GENERAL STRUCTURAL NOTES

1. CODES AND MANUALS
   International Building Code, 2009 Edition
   ACI 318, current edition.
   AISC Manual of steel construction, Current Edition
   AISI Specification for the design of Cold Form, Current Edition
   Steel Structural Members, Current Edition
   ACI 530, Current Edition
   Structural Design Manual for Hospital Projects, Department of Veterans Affairs, August 2009

2. DESIGN LOADS:

   A. Vertical:

3rd Floor (Existing)	LL=100psf
3rd Floor (Existing)	DL=50psf
3rd Floor Interstitial (Existing)	LL=25psf
3rd Floor Interstitial (Existing)	DL=50psf

   B. Horizontal:

   (1) WIND - ASCE 7 Main Force Resiting System Method 2

   WALLS

V 3-Sec. Gust	=	90mph
Iw	=	1.15
Exposure	=	C
Mean Roof Height	=	145 ft
Roof Angle	=	22.62
Λ	=	1.22
P(0'-20')	=	18.1psf
P(20'-60')	=	21.3psf
P(60'-80')	=	22.3psf
P(80'-120')	=	23.9psf
P(120'-140')	=	24.5psf

   (2) SEISMIC(EQUIVALENT LATERAL FORCE PROCEDURE) V = Cs W

Site Class	=	D
Occupancy Category	=	IV
Seismic Design Category	=	D
I_E	=	1.5
S_{DS}	=	0.505
S_{DI}	=	0.239
R (Special Concrete Shear Walls)	=	5
Cs	=	0.08

3. GENERAL
   A. The Contractor shall verify all dimensions in the field.
   B. Shop drawings shall be furnished for review before any fabrication and erection is started. Poorly executed shop drawings shall be rejected and resubmitted.
   C. The Contractor shall be responsible for providing safe and adequate shoring for all parts of the structure during construction.
   D. All trades shall coordinate and verify all openings in floors, roof, walls, and beams with the General Contractor.
   E. The General Contractor shall be responsible for foundations under Mechanical equipment and shall coordinate size and location of foundations with Mechanical Contractor.

4. MATERIALS
   A. Structural and Miscellaneous Steel:
      (1) All structural and miscellaneous steel members, shapes and connections shall conform to ASTM A992 Fy=50ksi
      (2) The contractor shall be responsible for checking the Architectural drawings for all miscellaneous steel. All miscellaneous steel shall be ASTM A36 fY=36ksi
      (3) Bolts Shall Conform to ASTM A325 tension control bolts unless noted otherwise, with sizes as shown on the drawings. Anchor bolts embedded in concrete or masonry shall be ASTM F1554 Grade 36 bolts or A36 threaded bars.
      (4) All welding shall be done by certified welders and shall be in accordance with the latest standards of the AWS and AISC. Inspect all welding in Accordance with the specifications.
      (5) Tube steel shall be ASTM 500 grade B Fy=46ksi.

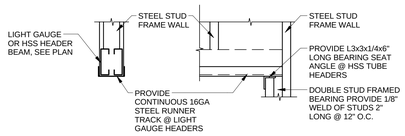
   B. Cold formed structural and miscellaneous steel
      (1) All cold formed shapes and connections shall have a yield stress of Fy=50 ksi for 16gauge & heavier & 33ksi for 18gauge & lighter.
      (2) All welding shall conform to the provisions of AWS D1.1-2000 and ANSI/AWS D1.3-98. Where the weld throat is not shown on the drawings, the weld throat shall be at least as the thickness of the thinnest sheet joined. All welds shall provide complete fusion of the sheets without "blowouts".
      (3) At all butt joints, abutting pieces of track shall be securely anchored to a common structural element or they shall be splice welded together.
      (4) All structural stud framing shall have rows of horizontal bridging installed at a maximum of 4'-0" o.c. See detail this sheet.
      (5) The track of all structural stud framing shall be 16gauge minimum.

QUALITY ASSURANCE PLAN

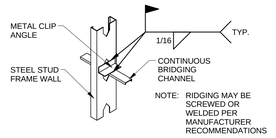
General Requirements:

1. The Contractor shall be responsible for hiring the special inspector(s) and must incur all associated costs per section 1704.1 of the IBC-2006.
2. The permit applicant shall submit a statement of special inspections prepared by the registered design professional in responsible charge per section 1704.1.1 of the IBC-2006. The statement of special inspections shall be as shown below
3. Special inspectors shall submit inspection reports to the building official, and to the registered design professional in responsible charge. The reports shall be prepared in accordance with the requirements contained in section 1704.1.2 of the IBC-2006.
4. The required Special Inspections for this project have been summarized below. All other normal inspections and testing not included in the Special Inspections shown below (i.e. soils compaction testing, concrete sampling and testing, permit agency inspections, etc.) shall be paid for by the General Contractor. All normal testing and inspections, as well as all Quality Assurance testing and inspections (Special Inspections), shall be coordinated and scheduled by the General Contractor to fit within the workflow of the project

Special Inspections /Quality Assurance Requirements	
Item	Special Inspection Requirement
1. Steel Construction	
a. Verification of high strength bolts, nuts and washers. Verify confirmation of identification markings to ASTM standard specified. Obtain manufacturer's certificate of compliance.	Periodic Inspection required as defined in AISC 360 Section A3.3 and applicable ASTM material specification
b. Verification of high strength bolting:	
1) bearing-type connections	Periodic Inspection required as defined in AISC 360 Section M2.5
2) Slip-Critical connections	Continuous Inspection required as defined in AISC 360 Section M2.5
c. Inspection of Welding:	
1) Complete and partial penetration groove welds	Continuous Inspection required as defined in AWS D1.1 and IBC section 1704.3.1
2) Multipass fillet welds	Continuous Inspection required as defined in AWS D1.1 and IBC section 1704.3.1
3) Single pass fillet welds greater than 5/16"	Continuous Inspection required as defined in AWS D1.1 and IBC section 1704.3.1
4) Single pass fillet welds less than 5/16"	Periodic Inspection required as defined in AWS D1.1 and IBC section 1704.3.1
5) Floor and Roof Deck welds	Periodic Inspection required as defined in AWS D1.3
6) Verification of weldability of reinforcing steel other than ASTM A 706	Periodic Inspection required as defined in AWS D1.4 and ACI 318 Section 3.5.2
7) Shear reinforcement	Continuous Inspection required as defined in AWS D1.4 and ACI 318 Section 3.5.2
8) Other reinforcing steel	Periodic Inspection required as defined in AWS D1.4 and ACI 318 Section 3.5.2
d. Inspection of Steel frame joints for compliance with approved construction documents	Periodic Inspection required as defined in IBC 2006 Section 1704.3.2



EXTERIOR NON-LOAD BEARING HEADER DETAIL
NOT TO SCALE



HORIZ. BRIDGING DETAIL
NOT TO SCALE

COMPLETION ITEM NO. ____
FULLY SPRINKLERED

#	Revisions	Date

CONSULTANTS:

QPEC
QUIROGA-PFEIFFER ENGINEERING CORPORATION

RICHARD S. PFEIFFER NEW MEXICO 11165 REGISTERED PROFESSIONAL ENGINEER
Architect 9/26/14 Engineer

ARCHITECT/ENGINEERS

THE HARTMAN + MAJEWSKI DESIGN GROUP
Architects Engineers Interior Design
Planners Urban Designers LEED®
120 Vassar Dr SE Suite 100
Albuquerque New Mexico 87106
Tel 505 242 6880 Fax 505 242 6881

Drawing Title: GENERAL STRUCTURAL NOTES	Project Title: MICU AND SICU CONSOLIDATION		Project Number: 501-324
			Building Number: BUILDING 41
Approved: Project Director	Location: NMVAHCS RAYMOND G. MURPHY VAMC		Drawing Number: S-001
	Date: September 26, 2014	Checked: RSP / Drawn: RMR	Dwg. Of

Office of Construction and Facilities Management
Department of Veterans Affairs

9/25/2014 3:35:32 PM