

Plan and design for power on-site

Contact your power company early to identify if the building needs an electrical transformer to power it and to identify a suitable location on private property that meets their requirements (and City requirements). There are a number of locations that may be suitable on the ground floor (e.g., at the building's street facing edge or further into the building), one floor down (e.g., in a basement or parking garage) or outside of a building (e.g., above or below ground on private property). Applicants are encouraged to seek early assistance so that BDS and PBOT staff can help clarify the zoning and design overlay (if applicable) requirements referenced below. Early assistance options are described here: [Early Assistance | Portland.gov](#)

Right-of-Way Exceptions Process

Electrical transformers that power private buildings may be permitted in the right-of-way by exception. TRN 8.13 identifies the submittal requirements for requesting an exception, which includes documentation that the applicant was unable to identify a suitable location with their provider and City staff on-site that satisfies requirements in the zoning code, design overlay (if applicable), and site considerations described below.

When placed in the right-of-way, transformers are typically placed in vaults, with additional clear space provided on several sides of the transformer to allow for venting and person access. The large amount of space these take up in the frontage impacts the ability to deliver other city priorities for the public, as required in city code. They typically reduce or eliminate spaces for trees which provide shade and cooling, impinge upon the pedestrian through zone, and can force utility connections to the building closer together which can violate utility clearance requirements and complicate and delay the development review process.

Considerations for Siting Electrical Transformers at the building's street facing edge

Design Overlay. Areas subject to design overlay have the highest aspirations for ground floor active uses for people such as retail, common spaces, office, or lobbies. The design overlay also typically has the highest level of requirements for active ground floor uses in zoning code standards and design guidelines. Development within the design overlay may not be able to meet zoning code requirements or design guidelines with a transformer at the building edge. **Development outside of design overlay** may be able to meet zoning code requirements for active uses with a transformer room at the building edge.

Frontage length. Developments with longer frontages may have opportunities to meet non-active building needs at the ground level while retaining sufficient space for active ground floor uses after all other non-street facing alternatives have been explored. Shorter developments still often have other viable locations in the building to explore with their utility provider, such as basements, loading areas, or parking areas.

Side streets. Side streets may have lesser ground floor activation objectives than main streets. For buildings with two frontages, the side street may be a suitable location for locating transformer rooms at the building edge after all other non-street facing alternatives have been explored; the street classification of the side street will be a factor in making this determination (e.g., the higher the street classification the less likely a transformer can be located at the building edge).

Ground level activation. Developments that have minimized inactive ground level uses (e.g., parking, loading, and/or other building services, etc.), and explored all other non-street facing alternatives, may be able to meet design overlay requirements with an electrical room located at the edge of the building. Development that includes parking areas, basements, or on-site loading are expected to first explore siting electrical transformers in these spaces with their electrical provider.

General Information

Will the parcel be going through a discretionary Design Review? Yes No

Does the proposal include a basement, on-site loading and/or parking garage?
Yes No

Does the proposal include surface parking? Yes No

How long is the frontage? <=100' 101'-199' 200'+

Does the parcel have multiple frontages? Yes No

Has the property minimized inactive ground level uses by not providing parking, loading and/or other building services? Yes No

Parcels not going through Discretionary Design Review

Can the electrical room be placed in the basement or loading/parking garage, on the ground floor away from the building edge, or on private property outside of the building?
Yes No

Can the property meet zoning code requirements with the electrical room at the building's street facing edge?
Yes No

If the property has two frontages, can it meet zoning code requirements by placing the electrical room on a side street with lower ground floor activation objectives?
Yes No

Parcels going through Discretionary Design Review

Can the electrical room be placed in the basement or loading/parking garage, on the ground floor away from the building edge, or on private property outside of the building?
Yes No

Has the property minimized inactive ground level uses such that it can meet zoning code and design guidelines for ground floor activation with the electrical room at the building's street facing edge?
Yes No

If the property has multiple frontages, can it meet zoning code and design guidelines by placing the electrical room on a side street?
Yes No