			TITLE		
S	RUCTURES GENERAL NOTES)			
	SCELLANEOUS CONCRETE D	ETAILS			
	ASONRY DETAILS				
R	OF DIAPHRAGM TO MASON	IRY WAL	L DETAILS		
- -	-	-	THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		
	-		IN NO WAY WARRANTED TO INDICATE	NOT TO SCALE	

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Model: XX-GD_INDEX

OFFICE OF ENGINEERING

ILLUMINATION **GUIDE SHEET INDEX**

GUIDE SHEET NO.:

*R**EVISE**D OR ADD**E**D

CODES AND REFERENCES

1.	. A BI	LL WORK SHALL CONFORM TO THE STATI UILDING CODE AND THE CONTRACT DOCU	e of conn Jments.	ECTICUT
	D	ESIGN LOADS		
1	. R(a. b. c. d.	OOF SNOW LOAD GROUND SNOW LOAD, Pg = 30 PSF. FLAT-ROOF SNOW LOAD, Pf = 30 PSF. EXPOSURE FACTOR, Ce = 1.0 SNOW IMPORTANCE FACTOR, Is = 1.2		
2	. W a. b.	IND LOAD BASIC WIND SPEED, 110 MPH. WIND IMPORTANCE FACTOR, IW = 1.1 EXPOSURE B	5	
3	a. b. cd. e. f. g. h. i. j.	STEEL BRACED FRAME REINFORCED CMU SHEAR WALLS RESPONSE MODIFICATION FACTOR, R = DEFLECTION AMPLIFICATION FACTOR, C ANALYSIS PROCEDURE UTILIZED - EQUI LATERAL FORCE PROCEDURE SEISMIC DESIGN CATEGORY C. SEISMIC LOAD FACTORS, SDs = 0.2504,	5 d = 2 ¹ / ₂ VALENT	
		GENERAL NOTES		
	1.	THE STRUCTURAL DRAWINGS SHALL BE C OTHER DISCIPLINE DRAWINGS AND WIT MANUFACTURERS TO ENSURE THAT OPEN ROOF AND WALLS ARE PROVIDED WITH APPURTENANT FRAMING OR SUPPORT SY	H EQUIPME NINGS IN T THE REQU	NT THE
	2.	DIMENSIONS AND DETAILS RELATED TO LOCATION OF EQUIPMENT SHALL BE VER EQUIPMENT MANUFACTURER PRIOR TO C	IFIED WITH	1 THE
	3.	SIZES AND LOCATIONS OF EMBEDDED N ELECTRICAL FIXTURES SHALL BE VERIFIE CONSTRUCTION.		
	4.	METHODS, PROCEDURES AND SEQUENCES THE RESPONSIBILITIES OF THE CONTRACT IS RESPONSIBLE FOR IDENTIFYING AND NECESSARY PRECAUTIONS TO MAINTAIN INTEGRITY OF THE STRUCTURE AT ALL CONSTRUCTION.	TOR. THE (D IMPLEME AND ENSU	CONTRACTOR NTING THE JRE THE
	5.	TEMPORARY BRACING, SHEETING, SHORIN SAFETY PRECAUTIONARY MEASURES DUR THE RESPONSIBILITIES OF THE CONTRAC DESIGNED BY A REGISTERED PROFESSION BY HIM.	ING CONST TOR AND	R UCTION ARE SHALL BE
	6.	THE CONTRACTOR SHALL REPAIR, AT THE ANY DAMAGE TO THE STRUCTURES AND TO CONTRACTOR'S CONSTRUCTION OPER	APPUR TEN	XPENSE, Ances due
	7.	THE IMPLEMENTATION OF JOB SAFETY SI RESPONSIBILITY OF THE CONTRACTOR.	HALL BE TH	IE
	<u>C(</u>	DNCRETE		
	1.	FOUNDATIONS SHALL BE PLACED ON 12 OF COMPACTED GRANULAR FILL IN ACCO SECTION 2.13. COMPACTION SHALL BE D EXTEND THE LIMITS OF GRANULAR FILL HORIZONTALLY OUTSIDE THE ENTIRE FOO BUILDING. THE AREA OUTSIDE OF THE L FILL IS TO HAVE THE FOUNDATION PREF ACCORDANCE WITH FORM 816 SECTION	ORDANCE W DONE STATI BY 2 FEET DTPRINT OF IMITS OF (PARATION 1	ITH FORM 816, ICALLY. F THE GRANULAR
	2.	SLAB-ON-GRADE SHALL BE PLACED ON 8 OF PROCESSED AGGREGATE BASE IN FORM 816, SECTION 2.13. COMPACTION	ACCORDANC	CE WITH
	3.	PROVIDE RIGID INSULATION AT EXTERIO AND VAPOR BARRIER UNDER SLAB-ON-G SHOWN ON THE STRUCTURAL PLANS.	DR WALLS RAD E (TY P.	(TYP.)), AS
	4.	THE CONTRACTOR SHALL COORDINATE T OF FOUNDATION EXPANSION JOINTS AND CONTROL JOINTS. CONTROL JOINTS FOR BE PLACED AT LOCATIONS WHERE EXPAN OCCUR IN THE FOUNDATION.	D MASONRY MASONRY	/ SHALL
		CONSTRUCTION JOINTS IN THE FOUNDA SHALL BE PROVIDED AT A MAXIMUM SP	ACING OF	50 FT.
		REINFORCED CONCRETE SHALL BE IN AC ACI 318 "BUILDING CODE REQUIREMENTS CONCRETE".	5 FOR REIN	IFORCED
	7.	ALL CAST-IN-PLACE CONCRETE SHALL BE AND SHALL BE CLASS 'F' IN ACCORDANC SECTION M.03. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4,000 PSI.	E WITH FO	R M 816,
	-	-	-	THE INFORMATION, INCLUDI

CONFORMING TO ASTM A615, GRADE 60.

WORK.

ASTM A185.

AS SHOWN ON THE STRUCTURAL PLANS.

CHAMFER, UNLESS OTHERWISE NOTED.

FOOTINGS - 3" FOUNDATION WALLS AND PIERS - 2" SLAB ON GRADE - 2"

STEEL

- 1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF AISC "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- 2. STRUCTURAL SHAPES AND PLATES SHALL CONFORM TO ASTM A992 50 KSI, STEEL, UNLESS OTHERWISE NOTED.
- 3. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF AWS D1.1, USING E7018 ELECTRODES.
- 4. WHERE WELD SIZES ARE NOT SPECIFIED, A MINIMUM WELD SIZE SHALL BE USED IN ACCORDANCE WITH THE REQUIREMENTS OF AWS D1.1
- 5. WELDS SHALL BE VISUALLY INSPECTED, UNLESS OTHERWISE NOTED.
- 6. SHOP AND FIELD WELDS SHALL BE INSPECTED BY AN AWS-CERTIFIED WELDING INSPECTOR HIRED BY THE CONTRACTOR.
- 7. BOLTS SHALL BE $\frac{3}{4}$ " DIAMETER ASTM A325-X WITH $\frac{13}{16}$ " DIAMETER HOLES, UNLESS OTHERWISE NOTED. ALL BOLT CONNECTIONS SHALL BE SLIP-CRITICAL UNLESS OTHERWISE NOTED.
- 8. ALL A325 BOLTS SHALL BE PRETENSIONED, UNLESS OTHERWISE NOTED. TENSION-CONTROL (TC) BOLTS ARE ALSO ACCEPTABLE.
- 9. BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS.
- 10. ALL STRUCTURAL STEEL SHALL BE PRIMED AND PAINTED IN CONFORMANCE WITH THE CONTRACT SPECIFICATIONS.
- 11. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554, UNLESS OTHERWISE NOTED.
- 12. COLUMN BASE PLATES SHALL BE LEVELED USING DOUBLE NUTS AND GROUT.
- 13. THE CONTRACTOR SHALL COMPLY WITH OSHA SAFETY STANDARD FOR STEEL ERECTION, EFFECTIVE JANUARY 18, 2002.

MASONRY

- 1. MASONRY DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 530, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES".
- 2. CONCRETE BLOCK UNITS SHALL BE TYPE I, LIGHTWEIGHT, LOAD BEARING CONCRETE MASONRY UNITS CONFORMING TO ASTM C90 FOR HOLLOW BLOKS AND ASTM C145 FOR SOLID BLOCKS.
- 3. CONCRETE MASONRY UNITS SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH (fm) OF 1,900 PSI.
- 4. ALL REINFORCED CELLS SHALL BE CONTINUOUSLY GROUTED. GROUT IS TO CONFORM TO ASTM C476 AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

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-	-	-			-	OF WORK WHICH WILL BE REQUIRED.		
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- 8. REINFORCING BARS SHALL BE DEFORMED BILLET STEEL
- 9. COORDINATE PLANS WITH THE CIVIL, MECHANICAL AND ELECTRICAL DRAWINGS FOR MISCELLANEOUS CONCRETE
- 10. WELDED WIRE REINFORCEMENT SHALL CONFORM TO
- 11. REINFORCEMENT DETAILS SHALL CONFORM TO ACI 318. ALL CONCRETE REINFORCEMENT SPLICES SHALL BE ACI 318 CLASS 'B' SPLICES, UNLESS OTHERWISE NOTED.
- 12. ADDITIONAL REINFORCEMENT AT PENETRATIONS THROUGH REINFORCED CONCRETE WALLS AND SLABS SHALL BE PROVIDED
- 13. EXPOSED CORNERS OF CONCRETE SHALL HAVE A $\frac{3}{4}$ " X $\frac{3}{4}$ "
- 14. NON-SHRINK GROUT UNDER BASE PLATES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 6,000 PSI.
- 15. REINFORCING CLEAR COVER, UNLESS OTHERWISE NOTED:
- 16. CONCRETE MIX DESIGN WITH ADMIXTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.



- 5. MORTAR FOR CONCRETE BLOCK SHALL BE TYPE S, CONFORMING TO ASTM C270, AS SPECIFIED, UNLESS OTHERWISE NOTED. THE FIRST COURSE OF BLOCK SHALL BE PLACED USING A FULL MORTAR BED. FOR EXTERIOR BRICK VENEER MORTAR SHALL BE TYPE N, CONFORMING TO ASTM C270.
- 6. MASONRY WALLS WITH A HEIGHT GREATER THAN 12 FT. SHALL BE LATERALLY SUPPORTED AT THE TOP AS SPECIFIED ON THE STRUCTURAL DRAWINGS USING ANGLES ATTACHED TO STRUCTURAL STEEL OR ROOF DECKING, UNLESS OTHERWISE NOTED. THE ATTACHMENT SHALL ALLOW VERTICAL MOVEMENT (DEFLECTION) OF THE DECK AND JOIST, UNLESS OTHERWISE NOTED. ALL MASONRY WALLS SHALL BE APPROPRIATELY SHORED DURING CONSTRUCTION TO RESIST ALL DESIGN WIND LOADING.
- 7. BOND BEAMS WITH TWO (2) #5 BARS SHALL BE PROVIDED AT THE TOP OF ALL MASONRY WALLS, UNLESS OTHERWISE NOTED.
- 8. LINTELS SHALL BE PROVIDED AT ALL MASONRY OPENINGS AS SHOWN ON THE STRUCTURAL PLANS OR AS REQUIRED DUE TO ELECTRICAL OR MECHANICAL PENETRATIONS, UNLESS OTHERWISE NOTED.
- 9. PROVIDE ONE (1) #5 REBAR EACH SIDE OF ALL OPENINGS WITHIN MASONRY, OR CELLS ADJACENT TO STRUCTURAL STEEL OR CONTROL JOINTS. REBAR SHALL EXTEND 2 FEET BEYOND OPENING, OR BE HOOKED IF APPROVED BY THE DESIGNER.
- 10. ALL VISIBLE JOINTS SHALL BE SEALED. PROVIDE BACKER ROD.
- 11. PROVIDE CONTROL JOINTS IN MASONRY AS SHOWN ON THE PLANS AND AS CALLED FOR WITHIN THE CONTRACT SPECIFICATIONS.
- 12. WHERE MASONRY IS ADJACENT TO STRUCTURAL STEEL, FLEXIBLE ANCHORS, COMPRESSIBLE JOINT FILLER MATERIAL AND JOINT SEALANT SHALL BE USED.
- 13. MASONRY REINFORCEMENT SPLICES SHALL CONFORM TO UNLESS OTHERWISE SHOWN.
- 14. UNFINISHED WALLS AT THE END OF A WORKDAY SHAL TO PREVENT INFILTRATION OF WATER.

STEEL JOIST

- 1. STEEL JOISTS SHALL BE INSTALLED IN ACCORDANCE THE THE SJI STANDARD SPECIFICATIONS FOR STEEL JOIST CONSTRUCTION, UNLESS OTHERWISE NOTED. WELDERS MUST BE AWS-CERTIFIED.
- 2. WHERE THE BOTTOM OF A JOIST IS TO BE ATTACHED T BEAM, COLUMN OR WALL, THE ATTACHMENT SHALL BE MA AFTER THE ROOF SYSTEM HAS BEEN INSTALLED AND ATTAINED FULL DEAD LOAD DEFLECTION.
- 3. MISCELLANEOUS SUPPORTS ATTACHED TO JOISTS SHALL LOCATED AT THE PANEL POINTS (NODES) AND SHALL NO IMPOSE LOADS EXCEEDING 200 POUNDS.
- 4. ALL JOIST EXTENSIONS SHALL BE PROVIDED AS INDICAT THE PLANS OR AS REQUIRED FOR COMPLETE INSTALLATION
- 5. ALL JOISTS SHALL BE ANCHORED DOWN AT BEARING POI SHOWN ON THE STRUCTURAL PLANS.
- 6. STABILIZER PLATES SHALL BE INSTALLED AT THE TWO E JOISTS AND AT EVERY THIRD INTERIOR JOIST SUCH THAT MAXIMUM DISTANCE BETWEEN STABILIZED JOISTS IS 16
- 7. JOISTS SHALL BE DESIGNED FOR 15 LBS. PER SQUARE F OF NET UPLIFT FORCE.
- 8. THE JOIST MANUFACTURER SHALL VERIFY THE WEIGHTS O EOUIPMENTS (UNIT HEATERS, ETC.) AND POINTS OF SUPP FOR THE PURPOSE OF SPECIAL JOIST MANUFACTURE, WHE APP**LIC**AB**LE**.

METAL DECKING

- 1. ALL STEEL DECK SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO THE SDI "SPECIFICATIONS FOR COMPOSITE DECKS, FORM DECKS, ROOF DECKS AND CELLULAR METAL FLOOR DECK WITH ELECTRICAL DISTRIBUTION," AND SHALL BE INSTALLED ACCORDING TO THE PROVISIONS AS OUTLINED WITHIN THE CONTRACT SPECIFICATIONS.
- 2. ALL STEEL DECK SHALL COMPLY WITH ASTM A446, AND SHALL BE GALVANIZED PER ASTM A525, COATING DESIGNATION G90.
- 3. METAL DECKING SHALL BE ATTACHED AS SPECIFIED IN SPECIFICATION SECTION 053100 OF THE CONTRACT SPECIFICATIONS.
- 4. ROOF DECK SHALL BE 1¹/₂" WIDE RIB, 18 GAUGE STEEL TYPE B, WITH MINIMUM YIELD STRENGTH OF 33 KSI. -SUPPORT FASTENERS: 5/8" PUDDLE WELDS, -SIDELAP FASTENERS: 2-#10 TEK SCREWS
- 5. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIRMENTS OF AWS D1.3.
- 6. ALL PUDDLE WELD BLOWOUTS MUST BE PATCHED.

RO**JECT TITLE**

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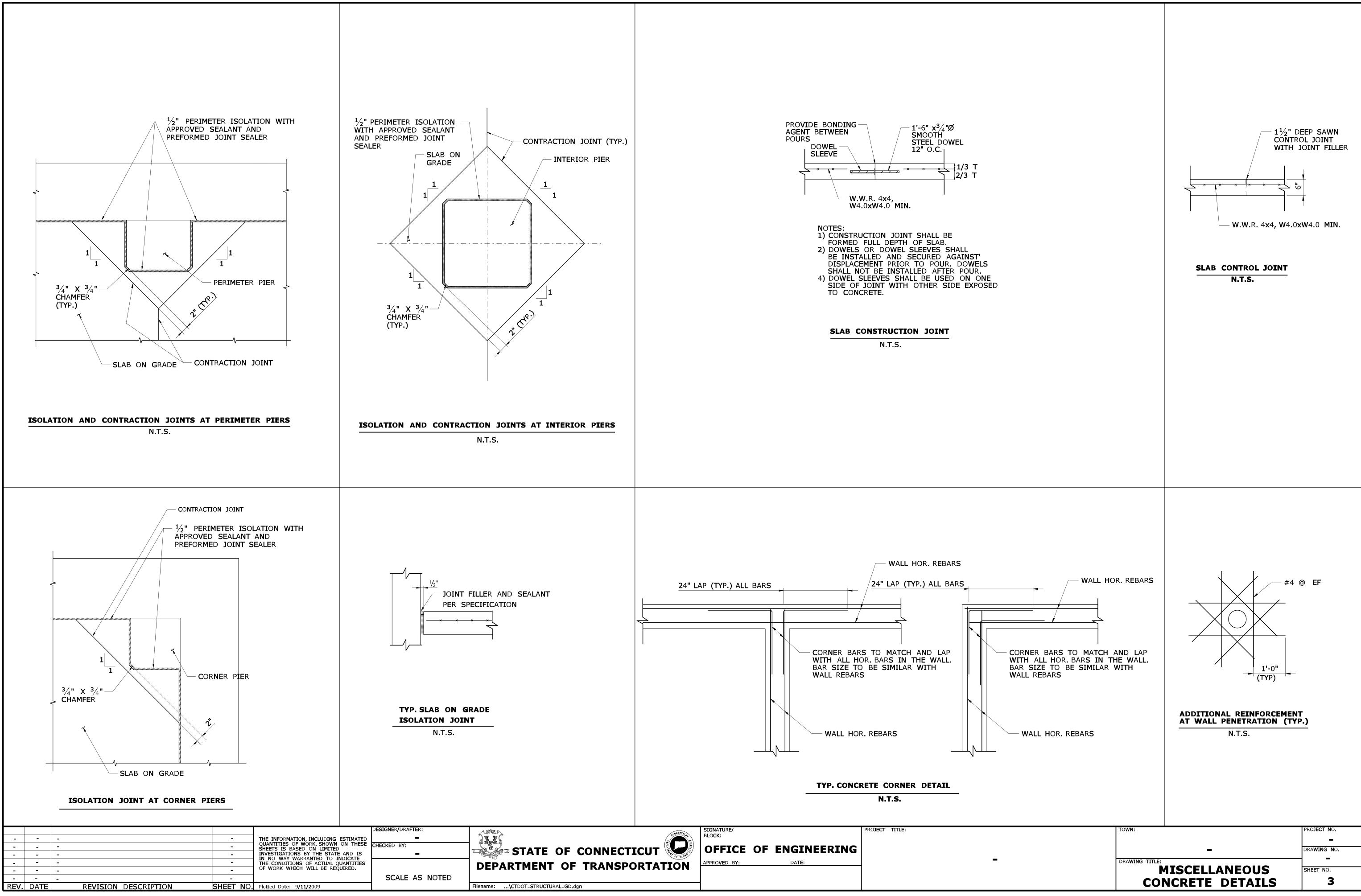
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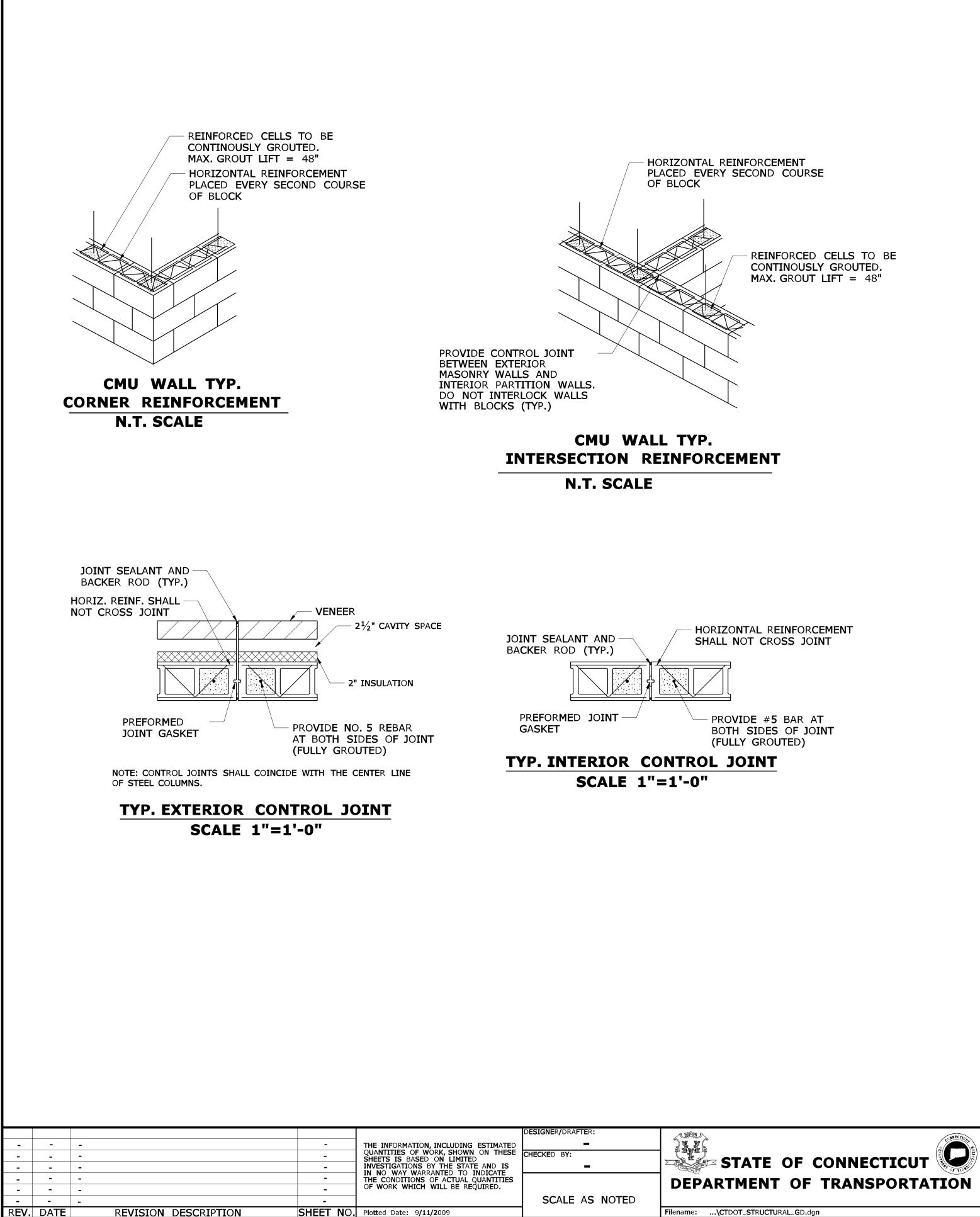
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ABBREVIATIONS

E	BR G B FE BO S	BEARING BOTTOM OF FOOTING ELEVATION BOTTOM OF STEEL
HE	C CJ CLR COL CONC CONC CONC BLK CONT	CENTER LINE CONTROL (CONTRACTION) JOINT CLEAR COLUMN CONCRETE CONCRETE BLOCK CONTINUOUS
	D ET DIA; Ø DL	D ETAIL DIAMETER DOUBLE ANGLE
N ,	ea El Eq Ej Ew	EACH ELEVATION EQUAL EXPANSION (ISOLATION) JOINT EACH WAY
NS	FH FV FF FT	FLIPPED HORIZONTALLY FLIPPED VERTICALLY FINISH FLOOR FOOT
	GRT	GIRT
O A CI 53 0,	HP HT	HIGH POINT HEIGHT
LL BE COVERED	JT	JOINT
	LP	LOW POINT
E	MAINT MATL MET MFR MIN M.O.	MAINTENANCE MATERIAL METAL MANUFACTURER MINIMUM MASONRY OPENING
το Α	NTS	NOT TO SCALE
ADE	0 .C. OH	ON CENTER OVERHEAD
BE	PL	PLATE
OT TED ON	R EINF R E Q R.O.	R EINF OR CE D REQUIRED ROUGH OPENING
TON. DINTS AS	SECT SIM SP SQ STRUCT	SECTION SIMILAR SPECIAL SQUARE STRUCTURAL
AT THE 6'-6". FOOT OF PORTS IERE	T & B TOC TOCh TOB TOG TOJ TOKW TOS TS TYP	TOP AND BOTTOM TOP OF CONCRETE TOP OF CHANNEL TOP OF BEAM TOP OF GRATE TOP OF GRATE TOP OF JOIST TOP OF KNEEWALL TOP OF STEEL STRUCTURAL STEEL TUBING TYPICAL
	UON UOS	UNLESS OTHERWISE NOTED UNLESS OTHERWISE SHOWN
	W/ WWR	WITH WELDED WIRE REINFORCEMENT

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NOTES & ABBREVIATIONS	2





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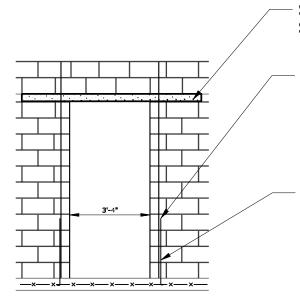
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1. CONTRACTOR SHALL SUPPLY LOOSE ANGLE LINTELS OVER ALL MASONRY OPENINGS AND RECESSES U.N.O. LINTELS NOT SCHEDULED ON DRAWINGS SHALL CONSIST OF SINGLE ANGLE WITH $3\frac{1}{2}$ INCH LEG HORIZONTAL FOR EACH 4 INCH OF WALL THICKNESS, ANGLES SHALL BE AS FOLLOWS: 2. EXTERIOR LINTELS SHALL BE GALVANIZED. 3. ALL DOUBLE ANGLES OVER 5'-0" LONG ARE TO BE BOLTED @ 3'-0" O.C.

MASON **3'-**0" OR OVER 3 O**VE**R 6'



STEEL LINTEL SEE SCHEDULE

ADD 1 # 5 VERT. EACH SIDE OF ALL OPENINGS. REBAR SHOULD EXTEND 2'-0" ABOVE OPENING ADD 1 # 5 DOWELL EACH SIDE OF ALL OP**ENINGS**

INTERIOR MASONRY WALL OPENING SCALE 1"=1'-0"

LOOSE LINTEL SCHEDULE FOR NON-LOAD BEARING MASONRY WALLS

NRY OPENING	ANGLE SIZE	BEARING EACH END
R LESS	3 ¹ ⁄ ₂ " x 3 ¹ ⁄ ₂ " x ⁵ ⁄ ₁₆ "	8"
3'- 0" T O 6'-0"	5" x 3 ¹ / ₂ " x ⁵ / ₁₆ "	8"
6'-0" T O 8'-0"	6" x 3 ¹ / ₂ " x ⁵ / ₁₆ "	8"

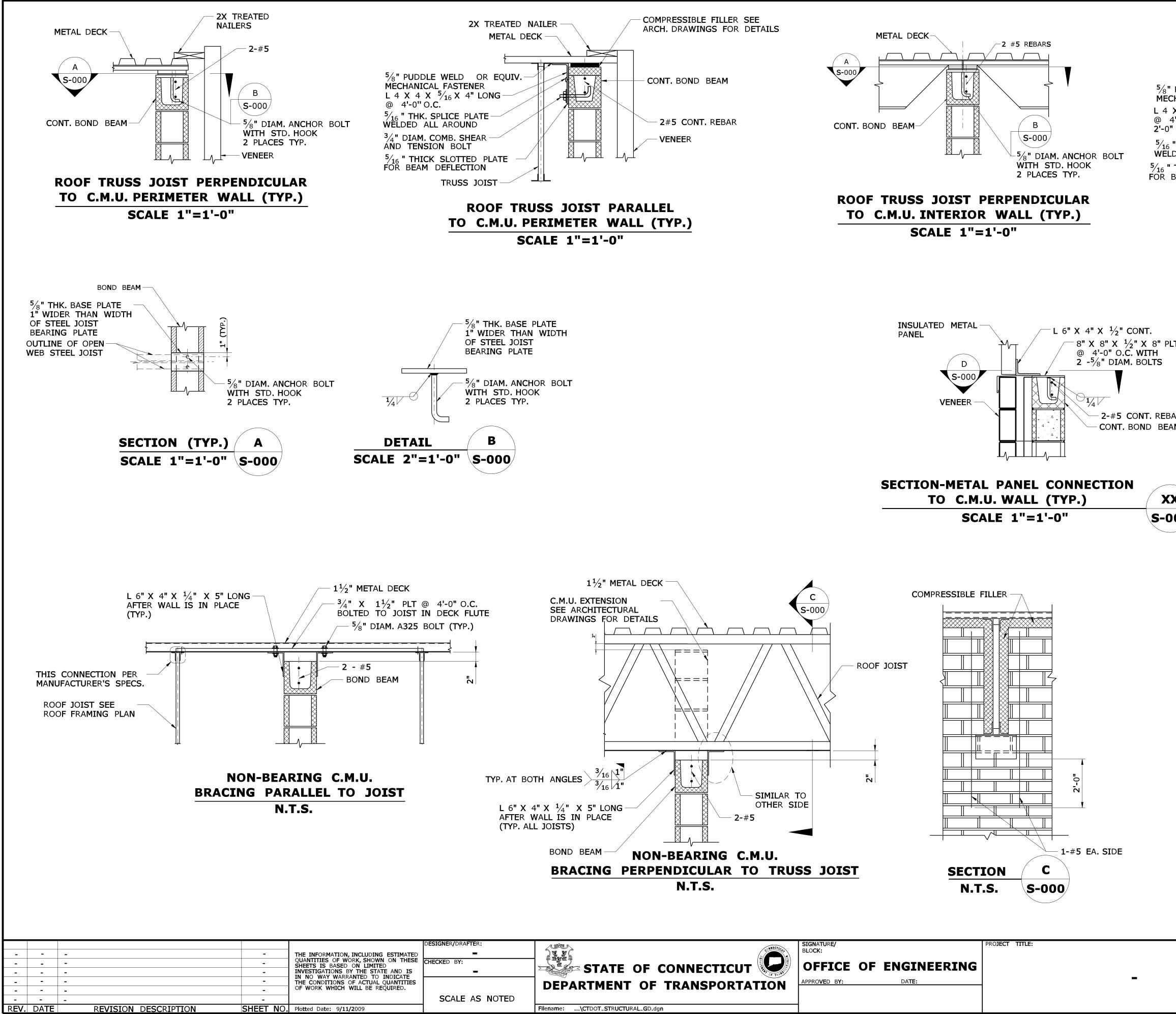
4. ALL ANGLES LONG LEG VERTICAL, UON.

5. PROVIDE MIN. 6" BEARING ON BRICK OR SOLID

CONCRETE BLOCK. 6. PROVIDE MIN.8" x WALL THICKNESS x 8" HIGH

- GROUTED CMU OR BRICK BEARING PAD UNDER ALL LINTELS, UON. GROUT JAMBS OF MASONRY OPENINGS 6'-0' OR LARGER FULL HEIGHT FOR 8" MIN. WIDTH.
- 7. AT OPENINGS FOR 6" CMU USE PLT. 5" X 1" WITH BEARING OF MIN. OF 8" AT EACH END

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DRAWING TITLE:	DRA WING N O.
MASONRY DETAILS	sheet no. 4



METAL DE	ECK —	FILLER, FOR DE		SIBLE INGS
PUDDLE WELD OR EQU CHANICAL FASTENER X 4 X ⁵ / ₁₆ X 4" LONG 4'-0" O.C. STAGGERED ' O.C. OPP. SIDES " THK. SPLICE PLATE DED ALL AROUND THICK SLOTTED PLATE BEAM DEFLECTION			ONT. REBAR RUSS JOIST IAM. COMB. SHE TENSION BOLT . BOND BEAM	AR
	F TRUSS J M.U. INTER			
	SCALE :	1"=1'-0"		
.т.	8" BOND BEAM- ¹ ⁄2" THK. PLT			ED
L 6" X 4" X Ar M	(¹ / ₂ " CONT.	PLAN		
X 000	SCAL	E 1/2"=1'·	-0" S-000	$\overline{\mathcal{V}}$
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