

**PARTIAL ROOF FRAMING PLAN**

SCALE: 3/32" = 1'-0"

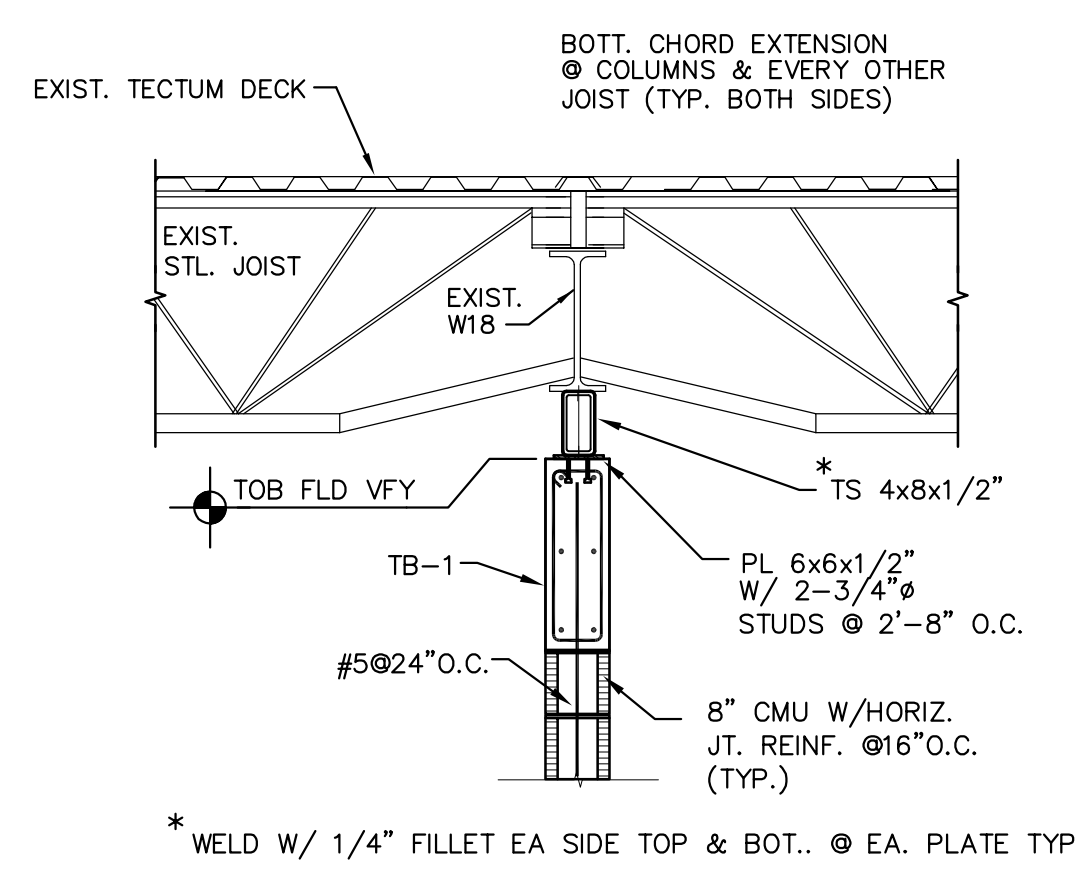
TB-1 TO BE 8"x24" W/ 2-#5 TOP AND BOT. & #3 TIES @ 8" O.C.

COMPONENT	AREA	DESIGN LOAD SCHEDULE (ALL LOADS SHOWN ARE IN POUNDS PER SQ. FT.)	
		ROOF	RTU S
STL JOIST & DECK	15		
CEILING, MECH.	5		
MISCELLANEOUS	13		
ROOFING & INSUL.	7		
<b>TOTAL DEAD LOAD</b>	<b>40</b>		
<b>TOTAL LIVE LOAD</b>	<b>30</b>		
<b>TOTAL LOAD</b>	<b>70</b>		<b>800 LBS</b>

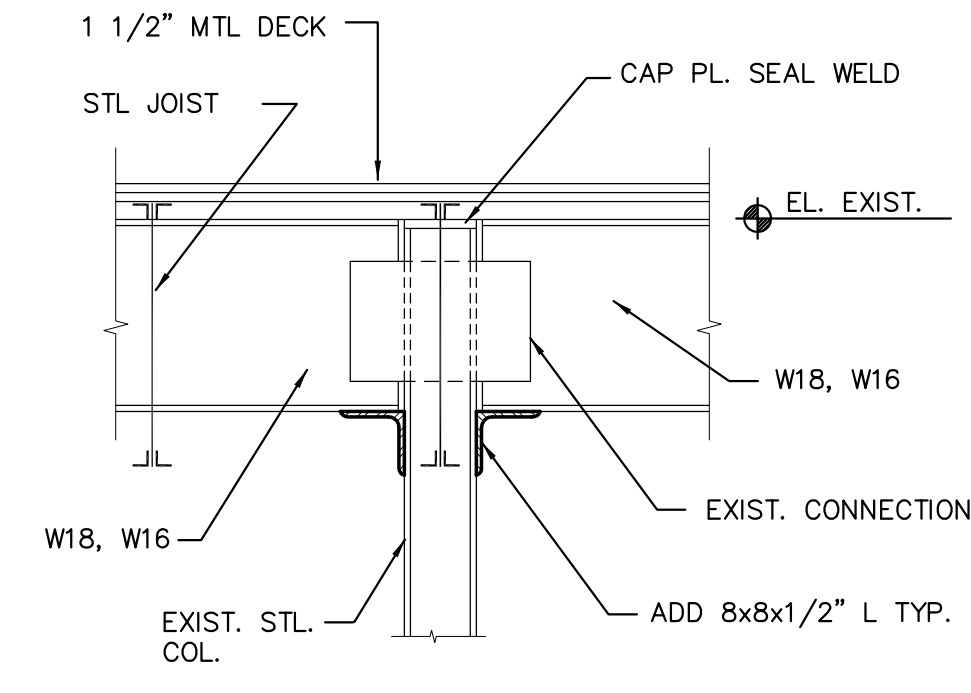
**REINFORCED MASONRY**

- MASONRY DESIGN IS BASED UPON FULL STRUCTURAL VALUES AND "SPECIAL INSPECTION" OF ALL MASONRY CONSTRUCTION IS REQUIRED.
- ALL BLOCK WALLS SHALL BE TWO CELL HOLLOW CONCRETE MASONRY REGULAR SIZE. BLOCK MASONRY UNITS SHALL PROVIDE A MINIMUM PRISM STRENGTH OF  $f_m = 2,000$  psi IN 28 DAYS AS DELIVERED TO THE JOB SITE FOR ALL MASONRY.
- PROVIDE REINFORCING AS INDICATED ON THE DRAWINGS AND AT ALL CORNERS AND TERMINATIONS OF WALLS. PROVIDE (1)-#5 VERTICAL WITH GROUTED CELL AT EACH SIDE OF ALL WALL OPENINGS WIDER THAN 2 FEET, EXCEPT WHERE A Poured COLUMN IS OTHERWISE PROVIDED. PROVIDE DOWELS INTO FOUNDATION OF THE SAME SIZE AS THE VERTICAL REINFORCING, LAP 24" MINIMUM.
- ALL GROUT USED SHALL COMPLY WITH ASTM C-476, "SPECIFICATIONS FOR MORTAR AND GROUT FOR REINFORCED MASONRY", WITH A MINIMUM COMPRESSIVE STRENGTH  $f_c = 3,000$  psi IN 28 DAYS. MIX SHALL HAVE 3/8" MAXIMUM SIZE AGGREGATE AND SHOULD BE OF FLUID CONSISTENCY WITH A MAXIMUM SLUMP OF EIGHT (8) INCHES.

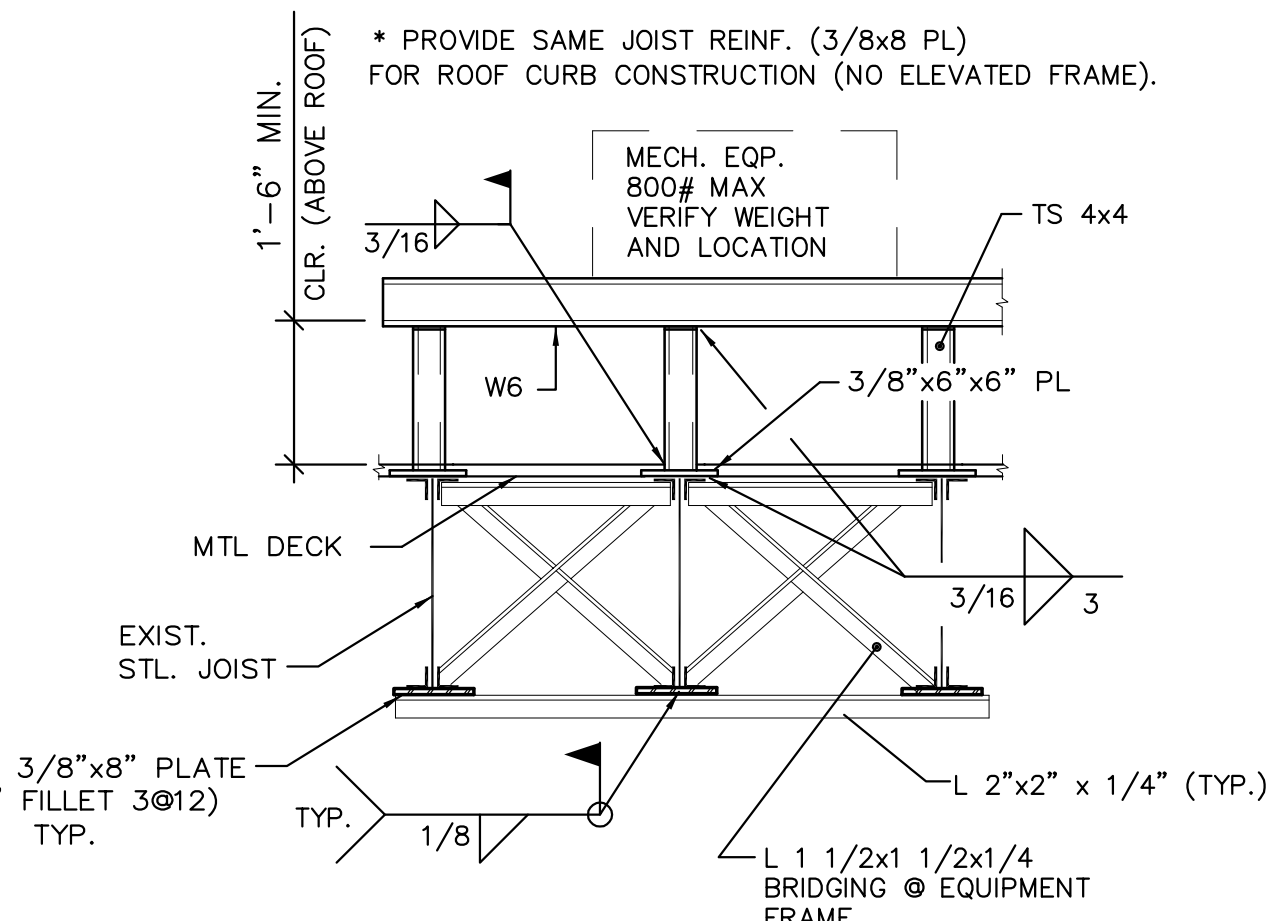
- TYPE M MORTAR SHALL BE USED EXCLUSIVELY AND PROPORTIONED AS OUTLINED UNDER ASTM C-270. HOLLOW UNITS SHALL BE LAID WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS, EXCEPT THAT WEBS SHALL ALSO BE BEDDED IN ALL COURSES OF PIERS, COLUMNS AND PILASTERS, AND IN THE STARTING COURSE ON THE FOOTINGS AND SOLID FOUNDATIONS WALLS, AND WHERE ADJACENT TO CELLS OR CAVITIES TO BE REINFORCED AND/OR FILLED WITH GROUT OR CONCRETE. HORIZONTAL AND VERTICAL FACE JOINTS SHALL BE 3/8" THICK UNLESS OTHERWISE NOTED. VERTICAL JOINTS SHALL BE SHOVED TIGHT. MORTAR PROTRUSIONS EXTENDING INTO CELLS OF CAVITIES TO BE REINFORCED AND FILLED SHALL BE REMOVED. RUNNING BOND SHALL BE USED FOR ALL MASONRY UNLESS NOTED OTHERWISE.
- ALL MASONRY SHALL BE "KEYED" WITH ADJACENT CONCRETE COLUMNS AND BEAMS.
- PROTECTION OF REINFORCING, VARIATION FROM PLUMB ALIGNMENT, BONDING, PROTECTION OF MASONRY UNITS, ETC. SHALL CONFORM WITH THE SPECIFIED PROCEDURES OF THE NOMA BUILDING CODE AND/OR PROJECT SPECIFICATIONS. CONTRACTOR SHALL BRACE ALL COLUMNS, WALLS, AND BEAMS AS REQUIRED TO PREVENT BLOW OUTS OR LOSS OF STRUCTURE.



**SECTION 1**  
SCALE 1/2"=1'-0"



**SECTION 2**  
SCALE 1/2"=1'-0"



**SECTION A**  
EQUIPMENT FRAME  
N.T.S.

**GENERAL NOTES :**

**CAST IN PLACE CONCRETE**

- ALL CONCRETE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS AND RECOMMENDATIONS OF ACI 318 AND ACI 301.
- STRUCTURAL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH AND WATER CEMENT RATIO AS LISTED:  
BEAMS, COLUMNS, ELEVATED SLABS 4,000 PSI  
FOUNDATIONS, SLABS-ON-GRADE, OTHER CONCRETE 3,000 PSI  
W/C RATIO .46
- ALL CONCRETE COLUMNS AND BEAMS SHALL BE CAST AND KEYPED DIRECTLY WITH ADJACENT MASONRY ELEMENTS.

**REINFORCING STEEL**

- REINFORCING STEEL SHALL BE NEW ASTM A615 GRADE 60.
- TOLERANCE FOR REINFORCING BAR FABRICATION SHALL CONFORM TO THE CURRENT C.R.S.I. MANUAL OF STANDARD PRACTICE.
- ACI STANDARD HOOKS SHALL BE USED UNLESS OTHERWISE NOTED. WHERE POSSIBLE DEVELOP TOP BEAM REINFORCING INTO FLOOR SLAB IN LIEU OF HOOKS.
- PROVIDE CORNER BARS FOR ALL BEAMS AND FOUNDATIONS.
- PROVIDE MINIMUM 36 BAR DIAMETER SPLICES.

**FOUNDATIONS**

- CONTRACTOR SHALL ATTAIN THE SERVICES OF A GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF FLORIDA TO PREPARE A SOILS REPORT AND PROVIDE ALL REQUIRED SOILS INFORMATION FOR THE CONSTRUCTION OF THIS PROJECT.
- THE SOILS SHALL BE PREPARED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERS RECOMMENDATIONS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL RETAIN THE GEOTECHNICAL ENGINEER TO MONITOR THE SOIL PREPARATION. AT THE CONCLUSION OF THE PREPARATION PROGRAM AND PRIOR TO CONTINUATION OF ANY STRUCTURAL WORK, THE CONTRACTOR SHALL SUBMIT A STATEMENT BY THE GEOTECHNICAL ENGINEER THAT THE WORK HAS BEEN PREPARED IN ACCORDANCE WITH THEIR REPORT AND THAT THE SOIL WILL ADEQUATELY SUPPORT THE LOADS BASED UPON A MINIMUM SOIL BEARING CAPACITY OF 2,000 PSF.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY EXISTING FOUNDATION CONDITIONS OR DETAILS THAT ARE IN CONFLICT WITH THE DETAILS SHOWN ON THE CONSTRUCTION DOCUMENTS.
- ANY AREAS OF EXISTING ELEMENTS TO REMAIN, UNDERCUT AS A RESULT OF THE WORK SHALL BE FILLED WITH LOW SLUMP CONCRETE.

**GENERAL**

- THESE NOTES ARE NOT INTENDED TO REPLACE THE PROJECT SPECIFICATIONS. IN CASE OF CONFLICT BETWEEN THE REQUIREMENTS OF THE SPECIFICATIONS AND THESE NOTES, THE MORE STRINGENT REQUIREMENT SHALL APPLY.

**DIMENSIONS**

- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS GIVEN ON THE STRUCTURAL DRAWINGS RELATING TO THE GRID LINES, COLUMN AND WALL LOCATIONS, STRUCTURAL AND FINISH FLOOR ELEVATIONS, MEMBER SIZES, ETC. WITH THE ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/ARCHITECT OF ANY DISCREPANCY.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECT FOR ANY DIMENSIONS NOT SHOWN ON THE DRAWINGS. SCALING OF DRAWINGS SHALL NOT BE USED TO OBTAIN OR VERIFY ANY DIMENSIONS.

**SHOP DRAWINGS**

- REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS LIMITED TO COMPLIANCE WITH THE DESIGN CONCEPT AND INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. CONTRACTOR IS SOLELY RESPONSIBLE FOR DIMENSIONS, QUANTITIES, PERFORMANCE, SAFETY, COORDINATION WITH OTHER WORK, AND ALL OTHER REQUIREMENTS OF THE CONTRACT DOCUMENTS. REVIEW DOES NOT AUTHORIZE CHANGE TO CONTRACT DOCUMENTS UNLESS STATED SPECIFICALLY IN A SEPARATE LETTER OR CHANGE ORDER.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR HIS REVIEW IN ACCORDANCE WITH A SCHEDULE OF SUBMITTAL ACCEPTABLE TO THE ENGINEER. THESE SHOP DRAWINGS SHALL BE COMPLETELY REVIEWED AND ACCEPTED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE ENGINEER. THE DATA SHOWN ON THE SHOP DRAWINGS SHALL BE COMPLETE WITH RESPECT TO DIMENSIONS, DESIGN CRITERIA INCLUDING, WHEN REQUIRED, ALL NECESSARY CALCULATIONS DULY SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.
- SUBMIT SHOP DRAWINGS FOR ALL CONCRETE REINFORCING, AND STRUCTURAL STEEL..

**BASIS OF DESIGN**

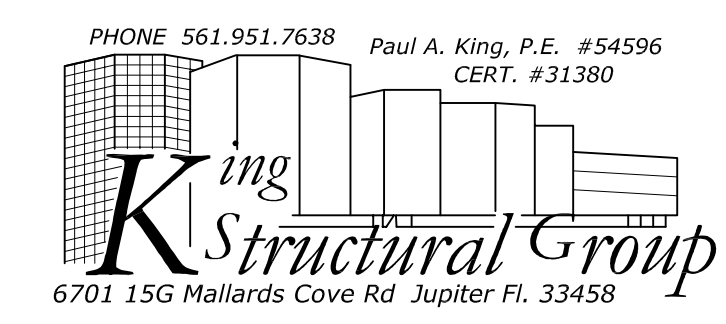
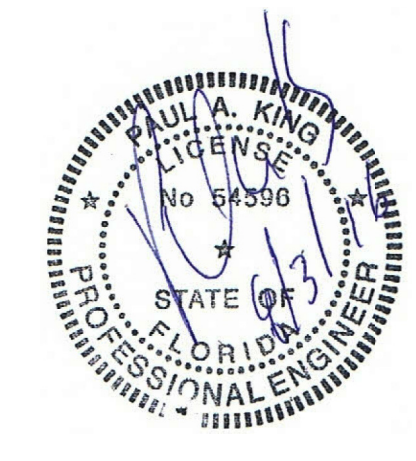
BUILDING CODE: FLORIDA BUILDING CODE - 2014 EDITION WITH PERTINENT ADDENDA.  
DESIGN WIND LOADS ARE BASED UPON A WIND VELOCITY OF 170 MPH IN ACCORDANCE WITH THE ASCE 7-10 EXP. = B, I.F. = 1.0,  $G_{Cp1} = \pm 0.18$

**STRUCTURAL STEEL**

- ALL STRUCTURAL STEEL SHALL BE ASTM A-36 (MIN.), ANCHOR BOLTS ASTM A-307, STRUCTURAL TUBING A500 GRADE B,  $F_y = 46$  KSI
- ALL FABRICATION, WORKMANSHIP, ERECTION AND DETAILS SHALL BE IN ACCORDANCE WITH AISC SPECIFICATIONS.
- ALL WELDING SHALL BE IN ACCORDANCE WITH AWS USING E-70 ELECTRODES (MIN.). ALL WELDERS SHALL BE QUALIFIED AND CERTIFIED FOR THE TYPE OF WELDING PERFORMED.
- ALL STEEL SHALL BE COATED WITH (1) COAT OF CORROSION INHIBITING PAINT.
- WEDGE ANCHORS (WA) SHALL BE 5/8" HILTI WITH 4" EMBEDMENT UNLESS NOTES OTHERWISE.

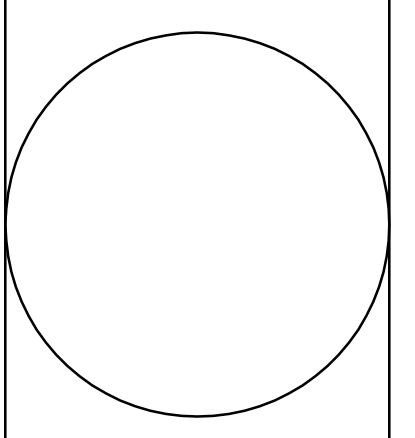
**PENETRATIONS AND CONDUITS**

- CHASES, SLEEVES, OPENINGS, OR OTHER PENETRATIONS IN STRUCTURAL CONCRETE ELEMENTS NOT SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS SHALL NOT BE PERMITTED WITHOUT PRIOR ACCEPTANCE IN WRITING BY THE ENGINEER.



**ACKAL** A PROFESSIONAL CORPORATION  
ARCHITECTS  
105 CHAPEL DRIVE - LAFAYETTE, LOUISIANA 70506  
337-988-5271 ph - 337-988-5272 fax  
www.ackalarchitects.com

INTERIOR TENANT IMPROVEMENT FOR:  
IMMUNOTEK BIO CENTERS, LLC  
4560 LAKE WORTH ROAD  
OFFICE DEPOT PLAZA, SUITE B-5  
LAKE WORTH, PALM BEACH COUNTY, FL 33463



COPYRIGHT © 2016 ACKAL ARCHITECTS, APC.  
THIS DOCUMENT IS THE PROPERTY OF ACKAL ARCHITECTS, APC.  
REPRODUCTION OR USE WITHOUT WRITTEN CONSENT FROM ACKAL ARCHITECTS, APC.

date: 08-02-2016

ENGINEER:  
PAUL A KING PE  
drawn by:  
PAK

sheet no.

**S-2**

19 of 42