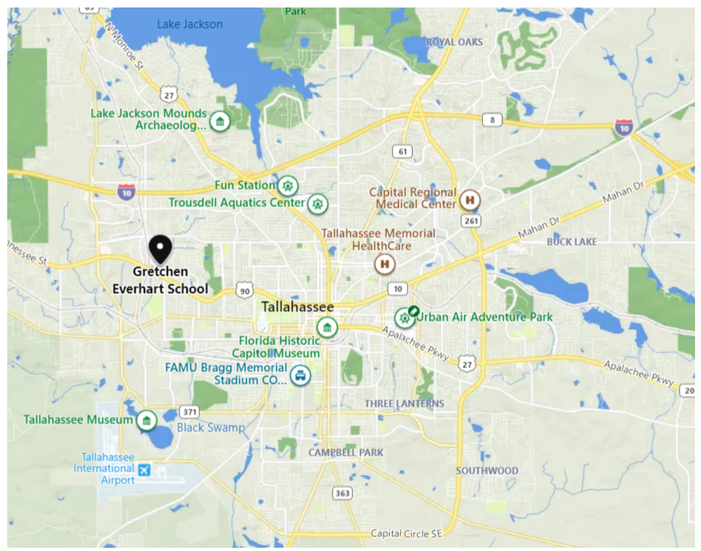
CONSTRUCTION DOCUMENTS FOR:

GRETCHEN EVERHART SCHOOL
CHILLER YARD SCREEN WALL

PREPARED FOR:

LEON COUNTY SCHOOLS
FACILITIES AND CONSTRUCTION
3420 WEST THARPE STREET, SUITE 100
TALLAHASSEE, FLORIDA 32303



VICINITY MAP

DRAWING INDEX	
SHEET NUMBER	SHEET NAME
S0	STRUCTURAL NOTES
S1	FOUNDATION PLAN & DETAILS
T1.0	TITLE SHEET

PROJECT SIGN OFF:

_____DANNY ALLBRITTON, DIRECTOR OF CONSTRUCTION

_____MARTH CHAUNCEY, CAPITAL OUTLAY SPECIALIST

_____DIRECTOR OF SCHOOLS, GRETCHEN EVERHART SCHOOL

_____JOHN HUNKIAR, DIRECTORY OF SAFETY & SECURITY

_____ROD MCQUEEN, BUILDING OFFICIAL

_____JANE FLOYD BULLEN, PRINCIPAL

_____RYAN WILLIAMS, PROJECT COORDINATOR

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LEON COUNTY
SCHOOL BOARD

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LEON COUNTY SCHOOLS

GRETCHEN EVERHART SCHOOL
CHILLER YARD SCREEN WALL
2750 MISSION ROAD, TALLAHASSEE, FL

PROJECT NO:	LSB22GES
DRAWING FILE:	LSB22GES.rvt
DRAWN BY:	JMG
CHECKED BY:	JMG
DATE ISSUED:	03.21.2022

#	DESCRIPTION	DATE

JAMIE M. GRAHAM, PE

JAMIE M. GRAHAM LICENSE No. 72659 STATE OF FLORIDA PROFESSIONAL ENGINEER

FLORIDA REG. NO. 72659

SHEET TITLE:
TITLE SHEET

SHEET NO:
T1.0

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GENERAL NOTES

1. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS OF ALL OTHER DISCIPLINES AND THE SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES, AND OTHER ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATIONS DURING THE WORK. THE ENGINEER WILL NOT ADVISE ON OR ISSUE DIRECTION AS TO SAFETY PRECAUTIONS AND PROGRAMS.

3. THE STRUCTURAL DRAWINGS HEREIN REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL ALL STRUCTURAL WORK AND CONNECTIONS HAVE BEEN COMPLETED. THE INVESTIGATION, DESIGN, SAFETY, ADEQUACY, AND INSPECTION OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC. IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

4. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE METHODS, TECHNIQUES, AND SEQUENCES OF PROCEDURES TO PERFORM THE WORK. THE SUPERVISION OF THE WORK IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

5. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO APPROVAL BY THE ENGINEER.

6. ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE, AND ERECTION IN ACCORDANCE WITH THE SUPPLIER'S INSTRUCTIONS AND REQUIREMENTS.

7. LOADING APPLIED TO THE STRUCTURE DURING THE PROCESS OF CONSTRUCTION SHALL NOT EXCEED THE SAFE LOAD-CARRYING CAPACITY OF THE STRUCTURAL MEMBERS. THE LIVE LOADING USED IN THE DESIGN OF THIS STRUCTURE ARE INDICATED IN THE "DESIGN CRITERIA NOTES". DO NOT APPLY ANY CONSTRUCTION LOADS UNTIL STRUCTURAL FRAMING IS CONNECTED TOGETHER AND UNTIL ALL TEMPORARY BRACING IS IN PLACE.

8. ALL ASTM AND OTHER REFERENCES ARE PER THE LATEST EDITIONS OF THESE STANDARDS, UNLESS OTHERWISE NOTED.

9. SHOP DRAWINGS AND OTHER ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE GENERAL CONTRACTOR BEFORE SUBMITTAL. THE ENGINEER'S REVIEW IS TO BE FOR CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE RELEVANT CONTRACT DOCUMENTS. THE ENGINEER'S REVIEW DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW, CHECK, AND COORDINATE THE SHOP DRAWINGS PRIOR TO SUBMISSION. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, DIMENSIONS, ETC.

10. AS A MINIMUM, SUBMIT THE FOLLOWING ITEMS FOR REVIEW:

A. STEEL REINFORCING SHOP DRAWINGS
B. CAST-IN-PLACE CONCRETE MIX DESIGNS

OTHER SUBMITTALS ARE REQUIRED PER THE NOTES CONTAINED HEREIN AND THE PROJECT SPECIFICATIONS.

11. ALL "STRUCTURAL SUBMITTALS" SHALL BE PREPARED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF FLORIDA. DRAWINGS PREPARED SOLELY AS A GUIDE FOR ERECTION, INSTALLATION, AND CATALOG INFORMATION WILL NOT REQUIRE AN ENGINEER'S SEAL; HOWEVER, THEY SHALL BEAR THE ENGINEER'S SIGNATURE AND AN INDICATION THAT HE OR SHE CHECKED THE WORK.

12. DRAWINGS INTRODUCING ENGINEERING INPUT AND CALCULATIONS SHALL BE SIGNED, SEALED, AND DATED BY THE ENGINEER PREPARING SUCH WORK.

DESIGN CRITERIA

1. THE INTENDED DESIGN STANDARDS AND/OR CRITERIA ARE AS FOLLOWS:

GENERAL	FLORIDA BUILDING CODE 7TH EDITION (2020) BUILDING
CONCRETE	BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE ACI 318-14
STRUCTURAL STEEL	SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS AISC 360-10 (LRFD)
MASONRY	BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES ACI 530-13/ASCE 5-13/TMS 402-13
COLD-FORMED STEEL	2012 NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS

2. DESIGN SUPERIMPOSED GRAVITY DEAD LOADS USED IN THE DESIGN OF THIS STRUCTURE ARE AS FOLLOWS:

ALL OTHERS	ACTUAL SELF-WEIGHT

3. DESIGN LATERAL LIVE LOADS USED IN THE DESIGN OF THIS STRUCTURE ARE AS FOLLOWS:

WIND LOADS PER ASCE 7-16 (3-SEC GUST)
ULTIMATE WIND SPEED = 130 MPH
RISK CATEGORY III
EXPOSURE B
ULTIMATE WIND PRESSURE = 27.9 PSF

4. THIS STRUCTURE HAS BEEN DESIGNED WITH "SAFETY FACTORS" IN ACCORDANCE WITH GENERALLY ACCEPTED PRINCIPLES OF STRUCTURAL ENGINEERING. THE FUNDAMENTAL NATURE OF THE "SAFETY FACTOR" IS TO COMPENSATE FOR UNCERTAINTIES IN THE INTENDED DESIGN, FABRICATION AND ERECTION OF STRUCTURAL BUILDING COMPONENTS. IT IS INTENDED THAT "SAFETY FACTORS" BE USED SO THAT THE LOAD CARRYING CAPACITY OF THE STRUCTURE DOES NOT FALL BELOW THE DESIGN LOAD AND THAT THE BUILDING WILL PERFORM UNDER DESIGN LOAD WITHOUT DISTRESS. WHILE THE USE OF "SAFETY FACTORS" IMPLIES SOME EXCESS CAPACITY BEYOND DESIGN LOAD, SUCH EXCESS CAPACITY CANNOT BE ADEQUATELY PREDICTED AND SHALL NOT BE RELIED UPON.

FOUNDATION NOTES

1. ALL CONSOLIDATION OF SUBSOIL SHALL CLOSELY FOLLOW THE GEOTECHNICAL REPORT PREPARED BY ARDAMAN & ASSOCIATES, INC., FILE NO. 113-22-40-1291 DATED FEBRUARY 9, 2022. ALL FOUNDATION EXCAVATIONS SHALL BE EVALUATED BY THE GEOTECHNICAL ENGINEER/TESTING AGENCY PRIOR TO PLACING FOUNDATION CONCRETE.

1

2. ALL FOUNDATION CONCRETE SHALL OBTAIN A 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI. FOUNDATION CONCRETE TO ACHIEVE A MINIMUM OF 65% COMPRESSIVE STRENGTH (3 - 4 DAYS OF CURING) PRIOR TO SETTING OF CMU WALLS.

3. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE BUILDINGS". HOT WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305. COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 306.

4. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60.

5. UNLESS OTHERWISE NOTED, THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

A) CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH - 3"

B) CONCRETE EXPOSED TO EARTH OR WEATHER:
#6 THROUGH #18 BARS - 2"
#5 BAR, W31 OR D31 WIRE & SMALLER- 1 1/2"

CONCRETE MASONRY NOTES

1. MASONRY CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530-13/ASCE 5-13/TMS 402-13)", PUBLISHED BY THE AMERICAN CONCRETE INSTITUTE, DETROIT, MICHIGAN.

2. THE MINIMUM DESIGN COMPRESSIVE STRENGTH OF THE MASONRY (f'm) SHALL BE 2,000 PSI AT 28 DAYS AS DETEMINED BY THE UNIT STRENGTH METHOD USING TABLE 2 IN ACI 530. THE STRUCTURE IS SUPPORTED BY BEARING WALLS UNLESS NOTED OTHERWISE. ERECT MASONRY PRIOR TO CASTING CONCRETE COLUMNS WITHIN BEARING WALLS OR CASTING BEAMS AND SLABS SUPPORTED BY BEARING WALLS.

3. HOLLOW LOAD-BEARING MASONRY UNITS SHALL CONFORM TO ASTM C-90, GRADE N. BLOCK SHALL HAVE A NET AREA COMPRESSIVE STENGTH OF 2,800 PSI AND SHALL BE MANUFACURED WITH NORMAL WEIGHT AGGREGATE.

4. THE USE OF MASONRY-CEMENT MORTAR IS STRICTLY PROHIBITED. MORTAR SHALL CONFORM TO ASTM C-270, TYPE S EXCEPT USE TYPE M MORTAR BELOW GRADE. ALL MORTAR SHALL MEET THE "PROPORTION SPECIFICATION" OF ASTM C-270 AND SHALL BE MADE WITH PORTLAND CEMENT/LIME (NON AIR-ENTRAINED). HEAD AND BED JOINTS SHALL BE 3/8" FOR THE THICKNESS OF THE FACE SHELL. WEBS ARE TO BE FULLY MORTARED IN ALL COURSES OF PIERS, COLUMNS AND PILASTERS; IN THE STARTING COURSE; AND WHERE AN ADJACENT CELL IS TO BE GROUTED. REMOVE MORTAR PROTRUSIONS EXTENDING 1/2" OR MORE INTO THE CELL.

5. FILL ALL BOND BEAMS AND REINFORCED CELLS SOLIDLY WITH FINE GROUT. GROUT SHALL CONFORM TO ASTM C-476 AND SHALL OBTAIN A MIN. 28 DAY COMPRESSIVE STRENGTH OF 2,500 PSI. AGGREGATE TO CONFORM TO ASTM C404 FOR FINE GROUT WITH A SLUMP OF 8" TO 10". GROUT ALL MASONRY CONTAINING REINFORCING, ALL CELLS OF 4 HOUR RATED WALLS, AND WHERE INDICATED ON THE DRAWINGS. ALLOW MORTAR TO CURE 24 HOURS PRIOR TO GROUTING. PROVIDE CLEANOUT OPENINGS A TTHE BASE OF CELLS CONTAINING REINFORCING STEEL TO CLEAN THE CELL AND TIE THE VERTICAL BAR TO THE DOWEL. IN HIGH-LIFT GROUTING, USE 5'-0" MAXIMUM LIFTS, WITH 1/2 HOUR TO 1 HOUR BETWEEN LIFTS. VIBRATE EACH LIFT AND RECONSOLIDATE THE PREVIOUS LIFT.

6. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A-615, GRADE 60. SHOP FABRICATE REINFORCING BARS WHICH ARE SHOWN TO BE HOOKED OR BENT. USE BAR SPACERS AT 10 FT. O.C. WHERE GROUT POUR HEIGHT EXCEEDS 10 FEET.

7. UNLESS OTHERWISE INDICATED, ALL WALLS SHALL BE LAID IN RUNNING BOND. SAWCUT UNITS WHICH ARE NOT IN MULTIPLES OF 8" . UNITS SHALL BE AT LEAST 8" LONG. BOND CORNERS BY LAPPING 8" IN SUCCESSIVE VERTICAL COURSES.

8. PROVIDE VERTICAL REINFORCING BARS OF THE GIVEN SIZE AND SPACING AS INDICATED. PROVIDE BARS AT ALL WALL CORNERS, INTERSECTIONS AND OPENING EDGES. AT BOND/TIE BEAM CORNERS AND INTERSECTIONS, PLACE 1-#5x5'-0" TOP AND BOTTOM CORNER BAR WITH 32" LEGS EACH WAY, AT THE EXTERIOR FACE.

9. PROVIDE REBAR DOWELS FROM FOUNDATIONS TO MATCH VERTICAL REINFORCING SIZE AND SPACING. DOWELS SHALL HAVE STANDARD 90 DEGREE HOOKS AND LAP WITH THE FIRST LIFT OF REINFORCING.

10. PROVIDE HORIZONTAL BOND BEAMS WITH CONTINUOUS REINFORCING AS INDICATED. DISCONTINUE ALL HORIZONTAL REINFORCING AT CONTROL JOINTS EXCEPT FOR THE BOND BEAMS AT BEARING ELEVATIONS.

11. ALL VERTICAL WALL REINFORCING SHALL BE EXTENDED TO WITHIN 2" OF THE TOP OF ALL WALLS AND TERMINATED IN A STANDARD ACI 90-DEGREE HOOK.

12. PROVIDE STANDARD 9 GAUGE HORIZONTAL JOINT REINFORCING AT 16" ON CENTER IN ALL WALLS. JOINT REINFORCING AND ANCHORS IN EXTERIOR WALLS SHALL CONFORM TO ASTM A153 CLASS B2, WITH A COATING THICKNESS OF 1.50 OZ/SF: CONFORM TO ASTM A641 IN INTERIOR WALLS. OVERLAP DISCONTINUOUS ENDS 6". USE PREFABRICATED CORNERS AND TEES. PROVIDE LADDER TYPE JOINT REINFORCING FOR ALL CONCRETE MASONRY. STOP ALL HORIZONTAL JOINT REINFORCING AT CONTROL JOINTS.

13. REINFORCED MASONRY WALL CONSTRUCTION SHALL BE INSPECTED BY AN ENGINEER OR ARCHITECT IN ACCORDANCE WITH ACI 530.

14. SEE THE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ALL DOOR AND WINDOW OPENINGS.

15. THE MASONRY CONTRACTOR SHALL PROVIDE ALL REQUIRED TEMPORARY WALL BRACING DURING CONSTRUCTION (SEE "GENERAL STRUCTURAL NOTES").

16. WHERE ANCHOR BOLTS, WEDGE ANCHORS OR ANCHORS SET IN EPOXY ARE SET IN A MASONRY WALL, FILL CELLS WITH GROUT FOR BOLTED COURSE, ONC COURSE ABOVE AND TWO COURSES BELOW. DO NOT SET MORE THAN ONE ANCHOR PER CELL.

17. PROVIDE LINTELS OR HEADERS AS SCHEDULED WITH MIN. 8" BEARING AT ALL MASONRY OPENINGS. AT EXTERIOR OPENINGS EXTEND BARS 24" BEYOND THE FACE OF THE SUPPORT. FOR INTERIOR PARTITIONS EXTEND BARS 6" BEYOND THE FACE OF THE SUPPORT.

18. WALL CONTROL JOINTS SHALL BE NO MORE THAN 35 FEET APART. COORDINATE LOCATIONS WITH ARCHITECTURAL DRAWINGS.

19. USE PRESSURE-TREATED WOOD FOR ALL WOOD IN CONTACT WITH MASONRY.

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PROJECT NO:	LSB22GES
DRAWING FILE:	LSB22GES.rvt
DRAWN BY:	JMG
CHECKED BY:	JMG
DATE ISSUED:	03.21.2022

#	DESCRIPTION	DATE
1	REMOVE JOG, MOVE 10" NORTH	05.18.2022

JAMIE M. GRAHAM, PE

JAMIE M. GRAHAM LICENSE No. 72659 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Jamie M Graham
DN: CN=Jamie M Graham, dnQualifier=A01410D0000017E446F6C8900006B4F, O=Florida, C=US
Date: 2022.05.18 08:50:36-04'00'

FLORIDA REG. NO. 72659

SHEET TITLE:
STRUCTURAL NOTES

SHEET NO:
S0

100% CONSTRUCTION DOCUMENTS

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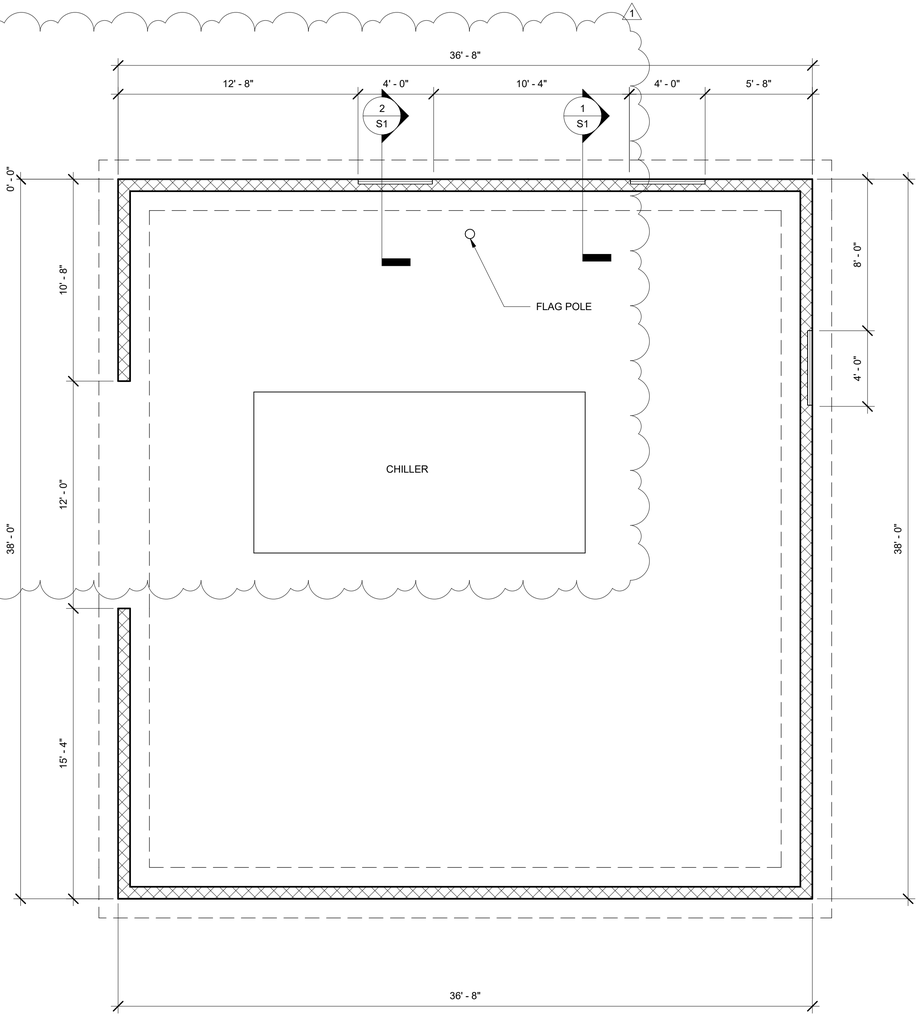
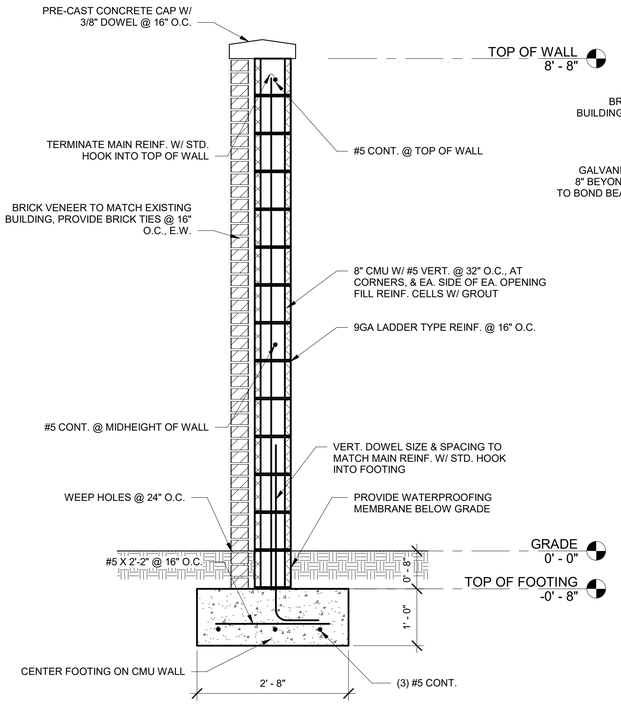
X	RELEASED FOR CONSTRUCTION



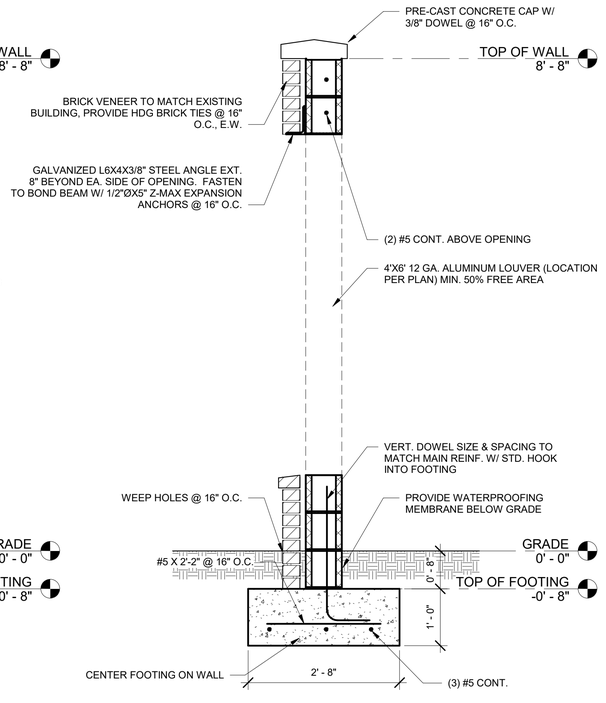
FOUNDATION PLAN

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



1 S1 SECTION

SCALE: 3/4" = 1'-0"

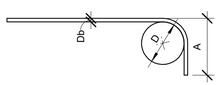


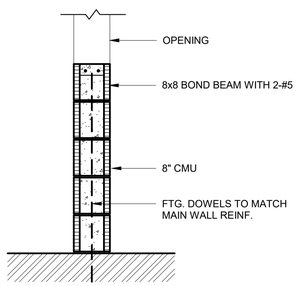
2 S1 SECTION

SCALE: 3/4" = 1'-0"

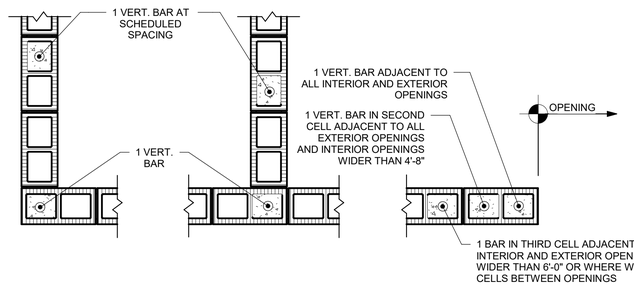
MASONRY REINFORCING LAP & BEND SCHEDULE			
BAR SIZE	STANDARD LAP LENGTH MASONRY	STANDARD HOOKS DIAMETER D	LENGTH A
#2	12"	1 1/2"	2"
#3	18"	2 1/4"	6"
#4	24"	3"	8"
#5	30"	3 3/4"	10"
#6	36"	4 1/2"	12"
#7	42"	5 1/4"	14"
#8	48"	6"	16"

* MASONRY HAS BEEN DESIGNED ASSUMING THAT THE TENSILE STRESS IN THE STEEL DOES NOT EXCEED 25,600 PSI FOR GRADE 60 STEEL.





SILL REINFORCEMENT



MASONRY WALL REINFORCING

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Date: 2022.05.18 09:50:16 -04'00'

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S1

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