IMPROVEMENT PLANS

RIVIAN

13704 N. HIGHWAY 191
MOAB, UT 84532
DECEMBER 21, 2020

VICINITY MAP N.T.S.

PROJECT DESCRIPTION

INSTALLATION OF (1) SWITCHGEAR, (2) POWER CABINETS, (3) RIVIAN DC FAST CHARGERS, (2) SWITCHGEARS AND (1) STEP-DOWN TRANSFORMER

UDOT SPECIFICATION

THE STANDARD SPECIFICATIONS OF THE STATE OF UTAH, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

APPLICABLE CODES

2018 INTERNATIONAL BUILDING CODE (IBC)
2017 NATIONAL ELECTRIC CODE (NEC)

PLAN REPRODUCTION WARNING

THE PLANS HAVE BEEN PREPARED FOR PRINTING ON ANSI B (11"x17") SHEETS. PRINTING ON OTHER SIZE SHEETS MAY DISTORT SCALES. REFER TO GRAPHIC SCALES.

INDEX OF DRAWINGS

TITLE SHEET	TS-001
GENERAL NOTES	C-001
GENERAL NOTES	C-002
GENERAL NOTES	C-003
OVERALL SITE PLAN	C-100
DEMOLITION PLAN	C-101
SITE PLAN	C-111
DIMENSION SITE PLAN	C-112
SEPTIC AND WELL PLAN	C-113
GRADING PLAN	C-114
DETAILS	C-301
DETAILS	C-302
ELECTRICAL GENERAL NOTES	E-001
ELECTRICAL GENERAL NOTES	E-002
UTILITY PLAN	E-101
SINGLE LINE DIAGRAM	E-201
ELECTRICAL NOTES, DETAILS, & PANEL SCHEDULE	E-202
PANEL SCHEDULE	E-203
PHOTOMETRICS PLAN	E-204
LIGHT DETAILS	E-205
PRELIMINARY AMENITIES PANEL SCHEDULES	-----
AUTOTURN	A-101
AUTOTURN	A-102
AUTOTURN	A-103
ELECTRICAL DETAILS	G-101

OWNER AND DEVELOPER

RIVIAN AUTOMOTIVE, LLC
13250 N. HAGGERTY ROAD
PLYMOUTH, MI 48170-4206

APPROVALS

NAME OF CITY ENGINEER — DATE :

NAME OF SANITARY ENGINEER — DATE :

WATER DEPARTMENT — DATE :

STORMWATER MANAGEMENT — DATE :

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

TITLE SHEET

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

TS-001

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - hsyer

GENERAL CONSTRUCTION NOTES

1. FOR THE PURPOSE CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
   GENERAL CONTRACTOR: TBD
   CONTRACTOR: TBD
   OWNER: RIVIAN

2. THE TOPOGRAPHIC SURVEY BY CLARK LAND SURVEYING, INC., DATED 07/30/20 SHALL BE REFERENCED AS PART OF THESE PLANS ONLY. THE G.C. IS RESPONSIBLE FOR LOCATING IMPROVEMENTS PER THESE PLANS.

3. THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THE PLAN ARE BASED ON FIELD SURVEYS AND CITY RECORDS. DUE TO THE LIMITATIONS IN TECHNOLOGY AND GROUND CONDITIONS, NOT ALL UNDERGROUND UTILITIES ARE ABLE TO BE LOCATED. IF AN EXISTING UTILITY LINE IS DAMAGED DURING CONSTRUCTION, IT SHALL BE DETERMINED IF SAID UTILITY LINE WAS ABLE TO BE LOCATED WITH CURRENT TECHNOLOGY BEFORE THE UTILITY LOCATES WOULD TAKE RESPONSIBILITY. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO STARTING CONSTRUCTION. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY HIS WORK FORCE.

4. ALL PROPERTY LINES, RIGHT OF WAYS, CENTERLINES, DIMENSIONS, GRADES, AND UTILITY LOCATIONS SHOWN ON THESE PLANS WERE BASED ON A TOPOGRAPHIC SURVEY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY CONSTRUCTION/PROJECT MANAGER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO INFORMATION SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.

5. THE GENERAL CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CONTRACT DOCUMENTS, FIELD DOCUMENTS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

6. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUES ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WORK.

7. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND FEDERAL, STATE AND LOCAL JURISDICTION CODES, ORDINANCES AND APPLICABLE REGULATIONS.

8. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATION ON THE DRAWINGS.

9. PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.

10. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

11. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER PRIOR TO PROCEEDING.

12. THE GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.

13. CONSTRUCTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE.

14. WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES. CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.

15. THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.

16. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.

17. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.

18. THE GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND CONTRACTORS TO THE SITE AND/OR BUILDING.

19. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.

20. THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.

21. THE GENERAL CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A OT 2-A:10-B:C AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.

22. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. THE CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION.

23. ONLY ITEMS SPECIFICALLY CALLED OUT TO BE REMOVED OR DEMOLISHED SHALL BE AFFECTED. ANY ITEMS INCLUDING, BUT NOT LIMITED TO, CURBS, PAVEMENT, UTILITY ITEMS, LANDSCAPING, ETC. SHALL REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO REPAIR OR REPLACE ANY AFFECTED ITEMS AT OWNERS DISCRETION.

24. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.

25. THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.

26. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.

27. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

28. THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY UNDER PAVEMENT, SIDEWALKS AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.

29. ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.

30. ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE OWNER AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.

31. THE CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR AND OWNER UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.

32. THE CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION AT THE END OF EACH WORKDAY AND TURNOVER TO OWNER.

33. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS REQUIRED FOR SERVICE EQUIPMENT). HANDICAP ACCESS MAY BE REQUIRED FOR CHARGING POSTS. SEE PLAN.

34. NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.

35. CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF CONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR AND OWNER IMMEDIATELY.

36. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS AND DISPOSE IN A LAWFUL MANNER.

37. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

GENERAL NOTES

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

C-001

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - Hyer

GENERAL SITE WORK NOTES CONTINUED

PART 1 - GENERAL

CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUBGRADE PREPARATION AND FINISH GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS.

1.1 REFERENCES:

A. (STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION-CURRENT EDITION).

B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS).

C. OSHA (OCCUPATION SAFETY AND HEALTH ADMINISTRATION).

1.2 INSPECTION AND TESTING:

A. FIELD TESTING OF EARTHWORK COMPACTION AND CONCRETE CYLINDERS SHALL BE PERFORMED BY AN INDEPENDENT TESTING LAB. THIS WORK TO BE COORDINATED BY THE CONTRACTOR.

B. ALL WORK SHALL BE INSPECTED AND RELEASED BY THE GENERAL CONTRACTOR WHO SHALL CARRY OUT THE GENERAL INSPECTION OF THE WORK WITH SPECIFIC CONCERN TO PROPER PERFORMANCE OF THE WORK AS SPECIFIED AND/OR CALLED FOR ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REQUEST TIMELY INSPECTIONS PRIOR TO PROCEEDING WITH FURTHER WORK THAT WOULD MAKE PARTS OF WORK INACCESSIBLE OR DIFFICULT TO INSPECT.

1.3 SITE MAINTENANCE AND PROTECTION:

A. PROVIDE ALL NECESSARY JOB SITE MAINTENANCE AND PROTECTION FROM COMMENCEMENT OF WORK UNTIL COMPLETION OF THE CONTRACT.

B. AVOID DAMAGE TO THE SITE AND TO EXISTING FACILITIES, STRUCTURES, TREES, AND SHRUBS DESIGNATED TO REMAIN. TAKE PROTECTIVE MEASURES TO PREVENT EXISTING FACILITIES THAT ARE NOT DESIGNATED FOR REMOVAL FROM BEING DAMAGED BY THE WORK.

C. KEEP SITE FREE OF ALL PONDING WATER.

D. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT, LOCAL PERMITTING AGENCY AND EPA REQUIREMENTS.

E. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK. GRAFFITI ON TEMPORARY FENCING SHALL BE PAINTED OVER WITHIN ONE DAY OF DISCOVERY.

F. EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE CONSTRUCTION MANAGER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.

G. PROVIDE A MINIMUM 48-HOUR NOTICE TO THE CONSTRUCTION MANAGER AND RECEIVE WRITTEN NOTICE TO PROCEED BEFORE INTERRUPTING ANY UTILITY SERVICE.

PART 2 - PRODUCTS

2.1 GRANULAR BACKFILL: SHALL MEET THE FOLLOWING GRADATION PER THE TABLE BELOW:

SIEVE SIZE	TOTAL PERCENT PASSING
1 1/2 INCH (37.5 MM)	100
1 INCH (25.0 MM)	75 TO 100
3/4 INCH (19.00 MM)	80 TO 100
3/8 INCH (9.5 MM)	35 TO 75
NO. 4 (4.75 MM)	30 TO 60
NO. 30 (0.600 MM)	7 TO 30
NO. 200 (0.75 MM)	3 TO 15

2.2 GRANULAR BEDDING AND TRENCH BACKFILL: WELL-GRADED SAND MEETING THE GRADATION REQUIREMENTS OF ASTM D2487 (SE OR SW-SM).

2.3 UNSUITABLE MATERIAL: HIGH AND MODERATELY PLASTICS SILTS AND CLAYS (LL>45). MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION, AND DEBRIS AS DETERMINED BY THE CONSTRUCTION MANAGER. TYPICAL THESE WILL BE SOILS CLASSIFIED BY ASTM AS PT, MH, CH, OH, ML, AND OL.

PART 3 - EXECUTION

3.1 GENERAL:

A. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES PER APPLICABLE PLAN PREPARED BY CONTRACTOR. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ALL TIMES.

B. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING, ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK.

C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE. REMOVE TREES, BRUSH, STUMPS, RUBBISH AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA TO BE CLEARED.

D. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STUMPS, AND OTHER DEBRIS, BRUSH, AND REFUSE EMBEDDED IN OR PROTRUDING THROUGH THE GROUND SURFACE, RAKE, DISK OR PLOW THE AREA TO A DEPTH OF NO LESS THAN 6 INCHES, AND REMOVE TO A DEPTH OF 12 INCHES ALL ROOTS AND OTHER DEBRIS THEREBY EXPOSED.

E. REMOVE TOPSOIL MATERIAL COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL. AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER UNDESIRABLE MATERIALS.

F. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM CLEARING, GRUBBING AND DEMOLITION WORK COMPLETELY WITH SUITABLE FILL.

G. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL ALL DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS. BURNING WILL NOT BE PERMITTED.

H. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATIONS OF FEATURES INDICATED ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER ITEM NOT SHOWN THAT MIGHT INTERFERE WITH THE PROPOSED CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.

I. SEPARATE AND STOCK PILE ALL EXCAVATED MATERIALS SUITABLE FOR BACKFILL. ALL EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.

J. DURING EXCAVATION, THE CONTRACTOR SHALL PROVIDE SHORING, SHEETING, AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF EXCAVATION.

K. THE BASE OF ALL FOUNDATION EXCAVATIONS SHOULD BE FREE OF WATER AND LOOSE SOIL PRIOR TO PLACING CONCRETE. CONCRETE SHOULD BE PLACED AS SOON AS POSSIBLE AFTER EXCAVATING TO MINIMIZE BEARING SOIL DISTURBANCE. SHOULD THE SOILS AT BEARING LEVEL BECOME EXCESSIVELY DRY, SATURATED, DISTURBED OR OTHERWISE ALTERED, THE AFFECTED SOIL SHOULD BE REMOVED PRIOR TO PLACING CONCRETE.

3.2 BACKFILL:

A. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE,INCLUDING EXPIRATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST-IN-PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.

B. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL BE REMOVED AND THE EXCAVATION CLEANED OF ALL TRASH, DEBRIS, AND UNSUITABLE MATERIALS.

C. DO NOT PLACE FROZEN MATERIAL IN AS BACKFILL.

D. BACKFILL BY PLACING AND COMPACTING SUITABLE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 8-INCHES LOOSE THICKNESS AND COMPACTED. WHERE HAND OPERATED COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4 INCHES IN LOOSE DEPTH AND COMPACTED.

E. WHENEVER THE DENSITY TESTING INDICATES THAT THE CONTRACTOR HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE SPECIFICATION REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE CONSTRUCTION MANAGER. THE CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY, SUCH AS DISKING AND DRYING, ADDING WATER, OR INCREASING THE COMPACTIVE EFFORT TO MEET THE MINIMUM COMPACTION REQUIREMENTS.

F. THOROUGHLY COMPACT EACH LAYER OF BACKFILL TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

3.3 EXCAVATION:

A. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE GENERAL CONTRACTOR. PROVIDE SHORING, SHEETING AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE TRENCH WALLS.

B. EXTEND THE TRENCH WIDTH A MINIMUM OF 6 INCHES BEYOND THE OUTSIDE EDGE OF THE OUTERMOST CONDUIT.

C. WHEN SOFT YIELDING, OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, CONTACT ENGINEER IMMEDIATELY.

3.4 BACKFILL:

A. PROVIDE GRANULAR BEDDING MATERIAL IN ACCORDANCE WITH THE DRAWINGS AND THE UTILITY REQUIREMENTS.

B. NOTIFY THE GENERAL CONTRACTOR 24 HOURS IN ADVANCE OF BACKFILLING.

C. CONDUCT UTILITY CHECK TESTS BEFORE BACKFILLING. BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.

D. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6-INCH UNCOMPACTED LIFTS UNTIL 12 INCHES OVER THE CONDUITS. SOLIDLY RAM AND TAMP BACKFILL INTO SPACE AROUND CONDUITS.

E. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE, OR UNBALANCED LOADING.

F. ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 8-INCH MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.

G. COMPACT FINAL BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE EXISTING UNDISTURBED MATERIAL IMMEDIATELY ADJACENT TO THE TRENCH BUT NO LESS THAN A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

3.5 FINISH GRADING:

A. PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.

B. UTILIZE SATISFACTORY FILL MATERIAL RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF FILLS, EMBANKMENTS AND FOR REPLACEMENT OF REMOVED UNSUITABLE MATERIALS.

C. REPAIR ALL ACCESS ROADS AND SURROUNDING AREAS USED DURING THE COURSE OF THIS WORK TO THEIR ORIGINAL CONDITION.

D. CONTRACTOR TO GRADE SITE TO DRAIN AND NOT POND WATER.

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

GENERAL NOTES

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

C-002

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:27 AM hyer

GOVERNING BUILDING CODE:

GOVERNING BUILDING CODE: 2018 INTERNATIONAL BUILDING CODE, APPENDIX J, ISSUED BY THE INTERNATIONAL CODE COUNCIL W/ UTAH STATE AMENDMENTS

DESIGN LOADINGS:

LATERAL LOAD DESIGN:

WIND DESIGN DATA (ASCE DATA: 7-10):

BASIC WIND SPEED (V_{ULT})	115 MPH
BASIC WIND SPEED (V_{ASD})	89 MPH
IMPORTANCE FACTOR	1.0
EXPOSURE CATEGORY	C

SEISMIC DESIGN DATA (ASCE 7-10):

SEISMIC IMPORTANCE FACTOR (I)	1.0
RISK CATEGORY	II
SITE CLASS	D (ASSUMED)
MAPPED SPECTRAL RESPONSE	
SHORT PERIODS (Ss)	0.186
1 SEC. PERIODS (S_1)	0.063
SPECTRAL RESPONSE COEFFICIENT	
SHORT PERIODS (S_{DS})	0.198
1 SEC. PERIODS (S_{D1})	0.1
SEISMIC DESIGN CATEGORY	B

GENERAL PROVISIONS:

TYPICAL DETAILS AND GENERAL NOTES APPLY TO ALL PARTS OF THE WORK EXCEPT WHERE SPECIFICALLY DETAILED OR UNLESS OTHERWISE NOTED.

DRAWINGS ARE NOT TO BE SCALED.

THE CONTRACTOR SHALL CAREFULLY REVIEW THE DRAWINGS TO IDENTIFY THE SCOPE OF WORK REQUIRED, VISIT THE SITE TO RELATE THE SCOPE OF WORK TO EXISTING CONDITIONS, AND DETERMINE THE EXTENT OF WHICH THOSE CONDITIONS AND PHYSICAL SURROUNDINGS WILL IMPACT THE WORK.

EXISTING CONDITIONS, AS SHOWN ON THESE PLANS, ARE FOR REFERENCE ONLY. THE CONTRACTOR IS REQUIRED TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

THE CONTRACTOR SHALL ASSUME THE MOST STRINGENT REQUIREMENTS APPLY IN CASE OF CONFLICT AMONG SPECIFICATIONS, STANDARDS, CODES AND DRAWINGS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY TO RESOLVE THE CONFLICT.

ANY DEVIATION, MODIFICATION, OR SUBSTITUTION FROM THE BID SET OF STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR REVIEW/APPROVAL PRIOR TO ITS USE OR INCLUSION ON THE SHOP DRAWINGS. WITHOUT SUCH PRIOR APPROVAL, DEVIATIONS, MODIFICATIONS, OR SUBSTITUTIONS WILL BE REJECTED. COSTS FOR DEMOLITION AND REWORK OF SUCH ITEMS WILL BE BORNE BY THE CONTRACTOR.

THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER IT IS FULLY COMPLETED FOR IN-SERVICE LOADS ONLY. THE MEANS, METHODS, PROCEDURES, AND SEQUENCES OF CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR, WHICH INCLUDE THE DETERMINATION OF ALLOWABLE CONSTRUCTION LOADING OF THE STRUCTURE. THE CONTRACTOR SHALL PROVIDE, DESIGN, MONITOR, AND MAINTAIN ALL NECESSARY TEMPORARY AND PERMANENT SYSTEMS (SHORING, BRACING, GUYS, FALSEWORK, FORMWORK, SHEETING, ETC.) TO ENSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION. ANY SYSTEMS SHOWN ON THE DOCUMENTS ARE PARTIAL AND SCHEMATIC IN NATURE AND EXTENTS ARE NOT ALL INCLUSIVE. ALL WORK SHALL BE PERFORMED WITHOUT DAMAGE TO ADJACENT EXISTING WORK.

THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL REVIEW THE STRUCTURAL CONTRACT DOCUMENTS AND SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY CONFLICTS BETWEEN THOSE DOCUMENTS AND ANY SAFETY REGULATIONS. SUCH REVIEW AND NOTIFICATION SHALL OCCUR PRIOR TO PRODUCTION OF SHOP DRAWINGS.

THE CONTRACTOR SHALL PROTECT ALL WORK, MATERIALS, AND EQUIPMENT FROM DAMAGE AND SHALL PROVIDE PROPER STORAGE FACILITIES FOR MATERIALS AND EQUIPMENT DURING CONSTRUCTION.

SITE VISITS PERFORMED BY THE ARCHITECT/ENGINEER DO NOT INCLUDE INSPECTIONS OF MEANS AND METHODS OF CONSTRUCTION PERFORMED BY THE CONTRACTOR.

STRUCTURAL OBSERVATIONS PERFORMED BY THE ARCHITECT/ENGINEER DURING CONSTRUCTION ARE NOT THE CONTINUOUS AND SPECIAL INSPECTION SERVICES AND DO NOT WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED OF THE BUILDING DEPARTMENT INSPECTOR OR THE TESTING AGENCY. ALSO, OBSERVATIONS DO NOT GUARANTEE THE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSIDERED AS SUPERVISION OF CONSTRUCTION.

NO STRUCTURAL ELEMENTS ARE TO BE CUT UNLESS SPECIFICALLY APPROVED BY THE ENGINEER.

FOUNDATION SYSTEMS:

GENERAL:

THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO THE START OF ANY WORK. THE CONTRACTOR SHALL VERIFY ANY EXISTING FIELD CONDITION THAT MAY AFFECT THE INSTALLATION OF THE FOUNDATION SYSTEM.

THE CONTRACTOR SHALL EXERCISE GREAT CARE DURING EXCAVATION. UNDERGROUND UTILITY LOCATIONS, IF SHOWN, ARE APPROXIMATE. THE CONTRACTOR SHALL PREDETERMINE UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY IF DEVIATION FROM PLANS EXIST. THE CONTRACTOR IS RESPONSIBLE FOR THE SAFE SUPPORT OF UTILITIES ACROSS EXCAVATIONS.

SHEETING, SHORING, AND DEWATERING IS THE RESPONSIBILITY OF THE CONTRACTOR.

NO GEOTECHNICAL REPORT WAS PROVIDED AT THE TIME OF FOUNDATION DESIGN. A SOILS TESTING LABORATORY SHALL BE RETAINED BY THE OWNER TO PROVIDE CONSTRUCTION REVIEW TO ENSURE CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS DURING THE EXCAVATIONS, BACKFILL, AND FOUNDATION PHASES OF THE PROJECT.

SPREAD/TRENCH FOOTINGS:

DETERMINATION OF FINAL BEARING ELEVATIONS, TOPSOIL AND EXCAVATION STRIPPING DEPTH, INSPECTION OF ALL SUBSOIL EXPOSED DURING STRIPPING, SITE GRADING, EXCAVATION OPERATIONS, APPROVAL OF FILL MATERIALS, DENSITY TESTING OF FILLS TO ENSURE PLACEMENT PER SPECIFICATION REQUIREMENTS, INSPECTION OF FOUNDATION BEARING SURFACES, AND VERIFICATION OF ALLOWABLE BEARING PRESSURES ARE THE TESTING LABORATORY'S RESPONSIBILITY.

ALL FOUNDATIONS ARE TO REST ON FIRM UNDISTURBED SOIL OR COMPACTED FILL FREE FROM ORGANIC MATTER. IF POOR SOIL CONDITIONS ARE ENCOUNTERED AT FOUNDATION DEPTHS SHOWN, NOTIFY OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH CONSTRUCTION.

CONTRACTOR SHALL COMPACT SUBGRADE. SEE FROST/NO FROST DESIGN NOTES BELOW.

FOUNDATIONS HAVE BEEN DESIGNED BASED ON AN ASSUMED ALLOWABLE SOIL BEARING CAPACITY OF 1500 PSF PER PRESUMPTIVE LOAD-BEARING IBC TABLE 1806.2

NEW FOOTINGS PLACED ADJACENT TO EXISTING FOOTINGS SHALL BEAR AT THE SAME ELEVATION, UNLESS NOTED OTHERWISE.

STEP FOOTINGS AT A RATIO OF ONE (1) VERTICAL TO TWO (2) HORIZONTAL WITH A MAXIMUM VERTICAL STEP OF 2'-0" UNLESS NOTED OTHERWISE.

INUNDATION AND LONG TERM EXPOSURE OF BEARING SURFACES, WHICH WILL RESULT IN DETERIORATION OF BEARING FORMATIONS, SHALL BE PREVENTED. FOOTINGS SHALL BE PLACED IMMEDIATELY FOLLOWING FOOTING EXCAVATIONS AND BEARING SURFACE INSPECTION.

UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.

GROUNDWATER ASSUMED TO BE BELOW EXCAVATION DEPTH. IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION ON SITE, CONTRACTOR SHALL PROVIDE FOR ANY SITE DRAINAGE AND DE-WATERING REQUIRED.

CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING PUBLIC AND PRIVATE UTILITIES PRIOR TO EXCAVATION. IF NECESSARY, UTILITIES SHALL BE RELOCATED PRIOR TO FOUNDATION INSTALLATION.

SPECIAL INSPECTIONS:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND OVERSEEING OF ALL SPECIAL INSPECTIONS REQUIRED BY THE AUTHORITY HAVING JURISDICTION. SPECIAL INSPECTIONS MUST BE COMPLETED PRIOR TO FINAL INSPECTION APPROVAL.

CONCRETE:

GENERAL:

ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 301-10, "STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE" AND ACI 302, 305 AND 306 UNLESS NOTED OTHERWISE.

ALL DETAILING, FABRICATION AND PLACING OF CONCRETE SHALL CONFORM TO ACI 318-14, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" AND THE LATEST ACI "MANUAL OF STANDARD PRACTICE FOR DETAIL REINFORCED CONCRETE STRUCTURES" UNLESS NOTED OTHERWISE.

SAFETY AND PERFORMANCE OF THE STRUCTURE ARE THE RESPONSIBILITY OF THE CONTRACTOR INSOFAR AS THEY ARE AFFECTED BY THE LOCATION AND DETAILS OF CONSTRUCTION JOINTS. SHOP DRAWINGS OF THE PROPOSED CONSTRUCTION JOINT LOCATIONS AND DETAILS ARE TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL.

MAXIMUM SIZE OF AGGREGATE SHALL NOT EXCEED SIZE SUITABLE FOR INSTALLATION METHOD UTILIZED OR 1/3 CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING. MAXIMUM SIZE MAY BE INCREASED TO 2/3 CLEAR DISTANCE PROVIDED WORKABILITY AND METHODS OF CONSOLIDATION SUCH AS VIBRATING WILL PREVENT HONEYCOMBS OR VOIDS.

ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS AS FOLLOWS: ALL CONCRETE - 2500 PSI. ALL CONCRETE EXPOSED TO WEATHER SHALL CONTAIN 6% (± 1%) AIR ENTRAINMENT.

REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60.

WELDED WIRE FABRIC REINFORCING SHALL CONFORM TO ASTM A1064 AND BE FURNISHED IN FLAT SHEETS AND INSTALLED ON CHAIRS OR PRECAST CONCRETE BLOCKS.

NO TACK WELDING OF REINFORCING IN THE FIELD IS PERMITTED.

PROVIDE CORNER BARS AT ALL LOCATIONS WHERE REINFORCEMENT CHANGES DIRECTION.

PROVIDE STRAIGHT AND DIAGONAL BARS AT EDGES OF ALL OPENINGS.

REINFORCING EMBEDMENT AND LAP SPLICES (INCHES) FOR 2500 PSI CONCRETE

	OTHER		TOP*	
BAR SIZE	ANCHORAGE	SPLICE	ANCHORAGE	SPLICE
# 3	15	19	19	24
# 4	19	25	25	33
# 5	24	31	31	41
# 6	29	37	37	49

* HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE BELOW BAR

NON-SHRINK GROUT SHALL MEET A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 6000 PSI.

ADD 100% TIES FOR REBAR OVERLAY. NO COLD JOINTS SHALL BE PERMITTED DURING CONSTRUCTION.

STRUCTURAL STEEL

GENERAL:

MATERIAL PROPERTIES:

PLATE:	ASTM A36 UNO
PIPE:	ASTM A53, TYPE E OR S, GRADE B
TUBE:	ASTM A1085 GRADE A (Fy = 50 KSI)

DETAILING, FABRICATION, AND ERECTION SHALL CONFORM TO THE 2010 AISC (360-10) SPECIFICATIONS.

ALL WELDING SHALL BE DONE USING E-70XX ELECTRODES IN ACCORDANCE WITH AWS D1.1 SPECIFICATIONS.

FIELD VERIFY ALL CONDITIONS AT AND CONNECTIONS TO THE EXISTING CONSTRUCTION BEFORE FABRICATION.

ALL EXPOSED STRUCTURAL STEEL, ANCHOR RODS AND BOLTS SHALL BE HOT DIP GALVANIZED PER ASTM A123.

UNLESS NOTED OTHERWISE ON THE DRAWING, ALL ANCHOR RODS SHALL CONFORM TO ASTM F1554 Gr 55 WITH HEAVY HEXAGONAL NUT.

SUBMIT FABRICATION AND ERECTION DRAWINGS SHOWING ALL DETAILS, CONNECTIONS, MATERIAL DESIGNATIONS, AND TOP STEEL ELEVATIONS FOR APPROVAL. THE SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL CONFORMANCE TO THE CONTRACT DRAWINGS. SUCH APPROVAL SHALL NOT RELIEVE THE FABRICATOR/CONTRACTOR OF THE RESPONSIBILITY FOR EITHER THE ACCURACY OF THE DETAILED DIMENSIONS IN THE SHOP AND ERECTION DRAWINGS OR THE GENERAL FIT-UP OF PARTS THAT ARE TO BE ASSEMBLED IN THE FIELD.

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

GENERAL NOTES

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

C-003

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM , hyser

NOTES

1. AERIAL IMAGERY FROM GOOGLE EARTH DATED ON 08/24/2019. THIS PLAN IS FOR REFERENCE ONLY.

   MAP DATA: GOOGLE, LANDSAT, COPERNICUS

2. PROPERTY LINE AND RIGHT-OF-WAY BOUNDARIES ARE SHOWN FOR REFERENCE ONLY. REFER TO SURVEY BY OTHERS FOR EXACT LOCATION.

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

OVERALL SITE PLAN

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

C-100

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM, hdyer

GENERAL SHEET NOTES

1. EXISTING PROPERTY LINES, RIGHT-OF-WAY BOUNDARIES, EASEMENT BOUNDARIES, SETBACKS, AND UTILITIES ARE SHOWN FOR REFERENCE ONLY.
2. EXISTING STRUCTURE WAS FOUND TO HAVE ASBESTOS IN THE ROOFING AND FLOORING MATERIALS (EPA CATEGORY I MATERIALS). GC TO FOLLOW RECOMMENDATIONS PER 2/26/20 ASBESTOS REPORT. DEMOLITION CONTRACTOR MUST HAVE OSHA CLASS II ABESTOS ABATEMENT TRAINING AND CONDUCT PERSONAL AIR SAMPLING DURING DEMOLITION. MUST KEEP MATERIALS WET DURING DEMOLITION AND SUBSEQUENT LOADING TO PREVENT FUGITIVE DUST. DO NOT ALLOW ANY VISIBLE DUST.
3. REFER TO APPENDIX 'D' FOR DRAWING REVIEW SET EXPECTATIONS & REQUIREMENTS.
4. GC SHALL REFERENCE SOIL FEASIBILITY REPORT FROM JEX ENVIRONMENTAL SOLUTIONS DATED 06/24/2020. GC SHALL INCLUDE PRICING FOR DEMO, TRENCHING AND EXCAVATION/BACKFILL ACTIVITIES ACCORDINGLY.

PLAN KEYNOTES (#)

1. EXISTING STRUCTURE TO BE REMOVED.
2. EXISTING TREE TO BE REMOVED (TYPICAL OF 6). CONTRACTOR SHALL VERIFY EXACT SIZE AND TYPE IN FIELD.
3. EXISTING LANDSCAPING TO BE REMOVED (SHRUB, PERENNIALS, GROUNDCOVER, ETC.,). CONTRACTOR SHALL VERIFY EXACT SIZE AND TYPE IN FIELD.
4. EXISTING OVERHEAD ELECTRIC LINE TO BE REMOVED.
5. EXISTING UTILITY POLE TO BE REMOVED (TYPICAL OF 6). CONTRACTOR SHALL BACKFILL WITH COMPACTED MATERIAL. EXISTING POLES SHALL BE RETAINED BY RIVIAN.
6. EXISTING ELECTRIC METER TO BE REMOVED (TYPICAL OF 2).
7. EXISTING WATER WELL TO BE LEFT AS A MONITORING WELL PER DWTI REQUIREMENTS.
8. REPLACEMENT WELL SHALL BE INSTALLED. REFERENCE DETAILED CASCADE WELL DESIGN FOR FURTHER INFORMATION.

ELECTRICAL SCOPE OF WORK RESPONSIBILITIES

SCOPE	BY UTILITY	BY CONTRACTOR
PROVIDE PRIMARY SIDE TRENCHING		X
PROVIDE & INSTALL PRIMARY SIDE CONDUITS W/ PULLWIRE		X
PROVIDE & INSTALL PRIMARY SIDE CONDUCTORS	X	
PROVIDE & INSTALL UTILITY TRANSFORMER PAD		X
PROVIDE UTILITY TRANSFORMER	X	
INSTALL UTILITY TRANSFORMER	X	
INSTALL CONNECTIONS AT UTILITY TRANSFORMER (PRIMARY)	X	
INSTALL CONNECTIONS AT UTILITY TRANSFORMER (SECONDARY)	X	
PROVIDE METER PEDESTAL		X
INSTALL METER PEDESTAL	X	
PROVIDE METER BASE		X
INSTALL METER BASE		X
PROVIDE METER	X	
INSTALL METER	X	
PROVIDE CTs	X	
INSTALL CTs (INSIDE SWITCHGEAR)	X	
PROVIDE SECONDARY SIDE TRENCHING		X
PROVIDE & INSTALL SECONDARY SIDE CONDUITS W/ PULLWIRE		X
PROVIDE & INSTALL SECONDARY SIDE CONDUCTORS	X	
PROVIDE ROAD CUTS / ROAD BORES		X
PROVIDE & INSTALL PAVEMENT REPLACEMENT		X

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

DEMOLITION PLAN

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

C-101

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - hayer

LEGEND

(SEE SHEET C-001 FOR GENERAL LEGEND)

- PROPOSED COMPACTED DECOMPOSED GRANITE (INSTALLED AT PHASE 1)
- FUTURE CONCRETE
- PROPOSED DECOMPOSED GRANITE W/ STABILIZER BY TERRA KOAT INTERNATIONAL
- (#) CONSTRUCTION KEYNOTE
- (00) PROPOSED PARKING SPACE NUMBER
- (W) EXISTING WATER WELL

PARKING STALL SCHEDULE

PROPOSED EV STALLS	0
PROPOSED EV TRAILER STALL	3
FUTURE EV STALLS	15
PROPOSED STANDARD STALLS	12
FUTURE LEVEL 2 STALLS	18
NET STALL COUNT	+48

DAILY TRIP CALCULATIONS

PARKING STALL TYPE	DWELL TIME (HRS)	# OF STALLS	VEHICLES /OPERATION PERIOD
DCFC	1.5	18	288
L2	4	18	108
STANDARD	1	12	288
TOTAL		48	684

USE PERIOD/DAY (HRS)	24

MAX DAILY WATER DEMAND = 3.3 GPM PER UTAH DODW CALCULATIONS OF A ROADSIDE REST, BASED ON 684 VEHICLES/DAY

SANITARY LOAD ASSUMING 2 PEOPLE PER VEHICLE = 3 GAL/PERSON/DAY x 684 x 2 = 4104 GALLONS/DAY

GENERAL SHEET NOTES

1. EXISTING PROPERTY LINES, RIGHT-OF-WAY BOUNDARIES, EASEMENT BOUNDARIES, SETBACKS, AND UTILITIES ARE SHOWN FOR REFERENCE ONLY.

PLAN KEYNOTES (#)

1. PROPOSED PAD MOUNTED ELECTRICAL UTILITY TRANSFORMER (BY UTILITY). CONTRACTOR SHALL PROVIDE CONCRETE PAD PER UTILITY SPECIFICATIONS. COORDINATE FINAL LOCATION WITH UTILITY.
2. PROPOSED ELECTRIC METER MOUNTED TO SWITCHGEAR PER ELECTRIC COMPANY SPECIFICATIONS AND DETAILS ON ELECTRICAL SHEETS.
3. PROPOSED SWITCHGEAR PER ELECTRICAL DRAWINGS.
4. PROPOSED RIVIAN POWER CABINETS (TOTAL OF 2) MOUNTED ON CONCRETE PAD.
5. FUTURE RIVIAN POWER CABINETS (TOTAL OF 4).
6. PROPOSED RIVIAN DCFC DISPENSER (TOTAL OF 3) MOUNTED ON INDIVIDUAL FOUNDATIONS.
7. FUTURE RIVIAN DCFC DISPENSER (TOTAL OF 15).
8. PROPOSED P.C.C. EQUIPMENT PAD.
9. FUTURE WHEELSTOP (TYPICAL OF 45).
10. FUTURE NON-ILLUMINATED LEVEL 2 CHARGING SIGN (TOTAL OF 16).
11. FUTURE LEVEL 2 DISPENSER (TOTAL OF 18).
12. FUTURE NON-ILLUMINATED EV CHARGING SIGN (TOTAL OF 14).
13. PROPOSED "EV TRAILER PARKING ONLY" IN WHITE LETTERS, 12 INCHES (TYPICAL OF 3).
14. PROPOSED PAINTED TRANSVERSE STRIPING.
15. PROPOSED CONCRETE BEAM 4" WIDE SOLID STRIPE.
16. PROPOSED LIGHT POLE (TYPICAL OF 15). SEE DETAIL ON SHEET C-301. SEE ELECTRICAL DRAWINGS FOR POLE AND FIXTURE SPECIFICATIONS AND WIRING.
17. PROPOSED BACKLIT MONUMENT SIGN.
18. PROPOSED 2000A SWITCHGEAR PER ELECTRICAL DRAWINGS.
19. PROPOSED 500A STEP-DOWN TRANSFORMER PER ELECTRICAL DRAWINGS.
20. PROPOSED ROYAL ADA TEMPORARY RESTROOM TRAILERS (TYPICAL OF 2).
21. PROPOSED ADA COMPLIANT SURFACE (DECOMPOSED GRANITE W/ STABILIZER BY TERRAKOAT INTERNATIONAL, TERRAKOAT EX. SEE MANUFACTURER SPECIFICATIONS FOR INSTALLATION DETAILS).
22. PROPOSED ADA PARKING SIGN (TYPICAL OF 4). SEE DETAIL ON SHEET C-302.
23. PROPOSED 6" CONCRETE CURB TAPER.
24. PROPOSED DUMPSTER/ENCLOSURE W/ SAFETY BOLLARDS.
25. PROPOSED DETERRENT BOLLARDS (TYPICAL OF 8).
26. PROPOSED MASS WATER AREA PANELS (TYPICAL OF 4).
27. FUTURE MASS WATER AREA PANELS (TYPICAL OF 4).
28. FUTURE REPLACEMENT WELL. SEE SHEET C-113 FOR PROTECTION ZONES.
29. PROPOSED 6" CONCRETE CURB. SEE DETAIL ON SHEET C-301.
30. FUTURE CONCRETE BEAM 4" WIDE SOLID STRIPE.
31. PROPOSED PANEL 'L', LIGHTING CONTROLS, & SECURITY EQUIPMENT ENCLOSURE MOUNTED ON H-FRAME. SEE ELECTRICAL SHEETS.
32. PROPOSED PARKING DIRECTIONAL SIGN.
33. FUTURE WELLHOUSE.

C-1 EQUIPMENT ENLARGEMENT
1"=10'

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

SITE PLAN

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

C-111

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM , hdyer

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - heyer

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

DIMENSION SITE PLAN

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

C-112

GENERAL SHEET NOTES

1. EXISTING PROPERTY LINES, RIGHT-OF-WAY BOUNDARIES, EASEMENT BOUNDARIES, SETBACKS, AND UTILITIES ARE SHOWN FOR REFERENCE ONLY.

LEGEND

(SEE SHEET C-001 FOR GENERAL LEGEND)

APPROXIMATE FUTURE SEPTIC LOCATION OPTIONS

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

SEPTIC AND WELL PLAN

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

C-113

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - Hyler

GENERAL SHEET NOTES

1. SEE CLARK SURVEY FOR ALL APPLICABLE BENCHMARKS.
2. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ELEVATIONS PRIOR TO CONSTRUCTION. FINAL GRADES SHALL BE DETERMINED IN FIELD BY THE CONTRACTOR.
3. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE TOWARDS THE NEAREST EXISTING DRAINAGE STRUCTURE AND ENSURE NO PONDING OCCURS ON SITE.
4. THE FINAL SLOPES OF THE ADA AREA SHALL NOT EXCEED THE MAXIMUM ALLOWABLE SLOPES AS NOTED ON THE PLANS.
5. CONTRACTOR SHALL ENSURE SLOPES OF THE ADA STALLS CONFORM WITH ADA REQUIREMENTS. CONTRACTOR SHALL REMOVE AND RE-GRADE PAVEMENT AS REQUIRED TO ACHIEVE NECESSARY SLOPES PER AHJ ACCESSIBILITY REGULATIONS.

LEGEND

(SEE SHEET C-001 FOR GENERAL LEGEND)

- LIMITS OF GRADING
- 000 — PROPOSED CONTOUR
- XXX.XX± — EXISTING SPOT ELEVATION/ MATCH EXISTING GRADE
- XXX.XX — PROPOSED ELEVATION @ FINISHED GROUND ELEVATION
- T=XXX.XX / B=XXX.XX — TOP OF CURB ELEVATION / BOTTOM OF CURB/FINISHED PAVEMENT ELEVATION
- 0.0% — PROPOSED DRAINAGE SLOPE & DIRECTION
- # — PROPOSED ELEVATION KEYNOTE

SPOT ELEVATIONS

- # T=000.00 B=000.00

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

GRADING PLAN

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

C-114

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - hdyer

KEYED NOTES

1. PROPOSED 25'-0" POLE TO MATCH EXISTING IN TYPE WITH BROWN FINISH.
2. HAND HOLE
3. GROUND LUG
4. BOLT COVER
5. 3/4" CHAMFER
6. RUB CONCRETE TO REMOVE SONOTUBE FORM LINES AND FILL ALL HOLES FOR SMOOTH FINISH. WEATHERSEAL ALL EXPOSED CONCRETE.
7. ANCHOR BOLTS SUPPLIED WITH POLE. INSTALL PER POLE VENDOR DRAWINGS.
8. #6 CU. BARE GROUND CONDUCTOR
9. BRANCH CIRCUIT WIRING IN CONDUIT AT 24" (MINIMUM) BELOW GRADE
10. 1" SPARE CONDUIT STUBBED INTO POLE BASE & CAPPED 12" FROM BASE
11. 3/4"x10'-0" CU. CLAD GROUND ROD
12. (6) #6 REBAR (VERTICAL) TIE-WIRED TO #4 REBAR TIES AT 12" ON CENTER, U.N.O.
13. REINFORCED CONCRETE, 4000 PSI COMPRESSIVE STRENGTH
14. ADDITIONAL #4 REBAR TIES @ 3" ON CENTER

TYPICAL ELEVATION

C-2 CURB TAPER DETAIL
NTS

C-3 DISPENSER FOUNDATION DETAIL
NTS

NOTE:

1. BOLT HOLES FOR REFERENCE ONLY.
2. USE DOTTIE DUCT SEAL COMPOUND PC 6130 (CAT NO LHD1) TO SEAL ENDS OF CONDUIT (TYP. ALL CONDUITS FOR CHARGING CABINETS AND CHARGE POSTS).
3. USE BELL FITTINGS ON ALL AC AND DC CONDUIT STUBS
4. CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING REINFORCEMENT BEFORE DRILLING. ENSURE 3" GAP BETWEEN ANCHORS AND EXISTING REINFORCEMENT.

C-4 CABINET MOUNTING DETAIL
NTS

A-1 LIGHT POLE FOUNDATION
NTS

NOTES

ABOVE DETAILS TO BE USED AS MINIMUM STANDARDS.

B-2 P.C.C. CURB DETAIL
NTS

NOTES

1. SIGN AND TAMPER PROOF HARDWARE SHALL BE PROVIDED BY SIGN SUPPLIER.
2. 2"x2"x1/8" HSS STEEL POST SHALL BE PROVIDED BY CONTRACTOR (8' LONG, 6' ABOVE GRADE).
3. IF PAINT FINISH IS DAMAGED DURING INSTALLATION, CONTRACTOR SHALL REPAINT AS REQUIRED REFLECTIVITY WITH OWNER).
4. CONTRACTOR SHALL MOUNT SIGN POST IN 8" DIA., 3'-0" DEEP CONCRETE FOUNDATION OR CONCRETE BOLLARD. SEE PLAN.
5. SIGN POST SHALL BE POWDER COATED.
6. SIGN POST SHALL BE PLUGGED/CAPPED TO PREVENT WATER INTRUSION FROM TOP.
7. SIGN SHALL BE MOUNTED TO POST USING #8 FLATHEAD SCREW.

B-3 NON-ILLUMINATED PARKING SIGN DETAIL
NTS

B-4 DETERRENT BOLLARD WITH SIGN DETAIL
NTS

NOTES

SEE SITE PLAN FOR LOCATION AND QUANTITY OF WHEELSTOPS.

A-2 CONCRETE WHEELSTOP DETAIL
NTS

A-3 PCC EQUIPMENT PAD DETAIL
NTS

P.C.C. PAD NOTES & CONCRETE SPECIFICATIONS:

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 CODE.
7. PAD SHALL BE A MINIMUM OF 8" IN THICKNESS. THICKNESS OF PAD SHALL INCREASE AS THE PERIMETER SOIL SURFACE SLOPES TO MAINTAIN A MINIMUM OF 6" OF SOIL COVER TO THE BOTTOM OF THE PAD.
8. 100% TIES FOR REBAR OVERLAP. NO COLD JOINTS SHALL BE PERMITTED

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

DETAILS

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

C-301

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - hayer

C-1 CONCRETE MARKER AND PAVEMENT DETAIL
NTS

C-2 DETERRENT BOLLARD DETAIL
NTS

NOTES:

1. INSTALLATION TO BE COMPLETED PER MANUFACTURER'S SPECIFICATION.
2. THIS DRAWING IS PROVIDED FOR PLANNING PURPOSES. REFER TO MANUFACTURER'S INSTALLATIONS FOR CONSTRUCTION DETAILS.
3. REFER TO MANUFACTURER'S WEBSITE FOR PRODUCT INFORMATION.
4. IF FROST DEPTH EXCEEDS 4'-0", FOOTER TO EXCEED FROST DEPTH.
5. ENGINEER OF RECORD SHALL BE CONTACTED IMMEDIATELY IF GROUND WATER IS ENCOUNTERED DURING CONSTRUCTION.
6. FENCING SHALL BE TREX "SECLUSION" TYPE WITH "WINCHESTER GRAY" COLOR.

C-3 TREX FENCE DETAIL
NTS

NOTES:

1. CONTRACTOR SHALL VERIFY SIGN WITH LOCAL AND ADA REQUIREMENTS AND SPECIFICATIONS BEFORE INSTALLATION. LOCAL JURISDICTION SIGN REQUIREMENTS SHALL TAKE PRECEDENCE OVER THIS DETAIL.
2. SIGNS SHALL BE LOCATED SO THAT THEY CANNOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE.
3. SIGN TO BE PROVIDED AT ALL ACCESSIBLE PARKING SPACES AS PER ADA REGULATIONS.
4. IF SIGN IS MOUNTED TO BUILDING, THE BOTTOM OF THE VAN ACCESSIBLE SIGN SHALL BE 5'-0" FROM THE FINISH GRADE.

A-1 ADA ACCESSIBLE SIGN
NTS

B-2 DETAIL NOT USED
NTS

GATE NOTES:

- TREX SECLUSION SINGLE GATE OPENING AT 46-1/4" BETWEEN EDGE OF COMPOSITE POSTS
- TREX SECLUSION DOUBLE GATE OPENING AT 130-1/2" BETWEEN EDGE OF COMPOSITE POSTS
- REFER TO SITE PLAN FOR APPLICABLE GATE TYPES AND QUANTITIES

GENERAL NOTE

CONTRACTOR SHALL INSTALL SIGNAGE ON INTERIOR SIDE OF WIDE SWING GATE INDICATING THE FOLLOWING:

24"

DOUBLE GATE SHALL REMAIN OPEN AT ALL TIMES WHILE SERVICING ELECTRICAL EQUIPMENT

12"

INSTALLATION NOTES:

1. INSTALLATION TO BE COMPLETED PER MANUFACTURER'S RECOMMENDATIONS.
2. THIS DRAWING IS PROVIDED FOR PLANNING PURPOSES. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR CONSTRUCTION DETAILS.
3. REFER TO MANUFACTURER'S WEBSITE FOR PRODUCT INFORMATION.
4. DRAWING NOT TO SCALE.
5. IF FROST DEPTH EXCEEDS 4'-0", FOOTER TO EXCEED FROST DEPTH.

B-3 TREX GATE DETAIL
NTS

NOTES

1. FOR SOLID GATES & DOORS, CONTRACTOR SHALL UTILIZE LOCKEY STYLE 285P MED DUTY LEVER WITH PANIC BAR OR APPROVED EQUAL. PURCHASE ADDITIONAL ACCESSORIES AS REQUIRED.
2. FOR CHAINLINK GATES, CONTRACTOR SHALL UTILIZE LOCKEY PS11-SECURITY KIT OR APPROVED EQUAL.

A-2 DETAIL NOT USED
NTS

A-3 SINGLE GATE LOCK DETAIL
NTS

A-4 SINGLE GATE KEYPAD DETAIL W/ PANIC HARDWARE
NTS

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

DETAILS

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

C-302

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - hayter

GENERAL ELECTRICAL SPECIFICATIONS

1. THE FOLLOWING ARE ABBREVIATED SPECIFICATIONS. ALL ITEMS NECESSARY FOR A COMPLETE AND OPERABLE JOB (TO THE SATISFACTION OF OWNER) WHETHER SHOWN OR IMPLIED SHALL BE HELD AS THE RESPONSIBILITY OF THE CONTRACTOR

2. IMPORTANT NOTE: "CONTRACTOR" REFERENCED IN THESE SPECIFICATIONS SHALL INDICATE WORK BY ELECTRICAL CONTRACTOR OR ANY OF HIS SUBCONTRACTORS UNLESS NOTED OTHERWISE.

3. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT ONLY. COORDINATE INSTALLATION WITH OTHER TRADES TO VERIFY THE ACTUAL SPACE CONDITIONS THAT ARE TO BE MAINTAINED. NO ADDITIONAL PAYMENT WILL BE APPROVED FOR FAILURE TO COMPLY.

4. ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED CONSTRUCTION STANDARDS. IF THE CONTRACTOR HAS QUESTIONS REGARDING THEIR EXACT MEANING, THE ENGINEER SHALL BE NOTIFIED FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.

5. CONTRACTOR SHALL NOTE SCALE ELECTRICAL DRAWINGS. REFER TO SITE PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT AND CONFIRM WITH CONSTRUCTION MANAGER ANY SIZES AND LOCATIONS WHEN NEEDED.

6. CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE ALL ITEMS DEFINED IN THE CONTRACT DOCUMENTS. THE CONTRACT DOCUMENTS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING: THE CONTRACT, SPECIFICATIONS, AND CONSTRUCTION DRAWINGS. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO INSTALL ALL ELECTRICAL EQUIPMENT, CONDUIT, WIRING ETC. AS SHOWN OR IMPLIED ON THE DRAWINGS AND TO PROVIDE A COMPLETE OPERATIVE SYSTEM TO THE SATISFACTION OF OWNER.

7. CONTRACTOR SHALL PROVIDE ON-SITE SUPERVISION AT ALL TIMES WHILE THE WORK IS BEING PERFORMED AND SHALL DIRECT ALL WORK, USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES AND SEQUENCES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.

8. INSTALLATION OF ALL ELECTRICAL EQUIPMENT, DEVICES, CONDUITS, ETC. MUST BE COORDINATED WITH ALL OTHER TRADES. COORDINATE SHUTDOWN TIMES AND WORKING HOURS WITH BUILDING OWNER, INCLUDING OFF HOURS, WEEKEND, AND HOLIDAY WORK AS REQUIRED.

9. ANY DISCREPANCIES FOUND WITHIN THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE OWNER IN WRITING PRIOR TO THE AWARD OF THE CONTRACT AND AN ADDENDUM WILL BE ISSUED TO COVER SAME.

10. GUARANTEE - CONTRACTOR SHALL FURNISH OWNER WITH A WRITTEN GUARANTEE TO PROMPTLY REMEDY ALL DEFECTS OF WORK OR MATERIALS WITHOUT CHARGE FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE AND INSPECTION.

11. MATERIALS - ALL MATERIALS AND EQUIPMENT SHALL BE NEW, IN ORIGINAL CONTAINERS/WRAPPINGS, SHALL BE SPECIFICATION GRADE, AND LABELED OR LISTED BY U.L. OR AN ACCREDITED TESTING ORGANIZATION AS REQUIRED BY LOCAL INSPECTORS.

12. CONTRACTOR SHALL PROVIDE ADEQUATE AND REQUIRED LIABILITY INSURANCE FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION OF WORK

13. ALL EQUIPMENT SHALL BE DESIGNED TO OPERATE ON VOLTAGE AND PHASE SPECIFIED. CONTRACTOR FURNISHING EQUIPMENT OTHER THAN INDICATED SHALL BE RESPONSIBLE FOR ANY CHANGES IN CONDUCTORS, RACEWAYS, SWITCHES, MAIN FEEDERS, AND APPURTENANCES AND PAY ALL ASSOCIATED COSTS. REQUIREMENTS FOR ANY INCREASE IN CAPACITIES SHALL BE REVIEWED BY ENGINEER.

14. CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL REQUIREMENTS SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC. ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER, PRIOR TO BEGINNING ANY WORK.

LICENSES, CERTIFICATIONS OF INSPECTION

1. CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF ALL GOVERNING AGENCIES THAT REQUIRE SITE INSPECTION OF THE WORK AND/OR SIMPLY NOTIFICATION. THE CONTRACTOR SHALL OBTAIN AND PAY FOR PERMITS, LICENSES AND INSPECTIONS NECESSARY FOR PERFORMANCE OF THE WORK.

2. CONTRACTOR AND ALL OF HIS SUBCONTRACTORS THAT PERFORM ANY WORK ON THIS PROJECT SHALL BE CURRENTLY LICENSED BY ALL AGENCIES WHICH GOVERN OVER THE LAND(S) ON WHICH CONSTRUCTION IS TO TAKE PLACE. CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS AS REQUIRED, ALL COSTS SHALL BE BORNE BY CONTRACTOR.

3. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS INCIDENTAL TO WORK UNDER THIS CONTRACT. WHEN THE WORK IS COMPLETED, THE REQUIRED CERTIFICATES OF APPROVAL SHALL BE FURNISHED TO THE BUILDING OWNER. CONTRACTOR MUST BE LICENSED IN THE STATE, COUNTY AND CITY OF THE PROJECT SITE.

CODES AND ORDINANCES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH LATEST EDITION OF NEC AND ALL APPLICABLE CODES AND ORDINANCES, INCLUDING SUCH AS PERTAIN TO THE SAFETY AND HEALTH RELATIONS. CODES AND ORDINANCES SHALL TAKE PRECEDENCE OVER THE DRAWINGS AND SPECIFICATIONS ONLY IN CASE OF CONFLICT AND SHALL INCLUDE BUT NOT BE LIMITED TO:

A. UL - UNDERWRITERS LABORATORIES
B. NEC - NATIONAL ELECTRICAL CODE
C. NEMA - NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
D. OSHA - OCCUPATIONAL SAFETY AND HEALTH ACT
E. SBC - STANDARD BUILDING CODE
F. NFPA - NATIONAL FIRE CODES

POST CONSTRUCTION AND PROJECT CLOSEOUT DOCUMENTATION

2. AS-BUILT REQUIREMENTS: DO NOT USE RECORD DOCUMENTS FOR CONSTRUCTION PURPOSES. TO PROTECT RECORD DOCUMENTS FROM DETERIORATION AND LOSS, STORE IN A SECURE, FIRE-RESISTANT LOCATION. PROVIDE ACCESS TO RECORD DOCUMENTS FOR THE OWNER'S REFERENCE DURING NORMAL WORKING HOURS. MAINTAIN A CLEAN, UNDAMAGED SET OF BLUE OR BLACK LINE PRINTS OF CONTRACT DRAWINGS AND SHOP DRAWINGS. MARK THE SET TO SHOW THE ACTUAL INSTALLATION WHERE THE INSTALLATION VARIES SUBSTANTIALLY FROM THE WORK AS ORIGINALLY SHOWN. MARK DRAWINGS THAT ARE MOST CAPABLE OF SHOWING CONDITIONS FULLY AND ACCURATELY. WHERE SHOP DRAWINGS ARE USED, RECORD A CROSS-REFERENCE AT THE CORRESPONDING LOCATION ON THE CONTRACT DRAWINGS. GIVE PARTICULAR ATTENTION TO CONCEALED ELEMENTS THAT WOULD BE DIFFICULT TO MEASURE AND RECORD AT A LATER DATE. MARK RECORD SETS WITH RED ERASABLE PENCIL. USE OTHER COLORS TO DISTINGUISH BETWEEN VARIATIONS IN SEPARATE CATEGORIES OF THE WORK. MARK NEW INFORMATION THAT IS IMPORTANT TO THE OWNER BUT WAS NOT SHOWN ON THE CONTRACT DRAWINGS, DETAILS OR SHOP DRAWINGS. NOTE RELATED CHANGE ORDER NUMBERS WHERE APPLICABLE. NOTE RELATED RECORD DRAWING INFORMATION AND PRODUCT DATA. UPON COMPLETION OF THE WORK, SUBMIT ONE (1) COMPLETE SET OF RECORD DOCUMENTS TO THE CONSTRUCTION MANAGER FOR THE OWNER'S RECORDS. CONTRACTOR SHALL SUBMIT AS-BUILT SET OF PLANS TO THE ENGINEER WITHIN 7 DAYS OF COMPLETION OF CONSTRUCTION.

EXISTING CONDITIONS AND DEMOLITION

1. ALL ELECTRICAL DEMOLITION WORK, INCLUDING MATERIAL REMOVAL FROM THE SITE, SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR. BEFORE PROCEEDING WITH THE DEMOLITION WORK, THE CONTRACTOR SHALL OBTAIN FROM THE BUILDING OWNER A LIST OF ANY REMOVED ITEMS TO BE SALVAGED. ALL OTHER REMOVED MATERIALS AND EQUIPMENT SHALL BE PROPERLY DISCARDED OFF THE PREMISES.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING PROPERTY RESULTING FROM THE CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL REMOVE ALL DEBRIS FROM THE SITE AT THE COMPLETION OF WORK.

3. EXISTING UTILITIES AND CONDITIONS ARE SHOWN FROM FIELD DATA AND EXISTING DOCUMENTS AND ARE NOT NECESSARILY COMPLETE OR ACCURATE. ALL FIELD CONDITIONS SHALL BE VERIFIED BY CONTRACTOR BEFORE START OF CONSTRUCTION.

4. CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE, EXPOSE, AND DETERMINE IF CONFLICTS EXIST WITH THE PROPOSED IMPROVEMENTS. CONTRACTOR SHALL NOTIFY THE OWNER IN ORDER TO RESOLVE ANY CONFLICTS. EXISTING ELECTRICAL CONDUIT, WIRING, ETC. DAMAGED DURING RENOVATION SHALL BE REPLACED IN LIKE KIND AND CHARACTER, AND AT THE EXISTING UTILITY LINES, DRAIN OR FIELD TILE DAMAGED SHALL BE REPAIRED OR REPLACED, AS NEEDED, IN LIKE KIND AND CHARACTER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING CONDUITS, CONTROL WIRING, ETC., WHETHER SHOWN HEREON OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSES FOR REPAIR OR REPLACEMENT OF PROPERTY DAMAGED IN CONJUNCTION WITH THE EXECUTION OF WORK.

5. THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY CONFLICTS OR DISCREPANCIES IN THE CONTRACT DOCUMENTS OR FIELD CONDITIONS PRIOR TO EXECUTING THE WORK IN QUESTION. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IF DETAILS ARE CONSIDERED UNSOUND, UNSAFE, NOT WATERPROOF, OR NOT WITHIN CUSTOMARY TRADE PRACTICE. IF WORK IS PERFORMED, IT WILL BE ASSUMED THAT THERE IS NO OBJECTION TO THE DETAIL. DETAILS ARE INTENDED TO SHOW THE END RESULT OF THE DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS, AND SHALL BE INCLUDED AS PART OF THE WORK.

6. SITE VISIT - CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING HIS WORK. NO EXTRAS WILL BE PERMITTED FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS. QUANTITIES OF MATERIALS SHALL BE PER CONTRACTOR'S MEASUREMENTS.

BASIC ELECTRICAL MATERIALS AND METHODS

1. WHERE STRUCTURAL OPENINGS ARE NOT AVAILABLE, THE CONTRACTOR SHALL CORE DRILL OR CUT CHASES IN WALLS AND FLOORS AS REQUIRED. ALL NEW OPENINGS SHALL BE COORDINATED WITH THE ENGINEER. ALL PENETRATIONS OF THE BUILDING WALLS, CEILING AND FLOORS, THE CONTRACTOR SHALL SEAL WITH QUALITY CAULK, FIRE RATED AND WATERTIGHT, SUBMITTED FOR APPROVAL BY THE OWNER.

2. TRASH REMOVAL: CONTRACTOR SHALL REMOVE ALL TRASH CREATED BY HIMSELF OR HIS SUBCONTRACTORS DUE TO DEMOLITION OR CONSTRUCTION. THE CONTRACTOR SHALL ALSO REMOVE TRASH CREATED BY OTHER SUBCONTRACTORS INCLUDING CABLE REELS, CARDBOARD BOXES AND PACKING. PROMPTLY CLEAN-UP ALL SOILING, DEBRIS AND OTHER UNSIGHTLY OR HAZARDOUS CONDITIONS, CAUSED BY WORK OR DELIVERIES UNDER THIS CONTRACT, FROM THE BUILDING GROUNDS, ENTRIES, CORRIDORS, STAIRWAYS, ELEVATORS OR OTHER PUBLIC AREAS. ALL SHALL BE REMOVED FROM THE SITE IN A TIMELY FASHION TO A LEGAL DISPOSAL FACILITY.

3. GRAFFITI SHALL BE PAINTED OVER WITHIN ONE DAY AT DISCOVERY.

4. SIGNAGE: CONTRACTOR SHALL MAINTAIN SECURITY AROUND PERIMETER OF CONSTRUCTION SITE DURING ALL HOURS BY INSTALLING A TEMPORARY RIBBON FOR INTERIOR WORK TO IDENTIFY CONSTRUCTION AREAS AS REQUIRED. SIGNAGE SHALL BE POSTED WITH NOTIFICATIONS OF "NO TRESPASSING" AND "CONSTRUCTION AREA".

5. CHECK ACCURACY OF ALL DIMENSIONS IN THE FIELD. UNLESS SPECIFICALLY NOTED, DO NOT FABRICATE ANY MATERIALS OFF SITE, NOR DO ANY CONSTRUCTION UNTIL THE ACCURACY OF DRAWING DIMENSIONS HAVE BEEN VERIFIED AGAINST ACTUAL FIELD DIMENSIONS.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CUTTING, SUBSEQUENT PATCHING, AND REQUIRED FLASHING FOR ALL ITEMS NECESSARY FOR ELECTRICAL PART OF THE CONTRACT. PATCH, PAINT, AND REPAIR ANY AREA DAMAGED TO THE SATISFACTION OF THE BUILDING OWNER.

7. THE EXACT LOCATIONS OF ALL ELECTRICAL DEVICES, EQUIPMENT AND CONDUIT, AS SHOWN ON THE DRAWING, IS APPROXIMATE. WHEN NOT SHOWN IN DETAIL, THE EXACT LOCATION OR ROUTING SHALL BE DETERMINED BY THE CONTRACTOR, SUBJECT TO THE APPROVAL OF OWNER.

8. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING, BACKING, FRAMING, HANGERS OR OTHER SUPPORT FOR THE MOUNTING AND SUPPORT OF ALL ITEMS REQUIRING THE SAME AS REQUIRED BY N.E.C.

9. TRENCHING AND BACK FILL: CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION AND BACKFILLING AND COMPACTION.

10. WHEN DIRECTIONAL BORING IS REQUIRED, CONTRACTOR SHALL INSTALL A LOOSE TONING WIRE WITHIN INSTALLED CONDUIT TO ALLOW FOR IDENTIFICATION OF UNDERGROUND CONDUITS.

11. ALL BOLTS SHALL BE STAINLESS STEEL.

12. FOR UNDERGROUND RACEWAYS, PROVIDE ADDITIONAL SLACK IN CONDUCTORS AND CONDUIT EXPANSION JOINTS IN ORDER TO ALLOW FOR EARTH MOVEMENT FROM SETTLEMENT, FROST, ETC. IN ORDER TO PREVENT DAMAGE TO THE CONDUCTORS OR TO THE EQUIPMENT CONNECTED TO THE RACEWAYS PER THE NEC.

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

ELECTRICAL GENERAL NOTES

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

E-001

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - Hyer

ELECTRICAL EQUIPMENT

1. ALL EQUIPMENT SHALL BE DESIGNED TO OPERATE ON VOLTAGE AND PHASE SPECIFIED. CONTRACTOR FURNISHING EQUIPMENT OTHER THAN INDICATED SHALL BE RESPONSIBLE FOR ANY CHANGES IN CONDUCTORS, RACEWAYS, SWITCHES, MAIN FEEDERS, AND APPURTENANCES AND PAY ALL ASSOCIATED COSTS. REQUIREMENTS FOR ANY INCREASE IN CAPACITIES SHALL BE REVIEWED BY ENGINEER.

GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

1. ALL RACEWAYS AND EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH THE N.E.C. AND ANY LOCAL CODES.
2. ALL CONDUITS SHALL CONTAIN A CODE SIZE GROUNDING CONDUCTOR.
3. EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSULATED WITH GREEN-COLORED INSULATION.
4. GROUNDING ELECTRODE CONDUCTORS SHALL BE STRANDED COPPERWELD CABLE.
5. MATERIALS AND CONNECTION COMPONENTS FOR GROUNDING AND BONDING SHALL BE MANUFACTURED BY ERICO, THOMAS & BETTS, OR BURNDY.
6. GROUND-FAULT PROTECTION OF EQUIPMENT SHALL BE PROVIDED FOR SERVICE DISCONNECTS RATED 1000A OR MORE. THE GROUND-FAULT PROTECTION SYSTEM SHALL BE PERFORMANCE TESTED WHEN FIRST INSTALLED ON SITE. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH INSTRUCTIONS THAT SHALL BE PROVIDED WITH THE EQUIPMENT. A WRITTEN RECORD OF THIS TEST SHALL BE MADE AND SHALL BE AVAILABLE TO THE AUTHORITY HAVING JURISDICTION AND OWNER.

ELECTRICAL IDENTIFICATION

1. PROVIDE NAMEPLATES FOR ALL MAJOR ELECTRICAL EQUIPMENT AND ON EQUIPMENT AS DIRECTED BY OWNER.
2. PROVIDE ALL FEEDERS AND BRANCH CIRCUIT WIRING WITH COLOR CODED VINYL TAPE WRAPPED A MINIMUM OF 1.5 TIMES AROUND CIRCUMFERENCE OF JACKET/SHIELDING TO DESIGNATE PHASE.
3. COLOR CODING OF CONDUCTORS SHALL BE PER OWNERS REQUIREMENTS.
4. CONTRACTOR SHALL PLACE TWO LENGTHS OF WARNING TAPE AT A DEPTH OF 12" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL SERVICE CONDUITS. CAUTIONS TAPE TO READ "CAUTION BURIED ELECTRIC"

CONDUCTORS AND CABLES

1. WIRING - ALL CONDUCTORS SHALL BE EQUAL TO OR BETTER THAN MINIMUM #12 AWG FOR POWER, #14 AWG FOR CONTROL WITH 98% CONDUCTIVITY STRANDED COPPER, 600V, COLOR CODED, UNLESS NOTED ALUMINUM (AL). REFER TO "ALUMINUM CONDUCTOR REQUIREMENTS" THIS SHEET. PROVIDE 75°C RATED CONDUCTORS FOR AMPACITIES ABOVE 100A AND 60°C RATED CONDUCTORS FOR AMPACITIES OF 100 AMPS OR LESS. PROVIDE SOLID OR STRANDED FOR #10 AWG AND SMALLER, STRANDED FOR #8 AWG AND LARGER. UNLESS NOTED OTHERWISE ON DRAWINGS.
2. WIRE SIZE OF BRANCH CIRCUITS SHALL BE ADJUSTED TO COMPENSATE FOR VOLTAGE DROP BASED UPON ACTUAL CONDUIT ROUTING. CONTRACTOR SHALL MAINTAIN VOLTAGE DROP AS RECOMMENDED BY N.E.C. (NOT TO EXCEED 3%).
3. PROVIDE A SEPARATE NEUTRAL FOR EACH BRANCH CIRCUIT, FEEDER, ETC. NEUTRALS ARE NOT PERMITTED TO BE SHARED.
4. CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWG AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. 8 AWG AND LARGER.
5. ALL CONNECTIONS SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NO-OXIDE A" BY DEARBORNE CHEMICAL CO. COAT ALL WIRE SURFACES BEFORE CONNECTING. EXPOSED COPPER SURFACES, INCLUDING GROUND BARS, SHALL BE TREATED - NO SUBSTITUTIONS.
6. CABLES - MC CABLE IS NOT PERMITTED.
7. PROVIDE WIRE AND CABLE MANUFACTURED BY ONE OF THE FOLLOWING: AMERICAN INSULATED WIRE CORPORATION; NEXANS; CERROWIRE; SOUTHWIRE; OR ENCORE WIRE.
8. PROVIDE CONNECTORS MANUFACTURED BY ONE OF THE FOLLOWING: AMP INCORPORATED; GENERAL SIGNAL, O-Z/GEDNEY UNIT; SQUARE D COMPANY, ANDERSON; ILSCO; OR BURNDY.

ALUMINUM CONDUCTOR REQUIREMENTS

1. ALUMINUM CONDUCTOR GRADE SHALL BE MINIMUM AA-8000 OR THE NEWEST ALUMINUM CONDUCTOR SPECIFICATION BEING USED BY THE INDUSTRY.
2. THE CONTRACTOR SHALL ABIDE BY ALL ARTICLES RELATED TO ALUMINUM CONDUCTORS IN THE LATEST ISSUE OF THE NEC.
3. ALUMINUM CONDUCTORS SHALL ONLY BE TERMINATED USING ALUMINUM RATED CONNECTIONS. CONTRACTOR SHALL VERIFY TERMINATIONS ON EACH DEVICE OR EQUIPMENT BEFORE START OF WORK FOR RATED ALUMINUM CONNECTORS.
4. THE CONTRACTOR SHALL ABIDE BY ALL ALUMINUM WIRING INSTALLATION STANDARDS AS REQUIRED BY THE NEIS (NATIONAL ELECTRICAL INSTALLATION STANDARDS) PUBLISHED BY THE NECA (NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION). THE CONTRACTOR SHALL ABIDE BY ALL STANDARDS IN THE NECA / AA - 2006, WHICH DEFINES MINIMUM STANDARDS OF QUALITY AND WORKMANSHIP. A SUMMARY OF SOME OF THE REQUIREMENTS FOLLOW:

   A. TERMINATE WITH COMPRESSION CONNECTORS, NO RING CUTS OF THE INSULATION, CRIMP ONLY WITH A CRIMP TOOL AND THE CORRECT DIE AS REQUIRED BY THE MANUFACTURER.

   B. ALL CONDUCTORS TO RECEIVE ANTI-OXIDATIVE COATING DURING INSTALLATION.

   C. TERMINATING WITH A SET SCREW CONNECTOR, THE SCREW SHALL BE TIGHTENED USING ONLY A TORQUE WRENCH.

   D. NECA / AA RECOMMENDS BELLVILLE WASHERS WHEN CONNECTING ALUMINUM CONDUCTORS TO COPPER BUS BARS. ABIDE BY ALL NECA / AA RECOMMENDATIONS.

   E. DO NOT USE PIN CONNECTORS (WIRE ADAPTERS) UNLESS ABSOLUTELY NECESSARY. USE ALL / ANY OTHER OPTIONS, AND IF REQUIRED, PROVE TO ENGINEER BEFORE INSTALLING. IF USED, FOLLOW U.L. GUIDE FOR WIRE CONNECTORS (ZMOW), AND PROVIDE THE SPECIAL TOOLS REQUIRED BY THE MANUFACTURER. DIE-LESS CRIMPERS WILL NOT BE ACCEPTED.

RACEWAY AND BOXES

1. RACEWAYS: UNLESS NOTED OTHERWISE, ALL EXPOSED CONDUIT SHALL BE R.G.S. AND COVERED 6" BELOW FINISHED GRADE TO BE PVC, SCHEDULE 40. PROVIDE WEATHERPROOF FLEX CONNECTIONS WHERE REQUIRED. CONTRACTOR SHALL PROVIDE JUNCTION AND/OR PULL BOXES WHERE SHOWN ON THE DRAWINGS, OR AS REQUIRED, WHETHER SHOWN ON THE DRAWINGS OR NOT, AND SIZED PER N.E.C. PROVIDE NON-METALLIC ENCLOSURE WITH OPEN BOTTOM AND GASKETED COVER MANUFACTURED BY QUAZITE OR EQUIVALENT WITH DRIVE-OVER COVER ABLE TO WITHSTAND OCCASIONAL NON-DELIBERATE LIGHT VEHICULAR TRAFFIC. LABEL COVER TO SUIT INSTALLATION (I.E. "POWER" "COMMUNICATIONS", "LIGHTING", ETC.) AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

   A. ABOVE GRADE: R.G.S.

   B. BELOW GRADE: SCHEDULE 40 PVC (UNLESS NOTED OTHERWISE)

2. ALL WIRING SHALL BE INSTALLED IN CONDUIT. ALL CONDUIT SHALL BE A MINIMUM OF 3/4".
3. CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS - 200 LBS TEST POLYETHYLENE CORD. CONTRACTOR SHALL PROVIDE MANUFACTURED LONG RADIUS BENDS FOR ALL CONDUITS. RGS CONDUITS WHEN SPECIFIED, SHALL MEET UL-6 FOR GALVANIZED STEEL. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. COAT ALL THREADS WITH 'BRITE ZINC' OR 'GOLD GALV'.
4. OUTLET BOXES SHALL BE CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
5. PROVIDE METAL CONDUIT AND TUBING MANUFACTURED BY ONE OF THE FOLLOWING: ALFLEX CORPORATION; ANAMET INCORPORATED, ANACONDA METAL HOSE; ANIXTER BROTHERS INCORPORATED; CAROL CABLE COMPANY INCORPORATED; ELECTRI-FLEX COMPANY; GRINNELL COMPANY, ALLIED TUBE AND CONDUIT DIVISION; MONOGRAM COMPANY, AFC; REPUBLIC CONDUIT; OR WHEATLAND TUBE COMPANY.
6. PROVIDE NONMETALLIC CONDUIT AND TUBING MANUFACTURED BY ONE OF THE FOLLOWING: ANAMET INCORPORATED, ANACONDA METAL HOSE; CANTEX INDUSTRIES, HARSCO CORPORATION; CONDUX INTERNATIONAL, ELECTRICAL PRODUCTS; HUBBELL INCORPORATED, RACO, INCORPORATED; THOMAS & BETTS CORPORATION, CARLON ELECTRICAL PRODUCTS; OR O-Z/GEDNEY, UNIT OF GENERAL SIGNAL.
7. PROVIDE CONDUIT BODIES AND FITTINGS MANUFACTURED BY ONE OF THE FOLLOWING: CROUSE-HINDS, DIVISION OF COOPER INDUSTRIES; EMERSON ELECTRIC COMPANY, APPLETON ELECTRIC COMPANY; HUBBELL INCORPORATED, KILLARK ELECTRIC MANUFACTURING COMPANY; THOMAS & BETTS CORPORATION, CARLON ELECTRICAL PRODUCTS; OR O-Z/GEDNEY, UNIT OF GENERAL SIGNAL.
8. PROVIDE METAL WIREWAYS MANUFACTURED BY ONE OF THE FOLLOWING: HOFFMAN ENGINEERING COMPANY; KEYSTONE/REES, INCORPORATED; OR SQUARE D COMPANY.
9. PROVIDE BOXES, ENCLOSURES, AND CABINETS MANUFACTURED BY ONE OF THE FOLLOWING: CROUSE-HINDS, DIVISION OF COOPER INDUSTRIES; HOFFMAN ENGINEERING COMPANY, FEDERAL-HOFFMAN INCORPORATED; HUBBELL INCORPORATED, RACO INCORPORATED; THOMAS & BETTS, CARLON ELECTRICAL PRODUCTS; O-Z/GEDNEY, UNIT OF GENERAL SIGNAL; ROBROY INDUSTRIES INCORPORATED, ELECTRICAL DIVISION; OR SCOTT FETZER COMPANY, ADALET-PLM.

SAFETY SWITCHES

1. ALL DISCONNECT SWITCHES SHALL BE HEAVY-DUTY CONSTRUCTION WITH LOCKABLE HANDLES SIZED AS NOTED ON THE DRAWINGS AND/OR RISER DIAGRAM. PROVIDE NEMA ENCLOSURE AS REQUIRED BY EXPOSURE TYPE. ALL FUSIBLE SWITCHES SHALL BE PROVIDED WITH WINDOW AND WITH DUAL ELEMENTS FUSES SIZED PER THE EQUIPMENT MANUFACTURER'S RECOMMENDATION.

FUSES

1. FUSES SHALL BE DUAL ELEMENT, TIME DELAY CURRENT LIMITING. CONTRACTOR SHALL COORDINATE FUSE SIZES WITH EQUIPMENT MANUFACTURER'S REQUIREMENTS AND PER THE N.E.C.
2. PROVIDE FUSES MANUFACTURED FROM ONE OF THE FOLLOWING: COOPER BUSSMAN, INCORPORATED; EAGLE ELECTRIC MANUFACTURING COMPANY INCORPORATED, COOPER INDUSTRIES INCORPORATED; FERRAZ SHAWMUT INCORPORATED.

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

ELECTRICAL GENERAL NOTES

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

E-002

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - hayer

GENERAL SHEET NOTES

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 CONTRACTOR IN FIELD BASED ON PHYSICAL MEASUREMENTS. CONTRACTOR SHALL ORDER CONDUCTORS BASED ON FIELD MEASUREMENTS (MUST BE APPROVED BY PROJECT MANAGER).
2. CONTRACTOR SHALL REFER TO CIVIL SHEETS FOR EXISTING LANDSCAPING TO REMAIN AND PROPOSED LANDSCAPING.
3. CONTRACTOR SHALL HAND DIG AROUND ALL EXISTING UTILITIES.
4. CONDUIT ELBOWS SHALL BE SIZED PER NEC. CONTRACTOR SHALL VERIFY MANUFACTURER ALLOWABLE FILL AND MINIMUM CONDUCTOR BENDING RADIUS. SEE FEEDER SCHEDULE FOR CONDUIT & CONDUCTOR SPECIFICATIONS.
5. ALL CONDUITS ACCESSIBLE TO THE PUBLIC OR WHICH CAN BE DAMAGED SHALL BE RIGID GALVANIZED STEEL.

PLAN KEYNOTES (#)

1. PROPOSED UTILITY TRANSFORMER WITH TAPS, 480V/277V, 3Ø, 4W MOUNTED ON CONCRETE PAD. PROPOSED CTs MOUNTED IN SWITCHGEAR.
2. PROPOSED UNDERGROUND PRIMARY CONDUITS AND CONDUCTORS. COORDINATE WITH UTILITY FOR CONDUIT SIZE, QUANTITY, COMPLETE ROUTING AND PROVIDE ALL LABOR AND MATERIALS AS REQUIRED.
3. PROPOSED UTILITY METER MOUNTED ON SWITCHGEAR. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF METER WITH POWER COMPANY.
4. PROPOSED SWITCHGEAR MOUNTED TO CONCRETE PAD. SEE CIVIL SHEETS FOR CONCRETE SPECIFICATIONS.
5. PROPOSED UNDERGROUND SERVICE LATERAL CONDUITS FROM PROPOSED TRANSFORMER TO PROPOSED SWITCHGEAR PER POWER COMPANY REQUIREMENTS.
6. PROPOSED RIVIAN POWER CABINETS (TOTAL OF 2) MOUNTED ON CONCRETE PAD. SEE CIVIL SHEETS FOR CONCRETE SPECIFICATIONS.
7. FUTURE RIVIAN POWER CABINETS (TOTAL OF 4) MOUNTED ON CONCRETE PAD. GC TO SUPPLY, INSTALL, CAP AND BURY CONDUITS FOR FUTURE DISPENSERS. DOCUMENT PLACEMENT. SEE CIVIL SHEETS FOR CONCRETE SPECIFICATIONS.
8. PROPOSED CONDUITS FROM SWITCHGEAR TO RIVIAN POWER CABINETS.
9. PROPOSED RIVIAN DCFC DISPENSER (TOTAL OF 3) MOUNTED ON INDIVIDUAL FOUNDATIONS. SEE CIVIL SHEETS FOR FOUNDATION SPECIFICATIONS AND DETAILS
10. FUTURE RIVIAN DCFC DISPENSER (TOTAL OF 15) MOUNTED ON INDIVIDUAL FOUNDATIONS. GC TO SUPPLY, INSTALL, CAP AND BURY CONDUITS FOR FUTURE DISPENSERS. DOCUMENT PLACEMENT. SEE CIVIL SHEETS FOR CONCRETE SPECIFICATIONS.
11. FUTURE LEVEL 2 DISPENSER (TOTAL OF 18) MOUNTED ON INDIVIDUAL FOUNDATIONS. SEE CIVIL SHEETS FOR FOUNDATION SPECIFICATIONS AND DETAILS.
12. PROPOSED RIVIAN DCFC DISPENSER CONDUITS (1 PER POST). UNDERGROUND CONDUITS SHALL BE ROUTED UP THROUGH CONCRETE SLAB.
13. PROPOSED 2000A SWITCHGEAR MOUNTED TO CONCRETE PAD. SEE CIVIL SHEETS FOR CONCRETE SPECIFICATIONS.
14. PROPOSED 500A STEP-DOWN TRANSFORMER TO CONCRETE PAD. SEE CIVIL SHEETS FOR CONCRETE SPECIFICATIONS.
15. PROPOSED PANEL 'L' , LIGHTING CONTROLS, & SECURITY EQUIPMENT ENCLOSURES MOUNTED ON H-FRAME.
16. PROPOSED LEVEL 2 DISPENSER CONDUITS (1 PER POST). UNDERGROUND CONDUITS SHALL BE ROUTED UP THROUGH CONCRETE SLAB.
17. PROPOSED 3/4" CONDUIT FROM SECURITY ENCLOSURE FOR FUTURE SECURITY CAMERA (1 PER LIGHT POLE).
18. PROPOSED UNDERGROUND SERVICE LATERAL CONDUITS FROM PROPOSED 2000A SWITCHGEAR TO FUTURE UTILITY ROOM PER NEC REQUIREMENTS.
19. PROPOSED CONDUIT FOR AREA LIGHTS. ROUTE CIRCUIT THROUGH LIGHTING CONTACTOR. SEE SCHEDULE ON THE PHOTOMETRICS PLAN.
20. PROPOSED AREA LIGHT ON CONCRETE FOUNDATION (TYPICAL OF 15).
21. PROPOSED MONUMENT SIGN. PROVIDE 30A/2P/240V/N3R/NF DISCONNECT SWITCH.

LEGEND

(#) FEEDER SCHEDULE REFERENCE. SEE SHEET E-201 FOR FEEDER / CIRCUIT SCHEDULE.

L-#.# CIRCUIT NUMBER

E-1 EQUIPMENT ENLARGEMENT
1"=5'

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

UTILITY PLAN

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

E-101

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - Hayer

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

SINGLE LINE DIAGRAM

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

E-201

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM , hyer

SINGLE LINE DIAGRAN GENERAL SHEET NOTES

1. PROPOSED UTILITY CTs SHALL BE LOCATED IN UTILITY APPROVED CT COMPARTMENTS MOUNTED IN SWITCHGEAR. PROPOSED METER SHALL BE MOUNTED ON SIDE OF SWITCHGEAR.
2. REFER TO THIS SHEET FOR FAULT CURRENT CALCULATIONS. CONTRACTOR SHALL MARK ON ALL EQUIPMENT AS REQUIRED PER NEC
3. REFER TO ARC FLASH DETAILS FOR ARC FLASH LABEL. CONTRACTOR SHALL LABEL ALL EQUIPMENT AS REQUIRED PER NEC.
4. ALL ALUMINUM (Al) CONDUCTORS TO RECEIVE ANTI-OXIDATIVE COATING DURING INSTALLATION. ALL OTHER CONDUCTORS ARE COPPER UNLESS NOTED OTHERWISE.
5. ALL CONDUITS ACCESSIBLE TO THE GENERAL PUBLIC OR WHICH CONDUITS CAN BE DAMAGED SHALL BE RIGID GALVANIZED STEEL.
6. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED, LISTED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCREDITED BY THE UNITED STATES OCCUPATIONAL SAFETY HEALTH ADMINISTRATION.
7. THE AFOREMENTIONED STANDARDS IDENTIFY THE REQUIREMENTS MET BY THE EQUIPMENT, INCLUDING BUT NOT LIMITED TO :
   - PROTECTION AGAINST ELECTRIC SHOCK
   - OVERLOAD AND SHORT CIRCUIT PROTECTION
   - FAULT PROTECTION
   - DEGREES OF PROTECTION AGAINST ACCESS TO HAZARDOUS LIVE PARTS.
   - INTERLOCK THAT DE-ENERGIZES THE ELECTRIC VEHICLE CONNECTOR WHENEVER THE ELECTRICAL CONNECTOR IS UNCOUPLED FROM THE ELECTRIC VEHICLE
   - AUTOMATIC DE-ENERGIZATION OF CHARGING POST CABLE UPON EXPOSURE TO STRAIN
8. FEEDER SCHEDULE REFERENCE DENOTED ON SHEET E-2 WITH AN ASTERISK "(#*)" REPRESENT PROPOSED CONDUITS W/ PULLSTRING ONLY FOR FUTURE EQUIPMENT TO MATCH CONDUIT SPECIFIED FOR PROPOSED EQUIPMENT.

FEEDER / CIRCUIT SCHEDULE

NO	CONFIGURATION
1	(3) 600 MCM Al (XHHW-2, 90°C) (1) 600 MCM Al NEUT (XHHW-2, 90°C) IN (12) 4" PVC CONDUIT
2	(6) 500 MCM Al (XHHW-2, 90°C) (1) #1 AWG Cu GND (XHHW-2, 90°C) IN 4" PVC CONDUIT.
3	(4) 500 MCM Al (XHHW-2, 90°C) 1000V CLASS 1 COMM CABLE (1 ONLY) (1) #2 AWG CU GND (XHHW-2, 90°C) IN 4" PVC CONDUIT
4	(3) 500 MCM Al (THWN-2) (1) 1/0 AWG CU GND (THWN-2) IN (3) 4" PVC CONDUIT
5	(3) 600 MCM Al (XHHW-2, 90°C) (1) 600 MCM Al NEUT (XHHW-2, 90°C) IN EACH (6) 4" PVC CONDUITS
6	1" PVC CONDUIT & PULL STRING FOR FUTURE EQUIPMENT
7	(2) 4" PVC CONDUITS & PULL STRING FOR FUTURE EQUIPMENT
8	(3) #1/0 MCM Al (THWN-2) (1) #1/0 MCM Al NEUT (THWN-2) (1) #6 AWG CU GND (THWN-2) IN 2" PVC CONDUIT
9	(1) #10 AWG CU (THWN-2, 90°C) (1) #10 AWG CU NEUT (THWN-2-2, 90°C) (1) #10 AWG CU GND (THWN-2-2, 90°C) IN 1" CONDUIT
10	(3) #2/0 MCM Al (THWN-2) (1) #2/0 MCM Al NEUT (THWN-2) (1) #6 AWG CU GND (THWN-2) IN 2" PVC CONDUIT
11	(1) #8 AWG CU (THWN-2, 90°C) (1) #8 AWG CU NEUT (THWN-2-2, 90°C) (1) #10 AWG CU GND (THWN-2-2, 90°C) IN 1" CONDUIT
12	2" PVC CONDUIT & PULL STRING FOR FUTURE EQUIPMENT

NOTES

1. SITE LIGHTS ARE EQUIP WITH INTEGRAL MOTION SENSORS. REFER TO LIGHT FIXTURE SCHEDULE MODEL #s AND SPECIFICATION SHEETS.

B-3 LIGHTING CONTROL DETAIL
NTS

PANEL NAME:	MDP	MAINS TYPE:	MLO	DISTRIBUTION TYPE:	277/480Y, 3-PH, 4-WIRE
		MAINS RATING (A):	4000	RATED FAULT CURRENT:	65 KAIC (VERIFY W/ POWER CO. PRIOR TO ORDERIN
STATUS:	NEW	BUS RATING (A):	4000	RATING TYPE:	FULLY RATED
LOCATION:	EQUIPMENT ENCLOSURE	ENCLOSURE:	NEMA 3R	SERVICE ENTRANCE RATED:	YES
SUPPLY FROM:	SERVICE	MOUNTING:	PAD-MOUNTED	ISOLATED GND BAR:	NO

CKT #	LOAD L	R	HV	M	K	DESCRIPTION	NOTE	POLES	AMPS	TOTAL PER PHASE IN KVA A	B	C	AMPS	POLES	NOTE	DESCRIPTION	LOAD L	R	HV	M	K	CKT #
1	124					RIVIAN POWER CABINET		3	600	248.92	0.00	0.00	600	3		RIVIAN POWER CABINET	124					2
3	124									0.00	248.92	0.00					124					4
5	124									0.00	0.00	248.92					124					6
7	124					FUTURE RIVIAN POWER CABINET		3	600	248.92	0.00	0.00	600	3		FUTURE RIVIAN POWER CABINET	124					8
9	124									0.00	248.92	0.00					124					10
11	124									0.00	0.00	248.92					124					12
13	124					FUTURE RIVIAN POWER CABINET		3	600	248.92	0.00	0.00	600	3		FUTURE RIVIAN POWER CABINET	124					14
15	124									0.00	248.92	0.00					124					16
17	124									0.00	0.00	248.92					124					18
19						SPACE				0.00	0.00	0.00				SPACE						20
21										0.00	0.00	0.00										22
23										0.00	0.00	0.00										24
25	74.6	2.48	8.20	17.3	1.66	PANEL DP XFMR		3	800	104.33	0.00	0.00				SPACE						26
27	72.5	3.56	8.20	17.1	3.01					0.00	104.33	0.00										28
29	75.4	1.40	1.60	17.3	1.97					0.00	0.00	97.62										30
									TOTAL KVA =	851	851	844				2547 TOTAL CONN KVA						
									TOTAL AMPS =	3,073	3,073	3,048				3063 TOTAL CONN AMPS						

	DEMAND FACTOR	A	B	C	TOTAL
LIGHTING/CONTINUOUS	1.00	821.41	819.26	822.13	2462.79
FIRST 10KVA RECEPTACLES	1.00	2.48	3.33	1.40	7.21
REMAINING RECEPTACLES	0.50	0.00	0.12	0.00	0.12
HVAC EQUIP	1.00	8.20	8.20	1.60	18.00
25% OF LARGEST MOTOR	0.25	0.00	0.00	0.00	0.00
MISCELLANEOUS	1.00	17.34	17.06	17.28	51.69
KITCHEN EQUIPMENT	0.65	1.08	1.96	1.28	4.32
(** KITCHEN LOAD PER 2017 NEC TABLE 220.56)					
TOTALS (KVA)		851	850	844	2544
TOTALS (A)		3070	3068	3046	3060

NOTES

A-1 PANEL SCHEDULE 'MDP'
NTS

PANEL BOARD NOTES

1. PANELS LOCATED WITHIN PROPOSED SERVICE EQUIPMENT ARE PROVIDED AND INSTALLED BY MANUFACTURER.
2. PROVIDE EQUIPMENT WITH SUFFICIENT INTERRUPTING CAPACITY (AIC) REQUIRED FOR A SAFE INSTALLATION. AIC RATING NOTED ON EACH PANELBOARD SCHEDULE IS MINIMUM RATING ACCEPTED WITHOUT ADDITIONAL DOCUMENTATION THAT INDICATES DIFFERENTLY.
3. CIRCUITS SHALL BE REARRANGED AS REQUIRED TO MAINTAIN THE MOST BALANCED LOADS ON EACH PHASE WITHIN EACH PANEL. PROVIDE TYPED PANEL DIRECTORY MOUNTED PER MANUFACTURERS RECOMMENDATIONS WITH SERVICE EQUIPMENT.

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

ELECTRICAL NOTES, DETAILS, & PANEL SCHEDULES

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

E-202

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - hdyer

PANEL NAME:	DP	**MAINS TYPE:**	MCB	**DISTRIBUTION TYPE:**	120/208Y, 3-PH, 4-WIRE
		MAINS RATING (A):	2000	**RATED FAULT CURRENT:**	65 KAIC (VERIFY W/ POWER CO. PRIOR TO ORDERIN
STATUS:	NEW	**BUS RATING (A):**	2000	**RATING TYPE:**	FULLY RATED
LOCATION:	EQUIPMENT ENCLOSURE	**ENCLOSURE:**	NEMA 3R	**SERVICE ENTRANCE RATED:**	NO
SUPPLY FROM:	MDP VIA 500kVA XMFR	**MOUNTING:**	PAD-MOUNTED	**ISOLATED GND BAR:**	NO

CKT #	LOAD L	R	HV	M	K	DESCRIPTION	NOTE	POLES	AMPS	TOTAL PER PHASE IN KVA A	B	C	AMPS	POLES	NOTE	DESCRIPTION	LOAD L	R	HV	M	K	CKT #
1	5.76					FUTURE RIVIAN LEVEL 2 CHARGER		2	60	11.52	0.00	0.00	60	2		FUTURE RIVIAN LEVEL 2 CHARGER	5.76					2
3	5.76									0.00	11.52	0.00					5.76					4
5	5.76					FUTURE RIVIAN LEVEL 2 CHARGER		2	60	0.00	0.00	11.52	60	2		FUTURE RIVIAN LEVEL 2 CHARGER	5.76					6
7	5.76									11.52	0.00	0.00					5.76					8
9	5.76					FUTURE RIVIAN LEVEL 2 CHARGER		2	60	0.00	11.52	0.00	60	2		FUTURE RIVIAN LEVEL 2 CHARGER	5.76					10
11	5.76									0.00	0.00	11.52					5.76					12
13	5.76					FUTURE RIVIAN LEVEL 2 CHARGER		2	60	11.52	0.00	0.00	60	2		FUTURE RIVIAN LEVEL 2 CHARGER	5.76					14
15	5.76									0.00	11.52	0.00					5.76					16
17	5.76					FUTURE RIVIAN LEVEL 2 CHARGER		2	60	0.00	0.00	11.52	60	2		FUTURE RIVIAN LEVEL 2 CHARGER	5.76					18
19	5.76									11.52	0.00	0.00					5.76					20
21	5.76					FUTURE RIVIAN LEVEL 2 CHARGER		2	60	0.00	11.52	0.00	60	2		FUTURE RIVIAN LEVEL 2 CHARGER	5.76					22
23	5.76									0.00	0.00	11.52					5.76					24
25	5.76					FUTURE RIVIAN LEVEL 2 CHARGER		2	60	11.52	0.00	0.00	60	2		FUTURE RIVIAN LEVEL 2 CHARGER	5.76					26
27	5.76									0.00	11.52	0.00					5.76					28
29	5.76					FUTURE RIVIAN LEVEL 2 CHARGER		2	60	0.00	0.00	11.52	60	2		FUTURE RIVIAN LEVEL 2 CHARGER	5.76					30
31	5.76									11.52	0.00	0.00					5.76					32
33	5.76					FUTURE RIVIAN LEVEL 2 CHARGER		2	60	0.00	11.52	0.00	60	2		FUTURE RIVIAN LEVEL 2 CHARGER	5.76					34
35	5.76									0.00	0.00	11.52					5.76					36
37	4.80	2.28	8.20	5.34	1.66	FUTURE PANEL 'A'		3	600	34.29	0.00	0.00	100	3		FUTURE KIOSK PANEL				12.0		38
39	2.40	3.56	8.20	5.06	3.01					0.00	34.24	0.00								12.0		40
41	6.00	1.40	1.60	5.28	1.97					0.00	0.00	28.25								12.0		42
43	0.73	0.20				PANEL 'L'		3	125	0.9	0.0	0.0										44
45	0.98									0.0	1.0	0.0										46
47	0.25									0.0	0.0	0.3										48
49										0.0	0.0	0.0										50
51										0.0	0.0	0.0										52
53										0.0	0.0	0.0										54
									TOTAL KVA =	104	104	98					306	**TOTAL CONN KVA**				
									TOTAL AMPS =	869	869	814					850	**TOTAL CONN AMPS**				

	DEMAND FACTOR	A	B	C	TOTAL
LIGHTING/CONTINUOUS	1.25	93.31	90.62	94.21	278.14
FIRST 10KVA RECEPTACLES	1.00	2.48	3.33	1.40	7.21
REMAINING RECEPTACLES	0.50	0.00	0.12	0.00	0.12
HVAC EQUIP	1.00	8.20	8.20	1.60	18.00
25% OF LARGEST MOTOR	0.25	0.00	0.00	0.00	0.00
MISCELLANEOUS	1.00	17.34	17.06	17.28	51.69
KITCHEN EQUIPMENT	0.65	1.08	1.96	1.28	4.32
(** KITCHEN LOAD PER 2017 NEC TABLE 220.56)					
TOTALS (KVA)		122	121	116	359
TOTALS (A)		1020	1011	965	998

NOTES

B-1 PANEL SCHEDULE 'DP'
NTS

PANEL NAME:	L	**MAINS TYPE:**	MLO	**DISTRIBUTION TYPE:**	120/208Y, 3-PH, 4-WIRE
		MAINS RATING (A):	125	**RATED FAULT CURRENT:**	42 KAIC (VERIFY W/ POWER CO. PRIOR TO ORDERIN
STATUS:	NEW	**BUS RATING (A):**	125	**RATING TYPE:**	FULLY RATED
LOCATION:	H-FRAME	**ENCLOSURE:**	NEMA 3R	**SERVICE ENTRANCE RATED:**	NO
SUPPLY FROM:	DP	**MOUNTING:**	H-FRAME	**ISOLATED GND BAR:**	NO

CKT #	LOAD L	R	HV	M	K	DESCRIPTION	NOTE	POLES	AMPS	TOTAL PER PHASE IN KVA A	B	C	AMPS	POLES	NOTE	DESCRIPTION	LOAD L	R	HV	M	K	CKT #
1		0.20				LIGHTING CONTACTOR		1	20	0.33	0.00	0.00	20	2	C	SITE LIGHTING B	0.13					2
3	0.25					SITE LIGHTING A	C	1	20	0.00	0.38	0.00					0.13					4
5	0.25									0.00	0.00	0.25	20	2		SPARE						6
7	0.60					MONUMENT SIGN	C	2	20	0.60	0.00	0.00										8
9	0.60									0.00	0.60	0.00	20	1		SPARE						10
11						SPARE		1	20	0.00	0.00	0.00	20	1		SPARE						12
									TOTAL KVA =	0.93	0.98	0.25					2.15	**TOTAL CONN KVA**				
									TOTAL AMPS =	7.7	8.1	2.1					5.97	**TOTAL CONN AMPS**				

	DEMAND FACTOR	A	B	C	TOTAL
LIGHTING	1.25	0.91	1.22	0.31	2.44
FIRST 10KVA RECEPTACLES	1.00	0.20	0.00	0.00	0.20
REMAINING RECEPTACLES	0.50	0.00	0.00	0.00	0.00
HVAC EQUIP	1.00	0.00	0.00	0.00	0.00
25% OF LARGEST MOTOR	0.25	0.00	0.00	0.00	0.00
MISCELLANEOUS	1.00	0.00	0.00	0.00	0.00
KITCHEN EQUIPMENT	0.65	0.00	0.00	0.00	0.00
(** KITCHEN LOAD PER 2017 NEC TABLE 220.56)					
TOTALS (KVA)		1.11	1.22	0.31	2.64
TOTALS (A)		9.22	10.16	2.60	7.32

NOTES

C - Indicates circuit is controled through lighting contactor. Refer to lighting control detail for more information.

A-1 PANEL SCHEDULE 'L'
NTS

PANEL BOARD NOTES

1. PANELS LOCATED WITHIN PROPOSED SERVICE EQUIPMENT ARE PROVIDED AND INSTALLED BY MANUFACTURER.
2. PROVIDE EQUIPMENT WITH SUFFICIENT INTERRUPTING CAPACITY (AIC) REQUIRED FOR A SAFE INSTALLATION. AIC RATING NOTED ON EACH PANELBOARD SCHEDULE IS MINIMUM RATING ACCEPTED WITHOUT ADDITIONAL DOCUMENTATION THAT INDICATES DIFFERENTLY.
3. CIRCUITS SHALL BE REARRANGED AS REQUIRED TO MAINTAIN THE MOST BALANCED LOADS ON EACH PHASE WITHIN EACH PANEL. PROVIDE TYPED PANEL DIRECTORY MOUNTED PER MANUFACTURERS RECOMMENDATIONS WITH SERVICE EQUIPMENT.

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

PANEL SCHEDULE

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

E-203

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - hetyer

PANEL BOARD NOTES

1. PHOTOMETRICS ARE MODELED WITH A 0.9 LIGHT LOSS FACTOR.
2. FIXTURES SHALL BE ORIENTED ACCORDING TO DIRECTION SHOWN ON PLAN.

PHOTOMETRIC STATISTIC

DESCRIPTION	SYMBOL	AVG	MAX	MIN	MAX/MIN	AVG/MIN
HARDSCAPE	*	1.9fc	4.9fc	0.4fc	12.3:1	4.8:1

LIGHTING FIXTURE SCHEDULE

LABEL	QTY	CATALOG NUMBER	MANUFACTURER	DESCRIPTION	LAMP	WATTS	VOLTS	MOUNTING
A3	5	LUMINAIRE: 99595K3 IMS-L4	BEGA	LED AREA LIGHTING WIDE BEAM DISTRIBUTION 3000K 7343 INITIAL LUMENS BLACK FINISH MOTION SENSOR	LED FURNISHED WITH FIXTURE	47.2	120	25'
A4	10	LUMINAIRE: 99522K3 IMS-L4	BEGA	LED AREA LIGHTING FORWARD DISTRIBUTION 3000K 6855 INITIAL LUMENS BLACK FINISH MOTION SENSOR	LED FURNISHED WITH FIXTURE	47.2	120	25'

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

PHOTOMETRICS PLAN

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

E-204

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:17 AM - Hyper

LED pole-top luminaires - Asymmetrical flat beam light distribution

BEGA

Application
LED pole-top luminaire with asymmetrical flat beam light distribution designed for the illumination of parking areas and roadways. Tool-less entry with hinged door for ease of maintenance. Provided with slip fitter to fit 3" O.D. poles.

Materials
Luminaire housing and pole fitter constructed of die-cast marine grade, copper free (≤0.3% copper content) A360.0 aluminum alloy
Clear safety glass with anti-reflective coating for increased transmission
Reflector made of pure anodized aluminum
Silicone applied robotically to casting, plasma treated for increased adhesion
High temperature silicone gasket
Mechanically captive stainless steel fasteners

NRTL listed to North American Standards, suitable for wet locations
Protection class IP66
Weight: 19.0 lbs.

EPA (Effective projection area): 0.75 sq. ft.

Electrical

Operating voltage	120-277V AC
Minimum start temperature	-30°C
LED module wattage	47.2W
System wattage	59.6W
Controllability	0-10V dimmable
Color rendering index	Ra > 80
Luminaire lumens	7,343 lumens (3000K)
LED Service life	60,000 h (L70)

LED color temperature

4000K - Product number + **K4**
3500K - Product number + **K35**
3000K - Product number + **K3**
2700K - Product number + **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish
All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors	Black (BLK)	White (WHT)	RAL:
	Bronze (BRZ)	Silver (SLV)	CUS:

Type:
BEGA Product:
Project:
Modified:

Available Accessories

IMS-L2	Internal motion sensor - 8' mouting height
IMS-L3	Internal motion sensor - 20' mouting height
IMS-L4	Internal motion sensor - 40' mouting height - narrow
IMS-L7	Internal motion sensor - 40' mouting height - wide
FSIR-100	Configuration tool

See individual accessory spec sheet for details.

Pole-top luminaire · Asymmetrical flat beam

	LED	A	B	C
99 595	47.2W	13⅜	3	26

Recommended for use with 20' to 30' poles

BEGA 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 info@bega-us.com

Due to the dynamic nature of lighting products and the associated technologies, luminaire data on this sheet is subject to change at the discretion of BEGA North America. For the most current technical data, please refer to bega-us.com
© copyright BEGA 2018
Updated 01/17/19

LED pole-top luminaires - Asymmetrical light distribution

BEGA

Application
LED pole-top luminaire with asymmetrical light distribution designed for the illumination of parking areas and roadways. Tool-less entry with hinged door for ease of maintenance. Provided with slip fitter to fit 3" O.D. poles.

Materials
Luminaire housing and pole fitter constructed of die-cast marine grade, copper free (≤0.3% copper content) A360.0 aluminum alloy
Clear safety glass with anti-reflective coating for increased transmission
Reflector made of pure anodized aluminum
Silicone applied robotically to casting, plasma treated for increased adhesion
High temperature silicone gasket
Mechanically captive stainless steel fasteners

NRTL listed to North American Standards, suitable for wet locations
Protection class IP66
Weight: 19.0 lbs.

EPA (Effective projection area): 0.75 sq. ft.

Electrical

Operating voltage	120-277V AC
Minimum start temperature	-30°C
LED module wattage	47.2W
System wattage	56.0W
Controllability	0-10V dimmable
Color rendering index	Ra > 80
Luminaire lumens	6,855 lumens (3000K)
Lifetime at Ta = 15°C	> 500,000 h (L70)
Lifetime at Ta = 50°C	192,000 h (L70)

LED color temperature

4000K - Product number + **K4**
3500K - Product number + **K35**
3000K - Product number + **K3**
2700K - Product number + **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish
All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors	Black (BLK)	White (WHT)	RAL:
	Bronze (BRZ)	Silver (SLV)	CUS:

Type:
BEGA Product:
Project:
Modified:

Available Accessories

IMS-L2	Internal motion sensor - 8' mouting height
IMS-L3	Internal motion sensor - 20' mouting height
IMS-L4	Internal motion sensor - 40' mouting height - narrow
IMS-L7	Internal motion sensor - 40' mouting height - wide
FSIR-100	Configuration tool

See individual accessory spec sheet for details.

Pole-top luminaire · Asymmetrical light distribution

	LED	A	B	C
99 522	47.2W	13⅜	3	26

Recommended for use with 20' to 30' poles

BEGA 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 info@bega-us.com

Due to the dynamic nature of lighting products and the associated technologies, luminaire data on this sheet is subject to change at the discretion of BEGA North America. For the most current technical data, please refer to bega-us.com
© copyright BEGA 2018
Updated 01/17/19

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

LIGHT DETAILS

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

E-205

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - Hayer

PANEL NAME:	A	**MAINS TYPE:**	MCB	**DISTRIBUTION TYPE:**	120/208Y, 3-PH, 4-WIRE
		MAINS RATING (A):	600	**RATED FAULT CURRENT:**	22 KAIC (VERIFY W/ POWER CO. PRIOR TO ORDERIN
STATUS:	NEW	**BUS RATING (A):**	600	**RATING TYPE:**	FULLY RATED
LOCATION:	RETAIL A	**ENCLOSURE:**	NEMA 1	**SERVICE ENTRANCE RATED:**	NO
SUPPLY FROM:	DP	**MOUNTING:**	SURFACE	**ISOLATED GND BAR:**	NO

CKT #	LOAD L	R	HV	M	K	DESCRIPTION	NOTE	WIRE	BRKR	TOTAL PER PHASE IN KVA A	B	C	BRKR	WIRE	NOTE	DESCRIPTION	LOAD L	R	HV	M	K	CKT #
1			2.40			CU-1			25/2	3.60	0.00	0.00	20/1			BUILDING A LIGHTING	1.20					2
3			2.40							0.00	3.12	0.00	20/1			BUILDING A RECEPT		0.72				4
5			0.20			GF-1			15/1	0.00	0.00	1.40	20/1			MONUMENT SIGN	1.20					6
7		1.08				OUTDOOR CONV. REC.			20/1	1.08	0.00	0.00	20/1			SPARE						8
9					1.35	HEATED MERCHANDISER	GP		20/2	0.00	1.55	0.00	20/1			LIGHTING CONTROLLER		0.20				10
11					1.35					0.00	0.00	1.55	20/1			IRRIGATION CONTROLLER		0.20				12
13					1.66	3 HOPPER BEAN BREWER	GP		20/2	2.86	0.00	0.00	20/1			EXTERIOR SIGNAGE	1.20					14
15					1.66					0.00	2.86	0.00	20/1	`		EXTERIOR SIGNAGE	1.20					16
17					0.62	12-HD SODA FOUNTAIN	GP		20/1	0.00	0.00	1.82	20/1			EXTERIOR CANOPY LIGHTS	1.20					18
19				1.20		REMOTE CONDENSOR			30/2	2.40	0.00	0.00	20/2			EXTERIOR SITE LIGHTING	1.20					20
21				1.20						0.00	2.40	0.00					1.20					22
23				0.24		REFRIGERATOR	GP		20/1	0.00	0.00	1.44	20/2			EXTERIOR CANOPY LIGHTING	1.20					24
25				0.28		FREEZER	GP		20/1	1.48	0.00	0.00					1.20					26
27						SPACE				0.00	0.00	0.00	20/1			SPARE						28
29				1.18		1 HP WATER FEATURE PUMP			20/1	0.00	0.00	1.18	20/1			SPARE						30
31				3.86		10 HP WELL PUMP			60/3	4.46	0.00	0.00	20/1			ELECTRIC BIKE CHARGING		0.60				32
33				3.86						0.00	4.46	0.00	20/1			ELECTRIC BIKE CHARGING		0.60				34
35				3.86						0.00	0.00	4.46	20/1			ELECTRIC BIKE CHARGING		0.60				36
37						SPARE			20/1	0.60	0.00	0.00	20/1			ELECTRIC BIKE CHARGING		0.60				38
39						SPARE			20/1	0.00	0.60	0.00	20/1			ELECTRIC BIKE CHARGING		0.60				40
41						SPARE			20/1	0.00	0.00	0.60	20/1			ELECTRIC BIKE CHARGING		0.60				42
43			2.40			PANEL B			100/3	5.8	0.0	0.0				PANEL C			3.40			44
45		0.72	2.40							0.0	7.2	0.0						0.72	3.40			46
47	1.20		0.20							0.0	0.0	3.8					1.20		1.20			48
49						SOLAR INVERTER			100/3	0.0	0.0	0.0				SPACE						50
51										0.0	0.0	0.0										52
53										0.0	0.0	0.0										54
									TOTAL KVA =	22.29	22.24	16.25					60.78	**TOTAL CONN KVA**				
									TOTAL AMPS =	185.7	185.3	135.5					168.71	**TOTAL CONN AMPS**				

	DEMAND FACTOR	A	B	C	TOTAL
LIGHTING	1.25	6.00	3.00	7.50	16.50
FIRST 10KVA RECEPTACLES	1.00	2.28	3.33	1.40	7.01
REMAINING RECEPTACLES	0.50	0.00	0.12	0.00	0.12
HVAC EQUIP	1.00	8.20	8.20	1.60	18.00
25% OF LARGEST MOTOR	0.25	0.97	0.97	0.33	2.26
MISCELLANEOUS	1.00	5.34	5.06	5.28	15.69
KITCHEN EQUIPMENT	1.00	1.66	3.01	1.97	6.65
(** KITCHEN LOAD PER 2017 NEC TABLE 220.56)					
TOTALS (KVA)		24.45	23.69	18.08	66.23
TOTALS (A)		203.78	197.41	150.70	183.83

NOTES

PANEL NAME:	B	**MAINS TYPE:**	MCB	**DISTRIBUTION TYPE:**	120/208Y, 3-PH, 4-WIRE
		MAINS RATING (A):	100	**RATED FAULT CURRENT:**	22 KAIC (VERIFY W/ POWER CO. PRIOR TO ORDERIN
STATUS:	NEW	**BUS RATING (A):**	100	**RATING TYPE:**	FULLY RATED
LOCATION:	RETAIL B	**ENCLOSURE:**	NEMA 1	**SERVICE ENTRANCE RATED:**	NO
SUPPLY FROM:	A	**MOUNTING:**	SURFACE	**ISOLATED GND BAR:**	NO

CKT #	LOAD L	R	HV	M	K	DESCRIPTION	NOTE	WIRE	BRKR	TOTAL PER PHASE IN KVA A	B	C	BRKR	WIRE	NOTE	DESCRIPTION	LOAD L	R	HV	M	K	CKT #
1			2.40			CU-2			25/2	2.40	0.00	0.00	20/1			SPARE						2
3			2.40							0.00	3.12	0.00	20/1		`	RETAIL B RECEPT		0.72				4
5			0.20			GF-2			15/1	0.00	0.00	1.40	20/1			RETAIL B LIGHTING	1.20					6
7						SPACE				0.00	0.00	0.00	20/1			SPARE						8
9						SPACE				0.00	0.00	0.00				SPACE						10
11						SPACE				0.00	0.00	0.00				SPACE						12
									TOTAL KVA =	2.40	3.12	1.40					6.92	**TOTAL CONN KVA**				
									TOTAL AMPS =	20.0	26.0	11.7					19.21	**TOTAL CONN AMPS**				

	DEMAND FACTOR	A	B	C	TOTAL
LIGHTING	1.25	0.00	0.00	1.50	1.50
FIRST 10KVA RECEPTACLES	1.00	0.00	0.72	0.00	0.72
REMAINING RECEPTACLES	0.50	0.00	0.00	0.00	0.00
HVAC EQUIP	1.00	2.40	2.40	0.20	5.00
25% OF LARGEST MOTOR	0.25	0.00	0.00	0.00	0.00
MISCELLANEOUS	1.00	0.00	0.00	0.00	0.00
KITCHEN EQUIPMENT	0.65	0.00	0.00	0.00	0.00
(** KITCHEN LOAD PER 2017 NEC TABLE 220.56)					
TOTALS (KVA)		2.40	3.12	1.70	7.22
TOTALS (A)		20.00	26.00	14.17	20.04

NOTES

PANEL NAME:	C	**MAINS TYPE:**	MCB	**DISTRIBUTION TYPE:**	120/208Y, 3-PH, 4-WIRE
		MAINS RATING (A):	100	**RATED FAULT CURRENT:**	22 KAIC (VERIFY W/ POWER CO. PRIOR TO ORDERIN
STATUS:	NEW	**BUS RATING (A):**	100	**RATING TYPE:**	FULLY RATED
LOCATION:	RESTROOM BUILDING	**ENCLOSURE:**	NEMA 1	**SERVICE ENTRANCE RATED:**	NO
SUPPLY FROM:	A	**MOUNTING:**	SURFACE	**ISOLATED GND BAR:**	NO

CKT #	LOAD L	R	HV	M	K	DESCRIPTION	NOTE	WIRE	BRKR	TOTAL PER PHASE IN KVA A	B	C	BRKR	WIRE	NOTE	DESCRIPTION	LOAD L	R	HV	M	K	CKT #
1			2.40			CU-3			25/2	2.40	0.00	0.00	20/1			SPARE						2
3			2.40							0.00	3.12	0.00	20/1		`	RECEPT		0.72				4
5			0.20			GF-3			15/1	0.00	0.00	1.40	20/1			LIGHTING	1.20					6
7			1.00			WH-1			20/3	1.00	0.00	0.00	20/1			SPARE						8
9			1.00							0.00	1.00	0.00				SPACE						10
11			1.00							0.00	0.00	1.00				SPACE						12
									TOTAL KVA =	3.40	4.12	2.40					9.92	**TOTAL CONN KVA**				
									TOTAL AMPS =	28.3	34.3	20.0					27.54	**TOTAL CONN AMPS**				

	DEMAND FACTOR	A	B	C	TOTAL
LIGHTING	1.25	0.00	0.00	1.50	1.50
FIRST 10KVA RECEPTACLES	1.00	0.00	0.72	0.00	0.72
REMAINING RECEPTACLES	0.50	0.00	0.00	0.00	0.00
HVAC EQUIP	1.00	3.40	3.40	1.20	8.00
25% OF LARGEST MOTOR	0.25	0.00	0.00	0.00	0.00
MISCELLANEOUS	1.00	0.00	0.00	0.00	0.00
KITCHEN EQUIPMENT	0.65	0.00	0.00	0.00	0.00
(** KITCHEN LOAD PER 2017 NEC TABLE 220.56)					
TOTALS (KVA)		3.40	4.12	2.70	10.22
TOTALS (A)		28.33	34.33	22.50	28.37

NOTES

PRELIMINARY AMENITIES
PANEL SCHEDULES

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

AUTOTURN

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

A-101

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:27 AM - hyer

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

AUTOTURN

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

A-102

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:7 AM - hyer

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

AUTOTURN

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

A-103

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:8 AM - hiyer

C-1 DETAIL NOT USED
NTS

C-2 DETAIL NOT USED
NTS

C-3 GROUNDING DETAIL
NTS

B-1 DETAIL NOT USED
NTS

B-2 DETAIL NOT USED
NTS

B-3 DETAIL NOT USED
NTS

B-4 DETAIL NOT USED
NTS

A-1 DETAIL NOT USED
NTS

A-2 DETAIL NOT USED
NTS

A-3 DETAIL NOT USED
NTS

A-4 DETAIL NOT USED
NTS

GPD GROUP
Professional Corporation
520 South Main Street, Suite 2531
Akron, OH 44311
330.572.2100 Fax 330.572.2101

RIVIAN

REV.	DATE	DESCRIPTION
A	11/19/2020	ISSUED FOR 50% REVIEW
B	12/21/2020	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

RIVIAN
13704 N. HIGHWAY 191
MOAB, UT 84532

ELECTRICAL DETAILS

ISSUED FOR:	
PERMIT	-
BID	-
CONSTRUCTION	-
RECORD	-

PROJECT MANAGER	DESIGNER
ZS	KSB

JOB NO.
2020264.03

G-101

Drawing Name: O:\2020\2020264\03 - Moab, UT\dwg\2020264.03 SD.dwg
December 22, 2020 9:8 AM - hsyer