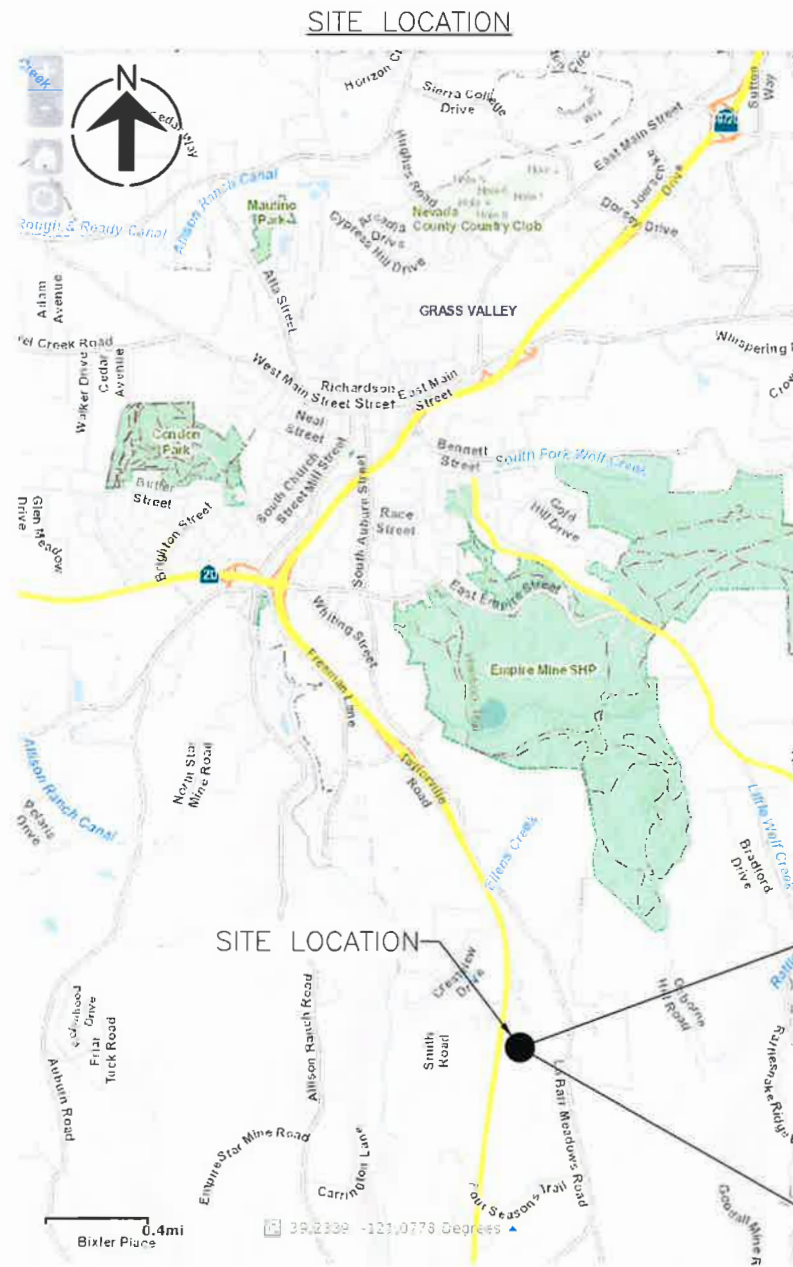


Attachment 5

NEVADA COUNTY DEPARTMENT OF PUBLIC WORKS
 CIVIL ENGINEERING PLANS FOR THE CONSTRUCTION OF
ELECTRIC BUS CHARGING PROJECT NCOC PHASE-1
 NEVADA COUNTY OPERATIONS CENTER (NCOC)
 12350 LA BARR MEADOWS ROAD, GRASS VALLEY, CALIFORNIA
 COUNTY PROJECT NO. 889830

FUNDED BY:
 CALIFORNIA AIR RESOURCES BOARD (CARB) GRANT NO. G20-NS-001
 A SUB GRANT OF U.S. ENVIRONMENTAL PROTECTION AGENCY 2019 AND 2020 TARGETED AIR SHED GRANT PROGRAM #TA98T15301-0 WITH CARB



SHEET INDEX

SHEET	TITLE
C001	TITLE SHEET
C002	GENERAL NOTES
C101	EXISTING CONDITIONS
C102	SITE PLAN
C501	DETAILS 1
C502	DETAILS 2

(ELECTRICAL PLANS)
 E0.01 COVER SHEET
 E0.01 SYMBOLS, ONE-LINE, SCHEDULES & NOTES
 E1.01 OVERALL SITE PLAN
 E1.02 ENLARGED PLAN
 E2.01 DETAILS

NOTICE TO CONTRACTOR
 48 HOURS NOTICE REQUIRED PRIOR TO COMMENCING WORK
 BEFORE COMMENCING WORK, ALL REQUIRED PLANS, SCHEDULES, PROGRAMS AND OTHER SUBMITTALS MUST BE SUBMITTED AND APPROVED IN ACCORDANCE WITH THE CALTRANS STANDARD SPECIFICATIONS DATED 2018, THE CONTRACT DOCUMENTS AND SPECIAL PROVISIONS. BEFORE COMMENCING WORK THE CONTRACTOR SHALL NOTIFY THE NEVADA COUNTY DEPARTMENT OF PUBLIC WORKS 48 HOURS IN ADVANCE OF THE TIME OF COMMENCEMENT.

PROJECT CONTACTS

AGENCY	CONTACT	PHONE	EMAIL
OWNER NEVADA COUNTY CONNECTS + NEVADA COUNTY NOW	ROBIN VAN VALKENBURGH	530-470-2833	robin.vanvalkenburgh@nevadacountyca.gov
CIVIL ENGINEER/OWNER NEVADA COUNTY	RICHARD POOLE (PROJECT MANAGER)	530-913-1028	richard.poole@nevadacountyca.gov
ELECTRICAL ENGINEER THE ENGINEERING ENTERPRISE	SCOTT WHEELER	530-305-4717	scott@engent.com
CHARGING EQUIPMENT VENDOR CHARGEPOINT	MARIA BROWN	478-397-6003	maria.brown@chargepoint.com
UTILITIES PG&E	LEE WELLS	530-320-3908	LPW3@pge.com
AT&T	LEE NIETO	916-505-7308	ln1985@att.com
NEVADA IRRIGATION DISTRICT (NID)	CAMERON PRICE	530-273-6185 EXT.204	pricec@nidwater.com

SITE PLAN NTS



Patrick Perkins 5/24/23
 Patrick Perkins PE 52684
 Principal Civil Engineer, Department of Public Works
 Date

Heba El-Guindy 5/24/23
 Heba El-Guindy
 Director, Department of Public Works
 Date

Chair, Board of Supervisors _____ Date _____

Revisions		
No.	Description	Date



Electric Bus Charging Project
 NCOC Phase-1
TITLE SHEET
 Nevada County – Department of Public Works



Date:	
Designed:	RP SW
Drawn:	RP
Checked:	SW PP
Job No:	889830
Date:	May 24, 2023
Scale Reference	1in
Drawing	C001

GENERAL NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
- AT THE TIME THE CONTRACT IS AWARDED, THE CONTRACTOR SHALL POSSESS A CLASS "A" LICENSE, OR A COMBINATION OF CLASSES REQUIRED BY THE CATEGORIES AND CLASSES OF WORK INCLUDED IN THIS CONTRACT.
- THE CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE 2018 EDITION OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AND STANDARD PLANS, INCLUDING REVISED STANDARD PLANS AND SPECIFICATIONS, AND APPLICABLE NEVADA COUNTY STANDARD DRAWINGS. IN CASE OF CONFLICT, REFER TO THE PROJECT SPECIAL PROVISIONS FOR ORDER OF PRECEDENCE.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER.
- THE COUNTY SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY WORK BEING PERFORMED.
- THE COST OF CORRECTIVE WORK REQUIRED FOR COMPLETION AND/OR ACCEPTANCE OF THE WORK NECESSITATED BECAUSE OF UNSATISFACTORY WORKMANSHIP OR MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS.
- CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THIS REQUIREMENT SHALL NOT BE LIMITED TO NORMAL WORKING HOURS.
- THE COUNTY MAY REQUIRE THE CONTRACTOR TO UNCOVER ANY IMPROVEMENTS THAT HAVE BEEN COMPLETED WITHOUT PROPER COUNTY INSPECTION AND/OR APPROVAL. IF THE INSTALLATION IS FOUND NOT TO MEET COUNTY STANDARDS OR PREVIOUSLY APPROVED ALTERNATIVES SHOWN ON THE PLANS, THE CONTRACTOR SHALL REMOVE AND REPLACE SUCH IMPROVEMENTS AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL DEVELOP A WATER POLLUTION CONTROL PROGRAM AND ENSURE IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. ALL PERSONNEL SHALL BE TRAINED IN THE CONDITIONS OF THE PLAN AND SHALL BE FULLY KNOWLEDGEABLE OF THE REPORTING REQUIREMENTS AND PROCEDURES.
- NO CONSTRUCTION SHALL BE PERFORMED WITHOUT A COUNTY APPROVED EROSION AND SEDIMENT CONTROL PLAN TO PREVENT SOIL EROSION. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH APPROPRIATE GUIDELINES, SUCH AS THE CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA) CONSTRUCTION BMP HANDBOOK. APPLICANT AND/OR CONTRACTOR SHALL SECURE ANY NECESSARY STATE OF CALIFORNIA COVERAGE AS NEEDED UNDER THE STATE'S CONSTRUCTION GENERAL PERMIT FOR STORM WATER DISCHARGES UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES).
- INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF ANY EROSION OR SILTATION ENTERING THE STORM DRAIN SYSTEM, NATURAL DRAINAGE COURSES AND/OR INTRUDING UPON ADJACENT ROADWAYS AND PROPERTIES. THIS RESPONSIBILITY SHALL APPLY THROUGHOUT THE COURSE OF CONSTRUCTION AND UNTIL ALL DISTURBED AREAS HAVE BECOME STABILIZED AND SHALL NOT BE LIMITED TO WET WEATHER PERIODS.
- THE COST OF PROTECTION AND/OR REPAIR OF THE CONTRACTOR'S WORK AS AFFECTED BY STORM WATERS DURING INCLEMENT WEATHER SHALL BE THE CONTRACTOR'S RESPONSIBILITY UNTIL THE IMPROVEMENTS HAVE BEEN ACCEPTED BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ADJACENT PROPERTIES OR IMPROVEMENTS AS A RESULT OF NOT PROTECTING SUCH AREAS FROM STORM WATERS FLOWING OUT OF THE WORK AREA.
- THE DATA FOR THE EXISTING UTILITIES AND IMPROVEMENTS ARE APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATIONS FOR THE EXISTING FACILITIES AND FOR THE PROTECTION AND REPAIR OF DAMAGE TO THEM CAUSED BY THE CONTRACTOR'S OPERATIONS. NEVADA COUNTY HAS MADE EVERY EFFORT TO SHOW LOCATIONS OF ANY AND ALL EXISTING SURFACE AND SUBSURFACE FACILITIES. HOWEVER, ACTUAL FIELD CONDITIONS AND LOCATIONS CAN VARY CONSIDERABLY FROM PLAN LOCATION. THEREFORE, NEVADA COUNTY CANNOT, AND DOES NOT, ASSUME RESPONSIBILITY FOR THE EXISTENCE OR LOCATION OF ANY FACILITIES SUCH AS, BUT NOT LIMITED TO, UTILITIES, PIPELINES AND SEWER. THE CONTRACTOR IS RESPONSIBLE FOR ACCURATELY LOCATING UTILITIES.
- ANY EXISTING UTILITY STRUCTURE, INCLUDING BUT NOT LIMITED TO VALVE BOXES, SEWER AND STORM MANHOLES AND INLETS, ELECTRICAL, WATER, GAS, AND TELEPHONE BOXES AND VAULTS OCCURRING IN THE LOCATION OF PROPOSED IMPROVEMENTS SHALL BE PROTECTED.

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR POTHOLING EXISTING UTILITIES AS REQUIRED PRIOR TO CONSTRUCTION OF ANY UNDERGROUND WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ANY NECESSARY UTILITY RELOCATIONS.
- THE CONTRACTOR SHALL MAINTAIN ADEQUATE DUST CONTROL PER SECTION 10-5 OF THE CALTRANS STANDARD SPECIFICATIONS.
- TRUCKS HAULING DIRT AND DEBRIS SHALL BE COVERED TO REDUCE WIND BLOWN DUST AND SPILLS.
- IF ANY ARCHAEOLOGICAL ARTIFACTS, EXOTIC ROCK (NON-NATIVE), OR UNUSUAL AMOUNTS OF SHELL OR BONE ARE UNCOVERED DURING ANY ON-SITE CONSTRUCTION ACTIVITIES, ALL WORK MUST STOP IMMEDIATELY IN THE AREA. ENGINEER SHALL BE NOTIFIED, AND A QUALIFIED ARCHAEOLOGIST RETAINED TO EVALUATE THE DEPOSIT. IF THE DISCOVERY CONSISTS OF HUMAN REMAINS, ENGINEER SHALL BE NOTIFIED AND THE NEVADA COUNTY CORONER AND NATIVE AMERICAN HERITAGE COMMISSION MUST ALSO BE CONTACTED. WORK IN THE AREA MAY ONLY PROCEED AFTER AUTHORIZATION IS GRANTED BY THE COUNTY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AS-BUILT DRAWINGS THROUGHOUT THE COURSE OF CONSTRUCTION. SUCH DRAWINGS SHALL RECORD THE LOCATION AND DETAILS OF ALL IMPROVEMENTS CONSTRUCTED AND SHALL BE SUBMITTED TO THE CONSTRUCTION INSPECTOR PRIOR TO, AND IN CONSIDERATION OF THE OWNER'S ACCEPTANCE OF THE WORK.
- THE CONTRACTOR SHALL ACCURATELY RECORD ALL LOCATIONS AND ELEVATIONS OF ALL ANGLE POINTS AND FITTINGS OF NEW UTILITIES, AND ABANDONED LINES.
- THE CONTRACTOR SHALL SECURE A TRENCH PERMIT FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO EXCAVATION OF ANY TRENCH OVER FIVE FEET IN DEPTH.
- PRIOR TO THE CONCLUSION OF THE WORK, THE CONTRACTOR SHALL REPAIR OR REPLACE IN KIND ALL DAMAGED PROPERTY FOR WHICH HE IS RESPONSIBLE (INCLUDING UTILITIES, DRAINAGE, CULVERTS, FENCING, CURB, GUTTER AND SIDEWALK). THE WORK SITE AND ADJACENT AREAS SHALL BE CLEANED UP. THIS REPAIR AND REPLACEMENT, AND CLEAN UP WORK SHALL BE SUBJECT TO THE APPROVAL AND ACCEPTANCE OF THE OWNER.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK AND FOR PROVIDING PROPER AND SAFE ROUTING OF THE VEHICULAR AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO WORKING HOURS. THE USE OF FLAGGERS, BARRICADES AND CONSTRUCTION SIGNING SHALL COMPLY WITH THE CURRENT EDITION OF WORK AREA AND TRAFFIC CONTROL HANDBOOK (W.A.T.C.H.) AND THE CALIFORNIA MUTCD.
- PUBLIC SAFETY AND TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH COUNTY REQUIREMENTS. SAFE VEHICULAR AND PEDESTRIAN ACCESS SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED BY THE CONTRACTOR AT LEAST 10 DAYS PRIOR TO COMMENCEMENT OF ANY WORK.
- THE DEPARTMENT OF PUBLIC WORKS (DPW) SHALL HAVE FIRST RIGHT OF REFUSAL FOR AC GRINDINGS AND/OR REUSABLE AB MATERIAL THAT IS REMOVED. CONTRACTOR SHALL NOTIFY DPW ROAD MAINTENANCE DIVISION AT LEAST 24 HOURS PRIOR TO BEGINNING WORK TO DETERMINE IF DPW INTENDS TO RETAIN AC GRINDINGS AND/OR REUSABLE AB MATERIAL. IF DPW OPTS TO RETAIN ANY MATERIAL THEY WILL PROVIDE THE CONTRACTOR WITH A LOCAL SITE FOR THE CONTRACTOR TO DEPOSIT, AT CONTRACTOR'S EXPENSE, THE REUSABLE MATERIALS FOR THE BENEFIT OF DPW. IF DPW OPTS TO NOT RETAIN ANY MATERIAL THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR FINAL MATERIAL DISPOSAL.
- THE CONTRACTOR MUST PROVIDE TEMPORARY TRAFFIC STRIPING IF EXISTING DELINEATION IS DESTROYED DURING TRENCHING OR OTHER WORK. PAINTED MARKINGS OR STRIPING TAPE MAY BE USED. THE TEMPORARY STRIPING MUST BE APPROVED FOR MATERIAL AND LAYOUT BY THE COUNTY BEFORE TRENCHING OR OTHER WORK IS STARTED. THE CONTRACTOR, AT ITS EXPENSE, SHALL SANDBLAST ALL TEMPORARY PAINTED MARKINGS THAT ARE TO BE REMOVED.
- ALL TRAFFIC STRIPES, ARROWS, AND PAVEMENT MARKINGS SHALL BE REPLACED IN-KIND WITH LIKE MATERIALS (PAINT OR THERMOPLASTIC) TO THE SPECIFICATIONS SET FORTH IN CHAPTER 3 OF THE CALIFORNIA MUTCD LATEST EDITION.
- THE CONTRACTOR IS RESPONSIBLE FOR PRESERVATION AND PROTECTION OF EXISTING SURVEY AND PROPERTY CORNER MONUMENTS THAT EXIST AT THE TIME OF CONSTRUCTION IN THE AREA WHERE CONSTRUCTION ACTIVITIES OCCUR. MONUMENTS DISTURBED, OR LOST, DUE TO CONSTRUCTION ACTIVITIES WILL REQUIRE THAT THE CONTRACTOR HAVE THEM REPLACED, IN KIND, BY A LICENSED CALIFORNIA LAND SURVEYOR, WHO WILL BE REQUIRED TO FILE WITH THE COUNTY EITHER A CORNER RECORD OR A RECORD OF SURVEY, WHICHEVER

WILL MEET THE REQUIREMENTS OF THE LAND SURVEYOR'S ACT, SECTION 8771(B) AND (C).


- CONTRACTOR SHALL COMPLY WITH BUSINESS AND PROFESSIONS CODE SECTION 8771(B) REGARDING REFERENCING, PRESERVING AND RECONSTRUCTING MONUMENTS, WHETHER OR NOT MONUMENTS ARE SHOWN IN THESE PLANS.
- CONTRACTOR SHALL PROTECT ALL EXISTING FACILITIES AND SHALL RESTORE ANY DAMAGED FACILITIES TO EXISTING CONDITION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING/REINSTATING THE EXISTING IRRIGATION SYSTEM IF THIS IS NEEDED IN ORDER TO ACCOMPLISH THE WORK. THE REINSTATED IRRIGATION SYSTEM SHALL BE COMPLETED AND TESTED BY THE CONTRACTOR AND SHALL BE SUBJECT TO THE APPROVAL AND ACCEPTANCE OF THE OWNER.
- THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR JOB SITE SECURITY OF THEIR VEHICLES, EQUIPMENT, TOOLS, MATERIALS, PERSONAL BELONGINGS, ETC. THE OWNER OR ITS AGENT SHALL NOT BE RESPONSIBLE FOR LOSS OR DAMAGE TO THESE ITEMS OR ANY OTHER ITEMS OWNED BY CONTRACTOR, EMPLOYEES OR SUBCONTRACTORS.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL CONSTRUCTION SURVEYING AND STAKING THAT MAY BE REQUIRED FOR CONSTRUCTION ACTIVITIES, INCLUDING, BUT NOT LIMITED TO, SETTING ANY ELEVATIONS AS REQUIRED.
- CONTRACTOR SHALL LIMIT STORAGE AND STAGING TO AREA INDICATED ON PLANS. STORAGE OR STAGING WITHIN OTHER AREAS OF THE NEVADA COUNTY OPERATIONS CENTER MUST BE APPROVED BY THE OWNER AND ENGINEER A MINIMUM OF 24 HOURS IN ADVANCE.

ABBREVIATIONS

- | | |
|--------|--------------------------------------|
| (E) | EXISTING |
| (N) | NEW |
| (F) | FUTURE |
| AB | AGGREGATE BASE |
| C | CONDUIT |
| CB | CIRCUIT BREAKER |
| CLSM | CONTROLLED LOW-STRENGTH MATERIAL |
| EQUIP. | EQUIPMENT |
| EVCS | ELECTRIC VEHICLE CHARGING SYSTEM |
| F&I | FURNISH AND INSTALL |
| INFO | INFORMATION |
| MIN | MINIMUM |
| MSB | MAIN SWITCH BOARD |
| NCOC | NEVADA COUNTY OPERATIONS CENTER |
| OFCI | OWNER FURNISHED CONTRACTOR INSTALLED |
| PB | PULL BOX |
| TYP | TYPICAL |


FOR ADDITIONAL ABBREVIATIONS, SEE CALTRANS STANDARD PLANS A3A, A3B & A3C.

Revisions				
Date	By	Description	No.	



Electric Bus Charging Project
NCOC Phase-1
GENERAL NOTES

Nevada County – Department of Public Works



Date: _____

Designed: RP SW

Drawn: RP

Checked: SW PP

Job No: 889830

Date: May 24, 2023

Scale Reference
0 _____ 1in

Drawing
C002



SCALE 1" = 20'

LEGEND

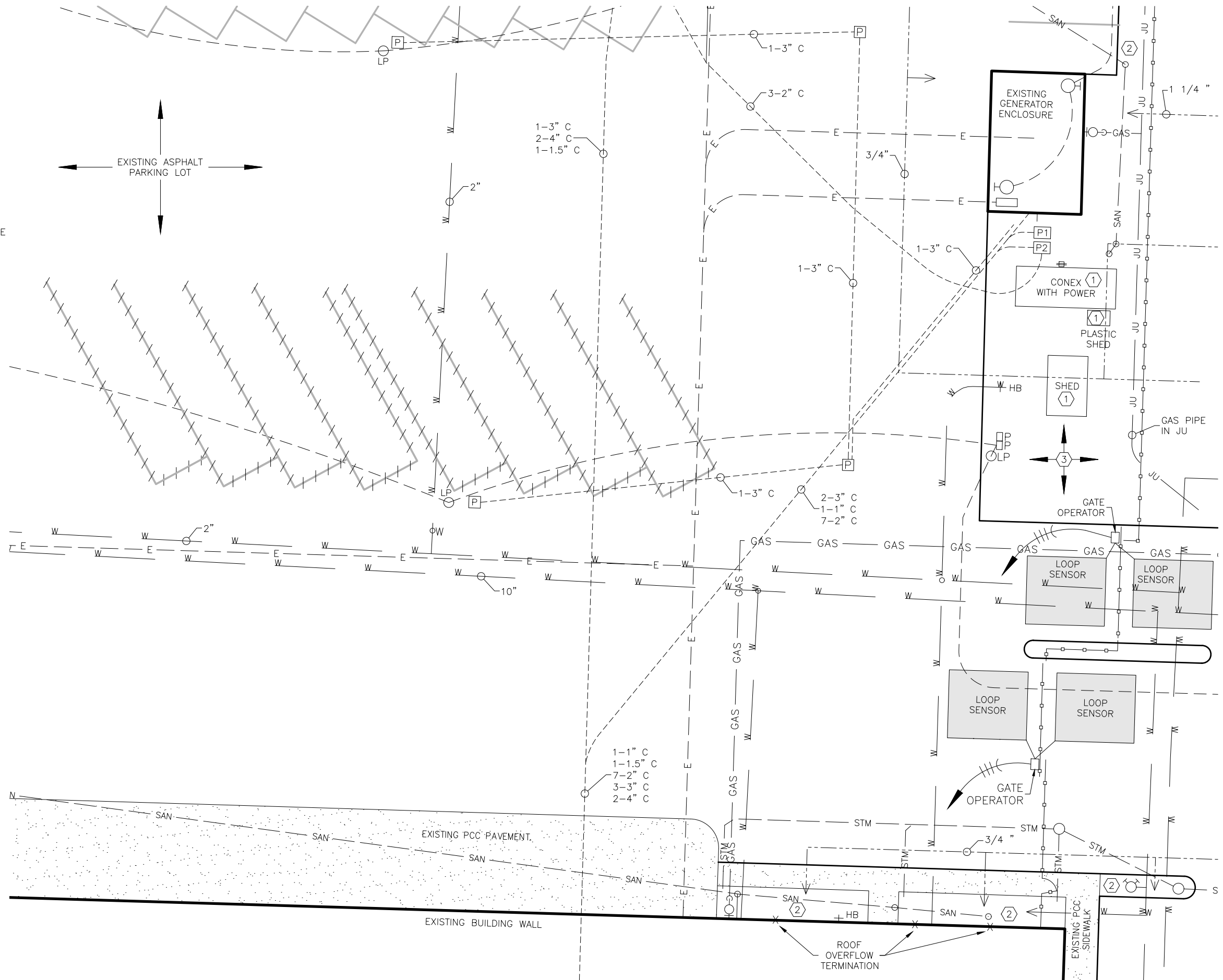
- PULL BOX
- 24" LIGHT POLE BASE
- HOSE BIBB
- CONDUIT
- GAS PRESSURE REGULATOR
- WALL MOUNTED LUMINAIRE
- BRANCH CIRCUIT FOR 208V 3-PHASE 2HP GATE OPERATOR/CONTROLLER AND LOOP SENSOR HOME RUNS TO PANEL - PATH NOT KNOWN
- HYDRANT

EXISTING FACILITY LINETYPES

- SAN ——— SANITARY SEWER
- STM ——— STORMWATER SEWER
- GAS ——— GAS
- W ——— WATER
- E ——— ELECTRICAL
- JU ——— JOINT TRENCH
- CONDUIT
- LIGHTING CIRCUIT EXACT PATH NOT KNOWN
- IRRIGATION
- FENCE/GATE
- PARKING STRIPE
- PARKING STRIPE TO BE REMOVED

NUMBERED NOTES

- ① TO BE RELOCATED BY COUNTY
- ② PLANTED AREAS HAVE IRRIGATION EMITTERS AT TREES AND SHRUBS FED BY BLACK POLY TUBING. PROTECT IN PLACE OR RELOCATE AND REINSTATE AS NEEDED. SEE GENERAL NOTES.
- ③ EXISTING AGGREGATE BASE SURFACED/BARE EARTH AREA



Revisions

No.	Description	By	Date



Electric Bus Charging Project
 NCOC Phase-1
EXISTING CONDITIONS

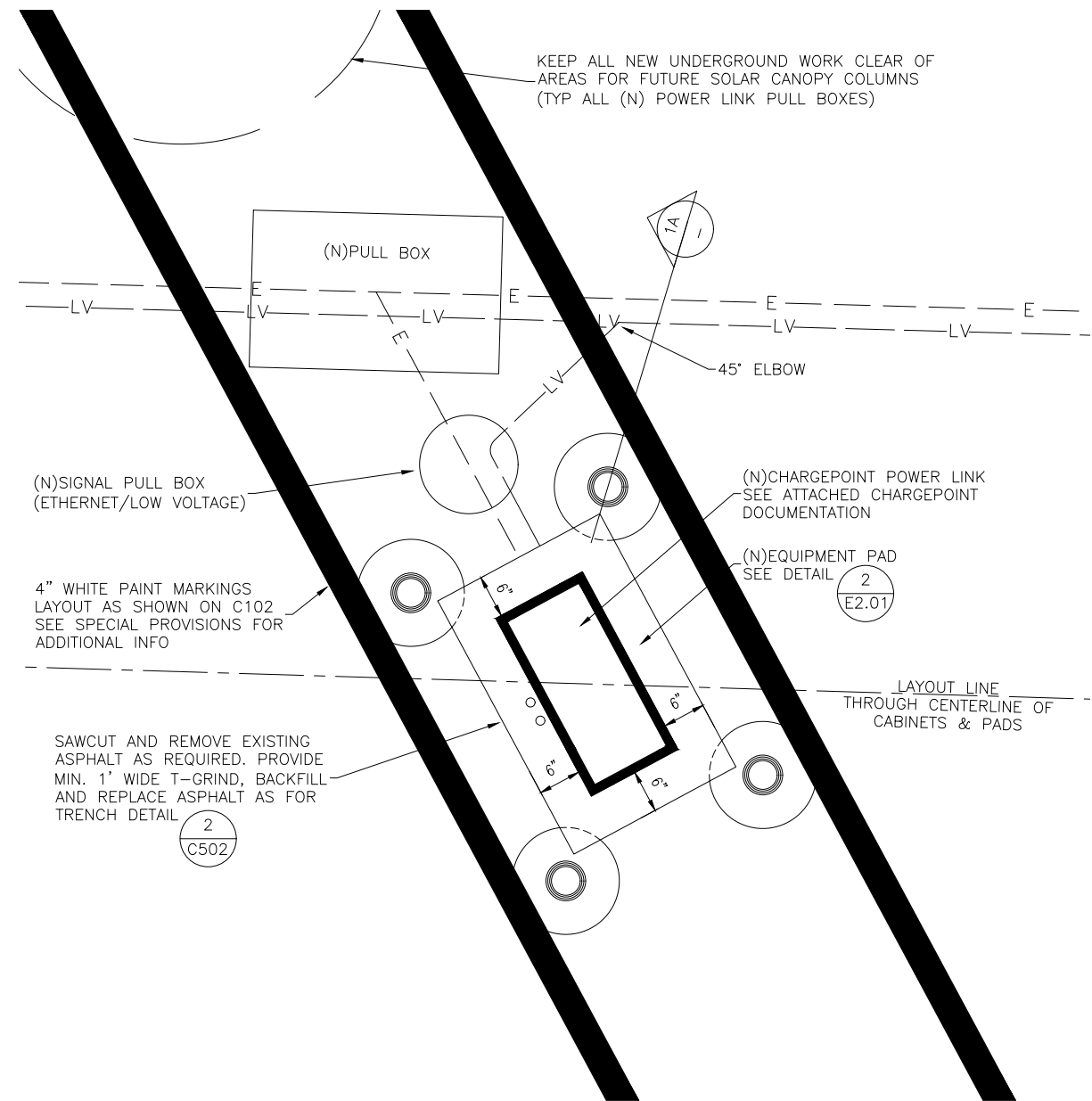
Nevada County – Department of Public Works



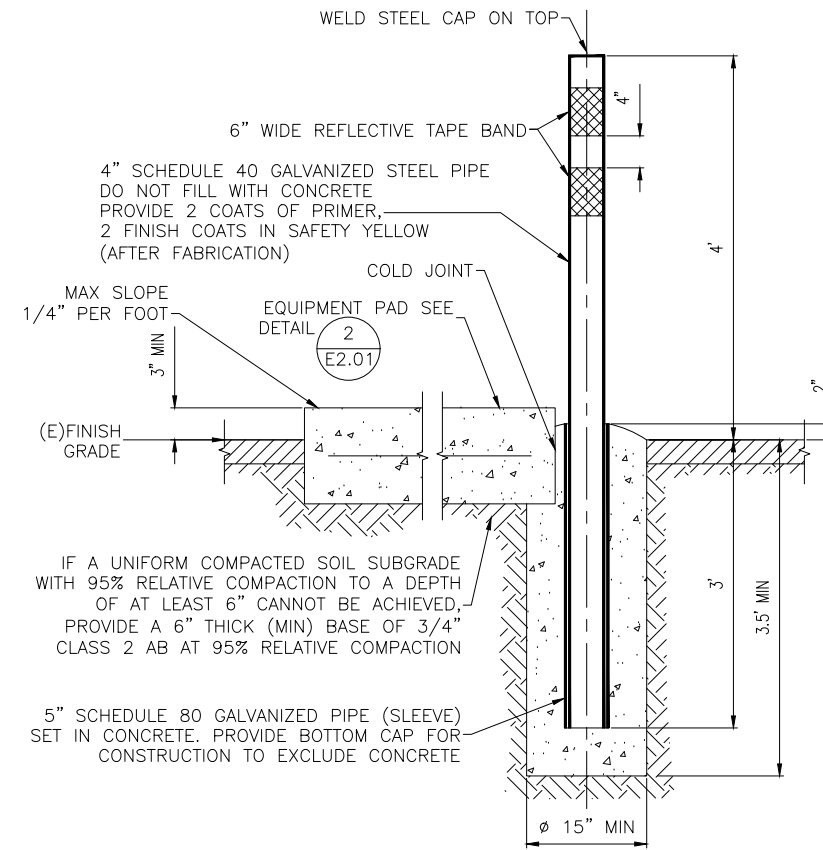
Date: _____
 Designed: RP SW
 Drawn: RP
 Checked: SW PP
 Job No: 889830
 Date: May 24, 2023

Scale Reference
 0 _____ 1in

Drawing C101



1 DETAIL - EQUIPMENT PAD WITH REMOVABLE BOLLARD
- NTS





- NOTES:
1. POST SHALL BE REMOVABLE FROM SLEEVE
 2. CONCRETE PER SECTION 90 OF THE SPECIFICATIONS
 3. CONCRETE MOUNTING TEMPLATES AND CONDUIT PENETRATIONS SHALL BE PLACED IN ACCORDANCE WITH THE ATTACHED CHARGEPOINT DOCUMENTATION:

1A SECTION - EQUIPMENT PAD WITH REMOVABLE BOLLARD
- NTS

SHEET INDEX

Revisions	
Date	By
Description	No.


 Electric Bus Charging Project
 NCOC Phase-1
DETAILS 1
 Nevada County - Department of Public Works


 Date: _____
 Designed: RP SW
 Drawn: RP
 Checked: SW PP
 Job No: 889830
 Date: May 24, 2023
 Scale Reference
 0 1in
 Drawing
C501

