STRUCTURAL NOTES:

I. DESIGN DATA

A. BUILDING CODE

1. INTERNATIONAL BUILDING CODE 2015 EDITION

B. DESIGN LOADS/DESIGN CRITERIA

1. WIND LOAD
   - BASIC WIND SPEED (3-SECOND GUST) ---------- Vult = 115 MPH, RISK CATEGORY II
   - ---------- Vasd = 90 MPH, WIND IMPORTANCE FACTOR, I = 1.0
   - EXPOSURE ---------- C
   - INTERNAL PRESSURE COEFFICIENTS, GC_{pi} ---------- +/-0.18

2. ROOF LOADS

LIVE LOAD (L.L.) ----------	30	PSF**
DEAD LOAD (DESIGN D.L.) ----------	20	PSF

3. ROOF SNOW LOAD

GROUND SNOW LOAD, P_g ----------	30	PSF
FLAT-ROOF SNOW LOAD, P_f ----------	21	PSF
SNOW EXPOSURE FACTOR, C_e ----------	1.0	
SNOW LOAD IMPORTANCE FACTOR, I ----------	1.0	
THERMAL FACTOR, C_t ----------	1.0	

4. SEISMIC DESIGN DATA
   - SEISMIC IMPORTANCE FACTOR ---------- 1.0
   - RISK CATEGORY ---------- II
   - MAPPED SPECTRAL RESPONSE ACCELERATIONS
   - ---------- 0.126 S_s
   - ---------- 0.052 S_1
   - SPECTRAL RESPONSE COEFFICIENTS
   - ---------- 0.134 S_{DS}
   - ---------- 0.084 S_{D1}
   - SITE CLASS ---------- D
   - SEISMIC DESIGN CATEGORY ---------- B

SEISMIC DESIGN AND ANCHORAGE OF NON-STRUCTURAL COMPONENTS SHALL BE THE RESPONSIBILITY OF THE SUPPLIER OF THE COMPONENTS. NON-STRUCTURAL COMPONENTS INCLUDES, BUT IS NOT LIMITED TO, ARCHITECTURAL, MECHANICAL, ELECTRICAL AND STORAGE RACKING SYSTEMS. IT SHALL BE THE RESPONSIBILITY OF THE SUPPLIER TO EXAMINE THE SYSTEMS AND COMPONENTS BEING PROVIDED RELATIVE TO THE PROVISIONS OF ASCE-7, CHAPTER 13 TO DETERMINE APPLICABILITY OF THE PROVISIONS TO THE SCOPE OF WORK. IN THE EVENT THAT PROVISIONS APPLY TO THE SCOPE OF WORK, AN ENGINEER REGISTERED IN THE STATE OF THE PROJECT SHALL DESIGN THE APPLICABLE SUPPORT SYSTEMS AND ANCHORAGE FOR THE COMPONENTS AND PRODUCE SIGNED AND SEALED DRAWINGS AND CALCULATIONS FOR SUBMITTAL AND REVIEW BY THE ENGINEER OF RECORD.

C. ALTERNATE DESIGNS

ALTERNATE STRUCTURAL SYSTEMS & DETAILS WILL ONLY BE CONSIDERED PROVIDED THEY ARE SUBMITTED WITH CALCULATIONS CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT. THE CALCULATIONS MUST SHOW THE EQUIVALENCY OF THE ALTERNATE. ACCEPTANCE OF THE ALTERNATE BY THE ENGINEER OF RECORD MUST BE IN WRITING.

D. GENERAL NOTES

1. IN ALL CASES WHERE A CONFLICT MAY OCCUR, SUCH AS BETWEEN REQUIREMENTS IN THE SPECIFICATION AND REQUIREMENTS ON THE DRAWINGS, THE STRUCTURAL ENGINEER OF RECORD SHALL BE IMMEDIATELY NOTIFIED IN WRITING AND THE STRUCTURAL ENGINEER OF RECORD SHALL INTERPRET THE INTENT OF THE CONTRACT DOCUMENT.
2. IN NO CASE, SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THE STRUCTURAL DRAWINGS.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOBSITE AND TO CROSS CHECK ALL DETAILS AND DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH RELATED REQUIREMENTS ON THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND CIVIL DRAWINGS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
4. PROVIDE TEMPORARY BRACING FOR ALL BUILDING ELEMENTS AND COMPONENTS UNTIL THE STRUCTURE IS SUFFICIENTLY COMPLETE TO PROVIDE PERMANENT BRACING.

II. CONCRETE

A. CONCRETE MATERIAL PROPERTIES

1. CONCRETE PROPERTIES: STRENGTH (f'_c @ 28 DAYS)
   - INTERIOR SLAB ON GRADE ---------- 4000 PSI
2. CONCRETE MIX DESIGNS & SUPPORTIVE DATA MUST BE SUBMITTED FOR APPROVAL ACCORDING TO ACI-318 SECTION 5.3, AND ACI-301, SECTION 1.5.

B. REINFORCING MATERIAL PROPERTIES

1. REINFORCING PROPERTIES:

	fy KSI	ASTM
ALL BARS UNLESS NOTED ----------	60	A615
WELDED WIRE FABRIC (SMOOTH) ----------	65	A185

C. CAST IN PLACE CONCRETE

1. ALL CONCRETE SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH IBC CHAPTER 19 & ACI 318.
2. ALL REINFORCING SHALL BE DETAILED, FABRICATED & PLACED IN ACCORDANCE WITH CRSI "MANUAL OF STANDARD PRACTICE."

III. WOOD / TIMBER CONSTRUCTION

A. DIMENSION LUMBER

1. STRUCTURAL LUMBER SHALL BE DESIGNED & CONSTRUCTED IN ACCORDANCE WIDC CHAPTER 23 & THE NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION.
2. THIS STRUCTURE IS A NON-SELF SUPPORTING WOOD FRAME REQUIRING INTERACTION WITH OTHER ELEMENTS TO PROVIDE THE REQUIRED STABILITY. THE FRAMER SHALL PROVIDE TEMPORARY BRACING UNTIL FINAL STABILITY IS PROVIDED.
3. NAILING SHALL BE IN ACCORDANCE WITH IBC SECTION 2304.9 (AS A MINIMUM) OR AS SHOWN ON THE DRAWINGS. SPACE NAILS TO AVOID SPLITTING. ALL NAILS ARE COMMON U.N.O.
4. WHERE PENNY WEIGHTS ARE INDICATED ON THE DRAWINGS, THE NAILS SHALL COMPLY WITH THE MINIMUM DIAMETERS INDICATED BELOW:

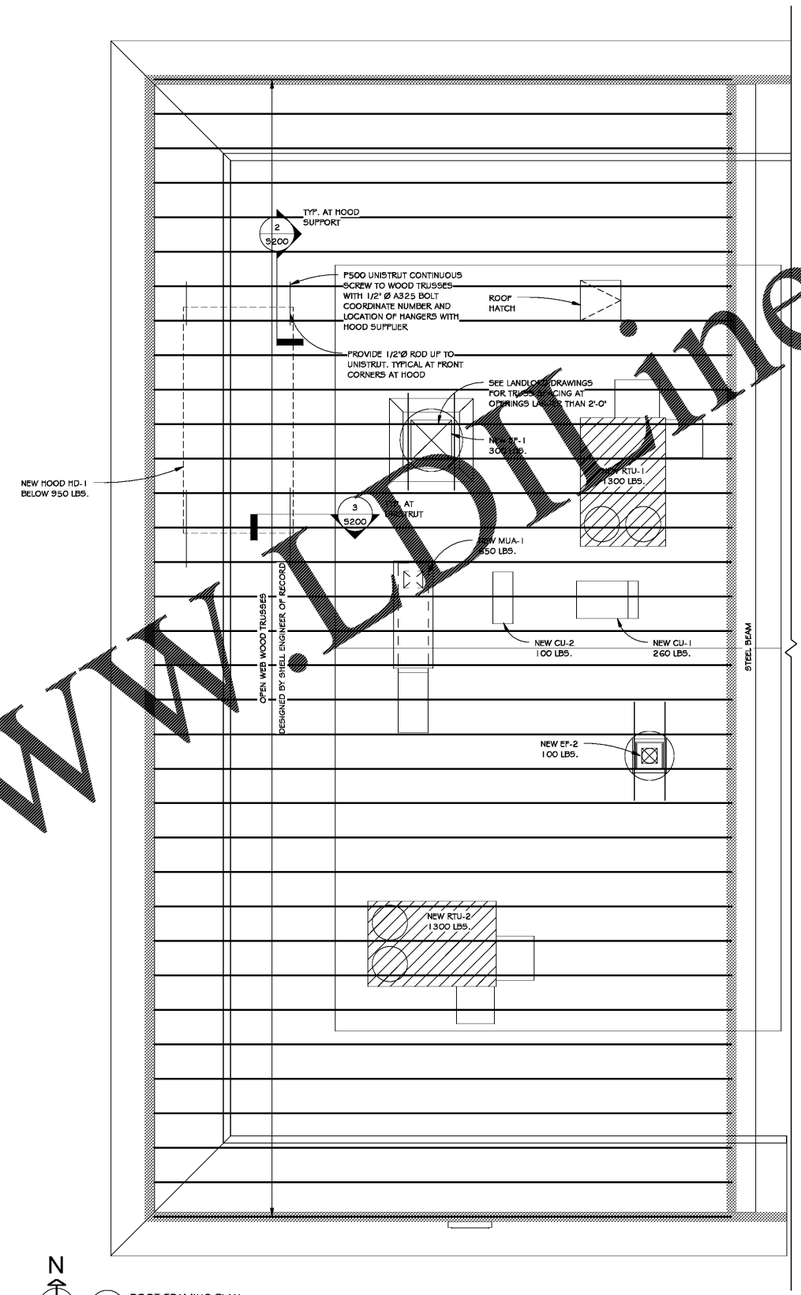
PENNY WEIGHT	MIN. SHANK DIAMETER
8D	0.131"
10D	0.148"
16D	0.162"

5. NAILS AND STAPLES USED FOR FRAMING AND SHEATHING CONNECTIONS SHALL CONFORM TO ASTM F 1667 AND SHALL HAVE THE FOLLOWING MINIMUM BENDING YIELD STRENGTHS:

SHANK DIAMETER (IN)	BENDING YIELD STRENGTH
0.178" – 0.254"	80 KSI
0.143" – 0.172"	90 KSI
0.099" – 0.142" (16d AND SMALLER)	100 KSI

B. OPEN WEB WOOD JOISTS

1. THE DESIGN AND FABRICATION OF ALL TRUSSES SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATIONS FOR STRESS GRADE LUMBER AND ITS FASTENINGS BY NATIONAL FOREST PRODUCTS ASSOCIATION AND NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION BY THE TRUSS PLATE INSTITUTE.
2. WOOD JOIST SUPPLIER SHALL DESIGN AND SUPPLY ALL MATERIAL, CONNECTORS, AND ACCESSORIES REQUIRED FOR INSTALLATION INCLUDING, BUT NOT LIMITED TO HANGERS, WALL CONNECTIONS, BLOCKING, WEB STIFFENERS, AND RIM BOARDS TO PROVIDE A COMPLETE INSTALLATION.
3. WOOD TRUSS SUPPLIER SHALL ACCOUNT FOR THE DEAD LOADS ASSOCIATED WITH FIXED ROOFTOP EQUIPMENT. PLACEMENT OF MECHANICAL UNITS & HANGERS SUPPORTED BY ROOF TRUSSES IS SUBJECT TO THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.



N

1 ROOF FRAMING PLAN

1/4" = 1'-0"

0 4 8 12

PLAN NOTES:

1. FIELD VERIFY ALL EXISTING DIMENSIONS AND ELEVATIONS.
2. SEE ARCHITECTURAL DRAWINGS FOR EXTENTS AND LAYOUT OF NEW WORK.
3. IT IS ASSUMED THE EXISTING BUILDING WAS CONSTRUCTED IN CONFORMANCE WITH THE ORIGINAL STRUCTURAL DRAWINGS AND STANDARD PRACTICES. NOTIFY THE ARCHITECT/ ENGINEER IMMEDIATELY OF ANY DISCREPANCIES WITH ACTUAL EXISTING CONDITIONS.
4. VERIFY NUMBER, SIZE AND LOCATION OF ALL OPENINGS IN WOOD DECK WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.
5. THE DESIGN OF REQUIRED MODIFICATIONS TO ROOF FRAMING ELEMENTS FOR SUPPORT OF NEW EQUIPMENT IS THE RESPONSIBILITY OF THE LANDLORD. SEE THIS PLAN AND THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION ON EQUIPMENT.
6. EXISTING SLAB ON GRADE IS 4" THICK, REINFORCED WITH 4x4-W1.4xW1.4 W.W.F., SEE DETAIL 1/S200 FOR TYPICAL SLAB CONTROL JOINT. SEE ARCH. DRAWINGS FOR SLAB TO BE REMOVED. REPLACE SLAB TO MATCH EXISTING THICKNESS AND REINFORCING.

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Issue Record:

12-19-16	Permit Set

Revisions:

Drawn: A. MAGER
Checked: E. LARSEN

Project No.: VA 1040

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