ADD2095 A-5

CD: 11/17/67 **4.77 ACRES**

APPROVED Plan Review

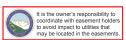
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EPC Planning & Community



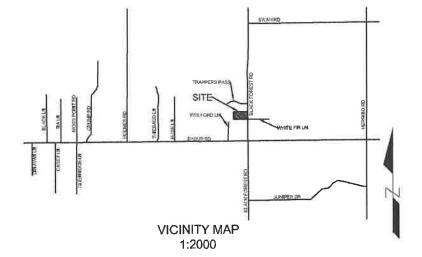
Not Required BESQCP

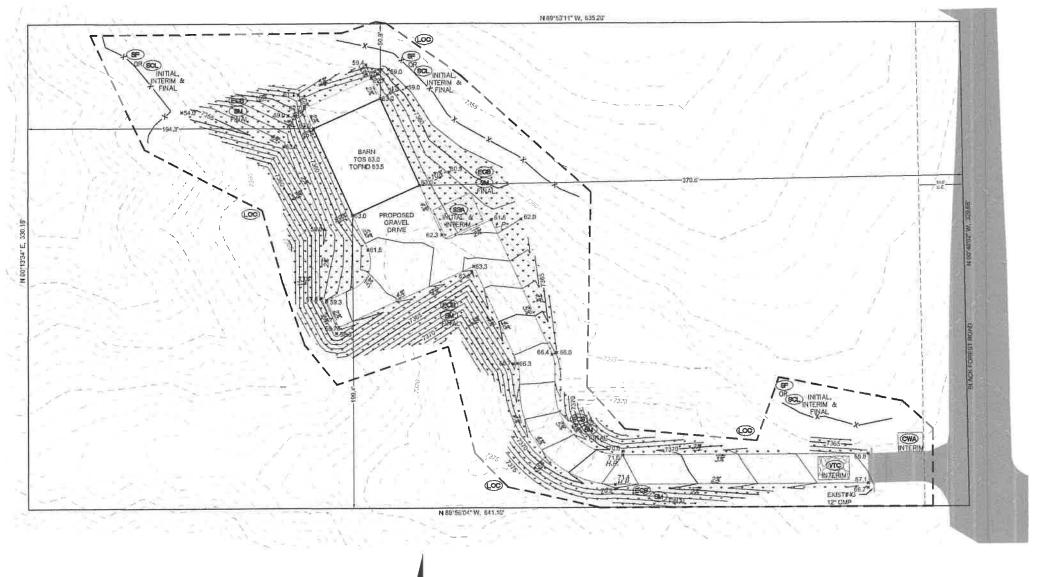
02/28/2020 10:45:32 AM **EPC Planning & Co**



PLOT AND DESC PLAN

12740 BLACKFOREST ROAD







EROSION CONTROL BLANKET (FINAL) (SM) SEEDING & MULCHING (FINAL)

SEDIMENT CONTROL LOG (INITIAL, INTERIM & FINAL)

SILT FENCE (INITIAL, INTERIM & FINAL) VEHICLE TRACKING CONTROL (INTERIM)

CONCRETE WASHOUT AREA (INTERIM)

(89A) STABILIZED STAGING AREA (INITIAL & INTERIM)

- 1. ANY LAND DISTURBANCE BY ANY OWNER, DEVELOPER, BUILDER, CONTRACTOR, OR OTHER PERSON SHALL COMPLY WITH THE BASIC GRADING, EROSION & STORMWATER QUALITY CONTROL REQUIREMENTS & GENERAL PROHIBITIONS NOTED IN THE DRAINAGE CRITERIA MANUAL VOLUME II.
- 2. NO CLEARING, GRADING, EXCAYATION, FILLING, OR OTHER LAND DISTURBING ACTIVITIES SHALL BE PERMITTED UNTIL SYNCEF & ACCEPTANCE OF THE GRADING PLAN & EROSION & STORMWATER QUALITY CONTROL PLAN IS RECEIVED FROM THE EDRO.
- . THE INSTALLATION OF THE FIRST LEVEL OF TEMPORARY BROSION CONTROL FACILITIES & BMPS SHALL BE INSTALED & INSPECTED PRIOR TO ANY EARTH DISTURBANCE OPERATIONS TANGON FLACE, CALL CITY STORMWATER INSPECTIONS, 389-3980, 48 HOURS PRIOR TO CONSTRUCTION.
- SEDIMENT (MUD & DIRT) TRANSPORTED ONTO A PUBLIC ROAD, REGARDLESS OF THE SIZE OF THE SITE, SHALL BE CLEANED IMMEDIATELY.
- 5. CONCRETE WASH WATER SHALL NOT BE DISCHARGED TO OR ALLOWED TO RUNDFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- WATERS, INCLUDING ANY SURFACE OR SUBSIRFACE STORM DRAWAGE SYSTEM OR FACILITIES

 SOIL EROSON CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DICTORIES, OR ANY
 DISTURBED LAND AREA SHALL BE COMPLETED WITHIN TWENTY-CHE (21) CALENDAR DAYS
 AFER FINAL GRADING OR FINAL EARTH OSTERBANCE HAS BEEN COMPLETED. DISTURBED

 APEAS & STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMAT FOR
 LONGER FOR THIRTY (30) DAYS SHALL ALSO BE NULCHED WITHIN THENTY-ONE (21) DAYS
 OF INTERNA GRADING, AN AREA THAT IS COMP TO REMAIN IN AN INTERNI STATE FOR MORE
 THAN SIXTY (60) DAYS SHALL ALSO BE SEEDED, ALL TEMPORARY SOIL EROSON CONTROL

 MEASURES & BBMS SHALL BE MANTAINED WITH, PERMANDRAT TOIL EROSON CONTROL

 NEASURES & BBMS SHALL BE MANTAINED.
- 7. THE GRADING & EROSION CONTROL PLAN WILL BE SUBJECT TO RE-REVIEW & RE-ACCEPTANCE BY EDRIC SHOULD ANY OF THE FOLLOWING OCCUR: GRADING DOES NOT COMMENCE WITHIN TWELVE (12) MONTHS OF THE CITY ENGNEER'S ACCEPTANCE OF THE PLAN, A CHANGE IN PROPERTY OWNERSHIP, OR PROPOSED GRADING REVISIONS.
- PLAN, A CHANGE IN PROPERTY OWNERSHIP, OR PROPOSED GRADNO REVISIONS.

 THE PLAN SHALL NOT SUBSTANTIALLY CHANGE THE DEPTH OF COVER, OR ADCESS EXISTING
 UTILITY LINES. ADCEPTANCE OF THIS PLAN DOES NOT CONSTITUTE APPROVAL TO GRADE IN
 ANY UTILITY EASEMENT OR RIGHT OF WAY. APPROVALS TO GRADE WITHIN UTILITY EASEMENTS
 MUST BE OBTAINED FROM THE APPROPRIATE UTILITY COMPANY. IT IS NOT PERMISSIBLE FOR
 MAY PERSON TO MODELY THE GRADE OF THE EARTH ON ANY OCCURANO SPRIMS UTILITY
 EASEMENT OR UTILITY RIGHT—OF—WAY WITHOUT THEIR WRITTEN APPROVAL THE PLAN
 SHOULD NOT INCREASE OF UNERT WATER TOWARDS UTILITY FACILITES. ANY CHANGES TO
 THE EXISTING UTILITY FACILITIES TO ACCOMMODATE THE PLAN MUST GE APPROVED BY THE
 APPECTED UTILITY OWNER PROR TO IMPLEMENTING THE PLAN. THE COST TO RELOCATE OR
 PROTECT EXISTING UTILITIES OR TO PROVICE INTERM ACCESS IS THE APPLICANT'S EXPENSE.
- 9. ANY AREA WHERE VEGETATION IS REMOVED BY VEHICLE TRAFFIC OR STAGING WILL BE SEEDED AND MULCHED.
- 10. ANY ADDITIONAL EROSION CONTROLS DEENED NECESSARY BY THE COLORADO SPRINGS EROSION CONTROL INSPECTOR WILL BE INSTALLED PER THE INSPECTORS DIRECTION.
- 11. ALL DISTURBED SOIL OUTSIDE OF BUILDING FOOTPRINT WILL BE SEDIED AND MULCHED IN ACCORDANCE WITH DOUGLAS COUNTY CRITERIA UNLESS SURFACED WITH GRAVEL, CONCRETE
- 12. ANY CREATED SLOPES STEEPER THAN 4H:1V WILL BE PROTECTED BY EROSION CONTROL BLANKET, SEEDING AND MULCHING
- 13. GRADED SLOPES SHALL NOT BE STEEPER THAN 3H:1V.
- 10. A MINIMUM SLOPE OF 10% AND A MAXIMUM SLOPE OF 33% IN THE FIRST 10 FEET AWAY FROM THE FOUNDATION WALLS AND WINDOW WELLS SHALL BE ESTABLISHED FOR PERMIOUS SURFACES. ALL OTHER DISTURBED AREAS SHALL HAVE A MINIMUM OF 2% SLOPE.
- 16. THIS PLOT PLAN IS FOR THE DESIGN OF GRADING AND DRAWAGE SURROUNDING THE BARN.
 IT IS NOT TO BE USED FOR FOUNDATION (BIMENSONS, OR CONSTRUCTION OF THE BARN
 EXCEPT FOR ESTABLISHING THE FOP OF FOUNDATION (BYANE).

 16. THE EMSTING TOPOGRAPHIC SURVEY USED FOR THIS PROJECT WAS COMPLETED BY RAMPART
 SURVEYS, LLC. ON 07-08-2018. THE AGCURACY OF THIS SURVEY HAS NOT BEEN VERIFIED
 & IS NOT THE RESPONSIBILITY OF 24 OWN. LLC.
- 17. SIDING TO REMAIN 8" ABOVE FINISHED GRADE.

'THIS STORMWATER MANAGEMENT PLAN HAS BEEN PLACED IN THE CITY OF COLORADO SPRINGS FLE FOR THIS PROJECT AND HAS BEEN DETERMINED TO COMPLY WITH THE APPLICABLE CITY OF COLORADO SPRINGS STORMWATER MANAGEMENT CRITERIA. ADDITIONAL STORMWATER MANAGEMENT, EROSICH AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED OF THE OWNER OR IN HISHER AGENTS, DUE TO UNFORESEEN EROSICH PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT FUNCTION AS INTENDED."

REVIEW OF THIS PLAN BY THE CITY OF COLORADO SPRINGS SHALL NOT IMPLY THAT IT HAS BEEN REVIEWED FOR COMPLIANCE WITH THE REQUIREMENTS SET FORTH BY THE STATE OF COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY."

'SEE APPROVED STORMWATER MANAGEMENT PLAN DESIGN DRAWINGS (SITE PLAN) FOR SITE SPECIFIC BEST

PROJECT OWNER/DEVELOPER SIGNATURE BLOCK
I HAVE REVIEWED THE INFORMATION CONTAINED WITHIN THE STORMWATER MANAGEMENT PLAN AND ACCEPT
RESPONSIBILITY FOR THE REQUIREMENTS SET FORTH.

PERMETEL/AFFILIATION

PLAN PREPARER SIGNATURE BLOCK TACKYOWILEDGE MY RESPONSIBILITY FOR THE PREPARATION OF THE STORMWATER MANAGEMENT PLAN.

CO PROFESSIONAL ENGINEER RYAN EICHELE, P.E.

DATE Approved For One Year From This Date DESC PLAN

1 OF 2

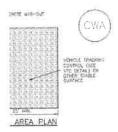
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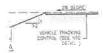
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PLOT AND DESC PLAN 12740 BLACK FOREST ROAD COLORADO SPRINGS, CO

MM-1





ASHOUT AREA

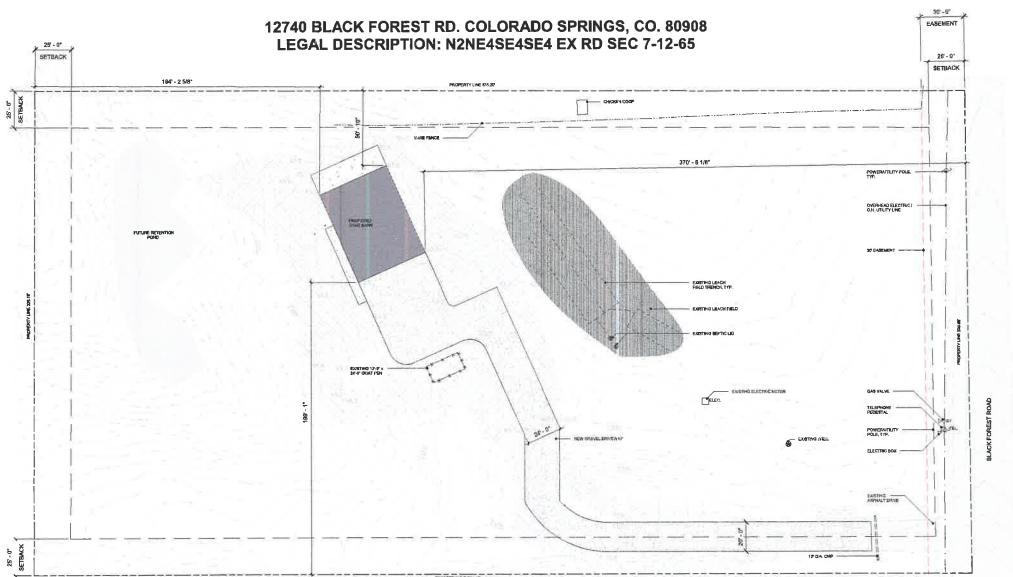
OF ACK MASIMAL DRAWAGE FATHWAY OF WELLS OF CRIMENS, WATER SOURCES, IF JUNY PERMANELS SOUS ENTS OF SITE, IT LINES (OF MIL JUN, THOMMESS) OF JUN CONCESTS, WASHOUT DEVOLES OR A SEO.

ETE PLACEINENT DY STE. MAT IS AT LEAST B" BY B" SHOPES OF OR CLATTER THE RET SHALL BE AT

WA SHALL HAVE MINUM HEIGHT OF I OMASOS SHE DIVA BRIGANCE, AT THE CINA, AND HE BOCATION OF THE CINA TO OPERATORS

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CWA-3



	SHEET INDEX	
ARCHITECTURAL		
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A2	FRST FLOOR PLAN	02/12/2020
EA.	LOFT PLAN	02/12/2020
M	ELEVATIONS	92/12/2010
A5	ELEVATIONS .	62/12/2020
AS A7 AR	FOUNDATION PLAN	02/12/2020
A2	SECTION 1	92/12/2929
AR.	SECTION 2	02/12/2020
AS	SECTION 3	02/12/2020
CIVIL		
1 OF 2	PLOT AND DESC PLAN	03/43/2030
2 CF 2	PLOT AND DESIG PLAN	02/12/2020
ELECTRICAL	= After anything was a mean	- Jan 1977 - 112-
E-0	ELECTRICAL SPECIFICATIONS	92/12/2925
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STEUCTURAL		
30.2	GENERAL STRUCTURAL NOTES	02/12/2021
50.3	GENERAL STRUCTURAL NOTES	02/12/2025
50.5	SPECIAL INSPECTIONS	02/12/2020
30.7	SCHEDULES	92/12/2020
51,1	FULINDATION PLAN	02/12/2020
53.0	TYP CONCRETE DETAILS	02/12/2020
51.1	FOUNDATION DETAILS	03/42/24/30

1" = 30'-0"

CODE DATA							
ZONING	A-B (AGRICULTURAL)	FIRE SPRINKLED:	NO				
EXISTING USE:	VACANT COMMERCIAL LOT	ALLOWABLE AREA:	UNLIMITED (SEC, 507)				
PROPOSED USE:	AGRICULTURAL STRUCTURE	ACTUAL BUILDING AREA:	3,250 9F FIRST FLOOR PLUS 1,410 SF LOFT OK				
OCCUPANCY(S)	Ü	TOTAL OCCUP LOAD;	15				
BUILDING HEIGHT:	30 ALLOWED (TABLE 504.3) ACTUAL BUILDING HEIGHT = 28'-11"	LOT AREA	4.77 ACRES (<1 ACRE DISTURBED				
NUMBER OF STORIES:	2 STORIES ALLOWED (TABLE 504,4) ACTUAL NUMBER OF STORIES = 2	AREA INCREASE - SETBACK:	NOT USED				
CONSTRUCTION:	TYPE IIB						



Architects & Planners, Inc. 4949 S. SYRACUSE SUITE 320 DENVER, CO

BLACK FOREST BARN

PROJE	CT C	O D E:
ISSUE	DATE	02/2/20
CD		
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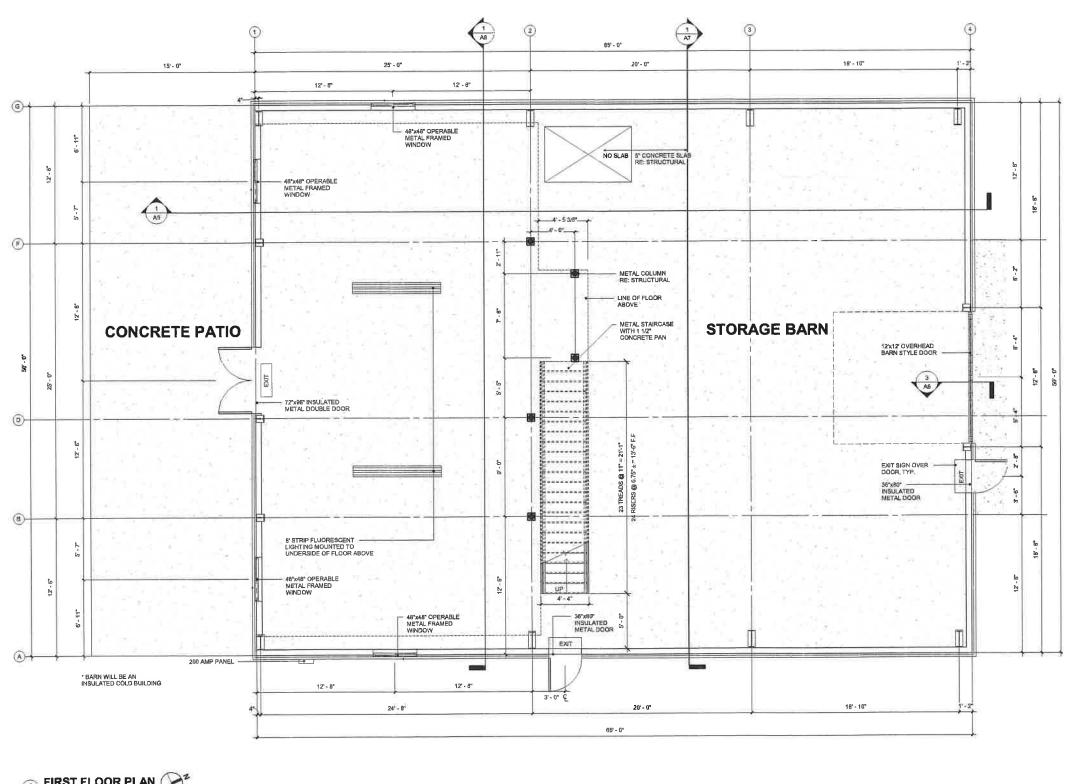
PREPARED FOR: ROB HADDOCK

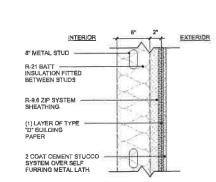
PATRICK W. NOOK B-2188

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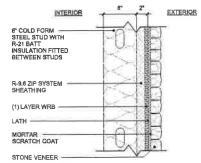
SITE PLAN

SHEET NUMBER

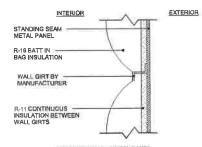




EXTERIOR WALL - CEMENT STUCCO



EXTERIOR WALL - STONE VENEER



EXTERIOR WALL - METAL PANEL





Z|

BLACK FOREST BARN
12740 BLACK FOREST RD COLORADO
SPRINGS, CO 80908

PROJECT CODE:

ISSUE DATE: 02/12/2020

CD

REVISIONS
DATE NO. DESCRIPTION

DRAWINGS
PREFARED FOR:
ROB HADDOCK

FATRICK W. NOOK B-2168

SHEET NUMBER
FIRST FLOOR
PLAN

SHEET NUMBER

A2

1 FIRST FLOOR PLAN 2
1/4" = 1"-0"

APPLY UNLESS NOTED OTHERWISE

1.0 STRUCTURAL ENGINEERING GENERAL REQUIREMENTS:

BUILDING CODE:

2015 EDITION OF THE INTERNATIONAL BUILDING CODE / ASCE/SEI 7-10 WITH PIKE PEAK REGIONAL BUILDING CODE AMENDMENTS.

ALL COMPONENTS REQUIRING DESIGN BY THE CONTRACTOR AND THEIR SUBCONTRACTORS SHALL USE THE DESIGN CRITERIA DEFINED BELOW. ALL FORCES AND PRESSURES LISTED BELOW SHALL BE THE MINIMUM PERUISSIBLE UNLESS SUBSTANTIATING CALCULATIONS USING THE DESIGN CRITERIA SHOWN ARE PROVIDED TO THE LEFFLER GROUP FOR REVIEW

RISK CATEGORY = II

TYPICAL FLOOR LIVE LOAD = 125 PSF (REDUCIBLE). EXCEPT AS FOLLOWS: LOBBY, CORRIDOR AND STAIR LIVE LOAD = 100 PSF (NOM-REDUCTBLE)

ROOF LIVE LOAD = 20 PSF (NON-REDUCIBLE) SUPERIMPOSED DEAD LOAD ON ROOF STRUCTURE = 4 PSF.

GROUND SNOW LOAD, Pg = 57 PSF ROOF SNOW LOAD, Pf = 40 PSF (NON-REDUCTBLE SNOW DRIFT PER ASCE-7 (Ce = 1 Ct = 1 Cs = 1)

WIND DESTON DATA: RISK CATEGORY = I ULTIMATE DESIGN WIND SPEED, Vult = 130 MPH (3 SEC. GUST) EQUIVALENT MOMINAL DESIGN WIND SPEED, Vasd = 101 MPH (3 SEC. GUST, USING I = 1.3) EXPOSURE 0 MEAN BOOK HEIGHT USED FOR DESIGN, b = 24 FT

INTERNAL PRESSURE COEFFICIENT, GCpi = =0.18

SEISUIC DESIGN DATA: RISK CATEGORY = 11 SEISUIC IMPORTANCE FACTOR, Ie = 1.0 Ss = 0.185, SI = 0.059 SITE CLASS: D SDS = 0.197 SD1 = 0.094 SEISUIC DESIGN CATEGORY B BASIC SEISHIC FORCE RESISTING SYSTEM = STEEL NOT SPECIFICALLY DESIGNED FOR SEISHIC DESIGN BASE SHEAR V= 8.2K SEISUIC RESPONSE COEFFICIENT, STRENGTH DESIGN, Cs = 0.066 RESPONSE MODIFICATION FACTOR, R = 3 ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE

THESE DRAWLINGS ARE A SCHEMATIC REPRESENTATION OF THE STRUCTURAL SYSTEM AND REQUIREMENTS FOR THE PROJECT, AND ARE DALY A PORTION OF THE COMPLETE CONTRACT DOCUMENTS. THE STRUCTURAL SYSTEMS REQUIRE CAREFUL COORDINATION BETWEEN ALL STRUCTURAL COMPONENTS AND MATERIALS SHOWN IN THESE STRUCTURAL DRAWINGS, AND CAREFUL COORDINATION OF INFORMATION SHOWN ON OTHER DISCIPLINES' DRAWINGS IN ORDER TO BE CONSTRUCTED. CONTRACTOR SHALL COORDINATE CONSTRUCTION OPERATIONS WITH ALL SUBCONTRACTORS AND OTHER RELATED ENTITIES TO ENSURE EFFICIENT AND ORDERLY INSTALLATION OF EACH PART OF THE WORK. EACH CONTRACTOR SHALL COORDINATE ITS OPERATIONS WITH THE OPERATIONS OF OTHER CONTRACTORS FOR PROPER INSTALLATION, CONNECTION AND OPERATION.

CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. ANY VARIANCE FROM CONDITIONS SHOWN ON THESE DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL ITEMS IN ADDITION TO ITEMS REQUIRED BY ARCHITECTURAL SPECIFICATIONS. THE STRUCTURAL SHOP DRAWING REVIEW IS INTENDED TO HELP THE ENGINEER VERIFY THE DESIGN CONCEPT. THE CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMITTAL, ITEUS NOT IN ACCORDANCE WITH CONTRACT DOCUMENTS SHALL BE IDENTIFIED UPON HIS REVIEW AND REVISED PRIOR TO FORWARDING TO ARCHITECT. THE STRUCTURAL SHOP DRAWINGS WILL BE RETURNED FOR FESUBWITTAL IF A CURSORY REVIEW SHOWS MAJOR ERRORS WHICH SHOULD HAVE BEEN FOUND BY THE CONTRACTOR'S CHECKING.

VERTEY ALL DIMENSIONS WITH ARCHITECT AND ALL FINISHED GRADE WITH CIVIL DRAWINGS.

ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM CONTRACT DOCUMENTS SHALL BE CLOUDED BY MANUFACTURER OR FARRICATOR ANY OF THE AFOREUENTIONED WHICH ARE NOT CLOUDED OR FLAGGED BY SUBUITIING PARTIES, SHALL NOT BE CONSIDERED APPROVED AFTER ENGINEER'S REVIEW, UNLESS NOTED ACCORDINGLY.

THE ENGINEER HAS THE RIGHT TO APPROVE OR DISAPPROVE ANY CHANGES TO CONTRACT DOCUMENTS AT ANY TIME BEFORE OR AFTER SHOP ERAWING REVIEW.

THE SHOP DRAWLINGS DO NOT REPLACE THE CONTRACT COCCUMENTS. ITEUS CMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER OR ARCHITECT ARE NOT TO BE CONSIDERED CHANGES TO CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE SURE ITEMS ARE CONSTRUCTED TO CONTRACT DOCUMENTS.

THE ADECNIACY OF ENGINEERING DESIGNS AND LAYOUT PERFORMED BY OTHERS RESTS WITH THE DESIGNING OR SUBMITTING

REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP CRAWINGS. RESPONSIBILITY

REPRODUCTION OF ANY PORTION OF THE CONTRACT DOCUMENTS FOR USE IN SUBMITTALS IS NOT PERMITTED AND MAY

DEFERRED SUBMITTALS: (PER GOVERNING BUILDING CODE)

FOR THE PURPOSES OF THIS SECTION, DEFERRED SUBJITTALS ARE DEFINED AS THOSE PORTLOWS OF THE DESIGN WHICH ARE NOT SUBMITTED AT THE TIME OF THE APPLICATION AND WHICH ARE TO BE SUBMITTED TO THE BUILDING OFFICIAL WITHIN A SPECIFIED PERIOD.

DEFERRAL OF ANY SUBMITTAL ITEMS SHALL HAVE PRIOR APPROVAL OF THE BUILDING OFFICIAL. THE ARCHITECT OR ENGINEER OF RECORD SHALL LIST THE DEFERRED SUBULTTALS ON THE PLANS AND SHALL SUBWIT THE DEFERRED SUBMITTAL DOCUMENTS FOR REVIEW BY THE BUILDING OFFICIAL.

CURRETTE PROTESTS ON DESCRIPE SUBMITTED TITMS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER OF RECORD SUBSTITUTE DOCUMENTS FOR OPERANCE SCENITION THE BUILDING OFFICIAL WITE A NOTATION INDICATION THE THE DEFENSED SMALLTRAL DOCUMENTS HAVE SEEN REVIEWED AND THAT THEY HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE DEFERRED SUBJITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBJITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

DEFERRED SUBMITTAL ITEMS

PRE-ENGINEERED WETAL BUILDING

GENERAL REQUIREMENTS:

ENTIRE CONTRACT DOCUMENTS SHALL BE USED TO BUILD BUILDING. SOME CRITICAL ITEMS REQUIRED BY OTHER DISCIPLINES MAY NOT BE SHOWN ON STRUCTURAL DRAWING (i.e. WALL, FLOOR AND ROOF OPENING, ARCHITECTURAL, MECHANICAL AND PLUMBING LOADS, SUPPORT PLATES ETC.) IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO PERFORM CAREFUL COORDINATION BETWEEN TRADES DURING CONSTRUCTION.

WHERE DISCREPANCIES OCCUR BETWEEN FLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN SPECIFIC DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER TYPICAL PETAILS AND GENERAL STRUCTURAL HOTES. BRING ALL DISCREPANCIES TO THE ATTENTION OF THE ENGINEER INMEDIATELY UPON DISCOVERY

DO NOT SCALE DRAWINGS FOR THE PURPOSE OF ESTABLISHING DIMENSIONS OF ANY KINO.

ALL PROPRIETARY ITEMS. MATERIALS AND COMPONENTS SHALL BE INSTALLED IN STRUCT ACCORDANCE WITH THE MARGIFACTURER'S INSTRUCTIONS, GUIDELINES AND/OR RECOMMENDATIONS

ITEMS SHOWN BY OTHER DISCIPLINES WITH REFERENCE TO STRUCTURAL DRAWING BUT NOT SHOWN ON THESE STRUCTURAL DOCUMENTS SHALL BE CONSIDERED DESIGN BUILD ITEMS AND COSTS REQUIRED FOR THESE ITEMS SHALL BE INCLUDED IN CONTRACTOR'S PRICING EXERCISES AND BID. CONTRACTOR SHALL SUBMIT DESIGN BY OTHERS FOR REVIEW.

THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION FOUTPMENT, FIG. THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERETO, MOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS.

CONSTRUCTION MATERIALS SHALL BE SPEED OUT IF PLACED ON FRAMED CONSTRUCTION. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.

WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST

ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL WITH PROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION, SHOW PENETRATIONS AND BLOCKOUT LOCATIONS ON SHOP DRAWINGS AND OTHER SUBMITTALS PRIOR TO ENGINEER'S REVIEW.

OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. IF HE CHOOSES AN OPTION, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES AND SHALL COORDINATE ALL DETAILS.

NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. TYPICAL DETAILS MAY NOT NECESSARILY BE CUT ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.

DETAILS INDICATED AS TYPICAL (i.e., TYP) APPLY TO ALL SINILAR CORDITIONS.

SOME DETAILS ARE DEFINED AS TYPICAL TO THE PROJECT AND MOT NECESSABILY CUT OR CALLED OUT ON PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO APPLY AND COORDINATE THESE DETAILS WITH CONDITIONS DEFINED THROUGHOUT

ALL DIMENSIONS SHOWN (INCLUDING ELEVATIONS) ON STRUCTURAL DRAWINGS ARE TO ASSIST CONTRACTOR IN

CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION - RESOLVE ANY DISCREPANCY WITH THE ARCHITECT. CONTRACTOR SHALL COORDINATE ALL EINTSHED CRADE FLEVATIONS SHOWN IN CIVIL DRAWINGS WITH NINIBHAY FOOTING DEPTHS SHOWN IN STRUCTURAL DRAWINGS - NOTIFY ENGINEER OF ANY DISCREPANCY PRIOR TO START OF CONSTRUCTION.

AMY ENGINEERING DESIGN, PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF AN ENGINEER

SUPPLIER OF ENGINEERED STRUCTURAL COMPONENTS (i.e. STEEL JOISTS, STAIRS, PRECAST ITEMS) SHALL BE RESPONSIBLE FOR COMPLETE DESIGN AND SHALL USE ENTIRE CONTRACT DOCUMENTS TO INCLUDE ALL LOADS AND DETAIL REQUIREMENTS FROM ALL DISCIPLINES. SUPPLIER SHALL PROVIDE ADDITIONAL MATERIAL REQUIRED TO MEET ALL THEIR REQUIREMENTS FOR INSTALLATION (i.e. WIDER BEARING PLATES, SHIMS, ERECTION BOLTS ETC.).

STRUCTURAL STEEL SUPPLIER SHALL FUENISH BOLTS FOR OSHA CONNECTIONS.

SPECIAL INSPECTION:

THE OWNER SHALL EUPLOY ONE OR MORE SPECIAL INSPECTORS OR AGENCIES WHO SHALL PROVIDE IMSPECTIONS DURING CONSTRUCTION FOR THE ITEMS LISTED BELOW, THE CONTRACTOR SHALL COOPERATE WOTH THE SPECIAL INSPECTOR AND SHALL FURNISH TOOLS, EQUIPMENT AND ASSISTANCE AS REQUESTED. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AT LEAST 24 HOURS PRIOR TO EXPECTED TIME FOR OPERATIONS REQUIRING TESTING OR INSPECTION SERVICES. THE INSPECTOR SHALL FAMILIARIZE HIMSELF WITH ALL APPLICABLE PORTIONS OF THE CONTRACT DOCUMENTS PERTAINING TO THE AREA OF INVESTIGATION PRIOR TO PERFORMING SERVICES. COMPENSATION FOR SPECIAL INSPECTION SERVICES SHALL

THE LEFFLER GROUP IS NOT THE SPECIAL INSPECTOR. AND SHALL NOT PERFORM THESE SERVICES.

INSPECTION BY THE OWNER OR OWNER'S AGENT DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

PER IBC SECTION 1704, SPECIAL INSPECTION IS REQUIRED FOR THE ITEMS CEFINED IN THE SPECIAL INSPECTION MATRIX FOR EACH TYPE OF CONSTRUCTION IN THESE STRUCTURAL CONSTRUCTION DOCUMENTS.

DUTTES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR

A) THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN IT CONFORMS WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATION. B) THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE

ENGINEER OR ACCUTECT OF RECORD. ALL DISCREPANDES SMALL BE BROWNET TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE DESIGN AUTHORITY AND THE BUILDING OFFICIAL. C) UPON COMPLETION OF THE WORK THE SPECIAL INSPECTOR SHALL COMPLETE AND SIGN THE APPROPRIATE FORUS CERTIFYING THAT TO THE BEST OF THEIR KNOWLEDGE THE WORK IS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE CODE.

ALL TEST & INSPECTION REPORTS SHALL BE COPIED TO THE STRUCTURAL ENGINEER WITHIN 3 DAYS OF INSPECTION OR

THE STRUCTURAL ENGINEER OF RECORD SHALL MAKE PERIODIC VISITS TO THE SITE TO OBSERVE GENERAL COUPLIANCE WITH THE APPROVED STRUCTURAL PLANS, SPECIFICATIONS AND CHANGE ORDERS. THE ENGINEER SHALL SUBNIT A STATEMENT IN WRITING TO THE BUILDING DEPARTMENT STATING THAT SITE VISITS HAVE BEEN MADE. AND THAT TO THE BEST OF THEIR KHOWLEDGE, ANY DEFICIENCIES NOTED HAVE BEEN CORRECTED. THE OWNER'S TESTING AGENCY SHALL ALSO SUBMIT A FINAL REPORT AS REQUIRED IN SECTION 1704 OF THE 2012 IBC.

2.0 FOUNDATIONS:

GEDTECHNICAL REPORT BY ENTECH ENGINEERING, INC.; JOB NO. 191487 DATED 10-18-19.

THE ENGINEETTING AND FLOOR SLAR SYSTEMS SHOWN ON THE STRUCTURAL DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT RECOMMENDATIONS. THE FOLLOWING FOUNDATION AND SLAB MOVEMENTS HAVE BEEN ESTIMATED BY THE GEOTECHNICAL ENGINEER USING THE DESIGN CRITERIA PRESENTED IN THE SOILS REPORT: TOTAL SETTLEMENT OF FOOTINGS = 1

- DIFFERENTIAL SETTLEMENT OF FOOTINGS = 1/2"
- ALL RISKS ASSOCIATED WITH THESE DESIGN REQUIREMENTS HAVE BEEN FULLY EVALUATED AND ACCEPTED BY THE OWNER.

THE SLAB-ON-GRADE HAS NOT BEEN DESIGNED TO ACT AS A FLOOR DIAPHRADM.

PERIMETER FOUNDATION CRAINS AND UNDERSLAB DRAINS ARE NON-STRUCTURAL ITEMS RELATED TO SOIL PERFORMANCE AND WATER TRANSPORT AWAY FROM THE BUILDING. THESE ITEMS ARE NOT THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER AND ARE NOT DEFINED OR SHOWN IN THE STRUCTURAL DRAWINGS. REFER TO OTHER DISCIPLINES' DRAWINGS AND THE GEOTECHNICAL REPORT FOR REQUIREMENTS.

SPREAD FOOTINGS SHALL BEAR ON SOILS AS DEFINED IN THE SOILS REPORT, 30 INCHES MINIMUM BELOW FINISHED GRADE AT EXTERIOR FOOTINGS, 12 INCHES MINIMAN BELOW GRADE AT INTERIOR FOOTINGS. FINISHED GRADE IS DEFINED AS TOP OF SLAS FOR INTERIOR FOOTINGS AND LOWEST ADJACENT GRADE WITHIN 5 FEET FOR PERIMETER FOOTINGS. DESIGN SOLL BEARING VALUE = 2,400 PSF. SOIL BEARING VALUES HAVE NOT BEEN INCREASED 33% FOR SEISMIC OR WIND LOADING. FOUNDATION EXCAVATIONS SHALL BE INSPECTED BY SOILS ENGINEER PRIOR TO PLACEMENT OF CONCRETE.

EDULYALENT FLUID PRESSURE USED FOR WALL DESIGN = 45 PCF FOR "ACTIVE" COMDITION, AND 200 PCF (ASSUMED) FOR "PASSIVE" CONDITION

FOUNDATION SUBMITTALS:

THE FOLLOWING ITEMS SHALL BE SUBMITTED FOR REVIEW FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH INFORMATION GIVEN AND THE DESIGN CONCEPT EXPRESSED IN THE CONTRACT DOCUMENTS. REFER TO PROJECT SPECIFICATIONS FOR ADCITIONAL REQUIRED SUBMITTALS.

STEEL REINFORCEMENT SHOP DRAWINGS WELDING CERTIFICATES **WATERIAL TEST REPORTS** MATERIAL CERTIFICATES FIELD QUALITY CONTROL TEST AND INSPECTION REPORTS COLD-WEATHER AND HOT-WEATHER PROCEDURES

3.0 CONCRETE:

ALL CONCRETE WORK SHALL CONFORM TO THE LATEST EDITION OF ACT 301, UNLESS MORE STRINGENT REQUIREMENTS ARE DEFINED ELSEWHERE IN THE CONTRACT DOCUMENTS.

CONCRETE DEFINED ON THE STRUCTURAL DRAWINGS SHALL HAVE THE FOLLOWING PROPERTIES:

USE	WIN f'c, 28 DAY	WAX SLUMP WAX W/C	RATIO AIR CONTENTA	CEMENT TYPE
FOOTINGS	3,000 PSI	4º 0.	.50 NO REQUIRENE	NT ++++ I/II
WALLS	3,000 PSI	4° 0.	50 NO REQUIREME	NT 1/11
SLABS ON GROUND (INTERIO	OR) 3,750 PSI	4" O.	45 NO REQUIREME	NT 1/11
PLACE OF COURT (EXTERT)	101 *4 3 750 PST	4" O.	45 5.05	1/11

- * SPECIFIED AIR CONTENT IS TOTAL CONCRETE AIR CONTENT (ENTRAPPED + ENTRAINED).
- ** PAYING AND EXTERIOR FLATWORK REFER TO ARCHITECTURAL/CIVIL DRAWINGS AND SPECIFICATIONS.

MECHANICALLY YIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THAT SLABS ON GRADE NEED BE VIBRATED ONLY AROUND UNDER-FLOOR DUCTS, ETC. IF PLASTICIZER IS USED, A HIGHER FINAL SLUMP MAY BE ALLOWED UPON STRUCTURAL ENGINEER'S APPROVAL. CAST CLOSURE POUR AROUND COLUMNS AFTER COLUMN DEAD LOAD IS APPLIED. UNLESS APPROVED OTHERWISE IN WRITING BY THE ARCHITECT, ALL CONCRETE SLABS ON GRADE SHALL BE BOUND BY CONTROL JOINTS (KEYED OR SAME CUT), SUCH THAT THE ENGLOSED AREA DOES NOT EXCEED 144 SQUARE FEET. KEYED CONTROL JOINTS WEED ONLY OCCUR AT EXPOSED EDGES DURING POURING, ALL OTHER JOINTS MAY BE SAW CUT. REFER TO ARCHITECTURAL ORANGINGS FOR

FLY ASH ADDITIVES USED IN FLATKORK OR ARCHITECTURALLY EXPOSED CONCRETE ARE NOT PERMITTED.

FLY ASH - IF PERMITTED, SHALL BE LIMITED TO 20% OF CEMENTITIOUS MATERIALS.

"NET STABBING" OF ANY EMBEDDED ITEM OR BOLT IS STRICTLY PROHIBITED

ASTM AR15 (FV = 80 KSC) DEFORMED BARS FOR ALL BARS, ALL GRADE GO REINFORCING TO BE WELDED OR FIELD BENT SHALL BE ASTM AZOS. WELDED WIRE FABRIC PER ASTM AISS, WIRE PER ASTM ABZ. NO TACK WELDING OF REINFORCING BARS ALLOWED WITHOUT PRIOR REVIEW OF PROCEDURE WITH THE STRUCTURAL ENGINEER. LATEST ACI CODE AND DETAILING MANUAL APPLY, CLEAR CONCRETE COVERAGES AS FOLLOWS:

CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3'
EXPOSED TO EARTH OR WEATHER	
#6 OR LARGER	
#5 AND SMALLER	1 1/2"
COLUMNS (TO TIES)	1 1/2"
BEAKS (TO STIRRUPS)	1 1/2"
FLAT CLAD	2142

ALL OTHERS PER LATEST EDITION OF ACT 318:

LAP SPLICES IN CONCRETE:

LAP SPLICES, UNLESS NOTED OTHERWISE, SHALL BE CLASS 'B' TENSION LAP SPLICES PER LATEST EDITION OF ACT 318.

LAP SPLICES IN CONCRETE COLUMNS SHALL BE STANDARD COMPRESSION LAP SPLICES. STAGGER SPLICES A MINIMUM OF ONE LAP LEMETH. LAPS IN MELDED WIRE FABRIC SHALL BE MADE SO THAT THE OVERLAP, MEASURED BETWEEN OUTERWOST CROSS WIRES OF EACH FABRIC SHEET, IS NOT LESS THAN THE SPACING OF CROSS WIRES PLUS 2 INCHES. ALL WELDED WIRE FARRIC SHALL BE CHAIRED TO ENSURE PROPER CLEARANCES.

FF	ABOYE FINISHED FLOOR	IF#	INSIDE FACE OF WALL
LT	ALTERNATÉ	ĪΤ	PRECAST INVERTED TEE BEAM
a.	ANCHOR BOLT	IK (KIP)	1000 POUNDS
00°L	ADD1T10NAL	LB	PRECAST ELC BEAM
RCH	ARCHITECT	TLBS (#)	POUNDS
RCH'L	ARCHITECTURAL	LL	LIVE LOAD
1	AT (MEASUREVENT)	LLH	LONG LES HORIZONTAL
318	BEAY	LLV	LONG LEG VERTICAL
OFF.	BELOW FINISHED FLOOR	LOC	LOCATION
906	BOTTOM OF BEAU	LVL	LAMINATED VENEER LUMBER
300	BOTTOM OF DECK	MAS	HASONRY
ice.	BOTTON OF FOOTING	HAS CJ	MASONRY CONTROL JOINT
(8) 108	BOTTOM	MAX	MAXIMUM
995	BEARING	MBAI	WETAL BUILDING WANUFACTURER
OFS	COLD FORMED STEEL	MECHIL	VECHANICAL
038	CENTER OF GRAVITY STRAND	MFR(S)	MANUFACTURER ('S)
QIP	CAST IN PLACE	MIN	UINTAU
OL.	CENTERLINE	HPII	MER PRINTED INSTALCATION INSTRUCTION
CJ .	CONTROL JOINT	R/A	NOT APPLICABLE
GUP .	COMPLETE JOINT PENETHATION	NTIL	HOT TO BOALE
CTR'D	CENTERED	loc	ON CENTER
CLE	CENTERLINE OF BEAM	OFW .	OUTSIDE FACE OF MALL
Of G	CENTERLINE OF COLUMN	ОН	OPPOSITE HAND
OL#	CENTERLINE OF FOOTING	CPF	OFPOSITE
OUN	CENTERLINE OF WALL	OPHG.	OPENING
CLN	CLEAR	OS .	OVERSIZED
200	COLUMN	058	ORIENTED STRAND BOARD
CONG	CONCRETE	7AF	POWDER ACTUATED PARTERER
DHI	CONCRETE MASONRY UNIT	PC	PRECAST CONCRETE
CONN	CONNECTION	PEAB	PRE-ENGINEERED WETAL BUILDING
CONT	CONTINUOUS	PFWT	PREFABRICATED WOOD TRUSS
d	PENNY (SIZE)	P.J	PANEL JOINT
DAG .	DEFORMED ANCHOR STUD	PL.	PLATE
DEG	DEGMEE	PLF	POUNDS PER LINEAR FOOT
AIG	DIAMETER	PLWD	PLYW000
DL.	DEAD LOAD	PREFAE	FREFABRICATED
DP:	DEEP OF DRILLED PIER	PSE	POUNDS PER SOLIARE FOOT
25	DOM	PSI	FOUNDS FER SOUNTE INCH
יודם	DETAIL	PT	POST TENSION
DIGITAL	DNAVING(S)	FTL	PRESSURE TREATED LUMBER
EA	EACH	FB	PRECAST RECTANGLE BEAM
EC	EPEXY COATED	AR:	MEFERENCE
EE	EACH END	SECTOR.	REINFORCINI
EL	ELEVATION	MED D	REGULAED
ENG#	ENGINEER	PG.	ROUGH BARIN
EOS	EDGE OF SUAS	SCHED	SCHEDULE
E0.	EQUAL	SLH	SHORT LEG HORIZONTAL
EGUIP	EQUIPMENT	JLV.	SHORT LEG VERTICAL
EXIST REL	ENESTEND	SIM	HIMILAN
EYF ANCH	EXPANSION ANDHOR	803	SLAN ON SPACE
EXP JT (EJ)	EXPANSION JOINT	SOV	BLAD ON VOID
EM.	EACH WAY	Su	SOUARE
FON	FOUNDATION	570	STANDARD
FF	FENESHED FLODA	sn.	STEEL
YOU .	FACE OF WEMBER	YAB	TOP AND BOTTON
FOW	FACE OF WALL	7L	TOTAL LOAD
FP	FIRE PROOFING	TJI	PLYMOOD NEB JOIST
FTG	FOOTING	TOB	TOP OF BEAM
rv	FIELD VERIFY	TOC	TOP OF COMCRETE
GA	QAGE	T00	TOP OF DECK
GALV	QALVAN1ZED	TOF	TOP OF FOOTING
DISM	GENERAL STRUCTURAL NOTES	TOL	TOP OF LEDGER
OLB (GLULAN)	GLUED LAWINATED BEAU	TOM	TOP OF MASONRY
gt	GTHRER THUSS	TOP	TOP OF PLATE
MCC	PRECAST HOLLOW CORE PLANK	Tos	TOP OF STEEL
HDAS	HEADED AND HIS STUD	TOW	TOP OF BALL
Hou	HOT-DIP GALVANIZED	TYP	TYPICAL
HK.	HOOK	UNO	UNLESS NOTED OTHERWISE
HORIZ	HORIZONTAL	VERT	VERTICAL
HT.	HEIGHT	₩P	WORK POINT
		WAF	WELDED WIRE FABRIC
		WE (W/)	WITH

	SHEET INDEX					
SHEET	DESCRIPTION					
S0.2	GENERAL STRUCTURAL NOTES					
80.3	GENERAL STRUCTURAL NOTES					
SO.8	SPECIAL INSPECTIONS					
S0.7	SCHEDULES					
\$1.1	FOUNDATION PLAN					
\$3.0	TYP CONCRETE DETAILS					
\$3.1	FOUNDATION DETAILS					

Architects & Planners, Inc.

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ORADO RD COL 80908 FS S BLACK FORES SPRINGS, C 12740

PROJECT CODE: SSUE DATE: 02/06/2020 BUILDING PERMIT

REVISIONS DATE NO DESCRIPTION

DRAWINGS PREPARED FOR: PWN ARCHITECTS & PLANNERS, INC.



SHEET NUMBER **GENERAL** STRUCTURAL

NOTES SHEET NUMBER

GENERAL STRUCTURAL NOTES - CONTINUED

APPLY UNLESS NOTED OTHERWISE

ALL SPLICE LOCATIONS SUBJECT TO APPROVAL BY THE STRUCTURAL ENGINEER. UNLESS NOTED, LAP TOP BARS AT MID-SPAN AND ROTTON RARS OVER SUPPORT, PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT ALL CORNERS AND INTERSECTIONS PER TYPICAL DETAILS. FETHFORCING BAR SPACING GIVEN ARE WAXTRUM ON CENTERS. ALL BARS PER CRSI SPECIFICATIONS AND HANDBOOK. DOWEL ALL VERTICAL REINFORCING TO FOUNDATION WITH STANDARD 90-DEGREE HOOKS UNLESS HOTED OTHERMISE. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE. CONCRETE COLUMN DOWEL EMBEDMENT SHALL BE A STANDARD COMPRESSION DOWEL WITH EMBEDMENT LENGTH ACCORDING TO THE LATEST EDITION OF THE ACT 318.

POST INSTALLED ANCHORS TO CONCRETE:

THE INSTALLATION OF POST INTALLED ANCHORS SHALL BE INSPECTED IN ACCORDANCE WITH SECTION 1.3 OF ACI 318, AND THE GOVERNING BUILDING CODE, ANCHORS SHALL BE INSTALLED BY QUALIFIED PERSONNEL IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (NPII). THE FOLLOWING INSTALLATION CONDITIONS ARE REQUIRED:

MORNAL WEIGHT CONCRETE WITH A UIN f'c = 2500 PSI AND MAX f'c = 8000 PSI. CONCRETE AT TIME OF ANCHOR INSTALLATION SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 2500 PSI

THE THISTALLIATION OF ADMESTME ANCHORS HORIZONTALLY OR UPWARDLY INCLINED TO SUPPORT SUSTAINED TENSION LOADS SHALL ONLY BE PERFORMED BY PERSONNEL CERTIFIED BY THE ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM, REFER TO THE SPECIAL INSPECTIONS MATRIX FOR ADDITIONAL TESTING AND INSPECTION REQUIREMENTS. THE FOLLOWING INSTALLATION CONDITIONS ARE REQUIRED:

ANCHORS SHALL MEET THE REQUIREMENTS OF ACT 355.4 ANCHORS SHALL BE INSTALLED IN HOLES DRILLED WITH A ROTARY IMPACT DRILL OR ROCK DRILL, CORE DRILLING IS NOT

CONCRETE AT TIME OF ANCHOR INSTALLATION SHALL HAVE A MINIMUM AGE OF 21 DAYS. CONCRETE TEMPERATURE AT TIME OF ANCHOR INSTALLATION SHALL BE AT LEAST 50 DEGREES For DRY USE CONDITION - UNSATURATED CONCRETE, INSTALLATION HOLE CONTAINS NO WATER.

ACCEPTABLE ADHESTVES: HILTI HIT-HY 200 WAX ADHESTVE SIMPSON SET-XP ADMESIVE DEWALT/POWERS PURETION ADMESTV

TORQUE-CONTROLLED EXPANSION AHCHORS:

REFER TO SPECIAL INSPECTION MATRIX FOR TESTING AND INSPECTION REQUIREMENTS.

ACCEPTABLE TORONE-CONTROLLED EXPANSION ANCHORS: HILTI KWIK BOLT-TZ SINPSON STRONG-BOLT 2 DEWALT/POWERS POWER-STUD+SD2

CONCRETE SUBMITTALS:

THE FOLLOWING ITEMS SHALL BE SUBMITTED FOR REVIEW FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH INFORMATION GIVEN AND THE DESIGN CONCEPT EXPRESSED IN THE CONTRACT DOCUMENTS. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIRED SUBMITTALS.

SHOP DRAWINGS: SUBMIT SHOP DRAWINGS FOR FABRICATION, BENDING AND PLACEMENT OF REINFORCEMENT STEEL. COMPLY WITH ACT DETAILING MANUAL, SP-66, AND PROVIDE 1/4" = 1'-0' SCALE ELEVATIONS OF ALL WALLS, BEAMS, GRADE BEAMS, STEM WALLS, ILE BEAMS, CORE WALLS AND OTHER VERTICAL WORK. SHOW ALL OPENINGS IN VERTICAL WORK, SLAES AND BEAMS; ALL POCKETS IN BEAMS AND WALLS; TOP AND BOTTOM ELEVATIONS OF URBERS, SECTIONS THROUGH COLUMNS, PILASTERS AND BEAMS; PLAN VIEW OF ALL WALLS AND BEAM/JUIST INTERSECTIONS; PLACING SEQUENCE FOR MULTIPLE LAYERS OF REINFORCING STEEL; LOCATIONS OF ALL CONSTRUCTION JOINTS. ALL OPENINGS SHALL BE REVIEWED BY THE CTOR PRIOR TO SUBMITTING DRAWINGS FOR REVIEW. SHOW SPECIAL REINFORCEMENT AT OPENINGS.

MIX DESIGNS STEEL REINFORCEMENT SHOP DRAWINGS WELDING CERTIFICATES MATERIAL TEST REPORTS MATERIAL CERTIFICATES FIELD DUALITY CONTROL TEST AND INSPECTION REPORTS COLD-WEATHER AND HOT-WEATHER PROCEDURES

STRUCTURAL STEEL:

ALL WORK SHALL CONFORM TO THE LATEST EDITION OF ALSC MANUAL OF STEEL CONSTRUCTION, AND LATEST EDITION OF AME IN IT THE ESS MODE STRINGENT REQUIREMENTS ARE DEFINED ELSEWHERE IN THE CONTRACT DOCUMENTS. THE LEFFLER GROUP DUSQUITING STRUCTURAL ENGINEERS IS THE ENGINEER OF RECORD. UNLESS AN ACTIVITY OR DUTY IS SPECIFICALLY IDENTIFIED AS BEING PERFORMED BY THE PROJECT STRUCTURAL ENGINEER OF RECORD IN OSHA SUBPART R, IT WILL NOT BE PERFORMED BY THE ENGINEER. IT IS TO BE PERFORMED BY OTHERS.

ALL STRUCTURAL STEEL SHALL BE ASTM ASP2 (Fy = 50 KSI). ALL CHANNELS, AND PLATES SHALL BE ASTM ASS (Fy = 36 KSI), ALL PIPE STEEL SHALL BE ASTM A501 (Fy = 36 KSI) OR ASTM A53, TYPE E OR S, GRADE B (Fy = 36 KSI), ALL TURE STEEL SHALL BE ASTM A500 (Fy = 46 KSI), ALL TURE STEEL SHALL BE ASTM F1554, GRADE 36

ALL REFERENCE TO MEADED STUDS SHALL BE HIGH STRENGTH MEADED STUDS. ATTACHMENT OF MEADED STUDS SHALL CONFORM TO ALL REQUIREMENTS OF THE LATEST EDITION OF THE 'RECOMMENDED PRACTICES FOR STUD WELDING' AND THE "STRUCTURAL WELDING CODE" PUBLISHED BY AWS.

ALL BOLTS, ANCHOR BOLTS, EXPANSION BOLTS, ETC. SHALL BE INSTALLED WITH STEEL WASHERS AT FACE OF WOOD OR AT SLOTTED HOLES IN STEEL BECTIONS.

ALL WELDING SHALL BE PERFORMED BY WELDERS HOLDING VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELD SHOWN ON THE DRAWINGS OR NOTES, CERTIFICATES SHALL BE THOSE ISSUED BY AN ACCEPTED TESTING AGENCY, ALL MELDING DOME BY ETG SERIES LOW HYDROGEN ROOS UNLESS NOTED OTHERWISE. FOR GRADE SO REINFORCING BARS, USE EGG SERIES. ALL WELDING PER LATEST AMERICAN WELDING SOCIETY STANDARDS, (EXCEPT STEEL JOISTS AND INTER STORES SHALL COMPLY WITH SIT STANDARDS). SHOP WELDS AND FIELD WELDS SHALL BE SHOWN ON THE SHOP DRAWINGS SUBMITTED FOR REVIEW. ALL FULL (COMPLETE) PENETRATION WELDS SHALL BE TESTED AND CERTIFIED BY AN INDEPENDENT TESTING LABORATORY.

FILLET WELD SIZES SHOWN IN CONTRACT DOCUMENTS ARE THE FILLET WELD LEG SIZE. GROOVE WELD SIZES SHOWN IN CONTRACT DOCUMENTS ARE THE REQUIRED WELD SIZE "(E)"

THE ENGINEER SHALL BE COMPENSATED FOR ANY ANALYSIS, RE-DESIGN AND/OR REVIEW OF CONVECTIONS NOT CONFORMING TO THE CONTRACT DOCUMENTS, WHETHER MADE BY THE CONTRACTOR, THEIR SUBCONTRACTOR(S), FABRICATOR, DETAILER OR

CONTRACTOR SHALL NOT RECEIVE ADDITIONAL COMPENSATION FOR DETAILING, FABRICATION, ERECTION OR SCHEDULG IMPACTS AS A RESULT OF INCORRECT DETAILING IN THE SHOP DRAWINGS.

ORYPACK SHALL RE 5 DOO PST NOW-SHRINK GROUT. FIVE STAR OR FOULTVALENT, INSTALL DRYPACK UNDER BEARING PLATES BEFORE FRAMING MEMBER IS INSTALLED. AT COLUMNS, INSTALL DRYPACK UNDER BASE PLATES AFTER COLUMN HAS BEEN PLUMBED BUT PRIOR TO FLOOR OR ROOF INSTALLATION.

COLD FORMED STRUCTURAL STEEL FRANCING

ALL COLD-FORMED STEEL FRAUTING SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE LATEST EDITION OF 'SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL WEMBERS' BY THE AMERICAN IRON AND STEEL INSTITUTE.

ALL PROPRIETARY ITEMS, MATERIALS AND COMPONENTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE WANUFACTURER'S INSTRUCTIONS, GUIDELINES AND/OR RECOMMEMOATIONS.

STEEL FOR 12 14 AND 16 GAGE STUDS, JOISTS, TRACKS AND FOR ALL DIAGONA, TENSION STRAPS SHALL HAVE A MINIMAN VIELD STREAGTH OF 50 KSI. STEEL FOR ALL 18 AND 20 GAGE STUDS, JOISTS, AND TRACKS, AND FOR ALL GAGES OF ACCESSORIES AND BRIDGING SHALL HAVE A MINIMUM VIELD STRENGTH OF 33 K9I. STEEL SHALL BE GGO GALVANIZED <PAINTED>. STEEL SHEET FOR ALL STRUCTURAL FRAMING SHOWN IN THESE DRAWLINGS SHALL CONFORM TO A9TM A 1003/A 1003%, STRUCTURAL GRADE, TYPE H, WETALLIC COATED.

UNLESS SPECIFICALLY NOTED ELSEWHERE WITHIN THESE ENGINEERED COLD FORMED METAL FRAMING SHOP DRANINGS. THE UNLESS SPECIFICALLY MOTED ELSEWHERE WITHIN THESE EMBLACED OCLD FORMED METAL TOWARD SHOW THE STORY OF THE STOR BEARINGS AND JOIST BEARINGS. BRIDGING SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION WITH THE FOLLOWING MINIMUM REQUIREMENTS

BRIDGING SHALL BE STEEL CHANNEL MADE FROM ASTM A1003/A1003M, STRUCTURAL GRADE, TYPE H, METALLIC COATED STEEL SHEET, OF SAME GRADE AND COATING DESIGNATION USED FOR FRAMING MEMBERS

PROVIDE MALL BRIDGING AS NOTED ON THE DRAWINGS, SOLID BLOCKING SHALL BE INSTALLED IN LIEU OF

PROVIDE SOFFIT AND JOIST BRIDGING AS NOTED ON THE DRAWINGS. SOLID BLOCKING SHALL BE INSTALLED

BRIDGING CLIPS TO PROVIDE ATTACHMENT TO STUD WEB AND WRAP AROUND THE BRIDGING CHANNEL. BRIDGING ACCESSORIES DRIDDING CLIPS TO PROTICE ALL AGREEM TO SIDD MED AND BRAZE ADDUMBLING STRUCTURAL CONTROL. BRIDDING MCCESS SHALL BE FORMED FROM STRUCTURAL QUALITY STEEL WITH WINIMUM YIELD STRUCTURAL FRANKING ACCESSORIES SHALL BE FORMED FROM STRUCTURAL GUALITY STEEL WITH MINIMUM YIELD STRENGTH OF 50 KSI AND HAVE MINIMUM PROTECTIVE COATING EQUAL TO ASTM A1003 G-60 GALVANIZED COATING.

WHEN REQUIRED, DEFLECTION CONNECTIONS SHALL ALLOW FOR POSITIVE ATTACHMENT TO STRUCTURE AND STUD WER AND SHALL PROVIDE FRICTIONLESS, VERTICAL MOVEMENT. CONNECTION PRODUCTS ARE REQUIRED TO HAVE A VALID ICC ES REPORT OR FOUTVALENT COMPLYING WITH DCC ACCEPTANCE CRITERIA AC261. ALL STRUCTURAL FRAMING ACCESSORIES SHALL BE FORMED FROM STRUCTURAL QUALITY STEEL WITH MINIMUM YIELD STRENGTH OF 50 KBI AND HAVE MINIMUM PROTECTIVE COATING COMPLYING WITH ASTM 1003/A1003N (OR ASTM A653/A653N).

RIGID CONNECTIONS FOR ATTACHMENT OF VETAL FRAMING TO NETAL FRAMING AND TO THE PRIMARY STRUCTURE SMALL BE FORMED FROM STRUCTURAL QUALITY STEEL WITH WININGM YIELD STRENGTH OF 50 KSI AND HAVE WININGM PROTECTIVE COATING EQUAL TO COMPLYING WITH ASTM 1003/A1003M (OR ASTM A653/A653M).

ALL MEMBERS TO BE MANUFACTURED BY A MEMBER OF "STEEL STUD MANUFACTURERS ASSOCIATION" (SSMA), OR APPROVED

POMDER ACTUATED FASTENERS (PAF'S) SHALL BE HILTI X-U 0.157° DIA, OR APPROVED EQUAL. RE: DETAILS FOR EMBED

ALL SCREWS TO BE #10 U.N.O., SCREWS ATTACHED PER MER. INSTRUCTIONS AND SHALL PENETRATE 3 THREAD MINIMUM BEYONG THE ATTACHED WATERIAL

ALL WELDING SHALL BE PERFORMED BY WELDERS EXPERIENCED IN LIGHT GAGE STRUCTURAL STEEL FRAMING WORK.

DO NOT NOTCH FLANGES OF JOISTS OR STUDS.

HEADERS, JAMES, STUDS, JOISTS, RAFTERS, KICKERS AND GIRTS SHALL BE INSTALLED IN ONE-PIECE LENGTHS WITH NO SPLICES PERMITTED UNLESS SPECIFICALLY NOTED OTHERWISE IN THESE DRAWINGS.

PRE-ENCINEERED BUILDING DESIGN CRITERIA:

- 1. PRE-ENGINEERED BUILDING MANUFACTURER SHALL BE RESPONSIBLE FOR THE ENTIRE DESIGN OF THE STEEL ERSTRUCTURE, ROOF, DECK, FASCIAS, SUPPORT, BRACING, LATERAL ANALYSIS AND ALL RELATED WORK.
- 2. THE ENTIRE SUPERSTRUCTURE, INCLUDING THE ROOF DECK, SHALL BE DESIGNED IN ACCORDANCE WITH THE BUILDING CODE, WIND UPLIFT PRESSURES FOR ENCLOSED AND UMENCLOSED BUILDING AREAS SHALL BE CONSIDERED IN ACCORDANCE
- THE PRE-ENGINEERED BUILDING SHALL BE DEGIGNED TO SUPPORT SELF WEIGHT PLUS SUPERIMPOSED DEAD, LIVE, WIND OR SETSUIC LOADING, WHICHEVER COMBINATION PRODUCES THE MOST SEVERE CONDITION, IN ACCORDANCE WITH THE LATEST RECOMMENDATIONS OF THE NETAL BUILDING MANUFACTURERS ASSOCIATION, CONTRACTOR SHALL SUBMIT DESIGN CALCULATIONS AND SHOP DRAWINGS FOR REVIEW PRIOR TO MANUFACTURE
- CALCULATIONS AND SHOP DRAWINGS SHALL BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROJECT LOCATION AND SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS SHALL SHOW ALL INFORMATION INCLUDING, BUT NOT LIMITED TO, DIMENSIONS, MEMBER SIZES AND PROPERTIES, FRAMING PLANS,
- 5. STEEL PURLIN TYPE AND SPACING AND STEEL DECK SELECTION SHALL BE THE OPTION OF THE PRE-ENGINEERED BUILDING MANUFACTURER WITH APPROVAL OF ARCHITECT
- 6. PRE-ENGINEERED BUILDING MANUFACTURER SMALL DESIGN AND SUPPLY ALL REQUIRED SUB-FRANKING FOR OPENINGS, THE LUCTURE FRAMEING TO SUPPORT THE WEIGHT OF MECHANICAL EQUIPMENT.

PERFORMANCE SPECIFICATION FOR STAIRS DESIGN:

STAIRS SHALL BE DESIGNED FOR SELF WEIGHT PLUS A LIVE LOAD EQUAL TO 100 PSF. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS WITH DESIGN CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE GOVERNING JURISDICTION OF THE PROJECT, SUBMITTED FOR REVIEW PRIOR TO MANUFACTURE.

THE FOLLOWING ITEMS SHALL BE SUBMITTED FOR REVIEW FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH INFORMATION GIVEN AND THE DESIGN CONCEPT EXPRESSED IN THE CONTRACT DOCUMENTS, REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIRED SUBMITTALS.

SHOP DRAWINGS COLD-FORMED METAL FRAMING (PLANS AND ELEVATIONS) METAL STAIRS WELDING PROCEDURE SPECIFICATIONS AND PROCEDURE QUALIFICATION RECORDS QUALIFICATION DATA FOR QUALIFIED INSTALLER, FABRICATOR, PROFESSIONAL ENGINEER, TESTING AGENCY WELDING CERTIFICATES MILL TEST REPORTS PRODUCT TEST REPORTS SOURCE QUALITY CONTROL FEPORTS

PRE-ENGINEERED METAL BUILDING DRAWINGS AND CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN

PRODUCT DATA

ODARO IOS

INFORMATION ON DRAWINGS

PLAN LEGEND							
SYMBOL	DESCRIPTION	REMARKS					
$\begin{pmatrix} x \\ x \end{pmatrix}$	DETAIL CUTS SHOWN ON PLANS						
	CONCRETE WALL UNO	SEE PLANS AND SCHEDULES FOR REINFORCING					
-2-7-/- 2	B' MASONRY WALL UNO	OTHER SIZES ARE DIMENSIONED ON PLANS.					
	12" MASONRY WALL UNO	OTHER SIZES ARE DIMENSIONED ON PLANS.					
	STUD WALL UNO	SEE GSN, PLANS, AND SCHEDULES FOR SIZE AND SPACING OF STUDS.					
[-]	WECHANICAL EQUIPMENT	SEE PLANS FOR UNIT WEIGHTS.					
\bowtie	OPENING IN FRAMING	SEE NOTE #4.					
Esam Type AT XX* O.C.	INDICATES EXTENTS OF MEMBER	SEE PLANS.					



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BARN **FOREST**

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ORADO RD COL 80908 BLACK FOREST F SPRINGS, CO

PROJECT CODE: ISSUE DATE: 02/06/2020 BUILDING PERMIT REVISIONS DATE NO. DESCRIPTION
2019 Ø FOUNDATION
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PWN **ARCHITECTS &** PLANNERS, INC.

BUILDING PERMIT



SHEET NUMBER **GENERAL** STRUCTURAL NOTES

SHEET NUMBER

		SPECIAL STRU	JCTURAL	INSP	ECTIONS		
MATERIAL		VERIFICATION AND INSPECTION	FREQUENCY		REFERENCED STANDARD	IBC REFERENCE	
	<u>. </u>	Inox	CONTINUOUS	PERIODIC			
	1,	INSPECTION TASK 1. VERIFY WATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY. 2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL. 3. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS. 4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL, DESCRIPTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT. 2. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT. 2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1704.3, ITEM 50. 3. INSPECTION OF ANDREASED. OR WHERE STRENGTH DESIGN IS USED. 4. INSPECTION OF ANDREASED. OR WHERE STRENGTH DESIGN IS USED. 4. INSPECTION OF ARCHORS POST- INSTALLED IN HARDENED CONCRETE MEMBERS. 5. VERIFYING USE OF REQUIRED DESIGN MIX. 6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONCRETE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONCRETE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONCRETE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONCRETE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONCRETE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONCRETE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONCRETE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONCRETE SPECIFIED CURING TEMPERATURE AND TECHNIQUES. 8. INSPECTION OF PRESTRESSED CONCRETE: 1 INSPECTION OF PRESTRESSED CONCRETE: 9. INSPECTION OF PRESTRESSED	855	χ			
	2.	EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	***	X			
SOILS (RE: IBC TABLE	3.	TESTING OF CONTROLLED FILL	344	Х			
1705.6)	4.	DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.	x	***			
	5.	CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE	96	х			
	1.	STEEL, INCLUDING PRESTRESSING		х	ACI318: 3.5,7.1-7.7	1910.4	
	2.	INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE	222	#21	AWS D1.4 ACI318:3,5		
	3.	IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED. OR WHERE	х	***	22 <u>.</u>	1908.5, 1909.1	
	4.	INSTALLED IN HARDENED CONCRETE	242	X	ACI318:3.8.6, 8.1.3, 21.2.8	1909.1	
	5.		***	Х	ACI318: CH. 4,5.2-5.4	1904.2, 1910.2, 1910.3	
	6.	SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE	x	25tv	ASTM C 172 ASTM C 31 ACI318: 5.6,5.8	1910.10	
	7.6	INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR	Х	(4.44)	ACI318: 5.9,5.10	1910.6, 1910.7, 1910.8	
(RE: IBC TABLE	8.	SPECIFIED CURING TEMPERATURE	(#22	Х	ACI318: 5.11-5.13	1910.9	
1100.0)	9.						
		A. APPLICATION OF PRESTRESSING FORCES.	Х	19430	ACI 318: 18.20 ACI 318:		
		B. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC-FORCE-RESISTING SYSTEM.	х	300	18.18.4		
	10.	ERECTION OF PRECAST CONCRETE MEMBERS.	***	х	ACI318: CH. 16		
	11.	STRENGTH, PRIOR TO STRESSING OF TENDONS IN POSTTENSIONED CONCRETE AND PRIOR TO REWOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	STE	х	ACI 318: 6.2		
	12	INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	5645	х	ACI 318: 8.1.1		

MATERIAL		VERIFICATION AND INSPECTION TASK	FREG	JENCY	REFERENCED Standard	IBC REFERENCE
			CONTINUOUS	PERIODIC		
	1.	EPOXY ANCHORS A) ALL EPOXY BOLTS TO HAVE I.C.C. RATING FOR MATERIAL INTO WHICH INSTALLATION TAKES PLACE, ALL EPOXY BOLTS ARE SUBJECT TO THE FOLLOWING SPECIAL INSPECTION AND TESTING.				
		B) VERIFY ANCHOR TYPE, DIMENSIONS, BASE MATERIAL TYPE & STRENGTH, HOLE DIMENSIONS, HOLE CLEANING PROCEDURES, ANCHOR SPACING, EDGE DISTANCES, BASE MATERIAL THICKNESS, ANCHOR EMBEDMENT, AND TIGHTENING TORQUE.		х		
POST INSTALLED ANCHORS		C) LOAD TEST THE FIRST 10% OF EACH TYPE OF BOLT TO 150% RECOMMENDED ALLOWABLE WORKING LOAD IN TENSION. IF AT ANYTHME THE NUMBER OF REJECTED BOLTS EXCEEDS 10%, TEST 100% OF REMAINING BOLTS WITL NOT MORE THAN 10% FAIL LOAD TEST COSTS FOR ADDITIONAL TESTING BEYOND THE FIRST 10% OF ANY BOLT TYPE SHALL BE BORNE BY THE CONTRACTOR.		х		
	2.	EXPANSION ANCHORS]
		A) ALL EXPANSION BOLTS TO HAVE I.C.C. RATING FOR MATERIAL INTO WHICH INSTALLATION TAKES PLACE. ALL EXPANSION BOLTS ARE SUBJECT TO THE FOLLOWING SPECIAL INSPECTION AND TESTING.				
		B) VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, HOLE CLEARLINESS, EMBEDMENT DEPTH, BASE MATERIAL TYPE & STRENGTH, DRILL BIT DIAMETER, HOLE DEPTH, EDGE DISTANCES, ANCHOR SPACING, BASE MATERIAL THICKNESS, AND TIGHTENING TORQUE.	х			

NOTE: THIS TABLE IS NOT COMPREHENSIVE. ALL TESTING AND INSPECTION REQUIREMENTS DEFINED ELSEWHERE IN THE DRAWINGS AND SPECIFICATIONS ARE REQUIRED. CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS AND BRING ANY DISCREPANCIES TO THE ENGINEER'S ATTENTION PRIOR TO BEGINNING THE WORK.

Architects & Planners, Inc.

4949 S. SYRACUSE SUITE 320 DENVER, CO

BLACK FOREST BARN

12740 BLACK FOREST RD COLORADO SPRINGS, CO 80908

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REVISIONS

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SHEET NUMBER

SPECIAL INSPECTIONS

SHEET NUMBER

S0.6

185 SOUTH LIBERT RIVE, SLETTE TRIA, MECHOSTONIA (METHOSTONIA CONT.) PROSPONIA CONTROLLO CONT. PROSPONIA CONTROLLO CONT. PROSPONIA CONTROLLO CONTRO

		f!c	= 3,000	P9I OR	LESS		f'c = 4	.000 PSI		f*c	= 5,000	PS1 OR	LESS
BAR	LAP	TOP	BARS	OTHER	BARS	TOP	BARS	OTHER	BARS	TOP	BARS	OTHER	BARS
SIZE CLASS	GLASS	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE
40	A	22	32	17	25	19	28	15	22	17	25	13	19
#3	8	28	42	22	32	24	36	19	28	22	33	17	25
#4	A	29	43	22	33	25	37	19	29	22	33	17.	.26
#4	В	37	56	29	43	32	48	25	37	29	43	22	33
110	A	36	54	28	41	31	47	24	36	28	42	22	32
#5	B	47	70	36	54	40	60	31	47	36	54	28	42
40	A	43	64	33	50	37	56	29	43	33	50	26	38
#6	В	56	84	43	64	48	72	37	56	43	65	33	50
#7	A	63	94	48	72	54	81	42	63	49	73	37	56
#7	- 8	81	122	63	94	70	106	54	81	63	94	49	73
WB	A	72	107	55	82	62	93	48	7.1	55	83	43	84
#11	8	93	139	72	107	80	121	62	83	72	108	56	83
40	A	81	121	62	93	70	105	54	81	63	94	48	.72
#9	В	105	157	81	121	-91	136	70	105	81	122	83	94
#10	A	91	136	70	105	79	118	61	91	70	105	54	81
PIU	В	118	177	91	138	102	153	79	118	91	137	70	1.05
Ø11	A	101	151	78	116	87	131	67	101	78	117	60	90
917	B	131	196	101	151	113	170	87	131	101	152	7.8	117
#14	N/A	121	181	93	139	105	157	81	121	94	140	72	108
#18	N/A	161	241	124	186	139	209	107	161	125	187	98	144

NOTE:

1. TABULATED VALUES ARE BASED ON GRACE 60 REINFORCING BARS AND NORBAL WEIGHT CONCRETE.

2. TENSION DEVELOPMENT LENGTHS AND TENSION LAP SPLICE LENGTHS AME CALCULATED FER ACT 318-11, SECTIONS 12.2 AND 12.15, RESPECTIVELY. TALBULATED VALUES FOR BEAMS OR COLUMNS ARE BASED ON TRADSVERSE REINFORCEMENT AND CONCRETE COVER MEETING WINTHUM COOD REQUIREMENT AND CONCRETE COVER MEETING WINTHUM COOD REQUIREMENT AND CONCRETE COVER MEETING WINTHUM COOD REQUIREMENTS. LENGTHS ARE IN INCHES.

3. CASES 1 AND 2, WHICH DEPEND ON THE TYPE OF STROTURAL ELEMENT, CONCRETE COVER, MED THE CENTER TO-CENTER SPACINS OF THE BARS, AND DEFINED AS:
BEAMS OR CASE 1: COVER AT LEAST 1.0, d AND c.-c.
COLUMNS: SPACING AT LEAST 2.0, d AND c.-c.
OTHERS: SPACING AT LEAST 3.0, d AND c.-c.
OTHERS: SPACING AT LEAST 3.0, d AND c.-c.
OTHERS: SPACING AT LEAST 3.0, d AND c.-c.

4. LAP SPLICE LENGTHS ARE MULTIPLES OF TENSION DEVELOPMENT LENGTHS. ARE MULTIPLES OF TENSION CLASS B = 1, 3! (ACI 318-11, DESTION 12.15-1).

5. ACI 318-11 DOES NOT ALLOW LAP SPLICES OF #14 OR #18 BARS. THE TABULATED VALUES FOR THOSE BAR SIZES ARE THE TENSION DEVELOPMENT LENGTHS.

6. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS.

7. FOR LICHTWEIGHT AGGREGATE CONCRETE, WULTIPLY THE TABULATED VALUES BY 1.3.

8. FOR EPOXY-COATED BARS, MULTIPLY THE TABULATED VALUES BY 1.3.

8. FOR EPOXY-COATED BARS, MULTIPLY THE TABULATED VALUES BY 0.0 OF THE FOLLOWING FACTORS:
CONCRETE CAST BELOW THE BARS.

CONCRETE CAST BELOW THE BARS.

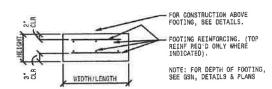
7. FOR LICHTWEIGHT AGGREGATE CONCRETE, WULTIPLY THE TABULATED VALUES BY 0.0 OF OTHE FOLLOWING FACTORS:
CONCRETE CAST BELOW THE BARS.

7. FOR EPOXY-COATED BARS, MULTIPLY THE TABULATED VALUES BY 0.0 OF OTHE FOLLOWING FACTORS:
CONCRETE CAST C.-C. SPACING < 7,0 0 1.7,1,3=1.31 1.50 COVER > 3.0 OR C.-C. C. SPACING < 7,0 0 1.7,1,3=1.31 1.50 COVER > 3.0 OR C.-C. C. SPACING < 7,0 0 1.7,1,3=1.31 1.50 COVER > 3.0 OR C.-C. C. SPACING < 7,0 0 1.20 1.20

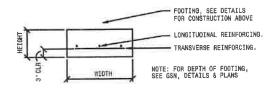
ISOLATED FOOTING SCHEDULE (F)

		DIMEN	SIONS		
MARK	THICKNESS	WIDTH	LENGTH	REINFORCING	COMMENTS
F1A	1'-0"	3'-0"	3'-0"	#5 AT 12" OC EW BOT	
F18	1'-0"	3'-0"	3'-0"	#5 AT 12" OC EW T&B	222
F2A	1'-0"	3'-6"	3'-6"	#5 AT 12" OC EW BOT	749
F2B	1'-0"	3'-6"	3'-6"	#5 AT 12" OC EW T&B	***
F3	1,-0.	4'-0*	4*-0*	#5 AT 12" OC EW T&B	1111

NOTE: "A" AFTER ISOLATED FTG NAME INDICATES BOT ONLY REBAR. "B" AFTER ISOLATED FT NAME INDICATES REBAR TOP AND BOT.



	DIMENSI	ONS I	REINE	ORCING	
MARK	THICKNESS	WIDTH	LONGITUDINAL	TRANSVERSE	REMARKS



TYPICAL ANCHOR BOLT EMBEDMENT SCHEDULE

BOLT DIAMETER (d _e)	VERT BOLT EMBEDMENT LENGTH	HORIZ BOLT EMBEDMENT LENGTH	HEADED STUD FILLET WELD SIZE, "S'.
1/2"	7*	4-	1/4"
5/8"	7"	4*	5/16*
3/4"	7*	5'	5/16"
7/8"	8"	6"	5/16
14	9"	7*	3/8"
1 1/8"	10"	8"	
1 1/4"	11*	9"	:00000

NOTES:
1. PROVIDE C.I.P. ANCHORS AND C.I.P. ANCHOR BOLTS PER THIS SCHEDULE UNLESS NOTED ON PLANS OR DETAILS.

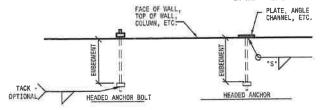
AT 'ANCHORS' USE 3/16" FILLET
WELD('S').
THICKNESS OF DRYPACK DOES NOT APPLY TOWARDS EMBEDMENT.
UNLESS NOTED OTHERWISE, HEADED BOLTS

SHALL BE USED AT ALL ANCHOR LOCATIONS EXCEPT THE FOLLOWING WHERE HOOKED ANCHORS MAY BE USED: - SHEAR WALLS (EXCLUDING HOLD-DOWNS) - BEAM/JOIST BEARING PLATES ON

CONCRETE OR MASONRY EXTERIOR WOOD AND WETAL STUD

WALLS BOTTOM ATTACHMENT TO

6. HEOURATED BED TO MATERIAL WITH A THE BOTTOM TO SATERIAL WITH A ON THE EMBEDED END OF THE ANCHOR.





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12740 BLACK FOREST RD COLORADO SPRINGS, CO 80908

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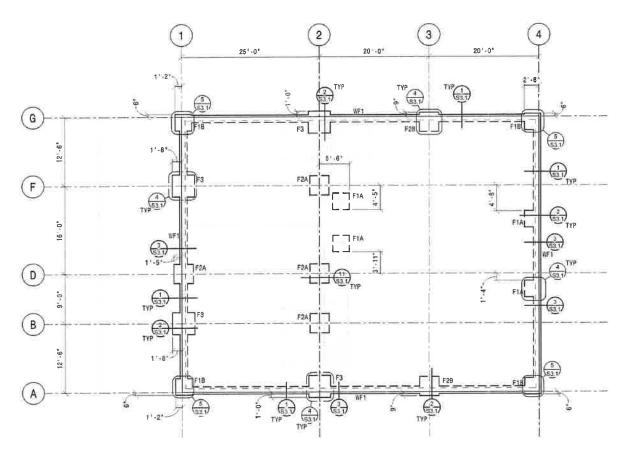


SHEET NUMBER

SCHEDULES

SHEET NUMBER

S0.7





FOUNDATION PLAN NOTES:

- ELEVATIONS SHOWN ON PLAN ARE BASED ON DATUM ELEVATION SPECIFIC TO THE PROJECT. RE: ARCH/CIVIL DRAWINGS FOR ACTUAL U.S.G.S. ELEVATIONS AND BENCHMARK LOCATION. TO
- CONCRETE SLAB ON GRADE IS 5" THICK REINFORCED WITH #3 AT 18" OC EW CENTERED IN SLAB UNO.
- 3. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
- 4. TOP OF FOOTING SHOWN AS (XX'-XX'). FOOTING ELEVATIONS SHOWN ARE MAXIMUMS AND MAY NEED TO BE LOWERED DUE TO SOIL CONDITIONS. VERIFY CHANGES WITH ENGINEER OF
- WF1, WF2, ETC AS SHOWN ON PLAN INDICATES CONTINUOUS WALL FOOTING, SEE SCHEDULE FOR SIZE AND REINFORCING.
- PROVIDE KEYED CONSTRUCTION JOINTS IN WALLS, GRADE BEAMS AND SLABS IN STRICT ACCORDANCE WITH THE REQUIREMENTS SHOWN IN THESE DOCUMENTS. HORIZONTAL REINFORCING SHALL BE CONTINUOUS THROUGH VERTICAL KEYED CONTROL JOINTS.
- 7. F1, F2, ETC AS SHOWN ON PLAN INDICATES ISOLATED FOOTING, SEE SCHEDULE FOR SIZE AND REINFORCING.
- 8. VERIFY EXACT LOCATION OF DEPRESSED SLABS WITH ARCHITECTURAL DRAWINGS.
- 9. FOR SIDEWALK LOCATION AND DETAILS, SEE ARCHITECTURAL
- VERIFY EXACT SIZE AND LOCATION OF OPENINGS WITH ARCHITECTURAL DRAWINGS.

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> BARN **FOREST**

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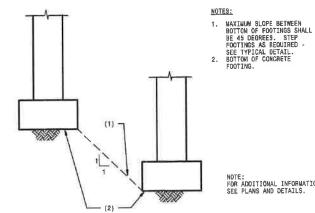
FOUNDATION PLAN

SHEET NUMBER

S1.1

PIPE PASSING UNDER WALL FOOTING IN SHALLOW

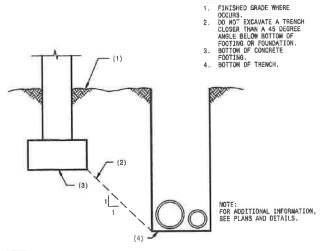
THIS DETAIL 1S TYPICAL TO THE PROJECT AND IS NOT NECESSARILY CUT OR CALLED OUT ON PLANS.



MAXIMUM SLOPE BETWEEN ADJACENT FOOTING 8

NOTES:

THIS DETAIL IS TYPICAL TO THE PROJECT AND IS NOT NECESSARILY CUT OR CALLED OUT ON PLANS.

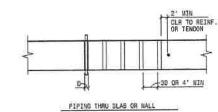


TRENCH PARALLEL TO FOUNDATION

THIS DETAIL IS TYPICAL TO THE PROJECT AND IS NOT NECESSARILY CUT OR CALLED OUT ON PLANS.

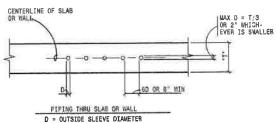
9

NO SCALE



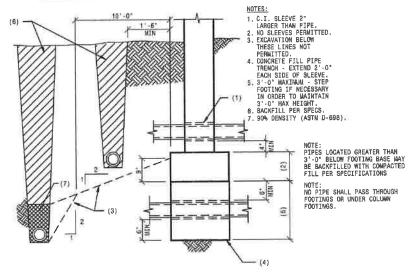
WHERE CLEAR DISTANCE BETWEEN SLEEVES IS IMPOSSIBLE THIS AREA SHALL BE TREATED AS A SLAB OR WALL OPENING REINFORCED AS PER TYPICAL OPENING DETAILS. PRESET ALL SLEEVES PRIOR TO POURING CONCRETE. NO CORE DRILLING ALLOWED WITHOUT STRUCTURAL ENGINEERS APPROVAL. NO PIPING OR CONDUIT PERMITTED IN OR THROUGH CONCRETE BEAMS, JOISTS OR COLUMNS UNLESS SPECIFICALLY DETAILED ON STRUCTURAL DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER

NO SCALE



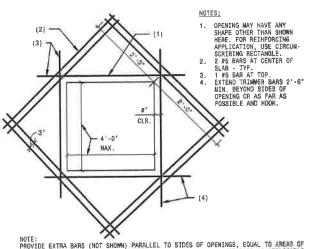
PIPING AND CONDUIT IN OR THRU SLAB OR WALL

THIS DETAIL IS TYPICAL TO THE PROJECT AND IS NOT NECESSARILY CUT OR CALLED OUT ON PLANS.



PIPE THROUGH FOOTING AND TRENCH

THIS DETAIL IS TYPICAL TO THE PROJECT AND IS NOT NECESSARILY CUT OR CALLED OUT ON PLANS.

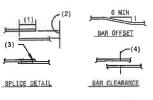


NOTE:
PROVIDE EXTRA BARS (NOT SHOWN) PARALLEL TO SIDES OF OPENINGS, EQUAL TO AREAS OF
INTERRUPTED SLAB BARS. EXTEND FULL LENGTH OF SPAN OR OF TOP BARS AS APPLICABLE.
THIS DETAIL IS TYPICAL AT OPENINGS UP TO 4'.0' MAX. DIMENSIONS EXCEPT AS SHOWN

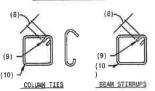
TYPICAL OPENING IN CONCRETE SLAB 6

THIS DETAIL IS TYPICAL TO THE PROJECT AND IS NOT NECESSARILY CUT OR CALLED OUT ON PLANS.

NO SCALE



BEND & HOOK DETAILS



NOTES: 1. LAP - SEE SCHEDULE

MAXIMUM 1/5 LAP

WIRE TIES. 1d (1" MINIMUM). RADIUS=3d FOR BARS

NOT OVER #8; 4d FOR #9, #10 AND # 11 BARS: 5d FOR # 14 AND #18 BARS. 5d FOR ALL GRADE 40 BARS WITH 180 DEGREE HOOK. 4d (4° MINIMUM)

12d (90 DEGREE HOOK). 6d (4" MINIMUN).

135 DEGREE BEND BEND AROUND 1 1/2* PIN FOR #3 BARS. BEND AROUND 2" PIN FOR #4 BARS, BEND AROUND 2 1/2' PIN FOR #5 BARS.

TYPICAL CONCRETE REINFORCING BAR DETAILS

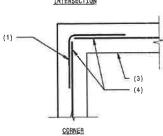
THIS DETAIL IS TYPICAL TO THE PROJECT AND IS NOT NECESSARILY CUT OR CALLED OUT ON PLANS.

INTERSECTION

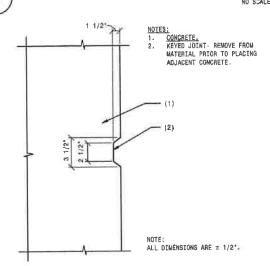
NOTES: 1. CORNER BARS SAME SIZE, QUANTITY AND SPACING AS HORIZONTAL REINFORCING. LAP PER G.S.N. (24" MINITUUMS.

ALTERNATE BEND. CONCRETE STEM WALL OR FOOTING. REINFORCING PER PLANS AND

/OR G.S.N.



PLAN - CORNER REINFORCING IN CONCRETE FOOTING AND / OR STEM WALL



TYPICAL KEY IN CONCRETE 3

THIS DETAIL IS TYPICAL TO THE PROJECT AND 16 NOT NECESSARILY CUT OR CALLED OUT ON PLANS.

NO SCALE



4949 S SYRACUSE SUITE 320 DENVER, CO

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ORADO 12740 BLACK FOREST RD COL SPRINGS, CO 80908

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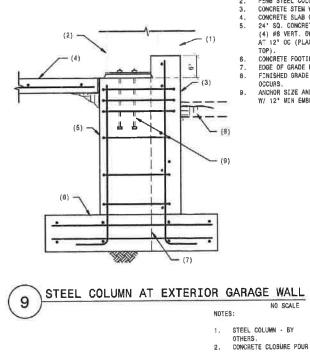


SHEET NUMBER TYP CONCRETE DETAILS

SHEET NUMBER

300 800

S3.0



AROUND COLUMN.
3. STEEL BASE PLATE (BY OTHERS) WITH DOUBLE

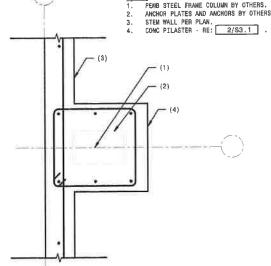
> DRYPACK. 3" MINIMUM CONCRETE COVER AROUND ALL STEEL BELOW GRADE. CONCRETE FOOTING. CONCRETE SLAB ON GRADE.

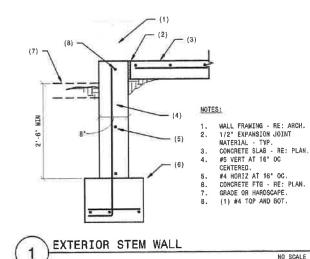
NUTS OVER 1 1/2'±

NOTES:
1. PEMB STEEL FRAME COLUMN BY OTHERS.
2. ANCHOR PLATES AND ANCHORS BY OTHERS. WALL FRAMING RE: ARCH.
PEMB STEEL COLUMN BY OTHERS.
CONCRETE STEM WALL PER: CONCRETE STEM WALL PER:
CONCRETE SLAB ON GRADE.
24' SQ. CONCRETE PILASTER W/
(4) M6 VERT. OWLS AND M3 TIES
AT 12' OC (PLACE (3) AT 3' AT
TOP).
CONCRETE FOOTING.
EDGE OF GRADE BM & FTG BEYOND.
FINISHED GRADE OR SLAB AS
OCCUBS. OCCURS.
ANCHOR SIZE AND LAYOUT PER MFR
W/ 12° MIN EMBEDMENT.

STEM WALL PER PLAN.
CONC PILASTER - RE: 2/S3.1

PERIMETER COLUMN FRAME BASE





1 1 (5)

WALL FRAMING RE: ARCH.
PEUB STEEL COLUMN BY OTHERS.

CONCRETE STEM WALL PER: CONCRETE SLAB ON GRADE. 24" SQ. CONCRETE PILASTER W/ (4) #6 VERT. DNLS AND #3 TIES AT 12" OC, (PLAGE (3) AT 3" AT TOP).
CONCRETE FOOTING.
EDGE OF STEM WALL & FTG BEYOND.
FINISHED GRADE OR SLAB AS

ANCHOR SIZE AND LAYOUT PER MFR W/ 12" MIN EMBEDMENT.

NO SCALE

NO SCALE

STEEL COLUMN AT EXTERIOR WALL

NOTES:

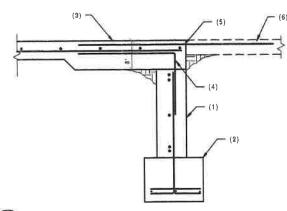
1. STEM WALL PER: 1/53.1

2. CONCRETE FTG - RE: PLAN & SCHEDULE. CONC SLAB ON GRADE. #4 A706x24"x24" AT 12" OC.

#3x6'-0" EPOXY COATED AT 12" OC. - STAGGER

ENDS 1'-0'.

6. EXTERIOR HARDSCAPE PER ARCH./CIVIL. WHERE



FOUNDATION AT THRESHOLD

Architects & Planners, Inc. 4949 S. SYRACUSE SUITE 320 DENVER, CO

BARN

12740 BLACK FOREST RD COLORADO SPRINGS, CO 80908

FOREST

BLACK

PROJECT CODE: 156UE DATE: 02/06/2020 BUILDING PERMIT REVISIONS DATE NO. DESCRIPTION
72019 Ø FOUNDATION
PERMIT

PREPARED FOR: **ARCHITECTS &** PLANNERS, INC.



SHEET NUMBER FOUNDATION **DETAILS**

SHEET NUMBER **S3.1**

TYPICAL GRATING SUPPORT

6 THIS DETAIL IS TYPICAL TO THE PROJECT AND IS NOT NECESSARILY CUT OR CALLED OUT ON PLANS.

CONCRETE SLAB AT TRENCH

INTERIOR STEEL COLUMN FOOTING

CORNER COLUMN FRAME BASE

5

CONSTRUCTION. L2X2X3/16 MIN x CONT w/ 3/8° DIA x 4° LONG HDAS AT 12° OC (HDG) INCREASE ANGLE VERT LEG AS REQ'D TO MATCH GRATE

GRATING BY OHIO GRATINGS, INC. OR EQUAL. SUPPLIER TO DESIGN GRATING TO SUPPORT 2000# LIVE LOAD OVER 4 POINT LOADS. SUBMIT PRODUCT AND DESIGN DATA PRIOR TO

NO SCALE

NO SCALE

(1) #5 CONT. (4 LOCS SHOWN) LAP MIN 24".

CONCRETE SLAB. CONT REINF

NOTES:

GRATING NOTES:

NOTES:
1. PEMB STEEL FRAME COLUMN BY OTHERS.

ANCHOR PLATES AND ANCHORS BY OTHERS. STEM WALL PER PLAN. CONG PILASTER - RE: 2/S3.1

GENERAL

- 1. CONTRACTOR SHALL BE HILD RESPONSINE FOR VERRICATION OF EXITING JOB CONDITIONS PRIGR TO NO. TO DETERMINE IF ANY ADDITIONAL WORK THAT MAY BE REQUIRE OF ANY INTERVERSINCE OF EXISTING CONDUST, LICHITI RETIRES, ETC OR DE RESPONSING CONDUST, LICHITI RETIRES, ETC OR DE RESPONSING CONDUST, AND RESPONSING CONTRACTOR OR THE SUBCONTRACTORS, AFTER BIDS HAVE BEEN SQUARTED AND CONTRACTOR OR THE SUBCONTRACTORS, AFTER BIDS HAVE BEEN SQUARTED AND CONTRACTOR OF THE OWNER PROPERTY OF THE PROPERTY OF TH
- 2. ELECTRICAL CONTRACTOR SHALL VISIT SITE AND EXAMINE DRAWINGS OF OTHER TRADES ON THIS PROJECT, PARTICULARLY DEMOUTION, ARCHITECTURAL, MECHANICAL AND PLUMRING TO DETERMINE IF ANY ADDITIONAL WORK THAT MAY BE REQUIRED FOR THE OTHER DISCIPLINES TO RELOCATE EXISTING CONDUIT, EQUIPMINT AND/OR ADDITIONAL ROUGHINS OR ELECTRICAL POWER CONNECTIONS ARE REQUIRED TO COMMETTE HE NEW TENANT PEMODEL WITH A FULLY OPERATIONAL ELECTRICAL INSTALLATION SHALL INCLUDE AN ALLOWANCE FOR THIS WORK IN 118 ED.
- 3. ALL WORK SHALL BE DONE IN COMPLIANCE WITH ALL THE LATEST NATIONAL CODES, INCLUDING THE N.E.C.
- 4. NEW UTULIT SERVICE (S) ARE MEDITED FOR THIS SCOPE OF WORK. THE GENERAL CONTRACTION ON ANYTHOPER ATE CONTRACTION SHALL SUBMIT APPLICATION AND ASSOCIATED DRAWINGS REGULED BY THE UTULIT COMPANY FOR THEIR PEVEW AND APPROVAL PRORTO TO DICHONI, IF ADDITIONAL INFORMATION IS REQUIRED, CONTACT ELECTRICAL ENGINEER, ALL WORK AND ASSOCIATED WORK SHALL BE CORDINATED AND INSTALLED PER UTULITY COMPANY REQUIREMENTS, SPECIFICATIONS AND OWNER APPROVAL.
- ALL WORK SHALL BE DONE IN COMPLIANCE WITH THE BUILDING OUTLINE SPECIFICATION. DEAWINGS, AND LATES
 REVISIONS ON CONTRINCTION DOCUMENTS FOR ELECTRICAL WORK. ELECTRICAL CONTRACTOR SHALL BESIDE
 ALL IN BUILDING. ELECTRICAL EQUIPMENT THAT IS PROVIDED AND INSTALLED SHALL COMPLY WITH BUILDING STANDARD,
 REQUIREMENTS AND IS ULL ABELED.
- 6. PE ELCURICAL DIA WHIGES ARE DIAGRAMMATICH CHARACTER, LOCALIDAD WOWN FOR ELCTRICAL DEPOPMENT ENCYCLE DECEMBRIS, ELC ARE APPROXIMATE ESCIPICAL CONSIGNATION REPORTINGS FOR CONCENTRATION REPORTINGS FOR CONCENTRATION REPORTINGS FOR CHARACTER FOR THE PROPRIED FOR CONCENTRATION REPORTINGS FOR ALL DIMENSIONS ARE TO BE TAKEN OF OF A RACHITECTURAL PLANS. ELEVATIONS, DEFAUS, ALL DIMENSIONS ARE TO BE TAKEN OF OF A RACHITECTURAL PLANS OF A RECEIVED FOR MANUFACTURES STAND FOR THE COMPANY AND PROPRIED FOR THE CONCENTRATION OF SECURITATIONS, COORDINATE WITH OTHER TAKES FOR SPACE CONFLICTS PRIOR TO INSTALLATION OF ELECTRICAL COUPLAND. CONTINUED WITH OTHER TAKES FOR SPACE CONFLICTS PRIOR TO INSTALLATION OF ELECTRICAL COUPLANDS.
- 7. WHEN DIMENSIONS ARE SHOWN ON ELECTRICAL PLANS OR DETAILS, THISE DIMENSIONS ARE TO BE PRED VERHED BY THE ELECTRICAL CONTRACTOR AGAINST ENSIFTS PELD CONDITIONS, INSTALLATION REQUIREMENTS OF OTHER TRADES, AND THE MANIFACTOR PLANSES TRANSPIRATED FOR EQUIPMENT OF BEHTMALED. SHOULD ANY CONTRACTOR WHICH CANNOT BE ASILY RESOLVED IN HE FILE UNIFOUT CHANGING THE DESIGN PLENT, THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- B. ELECTRICAL CONTRACTOR SHALL COORDINATE IN THE HELD WITH ALL OTHER TRADES TO AYOU CONFLICTS OF ELECTRICAL EQUIPMENT INSTALLATION AND PROVINCE ELECTRICAL WORK THAT IS REQUIRED BY OTHER TRADES. FOR SITE WORK, CONTRACTOR SHALL BE HELD RESPONSIBLE FOR LOCATING, VERYING, AND AYOUTING ANY EXISTING UNDER GROUND SERVICES, OR UTILITIES AND NEW SERVICES OR UTILITIES BEING INSTALLED.
- 9. THE ELECTRICAL CONTRACTOR OR COMPANIES SUBCONTRACTED UNDER THEIR SCOPE OF WORK SHALL ARRANGE FOR ALL INSPECTIONS WHEN THEY BECOME DUE, ALL WORK PERFORMED UNDER THIS CONTRACT SHALL REMAIN EMPOSED TO VIEW LINITL. SPROVED 3 THE INSPECTION AUTHORITY.
- IC. PREPARE AND MAINTAN AT JOB STE ACCURATE UPDATED "AS BUILT DRAWINGS OF ALL MIDDRED WORK IN THIS CONTRACT. AT THE CONCLUSION OF WORK, THE BECTIFICAL CONTRACTOR SHALL SUBJECT IS ESSENCIAL. AND AN ELECTROMIC SCAN FIDE DRAWINGS ON A OD REFLECTING AS BUILT CONDITION TO ELECTRICAL ENGINEER OF RECORD AND BUILDS. MARKAGEMENT/OWNER.
- PROVIDE R. TYPE WRITTEN, UP DATED PANEL DOOR DIRECTORIES FOR ALL AFFECTED PANELS ASSOCIATED WITH THE NEW WORK, REFLECTING ALL AFFECTED CRECUITS WITH THEIR ACCURANTE DETERMITIONS. HAND WRITTEN DIRECTORIES WILL NOT BY ACCEPTABLE. ALL UNUISED CIRCUITS THAT ARE SPARET SHALL BE TURNED OFF AND LABELED AS SPARES ON THE REVISED PANEL DIRECTORIES.
- PROVIDE NEW EICHED PLASTIC LAMINATED LABELS FOR NEW DISTRIBUTION EQUIPMENT. PROVIDE FOR PERMANEN ATTACHMENT TO EQUIPMENT WITH RIVETS OR SCREWS. SELF-ADHESIVE TYPE IT NOT ACCEPTABLE.
- CLEARLY MARK ALL NEW JUNCTION BOXES LOCATED IN THE CEILING SPACE OF THE ENTIRE BUILDING WITH PANEL DESIGNATION AND CIRCUIT NUMBERS IN THE JUNCTION BOXES.
- 14. ALL NEW MATERIALS INTIALED IN CRUMG PLENUM SHALL BE UIL, LABELED AND LISTED FOR ITENUM INSTALLATION. LOW YOLKAGE CASIE AND CONDUCTORS NOT ENCLOSED IN CONDUCTINAL SELLE, CLASS BASED, WITH INSULATION MEETING NON-TOXICITY PROJUREMENTS, EXPOSED SO CORDS OR TOXIC WIRING SHALL BE REMOYED AND REPLACE WITH APPROPRIATE CONDUCTION WIRING.
- 15, ALL NEW AND/OR RELOCATED ELECTRICAL EQUIPMENT OR ELECTRICAL DEVICES SHALL BE ULL LISTED, NO
- 16. UNLESS OTHERWISE INDICATED, ALL WIRING FOR BRANCH CIRCUITS SHALL BE NO, 13 AWG WHEN PROTECTED BY A 15 OR 20 AWP CIRCUIT SHALMER, IF DISTANCE FROM PANEL TO FIRST ELECTRICAL DEVICE BY 75 FEST OR GREATER FOR 120 YOUR CIRCUITS NO, 10 WIRN G 54 ALL B INSTALLED.
- MAXIMUM OF NIFE IPI RECEPTACLES SHALL BE CONNECTED TO A 25-AMP CIRCUIT UNLESS OTHERWISE MOLED OR MAXIMUM OF 16-AMPS SHALL BE CONNECTED TO A 25-AMP CIRCUIT. RETER TO BUILDING OUTLINE SPECIFICATION NOTES ON THIS SHEET AND DETAIL MOTES ON PLANS WHICH APPLY TO WORK TO BE PERFORMED UNDER THIS SCORE OF WORK.
- 18. ECATING CONDUIT GROUNDS ARE HOT ACCEPTABLE. ENSURE ALL TECLOPS NEW AND EASTEN! ASE PROVIDED WITH APPROPRIETY STUDY ISSULATED GROUND WIFE. WHETHER NOTED OR HOT, IF MOTED, THE ELECTRICAL CONTRACTION IS REQUIRED TO USE THE SIZE OF GROUND WHEE AS INDICATED ON THE EDAMINIOSE. THE GROUND WIRE INSIDE CONNECTION FROM THE ELECTRICAL PROVIDED BY AS TO THE ELECTRICAL DEVICES. ENSURE PULL SIZE GROUND BUS HAS REEN INSTALLED PER N.E.C. REQUIREMENTS, IF REQUIRED, PROVIDE GROUND BUS BAS K AND CONNECT OA REQUIREMENT.
- 19. ENICES IN WIRE SIZE, 80 AWG, AND SMALLES SHALL BE MADE WITH INSULATED THENGTYPE WIRE CONNECTORS, "ECONOLICUS OR EDITAL". SPLICES BY LARGER WAS AND CABLES SHALL BE MADE WITH INDEXT CONNECTORS APPROVED FOR THE PURPOSE, ALL INSULATING TAPE USED ON 600 VOLTS AND LESS SHALL BE 3-M #69 OR PLYMOUTH SUPKNOT GPAY.
- ALL CONDUITIONS AND ASSOCIATED JUNCTION EGIZES SHALL BE SECURELY BONDED TO GETHER. ENSURE ALL EXISTING, REJOCATED AND NEW CONDUIT ARE SUPPORTED SEPARATELY FROM CITILING GRAD AND FERTILE. REQUIREMENTS.
- 21. ENSURE RECTRICAL HOOMS, REMARKING AND VACANT AREAS MUST BE LEFT CLEAN. IN ADDITION, ALL CELING TILES MUST BE SET IN PLACE WHEN THE BUILD OUT IS COMPLETED OR DIRECTED BY BUILDING OWNER.
- ALL EMT, FLER AND MC FITTINGS SHALL BE STEEL. NO DIS CAST ZINC OR OTHER MATERIAL WILL BE ALLOWED UNLESS OTHERWISE APPROVED BY BUILDING ENGINEER IN WRITTEN FORM.
- 24. FOR SERVICE FEEDERS AND BRANCH CIRCUITS TO COMPLY WITH N.E.C., LOCAL CODES AND ALL OTHER APPLICABLE CIDES, ELECTRICAL COMPRACTION BUALS, ADJUST CONDUIT SIZE FOR CONDUIT FILL AND WIRE SIZE FOR NUMBER OF HOT CUPRENT CONDUITORS, YOLTAGE DROP AND DERAINING OF THE CONDUITORS IN EACH CONDUIT RUN.
- 25, ENSURE ALL NEW AND EXSTING CONDUITS, COMMUNICATION AND DATA CALLES, AND FIRE ALARM CABLES ARE SUSPENDED INDEPENDENT FROM TO ACCOMMODATE AND RISH IN CEILING PLENUIS MOTHER THAN 10" ARGVE THE TOP OF THE CEILING FOR IO ACCOMMODATE LIGHT RITURES.
- 26). ACCESS PANELS: AREAS OF DRIVMALL CELLING SHALL BE COGRDINATED BUCH THAT ACCESS PANELS ARE NOT REQUIRED, ELEMENTS REQUIRING ACCESS SHALLED BETACKATED TO AREAS OF ACCESSING ELLING OR IN ICCALIONS TO BE COORDINATED WITH ARCHITECT, PROVIDE ACCESS FOR PERMICE STRIVES AND VIOLENT APPARANTS INPOSSIBLE TO RELOCATE, ACCESS PANELS REQUIRED WITHIN DRIVMALL CELLING SHALLE ENTAILED STAMESTICALLY WITH OTHER OTHER PANELS OR DEVICES, AND SHALL BE INSTALLED AND THAILDRIVEN COORDINATE REACT TYPE, LOCATION AND REQUIREMENTS WITH ARCHITECT AND GENERAL, CONTRACTOR PRIOR TO BOUGHEN.
- 27. LARGE JUNCTION BOXES OR PULL BOXES SHALL BE LOCATED IN CEILING BY ACE OR LOCATIONS NOT INTERFERING WITH NEW WALL CONSTRUCTION OR PUTURE ELECTRICAL DISTRIBUTION EQUIPMENT FOR POTENTIAL GROWTH, COORDINATE ERACT LOCATION WITH GETERAL CONTRACTOR AND ENSURE CLEARANCES ARE WAINTAINED PER CURRENT NEC REQUIREMENTS.

LIGHTING

1. FURNIM AND INITIAL LIGHTING RITURES THAT ARE COMPLETE AND RULLY FUNCTIONAL INCLUDING LAMPS, BALLATICH OR APPOCRATE AVE. REVISIONMES AND REQUIRED MOUNTING HARDWARE, ELECTRICAL CONTRACTOR SHALL BURNING HARDWARE AND REQUIRED MOUNTING HARDWARE. CECTRICAL CONTRACTOR SHALL BURNING HARDWARES, WHICH THERE WORKING DATA AFTER PROJECT INTO A BENAMINED. TO THE TRAINE OF A DATA PROVINCE THAT SHAPE AND THAT A SERVEN AND THAT A PROVINCE THAT A SERVEN AND THAT A PREPARED THAT A SERVEN AND THAT A PROPERTY AND THAT AND THAT AND THAT AND THAT AND THAT A SERVEN A

- FLUORESCENT LIGHT FIXTURES THAT URLIZE DOUBLE-ENDED LAMPS AND CONTAIN BALLAST(S) THAT CAN BE SERVICED IN PLACE SHALL HAVE A DISCONNECTING MEANS PER THE CURRENT NEC REQUIREMENTS.
- 3. ALL LIGHT ING FIXTIRES SHALL BE POSITIVELY ATTACHED TO THE SUSPENDED CEILING SYSTEM BY MECHANICAL MEANS SLICH AS BOLITS, SCREWS, OR RIVETS, LUSTED CLUPS DENTRIED FOR USE WITH THE TYPE OF CEILING FRAMING MEMBER AND LIMINATIVES ARE ALSO PERMITTED. IN ADDITION, HEITIRES WERGHING LESS SHAM SO POUNDS SHALL HAVE A MINIMUM OF TWO NO. 9 GALICE WIRES CONNECTED FROM THE OPPOSITE CORNERS OF THE RIVINGE HOUSED OF STRUCTURE OBTECTLY ABOVE HER FRAVEL. FINITIES IN EXCESS OF SID FOOLANDS SHALL BE SUPPOSITED AT ALL FOUR COSNICIES DIRECTLY FROM THE STRUCTURE (PER ISC 2.S. 21.3, NEC ANTICLE 314).
- 4. PROVIDE NEW HANCERS FOR THE NEW AND/OR RELOCATED LIGHT EXTURE. PROVIDE SEPARATE HANCERS TO SOCIETY THE WIS OPPOSITE CONNESS OF THE WIS OPPOSITED TO STRUCTURE UNITS OTHERWISE DESCRIBED TO LOCAL AMENICATES FEGURATED THE FOLIK CONNESS OF THE TRUTHET TO BE SCURED. YEARTY WITH FELLO PROPERTOR OF THE PROVIDE TO THE REGIONAL, THE ADDRESS AND PROVIDE EXISTING LIGHT FATURES ARE SCURED, SECURE EXISTING FIXTURES AS REQUIRED.
- 5, INDEPENDENTLY SUPPORT FLEXIBLE WIRING WHIPS FOR ALL NEW AND RELOCATED LIGHT FIXTURES FROM THE GRID SUPPORT SYSTEM AND PER NEC REQUIREMENTS;
- WHERE NEW OR RELOCATED LIGHT FIXTURE LOCATIONS INTERFERE WITH DUCTWORK, LIGHT CONDUIT RUNS OR CHIEFS SEPPORTE, RELOCATE OR RADE LOW CONDUIT RUNS OR RELOCATED CHIEFS SUPPORTS. IF INPOSSIBLE, CONTACT DWITER OR ARCHITECT. USE END CONNECTION FOR LIGHT FIXTURES UNDER LOW DUCTWORK,
- ALL INTURES SHOWN IMPACTO AND BUT SIDES SHALL BE CONNECTED TO THE REARCST 120Y LICHTUNG CIRCLUT SERVING THE AREA. ALL EAT SION SHALL BO WHITE REACCESPOINS WITH CIRCLESS ELIZERS OF RESEARCH. ACHIOTRES COLOR REQUIREMENTS. REW EST SIGNED SHALL SE APPROVED BY ARCHITECT AND CROSSESS IMMEDIATELY TO STATISTICS THE PROJECT WILL SE COMPLETED ON TIME. ALL LOCATIONS OF THE CRITICAL SHALL BE COOKIDN AFED WITH LOCAL ANTHORNES, ROYLDE ADDITIONAL BUT SIGNED THE DIRECTION OF LOCAL.
- 8. TO COMPLY WITH THE EMERGENCY LIGHTING EDRESS PAIN AFTER THE TEMANT ELECTION HAS BEEN COMPLETED. YEARY AND EMSINE ALL LOCATIONS OF THE EMERGENCY LIGHTING AND EXIT SIGNS COMPLET WITH LOCAL AUTHORISES HELD INSPECTIONS. IF BEGUINED, BENDOVE TRELOCATED OR PROVIDE NEW EMERGENCY LIGHTING OR EXIT SIGNS PER THE DIRECTION OF THE TRELO INSPECTIONS.
- ALL NEW FLUORESCENT LIGHT FIXTURES SHALL BE ORDERED WITH ELECTRONIC 10% THO BALLAST OR HIGH
- 11. MULTIPLE LIGHT SWITCHES SHALL BE MOUNTED IN A SINGLE GANGED BOX WITH A SINGLE COVER PLATE. PROVIDE SEPARATION PLATES WHERE REQUIRED BY DIFFERENT VOLTAGES OCCUR.
- 12. CIRCUIT B &AKERS USED AS SWITCHES FOR FLUORESCENT LIGHTING CIRCUITS SHALL BE UL LISTED AND MARKED AS "SWD" OR "HO".
- 13): ALL EXPOSED LINEAR PLYORESCENT TUBES SHALL BE PROTECTED WITH CLEAR PLASTIC PROTECTOR OR WIRE CHARDED.
- 14. PROVIDE NEUTRAL CONDUCTOR IN ALL LIGHT SWITCH BOXES.
- 15. MATCH AND PROVIDE APPROPRIATE DIMMER FOR SELECTED LIGHT TIMBER BEING DAMED. INSTALL EACH DIMMER FOR MANUFACTURERS RECOMMENDATIONS AND SPECIFIC AND SELECTED AND PROVIDE A SEPARATE INSURING TOCKNESS OF THE REPORT OF CHECKING ON THE CONTROL OF THE PROVIDES FOR THE PROPRIATE DIMENS OF THE PROVIDES FOR EXCENSIVE APPROPRIATE DIMENS OF BALLAST AND DIMENSE ARE PROVIDED ON EXCENSIVE, RECORD OF THE PROVIDES OF THE

POWER

- BACK-TO-BACK OVERES IN THE SAME WALL AND THRIHWALL TYPEBOXES ARE NOT PERMITTED, PROVIDE NIPPLE ILLENGTH AS REQUIRED TO OFFSET FOR ALL OUTLETS SHOWN ON DPPOSITE SIDES OF A COMMON WALL TO JUNEAUS SOLUPE TRANSMISSION.
- FOR SUSPEND DUTLET (S): PROVIDE SHITMBLE FLEX CORD AND CABLE ASSEMBLY APPROVED FOR EXTRA-HARD
 USAGE AND INSTALL WITH STRAIN ROLLS CABLE GREPS AT BOTH ENDS. THE SUPPLY END AND AT THE FUNCTION BOX
 OR EQUIPMENT TERMAN BOLD POINT FOR TACK, OR COURSEMENT.
- 5. 120Y II CLAIED GROUND RECEPTACIES HUBBELLING, GOODS (GRANGE COLOR RECEPTACIE), CONNECT RECEPTACIE GROUND WITH AN INJURIZIONED LATER DROUND WIRE BACK TO THE BIOLIZED GROUND BUS OF THE DESIGNATED PANEL BOARD, CEUMENT GROUND SHALL ALSO BE FROVIDED AND CONNECTED FOR INJECT, REQUIREMENTS, ENSURE THE BIOLIZED AND EQUIPMENT GROUND BITS TARE ARE INSTALLED IN THE DESIGNANED PANELS FOR N.E.C. REQUIREMENTS, IF REQUIRED, INSTALLED CLAIED GROUND BITS FOR N.E.C. REQUIREMENTS WITH FULL SIZE GROUND WIRE.
- 4. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL NEW MECHANICAL AND FLUMBING ECOMPACTIVE REQUIRING ELECTRICAL CONNECTION WITH MECHANICAL FLUMBING CONTRACTOR, ALLO, ELECTRICAL CONTRACTOR SHALL OBJAIN MECHANICAL SUBMITTAL SERS NEW MECHANICAL EXIDENTIAL SERS NEW MECHANICAL FOR THE OBJAIN OF THE OBJAIN OBJAIN
- FOR MULTI-WIRE BRANCH CIRCUITS, SHALL BE SIMULTANEOUSLY DISCONNECTED AT THE ELECTRICAL PANEL BOARD WHERE THE BRANCH CIRCUITS ORIGINATES PER N.E.C. ARRICLE 403 SEGUIRE MORE THE CIRCUITS SHALL BE WIRE THE BRANCH CIRCUITS ORIGINATES OF THE CONTROL OF THE PROPERTY OF THE CONTROL OF
- MODILLAR FIRMITIER CONVECTION INCLIDES FLEX CONVECTIONS FROM WALL POWER POLE OR FLOOR POLE-THE FITTENCE TO MODILLAR FIRMITIRE ELECTRIFIED BAMES. COORDINATE ALL CONNECTION LOCATION WITH FURNITURE SUBCONTRACTOR PRIOR TO ROUGHAN. ELECTRICAL CONTRACTOR TO MAKE ALL FINAL ELECTRICAL CONNECTIONS TO FURNITURE SYSTEMS AS REQUIRED.
- 7. FOR MULLI-WIRE BRANCH CROUR SUPPLING POWER TO THE MODULAR PURNITIVE SHALL SESSIONAL RECORD Y DISCONNECTED AT THE EXCENSION AND WHERE THE BRANCH CANCEST CONCENT OF BRANCH AND THE EXCENSION AS THE CONCENT OF BRANCH AND THE RES OR AS DISCOTTED BY LOCAL JURISDICTION PELLO IMPECTION, VEHEY AND DESIGNED ACCOUNTED THE OF SHALL AND GUIST DISCONNECTING WITH LOCAL JURISDICTION FOR THE PREPETAR PRIOR OF CONNECTION OF THE FEBRUAR PARTICIAN. COORDINATE BLACK LOCATION OF THE SERVICE AND CONNECTIONS TO FUNDING FRANKLININF PARTITION PATALLER AS REQUIRED, INNAL CONNECTION FOR THE PARTICIAN PARTICIAN PARTICIAN FOR THE PARTICIAN PA
- BECCHROLL PANEL TO POWER WHITE CONNECTION SHALL BE THO WINNEST AS A CONDUIT.

 B. FLOOR DEVICES, POKE-THRUS OR FLOOR BOX: ELECTRICAL CONTRACTOR SHALL PROVIDE WIREMOLD POKE-THRU AND THE SERIES WILL BE BASED ON TENANT REQUIREMENTS, REFER TO AMCHITECTURAL AND ELECTRICAL DRAWNINGS FOR DEVICE REQUIREMENTS AND CONDUMENTE WITH THE APPROPRIATE CONTRACTOR (5) (COMMAND CADIDS, ALLECTORY DEVICE (1) PRIOR TO SHAWITHOUT ON THE RECHEMENTS. PEPCHALIONS, AND PHYSICAL SIZE OF THE FLOOR DEVICE (1) PRIOR TO SHAWITHOUT ON THE ARCHITECT AND THE AND TO RETIREMENTS. THE REVIEW, THE FRAIL SIZE CHEST DOOR DEVICE (3) SUMMITTALS THAT BE STRUCKED AND APPROVAL PRIOR TO PURCHASING OR POUGHENT, MO EXCEPTION WILL BE TAKEN WHITEST OF THE REVIEW. DIRECTED OF THE ARCHITECT OR THAN TO SHAWITH STRUCKED SHOWED SERVICED ORDER THAN THE ARCHITECT OR THAN THE SERVICE OF THE REVIEW INDICATED, CONTACT ARCHITECT OR ENGINEER IMMEDIATELY PRIOR TO BIDDING OR INSTALLATION.
- 9. SAFET DOSCONNECT SWITCHES. HEAVY DUTY TYPE, RATED FOR MOTIONS OR HEATING AS INDICATED ON PLANS. THAT DARRO BINCLODER INDICOS AND WEATHERSTEIN HIMM TIPE IN ENDICIDURE FOR OUTDOORS. FINIED OR NON-HISTOR DAY REQUIRED. HE SEED TO BE A RECOMMENDED BY EQUIPMENT ANALYSACITIERS. HEATING ALL CONTRACTOR HALF PROVIDE SAFET DISCONNECT WITCHES FOR ALL MECHANICAL FLOW, ELECTRICAL CONTRACTOR HALF PROVIDE SAFET DISCONNECT WITCHES FOR ALL MECHANICAL FLOW, ELECTRICAL CONTRACTOR HALF PROVINCE TO BE CONTRACTOR HALF PROVIDED WITCH AND HEATING HALF ELECTRICAL SAFET AND EQUIPMENT SCHOOL TO BE CONTRACTOR HALF RECOMMENTALLY, WHERE PLUSED DISCONNECTE ARE UNLIKE. FUSE SIZE SHALL BE VERIFIED WITCH HAMBURATED HALF BUT SHALL BE VERIFIED WITCH HAMBURATED HALF BUT SHALL BE VERIFIED WITCH HAMBURATED HAMED HALF SHALL BE VERIFIED WITCH HAMPURATED HAMED HALF SHALL SHALL BE VERIFIED HAMED HALF SHALL BE VERIFIED HAMED HAMED HALF SHALL BE VERIFIED HAMED HAMED
- MECHANICAL CONTRACTOR SMALL FURNISH TIJARTE'S FOR ALL THREE PHASE MECHANICAL EQUIPMENT (EXCEPT FOR STATIERS THAT ARE SHOWN TO BE PROVIDED IN MOTOR CONTRICL CHIEFER). STATIERS SHALL HAVE INSECTED AND STATIES SHALL HAVE INSECTED AND STATIES SHALL BE INSTALLED AND WIFED BY ELECTRICAL CONTRACTOR EXCEPT WHERE SUPPLIED INTEGRAL WITH MECHANICAL EQUIPMENT, MICHANICAL EXCENTION TO SCHOOL CONTRACTOR EXCEPT WHERE SUPPLIED INTEGRAL WITH MECHANICAL EQUIPMENT, MICHANICAL EXPRINANT SHALLED AND SHECK OF THE STATISTICAL STATISTICS OF THE SECTION OF THE STATISTICS OF THE STATISTICS OF THE SECTION OF THE STATISTICS OF
- I. ELCCIRICAL PANELS DOORNADOR TYPE WITH GLICKAMAE, QUICKARRAK PROVIDER AKER AND PROVIDED WITH FALL ISE REQUISED AND PROVIDED WITH FALL ISES CREATED AND PROVIDE A FROM THE REQUISED AND PROVIDE A FALL SITE INCLATED GROUND BUS BAR AND CONNECT FRE PLEC. REQUISEMENTS, SERVET DESCRIBED AND AND CONNECT FRE PLEC. REQUISEMENTS, SERVET OF CREATED AND PROVIDED AND

- AN BIDIYOUAL DISCONNECTING MEANS SHALL BE PROVIDED WITH A LOCK OF FOSTION AND WITHIN 10-0" OR LINE IN SIGHT WHICH EVER IS SHORTER OF EACH MOTOR OR DRIVEN MACHINERY IN ACCORDANCE OF N.E.C. REQUIREMENTS.
- 14, CIRCUIT BREAKERS MOLDED CASE TYPE WITH THERWAL MAGNETIC TRIPS, FRAME SIZE, NUMBER OF POLES, AND TRIP SETTING AS SHOWN ON PLANS OR SCHEDULES,
- I.S., ALL EXTERIOR AND INTERIOR FREE STANDING ELECTRICAL DISTRIBUTION EQUIPMENT SHALL BE MOUNTED ON A MINIMUM OF 4" CONCRETE HOUSE KEEPING PAD.
- ALL ELECTRICAL SWITCH GEAR BILS BARS, PANEL BUS BARS AND TRANSFORMER WINDINGS SHALL BE COPPER UNLESS OTHERWISE AUTHORIZED BY OWNER/ENGINEER IN WRITTEN FORM.
- PROVIDE AND INSTALL CURRENT BUILDING STANDARD MANUFACTURERS, NEW ELECTRICAL PANELS,
 TRANSFORMERS, DISCONNECT SWITCHES, ETC, NO EXCEPTIONS WILL BETAKEN, "VERIFY BUILDING MAJORITY
 MANUFACTURER WITH BUILDING EMGNEER PRIOR TO PURCHASING,"
- 3. ALL 15-VOLT, ENDLE PHASE, 15-A-02 20. AMPERE PECETYACLES EXITING OR HISTALES INFORM TO PERSONAL INFORMATION OF HISTALES INFORMATION OF HISTALES INFORMATION OF PERSONAL INFORMATION OF THE BELLING OR WITHOUT OF THE BELLING OF THE B
- 9. LABEL ALL RECEPTACLES WITH PANEL DESIGNATION AND CIRCUIT NUMBERS ON COVER PLATES, LABELS SHALL BE SELF-ADMENNET THE DYMO LABELS OR APPROVED EQUAL WITH MIN. 1/8" HIGH LETTERING, REFER TO DETAILS FOR ADDITIONAL INFORMATION.
- O. ALL DEDICATED COMPUTER CIRCUITS SHALL BE INSTALLED WITH NO. 10 WIRNING (HOT, NEUTRAL AND DEDICATED INSULATED GROUND), INSURANCE OF COMPUTER CIRCUITS SHALL NOT BE SHARED WITH OFFICE SQUIENTENT OR CENERAL POWER. COMPUTER CIRCUITS THAT ARE NOT CONNECTED TO THE EACH PLATE AND GROUND ONE. PROVIDED A SEPARATE NEUTRAL AND GROUND WIFE FOR COMPUTER AND GROUND SHAPE, PROVIDED AND CONDUCTION OF THE PROVID
- Outlet Boxes shall be galyanized pressed steel, 4" square x 1-"/2" deep minimum, with required device rings, secure boxes with ear hangers granco 900 spers). And single-gang find-for all new Communications dullets, unless diherence directed by Communication Contraction.
- 22. NEW POWER, DATA AND COMMUNICATIONS DEVICES, FLUSH OR SURFACE MOUNTED ON WALLS, SHALL BE MOUNTED IN "A.F., IRROM FLOOR TO CENTERLING OF THE BOX), AND ALL LIGHT SWITCHES SHALL BE MOUNTED 48" A.F.F., IN ORDER TO COMELY WITH ADA REQUIREMENTS, INCESS OTHERWISE NOTED ON ARCHITECTURAL DRAWINGS, REPER TO ARCHITECTURAL DRAWINGS PRIOR TO ROUGHLIN.
- 23. ALL ELECTRICAL WALL DEVICES (SWITCHES, RECEITACLES, ETC.) SHALL BE CURRENT BUILDING STANDARD AND 20A RATED UNLESS OFFICENCES SPECIFICO OR DIRECTED BY BUILDING ENGINEER AND/OR ARCHITECT. COLOR AND DEVICE TYPES WITH ASSOCIATED COVERPLAIES SHALL BE SELECTED BY ARCHITECT AND APPROVED BY CHIEF BUILDING ENGINEER/BUILDING MANAGEMENT PROR TO ORDERING OR PURCHASING.
- 24. MOTORIZED DAMPERS: ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY ELECTRICAL DEVICES.

 CONDUIT, WIRING AND CONNECT DAMPER AS REQUIRED TO BE A FULLY FUNCTIONAL SYSTEM, CONNECT THE
 MOTORIZE DAMPER TO THE NEAREST AVAILABLE TRIV CIRCUIT OR A DEBICATED TROV CIRCUIT FOR MOTORIZED
 DAMPERS EXPLINED THIS ASPER OR FLOOR, IF POSSIBLE, ALL MOTORIZED DAMPERS SHALL BE CONNECTED TO A
 29-AMP CIRCUIT UNLESS OTHERWISE NOTED OR A MANAMEM OF LEAAMPS SHALL BE CONNECTED TO A 20-AMP
 CIRCUIT, REPERT ON MECHANICAL DEAWNINGS FOR ADDITIONAL INFORMATION AND COGRODINATE EXACT POINT OF
 CONNECT ON AND REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGHIN.
- CONNECT ON AND REQUISEMENTS WITH MECHANICAL CONTRACTION PRIOR TO ROUGHNY.

 25. IF AFFLICABLE, E-MON DAMON METERS SHALL BE PROVIDED FOR BUILDING MANAGEMENT OR OWNER REQUIST OR SHOWN ON THE DRAWNIGS TO MICHIGAN FROM THE BUILDING MANAGEMENT FOR THEIR BUILDING MANAGEMENT FOR THEIR BUILDING METER ARE NOT SHOWN IN SCENARY INCLUDING ON THESE DISCRIPTION OF MANAGEMENT FOR THEIR BUILDING MANAGEMENT FOR THEIR BUILDING MANAGEMENT OF MANAGEMENT
- 26. ELECTRICAL CONTRACTOR SHALL NOTIFY THE ELECTRICAL ENGINEER OR REQUET IN A WRITTEN AUTHORIZATION LETTER FROM THE OWNER OR ARCHITECT FOR SUBSTITUTING AND PURCHASING ALUMNIUM FEEDER VS COPPER FEEDERS, IF ELECTRICAL ENGINEER WAS NOT NOTIFIED OR WRITTEN AUTHORIZATION WAS NOT ISSUED FROM THE OWNER OR ARCHITECT FOR SUBSTITUTING ALUMNIUM FEEDERS AND THE CREDER WAS PLACED. THE ALUMNIUM FEEDERS WILL NOTIFIED ACCOPPED. THE AUMINIUM WRITTEN SHALL BE RETURNED AT THE ELECTRICAL CONTRACTOR EXPENSE AND COPPER FEEDERS WILL BE PROVIDED AT NO ADDITIONAL COST TO THE FROJECT, IN ADDITION, OCCUPIED AND AUDITION OF THE PROJECT OF THE ADDITION OF THE

FIRE ALARM

- I. GENERAL CONTRACTOR SHALL SOLICITED FROM BUILDING OWNER'S DESIGNATED FIRE ALARM CONTRACTOR FOR DESIGN AND INSTALLATION OF AN APPROVED RISK ALARM SYSTEM AND DEVICES WHICH SHALL COMPLET WITH ALL APPLICABLE CODED AND ALL REQUIREMENTS OF AUTHORISTS HAVING AUTHORISTICION, GENERAL CONTRACTOR TO VERFY WITH BUILDING MANAGEMENT CONCERNING DESIGNATED FIRE ALARM CONTRACTOR PRIOR TO BIDING
- 2. HEQUIRED MODIFICATIONS TO EXISTING FIRE ALARM STATEM INALL BE PROVIDED ON A DESIGNABULD BASS BY FIRE ALARM CONTRACTOR. PRIOR TO BODING FIRE ALARM CONTRACTOR SHALL RELD YEARY EASTING FIRE ALARM SYSTEM CAPABUTY AND FER ALARM STATEM FIRE ALARM STATEM FOR ALARM STATEM SHALL BE UPCRADED TO MEET CURRENT COOES, RISE ALARM STATEM SHALL BE UPCRADED TO MEET CURRENT COOES, RISE ALARM CONTRACTOR SHALL PREPARE AND SHAPTAL ALL SHOP CHARMINGS AND EQUIPMENT BROCHURES TO ALL UNITHORITES HAVING MURICULTURES TO ALL UNITHORITES HAVING ALL SHAPE CONTRACTOR SHALL ALLO REVOIDE THE REQUIRED FOR FETEW AND APPROVAL, CONTRACTOR SHALL ALLO ROVIDE THE REVOICE WITH ORDER WHITH ONE (I) SET OF DRAWNINGS, CALCULATIONS AND EQUIPMENT SUBMITTALS, FOR THEIR REVIEW AND RECORDS.
- 1, PROVIDE NEW BUILDING STANDARD HRE ALARM STROBES, ADA HIGH INTENSITY, COMPATIBLE WITH EXISTING OR NEW FIRE ALARM SYSTEM, MODIFY EXISTING ALARM CIRCUIT CONDUCTORS AND FIRE ALARM FAMIL PER MANUFACTURER'S REQUIREMENTS, MOUNT STROBES +80" A.F.F., OR 6" BELOW THE CELLING, WHICHEVER IS LOWER.
- ARXIVACIOREN SEQUIREMENTS, MUNICIPATION OF SECURITY OF SAVI, WHILE REMOTE INDOCATING UIGHT AND TEST SWITCH, FOR ALL MECHANICAL ARXIMOTION DETECTIONS (1 TOWN OF SAVI), WHILE REMOTE INDOCATING UIGHT AND TEST SWITCH, FOR ALL MECHANICAL ARXIMOTION OF THE SAVE AND ALL SECTIONS FOR ARXIMOTION OF SAVID CONTINUES AS EASTFORMOOF SHALL BUS THE ASAX MANIFORM OF SAVID AND ARXIMOTION OF SAVID CECTIONS OF SAVID AND THE SAVID ON THE
- FRESMOKE DAMPER OR SMOKE DAMPERS PROVIDE ALL NECESSARY DEVICES. CONNECT DISCT DESCRICT OR OR SMOKE DESCRICTOR AND DAMPER SIX AS REQUIRED TO BE A FALLY PUNCTIONAL SYSTEM. CONNECT TO FREARSY 120°F LEASESPOY CIRCUIT OR A DESCRICTED 120°C DESCRIPTIONAL SYSTEM. CONNECT TO FREARSY 120°F LEASE OF THE PROVIDE DAMPER OR SMOKE DAMPER REPORTED FROM IN THE SAME AREA. SHALL BE CONNECTED TO DECLARD SAME DRICKING HOUSES CHEMISE NOTED GRAVE AREA. SHALL BE CONNECTED TO SCHAMP CRICKING CONDICIONAL SAME SHALL BE CONNECTED TO SCHAMP CRICKING CONDITIONS OF DEVICE AND ALL REQUIREMENTS WITH MECHANICAL AND FIRE LARM CONTRACTOR PROX TO ROUGHIN.

COMMUNICATIONS.

- ALL DATA AND TELECOMMUNICATIONS CABLING SHALL BE INSTALLED BY TENANTS VEHDOR. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING JUNCTION BOX ROUGHING CONDUT RACEWAYS. CONDUT SLEVEY AND JIE REQUIREMENTS WITH APPROPRIATE VENDOR PROFOT OR DOUGHIN.
- OUTLET BOXES SHALL BE GAL VANIED PRESSED STEEL, F SQUARE X 1 /2' DEEP MINIMUM, WITH SINGLE GANG RINGS AND A 1" CONDUST WITH PULL VINE UNLESS OTHERWISE DIRECTED BY TELECOMMUNICATIONS CONFIDENCE. SUB-CONDUST OF ABOVE CELLING LINE AND BUSH BOTH ENDS, YERFY WITH TELECOMMUNICATION CONTRACTOR EXACT REQUIREMENTS PRIOR TO ROUGH-IN.
- 3. BECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL A UIL JABEL GROUNDING BAR OR A MINIMUM A #4
 INDIGILATED GROUND WIRE FOR THE PHONE EQUIPMENT AND COMPUTER SEVENS ANJORS SEVER RACES.
 CORNECT GROUND BAR WITH #4 INSULATED GROUND WIRE OR THE #4 GROUND WIRE TO THE MAN BUILDING
 GROUNDING SYSTEM. UNLESS THE BUILDING DOES NOT HAVE A MAIN GROUNDING SYSTEM. UNLESS THE BUILDING SOR SHOT HAVE A MAIN GROUNDING SYSTEM. UNLESS THE BUILDING STEME. COORDINATE EXACT BAR LOCATION OR INSULATE
 GROUND WIRE AND ADDITIONAL REQUIREMENTS WITH DATA/COMMUNICATION CONTRACTOR. IF #4 INSULATE
 GROUND WIRE SHOW GUSED, COIL A IMPUMUM OF 5' OF GROUND WIPE ON THE FLOOR FOR COMMUNICATIO
 CONTRACTOR USE.

- ELECTRICAL CONTRACTOR SHALL VERIFY QUANTITY OF DATA/PHONE PORTS TO BE INCLUDED IN POKE-THRU DE MITT TELECOMMUNICATIONS CONTRACTOR AND PROVIDE APPROPRIATE POKE-THRU DEVICES PRIOR TO ORDIPISHO.
- S. ALL COMMUNECATION/DATA CABLING IN WALLS, CONCRETE FLOORS OR UNDER-FLOORS SHALL BE IN CONDUIT. NO EXCEPTION WILL SETARCH MARES AUTHORIZED BY TENANI/JOWNER IN WRITTEN FORM. ALL CONDUITS SHALL BE SUBBLED. FIND TENANI COLONG SPACE AND BUSH AT BOTH ENDS, PROVIDE WITH PULL WIRE FOR CABLE. INSTALLATION. CONDUITING REFAILED HANDER FLOOR SHALL BE PROJECTED TO THE PREMIET NEW HIGH WALL. CONDUITING BY ALLED HADDER FLOOR SHALL BE REQUIRED TO THE PREMIET NEW HIGH WALL. CONDUITING BY ALLED HADDER FLOOR SHALL SHALL SHALL BE RECITED THAT CONDUITING WHITH FLECK OF MANUFACTION CONTRACTOR THAT CENTED THE PRACT CONDUIT SHE AND SOUTHING WHITH FLECK COMMUNICATION CONTRACTOR THAT TO ROOM TO ROUGHON OR CONCROSION.
- 4. FOR MODULAR PURHTURE COMMUNICATION/CATA CABLE SERVICE POINTS (IN WALLS OR UNDER FLOODS). PROVIDE APPROPRIATE CONDUICT) SEE AND STIBE 6" ABOVE FIRST CHART CELLING SPACES WITH FULL WIRE AND BUILD AT EACH SHOTE, UNDER STORMING AUTORISED BY TERMOTION/FER IN WIRETEN SPACES OF ADMINISTRATION, CONDUITION INTO THAT I COUNTY CELLING SPACE. I PROLITION S. S.A.C. CONDUITION MANIFAM RES. RATING SETWERS IN COOKS.
- 7. PROVIDE BUSH AT BOTH ENDS WITH PULL YIRE FOR ALL PHONE, DATA, A/Y OR LCW YOLTAGE WIRING BEING ROUTED THRU THE CONDUIT, TYPICAL FOR NEW OR EXISTING CONDUITS.

SECURITY

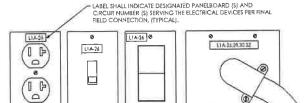
ELECTRICAL CONTRACTOR BHALL COORDINATE EXACT LOCATIONS AND REQUIREMENTS FOR ALL JUNCTION BOX ROUGH-INIT, COROUGH BUSING WHITE THE MET WHITE HE POWER REQUIREMENTS FOR STOLDERS THE STOLDERS. THE SECURITY SYSTEM WITH SECURITY CONTRACTOR PRIOR TO ROUGH-INIT SECURITY CONTRACTOR SHALL ALSO COORDINATE WITH THE FREE ALARM CONTRACTOR FOR INTERFACING SECURITY SYSTEM WITH RISE ALARM SYSTEM AS REQUIRED FOR LOCAL CUDIES AND FREE DEPARTMENT REQUIREMENTS.

AUDIO/VISUAL EQUIPMENT

LEECTRICAL CONTRACTOR SHALL YEARY AND COORDINATE THE FOLLOWING TAIX WITH THE AUDIO/VISUAL CONTRACTOR PRIOR TO ROUGHAN OR PURCHARMES: EXACT LOCAL DAY AND REQUIREMENT FOR ALL JUNCTION BOXES, CONDUST SEES WITH PULL YES, BOUNDS OF ALL CONDUST RECURRY'S, LOCAL PREPARADOR, POWER REQUIREMENT FOR AUDIO/Y/SUAL EQUIPMENT, AND EQUIPMENT REQUIREM SAME PHASE CONNECTION.

SITE WORK

- I CONTRACTOR SHALL BE HELD RESPONSIBLE FOR LOCATING, VERIFYING, AND AVOIDING ANY EXISTING UNDER GROUND SERVICES, OR UTILITIES AND NEW SERVICES OR UTILITIES BEING INSTALLED,
- FOR LIGHT FIXTURE CONCRETE BASE, ALL CONCRETE AND REINFORCEMENT SHALL BE ENGINEERED BY SOIL ENGINEER AND SHALL BE DONE BY GENERAL CONTRACTOR.
- 3 FOR LIGHT FIXTURE CONCRETE BASE, DEPTH SHALL BE AND DIAMETER SHALL YERFED AND COORDINATED WITH SOIL ENGINEER PRIOR TO DISGRING.
- 4 ELECTRICAL CONTRACTOR SHALL PROVIDE MANUFACTURE INFORMATION FOR INSTALLATION OF ANCHOR BOLIS WITH GENERAL CONTRACTOR PRIOR TO POURING OF CONCRETE.
- CONTRACTOR SHALL BE ENSURE ALL LITLITY SERVICES OR SPECIAL SYSTEM CARLING ARE LOCATED AND MARKED
 WHICH ME MEW CONSTRUCTION AREA. ALL CAUTION SHALL BETAKEN TO ENLINE URBITY SERVICES OR SPECIAL
 SYSTEM CABLING WILL NOT BE DESTINAD. IF SERVICES HAVE BEEN CAMAGED, CONTACT APPROPRIATE DIVISION
 AND REPAR CABLING AS REQUIRED FOR A FULLY OPERATIONAL SYSTEM.
- 6. COORDINATE ROUTING OF ALL CONDUITS WITH ENVIRONMENTAL CCNTRACTIOR AND ARCHITECT, ELECTRICAL CONTRACTION IS TO ROUTE ESTENCIAL SYSTEM SHRUGHE INTERCHES PROVIDED BY ENVIRONMENTAL CONTRACTIONS, ELECTRICAL CONTRACTION TO PROVIDE ADDITIONAL TRENCHING IN IMMEDIATE AREAS TO PROVIDE A COMPLETE SYSTEM.
- UPON COMPLETION OF NEW UTILITY SERVICES INSTALLATION. THE APPROPRIATE CONTRACTOR SHALL REPAIR OR REPLACE THE DAMAGES STEAREATO THE ORIGINAL CONDITIONS THAT WAS AFFECTED FOR THE INSTALLATION OF THE NEW LIGHTY SERVICE OR AS DEFECTED BY THE ARCHITECT.
- R. FOR TELEPHONE COMPANY AND CAME COMPANY LISE, PROVIDE AND INITIAL SOMEDITE BY CONDUITS WITH FILL WITE, AND MARRING TAPE. EXTEND CONDUIT IS 50° FROM EXTENDED OF THE BUILDING UNGEST OTHERWISE DIRECT BY HILLY COMPANIES OF DEPERAL CONTINUENCE. CAP AND TAKE DISTRIBUTE RIDE OF THE CONDUIT TO BE LOCATE FOR HUMBER LISE. COORDINATE EXACT TERMINATION POINT LOCATION, LISE OF CONDUITS MAJESTE OF CONDUITS AND ADDITIONAL REQUIREMENTS WITH APPROPRIATE UTURY COMPANIES AND GENERAL CONTRACTOR PROOF TO TRENCHING AND INSTALLATION.
- INTERCEPT AND EXTEND TELEPHONE/CARLE CONDUIT TO THE THE MAIN TELEPHONE ROOM. PROR TO STURBING CONDUIT AND THE MAIN TELEPHONE PLOCK. CONNECT DRC CONDUIT TO THE DRCS IDMINED SCHEDULE BY INCONDUIT AND REQUIRED AND STUB DRC CONDUIT WIND THE MAINT TELEPHONE AND BUSH. THE SCHEDULE BY PYC CONDUIT WILL NOT BE EXPOSED INDDE THE BUILDING STRUCTURE. COORDINATE EXACT ROUTING AND TERMANION POINTS WITH GENERAL CONTRACTOR PROR TO COMMERCIAN OF WORK.
- 10, FURNISH AND INSTALL LIGHTING FIXTURES COMPLETE WITH LAMPS, BALLAST(S), AND REQUIRED MOUNTING HARDWARE. ELECTRICAL CONTRACTOR SHALL SUBMIT FIXTURES CUT SHEETS TO OWNER AND ARCHITECT FOR THEIR HALLAPPROVAL PRIOR TO ORDERING THE RIVURES, ELECTRICAL CONTRACTOR SHALL ALSO VERIFY QUANTITIES. MOUNTING REQUIREMENTS, RIVISHES, PRIVINE AVAILABILITY AND LEAD TIME FOR DELIVERY TO SITE.
- HEAVY DASHED LINE WEIGHT INDICATES UNDERGROUND WIRING, REFER TO ELECTRICAL BUILDING OUTLINE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- ENSURE VOLTAGE DROP IS CALCULATED FOR FINAL CIRCUITRY ROUTING PRIOR TO TRENCHING, ADJUST CONDUIT
 AND WIRE SUZ PER THE CALCULATIONS,
 FOR LIGHT TURBLE CONCRETE BASE, ALL CONCRETE AND REINFORCEMENT SHALL BE ENGINEERED BY SOIL
 ENGINEER AND SHALL BE DONE BY CENERAL CONTRACTOR.



TYPICAL DEVICE COVERPLATE IDENTIFICATION

SCALE: NO SC

- DYNIO LASEL SHALL, NDICATE DESIGNATED PANELBOARD PER RINAL FIELD CONNECTION AS WELL AS BRANCH CIRCUIT CONNECTED TO THE DEVICE. EXAMPLE, "L1A-26" = "L1A". INDICATES PANELBOARD AND "25" INDICATES CIRCUIT NUMBER.
- LABELS SHALL BE SEL*-ADHESIVE TYPE, DYMO LABELS OR APPROVED EQUAL WITH MINIMUM 1/8* HIGHT LETTERS:
- 3. VERIFY WITH BUILDING ENGINEER WHICH OF THE ABOVE PRACTICES IS ACCEPTABLE.
- PROVIDE BUILDING STANDARD DEVICES UNLESS OTHERWISE DIRECTED BY ARCHITECT, DEVICES ARE SHOWN AS EXAMPLES ONLY.

COLORADO COMFORT CONSULTING ENGINEERS INC.

Media Electri Plumb

7891 LEWIS COURT ARVADA, CO. 20005 PH: 303-958-8811 FAX: 1-868-929-7413 EMAIL: DesEng1@Concept(not

BLACK FOREST BARN
12740 BLACK FOREST ROAD
COLORADO SPRINGS, CO

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CHECK	ED BY: JAF	_
REVISIO	NS:	
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ELECTRICAL SPECIFICATIONS

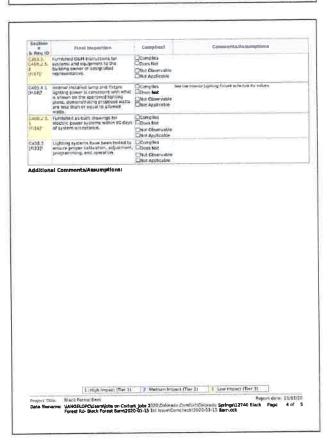


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Natha 16%	Signature	Date
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Section 6 Health	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
	Lighting concluse installment to an resemble to the lightling road by at reast \$2%.	Does Not:	
065-31	Occupancy sensors installed in	Comples	
COLUMN	rednied shacer	C)Does Not	
		☐Not Observable ☐Not Appl-cable	
CHIS 2.2	inveger and higheing controls installed and approved highling plans and all	Dones Not	
10.234 3	manual controls readily accessible and visible to occupants.	☐Not Observable ☐Not Applicable	
1415.22	Automatic controls to shut off all	Complet Core bot	
iscoor	building lighting installed in all buildings.	□Not Observable □Not Applicable	
C405.2.3	lights independent of general area	□Complies	
terres.		Does Not Not Observable	
	lighting	ENot Applicable	
S405 23	Primary wormstand in his are margin if with required highling	□Cemplies □Cores Not	
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E405-2-4 (E58)*	Additional interior fighting power allowed for special functions per the	□Correlies □Does Not	
	a destal (any civilla in final separated from general lighting	☐Not Observable ☐Not Applicable	
DESCRIPTION OF THE PERSON OF T	Est agns do not exceed 5 watts per	Cicompiles Cicors Not	
		Chart Observation	
Addition	nal Cumments Assumptions:		
	1 High Impact (Fer 1)	2 Medium Inspect (Tier 2	3 familyport (Ter II





BLACK FOREST BARN

12740 BLACK FOREST ROAD COLORADO SPRINGS, CO

DRAIN 61: JAF/RE
GEORD 81: JAF
REMONS:

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No. Describion Date

1 ISSUED FOR FERMIT/CONST. G1-18-20

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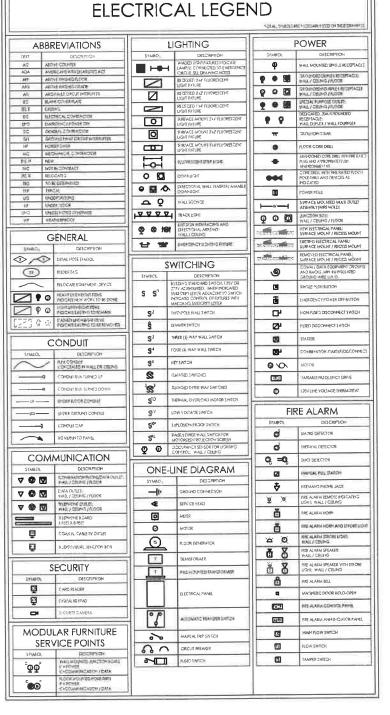
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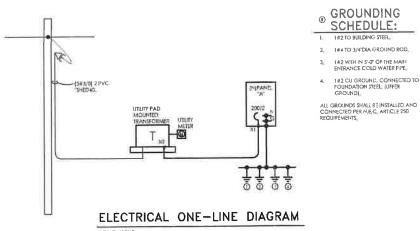
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E-1





FAULT CURRENT AND VOLTAGE DROP CALCULATIONS

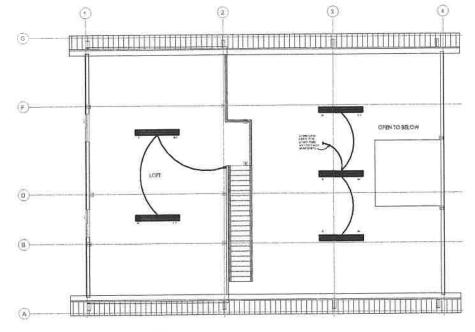
Maximum Available Fault Current (1/4:)

Where M = 1 / (1+t) and $t = (1.732 \times LX + t + t) / (C \times D \times E)$

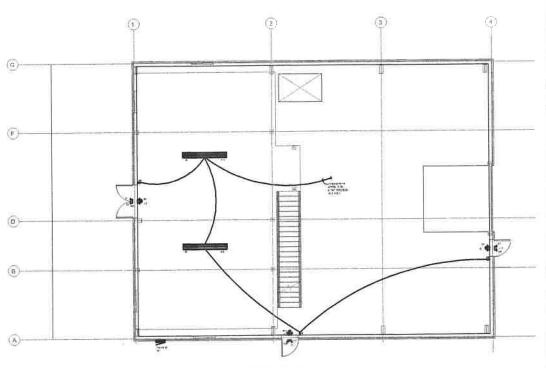
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	Service Transformer Secondary Winding per Xcel Energy										14,800	А		
8	Panel A	238	*4/0*	T	1	2	240	T	16673	14.800	7.871	B	200	394

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		LU	MINAIRE	SCHE	DULE	
TYPE	LAMPS	DESCRIPTION	MOUNTING	WATTS	MANUFACTURER CAT. NO.	NOTES
Ą	LED	8' LED LENSED STRIPLIGHT	CHAIN HUNG OR SURFACE	83	METALUX - CAT #8SLSTP11040DD- UNV	
x	LED	EXIT SIGN WITH GREEN LETTERS / WHITE BACKGROUND AND EMERGENCY SO-MINUTE BATTERY PACK, PROVIDED IRECTIONAL ARROWS AS INDICATED ON LIGHTING PLAN	AS INDICATED ON PLAN	5W	SELECTED BY OWNER (OR SURE- LITES: APX SERIES)	
X1	LED	COMBINATION EXIT SIGN WITH GREEN LETTERS / WHITE BACKGROUND AND ENERGENCY 96 MINUTE BATTERY TWN HEAD EMERGENCY LIGHT FIXTURE. PROVIDE DIRECTIONAL ARROWS AS INDICATED ON LIGHTING PLAN.	WALL MOUNTED OR CEILING	15	SELECTED BY OWNER (OR SURE- LITES APX SERIES)	
X2	WFIXTURE	93-MINUTE, WALL MOUNTED EMERGENCY BATTERY PACK WITH TWO LED LAMP HEADS	WALL +80" AFF OR CEILING	10	SELECTED BY OWNER (OR SURE- LITES: APEL SERIES)	



LOFT ELECTRICAL LIGHTING PLAN SCALE: 1/8° = 1°-0°



FIRST FLOOR ELECTRICAL LIGHTING PLAN

SCAIE: 1/8" = 150"



BLACK FOREST BARN

2740 BLACK FOREST ROAD COLORADO SPRINGS, CO

DRAWN BY: JAF/RE
OFFOLD BY: JAF

REMODES
No Description Doile

SSUE RECORD:
No Description Doile

1 ISSUED FOR PERMIT/CONST. 01-18-20

SHEEL CONTINUE
ELECTRICAL
PLANS

PROJECT NO:

E-2

GENERAL NOTES

1.1 Fabrication shall be in accordance with R.C.B. standard practices in compilance with the applicable sections, relating to design requirements and allowable stresses of the latest edition of the "AWS Structural Weiding Code D1.1 and D1.3". R.G.B. manufacturing procedures are certified by: Reference

Certification numbers

R.G.B. #456 Hounton

ASTM DESIGNATION MIN. YIELD STRENGTH 1.2 MATERIALS MATERIALS
Hot Rolled Steel Shapes (W, S, C & L)
Hot Rolled Steel Shapes (W)
Round Structural Tubing (HSS)
Square/Rect. Structural Tubing (HSS)
Structural Steel Web Plate
Structural Steel Flange Plates/Bars
Cold Formed Light Cage
Roof and Woll Sheets MIN. YELD. STRENGTI
Fy = 50 KSI
Fy = 50 KSI
Fy = 42 KSI
Fy = 48 KSI
Fy = 65 KSI
Fy = 65 KSI
Fy = 65 KSI
Fy = 65 KSI
Fy = 50, 80 KSI
Extra High Strength
Fy = 36 KSI A572/A529 A500 A500 A572/A1011 A529/A572 A653/A1011 A792/A663 A476 A36 MIN. TENSILE STRENGTH

Machine Boits & Nuts High Strength Boits (1"# and less) High Strength Boits (>1"# to 1 1/2"#) Anchor Boits (if supplied) Fu = 60 KSI Fu = 120 KSI Fu = 105 KSI A307 A325-TYPE 1 Fu = 120 KSI A325-TYPE 1 Fu = 105 KSI A36/A307/F1554 Gr.36 Fu = 58-80 KSI

Anchor Botts (if supplied)

A36/A307/F1554 Gr.36 Fu = 1

PRIMER
Shop primer point is a rust inhibitive primer which meets the end
performence of Federal Specification SSPC No. 15 and is R.G.B. Red
or Groy Oxide color. This point is not intended for long term exposure
to the elements, R.G.B. is not responsible for any deterioration
of the shop primer point as a result of improper handling and/or jobsite
storage, R.G.B. shall not be responsible for any field applied
paint and/or coatings. (Section 8.5 AISC Code of Standard Practice,
14th Edition). Naminal thickness of primer will be 1 mill unless otherwise
specified in contract decirates.

1.4 GALVANIZED OR SPECIAL COATINGS:

1.5 ALL BOLTS ARE 1/2"# x D'-1" A307 (enug-tightened) EXCEPT :

b) Early strut connection - 1/2° \$\psi \cdot 0'-1 \frac{1}{4}^* \cdot 307 \text{ without washer (unless noted otherwise)} b) Endwall rafter splice - 5/8° \$\psi \cdot 0'-1 \frac{1}{4}^* \cdot 325 \text{-N with washer} \
c) Endwall column to rafter connection - 1/2° \$\psi \cdot 0'-1 \frac{1}{4}^* \cdot 325 \text{-N with washer} \
d) Main frame moment splice connections - \cdot 325 \text{-N with washer} \
SEE CROSS SECTION for dimensions.

NOTE: One (01) washer is supplied on main frame moment splice and to A325 bolts unless noted atherwise on drawing

1.6 A325 BOLT TIGHTENING REQUIREMENTS

A325 BULL Intertentive recommendations.

All high strength bolts are A325—N unless specifically noted otherwise. Structural bolts shall be tightened by the turn-of-the-nut or calibrated wrench methods in accordance with the 14th Edition MSC/RCSC "Specification For Structural Joints using ASTM A325 or A490 Bolts". Washers are supplied separately from High Strength Bolts, however, assembly with weakers are required before erection. Installation inspection is recommended and be based on Section 9.1 and 9.2 of AISC/RCSC.

and be based on Section 9.1 and 9.2 of ASC/INCS.
Snug-tight is permitted EXCEPT for the following conditions:

a) Building located in high selamic areas; Selamic Design Categories D. E. F

b) Building supporting aranes

building supporting machinery that creates vibration, impact or stress reversal

c) Connections using ASTM A490

c) Connections using a SID—catical condition

f) or as prohibited in the contracts/specifications

1.7 CLOSURE STRIPS ARE FURNISHED FOR APPLICATION:

INSIDE— Under roof panels at eave OUTSIDE — Between endwall panels and rake trim — Under continuous ridge vent skirts

1.8 <u>ERECTION NOTE:</u> All bracing, strapping, & bridging shown and provided by R.G.B. for this building is required and shall be installed by the erector as a permanent part of the structure. If additional bracing is required for stability during erection, it shall be the erector's responsibility to determine the amount of such bracing and to procure and install as needed.

Any claims or shortages by buyer must be made to R.G.B. within five (5) working days after delivery, or such claims will be considered to have been walved by the customer and disallowed.

1.11 CORRECTIONS OF ERRORS AND REPAIRS (MBMA 6.10)
Claims for correction of alleged misfits will be disallowed unless R.G.B. shall have received prior notice thereof and allowed reasonable inspection of such misfits. The correction of minor misfits by the use of drift pins to drow the components into line, moderate amounts of reaming, chipping and cutting, and the replacement of minor shortages of material are a normal part of erection and are not subject to claim. No part of the Building may be returned for alleged misfits without the prior approval of R.G.B.

BUYER/END USE CUSTOMER RESPONSIBILITIES

- It is the responsibility of the BUYER/END USE CUSTOMER to obtain appropriate approvals and secure necessary permits from City, County, State, or Federal Agencles as required, and to advise/release R.G.B. to fabricate upon receiving such.
- upon receiving such.

 Rigid Global Buildings (hereafter referred to as R.G.B.)

 atondard specifications apply unless atipulated otherwise in the Contract
 Decuments. R.G.B. design, fabrication, quality criteria, standards,
 practice, methods and tolerances shall govern the work with any other
 interpretations to the contrary notwithstanding. It is understood by both
 Parties that the BUYER/FAD USE CUSTOMER is responsible for ciderification of
 inclusions or exclusions from the architectural pions and/or specifications,
 in case of discrepancies between R.G.B. structural steel plans and plans
 for other trades, R.G.B. plans shall govern. (Section. 3 AISC Code of
 Standard Practices, 14th Edition)
- Approval of R.G.B. drawings and calculations indicates that R.G.B. has correctly interpreted and applied the Contract Documents. This approval constitutes the contractor/owners acceptance of the R.G.B. design concepts, assumptions, and loading. (Section 4 AISC Code 14th Edition and MBMA 3.3.3)
- Once the BUYER/END USE CUSTOMER has signed R.G.B. Approval Package and the project is released for fabrication, changes shall be billed to the BUYER/ BND USE CUSTOMER including material, engineering and other costs. An additional fee may be charged if the project must be moved from the fabrication and shipping schedule.



DRAWING PACKAGE

			70 E 10 E	정도 마구/ 						
SALES NO.	65915	JOB NO.	142272	BUILDING	Α					
CUSTOMER	BLACK FO	BLACK FOREST LLC								
END USER	BLACK FO	BLACK FOREST LLC								
END USE	BARN	BARN								
STREET	12740 BLA	CK FORREST	rd.							
CITY ST ZIP	COLORADO SPRINGS, CO 80908									
COUNTY	EL PASO									

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE FOLLOWING AS INDICATED:

Design Code : IBC 15 Width (ft) : 50 Dead Loed (psf) : Metal building structure only by RGB Length (ft) : 65 Collateral Load (psf) : 4 (SEE NOTES) Eave Ht. at BSW (ft) : 12 Wind Load Eave Ht. at FSW (ft) : 12 Ultimate Design Wind Speed : Vult (3 sec. gust) = 130 mph Roof Slope at BSW : 24.0:12 Nominal Design Wind Speed : Vasd (3 sec. gust) = 100.700 Roof Slope at FSW : 24.0:12 Risk Category : II - Normal Bay Spacing (ft) : 1 at 25 Wind Exposure Coefficient, GCPi : 0.180 / -0.180 COVERING AND TRIMS: Design Wind Pressure For Wall Based on Norminal Design Wind Speed Roof Panels & Trims Components Wind Pressure (psf) : +20.34 Panel Type : 24 Ga. PT (16") Caddings Wind Pressure (psf) : +23.94 Trim Colors	
Collateral Load (psf) :4 (SEE NOTES) Eave Ht. at BSW (ft) :12 Wind Load Eave Ht. at FSW (ft) :12 Ultimate Design Wind Speed : Vult (3 sec. gust) = 130 mph Roof Slope at BSW : 24.0:12 Nominal Design Wind Speed : Vasd (3 sec. gust) = 100.700 Roof Slope at FSW : 24.0:12 Risk Category : II - Normal Bay Spacing (ft) : 1 at 25 Wind Exposure : C COVERING AND TRIMS: Design Wind Pressure For Wall : Based on Nominal Design Wind Speed Roof Panels & Trims Components Wind Pressure (psf) : + 20.34 Panel Type : 24 Ga. PT (16") Components Wind Suction (psf) : - 22.38 Panel Color : \$3000 Standard Claddings Wind Pressure (psf) : + 23.94 Trim Colors	
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Nominal Design Wind Speed Vasd (3 sec. gust) = 100.700 Roof Slope at FSW : 24.0:12	
Risk Category : II - Normal Bay Spacing (ft) : 1 at 25 2 at 20 Wind Exposure : C Internal Pressure Coefficient, GCPl : 0.180 / -0.180 Design Wind Pressure For Wall : Based on Norminal Design Wind Speed Roof Panels & Trims Components Wind Pressure (psf) : +20.34 Panel Type : 24 Ga. PT (16*) Components Wind Suction (psf) : -22.38 Panel Color : \$3000 Standard Claddings Wind Pressure (psf) : +23.94 Trim Colors	
Risk Category : II - Normal Bay Spacing (ft) : 1 at 25 2 at 20 Wind Exposure : C Internal Pressure Coefficient, GCPl : 0.180 / -0.180 Design Wind Pressure For Wall : Based on Norminal Design Wind Speed Roof Panels & Trims Components Wind Pressure (psf) : + 20.34 Panel Type : 24 Ga. PT (16*) Components Wind Suction (psf) : -22.38 Panel Color : \$3000 Standard Claddings Wind Pressure (psf) : + 23.94 Trim Colors	
Wind Exposure : C Internal Pressure Coefficient, GCPi : 0.180 / -0.180 Design Wind Pressure For Wall : Based on Norminal Design Wind Speed Roof Panels & Trims Components Wind Pressure (psf) : +20.34 Panel Type : 24 Ga. PT (16*) Components Wind Suction (psf) : -22.38 Panel Color : \$3000 Standard Claddings Wind Pressure (psf) : +23.94 Trim Colors	
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Claddings Wind Pressure (psf) : +23.94 Trim Colors	
Thirt Colors	
Claddings WInd Suction (psf): -25.92 Eave Trim : \$2000 Standard	
Enclosure : Closed Eave Gutter : N/A	
Live Load Primary Framing (psf) : 20.00 Gable Trim : \$3000 Standard	
Trlb. Area Reduction : No Wall Panel & Trims	
Passador Francis (art)	
Snow Load Paner Type : BY OTHERS	
Ground Snow Load, Pg (psf) : 57,000 Panel Color : BY OTHERS	
Roof Snow Load, Pf (psf) : 40 Trim Colors	
Sloped Roof Snow Load, Ps (psf) : 40 Corner Trims : BY OTHERS	
Snow Exposure Factor, Ce : 1.000 Opening Trims : BY OTHERS	
Snow Importance Factor, Is : 1.000 Downspouts : N/A	
Thermal Factor, Ct : 1.000 Base Trim : N/A	
Sloped Factor, Cs : 1.000 Mas. Flash N/A	
Seismic Load	
Seisific Importance Paciol, le	
Selsmic Occupancy Category : II - Normal DESIGN and DETAIL REQUIREMENTS: MEZZANINE INFORMATIO	ONS
Site Class	
Mapped Spectral Response Acceleration : Ss = 0.185 : S1 = 0.059	
Spectral Response Coefficients : Sds = 0.197 : Sd1 = 0.094 DEAD = 10 PSF Seismic Design Category : B FLOOR LIVE = 125 PSF	
For Seismic Resistance	
: Rigid Frames FLOOR LIVE = 125 PSF	1
: Braced Frames : 4 PSF COLLATERAL LOAD FOR SOLAR PANELS Total Design Base Shear, V (kips) : 8.18 (IF ANY) MECHANICAL DUCTS (IF ANY) AND LIGHTING	
Personne Modification Factors B	GS.
Seismic Response Coefficient, Cs : 0.066 NO CEILINGS / SPRINGLERS / OTHER MECHANICAL	
Analysis Procedure Used : Equivalent Lateral Force Procedure MECHANICAL LOADS / ETC.	
Rainfall Intensity (in/hr) : 4.000 ASSUMED WEIGHT OF METAL ROOF LINER PANEL	1
Other Loads/Requirements BY OTHERS TO BE 1.5 PSF OF LESS.	

Before erecting your building, please see the Rigid Erection & Safety Manual at rigidbuilding.com/document-library

24 Ga. PLATINUM - 16" ROOF WITH QUAD-LOK

The BUYER/END USE CUSTOMER is responsible for overall project coordination. All interface, compatibility, and design considerations concerning any materials not furnished by R.G.B. and R.G.B. steel system are to be considered and coordinated by the BUYER/END USE CUSTOMER. Specific design criteria concerning this interface between materials must be furnished before release for fabrication or R.G.B. assumptions will govern (Section 4 and Commentary, AISC Code of Standard Practice, 14th Edition)

It is the responsibility of the BUYER/END USE CUSTDMER to ensure that R.G.B. plans comply with the applicable requirements of any governing building authorities. The supplying of scaled engineering data and drayings for the metal building system does not imply or constitute an agreement that R.G.B. or its design engineers are acting as the engineer of record or sales. Solicity the design of the structural components furnished by D.B.

The UYER AID USE CUSTOMER is responsible for setting of anchor botts and recibin of seel in accordance with R.G.B. "For Construction" drayings unity. Temporary supports such as guys, braces, falsework, cribbing or other elements required for the exection operation shall be determined furnished and installed by the erector. No items should be purchased from a preliminary set of drayings, including anchor botts. Use only final "FOR CONSTRUCTION DRAWINGS" for this use. (Section 7 ASC Code of

"FOR CONSTRUCTION DRAWINGS" for this use. (Section 7 AISC Code of

Standard Practice, 14th Edition.)

Rigid Global Buildings is responsible for the design of the anchor bolt to permit the transfer of forces between the base plate and the anchor bolt in shear, bearing and tension, but is not responsible for the transfer of anchor bolt forces to the concrete, anchor bolt embedment or the adequacy of the anchor bolt in relation to the concrete.

Unless otherwise provided in the Order Documents, R.G.B. does not design and is not responsible for the design, material and construction of the foundation or foundation embedments. The END USE CUSTOMER should assure himself that adequate provisions are made in the foundation design for loads imposed by column reactions of the building, other imposed loads, and bearing capacity of the sail and other conditions of the building site.

It is recommended that the anchorage/anchor bolt embedment and foundation of the building be designed by a Registered Professional Engineer experienced in the design of such structures. (Chapter IV Section 3.2.2 Metal Building Systems Manual 2012-Editios)

Normal erection operations include the corrections of minor misfits by moderate amounts of reaming, chipping, welding or cutting, and the draying of elements into line through the use of drift pins. Errors which connot be corrected by the foregoing means or which require major changes in member configuration are to be reported immediately to R.C.B. by the BUYER/END USE CUSTOMER, to enable whoever is responsible either to correct the error or to approve the most efficient and economic method of correction to be used by others. (Section 7 AISC Code of Standard Practice, 14th Edition)

Neither the fabricator nor the BUYER/END USE CUSTOMER will cut, drill or otherwise after his work, or the work of other trades, to accommodate other trades, unless such work is clearly specified in the contract documents. Whenever such work is specified, the BUYER/END USE CUSTOMER is responsible for furnishing complete information as to materials, size, location and number of alterations prior to preparation of shop drawlings. (Section 7 AISC Code of Standard Practice, 14th Edition)

WARNING. In no case should Calvalume steel panels be used in conjunction with lead or copper. Both lead and copper have harmful corrosive effects on the Calvalume alloy coating when they are in contact with Galvalume steel panels. Even run—off from copper fiashing, wiring, or tubing onto Galvalume should be avoided,

SAFETY COMMITMENT. Rigid Global Buildings has a commitment to manufacture quality building components that can be safely erected. However, the safety commitment and job site practices of the erector are beyond the control of R.G.B.

It is strongly recommended that safe working conditions and accident prevention practices be the top priority of any job site. Local, State, and Federal safety and health standards should always be followed to help haure workers safety. Make certain all employees know the safest and most productive way of erecting a building. Emergency procedures should be known to all employees.

Dally meetings highlighting safety procedures are also recommended. The use of hard hats, rubber sole shoes for roof work, proper equipment for handling material, and safety nets where applicable, are recommended.

Roof drainage systems (gutter, downspouts, etc.) must be free of any obstruction to ensure smooth operation at any given time.

It is recommended by Factory Mutual (Reference: B2.44) that roofs be cleared of snow, when helf of the maximum snow depth is reached. The maximum snow depth can be estimated based on the design snow load and the density of snow and/or ice buildup. See Chart below.

EQUIVALENT SNOW HEIGHT AT ROOF (IN INCHES)	RECOMMENDED SNOW HEIGHT WHEN SNOW REMOVAL SHOULD STARI (IN INCHES)
16.60	8.30
17.90	8.95
19,20	9.50
20.50	10.25
21.80	10.90
23.10	11.55
24.40	12.20
	16.60 17.90 19.20 20.50 21.80 23.10

SEALING OF THIS DRAWING DOES NOT IMPLY OR CONSTITUTE THAT RIGID CLOBAL ENGINEER IS THE ENGINEER OF RECORD OR THE DESIGN PROFESSIONAL FOR THIS PROJECT, ONLY THE DESIGN OF THE METAL BUILDING SYSTEM AS FURNISHED BY RIGID IS INCLUDED. FOUNDATION ANALYSIS, ELECTRICAL, AND MECHANICAL SYSTEMS, AND/OR OTHER PARTS SUPPLIED BY ANYONE OTHER THAN RIGID ARE SPECIFICALLY EXCLUDED. NO INSPECTION OR SUPERVISION IS IMPLIED. IMPLIED.



128 180

UNLOADING, HANDLING AND STORING OF MATERIALS

STRUCTURAL

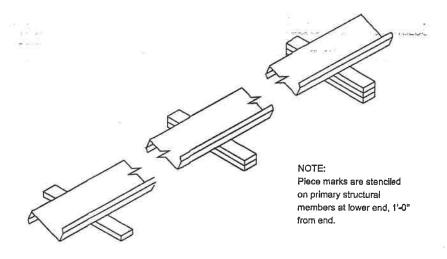
A great amount of time and trouble can be saved if the building site is according to a pre-arranged plan. Proper location and handling of components will eliminate unnecessary handling.

Inspect all shipments prior to releasing the tle-downs for loads that may have shifted during transit, REMEMBER, SAFETY FIRSTI

Blocking under the columns and rafters protects the splice plates and the slab from damage during the unloading process. It also facilitates the placing of slings or cables around the members for later lifting and allows members to be boilted together into sub-assemblies while on the ground. Extra care should always be exercised in the unloading operations to prevent injuries from handling the steel and to prevent damage to materials and the concrete slabs.

If water is allowed to remain for extended periods in bundles of primed parts such as girts, purlins etc., the pigment will fade and the paint will gradually soften, reducing the bond to the steel. Therefore, upon receipt of a job, all bundles of primed parts should be stored at an angle to allow any trapped water to drain away and permit air circulation for drying. Puddles of water should not be allowed to collect and remain on columns, rafters or beams for the same reason.

All Primer should be touched up as required before erection!



WALLS AND ROOF PANELS

RIGfD's wall and roof panels including color coated, galvalume and galvanized, provide excellent service under widely varied conditions. All unloading and erection personnel should fully understand that these panels are quality merchandise which merit cautious care in handling.

Under no circumstances should panels be handled roughly. Packages of sheets should be lifted off the truck with extreme care taken to insure that no damage occurs to ends of the sheets or to side ribs. The packages should be stored off the ground sufficiently high to allow air circulation underneath the packages. This avoids ground moisture and deters people from walking on the packages. One end of the package should always be elevated to encourage drainage in case of rain.

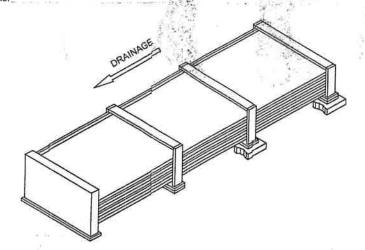
All stacked metal panels are subject, to some degree, to localized discoloration or stain when water is trapped between their closely nested surfaces. RIGID exercises extreme caution during fabricating and shipping operations to insure that all panel stock is kept dry. However, due to climatic conditions, water formed by condensation of humid air can be trapped between stacked sheets. Water can also be trapped between stacked sheets when exposed to rain. This discoloration caused by trapped moisture is often called wet storage stain.

The stain is usually superficial and has little effect on the appearance or service life of the panels as long as it is not permitted to remain on the panels. However, moisture in contact with the surface of the panels over an extended period can severely attack the finish and reduce the effective service life. Therefore, it is imperative that all panels be inspected for moisture upon receipt of the order. If moisture is present, dry the panels at once and store in a dry, warm place.

CAUTION: Care should always be taken when walking on panels. Use saftey lines and nets when necessary! Panels are slippery. Oil or wax applied to the roof and wall panels for protection against weather damage will make them a very slippery surface. Wipe dry any oil that has puddled from bundles stored on a slope. Dew, frost, or other forms of moisture greatly increase the slipperiness of the panels. Always assume panel surface is slippery and act accordingly.

Think safety!!

Use wood blocking to elevate and slope the panels in a manner that will allow moisture to drain. Wood blocking placed between bundles will provide additional air circulation. Cover the stacked bundles with a tarp or plastic cover leaving enough opening at the bottom for air to circulate.





When handling or uncrating the panels, lift, rather than slide, them apart. Burned edges may scratch the coated surfaces when sheets are slid over one another. Never allow panels to be walked on while on the ground.

Rough and improper handling of a panel is inexcusable and a prime example of poor job supervision.

NOTE:

ELEVATE

Use gloves when handling metal panels to prevent hand injuries. Be aware, of the dangers of handling panels on a windy day. A large panel can catch enough wind to knock a worker off his feet, even at ground levell|

Safety first!

ENERAL NOTE

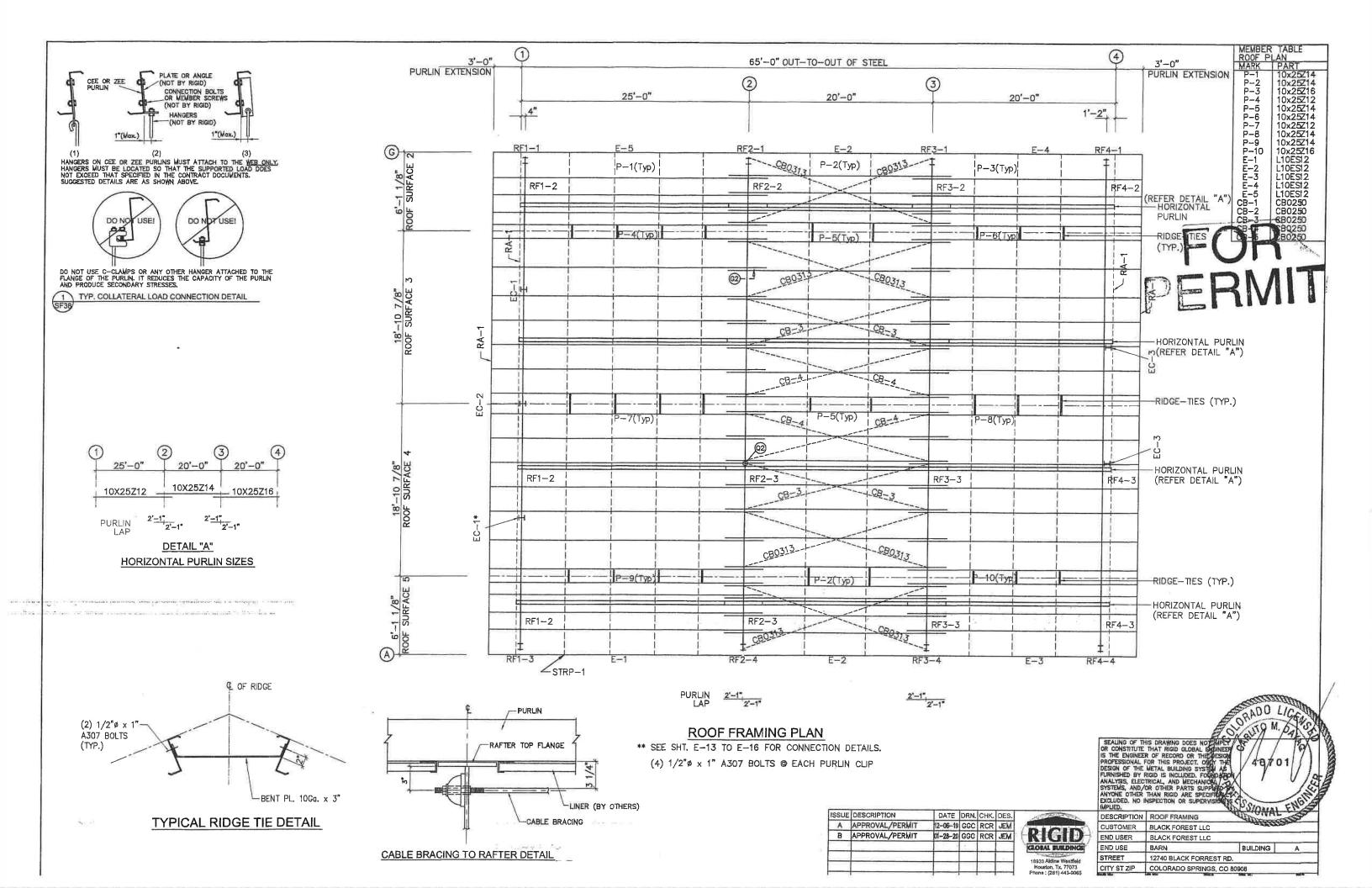
- 1. OIL CANNING OF PANELS IS NOT A CAUSE OF REJECTION.
- 2. EXTREME CARE MUST BE EXERCISED DURING THE ERECTION OF ROOF PANELS AND TRIMS. FOOT TRAFFIC MAY RESULT IN PERMANENT PANEL DISTORTION AND FINISH ABRASION.

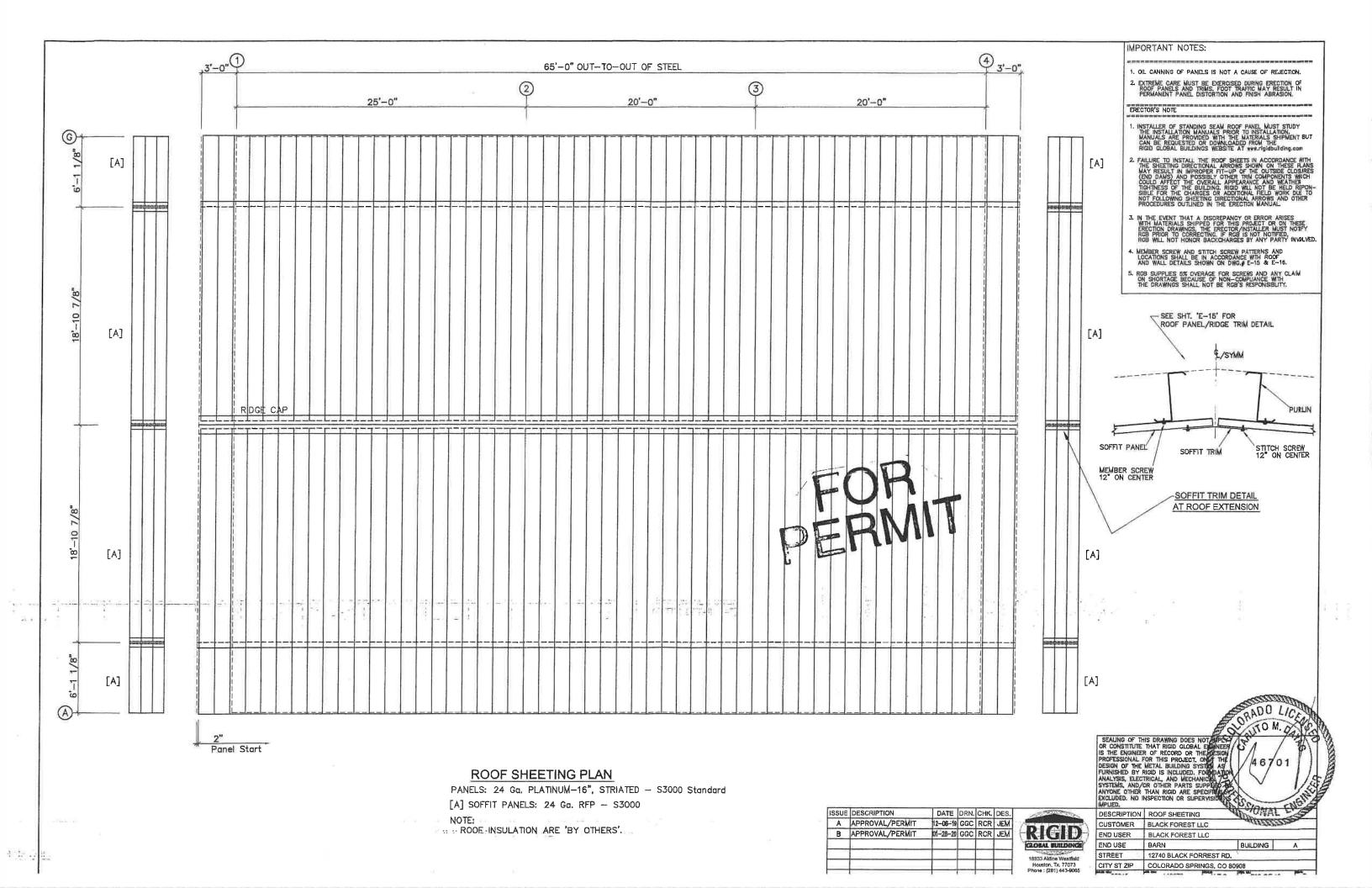
SEALING OF THIS DRAWING DOES NOT IMPLY OR CONSTITUTE THAT RIGID GLOBAL ENGINEER IS THE ENGINEER OF RECORD OR THE DESIGN PROFESSIONAL FOR THIS PROJECT, ONLY THE DESIGN OF THE METAL BUILDING SYSTEM AS FURNISHED BY RIGID IS INCLUDED, FOUNDATION ANALYSIS, ELECTRICAL, AND MECHANICAL SYSTEMS, AND/OR OTHER PARTS SUPPLIED BY ANYONE OTHER THAN RIGID ARE SPECIFICALLY EXCLUDED. NO INSPECTION OR SUPERVISION IS

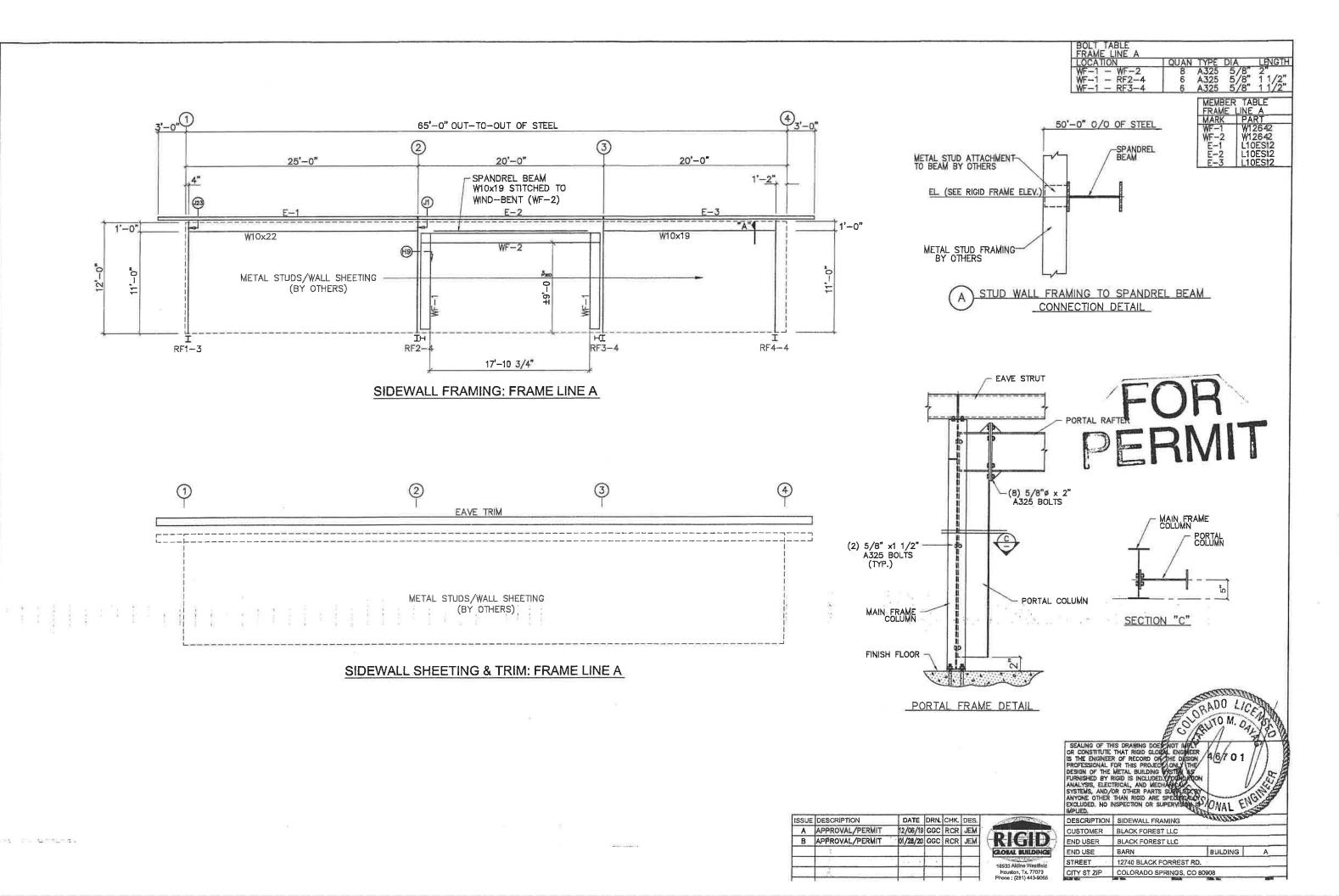


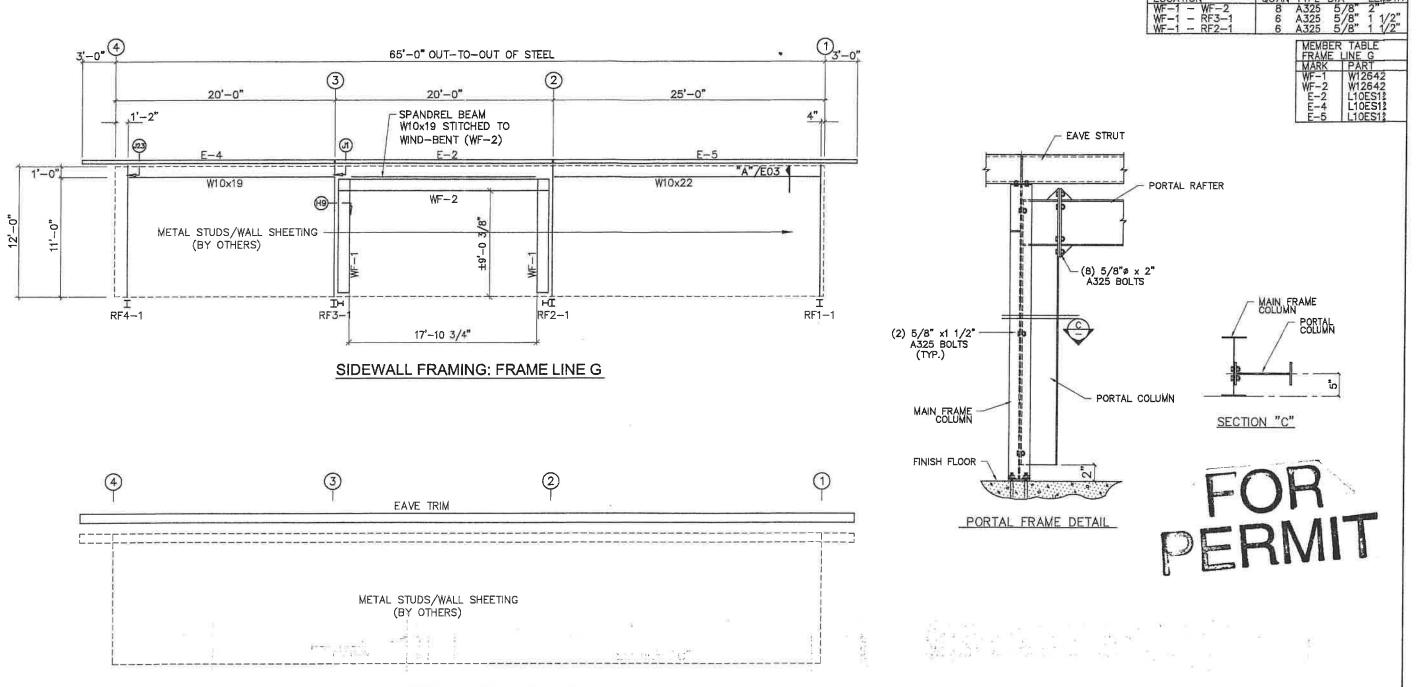
BLACK FOREST LLC

HARD 142070









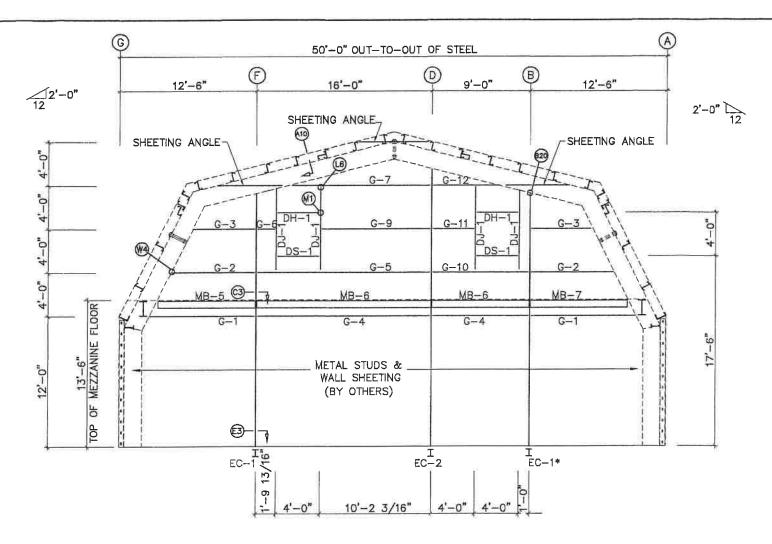
SIDEWALL SHEETING & TRIM: FRAME LINE G

ISSUE DESCRIPTION DATE DRN. CHK. DES. 12/06/19 GGC RCR JEM A APPROVAL/PERMIT
B APPROVAL/PERMIT 01/28/20 GGC RCR JEM

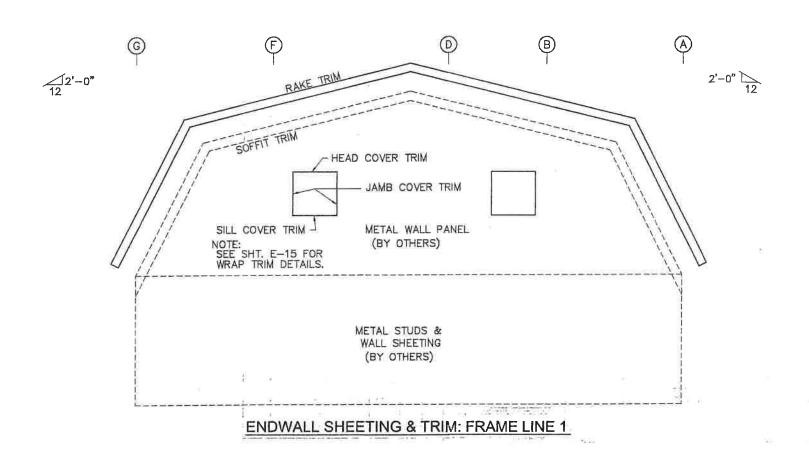
GLOBAL BUILDINGS

CITY ST ZIP

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ENDWALL FRAMING: FRAME LINE 1



BOLT TABLE
FRAME LINE 1
LOCATION QUAN TYPE DIA LENGTH
Columns/Raf 4 A325 5/8" 1"

MEMBER	TABLE LINE 1
MARK	PART
EC-1 EC-2 EC-1* DH-1-1 DD GG-7890 GG-112 MB-7 MB-7	W08642 W08642 W08642 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x35C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16 8x25C16



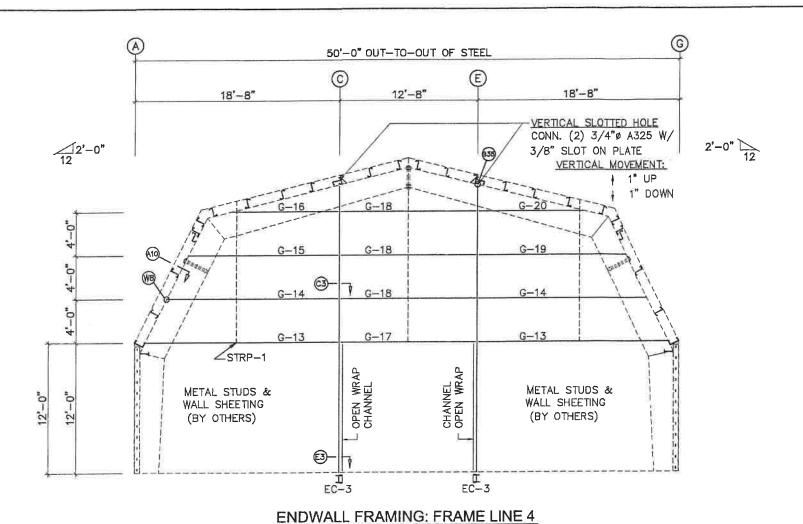
BUILDING

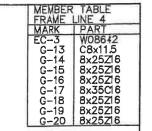
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-	IMPLIED.	NSPECTION OR SUPER	AVISION STEEL
DATE DRN. CHK. DES.	DESCRIPTION	SIDEWALL FRAMII	NG
12/06/19 GGC RCR JEM	CUSTOMER	BLACK FOREST LL	_C
01/28/20 GGC RCR JEM	END USER	BLACK FOREST LI	LC
GLOBAL BUILDINGS	END USE	BARN	BUII
18839 Altine Westfield	STREET	12740 BLACK FOR	REST RD.
Houston, Tx. 77073	CITY ST ZIP	COLORADO SPRIN	
Phon4: (281) 443-9065	DE LOCALE	Mile 4 application	lake mi

A APPROVAL/PERMIT

B APPROVAL/PERMIT



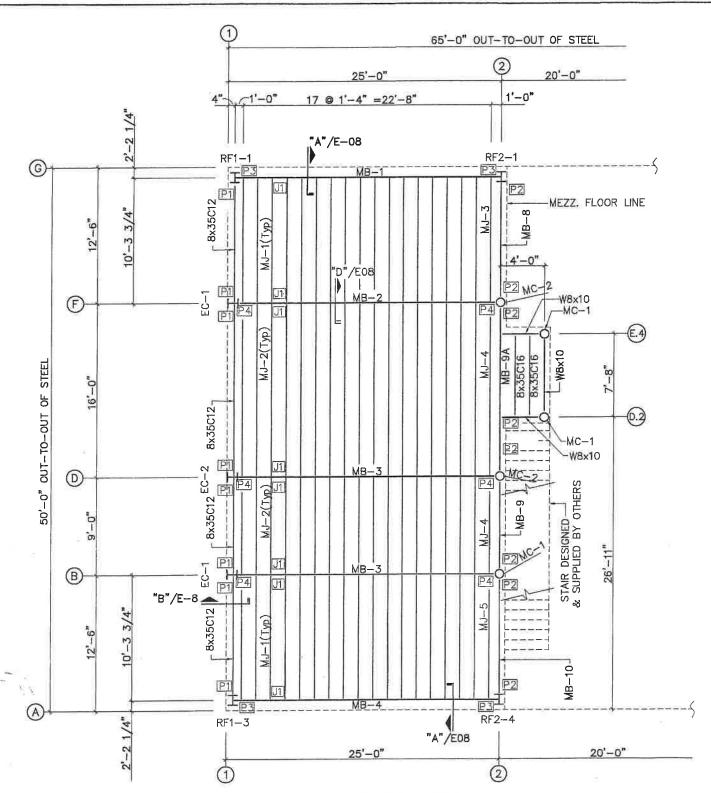


A)	RAKE TRIM		Ē	
	SOFFIT TRIM	METAL WALL PANEL (BY OTHERS)		
4 V	METAL STUDS & WALL SHEETING (BY OTHERS)	OVERHEAD DOOR (BY OTHERS)	METAL STUDS & WALL SHEETING (BY OTHERS)	
	ENDWALL SHI	EETING & TRIM: F	RAME LINE 4	

ISSUE	DESCRIPTION	DATE				
Α	APPROVAL/PERMIT	12/06/19	GGC	RCR	JEM	15
В	APPROVAL/PERMIT	01/28/20	GGÇ	RCR	JEM	\Box
				0.0	-	15

No. of the second secon	1.607
The state of the s	Df
DICERN	C
KIGID	E
GLOBAL BUILDINGS	E
18933 Aldine Westfield	ST
Houston, Tx. 77073	CI

OR CONSTITUTE IS THE ENGINEER PROFESSIONAL F DESIGN OF THE FURNISHED BY F ANALYSIS, ELEC- SYSTEMS, AND/ ANYONE OTHER	IS DRAMINO DOES NOT INTENTAT RIGHD GLOBAL ENGINE OF RECORD OR THE DESCRIPTION OF SUPERVISION OR SUPERVISIO	IGN 4/67	O 1
DESCRIPTION	SIDEWALL FRAMING	A DEFE	TELEVISION OF THE PERSON OF TH
CUSTOMER	BLACK FOREST LLC		
END USER	BLACK FOREST LLC		
END USE	BARN	BUILDING	A
STREET	12740 BLACK FORREST	RD.	
CITY ST ZIP	COLORADO SPRINGS. O	20 00000	



FLOOR FRAMING & JOISTS

NOTE: DEAD = 10 PSF FLOOR LIVE = 125 PSF TOP OF FLOOR DECK = 13'-6"

PLYWOOD DECK AND 24Ga. METAL LINER PANEL (BY OTHERS), FASTENED TO TOP AND BOTTOM FLANGE OF CEE - JOIST

LEKI	OLIAN	TYPE	DIA	LAIL IABLE	I PLATE
D1	2	A 325	1/2"	ELIVORIT	1/4"
P2	2	4.325	3/4"		3/8"
P3	3	A325	3/4"		3/8"
P4.	4	A325	3/4"		3/8"

JOIST	BOLT	TABLE		
DID	QUAN	TYPE	DIA	LENGTH
.11	2	A 325	1/2"	1 1/2"

	MBER RK	TABLE
MB MB	-1 -2	W16852 W20854
MB-	-3 -4	W18863 W16852
0.71	-6	W8x10 W8x10
1 111	-7 -8 -9	W8x10 W8x10 W8x10
MB-	-9A -10	W10x12 W8x10
MC-		D450x188 D662x125
MJ-	-1 -2	8x35C16 8x25C16
MJ-	-3 -4 -5	8x35C16 8x35C12 8x35C16



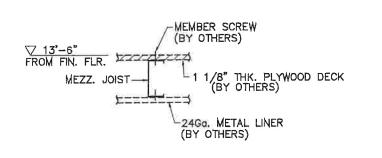
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12/06/19 GGC RCR JEM
01/28/20 GGC RCR JEM
CLORAL BUILDINGS
18833 Adline Weatfield
HOUSton, Tx, 77073
Phone: (281) 443-9065

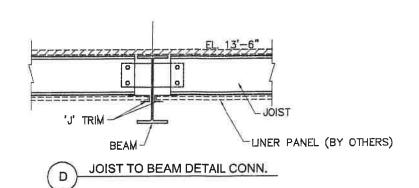
ISSUE DESCRIPTION

A APPROVAL/PERMIT
B APPROVAL/PERMIT

EXCLUDED. NO I	NSPECTION OR SUPERVISION IS	-65 E F F	3335
DESCRIPTION	FLOOR FRAMING & JOISTS		
CUSTOMER	BLACK FOREST LLC		
END USER	BLACK FOREST LLC	Š.	
END USE	BARN	BUILDING	A
STREET	12740 BLACK FORREST RD.		
CITY ST ZIP	COLORADO SPRINGS, CO 80	908	
NAME OF TAXABLE PARTY.	An egue	(Alp. Mar	1

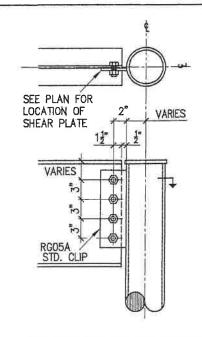


TYP. PLYWOOD TO JOIST DETAIL

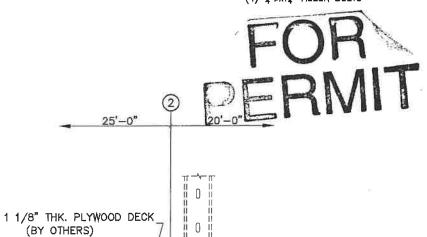


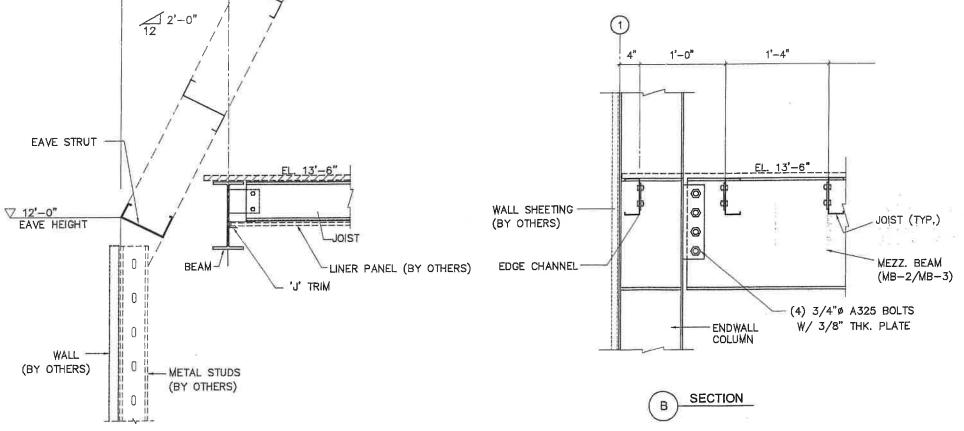
SEE PLAN FOR LOCATION OF SHEAR PLATE VARIES VARIES RG04B 7

BEAM TO ROUND HSS COLUMN (2)-3"øx13" A325N BOLTS



BEAM TO ROUND HSS COLUMN (4)-₹"øx1₹" A325N BOLTS





(TYP.)

SECTION ALONG FRAME LINE 2

SEALING OF THIS DRAWING DOES NOT TIPLY OR CONSTITUTE THAT RIGID GLOBAL ENCHER IS THE ENGINEER OF RECORD OR THE BESIGN PROFESSIONAL FOR THIS PROJECT, ONLY ATT DESIGN OF THE METAL BUILDING SYSTEMAS FURNISHED BY RIGID IS INCLUDED. FOUNDING ON ANALYSIS, ELECTRICAL, AND MECHANICAL SYSTEMS, AND/OR OTHER PARTS SUPPLIED ANYONE OTHER THAN RIGID ARE SPECIFICALLY EXCLUDED. NO INSPECTION OR SUPERVISION IS IMPUED.

METAL STUD

(BY OTHERS)

MAT CIED.				
DESCRIPTION	MEZZANINE DETAI	L DRAWING		
CUSTOMER	BLACK FOREST LLC	2		
END USER	BLACK FOREST LL	0		
END USE	BARN	BUI	LDING	Α
STREET	12740 BLACK FORF	REST RD.		
CITY ST ZIP	COLORADO SPRIN	GS, CO 80908		

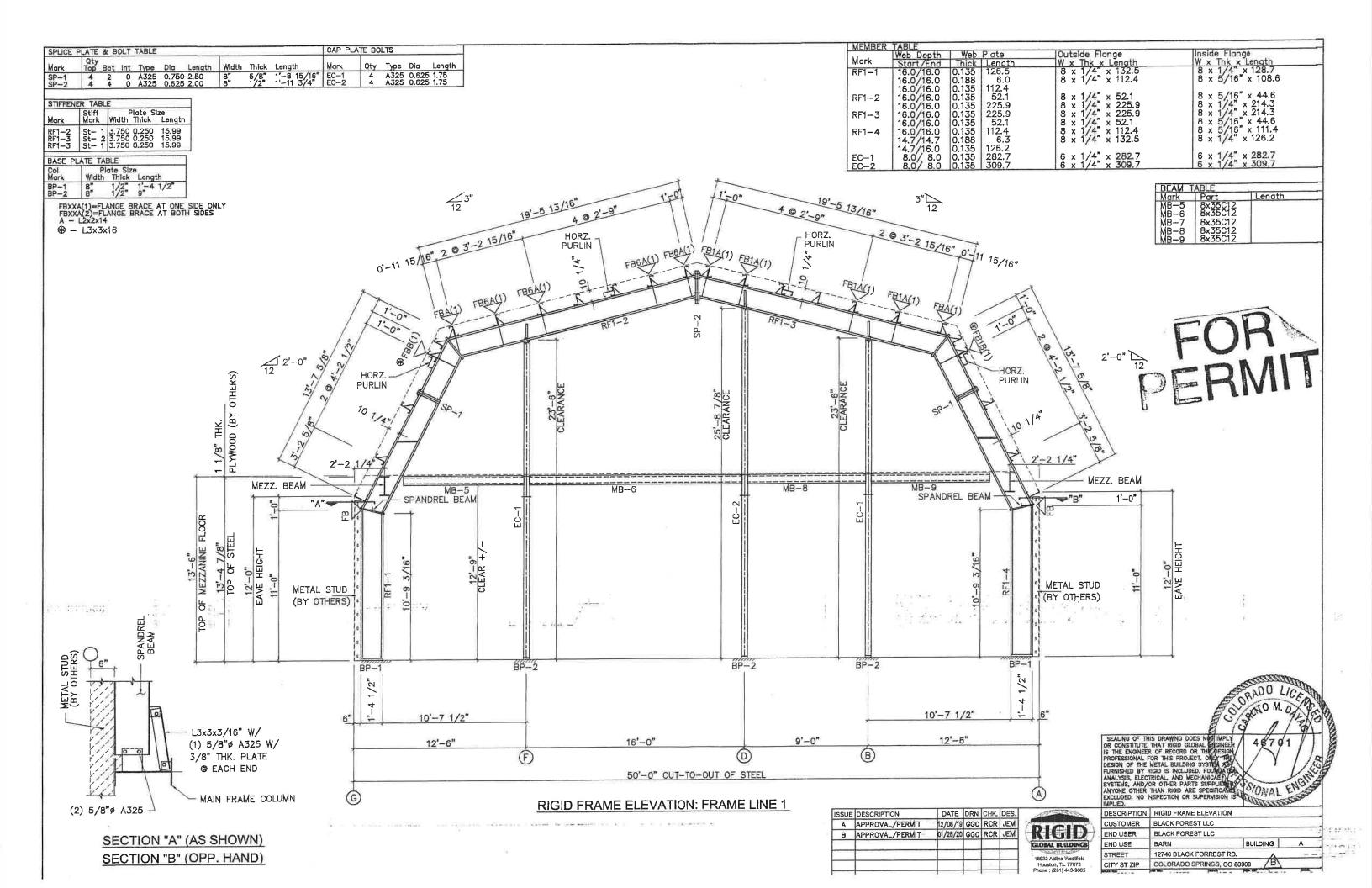
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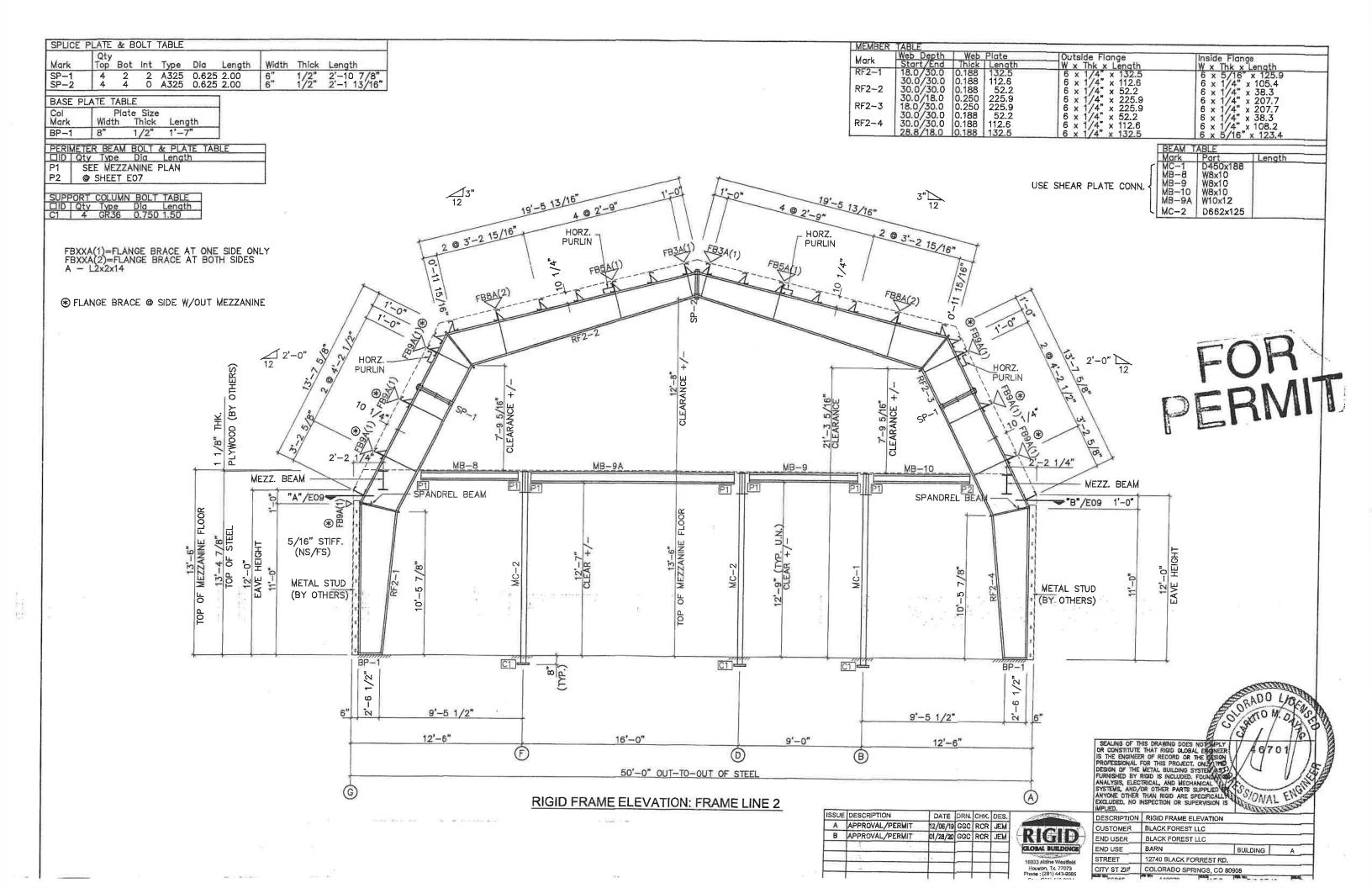
SSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.	ě.
Α	APPROVAL/PERMIT	12/06/19	GGC	RCR	JEM	7
В	APPROVAL/PERMIT	01/28/20	GGC	RCR	JEM	
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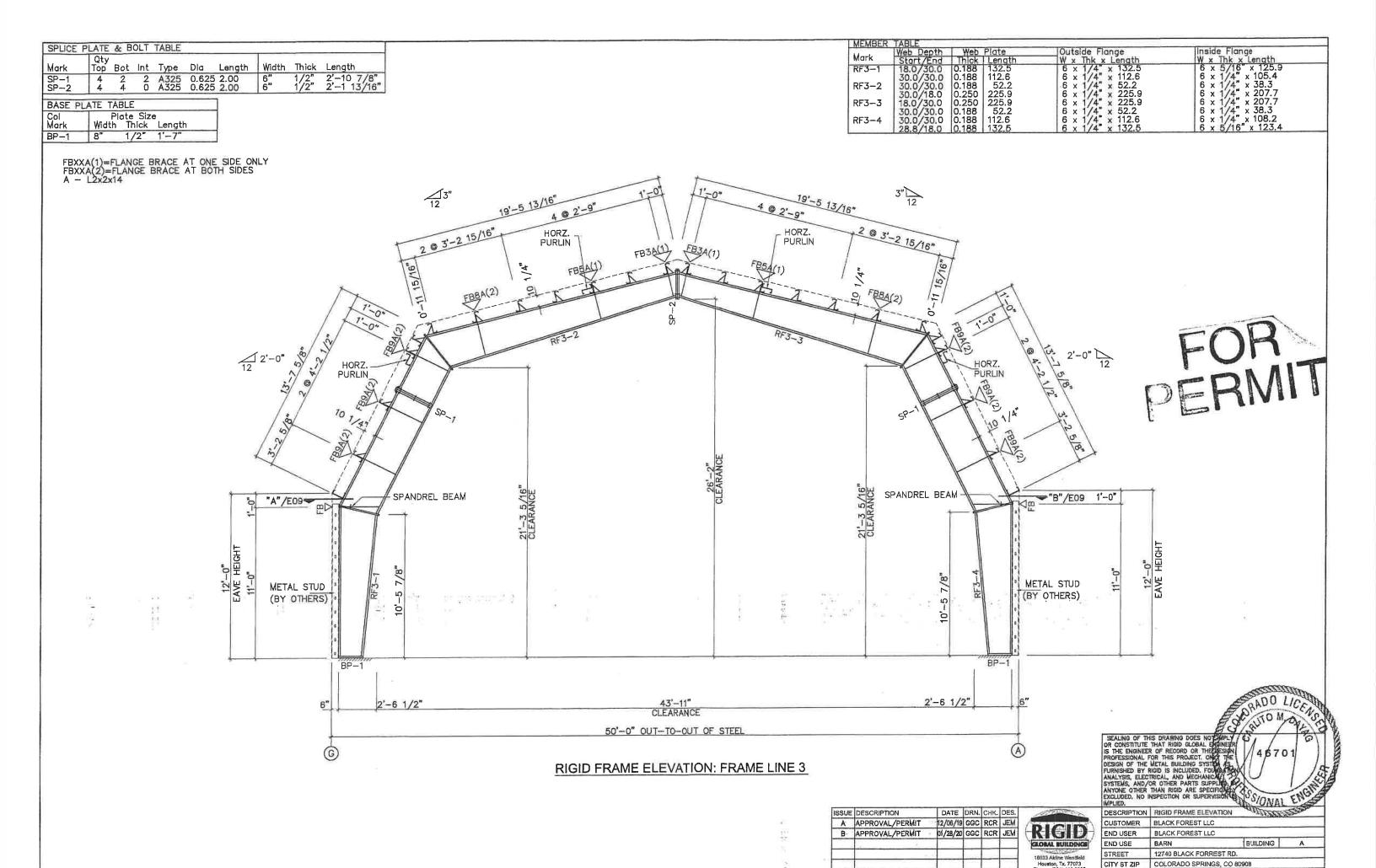
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1	DICTION !
	-KI(iII)
1	GORAL ELECTRICA
1	TO A PUT MALES
4	18933 Aldine Westfield

√ 13'-6" FROM FIN. FLR.

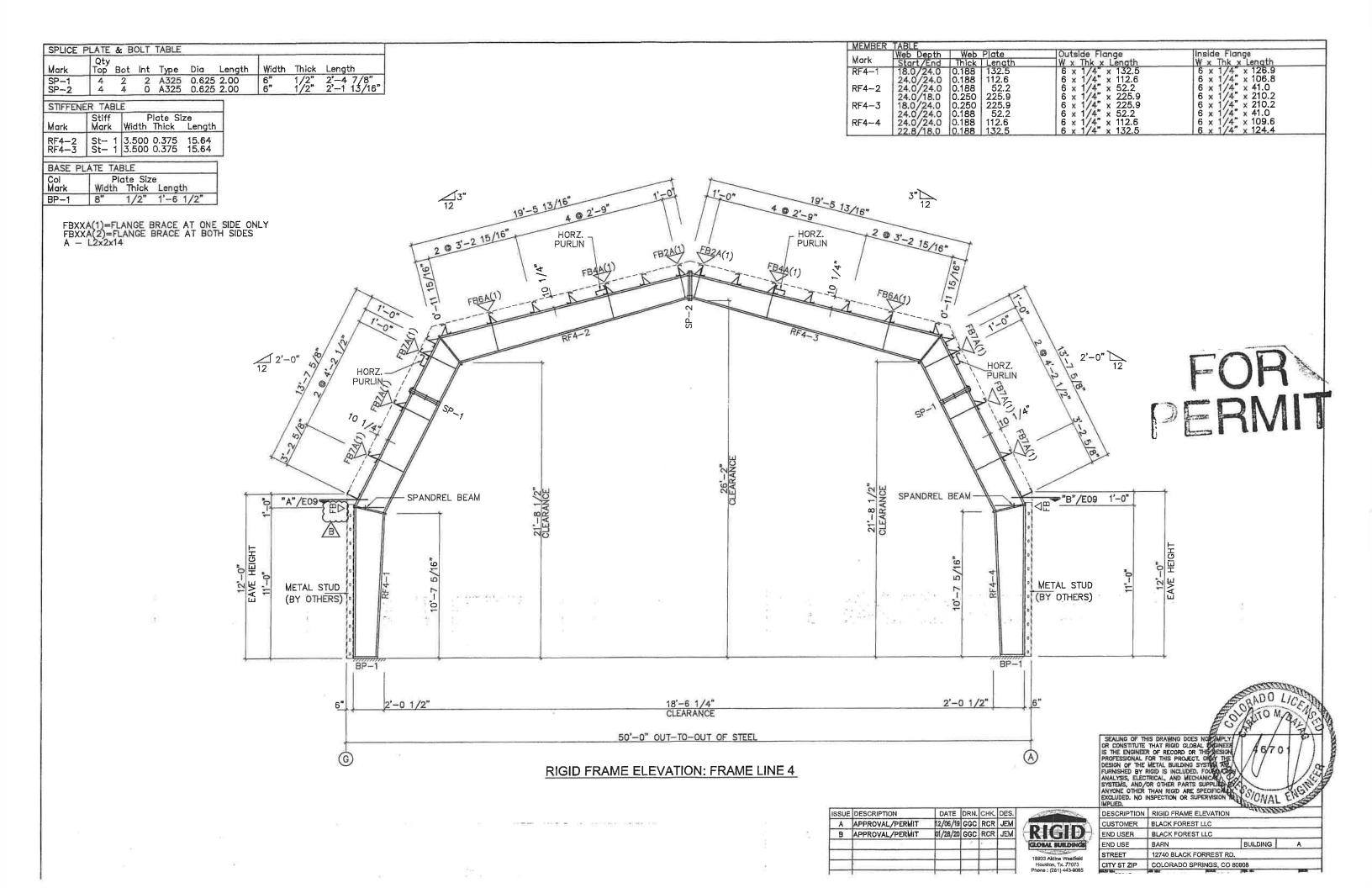
MEZZ. BEAM

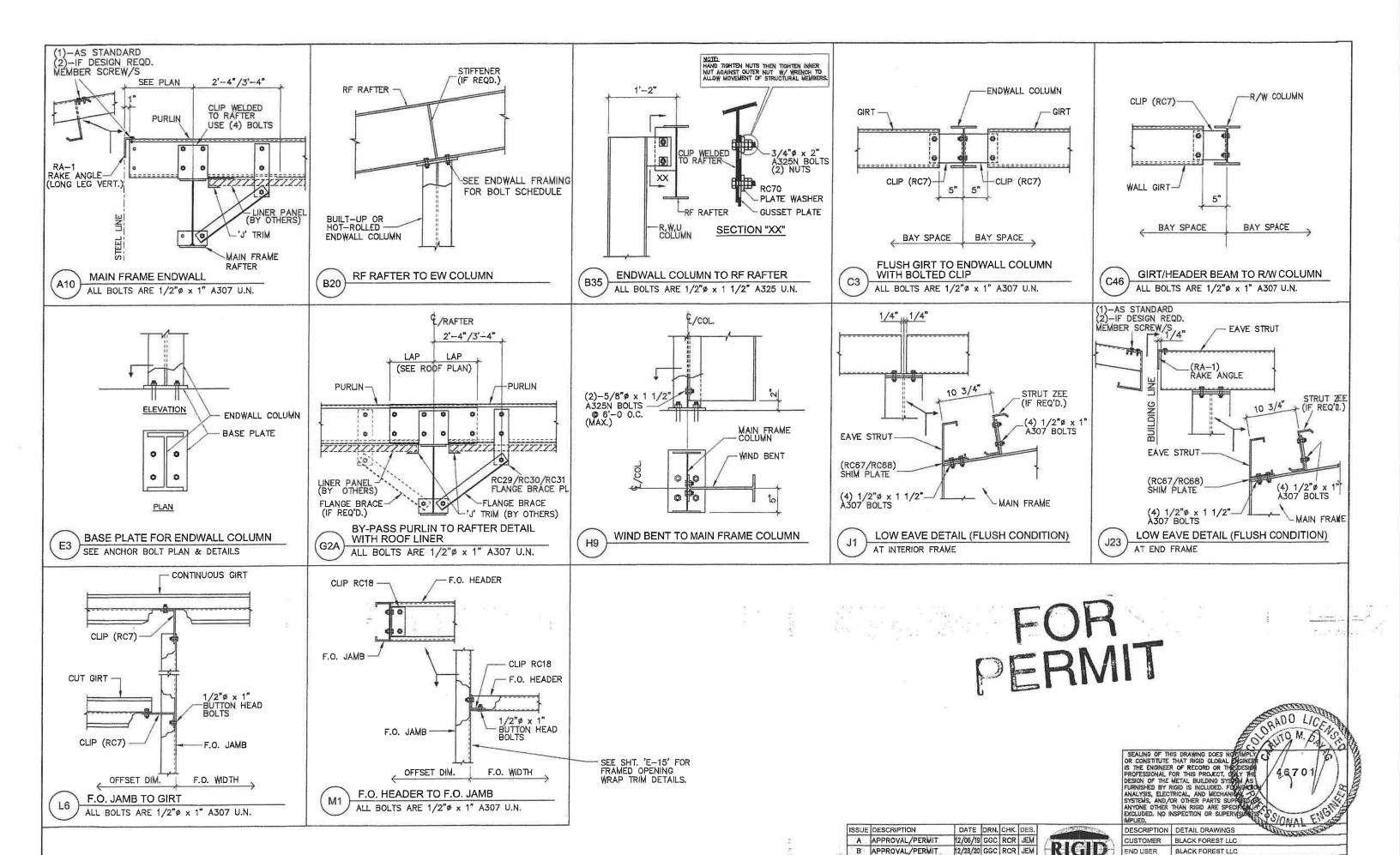






142272 HT S E11 OF 18





BUILDING

END USE

STREET

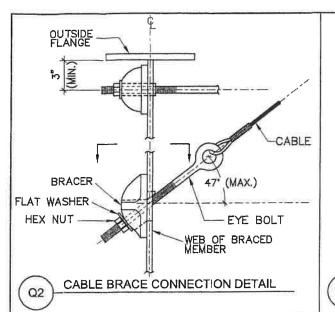
CITY ST ZIP

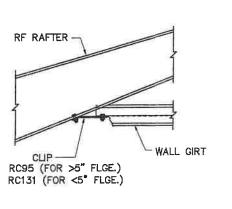
GLOBAL BUILDINGS

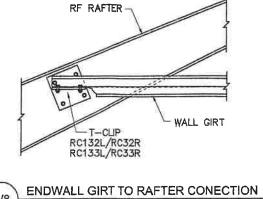
BARN

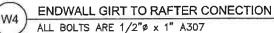
12740 BLACK FORREST RD.

COLORADO SPRINGS, CO 80908

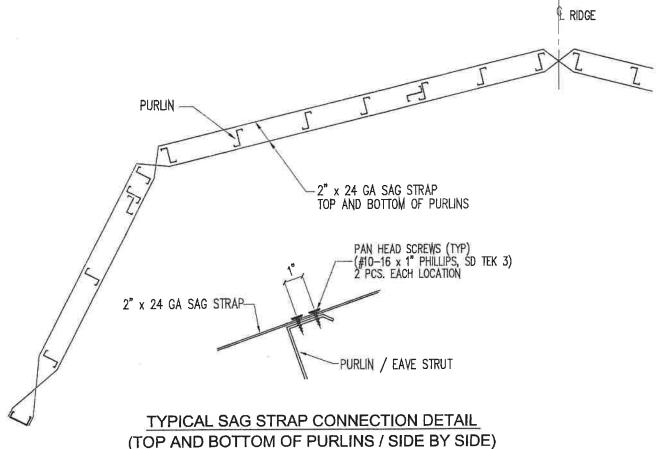


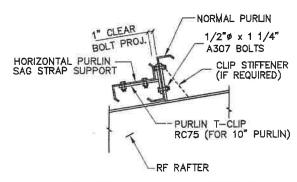






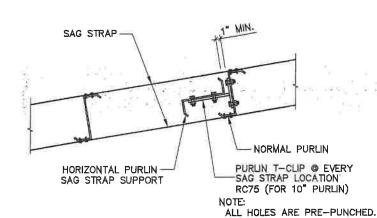
ALL BOLTS ARE 1/2" x 1" A307





HORIZONTAL PURLIN CONNECTION
TO RF RAFTER

ALL BOLTS ARE 1/2" × 1" A307 U.N.



HORIZONTAL PURLIN CONNECTION
TO NORMAL PURLIN

ALL BOLTS ARE 1/2" x 1" A307 U.N.

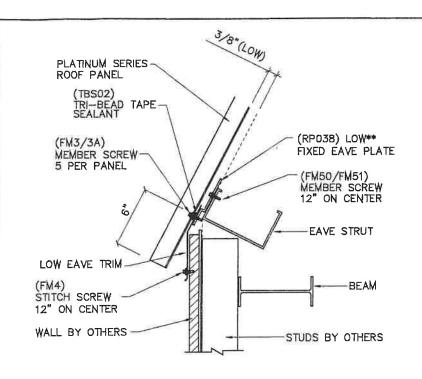
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GLOBAL BUILDINGS	END
18833 Aldine Westfield	STRE
Houston, Tx. 77073	CITY

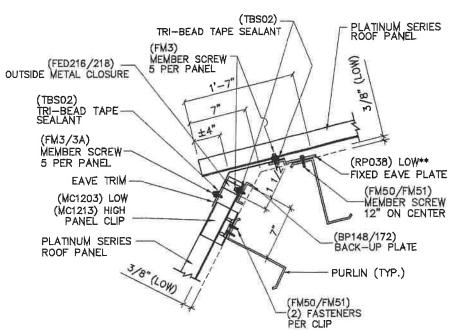
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CRIPTION	DETAIL DRAWINGS	TONUNA	AL Francis
TOMER	BLACK FOREST LLC	A SEETER	ILI COM
USER	BLACK FOREST LLC		
USE	BARN	BUILDING	Α
EET	12740 BLACK FORREST	RD,	
/ ST ZIP	COLORADO SPRINGS, C	O 80908	



SECTION THRU LOW EAVE - FIXED



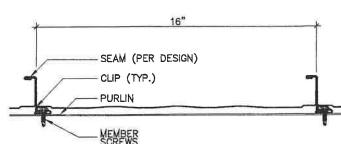
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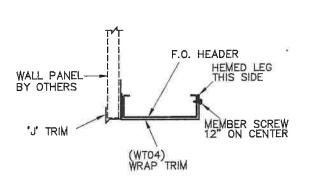
SCREWS

AT OTHER LOCATION

PLATINUM PANEL FASTENER LOCATION SECTION THRU LOW EAVE - FIXED WITH MANSARD

3 1/2" 1 1/2" 1 1/2" 3 1/2" MEMBER 16" AT EAVE



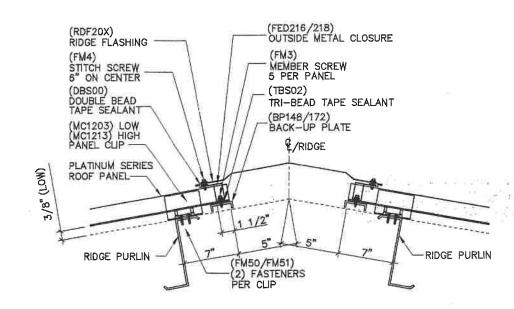


WITH EAVE TRIM

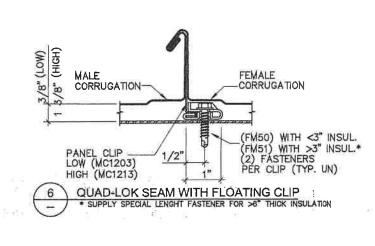
F.O. HEADER TRIM DETAIL WITH WRAP TRIM

HEMED LEG MEMBER SCREW 12" ON CENTER F.O.JAMB (WTO4) WRAP TRIM WALL PANEL J' TRIM BY OTHERS

F.O. JAMB TRIM DETAIL WITH WRAP TRIM



SECTION THRU RIDGE - FLOATING STANDARD CLIP



WRAP TRIM MEMBER SCREW 12" ON CENTER J' TRIM HEMED LEG THIS SIDE F.O SILL WALL PANEL BY OTHERS

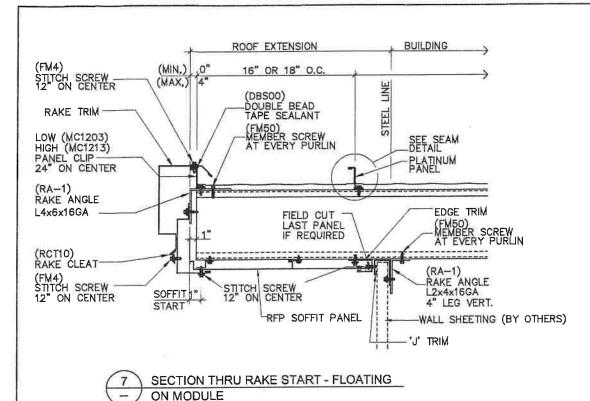
> F.O. SILL TRIM DETAIL WITH WRAP TRIM

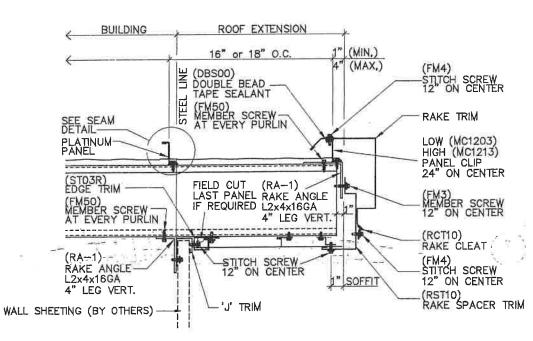
SSUE	DESCRIPTION	DATE			
A	APPROVAL/PERMIT	12/06/19	GGC	RCR	JEM
В	APPROVAL/PERMIT	01/28/20	GGC	RCR	JEM
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4	RIGID
E	ZORAL BUILDINGS
-	18933 Aidine Westfield Houston, Tx. 77073

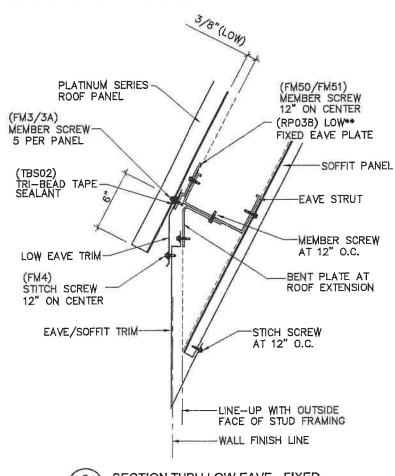
OR CONSTITUTE IS THE ENGINEER PROFESSION AL F DESIGN OF THE FURNISHED BY R ANALYSIS, ELECT SYSTEMS, AND/O	IS DRAWING DOES NO THAT RIGID GLOBAL BRIDGE OF RECORD OR THE GROWN THE PROJECT. ONE METAL BUILDING SYSTEM RIGID IS INCLUDED, FOUR RICAL, AND MECHANICAL OR OTHER PARTS SUPPLITHAN RIGID ARE SPECIFIC SPECTION OR SUPERVISI		ENGL
DESCRIPTION	DETAIL DRAWINGS	- Allients	
CUSTOMER	BLACK FOREST LLC		
END USER	BLACK FOREST LLC		
END USE	BARN	BUILDING	A
STREET	12740 BLACK FORRES	T RD.	
CITY ST ZIP	COLORADO SPRINGS,	CO 80908	
COLUMN TO SERVICE STATE OF THE	Zin Mari	LIPPE, WAL	Parties .

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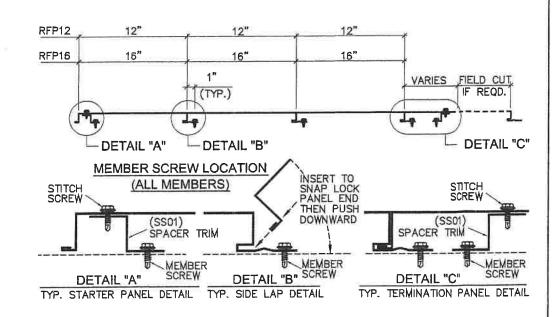




8 SECTION THRU LOW EAVE - FIXED
-- WITH SOFFIT PANEL AT ROOF EXTENSION

vide the for any manufacture of the confidence of

TENER - PERSON DENGET L'AMERICANT LES COMMITTES COMMITTES



2 "RFP12" & "RFP16" RIGID FLAT PANEL SCREW LAYOUT
(SOFFIT PANEL)



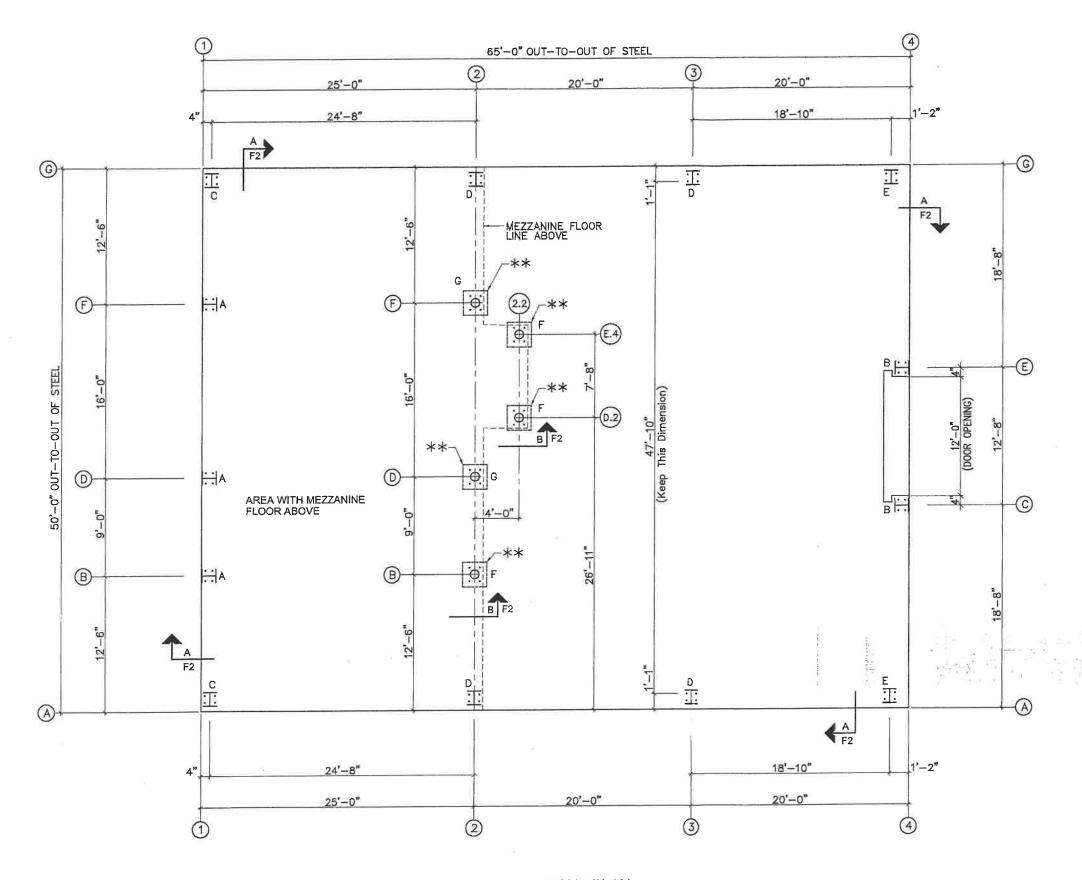
SEALING OF THIS DRAWING DOES NOT IMPLE OR CONSTITUTE THAT RIGID GLOBAL ENGINES. IS THE ENGINEER OF RECORD OR THE DESIGN. PROFESSIONAL FOR THIS PROJECT. ONLY THE DESIGN OF THE METAL BUILDING SYSTEM AS FURNISHED BY RIGID IS INCLUDED. FOUNDATION ANALYSIS, ELECTRICAL, AND MECHANICAL SYSTEMS, AND/OR OTHER PARTS SUPPLIED BY ANYONG OTHER THAN RIGID ARE SPECIFICALLY EXCLUDED. NO INSPECTION OR SUPERVISION IS

SSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.	
Α	APPROVAL/PERMIT	12/06/19	GGC	RCR	JEM	/
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KIGID	Ε
GLOBAL BUILDINGS	E
18933 Aldine Westfield	S
Houston, Tx. 77073	С

LUDED. NO I	NSPECTION OR SUPERVISION IS	70-6	OCTOR
SCRIPTION	DETAIL DRAWINGS		
STOMER	BLACK FOREST LLC		
D USER	BLACK FOREST LLC		
ID USE	BARN	BUILDING	Α
REET	12740 BLACK FORREST RD.		
TY ST ZIP	COLORADO SPRINGS, CO 8	908	
(A)	AND MAKE A PARTY OF THE PARTY O	MP AT	THE R. L.

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COLUMN LAYOUT PLAN

NOTE: All Base Plates @ 100'-0" (U.N.)

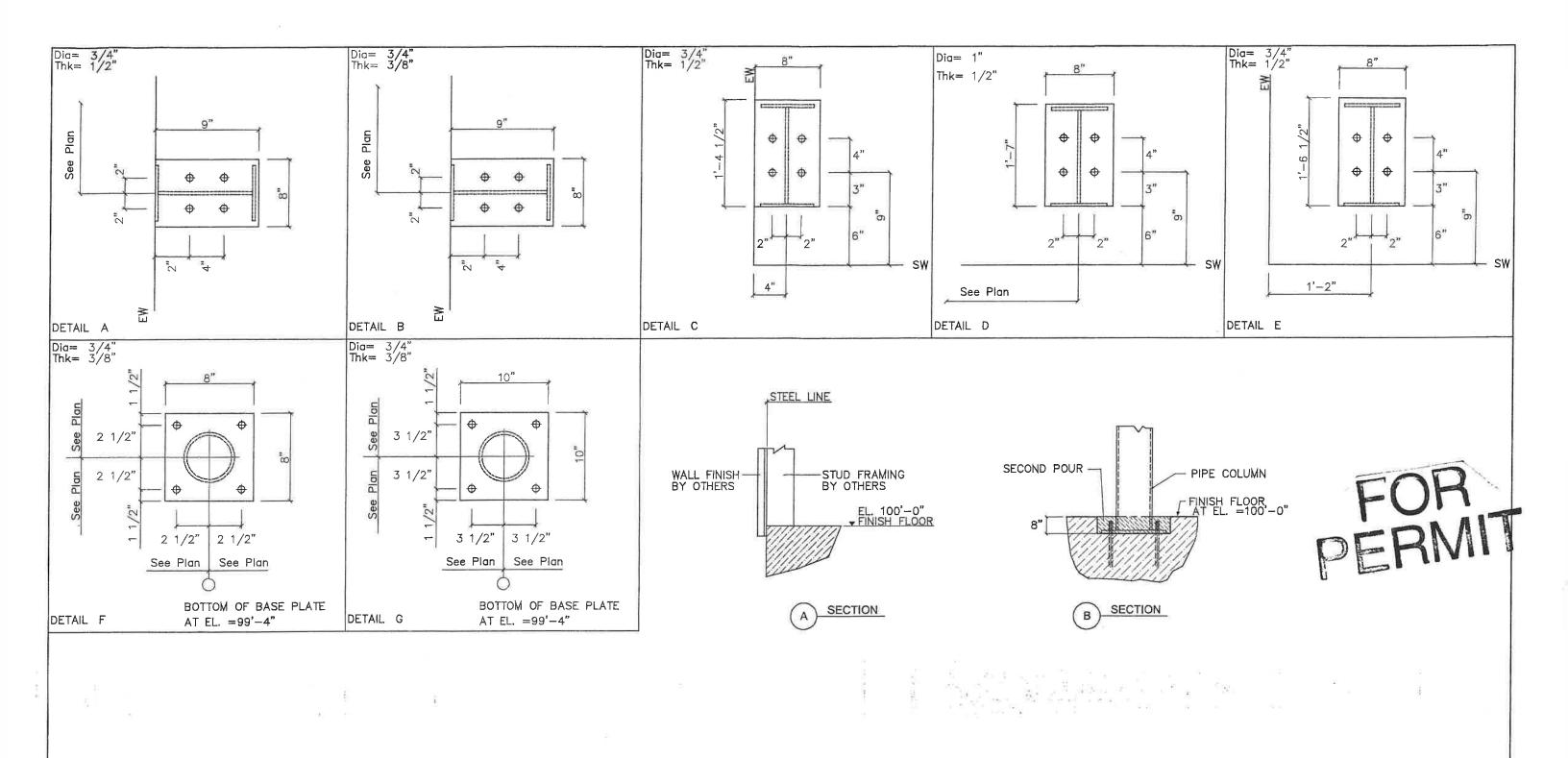
** = DENOTES BOTTOM OF BASE PLATE
AT EL, =99'-4"

ISSUE	DESCRIPTION	DATE	DRN.	снк.	DES.
Α	APPROVAL/PERMIT	12/02/19	GGC	RCR	JEM
В	APPROVAL/PERMIT	01-28-20	GGC	RCR	JEM
9.0					



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IMPLIED.	-1516 E C. W.				
DESCRIPTION	COLUMN LAYOUT PLAN				
CUSTOMER	BLACK FOREST LLC				
END USER	BLACK FOREST LLC				
END USE	BARN	BUILDING	Α		
STREET	12740 BLACK FORREST RE	D.			
CITY ST ZIP	COLORADO SPRINGS, CO	80908			



NOTE:

ONLY ANCHOR BOLTS SETTING PLAN ISSUED & STAMPED "FOR CONSTRUCTION" SHALL BE USED IN SETTING ANCHOR BOLTS. 'RIGID GLOBAL BUILDINGS' SHALL NOT BE RESPONSIBLE FOR ERROR OR DISCREPANCY IF THE DRAWING USED IS NOT VALID FOR CONSTRUCTION.

- 8	QTY.	SYMBOL	DIA.	PROJ.	ANCHOR BOLT D	ETA!
	-	+	1/2"		ANCHOR BOLT PROJECTION	DETA
2		•	5/8"	2"	"PROJ." IS MEASURED FROM	BOLT
OR -	56	-	3/4	2 1/2"	BOTTOM OF BASE PLATE	SUPF
N~	-	-	7/8"	2 3/4"		
LU	16:	-	1"	3" :-	LENGHT OF "PROJ." SHOWN IS	NUTS
		-	1 1/8"	3 1/2"	FOR ONE NUT + ONE WASHER	BY S

NCHOR BOLT D	ETAIL	
OLT PROJECTION MEASURED FROM BASE PLATE	DETAIL OF ANCHOR BOLT AS PER THE SUPPLIER	91 24 95 :
"PROJ." SHOWN IS UT + ONE WASHER	NUTS & WASHERS BY SUPPLIER	

ISSUE	DESCRIPTION	DATE	DRN.	CHK.	DES.
Α	APPROVAL/PERMIT	12/02/19	GGC	RCR	JEM
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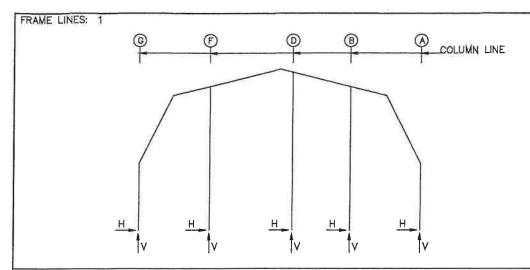
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18933 Aldine Westfield	S
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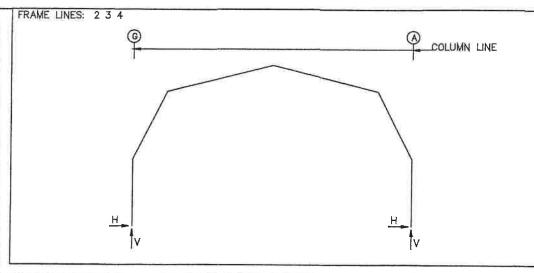
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DESCRIPTION ANCHOR BOLT DETAILS

CUSTOMER BLACK FOREST LLC

MPLIED:		AT LECE	COCC VINE
DESCRIPTION	ANCHOR BOLT DETAILS	-663	ALLES.
CUSTOMER	BLACK FOREST LLC		
END USER	BLACK FOREST LLC		
END USE	BARN	BUILDING	A
STREET	12740 BLACK FORREST RD		
CITY ST ZIP	COLORADO SPRINGS, CO	80908	-18-119





DIOI		. A.C.) ()										
1	D FRAI						=1.hvo		Elecr——		_ Pn out	\	d 6#1_	
Line 1 1 1 1 1	Line G A F D B	Horiz 0.2 -0.2 0.0 0.0	Vert 3.6 3.8 5.4 4.7 4.0	Horiz 0.1 -0.1 0,0 0,0	Vert 1.5 1.5 2.0 1.7	Horiz 0.3 -0.3 0.0 0.0	Vert 2.0 2.3 4.6 4.4 2.9	Horiz -0.5 0.5 0.0 0.0	Vert 10.4 10.4 22.0 20.6 16.3	Horiz 0.5 -0.5 0.0 0.0	Vert 4.1 4.6 9.2 8.8 5.8	Horiz -7.1 -7.5 0.0 0.0	d_Left1- Vert -9.4 7.1 7.6 -3.3 -15.5	
Frame Line 1 1 1 1	Column Line G A F D B	-Wind Horiz 7.4	_Right1- Vert 6.9	Wind Horiz -8.2 -6.3 0.0 0.0	_Left2-	−Wind_ Horiz 6.3	Right2-	Wind	_Long1_	Wine	d_Long2-	- Selsn	nic_Left	
Frame Line 1 1 1 1	Column Line G A F D B	1.4 1.4	e_Right Vert 2.3 -2.4 -2.7 -0.2 3.0	-MIN_5 Horiz 0.3 -0.3 0.0 0.0	SNOW Vert 2.0 2.3 4.6 4.4 2.9	F1UNB_ Horiz 0.1 -0.1 0.0 0.0	SL_i Vert 0.1 0.5 11.1 8.0 0.2	F1UNB_ Horiz 0.1 -0.1 0.0 0.0	SL_R- Vert 0.3 0.9 2.6 9.2 6.9					
Line 2 2		Horiz 1.9 -1.9	Vert 7.5 7.5	Horiz 1.3 –1.3	Vert 4.5 4.5	Horiz 4.3 -4.3		Horiz -0.5 0.5	Vert 9.9 9.9	Horiz 8.6 –8.6	Vert 23.0 23.0	Horiz -11.5 -6.0	Vert −10.9 −6.1	
Frame Line 2 2	Column Line G A	-Wind_ Horlz 6.0 11.5	Right1- Vert -6.1 -10.9	Wind Horiz -12.4 -5.1	l_Left2- Vert -3.9 0.9	-Wind_ Horiz 5.1 12.4	Right2- Vert 0.9 -3.9	——Wind Horiz 3.7 —0.7	l_Long1- Vert -19.6 -20.5	—— Wind Horiz 0.7 —3.7	l_Long2- Vert 20.5 19.6	- Seism Horiz -1.7 -1.8	vert -0.9 0.9	
Frame Line 2 2	Column Line G A	Seismid Horiz 1.7 1.8	e_Rīght Vert 0.9 -0.9	-Seism Horiz 0.0 0.0	ic_Long Vert -5.2 -5.2	-MIN_S Horiz 4.3 -4.3	11.5	-6.5	SL_L- Vert 17.0 11.2	-6.5	Vert 11.2 17.0			
Frame Line 3 3	Column Line G A	Horiz 1.8 -1.8	Dead—— Vert 5.7 5.7	Colla Horiz 1.1 -1.1	ateral— Vert 3.3 3.3	Horiz 3.7 -3.7	-Live Vert 10.0 10.0	Horiz 7.5 -7.5	-Snow Vert 20.0 20.0	Wind Horiz -10.0 -5.2	Left1- Vert -9.5 -5.3	-Wind_ Horiz 5.2 10.0	Right1- Vert -5.3 -9.5	
Frame Line 3	Column Line G A	Wind Horiz -10.8 -4.4	l_Left2- Vert -3.4 0.8	-Wind_ Horiz 4.4 10.8	Right2- Vert 0.8 -3.4	——Wind Horiz 3.2 —0,6	Long1- Vert -18.2 -18.9	Wind Horiz 0.6 -3.2	Long2~ Vert -18.9 -18.2	-Seism Horiz -0.7 -0.7	ic_Left Vert -0.3 0.3	Seismic Horiz 0.7 0.7	Right Vert 0.3 -0.3	
Frame Line 3 3	Column Line G A	Horiz	ic_Long Vert -5.2 -5.2	Horiz	NOW Vert 10.0 10.0	F2UNB_ Horiz 5.7 -5.7	Vert	F2UNB_ Horiz 5.7 -5.7	SL_R- Vert 9.8 14.8				ŧ	
Frame Line 4 4	Column Line G A	Horiz 1,2 -1,2	Dead—— Vert 4.3 4.3	Colla Horlz 0.7 0.7	teral— Vert 2.3 2.3	Horlz 2.5 -2.5	-Live Vert 7.0 7.0	Horiz 4,9 -4.9	Snow Vert 14.0 14.0	-—-Wind, Horlz -8.3 -4.5	_Left1- Vert -7.7 -4.2	-Wind_ Horlz 4.5 8.3	Right1— Vert —4.2 —7.7	
Frame Line 4 4	Column Line G A	——Wind Horiz —8.9 —3.9	l_Left2- Vert -3.5 0.1	-Wind_ Horiz 3.9 8.9	Right2- Vert 0.1 -3.5	Wind Horiz 2.3 -0.5	_Long1- Vert -6.7 -7.2	Wind Horiz 0.5 -2.3	Vert	-Seismi Horiz -0.5 -0.6	c_Left Vert -0,3 0.3	Selsmic. Horiz 0,5 0,6	Vert	
Frame Line	Column Line	-MIN_S	NOW Vert	F3UNB_ Horlz	SL_L- Vert	F3UNB_ Horiz	SL_R- Vert							

RIGID	FRAN	1E:	MAXIMU	/ REAC	TONS,	ANCHOR	BOLTS,	& E	BASE PL	ATES			***************************************	
Frm Line	Col Line	Load Id		mn_Re V Vmax	actions Load Id		V Vmin	Bo Qty	It(in) Dia	Base Width	e_Plate(Length	in) Thick	BOTT. (in)	OF BASE PLATE
1	G	5 9	4.6 3.2	7.8 20.9	12 10	-4.8 -4.1	-1.1 -3.5	4	0.750	8.000	16.50	0.500	0.0	
1	A	13 8	4.8 -3.2	−1.4 21.6	4 11	-4.7 4.2	8.0 -3.8	4	0.750	8.000	16.50	0.500	0.0	
1	F	17 8	0.2 0.0	1.2 34.5	16 11	-0.2 0.0	4.9 -6.3	4	0.750	8.000	8.500	0.500	0.0	
1	D	17 3	0.1 0.0	2.5 28.4	16 11	0.1 0.0	2.8 -0.2	4	0.750	8.000	8.500	0.500	0.0	
1	В	17 9	0.2 0.0	4.3 26.7	16 10	-0.2 0.0	0.2 -6.9	4	0.750	8.000	8.500	0.500	0.0	

RIGI	D FRA	νE:	MAXIMU	M REAC	ΠΟNS,	ANCHO	R BOLTS,	& E	BASE PL	ATES					
Fr Lii	m Col ne Line	Load Id	Col H Hmax H	umn_Re V Vmax	action Load Id	s(k) - Hmin H	V Vmin	Bo Qty	lt(in) Dia	Bas Width	e_Plate(Length	in) Thick	BOTT. (in)	OF BASE PLATE	
2	G	7 9	12.0 11.6	33.9 37.1	12 15	-6.3 1.6	2.2 -7.8	4	1.00	8.000	19.00	0.500	0.0		
2	A	13 8	6.3 -11.6	2.2 37.1	6 14	-12.0 -1.6	33.9 -7.8	4	1.00	8.000	19.00	0.500	0.0		

	CHE	T	?	, , ,
- P)		N	/ I '	Name of Street,

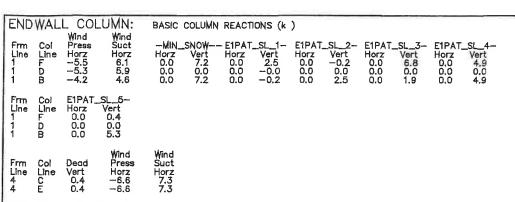
RIGID	FRAN	E:	MAXIMU	M REAC	TIONS, ANCHOR	R BOLTS,	& BASE PL	ATES						
Frm Line	Col Line	Load	Col Hmax H	umn_Re V Vmax	actions(k) - Load Hmin Id H	V Vmin	Bolt(in) Qty Dia	Bas Width	e_Plate(Length	in) Thick	BOTT. (in)	OF BASE	PLATE	
3	G	19 2	10.7 10.3	21.7 29.0	12 -5.4 15 1.4	1.4 -7.9	4 1.00	8.000	19.00	0,500	0.0	3.1		
3	A	13 2	5.4 -10.3	1.4 29.0	18 (-10.7 14 (-1.4	21.7 -7.9	4. 1.00	. 8.000	19.00	0.500	0.0	a,	. !.	

RIGID	FRAN	ſΕ:	MAXIMU	M REAC	ΠΟNS,	ANCHOR	R BOLTS,	&c E	BASE PL	ATES				
Frm Line	Col Line	Load (d	Hmax H	umn_Re V Vmax		s(k) - Hmin H	V Vmin	Bo Qty	t(in) Dia	Bas Width	e_Plate(i Length	n) Thick	BOTT. (in)	OF BASE PLATE
4	G	19 2	7.6 6.8	15.2 20.6	12 10	-4.6 -4.2	0.5 -2.1	4	0.750	8.000	18.50	0.500	0.0	
4	Α	13 2	4.6 -6.8	0.5 20.6	18 11	-7.6 4.2	15.2 -2.1	4	0.750	8.000	18.50	0.500	0.0	

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	SEALING OF THIS DRAWING DOES NOT IMPLY. OR CONSTITUTE THAT RIGID CLOBAL MISINEER IS THE ENGINEER OF RECORD OR THIS PESION APPROFESSIONAL FOR THIS PROJECT. ONLY THE DESION OF THE METAL BUILDING SYSTEM AS FURNISHED BY RIGID IS INCLUDED, FORWARD ANALYSIS, ELECTRICAL, AND MECHANICAL SYSTEMS, AND/OR OTHER PARTS SUPPLIES IN ANYONE OTHER THAN RIGID ARE SPECIFICALLY EXCLUDED. NO INSPECTION OR SUPERVISION MINUTED.

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B	APPROVAL/PERMIT	12/28/20	GGC	RCR	JEM
	DESCRIPTION APPROVAL/PERMIT	12/02/19			

	IMPLIED.		OF OW					
MAN CONTRACTOR OF THE PARTY OF	DESCRIPTION	REACTIONS	dille					
LOUN	CUSTOMER	CUSTOMER BLACK FOREST LLC						
IGID	END USER	BLACK FOREST LLC						
HAL BUILDINGS	END USE	BARN	BUILDING					
33 Aldine Westfield	STREET	12740 BLACK FORREST RD.						
ouston, Tx. 77073 ne : (281) 443-9065	CITY ST ZIP	COLORADO SPRINGS, CO 80908						
16 · (501) +43-3003	SHIRLES MELL	All Mile Bridge	The Day					

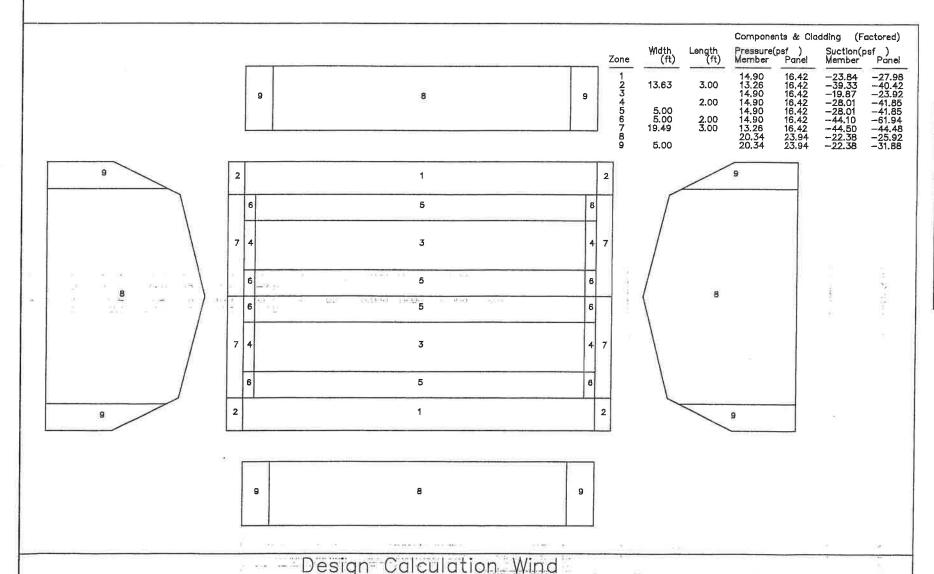


ENDWALL COLUMN: MAXIMUM REACTIONS, ANCHOR BOLTS, & BASE PLATES

Frm	Col Line	Load Id	Hmax H	umn_Re V Vmax	action Load Id		V Vmin	Bo Qty	olt(In) Dīa	Bas Width	e_Plate(Length		BOTT. OF BASE PL	ATE
1	F *	21 3	3.7 0.0	-6.7 37₋5	22 21	-3.3 3.7	-1,5 -6.7							
1	D *	23 1	3,5 0.0	0.1 22.9	22	-3.2	1.5							
1	B *	24 3	2,B 0.0	-6.9 32.7	22 24	-2.5 2.8	-4.0 -6.9							
4	С	26 20	4.4 0,0	0.2 0.4	24	-4.0	0.2	4	0.750	8.000	9.000	0.375	0.0	
4	Ε	26 20	4.4 0.0	0.2 0.4	24	-4.0	0.2	4	0.750	8.000	9.000	0.375	0.0	

	BUIL	DIN	3 BRA	CINC	RE	ACTI	ONS			
	Loc	all — Line	Col Line	± Horz	React Ind — Vert	lons(k —Sel: Horz) smic – Vert	Panel (lb. Wind	Shear 7ft) Sels	Note
	L_EW F_SW R_EW	1 A 4 G	2,3	3.82	8,60	2.30	5.20			(h)
ı	B_SW	Ġ	2,3	3.82	8.60	2.30	5.20			(E)
	(b)Win (h)Rig	d ben ld fran	t in bay ne at e	, base ndwali	above	finish	floor			

THE STREET STREET



NOTES FOR REACTIONS

- All loading conditions are examined and only maximum/minimum H or V and the corresponding H or V are reported.
- 2. Positive reactions are as shown in the sketch. Foundation loads are in opposite directions.
- Bracing reactions are in the plane of the brace with the H pointing away from the braced bay. The vertical reaction is downward.

4. Building reactions are based on the following building data.

Width (ft) : 50

Length (ft) : 65

Eave Height (ft) : 12 / 12

Roof Slape (rise/12) : 24.0:12 / 24.0:12

Design Code : IBC 15

Enclosure : Closed

Dead Load (psf) : SELF WEIGHT

Collateral Load (psf) : 130 mph

Wind Speed (mph) : 130 mph

Wind Importance Factor : 1.00

Wind Exposure : C

Live Load (psf) : 20.00 Live Load (psf)
Frame Live Load (psf)
Ground Snow Load (psf)
Roof Snow Load (psf) 20.00 20 57.000 40 1.000 1.000 1.000 Snow Exposure Snow Importance Factor Thermal Factor Seismic Importance Factor Spectral Response Accel. Spectral Response Coeff. Seismic Coeff. (Fa*Ss) 1.00 1.00 Ss=0.185 Sds=0.197 0.296 :S1=0.059 :Sd1=0.094 :Fa=1.600 Seismic Design Category

FLOOR COLUMN REACTIONS

Frame Line	Col Line	Max.	_Vert (k)	Dead Vert (k)	Coll Vert (k)	Live Vert (k)		Bolt Dia	Base Width	Plate (in Length) Thick	BOTT. (in)	OF	BASE	PLATE
2	F	1	32	2.8	0.6	28	4	0.750	10,00	10.00	0.375	-8.0	-		
2	D	1	27	2,4	0.5	24	4	0.750	10,00	10.00	0.375	-8.0			
2	В	1	22	20	0.5	19	4	0.750	8.000	8.000	0.375	-8.0			
2.2	E,4	1	2	0.2		1.5 =	4	0.750	8.000	8.000	0.375	-8.0			
2.2	D.2	. 1	6	0,4	in the	4,8	4	0.750	8.000	8.000	0.375	-8.0			

ISSUE DESCRIPTION DATE DRN. CHK. DES. A APPROVAL/PERMIT 12/02/19 GGC RCR JEM B APPROVAL/PERMIT 01/28/20 GGC RCR JEM

RIGID GLOBAL BUILDINGS

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DESCRIPTION	REACTIONS	- ASSESS	the con
CUSTOMER	BLACK FOREST LLC		
END USER	BLACK FOREST LLC		2.5
END USE	BARN	BUILDING	Α.
STREET	12740 BLACK FORRES	T RD.	
CITY ST ZIP	COLORADO SPRINGS,	CO 80908	
CONTRACTOR OF THE PERSON OF TH	AND DESIGNATION OF THE PARTY OF	TOTAL	

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