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## Site Selection How to Guide

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# Executive Summary

The development and implementation of rigorous site selection processes are key to efficient Electric Vehicle (EV) charge point deployment.

Clear processes and engagement points between stakeholders, consistent site criteria and identification and risk mitigation using appropriate strategies and tools all help facilitate swift, cost-efficient site selection and deployment of EV charge point sites, and result in better outcomes for charge point operators and customers.

This guide draws on our experience and learnings to provide general information for industry stakeholders. The guide suggests high-level processes, sets out key site selection criteria, highlights major risk factors and proposes strategies to overcome them.

# Introduction

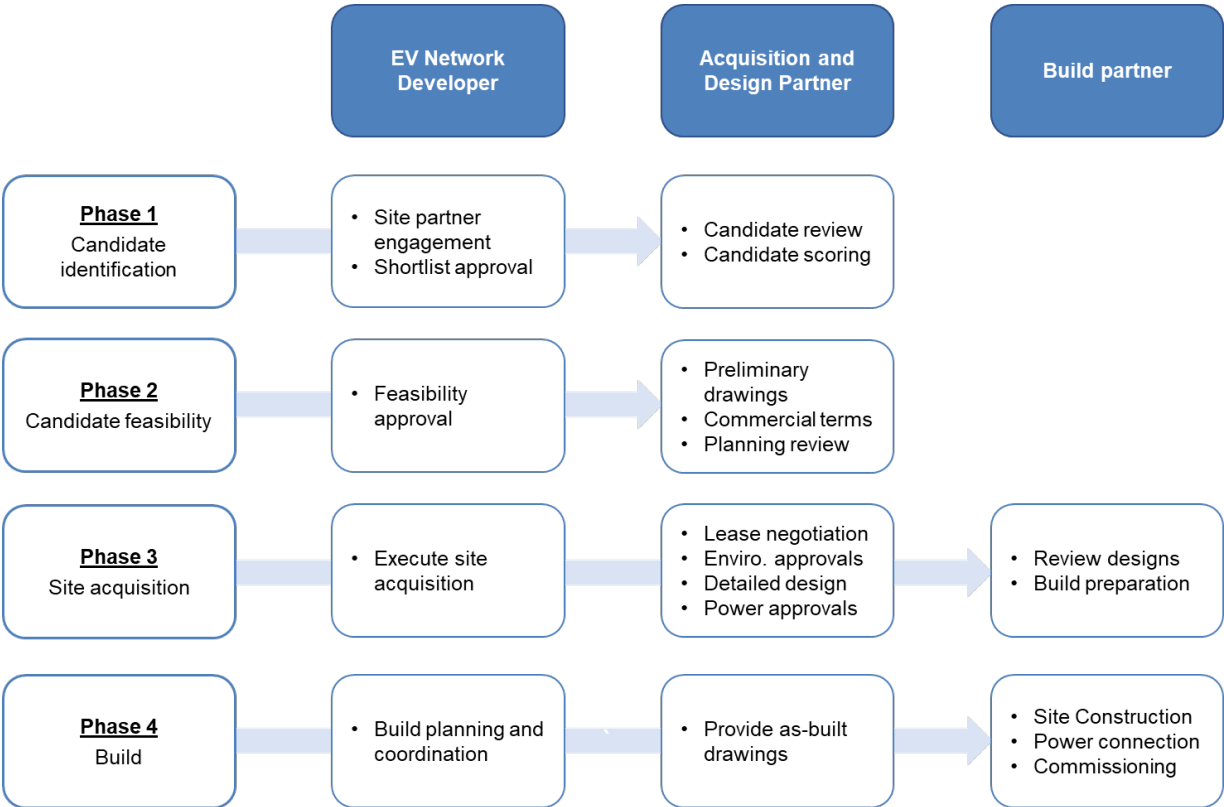
This How to Guide for Site Selection provides general information for industry stakeholders about Electric Vehicle Charging Station site acquisition and development approvals based on our experience and learnings to date.

The guide describes a suggested high-level process for stakeholder engagement, key site selection criteria, key risk factors and strategies to mitigate and overcome them.

# Process and Stakeholder Engagement

A thorough and clear site identification and assessment process is necessary to facilitate good candidate selection decision making.

The following project framework sets out core responsibilities for the different project partners during the Electric Vehicle Charging Station site deployment process.



# Key Site Criteria

Site selection requires consideration of numerous factors. Not all factors will be available at every potential candidate charging location. Optimal candidate assessment and selection needs to rank and evaluate the factors with reference to alternative options and optimal solutions.

Criteria	Rationale	Priority
Proximity to key travel routes	While not always possible to locate EV charging facilities directly on or adjacent to highway travel routes, proximity to them ensures minimal journey down time and positive and comparable user experience with regular drivers.	High
Accessibility	Highway sites can be located right on a highway or at a busy junction close to a highway. Convenient accessibility to the site from both sides of a highway or from the multiple points of a junction is a pivotal consideration to maximise convenience and use.	High
Safe ingress and egress to charging area	Safe access is critical. Site selection and design needs to be mindful of safety including vehicular movements in and around the chargers.	High
90-degree angle parking	90 degree angle parking is preferred to make charging optimal for all vehicle charging points but is not necessary if chargers are placed at suitably accessible locations next to the parking bays.	Medium
2 - 6 parking bays per site	Bay numbers will vary between sites depending on charger deployment, but additional spare bays are desirable.	High
24 / 7 accessibility	All hours accessibility to chargers is a highly desirable in order to provide a positive user experience and ensure optimal use of the equipment.	Medium
Existing Services	Identifying and avoiding or designing around existing underground services is desirable to minimize build complexity and reduce cost. Existing infrastructure services include water, power, drainage and communications. Site specific assets are also another consideration for example, at petrol stations existing tanks can impact charger and ancillary component location.	High
Access to existing power network	Siting charging facilities close to transformers is an integral factor to minimising capital costs.	High
Safe charging environment	A safe charging environment is important to encourage usage. Key characteristics for a safe site include lighting and pedestrian safety. Safety cameras can also act as a deterrent to mischievous behaviour and promote a safe environment.	High
Access to amenities	Access to amenities such as bathrooms, food and beverage services and rubbish bins ensures provision of similar facilities to a fuel station.	Medium
Securing a long-term tenure arrangement	Long term tenure arrangements are required to allow recovery of capital costs.	High
Securing environmental approvals	Clear understanding of obligations for obtaining environmental approvals can help with expediting acquisition timeframes.	High

# Key Risks

The following key risks associated with the site selection and acquisition process have the potential to impact site deployment timeframes and costs.

<b>Criteria</b>	<b>Rationale</b>
Power connections	<p>Understanding the nature of the local power network and level of supply at a property is critical to site selection to avoid delays and excessive development costs.</p> <p>Candidates with existing large-scale transformers will generally be cheaper and quicker to deploy or upgrade.</p> <p>They will also be less likely to require new easements which can be problematic and cause delays with site acquisition.</p> <p>Bringing a second supply onto a property is possible in certain circumstances but is not a preferred solution for power authorities due to safety considerations.</p> <p>A second supply can also lead to complications and delays with landowners. Landowners are typically reluctant to have their properties burdened with a second power easement.</p>
Leasing arrangements	<p>Underlying tenure arrangements can vary substantially at sites.</p> <p>The preferred arrangement is to deal directly with a landowner.</p> <p>If dealing with a tenant, it is preferable that the tenant holds a long term right of occupation and that they are entitled to grant subleasing or licensing rights without extensive recourse to the landowner.</p> <p>Complicated dealings with tenants and subtenants can create uncertainty and delays in the acquisition process and lead to sub optimal tenure outcomes.</p>
Environmental approvals	<p>Environmental planning regulations pertaining to EV chargers vary from state to state and from local government area to local government area.</p> <p>They need to be researched and understood so that applications can be submitted in a timely fashion.</p> <p>Another relevant issue to deal with is latent defects with existing development approvals and car parking requirements.</p> <p>It should not be assumed that an existing development has been built in compliance with development conditions. Furthermore, variations to existing permits can be required to amend or vary existing development conditions and ensure compliance for EV infrastructure.</p>

# Strategies

Implementation of the following measures will drive consistency and quality in the site selection process.

- Consistent tracking and reporting systems
- Design and acquisition guidelines
- Checklists
- Template report formats
- Project gates
- Formal approval and escalation processes
- Buildability design reviews between design and build partners
- Strong engagement with power authorities
- Supplier pre-approval and quality reviews

# Conclusion

The development and implementation of rigorous site selection processes are an important aspect of the EV charge point development cycle. Clear processes and engagement points between stakeholders, consistent site criteria and identification and management of key site risks using appropriate strategies and tools all help facilitate deployment of EV charge point sites in a timely and cost-effective way and lead to better outcomes for charge point operators and customers.