GENERAL NOTES:

1) CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE PROJECT SITE PRIOR TO STARTING WORK AND SHALL NOTIFY THE ARCHITECT AND/OR STRUCTURAL ENGINEER IMMEDIATELY OF ANY DISCREPANCIES. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY EXISTING SITE CONDITIONS THAT ARE NOT CONSISTENT WITH THE CONSTRUCTION DOCUMENTS.

2) ALL REFERENCED STANDARDS REFER TO THE LATEST EDITION.

3) DESIGN CRITERIA:
   A) BUILDING CODE: IBC 2012 WITH GEORGIA AMENDMENTS
   B) FLOOR LIVE LOAD: 100 PSF
   C) ROOF LIVE LOAD: 20 PSF
   D) GROUND SNOW LOAD: 0 PSF
   E) RISK CATEGORY: III
   F) WIND LOAD DATA:
      1) V: 142 MPH
      2) WIND EXPOSURE FRONT: B
      3) WIND EXPOSURE BACK: B
      4) INTERNAL PRESSURE COEFF: + - .18
      5) EDGE ZONE DISTANCE: 11'-6"
      6) COMPONENTS AND CLADDING LOADS (PSF):
         a) ROOF INTERIOR ZONE: 9.66 -21.76
         b ROOF EDGE ZONE: 9.60 -36.52
         c) ROOF CORNER EDGE ZONE: 9.60 -54.96
         d) WALL INTERIOR ZONE: 19.92 -21.58
         e) WALL EDGE ZONE: 19.92 -26.56
   H) EARTHQUAKE DESIGN DATA:
      1) SEISMIC IMPORTANCE FACTOR: 1.25
      2) SS: 0.324
      3) S1: 0.124
      4) SDS: 0.333
      5) SD1: 0.190
      6) SITE CLASS: D
      7) SEISMIC DESIGN CATEGORY: C
      8) RESPONSE MODIFICATION FACTOR R: 3.5
      9) SEISMIC RESPONSE COEFFICIENT CS: 0.119
      10) DESIGN BASE SHEAR: 298.5 kips
      11) BASIC SEISMIC FORCE RESISTING SYSTEM: INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
      12) ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE
   I) FLOOD LOADS: NOT APPLICABLE
   J) DESIGN SOIL BEARING PRESSURE: 1500 PSF

4) THE DESIGN LOADING INFORMATION PROVIDED IS FOR INFORMATIONAL PURPOSES ONLY. ALL COMPONENTS, CLADDING, FINISHES, VENEERS, MECHANICAL UNITS, ARCHITECTURAL FEATURES, ETC. SHALL BE DESIGNED FOR ADEQUATE CONNECTIVE CAPABILITY UNDER CODE SPECIFIED LOADING. THESE MANUFACTURER'S SHALL BE RESPONSIBLE TO DETERMINE THE REQUIRED LOADING CONDITIONS FOR THEIR PRODUCT, INCLUDING ANY SUPERIMPOSED LOADS, DEAD LOADS, CONCENTRATED LOADS AND ANY LOADS SHOWN ON THE PLANS.

5) ALL STRUCTURAL COMPONENTS AND SYSTEMS SHALL BE DESIGNED FOR THE FOLLOWING DEFLECTION LIMITS, UNLESS NOTED OTHERWISE ON THE PLANS AND DETAILS.

SYSTEM	D+L*	L*	W OR S*
WALLS W/ FLEXIBLE FINISH	N/A	N/A	L/240
WALLS W/ BRITTLE FINISH	N/A	N/A	L/480
WALLS W/ BRICK VENEER	N/A	N/A	L/600
ROOF BEAMS OR JOISTS	L/180	L/240	L/180
ROOF TRUSSES OR GIRDERS	L/240	L/360	L/240
WINDOW HEADERS	L/480	L/600	MATCH WALL
FLOOR JOIST OR BEAMS	L/360	L/360	N/A
FLOOR GIRDERS	L/480	L/480	N/A

*D = DEAD LOAD; L = LIVE LOAD; W = WIND LOAD; S = SEISMIC LOAD

6) CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL DISCIPLINES, INCLUDING BUT NOT LIMITED TO GROUNDING WIRES, CONDUITS, PIPE AND DUCT PENETRATIONS, ELECTRICAL, MECHANICAL AND PLUMBING OPENINGS, EQUIPMENT LOADS, ETC. SEE ARCHITECTURAL, CIVIL, ELECTRICAL AND MECHANICAL DRAWINGS FOR ITEMS NOW SHOWN ON THE STRUCTURAL DRAWINGS.

7) THE CONTRACTOR SHALL PROTECT ANY EXISTING FACILITIES, UTILITIES OR STRUCTURES FROM ALL DAMAGE.

8) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND ERECTION OF ALL TEMPORARY BRACING AND SHORING AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.

9) CONTRACT DRAWINGS, DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, SHORING AND TEMPORARY BRACING.

10) DO NOT SCALE THE DRAWINGS.

11) THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO ENSURE THE SAFETY OF ALL PERSONS AND STRUCTURES AT THE SITE AND ADJACENT TO THE SITE. VISITS TO THE SITE BY THE STRUCTURAL ENGINEER OR THE STRUCTURAL ENGINEER'S REPRESENTATIVE SHALL NOT RELIEVE THE CONTRACTOR OF THIS RESPONSIBILITY.

12) CONTRACTOR SHALL NOTIFY STRUCTURAL ENGINEER AND ARCHITECT OF ANY UNUSUAL AND OR EXCESSIVE LOADS DUE TO EQUIPMENT OR CONSTRUCTION REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER OR ARCHITECT OF ANY LOADS FROM EQUIPMENT HAT ARE DIFFERENT FROM THE DESIGN LOADS SHOWN ON THESE PLANS.

13) THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL CONSTRUCT THIS PROJECT IN ACCORDANCE WITH ALL APPLICABLE BUILDING CODES AND ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, LAWS AND REGULATIONS.

14) WORK NOT INDICATED AS PART OF THE DRAWINGS BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT AT CORRESPONDING PLACES SHALL BE REPEATED.

15) IN CASE OF CONFLICT BETWEEN THE DRAWINGS AND/OR SPECIFICATIONS, THE MORE RIGID REQUIREMENT SHALL BE ASSUMED TO GOVERN UNTIL A RULING IS MADE BY THE ARCHITECT/ ENGINEER.

16) THE CONTRACTOR SHALL REFER TO ELECTRICAL, MECHANICAL, ARCHITECTURAL AND OTHER DISCIPLINES DRAWINGS FOR LOCATIONS OF ALL OPENINGS. CONTRACTOR IS RESPONSIBLE TO COORDINATE THESE DRAWINGS WITH THE DRAWINGS OF OTHER DISCIPLINES. THE STRUCTURAL ENGINEER AND ARCHITECT SHALL BE IMMEDIATELY NOTIFIED OF ANY OPENINGS FOUND BY THIS COORDINATION THAT ARE REQUIRED IN THE STRUCTURAL MEMBERS. NO CUTS OR MODIFICATIONS OF ANY MEMBERS SHALL BE MADE THAT ARE NOT APPROVED BY THE STRUCTURAL ENGINEER.

17) THE ENGINEER'S APPROVAL OF SHOP DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DEVIATIONS FROM REQUIREMENTS IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS. DEVIATION FROM THE CONTRACT DOCUMENTS SHALL BE SUBMITTED SEPARATELY FOR APPROVAL.

18) THE CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS IN A TIMELY MANNER, ALLOWING THE ENGINEER AT LEAST TWO WEEKS TO REVIEW THE SHOP DRAWINGS. THE CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS IN A DIGITAL PDF FORMAT. ANY ITEMS NOT SPECIFICALLY DESIGNED OR DETAILED ON THESE DESIGN DRAWINGS SHALL BE SUBMITTED WITH CALCULATIONS TO THE STRUCTURAL ENGINEER FOR REVIEW.

19) PRIOR TO SUBMITTING ANY ITEMS FOR APPROVAL, INCLUDING SHOP DRAWINGS, THE CONTRACTOR SHALL REVIEW THE MATERIALS AND COORDINATE ALL TRADES. ALL COORDINATION REQUIREMENTS SHALL BE NOTED ON THE SUBMITTALS. NO SUBMITTALS OR OTHER ITEMS FOR REVIEW SHALL BE FORWARDED TO THE STRUCTURAL ENGINEER OR ARCHITECT UNTIL THEY HAVE BEEN REVIEWED AND APPROVED BY THE CONTRACTOR.

20) SUBMITTALS SHALL NOT BE THE REPRODUCTION OF THE CONTRACT DOCUMENTS.

21) THE CONTRACTOR SHALL NOT PROCEED WITH FABRICATION WITHOUT APPROVED SHOP DRAWINGS.

22) THE CONTRACTOR SHALL VERIFY SIZES AND LOCATIONS OF ALL SLOTS, PIPE SLEEVES, ANCHOR BOLTS, ETC. AS REQUIRED FOR ALL TRADES PRIOR TO CONSTRUCTION.

23) SEE MECHANICAL, PLUMBING, FIRE PROTECTION, HVAC, ELECTRICAL AND OTHER TRADES DRAWINGS FOR ADDITIONAL INFORMATION AFFECTING THE STRUCTURAL WORK, INCLUDING:
   A) HANGERS, SUSPENDED PIPING, SUSPENDED EQUIPMENT, SUSPENDED DUCT WORK.
   B) ELECTRICAL CONDUIT, ELECTRICAL BOXES
   C) INSERTS, EMBEDMENTS AND OTHER SUPPORTED EQUIPMENT
   D) SLAB ON GRADE OR FLOOR EQUIPMENT AND ANCHORS
   E) UNDERGROUND DUCT, ELECTRICAL TRENCHES, PITS, MANHOLES, PIPING
   F) SEISMIC TIES FOR EQUIPMENT REQUIRING ADDITIONAL SEISMIC STABILITY

24) ONCE THE PROJECT IS COMPLETED, IT IS THE OWNER'S RESPONSIBILITY TO PROVIDE THE APPROPRIATE MAINTENANCE TO PROTECT THE STRUCTURAL INTEGRITY OF THE STRUCTURE. AS PART OF THE CONTRACT, THE CONTRACTOR IS REQUIRED TO INFORM THE OWNER(S) OF THIS IN WRITING.

25) THE STRUCTURAL DESIGN OF THIS BUILDING TAKES INTO CONSIDERATION THE ANTICIPATED GRAVITY, LATERAL AND UPLIFT LOADS BASED ON SOUND ENGINEERING JUDGEMENT. THE ENGINEER OF RECORD RESERVES THE RIGHT TO VERIFY AND MODIFY THE STRUCTURE AS NEEDED AS A RESULT OF THESE LOADS IN THE SHOP DRAWING PROCESS.

26) THESE STRUCTURAL PLANS ARE BASED ON THE LATEST INFORMATION PROVIDED TO THE STRUCTURAL ENGINEER PRIOR TO THE DATE ON THESE DRAWINGS. IF THERE IS A CONFLICT BETWEEN THESE DRAWINGS AND ANY OTHER DISCIPLINE'S DRAWINGS OR A CHANGE HAS BEEN MADE TO THIS JOB AFTER THE DATE OF THESE DRAWINGS, THE CONTRACTOR SHALL CONTACT THE ARCHITECT AND THE STRUCTURAL ENGINEER TO INSURE THESE CHANGES ARE INCORPORATED INTO THE STRUCTURAL PLANS.

27) THE ARCHITECT OF RECORD SHALL BE COPIED ON ALL EMAILS.

CONCRETE NOTES:

1) ALL CONCRETE SHALL CONFORM TO ACI 301.

2) ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICALE ACI CODE.

3) ALL CONCRETE SHALL HAVE THE FOLLOWING STRENGTHS:
   A) SLABS AND FOOTINGS: 3000 PSI
   B) SIDEWALKS: 2500 PSI

4) SUBMIT MIX DESIGN TO ENGINEER FOR APPROVAL.

5) THE CONCRETE SLUMP SHALL FALL WITHIN THE FOLLOWING RANGES:
   A) FOOTINGS AND SLABS: 4 TO 6 INCHES
   B) WALLS: 5 TO 7 INCHES

6) THE CONCRETE AIR ENTRAINMENT SHALL FALL WITHIN THE FOLLOWING RANGES:
   A) FOOTINGS AND SLABS: 1 TO 4%
   B) SIDEWALKS: 5 TO 7%
   C) STRUCTURAL CONCRETE SUBJECTED TO FREEZE AND THAW ACTION: 5 TO 7%

7) FLYASH MAY BE USED IN THE CONCRETE MIX. FLYASH SHALL ONLY BE USED AS A 2 TO 1 REPLACEMENT OF CEMENT (2 FLYASH PER 1 POUND CEMENT) UP TO 120 POUNDS OF FLYASH MAXIMUM.

8) ALL CONCRETE REINFORCING STEEL TO BE ASTM A615 GRADE 60.

9) ALL WELDED WIRE MESH TO BE ASTM A185 65 KSI.

10) REBAR SHOP DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH ACI DETAILING MANUAL LATEST EDITION.

11) MINIMUM LAP ON ALL REBAR SHALL BE 50 BAR DIAMETERS, UNLESS NOTED OTHERWISE.

12) ALL REINFORCING BARS SHOWN TO BE HOOKED SHALL HAVE A STANDARD HOOK PER CRSI AND ACI STANDARDS, UNLESS SPECIFICALLY NOTED OTHERWISE ON THE STRUCTURAL PLANS.

13) CORNER BARS ARE REQUIRED AT ALL CORNERS UNLESS SPECIFICALLY NOTED OTHERWISE ON THE STRUCTURAL PLANS.

14) REINFORCEMENT SHALL BE HELD IN PLACE DURING CONCRETE PLACEMENT. IF REQUIRED, ADDITIONAL BARS SHALL BE PROVIDED BY THE CONTRACTOR TO FURNISH SUPPORT FOR ALL BARS.

15) SUBMIT REBAR SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

16) NO CALCIUM CHLORIDE SHALL BE USED IN THE CONCRETE MIX.

17) THE CONTRACTOR SHALL TAKE THE PRECAUTIONS SPECIFIED BY ACI WHEN PLACING CONCRETE IN HOT OR COLD WEATHER CONDITIONS.

18) NO WATER SHALL BE ADDED TO THE CONCRETE AT THE SITE OR IN ROUTE TO THE SITE.

19) LAP ALL WELDED WIRE FABRIC 12" MINIMUM.

20) PROVIDE REBAR SUPPORTS AND TIES IN THE CONCRETE PER ACI AND CRSI SPECIFICATIONS.

21) REINFORCING SHALL BE INSTALLED IN THE CONCRETE IN ACCORDANCE WITH THE FOLLOWING COVER REQUIREMENTS
   A) CONCRETE POURED AGAINST THE GROUND: 3"
   B) CONCRETE EXPOSED TO THE GROUND OR WEATHER: 2"
   C) CONCRETE NOT EXPOSED TO THE WEATHER OR IN CONTACT WITH THE GROUND:
      1) #3 - #11 BARS: 3/4"
      2) LARGER THAN #11 BARS: 1 1/2"
   D) CONCRETE IN BEAMS OR COLUMNS: 1 1/2"

22) A QUALIFIED TESTING LABORATORY SHALL BE RETAINED BY THE GENERAL CONTRACTOR TO COLLECT CYLINDER AND PERFORM THE NECESSARY CONCRETE TESTS. A MINIMUM OF FOUR CYLINDERS SHALL BE TAKEN FOR EVERY 50 CUBIC YARDS OR PORTION THEREOF OF EACH DAY'S POUR. ONE CYLINDER SHALL BE TESTED AT 7 DAYS, 2 CYLINDERS SHALL BE TESTED AT 28 DAYS AND THE REMAINING CYLINDER SHALL BE HELD IN RESERVE IF NEEDED. ONE COPY OF THE TEST REPORTS SHALL BE SENT TO THE ARCHITECT AND STRUCTURAL ENGINEER. NO ADDITIONAL ELEMENTS SHALL BE ADDED TO THE CONCRETE AFTER THE CONCRETE FOR THE CYLINDERS IS TAKEN.

23) IN ADDITION TO THE CONCRETE CYLINDERS THE TESTING LABORATORY SHALL PERFORM THE FOLLOWING TEST EACH TIME CONCRETE CYLINDERS ARE TAKEN:
   A) STANDARD SLUMP TEST
   B) AIR ENTRAINMENT TEST
   C) TEMPERATURE

24) THE CONTRACTOR SHALL REPAIR AND PATCH DEFECTIVE AREAS IMMEDIATELY AFTER REMOVAL OF FORMS.

25) ALL PLUMBING SLOTS SHALL BE FILLED WITH CONCRETE TO THE SAME DEPTH AS THE FLOOR SLAB AFTER PIPING IS INSTALLED.

26) REBAR DOWELS SHALL MATCH VERTICAL REINFORCING, ALL SLAB DOWELS SHALL BE STRAIGHT, SMOOTH AND FREE OF BURRS AT THE ENDS. DOWELS SHALL BE PROPERLY SUPPORTED DURING CONSTRUCTION AND PROPERLY ALIGNED TO KEEP DOWELS PARALLEL TO THE DIRECTION OF EXPECTED MOTION.

27) THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE PROPER DESIGN OF ALL TEMPORARY FRAMEWORK, FORMWORK AND SHORING.

28) ALL NON-SHRINK GROUT SHALL BE PLACED UNDER COLUMN BASE PLATES ONCE THE STEEL COLUMN IS IN PLACE AND PLUMB.

SHALLOW FOUNDATION NOTES:

1) FOUNDATION DESIGN IS BASED ON A SOIL BEARING CAPACITY OF 1500 PSF. CONTRACTOR IS RESPONSIBLE TO INSURE THIS CONDITION EXISTS.

2) PLACE CONCRETE IN FOOTINGS ON SAME DAYS AS FOOTINGS ARE EXCAVATED. IF THIS IS NOT POSSIBLE, CONTRACTOR SHALL PROTECT THE EXCAVATION FROM ANY DISTURBANCE UNTIL THE CONCRETE IS PLACED IN THE FOOTINGS. ANY TESTING OF THE SUBGRADE UNDER THE FOOTINGS SHALL BE MADE ON THE SAME DAY AS THE FOOTINGS ARE POURED.

3) THE CONTRACTOR SHALL OBTAIN A COPY OF THE SOILS REPORT BY WHITAKER LABORATORY, INC., DATED NOVEMBER 19, 2015. THE CONTRACTOR SHALL BE RESPONSIBLE TO FOLLOW ALL RECOMMENDATIONS IN THIS REPORT.

4) UNLESS SPECIFIED OTHERWISE IN THE SOILS REPORT, ALL SUBSOILS UNDER FOOTINGS SHALL BE COMPACTED TO A MINIMUM OF 98% OF THE MAXIMUM DENSITY AS MEASURED BY THE STANDARD PROCTOR METHOD (ASTM D-698) AT OPTIMUM MOISTURE CONTENT.

5) ALL COLUMNS AND WALLS SHALL BE CENTERED ON THEIR SUPPORTING FOOTING, UNLESS SPECIFICALLY SHOWN OTHERWISE ON THE STRUCTURAL PLANS.

6) WHERE WALL FOOTINGS ALIGN WITH COLUMN FOOTINGS, THE REINFORCING FOR THE WALL FOOTING SHALL RUN CONTINUOUS THROUGH THE COLUMN FOOTING.

7) ALL REINFORCING IN FOOTINGS SHALL BE EQUALLY SPACED UNLESS SPECIFICALLY SHOWN OTHERWISE ON THE STRUCTURAL PLANS.

8) ALL REINFORCING STEEL SHALL BE SUPPORTED BY WIRE CHAIRS AND ADDITIONAL STEEL RODS AS NEEDED. DO NOT SUPPORT REINFORCING STEEL ON BRICKS, BLOCKS OR OTHER SOLID ITEMS.

9) SIMPSON SET-XP EPOXY SHALL BE USED TO INSTALL ALL POST-INSTALLED THREADED RODS IN CONCRETE.

10) HOLE DIAMETER, DEPTH, CLEANING AND INSTALLATION OF EPOXY SHALL BE IN ACCORDANCE WITH SIMPSON SPECIFICATIONS FOR THE SPECIFIC EPOXY USED.

11) THE ANCHOR ROD MAY BE ADJUSTED DURING THE SPECIFIED GEL TIME, ACCORDING TO SIMPSON. DO NOT ADJUST OR DISRUPT THE THREADED ROD AFTER THIS GEL TIME HAS PASSED.

12) DO NOT INSTALL THE EPOXY IN THE CONCRETE WHEN ENVIRONMENTAL CONDITIONS SPECIFIED BY SIMPSON FOR THE EPOXY CANNOT BE MET.

13) PROVIDE ADEQUATE EXPOSED THREADING OF THE ANCHOR ROD TO PROVIDE FULL NUT ENGAGEMENT, FLUSH WITH THE OUTSIDE FACE. CARE SHOULD BE TAKEN TO INSURE THAT LENGTHS FOR ADDITIONAL PLATE WASHERS FOR OVERSIZED HOLES, SLOTTED HOLES FOR LATERAL LOADING PLATE WASHERS ARE TAKEN INTO ACCOUNT.

MASONRY NOTES:

1) ALL MASONRY WORK SHALL BE IN ACCORDANCE WITH ACI 530.

2) ALL CMU SHALL BE F'M = 1500 LIGHTWEIGHT ASTM C90.

3) MASONRY SHALL BE INSTALLED IN A RUNNING BOND PATTERN, UNLESS SPECIFICALLY NOTED OTHERWISE ON THE STRUCTURAL OR ARCHITECTURAL PLANS.

4) FILL ALL REINFORCED MASONRY UNITS, ALL UNITS BELOW GRADE, AND ALL UNITS SUPPORTING SOIL WITH 3000 PSI GROUT PER ASTM C476.

5) GROUT LIFTS IN VERTICAL CELLS SHALL NOT EXCEED 4'-0".

6) MORTAR FOR MASONRY SHALL BE ASTM C270 TYPE "S". MASONRY JOINTS SHALL BE 3/8" THICK FULL BED ON ALL HORIZONTAL AND VERTICAL JOINTS.

7) HORIZONTAL JOINT REINFORCEMENT SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION PER ASTM A153 CLASS B2.

8) HORIZONTAL JOINT REINFORCEMENT SHALL BE HEAVY DUTY LADDER TYPE CERTIFIED FOR USE IN SEISMIC DESIGN CATEGORIES C OR D. HORIZONTAL JOINT REINFORCING SHALL BE INSTALLED AT A MAXIMUM VERTICAL SPACING OF 16 INCHES. PREFABRICATED CORNER AND "T" SECTIONS SHALL BE USED AT WALL CORNERS AND INTERSECTIONS. JOINT REINFORCING SHALL HAVE A MINIMUM LAP OF 12".

9) ALL BRICK TIES SHALL BE SPACED AT 16" O.C. VERTICALLY AND HORIZONTALLY. ALL TIES SHALL BE RJ 7-11 OR EQUIVALENT SEISMIC BRICK TIES.

10) PROVIDE FACTORY MADE SECTIONS AT CORNERS AND WALL INTERSECTIONS.

11) SEE OTHER DISCIPLINES' DRAWINGS FOR SIZE AND LOCATION OF OPENINGS.

12) SPACE CONTROL JOINTS IN WALL AT 30'-0" ON CENTER. ALIGN WITH CONTROL JOINTS IN SLAB WHERE POSSIBLE.

13) THE CONTRACTOR SHALL TAKE ADDITIONAL PRECAUTIONS WHEN MASONRY IS TO BE CONSTRUCTED DURING COLD WEATHER (AMBIENT TEMPERATURE BELOW 40 DEGREES FAHRENHEIT). DURING HOT CONDITIONS (ABOVE 90 DEGREES FAHRENHEIT) PRECAUTIONS SHALL BE TAKEN TO MINIMIZE EXCESS HEAT IN THE MASONRY UNITS, WATER AND MORTAR. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDATION PRESCRIBED BY THE PORTLAND CEMENT ASSOCIATION FOR COLD OR HOT WEATHER CONSTRUCTION.

14) PREFORMED BED JOINT REINFORCEMENT SHALL BE USED AT ALL WALL CORNERS AND INTERSECTIONS.

15) ALL VERTICAL AND HORIZONTAL REBAR SHALL BE THE SAME SIZE AS SHOWN ON THE STRUCTURAL PLANS AS THE MAIN WALL REINFORCING.

16) DO NOT LOCATE MORE THAN 1 VERTICAL BAR IN EACH CELL UNLESS SPECIFICALLY DETAILED OTHERWISE ON THE STRUCTURAL DRAWINGS.

17) PROVIDE REBAR SPACERS IN THE WALL TO SUPPORT AND HOLD THE VERTICAL REBAR IN THE CENTER OF THE CELL SPACED NOT MORE THAN 48" ON CENTER.

18) PROVIDE (2) CELLS WITH VERTICAL REINFORCING GOR 8" WALLS AND (3) CELLS WITH VERTICAL REINFORCING FOR 12" WALLS AT END OF ALL WALLS. THIS REINFORCING SHALL BE LOCATED WITHIN 16" ON THE END OF THE WALL FOR 8" WALLS AND 24" FOR 12" WALLS.

19) PROVIDE REINFORCING IN 2 CELLS EACH SIDE OF ALL OPENING IN THE MASONRY WALL.

20) PROVIDE 1 BOND BEAM OVER AND UNDER ALL MASONRY OPENINGS. THESE BOND BEAMS SHALL HAVE A MINIMUM OF 2 HORIZONTAL REBARS. EXTEND THE BOND BEAM 16 INCHES BEYOND THE EDGES OF THE OPENING. HOOK THE HORIZONTAL REINFORCING AROUND THE VERTICAL SIDE BARS OF THE OPENING WITH A STANDARD 180 DEGREE HOOK.

21) PROVIDE BOND BEAMS IN THE WALL WITH 2 HORIZONTAL BARS SPACED NOT MORE THAN 4'-0" O.C. VERTICALLY.

22) HOOK THE ENDS OF ALL HORIZONTAL REBAR AROUND THE VERTICAL BARS WITH A STANDARD 180 DEGREE HOOK.

23) DO NOT RUN ANY ELECTRICAL CONDUIT, PLUMBING PIPES OR OTHER TRADE'S MATERIALS IN THE SAME CELLS OR BOND BEAMS AS THE REINFORCING STEEL.

SLAB ON GRADE NOTES:

1) ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 302.1R AND OTHER APPLICABLE ACI CODES.

2) THE SLAB ON GRADE SHALL BE PLACED ON A COMPACTED GRANULAR AGGREGATE BASE MATERIAL FILL HAVING LESS THAN 10% FINES. THIS G.A.B. MATERIAL SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS MEASURE BY THE STANDARD PROCTOR METHOD (ASTM D-698) AT OPTIMUM MOISTURE CONTENT. THE 4" AND 6" SLABS SHALL BE PLACED ON 6" OF G.A.B. THE 8" SLAB SHALL BE PLACED ON 8" G.A.B. COMPACTION SHALL BE VERIFY BY A QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO POURING CONCRETE. THE COMPACTION TEST RESULTS, WITH THE SEAL AND SIGNATURE OF THE GEOTECHNICAL ENGINEER, SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER AND ARCHITECT.

3) SAW CUTTING OF THE CONTROL JOISTS SHALL BE PERFORMED: 1) BEFORE THE CONCRETE BEGINS TO COOL; 2) AS SOON POSSIBLE TO SAWCUT THE CONCRETE WITHOUT DAMAGING THE FINISH OR DAMAGE OR TEAR THE CONCRETE WITH THE SAW BLADE; 3) BEFORE SHRINKAGE CRACKS BEGIN TO FORM.

4) MAXIMUM SPACING OF SAW-CUT CONTROL JOINTS SHALL BE 15'-0" FOR A 4" SLAB ON GRADE AND 20'-0" FOR A 6" SLAB ON GRADE. DO NOT ALIGN SAW-CUT CONTROL JOINTS WITH THICKENED SLABS THAT RUN PARALLEL TO THE JOINT.

5) ALL SAW-CUT CONTROL JOINTS SHALL SECTION THE SLAB ON GRADE INTO RECTANGULAR SECTIONS. THE WIDTH TO LENGTH RATIO OF THESE SEGMENTS SHALL NOT EXCEED 1.25.

6) ISOLATION JOINTS SHALL BE PLACED AT ALL COLUMNS THAT PENETRATE THE SLAB. THE CORNERS OF THE ISOLATION JOINTS SHALL ALIGN WITH THE SAW-CUT CONTROL JOINTS IN THE SLAB, UNLESS SHOWN OTHERWISE ON THE STRUCTURAL PLANS.

7) INSTALL EXPANSION JOINTS WHERE SHOWN ON THE PLANS.

8) LOCATE CONSTRUCTION JOINTS UNDER WALLS.

9) INSTALL CONSTRUCTION JOINTS TO LIMIT EACH POUR TO NO MORE THAN 7,500 SQUARE FEET. THE LENGTH OF ANY SINGLE POUR SHALL NOT EXCEED 100 FEET. ALLOW A MINIMUM OF 24 HOURS BETWEEN ADJACENT POURS.

10) THE VAPOR BARRIER UNDER THE SLAB ON GRADE SHALL BE A MINIMUM OF 15 MIL. LAP EDGES OF SHEETS A MINIMUM OF 12" AND CLOSE JOINTS WITH TAPE.

11) ALL SOIL DISTURBED BY PLUMBING, ELECTRICAL OR OTHER TRADE INSTALLATION SHALL BE PROPERLY REFILLED IN 6" LIFTS, COMPACTED AND TESTED IN ACCORDANCE WITH SPECIFICATIONS.

STEEL JOISTS AND GIRDERS NOTES:

1) ALL STEEL JOIST SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH SJI SPECIFICATIONS.

2) SUBMIT STEEL JOIST SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

3) JOIST AND GIRDER DESIGNERS SHALL VERIFY THE EXACT LOCATION AND WEIGHT OF ALL MECHANICAL EQUIPMENT PRIOR TO SHOP DRAWING SUBMITTAL AND JOIST FABRICATION.

4) ALL BOTTOM CHORDS OF JOIST AND JOIST GIRDERS SHALL HAVE BOTTOM CHORD EXTENSIONS FASTENED AFTER APPLICATION OF ALL DEAD LOADS ON THE JOISTS OR GIRDERS.

5) PROVIDE L4X4X3/8 ANGLES SURROUNDING ALL ROOF PENETRATIONS IN THE METAL DECK UNLESS NOTED OTHERWISE.

6) ALL STEEL JOISTS SHALL HAVE A MINIMUM OF 4" BEARING ON STEEL BEAMS. STAGGER SPACING AS REQUIRED TO PROVIDE BEARING ON BOTH SIDES OF THE BEAM. ALL STEEL JOISTS BEARING ON MASONRY WALL SHALL HAVE A MINIMUM OF 4" BEARING. STEEL JOISTS BEARING ON MASONRY SHALL BEAR ON BEARING PLATES (3/8"X6"X8" WITH 2 3/4" DIAMETER BY 8" LONG STUDS) UNLESS OTHERWISE NOTED IN PLANS.

7) JOIST DESIGNER/SUPPLIER SHALL VERIFY THE EXACT LOCATION AND WEIGHT OF ALL MECHANICAL EQUIPMENT PRIOR TO SHOP DRAWING SUBMITTAL AND JOIST FABRICATION. ALL JOISTS SHALL BE DESIGNED PER THE LOADS SHOWN ON THE PLANS, WITH ANY ADJUSTMENTS NEEDED AFTER MECHANICAM COORDINATION. THE CONTRACTOR SHALL OBTAIN AND SUBMIT CALCULATIONS RELATING TO THE DESIGN OF THE BAR JOISTS AND GIRDERS INCLUDING "SPECIAL JOISTS."

8) CONTRACTOR IS RESPONSIBLE TO COORDINATE THE TRADES (E.G. MECHANICAL, FIRE PROTECTIONS, KITCHEN EQUIPMENT, ETC) WITH THE JOIST MANUFACTURER TO INSURE THE JOIST MANUFACTURER HAS THE PROPER DIMENSIONS, LOCATIONS AND WEIGHTS, BASED ON SUPPLIERS SUPPLIED DATA, PRIOR TO THE DESIGN OF THE JOIST.

GAGE METAL NOTES:

1) METAL DECK FOR USE ON THE ROOF SHALL BE 20 GAGE TYPE "B" VENTED ROOF DECK IN ACCORDANCE WITH THE STEEL DECK INSTITUTE STANDARDS: IP = .205; SP = .227; IN = .213; SN = .238; FY = 33 KSI.

2) THE METAL ROOF DECK SHALL BE GALVANIZED WITH A G90 GALVANIZED FINISH.

3) THE METAL ROOF DECK SHALL BE PAINTED WITH A STANDARD GRAY SHOP PRIMER PAINT.

4) ATTACH THE ROOF DECK TO THE STEEL JOISTS WITH 5/8" DIAMETER PUDDLE WELD WASHERS. INSTALL IN A 36/7 PATTERN.

5) ATTACH THE ROOF DECK TO THE LIGHT GAUGE ROOF TRUSSES WITH #12 TEK SCREWS. INSTALL IN A 36/7 PATTERN.

6) END LAPS SHALL BE A MINIMUM OF 3" AND SHALL OCCUR CENTERED OVER STRUCTURAL SUPPORTS.

7) SIDE LAPS SHALL BE A MINIMUM OF 1 RIB.

8) PROVIDE (8)#10 SIDELAP SCREWS EQUALLY SPACED BETWEEN STEEL BAR JOIST.

9) PROVIDE (9)#10 SIDELAP SCREWS EQUALLY SPACED BETWEEN LIGHT GAUGE ROOF TRUSSES.

10) THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT DEFORMATION OF THE METAL DECK DURING CONSTRUCTION.

11) SUBMIT METAL DECK SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

12) ALL LIGHT GAGE METAL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH AISI SPECIFICATIONS, LATEST EDITION.

13) ALL METAL 18 GAGE AND LIGHTER SHALL BE FY = 33 KSI MINIMUM.

14) ALL METAL 16 GAGE AND HEAVIER SHALL BE FY = 50 KSI MINIMUM.

15) ALL SCREWS FOR CONNECTIONS SHALL BE #10 TEK.

16) ALL P.A.F. INTO CONCRETE SHALL BE RAMSET TE 1" PINS, OR EQUIVALENT.

17) ALL P.A.F. INTO STEEL SHALL BE RAMSET TE (KNURLED) PINS, OR EQUIVALENT.

18) SUBMIT LIGHT GAGE METAL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

19) ALL LIGHT GAGE FABRICATION AND/OR ERECTION SHALL BE MADE BY PERSONNEL EXPERIENCED IN LIGHT GAGE METAL FABRICATION AND/OR ERECTION.

20) ALL ATTACHMENT SHALL BE BY WELDING OR SCREWS. NO WIRE TYING OF LIGHT GAGE METAL SHALL BE USED.

21) WALL BRIDGING SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING WALL HEIGHTS, UNLESS NOTED OTHERWISE:
   A) 0' TO 8' 1 ROW AT MID HEIGHT
   B) OVER 8' SPACED AT 4'-0" O.C.

22) ALL BRIDGING SHALL BE INSTALLED PRIOR TO ADDING ANY LOADS TO THE LIGHT GAGE FRAMING.

23) ALL STUDS AND JOISTS SHALL BE OF THE SIZE, TYPE, GAGE AND SPACING AS INDICATED IN THE DRAWINGS AND TABLES.

24) THE CONTRACTOR SHALL PROVIDE THE MANUFACTURER'S STANDARD STEEL RUNNERS, TRACKS, BLOCKING, LINTELS, CLIP ANGLES, BRACING, REINFORCEMENTS, FASTENERS AND ACCESSORIES AS RECOMMENDED BY THE MANUFACTURER FOR THE PARTICULAR APPLICATION TO PROVIDE A COMPLETE STRUCTURAL SYSTEM.

25) THE EXTERIOR WALL SYSTEMS SHALL BE DESIGNED TO WITHSTAND BOTH POSITIVE AND NEGATIVE WIND PRESSURES AS INDICATED IN THE LATEST EDITION OF THE APPLICABLE BUILDING CODE. CARE SHALL BE TAKEN IN THE DESIGN TO CONSIDER DEFLECTIONS OF THE WALL SYSTEMS UNDER LOADING AS IT RELATES TO THE PRESCRIBED DEFLECTION LIMITS AS INDICATED IN THE APPLICABLE BUILDING CODE. LIGHT GAGE SUPPLIER SHALL PROVIDE LIGHT GAGE SHOP DRAWINGS AND CALCULATIONS SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE JURISDICTION OF THE PROJECT.

26) THE CONTRACTOR SHALL INSTALL SUFFICIENT TEMPORARY BRACING, AS NEEDED, UNTIL ERECTION OF THE STEEL FRAMING SYSTEMS ARE COMPLETE.

27) ALL INTERIOR STUD PARTITION WALLS SHALL BE FRAMED IN ACCORDANCE WITH THE LATEST EDITION OF ASTM C754.

GEORGIA REGISTERED PROFESSIONAL ENGINEER 022314
JAMES V. WILLIAMS
James V. Williams
03/07/19

HUSSEY GAY BELL
Established 1958
329 Commercial Drive, Savannah, Ga 31406 / T: T:912.354.4626

REVISIONS

DESIGNED	DRAWN	CHECKED
JVW	DEM	JVW

DATE: 08/02/2019
JOB NO. 119273573
03/07/19

EFFINGHAM COUNTY GYMNASIUM
CLARENCE E. MORGAN RECREATION COMPLEX
1750 GA. HWY 21 S, SPRINGFIELD, GEORGIA 31329

GENERAL NOTES

DRAWING NUMBER
S1.01

PERMIT DOCUMENTS

STRUCTURAL STEEL NOTES:

1) ALL STEEL WORK SHALL BE IN ACCORDANCE WITH AISC CODES AND SPECIFICATIONS.

2) NO STEEL SHALL BE FABRICATED WITHOUT APPROVED SHOP DRAWINGS.

3) ALL PIPE STEEL SHALL BE ASTM A501 OR A53 GRADE B.

4) ALL HSS STEEL SHALL BE ASTM A500 GRADE B.

5) ALL WIDE FLANGES AND MAJOR ROLLED SHAPES SHALL BE ASTM A992 GRADE 50.

6) ALL BASEPLATES, CAP PLATES, CONTINUITY PLATES, DOUBLER PLATES, GUSSET PLATES AND WEB STIFFENER PLATES SHALL BE ASTM A572 GRADE 50.

7) ALL OTHER STEEL AND MISCELLANEOUS ROLLED SHAPES SHALL BE ASTM A36.

8) ALL ANCHOR BOLTS SHALL BE A307.

9) NUTS SHALL BE ASTM A-563, HEAVY HEX CARBON STEEL. BOLTS, ANCHOR BOLTS AND THREADED RODS SHALL BE SIZED SUCH THAT NUT PROVIDE FULL THREAD ENGAGEMENT, FLUSH WITH THE OUTSIDE FACE OF THE NUT.

10) ALL BOLTS, NUTS AND WASHERS FOR STEEL CONNECTIONS SHALL BE ASTM A-325 BOLTS (A-490 WHERE SPECIFIED OTHERWISE). ALL BOLTS SHALL BE 3/4 INCH DIAMETER, UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE PRETENSIONED PER AISC SPECIFICATIONS. REUSE OF PREVIOUSLY PRETENSIONED BOLTS IS NOT ALLOWED.

11) DESIGN OF THE BOLTED CONNECTIONS SHALL BE IN ACCORDANCE WITH "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" LATEST EDITION.

12) UNLESS THE LOADS ARE SHOWN ON THE PLANS, BOLTED CONNECTIONS SHALL BE DESIGNED FOR THE FOLLOWING MINIMUM GRAVITY LOADS:
   A) NON-COMPOSITE BEAMS SHALL BE DESIGNED FOR THE MAXIMUM END REACTION FOR THE BEAM USING THE MAXIMUM UNIFORM LOAD, AISC TABLE 3-6. THE ACTUAL BEAM SPAN FULLY BRACED SHALL BE USED TO DETERMINE THIS LOAD.
   B) COMPOSITE BEAMS SHALL BE DESIGNED BASED ON 1.5 TIMES THE "MAXIMUM UNIFORM LOAD" REACTION.
   C) THE SHEAR REACTION FOR MOMENT CONNECTIONS SHALL BE DESIGNED FOR 1.5 TIMES THE "MAXIMUM UNIFORM LOAD" REACTION.
   D) CONNECTIONS FOR STRUTS, KICKERS, BRACES, VERTICAL BRACES AND TRUSS MEMBERS SHALL BE DESIGNED FOR THE MAXIMUM ALLOWABLE LOAD IN THE MEMBER AST*FY*(0.66), ALLOWABLE STRESS DESIGN PROCEDURE.

13) ALL BOLTED CONNECTIONS SHALL HAVE A MINIMUM OF TWO (2) BOLTS, UNLESS NOTED OTHERWISE.

14) ALL TUBE AND PIPE SIZES AND CONNECTIONS SHALL BE BASED ON THE AISC HOLLOW STRUCTURAL SECTIONS CONNECTIONS MANUAL LATEST EDITION 18) WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED IN ACCORDANCE WITH AWS REQUIREMENTS. A COPY OF THE WELD CERTIFICATES SHALL BE KEPT ON SITE AND IN THE SHOP. THE WELD CERTIFICATE SHALL SHOW THE TYPE, SIZE, POSITION AND BASE METALS THE WELDER IS CERTIFIED TO PERFORM WELDING OPERATIONS.

15) ALL WELDS SHALL BE E70XX ELECTRODES.

16) THE MINIMUM WELD SIZE SHALL BE 1/4 INCHES, UNLESS NOTED OTHERWISE ON THE DETAILS, BUT NOT MORE THAN THE BASE METAL THICKNESS. WHERE THICKNESS OF METALS BEING WELDED REQUIRE A LARGER MINIMUM SIZE PER AISC, THE AISC REQUIREMENTS SHALL GOVERN.

17) ALL WELDS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY (AWS) MANUAL, AWS D1.1 LATEST EDITION.

18) ALL CONNECTIONS SHALL BE DESIGNED AND DETAILED BY THE STEEL FABRICATOR. ALL CONNECTION DESIGN AND DETAILING SHALL BE PREPARED UNDER THE DIRECT SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE JURISDICTION OF THE PROJECT. THE FABRICATOR SHALL SUBMIT THE DESIGN CALCULATIONS SIGNED AND SEALED BY THE ENGINEER RESPONSIBLE FOR THEIR DESIGN WITH THE STEEL SHOP DRAWINGS.

19) ALL SHOP AND FIELD BOLTED CONNECTIONS SHALL BE INSPECTED BY AN APPROVED TESTING AGENCY. ALL CONNECTIONS SHALL BE VISUALLY INSPECTED. A MINIMUM OF 10% OF ALL BOLTED CONNECTIONS SHALL BE RANDOMLY TESTED BY AN APPROVED TESTING METHOD.

20) ALL SHOP AND FIELD WELDED CONNECTIONS SHALL BE INSPECTED BY AN APPROVED TESTING AGENCY. ALL WELDS SHALL BE VISUALLY INSPECTED. WELDED THAT DO NOT PASS VISUAL INSPECTION SHALL BE TESTED BY AN APPROVED METHOD. IN ADDITION WELDS SHALL BE INSPECTED AND TESTED AS FOLLOWS.
   A) 100% OF ALL FULL PENETRATION WELDS SHALL BE TESTED BY ULTRASONIC TESTING OR APPROVED EQUIVALENT METHOD.
   B) 100% OF WELDS THAT ARE PART OF THE WIND FORCES RESISTING SYSTEM OR SEISMIC FORCES RESISTING SYSTEM SHALL BE TESTED THROUGH AN APPROVED METHOD.
   C) A MINIMUM OF 20% OF PARTIAL PENETRATION WELDS SHALL BE TESTED THROUGH AN APPROVED METHOD.
   D) A MINIMUM OF 10% OF FILLET WELDS SHALL BE TESTED THROUGH AN APPROVED METHOD.
   E) THE INSPECTOR MAY REQUIRE ADDITIONAL TESTING IF BASED ON THE PERFORMANCE OF THE MINIMUM SHOP AND FIELD TESTS, IT IS DETERMINED MORE TESTING IS NEEDED.

21) SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR ADDITIONAL MISCELLANEOUS STEEL.

22) SEE ARCHITECTURAL DRAWINGS FOR ANY FIREPROOFING REQUIREMENTS.

23) ALL CAP PLATES SUPPORTING BEAMS OR JOISTS SHALL BE A MINIMUM OF 5/8" THICK, UNLESS THE CONNECTION ANALYSIS OR THE STRUCTURAL PLANS REQUIRE OTHERWISE.

24) ANCHOR RODS FOR STEEL CONNECTION TO CONCRETE OTHER THAN COLUMN ANCHOR BOLTS SHALL BE HEADED RODS CONFORMING TO THE REQUIREMENTS OF ASTM F-1554, GRADE 55 WITH WELDABILITY SUPPLEMENT S1.

25) PLATE WASHERS FABRICATED WITH STANDARD HOLES FOR ANCHOR RODS INSTALLED IN OVERSIZED HOLES SHALL CONFORM TO TABLE 14-2 OF AISC STEEL CONSTRUCTION MANUAL, LATEST EDITION. WHERE ANCHOR RODS RESIST LATERAL LOADS, PLATE WASHERS SHALL BE WELDED TO THE BASE PLATE TO DEVELOP THE HORIZONTAL CAPACITY OF THE ANCHOR ROD.

26) THREADED RODS SHALL BE ASTM A-193 GRADE B7 OR ASTM F-1554 GRADE 105.

27) THE ENDS OF ALL STEEL BEAMS AND JOIST GIRDERS SHALL BEAR FULLY ON BEARING PLATES.

28) ALL WELDS IN EXPOSED STEEL SHALL BE FIELD COATED W/ ZINC-RICH PAINT.

29) FOR ALL STEEL BEAMS, STIFFENER PLATES SHALL BE INSTALLED ON EACH SIDE OF THE WEB AT SUPPORTS AND LOCATION OF POINT LOADS FROM BEAMS AND COLUMNS.

30) THE CONTRACTOR SHALL NOT FIELD MODIFY THE STRUCTURAL STEEL TO CORRECT FABRICATION OR CONSTRUCTION ERRORS WITHOUT SUBMITTING A PROPOSED CORRECTION TO THE STRUCTURAL ENGINEER AND RECEIVING APPROVAL FOR THIS CORRECTION.

31) THE CONTRACTOR SHALL NOT FIELD CUT STEEL WITH GAS TORCHES OR FIELD BURN HOLES FOR BOLTED CONNECTIONS.

32) THE CONTRACTOR SHALL KEEP A DETAILED RECORD OF ALL FIELD CHANGES AND REPAIRS. ALL MODIFICATIONS OF STRUCTURAL FRAMING SHALL BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO PERFORMING THE WORK.

33) THERE SHALL BE NO CUTTING OF THE STRUCTURAL STEEL FRAMING MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT THE PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

34) FABRICATE BEAMS WITH NATURAL CAMBER UPWARD. SEE STRUCTURAL DRAWINGS FOR ANY ADDITIONAL CAMBER REQUIREMENTS.

SHOP DRAWING SUBMITTALS:

1) REVIEW BY HUSSEY GAY BELL, INC (HGB) OF SUBMITTALS IS FOR THE GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AS PRESENTED BY THE CONTRACT DOCUMENTS. NO DETAILED CHECK OF QUANTITIES OR DIMENSIONS WILL BE MADE.

2) THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ASSURING THAT ALL SUBMITTALS COMPLY WITH THE LATEST PROJECT PLANS, SPECIFICATIONS, GOVERNING CODES AND REGULATIONS AND IS SOLELY RESPONSIBLE FOR CONFIRMING ALL QUANTITIES, DIMENSIONS, FABRICATION TECHNIQUES AND COORDINATING WITH ALL TRADES.

3) A SHOP DRAWING SUBMITTAL SCHEDULE SHALL BE SUBMITTED A MINIMUM OF 4 WEEKS PRIOR TO THE FIRST SHOP DRAWING SUBMITTAL.

4) SHOP DRAWINGS ARE TO BE SUBMITTED IN A TIMELY MANNER ALLOWING ADEQUATE TIME FOR PROCESSING. THE ARCHITECT AND ENGINEER WILL REVIEW AND RETURN THE SHOP DRAWINGS WITHIN 14 CALENDAR DAYS OF RECEIVING THE SUBMITTAL.

5) SHOP DRAWINGS MUST BE REVIEWED AND APPROVED BY THE CONTRACTOR PRIOR TO SUBMITTING TO HGB. SHOP DRAWINGS THAT HAVE NOT BEEN REVIEWED BY THE CONTRACTOR OR SHOW CLEAR EVIDENCE OF NOT HAVING BEEN REVIEWED, WILL BE RETURNED TO THE CONTRACTOR WITHOUT REVIEW OR APPROVAL.

6) SHOP DRAWINGS FOR SPECIFIC COMPONENTS, SUCH AS COLUMNS, FOOTINGS ETC., SHALL BE SUBMITTED IN THEIR ENTIRETY. SHOP DRAWINGS FOR SIMILAR LAYOUTS, SUCH A FLOOR FRAMING, SHALL BE SUBMITTED TOGETHER.

7) ALL SHOP DRAWINGS SHALL BE SUBMITTED WITH A LETTER OF TRANSMITTAL. DO NOT COMBINE DIFFERENT SUBMITTALS ON THE SAME LETTER OF TRANSMITTAL.

8) ALL SHOP DRAWINGS SHALL BE SUBMITTED IN A DIGITAL PDF FORMAT.

9) ALL CHANGES AND ADDITIONS ON SHOP DRAWING RE-SUBMITTALS SHALL BE CLEARLY CLOUDED AND NOTED. SHOP DRAWING RE-SUBMITTALS THAT ARE NOT CLEARLY CLOUDED AND NOTED AS REQUIRED WILL BE RETURNED UNREVIEWED AND UNAPPROVED.

10) SHOP DRAWINGS THAT REQUIRE ENGINEERING DESIGN AND SUBMITTAL OF CALCULATIONS AND DRAWINGS SIGNED AND SEALED BY AN ENGINEER SHALL MEET THE REQUIREMENTS OF THE SPECIFICATIONS FOR THE INDIVIDUAL COMPONENT THAT IS APPLICABLE AND THE ADDITIONAL REQUIREMENTS OF THE "SHOP DRAWINGS REQUIRING SPECIALTY ENGINEERING" SECTION OF THESE SPECIFICATIONS.

11) SHOP DRAWINGS THAT DO NOT MEET ALL OF THE ABOVE REQUIREMENTS WILL NOT BE REVIEWED BUT WILL BE REJECTED AND RETURNED TO THE CONTRACTOR.

12) ALL SUBMITTAL SHALL HAVE HGB-STRUCTURAL DEPARTMENT DOCUMENT REVIEW STAMP AS SHOWN BELOW.

13) REVIEW OF SHOP DRAWINGS AND OTHER SUBMITTALS BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS BEFORE SUBMITTAL TO THE ENGINEER. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. CONTRACTOR IS ALSO RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION.

HUSSEY GAY BELL
Established 1958

DOCUMENT REVIEW

These documents have been reviewed only for general conformance with the design concept of the project and general compliance with the Contract Documents. Modifications or comments made on these documents do not relieve the Contractor from compliance with the requirements of the Contract Documents. Approval of a specific item does not include approval of the assembly of which the item is a component. The Contractor is responsible for: information that pertains solely to fabrication processes; confirming and correlating dimensions at the jobsite, the means, methods, techniques, sequences, and procedures of construction; coordination of the work of all trades; and performing all work in a safe and satisfactory manner.

☐ NO EXCEPTIONS TAKEN	☐ MAKE CORRECTIONS NOTED
☐ AMEND & RESUBMIT	☐ REJECTED/RESUBMIT
☐ DOCUMENT NOT REVIEWED	☐
DATE:	BY:

STAMP WILL BE DATED, INITIALED AND MARKED ONE OF THE FOLLOWING:

A. "NO EXCEPTIONS TAKEN" - MEANS NO EXCEPTIONS WERE FOUND ON THE SHOP DRAWINGS AND MAY BE USED FOR FABRICATION AND ERECTION.

B. "MAKE CORRECTIONS NOTED" - MEANS THE EXCEPTIONS WERE FEW OR SMALL. FABRICATION AND ERECTION MAY START AS SOON AS THE DRAWINGS ARE REVISED. ALSO, A RECORD COPY OF THE REVISIONS SHALL BE SENT TO THE "ENGINEER OF RECORD".

C. "AMEND & RESUBMIT" - MEANS THAT THE CORRECTIONS WERE MANY OR LARGE. REVISE THE SHOP DRAWINGS AND RESUBMIT THEM. FABRICATION AND/OR ERECTION MAY NOT START TILL THE DRAWINGS HAVE BEEN REVIEWED AND STAMPED "NO EXCEPTION TAKEN" OR "MAKE CORRECTIONS NOTED & SUBMIT RECORD COPY".

D. "REJECTED/RESUBMIT" - MEANS THAT THE SHOP DRAWING HAS TOO MANY CORRECTIONS OR DOES NOT COMPLY WITH GENERAL DESIGN CONCEPTS. ALSO, IF SHOP DRAWINGS HAVE NOT BEEN CHECKED BY THE DETAILER/ FABRICATOR AND REVIEWED BY CONTRACTOR, DRAWINGS WILL BE REJECTED. DRAWINGS REQUIRING A PROFESSIONAL ENGINEERING SEAL, THAT ARE NOT SEALED, WILL BE REJECTED.

E. "DOCUMENT NOT REVIEWED" - MEANS THAT THE SUBMITTAL DOCUMENT WAS NOT REVIEWED BY HGB STRUCTURAL DEPARTMENT

SHOP DRAWINGS REQUIRING SPECIALTY ENGINEERING:

1) THE SPECIALTY ENGINEER IS: A REGISTER ENGINEER LICENSED IN THE JURISDICTION OF THE PROJECT, BUT NOT THE STRUCTURAL ENGINEER OF RECORD, WHO SPECIALIZES IN THE ANALYSIS AND DESIGN OF A SPECIFIC STRUCTURAL COMPONENT OR STRUCTURAL SYSTEM THAT IS REQUIRED TO SUBMIT ENGINEERED DESIGN CALCULATIONS AND DRAWINGS FOR THIS PROJECT.

2) ALL SHOP DRAWINGS REQUIRING A SPECIALTY ENGINEER SHALL BE SUBMITTED WITH CALCULATIONS FOR THE SPECIFIC PRODUCT SPECIFIED IN THE SHOP DRAWINGS BASED ON THE SPECIFIC LOADING FOR THE PROJECT. ALL CALCULATIONS AND DRAWINGS SHALL BE SIGNED AND SEALED BY THE SPECIALTY DESIGN ENGINEER.

3) PRODUCT INFORMATION FROM A MANUFACTURER'S CATALOG OF STANDARD PRODUCTS DOES NOT REQUIRE THE SEAL OF THE SPECIALTY DESIGN ENGINEER.

4) HGB REVIEW OF THE SUBMITTAL BY THE SPECIALTY DESIGN ENGINEER SHALL BE LIMITED TO THE FOLLOWING:
   A) VERIFYING THE SPECIFIED STRUCTURAL SUBMITTALS HAVE BEEN PROVIDED.
   B) VERIFYING THE SPECIFIED STRUCTURAL SUBMITTALS HAVE BEEN SIGNED AND SEALED BY THE SPECIALTY DESIGN ENGINEER.
   C) VERIFYING THE SPECIALTY DESIGN ENGINEER UNDERSTANDS THE SCOPE OF THE WORK AND DESIGN ACCORDING TO THE SPECIFIED DESIGN CRITERIA LISTED IN THE GENERAL NOTES. A DETAILED REVIEW OF THE CALCULATIONS WILL NOT BE PERFORMED.
   D) VERIFYING THAT THE CONFIGURATION SHOWN IN THE SUBMITTALS IS IN GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS.

GEORGIA REGISTERED 022314 PROFESSIONAL ENGINEER JAMES V. WILLIAMS
03/07/19

HUSSEY GAY BELL
Established 1958
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REVISIONS

DESIGNED	DRAWN	CHECKED
JVW	DEM	JVW

DATE: 08/02/2019

JOB NO. 119273573

03/07/19

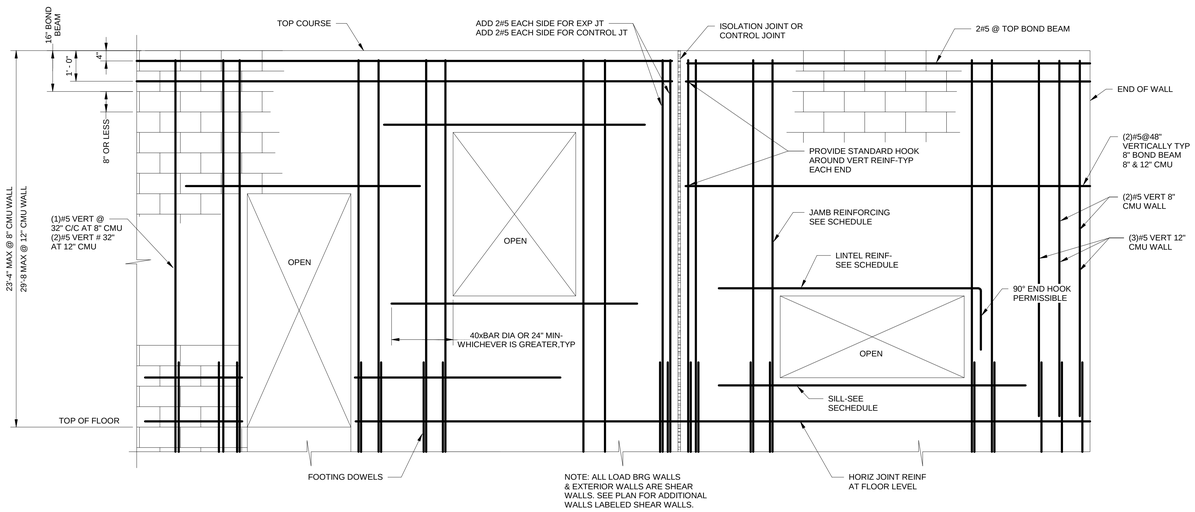
EFFINGHAM COUNTY GYMNASIUM
CLARENCE E. MORGAN RECREATION COMPLEX
1750 GA. HWY 21 S, SPRINGFIELD, GEORGIA 31329

GENERAL NOTES

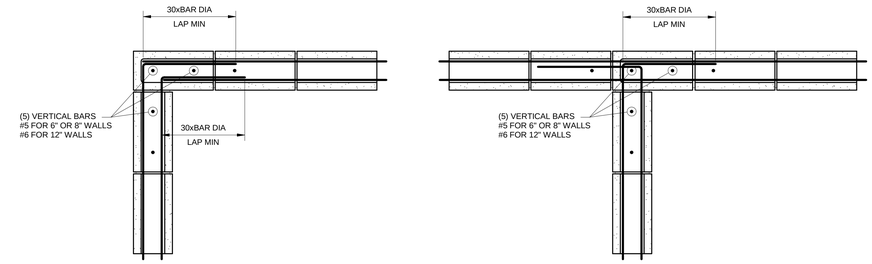
DRAWING NUMBER

S1.02

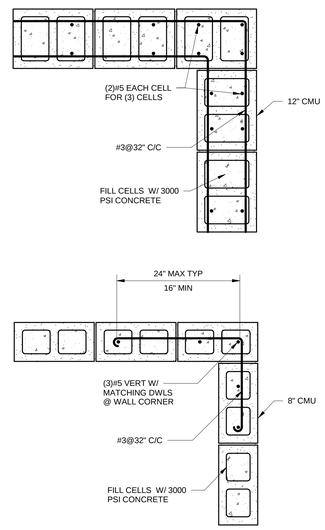
PERMIT DOCUMENTS



1 S1.05 CMU WALL REINFORCING
NTS



B S1.05 BOND BEAM REINF DETAIL
NTS



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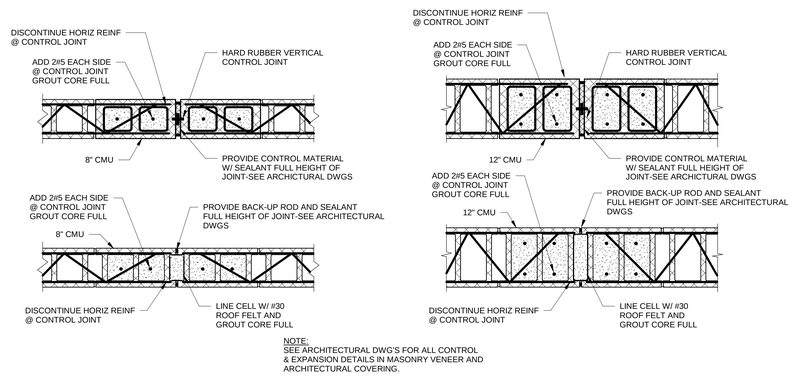
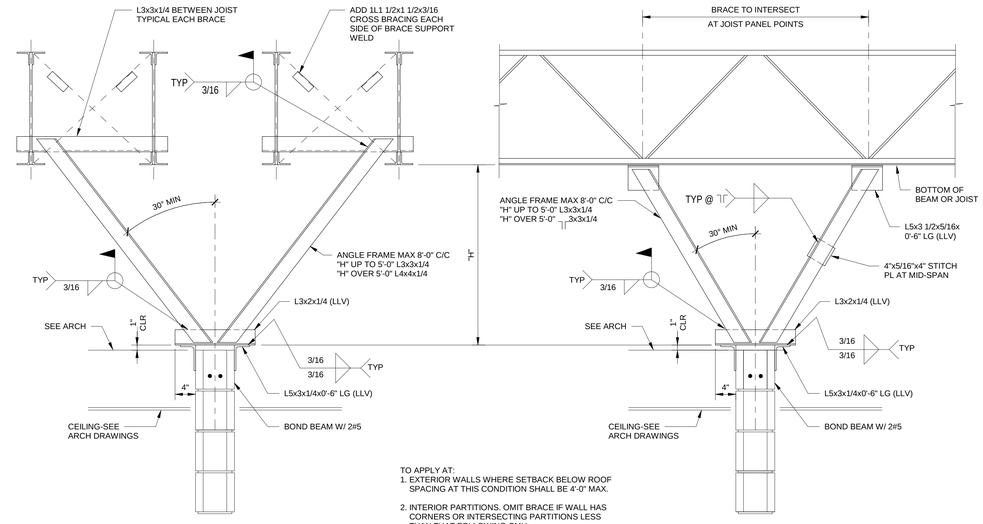


NOTE:
SEE ARCHITECTURAL DWG'S FOR ALL CONTROL & EXPANSION DETAILS IN MASONRY VENEER AND ARCHITECTURAL COVERING.

D S1.05 MASONRY CONTROL JOINT DETAILS
NTS



TYP WALL LATERAL SUPPORT EACH 8'-0" C/C MAX UNO CONTRACTOR SHALL SUBMIT LOCATION OF SUPPORTS TO ENGINEER/ARCHITECT FOR APPROVAL.

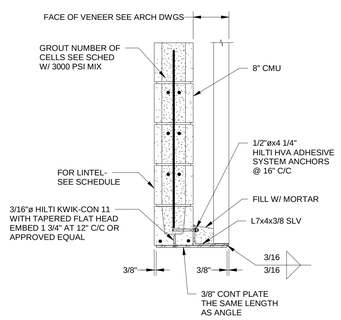
AT WALL BELOW LIGHT GAUGE MATERIAL USE LIGHT GAUGE MEMBERS INSTEAD OF ANGLES.

TO APPLY AT:
1. EXTERIOR WALLS WHERE SETBACK BELOW ROOF SPACING AT THIS CONDITION SHALL BE 4'-0" MAX.
2. INTERIOR PARTITIONS. OMIT BRACE IF WALL HAS CORNERS OR INTERSECTING PARTITIONS LESS THAN THAT FOLLOWING CMU
   6" CMU: 6'-0"
   8" CMU: 12'-0"
   12" CMU: 16'-0"

TYP WALL LATERAL SUPPORT EACH 8'-0" C/C MAX UNO CONTRACTOR SHALL SUBMIT LOCATION OF SUPPORTS TO ENGINEER/ARCHITECT FOR APPROVAL.

AT WALL BELOW LIGHT GAUGE MATERIAL USE LIGHT GAUGE MEMBERS INSTEAD OF ANGLES.

E S1.05 CMU LATERAL SUPPORT DETAIL
NTS



F S1.05 LINTEL DETAIL
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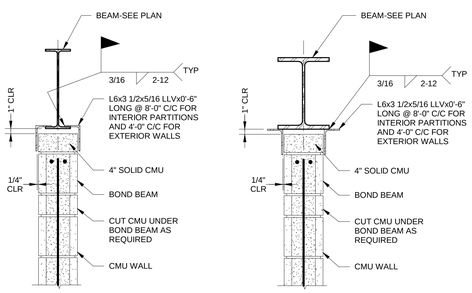

G S1.05 CMU AT BOTTOM OF BEAM CONNECTION DETAIL
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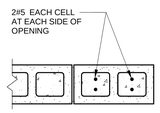

H S1.05 CMU END OF WALL REINF DETAIL
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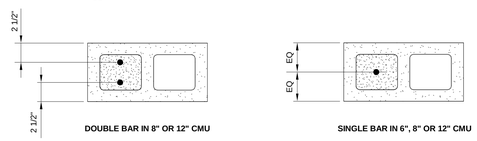

J S1.05 STANDARD REINF LOCATION DETAIL
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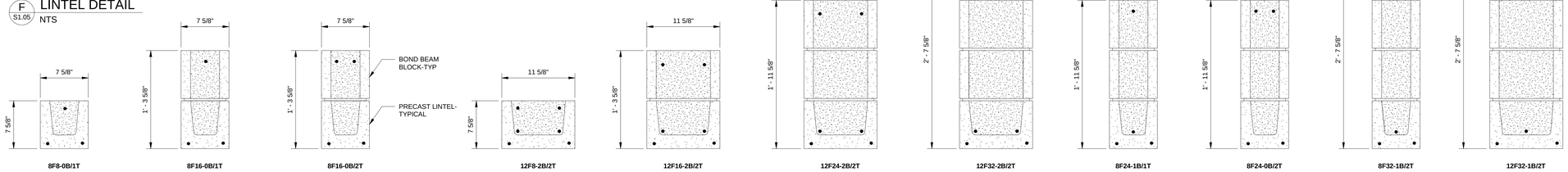

K S1.05 COMPOSITE U-LINTEL DETAILS
NTS

PERMIT DOCUMENTS

GEORGIA REGISTERED 022314 PROFESSIONAL ENGINEER JAMES V. WILLIAMS
03/07/19

REVISIONS

DESIGNED	DRAWN	CHECKED
JVW	DEM	JVW

DATE: 08/02/2019

JOB NO. 119273573

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HUSSEY GAY BELL
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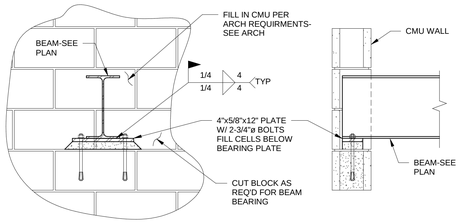
CMU DETAILS

DRAWING NUMBER
S1.05



A S1.06 BEAM BEARING ON WALL DETAIL
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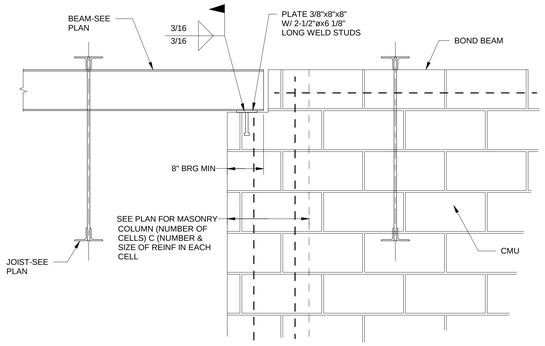

B S1.06 BEAM TO CMU BEARING DETAIL
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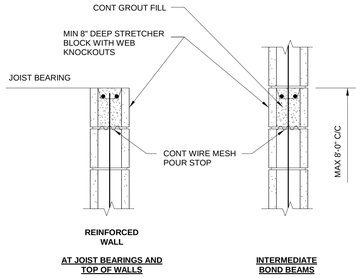
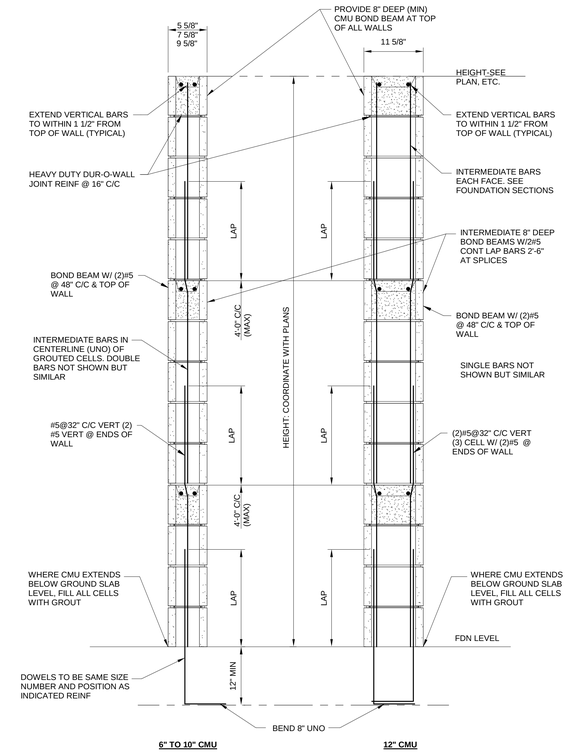


BOND BEAM NOTES:

1. ALL CMU WALLS (INTERIOR, EXTERIOR, BEARING OR NON-BEARING), 6" THICK (NOMINAL) OR GREATER, SHALL HAVE A BOND BEAM AT THE TOP OF THE WALL.
2. WHERE ALL EXTERIOR WALLS AND ANY LOAD BEARING WALLS ARE 10'-0" OR HIGHER, PROVIDE BOND BEAM AT MAXIMUM 8'-0" SPACING. WHERE INTERIOR PARTITION WALLS ARE 10'-8" HIGH PER ARCH DETAILS, PROVIDE BOND BEAM AT TOP OF WALL AT 10'-8".
3. BOND BEAMS SHALL BE PROVIDED AT ALL JOIST BEARING ELEVATIONS AND WHERE DETAILED AT OTHER SPECIAL LOCATIONS IN STRUCTURAL DRAWINGS, AND ALSO AS SHOWN IN ARCHITECTURAL DRAWINGS. BOND BEAMS REINFORCED WITH 2#5 CONT SHALL BE PROVIDED BELOW ALL WINDOW SILLS AND AT BOTTOM OF OTHER OPENINGS EXTEND BOND BEAM BARS INTO JAMBS AT ENDS WITH HOOK SAME AS INDICATED FOR CMU LINTELS PER TYPICAL DETAIL.
4. LAP CONTINUOUS BOND BEAM REINFORCING 2'-6" AT SPLICES AND CONTROL JOINTS AS DETAILED HEREIN.
5. PROVIDE 2#5x24"x24" HORIZONTAL BARS AT CHANGES IN BOND BEAM DIRECTION.
6. WHERE BOND BEAM INTERRUPTED BY OPENINGS, BEND REINFORCING 12" INTO REINFORCED JAMBS.
7. REINFORCING IN BOND BEAMS UNDER JOISTS SHALL BE CONTINUOUS THRU CONTROL JOINT.

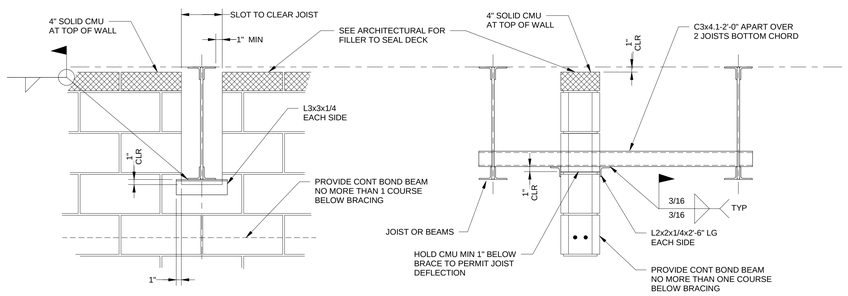
C S1.06 BOND BEAM REINF DETAIL
NTS



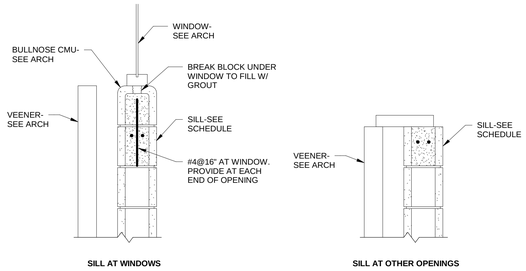
-SHOP DRAWINGS SHALL BE FURNISHED BY GENERAL CONTRACTOR INCLUDING WALL ELEVATION AND PLANS DETAILING FINAL LAYOUT OF ALL VERTICAL AND HORIZONTAL REINFORCING REQUIRED BY THIS SCHEDULE, SECTIONS, AND STRUCTURAL NOTES IN THESE DOCUMENTS.

-SEE DETAIL J/S1.05 FOR LOCATION OF REBAR IN CELL.

D S1.06 VERTICAL REINFORCING DETAIL
NTS



F S1.06 CMU LATERAL SUPPORT EXTEND TO ROOF DECK DETAIL
NTS



E S1.06 SILL DETAILS
NTS

TYPICAL WALL OPENING SCHEDULE

	CMU LINTELS					8" CMU H≤14'-8"		8" CMU 14'-8"<H≤18'-8"		12"CMU	
SPAN	8" CMU WALL	12" CMU WALL	ANGLE BEARING	LINTEL BEARING	SILL	INT JAMB	EXT JAMB	INT JAMB	EXT JAMB	INT JAMB	EXT JAMB
UP TO 4'-0"	8" 2#5 B	8" 2#5 B	6" EA END	6" EA END	8" W/ 2#5	2C1#5	2C1#5	2C1#5	2C2#5	2C1#6	2C2#6
4'-0" - 6'-0"	16" 2#5 T&B	16" 2#5 T&B	8" EA END	8" EA END	8" W/ 2#5	2C1#5	2C2#5	2C1#5	3C2#5	2C1#6	2C2#6
6'-0" - 7'-0"	16" 2#5 T&B	16" 2#5 T&B	10" EA END	10" EA END	16" W/ 2#5 T&B	2C1#5	3C2#5	2C1#5	3C2#5	2C1#6	3C2#6
7'-0" - 8'-0"	16" 2#5 T&B	16" 2#5 T&B	12" EA END	12" EA END	16" W/ 2#5 T&B	2C1#5	3C2#5	3C1#5	3C2#5	2C1#6	3C2#6
8'-0" - 9'-0"	24" 2#6 T&B	24" 2#6 T&B	14" EA END	14" EA END	16" W/ 2#5 T&B	3C1#5	4C2#5	3C1#5	4C2#5	3C1#6	4C2#6
9'-0" - 10'-0"	24" 2#6 T&B	24" 2#6 T&B	16" EA END	16" EA END	16" W/ 2#5 T&B	3C1#5	5C2#5	3C1#5	5C2#5	3C1#6	4C2#6

JAMB NOMENCLATURE ——► (NUMBER OF CELLS) C (NUMBER & SIZE OF REINFORCING IN EACH CELL)

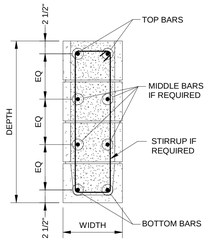
NOTE:
1. WIDTH OF LINTEL = FULL WIDTH OF WALL
2. IF FULL BEARING CAN BE OBTAINED, PROVIDE L6x6x5/16x0'-5" LONG ANGLE BEAM SEAT PROPERLY WELDED TO STEEL COLUMN WITH BEARING LENGTH OF NOT LESS THAN 6" AND END REACTION TO BE 5 KIPS WELD REINFORCING STEEL TO STEEL COLUMN.
3. REINFORCING STEEL SHALL BE 1/2" CLEAR FROM INTERIOR FACE OF VOID; TOP REINFORCING SHALL BE 1 1/2" CLEAR FROM TOP OF LINTEL BEAM; BOTTOM REINFORCING SHALL BE 1 1/2" CLEAR FROM BOTTOM OF LINTEL BEAM.
4. TIES SHALL BE CLOSED STIRRUPS AS PER ACI.
5. DO NOT CUT THE LINTEL FOR A/C DUCT.
6. SEE F/S1.05 FOR BRICK ANGLE DETAIL.
7. INT INDICATES INTERIOR JAMB, EXT INDICATES EXTERIOR JAMB (EXPOSED TO WIND LOAD).
8. "H" INDICATES BEARING HEIGHT OF WALL.

LENGTH OF CMU LAP SPLICES FOR REINFORCEMENT (INCHES)

BAR SIZE	Db (in)	LAP LENGTH (in)
#3	0.375	27
#4	0.500	40
#5	0.625	45
#6	0.750	54
#7	0.875	63
#8	1.000	72
#9	1.128	MECHANICAL CONNNECTOR ONLY
#10	1.270	
#11	1.410	
#14	1.693	
#18	1.257	

MASONRY BEAM SCHEDULE

MARK	MAX SPAN	MINIMAL WIDTH	DEPTH	BEARING	TOP BARS	BOTTOM BARS	MIDDLE BAR SIZE	MIDDLE BAR SET	STIRRUP SIZE	STIRRUP SPACING
MB1	8'-0"	12"	40"	16" EACH END W/ 3 CELLS 2#6 JAMBS	(2)#6	(2)#6	#6	(1)	#3	16" C/C
MB2	12'-4"	12"	32"	16" EACH END W/ 3 CELLS 2#6 JAMBS	(2)#6	(2)#6	#6	(1)	#3	16" C/C



PERMIT DOCUMENTS

GEORGIA REGISTERED 022314 PROFESSIONAL ENGINEER JAMES V. WILLIAMS
03/07/19

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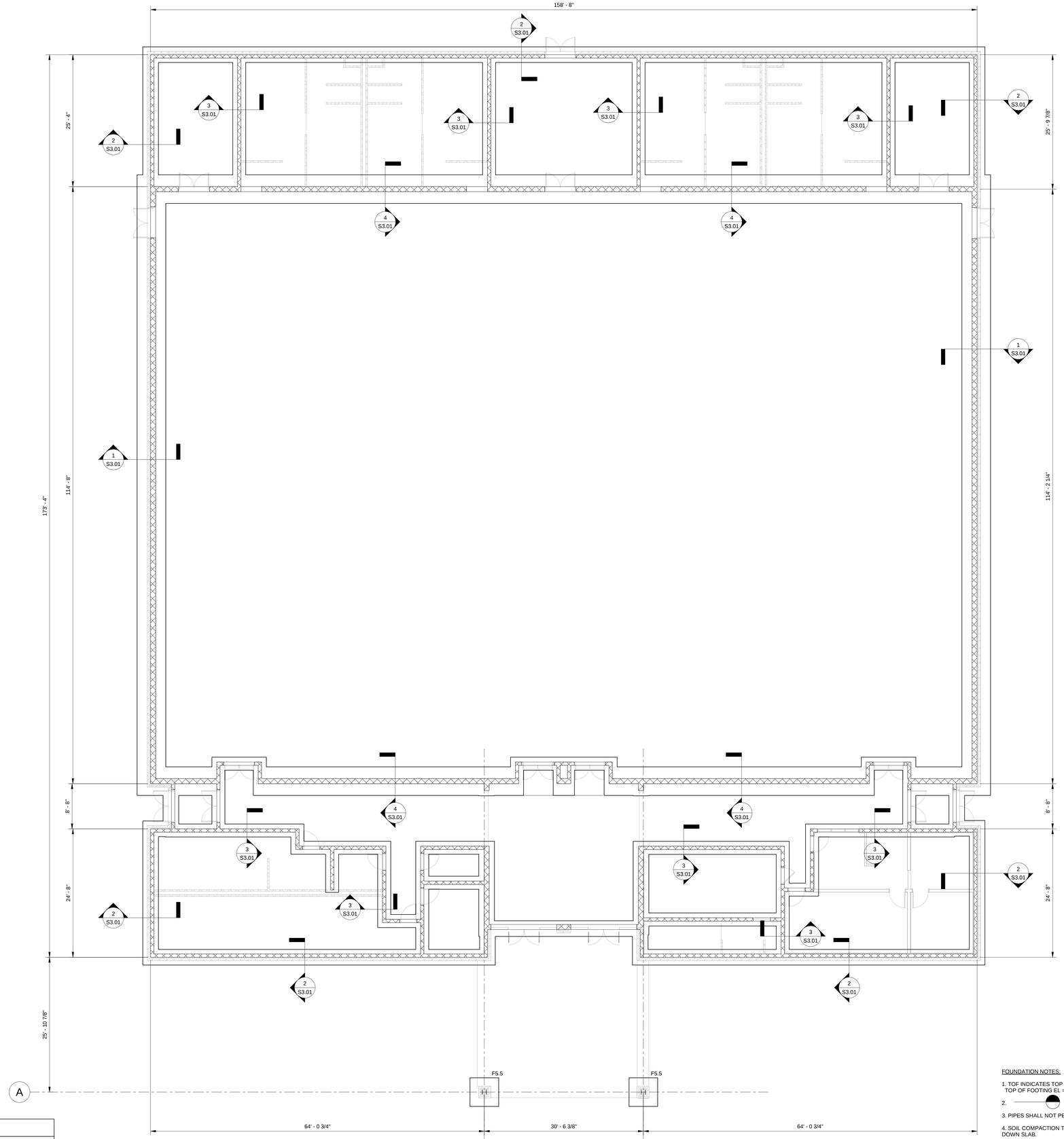
JVW	DEM	JVW

DATE: 08/02/2019
JOB NO. 119273573
03/07/19

EFFINGHAM COUNTY GYMNASIUM
CLARENCE E. MORGAN RECREATION COMPLEX
1750 GA. HWY 21 S, SPRINGFIELD, GEORGIA 31329

CMU DETAILS

DRAWING NUMBER
S1.06



1 S2.01 FOUNDATION PLAN
1/8" = 1'-0"

FOUNDATION (F) SCHEDULE

MARK	WIDTH	LENGTH	THICKNESS	REINFORCING BOTTOM LONG	REINFORCING BOTTOM SHORT	REINFORCING TOP LONG	REINFORCING TOP SHORT	REMARKS
F5.5	5' - 6"	5' - 6"	1' - 6"	(7)#5	(7)#5	(7)#5	(7)#5	T.O.F. 1'-6" B.F.F.

FOUNDATION NOTES:

1. TOF INDICATES TOP OF FOOTING ELEVATION BELOW FINISH FLOOR. TOP OF FOOTING EL = -1'-4" UNO.
2. INDICATES FOOTING STEP- SEE DETAIL A/S3.01.
3. PIPES SHALL NOT PENETRATE FOOTINGS.
4. SOIL COMPACTION TESTING IS REQUIRED WHEREVER PIPE IS PLACED UNDER TURN DOWN SLAB.
5. SEE DRAWINGS S6.01 AND S7.01 FOR COLUMNS AND BASE PLATES.

PERMIT DOCUMENTS

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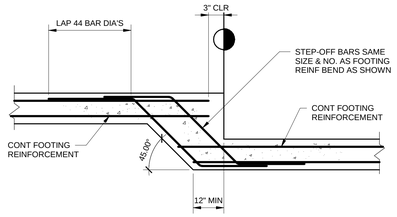
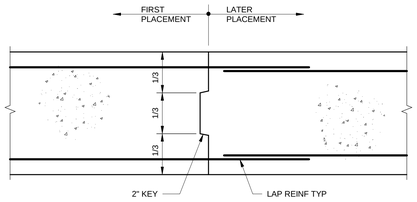
FOUNDATION PLAN

DRAWING NUMBER

S2.01



A S3.01 STEP FOOTING DETAIL
NTS



B S3.01 GRADE BEAM CONST JOINT DETAIL
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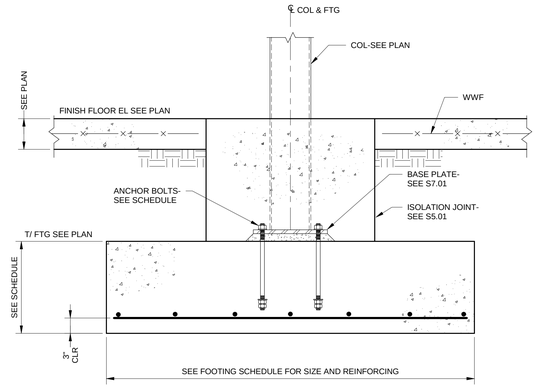

C S3.01 TYPICAL FOOTING DETAIL
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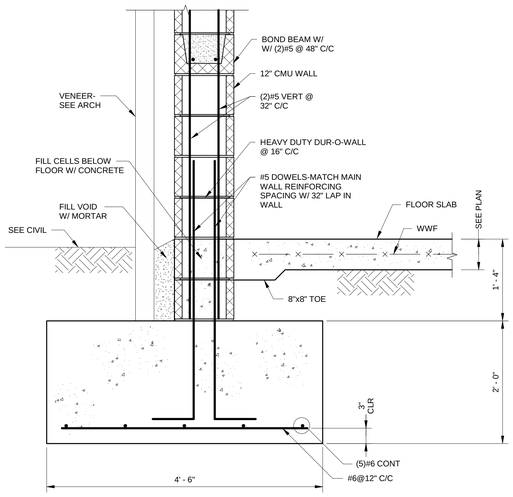
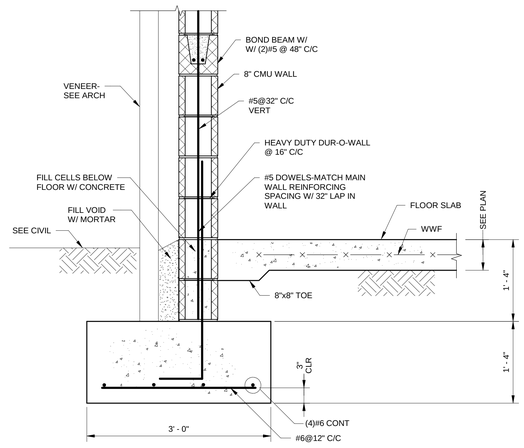


1 S3.01 SECTION
1" = 1'-0"



2 S3.01 SECTION
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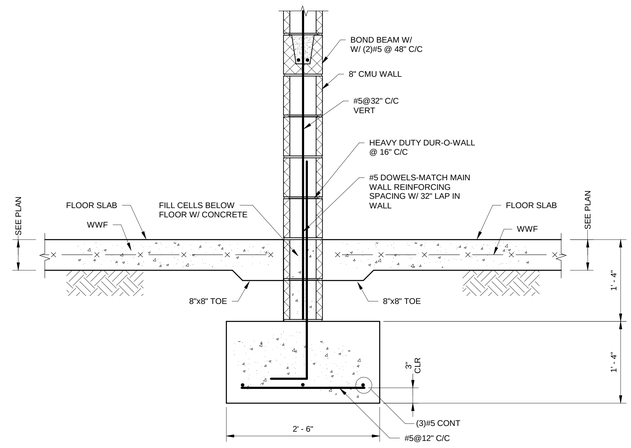
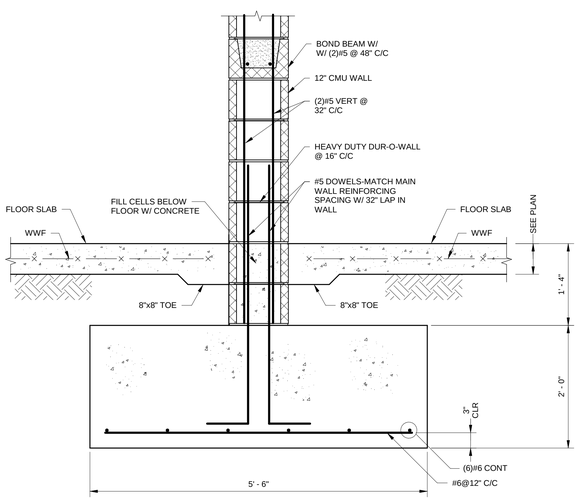


3 S3.01 SECTION
1" = 1'-0"



4 S3.01 SECTION
1" = 1'-0"

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CLARENCE E. MORGAN RECREATION COMPLEX
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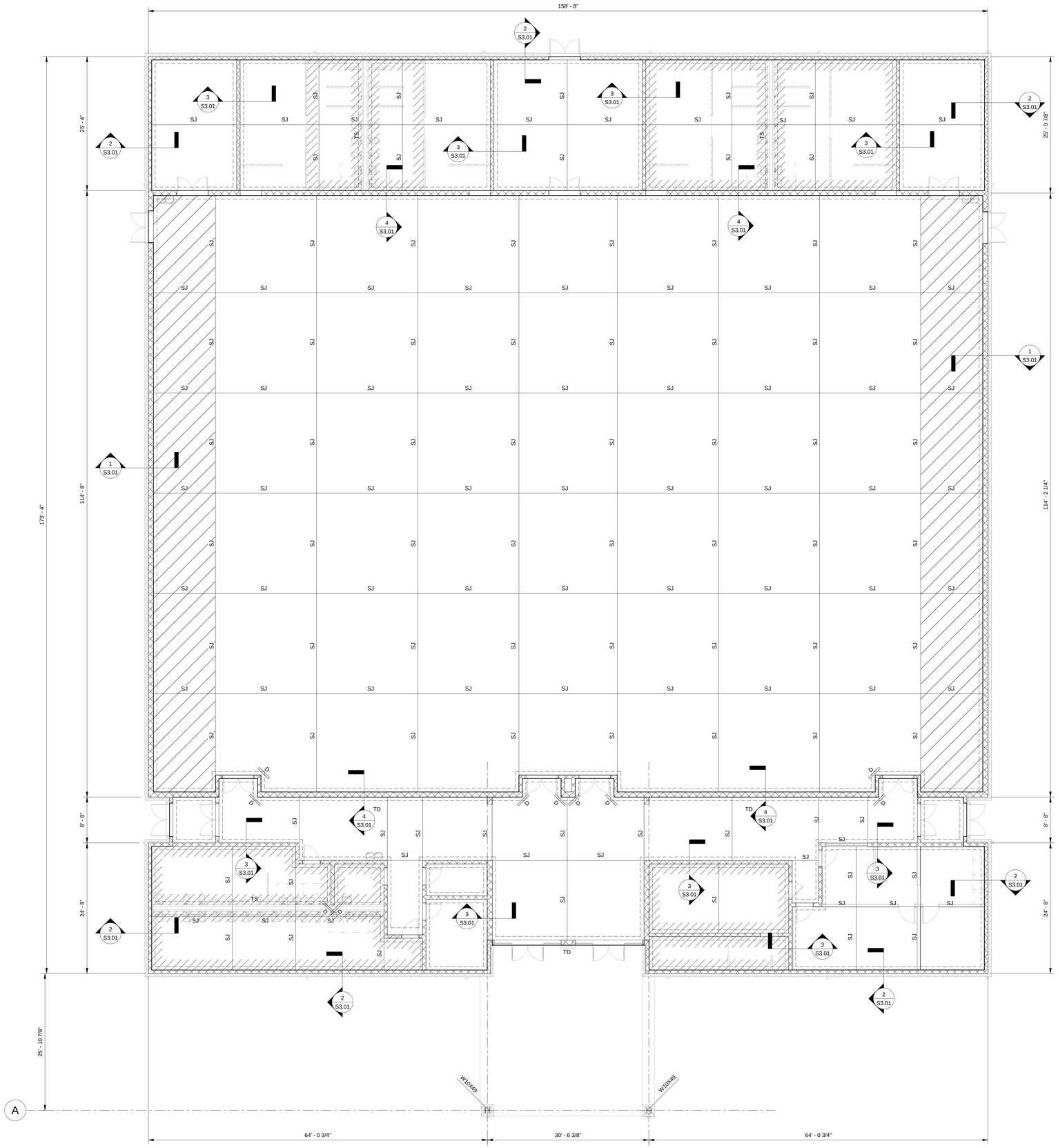
FOUNDATION SECTIONS

DRAWING NUMBER
S3.01



1 S4.01 FLOOR SLAB PLAN
1/8" = 1'-0"

SLAB NOTES:

1. MAIN LEVEL FINISH FLOOR ELEVATION 0'-0" UNLESS NOTED OTHERWISE.

2. ALL JOINTS SHOWN SHALL BE CONSTRUCTION JOINT (CJ) OR SAWED CONTROL JOINTS (SJ)AT CONTRACTOR OPTION UNO. CONTRACTOR TO LOCATE CONSTRUCTION JOINTS IN THE MOST BENEFICIAL LOCATIONS FOR PLACING THE CONCRETE SLAB, AS LONG AS THE SPACING OF THE CONSTRUCTION JOINT WILL NOT AFFECT THE ABILITY OF CONTRACTOR TO INSTALL THE SAWED CONTROL JOINTS BEFORE THE ONSET OF SHRINKAGE CRACKS. DETAILS OF THE JOINTS ARE SHOWN ON DRAWING S5.01.

3. SOIL COMPACTION TESTING IS REQUIRED WHEREVER PIPE IS PLACED UNDER TURN DOWN SLAB.

4. SLAB ON GRADE SHALL BE 6" THICK AT GYMNASIUM, ALL OTHER AREAS 4" THICK (U.N.O.) WITH 3000 PSI CONCRETE ON 15 MIL VAPOR RETARDER ON 6" GRANULAR AGGREGATE BASE COMPACTED TO 98% STANDARD PROCTOR, REINFORCED WITH W/6x6W2.1xW2.1 WWF AT MID DEPTH OF SLAB.

5. DESIGNATES 8" SLAB ON GRADE WITH 3000 PSI CONCRETE ON 15 MIL VAPOR RETARDER ON 8" GRANULAR AGGREGATE BASE COMPACTED TO 98% STANDARD PROCTOR, REINFORCED WITH #4 @ 12" C/C EACH WAY CENTERED IN SLAB.

6. TS DESIGNATES THICKENED SLAB SEE DETAIL D/S5.01.

7. TD DESIGNATES TURN DOWN SLAB SEE DETAIL C/S5.01.

8. D DESIGNATES 2-#4x3'-0" LONG AT MIDDLE OF SLAB THICKNESS.

9. SLAB TO RECEIVE TERRAZZO FINISH SHALL BE 4" THICK 4000 PSI CONCRETE ON 15 MIL VAPOR RETARDER, 2" COMPACTED SAND ON #57 CRUSHED STONE REINFORCED WITH 6x6-2.9xW2.9 WWF AT MID DEPTH OF SLAB UNO.

10. DESIGNATES DEPRESSED SLAB SEE DETAIL E/S5.01.

11. SEE ARCHITECTURAL DRAWING FOR ALL ADDITIONAL SLAB DIMENSIONS.

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022314
PROFESSIONAL
ENGINEER
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08/02/2019

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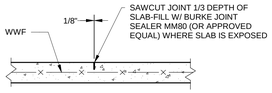
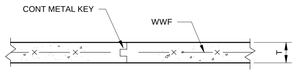
LEVEL 01 FLOOR SLAB

DRAWING NUMBER

S4.01



A S5.01 SAWED CONTROL JOINT DETAIL (SJ)
NTS



B S5.01 CONSTRUCTION JOINT DETAIL (CJ)
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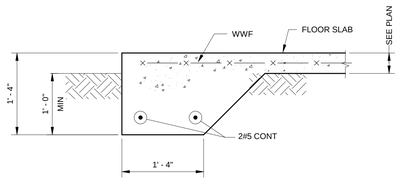

C S5.01 TURN DOWN SLAB DETAIL (TD)
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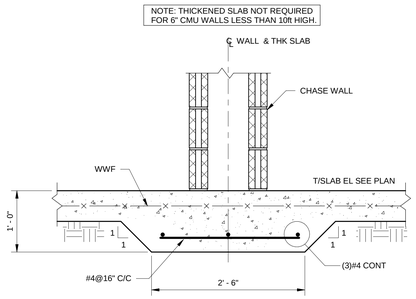

D S5.01 THICKENED SLAB DETAIL (TS)
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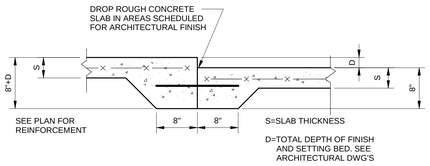

E S5.01 DEPRESSED SLAB DETAIL
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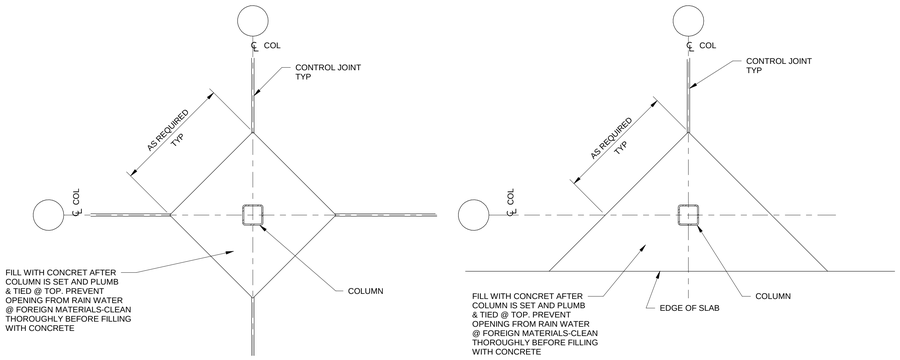
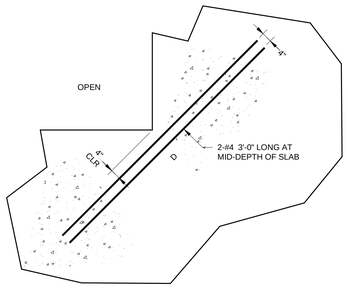
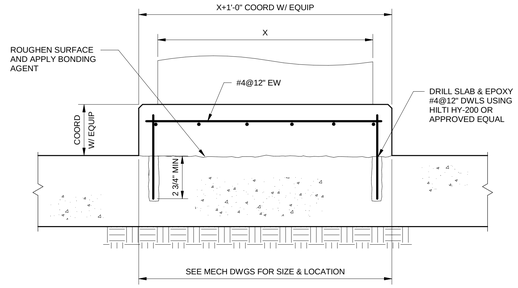


6 S5.01 ISOLATION JOINT DETAIL
NTS



F S5.01 D BAR DETAIL
NTS



G S5.01 MECHANICAL PAD DETAIL
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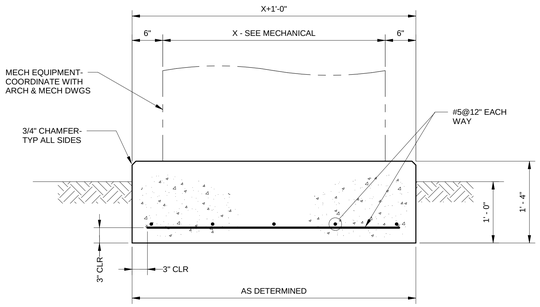

H S5.01 EXTERIOR MECHANICAL PAD DETAIL
NTS

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03/07/19

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JVW	DEM	JVW

DATE: 08/02/2019
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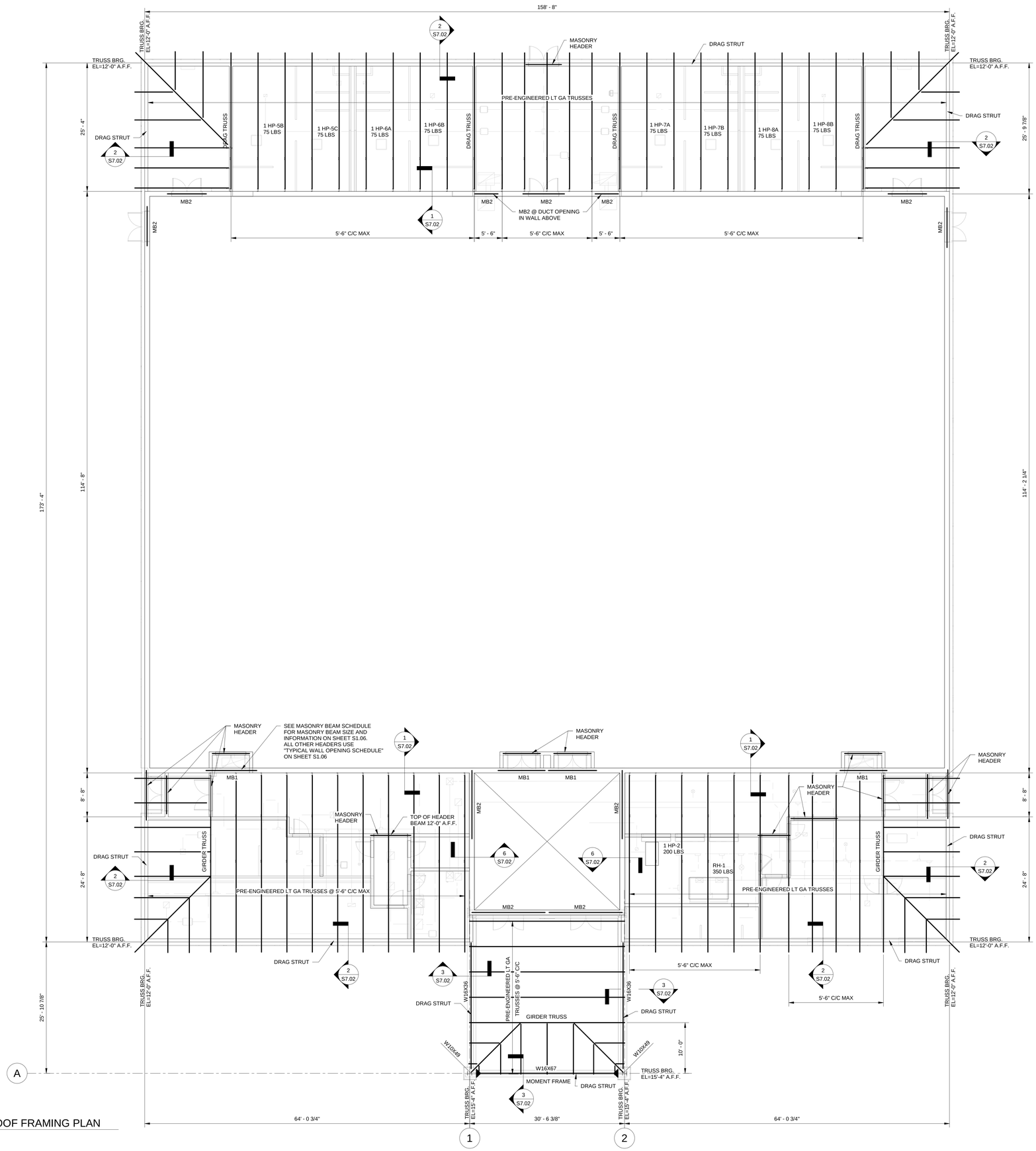
03/07/19

EFFINGHAM COUNTY GYMNASIUM
CLARENCE E. MORGAN RECREATION COMPLEX
1750 GA. HWY 21 S, SPRINGFIELD, GEORGIA 31329

FLOOR SLAB SECTIONS

DRAWING NUMBER
S5.01



1 S6.01 LOW ROOF FRAMING PLAN
1/8" = 1'-0"

NOTES:

- DRAG TRUSSES SHALL BE CAPABLE OF TRANSFERING 350 PLF TO THE SHEAR WALL BELOW THEM.

- DRAG STRUTS SHALL BE CAPABLE OF TRANSFERING 560 PLF TO THE SHEAR WALL BELOW THEM.

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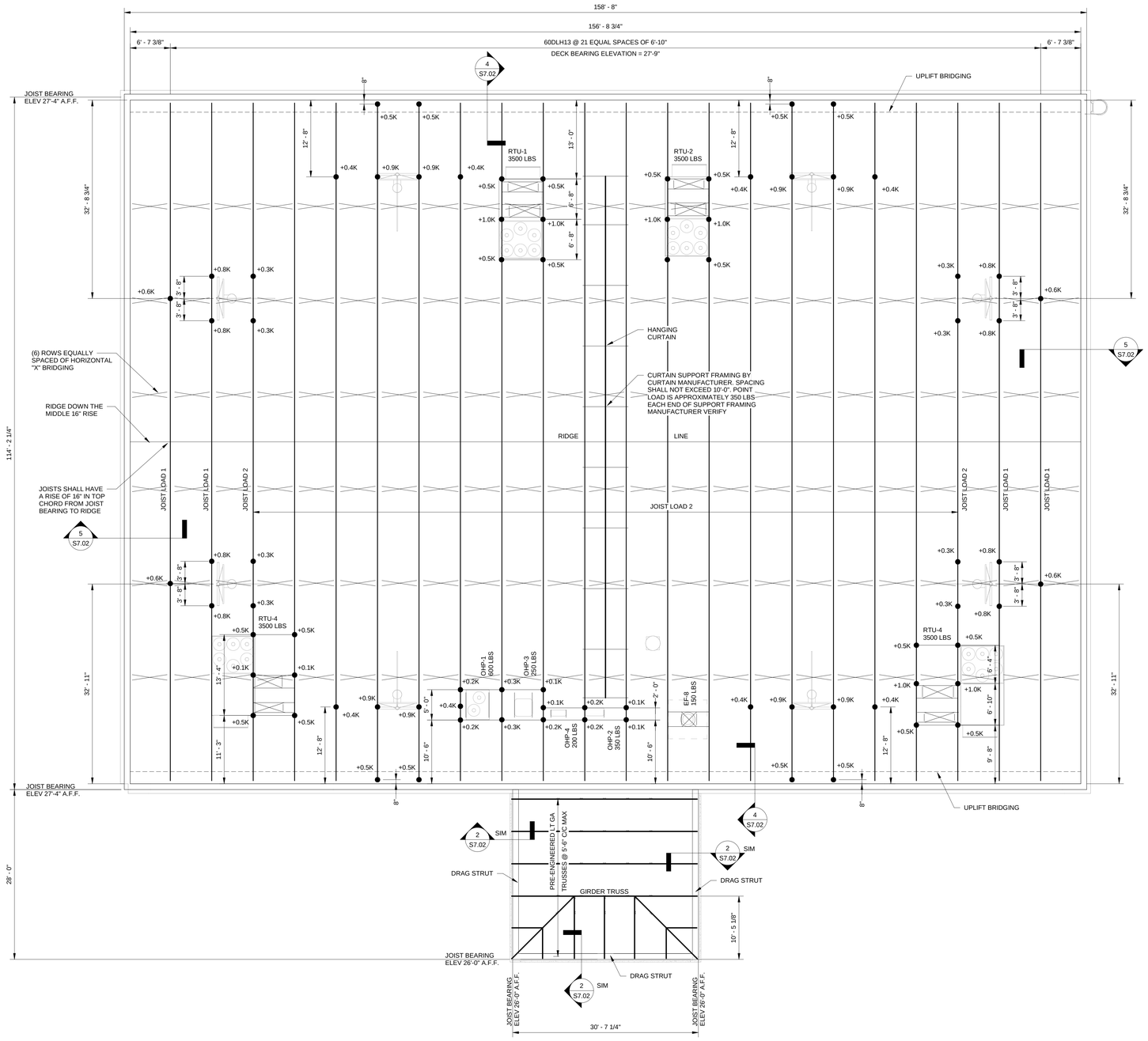
LOW ROOF FRAMING PLAN

DRAWING NUMBER

S6.01



1 S6.02 HIGH ROOF FRAMING PLAN
1/8" = 1'-0"

NOTES:

- BASKETBALL GOAL POINT LOADS ARE BOTTOM CHORD LOADS.
- VERIFY DIMENSIONS WITH ARCHITECTURAL PLANS AMD WITH MECHANICAL.

JOIST LOADING TABLE				
MARK	LIVE	DEAD	WIND *	HVAC / MISC ** EQUIPMENT
LOADING 1	100 PLF	170 PLF	+66 PLF -162 PLF	SEE ROOF PLAN
LOADING 2	100 PLF	170 PLF	+66 PLF -137 PLF	SEE ROOF PLAN

* WIND LOADING IS PER AISC 7-10 ASD WIND LOAD WITH THE 0.6 LOAD FACTOR APPLIED.

** CONTRACTOR SHALL COORDINATE WITH ALL EQUIPMENT MANUFACTURERS TO INSURE JOIST MANUFACTURER HAS THE LATEST WEIGHTS, LOCATIONS AND DIMENSIONS OF ALL HVAC AND MISCELLANEOUS EQUIPMENT.

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03/07/19

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EFFINGHAM COUNTY GYMNASIUM
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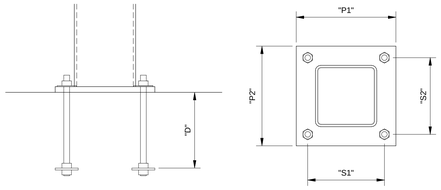
1750 GA. HWY 21 S. SPRINGFIELD, GEORGIA 31329

HIGH ROOF FRAMING PLAN

DRAWING NUMBER
S6.02

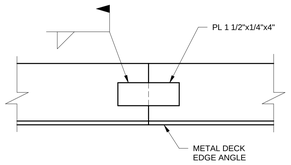
PERMIT DOCUMENTS



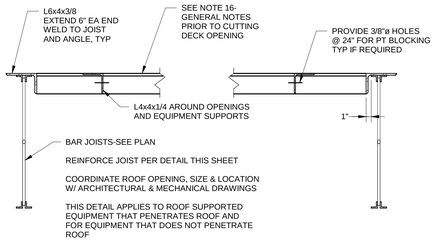
NOTE: THIS SCHEDULE DOES NOT APPLY TO COLUMNS LOCATED IN EXTERIOR WALLS AND WING WALL. SEE DETAIL D/S3.1 FOR COLUMNS LOCATED IN EXTERIOR WALLS AND WING WALL.

COLUMN	HSS4x4	HSS5x5	HSS6x6
BASE PLATE	-	5/8" THICK	5/8" THICK
ANCHOR BOLTS	-	(4) 5/8"ø	(4) 5/8"ø
"D"	-	8"	8"
"P1"	-	11"	11"
"P2"	-	11"	11"
"S1"	-	8"	8"
"S2"	-	8"	8"

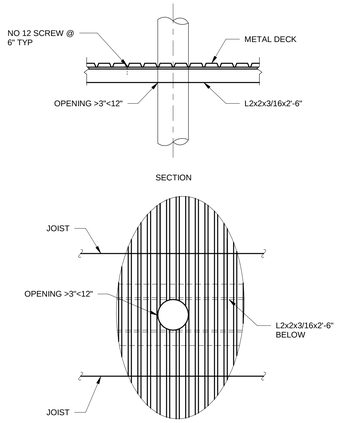
A S7.01 BASE PLATE-ANCHOR BOLT DETAILS
NTS



B S7.01 CONT ANGLE CONNECTION
NTS

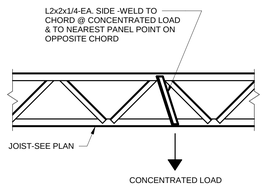


C S7.01 FRAMED DECK OPENING (>12") DETAIL
NTS



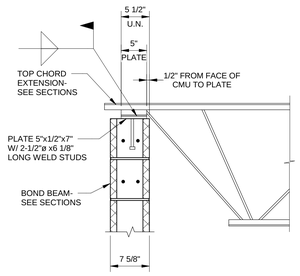
NOTE: THIS DETAIL APPLIES TO WIDE RIB METAL DECK ALSO.

D S7.01 FRAMED DECK OPENING (<12") DETAIL
NTS

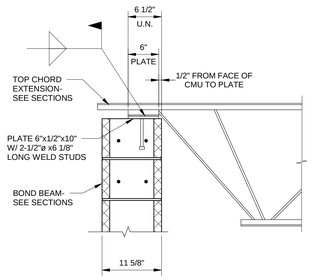


1. BOTTOM CHORD LOAD SHOWN, TOP CHORD LOAD SIM.
2. REINFORCING REQUIRED WHERE CONCENTRATED LOAD ON JOIST CHORD EXCEEDS 100 LBS.

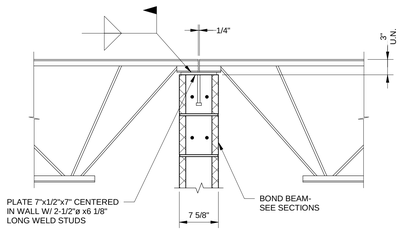
E S7.01 JOIST REINFORCING DETAIL
NTS



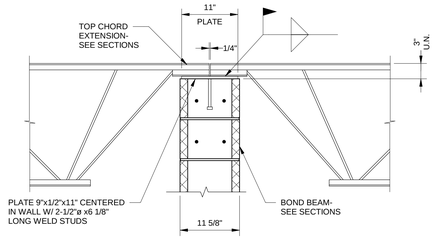
JOIST BEARING FROM ONE SIDE ON 8" CMU WALL



JOIST BEARING FROM ONE SIDE ON 12" CMU WALL



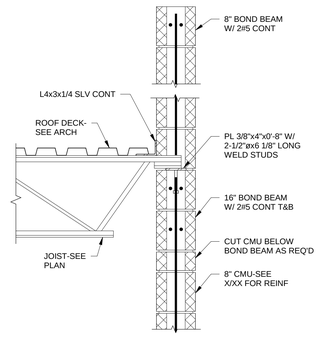
JOIST BEARING FROM TWO SIDS ON 8" CMU WALL



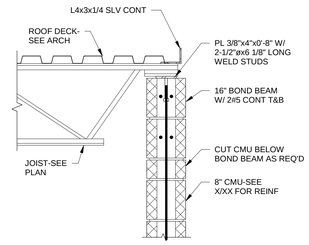
JOIST BEARING FROM TWO SIDES ON 12" CMU WALL

NOTES:
1. WHERE DOUBLE JOIST (JOISTS SPACED 6" APART) INDICATED ON PLAN, INCREASE PLATE DIMENSION PARALLEL TO WALL TO 12" (MIN.) AND PROVIDE (3) 1/2" DIA. x6"x2" ANCHORS.
2. EXTEND JOIST BOTTOM CHORDS TO 1/2" FROM FACE OF WALL WHERE REQUIRED FOR CEILING SUPPORT. COORDINATE WITH ARCHITECTURAL DRAWINGS.
3. WHERE CHANNEL BLOCK TYPE BOND BEAMS ARE SHOWN CHANGE ANCHORS TO 1/2" DIA.x4"x2".
4. VERTICAL REINF NOT SHOWN, SEE SECTIONS AND S2.1.

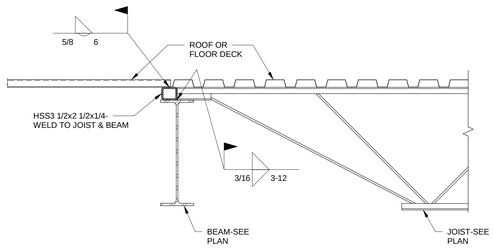
F S7.01 TYPICAL DETAIL AT JOISTS BEARING ON MASONRY WALL (JBMW)
NTS



G S7.01 JOIST FRAMING ON CMU DETAIL
NTS



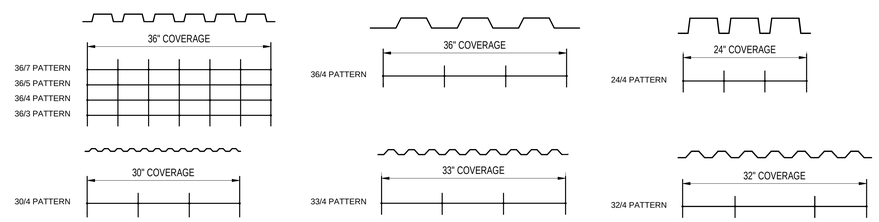
H S7.01 JOIST FRAMING ON CMU DETAIL
NTS

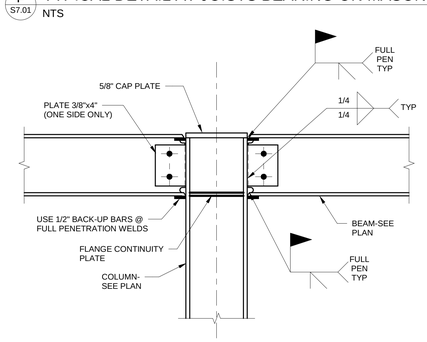


J S7.01 90° CHANGE IN DECK DIRECTION DETAIL
NTS

METAL DECK TABLE

LABEL	TYPE I LIGHTWEIGHT INSULATING CONCRETE FILL 125 PSI MIN	DECK TYPE	DECK GAUGE	Ip (in4/ft)	Sp (in3/ft)	In (in4/ft)	Sn (in³/ft)	Fy (ksi)	INTERMEDIATE SUPPORT		SIDE LAP		PERIMETER SUPPORT	
									FASTERER	PATTERN	FASTENER	# BETWEEN SUPPORTS	FASTERER	SPACING C/C
ROOF ON BAR JOISTS	1/8" COVER OVER METAL DECK	1 1/2" TYPE B WIDE RIB VENTED	20	0.205	0.227	0.213	0.238	33	5/8"ø PUDDLE WELD	36/7	#10 TEK	8	5/8"ø PUDDLE WELD	6"
ROOF ON LIGHT GAUGE ROOF TRUSSES	NONE	1 1/2" TYPE B WIDE RIB	20	0.205	0.227	0.213	0.238	33	#12 TEK	36/7	#10 TEK	9	#12 TEK	6"





K S7.01 BEAM TO COLUMN CONNECTION DETAIL (MC)
NTS

PERMIT DOCUMENTS

HUSSEY GAY BELL
Established 1958
329 Commercial Drive, Savannah, Ga 31406 / T: T:912.354.4626

GEORGIA REGISTERED 022314 PROFESSIONAL ENGINEER JAMES V. WILLIAMS
03/07/19

REVISIONS

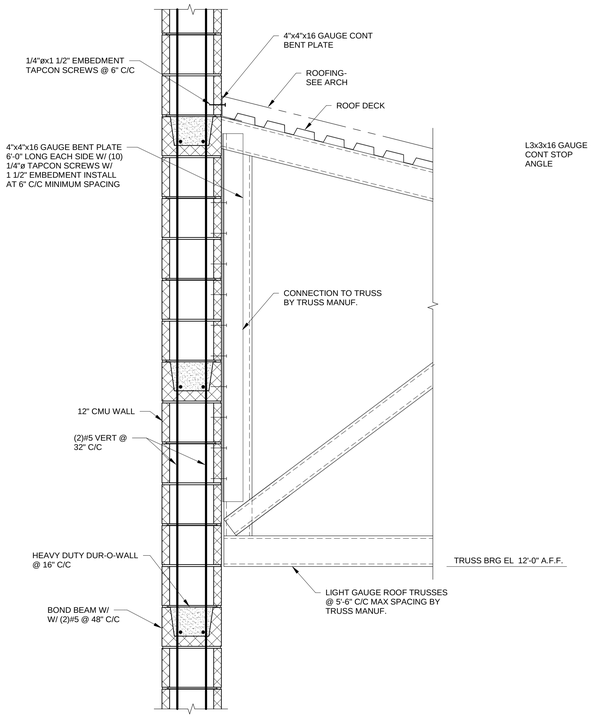
DESIGNED	DRAWN	CHECKED
JVW	DEM	JVW

DATE: 08/02/2019
JOB NO. 119273573
03/07/19

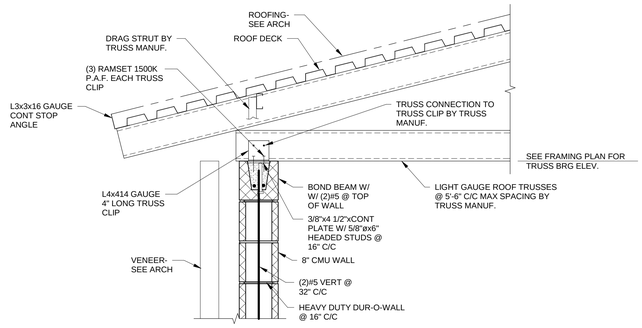
EFFINGHAM COUNTY GYMNASIUM
CLARENCE E. MORGAN RECREATION COMPLEX
1750 GA. HWY 21 S, SPRINGFIELD, GEORGIA 31329

FRAMING SECTIONS AND DETAILS

DRAWING NUMBER
S7.01



1 S7.02 SECTION
1" = 1'-0"



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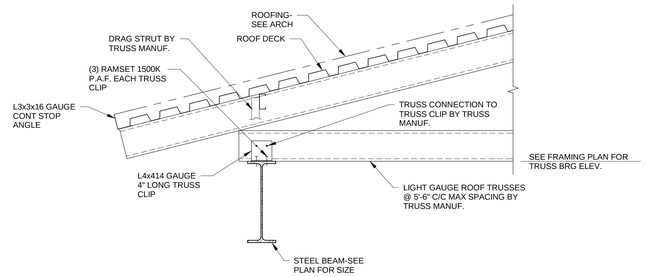

3 S7.02 SECTION
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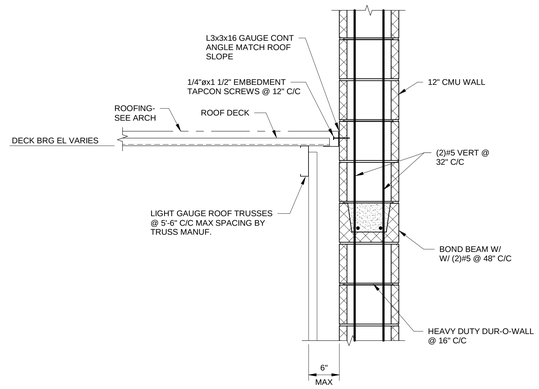

6 S7.02 SECTION
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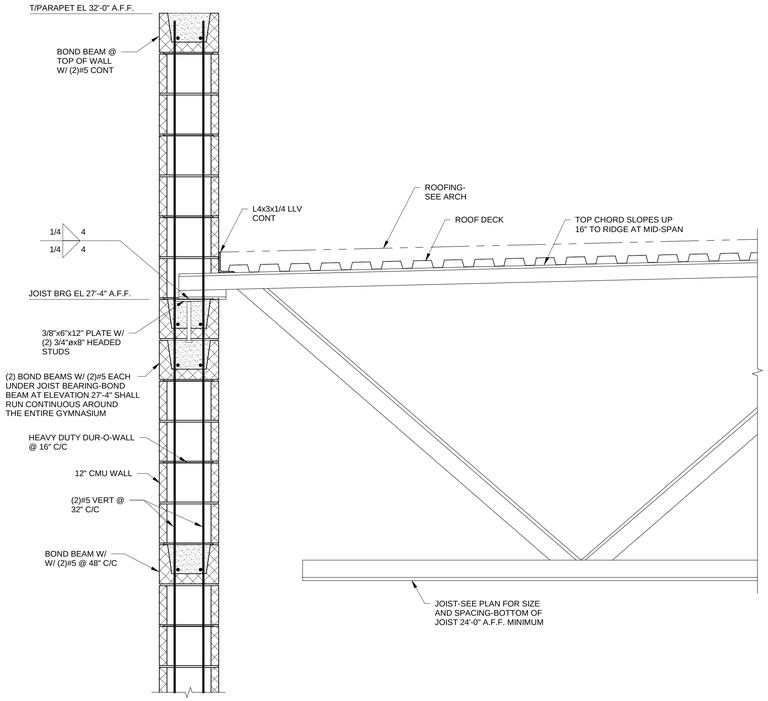

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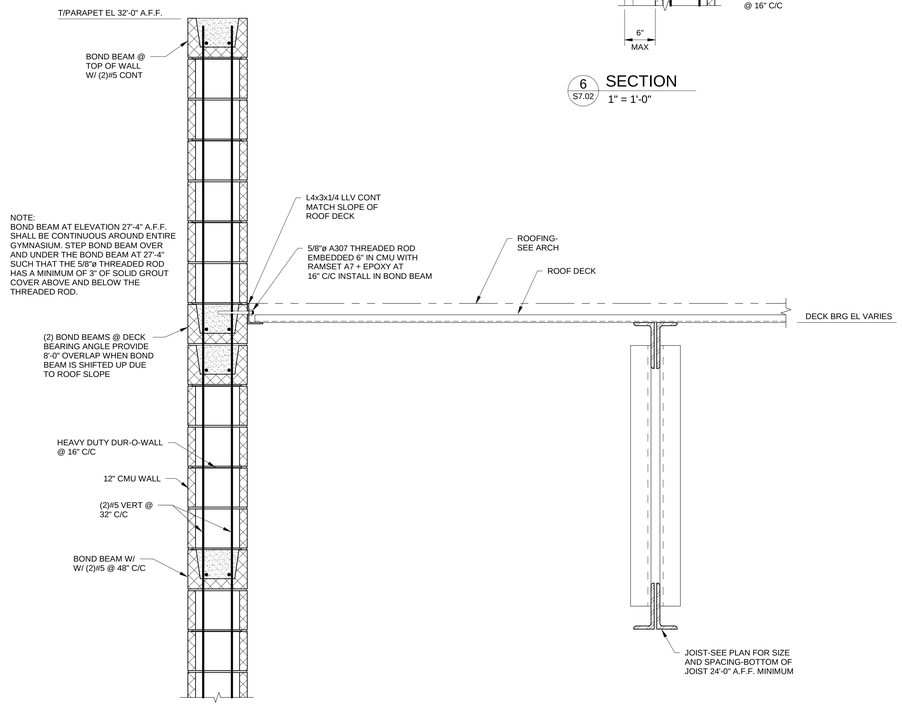

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1" = 1'-0"

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