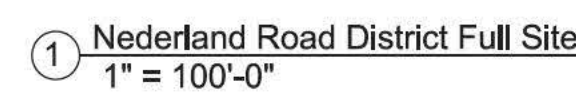


286 Ridge Rd, Nederland, CO 80466



7 CCR 1101-14

OCCUPANCY: S-1

TYPE OF CONSTRUCTION: CONCRETE FLATWORK

ZONE: F

PROJECT DATA

PROJECT ADDRESS
286 Ridge Rd, Nederland, CO 80466

PARCEL #: 158312000035

LEGAL DESCRIPTION: 25 ACS M/L IN SE 1/4 SE 1/4 12-1S-73

PROJECT DESCRIPTION:
CONSTRUCT A NEW CONCRETE PAD ADJACENT TO THE EXISTING FUEL TANK.
RELOCATE EXISTING ABOVE GROUND DUAL WALLED FUEL TANK AND PUMPS
ON TO NEW CONCRETE PAD. RELOCATE EXISTING ELECTRICAL TO SERVE
NEW TANK LOCATION. (NOTE: FUEL DISPENSERS ARE FOR FLEET VEHICLES ONLY.)

TYPICAL ABBREVIATIONS LIST OF DRAWINGS:

A.D.A.	AMERICAN DISABILITY ACT (COMPLIES WITH)	A0	INFORMATION SHEET
A.F.F.	ABOVE FINISHED FLOOR	A1	SITE PLAN ENLARGED PLAN AND FUEL TANK PAD SECTION
ARCH.	ARCHITECT		
BOT.	BOTTOM OF	S001	GENERAL NOTES PLANS AND DETAILS
BLDG.	BUILDING		
BM	BEAM	E0	SPECIFICATIONS AND LEGEND
CJ	CONTROL JOINT	E1	SITE PLAN, FLOOR PLAN AND DETAILS
CLG.	CEILING		
CONC.	CONCRETE		
CONT.	CONTINUOUS		
CONST.	CONSTRUCTION		
COORD.	COORDINATE		
DIA.	DIAMETER		
DIMS.	DIMENSION		
DS.	DOWN SPOUT		
D.O.T.	DEPARTMENT OF TRANSPORTATION		
EA.	EACH		
ELEV.	ELEVATION		
EJ	EXPANSION JOINT		
EQUIPT.	EQUIPMENT		
ETC.	ET CETERA		
EXST.	EXISTING		
EXP.	EXPOSED		

GENERAL NOTES:

- A: The contract documents include the drawings, project manual, specifications and the owner-contractor agreement. Any discrepancies found among the drawings, the specification, general notes, and the site conditions shall be reported to the architect who shall address such inconsistencies in a timely manner. Any work done by the contractor after discovery of such error shall be done at the contractor's risk. The contractor shall verify and familiarize themselves with all the drawings prior to proceeding with any work or fabrication.
- B: If there is a discrepancy between a small scale drawing and a large scale drawing, the larger scale drawing takes precedent.
- C: Notify the architect in writing as soon as any conflicts in drawings are recognized.

PROJECT DIRECTORY

ARCHITECT OF RECORD:
BOULDER COUNTY ADMINISTRATIVE SERVICES
BUILDING SERVICES DIVISION
2525 13TH STREET, BOULDER, CO 80304

GENERAL CONTRACTOR/PROJECT MANAGER:
BOULDER COUNTY ADMINISTRATIVE SERVICES
BUILDING SERVICES DIVISION
2525 13TH STREET, BOULDER, CO 80304

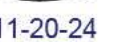
ELECTRICAL CONTRACTOR:
BOULDER COUNTY PUBLIC WORKS
BUILDING SERVICES DIVISION
2525 13TH STREET, BOULDER, CO 80304

ELECTRICAL ENGINEER:
ACKERMAN ENGINEERING, INC
16205 W 64TH AVE, SUITE B3
ARVADA, CO 80007

STRUCTURAL ENGINEER
JVA INC.
1319 SPRUCE STREET
BOULDER, CO 80302



2525 13TH STREET
BOULDER, CO 80304
PHONE 303 441 3905



BOULDER COUNTY

NEDERLAND ROAD DISTRICT GARAGE FUEL TANK RELOCATION

PROJECT
NEDERLAND ROAD DISTRICT
FUEL TANK RELOCATION

LOCATION
286 RIDGE ROAD
NEEDERLAND, CO 80466

SHEET
INFORMATION SHEET

FILE NAME
ROAD DISTRICT FUEL TANK
LOCATION.DWG

CCT: 102999
 DATE: 11-20-24
 DRAWN BY: SMJ
 CHECKED BY: SMJ

REVISIONS

REV-1	11-20-24

SHEET

A0

OF 2

DESIGN LOADS:		
1.	DESIGN LOADS: 2015 INTERNATIONAL BUILDING CODE WITH BOULDER COUNTY AMENDMENTS, ASCE 7-10	
2.	RISK CATEGORY: II STANDARD	
3.	WIND:	
A.	ULTIMATE DESIGN WIND SPEED, V_{ult} , (3-SECOND GUST)	175 MPH
B.	NOMINAL DESIGN WIND SPEED, V_{nec} , (3-SECOND GUST)	105 MPH
C.	WIND EXPOSURE	C
D.	GROUND ELEVATION FACTOR	0.74
E.	COMPONENTS AND CLADDING ULTIMATE DESIGN WIND PRESSURES 29.2 PSF	
4.	SEISMIC:	
A.	SPECTRAL RESPONSE ACCELERATION PARAMETERS	
1.	SHORT PERIOD	
a.	S_s	0.264g
b.	$S_{0.05}$	0.28g
2.	ONE SECOND	
a.	S_1	0.067g
b.	$S_{0.1}$	0.107g
B.	SOILS SITE CLASS	D
C.	SEISMIC IMPORTANCE FACTOR	1.0
D.	SEISMIC DESIGN CATEGORY	B
E.	DESIGN BASE SHEARS	111 KIPS
F.	SEISMIC RESPONSE COEFFICIENT(S) C_u	0.012
G.	RESPONSE MODIFICATION COEFFICIENT(S) R	3
H.	ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE

1. DESIGN IS BASED ON ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE."
2. CONCRETE WORK SHALL CONFORM TO ACI 301 "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE."
3. STRUCTURAL CONCRETE SHALL HAVE THE FOLLOWING PROPERTIES:

4. CONCRETE MIX TABLE NOTES:

A. SLUMP VALUES INDICATED ARE SUGGESTED BASED ON USE AND TYPICAL PLACEMENT METHODS. CONTRACTOR MAY ADJUST SLUMP AS NECESSARY FOR FIELD CONDITIONS AND INSTALLATION METHOD. USE PROVIDED REMAINING REQUIREMENTS ARE MET.

5. DETAILING, FABRICATION, AND PLACEMENT OF REINFORCING BARS IN STEEL SHALL BE IN ACCORDANCE WITH ACI 318 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT".

6. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, EXCEPT BARS SHOWN TO BE FIELD-BENT SHALL BE ASTM A706, GRADE 60.

7. BARS TO BE WELDED SHALL CONFORM TO ASTM A706.

8. UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS, LAP BARS PER THE CONCRETE LAP SPlice SCHEDULE.

9. EXCEPT AS NOTED ON THE DRAWINGS, CONCRETE PROTECTION FOR REINFORCEMENT IN CAST-IN-PLACE CONCRETE SHALL BE AS FOLLOWS:

A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"

B. EXPOSED TO EARTH OR WEATHER:

1. #5 THROUGH #18 BARS 2"

2. #9 BAR, W31 OR D31 WIRE, AND SMALLER 1-1/2"

C. NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:

1. SLABS, WALLS, JOISTS: #11 BARS AND SMALLER 3/4"

2. BEAMS AND COLUMNS:

a. PRIMARY REINFORCEMENT 1-1/2"

b. STIRRUPS, TIES, SPIRALS 1-1/2"

10. ANCHOR BOLTS AND RODS FOR BEAM AND COLUMN BEARING PLATES SHALL BE PLACED WITH SETTING TEMPLATES.

1. HOLLOW STRUCTURAL SECTION (HSS) RECTANGULAR OR ROUND SHAPES SHALL CONFORM TO ASTM A500 GRADE C, 50 KSI YELD.

1. ALL CAST-IN-PLACE ANCHORS DESIGNED IN ACCORDANCE WITH ACI 318.

2. POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPEC'ED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER OF RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS OR ANY OTHER TYPE OF ANCHOR.

3. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH EXISTING REBAR. EXISTING NG REINFORCING BARS SHALL NOT BE CUT UNLESS APPROVED BY THE EOR.

4. ALL ANCHORS MUST BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INFORMATION (MPI) IN CONJUNCTION WITH EDGE DISTANCE, SPACING, AND EMBEDMENT DEPTH AS INDICATED ON THE DRAWINGS. HOLES SHALL BE DRILLED AND CLEANED IN ACCORDANCE WITH THE MPI. SUBSTITUTION REQUESTS, FOR PRODUCTS OTHER THAN THOSE SPECIFIED, MUST BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER OF RECORD ALONG WITH CALCULATIONS THAT ARE PREPARED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER. REGISTRATION MUST BE IN THE STATE IN WHICH THE PROJECT IS LOCATED. THE CALCULATIONS SHALL DEMONSTRATE THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING EQUIVALENT OR BETTER STRENGTH VALUES AND OF THE PRODUCT USING THE APPROPRIATE DESIGN PROCEDURE AND/OR STANDARD(S) AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

5. THE CONTRACTOR SHALL ARRANGE FOR A MANUFACTURER'S FIELD REPRESENTATIVE TO PROVIDE INSTALLATION TRAINING FOR ALL PRODUCTS TO BE USED, PRIOR TO THE ANCHOR INSTALLATION. A RECORD OF TRAINING SHALL BE MAINTAINED BY THE CONTRACTOR AND MADE AVAILABLE TO THE ENGINEER OF RECORD.

6. ADHESIVE ANCHORS INSTALLED IN HORIZONTAL TO VERTICALLY OVERHEAD ORIENTATION THAT SUPPORT SUSTAINED TENSION LOADS SHALL BE DONE BY A CERTIFIED ANCHOR INSTALLER (AAI) AS CERTIFIED THROUGH ACI/CES (ACI 318-11 D 9.2.2, ACI 318-14 7.2.2) PROOF OF CURRENT CERTIFICATION SHALL BE SUBMITTED TO THE EOR FOR APPROVAL PRIOR TO COMMENCEMENT OF INSTALLATION.

7. ADHESIVE ANCHORS MUST BE INSTALLED IN CONCRETE AGE A MINIMUM OF 21 DAYS (ACI 318-11 D 9.2.2, ACI 318-14 7.1.2).

8. ALL POST-INSTALLED ANCHORS SHALL BE INSTALLED IN DRY HOLES THAT HAVE BEEN DRILLED, CLEANED, AND PREPARED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INFORMATION AND THE RESPECTIVE ICC-ES EVALUATION REPORTS.

9. PROVIDE SPECIFIC INSTRUCTIONS FOR THE PROPER MIXING AND APPLICATION OF THE APPLICABLE BUILDING CODE AND PER THE CURRENT ICC-ES REPORT (IC 703-1303 3 NOTE B).

SHOP DRAWINGS

1. THE STRUCTURAL DRAWINGS ARE COPYRIGHTED AND SHALL NOT BE COPIED OR USED AS ERECTION PLANS OR SHOP DATA. THE USE OF JVA'S ELECTRONIC FILES AS THE BASIS FOR SHOP DRAWINGS REQUIRES PRIOR APPROVAL BY JVA. A SIGNED RELEASE OF LIABILITY BY THE GENERAL CONTRACTOR AND/OR HIS SUBCONTRACTORS, AND DELETION OF JVA'S NAME AND LOGO FROM ALL SHEETS SO REQUESTED.
2. THE GENERAL CONTRACTOR SHALL SUBMIT IN WRITING ANY REQUESTS TO MODIFY THE STRUCTURAL DRAWINGS OR PROJECT SPECIFICATIONS.
3. ALL SHOP AND ERECTION DRAWINGS SHALL BE CHECKED AND STAMPED (AFTER HAVING BEEN CHECKED) BY THE GENERAL CONTRACTOR PRIOR TO SUBMISSION FOR STRUCTURAL ENGINEER'S REVIEW. SHOP DRAWING SUBMITTALS NOT CHECKED BY THE GENERAL CONTRACTOR PRIOR TO SUBMISSION TO THE STRUCTURAL ENGINEER WILL BE RETURNED WITHOUT REVIEW.
4. FURNISH ELECTRONIC VERSION (PDF) OF SHOP AND ERECTION DRAWINGS TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION.
 - A. CONCRETE MIX DESIGNS
 - B. CONCRETE REINFORCING STEEL
5. SUBMIT A TIMELY MANNER TO PERMIT TO WORKING DAYS FOR REVIEW BY THE STRUCTURAL ENGINEER.
6. SHOP DRAWINGS SUBMITTED FOR REVIEW DO NOT CONSTITUTE "REQUEST FOR CHANGE IN WRITING" UNLESS SPECIFIC SUGGESTED CHANGES ARE CLEARLY MARKED. IN ANY EVENT, CHANGES MADE BY MEANS OF THE SHOP DRAWING SUBMITTAL PROCESS BECOME THE RESPONSIBILITY OF THE ONE INITIATING THE CHANGE.

1. THE GENERAL CONTRACTOR SHALL THOROUGHLY INSPECT AND SURVEY THE EXISTING STRUCTURE TO VERIFY CONDITIONS THAT AFFECT THE WORK SHOWN ON THE DRAWINGS.
2. THE GENERAL CONTRACTOR SHALL REPORT ANY VARIATIONS OR DISCREPANCIES TO THE ARCHITECT AND STRUCTURAL ENGINEER BEFORE PROCEEDING.

1. THE FOLLOWING SPECIAL INSPECTIONS AND TESTING SHALL BE PERFORMED BY A QUALIFIED SPECIAL INSPECTOR, RETAINED BY THE OWNER, IN ACCORDANCE WITH THE FOLLOWING SECTIONS OF EBC CHAPTER 17:
 - A. SECTION 1704 SPECIAL INSPECTIONS, CONTRACTOR RESPONSIBILITY, AND STRUCTURAL OBSERVATIONS AND THE FOLLOWING SUB-SECTIONS:
 - B. SECTION 1705 REQUIRED VERIFICATION AND INSPECTION AND THE FOLLOWING SUB-SECTIONS:
 1. 1705-3 CONCRETE CONSTRUCTION
2. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. THE APPROVED INSPECTOR MUST BE INDEPENDENT FROM THE CONTRACTOR RESPONSIBLE FOR THE WORK BEING INSPECTED.
3. DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR SHALL BE TO INSPECT AND/OR TEST THE WORK OUTLINED ABOVE AND WRITE THE STATEMENT OF SPECIAL INSPECTIONS, IN ACCORDANCE WITH CHAPTER 17 OF THE EBC FOR CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.
4. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.
5. PER SECTION 1704.2.4 THE SPECIAL INSPECTOR SHALL FURNISH REGULAR REPORTS TO THE BUILDING OFFICIAL AND THE STRUCTURAL ENGINEER. PROGRESS REPORTS FOR CONTINUOUS INSPECTION SHALL BE FURNISHED WEEKLY. INITIAL DAILY REPORTS OF PERIODIC INSPECTIONS SHALL BE FURNISHED WITHIN ONE WEEK OF INSPECTION DATES. REPORTS SHALL NOTE CORRECTED DEFICIENCIES, CORRECTION OF PREVIOUSLY REPORTED DEFICIENCIES, AND CHANGES TO THE APPROVED CONSTRUCTION DOCUMENTS AUTHORIZED BY THE STRUCTURAL ENGINEER OF RECORD.
6. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNIFICANT REPORT WITHIN 10 DAYS OF THE FINAL SPECIAL INSPECTION STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE EBC. WORK NOT IN COMPLIANCE SHALL BE NOTED IN THE REPORT.
7. THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON A MAIN WIND- OR SEISMIC-FORCE-RESISTING SYSTEM PER SECTION 1704.4. THE STATEMENT SHALL ACKNOWLEDGE THE AWARENESS OF THE SPECIAL LISTED REQUIREMENTS OF DESIGNATED SEISMIC SYSTEM OR A WIND- OR SEISMIC-RESISTING COMPONENT IN THE STATEMENT OF SPECIAL INSPECTIONS PER SECTION 1704.5.
8. EXCEPT AS NOTED, THE SPECIAL INSPECTOR OUTLINED ABOVE ARE ADDITION TO, AND BEYOND THE SCOPE OF, PERIODIC STRUCTURAL OBSERVATIONS AS DEFINED IN SECTION 1704.6. STRUCTURAL OBSERVATIONS ARE OUTLINED IN THE STRUCTURAL ENGINEERING DESIGN AND CONSTRUCTION ADMINISTRATION SERVICES PROVIDED BY THE STRUCTURAL ENGINEER.

NOTES

1. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF FRESH CONCRETE CAST BELOW BARS
2. TABULATED VALUES ARE BASED ON GRADE 60 NON-EPOXY-COATED REINFORC NG BARS AND NORMAL WEIGHT CONCRETE
3. VALUES ARE IN NCHES

NO SCALE



**BOULDER COUNTY
NEDERLAND ROAD DISTRICT GARAGE
FUEL TANK RELOCATION**

PROJECT
PROJECT NAME

LOCATION
286 RIDGE ROAD
NEDERLAND, COLORADO
80466

SHEET
**GENERAL NOTES, PLAN &
DETAILS**

C:\Users\LAO\Documents\2300088_CTR Newfield Road
 Dist Fuel tank slab 522_bourne@bayer.com.nf

ACCT: N/A
DATE: 4/5/18
DRAWN BY: DJM_LAC
CHECKED BY: LAC

REVISIONS

REVISION 1 - 05-27-2025

SHEET
S001



ELECTRICAL SPECIFICATIONS

GENERAL

FURNISH AND INSTALL ALL MATERIALS AND EQUIPMENT AND PROVIDE ALL LABOR REQUIRED AND NECESSARY TO COMPLETE THE WORK SHOWN ON DRAWINGS AND/OR LISTED BELOW AND ALL OTHER WORK AND MISCELLANEOUS ITEMS, NOT SPECIFICALLY MENTIONED, BUT INFERRED FOR A COMPLETE INSTALLATION, INCLUDING ALL ACCESSORIES AND APPURTENANCES REQUIRED FOR TESTING THE SYSTEM. IT IS THE INTENT OF DRAWINGS AND SPECIFICATIONS THAT ALL SYSTEMS BE COMPLETE AND READY FOR OPERATION.

STANDARDS FOR MATERIALS

ALL MATERIALS SHALL BE NEW, LISTED, LABELED, AND CONFORM WITH THE CURRENT APPLICABLE INDUSTRY STANDARDS. WORKMANSHIP AND NEAT APPEARANCE SHALL BE AS IMPORTANT AS ELECTRICAL AND MECHANICAL OPERATION. DEFECTIVE OR DAMAGED MATERIALS SHALL BE REPLACED OR REPAIRED PRIOR TO FINAL ACCEPTANCE IN A MANNER MEETING APPROVAL OF THE OWNER/ARCHITECT/ENGINEER AND AT NO ADDITIONAL COST TO OWNER.

THE LATEST EDITIONS OF THE FOLLOWING STANDARDS ARE MINIMUM REQUIREMENTS.

UNDERWRITERS' LABORATORIES, INC. (UL)
NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA)
AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)
ELECTRICAL TESTING LABORATORIES (ETL)
INDEPENDENT TESTING LABORATORIES (ITL)
NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION (NECA)
NATIONAL ELECTRICAL CODE (NEC)
THE TERMS "LISTED AND LABELED": AS DEFINED IN THE "NATIONAL ELECTRICAL CODE," ARTICLE 100.

LISTING AND LABELING AGENCY QUALIFICATIONS: A "NATIONALLY RECOGNIZED TESTING LABORATORY" (NRTL) AS DEFINED IN OSHA REGULATION 1910.7.

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL COMPLY WITH LATEST RULES, CODES AND REGULATIONS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: OSHA, NATIONAL ELECTRICAL CODE (NEC), NATIONAL ELECTRICAL SAFETY CODE AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.

DRAWINGS

DRAWINGS INDICATE GENERAL ARRANGEMENT OF CIRCUITS, LOCATIONS OF EQUIPMENT, PANELBOARDS AND OTHER WORK. DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY EACH TO THE OTHER, AND WHAT IS CALLED FOR BY ONE SHALL BE BINDING AS IF CALLED FOR BY BOTH. DATA PRESENTED ON DRAWINGS IS AS ACCURATE AS PLANNING CAN DETERMINE, BUT ACCURACY IS NOT GUARANTEED AND FIELD VERIFICATION OF ALL DIMENSIONS, LOCATIONS, LEVELS, ETC. TO SUIT FIELD CONDITIONS IS DIRECTED.

JOB CONDITIONS

REVIEW THE EXISTING CONDITIONS OF THE PROJECT SITE AND ADJUST ALL WORK TO CONFORM TO THE EXISTING CONDITIONS.

RECORD DOCUMENTS

MAINTAIN ONE SET OF PROJECT RECORD DRAWINGS INDICATING INSTALLED CONDITIONS FOR: MAJOR RACEWAY SYSTEMS, SIZE AND LOCATION, FOR BOTH EXTERIOR AND INTERIOR; LOCATIONS OF CONTROL DEVICES; DISTRIBUTION AND BRANCH ELECTRICAL CIRCUITRY; FUSE AND CIRCUIT BREAKER SIZE AND ARRANGEMENTS; EQUIPMENT LOCATIONS (EXPOSED AND CONCEALED) DIMENSIONED FROM PROMINENT BUILDING LINES; APPROVED SUBSTITUTIONS, CONTRACT MODIFICATIONS, AND ACTUAL EQUIPMENT AND MATERIALS INSTALLED.

OPERATIONAL CHECK

CHECK CLEANLINESS OF ALL INTERIORS AND ALL PARTS. REMOVE ANY EXCESS PACKING, SHIPPING BOLTS, ETC.

TIGHTEN ALL POINTS OF CONNECTION.

VERIFY PROPER OPERATING CONDITIONS OF ALL EQUIPMENT MECHANICALLY AND ELECTRICALLY.

AT THE COMPLETION OF THE WORK, THE CONTRACTOR SHALL REMOVE ALL WASTE MATERIAL, RUBBISH, AND OTHER DEBRIS FROM AND ABOUT THE WORK, AS WELL AS ALL TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY AND SURPLUS MATERIALS, AND SHALL LEAVE THE WORK "BROOM CLEAN," UNLESS OTHERWISE SPECIFIED, AND READY FOR USE BY THE OWNER. SUCH CLEANUP SHALL INCLUDE, AS APPLICABLE AND WITHOUT LIMITATION, THE FOLLOWING:

REMOVAL OF ALL MARKS, STAINS, FINGERPRINTS, AND OTHER SOIL OR DIRT FROM ANY AND ALL PAINTED OR DECORATED SURFACES.

CLEANING AND POLISHING OF ALL HARDWARE, INCLUDING REMOVAL OF ALL STAINS, DUST, DIRT, PAINT, ETC.

RESTORED TO THEIR ORIGINAL CONDITION OF THOSE PORTIONS OF THE SITE WHICH WERE NOT DESIGNATED FOR ALTERATION BY THE CONTRACT DOCUMENTS BUT WHICH HAVE BEEN AFFECTED BY THE CONTRACTOR'S OPERATIONS.

REMOVAL OF ALL TEMPORARY CONSTRUCTION OR PROTECTION AND REMOVAL FROM THE PREMISES OF ALL ITEMS OF ANY NATURE WHATSOEVER WHICH WERE INSTALLED OR USED FOR TEMPORARY PURPOSES DURING THE CONSTRUCTION.

IF THE CONTRACTOR FAILS TO PROPERLY CLEAN UP, THE OWNER MAY DO SO AND THE COST THEREOF SHALL BE CHARGED TO THE CONTRACTOR.

GUARANTEE

LEAVE ENTIRE ELECTRICAL SYSTEM INSTALLED UNDER THIS DIVISION IN PROPER WORKING ORDER. REPLACE WITHOUT ADDITIONAL CHARGE ANY WORK MATERIALS OR EQUIPMENT PROVIDED UNDER THIS DIVISION WHICH DEVELOPS DEFECTS WITHIN ONE YEAR FROM DATE OF FINAL ACCEPTANCE. GUARANTEE ALL MATERIALS AND EQUIPMENT AGAINST DEFECTS IN COMPOSITION, DESIGN OR WORKMANSHIP.

BASIC ELECTRICAL MATERIALS AND METHODS

RACEWAYS

EMT: ELECTRICAL METALLIC TUBING; ANSI C80.3, ZINC-COATED STEEL, WITH SET-SCREW COMPRESSION FITTINGS.
RNC: RIGID NONMETALLIC CONDUIT; NEMA TC 2, SCHEDULE 40 PVC (SCHEDULE 80 PVC WHERE INDICATED ON THE DRAWINGS), WITH NEMA TC3 FITTINGS.
LFMC: LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT, ZINC-COATED STEEL WITH SUNLIGHT-RESISTANT AND MINERAL-OIL-RESISTANT PLASTIC JACKET, UL 514C.
RACEWAY FITTINGS: SPECIFICALLY DESIGNED FOR RACEWAY TYPE WITH WHICH USED.
RACEWAY APPLICATION FOR INDOOR INSTALLATIONS:
EXPOSED: EMT.
CONCEALED IN WALLS OR CEILINGS: EMT.
CONNECTIONS TO VIBRATING EQUIPMENT: LFMC
BOXES AND ENCLOSURES: NEMA 1, UNLESS OTHERWISE INDICATED.
RACEWAY APPLICATIONS FOR OUTDOOR INSTALLATIONS:
BOXES AND ENCLOSURES: NEMA 250, TYPE 3R OR TYPE 4, UNLESS OTHERWISE INDICATED.
USE RMC ELBOWS FOR ALL BELOW GRADE INSTALLATIONS.
UNDERGROUND FEEDERS AND BRANCH CIRCUITS: INSULATED SINGLE CONDUCTORS IN RACEWAY.
INSTALL CONTINUOUS UNDERGROUND PLASTIC WARNING TAPE DURING TRENCH BACKFILLING, FOR EXTERIOR UNDERGROUND POWER, CONTROL, SIGNAL, AND COMMUNICATION LINES LOCATED DIRECTLY ABOVE POWER AND COMMUNICATION LINES. LOCATE 6 TO 8 INCHES (150 TO 200 MM) BELOW FINISHED GRADE. IF WIDTH OF MULTIPLE LINES INSTALLED IN A COMMON TRENCH OR CONCRETE ENVELOPE DOES NOT EXCEED 16 INCHES (400 MM) OVERALL, USE A SINGLE LINE MARKER.

WIRES, CABLES, AND CONNECTIONS

CONDUCTORS, NO. 10 AWG AND SMALLER: SOLID OR STRANDED COPPER.
CONDUCTORS, LARGER THAN NO. 10 AWG: STRANDED COPPER.
INSULATION: THERMOPLASTIC, RATED 600 V, 75 DEG C MINIMUM, TYPE THW, THHN-THWN, OR USE DEPENDING ON APPLICATION..
WIRE CONNECTORS AND SPLICES: UNITS OF SIZE, AMPACITY RATING, MATERIAL, TYPE, AND CLASS SUITABLE FOR SERVICE INDICATED.
MAKE SPLICES AND TAPS THAT ARE COMPATIBLE WITH CONDUCTOR MATERIAL AND THAT POSSESS EQUIVALENT OR BETTER MECHANICAL STRENGTH AND INSULATION RATINGS THAN UNSPLICED CONDUCTORS.

(CONTINUED)

OUTLET, JUNCTION AND PULL BOXES

FLUSH WITH GRADE ENCLOSURES AND PULL BOXES SHALL BE QUAZITE® AS MANUFACTURED BY STRONGWELL OR APPROVED EQUAL. THE PULL/SPLICE BOX SHALL BE CONSTRUCTED OF POLYMER CONCRETE CONSISTING OF SAND AND AGGREGATE BOUND TOGETHER WITH A POLYMER RESIN. INTERNAL REINFORCEMENT MAY BE PROVIDED BY MEANS OF STEEL, FIBERGLASS, OR A COMBINATION OF THE TWO. BOXES AND COVERS SHALL BE CONCRETE GRAY, AND SUSTAIN A MINIMUM VERTICAL TEST LOAD OF 22,568# OVER A 10" SQUARE. BOXES SHALL BE STACKABLE FOR EXTRA DEPTH.

FLUSH WITH GRADE PULL BOXES: PROVIDE JUNCTION/PULL BOXES WHEREVER UNDERGROUND CONDUIT RUNS EXCEED 500 FEET OR WHERE REQUIRED TO COMPLY WITH THE MAXIMUM NUMBER/RADIUS OF BENDS PER THE NEC. JUNCTION/PULL BOXES SHALL BE SIZED ACCORDING TO NEC-LATEST EDITION, AND HAVE LOCKABLE SCREW-ON COVERS. ALL JUNCTION BOXES SHALL BE ACCESSIBLE.

OUTDOOR/DAMP LOCATION BOXES: CAST TYPE BOXES SHALL BE FERROUS ALLOY AND HAVE GASKETED CAST COVERS AND INSIDE THREADED HUBS WITH ADAPTERS AS NECESSARY. CAST-METAL BOXES SHALL COMPLY WITH NEMA 3R.

WIRING DEVICES

STRAIGHT-BLADE AND LOCKING RECEPTACLES: GENERAL-DUTY GRADE, 20-AMPERE, NYLON, COMPLY WITH NEMA WD 6.

GFCI RECEPTACLES: FEED-THROUGH TYPE, WITH INTEGRAL NEMA WD 6 CONFIGURATION 5-20R DUPLEX RECEPTACLE ARRANGED TO PROTECT CONNECTED DOWNSTREAM RECEPTACLES ON SAME CIRCUIT.

SNAP SWITCHES: GENERAL-DUTY, NYLON, QUIET TYPE. SWITCH SHALL BE RATED AT 20 A, 120/277-VAC.

SUPPORTING DEVICES

MATERIAL: COLD-FORMED STEEL, WITH CORROSION-RESISTANT COATING.
METAL ITEMS FOR USE OUTDOORS OR IN DAMP LOCATIONS: HOT-DIP GALVANIZED STEEL
SLOTTED-STEEL CHANNEL: FLANGE EDGES TURNED TOWARD WEB, AND 9/16-INCH-DIAMETER SLOTTED HOLES AT A MAXIMUM OF 2 INCHES O.C., IN WEBS. STRENGTH RATING TO SUIT STRUCTURAL LOADING.
SLOTTED CHANNEL FITTINGS AND ACCESSORIES: RECOMMENDED BY THE MANUFACTURER FOR USE WITH THE TYPE AND SIZE OF CHANNEL WITH WHICH USED.
EXPANSION ANCHORS: CARBON-STEEL WEDGE OR SLEEVE TYPE.
TOGGLE BOLTS: ALL-STEEL SPRINGHEAD TYPE.

ELECTRICAL IDENTIFICATION

IDENTIFICATION DEVICE COLORS: USE THOSE PRESCRIBED BY ANSI A13.1, NFPA 70, AND THESE SPECIFICATIONS.

COLOR-ADHESIVE MARKING TAPE FOR RACEWAYS, WIRES, AND CABLES: SELF-ADHESIVE VINYL TAPE, NOT LESS THAN 1 INCH WIDE BY 3 MILS THICK.

TAPE MARKERS FOR CONDUCTORS: VINYL OR VINYL-CLOTH, SELF-ADHESIVE, WRAP-AROUND TYPE WITH PREPRINTED NUMBERS AND LETTERS.

DETECTABLE UNDERGROUND WARNING TAPE: PERMANENT, BRIGHT-COLORED, CONTINUOUS-PRINTED, VINYL TAPE COMPOUNDED FOR PERMANENT DIRECT-BURIAL SERVICE, MANUFACTURED SPECIFICALLY FOR MARKING AND IDENTIFYING UNDERGROUND UTILITIES, AND WITH THE FOLLOWING FEATURES:
NOT LESS THAN 6 INCHES WIDE BY 4 MILS THICK.
EMBEDDED CONTINUOUS METALLIC STRIP OR CORE.
PRINTED LEGEND THAT INDICATES TYPE OF UNDERGROUND LINE.

TAG AND LABEL ALL CIRCUITS: IDENTIFY SOURCE AND CIRCUIT NUMBERS IN EACH CABINET, PULL-BOX, JUNCTION BOX, AND OUTLET BOX. PROVIDE TYPED ADHESIVE LABELS ON THE FACEPLATES OF RECEPTACLES AND SWITCHES. COLOR-CODING SHALL BE USED FOR VOLTAGE AND PHASE IDENTIFICATION.

PROVIDE TYPED ADHESIVE LABELS ON THE FACEPLATES OF RECEPTACLES AND SWITCHES. LOCATE LABEL ON THE FRONT SIDE OF THE COVERPLATE AS WELL AS IDENTIFY CIRCUITS WITH PERMANENT INK ON THE BACKSIDE OF THE COVERPLATE.

PROVIDE UPDATED TYPED PANEL DIRECTORIES FOR NEW OR MODIFIED PANELS. ALL SPARE CIRCUIT BREAKERS SHALL BE SWITCHED OFF.

ELECTRICAL EQUIPMENT INSTALLATION

MATERIALS AND COMPONENTS: INSTALL LEVEL, PLUMB, AND PARALLEL AND PERPENDICULAR TO OTHER BUILDING SITE SYSTEMS AND COMPONENTS, UNLESS OTHERWISE INDICATED.

EQUIPMENT: INSTALL TO FACILITATE SERVICE, MAINTENANCE, AND REPAIR OR REPLACEMENT OF COMPONENTS. CONNECT FOR EASE OF DISCONNECTING, WITH MINIMUM INTERFERENCE WITH OTHER INSTALLATIONS.

POWER, LIGHTING, & TELECOM

- J-BOX
- MOTOR
- CEILING RECEPTACLE
- FLOOR RECEPTACLE
- DUPLEX RECEPTACLE
- FOUR-PLEX RECEPTACLE
- BLANK FACE GFCI PROTECTION DEVICE
- SPECIAL NEMA RECEPTACLE
- HEAVY DUTY DISCONNECT SWITCH
- MOTOR STARTER
- HEAVY DUTY STARTER-DISCONNECT
- VFD MOTOR STARTER
- VFD HEAVY DUTY STARTER-DISCONNECT
- TRANSFORMER
- SURGE SUPPRESSION DEVICE
- METER
- THERMAL OVERLOAD SW
- BRANCH CIRCUIT PANEL
- TELEPHONE OUTLET
- TELE-DATA OUTLET
- DATA OUTLET
- TELEPHONE OUTLET FLOOR
- TELE-DATA OUTLET FLOOR
- TV OUTLET
- EMERGENCY BATTERY LIGHT
- WALL MOUNTED EXIT SIGN
- CEILING MOUNT EXIT SIGN
- CLG MNT EX/EM LT COMBO
- SURFACE WALL LUMINAIRE
- SURFACE CEILING LUMINAIRE
- KEYLESS LAMP HOLDER
- RECESSED DOWNLIGHT
- RECESSED WALL WASHER
- LUMINAIRE STRIP
- SURFACE OR WALL LUMINAIRE
- RECESSED LUMINAIRE
- TRACK LIGHTING
- PARKING LOT POLE LIGHT
- PEDESTRIAN POLE LUMINAIRE
- FLOOD LUMINAIRE
- SWITCH
- 3-WAY SWITCH
- OCCUPANCY SENSOR SWITCH
- OCC. SENSOR DIMMER SWITCH
- LOW VOLTAGE SWITCH
- DIMMER SWITCH
- PHOTOCELL
- OCCUPANCY SENSOR
- OCC. SEN. POWER PACK
- ROOM CONTROLLER
- TIME CLOCK
- CLOCK-WALL MOUNT
- CLOCK/SPEAKER IN COMBINATION BACK-BOX
- SPEAKER-WALL MOUNT
- SPEAKER HORN-WALL MOUNT
- SPEAKER-RECESSED CEILING (HARD CEILING)
- SPEAKER-RECESSED CEILING (LAYIN GRID CEILING)
- SPEAKER-SURFACE OR PENDANT MOUNT CEILING
- CALL STATION
- PUSH BUTTON STATION

GENERAL

- SECTION BUBBLE
 - SECTION LETTER
 - REFERENCE DWG NUMBER
- REFERENCE BUBBLE
 - SECTION NUMBER
 - REFERENCE NUMBER
- REVISION NUMBER
- EQUIPMENT TAG
- DRAWING NOTE
- FLAG NOTE
- BREAKLINE
- MATCHLINE
- WIREMOLD
- OVERHEAD PRIMARY ELECTRIC
- OVERHEAD SECONDARY ELECTRIC
- UNDERGROUND PRIMARY ELECTRIC
- UNDERGROUND SECONDARY ELECTRIC
- UNDERGROUND BRANCH ELECTRIC
- OVERHEAD BRANCH ELECTRIC
- UNDERGROUND COMMUNICATION
- BOLD LINEWEIGHT AND/OR "N" INDICATES NEW DEVICE OR EQUIPMENT
- BOLD LINEWEIGHT AND/OR "R" INDICATES DEVICE OR EQUIPMENT TO BE REPLACED
- LIGHT LINEWEIGHT AND/OR "E" INDICATES EXISTING DEVICE TO REMAIN
- DASHED LINETYPE AND/OR "D" INDICATES DEVICE TO BE REMOVED / DEMOLISHED

ELECTRONIC SAFETY & SECURITY

- MAGNETIC DOOR HOLD
- SMOKE DETECTOR
- THERMAL DETECTOR
- DUCT SMOKE DETECTOR
- MANUAL PULL STATION
- COMBO SPEAKER/STROBE
- CEILING ALARM STROBE LIGHT
- WALL ALARM STROBE LIGHT
- ALARM SPEAKER OR HORN
- REMOTE INDICATOR LIGHT
- FLOW SWITCH
- TAMPER SWITCH
- CONTROL MODULE
- MONITOR MODULE
- BEAM DETECTION TRANSMITTER
- BEAM DETECTION RECEIVER
- CARBON MONOXIDE DETECTOR
- REMOTE TEST SWITCH
- AIPHONE MONITOR STATION
- AIPHONE INTERCOM STATION
- ELECTRIC DOOR HARDWARE
- GLASS BREAK DETECTOR
- CAMERA
- MOTION SENSOR
- CARD READER
- DOOR POSITION SWITCH
- DOOR STRIKE
- SECURITY CONTROL KEYPAD

DEFINITIONS

- AC INDICATES ABOVE COUNTER, COORDINATE EXACT HEIGHT
- BC INDICATES BELOW COUNTER, COORDINATE EXACT HEIGHT
- AFF ABOVE FINISHED FLOOR
- AFG ABOVE FINISHED GRADE
- GFI INDICATES GROUND FAULT CIRCUIT INTERRUPT DEVICE
- D INDICATES EXISTING DEVICE TO BE REMOVED
- E INDICATES EXISTING DEVICE TO REMAIN AS IS
- R INDICATES EXISTING DEVICE TO BE REPLACED
- RL INDICATES EXISTING DEVICE TO BE RELOCATED TO POSITION SHOWN
- SPD INDICATES SURGE SUPPRESSION DEVICE
- USB INDICATES UNIVERSAL SERIAL BUS DEVICE
- VFD INDICATES VARIABLE FREQUENCY MOTOR DRIVE
- WP INDICATES WEATHERPROOF EQUIPMENT/DEVICE
- EMT ELECTRICAL METALLIC CONDUIT
- FMC FLEXIBLE METALLIC CONDUIT
- LFC LIQUIDTIGHT FLEXIBLE CONDUIT
- PVC POLYVINYL CHLORIDE CONDUIT
- RNC RIGID NONMETALLIC CONDUIT
- RSC RIGID STEEL CONDUIT
- CT CURRENT TRANSFORMER
- HVAC HEATING, VENTILATION AIR CONDITIONING
- LED LIGHT EMITTING DIODE
- AIC AMPS INTERRUPTING CAPACITY
- Isc SHORT CIRCUIT CURRENT
- FLA FULL LOAD AMPS
- MCA MINIMUM CIRCUIT AMPS
- MCCB MOLDED-CASE CIRCUIT BREAKER
- MCP MOTOR CIRCUIT PROTECTOR
- MOCP MAXIMUM OVERCURRENT PROTECTION
- OCPD OVERCURRENT PROTECTIVE DEVICE
- N.C. NORMALLY CLOSED
- N.O. NORMALLY OPEN
- NEC NATIONAL ELECTRICAL CODE NFPA 70
- NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
- NFPA NATIONAL FIRE PROTECTION ASSOCIATION
- UL UNDERWRITERS LABORATORY
- ACS ACCESS CONTROL SYSTEM
- SDS SECURITY DETECTION SYSTEM
- VSS VIDEO SURVEILLANCE SYSTEM
- ANN FIRE ALARM ANNUNCIATOR PANEL
- DACT DIGITAL ALARM COMMUNICATOR TRANSMITTER
- EOL END-OF-LINE
- FACP FIRE ALARM CONTROL PANEL
- NAC NOTIFICATION APPLIANCE CIRCUIT
- SLC SIGNALING LOOP CIRCUIT
- AV AUDIO/VISUAL
- MDF MAIN DISTRIBUTION FRAME
- IDF INTERMEDIATE DISTRIBUTION FRAME
- LAN LOCAL AREA NETWORK
- WAN WIDE AREA NETWORK
- TBB TELECOMMUNICATIONS BONDING BACKBONE
- TGB TELECOMMUNICATIONS GROUND BUS BAR
- UPS UNINTERRUPTIBLE POWER SUPPLY

Boulder County

PUBLIC WORKS
DEPARTMENT
BUILDING SERVICES
DIVISION

2525 13TH STREET
BOULDER, CO 80304
P.O. BOX 471
BOULDER, CO 80306
PHONE 303 441 3905



BOULDER COUNTY

NERDLAND ROAD DISTRICT GARAGE
FUEL TANK RELOCATION

PROJECT
NERDLAND ROAD DISTRICT
FUEL TANK RELOCATION

LOCATION
286 RDGE ROAD
NERDLAND, CO 80466

SHEET

SPECIFICATIONS AND
LEGEND

FILE NAME
BC NERDLAND FUELING.DWG

ACCT. 102999
DATE APR 130 2024
DRAWN BY AEI
CHECKED BY AEI

REVISIONS	
21	EP0 LOCATION NOV 20 2024



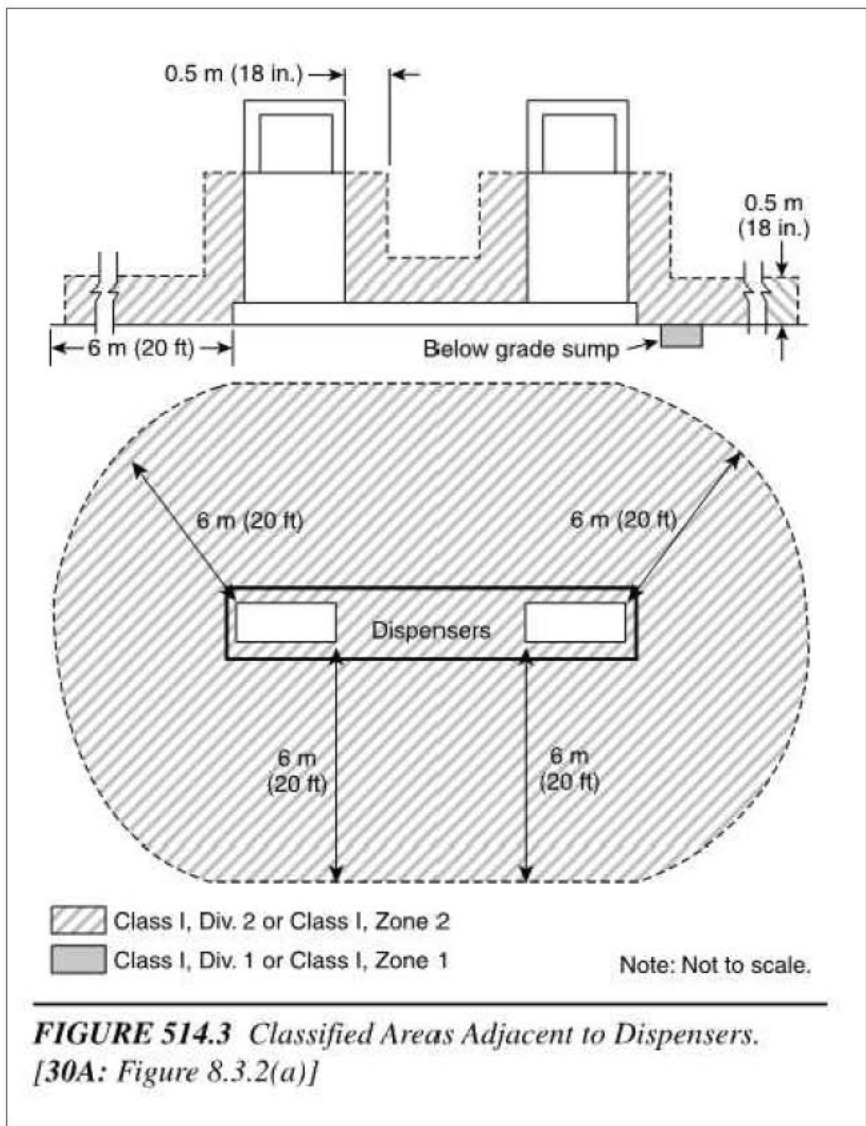
ackerman
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3000 Youngfield St., Suite 264
Wheat Ridge, Colorado 80215
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www.aecconsulting.com

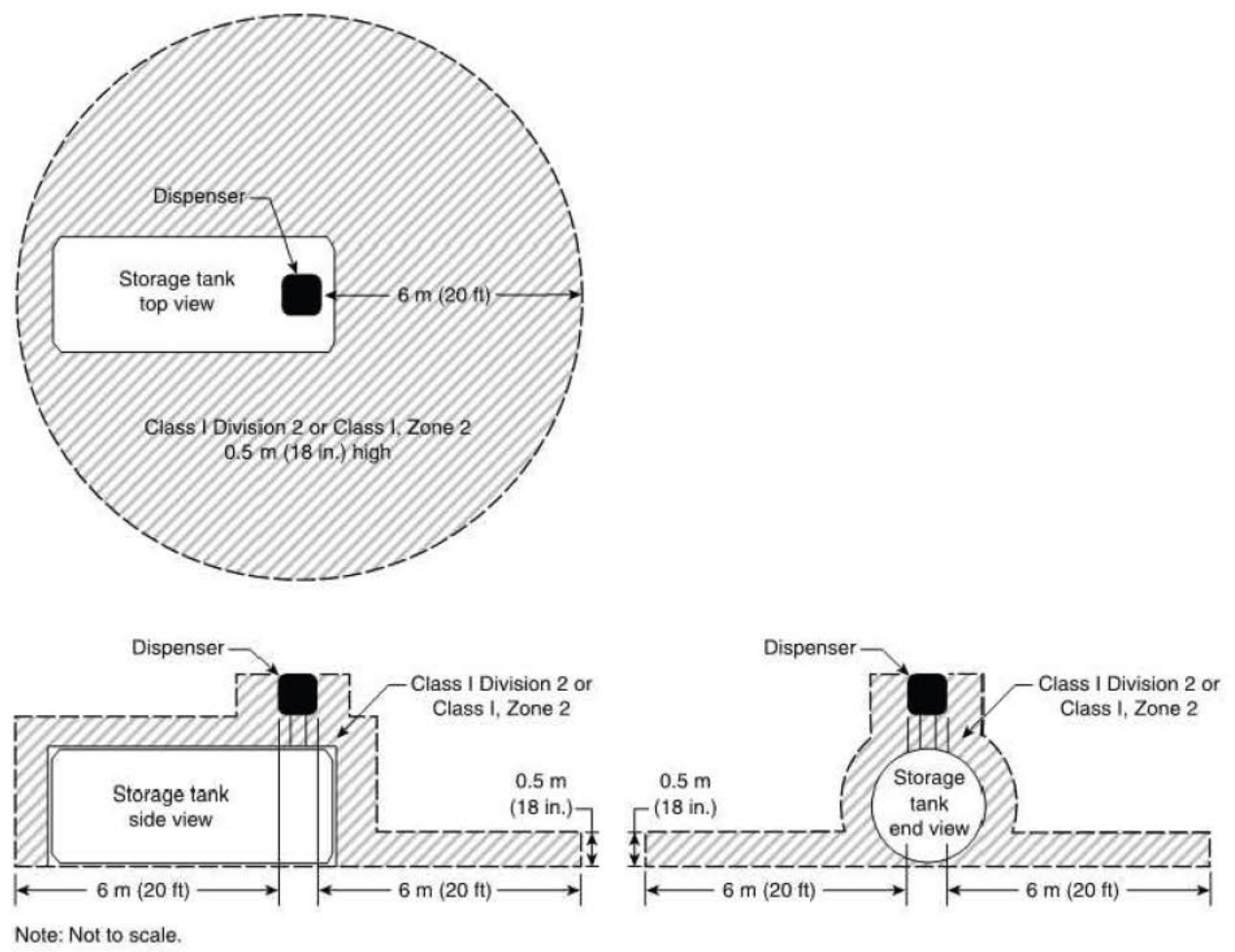
SHEET

E0

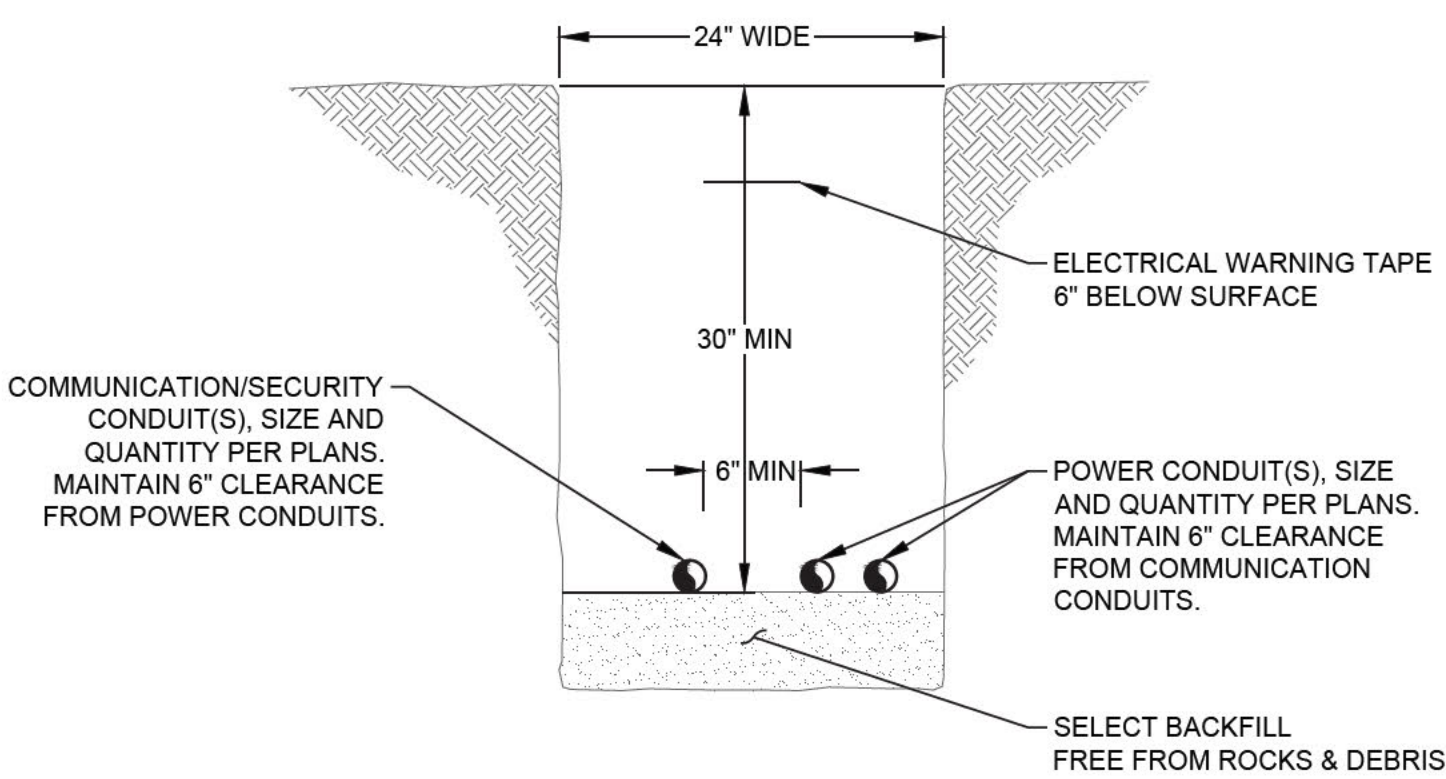
1 of 3



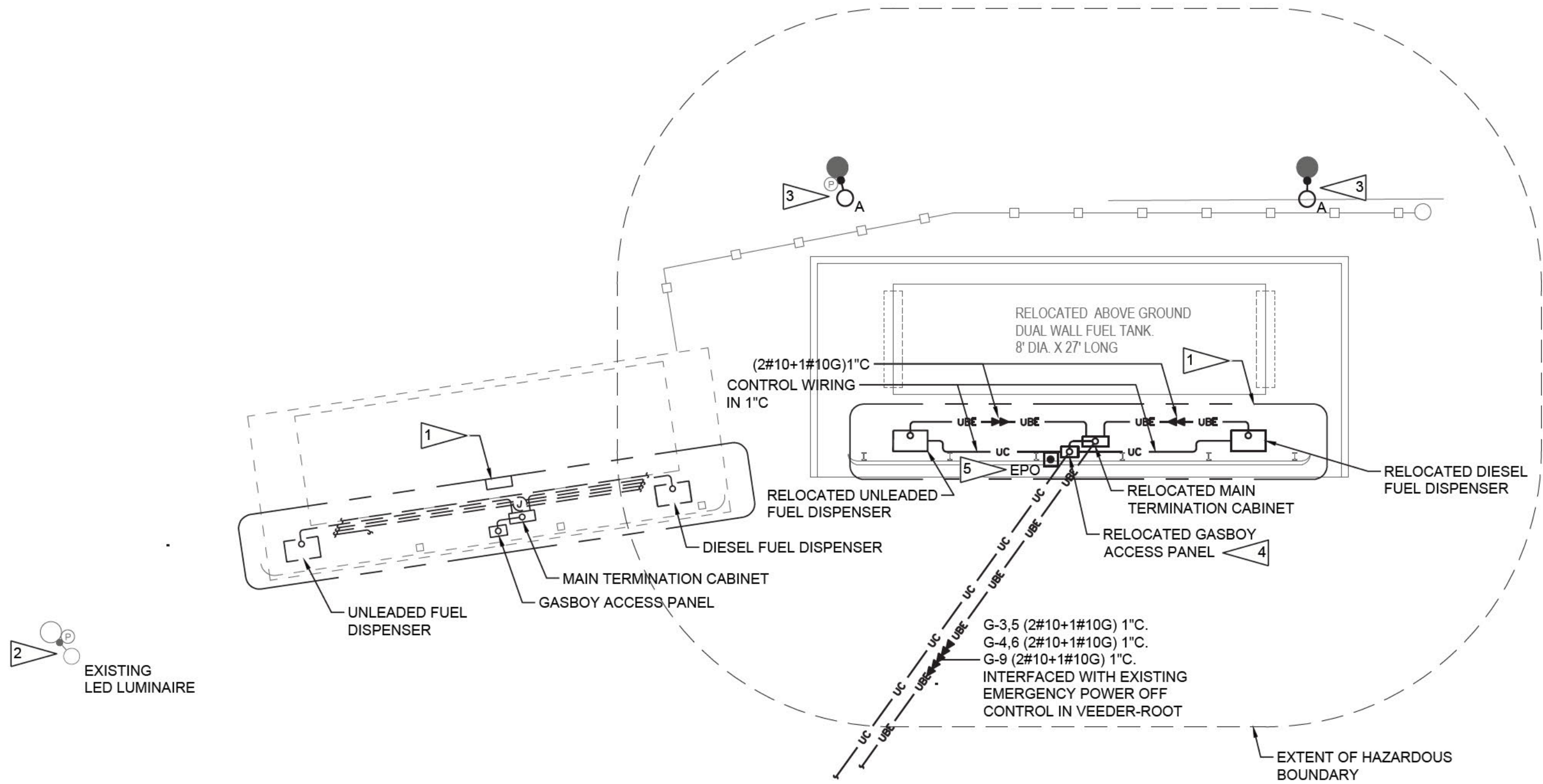
NEC Classified Area Figure 514.3A
Scale: NA



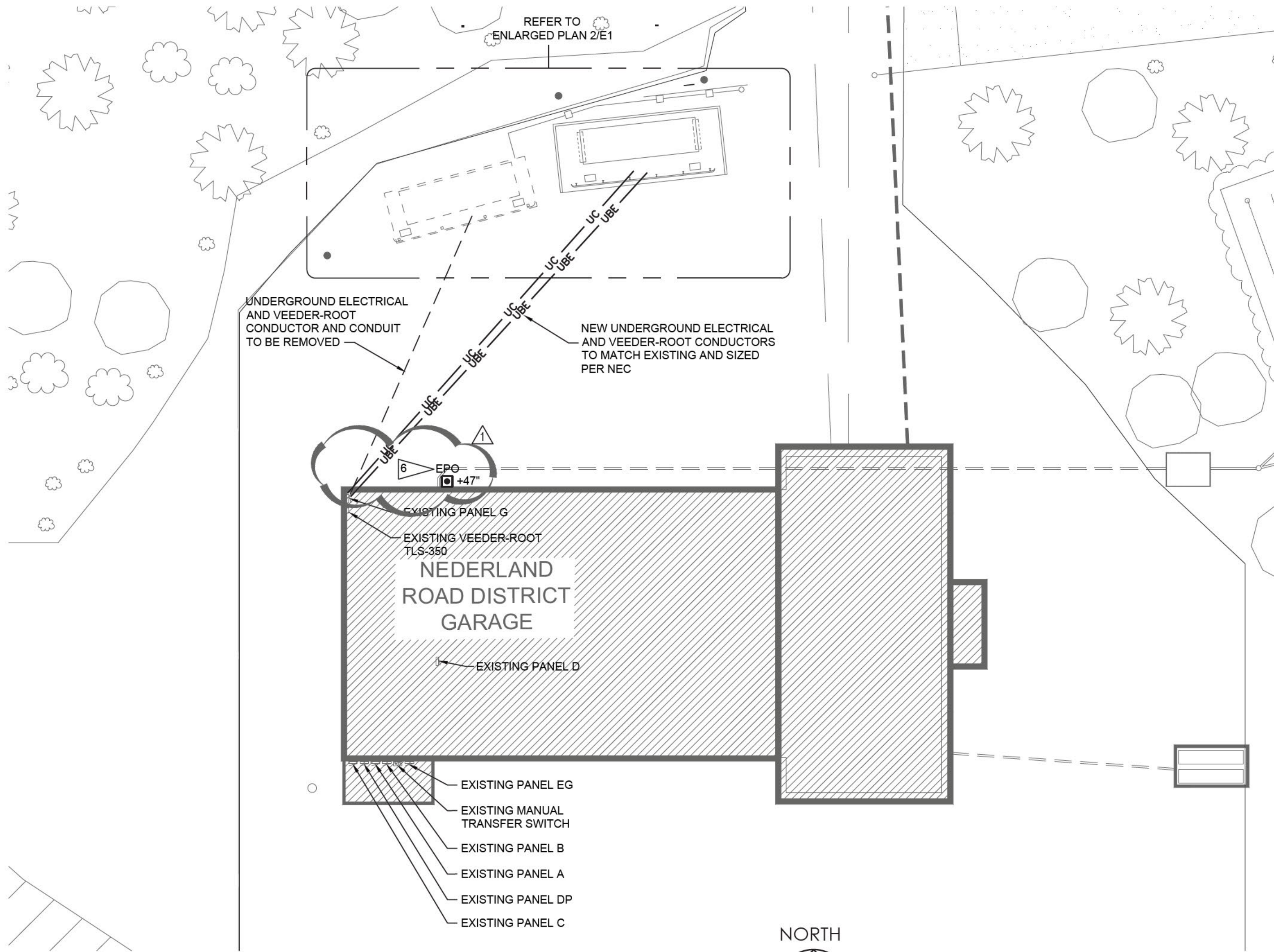
NEC Classified Area Figure 514.3B
Scale: NA



TYPICAL TRENCH DETAIL
SCALE: NONE



PARTIAL ENLARGED SITE / FUEL TANK PLAN - ELECTRICAL
SCALE: 1/8" = 1'-0"



SITE PLAN - ELECTRICAL
SCALE: 1" = 20'-0"

PLAN GENERAL NOTES:
REFER TO E0 FOR ELECTRICAL GENERAL NOTES AND LEGEND.

FLAG NOTES:

- EXISTING FUEL TANK ELECTRICAL CONTROLS, DISPENSERS AND GRADE MOUNTED CLASS 1, DIV 2 CONDUIT SYSTEM TO BE RELOCATED TO NEW TANK LOCATION. ALL EXISTING CONDUIT FITTINGS, BOXES AND CONNECTIONS SHALL BE REPLACED WITH NEW CLASS 1/DIV.2 DEVICES. ALL EXISTING CONDUCTORS SHALL BE REPLACED WITH NEW AND SIZED PER NEC. EXISTING FUEL SYSTEM ELECTRICAL AND CONTROL DRAWINGS DO NOT EXIST. E.C. SHALL FIELD VERIFY EXISTING FIELD CONDITIONS.
- EXISTING LED LUMINAIRE MOUNTED ON STEEL POLE TO REMAIN. LUMINAIRE IS CONTROLLED BY A BUTTON TYPE PHOTOCCELL MOUNTED ADJACENT TO LUMINAIRE.
- EXISTING LED LUMINAIRE MOUNTED ON STEEL POLE TO REMAIN. LUMINAIRES ARE OUTSIDE OF THE HAZARDOUS BOUNDARY. PROVIDE CONDUIT SEAL-OFFS ON CONDUIT RISER AT +24" ABOVE GRADE. ALSO PROVIDE CONDUIT SEAL-OFFS AT THE POINT THE BRANCH CIRCUIT CONDUIT RISES ABOVE GRADE AT THE BUILDING.
- RELOCATED GASBOY FUEL MANAGEMENT SYSTEM CONTROLLER PEDESTAL ANCHORED TO CONCRETE FUEL ISLAND.
- PROVIDE NEW EPO (2#10) 1" C TO EXISTING VEEDER-ROOT CONTROL. MOUNT ON GASBOY CABINET.
- EXISTING EPO TO BE REMOVED. PROVIDE NEW EPO (2#10) 1" C TO EXISTING VEEDER-ROOT CONTROL. MOUNT ON BUILDING AS SHOWN.

Boulder County

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COLORADO REGISTERED
PROFESSIONAL ENGINEER
30498
11/20/2024

BOULDER COUNTY
NEDERLAND ROAD DISTRICT GARAGE
FUEL TANK RELOCATION

ALL ELECTRICAL WITHIN NEC DEFINED CLASS-1/DIV1 AND CLASS-1/DIV-2 HAZARDOUS ZONES AROUND THE FUEL TANK AND FUELING EQUIPMENT SHALL BE INSTALLED IN COMPLIANCE WITH THE NEC AND NFPA HAZARDOUS LOCATIONS REQUIREMENTS. ALL CONDUITS ENTERING OR LEAVING THE HAZARDOUS ZONES SHALL BE PROVIDED WITH APPROPRIATE SEAL OFFS AT BOTH ENDS.

PROJECT NEDERLAND ROAD DISTRICT FUEL TANK RELOCATION	
LOCATION 286 R DGE ROAD NEDERLAND, CO 80466	
SHEET SITE PLAN, FLOOR PLAN AND DETAILS	
FILE NAME BC NEDERLAND FUELING.DWG	
ACCT.	102999
DATE	APRIL 30, 2024
DRAWN BY	AEI
CHECKED BY	AEI

REVISIONS	
21 EPO LOCATION	NOV 20, 2024

SHEET
E1
2 of 3



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BOULDER COUNTY
NEDERLAND ROAD DISTRICT GARAGE
FUEL TANK RELOCATION

PROJECT
NEDERLAND ROAD DISTRICT
FUEL TANK RELOCATION

LOCATION
286 R.DGE ROAD
NEDERLAND, CO 80466

SHEET

DIAGRAMS & SCHEDULES

FILE NAME
BC NEDERLAND FUELING.DWG

ACCT. 102999
DATE APR 13, 2024
DRAWN BY AEI
CHECKED BY AEI

REVISIONS

NO.	LOCATION	NOV 20, 2024

SHEET

E2

3 of 3

Name:	C (Existing)					Mnt	Method:	Flush
Volt:	240/120					Bus	Rating:	200A
Ph:	1					Main	Breaker	MLO
Wire:	3					AIC	Rating:	10,000

	Code	Description	Load VA	Blk	P	Ph	P	Blk	Load VA	Description	Code
1	6	Phone Equipment	2000	30	2	*	1	20	180	Rec-Ext. GHNW Bldg	2 2
3	-----	/	/	/	/	*	2	90	8000	Yard Sub Panel	7 4
5	6	Exhaust System	3500	30	2	*	*	/	-----	-----	6
7	-----	/	/	/	/	*	1	20	250	Generator Battery	6 8
9	6	Exhaust System	3500	30	2	*	1	20	250	Generator Clock Heater	6 10
11	-----	/	/	/	/	*	/	/	-----	Space Only	12
13	1	Text Lights for Fuel Disp	120	20	1	*	*	-	-----	Space Only	14
15	Space Only	-	-	-	-	*	-	-	-----	Space Only	16
17	Space Only	-	-	-	-	*	-	-	-----	Space Only	18
19	Space Only	-	-	-	-	*	-	-	-----	Space Only	20
21	Space Only	-	-	-	-	*	-	-	-----	Space Only	22
23	Space Only	-	-	-	-	*	-	-	-----	Space Only	24
25	Space Only	-	-	-	-	*	-	-	-----	Space Only	26
27	Space Only	-	-	-	-	*	-	-	-----	Space Only	28
29	Space Only	-	-	-	-	*	-	-	-----	Space Only	30
31	Space Only	-	-	-	-	*	-	-	-----	Space Only	32
33	Space Only	-	-	-	-	*	-	-	-----	Space Only	34
35	Space Only	-	-	-	-	*	-	-	-----	Space Only	36
37	Space Only	-	-	-	-	*	-	-	-----	Space Only	38
39	Space Only	-	-	-	-	*	-	-	-----	Space Only	40

Shading indicates existing circuit / breaker - No Change >><< Unshaded indicates new circuit / breaker						
Code	Description	Load VA	Dem	Per	Phase	Load Summary
1	Lighting	120	125%			
2	Rec up to 10,000	180	100%	Ph A	9050 VA	
3	Rec over 10,000	50%		Ph B	8750 VA	
3	Motor	100%				
4	Largest Motor	125%				
4	Heater	100%		Connected		17800 VA
5	Kitchen	100%		Code Demand		17830 VA
6	Miscellaneous	9500	100%			
7	Sub Panel	8000	100%	Code Demand		74.29 Amps

* Revised load on existing circuit. Load increase by 40W.

Name:	EG (Existing)	Mnt	Method:	Flush
Volt:	240/120	Bus	Rating:	200A
Ph:	1	Main	Breaker	MLO
Wire:	3	AIC	Rating:	10,000

	Code	Description	Load	Blk	P	Ph	P	Blk	Load	Description	Code
			VA			A	B		VA		
1	7	Panel G	11440	50	2	*	2	20	2400	Garage Doors	6 2
3		-----	/	/	/	*	/	/	-----	-----	4
5		Gate (Spare)	20	1	*	1	20	1176	Garage Doors	6 6	
7		Gate Reader (Spare)	20	1	*	1	20	1176	Garage Doors	6 8	

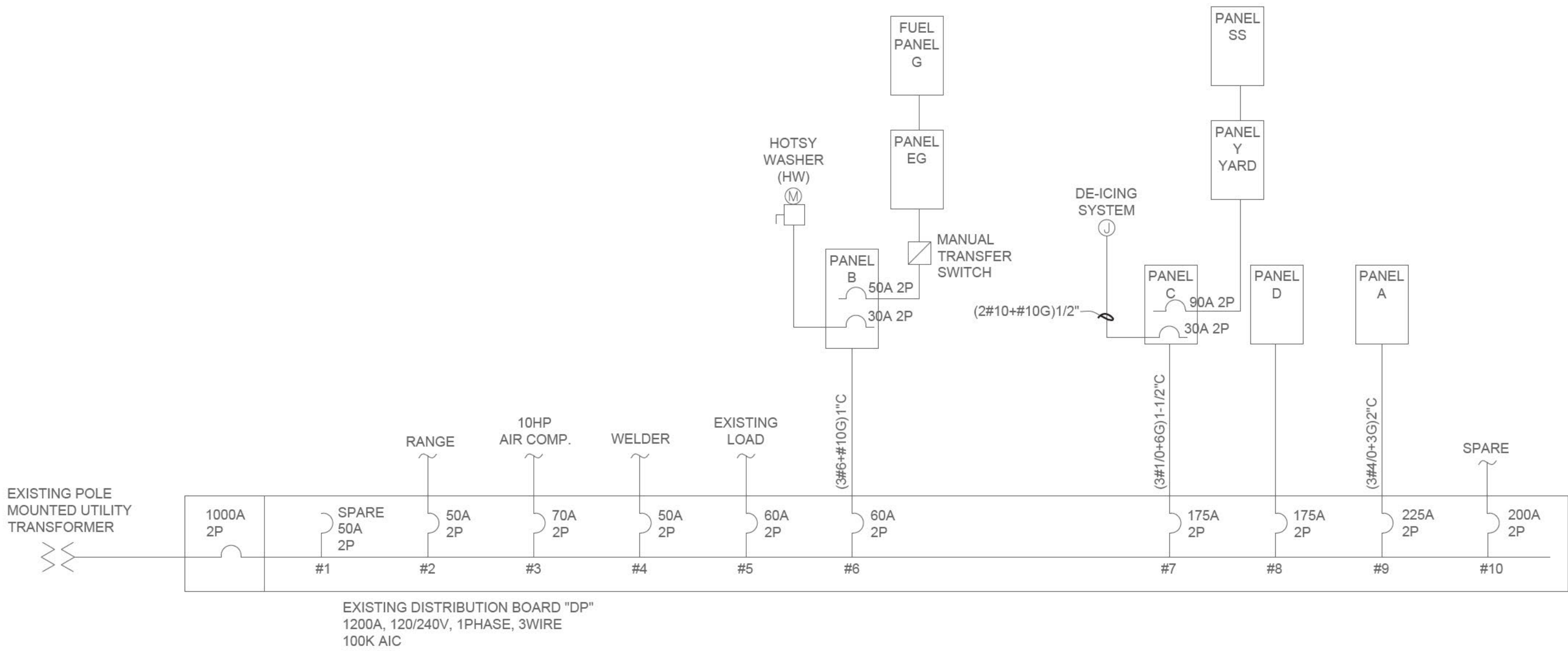
Shading indicates existing circuit / breaker - No Change >><< Unshaded indicates new circuit / breaker

Code	Description	Load VA	Dem	Per	Phase	Load Summary
1	Lighting	125%				
2	Rec up to 10,000	100%		Ph A	8096	VA
3	Rec over 10,000	50%		Ph B	8096	VA
3	Motor	100%				
4	Largest Motor	125%				
4	Heater	100%		Connected		16192 VA
5	Kitchen	100%		Code Demand		16192 VA
6	Miscellaneous	4752	100%			
7	Sub Panel	11440	100%	Code Demand		67.47 Amps

Name:	G (Existing)				Mnt	Method:	Flush
Volt:	240/120				Bus	Rating:	60A
Ph:	1				Main	Breaker	MLO
Wire:	3				AIC	Rating:	10,000

Code	Description	Load	VA	Blk	P	Ph	P	Blk	VA	Description	Code
1	2 Receptacle	540	15	1	*	1	15	180	Shunt-Trip		2
3	6 Unleaded Fuel Dep.	2400	20	2	*	2	50	8000	Diesel Dispenser		6 4
5	-----	/	/	/	*	/	/	-----	-----		6
7	Shunt-Trip	15	1	*	1	20	250	EPO			8
9	6 Veeder-Root	250	20	1	*	1	20	250	Card Reader		6 10
11	Space Only	-	-	-	*	-	-	-	Space Only		12
13	Space Only	-	-	-	*	-	-	-	Space Only		14
15	Space Only	-	-	-	*	-	-	-	Space Only		16

Shading indicates existing circuit / breaker - No Change >><< Unshaded indicates new circuit / breaker											
Code	Description	Load VA	Dem	Per	Phase	Load Summary					
1	Lighting	125%									
2	Rec up to 10,000	540	100%	Ph A	6420 VA						
3	Rec over 10,000		50%	Ph B	5450 VA						
3	Motor	100%									
4	Largest Motor	125%									
4	Heater	100%		Connected		11440 VA					
5	Kitchen	100%		Code Demand		11440 VA					
6	Miscellaneous	10900	100%								
7	Sub Panel	100%		Code Demand		47.67 Amps					



Existing Electrical One-line Diagram
Scale: None

Nederland Fueling - Luminaire Schedule											
Key	Wattage, LED Color	Delivered Lumens	Driver & Dimming	Description	Finish	Mount	Specification			Max Input Wattage	Notes
							Manufacturer	Catalog Number	Volt		
A	40W,5000K	4000	Non-dimming	LED Area Luminaire with integral non-dimming driver, Class 1, Div. 2, IP67/Nema 6 Rated	Gray	Surface	Solas Ray Lighting	Attendant HTRT-040-50-120-AB	120	40	

Not all parts and pieces may be identified in the catalog number. It shall be the Contractor's and Supplier/Manufacturer's responsibility to ensure all necessary parts, pieces, and hardware are provided with the luminaire for a complete installation.

