

Strathmeade Square EV Charging

Possibility Study

Why EV Charging stations?

- **Meeting the Needs of Residents:** As EVs become more popular, residents within the community may own electric vehicles. Installing charging stations can cater to their needs, making it convenient for them to charge their cars at home.
- **Property Value:** Homes in communities with EV charging infrastructure often have higher property values. This can be an attractive feature for potential buyers and may lead to increased demand for homes in the community.
- **Sustainability:** Supporting EVs aligns with sustainability goals. EVs produce fewer emissions than traditional gasoline-powered vehicles, contributing to cleaner air and a reduced carbon footprint. HOAs can demonstrate a commitment to sustainability by providing charging infrastructure.
- **Enhancing Community Appeal:** Offering EV charging can make the community more attractive to potential residents who are environmentally conscious and value clean transportation options.
- **Compliance with Regulations:** Some regions and cities may have regulations or incentives encouraging the installation of EV charging infrastructure. By proactively installing charging stations, HOAs can ensure compliance with local laws and possibly access government incentives or rebates.
- **Future-Proofing:** As governments worldwide push for a transition to electric vehicles, it's likely that the number of EVs on the road will continue to grow. Installing charging stations now can help future-proof the community and ensure it remains competitive and relevant.
- **Revenue Generation:** Depending on the setup, charging stations can generate revenue. HOAs can charge residents and guests for using the stations, potentially offsetting the installation and maintenance costs.

Site Survey and Estimates from the contractors

- Received bid from two companies after they tested the power consumption during peak hours
- It was recommended to add a new panel to cover the power load for four units(2 set of two units) for 400A box. Currently we have 200A box.
- Install 2 set of CT4000 (cost of 12K each pay 5 yearly installments)
 - Total cost of equipment 24K
 - Annual cost of \$4800 for both units

Little's Quality Contracting : David



Little's Quality Contracting LLC
 3506 Beaver Ford Rd
 Woodbridge, Va 22192

Phone # (703) 398-8496 david@lqcontracting.com

Estimate

Date	Estimate #
10/2/2023	274

Name / Address
8365 Thompson Rd Annandale, VA 22003

		Project
Description		Total
UPGRADE TO 400 AMP SERVICE (\$7,500.00) - Demo Existing 200 amp meter base - Install New 400 amp meter base supplied by Dominion Energy (LQC WILL HAVE TO COORDINATE WITH DOMINION ENERGY THROUGHOUT THE PROCESS) - Install New service entrance cable from the new meter to each electrical panel - Install New 200 amp panel next to the existing panel (Will have to move around some conduits to make room for new panel) - Upgrade Grounding to support new 200 amp panel (Run #4 copper to cold water main pipe) -Install Ground rods GROUND WORK (\$1,500.00) - Run approximately 25-30' 1&1/2" PVC Conduit from new panel outside 2' underground to a 12"x12" PVC inground junction box - TRENCH Pathway for conduit 2' underground INSTALL 2 EV CHARGERS (\$4,500.00) - Trench approximately 8-10' from Junction box to Charger 1 with 3/4" PVC Conduit - Trench approximately 20' from junction box to Charger 2 with 3/4" PVC Conduit - Possibly Saw Cut side walk to get the feed across - Mount (2) pedestals in concrete using Chargepoint template - Install new concrete - Tie in chargers with #6 copper wire to two 40amp breakers in each pedestal - Pull permit with Fairfax County, meet with Inspector for all inspections - Provide Signage and Bollards for the chargers LABOR, MATERIAL, PERMIT (CUSTOMER TO SUPPLY CHARGERS)	13,500.00	13,500.00
All work is accompanied with a one year craftsmanship warranty		
Total		\$13,500.00

Salone Solutions: Les Salone

FEE SUMMARY

Description	Unit Price	Quantity	Amount
Electrical Service infrastructure upgrade from 200A to 400A Replace existing 200A meter box and replace with 400A meter box Install new 200A electrical panel adjacent to the existing 200A electrical panel Install supplemental grounding rods and required bonding jumpers Install 4 40A breakers in newly installed breaker	4500.00	1.00	4500.00
Run approximately 30ft. 1 1/2" rigid conduit from electrical panel to in ground junction box by parking lot sidewalk	2900.00	1.00	2900.00
*****EV CHARGER 1*****			
Cut across sidewalk and trench 10ft from junction box to charging location 12" of curb. Install 3/4" rigid conduit and pull two sets of #6 cable to pipe stub up/ set bolts in place/ Replace concrete after concealment inspection	3500.00	1.00	3500.00
Mount CT4000 Level 2 charging station on the bolt configurations and hardwire two 40A connections	2400.00	1.00	2400.00
*****EV Charger 2*****			
Trench approximately 20ft from junction box in ground/ Cut across sidewalk and trench 10ft from junction box to charging location 12" of curb. Install 3/4" rigid conduit and pull two sets of #6 cable to pipe stub up/ set bolts in place/ Replace concrete after concealment inspection	4000.00	1.00	4000.00
Mount CT4000 Level 2 charging station on the bolt configurations and hardwire two 40A connections	2400.00	1.00	2400.00

*****Permits/Utility*****			
Obtain Fairfax County electrical permit/ coordination with Dominion Energy/ inspection	1000.00	1.00	1000.00
*****Miscellaneous*****			
Install 4 total bollards for EVSE protection	600.00	4.00	2400.00
Install 4 EV signage on parking spots	300.00	4.00	1200.00
Total Amount			24300.00

Potential ROI Calculator

- Sample template from Tesla (can customize as we like it)

Potential ROI Calculator							
Charging sessions per day	2						
Number of Chargers	4						
Average kWh per session	35						
Average profit per kWh	\$0.08	*note Tesla has a one penny/kwh billing service fee					
	Total potential earnings per day					ROI (in years)	
	\$22.40					4.8	
	Potential earnings per year						
	\$8,176.00						
	Hardware + Install Cost						
	\$39,000						