 or	r better) or O	utdoor (N	EMA 3R or bette	er)			
2.	Service Rating:	Amper	es	_Volts _	Phase	Wires			
3.	Main Disconnect:	Circuit Breaker or	Fused Switcl	ו					
4.	Minimum Interrupting	or Short Circuit Rat	ting of Panel		_ A, RMS Sym.	@:	V L-L		
5.	CT Compartment (pe	r EUSERC #320 or	#322, which	ever is ap	plicable)				
6.	Meter Plate (per EUS	ERC #332)							
7.	Pull Section (per EUS	SERC #345)							
8.	Line Termination (per EUSERC #347)								
9.	Residential 400A (Cla	ass 320), 120/240 V	meter panel	(per EUS	SERC #302B)				
10.	Factory-installed bolt-	type test by-pass/d	isconnect blo	ck (for se	elf contained met	ters only)			
11.	CPAU installs only so	cket type meters. I	Meter socket	require th	ne following num	ber of jaws:			
	120/240 V, single pha 120/208V, single pha 120/208 V, three pha 277/480 V, three pha	se, 3 wire service se, 4 wire service	4 5 7 or 13 7 or 13	(7 up to	v at 9 o-clock po 200A, 13 greate 200A, 13 greate	er than 200A)			
12.	Space for installing p	ootential transforme	ers shall be	provided	inside the elect	tric panel per	СРА		

 Space for installing potential transformers shall be provided inside the electric panel per CPAU Drawing # SR-MT-M-1019, as required.

<u>NOTE:</u> Please contact the Electric Meter Shop, at (650) 496-6978 as soon as the equipment arrives at the job site to schedule the inspection of the equipment and installation of CPAU-furnished instrument transformers and other metering devices.

The service equipment will also have to be inspected and approved by the City of Palo Alto's Building Department Electrical Inspector, (650) 329-2496, before it can be energized.



City of Palo Alto Frequently Asked Questions

Commercial or Multifamily Electric Service

How long will it take to review our submittal?

Providing all the information is available at the time of submittal, you can expect a 10 business days turn around for initial response.

What kind of costs can I expect for an electric service?

An estimated service order inclusive of labor and materials costs to provide the requested service will be required to determine the cost of providing electric service. The Applicant is responsible for <u>ALL</u> costs associated with the provision of electric service as required for their project, excluding the material cost of the utility transformer, switches, and electric meter.

Other than the work I am proposing for my building, is there anything else I am required to install?

You are responsible for installing all substructures (boxes, conduits, etc.) and service cable as determined to be required by CPAU to provide electric service.

Where do I submit by Utility Service Application and plans?

Utilities has a representative at the City of Palo Alto Development Center, 285 Hamilton Avenue, who can accept your application or answer questions about your project or the process. If necessary, a time can be set up to meet with staff in Engineering to discuss details of your project.

Prior to submitting plans for permit on a new Commercial Development may I discuss what can be expected to provide electric service?

CPAU would be more than willing to meet to do a preliminary review of your electric service needs. We can layout your service options and determine a service location relevant to the available source. We can provide a clear understanding of the utilities standards and policies regarding your service request. A Utilities representative is available at the Development Center for consultation.

Is Electric Engineering located at the Development Center downtown?

No, Utilities Engineering is located at 1007 Elwell Court off of East Bayshore Road near San Antonio exit off Highway 101. Our hours are Monday through Friday, 9:00am to 4:00pm.

How do I get temporary power for construction?

Complete an Electric Application for Temporary Commercial Electric service and submit to Utilities Engineering. This is a separate application form in addition to the Permanent Electric Application.