STAFF REPORT FOR THE PLANNING COMMISSION MEETING OF MARCH 29, 2023

FILE NO: LU-2023-0062 **AGENDA ITEM: 6.J**

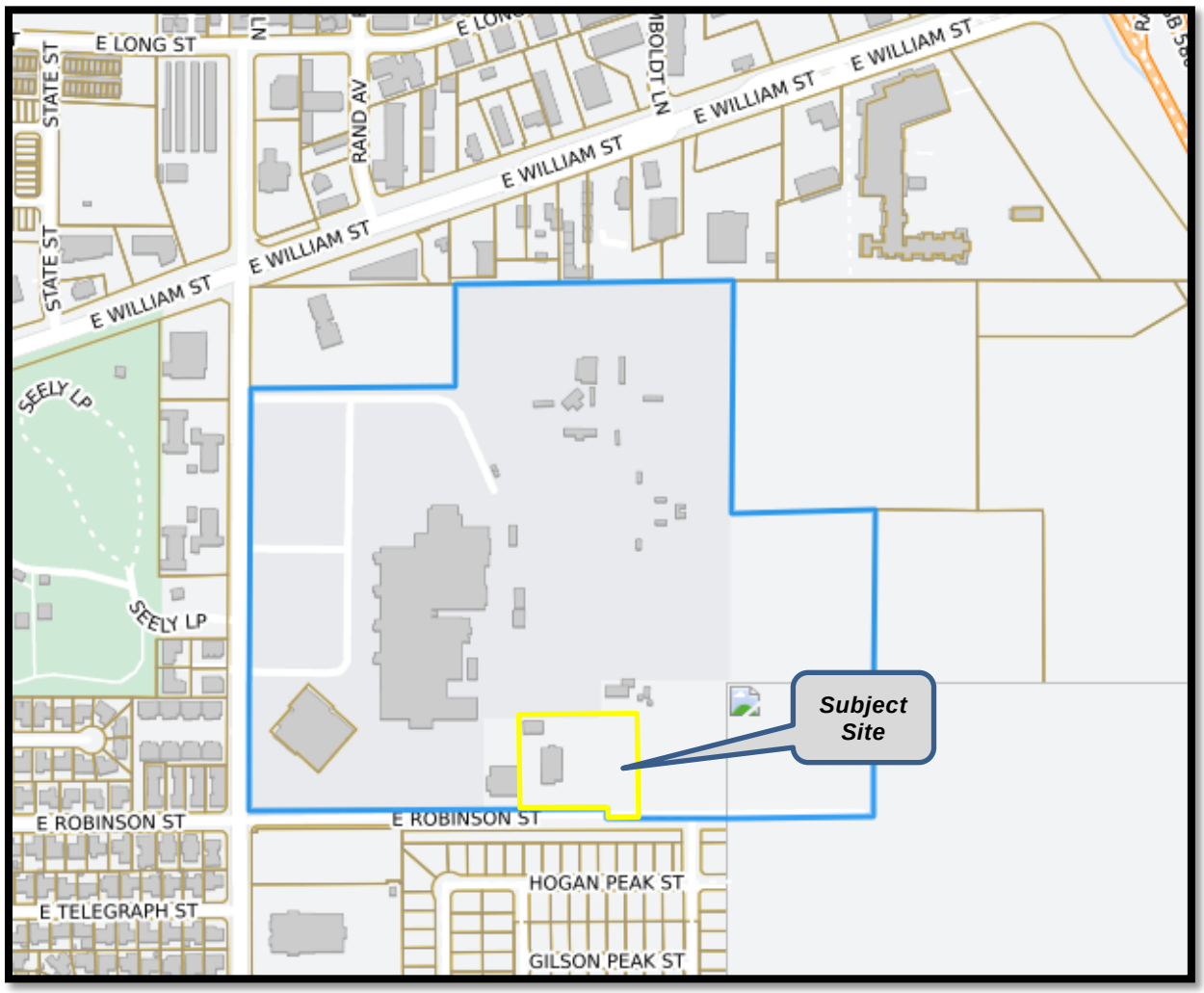
STAFF AUTHOR: Heather Manzo, Associate Planner

AGENDA TITLE: For Possible Action: Discussion and possible action regarding a request from Carson City School District ("Applicant") for a special use permit ("SUP") to allow for the installation of electric vehicle ("EV") charging stations and associated equipment to serve the Carson City School District EV fleet on property zoned Public ("P") located at 1111 North Saliman Road, Assessor's Parcel Number 010-041-64. (Heather Manzo hmanzo@carson.org)

Summary: The Applicant is proposing to install 14 EV charging stations and associated equipment within the existing transportation parking area for the purposes of charging the school district's EV bus fleet. The project will be completed in a minimum of two phases, the first phase will include the establishment of four charging stations. As the property is zoned Public, the proposed improvements are subject to the approval of a SUP. The Planning Commission is authorized to approve the SUP.

RECOMMENDED MOTION: "I move to approve LU-2023-0062 based on the ability to make the required findings and subject to the conditions of approval included in the staff report."

VICINITY MAP:



RECOMMENDED CONDITIONS OF APPROVAL:

1. All development shall be substantially in accordance with Special Use Permit plans and application materials on file with the Carson City Community Development, Planning Division ("Planning Division").

2. All on and off-site improvements shall conform to City standards and requirements.

3. The applicant shall meet all the conditions of approval and commence the use for which this permit is granted, within 12 months of the date of issuance of the special use permit. A single, one-year extension of time may be granted if requested in writing to the Planning Division 30 days prior to the one-year expiration date. Should this permit not be initiated within one-year and no extension granted, the permit shall become null and void.

4. The applicant must sign and return the Notice of Decision within ten (10) days of receipt of notification. If the Notice of Decision is not signed and returned within ten (10) days, then the item may be rescheduled for the next Planning Commission meeting for further consideration.

LEGAL REQUIREMENTS: Carson City Municipal Code ("CCMC") 18.02.050 (Review); 18.02.080 (Special Use Permit); 18.04.170 (Public)

MASTER PLAN DESIGNATION: Public / Quasi-Public

ZONING DISTRICT: Public ("P")

KEY ISSUES: Will the use be compatible with the surrounding neighborhood and be in keeping with the standards of the Carson City Municipal Code?

SURROUNDING ZONING AND LAND USE INFORMATION:
NORTH: General Commercial ("GC") / various commercial and non-residential uses
EAST: GC-SPA / vacant land
WEST: MFA, PR, RO / single and multifamily residences and Mills Park
SOUTH: SF1A & SF6-SPA / single family residences and vacant land

ENVIRONMENTAL INFORMATION:
FLOOD ZONE: Zone X Shaded (minimal flood hazard)
EARTHQUAKE FAULT: Zone II (Moderate Severity)
FAULT ZONE: Beyond 500 feet

SITE DEVELOPMENT INFORMATION:
LOT SIZE: ±2.4-acre portion of a ±64.42 acre site
VARIANCES REQUESTED: None

PREVIOUS REVIEWS:

- LU-2021-0307 – An expansion to the existing Carson High School greenhouse project previously approved by LU-2020-0009.
- LU-2020-0009 – An amendment to SUP-10-014 to expand the greenhouse project to include 400 square feet of outdoor classroom space and 124 square feet of office area to serve the project.
- SUP-10-014 – Approved to establish the greenhouse project on the Carson High School campus.

DISCUSSION:

The subject property is within the Carson High School property in the Public zone. Every development request within the Public zone requires the approval of a SUP. The School District has requested a SUP to install EV charging stations and associated electrical equipment and site work in at least two phases within the established transportation yard. The transportation yard is approximately 2.4 acres in size located along East Robinson Street and is west of the greenhouse project and east of the ROTC building. The greenhouse project serves as a visual buffer as viewed from the east side of the transportation yard where the EV equipment is proposed to be located.

The Carson City School District has been awarded a grant from NV Energy for four EV buses to replace four older diesel fueled buses. The four buses and charging infrastructure will be established with the first phase with the EV charging stations replacing existing diesel bus parking stalls. The School District has plans to replace an additional 10 diesel buses with EV buses as funds are available. Phase 2 will include an additional 10 EV charging stations which can be installed as additional buses are added to the School District bus fleet.

Per CCMC 18.04.170, the use may only be established or modified in the Public zoning district subject to first obtaining a SUP. The Planning Commission is authorized to approve the SUP.

PUBLIC COMMENTS:

Public notices were mailed to 164 property owners within 900 feet of the subject site on March 16, 2023. As of the writing of this report, staff had not received any public comments related to the request. Any comments that are received after this report is completed will be submitted to the Planning Commission prior to or at the meeting on March 29, 2023, depending on the date of submission of the comments to the Planning Division.

OTHER CITY DEPARTMENTS OR OUTSIDE AGENCY COMMENTS:

Plans were routed to commenting agencies, and the following comments were received. Comments have been incorporated into the conditions of approval, as appropriate.

Development Engineering
The Carson City Public Works Department, Development Engineering Division ("Development Engineering") has no preference or objection to the SUP request.

Development Engineering has reviewed the application within our areas of purview relative to adopted standards and practices and to the provisions of CCMC 18.02.080, Conditional Uses. Development Engineering offers the following discussion:

CCMC 18.02.080(5)(a) - Master Plan
The request is not in conflict with any Engineering Master Plans.

CCMC 18.02.080(5)(b) – Use, Peaceful Enjoyment, Economic Value, Compatibility
Development Engineering has no comment on this finding.

CCMC 18.02.080(5)(c) - Traffic/Pedestrians
Development Engineering has no comment since the proposed project is changing existing parking to electrical service stations and will not increase traffic.

CCMC 18.02.080(5)(d) - Public Services
The existing sewer, water, and storm drain infrastructure are sufficient to serve the project. The proposal is not going to require additional connections to existing infrastructure.

CCMC 18.02.080(5)(e) – Title 18 Standards
Development Engineering has no comment on this finding. This project must meet all Carson City Development Standards and Standard Details.

CCMC 18.02.080(5)(f) – Public health, Safety, Convenience, and Welfare
The project will meet engineering standards for health and safety if the above conditions of approval are met.

CCMC 18.02.080(5)(g) – Material Damage or Prejudice to Other Property
Development Engineering has no comment on this finding.

CCMC 18.02.080(5)(h) – Adequate Information
The plans and reports provided were adequate for this analysis.

Fire Department Comments

1. The project must comply with the international Fire Code and northern Nevada fire code amendments as adopted by Carson City.
2. An emergency power shut off switch shall be provided for access by anyone working in the area.
3. Gated areas shall have a Knox box with the appropriate keys for Carson City Fire Department ("Fire Department") Access.
4. Fire Extinguishers shall be provided that meet or exceed the Internarial Fire Code and NFPA requirements
5. Emergency Evacuation plans shall be established for rapid evacuation of the buses due to Fire. Training of all personnel operating the buses should be provided with special attention to the Lithium-Ion batteries and fires. Said program shall be reviewed and approved by the Fire Department.

Building Division

The Applicant will need to obtain permits to complete the work. As such, the following items apply to the building permit process:

1. Plans must specifically identify each of the respective adopted 2018 Code Series and Northern Nevada Amendments (Building and Fire) on the cover sheet that govern the design, construction, and inspection of the proposed development.
2. All plan submittals must comply with The Blue Book, A Reference Guide for the Nevada Design and Construction Industry.
3. Apply at Carson City permit center digitally at permitcenter.carson.org.
4. Please include a site plan / civil page within the Building Plan submittal.
5. Please provide stamped electrical pages within the plan submittal.

FINDINGS:

Staff's recommendation is based upon the findings as required by CCMC Section 18.02.080 (Special Use Permits) enumerated below and substantiated in the public record for the project.

1. *Will be consistent with the objectives of the Master Plan elements.*

The proposed addition of EV charging stations and associated equipment to facilitate the addition of EV buses to the Carson City School District fleet is consistent with the Master Plan. The subject property has a Public/Quasi-Public ("PQP") Master Plan designation. The PQP designation is intended for schools, government offices, community centers, fire stations, airports, libraries, hospitals, and other similar uses. The project is proposed at the existing site of Carson High School.

2. ***Will not be detrimental to the use, peaceful enjoyment, economic value, or development of surrounding properties or the general neighborhood; and is compatible with and preserves the character and integrity of adjacent development and neighborhoods or includes improvements or modifications either on-site or within the public right-of-way to mitigate development related to adverse impacts such as noise, vibrations, fumes, odors, dust, glare or physical activity.***

The subject area currently operates as a transportation yard and bus parking lot for the School District. The proposed conversion from diesel powered to EV buses within the parking lot will have very little impact on the surrounding area. The project will not be detrimental to the use, peaceful enjoyment, economic value, or development of surrounding properties or the general neighborhood.

3. Will have little or no detrimental effect on vehicular or pedestrian traffic.

Since the requested EV equipment will be installed within the existing School District parking lot, the request will not have a detrimental effect on vehicular nor pedestrian traffic.

4. ***Will not overburden existing public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage, and other public improvements.***

The proposed project is located on the Carson High School campus and the use exists. The proposed addition of EV charging technology will not affect the site design nor will it have an impact on public services and facilities or other public improvements.

5. ***Meets the definition and specific standards set forth elsewhere in this Title for such particular use and meets the purpose statement of that district.***

The primary purpose of the Public zoning (CCMC 18.04.170) is to accommodate a wide range of public institutional and auxiliary uses including but not limited to, buildings and facilities owned, leased or operated by the School District. Per CCMC 18.04.170 the use may only be established or modified subject to a SUP. The replacement of diesel buses with electric buses and the replacement of the diesel engine plugs with EV technology supports the School District operations and is consistent with the standards of this Title. As conditioned, the project will meet the definition and specific standards set forth in Title 18.

6. ***Will not be detrimental to the public health, safety, convenience and welfare.***

The proposed EV charging stations will be located within the existing bus fleet parking area on the south side of the Carson High School campus. The addition of the EV buses to the school district fleet will reduce vehicle emissions and contribute to improved air quality and will not be detrimental to the public health, safety, convenience and welfare.

7. ***Will not result in material damage or prejudice to other property in the vicinity, as a result of proposed mitigation measures.***

The proposed EV charging stations will be located within the existing bus fleet parking area on the south side of the Carson High School campus. The addition of the EV charging stations and equipment will not result in material damage or prejudice to properties in the vicinity.

Attachments: Application LU-2023-0062

Carson City Planning Division
108 E. Proctor Street · Carson City NV 89701
Phone: (775) 887-2180 • E-mail: planning@carson.org

FOR OFFICE USE ONLY:

CCMC 18.02.080

SPECIAL USE PERMIT

FEE*: **$2,450.00 MAJOR**
$2,200.00 MINOR (Residential zoning districts)
+ noticing fee
*Due after application is deemed complete by staff

FILE # SUP -

APPLICANT	PHONE #
Carson High School, Transportation Dept.	775.283.1960

MAILING ADDRESS, CITY, STATE, ZIP
1111 North Saliman Road, Carson City, NV 89701

EMAIL ADDRESS
mjohnson@carson.k12.nv.us

PROPERTY OWNER	PHONE #
Carson City School District	775.283.2170

MAILING ADDRESS, CITY, STATE, ZIP
P.O. Box 603, Carson City, NV 89702

EMAIL ADDRESS
mjohnson@carson.k12.nv.us

APPLICANT AGENT/REPRESENTATIVE	PHONE #
Mark Johnson	775.283.2170

MAILING ADRESS, CITY STATE, ZIP
P.O. Box 603, Carson City, NV 89702

EMAIL ADDRESS
mjohnson@carson.k12.nv.us

SUBMITTAL PACKET – 4 Complete Packets (1 Unbound Original and 3 Copies) including:
- Application Form
- Detailed Written Project Description
- Site Plan
- Building Elevation Drawings and Floor Plans
- Special Use Permit Findings
- Master Plan Policy Checklist
- Applicant's Acknowledgment Statement
- Documentation of Taxes Paid-to-Date
- Project Impact Reports (Engineering)

CD or USB DRIVE with complete application in PDF

Application Received and Reviewed By:

Submittal Deadline: Planning Commission application submittal schedule.

Note: Submittals must be of sufficient clarity and detail for all departments to adequately review the request. Additional information may be required.

Project's Assessor Parcel Number(s):	Street Address
003-171-01	1111 North Saliman Road, Carson City, NV 89701

Project's Master Plan Designation	Project's Current Zoning	Nearest Major Cross Street(s)
Public	P	Robinson Street

Please provide a brief description of your proposed project and/or proposed use below. Provide additional pages to describe your request in more detail.

Electrical service for Electric Vehicles (EV) buses (see detailed Project description)

PROPERTY OWNER'S AFFIDAVIT

I, Mark M. Johnson, being duly deposed, do hereby affirm that I am the record owner of the subject property, and that I have knowledge of, and I agree to, the filing of this application.

Mark M. Johnson — Signature
P.O. Box 603, Carson City, NV 89702 — Address
2/8/2023 — Date

Use additional page(s) if necessary for additional owners.

STATE OF NEVADA)
COUNTY Carson City)

On February 8, 2023, Mark Johnson, personally appeared before me, a notary public, personally known (or proved) to me to be the person whose name is subscribed to the foregoing document and who acknowledged to me that he/she executed the foregoing document.

R Cortez — Notary Public

R. CORTEZ
NOTARY PUBLIC
STATE OF NEVADA
My Commission Expires: 2-23-2025
Certificate No: 08-10772-3

NOTE: If your project is located within the Historic District or airport area, it may need to be scheduled before the Historic Resources Commission or the Airport Authority in addition to being scheduled for review by the Planning Commission. Planning staff can help you make this determination.

Carson City School District Electrical Vehicles (EV) Bus Project

Project Description:

Carson City School District (CCSD) received a grant from NV Energy for four (4) Electrical Vehicles (EV) buses to replace four (4) of our older diesel buses. Along with this, the grant will cover the electrical infrastructure for the Carson School District Bus Electrical Vehicle Project.

The electrical for the infrastructure project shall consist of a NV Energy primary feeder extension to a new NV Energy transformer and new main electrical services to be used in charging EV Buses. A total of fourteen chargers (Nuvve Chargers) may be used simultaneously. The management system may also be used to stagger the charger starting which will help lower the utility demand and facility charges. Each charger is to have an IP address, these are to be coordinated with the schools Innovation & Technology Department. The project is broken into two phases. Phase I shall consist of four new EV chargers and associated electrical equipment. It shall include the future NV Energy secondary conduits stubbed into a N36 box for the service of the second phase. Phase II, is to be completed in Q3 2024, and consist of ten new EV chargers and associated electrical equipment.

Phase I will consist of a new Main Service-MSB 1, Distribution-CSBP, Transformer along the east side of the Transportation property/fence line on a concrete pad. Along with this, four (4) fast chargers, four (4) dispensers, and future NV Energy secondary conduits stubbed on east side of Transportation property adjacent to the fence. The Phase I Project is proposed to be constructed the summer of 2023. Phase II will consist of a new Main Service-MSB 2 and Distribution-CSBP along the east side of the Transportation property/fence line on a concrete pad. Along with this, ten (10) fast chargers and ten (10) dispensers are to be installed during the Phase II Project on the southeast corner of the Transportation property along the fence on new concrete. The Phase II Project is not scheduled/proposed, it is a future project.

Future bus charging would be on a twice daily cycle, nighttime charging would serve the morning bus run with daytime charging for the afternoon bus run. The Nuvve Chargers have a charge time of 3 hours for a complete charge and 1.5 hours for a half charge. This allows for three full cycles at night and three half cycles during the day.

DEVELOPMENT CHECKLIST

Chapter 3: A Balanced Land Use Pattern

- The project meets applicable provisions of the Growth Management Ordinance.
- The project uses no water or lighting. The EV Buses will provide a direct benefit to the air quality by reducing the vehicle emissions. The new vehicle

chargers have a management system to stagger the charger starting which will help lower the utility demand and facility charges.

- The project is not located in a priority infill development area.
- The project does not interfere with pathway connections and easements consistent with the adopted Unified Pathways Master Plan and maintain access to adjacent public lands.
- The project does not influence pathway connections or access.
- The project is not adjacent to county boundaries. Ingress/egress is not influenced by the project.
- The project meets all applicable transition standards.
- The project is not situated to affect environmentally sensitive areas.
- The project is situated outside the primary floodplain and geologic areas.
- The project does not interfere with potential or existing level of services.
- The project is not within a Specific Plan Area.

Chapter 5: Economic Vitality

- Goal 5.5- The EV Buses promotes educational resources, recreational facilities, school activities and quality of life opportunities.

Chapter 6: Livable Neighborhoods and Activity Centers

- The project uses durable products.
- The project adheres to height and setback requirements.
- The project meets all appropriate height, and setback transitions and connectivity to surrounding development to ensure compatibility with surrounding development for infill projects.
- The project is not in a MU Activity Center.
- The project is not downtown. Housing models are not applicable.

Chapter 7: A Connected City

- The EV Buses will replace older buses in the Carson City School fleet for zero emission vehicle for a healthier connected school system with the neighborhoods where the students live.
- Currently, Washoe Schools, RTC Washoe, and other Transit Districts are operating EV Buses successfully along their bus routes.
- The project does not maintain or enhance roadway connections, nor does it interfere with pathways.
- However, the EV Buses replacement will provide a direct benefit to the air quality by reducing the vehicle emissions.

SPECIAL USE PERMIT FINDINGS

NORTH: St. Paul's Lutheran Church (RO)
SOUTH: Single Family Residential (SF6) - Residential single family homes
EAST: Zoning (GC & GCSPA) - undeveloped
WEST: Apartments (RO)

1. **Will be consistent with the objectives of the Master Plan elements.**

   The CCSD Transportation Department is located on the Carson High School campus. It is zoned-Public (P) and has been fully developed on 64.42 acres. The electrical infrastructure, main electrical feed, transformer, and the chargers for the EV Buses for the Carson City School District Transportation Department will be consistent with the codes and objectives of the City Master Plan.

2. **Will not be detrimental to the use, peaceful enjoyment, economic value, or development of surrounding properties or the general neighborhood; and will cause no objectionable noise, vibrations, fumes, odors, dust, glare or physical activity.**

   The infrastructure project will provide electrical service to four (4) EV Buses for the Carson City School District Fleet. While replacing four (4) old diesel powered buses and getting them off the Carson City roadways. The EV Buses will provide a direct benefit to the air quality by reducing the vehicle emissions. The new vehicle chargers have a management system to stagger the charger starting which will help lower the utility demand and facility charges. The EV buses are eco-friendly, operate quietly, and no fumes.

   The actual infrastructure will not be detrimental to the use and enjoyment of surrounding properties in all directions because they are already developed or in public use.

3. **Will have little or no detrimental effect on vehicle or pedestrian traffic.**

   No additional vehicle or pedestrian traffic will be impacted due to additional infrastructure for EV Buses. Once the EV Buses are on line for CCSD Transportation, the number of buses running routes for the school district will remain the same. No new routes or increase to traffic will be noticed. No additional traffic controls are needed because of the project. Existing setbacks will be adhered to in order to prevent interference with driver visibility. Electrical Vehicle Charging Stations are used throughout Carson City with no known detriment to motorist or pedestrians.

4. **Will not overburden existing public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage, and other public improvements.**

The infrastructure project will provide electrical service to four (4) EV Buses for the Carson City School District fleet. While replacing four (4) old diesel powered buses and getting them off the Carson City roadways. The EV Buses will provide a direct benefit to the air quality by reducing the vehicle emissions. The new vehicle chargers have a management system to stagger the charger starting which will help lower the utility demand and facility charges. The EV buses are eco-friendly, operate quietly, and no fumes. This project will not cause any additional burden on the Police and Fire Departments. There will be not impact to water or sewer services due to the implementation of the infrastructure. No new paving is being added to the project, and the drainage at the transportation department is met. Robinson Street where the transportation department is located has been developed and built out. No improvements are needed.

5. **Meets the definition of specific standards set forth elsewhere in Carson City Municipal Code, Title 18 for such particular use and meets the purpose state of that district.**

   Carson High School is zoned-Public (P) 18.04.170. The EV Buses will replace older buses in the Carson City School fleet for zero emission vehicles for a healthier connected school system with the neighborhoods and community. The EV Buses replacement will provide a direct benefit to the air quality by reducing the vehicle emissions. The EV Buses will help carry out the mission of CCSD by bringing children to and from school.

6. **Will not be detrimental to the public health, safety, convenience and welfare.**

   The project will not have any health or safety concerns for the community. The infrastructure project will provide electrical service to four (4) EV Buses for the Carson City School District fleet. While replacing four (4) old diesel powered buses and getting them off the Carson City roadways. The EV Buses will provide a direct benefit to the air quality by reducing the vehicle emissions.

7. **Will not result in material damage or prejudice to other property in the vicinity, as a result of proposed mitigation measures.**

   This project will not result in material damage or prejudice to other property in the vicinity as explained above.

To summarize, the infrastructure project will provide electrical service to four (4) EV Buses for the Carson City School District fleet. While replacing four (4) old diesel powered buses and getting them off the Carson City roadways, the EV Buses will provide a direct benefit to the air quality by reducing the vehicle emissions. The EV Buses will help carry out the mission of CCSD by bringing children to and from our great schools. Carson City School District appreciates your consideration of this request for a special use permit.

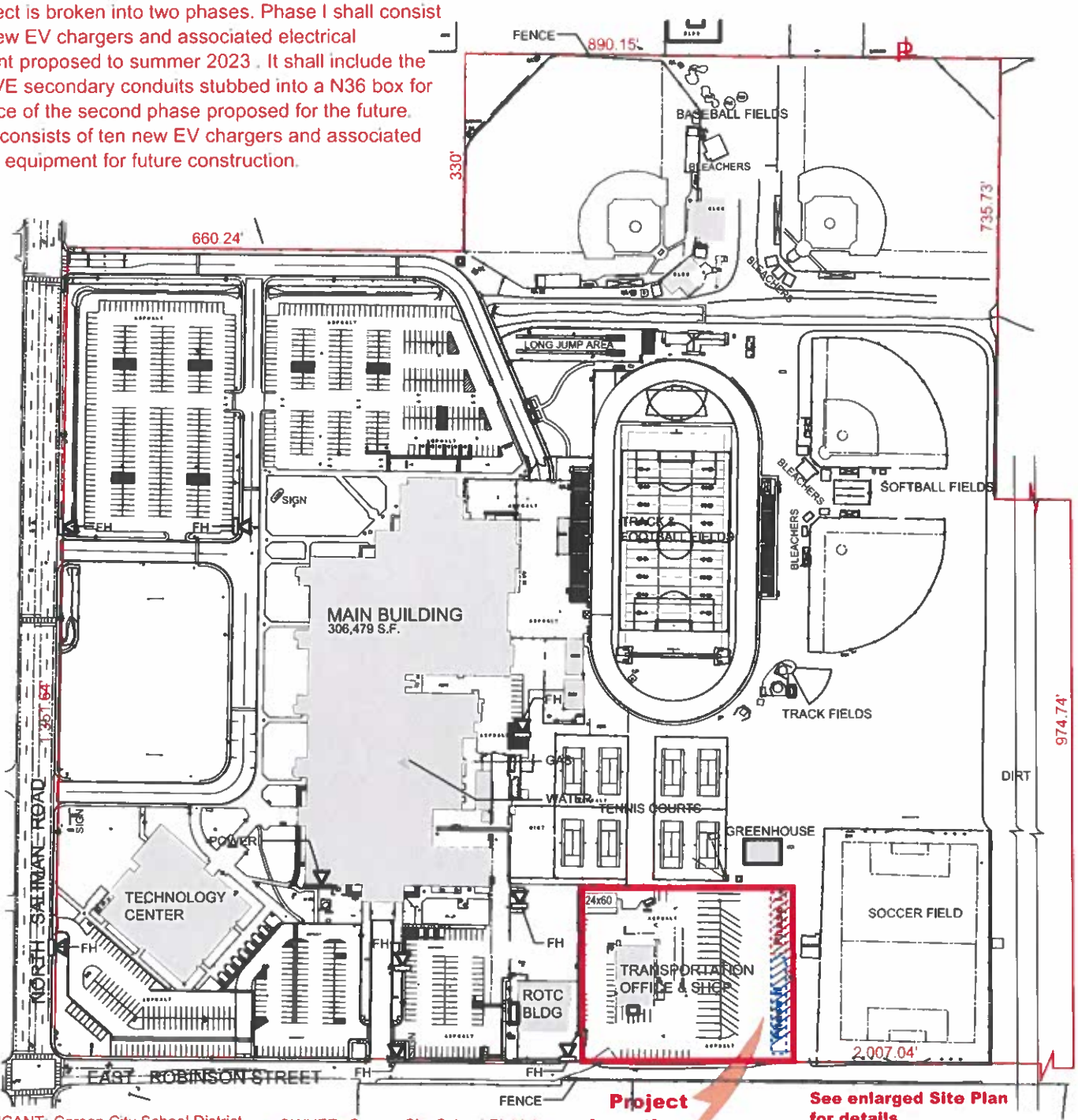
ACKNOWLEDGEMENT OF APPLICANT

I certify that the foregoing statements are true and correct to the best of my knowledge and belief. I agree to fully comply with all conditions as established by the Planning Commission. I am aware that this permit becomes null and void if the use is not initiated within one year of the date of the Planning Commission's approval; and I understand that this permit may be revoked for violation of any of the conditions of approval. I further understand that approval of this application does not exempt me from all City code requirements.

Applicant Mark M. Johnson, Capital & Special Projects Manager Date 2/9/2023

REQUEST: Approve the installation of a NV Energy primary feeder extension to a new NVE transformer and new main electrical services to be used in charging Electrical Vehicle (EV) Buses at the Carson High School Transportation Yard. A total of fourteen chargers may be used simultaneously. The project is broken into two phases. Phase I shall consist of four new EV chargers and associated electrical equipment proposed to summer 2023 . It shall include the future NVE secondary conduits stubbed into a N36 box for the service of the second phase proposed for the future. Phase II consists of ten new EV chargers and associated electrical equipment for future construction.

SITE PLAN



APPLICANT: Carson City School District
Mark Johnson, Project Manager
P.O. Box 603
Carson City,
NV 89702
775.283.2170

OWNER: Carson City School District
P.O. Box 603
Carson City, NV 89702
775.283.2181

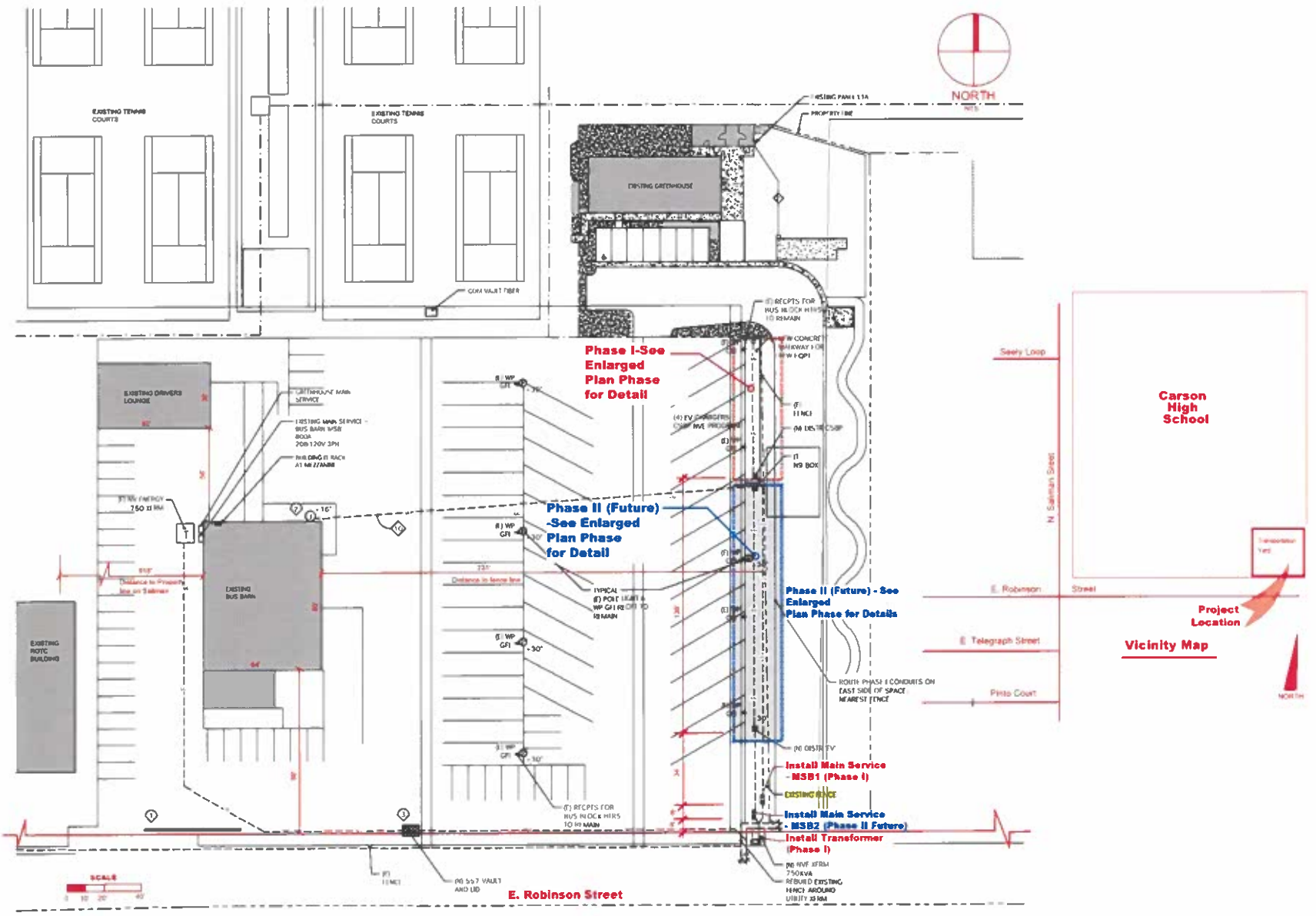
Carson City School District

Zoned-Public (P) 18.04.170 Acres: 64.42 Site Plan Prepared by: Mark Johnson

CARSON HIGH SCHOOL

Bus Electrical Vehicle (EV) Service Project

A.P.N.:	ADDRESS:	ISSUE DATE:
10-041-53	1111 NORTH SALIMAN ROAD, Carson City, NV	03.18.13



CCSD EV Bus Project

Enlarged Site Plan

Construction Design Services, inc.

Permit Set

EV - Bus Project
1111 North Saliman Rd
Transportation
CCSD #51.22.01

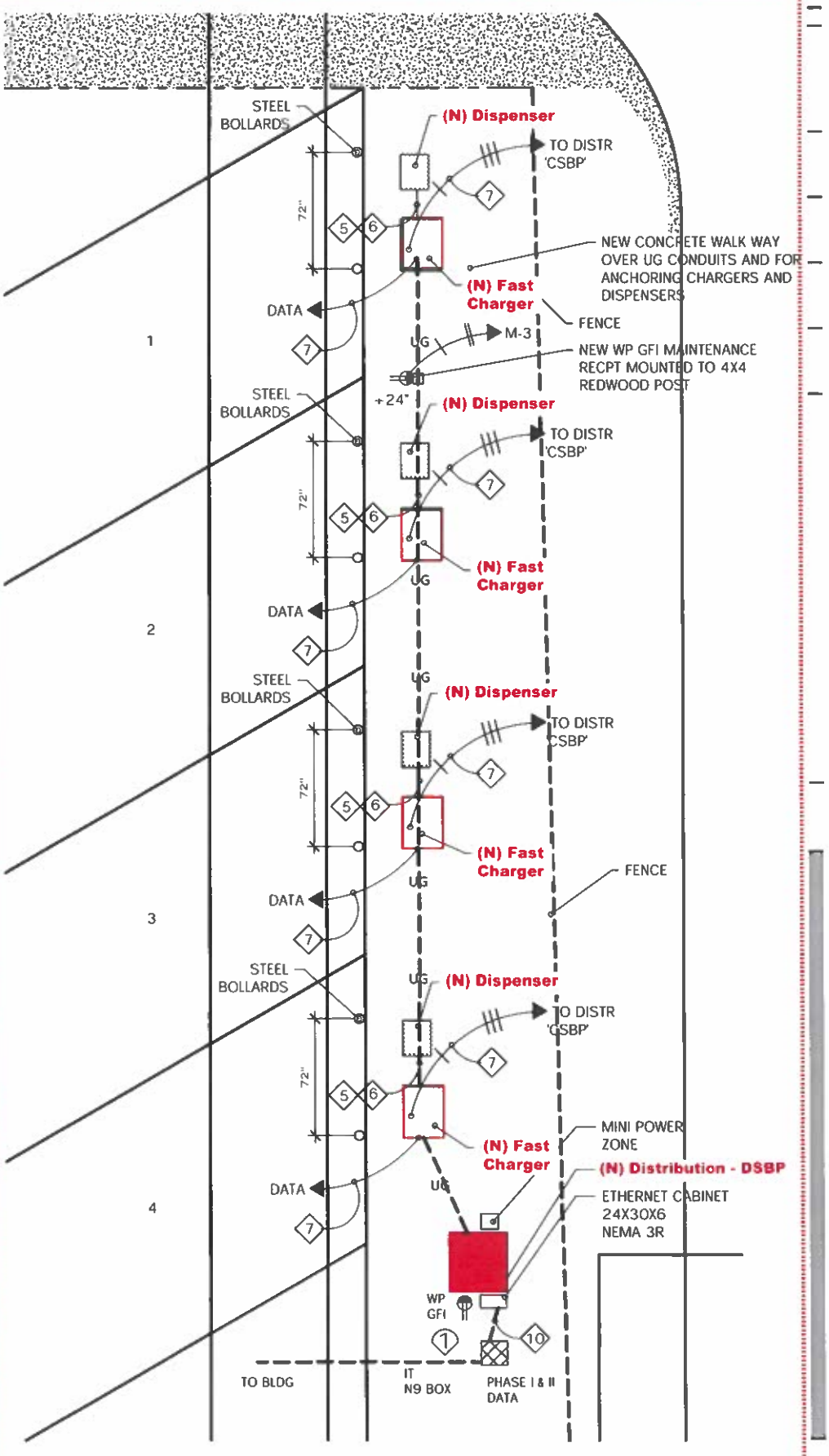
Revisions:

Date:	01/06/2023
Issued For:	Permit
Drawn By:	CRN
Checked By:	MP
Scale:	As indicated
Project No.:	19-185

Sheet Contents

Enlarged Site Plan

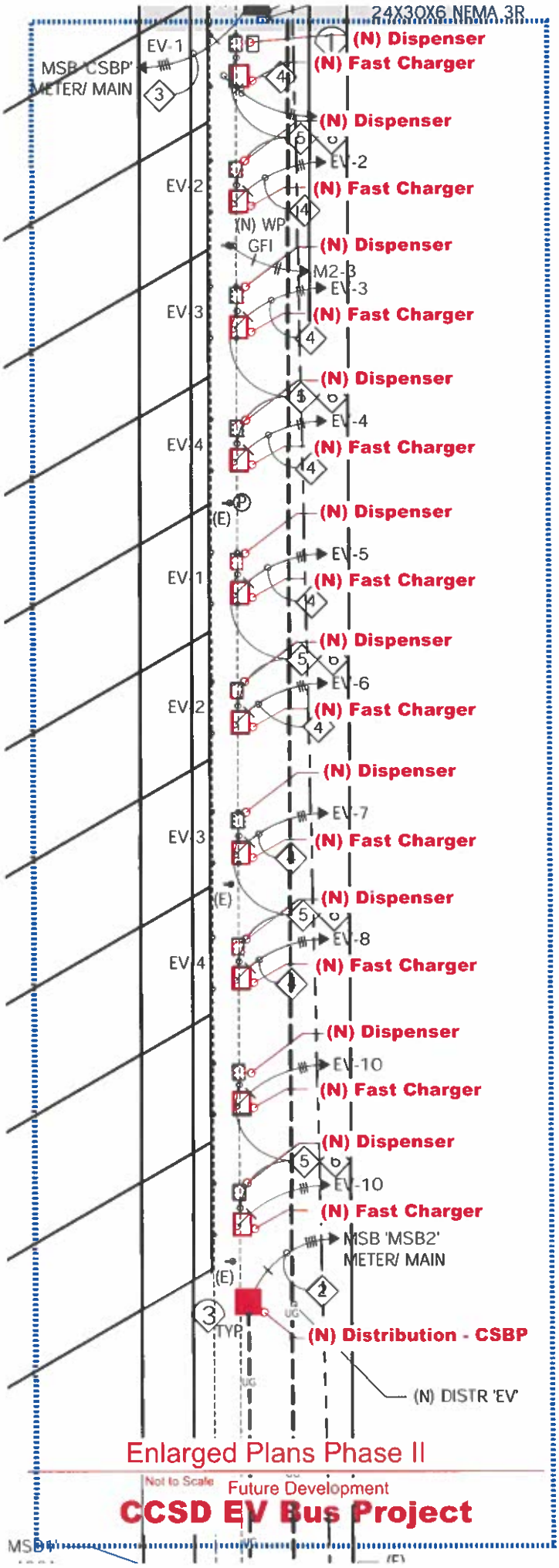
Sheet Number
E1.1.1



Enlarged Plan Phase I

Not to Scale

CCSD EV Bus Project



Enlarged Plans Phase II

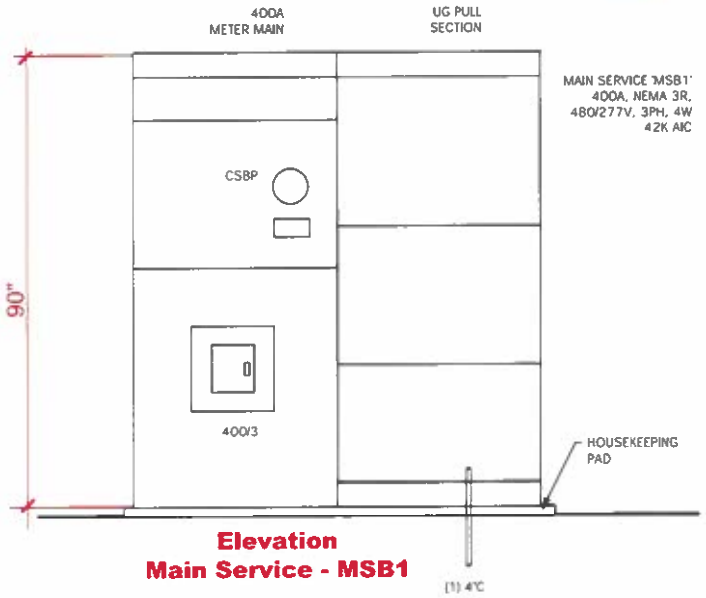
Not to Scale

Future Development

CCSD EV Bus Project

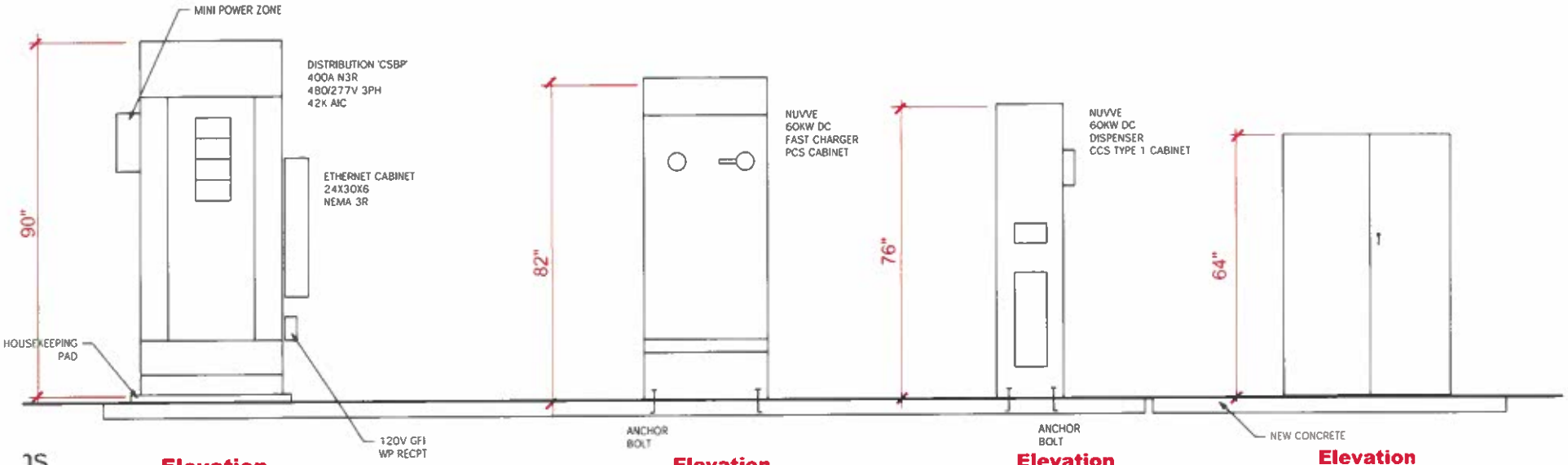
PHASE I

Proposed to Construct
Summer 2023



Elevation
Main Service - MSB1

Carson High School
Transportation Depart
1111 N. Saliman Road
Carson City, NV



Elevation
Distribution - CSBP

A new Main Service - MSB 1, Distribution - CSBP, and Transformer is to be installed during the Phase I Project along the east side of the Transportation property along the fence with a new concrete pad.

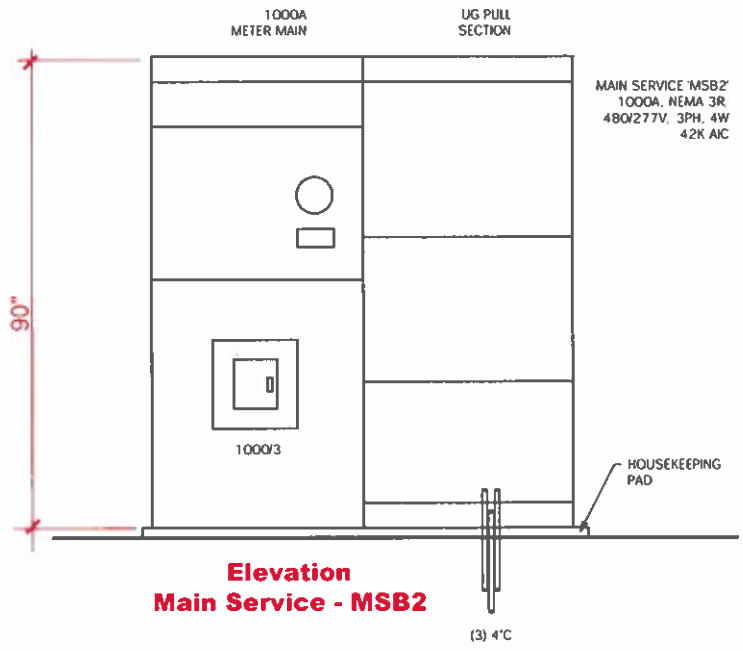
Elevation
Fast Chargers for Buses

Four (4) Fast Chargers and four (4) dispensers are to be installed during the Phase I Project on the northeast corner of the Transportation property along the fence on new concrete.

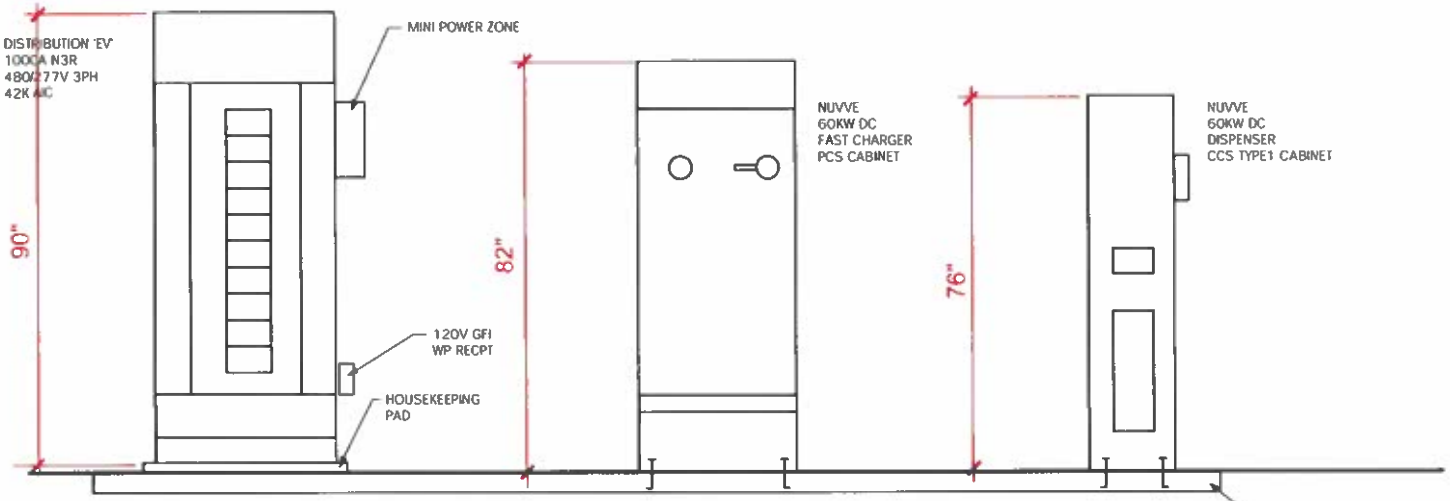
Elevation
Dispenser for Bus Chargers

Elevation
Three Phase pad mounted compartmental type transformer 750kVA

PHASE II
Future Construction



Elevation
Main Service - MSB2



Elevation
Distribution - CSBP

Elevation
Fast Chargers for Buses

Elevation
Dispenser

A new Main Service - MSB 2 and Distribution - CSBP is proposed to be installed during the Phase II Project along the east side of the Transportation property along the fence with a new concrete pad in 2025-26

Ten (10) Fast Chargers and Ten (10) dispensers are proposed to be installed during the Phase II Project 2025-26 along the east side of the Transportation property along the fence on new concrete.

NUVVE

We Make Electric Vehicles Greener

EVSE@nuvve.com
NUVVE.com

Nuvve DC Heavy Duty Charging Station

V2G | 60kW | DC CCS | Heavy-Duty

The Nuvve DC Heavy-Duty Charging Station (RES-HD60-V2G) is designed specifically for vehicle-to-grid (V2G) applications and is the ideal solution for the rapid, smart charging of heavy-duty fleet vehicles such as electric school buses. The RES-HD60-V2G is fully controllable through Nuvve's fleet management app and our V2G platform (GIVe™) enables unidirectional charging of any vehicle or full, bidirectional V2G and vehicle-to-building (V2B) services when connected to a V2G-compatible vehicle.

Key Features

- CCS1 connector (combo)
- IEEE 1547
- UL-1741 SA
- 95% efficiency

Powerful, Reliable Charging

The Nuvve DC Heavy-Duty Charging Station (RES-HD60-V2G) features a CCS connector that can charge any vehicle with combo connector and can discharge vehicles with V2G capability. It is designed to meet all utility safety standards in North America to enable interconnection of vehicles as a distributed energy resource.

Your Fleet's Charging Activity at a Glance

Nuvve's fleet management app allows you to set and schedule charge levels for each vehicle in your fleet. Instant access to view vehicle charging status and state of charge allow quick views of an entire fleet with the ability to trigger instant charging if needed.

Intelligent Grid Services

Nuvve's solution is fully scalable to fit your needs and can perform a variety of grid services including frequency regulation, demand response, demand charge management, and time-of-use rate arbitrage.

Technical Specs RES-HD60-V2G

AC Specifications (Power)	
Bidirectional Capable	Yes
Rated Power (kW/kVA)	60
Utility Grid Voltage (Vac)	480-3P
Max Rated Utility Current (Aac)	79A @ 480VAC (60 Hz)
Wiring	3 phase WYE (L1, L2, L3, Neutral, Gnd)
Utility Grid Frequency (Hz)	60
Power Factor Range	+/- 0.5
THD for Linear Loads	<5%
Maximum Efficiency	>95%
Grid Isolation	Galvanic, Integrated
DC Output	
Maximum Power (kW)	60
Voltage Operating Range (Vdc)	270 to 870
Maximum Current (Adc)	+/- 200A (charging cable limited)
Connector and Cable	CCS1, up to 8m (25 ft)
Energy Metering	
AC Energy Meter (Option)	+/- 1% from 10% to full scale
Mechanical	
PCS Dimensions	31.5"W x 24.5"D x 82"H
PCS Weight	1600 lbs
Dispenser Dimensions	22"W x 17"D x 75"H
Dispenser Weight	150 lbs (configuration dependent)
Environmental	
Cooling	Air cooled
Environmental Rating	NEMA 3R
Operating Ambient Temp.	20°C to 45°C (-4 to 113°F)
Storage Temperature Range	-30°C to 60°C (-22 to 140°F)
Humidity	0 to 95% (non-condensing)
Altitude	De-rated over 2,000 m above sea level
Communication & Control	
Network Interface	Standard Ethernet (Optional: WiFi, 3G, 4G, LTE)
Certification, Safety, Compliance	
Certifications	UL1741-SA, UL 2202, IEEE 1547.1 & CSA C22.2 No. 107.1-16

Charging Station

Dispenser

Three-phase pad-mounted compartmental type transformer

General

At Eaton, we are constantly striving to introduce new innovations to the transformer industry, bringing you the highest quality, most reliable transformers. Eaton's Cooper Power series Transformer Products are ISO 9001 compliant, emphasizing process improvement in all phases of design, manufacture, and testing. In order to drive this innovation, we have invested both time and money in the Thomas A. Edison Technical Center, our premier research facility in Franksville, Wisconsin. Such revolutionary products as distribution-class UltraSIL™ Polymer-Housed Evolution™ surge arresters and Envirotemp™ FR3™ fluid have been developed at our Franksville lab.

With transformer sizes ranging from 45 kVA to 12 MVA and high voltages ranging from 2400 V to 46 kV, Eaton has you covered. From fabrication of the tanks and cabinets to winding of the cores and coils, to production of arresters, switches, tap changers, expulsion fuses, current limit fuses, bushings (live and dead) and molded rubber goods, Eaton does it all. Eaton's Cooper Power series transformers are available with electrical grade mineral oil or Envirotemp™ FR3™ fluid, a less-flammable and bio-degradable fluid. Electrical codes recognize the advantages of using Envirotemp™ FR3™ fluid both indoors and outdoors for fire sensitive applications. The bio-based fluid meets Occupational Safety and Health Administration (OSHA) and Section 450.23 NEC Requirements.

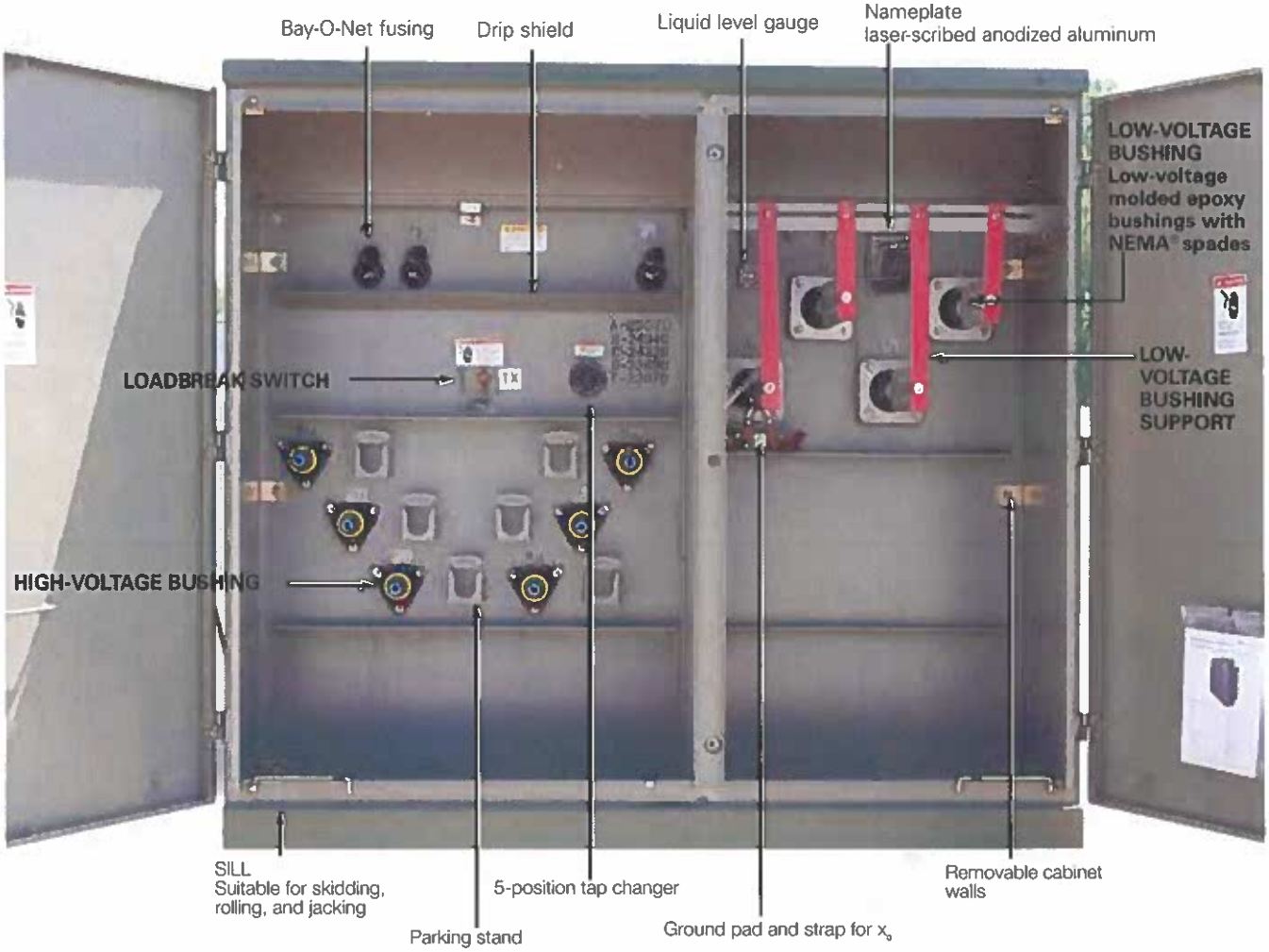


Figure 1. Three-phase pad-mounted compartmental type transformer.

Table 1. Product Scope

Type	Three Phase, 50 or 60 Hz, 65 °C Rise (55 °C, 55/65 °C), 65/75 °C, 75 °C
Fluid Type	Mineral oil or Envirotemp™ FR3™ fluid
Coil Configuration	2-winding or 4-winding or 3-winding (Low-High-Low), 3-winding (Low-Low-High)
Size	45 – 10,000 kVA
Primary Voltage	2,400 – 46,000 V
Secondary Voltage	208Y/120 V to 14,400 V
Specialty Designs	Inverter/Rectifier Bridge
	K-Factor (up to K-19)
	Vacuum Fault Interrupter (VFI)
	UL® Listed & Labeled and Classified
	Factory Mutual (FM) Approved®
	Solar/Wind Designs
	Differential Protection
	Seismic Applications (including OSHPD)
	Hardened Data Center

Taxes paid to date

February 8, 2023

Carson City School District is Exempt from local taxes.