Addition to CTE Building

Triton High School

Harnett County Schools NCDSP Unit 430 - School 378

215 Maynard Lake Road / Erwin / North Carolina

ABBREVIATIONS

AFF	ABOVE FINISH FLOOR	INV	
L	ANGLE	JT	JOINT
AB	ANCHOR BOLT	LAV	LAVATORY
@	АТ	MAS	MASONRY
B/B	BACK TO BACK (CURB)	MAX	MAXIMUM
BRG	BEARING	MΒ	MARKER BOARD
BD	BOARD	MET	METAL
BC	BRICK COURSE	MC	MECHANICAL CONTRACTOR
BLDG	BUILDING	ΜT	METAL THRESHOLD
CI	CAST IRON	MIN	MINIMUM
CPT	CARPET	MISC	MISCELLANEOUS
СВ	CATCH BASIN	NOM	NOMINAL
CLG	CEILING	N	NORTH
СТ	CEILING TILE	NIC	NOT IN CONTRACT
СВ	CHALKBOARD	NTS	NOT TO SCALE
CJ		0 C	ON CENTER
CONC	CONCRETE	OPG	OPENING
CMU	CONCRETE MASONRY UNIT	OPP	OPPOSITE
CG		PC	
CMP	CORRUGATED METAL PIPE	PLAS	PLASTER
CONT.	CONTINUOUS	PL	PLATE
CONT.	CURTAIN & ROD	PT	PRESSURE TREATED
C & T			
	CURTAIN & TRACK	R	RADIUS
DIA	DIAMETER	REF	
DIM	DIMENSION	RENIF	
DS	DOWNSPOUT	RCP	
DWR	DRAWER	REQ'D	
EA		RFS	
E C			
EIFS			
ELECT		RD	
EWC		RDL	
	ELEVATION	RGH	ROUGH
EQ	EQAUL	SCHED	
ETR	EXISTING TO REMAIN	SCJ	SAW CUT JOINT
EXIST	EXISTING	SH	SHELF
EXP	EXPOSED, EXPANSION	SHTG	SHEATHING
EJ	EXPANSION JOINT	SIM	SIMILAR
F/F	FACE TO FACE (CURB)	SPEC	SPECIFIED
FIN	FINISH	SPECS	SPECIFICATIONS
FE	FIRE EXTINGUISHER	STD	STANDARD
FEC	FIRE EXTINGUISHER CABINET	SUSP	SUSPENDED
FHC	FIRE HOSE CABINET	TB	TACKBOARD
FTG		TYP	TYPICAL
	FLOOR DRAIN		TYPICAL CONTROL JOINT
FL		UON	
FSR		UR	
GB		V B	
GC			VERTICAL
HM			VINYL COMPOSITION TILE
HOR			WATER CLOSET
			WELDED WIRE FABRIC
INSUL	INSULATION	VV VV F	METNEN MIKE LARKIC

W/ WITH

Hite associates ADCUITECTUDE / DI ANNUNC / TECHNOLOGY

2600 Meridian Drive / Greenville, N.C. 27834 / tel 252-757-0333

STRUCTURAL CONSULTANT:

QUEEN ENGINEERING & DESIGN, P.A.

5530 Munford Road Raleigh, North Carolina 27612 tel (919) 420-0480

COVER / INDEX BCS BUILDING CODE SUMMARY A-101 FLOOR PLAN / EXTERIOR ELEVATIONS / ROOF PLAN A-102 REFLECTED CEILING PLAN A-201 BUILDING SECTIONS A-202 WALL SECTIONS S-101 FOUNDATION PLAN S-102 ROOF FRAMING PLAN S-1101 FOUNDATION DETAILS S-1102 ROOF FRAMING DETAILS S-1201 GENERAL NOTES

Building Code Summary Classroom Building Addition

ame of Project: <u>Tr</u>	riton High SchoolClassro	oom Building Addition			
	15 Maynard Lake Road,	Erwin, NC			
oposed Use:E		DI N (050	. 757 0777		
wner or Authorized A wned by:	kgent: <u>James G. Hite</u>			e-mail <u>jgh@hiteas:</u> tate	soc.com
ode Enforcement Jur	<u> </u>	X County		tate	
.EAD DESIGN PR	OFFSSIONAL:	James G. Hite, AIA			
esigner	Firm	Name	License #	Telephone *	e-mail
rchitectural	Hite Associates	James G. Hite, AIA	NC 3754	(252) 757-0333	jgh@hiteassoc.com
ivil	NA				
ectrical	Engineering Source	Wilson Pou, P.E.	NC 021993	(252) 439-0338	Wilson@engrsource.com
re Alarm	NA				
lumbing echanical	NA NA				
prinkler-Standpipe	NA				
tructural	Queen Engineering	Bruce Queen, P.E.	NC 018991	(919) 420-0480	bruce@qedpa.net
etaining Walls>5' High	NA				
ther	NA				
018 EDITION OF	NC CODE FOR:	New Constru	ction X Add	dition Upfit	
	_	Iteration Repair	Renovation	_	
)(1)	
ONSTRUCTED					
ENOVATED	CURRENT US	E PROPOSED	O USE		
UILDING DATA					
onstruction Type:	☐ I - A	III-A IV	V - A		
	☐ I-B X II-B	□ III-B	V-B		
Mixed Cor	nstruction: No	Yes Types _			
prinklers: round Floor	X No Yes	Partial NFPA 1	13 NFPA 1	3R NFPA 13D	
quipment Platform	X No Yes	Partial NFPA 1	I3 NFPA 1	3R ∏NFPA 13D	
tandpipes:	X No Yes	Class	∏III	_	
re District:	X No Yes		ard Area: X No		
uilding Height:	Feet: 15'	Number of Stories: 1	1		
ezzanine:	X No Yes				
ross Building Area:					
oor	Existing (SQ FT)	New (SQ FT)	Sub-To	otal	
quipment Platform					
hird Floor					
econd Floor					
rst Floor	18,537	1,029	19,	566	
otal	18,537	1,029	19,	 566	
otal	18,537	1,029	19,	D00	
LLOWABLE AREA	A				
Primary Occupancy: Assembly	A-1 A-2	A-3 A-4	☐ A-5		
Assembly	Business	A-3A-4	A-3		
	X Educational				
Factory	F-1 Moderate	F-2 Low			
Hazardous	H-1 Detonate	_	H-3 Combust]H-4 Health] H-5 HPM
Institutional	☐ I-1 ☐ I-2	□ 1-3			
	I-3 Condition	1 2	3 4	5	
	Mercantile				
Residential	R-1 R-2	R-3 R-4			
Storage Parking Garage	S-1 Moderate Open Enclos	S-2 Low	High-Piled	ı	
i arking Guruye	open Elicios	Fliveham			

Utility and Miscellaneous

This Separation is not exempt as a Non-Separated Use (see exceptions)

Accessory Occupancy Classification(s): <u>S-2</u>

Special Uses (Chapter 4 - List code Sections): NA

Special Provisions (Chapter 5 - List code Sections): <u>NA</u>

Incidental Uses (Table 509): <u>NA</u>

Mixed Occ	cupancy: [No	XYes	Separation:	Hr:	Exception:
X	on-Separated	Use (508.3	3)			

The required type of construction of the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

Separated Use (508.4) - See below for area calculations For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1. Actual Area of Occupancy A Actual Area of Occupancy B

	O		O		
STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 AREA ₄	(C) AREA FOR OPEN SPACE INCREASE 1,5	(D) ALLOWAB AREA OI UNLIMITE
1	Educational	19,566	14,500	6,781	21,281

Allowable Area of Occupancy A Allowable Area of Occupancy B

- 1 Frontage increases from Section 506.2 are computed thus:
- a. Perimeter which fronts a public way or open space having 20 feet minimum width = 394 (F)
- b. TotalBuilding Perimeter = 549 (P) c. Ratio (F/P) = 0.718 (F/P)
- d. W= Minimum width of public way = 30 (W)
- 2 Unlimited area applicable under conditions of Section 507.
- 3 Maximum Building Area = total number of stories in the building x D (506.2)
- 4 The maximum area of parking garages must comply with 406.5.4. The maximum area of air traffic control towers must comply with 412.3.1.
- 5 Frontage increase is based on the unsprinkled area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	Feet 75	15	
Building Height in Stories (Table 504.4)	Stories 3	1	

FIRE PROTECTION REQUIREMENTS

BUILDING	FIRE	RATING		DETAIL NO.	DESIGN NO.	DESIGN NO.	DESIGN	
ELEMENT	SEPARATION DISTANCE (FEET)	REQ'D	PROVIDED (W/ * REDUCTION)	AND SHEET NO.	FOR RATED ASSEMBLY	FOR RATED PENETRATION	NO. FOR RATED JOIST	
Structural frame, including columns, girders, trusses		0	NA	NA	NA	NA	NA	
Bearing walls								
Exterior								
North	NA	NA	NA	NA	NA	NA	NA	
East	NA	NA	NA	NA	NA	NA	NA	
West	NA	NA	NA	NA	NA	NA	NA	
South	NA	NA	NA	NA	NA	NA	NA	
Interior	NA	NA	NA	NA	NA	NA	NA	
Nonbearing walls and partitions Exterior								
North	> 30	0	NA	NA	NA	NA	NA	
East	> 30	0	NA	NA	NA	NA	NA	
West	> 30	0	NA	NA	NA	NA	NA	
South	NA	NA	NA	NA	NA	NA	NA	
Interior		0	NA	NA	NA	NA	NA	
Floor construction including support beams and joist		0	NA	NA	NA	NA	NA	
Above Corridor		NA	NA	NA	NA	NA	NA	
Columns Supporting Floors								
Roof construction including support beams and joist		0	NA	NA	NA	NA	NA	
Roof Ceiling Assembly		NA	NA	NA	NA	NA	NA	
Columns Supporting Roof		NA	NA	NA	NA	NA	NA	
Shafts - Exit		NA	NA	NA	NA	NA	NA	
Shafts - Other		NA	NA	NA	NA	NA	NA	
Corridor Separation		NA	NA	NA	NA	NA	NA	
Occupancy Separation		NA	NA	NA	NA	NA	NA	
Party/Fire Wall Separation		NA	NA	NA	NA	NA	NA	
Smoke Barrier Separation		NA	NA	NA	NA	NA	NA	
Smoke Partition		NA	NA	NA	NA	NA	NA	
Tenant Separation		NA	NA	NA	NA	NA	NA	
Incidental Use Separation		NA	NA	NA	NA	NA	NA	
* Indicate section num	har narm	sitting red	iction					

Indicate section number permitting reduction

706.4 Exception (a)

PERCENTAGE OF WALL AREA CALCULATIONS

FIRE SEPARATION DISTANCE FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA	ACTUAL SHOWN ON PLANS
>30	Unprotected, Sprinkled	No Limit	NA

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	X No	Ye
Exit Signs:	X No	Ye
Fire Alarm:	No	X Ye
Smoke Detection Systems:	No	X Ye

Carbon Monoxide Detesction: No X Yes

Life Safety Plan Sheet #: <u>NA</u>

- Fire and/or smoke rated wall-locations (Chapter 7)
- Assumed and real property line locations
- Exterior wall opening area with respect to distance to assumed property lines (705.8)
- Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2) Occupant loads for each area
- Exit access travel distances (1017)
- Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))
- Dead end lengths (1020.4)
- Clear exit widths for each exit door
- Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
- \square A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- Location of doors with panic hardware (1010.1.10)
- Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
- Location of doors with electromagnetic egress locks (1010.1.9.9)
- Location of doors equipped with hold-open devices Location of emergency escape windows (1030)
- ☐ The square footage of each fire area (202)
- ☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
- Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS (SECTION 1107)

		\		,			
LOT OR Parking area	LIMITS	ACCESSIBLE UNITS PROVIDED	UNITS	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING (SECTION 1106)

LOT OR		NO. OF SPACES	NO. OF ACCESSIBI	TOTAL NO. ACCESSIBLE		
PARKING AREA	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH		PROVIDED
				132" ACCESS AISLE	8' ACCESS AISLE	
TOTAL						

DITIMPING FIVELIDE DECLIDEMENTS

PLUMBING FIXTURE REQUIREMENTS									
USE		WATERO	CLOSETS	URINALS	LAVATORIES		SHOWERS/	DRINKING FOUNTAINS	
USE		MALE	FEMALE		MALE	FEMALE	TUBS	REGULAR	ACCESSIBLE
	NEW								
NA	EXISTING								
	REQ'D								
	NEW								
	EXISTING								
	REQ'D								
	NEW								
	EXISTING								
	REQ'D								

SPECIAL APPROVALS

Unisex toilet at 2nd floor.

OF LOWE 711 TO VALO
Special approval: (Local Jurisdiction, Department of Insurance, SBCCI, ICC, etc., describe below)
None

ENERGY SUMMARY

ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs. annual energy cost for the proposed design.

_____3 _____4 _____5

- Method of Compliance:
- Prescriptive (Energy Code) Performance (Energy Code)
- Prescriptive (ASHRAE 90.1) Performance (ASHRAE 90.1)

THERMAL ENVELOPE

Roof/ceiling Assembly (each assembly)	
Description of assembly	NA
U-Value of total assembly	NA
R-Value of insulation	NA
Skylights in each assembly	NA
U-Value of skylight	Nz

total square footage of skylights in each assembly N/A

Exterior Walls (each assembly)	
Description of assembly	N
U-Value of total assembly	N
R-Value of insulation	N
Openings (windows or doors with glazing)	N
U-Value of total assembly	
solar heat gain coefficient	
projection factor	

Door R-Values	N/A
Exterior Walls (each assembly)	
Description of assembly	NA
U-Value of total assembly	NA
R-Value of insulation	NA
Openings (windows or doors with glazing)	N/A
U-Value of total assembly	
shading Coefficient	
projection factor	

Walls below grade -

Description of assembly U-Value of total assembly R-Value of insulation

Door R-Values

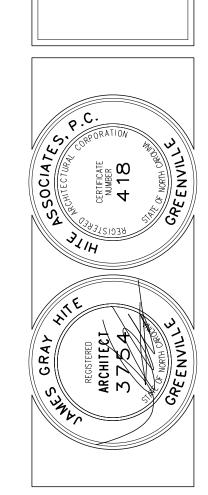
Floor over unconditioned space (each assembly) - NOT USED

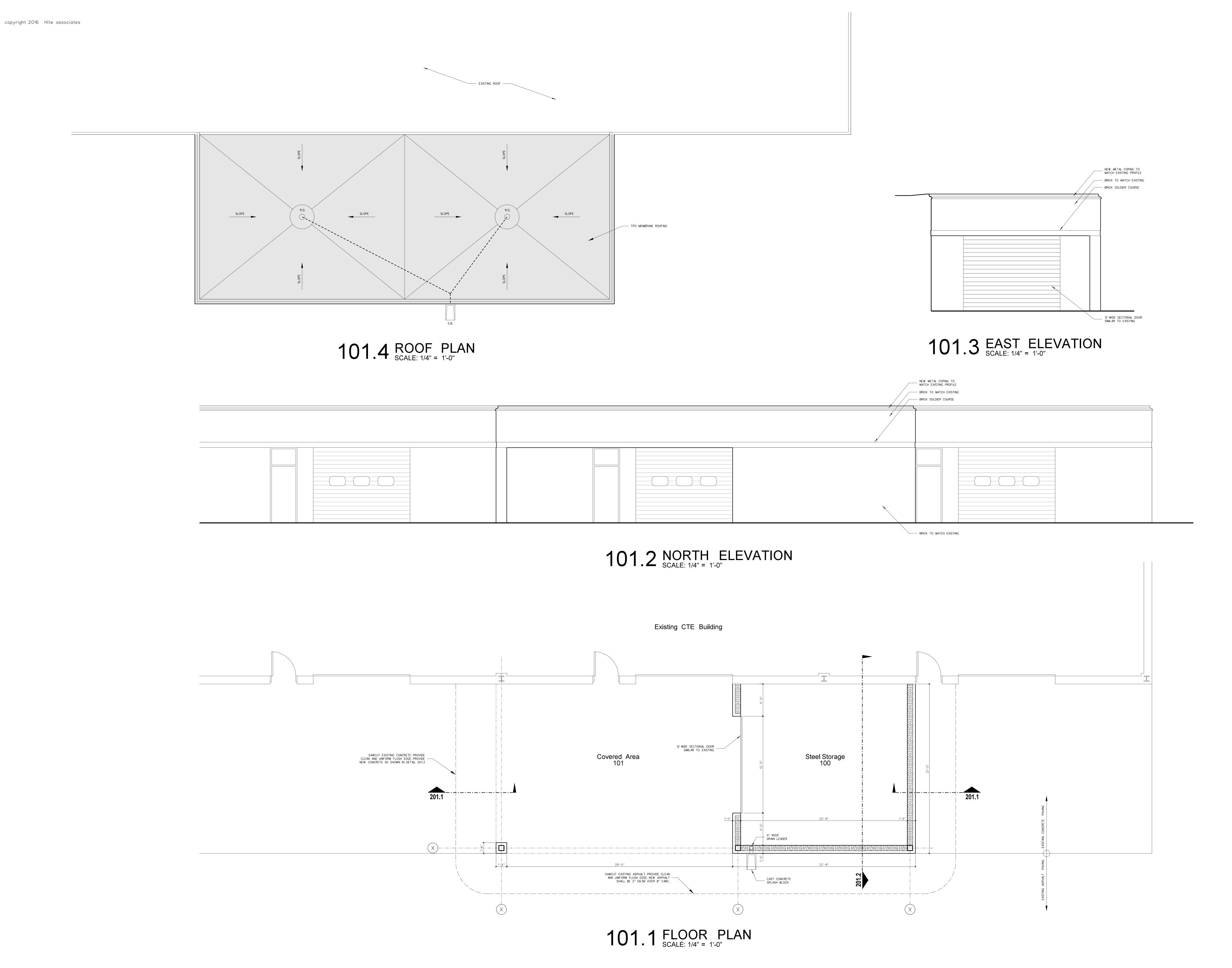
Description of assembly U-Value of total assembly R-Value of insulation

Floor slab on grade Description of assembly

slab heated

U-Value of total assembly R-Value of insulation Horizontal/vertical requirement





o. Date Revision

HITE 3880CIBTES

REHITECTURE / PLANNING / TECHNOLOGY

600 Meridian Drive / Greenville, NC 27834 / tel (252) 757-03.



riton High Schools
Harnett County Schools

Project No.
21917

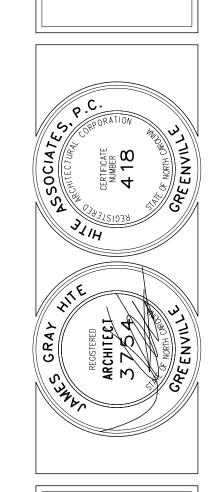
Date:
May 2019

Drawing no.

A 10







riton High Schools

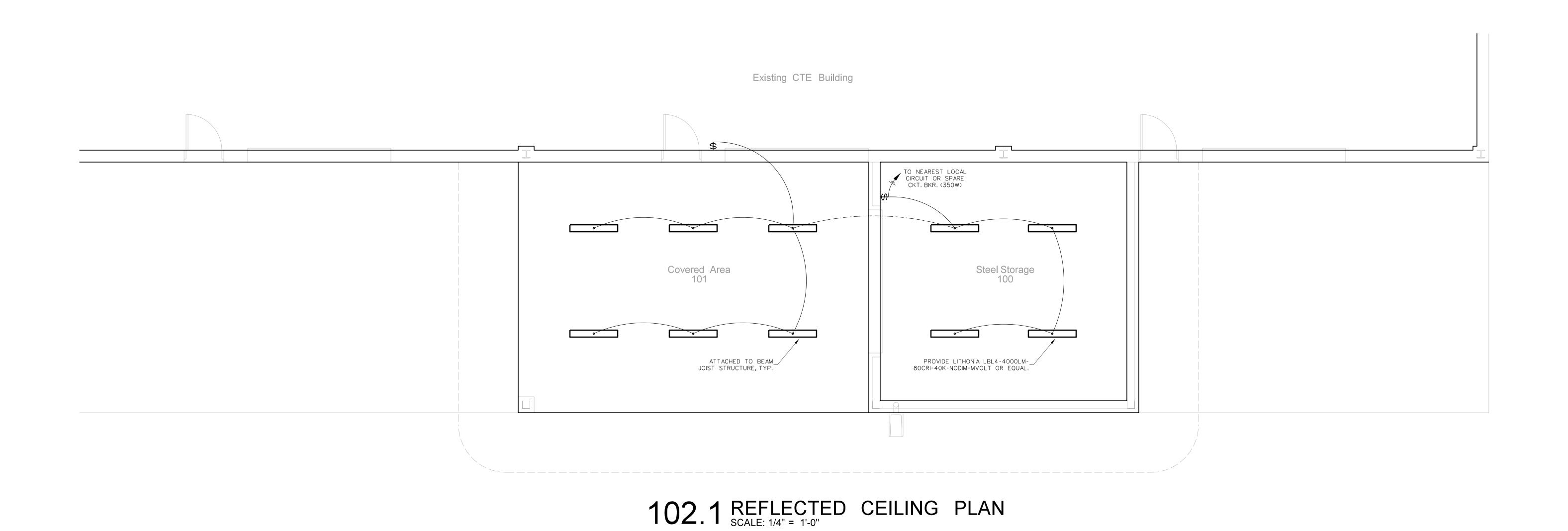
Harnett County Schools

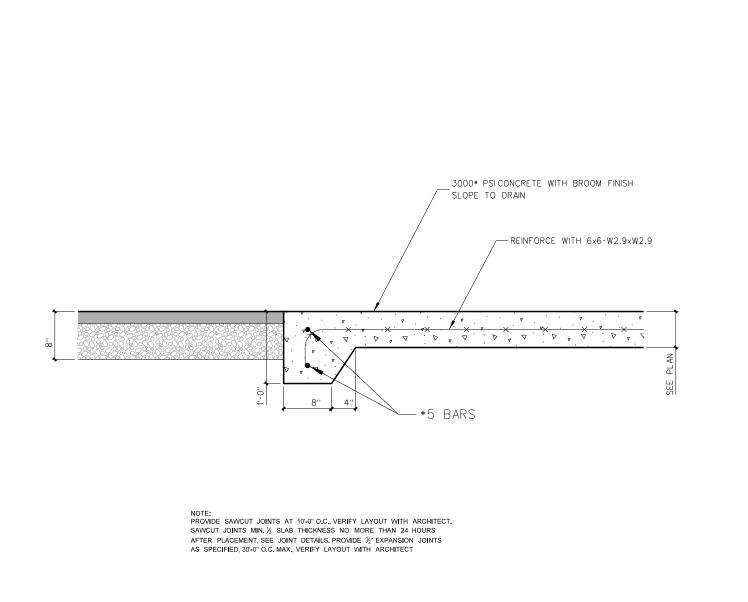
Project No.
21917

Dote:

May 2019

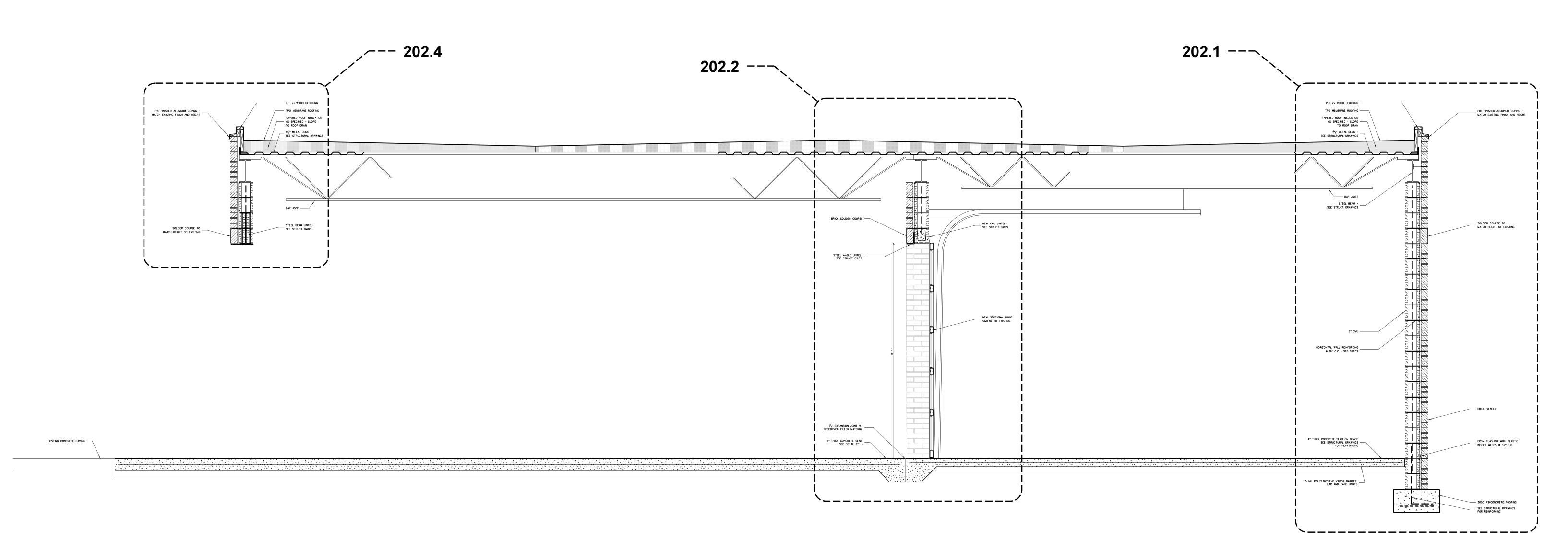
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201.3 CONCRETE SLAB DETAIL

201.2 BUILDING SECTION SCALE: 1/2" = 1'-0"



201.1 BUILDING SECTION SCALE: 1/2" = 1'-0"

ITE 3880GISTES CHITECTURE / PLANNING / TECHNOLOGY

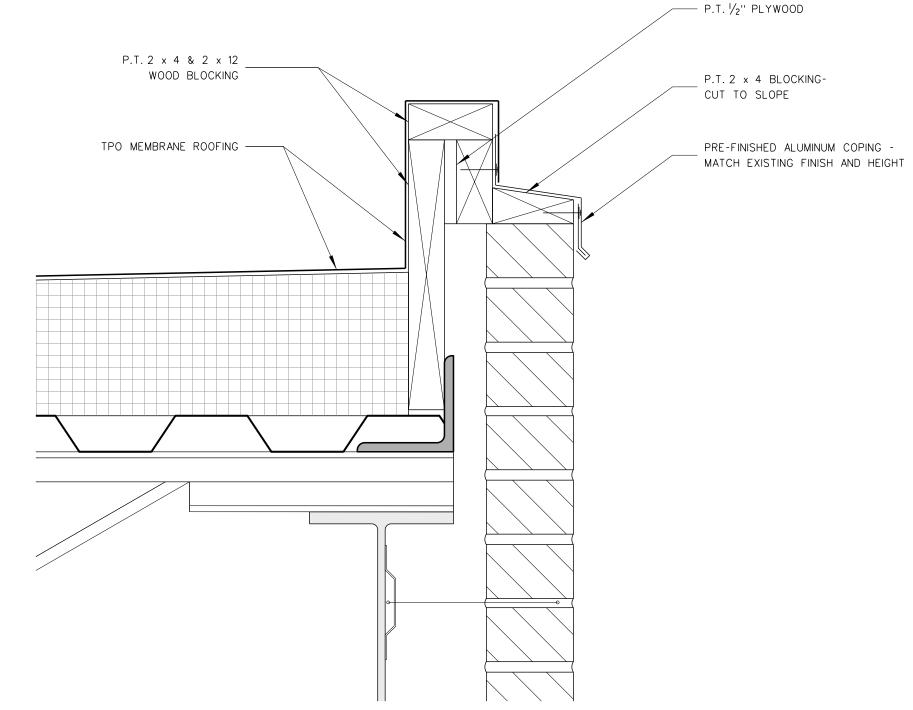


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NEW SECTIONAL DOOR SIMILAR TO EXISTING

202.5 COPING DETAIL SCALE: 3" = 1'-0"

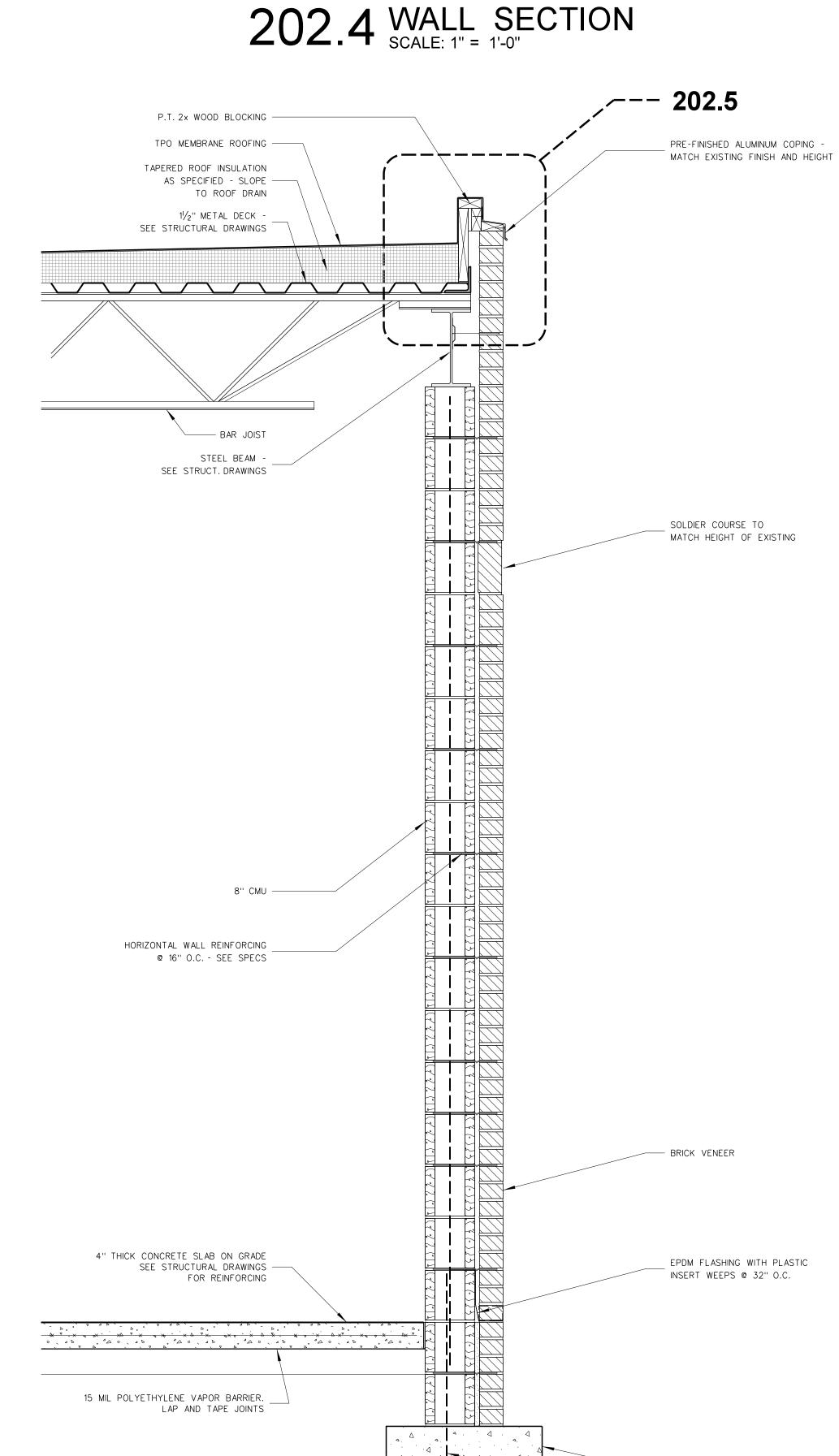
BRICK SOLDIER COURSE ----

STEEL BEAM & PLATE LINTEL- SEE STRUCT. DWGS.

 $\frac{1}{2}$ " EXPANSION JOINT W/PREFORMED FILLER MATERIAL

6" THICK CONCRETE SLAB.

SEE DETAIL 201.3



— P.T. 2x WOOD BLOCKING

TAPERED ROOF INSULATION

— AS SPECIFIED - SLOPE

TO ROOF DRAIN

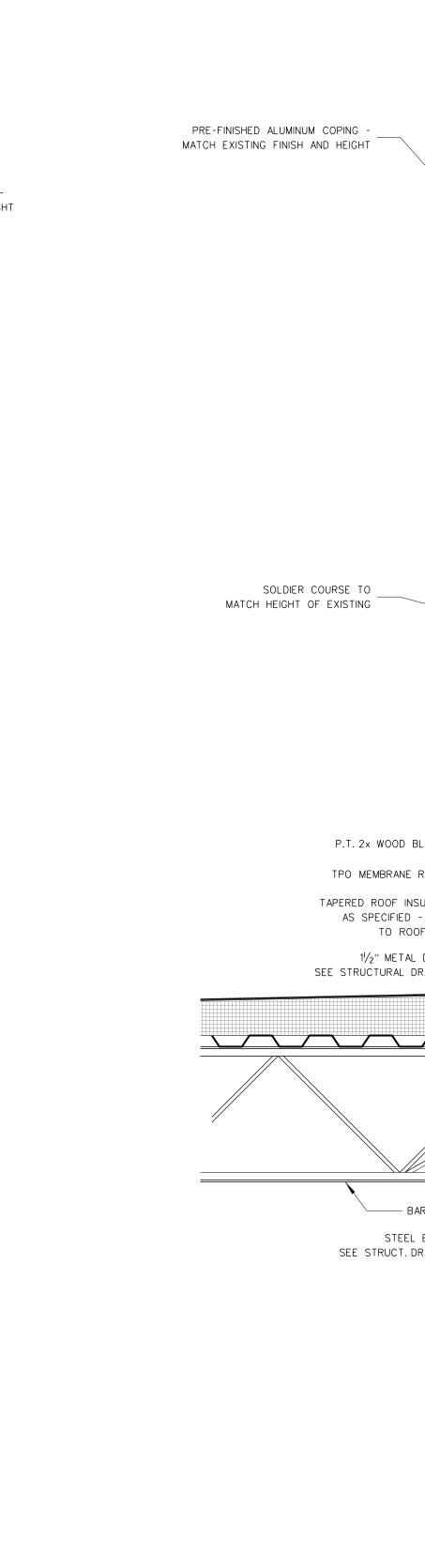
SEE STRUCTURAL DRAWINGS

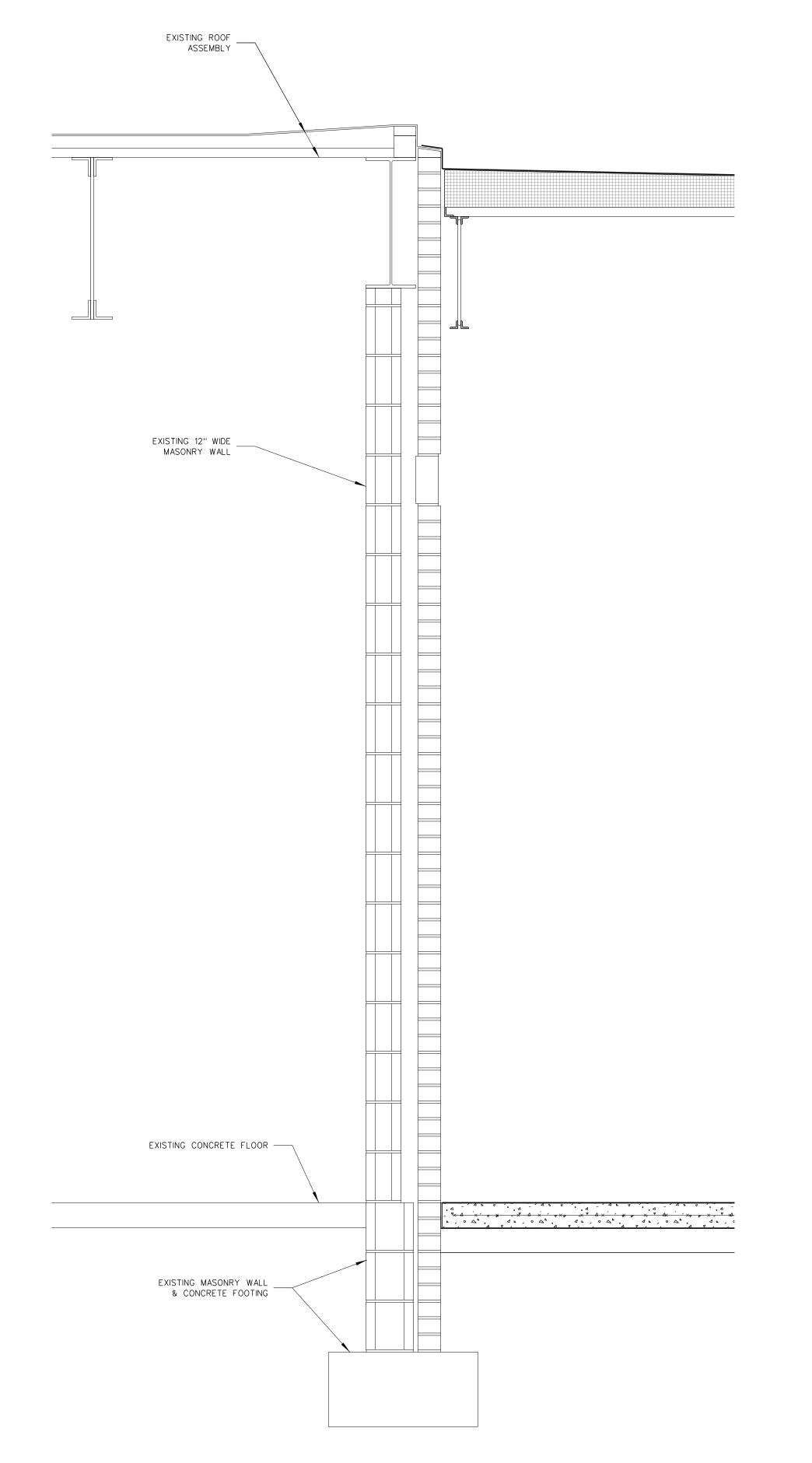
TPO MEMBRANE ROOFING

11/2" METAL DECK -

__ STEEL BEAM LINTEL-SEE STRUCT. DWGS.

202.2 WALL SECTION SCALE: 1" = 1'-0"





202.3 WALL SECTION SCALE: 1" = 1'-0"



1 6/19/19 REVISED PER DPI REVIEW COMMENT
No. Date Revision

SSOCIATES
/ PLANNING / TECHNOLOGY

REGISTERED

RECISTERED

RECIST

Addition to CTE Building

Triton High Schools

Harnett County Schools

Project No. 21917

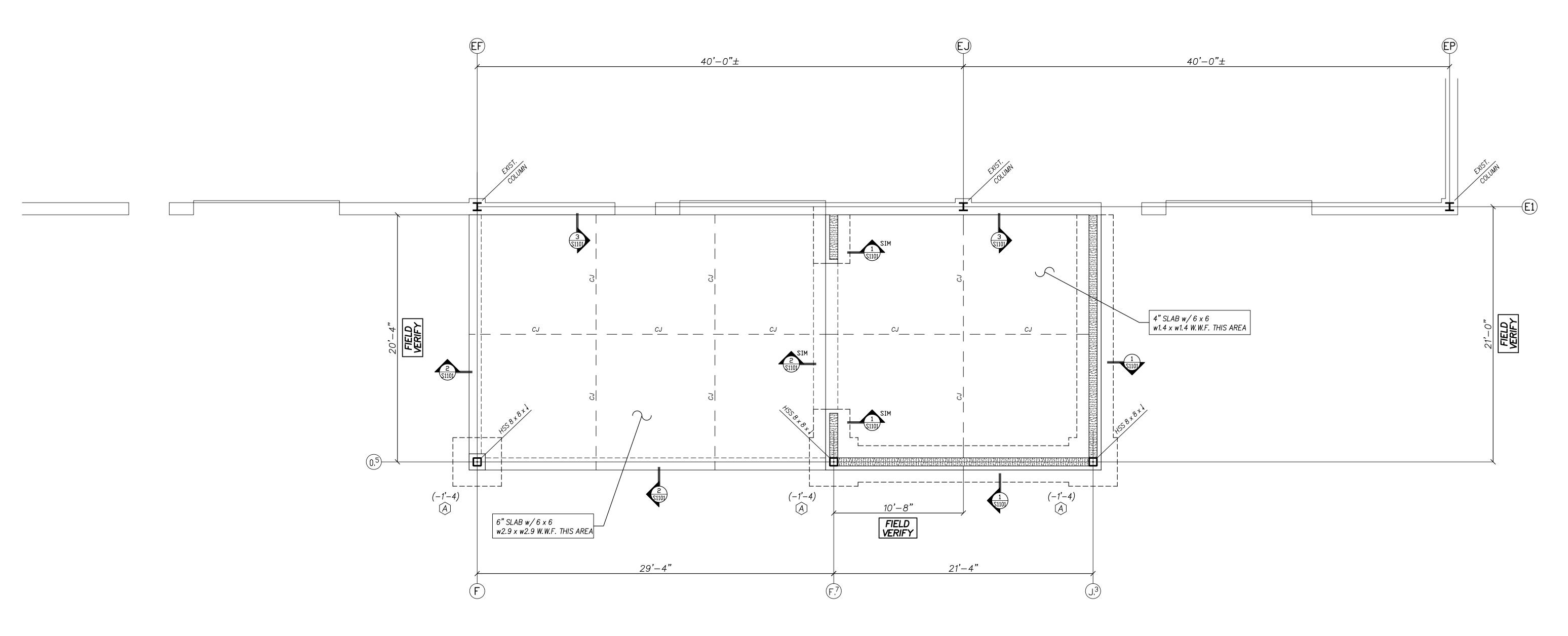
Date: May 2019

Drawing no. A

202

3000 PSICONCRETE FOOTING

_ SEE STRUCTURAL DRAWINGS FOR REINFORCING



CTE ADDITION FOUNDATION PLAN

1.) FOOTING DESIGN BASED ON AN ASSUMED SOIL BRG. CAPACITY OF 2000 PSF.
IF UNSTABLE, ORGANIC, WEAK OR OTHERWISE UNACCEPTABLE SOIL CONDITIONS ARE
ENCOUNTERED DURING EXCAVATIONS OR SUBSEQUENT GEOTECHNICAL INVESTIGATIONS.

 $\frac{1}{4}$ " = 1'-0"

2.) ELEV. NOTED (-) ARE BELOW REFERENCE FINISHED FLOOR TO TOP OF FOOTING, (210.33' \pm - FIELD VERIFY).

3.) SLAB ON GRADE IS NORMAL WEIGHT CONCRETE WITH REINFORCED WITH W.W.F. (SEE PLAN) ON A 4" NO. 57/67 WASHED STONE AND 15 MIL POLY VAPOR BARRIER, TYP. U.O.N.
4.) ALL CONCRETE SHALL BE A MINIMUM STRENGTH OF 3000 PSI MEETING ACI 301 AND ACI 318. ALL CONCRETE SHALL BE MIXED, HANDLED, SAMPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES SUBJECT TO PUMPING SHALL BE TAKEN AT THE EXIT END OF THE PUMP AT THE ELEVATION OF PLACEMENT. (REFERENCE ACI MANUAL OF CONCRETE PRACTICE).

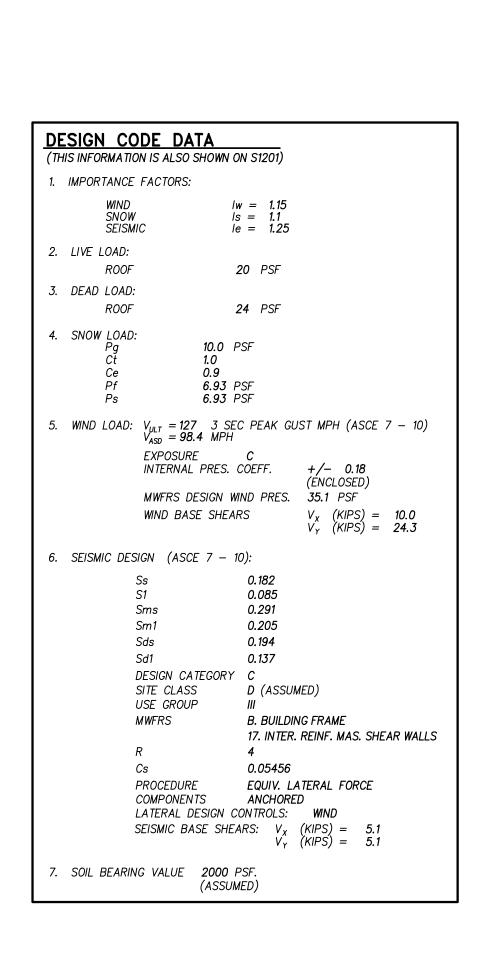
5.) ALL REINFORCING BARS SHALL BE GRADE 60 CONFORMING TO ASTM 615. LAP BARS WHERE REQUIRED USING CLASS B TENSION LAP SPLICES, OR 40 BAR DIAMETERS. DEVELOPMENT LENGTHS SHALL BE CRSI MINIMUM UON.

6.) SEE S1101 FOR COLUMN FOOTING SCHEDULE AND ADDITIONAL NOTES THAT APPLY.

7.) REFERENCE ARCHITECTURAL AND PLUMBING DRAWINGS FOR COORDINATION OF SLOPED FLOORS AT FLOOR DRAINS, AND DEPRESSED FLOOR SLAB LOCATIONS.

8.) ARCHITECTURAL BACKGROUND IS SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF WALLS.

ALIZATIONAL BRANINGS FOR EXACT ECCATIONS OF

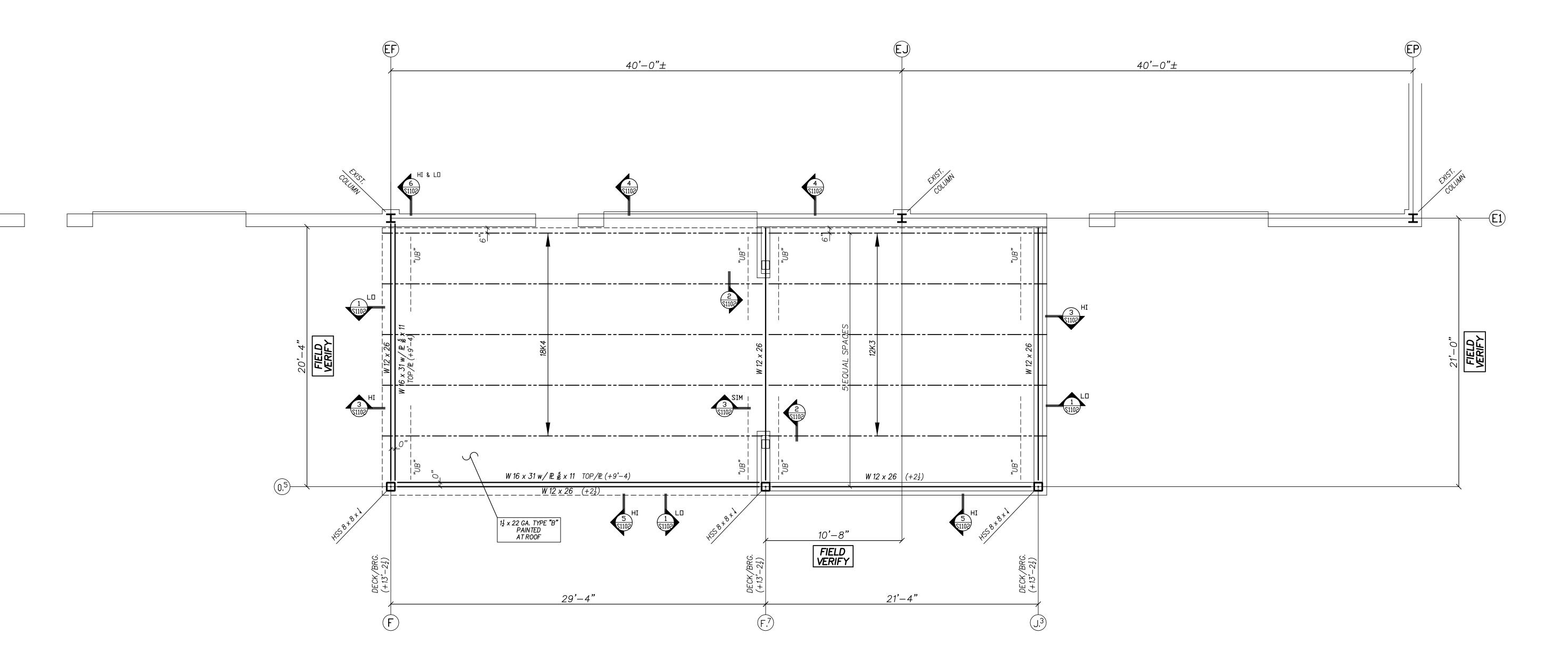


CTE Addition
Triton High School
Harnett County Schools

Project No.

Date:
01 MAY 2019

Drawing no.



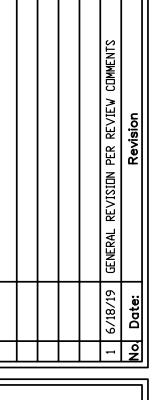
CTE ADDITION

ROOF FRAMING PLAN PLAN

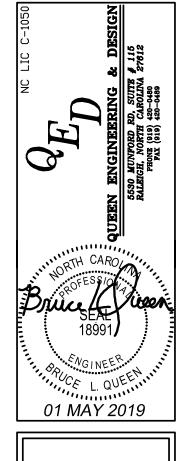
1.) METAL ROOF DECK IS 1 1/2" \times 22 GA TYPE "B" PAINTED M.R.D., TYP. U.O.N. FOR ATTACHMENT, SEE TYPICAL M.R.D. FASTENING DETAIL ON S1102.

4" = 1'-0"

- 2.) ELEV NOTED(+) ARE ABOVE REFERENCED FINISHED FLOOR.
- 4.) METAL ROOF DECK IS TO BE USED TO TRANSMIT LATERAL LOADS TO WALLS. SEE TYP. DECK FASTENING PATTERN ON S1102.
- 5.) JOIST SUPPLIER SHALL DESIGN JOISTS FOR ADDITIONAL POINT LOADS FROM ROOF TOP MECHANICAL UNITS. CONTRACTOR SHALL VERIFY SIZE AND WEIGHT OF UNITS AND REPORT THIS INFORMATION TO THE STRUCTURAL ENGINEER OF RECORD, IF REQUIRED.
- A "STRUT" TO TRANSFER THE LOAD TO A PANEL POINT ON THE OPPOSITE CHORD
 SHALL NOT BE REQUIRED PROVIDED THAT ANY SUSPENDED LOAD WITHIN A BOTTOM
- CHORD PANEL POINT DOES NOT EXCEED 100 POUNDS.
- 6.) ALL WIDE FLANGE BEAMS TO BE "V50" STEEL.
- 7.) SEE S1201 FOR NET UPLIFT DESIGN LOADING FOR ALL JOISTS.
- 8.) "UB" INDICATES UPLIFT BRIDGING TO BE LOCATED AT THE FIRST BOTTOM CHORD PANEL POINT OF JOIST.
- 9.) NO FABRICATION OR ERECTION SHALL COMMENCE PRIOR TO THE APPROVAL OF ALL STRUCTURAL STEEL SHOP DRAWINGS BY THE ENGINEER OF RECORD.
- 10.) COORDINATE AND VERIFY ALL DECK EDGE LOCATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
- 11.) IT IS THE JOIST SUPPLIER'S RESPONSIBILITY TO DESIGN AND SUPPLY ALL REQUIRED JOIST AND GIRDER BRIDGING AS REQUIRED BY SJI.
- 12.) ARCHITECTURAL BACKGROUND IS SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF WALLS.
- 13.) REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATION AND LOCATION OF ALL LINTELS.



IITE 2880CI21E8



CTE Addition
Triton High Schools
Harnett County Schools

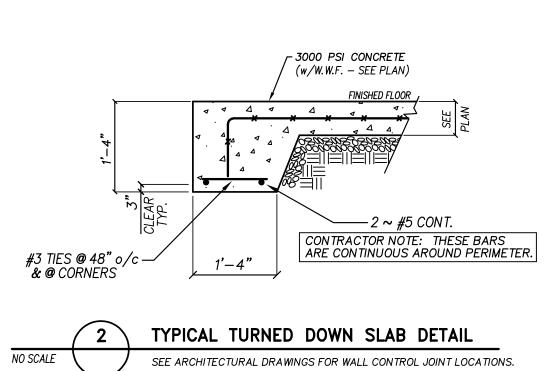
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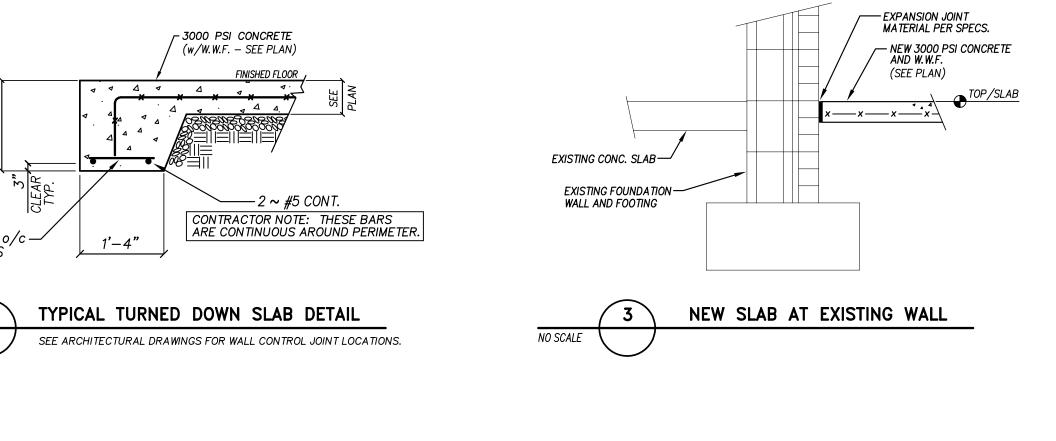
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Drawing no.

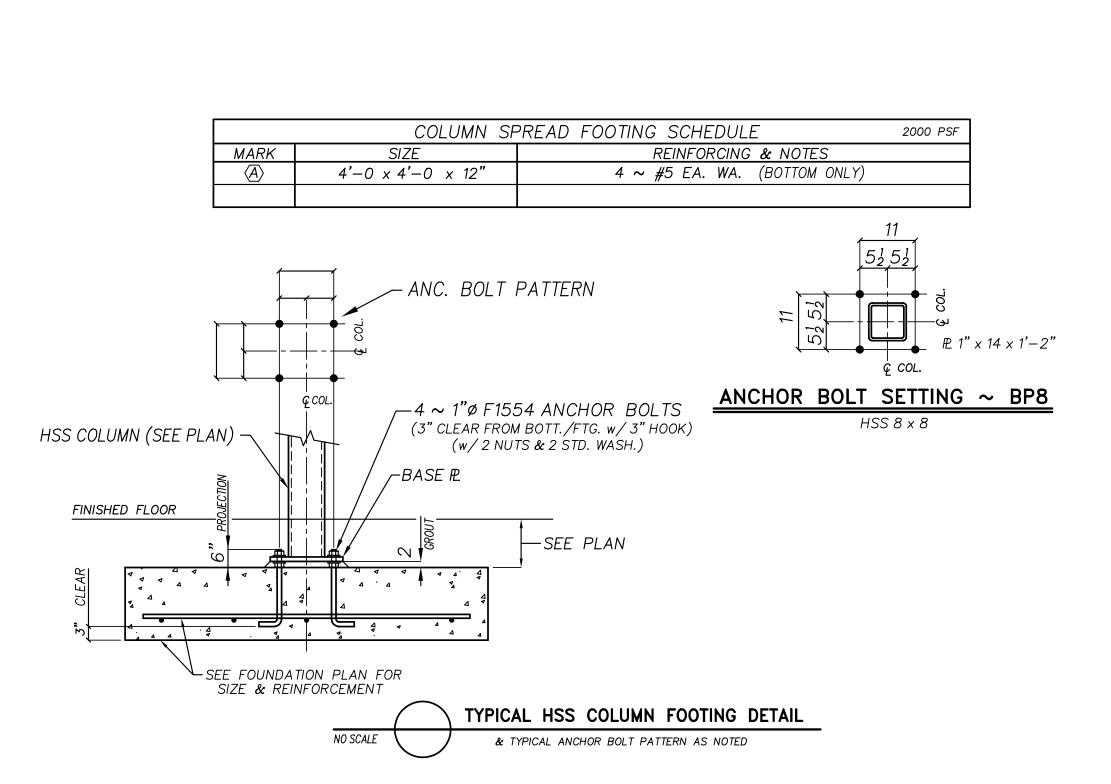
01 MAY 2019

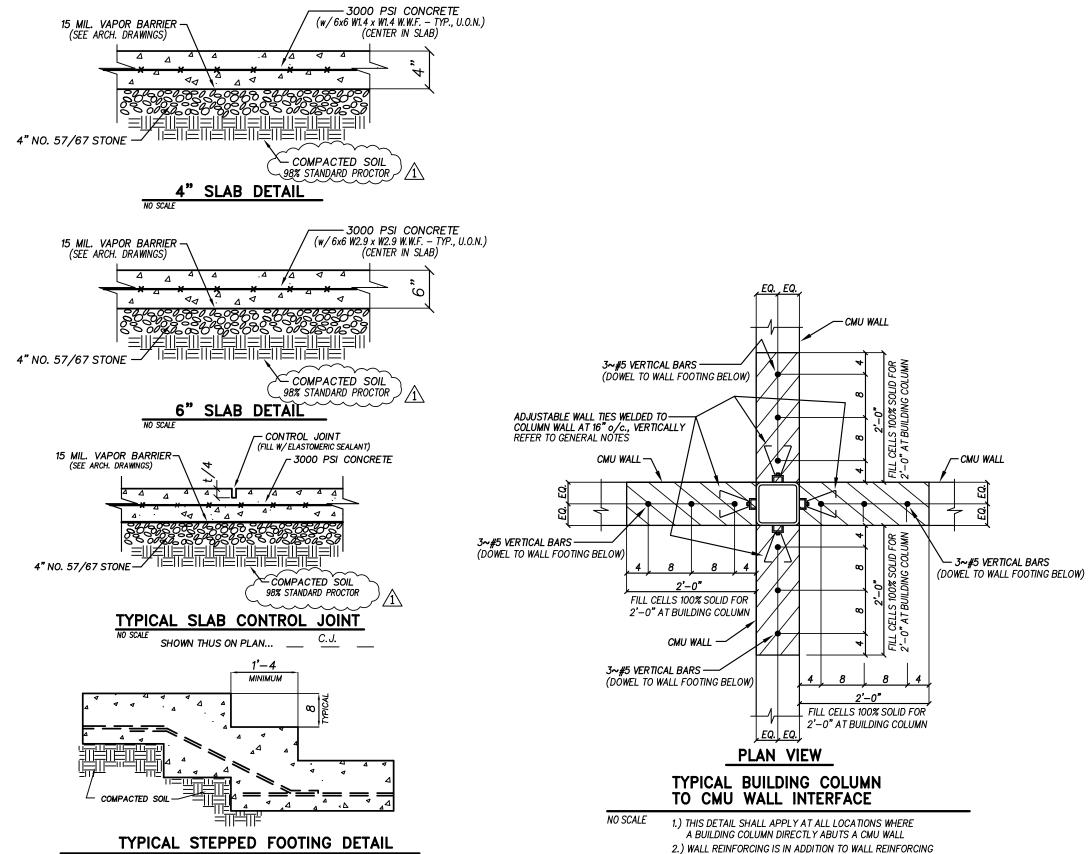
SEE ARCH. DRAWINGS FOR ADDITIONAL NOTES THAT APPLY GALVANIZED LADDER WIRE REINFORCING — AT 16" o/c. (TYPICAL) — #5 AT CORNERS & 32" o/c — 3000 PSI CONCRETE (w/W.W.F. – SEE PLAN) - #5 DOWEL AT CORNERS & 32" o/c 3'-0 x 1'-0 TYPICAL WALL FOOTING w/3 ~ #5 CONT. & #3 TIES @ 32" o/c TYPICAL FOUNDATION SECTION NO SCALE 1.) DOWELS OCCUR AT 32" o/c, AT ALL CORNERS AND AT OPENINGS. GROUT ALL FILLED CELLS SOLID. 2.) ALL CMU CELLS BELOW FINISHED FLOOR SHALL BE FILLED WITH CONCRETE.



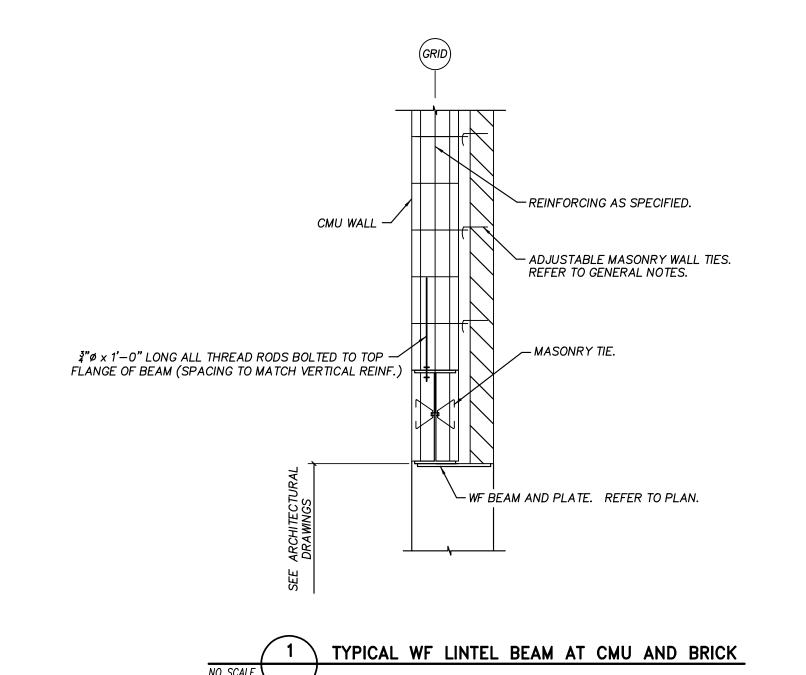


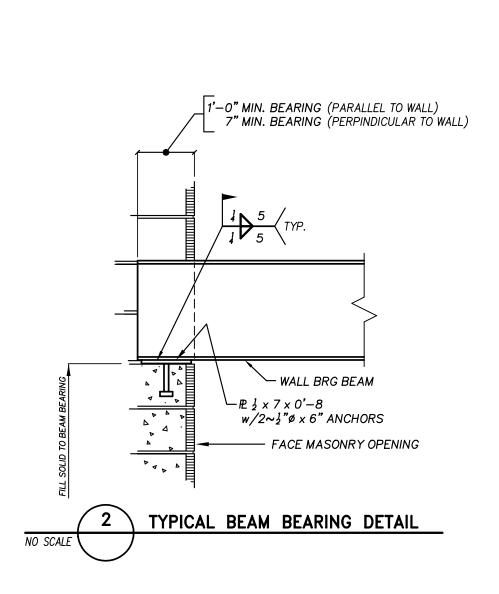
NO SCALE IF REQUIRED TO MEET EARTH COVER REQUIREMENTS

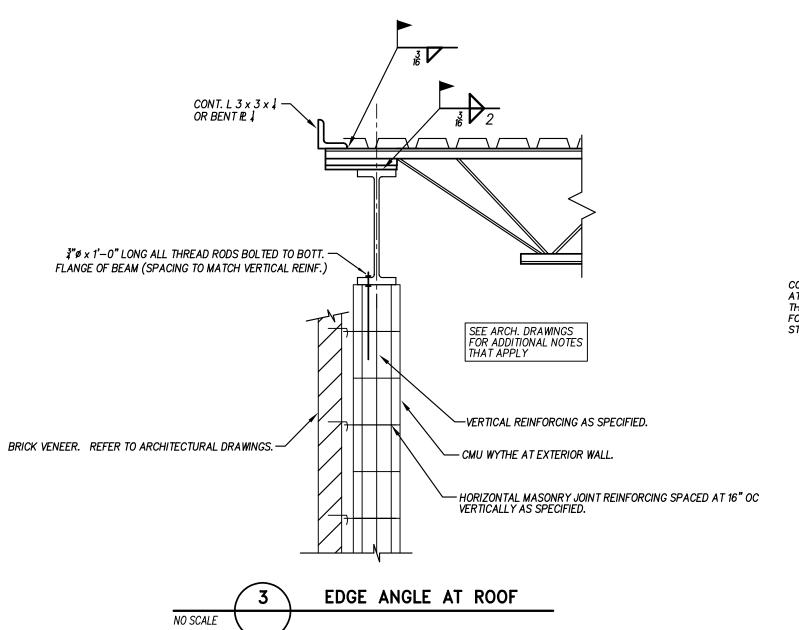


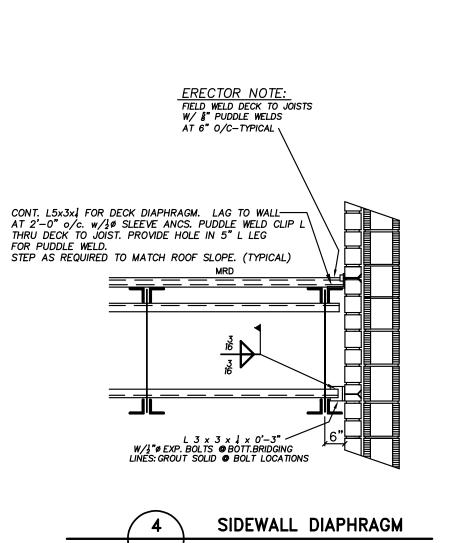


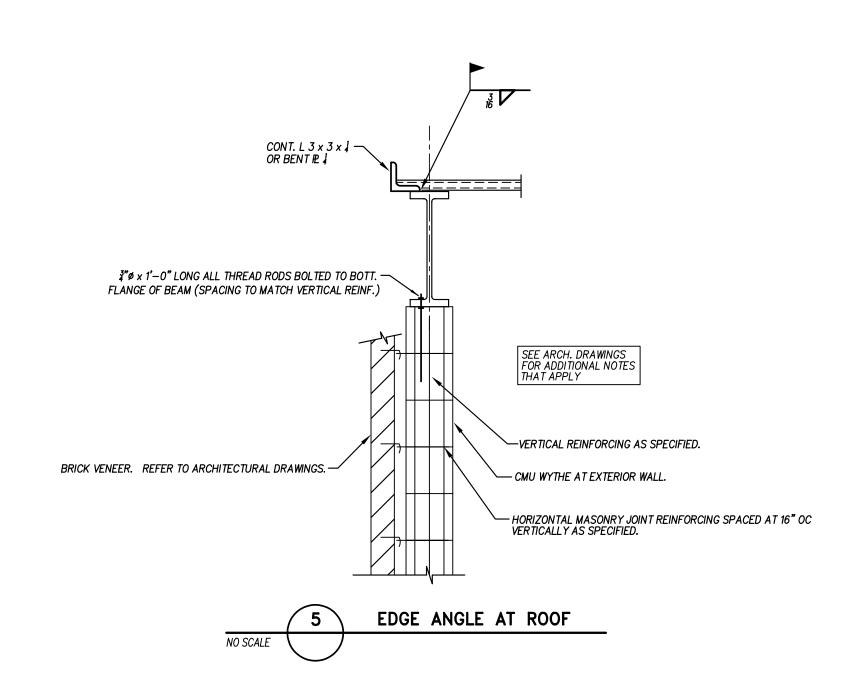
2.) WALL REINFORCING IS IN ADDITION TO WALL REINFORCING SHOWN ON PLANS AND OTHER DETAILS THAT APPLY.

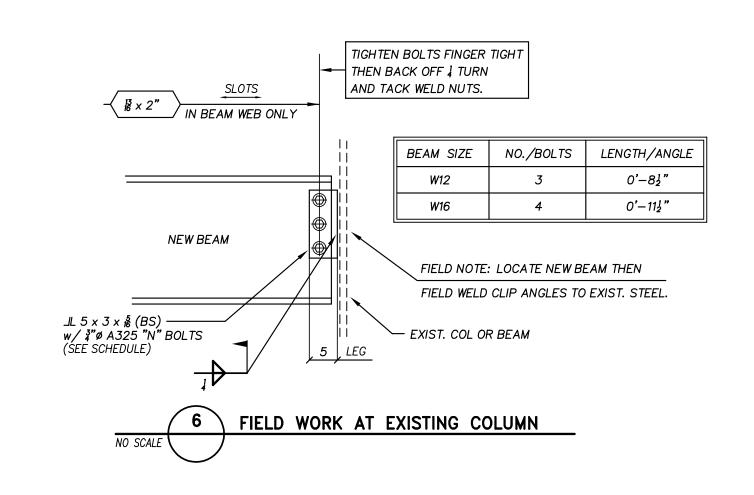


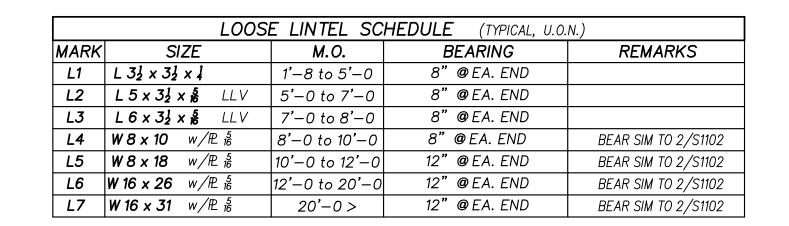


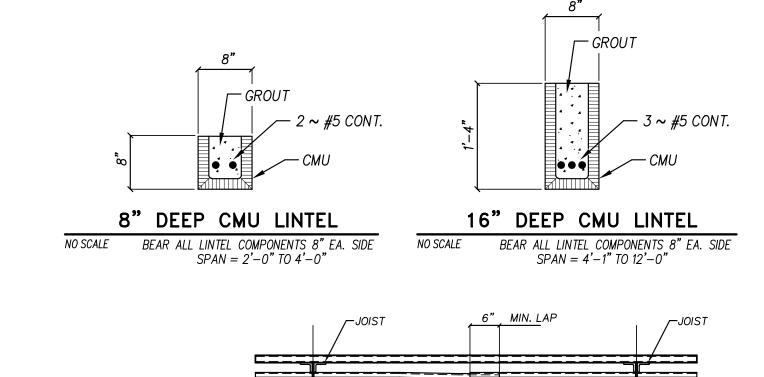


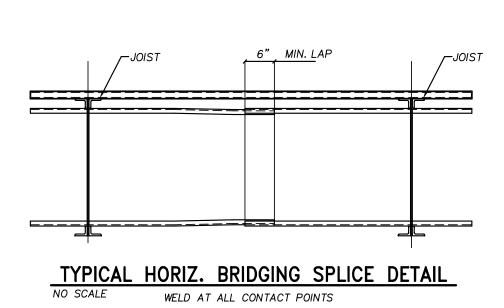


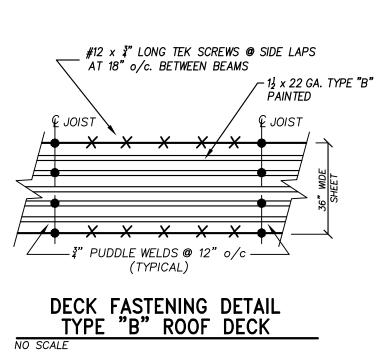












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FOUNDATIONS

- 1. ASSUMED SOIL DESIGN NET BEARING VALUE SHALL BE 2000 PSF TO BE FIELD VERIFIED BY THE GEOTECHNICAL TESTING LABORATORY AT THE TIME OF CONSTRUCTION. 2000 PSF ALLOWABLE NET BEARING PRESSURE IS CONSIDERED TO BE BEARING SOIL THAT IS EITHER UNIMPROVED NATURAL SOIL STRATA OR SHALLOW IMPROVED BEARING SOIL STRATA. REFER TO THE 2000 PSF COLUMN FOOTING SCHEDULE FOR USE WITH THIS CRITERIA.
- 2. CONTINUOUS WALL FOOTINGS SHALL BE PLACED UPON BEARING SOIL THAT IS EITHER UNIMPROVED OR IMPROVED TO THE SAME ALLOWABLE NET BEARING VALUE AS THE CONTIGUOUS COLUMN FOOTINGS. 3. SITE CONDITIONS MAY DICTATE THAT THE SOIL IMPROVEMENT MEASURES BE TRANSITIONED OUT FROM THE AREAS OF UNIMPROVED OR SHALLOW IMPROVED DEPTHS. SUCH TRANSITIONING SHALL BE AS DIRECTED BY THE GEOTECHNICAL LABORATORY AT THE TIME OF CONSTRUCTION.
- 4. SITE PREPARATION AND PLACEMENT OF ENGINEERED COMPACTED FILL AND THE INTERMEDIATE SOIL IMPROVEMENT WORKS SHALL BE MONITORED BY THE GEOTECHNICAL LABORATORY. ALL NECESSARY PREPARATORY STRIPPING, CUTTING, PROOF ROLLING, AND FILLING AND IMPROVEMENT OPERATIONS SHALL BE SO MONITORED.
- 5. ALL FILL INSIDE THE BUILDING AND TO 10'-0" OUTSIDE THE BUILDING INCLUDING RAMPS. STOOPS. AND STEPS SHALL BE CLEAN SELEC' MATERIAL FREE OF DELETERIOUS MATERIALS SUCH AS WOOD, ROOTS, TRASH. OR OTHER EXTRANEOUS MATERIALS. PLACE FILL TO BE COMPACTED IN 9" LIFTS. MEASURED LOOSE, AND COMPACT EACH LIFT TO 95% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS MEASURED BY ASTM D698. COMPACT THE TOP THREE 9" LIFTS TO 100% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS MEASURED BY
- 6. ALL FOOTING EXCAVATIONS SHALL BE APPROVED BY THE GEOTECHNICAL LABORATORY PRIOR TO PLACING FOOTING CONCRETE. 7. FOOTING ELEVATIONS SHALL NOT BE RAISED OR LOWERED UNLESS
- SPECIFICALLY APPROVED BY THE ARCHITECT. 8. FOOTINGS MAY BE CARRIED TO LOWER ELEVATION WHERE DIRECTED BY THE ARCHITECT.
- 9. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONAL LOCATIONS OF MASONRY WALLS AND PARTITIONS THAT REQUIRE CONTINUOUS WALL FOOTINGS AND/OR MONOLITHIC THICKENED SLAB FOOTINGS FOR SUPPORT.
- 10. CONSTRUCTION JOINTS IN CONTINUOUS WALL FOOTINGS SHALL BE MADE MIDWAY BETWEEN COLUMNS AND AT LEAST 4'-0" FROM THE INTERSECTION OF ANOTHER WALL FOOTING.
- 11. COLUMN FOOTINGS IN LINE WITH WALL FOOTINGS SHALL BE PLACED MONOLITHICALLY AND FLUSH TOP WITH THE CONTIGUOUS WALLS
- 12. STEPPED WALL FOOTINGS IF REQUIRED SHALL START OR TERMINATE AT LEAST 4' FROM A COLUMN FOOTING, WALL CORNER, OR WALL INTERSECTIONS.
- 13. AT LOCATIONS WHERE SLAB BLOCK OUTS ARE REQUIRED AWAITING THE STEFI COLUMN FRECTION PROVIDE FOR A SLAB TURNDOWN OF 8" MINIMUM CONCRETE THICKNESS AROUND THE BLOCKOUT TO RETAIN THE SUPPORTING SOIL UNDER THE SLAB. AT THE CONTRACTORS OPTION THIS SOIL RETAINING TURNDOWN MAY BE CONSTRUCTED WITH 8" CMU

FILLED 100% SOLID WITH 3000 PSI CONCRETE.

14. FOUNDATIONS SHALL BE PLACED ONLY ON APPROVED NATURAL UNDISTURBED SOIL STRATA OR ON PROPERLY PLACED ENGINEERED ONTROLLED COMPACTED IMPROVED FILL UNDER THE SUPERVISION OF THE GEOTECHNICAL LABORATORY.

- 1. CONCRETE SHALL DEVELOP THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS:
- FOOTINGS AND PEDESTAL INTERIOR SLABS ON GRADE FILL FOR MASONRY UNITS OTHER INTERIOR CONCRETE EXPOSED EXTERIOR CONCRETE

MASONRY CAVITY WALL FILL

- 3000 PSI 3000 PSI 4000 PSI 3000 KSI
- 2. CONCRETE FOR FOOTINGS AND SLABS ON GRADE SHALL BE REGULAR STONE CONCRETE.
- 3. CONCRETE FOR FILL IN CONCRETE MASONRY BLOCK CELLS, BOND BEAMS, LINTEL BLOCKS, AND CAVITY WALL FILL BELOW FLOOR IN EXTERIOR WALLS AND OTHER MASONRY UNITS SHALL BE FINE AGGREGATE CONCRETE MASONRY GROUT CONFORMING TO ASTM C476 OR 3000 PSI CONCRETE WITH 3/8" MAXIMUM COARSE AGGREGATE SIZE. AT CONTRACTORS OPTION 3000 PSI SELF CONSOLIDATING CONCRETE GROUT MAY BE UTILIZED FOR MASONRY GROUTING PURPOSES WITH PROPER PRECAUTIONS TAKEN FOR THE HYDROSTATIC PRESSURE ISSUES.
- 4. UNLESS SELF CONSOLIDATING CONCRETE GROUT IS UTILIZED THE CONCRETE MIX FOR CONCRETE MASONRY BLOCK AND CAVITY WALL GROU'S SHALL BE PROPORTIONED AT THE PLANT FOR A HIGH SLUMP OF 8" TO 11" TO FACILITATE PLACEMENT AND TO ACCOMMODATE WATER ABSORPTION BY THE MASONRY UNITS. HIGH SLUMP SHALL BE ACHIEVED WHILE KEEPING THE WATER CEMENT RATIO IN THE NORMAL RANGE FOR A 3000 PSI MIX. THIS WILL REQUIRE ADDITIONAL CEMEN IN THE BATCH TO GO ALONG WITH THE WATER ADDED FOR THE SLUMP REQUIREMENT.
- 5. MORTAR MIX SHALL NOT BE ALLOWED FOR ANY BLOCK MASONRY FILL REQUIREMENTS.
- 6. CONCRETE TO BE PERMANENTLY EXPOSED TO WEATHER SHALL HAVE 5% (+/- 1%) AIR ENTRAINMENT.
- 7. CONCRETE NOT PERMANENTLY EXPOSED TO THE WEATHER SHALL NOT HAVE AIR ADDED BY ENTRAINMENT. THIS REQUIREMENT SHALL BE VERIFIED AND REPORTED BY LABORATORY TESTS.
- 8. ALL CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE," ACI 318.
- 9. OBSERVE ALL AND STRICTLY FOLLOW ALL ACI 305 AND 306 REQUIREMENTS RESPECTIVELY FOR PROTECTION OF CONCRETE IN HOT AND COLD WEATHER.
- 10. ALL CONCRETE SLAB WORK SHALL BE PROPERLY CURED IN CONFORMANCE WITH ACL 308 FITHER WATER CURING WATERPROOF PAPER CURING PLASTIC SHEET, OR SPRAY-ON SEALING MATERIALS METHOD MAY BI USED PROVIDED THAT THE METHOD CHOSEN HAS NO DETRIMENTAL EFFECT ON THE FINAL FINISH SPECIFIED FOR THE RESPECTIVE AREAS. THE PROPOSED CURING METHOD TO BE USED SHALL BE
- APPROVED BY THE ARCHITECT. 11. BUILDING SLABS ON GRADE SHALL BE 4" MINIMUM THICKNESS.
- 12. PLACE 1/4" PRE-FORMED, IMPREGNATED EXPANSION JOINT FILLER FULL DEPTH OF SLAB ON GRADE AT ABUTTING WALL SURFACES UNLESS OTHERWISE NOTED.
- 13. PROVIDE CONSTRUCTION OR CONTROL JOINTS IN SLABS ON GRADE IN LOCATIONS AS SHOWN ON FOUNDATION PLAN OR AT OTHER LOCATIONS APPROVED OR REQUIRED BY THE ARCHITECT. BUT SPACING OF JOINTS SHALL NOT EXCEED 12' IN ANY DIRECTION.
- 14. THE TYPE OF JOINT USED WHETHER CONTROL JOINT OR CONSTRUCTION JOINT IS THE OPTION OF THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 15. SAW JOINTS AT CONTROL JOINTS IN THE CONCRETE SLABS SHALL BE MADE AS SOON AS THE CONCRETE HAS SUFFICIENT STRENGTH TO PREVENT SPALLING OF THE JOINT DUE TO THE ACTION OF THE SAW BUT IN NO CASE GREATER THAN 4 HOURS AFTER INITIAL PLACEMENT OF THE CONCRETE.
- 16. SLAB JOINT FILLER SHALL BE OF THE TYPE COMPATIBLE WITH THE FINAL FLOOR COVERING USED. SLAB JOINTS UNDER PERMANENT PARTITIONS OR CASE WORK NEED NOT BE FILLED.
- 17. CHAMFER EXPOSED EDGES AND CORNERS OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.
- 18. SEE ARCHITECTURAL DRAWINGS FOR REQUIRED FLOOR FINAL FINISHFS AND PROVIDE NECESSARY SLOPES, DEPRESSIONS, AND SLAB FINISH AS REQUIRED TO ACCEPT THE SPECIFIED FINAL FINISHES.

REINFORCING STEEL

- 1. BARS SHALL BE ROLLED FROM NEW BILLET-STEEL CONFORMING TO "SPECIFICATION FOR DEFORMED BILLET—STEEL BARS FOR CONCRETE REINFORCEMENT," ASTM A615, GRADE 60.
- 3. DETAIL AND FABRICATE REINFORCING STEEL IN ACCORDANCE WITH "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315.

2. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185.

- 4. REINFORCING STEEL SHALL BE IN PLACE AND REVIEWED BY THE ARCHITECT PRIOR TO PLACING CONCRETE.
- 5. PROVIDE WWF IN FLAT SHEETS. ROLLED WWF WILL NOT BE ACCEPTED ON THIS PROJECT.
- SPLICES ONE FULL MESH AND TIE OFF WITH STANDARD TIE WIRES. 7. FABRICATE REBARS IN CONTINUOUS FOOTINGS, WALLS, BOND BEAMS, AND MONOLITHIC TURNED DOWN SLABS TO LONGEST PRACTICAL

6. LAP ALL WWF END SPLICES TWO FULL MESHES AND ALL SIDE LAP

- 8. LAP HORIZONTAL REBAR SPLICES A MINIMUM OF 40 BAR DIAMETERS BUT A MINIMUM OF 24" UNLESS OTHERWISE NOTED. PLAN REBAR SPLICES TO OCCUR AT POINTS OF MINIMUM STRESS UNLESS OTHERWISE
- 9. LAP VERTICAL REBAR SPLICES INCLUDING DOWELS FROM FOOTINGS IN CMU WALLS A MINIMUM OF 60 BAR DIAMETERS.
- 10. BARS IN INDIVIDUAL COLUMN SPREAD FOOTINGS SHALL NOT BE
- AND TURNED DOWN SLABS, WITH A STANDARD 90 DEGREE HOOK AT DISCONTINUOUS ENDS, CORNERS, AND INTERSECTIONS. 12. AT LOCATIONS REQUIRING VERTICAL DOWELS INTO FOOTINGS AND

11. TERMINATE CONTINUOUS BARS IN WALL FOOTINGS, WALLS, BOND BEAMS

- ELEVATED SLABS. THE PLACEMENT OF THE DOWELS SHALL MATCH THE SIZE AND CLOSELY MATCH THE LOCATION OF THE VERTICAL WALL REBARS REQUIRING THE DOWELS.
- 13. ALL DOWELS SHALL TERMINATE IN THE FOOTING OR ELEVATED SLAB WITH A STANDARD ACI 90 OR 180 DEGREE HOOK AS APPROPRIATE UNLESS SPECIFICALLY SHOWN OTHERWISE. DOWELS SHALL LAP THEIR MATCHING VERTICAL REBAR 60 BAR DIAMETERS.
- 14. PROVIDE THE FOLLOWING CLEARANCES FROM REBARS TO CONCRETE FACE UNLESS OTHERWISE NOTED ON DRAWINGS: EARTH FORMS WALL FORMS TOP OF SLAB
- SLAB FORMS CMU WYTHE - CENTER BARS IN CENTER OF WYTHE 15. UNLESS OTHERWISE NOTED OR SPECIFIED PROVIDE #6 VERTICAL
- REINFORCING AT 24" o/c. FOR EXTERIOR MASONRY WALLS. 16. UNLESS OTHERWISE NOTED OR SPECIFIED PROVIDE #5 VERTICAL REINFORCING AT 48" o/c. FOR INTERIOR MASONRŸ WALLS.
- 17. PROVIDE INDUSTRY APPROVED REBAR CENTERING DEVICES FOR HOLDING VERTICAL REINFORCING BARS SECURELY IN THE CENTER OF THE CMU
- 18. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.

STRUCTURAL STEEL

- 1. STEEL WIDE FLANGE SHAPES SHALL CONFORM TO STRUCTURAL STEEL -ASTM A992, Fy = 50 KSI, Fu = 65 KSI. STEEL CHANNÉLS, PLATES, ANGLES, BARS, AND RODS — ASTM A36, FY = 36 KSI. Fu = 58 KSI. PIPE COLUMNS – ASTM A53, GRADE B, Fy = 35 KSI, Fu = 60 KSI. BOLTS - ASTM A325. FLAT WASHERS - ASTM F436 WELDS - AWS CLASS E70 LOW HYDROGEN ELECTRODES. TUBE COLUMNS – ASTM A500, GRADE B, Fy = 46 KSI, Fu = 58 KSI. COLUMN ANCHOR RODS - ASTM F1554 GRADE 36.
- 2. ALL STEEL WORK SHALL CONFORM TO "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS — ALLOWABLE STRESS DESIGN" AND THE AISC CODE

HEADED SHEAR STUDS - ASTM A108.

- 3. CONNECTION BOLTS SHALL BE 3/4" DIAMETER ASTM A325 BOLTS WITH PROPER HARDENED WASHERS AND HEX NUTS UNLESS OTHERWISE NOTED. ALL BOLTS AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING A325 AND A490 BOLTS.
- 4. UNLESS OTHERWISE NOTED ALL CONNECTION BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC.
- 5. INSTALL A SUITABLE HARDENED WASHER UNDER THE HEAD OR NUT, WHICHEVER IS USED AS THE TURNED ELEMENT FOR TIGHTENING AND OVER ALL EXPOSED SLOTTED OR OVERSIZED HOLES.
- 6. UNLESS OTHERWISE NOTED ON THE PLANS ALL CONNECTION BOLTS SHALL BE DESIGNED AS BEARING TYPE WITH TREADS IN THE SHEAR PLANE (A325N). ALL CONNECTIONS SHALL BE FULL DEPTH.
- 7. ALL WELDING SHALL BE DONE BY WELDING OPERATORS CERTIFIED JOB. ACCORDING TO AWS D1. FOR THE WELDING POSITIONS AND WELDING EQUIPMENT BEING USED FOR MAKING THE CONNECTIONS REQUIRED FOR
- 8. UNLESS OTHERWISE NOTED MASONRY SUPPORTED BEAMS BEARING PERPENDICULAR TO MASONRY WALLS SHALL BEAR A MINIMUM OF 6" ON SOLID MASONRY AT EXPOSED 8" CMU WALLS AND 8" ON SOLID MASONRY AT CONCEALED 8" CMIJ WALLS AND 8" ON SOLID MASONRY AT 12" CMU WALLS. MASONRY SUPPORTED BEAMS AND PLATE LINTELS BEARING PARALLEL TO MASONRY WALLS SHALL BEAR A MINIMUM OF 12" ON
- 9. ALL COPES, CUTS, BLOCKS, NOTCHES SHALL HAVE SMOOTH RE-ENTRANT
- CORNERS OF 1/2" MINIMUM RADIUS. 10. RETURN ALL WELDS AT CORNERS A MINIMUM OF TWICE THE NOMINAL SIZE OF THE WELD.
- 11. PROVIDE HOLES FOR BLOCKING AND NAILER BOLTS AS REQUIRED BY ARCHITECTURAL DRAWINGS.
- 12. STRUCTURAL STEEL SHALL RECEIVE ONE COAT OF GREY OXIDE PAINT OF 2 MIL DFT. SURFACE PREPARATION SHALL BE POWER TOOL CLEANING CONFORMING TO SSPC-SP3.
- 13. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADEQUATE TEMPORARY BRACING AND GUYING OF STEEL FRAMING AND LOAD BEARING WALLS TO PROVIDE FOR SAFETY OF THE STRUCTURE AND WORKMEN. BRACING TO REMAIN UNTIL NO LONGER REQUIRED FOR SAFE SUPPORT OF FRAME.
- 15. COLUMN CAP AND BASE PLATES SHALL BE FULLY WELDED ALL AROUND TO COLUMN SHAFT WITH 5/16" FILLET WELDING UNLESS OTHERWISE
- 16. ALL COLUMNS SHALL HAVE A MINIMUM OF 4 ANCHOR RODS SET ON A

MEMBERS SHALL BE 3/4" MINIMUM THICKNESS.

- 17. ALL COLUMN CAP PLATES SUPPORTING OR BEING CONNECTED TO OTHER
- 18. ALL OTHER COLUMN CAP PLATES NOT SUPPORTING OR BEING CONNECTED TO OTHER MEMBERS SHALL BE CAPPED WITH 1/2" MINIMUM THICKNESS.
- 19. SHEAR TAB PLATES ATTACHED TO COLUMN OR BEAMS SHALL BE 3/8" MINIMUM THICKNESS AND SHALL BE WELDED TO THE SUPPORT MEMBER WITH 5/16" CONTINUOUS FILLET WELDS BOTH SIDES.
- 20. STABILIZER PLATES FOR JOIST BOTTOM CHORDS AT COLUMNS OR BEAMS SHALL BE 3/4" x 8" x 0'-8" MINIMUM AND SHALL BE SHOP WELDED
- TO COLUMN OR BEAM WITH 5/16" CONTINUOUS FILLET WELDS BOTH SIDES. OR BEAMS SHALL BE 3/4" x 8" x 0'-8" MINIMUM AND SHALL BE SHOP
- WELDED TO COLUMN OR BEAM WITH 5/16" CONTINUOUS FILLET WELDS BOTH SIDES. 22. UNLESS OTHERWISE NOTED PROVIDE 2" NOMINAL GROUT THICKNESS UNDER COLUMN BASE PLATES TO ALLOW FOR A HEAVY HEX LEVELING NUT AND STANDARD FLAT WASHER TO BE PLACED ON EACH ANCHOR BOLT ON THE UNDERSIDE OF THE COLUMN BASE PLATE FOR PRECISION LEVELING AND PLUMBING THE COLUMN. PROVIDE A STANDARD FLAT

WASHER UNDER A HEAVY HEX CLAMPING NUT ON TOP OF THE BASE

23. ALL LINTEL ANGLES, BEAMS AND PLATES IN EXTERIOR WALLS SHALL BE HOT DIP GALVANIZED TO G60 STANDARDS AFTER FABRICATION. ALL INTERMITTENT WELDS AND OTHER SEAMS ON BEAM AND PLATE LINTELS SHALL BE SEALED.

PLATE FOR EACH ANCHOR BOLT.

24. PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.

CONCRETE AND BRICK MASONRY STEEL JOISTS AND JOIST GIRDERS

- 1. CONCRETE MASONRY UNITS SHALL BE LIGHTWEIGHT OR BLENDED LIGHTWEIGHT UNITS CONFORMING TO ASTM C90 WITH A COMPRESSIVE STRENGTH OF 1900 PSI MINIMUM TESTED IN ACCORDANCE WITH ASTM
- 2. BRICK VENEER UNIT SHALL BE FULLY FIRED VITRIFIED CLAY UNITS AS SELECTED BY THE ARCHITECT.
- 4. CONCRETE MASONRY DESIGN f'm = 1500 PSI.

ASTM C270.

- 5. WALLS SHALL BE ACCURATELY LAID OUT AND CONSTRUCTED SO THAT NO WALL VARIES MORE THAN 1/4" FROM ITS DESIGNATED LOCATION. THIS VARIATION LIMIT SHALL APPLY TO WALL PLUMBNESS AND WALL STRAIGHTNESS.
- MASONRY WALLS SHALL BE HEAVY DUTY GALVANIZED TRUSS TYP. SPACED AT 16" o/c. MAXIMUM.
- 9. HORIZONTAL JOINT REINFORCING FOR ALL MULTIPLE WYTHE EXTERIOR MASONRY WALLS SHALL BE GALVANIZED HEAVY DUTY TRUSS TYPE HORIZONTAL JOINT REINFORCEMENT BY HOHMAN AND BARNARD OR APPROVED EQUAL WITH 3/16" SIDE RODS AND #9 DIAGONAL CROSS RODS FOR THE CMU WYTHE WITH INTEGRAL DOUBLE EYE AND ADJUSTABLE 1/4" DIAMETER PINTLE BRICK TIE SPACED AT 24" o/c. HORIZONTALLÝ.
- 10. PROVIDE PREFABRICATED TEE AND CORNER PIECES AT WALL INTERSECTIONS.
- 1. ALL MASONRY WALLS SHALL BE BONDED AT CORNERS UNLESS OTHERWISE NOTED ON THE PLANS. REFER TO ARCHITECTURAL DRAWINGS FOR CORNER AND TEE WALL INTERSECTION REQUIREMENTS AT MASONRY PARTITIONS AND LOAD BEARING WALLS.
- COLUMNS WITH FIELD WELDED HEAVY DUTY ADJUSTABLE TIES AS NOTED ON THE DRAWINGS. PROVIDE MINIMUM 97 MIL GALVANIZED STAMPED STEEL ANCHORS WITH AN INTEGRAL VERTICAL SLOT TO LIMIT HORIZONTAL MOVEMENT OF THE TRIANGULAR WIRE TIE TO 1/16". DO NOT USE THE BENT WIRE TYPE ANCHORS TO THE COLUMN.
- 13. ALL CMU WALLS SHALL BE FASTENED TO THE TOP AND BOTTOM FLANGES OF EMBEDDED STEEL BEAMS WITH THE 3/4" DIAMETER x 1'-0" LONG ALL THREAD ROD DOWELS SPACED AT 24" o/c. OR AS NOTED ON THE
- 14. PROVIDE VERTICAL CRACK CONTROL JOINTS IN ALL MASONRY WALLS AT INTERVALS SHOWN ON THE ARCHITECTURAL DRAWINGS. CONTROL JOINT INTERVALS SHALL NOT EXCEED 32'-0".
- OF PROPER LENGTH TO PROVIDE 16" BEARING EACH END. BEAM LINTELS FÖR OPENINGS UP TO 6'-4". PROVIDE 2 ~ #5 CONTINUOUS TOP AND BOTTOM FOR 12" x 8" CMU
- 15. WHERE A STEEL COLUMN OCCURS IN INTERIOR AND EXTERIOR CMU WALLS THAT PRECLUDE THE PROPER 16" MINIMUM BEARING LENGTH OF THE BOND BEAM TYPE LINTEL A STEEL BEAM AND PLATE LINTEL SHALL BE PROVIDED AND SHALL BE CONNECTED DIRECTLY TO THE STEEL COLUMN. REFER TO THE PLANS AND/OR LINTEL SCHEDULE FOR ALL STEEL MEMBER LINTELS.
- 17. ALL CONCRETE MASONRY UNITS BELOW FINISH MAIN FLOOR AND/OR BELOW FINISH GRADE SHALL BE 100% GROUTED SOLID WITH FINE AGGREGATE CONCRETE MASONRY GROUT CONFORMING TO ASTM C476 OR 3000 PSI CONCRETE WITH 3/8" MAXIMUM COARSE AGGREGATE SIZE. AT CONTRACTORS OPTION 3000 PSI SELF CONSOLIDATING CONCRETE GROUT MAY BE UTILIZED FOR MASONRY GROUTING PURPOSES WITH PROPER PRECAUTIONS TAKEN FOR THE HYDROSTATIC PRESSURE ISSUES.
- 18. IN ADDITION IN ALL MULTIPLE WYTHE MASONRY WALLS THE CAVITY COLLAR JOINT SPACE BETWEEN WYTHES BELOW GRADE SHALL BE GROUTED SOLID AT THE TIME THE BRICK WYTHE IS BEING LAID WITH FINE AGGREGATE CONCRETE MASONRY GROUT CONFORMING TO ASTM C476 OR 3000 PSI CONCRETE WITH 3/8" MAXIMUM COARSE AGGREGATE SIZE. AT CONTRACTORS OPTION 3000 PSI SELE CONSOLIDATING CONCRETE GROUT MAY BE UTILIZED FOR MASONRY GROUTING PURPOSES WITH
- 19. UNLESS OTHERWISE NOTED PROVIDE WEEP HOLES AT 32" o/c. MAXIMUM ABOVE ALL WALL FLASHING LOCATIONS. REFER TO ARCHITECTURAL
- DRAWINGS FOR LOCATION AND DETAILS OF ALL FLASHING. 20. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ADEQUATE TEMPORARY BRACING AND GUYING OF ALL MASONRY WALLS TO PROVIDE FOR SAFETY

OF THE STRUCTURE AND WORKMEN. BRACING TO REMAIN UNTIL NO

- 2. UNLESS OTHERWISE NOTED OR SPECIFIED PROVIDE #5 VERTICAL REINFORCING AT 48" o/c. FOR INTERIOR MASONRY WALLS. 3. TERMINATE CONTINUOUS BARS IN WALL FOOTINGS, WALLS, BOND BEAMS AND TURNED DOWN SLABS WITH A STANDARD 90° HOOK AT DISCONTINUOUS ENDS, CORNERS, AND INTERSECTIONS. CONTINUOUS WALL FOOTING REBARS TERMINATING IN COLUMN FOOTINGS SHALL EXTEND FULLY TO THE FAR FACE OF THE COLUMN
- 24. AT LOCATIONS REQUIRING VERTICAL WALL REINFORCING, PROVIDE OF THE DOWELS SHALL MATCH THE SIZE AND CLOSELY MATCH THE LOCATION OF THE VERTICAL WALL REBARS REQUIRING THE DOWELS

1. STEEL JOISTS SHALL CONFORM TO STEEL JOIST INSTITUTE (SJI) "K" SERIES JOISTS AND ACCESSORIES.

NOTED TO DO SO ON THE DRAWINGS.

IS NOT INCLUDED IN THIS REQUIREMENT.

OTHERWISE NOTED.

ON THE DRAWINGS.

2. JOIST MANUFACTURER SHALL COORDINATE AND CONFIRM WITH THE STEEL FABRICATOR ALL SPECIAL BEARING CONDITIONS FOR JOIST AND JOIST GIRDER SYSTEMS.

4. JOISTS BEARING ONLY ON ONE SIDE OF A STEEL SUPPORT SHALL BEAR

5. THE BOTTOM CHORD STRUTS OF JOISTS OR JOIST GIRDERS SHALL NOT

BE RIGIDLY FASTENED TO MASONRY WALLS UNLESS SPECIFICALLY

6. BOTTOM CHORD STRUTS OF JOISTS WHERE REQUIRED SHALL BE RIGIDLY

7. BOTTOM CHORD STRUTS OF JOIST GIRDERS SHALL NOT BE WELDED TO

8. ALL STEEL JOISTS REQUIRED TO SJI AND OSHA BE BOLTED TO THE

10. ADDITIONALLY THE BOLTED ENDS OF JOIST CONNECTIONS SHALL BE

11. PROVIDE FIELD BOLTED CONNECTIONS UTILIZING 3/4" DIAMETER A325

ERECTION BY SJI AND OSHA REGULATIONS. THESE CONNECTIONS

SHALL BE FIELD WELDED IN ADDITION TO THE ERECTION BOLTING.

WELDING TO PROVIDE EQUAL STRENGTH OF THE MISSING BOLTS AS

SHALL BE RIGIDLY ATTACHED TO THE INDICATED JOISTS AND STEEL

WELDING. THESE FIELD WELDS SHALL BE OF SIZE AND LENGTH AS

REQUIRED FOR 4 KIP UNFACTORED AXIAL LOAD. THIS IS A WELDING

REQUIREMENT AND DOES AFFECT THE JOIST SUPPLIER'S DESIGN OF

15. PROVIDE CONTINUOUS HORIZONTAL AND/OR DIAGONAL CROSS BRIDGING

AT LOCATIONS SHOWN ON THE DRAWINGS. WHERE SJI STANDARDS

SHOWN ON THE DRAWINGS THE ADDITIONAL LINES SHALL BE PROVIDED.

BOLTED TO JOISTS AND AT INTERSECTIONS WITH 1/2" DIAMETER A307

BOLTS SHALL BE COMPENSATED FOR FULLY BY FIELD WELDING. DO

MACHINE BOLTS. THESE BRIDGING CONNECTIONS DO NOT REQUIRE

FIELD WELDING IN ADDITION TO BOLTING. MISSING OR MISALIGNED

REQUIRED FOR UPLIFT SHALL BE MADE BY THE JOIST FABRICATOR.

CONFIGURATION TO DEVELOP 2 KIPS MINIMUM FORCE. ANY LARGER

JOIST SHOP DRAWINGS TO BE PROVIDED BY THE JOIST ERECTOR.

COLUMN, OR BEARING PLATE WITH A 3/16" x 2" FILLET WELD OR

EQUIVALENT FIELD WELD BOTH SIDES OF EACH JOIST SEAT AT EACH

FORCES THAT MAY BE REQUIRED BY SJI SHALL BE DESIGNATED ON THE

18. ALL BRIDGING SHALL BE WELDED TO TOP AND BOTTOM CHORDS AT ALL

NOT UTILIZE 3/8" BOLTS FOR THIS REQUIREMENT.

17. PROPER ALLOWANCE FOR EXTRA BOTTOM CHORD BRIDGING WHERE

POINTS OF CONTACT WITH WELDS OF SUFFICIENT SIZE AND

19. REFER TO DRAWINGS FOR ADDITIONAL FIELD WELDED DIAGONAL

20. ALL JOISTS SHALL BE FIELD WELDED TO THE STEEL SUPPORT BEAM,

22. BRIDGING SHALL BE IN PLACE. AND WELDED FOR REVIEW BY THE

ARCHITECT PRIOR TO INSTALLING THE METAL ROOF DECK.

24. STEEL JOISTS SHALL BE DESIGNED BY THEIR FABRICATOR FOR

23. JOISTS AND ACCESSORIES SHALL RECEIVE ONE DIP COAT OF STANDARD

PRIMERS SHALL BE COMPATIBLE WITH FIREPROOFING AND FINAL

GREY OXIDE PAINT WHERE PERMANENTLY EXPOSED TO VIEW. ALL

ONE THIRD INCREASE IN ALLOWABLE STRESS MAY <u>NOT</u> BE UTILIZED

WELDING WORKS TO PREVENT DAMAGE TO THE JOIST MEMBERS. ANY

JOIST FOUND TO BE DAMAGED SHALL BE REPLACED OR REPAIRED AS

25. PROPER CARE SHALL BE EXERCISED IN THE ERECTION AND ALL FIELD

26. PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.

1. METAL ROOF DECK ON OPEN WEB STEEL JOISTS AT ALL OTHER UNITS

WITH 36" COVER CONFORMING TO STEEL DECK INSTITUTE (SDI)

2. 1 1/2" DEEP METAL ROOF DECKING SHALL BE WELDED TO STEEL

3. SIDE LAPS FOR ALL 1 1/2" METAL ROOF DECK UNITS SHALL BE

4. ALL DECKING UNITS SHALL BE LAID OUT BY THE SUPPLIER TO A

SHALL BE 1 1/2" DEEP, 22 GAGE, WIDE RIB PRIMED DECK UNITS

SÚPPORTING MEMBERS WITH 3/4" DIAMETER PUDDLE WELDS AT 12" o/c

AT ALL END LAPS AND ALL IŃTERMEDIATE SUPPORTS, EXCEPT THAT Â

THE WELD SPACING SHALL BE DECREASED TO 6" o/c. WITHIN 12'-0" OF

LOW EAVES, RIDGES, AND GABLE ENDS. THE WELD SPACING SHALL BE

EAVES AND RIDGES. AT HIPS AND VALLEYS WHERE DECK UNITS ARE

CUT ON A BIAS PROVIDE 2 \sim 3/4" DIAMETER PUDDLE WELDS PER

MECHANICALLY FASTENED AT 18" o/c. WITH #12 SELF DRILLING TEK

PATTERN THAT PROVIDES FOR A MINIMUM THREE SPAN CONDITION AND

SHALL BE LAPPED 3" MINIMUM AT END JOINTS OVER SUPPORTS.

5. DECK UNITS SHALL BE SECURELY FASTENED IN STRAIGHT LINES AND

TO TRUE PLANES TO ACCEPT THE SPECIFIED ROOFING SYSTEMS.

6. PROVIDE ALL NECESSARY ACCESSORIES. SUCH AS CONTINUOUS RIDGE.

HIP, VALLEY, EAVE, RAKE CLOSURE PLATES, SUMP PANS, ANOTHER

A COMPLETE FIRST CLASS WEATHERTIGHT JOB. MINIMUM WIDTH OF

THESE CLOSURE PLATES SHALL BE 8" AND SHALL BE 22 GAGE G60

GALVANIZED MATERIAL AND SHALL BE WELDED WITH PAIRS OF 3/4'

7. PROPER CARE SHALL BE TAKEN BY THE ERECTOR SO AS NOT TO BURN

SUPPORTING MEMBERS SHALL BE CAUSE FOR REJECTION. REJECTED

WORK SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL COST IF

WITH PAIRS OF #12 SDST TEK SCREWS SPACED AT 6" o/c.

8. TOUCH UP WELDS AND ABRASIONS WITH ZINC RICH PAINT.

9. METAL DECKING SHALL BE INSPECTED BY ARCHITECT AND ROOFING

10. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.

DECK RELATED ACCESSORIES OF PROPER SIZE AND SHAPE TO PROVIDE

DIAMETER PUDDLE WELDS SPACED AT 6" o/c. OR FASTENED INTO PLACE

HOLES IN DECK OR SUPPORTING MEMBERS. BURNED HOLES OR DAMAGES

UNEVEN, LOOSE, BENT, OR OTHERWISE BADLY INSTALLED DECK WILL BE REJECTED AND SHALL BE REPLACED AT NO ADDITIONAL COST IF SO

DECREASED TO 6" o/c. AT CONTINUOUS DECK EDGE SUPPORTS AT LOW

BRIDGING AT ENDS OF BRIDGING RUNS.

21. ALL JOIST CHORD MEMBERS SHALL BE ANGLES.

A NET UPLIFT OF NOT LESS THAN **33** PSF.

FINISHES SPECIFIED.

FOR THIS LOAD CASE.

METAL ROOF DECK

DIRECTED BY THE ARCHITECT.

DIRECTED BY THE ARCHITECT.

SO DIRECTED BY THE ARCHITECT.

INSTALLER PRIOR TO COVERING.

REQUIRE ADDITIONAL LINES OF BRIDGING IN ADDITION TO THOSE

FIELD BOLTED DIAGONAL BRIDGING AS REQUIRED BY SJI SHALL BE

SUPPORTS DURING THE STEEL ERECTION PROCESS WITH FIELD

BOLTS FOR COMMON JOIST CONNECTIONS AS REQUIRED FOR

12. THE CAPACITY OF ANY BOLTS FOUND MISSING IN THE JOIST

CONNECTIONS SHALL BE MADE UP BY PROPER FIELD

DIRECTED BY THE INSPECTING TESTING LABORATORY.

VERIFIED AND REPORTED BY THE TESTING LAB.

13. BOLT TIGHTENING AND FIELD WELDING OF CONNECTIONS SHALL BE

14. BOTTOM CHORDS OF JOISTS DESIGNATED ON PLANS WITH A "BCX"

9. BOLTS IN JOIST GIRDER TO COLUMN CONNECTIONS SHALL BE

SUPPORTS UNTIL THE FULL DEAD LOAD OF THE ROOF DECK AND

INSULATION IS IN PLACE. ROOF SUPPORTED MECHANICAL APPARATUS

COLUMN OR BEAM OR JOIST GIRDER SHALL BE BOLTED WITH 2 - 3/4"

DIAMETER A325 BOLTS. DO NOT UTILIZE 1/2" DIAMETER BOLTS FOR

TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED BY THE AISC.

FIELD WELDED IN ADDITION TO THE BOLTING REQUIREMENTS AS NOTED

ATTACHED TO STEEL SUPPORTS DURING THE STEEL ERECTION PROCESS.

A MINIMUM OF 2" PAST THE CENTERLINE OF THAT SUPPORT UNLESS

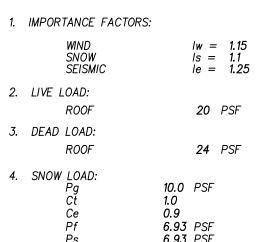
- 3. "K" SERIES JOISTS SHALL BEAR A MINIMUM OF 2 1/2" ON 3. ALL MORTAR SHALL BE TYPE "S" PER PROPORTION SPECIFICATION STEEL SUPPORTS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- 6. ALL BED AND HEAD JOINTS SHALL BE FULLY MORTARED.
- 7. HORIZONTAL JOINT REINFORCING FOR ALL SINGLE WYTHE CONCRETE HORIZONTAL JOINT REINFORCEMENT BY HOHMAN AND BARNARD OF APPROVED EQUAL. HORIZONTAL JOINT REINFORCEMENT SHALL BE
- 8. THE TRUSS TYPE HORIZONTAL JOINT REINFORCING SHALL HAVE 3/16" SIDE RODS AND #9 DIAGONAL CROSS RODS. LAP ALL REINFORCEMENT JOINTS A MINIMUM OF 12".

- 12. ALL CMU WALLS SHALL BE TIED TO ALL CONTACT FACES OF ALL STEEL
- 5. UNLESS OTHERWISE NOTED LINTELS FOR OPENINGS UP TO 6'-4" IN CONCRETE MASONRY WALLS (CMU) SHALL BE BOND BEAM TYPE LINTELS PROVIDE ONE ~ #5 CONTINUOUS TOP AND BOTTOM FOR 8" x 8" CMU BOND
- BOND BEAM LINTELS FOR OPENINGS UP TO 6'-4".
- 16. ALL DOOR. WINDOW. AND OPENING JAMBS IN CMU WALLS SHALL BE FILLED WITH 3000 PSI CONCRETE FOR 2'-0" WIDTH (3 CELLS) FROM LINTEL BEARING DOWN TO FLOOR. PROVIDE ONE ~ #6 BAR IN EACH
- PROPER PRECAUTIONS TAKEN FOR THE HYDROSTATIC PRESSURE ISSUES.
- LONGER REQUIRED FOR SAFE SUPPORT OF WALLS. UNLESS OTHERWISE NOTED OR SPECIFIED PROVIDE #6 VERTICAL
- REINFORCING AT 24" o/c. FOR EXTERIOR MASONRY WALLS.
- FOOTING AND TERMINATE WITH A STANDARD 90° HOOK. MATCHING DOWELS INTO FOOTINGS AND ELEVATED SLABS. THE PLACEMENT

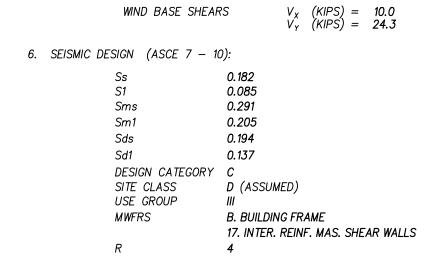
1. PROVIDE NON-SHRINK, NON-METALLIC PRE-MIXED GROUT UNDER ALL COLUMN BASE PLATES AND BEAM BEARING PLATES. GROUT SHALL HAVE

A COMPRESSIVE STRENGTH OF 7,000 PSI AT 7 DAYS.

DESIGN CODE DATA



6.93 PSF 5. WIND LOAD: $V_{ULT}=127$ 3 SEC PEAK GUST MPH (ASCE 7 - 10) $V_{ASD}=98.4$ MPH INTERNAL PRES. COEFF. +/- 0.18 (ENCLOSED) MWFRS DESIGN WIND PRES. 35.1 PSF



0.05456

ANCHORED

EQUIV. LATERAL FORCE

LATERAL DESIGN CONTROLS: WIND SEISMIC BASE SHEARS: V_X (KIPS) =

PROCEDURE

7. SOIL BEARING VALUE 2000 PSF

COMPONENTS

LINTEL SCHEDULE FOR MASONRY OPENINGS <u>NOT SPECIFIED OTHERWISE</u>

(ASSUMED

EXTERIOR MASONRY WALL OPENINGS MASONRY OPENING UP TO 4'-0" BRICK WYTHE L $\frac{4}{x}$ $\frac{x}{4}$ $\frac{x}{1}$ /4 8" CMU WYTHE 8" x 8" BOND BEAM w/ 2 ~ #5 CONTINUOUS

TOP & BOTTOM MASONRY OPENING 4'-1" TO 6'-8" BRICK WYTHE L 6 x 4 x 5/16 LLV 8" CMU WYTHE 8" x 8" BOND BEAM w/ 2 ~ #5 CONTINUOUS

TOP & BOTTOM

MASONRY OPENING UP TO 4'-0"

MASONRY OPENING 4'-1" TO 6'-8"

MASONRY OPENING 6'-1" TO 8'-0"

MASONRY OPENING 6'-1" TO 8'-0"

MASONRY OPENING 6'-9" TO 8'-0" BRICK WYTHF I 6 x 4 x 3/8 IIV 8" CMU WYTHE 8" x 8" BOND BEAM w/ 2 ~ #6 CONTINUOUS TOP & BOTTOM

12" CMU WYTHE 12" x 8" BOND BEAM w/ 2 ~ #5 CONTINUOUS TOP & BOTTOM

BRICK WYTHE L 6 x 4 x 5/16 LLV 12" CMU WYTHE 12" x 8" BOND BEAM $w/2 \sim \#5$ CONTINUOUS TOP & BOTTOM MASONRY OPENING 6'-9" TO 8'-0" BRICK WYTHE 16 X 4 X 3/8 11\

12" CMU WYTHE 12" X 8" BOND BEAM W/ 2 -#6 CONTINUOUS TOP AND

INTERIOR MASONRY WALL OPENINGS

8" CMU WYTHE 8" x 8" BOND BEAM w/ 2 ~ #5 CONTINUOUS

TOP & BOTTOM 8" CMU WYTHE 8" \times 8" BOND BEAM $w/2 \sim \#5$ CONTINUOUS TOP AND TOP & BOTTOM

8" CMU WYTHE W 8 x 10 w/ BOTTOM PLATE 1/4" x 7" (FULL LENGTH)

12" CMU WYTHE W 8 x 10 w/ BOTTOM PLATE 1/4" x 11" (FULL LENGTH)

MASONRY OPFNING UP TO 4'-0 12" CMU WYTHE 12" x 8" BOND BEAM w/ 2 ~ #5 CONTINUOUS MASONRY OPENING 4'-1" TO 6'-0"

TOP & BOTTOM

12" CMU WYTHE 12" x 8" BOND BEAM w/ 2 ~ #5 CONTINUOUS

SPECIAL INSPECTIONS

- 1. SPECIAL INSPECTIONS SHALL BE PERFORMED CONTINUOUSLY OR PERIODICALLY AS REQUIRED BY CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE (IBC BUILDING CODE) AS SCHEDULED BELOW.
- 2. SPECIAL INSPECTORS SHALL BE DULY CERTIFIED TO INSPECT THE WORK
- REQUIRING THE INSPECTION AS SCHEDULED.
- 3. SPECIAL INSPECTION NOTES:
- A) THE INSPECTOR SHALL MONITOR ALL SOIL CUTTING AND FILLING AREAS UNDER THE BUILDING AND TO 10' OUTSIDE THE BUILDING AREA IN ACCORDANCE WITH TABLE 1705.6 OF THE IBC BUILDING
- B) STEEL FABRICATION SHOPS NOT CERTIFIED BY AISC WILL REQUIRE IN SHOP INSPECTION BY THE SPECIAL INSPECTOR. AISC SHOPS MAY WAIVE
- THIS REQUIREMENT. C) ALL STRUCTURAL STEEL FABRICATION SHALL BE PERFORMED IN SHOPS WITH MINIMUM OF FIVE YEARS OF SATISFACTORY
- COMPLETION OF WORK SIMILAR TO WORK ON THIS PROJECT. D) WELD CERTIFICATION PAPERS FOR ALL FIELD WELDERS SHALL BE
- E) ALL FIELD WELDING OF LIGHT GAGE MEMBERS TO STRUCTURAL STEEL PARTS SHALL BE PERIODICALLY INSPECTED.

VERIFIED BY THE SPECIAL INSPECTOR.

ENGINEER OF RECORD.

COMMENCING CONSTRUCTION.

F) SPECIAL INSPECTORS SHALL BE IN DIRECT COMMUNICATION WITH THE ENGINEER OF RECORD DURING THE INSPECTION PROCESS. G) FULL REPORTS OF ALL INSPECTIONS SHALL BE SUBMITTED TO THE

<u>DIMENSIONS</u>

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL DIMENSIONS IN THE DRAWINGS AND ADVISING THE ARCHITECT OF ANY DIFFERENCES IN THE DIMENSIONS ON THE DRAWINGS PRIOR TO
- 2. ARCHITECTURAL BACKGROUND IS SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF WALLS.

QUALITY ASSURANCE WIND AND SEISMIC SUBMITTALS

- 1) MILL TEST REPORTS FOR ALL STRUCTURAL STEEL MATERIAL SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS.
- 2) MILL TEST REPORTS FOR ALL STEEL JOISTS SHALL BE SUBMITTED WITH THE SHOP DRAWINGS FOR APPROVAL. 4) OPEN WEB STEEL JOISTS SHALL BE MANUFACTURED IN AN SJI CERTIFIED
- 5) MILL TEST REPORTS FOR ALL METAL DECK AND STRUCTURAL
- PROPERTIES OF DECK PROFILES SHALL BE SUBMITTED WITH THE SHOP DRAWINGS FOR APPROVAL. 6) ALL METAL ROOF DECK SHALL BE ROLL FORMED IN A STEEL DECK
- INSTITUTE (SDI) CERTIFIED SHOP. ALL COMPOSITE METAL FLOOR DECK SHALL BE ROLL FORMED IN A STEEL DECK INSTITUTE (SDI) CERTIFIED SHOP.
- MILL TEST REPORTS FOR ALL BOLTS AND SHEAR STUDS SHALL BE SUBMITTED FOR APPROVAL WITH THE SHOP DRAWINGS.
- 7) ALL FIELD WELDING SHALL BE PERFORMED BY WELDING PERSONNEL HOLDING CURRENT CERTIFICATION BY AWS FOR THE TYPES OF WELDING BEING PERFORMED. THE CERTIFICATION PAPERS SHALL BE EXAMINED
- AND APPROVED BY THE TESTING AGENCY. 8) TEST REPORTS FOR ALL CONCRETE MASONRY UNITS SHALL BE SUBMITTED PRIOR TO CONSTRUCTION.
- 9) TEST REPORTS FOR ALL MORTARS AND GROUTS SHALL BE SUBMITTED PRIOR TO CONSTRUCTION. 10) MILL TEST REPORTS FOR ALL REINFORCING STEEL SHALL BE
- SUBMITTED WITH THE SHOP DRAWINGS. 11) TEST REPORTS FOR ALL CONCRETE SHALL BE SUBMITTED PRIOR TO CONSTRUCTION.

BE SUBMITTED PRIOR TO CONSTRUCTION.

EXISTING CONDITIONS

RECONCILIATION.

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL EXISTING JOB CONDITIONS. ANY ADVERSE EXISTING CONDITIONS AFFECTING WORK SHOWN ON THESE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR POSSIBLE CLARIFICATION OF

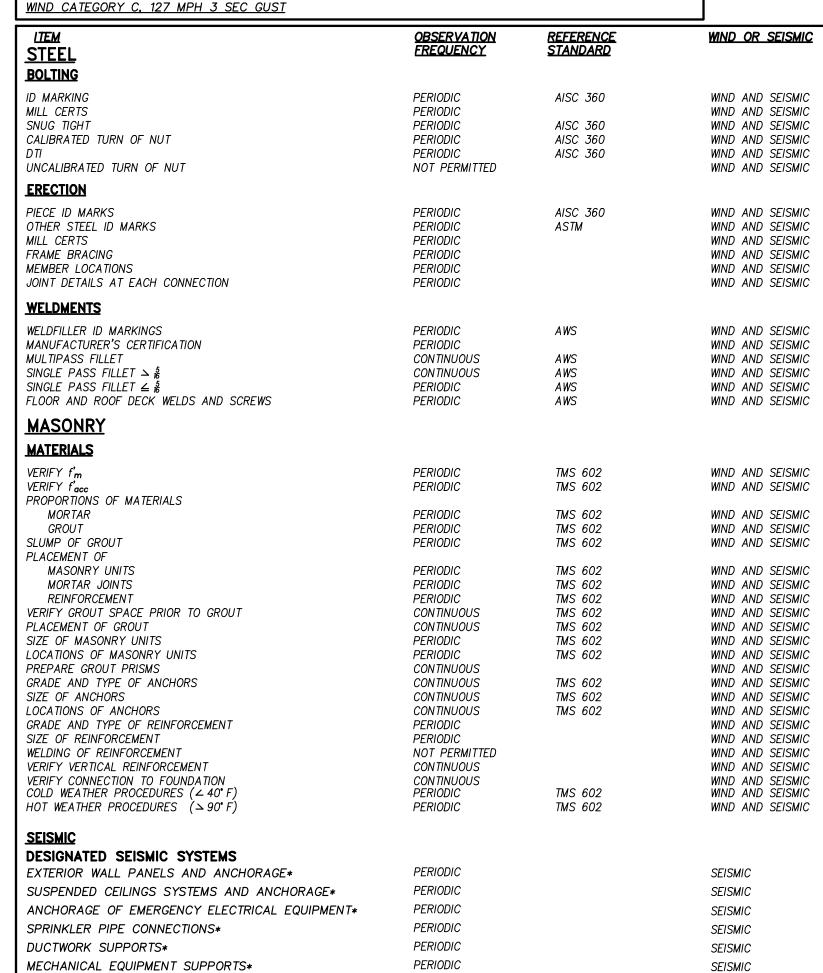
1. THESE DRAWINGS DO NOT CONTAIN THE REQUIREMENTS FOR JOB

12) TEST REPORTS FOR ALL MACRO FIBER CONCRETE REINFORCING SHALL

CONSTRUCTION SAFETY

SAFETY. ALL PROVISIONS FOR SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

<u>STATEMENT OF SPECIAL INSPECTIONS</u> QUALITY ASSURANCE FOR WIND AND SEISMIC
EACH OF THE FOLLOWING COMPONENTS (STEEL, MASONRY, DESIGNATED SEISMIC)
ARE IN EITHER THE SEISMIC OR WIND FORCE RESISTING SYSTEMS OR BOTH.
EACH REQUIRES STRUCTURAL OBSERVATION IN ACCORDANCE WITH CH.17 OF THE IBC SEISMIC DESIGN CATEGORY C



STATEMENT OF SPECIAL INSPECTIONS	<u>INSPECTION</u>	
CONCRETE	FREQUENCY	
1. INSPECTION OF REINFORCING STEEL, AND PLACEMENT.	PERIODIC	ACI 318: 3.5, 7.1–7.7
2. REINFORCING STEEL WELDING.	NOT PERMITTED	AWS D1.4, ACI 318: 3.5.2
3. INSPECTION OF BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE.	CONTINUOUS	ACI 318: 8.1.3, 21.2.8
4. INSPECTION OF ANCHORS INSTALLED IN HARDENED CONCRETE.	PERIODIC	ACI 318: 3.8.6, 8.1.3, 21.2.8
5. VERIFYING USE OF REQUIRED DESIGN MIX.	PERIODIC	ACI 318: CH.4, 5.2–5.4
6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	CONTINUOUS	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8
7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	CONTINUOUS	ACI 318: 5.9, 5,.10
8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	PERIODIC	ACI 318: 5.11–5.13
9. N/A		
10. N/A		
11. VERIFICATION OF IN—SITU CONCRETE STRENGTH, PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	PERIODIC	ACI 318: 6.2
12. INSPECT FORMWORK FOR SHAPE, LOCATOIN AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	PERIODIC	ACI 318: 6.1.1
<u>soils</u>		
 VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY. 	PERIODIC	
 VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL. 	PERIODIC	
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	PERIODIC	
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	CONTINUOUS	
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE	PERIODIC	

*VERIFY THAT THE LABEL, ANCHORAGE, OR MOUNTING CONFORMS TO THE

MANUFACTURER'S CERTIFICATE OF COMPLIANCE.

SUBGRADE AND VERIFY THAT SITE HAS BEEN

PREPARED PROPERLY.

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