## SUBMITTED TO :

## TTL COATS, LLC ATTN: MICHAEL SMITH **165 SOMMERVILLE PARK ROAD** RALEIGH, NORTH CAROLINA 27603

PHONE: (910) 890-3256

NOTE: DETAIL LABELS CONTAINED WITHIN THIS SET OF PLANS MAY REFERENCE THE ERECTION DRAWINGS MARKED IN THIS SCHEDULE. EXAMPLE: DETAIL A/900 REFERS TO DETAIL "A" LOCATED ON ERC900X.

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ERC010X	$\boxtimes$	ERC200X		ERC420X		ERC619X		ERC752X	
ERC016X	$\mathbf{X}$	ERC201X	X	ERC500X		ERC620X		ERC753X	
ERC100X	$\aleph$	ERC202X	Х	ERC505X	$\mathbf{X}$	ERC621X		ERC754X	
ERC105X	$\mathbf{X}$	ERC203X	$\mathbf{X}$	ERC506X	Х	ERC622X		ERC800X	
ERC106X		ERC204X		ERC515X		ERC623X		ERC900X	
ERC110X	$\mathbf{X}$	ERC206X		ERC600X	Х	ERC624X		ERC901X	
ERC112X	$\bowtie$	ERC207X	$\mathbf{X}$	ERC601X	Х	ERC625X		ERC902X	
ERC115X		ERC208X	$\mathbf{X}$	ERC602X	$\mathbf{X}$	ERC626X		ERC903X	
ERC120X		ERC209X		ERC603X		ERC630X	Х	ERC904X	
ERC130X	$\mathbf{X}$	ERC250X	$\mathbf{X}$	ERC604X		ERC631X	Х	ERC905X	
ERC150X		ERC250XFHP		ERC605X		ERC650X	imes	ERC907X	
ERC151X		ERC251X		ERC606X		ERC700X	$\mathbf{X}$	ERC908X	
ERC152X		ERC251XFHP		ERC607X		ERC710X		ERC910X	
ERC153X		ERC252X	$\boxtimes$	ERC608X		ERC711X		ERC911X	
ERC154X		ERC251XFHP		ERC609X		ERC712X		ERC912X	
ERC155X		ERC253X		ERC610X	$\mathbf{X}$	ERC713X		ERC913X	
ERC175X		ERC254X	$\ltimes$	ERC611X		ERC720X		ERC914X	
ERC176X		ERC255X		ERC612X		ERC725X		ERC915X	
ERC177X		ERC256X		ERC613X		ERC730X		ERC916X	
ERC178X		ERC257X		ERC614X	Х	ERC731X		ERC917X	
ERC179X		ERC258X		ERC615X	Х	ERC731XFHP		ERC918X	
ERC180X		ERC302X	$\mathbf{X}$	ERC616X		ERC732X		ERC919X	
ERC181X		ERC302X(INS)		ERC617X	Х	ERC732XFHP			
ERC182X		ERC410XFL	X	ERC618X	Х	ERC750X			
ERC183X		ERC411X		ERC618XALT	Х	ERC751X			

SCHED	ULE OF DRAWINGS
DRAWING NO.	DESCRIPTION
	COVER SHEET BUILDING NOTES APPENDIX B
S3	ELEVATIONS & NOTES FLOOR PLAN, DETAILS & NOTES FLOOR PLAN, DETAIL & NOTES FLOOR PLAN, DETAILS & NOTES CROSS SECTIONS FRAMING ELEVATIONS & NOTES
E	FOUNDATION PLAN, DETAIL & NOTES FOUNDATION PLAN, DETAILS & NOTES FOUNDATION PLAN, DETAILS & NOTES



## UNIVERSITY STORAGE COATS, NORTH CAROLINA

#### WIND LOAD DESIGN DATA:

ULTIMATE DESIGN WIND SPEED (V<sub>ULT</sub>): 110 MPH NOMINAL DESIGN WIND SPEED (VASD): 86 MPH **RISK CATEGORY: I** WIND EXPOSURE: B INTERNAL PRESSURE COEFFICIENT: ± 0.18

### SNOW LOAD DESIGN DATA: GROUND SNOW LOAD (Pg): 15 PSF FLAT-ROOF SNOW LOAD (Pf): 12.1 PSF SNOW EXPOSURE FACTOR (Ce): 1.2 SNOW LOAD IMPORTANCE FACTOR (I): 0.8 THERMAL FACTOR (Ct): 1.2

EARTHQUAKE LOAD DESIGN DATA: - RISK CATEGORY: I - SEISMIC IMPORTANCE FACTOR (I): 1.0 - SEISMIC DESIGN CATEGORY: C - ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE (ASCE 7-10 SECTION 12.8) - BASIC SEISMIC-FORCE-RESISTING SYSTEM: LIGHT FRAMED WALLS WITH STEEL SHEAR PANELS - SITE CLASS: D - DESIGN BASE SHEAR: BUILDING "1": 2.268<sup>K</sup> BUILDING "2": 2.268<sup>K</sup> BUILDING "3": 1.040<sup>K</sup> - RESPONSE MODIFICATION FACTOR (R): 7.0 - SEISMIC RESPONSE COEFFICIENT (C<sub>s</sub>): 0.027 - MAPPED SPECTRAL RESPONSE ACCELERATION (S<sub>S</sub>): 17.7% G (S<sub>1</sub>): 8.4% G - SPECTRAL RESPONSE COEFFICIENTS (S<sub>DS</sub>): 18.8% G  $(S_{D1}): 13.4\%$  G

**BUILDING DESCRIPTION :** 

**BUILDING CODE :** 

SEAL 027055

19-350 N15

Reviewed For Code Compliance By: D. Banks Wallace

Chief Deputy Fire Marshal

11/12/2019 8:05:37 AM

**BUILDING DATA :** 

SINGLE STORY METAL BUILDINGS BOLTED TO CONCRETE SLAB FOUNDATIONS.

**BUILDING SIZE :** 

BUILDING BUILDING BUILDING	"2"	60' x 280' 60' x 280' 27.5' x 280'	_	16,800	sq.	ft.	9'-4"	EAVE	HEIGHT HEIGHT HEIGHT	
		TOTAL	=	41,300	sq.	ft.				

**PARKING DATA :** 

SEE SITE PLAN BY OTHERS

THE 2018 NORTH CAROLINA BUILDING CODE

**DESIGN CRITERIA :** 

THESE BUILDINGS HAVE BEEN DESIGNED TO CONFORM TO THE STRUCTURAL REQUIREMENTS OF THE 2018 NORTH CAROLINA BUILDING CODE. WITH CURRENT REVISIONS.

THESE BUILDINGS HAVE BEEN DESIGNED FOR THE FOLLOWING LIVE LOADINGS IN ADDITION TO THE DEAD LOADINGS :

<b>ROOF LIVE LOADING :</b>	20 psf
FLOOR LIVE LOADING:	125 psf
USE GROUP:	S-1
TYPE OF CONSTRUCTION:	II–B

IT IS THE RESPONSIBILITY OF THE BUYER/OWNER TO VERIFY THE FIREWALL, LIVE LOAD AND WIND LOAD REQUIREMENTS WITH THE LOCAL CODE AUTHORITY.

**PROJECT NUMBER :** 

NC19185

ADDED ERC650X 10/28/19 JCM [2] ADDED SHEET 10/28/19 JCM

ENERAL NOTES:	CONSTRUCT
I. CONCRETE FOUNDATIONS AND FLOOR SLAB ARE TO BE SUPPLIED AND INSTALLED BY OTHERS . WEDGE ANCHORS FOR INTERIOR AND EXTERIOR FOOTINGS SUPPLIED AND INSTALLED BY BETCO.	I. THE CONTRACTOR RELATED TO ALL
2. EXTERIOR OPENINGS, NOT DESIGNATED AS DOOR LOCATIONS, TO BE COMPLETED USING EXTERIOR WALL PANELS FURNISHED BY BETCO.	2. THE CONTRACTOR
3. USE DOW 191 SILICONE CAULK AND 1/2" WIDE BUTYL RUBBER TAPE SEALANT FOR ROOF INSTALLATION. USE DOW 199 SILICONE CAULK AT DOUNSPOUT TO GUTTER JOINT.	ON OR ADJACENT 3. MEANS AND METH
I. INTERIOR PARTITIONS PERPENDICULAR TO ROOF BEAM(S) MUST BE COMPLETED BEFORE ROOF PANELS ARE	CONTRACTORS RE 4. STRUCTURAL DRA
INSTALLED. USE PARTITION FRAMING TO PLUMB AND SQUARE COLUMNS AND HEADER SECTIONS. CHECK BUILDING WIDTH AT TOP OF COLUMNS PRIOR TO ROOF INSTALLATION.	AND TRADES. THE 5. NO OPENINGS NO
5. THOROUGHLY SWEEP ROOF PANELS FOLLOWING INSTALLATION TO REMOVE METAL DRILLINGS. 6. THIS DESIGN IS BASED ON USING ONLY METAL BUILDING COMPONENTS WHICH ARE PROPRIETARY TO BETCO. FURTHER.	ELEMENTS WITHOU 6. THE CONTRACTO
THE PROFESSIONAL ENGINEER'S SEAL IS INVALID UNLESS ONLY BETCO METAL BUILDING COMPONENTS ARE UTILIZED.	STRUCTURE. SUCH T. THE STRUCTURE
7. METAL STUDS (IF APPLICABLE) MAY REQUIRE FIELD CUTTING DEPENDING UPON THE EAVE HEIGHT OF THE STRUCTURE.	SUPPORT REQUI
8. UNIT SIZES SHOWN ARE NOMINAL. ACTUAL CLEAR DIMENSIONS INSIDE UNITS MAY VARY ACCORDING TO FINAL DESIGN OF COMPONENTS.	8. THE CONTRACTO DEVIATION OR 8 OF ANY REQUIRE
9. THESE DRAWINGS ARE THE PROPERTY OF BETCO, INC. AND MAY NOT BE USED OR REPRODUCED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF BETCO, INC.	SHOP DRAWINGS THE STRUCTURAL STRUCTURAL EN
10. THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH AND COORDINATED WITH THE ARCHITECTURAL DRAWINGS AND OTHER CONTRACT DOCUMENTS.	9. ALL THINGS WHI CONTRADICTION
11. THE GENERAL CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL SLEEVES, PADS, DEPRESSIONS, OPENINGS, ETC. AS REQUIRED BY THE VARIOUS TRADES.	OF THE STRUCTU WORK MAY PRO
	10. CONTRACTOR S WITH NEW WORK
<u>DUNDATIONS:</u> I. The foundation design is based on a presumed allowable soil bearing pressure of 3000 psf.	IN WRITING OF C 11. CONTRACTOR 18 INCONSISTENCIE
NOTIFY ENGINEER IF SITE CONDITIONS DIFFER FROM DESIGN ASSUMPTIONS SPECIFIED. 2. IF FOOTING ELEVATIONS SHOWN OCCUR IN A DISTURBED, UNSTABLE OR UNSUITABLE SOIL,	CONTRACT, SHO
THE ENGINEER SHALL BE NOTIFIED. 3. TOP OF FOOTING ELEVATIONS ARE SHOWN ON THE DRAWINGS ARE TO BE DETERMINED BY THE CONTRACTOR	12. DO NOT SCALE
IN THE FIELD IN ACCORDANCE WITH THE GUIDE LINES SET FORTH IN THE DRAWINGS AND SPECIFICATIONS.	
REQUIREMENTS OF THE GEOTECHNICAL REPORT. MATERIALS USED FOR FILL UNDER FOOTINGS AND WITHIN BUILDING LIMITS SHALL BE TESTED AND APPROVED FOR THE USE BY THE GEOTECHNICAL TESTING AGENCY.	<u>CONCRETE:</u> 1. SUBMIT WRITTEN REP
3. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE STRUCTURAL ENGINEERS APPROVAL.	THAN IS DAYS PRIC THAN TWELVE (12) M
5. FOUNDATION WALLS RETAINING EARTH SHALL BE BRACED AGAINST BACK FILLING PRESSURES UNTIL FLOOR SLABS AT TOP AND BOTTOM ARE IN PLACE.	2. ALL CONCRETE WOR ACI BUILDING CODE
I. FOUNDATION WALLS OR GRADE BEAMS HAVING EARTH PLACED ON EACH SIDE SHALL HAVE BOTH FILLED SIMULTANEOUSLY TO MAINTAIN A COMMON ELEVATION. 3. DO NOT PLACE CONCRETE IN ANY EXCAVATION CONTAINING ICE, FROST, FROZEN GROUND	(ACI 318-14). 3. ALL CONCRETE 6H4
OR FREE WATER FROZEN SUB GRADES MUST BE THAWED AND RECOMPACTED PRIOR TO PLACING CONCRETE.	FOR STANDARD PA TWO COPIES OF ALL ARCHITECT.
B. EARTH FORMED FOOTINGS SHALL CONFORM TO THE SHAPE, LINES, AND DIMENSIONS AS SHOWN ON THE	
FOUNDATION PLAN. ALL WATER SHALL BE REMOVED BEFORE DEPOSITING CONCRETE.	
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ROUNDATICN FLAN. ALL WATER GHALL BE REFORE DEPORTING CONCRETE. (8) BEFORE PLACING CONCRETE, ALL DIFIBUIDING THE BONDERLY LOCATED, ACCURATELY POSITIONED, AND MAINTAINED SECURELY IN FLACE. (1) THE CONTRACTOR GHALL COORDINATE AND VERITY ALL DIFINSIONS PRIOR TO STARTING CONSTRUCTION, AND ANY DISCRETANCY GHALL BE EXCLUSED TO THE PLANEER. (2) PERIFETER FOUNDATION MUST NOT EXCEED 1/4' ELEVATION VARIATION ALONG ANY B/0' DISTANCE OF BUILDING LENGTH. (3) PERIFETER FOUNDATION TO EXTEND PELOW PROOF LINE. VERITY REQUIRED DEPTH WITH LOCAL BUILDING OFFICIALS PROVIDED TO PROCEEDING WITH FOUNDATION WORK AND NOTIFY DEGINEER OF DEVIATION REOR TO AWING. (4) THE ATTERNIC AND CONCRETE WEN SUBJECTED TO TENSILE STRESS (5) AWI CONCRETE WEN SUBJECTED TO TENSILE STRESS (5) AWI CONTROL, JOINTS IN LAB SUBFACE AT APPROXIMATELY 10/-0' INTERVALS OFFICE TERM FERMENCIES OCCURETE WEN SUBJECTED TO TENSILE STRESS (5) AWI CONTROL, JOINTS IN LAB SUBFACE AT APPROXIMATELY 10/-0' INTERVALS OFFICE (2) SOUTONED, DOINTS IN LAB SUBFACE AT APPROXIMATELY 10/-0' INTERVALS OFFICE (2) SOUTONE OF CONCRETE WEN SUBJECTED TO TENSILE STRESS (5) AWI CONTROL, JOINTS IN LAB SUBFACE AT APPROXIMATELY 10/-0' INTERVALS OFFICE (2) SOUTONE OF CONCRETE WEN SUBJECTED TO TENSILE STRESS (5) AWI CONTROL, JOINTS IN LAB SUBFACE AT APPROXIMATELY 10/-0' INTERVALS OFFICE (2) SOUTONE OF CONCRETE REINFORCING STELL IN INFO TENTIONE INFORMATION ALONG AND AND AND (2) SOUTONE OF CONCRETE REINFORCING STELL INFO TENSILE (2) FORMED START AFED, SAME SUBJECTED DATE AND AND (2) SUBJECTED AND ATT AFED STRESS (3) AND THE ATTRONE OF CONCRETE REINFORCING STELL IN INFO (4) FLACE REINFORCEMENT AND THES IN GROUT SPACES PRIOR TO GROUTING. (4) FLACE REINFORCEMENT AND THES IN GROUT SPACES PRIOR TO GROUTING. (5) CONCRETE CONTRACT 2) INCLUES (6) ALD REINFORCEMENT AND THES IN GROUT SPACES PRIOR TO GROUTING. (6) CONCRETE AND ARD ORATION 2) INCLUES (7) ALD REINFORCEMENT AND THES IN GROUT SPACES PRIOR TO GROUTING. (6) CONCRETE AND AND CONTACT 2) INCLESS (6) ALD	<ul> <li>WITH MAXIMUM UNIT STRENGTH SHALL E SLABS ON GRADE. SHALL BE NORMAL 4000 PSI AT 28 DJ</li> <li>MIX DESIGNS, INCLU PREPARED IN ACC WHERE NOTED OTH COMFORM TO ASTM TYPE IP WHERE FLY ASTM C 33 AGGREG SHALL CONFORM TO CHLORIDE SHALL E</li> <li>AGGREGATE SIZES I. FORMED CO. II. GRADE SLIII. COARSE MI IV. FINE MASC</li> <li>WATER REDUCING J.</li> <li>AIR ENTRAINING AD USED IN ALL CONC OR SERVICE COND</li> <li>WATER/CEMENT RA PREEZING/THAWING.</li> <li>ALL PUMPED CONC SHALL CONTAIN A PREEZING/THAWING.</li> <li>ALL PUMPED CONC SHALL CONTAIN A IN NO CASE SHALL I. ALL FOUNDA II. EXTERIOR F III. ALL EXPOSE IIII. SLABS ON G</li> <li>LIGUID MEMBRANE APPLIED WITHIN TW AND WALLS, UNO, C</li> <li>FLOORS IN AREAS SHALL BE CURED CURED BY USE OF THOROUGHLY BRC</li> <li>USE A NON-CORRC TEMPERATURES BE TEMPERATURES DE TEMPERATURES DE TEMPERATURES</li></ul>
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ROUNDATION PLAN. ALL WATER GHALL BE REFORDED TENS BEFORE DEPOSITING CONCRETE.	<ul> <li>WITH MAXIMUM UNIT STRENGTH SHALL E SLABS ON GRADE. SHALL BE NORMAL 4000 PSI AT 28 D.</li> <li>MIX DESIGNS, INCLU PREPARED IN ACC WHERE NOTED OTH COMFORM TO ASTM TYPE IP WHERE FLY ASTM C 33 AGGREG SHALL CONFORM TO CHLORIDE SHALL E AGGREGATE SIZES I. FORMED C II. GRADE SL III. COARSE M IV. FINE MASC</li> <li>G. WATER REDUCING J.</li> <li>AIR ENTRAINING AD USED IN ALL CONC OR SERVICE COND</li> <li>WATER/CEMENT RA FREEZING/THAWING.</li> <li>ALL PUMPED CONC SHALL CONTAIN A IN NO CASE SHALL I. ALL FOUNDA II. EXTERIOR F III. ALL EXPOSE IIII. SLABS ON G</li> <li>II. LIQUID MEMBRANE APPLIED WITHIN TW AND WALLS, UNO, C</li> <li>FLOORS IN AREAS SHALL DE CURED CURED BY USE OF THOROUGHLY BRC</li> <li>USE A NON-CORRC TEMPERATURE OF I WITH ACI 306.</li> <li>ALL CONSTRUCTIVE UNLESS</li> <li>REINFORCING IN AL OR AROUND ALL C AND SPACING TO IS. REINFORCING IN AL OR AROUND ALL C AND SPACING TO IS. REFER TO ARCHIT WASHES, MASONRY EMBEDDED PLATE</li> <li>FORMS FOR ROUND FINISH ON EXPOSE</li> <li>REFER TO ARCHIT WASHES, MASONRY EMBEDDED PLATE</li> <li>REFER TO ARCHIT WASHES FOR ROUND FINISH ON EXPOSE</li> </ul>
RONDATION FLAN. ALL WATER BHALL BE RETIONED BEFORE DEPOINTING CONCRETE. () BEFORE FLACING CONCRETE ALL DEPORTURE DITENTS SHALL BE PROPERLY LOCATED, ACQURATELY POSITIONED, AND MAINTAINED SECURELY IN FLACE II THE CONTRACTOR SHALL CO-DENDANCE AND VERITY ALL DIFENSIONS PRIOR TO STARTING CONSTRUCTION, AND ANY DIGENERATION HIAL DE DENDANCE TO LEAST TO THE ATENNON OF THE ENVINEER 2. PERIFIETER FOUNDATION MUST NOT EXCEED IN'S BUILT TO THE ATENNON OF THE ENVINEER 3. PERIFIETER FOUNDATION TRATINGT EXCEED IN'S ELEVATION VARIATION ALONG ANY 59' DISTANCE OF BUILDING DENDELOU PROST LINE. VERITY REQUIRED DEFINI WITH LOCAL BUILDING OFFICIALS FRICKT TO PROCEED CONCRETE INSTITUTE DOES NOT RECORMED PERIFITY ENGINEER OF DEVATION FROM TRATINGS. 4. THE ATENCAN CONCRETE INSTITUTE DOES NOT RECORMED INTERIOR DEFINI WITH LOCAL BUILDING OFFICIALS FRICKT TO PROCEED CONCRETE INSTITUTE DOES NOT RECORMED BARS CONFORMING TO ADMIN AND ALL BE NEUBILLET STELL, DEPORTED BARS CONFORMING TO ADMIN AND ALL BE DETAILED, FARMENTELY 16'-0' INTERVALS OFFSET CITIS 2'-5' TIMINUT FROM INTERIOR COLUNI LINES.  ENDINE ENDING OF CONCRETE REINFORCING STELL IS NOT PERMITTED WITHOUT WITTIN ATTRACT INTERIOR COLUNI LINES.  ENDINCE CONCRETE REINFORCING STELL IS NOT PERMITTED WITHOUT WITTIN ATTRACT AND THEN IN REQUITIES AND PLACED IN ACCORDANCE UITH ACI SH-6' ACI DETAILING MANULL-BE'S ANDHER  3. ALL REINFORCING STALL BE DETAILED, FARRICATED AND PLACED IN ACCORDANCE UITH ACI SH-6' ACI DETAILING MANULL-BE'S ANDHER  3. ALL REINFORCING STELL BUILLET STELL DERVENTED UITH ACI SH-6' ACI DETAILING MANULL-BE'S ANDHER  4. FOOTING AND GRADE BEAN  5. CONCRETE CONCRAGE OF REINFORCING STELL BUILL DE IN MANUL OF ATADARD FRAACTORY LATER TA AND THE DIMENNIALL DE IN ACCORDANCE UITH ACI SH-6' ACI DETAILING MANULL-BE'S ANDHER  5. CONCRETE CONCRAGE OF REINFORCENS STELL BUILL DE IN ACCORDANCE UITH ACI SH-6' ACI DETAILING MANULL-BE'S ANDHER  5. CONCRETE CONCRAGE OF REINFORCENS STELL BUILL DE IN ACCORDANCE UITH ACI SH-6' ACI DETAILING MANULL-BE'S ANDHER  5. CONCRETE AND CAN PERMISSION  5	<ul> <li>WITH MAXIMUM UNIT STRENGTH SHALL E SLABS ON GRADE. SHALL BE NORMAL 4000 PSI AT 28 D.</li> <li>MIX DESIGNS, INCLU PREPARED IN ACC WHERE NOTED OTH COMFORM TO ASTM TYPE IP WHERE FLY ASTM C 33 AGGREG SHALL CONFORM TO CHLORIDE SHALL E</li> <li>AGGREGATE SIZES I. FORMED C II. GRADE SHALL E</li> <li>AGGREGATE SIZES I. FORMED C II. GRADE SHALL E</li> <li>CARSE MIN. FINE MASC</li> <li>WATER REDUCING J.</li> <li>AIR ENTRAINING AD USED IN ALL CONC OR SERVICE COND</li> <li>WATER/CEMENT RAI FREEZING/THAWING.</li> <li>ALL PUMPED CONC SHALL CONTAIN A FREEZING/THAWING.</li> <li>ALL PUMPED CONC SHALL CONTAIN A II. EXTERIOR P III. ALL EXPOSE IIII. SLABS ON G</li> <li>II. LIQUID MEMBRANE APPLIED WITHIN TW AND WALLS, UNO, C</li> <li>FLOORS IN AREAS SHALL DE CURED CURED BY USE OF THOROUGHLY BRO</li> <li>USE A NON-CORRC TEMPERATURES DE TEMPERATURE OF I WITH ACI 306.</li> <li>ALL CONSTRUCTION STRUCTURE UNLESS</li> <li>REINFORCING IN AL OR AROUND ALL C AND SPACING TO THE WASHES, MASONRY EMBEDDED PLATE</li> <li>REFER TO ARCHIT WASHES, MASONRY</li> <li>BASE PLATES, ANG</li> </ul>
MONDATION FLAN. ALL UNTER BAULL DE REPORTED DEFORE DEPORTING CONCRETE.         IS BEFORE FLACING SCREETE ALL EDEBORDED THE'S SHALL DE PROFERIT LOCATED, ACCURATELY         POSITIONED, AND MANTAINED SECURELY IN FLACE         IN THE CONTRACTOR SHALL CORDINATE AND VEREFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION, AND MANTAINED SECURED IN' ELEVATION VARIATION ALC'NG ANY SE'D DISTANCE         CO BUILDING STALL CORDINATE AND VEREFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION, AND MAN DISCRETANCY GALL DE EXCEED IN' ELEVATION VARIATION ALC'NG ANY SE'D DISTANCE         CO BUILDING STATION TO EXTEND BELCU PROFILE.       VEREFY REQUIRED DEPTH WITH LOCAL DUILDING OFICIALS         PRIOR TO PROCEED CONCRETE INSTITUTE DOES NOT RECOGNIZE FIBERTEEH 44 & A GUBSTITUTE FOR WIRE         PENN RENORCED CONCRETE WIST MALE DOES NOT RECOGNIZE FIBERTEEH 44 & A GUBSTITUTE FOR WIRE         MEM RENORCED CONCRETE INSTITUTE DOES NOT RECOGNIZE FIBERTEEH 44 & A GUBSTITUTE FOR WIRE         MEM RENORCED CONCRETE INSTITUTE DOES NOT RECOGNIZE FIBERTEEH 44 & A GUBSTITUTE FOR WIRE         MEM RENORMED SECLEMENT RENORMATION TO START TO START         MEM RENORME SECLE STOTE TO ENDINGE         MEM RENORME GENERGE COLUMN LINES.         CONCRETE CONCRETE RENORMANT STELL IN NOT PERMITTED WITHOUT         WIRTH RENORMAGE OF CONCRETE RENORMANTER         ALL RENORMENS AGUE DE PETALLED, FARENCIATED AND FALCED IN ACCORDANCE         WIRTH RENORMAGE OF THE RENORMANTER STELL IS NOT PERMITTED WITHOUT         WIRTH RENORMAGE OF CONCRET RENORMAGE STELL IS NOT PERMITTED WITHOUT <td><ul> <li>WITH MAXIMUM UNIT STRENGTH SHALL E SLABS ON GRADE. SHALL BE NORMAL 4000 PSI AT 28 D.</li> <li>MIX DESIGNS, INCLU PREPARED IN ACC WHERE NOTED OTH COMFORM TO ASTM TYPE IP WHERE FLY ASTM C 33 AGGREG SHALL CONFORM TO CHLORIDE SHALL E</li> <li>AGGREGATE SIZES I. FORMED CI II. GRADE SHALL E</li> <li>AGGREGATE SIZES I. FORMED CI II. GRADE SHALL E</li> <li>AGGREGATE SIZES III. COARSE M IV. FINE MASCI</li> <li>WATER REDUCING .</li> <li>AIR ENTRAINING AD USED IN ALL CONC OR SERVICE COND</li> <li>WATER/CEMENT RA FREEZING/THAWING.</li> <li>ALL FUMPED CONC SHALL CONTAIN A FREEZING/THAWING.</li> <li>ALL FUMPED CONC SHALL CONTAIN A II. EXTERIOR P III. ALL EXPOSE IIII. SLABS ON G</li> <li>III. LIQUID MEMBRANE APPLIED WITHIN TW AND WALLS, UNO, C</li> <li>FLOORS IN AREAS SHALL BE CURED CURED BY USE OF THOROUGHLY BRO</li> <li>USE A NON-CORRC TEMPERATURES DE TEMPERATURES DE TE</li></ul></td>	<ul> <li>WITH MAXIMUM UNIT STRENGTH SHALL E SLABS ON GRADE. SHALL BE NORMAL 4000 PSI AT 28 D.</li> <li>MIX DESIGNS, INCLU PREPARED IN ACC WHERE NOTED OTH COMFORM TO ASTM TYPE IP WHERE FLY ASTM C 33 AGGREG SHALL CONFORM TO CHLORIDE SHALL E</li> <li>AGGREGATE SIZES I. FORMED CI II. GRADE SHALL E</li> <li>AGGREGATE SIZES I. FORMED CI II. GRADE SHALL E</li> <li>AGGREGATE SIZES III. COARSE M IV. FINE MASCI</li> <li>WATER REDUCING .</li> <li>AIR ENTRAINING AD USED IN ALL CONC OR SERVICE COND</li> <li>WATER/CEMENT RA FREEZING/THAWING.</li> <li>ALL FUMPED CONC SHALL CONTAIN A FREEZING/THAWING.</li> <li>ALL FUMPED CONC SHALL CONTAIN A II. EXTERIOR P III. ALL EXPOSE IIII. SLABS ON G</li> <li>III. LIQUID MEMBRANE APPLIED WITHIN TW AND WALLS, UNO, C</li> <li>FLOORS IN AREAS SHALL BE CURED CURED BY USE OF THOROUGHLY BRO</li> <li>USE A NON-CORRC TEMPERATURES DE TEMPERATURES DE TE</li></ul>
NONDATION FLAN. ALL WATER SHALL BE RETOVED BEFORE DEPOSITING CONCRETE. S BEFORE FLACING CONCRETE ALL DISEDUCTION THE ALL DISENSING PRICE TO STARTING CONSTRUCTION, AND ANY DISCREPANCY GHALL BE BROUNDER TO THE ATABLICKY OF THE DISINGLY IN THE CONTRACTOR SHALL COORDINATE AND VERYT ALL DIRENSIONS PRICE TO STARTING CONSTRUCTION, AND ANY DISCREPANCY GHALL BE BROUNDER TO THE ATABLICKY OF THE DISINGLY IN THE CONTRACTOR SHALL COORDINATE AND VERYT ALL DIRENSIONS PRICE TO STARTING CONSTRUCTION, AND ANY DISCREPANCY GHALL BE BROUNDER TO THE ATABLICKY OF THE DISINGLY IN THE CONTRACTOR MUST NOT EXCEED VI' ELEVATION VARIATION ALCAG ANY BO' DISTANCE OF BUILDING CONCRETE NOTITIE DOES NOT RECOGNIZE FIBERTIESH AS A SUBSTITUTE FOR UNRE THESH REPROCEED CONCRETE INSTITUTE DOES NOT RECOGNIZE FIBERTIESH AS A SUBSTITUTE FOR UNRE THESH REPROCEED CONCRETE INSTITUTE DOES NOT RECOGNIZE FIBERTIESH AS A SUBSTITUTE FOR UNRE THESH REPROCEED CONCRETE INSTITUTE DOES NOT RECOGNIZE FIBERTIESH AS A SUBSTITUTE FOR UNRE THESH REPROCEED CONCRETE INSTITUTE DOES NOT RECOGNIZE FIBERTIESH AS A SUBSTITUTE FOR UNRE THESH REPROCEED CONCRETE INSTITUTE DOES NOT RECOGNIZE FIBERTIESH AS A SUBSTITUTE FOR UNRE THESH REPROVERED CONCRETE INSTITUTE TO TENDIE TREESSE  S & SAU OTT CONTROL JOINTS IN SLAD BURGAL EXAMINETRY  I. REINFORCENDS OF CONCRETE REINFORCING STELL IS NOT PERMITTED UTHOUT UNTERNATERY AND AND ALL BE NEU BILLET STELL, DEFORTED BARSS CONCRETING STOLED EDITALED. PARENCATED AND PLACED IN ACCORDANCE UNTH ACTOR AND GRAD TRENS RECOMPARIATELY 10°-0° INTERVALS OFFICE  I. REINFORCENTS SHALL DE DEDITALED. PARENCATED AND PLACED IN ACCORDANCE UNTH ACTOR AND GRAD TRENS RECOMPARIATELY 10°-0° INTERVALS OFFICE  I. REINFORCENTS AND THE IN RECOMPARIATELY 10°-0° INTERVALS OFFICE  I. REINFORCENTS AND THE INSTRUCTURE STELL SHALL DE IN ACCORDANCE UNTH ACTOR AND GRAD TREAS AND PLACE PRIOT TO GRAD THAN ACTOR AND GRAD CONTACT  I. REINFORCENTS AND THE INSTRUCTURE AND PLACE THE INFORMATION  A. L. REINFORCENTS AND THE INSTRUCTURE AND PLACE THE INFORMANCE  A. DO RELATI	<ul> <li>WITH MAXIMUM UNIT STRENGTH SHALL E SLABS ON GRADE. SHALL BE NORMAL 4000 PSI AT 29 D.</li> <li>MIX DESIGNS, INCLU PREPARED IN ACC WHERE NOTED OTH COMFORM TO ASTM TYPE IP WHERE FLY ASTM C 33 AGGREG SHALL CONFORM TO CHLORIDE SHALL E AGGREGATE SIZES I. FORMED CO II. GRADE SL III. COARSE M IV. FINE MASC 6. WATER REDUCING .</li> <li>WATER REDUCING .</li> <li>WATER REDUCING .</li> <li>WATER/CEMENT RA FREEZING/THAWING.</li> <li>WATER/CEMENT RA FREEZING/THAWING.</li> <li>WATER/CEMENT RA FREEZING/THAWING.</li> <li>MALL PUMPED CONC SHALL CONTAIN A II. ALL FOUNDA II. EXTERIOR P III. ALL EXPOSE IIII. SLABS ON G</li> <li>III. LIQUID MEMBRANE APPLIED WITHIN TW AND WALLS, UNO, C</li> <li>FLOORS IN AREAS SHALL BE CURED CURED BY USE OF THOROUGHLY BRC</li> <li>USE A NON-CORRC TEMPERATURES DE TEMPERATURE OF I WITH ACI 306.</li> <li>ALL CONSTRUCTION STRUCTURE UNLESS</li> <li>REINFORCING IN AN OR AROUND ALL CAND SPACING TO II. FORMS FOR ROUND FINISH ON EXPOSE II. FORMS FOR ROUND FINISH ON EXPOSE</li> <li>REFER TO ARCHITI WASHES, MASONRY EMBEDDED PLATES</li> <li>REFER TO ARCHITI WASHES, MASONRY</li> <li>BASE PLATES, ANG GRANULAR FILL SF</li> </ul>
POINDATION PLAN. ALL WATER HALL DE REPORTED DEFORE DEPOSITING CONCRETE. () BEFORE PLANS CONCRETE ALL DEPOSICIENT IN PLACE. () THE CONTRACTOR MALL DEC MOREONIE AND VERETY ALL DE ENDORAD PROR TO STARTING CONSTRUCTION, ADD ANY DISCREPANCY SHALL DE DESCENDIU'S ELEVATION VARIATION ALONG ANY SP DISTANCE () PRIVETER RONDATION THAT NOT EXCEED I/S' ELEVATION VARIATION ALONG ANY SP DISTANCE () PRIVETER RONDATION THAT NOT EXCEED I/S' ELEVATION VARIATION ALONG ANY SP DISTANCE () PRIVETER RONDATION THAT NOT EXCEED I/S' ELEVATION VARIATION ALONG ANY SP DISTANCE () PRIVETER RONDATION TO EXTEND BELOU PROST LINE. VERY REQUIRED DEPTH UTH LOCAL BUILDING OFFICIALS PRIVET TO PROCEED CONCRETE INSTITUTE DOES NOT RECORNIZE FIBERMENT AS A SUBSTITUTE FOR WIRE INFEM RETWORED CONCRETE WERN NUELED TO TO BUILD STREED () ALL TRENCACOCORDET DOT STREED TO TO BUILD STREED () ALL DEFORMENT OF ANTEND BELOU PROST LINE. VERY REQUIRED DEPTH UTH LOCAL BUILDING OFFICIALS () THEM RETWORED CONCRETE WERN NUELED TO TO BUILD STREED () ALL DEFORMENT DO STREEL SOLUTION TO ANTIN' EXAMPLE OF DEVALION NECK DRAMAN () THEM RETWORED CONCRETE REINFORMENT STREEL IN ALL DEFORMED BARS () CONCRETE CONFRONT STREED REINFORMENT STREEL IN AN TERMITTED WITHOUT () REINFORMENT OF ASTITUS AND REALT STREEL DEFORMED BARS () CONCRETE CONFRONT STALL BE DETAILED, FARRECATED AND PLACED IN ACCORDANCE () WILL CONCRETE REINFORCHS STREEL IS NOT PERMITTED WITHOUT () WITHOUT FOR THE STRECTURAL DENNERNER () ALL REINFORMENT AND THESI IN GROUT SPACES FRIOR TO GROUTINA () CONCRETE CONFRAGE OF REINFORCHS STREEL SHALL BE IN ACCORDANCE () WILL CONCRETE CONFRAGE OF REINFORCHS STREEL SHALL BE IN ACCORDANCE WITH THE FOLLOWING SCHEED BAILE ON DEPOSED TO BARTH, LIQUID () BLAGE REINFORCED AND THESIN AND THESIN AND LIVES TO BARCED () BLAGE REINFORCED AND LAR SCHEED SHALL BE IN ACCORDANCE WITH ACCORDED WILL BARTHE AND LAR SCHEED SHALL BE IN ACCORDANCE WITH ACCORDED WILL SCHEED STREED SHALL BE IN ACCORDANCE WITH ACCORDED WILL BARTHE CONTRACT ON THE DRAWINGS, WE CLASS STREED (	<ul> <li>WITH MAXIMUM UNIT STRENGTH SHALL E SLABS ON GRADE SHALL BE NORMAL. 4000 PSI AT 28 DJ</li> <li>MIX DESIGNS, NCLU PREPARED IN ACC WHERE NOTED OTH CONFORM TO ASTM TYPE IP WHERE FLY ASTM C 33 AGGREG SHALL CONFORM TO CHLORIDE SHALL E</li> <li>AGGREGATE SIZES I. FORMED C II. GRADE SHALL E</li> <li>AGGREGATE SIZES I. FORMED C II. GRADE SHALL III. COARSE M IV. FINE MASC</li> <li>6. WATER REDUCING J III. COARSE SHALL CONTAIN A H REEZING/THAWING.</li> <li>9. ALL PUMPED CONC SHALL CONTAIN A H III. ALL EXPOSE IIII. SLABS ON G</li> <li>11. LIQUID MEMBRANE APPLIED WITHIN TW AND WALLS, UNO, C</li> <li>12. FLOORS IN AREAS SHALL BE CURED CURED BY USE OF THOROUGHLY BRC</li> <li>13. USE A NON-CORRC TEMPERATURE OF WITH ACI 306.</li> <li>14. ALL CONSTRUCTION STRUCTURE UNLESS</li> <li>15. REINFORCING IN AN OR AROUND ALL C AND SPACING TO III. SLABS ON ROUND STRUCTURE UNLESS</li> <li>16. REFER TO ARCHIT WASHES, MASONRY EMBEDDED PLATE</li> <li>17. FORMS FOR ROUND FINISH ON EXPOSE</li> <li>18. REFER TO ARCHIT WASHES, MASONRY EMBEDDED PLATE</li> <li>19. BASE PLATES, ANG GRANULAR FILL SH 20. FINISHING TO LERA SHALL BE GIVEN T ELEVATIONS.</li> <li>21. NON-SHRINK GROUND CONFORM TO REGO</li> <li>21. NON-SHRINK GROUND CONTAINING SILLCA</li> </ul>
PONDATION PLAN. ALL WATER SHALL BE REYOYED BEFORE DEPORTING CONCRETE. S BEFORE FLACKS CONCRETE ALL EPISEDDED TETHS SHALL BE PROPERLY LOCATED, ACCURATELY POSITIONED, AND MAINTAINED BECIRELY N PLACE. IT RECONTRACTS SHALL DESIDINATE AND VIERT ALL DISENSIONS PRICE TO STARTING CONSTRUCTION, ADD ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE DISINEER  2. PERIFETER FORDATION MUST NOT EXCEED VI' ELEVATION VARIATION ALCAG ANY DO' DISTANCE OF DILLIDAR LIBANH. 3. PERIFETER FORDATION TO EXTEND BELOW ROOT LINE. VERIFY REQUIRED DEPTH WITH LOCAL BUILDING OFFICIALS PRICE TO FORDED LIBANH. 3. PERIFETER FORDATION TO EXTEND BELOW ROOT LINE. VERIFY REQUIRED DEPTH WITH LOCAL BUILDING OFFICIALS PRICE TO FORDED LIBANH. 3. PERIFETER FORDATION TO EXTEND DELOW ROOT LINE. VERIFY REQUIRED DEPTH WITH LOCAL BUILDING OFFICIALS PRICE TO FORDED LIBANH. 3. PERIFETER FORDATION TO BUTTINE DOES NOT RECORDING THESE THESES  5. SAU OTI CONTROL, JOINTS IN SLAB BURACE AT APPROXIMATELY 19-0' INTERVALS OFFICE CONTROL, JOINTS IN SLAB BURACE AT APPROXIMATELY 19-0' INTERVALS OFFICE CONTROL ONTON INTEROR COLUMN LINES.  2. INTERVENCING STEEL BUTTINE DEPOSITED TO TENNIE THESES  3. SAU OTI CONTROL, ONTO INTERCOR COLUMN LINES.  3. PEDD BENDRONG OF CONCERT REINFORCING DATEL IN THE PRIVITED WITHOUT UNTITED APPROVAL OF THE DISTRUCTURE AND PLACED IN ACCOMPANCE CONCERTING TO ASTITLA FIEL, GRADE & DISTRUCTURE AND PLACED IN ACCOMPANCE INFORMATION AND THE DISTRUCTURE AND PLACED IN ACCOMPANCE CONCERTING TO ASTITLA FIEL GRADE & OTIGLE IN NOT PERMITTED WITHOUT UNTITED APPROVAL OF THE DISTRUCTURE AND PLACED IN ACCOMPANCE INFORMED CONTACT  3. LILE DEPOSITION  4. PLACE REINFORCEMENT AND THES IN REQUIRE THAT AD LIVE BY ACTIONE A. PLACE REINFORCEMENT AND PLACED PRIVE A. PLACE REINFORCEMENT AND PLACED PRIVE TO GROUTING  5. CARRET CONFRAME CONTACT  5. ALLE BENDROLLING SCIENCE AND PLACED IN ACCOMPANCE WITH ACCOMPANE CONTACT  5. ALLE BENDROLLING AND PLACED LIVE AND PLACED THE CONTING AND DISTAND AND THE DISTANDANE, BUTTINED USAL AND AND THE PRIVENCIAL BEING SCIENC	<ul> <li>WITH MAXIMUM UNIT STRENGTH SHALL E SLABS ON GRADE. SHALL BE NORMAL 4000 PSI AT 28 D.</li> <li>MIX DESIGNS, INCLU PREPARED IN ACC WHERE NOTED OTH CONFORM TO ASTM TYPE IP WHERE FL' ASTM C 33 AGGREG SHALL CONFORM TO CHLORIDE SHALL I AGGREGATE SIZES I. FORMED CILL II. GRADE SHALL I AGGREGATE SIZES I. GRADE SHALL I COARSE MI IV. FINE MASC</li> <li>WATER REDUCING J.</li> <li>AIR ENTRAINING AD USED IN ALL CONC OR SERVICE COND 8. WATER/CEMENT RA FREEZING/THAWING.</li> <li>ALL PUMPED CONC SHALL CONTAIN A IR EXTERIOR F III. ALL FOUNDA II. EXTERIOR F III. ALL EXPOSI IIII. SLABS ON G</li> <li>LIGUID MEMBRANE APPLIED WITHIN TW AND WALLS, UNO, C</li> <li>FLOORS IN AREAS SHALL BE CURED CURED BY USE OF THOROUGHLY BRC</li> <li>USE A NON-CORRC TEMPERATURE OF WITH ACI 306.</li> <li>LISE A NON-CORRC TEMPERATURE OF WITH ACI 306.</li> <li>ALL CONSTRUCTION STRUCTURE UNLESS</li> <li>REINFORCING IN A OR AROUND ALL CON AND SPACING TO ENDED PLATE</li> <li>REFER TO ARCHIT WASHES, MASONRY EMBEDD PLATE</li> <li>PORMS FOR ROUND FINISHING TOLERA SHALL BE GIVEN T ELEVATIONS.</li> <li>NON-SHRINK GROUND FINISHING TOLERA SHALL BE SUPER T ELEVATIONS.</li> <li>NON-SHRINK GROUND SHALL BE SUPER T ELEVATIONS.</li> </ul>
PONDATION PLAN. ALL WATER SHALL BE REYOYED BEFORE DEPORTING CONCRETE. S BEFORE FLACKS CONCRETE ALL EPISEDDED TETHS SHALL BE PROPERLY LOCATED, ACCURATELY POSITIONED, AND MAINTAINED BECIRELY N PLACE. IT RECONTRACTS SHALL DESIDINATE AND VIERT ALL DISENSIONS PRICE TO STARTING CONSTRUCTION, ADD ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE DISINEER  2. PERIFETER FORDATION MUST NOT EXCEED VI' ELEVATION VARIATION ALCAG ANY DO' DISTANCE OF DILLIDAR LIBANH. 3. PERIFETER FORDATION TO EXTEND BELOW ROOT LINE. VERIFY REQUIRED DEPTH WITH LOCAL BUILDING OFFICIALS PRICE TO FORDED LIBANH. 3. PERIFETER FORDATION TO EXTEND BELOW ROOT LINE. VERIFY REQUIRED DEPTH WITH LOCAL BUILDING OFFICIALS PRICE TO FORDED LIBANH. 3. PERIFETER FORDATION TO EXTEND DELOW ROOT LINE. VERIFY REQUIRED DEPTH WITH LOCAL BUILDING OFFICIALS PRICE TO FORDED LIBANH. 3. PERIFETER FORDATION TO BUTTINE DOES NOT RECORDING THESE THESES  5. SAU OTI CONTROL, JOINTS IN SLAB BURACE AT APPROXIMATELY 19-0' INTERVALS OFFICE CONTROL, JOINTS IN SLAB BURACE AT APPROXIMATELY 19-0' INTERVALS OFFICE CONTROL ONTON INTEROR COLUMN LINES.  2. INTERVENCING STEEL BUTTINE DEPOSITED TO TENNIE THESES  3. SAU OTI CONTROL, ONTO INTERCOR COLUMN LINES.  3. PEDD BENDRONG OF CONCERT REINFORCING DATEL IN THE PRIVITED WITHOUT UNTITED APPROVAL OF THE DISTRUCTURE AND PLACED IN ACCOMPANCE CONCERTING TO ASTITLA FIEL, GRADE & DISTRUCTURE AND PLACED IN ACCOMPANCE INFORMATION AND THE DISTRUCTURE AND PLACED IN ACCOMPANCE CONCERTING TO ASTITLA FIEL GRADE & OTIGLE IN NOT PERMITTED WITHOUT UNTITED APPROVAL OF THE DISTRUCTURE AND PLACED IN ACCOMPANCE INFORMED CONTACT  3. LILE DEPOSITION  4. PLACE REINFORCEMENT AND THES IN REQUIRE THAT AD LIVE BY ACTIONE A. PLACE REINFORCEMENT AND PLACED PRIVE A. PLACE REINFORCEMENT AND PLACED PRIVE TO GROUTING  5. CARRET CONFRAME CONTACT  5. ALLE BENDROLLING SCIENCE AND PLACED IN ACCOMPANCE WITH ACCOMPANE CONTACT  5. ALLE BENDROLLING AND PLACED LIVE AND PLACED THE CONTING AND DISTAND AND THE DISTANDANE, BUTTINED USAL AND AND THE PRIVENCIAL BEING SCIENC	<ul> <li>WITH MAXIMUM UNIT STRENGTH SHALL E SLABS ON GRADE. SHALL BE NORMAL 4000 PSI AT 28 DA</li> <li>MIX DESIGNS, INCLU FREEPARED IN ACC WHERE NOTED OTH COMFORM TO ASTM TYPE IP WHERE FLT ASTM C 33 AGGREG SHALL CONFORM TO CHLORIDE SHALL E</li> <li>AGGREGATE SIZES I. FORMED C II. GRADE SL III. COARSE M IV. FINE MASO</li> <li>WATER REDUCING A USED IN ALL CONCI OR SERVICE COND</li> <li>WATER/CEMENT RA' FREEZING/THAWING.</li> <li>ALL PUMPED CONC SHALL CONTAIN A H IV. FINE MASO</li> <li>WATER/CEMENT RA' FREEZING/THAWING.</li> <li>ALL PUMPED CONC SHALL CONTAIN A H IV. EXTERIOR P III. ALL EXPOSE IIII. SLABS ON G</li> <li>II. LIQUID MEMBRANE APPLIED WITHIN TW AND WALLS, UNO, C</li> <li>FLOORS IN AREAS SHALL BE CURED I CURED BY USE OF THOROUGHLY BRO</li> <li>USE A NON-CORRC TEMPERATURES DE TEMPERATURE OF I WITH ACI 326.</li> <li>ALL CONSTRUCTIVE UNLESS</li> <li>REINFORCING IN AL OR AROUND ALL C AND SPACING TO TI USE A NON-CORRC TEMPERATURE OF I WITH ACI 326.</li> <li>ALL CONSTRUCTIVE UNLESS</li> <li>REINFORCING IN AL OR AROUND ALL C AND SPACING TO TI USE A NON-CORRC TEMPERATURES DE TEMPERATURES DE TEMPERATURE OF I WITH ACI 326.</li> <li>ALL CONSTRUCTIVE UNLESS</li> <li>REINFORCING IN AL OR AROUND ALL C AND SPACING TO TI USE A NON-CORRC TEMPERATURE OF I WITH ACI 326.</li> <li>ALL CONSTRUCTIVE UNLESS</li> <li>REINFORCING IN AL OR AROUND ALL C AND SPACING TO TI USE A NON-CORRC TEMPERATURE OF I WITH ACI 326.</li> <li>ALL CONSTRUCTIVE UNLESS</li> <li>REINFORCING IN AL OR AROUND ALL C AND SPACING TO TI USE A NON-CORRC TEMPERATURE OF I WITH ACI 326.</li> <li>ALL CONSTRUCTIVE UNLESS</li> <li>REINFORCING IN AL OR AROUND ALL C AND SPACING TO TI USE A NON-CORRC TEMPERATURE OF I WITH ACI 326.</li> <li>NON-SHRINK GROUND FINISH ON EXPOSED</li> <li>REFER TO ARCHIT CONTAINING SILICA AGENTS, PRODUCT SHALL BE 5000 F PRODUCING OR ALL OR GTPSUM.</li> </ul>
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FORDATION FLAN. ALL WATER BHALL BE RETIVED BEFORE DEPORTING CONCRETE.       IS BEFORE FLACKS CONCRETE ALL ETBEDDED TETHS MALL BE PROPERLY LOCATED, ACCURATELY POSITIONED, AND MAINTAINED BECURELY IN FLACE.         IN RECONTRACTOR BHALL COORDINATE ADV DEPORT ALL DEPENDING PRIVATION VARIATION ALCAS ANY DISCRETPACT GHALL BE BROWNERT TO THE ATTENTION OF THE BRANEER.         IN RECONTRACTOR BHALL COORDINATE ADV DEPORT ALL DEPENDING PRIVATION VARIATION ALCAS ANY DISCRETPACT GHALL BE BROWNERT TO THE ATTENTION OF THE BRANEER.         IN RECONTRACTOR MUST NOT EXCEED IN " ELEVATION VARIATION ALCAS ANY DISTANCE OF DEVIATION TRACE OF DEVIATION TRACE DEVIATION TRACE         IN PERFETER FORDADIES IN THE DEBLOW RECKIE DET TO TENNIE TO DEVIATION ALCAS.         IN REPORT DORACED CONCRETE INSTITUTE DOES NOT RECCONTRE TERRETE! AS A SUBSTITUTE FOR UNRE         TECH RENFORMED CONCRETE INSTITUTE DOES NOT RECCONTRE TERRET.         IN RENFORMED CONCRETE INSTITUTE DOES NOT RECCONTRE TERRET.         IN RENFORMED CONCRETE INSTITUTE DOES NOT RECCONTRE TERRET.         IN RENFORMED CONCRETE INSTITUTE DOES NOT RECONTRE TERRET.         INTERVENTION OF CONCRETE RENFORCING DAD PLACED IN ACCOMPANCE         INTERNATION OF CONCRETE RENFORCING DAD PLACED IN ACCOMPANCE         INTERNATION OF TAX THESI DE RELEMENTE DAD PLACED IN ACCOMPANCE         INTERNATION OF CONCRETE RENFORCING DAD PLACED IN ACCOMPANA	<ul> <li>WITH MAXIMUM UNIT I STRENGTH SHALL BE SLABG ON GRADE. SHALL BE NORMAL 4000 PSI AT 28 DA</li> <li>MIX DESIGNS, INCLU PREPARED IN ACCU WHERE NOTED OTHE COMFORM TO ASTM TYPE IP WHERE FLY ASTM C 33 AGGREG SHALL CONFORT TO CHLORIDE SHALL E</li> <li>AGGREGATE SIZES I. FORMED C. II. GRADE SL. III. COARSE M, IV. FINE MASOR</li> <li>WATER REDUCING A</li> <li>G. WATER REDUCING A</li> <li>I. AIR ENTRAINING AD USED IN ALL CONCO OR SERVICE CONDI</li> <li>WATER/CEMENT RAT FREEZING/THAWING.</li> <li>ALL PUMPED CONC SHALL CONTAIN A H</li> <li>III. ALL EXPOSE IIII. SLABS ON GI</li> <li>III. LIQUID MEMBRANE O APPLIED WITHIN TW AND WALLS, UNO, C</li> <li>FLOORS IN AREAS SHALL BE CURED U CURED BY USE OF THOROUGHLY BROX</li> <li>USE A NON-CORRC TEMPERATURES BE TEMPERATURES DE TEMPERATURE OF N WITH ACI 306.</li> <li>ALL CONSTRUCTION STRUCTURE UNLESS</li> <li>REINFORCING IN AL OR AROUND ALL C AND SPACING TO T</li> <li>REFER TO ARCHITE WASHES, MASONRY EMBEDDED PLATE</li> <li>FORMS FOR ROUND FINISH ON EXPOSED</li> <li>REFER TO ARCHITE WASHES, MASONRY EMBEDDED PLATE</li> <li>PORMS FOR ROUND FINISH ON EXPOSED</li> <li>REFER TO ARCHITE WASHES, MASONRY EMBEDDED PLATE</li> <li>NON-SHRINK GROUND FINISH ON EXPOSED</li> <li>REFER TO ARCHITE WASHES, MASONRY EMBEDDED PLATE</li> <li>NON-SHRINK GROUND FINISH ON EXPOSED</li> <li>REFER TO ARCHITE WASHES, MASONRY EMBEDDED PLATE</li> <li>NON-SHRINK GROUND FINISH ON EXPOSED</li> <li>REFER TO ARCHITE WASHES, MASONRY EMBEDDED PLATE</li> <li>NON-SHRINK GROUND FINISH ON EXPOSED</li> <li>REFER TO ARCHITE WASHES, MASONRY EMBEDDED PLATE</li> <li>NON-SHRINK GROUND FINISH ON EXPOSED</li> <li>REFER TO ARCHITE WASHES, MASONRY EMBEDDED PLATES, AND GRANULAR FILL SH SHALL BE GIVEN TO ELEVATIONS.</li> </ul>

#### ION AND SAFETY:

IS SOLELY RESPONSIBLE FOR ALL SAFETY REGULATIONS, PROGRAMS AND PRECAUTIONS WORK ON THIS PROJECT.

IS SOLELY RESPONSIBLE FOR THE PROTECTION OF PERSONS AND PROPERTY EITHER TO THE PROJECT AND SHALL PROTECT SAME AGAINST INJURY, DAMAGE OR LOSS. DDS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIALS ARE SOLELY THE SPONSIBILITY.

UNGS ARE INTENDED TO BE USED IN CONJUNCTION WITH THE DRAWINGS OF OTHER CONSULTANTS CONTRACTOR SHALL COORDINATE THE VARIOUS REQUIREMENTS.

ANY CHANGES IN SIZE, DIMENSION OR LOCATION SHALL BE MADE IN ANY STRUCTURAL WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

R IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED ON THE LOADS SHALL NOT EXCEED THE CAPACITY OF THE STRUCTURE AT ANY TIME. DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION, AND ANY TEMPORARY BRACING OR ED TO ACCOMMODATE THE CONTRACTORS MEANS AND METHODS ARE THE RESPONSIBILITY

R SHALL INFORM THE STRUCTURAL ENGINEER, CLEARLY AND EXPLICITLY IN WRITING, OF ANY BSTITUTION OF REQUIREMENTS OF THE CONTRACT DOCUMENTS. CONTRACTOR IS NOT RELIEVED 1ENTS OF THE CONTRACT DOCUMENTS BY VIRTUE OF THE STRUCTURAL ENGINEERS REVIEW OF PRODUCT DATA, ETC., UNLESS THE CONTRACTOR HAS CLEARLY AND EXPLICITLY INFORMED ENGINEER IN WRITING OF ANY DEVIATIONS OR SUBSTITUTIONS AT TIME OF SUBMISSION, AND THE INEER HAS GIVEN WRITTEN APPROVAL FOR THE SPECIFIC DEVIATIONS OR SUBSTITUTIONS.

I, IN THE OPINION OF THE CONTRACTOR, APPEAR TO BE DEFICIENCIES, OMISSIONS, OR AMBIGUITIES IN THE DRAWINGS OR SPECIFICATIONS, SHALL BE BROUGHT TO THE ATTENTION AL ENGINEER. CORRECTIONS OR WRITTEN INTERPRETATIONS SHALL BE ISSUED BEFORE AFFECTED EED.

ALL VERIFY ALL EXISTING CONDITIONS PRIOR TO ORDERING MATERIALS OR PROCEEDING I AREAS AFFECTED BY THE EXISTING CONDITIONS, STRUCTURAL ENGINEER SHALL BE INFORMED IFLICTS BETWEEN EXISTING AND PROPOSED NEW CONSTRUCTION.

RESPONSIBLE FOR COORDINATING ALL DIMENSIONS SHOWN ON THE CONTRACT DOCUMENTS. ON THE STRUCTURAL DRAWINGS OR BETWEEN THE STRUCTURAL DRAWINGS AND ANY OTHER , FABRICATION, OR OTHER DRAWINGS OR INFORMATION SHALL BE BROUGHT TO THE ATTENTION VAL ENGINEER PRIOR TO PROCEEDING WITH AFFECTED WORK.

HESE DRAWINGS, USE THE DIMENSIONS SHOUN.

RTS OF EACH PROPOSED CONCRETE DESIGN MIX NOT LESS TO THE START OF WORK. DESIGN MIXES PREPARED MORE ITHS PRIOR TO THE DATE THE SUBMITTAL ARE NOT PERMITTED.

SHALL BE DONE IN ACCORDANCE WITH CURRENT REQUIREMENTS FOR REINFORCED CONCRETE

L BE TESTED BY AN INDEPENDENT TESTING AGENCY AMETERS (SLUMP, COMPRESSIVE STRENGTH, ETC.) REPORTS SHALL BE SUBMITTED TO THE ENGINEER/

CONCRETE SHALL HAVE ASTM C-33 AGGREGATE EIGHT OF 150 PCF. CONCRETE COMPRESSIVE 3000 PSI AT 28 DAYS, MINIMUM FOR FOUNDATIONS AND ALL CONCRETE FOR FLOOR SLABS ON METAL DECK FORMS EIGHT CONCRETE WITH COMPRESSIVE STRENGTH OF

NG WATER CEMENT RATIOS AND SLUMPS, SHALL BE RDANCE WITH MOST CURRENT ACI 301 CHAPTER 3, EXCEPT RUISE IN THE PROJECT SPECIFICATIONS. CEMENT SHALL ISO TYPE 1 OR AT CONTRACTOR'S OPTION, ASTM C 595 ASH IS PERMITTED. NORMAL WEIGHT CONCRETE SHALL CONFORM TO ITE WITH MAXIMUM UNIT WEIGHT OF 150 PCF AND LIGHT WEIGHT CONCRETE ASTM C 330 AGGREGATE. NO ADMIXTURES CONTAINING CALCIUM PERMITTED IN ANY CONCRETE.

#### HALL BE:

NCRETE ELEMENTS, UN.O61	STONE (3/4" MAX)
BS AND EARTH FORMED ELEMENTS	STONE (I' MAX)
SONRY GROUT REQUIRED	STONE (3/4" MAX)
RY GROUT REQUIRED	TONE (3/8' MAX)

MIXTURE SHALL BE USED IN ALL CONCRETE.

IXTURE IN ACCORDANCE WITH ACI 301-84 TABLE 3.4.1. SHALL BE TTE EXPOSED TO FREEZING AND THAWING DURING CONSTRUCTION ONS.

SHALL NOT EXCEED 0.45 FOR ANY CONCRETE SUBJECTED TO

ETE SHALL HAVE A WATER/CEMENT RATIO LESS THAN 0.45 AND 3H RANGE WATER REDUCING ADMIXTURE (SUPERPLASTICIZER).

A WATER/CEMENT RATIOS EXCEED THE FOLLOWING: ON CONCRETE IC 3000 psi (ING CONCRETE IC 3500 psi (ING CONCRETE IC 3500 psi (I.P. WATERTABLE, PIERS, ETC... IC 3500 psi (0.45 MAX. W/C RATIO ADE IC 3000 psi (0.45 MAX. W/C RATIO

JRING COMPOUND WITH A MINIMUM 30% SOLIDS CONTENT SHALL BE (2) HOURS AFTER COMPLETION OF FINISHING TO ALL CONCRETE FLATWORK HER THAN FOOTINGS AND GRADE BEAMS.

ECEIVING QUARRY TILE, CERAMIC TILE AND LIQUID FLOOR HARDENER IH DISSIPATING LIQUID MEMBRANE CURING COMPOUND OR WET OISTURE RETAINING COVER. DISSIPATING CURING COMPOUND SHALL BE 1ED AND WASHED OFF PRIOR TO APPLICATION OF FLOOR FINISH.

VE, NON-CHLORIDE ACCELERATING ADMIXTURE IN CONCRETE EXPOSED TO DW 40 DEGREES. UNIFORMLY HEAT THE WATER AND AGGREGATES TO A IT LESS THAN 50 DEGREES. PLACE AND CURE CONCRETE IN ACCORDANCE

JOINTS SHOWN ON THE DRAWINGS SHALL BE INCORPORATED INTO THE HEIR ELIMINATION IS APPROVED BY THE STRUCTURAL ENGINEER. ABUTTING CONCRETE, INCLUDING FOOTINGS, SHALL BE CONTINUOUS THROU

ABUTTING CONCRETE, INCLUDING FOOTINGS, SHALL BE CONTINUOUS THROUGH RNERS OR INTERSECTIONS. DOWELS OR SPLICES SHALL BE EQUAL IN SIZE E REINFORCING IN THE ABUTTING MEMBERS.

TURAL DRAWINGS FOR DOOR AND WINDOW OPENINGS, DRIPS, REGLETS, NCHORS, BRICK LEDGE ELEVATIONS, SLAB DEPRESSIONS AND MISCELLANEOUS BOLTS, ANCHORS, ANGLES, ETC.

COLUMNS SHALL BE ONE PIECE FIBERGLASS FORM TO PRODUCE SMOOTH COLUMNS.

TURAL DRAWINGS FOR CONCRETE FINISHES. WHERE FINISH IS NOT SPECIFIED, EMENTS OF ACI 301.

OR RODS, SUPPORT ANGLES AND OTHER STEEL EXPOSED TO EARTH OR L BE COVERED WITH A MINIMUM OF 3' OF CONCRETE.

E SHALL BE WITHIN CLASS B IN ACCORDANCE WITH ACI 301 AND CONSIDERATION SEQUENCING OF CONCRETE PLACEMENT TO FACILIATE CONTROL OF FINISH

HALL BE PRE-MIXED, NON-CORROSIVE, NON-METALLIC, NON-STAINING ANDS, PORTLAND CEMENT, SHRINKAGE COMPENSATING AND WATER REDUCING HALL ONLY REQUIRE THE ADDITION OF WATER. MINIMUM COMPRESSIVE STRENGTH AFTER ONE DAY AND 7000 PSI AFTER 28 DAYS. GROUT SHALL BE FREE OF GAS RELEASING AND OXIDIZING AGENTS AND CONTAIN NO CORROSIVE IRON, ALUMINUM

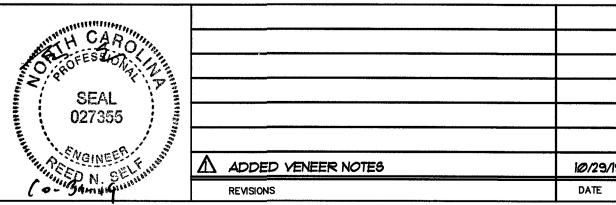
GROUT - NOT MORTAR - FOR REINFORCING MASONRY LINTEL AND BOND ATED ON DRAWINGS OR AS SCHEDULED.

CHOR RODS AND OTHER EMBEDDED ITEMS SHALL BE PER THE AISC CODE TICE SECTION 7.5.

SHOWN IN THE ARCHITECTURAL DRAWINGS, PROVIDE 3/4" CHAMFERS AT ALL , OR BEAM EDGES THAT ARE EXPOSED TO VIEW IN THE FINISHED STRUCTURE.

#### BLOCK VENEER - STEEL STUDWALLS:

- AIR SPACE:
   a. 2 in (51 mm) MINIMUM AIR SPACE RECOMMENDED ± 1 in (24.5 mm) MINIMUM AIR SPACE REQUIRED.
   b. 4 1/2 in (114 mm) MAXIMUM DISTANCE REQUIRED BETWEEN BACK OF BLOCK VENEER AND STEEL FRAMING UNLESS ANCHORS ARE RATIONALLY DESIGNED.
- 2. FLASHING: a. DO NOT STOP FLASHING BEHIND FACE OF THE BLOCKWORK.
- 5. PLACE FLASHING AT ALL POINTS WHERE AIR SPACE IS INTERRUPTED. C. EXTEND FLASHING VERTICALLY UP THE BACKING TO 8 In (203 mm) MINIMUM HEIGHT. C. LAP FLASHING 4 IN (102 mm) MINIMUM HEIGHT UNDER WATER-RESISTANT BARRIER OR BEHIND SHEATHING ABOVE GRADE.
- e. INSTALL BASE FLASHING MINIMUM 6 in (152 mm) ABOVE GRADE. f. TURN UP FLASHING ENDS INTO HEAD JOINT A MINIMUM OF 1 in (25,4 mm) FOR FORM END DAM.
- 3. WEEPS:
  a. OPEN HEAD JOINT WEEPS SPACED AT NO MORE THAN 24 in (610 mm) O.C. RECOMMENDED.
  b. MOST BUILDING CODES PERMIT WEEPS NO LESS THAN 3/16" in (4.8 mm) DIAMETER AND SPACED NO MORE THAN 33 in (838 mm) O.C.
  c. WICK AND TUBE WEEP SPACING RECOMMENDED AT NO MORE THAN 16 in (406 mm) O.C.
- 4. ANCHORS: a. CORRUGATED ANCHORS NOT PERMITTED WITH STEEL STUD BLOCKING. b. MINIMUM WI.T (3 gage) ADJUSTABLE WIRE ANCHORS, HOT-DIPPED GALVANIZED, TWO PIECE PER ASTM A153 CLASS B-2.
- c. VERTICAL SPACING: MAXIMUM 16 in (406 mm) O.C. d. HORIZONTAL SPACING: MAXIMUM 24 in (610 mm) O.C.
- C. SECURELY ATTACH ANCHORS TO THE STEEL STUDS THROUGH THE SHEATHING, NOT THE SHEATHING ALONE.
- 5. SHELF ANGLES AND LINTELS:
- a. SHELF ANGLES LOCATED ABOVE THE HEIGHT LIMIT MAY SUPPORT NO MORE THAN I STORY OF BLOCK.
  b. SIZE HORIZONTAL LEG OF ALL SHELF ANGLES AND LINTELS TO PROVIDE A MINIMUM BEARING OF 2/3 THICKNESS OF THE BRICK WYTHE.
- 6. SHEATHING: a. EXTERIOR GRADE GYPSUM SHEATHING OR OSB OR GLASS FIBER MAT-FACED SHEATHING OR CEMENT BOARD, MINIMUM 1/2 in (12.7 mm) THICK.
- 1. WATER-RESISTANT BARRIER:
  a. WATER-RESISTANT BARRIERS INCLUDE IS ASPHALT FELT, BUILDING PAPER, QUALIFYING HIGH-DENSITY POLYETHYLENE OR POLYPROPYLENE PLASTICS (HOUSEWRAPS).
  b. INSTALL WATER-RESISTANT BARRIER OVER SHEATHING.
  c. SEAL WATER-RESISTANT BARRIER OVER SHEATHING.
- C. SEAL WATER-RESISTANT SHEATHING PER MANUFACTURER TO PERFORM AS WATER-RESISTANT BARRIER C. SHIP LAP WATER-RESISTANT BARRIER PIECES MINIMUM 6 in (152 mm).
- a. GALVANIZED STEEL STUDS WITH MINIMUM G-90 COATING.
  b. RESTRICT ALLOWABLE OUT-OF-PLANE DEFLECTION OF STEEL STUDS TO L/600 USING SERVICE LEVEL LOADS.
  c. MINIMUM 0043 in (18 gage ± 109 mm) STUDS FOR EXTERIOR WALLS.
  d. DO NOT FIELD WELD STEEL STUDS.
- 9. MORTAR: a. COMPLY WITH ASTM C270.
- 6. TYPE N RECOMMENDED ± TYPE S ALTERNATE.
- 10. EXPANSION JOINTS: a. PROVIDE VERTICAL AND HORIZONTAL EXPANSION JOINTS THROUGH BLOCK VENEER.

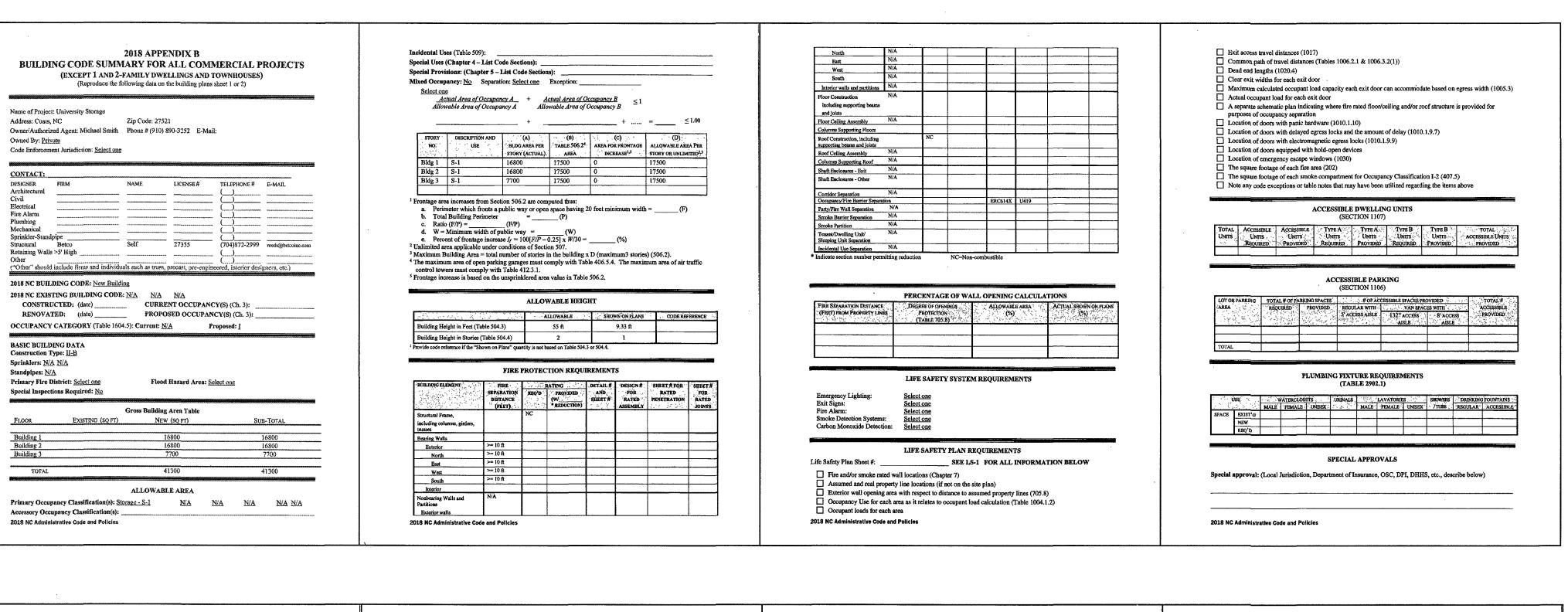


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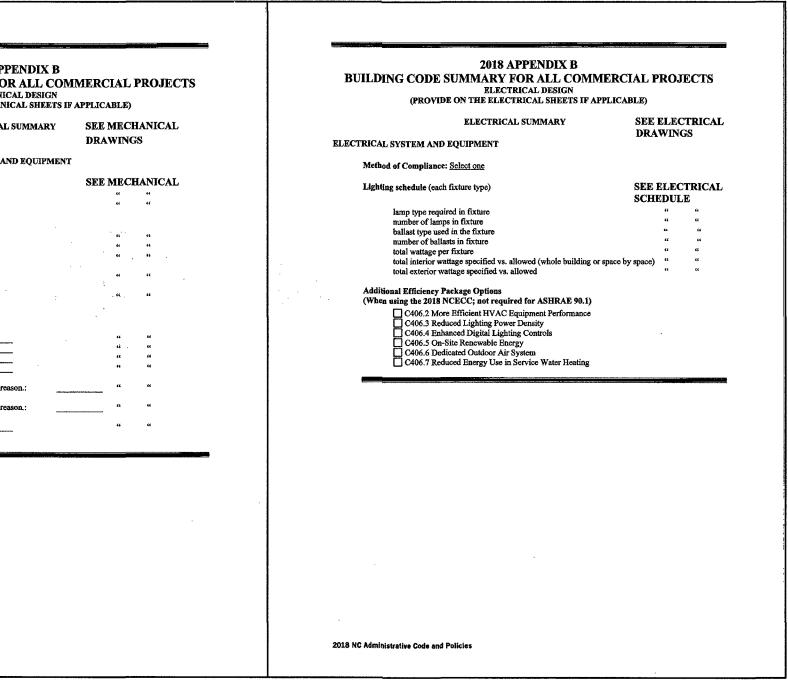
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> ENERGY I The following also be provided If performant proposed de Exempt B THERMA R E W F

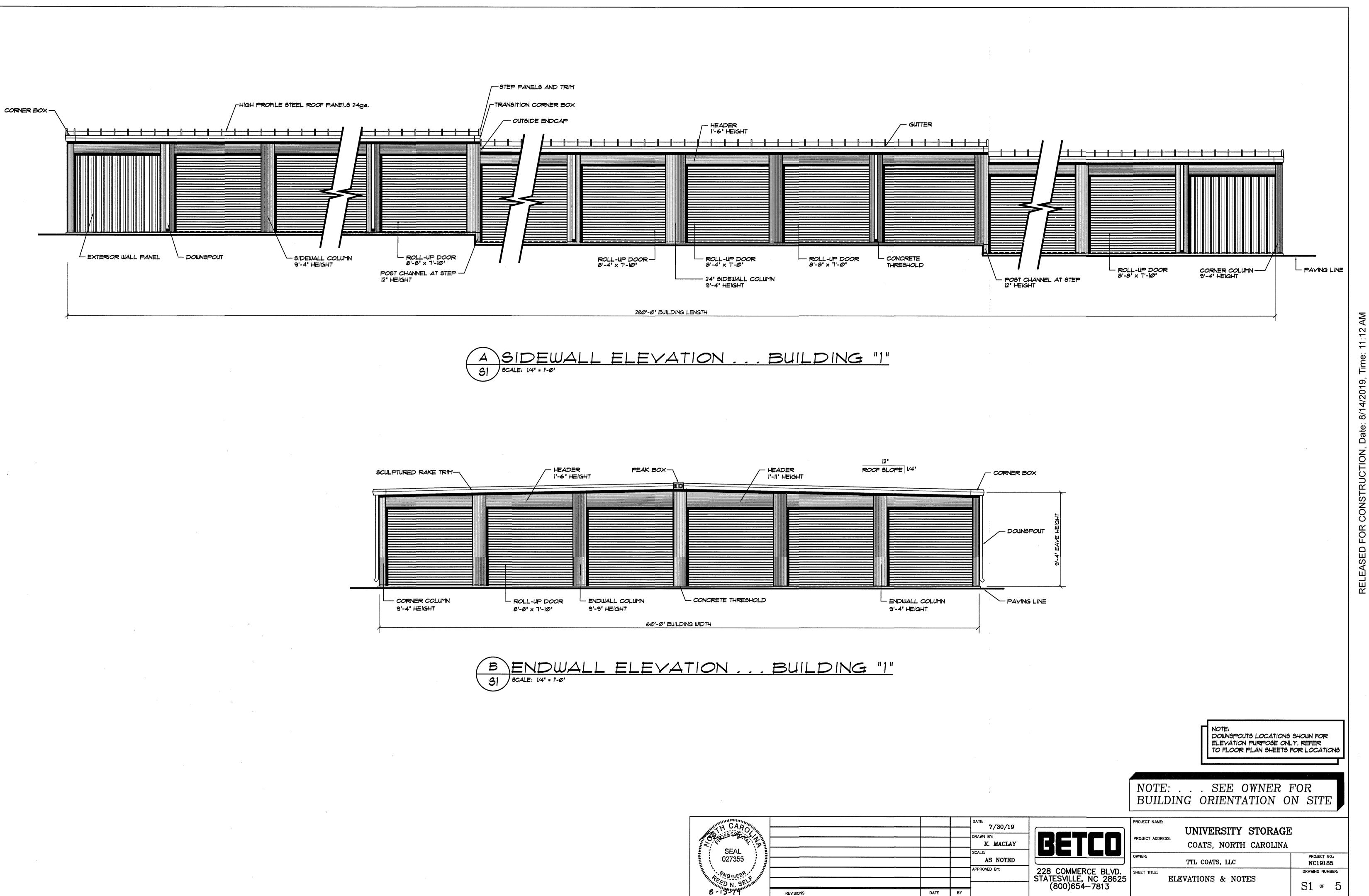


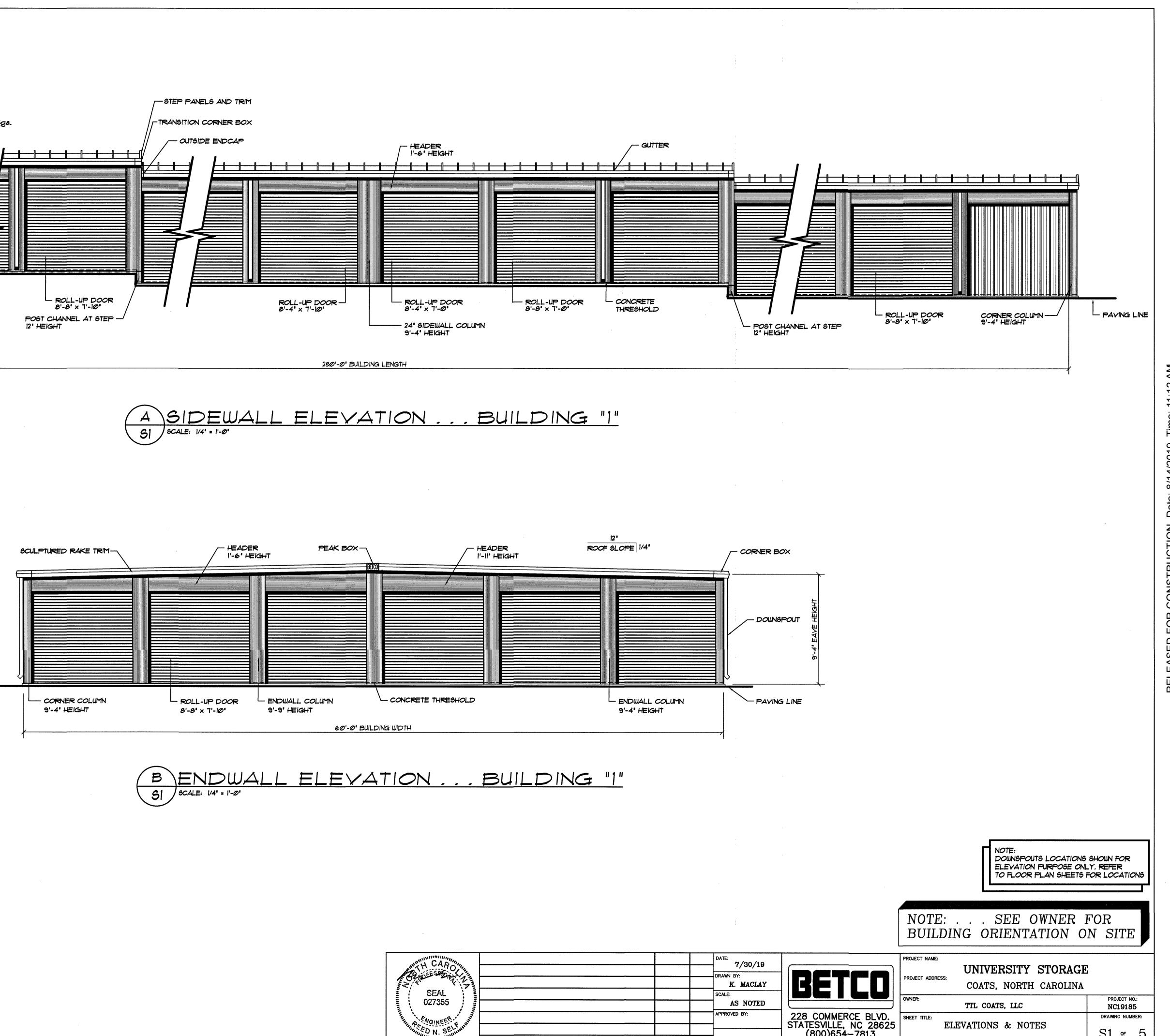
ENERGY SUMMARY REQUIREMENTS: ing data shall be considered minimum and any special attribute required to meet the energy code shall ovided. Each Designer shall furnish the required portions of the project information for the plan data sheet, ance method, state the annual energy cost for the standard reference design vs annual energy cost for the lesign. uliding envelope complies with code: <u>Select one</u>	2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS STRUCTURAL DESIGN (PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE) DESIGN LOADS: Importance Factors: Snow (Is) 0.80 Seismic (Is) 1.0	2018 APP BUILDING CODE SUMMARY FO MECHANIC (PROVIDE ON THE MECHANI MECHANICAL
uilding: Yes       Provide code or statutory reference: N.C.G.S 143-138         Hinate Zone: Solect one (If "Other" specify source here)	Live Loads: Roof 20 psf Mozzanic N/A psf Floor 125 psf Ground Snow Load: 15 psf Wind Load: Design Wind Speed Yultimate)=110 mph (ASCE 7-10) Exposure Category B Wind Base Shear (MWFRS): Bidg 1; Vx=42.0 k Vy=250 k Bidg 2; Vx=20 k Vy=20 k SEISMIC DESIGN CATEGORY: <u>C</u> Provide the following Seismic Design Parameters: Risk Category (Table 1604.5) 1 Spectral Response Acceleration S <sub>5</sub> =17.7 %g S <sub>1</sub> =8.4 %g Site Classification (ASCE 7) <u>D</u> Data Source: <u>Presumptive</u> Basic structural system <u>Building Frane</u> Seismic Base Shear: Bidg 1; Vx=2.268 k Vy=2.268 k Bidg 2; Vx=2.068 k Vy=2.068 k Bidg 2; Vx=2.000 psf Pie size, type, and capacity	MECHANICAL SYSTEMS, SERVICE SYSTEMS AN Thermal Zone winter dry bulb: summer dry bulb: summer dry bulb: relative humidity: Building heating load: Building cooling load: Unitary description of unit: heating efficiency: size category. If oversized, state rea Chiller Size category. If oversized, state rea List equipment efficiencies:
dministrative Code and Policies	2018 NC Administrative Code and Policies	2018 NC Administrative Code and Policies

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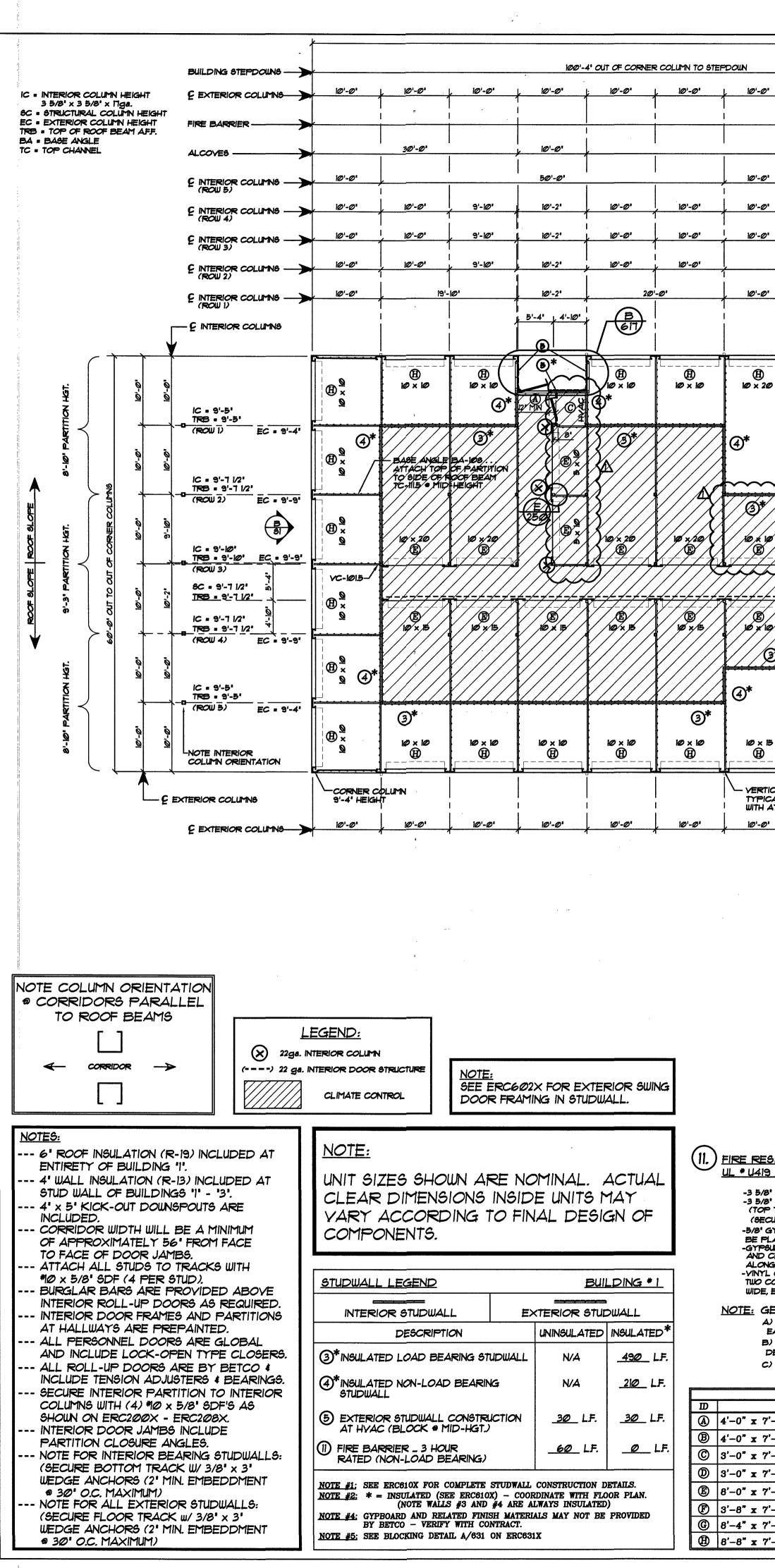


		DATE: 7/30/19 DRAWN BY: K. MACLAY		PROJECT NAME: PROJECT ADDRESS: COATS, NORTH CAROLINA						
		SCALE: AS NOTED		OWNER:	TTL COATS, LLC	PROJECT NO.: NC19185				
DATE	BY	APPROVED BY:	228 COMMERCE BLVD. STATESVILLE, NC 28625 (800)654-7813	SHEET TITLE:	APPENDIX B	DRAWING NUMBER:				





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SCALE: 1' = 10'-0'

▼/ (全) ADJUSTABLE CONTROL JOINI COLUMNS. 9'-4" HEIGHT

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(11.) FIRE REGISTANT PARTITION ... 3 HOUR RATED UL \* U419 ... (NON-LOAD BEARING) (SEE ERC 614X)

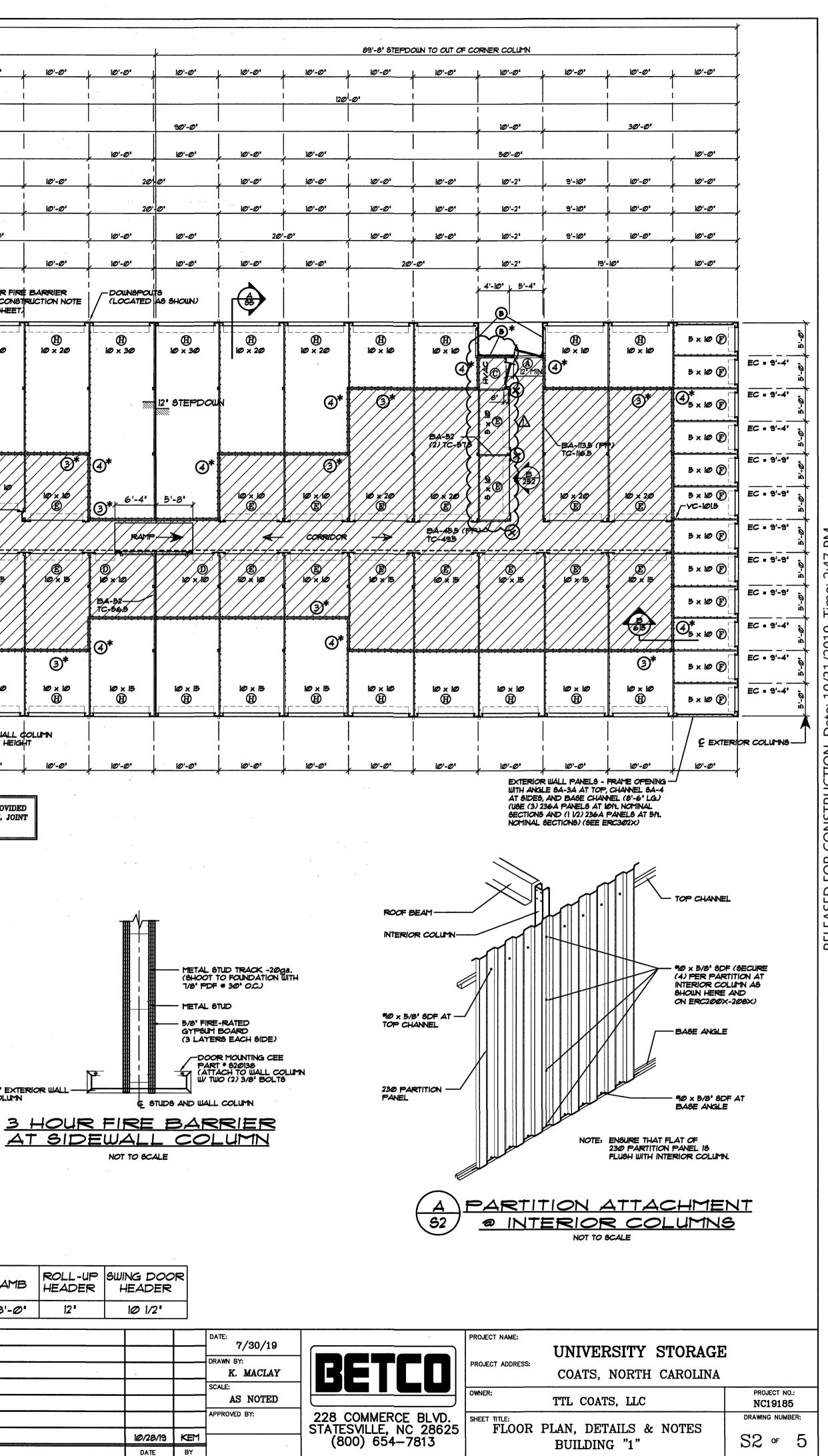
-3 5/8' METAL STUDS 24' O.C. - 20ga. -3 5/8' CONTINUOUS FLOOR and CEILING TRACK - 20ga (TOP TRACK MUST FOLLOW SLOPE OF ROOF DECK) (SECURE BOTTOM TRACK W/ 7/8' PDF'S AT 24' O.C.) -5/8' GYPSUM BOARD (X-RATED) 3 LAYERS EACH SIDE IT MUST BE PLACED SUCH THAT ALL JOINTS ARE VERTICAL. -GYPSUM BOARD (NOT BY BETCO) SHALL BE ATTACHED TO STUDS, FLOOR AND CEILING TRACK USING TYPE 'S' SELF-TAPPING SCREWS ALONG EDGES OF BOARD SPACED S' OC. AND 12' OC. IN THE FIELD. -VINYL OR CASE-IN, DRY OR PRE-MIXED JOINT COMPOUND APPLIED IN TWO COATS TO JOINTS SCREW-HEADS, PERFORATED PAPER TAPE, 2' WIDE, EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS.

NOTE: GENERAL STUDWALL CONSTRUCTION: A) -ATTACH STUDS W/ 90 × 5/8' SDF'S EACH SIDE OF TRACK (4 PER STUD) B) -WALLS MUST EXTEND FROM ROOF TO FLOOR DECK AND INTO WALL COLUMN CAVITY.

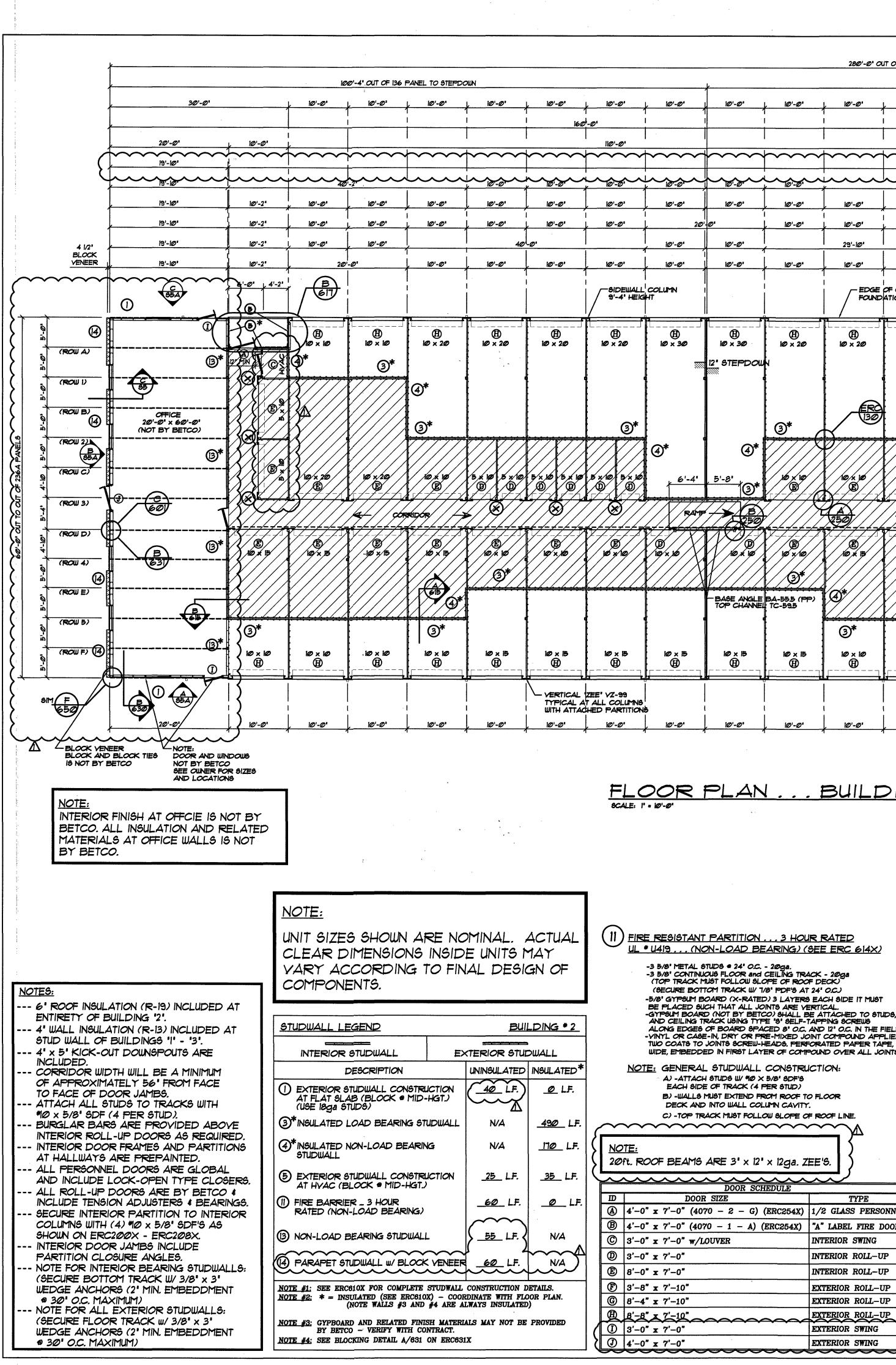
C) - TOP TRACK MUST FOLLOW SLOPE OF ROOF LINE.

DOOR SCHEDULE				
DOOR SIZE	TYPE			
7'-0" (4070 - 2 - G) (ERC254X)	1/2 GLASS PERSONNEL			
7'-0" (4070 - 1 - A) (ERC254X)	"A" LABEL FIRE DOOR			
7'-0" w/LOUVER	INTERIOR SWING			
7'-0"	INTERIOR ROLL-UP			
7'-0"	INTERIOR ROLL-UP			
7'-10"	EXTERIOR ROLL-UP			
7'-10"	EXTERIOR ROLL-UP			
7'-10"	EXTERIOR ROLL-UP			

		NOTE: BLOCK ALL LOAD-BEARING INTERIOR & EXTERIOR STUD WALLS	JAMB	ROLL-UP HEADER	SWING D HEAD
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FLOOR PLAN ... BUILDING "2"

NOTE: BUILDING "2" IS PROVIDED W/(6) ADJUSTABLE CONTROL JOINT COLUMNS. 9'-4" HEIGHT

(11) FIRE RESISTANT PARTITION ... 3 HOUR RATED UL \* U419 ... (NON-LOAD BEARING) (SEE ERC 614X)

-3 5/8" METAL STUDS @ 24" O.C. - 20ga. -3 5/8" CONTINUOUS FLOOR and CEILING TRACK - 20ga (TOP TRACK MUST FOLLOW SLOPE OF ROOF DECK)

(SECURE BOTTOM TRACK W/ 7/8' PDF'S AT 24' O.C.) -5/8' GYPSUM BOARD (X-RATED) 3 LAYERS EACH SIDE IT MUST BE FLACED SUCH THAT ALL JOINTS ARE VERTICAL. -GYPSUM BOARD (NOT BY BETCO) SHALL BE ATTACHED TO STUDS, FLOOR AND CEILING TRACK USING TYPE 'S' SELF-TAPPING SCREWS

ALONG EDGES OF BOARD SPACED S' O.C. AND 12' O.C. IN THE FIELD. - VINYL OR CASE-IN, DRY OR PRE-MIXED JOINT COMPOUND APPLIED IN TWO COATS TO JOINTS SCREW-HEADS, PERFORATED PAPER TAPE, 2' WIDE, EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS.

NOTE: GENERAL STUDWALL CONSTRUCTION: A) -ATTACH STUDS W/ 40 × 5/8' SDF'S EACH SIDE OF TRACK (4 PER STUD)

B) -WALLS MUST EXTEND FROM ROOF TO FLOOR DECK AND INTO WALL COLUMN CAVITY.

C) - TOP TRACK MUST FOLLOW SLOPE OF ROOF LINE. 

20ft. ROOF BEAMS ARE 3' × 12' × 12ga. ZEE'S.

<u>.....</u> OOR SCHEDULE DOOR SIZE TYPE

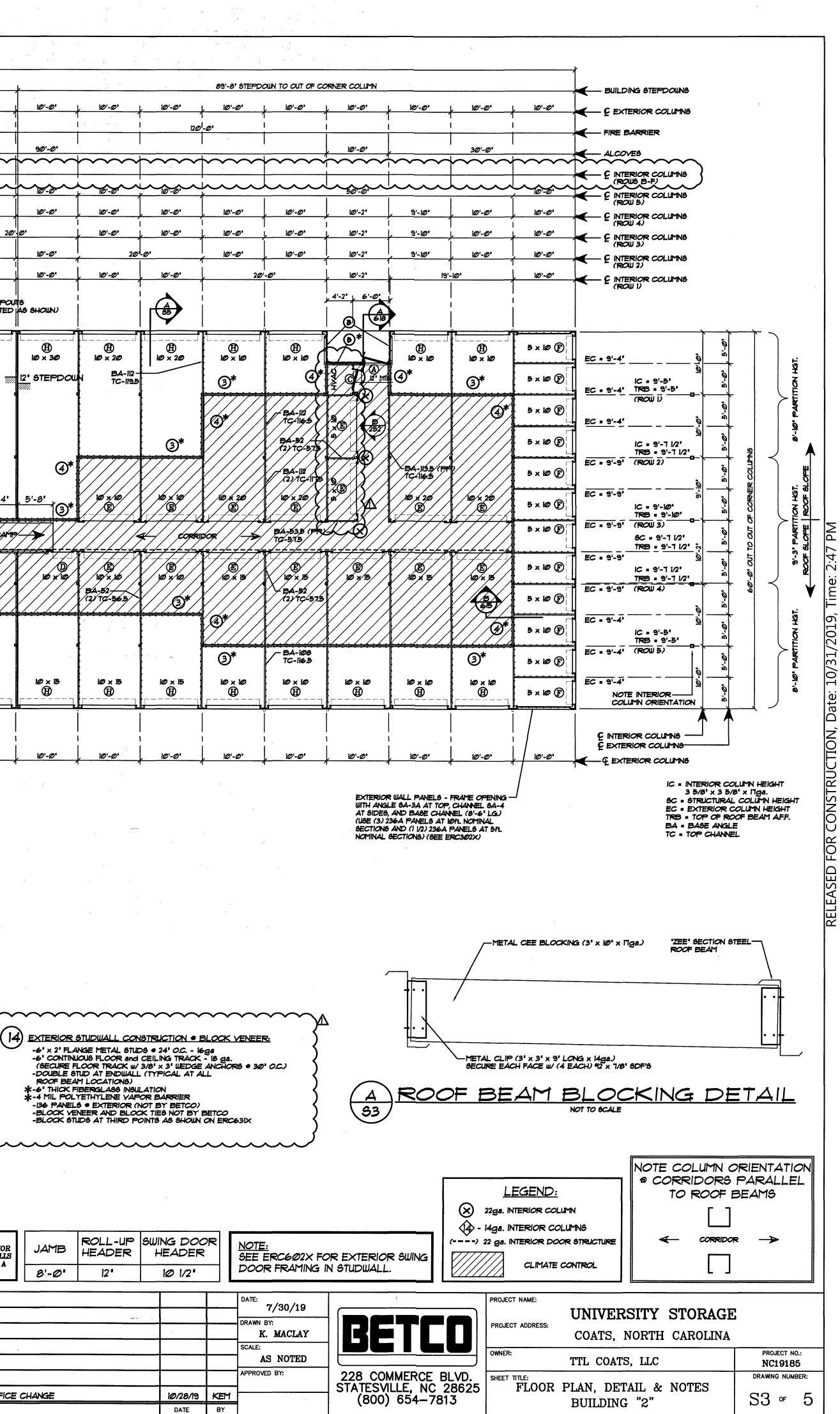
(A)  $|4'-0'' \times 7'-0'' (4070 - 2 - G)$  (ERC254X) |1/2 GLASS PERSONNEL **B**  $[4'-0'' \times 7'-0'' (4070 - 1 - A) (ERC254X) ] "A" LABEL FIRE DOOR$ © 3'-0" x 7'-0" w/LOUVER INTERIOR SWING INTERIOR ROLL-UP INTERIOR ROLL-UP EXTERIOR ROLL-UP EXTERIOR ROLL-UP EXTERIOR ROLL-UP EXTERIOR SWING

EXTERIOR SWING

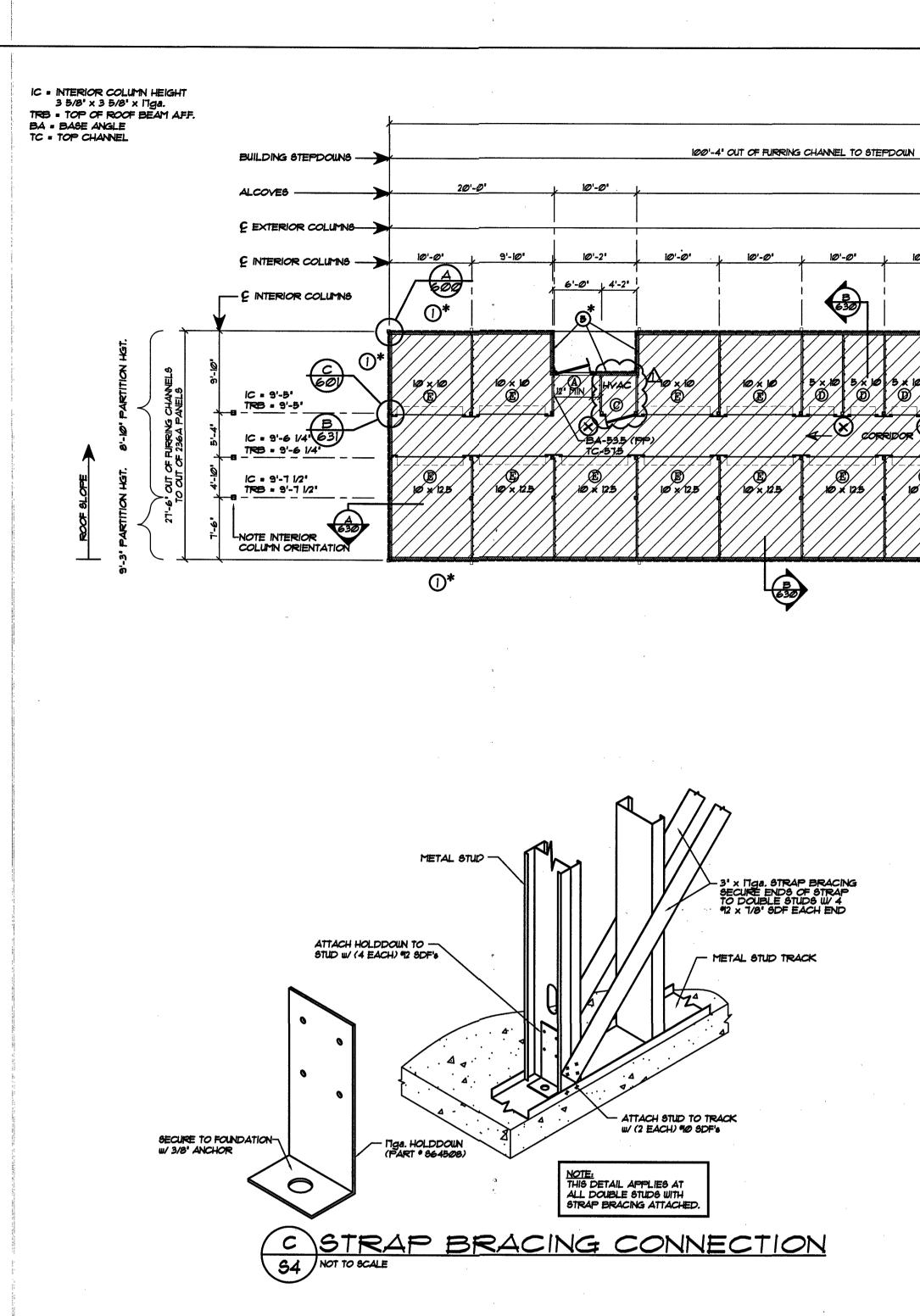
(13) INSULATED NON-LOAD BEARING STUDWALL : -3 5/8' METAL STUDS . 24' O.C. - 20ga -3 5/8' CONTINUOUS FLOOR AND CEILING TRACK - 20ga. (ATTACH BASE TRACK TO CONCRETE FLOOR SLAB WITH 7/8' PDF's • 24' O.C) -J-TRIM AT TOP OF LINER PANELS TO ROOF PURLINS -230 LINER PANELS • STORAGE SIDE (ATTACH EACH PANEL AT BASE AND TOP W/ (4) EACH #0 SDF'S)

(14) EXTERIOR STUDWALL CONSTRUCTION . BLOCK VENEER: -6' x 2' FLANGE METAL STUDS • 24' O.C. - 16ga -6' CONTINUOUS FLOOR and CEILING TRACK - 18 ga. -5" CONTINUOUS FLOOR and CEILING TRACK - 15 ga. (SECURE FLOOR TRACK W/ 3/8" x 3" WEDGE ANCHORS • 30" O.C.) -DOUBLE STUD AT ENDWALL (TYPICAL AT ALL ROOF BEAM LOCATIONS) X-6" THICK FIBERGLASS INSULATION X-4 MIL POLYETHYLENE VAPOR BARRIER 184 BANEL & A EXTERIOR (HAR BETCO) -136 PANELS • EXTERIOR (NOT BY BETCO) -BLOCK VENEER AND BLOCK TIES NOT BY BETCO -BLOCK STUDS AT THIRD POINTS AS SHOUN ON ERCESIX

	LOAI & E	NOTE: BLOCK ALL OAD-BEARING INTERIOR & EXTERIOR STUD WALLS		JAMB	ROLL-UP HEADER		ING HEA
		SHOWN IN DETAIL A ERC631X.		8'-0"	12"		10
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#### NOTES:

- --- 6' ROOF INSULATION (R-19) INCLUDED AT ENTIRETY OF BUILDING '3'.
- --- 4" WALL INSULATION (R-13) INCLUDED AT STUD WALL OF BUILDINGS '1' - '3'.
  --- 4" x 5" KICK-OUT DOWNSPOUTS ARE INCLUDED.
  --- CORRIDOR WIDTH WILL BE A MINIMUM OF APPROXIMATELY 56" FROM FACE TO FACE OF DOOR JAMBS.
- --- ATTACH ALL STUDS TO TRACKS WITH #10 x 5/8" SDF (4 PER STUD). --- BURGLAR BARS ARE PROVIDED ABOVE
- INTERIOR ROLL-UP DOORS AS REQUIRED.
- AT HALLWAYS ARE PREPAINTED. --- ALL PERSONNEL DOORS ARE GLOBAL
- AND INCLUDE LOCK-OPEN TYPE CLOSERS.
- --- SECURE INTERIOR PARTITION TO INTERIOR COLUMNS WITH (4) #10 x 5/8" SDF'S AS
- SHOWN ON ERC200X ERC208X. --- INTERIOR DOOR JAMBS INCLUDE PARTITION CLOSURE ANGLES.
- --- NOTE FOR INTERIOR BEARING STUDWALLS: (SECURE BOTTOM TRACK W/ 3/8' x 3' WEDGE ANCHORS (2' MIN. EMBEDDMENT) @ 30' O.C. MAXIMUM)
- --- NOTE FOR ALL EXTERIOR STUDWALLS: (SECURE FLOOR TRACK w/ 3/8' x 3' WEDGE ANCHORS (2' MIN. EMBEDDMENT) @ 30' O.C. MAXIMUM)

#### NOTE:

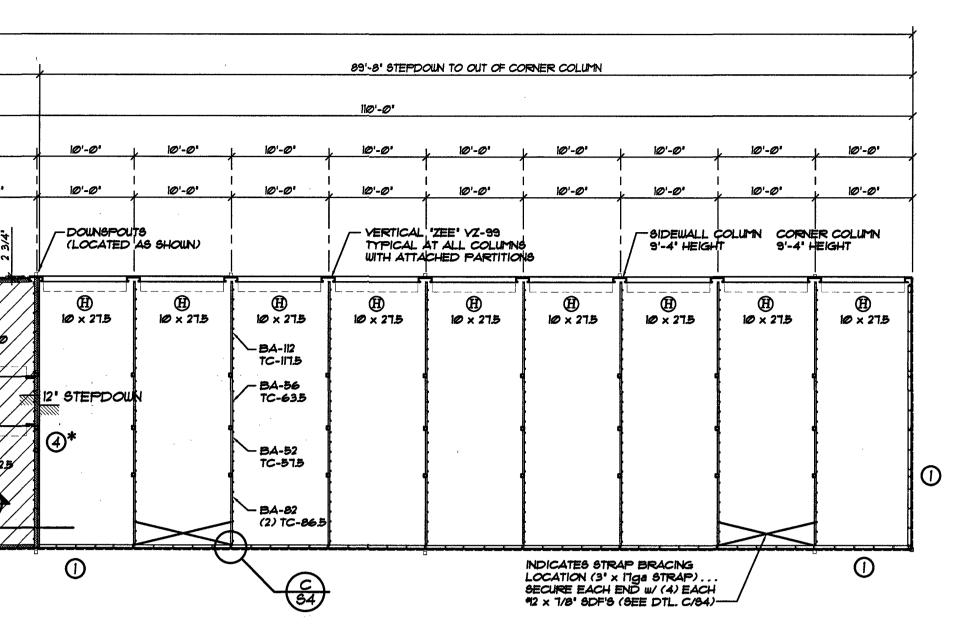
UNIT SIZES SHOWN ARE NOMINAL. ACTUAL CLEAR DIMENSIONS INSIDE UNITS MAY VARY ACCORDING TO FINAL DESIGN OF COMPONENTS.

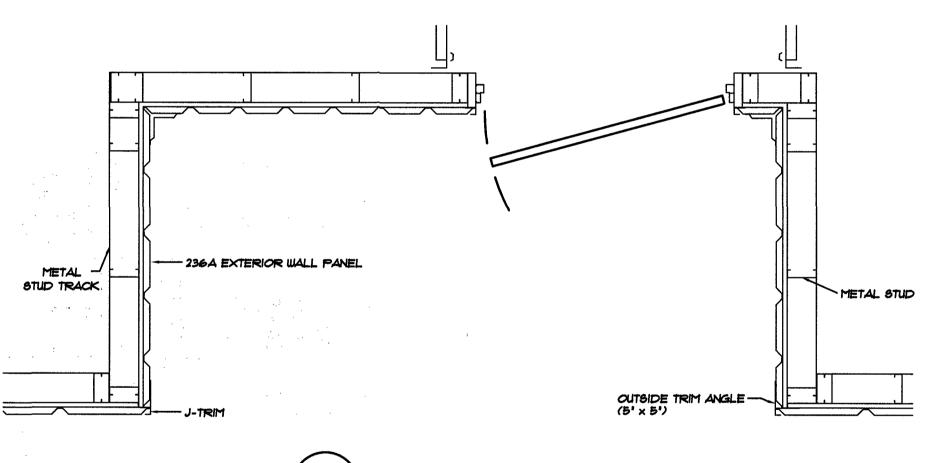
		· `			
STUDWALL LEGEND	•	BUILDING * 1			
INTERIOR STUDWALL	Ε×		SWALL		
DESCRIPTION	-	UNINGULATED			
O*EXTERIOR STUDWALL CONSTRU- AT FLAT SLAB (BLOCK @ MID-	ICTION HGT.)	<u> </u>	<u>3875</u> LF.		
(4)*INSULATED NON-LOAD BEARIN STUDWALL	G	N/A	<u>275</u> L.F.		
5 EXTERIOR STUDWALL CONSTRU AT HVAC (BLOCK @ MID-HGT.)		N/A	<u>40</u> L.F.		
NOTE #1: SEE ERC610X FOR COMPLETE STUDWALL CONSTRUCTION DETAILS. NOTE #2: * = INSULATED (SEE ERC610X) - COORDINATE WITH FLOOR PLAN. (NOTE WALLS #3 AND #4 ARE ALWAYS INSULATED) NOTE #3: GYPBOARD AND RELATED FINISH MATERIALS MAY NOT BE PROVIDED BY BETCO - VERIFY WITH CONTRACT.					
	NTRACT.		E IVV A IIJEID		

	DOOR SCHEDULE	
ID	DOOR SIZE	TYPE
A	4'-0" x $7'-0$ " ( $4070 - 2 - G$ ) (ERC254X)	1/2 GLASS PERSONNEL
B	$4'-0" \ge 7'-0" (4070 - 1 - A)$ (ERC254X)	"A" LABEL FIRE DOOR
C	3'-0" x 7'-0" w/LOUVER	INTERIOR SWING
	3'-0" x 7'-0"	INTERIOR ROLL-UP
E	8'-0" x 7'-0"	INTERIOR ROLL-UP
Þ	3'-8" x 7'-10"	EXTERIOR ROLL-UP
G	8'-4" x 7'-10"	EXTERIOR ROLL-UP
€	8'-8" x 7'-10"	EXTERIOR ROLL-UP
·····		EXTERIOR ROLL-UP

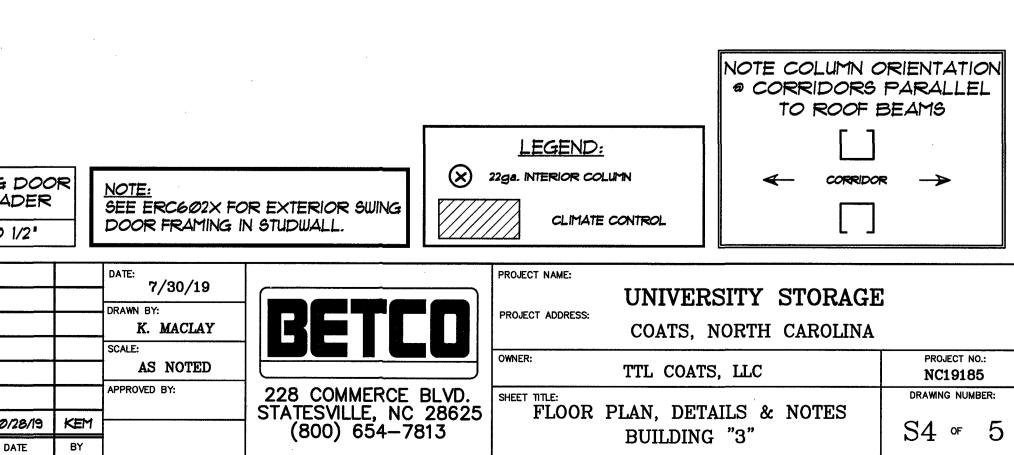
				*		280'-0 <b>'</b> Out	OF FURRING CHAN	NEL TO OUT OF CO	RNER COLUMN			ζ.
1				J			<del>3</del> 0'-0	' STEPDOWN TO ST	EPDOWN			
			130'- <b>0'</b>				•			, 10'-0'		
			130'-0"									
0'-0'	<u>i@'-@'</u>	10'-0'	↓i@'-@ <b>'</b>	i@'-@*	10'-0'	i@'-@'	10'-0'	10'-0'	l@'-@ <b>'</b>	, lø'-2 <b>'</b>	9'-10"	+ 10'-e
	E	0*	EDGE Found	OF CONCRETE ATION				<b>633</b>		,4'-2' 6'-0'		0*
	5 x 10 5 x 10		10 x 10 D x 6'-4'	BASE ANALE I TOP CHANNEL $10 \times 10$ $5^{1}-8^{1}$	10 × 10	BA-105 TC-145 12 x 12	10 * 10	10 * 10	/10/x 10/	HVAC V 12V MIK	10 × 10	
8/4												
		<b>250</b> ///	X			<u>                                      </u>		$\mathbf{V} = \mathbf{V} = \mathbf{V}$			\\^ \\	X
B 7 × 12 B		10 × 125		12* STEFOØU	10 × 125	10 x 12 5 BA-52 (2) TC-515 BA-82	10 x 12 5	10 × 12.5	10 x 12 5	10/x 125	10 × 125	
						72/TG-555						
	ROO NOTE: INSULATI AT STUDI		FLOC OCALE: 1' - 10'	- <b>@'</b> CL	.IP ROOF PERIMETER TAPE - FURRING CH	■		NG "3		BUILDING "3" ADJUSTABLE CO NS. 9'-4" HEI	ONTROL JOINT	
		4 MIL VAP UNFACE 230 LIN	9 Stud Track		NOTE: 15/8': PROVI	E TRIM ANGLE × 2 1/2') DE CLOSURE 78' SDF (PP) UD PANEL M × 6' DRIP CAP ( DED FOR STUDI NGRETE, CAULK	236A PANEL - 8'-@' 5'-@'	T'-@' HIGH OI		A PANEL IGGA) BWING DOOR DER DETAIL) TRIM M CHANNEL		
							·	NOTE: BL LOAD-BEA & EXTERI	OCK ALL ARING INTERIOR OR STUD WALLS	JAMB	ROLL-UP HEADER	SWING

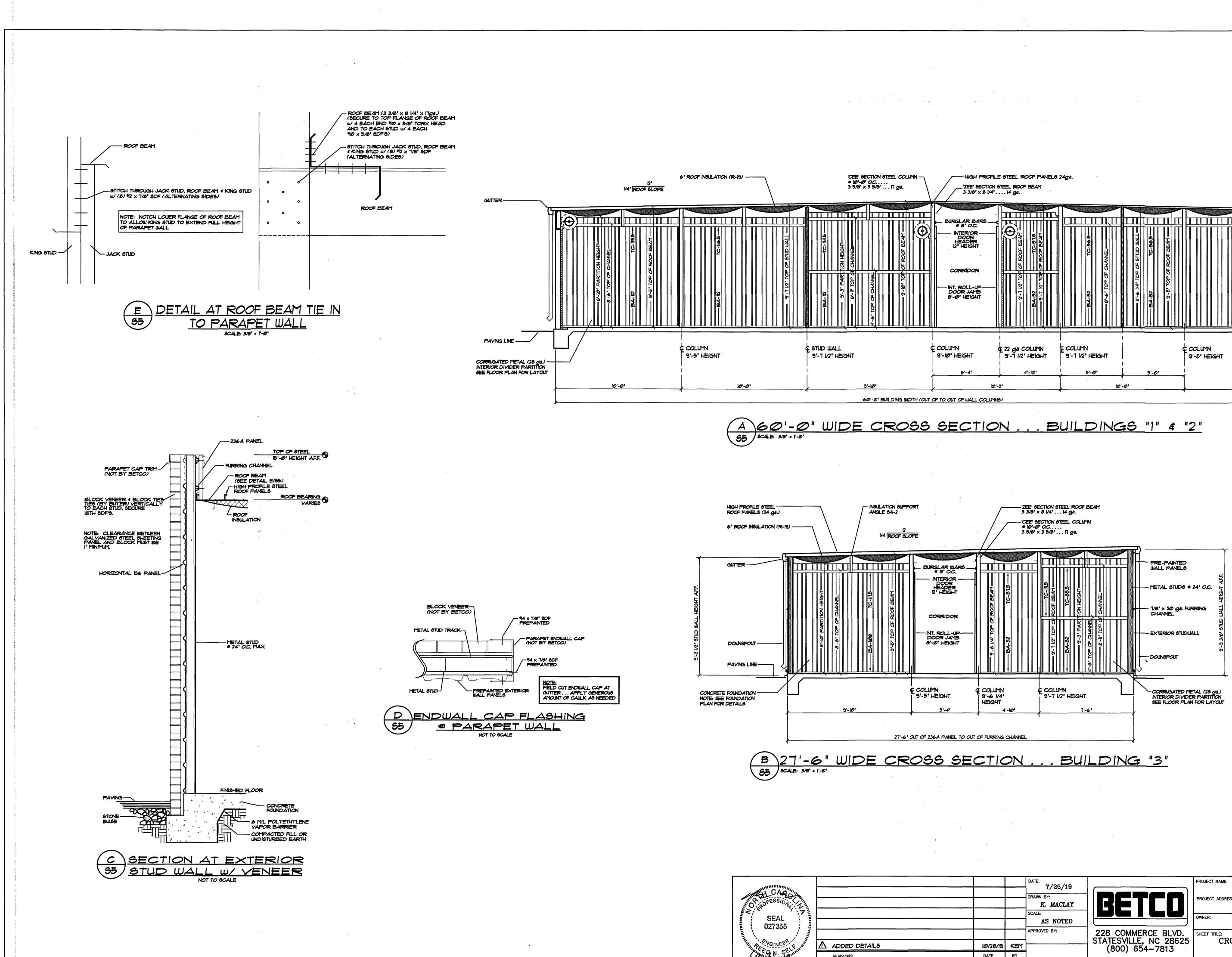
	OF ERC	631X.		8'-0"	12"	10 1/
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OFESSION T					· · ·	
	1. In					
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TRIM AT ALCOVE



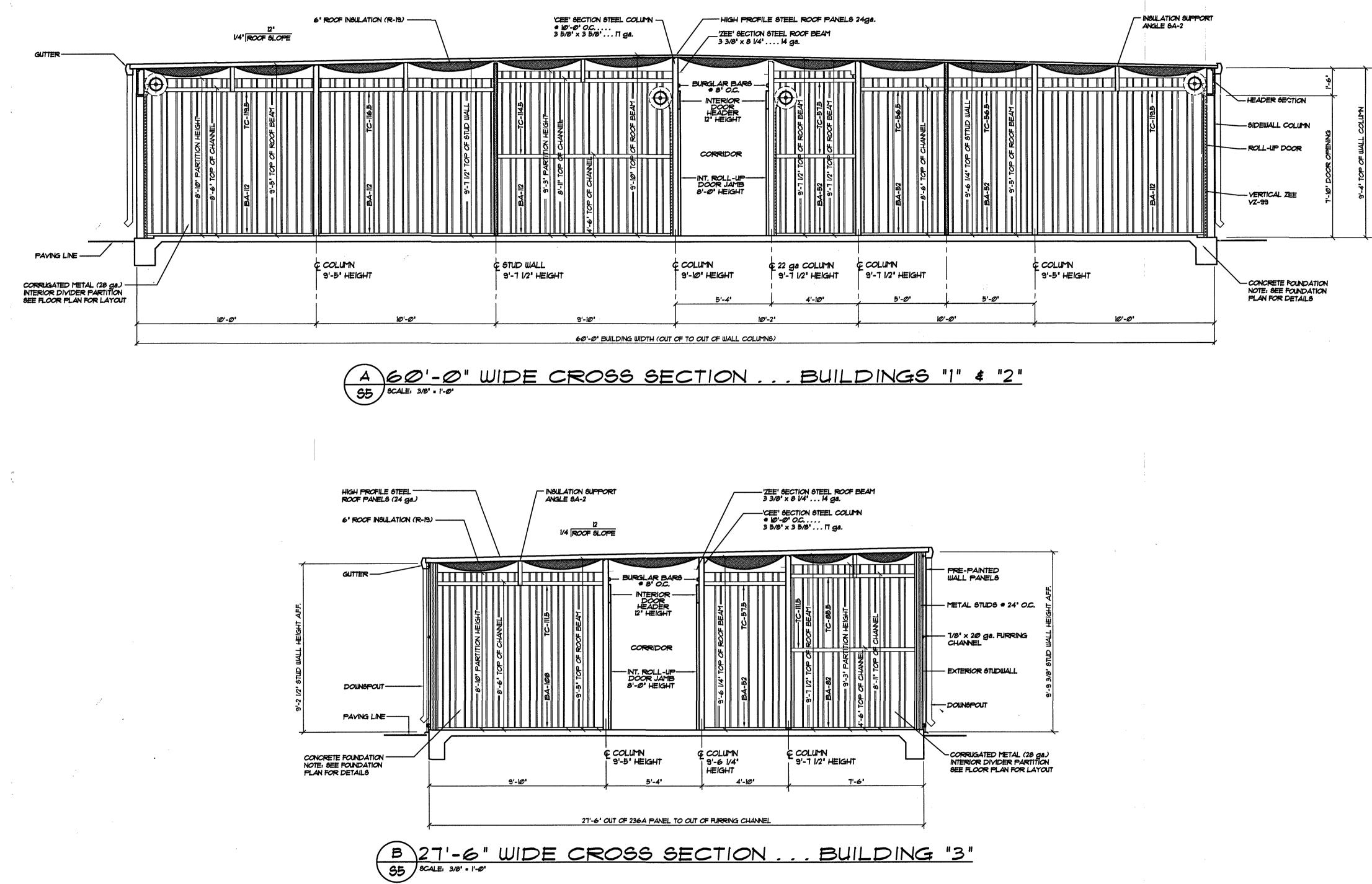


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Juis muligine	REVISIONS	

- INSULATION SUPPORT ANGLE SA-2 

HEADER SECTION ------BA-112 TC-119.5 ---SIDEWALL COLUMN - ROLL-UP DOOR - VERTICAL ZEE **∕Z-99** CONCRETE FOUNDATION NOTE: SEE FOUNDATION FLAN FOR DETAILS

		DATE: 7/25/19		PROJECT NAME:	UNIVERSITY STORAGE	
		DRAWN BY: K. MACLAY	BETCO	PROJECT ADDRESS:	COATS, NORTH CAROLINA	
		SCALE: AS NOTED		OWNER:	TTL COATS, LLC	PROJECT NO.: NC19185
10/28/19	KEM	APPROVED BY:	228 COMMERCE BLVD. STATESVILLE, NC 28625 (800) 654-7813	SHEET TITLE: CROSS	SECTIONS & DETAILS	DRAWING NUMBER: S5 of 5
DATE	BY					



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2 PT LA P		
SEAL 027355		
027355 027355 027355 8-13-19		
THE OCTOBINEER F WOND		
The DN. SELIMIN		
8-13-19	REVISIONS	DATE

	DATE:		PROJECT NAME:		
	7/25/19 DRAWN BY:			UNIVERSITY STORAGE	1
	K. MACLAY	BETCO	PROJECT ADDRESS:	COATS, NORTH CAROLINA	
 	SCALE: AS NOTED		OWNER:		PROJECT NO.:
				TTL COATS, LLC	NC19185
	APPROVED BY:	228 COMMERCE BLVD.	SHEET TITLE:	CDOSS SECTIONS	DRAWING NUMBER:
		STATESVILLE, NC 28625 (800) 654-7813		CROSS SECTIONS	S5 º 5
BY					

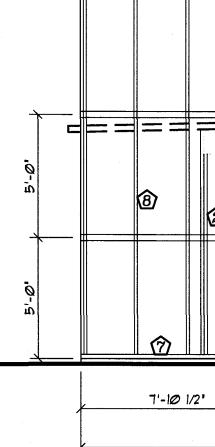


, 2'-0', 3'-2'

4'-7**'** 

63

LEGEND:
1 METAL STUD TRACK (3 5/8' × 1 1/4' LEG × 18ga) FASTEN TO EACH METAL STUD
WITH 2 EACH #10 × 5/8' 3DF PER FLANGE
2 EACH - METAL STUD AT EACH ROOF BEAM LOCATION - SIMILAR TO C/601X.
3 DH-1 - DOUBLE CEE BOXED HEADER - 6' (SEE ERC602X)
(1) I EACH - METAL STUD (3 5/8' x 1 5/8' x 18ga)
D METAL STUD TRACK ABOVE HEADER (3 5/8' × 1 1/4' × 18ga) FASTEN TO EACH
METAL STUD WITH 2 EACH #10 $\times$ 5/8' SDF PER FLANGE - FASTEN TO TOP OF DH-1 WITH 2 EACH #12 $\times$ 7/8' SDF AT 12' O.C.
6) STRAP BRACING FOR BLOCKING (SEE DETAIL "A" ON ERC631X)
(7) METAL STUD TRACK (6' x 1 1/4' LEG x 18ga) FASTEN TO EACH METAL STUD WITH 2 EACH #10 x 5/8' SDF PER FLANGE
(B) I EACH - METAL STUD (6' x 2' x 16ga)
DIMETAL STUD TRACK ABOVE HEADER (6' x 1 1/4' x 18ga) FASTEN TO EACH
METAL STUD WITH 2 EACH #10 x 5/8' SDF PER FLANGE - FASTEN TO TOP OF
DH-1 WITH 2 EACH #12 x 7/8' SDF AT 12' O.C.



63

4'*-0*"

20'-0' OUT OF FURRING CHANNEL TO OUT OF 136 PANELS

6'-3"

BUILDING "2"

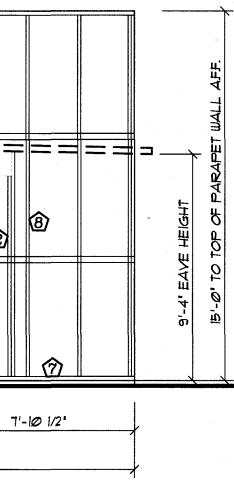
(?)		$(\overline{\gamma})$
4'-0' 5'-10 1/2' 4'-0'	6'-1' 4'-2' 6'-1' 4'-4	er 5'-10 1/2r 4'-0r 7
יין אר אר אר אין אר אר אר אין אר אר אר אר אין אר	1 1 1 59'-9 1/2' OUT TO OUT OF FURRING CHANNELS	л Д Д

B FRAMING ELEVATION ENDUALL (NOTE: VERIFY ALL ROUGH OPENING LOCATIONS AND SIZES) . BUILDING "2" (NOTE: VERIFY ALL ROUGH OPENING LOCATIONS AND SIZES)

CARO SEAL 027355 A. ENGINEE SED N. 11- "Junesyno REVISIONS

3 5 36 3'-2' 4'-Ø**'** 5'-7" 6'-3' 20'-0' OUT OF 136 PANEL TO CORNER COLUMN

BUILDING "2" (NOTE: VERIFY ALL ROUGH OPENING LOCATIONS AND SIZES)



PROJECT NAME: DATE: 10/28/19 UNIVERSITY STORAGE AWN BY: PROJECT ADDRESS: COATS, NORTH CAROLINA K. MACLAY SCALE: OWNER: PROJECT NO .: TTL COATS, LLC AS NOTED NC19185 228 COMMERCE BLVD. STATESVILLE, NC 28625 (800) 654-7813 APPROVED BY: SHEET TITLE: FRAMING ELEVATIONS & NOTES DRAWING NUMBER: S5A ° 5 BUILDING "2" DATE BY

/201 Dat ION, RELEASED FOR CONSTRUCT

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			BUILDING STEPDOUNS)	<b>.</b>			k	00'-5 1/2 <b>'</b> OUT OF	SLAB TO STEPDOW	N
			EXTERIOR COLUMNS	10'-1 1/2"	l <u>lo'-0'</u>	. IØ'-Ø'	l 10'-0'	, 10'-0 <b>'</b>	↓ i@'-@ <b>'</b>	10'-0
					       		I 			
			ALCOVES		<u>3@'-1 1/2'</u>		 i@'-@'			
			E INTERIOR COLUMNS	i@'-1 1/2'	 <del>/  </del>		50'-0 <b>'</b>		 	, 10'-4
			E INTERIOR COLUMNS	10'-1 1/2"	1 <u>0'-0</u> '	9'-10'	10'-2"	10'-0'	1 1 1	,10'-1
			E INTERIOR COLUMNS	10'-1 1/2'	   10'-0'	9'-10'	l l 10'-3'	  1@'-@ <b>'</b>	  @'-@' 	. 10'-1
			E INTERIOR COLUMNS	10'-1 1/2'	10'-0'     1	9'-10'	10'-2 <b>'</b>	k 10'-0 <b>'</b>	    0'-0' 	·
			E INTERIOR COLUMNS	10'-1 1/2"	  -1:61 	Ø'	10'-2'	, 2e	)' <i>-@</i> '	, iØ'-i
		V	- 2 INTERIOR COLUMNS	- 1/2" x 3 3/ ONE PER (3" EMBE	4" KB-TZ ANCHO CORNER COLUM DMENT)	<b>RS</b> N				
	101 12.	10-1 1/2				5-234"				
	+		(ROW 1)					 I		
	10'-0'	10'-0*						1		
£ ₽			(ROW 2)		▶   		• ·	•   	♣ + 	
\$@'-3' OUT TO OUT OF \$LAB	Ø,-0	,Ø]-,6								
our to	*		(ROW 3)		╋╴ <u>╼╶</u> ╸╼╶┿ ╎ ╎	<del></del>				<u> </u>
60'-3"	.0- .0	Ø'-2					   			
	+		(ROW 4)		↓ → ↓				+	
	.0- .0									
	+		(ROW 5)		· • · · · · · · · · · · · · · · · · · ·			<u> </u>		<b>-</b>
	10'-1 In'	10'-1 I/2'							/	
ŕ		<b>\</b>				4' C WWr	H ONCRETE FLOOR 1 PLACED ON 6	e 6lab W/6 x 6 Mil folyethy		
		C =	XTERIOR COLUMNS			BAR SLA OFT	RIER NOTE: S B SURFACE AT A SET CUTS 2'-6' M	AW CUT CONTR PPROXIMATELY NIMUM FROM INT	UI.4 × UI.4 - LENE VAPOR OL JOINTS IN 10'-0' INTERVAL TERIOR COLUMN L	.6. .ines
	_	E E	Exterior columns	10'-1 1/2"	10'-0'	i@'-@*	10'-0'	10'-0'	10'-0"	10'-4

CATEGORY	SEVERITY	CLASS	CONDITION	
F FREEZING AND THAWING	NOT APPLICABLE	FO	CONCRETE NOT EXPOSED TO FREEZING AND-THAWING CYCLES	3-
S Sulfate			WATER-SOLUBLE SULFATE (SO4) IN SOIL PERCENT BY WEIGHT	DISSOLVED SULFATE (SO4) IN WATER, ppm
	NOT APPLICABLE	<b>S</b> 0	SO <sub>4</sub> < 0.10	S0 <sub>4</sub> < 150
P REQUIRING LOW PERMEABILITY	NOT APPLICABLE	PO	IN CONTACT WITH WATER WHERE LOW PERMEABILITY IS NOT REQUIRED	•
C CORROSION PROTECTION OF REINFORCEMENT	MODERATE	Ci	CONCRETE EXPOSED TO MOISTURE BU NOT TO EXTERNAL SOURCES OF CHLO	-

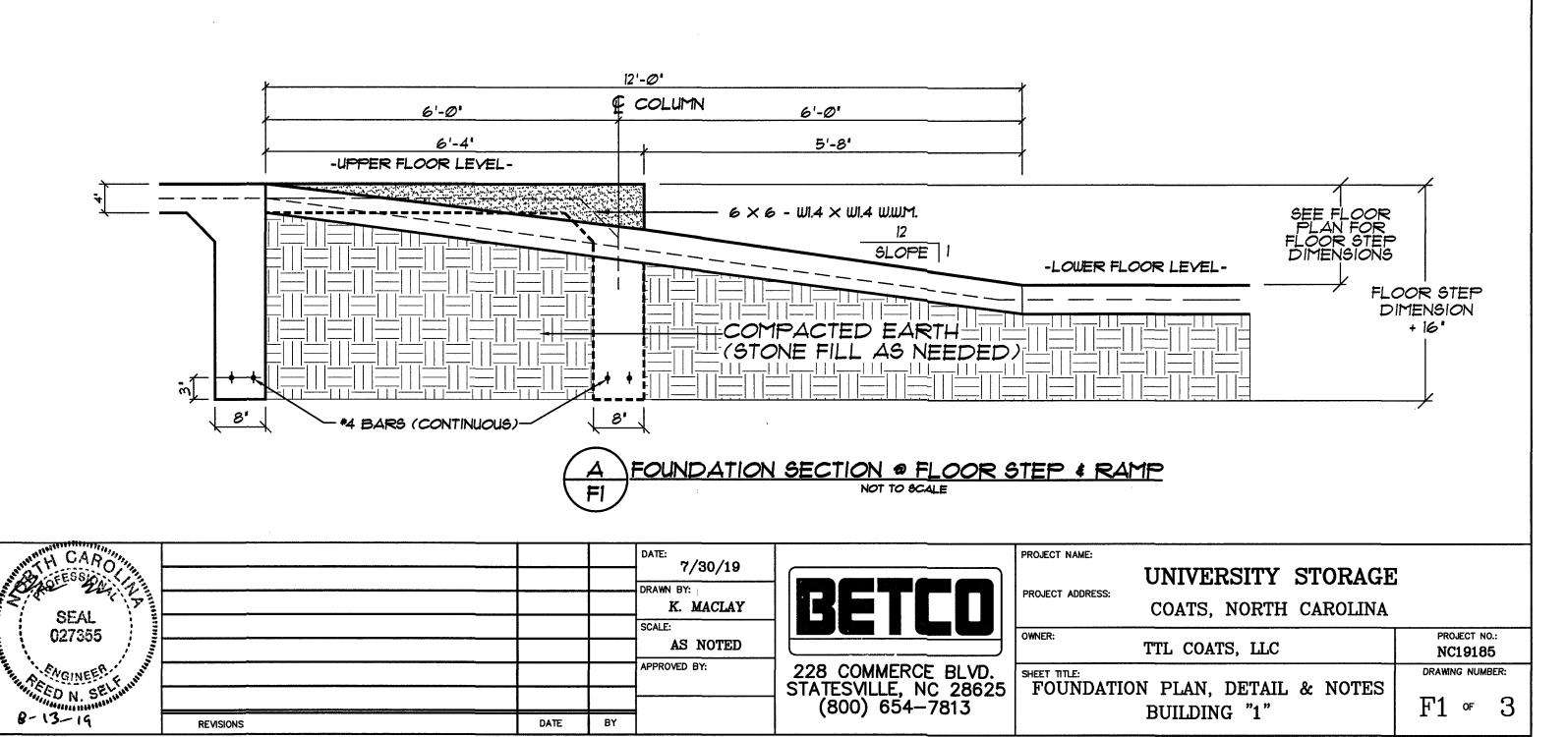
NOTE: . . . SEE OWNER FOR BUILDING ORIENTATION ON SITE

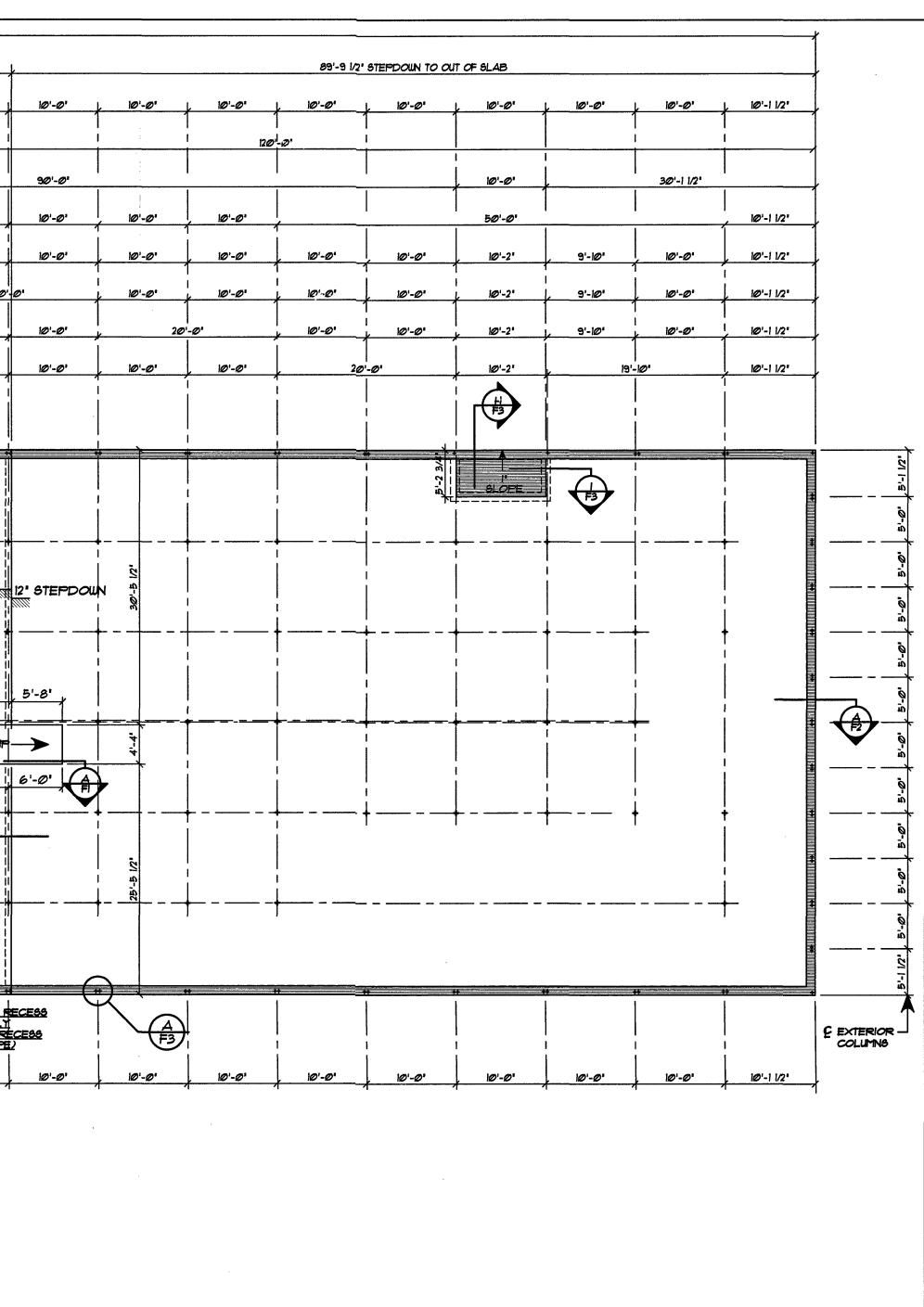
NOTE: KB-TZ ANCHORS ARE PROVIDED BY BETCO. EMBEDDED ANCHOR BOLTS IN SLAB ARE NOT REQUIRED BY BUYER

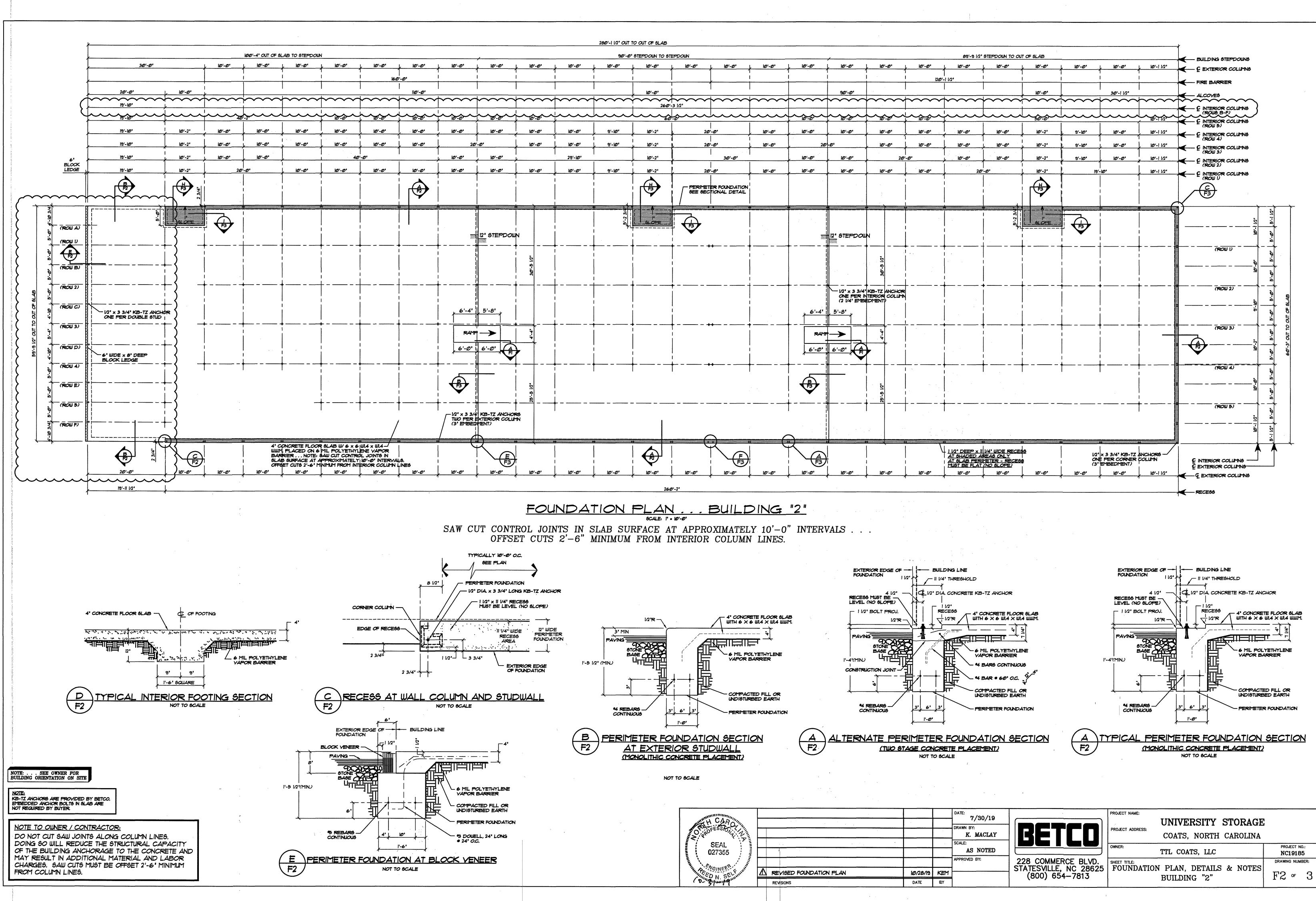
NOTE TO OWNER / CONTRACTOR: DO NOT CUT SAW JOINTS ALONG COLUMN LINES. DOING SO WILL REDUCE THE STRUCTURAL CAPACITY OF THE BUILDING ANCHORAGE TO THE CONCRETE AND MAY RESULT IN ADDITIONAL MATERIAL AND LABOR CHARGES. SAW CUTS MUST BE OFFSET 2'-6' MINIMUM FROM COLUMN LINES.

						280'-3' OUT TO	OUT OF SLAB				
			£			3@'-@ <b>'</b>	STEPDOWN TO ST	EPDOWN			
10'-0'	10'-0'	10'-0'	10'-0'	, 10'-0'	1 10'-0'	<u>j 10'-0' j</u>	10'-0'	, 10'-0 <b>'</b>	, 10'-0 <b>'</b> į	10'-0"	10'-0'
    64	0 <sup>1</sup> -0'				1	1					 
		) )'-@'					10'-0"				
10'-0'	i@'-@'	10'-0'	10'-0'	10'-0'		1	60	'- <i>0</i> "			10'-0"
1  i@'-@'	1	1	1   	, i0'-0'	1  i@'-@'	9'-10'	<i>i</i> ⊘'-2'	L 20'	-0'	10'-0'	1     i@'-@ <b>'</b>
1      @'-@ <b>'</b>	1      0'-0'	1	1	10'-0'	1         	     9'- <i>i</i> @' i	10'-2'	. 20		10'-0'	1 1 1 20
1	1 10 -10			, 10-0	1	<u> </u>			1		1
30'-0'		<u>, 10'-0'</u>	10'-0'		29'-10'		lØ'-2"		30'-0'		<u>, 10'-0'</u>
@'-@'   	<u> </u>	10'-0'   	10'-0 <b>'</b>	, 10'-0'	0'-@'   	9'-10' 1	10'-2'	20'	<del>۲</del>	10'-0°	1 1
									ER FOUNDATION TIONAL DETAIL		
			1 1 1 1								<u>+</u>
 	 								1		
	<b>_</b>	<b>.</b>					<u> </u>	· · ·	•		<b>_</b>
				12.				1	1		1
			12" STEPDOU	Z 30'-5	1	 			l		🛛
- +	+	<b>•</b>	H		<u> </u>	├ <b> </b>		•			┿── - ──
   =	´   	6'-4'	5'-8'		   - <del>K</del>	 		••	 ++		6'-4'
		RAMF		44	- 1/2" x 3 3/4 ONE PER II (2 1/4" EMB	KB-TZ ANCHOR TERIOR COLUMN EDMENT)					RAM
		6'-0'	6'-0'			 		 			6'-0'
· +	<b>+</b>	↓ ↓ ↓	· · · · · · · ·	•	<b>↓</b>	<b>॑</b> ── - ── <b>॑</b>	· <u> </u>	<b>↓</b> +	•		↓ · .
				.21							
	↓ ↓	Ⅰ. <b>▼</b>			L				<u> </u>	<u> </u>	↓ <b>∀</b> ↓
1	1	1			ļ						ļ
- 1/2' x 3 3/ Two Per (3' Embe	'4' KB-TZ ANCHO EXTERIOR COLU DMENT)	rs Mn							_		
		•			1	• • • • • • • • • • • • • • • • • • •		·(•			H 
1				- -	1			1	F F3		PERIMETER - 1 FLAT (NO SLOF
10'-0'	10'-0'	10'-0"	10'-0'	10'-0"	10'-0"	10'-0'	10'-0"	10'-0'	10'-0'	10'-0"	10'-0'

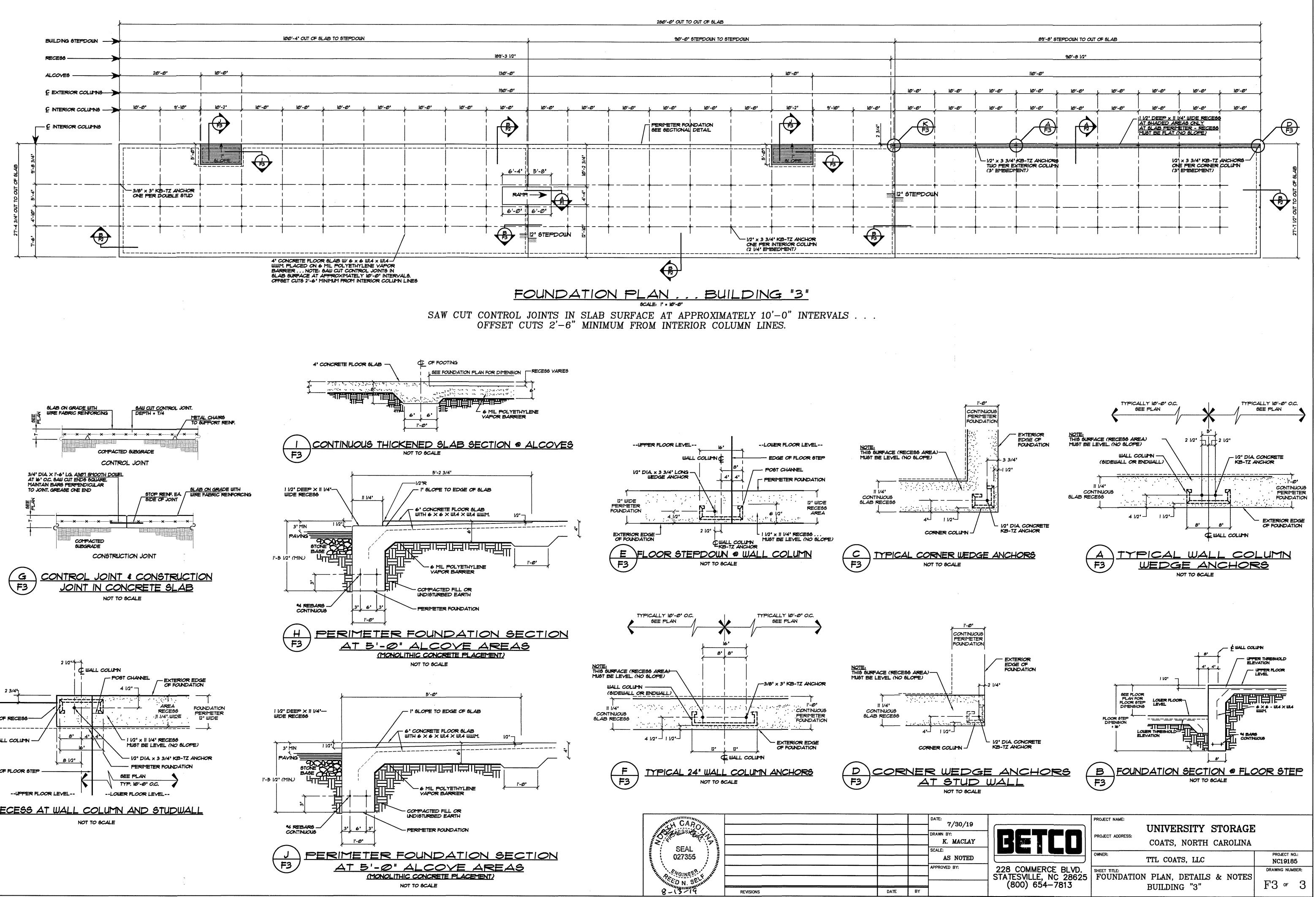
SCALE: 1' = 10'-0' SAW CUT CONTROL JOINTS IN SLAB SURFACE AT APPROXIMATELY 10'-0" INTERVALS . . . OFFSET CUTS 2'-6" MINIMUM FROM INTERIOR COLUMN LINES.



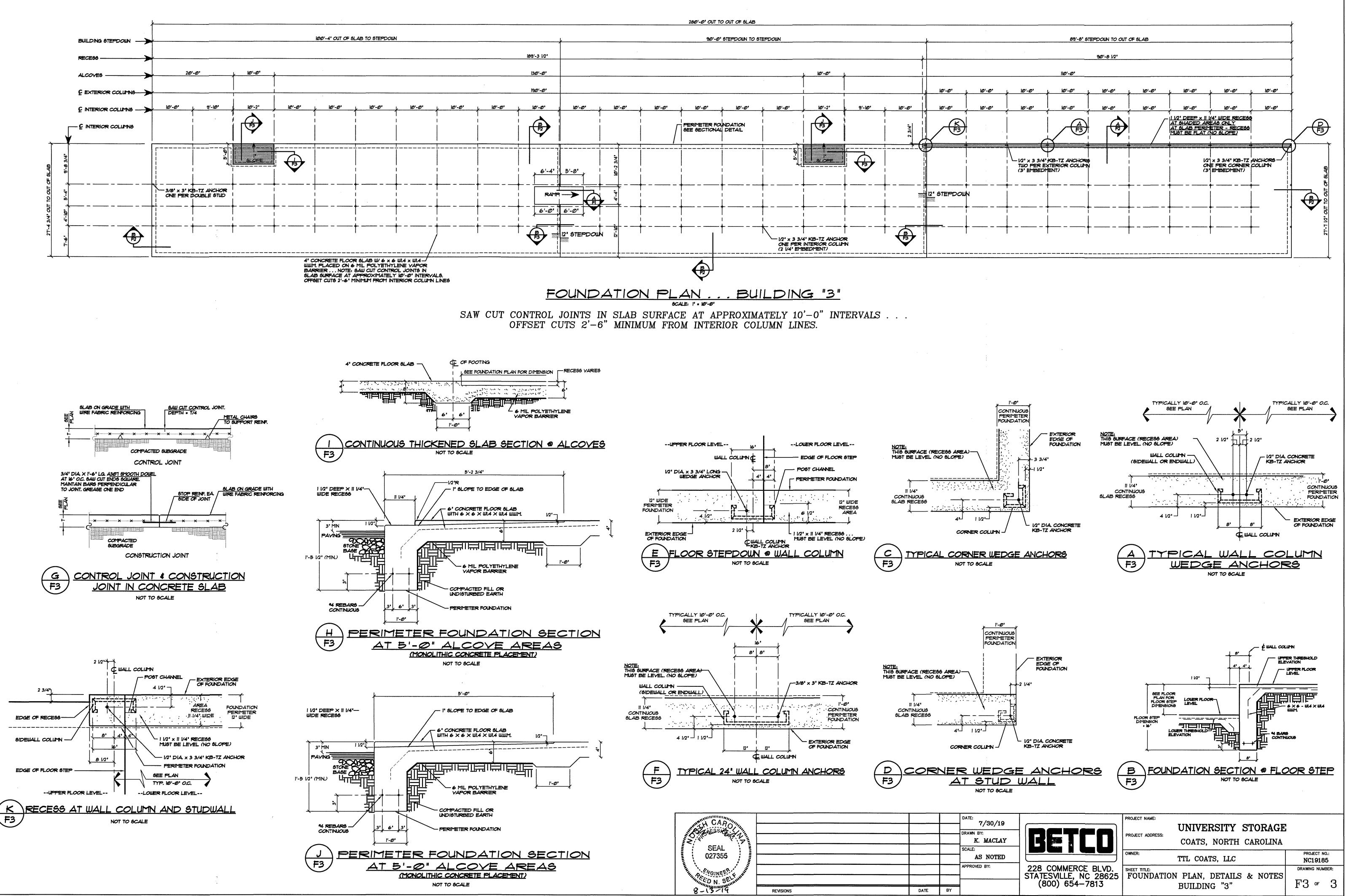


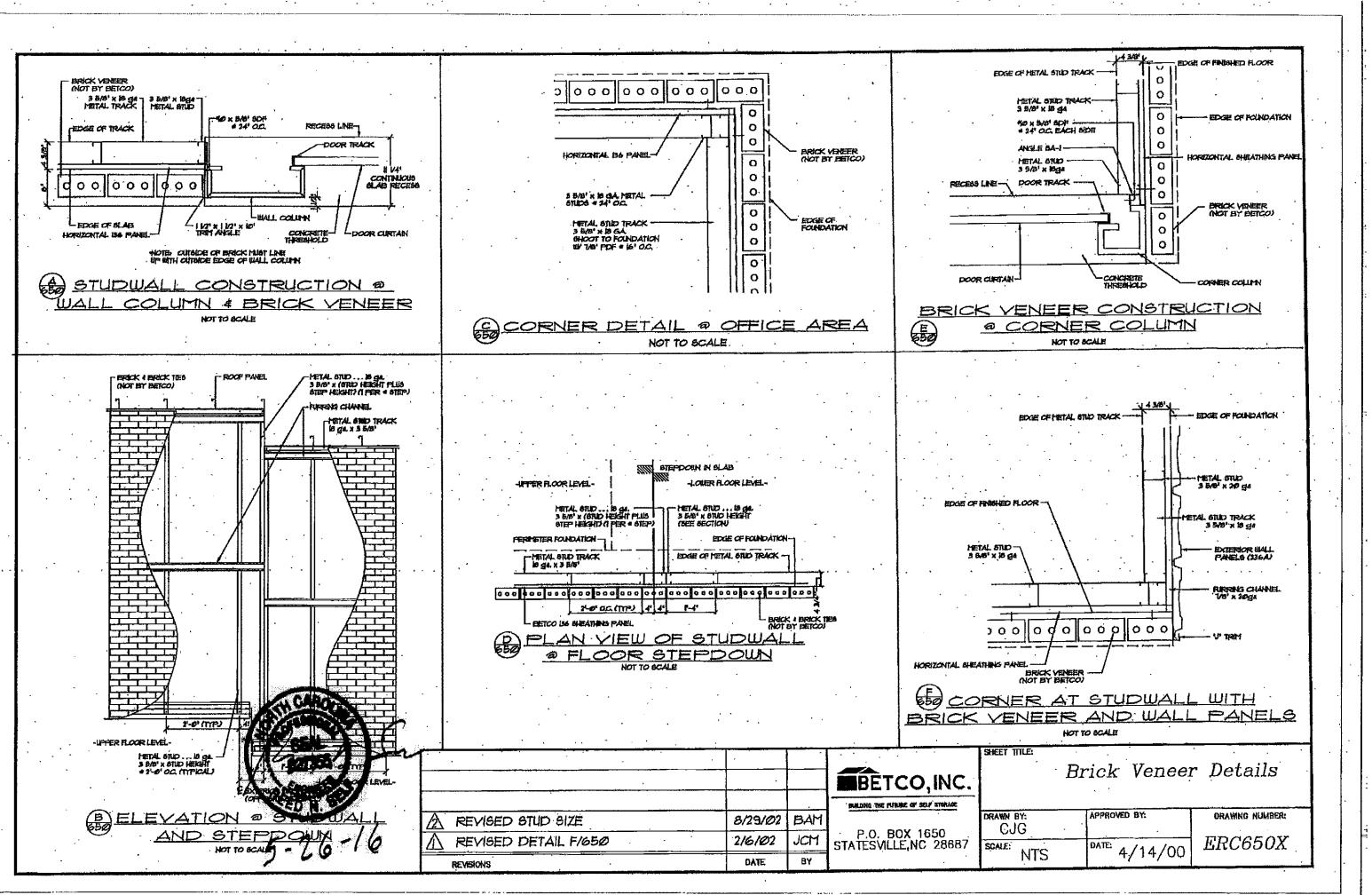


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EXIT REQUIREMENTS:

		NUMB	ER AND ARRAN	IGEMENTS OF I	EXITS		
FLOOR, ROOM OR SPACE DESIGNATION	MINI NO. OF	MUM <sup>2</sup> EXITS	TRAVEL DIS	TANCE	ARRANGEMENT MEANS OF EGRESS <sup>1,3</sup> (SECTION 1016-1021		
	REQ'D.	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1017.2)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS	
S-1	2	3	200'	105'-6"	131'-8"	215'-5"	
	1	1	1	l ·	1		

1. CORRIDOR DEAD ENDS (SECTION 1020.4) 2. BUILDINGS WITH SINGLE EXITS (TABLE 1006.3.2(2)), SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY (TABLE 1006.2.1) 3. COMMON PATH OF TRAVEL (SECTION 1029.8)

EXIT WDTH

			1	me m					
USE GROUP OR SPACE DESCRIPTION	(a)	(b)		(c)	)		EXIT WI	OTH (in)	
	AREA <sup>1</sup> SQ. FT.	AREA <sup>1</sup> PER OCCUPANT (TABLE	CALCULATED OCCUPANT LOAD	EGRESS PER OCC (TABLE	CUPANT	REQUIRE (SECTION (a/t	ED WIDTH N 1005.1) D) x c	ACTUAL SHOW PLA	N ON
		1004.1.2)	(a/b)	STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
S-1	8275	500 GROSS	17	N/A	.2	N/A	3.4"	N/A	144"

1. SEE TABLE 1004.1.2 TO DETERMINE WHETHER NET OR GROSS AREA IS APPLICABLE SEE DEFINITION "AREA, GROSS" AND "AREA, NET" (SECTION 1002, DEFINED IN CHAPTER 2)

2. MINIMUM STAIRWAY WIDTH (SECTION 1011.2); MIN. CORRIDOR WIDTH (SECTION 1020.2); MIN. DOOR WIDTH

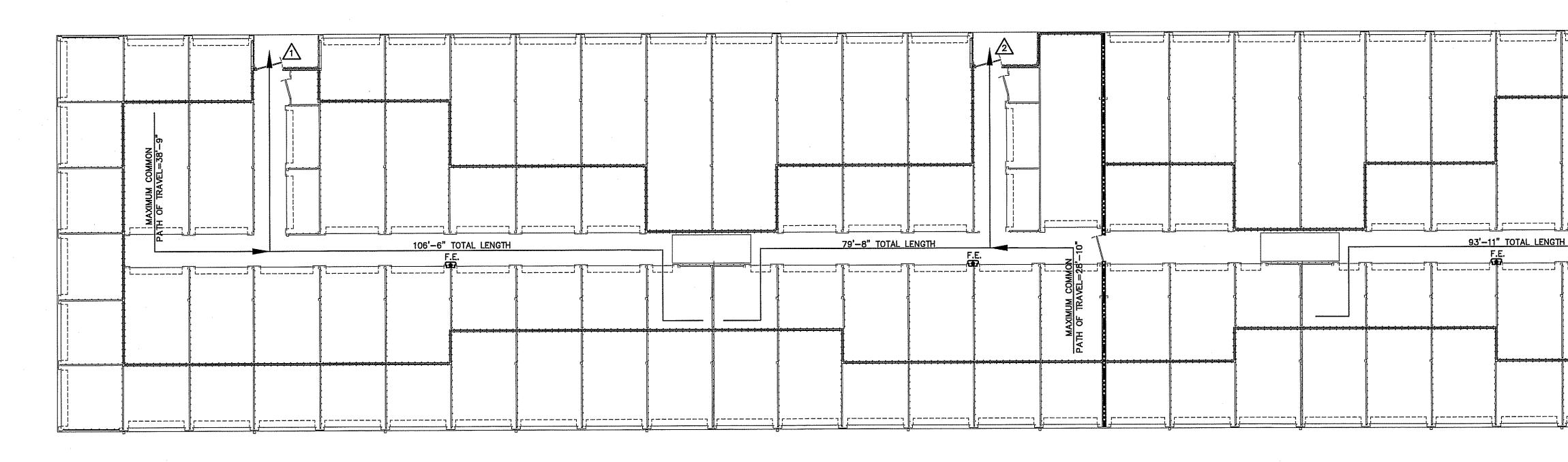
(SECTION 1010.1.1)

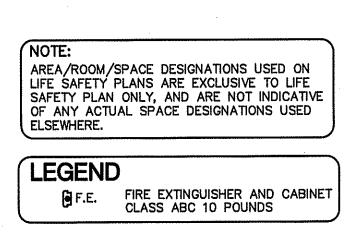
3. MINIMUM WIDTH OF EXIT PASSAGEWAY (SECTION 1024) 4. SEE SECTION 1005.6 FOR CONVERGING EXITS.

5. THE LOSS OF ONE MEANS OF EGRESS SHALL NOT REDUCE THE AVAILABLE CAPACITY TO LESS THAN 50% OF

THE TOTAL REQUIRED (SECTION 1005.5)

6. ASSEMBLY OCCUPANCIES (SECTION 1029)





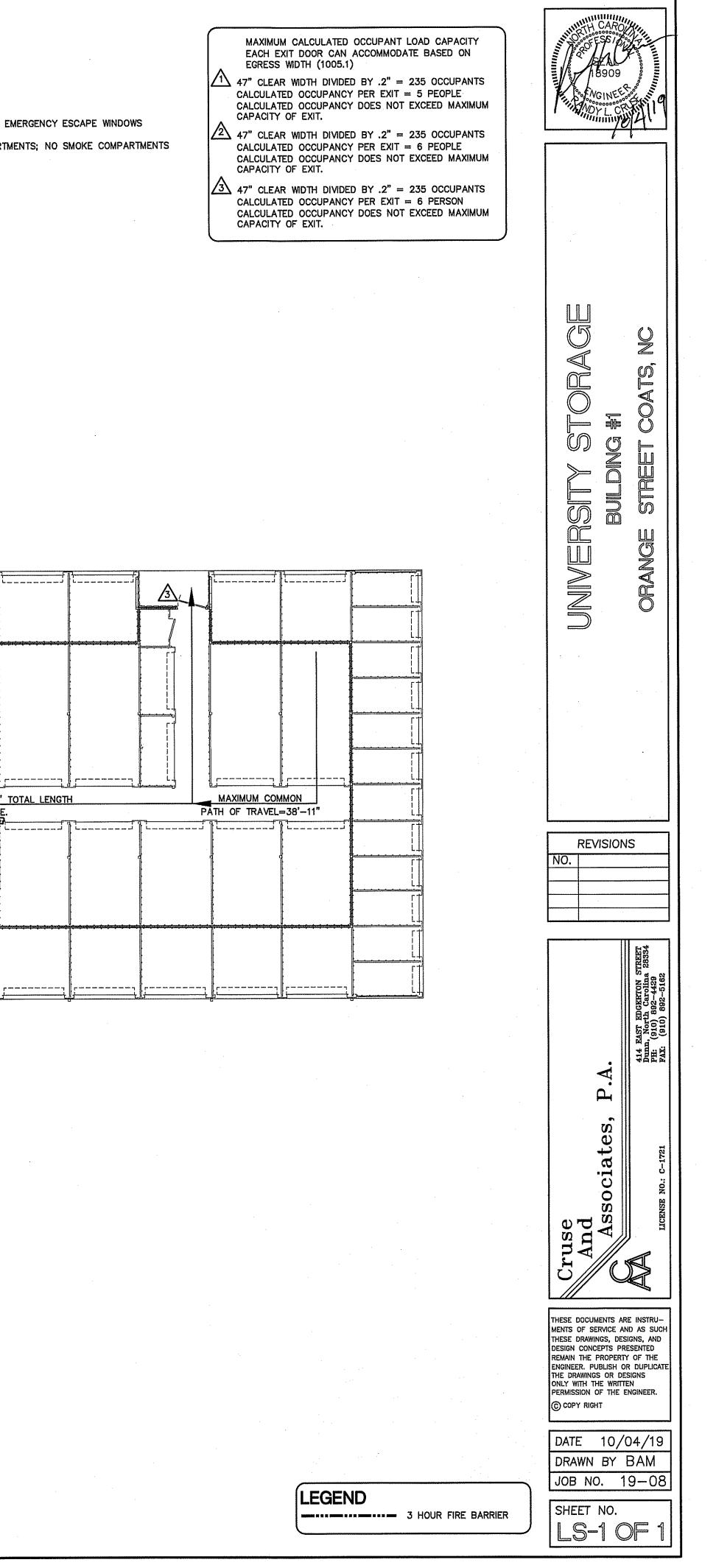
NOTE: EXIT REQUIREMENTS CALCULATED ONLY FOR CONDITIONED AREAS. ALL OTHER AREAS HAVE DIRECT EXIT TO EXTERIOR.

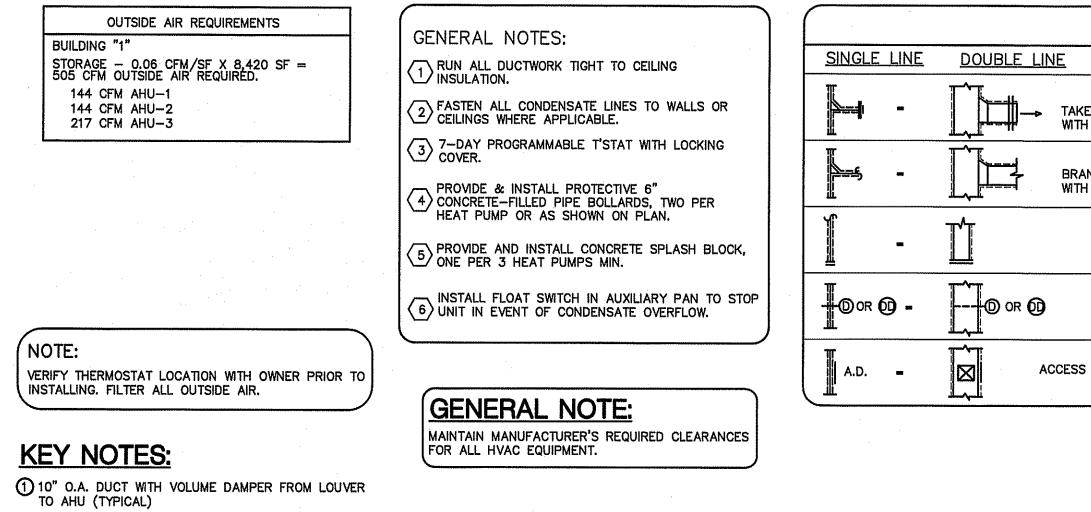
LIFE SAFETY PLAN REQUIREMENTS: LIFE SAFETY PLAN NOTES: 1. SEE LEGEND FOR RATED WALLS. ☑ FIRE AND/OR SMOKE RATED WALL LOCATIONS (CHAPTER 7) - SEE NOTE 1 2. ASSUMED PROPERTY LINE = 12'; REAL PROPERTY LINES >80'. X ASSUMED AND REAL PROPERTY LINE LOCATIONS - SEE NOTE 2 3. ASSUMED PROPERTY LINES = >12' UNLIMITED; NCSBC 705.8.1 EXCEPTION 2 X EXTERIOR WALL OPENING AREA WITH RESPECT TO DISTANCE TO ASSUMED PROPERTY LINES (705.8) - SEE NOTE 3 4. NO DEAD ENDS OVER 20'; 20' ALLOWED. S OCCUPANCY TYPES FOR EACH AREA AS IT RELATES TO OCCUPANT LOAD CALCULATION (TABLE 1004.1.2) 5. NO RATING REQUIRED THIS STRUCTURE. S OCCUPANT LOADS FOR EACH AREA PANIC HARDWARE NOT REQUIRED. ☑ EXIT ACCESS TRAVEL DISTANCES (1017) NO DELAYED EGRESS LOCKS, ELECTROMAGNETIC LOCKS, HOLD OPEN DEVICES, OR EMERGENCY ESCAPE WINDOWS COMMON PATH OF TRAVEL DISTANCES (1006.2.1 & 1006.3.2(1)) 8. FIRE AREAS DO NOT EXCEED CODE ALLOWANCE 9. BUILDING MEETS CODE REQUIREMENTS WITHOUT SUBDIVISION INTO SMOKE COMPARTMENTS; NO SMOKE COMPARTMENTS 🔀 DEAD END LENGTHS (1020.4) - SEE NOTE 4 X CLEAR EXIT WIDTHS FOR EACH EXIT DOOR MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.3) X ACTUAL OCCUPANT LOAD FOR EACH EXIT DOOR A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR/CEILING AND/OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION. SEE NOTE 5 ☑ LOCATION OF DOORS WITH PANIC HARDWARE (1008.1.10) - SEE NOTE 6 ☑ LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND AND THE AMOUNT OF DELAY (1008.1.9.7) - SEE NOTE 7 ☑ LOCATION OF DOORS WITH ELECTROMAGNETIC EGRESS LOCKS (1008.1.9.8) - SEE NOTE 7 ☑ LOCATION OF DOORS EQUIPPED WITH HOLD-OPEN DEVICES - SEE NOTE 7 ☑ LOCATION OF EMERGENCY ESCAPE WINDOWS (1029) - SEE NOTE 7 🖾 THE SQUARE FOOTAGE OF EACH FIRE AREA (902) - SEE NOTE 8 THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT (407.5) - SEE NOTE 9

INOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY HAVE BEEN UTILIZED REGARDING THE ITEMS ABOVE

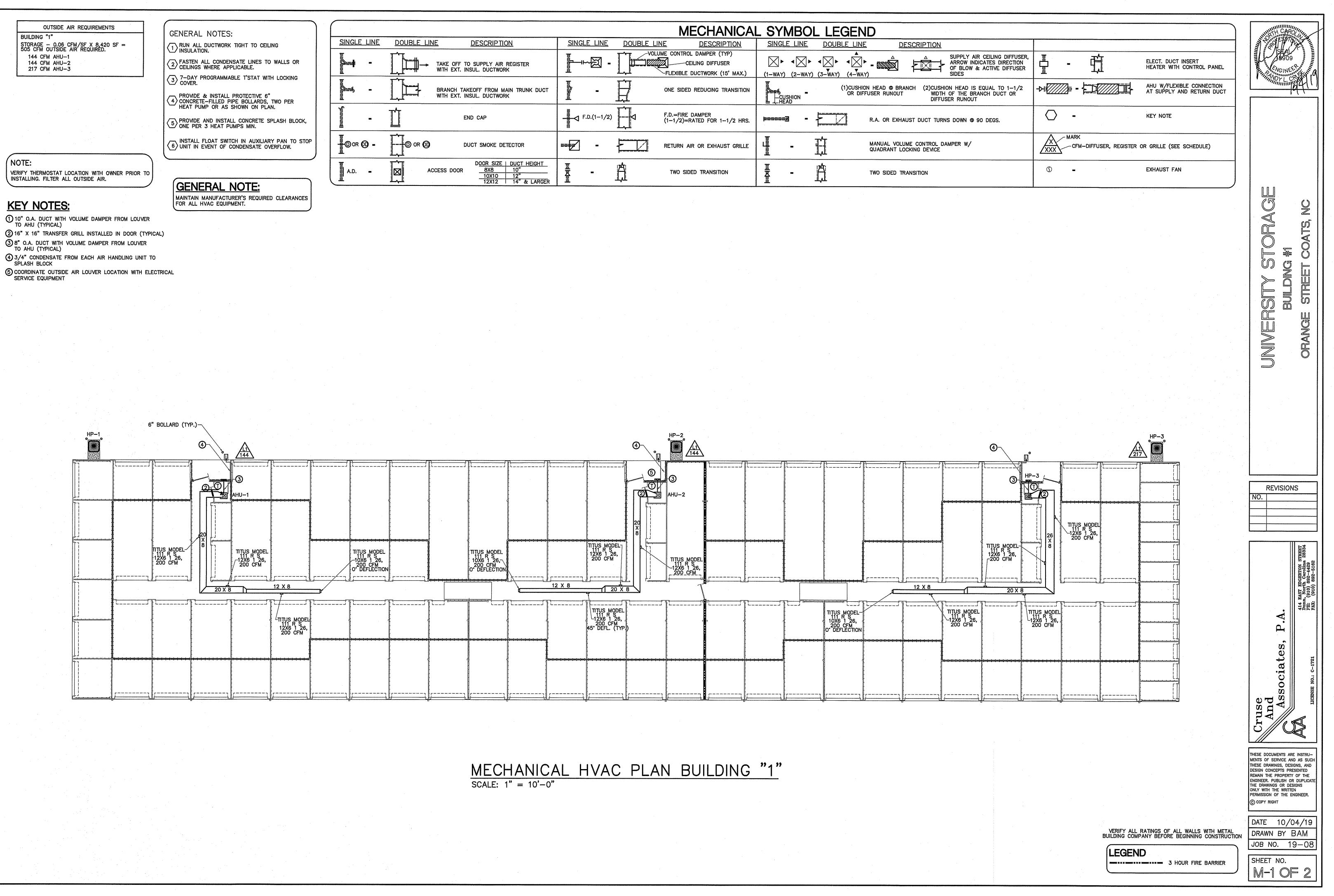
## <u>LIFE SAFETY PLAN BUILDING "1"</u>

SCALE: 1'' = 10' - 0''





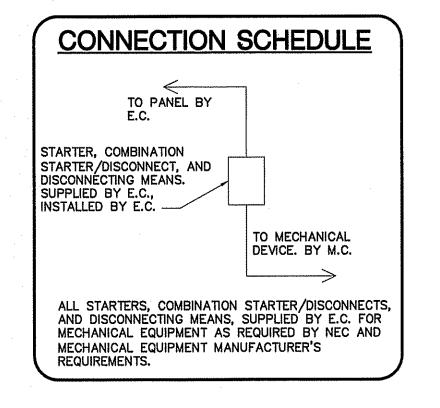
SPLASH BLOCK

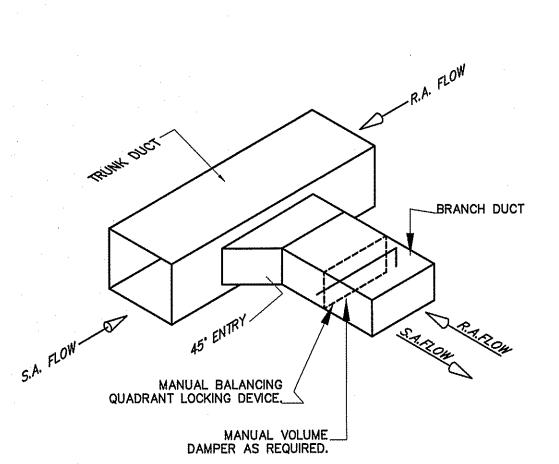


			MECHANICAL	_ SYI	MBO	L LEG	GEND	
DESCRIPTION	SINGLE LINE	DOUBLE LINE	DESCRIPTION	<u>SINGL</u>	<u>E LINE</u>	DOUBL	<u>E LINE</u> <u>C</u>	ESCRIPTIC
KE OFF TO SUPPLY AIR REGISTER TH EXT. INSUL. DUCTWORK	<b>₽</b>		CONTROL DAMPER (TYP) CEILING DIFFUSER EXIBLE DUCTWORK (15' MAX.)	(1-WAY)	< (2−₩AY)	< ∑► (3-₩AY)		
ANCH TAKEOFF FROM MAIN TRUNK DUCT H EXT. INSUL. DUCTWORK	-		E SIDED REDUCING TRANSITION		SHION -	(1	)CUSHION HEAD @ BR OR DIFFUSER RUNOUT	ANCH (2)C W D
END CAP		F.( (1-	D.=FIRE DAMPER -1/2)=RATED FOR 1-1/2 HRS.	<b>Pecas</b>	8 **		R.A. OR EXH	AUST DUCT
DUCT SMOKE DETECTOR	-	RE	TURN AIR OR EXHAUST GRILLE		-		MANUAL VOL QUADRANT L	UME CONTRO OCKING DEVI
S DOOR DOOR SIZE DUCT HEIGHT 8X8 10" 10X10 12" 12X12 14" & LARGER	표 -	Â	TWO SIDED TRANSITION			Â	TWO SIDED T	RANSITION

$\begin{array}{c} AHU NO. \end{array} \\ AHU NO. \end{array} \\ HODEL \end{array} \\ WANUFACTURER \\ MODEL \end{array} \\ WOLTAGE \\ UOLTAGE \end{array} \\ VOLTAGE \\ AR (CFM) \end{array} \\ CFM \\ UNIT FLA \\ AR (CFM) \\ AR (CFM) \end{array} \\ CFM \\ UNIT FLA \\ AR (CFM) \\ AR (CFM$												UNIT										SPLII S	YSTEM HE		i I
AHU NO. MANUFACTURER MODEL VOLTAGE E.S.P. AIR (CFM) CFM ONT FLA GAS LIQ. TOTAL SENS. HIGH LOW CFM CFM CFM ONT FLA GAS LIQ. TOTAL SENS. HIGH LOW CFM						OUTSIDE			REF	LINES			COOI CAPACIT	LING Y (MBH)	HEAT CAPACIT	ING Y (MBH)		MIN. CIRC.	M.O.C.P.	MARK	MANUF.	MODEL	VOLTAGE	# COMP.	
NULL 2 20 316 3/4 3/9 155 72 240 179 220 135 90 40 HP-1.2 RHEEM RP1	IO.   M	ANUFACTURER MODEL	.   VOI	FAGE	E.S.P.		CFM	UNII FLA	<u>ا</u>	ſ	SEER		TOTAL	SENS.	HIGH	LOW	norr								
AHU-1,2 RHEEM RH1T-2417STAN 240/10/60 .46 * 800 31.6 3/4 3/8 15.5 7.2 24.0 17.9 22.0 13.5 9.0 40 40 HP-1,2 RHEEM RH		RHEEM RH1T-2417S	7STAN 240,	¢/60	.46	*	800	31.6	3/4	3/8	15.5	7.2	24.0	17.9	22.0	13.5	9.0	40	40	HP-1,2	RHEEM	RP1524BJ1	240/1/60	1	
AHU-3 RHEEM RH1T-3617STAN 240/10/60 .46 * 1200 34.1 3/4 3/8 15.0 7.2 35.6 26.4 33.8 22.2 9.0 43 45 HP-3 RHEEM RP1		RHEEM RH1T-3617S	7STAN 240	ø/60	.46	*	1200	34.1	3/4	3/8	15.0	7.2	35.6	26.4	33.8	22.2	9.0	43	45	HP3	RHEEM	RP1536AJ1	240/1/60	1	

\* SEE OUTSIDE AIR CHART ON MECHANICAL SHEETS \*\* PROVIDE OUTDOOR THERMOSTAT TO LOCK OUT SUPPLEMENTAL ELECTRIC HEAT AT OUTDOOR TEMPERATURES ABOVE 40%.





#### BRANCH DUCT TAKE-OFF DETAIL NOT TO SCALE

#### MECHANICAL NOTES (GENERAL)

- 1. DUCTWORK LAYOUTS ARE SCHEMATIC. ALL RISES, DROPS, OFFSETS, AND TRANSITIONS REQUIRED BUT ARE NOT SHOWN SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 2. DUCTWORK SHALL BE GALVANIZED STEEL AND SHALL BE CONSTRUCTED IN COMPLIANCE WITH SMACNA STANDARDS FOR LOW VELOCITY DUCTWORK. DUCT SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. FLEXIBLE RUNOUTS SHALL NOT EXCEED 15' AND SHALL NOT BE USED TO FORM ELBOWS. CONNECTIONS FROM RECTANGULAR TO ROUND DUCT SHALL BE MADE WITH MANUFACTURED 45 DEG. LATERAL TAPS.
- 3. ALL DUCTWORK SHALL BE SEALED AIR TIGHT WITH SEALING COMPOUND.
- 4. ALL ELBOWS IN DUCTWORK SHALL BE RADIUS ELBOWS, UNLESS NOTED OTHERWISE. WHERE SQUARE ELBOWS ARE SHOWN, INSTALL TURNING VANES. DUCT SIZES SHOWN ARE NET INTERIOR DIMENSIONS.
- 5. THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF OTHER TRADES PRIOR TO INSTALLATION OF ANY OF HIS PIPING, DUCTWORK, OR EQUIPMENT.
- 6. THE MECHANICAL CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE MECHANICAL PLANS, SCHEDULES, AND DETAILS PRIOR TO INSTALLATION OF THE MECHANICAL SYSTEMS AND REVIEW ANY CONFLICTS THAT ARE NOTED WITH THE ENGINEER.
- 7. IT WILL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO ENSURE THAT ITEMS TO BE FURNISHED UNDER HIS CONTRACT WILL FIT THE SPACE AVAILABLE. HE SHALL MAKE NECESSARY FIELD MEASUREMENTS TO ASCERTAIN SPACE REQUIREMENTS, INCLUDING THOSE FOR CONNECTIONS AND SHALL FURNISH AND INSTALL SUCH SIZES AND SHAPES OF EQUIPMENT THAT ARE THE TRUE AND INTENT MEANING OF THE PLANS AND SPECIFICATIONS. HE SHALL PROVIDE THE ENGINEER SCALED DRAWINGS OF ALL MECHANICAL DRAWINGS.
- 8. ALL EQUIPMENT SHALL BE LOCATED AND INSTALLED TO PROVIDE MAXIMUM SPACE FOR MAINTENANCE AND SERVICE.

9. PROVIDE FACTORY OR FIELD INSTALLED DRAIN PANS UNDER ALL COOLING COIL UNITS. INSTALL DRAIN PAN FLOAT TO SHUT DOWN UNIT FAN IN EVENT THAT CONDENSATE BEGINS TO FILL EMERGENCY DRAIN PAN. RUN ALL CONDENSATE DRAIN LINES TO APPROPRIATE DRAIN.

#### 1 TIME-DELAY RELAY

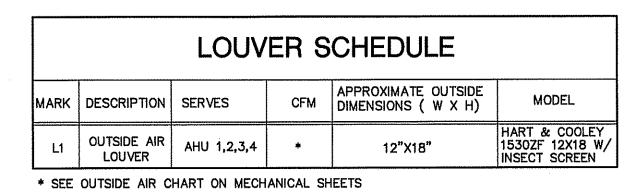
- 2 CYCLE PROTECTOR **3 EVAPORATOR FREEZE PROTECTOR**
- 4 ISOLATION RELAY
- 8 LOW-AMBIENT CONTROLLER 9 FILTER DRIER (LIQUID LINE)

7 LIQUID SOLENOID VALVE

5 TXV

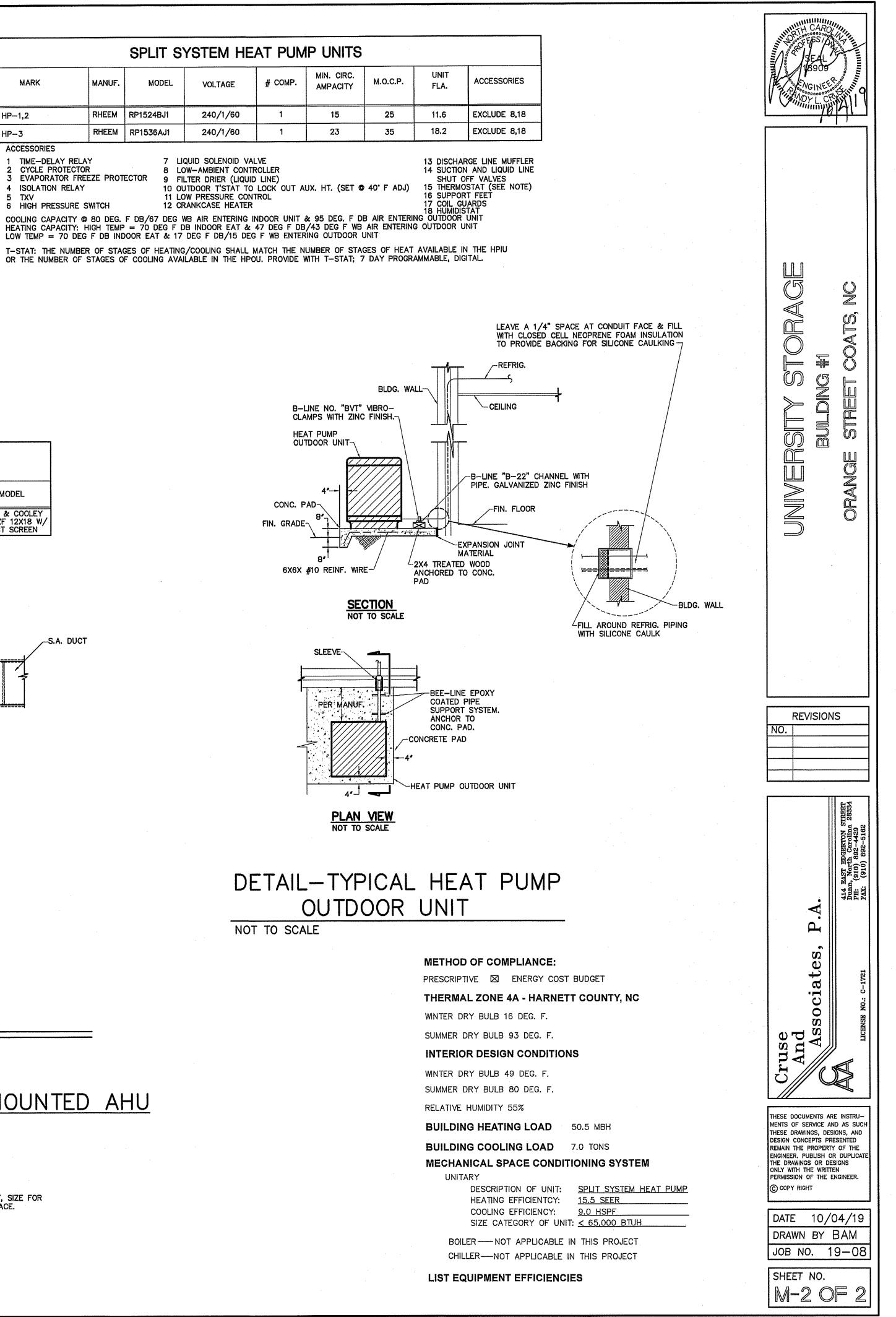
11 LOW PRESSURE CONTROL

HEATING CAPACITY: HIGH TEMP = 70 DEG F DB INDOOR EAT & 47 DEG F DB/43 DEG F WB AIR ENTERING OUTDOOR UNIT LOW TEMP = 70 DEG F DB INDOOR EAT & 17 DEG F DB/15 DEG F WB ENTERING OUTDOOR UNIT T-STAT: THE NUMBER OF STAGES OF HEATING/COOLING SHALL MATCH THE NUMBER OF STAGES OF HEAT AVAILABLE IN THE HPIU OR THE NUMBER OF STAGES OF COOLING AVAILABLE IN THE HPOU. PROVIDE WITH T-STAT; 7 DAY PROGRAMMABLE, DIGITAL.



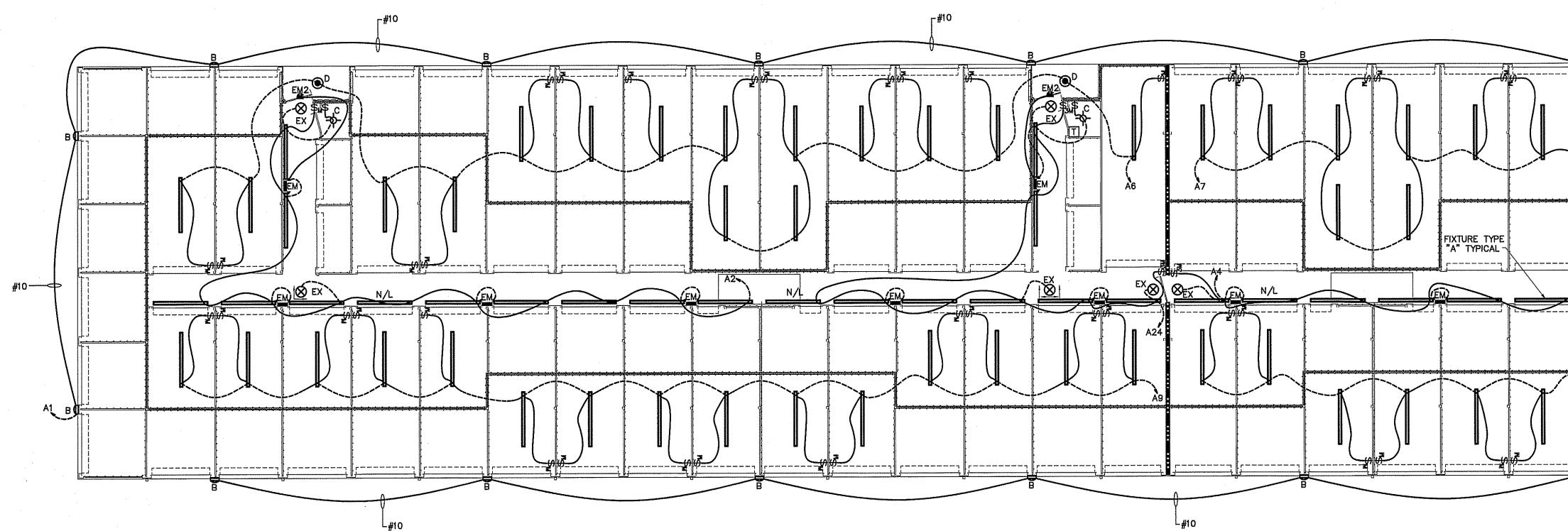
-S.A. DUCT 6 - AHU 3/4" CONDENSATE AND EMERGENCY DRAINS CONNECT INTO 1-1/2" GRAVITY DRAIN. INSULATE CONDENSATE DRAIN WITH 1/2" THICK CLOSED CELL NEOPRENE UNLESS IN CONDITIONED SPACE. TERMINATE OVER SPLASH BLOCK OUTSIDE. VOLUME CONTROL DAMPER OUTSIDE AIR DUCT -TO LOCATION AS SHOWN ON MECHANICAL PLAN \_\_MECH\_ROOM 3" X 3" X 1/4"<sup>2</sup> PL. WELDED TO ANGLE -PLENUM FULL SIZE OF AHU RETURN OPENING TYPICAL DETAIL AT FLOOR MOUNTED AHU NOT TO SCALE NOTES:  $\left< 5 \right>$  1" PLEATED FILTER 1 FLEXIBLE CONNECTION 6 OUTSIDE AIR LOUVER, RAIN PROOF, SIZE FOR 0.06 CFM/SF OF CONDITIONED SPACE. 2 NEOPRENE-IN-SHEAR VIBRATION ISOLATORS  $\langle 3 \rangle$  SHEET METAL COLLAR AT WALL PENETRATION (4) 1-1/2" X 1-1/2" X 3/16" ANGLE HPIU SUPPORT STAND WITH ALL WELDED CONSTRUCTION. PAINT WITH 1 COAT OF PRIMER AND FINISH WITH (2) COATS GRAY HIGH GLOSS MACHINE ENAMEL, MARTIN SENOUR OR EQUAL.

PROVIDE PROGRAMMABLE THERMOSTAT FOR EACH SYSTEM.



		ELI	ECTRICAL LEGEND		
MARK	DESCRIPTION	MARK	DESCRIPTION	MARK	DESCRIPTION
#	QUAD RECEPTACLE	\$ <sub>3M</sub>	MOTION DETECTING 3-WAY SWITCH (4-WAY SWITCH) WITH TIMER	N/L	UNSWITCHED FIXTURE
Φ	DUPLEX RECEPTACLE	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	UNSWITCHED BRANCH CIRCUIT		FUSED DISCONNECT SWITCH
Τ	TIMECLOCK FOR WALLPACKS	7-2-	120/208 VOLT CIRCUIT	[]h	CEILING MOUNTED FUSED DISCONNECT SWITCH
Φ	CEILING MOUNTED DUPLEX RECEPTACLE	\$ <sub>M</sub>	MOTION DETECTING SINGLE-POLE SWITCH	4	DATA/PHONE OUTLET
·	FLUORESCENT FIXTURE	8	'EXIT' LIGHT FIXTURE, TYPE 'EX'	J	JUNCTION BOX
~~~	SWITCHED BRANCH CIRCUIT	Ļ	BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.)	\$	SINGLE POLE SWITCH OR TIMER AS

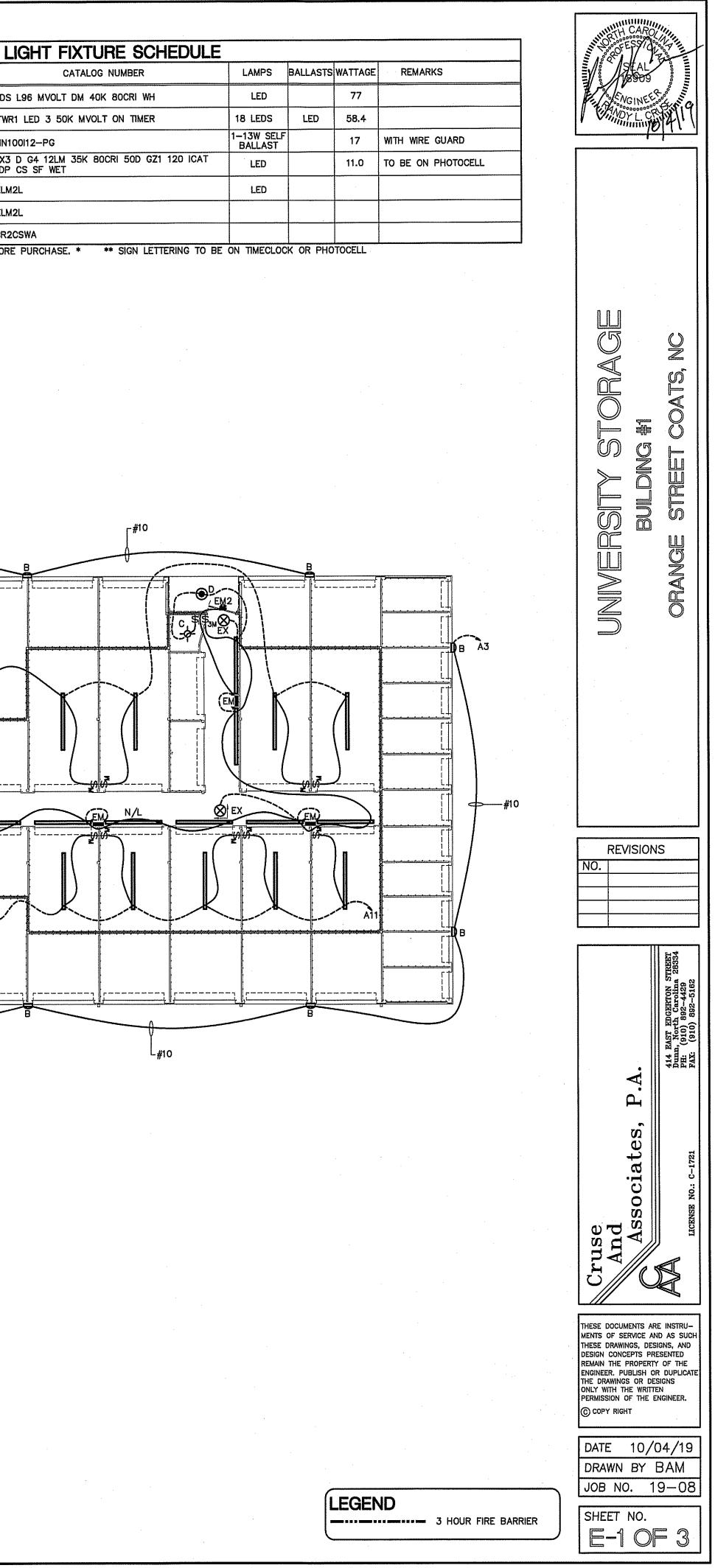
	LIGHTING DATA FOR NC ENERGY CODE									
AREA USE	AREA FT <sup>2</sup>	WATTS PER FT <sup>2</sup> ALLOWED	TOTAL WATTS ALLOWED	TOTAL WATTS USED	TOTAL WATTS LEFT OVER					
STORAGE	16,800	0.66	11,088	6,613	4,475					
TOTAL	16,800		11,088	6,613	4,475					



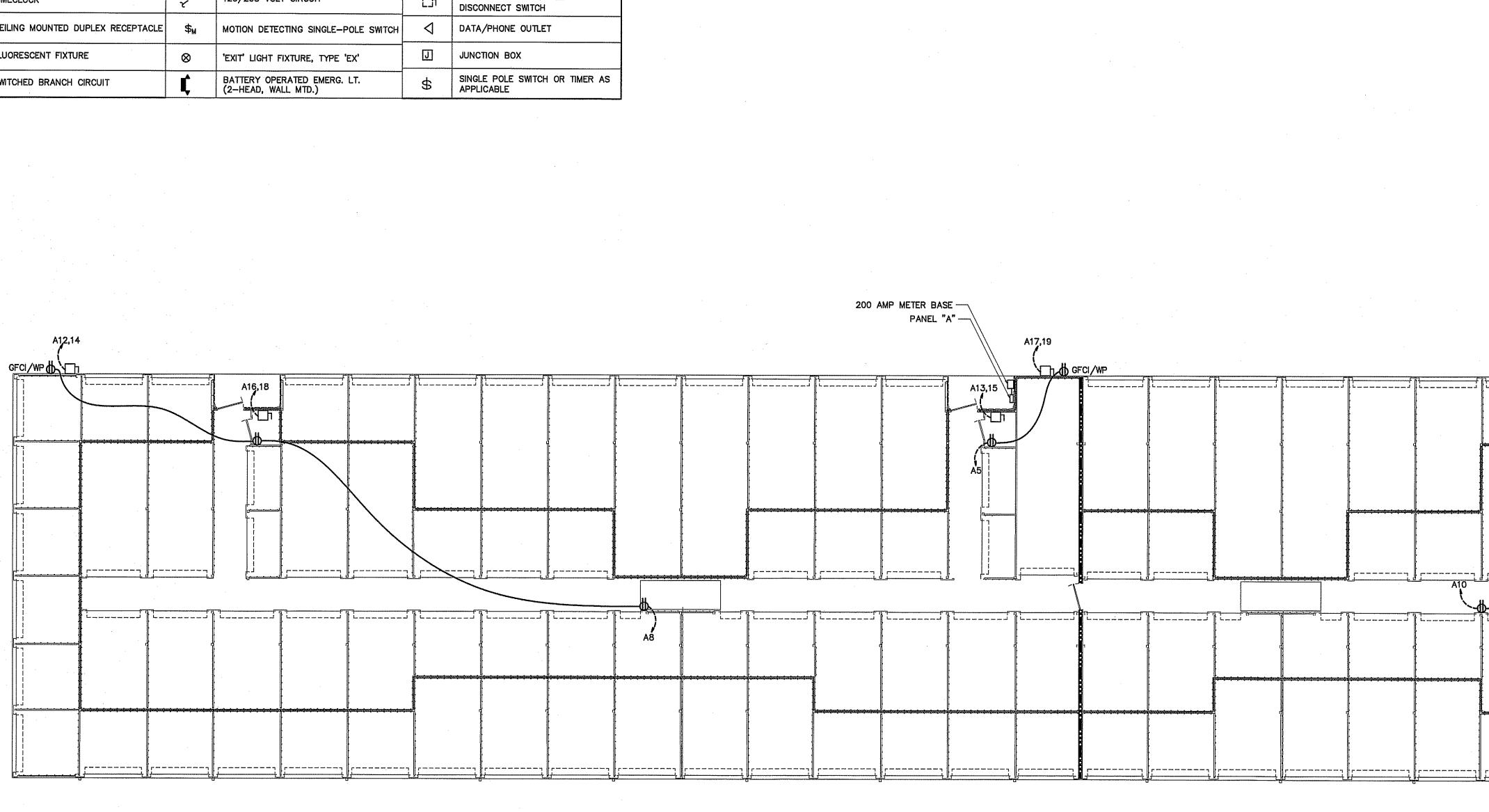
				L
TACLES	MARK	K DESCRIPTION	MANUFACTURER	-
	A	8' LED STRIPLIGHT	LITHONIA	CDS I
	В	LED WALL PACKS	LITHONIA	TWF
	С	COMPACT FLUORESCENT FIXTURE WITH WRE GUARD	DAYBRITE	VIN
	D	3" LED RECESSED DOWNLIGHT	ACULUX	AX 3D
	EM	EMERGENCY LIGHT WITH BATTERY BACKUP	LITHONIA	ELN
	EX	LED TYPE EXIT LIGHT WITH BATTERY BACKUP	LITHONIA	ELN
	EM2	2 EMERGENCY LIGHT REMOTE WEATHERHEAD(S)	MCPHILBEN	CR2

## ELECTRICAL LIGHTING PLAN BUILDING "1"

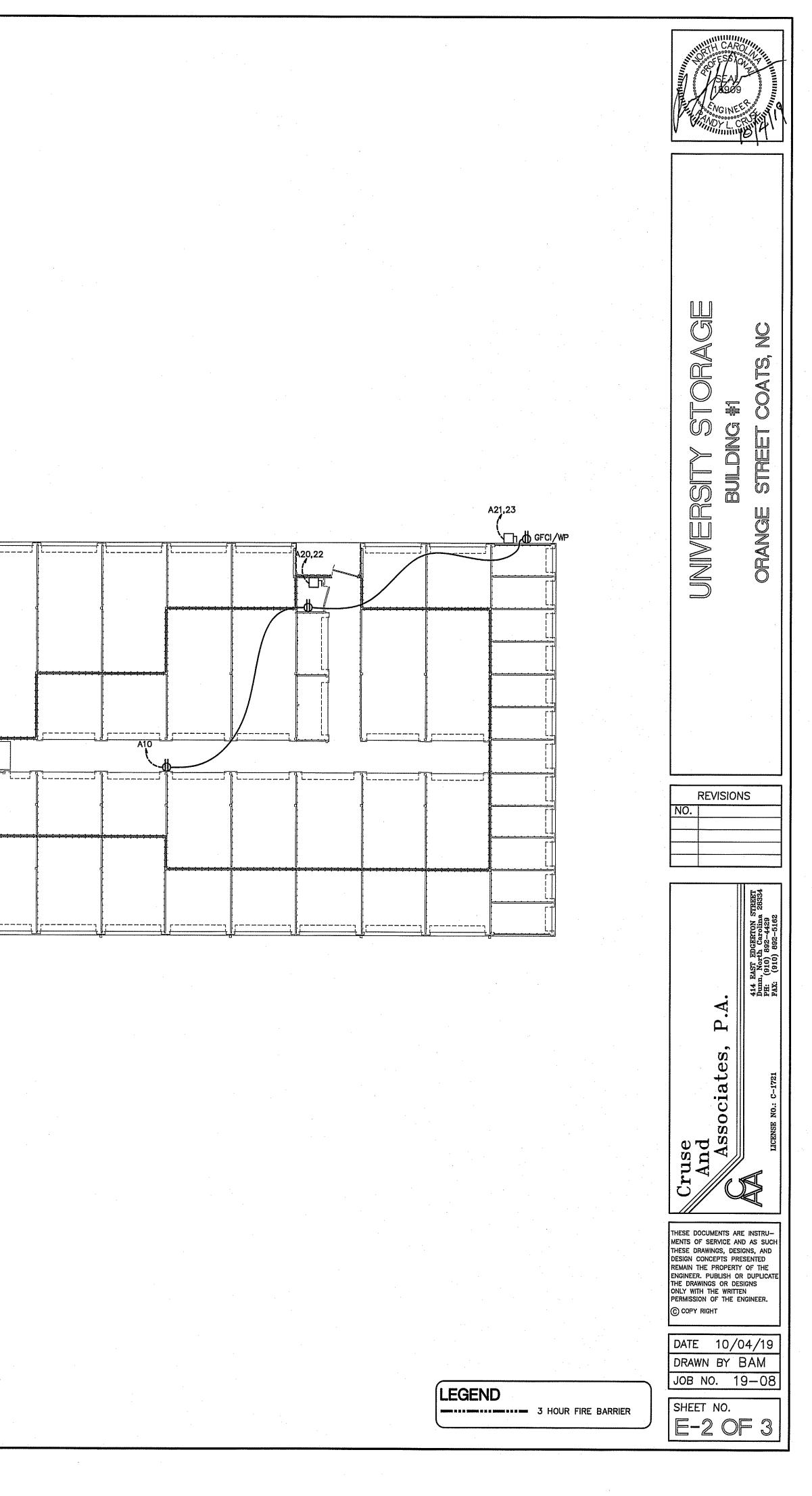
SCALE: 1'' = 10' - 0''



		ELI	ECTRICAL LEGEND		
MARK	DESCRIPTION	MARK	DESCRIPTION	MARK	DESCRIPTION
\$	QUAD RECEPTACLE	\$34	MOTION DETECTING 3-WAY SWITCH (4-WAY SWITCH) WITH TIMER	N/L	UNSWITCHED FIXTURE
Φ	DUPLEX RECEPTACLE	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	UNSWITCHED BRANCH CIRCUIT		FUSED DISCONNECT SWITCH
٦	TIMECLOCK	7- <b>D</b>	120/208 VOLT CIRCUIT	[]	CEILING MOUNTED FUSED DISCONNECT SWITCH
Φ	CEILING MOUNTED DUPLEX RECEPTACLE	\$ <sub>M</sub>	MOTION DETECTING SINGLE-POLE SWITCH	4	DATA/PHONE OUTLET
	FLUORESCENT FIXTURE	8	'EXIT' LIGHT FIXTURE, TYPE 'EX'	IJ	JUNCTION BOX
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	SWITCHED BRANCH CIRCUIT	Ļ	BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.)	\$	SINGLE POLE SWITCH OR TIMER AS



# ELECTRICAL LIGHTING PLAN BUILDING "1" scale: 1" = 10'-0"



#### **ELECTRICAL NOTES (GENERAL)**

. THE ELECTRICAL INSTALLATION, EQUIPMENT, MATERIALS, AND WORKMANSHIP SHALL, AS A MINIMUM, BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC), OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), ALL APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL CODES, LAWS, AND ORDINANCES, AND RULINGS OF THE INSPECTION AUTHORITIES HAVING JURISDICTION. ALL FEES, PERMITS, ETC., ASSOCIATED WITH THE ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

2. THE DRAWINGS GENERALLY INDICATE THE WORK TO BE INSTALLED, BUT DO NOT SHOW ALL BENDS, BOXES, FITTINGS, AND SPECIALTIES WHICH MAY BE REQUIRED FOR A COMPLETE INSTALLATION. ALL SUCH ITEMS REQUIRED TO COMPLETE THE INSTALLATION ACCORDING TO INDUSTRY ACCEPTED PRACTICES SHALL BE INCLUDED IN THE BID.

3. ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND LISTED AND LABELED BY UNDERWRITERS LABORATORIES, INC.

4. ALL PENETRATIONS OF FIRE WALLS SHALL BE SEALED WITH APPROVED SEALING MATERIALS TO MAINTAIN THE FIRE RATING OF THE WALLS. 5. THE CONTRACTOR SHALL VERIFY WIRE AND FUSE/CIRCUIT BREAKER SIZING FOR ALL MECHANICAL EQUIPMENT PRIOR TO PURCHASING MATERIALS AND INSTALLING BRANCH CIRCUITS.

6. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES TO AVOID INTERFERENCES AND CONFLICTS. APPARENT INTERFERENCES OR CONFLICTS SHALL BE REPORTED TO THE PRIME CONTRACTOR AND RESOLVED PRIOR TO PROCEEDING WITH THE WORK IN QUESTION.

7. THE ELECTRICAL CONTRACTOR SHALL CONNECT BRANCH CIRCUITS TO THE MAIN LINE TERMINALS OF EQUIPMENT FURNISHED BY OTHER CONTRACTORS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY NECESSARY SWITCHES, DISCONNECTS, OR OVERCURRENT PROTECTION AHEAD OF SUCH EQUIPMENT.

8. RACEWAYS ARE SHOWN SCHEMATICALLY AND MAY BE REROUTED IN THE FIELD. THEY SHALL BE INSTALLED AT RIGHT ANGLES TO OR PARALLEL WITH BUILDING LINES. THEY SHALL BE RUN CONCEALED WITHIN WALLS OR BUILDING STRUCTURES WHEREVER POSSIBLE. 9. ALL RACEWAYS, EQUIPMENT, ETC., ABOVE A SUSPENDED CEILING SHALL BE MOUNTED A MINIMUM OF 18" ABOVE THE CEILING SO AS NOT TO

10. THE MINIMUM ALLOWABLE SIZE FOR ANY CONDUIT, IMC, OR EMT SHALL BE 1/2" AND MAY BE USED FOR 2#12 WIRE SWITCHLEGS ONLY. A SWITCHLEG SHALL BE DEFINED AS THE RUN OF CONDUIT FROM THE SWITCH OUTLET BOX TO THE FIRST OUTLET BEING SWITCHED. 11. FULL WEIGHT GALVANIZED RIGID STEEL CONDUIT SHALL BE USED IN THE FOLLOWING AREAS:

A. ON THE EXTERIOR OF THE BUILDING OR ROOF,

B. VERTICAL DROPS WHERE THE CONDUIT CANNOT BE ANCHORED TO WALLS OR OTHER SUPPORT

STRUCTURES, C. WHERE SUBJECT TO MECHANICAL DAMAGE.

BLOCK ANY TILE OR FIXTURE ACCESS.

21. NOT USED

12. ALL WIRE AND CABLE SHALL BE COPPER AND HAVE 600 VOLT THHN-THWN INSULATION. ALUMINUM WIRING SHALL NOT BE PERMITTED.

13. THE MINIMUM WIRE SIZE SHALL BE #12 AWG EXCEPT FOR CONTROL WIRING, WHICH MAY BE #14 AWG. CONTROL WIRING SHALL USE STRANDED CONDUCTORS UNLESS OTHERWISE NOTED.

14. ALL METAL RACEWAY SYSTEMS SHALL BE MADE ELECTRICALLY CONTINUOUS. THE RACEWAY SYSTEM SHALL NOT BE THE SOLE GROUNDING METHOD. AN INSULATED COPPER GROUNDING CONDUCTOR SHALL BE INSTALLED FOR ALL FEEDERS AND BRANCH CIRCUITS. AT RECEPTACLES, A GREEN GROUND CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL OF THE RECEPTACLE.

15. THE ELECTRICAL CONTRACTOR SHALL COORDINATE FUSE AND DISCONNECT SWITCH SIZES WITH THE MECHANICAL EQUIPMENT SUPPLIER PRIOR TO PURCHASE AND INSTALLATION OF BRANCH CIRCUIT EQUIPMENT. IF EQUIPMENT SIZING CHANGES FROM DESIGN SIZES, CIRCUITS SHALL BE RESIZED ACCORDINGLY.

16. LIGHT FIXTURES FOR INSTALLATION IN A SUSPENDED CEILING SHALL BE SECURELY FASTENED TO THE CEILING SUSPENSION SYSTEM IN A MANNER TO PREVENT FIXTURES FROM FALLING. IN ADDITION, 16 GAGE WIRE HANGERS SHALL BE FASTENED TO THE FOUR CORNERS OF THE FIXTURES.

17. CONNECTIONS TO FIXTURES INSTALLED IN SUSPENDED CEILINGS SHALL BE MADE WITH FLEXIBLE METAL CONDUIT TO ALLOW THE FIXTURE TO BE LIFTED OUT OF THE GRID AND MOVED TO AN ADJACENT GRID LOCATION. 18. BREAKERS SUPPLYING HVAC OR REFRIGERATION EQUIPMENT SHALL BE HACR TYPE.

19. 3/4" CONDUIT IS MINIMUM ALLOWABLE SIZE EXCEPT AS INDICATED IN #10. CONDUIT FILL NOT TO EXCEED 40% AS PERMITTED BY THE

NATIONAL ELECTRIC CODE. 20. ALL CONDUCTORS TO BE INSTALLED IN CONDUIT (EXCEPT WHERE ROMEX IS INSTALLED). EMT FITTINGS TO BE COMPRESSION TYPE, INSULATED THROAT.

22. DATA, SECURITY, THEATRICAL, AND VIDEO SYSTEMS TO BE PROVIDED BY OWNER. ROUGH-IN OF OUTLETS AND CONDUIT WILL BE BY CONTRACTOR AS SHOWN ON DRAWINGS. 23. NOT USED

24. NO. 10 CU AWG CONDUCTORS SHALL BE USED FOR 20 AMP BRANCH CIRCUIT HOMERUNS EXCEEDING 50 FT. TO THE JUNCTION POINT. 20 AMP BRANCH CIRCUIT WIRING SHALL BE NO. 10 CU AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 100 FEET TOTAL LENGTH.

20 AMP BRANCH CIRCUIT WIRING SHALL BE NO. 8 CU AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 200 FEET TOTAL LENGTH. 20 AMP BRANCH CIRCUIT WIRING SHALL BE NO. 6 CU AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 400 FEET TOTAL LENGTH.

20 AMP BRANCH CIRCUIT SHALL BE NOT EXCEED 500' FEET IN TOTAL LENGTH. (UNLESS MARKED OTHERWISE)

25. CONDUCTORS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET. SPLICES WILL NOT BE MADE EXCEPT WITHIN ACCESSIBLE OUTLET OR JUNCTION BOXES, TROUGHS, OR GUTTERS.

26. MAKE CONDUCTOR LENGTHS FOR PARALLEL CIRCUITS EQUAL.

27. INSTALL TELEPHONE OUTLETS WITH 3/4" EMPTY CONDUIT AND PULL CORD. STUB OUT ABOVE CEILING. PHONE SYSTEM INSTALLED BY OWNER. 28. ALL CONDUIT WITHOUT CONDUCTORS SHALL HAVE NYLON PULLCORDS INSTALLED.

29. THE CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE PLANS, SCHEDULES, AND DETAILS PRIOR TO INSTALLATION, AND REVIEW ANY CONFLICTS THAT ARE NOTED WITH THE ENGINEER.

30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES FOR PERMITS AND INSPECTIONS. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR ELECTRIC UTILITY CONNECTION FEES AND LINE EXTENSION FEES.

31. ELECTRICAL CONNECTIONS TO EQUIPMENT SUBJECT TO VIBRATION WHICH DEVELOPS OBJECTIONABLE NOISES SHALL BE MADE FROM THE CONDUIT SYSTEM WITH SHORT LENGTHS OF FLEXIBLE "LIQUID-TITE" CONDUIT. 32. ALL WRE TERMINATIONS AND EQUIPMENT TO BE RATED FOR 75' C MINIMUM.

33. ELECTRICAL CONTRACTOR TO MAINTAIN 2' OF SEPARATION ON RECEPTACLES ON OPPOSITE SIDES OF ANY FIRE RATED WALL PER 2017

N.E.C. 300.21. 34. WIRING TO DISCONNECT SWITCH AND DISCONNECT SWITCH SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR. WIRING FROM THE DISCONNECT TO THE EQUIPMENT SHALL BE BY THE MECHANICAL CONTRACTOR.

ELECTRICAL SYSTEM		ENT			
	PRESCRIPTIVE PRESCRIPTIVE			RMANCE RMANCE	
REFER TO DRAWINGS FOR I	RISER DIAGRAM	AND PANEL	SCHEDUL	ES	
LIGHTING SCHEDULE					
LAMP TYPE REQUIRED IN F	IXTURE:	SEE	SCHEDU	JLE	
NUMBER OF LAMPS IN FIXT	TURE:				
BALLASTS TYPE USED IN F	TXTURE:				
NUMBER OF BALLASTS IN	FIXTURE:				
TOTAL WATTAGE PER FIXTU	JRE:				
TOTAL INTERIOR WATTAGE	SPECIFIED VS.	ALLOWED:		·	
TOTAL EXTERIOR WATTAGE	SPECIFIED VS.	ALLOWED:			
ADDITIONAL PRESCRI	PTIVE COMPL	IANCE			
506.2.1 MORE EFFICIENT M	ECHANICAL EQU	IPMENT			
506.2.2 REDUCED LIGHTING	POWER DENSI	ry I	X		
506.2.3 ENERGY RECOVERY	Y VENTILATION	SYSTEMS			
506.2.4 HIGHER EFFICENCY	SERVICE WATE	R HEATING			
506.2.5 ON-SITE SUPPLY	OF RENEWABLE	ENERGY			

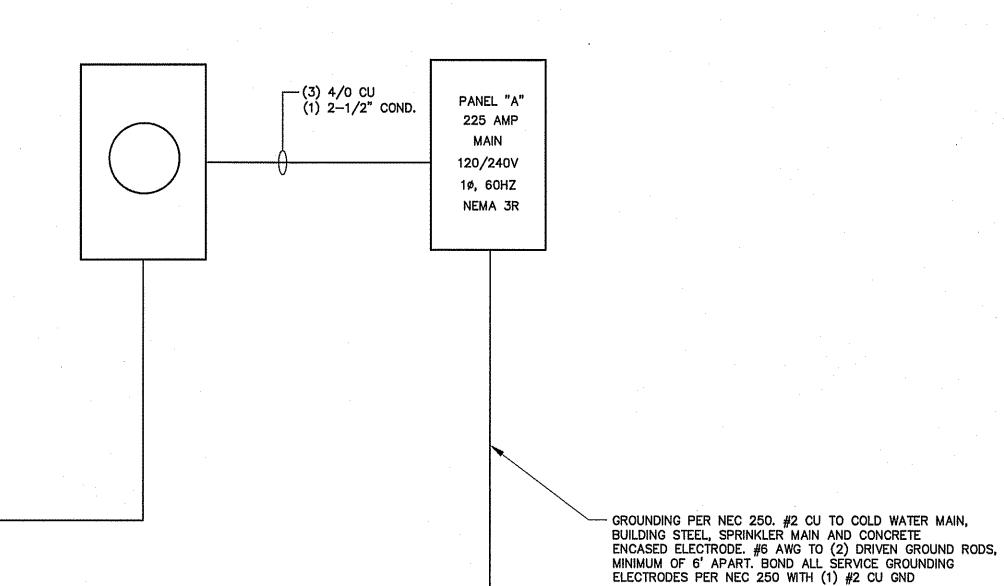
506.2.6 AUTOMATIC DAYLIGHTING CONTROL SYSTEMS

FEEDER SCHEDULE											
UNIT	FEEDERS	FUSED DISCONNECT	CONDUIT								
AHU'S 1,2,3	2#8 CU, 1#10 CU GND	60	3/4"								
HEAT PUMPS 1,2,3	2#12 CU, 1#12 CU GND	30	3/4"								
HEAT PUMP 3	2#10 CU, 1#12 CU GND	30	3/4"								

NUI					
VERIFY	AIC	RATING	& L	.UG	SPAC
MTH U	TILIT	COMP	ANY	BEF	ORE
ORDER	NG P	ANELS.			

INTE

ELECTRICAL LOAD CALCULATIONS	
16800 SQUARE FEET	_VA_
NONCONTINUOUS LOADS:	
8 RECEPTACLES @ 180 VA EA. 1ST 10000 REMAINDER @ 50% TOTAL	1440 1440 0 1440
CONTINUOUS LOADS:	
GENERAL LIGHTING LOAD VA/SQ. FT. 16800 SQ. FT. 0.25 4200 x 1.25	4200 5250
AIR HANDLER UNIT	23352
HEAT PUMPS	9936
EQUIPMENT:	o
25% OF LARGEST MOTOR	1092
GRAND TOTAL	41070
171 AMPS @ 120/240V, 1ø, 60HZ	J



## ELECTRICAL RISER DIAGRAM

UNDERGROUND ELECTRIC SERVICE

BY ELECTRIC UTILITY COMPANY

\_\_\_\_\_

\_\_\_\_

	PANEL: "A" SCHEDULE:MANUFACTURER: SQ. D. NO. OF SPACES 42         VOLTS: 120/240       AMPS: 225         TYPE: "NQOD"       MOUNTING: SURFACE         ENCLOSURE: NEMA 3R       Ø: 1         SHORT CIRCUIT RATING: 22,000         MAN: IS       MLO: I         TOP FEED: ID       BOTTOM FEED: IS         COPPER BUB: IS       GROUND BAR KT: I         NEUTRAL BAR KT: I       I														
	L1	L2	CIRCUIT	POLES	TRIP	ASSIGNMENT		ASE	ASSIGNMENT	TRIP	POLES	CIRCUIT	L1	L2	
	4.4	$\ge$	1	1	20	WALLPACKS	0	<u> </u>	CORRIDOR LIGHTS LEFT SIDE	20	1	2	7.2	$\ge$	
	$\geq$	4.4	3	1	20	WALLPACKS	.l	0	CORRIDOR LIGHTS RIGHT SIDE	20	1	4	$\geq$	8.6	
	3.0	$\geq$	5	1	20	UNITS #2 CONV. RECEPTS.	<u> </u>		LEFT 10X20/10X30 UNIT LTS.	20	1	6	9.8	스	
	$\leq$	7.7	7	1	20	RT. 10X20/10X30 UNIT LTS.		0	LEFT SIDE RECEPTACLES	20	1	8	$\geq$	4.5	
	9.6	$\leq$	9	1		LEFT SIDE 10X15 UNIT LIGHTS		-	RIGHT SIDE RECEPTACLES	20	1	10	4.5	$ \ge $	
ŀ	$\leq$	7.0	11	1	20	RT. SIDE 10X15 UNIT LIGHTS	-	0	HP1	25	2	12		11.6	
	31.6	31.6	13 15	2	40	AHU-2	<b>•</b>	0	AHU1	40	2	14 16	11.6	31.6	
$\mathbf{I}$	11.6	<u></u>	15	2	25	HP-2	0			40 	4	18	31.6	51.0	
ŀ		11.6	17	4	20		+	0	AHU-3	45	2	20	51.0	34.1	
ł	18.2	$\sim$	21	2	35	HP-3	6	<u>ا</u>		1-1-0		20	34.1		
ł	$\overline{}$	18.2	23				+	0	CORRIDOR LIGHTS CENTER	20	1	24	$\overline{\mathbf{x}}$	5.3	
ŀ	$\overline{\mathbf{x}}$	$\overline{}$	25	1	20	SPARE	0		SPARE	20	1	26	x	$ \ge  1 $	
ŀ	$\leq$	$\overline{\mathbf{x}}$	27	1	20	SPARE	+	0	SPARE	20	1	28	$\overline{\mathbf{x}}$	$\overline{\mathbf{x}}$	
ľ	X	$\sim$	29	1	20	SPARE	0	1	SPARE	20	1	30	X	$\leq$	
ľ	$\geq$	X	31	1	20	SPARE		0	SPARE	20	1	32	$\ge$	X	
ľ	X	$\ge$	33	1	20	SPARE	0	1	SPARE	20	1	34	X	$\ge$	
ľ	$\ge$	X	35	1	20	SPARE		0	SPARE	20	1	36	$\succ$	X	
ſ	Х	$\ge$	37	1	20	SPARE	0		SPARE	20	1	38	Х	$\ge$	
ſ	$\ge$	Х	39	1	20	SPARE		0	SPARE	20	1	40	$\ge$	X	
ſ	X	$\ge$	41	1	20	SPARE	0		SPARE	20	1	42	Х	$\geq$	

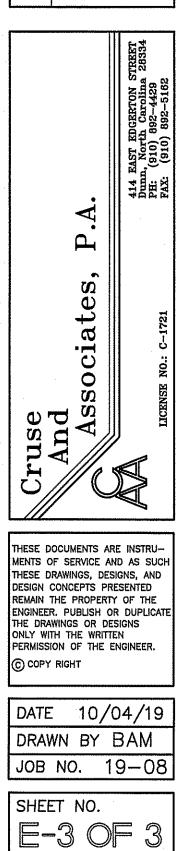
L1 = 177.2 AL2 = 176.2 A

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EXIT REQUIREMENTS: NUMBER AND ARRANGEMENTS OF FYITS

		NOMD	ER AND ARRAN	IGEMENTS OF I	CVI 2				
FLOOR, ROOM OR SPACE DESIGNATION	MIN NO, OF	MUM <sup>2</sup> F EXITS	TRAVEL DIS	TANCE	ARRANGEMENT MEANS OF EGRESS <sup>1,3</sup> (SECTION 1016-1021)				
	REQ'D.	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1017.2)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS			
S-1	2	3	200'	106'-6"	131'-8"	215'-5"			
OFFICE	1	2	100'	47'-8"	N/A	N/A			

CORRIDOR DEAD ENDS (SECTION 1020.4) 2. BUILDINGS WITH SINGLE EXITS (TABLE 1006.3.2(2)), SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY (TABLE 1006.2.1)

3. COMMON PATH OF TRAVEL (SECTION 1029.8) EXIT WDTH

			LVII	MIC III					
USE GROUP OR SPACE DESCRIPTION	(a)	(b)		(c)	)		EXIT WI	OTH (in)	
	AREA <sup>1</sup> SQ. FT.	AREA <sup>1</sup> PER OCCUPANT (TABLE	CALCULATED OCCUPANT LOAD	EGRESS PER OCO (TABLE	CUPANT	REQUIRI (SECTIOI (a/l		ACTUAL SHOW PLA	N ON
		1004.1.2)	(a/b)	STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
S-1	8270	500 GROSS	17	N/A	.2	N/A	3.4"	N/A	144"
OFFICE	1200	100 GROSS	12	N/A	.2	N/A	2.4"	N/A	70"
• ·	1	1	· · · · ·			1			

1. SEE TABLE 1004.1.2 TO DETERMINE WHETHER NET OR GROSS AREA IS APPLICABLE

SEE DEFINITION "AREA, GROSS" AND "AREA, NET" (SECTION 1002, DEFINED IN CHAPTER 2) 2. MINIMUM STAIRWAY WIDTH (SECTION 1011.2); MIN. CORRIDOR WIDTH (SECTION 1020.2); MIN. DOOR WIDTH

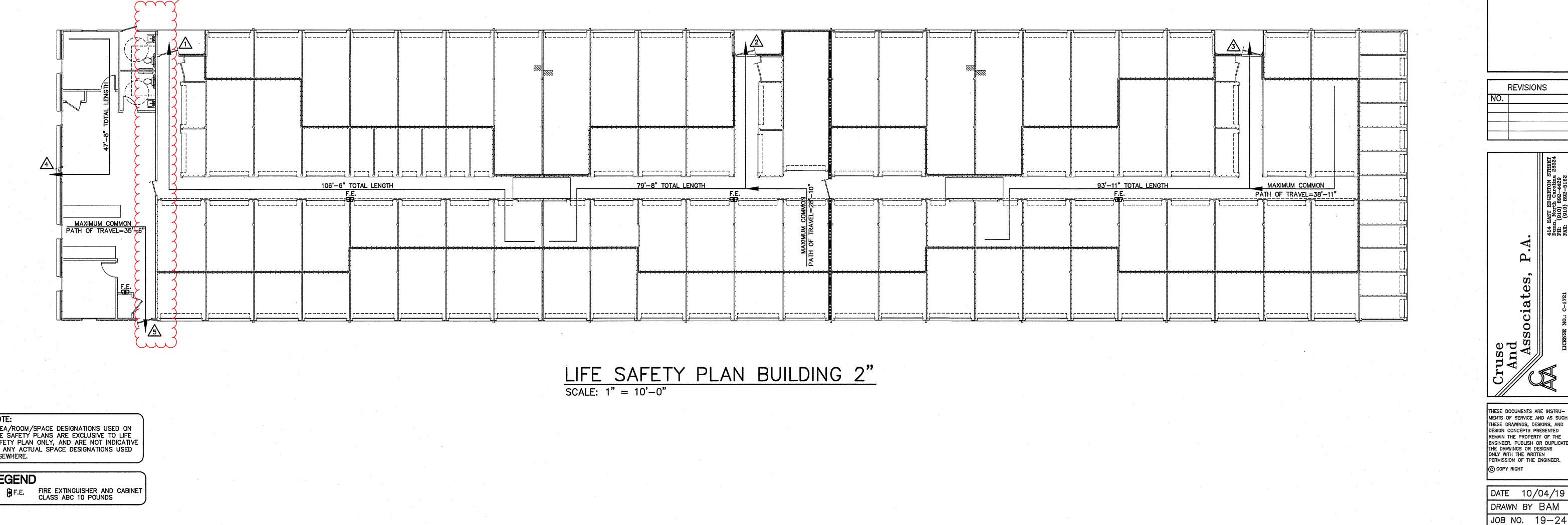
(SECTION 1010.1.1)

3. MINIMUM WIDTH OF EXIT PASSAGEWAY (SECTION 1024) 4. SEE SECTION 1005.6 FOR CONVERGING EXITS.

5. THE LOSS OF ONE MEANS OF EGRESS SHALL NOT REDUCE THE AVAILABLE CAPACITY TO LESS THAN 50% OF

THE TOTAL REQUIRED (SECTION 1005.5) 6. ASSEMBLY OCCUPANCIES (SECTION 1029)

#### STORAGE AND BUSINESS SPACES MUST BE SEPARATED BY A 2-HR RATED WALL (NC BUILDING CODE TABLE 508.4)



NOTE: AREA/ROOM/SPACE DESIGNATIONS USED ON LIFE SAFETY PLANS ARE EXCLUSIVE TO LIFE SAFETY PLAN ONLY, AND ARE NOT INDICATIVE OF ANY ACTUAL SPACE DESIGNATIONS USED ELSEWHERE. LEGEND

NOTE: EXIT REQUIREMENTS CALCULATED ONLY FOR CONDITIONED AREAS. ALL OTHER AREAS HAVE DIRECT EXIT TO EXTERIOR.

LIFE SAFETY PLAN REQUIREMENTS: LIFE SAFETY PLAN NOTES: 1. SEE LEGEND FOR RATED WALLS. ▼ FIRE AND/OR SMOKE RATED WALL LOCATIONS (CHAPTER 7) - SEE NOTE 1 2. ASSUMED 12' AND REAL PROPERTY LINES >80'. ☑ ASSUMED AND REAL PROPERTY LINE LOCATIONS - SEE NOTE 2 3. ASSUMED PROPERTY LINES 12'; 705.8; EXC. 2 - UNLIMITED X EXTERIOR WALL OPENING AREA WITH RESPECT TO DISTANCE TO ASSUMED PROPERTY LINES (705.8) - SEE NOTE 3 NO DEAD ENDS OVER 20'; 20' ALLOWED. IN OCCUPANCY TYPES FOR EACH AREA AS IT RELATES TO OCCUPANT LOAD CALCULATION (TABLE 1004.1.2) 5. NO RATING REQUIRED THIS STRUCTURE. S OCCUPANT LOADS FOR EACH AREA PANIC HARDWARE NOT REQUIRED. X EXIT ACCESS TRAVEL DISTANCES (1017) NO DELAYED EGRESS LOCKS, ELECTROMAGNETIC LOCKS, HOLD OPEN DEVICES, OR EMERGENCY ESCAPE WINDOWS COMMON PATH OF TRAVEL DISTANCES (1006.2.1 & 1006.3.2(1)) 8. FIRE AREAS DO NOT EXCEED CODE ALLOWANCE 🔀 DEAD END LENGTHS (1020.4) - SEE NOTE 4 9. BUILDING MEETS CODE REQUIREMENTS WITHOUT SUBDIVISION INTO SMOKE COMPARTMENTS; NO SMOKE COMPARTMENTS CLEAR EXIT WIDTHS FOR EACH EXIT DOOR X MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.3) X ACTUAL OCCUPANT LOAD FOR EACH EXIT DOOR X A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR/CEILING AND/OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION. SEE NOTE 5 ☑ LOCATION OF DOORS WITH PANIC HARDWARE (1008.1.10) - SEE NOTE 6 X LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND AND THE AMOUNT OF DELAY (1008.1.9.7) - SEE NOTE 7 ☑ LOCATION OF DOORS WITH ELECTROMAGNETIC EGRESS LOCKS (1008.1.9.8) - SEE NOTE 7 ☑ LOCATION OF DOORS EQUIPPED WITH HOLD-OPEN DEVICES - SEE NOTE 7 ☑ LOCATION OF EMERGENCY ESCAPE WINDOWS (1029) - SEE NOTE 7

- ☑ THE SQUARE FOOTAGE OF EACH FIRE AREA (902) SEE NOTE 8
- X THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT (407.5) SEE NOTE 9 INOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY HAVE BEEN UTILIZED REGARDING THE ITEMS ABOVE

MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.1) 1/1 47" CLEAR WDTH DIVIDED BY .2" = 235 OCCUPANTS CALCULATED OCCUPANCY PER EXIT = 5 PEOPLE CALCULATED OCCUPANCY DOES NOT EXCEED MAXIMUM CAPACITY OF EXIT.  $2^{2}$  47" CLEAR WIDTH DIVIDED BY .2" = 235 OCCUPANTS CALCULATED OCCUPANCY PER EXIT = 6 PEOPLE CALCULATED OCCUPANCY DOES NOT EXCEED MAXIMUM CAPACITY OF EXIT. 47" CLEAR WIDTH DIVIDED BY .2" = 235 OCCUPANTS CALCULATED OCCUPANCY PER EXIT = 6 PERSON CALCULATED OCCUPANCY DOES NOT EXCEED MAXIMUM CAPACITY OF EXIT. 4 35" CLEAR WIDTH DIVIDED BY .2" = 175 OCCUPANTS CALCULATED OCCUPANCY PER EXIT = 6 PERSON CALCULATED OCCUPANCY DOES NOT EXCEED MAXIMUM CAPACITY OF EXIT. 5 35" CLEAR WIDTH DIVIDED BY .2" = 175 OCCUPANTS CALCULATED OCCUPANCY PER EXIT = 6 PERSON CALCULATED OCCUPANCY DOES NOT EXCEED MAXIMUM

CAPACITY OF EXIT.

LEGEND

3 HOUR FIRE BARRIER

 $\square$ 

5 C

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REVISIONS

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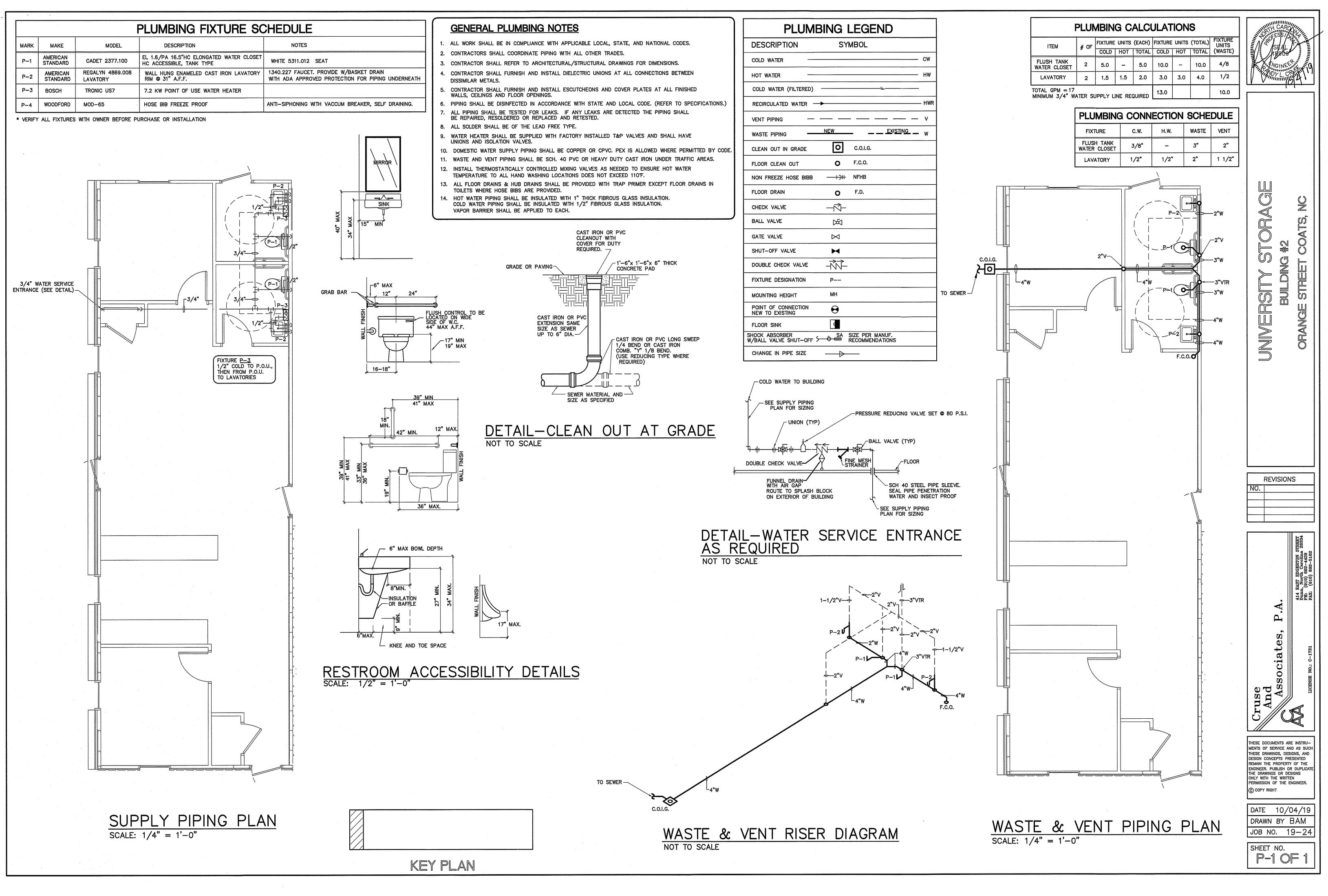
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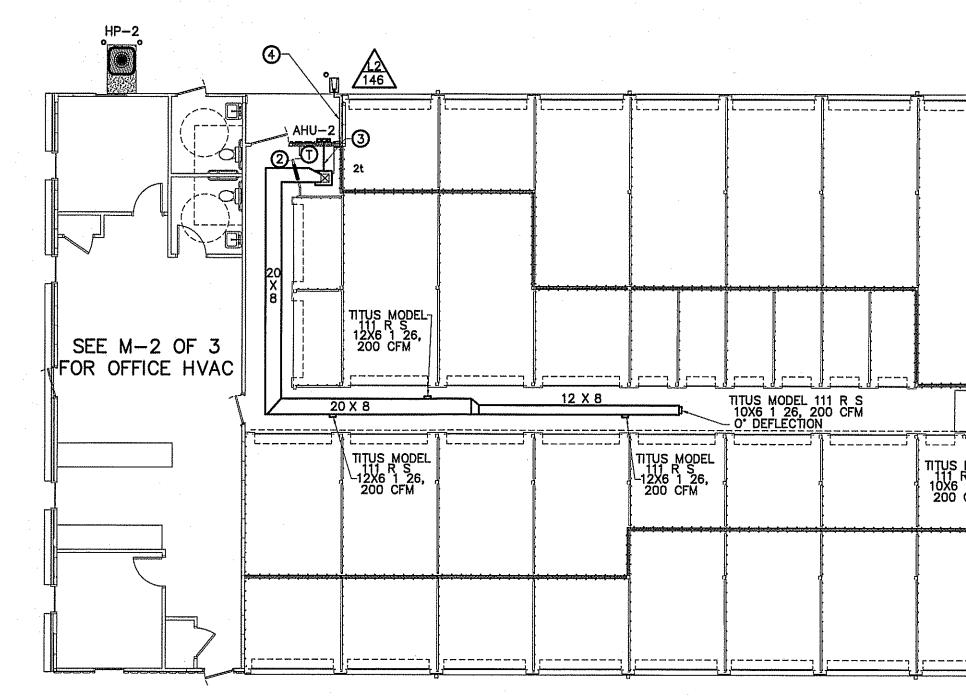
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(5)





- TO AHU (TYPICAL) (4) 3/4" CONDENSATE FROM EACH AIR HANDLING UNIT TO SPLASH BLOCK
- 5 COORDINATE OUTSIDE AIR LOUVER LOCATION WITH ELECTRICAL SERVICE EQUIPMENT
- 3 8" O.A. DUCT WITH VOLUME DAMPER FROM LOUVER
- 2 16" X 16" TRANSFER GRILL INSTALLED IN DOOR (TYPICAL)
- 10" O.A. DUCT WITH VOLUME DAMPER FROM LOUVER TO AHU (TYPICAL)
- **KEY NOTES:**

- (NOTE: INSTALLING. FILTER ALL OUTSIDE AIR.

- VERIFY THERMOSTAT LOCATION WITH OWNER PRIOR TO

OUTSIDE AIR REQUIREMENTS

STORAGE - 0.06 CFM/SF X 7,900 SF = 474 CFM OUTSIDE AIR REQUIRED.

BUILDING "2"

146 CFM AHU-2

109 CFM AHU-3

219 CFM AHU-4

GENERAL NOTE:

FOR ALL HVAC EQUIPMENT.

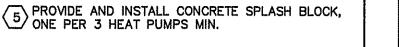
1 RUN ALL DUCTWORK TIGHT TO CEILING INSULATION.

GENERAL NOTES:

- 6 INSTALL FLOAT SWITCH IN AUXILIARY PAN TO STOP

2 FASTEN ALL CONDENSATE LINES TO WALLS OR CEILINGS WHERE APPLICABLE.

MAINTAIN MANUFACTURER'S REQUIRED CLEARANCES



3 7-DAY PROGRAMMABLE T'STAT WITH LOCKING COVER. Pres A PROVIDE & INSTALL PROTECTIVE 6" CONCRETE-FILLED PIPE BOLLARDS, TWO PER HEAT PUMP OR AS SHOWN ON PLAN. -0 OR 00

A.D.

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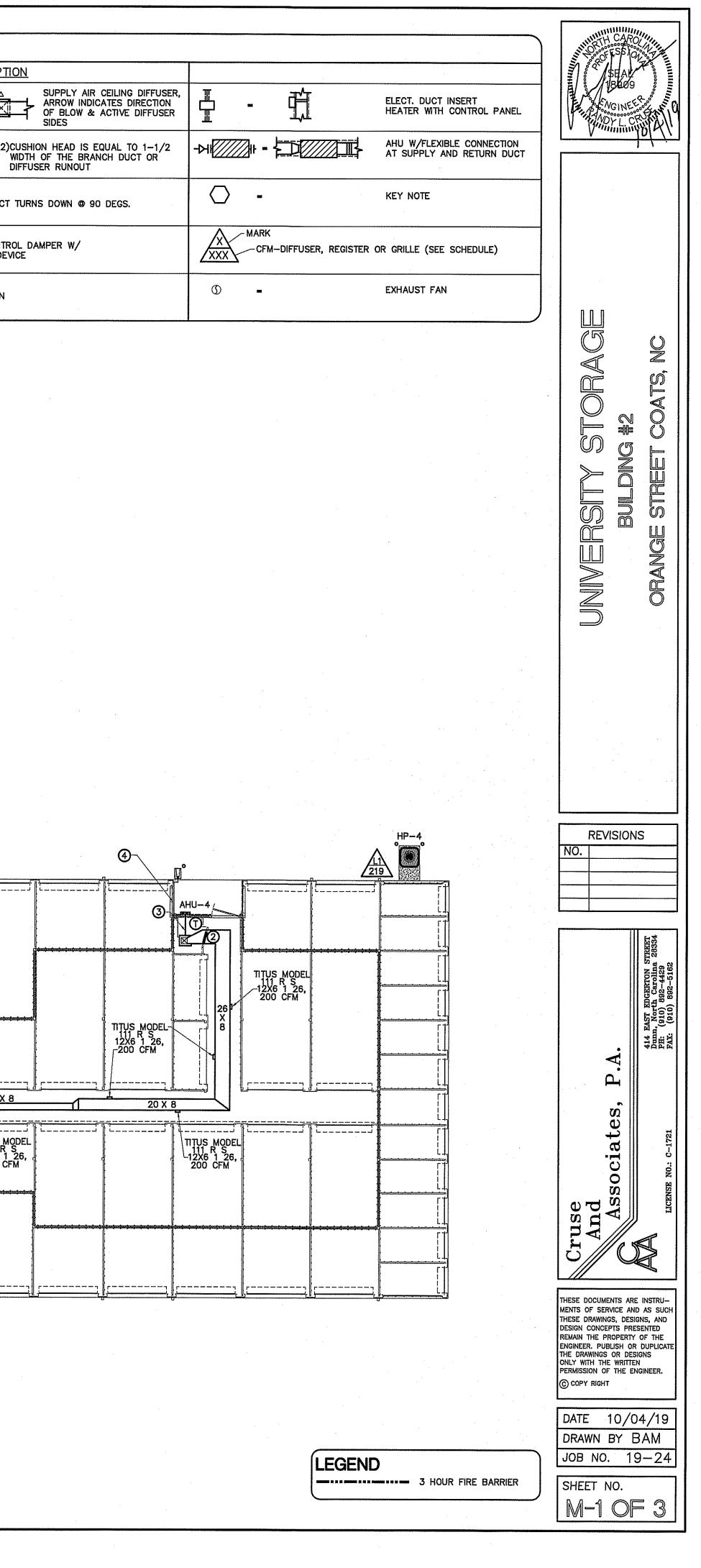
<u>SINGLE LINE</u>

			MECHANICAI	_ SYI	MBO	L LEGE	ND
DOUBLE_LINE DESCRIPTION	SINGLE LINE	DOUBLE LIN	E DESCRIPTION	<u>SINGL</u>	<u>e line</u>	DOUBLE LIN	LE DESCRIPTIO
TAKE OFF TO SUPPLY AIR REGISTER WITH EXT. INSUL. DUCTWORK	<b>₽</b>	Volu	ME CONTROL DAMPER (TYP)	▲ (1-WAY)	< ∑ ► (2-WAY	· •    •    •    •    •    •	]•
BRANCH TAKEOFF FROM MAIN TRUNK DUCT WITH EXT. INSUL. DUCTWORK	-	Ê	ONE SIDED REDUCING TRANSITION		SHION AD	(1)CUSH OR D	IION HEAD © BRANCH (2)CU IFFUSER RUNOUT WI DI
			F.D.=FIRE DAMPER (1–1/2)=RATED FOR 1–1/2 HRS.	<b> ====</b> =	3 -		R.A. OR EXHAUST DUCT 1
DUCT SMOKE DETECTOR			RETURN AIR OR EXHAUST GRILLE		•••		MANUAL VOLUME CONTRO QUADRANT LOCKING DEVIC
ACCESS DOOR DOOR SIZE DUCT HEIGHT 8X8 10" 10X10 12" 12X12 14" & LARGER	표 -	Â	TWO SIDED TRANSITION	H H H H H		Å	TWO SIDED TRANSITION

6" BOLLARD (TYP.)-

**(4**)-. .... .... .... .... .... \_\_\_\_/ ----------5  $(\mathbf{3})$ AHU-3 TITUS MODEL-111 R S 12X6 1 26, 200 CFM ----------<u>12 X 8</u>  $\longrightarrow$ ───⊳ . \_\_\_\_\_\_\_ \_\_\_\_\_ [ L\_\_\_\_\_ -----TITUS MODEL 111 R S -102X6 1 26. 200 CFM 45° DEFL. (TYP. TITUS MODEL 111 R S 12X6 1 26, 200 CFM TITUS MODEL-111 R S 10X6 1 26, 200 CFM TITUS MODEL 111 R S-10X6 1 26, 200 CFM O' DEFLECTION \_ \_ \_ \_ \_ \_ \_ \_-----------

### MECHANICAL HVAC PLAN BUILDING "2" SCALE: 1'' = 10' - 0''



# OUTSIDE AIR REQUIREMENTS OFFICE - 0.06 CFM/SF X 1200 SF = 72 CFM 5 PEOPLE X 5 CFM/PERSON = 25 CFM 97 CFM FOR OFFICE AHU 1. NOTE:

VERIFY THERMOSTAT LOCATION WITH OWNER PRIOR TO INSTALLING. FILTER ALL OUTSIDE AIR.

#### GENERAL NOTES:

T RUN ALL DUCTWORK TIGHT TO CEILING INSULATION.

- 2 FASTEN ALL CONDENSATE LINES TO WALLS OR CEILINGS WHERE APPLICABLE.
- 3 7-DAY PROGRAMMABLE T'STAT WITH LOCKING COVER.
- PROVIDE & INSTALL PROTECTIVE 6"

   CONCRETE-FILLED PIPE BOLLARDS, TWO PER

   HEAT PUMP OR AS SHOWN ON PLAN.
- 5 PROVIDE AND INSTALL CONCRETE SPLASH BLOCK, ONE PER 3 HEAT PUMPS MIN.
- 6 INSTALL FLOAT SWITCH IN AUXILIARY PAN TO STOP

#### **GENERAL NOTE:**

MAINTAIN MANUFACTURER'S REQUIRED CLEARANCES FOR ALL HVAC EQUIPMENT.

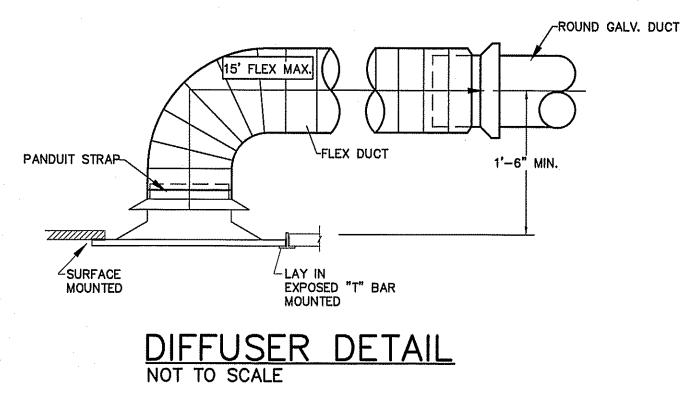
### KEY NOTES:

10" O.A. DUCT WITH VOLUME DAMPER FROM LOUVER TO AHU (TYPICAL)

(2) 16" X 16" TRANSFER GRILLE, INSTALLED IN DOOR (TYPICAL) 3 8" O.A. DUCT WITH VOLUME DAMPER FROM LOUVER

TO AHU (TYPICAL) (4) 3/4" CONDENSATE FROM EACH AIR HANDLING UNIT TO SPLASH BLOCK.

(5) 18" X 8" TRANSFER GRILLE, INSTALLED ABOVE DOOR 6 18" X 18" TRANSFER GRILLE, INSTALLED IN DOOR



#### OFFICE

METHOD OF COMPLIANCE:

PRESCRIPTIVE 🖾 ENERGY COST BUDGET

#### THERMAL ZONE 4A - HARNETT COUNTY, NC

WINTER DRY BULB 16 DEG. F.

SUMMER DRY BULB 93 DEG. F.

#### INTERIOR DESIGN CONDITIONS

WINTER DRY BULB 65 DEG. F. SUMMER DRY BULB 80 DEG. F.

RELATIVE HUMIDITY 55%

BUILDING HEATING LOAD 17.3 MBH

BUILDING COOLING LOAD 3.0 TONS

#### MECHANICAL SPACE CONDITIONING SYSTEM

UNITARY HEATING EFFICIENTCY: <u>15.0 SEER</u>

DESCRIPTION OF UNIT: <u>SPLIT SYSTEM HEAT PUMP</u>

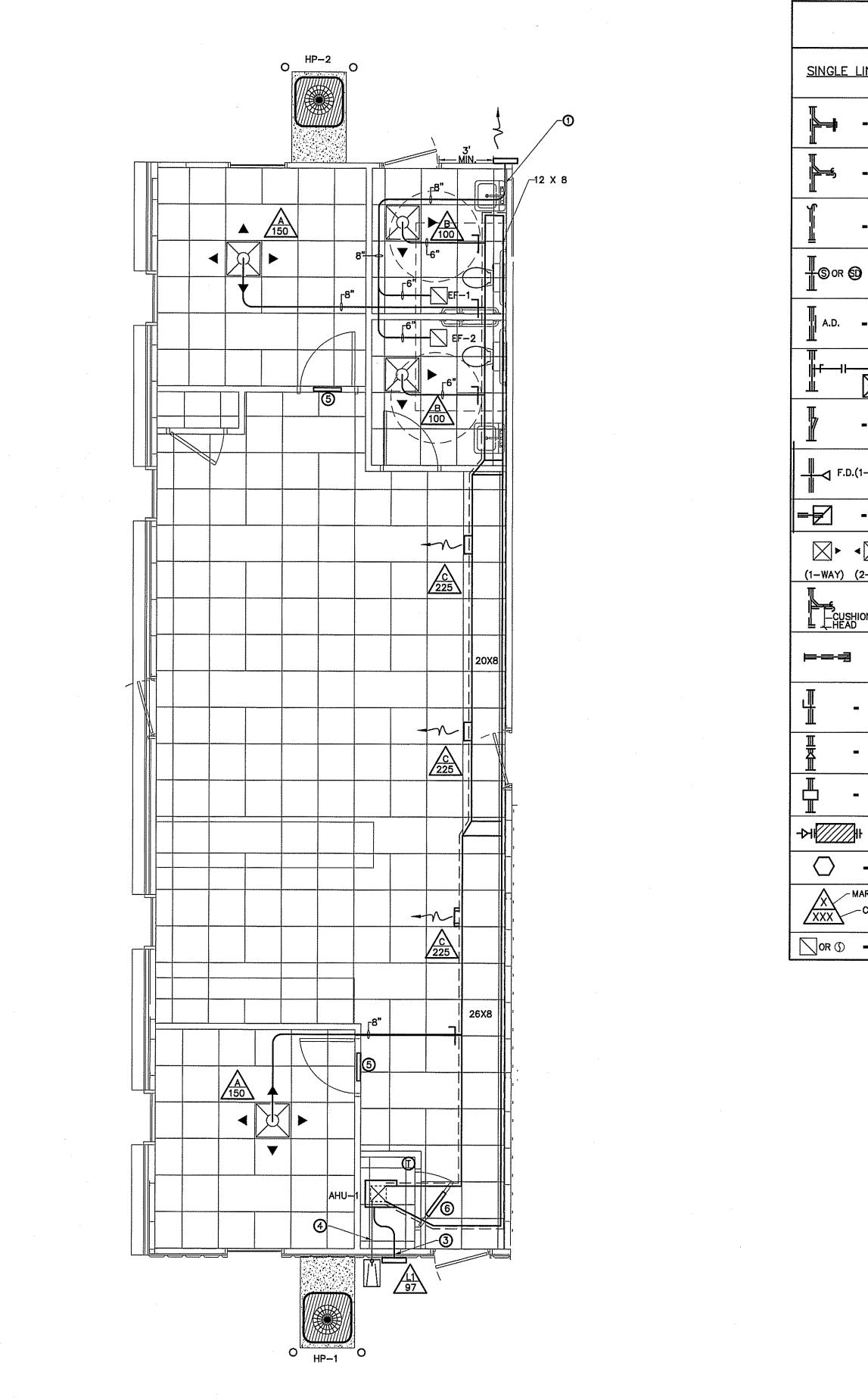
COOLING EFFICIENCY: <u>9.0 HSPF</u>

SIZE CATEGORY OF UNIT: < 65,000 BTUH

BOILER ---- NOT APPLICABLE IN THIS PROJECT CHILLER-NOT APPLICABLE IN THIS PROJECT

LIST EQUIPMENT EFFICIENCIES

•



## MECHANICAL HVAC PLAN BUILDING "2"

SCALE: 1/4" = 1'-0"

	MECHAN	CAL SYMBOL LEGEND	HUNDER CAROUNT
.INE	DOUBLE LINE	DESCRIPTION	HILL CRUMENT
-		TAKE OFF TO SUPPLY AIR REGISTER WITH EXT. INSUL. DUCTWORK	
=		BRANCH TAKEOFF FROM MAIN TRUNK DUCT WITH EXT. INSUL. DUCTWORK	
	TT.	END CAP	
) =		DUCT SMOKE DETECTOR	
=		ACCESS DOOR DOOR SIZE DUCT HEIGHT ACCESS DOOR 8X8 10" 10X10 12" 12X12 14" & LARGER	V V
চিব		CONTROL DAMPER (TYP) CEILING DIFFUSER	OH OATS,
-		EXIBLE DUCTWORK (10' MAX.) ONE SIDED REDUCING TRANSITION	
1-1/2)		S.D.=SMOKE DAMPER F.D.=FIRE DAMPER (1-1/2)=RATED FOR 1-1/2 HRS.	
<b></b>		RETURN AIR OR EXHAUST GRILLE	
2-WAY	· • • • • • • • • • • • • • • • • • • •	- CONTRACT OF BLOW & ACTIVE DIFFUSER SIDES	UNIVER orange
ON <b>-</b>		CUSHION HEAD @ BRANCH (2)CUSHION HEAD IS EQUAL TO 1-1/2 OR DIFFUSER RUNOUT WIDTH OF THE BRANCH DUCT OR DIFFUSER RUNOUT	
-		R.A. OR EXHAUST DUCT TURNS DOWN @ 90 DEGS.	
	₽ ₽	MANUAL VOLUME CONTROL DAMPER W/ QUADRANT LOCKING DEVICE	
		TWO SIDED TRANSITION	
	<b>₽</b>	ELECT. DUCT INSERT HEATER WITH CONTROL PANEL	
⊦ <b>-</b> {		AHU W/FLEXIBLE CONNECTION AT SUPPLY AND RETURN DUCT	REVISIONS NO.
- ARK		KEY NOTE	
	DIFFUSER, REGISTER OR	GRILLE (SEE SCHEDULE)	
		EXHAUST FAN	• 414 EAST EDGERTON STREET Dunn, North Carolina 28334 PH: (910) 892-4429 FAX: (910) 892-5162
		CONNECTION SCHEDULE	P.A
		TO PANEL BY E.C. STARTER, COMBINATION STARTER, DISCONNECT, AND DISCONNECTING MEANS. SUPPLIED BY E.C., INSTALLED BY E.C. ALL STARTERS, COMBINATION STARTER/DISCONNECTS, AND DISCONNECTING MEANS, SUPPLIED BY E.C. FOR MECHANICAL EQUIPMENT AS REQUIRED BY NEC AND MECHANICAL EQUIPMENT MANUFACTURER'S REQUIREMENTS.	Sale of the second of the seco
			DATE 10/04/19 DRAWN BY BAM JOB NO. 19-24
			ISTELL NU.

KEY PLAN

M-2 OF 3

	AIR H	HAN	DLER	UNIT										SPLIT S	YSTEM HE	AT F
A		INES	SEER	HTR KW	COO CAPACIT	LING Y (MBH)	HEATING CAPACITY (MBH)			MIN. CIRC. AMPACITY	M.O.C.P.	MARK	MANUF.	MODEL	VOLTAGE	# co
-, ,	GAS	LIQ.		(240)	TOTAL	SENS.	HIGH	LOW	norr						1021/102	"
	3/4	3/8	16.0	7.2	18.5	14.5	15.7	9.1	9.0	40	40	HP-3	RHEEM	RP1518BJ1	240/1/60	1
	3/4	3/8	15.5	7.2	24.0	17.9	22.0	13.5	9.0	40	40	HP-2	RHEEM	RP1524BJ1	240/1/60	1
	3/4	3/8	15.0	7.2	35.6	26.4	33.8	22.2	9.0	43	45	HP-1,4	RHEEM	RP1536AJ1	240/1/60	1
				t		I			1	1		ACCESSORIES				1

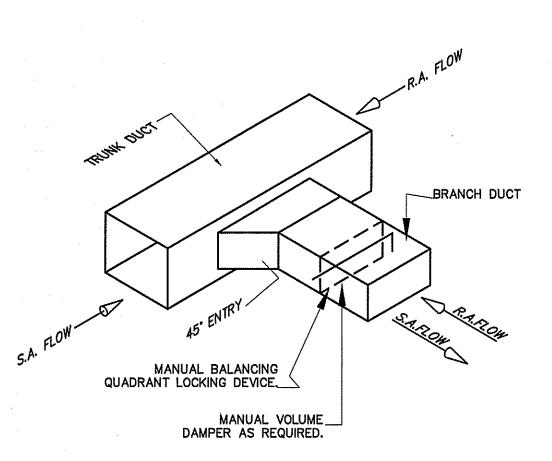
	•							AIR I	HAN	DLER	UNIT											SPLIT S	YSTEM HE	EAT P
AHU NO.	MANUFACTURER	MODEL	VOLTAGE	E.S.P.	OUTSIDE AIR (CFM)	CFM	UNIT FLA	REF LINES SEER		HTR KW	COOLING CAPACITY (MBH)		ING (MBH)	HEAT CAPACIT	1NG Y (MBH)	HSPF	MIN. CIRC. AMPACITY	M.O.C.P.	MARK	MANUF.	MODEL	VOLTAGE	# CON	
								GAS	LIQ.		(240)		TOTAL	SENS.	HIGH	LOW		AMEAULL					TOLINOL	
AHU-3	RHEEM	RH1T-2417STAN	240/1ø/60	.46	*	600	31.6	3/4	3/8	16.0	7.2		18.5	14.5	15.7	9.1	9.0	40	40	HP-3	RHEEM	RP1518BJ1	240/1/60	1
AHU-2	RHEEM	RH1T-2417STAN	240/1ø/60	.46	*	800	31.6	3/4	3/8	15.5	7.2		24.0	17.9	22.0	13.5	9.0	40	40	HP-2	RHEEM	RP1524BJ1	240/1/60	1
AHU—1,4	RHEEM	RH1T-3617STAN	240/1ø/60	.46	*	1200	34.1	3/4	3/8	15.0	7.2		35.6	26.4	33.8	22.2	9.0	43	45	HP-1,4	RHEEM	RP1536AJ1	240/1/60	1

\*\* PROVIDE OUTDOOR THERMOSTAT TO LOCK OUT SUPPLEMENTAL ELECTRIC HEAT AT OUTDOOR TEMPERATURES ABOVE 40'F.

	REGISTER, GRILLE, & DIFFUSER SCHEDULE*											
MARK	DESCRIPTION	MAX. NC	NECK	BORDER TYPE	MATERIAL	FINISH	MANUFACTURER	MODEL NUMBER	ACCESSORIES / NOTES			
A	DIFFUSER-4-WAY	30	9"X9"	LAY-IN	STEEL	WHITE	TITUS	TDC 9X9 3 26 4	SQ-TO-RND			
В	DIFFUSER-2-WAY	30	6"X6"	LAY-IN	STEEL	WHITE	TITUS	TDC 6X6 3 26 2	SQ-TO-RND			
С	SIDEWALL	30	12"X6"	SURFACE	STEEL	WHITE	TITUS	111 RS	22.5" DEFL.			

\* VERIFY CEILING TYPE BEFORE ORDERING, NARROW TEE REQUIREMENTS, PLASTER FRAMES ETC. TO BE INCLUDED WITH DIFFUSERS AT NO ADDITIONAL COST TO OWNER

			EXHAU	ST FA	N SCH	IEDULE	•			
		Monet			EXTERNAL		ELECTR			
MARK	MAKE	MODEL	TYPE	CFM	S.P. IN (W.G.)	AMPS	VOLT	PH	HZ	NOTES
EF-1,2	GREENHECK	SP-A90	CEILING FAN	70	.125	.34	115	1ø	60	WC-8 WALL



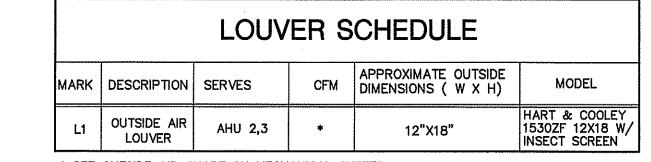
#### BRANCH DUCT TAKE-OFF DETAIL NOT TO SCALE

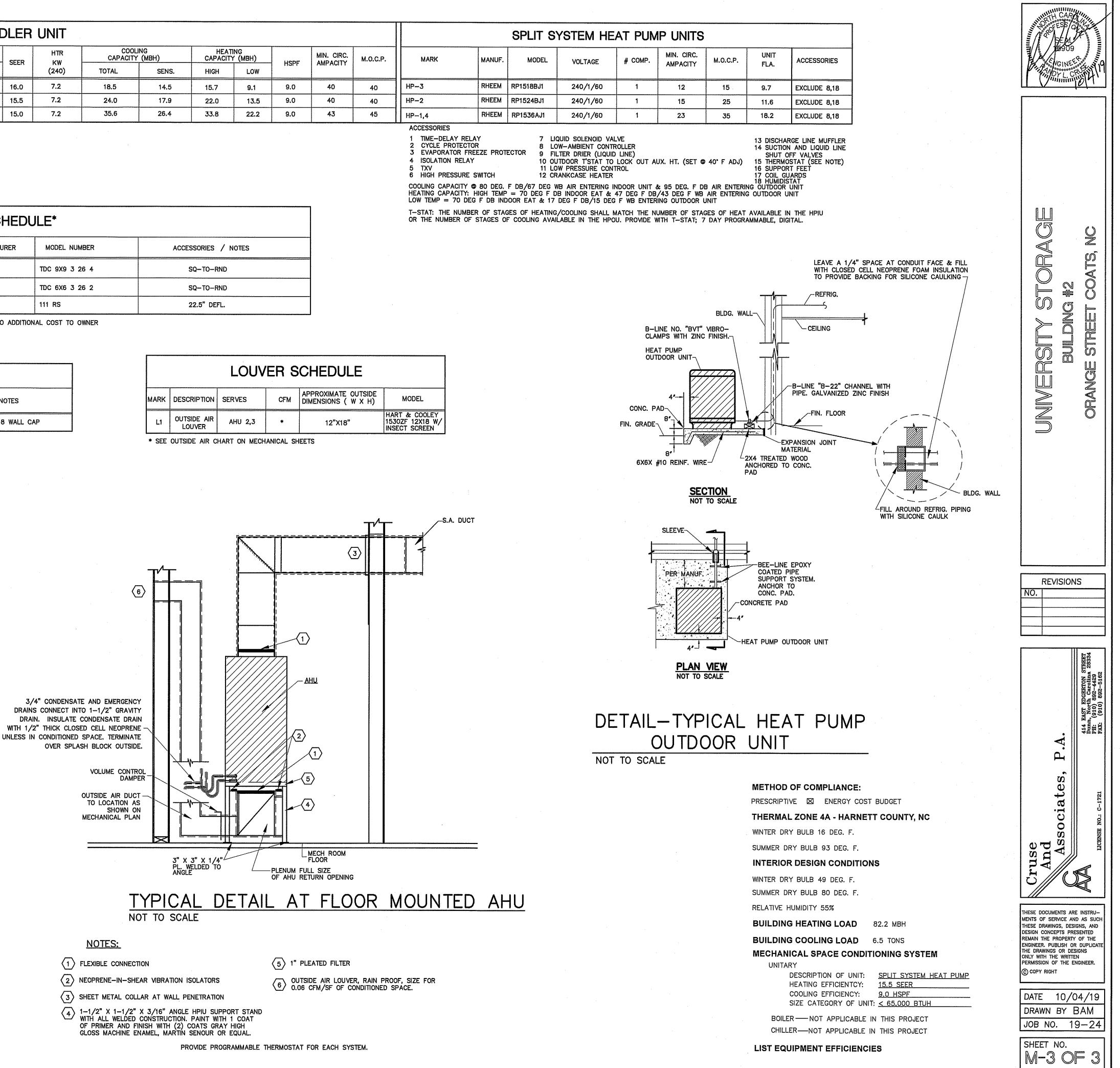
#### MECHANICAL NOTES (GENERAL)

- 1. DUCTWORK LAYOUTS ARE SCHEMATIC. ALL RISES, DROPS, OFFSETS, AND TRANSITIONS REQUIRED BUT ARE NOT SHOWN SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 2. DUCTWORK SHALL BE GALVANIZED STEEL AND SHALL BE CONSTRUCTED IN COMPLIANCE WITH SMACNA STANDARDS FOR LOW VELOCITY DUCTWORK. DUCT SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. FLEXIBLE RUNOUTS SHALL NOT EXCEED 15' AND SHALL NOT BE USED TO FORM ELBOWS. CONNECTIONS FROM RECTANGULAR TO ROUND DUCT SHALL BE MADE WITH MANUFACTURED 45 DEG. LATERAL TAPS.
- 3. ALL DUCTWORK SHALL BE SEALED AIR TIGHT WITH SEALING COMPOUND.
- 4. ALL ELBOWS IN DUCTWORK SHALL BE RADIUS ELBOWS, UNLESS NOTED OTHERWISE. WHERE SQUARE ELBOWS ARE SHOWN, INSTALL TURNING VANES. DUCT SIZES SHOWN ARE NET INTERIOR DIMENSIONS.
- 5. THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF OTHER TRADES PRIOR TO INSTALLATION OF ANY OF HIS PIPING, DUCTWORK, OR EQUIPMENT.
- 6. THE MECHANICAL CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE MECHANICAL PLANS, SCHEDULES, AND DETAILS PRIOR TO INSTALLATION OF THE MECHANICAL SYSTEMS AND REVIEW ANY CONFLICTS THAT ARE NOTED WITH THE ENGINEER.
- 7. IT WILL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO ENSURE THAT ITEMS TO BE FURNISHED UNDER HIS CONTRACT WILL FIT THE SPACE AVAILABLE. HE SHALL MAKE NECESSARY FIELD MEASUREMENTS TO ASCERTAIN SPACE REQUIREMENTS, INCLUDING THOSE FOR CONNECTIONS AND SHALL FURNISH AND INSTALL SUCH SIZES AND SHAPES OF EQUIPMENT THAT ARE THE TRUE AND INTENT MEANING OF THE PLANS AND SPECIFICATIONS. HE SHALL PROVIDE THE ENGINEER SCALED DRAWINGS OF ALL MECHANICAL DRAWINGS.
- 8. ALL EQUIPMENT SHALL BE LOCATED AND INSTALLED TO PROVIDE MAXIMUM SPACE FOR MAINTENANCE AND SERVICE.
- 9. PROVIDE FACTORY OR FIELD INSTALLED DRAIN PANS UNDER ALL COOLING COIL UNITS. INSTALL DRAIN PAN FLOAT TO SHUT DOWN UNIT FAN IN EVENT THAT CONDENSATE BEGINS TO FILL EMERGENCY DRAIN PAN. RUN ALL CONDENSATE DRAIN LINES TO APPROPRIATE DRAIN.

AU	CESSURIES		
1	TIME-DELAY RELAY	7	E
2	CYCLE PROTECTOR	8	Ł
3	EVAPORATOR FREEZE PROTECTOR	9	F
4	ISOLATION RELAY	10	Ċ
5	TXV	11	L
6	HIGH PRESSURE SWITCH	12	C

CRANKCASE HEATER

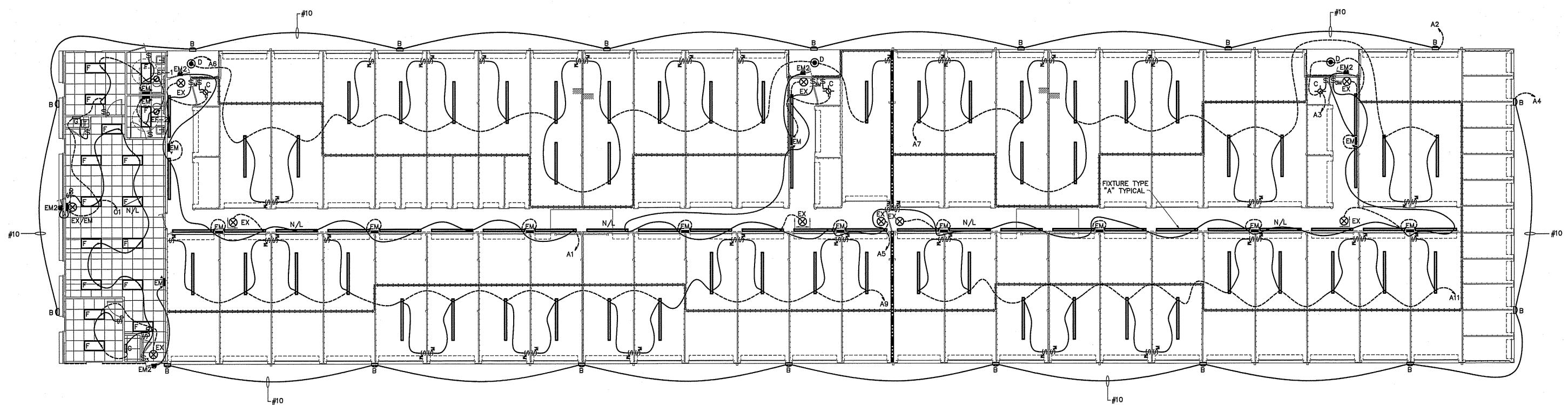




•										LIG
						NOTE:	MAR	< DESCRIPTION	MANUFACTURE	ER
		EL	ECTRICAL LEGEND			1. VERIFY LOCATION OF LIGHTS & RECEPTACLES WITH OWNER BEFORE CONSTRUCTION.	A	8' LED STRIPLIGHT	LITHONIA	CDS L96
MARK	DESCRIPTION	MARK	DESCRIPTION	MARK	DESCRIPTION	2. COORDINATE LOCATION OF 8' STRIP LIGHTS IN CORRIDOR WITH DUCT WORK WHERE APPLICABLE.	В	LED WALL PACKS	LITHONIA	TWR1 LE
	QUAD RECEPTACLE	\$3(4)	MOTION DETECTING 3-WAY SWITCH			3. ALL LED LIGHTS IN CORRIDORS TO BE MOUNTED ON THE WALLS WHERE APPLICABLE.	С	COMPACT FLUORESCENT FIXTURI WITH WIRE GUARD	E DAYBRITE	VIN100112
		<u> </u>	(4-WAY SWITCH) WITH TIMER	N/L	UNSWITCHED FIXTURE	4. ALL HALLWAYS SWITCHES TO BE ON MOTION	D	3" LED RECESSED DOWNLIGHT	ACULUX	AX3 D G4 3DP CS S
Ф	DUPLEX RECEPTACLE	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	UNSWITCHED BRANCH CIRCUIT		FUSED DISCONNECT SWITCH	SENSORS OR SWITCHED AS INDICATED AND ON TIMERS OF 30 MINUTES. ALL UNIT	F	2X4 FLAT PANEL LED LIGHT	ACULUX	EPANL 2
Ē	TIMECLOCK	7 ×	120/208 VOLT CIRCUIT	[]	CEILING MOUNTED FUSED DISCONNECT SWITCH	SWITCHES TO BE ON TIMER OF 30 MINUTES WITH NO HOLD MECHANISMS.	G	LED CLOSET LIGHT	LITHONIA	FMMCL 18
	CEILING MOUNTED DUPLEX RECEPTACLE	\$,,	MOTION DETECTING SINGLE-POLE SWITCH		DATA/PHONE OUTLET	5. VERIFY NIGHT LIGHTS AND PERMANENT BURN FIXTURES WITH OWNER BEFORE WIRING.	EM	EMERGENCY LIGHT WITH BATTERY BACKUP	LITHONIA	ELM2L
<u></u>	CEILING MOONTED DUFLEX RECEFTACLE	-PM	MOTION DETECTING SINGLE-FOLE SWITCH				EX	LED TYPE EXIT LIGHT WITH BATTERY BACKUP	LITHONIA	ELM2L
	FLUORESCENT FIXTURE	$\otimes$	'EXIT' LIGHT FIXTURE, TYPE 'EX'	J	JUNCTION BOX		EM2	ENEDOENOV LIQUT	MCPHILBEN	CR2CSWA
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	SWITCHED BRANCH CIRCUIT	¢	BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.)	\$	SINGLE POLE SWITCH OR TIMER AS APPLICABLE		* ALI	FIXTURE SELECTIONS TO BE VERIF	FIED BY OWNER	BEFORE PUI

	LIGHTING DATA FOR NC ENERGY CODE												
AREA USE	AREA FT <sup>2</sup>	WATTS PER FT <sup>2</sup> ALLOWED	TOTAL WATTS ALLOWED	TOTAL WATTS USED	TOTAL WATTS LEFT OVER								
STORAGE	15,600	0.58	9,048	6,348	2,700								
OFFICE	1,200	1.11	1332	636	696								
TOTAL	16,800		10,380	6,984	3,396								

└*⋕*10

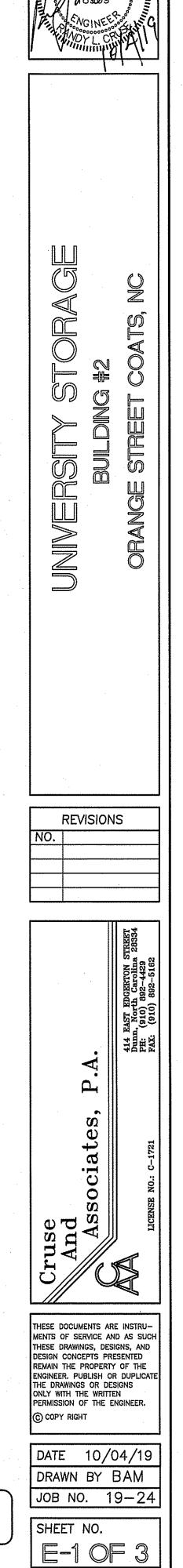


# ELECTRICAL LIGHTING PLAN BUILDING "2" SCALE: 1" = 10'-0"

CATALOG NUMBER	LAMPS	BALLASTS	WATTAGE	REMARKS	
6 MVOLT DM 40K 80CRI WH	LED		77	· ·	
ED 3 50K MVOLT ON TIMER	18 LEDS	LED	58.4	ON TIMER	
12-PG	1-13W SELF BALLAST		17	WITH WIRE GUARD	
G4 12LM 35K 80CRI 50D GZ1 120 ICAT SF WET	LED		11.0	TO BE ON PHOTOCELL	
2X4 4000LM 80CRI 35K MIN10 MVOLT	LED		38	NLTAIR2 OPTION FOR N	/L FIX.
18 840	LED		14	CEILING OR SIDEWALL M	OUNTED
	LED				
VA					
					• • •

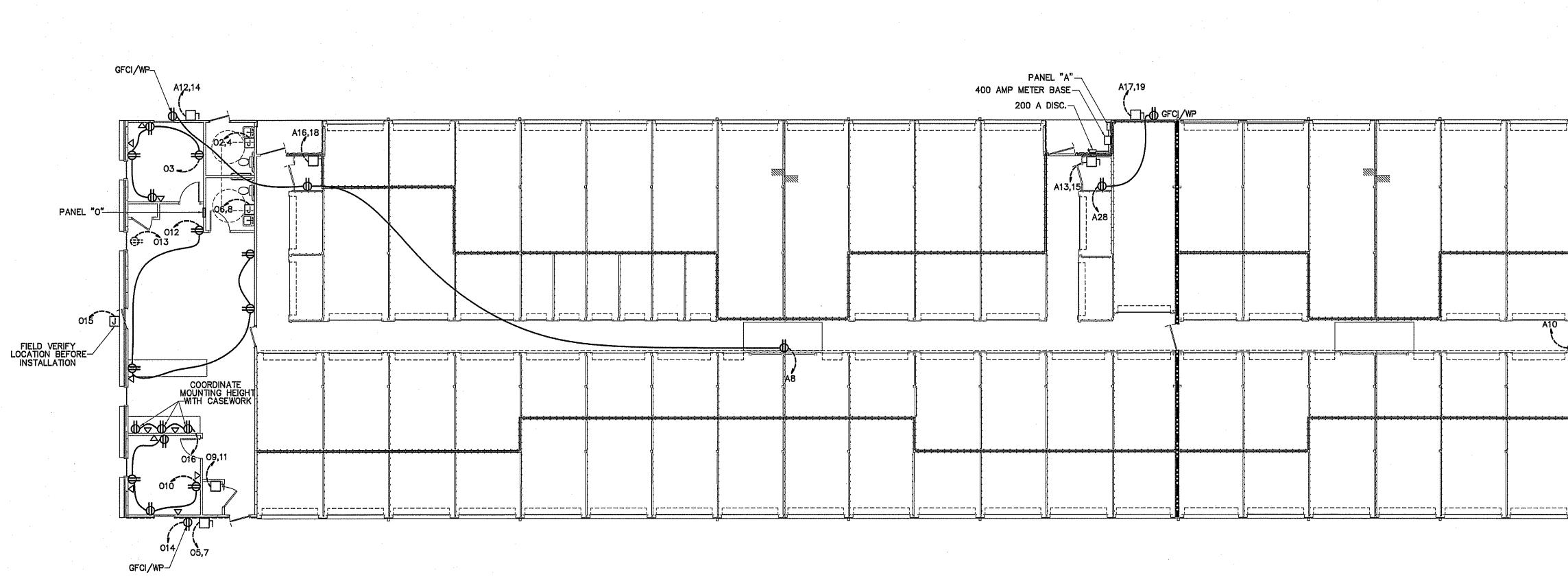
LEGEND

------ 3 HOUR FIRE BARRIER

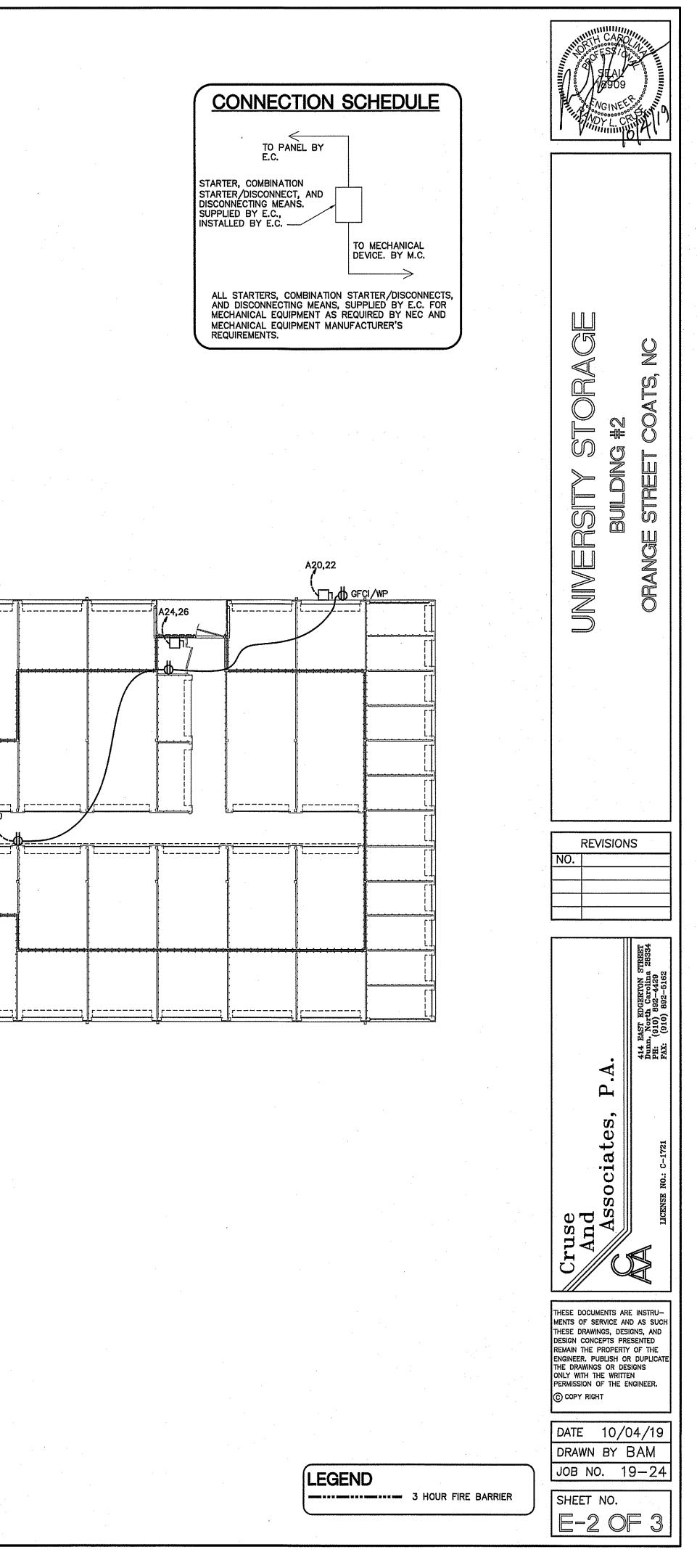


		ELI	ECTRICAL LEGEND		
MARK	DESCRIPTION	MARK	DESCRIPTION		
#	QUAD RECEPTACLE	\$3(4)	MOTION DETECTING 3-WAY SWITCH (4-WAY SWITCH) WITH TIMER		UNSWITCHED FIXTURE
Φ	DUPLEX RECEPTACLE	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	UNSWITCHED BRANCH CIRCUIT		FUSED DISCONNECT SWITCH
Π	TIMECLOCK	2	120/208 VOLT CIRCUIT	[]	CEILING MOUNTED FUSED DISCONNECT SWITCH
Φ	CEILING MOUNTED DUPLEX RECEPTACLE	\$ <sub>M</sub>	MOTION DETECTING SINGLE-POLE SWITCH	$\triangleleft$	DATA/PHONE OUTLET
FLUORESCENT FIXTURE		8	'EXIT' LIGHT FIXTURE, TYPE 'EX'	J	JUNCTION BOX
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	SWITCHED BRANCH CIRCUIT	L,	BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.)		SINGLE POLE SWITCH OR TIMER AS APPLICABLE

### NOTE: VERIFY ALL PHONE/DATA OUTLETS WITH OWNER BEFORE BEGINNING CONSTRUCTION.



# ELECTRICAL POWER PLAN BUILDING "2" SCALE: 1" = 10'-0"



#### **ELECTRICAL NOTES (GENERAL)**

1. THE ELECTRICAL INSTALLATION, EQUIPMENT, MATERIALS, AND WORKMANSHIP SHALL, AS A MINIMUM, BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC), OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), ALL APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL CODES, LAWS, AND ORDINANCES, AND RULINGS OF THE INSPECTION AUTHORITIES HAVING JURISDICTION. ALL FEES, PERMITS, ETC., ASSOCIATED WITH THE ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

2. THE DRAWINGS GENERALLY INDICATE THE WORK TO BE INSTALLED, BUT DO NOT SHOW ALL BENDS, BOXES, FITTINGS, AND SPECIALTIES WHICH MAY BE REQUIRED FOR A COMPLETE INSTALLATION. ALL SUCH ITEMS REQUIRED TO COMPLETE THE INSTALLATION ACCORDING TO INDUSTRY ACCEPTED PRACTICES SHALL BE INCLUDED IN THE BID.

3. ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND LISTED AND LABELED BY UNDERWRITERS LABORATORIES, INC.

4. ALL PENETRATIONS OF FIRE WALLS SHALL BE SEALED WITH APPROVED SEALING MATERIALS TO MAINTAIN THE FIRE RATING OF THE WALLS. 5. THE CONTRACTOR SHALL VERIFY WIRE AND FUSE/CIRCUIT BREAKER SIZING FOR ALL MECHANICAL EQUIPMENT PRIOR TO PURCHASING MATERIALS AND INSTALLING BRANCH CIRCUITS.

6. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES TO AVOID INTERFERENCES AND CONFLICTS. APPARENT INTERFERENCES OR CONFLICTS SHALL BE REPORTED TO THE PRIME CONTRACTOR AND RESOLVED PRIOR TO PROCEEDING WITH THE WORK IN QUESTION.

7. THE ELECTRICAL CONTRACTOR SHALL CONNECT BRANCH CIRCUITS TO THE MAIN LINE TERMINALS OF EQUIPMENT FURNISHED BY OTHER CONTRACTORS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY NECESSARY SWITCHES, DISCONNECTS, OR OVERCURRENT PROTECTION AHEAD OF SUCH EQUIPMENT.

8. RACEWAYS ARE SHOWN SCHEMATICALLY AND MAY BE REROUTED IN THE FIELD. THEY SHALL BE INSTALLED AT RIGHT ANGLES TO OR PARALLEL WITH BUILDING LINES. THEY SHALL BE RUN CONCEALED WITHIN WALLS OR BUILDING STRUCTURES WHEREVER POSSIBLE. 9. ALL RACEWAYS, EQUIPMENT, ETC., ABOVE A SUSPENDED CEILING SHALL BE MOUNTED A MINIMUM OF 18" ABOVE THE CEILING SO AS NOT TO

10. THE MINIMUM ALLOWABLE SIZE FOR ANY CONDUIT, IMC, OR EMT SHALL BE 1/2" AND MAY BE USED FOR 2#12 WIRE SWITCHLEGS ONLY. A SWITCHLEG SHALL BE DEFINED AS THE RUN OF CONDUIT FROM THE SWITCH OUTLET BOX TO THE FIRST OUTLET BEING SWITCHED. 11. FULL WEIGHT GALVANIZED RIGID STEEL CONDUIT SHALL BE USED IN THE FOLLOWING AREAS:

A. ON THE EXTERIOR OF THE BUILDING OR ROOF,

BLOCK ANY TILE OR FIXTURE ACCESS.

- B. VERTICAL DROPS WHERE THE CONDUIT CANNOT BE ANCHORED TO WALLS OR OTHER SUPPORT
- STRUCTURES, C. WHERE SUBJECT TO MECHANICAL DAMAGE.

12. ALL WIRE AND CABLE SHALL BE COPPER AND HAVE 600 VOLT THHN-THWN INSULATION. ALUMINUM WIRING SHALL NOT BE PERMITTED.

13. THE MINIMUM WIRE SIZE SHALL BE #12 AWG EXCEPT FOR CONTROL WIRING, WHICH MAY BE #14 AWG. CONTROL WIRING SHALL USE STRANDED CONDUCTORS UNLESS OTHERWISE NOTED.

14. ALL METAL RACEWAY SYSTEMS SHALL BE MADE ELECTRICALLY CONTINUOUS. THE RACEWAY SYSTEM SHALL NOT BE THE SOLE GROUNDING METHOD. AN INSULATED COPPER GROUNDING CONDUCTOR SHALL BE INSTALLED FOR ALL FEEDERS AND BRANCH CIRCUITS. AT RECEPTACLES, A GREEN GROUND CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL OF THE RECEPTACLE.

15. THE ELECTRICAL CONTRACTOR SHALL COORDINATE FUSE AND DISCONNECT SWITCH SIZES WITH THE MECHANICAL EQUIPMENT SUPPLIER PRIOR TO PURCHASE AND INSTALLATION OF BRANCH CIRCUIT EQUIPMENT. IF EQUIPMENT SIZING CHANGES FROM DESIGN SIZES, CIRCUITS SHALL BE RESIZED ACCORDINGLY.

16. LIGHT FIXTURES FOR INSTALLATION IN A SUSPENDED CEILING SHALL BE SECURELY FASTENED TO THE CEILING SUSPENSION SYSTEM IN A MANNER TO PREVENT FIXTURES FROM FALLING. IN ADDITION, 16 GAGE WIRE HANGERS SHALL BE FASTENED TO THE FOUR CORNERS OF THE FIXTURES.

17. CONNECTIONS TO FIXTURES INSTALLED IN SUSPENDED CEILINGS SHALL BE MADE WITH FLEXIBLE METAL CONDUIT TO ALLOW THE FIXTURE TO BE LIFTED OUT OF THE GRID AND MOVED TO AN ADJACENT GRID LOCATION.

18. BREAKERS SUPPLYING HVAC OR REFRIGERATION EQUIPMENT SHALL BE HACR TYPE.

19. 3/4" CONDUIT IS MINIMUM ALLOWABLE SIZE EXCEPT AS INDICATED IN #10. CONDUIT FILL NOT TO EXCEED 40% AS PERMITTED BY THE NATIONAL ELECTRIC CODE.

20. ALL CONDUCTORS TO BE INSTALLED IN CONDUIT (EXCEPT WHERE ROMEX IS INSTALLED). EMT FITTINGS TO BE COMPRESSION TYPE, INSULATED THROAT. 21. NOT USED

22. DATA, SECURITY, THEATRICAL, AND VIDEO SYSTEMS TO BE PROVIDED BY OWNER. ROUGH-IN OF OUTLETS AND CONDUIT WILL BE BY CONTRACTOR AS SHOWN ON DRAWINGS.

- 23. NOT USED 24. NO. 10 CU AWG CONDUCTORS SHALL BE USED FOR 20 AMP BRANCH CIRCUIT HOMERUNS EXCEEDING 50 FT. TO THE JUNCTION POINT. 20 AMP BRANCH CIRCUIT WIRING SHALL BE NO. 10 CU AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 100 FEET TOTAL LENGTH. 20 AMP BRANCH CIRCUIT WIRING SHALL BE NO. 8 CU AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 200 FEET TOTAL LENGTH.
- 20 AMP BRANCH CIRCUIT WIRING SHALL BE NO. 6 CU AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 400 FEET TOTAL LENGTH. 20 AMP BRANCH CIRCUIT SHALL BE NOT EXCEED 500' FEET IN TOTAL LENGTH. (UNLESS MARKED OTHERWISE)

25. CONDUCTORS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET. SPLICES WILL NOT BE MADE EXCEPT WITHIN ACCESSIBLE OUTLET OR JUNCTION BOXES, TROUGHS, OR GUTTERS.

26. MAKE CONDUCTOR LENGTHS FOR PARALLEL CIRCUITS EQUAL.

506.2.6 AUTOMATIC DAYLIGHTING CONTROL SYSTEMS

27. INSTALL TELEPHONE OUTLETS WITH 3/4" EMPTY CONDUIT AND PULL CORD. STUB OUT ABOVE CEILING. PHONE SYSTEM INSTALLED BY OWNER. 28. ALL CONDUIT WITHOUT CONDUCTORS SHALL HAVE NYLON PULLCORDS INSTALLED.

29. THE CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE PLANS, SCHEDULES, AND DETAILS PRIOR TO INSTALLATION, AND REVIEW ANY CONFLICTS THAT ARE NOTED WITH THE ENGINEER.

30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES FOR PERMITS AND INSPECTIONS. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR ELECTRIC UTILITY CONNECTION FEES AND LINE EXTENSION FEES.

31. ELECTRICAL CONNECTIONS TO EQUIPMENT SUBJECT TO VIBRATION WHICH DEVELOPS OBJECTIONABLE NOISES SHALL BE MADE FROM THE CONDUIT SYSTEM WITH SHORT LENGTHS OF FLEXIBLE "LIQUID-TITE" CONDUIT.

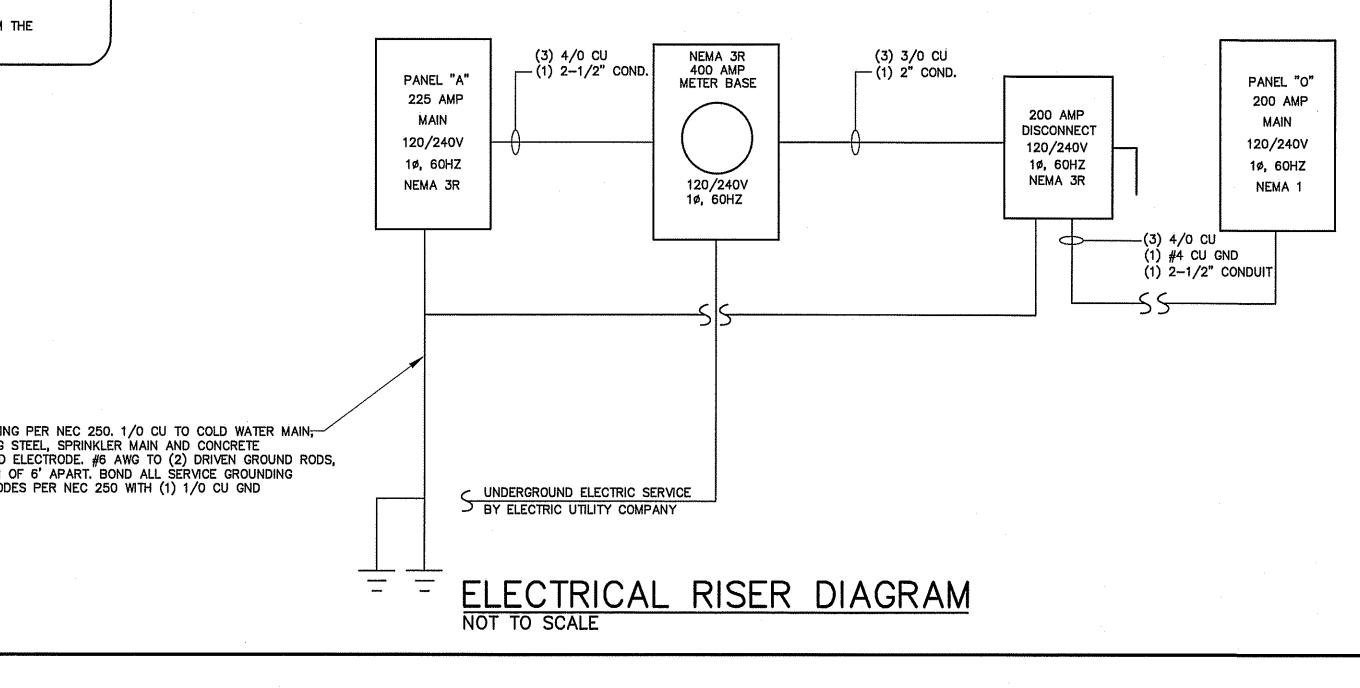
32. ALL WRE TERMINATIONS AND EQUIPMENT TO BE RATED FOR 75° C MINIMUM. 33. ELECTRICAL CONTRACTOR TO MAINTAIN 2' OF SEPARATION ON RECEPTACLES ON OPPOSITE SIDES OF ANY FIRE RATED WALL PER 2017 N.E.C. 300.21.

34. WRING TO DISCONNECT SWITCH AND DISCONNECT SWITCH SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR. WRING FROM THE DISCONNECT TO THE EQUIPMENT SHALL BE BY THE MECHANICAL CONTRACTOR.

ELECTRICAL SYSTE METHOD OF COMPL				
ENERGY CODE: ASHRAE 90.1:		PERFORMANCE PERFORMANCE	—	
REFER TO DRAWINGS FO	R RISER DIAGRAM AND PANEL	SCHEDULES		
LIGHTING SCHEDUL	E			
LAMP TYPE REQUIRED IN	N FIXTURE: SE	E SCHEDULE		
NUMBER OF LAMPS IN F	FIXTURE:			
BALLASTS TYPE USED I	N FIXTURE:			
NUMBER OF BALLASTS	IN FIXTURE:			
TOTAL WATTAGE PER FI	XTURE:			
TOTAL INTERIOR WATTAC	GE SPECIFIED VS. ALLOWED:			DOUN
TOTAL EXTERIOR WATTA	GE SPECIFIED VS. ALLOWED:	***	B	
ADDITIONAL PRESC	RIPTIVE COMPLIANCE		M	NCAS
506.2.1 MORE EFFICIENT	MECHANICAL EQUIPMENT		21	LECTR
506.2.2 REDUCED LIGHT	ING POWER DENSITY			
506.2.3 ENERGY RECOV	ERY VENTILATION SYSTEMS			
506.2.4 HIGHER EFFICEN	NCY SERVICE WATER HEATING			
506.2.5 ON-SITE SUPPL	Y OF RENEWABLE ENERGY			

			0	FFICE PA	NEL																
		PANEL:	<u>)</u> schedule: M	ANUFACT	URER: SQ. D NO. OF S	SPACES 42		NOT	E			PANEL	.: "A"	_ SCHEDULE: M/	NUF	ACTURER: SQ. D.	NO. OF SP	ACE	5 <u>42</u>	7	
		VOLTS: 12	0/240 AMPS: 200	TYPE: _	NQOD" MOUNTING:	FLUSH		VERIFY	AIC RATING WITH			VOLTS	5: <u>120/</u>	240 AMPS: 225	TYF	PE: <u>"NQOD"</u> MC	)UNTING: <u>S</u>	SURFA	<b>\CE</b>		
		ENCLOSU	RE: <u>NEMA 1</u> Ø: <u>1</u>	S	HORT CIRCUIT RATING: _2	2.000			Y COMPANY BEFORE			ENCLO	OSUR	E: <u>NEMA 3R ·</u> Ø: <u>1</u>		SHORT CIRCUIT R/	TING:10,(	000			
		MAIN: 23 MI	.0: 🗋 Top Feed: 🖾 Bottom Feed:	COPPER	908: 🖾 Ground Bar Kit: 🖾 Neu	TRAL BAR KIT: 🖸						MAIN: 🖾	MLO:	D TOP FEED: D BOTTOM FEED: D	1 CO	PPER BUS: 🖾 GROUND BAR K	II: 🗆 NEUTR	VAL BAR	кт. 🗆		
L1	L2	CIRCUIT POLES TRIP	ASSIGNMENT	PHASE	ASSIGNMENT	TRIP POLES	L1	L2		L1	L2	CIRCUIT	TRIP	ASSIGNMENT		ASSIGNM	ENT	TRIP	POLES		L2
6.0	$\ge$	1 1 20	OFFICE LIGHTS	0	POINT OF USE	30 2 2	30.0	$\searrow$		6.4	$\ge$	1 1	20	CORRIDOR LIGHTS LEFT SIDE	0	WALLPACK	S	20	1 2	4.4	$\square$
$\bowtie$	6.0	3 1 20	OFFICE RECEPTACLES	0		4		30.0	~	$\boxtimes$	8.6	3 1	20	CORRIDOR LIGHTS RIGHT SID	E	o WALLPACK	S	20	1 4	$\geq$	4.4
18.2	$\geq$	5 2 35	HP-1	0	POINT OF USE	30 2 6	30.0	$\succ$		5.3	$\ge$	5 1	20	CORRIDOR LIGHTS CENTER	0	LEFT 10X20/10X30	UNIT LTS.	20	1 6	9.2	$\cdot$
$\geq$	18.2	7		0		3		30.0		$\geq$	7.7	7 1	20	RT. 10X20/10X30 UNIT LTS.		O LEFT SIDE RECEP	TACLES	20	1 8	$\geq$	4.5
34.1	$\geq$	9 2 45	AHU—1	0	OFFICE RECEPTACLES	20 1 1	6.0	$\succ$		9.0	$\triangleright$	9 1	20	LEFT SIDE 10X15 UNIT LIGHT	SO	RIGHT SIDE RECEP	TACLES	20	1 10	) 4.5	$\bowtie$
$\geq$	34.1	11		0	LOBBY RECEPTACLES	20 1 1	$^{2}$	6.0		$\geq$	7.1	11 1	20	RT. SIDE 10X15 UNIT LIGHTS		o HP-2		25	2 12	<u>'</u>	11.6
1.5	$\geq$	13 1 20	CEILING RECEPTACLE	0	EXTERIOR RECEPTACLE	20 1 1	1.5	$\geq$		31.6	$\geq$	13 2	40	AHU-3	0				14	4 11.6	$, \sum$
$\geq$	10.0	15 1 20	BUILDING SIGN	0	COUNTER RECEPTACLES	20 1 1	$\sim$	4.5		$\geq$		15				o AHU—2		40	2 16	×D×	31.6
10.0	$\geq$	17 1 20	STREET SIGN	0		20 1 1	3 X	$\geq$		9.7	$\geq \leq$	17 2	15	HP-3	0					3 31.6	
$\geq$	Х	19 1 20		0		20 1 2	$\sim$	X		$\geq$	9.7	19				o HP-4		35	2 20	N	18.2
X	$\geq$	21 1 20		0		20 1 2	2 X	$\geq$		Х	$\geq$	21 1	20	SPARE	0				22	2 18.2	ż DS
$\geq$	X	23 1 20		0		20 1 2	$\downarrow$	X		$\geq$	X	23 1	20	SPARE		o AHU-4		45	2 24	· D	34.1
X	$\geq$	25 1 20		0		20 1 2	3 X	$\geq$		Х	$\geq$	25 1	20	SPARE	0				26	6 34.1	
$\geq$	X	27 1 20		0		20 1 2	3≥	] x		$\geq$	X	27 1	20	SPARE		O CENTER CONV. REC	EPTACLES	20	1 28	<u>۲</u>	3.0
X	$\geq$	29 1 20		0		20 1 3	x c	$\geq$	]	Х	$\geq$	29 1	20	SPARE	0	SPARE		20	1 30	) X	$\searrow$
$\geq$	X	31 1 20		0		20 1 3	2 🖂	X		$\geq$	X	31 1	20	SPARE		o SPARE		20	1 32	<u>²</u> [>>	$\langle x \rangle$
X	$\geq$	33 1 20		0		20 1 3	4 X	$\succ$	]	Х	$\geq$	33 1	20	SPARE	0	SPARE		20	1 34	+ X	$\bowtie$
$\geq$	X	35 1 20		0		20 1 3	، 🖂	X		$\geq$	X	35 1	20	SPARE		o SPARE		20	1 36	; 🖂	$\langle x \rangle$
X	$\geq$	37 1 20		0		20 1 3	3 X	$\boxtimes$	]	Х	$\bowtie$	37 1	20	SPARE	0	SPARE		20	1 38	3 X	$\boxtimes$
$\bowtie$	Х	39 1 20		0		20 1 4	νÌX	X		$\geq$	X	39 1	20	SPARE		o SPARE		20	1 40	×	$\langle x \rangle$
X	$\geq$	41 1 20		0		20 1 4	2 X	$\geq$		Х	$\ge$	41 1	20	SPARE	0	SPARE		20	1 42	2 X	$\square$
				L1 = 137. L2 = 138.												175.6 A 172.1 A					

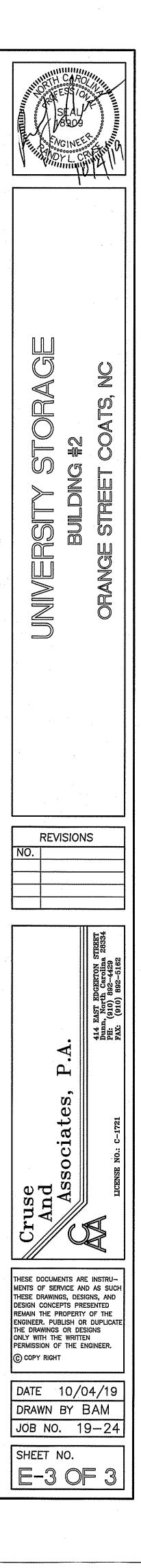
LZ = 130.0 A



L2 = 172.1 A

	FEEDER SCHEDULE										
UNIT FEEDERS FUSED CON											
AHU'S 1,2,3,4	2#8 CU, 1#10 CU GND	60	3/4"								
HEAT PUMPS 2,3	2#12 CU, 1#12 CU GND	30	3/4"								
HEAT PUMPS 1,4	2#10 CU, 1#12 CU GND	60	3/4"								
POINT OF USE											

ELECTRICAL LOAD CALCULATIONS	
16800 SQUARE FEET	VA_
NONCONTINUOUS LOADS:	
24 RECEPTACLES @ 180 VA EA.	4320
1ST 10000 REMAINDER @ 50%	4320 0
TOTAL	4320
CONTINUOUS LOADS:	
STORAGE GENERAL LIGHTING LOAD VA/SQ. FT.	
15600 SQ. FT. 0.25	3900
3900 x 1.25 OFFICE	4875
GENERAL LIGHTING LOAD VA/SQ. FT.	
1200 SQ. FT. 3.5 4200 x 1.25	4200 5250
AIR HANDLER UNIT	31536
HEAT PUMPS	13848
EQUIPMENT:	16892
25% OF LARGEST MOTOR	1092
GRAND TOTAL	77813
324 AMPS @ 120/240V, 1ø, 60HZ	
02T ANITS & 120/2409, 10, 00HZ	



EXIT REQUIREMENTS: NUMBER AND ARRANGEMENTS OF EXITS

		NUMD	ER AND ARRAN	IGEMEINTS OF D	27112	
FLOOR, ROOM OR SPACE DESIGNATION	MINI NO, OF	IENT MEANS OF SECTION 1016-1021)				
	REQ'D.	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1017.2)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
S-1	2 2		200'	79'-10"	96'-0"	145'-0"
					·	

1. CORRIDOR DEAD ENDS (SECTION 1020.4) 2. BUILDINGS WITH SINGLE EXITS (TABLE 1006.3.2(2)), SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY (TABLE 1006.2.1) 3. COMMON PATH OF TRAVEL (SECTION 1029.8)

EXI	r width	

USE GROUP OR SPACE DESCRIPTION	(a)	(b)		(c	)		EXIT WE	)TH (in)	
	AREA <sup>1</sup> SQ. FT.	AREA <sup>1</sup> PER OCCUPANT (TABLE 1004.1.2)	CALCULATED OCCUPANT LOAD (a/b)	EGRESS WIDTH PER OCCUPANT (TABLE 1005.1)		REQUIRED WDTH (SECTION 1005.1) (a/b) x c		ACTUAL WDTH SHOWN ON PLANS	
· · ·				STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
S-1	5100	500 GROSS	11	N/A	.2	N/A	2.2"	N/A	94"
· ·									
·									

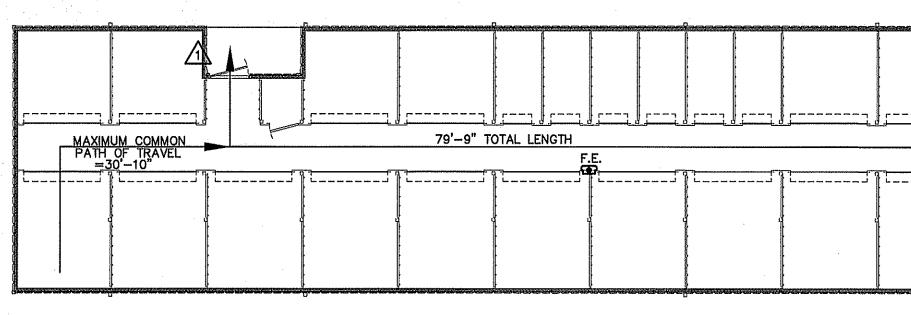
1. SEE TABLE 1004.1.2 TO DETERMINE WHETHER NET OR GROSS AREA IS APPLICABLE SEE DEFINITION "AREA, GROSS" AND "AREA, NET" (SECTION 1002, DEFINED IN CHAPTER 2)

2. MINIMUM STAIRWAY WIDTH (SECTION 1011.2); MIN. CORRIDOR WIDTH (SECTION 1020.2); MIN. DOOR WIDTH (SECTION 1010.1.1)

3. MINIMUM WIDTH OF EXIT PASSAGEWAY (SECTION 1024)

4. SEE SECTION 1005.6 FOR CONVERGING EXITS.

5. THE LOSS OF ONE MEANS OF EGRESS SHALL NOT REDUCE THE AVAILABLE CAPACITY TO LESS THAN 50% OF THE TOTAL REQUIRED (SECTION 1005.5) 6. ASSEMBLY OCCUPANCIES (SECTION 1029)



LIFE SAFETY	SPACE DESIGNATIONS USED ON PLANS ARE EXCLUSIVE TO LIFE I ONLY, AND ARE NOT INDICATIVE JAL SPACE DESIGNATIONS USED
LEGENI @F.E.	<b>D</b> FIRE EXTINGUISHER AND CABINET CLASS ABC 10 POUNDS

NOTE: EXIT REQUIREMENTS CALCULATED ONLY FOR CONDITIONED AREAS. ALL OTHER AREAS HAVE DIRECT EXIT TO EXTERIOR.

LIFE SAFETY PLAN REQUIREMENTS: 🔀 OCCUPANT LOADS FOR EACH AREA X EXIT ACCESS TRAVEL DISTANCES (1017) 🖾 DEAD END LENGTHS (1020.4) - SEE NOTE 4 🔀 CLEAR EXIT WIDTHS FOR EACH EXIT DOOR

SI FIRE AND/OR SMOKE RATED WALL LOCATIONS (CHAPTER 7) - SEE NOTE 1

🔀 ASSUMED AND REAL PROPERTY LINE LOCATIONS - SEE NOTE 2

X EXTERIOR WALL OPENING AREA WITH RESPECT TO DISTANCE TO ASSUMED PROPERTY LINES (705.8) - SEE NOTE 3 SOCCUPANCY TYPES FOR EACH AREA AS IT RELATES TO OCCUPANT LOAD CALCULATION (TABLE 1004.1.2)

COMMON PATH OF TRAVEL DISTANCES (1006.2.1 & 1006.3.2(1))

X MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.3) X ACTUAL OCCUPANT LOAD FOR EACH EXIT DOOR

X A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR/CEILING AND/OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION. SEE NOTE 5

🔀 LOCATION OF DOORS WITH PANIC HARDWARE (1008.1.10) - SEE NOTE 6

🖾 LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND AND THE AMOUNT OF DELAY (1008.1.9.7) - SEE NOTE 7 X LOCATION OF DOORS WITH ELECTROMAGNETIC EGRESS LOCKS (1008.1.9.8) - SEE NOTE 7

☑ LOCATION OF DOORS EQUIPPED WITH HOLD-OPEN DEVICES - SEE NOTE 7

☑ LOCATION OF EMERGENCY ESCAPE WINDOWS (1029) - SEE NOTE 7

🔀 THE SQUARE FOOTAGE OF EACH FIRE AREA (902) – SEE NOTE 8 ☑ THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT (407.5) - SEE NOTE 9

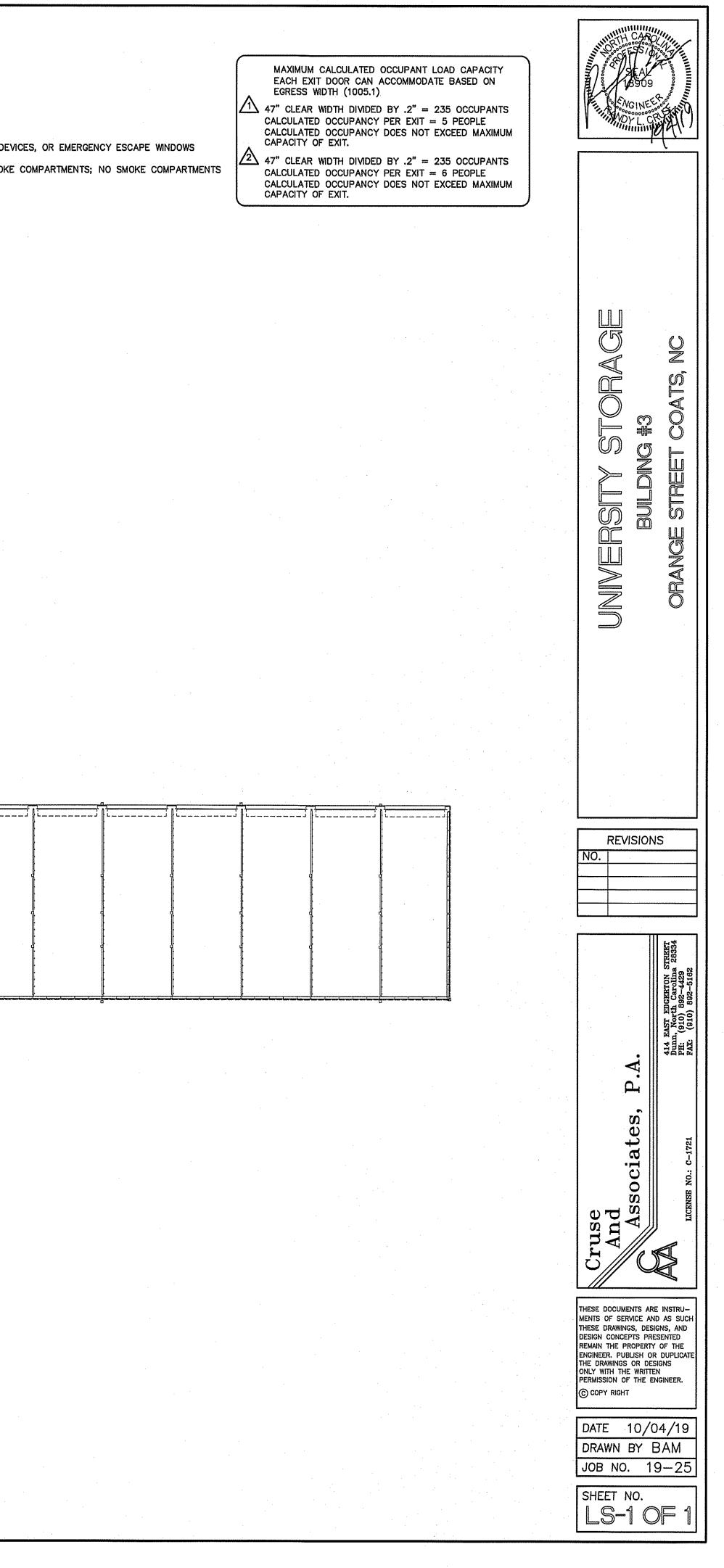
INOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY HAVE BEEN UTILIZED REGARDING THE ITEMS ABOVE

- LIFE SAFETY PLAN NOTES:
- 1. SEE LEGEND FOR RATED WALLS. 2. ASSUMED 12' AND REAL PROPERTY LINES >80'.
- 3. ASSUMED PROPERTY LINES 12'; 705.8; EXC. 2 UNLIMITED
- NO DEAD ENDS OVER 20'; 20' ALLOWED.
   NO RATING REQUIRED THIS STRUCTURE.
- 6. PANIC HARDWARE NOT REQUIRED.
- 7. NO DELAYED EGRESS LOCKS, ELECTROMAGNETIC LOCKS, HOLD OPEN DEVICES, OR EMERGENCY ESCAPE WINDOWS

8. FIRE AREAS DO NOT EXCEED CODE ALLOWANCE 9. BUILDING MEETS CODE REQUIREMENTS WITHOUT SUBDIVISION INTO SMOKE COMPARTMENTS; NO SMOKE COMPARTMENTS

 				jo	<del>م</del>	
	79'-10" TO F.E.	TAL LENGTH	MAXIMUM COMMON PATH OF TRAVEL =30'-10"			

## LIFE SAFETY PLAN BUILDING 3" SCALE: 1" = 10'-0"



OUTSIDE AIR REQUIREMENTS BUILDING "3" STORAGE - 0.06 CFM/SF X 5,100 SF = 306 CFM OUTSIDE AIR REQUIRED. 184 CFM AHU-1 122 CFM AHU-2

NOTE: VERIFY THERMOSTAT LOCATION WITH OWNER PRIOR TO INSTALLING. FILTER ALL OUTSIDE AIR.

### KEY NOTES:

10" O.A. DUCT WITH VOLUME DAMPER FROM LOUVER TO AHU (TYPICAL) (2) 16" X 16" TRANSFER GRILL INSTALLED IN DOOR (TYPICAL)

3 8" O.A. DUCT WITH VOLUME DAMPER FROM LOUVER TO AHU (TYPICAL) (4) 3/4" CONDENSATE FROM EACH AIR HANDLING UNIT TO

SPLASH BLOCK 5 COORDINATE OUTSIDE AIR LOUVER LOCATION WITH ELECTRICAL SERVICE EQUIPMENT

### GENERAL NOTES:

1 RUN ALL DUCTWORK TIGHT TO CEILING INSULATION. 2 FASTEN ALL CONDENSATE LINES TO WALLS OR CEILINGS WHERE APPLICABLE.

3 7-DAY PROGRAMMABLE T'STAT WITH LOCKING COVER.

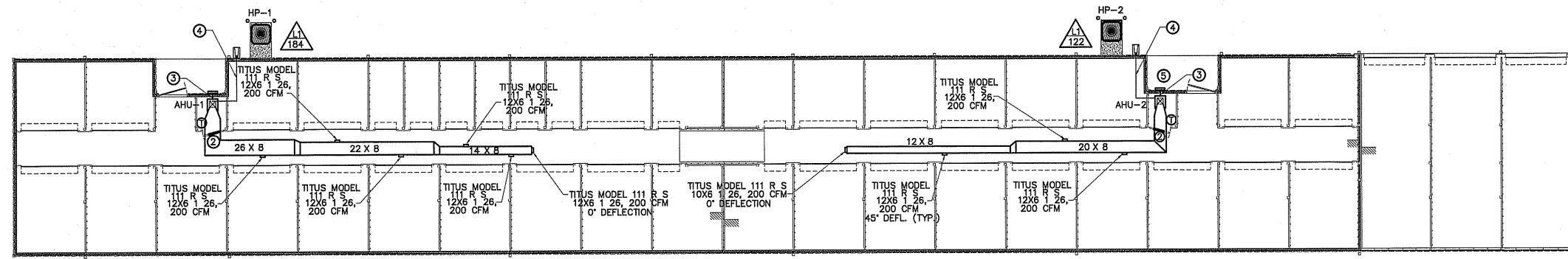
PROVIDE & INSTALL PROTECTIVE 6" CONCRETE-FILLED PIPE BOLLARDS, TWO PER HEAT PUMP OR AS SHOWN ON PLAN.

5 PROVIDE AND INSTALL CONCRETE SPLASH BLOCK, ONE PER 3 HEAT PUMPS MIN.

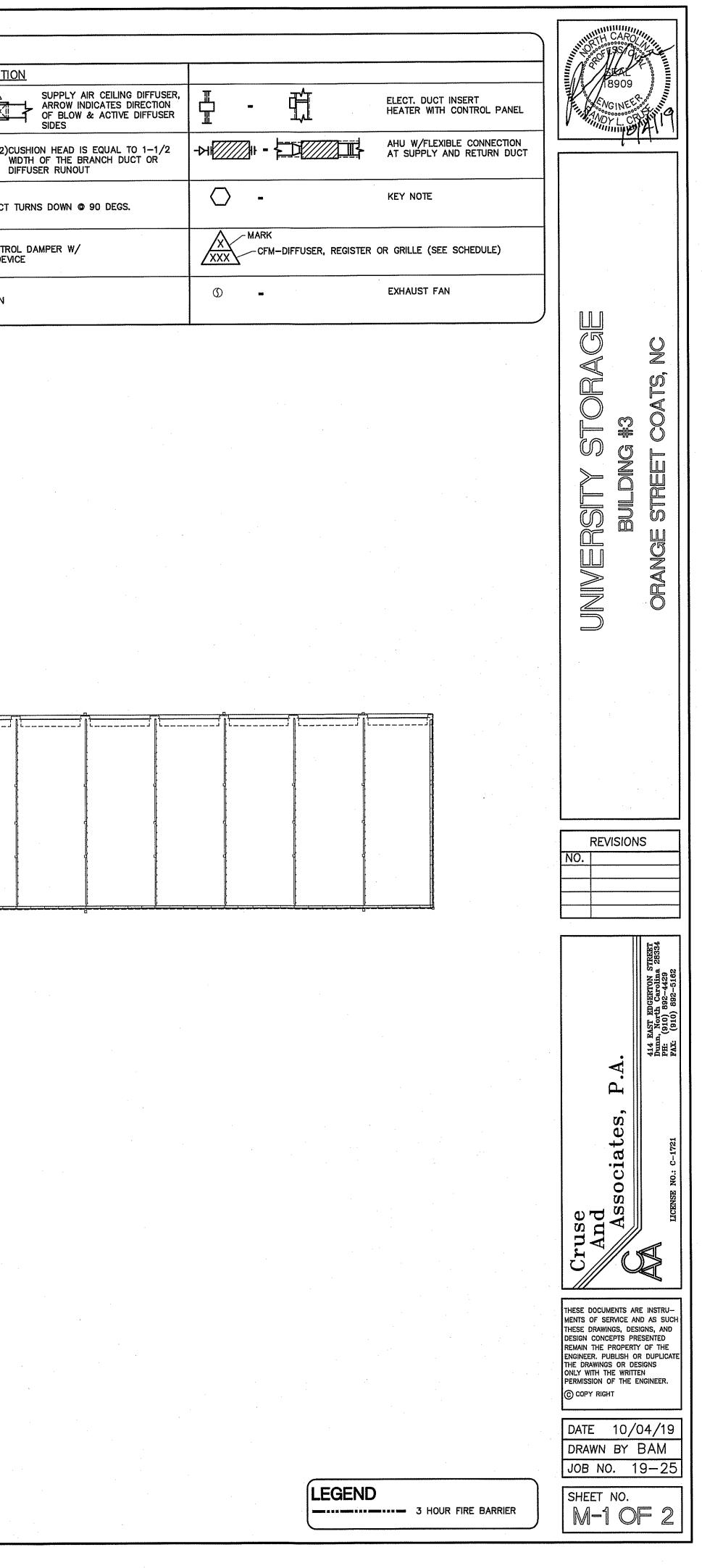
6 INSTALL FLOAT SWITCH IN AUXILIARY PAN TO STOP

GENERAL NOTE: MAINTAIN MANUFACTURER'S REQUIRED CLEARANCES FOR ALL HVAC EQUIPMENT.

$\bigcap$		MECHANICA	L SYMBOL LEGEND
SINGLE LINE	DOUBLE LINE DESCRIPTION	SINGLE LINE DOUBLE LINE DESCRIPTION	SINGLE LINE DOUBLE LINE DESCRIPT
-	TAKE OFF TO SUPPLY AIR REGISTER WITH EXT. INSUL. DUCTWORK	VOLUME CONTROL DAMPER (TYP) CEILING DIFFUSER FLEXIBLE DUCTWORK (15' MAX.)	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
	BRANCH TAKEOFF FROM MAIN TRUNK DUCT WITH EXT. INSUL. DUCTWORK		(1)CUSHION HEAD @ BRANCH (2) CUSHION OR DIFFUSER RUNOUT
-			
		RETURN AIR OR EXHAUST GRILLE	MANUAL VOLUME CONT QUADRANT LOCKING DE
A.D	ACCESS DOOR ACCESS DOOR DOOR SIZE   DUCT HEIGHT 8X8 10" 10X10 12" 12X12 14" & LARGER	Two sided transition	Two sided transition

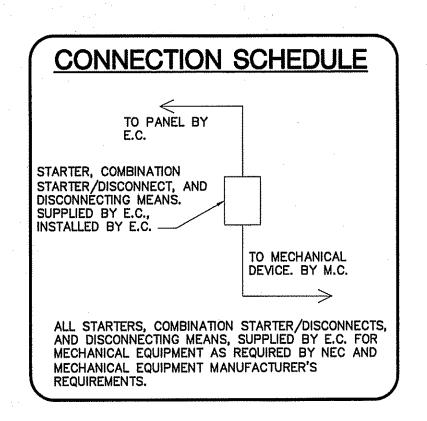


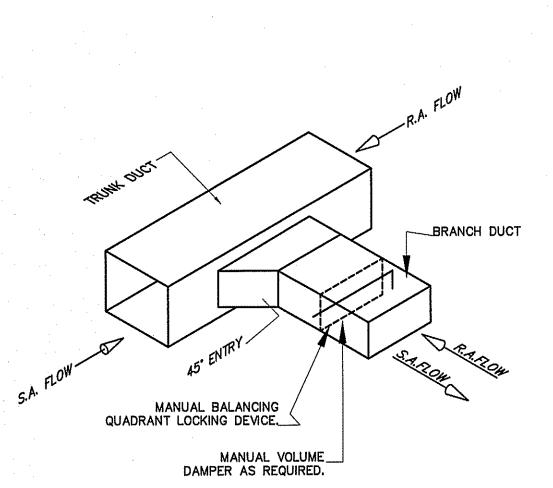
## MECHANICAL HVAC PLAN BUILDING 3" SCALE: 1'' = 10' - 0''



								AIR	HAN	DLER	UNIT										SPLIT S	YSTEM HE	EAT PUN
					OUTSIDE			REF	LINES		HTR	COOL CAPACIT	ING ( (MBH)	HEAT CAPACIT	ING Y (MBH)	HSPF	MIN. CIRC. AMPACITY	M.O.C.P.	MARK	MANUF.	MODEL	VOLTAGE	# COMP.
AHU NO.	MANUFACTURE	R MÖDEL	VOLTAGE	E.S.P.	AIR (CFM)	CFM	UNIT FLA	GAS	LIQ.	SEER	KW (240)	TOTAL	SENS.	HIGH	LOW	norr							
AHU-2	RHEEM	RH1T-2417STAN	240/1ø/60	.46	*	800	31.6	3/4	3/8	15.5	7.2	24.0	17.9	22.0	13.5	9.0	40	40	HP-2	RHEEM	RP1524BJ1	240/1/60	1
AHU—1	RHEEM	RH1T-3617STAN	240/1ø/60	.46	*	1200	34.1	3/4	3/8	15.0	7.2	35.6	26.4	33.8	22.2	9.0	43	45	HP-1	RHEEM	RP1536AJ1	240/1/60	1
L					1			<u> </u>			1	. <u>L.</u>	1						ACCESSORIES		1		I

\* SEE OUTSIDE AIR CHART ON MECHANICAL SHEETS \*\* PROVIDE OUTDOOR THERMOSTAT TO LOCK OUT SUPPLEMENTAL ELECTRIC HEAT AT OUTDOOR TEMPERATURES ABOVE 40F.





BRANCH DUCT TAKE-OFF DETAIL NOT TO SCALE

#### MECHANICAL NOTES (GENERAL)

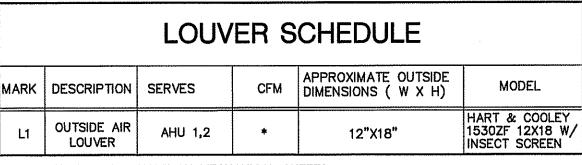
1. DUCTWORK LAYOUTS ARE SCHEMATIC. ALL RISES, DROPS, OFFSETS, AND TRANSITIONS REQUIRED BUT ARE NOT SHOWN SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

- 2. DUCTWORK SHALL BE GALVANIZED STEEL AND SHALL BE CONSTRUCTED IN COMPLIANCE WITH SMACNA STANDARDS FOR LOW VELOCITY DUCTWORK. DUCT SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. FLEXIBLE RUNOUTS SHALL NOT EXCEED 15' AND SHALL NOT BE USED TO FORM ELBOWS. CONNECTIONS FROM RECTANGULAR TO ROUND DUCT SHALL BE MADE WITH MANUFACTURED 45 DEG. LATERAL TAPS. 3. ALL DUCTWORK SHALL BE SEALED AIR TIGHT WITH SEALING COMPOUND.
- 4. ALL ELBOWS IN DUCTWORK SHALL BE RADIUS ELBOWS, UNLESS NOTED OTHERWISE. WHERE SQUARE ELBOWS ARE SHOWN, INSTALL
- TURNING VANES. DUCT SIZES SHOWN ARE NET INTERIOR DIMENSIONS. 5. THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF OTHER TRADES PRIOR TO INSTALLATION OF ANY OF HIS PIPING, DUCTWORK, OR EQUIPMENT.
- 6. THE MECHANICAL CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE MECHANICAL PLANS, SCHEDULES, AND DETAILS PRIOR TO INSTALLATION OF THE MECHANICAL SYSTEMS AND REVIEW ANY CONFLICTS THAT ARE NOTED WITH THE ENGINEER.

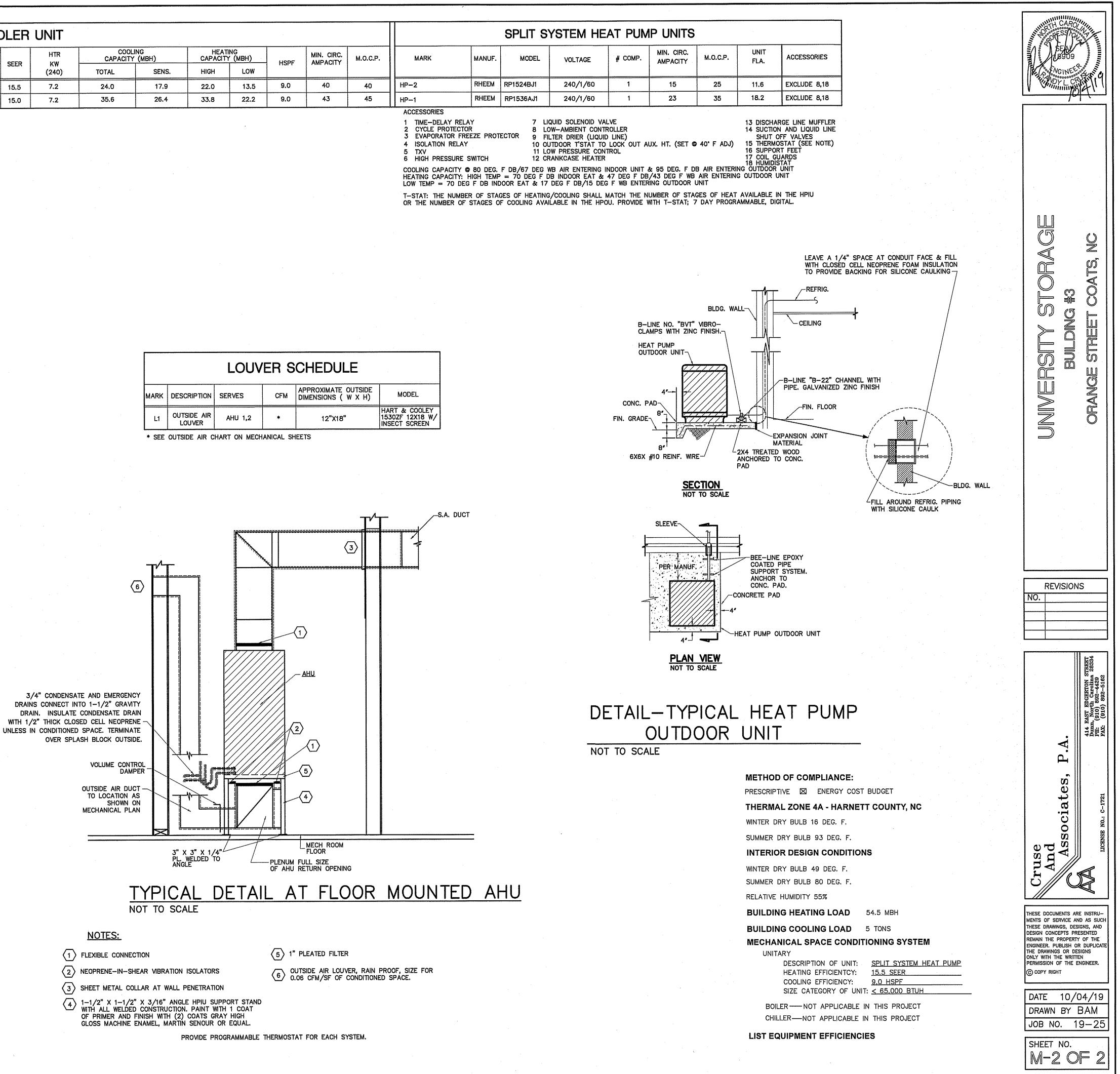
8. ALL EQUIPMENT SHALL BE LOCATED AND INSTALLED TO PROVIDE MAXIMUM SPACE FOR MAINTENANCE AND SERVICE.

- 7. IT WILL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO ENSURE THAT ITEMS TO BE FURNISHED UNDER HIS CONTRACT WILL FIT THE SPACE AVAILABLE. HE SHALL MAKE NECESSARY FIELD MEASUREMENTS TO ASCERTAIN SPACE REQUIREMENTS, INCLUDING THOSE FOR CONNECTIONS AND SHALL FURNISH AND INSTALL SUCH SIZES AND SHAPES OF EQUIPMENT THAT ARE THE TRUE AND INTENT MEANING OF THE PLANS AND SPECIFICATIONS. HE SHALL PROVIDE THE ENGINEER SCALED DRAWINGS OF ALL MECHANICAL DRAWINGS.
- 9. PROVIDE FACTORY OR FIELD INSTALLED DRAIN PANS UNDER ALL COOLING COIL UNITS. INSTALL DRAIN PAN FLOAT TO SHUT DOWN UNIT FAN IN EVENT THAT CONDENSATE BEGINS TO FILL EMERGENCY DRAIN PAN. RUN ALL CONDENSATE DRAIN LINES TO APPROPRIATE DRAIN.

- 1 TIME-DELAY RELAY CYCLE PROTECTOR

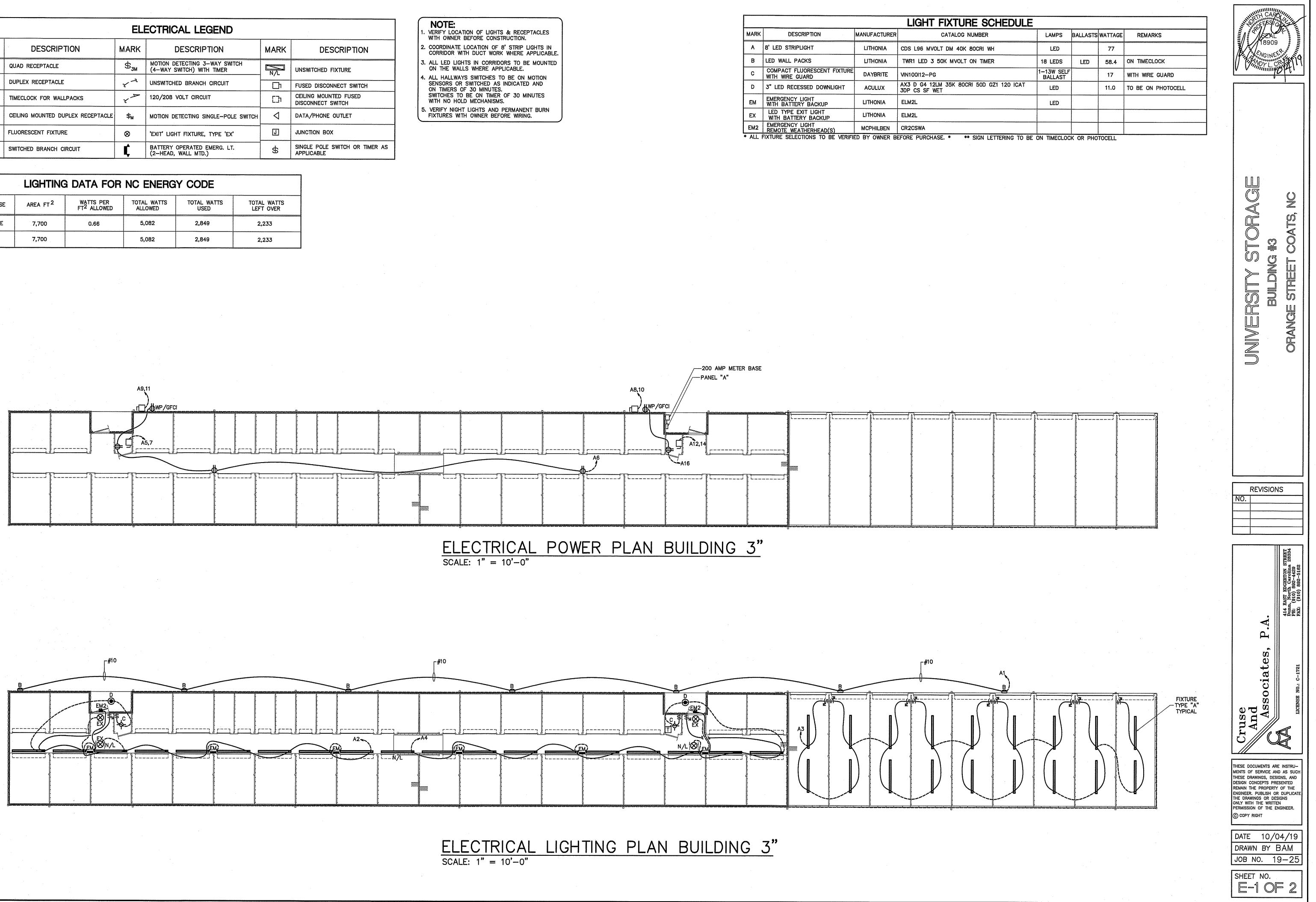


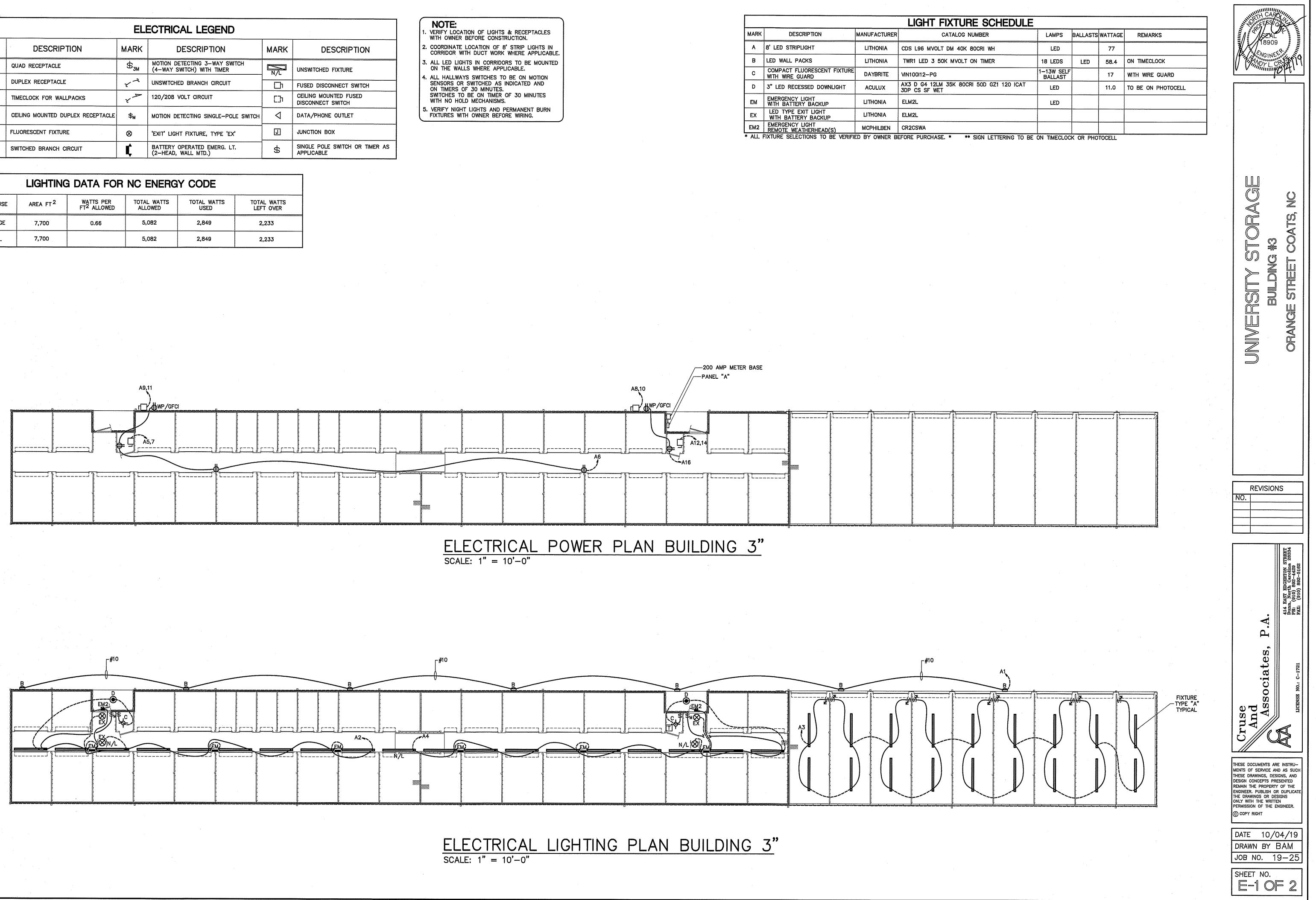
\* SEE OUTSIDE AIR CHART ON MECHANICAL SHEETS

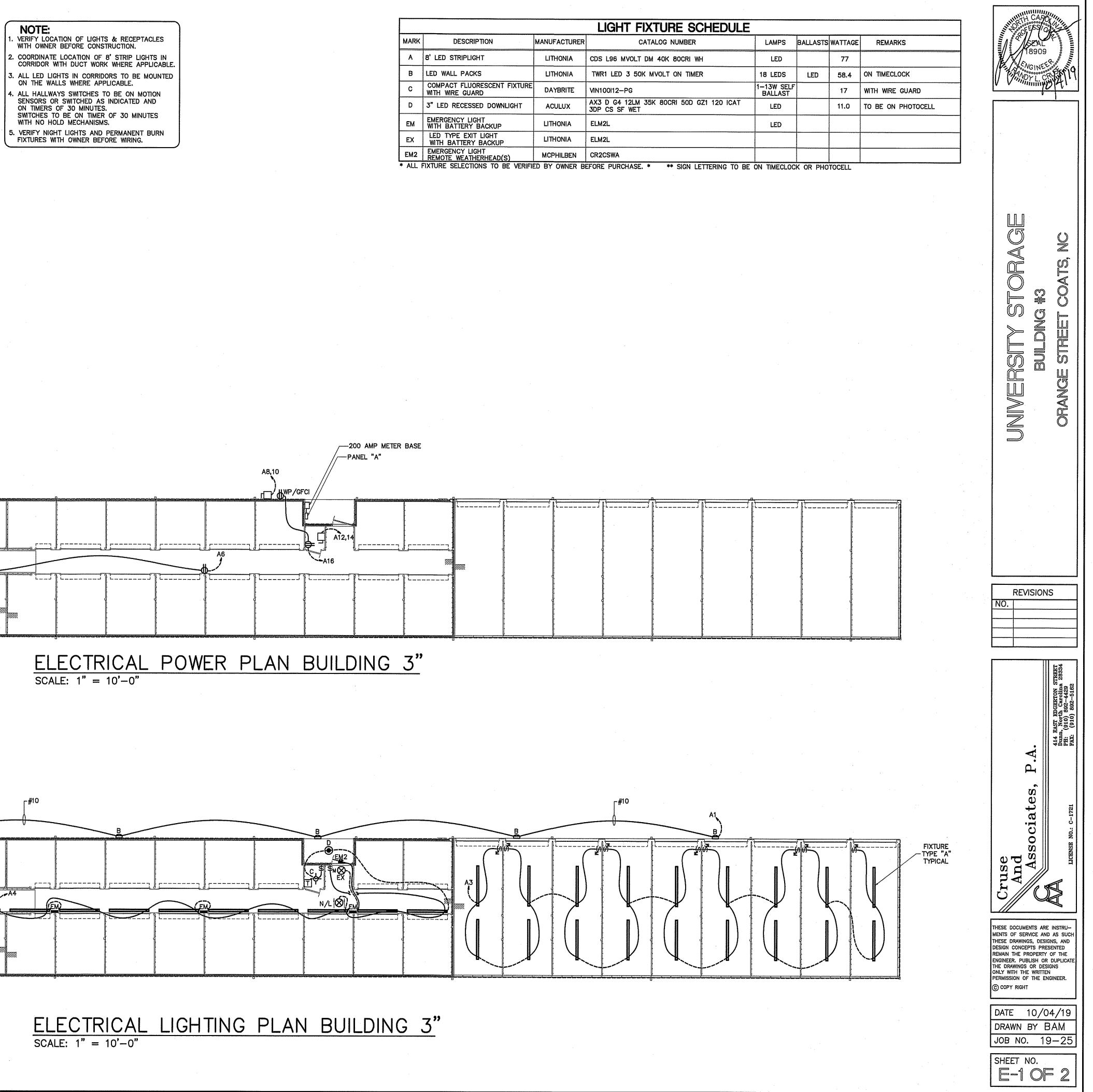


	ELECTRICAL LEGEND										
MARK	DESCRIPTION	MARK	DESCRIPTION	MARK	DESCRIPTION						
	QUAD RECEPTACLE	\$31	MOTION DETECTING 3-WAY SWITCH (4-WAY SWITCH) WITH TIMER		UNSWITCHED FIXTURE						
Ф	DUPLEX RECEPTACLE	22	UNSWITCHED BRANCH CIRCUIT		FUSED DISCONNECT SWITCH						
Π	TIMECLOCK FOR WALLPACKS	r A	120/208 VOLT CIRCUIT	[]	CEILING MOUNTED FUSED DISCONNECT SWITCH						
\$	CEILING MOUNTED DUPLEX RECEPTACLE	\$ <sub>M</sub>	MOTION DETECTING SINGLE-POLE SWITCH	4	DATA/PHONE OUTLET						
	FLUORESCENT FIXTURE	8	'EXIT' LIGHT FIXTURE, TYPE 'EX'	IJ	JUNCTION BOX						
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	SWITCHED BRANCH CIRCUIT	Ļ	BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.)	\$	SINGLE POLE SWITCH OR TIMER AS APPLICABLE						

	LIGHTING DATA FOR NC ENERGY CODE									
AREA USE	AREA FT <sup>2</sup>	WATTS PER FT <sup>2</sup> ALLOWED	TOTAL WATTS ALLOWED	TOTAL WATTS USED	TOTAL WATTS LEFT OVER					
STORAGE	7,700	0.66	5,082	2,849	2,233					
TOTAL 7,700		5,082	2,849	2,233						







EL	EC	TRI	CAL	NO	TES	(GEN	IERAL)	

1. THE ELECTRICAL INSTALLATION, EQUIPMENT, MATERIALS, AND WORKMANSHIP SHALL, AS A MINIMUM, BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC), OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), ALL APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL CODES, LAWS, AND ORDINANCES, AND RULINGS OF THE INSPECTION AUTHORITIES HAVING JURISDICTION. ALL FEES, PERMITS, ETC., ASSOCIATED WITH THE ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

2. THE DRAWINGS GENERALLY INDICATE THE WORK TO BE INSTALLED, BUT DO NOT SHOW ALL BENDS, BOXES, FITTINGS, AND SPECIALTIES WHICH MAY BE REQUIRED FOR A COMPLETE INSTALLATION. ALL SUCH ITEMS REQUIRED TO COMPLETE THE INSTALLATION ACCORDING TO INDUSTRY ACCEPTED PRACTICES SHALL BE INCLUDED IN THE BID.

3. ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND LISTED AND LABELED BY UNDERWRITERS LABORATORIES, INC.

4. ALL PENETRATIONS OF FIRE WALLS SHALL BE SEALED WITH APPROVED SEALING MATERIALS TO MAINTAIN THE FIRE RATING OF THE WALLS. 5. THE CONTRACTOR SHALL VERIFY WIRE AND FUSE/CIRCUIT BREAKER SIZING FOR ALL MECHANICAL EQUIPMENT PRIOR TO PURCHASING MATERIALS AND INSTALLING BRANCH CIRCUITS.

6. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES TO AVOID INTERFERENCES AND CONFLICTS. APPARENT INTERFERENCES OR CONFLICTS SHALL BE REPORTED TO THE PRIME CONTRACTOR AND RESOLVED PRIOR TO PROCEEDING WITH THE WORK IN QUESTION.

7. THE ELECTRICAL CONTRACTOR SHALL CONNECT BRANCH CIRCUITS TO THE MAIN LINE TERMINALS OF EQUIPMENT FURNISHED BY OTHER CONTRACTORS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY NECESSARY SWITCHES, DISCONNECTS, OR OVERCURRENT PROTECTION AHEAD OF SUCH EQUIPMENT.

8. RACEWAYS ARE SHOWN SCHEMATICALLY AND MAY BE REROUTED IN THE FIELD. THEY SHALL BE INSTALLED AT RIGHT ANGLES TO OR PARALLEL WITH BUILDING LINES. THEY SHALL BE RUN CONCEALED WITHIN WALLS OR BUILDING STRUCTURES WHEREVER POSSIBLE. 9. ALL RACEWAYS, EQUIPMENT, ETC., ABOVE A SUSPENDED CEILING SHALL BE MOUNTED A MINIMUM OF 18" ABOVE THE CEILING SO AS NOT

9. ALL RACEWAYS, EQUIPMENT, ETC., ABOVE A SUSPENDED CEILING SHALL BE MOUNTED A MINIMUM OF 18" ABOVE THE CEILING SO AS NOT TO BLOCK ANY TILE OR FIXTURE ACCESS. 10. THE MINIMUM ALLOWABLE SIZE FOR ANY CONDUIT, IMC, OR EMT SHALL BE 1/2" AND MAY BE USED FOR 2#12 WIRE SWITCHLEGS ONLY.

A SWITCHLEG SHALL BE DEFINED AS THE RUN OF CONDUIT FROM THE SWITCH OUTLET BOX TO THE FIRST OUTLET BEING SWITCHED. 11. FULL WEIGHT GALVANIZED RIGID STEEL CONDUIT SHALL BE USED IN THE FOLLOWING AREAS:

A. ON THE EXTERIOR OF THE BUILDING OR ROOF,

B. VERTICAL DROPS WHERE THE CONDUIT CANNOT BE ANCHORED TO WALLS OR OTHER SUPPORT STRUCTURES,

C. WHERE SUBJECT TO MECHANICAL DAMAGE.

12. ALL WIRE AND CABLE SHALL BE COPPER AND HAVE 600 VOLT THHN-THWN INSULATION. ALUMINUM WIRING SHALL NOT BE PERMITTED.

13. THE MINIMUM WIRE SIZE SHALL BE #12 AWG EXCEPT FOR CONTROL WIRING, WHICH MAY BE #14 AWG. CONTROL WIRING SHALL USE STRANDED CONDUCTORS UNLESS OTHERWISE NOTED.

14. ALL METAL RACEWAY SYSTEMS SHALL BE MADE ELECTRICALLY CONTINUOUS. THE RACEWAY SYSTEM SHALL NOT BE THE SOLE GROUNDING METHOD. AN INSULATED COPPER GROUNDING CONDUCTOR SHALL BE INSTALLED FOR ALL FEEDERS AND BRANCH CIRCUITS. AT RECEPTACLES, A GREEN GROUND CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL OF THE RECEPTACLE.

15. THE ELECTRICAL CONTRACTOR SHALL COORDINATE FUSE AND DISCONNECT SWITCH SIZES WITH THE MECHANICAL EQUIPMENT SUPPLIER PRIOR TO PURCHASE AND INSTALLATION OF BRANCH CIRCUIT EQUIPMENT. IF EQUIPMENT SIZING CHANGES FROM DESIGN SIZES, CIRCUITS SHALL BE RESIZED ACCORDINGLY.

16. LIGHT FIXTURES FOR INSTALLATION IN A SUSPENDED CEILING SHALL BE SECURELY FASTENED TO THE CEILING SUSPENSION SYSTEM IN A MANNER TO PREVENT FIXTURES FROM FALLING. IN ADDITION, 16 GAGE WIRE HANGERS SHALL BE FASTENED TO THE FOUR CORNERS OF THE FIXTURES.

17. CONNECTIONS TO FIXTURES INSTALLED IN SUSPENDED CEILINGS SHALL BE MADE WITH FLEXIBLE METAL CONDUIT TO ALLOW THE FIXTURE TO BE LIFTED OUT OF THE GRID AND MOVED TO AN ADJACENT GRID LOCATION.

19. 3/4" CONDUIT IS MINIMUM ALLOWABLE SIZE EXCEPT AS INDICATED IN #10. CONDUIT FILL NOT TO EXCEED 40% AS PERMITTED BY THE NATIONAL ELECTRIC CODE.

20. ALL CONDUCTORS TO BE INSTALLED IN CONDUIT (EXCEPT WHERE ROMEX IS INSTALLED). EMT FITTINGS TO BE COMPRESSION TYPE, INSULATED THROAT.

21. NOT USED

22. DATA, SECURITY, THEATRICAL, AND VIDEO SYSTEMS TO BE PROVIDED BY OWNER. ROUGH-IN OF OUTLETS AND CONDUIT WILL BE BY CONTRACTOR AS SHOWN ON DRAWINGS. 23. NOT USED

24. NO. 10 CU AWG CONDUCTORS SHALL BE USED FOR 20 AMP BRANCH CIRCUIT HOMERUNS EXCEEDING 50 FT. TO THE JUNCTION POINT. 20 AMP BRANCH CIRCUIT WIRING SHALL BE NO. 10 CU AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 100 FEET TOTAL LENGTH. 20 AMP BRANCH CIRCUIT WIRING SHALL BE NO. 8 CU AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 200 FEET TOTAL LENGTH. 20 AMP BRANCH CIRCUIT WIRING SHALL BE NO. 6 CU AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 400 FEET TOTAL LENGTH. 20 AMP BRANCH CIRCUIT SHALL BE NO. 6 CU AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 400 FEET TOTAL LENGTH. 20 AMP BRANCH CIRCUIT SHALL BE NOT EXCEED 500' FEET IN TOTAL LENGTH. (UNLESS MARKED OTHERWISE)

25. CONDUCTORS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET. SPLICES WILL NOT BE MADE EXCEPT WITHIN ACCESSIBLE OUTLET OR JUNCTION BOXES, TROUGHS, OR GUTTERS. 26. MAKE CONDUCTOR LENGTHS FOR PARALLEL CIRCUITS EQUAL.

20. MARE CONDUCTOR LENGTHS FOR PARALLEL CIRCUITS EQUAL.

18. BREAKERS SUPPLYING HVAC OR REFRIGERATION EQUIPMENT SHALL BE HACR TYPE.

27. INSTALL TELEPHONE OUTLETS WITH 3/4" EMPTY CONDUIT AND PULL CORD. STUB OUT ABOVE CEILING. PHONE SYSTEM INSTALLED BY OWNER.28. ALL CONDUIT WITHOUT CONDUCTORS SHALL HAVE NYLON PULLCORDS INSTALLED.

29. THE CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE PLANS, SCHEDULES, AND DETAILS PRIOR TO INSTALLATION, AND REVIEW ANY CONFLICTS THAT ARE NOTED WITH THE ENGINEER.

30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES FOR PERMITS AND INSPECTIONS. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR ELECTRIC UTILITY CONNECTION FEES AND LINE EXTENSION FEES.

31. ELECTRICAL CONNECTIONS TO EQUIPMENT SUBJECT TO VIBRATION WHICH DEVELOPS OBJECTIONABLE NOISES SHALL BE MADE FROM THE CONDUIT. SYSTEM WITH SHORT LENGTHS OF FLEXIBLE "LIQUID-TITE" CONDUIT. 32. ALL WIRE TERMINATIONS AND EQUIPMENT TO BE RATED FOR 75' C MINIMUM.

33. ELECTRICAL CONTRACTOR TO MAINTAIN 2' OF SEPARATION ON RECEPTACLES ON OPPOSITE SIDES OF ANY FIRE RATED WALL PER 2017 N.E.C. 300.21.

34. WIRING TO DISCONNECT SWITCH AND DISCONNECT SWITCH SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR. WIRING FROM THE DISCONNECT TO THE EQUIPMENT SHALL BE BY THE MECHANICAL CONTRACTOR.

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ENERGY CODE: ASHRAE 90.1:	PRESCRIPTIVE		PERFORMANCE PERFORMANCE
REFER TO DRAWINGS FOR			SCHEDULES
LIGHTING SCHEDULE			•
LAMP TYPE REQUIRED IN	FIXTURE:	SE	E SCHEDULE
NUMBER OF LAMPS IN FI	KTURE:		
BALLASTS TYPE USED IN	FIXTURE:		
NUMBER OF BALLASTS IN	FIXTURE:		
TOTAL WATTAGE PER FIX	TURE:		
TOTAL INTERIOR WATTAGE	SPECIFIED VS.	ALLOWED:	
TOTAL EXTERIOR WATTAG	E SPECIFIED VS.	ALLOWED:	
ADDITIONAL PRESCR	IPTIVE COMPL	IANCE	
506.2.1 MORE EFFICIENT	MECHANICAL EQU	IPMENT	
506.2.2 REDUCED LIGHTIN	IG POWER DENSIT	ΓY	
506.2.3 ENERGY RECOVER	RY VENTILATION S	SYSTEMS	
506.2.4 HIGHER EFFICENC	Y SERVICE WATE	R HEATING	
506.2.5 ON-SITE SUPPLY			
506.2.6 AUTOMATIC DAYL	IGHTING CONTROL	L SYSTEMS	

FEEDER SCHEDULE								
UNIT	FEEDERS	FUSED DISCONNECT	CONDUIT					
AHU'S 1 & 2	2#8 CU, 1#10 CU GND	60	3/4"					
HEAT PUMPS 1 & 2	2#10 CU, 1#12 CU GND	30	3/4"					

ELECTRICAL LOAD CALCULATIONS <u>AV.</u> 7700 SQUARE FEET NONCONTINUOUS LOADS: 6 RECEPTACLES @ 180 VA EA. 1080 1ST 10000 REMAINDER @ 50% 1080 TOTAL CONTINUOUS LOADS: GENERAL LIGHTING LOAD VA/SQ. FT. 7700 SQ. FT. 0.25 1925 1925 x 1.25 2406 15768 AIR HANDLER UNIT HEAT PUMPS 7152 EQUIPMENT: 1092 25% OF LARGEST MOTOR GRAND TOTAL 27498 115 AMPS @ 120/240V, 1ø, 60HZ

UNDERGROUND ELECTRIC SERVICE BY ELECTRIC UTILITY COMPANY NOTE: VERIFY AIC RATING WITH UTILITY COMPANY BEFORE ORDERING PANELS & EQUIPMENT.

L1 | L2 3.4 >> 11.6 34.1 🔀 34.1 18.2 > 18.2  $\times$  $\times$  $\times$  $\times$  $\times \triangleright$  $\times$ 



-(3) 3/0 CU

(1) 2" COND.

PANEL "A"

200 AMP

MAIN

120/240V

1ø, 60HZ

NEMA 3R

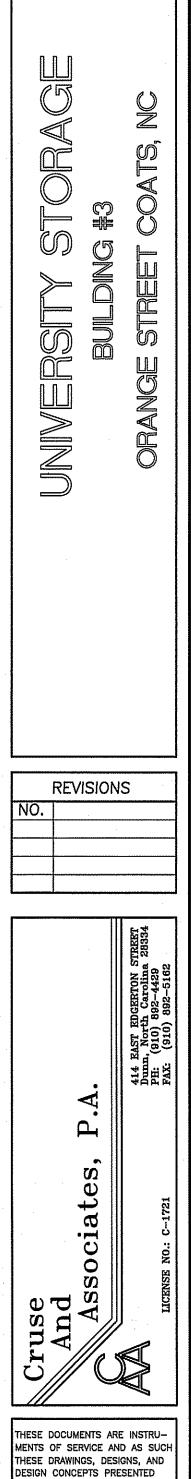
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- GROUNDING PER NEC 250. #4 CU TO COLD WATER MAIN, BUILDING STEEL, SPRINKLER MAIN AND CONCRETE ENCASED ELECTRODE. #6 AWG TO (2) DRIVEN GROUND RODS, MINIMUM OF 6' APART. BOND ALL SERVICE GROUNDING ELECTRODES PER NEC 250 WITH (1) #4 CU GND

[	PAN	JFI ·	"A"	SCHEDULE: M			TURER: SQ. D. NO. OF SI	PACI	-5 4	2	1	
	VOLTS: <u>120/240</u> AMPS: <u>200</u> ENCLOSURE: <u>NEMA 3R</u> : Ø:1					TYPE: <u>"NQOD"</u> MOUNTING: <u>SURFACE</u>						
	MAIN		MLQ	· ·	3 COI		HORT CIRCUIT RATING: 22 BUG: 🛛 GROUND BAR KIT: 🗆 NEUTI	RAL BA		_		
>	CIRCUIT	POLES	TRIP	ASSIGNMENT		ASE		TRIP	POLES	CIRCUIT	L1	L2
	1	1	20	WALLPACKS	0		CORRIDOR LIGHTS LEFT SIDE	20	1	2	6.0	$\geq$
;	3	1	20	10X30 UNIT LIGHTS		0	CORRIDOR LIGHTS RIGHT SIDE	20	1	4	$\ge$	6.7
$\vee$ $\vee$	5	2	45	AHU-1	0		HVAC/CORRIDOR RECEPTACLES	20	1	6	6.0	$\geq$
	7					0	HP-2	25	2	8	$\geq$	11.6
	9	2	35	HP-1	<u> </u>					10	11.6	$\geq$
2	11					0	AHU-2	40	2	12	$\geq$	31.6
$\leq$	13	1	20	SPARE	0					14	31.6	$\geq$
_	15	1	20	SPARE		0	HP AND AHU #2 CONV. RECS.	20	1	16	$\geq$	3.0
$\leq$	17	1	20	SPARE	0		SPARE	20	1	18	X	$\geq$
_	19	1	20	SPARE	_	0	SPARE	20	1	20	$\geq$	X
$\leq$	21	1	20	SPARE	<u> </u>	<u> </u>	SPARE	20	1	22	X	$\geq$
_	23	1	20	SPARE		0	SPARE	20	1	24	$\geq$	X
5	25	1	20	SPARE	<u> </u>	<u> </u>	SPARE	20	1	26	X	$\geq$
_	27	1	20	SPARE		0	SPARE	20	1	28	$\geq$	X
$\leq$	29	1	20	SPARE	<u> </u>	<u> </u>	SPARE	20	1	30	X	$\geq$
_	31	1	20	SPARE		0	SPARE	20	1	32	$\geq$	X
$\leq$	33	1	20	SPARE	<u> </u>	ļ	SPARE	20	1	34	X	$\geq$
_	35	1	20	SPARE		0	SPARE	20	1	36	$\geq$	X
$\leq$	37	1	20	SPARE	<u> </u>	<u> </u>	SPARE	20	1	38	X	$\geq$
~	39	1	20	SPARE		0	SPARE	20	1	40	$\geq$	X
$\leq$	41	1	20	SPARE	0		SPARE	20	1 -	42	X	$\geq$

L1 = 110.9 AL2 = 116.8 A



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