

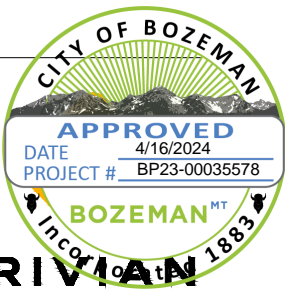


ELECTRIC VEHICLE CHARGING STATIONS

BOZEMAN

SAI PROJECT #: MT-279-23001

1771 N 19TH AVE, BOZEMAN, MT 59718



12 INDUSTRIAL WAY
SALEM, NEW HAMPSHIRE 03079



EXPIRES: 6-30-24
Richard B. Hall

JOB NAME
BOZEMAN
1771 N 19TH AVE
BOZEMAN, MT 59718

SITE INFORMATION

SITE NAME: BOZEMAN
SAI PROJECT NUMBER: MT-279-23001
SITE ADDRESS: 1771 N 19TH AVE
BOZEMAN, MT 59718
JURISDICTION: CITY OF BOZEMAN
PARCEL ID: 06-0798-02-1-02-54-0000
SITE COORDINATES: N45° 41' 40.67" (N45.694631°) (NAD83)
W111° 03' 53.27" (W111.064797°) (NAD83)
GROUND ELEVATION: 4752.56'± (NAVD88)
PROPERTY OWNER NAME: STONE RIDGE PARTNERS, L.L.C. c/o HAWKINS COMPANY
PROPERTY OWNER ADDRESS: 855 BROAD ST, SUITE 300
BOISE, ID 83702-7154
POWER COMPANY: NORTHWESTERN ENERGY
KORY GRAHAM
(406) 274-5920
KORY.GRAHAM@NORTHWESTERN.COM
PROJECT MANAGER: SAI
12 INDUSTRIAL WAY
SALEM, NEW HAMPSHIRE 03079
ENGINEER CONTACT: RICHARD B. HALL, AIA, NCARB
(425) 806-1869
RHALL@LDCCORP.COM
RIVIAN CONTACT DEPLOYMENT MANAGER: ALEX GRANT
(971) 275-7365
AGRANT@RIVIAN.COM
REAL ESTATE MANAGER: CHELSEY WILLIAMS
(650) 407-9272
CHELSEYW@RIVIAN.COM

VICINITY MAP



AERIAL MAP



PROJECT DESCRIPTION

1. INSTALL (1) UTILITY TRANSFORMER
2. INSTALL (1) SWITCHGEAR ASSEMBLY
3. INSTALL (8) RIVIAN CHARGING STATIONS
4. INSTALL (2) LED LIGHT

CODE REVIEW

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES:

BUILDING CODE: INTERNATIONAL BUILDING CODE (IBC), 2021 EDITION
INTERNATIONAL EXISTING BUILDING CODE (IEBC), 2021 EDITION
ELECTRICAL CODE: NATIONAL ELECTRICAL CODE (NEC), 2020 EDITION
FIRE SAFETY CODE: INTERNATIONAL FIRE CODE (IFC), 2021 EDITION
USE GROUP: U (UTILITY)
CONSTRUCTION TYPE: IIB

DRAWING INDEX

SHEET NO.	SHEET TITLE	REV#
CS-1	COVER SHEET	
GN-1	GENERAL NOTES	
GN-2	GENERAL NOTES	
A-1	OVERALL SITE PLAN	
A-2	DEMOLITION PLAN	
A-3	PROPOSED LAYOUT	
A-3.1	PROPOSED LAYOUT	
A-4	EQUIPMENT SLAB LAYOUT	
A-4.1	ELEVATION	
A-5	STAGING PLAN	
D-1	CONSTRUCTION DETAILS	
D-2	CONSTRUCTION DETAILS	
D-3	CONSTRUCTION DETAILS	
D-4	CONSTRUCTION DETAILS	
E-1	UTILITY PLAN	
E-2	ELECTRICAL PLAN	
E-2.1	ELECTRICAL PLAN	
E-3	ONE-LINE DIAGRAM	
E-4	ELECTRICAL DETAILS	
E-6	GROUNDING DETAILS	

SHEET TITLE
COVER SHEET

REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

CONTRACTOR NOTE

1. CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY REPAIRS OR REPLACEMENT DUE TO NEW CONSTRUCTION, OF EXISTING ELECTRICAL, PAVING, PVC CONDUITS, AND LIGHTS.

CALL BEFORE YOU DIG



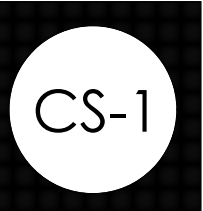
DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED TO BE FULL SIZE AT 22"x34".
CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

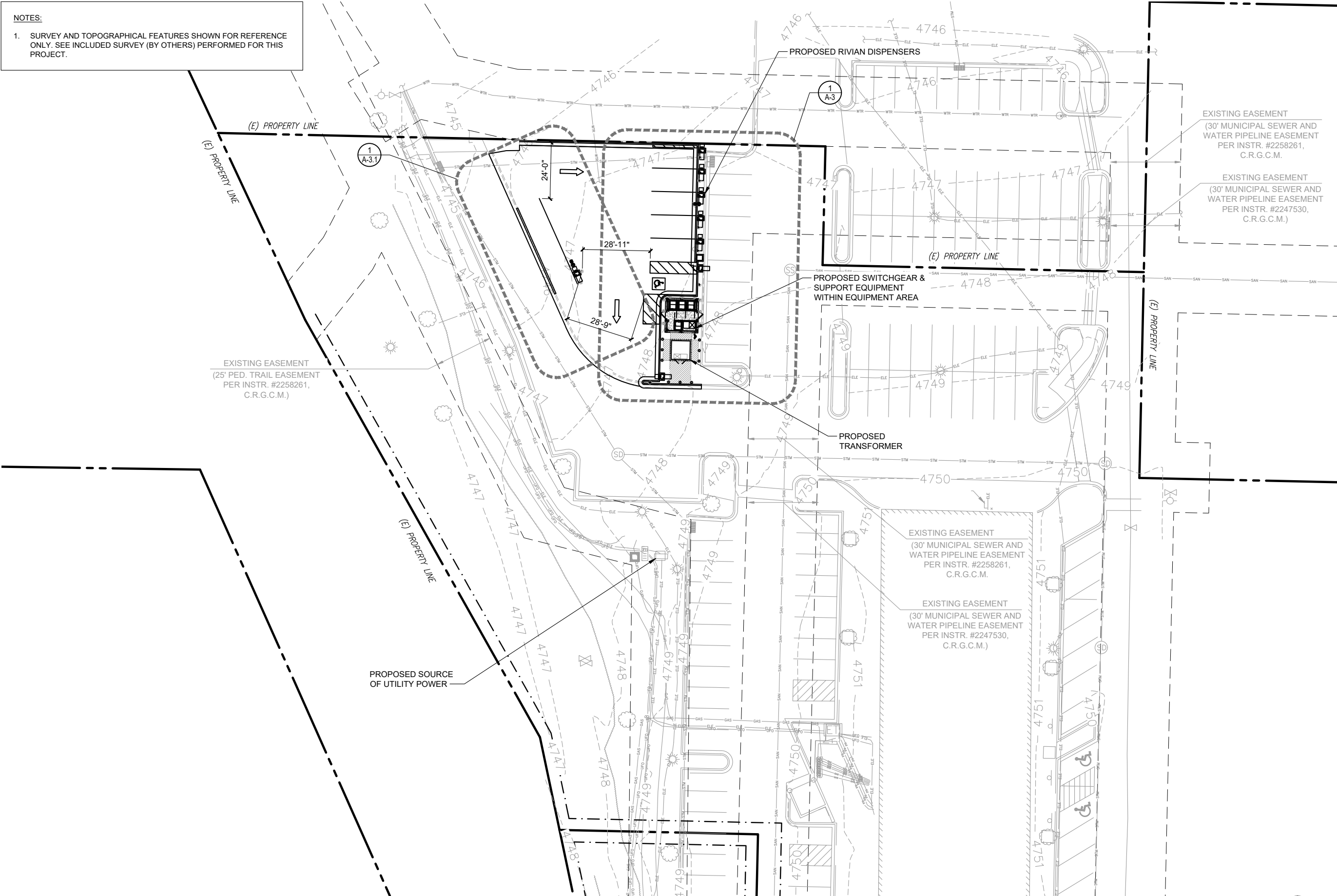
REFERENCE DRAWING

SURVEY
RIVIAN CHARGERS SPEC SHEET

CHECKED BY: RBH



NOTES:
 1. SURVEY AND TOPOGRAPHICAL FEATURES SHOWN FOR REFERENCE ONLY. SEE INCLUDED SURVEY (BY OTHERS) PERFORMED FOR THIS PROJECT.



EXISTING EASEMENT
 (25' PED. TRAIL EASEMENT
 PER INSTR. #2258261,
 C.R.G.C.M.)

EXISTING EASEMENT
 (30' MUNICIPAL SEWER AND
 WATER PIPELINE EASEMENT
 PER INSTR. #2258261,
 C.R.G.C.M.)

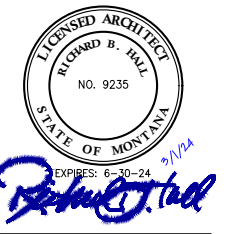
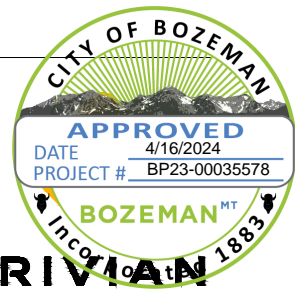
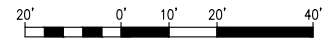
EXISTING EASEMENT
 (30' MUNICIPAL SEWER AND
 WATER PIPELINE EASEMENT
 PER INSTR. #2247530,
 C.R.G.C.M.)

EXISTING EASEMENT
 (30' MUNICIPAL SEWER AND
 WATER PIPELINE EASEMENT
 PER INSTR. #2258261,
 C.R.G.C.M.)

EXISTING EASEMENT
 (30' MUNICIPAL SEWER AND
 WATER PIPELINE EASEMENT
 PER INSTR. #2247530,
 C.R.G.C.M.)

PROPOSED SOURCE
 OF UTILITY POWER

1 OVERALL SITE PLAN
 A-1 22' x 34" SCALE: 1" = 20' 11" x 17" SCALE: 1" = 40'

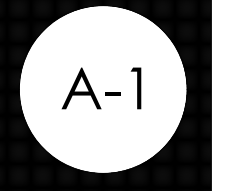


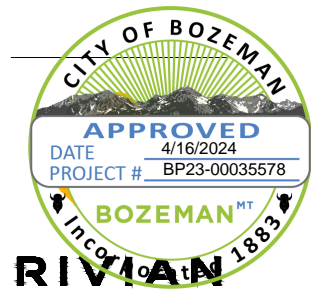
JOB NAME
 BOZEMAN
 1771 N 19TH AVE
 BOZEMAN, MT 59718

SHEET TITLE
 OVERALL SITE
 PLAN

REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

CHECKED BY: RBH



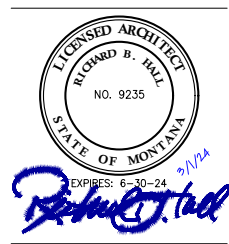


RIVIAN



12 INDUSTRIAL WAY
SALEM, NEW HAMPSHIRE 03079

LDC Surveying
Engineering
Planning
Kent Woodville Olympia
20210 140th Avenue NE
Woodville, WA 98072
T 425.806.1888 www.LDCorp.com F 425.482.2883

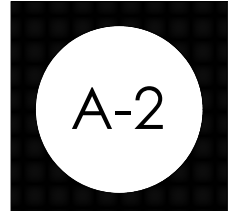


JOB NAME
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BOZEMAN, MT 59718

SHEET TITLE
DEMOLITION PLAN

REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

CHECKED BY: RBH

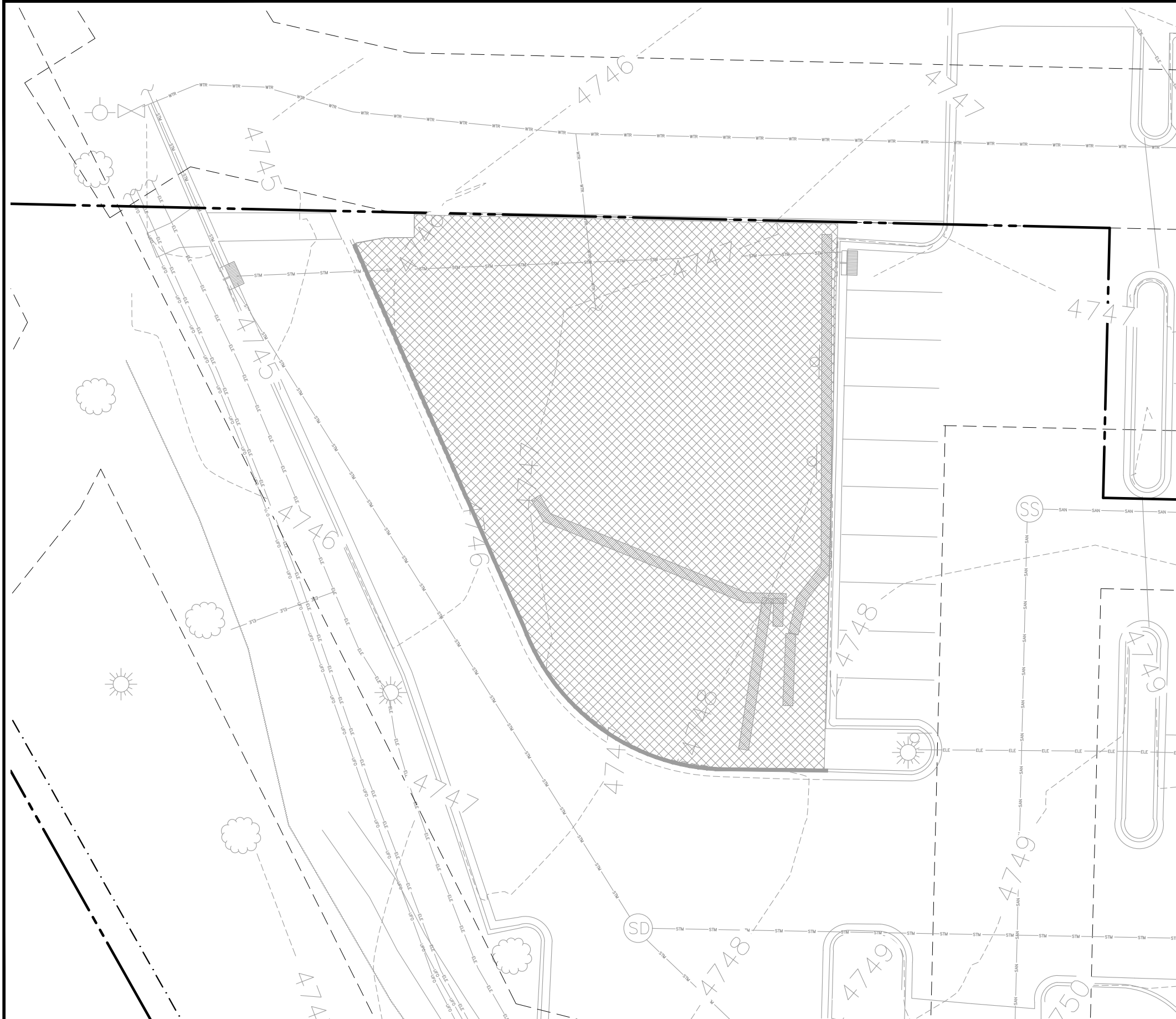


DEMO QUANTITIES TABLE

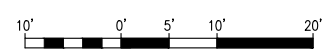
	ASPHALT	N/A	± SQ FT
	PARKING LINES	N/A	± LINEAR FT
	CURB/GUTTER	148	± LINEAR FT
	LANDSCAPING	345	± SQ FT
	LANDSCAPING SHRUB REMOVAL AND REPLANTING	N/A	
	CONCRETE	N/A	± SQ FT
	BORING	N/A	± LINEAR FT
	TRENCHING	187	± LINEAR FT

NOTES

- DEMOLITION NOTES:**
- SURVEY AND TOPOGRAPHICAL FEATURES SHOWN FOR REFERENCE ONLY. SEE INCLUDED SURVEY (BY OTHERS) PERFORMED FOR THIS PROJECT.
 - CONTRACTOR SHALL PROTECT EXISTING INFRASTRUCTURE IN PLACE WITHIN THE AREA OF IMPROVEMENTS, AND RETURN SIDEWALKS, CURBING, ASPHALT, LANDSCAPING, PLANTERS, IRRIGATION SYSTEMS, AND ANY OTHER FACILITIES DISTURBED BY THE WORK TO THE SAME OR BETTER CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK.
 - CONTRACTOR SHALL PROTECT EXISTING LANDSCAPING, TREES, GROUND COVER, AND ROOT SYSTEMS TO THE MAXIMUM EXTENT POSSIBLE.
 - CONTRACTOR TO NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING WORK.
 - QUANTITIES LISTED ARE ONLY APPROXIMATIONS. CONTRACTOR SHALL VERIFY ALL QUANTITIES PRIOR TO BIDDING.
 - TRENCHING IS TO BE USED EXCEPT IN HEAVY TRAFFIC AREAS, MAIN DRIVE AISLES, AND ACROSS STORE ENTRANCES.

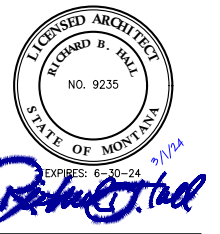
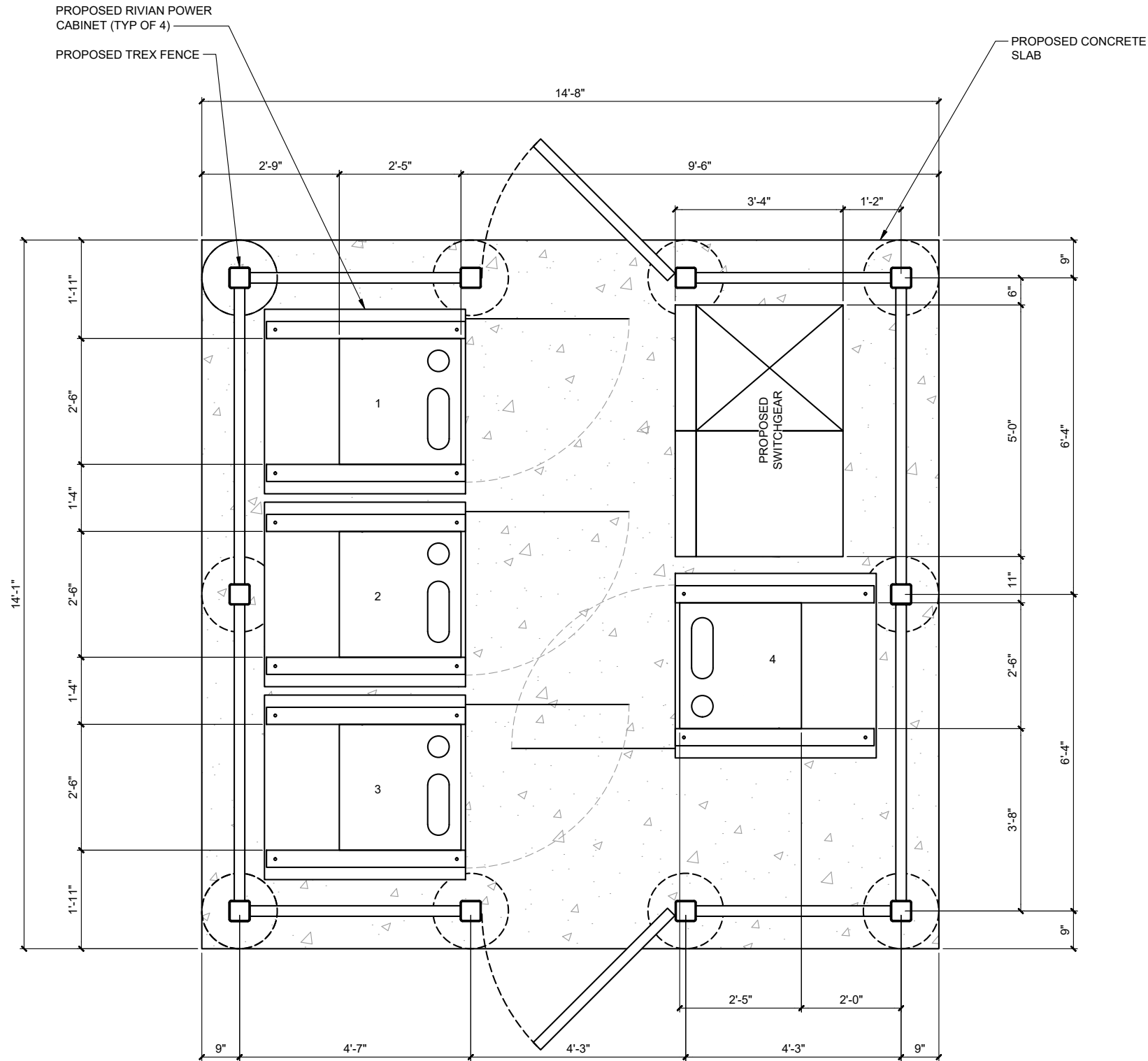


1
A-2
DEMOLITION PLAN
22" x 34" SCALE: 1" = 10' 11" x 17" SCALE: 1" = 20'



NOTES:

1. CONDUIT STUBS FOR FUTURE EQUIPMENT SHALL BE CAPPED.
2. ALL CONDUIT STUBS FOR (FUTURE AND PROPOSED) SHALL HAVE ENOUGH SEPARATION TO INSTALL BELL ENDS ON ALL CONDUITS.



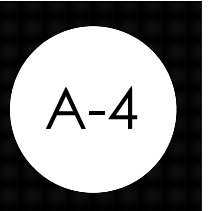
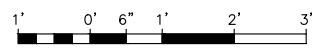
JOB NAME
BOZEMAN
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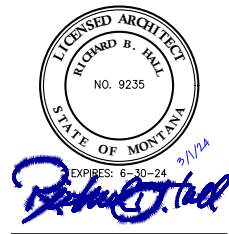
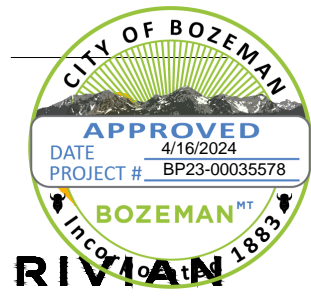
SHEET TITLE
EQUIPMENT SLAB LAYOUT

REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

CHECKED BY: RBH

1 EQUIPMENT SLAB LAYOUT
 22" x 34" SCALE: 3/4" = 1'-0" 11" x 17" SCALE: 3/8" = 1'-0"



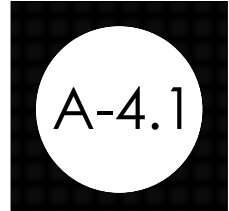


JOB NAME
BOZEMAN
 1771 N 19TH AVE
 BOZEMAN, MT 59718

SHEET TITLE
ELEVATION

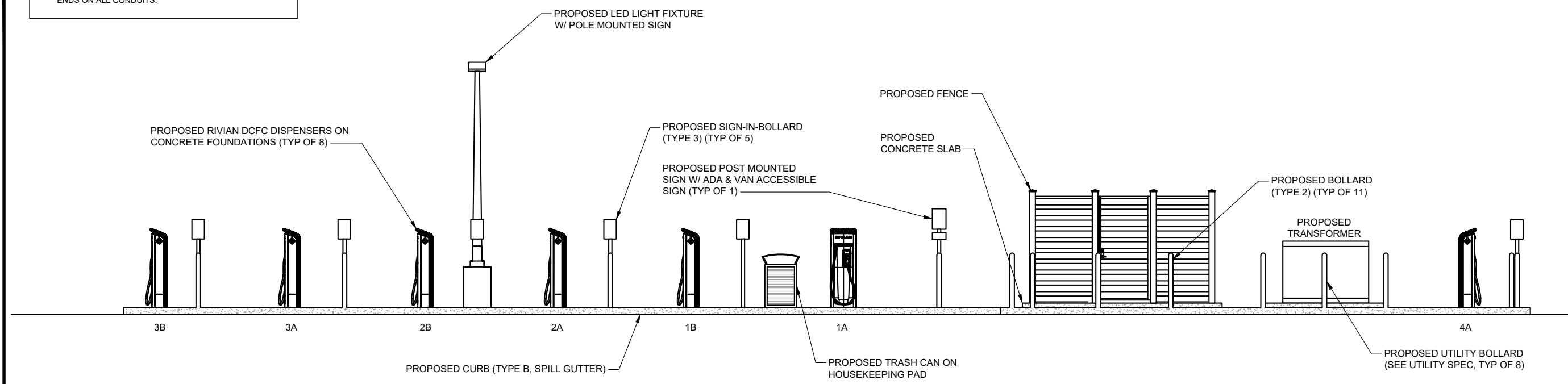
REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

CHECKED BY: RBH

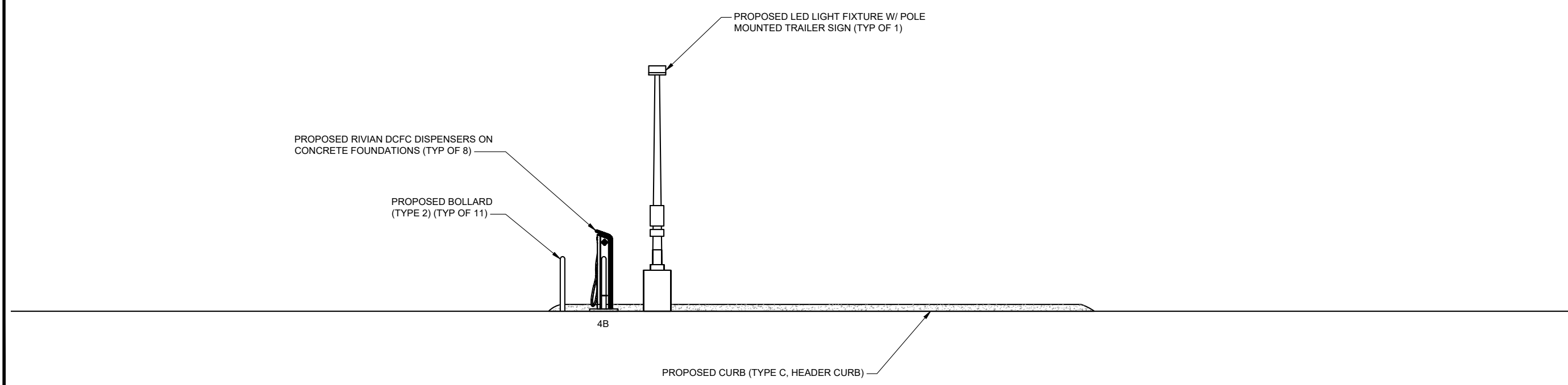


NOTES:

- CONDUIT STUBS FOR FUTURE EQUIPMENT SHALL BE CAPPED.
- ALL CONDUIT STUBS FOR (FUTURE AND PROPOSED) SHALL HAVE ENOUGH SEPARATION TO INSTALL BELL ENDS ON ALL CONDUITS.



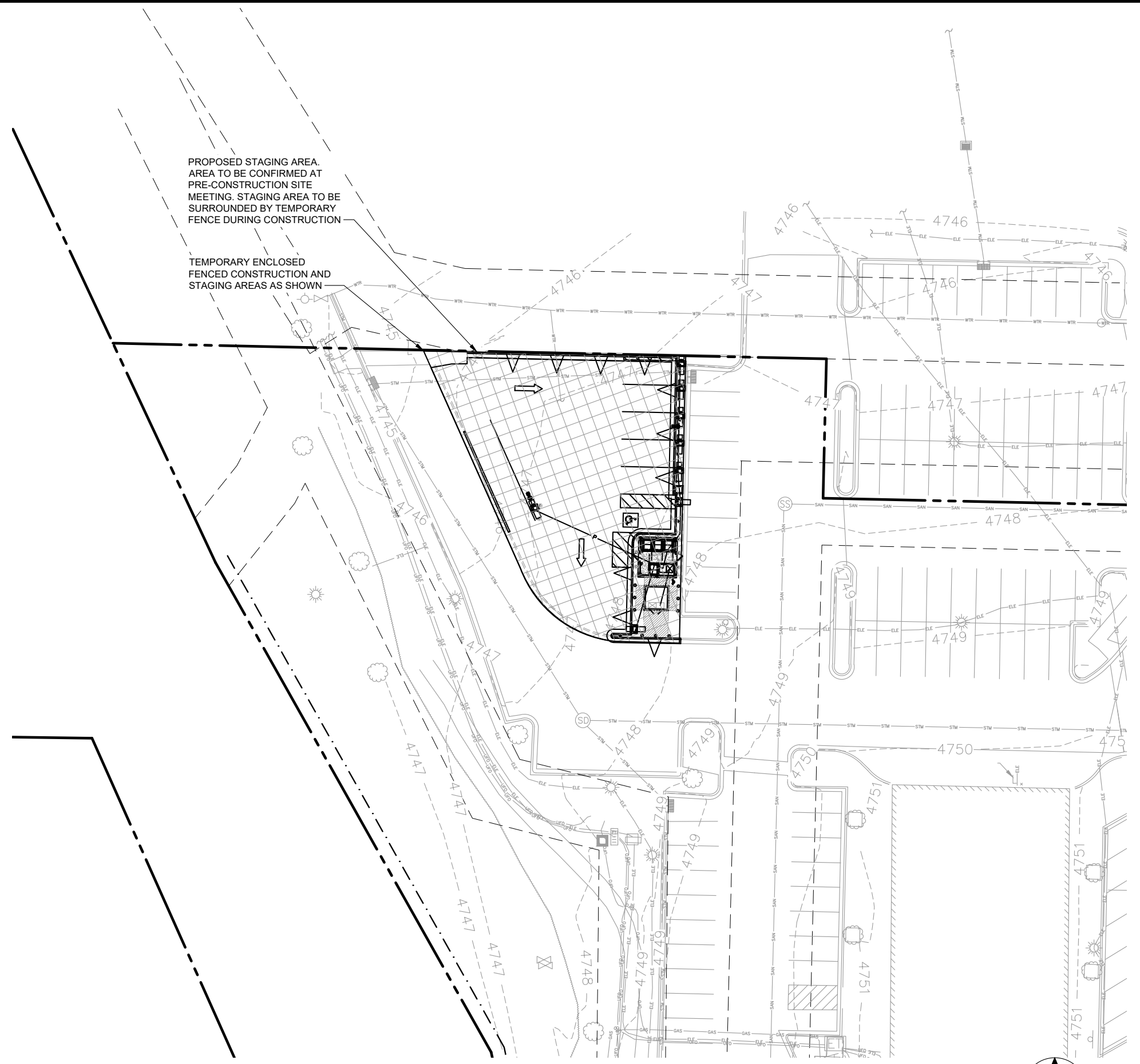
1
 A-4.1 **ELEVATION**
 22" x 34" SCALE: 1/4" = 1'-0" 11" x 17" SCALE: 1/8" = 1'-0"



2
 A-4.1 **ELEVATION @ TRAILER DISPENSER**
 22" x 34" SCALE: 1/4" = 1'-0" 11" x 17" SCALE: 1/8" = 1'-0"

REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

CHECKED BY: RBH



PROPOSED STAGING AREA.
 AREA TO BE CONFIRMED AT
 PRE-CONSTRUCTION SITE
 MEETING. STAGING AREA TO BE
 SURROUNDED BY TEMPORARY
 FENCE DURING CONSTRUCTION

TEMPORARY ENCLOSED
 FENCED CONSTRUCTION AND
 STAGING AREAS AS SHOWN

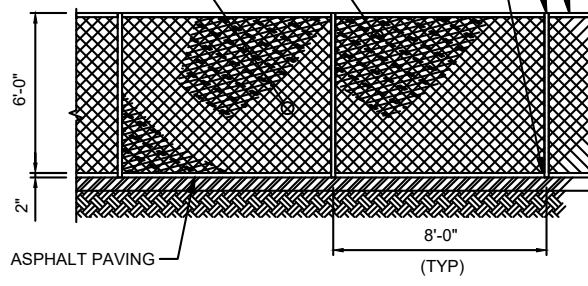
ENDURO SHADE CLOTH BY
 HENDEE ENTERPRISES, INC. (OR
 EQUAL) TEL: 1-800-231-7275

NO. 9 GAGE, 0.148" ± 0.00",
 FINISHED SIZE GALVANIZED
 STEEL WIRES. 2" MESH, TOP
 AND BOTTOM SELVAGES
 TWISTED AND BARBED
 CONFORMING TO ASTM A392,
 A491, F668, OR F573

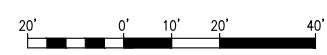
TOP RAIL 1.66 IN OD,
 2.27 LB/FT GALVANIZED
 STEEL PIPE (TYP)

POST 1.90 IN OD, 2.70
 LB/FT GALVANIZED
 STEEL PIPE (TYP)

TEMPORARY FENCE
 TO BE WEIGHTED
 DOWN (NOT TO USE
 SANDBAGS)



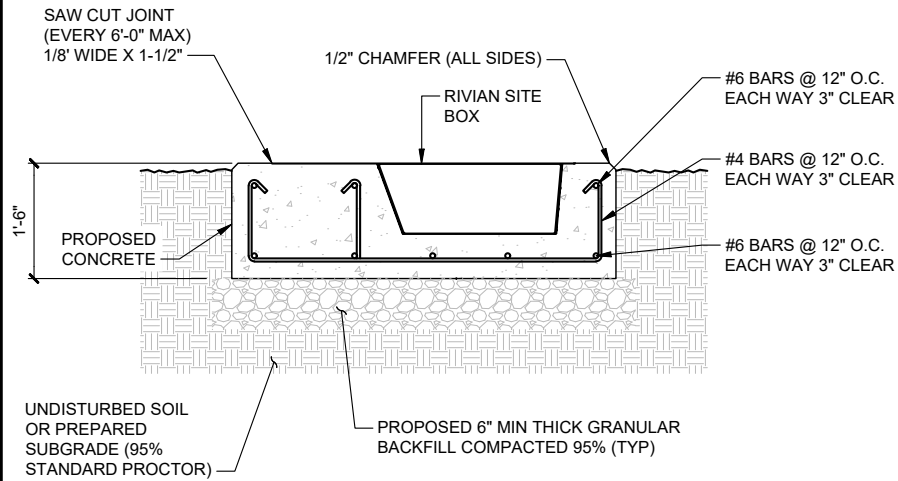
1 STAGING PLAN
 22" x 34" SCALE: 1" = 20' 11" x 17" SCALE: 1" = 40'



2 TEMPORARY FENCE DETAIL
 SCALE: N.T.S.

NOTES:

1. FOUNDATION AREA SHALL BE EXCAVATED TO THE DEPTH AND DIMENSIONS SHOWN ON THE PLANS. OTHER UNSUITABLE MATERIAL SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE. THE SUBGRADE SHALL BE ROLLED WITH A 1-TON, VIBRATORY, WALK-BEHIND ROLLER AT A SPEED OF LESS THAN 2 FPS, 6 PASSES MINIMUM, TO PROVIDE UNYIELDING SURFACE.
2. UNDERCUT SOFT OR "WEAVING" AREAS A MINIMUM OF 12 INCHES DEEP. BACKFILL UNDERCUT AREA WITH FILL MEETING THE SPECIFICATIONS OF STRUCTURAL FILL.
3. CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH (f_c)=2500 psi.
4. REINFORCING BAR TO BE ASTM A615 GRADE 60.
5. ALL REINFORCING TO HAVE MINIMUM CONCRETE COVER PER ACI SPECIFICATIONS.
6. ALL CONCRETE MATERIALS AND WORKMANSHIP SHALL CONFORM TO ACI 318-14 AND APPLICABLE STATE BUILDING
7. 100% TIES FOR REBAR OVERLAP. NO COLD JOINTS SHALL BE PERMITTED

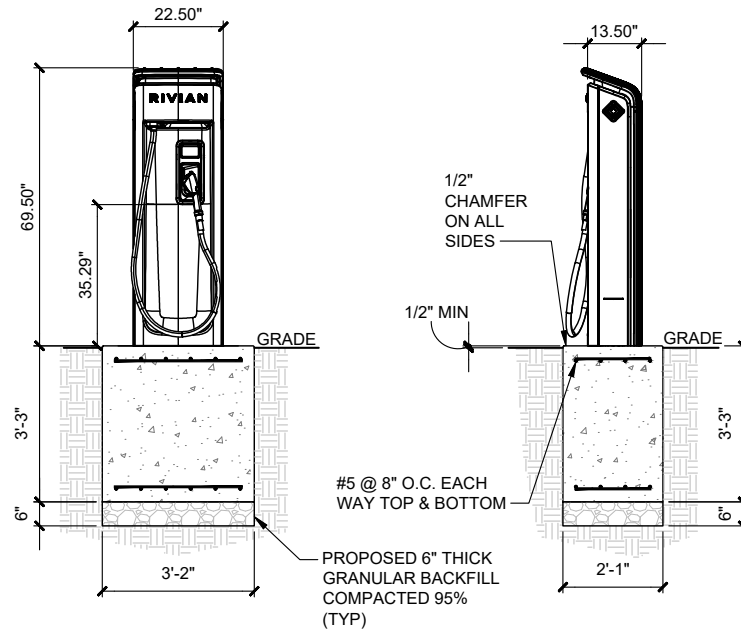


1 POWER UNIT & SWITCHGEAR FOUNDATION DETAIL

D-1 22" x 34" SCALE: 1/2" = 1'-0" 11" x 17" SCALE: 1/4" = 1'-0"

NOTE:

1. OPERABLE PARTS OF DISPENSER TO FRONT OF CURB SHALL BE 10" MAX.
2. OPERABLE PARTS OF DISPENSER SHALL NOT EXCEED 48" ABOVE PARKING SURFACE.
3. CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH (f_c)=2500 psi.

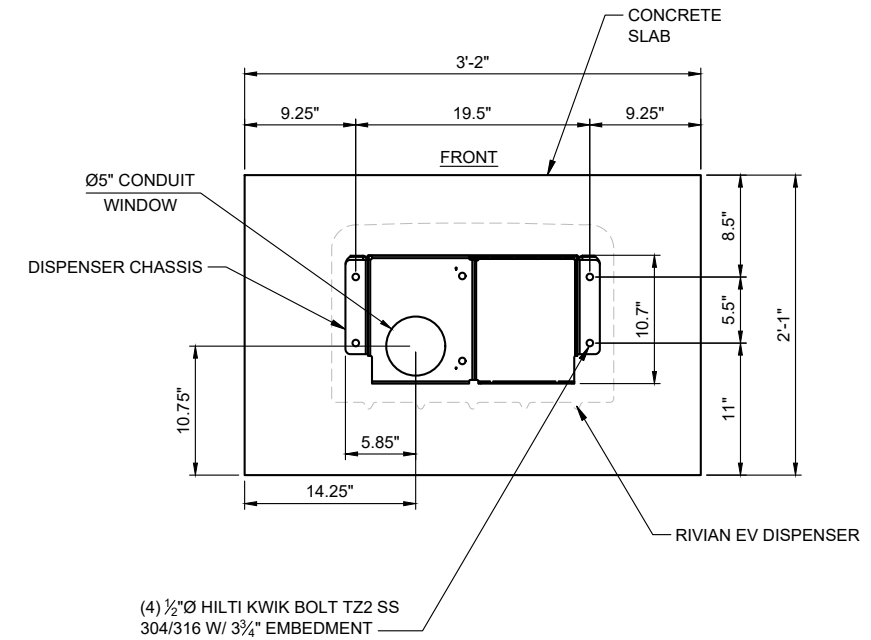


2 DISPENSER SLAB SECTION/ELEVATION DETAIL

D-1 22" x 34" SCALE: 1/2" = 1'-0" 11" x 17" SCALE: 1/4" = 1'-0"

NOTE:

1. MINIMUM CONCRETE EDGE DISTANCE FOR PROPOSED ANCHORS SHALL BE 6".
2. MINIMUM CLEAR SPACING BETWEEN ANCHOR AND CONDUIT SHALL BE 3 INCHES.
3. CONTRACTOR TO FIELD VERIFY THE ANCHOR SPACING PER MANUFACTURER'S INSTALLATION MANUAL.

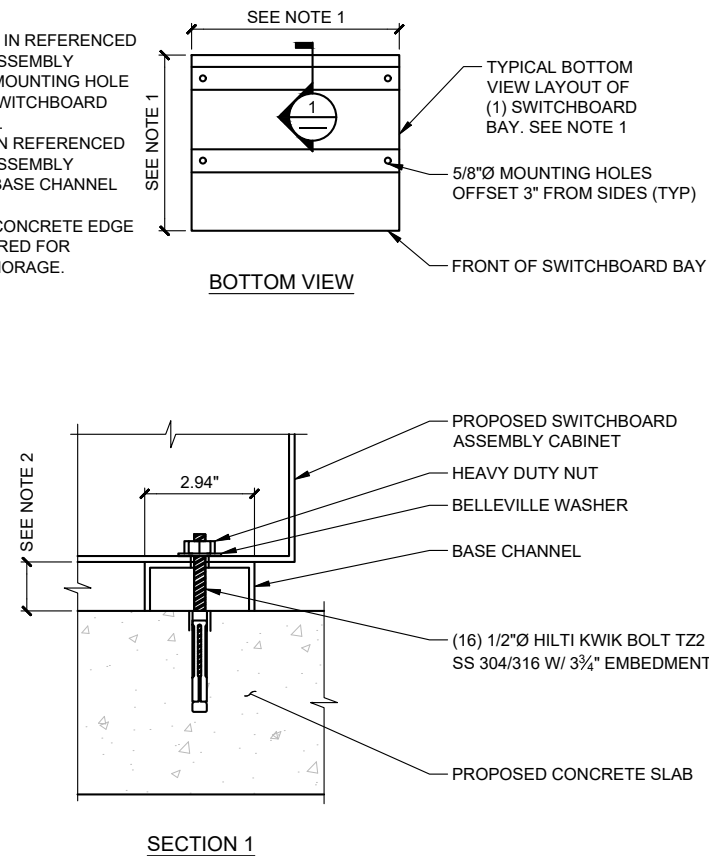


3 DISPENSER ANCHORAGE AND CONDUIT ENTRY DETAIL

D-1 SCALE: N.T.S.

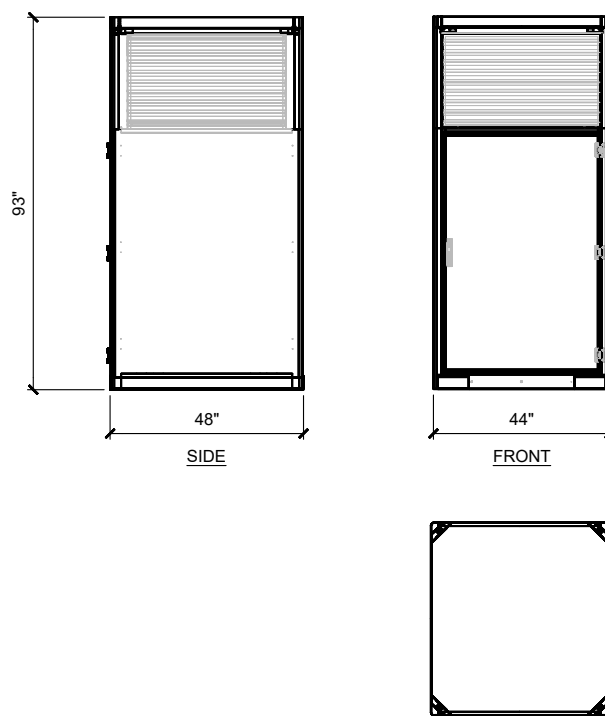
NOTES:

1. SEE FLOOR PLAN IN REFERENCED SWITCHBOARD ASSEMBLY DRAWINGS FOR MOUNTING HOLE LOCATION AND SWITCHBOARD BAY DIMENSIONS.
2. SEE ELEVATION IN REFERENCED SWITCHBOARD ASSEMBLY DRAWINGS FOR BASE CHANNEL DIMENSION.
3. MINIMUM 10 1/2" CONCRETE EDGE DISTANCE REQUIRED FOR PROPOSED ANCHORAGE.



4 SWITCHGEAR MOUNTING DETAIL

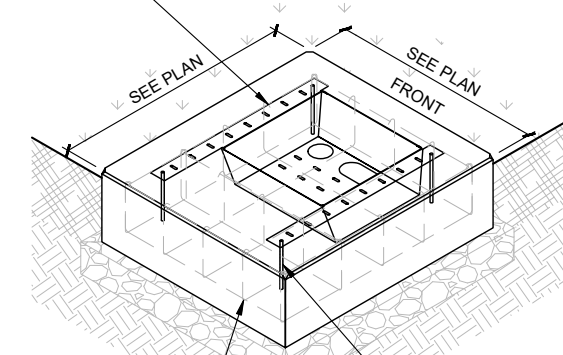
D-1 22" x 34" SCALE: 1/2" = 1'-0" 11" x 17" SCALE: 1/4" = 1'-0"



5 POWER UNIT DETAIL

D-1 SCALE: N.T.S.

PROPOSED RIVIAN SITE BOX (TYP OF 1 PER CABINET)

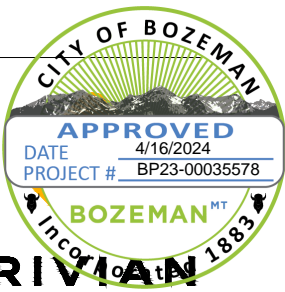


PROPOSED REBAR, SEE PCC EQUIPMENT SLAB DETAIL ON THIS SHEET.

PROPOSED 1/2" WILLIAMS B3Z COLUMN ANCHOR WITH 12" EMBEDMENT (TYP OF 4 PER CABINET). PROVIDED AND INSTALLED BY CONTRACTOR.

6 POWER UNIT ANCHORAGE AND CONDUIT ENTRY DETAIL

D-1 SCALE: N.T.S.



12 INDUSTRIAL WAY
SALEM, NEW HAMPSHIRE 03079



JOB NAME
BOZEMAN
1771 N 19TH AVE
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SHEET TITLE
CONSTRUCTION
DETAILS

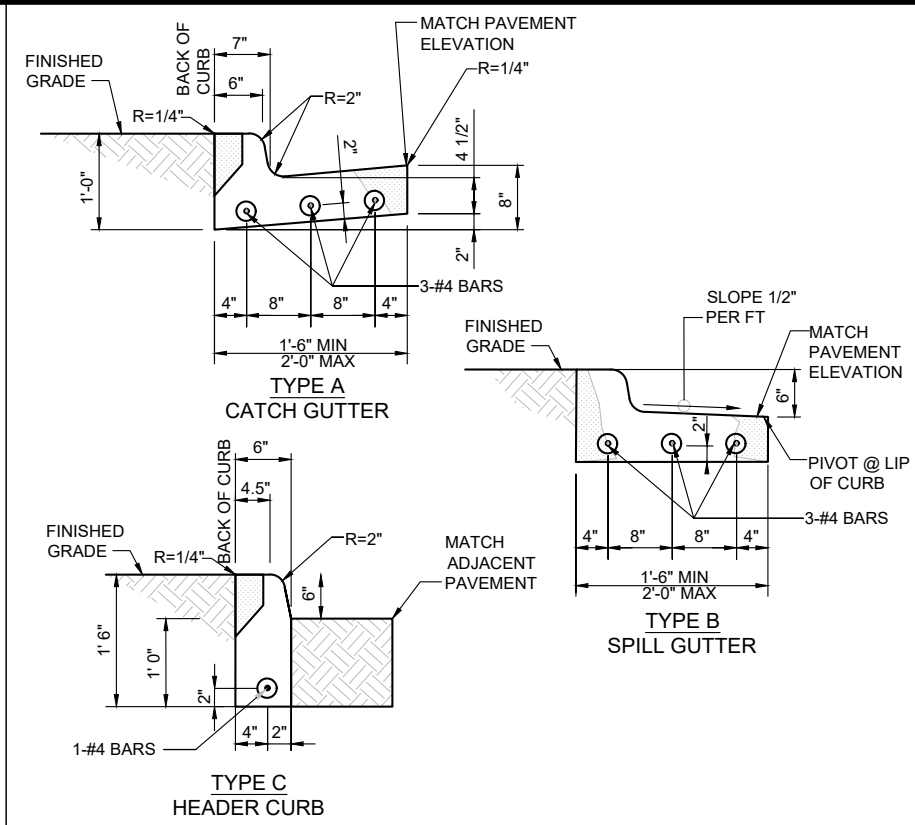
REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

CHECKED BY: RBH

D-1

REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

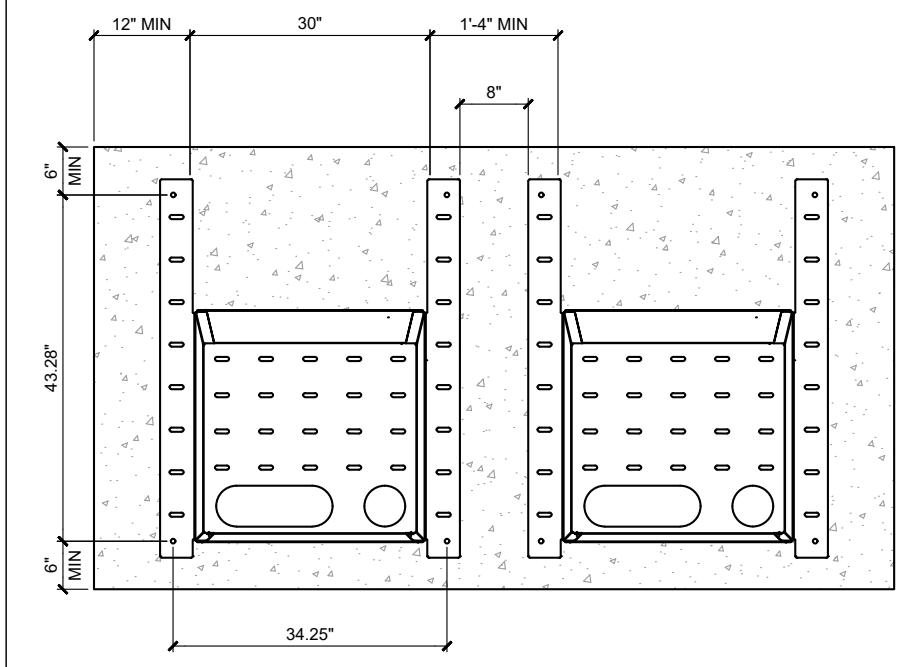
CHECKED BY: RBH



NOTE
 1. 1/2" PRE MOLDED EXPANSION JOINTS SHALL BE PLACED AT POINTS OF CURVATURE, CURB RETURNS, CURB INLETS, AND AT 250' CENTERS. CONTRACTION JOINTS SHALL BE 2" DEEP, 3/16" WIDE, AND PLACED AT 15' INTERVALS EQUALLY SPACED BETWEEN EXPANSION JOINTS.

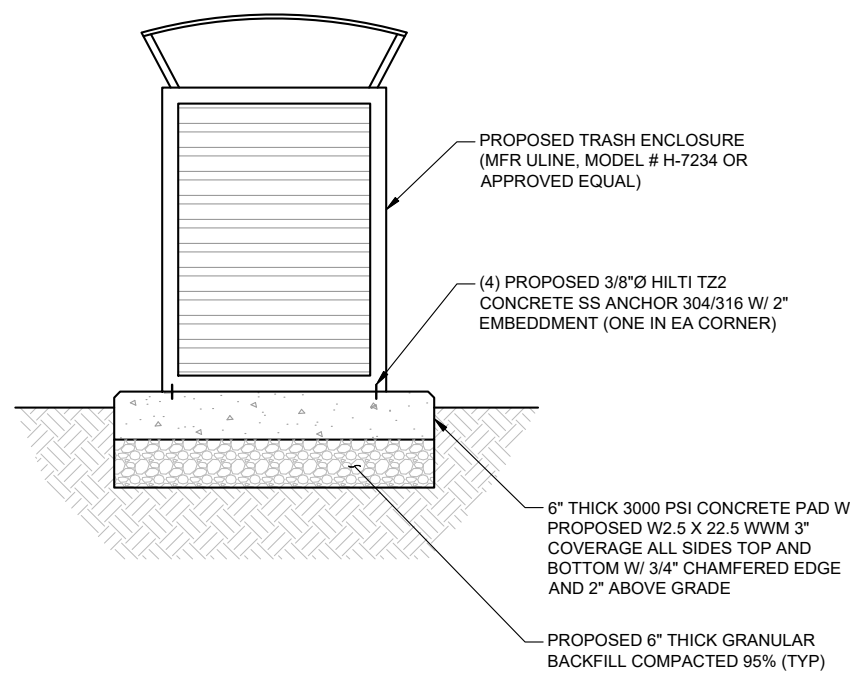
3 CONCRETE CURB DETAIL
 SCALE: N.T.S.

NOTE
 1. INSET PART OF SITE BOX SHALL BE 12" FROM SWITCHGEAR OR OTHER HARDWARE WHEN SHARING A SLAB



FRONT

6 SITE BOX DETAIL
 SCALE: N.T.S.

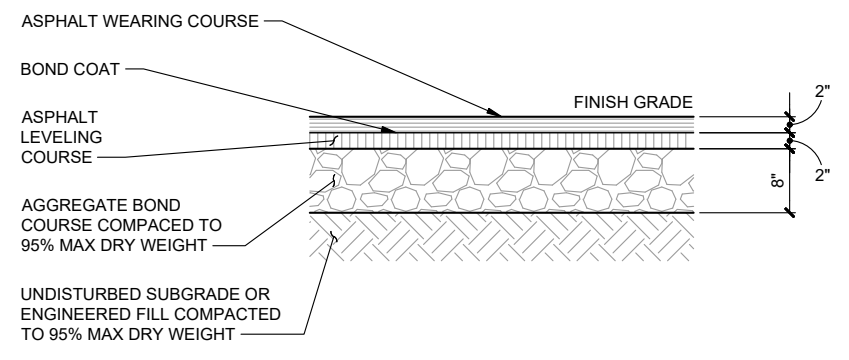


3 TRASH CAN AND HOUSEKEEPING PAD DETAIL
 22" x 34" SCALE: 1" = 1'-0" 11" x 17" SCALE: 1/2" = 1'-0"



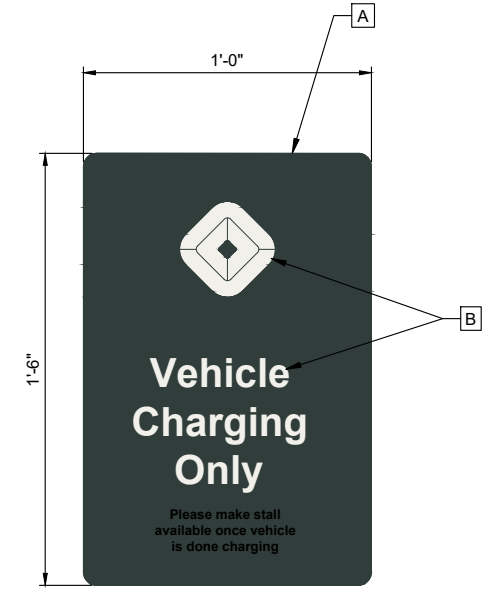
NOTE:
 A. 1/8" THICK POWDER COATED ALUMINUM PANEL, TO MATCH RAL 6012, SATIN FINISH. MECHANICALLY ATTACHED TO POST WITH CONCEALED STUDS/FASTENERS.
 B. APPLIED BNYLE OR DIRECT PRINTED EXTERIOR-GRADE GRAPHICS. COLORS AS INDICATED TO MATCH RAL 9016 "TRAFFIC WHITE".
 C. SIGN TO BE INSTALLED NO LESS THAN 66" ABOVE GRADE.

5 TRAILER PRIORITY SIGN DETAIL
 SCALE: N.T.S.



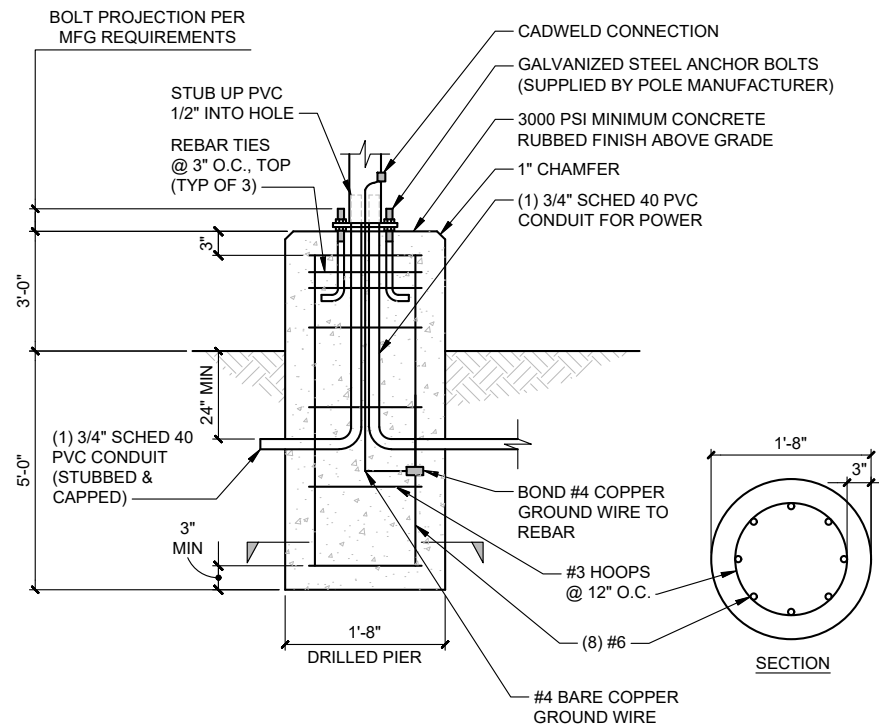
1 ASPHALT DETAIL
 SCALE: N.T.S.

NOTE:
 A. 1/8" THICK POWDER COATED ALUMINUM PANEL, TO MATCH RAL 6012, SATIN FINISH. MECHANICALLY ATTACHED TO POST WITH CONCEALED STUDS/FASTENERS.
 B. APPLIED BNYLE OR DIRECT PRINTED EXTERIOR-GRADE GRAPHICS. COLORS AS INDICATED TO MATCH RAL 9016 "TRAFFIC WHITE".
 C. SIGN TO BE INSTALLED NO LESS THAN 66" ABOVE GRADE.



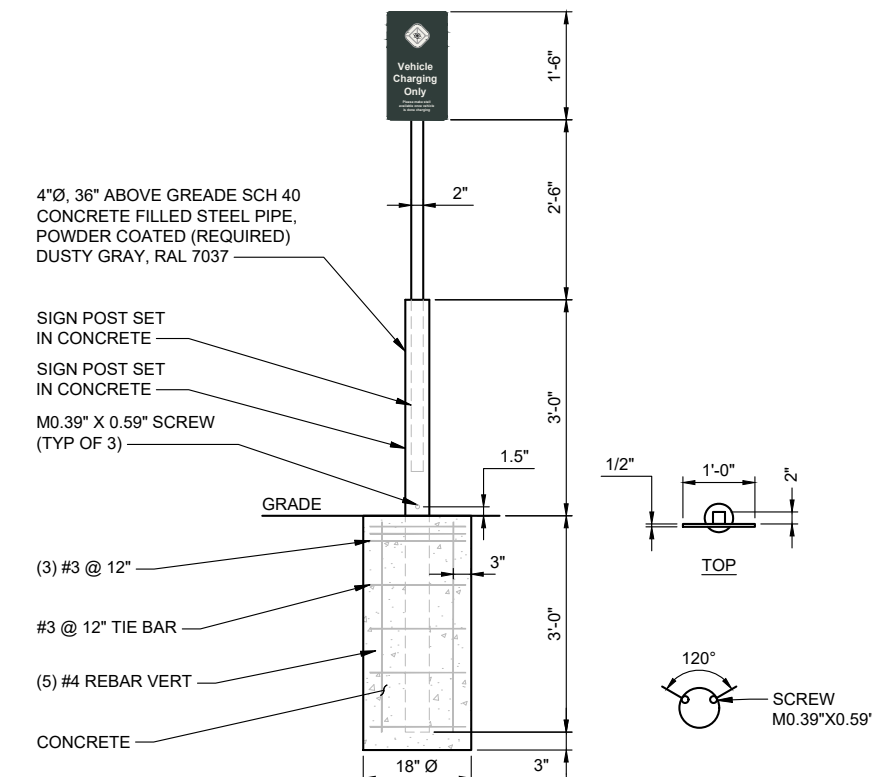
4 NO PARKING DETAIL
 22" x 34" SCALE: 3" = 1'-0" 11" x 17" SCALE: 1 1/2" = 1'-0"

- NOTES:
1. GENERIC LOADING: V= 115 MPH. EXP C. K.ZT =1.3.
 2. 15' POLE MAX 36" ABOVE GRADE MAX WITH 4" MAX ROUND POLE. MAX WEIGHT OF POLE AND LIGHT: 160 LBS MAX EPA OF LIGHT FIXTURE: 1.7 SF.
 3. LIGHT POLE AND ANCHORAGE DESIGNED AND PROVIDED BY OTHERS.



1 LIGHT FOUNDATION DETAIL
D-3 22" x 34" SCALE: 1" = 1'-0" 11" x 17" SCALE: 1/2" = 1'-0"

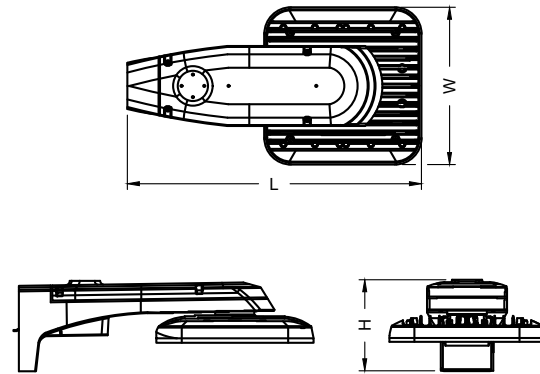
- NOTES:
1. BOLLARD IS FOR WARNING PURPOSES ONLY.
 2. BOLLARD DETAIL FOR BOLLARDS AROUND RIVIAN EQUIPMENT.
 3. CONTRACTOR TO PROVIDE (2) 6' LONG, 1/2" THICK FOAM STRIPS CROSSED OVER TOP OF STEEL PIPE TO STABILIZE SLIP COVER.
 4. BOTTOM OF LOWEST SIGN SHALL BE INSTALLED 66" ABOVE GRADE.



4 WARNING BOLLARD WITH SIGN DETAIL
D-3 22" x 34" SCALE: 3/4" = 1'-0" 11" x 17" SCALE: 3/8" = 1'-0"

SPECIFICATIONS

EPA: 0.7 FT² (0.07MP)
 LENGTH: 25" (64CM)
 WIDTH: 13-1/4" (34CM)
 HEIGHT: 7-3/4" (20CM)
 WEIGHT (MAX): 26 LBS (11.8KG)



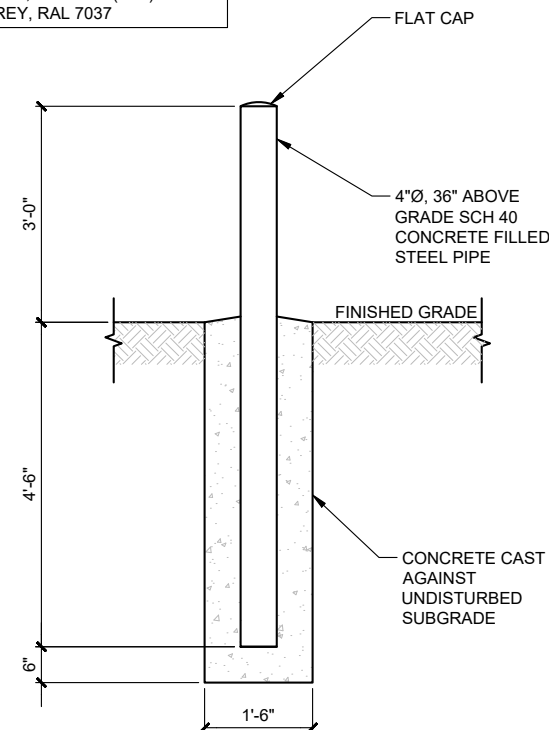
FIXTURE:	LTH KAX1 LED P1 50K R3 MVOLT RPA PER DBLXD
POLE:	RSS 15 4-5B DM19AS FDL11-6B DBLXD
PHOTOCELL:	DLL 127F 1.5 JU

- NOTES:
1. FIXTURE TO BE LED, FULL CUT-OFF, SINGLE FIXTURE AS MANUFACTURED BY LITHONIA LIGHTING.
 2. POLE TO BE 15 FOOT, ROUND STRAIGHT STEEL AS MANUFACTURED BY LITHONIA LIGHTING.
 3. PHOTOCELL TO BE DLL ELITE AS MANUFACTURED BY ACUITY CONTROLS.
 4. FIXTURE AND POLE COLOR BLACK.
 5. CONTRACTOR TO SUPPLY AND INSTALL METAL BIRD SPIKES TO TOP OF HORIZONTAL SURFACES.

2 LIGHTING FIXTURE, POST, PHOTOCELL DETAIL
D-3 22" x 34" SCALE: 2" = 1'-0" 11" x 17" SCALE: 1" = 1'-0"

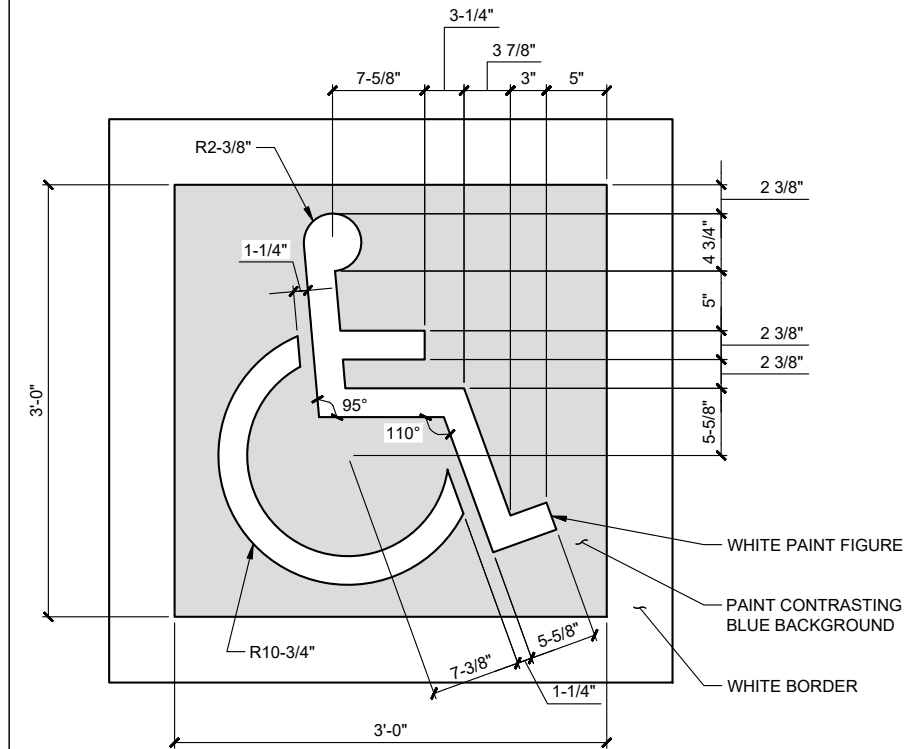
NOTE:

MATERIAL: STEEL
 FINISH: POWDER COATED (REQUIRED)
 GALVANIZED, PAINTED (ALT)
 COLOR: DUSTY GREY, RAL 7037



5 WARNING BOLLARD DETAIL
D-3 22" x 34" SCALE: 3/4" = 1'-0" 11" x 17" SCALE: 3/8" = 1'-0"

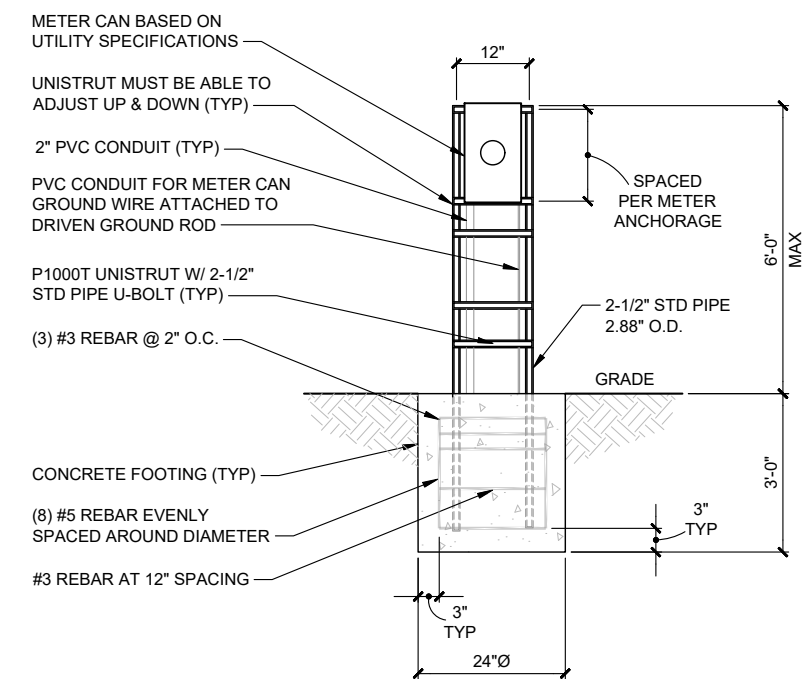
- NOTES:
1. SYMBOL TO BE CENTERED ON WIDTH OF PARKING STALL.
 2. BOTTOM OF SYMBOL TO BE LOCATED FLUSH WITH ACCESS DRIVE, CENTERED ON PARKING SPACE.
 3. SYMBOL IS REQUIRED TO CONTRAST WITH BACKGROUND.



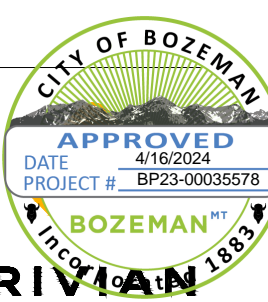
3 INTERNATIONAL SYMBOL OF ACCESSIBILITY DETAIL
D-3 22" x 34" SCALE: 1 1/2" = 1'-0" 11" x 17" SCALE: 3/4" = 1'-0"

STANDALONE CUSTOMER PROVIDED TUV INSTRUMENT RATED METER CAN ON UNISTRUT SUPPORT

- NOTE:
1. GENERIC LOADING: V=115 MPH, EXP C, KZ=0.85, SS=3.73g, SITE CLASS=D, SDS=2.64, (2) 1-1/4" CONDUIT, METER MAX WIND AREA = 540 SQ IN.



6 METER H-FRAME DETAIL
D-3 SCALE:N.T.S.



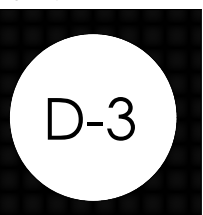
EXPIRES: 6-30-24
Richard B. Paul

JOB NAME
 BOZEMAN
 1771 N 19TH AVE
 BOZEMAN, MT 59718

SHEET TITLE
 CONSTRUCTION
 DETAILS

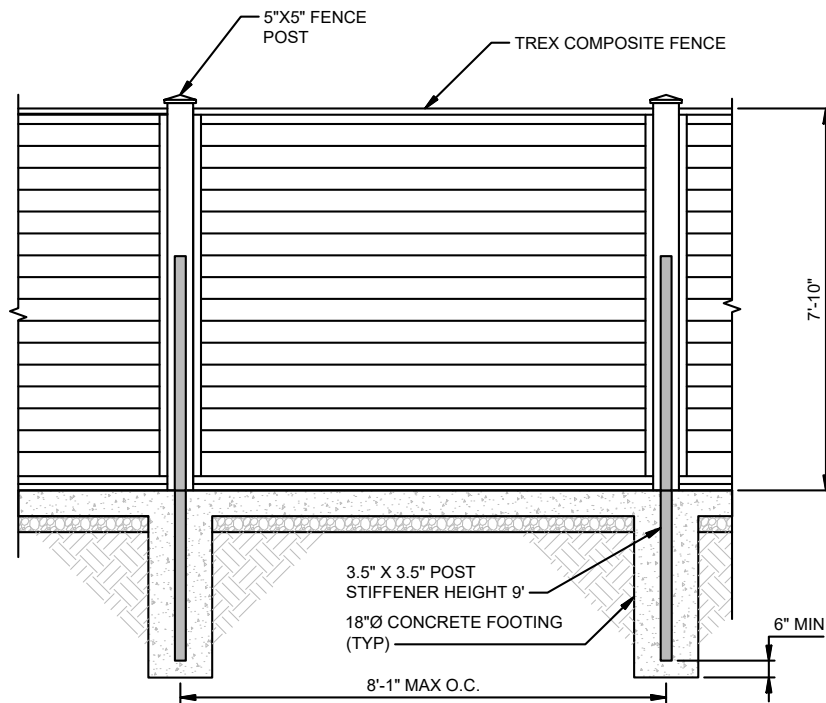
REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

CHECKED BY: RBH



NOTES:

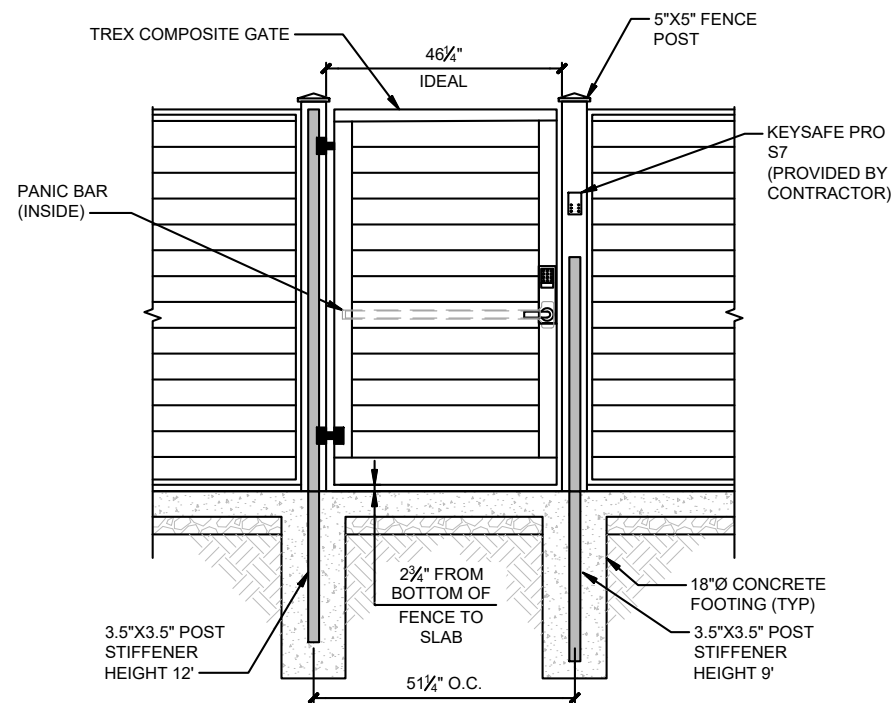
1. COLOR: WOODLAND BROWN
2. INSTALLATION TO BE COMPLETED PER MANUFACTURER'S SPECIFICATION.
3. CONTRACTOR TO PROVIDE RAIL AND PICKET CUTS TO LENGTH ACCORDING TO FENCE POST LAYOUT.
4. HEAVY DUTY POST STIFFENER HEIGHTS AVAILABLE: 9' AND 12'



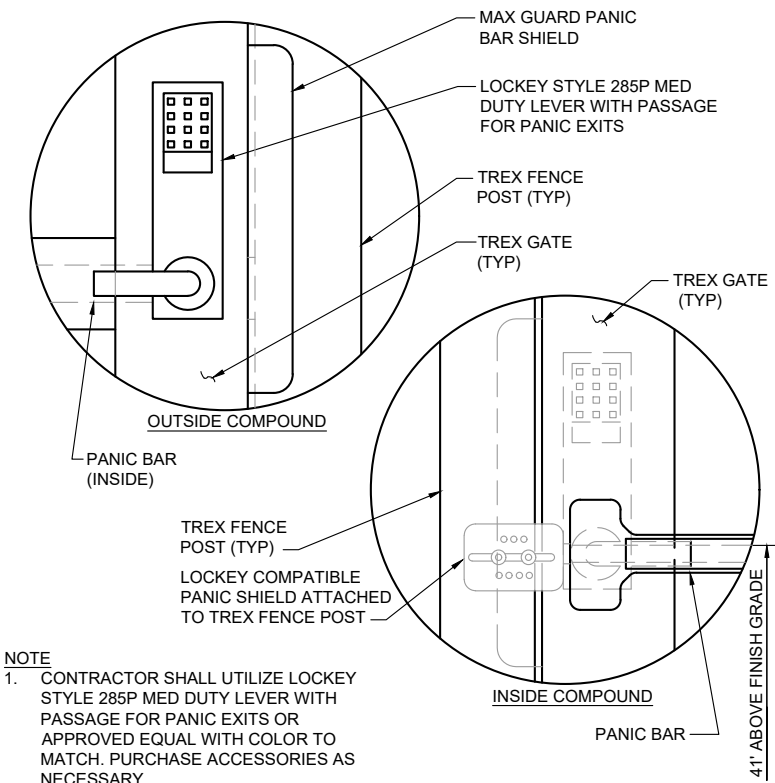
1
D-4 TYPICAL TREX FENCE ELEVATION DETAIL
SCALE: N.T.S.

NOTES:

1. COLOR: WOODLAND BROWN
2. INSTALLATION TO BE COMPLETED PER MANUFACTURER'S SPECIFICATION.
3. CONTRACTOR TO PROVIDE RAIL AND PICKET CUTS TO LENGTH ACCORDING TO FENCE POST LAYOUT.
4. HEAVY DUTY POST STIFFENER HEIGHTS AVAILABLE: 9' AND 12'
5. POST STIFFENER ON HINGE SIDE OF GATE TO EXTEND TO THE FULL HEIGHT OF GATE/FENCE.
6. NON-HINGED STEEL POSTS MUST BE 3'-0" MIN, BUT GC MAY CHOOSE TO KEEP AT A TALLER HEIGHT IF PREFERABLE.



2
D-4 SINGLE GATE DETAIL
SCALE: N.T.S.

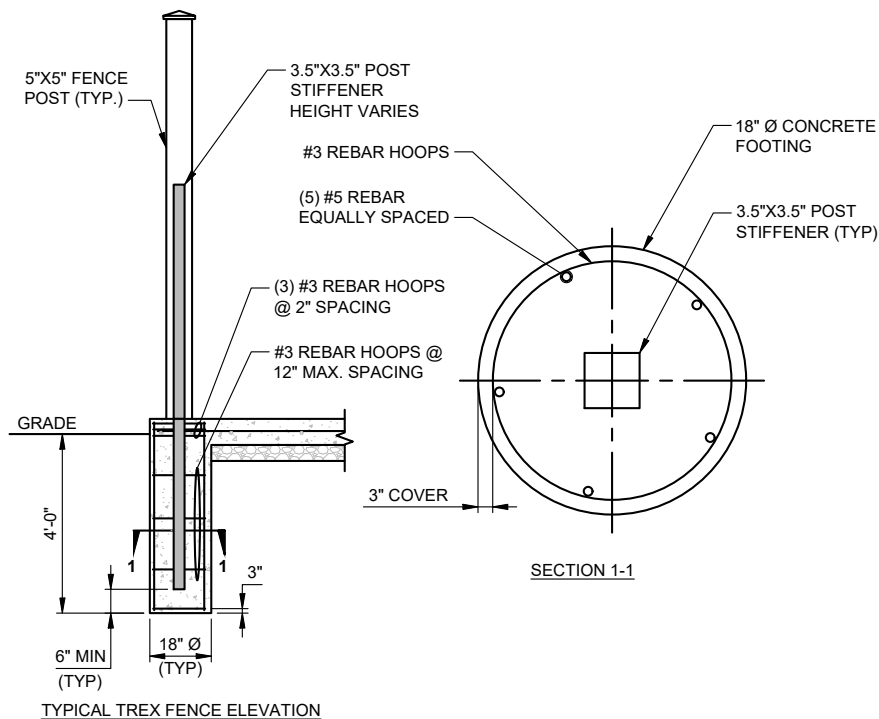


- NOTE**
1. CONTRACTOR SHALL UTILIZE LOCKEY STYLE 285P MED DUTY LEVER WITH PASSAGE FOR PANIC EXITS OR APPROVED EQUAL WITH COLOR TO MATCH. PURCHASE ACCESSORIES AS NECESSARY.

3
D-4 LOCK DETAIL W/ KEYPAD
SCALE: N.T.S.

NOTES:

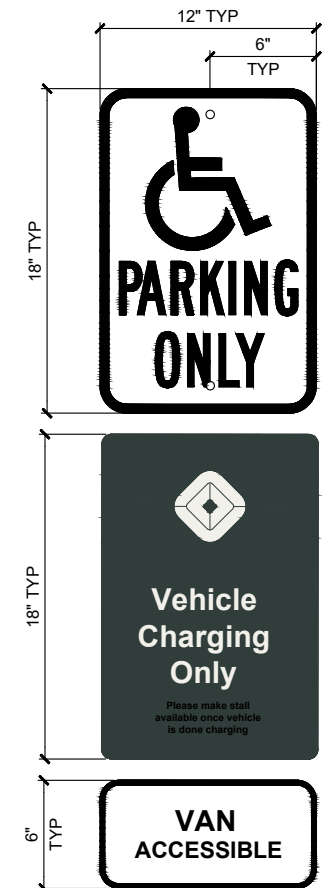
1. COLOR: WOODLAND BROWN
2. INSTALLATION TO BE COMPLETED PER MANUFACTURER'S SPECIFICATION.
3. CONTRACTOR TO PROVIDE RAIL AND PICKET CUTS TO LENGTH ACCORDING TO FENCE POST LAYOUT.
4. HEAVY DUTY POST STIFFENER HEIGHTS AVAILABLE: 9' AND 12'



4
D-4 TYPICAL TREX FENCE POST FOUNDATION DETAIL
SCALE: N.T.S.

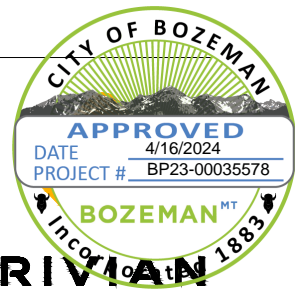
NOTE:

1. BOTTOM OF LOWEST SIGN SHALL BE INSTALLED 66" ABOVE GRADE.
2. ALL SIGNS ARE TO HAVE A WHITE RETROREFLECTIVE BACKGROUND WITH RED RETROREFLECTIVE LETTERS AND BORDER, UNLESS NOTED OTHERWISE.
3. ADA SIGN TO CONFORM TO MUTCD R99 (CA).
4. ADA SIGNS TO BE MOUNTED ABOVE ALL OTHER SIGNAGE.
5. VAN ACCESSIBLE SIGN TO CONFORM TO MUTCD R7-8B FOR STALL 1A



5
D-4 ADA/VAN SIGN DETAILS
SCALE: N.T.S.

6
D-4 NOT USED
SCALE: N.T.S.



JOB NAME
BOZEMAN
1771 N 19TH AVE
BOZEMAN, MT 59718

SHEET TITLE
CONSTRUCTION
DETAILS

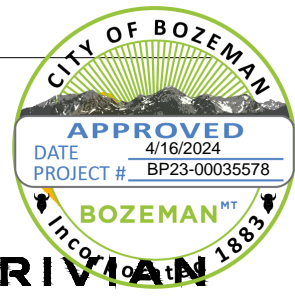
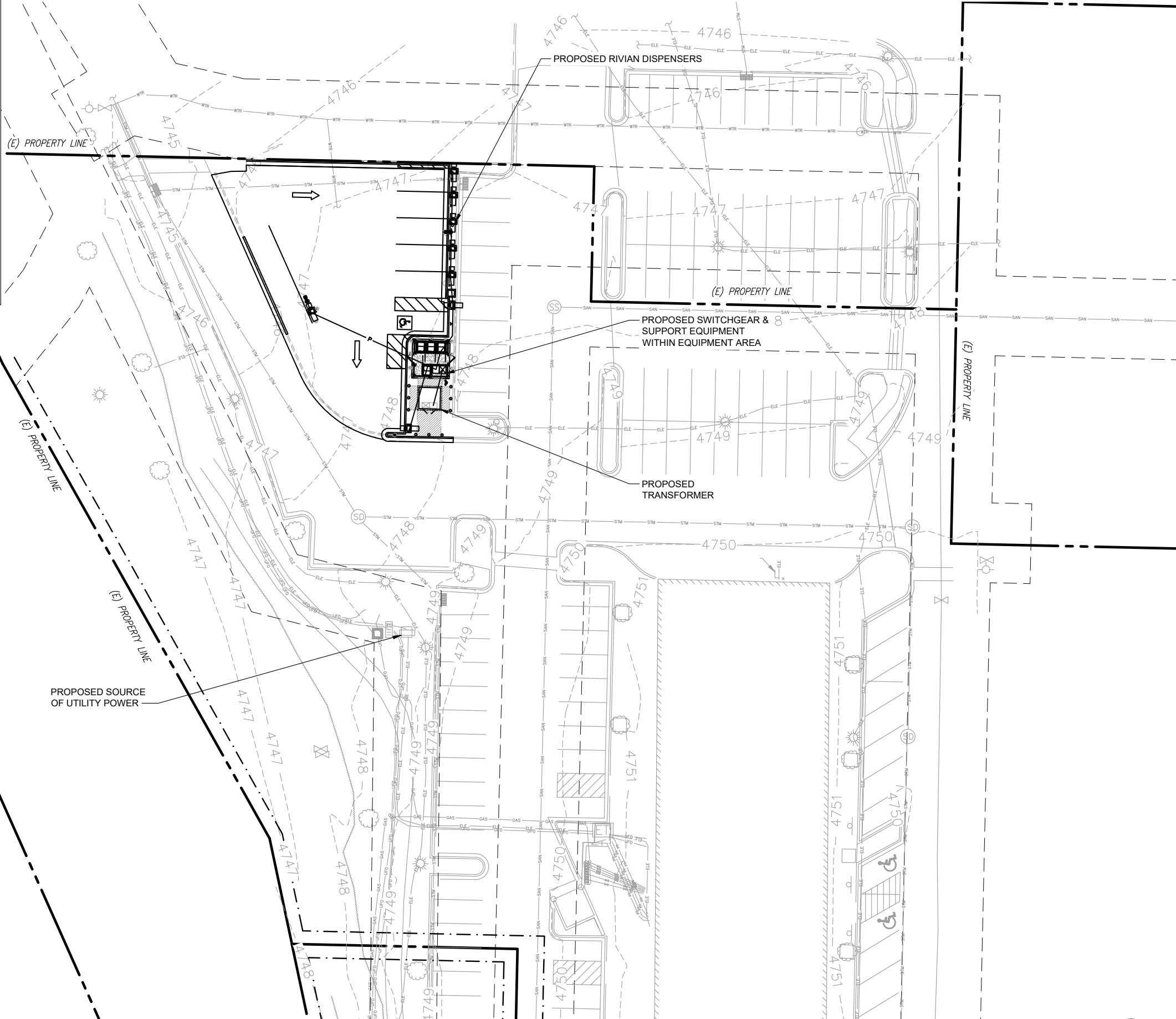
REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

CHECKED BY: RBH



NOTES:

1. ALL ELECTRICAL WORK AND RELATED ACTIVITIES ON-SITE SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (NEC) STANDARDS AND ENFORCED BY ALL APPLICABLE JURISDICTIONAL REQUIREMENTS AT THE TIME OF CONSTRUCTION.
2. ALL ALUMINUM CONDUCTORS TO RECEIVE ANTI-OXIDATIVE COATING DURING INSTALLATION.
3. ALL PVC CONDUIT SHALL HAVE BELL-ENDS AND SEALED WITH DUCT SEAL.
4. ALL TERMINATION LUGS SHALL BE CRIMPED WITH APPROVED LUG CRIMPER WITH UL CERTIFICATION.
5. UTILITY EQUIPMENT, PREP WORK, INSTALLATION, AND SCOPE OF WORK RESPONSIBILITIES SHALL BE COORDINATED WITH UTILITY ENGINEER AT TIME OF PRECONSTRUCTION MEETING OR BEFORE THE COMMENCEMENT OF CONSTRUCTION.
6. TRANSFORMER BOLLARD PROTECTION TO BE INSTALLED PER UTILITY SPECIFICATIONS. EXACT QUANTITY, LOCATION, AND SPACING MAY BE AT THE DISCRETION OF THE UTILITY FIELD ENGINEER/INSPECTOR.
7. CONTRACTOR TO COORDINATE EXACT LOCATION OF H-FRAME MOUNTED METER WITH UTILITY COMPANY.



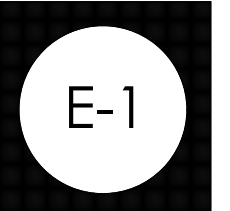
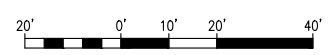
JOB NAME
BOZEMAN
 1771 N 19TH AVE
 BOZEMAN, MT 59718

SHEET TITLE
UTILITY PLAN

REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

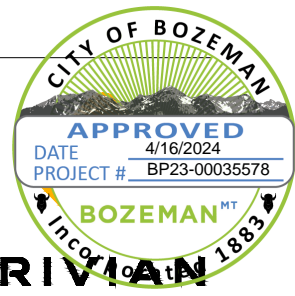
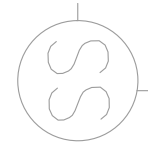
CHECKED BY: RBH

UTILITY PLAN
 22" x 34" SCALE: 1" = 20' 11" x 17" SCALE: 1" = 40'



NOTE:

1. CONDUCTOR LENGTHS ARE ESTIMATES ONLY. LENGTHS ARE BASED ON DIAGRAMMATICAL MEASUREMENTS AND APPROXIMATED BURIED DEPTHS. THE EXACT ROUTING PATH AND CONDUCTOR RUN LENGTHS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD BASED ON PHYSICAL MEASUREMENTS. CONTRACTOR TO ORDER CONDUCTORS BASED ON FIELD MEASUREMENTS.
2. ALL ELECTRICAL WORK AND RELATED ACTIVITIES ON-SITE SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (NEC) STANDARDS AND ENFORCED BY ALL APPLICABLE JURISDICTIONAL REQUIREMENTS AT THE TIME OF CONSTRUCTION.
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8. CONTRACTOR TO COORDINATE EXACT LOCATION OF H-FRAME MOUNTED METER WITH UTILITY COMPANY.
9. LANDSCAPING NOT SHOWN FOR CLARITY.
10. REFER TO E-3 FOR CONDUIT AND WIRING SCHEDULE AS REFERENCED BY #
11. CONDUIT STUBS FOR FUTURE EQUIPMENT SHALL BE CAPPED
12. ALL CONDUIT STUBS FOR (FUTURE AND PROPOSED) SHALL HAVE ENOUGH SEPARATION TO INSTALL BELL ENDS ON ALL CONDUITS.



12 INDUSTRIAL WAY
SALEM, NEW HAMPSHIRE 03079

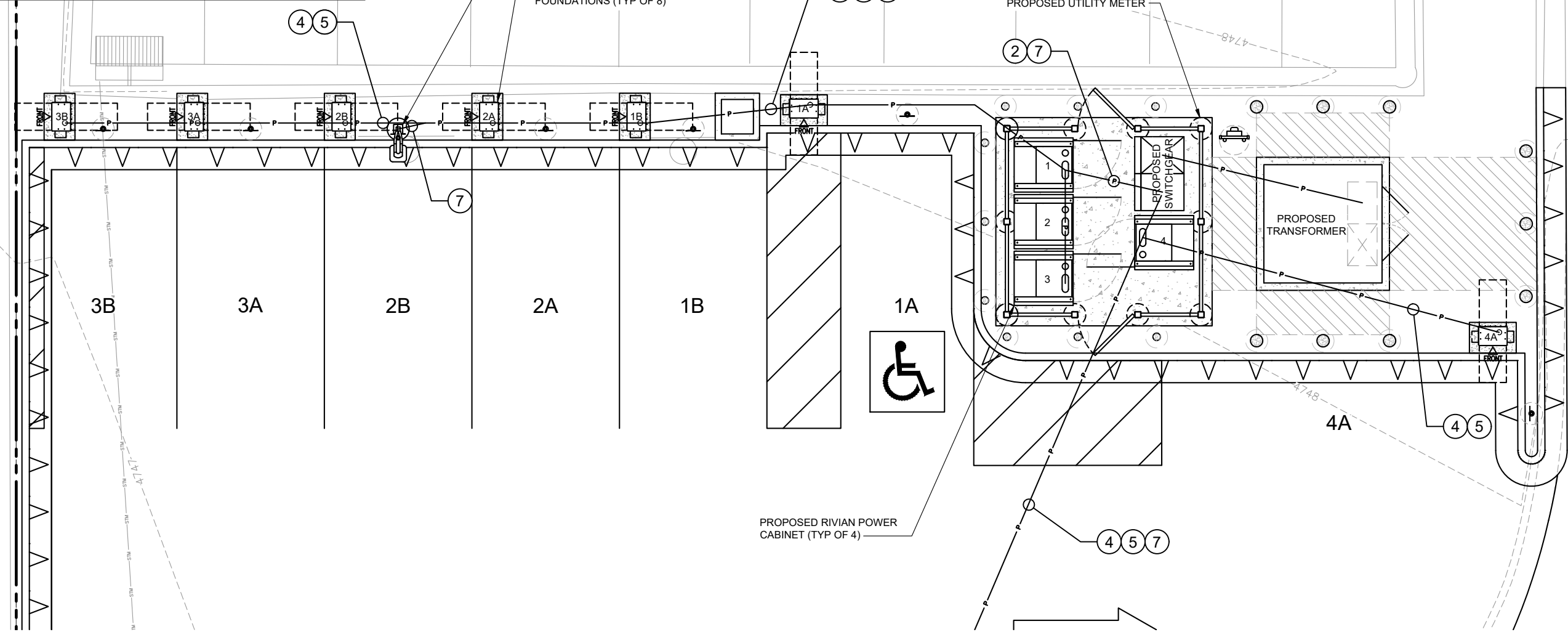
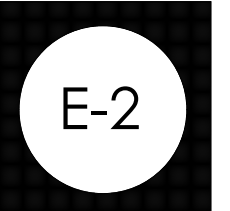


JOB NAME
BOZEMAN
1771 N 19TH AVE
BOZEMAN, MT 59718

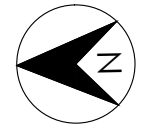
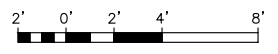
SHEET TITLE
ELECTRICAL PLAN

REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

CHECKED BY: RBH

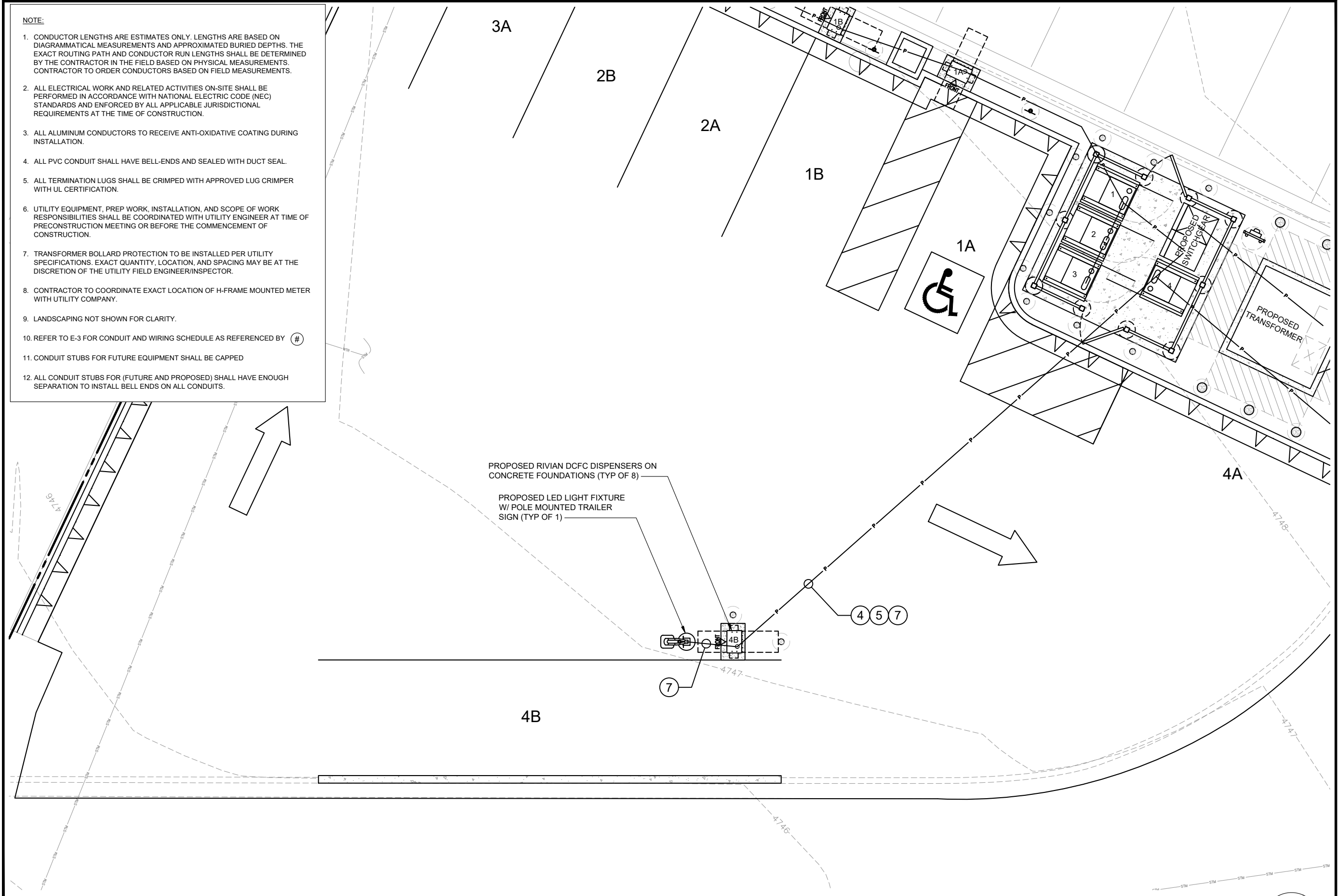


1 ELECTRICAL PLAN
E-2 22" x 34" SCALE: 1/4" = 1'-0" 11" x 17" SCALE: 1/8" = 1'-0"

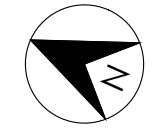
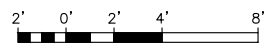


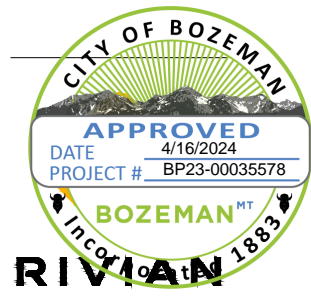
REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

- NOTE:**
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 2. ALL ELECTRICAL WORK AND RELATED ACTIVITIES ON-SITE SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (NEC) STANDARDS AND ENFORCED BY ALL APPLICABLE JURISDICTIONAL REQUIREMENTS AT THE TIME OF CONSTRUCTION.
 3. ALL ALUMINUM CONDUCTORS TO RECEIVE ANTI-OXIDATIVE COATING DURING INSTALLATION.
 4. ALL PVC CONDUIT SHALL HAVE BELL-ENDS AND SEALED WITH DUCT SEAL.
 5. ALL TERMINATION LUGS SHALL BE CRIMPED WITH APPROVED LUG CRIMPER WITH UL CERTIFICATION.
 6. UTILITY EQUIPMENT, PREP WORK, INSTALLATION, AND SCOPE OF WORK RESPONSIBILITIES SHALL BE COORDINATED WITH UTILITY ENGINEER AT TIME OF PRECONSTRUCTION MEETING OR BEFORE THE COMMENCEMENT OF CONSTRUCTION.
 7. TRANSFORMER BOLLARD PROTECTION TO BE INSTALLED PER UTILITY SPECIFICATIONS. EXACT QUANTITY, LOCATION, AND SPACING MAY BE AT THE DISCRETION OF THE UTILITY FIELD ENGINEER/INSPECTOR.
 8. CONTRACTOR TO COORDINATE EXACT LOCATION OF H-FRAME MOUNTED METER WITH UTILITY COMPANY.
 9. LANDSCAPING NOT SHOWN FOR CLARITY.
 10. REFER TO E-3 FOR CONDUIT AND WIRING SCHEDULE AS REFERENCED BY #
 11. CONDUIT STUBS FOR FUTURE EQUIPMENT SHALL BE CAPPED
 12. ALL CONDUIT STUBS FOR (FUTURE AND PROPOSED) SHALL HAVE ENOUGH SEPARATION TO INSTALL BELL ENDS ON ALL CONDUITS.



1 ELECTRICAL PLAN
 E-2.1 22" x 34" SCALE: 1/4" = 1'-0" 11" x 17" SCALE: 1/8" = 1'-0"





RIVIAN



12 INDUSTRIAL WAY
SALEM, NEW HAMPSHIRE 03079

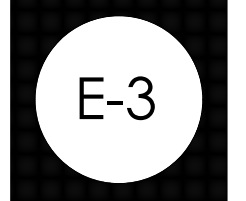


JOB NAME
BOZEMAN
1771 N 19TH AVE
BOZEMAN, MT 59718

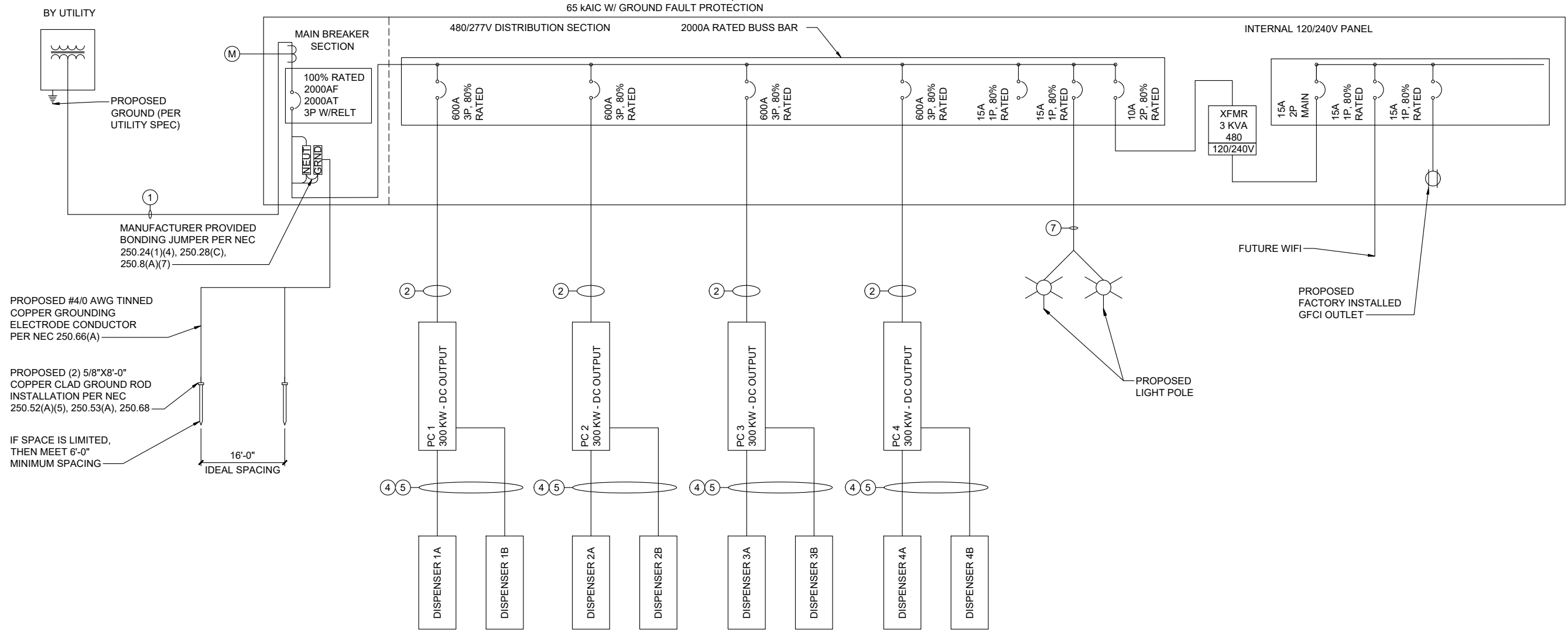
SHEET TITLE
ONE-LINE DIAGRAM

REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

CHECKED BY: RBH



2000A SWITCHGEAR, 480/277V, 3φ, 4W
65 KAIC W/ GROUND FAULT PROTECTION



RIVIAN CABINET & POST ELECTRICAL SPECS

EQUIPMENT	AC INPUT VOLTAGE TO CABINET	KVA INPUT TO CABINET	AC INPUT CURRENT TO CABINET	DC OUTPUT VOLTAGE TO CHARGE POST	DC OUT CURRENT TO CHARGE POST	SHORT CIRCUIT CURRENT RATING
POWER CABINETS	480V	374 KVA	448A	200VDC - 1000VDC	500A	65 KAIC

BREAKER SETTING - BOZEMAN, MT

BREAKER USE	BREAKER SIZE	LONG DELAY	LONG DELAY TIME	SHORT DELAY	SHORT DELAY TIME	INSTANTANEOUS	GROUND SETTING	GROUND TIME
MCB	2000A	1	24	3	0.2	M1	1	0.5
CHARGER BRANCH CIRCUIT	600A	X	X	X	X	2	X	X

- NOTES:**
- POWER UNITS AND DISPENSERS MANUFACTURED BY RIVIAN.
 - PROPOSED CTs/PTs SHALL BE LOCATED AS APPROVED BY THE UTILITY COMPANY.
 - MAIN BREAKER IS EQUIPPED WITH REDUCED ENERGY LET THROUGH (RELT) MAINTENANCE SWITCH WITH LOCAL STATUS INDICATION.

LOAD SUMMARY

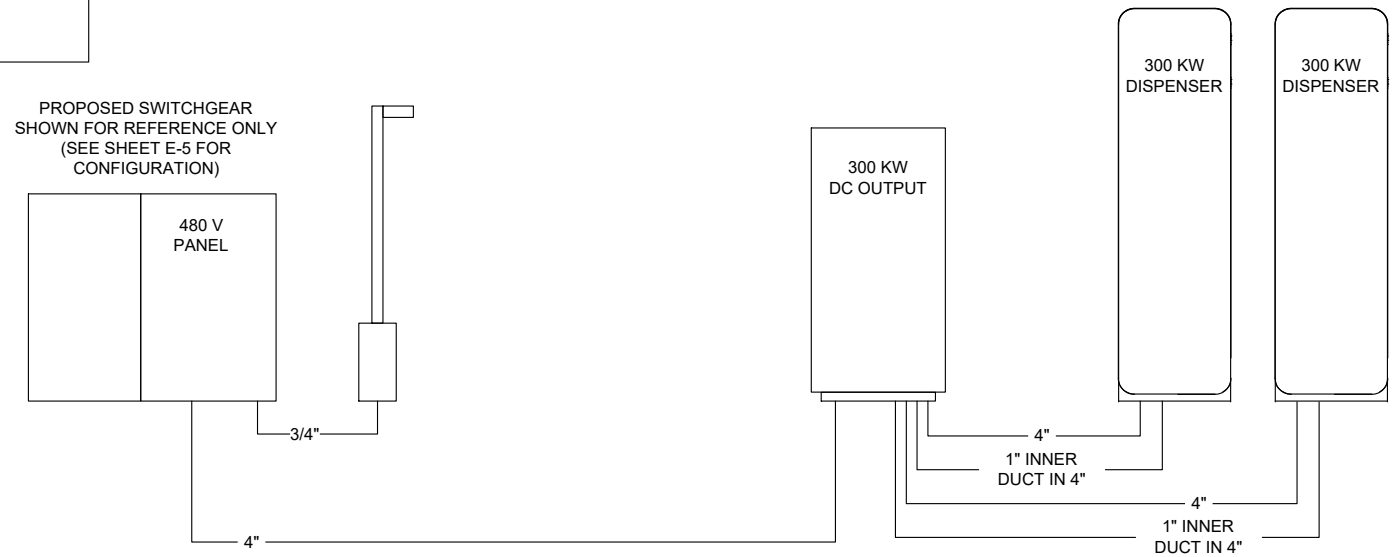
	kVA	QTY	TOTAL kVA
POWER UNIT	374 kVA	4	1496
3 KVA TRANSFORMER			3
TOTAL			1499
AMPS (480V, 3-PH)			1805

CONDUIT & WIRING SCHEDULE

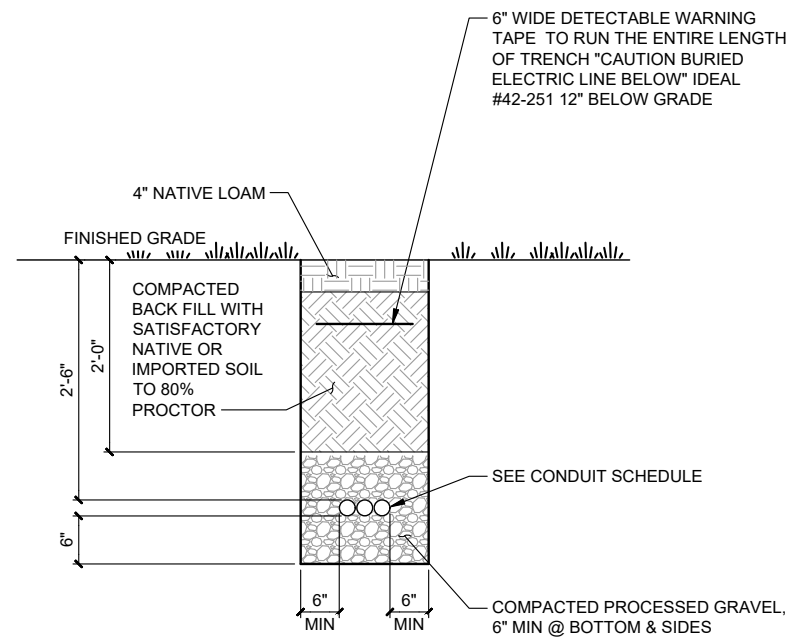
NO	FROM	TO	CONFIGURATION
①	PROPOSED TRANSFORMER	PROPOSED SWITCHBOARD 480/277V MAIN DISTRIBUTION SECTION	PROPOSED (4) 4" CONDUITS (BY CONTRACTOR) WIRE BY UTILITY
②	PROPOSED SWITCHBOARD 480/277V MAIN DISTRIBUTION SECTION	PROPOSED POWER UNIT	PROPOSED (6) 500 MCM AL XHHW-2 90° "C" (1) #1 CU GND (1) 4" PVC CONDUIT
③	NOT USED		
④	PROPOSED POWER UNIT	PROPOSED DISPENSER (DC POWER)	PROPOSED (2) PARALLEL SETS OF 500 MCM AL XHHW-2 90° "C" 1000V RATED (1) #1 CU GND (1) 4" PVC CONDUIT (1) 4/C #14 1000V RATED (1) 2/C #16 TSP 1000V RATED
⑤	PROPOSED POWER UNIT	PROPOSED DISPENSER (COMM)	PROPOSED (1) CAT 6 (1) 1/2" INNER DUCT (IN THE 4" PVC CONDUIT)
⑥	NOT USED		
⑦	PROPOSED SWITCHBOARD 480/277V MAIN DISTRIBUTION SECTION	PROPOSED LED LIGHT	PROPOSED (2) #10 AWG CU (1) #10 AWG CU GND (1) 3/4" CONDUIT
⑧	NOT USED		

① ONE-LINE DIAGRAM
SCALE: N.T.S.

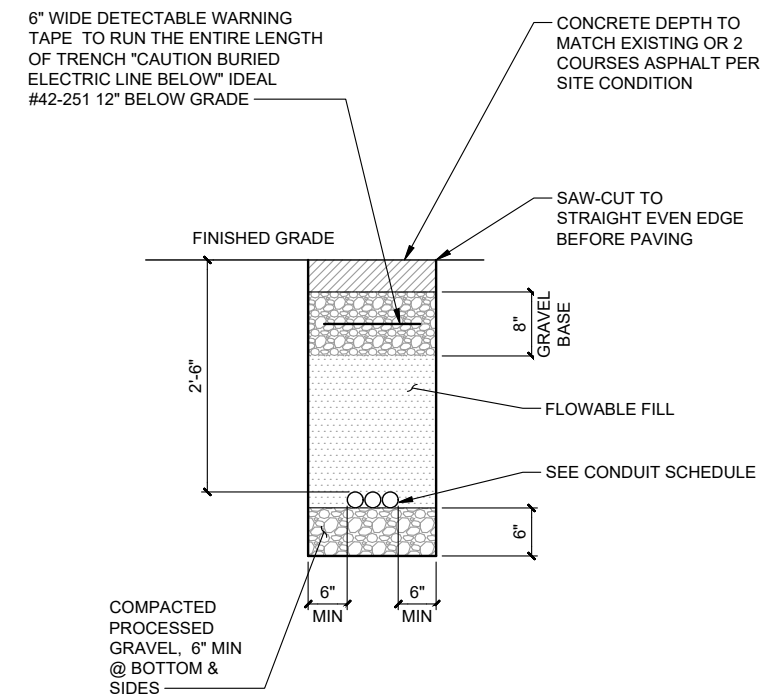
- NOTES:
- ELEVATION VIEW IS FOR REVIEW REFERENCE AND NOT TO BE USED FOR CONSTRUCTION. REFER TO LAYOUTS AND DETAIL SHEETS FOR CONSTRUCTION.
 - CONDUIT STUBS FOR FUTURE EQUIPMENT SHALL BE CAPPED.



1 ELECTRICAL CONDUIT ELEVATION (FOR REFERENCE ONLY)
E-4 SCALE: N.T.S.

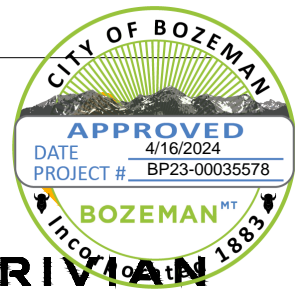


3 NON-UTILITY CONDUIT TRENCHING SOIL DETAIL
E-4 SCALE: N.T.S.



4 NON-UTILITY CONDUIT TRENCHING PAVEMENT DETAIL
E-4 SCALE: N.T.S.

2 NOT USED
E-4 SCALE: N.T.S.

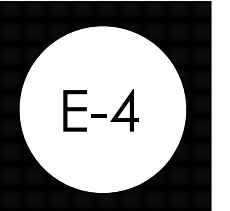


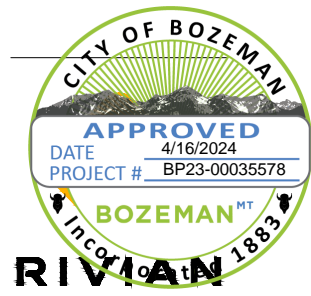
JOB NAME
BOZEMAN
1771 N 19TH AVE
BOZEMAN, MT 59718

SHEET TITLE
ELECTRICAL DETAILS

REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

CHECKED BY: RBH

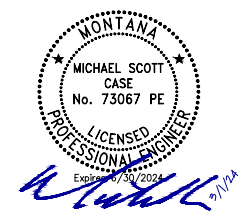




RIVIAN



12 INDUSTRIAL WAY
SALEM, NEW HAMPSHIRE 03079

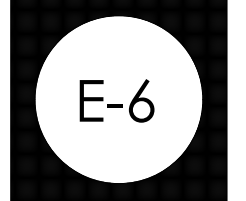


JOB NAME
BOZEMAN
1771 N 19TH AVE
BOZEMAN, MT 59718

SHEET TITLE
GROUNDING
DETAILS

REV	DATE	DESCRIPTION
2	3-1-24	S&S
1	8-29-23	S&S

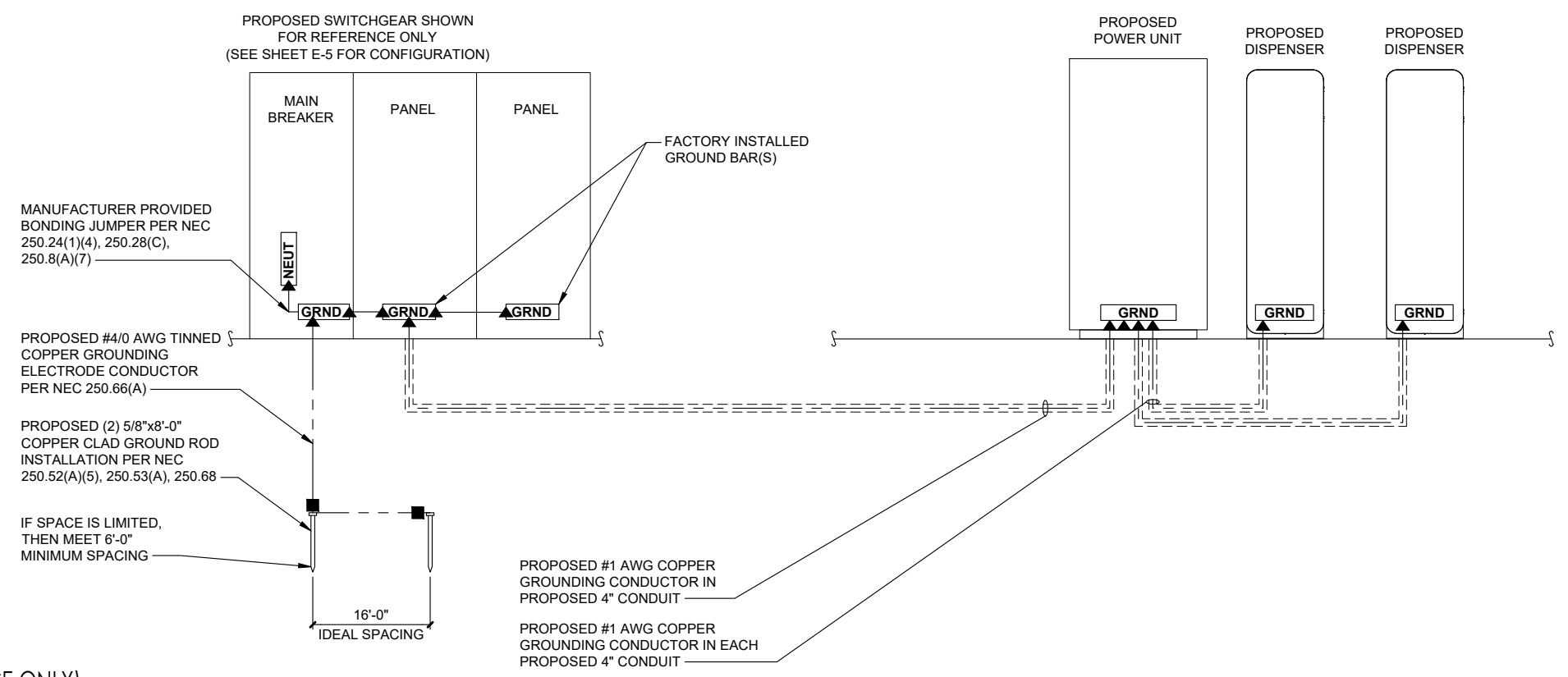
CHECKED BY: RBH



LEGEND

▲	MECHANICAL CONNECTION
■	CADWELD CONNECTION

- NOTES:**
- ALL HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
 - FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
 - 2014 NEC 250.121 EXCEPTION: A WIRE-TYPE EQUIPMENT GROUNDING CONDUCTOR INSTALLED IN COMPLIANCE WITH 250.6(A) AND THE APPLICABLE REQUIREMENTS FOR BOTH THE EQUIPMENT GROUNDING CONDUCTOR AND THE GROUNDING ELECTRODE CONDUCTOR IN PARTS II, III, AND VI OF THIS ARTICLE SHALL BE PERMITTED TO SERVE AS BOTH AN EQUIPMENT GROUNDING CONDUCTOR AND A GROUNDING ELECTRODE CONDUCTOR.
 - ALL TERMINATION LUGS SHALL BE CRIMPED WITH APPROVED LUG CRIMPER WITH UL CERTIFICATION.



1 GROUNDING SCHEMATIC (FOR REFERENCE ONLY)
SCALE: N.T.S.

CADWELD CONNECTIONS (OR APPROVED EQUAL)

CADWELD CONNECTION DETAIL
SCALE: N.T.S.

BURNDY CONNECTIONS (OR APPROVED EQUAL)

MECHANICAL CONNECTION DETAIL
SCALE: N.T.S.

NOT USED
SCALE: N.T.S.

2 CADWELD CONNECTION DETAIL
SCALE: N.T.S.

3 MECHANICAL CONNECTION DETAIL
SCALE: N.T.S.

4 NOT USED
SCALE: N.T.S.