BUNCOMBE COUNTY SCHOOLS
T.C. ROBERSON HIGH SCHOOL
POOL HOUSE RENOVATION
250 OVERLOOK ROAD
ASHEVILLE, NC 28803

APPROX. ELEVATION - 2200'

DRAWING INDEX

03-18-2020

STRUCTURAL NOTES

A. GENERAL

1. THE PROVIDED DRAWINGS ARE LIMITED TO THE ITEMS SPECIFIED HEREIN. NO OPINION IS OFFERED, AND NONE SHOULD BE INFERRED REGARDING OTHER ASPECTS OF THIS STRUCTURE, OR THE STRUCTURES TAKEN AS A WHOLE. ANY ASSOCIATED REMEDIES EXPRESSED OR REFERENCED ARE EXCLUSIVE TO THE ITEMS SPECIFIED HEREIN. NO WARRANTY IS EXPRESSED OR IMPLIED.
2. THE DRAWINGS CONTAINED HEREIN, IN-WHOLE OR IN-PART, REMAIN THE PROPERTY OF MEDLOCK & ASSOCIATES ENGINEERING, PA. THE DRAWINGS MAY NOT BE USED, TRANSFERED OR REPRODUCED FOR ANY PROJECT OTHER THAN THAT SPECIFIED WITHIN THE DRAWINGS WITHOUT WRITTEN CONSENT FROM MEDLOCK & ASSOCIATES ENGINEERING, PA.
3. ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE INTERNATIONAL BUILDING CODE, AS ADOPTED AND SUPPLEMENTED BY LOCAL REGULATIONS.
4. PROTECTION AND SAFETY:
THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL COMPLY THE PROTECTION AND SAFETY REQUIREMENTS OF THE STATE OF NORTH CAROLINA STATE BUILDING CODE , FEDERAL LAWS AND ALL LOCAL REGULATIONS. THE ENGINEER OR HIS EMPLOYEES ARE NOT RESPONSIBLE FOR SAFETY AND PROTECTION PROCEDURES ON THIS PROJECT.
5. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, LEVELS AND SITE CONDITIONS PRIOR TO START OF CONSTRUCTION. THEY SHALL REPORT ANY ERRORS, DISCREPANCIES OR INCONSISTENCIES TO THE ARCHITECT / ENGINEER (A/E) PRIOR TO COMMENCING WORK. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL LAYOUT THEIR WORK FROM ESTABLISHED REFERENCE POINTS AND SHALL BE RESPONSIBLE FOR ALL MESURMENTS AND ELEVATIONS IN CONNECTION WITH THEIR WORK.
6. IN THE EVENT ANY OMISSIONS OR ERRORS APPEAR IN THE DRAWINGS, SPECIFICATIONS OR OTHER DOCUMENTS, THE GENERAL CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER IN WRITING OF SUCH ERRORS OR OMISSIONS PRIOR TO PROCEEDING WITH WORK WHICH MAY BE IN QUESTION. IF THE GENERAL CONTRACTOR OR ANY SUBCONTRACTORS FAIL TO GIVE SUCH NOTICE, HE SHALL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY SUCH ERRORS OR OMISSIONS AND THE COST OF RECTIFYING THE SAME.
7. NO CHANGES TO THE INFORMATION SHOWN ON THE DRAWINGS OR SUBSTITUTIONS OF MATERIALS SHALL BE MADE WITHOUT THE SPECIFIC WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
8. DESIGN INFORMATION SHOWN ON THE DRAWINGS PROVIDE OVERALL DIMENSIONAL PARAMETERS AND DESCRIBE ELEMENTS TO BE CONSTRUCTED AND ARE IN-PART DIAGRAMMATIC. THE DRAWINGS ARE NOT INTENDED TO BE SCALED FOR ROUGH-IN MEASUREMENTS OR TO SERVE AS SHOP DRAWINGS OR PORTTIONS THEREOF.
9. PRE-ENGINEERED WOOD MEMBERS SUCH AS TRUSSES OR SIMILAR BUILDING ELEMENTS SHALL BE DESIGNED BY THE MANUFACTURER UNLESS OTHERWISE NOTED ON THE PLANS. ALL LOADING AND DEFLECTION CRITERIA SHALL BE COORDINATED WITH THE OWNER OR ARCHITECT DIRECTLY FOR APPROVAL.
10. ALL INFORMATION REGARDING PRE-ENGINEERED BUILDING COMPONENTS (EG: MANUF. TRUSS LAYOUT AND LOADING) SHALL BE PROVIDED TO ENGINEER OF RECORD FOR COORDINATION AND LOAD VERIFICATION PRIOR TO CONSTRUCTION.
11. NO SHOP DRAWINGS SHALL BE SUBMITTED FOR ARCHITECTURAL / STRUCTURAL ENGINEER REVIEW UNTIL AFTER THEY HAVE BEEN REVIEWED AND NOTED FOR CONSTRUCTION METHOD, DIMENSIONING AND OTHER TRADE REQUIREMENTS BY THE CONTRACTOR AND STAMPED WITH THE CONTRACTOR'S APPROVAL SEAL. THE STRUCTURAL ENGINEER ASSUMES NO REPONSIBLITY FOR DIMENSIONS, QUANITIES , ERRORS OR OMISSIONS AS A RESULT OF CHECKING AND REVIEWING ANY SHOP DRAWINGS. ANY ERRORS OR OMISSIONS SHALL BE RECITFIED BY THE CONTRACTOR, IRRESPECTIVE OF RECEIPT, CHECKING OR REVIEW OF DRAWINGS BY STRUCTURAL ENGINEER REGARDLESS IF WORK IS DONE IN ACCORDANCE WITH SUCH DRAWINGS.
12. THE REVIEW OF ALL STRUCTURAL SUBMITTALS BY THE STRUCTURAL ENGINEER OF RECORD SHALL BE TO INSURE THE THE INTENT HAS BEEN UNDERSTOOD AND THAT THE SPECIFIED CRITERIA HAVE BEEN USED. A COPY OF ALL STRUCTURAL SUBMITTALS WILL BE RETAINED FOR RECORD KEEPING PURPOSES ONLY. WHERE CRITICAL DIMENSIONS CANNOT BE DETERMINED FROM THE PLANS OR WHERE NEW WORK ADJOINS EXISTING CONSTRUCTION, OR WHERE ONE MATERIAL ADJOINS AN IN-PLACE MATERIAL, THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AS REQUIRED TO COMPLETE SHOP DRAWINGS AND INSTALLATION. REPORT ANY DISCREPANCIES EXCEEDING 3% BETWEEN FIELD MEASURED DIMENSIONS AND SCALED DRAWING DIMENSIONS TO ARCHITECT BEFORE PROCEEDING WITH THE WORK.
13. ARCHITECT AND CONTRACTOR SHALL COORDINATE DOOR AND WINDOW OPENINGS AND INTERIOR AND EXTERIOR FINISHES.
14. DEMOLITION SHALL INCLUDE REMOVAL, TRANSPORT AND DISPOSAL OF ALL WASTE MATERIAL RELATED TO THE CONSTRUCTION OF THE PROJECT TO AN APPROVED FACILITY.

B. DESIGN LOADS

LIVE LOADS :
ROOF.. 20 PSF

DEAD LOADS :
ROOF.. 15 PSF

SNOW LOADS:
GROUND.. 15 PSF
WIND LOADS:
BASIC WIND SPEED (ULTIMATE).. 115 MPH

1. ALL STRUCTURAL ELEMENTS DESIGNED TO SUSTAIN SPECIFIED DEAD AND LIVE LOADS IN COMBINATION SO AS TO PRODUCE THE MOST CRITICAL CONDITIONS.
2. WHERE CONFLICTS OCCUR BETWEEN NOTES OR DRAWINGS, THE CONTRACTOR SHALL NOT PROCEED WITH THE AFFECTED WORK UNTIL THE STRUCTURAL ENGINEER ISSUES A CLARIFICATION.
3. THE STRUCTURAL CONTRACT DRAWINGS SHALL NOT BE USED AS TEMPLATES FOR SHOP DRAWINGS UNLESS EXPLICIT APPROVAL IS PROVIDED BY THE STRUCTURAL ENGINEER IN ADVANCE OF ANY SUBMITTALS. SUBMITTALS RECEIVED THAT HAVE USED THE DRAWINGS WITHOUT APPROVAL WILL BE REJECTED WITHOUT REVIEW.

C. STRUCTURAL STEEL

1. STEEL WORK SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, NINTH EDITION.
2. STRUCTURAL STEEL: DESIGN PER CURRENT EDITION A.I.S.C. AS FOLLOWS WITH ONE SHOP COAT OF PAINT.
ROLLED SHAPES.. ASTM A-992
PLATES, ANGLES, AND BARS.. ASTM A-36
TUBES.. ASTM A-500 GR. B
ANCHOR BOLTS (A.B.'S).. ASTM F-1554, GRADE 36
USE ONLY WHERE SPECIFICALLY CALLED FOR.
3. SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
4. ALL EXTERIOR STEEL SHALL BE COATED IN INDUSTRIAL ENAMEL. TOUCH-UP DAMAGED SURFACED AFTER ERECTION.
5. AT ANCHOR BOLTS, THE NUT SHALL BE DRAWN TIGHT AND PROJECTING THREADS UPSET.
6. ALL WELDS SHALL CONFORM TO AWS D1.1, LATEST EDITION, BY CERTIFIED WELDERS. FOR ASTM A 36 STEEL, USE CLASS E70XX SERIES ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING. WELDED FIELD CONNECTIONS WILL BE ACCEPTED ONLY WHERE SPECIFICALLY SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER IN WRITING. CONNECTIONS SHALL BE DESIGNED IN ACCORDANCE WITH AISC VOLUME II, CONNECTIONS MANUAL OF STEEL CONSTRUCTION, LATEST EDITION.
7. STEEL SURFACES TO BE FIELD WELDED SHALL BE CLEANED THOROUGHLY AND PRIMER REMOVED PRIOR TO WELDING. FOR FIELD WELDS EXPOSED TO THE ELEMENTS, COAT WELDS AND AREAS OF REMOVED PRIMER WITH INDUSTRIAL ENAMEL ONCE WELDING (AND INSPECTION OF WELDS, IF REQUIRED) IS COMPLETED.
8. FIELD VERIFY SITE CONDITIONS PRIOR TO FABRICATION OF STEEL WORK.

D. COLD-FORMED STEEL FRAMING

1. ALL CURTAIN WALL LIGHT GAGE STRUCTURAL STEEL MEMBERS SHALL BE FORMED FROM STEEL SECTIONS THAT CONFORM TO THE SPECIFICATIONS OF THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA).
2. ALL LIGHT GAGE STRUCTURAL STEEL MEMBERS SHALL HAVE A MINIMUM FY = 33 KSI, BE SPACED AT 16" O/C U.0.N., WITH GROSS SECTION PROPERTIES EQUAL TO OR EXCEEDING:

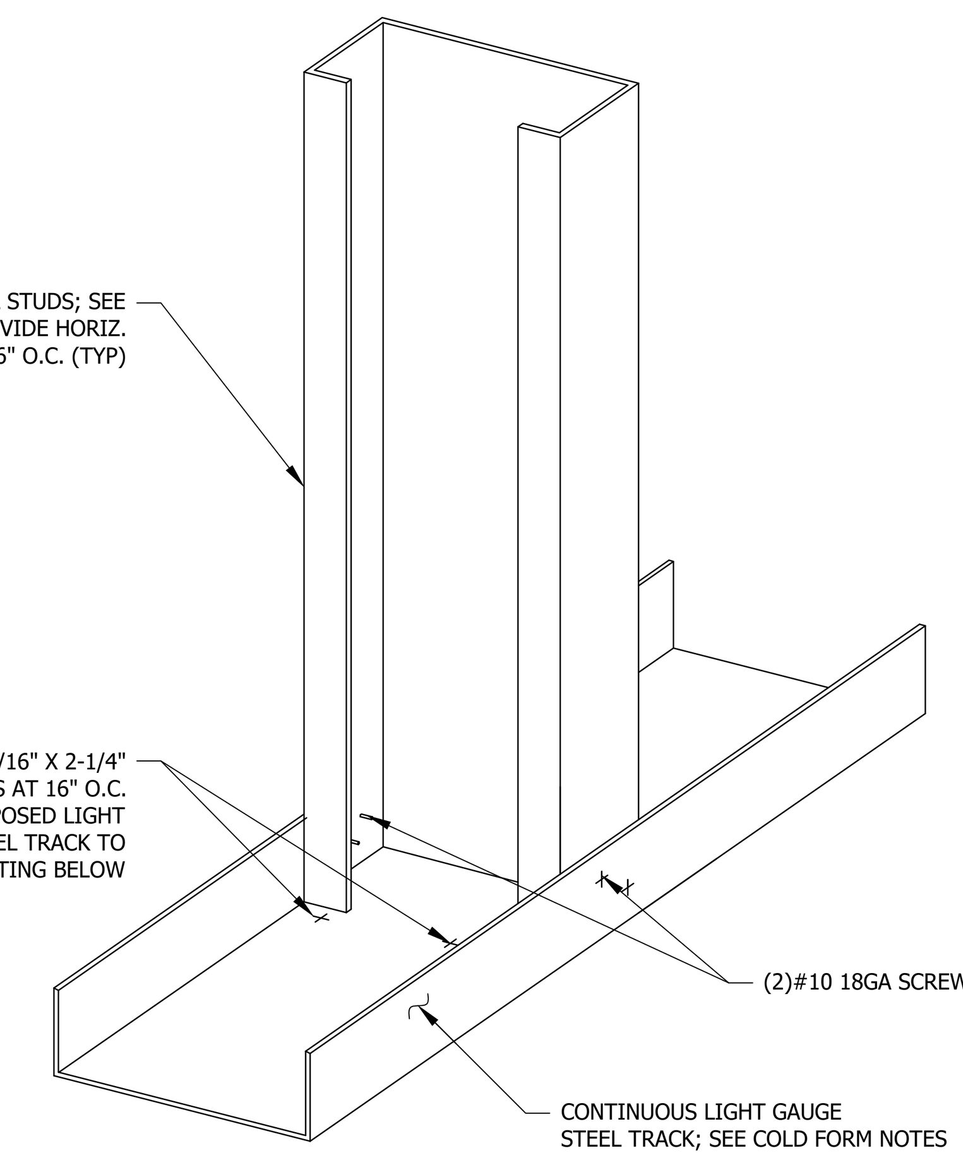
SSMA DESI	FY	DIMENSIONS	DESIGN THICK	A, IN2	IX, IN4	SX, IN3	RX, IN	IY, IN4	RY, IN
WALL STUDS:									
600S162-54	50KSI	6" X 1-5/8"	0.0566	0.556	2.860	0.954	2.270	0.180	0.570
WALL TRACK:									
600T150-54	50KSI	6" X 1-1/2"	0.0566	0.509	2.610	0.840	2.270	0.091	0.422
DOOR HEADER (BOX):									
(2) 600S137-54	50KSI	6" X 1-5/8"	0.0566	0.514	2.520	0.839	2.210	0.105	0.452

1

3. FASTEN TRACK TO SLAB W/ TITAN 1/2" ⌀ X 6" ANCHORS @ 32" O.C.

E. MISCELLANEOUS ITEMS

1. EPOXY FOR THE SETTING OF DOWELS OR ANCHOR BOLTS SHALL BE SIMPSON SET EPOXY ADHESIVE. AS MANUFACTURED BY SIMPSON STRONG TIE OR AN APPROVED EQUIVALENT. INSTALLATION OF THE DOWELS/ ANCHOR BOLTS SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
2. GROUT FOR SETTING BEARING SURFACES SHALL BE NON-SHRINK
3. WALLS RETAINING EARTH, OTHER THAN WALLS DESIGNED AS CANTILEVERS, SHALL BE ADEQUATELY BRACED UNTIL CONCRETE FOR THE SUPPORTING SLABS HAS BEEN PLACED AND SUFFICIENTLY CURED.
4. UNLESS SPECIFICALLY SHOWN OR NOTED ON THE DRAWINGS, NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED, BORED, OR OTHERWISE WEAKENED WITHOUT THE PERMISSION OF THE STRUCTURAL ENGINEER



1 / S0.1 L.G. STUD TO TRACK DETAIL (TYP.)
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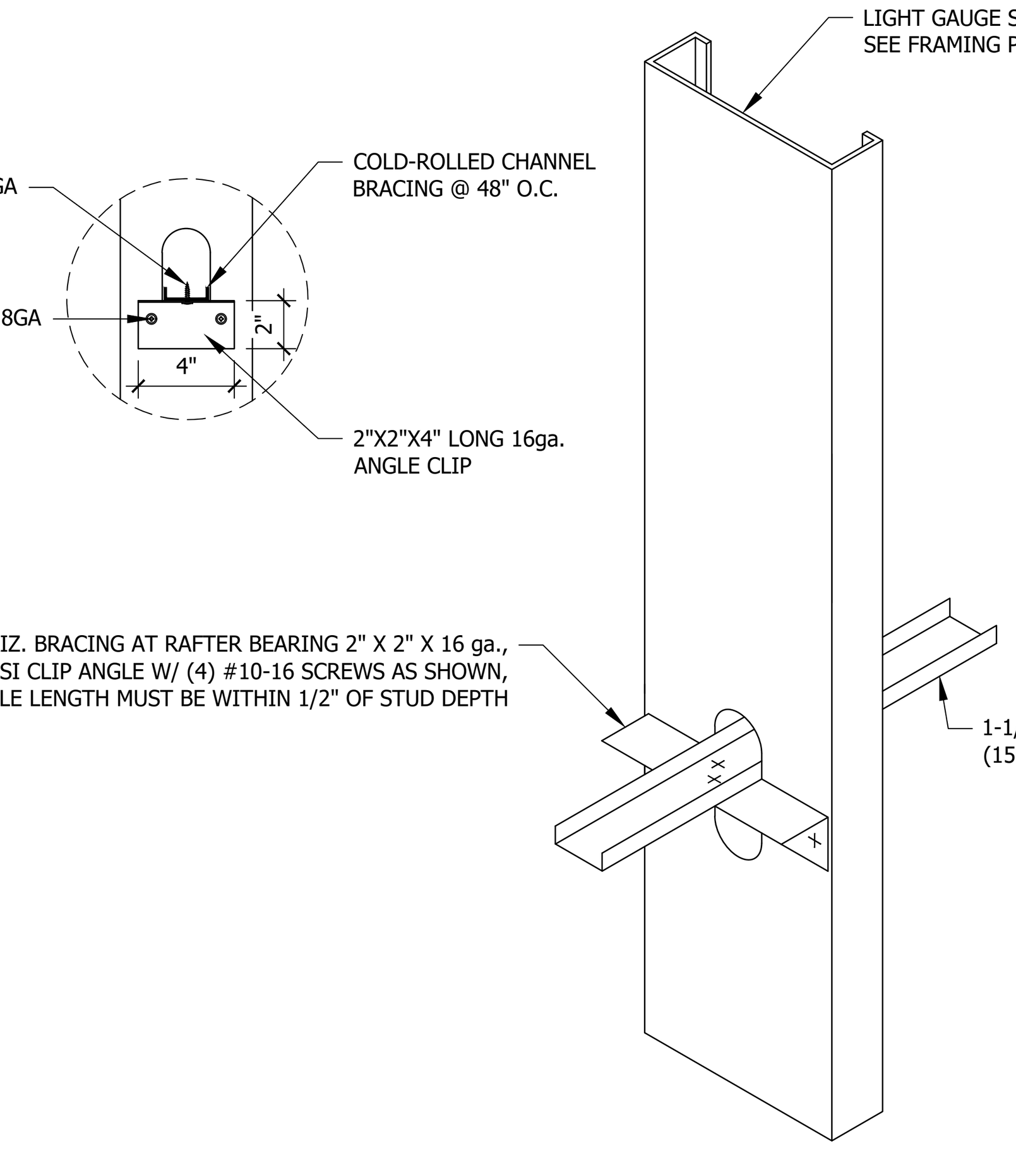

2 / S0.1 BLOCKING CONNECTION DETAIL (TYP.)
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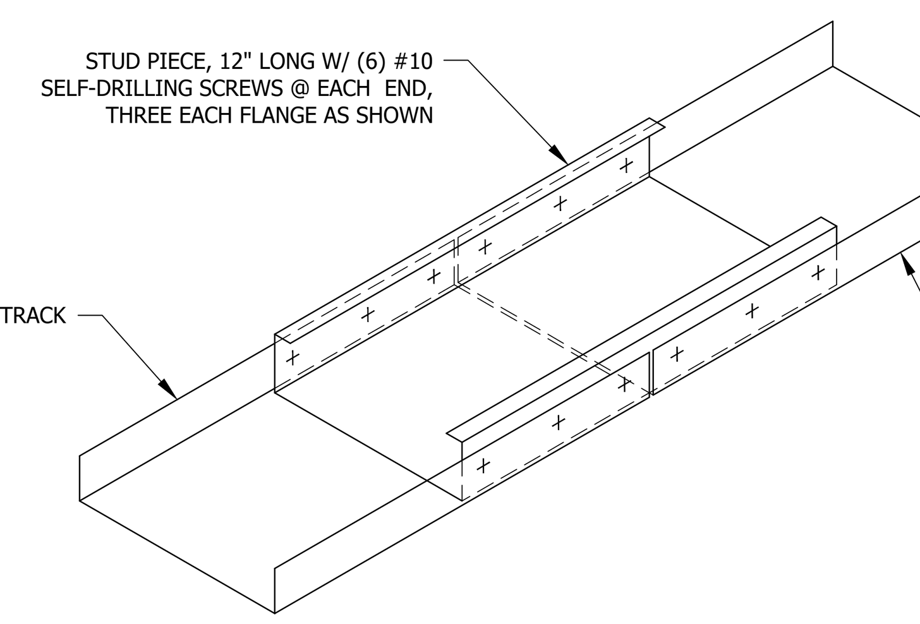

3 / S0.1 TRACK SPLICE DETAIL (TYP.)
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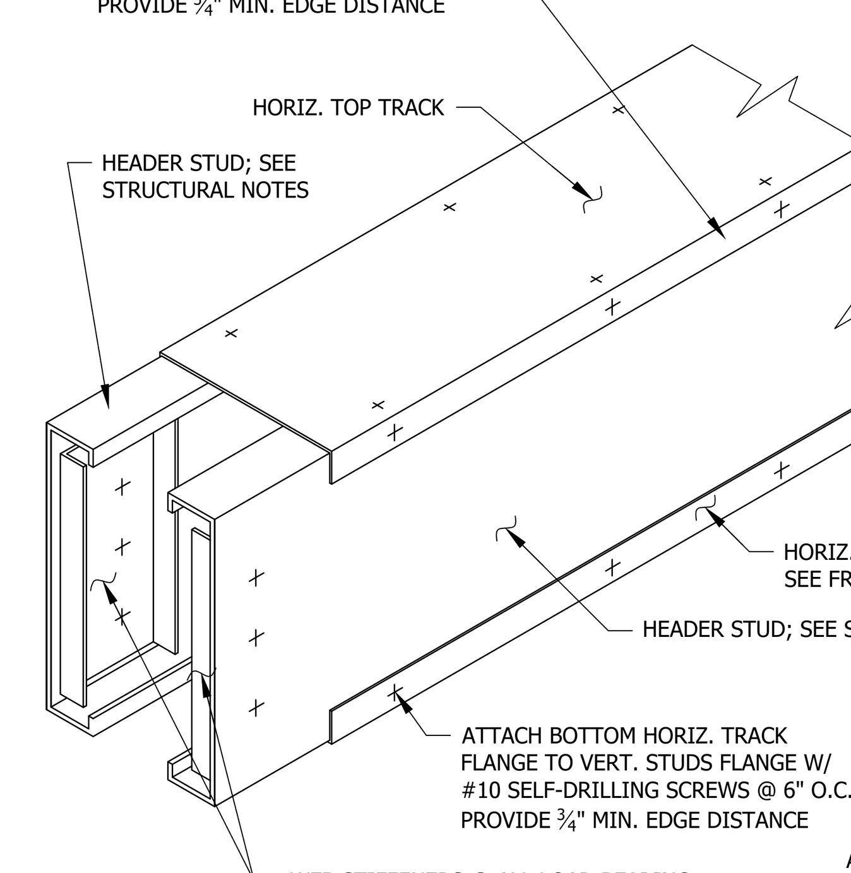

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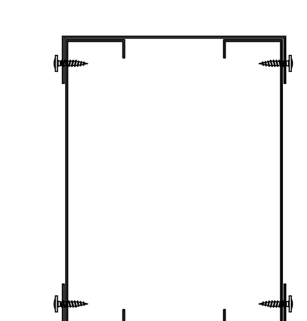
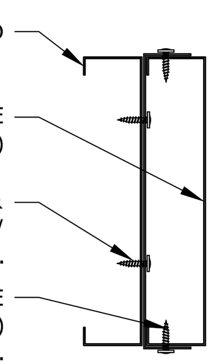


HDR. CONFIG.



JAMB SECT. (TYP)

1

4 / S0.1 STUD WALL BLOCKING DETAIL (TYP.)
SCALE: 1-1/2"=1'-0"

No.	REVISIONS/SUBMISSIONS	Date
1	DOOR REVISIONS	03/18/2020

NORTH CAROLINA MEDLOCK & ASSOCIATES ENG. CERT.# C3133

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 30443 FRANK UNGERT

CONSTRUCTION SET

Designed: FUN | Reviewed: FUN
Drawn: PLV | Scale: AS NOTED
Checked: FUN | Date: 03-04-20

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POOL HOUSE RENOVATIONS
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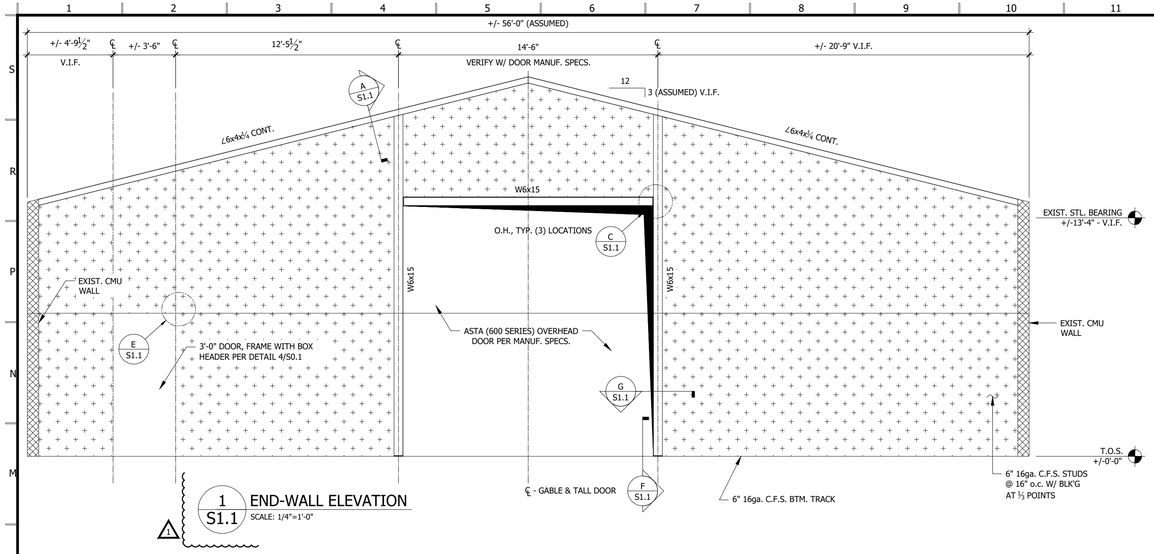
Project No: 652319

S0.1
1 OF 2

Drawing Title:
END-WALL & TRUSS MODIFICATION ELEVS. & DETAILS



1 S1.1 END-WALL ELEVATION
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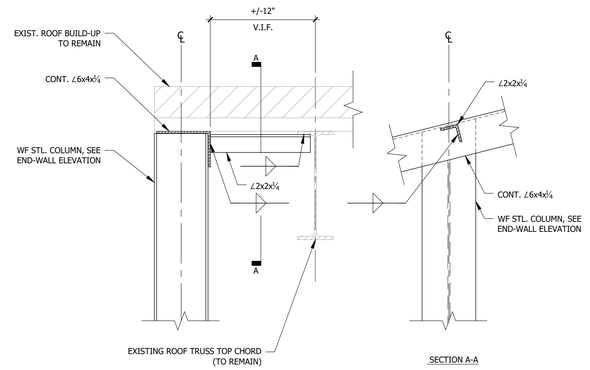

A S1.1 COLUMN DETAIL AT TRUSS BRACING
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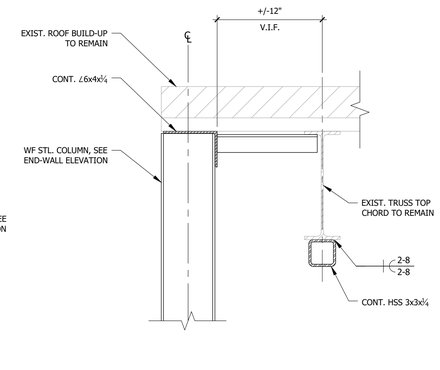

B S1.1 TRUSS MODIFICATION DETAIL
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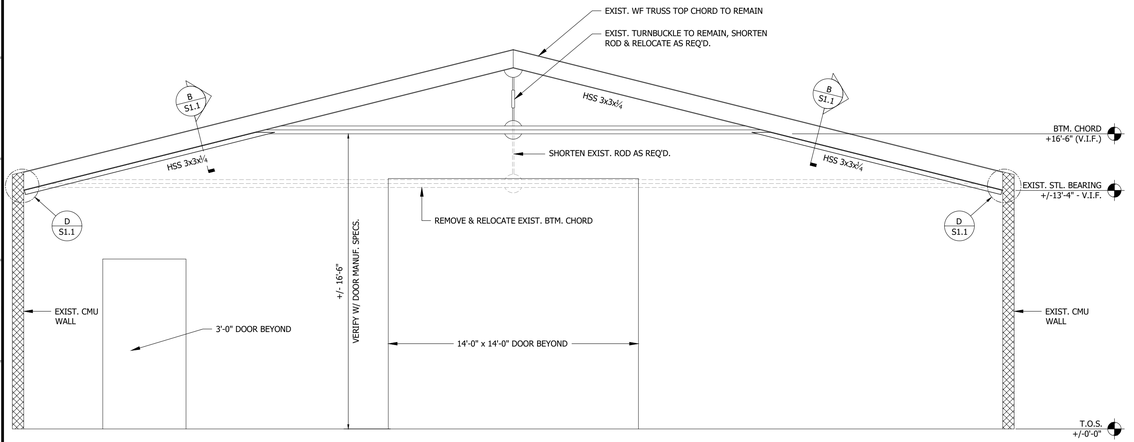
03-18-2020



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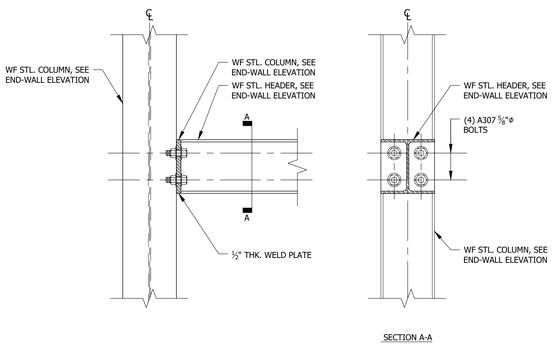

C S1.1 HEADER CONNECTION DETAIL
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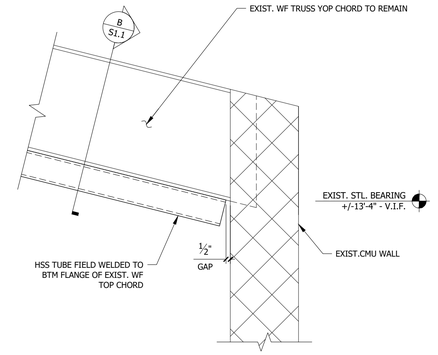

D S1.1 JAMB DETAIL
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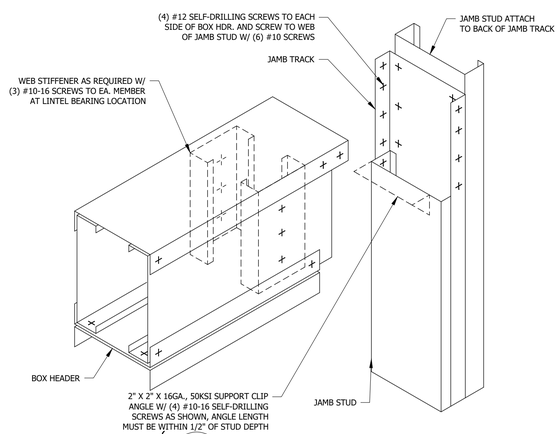

E S1.1 TYPICAL L.G. HEADER BEARING
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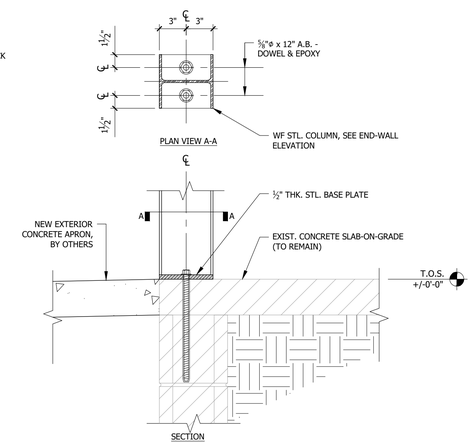

F S1.1 COLUMN BASE DETAIL
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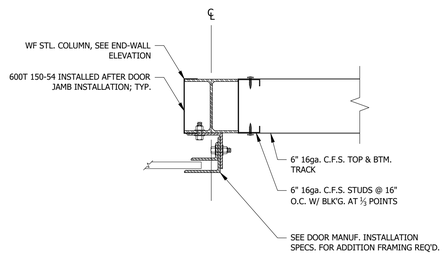

G S1.1 JAMB DETAIL
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