

Capital Facilities Program Update

San Rafael City Schools

August 26, 2019

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Introduction - Sustainability

The SRCS EV Charging Projects are aimed at addressing a myriad of energy and environmental sustainability issues in the education system. These projects present a distinct opportunity to shape sustainability practices at SRCS and to influence efforts of energy usage reduction goals that directly and positively support SRCS' General Fund.

At the core of this project is developing the next generation of students, thinkers and doers to help address sustainability issues in educational settings. EV Chargers located at the school sites will support sustainability efforts identified sections within our SRCS developing LCAP *Sustainability Plan* goals in the following areas: Transportation and Energy.

PG&E's *EV Charge Network* grant provided ***approximately two million dollars*** of infrastructure work, prepared plans and specifications for these installations.

EV Project Background

On the **December 17th, 2018** BOE approval of the following steps:

- Transportation Authority of Marin support
- Marin Clean Energy Rebate
- Following City of San Rafael examples at Civic Center & College of Marin
- PG&E Grant Baseline -10 ports / school site @ 8 Schools = 80 Chargers
Bahia Vista PG&E EV Charge Sponsor program = No annual costs
- EV Charge owner = Annual costs offset with pass-through fee for participant charging
- **Taking the first steps** – Approved PG&E Terms & Conditions, Approved proceeding with Preliminary Site Designs, and Approved directional process for moving RFP forward.

EV Charging – Project Schedule

Task Name	Project Design Start	Construction Start	Finish
<i>PHASE 1</i>			
San Rafael HS	Mon 4/29/19	Mon 9/23/19	Tue 12/17/19
Bahia Vista	Mon 4/15/19	Mon 9/9/19	Tue 10/22/19
San Pedro Elementary	Mon 4/15/19	Mon 9/23/19	Tue 10/22/19
Glenwood Elementary	Mon 5/6/19	Mon 9/16/19	Tue 11/12/19
Davidson Middle School	Mon 5/20/19	Mon 10/1/19	Tue 11/26/19
<i>PHASE 2</i>			
Coleman Elementary	Mon 5/27/19	Mon 10/14/19	Tue 12/31/19
Sun Valley Elementary	Mon 5/27/19	Mon 10/21/19	Tue 12/31/19
Terra Linda HS	Mon 5/20/19	Mon 10/7/19	Tue 12/24/19

EV Charging – Charger Costs

Financial Impact: \$438,080 (Equipment & Service Agreement) Funded initially through the General Fund and then fully reimbursed through the following grants. Currently, SRCS has received grant funding for

Secured PG&E Infrastructure Construction Costs or “make ready” valued at \$1.875 million.
Marin Clean Energy “Early Adopters” Grant - \$65,772+\$39,100 = \$104,872
Transportation Fund for Clean Air (TFCA) - \$60,000
= **\$164,872** of current grant funding

Expecting Estimated Grants:

PG&E Rebate - \$63,825

BAAQMD - \$237,000 (*Under evaluation. Next step Award!*)

Sub-total - \$426,597

Transportation Authority of Marin (TAM) = \$TBD Commitment to fund any gaps to the “***last dollar***”.

Charging Rate Pro forma

kWh (kilo Watt hour) electricity rates vary by tiers – Based on time of use and season. Charging rates will be established based on *Pass through Charge* method:

Electricity rate + Operational Costs = *Blended Pass through Rate*

Example - San Pedro Elementary School will have 7 dual ports and 1 single port, totaling 15 ports.

Assuming all chargers are used for 8 hours per day 7 days per week, this equates to 864 kWh/day. (**Based on Max usage cost model.**)

Assuming a flat rate of \$0.185/kWh for a rate charge by PG&E = annual electricity cost is \$58,342. Factoring in an annual O&M cost (network, licensing, payment processing, maintenance, and service) of \$15,700, the overall cost is **\$74,042**.

The *break even Pass through Rate* = \$0.235/kWh or **\$1.70/hour**.

*Rates may need to fluctuate based on usage and amortization models.

EV Box

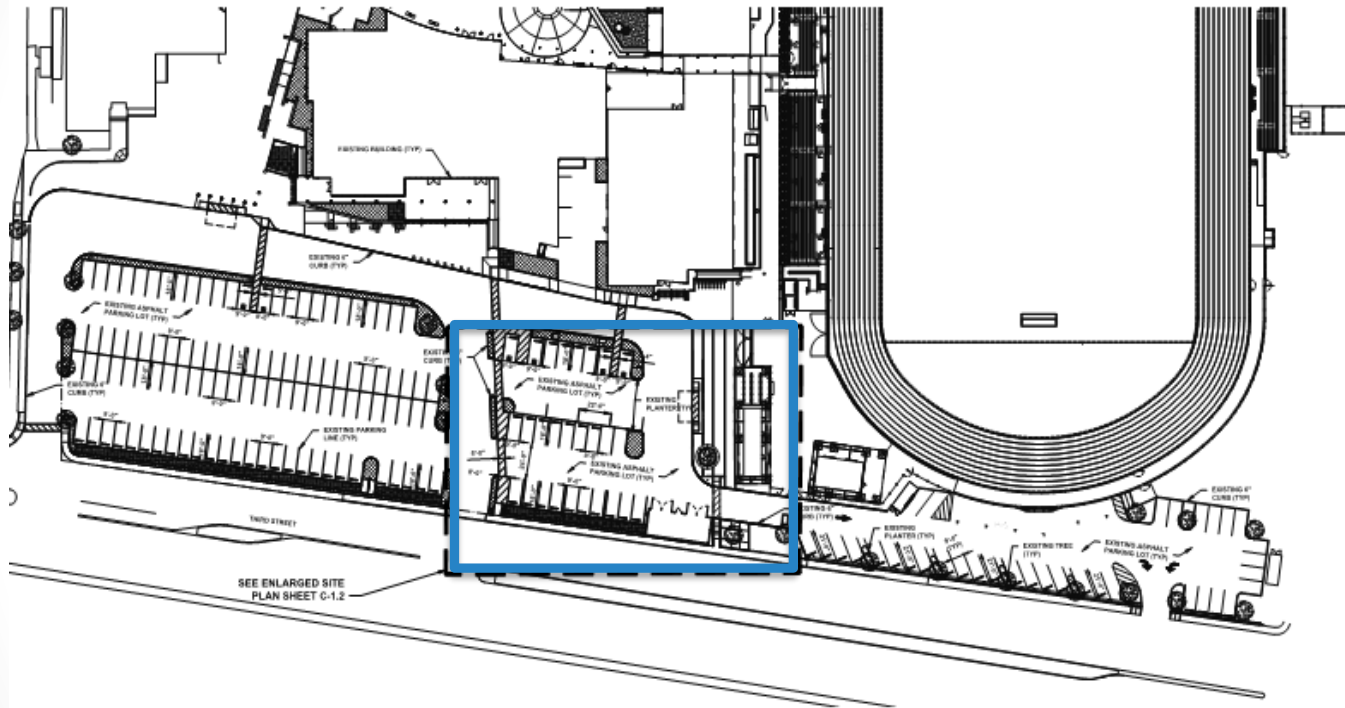


The Contractor (NEMA) paired with vendor EV Box from PG&E's Approved Vendor Selection List.

Initial (ROM) Rough Order Magnitude = \$10,000 per dual port

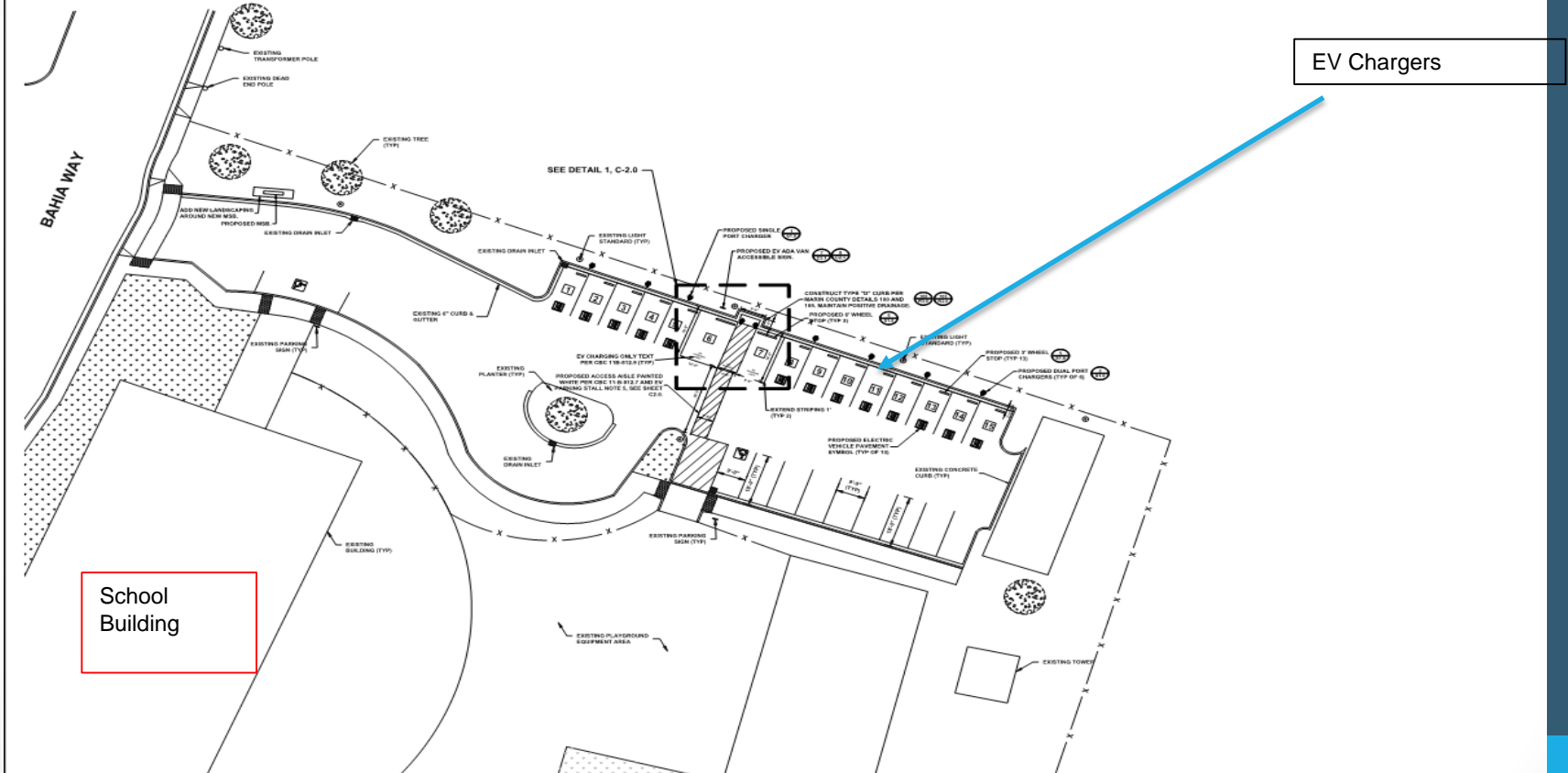
NEMA/ CLEAResult = \$6446.00

EV Charging – San Rafael High School



Located along Point San Pedro Road adjacent to the track.

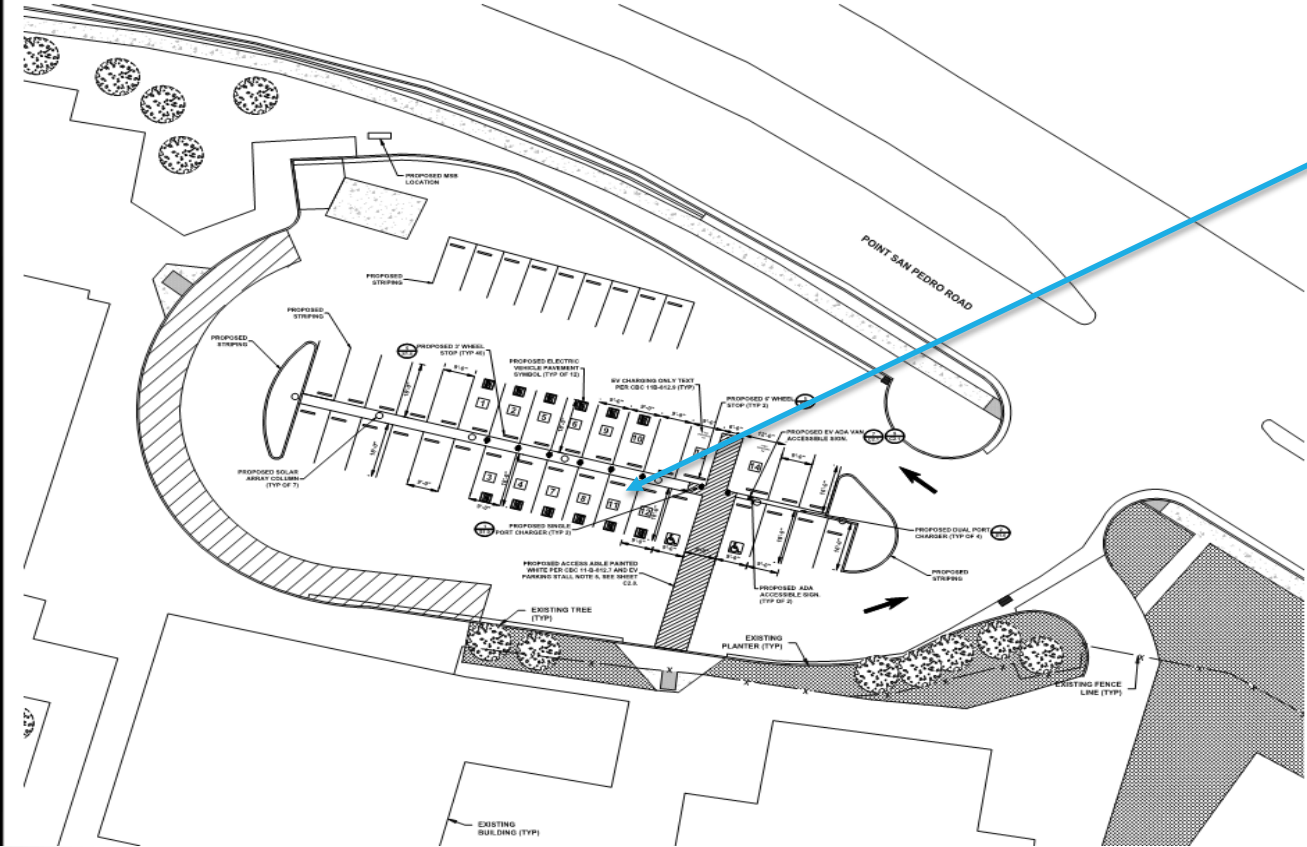
EV Charging – Bahia Vista Elementary



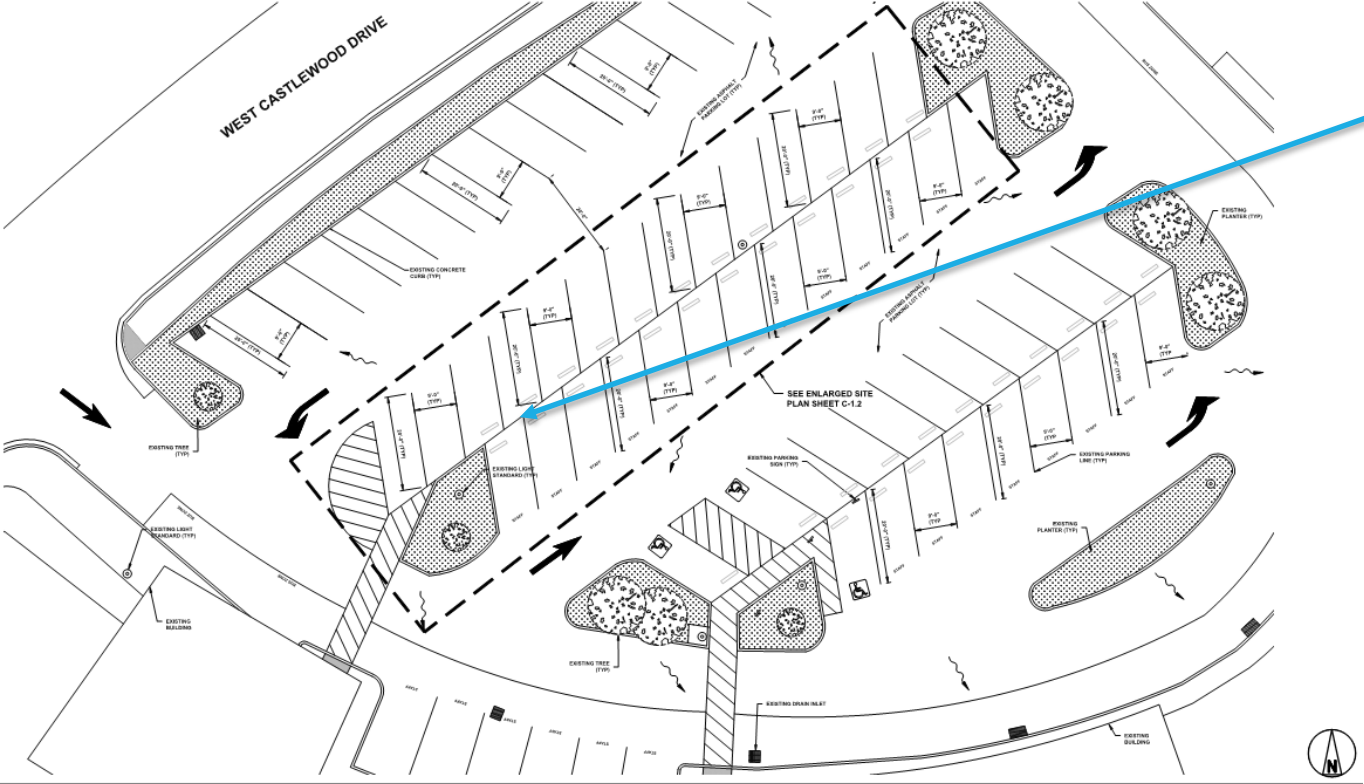
EV Chargers

EV Charging – San Pedro Elementary

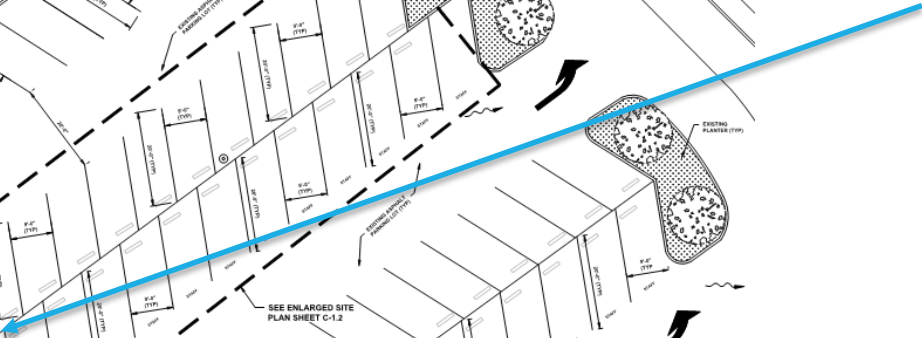
EV Chargers



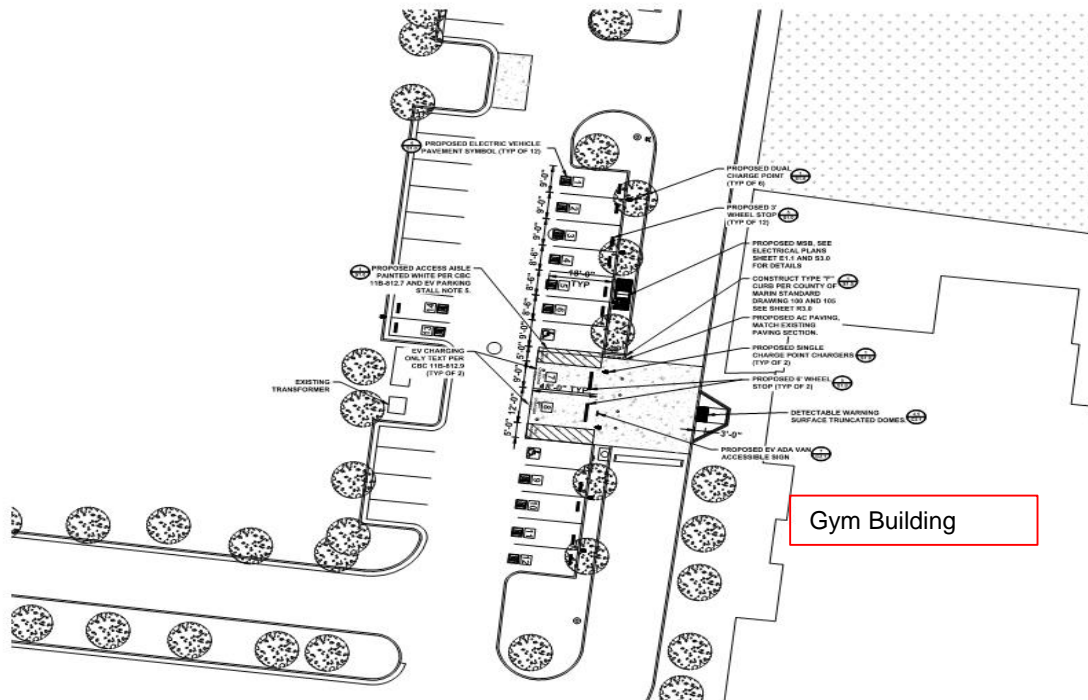
EV Charging – Glenwood Elementary



EV Chargers



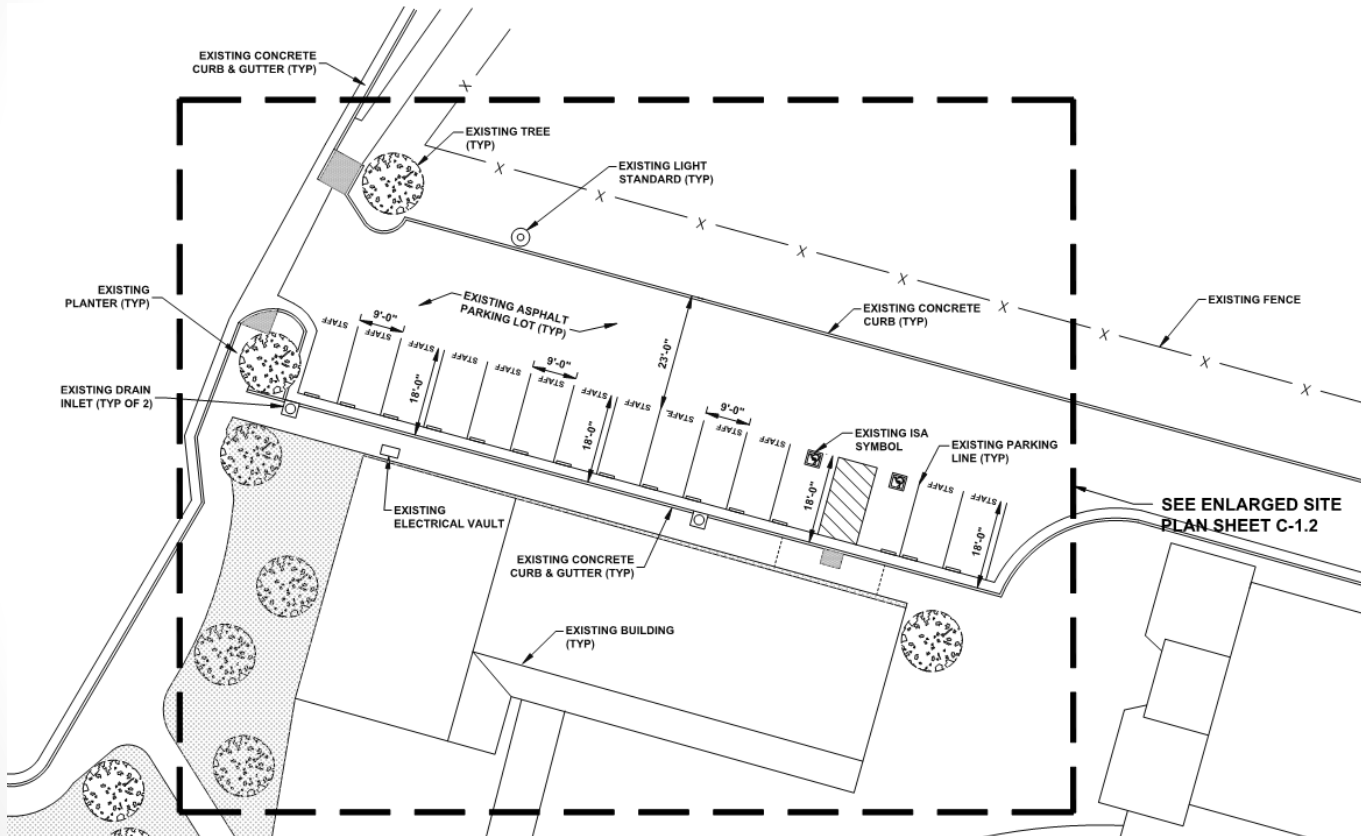
EV Charging – Davidson Middle School



Located adjacent to the gym

Gym Building

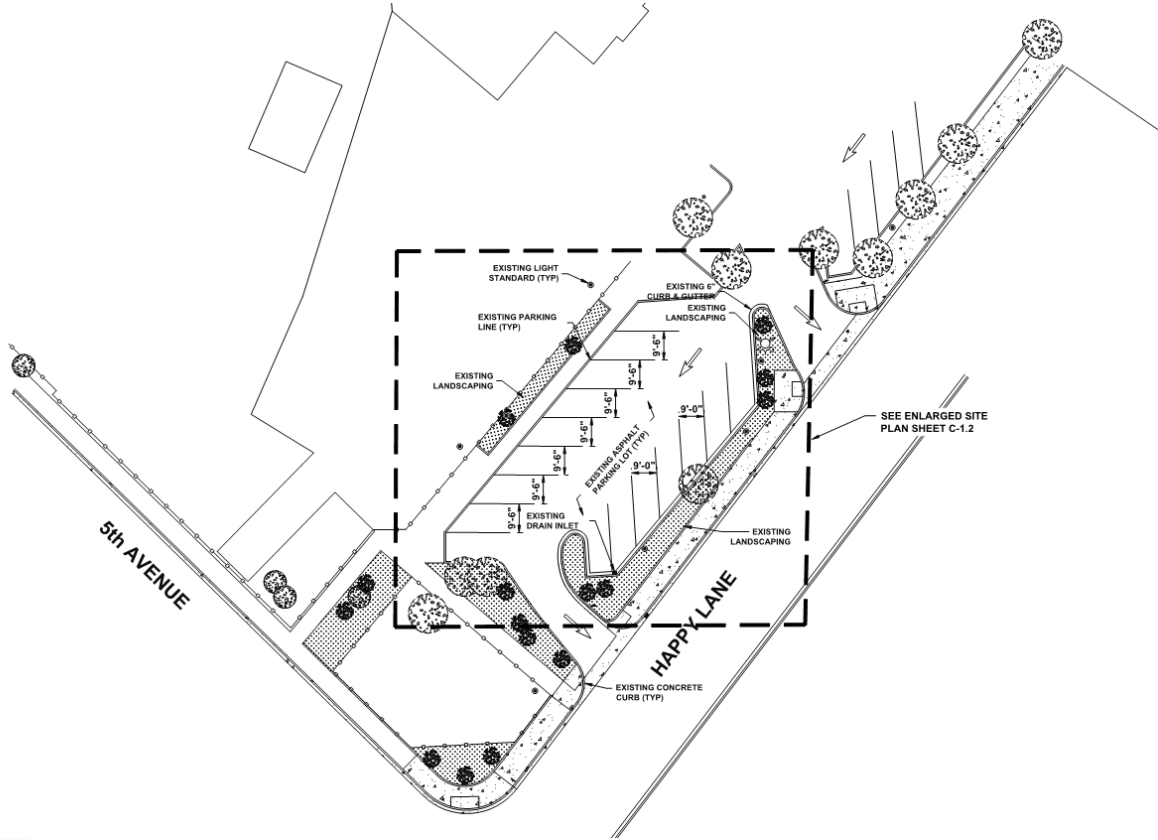
EV Charging – Coleman Elementary



Located in this parking lot, charger locations being revised

EV Charging – Sun Valley Elementary

Located in this parking lot at the corner of Fifth and Happy Lane, charger locations being revised



Questions