GENERAL NOTES

1. THE GENERAL CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND THE ENGINEER OF ANY DISCREPANCIES WITHIN THE CONSTRUCTION DOCUMENTS.

2. DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2018 NORTH CAROLINA BUILDING CODE.

3. DESIGN LOADS:

Importance Factor: Wind (Iw) 1.0
Snow (Is) 1.0
Seismic (Ie) 1.0

Live Loads: Roof 20 psf
Mezzanine N/A
Floor 125 psf

Ground Snow Load: 15 psf

Wind Load: Basic Wind Speed 115 mph (ASCE-7-10)
Exposure Category B
Wind Base Shears (for MWFRS)Vx =21.0K Vy = 43.7K

SEISMIC DESIGN CATEGORY B
Provide the following Seismic Design Parameters:
Occupancy Category (Table 1604.5) II
Spectral Response Acceleration Ss 17.2% g S1 8.3% g
Site Classification D (Field Test)
Basic structural system (check one)
___Bearing Wall ____ Dual w/ Special Moment Frame
__X__ Building Frame ____ Dual w/ Intermediate R/C or Special Steel
____ Moment Frame ____ Inverted Pendulum
Seismic base shear Vx = 18.0K Vy= 18.0K
Analysis Procedure ___Simplified _X_ Equivalent Laterial Force ___ Modal
Architectural, Mechanical, Components anchored? No

LATERAL DEISGN CONTROL: Earthquake ____ Wind __X__

SOIL BEARING CAPABILITIES:
Field Test (provide copy of test report) _____ psf
Presumptive Bearing Capacity ___2000_____ psf
Pile size, type and capacity _____

4. ALL SAFETY REGULATIONS, METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIAL SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. IT SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SHORING, BRACING AND FORMWORK, ETC. AS REQUIRED.

5. THE GENERAL CONTRACTOR PRIOR TO CONSTRUCTION SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, THE SIZE AND LOCATION OF ALL SLEEVES, PADS, DEPRESSIONS, OPENINGS, ETC.

6. DIMENSIONS ARE NOT TO BE DERIVED BY SCALING THESE DRAWINGS. IF THERE IS ANY QUESTION ABOUT DETAILS OR DIMENSIONS, CONTACT THE ARCHITECT AND ENGINEER FOR CLARIFICATION.

7. IF ANY BIDDER IS IN DOUBT AS TO THE TRUE MEANING OF ANY PART OF THE DOCUMENTS, THEY SHALL REQUEST AN INTERPRETATION FROM THE ARCHITECT IN WRITING.

SUBMITTALS

1. THE CONTRACT DOCUMENTS ARE THE STRUCTURAL ENGINEER'S INSTRUMENTS OF SERVICE TO CONVEY DESIGN INTENT. THEY ARE NOT TO BE CONSIDERED FABRICATION OR LAYOUT DRAWINGS.

2. THE FOLLOWING ARE REQUIRED SUBMITTALS:
   A. CONCRETE MIX DESIGNS
   B. REINFORCING BAR DRAWINGS
   C. ~~STRUCTURAL STEEL~~
   D. ~~METAL DECK~~
   E. ~~STEEL JOISTS~~
   F. OTHER SUBMITTALS AS NOTED ON THE DRAWINGS AND SPECIFICATIONS

3. FOR REVIEW OF EACH SUBMITTAL, THE SCHEDULE SHALL ALLOW FOR TEN BUSINESS DAYS FOLLOWING ENGINEER'S RECEIPT.

4. SUBMITTALS TO BE REVIEWED BY THE ENGINEER SHALL BE SUBMITTED TO THE ARCHITECT. THE STRUCTURAL ENGINEER WILL NOT ACCEPT SUBMITTALS DIRECTLY FROM CONTRACTORS WITHOUT THE ENGINEER'S PRIOR APPROVAL.

5. UPON COMPLETION OF THE ENGINEER'S REVIEW, SUBMITTALS WILL BE RETURNED TO THE ARCHITECT FOR THEIR REVIEW.

6. ANY DEVIATION IN DESIGN, DETAILS, DIMENSIONS, ETC. FROM THE CONSTRUCTION DOCUMENTS SHALL BE CLOUDED ON THE SUBMITTAL AND VERIFICATION OF THE CHANGE SHALL BE REQUESTED. "VERIFY" MARKS NOT ADDRESSED SHALL NOT BE ASSUMED CORRECT AND SHALL BE RESUBMITTED TO THE ENGINEER OR CLARIFIED BY A REQUEST FOR INFORMATION. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ANY DEVIATIONS UNLESS ENGINEER REVIEWS AND ACKNOLEDGES THE CHANGES IN WRITING.

7. THE ENGINEER WILL NOT REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.

FOUNDATIONS

1. ALLOWABLE SOIL BEARING IS STATED ON THE FOUNDATION PLANS.

2. BACKFILLING SHALL BE PERFORMED IN EQUAL LIFTS AROUND THE BUILDING PERIMETER TO BALANCE LATERAL EARTH PRESSURE ON THE BUILDING. WALK BEHIND COMPACTION EQUIPMENT IS REQUIRED WITHIN A DISTANCE OF TWO TIMES THE WALL HEIGHT.

3. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE STRUCTURAL ENGINEER'S APPROVAL IN WRITING. THE CONTRACTOR SHALL LOCATE ANY EXISTING UNDERGROUND UTILITIES PRIOR TO ANY CONSTRUCTION.

CONCRETE

1. ALL CONCRETE WORK TO BE DONE IN ACCORDANCE WITH THE CODE REFERENCED EDITION OF ACI-318: "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"

2. CONCRETE MIX DESIGN REQUIREMENTS AND COMPRESSIVE STRENGTH AT 28 DAYS:

DESCRIPTION	28 DAY STENGTH (PSI)	WEIGHT PER CUBIC FOOT (PCF)	SLUMP AT POINT OF PLACEMENT	AGGREGATE	% AIR
FOOTING AND FOUNDATION WALLS	3000	145	4" ±1"	ASTM C33	3
SLAB ON GRADE	3000	145	4" ±1"	ASTM C33	3
~~COMPOSITE FLOOR TOPPING (LIGHT WEIGHT)~~	~~3500~~	110	5" ±1"	~~ASTM C330~~	~~3~~

FLY ASH SHALL BE LIMITED TO 20% OF THE TOTAL CEMENTITIOUS MATERIAL WEIGHT. WATER REDUCING ADMIXTURES MAY BE USED TO ACHIEVE SLUMP REQUIREMENTS.

3. SEE ARCHITECTURAL DOCUMENTS FOR JOINT SIZES AND FILLER MATERIALS.

4. LOCATION OF ALL CONSTRUCTION JOINTS, EXCLUDING SLABS ON GRADE, SHALL BE COORDINATED WITH STRUCTURAL ENGINEER.

5. ALL EXPOSED CONCRETE CORNERS SHALL HAVE A ¾" CHAMFER, UNLESS NOTED OTHERWISE BY THE ARCHITECT.

6. SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER SHOWING PROPOSED LOCATIONS OF ANY MATERIAL SUCH AS BUT NOT LIMITED TO CONDUITS, EMBEDMENTS, OR FIXTURES TO BE PLACED INSIDE ANY STRUCTURAL CONCRETE MEMBER SUCH AS BEAMS, WALLS, SLABS, COLUMNS OR FOOTINGS.

7. UNLESS SPECIFIED OTHERWISE IN THE SPECIFICATION, TESTING OF CONCRETE SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF ACI 318 SECTION 5.6 "EVALUATION AND ACCEPTANCE OF CONCRETE."

8. THE FOLLOWING PROCEDURES SHALL MEET THE REQUIREMENTS OF THE REFERENCED CODE SECTIONS

PROCEDURE	REFERENCE SECTION
PREPARATION	ACI 304 - "GUIDE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE"
CONVEYING	ACI 318 SECTION 5.9 - "CONVEYING"
DEPOSITING	ACI 318 SECTION 5.10 - "DEPOSITING"
CONSOLIDATION	ACI 309 - "GUIDE FOR CONSOLIDATION OF CONCRETE"
CURING	ACI 308 - "STANDARD PRACTICE FOR CURING CONCRETE"
HOT WEATHER CONCRETING	ACI 305 - "HOT WEATHER CONCRETING"
COLD WEATHER CONCRETING	ACI 306 - "COLD WEATHER CONCRETING"

REINFORCING STEEL

1. REINFORCING STEEL SHALL BE NEW BILLET STEEL, DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60.

2. WELDED WIRE FABRIC SHALL BE SHEETS OF NEW BILLET STEEL COLD DRAWN, CONFORMING TO ASTM SPECIFICATION A82, GRADE 60.

3. BAR SUPPORTS, DESIGN, DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI 318 AND "THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES." ACI 315.

4. SPLICES FOR CONTINUOUS BARS SHALL BE CLASS B, UNLESS NOTED OTHERWISE, WELDED WIRE FABRIC SHALL BE LAPPED 12" MINIMUM.

5. MINIMUM CONCRETE COVERAGE SHALL BE AS FOLLOWS. IF STIRRUPS, TIES OR SPIRALS ARE USED, COVERAGE SHALL BE THE OUTERMOST FACE OF THE ELEMENTS.
   A. FOOTINGS, CAISSONS, AND OTHER MEMBERS WHERE CONCRETE IS DEPOSITED AGAINST SOIL (EXCEPT SLABS ON GRADE.) — 3"
   B. CONCRETE EXPOSED TO WEATHER OR SOIL
      #6 BAR AND LARGER: — 2"
      #5 BAR AND SMALLER: — 1½"
   C. CONCRETE NOT EXPOSED TO WEATHER OR SOIL (SLABS, WALLS, JOISTS)
      #14 BAR AND LARGER — 1½"
      #11 BAR AND SMALLER — ¾"
      BEAMS AND COLUMNS — 1½"

6. WALL FOOTING REINFORCEMENT SHALL BE CONTINUOUS THROUGH COLUMN FOOTING.

7. PROVIDE DOWELS IN WALL FOOTING TO MATCH WALL VERTICALS UNLESS NOTED OTHERWISE ON DRAWINGS. PROVIDE CLASS B SPLICE. USE STANDARD ACI 90° HOOK WITH 3" CLEAR TO BOTTOM OF FOOTING UNLESS NOTED OTHERWISE.

COLD-FORMED STEEL STUD FRAMING

1. ALL STRUCTURAL MEMBERS SHALL BE FORMED FROM CORRISION-RESISTANT STEEL CORRESPONDING TO THE REQUIREMENTS OF ASTM-A653. WELDS SHALL BE TOUCHED UP WITH A ZINC RICH PROTECTIVE PAINT FOR CORROSION RESISTANCE. STRUCTURAL STEEL STUDS SHALL HAVE A MINIMUM THICKNESS OF 33 MILS AND SHALL HAVE A MINIMUM YIELD STRENGTH 33 KSI

COLD-FORMED STEEL STRUCTURAL MEMBERS	
THICKNESS (MILS)	GAUGE
33	20
43	18
54	16
68	14
97	12
118	10

2. PROVIDE VERTICAL DEFLECTION CONNECTION WITH MECHANICAL ATTACHMENT TO THE WEB OF ALL STUDS WHICH PASS BY THE STRUCTURE (FLOOR AND ROOF) OR ATTACH TO THE BOTTOM OF THE STRUCTURE.

3. UNLESS SUPERSEDED BY FINISH OR GLAZING SYSTEM MANUFACTURER'S MORE STRINGENT REQUIREMENTS (GENERAL CONTRACTOR TO COORDINATE), STUDS HAVE BEEN DESIGNED TO THE FOLLOWING MINIMUM REQUIREMENTS:
   A. BRICK VENEER — L/600
   B. EXTERIOR INSULATION AND FINISH SYSTEM (EIFS) — L/240
   C. STUCCO — L/240

4. "C" SHAPED STUDS AND JOISTS SHALL HAVE A MINIMUM FLANGE WIDTH OF 1⅜" WITH A MINIMUM RETURN LIP OF ⅜". TRACKS SHALL HAVE A MINIMUM OUTSTANDING LEG OF 1¼".

5. ALL STRUCTURAL MEMBERS SHALL BE CONTINUOUS FULL LENGTH, SPLICING OF MEMBERS IS NOT PERMITTED UNLESS SPECIFICALLY DETAILED BY ENGINEER.

6. SCREWS SHALL BE SELF DRILLING WITH A LENGTH THAT ENSURES THREE EXPOSED THREADS BEYOND PENETRATION OF THE JOINED MATERIAL. MINIMUM SCREW SPACING SHALL BE ¾", MINIMUM EDGE DISTANCE SHALL BE ½".

7. METAL STUD BRIDGING IS REQUIRED @ 48" O.C. MAXIMUM UNLESS WALLS ARE SHEATHED ON BOTH SIDES.

HARRIS STRUCTURAL DESIGN, PA
PH: (919) 556-6032
FAX: (919) 556-6032
CELL: (919) 946-0798
3206 Heritage Trade Dr. Ste. 116
Wake Forest, NC 27587
EMAIL: thomas-hsd@nc.rr.com

Corp. License Number C-2550

NORTH CAROLINA PROFESSIONAL SEAL 029465 ENGINEER THOMAS B. HARRIS

SEAL DATE: 4-3-2020

NEILL'S CREEK BAPTIST CHURCH

FELLOWSHIP HALL
ANGIER, NC

issue date:
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GENERAL NOTES

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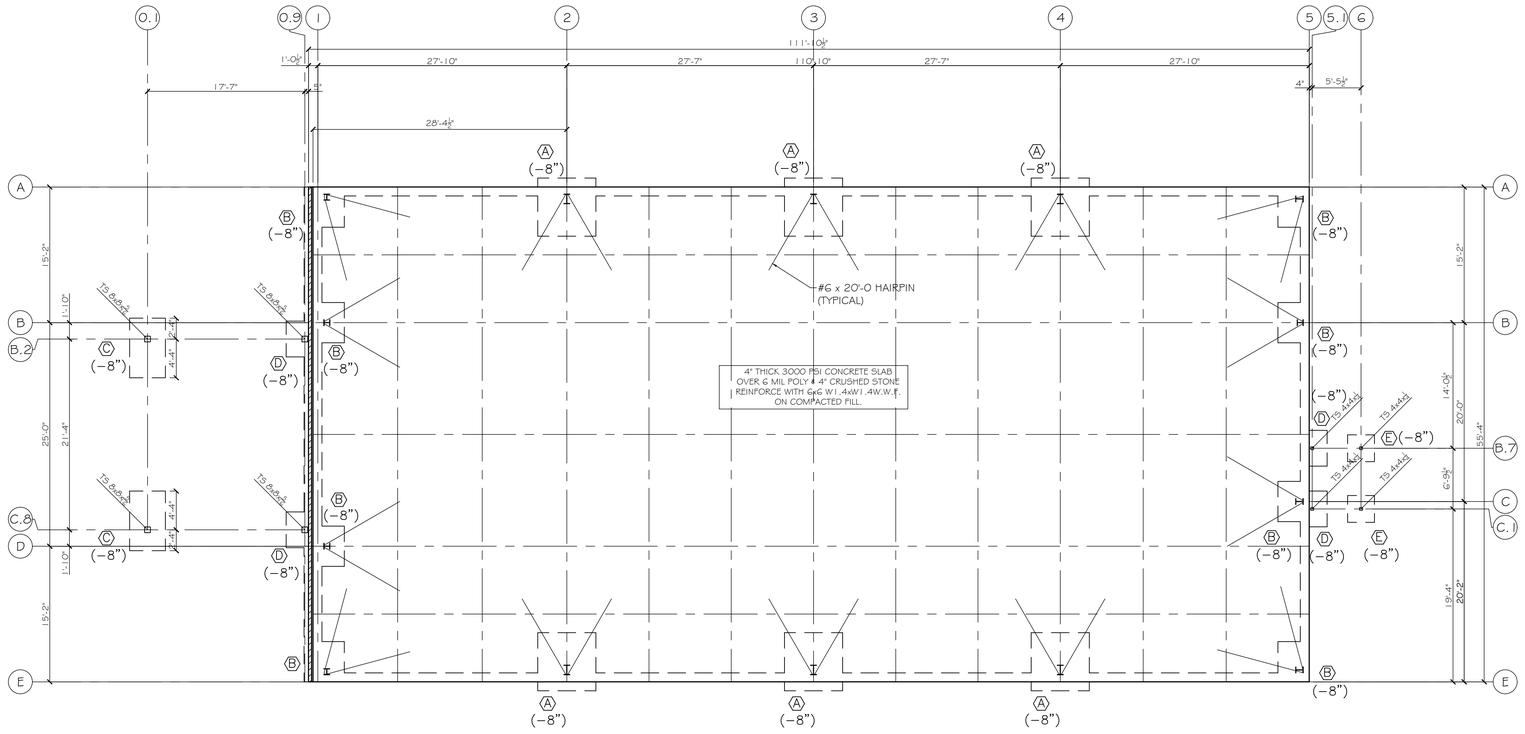
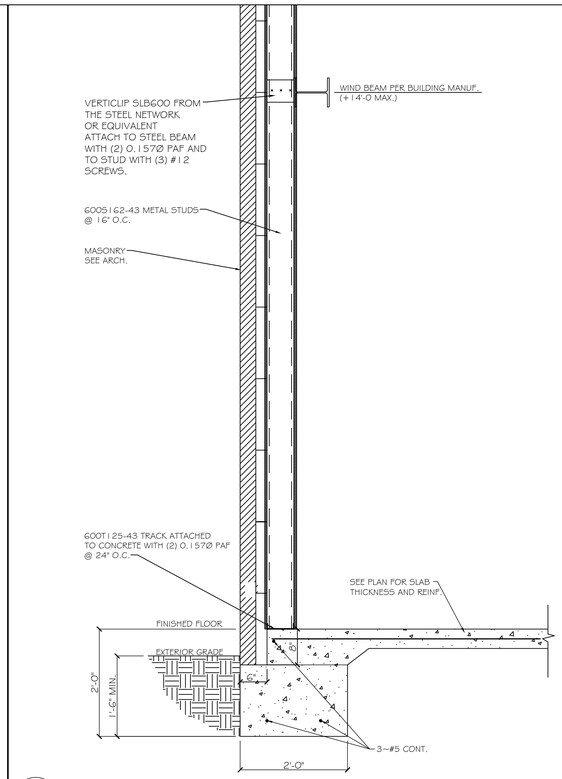
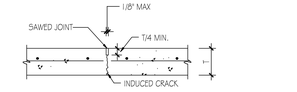


C1 BUILDING FOUNDATION PLAN
SCALE: 1/8" = 1'-0"

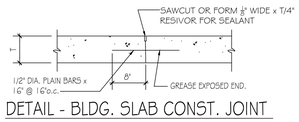


B4 FRONT WALL SECTION
SCALE: 3/4" = 1'-0"



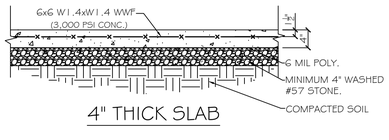
NOTES: 1) SAW JOINTS AS SOON AS CONCRETE WILL NOT RAVEL UNDER SAW BLADE.
ALLOW SLAB TO CURE FOR 30 DAYS (MIN.) BEFORE FILLING JOINTS W/ SEALANT.

DETAIL - BLDG. SLAB CONTROL JOINT



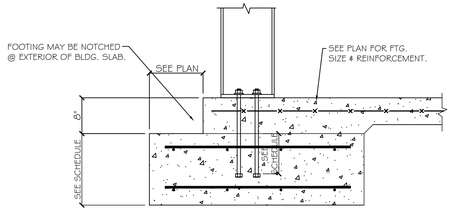
DETAIL - BLDG. SLAB CONST. JOINT

C4 SLAB JOINT DETIAILS

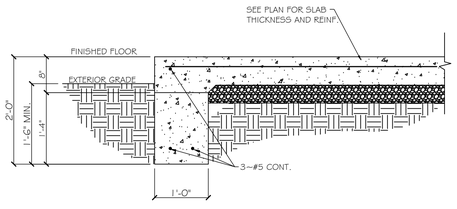


4" THICK SLAB

D1 SLAB REINFORCEMENT DETAILS
SCALE: 3/4" = 1'-0"

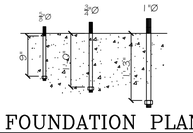


D2 EXTERIOR COLUMN FOOTING DETAIL
SCALE: 3/4" = 1'-0"



D3 PERIMETER FOOTING DETAIL
SCALE: 3/4" = 1'-0"

ANCHOR BOLT DETAILS



FOUNDATION PLAN

FOOTING SCHEDULE		2000 PSF
MARK	SIZE	REINFORCING
A	6'-6 x 6'-6 x 16"	7 ~ #5 E.W. TOP & BOTT.
B	4'-6 x 4'-6 x 16"	4 ~ #5 E.W. TOP & BOTT.
C	6'-8 x 4'-0 x 12"	#5 @ 12" E.W. BOTT. ONLY
D	4'-0 x 2'-0 x 16"	#5 @ 12" E.W. BOTT. ONLY
E	3'-0 x 3'-0 x 12"	3 ~ #4 E.W. BOTT. ONLY

1.) FOOTING DESIGN BASED ON ASSUMED SOIL BRG. CAPACITY OF 2000 PSF. NOTIFY ENGINEER IF TESTS SHOW OTHERWISE.
2.) ELEV. NOTED (-) ARE BELOW F.F. (0.00) TO TOP OF FOOTING.
3.) FOUNDATION DESIGNED PER METAL BUILDING REACTIONS.

D4 FOUNDATION NOTES

HARRIS STRUCTURAL DESIGN, PA
PH: (919) 556-6032
FAX: (919) 556-6032
CELL: (919) 946-0798
3206 Heritage Trade Dr. Ste. 116
Wake Forest, NC 27587
EMAIL: thomas-hsd@nc.rr.com

Corp. License Number C-2550

NORTH CAROLINA PROFESSIONAL SEAL 029465 ENGINEER THOMAS B. HARRIS

SEAL DATE: 1-30-2020

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FELLOWSHIP HALL
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FOUNDATION PLAN & DETAILS

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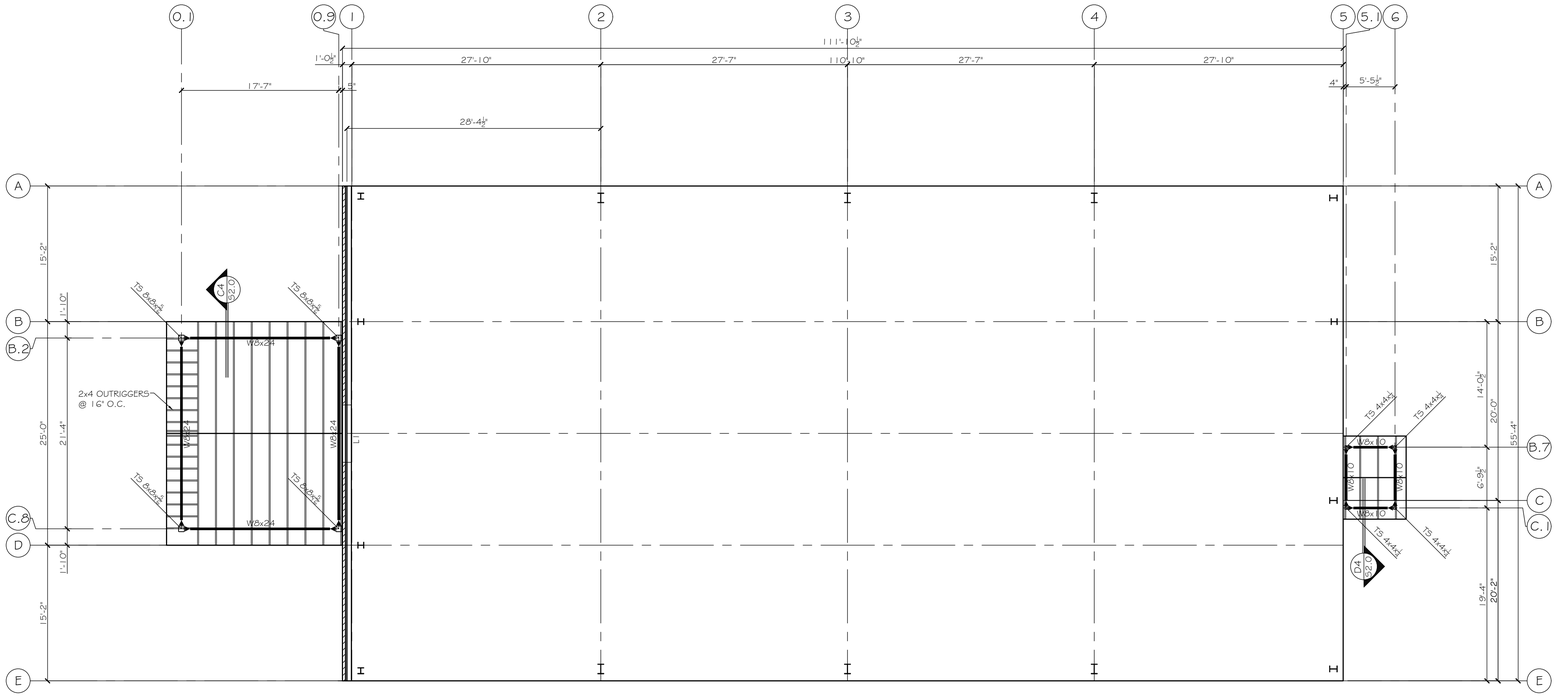
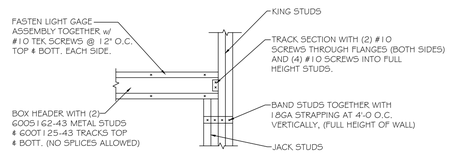


D1 CANOPY FRAMING PLAN
SCALE: 1/8" = 1'-0"

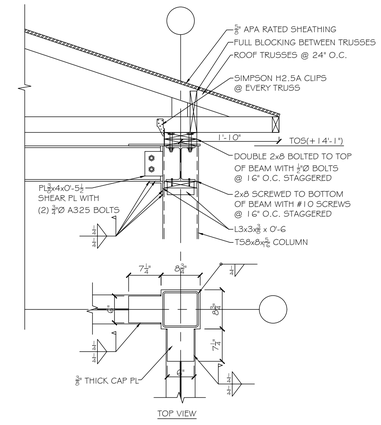
HEADER /LINTEL SCHEDULE

DESIGNATION	HEADER/LINTEL	HEADER SUPPORT
L1	2-600S162-43 METAL STUDS WITH 600T125-43 TRACK TOP & BOTT. & L6x6x⅝ BRICK LINTEL BEAR 8" MIN. ATTACH LINTEL TO HEADER WITH (2) #10 SCREWS AT 12" O.C. (BEAR LINTEL 8" EACH SIDE)	(2) 600S162-43 JACKS (2) 600S162-43 KINGS



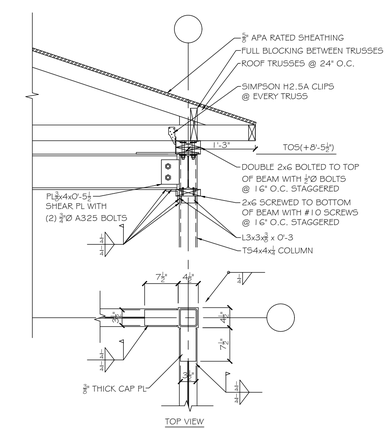
HEADER CONNECTION TO KING STUDS

A4 HEADER/LINTEL SCHEDULE



TOP VIEW

C4 CANOPY SECTION
SCALE: 3/4" = 1'-0"



TOP VIEW

D4 CANOPY SECTION
SCALE: 3/4" = 1'-0"

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CANOPY PLAN

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