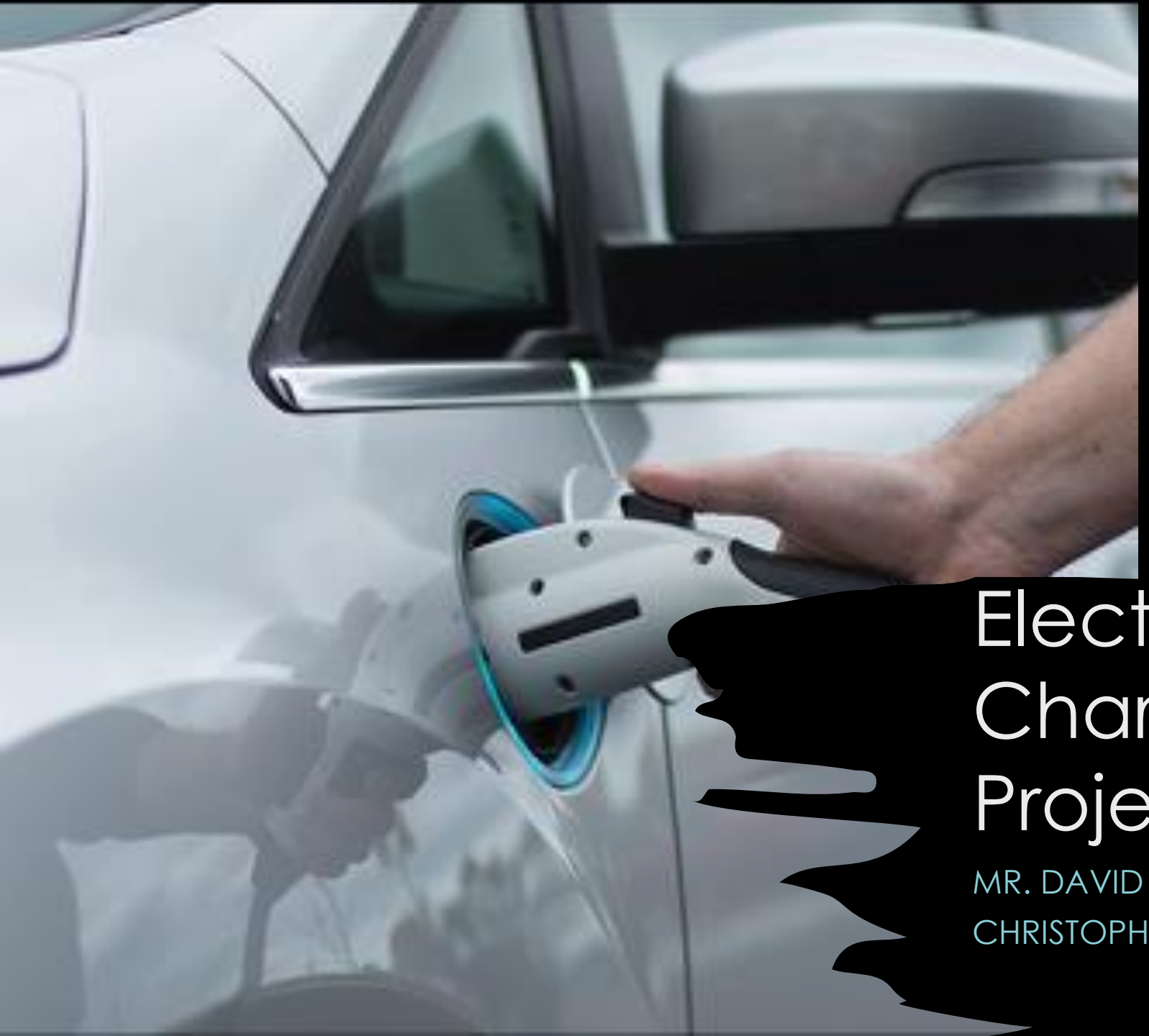

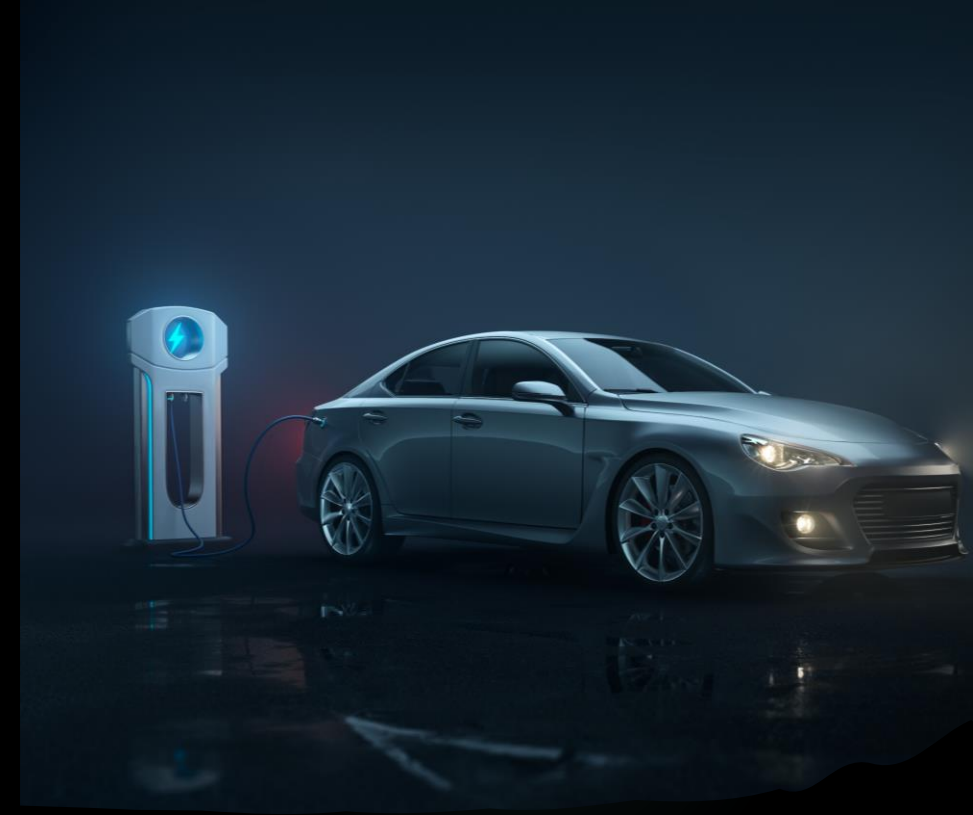

Electric Vehicle Charging Station Project Planning

MR. DAVID NOVAK

CHRISTOPHER B. BURKE ENGINEERING, LTD.

Introduction

- Types of Electric Vehicle Charging
- Determine Needs
- Site Planning
- Project Considerations

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Types of Electric Vehicle Charging

Level 1–120-volt single phase. Typical household duplex receptacle. Miles per hour of charge time 2 to 5 miles

Level 2- 208- or 240-volt single phase requires the installation of additional hard wired charging infrastructure. Provides vehicle charging at 208 or 240-volt single phase power. Miles per hour of charge time 30 to 40 miles

Level 3- 480 volt 3-phase requires the installation of additional hard wired charging infrastructure. Miles per hour of charge time 375 to 750 miles

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Determine Needs

Include all stakeholders as each locations needs vary as infrastructure can come at a high cost.

Number and types of EV Charging Stations needed today

Future EV Charging Station considerations

Funding for current requests and future funding

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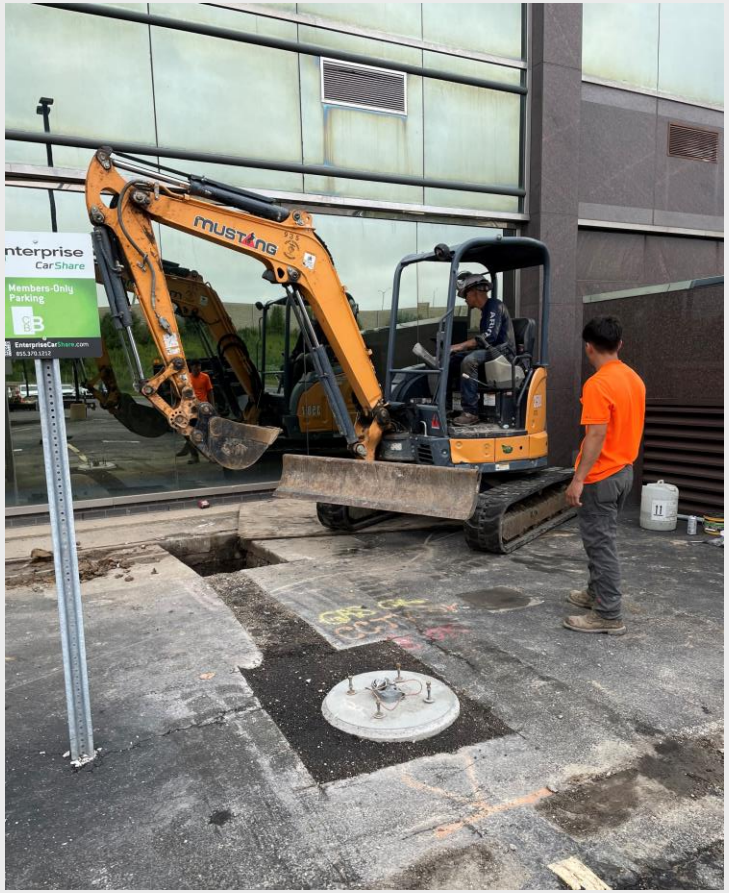
Site Planning



- Involve all stakeholders in planning process
- Convenience of EV Charging Station locations
- Power requirements for EV Charging Stations
- Consider placing EV Charging Stations in covered parking structures
- Keep EV Charging Stations away from water and irrigation drains
- Consider bollards, curbs, wheel stops, and setbacks to prevent vehicle damage to EV Charging Station
- Electric Vehicle signage that designates EV Parking Only and proper site lighting
- Identify and mitigate any significant safety risks
- Proximity to Power Source

Project Considerations

- Electric Vehicle Charging Station
- Design and Construction Administration
- Future Proofing Approach
- Electrical Work
- Project Management
- Site Work
- Installation
- Utility Upgrades and Connection
- Contract Bond
- Operational and Maintenance Contract
- Signage and Pavement Markings

Questions and Answers

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