ADDENDUM

Project Name:	UNK University Village Student Housing
Project Number:	15097
Owner:	University of Nebraska at Kearney
Addendum Number:	01, Revision 01
Date:	April 21, 2016
By:	Matt Neaderhiser, Holland Basham Architects
To:	Project Bidders

This Addendum to the project bidding documents and attached reference drawings dated April 21, 2016, issued to inform bidders of revisions to the bidding documents.

All related requirements contained in the original bidding documents, dated April 1, 2016 shall still apply to this Addendum. The general character of the work specified in this Addendum shall be the same as originally set forth in the applicable portions of the bidding documents for similar work, unless otherwise specified in this Addendum. All additional work necessitated by this Addendum as required to complete the work shall be included in the bids even though not particularly mentioned in this Addendum.

PRE-BID MEETING MINUTES

1. List of Attendees (attached)
2. Project Completion Date: July 15, 2017
3. UNK to begin moving in furniture after that date
4. August 2017 is resident move-in.
5. Special inspections to be performed/contracted by UNK.

RESPONSE TO QUESTIONS FROM BIDDERS:

1. Section 00 4513 is to be submitted with the bid form.
2. No unit prices or allowances are currently required in the bid.
3. The gas grills noted on A0.01 will be provided and installed by Contractor.
4. Section 05 1200, 1.04:
    a. In lieu of AISC Certification of the steel fabricator, the fabricator shall provide descriptions of a minimum of two comparable projects in terms of size and complexity. In addition, the fabricator shall provide weld inspections of shop welds and welding inspection certificates of the weld inspectors."
5. A8.01, General Note 1: Blocking OR strapping is an acceptable means within walls.
6. Foil faced rigid insulation is not required on the project.
7. 2/A.3.13 – Note indicating signage on the building is to be installed by Contractor, provided by Owner.
8. A0.01 – Elevation noted for CIP walls is for the height of walls. The width of the walls is noted on detail 8/A6.04.
9. Benches and trash receptacles on the site are specified and located on A0.01.
10. Integral curb is acceptable in lieu of curb and gutter.

APPROVED SUBSTITUTIONS:

1. Whirlpool appliances are currently specified. Approved equals by GE will be accepted.
2. Versico Versagard EPDM is an acceptable substitution.
3. Carlisle Barritech VP is an acceptable substitution for the fluid applied weather barrier.

SPECIFICATIONS:

SECTION 00 01 10 – TABLE OF CONTENTS

1. Delete sections 01 21 00-Allowances and 01 22 00-Unit Prices.

2. ADD section 10 5623 – Wire Storage Shelving

SECTION 01 22 00 – UNIT PRICES
1. Remove section in its entirety.

SECTION 03 3000 – CAST-IN-PLACE CONCRETE
1. Add reference to a sealer for the sealed concrete locations.

SECTION 04 2000 – UNIT MASONRY
1. Add mortar colors for each brick.

SECTION 06 4100 – ARCHITECTURAL WOOD CASEWORK.
1. Update missing information under section 2.04.
2. Update missing hardware information.

SECTION 08 7100 – DOOR HARDWARE
1. Updated hardware sets.

SECTION 08 8000 – GLAZING
1. Updated performance requirements for IG-1.

SECTION 09 0600 – COLOR SCHEDULE
1. Add reference to wood base for WP-1
2. Revise Polished Concrete to read Sealed Concrete.

SECTION 10 5623 – WIRE STORAGE SHELVING
1. Section added in its entirety.

ARCHITECTURAL:

SHEET A0.12 – CODE REVIEW PLANS
1. This sheet is REVISED and REISSUED with this revision.
2. Add 1-HR rating around Laundry Room at 2nd and 3rd floor.

SHEET A0.41 – OCCUPANCY REVIEW PLANS
1. This sheet is REVISED and REISSUED with this revision.
2. Update clubhouse and storage occupancy.

SHEET A1.01A – FIRST FLOOR PLAN – WEST WING & CENTER
3. This sheet is REVISED and REISSUED with this revision.
4. Add elevation tag to Clubhouse 103.

SHEET A1.01B – FIRST FLOOR PLAN – EAST WING & ENCLOSURE
1. This sheet is REVISED and REISSUED with this revision.
2. Unit C-1, Rm 140, exterior entry door changed from being Door C-1.03 on A5.24 Enlarged Unit Plan Door Schedule to being Door 140 on A2.11 Building Door Schedule.

SHEET A1.02A – SECOND FLOOR PLAN – WEST WING & CENTER
1. This sheet is REVISED and REISSUED with this revision.
2. Add elevation tag to Laundry 200.

SHEET A1.02B – SECOND FLOOR PLAN – EAST WING
3. This sheet is REVISED and REISSUED with this revision.
4. Update elevation callouts.

SHEET A1.03A – THIRD FLOOR PLAN – WEST WING & CENTER
1. This sheet is REVISED and REISSUED with this revision.
2. Add elevation tag to Laundry 300.

SHEET A1.21A – FIRST FLOOR REFLECTED CEILING PLAN – WEST WING & CENTER

1. This sheet is REVISED and REISSUED with this revision.
2. Clarify ceiling finishes in common spaces.

SHEET A1.31B – FIRST FLOOR FINISH PLAN – EAST WING & ROOM FINISH SCHEDULE
1. This sheet is REVISED and REISSUED with this revision.
2. Revise Material Key to indicate Sealed Concrete (PC-1).
    a. There will not be polished concrete within the project scope.
3. Remove FRP from Custodial Storage 112A.

SHEET A2.11 – DOOR & FRAME TYPES & SCHEDULE
1. This sheet is REVISED and REISSUED with this revision.
2. Updated hardware types.
3. Door 140 added to Door Schedule.

SHEET A2.12 – FRAME & WINDOW TYPES
1. This sheet is REVISED and REISSUED with this revision.
2. Add window type W19.

SHEET A3.11 – BUILDING ELEVATIONS
1. This sheet is REVISED and REISSUED with this revision.
2. Added control joints in the masonry.

SHEET A3.12 – BUILDING ELEVATIONS
1. This sheet is REVISED and REISSUED with this revision.
2. Added control joints in the masonry.

SHEET A3.13 – BUILDING ELEVATIONS
1. This sheet is REVISED and REISSUED with this revision.
2. Added control joints in the masonry.
3. 2/A3.13 – Updated window tags.

SHEET A3.21 – ENLARGED BUILDING ELEVATIONS
1. This sheet is REVISED and REISSUED with this revision.
2. Added control joints in the masonry.

SHEET A3.22 – ENLARGED BUILDING ELEVATIONS
1. This sheet is REVISED and REISSUED with this revision.
2. Added control joints in the masonry.

SHEET A4.03 – WALL SECTIONS
1. Detail 6&7 – Add pavers to roof.

SHEET A4.05 – WALL SECTIONS
1. Detail 6 – Revise flashing note from THROUGH WALL FLASHING W/ WEEPS to read PREFIN METAL FLASHING.

SHEET A5.21 – ENLARGED PLANS AND SCHEDULES – UNIT TYPES A-1, A-1A
1. This sheet is REVISED and REISSUED with this revision.
2. Add keynote for window blinds to all windows in units.
3. Misc updates to schedules.
4. Update ceiling elevation callout.

SHEET A5.22 – ENLARGED PLANS AND SCHEDULES – UNIT TYPES B-1, B-2
1. This sheet is REVISED and REISSUED with this revision.
2. Add keynote for window blinds to all windows in units.
3. Misc updates to schedules.

SHEET A5.23 – ENLARGED PLANS AND SCHEDULES – UNIT TYPES B-3, B-4
1. This sheet is REVISED and REISSUED with this revision.
2. Add keynote for window blinds to all windows in units.
3. Misc updates to schedules.

SHEET A5.24 – ENLARGED PLANS AND SCHEDULES – UNIT TYPES B-4A, C-1
1. This sheet is REVISED and REISSUED with this revision.
2. Door C-1.03 removed from Unit C-1 Door Schedule.
3. Add keynote for window blinds to all windows in units.
4. Misc updates to schedules.

SHEET A6.01 – DETAILS
1. This sheet is REVISED and REISSUED with this revision.
2. Updates to details 8 and 16.

SHEET A6.02 – DETAILS
1. This sheet is REVISED and REISSUED with this revision.
2. Updates to details 8 and 11.

SHEET A7.01 – INTERIOR DETAILS
1. This sheet is REVISED and REISSUED with this revision.
2. Add detail 14.
3. Delete detail 9.

SHEET A8.01 – INTERIOR ELEVATIONS
1. This sheet is REVISED and REISSUED with this revision.

SHEET A8.02 – INTERIOR ELEVATIONS
1. This sheet is REVISED and REISSUED with this revision.

SHEET A8.03 – INTERIOR ELEVATIONS – UNIT TYPES
1. This sheet is REVISED and REISSUED with this revision.

SHEET A8.04 – INTERIOR ELEVATIONS – UNIT TYPES
1. This sheet is REVISED and REISSUED with this revision.

SHEET A9.01 – CASEWORK SECTIONS OR DETAILS
1. This sheet is REVISED and REISSUED with this revision.

LANDSCAPE:

See attached narrative provided by Studio InSite.

STRUCTURAL:

See attached narrative provided by Nielsen-Baumert Engineering

MEP:

See attached narrative provided by Morrissey Engineering, Inc.

ATTACHMENT:

See attached list of Pre-Bid Meeting Attendees
See attached revised sheets provided by Holland Basham Architects.
See attached revised sheets provided by Nielsen Baumert Engineering.
See attached revised sheets provided by Morrissey Engineering.
See attached revised sheets provided by Olsson and Associates.
See attached revised sheets provided by Studio InSite.

ADDENDUM "1" – "For Construction" Package
4/20/2016

PROJECT: University of Nebraska at Kearney
Village Student Housing

ARCHITECT: Holland Basham Architects

TO ALL BIDDERS:
This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents and all subsequent addenda. Receipt of this Addendum must be acknowledged in the space provided in the Bid Form.

CHANGE SPECIFICATIONS

None

CHANGES TO DRAWINGS

LANDSCAPE SHEETS:

1-1 Sheet L1.00 – 02/Plant Schedule – CHANGE quantities of 'Feather Reed Grass'/FRG to 732
1-2 Sheet L1.00 – 02/Plant Schedule – CHANGE quantities of 'Prairie Dropseed'/PRD to 921
1-3 Sheet L1.00 – 01/Overall Landscape Plan – ADD 6 Prairie Dropseed and 21 Feather Reed Grass to fill in areas where seat walls were removed along streetscape (RE:Civil)
1-4 Sheet L2.00 – Detail 01/Mow Strip – CHANGE Steel Edging to Aluminum Edging per specifications.
1-5 Sheet L2.00 – Detail 06/Flagstone Walkthrough Detail – CHANGE Joint material from grout to decomposed granite.

NIELSEN-BAUMERT ENGINEERING, INC.

10855 W. Dodge Rd., Suite 180 • Omaha, NE 68154
Phone: (402) 496-4750
Fax: (402) 496-1147

Project: UNK University Village Student Housing
Issue: Addendum #1
Date: 4/21/16

Addendum Items:

Sheet S0.01 – Structural General Notes

1. Note C3 – Concrete mix note revised to clarify mix use locations and remove the light weight concrete options.
2. Note C11 – Note deleted.
3. Note C12 – Note deleted.
4. Note C14 – Note deleted.
5. Note M2 – Modified wording of note.
6. Note G8 – Modified seismic coefficients and seismic code information.

Sheet S1.01a – Foundation Plan – West Wing and Center

1. Moved exterior footing steps to north of grid F.
2. Removed interior footing steps.
3. Added CMU control joints at cooridor CMU walls between grids F and G.

Sheet S1.01B – Foundation Plan – East Wing

1. Added CMU control joints at storm shelter walls.

Sheet S1.02A – Second Floor Framing – West Wing and Center

1. Added missing beam labels at grid F.
2. Revised slab edge dimension between grids G & H.
3. Added beam dimensions between grids H & J.
4. Revised window header labels.
5. Added section cuts 4/S4.01 at center stair/elevator tower.
6. Revised plan notes.

Sheet S1.02B – Second Floor Framing – East Wing

1. Added typical section cuts 3 & 4 on S3.01 at grid 9.
2. Added typical section cut 6/S3.01 at grid 11.
3. Revised window header labels.
4. Revised plan notes.

Sheet S1.03A – Third Floor Framing – West Wing and Center

1. Revised masonry lintel labels.
2. Revised stair landing designation at the main floor level.
3. Revised joist framing around mechanical chases and added associated section cuts.
4. Revised plan notes.

Sheet S1.03B – Third Floor Framing – East Wing

1. Revised joist framing around mechanical chases and added associated section cuts.
2. Revised plan notes.

Sheet S1.04A – Roof Framing – West Wing and Center

1. Revised stair landing slab designation.
2. Showed RTU location based on base bid only.
3. Revised plan notes.
4. Revised masonry lintel labels.
5. Added section cuts to high roof framing plan

Sheet S1.04B – Roof Framing – East Wing

1. Showed RTU location based on base bid only.
2. Revised plan notes.
3. Revised masonry lintel labels.

S2.01 – Foundation Details

1. Detail 8 – Revised CMU wall note from 6" to 8".
2. Detail 11 – Clarified stud wall and brick column location. Identified metal stud bottom track size and anchor bolt size, spacing, and embedment.
3. Detail 12 - Identified metal stud top and bottom track size and anchor bolt size, spacing, and embedment. Provided grade beam dimensions and elevation.
4. Detail 15 – Provided interior CMU wall footing dimensions.
5. Detail 16 – Identified elevation of stair tower wall footing.

S2.02 – Foundation Details

1. Detail 1 – Clarified stud wall location.
2. Detail 4 – Clarified ramp slab elevation varies.
3. Detail 7 – Identified top of concrete wall elevation.

Sheet S3.01 – Typical Framing Details

1. Detail 1 – Revised general notes.
2. Added detail 10 for elevated slab opening framing.

Sheet S3.02 – Framing Details

1. Detail 1 – Referred to plan for window header and brick lintel information.
2. Detail 7 – Clarified slab edge and roof deck support information.

Sheet S3.03 – Framing Details

1. Detail 1 – Provided detail reference for slab kicker information.
2. Detail 2 – Provided detail reference for slab kicker information. Clarified sleeve tube to not be welded to column.
3. Detail 3 – Provided detail reference for slab kicker information.
4. Detail 4 – Provided detail reference for slab kicker information. Clarified sleeve tube to not be welded to column.
5. Detail 5 – Clarified sleeve tube to not be welded to column.

Sheet S4.01 – CMU Sections and Details

1. Detail 8 – Clarified locations of CMU expansion joints.

Sheet S5.01 – Framing Details

1. Detail 3 – Revised section references.
2. Added details 13 & 14 for floor opening framing information.

Sheet S5.02 – Framing Details

1. Detail 2 – Revised deck to track connection note.

Sheet S5.03 – Framing Details

1. Detail 3 – Revised rim track note and fasteners.
2. Detail 4 – Revised rim track note and fasteners.
3. Detail 4 – Revised rim track note and fasteners.

Sheet S5.04 – Roof Framing Details

1. Detail 3 – Identified infill studs of brick return wall.
2. Detail 6 – Clarified that window connection to structure is by window supplier.
3. Detail 6 – Clarified that window connection to structure is by window supplier.
4. Detail 9 – Identified masonry bond beam at joist ledger connection.
5. Detail 10 – Clarified joist & header framing around duct penetrations through roof.

Sheet S5.05 – High Roof Framing Details

1. Detail 1 – Revised framing detail to support revised architectural wall fascia detail.
2. Detail 2 – Revised framing detail to support revised architectural wall fascia detail.
3. Detail 6 – Revised framing detail to support revised architectural wall fascia detail.
4. Added details 8 & 9

addendum

addendum no.	1
date:	2016-4-20
bid date:	2016-4-28
project name:	UNK University Village Student Housing
project no:	15273

This addendum is hereby made a part of the contract documents to the same extent as if it were originally included therein. Contract documents shall be considered modified or revised as hereinafter described.

mechanical items

specification items

1. The following manufacturers are approved for the listed items subject to compliance with the plans and specifications.

    a. Specification 221319 – Plumbing Specialties
        i. Electronic Mixing Valves: Powers Intellistation
    b. Specification 221429 – Sump Pumps
        i. Stancor
    c. Specification 223400 – Domestic Water Heaters
        i. Expansion Tanks: Patterson, American Wheatley
    d. Specification 224000 – Plumbing Fixtures
        i. Vitreous China and Enameled Fixtures: Zurn
        ii. Flush Valves: Moen
        iii. Electric Water Coolers: Acorn
        iv. Mop Sinks: Acorn
        v. Fixture Carriers: Watts
    e. Specification 230960 – Variable Frequency Drives
        i. Eaton
    f. Specification 232113 – Hydronic Piping
        i. Glycol Makeup Package: J.L. Wingert, American Wheatley, John Wood
        ii. Expansion Tanks: Patterson
        iii. Air-Dirt Separators:
        iv. Balancing Valves: PRO Hydronic Specialties
        v. Automatic Flow Control Valves: Nexus, PRO Hydronic Specialties
        vi. Check Valves: Titan
        vii. Chemical Feeder: American Wheatley
    g. Specification 232115 – Ground Loop Heat Pump Piping
        i. Pre-manufactured Geothermal Valve Vault: Uponor
    h. Specification 232123 – Hydronic Pumps
        i. Patterson, Wilo-USA
    i. Specification 233113 – Metal Ducts and Accessories

i. Fire and Fire/Smoke Dampers: Leader
j. Specification 233423 – Power Ventilators
i. Soler & Palau
k. Specification 235216 – Condensing Boilers
i. Fulton, Riverside Hydronics, Camus
l. Specification 237200 – Energy Recovery Ventilators
i. Carrier

2. Specification Section 232500 – HVAC Water Treatment
a. Revise 1.02 Summary. Add the following:
b. Item C. Water Treatment shall be provided by Fremont Industries. The owner has a contract with Fremont Industries for other buildings on the campus.

drawing items

1. Revised Sheets and Additional Sheets
a. Alternate 1
i. Base Bid, ERV Units: Added sheet M5.03 – Mechanical Risers
ii. Alternate Bid, RTU Units: Added sheet MA1.05 – Mechanical (Alt 1) Mechanical Risers
b. Base Bid HVAC – Water source heat pumps with fluid cooler and gas fired boilers.
i. Revised sheet M1.00 – Mechanical Site Plan
c. Alternate 2 – Geothermal water source heat pumps
i. Revised sheet MA2.00 – Mechanical Site Plan
ii. Added Sheets MA2.01 and MA2.02 – Mechanical Details
d. Alternate 3 - Hybrid water source heat pump with reduced geothermal with fluid cooler and gas fired boilers
i. Revised sheet MA3.00 – Mechanical Site Plan
ii. Added Sheets MA3.01 and MA3.02 – Mechanical Details
e. General Sheet Revisions:
i. M1.01A – First Floor HVAC Plan – West Wing & Center. Clouded changes.
ii. M1.01B – First Floor HVAC Plan – East Wing. Clouded changes.
iii. M1.02A – Second Floor HVAC Plan – West Wing & Center. Clouded changes.
iv. M1.03A – Third Floor HVAC Plan – West Wing & Center. Clouded changes.
v. M1.03B – Third Floor HVAC Plan – East Wing. Clouded Changes.
vi. M2.01A – First Floor HVAC Piping Plan – West Wing & Center. Clouded changes.
vii. M2.01B – First Floor HVAC Piping Plan – East Wing. Clouded changes.
viii. M4.01 – Enlarged Mechanical Plans – Units. Clouded changes.
ix. M4.03 – Enlarged Mechanical Plans. Clouded changes.
x. M5.02 – Mechanical Risers. Clouded changes.
xi. M6.01 – Mechanical Details. Clouded changes.
xii. M7.01 – Mechanical Schedules. Clouded changes.
xiii. M7.02 – Mechanical Schedules. Clouded changes.

2. Revised underground and above ground waste and vent piping at the first floor to accommodate future conversion of first floor to Commercial Retail space.
a. In general, all risers offset at first floor to the nearest column. Plans have been revised as required. Individual changes are not clouded on plans. In general, all risers were affected.
b. See the following revised sheets: M3.00A, M3.00B, M3.01A, M3.01B, M3.02A, M3.02B, M3.03A, M3.03B, M5.01.

electrical items

specification items

1. The following manufacturers are approved for the listed items subject to compliance with the plans and specifications.
    a. Specification 263213 – Packaged Engine Generators
        i. Generac Power Systems

2. Section 268100 Fire Alarm
    a. Section 2.01 Manufacturer's – Siemens Building Technologies. The new fire alarm/mass notification system is required to match the existing campus system.

drawing items

1. Sheet E0.01 – General Information
    a. Revise Electrical Symbols Legend and General Fire Alarm Notes

2. ES1.01 – Site Plan
    a. Add receptacles at pole lights.
    b. Add 208V receptacle at two pedestrian poles.

3. Sheet E1.01A – First Floor Lighting Plan – West Wing & Center
    a. Add automatic load control relays.

4. Sheet E1.02A – Second Floor Lighting Plan – West Wing & Center
    a. Add automatic load control relays.

5. Sheet E1.03A – Third Floor Lighting Plan – West Wing & Center
    a. Add automatic load control relays.

6. Sheet E2.01A – First Floor Power Plan – West Wing & Center
    a. Clarify circuit numbers.

7. Sheet E3.01B – First Floor Special Systems Plan – East Wing
    a. Add fire alarm door hold opens and associated smoke detection.

8. Sheet E2.02B – Second Floor Power Plan – East Wing
    a. Clarify detail reference number.

9. Sheet E2.04A – Roof Power Plan – West Wing & Center
    a. Clarify lighting fixture type in stairs.

10. Sheet E4.01 – Enlarged Electrical Plans – Units
    a. Revise card reader rough-in requirements.
    b. Revise heat pump disconnect key note.
    c. Add receptacle to detail 1/E4.01.

11. Sheet E4.02 – Enlarged Electrical Plans
    a. Revise Key Notes

b. Detail 3/E4.02 – Add lighting at trash area and label light fixtures in Mail Room 144.
c. Detail 6/E4.02 – Clarify devices and circuiting.

12. Sheet E6.02 – Electrical Schedules
    a. Revise Panel Schedule '1B'.

13. Sheet E6.03 – Electrical Schedules (This sheet is not re-issued – refer to verbiage below)
    a. Lighting Fixture Schedule - The following manufacturers are approved for the listed items subject to compliance with the plans and specifications.
        i. Fixture #7 – Emergi-Lite
        ii. Fixture #8 – GE Lighting, Halo Lighting
        iii. Fixture #9 – AFX
        iv. Fixture #10 – Kichler Lighting
        v. Fixture #12A – Neo-Ray
        vi. Fixture #12B – Neo-Ray

14. Sheet E7.01 – Electrical Details
    a. Modify Detail 7/E7.01

end of addendum

Purpose: Pre Construction Meeting
Project Name: University Village Student Housing
Project Number: K048P001
Date: April 14, 2016 @ 2:00 PM - Ockinga Conference Room

Name	Organization	Phone
Michael Fox	A-1 Heating & HVAC	308-832-0251
Chane McDowell	Anderson Brothers	308-236-6437
Dave Barger	Anderson Brothers	308-236-6437
Kyle Fedorchik	Anderson Brothers	308-236-6437
Roger Scheidies	Bamford Inc	308-237-2157
Phil Cook	Capitol City Electric	402-420-7435
Steve Beall	Central Contracting	308-234-2421
Steve Lentell	Central Contracting	308-234-2421
Aaron Moser	Chief	308-390-5158
Austin Schindler	Chief	308-389-7422
Marc Fredericks	Chief	308-380-3712
Ed Burmood	Commonwealth Electric	308-233-2886
Dave Waggoner	Dave Waggoner Plumbing	308-236-6850
Curt Bennett	Electric Systems	402-463-0200
Shawn Eutsler	Fiddelke	308-234-2141
Steve Rockfeller	Fiddelke	308-234-2141
Dan Clement	Hausmann Construction	402-613-2936
Zac Fredrickson	HBA	402-551-0800
Craig Thurston	ICMS, INC	308-383-5373
AJ Dahlgren	Integrity Construction	308-440-4024
Craig Sup	Kidwell	844-233-5114
Dan Gray	Masonry Unlimited	308-279-1226
Matt Treffer	Middeton Electric	308-382-2550
Dustin Klein	Midlands	308-440-6346
Matt Andersen	Midlands	402-705-2291
Dennis Feeken	Pella Windows	
Bill Mooney	Progressive Electric	308-234-2822
Wayne Gallaway	Sampson	308-441-3211
Don Reeves	Tri-County Glass	308-237-4855
Alan Wedige	UNK	308-865-1700
George Holman	UNK	308-895-8519
LeAnn Clausen	UNK	308-865-8519
Michael Cremers	UNK	308-440-4680
Dave Engel	Willar Electric	402-610-1118

Email

a1heating@hotmail.com
chane_mcdowell@andersonbros.com
dave_barger@andersonbros.com
kyle-fedorchik@andersonbros.com
roger.scheidies@bamfordinc.com
pcook@cce-ne.com
sbeall@centralcontracting.net
slentell@centralcontracting.net
aaron.moser@chiefind.com
austin.schindler@chiefind.com
Marc.Fredericks@chiefind.com
eburmood@commonwealthelectric.com
jeff.waggonerplb@frontier.net
elecsys@lcdsi.net
shawn@fiddelkehvac.com
steve@fiddelkehvac.com
danc@hausmannconstruction.com
zfredrickson@hba1.com
craigthurston@icmsbuild.com
intllc@aol.com
csup@kidwell.us.com
masonryunlimited@frontier.net
matt@middletonelectric.com
dklein@midmechinc.com
mandersen@midmechinc.com
dennisfeeken@heartlandpella.com
billm@progressiveelectric.net
wayne.gallaway@sampson-construction.com
Don@TC
wedigead@unk.edu
holmangp@unk.edu
clausenll@unk.edu
cremersmr@unk.edu
dengel@willmar-electric.com

SECTION 03 3000
CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Concrete formwork.

B. Concrete for footings, foundation walls and building frame members.

C. Concrete for composite floor construction.

D. Elevated concrete slabs.

E. Floors and slabs on grade.

F. Concrete walls.

G. Concrete reinforcement.

H. Joint devices associated with concrete work.

I. Miscellaneous concrete elements, including equipment pads, light pole bases, flagpole bases, thrust blocks, and manholes.

J. Concrete curing.

1.02 RELATED REQUIREMENTS

A. Section 07 9200 - Joint Sealants: Products and installation for sealants for saw cut joints and isolation joints in slabs.

1.03 REFERENCE STANDARDS

A. ACI 117 - Standard Specifications for Tolerances for Concrete Construction and Materials; American Concrete Institute International; 2010.

B. ACI 211.1 - Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete; American Concrete Institute International; 1991 (Reapproved 2009).

C. ACI 301 - Specifications for Structural Concrete; American Concrete Institute International; 2010 (Errata 2012).

D. ACI 302.1R - Guide for Concrete Floor and Slab Construction; American Concrete Institute International; 2004 (Errata 2007).

E. ACI 302.2R - Guide for Concrete Floor and Slab Construction; American Concrete Institute International; 2004 (Errata 2007).

F. ACI 304R - Guide for Measuring, Mixing, Transporting, and Placing Concrete; American Concrete Institute International; 2000.

G. ACI 305R - Hot Weather Concreting; American Concrete Institute International; 2010.

H. ACI 306R - Cold Weather Concreting; American Concrete Institute International; 2010.

I. ACI 308R - Guide to Curing Concrete; American Concrete Institute International; 2001 (Reapproved 2008).

J. ACI 318 - Building Code Requirements for Structural Concrete and Commentary; American Concrete Institute International; 2011.

K. ACI 347R - Guide to Formwork for Concrete; American Concrete Institute International; 2014.

L. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon Billet-Steel Bars for Concrete Reinforcement; 2015.

M. ASTM A767/A767M - Standard Specification for Zinc-Coated (Galvanized) Steel Bars for Concrete Reinforcement; 2009.

N. ASTM A775/A775M - Standard Specification for Epoxy-Coated Steel Reinforcing Bars; 2007b (Reapproved 2014).

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O. ASTM A1064/A1064M - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete; 2015.

P. ASTM C33/C33M - Standard Specification for Concrete Aggregates; 2013.

Q. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens; 2015a.

R. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete; 2015.

S. ASTM C109/C109M - Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or (50-mm) Cube Specimens); 2013.

T. ASTM C143/C143M - Standard Test Method for Slump of Hydraulic-Cement Concrete; 2012.

U. ASTM C150/C150M - Standard Specification for Portland Cement; 2012.

V. ASTM C171 - Standard Specification for Sheet Materials for Curing Concrete; 2007.

W. ASTM C260/C260M - Standard Specification for Air-Entraining Admixtures for Concrete; 2010a.

X. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete; 2011.

Y. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete; 2013.

Z. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete; 2015.

AA. ASTM C685/C685M - Standard Specification for Concrete Made by Volumetric Batching and Continuous Mixing; 2014.

AB. ASTM C881/C881M - Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete; 2014.

AC. ASTM C1059/C1059M - Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete; 2013.

AD. ASTM C1107/C1107M - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink); 2014.

AE. ASTM C1116/C1116M - Standard Specification for Fiber-Reinforced Concrete; 2010a.

AF. ASTM C1240 - Standard Specification for Silica Fume Used in Cementitious Mixtures; 2014.

AG. ASTM C1609/C1609M - Standard Test Method for Flexural Performance of Fiber-Reinforced Concrete (Using Beam With Third-Point Loading); 2012.

AH. ASTM D3963/D3963M - Standard Specification for Fabrication and Jobsite Handling of Epoxy Coated Reinforcing Steel Bars; 2001 (Reapproved 2007).

AI. ASTM E1155 - Standard Test Method for Determining F(F) Floor Flatness and F(L) Floor Levelness Numbers; 1996 (Reapproved 2008).

AJ. ASTM E1643 - Standard Practice for Selection, Design, Installation and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs; 2011.

AK. ASTM E1745 - Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs; 2011.

AL. COE CRD-C 572 - Corps of Engineers Specifications for Polyvinylchloride Waterstop; Corps of Engineers; 1974.

1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Submit manufacturers' data on manufactured products showing compliance with specified requirements and installation instructions.
   1. For curing compounds, provide data on method of removal in the event of incompatibility with floor covering adhesives.

C. Mix Design: Submit proposed concrete mix design.

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1. Indicate proposed mix design complies with requirements of ACI 301, Section 4 - Concrete Mixtures.
2. Indicate proposed mix design complies with requirements of ACI 318, Chapter 5 - Concrete Quality, Mixing and Placing.

D. Shop Drawings: Include bar schedules, shapes of bent bars, spacing of bars, and location of splices.

E. Samples: Submit samples of underslab vapor retarder to be used.

F. Certificate: Certify with documentation from synthetic macro fiber manufacturer showing that proposed fiber dosage will meet or exceed the specified Re3 (RT150) performance value per ASTM C1609.
1. Where synthetic macro fibers are to be used in composite metal decks, Contractor shall submit documentation that the structural synthetic macro fibers are Underwriters Laboratories (UL) rated for Floor-Ceiling D700, D800, and D900 Series Designs for assemblies having a 2-hour maximum fire resistance rating.

G. Certificate: Certify that reinforcing, steel and accessories meet or exceed specified requirements.

H. Manufacturer's Installation Instructions: For concrete accessories, indicate installation procedures and interface required with adjacent construction.

I. Project Record Documents: Accurately record actual locations of embedded utilities and components that will be concealed from view upon completion of concrete work.

1.05 QUALITY ASSURANCE

A. Perform work of this section in accordance with ACI 301 and ACI 318.

B. Follow recommendations of ACI 305R when concreting during hot weather.

C. Follow recommendations of ACI 306R when concreting during cold weather.

PART 2 PRODUCTS

2.01 FORMWORK

A. Formwork Design and Construction: Comply with guidelines of ACI 347R to provide formwork that will produce concrete complying with tolerances of ACI 117.

B. Form Materials: Contractor's choice of standard products with sufficient strength to withstand hydrostatic head without distortion in excess of permitted tolerances.
1. Form Coating: Release agent that will not adversely affect concrete or interfere with application of coatings.
2. Form Ties: Cone snap type that will leave no metal within 1-1/2 inches of concrete surface.

2.02 REINFORCEMENT

A. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi).
1. Type: Deformed billet-steel bars.
2. Finish: Unfinished, unless otherwise indicated.
3. Finish: Galvanized in accordance with ASTM A767/A767M, Class I where indicated on the drawings.
4. Finish: Epoxy coated in accordance with ASTM A775/A775M where indicated on the drawings.

B. Steel Welded Wire Reinforcement (WWR): Plain type, ASTM A1064/A1064M.
1. WWR Style: As indicated on drawings.

C. Reinforcement Accessories:
1. Tie Wire: Annealed, minimum 16 gage, 0.0508 inch.
2. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for adequate support of reinforcement during concrete placement.

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3. Provide stainless steel, galvanized, plastic, or plastic coated steel components for placement within 1-1/2 inches of weathering surfaces.

2.03 CONCRETE MATERIALS

A. Cement: ASTM C150, Type I - Normal Portland type.

B. Fine and Coarse Aggregates: ASTM C 33.

C. Fly Ash: ASTM C618, Class C or F.

D. Calcined Pozzolan: ASTM C618, Class N.

E. Silica Fume: ASTM C1240, proportioned in accordance with ACI 211.1.

F. Water: Clean and not detrimental to concrete.

G. Fiber Reinforcement: Polypropylene/polyethylene synthetic macro fiber complying with ASTM C1116/C1116M Type 3, minimum 2 inch length, aspect ratio 50 to 90.
   1. Fiber manufacturer shall have ISO 9001 certification.
   2. Products:
      a. a) Euclid Chemical Company (The); Tuf-Strand SF: www.euclidchemical.com
      b. Substitutions: See Section 01 6000 - Product Requirements.

2.04 ADMIXTURES

A. Chemical Admixture Manufacturers: ASTM C494/C494M.

B. Do not use chemicals that will result in soluble chloride ions in excess of 0.1 percent by weight of cement.

C. Air Entrainment Admixture: ASTM C260/C260M.

2.05 ACCESSORY MATERIALS

A. Underslab Vapor Barrier: Multi-layer, fabric-, cord-, grid-, or aluminum-reinforced polyethylene or equivalent, complying with ASTM E 1745, Class A; stated by manufacturer as suitable for installation in contact with soil or granular fill under concrete slabs. The use of single ply polyethylene is prohibited.
   1. Installation: Comply with ASTM E1643.
   2. Thickness: 15 mil.
   3. Water Vapor Permeance: 0.01 perm, maximum, when tested in accordance with ACI 302.2R-06.
   4. Accessory Products: Vapor barrier manufacturer's recommended tape, adhesive, mastic, prefabricated boots, etc., for sealing seams and penetrations in vapor membrane.
   5. Products:
      a. Stego Industries, LLC: www.stegoindustries.com.
      b. Reef® Industries; Vaporguard: www.reefindustries.com.
      c. Substitutions: Not permitted.

B. Chemical Hardener: Fluosilicate solution designed for densification of cured concrete slabs.

C. Non-Shrink Cementitious Grout: Premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents.
   1. ASTM C1107/C1107M; Grade A, B, or C.
   2. Minimum Compressive Strength at 48 Hours: 2,000 pounds per square inch.
   3. Minimum Compressive Strength at 28 Days: 7,000 pounds per square inch.

2.06 BONDING AND JOINTING PRODUCTS

A. Latex Bonding Agent: Non-redispersable acrylic latex, complying with ASTM C1059/C1059M, Type II.

B. Epoxy Bonding System:
   1. Complying with ASTM C881/C881M and of Type required for specific application.

C. Waterstops: PVC, complying with COE CRD-C 572.
   1. Configuration: As indicated on the drawings.

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2. Size: As indicated on the drawings.

D. Slab Isolation Joint Filler: 1/4 inch thick, height equal to slab thickness, with removable top section that will form 1/2 inch deep sealant pocket after removal.
   1. Material: Closed-cell, non-absorbent, compressible polyethylene or polymer foam in sheet form.

2.07 CURING MATERIALS

A. Evaporation Reducer: Liquid thin-film-forming compound that reduces rapid moisture loss caused by high temperature, low humidity, and high winds; intended for application immediately after concrete placement.

B. Curing Compound, Non-dissipating: Liquid, membrane-forming, clear, non-yellowing acrylic; complying with ASTM C309.
   1. Color: Type 1, clear or translucent.
   2. Products:
      a. Dayton Superior Corporation; Cure & Seal 30% J23UV: www.daytonsuperior.com.
      b. L&M Construction Chemicals, Inc., a subsidiary of Laticrete International, Inc.; Dress & Seal WB 30: www.lmcc.com.
      c. BASF; MasterKure CC 300 XS: www.master-builders-solutions.basf.us.
      d. Substitutions: See Section 01 6000 - Product Requirements.

1

C. Curing and Sealing Compound, Low Gloss: Liquid, membrane-forming, clear, non-yellowing acrylic; complying with ASTM C1315 Type 1 Class A.
   1. Application: Use at locations designated in the Room Finish Schedule.
   2. Products:
      a. Dayton Superior Corporation; Cure & Seal 1315 J22WB: www.daytonsuperior.com.
      b. Substitutions: See Section 01 6000 - Product Requirements.

D. Moisture-Retaining Sheet: ASTM C171.

2.08 CONCRETE MIX DESIGN

A. Proportioning Normal Weight Concrete: Comply with ACI 211.1 recommendations.

B. Concrete Strength: As indicated in structural documents general notes.

C. Admixtures: Add acceptable admixtures as recommended in ACI 211.1 and at rates recommended or required by manufacturer.

D. Fiber Reinforcement: Add to mix at rate as indicated on the drawings.

2.09 MIXING

A. On Project Site: Mix in drum type batch mixer, complying with ASTM C685. Mix each batch not less than 1-1/2 minutes and not more than 5 minutes.

B. Transit Mixers: Comply with ASTM C94/C94M.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify lines, levels, and dimensions before proceeding with work of this section.

3.02 PREPARATION

A. Formwork: Comply with requirements of ACI 301. Design and fabricate forms to support all applied loads until concrete is cured, and for easy removal without damage to concrete.

B. Verify that forms are clean and free of rust before applying release agent.

C. Coordinate placement of embedded items with erection of concrete formwork and placement of form accessories.

D. Where new concrete is to be bonded to previously placed concrete, prepare existing surface by cleaning with steel brush and applying bonding agent in accordance with manufacturer's instructions.

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1. Use epoxy bonding system for bonding to damp surfaces, for structural load-bearing applications, and where curing under humid conditions is required.
2. Use latex bonding agent only for non-load-bearing applications.

E. Interior Slabs on Grade: Install vapor barrier under interior slabs on grade. Lap joints minimum 6 inches. Seal joints, seams and penetrations watertight with manufacturer's recommended products and follow manufacturer's written instructions. Repair damaged areas by cutting patches of vapor membrane material, overlapping damaged area 6 inches and taping all four sides with tape before covering.
1. Install vapor barrier in accordance with manufacturer's instructions and ASTM E1643.
2. Unroll vapor membrane material with the longest dimension parallel with the direction of the pour.
3. Lap vapor membrane material over footings and seal to foundation walls.
4. No penetration of the vapor membrane material is allowed except for reinforcing steel and permanent utilities.

3.03 INSTALLING REINFORCEMENT AND OTHER EMBEDDED ITEMS

A. Fabricate and handle epoxy-coated reinforcing in accordance with ASTM D3963/D3963M.

B. Comply with requirements of ACI 301. Clean reinforcement of loose rust and mill scale, and accurately position, support, and secure in place to achieve not less than minimum concrete coverage required for protection.

C. Install welded wire reinforcement in maximum possible lengths, and offset end laps in both directions. Splice laps with tie wire.

D. Verify that anchors, seats, plates, reinforcement and other items to be cast into concrete are accurately placed, positioned securely, and will not interfere with concrete placement.

3.04 PLACING CONCRETE

A. Place concrete in accordance with ACI 304R.

B. Place concrete for floor slabs in accordance with ACI 302.1R.

C. Notify Architect not less than 24 hours prior to commencement of placement operations.

D. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.

E. Ensure reinforcement, inserts, waterstops, embedded parts, and formed construction joint devices will not be disturbed during concrete placement.

F. Repair underslab vapor membrane material damaged during placement of concrete reinforcing. Repair with vapor membrane material; lap over damaged areas minimum 6 inches and seal watertight.

G. Place concrete continuously without construction (cold) joints wherever possible; where construction joints are necessary, before next placement prepare joint surface by removing laitance and exposing the sand and sound surface mortar, by sandblasting or high-pressure water jetting.

H. Finish floors level and flat, unless otherwise indicated, within the tolerances specified below.

3.05 SLAB JOINTING

A. Locate joints as indicated on the drawings.

B. Anchor joint fillers and devices to prevent movement during concrete placement.

C. Isolation Joints: Use preformed joint filler with removable top section for joint sealant, total height equal to thickness of slab, set flush with top of slab.

D. Separate slabs on grade from vertical surfaces with joint filler.

E. Place joint filler in floor slab pattern placement sequence. Set top to required elevations. Secure to resist movement by wet concrete.

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F. Extend joint filler from bottom of slab to within 1/2 inch of finished slab surface. Conform to Section 07 9200 - Joint Sealants for finish joint sealer requirements.

G. Install joint devices in accordance with manufacturer's instructions.

H. Install construction joint devices in coordination with floor slab pattern placement sequence. Set top to required elevations. Secure to resist movement by wet concrete.

I. Apply sealants in joint devices in accordance with Section 07 9200 - Joint Sealants.

J. Place concrete continuously between predetermined expansion, control, and construction joints.

K. Do not interrupt successive placement; do not permit cold joints to occur.

L. Place floor slabs in saw cut pattern indicated.

M. Saw cut joints within 24 hours after placing.

3.06 SEPARATE FLOOR TOPPINGS

A. Prior to placing floor topping, roughen substrate concrete surface and remove deleterious material. Broom and vacuum clean.

B. Place required dividers, edge strips, reinforcing, and other items to be cast in.

C. Apply bonding agent to substrate in accordance with manufacturer's instructions.

D. Apply sand and cement slurry coat on base course, immediately prior to placing toppings.

E. Place concrete floor toppings to required lines and levels.
   1. Place topping in checkerboard panels not to exceed 20 feet in either direction.

F. Screed toppings level, maintaining surface flatness of maximum 1:1000.

3.07 FLOOR FLATNESS AND LEVELNESS TOLERANCES

A. Screed floor slabs on grade and elevated floor slabs to achieve the tolerances specified below:
   1. All floor slab on grade and elevated slabs shall be measured within 24 hours for flatness and levelness according to ASTM E1155. Measurements for elevated slabs shall be made prior to removal of shoring. Construction tolerance on absolute floor elevation from the specified elevation shown on the drawing shall be + or - 3/4 inch.
   2. Floor slabs on grade: Slab in mechanical rooms, parking areas, surfaces to receive raised flooring, or have thick set tile or topping, shall have specified overall values FF 20 / FL 15, minimum local values FF15 / FL10. Slabs in carpeted areas shall have specified overall values FF25 / FL20, minimum local values FF17 / FL15. Exposed slab in public spaces or slabs to receive thin-set flooring shall have specified overall values, FF35 / FL25, minimum local values FF24 / FL17.
   3. Elevated slabs: Slabs in mechanical rooms, parking areas, surfaces to receive raised flooring or have thick-set tile or topping shall have specified overall values FF20, minimum local values FF15. Slabs in carpeted area shall have specified overall value FF25, minimum local value FF17. Exposed slabs in public spaces or slabs to receive thin-set flooring shall have specified overall value FF30, minimum local value FF24. When specified overall value is FF25 or higher, the elevation readings of 80 percent of the final floor surface shall be within + or - 3/8 inch of the average elevation of all the readings. The average elevation of all reading, shall be within + or - 3/8 inch of the design elevation shown on the drawings. Contractor shall adjust thickness of topping over metal deck to achieve a level floor. See drawings for minimum and maximum topping thickness. Extra concrete required shall be provided at no additional cost to the owner.

B. Correct defects by grinding or by removal and replacement of the defective work. Areas requiring corrective work will be identified. Re-measure corrected areas by the same process.

3.08 CONCRETE FINISHING

A. Repair surface defects, including tie holes, immediately after removing formwork.

B. Unexposed Form Finish: Rub down or chip off fins or other raised areas 1/4 inch or more in height.

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C. Exposed Form Finish: Rub down or chip off and smooth fins or other raised areas 1/4 inch or more in height. Provide finish as indicated on the drawings.

D. Concrete Slabs: Finish to requirements of ACI 302.1R, and as follows:
   1. Surfaces to Receive Thick Floor Coverings: "Wood float" as described in ACI 302.1R; thick floor coverings include quarry tile, ceramic tile, and terrazzo with full bed setting system.
   2. Surfaces to Receive Thin Floor Coverings: "Steel trowel" as described in ACI 302.1R; thin floor coverings include carpeting, resilient flooring, seamless flooring, thin set quarry tile, and thin set ceramic tile.
   3. Other Surfaces to Be Left Exposed: Trowel as described in ACI 302.1R, minimizing burnish marks and other appearance defects.
      a. Chemical Hardener: After slab has cured, apply water-diluted hardener in three coats per manufacturer's instructions, allowing 24 hours between coats.

E. In areas with floor drains, maintain floor elevation at walls; pitch surfaces uniformly to drains as indicated on drawings.

3.09 CURING AND PROTECTION

A. Comply with requirements of ACI 308R. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.

B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
   1. Normal concrete: Not less than 7 days.
   2. High early strength concrete: Not less than 4 days.

C. Formed Surfaces: Cure by moist curing with forms in place for full curing period.

D. Surfaces Not in Contact with Forms:
   1. Initial Curing: Start as soon as free water has disappeared and before surface is dry. Keep continuously moist for not less than three days by water ponding, water-saturated sand, water-fog spray, or saturated burlap.
   2. Final Curing: Begin after initial curing but before surface is dry.
      a. Moisture-Retaining Sheet: Lap strips not less than 3 inches and seal with waterproof tape or adhesive; secure at edges.

3.10 FIELD QUALITY CONTROL

A. An independent testing agency will perform field quality control tests, as specified in Section 01 4000 - Quality Requirements.
   1. Curing and Sealing Compound: Apply in two coats at right angles, using application rate recommended by manufacturer.

B. Provide free access to concrete operations at project site and cooperate with appointed firm.

C. Submit proposed mix design of each class of concrete to Architect for review prior to commencement of concrete operations.

D. Tests of concrete and concrete materials may be performed at any time to ensure conformance with specified requirements.

E. Compressive Strength Tests: ASTM C39/C39M. For each test, mold and cure three concrete test cylinders. Obtain test samples for every 100 cubic yards or less of each class of concrete placed.

F. Take one additional test cylinder during cold weather concreting, cured on job site under same conditions as concrete it represents.

G. Perform one slump test for each set of test cylinders taken, following procedures of ASTM C143/C143M.

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3.11 DEFECTIVE CONCRETE

A. Test Results: The testing agency shall report test results in writing to Architect and Contractor within 24 hours of test.

B. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.

C. Repair or replacement of defective concrete will be determined by the Architect. The cost of additional testing shall be borne by Contractor when defective concrete is identified.

D. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Architect for each individual area.

3.12 PROTECTION

A. Do not permit traffic over unprotected concrete floor surface until fully cured.

3.13 END OF SECTION

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SECTION 04 2000

UNIT MASONRY

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Concrete Block.

B. Clay Facing Brick.

C. Precast Concrete Trim Units

D. Mortar and Grout.

E. Reinforcement and Anchorage.

F. Flashings.

G. Accessories.

1.02 RELATED REQUIREMENTS

A. Section 05 5000 - Metal Fabrications: Loose steel lintels.

B. Section 07 9200 - Joint Sealants: Sealing control and expansion joints.

1.03 REFERENCE STANDARDS

A. ACI 530/530.1/ERTA - Building Code Requirements and Specification for Masonry Structures and Related Commentaries; American Concrete Institute International; 2011.

B. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.

C. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon Steel Bars for Concrete Reinforcement; 2015.

D. ASTM A641/A641M - Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire; 2009a.

E. ASTM A1064/A1064M - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete; 2015.

F. ASTM C67 - Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile; 2014.

G. ASTM C90 - Standard Specification for Loadbearing Concrete Masonry Units; 2014.

H. ASTM C150/C150M - Standard Specification for Portland Cement; 2012.

I. ASTM C216 - Standard Specification for Facing Brick (Solid Masonry Units Made From Clay or Shale); 2014.

J. ASTM C270 - Standard Specification for Mortar for Unit Masonry; 2014a.

K. ASTM C404 - Standard Specification for Aggregates for Masonry Grout; 2011.

L. ASTM C476 - Standard Specification for Grout for Masonry; 2010.

M. ASTM C979/C979M - Standard Specification for Pigments for Integrally Colored Concrete; 2010.

N. ASTM D226/D226M - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing; 2009.

O. BIA 7 - Brick Institute of America Technical Notes 7 - Water Penetration Resistance, Design and Detailing; 2005.

P. IMIAWC (CW) - Recommended Practices & Guide Specifications for Cold Weather Masonry Construction; International Masonry Industry All-Weather Council; current edition.

Q. IMIAWC (HW) - Recommended Practices & Guide Specifications for Hot Weather Masonry Construction; International Masonry Industry All-Weather Council; current edition.

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1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data for masonry units, fabricated wire reinforcement, mortar, and masonry accessories.

C. Manufacturer's Certificate: Certify that masonry units meet or exceed specified requirements.

1.05 QUALITY ASSURANCE

A. Comply with provisions of ACI 530/530.1/ERTA, except where exceeded by requirements of the contract documents.

1.06 MOCK-UP

A. Construct a masonry wall as a mock-up panel sized 8 feet long by 6 feet high; include mortar, accessories, structural backup, and flashings (with lap joint, corner, and end dam) in mock-up.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Deliver, handle, and store masonry units by means that will prevent mechanical damage and contamination by other materials.

PART 2 PRODUCTS

2.01 CONCRETE MASONRY UNITS

A. Concrete Block (CMU): Comply with referenced standards and as follows:
   1. Size: Standard units with nominal face dimensions of 16 x 8 inches and nominal depths as indicated on the drawings for specific locations.
   2. Special Shapes: Provide non-standard blocks configured for corners, lintels, headers, control joint edges, and other detailed conditions.
      a. Exposed outside corners: Provide bullnose units.
   3. Load-Bearing Units: ASTM C90, normal weight.
      a. Hollow block unless indicated otherwise.

2.02 BRICK UNITS

A. Manufacturers:
   1. Endicott Clay Products Co: www.endicott.com.
   2. Interstate Brick: www.interstatebrick.com.

B. Facing Brick: ASTM C216, Type FBS, Grade SW.
   1. Color and texture: As noted below.
      a. FB-1: Interstate Brick
         1) Standard modular, running bond
         2) Ash I -4
         3) Mortar color: Calamus UM3410 by Promix
      b. FB-2: Endicott Clay Products Co.
         1) Standard modular, running bond
         2) 75% Red Blend Velour / 25% Medium Ironspot Velour
         3) Mortar color: Standard gray
      c. FB-3: Endicott Clay Products Co.
         1) Utility, stack bond
         2) Light Grey Blend Velour
         3) Mortar color: Mushroom by United Products
   2. Actual size: Standard Modular and Utility.
   3. Special shapes: Molded units as required by conditions indicated, unless standard units can be sawn to produce equivalent effect.
   4. Compressive strength: 2500 psi, measured in accordance with ASTM C67.

2.03 MORTAR AND GROUT MATERIALS

A. Portland Cement: ASTM C150/C150M, Type I; color as required to produce approved color sample.

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1. Grout Aggregate: ASTM C404.

B. Pigments for Colored Mortar: Pure, concentrated mineral pigments specifically intended for mixing into mortar and complying with ASTM C979.

C. Water: Clean and potable.

D. Accelerating Admixture: Nonchloride type for use in cold weather.

2.04 REINFORCEMENT AND ANCHORAGE

A. Manufacturers of Joint Reinforcement and Anchors:
1. Dur-O-Wal: www.dur-o-wal.com.
2. Heckmann Building Products, Inc: www.heckmannbuildingprods.com.
3. Hohmann & Barnard, Inc (including Dur-O-Wal brand): www.h-b.com.
4. WIRE-BOND: www.wirebond.com.
5. Substitutions: See Section 01 6000 - Product Requirements.

B. Reinforcing Steel: ASTM A615/A615M, Grade 60 (60,000 psi), deformed billet bars; galvanized.

C. Single Wythe Joint Reinforcement: Ladder type; ASTM A1064/A1064M steel wire, mill galvanized to ASTM A641/A641M, Class 3 for interior walls; 0.1483 inch side rods with 0.1483 inch cross rods; width as required to provide not more than 1 inch and not less than 1/2 inch of mortar coverage on each exposure.

D. Strap Anchors: Bent steel shapes size as indicated on the drawings, hot dip galvanized to ASTM A153/A153M, Class B-2.

E. Flexible Anchors: 2-piece anchors that permit differential movement between masonry and building frame, sized to provide not more than 1 inch and not less than 1/2 inch of mortar coverage from masonry face.

F. Adjustable Wall Tie Between Concrete Block and Masonry Veneer: Formed steel wire 0.1875 inch diameter, eye and pintle type, hot dip galvanized to ASTM A153/A153M, Class B-2.

G. Horizontal Joint Reinforcement Tie Between Concrete Block and Masonry Veneer In Lieu of Adjustable Wall Ties:
1. Provide ladder type with perpendicular cross rods at 16 inches on center with one side rod for veneer and two side rods for block back-up wall.

H. Masonry Veneer Anchors to Metal or Wood Stud Framing: 2-piece anchors that permit differential movement between masonry veneer and structural backup, hot dip galvanized to ASTM A153/A153M, Class B-2.
1. Anchor plates: Not less than 0.0785 inch thick, designed for fastening to structural backup through sheathing by two screws; provide design with legs that penetrate sheathing and insulation to provide positive anchorage.
2. Wire ties: Triangular shape, 0.1875 inch thick.
3. Vertical adjustment: Not less than 3-1/2 inches.
4. Screws shall be type specifically recommended by anchor manufacturer, corrosion resistant, extending through the exterior sheathing into the stud.

2.05 FLASHINGS

A. Plastic Flashings: Sheet composite membrane laminated to polyethylene; 40 mil thick.
1. Manufacturers:
a. Hohmann & Barnard, Inc; Textroflash: www.h-b.com.
b. Substitutions: See Section 01 6000 - Product Requirements.

B. Rubberized Asphalt Flashing: Self-adhering polymer modified asphalt sheet; 40 mils (0.040 inch) minimum total thickness; with cross laminated polyethylene top and bottom surfaces.
1. Manufacturers:
a. Advanced Building Products, Inc.; Strip-N-Flash: www.advancedbuildingproducts.com.
b. Substitutions: See Section 01 6000 - Product Requirements.

C. Flashing Sealant/Adhesive: Butyl type as specified in Section 07 9200.

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2.06 ACCESSORIES

A. Joint Filler: Closed cell polyethylene; oversized 50 percent to joint width; self expanding; three inch wide x by maximum lengths available.

B. Cavity Mortar Control: Semi-rigid polyethylene or polyester mesh panels, sized to thickness of wall cavity, and designed to prevent mortar droppings from clogging weeps and cavity vents and allow proper cavity drainage.
   1. Mortar Diverter: Semi-rigid mesh designed for installation at flashing locations.
      a. Manufacturers:
         1) Advanced Building Products Inc; Mortar Break: www.advancedflashing.com.
         2) Mortar Net Solutions; Cell Vent: www.mortarnet.com.
         3) Substitutions: See Section 01 6000 - Product Requirements.

C. Building Paper: ASTM D226/D226M, Type I ("No.15") asphalt felt.

D. Nailing Strips: Softwood lumber, preservative treated for moisture resistance, dovetail shape, sized to masonry joints.

E. Weeps:
   1. Type: Molded PVC grilles, insect resistant.
      a. Manufacturers:
         1) Dur-O-Wal; Product D/A 1006 - Cell Vents: www.dur-o-wal.com.
         2) Heckmann Building Products, Inc; Product No. 85 Cell Vent: www.heckmannbuildingprods.com.
         3) Hohmann & Barnard, Inc; QV - Quadro-Vent: www.h-b.com.
         4) Substitutions: See Section 01 6000 - Product Requirements.

F. Cavity Vents:
   1. Type: Molded PVC grilles, insect resistant.
      a. Manufacturers:
         1) Dur-O-Wal; Product D/A 1006 - Cell Vents: www.dur-o-wal.com.
         2) Heckmann Building Products, Inc; Product No. 85 Cell Vent: www.heckmannbuildingprods.com.
         3) Hohmann & Barnard, Inc; QV - Quadro-Vent: www.h-b.com.
         4) Substitutions: See Section 01 6000 - Product Requirements.

G. Cleaning Solution: Non-acidic, not harmful to masonry work or adjacent materials.

2.07 PRECAST CONCRETE OR CAST STONE TRIM UNITS

A. Comply with the requirements of Section 03 3000.

B. Surface Finish Aggregate: Smooth sandblast finish, match Architect's sample color.

2.08 MORTAR AND GROUT MIXES

A. Mortar for Unit Masonry: ASTM C270, using the Proportion Specification.
   1. All masonry: Type S.

B. Colored Mortar: Proportion selected pigments and other ingredients to match Architect's sample, without exceeding manufacturer's recommended pigment-to-cement ratio.

C. Grout: ASTM C476; consistency required to fill completely volumes indicated for grouting; fine grout for spaces with smallest horizontal dimension of 2 inches or less; coarse grout for spaces with smallest horizontal dimension greater than 2 inches.

D. Mixing: Use mechanical batch mixer and comply with referenced standards.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive masonry.

B. Verify that related items provided under other sections are properly sized and located.

C. Verify that built-in items are in proper location, and ready for roughing into masonry work.

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3.02 PREPARATION

A. Direct and coordinate placement of metal anchors supplied for installation under other sections.

B. Provide temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent bracing.

3.03 COLD AND HOT WEATHER REQUIREMENTS

A. Maintain materials and surrounding air temperature to minimum 40 degrees F prior to, during, and 48 hours after completion of masonry work.
   1. Cold Weather Requirements: Comply with recommendations of IMIAWC (CW).

B. Maintain materials and surrounding air temperature to maximum 90 degrees F prior to, during, and 48 hours after completion of masonry work.
   1. Hot Weather Requirements: Comply with IMIAWC (HW).

3.04 COURSING

A. Establish lines, levels, and coursing indicated. Protect from displacement.

B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.

C. Concrete Masonry Units:
   1. Bond: Running.

D. Brick Units:
   1. Bond: As indicated for different locations.
   2. Mortar Joints: Concave.

3.05 PLACING AND BONDING

A. Lay solid masonry units in full bed of mortar, with full head joints, uniformly jointed with other work.

B. Lay hollow masonry units with face shell bedding on head and bed joints.

C. Buttering corners of joints or excessive furrowing of mortar joints is not permitted.

D. Remove excess mortar and mortar smears as work progresses.

E. Interlock corners, except for units laid in stack bond.

F. Do not shift or tap masonry units after mortar has achieved initial set. Where adjustment must be made, remove mortar and replace.

G. Perform job site cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.

H. Isolate masonry partitions from vertical structural framing members with a control joint as indicated.

I. Isolate top joint of masonry partitions from horizontal structural framing members and slabs or decks as indicated.

3.06 WEEPS/CAVITY VENTS

A. Install weeps in veneer and cavity walls at 24 inches on center horizontally above through-wall flashing, above shelf angles and lintels, and at bottom of walls.

B. Install cavity vents in veneer and cavity walls at 24 inches on center horizontally below shelf angles and lintels and near top of walls.

3.07 CAVITY MORTAR CONTROL

A. Do not permit mortar to drop or accumulate into cavity air space or to plug weep/cavity vents.

B. Install cavity mortar diverter at base of cavity and at other flashing locations as recommended by manufacturer to prevent mortar droppings from blocking weep/cavity vents.

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3.08 REINFORCEMENT AND ANCHORAGE - GENERAL

A. Unless otherwise indicated on drawings or specified under specific wall type, install horizontal joint reinforcement 16 inches on center.

B. Place masonry joint reinforcement in first horizontal joints above and below openings. Extend minimum 16 inches each side of opening.

C. Place continuous joint reinforcement in first joint below top of walls.

D. Lap joint reinforcement ends minimum 6 inches.

E. Reinforce stack bonded unit joint corners and intersections with strap anchors 16 inches on center.

F. Fasten anchors to structural framing and embed in masonry joints as masonry is laid. Unless otherwise indicated on drawings or closer spacing is indicated under specific wall type, space anchors at maximum of 16 inches horizontally and 16 inches vertically.

3.09 REINFORCEMENT AND ANCHORAGE - SINGLE WYTHE MASONRY

A. Install horizontal joint reinforcement 16 inches on center.

B. Place masonry joint reinforcement in first horizontal joints above and below openings. Extend minimum 16 inches each side of opening.

C. Place continuous joint reinforcement in first joint below top of walls.

D. Lap joint reinforcement ends minimum 6 inches.

E. Reinforce stack bonded unit joint corners and intersections with strap anchors 16 inches on center.

3.10 REINFORCEMENT AND ANCHORAGE - MASONRY VENEER

A. Install horizontal joint reinforcement 16 inches on center at CMU veneer only.

B. Place masonry joint reinforcement in first and second horizontal joints above and below openings. Extend minimum 16 inches each side of opening.

C. Place continuous joint reinforcement in first and second joint below top of walls.

D. Lap joint reinforcement ends minimum 6 inches.

E. Masonry Back-Up: Embed anchors to bond veneer at maximum 16 inches on center vertically and 16 inches on center horizontally. Place additional anchors at perimeter of openings and ends of panels, so maximum spacing of anchors is 8 inches on center.

F. Stud Back-Up: Secure veneer anchors to stud framed back-up and embed into masonry veneer at maximum 16 inches on center vertically and 16 inches on center horizontally. Place additional anchors at perimeter of openings and ends of panels, so maximum spacing of anchors is 8 inches on center.

G. Reinforce stack bonded unit joint corners and intersections with strap anchors 16 inches on center.

3.11 MASONRY FLASHINGS

A. Whether or not specifically indicated, install masonry flashing to divert water to exterior at all locations where downward flow of water will be interrupted.
   1. Extend flashings full width at such interruptions and at least 6 inches into adjacent masonry or turn up at least 8 inches to form watertight pan at non-masonry construction.
   2. Remove or cover protrusions or sharp edges that could puncture flashings.
   3. Seal lapped ends and penetrations of flashing before covering with mortar.
   4. Provide end dams at the terminations of all non-continuous and stepped through-wall flashings and in accordance with BIA 7.

B. Extend metal flashings through exterior face of masonry and turn down to form drip. Install joint sealer below drip edge to prevent moisture migration under flashing.

C. Extend plastic and laminated flashings to within 1/4 inch of exterior face of masonry.

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D. Lap end joints of flashings at least 6 inches and seal watertight with flashing sealant/adhesive.

3.12 GROUTING

A. Support and secure reinforcing bars from displacement. Maintain position within 1/2 inch of dimensioned position.

B. Place and consolidate grout fill without displacing reinforcing.

C. At bearing locations, fill masonry cores with grout for extent shown on the drawings at both sides of the opening.

D. Perform all grouting by means of low-lift technique. Do not employ high-lift grouting.

E. Limit height of pours to 4 feet - 8 inches.

F. Pour grout only after vertical reinforcing is in place.

G. Place grout for each pour continuously and consolidate immediately; do not interrupt pour for more than1-1/2 hours.

3.13 CONTROL AND EXPANSION JOINTS

A. Do not continue horizontal joint reinforcement through control or expansion joints.

B. Form control joint with a sheet building paper bond breaker fitted to one side of the hollow contour end of the block unit. Fill the resultant core with grout fill. Rake joint at exposed unit faces for placement of backer rod and sealant.

C. Install preformed control joint device in continuous lengths. Seal butt and corner joints in accordance with manufacturer's instructions.

D. Size control joints as indicated on drawings; if not shown, 3/8" inch wide and deep.

E. Form expansion joint as detailed on drawings.

3.14 BUILT-IN WORK

A. As work progresses, install built-in metal door frames and other items to be built into the work and furnished under other sections.

B. Install built-in items plumb, level, and true to line.

C. Bed anchors of metal door and glazed frames in adjacent mortar joints. Fill frame voids solid with grout.
   1. Fill adjacent masonry cores with grout minimum 8 inches from framed openings.

D. Do not build into masonry construction organic materials that are subject to deterioration.

3.15 TOLERANCES

A. Maximum Variation from Alignment of Columns and Pilasters: 1/4 inch.

B. Maximum Variation From Unit to Adjacent Unit: 1/16 inch.

C. Maximum Variation from Plane of Wall: 1/4 inch in 10 ft and 1/2 inch in 20 ft or more.

D. Maximum Variation from Plumb: 1/4 inch per story non-cumulative; 1/2 inch in two stories or more.

E. Maximum Variation from Level Coursing: 1/8 inch in 3 ft and 1/4 inch in 10 ft; 1/2 inch in 30 ft.

F. Maximum Variation of Mortar Joint Thickness: Head joint, minus 1/4 inch, plus 3/8 inch.

G. Maximum Variation from Cross Sectional Thickness of Walls: 1/4 inch.

3.16 CUTTING AND FITTING

A. Cut and fit for chases, pipes, conduit, sleeves, and grounds. Coordinate with other sections of work to provide correct size, shape, and location.

B. Obtain approval prior to cutting or fitting masonry work not indicated or where appearance or strength of masonry work may be impaired.

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3.17 CLEANING

A. Remove excess mortar and mortar droppings.

B. Replace defective mortar. Match adjacent work.

C. Clean soiled surfaces with cleaning solution.

D. Use non-metallic tools in cleaning operations.

3.18 PROTECTION

A. Without damaging completed work, provide protective boards at exposed external corners that are subject to damage by construction activities.

END OF SECTION

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SECTION 06 4100

ARCHITECTURAL WOOD CASEWORK

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Specially fabricated cabinet units.

B. Countertops.

C. Cabinet hardware.

1.02 RELATED REQUIREMENTS

A. Section 06 1000 - Rough Carpentry: Support framing, grounds, and concealed blocking.

B. Section 06 6100 - Simulated Stone Fabrications: Cast plastic countertops.

C. Section 09 0600 - Color Schedule: Plastic Laminate manufacturer, color and finish and Solid Surfacing manufacturer, color, finish and thickness.

1.03 REFERENCE STANDARDS

A. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2014.

B. NEMA LD 3 - High-Pressure Decorative Laminates; National Electrical Manufacturers Association; 2005.

1.04 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories.
   1. Provide the information required by AWI/AWMAC/WI (AWS).

C. Product Data: Provide data for hardware accessories.

D. Samples: Submit two of each finish material specified, 6 x 6 inch in size, illustrating cabinet finish and counter top finish.

1.05 QUALITY ASSURANCE

A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum three years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Protect units from moisture damage.

1.07 FIELD CONDITIONS

A. During and after installation of custom cabinets, maintain temperature and humidity conditions in building spaces at same levels planned for occupancy.

PART 2 PRODUCTS

2.01 CABINETS

A. Quality Grade: Unless otherwise indicated provide products of quality specified by AWI//AWMAC/WI (AWS) for Premium Grade.

2.02 WOOD-BASED COMPONENTS

A. Wood fabricated from old growth timber is not permitted.

2.03 LAMINATE MATERIALS

A. Manufacturers:
   1. Formica Corporation: www.formica.com.
   2. Panolam Industries International, Inc\Nevamar: www.nevamar.com.
   3. Pionite: www.pionite.com.
   4. Wilsonart, LLC: www.wilsonart.com.
   5. Substitutions: See Section 01 6000 - Product Requirements.

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B. High Pressure Decorative Laminate (HPDL): NEMA LD 3, types as recommended for specific applications.

C. Provide specific types as follows:
   1. Horizontal Surfaces: HGS, 0.048 inch nominal thickness, colors as scheduled, finish as scheduled.
   2. Vertical Surfaces: VGS, 0.028 inch nominal thickness, colors as scheduled, finish as scheduled.
   3. Post-Formed Horizontal Surfaces: HGP, 0.039 inch nominal thickness, colors as scheduled, finish as scheduled.
   4. Cabinet Liner: CLS, 0.020 inch nominal thickness, colors as scheduled, finish as scheduled.
   5. Laminate Backer: BKL, 0.020 inch nominal thickness, undecorated; for application to concealed backside of panels faced with high pressure decorative laminate.
   6. Color(s): See Section 09 0600 - Color Schedule.

1

2.04 COUNTERTOPS AND WINDOW STOOLS

A. Cultured Marble Surfacing: Specified in Section 06 6100.

B. Plastic Laminate Countertops: Medium density fiberboard substrate covered with HPDL, conventionally fabricated and self-edge banded.

2.05 ACCESSORIES

A. Adhesive: Type recommended by fabricator to suit application.

B. Fasteners: Size and type to suit application.

C. Concealed Joint Fasteners: Threaded steel.

D. Grommets: Standard plastic, painted metal, or rubber grommets for cut-outs, in color to match adjacent surface.
   1. Product: 3 inch diameter, "EDP" manufactured by Doug Mockett & Company, Inc.
   2. Product: 6 inch diameter x 2 inch depth, satin stainless steel, "TM1B" manufactured by Doug Mockett & Company, Inc.

1

2.06 HARDWARE

A. Adjustable Shelf Supports: Standard side-mounted system using recessed metal shelf standards or multiple holes for pin supports and coordinated shelf rests, polished chrome finish, for nominal 1 inch spacing adjustments.

B. Drawer and Door Pulls: "U" shaped wire pull, steel with chrome finish, 4 inch centers.
   1. Do not provide pulls on pencil drawers unless otherwise indicated on the drawings.

C. Cabinet Locks: Keyed cylinder, two keys per lock, master keyed, steel with chrome finish.

D. Drawer Slides:
   1. Type: Extension types as scheduled.
   2. Static Load Capacity: Commercial grade.
   3. Mounting: Side mounted.
   4. Stops: Integral type.
   5. Features: Provide self closing/stay closed type.
   6. Products:
      a. Accuride International, Inc: www.accuride.com.
      b. Knape & Vogt Manufacturing Company: www.knapeandvogt.com.
      c. Substitutions: See Section 01 6000 - Product Requirements.

E. Hinges: European style concealed self-closing type, BHMA No. 156.9, steel with polished finish.

2.07 FABRICATION

A. Assembly: Shop assemble cabinets for delivery to site in units easily handled and to permit passage through building openings.

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B. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide matching trim for scribing and site cutting.

C. Plastic Laminate: Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel arises. Locate counter butt joints minimum 2 feet from sink cut-outs.
   1. Apply laminate backing sheet to reverse side of plastic laminate finished surfaces.
   2. Cap exposed plastic laminate finish edges with material of same finish and pattern.
   3. Apply edges of doors and drawers before applying the face laminate.

D. Mechanically fasten back splash to countertops with steel brackets at 16 inches on center.

E. Install two grommets per "knee space" and as indicated on the drawings. Coordinate locations with Owner.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify adequacy of backing and support framing.

B. Verify location and sizes of utility rough-in associated with work of this section.

3.02 INSTALLATION

A. Set and secure custom cabinets in place, assuring that they are rigid, plumb, and level.

B. Use fixture attachments in concealed locations for wall mounted components.

C. Use concealed joint fasteners to align and secure adjoining cabinet units and countertops.

D. Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim for this purpose.

E. Secure cabinets to floor using appropriate angles and anchorages.

F. Countersink anchorage devices at exposed locations. Conceal with solid wood plugs of species to match surrounding wood; finish flush with surrounding surfaces.

3.03 ADJUSTING

A. Adjust installed work.

B. Adjust moving or operating parts to function smoothly and correctly.

3.04 CLEANING

A. Clean casework, counters, shelves, hardware, fittings, and fixtures.

END OF SECTION

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SECTION 087100 – DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes commercial door hardware for the following:

1. Swinging doors.

B. Door hardware includes, but is not necessarily limited to, the following:

1. Mechanical door hardware.
2. Electromechanical door hardware.
3. Automatic operators.

C. Related Sections:

1. Division 08 Section “Hollow Metal Doors and Frames”.
2. Division 08 Section “Flush Wood Doors”.
3. Division 08 Section “Aluminum-Framed Entrances and Storefronts”.
4. Division 28 Section “Access Control”.

D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.
3. NFPA 70 - National Electrical Code.
4. NFPA 80 - Fire Doors and Windows.
5. NFPA 101 - Life Safety Code.
6. NFPA 105 - Installation of Smoke Door Assemblies.
7. UL/ULC and CSA C22.2 – Standards for Automatic Door Operators Used on Fire and Smoke Barrier Doors and Systems of Doors.
8. State Building Codes, Local Amendments.

E. Standards: All hardware specified herein shall comply with the following industry standards:

1. ANSI/BHMA Certified Product Standards - A156 Series
2. UL10C – Positive Pressure Fire Tests of Door Assemblies

1.2 SUBMITTALS

A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.

B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."

2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.

3. Content: Include the following information:

    a. Type, style, function, size, label, hand, and finish of each door hardware item.
    b. Manufacturer of each item.
    c. Fastenings and other pertinent information.
    d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    e. Explanation of abbreviations, symbols, and codes contained in schedule.
    f. Mounting locations for door hardware.
    g. Door and frame sizes and materials.
    h. Warranty information for each product.

4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.

C. Shop Drawings: Details of electrified access control hardware indicating the following:

1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:

    a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
    b. Complete (risers, point-to-point) access control system block wiring diagrams.
    c. Wiring instructions for each electronic component scheduled herein.

2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.

D. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.

1. Keying Instructions:
    a. General: Each building will have a unique fire/life safety Master Key System with as many sub-masters as necessary to accommodate the different departments housed within the building. The Master Key System and individual keying of locks will be determined by the UNK Facilities Key Shop.
    b. Exterior Doors: Each building will have each exterior door keyed with a BEST key system utilizing an interchangeable core (IC core). All exterior doors on each building will be keyed alike, but will be unique for each building. All roof access doors are to be keyed EL UNK keyway.
    c. Interior Doors: Each door shall have a separate day key. Where possible, doors within an area used by a specific individual shall all be keyed alike.
    d. All mechanical rooms and electrical closets shall be keyed off the master system with the present mechanical room key. Telecommunications wiring closets and custodial closets shall be keyed separately using the key

designated by the UNK Facilities Key Shop. Mechanical rooms, elevator equipment rooms, and roof access are to be provided with BEST keyway.

e. The custodial rooms for all buildings will be keyed separately from the building master, on a separate grand-master key system, with each building sub-master keyed differently and all custodial rooms keyed alike within a building. This arrangement permits all custodial rooms to be entered with a single grand-master key.

f. Project specifications shall require that all keys furnished for a project be supplied by the lockset supplier, and furnished with a biting list and comprehensive key schedule.

g. Any card access door shall utilize an appropriate BEST Keyway.

E. Informational Submittals:

1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

F. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Submittals.

1.3 QUALITY ASSURANCE

A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.

B. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

C. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

D. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.

1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.

2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.

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E. Each unit to bear third party permanent label demonstrating compliance with the referenced standards.

F. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:

1. Function of building, purpose of each area and degree of security required.
2. Plans for existing and future key system expansion.
3. Requirements for key control storage and software.
4. Installation of permanent keys, cylinder cores and software.
5. Address and requirements for delivery of keys.

G. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.

1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
3. Review sequence of operation narratives for each unique access controlled opening.
4. Review and finalize construction schedule and verify availability of materials.
5. Review the required inspecting, testing, commissioning, and demonstration procedures

H. At completion of installation, provide written documentation that components were applied to manufacturer's instructions and recommendations and according to approved schedule.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

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1.5 COORDINATION

A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.

B. Door Hardware and Electrical Connections: Coordinate the layout and installation of scheduled electrified door hardware and related access control equipment with required connections to source power junction boxes, low voltage power supplies, detection and monitoring hardware, and fire and detection alarm systems.

C. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.6 WARRANTY

A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:

1. Structural failures including excessive deflection, cracking, or breakage.
2. Faulty operation of the hardware.
3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
4. Electrical component defects and failures within the systems operation.

C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.

D. Special Warranty Periods:

1. Ten years for mortise locks and latches.
2. Ten years for extra heavy duty cylindrical (bored) locks and latches.
3. Five years for exit hardware.
4. Twenty five years for manual surface door closer bodies.
5. Two years for electromechanical door hardware.

1.7 MAINTENANCE SERVICE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

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PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.

B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:

C. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.

D. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.2 HANGING DEVICES

A. Hinges: ANSI/BHMA A156.1 certified butt hinges with number of hinge knuckles as specified in the Door Hardware Sets.

1. Quantity: Provide the following hinge quantity, unless otherwise indicated:

    a. Two Hinges: For doors with heights up to 60 inches.
    b. Three Hinges: For doors with heights 61 to 90 inches.
    c. Four Hinges: For doors with heights 91 to 120 inches.
    d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.

2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:

    a. Widths up to 3’0”: 4-1/2” standard or heavy weight as specified.
    b. Sizes from 3’1” to 4’0”: 5” standard or heavy weight as specified.

3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:

    a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
    b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.

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4. Hinge Options: Comply with the following where indicated in the Hardware Sets or on Drawings:

    a. Non-removable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.

5. Acceptable Manufacturers:

    a. Hager Companies (HA).
    b. McKinney Products (MK).
    c. Stanley Hardware (ST).

B. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 certified continuous geared hinge. with minimum 0.120-inch thick extruded 6060 T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.

1. Acceptable Manufacturers:

    a. Ives (IV).
    b. McKinney Products (MK).
    c. Pemko Manufacturing (PE).

2.3 POWER TRANSFER DEVICES

A. Concealed Quick Connect Electric Power Transfers: Provide concealed wiring pathway housing mortised into the door and frame for low voltage electrified door hardware. Furnish with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Acceptable Manufacturers:

    a. Securitron (SU) - EL-CEPT Series.
    b. Stanley Hardware (ST) EPT-12C Series.
    c. Von Duprin (VD) - EPT-10 Series.

B. Electric Door Wire Harnesses: Provide electric/data transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number and type of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable. Determine the length required for each electrified hardware component for the door type, size and construction, minimum of two per electrified opening.

1. Provide one each of the following tools as part of the base bid contract:

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a. McKinney Products (MK) - Electrical Connecting Kit: QC-R001.
b. McKinney Products (MK) - Connector Hand Tool: QC-R003.

2. Acceptable Manufacturers:

a. McKinney Products (MK) – QC-C Series.
b. Stanley Hardware (ST) – WH Series.

2.4 DOOR OPERATING TRIM

A. Flush Bolts and Surface Bolts: ANSI/BHMA A156.3 and A156.16, Grade 1, certified.

1. Manual flush bolts to be furnished with top rod of sufficient length to allow bolt location approximately six feet from the floor.
2. Furnish dust proof strikes for bottom bolts.
3. Surface bolts to be minimum 8” in length and U.L. listed for labeled fire doors and U.L. listed for windstorm components where applicable.
4. Provide related accessories (mounting brackets, strikes, coordinators, etc.) as required for appropriate installation and operation.

5. Acceptable Manufacturers:

a. Ives (IV).
b. Rockwood Manufacturing (RO).
c. Trimco (TC).

B. Door Push Plates and Pulls: ANS/BHMA A156.6 certified door pushes and pulls of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.

1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
4. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.

5. Acceptable Manufacturers:

a. Hiawatha, Inc. (HI).
b. Rockwood Manufacturing (RO).
c. Trimco (TC).

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2.5 CYLINDERS AND KEYING

A. General: Cylinder manufacturer to have minimum (10) years' experience designing secured master key systems and have on record a published security keying system policy.

B. Cylinders: Original manufacturer cylinders complying with the following:

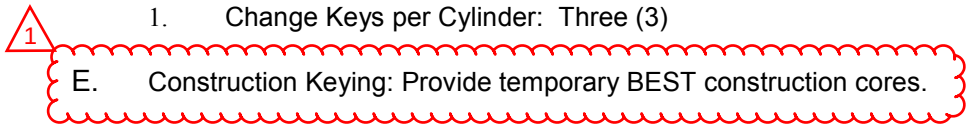
1. Mortise Type: Threaded cylinders with rings and cams to suit hardware application.
2. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
3. Bored-Lock Type: Cylinders with tailpieces to suit locks.
4. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
5. Keyway: Core: 7 pin. SFIC (Keyways TBD by UNK Key Services)

C. Keying System: Each type of lock and cylinders to be factory keyed.

1. Conduct specified "Keying Conference" to define and document keying system instructions and requirements.
2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.

D. Key Quantity: Provide the following minimum number of keys:

1. Change Keys per Cylinder: Three (3)



F. Key Registration List (Bitting List):

1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
2. Provide transcript list in writing or electronic file as directed by the Owner.

G. Key Control Cabinet: Provide a key control system including envelopes, labels, and tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet. Key control cabinet shall have expansion capacity of 150% of the number of locks required for the project.

1. Acceptable Manufacturers:

a. Lund Equipment (LU).
b. MMF Industries (MM).
c. Telkee (TK).

H. Key Control Software: Provide one network version of "Key Wizard" branded key management software package that includes one year of technical support and upgrades to software at no charge. Provide factory key system formatted for importing into "Key Wizard" software.

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2.6 MECHANICAL LOCKS AND LATCHING DEVICES

A. Mortise Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.13, Series 1000, Operational Grade 1 certified. Locksets are to be manufactured with a corrosion resistant steel case and be field-reversible for handing without disassembly of the lock body.

1. Acceptable Manufacturers:

    a. Sargent Manufacturing (SA) – 8200 Series.
    b. Stanley Best (BE) – 40H Series.

2.7 ELECTROMECHANICAL LOCKING DEVICES

A. Electromechanical Mortise Locksets, Grade 1 (Heavy Duty): Subject to same compliance standards and requirements as mechanical mortise locksets, electrified locksets to be of type and design as specified below.

1. Electrified Lock Options: Where indicated in the Hardware Sets, provide electrified options including: outside door lock/unlock trim control, latchbolt and lock/unlock status monitoring, deadbolt monitoring, and request-to-exit signaling. Support end-of-line resistors contained within the lock case. Unless otherwise indicated, provide electrified locksets standard as fail secure.

2. Energy Efficient Design: Provide lock bodies which have a holding current draw of 15mA maximum, and can operate on either 12 or 24 volts. Locks are to be field configurable for fail safe or fail secure operation.

3. Acceptable Manufacturers:

    a. Sargent Manufacturing (SA) - 8200 Series.
    b. Stanley Best (BE) - 40HW EL/EU Series.

2.8 STAND ALONE ACCESS CONTROL LOCKING DEVICES

A. Stand Alone Electronic Keypad Locksets: Internal, battery-powered, self-contained ANSI Grade 1 mortise or cylindrical lock consisting of electronically motor driven locking mechanism and integrated keypad without requirements for separate electronic programming devices. Locks to accept standard, interchangeable (removable) core, security and high security override cylinders. Provide keypad locks with a minimum 100 user codes furnished standard with 6 "AA" batteries and non-volatile memory.

1. Energy Efficient Design: Provide lock bodies which have a holding current draw of 15mA maximum, and can operate on either 12 or 24 volts. Locks are to be field configurable for fail safe or fail secure operation.

2. Acceptable Manufacturers:

    a. Sargent Manufacturing (SA) - KP Series.

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2.9 LOCK AND LATCH STRIKES

A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:

1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.

B. Standards: Comply with the following:

1. Strikes for Mortise Locks and Latches: BHMA A156.13.
2. Strikes for Bored Locks and Latches: BHMA A156.2.
3. Strikes for Auxiliary Deadlocks: BHMA A156.5.
4. Dustproof Strikes: BHMA A156.16.

2.10 CONVENTIONAL EXIT DEVICES

A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:

1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.

2. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer’s catalog and template book for specific requirements.

3. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.

4. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.

5. Electromechanical Options: Subject to same compliance standards and requirements as mechanical exit devices, electrified devices to be of type and design as specified in hardware sets. Include any specific controllers when conventional power supplies are not sufficient to provide the proper inrush current.

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6. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.

    a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
    b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.

7. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.

8. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2” wide stiles.

9. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.

10. Rail Sizing: Provide exit device rails factory sized for proper door width application.

11. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.

B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 certified panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Exit device latch to be stainless steel, pullman type, with deadlock feature.

1. Acceptable Manufacturers:

    a. Sargent Manufacturing (SA) - 80 Series.
    b. Stanley Precision (PR) - Apex 2000 Series.
    c. Von Duprin (VD) - 35A/98 XP Series.

C. Tube Steel Removable Mullions: ANSI/BHMA A156.3 removable steel mullions with malleable-iron top and bottom retainers and a primed paint finish.

1. Provide keyed removable feature where specified in the Hardware Sets.

2. Provide stabilizers and mounting brackets as required.

3. Provide electrical quick connection wiring options as specified in the hardware sets.

4. Acceptable Manufacturers:

    a. Corbin Russwin Hardware (RU) - 700/900 Series.
    b. Sargent Manufacturing (SA) - 980S Series.
    c. Yale Locks and Hardware (YA) - M200 Series.

2.11 DOOR CLOSERS

A. All door closers specified herein shall meet or exceed the following criteria:

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1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers including installation and adjusting information on inside of cover.

2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.

3. Cycle Testing: Provide closers which have surpassed 15 million cycles in a test witnessed and verified by UL.

4. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the physically handicapped, provide units complying with ANSI ICC/A117.1.

5. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.

6. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.

7. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates, and through-bolt and security type fasteners as required for proper installation.

B. Door Closers, Surface Mounted (Large Body Cast Iron): ANSI/BHMA A156.4, Grade 1 surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control.

1. Acceptable Manufacturers:

1
a. LCN Closers (LC) - 4040XP Series.
b. Sargent Manufacturing (SA) - 281 Series.
c. Stanley (ST)

2.12 AUTOMATIC DOOR OPERATORS

A. General: Provide operators of size recommended by manufacturer for door size, weight, and movement; for condition of exposure; and for compliance with UL 325. Coordinate operator mechanisms with door operation, hinges, and activation devices.

1. Fire-Rated Doors: Provide door operators for fire-rated door assemblies that comply with NFPA 80 for fire-rated door components and are listed and labeled by a qualified testing agency.

B. Brackets and Reinforcements: Manufacturer's standard, fabricated from aluminum with nonferrous shims for aligning system components.

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C. Standard: Certified ANSI/BHMA A156.19.

1. Performance Requirements:

a. Powered Closer/Operator Systems: Building entrances, including vestibule doors, and high-traffic interior door locations where doors are not held in the "open" position during normal business hours, shall be equipped with a power closer/operator system enabling these doors to meet the ADA accessibility standards. Such a system shall have the following characteristics: 1) low-speed and low energy movement of the door leaf, making safety pads and/or guard rails unnecessary; 2) manual operation of the door without power assistance, permitting the continued use of the door in the event the operator mechanism fails; 3) have a demonstrated record of reliability and serviceability in institutional applications. Depending upon the specific application, one of the following systems shall be used and coordinated with the UNK Facilities :

b. Operator: Electric operating mechanism with maximum current draw not to exceed 3.15 amps. Operator shall be isolation mounted and concealed in an extruded aluminum case with side access wherever possible.

c. Opening action shall be accomplished by 1/8 hp DC permanent magnet motor working through reduction gears to the output shaft. Gear train bearings shall be sealed ball bearing type.

d. Closing action shall be accomplished by a maximum-duty spring (four independent coil springs separated by Teflon discs and enclosed in an external spring box) with a lifetime warranty. Close speed control shall be supplied by dynamic braking of the motor and shall be fully adjustable. Operator to act as manual closer when power is off or when the master control unit is removed.

e. Off/On/Hold Open switch shall be supplied and remain inside the aluminum header in the On position unless noted otherwise. Where the switch is located outside the header, it shall be located on the top side wherever possible.

f. Master Control shall incorporate the following features:

g. Adjustable time delay of 13 seconds.

h. Infinite adjustment to opening and open check speeds, including adjusting the opening force without affecting the opening speed.

i. Immediate reversal of door motion with undue strain on the drive train. The door shall reverse when closing if an object stops the door.

j. Motor Protection Circuit: Provide a locked door motor protection circuit which will shut off current when the door is inadvertently locked or otherwise prevented from opening.

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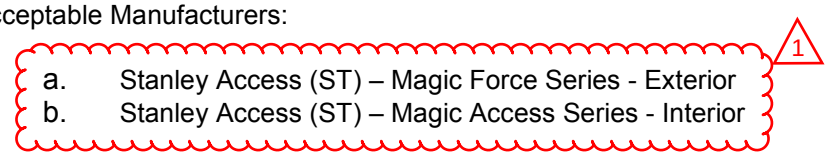
k. Include provision in the master control to provide interface with electric strikes, fire alarms, actuators, safety sensors, and related auxiliary contacts. Provide built-in power supply for peripherals with a maximum combined load of 1.0 amp at 12 or 24 v. DC.

l. Emergency Breakout for In-Swinging Doors (Overhead Concealed): When door is in emergency breakout position, power shall be removed from the operator.

m. Power Operation: Automatic pushbutton switch actuates door open; door closes after time delay expires. Opening and closing force, measured 1" out from the lock stile, shall not exceed 15 pounds to stop the door when operating in either direction. Operator shall include variable opening speed adjustment of 4 to 6 seconds and variable closing speed adjustment of 4 to 6 seconds to comply with ASTM Standard A156.19.

n. Manual Operation: Manual opening force, measured 1" out from the lock stile, shall not exceed 15 pounds at exterior doors and 5 pounds at interior doors. Operator shall be provided with Push and Go option (manually pushing door activates opening cycle; door closes after time delay expires) but shall be set for automatic operation unless noted otherwise.

2. Acceptable Manufacturers:



a. Stanley Access (ST) – Magic Force Series - Exterior
b. Stanley Access (ST) – Magic Access Series - Interior

2.13 SURFACE MOUNTED CLOSER HOLDERS

A. Electromagnetic Door Holders: Certified ANSI A156.15 electromagnetic door holder/releases with a minimum 20 to 40 pounds holding power and single coil construction able to accommodate.12VDC, 24VAC, 24VDC and 120VAC. Coils to be independently wound, employing an integral fuse and armatures to include a positive release button.

1. Acceptable Manufacturers:

a. LCN Door Closers (LC) - SEM7800 Series.
b. Rixson (RF) - 980/990 Series.
c. Sargent Manufacturing (SA) - 1560 Series.

2.14 ARCHITECTURAL TRIM

A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.

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2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1” LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.

3. Protection Plates: ANSI/BHMA A156.6 certified protection plates (kick, armor, or mop), fabricated from the following:

    a. Stainless Steel: 300 grade, 050-inch thick.

4. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.

5. Acceptable Manufacturers:

    a. Hiawatha, Inc. (HI).
    b. Rockwood Manufacturing (RO).
    c. Trimco (TC).

2.15 DOOR STOPS AND HOLDERS

A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.

B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 certified door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.

1. Acceptable Manufacturers:

    a. Hiawatha, Inc. (HI).
    b. Rockwood Manufacturing (RO).
    c. Trimco (TC).

C. Overhead Door Stops and Holders: ANSI/BHMA A156.6, Grade 1 certified overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.

1. Acceptable Manufacturers:

    a. Glynn Johnson (GJ).
    b. Rixson Door Controls (RF).
    c. Rockwood Manufacturing (RO).

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2.16 ARCHITECTURAL SEALS

A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.

B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.

1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.

C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.

1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and UBC 7-2, Fire Tests of Door Assemblies.

D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.

E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.

F. Acceptable Manufacturers:

1. National Guard Products (NG).
2. Pemko Manufacturing (PE).
3. Reese Enterprises, Inc. (RE).

2.17 ELECTRONIC ACCESSORIES

A. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. On recessed models the contact and magnetic housing snap-lock into a 1" diameter hole. Surface mounted models include wide gap distance design complete with armored flex cabling. Provide SPDT, N/O switches with optional Rare Earth Magnet installation on steel doors with flush top channels.

1. Acceptable Manufacturers:

a. Sargent Manufacturing (SA) – 3280 Series.
b. Security Door Controls (SD) - DPS Series.
c. Securitron (SU) - DPS Series.

B. Power Supplies: Provide Nationally Recognized Testing Laboratory Listed 12VDC or 24VDC (field selectable) filtered and regulated power supplies. Include battery backup option with integral battery charging capability in addition to operating the DC load in event of line voltage failure. Provide the least number of units, at the appropriate amperage level, sufficient to

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exceed the required total draw for the specified electrified hardware and access control equipment.

1. Acceptable Manufacturers:

    a. Securitron (SU) - BPS Series.
    b. Von Duprin (VD) - PS.

2.18 FABRICATION

A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.19 FINISHES

A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.

B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware.

C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.

B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.

B. Wood Doors: Comply with ANSI/DHI A115-W series.

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3.3 INSTALLATION

A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.

1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.

B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:

1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.

C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

E. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

A. Field Inspection: Supplier will perform a final inspection of installed door hardware and state in report whether work complies with or deviates from requirements, including whether door hardware is properly installed, operating and adjusted.

3.5 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

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3.6 CLEANING AND PROTECTION

A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.

B. Clean adjacent surfaces soiled by door hardware installation.

C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.8 DOOR HARDWARE SETS

A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

B. Manufacturer's Abbreviations:

1

1. MK - McKinney
2. PE - Pemko
3. AD - Adams Rite
4. RO - Rockwood
5. SA - Sargent
6. RF - Rixson
7. LC - LCN Closers
8. OT - By Others
9. SU – Securitron
10. DE – Detex
11. HS – HES
12. ST – Stanley
13. SI – Simplex
14. BE – Best

1

Hardware sets have been revised in their entirety and each should be reviewed.

Hardware Schedule

Set: 1.0

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2	Continuous Hinge	CFMxxSLF-HD1		PE
1	Header Bolt	4085-IB	603	AD
1	Mortise Deadlock	MS1950 x 4015 x 4016	628	AD
2	Cylinder	70 41	US32D	SA
2	Door Pull	BF15747 Mtg-Type 1XHD	US32D	RO
2	Door Closer	4040XP EDA	AL	LC
2	Drop Plate	4040XP-18PA	AL	LC
2	Shoe Support	4040XP- 30	AL	LC
2	Spacer	4040XP- 61	AL	LC
1	Threshold	252x3AFG		PE
1	Perimeter Weatherstrip	By door/frame supplier		PE
1	Astragal	By door/frame supplier		OT
1	Rain Guard	346C		PE
2	Sweep	345ANB		PE
2	Position Switch	DPS-M-GY		SU
2	SFIC	Best core to match existing		BE

Notes: Provide pull on inside and outside of active leaf. Inside of inactive leaf only.
Door position switches provided by hardware suppler.
Hardware supplier to provide template information for door supplier.
Security system integrator to connect switches to access control system.

Set: 2.0

1	Continuous Hinge	CFMxxSLF-HD1 PT		PE
1	Alarmed Exit Device	ECL-230D-PH		DE
1	Rim Cylinder	70 34	US32D	SA
1	Door Closer	4040XP SCUSH	AL	LC
1	Shoe Support	4040XP-30	AL	LC
1	Drop Plate	4040XP-18PA	AL	LC
1	Spacer	4040XP-61	AL	LC
1	Threshold	252x3AFG		PE
1	Perimeter Weatherstrip	By door/frame supplier		PE
1	Rain Guard	346C		PE
1	Sweep	345ANB		PE
1	Position Switch	DPS-M-GY		SU
1	SFIC	Best core to match existing		BE

Notes: Balance of hardware including weatherstripping, gasketing by aluminum door supplier.
Door position switches provided by hardware suppler.
Hardware supplier to provide template information for door supplier.
Security system integrator to connect switches to access control system.
Coordinate supply, installation and connection of electrified and access control components.
Operation Narrative:
Doors are normally closed and exit only with alarm.
Door position will be monitored.
Door will be available for emergency egress only and local alarm will sound upon unauthorized use.
Alarm must be reset at device by key.
In the event of a loss of power or fire alarm activation, doors will remain secure from exterior.
Key override is available for emergency access.
Free egress is always available from inside.

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Set: 3.0

1	Continuous Hinge	CFMxxSLI-HD1		PE
1	Storeroom Lock	70 8204 ONJ	US32D	SA
1	Electric Strike	1006CS	US32D	HS
1	Door Closer	4040XP SCUSH	AL	LC
1	Threshold	252x3AFG		PE
1	Perimeter Weatherstrip	294AV		PE
1	Rain Guard	346C		PE
1	Sweep	345ANB		PE
1	Position Switch	DPS-M-GY		SU
1	SFIC	Best core to match existing		BE

Notes: Door position switches provided by hardware suppler.
Hardware supplier to provide template information for door supplier.
Security system integrator to connect switches to access control system.
Coordinate supply, installation and connection of electrified components.
Operation Narrative:
Doors are normally closed and locked.
Door position is monitored for unauthorized use.

Set: 4.0

2	Continuous Hinge	CFMxxSLF-HD1		PE
2	Dummy Exit Rail	8893	US32D	SA
2	Door Pull	BF157A Mtg-Type 1XHD	US32D	RO
1	Door Closer	4040XP SCUSH	AL	LC
1	Shoe Support	4040XP-30	AL	LC
1	Drop Plate	4040XP-18PA	AL	LC
1	Spacer	4040XP-61	AL	LC
1	Door Operator	Stanley Magic Force	689	ST
2	Actuators	CL4163		ST
1	Threshold	252x3AFG		PE
1	Perimeter Weatherstrip	By door/frame supplier		PE
1	Astragal	By door/frame supplier		OT
1	Rain Guard	346C		PE
2	Sweep	345ANB		PE

Notes: Balance of hardware including weatherstripping, gasketing by aluminum door supplier.
Door position switches provided by hardware suppler.
Hardware supplier to provide template information for door supplier.
Security system integrator to connect switches to access control system.
Coordinate supply, installation and connection of electrified components.
Operation Narrative:
Doors are normally closed.
Automatic operator switches are always available for use unless there is a loss of power.
Free egress is always available from inside.

Set: 5.0

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2	Continuous Hinge	CFMxxSLI-HD1		PE
2	Flushbolts	555	US32D	RO
1	Mortise Lock	70 8204 ONJ	US32D	SA
2	Door Closer	4040XP SHCUSH	AL	LC
1	SFIC	Best core to match existing		BE

Set: 6.0

1	Continuous Hinge	CFMXXSLI-HD1 PT		PE
1	Continuous Hinge	CFMXXSLI-HD1		PE
1	Exit Device	55 56 70 8804 ETP	US32D	SA
1	Exit Device	55 8810 ETP	US32D	SA
2	Door Closer	4040XP SHCUSH	AL	LC
1	Mullion	70 L980A x 980C1	689	SA
1	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO
1	Threshold	252x3AFG		PE
1	Weatherstrip	294AV		PE
1	Rain Guard	346C		PE
2	Sweep	345ANB		PE
2	Electric Power Transfer	EL-CEPT		SU
2	ElectroLynx Harness	As required (EPT to ACP)		MK
2	ElectroLynx Harness	As required (EPT to lock)		OT
2	Position Switch	DPS-M-GY		SU
1	Card Reader	By Security Integrator		OT
1	Power Supply (Reader)	By Security Integrator		OT
1	SFIC	Best core to match existing		BE

Notes: Coordinate supply, installation and connection of electrified components.
Operation Narrative:
Door is normally closed and locked.
Door position is monitored for unauthorized use.
Presentation of authorized credential to card reader unlocks electrified lock and shunts door position switch to allow access.
Door to re-lock 15 seconds after card is read.
Door is to remain locked in the event of a loss of power or fire alarm activation.
Key override is available for emergency access.
Free egress is always available from inside.

Set: 7.0

1	Cylinder as Required	(Coordinate with Access Panel Supplier)	
1	SFIC	Best core to match existing system	BE

Set: 8.0

1	Continuous Hinge	CFMxxSLF-HD1		PE
1	Access Control Mort Lock	70 IN120-7978 IP B ONJ	US26D	SA
1	Door Closer	4040XP REG	AL	LC
1	Drop Plate	4040XP-18	AL	LC

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1	Wall Stop	406	US32D	RO
1	Perimeter Weatherstrip	By door/frame supplier		PE
1	SFIC	Best core to match existing		BE

Notes: Coordinate supply, installation and connection of electrified and access control components.
Verify stile width will support lock body installation.
Operation Narrative:
Door is normally closed and locked.
Presentation of authorized credential to card reader unlocks trim and allows entry.
Door may also be unlocked by access control system for access.
In the event of loss of power or fire alarm activation doors will become unlocked.
After reset of fire alarm or return of power, doors will return to previous status.
Key override is available for emergency access.
Free egress is always available from inside.

Set: 9.0

2	Continuous Hinge	CFMxxSLF-HD1		PE
1	Removable Mullion	70 L980A x 980C1	US28	SA
1	Exit Device (rim)	70 AD8504	US32D	SA
1	Exit Device (rim, EO)	AD8510	US32D	SA
2	Door Pull	BF157A Mtg-Type 1XHD	US32D	RO
2	Door Closer	4040XP SCUSH	AL	LC
2	Shoe Support	4040XP-61	AL	LC
2	Spacer	4040XP-30	AL	LC
1	Perimeter Weatherstrip	By door/frame supplier		PE
1	Astragal	By door/frame supplier		OT
2	Position Switch	DPS-M-GY		SU
2	SFIC	Best core to match existing		BE

Set: 10.0

2	Continuous Hinge	CFMxxSLF-HD1 PT		PE
1	Removable Mullion	70 L980A x 980C1	US28	SA
1	Exit Device (rim, signal switch)	55 AD8510	US32D	SA
1	Electric Exit Device (rim, ELR, fail secure)	55 56 70 AD8504	US32D	SA
2	Door Pull	BF157A Mtg-Type 1XHD	US32D	RO
1	Door Closer	4040XP SCUSH	AL	LC
1	Drop Plate	4040XP-18PA	AL	LC
1	Shoe Support	4040XP-30	AL	LC
1	Spacer	4040XP-61	AL	LC
1	Door Operator	Magic Access	689	ST
2	Actuators	CL4163		ST
1	Perimeter Weatherstrip	By door/frame supplier		PE
1	Astragal	By door/frame supplier		OT
2	Electric Power Transfer	EL-CEPT		SU
2	ElectroLynx Harness	As required (EPT to exit device)		MK
2	ElectroLynx Harness	As required (EPT to ACP)		MK
2	Position Switch	DPS-M-GY		SU
1	Card Reader	By Security Integrator		OT
1	Power Supply (Reader)	By Security Integrator		OT

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2	SFIC	Best core to match existing		BE

Notes: Balance of hardware including weatherstripping, gasketing by aluminum door supplier.
Coordinate supply, installation and connection of electrified and access control components.
Operation Narrative:
Doors are normally closed and locked.
Door position will be monitored.
Vestibule automatic door operator switch to be disabled at times when doors are locked.
Presenting authorized credential to reader retracts active leaf exit device latch and powers automatic operator switch to allow manual or assisted entry.
Doors may allow exit device latches to be retracted and switches powered for push/pull and assisted operation as directed by access control system.
Inside automatic operator switch is always available for use.
In the event of a loss of power or fire alarm activation, doors will become or remain locked.
Key override is available for emergency access.
Free egress is always available from inside.

Set: 11.0

6	Hinge (heavy weight)	T4A3786 4-1/2" x 4-1/2"	US26D	MK
2	Flush Bolt	2805	US32D	RO
1	Storeroom Lock	70 8204 ONJ	US32D	SA
2	Surface Overhead Stop	9-X36	630	RF
2	Door Closer	4040XP REG	AL	LC
2	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO
2	Wall Stop	406	US32D	RO
1	Gasketing	S88D		PE
1	Astragal	S772D		PE
1	SFIC	Best core to match existing		BE

Set: 12.0

3	Hinge (heavy weight)	T4A3786 NRP 4-1/2" x 4-1/2"	US26D	MK
1	Access Control Mort Lock	70 IN120-7978 IP B ONJ	US26D	SA
1	Door Closer	4040XP REG	AL	LC
1	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO
1	Gasketing	S88D		PE
1	Viewer	620	STNN	RO
1	SFIC	Best core to match existing		BE

Notes: Coordinate supply, installation and connection of electrified and access control components.
Operation Narrative:
Door is normally closed and locked.
Door position will be monitored to be sure that it is closed when secured.
Presentation of authorized credential to reader will unlock trim to allow access.
Door to re-lock after 5 seconds.
In the event of a loss of power or fire alarm activation door will remain locked.
Key override is available for emergency access.
Free egress is always available from inside.

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Set: 14.0

3	Hinge (heavy weight)	T4A3786 NRP 4-1/2" x 4-1/2"	US26D	MK
1	Exit Device	12 55 56 70 8804 ETJ	US32D	SA
1	Power Transfer	EL-CEPT		
1	Door Closer	4040XP EDA	AL	LC
1	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO
1	Wall Stop	406	US32D	RO
1	Gasketing	S88D		PE
1	ElectroLynx Harness	As required (EPT to exit device)		MK
1	ElectroLynx Harness	As required (EPT to ACP)		MK
1	Position Switch	DPS-M-GY		SU
1	Card Reader	(By Security Contractor)		
1	SFIC	Best core to match existing		BE

Notes: Coordinate supply, installation and connection of electrified and access control components.
Operation Narrative:
Door is normally closed and locked.
Door position will be monitored to be sure that it is closed when secured.
Presentation of authorized credential to reader will unlock trim to allow access.
Door to re-lock after 15 seconds.
In the event of a loss of power or fire alarm activation door will remain locked.
Free egress is always available from inside.

Set: 15.0

3	Hinge (heavy weight)	T4A3786 NRP 4-1/2" x 4-1/2"	US26D	MK
1	Electric Exit Device (rim, elec. trim, fail safe)	12 55 70 8876-24v ETNJ	US32D	SA
1	Door Closer	4040XP SCUSH	AL	LC
1	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO
1	Gasketing	S88D		PE
1	Electric Power Transfer	EL-CEPT		SU
1	ElectroLynx Harness	As required (EPT to exit device)		MK
1	ElectroLynx Harness	As required (EPT to ACP)		MK
1	Position Switch	DPS-M-GY		SU
1	Card Reader	By Security Integrator		OT
1	Power Supply (Reader)	By Security Integrator		OT
1	SFIC	Best core to match existing		BE

Notes: Coordinate supply, installation and connection of electrified and access control components.
Operation Narrative:
Door is normally closed and locked.
Door position will be monitored to be sure that it is closed when secured.
Presentation of authorized credential to reader will unlock trim to allow access.
Door to re-lock after 15 seconds.
In the event of a loss of power door or fire alarm activation will close and remain locked.
Key override is available for emergency access.
Free egress is always available from inside.

Set: 16.0

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8	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
2	fire-Rated Exit Device (svr, lbr, EO)	12 NB8710	US32D	SA
2	Surface Closer	4040XPT-Pull DE	AL	LC
2	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO
2	Electromagnetic Holder	998 24VDC	689	RF
1	Gasketing	S88D		PE
1	Astragal	S772D		PE

Notes: Electromagnetic hold opens will not be tied into fire alarm control panel for release in smoke/fire alarm event.

Set: 17.0

3	Hinge (heavy weight)	T4A3786 NRP 4-1/2" x 4-1/2"	US26D	MK
1	Fire-Rated Exit Device (rim, passage)	12 8815 ETJ	US32D	SA
1	Door Closer	4040XP REG	AL	LC
1	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO
1	Wall Stop	406	US32D	RO
1	Gasketing	S88D		PE

Set: 19.0

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Keypad Lock	P2031B-LL-626-41	US26D	SI
1	Wall Stop	406	US32D	RO
1	SFIC	Best core to match existing		BE

Set: 20.0

3	Hinge (heavy weight)	T4A3786 NRP 4-1/2" x 4-1/2"	US26D	MK
1	Access Control Mort Lock	70 IN120-7978 IP B ONJ	US26D	SA
1	Door Closer	4040XP REG	AL	LC
1	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO
1	Gasketing	S88D		PE
1	SFIC	Best core to match existing		BE

Notes: Coordinate supply, installation and connection of electrified and access control components.
Operation Narrative:
Door is normally closed and locked.
Door position will be monitored to be sure that it is closed when secured.
Presentation of authorized credential to reader will unlock trim to allow access.
Door to re-lock after 15 seconds.
In the event of a loss of power or fire alarm activation door will remain locked.
Key override is available for emergency access.
Free egress is always available from inside.

Set: 22.0

1	Continuous Hinge	CFMxxSLF-HD1		PE
1	Access Control Mort Lock	70 IN120-7978 IP B ONJ	US26D	SA
1	Door Closer	4040XP REG	AL	LC

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1	Drop Plate	4040XP-18	AL	LC
1	Wall Stop	406	US32D	RO
1	Perimeter Weatherstrip	By door/frame supplier		PE
1	Threshold	252x3AFG		PE
1	Sweep	345ANB		PE
1	SFIC	Best core to match existing		BE

Notes: Coordinate supply, installation and connection of electrified and access control components.
Verify stile width will support lock body installation.
Operation Narrative:
Door is normally closed and locked.
Presentation of authorized credential to card reader unlocks trim and allows entry.
Door may also be unlocked by access control system for access.
In the event of loss of power or fire alarm activation doors will become unlocked.
After reset of fire alarm or return of power, doors will return to previous status.
Key override is available for emergency access.
Free egress is always available from inside.

Set: 23.0

3	Hinge (heavy weight)	T4A3786 NRP 5" x 4-1/2"	US26D	MK
1	Storeroom Lock	70 8204 ONJ	US32D	SA
1	Door Closer	4040XP REG	AL	LC
1	Wall Stop	406	US32D	RO
1	Gasketing	S88D		PE
1	SFIC	Best core to match existing		BE

Set: 24.0

3	Hinge (heavy weight)	T4A3786 4-1/2" x 4-1/2"	US26D	MK
1	Storeroom Lock	70 8204 ONJ	US32D	SA
1	Door Closer	4040XP REG	AL	LC
1	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO
1	Wall Stop	406	US32D	RO
1	Gasketing	S88D		PE
1	SFIC	Best core to match existing		BE

Set: 25.0

3	Hinge (heavy weight)	T4A3786 4-1/2" x 4-1/2"	US26D	MK
1	Storeroom Lock	70 8204 ONJ	US32D	SA
1	Door Closer	4040XP REG	AL	LC
1	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO
1	Gasketing	S88D		PE
1	Threshold	252x3AFG		PE
1	Rain Guard	346C		PE
1	Sweep	345ANB		PE
1	SFIC	Best core to match existing		BE

Set: 26.0

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK

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1	Storeroom Lock	70 8204 ONJ	US32D	SA
1	Door Closer	4040XP EDA	AL	LC
1	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO
1	Wall Stop	406	US32D	RO
1	Gasketing	S88D		PE
1	SFIC	Best core to match existing		BE

Set: 27.0

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Storeroom Lock	70 8204 ONJ	US32D	SA
1	Door Closer	4040XP SCUSH	AL	LC
1	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO
1	Wall Stop	406	US32D	RO
1	Gasketing	S88D		PE
1	SFIC	Best core to match existing		BE

Set: 28.0

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Office Lock	70 8205 ONJ	US32D	SA
1	Wall Stop	406	US32D	RO
1	Gasketing	S88D		PE
1	SFIC	Best core to match existing		BE

Set: 29.0

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Access Control Mort Lock	70 IN120-7978 IP B ONJ	US26D	SA
1	Surface Overhead Stop	9-X36	630	RF
1	Door Closer	4040XP EDA	AL	LC
1	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO
1	Gasketing	S88D		PE
1	SFIC	Best core to match existing		BE

Set: 30.0

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Passage Set	28 10U15 LJ	US26D	SA
1	Surface Overhead Stop	9-X36	630	RF

Set: 31.0

3	Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1	Privacy Set	28 10U65 LJ	US26D	SA
1	Wall Stop	406	US32D	RO

Set: 32.0

3	Hinge (heavy weight)	T4A3786 NRP 4-1/2" x 4-1/2"	US26D	MK
1	Institutional Privacy Lock	49 70 8267 ONJ	US32D	SA
1	Door Closer	4040XP REG	AL	LC

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1	Kick Plate	K1050 10" x 2" LDW 4BE CSK	US32D	RO
1	Wall Stop	406	US32D	RO
1	Gasketing	S88D		PE
1	SFIC	Best core to match existing		BE

END OF SECTION 087100

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SECTION 08 8000

GLAZING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Insulating glass units.

B. Glazing units.

C. Mirrors.

D. Glazing compounds and accessories.

1.02 RELATED REQUIREMENTS

A. Section 08 5413 - Residential Windows: Glazing furnished by window manufacturer.

1.03 REFERENCE STANDARDS

A. 16 CFR 1201 - Safety Standard for Architectural Glazing Materials; current edition.

B. ANSI Z97.1 - American National Standard for Safety Glazing Materials Used in Buildings, Safety Performance Specifications and Methods of Test; 2010.

C. ASTM C864 - Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers; 2005 (Reapproved 2011).

D. ASTM C1036 - Standard Specification for Flat Glass; 2011e1.

E. ASTM C1048 - Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass; 2012.

F. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2013.

G. ASTM C1376 - Standard Specification for Pyrolytic and Vacuum Deposition Coatings on Flat Glass; 2015.

H. ASTM E1300 - Standard Practice for Determining Load Resistance of Glass in Buildings; 2012a.

I. ASTM E2190 - Standard Specification for Insulating Glass Unit Performance and Evaluation; 2010.

J. GANA (GM) - GANA Glazing Manual; Glass Association of North America; 2009.

K. GANA (SM) - GANA Sealant Manual; Glass Association of North America; 2008.

L. ICC (IBC) - International Building Code; 2015.

M. IGMA TM-3000 - North American Glazing Guidelines for Sealed Insulating Glass Units for Commercial & Residential Use; Insulating Glass Manufacturers Alliance; 1990 (2004).

N. NFRC 100 - Procedure for Determining Fenestration Product U-factors; 2014.

O. NFRC 200 - Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence; 2014.

P. NFRC 300 - Test Method for Determining the Solar Optical Properties of Glazing Materials and Systems; 2014.

1.04 DEFINITIONS

A. Sealed Insulating Glass Unit Surfaces:
   1. Surface 1 - Exterior surface of outer pane.
   2. Surface 2 - Interior surface of outer pane.
   3. Surface 3 - Interior surface of inner pane.
   4. Surface 4 - Exterior surface of inner pane.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

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B. Product Data on Insulating Glass Unit and Glazing Unit Glazing Types: Provide structural, physical and environmental characteristics, size limitations, special handling and installation requirements.

C. Product Data on Glazing Compounds and Accessories: Provide chemical, functional, and environmental characteristics, limitations, special application requirements. Identify available colors.

D. Samples: Submit two samples 12 by 12 inch in size of glass units, showing coloration and design.

E. Certificates: Certify that products meet or exceed specified requirements.

F. Manufacturer's Certificate: Certify that glass and glazing products meets or exceeds specified requirements.

G. Warranty Documentation: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.06 QUALITY ASSURANCE

A. Perform Work in accordance with GANA (GM) and IGMA TM-3000 for glazing installation methods.

B. Installer Qualifications: Company specializing in performing the work of this section with minimum three years documented experience.

C. Fabricate, store, transport, receive, install, and clean mirrors in accordance with NAMM recommendations.

1.07 FIELD CONDITIONS

A. Do not install glazing when ambient temperature is less than 40 degrees F.

B. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

1.08 WARRANTY

A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.

B. Warranty covers specific items identified below due to normal conditions of use and not to handling, installing, and cleaning practices contrary to the glass manufacturer’s published instructions.

C. Insulating Glass Units: Provide a five (5) year manufacturer warranty to include coverage for seal failure, interpane dusting or misting, including replacement of failed units.

D. Provide five year manufacturer warranty for reflective coating on mirrors and replacement of same.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Glass Fabricators:
   1. Insulite Glass Company, Inc.: www.insuliteglass.com.
   2. Viracon, Inc: www.viracon.com.
   3. Substitutions: Refer to Section 01 6000 - Product Requirements.

B. Float Glass Manufacturers:
   1. AGC Glass Company North America, Inc: www.us.agc.com.
   2. Cardinal Glass Industries: www.cardinalcorp.com.
   3. Guardian Industries Corp: www.sunguardglass.com.
   4. Pilkington North America Inc: www.pilkington.com/na.
   5. PPG Industries, Inc: www.ppgideascapes.com.
   6. Substitutions: Refer to Section 01 6000 - Product Requirements.

C. Fire-Protection-Rated Glass Manufacturers:
   1. SCHOTT North America Inc; PYRAN Platinum: www.us.schott.com.

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2. Technical Glass Products; Pilkington Pyrostop: www.fireglass.com.
3. Vetrotech Saint-Gobain North America; Contraflam: www.vetrotechusa.com.
4. Substitutions: Refer to Section 01 6000 - Product Requirements.

2.02 PERFORMANCE REQUIREMENTS - EXTERIOR GLAZING ASSEMBLIES

A. Select type and thickness of exterior glazing assemblies to withstand dead and live loads caused by positive and negative wind pressure acting normal to plane of glass.
   1. Design Pressure: Calculated in accordance with applicable codes.
   2. Comply with ASTM E1300 for design load resistance of glass type, thickness, dimensions, and maximum lateral deflection of supported glass.
   3. Provide glass edge support system sufficiently stiff to limit the lateral deflection of supported glass edges to less than 1/175 of their lengths under specified design load.
   4. Glass thicknesses listed are minimum.

B. Vapor Retarder and Air Barrier Seals: Provide completed assemblies that maintain continuity of building enclosure vapor retarder and air barrier.
   1. In conjunction with vapor retarder and joint sealer materials described in other sections.
   2. To maintain a continuous vapor retarder and air barrier throughout the glazed assembly from glass pane to heel bead of glazing sealant.

C. Thermal and Optical Performance: Provide glass products with performance properties as indicated. Performance properties are in accordance with manufacturer's published data as determined with the following procedures and/or test methods:
   1. Center of Glass U-Value: Comply with NFRC 100 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 5.2/6.3 computer program.
   2. Center of Glass Solar Heat Gain Coefficient (SHGC): Comply with NFRC 200 using Lawrence Berkeley National Laboratory (LBNL) WINDOW 5.2/6.3 computer program.
   3. Solar Optical Properties: Comply with NFRC 300 test method.

2.03 GLASS MATERIALS

A. Float Glass: Provide float glass based glazing unless noted otherwise.
   1. Annealed Type: ASTM C1036, Type I - Transparent Flat, Class 1 - Clear, Quality-Q3.
   2. Heat-Strengthened and Fully Tempered Types: ASTM C1048, Kind HS and FT.
      a. Fabrication by horizontal roller heating process only, roll wave distortion parallel to bottom edge of glass as installed. The deviation from flatness at any peak (peak to valley deviation) shall not exceed 0.003 inches in the center of a lite and shall not exceed 0.008 inches within 10.5 inches of the leading or trailing edge.
      b. Heat Treated Flat Glass to be by horizontal (roller hearth) process with inherent rollerwave distortion parallel to the bottom edge of the glass as installed.
      c. For clear or low-iron glass greater than or equal to 5mm thick without ceramic frit or ink, maximum + or - 125 mD (millidiopter) over 95% of the glass surface.
      d. All glass must be heat treated prior to the application of a low-e coating.
   3. Fully Tempered Safety Glass: Complies with ANSI Z97.1 and 16 CFR 1201 criteria.
   4. Tinted Type: ASTM C1036, Class 2 - Tinted, Quality-Q3, color and performance characteristics as indicated.
   5. Thicknesses indicated are minimums; for exterior glazing comply with specified requirements for wind load design regardless of thickness indicated, provide greater thickness as required for exterior glazing wind load design; for interior glazing limit glass deflection to maximum allowed by applicable code for interior glazed areas regardless of thickness indicated.

2.04 INSULATING GLASS UNITS

A. Insulating Glass Units Manufacturers:
   1. Any of the manufacturers specified for float glass.
   2. Fabricator certified by glass manufacturer for type of glass, coating, and treatment involved and capable of providing specified warranty.
   3. Cardinal Glass Industries: www.cardinalcorp.com.

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4. GCI Industries: www.gciindustries.com.
5. Insulite Glass Company, Inc.: www.insuliteglass.com.
6. Oldcastle Glass: www.oldcastleglass.com.
7. Viracon, Apogee Enterprises, Inc: www.viracon.com.
8. Substitutions: Refer to Section 01 6000 - Product Requirements.

B. Insulating Glass Units: Types as indicated.
1. Durability: Certified by an independent testing agency to comply with ASTM E2190.
2. Coated Glass: Comply with requirements of ASTM C1376 for pyrolytic (hard-coat) or magnetic sputter vapor deposition (soft-coat) type coatings on flat glass; coated vision glass, Kind CV; coated overhead glass, Kind CO; or coated spandrel glass, Kind CS.
3. Warm-Edge Spacers: Thermally broken polyurethane polymer and organic coated aluminum.
4. Spacer Color: Black.
5. Edge Seal:
   a. Dual-Sealed System: Provide polyisobutylene sealant as primary seal applied between spacer and glass panes, and silicone, polysulfide, or polyurethane sealant as secondary seal applied around perimeter.
   b. Color: Black.
6. Purge interpane space with dry air, hermetically sealed.

C. Type IG-1 - Insulating Glass Units: Vision glass, double glazed.
1. Applications: Exterior glazing unless otherwise indicated.
2. Space between lites filled with air.
3. Outboard Lite: Annealed float glass, 1/4 inch thick, minimum.
   a. Tint: Solargray.
   b. Coating: Low-E, PPG Solarban 70XL, on #2 surface.
4. Inboard Lite: Annealed float glass, 1/4 inch thick, minimum.
   a. Tint: Clear.
5. Total Thickness: 1 inch.
6. Thermal Transmittance (U-Value): 0.26 (Summer) / 0.28 (Winter), minimum.
7. Visible Light Transmittance (VLT): 34 percent, nominal.
8. Solar Heat Gain Coefficient (SHGC): 0.20 percent, maximum. 1
9. Glazing Method: Dry glazing method, gasket glazing.

D. Type IG-2 - Insulating Glass Units: Spandrel glazing.
1. Applications: Exterior spandrel glazing unless otherwise indicated.
2. Outboard Lite: Annealed float glass, 1/4 inch thick, minimum.
   a. Tint: Clear.
   b. Coating: Same as on vision units, on #2 surface.
3. Inboard Lite: Heat-strengthened float glass, 1/4 inch thick.
   a. Tint: Clear.
   b. Opacifier: Elastomeric coating, on #4 surface.
   c. Opacifier Color: Warm Gray.
4. Total Thickness: 1 inch.
5. Thermal Transmittance (U-Value): 0.26 (Summer) / 0.28 (Winter), minimum.

E. Type IG-5 - Insulating Glass Units: Safety glazing.
1. Applications:
   a. Glazed sidelights and panels next to doors.
   b. Other locations required by applicable federal, state, and local codes and regulations.
   c. Other locations indicated on the drawings.
2. Space between lites filled with air.
3. Glass Type: Same as Type IG-1 except use fully tempered float glass for both outboard and inboard lites.
4. Total Thickness: 1 inch.

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2.05 GLAZING UNITS

A. Type FG-1 - Monolithic Exterior Safety Glazing:
   1. Applications: Exterior doors.
   2. Glass Type: Fully tempered float glass.
   3. Tint: Clear.
   4. Thickness: 1/4 inch, nominal.
   5. Glazing Method: Dry glazing method, gasket glazing.

B. Type FG-2 - Monolithic Interior Vision Glazing:
   1. Applications: Interior glazing unless otherwise indicated.
   2. Glass Type: Annealed float glass.
   3. Tint: Clear.
   4. Thickness: 1/4 inch, nominal.
   5. Glazing Method: Gasket glazing or any interior method specified.

C. Type FG-4 - Fire-Protection-Rated Glazing: Type, thickness, and configuration as required to achieve indicated ratings.
   1. Applications:
      a. Glazed lites in fire doors.
      b. Sidelights, borrowed lites, and other glazed openings in partitions indicated as having an hourly fire rating.
   2. Glass Type: Fully tempered float glass.
   3. Labeling: Provide permanent label on fire-rated glazing in compliance with ICC (IBC) and authorities having jurisdiction.
   4. Provide products listed by Underwriters Laboratories or Intertek Warnock Hersey.
   5. Provide products tested to the size indicated on the drawings.
   6. Safety Glazing Certification: 16 CFR 1201 Category II.
   7. Glazing Method: As required for fire rating.
   8. Fire-Protection-Rating Period: As scheduled.

D. Type FG-5 - Monolithic Safety Glazing: Non-fire-rated.
   1. Applications:
      a. Glazed lites in doors, except fire doors.
      b. Glazed sidelights to doors, except in fire-rated walls and partitions.
      c. Other locations required by applicable federal, state, and local codes and regulations.
      d. Other locations indicated on the drawings.
   2. Glass Type: Fully tempered safety glass as specified.
   3. Tint: Clear.
   4. Thickness: 1/4 inch, nominal.
   5. Glazing Method: Gasket glazing or any interior method specified.

E. Type MR-1 - Mirror Glass:
   1. Application: Locations indicated on the drawings.
   2. Type: Fully tempered float glass as specified.
   3. Tint: Clear.
   4. Thickness: 1/4 inch.
   5. Glazing Method: Adhesive attached.

2.06 GLAZING COMPOUNDS

A. Manufacturers:
   1. Bostik Inc: www.bostik-us.com.
   2. Dow Corning Corp: www.dowcorning.com.
   3. Momentive Performance Materials, Inc (formerly GE Silicones): www.momentive.com.
   4. Pecora Corporation: www.pecora.com.
   5. BASF Corporation: www.basf.com/us/en.html.
   6. Substitutions: Refer to Section 01 6000 - Product Requirements.

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B. Glazing Putty: Polymer modified latex, knife grade consistency; grey color.

2.07 ACCESSORIES

A. Setting Blocks: Neoprene, EPDM, TPE (Santoprene) or Silicone, 80 to 90 Shore A durometer hardness; ASTM C864 Option I. Length of 0.1 inch for each square foot of glazing or minimum 4 inch x width of glazing rabbet space minus 1/16 inch x height to suit glazing method and pane weight and area.

B. Spacer Shims: Neoprene or Silicone, 50 to 60 Shore A durometer hardness; ASTM C864 Option I. Minimum 3 inch long x one half the height of the glazing stop x thickness to suit application, self adhesive on one face.

C. Glazing Tape: Provide preformed butyl compound or Closed cell polyvinyl chloride foam, coiled on release paper over adhesive on two sides, to effect an air barrier and vapor retarder seal.

D. Glazing Gaskets: Resilient silicone extruded shape to suit glazing channel retaining slot; ASTM C864 Option I; color black.

E. Glazing Clips: Manufacturer's standard type.

PART 3 EXECUTION

3.01 VERIFICATION OF CONDITIONS

A. Verify that openings for glazing are correctly sized and within tolerances, including those for size, squareness, and offsets at corners.

B. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and support framing is ready to receive glazing system.

3.02 PREPARATION

A. Clean contact surfaces with appropriate solvent and wipe dry within maximum of 24 hours before glazing. Remove coatings that are not tightly bonded to substrates.

B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.

C. Prime surfaces scheduled to receive sealant where required for proper sealant adhesion.

3.03 INSTALLATION, GENERAL

A. Install glazing in compliance with written instructions of glass, gaskets, and other glazing material manufacturers, unless more stringent requirements are indicated, including those in glazing referenced standards.

B. Install glazing sealants in accordance with ASTM C1193, GANA Sealant Manual, and manufacturer's instructions.

C. Do not exceed edge pressures around perimeter of glass lites as stipulated by glass manufacturer.

D. Set glass lites of system with uniform pattern, draw, bow, and similar characteristics.

E. Set glass lites in proper orientation so that coatings face exterior or interior as indicated.

F. Prevent glass from contact with any contaminating substances that may be the result of construction operations such as, and not limited to the following; weld splatter, fire-safing, plastering, mortar droppings, etc.

3.04 INSTALLATION - DRY GLAZING METHOD (GASKET GLAZING)

A. Application - Exterior and/or Interior Glazed: Set glazing infills from either the exterior or the interior of the building.

B. Place setting blocks at 1/4 points with edge block no more than 6 inch from corners.

C. Rest glazing on setting blocks and push against fixed stop with sufficient pressure on gasket to attain full contact.

D. Install removable stops without displacing glazing gasket; exert pressure for full continuous contact.

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3.05 INSTALLATION - DRY GLAZING METHOD (TAPE AND TAPE)

A. Application - Interior Glazed: Set glazing infills from the interior of the building.

B. Cut glazing tape to length and set against permanent stops, projecting 1/16 inch above sight line.

C. Place setting blocks at 1/4 points with edge block no more than 6 inch from corners.

D. Rest glazing on setting blocks and push against tape for full contact at perimeter of pane or unit.

E. Place glazing tape on free perimeter of glazing in same manner described above.

F. Install removable stop without displacement of tape. Exert pressure on tape for full continuous contact.

G. Carefully trim protruding tape with knife.

3.06 INSTALLATION - MIRRORS

A. Install mirrors in accordance with GANA recommendations.

B. Set mirrors plumb and level, free of optical distortion.

C. Set mirrors with edge clearance free of surrounding construction including countertops or backsplashes.

D. Frameless Mirrors: Set mirrors with adhesive, applied in accordance with adhesive manufacturer's instructions.

3.07 FIELD QUALITY CONTROL

A. Glass and Glazing product manufacturers to provide field surveillance of the installation of their products.

B. Monitor and report installation procedures and unacceptable conditions.

3.08 CLEANING

A. Remove excess glazing materials from finish surfaces immediately after application using solvents or cleaners recommended by manufacturers.

B. Remove non-permanent labels immediately after glazing installation is complete.

C. Clean glass and adjacent surfaces after sealants are fully cured.

D. Clean glass on both exposed surfaces not more than 4 days prior to Date of Substantial Completion in accordance with glass manufacturer's written recommendations.

3.09 PROTECTION

A. After installation, mark pane with an 'X' by using removable plastic tape or paste; do not mark heat absorbing or reflective glass units.

B. Remove and replace glass that is damaged during construction period prior to Date of Substantial Completion.

END OF SECTION

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SECTION 09 0600

COLOR SCHEDULE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. The extent of interior surfaces to be painted or otherwise finished.

PART 2 PRODUCTS

2.01 LIST OF FINISHES

A. Project Number - Project Name: 15097 - UNK Student Housing

PLASTIC LAMINATE (PL):

	MANUFACTURER	COLOR	FINISH
PL-1	Arborite	P-344 RM Inukshuk Grey	Refined Matte
PL-2	Abet Laminati	727 Satinata	
PL-3	Nevamar	Fossil Gray	Textured

SOLID SURFACE MATERIAL (SSM):

	MANUFACTURER	COLOR	FINISH	THICKNESS
SSM-1	Silestone	Kensho	Polished	1/2"

1 **SEALED CONCRETE (PC-1): SEE SECTION 03 3000 CAST - IN - PLACE CONCRETE**

WOOD WALL PANEL (WP):

	MANUFACTURER	STYLE	SPECIES	SIZE
WP-1	Architectural Systems	WPVEP025	Maple	13.5" x 53.5"

1 Provide 4" tall maple S4S wood base (WB-1) at all locations with WP-1. Stain to match WP-1.

CERAMIC TILE (CT):

	MANUFACTURER	STYLE/COLOR	SIZE
CT-1	Daltile	Haute Monde HM05 Elite Grey	12x24
CT-2	Daltile	DR10 Emenence Grey	12x24
CT-3	Daltile	DR07 Luminary White	12x24
CT-4	Daltile	0790 Arctic White - Matte	6x6
CT-5	Daltile	0190 Arctic White - Gloss	6x6
CT-6	Florida Tile	29615 Maltese Roman Grey	12x12

* NOTE: 1/8" GROUT LINE. Cap all exposed edges of wall tile and base with Schluter Jolly trim. Contact: Daltile Amanda Balhorn, Amanda.balhorn@daltile.com, 402-981.7045 and Sunderlands Brothers Company Andie Gottschalk, andieg@sunderlands.com, 402.669.7698

GROUT (G):

	MANUFACTURER	COLOR	LOCATION
G-1	Mapei	11 Sahara Beige	Epoxy at Toilets, Sanded at Clubhouse
G-2	Mapei	38 Avalanche	Epoxy

ACOUSTIC PANEL CEILING (APC):

	MANUFACTURER	STYLE	COLOR	SIZE

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APC-1 APC-2	Armstrong Ceiling Plus	Ultima Tegular #1942 Illusions	White Anigre Arboreal	24" x 24" x 1" Sizes vary, see RCP
GRID-1	Armstrong	SUPRAfine (Use with APC-1) Straight Wall Molding Shadow at Resident Hall Corridors (AXM7575STR)	White	9/16"
GRID-2	Ceiling Plus	Illusions Suspension System	Aluminum	-

MARMOLEUM COMPOSITION TILE (MCT):

	MANUFACTURER	STYLE	COLOR	SIZE
MCT-1	Forbo	MCT-629	Eiger	10x20

LUXURY VINLY TILE (LVT):

	MANUFACTURER	STYLE	COLOR	SIZE
LVT-1	Mannington Commercial	Nature's Path Select, Barnwood Plank	12157 Cognac	5"x48"

RESILIENT BASE (RB):

	MANUFACTURER	COLOR	SIZE
RB-1	ROPPE	193 Black Brown	4"H

* Straight Base at CPT & WMT; Coved base at hard surfaces

TRANSITION STRIP (TRS):

	MANUFACTURER	STYLE	COLOR	LOCATION
TRS-1	Schluter*	Schiene	EB Brushed Stainless Steel	CT to CPT, Exposed edges of tile
TRS-2	Tandus Centiva*	ME002	00082 Black Pearl	CPT to LVT
TRS-3	Schluter*	RENO U	EB Brushed Stainless Steel	CT to MCT
TRS-4	Schluter*	Roppe*	#193 Black Brown	CPT to RS

* Profile to create a flush transition between varying materials. Contractor to verify material heights prior to ordering.

RESILIENT STAIR ACCESSORIES (RSA):

	MANUFACTURER	STYLE	COLOR
RSA-1	Mohawk	Master Step Round MCR - Nose, Tread, & Riser	134 Platinum Gray

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1. * Mohawk Rep Contact: Penny Johnston / penny_johnston@mohawkind.com / 402-419-9054

CARPET (CPT):

	MANUFACTURER	STYLE	COLOR	SIZE
CPT-1	J&J Contract Kinetex	Analog 1821	1551 Counterpart	24" x 24"
CPT-2	J&J Contract Kinetex	Analog Mono 1822	Link 1553	24" x 24"
CPT-3	Shaw	Wander 5T039	Shadow 37761	24" x 24"

WALK-OFF MAT (WMT):

	MANUFACTURER	STYLE	COLOR	SIZE
WMT-1	Mohawk	First Step II GT315	983 Iron Ore	24" x 24"

PAINT (P):

	MANUFACTURER	COLOR
P-1	Sherwin Williams	SW 7036 Accessible Beige
P-2	Sherwin Williams	SW 7039 Virtual Taupe
P-3	Sherwin Williams	SW 7602 Indigo Batik
P-4	Sherwin Williams	SW 7598 Sierra Redwood
P-5	Sherwin Williams	SW 6402 Antiquity
P-6	Sherwin Williams	SW 7626 Zurich White
P-7	Sherwin Williams	SW 7040 Smokehouse
P-8	Sherwin Williams	SW7020 Black Fox

STAIN (S):

	MANUFACTURER	COLOR	SHEEN
S-1	Marshfiled Door System	Nutmeg 48-97	Factory UV Finish

HIGH-PERFORMANCE COATINGS (HPC):

	MANUFACTURER	COLOR
HPC-1	Sherwin Williams	SW7039 Virtual Taupe

TACKBOARD (TKBD):

	MANUFACTURER	SUBSTRATE	FINISH	SIZE
TKBD-1	Platinum Visual Systems	1/8" thick underlayment cork laminated to 3/8" thick fiberboard	Carnegie, Xorel Meteor 6427 703	See Interior Elevations.

CORNER GUARD (CG):

	MANUFACTURER	MODEL	COLOR
CG-1	Acrovyn	C-08	Stainless Satin Finish

* Install directly above base for overall height of 52" AFF

FIBERGLASS REINFORCED PLASTIC (FRP):

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	MANUFACTURER	COLOR	
FRP-1	Crane Composites	Glasbord FRP with Surfaseal PSIF / 48 Pearl Greay	Smooth

VERTICAL LOUVER BLINDS (VLB):

	MANUFACTURER	STYLE	COLOR
VLB-1	Hunter Douglas	Vertical Solutions	Vinyl- 1643900

END OF SECTION

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1 Section added in its entirety.

SECTION 10 5623
WIRE STORAGE SHELVING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Wall mounted wire closet shelving.

B. Accessories.

1.02 RELATED REQUIREMENTS

A. Section 06 1000 - Rough Carpentry: Blocking in walls for attachment of shelving.

B. Section 09 2116 - Gypsum Board Assemblies: Blocking in metal stud walls for attachment of standards.

1.03 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Manufacturer's data sheets on each product to be used, with installation instructions.

C. Shop Drawings: Provide drawings prepared specifically for this project; show dimensions of shelving and attachment to substrates.

1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Store products under cover and elevated above grade.

C. Store flat to prevent warpage and bending.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Wire Storage Shelving:
   1. ClosetMaid Corporation : www.closetmaid.com.
   2. RubberMaid Closet and Organization Products : www.rubbermaidcloset.com.
   3. Organized Living. www.organizedliving.com
   4. Substitutions: See Section 01 6000 - Product Requirements.

2.02 SHELVING APPLICATIONS

A. Shelf Depth: 12 inches, unless otherwise indicated.

B. Bedroom Closets:
   1. Wall-to-wall shelf with free sliding hanger rod.

C. Coat/Storage/Linen Closets:
   1. Wall-to-wall shelf with integral hanger rod.

2.03 MATERIALS

A. Wire Shelving: Factory-assembled coated wire mesh shelf assemblies for wall-mounting, with all components and connections required to produce a rigid structure that is free of buckling and warping.
   1. Construction: Cold-drawn steel wire with average tensile strength of 100,000 psi resistance welded into uniform mesh units, square, rigid, flat, and free of dents or other distortions, with wires trimmed smooth.
   2. Coating: PVC or epoxy, applied after fabrication, covering all surfaces.
   3. PVC Coating: 9 to 11 mils thick.

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4. Epoxy Coating: Non-toxic epoxy-polyester powder coating baked-on finish, 3 to 5 mils thick.
5. Standard Mesh Shelves: Cross deck wires spaced at 1 inch.
6. Shelf and Rod Units: Integral hanging rod at front edge of shelf.
7. Free-Sliding Hanging Rod: Integral hanging rod that permits uninterrupted sliding of hangers the full width of the shelf.
8. Corner Units: Same wire spacing as standard mesh shelves; provide wherever shelves meet at right angles.

B. Hanging Rod: Tubular steel, 1 inch diameter, with end caps on open ends.
1. Finish: Epoxy powder coat.
2. Wall Thickness: 20 gage, 0.035 inch.
3. Provide corner hanging rods and hanging rod connectors where required.

C. Mounting Hardware: Provide manufacturer's standard mounting hardware; include support braces, wall brackets, back clips, end clips, poles, and other accessories as required for complete and secure installation; factory finished to match shelving.

D. Fasteners: As recommended by manufacturer for mounting substrates.

PART 3 EXECUTION

3.01 EXAMINATION

A. Inspect areas to receive shelving, to verify that spaces are properly prepared to receive shelf units, and are of dimensions indicated on shop drawings.

B. Verify appropriate fastening hardware.

C. Do not begin installation until substrates have been properly prepared.

D. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

A. Install in accordance with manufacturer's instructions, with shelf surfaces level.

B. Cap exposed ends of cut wires.

C. Install back clips, end clips at side walls, and support braces at open ends. Install intermediate support braces as recommended by manufacturer.

D. Mounting Heights:
1. As indicated on drawings.

3.04 CLEANING

A. Clean soiled surfaces after installation.

3.05 PROTECTION

A. Protect installed work from damage.

B. Touch-up, repair, or replace damaged products before Substantial Completion in a manner that eliminates evidence of replacement.

END OF SECTION

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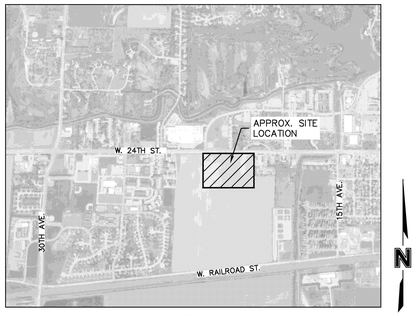


VICINITY MAP
NOT TO SCALE

BENCHMARKS

TBM	ELEVATION	DESCRIPTOR
6	2186.51	CHISELED "X" TOP CONCRETE LIGHT POLE BASE, WEST ENTERANCE FRANK HOUSE
7	2174.87	CHISELED "X" TOP SE FLANGE BOLT, FIRE HYDRANT, NORTH OF HWY. 30 WEST SIDE 19TH AVE.
8	2168.47	CHISELED "X" TOP NW FLANGE BOLT, FIRE HYDRANT, EAST SIDE OF LOT 18 PARKING LOT
9	2168.44	CHISELED "X" ON LITE POLE BASE NORTH OF CONTROL POINT 2030
10	2172.23	CHISELED "X" TOP NW FLANGE BOLT, FIRE HYDRANT, SOUTH OF CONTROL POINT 2031
11	2175.18	CHISELED "X" TOP NW FLANGE BOLT, FIRE HYDRANT, WEST SIDE OF ENTERANCE BRUNER SCIENCE HALL
12	2172.45	CHISELED "X" TOP NW FLANGE BOLT, FIRE HYDRANT, EAST OF CONTROL POINT 2036

CONTROL POINTS

1,	2196.505,	1/2"X24" REBAR BASE1
2,	2169.529,	BRASS CAP H 435
3,	2195.860,	1/2"X24" REBAR
4,	2198.710,	1/2"X24" REBAR
5,	2200.750,	1/2"X24" REBAR
6,	2201.130,	1/2"X24" REBAR
7,	2200.250,	1/2"X24" REBAR
24,	2172.62,	NAIL
2025,	2182.780,	1/2"X24" REBAR
2026,	2182.620,	1/2"X24" REBAR
2027,	2175.800,	1/2"X24" REBAR
2028,	2172.710,	1/2"X24" REBAR
2029,	2165.660,	1/2"X24" REBAR
2030,	2166.190,	1/2"X24" REBAR
2031,	2169.680,	1/2"X24" REBAR
2032,	2171.260,	1/2"X24" REBAR
2033,	2172.780,	1/2"X24" REBAR
2035,	2170.680,	1/2"X24" REBAR
2036,	2170.860,	1/2"X24" REBAR
50003,	2172.00,	NAIL

SITE INFORMATION

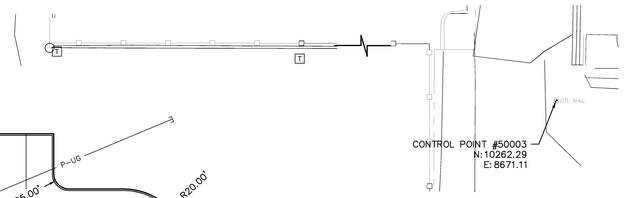
HANDICAP STALLS: 6 STALLS
SURFACE STALLS: 168 STALLS
TOTAL STALLS: 174 STALLS

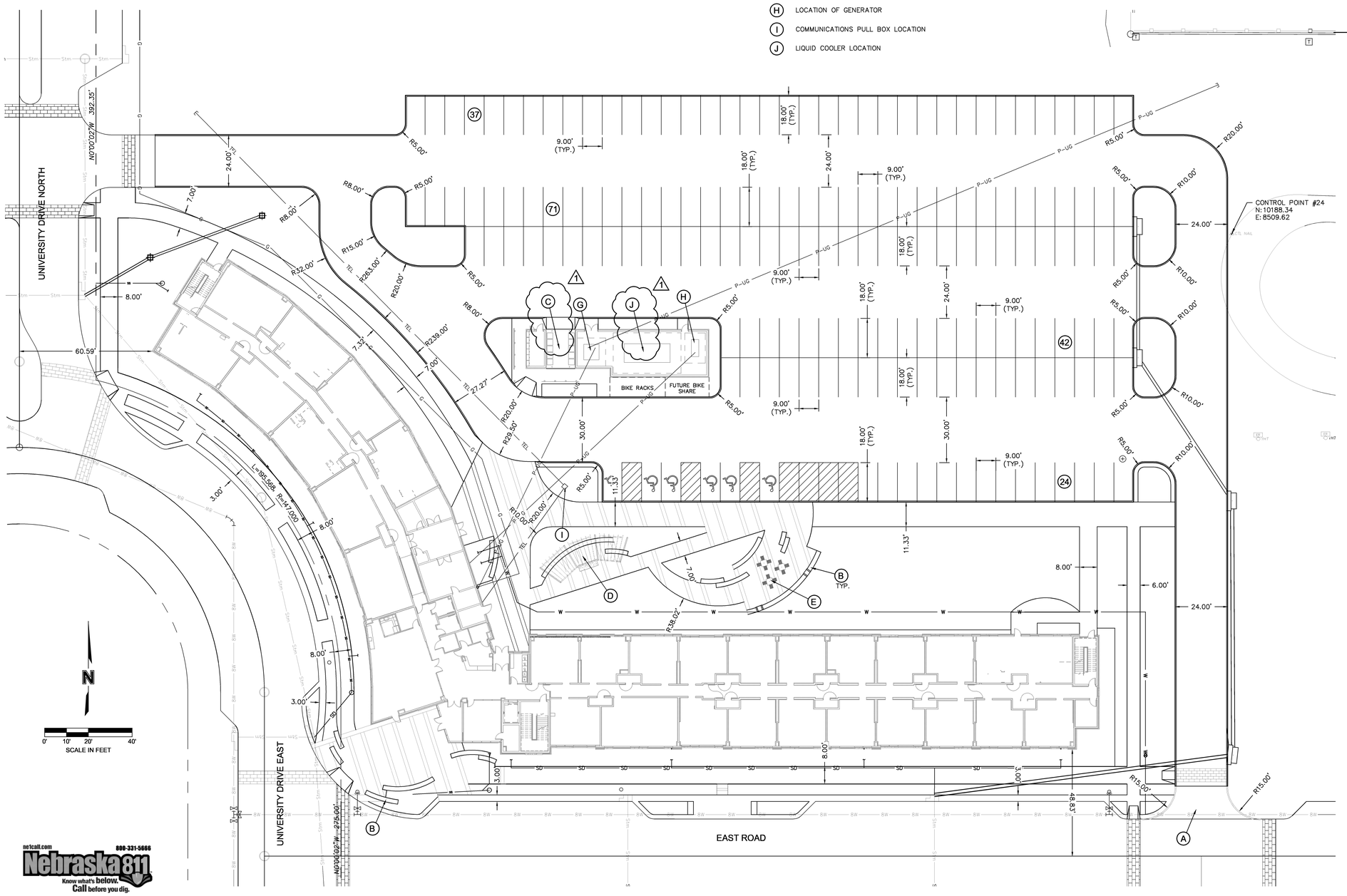
LEGEND

- (A) PROPOSED DRIVE RETURN, TO BE BUILT BY OTHERS
- (B) CAST IN PLACE SEAT WALL, REFER TO ARCHITECTURAL PLANS
- (C) TRASH ENCLOSURE
- (D) PERGOLA, REFER TO ARCHITECTURAL PLANS
- (E) OUTDOOR TABLES, REFER TO ARCHITECTURAL PLANS
- (F) LOCATION OF GAS METER
- (G) LOCATION OF TRANSFORMER
- (H) LOCATION OF GENERATOR
- (I) COMMUNICATIONS PULL BOX LOCATION
- (J) LIQUID COOLER LOCATION

LEGEND

- T — TELEPHONE RISER
- F — FIBER OPTIC BOX
- CV — CABLE VAULT
- ⊕ — 1" IRON PIPE
- CONTROL POINT
- FIRE HYDRANT
- EXISTING CURB AND GUTTER
- GRAVEL ROAD
- G — EXISTING GAS LINE
- FO — EXISTING FIBER OPTIC LINE
- CROP LINE
- EXISTING FENCE
- PROPOSED BACK OF CURB
- W — PROPOSED WATER MAIN
- SS — PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- G — PROPOSED GAS SERVICE
- P-UG — PROPOSED ELECTRICAL SERVICE
- PROPOSED STORM SEWER CURB INLET
- PROPOSED STORM SEWER AREA INLET





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No.	Description	Date
1	REV01-ADD01	4.21.2015

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

SITE PLAN

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT: 15097
DATE: 4/1/2016

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LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- FLOW ARROWS
- LIMITS OF GRADING ACTIVITIES
- LIMITS OF OVER EXCAVATION

N

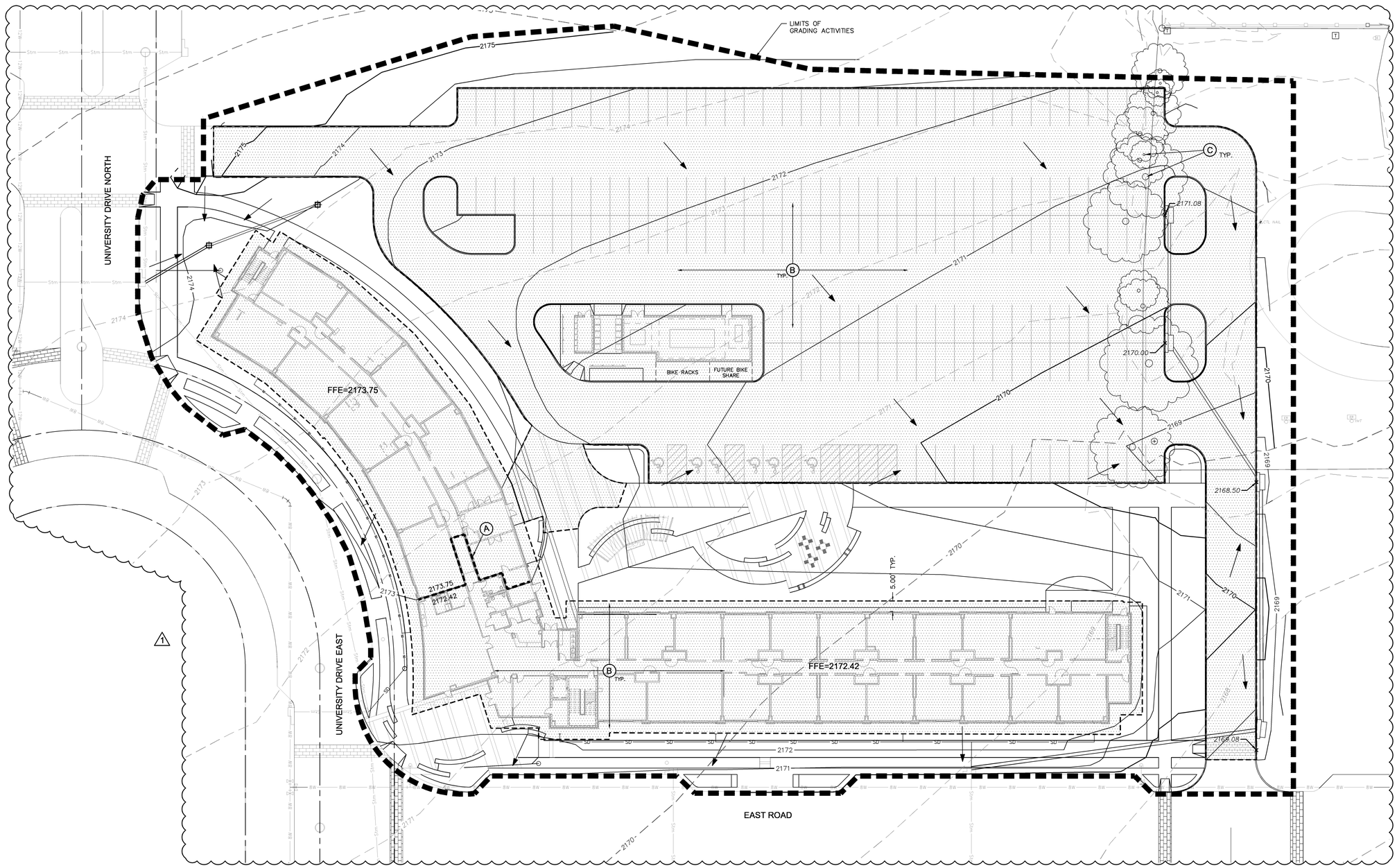
0' 10' 20' 40'
SCALE IN FEET

LEGEND

(A) 16" BUILDING STEP

(B) OVEREXCAVATE AS NEEDED TO PROVIDE A MINIMUM OF 3 FEET OF STRUCTURAL FILL BELOW AND AROUND ALL LOAD BEARING FOOTINGS AND 18 INCHES BELOW FLOOR SLABS AND PAVEMENT SECTIONS.

(C) CONTRACTOR TO REMOVE ALL TREES WITHIN LIMITS OF GRADING ACTIVITIES (TYP.)



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UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

GRADING PLAN

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
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SITE INFORMATION

TOTAL DISTURBED AREA	3.8 Ac.
TOTAL SITE AREA	3.8 Ac.

NPDES PERMIT IS REQUIRED

ENGINEER

OLSSON ASSOCIATES
601 P STREET, STE 200
P.O. BOX 84608
LINCOLN, NE 68508
CONTACT: ERIN BRIGHT
PHONE: (402)458-5608

EROSION CONTROL IMPROVEMENT LEGEND

(CE) CONSTRUCTION ENTRANCE/EXIT TO BE BUILT BY CONTRACTOR. MINIMUM 24' WIDE X 70' LONG FROM EXISTING ROAD. 2" TO 3.5" CLEAN STONE, 6" THICK MIN. WITH GEOTEXTILE FILTER FABRIC, PER DETAIL ON SHEET C2.4

(SF) SILT FENCE MUST BE INSTALLED IN NO GREATER THAN 100' RUNS, THE ENDS OF EACH RUN MUST TURN UPHILL ('J' HOOKS) FOR AN APPROPRIATE DISTANCE TO KEEP WATER FROM FLOWING TO THE NEXT SECTION OF SILT FENCE. (TYPICAL), PER DETAIL ON SHEET C2.4

(SD) SEEDING SHALL BE PROVIDED BY CONTRACTOR. CONTRACTOR TO COORDINATE WITH SEED INSTALLER FOLLOWING FINAL GRADING.

(SI) INSTALL SWPPP INFORMATION SIGN, PER DETAIL ON SHEET C2.4

(CW) INSTALL CONCRETE WASHOUT, PER DETAIL ON SHEET C2.4

(SD) SEEDING SHALL BE PROVIDED BY CONTRACTOR. CONTRACTOR TO COORDINATE WITH SEED INSTALLER FOLLOWING FINAL GRADING.

(IP) INSTALL INLET PROTECTION PER DETAIL ON SHEET C2.4

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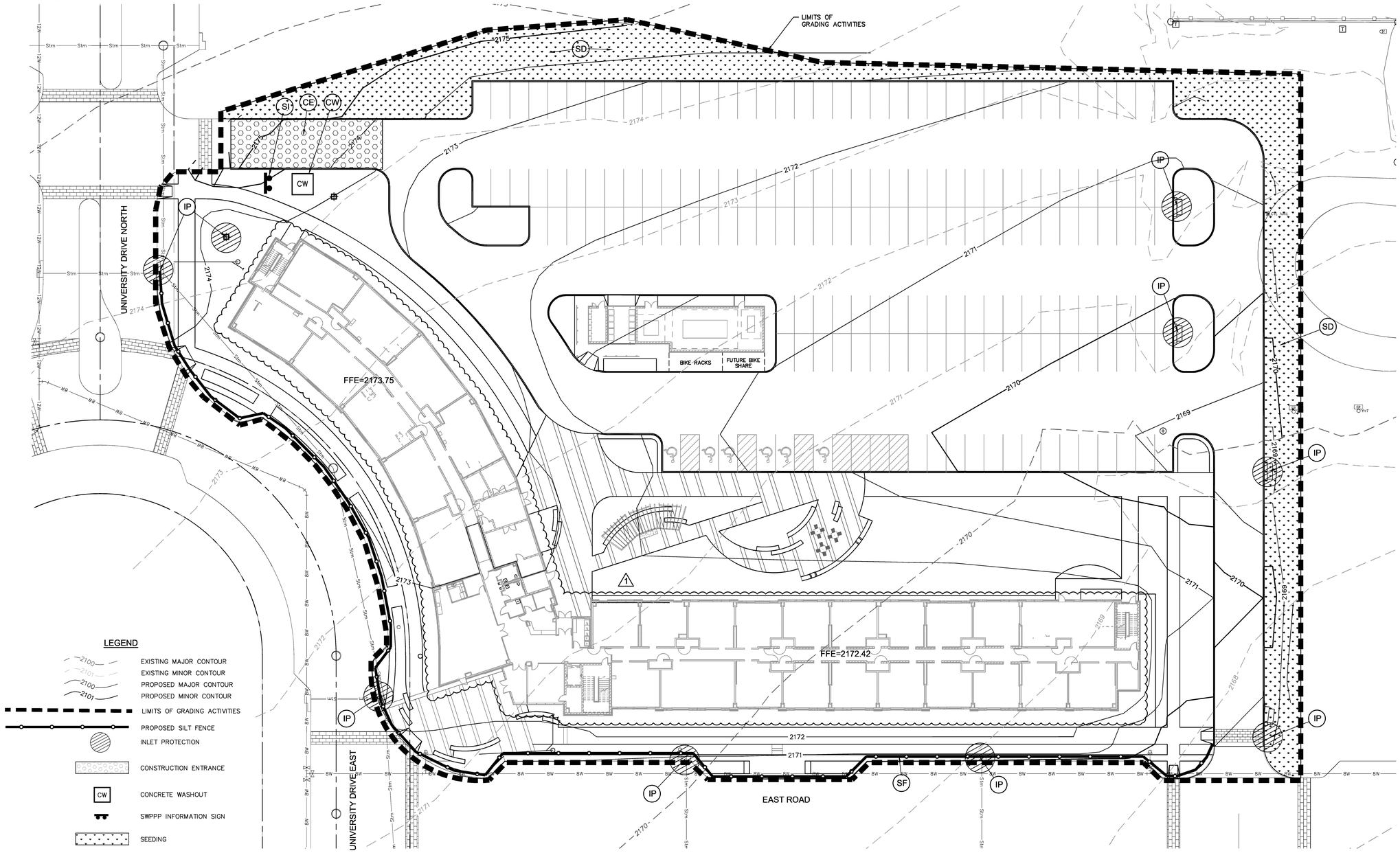
SCALE IN FEET

BMP IMPLEMENTATION SCHEDULE

SPECIFIED BMP	INSTALLATION	REQUIRED MAINTENANCE	REMOVAL
VEGETATED BUFFER/ FILTER STRIP	PRESERVE BUFFER STRIPS NEIGHBORING SENSITIVE AREAS	WEED AND PEST CONTROL, MOWING, FERTILIZING, IRRIGATING, AND PRUNING, INSPECT FOR VEGETATION FOR CONTINUED ESTABLISHMENT	ADOPT BUFFER INTO FINAL LANDSCAPE
CONSTRUCTION ENTRANCE	UPON MOBILIZATION OF GRADING CONTRACTOR	ADD OR REPLACE ROCK AS REQUIRED TO MAINTAIN FUNCTIONALITY	COMPLETION OF STREET PAVING.
SILT FENCE	IMMEDIATELY FOLLOWING CLEARING AND GRUBBING AROUND PERIMETER	REPAIR WASH-OUTS, DOWNED FABRIC, AND REMOVE SEDIMENT WHEN DEPTH IS ½ THE HEIGHT OF THE FABRIC.	95% VEGETATIVE COVER ON UPSTREAM AREAS.
DIVERSION DIKE	IMMEDIATELY FOLLOWING CLEARING AND GRUBBING AROUND PERIMETER	REMOVE SEDIMENT BUILDUP WHICH WILL PREVENT DRAINAGE	95% VEGETATIVE COVER ON UPSTREAM AREAS.
TEMPORARY SEEDING	IMMEDIATELY FOLLOWING MAJOR GRADING AND INSTALLATION OF EROSION CONTROL PRACTICES	RE-SEED AREAS WHICH FAIL TO ESTABLISH VEGETATIVE COVER; CONTROL WEEDS; ENSURE GOOD STAND IS MAINTAINED	N/A
CONCRETE WASHOUT	UPON MOBILIZATION OF UTILITY CONTRACTOR	REMOVE CONCRETE RUBBLE AS REQUIRED TO MAINTAIN FUNCTIONALITY	COMPLETION OF STREET PAVING.
STORM DRAIN INLET PROTECTION	IMMEDIATELY FOLLOWING INSTALLATION OF STORM SEWER	REMOVE SEDIMENT WHEN DEPTH IS ½ THE HEIGHT OF THE FABRIC.	COMPLETION OF STREET PAVING.
PERMANENT SEEDING	IMMEDIATELY FOLLOWING FINISHED GRADING AND INSTALLATION OF EROSION CONTROL PRACTICES	RE-SEED AREAS WHICH FAIL TO ESTABLISH VEGETATIVE COVER; CONTROL WEEDS; ENSURE GOOD STAND IS MAINTAINED	N/A
HYDROSEEDING/ HYDROMULCHING	IMMEDIATELY FOLLOWING FINISHED GRADING	INSPECT FOR EROSION, ADD MULCH AND/OR SEED AS NECESSARY	N/A
MULCHING		INSPECT FOR EROSION, ADD MULCH AS NECESSARY UNTIL GRASSES ARE FIRMLY ESTABLISHED	N/A



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UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

EROSION AND SEDIMENT CONTROL PLAN

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
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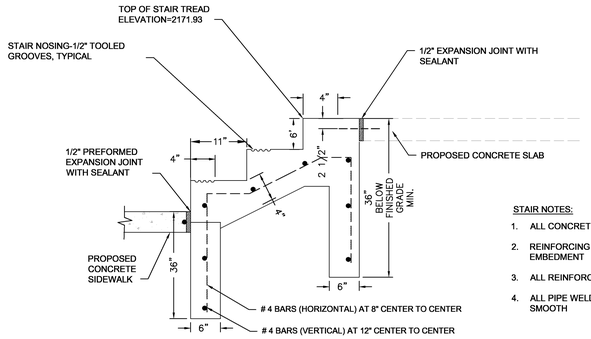
PAVING LEGEND

8" HEAVY DUTY CONCRETE PAVEMENT

6" CONCRETE SIDEWALK

LEGEND

- TELEPHONE RISER
- FIBER OPTIC BOX
- CABLE VAULT
- 1" IRON PIPE
- CONTROL POINT
- FIRE HYDRANT
- EXISTING CURB AND GUTTER
- GRAVEL ROAD
- EXISTING GAS LINE
- EXISTING FIBER OPTIC LINE
- CROP LINE
- EXISTING FENCE
- PROPOSED BACK OF CURB
- PROPOSED WATER MAIN
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED GAS SERVICE
- PROPOSED ELECTRICAL SERVICE
- PROPOSED STORM SEWER CURB INLET
- PROPOSED STORM SEWER AREA INLET
- SAWCUT EXISTING PAVEMENT

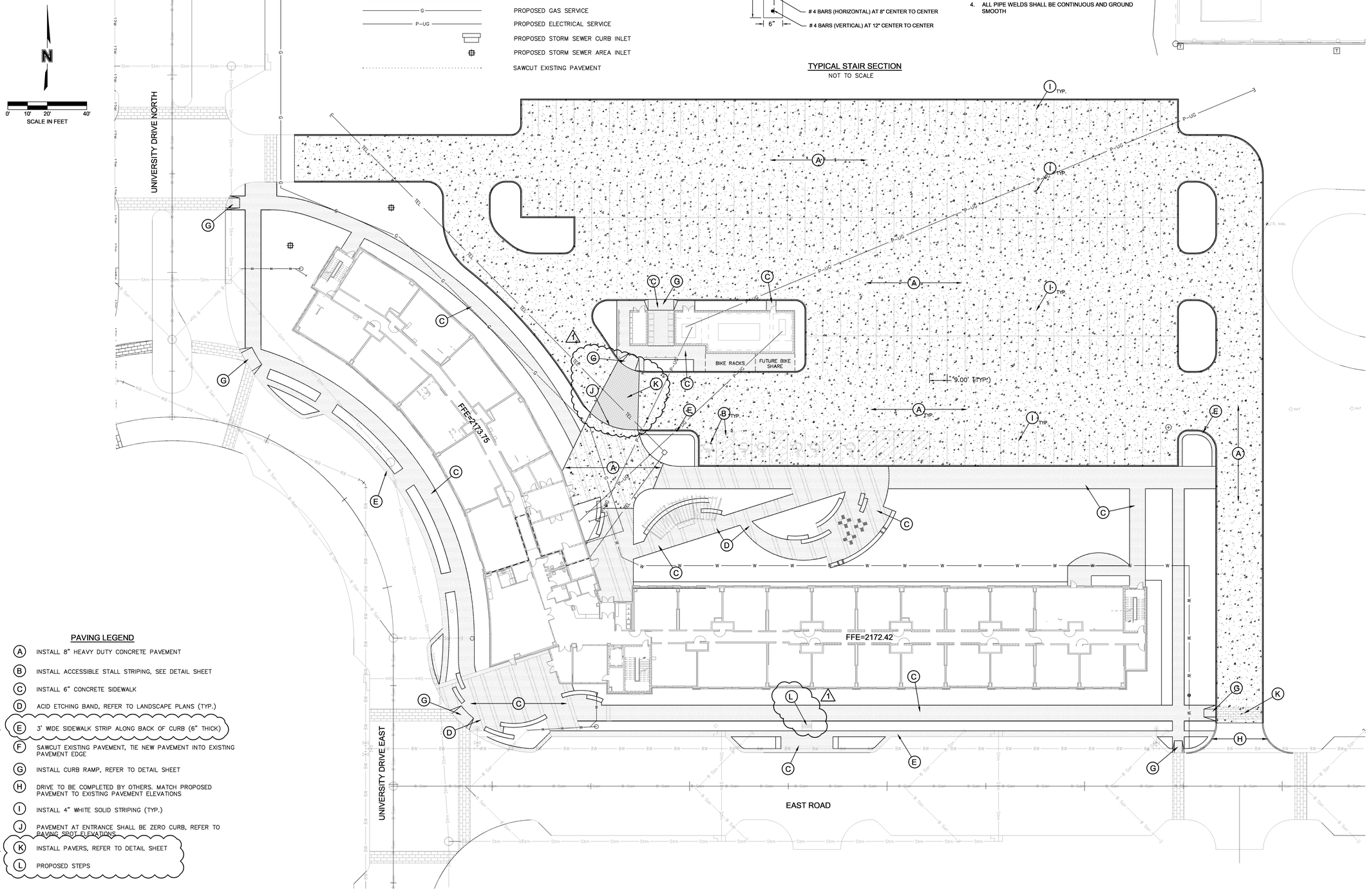


STAIR NOTES:

1. ALL CONCRETE SHALL BY L-3500
2. REINFORCING BARS SHALL HAVE A MINIMUM 2" EMBEDMENT
3. ALL REINFORCING BARS SHALL BE EPOXY COATED
4. ALL PIPE WELDS SHALL BE CONTINUOUS AND GROUND SMOOTH

TYPICAL STAIR SECTION

NOT TO SCALE



PAVING LEGEND

- (A) INSTALL 8" HEAVY DUTY CONCRETE PAVEMENT
- (B) INSTALL ACCESSIBLE STALL STRIPING, SEE DETAIL SHEET
- (C) INSTALL 6" CONCRETE SIDEWALK
- (D) ACID ETCHING BAND, REFER TO LANDSCAPE PLANS (TYP.)
- 1 (E) 3' WIDE SIDEWALK STRIP ALONG BACK OF CURB (6" THICK)
- (F) SAWCUT EXISTING PAVEMENT, TIE NEW PAVEMENT INTO EXISTING PAVEMENT EDGE
- (G) INSTALL CURB RAMP, REFER TO DETAIL SHEET
- (H) DRIVE TO BE COMPLETED BY OTHERS. MATCH PROPOSED PAVEMENT TO EXISTING PAVEMENT ELEVATIONS
- (I) INSTALL 4" WHITE SOLID STRIPING (TYP.)
- (J) PAVEMENT AT ENTRANCE SHALL BE ZERO CURB, REFER TO PAVING SPOT ELEVATIONS
- 1 (K) INSTALL PAVERS, REFER TO DETAIL SHEET
- (L) PROPOSED STEPS

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UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

PAVING PLAN

HOLLAND BASHAM ARCHITECTS
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PROFESSIONAL CIVIL ENGINEER
ERIN S. BRIGHT
E-12443
STATE OF NEBRASKA

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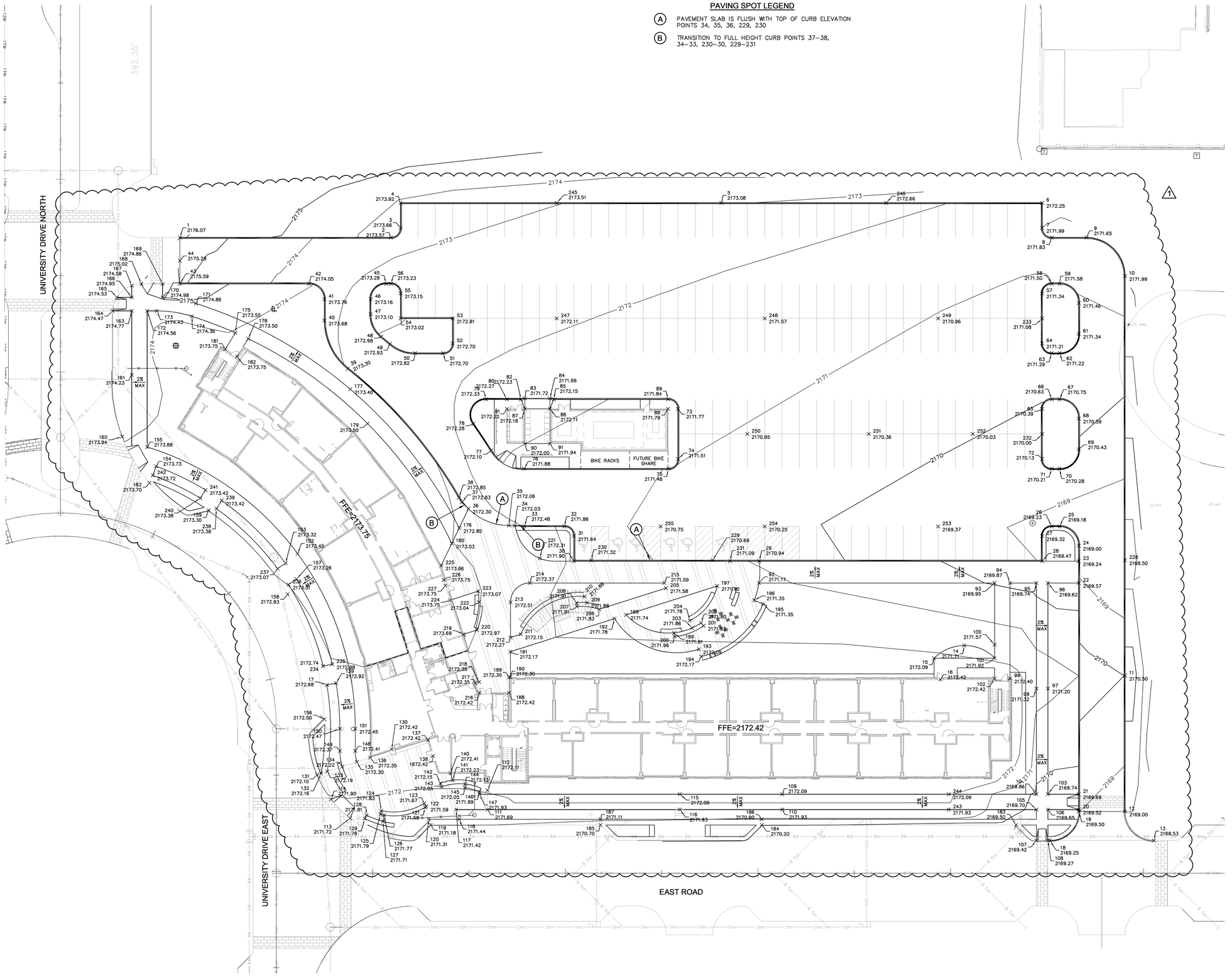
SCALE IN FEET

PAVING SPOT LEGEND

(A) PAVEMENT SLAB IS FLUSH WITH TOP OF CURB ELEVATION POINTS 34, 35, 36, 229, 230

(B) TRANSITION TO FULL HEIGHT CURB POINTS 37–38, 34–33, 230–30, 229–231



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1	REV01-ADD01	4.21.2015

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

PAVING SPOT ELEVATION PLAN

HOLLAND BASHAM ARCHITECTS
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Point Table				
POINT #	NORTHING	EASTING	ELEVATION	FULL DESCRIPTION
1	10233.5163	8017.2068	2176.070	TC, ME
2	10233.5163	8126.7052	2173.570	PC
3	10238.5163	8131.7052	2173.656	PT
4	10251.5163	8131.7052	2173.916	TC
5	10251.5163	8298.2052	2173.084	MP
6	10251.5163	8464.7052	2172.251	TC
7	10238.5163	8464.7052	2171.991	PC
8	10233.5163	8469.7052	2171.834	PT
9	10233.5163	8487.7090	2171.654	PC
10	10213.5163	8507.7090	2171.993	PT
11	10006.0175	8507.7090	2170.497	TC
12	9935.5187	8507.7090	2169.000	PC
13	9920.5187	8522.7090	2168.529	PT, ME
14	10021.7144	8424.2686	2171.706	MP
15	10015.1083	8408.6311	2172.093	TC
16	10004.0146	8411.9020	2172.421	BLDG
17	10001.2391	8093.4824	2172.680	SW
18	9920.5187	8468.7090	2169.250	PT, ME
19	9935.5187	8483.7090	2169.500	PC
20	9936.5160	8483.7090	2169.521	TC
21	9944.5160	8483.7090	2169.691	TC
22	10054.1836	8483.7090	2169.573	TC
23	10065.5163	8483.7090	2169.237	TC
24	10073.5163	8483.7090	2169.000	PC
25	10083.5163	8473.7090	2169.184	PT
26	10083.5163	8469.7019	2169.230	PC
27	10078.5163	8464.7052	2169.322	PT
28	10065.5163	8464.7052	2169.474	TC
29	10065.5163	8317.8845	2170.943	TC
30	10065.5163	8221.7052	2171.904	TC
31	10078.5163	8221.7052	2171.644	PC
32	10083.5163	8216.7052	2171.856	PT
33	10083.5163	8195.9199	2172.480	TC
34	10084.0163	8190.9449	2172.033	TS
35	10084.0163	8187.9095	2172.064	PC, TS
36	10092.7343	8166.9725	2172.296	TS
37	10096.0672	8163.5061	2172.830	TC, PC
38	10098.4621	8161.9601	2172.850	PT, PC
39	10165.3789	8104.2558	2173.300	PT, PC
40	10190.3962	8092.2090	2173.678	PT
41	10201.5163	8092.2090	2173.756	PC
42	10209.5163	8084.2090	2174.046	PT
43	10209.5163	8017.2070	2175.590	TC, ME
44	10221.4479	8017.2069	2175.275	ME
45	10209.5163	8124.2090	2173.282	HP, PC
46	10201.5163	8116.2090	2173.156	PT
47	10193.7406	8116.2090	2173.096	PC
48	10182.1286	8121.7138	2172.982	PT, PC
49	10178.3230	8126.2621	2172.932	PT, PC
50	10173.5163	8139.2683	2172.822	PT
51	10173.5163	8153.7052	2172.704	PC
52	10178.5163	8158.7052	2172.702	PT
53	10191.5163	8158.7052	2172.813	TC
54	10191.5163	8131.7052	2173.023	TC
55	10204.5163	8131.7052	2173.153	PC
56	10209.5163	8126.7052	2173.232	PT
57	10204.5163	8464.7052	2171.343	PC
58	10209.5163	8469.7052	2171.500	PT
59	10209.5163	8473.7090	2171.580	HP, PC
60	10199.5163	8483.7090	2171.462	PT
61	10183.5163	8483.7090	2171.342	PC
62	10173.5163	8473.7090	2171.224	PT
63	10173.5163	8469.7052	2171.291	PC
64	10178.5163	8464.7052	2171.213	PT
65	10144.5163	8464.7052	2170.394	PC
66	10149.5163	8469.7052	2170.630	PT
67	10149.5163	8473.7090	2170.750	PC
68	10139.5163	8483.7090	2170.593	PT
69	10123.5163	8483.7090	2170.433	PC
70	10113.5163	8473.7090	2170.276	PT
71	10113.5163	8469.7052	2170.213	PC
72	10118.5163	8464.7052	2170.134	PT
73	10144.5163	8275.7052	2171.765	PT
74	10118.5163	8275.7052	2171.511	PC
75	10113.5163	8270.7052	2171.485	PT

Point Table				
POINT #	NORTHING	EASTING	ELEVATION	FULL DESCRIPTION
76	10113.5163	8195.8379	2171.880	PC
77	10122.9873	8178.8338	2172.096	PT, PC
78	10136.8820	8169.6081	2172.283	PT, PC
79	10149.5163	8176.1291	2172.328	PT
80	10149.5163	8186.8874	2172.272	TC
81	10144.5550	8186.8874	2172.225	SW
82	10149.5163	8194.2207	2172.235	TC
83	10150.0163	8196.2207	2171.724	TS
84	10150.0163	8209.2207	2171.657	TS
85	10149.5163	8211.2207	2172.147	TC
86	10144.5550	8209.2207	2172.109	SW
87	10144.5550	8196.2207	2172.176	SW
88	10144.5550	8270.5540	2171.791	SW
89	10149.5163	8270.5540	2171.840	PC
90	10126.5550	8196.2207	2172.003	SW
91	10126.5550	8209.2207	2171.936	SW
92	10054.1836	8317.7176	2171.171	SW
93	10054.1836	8440.0061	2169.950	SW
94	10054.1836	8448.0061	2169.869	SW
95	10054.1836	8461.7080	2169.740	SW
96	10054.1836	8467.7080	2169.620	SW
97	9999.3498	8467.7080	2171.202	SW
98	9999.3498	8461.7080	2171.322	SW
99	10004.5980	8448.0061	2172.397	SW
100	10022.0831	8440.0061	2171.568	SW
101	10015.1083	8440.0061	2171.920	SW, PC
102	10004.5980	8440.0061	2172.420	SW
103	9944.5160	8467.7080	2169.740	SW
104	9944.5160	8461.7080	2169.860	SW
105	9936.5157	8461.7080	2169.700	SW
106	9936.5157	8467.7080	2169.648	SW
107	9920.5187	8461.7080	2169.422	TC, ME
108	9920.5181	8467.7080	2169.274	TC, ME
109	9944.5171	8329.8363	2172.090	SW
110	9936.5157	8329.8330	2171.930	SW
111	9936.5157	8176.8484	2171.695	SW
112	9946.5167	8176.8484	2172.112	SW
113	9932.0171	8105.5738	2171.724	SW, TC
114	9941.8455	8095.6739	2171.897	SW, TC
115	9944.5157	8276.6302	2172.090	SW
116	9936.5157	8276.6302	2171.930	SW
117	9936.5157	8160.5239	2171.420	SW
118	9931.5166	8162.1133	2171.437	SW
119	9928.5165	8147.3273	2171.179	TC, ME
120	9931.5165	8146.3735	2171.311	SW
121	9937.6711	8144.4167	2171.581	BW
122	9938.0755	8145.0849	2171.595	BW
123	9939.7738	8144.0286	2171.672	BW
124	9935.9567	8121.6996	2171.827	BW
125	9934.0039	8121.2674	2171.789	BW
126	9933.6428	8123.1703	2171.775	BW
127	9930.3931	8122.6549	2171.710	BW
128	9933.6580	8114.0389	2171.813	BW
129	9931.8697	8113.1432	2171.782	BW
130	9967.8424	8127.1067	2172.420	TC
131	9954.5522	8088.3609	2172.101	SW
132	9955.2472	8090.4999	2172.158	SW
133	9956.2898	8093.7087	2172.191	SW
134	9958.7999	8101.4340	2172.220	BW
135	9961.2725	8109.0439	2172.300	SW
136	9963.5031	8115.9090	2172.350	BLDG
137	9972.6338	8145.8981	2172.420	BLDG
138	9964.3774	8148.5672	1872.420	BLDG
139	10002.2007	8098.2612	2172.920	SW
140	9955.4105	8157.5978	2172.414	BLDG
141	9951.7725	8158.7544	2172.228	BW
142	9950.2140	8152.3213	2172.148	BW
143	9948.3060	8152.9279	2172.048	BW
144	9949.8271	8165.3093	2172.126	BW
145	9947.8393	8165.0881	2172.046	BW
146	9945.7725	8172.6225	2171.992	BW
147	9944.5160	8172.6225	2171.928	BW
148	9966.9668	8108.2093	2172.414	PT, PC, SW
149	9966.9668	8100.2093	2172.368	PT, PC, SW
150	9978.5119	8100.2093	2172.473	PT, PC, SW

Point Table				
POINT #	NORTHING	EASTING	ELEVATION	FULL DESCRIPTION
151	9978.5119	8108.2093	2172.446	PT, PC, SW
152	10069.4088	8078.2828	2173.450	SW
153	10064.4147	8072.0256	2173.321	SW
154	10114.7416	8004.8836	2173.731	SW
155	10124.7485	8000.2100	2173.881	SW
156	9983.3780	8092.1225	2172.500	TC, ME
157	10056.1588	8077.6683	2173.262	TS
158	10048.2849	8073.1040	2172.926	TC, ME
159	10091.8910	8032.1158	2173.300	TC, ME
160	10130.2021	7987.2115	2173.939	SW
161	10162.2503	7992.2100	2174.230	SW
162	10106.1470	8001.3285	2173.700	ME
163	10195.4476	7992.2100	2174.768	SW
164	10195.4476	7982.2405	2174.473	SW
165	10202.4476	7984.5185	2174.533	SW
166	10202.4476	7992.2100	2174.950	SW
167	10208.5909	7992.2100	2174.584	TC, ME
168	10209.4477	7997.2070	2175.024	TC, ME
169	10209.4328	8008.2068	2174.859	TC, ME
170	10202.3799	8008.2068	2174.981	SW, PC
171	10199.2876	8025.5287	2174.860	SW
172	10195.4476	8000.2100	2174.555	SW
173	10195.4476	8005.1950	2174.425	SW, PC
174	10192.6177	8023.4043	2174.358	SW, PC
175	10184.0541	8046.0073	2173.550	SW
176	10082.7114	8162.1604	2172.852	SW
177	10154.7769	8105.5997	2173.400	SW
178	10181.0063	8052.6150	2173.500	SW
179	10136.9114	8114.5872	2173.500	SW
180	10074.6683	8158.2989	2173.031	SW
181	10175.5780	8040.7108	2173.752	BLDG
182	10171.7173	8046.8106	2173.752	BLDG
183	9928.5180	8451.2079	2169.500	TC, ME
184	9928.5170	8319.2079	2170.200	TC, ME
185	9928.5163	8235.4586	2170.700	TC, ME
186	9931.5178	8319.0851	2170.898	TS
187	9931.5172	8235.4585	2171.114	TS
188	9997.2021	8188.0061	2172.420	BLDG
189	10005.2021	8188.0061	2172.300	BLDG
190	10005.2230	8188.7126	2172.300	BLDG
191	10018.4929	8188.7126	2172.170	SW
192	10035.6820	8242.7779	2171.782	SW, PC
193	10019.7827	8286.5690	2172.090	SW, PT
194	10016.0038	8287.7704	2172.173	SW, PC
195	10043.2950	8319.8550	2171.346	SW, PT
196	10045.1759	8315.2222	2171.355	SW, PC
197	10052.6158	8296.0403	2171.400	SW
198	10037.6050	8248.8264	2171.739	SW
199	10028.3025	8273.6731	2171.915	BW
200	10026.3126	8273.8736	2171.956	BW
201	10031.9523	8289.0300	2171.830	BW
202	10033.4492	8287.6797	2171.800	BW
203	10030.8323	8283.0560	2171.857	BW
204	10034.6753	8281.8341	2171.779	BW
205	10051.5179	8269.4837	2171.585	SW
206	10040.4889	8234.7938	2171.834	SW
207	10041.9424	8223.2269	2171.913	BW
208	10043.9337	8223.0404	2171.912	BW
209	10043.9369	8228.3971	2171.875	BW
210	10047.1535	8227.1493	2171.881	BW
211	10027.5379	8194.0588	2172.146	SW
212	10025.8649	8188.7969	2172.266	SW
213	10044.1836	8188.7969	2172.512	SW, PC
214	10054.1836	8198.7969	2172.374	SW, PT
215	10054.1836	8268.6362	2171.588	SW
216	9997.2021	8172.7145	2172.420	BLDG
217	10002.1710	8170.5658	2172.350	BLDG
218	10002.7882	8172.4654	2172.350	BLDG
219	10027.5146	8164.4341	2173.693	BLDG
220	10029.7964	8171.4567	2172.969	SW
221	10066.9723	8203.9632	2172.306	BW
222	10044.2721	8172.3519	2173.041	BW
223	10049.9594	8172.0204	2173.074	SW
224	10045.2091	8157.4006	2173.750	BLDG
225	10063.2540	8152.8189	2173.664	BLDG

Point Table				
POINT #	NORTHING	EASTING	ELEVATION	FULL DESCRIPTION
226	10055.7126	8154.1302	2173.750	BLDG
227	10052.8176	8154.9284	2173.750	BLDG
228	10066.0163	8507.7090	2168.500	LP
229	10066.0163	8293.7052	2170.686	TS
230	10066.0163	8230.7052	2171.319	TS
231	10065.5163	8302.7052	2171.094	TS
232	10131.5163	8464.7052	2170.004	TS
233	10191.5163	8464.7052	2171.083	TS
234	10011.0374	8091.4836	2172.739	SW
235	10012.0042	8096.2884	2172.979	SW
236	10053.3413	8073.5460	2173.011	SW
237	10061.5899	8067.8926	2173.072	SW
238	10092.7302	8036.1255	2173.380	SW
239	10096.9354	8038.8845	2173.420	SW
240	10098.2180	8027.7658	2173.380	SW
241	10102.4213	8030.5236	2173.420	SW
242	10110.0412	8003.1694	2173.718	SW
243	9936.5157	8416.2080	2171.929	SW
244	9944.5157	8416.2080	2172.089	SW
245	10251.5163	8212.7052	2173.511	TC
246	10251.5163	8383.7052	2172.656	TC
247	10191.5163	8212.7052	2172.108	TS
248	10191.5163	8320.7052	2171.567	TS
249	10191.5163	8410.7052	2170.960	TS
250	10131.5163	8311.7052	2170.852	TS
251	10131.5163	8374.7052	2170.363	TS
252	10131.5163	8428.7052	2170.034	TS
253	10083.5163	8410.7052	2169.371	TS
254	10083.5163	8320.7052	2170.250	TS
255	10083.5163	8266.7052	2170.750	TS

1

PAVING SPOT LEGEND

TC	=	TOP OF CURB ELEVATION
TS	=	TOP OF SLAB ELEVATION
PC	=	POINT OF CURVATURE
PT	=	POINT OF TANGENCY
ME	=	MATCH EXISTING PAVEMENT
BW	=	BOTTOM OF WALL ELEVATION
BLDG	=	ELEVATION AT BUILDING
MP	=	MIDPOINT
HP	=	HIGH POINT
LP	=	LOW POINT
RX'	=	RADIUS POINT

NOTE: ALL ELEVATIONS ARE TOP OF CURB ELEVATIONS UNLESS OTHERWISE NOTED

OLSSON ASSOCIATES

601 P Street, Suite 200
P.O. Box 84608
Lincoln, NE 68508

TEL 402.474.6311
FAX 402.474.5160

www.olssonassociates.com

No.	Description	Date
1	REV01-ADD01	4.21.2015

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

PAVING SPOT ELEVATION TABLE

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROFESSIONAL CIVIL ENGINEER
ERIN S. BRIGHT
E-12443
STATE OF NEBRASKA

PROJECT:15097
DATE: 4/1/2016

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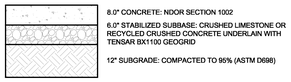
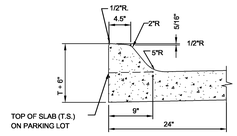
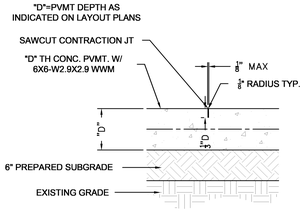


CONCRETE PAVEMENT (HEAVY DUTY)

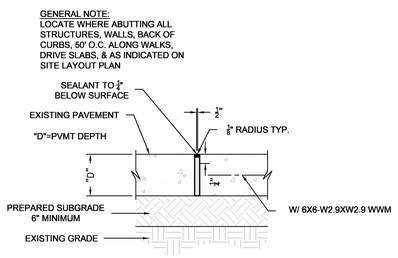
PAVING DETAILS
NOT TO SCALE



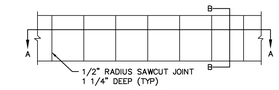
STANDARD 24" CURB & GUTTER DETAIL
NOT TO SCALE



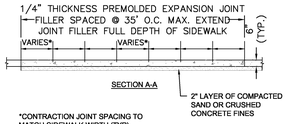
CONCRETE CONTRACTION JOINT
NOT TO SCALE



CONCRETE EXPANSION JOINT
NOT TO SCALE



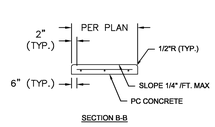
PLAN VIEW



SECTION A-A

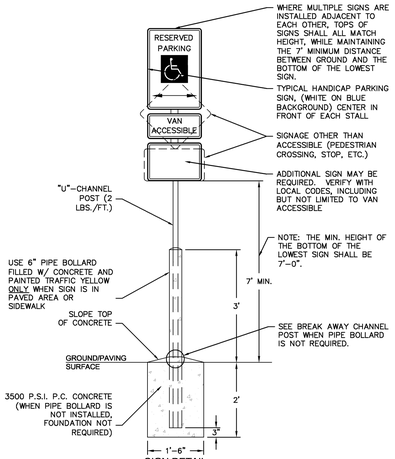
*CONTRACTION JOINT SPACING TO MATCH SIDEWALK WIDTH (TYP) UNLESS OTHERWISE NOTED ON THE PLANS

NOTE:
1. PROVIDE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND ALL FIXED OBJECTS
2. REINFORCEMENT WILL BE 6 x 6 - W1.4 X W1.4 WWF
3. ALL JOINTS TO BE SEALED WITH POLYURETHANE SEALANT
4. NON-SLIP BROOM FINISH FREE OF TROWEL MARKS EXCEPT FOR EDGING TOOL.

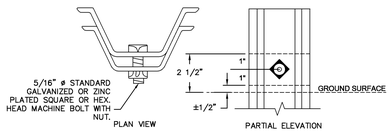


SECTION B-B

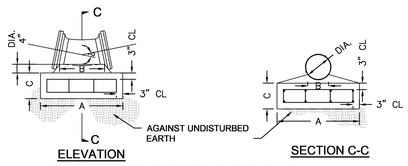
CONCRETE SIDEWALK
NOT TO SCALE



SIGN DETAIL

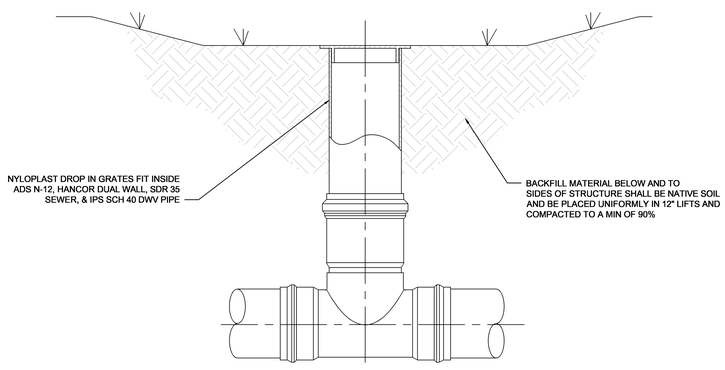


BREAK AWAY CHANNEL POST DETAIL
NOT TO SCALE

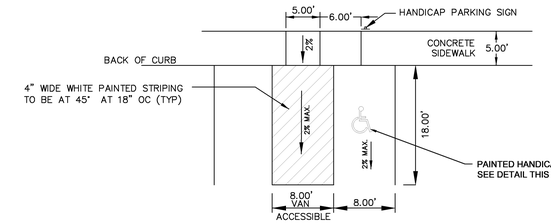


REINFORCED CONCRETE THRUST BLOCKS
NOT TO SCALE

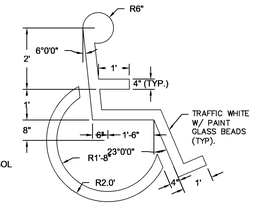
DIA.	A	B	C	ROUND BAR SIZE	# OF BARS EACH WAY	STEEL LBS.	CONC. CU. FEET
				Θ = 11 1/4°			
4"	1'-3"	0'-9"	0'-9"	-	-	2.0	0.1
				Θ = 22 1/2°			
	1'-6"	0'-9"	0'-9"	-	-	2.7	0.1
				Θ = 45°			
	1'-9"	1'-3"	1'-0"	-	-	5.0	0.3
				Θ = 90°			
	2'-3"	1'-0"	1'-0"	-	-	7.0	0.3



TYPICAL DROP-IN GRATE INSTALLATION
NOT TO SCALE

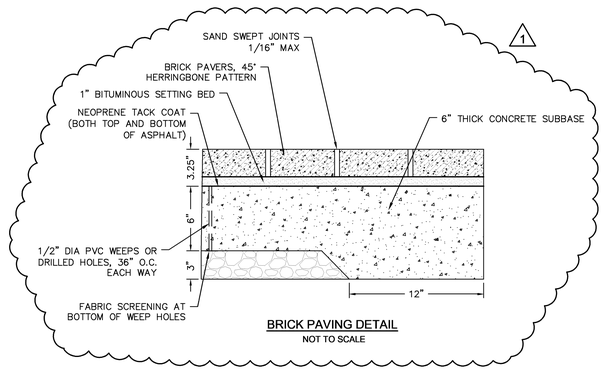


TYPICAL ADA PARKING STALL DETAIL

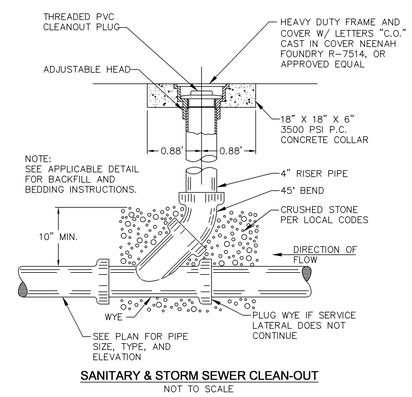


NOTE: SYMBOL TO BE CENTERED IN PARKING SPACE AND ORIENTED AS ILLUSTRATED ON PLANS.

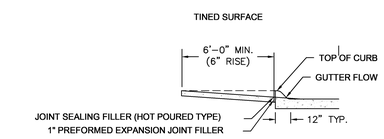
HANDICAP PARKING PAVEMENT MARKING DETAIL
NOT TO SCALE



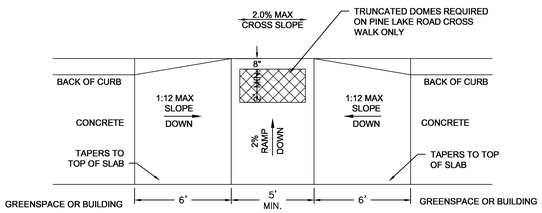
BRICK PAVING DETAIL
NOT TO SCALE



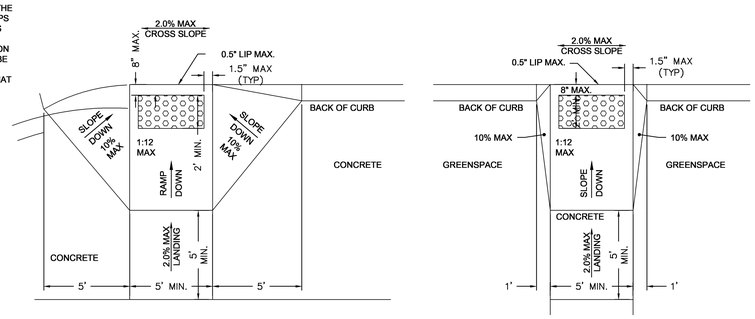
SANITARY & STORM SEWER CLEAN-OUT
NOT TO SCALE



TYPICAL RAMP PROFILE



NOTE:
ALL RAMP AREAS SHALL BE 6" THICK. THE WORK OF CONSTRUCTING THESE RAMPS SHALL BE MEASURED AND PAID FOR AS PART OF THE WORK FOR CONCRETE SIDEWALK. THE WORK OF MODIFICATION OF NEW OR EXISTING CURB WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO ITEMS THAT WORK IS BEING PAID.



TYPICAL CURB RAMPS
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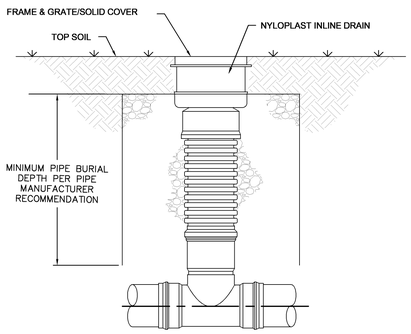

TYPICAL INLINE DRAIN INSTALLATION
NOT TO SCALE

OLSSON ASSOCIATES
601 P Street, Suite 200
P.O. Box 84608
Lincoln, NE 68508
TEL 402.474.6311
FAX 402.474.5160
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No.	Description	Date
1	REV01-ADD01	4.21.2015

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

DETAIL PLAN

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROFESSIONAL CIVIL ENGINEER — ERIN S. BRIGHT E-12443 — STATE OF NEBRASKA

PROJECT:15097
DATE: 4/1/2016

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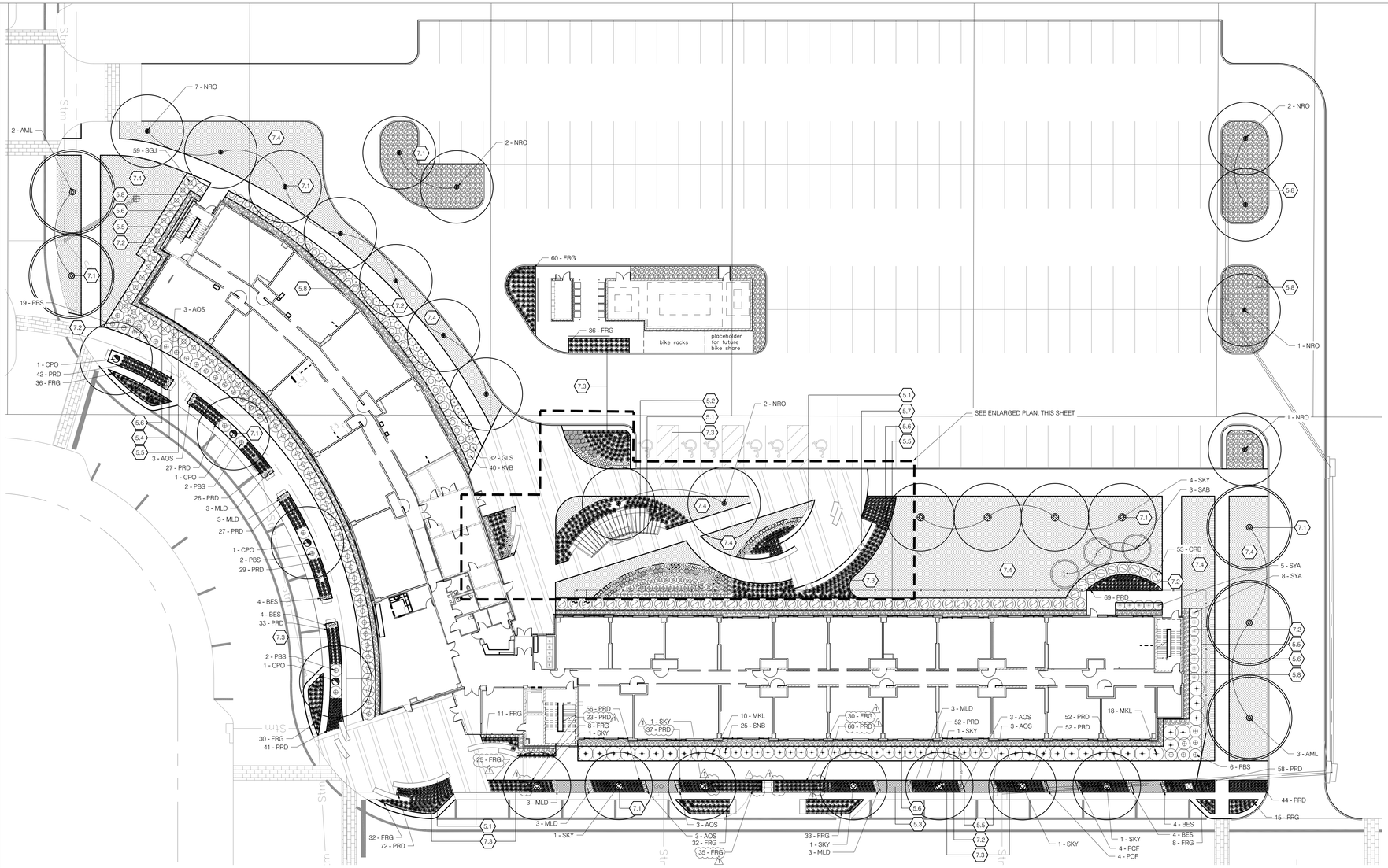


01 Overall Landscape Plan

1" = 20'

0 10 20 40 N

MATERIAL KEYNOTES

0.0 EXISTING CONDITIONS
- 0.1 NOT USED

1.0 PAVING
- 1.1 NOT USED

2.0 JOINTING
- 2.1 NOT USED

3.0 CURBS, EDGES, STEPS
- 3.1 NOT USED

4.0 WALLS
- 4.1 NOT USED

5.0 SITE FURNISHINGS & SITE ELEMENTS
- 5.1 SEAT WALL; RE:CIVIL
- 5.2 PERGOLA; RE: ARCH
- 5.3 FLAGSTONE WALK THROUGH — DTL 06/L2.00
- 5.4 4' BENCH; RE:ARCH
- 5.5 ALUMINUM EDGING — DTL 01/L2.00
- 5.6 MOW EDGE — DTL 01/L2.00
- 5.7 OUTDOOR GRILL; RE: ARCH
- 5.8 DECOMPOSED GRANITE — DTL 01/L2.00

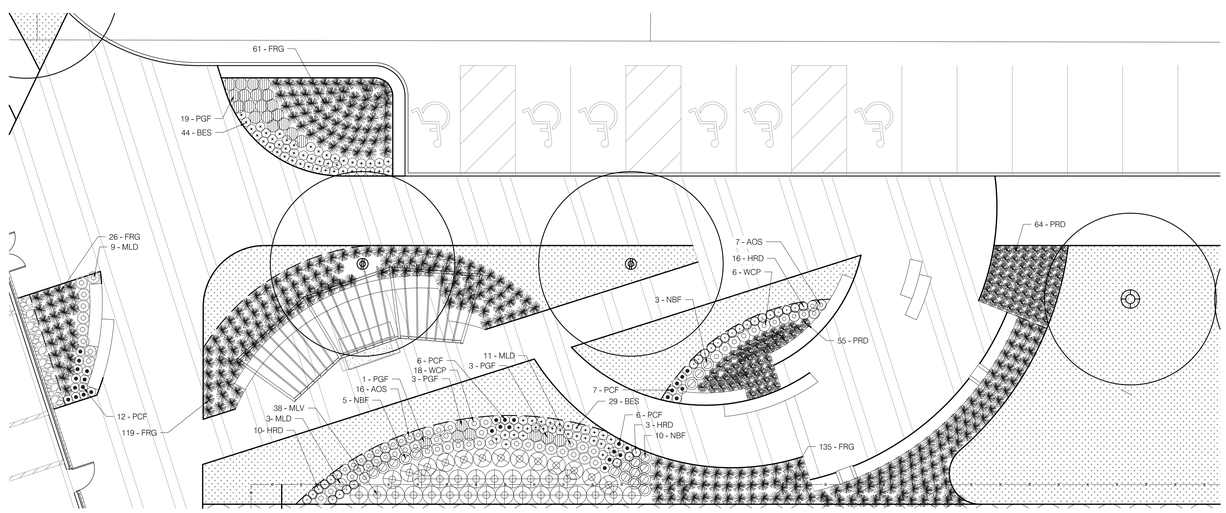
6.0 SITE LIGHTING
- 6.1 STREET LIGHT; BY OTHERS

7.0 PLANTING
- 7.1 DECIDUOUS TREE — DTL 03/L2.00
- 7.2 SHRUB PLANTING — DTL 05/L2.00
- 7.3 PERENNIAL PLANTING BED — DTL 04/L2.00
- 7.4 SODDED TURF LAWN

SYM	QTY	COMMON.NAME	BOTANICAL.NAME	PLANTING.SIZE	NOTES	SPACING
DECIDUOUS TREES						
SKY	11	Honeylocust, Skyline	Gleditsia triacanthos inermis Skyline	2" CAL	B&B	As shown
AML	5	Linden, American	Tilia americana	3" CAL	B&B	As shown
CPO	4	Oak, Chinkapin	Quercus muehlenbergii	2" CAL	B&B	As shown
NRO	15	Oak, Northern Red	Quercus rubra	2" CAL	B&B	As shown
ORNAMENTAL TREES						
SAB	3	Serviceberry, Autumn Brilliance	Amelanchier x grandiflora 'Autumn Brilliance'	6' HT	MULTISTEM	As shown
DECIDUOUS SHRUBS						
PBS	31	Cherry, Creeping Western Sand	Prunus besseyi 'Pawnee Buttes'	5 GAL	CONT	4'-0" OC
CRB	53	Coralberry, Chenault	Symphoricarpos × chenaultii 'Hancock'	5 GAL	CONT	As shown
MKL	28	Lilac, Miss Kim	Syringa patula 'Miss Kim'	5 GAL	CONT	As shown
SNB	25	Ninebark, Summer Wine	Physocarpus 'Summer Wine'	5 GAL	CONT	As shown
SYA	13	Snowberry	Symphoricarpos albus	5 GAL	CONT	As shown
GLS	32	Sumac, Gro-Low Fragrant	Rhus aromatica 'Gro-Low'	5 GAL	CONT	As shown
KVB	40	Viburnum, Koreanspice	Viburnum carlesii	5 GAL	CONT	As shown
MLV	38	Viburnum, Maple Leaf	Viburnum acerifolium	5 GAL	CONT	As shown
EVERGREEN SHRUBS						
SGJ	59	Juniper, Sea Green	Juniper pfitzeriana 'Sea Green'	5 GAL	CONT	As shown
ORNAMENTAL GRASSES						
FRG	732	Feather Reed Grass	Calamagrostis acutiflora 'Karl Forester'	5 GAL	CONT	As shown
PRD	921	Prairie Dropseed	Sporobolus heterolepis	5 GAL	CONT	As shown
PERENNIAL | GROUNDCOVER						
AOS	41	Aster, October Skies	Aster oblongifolius 'October Skies'	1 GAL	CONT	As shown
BES	89	Black Eyed Susan	Rudbeckia fulgida	1 GAL	CONT	As shown
PCF	39	Coneflower, Purple	Echinacea purpurea	1 GAL	CONT	As shown
HRD	29	Daylily, Hapy Returns	Hemerocallis 'Happy Returns'	1 GAL	CONT	As shown
MLD	41	Daylily, Mauna Loa	Hemerocallis 'Mauna Loa'	1 GAL	CONT	As shown
NBF	18	Gaillardia, Blanket Flower	Gaillardia aristata	1 GAL	CONT	As shown
PGF	26	Gayfeather, Purple	Liatris spicata 'Floristan Purple'	1 GAL	CONT	As shown
WCP	24	Wine Cups / Poppy Mallow	Callirhoe involucrata	1 GAL	CONT	As shown

02 Plant Schedule

NTS



03 Enlarged Landscape Plan

1" = 10'

0 5 10 20 N

studioINSITE
1209 Harney, Unit 010, Omaha, Nebraska 68102
tel 402.281.1800

No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

Overall Landscape Plan

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15097
DATE: 04/01/16

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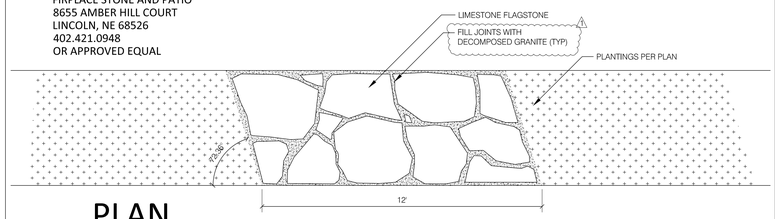
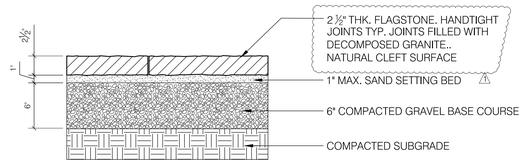
FLAGSTONE TO BE 'SANTA CRUZ IVORY'
AS DISTRIBUTED BY:
FIRPLACE STONE AND PATIO
8655 AMBER HILL COURT
LINCOLN, NE 68526
402.421.0948
OR APPROVED EQUAL

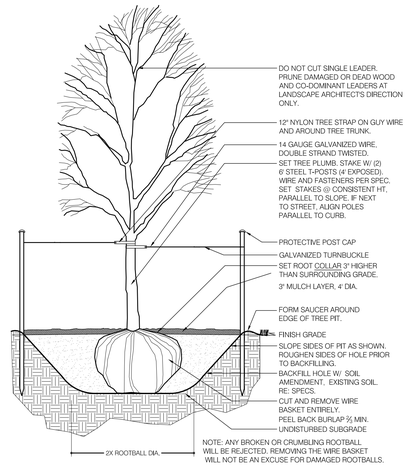


PLAN



SECTION

06 FLAGSTONE WALKTHROUGH DETAIL
NTS



03 DECIDUOUS TREE DETAIL
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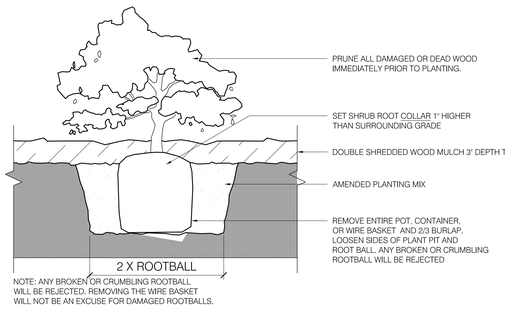
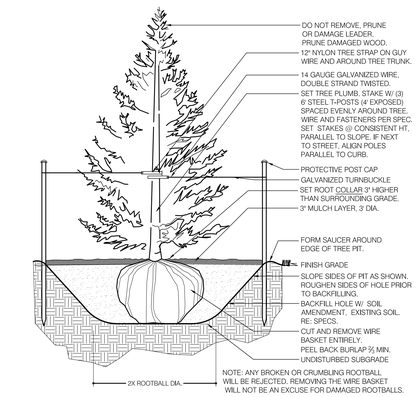
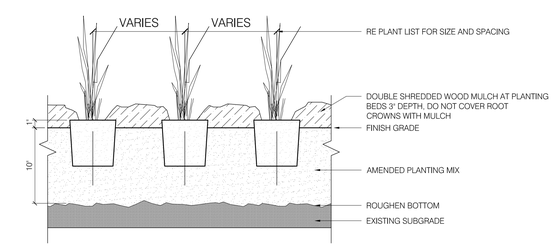


05 SHRUB PLANTING DETAIL
NTS



02 EVERGREEN TREE DETAIL
NTS



04 PERENNIAL PLANTING DETAIL
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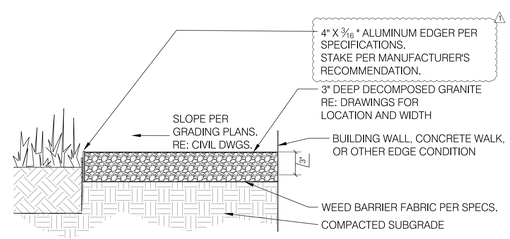

01 MOW EDGE DETAIL
NTS

studioINSITE
1209 Harney, Unit 010, Omaha, Nebraska 68102
tel 402.281.1800

No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

LANDSCAPE DETAILS

HOLLAND BASHAM ARCHITECTS
HBA
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROFESSIONAL LANDSCAPE ARCHITECT — MATTHEW BYRON SAWYER — 940 — STATE OF NEBRASKA — 4.1.16

PROJECT: 15097
DATE: 04/01/16

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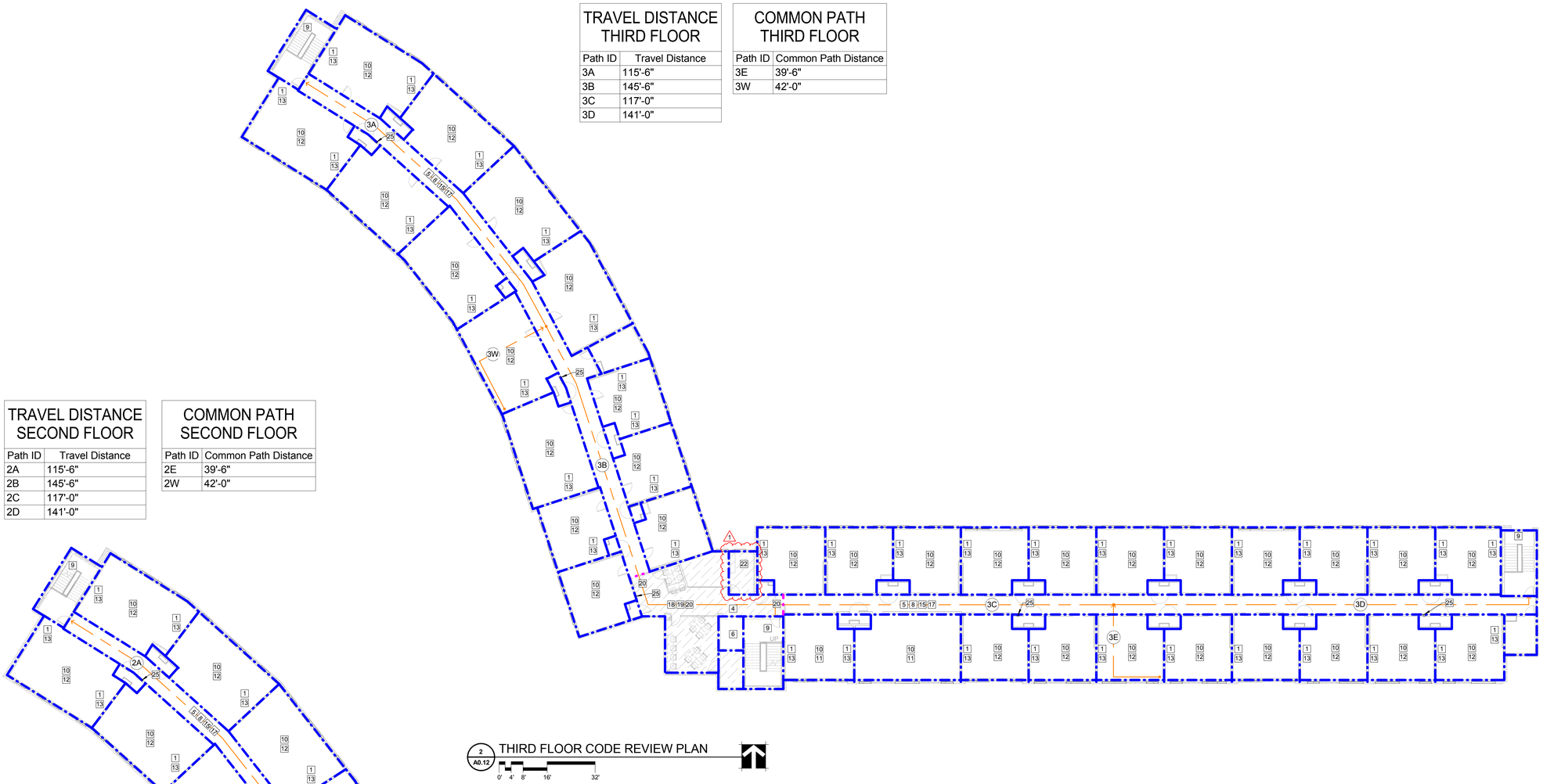
TRAVEL DISTANCE THIRD FLOOR	
Path ID	Travel Distance
3A	115'-6"
3B	145'-6"
3C	117'-0"
3D	141'-0"

COMMON PATH THIRD FLOOR	
Path ID	Common Path Distance
3E	39'-6"
3W	42'-0"

TRAVEL DISTANCE SECOND FLOOR	
Path ID	Travel Distance
2A	115'-6"
2B	145'-6"
2C	117'-0"
2D	141'-0"

COMMON PATH SECOND FLOOR	
Path ID	Common Path Distance
2E	39'-6"
2W	42'-0"



2 A0.12 THIRD FLOOR CODE REVIEW PLAN
0' 4' 8' 16' 32'

1 A0.12 SECOND FLOOR CODE REVIEW PLAN
0' 4' 8' 16' 32'

GENERAL CODE NOTES

1. SEE SHEET **A0.11** FOR GENERAL CODE NOTES.

BUILDING STATISTICS

1. SEE SHEET **A0.11** FOR BUILDING STATISTICS.

CODE SCHEDULE

1. SEE SHEET **A0.11** FOR THE CODE SCHEDULE.

KEYED CODE PLAN NOTES

1. SEE SHEET **A0.11** FOR THE KEYED CODE NOTES.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

CODE REVIEW PLANS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

CURTIS G. MITZENBURG
ARCHITECT
STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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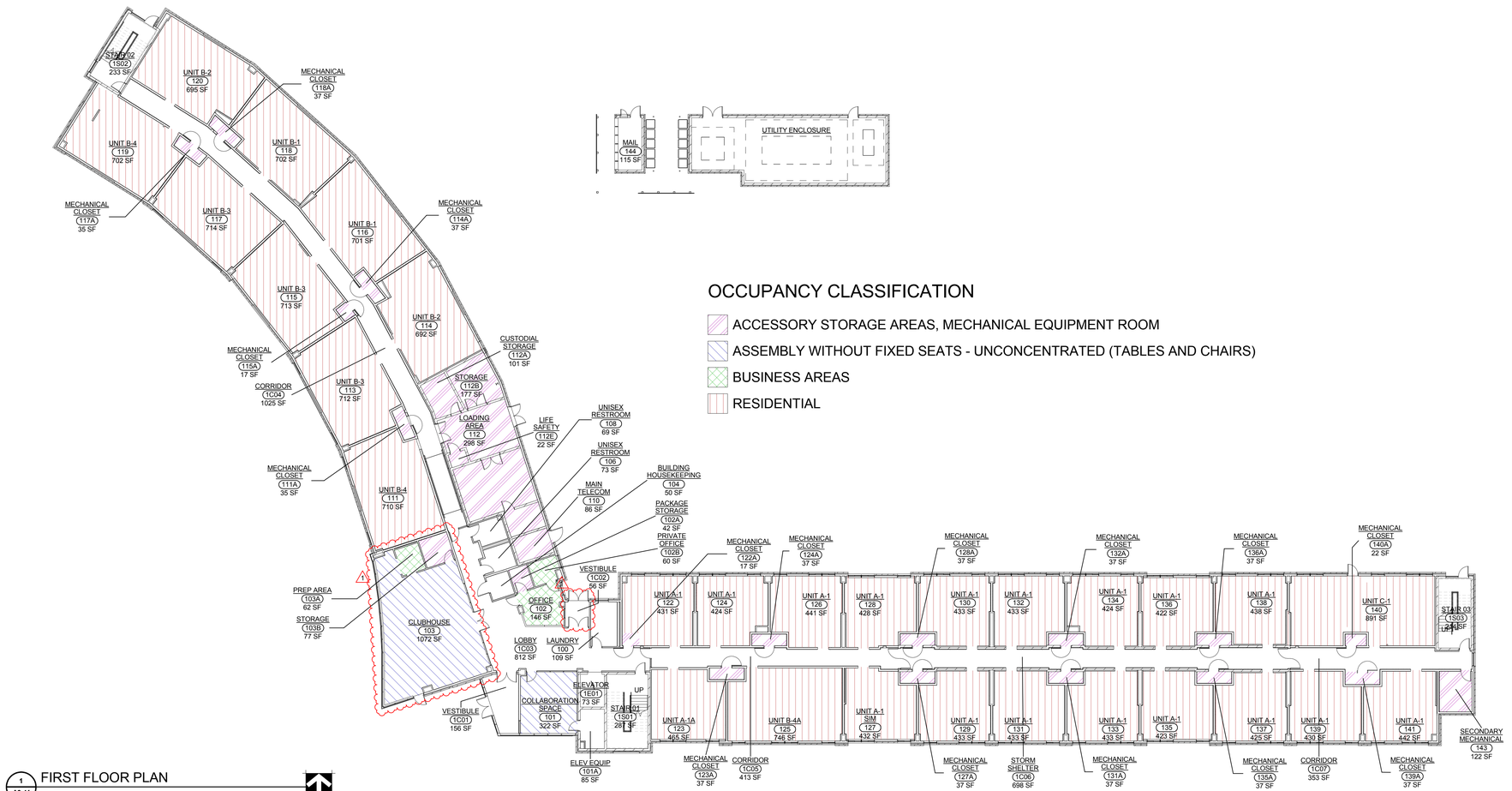

OCCUPANCY CLASSIFICATION

- ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM
- ASSEMBLY WITHOUT FIXED SEATS - UNCONCENTRATED (TABLES AND CHAIRS)
- BUSINESS AREAS
- RESIDENTIAL

1 A0.41 FIRST FLOOR PLAN

0' 4' 8' 16' 32'

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

OCCUPANCY REVIEW PLANS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15097
DATE: 04/01/16

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ARCHITECT CURTIS C. MITTENBUHL NE 10 STATE OF NEBRASKA

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GENERAL PLAN NOTES

1. ALL BOLD OR FULL-TONE LINES INDICATE NEW CONSTRUCTION, FIXTURES OR EQUIPMENT. ALL LIGHT OR HALF-TONE LINES INDICATE EXISTING CONSTRUCTION, FIXTURES OR EQUIPMENT.

2. ALL DIMENSIONS ARE TAKEN TO THE FACE OF EXISTING CONSTRUCTION OR THE FINISH FACE OF NEW CONSTRUCTION, UNLESS OTHERWISE NOTED ON THE PLANS. LIGHT OR HALF TONE DIMENSIONS ARE SHOWN FOR INFORMATION ONLY.

3. FIELD VERIFY ALL DIMENSIONS SHOWN ON THE PLANS WITH THE ACTUAL EXISTING CONDITIONS.

4. FINISH FLOOR ELEVATION = 100'-0" (2172.42 CIVIL ELEVATION), UNLESS OTHERWISE NOTED ON PLAN.

5. ALL NEW PARTITIONS SHOWN WITHIN THE LIMITS OF CONSTRUCTION ARE TYPE **A.1** UNLESS NOTED OTHERWISE.

6. SEE SHEET **A2.01** FOR PARTITION TYPES.

7. PROVIDE CONTINUOUS BLOCKING OR STRAPPING WITHIN NEW WALLS AS REQUIRED FOR ALL WALL MOUNTED CASEWORK, FIXTURES, ACCESSORIES AND EQUIPMENT. ANCHOR BLOCKING BETWEEN THE STUDS, AT THE FACE OF THE STUDS, FOR THE ENTIRE WIDTH OF THE ITEM TO BE MOUNTED ON THE WALL. ANCHOR 22 GA SHEET METAL STRAPPING TO THE FACE OF THE STUDS, FOR THE ENTIRE WIDTH OF THE ITEM TO BE MOUNTED ON THE WALL. VERIFY VERTICAL LOCATION OF BLOCKING WITH THE MOUNTING HEIGHT REQUIRED AND THE REQUIREMENTS OF THE ITEM TO BE MOUNTED ON THE WALL.

8. OWNER FURNISHED EQUIPMENT SHOWN DASHED ON PLAN, UNLESS OTHERWISE NOTED.

9. PROVIDE SELF-LEVELING CONCRETE FLOOR UNDERLAYMENT AS REQUIRED TO ACHIEVE A SMOOTH AND LEVEL SUBSTRATE FOR FLOOR FINISHES.

10. ALL FURNITURE IS NOT-IN-CONTRACT AND SHOWN FOR INFORMATION AND COORDINATION ONLY.

11. FOR DESIGNATED WALL RATING REFER TO BUILDING CODE REVIEW PLANS, SHEET **A0.11-A0.42**.

12. WHEN PARTITIONS OF DIFFERENT RATINGS ARE LOCATED ALONG THE SAME WALL, ALIGN FINISH FACE OF WALL AS REQUIRED.

13. FOR ALL INTERIOR FINISHES REFER TO ROOM FINISH SCHEDULE, SHEET **A1.31B**

14. SEE SHEETS **A5.21-A5.24** FOR UNIT PLAN INFORMATION

KEYED PLAN NOTES

☐ TAG USED FOR THIS SCHEDULE

1	SEE ARCHITECTURAL DETAILS FOR SLAB HEIGHT TRANSITION. SEE STRUCTURAL FOR EXTENTS OF SLAB EDGES
2	CENTER WALL TYPE ON COLUMN GRID.
3	CENTER DOOR ON COLUMN GRID.
4	EXPOSED COLUMNS TO RECIEVE INTUMESCENT COATING
5	1-HR RATED CHASE 2ND AND 3RD FLOOR ONLY.
6	POINT OF WALL TRANSITION
7	UNIT TYPE NOT SHOWN FOR CLARITY, SEE ENLARGED UNIT PLANS.
8	WASHER/DRYER. OWNER FURNISHED, CONTRACTOR INSTALLED
9	LOCATION OF ROOF DRAINS BELOW PAVER SYSTEM
10	SIDE FOLDING SECURITY GRILLE
11	ADA ACTUATOR PEDESTAL
12	PAVERS ON PEDESTALS BY MFR.
13	PAVERS ON 1/2" PEDESTALS BY MFR., MATCHING SLOPE OF ROOF BELOW
14	VENDING MACHINE, N.I.C.
15	ICE MAKER, N.I.C.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR PLAN - WEST WING & CENTER

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15097
DATE: 04/01/16

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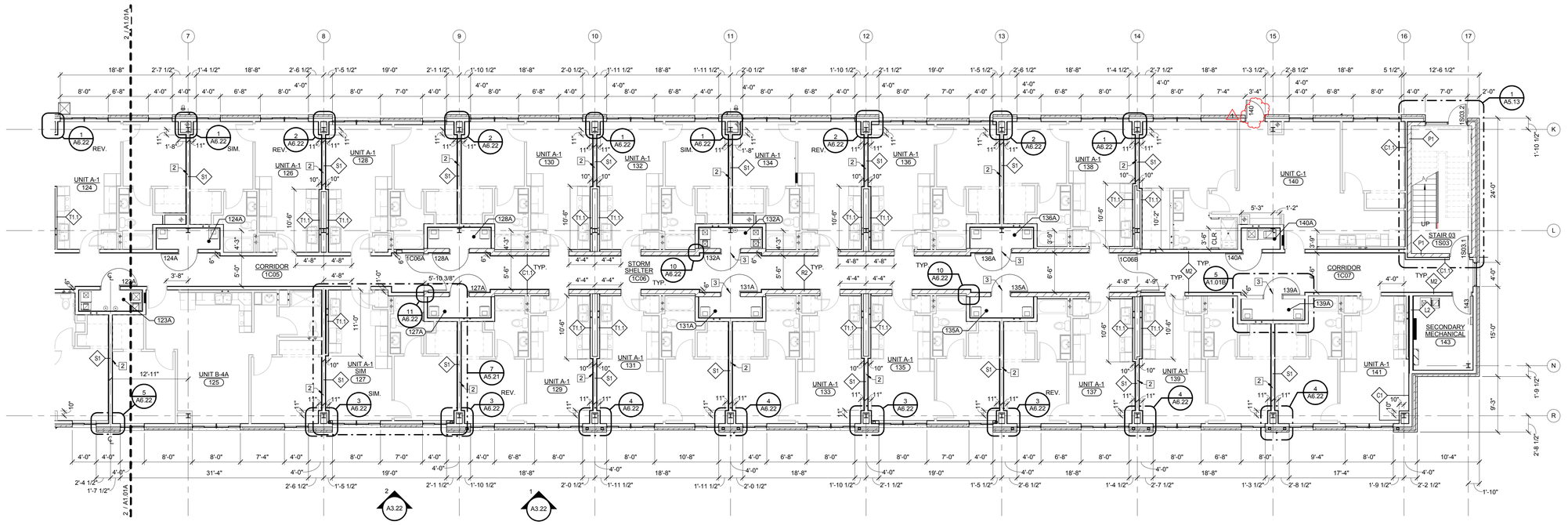
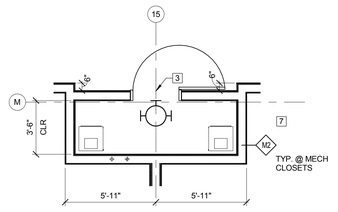


1 A1.01B FIRST FLOOR PLAN - EAST WING

0' 2' 4' 8' 16'



5 A1.01B TYP MECH CLOSET @ FIRST FLOOR (UNLESS NOTED OTHERWISE)

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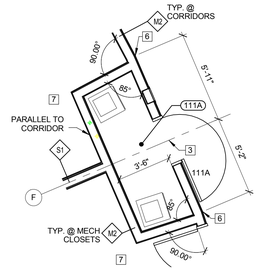
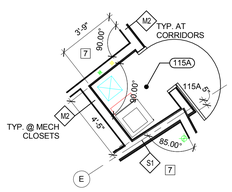


3 A1.01B ENLARGED MECH CLOSET 111A

0' 1' 2' 4' 8'



6 A1.01B ENLARGED MECH CLOSET 115A

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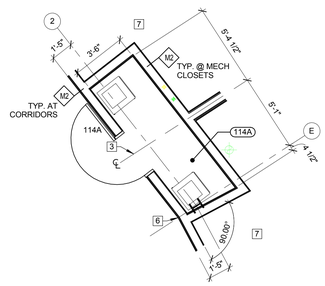

7 A1.01B ENLARGED MECH CLOSET 114A

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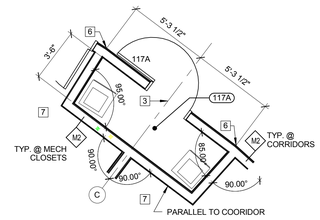

8 A1.01B ENLARGED MECH CLOSET 117A

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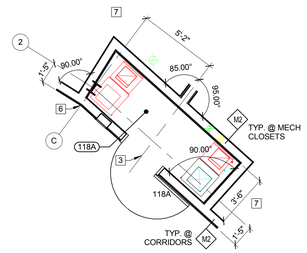

9 A1.01B ENLARGED MECH CLOSET 118A

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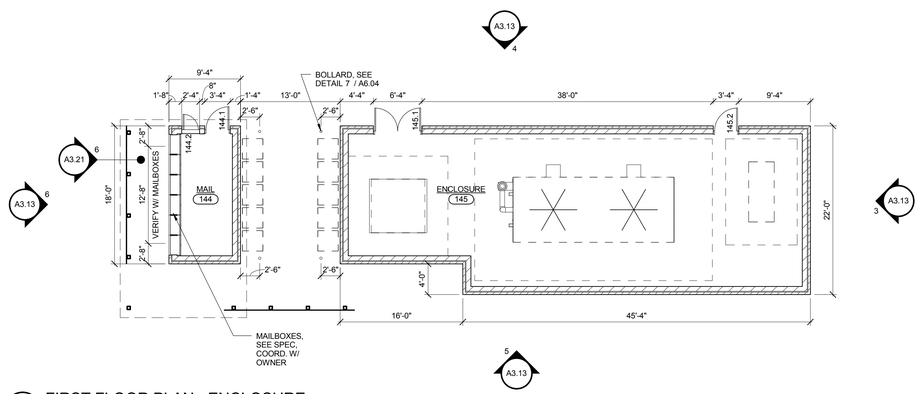

2 A1.01B FIRST FLOOR PLAN - ENCLOSURE

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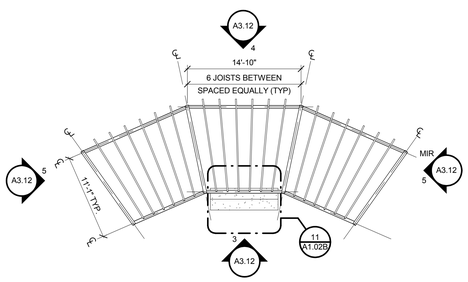

4 A1.01B ENLARGED PERGOLA PLAN

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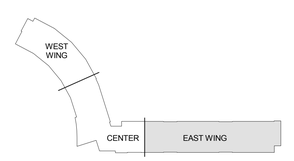

KEY PLAN

NOT TO SCALE

GENERAL PLAN NOTES

1. SEE SHEET **A1.01A** FOR GENERAL PLAN NOTES.

KEYED PLAN NOTES

1. SEE SHEET **A1.01A** FOR KEYED PLAN NOTES.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR PLAN - EAST WING & ENCLOSURE

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15097
DATE: 04/01/16

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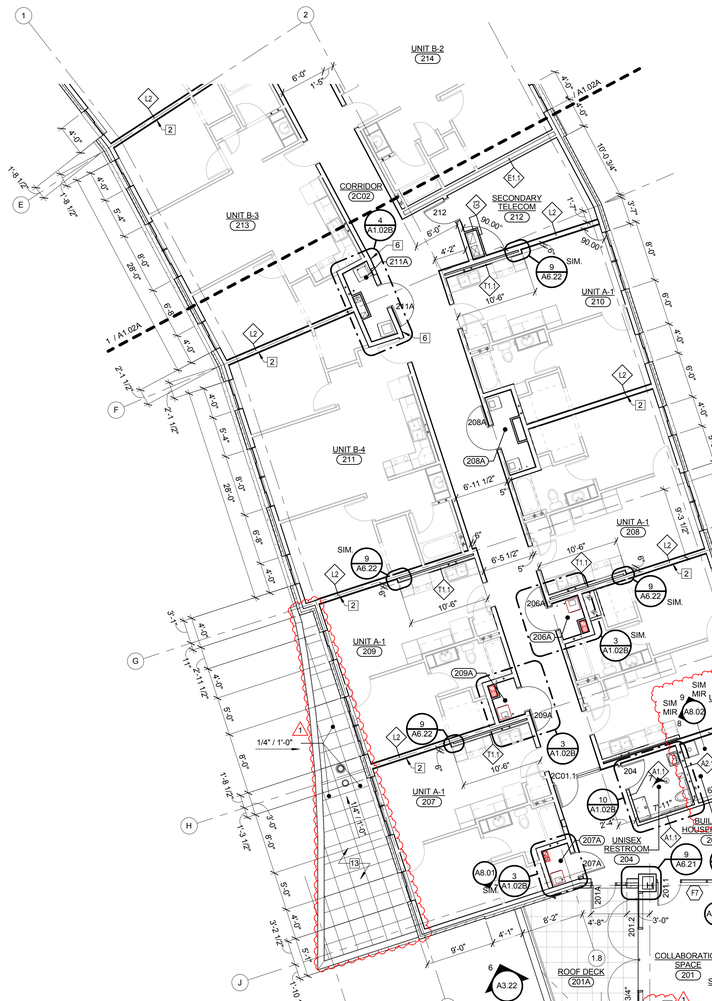
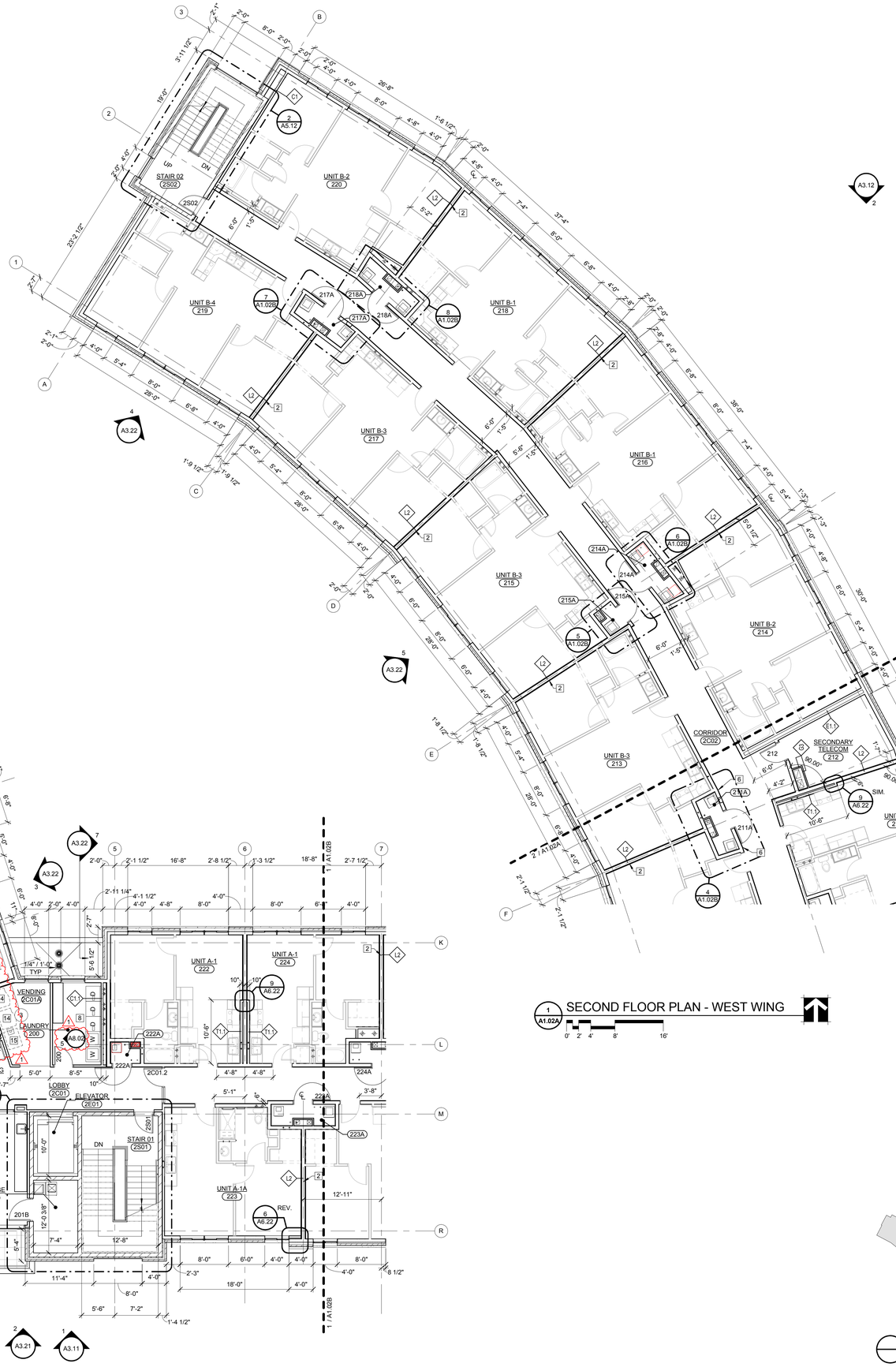
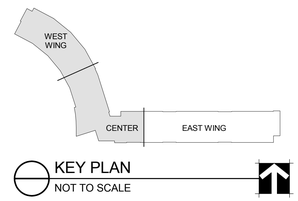


2 SECOND FLOOR PLAN - CENTER
A1.02A
0' 2' 4' 8' 16'



1 SECOND FLOOR PLAN - WEST WING
A1.02A
0' 2' 4' 8' 16'



KEY PLAN
NOT TO SCALE

GENERAL PLAN NOTES

1. SEE SHEET **A1.01A** FOR GENERAL PLAN NOTES.

KEYED PLAN NOTES

1. SEE SHEET **A1.01A** FOR KEYED PLAN NOTES.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

SECOND FLOOR PLAN - WEST WING & CENTER

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
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PROJECT:15097
DATE: 04/01/16

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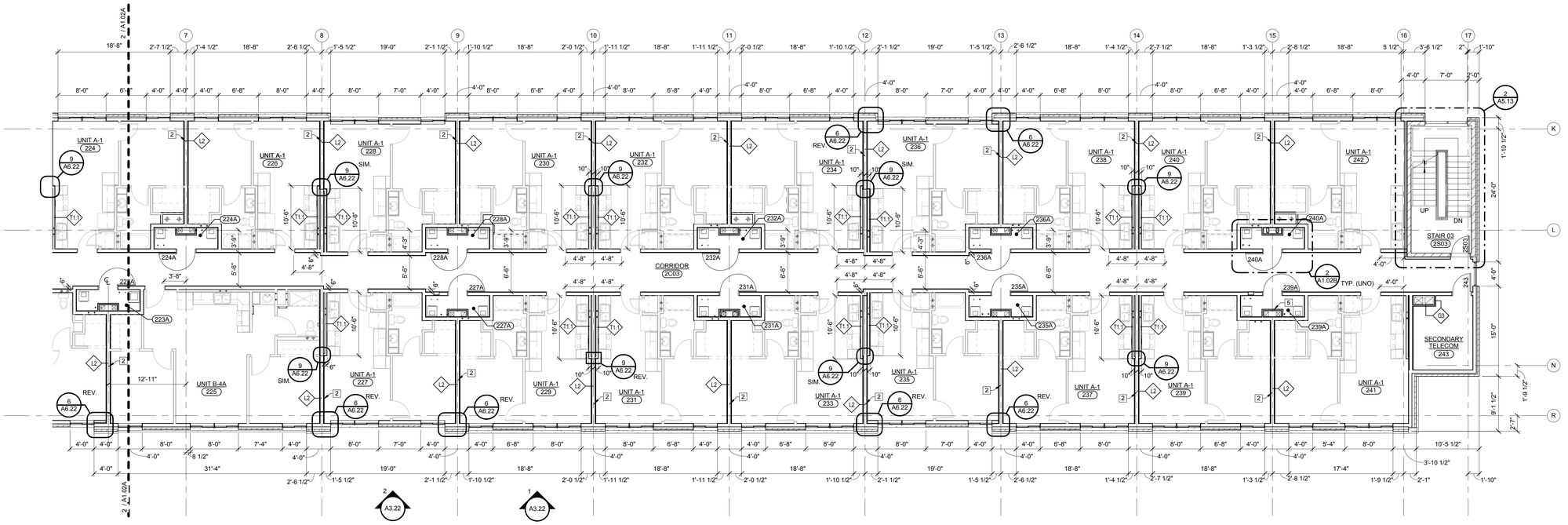
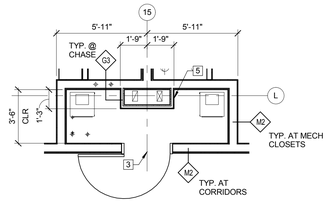


1 SECOND FLOOR PLAN - EAST WING
A1.02B
0' 2' 4' 8' 16'



2 TYP. MECH CLOSET 2ND AND 3RD FLOOR (UNLESS NOTED OTHERWISE)
A1.02B
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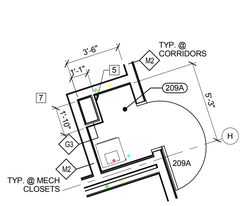
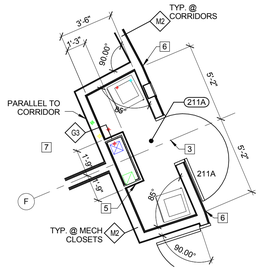
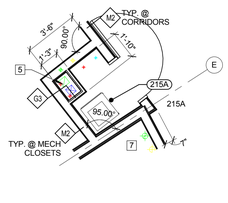


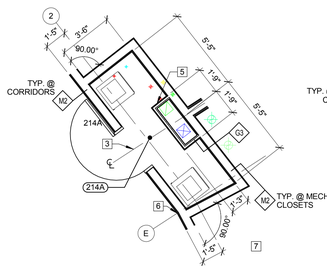
3 ENLARGED MECH CLOSET 209A
A1.02B
0' 1' 2' 4' 8'



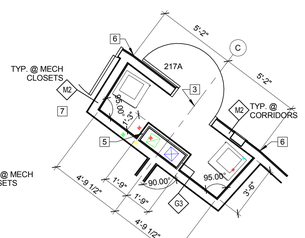
4 ENLARGED MECH CLOSET 211A
A1.02B
0' 1' 2' 4' 8'



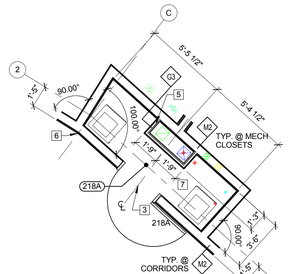
5 ENLARGED MECH CLOSET 215A
A1.02B
0' 1' 2' 4' 8'



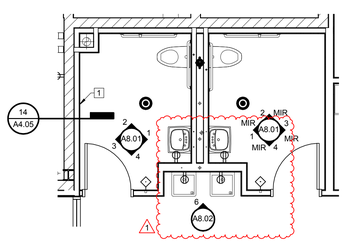
6 ENLARGED MECH CLOSET 214A
A1.02B
0' 1' 2' 4' 8'



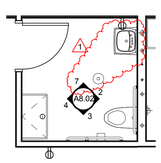
7 ENLARGED MECH CLOSET 217A
A1.02B
0' 1' 2' 4' 8'



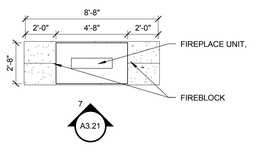
8 ENLARGED MECH CLOSET 218A
A1.02B
0' 1' 2' 4' 8'



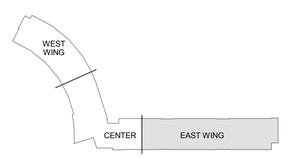
9 FIRST FLOOR ENLARGED RESTROOM PLAN
A1.02B
0' 1' 2' 4' 8'



10 SECOND FLOOR ENLARGED RESTROOM PLAN
A1.02B
0' 1' 2' 4' 8'



11 ENLARGED PLAN - FIREPLACE
A1.02B
0' 1' 2' 4' 8'



KEY PLAN
NOT TO SCALE

GENERAL PLAN NOTES

1. SEE SHEET **A1.01A** FOR GENERAL PLAN NOTES.

KEYED PLAN NOTES

1. SEE SHEET **A1.01A** FOR KEYED PLAN NOTES.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

SECOND FLOOR PLAN - EAST WING

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT: 15097
DATE: 04/01/16

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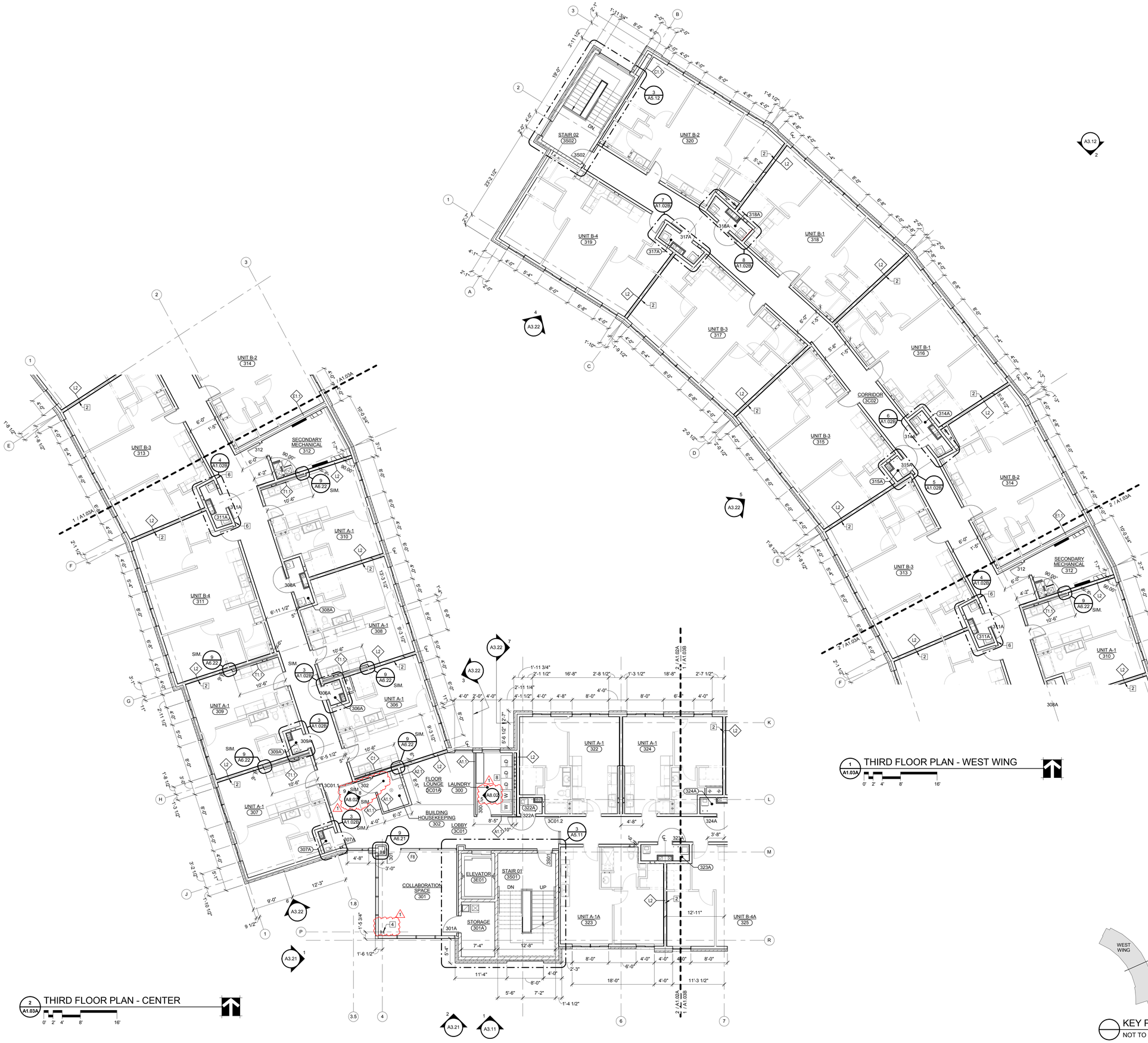

GENERAL PLAN NOTES

1. SEE SHEET **A1.01A** FOR GENERAL PLAN NOTES.

KEYED PLAN NOTES

1. SEE SHEET **A1.01A** FOR KEYED PLAN NOTES.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

THIRD FLOOR PLAN - WEST WING & CENTER

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

CURTIS G. MITZENBUSH — ARCHITECT — STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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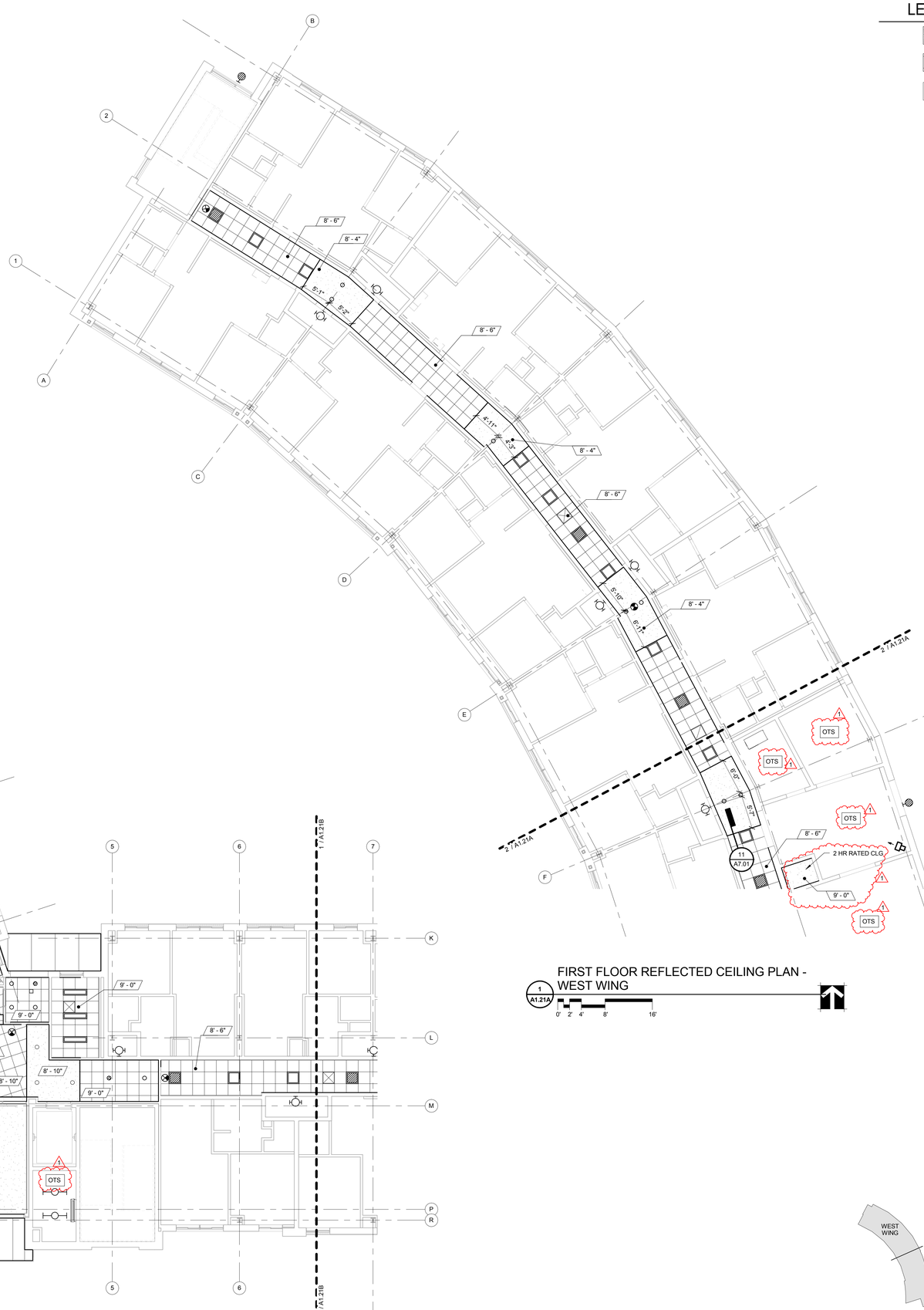
3 A1.21A CLUBHOUSE REFLECTED CEILING PLAN

0' 1' 2' 4' 8'

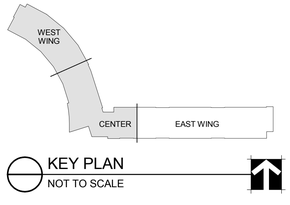


1 A1.21A FIRST FLOOR REFLECTED CEILING PLAN - WEST WING

0' 2' 4' 8' 16'

2 A1.21A FIRST FLOOR REFLECTED CEILING PLAN - CENTER

0' 2' 4' 8' 16'



KEY PLAN
NOT TO SCALE

LEGEND OF SYMBOLS

- GWB CEILING / SOFFIT
- 2 X 2 APC
- OPEN TO STRUCTURE (OTS) 1
- RECESSED DOWN LIGHT
- HANGING PENDANT
- 1 X 1 FLUORESCENT LIGHT
- 2 X 2 FLUORESCENT LIGHT
- 2 X 4 FLUORESCENT LIGHT
- 1 X 4 FLUORESCENT LIGHT
- 1 X 4 SURFACE MOUNTED FLUORESCENT LIGHT
- SURFACE MOUNTED FIXTURE
- MECHANICAL SUPPLY DIFFUSER
- MECHANICAL RETURN GRILLE
- SMOKE DETECTOR
- HEAT DETECTOR
- EXIT LIGHT
- DECORATIVE PENDANT LIGHT
- CUBICLE CURTAIN TRACK

GENERAL RCP NOTES

1. SEE ROOM FINISH SCHEDULE FOR CEILING FINISHES UNLESS NOTED OTHERWISE ON THE REFLECTED CEILING PLAN.
2. ALL GYPSUM BOARD SOFFITS SHALL BE AT 8'-0" ABOVE FINISH FLOOR UNLESS NOTED OTHERWISE.
3. ALL CEILING HEIGHTS REFERENCE ABOVE FINISH FLOOR.
4. CEILING HEIGHT AS NOTED FOR ACOUSTIC PANEL CEILINGS SHALL BE MEASURED TO THE FINISH FACE OF THE GRID.
5. PAINT ALL GYPSUM BOARD CEILINGS AND SOFFITS (HORIZONTAL AND VERTICAL SURFACES) 'P-6', UNLESS NOTED OTHERWISE. 1
6. SEE ENLARGED UNIT PLAN SHEETS FOR UNIT REFLECTED CEILING PLAN INFORMATION.
7. PAINT EXPOSED CEILING AND IN CLUBHOUSE (P-8). PAINT ALL EXPOSED STRUCTURE, DUCTWORK, PIPING, ETC. VERIFY WITH ARCHITECT.

RATED PARTITION NOTES

1. VERIFY THAT ALL EXISTING WALLS SHOWN AS FIRE RATED, MEET ALL APPLICABLE CODE REQUIREMENTS. PATCH AND REPAIR AS REQUIRED, WITH APPROVED FIRESTOPPING MATERIALS, ANY EXISTING WALLS FOUND TO BE NONCOMPLIANT.
2. SPRINKLER HEAD LOCATIONS ARE NOT SHOWN ON THE REFLECTED CEILING PLAN. THE FIRE SPRINKLER CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR THE SYSTEM.

KEYED RCP NOTES

☐ TAG USED FOR THIS SCHEDULE

1	EXTENTS OF APC-2
2	SECURITY GRILLE, SEE SPEC
3	BOTTOM OF RATED FLOOR/CEILING ASSEMBLY

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR REFLECTED CEILING PLAN - WEST WING & CENTER

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

ARCHITECT CHRIS G. MEADENHEISER STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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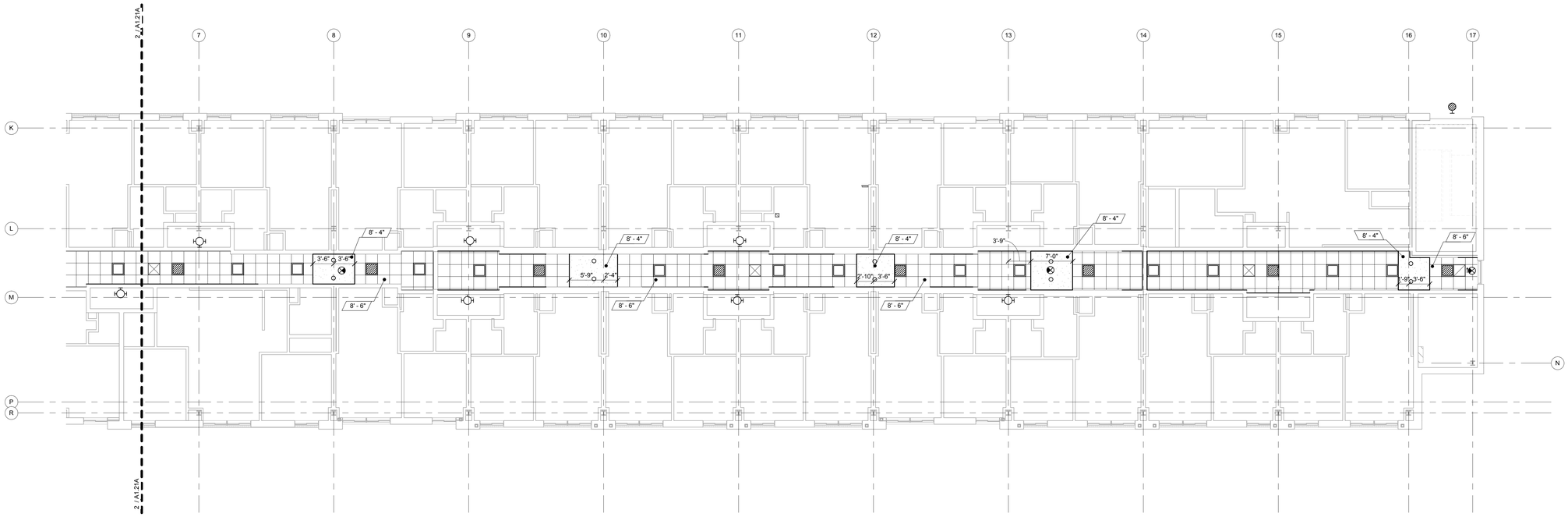
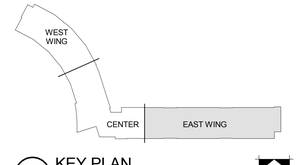


1 A1.21B

FIRST FLOOR REFLECTED CEILING PLAN - EAST WING

0' 2' 4' 8' 16'



KEY PLAN
NOT TO SCALE

GENERAL RCP NOTES

1. SEE SHEET **A1.21A** FOR GENERAL RCP NOTES.

RATED PARTITION NOTES

1. SEE SHEET **A1.21A** FOR GENERAL RATED PARTITION NOTES.

KEYED RCP NOTES

1. SEE SHEET **A1.21A** FOR KEYED RCP NOTES.

LEGEND OF SYMBOLS

1. SEE SHEET **A1.21A** FOR RCP LEGEND OF SYMBOLS

No.	Description	Date

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR REFLECTED CEILING PLAN - EAST WING

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

ARCHITECT
CURTIS G. CHITTENDEN
#A10
STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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SHEET: A1.21B

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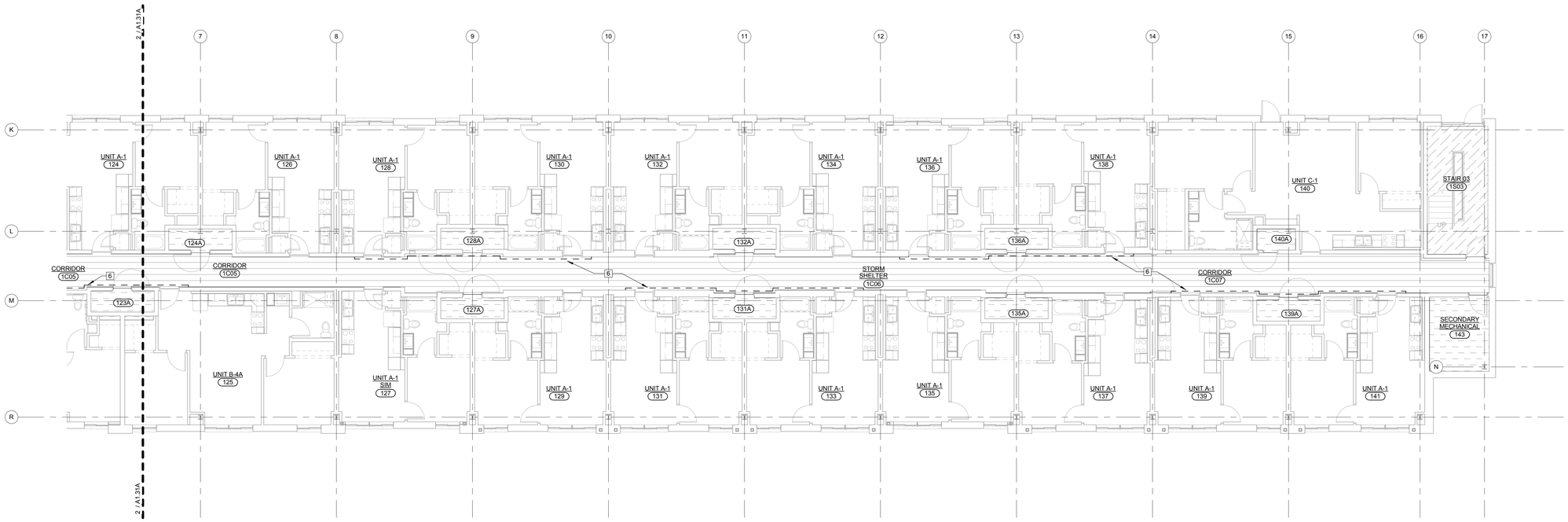


1 A1.31B FIRST FLOOR FINISH PLAN - EAST WING

0' 2' 4' 8' 16'

MATERIAL KEY

EXTENTS OF CT-1
HERRINGBONE FLOOR INSTALLATION

EXTENTS OF CT PATTERN - 1
25% CT-3
75% CT-2

EXTENTS OF SEALED CONCRETE (PC-1) 1

EXTENTS OF MCT-1

EXTENTS OF WMT-1

EXTENTS OF CPT PATTERN - 1
90% CPT-1
10% CPT-2
QUARTER TURN INSTALLATION

EXTENTS OF RSA-1

EXTENTS OF LVT-1

EXTENTS OF CPT - #

EXTENTS OF CT - 6

ROOM FINISH SCHEDULE

Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Comments
FIRST FLOOR PLAN						
1C01	VESTIBULE	WMT-1	RB-1	P-1	APC-1	
1C02	VESTIBULE	WMT-1	RB-1	P-1	APC-1	
1C03	LOBBY	CT-2, CT-3	RB-1	P-1, P-2*, CT-3*	APC-1, GWB*	* SEE ROOM FINISH SCHEDULE NOTES
1C05	CORRIDOR	CPT-1, CPT-2	RB-1	P-1, P-5*, HPC-1*	APC-1, GWB*	* SEE ROOM FINISH SCHEDULE NOTES
1C06	STORM SHELTER					
1C07	CORRIDOR	CPT-1, CPT-2	RB-1	P-1, P-5*, HPC-1*	APC-1, GWB*	* SEE ROOM FINISH SCHEDULE NOTES
1E01	ELEVATOR	WMT-1				* SEE SPECIFICATIONS
1S01	STAIR 01	RSA-1	RB-1	P-1	GWB	
1S03	STAIR 03	RSA-1	RB-1	P-1	GWB	
100	LAUNDRY	MCT-1	RB-1	P-1, CT-4*, CT-5*	APC-1	* SEE ROOM FINISH SCHEDULE NOTES
101	COLLABORATION SPACE	CPT-1, CPT-2	RB-1	P-1, P-5*	APC-1	
101A	ELEV EQUIP	WMT-1	RB-1	P-1	GWB	
102	OFFICE	CPT-1, CPT-2	RB-1	P-1, P-2*	APC-1	
102A	PACKAGE STORAGE	CPT-1, CPT-2	RB-1	P-1	APC-1	
102B	PRIVATE OFFICE	CPT-1, CPT-2	RB-1	P-1	APC-1	
103	CLUBHOUSE	CT-2, CT-3, CPT-1, CPT- 2	RB-1, WB-1*	P-1, P-2*, WP-1*	APC-2*, GWB*	* SEE ROOM FINISH SCHEDULE NOTES
103A	PREP AREA	CT-2, CT-3	RB-1	P-1	GWB	
103B	STORAGE	CT-2, CT-3	RB-1	P-1	GWB	
104	BUILDING HOUSEKEEPING	PC-1	RB-1	P-1, CT-5 1	APC-1	
106	UNISEX RESTROOM	CT-1	CT-1	P-1, CT-1*	APC-1	* SEE ROOM FINISH SCHEDULE NOTES
108	UNISEX RESTROOM	CT-1	CT-1	P-1, CT-1*	APC-1	* SEE ROOM FINISH SCHEDULE NOTES
110	MAIN TELECOM	PC-1	RB-1	P-1	GWB	
112E	LIFE SAFETY	PC-1	RB-1	P-1	GWB	
143	SECONDARY MECHANICAL	PC-1	RB-1	P-1	GWB	
144	MAIL		RB-1	P-1	GWB	
145	ENCLOSURE					
FIRST FLOOR PLAN - WEST WING						
1C04	CORRIDOR	CPT-1, CPT-2	RB-1	P-1, P-5*	APC-1, GWB*	* SEE ROOM FINISH SCHEDULE NOTES
1S02	STAIR 02	RSA-1	RB-1	P-1	-	
112	LOADING AREA	PC-1	RB-1	P-1 1	OTS	
112A	CUSTODIAL STORAGE	PC-1	RB-1	P-1	OTS	
112B	STORAGE	PC-1	RB-1	P-1	OTS	
112C	MAIN MECHANICAL EQUIPMENT	PC-1	RB-1	P-1	OTS	
112D	MAIN ELECTRICAL	PC-1	RB-1	P-1	OTS 1	
SECOND FLOOR PLAN						
2C01	LOBBY	CT-2, CT-3	RB-1	P-1, P-3*	APC-1	* SEE ROOM FINISH SCHEDULE NOTES
2C01A	VENDING	CT-2, CT-3	RB-1	P-1	APC-1	
2C02	CORRIDOR	CPT-1, CPT-2	RB-1	P-1, P-4*, HPC-1*	APC-1, GWB*	* SEE ROOM FINISH SCHEDULE NOTES
2C03	CORRIDOR	CPT-1, CPT-2	RB-1	P-1, P-4*, HPC-1*	APC-1, GWB*	* SEE ROOM FINISH SCHEDULE NOTES
2E01	ELEVATOR	WMT-1				* SEE SPECIFICATIONS
2S01	STAIR 01	RSA-1	RB-1	P-1		
2S02	STAIR 02	RSA-1	RB-1	P-1		
2S03	STAIR 03	RSA-1	RB-1	P-1		
200	LAUNDRY	MCT-1	RB-1	P-1, CT-4*, CT-5*	APC-1	* SEE ROOM FINISH SCHEDULE NOTES
201	COLLABORATION SPACE	CT-2, CT-3	RB-1	P-1, P-4*	GWB 1	* SEE ROOM FINISH SCHEDULE NOTES
201A	ROOF DECK					
201B	STORAGE	CT-2, CT-3	RB-1	P-1	GWB	
202	BUILDING HOUSEKEEPING	PC-1	RB-1	P-1, CT-5 1	GWB	* SEE ROOM FINISH SCHEDULE NOTES
204	UNISEX RESTROOM	CT-1	RB-1	P-1, CT-1*	APC-1	* SEE ROOM FINISH SCHEDULE NOTES
212	SECONDARY TELECOM	PC-1	RB-1	P-1	GWB	
243	SECONDARY TELECOM	PC-1	RB-1	P-1	GWB	
THIRD FLOOR PLAN						
3C01	LOBBY	CT-2, CT-3	RB-1	P-1, P-3*	APC-1	* SEE ROOM FINISH SCHEDULE NOTES
3C01A	FLOOR LOUNGE	CPT-1, CPT-2	RB-1, WB-1*	P-2*, WP-1*	APC-1	* SEE ROOM FINISH SCHEDULE NOTES
3C02	CORRIDOR	CPT-1, CPT-2	RB-1	P-1, P-3*, HPC-1*	APC-1, GWB*	* SEE ROOM FINISH SCHEDULE NOTES
3C03	CORRIDOR	CPT-1, CPT-2	RB-1	P-1, P-3*, HPC-1*	APC-1, GWB*	* SEE ROOM FINISH SCHEDULE NOTES
3E01	ELEVATOR	WMT-1				* SEE SPECIFICATIONS
3S01	STAIR 01	RSA-1	RB-1	P-1		
3S02	STAIR 02	RSA-1	RB-1	P-1		
3S03	STAIR 03	RSA-1	RB-1	P-1		
300	LAUNDRY	MCT-1	RB-1	P-1, CT-4*, CT-5*	APC-1	* SEE ROOM FINISH SCHEDULE NOTES
301	COLLABORATION SPACE	CPT-1, CPT-2	RB-1	P-1, P-3*	GWB 1	* SEE ROOM FINISH SCHEDULE NOTES
301A	STORAGE	CPT-1, CPT-2	RB-1	P-1	GWB	
302	BUILDING HOUSEKEEPING	PC-1	RB-1	P-1, CT-5 1	GWB	* SEE ROOM FINISH SCHEDULE NOTES
312	SECONDARY MECHANICAL	PC-1	RB-1	P-1	GWB	
343	SECONDARY MECHANICAL	PC-1	RB-1	P-1	GWB	

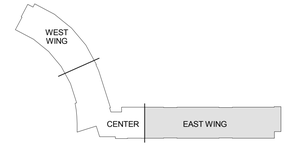
KEYED FINISH NOTES

☐ TAG USED FOR THIS SCHEDULE

1	EXTENTS OF WP-1
2	EXTENTS OF CT-4 AND CT-5
3	EXTENTS OF FRP-1
4	EXTENTS OF CT-1
5	EXTENTS OF P-2
6	EXTENTS OF P-5
7	EXTENTS OF P-4
8	EXTENTS OF P-3
9	PATIO ROOF PAVERS - SEE SPEC
10	EXTENTS OF CT-3

ROOM FINISH SCHED NOTES

1. ALL WALLS TO BE PAINTED <P-1> UNLESS NOTED OTHERWISE. SEE FLOOR FINISH PLANS FOR ACCENT WALL FINISH LOCATIONS.
2. SEE REFLECTED CEILING PLANS FOR ACCENT CEILING FINISH LOCATIONS.
3. SEE INTERIOR ELEVATIONS, A8 SERIES, FOR TILE PATTERNS.
4. SEE INTERIOR ELEVATIONS, A8 SERIES, FOR ACCENT FINISH LOCATIONS.
5. AT ALL WALLS THAT GO TO DECK IN AREAS WITH EXPOSED CEILINGS, PROVIDE A HORIZONTAL CONTROL JOINT AT 10'-0" A.F.F.



KEY PLAN
NOT TO SCALE

GENERAL FINISH NOTES

1. PROVIDE SELF-LEVELING CONCRETE FLOOR UNDERLAYMENT AS REQUIRED TO ACHIEVE A SMOOTH AND LEVEL SUBSTRATE FOR FLOOR FINISHES.
2. WHERE FLOOR FINISHES DIFFER IN COLOR AND/OR MATERIAL BETWEEN ROOMS, LOCATE THE JOINT BELOW THE CENTERLINE OF THE (CLOSED) DOOR. PROVIDE TRANSITION STRIPS BETWEEN FLOORS OF DIFFERENT MATERIALS. SEE COLOR SCHEDULE, SECTION 09 0600, FOR TRANSITION STRIP (TRS) TYPES AND LOCATIONS.
3. ALL FREE-STANDING COLUMNS WITHIN A ROOM SHALL BE FINISHED WITH THE SAME MATERIAL SCHEDULED FOR THE WALLS, UNLESS NOTED OTHERWISE.
4. PAINT ALL ELECTRICAL PANELS AND ACCESS DOORS THROUGHOUT EXTENTS OF CONSTRUCTION TO MATCH ADJACENT WALL OR CEILING COLOR, UNLESS NOTED OTHERWISE.
5. OWNER FURNISHED EQUIPMENT SHOWN DASHED ON PLAN, UNLESS NOTED OTHERWISE.
6. SEE SHEETS **A5.21-A5.24** FOR UNIT FLOOR FINISH INFORMATION.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR FINISH PLAN - EAST WING & ROOM FINISH SCHEDULE

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

CURTIS G. HITTENBERGER ARCHITECT A-1294 STATE OF NEBRASKA

PROJECT: 15097
DATE: 04/01/16

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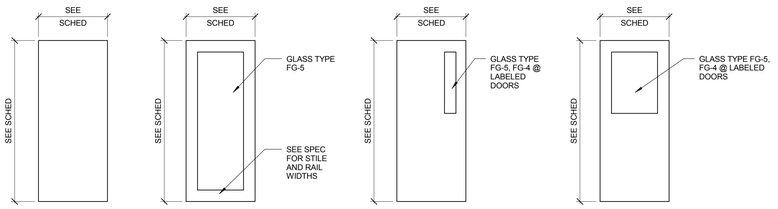
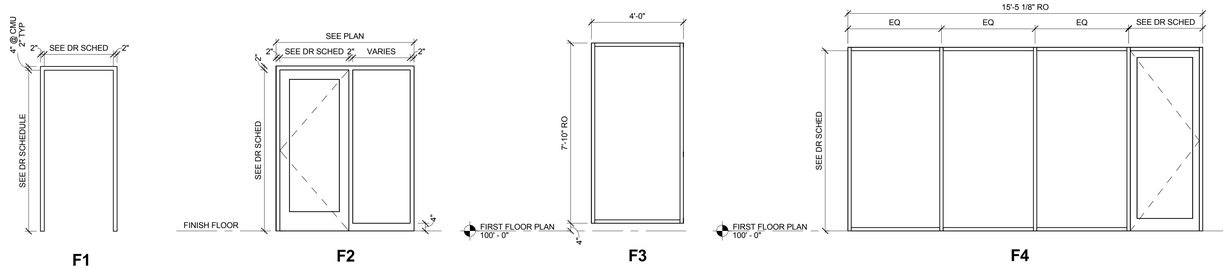


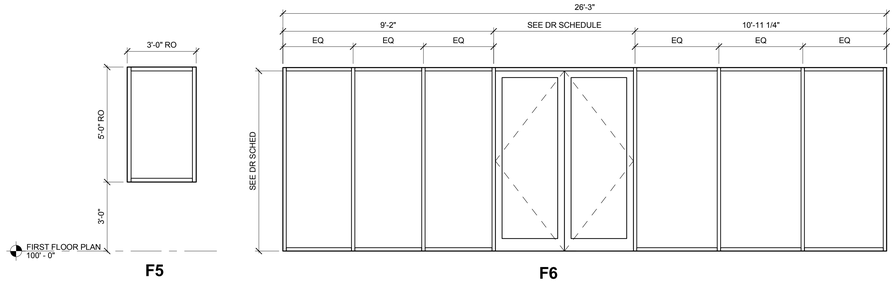
DOOR TYPES

0' 1' 2' 4' 8'



FRAME TYPE

A2.11



FRAME TYPE_F5

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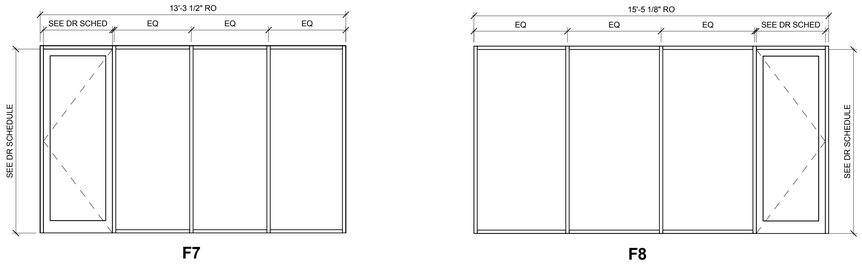

FRAME TYPE_F7

A2.11

DOOR SCHEDULE

DOOR NO.	DOOR PR.	WIDTH	HEIGHT	TYPE	MAT'L	FIN.	FRAME TYPE	MAT'L	FIN.	LABEL	HDWR.	DETAIL	SHEET	REMARKS
1C01.1	PR.	6' - 0"	8' - 0"	D2	AL	ANOD	W26	AL	ANOD	- - -	4	- - -	- - -	
1C01.2	PR.	3' - 0"	7' - 10"	D2	AL	ANOD	F1	AL	ANOD	- - -	10	1,2	A6.21	
1C02.1	PR.	3' - 0"	7' - 10"	D2	AL	ANOD	W20	AL	ANOD	- - -	4	- - -	- - -	
1C02.2	PR.	3' - 0"	7' - 10"	D2	AL	ANOD	F1	AL	ANOD	- - -	10	6,8	A2.21	
1C03.1	- - -	3' - 0"	7' - 0"	D2	WD	S-1	F2	HM	P-8	20 MIN.	14	1	A2.21	
1C03.2	- - -	3' - 0"	7' - 0"	D2	WD	S-1	F2	HM	P-8	20 MIN.	14	1	A2.21	
1C06A	PR.	3' - 0"	8' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	16	- - -	- - -	
1C06B	PR.	3' - 0"	8' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	16	- - -	- - -	
1S01	- - -	3' - 0"	7' - 0"	D3	HM	P-7	F1	HM	P-8	60 MIN.	15	4	A2.21	
1S02.1	- - -	3' - 0"	7' - 0"	D3	HM	P-7	F1	HM	P-8	60 MIN.	17	4	A2.21	
1S02.2	- - -	3' - 0"	7' - 2"	D2	AL	ANOD	W8	AL	ANOD	- - -	2	- - -	1	
1S03.1	- - -	3' - 0"	7' - 0"	D3	HM	P-7	F1	HM	P-8	60 MIN.	17	12	A6.22	
1S03.2	- - -	3' - 0"	7' - 2"	D2	AL	ANOD	W5	AL	ANOD	- - -	2	13	A6.22	
2C01.1	- - -	3' - 0"	7' - 0"	D2	WD	S-1	F2	HM	P-8	20 MIN.	14	1	A2.21	
2C01.2	- - -	3' - 0"	7' - 0"	D2	WD	S-1	F2	HM	P-8	20 MIN.	14	1	A2.21	
2S01	- - -	3' - 0"	7' - 0"	D3	HM	P-7	F1	HM	P-8	60 MIN.	17	4	A2.21	
2S02	- - -	3' - 0"	7' - 0"	D3	HM	P-7	F1	HM	P-8	60 MIN.	17	4	A2.21	
2S03	- - -	3' - 0"	7' - 0"	D3	HM	P-7	F1	HM	P-8	60 MIN.	17	4	A2.21	
3C01.1	- - -	3' - 0"	7' - 0"	D2	WD	S-1	F2	HM	P-8	20 MIN.	14	1	A2.21	
3C01.2	- - -	3' - 0"	7' - 0"	D2	WD	S-1	F2	HM	P-8	20 MIN.	14	1	A2.21	
3S01	- - -	3' - 0"	7' - 0"	D3	HM	P-7	F1	HM	P-8	60 MIN.	17	4	A2.21	
3S02	- - -	3' - 0"	7' - 0"	D3	HM	P-7	F1	HM	P-8	60 MIN.	17	4	A2.21	
3S03	- - -	3' - 0"	7' - 0"	D3	HM	P-7	F1	HM	P-8	60 MIN.	17	4	A2.21	
4S01	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	25	- - -	- - -	
100	- - -	3' - 0"	7' - 0"	D4	HM	P-7	F1	HM	P-8	- - -	20	1	A2.21	
101	- - -	3' - 0"	7' - 10"	D2	AL	ANOD	F4	AL	ANOD	- - -	8	- - -	- - -	
101A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	60 MIN.	27	4	A2.21	
102	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	29	1	A2.21	
102A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	27	1	A2.21	
102B	- - -	3' - 0"	7' - 0"	D3	HM	P-7	F1	HM	P-8	- - -	28	1	A2.21	
103.1	PR.	6' - 0"	7' - 10"	D2	AL	ANOD	F6	AL	ANOD	- - -	9	- - -	- - -	
103.2	- - -	3' - 0"	8' - 0"	D2	AL	ANOD	W24	AL	ANOD	- - -	2	8	A6.21	
103B	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	27	1	A2.21	
104	- - -	3' - 6"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	23	1	A2.21	
106	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	32	1	A2.21	
108	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	32	1	A2.21	
110	- - -	3' - 8"	7' - 0"	D1	HM	P-2	F1	HM	P-7	- - -	3	10	A2.21	
111A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
112.1	PR.	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	11	9	A2.21	
112.2	PR.	3' - 0"	7' - 0"	D1	HM	P-2	F1	HM	P-7	- - -	6	10	A2.21	
112A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	24	4	A2.21	
112B	PR.	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	11	4	A2.21	
112C	PR.	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	11	4	A2.21	
112D	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	60 MIN.	24	4	A2.21	
112E	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	120 MIN.	24	4	A2.21	
114A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
115A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
117A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
118A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
122A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
123A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
124A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
127A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	5	A2.21	
128A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	5	A2.21	
131A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	5	A2.21	
132A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	5	A2.21	
135A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	5	A2.21	
136A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	5	A2.21	
139A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	5	A2.21	
140	- - -	3' - 0"	7' - 0"	D1	HM	P-2	F1	HM	P-7	- - -	3	- - -	- - -	INSTALL VIEWER @ 43" AFF
140A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
143	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	24	- - -	- - -	
144.1	- - -	3' - 0"	7' - 0"	D1	HM	P-2	F1	HM	P-7	- - -	25	- - -	- - -	
144.2	- - -	2' - 0"	3' - 0"	D1	HM	- - -	- - -	HM	- - -	- - -	7	- - -	- - -	ACCESS DOOR
145.1	PR.	3' - 0"	7' - 0"	D1	HM	P-2	F1	HM	P-7	- - -	5	- - -	- - -	
145.2	- - -	3' - 0"	7' - 0"	D1	HM	P-2	F1	HM	P-7	- - -	25	- - -	- - -	
200	- - -	3' - 0"	7' - 0"	D4	HM	P-7	F1	HM	P-8	- - -	20	- - -	- - -	
201.1	- - -	3' - 0"	8' - 0"	D2	AL	ANOD	F7	AL	ANOD	- - -	8	- - -	- - -	
201.2	PR.	6' - 0"	8' - 0"	D2	AL	ANOD	W30	AL	ANOD	- - -	1	- - -	- - -	TERRACE DOORS
201A	- - -	3' - 0"	8' - 0"	D2	AL	ANOD	W28	AL	ANOD	- - -	22	11	A6.21	TERRACE DOOR
201B	- - -	3' - 6"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	27	4	A2.21	
202	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	23	1	A2.21	
204	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	32	1	A2.21	
206A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
207A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
208A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
209A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
211A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
212	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	24	1	A2.21	
214A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
215A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
217A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
218A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
222A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
223A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
224A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
227A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
228A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
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236A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
239A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
240A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
243	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	24	- - -	- - -	
300	- - -	3' - 0"	7' - 0"	D4	HM	P-7	F1	HM	P-8	- - -	20	- - -	- - -	
301	- - -	3' - 0"	8' - 0"	D2	AL	ANOD	F8	AL	ANOD	- - -	8	- - -	- - -	
301A	- - -	3' - 6"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	27	- - -	- - -	
302	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	- - -	23	- - -	- - -	
306A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
307A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
308A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
309A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
311A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
312	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	24	1	A2.21	
314A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
315A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
317A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
318A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
322A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
323A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
324A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
327A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
328A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
331A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
332A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
335A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
336A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
339A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
340A	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	26	1	A2.21	
343	- - -	3' - 0"	7' - 0"	D1	HM	P-7	F1	HM	P-8	20 MIN.	24	1	A2.21	
401	- - -	3' - 0"	4' - 0"	D1	HM	- - -	- - -	HM	- - -	- - -	7	- - -	- - -	ACCESS DOOR

1

GENERAL NOTES

1. ALL DOORS SHALL BE 1 3/4" THICK UNLESS OTHERWISE NOTED.
2. ALL EXTERIOR CURTAINWALL AND STOREFRONT SHALL BE GLAZED WITH GLASS TYPE IG-1 OR IG-2. SEE ELEVATIONS FOR LOCATIONS.
3. ALL DOORS AND FRAMES SHALL BE GLAZED WITH GLASS TYPE FG-1 UNLESS OTHERWISE NOTED ON THE DOOR AND FRAME TYPE.
4. CONTRACTOR TO VERIFY LOCATIONS OF REQUIRED SAFETY GLAZING WITH LOCAL CODE AND PROVIDE AS NECESSARY.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

DOOR & FRAME TYPES & SCHEDULE

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

CURTIS G. MITZENBUSH
REGISTERED ARCHITECT
STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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SHEET: A2.11

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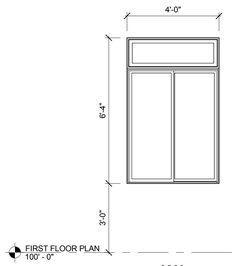

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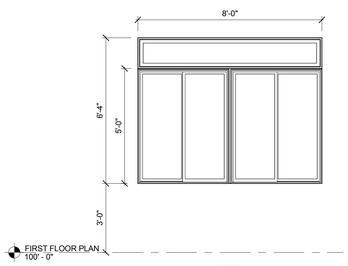

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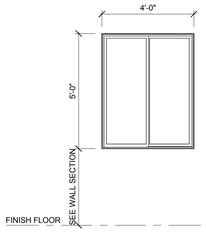

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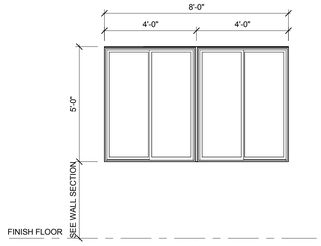

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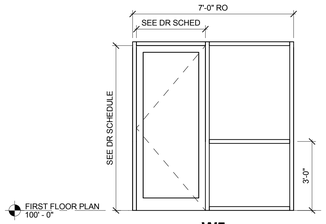

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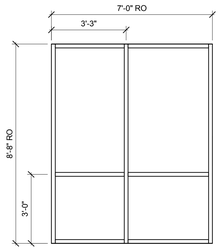
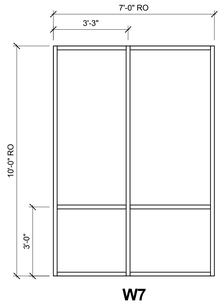


W6

WINDOW TYPES
A2.12



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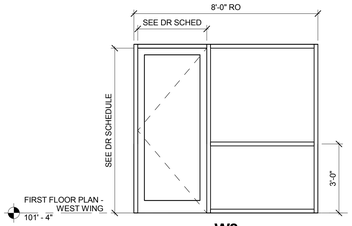

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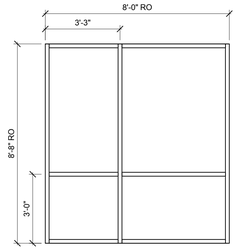

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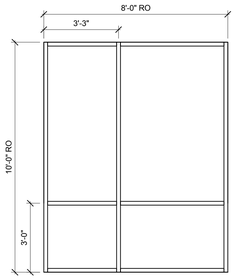

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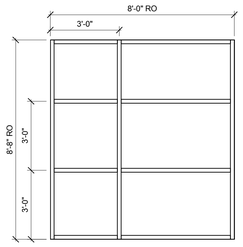

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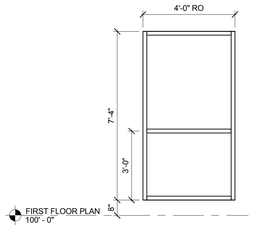
WINDOW TYPES
A2.12



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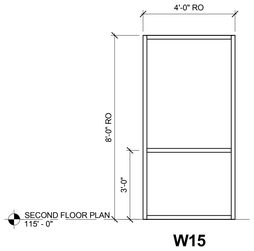

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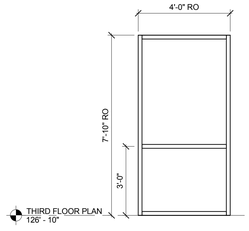

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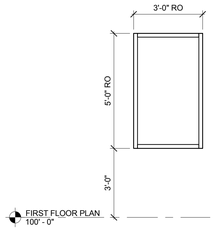

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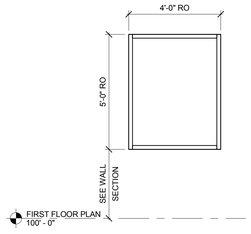

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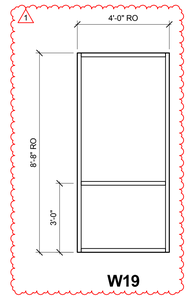

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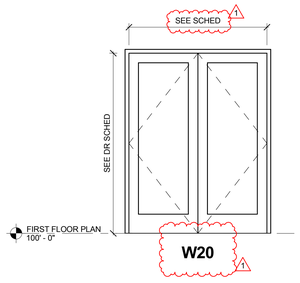

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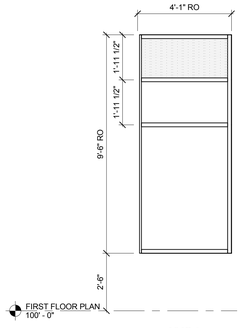
WINDOW TYPES
14
A2.12
0' 1' 2' 4'



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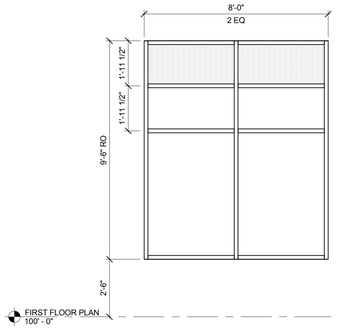

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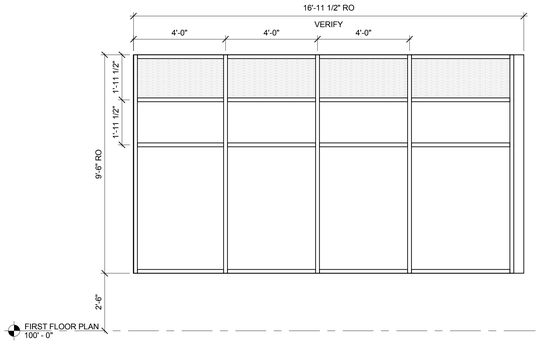

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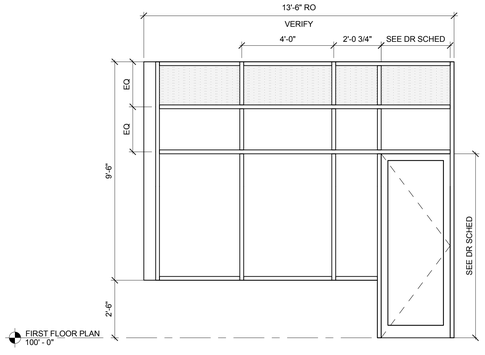

W24

WINDOW TYPES
20
A2.12
0' 1' 2' 4'

GENERAL NOTES

1. SEE SHEET **A1.11** FOR GENERAL NOTES FOR DOOR, FRAME AND WINDOWS.

MATERIAL KEY

EXTENTS OF SPANDREL GLAZING

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FRAME & WINDOW TYPES

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

ARCHITECT
CURTIS G. CITTENBURG
A-10
STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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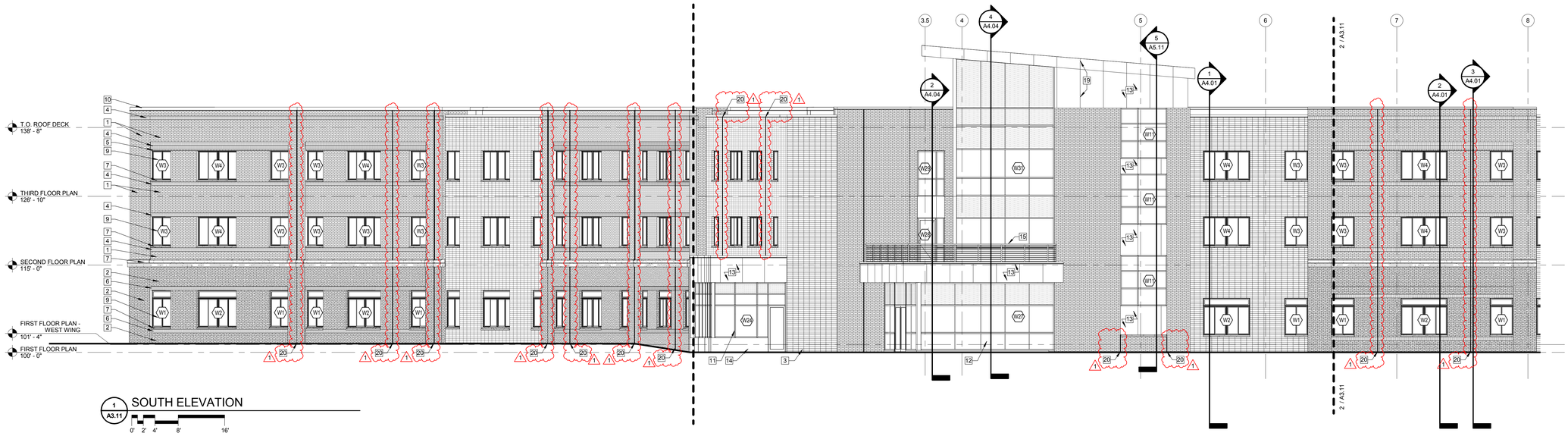
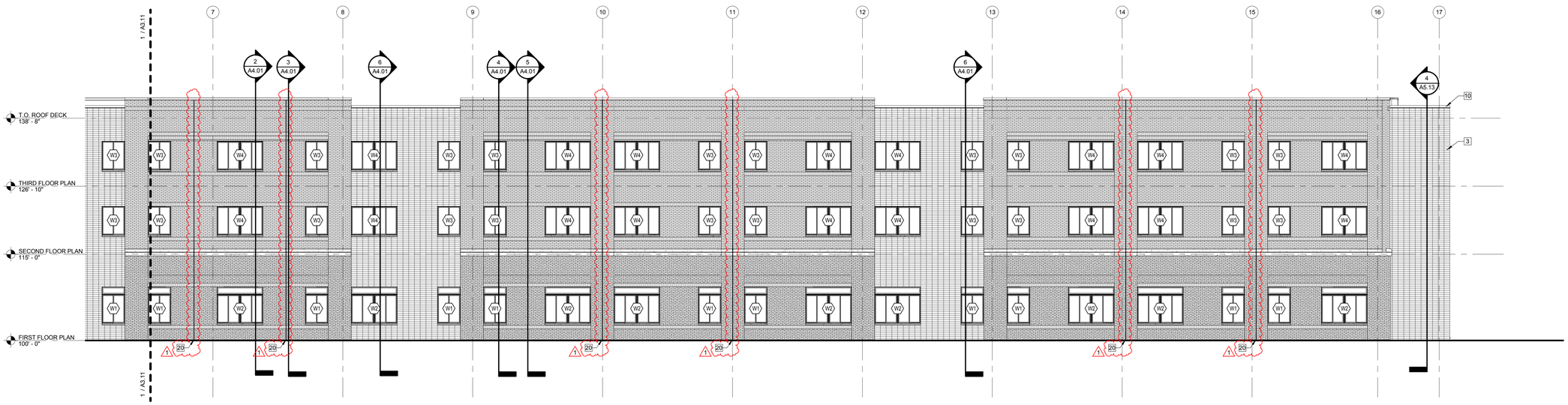


1 A3.11 SOUTH ELEVATION

0' 2' 4' 8' 16'



2 A3.11 SOUTH ELEVATION

0' 2' 4' 8' 16'

GENERAL ELEVATION NOTES

1. SEE SHEET **A1.00A** - ORIENTATION PLAN - FOR EXTERIOR BUILDING ELEVATION LOCATIONS

KEYED ELEVATION NOTES

☐ TAG USED FOR THIS SCHEDULE

1	FACE BRICK 1 - SEE SPEC
2	FACE BRICK 2 - SEE SPEC
3	FACE BRICK 3 UTILITY BRICK - SEE SPEC
4	FACE BRICK 1 SOLDIER COURSE - SEE SPEC
5	FACE BRICK 1 HEADER COURSE - SEE SPEC
6	FACE BRICK 2 SOLDIER COURSE - SEE SPEC
7	MASONRY CAST STONE SILL
8	MASONRY CAST STONE LINTEL
9	FIBERGLASS WDW UNIT
10	PREFINISHED METAL COPING
11	ALUM STOREFRONT WDW SYSTEM
12	ALUM CURTAIN WALL WDW SYSTEM
13	COMPOSITE METAL PANEL SYSTEM
14	CIP CONC
15	PAINTED STEEL RAILING, SEE SPEC
16	STANDING SEAM METAL ROOFING, SEE SPEC
17	PRECAST CAP
18	36 X 48" ACCESS PANEL - SEE SPEC
19	ALIGN JOINTS
20	CONTROL JOINTS

MATERIAL KEY

EXTENTS OF BRICK-1

EXTENTS OF BRICK-2

EXTENTS OF BRICK-3

EXTENTS OF MP-1

EXTENTS OF IG-2

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

BUILDING ELEVATIONS

HOLLAND BASHAM ARCHITECTS
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OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15097

DATE: 04/01/16

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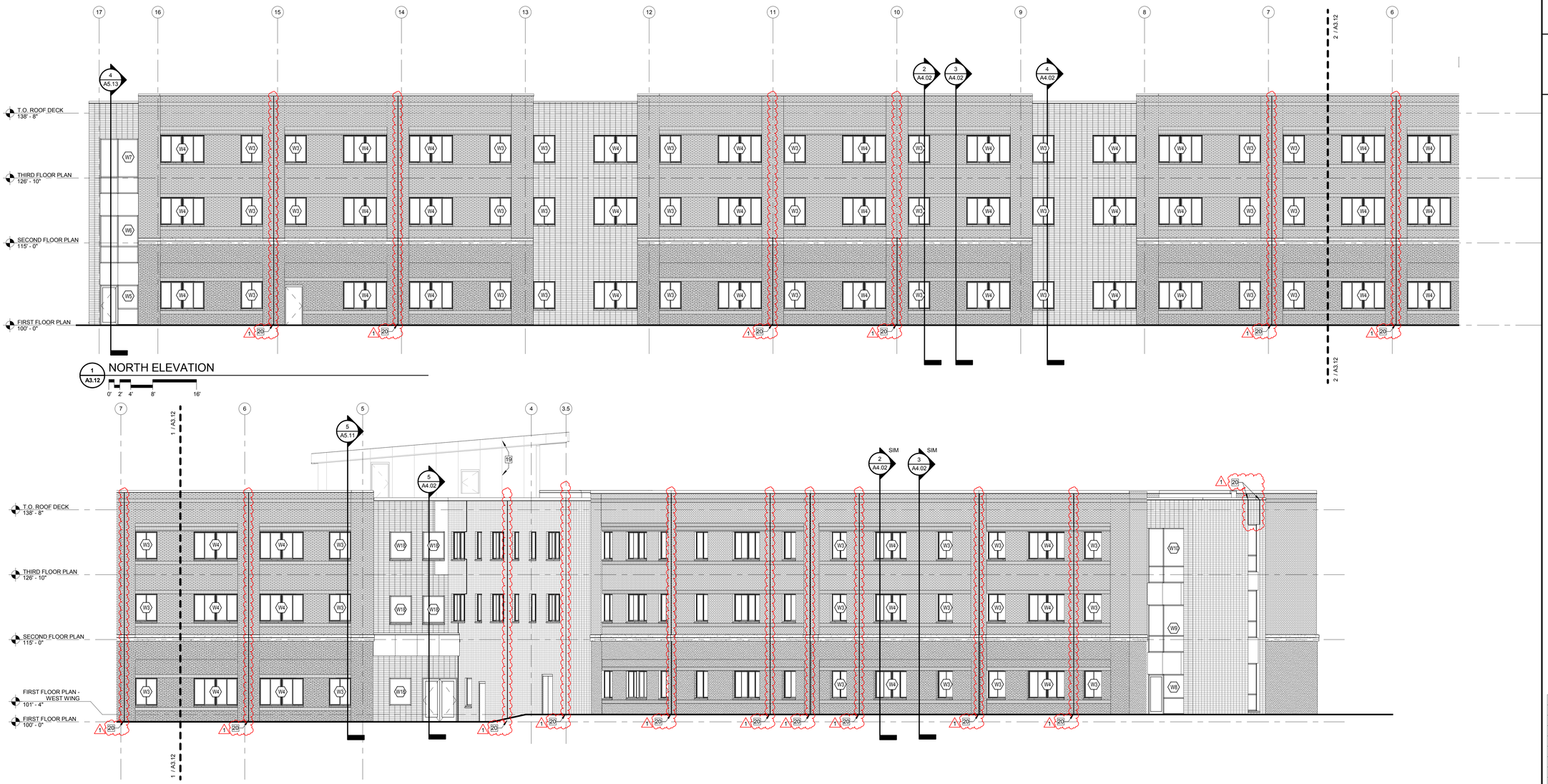
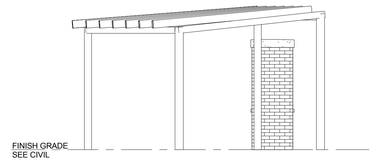


1 / A3.12 NORTH ELEVATION

0' 2' 4' 8' 16'

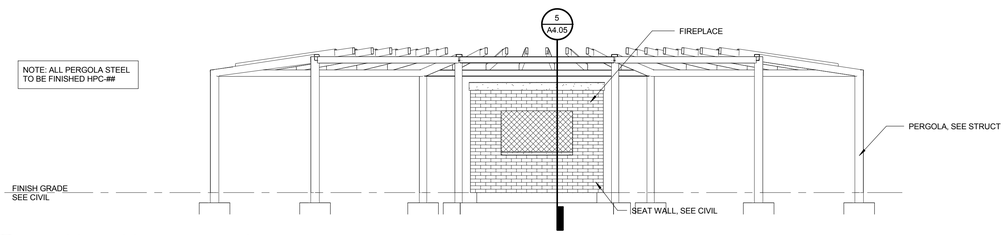
2 / A3.12 NORTH ELEVATION - CENTER & WEST WING

0' 2' 4' 8' 16'



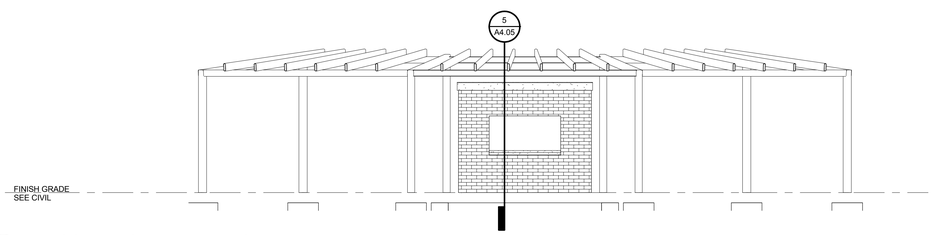
5 / A3.12 PERGOLA - WEST ELEVATION

0' 2' 4' 8' 16'



3 / A3.12 PERGOLA - SOUTH ELEVATION

0' 2' 4' 8' 16'



4 / A3.12 PERGOLA - NORTH ELEVATION

0' 2' 4' 8' 16'

GENERAL ELEVATION NOTES

1. SEE SHEET **A3.11** FOR GENERAL ELEVATION NOTES.

KEYED ELEVATION NOTES

1. SEE SHEET **A3.11** FOR KEYED ELEVATION NOTES.

MATERIAL LEGEND

1. SEE SHEET **A3.11** FOR THE MATERIAL LEGEND.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

BUILDING ELEVATIONS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

ARCHITECT
CURTIS G. MEADER
NEBRASKA

PROJECT:15097
DATE: 04/01/16

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1 A3.13 EAST ELEVATION

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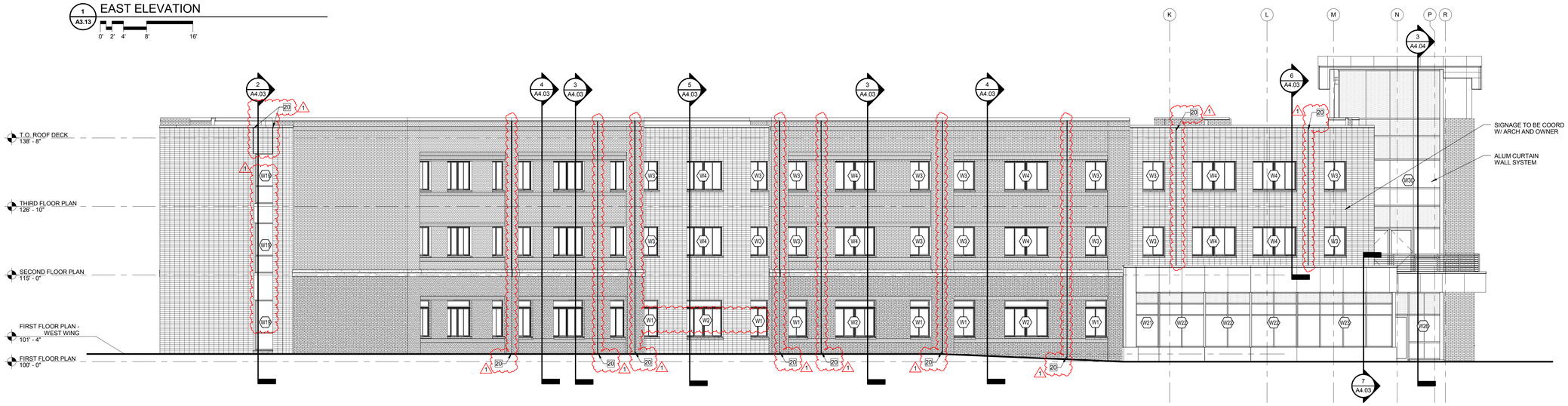
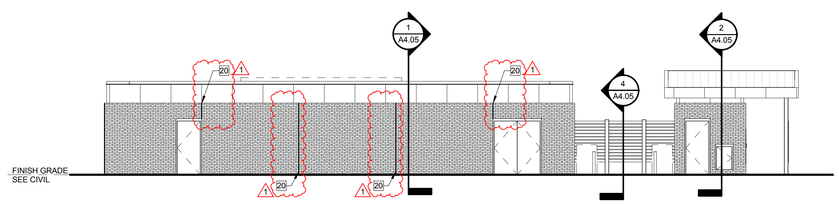


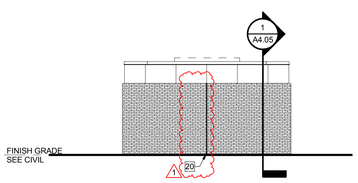
2 A3.13 WEST ELEVATION

0' 2' 4' 8' 16'



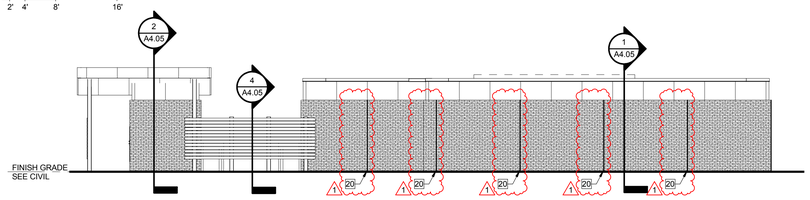
4 A3.13 ENCLOSURE - NORTH ELEVATION

0' 2' 4' 8' 16'



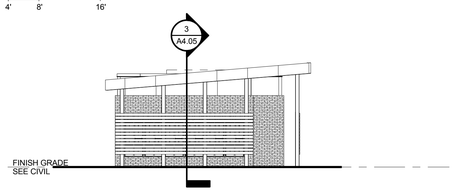
3 A3.13 ENCLOSURE - EAST ELEVATION

0' 2' 4' 8' 16'



5 A3.13 ENCLOSURE - SOUTH ELEVATION

0' 2' 4' 8' 16'



6 A3.13 ENCLOSURE - WEST ELEVATION

0' 2' 4' 8' 16'

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

BUILDING ELEVATIONS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

ARCHITECT
CURTIS G. MITZENBERG
#A1276
STATE OF NEBRASKA

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DATE: 04/01/16

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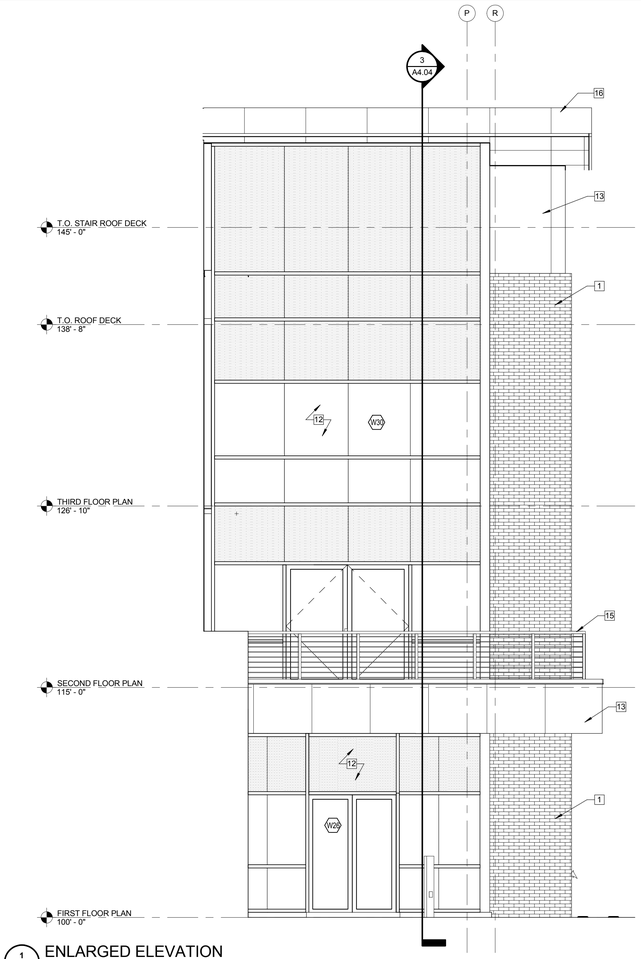

1 A3.21 ENLARGED ELEVATION

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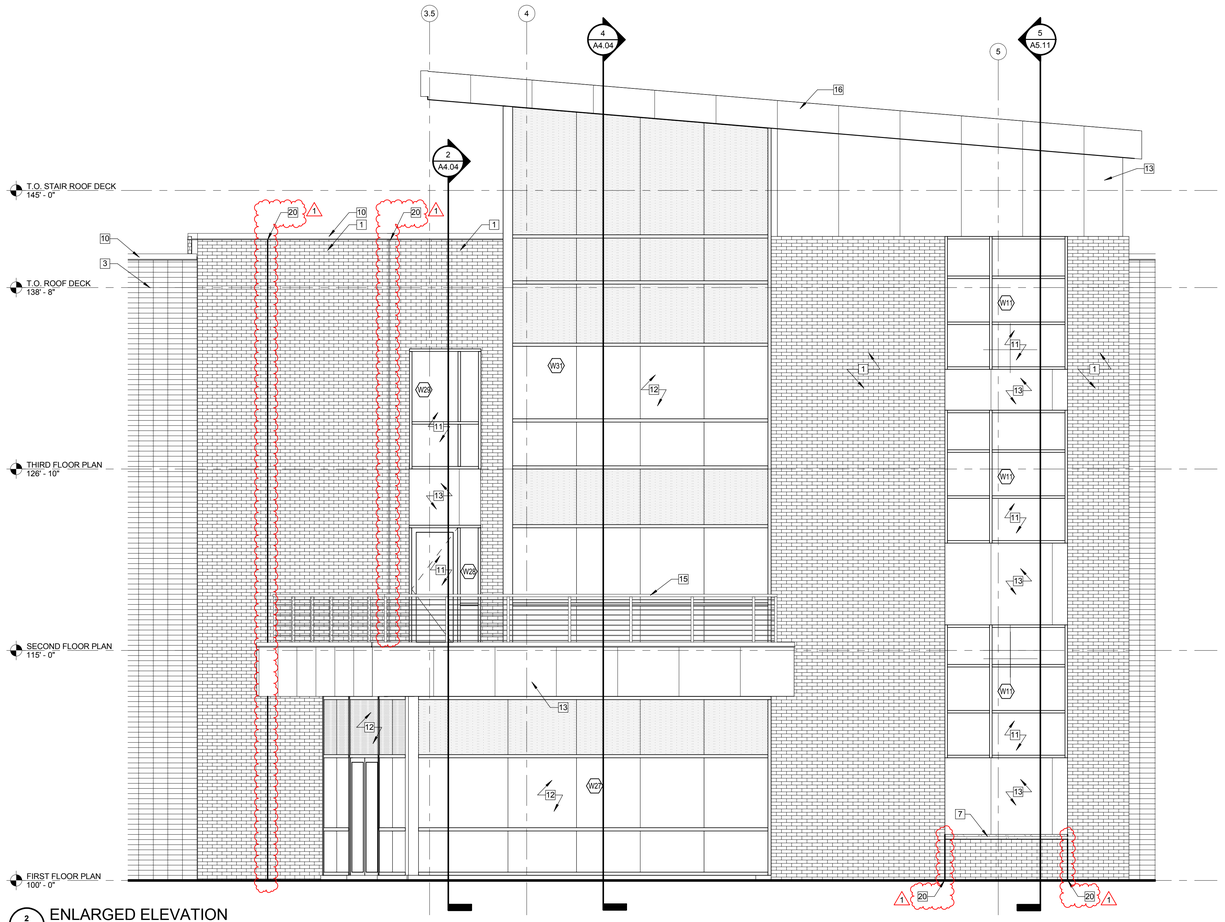

2 A3.21 ENLARGED ELEVATION

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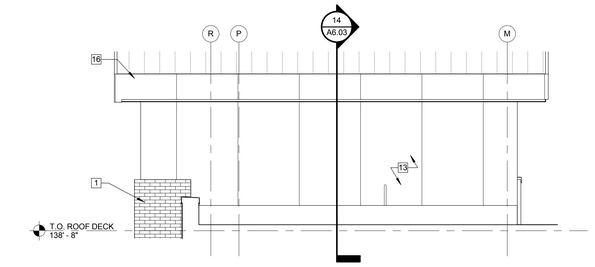

3 A3.21 ENLARGED ELEVATION

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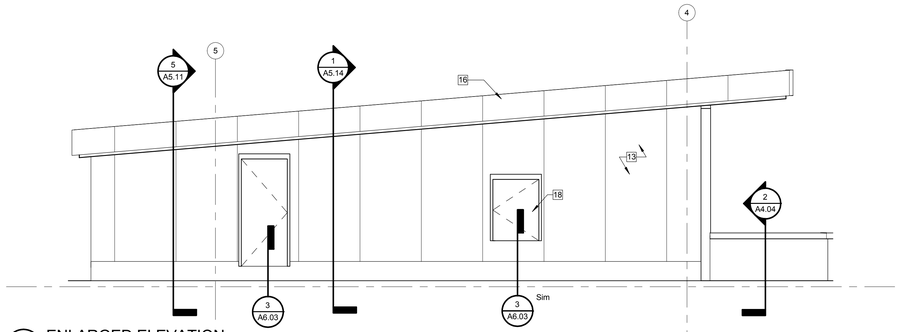
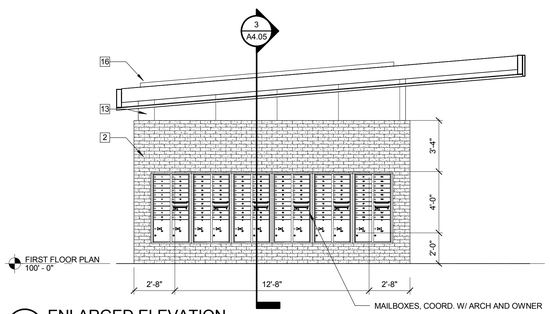


4 A3.21 ENLARGED ELEVATION

0' 1' 2' 4' 8'



6 A3.21 ENLARGED ELEVATION

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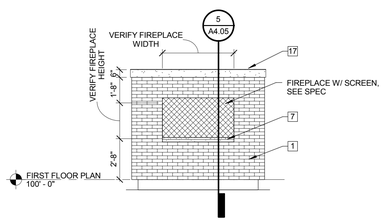

7 A3.21 ENLARGED ELEVATION

0' 1' 2' 4' 8'

GENERAL ELEVATION NOTES

1. SEE SHEET **A3.11** FOR GENERAL ELEVATION NOTES.

KEYED ELEVATION NOTES

1. SEE SHEET **A3.11** FOR KEYED ELEVATION NOTES.

MATERIAL LEGEND

1. SEE SHEET **A3.11** FOR THE MATERIAL LEGEND.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

ENLARGED BUILDING ELEVATIONS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

ARCHITECT
CURTIS G. MITZENBERG
REGISTERED
STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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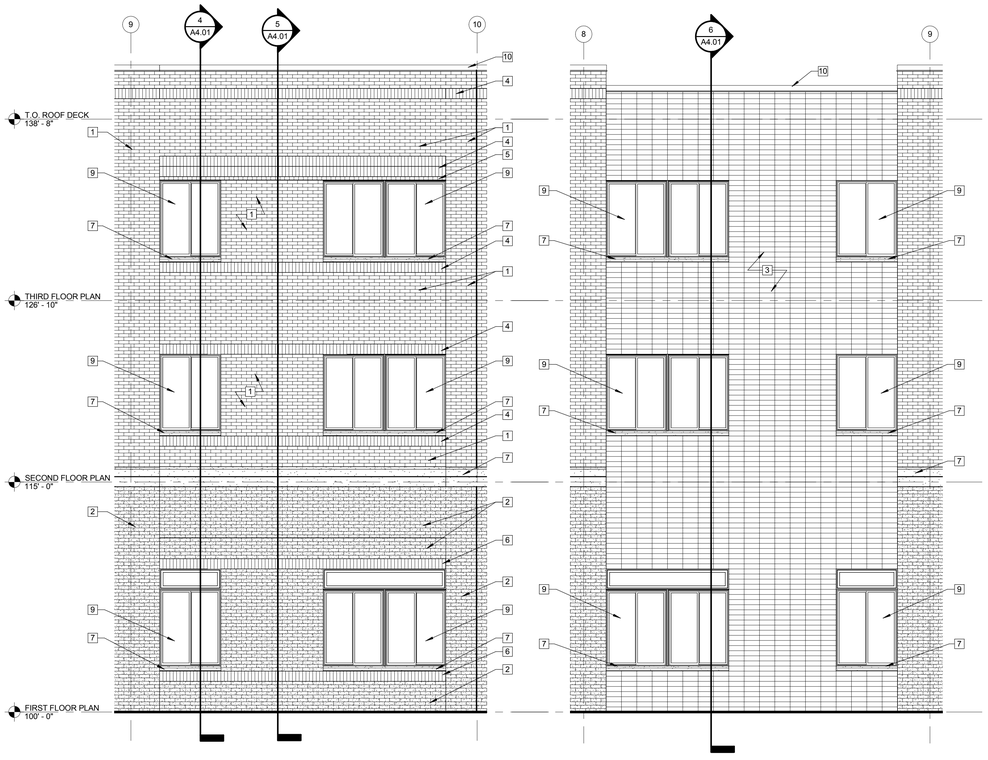
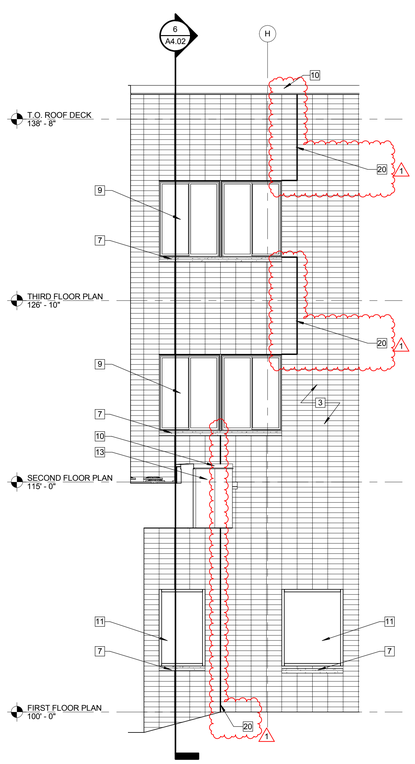


1 A3.22 ENLARGED ELEVATION

0' 1' 2' 4' 8'

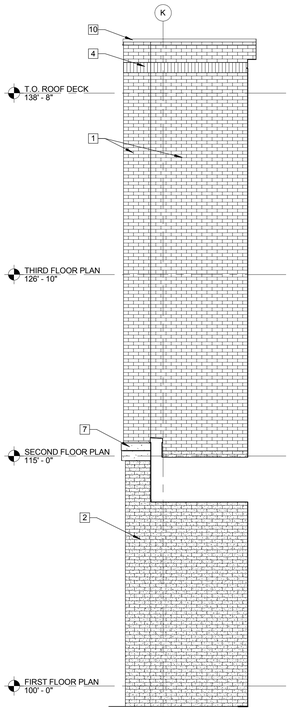
2 A3.22 ENLARGED ELEVATION

0' 1' 2' 4' 8'



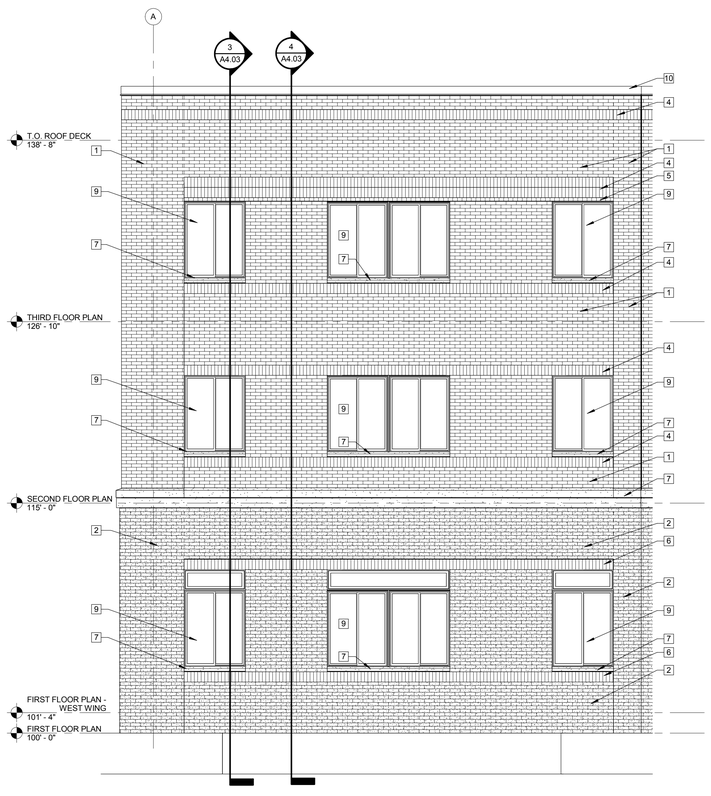
3 A3.22 ENLARGED ELEVATION

0' 1' 2' 4' 8'



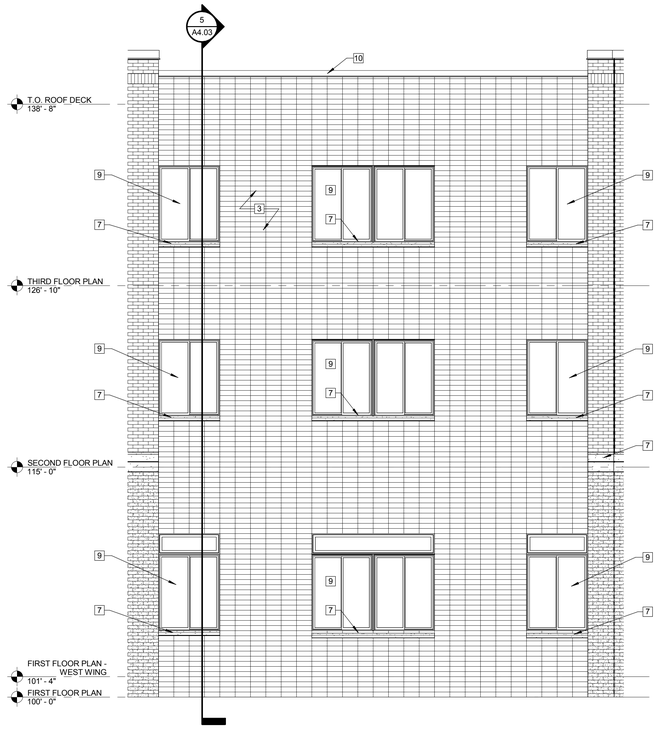
7 A3.22 ENLARGED ELEVATION

0' 1' 2' 4' 8'



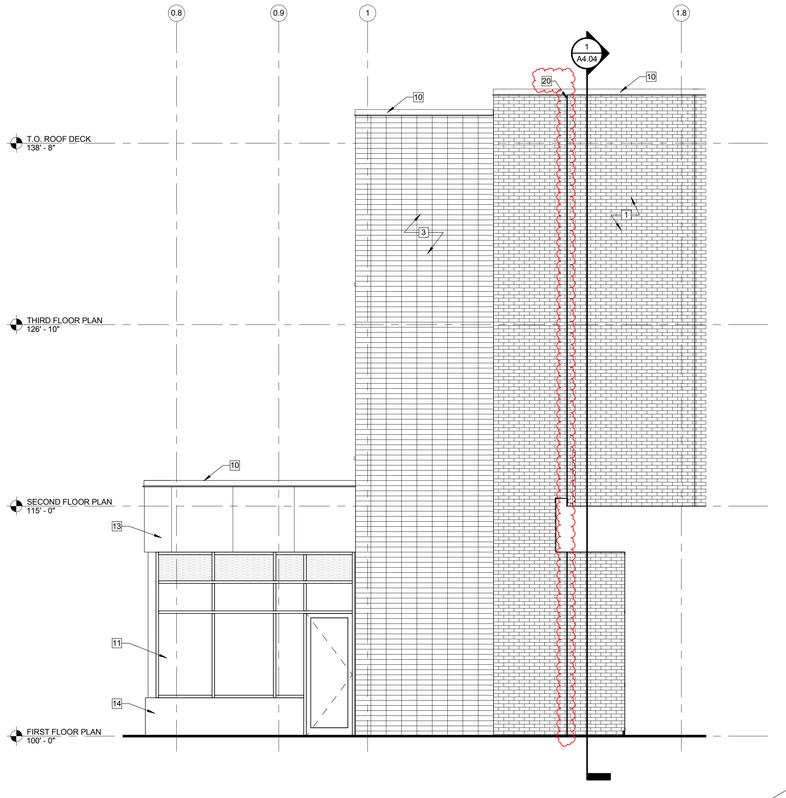
4 A3.22 ENLARGED ELEVATION

0' 1' 2' 4' 8'



5 A3.22 ENLARGED ELEVATION

0' 1' 2' 4' 8'



6 A3.22 ENLARGED ELEVATION

0' 1' 2' 4' 8'

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

ENLARGED BUILDING ELEVATIONS

HOLLAND BASHAM ARCHITECTS

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SHEET: A3.22

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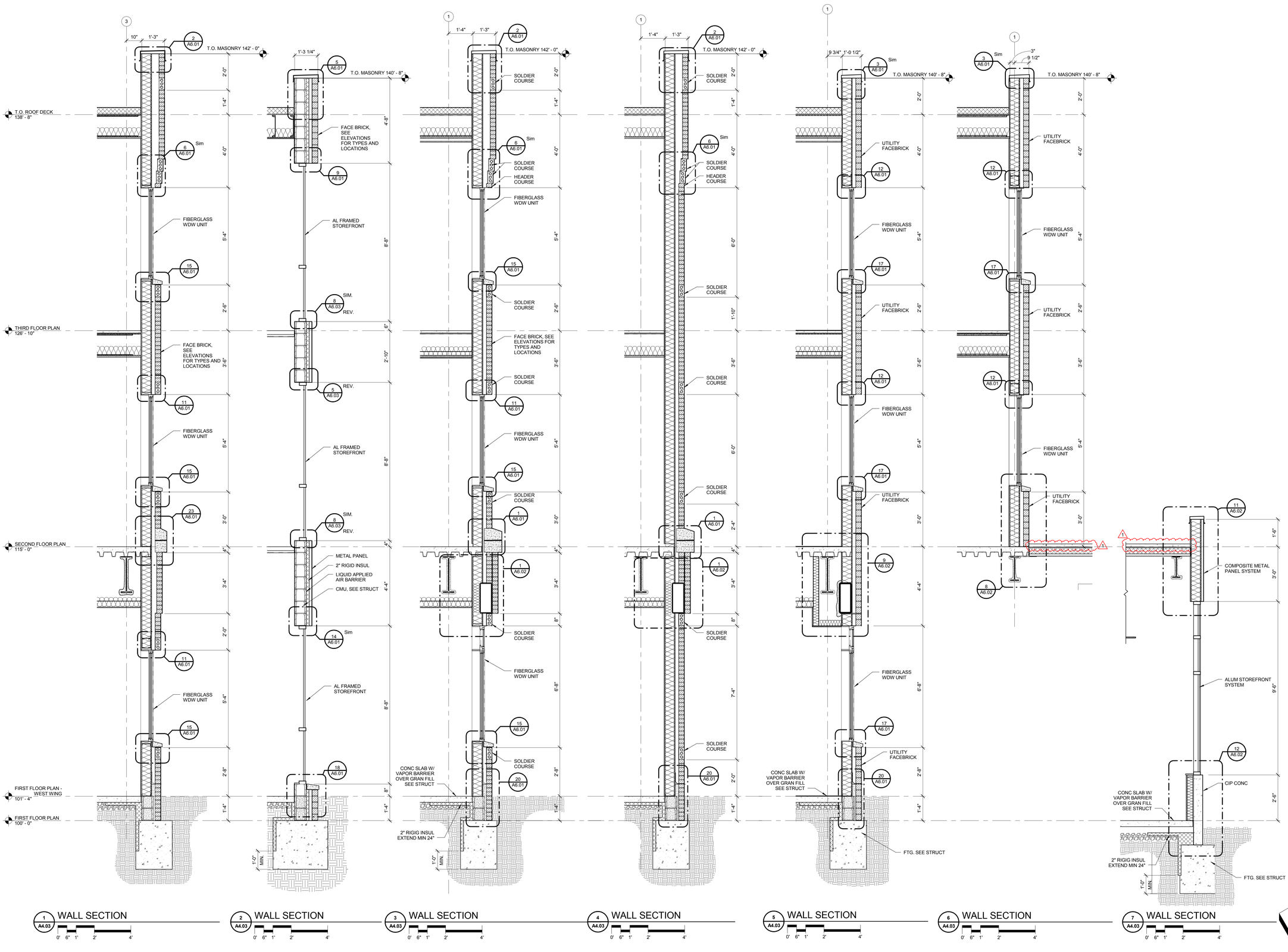

1 WALL SECTION A4.03 — 0' 6" 1' 2' 4'

2 WALL SECTION A4.03 — 0' 6" 1' 2' 4'

3 WALL SECTION A4.03 — 0' 6" 1' 2' 4'

4 WALL SECTION A4.03 — 0' 6" 1' 2' 4'

5 WALL SECTION A4.03 — 0' 6" 1' 2' 4'

6 WALL SECTION A4.03 — 0' 6" 1' 2' 4'

7 WALL SECTION A4.03 — 0' 6" 1' 2' 4'

GENERAL SECTION NOTES

1. SEE SHEET **A4.01** FOR GENERAL WALL SECTION NOTES

2. SEE SECTION 1 ON THIS SHEET FOR ALL TYPICAL NOTES, DIMENSIONS, AND DETAIL REFERENCES. SEE THE INDIVIDUAL WALL SECTION FOR NOTES, DIMENSIONS AND DETAIL REFERENCES DESCRIBING UNIQUE CONDITIONS.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

WALL SECTIONS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PRELIMINARY NOT FOR CONSTRUCTION

PROJECT:15097
DATE: 04/01/16

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SHEET: A4.03

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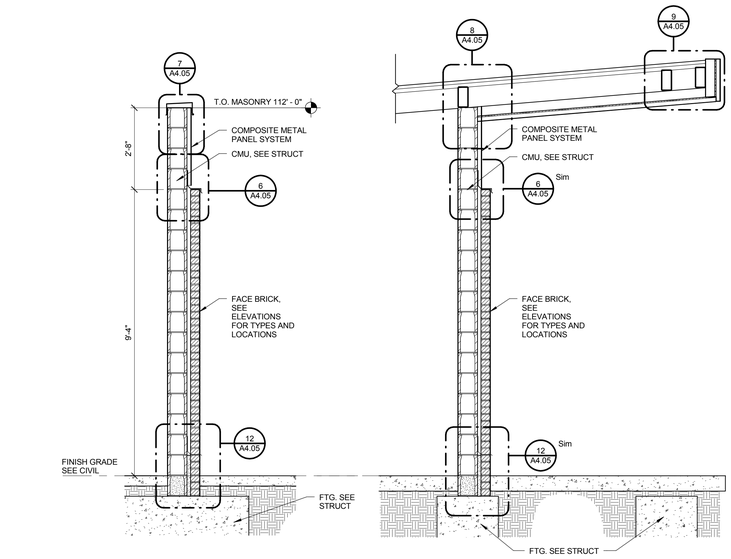
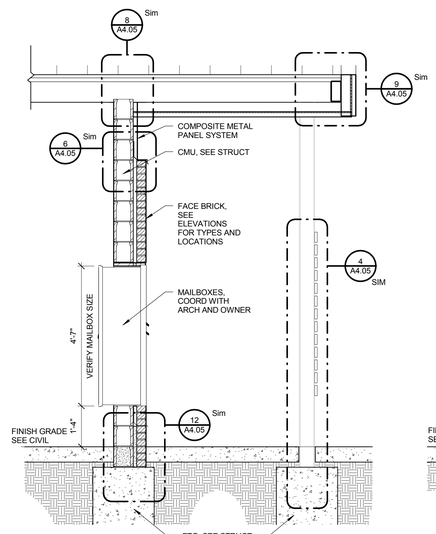


1 A4.05 WALL SECTION - ENCLOSURE

0' 6" 1' 2' 4'

2 A4.05 WALL SECTION - ENCLOSURE SOUTH

0' 6" 1' 2' 4'



3 A4.05 WALL SECTION

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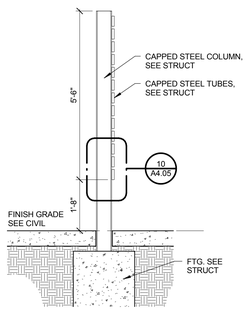

4 A4.05 WALL SECTION

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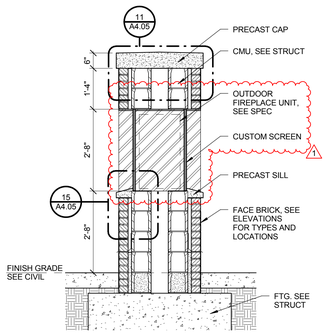
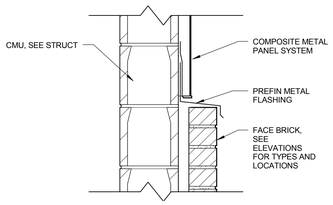


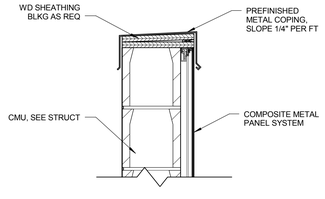
5 A4.05 FIREPLACE SECTION

0' 6" 1' 2' 4'



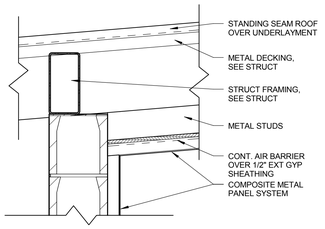
6 A4.05 SECTION DETAIL

0' 3" 6" 1'



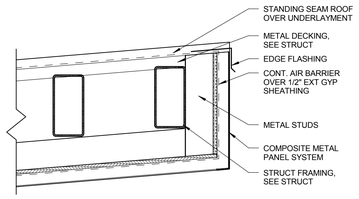
7 A4.05 SECTION DETAIL

0' 3" 6" 1'



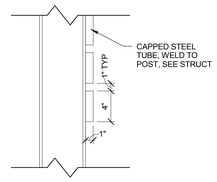
8 A4.05 SECTION DETAIL

0' 3" 6" 1'



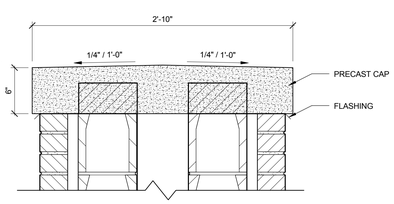
9 A4.05 SECTION DETAIL

0' 3" 6" 1'



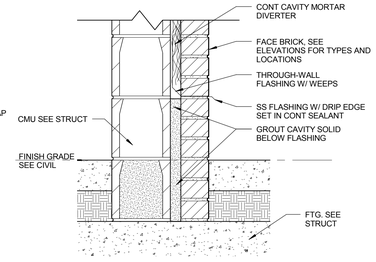
10 A4.05 SECTION DETAIL

0' 3" 6" 1'



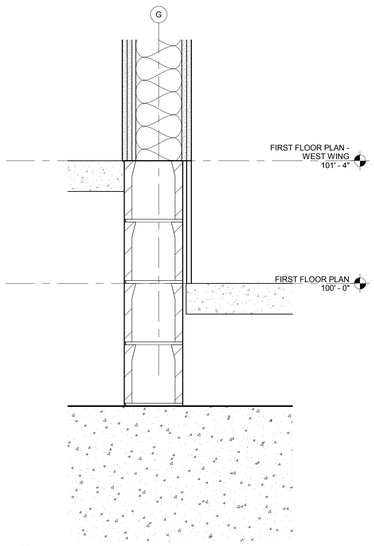
11 A4.05 SECTION DETAIL

0' 3" 6" 1'



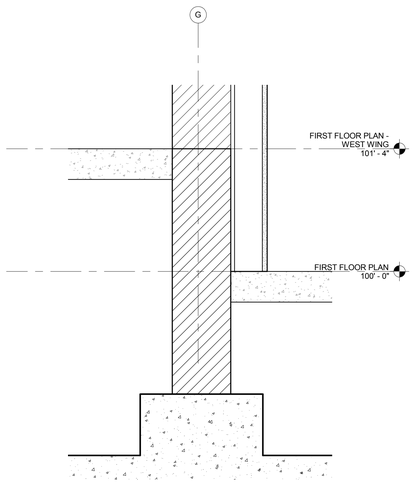
12 A4.05 SECTION DETAIL

0' 3" 6" 1'



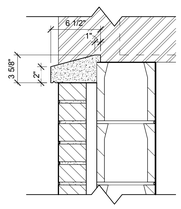
13 A4.05 SECTION DETAIL

0' 3" 6" 1'



14 A4.05 SECTION DETAIL

0' 3" 6" 1'



15 A4.05 SECTION DETAIL

0' 3" 6" 1'

GENERAL SECTION NOTES

1. SEE SHEET **A4.01** FOR GENERAL WALL SECTION NOTES

2. SEE SECTION 1 ON THIS SHEET FOR ALL TYPICAL NOTES, DIMENSIONS, AND DETAIL REFERENCES. SEE THE INDIVIDUAL WALL SECTION FOR NOTES, DIMENSIONS AND DETAIL REFERENCES DESCRIBING UNIQUE CONDITIONS.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

WALL SECTIONS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15097
DATE: 04/01/16

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SHEET: A4.05

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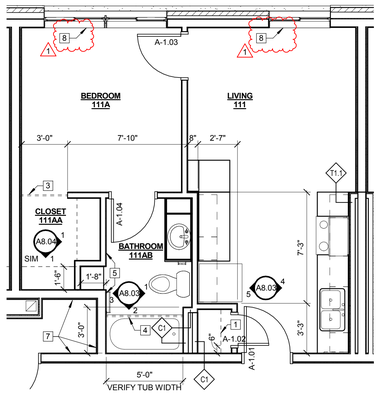
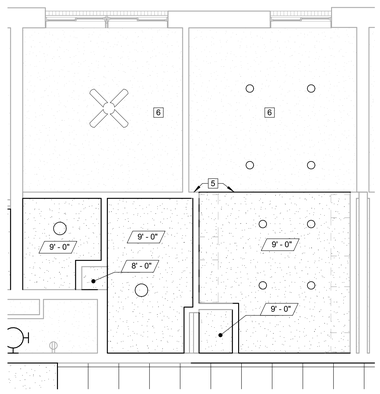


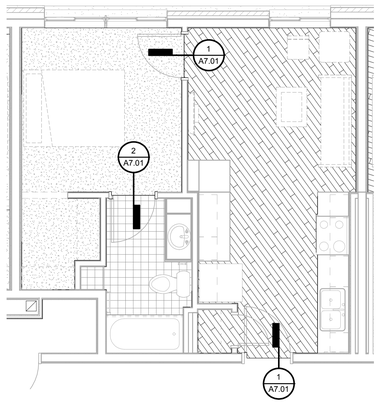
5 A5.21 UNIT A-1 FLOOR PLAN

0' 1' 2' 4' 8'



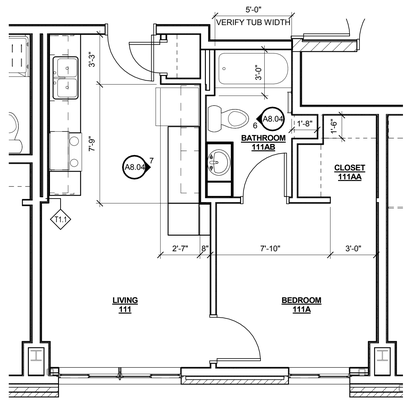
4 A5.21 UNIT A-1 REFLECTED CEILING PLAN

0' 1' 2' 4' 8'



6 A5.21 UNIT A-1 FINISH FLOOR PLAN

0' 1' 2' 4' 8'



7 A5.21 UNIT A-1 SIM FLOOR PLAN

0' 1' 2' 4' 8'

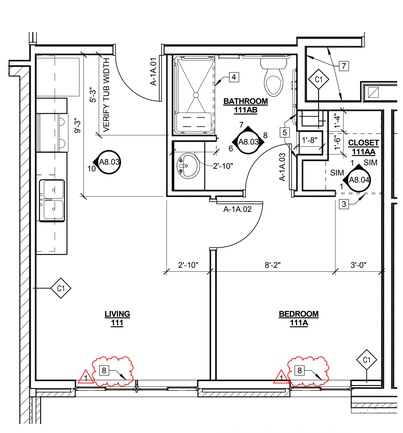
DOOR SCHEDULE UNIT A-1

DOOR NO.	DOOR PR.	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MAT'L	DOOR FIN.	FRAME TYPE	FRAME MAT'L	FRAME FIN.	LABEL	HDWR.	DETAIL	SHEET	REMARKS
A-1.01	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	20 MIN.	12	- - -	- - -	
A-1.02	- - -	2' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	30	- - -	- - -	
A-1.03	- - -	2' - 10"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	31	- - -	- - -	
A-1.04	- - -	2' - 10"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	31	- - -	- - -	

1. SEE SHEET A2.01 FOR GENERAL DOOR SCHEDULE NOTES.
2. CONTRACTOR TO COORDINATE UNIT DOORS/HARDWARE FOR MIRRORED UNITS

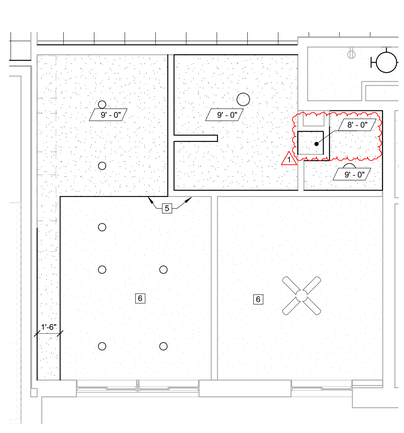
ROOM FINISH SCHEDULE UNIT A-1

Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Comments
A-1-111	LIVING	LVT-1	RB-1	P-1	GWB	
A-1-111A	BEDROOM	CPT-3	RB-1	P-1	GWB	
A-1-111AA	CLOSET	CPT-3	RB-1	P-1	GWB	
A-1-111AB	BATHROOM	CT-6	RB-1	P-1, CT-6*	GWB	* SEE SHEETS A8.03 & A8.04 FOR EXTENTS OF CT-6



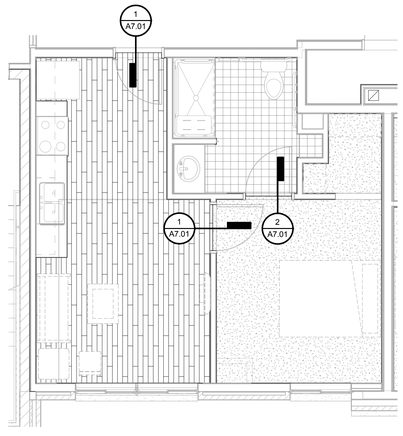
1 A5.21 UNIT A-1A FLOOR PLAN - ACCESSIBLE

0' 1' 2' 4' 8'



2 A5.21 UNIT A-1A REFLECTED CEILING PLAN

0' 1' 2' 4' 8'



3 A5.21 UNIT A-1A FINISH FLOOR PLAN

0' 1' 2' 4' 8'

DOOR SCHEDULE UNIT A-1A

DOOR NO.	DOOR PR.	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MAT'L	DOOR FIN.	FRAME TYPE	FRAME MAT'L	FRAME FIN.	LABEL	HDWR.	DETAIL	SHEET	REMARKS
A-1A.01	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	20 MIN.	12	- - -	- - -	INSTALL VIEWER @ 43" AFF
A-1A.02	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	31	- - -	- - -	
A-1A.03	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	31	- - -	- - -	

1. SEE SHEET A2.01 FOR GENERAL DOOR SCHEDULE NOTES.

ROOM FINISH SCHEDULE UNIT A-1A

Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Comments
A-1A-111	LIVING	LVT-1	RB-1	P-1	GWB	
A-1A-111A	BEDROOM	CPT-3	RB-1	P-1	GWB	
A-1A-111AA	CLOSET	CPT-3	RB-1	P-1	GWB	
A-1A-111AB	BATHROOM	CT-6	RB-1	P-1, CT-6*	GWB	* SEE SHEETS A8.03 & A8.04 FOR EXTENTS OF CT-6

GENERAL UNIT NOTES

1. ALL BOLD OR FULL-TONE LINES INDICATE NEW CONSTRUCTION, FIXTURES OR EQUIPMENT. ALL LIGHT OR HALF-TONE LINES INDICATE EXISTING CONSTRUCTION, FIXTURES OR EQUIPMENT.
2. ALL DIMENSIONS ARE TAKEN TO THE FACE OF EXISTING CONSTRUCTION OR THE FINISH FACE OF NEW CONSTRUCTION, UNLESS OTHERWISE NOTED ON THE PLANS. LIGHT OR HALF TONE DIMENSIONS ARE SHOWN FOR INFORMATION ONLY.
3. ALL NEW PARTITIONS SHOWN WITHIN THE LIMITS OF CONSTRUCTION ARE TYPE "**A.1**" UNLESS NOTED OTHERWISE.
4. SEE SHEET **A2.01** FOR PARTITION TYPES.
5. PROVIDE CONTINUOUS BLOCKING OR STRAPPING WITHIN NEW WALLS AS REQUIRED FOR ALL WALL MOUNTED CASEWORK, FIXTURES, ACCESSORIES AND EQUIPMENT. ANCHOR BLOCKING BETWEEN THE STUDS, AT THE FACE OF THE STUDS, FOR THE ENTIRE WIDTH OF THE ITEM TO BE MOUNTED ON THE WALL. ANCHOR 22 GA SHEET METAL STRAPPING TO THE FACE OF THE STUDS, FOR THE ENTIRE WIDTH OF THE ITEM TO BE MOUNTED ON THE WALL. VERIFY VERTICAL LOCATION OF BLOCKING WITH THE MOUNTING HEIGHT REQUIRED AND THE REQUIREMENTS OF THE ITEM TO BE MOUNTED ON THE WALL.
6. OWNER FURNISHED EQUIPMENT SHOWN DASHED ON PLAN, UNLESS OTHERWISE NOTED.
7. PROVIDE SELF-LEVELING CONCRETE FLOOR UNDERLAYMENT AS REQUIRED TO ACHIEVE A SMOOTH AND LEVEL SUBSTRATE FOR FLOOR FINISHES.
8. ALL FURNITURE IS NOT-IN-CONTRACT AND SHOWN FOR INFORMATION AND COORDINATION ONLY.
9. FOR DESIGNATED WALL RATING REFER TO BUILDING CODE REVIEW PLANS, SHEET **A0.11-A0.13.**
10. WHEN PARTITIONS OF DIFFERENT RATINGS ARE LOCATED ALONG THE SAME WALL, ALIGN FINISH FACE OF WALL AS REQUIRED.
11. FOR ALL INTERIOR FINISHES REFER TO ROOM FINISH SCHEDULE, SHEET **A1.31B.**
12. SEE OVERALL AREA PLANS FOR LOCATION OF MECHANICAL CLOSET AND CORRIDOR WALLS.
13. SEE SHEETS ***A1.01A-A1.03B*** FOR LOCATIONS AND PARTITION TYPES OF DEMISING, MECH CLOSET, AND CORRIDOR WALLS.

FINISH MATERIAL KEY

1. SEE SHEET **A1.31B** FOR THE MATERIAL KEY LEGEND

KEYED UNIT NOTES

☐ TAG USED FOR THIS SCHEDULE

	1	CLOSET, SEE 1/A8.04
1	2	NOT USED
	3	CLOSET ROD
	4	SHOWER ROD
	5	ALIGN FINISH FACES OF WALL
	6	BOTTOM OF RATED FLOOR/CEILING ASSEMBLY, EXCEPT ON FIRST FLOOR WHERE CEILINGS ARE 10'-4" AFF
	7	SEE AREA PLANS FOR LOCATION OF CORRIDOR AND MECHANICAL CLOSET WALLS
	8	VERTICAL BLINDS. SEE SPEC SECTION 12 2116. INSTALL BELOW TRANSOMS WHERE APPLICABLE

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

ENLARGED PLANS AND SCHEDULES - UNIT TYPES A-1, A-1A

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

ARCHITECT — CURTIS G. MITZENBERG — 0A1019 — STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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SHEET: A5.21

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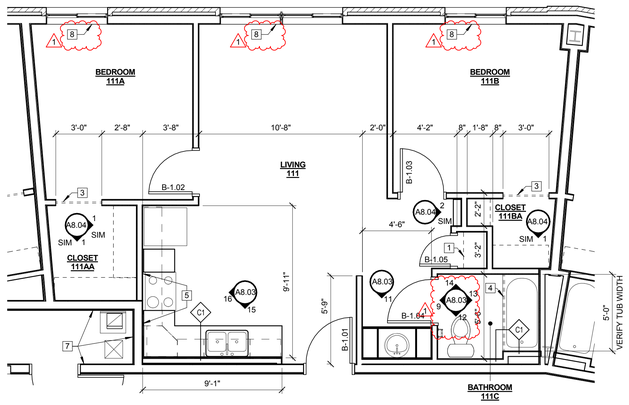
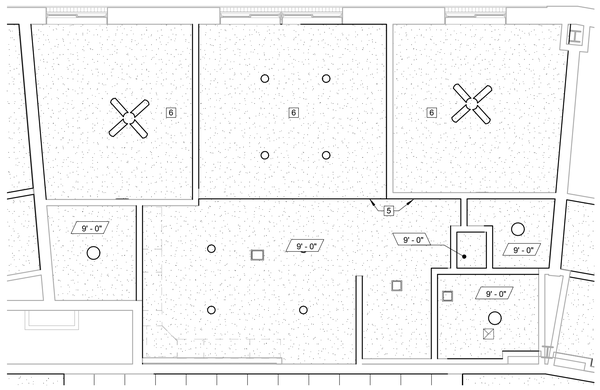


1 UNIT B-1 FLOOR PLAN

A5.22

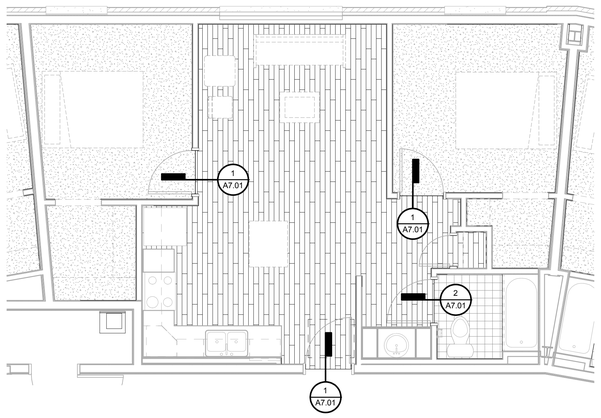
0' 1' 2' 4' 8'



7 UNIT B-1 REFLECTED CEILING PLAN

A5.22

0' 1' 2' 4' 8'



2 UNIT B-1 FINISH FLOOR PLAN

A5.22

0' 1' 2' 4' 8'

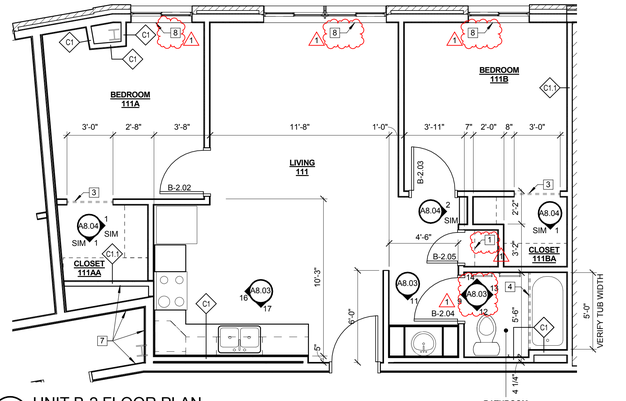
DOOR SCHEDULE UNIT B-1

DOOR NO.	DOOR PR.	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MAT'L	DOOR FIN.	FRAME TYPE	FRAME MAT'L	FRAME FIN.	LABEL	HDWR.	DETAIL	SHEET	REMARKS
B-1.01	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	20 MIN.	12	- - -	- - -	
B-1.02	- - -	2' - 10"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	19	- - -	- - -	
B-1.03	- - -	2' - 10"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	19	- - -	- - -	
B-1.04	- - -	2' - 10"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	31	- - -	- - -	
B-1.05	- - -	2' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	30	- - -	- - -	

1. SEE SHEET A2.01 FOR GENERAL DOOR SCHEDULE NOTES.
2. CONTRACTOR TO COORDINATE UNIT DOORS/HARDWARE FOR MIRRORED UNITS

ROOM FINISH SCHEDULE UNIT B-1

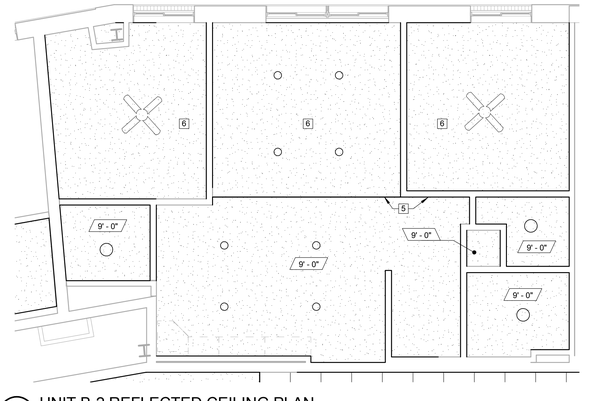
Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Comments
B-1-111	LIVING	LVT-1	RB-1	P-1	GWB	
B-1-111A	BEDROOM	CPT-3	RB-1	P-1	GWB	
B-1-111AA	CLOSET	CPT-3	RB-1	P-1	GWB	
B-1-111B	BEDROOM	CPT-3	RB-1	P-1	GWB	
B-1-111BA	CLOSET	CPT-3	RB-1	P-1	GWB	
B-1-111C	BATHROOM	CT-6	RB-1	P-1, CT-6*	GWB	* SEE SHEETS A8.03 & A8.04 FOR EXTENTS OF CT-6



3 UNIT B-2 FLOOR PLAN

A5.22

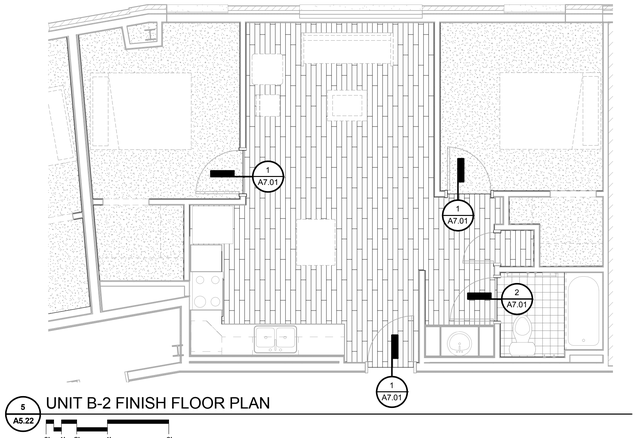
0' 1' 2' 4' 8'



4 UNIT B-2 REFLECTED CEILING PLAN

A5.22

0' 1' 2' 4' 8'



5 UNIT B-2 FINISH FLOOR PLAN

A5.22

0' 1' 2' 4' 8'

DOOR SCHEDULE UNIT B-2

DOOR NO.	DOOR PR.	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MAT'L	DOOR FIN.	FRAME TYPE	FRAME MAT'L	FRAME FIN.	LABEL	HDWR.	DETAIL	SHEET	REMARKS
B-2.01	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	20 MIN.	12	- - -	- - -	
B-2.02	- - -	2' - 10"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	19	- - -	- - -	
B-2.03	- - -	2' - 10"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	19	- - -	- - -	
B-2.04	- - -	2' - 10"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	31	- - -	- - -	
B-2.05	- - -	2' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	30	- - -	- - -	

1. SEE SHEET A2.01 FOR GENERAL DOOR SCHEDULE NOTES.
2. CONTRACTOR TO COORDINATE UNIT DOORS/HARDWARE FOR MIRRORED UNITS

ROOM FINISH SCHEDULE UNIT B-2

Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Comments
B-2-111	LIVING	LVT-1	RB-1	P-1	GWB	
B-2-111A	BEDROOM	CPT-3	RB-1	P-1	GWB	
B-2-111AA	CLOSET	CPT-3	RB-1	P-1	GWB	
B-2-111B	BEDROOM	CPT-3	RB-1	P-1	GWB	
B-2-111BA	CLOSET	CPT-3	RB-1	P-1	GWB	
B-2-111C	BATHROOM	CT-6	RB-1	P-1, CT-6*	GWB	* SEE SHEETS A8.03 & A8.04 FOR EXTENTS OF CT-6

GENERAL UNIT NOTES

1. SEE SHEET **A5.21** FOR GENERAL UNIT NOTES.

FINISH MATERIAL KEY

1. SEE SHEET **A1.31B** FOR MATERIAL KEY LEGEND.

KEYED UNIT NOTES

1. SEE SHEET **A5.21** FOR KEYED UNIT NOTES.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

ENLARGED PLANS AND SCHEDULES - UNIT TYPES B-1, B-2

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

ARCHITECT
CURTIS G. CITTENBURG
A-10
STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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SHEET: A5.22

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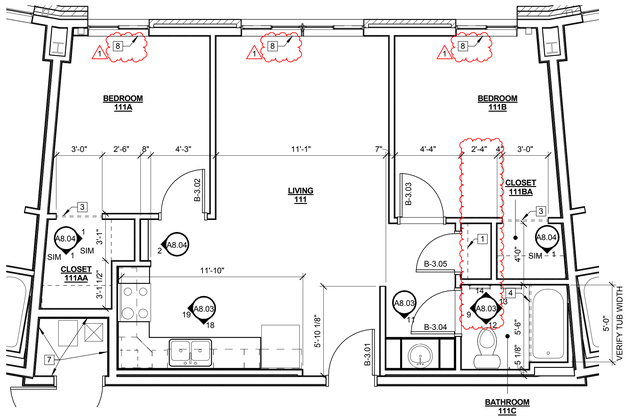
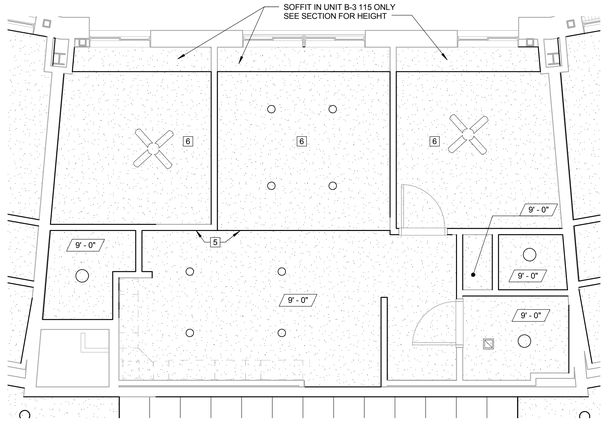


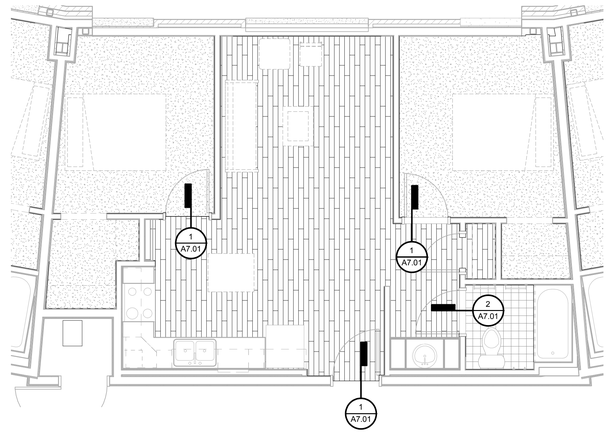
1 A5.23 UNIT B-3 FLOOR PLAN

0' 1' 2' 4' 8'



6 A5.23 UNIT B-3 REFLECTED CEILING PLAN

0' 1' 2' 4' 8'



2 A5.23 UNIT B-3 FINISH FLOOR PLAN

0' 1' 2' 4' 8'

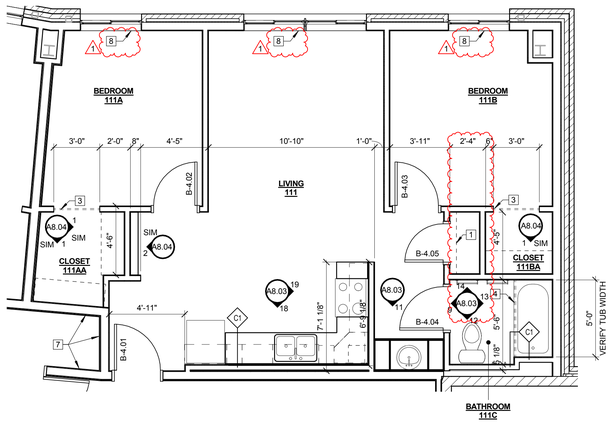
DOOR SCHEDULE UNIT B-3

DOOR NO.	DOOR PR.	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MAT'L	DOOR FIN.	FRAME TYPE	FRAME MAT'L	FRAME FIN.	LABEL	HDWR.	DETAIL	SHEET	REMARKS
B-3.01	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	20 MIN.	12	- - -	- - -	
B-3.02	- - -	2' - 10"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	19	- - -	- - -	
B-3.03	- - -	2' - 10"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	19	- - -	- - -	
B-3.04	- - -	2' - 10"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	31	- - -	- - -	
B-3.05	- - -	2' - 6"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	30	- - -	- - -	

1. SEE SHEET A2.01 FOR GENERAL DOOR SCHEDULE NOTES.
2. CONTRACTOR TO COORDINATE UNIT DOORS/HARDWARE FOR MIRRORED UNITS

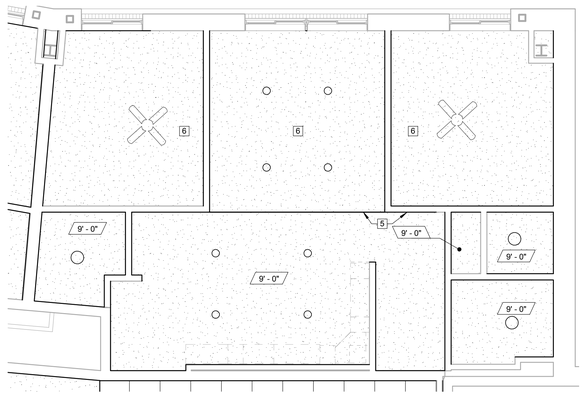
ROOM FINISH SCHEDULE UNIT B-3

Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Comments
B-3-111	LIVING	LVT-1	RB-1	P-1	GWB	
B-3-111A	BEDROOM	CPT-3	RB-1	P-1	GWB	
B-3-111AA	CLOSET	CPT-3	RB-1	P-1	GWB	
B-3-111B	BEDROOM	CPT-3	RB-1	P-1	GWB	
B-3-111BA	CLOSET	CPT-3	RB-1	P-1	GWB	
B-3-111C	BATHROOM	CT-6	RB-1	P-1, CT-6*	GWB	* SEE SHEETS A8.03 & A8.04 FOR EXTENTS OF CT-6



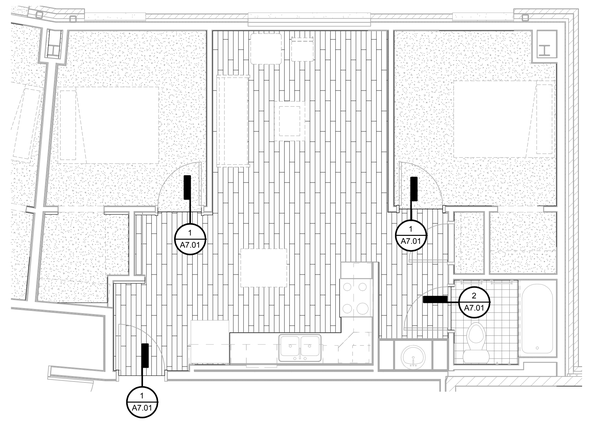
3 A5.23 UNIT B-4 FLOOR PLAN

0' 1' 2' 4' 8'



4 A5.23 UNIT B-4 REFLECTED CEILING PLAN

0' 1' 2' 4' 8'



5 A5.23 UNIT B-4 FINISH FLOOR PLAN

0' 1' 2' 4' 8'

DOOR SCHEDULE UNIT B-4

DOOR NO.	DOOR PR.	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MAT'L	DOOR FIN.	FRAME TYPE	FRAME MAT'L	FRAME FIN.	LABEL	HDWR.	DETAIL	SHEET	REMARKS
B-4.01	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	20 MIN.	12	- - -	- - -	
B-4.02	- - -	2' - 10"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	19	- - -	- - -	
B-4.03	- - -	2' - 10"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	19	- - -	- - -	
B-4.04	- - -	2' - 10"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	31	- - -	- - -	
B-4.05	- - -	2' - 6"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	30	- - -	- - -	

1. SEE SHEET A2.01 FOR GENERAL DOOR SCHEDULE NOTES.
2. CONTRACTOR TO COORDINATE UNIT DOORS/HARDWARE FOR MIRRORED UNITS

ROOM FINISH SCHEDULE UNIT B-4

Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Comments
B-4-111	LIVING	LVT-1	RB-1	P-1	GWB	
B-4-111A	BEDROOM	CPT-3	RB-1	P-1	GWB	
B-4-111AA	CLOSET	CPT-3	RB-1	P-1	GWB	
B-4-111B	BEDROOM	CPT-3	RB-1	P-1	GWB	
B-4-111BA	CLOSET	CPT-3	RB-1	P-1	GWB	
B-4-111C	BATHROOM	CT-6	RB-1	P-1, CT-6*	GWB	* SEE SHEETS A8.03 & A8.04 FOR EXTENTS OF CT-6

GENERAL UNIT NOTES

1. SEE SHEET **A5.21** FOR GENERAL UNIT NOTES.

FINISH MATERIAL KEY

1. SEE SHEET **A1.31B** FOR MATERIAL KEY LEGEND.

KEYED UNIT NOTES

1. SEE SHEET **A5.21** FOR KEYED UNIT NOTES.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

ENLARGED PLANS AND SCHEDULES - UNIT TYPES B-3, B-4

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

ARCHITECT
CURTIS G. CHRISTENSEN
A-9109
STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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SHEET: A5.23

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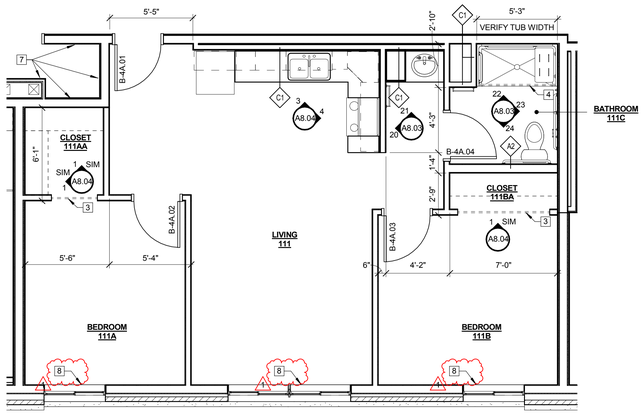
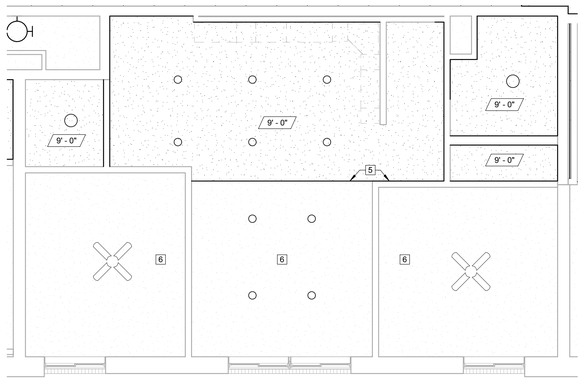


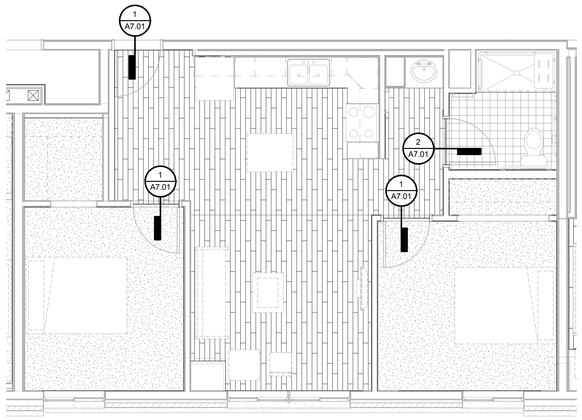
9 A5.24 UNIT B-4A FLOOR PLAN - ACCESSIBLE

0' 1' 2' 4' 8'



8 A5.24 UNIT B-4A REFLECTED CEILING PLAN

0' 1' 2' 4' 8'



3 A5.24 UNIT B-4A FINISH FLOOR PLAN

0' 1' 2' 4' 8'

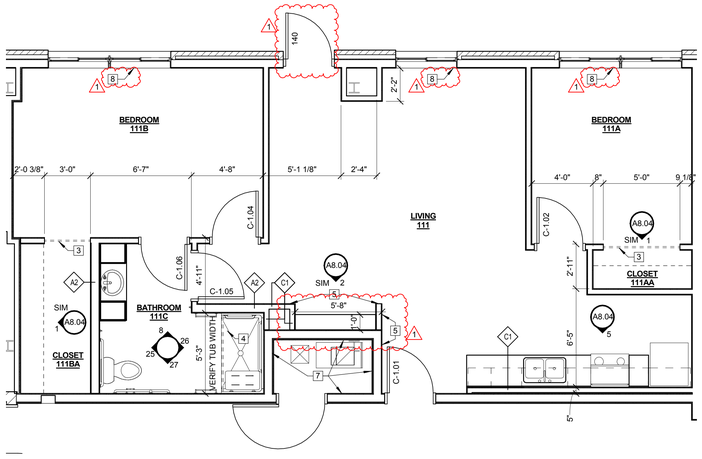
DOOR SCHEDULE UNIT B-4A

DOOR NO.	DOOR						FRAME			LABEL	HDWR.	DETAIL	SHEET	REMARKS
	PR.	WIDTH	HEIGHT	TYPE	MAT'L	FIN.	TYPE	MAT'L	FIN.					
B-4A.01	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	20 MIN.	12	- - -	- - -	INSTALL VIEWER @ 43" AFF
B-4A.02	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	19	- - -	- - -	
B-4A.03	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	19	- - -	- - -	
B-4A.04	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	31	- - -	- - -	

1. SEE SHEET A2.01 FOR GENERAL DOOR SCHEDULE NOTES.

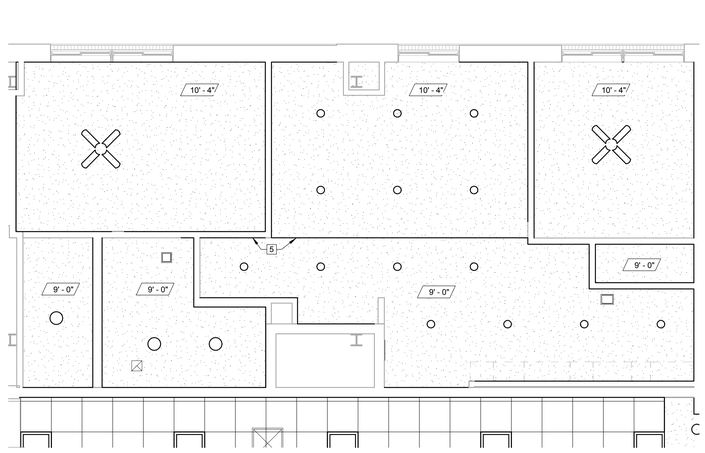
ROOM FINISH SCHEDULE UNIT B-4A

Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Comments
B-4A-111	LIVING	LVT-1	RB-1	P-1	GWB	
B-4A-111A	BEDROOM	CPT-3	RB-1	P-1	GWB	
B-4A-111AA	CLOSET	CPT-3	RB-1	P-1	GWB	
B-4A-111B	BEDROOM	CPT-3	RB-1	P-1	GWB	
B-4A-111BA	CLOSET	CPT-3	RB-1	P-1	GWB	
B-4A-111C	BATHROOM	CT-6	RB-1	P-1, CT-6*	GWB	* SEE SHEETS A8.03 & A8.04 FOR EXTENTS OF CT-6



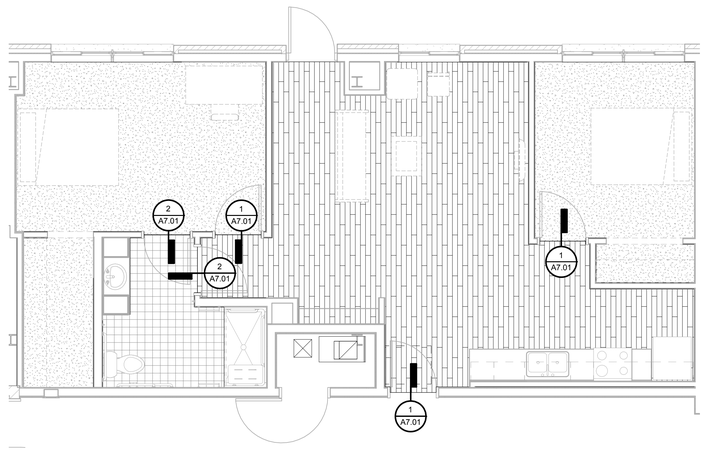
1 A5.24 UNIT C-1 FLOOR PLAN - ACCESSIBLE

0' 1' 2' 4' 8'



2 A5.24 UNIT C-1 REFLECTED CEILING PLAN

0' 1' 2' 4' 8'



7 A5.24 UNIT C-1 FINISH FLOOR PLAN

0' 1' 2' 4' 8'

DOOR SCHEDULE UNIT C-1

DOOR NO.	DOOR						FRAME			LABEL	HDWR.	DETAIL	SHEET	REMARKS
	PR.	WIDTH	HEIGHT	TYPE	MAT'L	FIN.	TYPE	MAT'L	FIN.					
C-1.01	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	20 MIN.	12	- - -	- - -	INSTALL VIEWER @ 43" AFF
C-1.02	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	19	- - -	- - -	
C-1.04	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	19	- - -	- - -	
C-1.05	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	31	- - -	- - -	
C-1.06	- - -	3' - 0"	7' - 0"	D1	WD	S-1	F1	HM	P-8	- - -	31	- - -	- - -	

1. SEE SHEET A2.01 FOR GENERAL DOOR SCHEDULE NOTES.

ROOM FINISH SCHEDULE UNIT C-1

Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Comments
C-1-111	LIVING	LVT-1	RB-1	P-1	GWB	
C-1-111A	BEDROOM	CPT-3	RB-1	P-1	GWB	
C-1-111AA	CLOSET	CPT-3	RB-1	P-1	GWB	
C-1-111B	BEDROOM	CPT-3	RB-1	P-1	GWB	
C-1-111BA	CLOSET	CPT-3	RB-1	P-1	GWB	
C-1-111C	BATHROOM	CT-6	RB-1	P-1, CT-6*	GWB	* SEE SHEETS A8.03 & A8.04 FOR EXTENTS OF CT-6

GENERAL UNIT NOTES

1. SEE SHEET **A5.21** FOR GENERAL UNIT NOTES.

FINISH MATERIAL KEY

1. SEE SHEET **A1.31B** FOR MATERIAL KEY LEGEND.

KEYED UNIT NOTES

1. SEE SHEET **A5.21** FOR KEYED UNIT NOTES.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

ENLARGED PLANS AND SCHEDULES - UNIT TYPES B-4A, C-1

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

ARCHITECT CURTIS G. CHITTENDEN 14109 STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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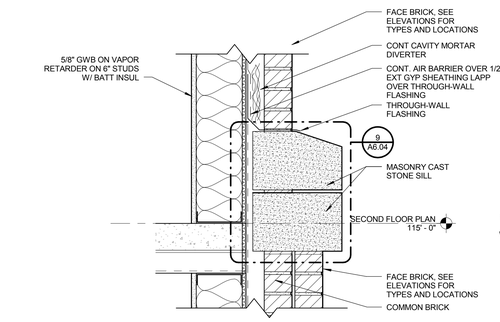
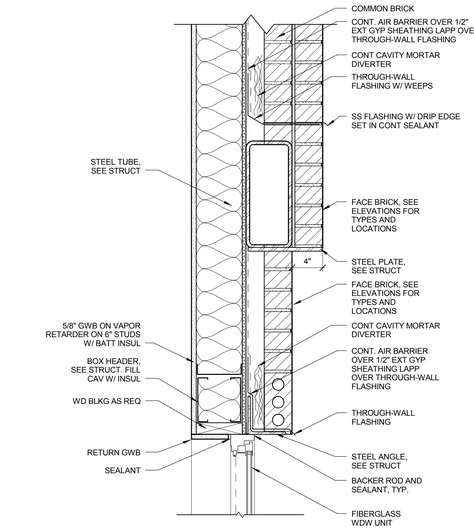
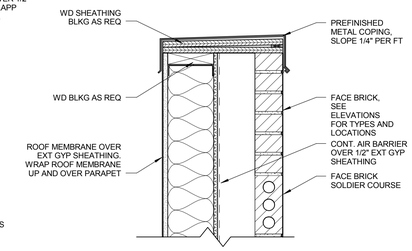


1 A6.01 SILL DETAIL





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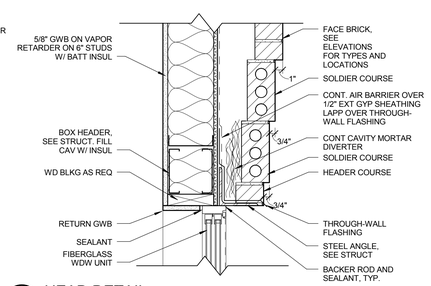
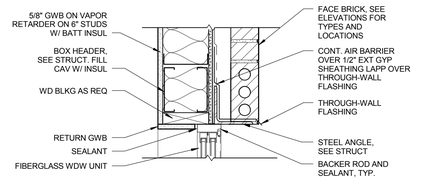
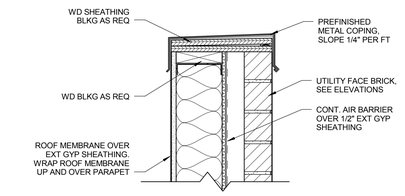


6 A6.01 HEAD DETAIL





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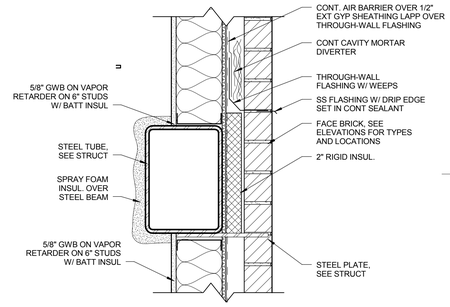
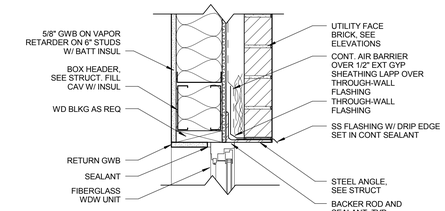
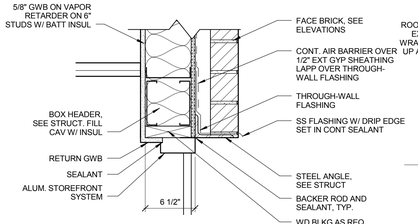
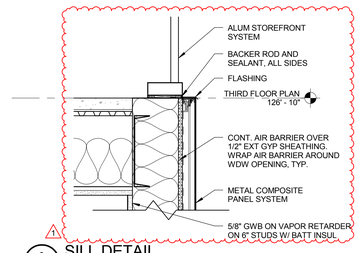


7 A6.01 LINTEL DETAIL

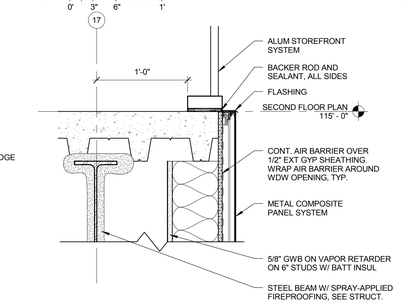


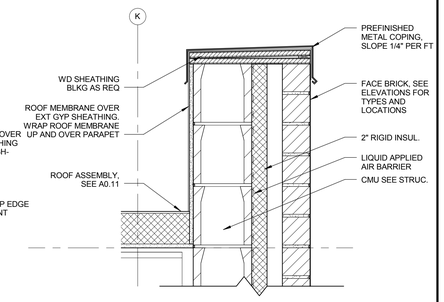


4 A6.01 HEAD DETAIL

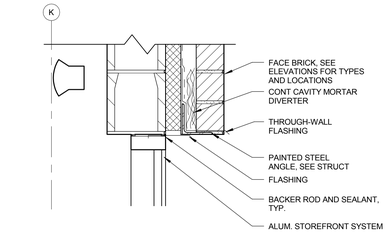


8 A6.01 SILL DETAIL

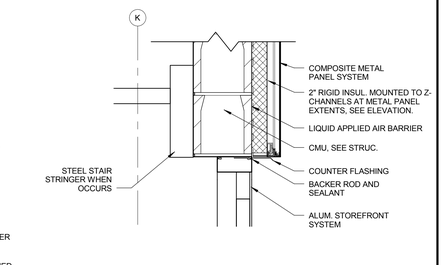


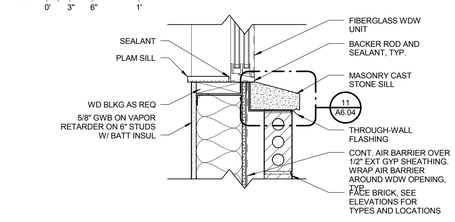


5 A6.01 PARAPET DETAIL



9 A6.01 HEAD DETAIL





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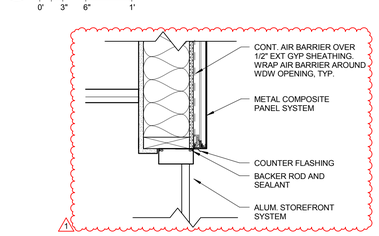
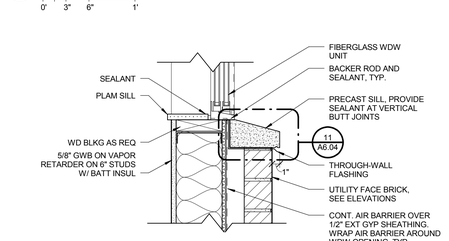
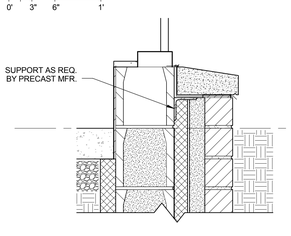


11 A6.01 HEAD DETAIL



12 A6.01 HEAD DETAIL



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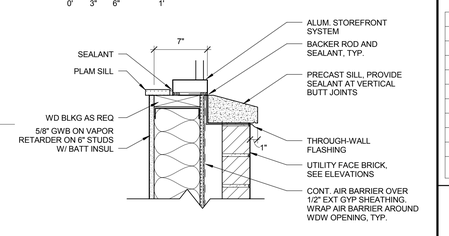
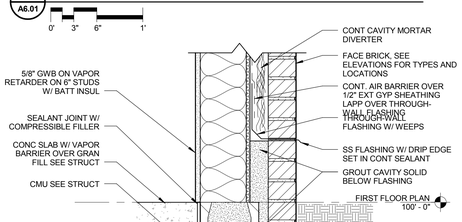


14 A6.01 HEAD DETAIL



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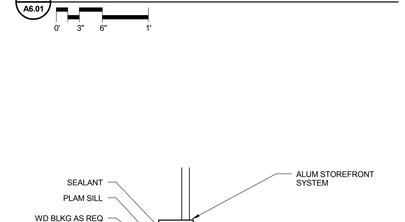

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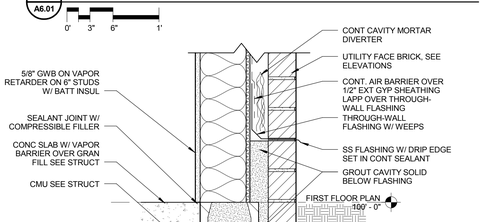

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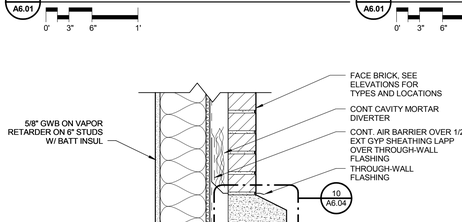
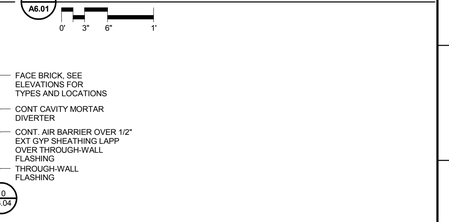


18 A6.01 SILL DETAIL



19 A6.01 SILL DETAIL

20 A6.01 SECTION DETAIL

21 A6.01 SILL DETAIL

22 A6.01 SECTION DETAIL

23 A6.01 SILL DETAIL

GENERAL DETAIL NOTES

1. SEE SHEET **A4.01** FOR GENERAL SECTION NOTES.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

DETAILS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15097
DATE: 04/01/16

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SHEET: A6.01

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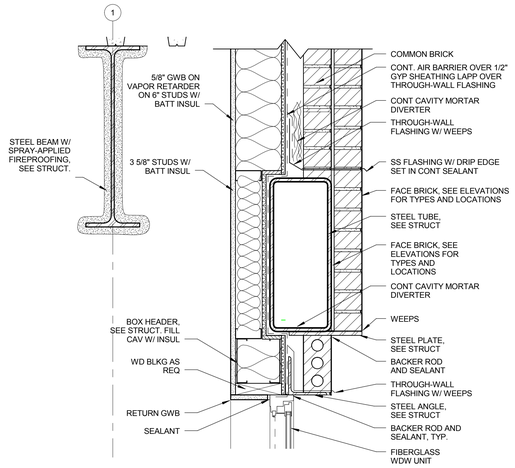
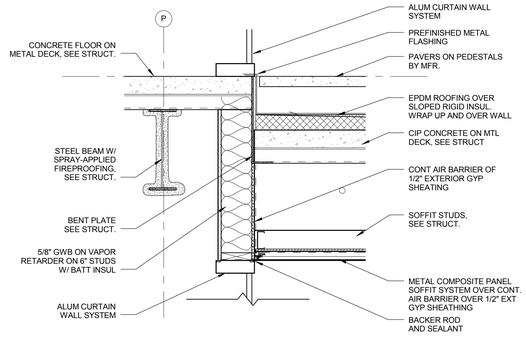


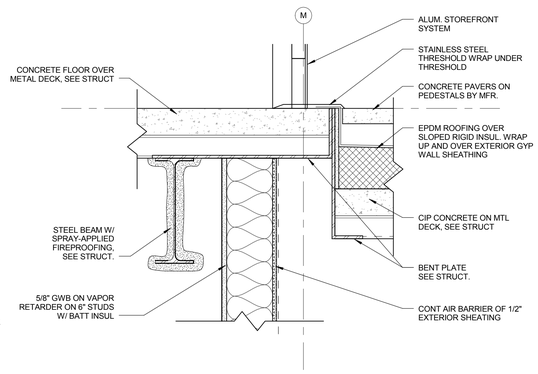
1 A6.02 SECTION DETAIL

0' 3" 6" 1'



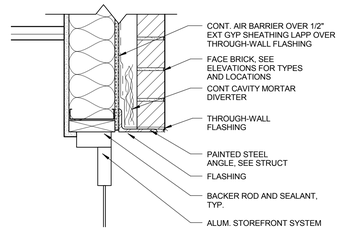
2 A6.02 Section Detail 0

0' 3" 6" 1' 2'



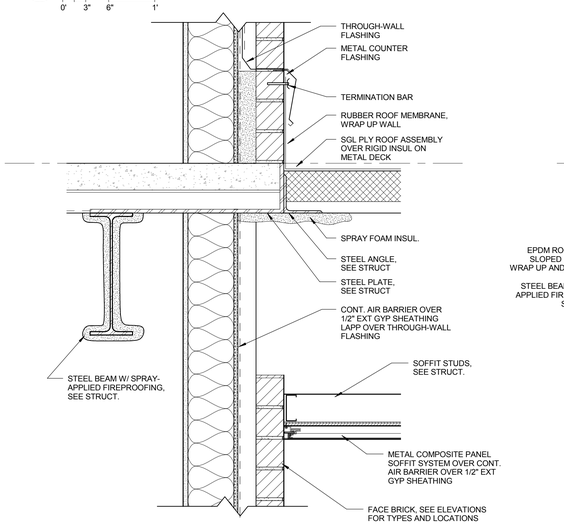
3 A6.02 SECTION DETAIL

0' 3" 6" 1'



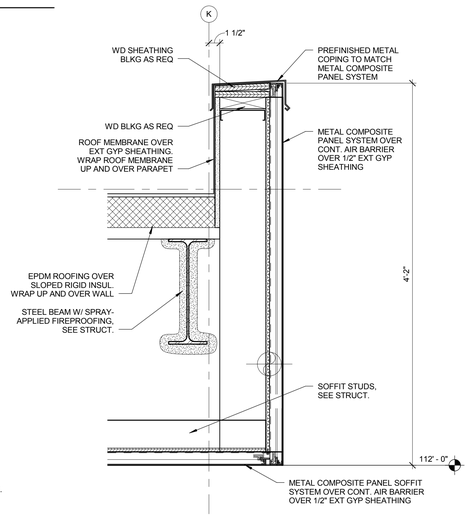
4 A6.02 HEAD DETAIL

0' 3" 6" 1'



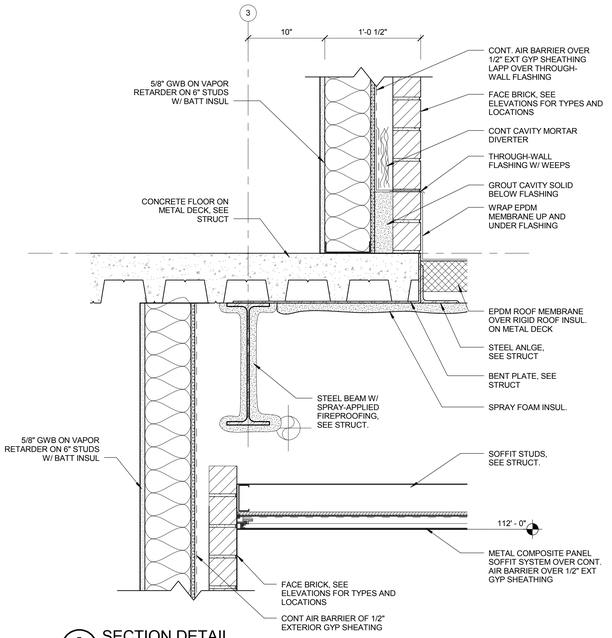
5 A6.02 SECTION DETAIL

0' 3" 6" 1'



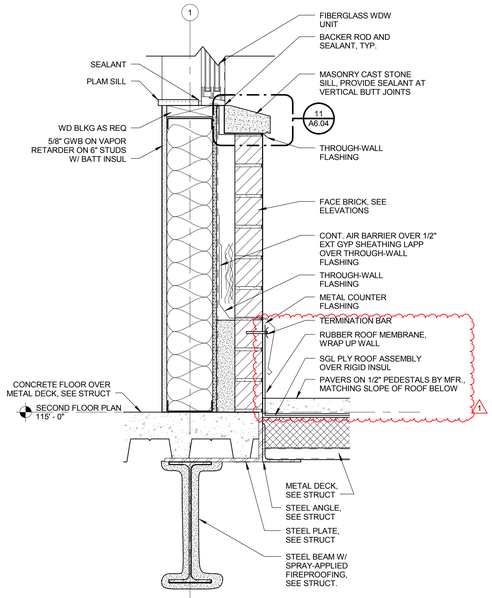
6 A6.02 SECTION DETAIL

0' 3" 6" 1'



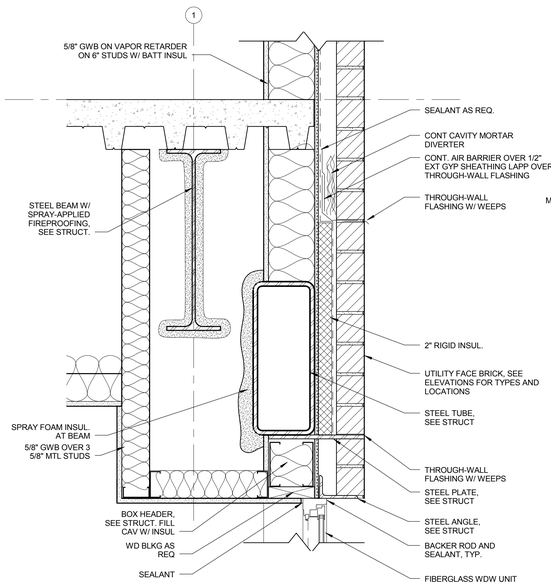
7 A6.02 SECTION DETAIL

0' 3" 6" 1'



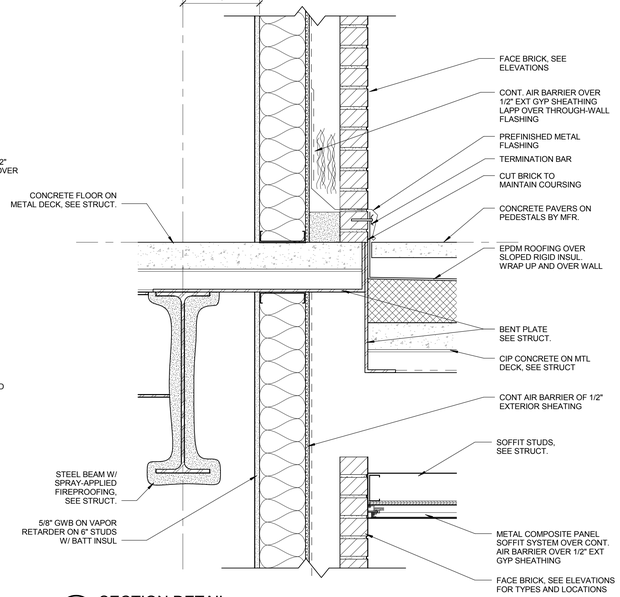
8 A6.02 SECTION DETAIL

0' 3" 6" 1'



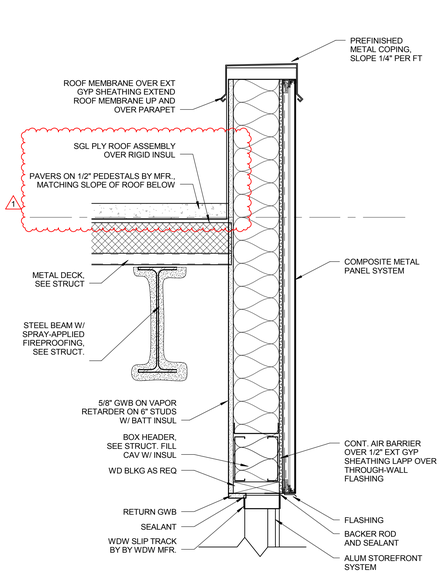
9 A6.02 SECTION DETAIL

0' 3" 6" 1'



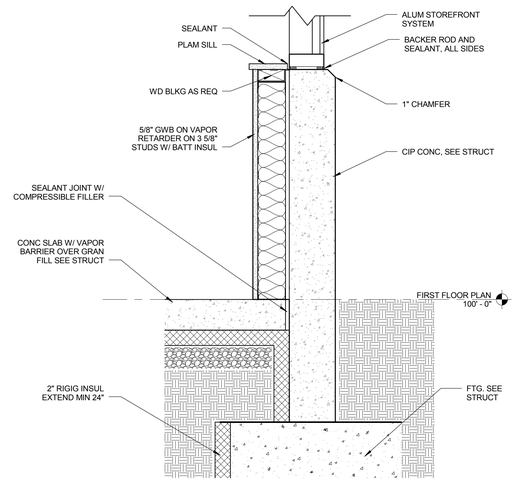
10 A6.02 SECTION DETAIL

0' 3" 6" 1'



11 A6.02 PARAPET DETAIL - METAL PANEL

0' 3" 6" 1'



12 A6.02 SECTION DETAIL

0' 3" 6" 1'

GENERAL DETAIL NOTES

1. SEE SHEET **A4.01** FOR GENERAL SECTION NOTES.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

DETAILS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PRELIMINARY NOT FOR CONSTRUCTION

PROJECT: 15097

DATE: 04/01/16

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SHEET: A6.02

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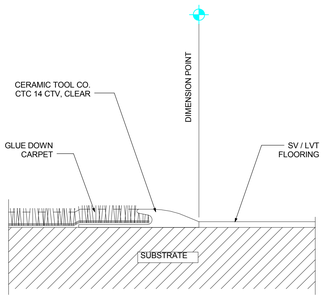
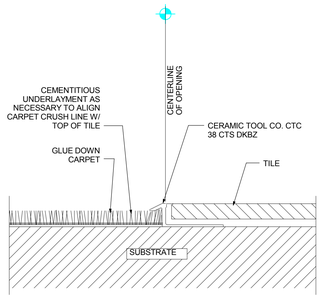


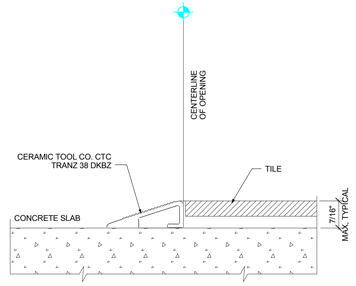
1 A7.01 FLOOR TRANSITION CPT TO SV / LVT

0' 3" 6" 1' 2'



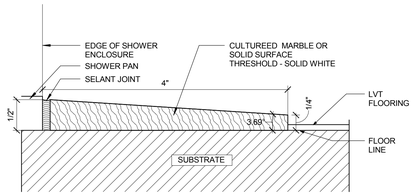
2 A7.01 FLOOR TRANSITION CPT TO TILE

0' 3" 6" 1' 2'



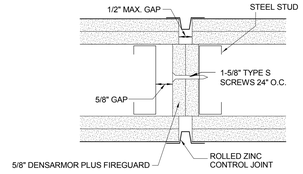
3 A7.01 FLOOR TRANSITION TILE TO CONCRETE

0' 3" 6" 1' 2'



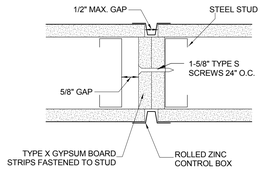
4 A7.01 ACCESSIBLE SHOWER FLOOR TRANSITION

0' 3" 6" 1' 2'



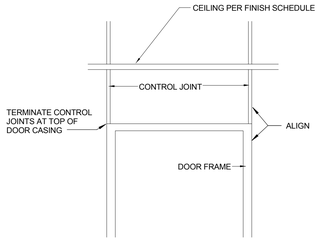
5 A7.01 CONTROL JOINT 2 HR, STL

0' 3" 6" 1'



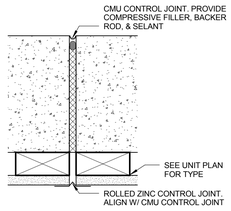
6 A7.01 CONTROL JOINT 1 HR, STL

0' 3" 6" 1'



7 A7.01 AL JAMB DETAIL - HEAD SIM

0' 3" 6" 1'

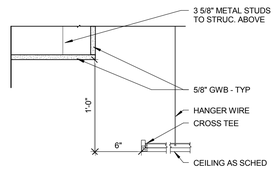


8 A7.01 CONTROL JOINT, CMU W/ GWB

NOT TO SCALE

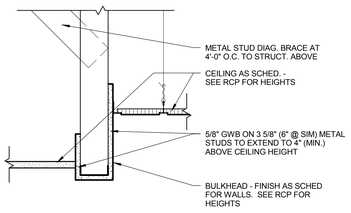
9 A7.01 NOT USED

NOT TO SCALE



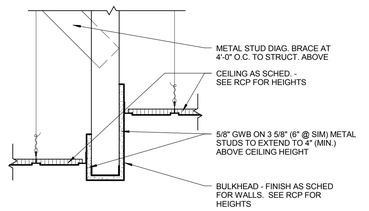
10 A7.01 CEILING TRANSITION GWB TO APC-2

0' 3" 6" 1'



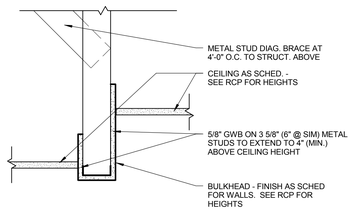
11 A7.01 CEILING TRANSITION GWB TO APC-1

0' 3" 6" 1'



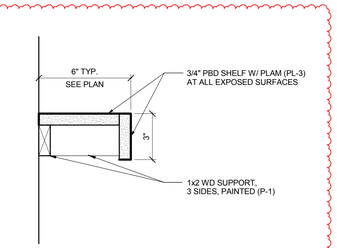
12 A7.01 BULKHEAD DETAIL ACP TO ACP

0' 3" 6" 1'



13 A7.01 BULKHEAD DETAIL GWB TO GWB

0' 3" 6" 1'



14 A7.01 NOOK SHELF DETAIL

0' 1-1/2" 3" 6"

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

INTERIOR DETAILS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

CURTIS G. MITZENBURG
REGISTERED
ARCHITECT
STATE OF NEBRASKA

PROJECT:15097

DATE: 04/01/16

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SHEET: A7.01

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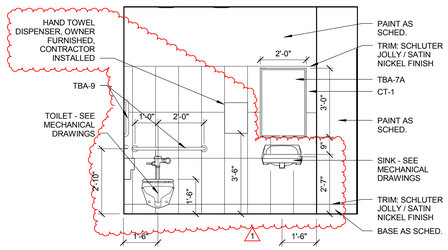
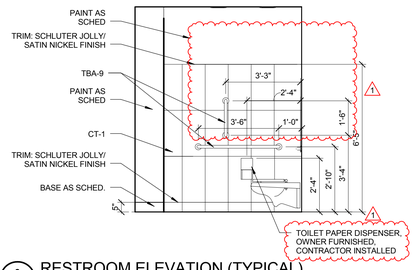


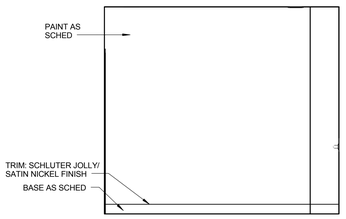
1 A8.01 RESTROOM ELEVATION (TYPICAL)

0' 1' 2' 4'



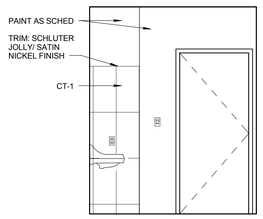
2 A8.01 RESTROOM ELEVATION (TYPICAL)

0' 1' 2' 4'



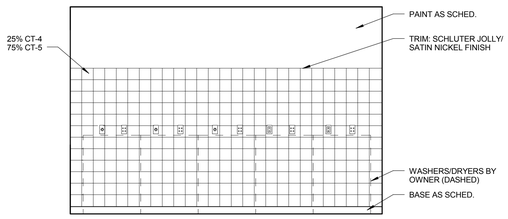
3 A8.01 RESTROOM ELEVATION (TYPICAL)

0' 1' 2' 4'



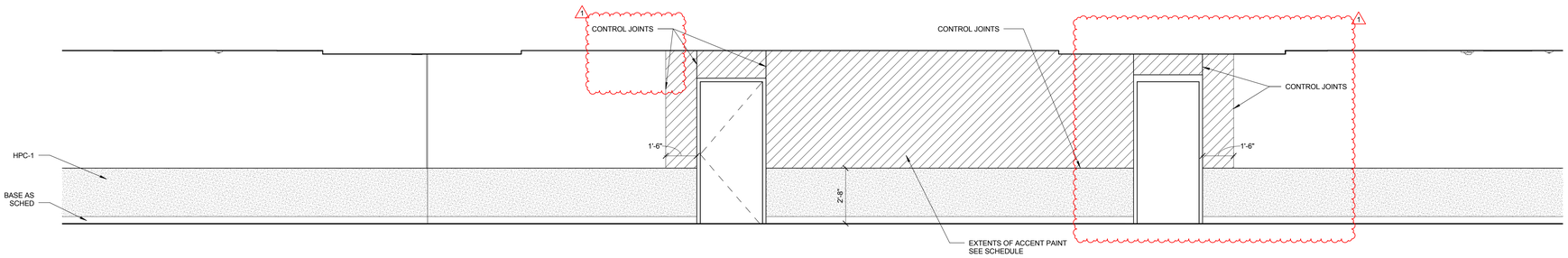
4 A8.01 RESTROOM ELEVATION (TYPICAL)

0' 1' 2' 4'



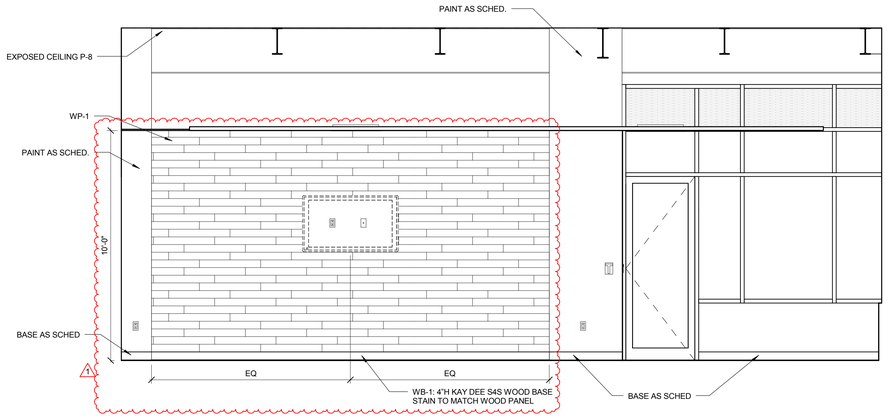
5 A8.01 LAUNDRY (TYPICAL)

0' 1' 2' 4'



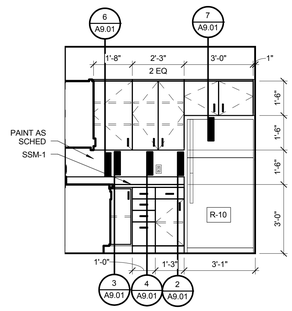
6 A8.01 TYPICAL CORRIDOR ELEVATION

0' 1' 2' 4'



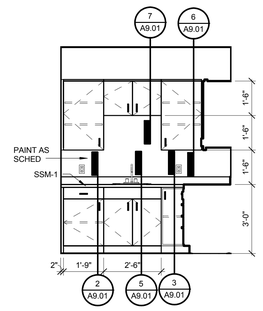
7 A8.01 CLUBHOUSE EAST ELEVATION

0' 1' 2' 4'



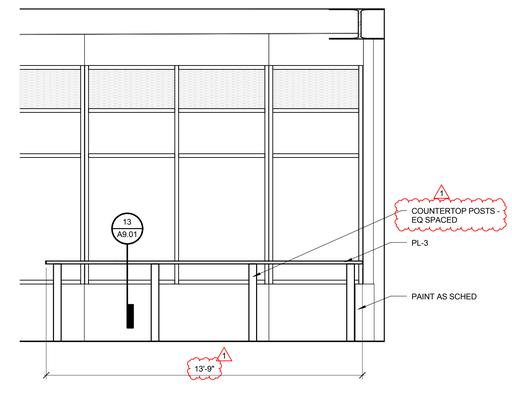
8 A8.01 CLUBHOUSE PREP AREA A

0' 1' 2' 4'



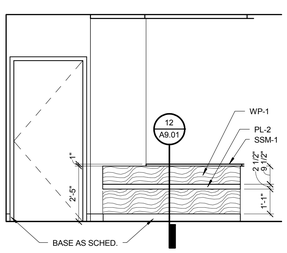
9 A8.01 CLUBHOUSE PREP AREA B

0' 1' 2' 4'



10 A8.01 CLUBHOUSE BAR SEATING

0' 1' 2' 4'



11 A8.01 RECEPTION DESK A

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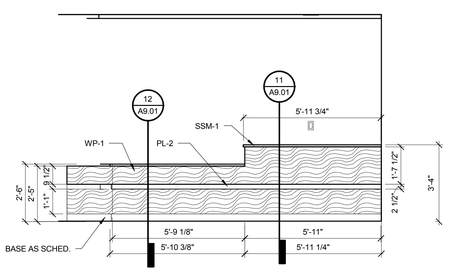

12 A8.01 RECEPTION DESK B

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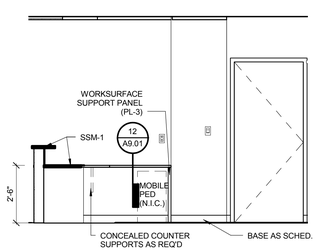

13 A8.01 RECEPTION DESK BACK A

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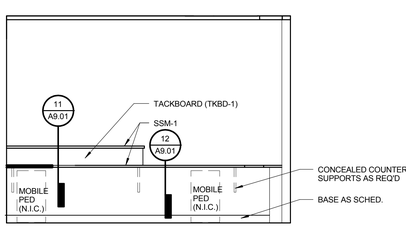

14 A8.01 RECEPTION DESK BACK B

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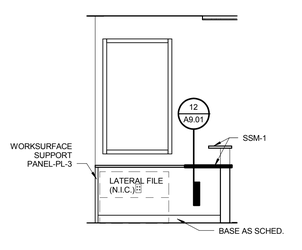

15 A8.01 FRONT DESK BACK C

0' 1' 2' 4'

GEN INTERIOR ELEV NOTES

1. PROVIDE CONTINUOUS BLOCKING OR STRAPPING WITHIN NEW WALLS AS REQUIRED FOR ALL WALL MOUNTED CASEWORK, FIXTURES, ACCESSORIES AND EQUIPMENT. ANCHOR BLOCKING BETWEEN THE STUDS, AT THE FACE OF THE STUDS, FOR THE ENTIRE WIDTH OF THE ITEM TO BE MOUNTED TO THE WALL. ANCHOR 22 GA SHEET METAL STRAPPING TO THE FACE OF THE STUDS FOR THE ENTIRE WIDTH OF THE ITEM TO BE MOUNTED TO THE WALL. VERIFY VERTICAL LOCATION OF BLOCKING WITH THE MOUNTING HEIGHT REQUIRED AND THE REQUIREMENTS OF THE ITEM TO BE MOUNTED TO THE WALL.

2. PROVIDE MINIMUM 1" FILLER PANEL BETWEEN ALL CASEWORK DOORS/DRAWERS AND ADJACENT WALLS, UNLESS NOTED OTHERWISE.

3. PROVIDE FINISHED END PANELS AT ALL EXPOSED CASEWORK SIDES.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

INTERIOR ELEVATIONS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

ARCHITECT
CURTIS G. MITZENBURG
STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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SHEET: A8.01

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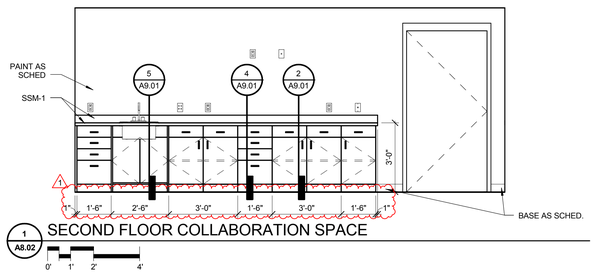
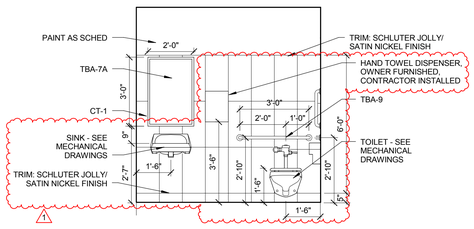


1 A8.02 SECOND FLOOR COLLABORATION SPACE

0' 1' 2' 4'



2 A8.02 SECOND FLOOR RESTROOM EAST ELEVATION

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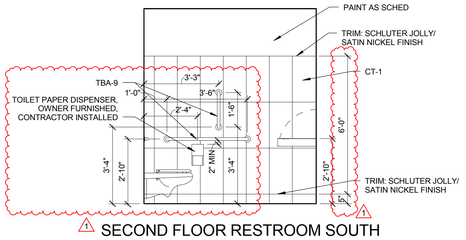

3 A8.02 SECOND FLOOR RESTROOM SOUTH ELEVATION

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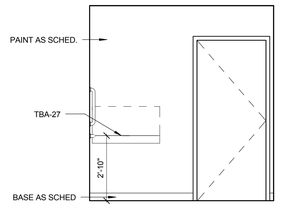

4 A8.02 SECOND FLOOR RESTROOM WEST ELEVATION

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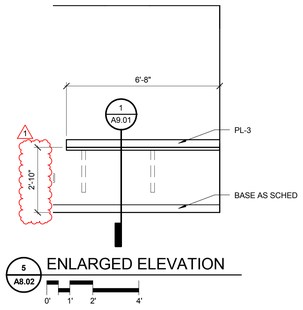

5 A8.02 ENLARGED ELEVATION

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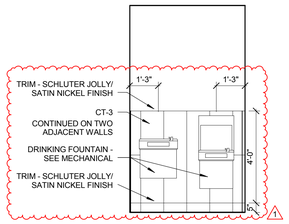

6 A8.02 WATER FOUNTAIN (TYPICAL)

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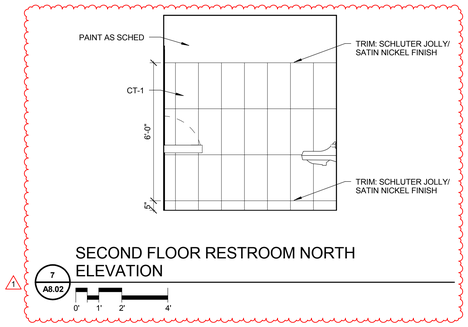

7 A8.02 SECOND FLOOR RESTROOM NORTH ELEVATION

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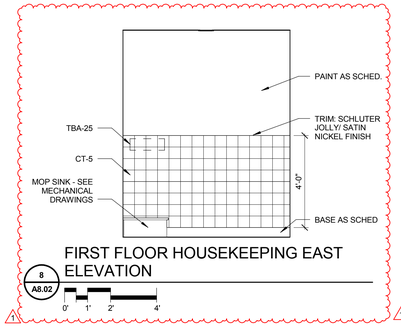

8 A8.02 FIRST FLOOR HOUSEKEEPING EAST ELEVATION

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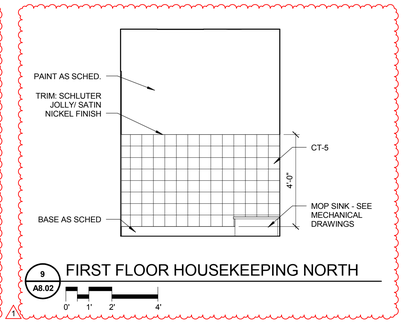

9 A8.02 FIRST FLOOR HOUSEKEEPING NORTH

0' 1' 2' 4'

GEN INTERIOR ELEV NOTES

1. SEE SHEET **A8.01** FOR GENERAL INTERIOR ELEVATION NOTES.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

INTERIOR ELEVATIONS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

ARCHITECT
CURTIS G. MITZENBERG
STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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SHEET: A8.02

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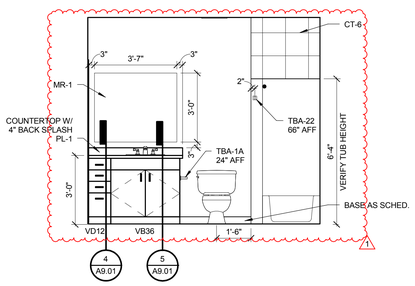
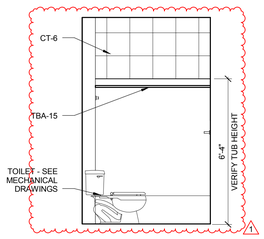
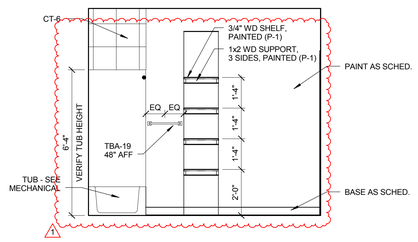
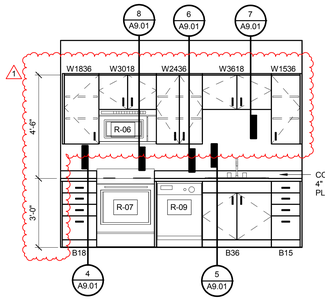
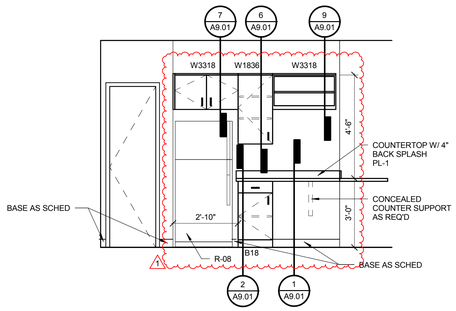


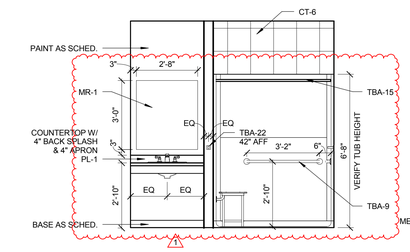








1 A8.03 BATHROOM ELEVATION



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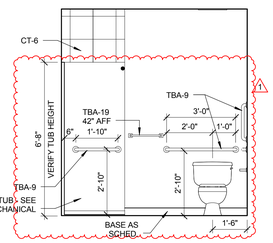

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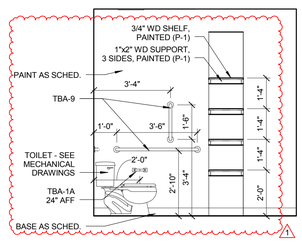
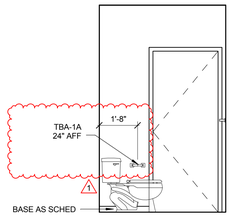
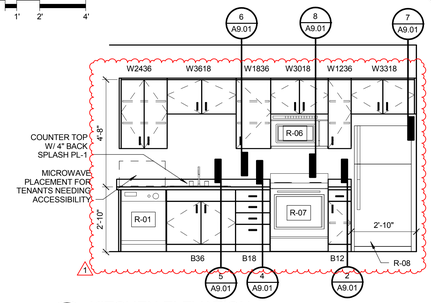




4 A8.03 KITCHEN ELEVATION



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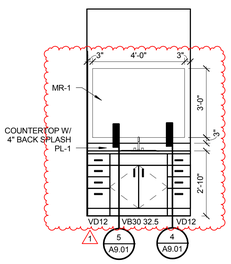

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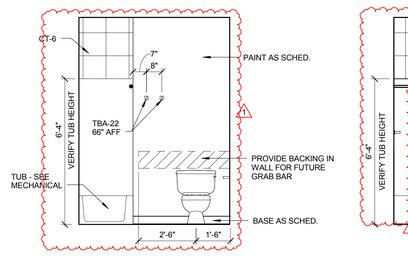

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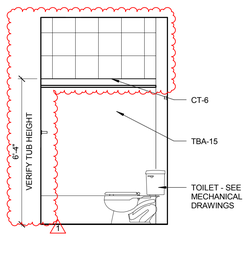

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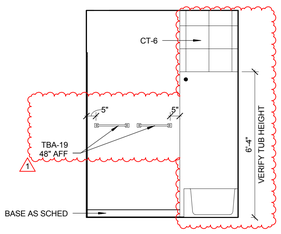

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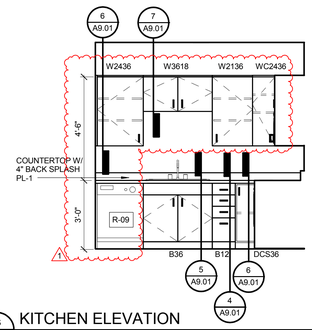

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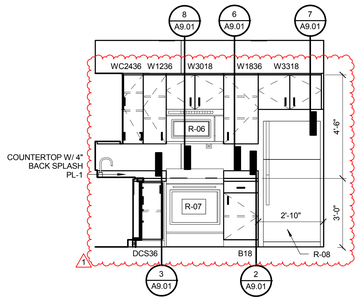

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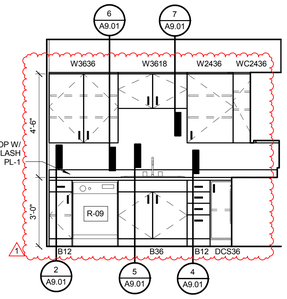

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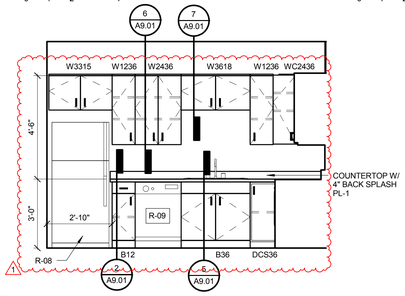
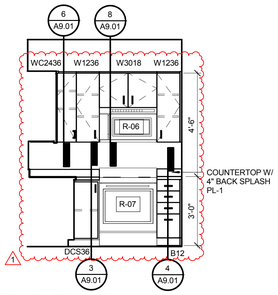


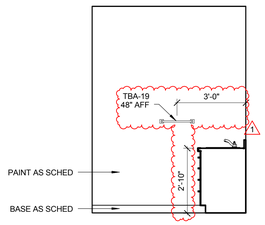
13 A8.03 BATHROOM ELEVATION

14 A8.03 BATHROOM ELEVATION

15 A8.03 KITCHEN ELEVATION



16 A8.03 KITCHEN ELEVATION



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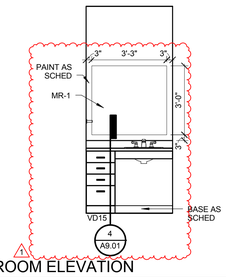

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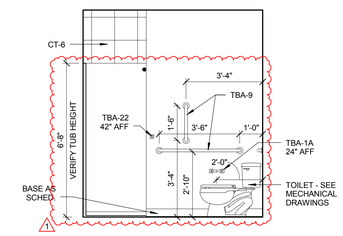

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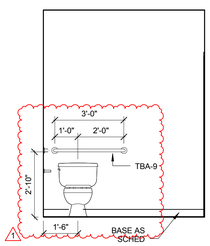

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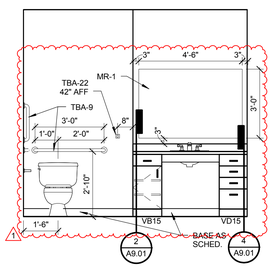
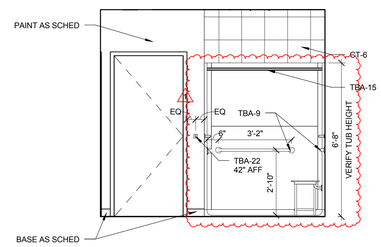
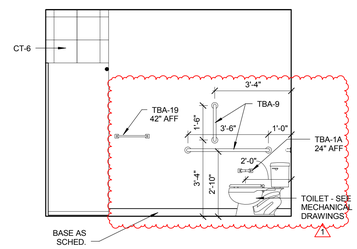


21 A8.03 BATHROOM ELEVATION



22 A8.03 ADA BATHROOM ELEVATION



23 A8.03 ADA BATHROOM ELEVATION

24 A8.03 BATHROOM ELEVATION

25 A8.03 BATHROOM ELEVATION

26 A8.03 BATHROOM ELEVATION

27 A8.03 BATHROOM ELEVATION

GEN INTERIOR ELEV NOTES

1. SEE SHEET **A8.01** FOR GENERAL INTERIOR ELEVATION NOTES.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

INTERIOR ELEVATIONS - UNIT TYPES

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

ARCHITECT
CURTIS G. FITZENBURG
REGISTERED
STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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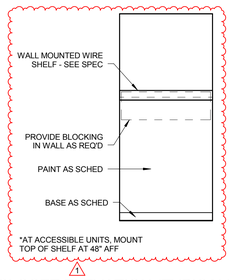
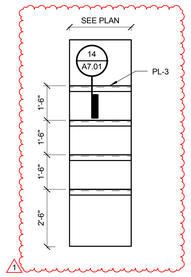


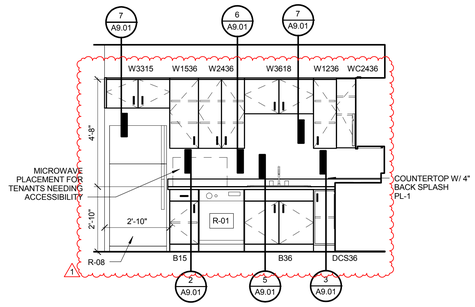
1 A8.04 CLOSET ELEVATION (TYPICAL)

0' 1' 2' 4'



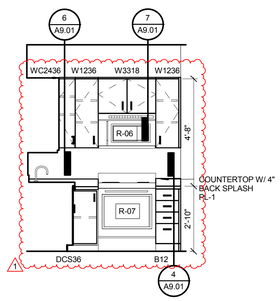
2 A8.04 NOOK SHELVING (TYPICAL)

0' 1' 2' 4'



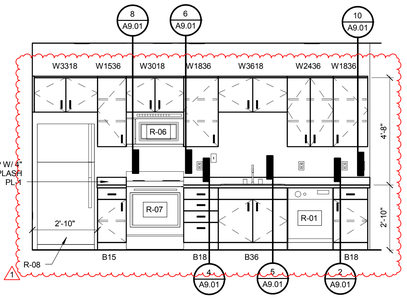
3 A8.04 KITCHEN ELEVATION

0' 1' 2' 4'



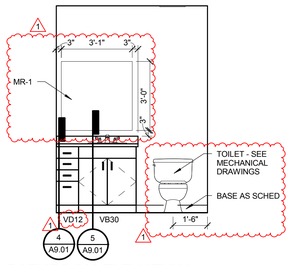
4 A8.04 KITCHEN ELEVATION

0' 1' 2' 4'



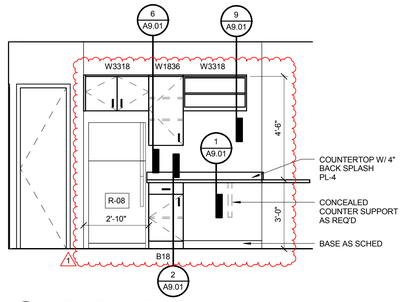
5 A8.04 KITCHEN ELEVATION

0' 1' 2' 4'



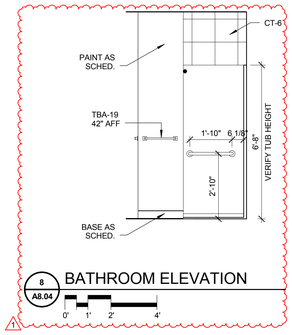
6 A8.04 BATHROOM ELEVATION

0' 1' 2' 4'



7 A8.04 KITCHEN ELEVATION

0' 1' 2' 4'



8 A8.04 BATHROOM ELEVATION

0' 1' 2' 4'

GEN INTERIOR ELEV NOTES

1. SEE SHEET **A8.01** FOR GENERAL INTERIOR ELEVATION NOTES.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

INTERIOR ELEVATIONS - UNIT TYPES

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

ARCHITECT
CURTIS G. CHITTENDEN
#A1016
STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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SHEET: A8.04

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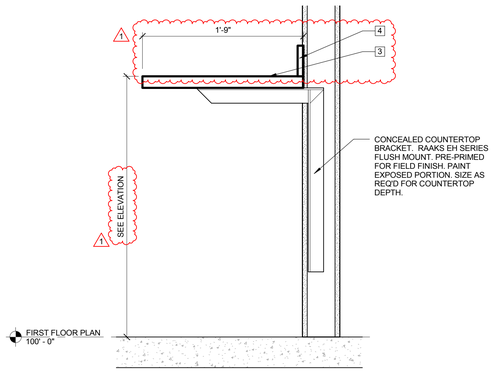
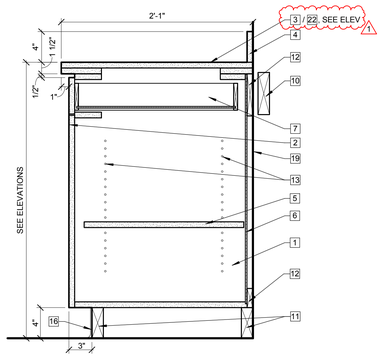


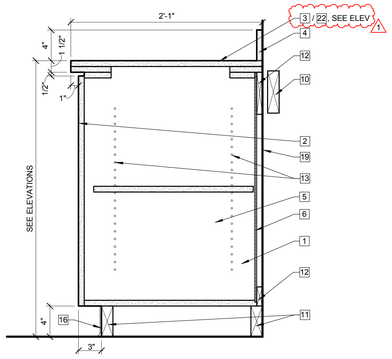
1 A9.01 CASEWORK SECTION

0' 3" 6" 1'



2 A9.01 COMBINATION BASE CABINET SECTION

0' 3" 6" 1'



3 A9.01 DOOR BASE CABINET SECTION

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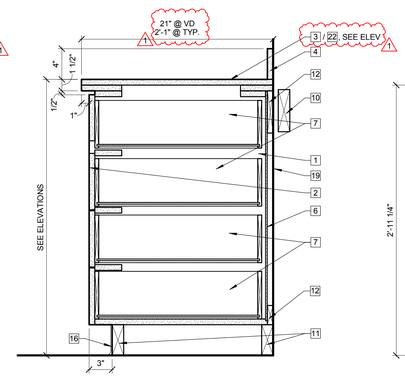

4 A9.01 DRAWER BASE CABINET SECTION

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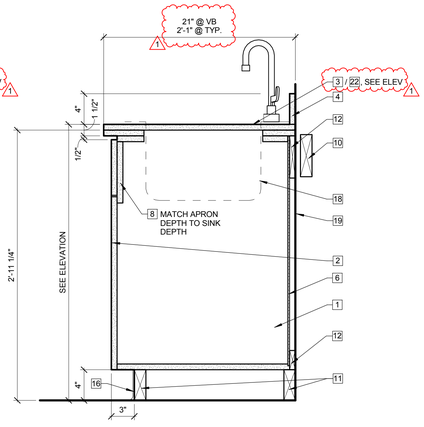

5 A9.01 SINK BASE CABINET SECTION

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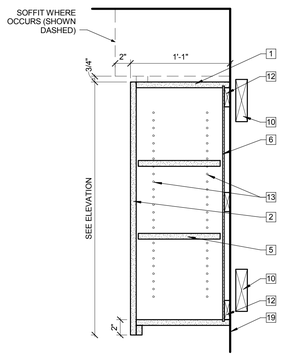

6 A9.01 WALL CABINET SECTION

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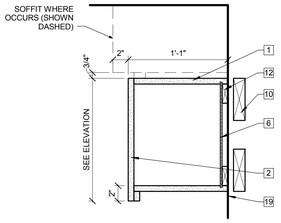
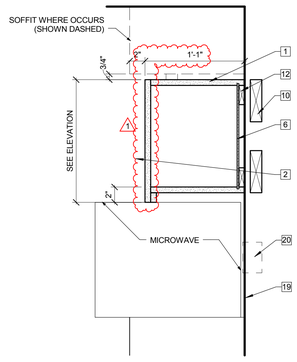


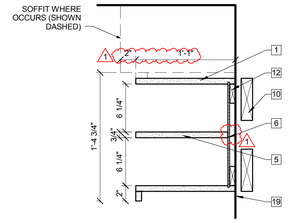
7 A9.01 WALL CABINET SECTION

0' 3" 6" 1'



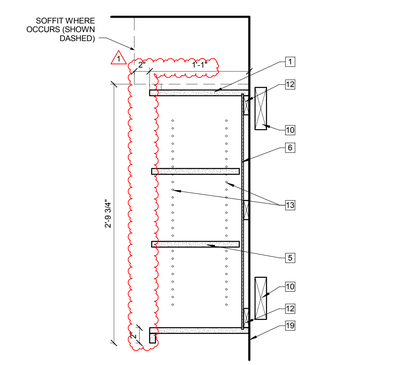
8 A9.01 WALL CABINET SECTION - MICROWAVE

0' 3" 6" 1'



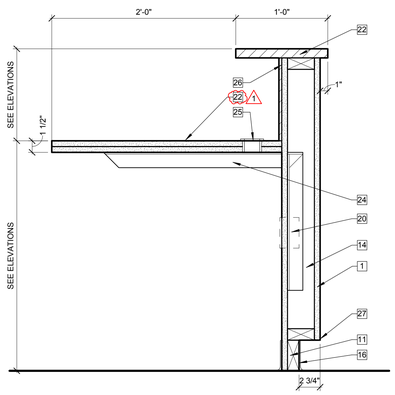
9 A9.01 WALL CABINET SECTION - OPEN SHELVING

0' 6" 1' 2' 4'



10 A9.01 WALL CABINET SECTION - OPEN SHELVING

0' 6" 1' 2' 4'



11 A9.01 DESK COUNTER BASE CABINET SECTION

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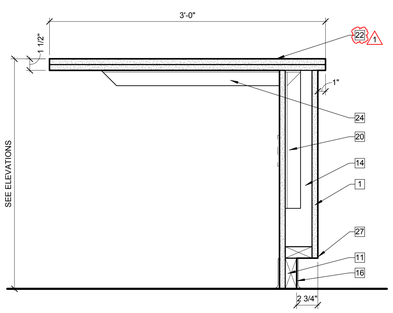
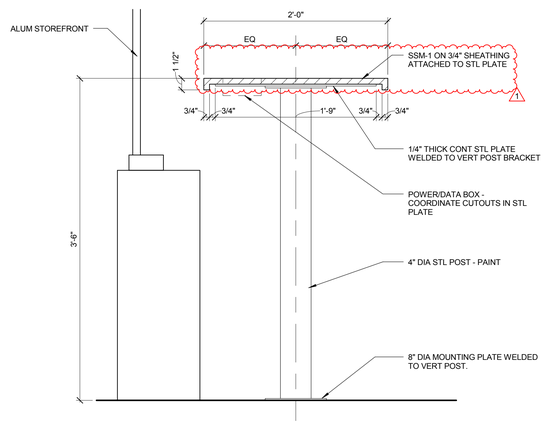


12 A9.01 DESK COUNTER BASE CABINET SECTION

0' 3" 6" 1'



13 A9.01 CLUBHOUSE BAR SEATING

0' 3" 6" 1'

GENERAL CASEWORK NOTES

1. PROVIDE CASEWORK HARDWARE AS SPECIFIED IN SECTION 06 4100 - "ARCHITECTURAL WOOD CASEWORK".
2. SEE ELEVATIONS, A8 SERIES, FOR FINISHES.
3. SEE ELEVATIONS, A8 SERIES, FOR CABINET LOCKS.
4. COORDINATE ALL POWER AND DATA LOCATIONS WITH ELECTRICAL.
5. COORDINATE ALL GROMMET LOCATIONS WITH OWNER IN THE FIELD. SEE SPECIFICATION SECTION 06 4100 - ARCHITECTURAL WOOD CASEWORK.
6. ALL EXPOSED OUTSIDE CORNERS OF COUNTERTOPS SHALL BE RADIUSED 2" UNLESS NOTED OTHERWISE.

KEYED CASEWORK NOTES

☐ TAG USED FOR THIS SCHEDULE

1	3/4" PARTICLE BOARD CASE W/ PLASTIC LAMINATE. PROVIDE EDGE AS SPECIFIED.
2	3/4" PARTICLE BOARD DRAWER/DOOR FRONT W/ PLASTIC LAMINATE. PROVIDE EDGE AS SPECIFIED.
3	3/4" PARTICLE BOARD COUNTERTOP W/ PLASTIC LAMINATE. PROVIDE EDGE AS SPECIFIED.
4	3/4" PARTICLE BOARD BACKSPLASH W/ PLASTIC LAMINATE, ALL EXPOSED SURFACES.
5	3/4" PARTICLE BOARD ADJUSTABLE SHELF W/ PLASTIC LAMINATE, ALL EXPOSED SURFACES. HIDDEN SURFACES MAY BE MELAMINE. SEE ELEVATION FOR NUMBER OF SHELVES.
6	1/4" TEMPERED HARDBOARD. EXPOSED SURFACES TO RECEIVE PLASTIC LAMINATE. HIDDEN SURFACES MAY BE MELAMINE.
7	DRAWER UNIT, SEE ELEVATION FOR SIZES.
8	3/4" PARTICLE BOARD SINK FRONT W/ PLASTIC LAMINATE, ALL EXPOSED SURFACES.
9	3/4" PARTICLE BOARD FIXED SHELF W/ PLASTIC LAMINATE, ALL EXPOSED SURFACES. HIDDEN SURFACES MAY BE MELAMINE. SEE ELEVATION FOR NUMBER OF SHELVES.
10	CONTINUOUS BLOCKING/STRAPPING W/ IN WALL PARTITION
11	BASE BLOCKING.
12	WOOD CLEAT.
13	FULL HEIGHT HOLES FOR SHELF SUPPORTS AT 1" O.C.
14	POWER CHASE. PROVIDE ACCESS PANELS BEHIND COUNTER TO ACCESS POWER CABLES.
15	DOOR/DRAWER PULL. SEE ELEVATIONS.
16	BASE. SEE ROOM FINISH SCHEDULE OR ELEVATIONS FOR MATERIAL.
17	UNDER CABINET LIGHT FIXTURE WHERE OCCURS, SEE ELECTRICAL.
18	SINK. SEE SPECIFICATIONS AND MECHANICAL.
19	FINISH FACE OF ADJACENT CONSTRUCTION.
20	POWER/DATA WHERE OCCURS, SEE ELECTRICAL.
21	1/2" SOLID SURFACE MATERIAL W/ INTEGRAL BACKSPLASH.
22	3 CM SIMULATED STONE.
23	RAKKS FLUSH MOUNT COUNTERTOP BRACKET. LENGTHS WILL VARY - COORDINATE W/ COUNTERTOP DEPTH. PAINT EXPOSED PORTION TO MATCH ADJACENT WALL.
24	A&M HARDWARE CONCEALED COUNTERTOP BRACKET. LENGTHS WILL VARY – COORDINATE W/ COUNTERTOP DEPTH.
25	GROMMET.
26	TACKABLE SURFACE, SEE ELEVATION.
27	FRY REGLET J-MOLD WHERE INDICATED ON ELEVATIONS.
28	NOT USED.
29	PULL-OUT BIN ON FULL EXTENSION DRAWER GLIDES. SEE SPECIFICATIONS.

No.	Description	Date
1	REV 01 ADD 01 - ADDENDUM 01	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

CASEWORK SECTIONS & DETAILS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT: 15097
DATE: 04/01/16

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SHEET: A9.01

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STRUCTURAL GENERAL NOTES

FOUNDATIONS

F1. Subsoil investigation for this project was made by Mid-State Engineering & Testing from Kearney, Nebraska dated January 6, 2016. A copy of their investigation is available from the Architect. The accuracy of the investigation is not guaranteed and it is not to be construed as part of the plans governing construction of the project. The contractor shall familiarize himself with the report and shall follow all conclusions and recommendations contained in the report.

F2. The Geotechnical Engineer shall be retained for testing and observation during all earthwork and foundation construction phases to verify that the recommendations of the subsoil investigation are being implemented. The Geotechnical Engineer shall inspect all footing excavations and slab subgrade immediately prior to placement of any concrete, and shall test all fill for proper compaction.

F3. Remove all topsoil, rubble, and tree roots in excess of 2-inch diameter. Soils below footing level disturbed by grubbing shall be recompacted to 95 percent of the maximum density per ASTM D 698. Keep excavations free of standing water during construction.

F4. Structural fill materials shall consist of suitable on-site or borrow materials approved by the Geotechnical Engineer and placed in 8-inch maximum lifts and compacted to a minimum 95 percent of the maximum density as determined by ASTM D 698.

F5. Fill below slabs-on-grade shall consist of clean granular material compacted to 70 percent of relative density per ASTM D 4253-54.

F6. Bear footings on natural soils or suitable compacted fill materials. No footings shall be placed on frozen soils. All footings have been designed for an allowable net bearing pressure of 2,000 psf.

F7. The Contractor shall locate and protect any existing utilities from damage or interruption during construction.

CONCRETE AND REINFORCEMENT

C1. Concrete work shall conform to all requirements of ACI 301, "Specifications for Structural Concrete for Buildings", except as modified by the Supplemental Requirements below.

C2. Submit a concrete mix design for each class of concrete for approval by the Project Engineer. The mix design shall include the proportions and test results or certifications for all components of the mix in accordance with the latest ACI 301. Submit documented results of "field test data" or "trial mixtures" in accordance with ACI 301 for each class of concrete to be used. The mix designs shall meet the following guidelines except as approved by the Project Engineer.

C3. Use f'c = 4,000 PSI (L6.5) limestone concrete for all exterior stoops, walks and paving.
Use f'c = 3,000 PSI (L5.5) limestone concrete for topping over metal deck.
Use f'c = 3,000 PSI (L5.5) limestone concrete for all other structural concrete.
Use f'c = 3,000 PSI (SG7.0) sand-gravel concrete for all masonry grouting and bond beam lintels. Design concrete mixes to the following specifications:

Mix	Cement per cu. yd. (min. sacks)	Water/ Cement (max. ratio)	Air Content (%)	Slump (inches)
L6.5	6 ½	.42	5-7	2-4
L5.5	5 ½	.47	5-7	2-4
SG7.0	7	--	--	8-10

Air entrainment shall not be used for interior slabs.

C4. The addition of water to the mix on site will not be allowed, unless specifically approved. Concrete may not be placed during freezing weather unless suitably protected, per ACI 306.1. Conform to ACI 305.1 for hot weather concreting.

C5. Cure concrete flatwork by moist cure or membrane forming curing compound for 72 hours.

C6. All reinforcing steel shall be ASTM A 615 grade 60.

C7. Provide lap splices as indicated below unless noted otherwise in details and schedules. Top bars are horizontal bars with more than 12-inches of fresh concrete cast below the bars in question.

Bar Size	Splice Length Top Bars	All Other Bars
#3	1'-4"	1'-1"
#4	1'-10"	1'-5"
#5	2'-3"	1'-9"
#6	2'-8"	2'-1"
#7	3'-11"	3'-0"
#8	4'-6"	3'-6"
#9	5'-1"	3'-11"

C8. Concrete cover of reinforcement shall conform to ACI 318-11 unless detailed otherwise.

C9. Submit reinforcing steel shop drawings indicating placement, spacing and lap lengths for review by the Project Engineer.

C10. Welded wire fabric shall be flat sheets and shall conform to ASTM A 1064.

C11.

C12.

C13. Slabs-on-grade shall be 4-inches thick with welded wire fabric or macro-synthetic fibers and shall be placed over a vapor barrier and 4-inches minimum of granular fill.

C14.

C15. Vapor barrier shall be 15 mil polyethylene sheets unless otherwise specified, with all laps sealed and edges turned up 1/2 inches below finish floor slabs.

C16. Non-shrink grout shall be factory premixed as manufactured by L & M Chemicals, or equivalent.

C17. Expansion anchors shall be Hilti Kwik-Bolt 3, Red Head Trubolt or approved equivalent, with size as noted on the drawings. Install per manufacturer's instructions.

C18. Screw anchors shall be Hilti KWIK HUS-EZ, Red Head Large Diameter Tapcon, Simpson TitenHD or approved equivalent, with size as noted on the drawings. Install per manufacturer's instructions.

C19. Adhesive anchors shall utilize Red Head "A7 Acrylic Adhesive" Anchor System. Simpson Strong-Tie "Acrylic-Tie" and "Epoxy-Tie" anchor systems or Hilti "HIT HY-200" system are also acceptable provided their shear and tension allowable load capacities are equivalent to or greater than Red Head A7 Acrylic Adhesive. Threaded rods shall be ASTM A193 Grade B7 unless noted otherwise. Installation of anchors shall be in strict accordance with manufacturer's recommendations including finish, minimum embedment, adhesive types, recommended accessories for base conditions (such as screens at hollow base conditions) and cure times for weather conditions.

C20. Deformed bar anchors shall conform to ASTM A 496.

C21. Portland cement shall conform to ASTM C150, type I.

C22. Air-entraining admixtures shall conform to ASTM C260. Other admixtures, if used, shall conform to ASTM C494.

C23. Any horizontal construction joints in concrete pours not shown on the drawings shall be submitted to the Structural Engineer for review.

CONCRETE MASONRY

M1. Concrete masonry units shall be normal aggregate, hollow units and shall comply with "Quality Concrete Block Specifications for the State of Nebraska."

M2. Masonry units shall conform to ASTM C 90. Minimum compressive strength of individual units shall be 2000 PSI on the net area of the block. Design compressive strength of masonry, f'm = 1,500 PSI, unless noted otherwise. Masonry units used in storm shelter shall have a minimum compressive strength of 2500 PSI.

M3. Mortar shall conform to ASTM C 270, type S.

M4. Furnish equipment and materials and perform all labor necessary to build concrete masonry, complete, as shown on the drawings and/or in accordance with "Quality Concrete Block Specifications for the State of Nebraska."

M5. Grout for bond beams and for filling vertically reinforced masonry cells shall comply with cast-in-place concrete specifications and shall be well consolidated by rodding or vibrating. Grout by low-lift method with a maximum grout height of 4'-8".

M6. Reinforce all masonry horizontally with galvanized 9 gage Durowal at 16 inches on center. Reinforce walls vertically as shown on the drawings. Lap splice vertical reinforcing as shown on the drawings.

M7. Masonry may not be laid during freezing weather unless suitably protected. Conform to "Recommended Practice for Cold Weather Masonry Construction" by the International Masonry Industry All-Weather Council.

M8. The contractor shall provide all temporary shoring necessary to laterally support all masonry walls.

M9. All openings required in masonry walls greater than 8 inches wide shall be placed at the time of wall construction. The Contractor shall contact the Structural Engineer if openings greater than 8 inches wide are required after the walls have been constructed. Do not place any duct openings directly below beam bearing locations unless specifically shown on the drawings.

M10. Shore steel lintels if required during construction to prevent rotation due to eccentric loads.

M11. Lintel bearing length specified on the Drawings is the length on the structural CMU wall, exclusive of any 4-inch brick or CMU veneer returns which may be shown on the Architectural Plans and jamb details.

M12. Additional vertical control joints or vertical joints between dissimilar block types not shown or prescribed on the drawings must be approved by the structural engineer, particularly when such joints occur near beam or joist bearing conditions.

STRUCTURAL STEEL

S1. All W-shape and WT-shape sections shall conform to ASTM A 992 (Fy = 50 ksi).

S2. All S-shapes, M-shapes, channels, angles, bars and plates shall conform to ASTM A 36 (Fy = 36 ksi).

S3. Tube sections shall conform to ASTM A 500 Grade B (Fy = 46 ksi).

S4. Pipe sections shall conform to ASTM A 53 Grade B (Fy = 35 ksi) or ASTM A500 Grade B (Fy = 42 ksi).

S5. Bolts for structural connections shall be 3/4-inch diameter A325 in bearing-type connections, tightened to snug tight, unless noted otherwise. Snug tight is the tightness that exists when all plies in a joint are in firm contact, and may be achieved by a few impacts of an impact wrench or the full effort of a man using an ordinary spud wrench.

S6. Anchor rods shall conform to ASTM A 36 or ASTM F 1554, Grade 36 unless indicated otherwise. Anchor rods designated as "high strength" shall conform to ASTM A 193, Grade B7 or ASTM F 1554, Grade 105. All nuts used with anchor rods shall be heavy hex head conforming to ASTM A 563.

S7. Headed studs shall conform to ASTM A 108 complying with AWS Code.

S8. Welding shall be performed by certified welders using low hydrogen E70 electrodes. Comply with AWS for electrodes and procedures.

S9. Connections not specifically detailed shall be designed by the fabricator to support a minimum of one-half the total uniform load capacity calculated from the tables for Allowable Uniform Loads for Beams in the AISC "Manual of Steel Construction (Ninth Edition) for the given shape, span and steel specification of the beam in question, unless otherwise noted. Shop drawings shall be prepared by a registered professional engineer in the State of Nebraska, and shall be submitted for review by the Project Engineer.

S10. All steel shall be prime painted with TNEMEC 10-1009 or equivilant, except steel permanently exposed shall be paintedwith two coats of TNEMEC 90-97. Galvanize exterior lintel members in contact with masonry

S11. The thickness of curved angles and tubes indicated on these drawings is a minimum and shall be increased as required by the fabrication method utilized to prevent buckling.

METAL DECK

D1. Roof deck shall be 9/16 inch deep, 22 gage steel form deck with a minimum yield strength of 60 ksi or 1-1/2 inch deep, 22 gage wide rib deck with a minimum yield strength of 33 ksi. Steel deck shall conform to SDI and ASTM A 1008 (painted).

D2. Fasten 9/16 inch deep roof deck to supporting members with #10-16 screws as noted on the details.

D3. Weld 1-1/2 inch deep roof deck to supporting members at 6 inches on center at ALL supports, including edge supports along the side of the deck at the perimeter of the building, around openings, etc. Welds shall be 5/8-inch diameter plug welds. Fasten adjacent deck units at side laps using (2) #10 TEK screws per deck span, located at third points between supports.

D4. Floor deck shall be 9/16 inch deep 22 gage steel form deck conforming to SDI with a minimum yield strength of 60 ksi. Fasten deck with #10-16 screws as noted on the details.

D5. Podium level Floor deck shall be 3-inch deep 20 gage wide-rib composite metal deck conforming to SDI with a minimum yield strength of 50 ksi. Weld to supporting members at 12-inches on center at all supports, including edge supports along the side of the deckat the perimeter of the building, around openings, etc. (use welding washers). Fasten side laps between supports at intervals not exceeding 36 inches, using #10 TEK screws, button punch, 5/8-inch diameter plug weld or 1-inch long fillet weld.

D6. 3-inch floor deck shall conform to ASTM A-446 and shall be given a minimum galvanized coating conforming to ASTM A-653, G-60.

D7. Provide all necessary accessories including roof sump pans, column and end closures, etc.

D8. Metal deck manufacturer shall submit shop drawings for review by the Project Engineer.

D9. All openings in metal roof deck larger than 6 inches less than or equal to 12 inches in any one direction shall be reinforced with a 20 gage galvanized flat plate attached to deck at each corner and 6 inch maximum centers with 5/8 inch diameter weld or sheet metal screws. All openings in metal roof deck larger than 12 inches in any direction shall be reinforced with headers and intermediate framing on sides spanning to the nearest structural members unless detailed otherwise. (Mandatory at interior roof drains.) All openings in elevated concrete floor slabs larger than 12 inches in any direction shall be reinforced with a C8x11.5 on all sides spanning to the nearest structural members unless details otherwise. Floor or roof openings wider than 2'-8" in the direction perpendicular to deck span shall be submitted to the structural engineer for review. See mechanical/electrical drawings for openings in addition to those shown on framing plans.

D10. Provide 6-inch minimum wide, continuous cover plate of same thickness as decking where decking changes direction or changes slope such as at valleys or ridges. Screw deck along both sides at 12-inch centers maximum.

COLD FORMED, LIGHT GAGE, STEEL FRAMING

CF1. Work shall meet the requirements of the American Iron And Steel Institute (AISI), "Design of Cold Formed Steel Structural Members", latest standards.

CF2. All galvanized, light gage steel members shall be formed from steel having a galvanized coating meeting the requirements of ASTM A653.

CF3. All field cutting of studs must be done by sawing or shearing. Torch cutting of cold-formed members is unacceptable

CF4. Touch-up all welds with zinc-rich paint (ASTM A-780).

CF5. Where steel studs are used for a truss, mansard or header application studs shall be un-punched through the web.

CF6. For all tracks used in composite members such as trusses, posts, and jambs, the track must be installed as a single piece, no splicing permitted.

CF7. Connections for light gage steel members shall be standard details as recommended by the light gage steel manufacturer unless noted otherwise.

CF8. Fastening of light gage steel members shall be with self-tapping screws or welding. Self-tapping screws shall be #10 unless noted otherwise. Self-tapping screws shall have a minimum spacing of 3/4 inch and a minimum edge distance of 3/4 inch unless noted otherwise. Approved self-tapping screws shall be shall be manufactured by Buildex, Compass, or Grabber.

CF9. Welding procedure shall be in accordance with AWS D1.3, most current version.

CF10. Fastening of light gage steel members to structural steel shall be with #12 TEK screws or with 0.177-inch shank diameters power driven fasteners unless noted otherwise.

CF11. Fastening of horizontal light gage steel running track to concrete foundation/slab shall be with two (2) -1/4 x 1 ¼ inch screw anchors within one foot of each corner or opening edge and then at 32 inches on center.

CF12. Fastening of vertical light gage steel framing to other concrete or grouted solid masonry shall be with minimum 3/16 x 1 ¼ inch screw anchor at 32 inches on center unless noted otherwise.

CF13. All framing components shall be cut squarely for attachment to perpendicular members. Members shall be held in place until properly fastened.

CF14. Light gage steel bearing studs shall have full bearing against top and bottom track web. Studs shall be securely attached to the flange or web of both top track and bottom track unless noted otherwise.

CF15. Light gage steel non-bearing studs shall have slip connection at top track and shall have full bearing against bottom track web with studs securely attached to the flange or web of the bottom track unless noted otherwise.

CF16. No splices in studs, joists, headers or other load-carrying member may be made without prior engineering review and specific details for any such splice(s).

CF17. Track member splices shall be fastened with butt-welds or shall be fastened with a piece of stud inserted and centered in the track splice with three (3) screws in each track flange for twelve (12) screws total.

CF18. Install wall stud bridging after studs are erected and before construction loads are applied. Bridging shall be attached in a manner to prevent stud rotation. Unless noted otherwise, bridging shall be spaced at 4'-0" on center maximum. Follow recommendations by light gage stud manufacturer for bridging.

CF19. Install roof or floor joist bridging after joists are erected and before construction loads are applied. Bridging shall be attached in a manner to prevent joist rotation. Unless noted otherwise, bridging shall be installed at mid-span for spans 14 feet or less and installed at a maximum of 8'-0" on center for spans greater than 14 feet. Follow recommendations by light gage joist manufacturer for bridging.

CF20. The contractor is responsible to not overload members during construction or erection and to supply adequate temporary bracing until permanent bridging providing stability to both flanges is in place.

CF21. The Contractor shall submit light gage steel framing shop drawings to the Architect.

CF22. For specific requirements on systems or materials connected and appurtenant to the cold-formed steel framing including EIFS, windows, caulking and flashings refer to the manufacturer's data.

COORDINATION AND VERIFICATION

V1. Structural drawings shall be coordinated with Architectural, Mechanical, and Electrical drawings for additional openings, sleeves, under-floor ducts, floor depressions, etc. not shown on the structural drawings. Coordinate location, size, and reinforcement of all openings with respective trades before fabrication.

V2. The Contractor shall verify all dimensions before starting work or fabricating any structural materials. The Architect shall be notified of any discrepancies found.

GENERAL DESIGN CRITERIA

G1. Building Code - 2012 International Building Code (IBC).

G2. Dead Load (in addition to weight of structural members and non-load bearing walls/partitions):

Mech/Elect/Ceiling/Fireproofing/misc.	= 15 PSF
Extra Concrete for floor leveling	= 5 PSF
Roofing System	= 15 PSF

G3. The following roof live and snow loads are the minimums required by the building code. The minimum load used in design was 30 psf, or applicable snow drift (whichever was greater).

G4. Roof Live Load (non-concurrent with Roof Snow Loads) = 25 psf

G5. ROOF SNOW LOAD

Ground Snow Load (Pg)	= 25 PSF
Flat Roof Snow Load (Pf)	= 20 PSF
Rain-on-Snow	= 0 PSF
Snow Exposure Factor (Ce)	= 1.0
Snow Load Importance Factor (Is)	= 1.0
Thermal Factor (Ct)	= 1.0

G6. FLOOR LIVE LOAD

Typical (reduced for girders, columns & footings; not reduced for beams)	= 40 PSF
Assembly Areas, Lobbies, 1st Floor Corridors	= 100 PSF
Corridors above 1st Floor	= 80 PSF
Stairways & exit facilities	= 100 PSF

G7. WIND LOAD

Design Criteria	Section 6 of ASCE 7-10, per Section 1609.1 of IBC.
Base Wind Speed (3-second gust)	= 115 MPH
Risk Category	= 'II'
Wind Exposure	= 'C'

Internal Pressure Coefficient 'GCpi' = +/- 0.18

G8. EARTHQUAKE LOAD

Site Class	= D
Spectral Response Coefficient SDS	= 0.091
Spectral Response Coefficient SD1	= 0.063
Seismic Design Category	= A

Section 6 of ASCE 7-10, per Section 1609.1 of IBC.

Lateral force computed per Section 11.7 of ASCE 7-10

Mechanical unit seismic loads will be transferred at the point of support to the lateral system.
Fire sprinkler lines will be braced to the structure by the fire sprinkler contractor.

SPECIAL INSPECTIONS

SP1. The Contractor shall insure conformance with the 2012 IBC.

SP2. Special inspections as defined and required by the above code shall be performed by an independent inspection agency approved by the Building Official to perform such work. The designated Special Inspector shall also be approved by the Architect and Engineer of Record and shall be paid for by the testing allowance.

SP3. The Special Inspector shall observe the work here in after assigned for conformance with approved design drawings and specifications and shall bring all discrepancies to the immediate attention of the Contractor for correction. Uncorrected discrepancies shall be reported to the Building Official and Architect/Engineer of Record.

SP4. The Special Inspector shall furnish inspection reports to the Building Official and the Architect/Engineer of Record at monthly intervals and shall submit a final signed report at the project completion stating whether the work inspected was, to the best of his knowledge, in accordance with approved design drawings and specifications.

SP5. Special inspection requirements for specific classifications of work are as follows (by IBC Section Reference):

1704.2 Inspection of Fabricators. Items fabricated in fabricator's shop shall be inspected per all applicable portions of Section 1704.2, except when fabricator is approved in accordance with Section 1704.2.2.

1704.3 Steel Construction. Steel elements shall be inspected per all applicable portions of Section 1704.3 and Table 1704.3.

1704.4 Concrete Construction. Concrete foundations, structural members, reinforcing and all applicable portions of Table 1704.4. Exception numbers (1) and (2) listed in Section 1704.4 will not be allowed.

1704.5 Masonry Construction. Masonry elements shall be inspected per all applicable portions of Section 1704.5 and Table 1704.5.1 (level 1 special inspection). Exception numbers (1) and (2) listed in Section 1704.5 will not be allowed.

1704.7 Soils. Soil excavation, fill placement and existing site soil conditions shall be inspected per Section 1704.7.1 through 1704.7.3. and as specified elsewhere in these Contract Documents.

NIELSEN-BAUMERT ENGINEERING, INC.
10855 West Dodge Road, Suite 180
OMAHA, NEBRASKA 68154
(402)496-4750 FAX (402)496-1147

No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

STRUCTURAL GENERAL NOTES

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15927
DATE: 04/01/16

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PROFESSIONAL STRUCTURAL ENGINEER RYAN T. BAUMERT E-9999 STATE OF NEBRASKA

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COLUMN FOOTING SCHEDULE

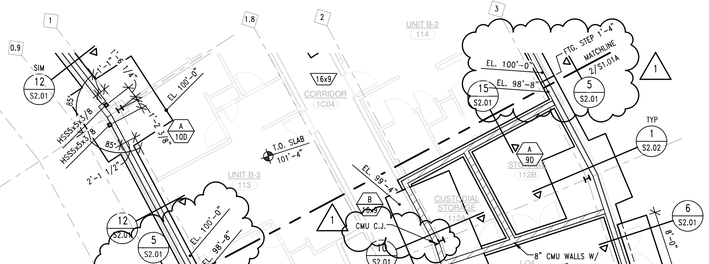
TYPE MARK	TYPE	REINFORCEMENT	
		(BOT. EA. WAY)	(TOP EA. WAY)
4D	4'-0" x 4'-0" x 2'-8"	(4)#5	(4)#5
6D	6'-0" x 6'-0" x 2'-8"	(6)#5	(6)#5
7D	7'-0" x 7'-0" x 2'-8"	(7)#5	(7)#5
8D	8'-0" x 8'-0" x 2'-8"	(9)#5	(9)#5
9	9'-0" x 9'-0" x 1'-6"	(8)#6	N/A
9D	9'-0" x 9'-0" x 2'-8"	(8)#6	(8)#6
10D	10'-0" x 10'-0" x 2'-8"	(10)#6	(10)#6
16x9	16'-0" x 9'-0" x 2'-6"	(14)#8 L.D., (8)#6 S.D.	N/A

NOTES:
1. CENTER COLUMN FOOTINGS UNDER COLUMN UNLESS NOTED.
2. CONTINUE WALL FOOTING REINFORCING THRU COLUMN FOOTING WHERE OCCURS.

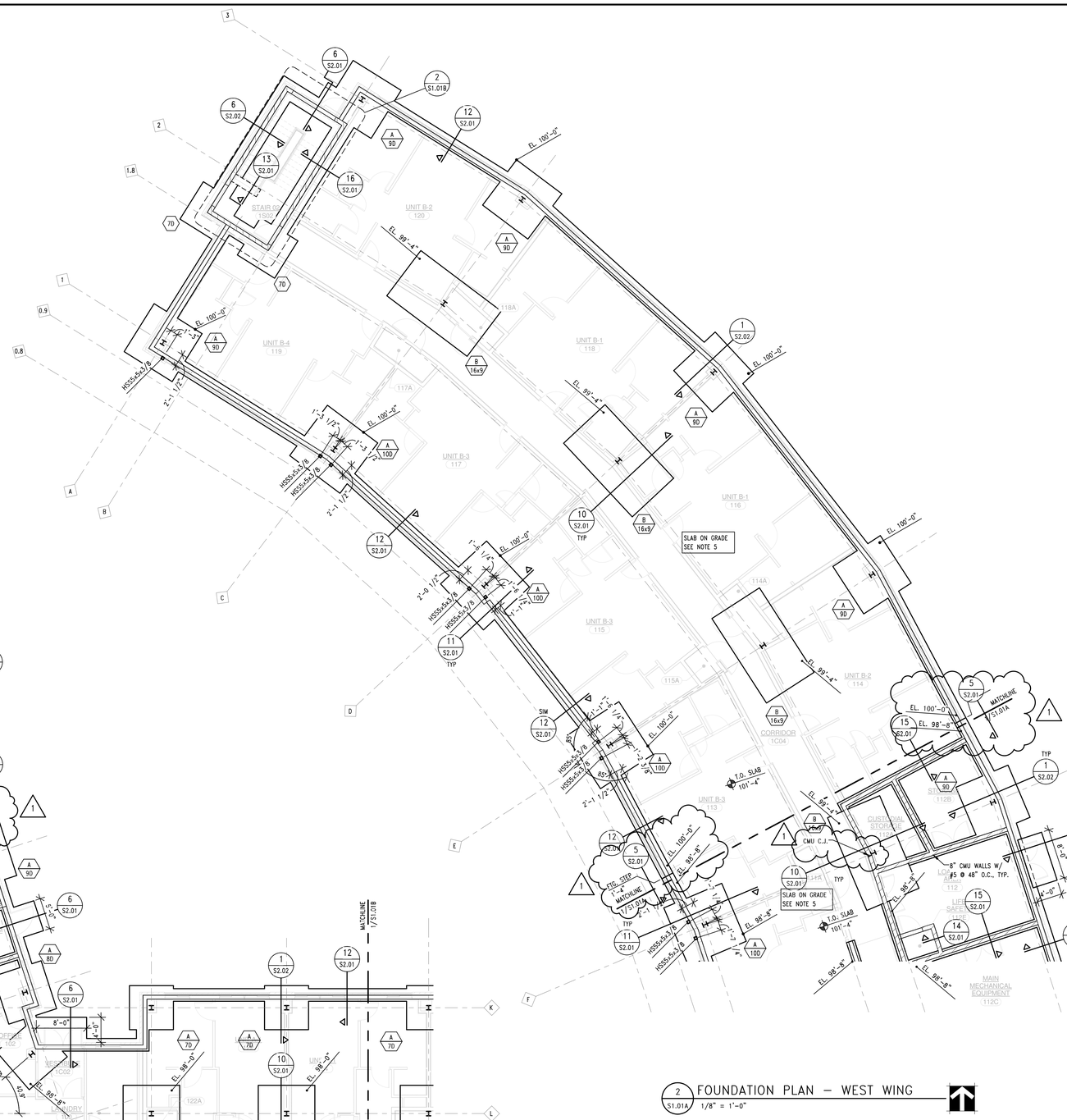
COLUMN SCHEDULE

MARK	SIZE	BASE PL. SIZE
A	WB8x31	PL 1.25"x14"x14"
B	WB8x48	PL 1.75"x16"x16"

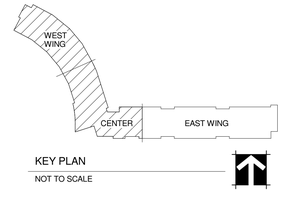
NOTE:
1. SEE ROOF FRAMING PLAN FOR TOP OF STEEL ELEVATIONS.



1 S1.01A FOUNDATION PLAN – CENTER
1/8" = 1'-0"



2 S1.01A FOUNDATION PLAN – WEST WING
1/8" = 1'-0"



PLAN NOTES

1. FINISH FLOOR ELEVATION SHALL BE 100'-0" UNLESS NOTED OTHERWISE. SEE CIVIL DRAWINGS FOR MEAN SEA LEVEL ELEVATION CORRESPONDING TO THE FINISHED FLOOR ELEVATION 100'-0".
2. TOP OF FOOTING ELEVATION NOTED THUSLY, EL. XXX'-X" TOP OF FOUNDATION ELEVATION SHALL BE 98'-8" UNLESS NOTED OTHERWISE
   C# / F# INDICATES COLUMN SIZE / INDICATES FOOTING SIZE > SEE SCHEDULE THIS SHEET
3. ------- INDICATES PERIMETER OF STORM SHELTER. STORM SHELTER WALLS SHALL BE FULLY-GROUTED & REINFORCED VERTICALLY w/#5 @ 8" c/c
4. SEE DETAIL 5/S2.01 FOR TYPICAL FTG STEP DETAIL
5. ALL SLABS-ON-GRADE SHALL BE 4-INCHES THICK WITH 6x6-W2.1xW2.1 WWF LOCATED 1 1/2" BELOW TOP OF SLAB. SLAB SHALL BEAR ON 15 MIL VAPOR BARRIER AND 4" SELECT GRANULAR FILL UNLESS NOTED OTHERWISE.
6. NO SLAB-ON-GRADE JOINTS HAVE BEEN SHOWN. THE SLAB-ON-GRADE JOINT PATTERN SHALL BE DETERMINED BY THE CONTRACTOR AND SHALL BE DESIGNED TO LIMIT UNCONTROLLED CRACKING OF THE SLAB. JOINTS SHALL GENERALLY BE LOCATED A MAXIMUM DISTANCE OF 12'-0" ON CENTER WITH AS NEARLY A SQUARE PATTERN AS POSSIBLE. IN ADDITION, LOCATE JOINTS AT RE-ENTRANT CORNERS AND OTHER LOCATIONS WHERE CRACKING IS LIKELY.
7. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN ON THIS PLAN.
8. REFER TO GENERAL STRUCTURAL NOTES FOR SLAB ON GRADE STRENGTH, W/C RATIO, AND SLUMP REQUIREMENTS.
9. SLEEVE STORM DRAIN LINE THROUGH COLUMN FOOTING.
10. SEE A1.00B FOR GRID LAYOUT & DIMENSIONS.

1

NIELSEN-BAUMERT ENGINEERING, INC.
10855 West Dodge Road, Suite 180
OMAHA, NEBRASKA 68154
(402)496-4750 FAX (402)496-1147

No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FOUNDATION PLAN - WEST WING & CENTER

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15927
DATE: 04/01/16

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PROFESSIONAL STRUCTURAL ENGINEER STATE OF NEBRASKA 4/1/16

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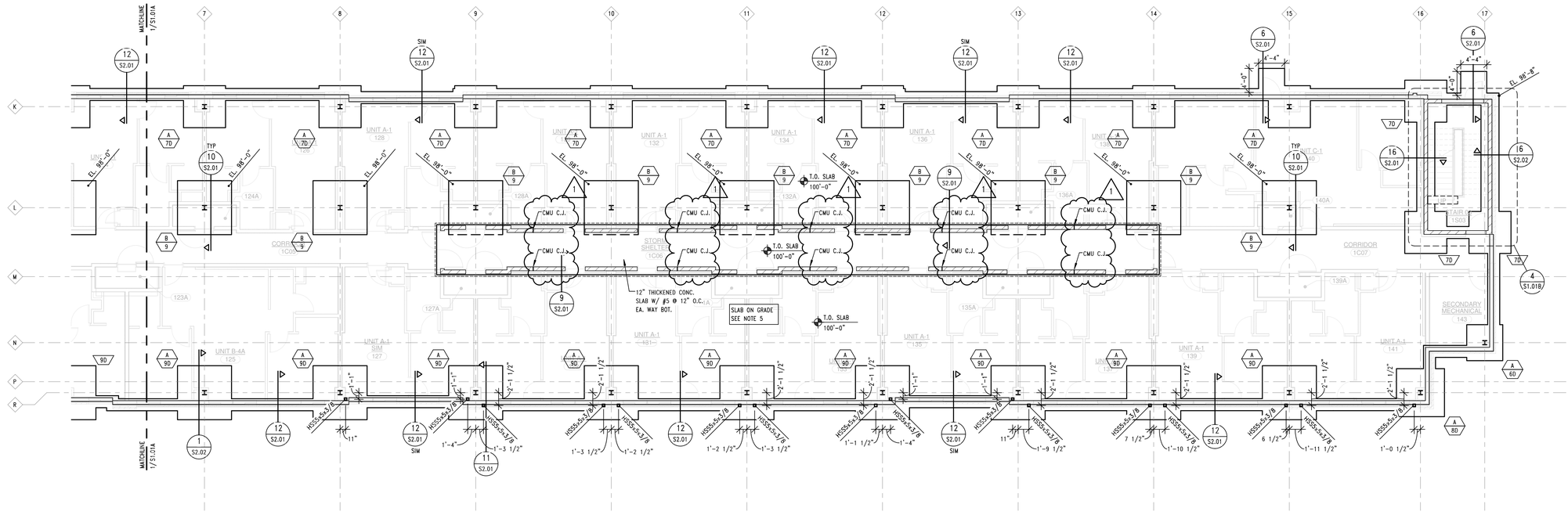


1 S1.01B FIRST FLOOR PLAN – EAST WING

1/8" = 1'-0"

COLUMN SCHEDULE

MARK	SIZE	BASE PL. SIZE
A	W8x31	PL 1.25"x14"x14"
B	W8x48	PL 1.75"x16"x16"

NOTE:
1. SEE ROOF FRAMING PLAN FOR TOP OF STEEL ELEVATIONS.

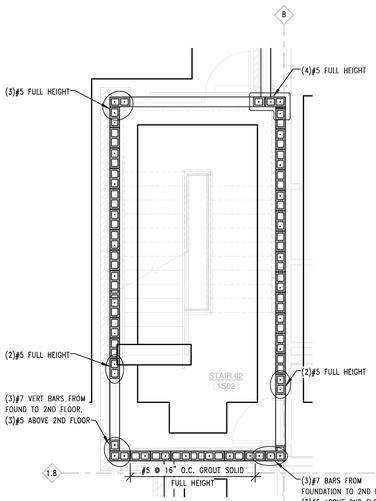
COLUMN FOOTING SCHEDULE

TYPE MARK	TYPE	REINFORCEMENT	
		(BOT. EA. WAY)	(TOP EA. WAY)
4D	4'-0" x 4'-0" x 2'-8"	(4)#5	(4)#5
6D	6'-0" x 6'-0" x 2'-8"	(6)#5	(6)#5
7D	7'-0" x 7'-0" x 2'-8"	(7)#5	(7)#5
8D	8'-0" x 8'-0" x 2'-8"	(9)#5	(9)#5
9	9'-0" x 9'-0" x 1'-6"	(8)#6	N/A
9D	9'-0" x 9'-0" x 2'-8"	(8)#6	(8)#6
10D	10'-0" x 10'-0" x 2'-8"	(10)#6	(10)#6
16x9	16'-0" x 9'-0" x 2'-6"	(14)#8 L.D., (8)#6 S.D.	N/A

NOTES:
1. CENTER COLUMN FOOTINGS UNDER COLUMN UNLESS NOTED.
2. CONTINUE WALL FOOTING REINFORCING THRU COLUMN FOOTING WHERE OCCURS.

PLAN NOTES

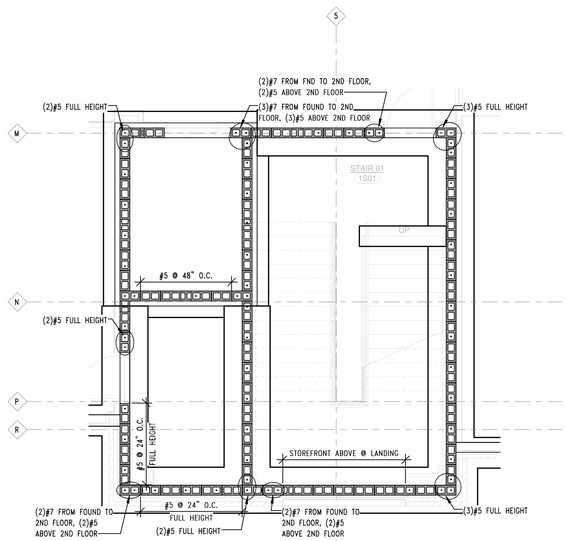
1. FINISH FLOOR ELEVATION SHALL BE 100'-0" UNLESS NOTED OTHERWISE. SEE CIVIL DRAWINGS FOR MEAN SEA LEVEL ELEVATION CORRESPONDING TO THE FINISHED FLOOR ELEVATION 100'-0".
2. TOP OF FOOTING ELEVATION NOTED THUSLY, EL. YXY'-Y" TOP OF FOUNDATION ELEVATION SHALL BE 98'-8" UNLESS NOTED OTHERWISE
   C# / F# INDICATES COLUMN SIZE / INDICATES FOOTING SIZE > SEE SCHEDULE THIS SHEET
3. ------ INDICATES PERIMETER OF STORM SHELTER. STORM SHELTER WALLS SHALL BE FULLY-GROUTED & REINFORCED VERTICALLY w/#5 @ 8" c/c
4. SEE DETAIL 5/S2.01 FOR TYPICAL FTG STEP DETAIL
5. ALL SLABS-ON-GRADE SHALL BE 4-INCHES THICK WITH 6x6-W2.1xW2.1 WWF LOCATED 1 1/2" BELOW TOP OF SLAB. SLAB SHALL BEAR ON 15 MIL VAPOR BARRIER AND 4" SELECT GRANULAR FILL UNLESS NOTED OTHERWISE.
6. NO SLAB-ON-GRADE JOINTS HAVE BEEN SHOWN. THE SLAB-ON-GRADE JOINT PATTERN SHALL BE DETERMINED BY THE CONTRACTOR AND SHALL BE DESIGNED TO LIMIT UNCONTROLLED CRACKING OF THE SLAB. JOINTS SHALL GENERALLY BE LOCATED A MAXIMUM DISTANCE OF 12'-0" ON CENTER WITH AS NEARLY A SQUARE PATTERN AS POSSIBLE. IN ADDITION, LOCATE JOINTS AT RE-ENTRANT CORNERS AND OTHER LOCATIONS WHERE CRACKING IS LIKELY.
7. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN ON THIS PLAN.
8. REFER TO GENERAL STRUCTURAL NOTES FOR SLAB ON GRADE STRENGTH, W/C RATIO, AND SLUMP REQUIREMENTS.
9. SLEEVE STORM DRAIN LINE THROUGH COLUMN FOOTING.
10. SEE A1.00B FOR GRID LAYOUT & DIMENSIONS.



NOTES:
1. ALL REINFORCING TO BE #5 @ 24" FULL HEIGHT – EXCEPT AS NOTED OTHERWISE
2. PROVIDE CONT. 8" BOND BEAM w/(2)#4 AT ALL INTERMEDIATE AND MAIN LEVEL FLOOR LANDING SLABS.

2 S1.01B MASONRY SHEARWALL PLAN

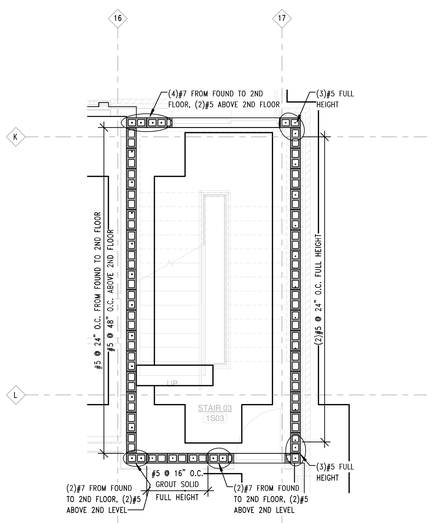
1/4" = 1'-0"



NOTES:
1. ALL REINFORCING TO BE #5 @ 24" O.C. FROM FOUNDATION TO 2ND FLOOR, #5 @ 48" O.C. ABOVE 2ND FLOOR – EXCEPT AS NOTED OTHERWISE.
2. PROVIDE CONT. 8" BOND BEAM W/(2)#4 AT ALL INTERMEDIATE AND MAIN LEVEL FLOOR LANDING SLABS.

3 S1.01B MASONRY SHEARWALL PLAN

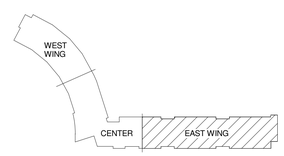
1/4" = 1'-0"



NOTES:
1. PROVIDE CONT. 8" BOND BEAM w/(2)#4 AT ALL INTERMEDIATE AND MAIN LEVEL FLOOR LANDING SLABS.

4 S1.01B MASONRY SHEARWALL PLAN

1/4" = 1'-0"



KEY PLAN

NOT TO SCALE

NIELSEN-BAUMERT ENGINEERING, INC.
10855 West Dodge Road, Suite 180
OMAHA, NEBRASKA 68154
(402)496-4750 FAX (402)496-1147

No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FOUNDATION PLAN - EAST WING

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15927
DATE: 04/01/16

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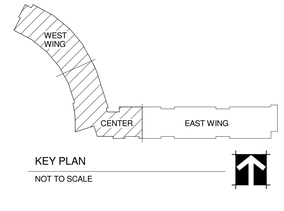
1 S1.02A SECOND FLOOR FRAMING – CENTER
1/8" = 1'-0"

2 S1.02A SECOND FLOOR FRAMING – WEST WING
1/8" = 1'-0"



KEY PLAN
NOT TO SCALE

SECOND FLOOR FRAMING PLAN NOTES:

1. TOP OF STEEL ELEVATION = EL. 114'-5 1/2" UNLESS NOTED OTHERWISE.
2. FINISH FLOOR ELEVATION = EL. 115'-0" UNLESS NOTED OTHERWISE.
3. THE FOLLOWING SYMBOLS WERE USED ON THIS PLAN;
   - ① 3" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK WITH 3 1/2" NORMAL-WEIGHT CONCRETE TOPPING (6 1/2" TOTAL THICKNESS) WITH 6x6-W1.4xW1.4 W.W.F. (DECK SHALL BE CONTINUOUS OVER 3 OR MORE SPANS).
   - ② 1 1/2" DEEP, WIDE RIB 22 GAGE PAINTED METAL ROOF DECK.
   - ③ 4" MINIMUM TOTAL THICKNESS CONCRETE STAIR LANDING SLAB OR DECK OR PAN BY STAIR DESIGNER.
   - W24x55 (27) (113'-0 1/4") — INDICATES THE ELEVATION AT THE TOP OF THE STEEL BEAM IF NOT NOTED OTHERWISE; INDICATES TOTAL NUMBER OF 3/4"Ø x 5" LONG (MIN. LENGTH AFTER WELDING) HEADED STUDS WELDED TO BEAM TOP FLANGE. DISTRIBUTE STUDS AS SHOWN ON DETAIL 1/S3.01
   - INDICATES A BEAM SPLICE. SEE 3/S3.01
   - INDICATES 8" CMU. SEE PLAN FOR REINFORCING.
   - HD = SIMPSON S/HDS8S HOLD DOWN ANCHOR. SEE DETAIL 7/S3.01.
   - INDICATES BEAM BEARING @ CMU WALL – SEE 6/S4.01
   - L-1 = L3 1/2"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END.
   - L-2 = L6"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END.
   - L-5 = L6"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END w/ ML-2 MASONRY LINTEL – SEE 3/S4.01.
   - L-6 = L3 1/2"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END w/ ML-1 MASONRY LINTEL – SEE 3/S4.01.
   - ML-x = SEE MASONRY LINTEL SCHEDULE 3/S4.01 FOR LINTEL SIZE & REINFORCING.
4. SEE SHEET S0.01 FOR STRUCTURAL GENERAL NOTES.
5. UNLESS NOTED OTHERWISE, ALL BEAMS EQUALLY SPACED BETWEEN COLUMN LINES.
6. STAIR DESIGN TO BE BY STEEL SUPPLIER, SIZES SHOWN ARE MINIMUM SIZES AS A BASIS AND MINIMUM CRITERIA FOR DESIGN.
7. ALL FIRST FLOOR METAL STUD WINDOW AND DOOR HEADERS SHALL BE TYPE H-1, SEE HEADER SCHEDULE ON 9/S5.01 FOR SIZES.
8. COORDINATE WITH ARCH/MECH FOR SLAB OPENING SIZES AND LOCATIONS OF MECHANICAL CHASES. SEE DETAIL 9/S3.01 FOR SLAB OPENING FRAMING REQUIREMENTS.

NIELSEN-BAUMERT ENGINEERING, INC.
10855 West Dodge Road, Suite 180
OMAHA, NEBRASKA 68154
(402)496-4750 FAX (402)496-1147

No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

SECOND FLOOR FRAMING - WEST WING & CENTER

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15927
DATE: 04/01/16

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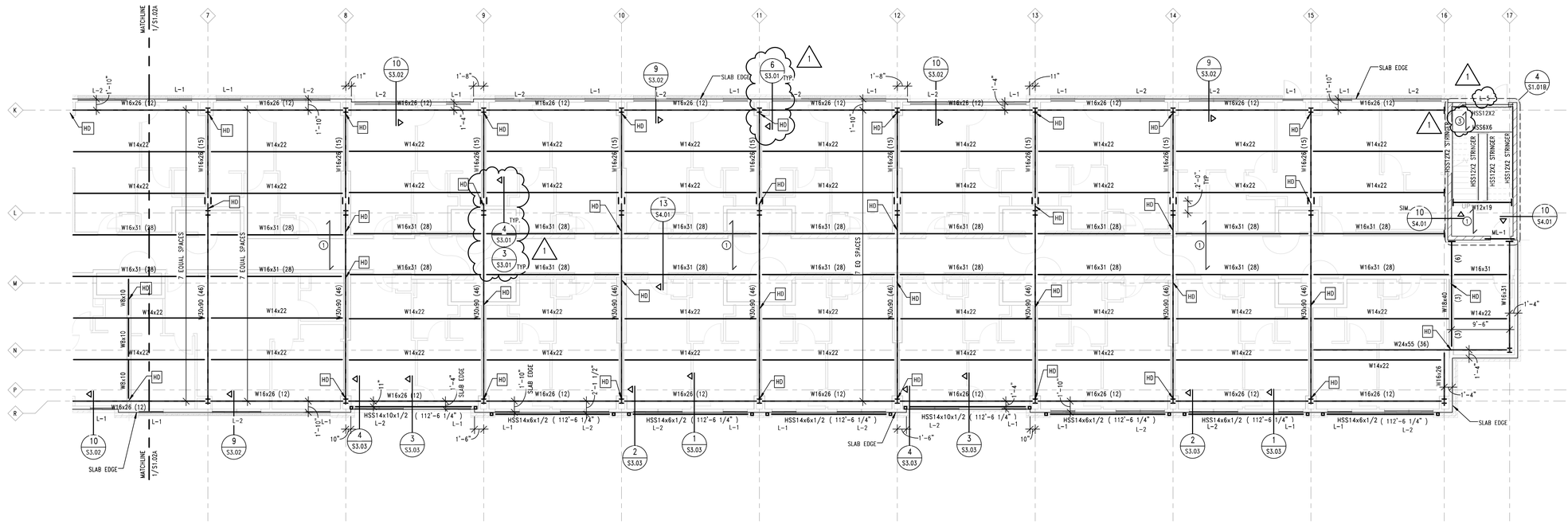


1 S1.02B — SECOND FLOOR FRAMING – EAST WING

1/8" = 1'-0"

SECOND FLOOR FRAMING PLAN NOTES:

1. TOP OF STEEL ELEVATION = EL. 114'-5 1/2" UNLESS NOTED OTHERWISE.
2. FINISH FLOOR ELEVATION = EL. 115'-0" UNLESS NOTED OTHERWISE.
3. THE FOLLOWING SYMBOLS WERE USED ON THIS PLAN;

① 3" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK WITH 3 1/2" NORMAL-WEIGHT CONCRETE TOPPING (6 1/2" TOTAL THICKNESS) WITH 6x6-W1.4xW1.4 W.W.F. (DECK SHALL BE CONTINUOUS OVER 3 OR MORE SPANS).

② 1 1/2" DEEP, WIDE RIB 22 GAGE PAINTED METAL ROOF DECK.

③ 4" MINIMUM TOTAL THICKNESS CONCRETE STAIR LANDING SLAB OR DECK OR PAN BY STAIR DESIGNER.

W24x55 (27),(113'-0 1/4") — INDICATES THE ELEVATION AT THE TOP OF THE STEEL BEAM IF NOT NOTED OTHERWISE; INDICATES TOTAL NUMBER OF 3/4"Ø x 5" LONG (MIN. LENGTH AFTER WELDING) HEADED STUDS WELDED TO BEAM TOP FLANGE. DISTRIBUTE STUDS AS SHOWN ON DETAIL 1/S3.01

INDICATES A BEAM SPLICE. SEE 3/S3.01

INDICATES 8" CMU. SEE PLAN FOR REINFORCING

HD = SIMPSON S/HDSB8 HOLD DOWN ANCHOR. SEE DETAIL 7/S3.01.

INDICATES BEAM BEARING @ CMU WALL – SEE 6/S4.01

L-1 = L3 1/2"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END.

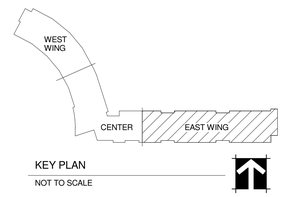
L-2 = L6"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END.

L-5 = L6"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END w/ ML-2 MASONRY LINTEL – SEE 3/S4.01.

L-6 = L3 1/2"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END w/ ML-1 MASONRY LINTEL – SEE 3/S4.01.

ML-x = SEE MASONRY LINTEL SCHEDULE 3/S4.01 FOR LINTEL SIZE & REINFORCING.

4. SEE SHEET S0.01 FOR STRUCTURAL GENERAL NOTES.
5. UNLESS NOTED OTHERWISE, ALL BEAMS EQUALLY SPACED BETWEEN COLUMN LINES.
6. STAIR DESIGN TO BE BY STEEL SUPPLIER, SIZES SHOWN ARE MINIMUM SIZES AS A BASIS AND MINIMUM CRITERIA FOR DESIGN.
7. ALL FIRST FLOOR METAL STUD WINDOW AND DOOR HEADERS SHALL BE TYP. H-1, SEE HEADER SCHEDULE ON 9/S5.01 FOR SIZES.
8. COORDINATE WITH ARCH/MECH FOR SLAB OPENING SIZES AND LOCATIONS OF MECHANICAL CHASES. SEE DETAIL 9/S3.01 FOR SLAB OPENING FRAMING REQUIREMENTS.



KEY PLAN

NOT TO SCALE

NIELSEN-BAUMERT ENGINEERING, INC.
10855 West Dodge Road, Suite 180
OMAHA, NEBRASKA 68154
(402)496-4750 FAX (402)496-1147

No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

SECOND FLOOR FRAMING - EAST WING

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15927

DATE: 04/01/16

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1 THIRD FLOOR FRAMING – CENTER
S1.03A 1/8" = 1'-0"

2 THIRD FLOOR FRAMING – WEST WING
S1.03A 1/8" = 1'-0"

KEY PLAN
NOT TO SCALE

THIRD LEVEL FRAMING PLAN NOTES:

1. TOP OF JOISTS = EL. 126'-7 11/16" UNLESS NOTED OTHERWISE.
2. THE FOLLOWING SYMBOLS WERE USED ON THIS PLAN;
   - ③ 4" MINIMUM TOTAL THICKNESS CONCRETE STAIR LANDING SLAB OR DECK OR PAN BY STAIR DESIGNER.
   - ④ 9/16", 22 GAGE METAL FORM DECK w/ GYPCRETE FILL TO TOP OF DECK, 1/4" ACCOUSTICAL MAT (SEE ARCH) & 1 1/2" GYPCRETE FILL. (TYPICAL IN ROOMS) DECK SHALL BE CONTINOUS OVER 3 OR MORE SPANS.
   - ⑤ 9/16", 22 GAGE METAL FORM DECK w/ 1 3/4" GYPCRETE FILL. (TYPCIAL IN CORRIDORS). DECK SHALL BE CONTINOUS OVER 3 OR MORE SPANS.
   - S1 STRUCTURAL WALL TYPE. SEE 1/S5.01 FOR WALL SCHEDULE AND FASTENING DETAILS.
   - H-x = SEE HEADER SCHEDULE 9/S5.01 FOR SIZES NOTED ON PLAN.
   - L-3 = L3 1/2"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END. AN H-1 BOXED HEADER LOCATED IN STUD WALL – SEE 9/S5.01.
   - L-4 = L6"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END. AN H-2 BOXED HEADER LOCATED IN STUD WALL – SEE 9/S5.01.
   - L-5 = L6"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END w/ ML-2 MASONRY LINTEL – SEE 3/S4.01.
   - L-6 = L3 1/2"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END w/ ML-1 MASONRY LINTEL – SEE 3/S4.01.
   - ML-x = SEE MASONRY LINTEL SCHEDULE 3/S4.01 FOR LINTEL SIZE & REINFORCING.
3. 14TDW14 = 14" TRADE READY JOIST BY DIETRICH METAL FRAMING; HEIGHT = 14" FLANGE = 2" THICKNESS = 14 GAGE (68 mils) Fy = 50ksi
   14TDW12 = 14" TRADE READY JOIST BY DIETRICH METAL FRAMING; HEIGHT = 14" FLANGE = 2" THICKNESS = 12 GAGE (97 mils) Fy = 50ksi
   9.25TDJ16 = 9.25" TRADE READY JOIST BY DIETRICH METAL FRAMING; HEIGHT = 9 1/4" FLANGE = 1 3/4" THICKNESS = 16 GAGE (54 mils) Fy = 50ksi
4. 14TDWxx JOISTS SHALL HAVE 10" ROUND WEB OPENINGS @ 4'-0"o.c. OFFSET WEB HOLES FROM ENDS AS INSTRUCTED BY SUPPLIER.
5. PROVIDE FLOOR JOIST BRIDGING @ 8'-0"o.c. MAX. SEE 8/S5.01 FOR TYPICAL BRIDGING DETAILS.
6. COORDINATE WITH ARCH/MECH FOR SLAB OPENINGS FOR MECHANICAL CHASES. SEE DETAILS 13 & 14 ON SHEET S5.01 FOR FRAMING REQUIREMENTS.

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OMAHA, NEBRASKA 68154
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No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

THIRD FLOOR FRAMING - WEST WING & CENTER

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROFESSIONAL STRUCTURAL ENGINEER – STATE OF NEBRASKA – 4/1/16

PROJECT:15927
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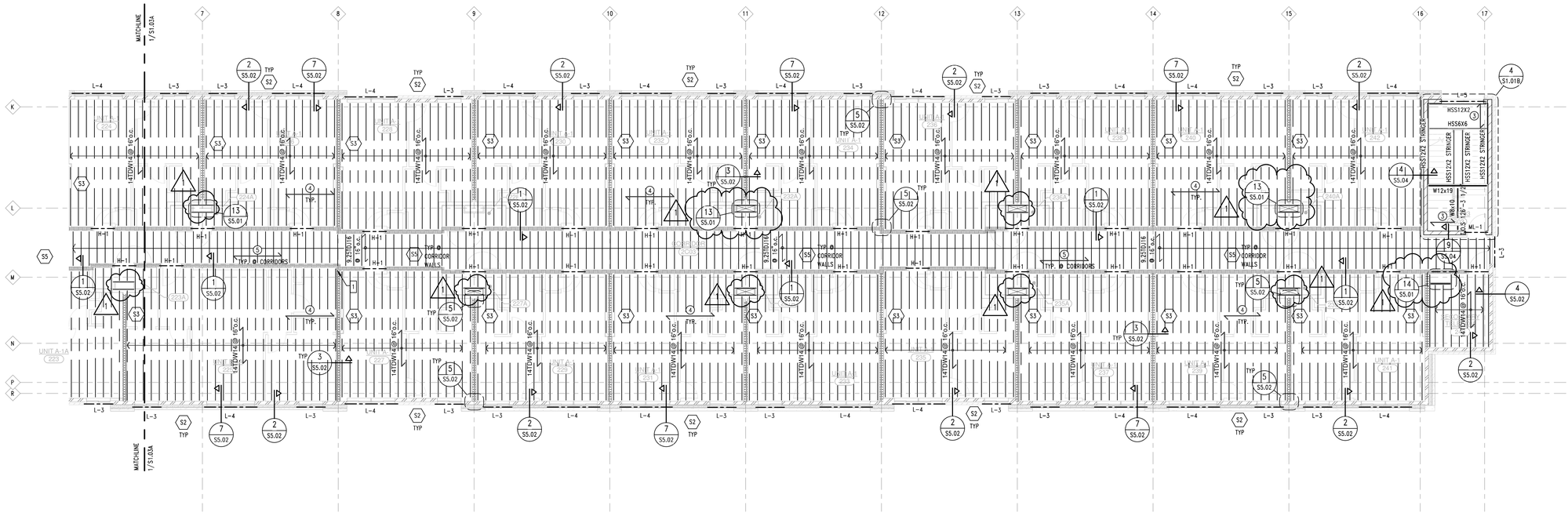
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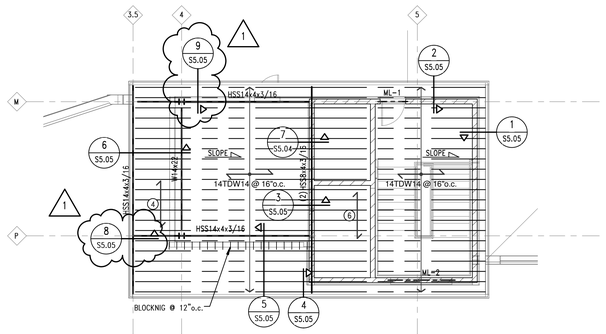
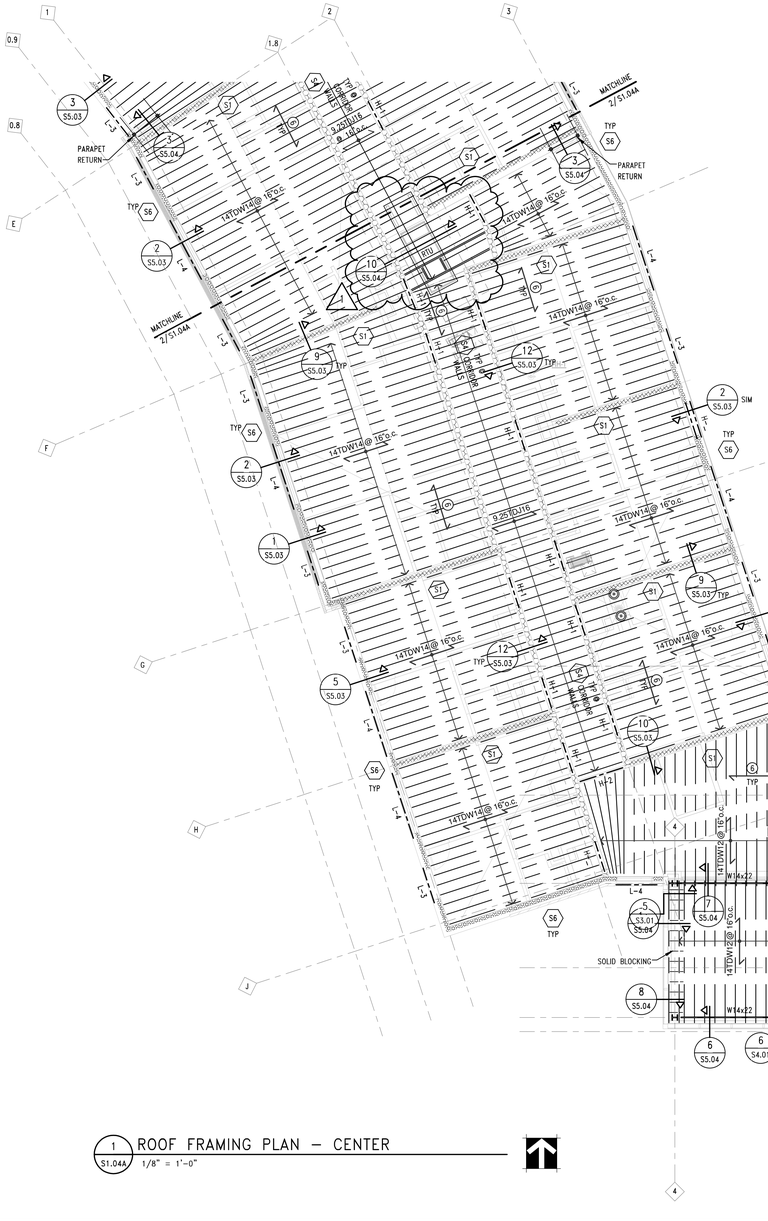


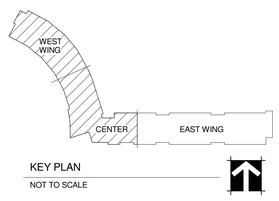
NOTE:
1. TOP OF JOIST ELEVATION VARIES ON HIGH ROOF - SEE DETAILS

3 HIGH ROOF FRAMING PLAN
S1.04A 1/8" = 1'-0"



1 ROOF FRAMING PLAN - CENTER
S1.04A 1/8" = 1'-0"

2 ROOF FRAMING PLAN - WEST WING
S1.04A 1/8" = 1'-0"



KEY PLAN
NOT TO SCALE

ROOF FRAMING PLAN NOTES:

1. TOP OF JOISTS = EL. 138'-0 7/16" UNLESS NOTED OTHERWISE.
2. THE FOLLOWING SYMBOLS WERE USED ON THIS PLAN;
   - ① 3" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK WITH 3 1/2" NORMAL-WEIGHT CONCRETE TOPPING (6 1/2" TOTAL THICKNESS) WITH 6x6-W1.4xW1.4 W.W.F. (DECK SHALL BE CONTINUOUS OVER 3 OR MORE SPANS).
   - ③ 4" MINIMUM TOTAL THICKNESS CONCRETE STAIR LANDING SLAB OR DECK OR PAN BY STAIR DESIGNER.
   - ⑥ 9/16", 22 GAGE METAL FORM DECK. DECK SHALL BE CONTINUOUS OVER 3 OR MORE SPANS. FASTEN DECK EDGES w/ #10-16 SCREWS. SEE DETAILS FOR FASTENER SPACING. FASTEN DECK FIELD w/ (1) #10-16 SCREWS @ 9"o.c. ALONG ALL SUPPORTING MEMBERS.
   - 1 SUPPORTING MEMBERS.
   - S1 STRUCTURAL WALL TYPE. SEE 1/S5.01 FOR WALL SCHEDULE AND FASTENING DETAILS.
   - H-x = SEE HEADER SCHEDULE 9/S5.01 FOR SIZES NOTED ON PLAN.
   - L-3 = L3 1/2"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END. AN H-1 BOXED HEADER LOCATED IN STUD WALL - SEE 9/S5.01.
   - L-4 = L6"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END. AN H-2 BOXED HEADER LOCATED IN STUD WALL - SEE 9/S5.01.
   - L-5 = L6"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END w/ ML-2 MASONRY LINTEL - SEE 3/S4.01.
   - L-6 = L3 1/2"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END w/ ML-1 MASONRY LINTEL - SEE 3/S4.01.
   - ML-x = SEE MASONRY LINTEL SCHEDULE 3/S4.01 FOR LINTEL SIZE & REINFORCING.
3. 14TDW14 = 14" TRADE READY JOIST BY DIETRICH METAL FRAMING;
   HEIGHT = 14"
   FLANGE = 2"
   THICKNESS = 14 GAGE (68 mils)
   Fy = 50ksi

   14TDW12 = 14" TRADE READY JOIST BY DIETRICH METAL FRAMING;
   HEIGHT = 14"
   FLANGE = 2"
   THICKNESS = 12 GAGE (97 mils)
   Fy = 50ksi

   9.25TDJ16 = 9.25" TRADE READY JOIST BY DIETRICH METAL FRAMING;
   HEIGHT = 9 1/4"
   FLANGE = 1 3/4"
   THICKNESS = 16 GAGE (54 mils)
   Fy = 50ksi
4. 14TDWxx JOISTS SHALL HAVE 10" ROUND WEB OPENINGS @ 4'-0"o.c. OFFSET WEB HOLES FROM ENDS AS INSTRUCTED BY SUPPLIER.
5. PROVIDE JOIST BRIDGING @ 8'-0"o.c. MAX. SEE 11/S5.03 FOR TYPICAL BRIDGING DETAILS.

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OMAHA, NEBRASKA 68154
(402)496-4750 FAX (402)496-1147

No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

ROOF FRAMING - WEST WING & CENTER

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15927
DATE: 04/01/16

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STATE OF NEBRASKA

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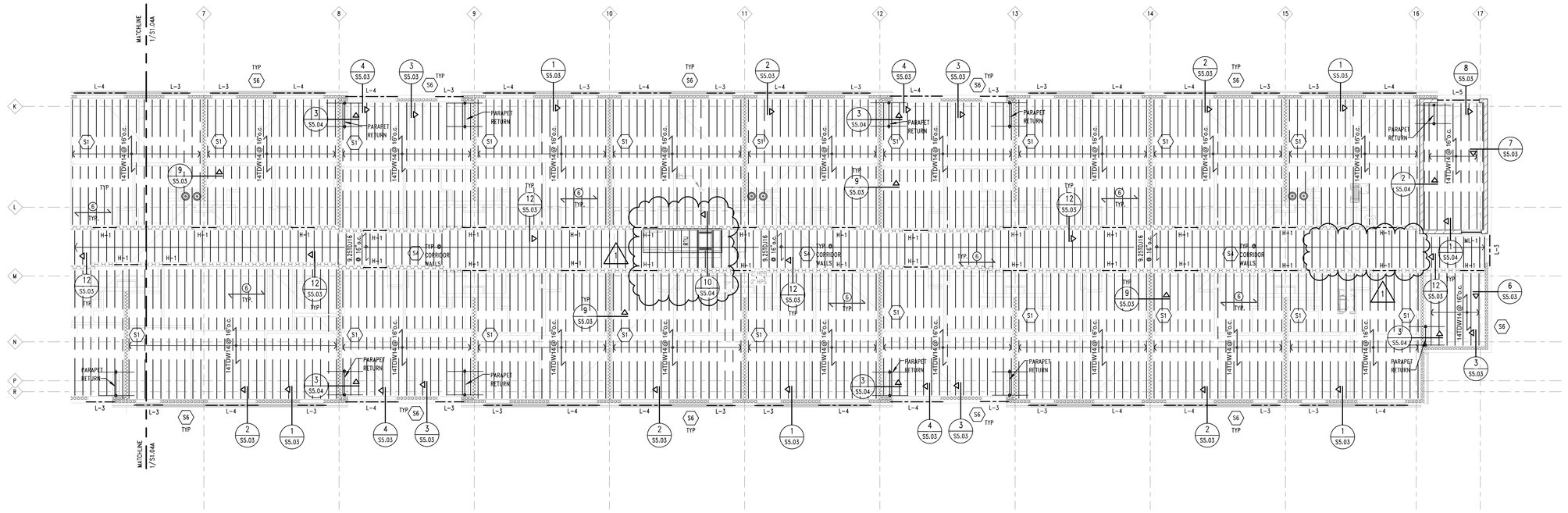
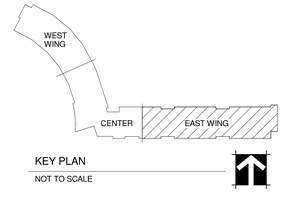


1 / S1.04B — ROOF FRAMING PLAN – EAST WING

1/8" = 1'-0"



ROOF FRAMING PLAN NOTES:

1. TOP OF JOISTS = EL. 138'-0 7/16" UNLESS NOTED OTHERWISE.

2. THE FOLLOWING SYMBOLS WERE USED ON THIS PLAN;

   ① — 3" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK WITH 3 1/2" NORMAL-WEIGHT CONCRETE TOPPING (6 1/2" TOTAL THICKNESS) WITH 6x6-W1.4xW1.4 W.W.F. (DECK SHALL BE CONTINUOUS OVER 3 OR MORE SPANS).

   ③ — 4" MINIMUM TOTAL THICKNESS CONCRETE STAIR LANDING SLAB OR DECK OR PAN BY STAIR DESIGNER.

   ⑥ — 9/16", 22 GAGE METAL FORM DECK. DECK SHALL BE CONTINUOUS OVER 3 OR MORE SPANS. FASTEN DECK EDGES w/ #10-16 SCREWS. SEE DETAILS FOR FASTENER SPACING. FASTEN DECK FIELD w/ (1) #10-16 SCREWS @ 9"o.c. ALONG ALL SUPPORTING MEMBERS.

   (1) — STRUCTURAL WALL TYPE. SEE 1/S5.01 FOR WALL SCHEDULE AND FASTENING DETAILS.

   H-x = SEE HEADER SCHEDULE 9/S5.01 FOR SIZES NOTED ON PLAN.

   L-3 = L3 1/2"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END, AN H-1 BOXED HEADER LOCATED IN STUD WALL – SEE 9/S5.01.

   L-4 = L6"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END. AN H-2 BOXED HEADER LOCATED IN STUD WALL – SEE 9/S5.01.

   L-5 = L6"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END w/ ML-2 MASONRY LINTEL – SEE 3/S4.01.

   L-6 = L3 1/2"x3 1/2"x5/16" LOOSE BRICK LINTEL THAT SHALL HAVE 8" MIN. BEARING EACH END w/ ML-1 MASONRY LINTEL – SEE 3/S4.01.

   ML-x = SEE MASONRY LINTEL SCHEDULE 3/S4.01 FOR LINTEL SIZE & REINFORCING.

3. 14TDW14 = 14" TRADE READY JOIST BY DIETRICH METAL FRAMING;
   HEIGHT = 14"
   FLANGE = 2"
   THICKNESS = 14 GAGE (68 mils)
   Fy = 50ksi

   14TDW12 = 14" TRADE READY JOIST BY DIETRICH METAL FRAMING;
   HEIGHT = 14"
   FLANGE = 2"
   THICKNESS = 12 GAGE (97 mils)
   Fy = 50ksi

   9.25TDJ16 = 9.25" TRADE READY JOIST BY DIETRICH METAL FRAMING;
   HEIGHT = 9 1/4"
   FLANGE = 1 3/4"
   THICKNESS = 16 GAGE (54 mils)
   Fy = 50ksi

4. 14TDWxx JOISTS SHALL HAVE 10" ROUND WEB OPENINGS @ 4'-0"o.c. OFFSET WEB HOLES FROM ENDS AS INSTRUCTED BY SUPPLIER.

5. PROVIDE JOIST BRIDGING @ 8'-0"o.c. MAX. SEE 11/S5.03 FOR TYPICAL BRIDGING DETAILS.

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No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

ROOF FRAMING - EAST WING

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT: 15927
DATE: 04/01/16

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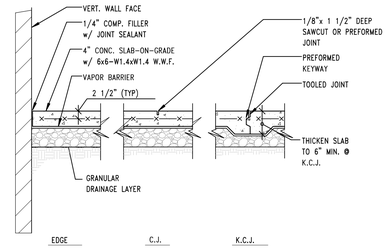
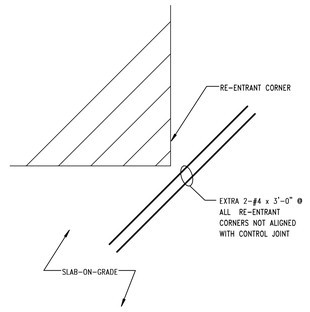


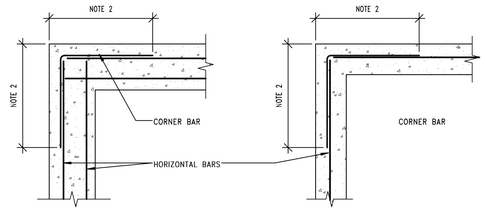
NOTES:

1. USE K.C.J. AT TERMINATION OF POURS IN LIEU OF CONTROL JOINT.
2. NO SLAB-ON-GRADE CONTROL JOINTS HAVE BEEN SHOWN. THE SLAB-ON-GRADE CONTROL JOINT PATTERN SHALL BE DETERMINED BY THE CONTRACTOR IN CONJUNCTION WITH THE FLOORING SUBCONTRACTOR AND APPROVED BY THE CONTRACTING OFFICER. THE SLAB-ON-GRADE CONTROL JOINTS SHALL GENERALLY BE LOCATED A MAXIMUM DISTANCE OF FIFTEEN FEET ON CENTER WITH AS NEARLY SQUARE PATTERN AS PRACTICAL. THE LENGTH OF ANY CONTROL JOINT PATTERN SHALL NOT EXCEED 1.5 TIMES THE WIDTH. IN ADDITION, SLAB-ON-GRADE CONTROL JOINT SHALL BE LOCATED AT RE-ENTRANT CORNERS AND OTHER LOCATIONS WHERE CRACKING IS LIKELY.

1 S2.01 SLAB JOINT DETAILS
3/4" = 1'-0"



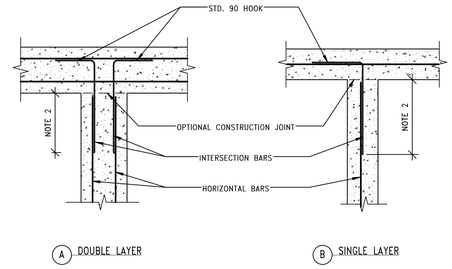
2 S2.01 TYP. SLAB-ON-GRADE RE-ENTRANT CORNER REINFORCING
3/4" = 1'-0"



NOTES:

1. CORNER BARS SHALL HAVE SAME SIZE AND SPACING AS HORIZONTAL BARS.
2. FOR CORNER BAR LEG LENGTH, USE LAP SPLICE DIMENSION SHOWN IN STRUCTURAL GENERAL NOTES FOR "ALL OTHER BARS".
3. DO NOT PLACE VERTICAL CONSTRUCTION JOINTS WITHIN 5'-0" OF CORNER.

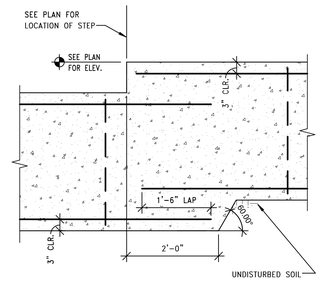
3 S2.01 TYP. FOOTING OR CONCRETE WALL CORNER REINFORCING
3/4" = 1'-0"



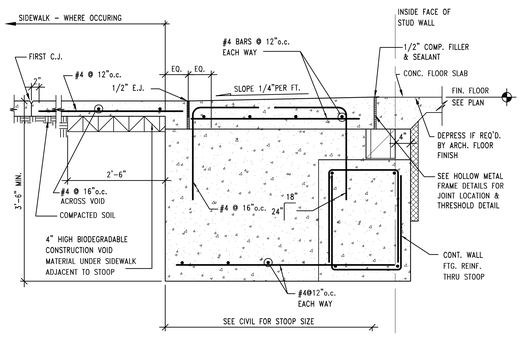
NOTES:

1. INTERSECTION BARS AT MONLITHIC INTERSECTIONS SHALL HAVE SAME SIZE AND SPACING AS HORIZONTAL BARS. WHERE OPTIONAL CONSTRUCTION JOINT IS USED, PLACE ADDITIONAL INTERSECTION BARS BETWEEN THOSE THATCOINCIDE WITH HORIZONTAL BARS.
2. FOR LAP SPLICE LENGTH INDICATYED, USE LAP SPLICE DIMENSION SHOWN IN STRUCTURAL GENERAL NOTES FOR "ALL OTHER BARS".

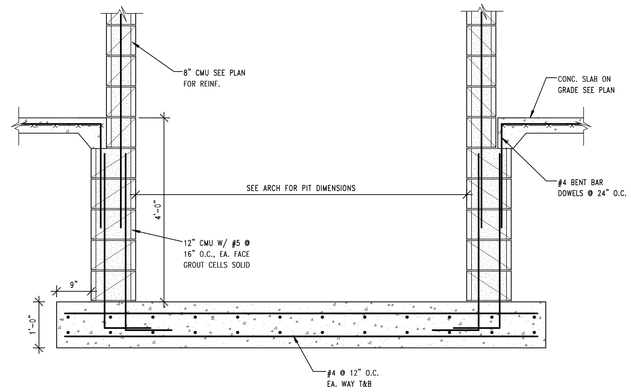
4 S2.01 TYP. FOOTING OR CONCRETE WALL "T" INTERSECTION REINFORCING
3/4" = 1'-0"



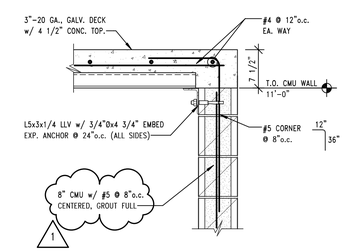
5 S2.01 TYP. TRENCH BEAM STEP
3/4" = 1'-0"



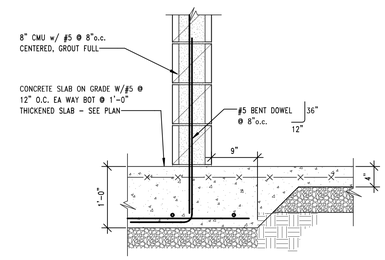
6 S2.01 STRUCTURAL STOOP DETAIL
3/4" = 1'-0"



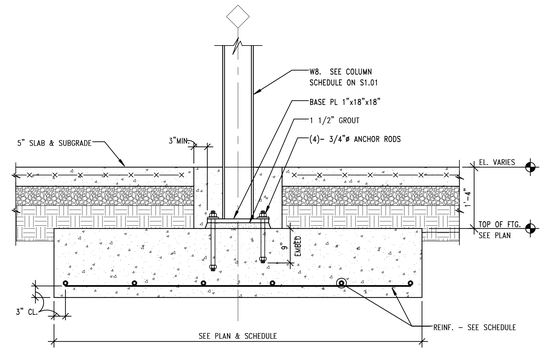
7 S2.01 ELEVATOR PIT SECTION
3/4" = 1'-0"



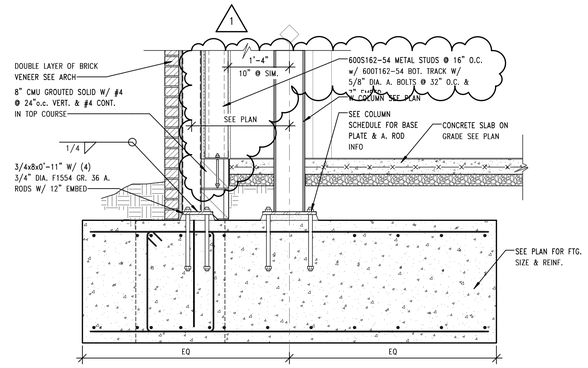
8 S2.01 SECTION @ STORM SHELTER
1" = 1'-0"



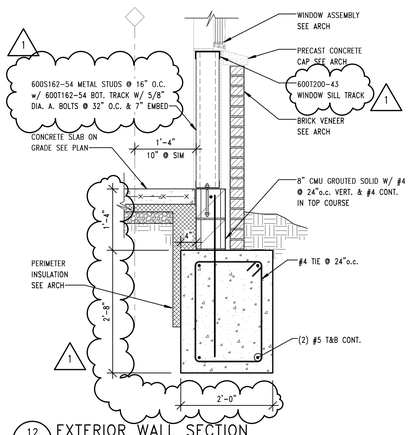
9 S2.01 STORM SHELTER FOUNDATION
1" = 1'-0"



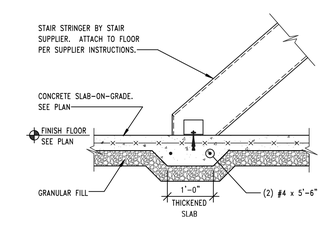
10 S2.01 TYP. INTERIOR COLUMN FOUNDATION
3/4" = 1'-0"



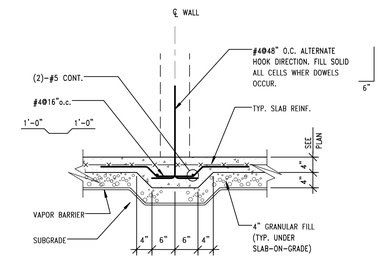
11 S2.01 SPREAD FOOTING AT EXTERIOR WALL
3/4" = 1'-0"



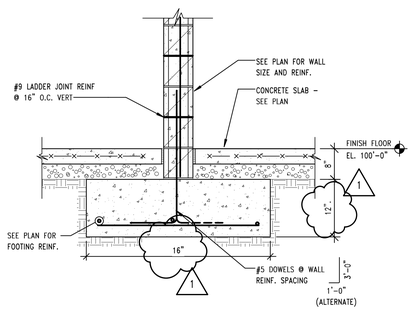
12 S2.01 EXTERIOR WALL SECTION
3/4" = 1'-0"



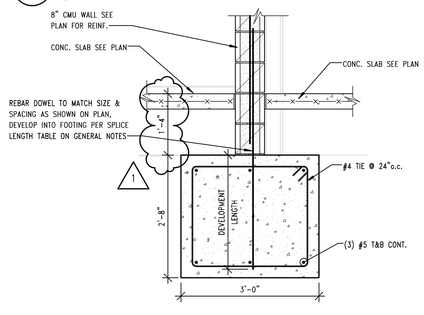
13 S2.01 STAIR STRINGERS
3/4" = 1'-0"



14 S2.01 NON-BEARING MASONRY WALLS
3/4" = 1'-0"



15 S2.01 INTERIOR CMU FOOTING SECTION
3/4" = 1'-0"



16 S2.01 INTERIOR STAIR WALL FOOTING SECTION
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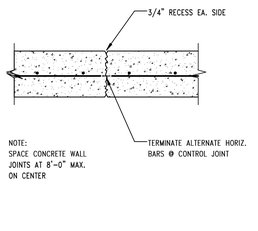

17 S2.01 CONCRETE WALL CONTROL JOINT PLAN
3/4" = 1'-0"

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OMAHA, NEBRASKA 68154
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FOUNDATION DETAILS

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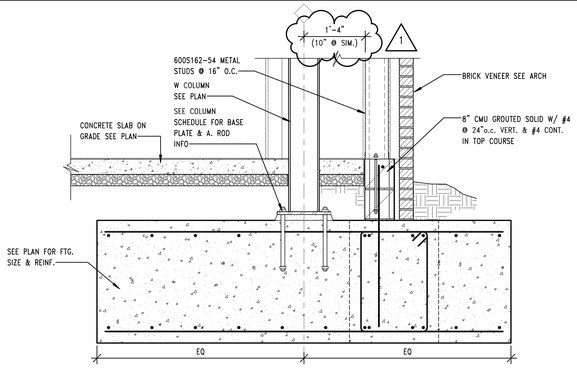
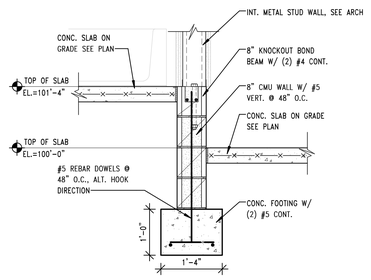
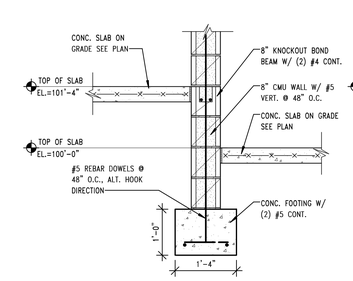


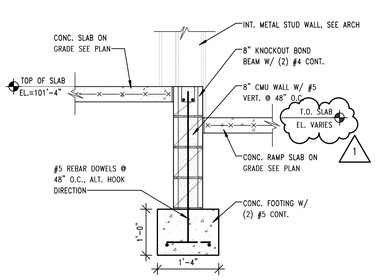
1 S2.02 COL AT EXTERIOR WALL
3/4" = 1'-0"



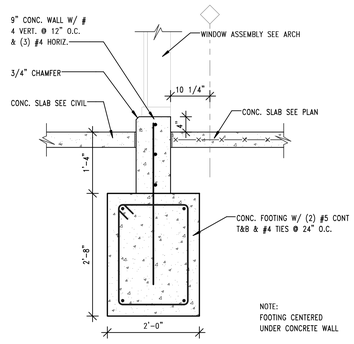
2 S2.02 SLAB STEP DETAIL
3/4" = 1'-0"



3 S2.02 SLAB STEP DETAIL
3/4" = 1'-0"



4 S2.02 RAMP SLAB DETAIL
3/4" = 1'-0"



5 S2.02 FOOTING AT CURTAINWALL
3/4" = 1'-0"

6 S2.02 GRADE BEAM AT STAIR
3/4" = 1'-0"

7 S2.02 EXT. WALL SECTION
3/4" = 1'-0"

8 S2.02 FOOTING STEP @ ELEV. PIT
3/4" = 1'-0"

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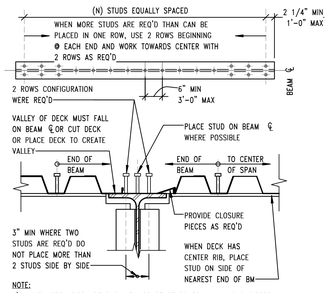
COMPOSITE CONSTRUCTION AND PLACEMENT INSTRUCTIONS FOR HEADER STUD TYPE SHEAR CONNECTORS FOR COMPOSITE BEAMS

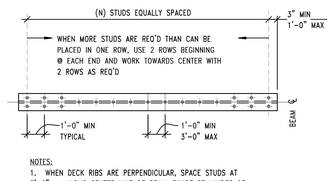
(REFERRED TO AS "STUDS" IN THE FOLLOWING NOTES)

GENERAL NOTES:

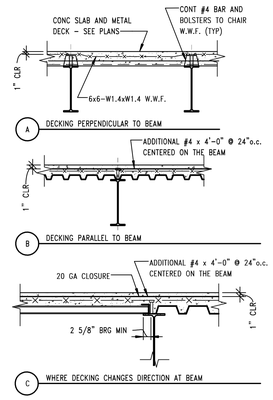
1. STUD SIZE AND HEIGHT AFTER WELDING: 3/4"Ø x 0'-5" AT FLOOR SLABS WITH 6 1/2" TOTAL THICKNESS.
2. SEE FRAMING PLANS FOR THE NUMBER OF STUDS, (N), TO BE PLACED ON EACH BEAM OR GIRDER. STUDS TO BE EQUALLY SPACED. SEE STUD PLACEMENT DETAILS FOR STUD SPACING. WHERE NO STUDS ARE SPECIFIED, STUDS SHALL BE PLACED AT A MINIMUM OF 18" O.C.
3. PREPARE STUD PLACEMENT DRAWING AND INCLUDE:
   TOTAL NUMBER OF STUDS REQUIRED FOR EACH BEAM, LOCATION OF STUDS AND DIMENSION FROM BEAM OR COLUMN CENTERLINE. DRAWING SHALL BE COMPLETE ENOUGH TO ALLOW INSTALLATION, INDEPENDENT OF CONTRACT DRAWINGS. PROVIDE CONTRACTING OFFICER TWO (2) COPIES OF EACH FILE.
4. STEEL FRAMING SYSTEM WAS DESIGNED FOR UNSHORED COMPOSITE CONSTRUCTION. FABRICATE BEAMS WITH INDICATED CAMBER. BEAMS WITHOUT SPECIFIED CAMBER SHALL BE FABRICATED AND ERECTED WITH MILL CAMBER UP.
5. BEAMS INDICATED TO BE CAMBERED SHALL BE FABRICATED WITH CAMBER TO WITHIN A TOLERANCE OF =3/8" OR -1/4" FROM CAMBER INDICATED ON DRAWINGS. BEAM FABRICATED OUTSIDE THIS RANGE SHALL BE REJECTED.
6. CONTRACTOR SHALL PLACE ELEVATED FLOOR SLABS TO WITHIN +3/8" TO - 3/8" FROM DESIGN ELEVATION (AS SHOWN ON DRAWINGS) AS MEASURED BY ASTM E 1155. THE ACTUAL THICKNESS OF THE CONCRETE TOPPING OVER THE METAL DECK (NOMINALLY 3 1/2" PER DRAWINGS MAY BE ADJUSTED TO NO LESS THAN 3 1/4" AND NO MORE THAN 4" TO ACHIEVE THIS CRITERIA. EXTRA CONCRETE REQUIRED SHALL BE PROVIDED AT NO COST TO THE OWNER.
7. FINISHED CONCRETE SHALL HAVE NO MORE THAT A 1/4" ELEVATION VARIATION IN A 10'-0" DISTANCE IN ANY DIRECTION.
8. STRIKE CONCRETE WITH VIBRATING OR WET SCREED.

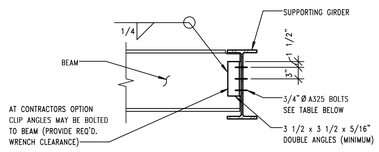


NOTE:
1) WHEN DECK RIBS ARE PARALLEL, SPACE STUDS EQUALLY ALONG GIRDER CENTERLINE. AS THE NUMBER OF STUDS INCREASE, DECREASE SPACING TO 1'-0" MIN. WHEN NUMBER OF STUDS EXCEED 1'-0" SPACING, DIVIDE REMAINDER AND BEGINNING AT EACH END, INSTALL STUDS AT 6"o.c. ALONG GIRDER CENTERLINE UNTIL REQUIRED NUMBER OF STUDS ARE PROVIDED. IF THE REQUIRED NUMBER OF STUDS CANNOT BE PLACED USING 6" SPACING, BEGINNING @ EACH END PLACE TWO ROWS OF STUDS @ EACH END 1'-0"o.c., UNTIL THE REQUIRED NUMBER OF STUDS IS PLACED ON THE BEAM.



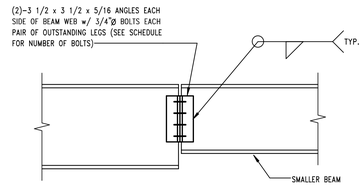
NOTES:
1. WHEN DECK RIBS ARE PERPENDICULAR, SPACE STUDS AT 3'-0"o.c. ALONG CENTER LINE OF BEAM. DIVIDE REMAINDER OF STUDS AND BEGINNING AT EACH END, INSTALL AT 1'-0"o.c. UNTIL REQUIRED NUMBER OF STUDS ARE PROVIDED. WHEN NUMBER OF STUDS EXCEED THE 1'-0" SPACING, BEGINNING AT EACH END PLACE TWO STUDS AT 1'-0"o.c. UNTIL REQUIRED NUMBER OF STUDS ARE PROVIDED.
2. CHALK BEAM CENTERLINE WHEN DECK SPAN IS PERPENDICULAR.





BEAM CONNECTION BOLT TABLE	
BEAM SIZE	MINIMUM NO. OF BOLTS (1/2 EACH ANGLE)
W8, W10, W12	4
W14, W16, W18	6
W21, W24	8
W27	10

NOTES:
1) ALL BOLTED CONNECTIONS, UNLESS DETAILED OTHERWISE, SHALL BE MADE w/ 3/4" BOLTS CONFORMING TO A.S.T.M. A325 AND TIGHTENED "SNUG FIT".
2) THIS TABLE IS TYPICAL EXCEPT WHERE SPECIFICALLY DETAILED OTHERWISE.
3) USE 5/16" BENT PLATES WHERE BEAM MEETS GIRDER AT A SKEWED ANGLE.

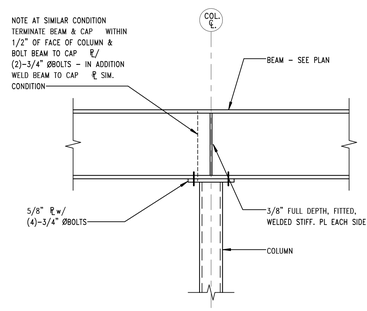


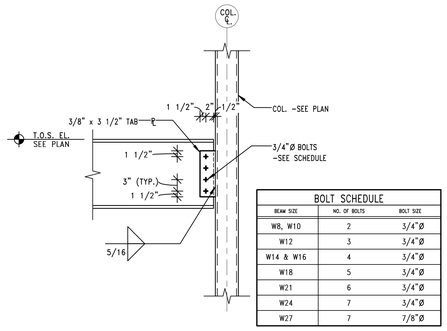
BOLT SCHEDULE	
SMALLER BEAM SIZE	NO. OF BOLTS EACH PAIR OF OUTSTANDING LEGS
W8, W10, W12	2
W14, W16, W18	3
W21, W24	4
W27	5

1 HEADED STUD PLACEMENT
S3.01 — NO SCALE

2 TYP. BEAM TO GIRDER CONNECTION DETAIL
S3.01 — 3/4" = 1'-0"

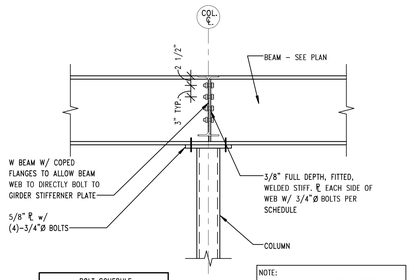
3 BEAM SHEAR SPLICE
S3.01 — 3/4" = 1'-0"





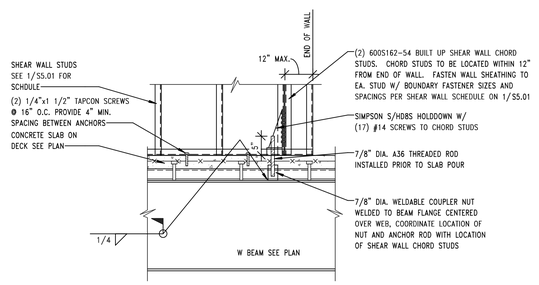
BOLT SCHEDULE		
BEAM SIZE	NO. OF BOLTS	BOLT SIZE
W8, W10	2	3/4"Ø
W12	3	3/4"Ø
W14 & W16	4	3/4"Ø
W18	5	3/4"Ø
W21	6	3/4"Ø
W24	7	3/4"Ø
W27	7	7/8"Ø

ALL BOLTS = A325-N, SNUGTIGHT



BOLT SCHEDULE	
BEAM SIZE	NO. OF BOLTS
W8 & W10	2
W12	3
W14 & W16	4
W18	5
W21 & W24	6

NOTE:
WHERE BEAMS FRAME INTO GIRDER AT A SKEWED ANGLE, ALIGN WEB STIFFENER PLATES WITH BEAM ANGLE.

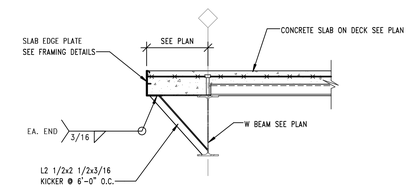


4 TYP. CANTILEVERED BEAM TO COLUMN CONNECTION
S3.01 — 3/4" = 1'-0"

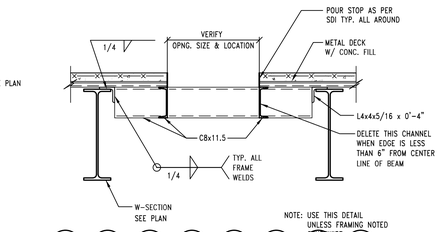
5 STEEL BEAM FRAMING INTO W COLUMN, w-PL
S3.01 — 3/4" = 1'-0"

6 BEAM CONN. @ CANTILEVERED BEAM
S3.01 — 3/4" = 1'-0"

7 SHEAR WALL ANCHORAGE TO PODIUM SLAB
S3.01 — 3/4" = 1'-0"



8 SLAB EDGE KICKER DETAIL
S3.01 — 3/4" = 1'-0"



9 TYP. FRAMING @ FLOOR OPENINGS
S3.01 — 3/4" = 1'-0"

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TYPICAL FRAMING DETAILS

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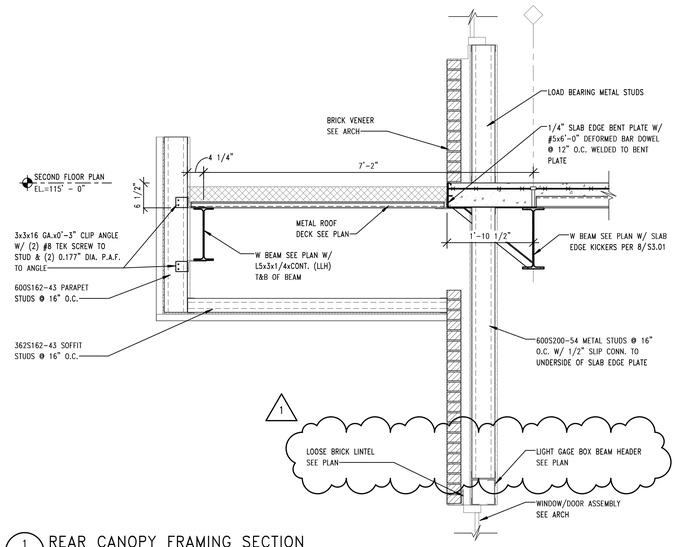
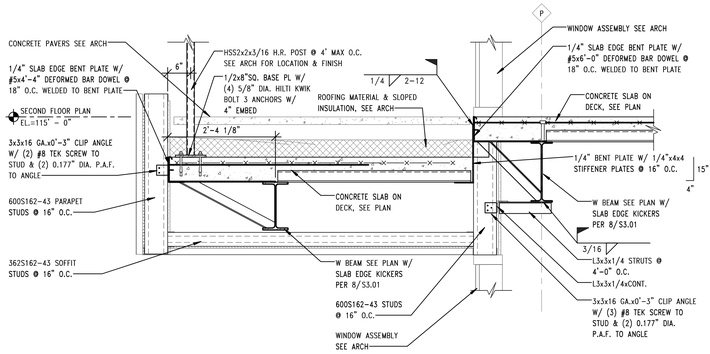
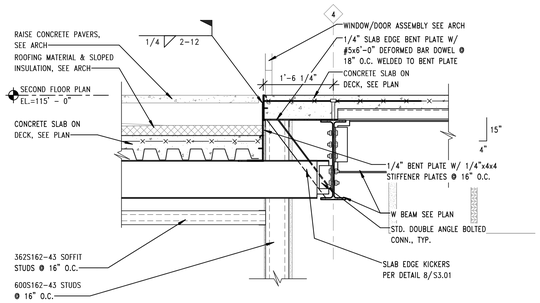


1 S3.02 REAR CANOPY FRAMING SECTION
3/4" = 1'-0"



2 S3.02 BALCONY FRAMING SECTION
3/4" = 1'-0"

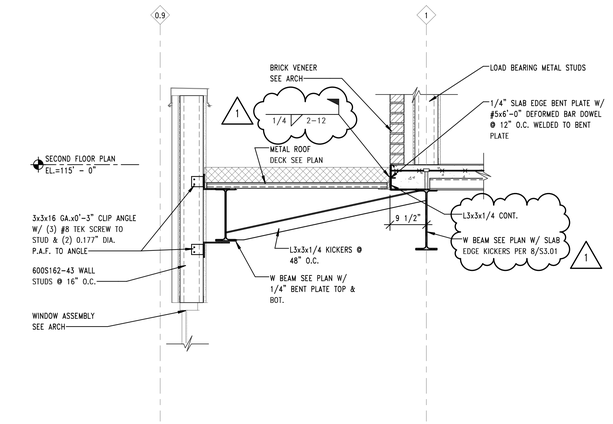


3 S3.02 BALCONY FRAMING SECTION
3/4" = 1'-0"

4 S3.02 BALCONY FRAMING SECTION
3/4" = 1'-0"

5 S3.02 BALCONY FRAMING SECTION
3/4" = 1'-0"

6 S3.02 ENLARGED BEAM CONNECTION PLAN
1" = 1'-0"



7 S3.02 FRAMING SECTION
3/4" = 1'-0"

8 S3.02 FRAMING SECTION
3/4" = 1'-0"

9 S3.02 TYP. PODIUM SLAB EDGE DETAIL
3/4" = 1'-0"

10 S3.02 PODIUM SLAB EDGE DETAIL
3/4" = 1'-0"

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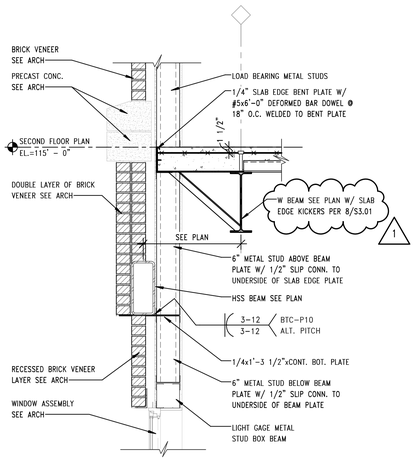
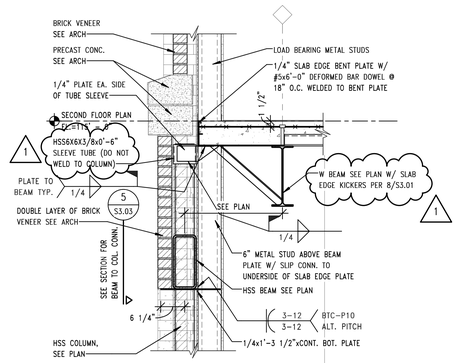
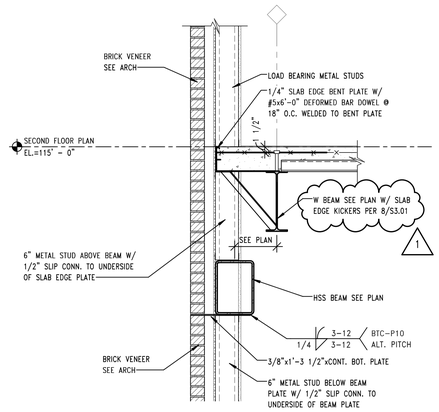


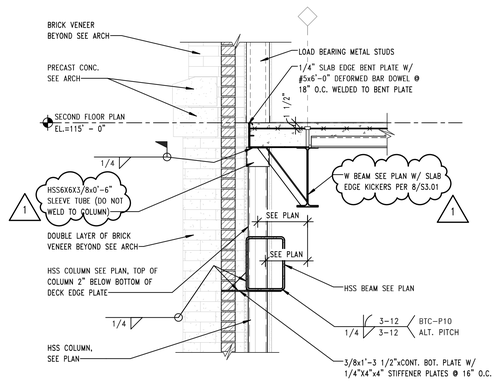
1 S3.03 FUTURE KNOCKOUT PANEL BRICK SUPPORT @ SETBACK WALL
3/4" = 1'-0"



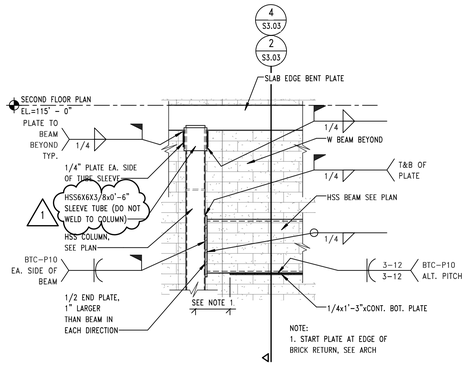
2 S3.03 KNOCKOUT SETBACK BRICK SUPPORT DETAIL @ COLUMN
3/4" = 1'-0"



3 S3.03 FUTURE KNOCKOUT PANEL BRICK SUPPORT @ FLUSH WALL
3/4" = 1'-0"



4 S3.03 KNOCKOUT FLUSH BRICK SUPPORT DETAIL @ COLUMN
3/4" = 1'-0"



5 S3.03 BRICK SUPPORT BEAM CONN TO COLUMN
3/4" = 1'-0"

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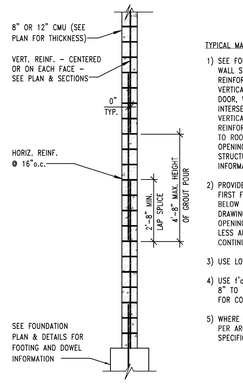


TYPICAL MASONRY WALL REINFORCING NOTES:

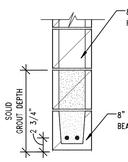
1) SEE FOUNDATION PLAN ON S1.01 AND WALL SECTIONS FOR VERTICAL WALL REINFORCEMENT. ALSO PROVIDE THE SAME VERTICAL REINFORCING AT WALL CORNERS, DOOR, WINDOW AND LOUVER JAMBS, INTERSECTIONS, AND BOTH SIDES OF VERTICAL CONTROL JOINTS. VERTICAL REINFORCING SHALL EXTEND FROM FOOTING TO ROOF EXCEPT AS INTERRUPTED BY OPENINGS. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION OR EXCEPTIONS.
2) PROVIDE BOND BEAM WITH (2)-#5 IN FIRST FULL COURSE ABOVE STEEL LINTELS, BELOW WINDOW SILLS, AND AS SHOWN ON DRAWINGS. EXTEND 2'-0" (MIN.) PAST OPENING. (WHERE OPENINGS ARE 6'-0" OR LESS APART, BOND BEAM SHALL BE CONTINUOUS BETWEEN THOSE OPENINGS).
3) USE LOW-LIFT GROUTING AS SPECIFIED.
4) USE f'c = 3000 psi S-G CONCRETE WITH 8" TO 10" SLUMP & VIBRATE OR PUDDLE FOR CONSOLIDATION.
5) WHERE VENEER OCCURS, PROVIDE TIES PER ARCHITECTURAL DETAILS AND SPECIFICATIONS.

1 S4.01 TYP. MASONRY WALL REINFORCING
3/4" = 1'-0"

MASONRY REINFORCING LAP SCHEDULE
fm = 1500psi

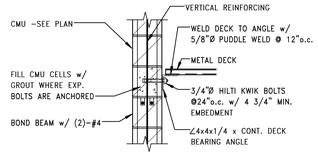
BAR SIZE	REINFORCING AT CENTERLINE		REINFORCING EACH FACE	
	8" MASONRY	12" MASONRY	8" MASONRY	12" MASONRY
#3	16"	16"	16"	16"
#4	21"	21"	24"	22"
#5	26"	26"	39"	35"
#6	43"	40"	54"	54"
#7	60"	46"	63"	63"
#8	72"	61"	72"	72"
#9	82"	74"	82"	82"

2 S4.01 MASONRY REINFORCING LAP SCHEDULE
3/4" = 1'-0"

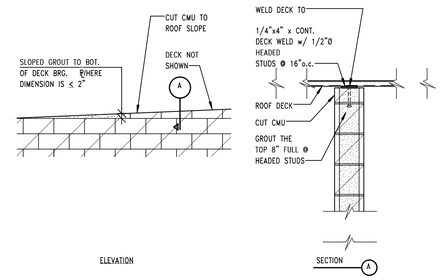


MASONRY LINTEL SCHEDULE		
MARK	REINFORCING	GROUT DEPTH
ML-1	(2) #4 HORIZ.	8" SOLID GROUTED
ML-2	(2) #4 HORIZ.	16" SOLID GROUTED

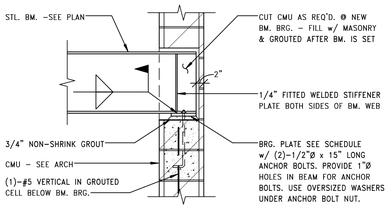
3 S4.01 MASONRY LINTEL DETAIL
1" = 1'-0"



4 S4.01 TYP. DECK BEARING ANGLE
3/4" = 1'-0"

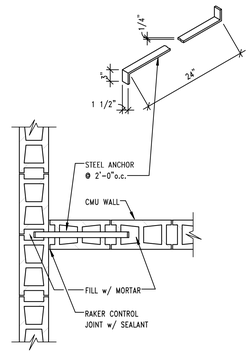


5 S4.01 DECK SUPPORT DETAIL
3/4" = 1'-0"

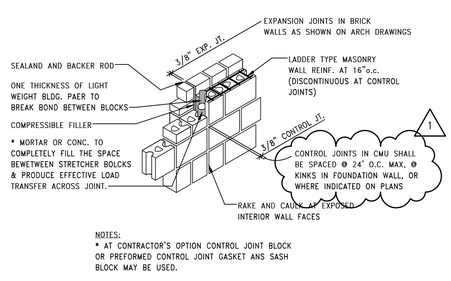


MASONRY BEARING PLATE SCHEDULE	
BEAM DEPTH	PLATE SIZE
<= W14	1/2"x6"x0'-8"
W16-W21	1 1/4"x6"x1'-0"
W24	1 3/4"x6"x1'-4"

6 S4.01 BEAM BEARING DETAIL
3/4" = 1'-0"

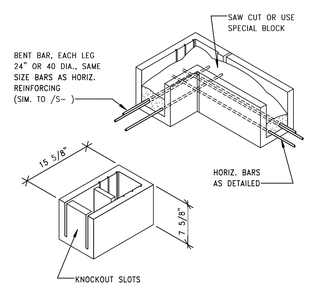


7 S4.01 TYPICAL INTERSECTION
3/4" = 1'-0"

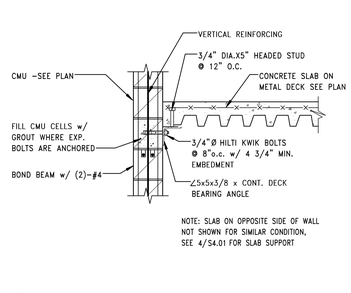


NOTES:
* AT CONTRACTOR'S OPTION CONTROL JOINT BLOCK OR PREFORMED CONTROL JOINT GASKET ANS SASH BLOCK MAY BE USED.

8 S4.01 TYP. MASONRY JOINT DETAIL
3/4" = 1'-0"

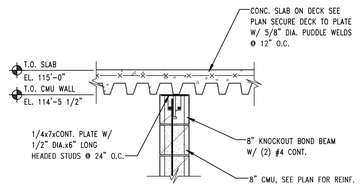


9 S4.01 BOND BEAM UNIT AT CORNER
3/4" = 1'-0"

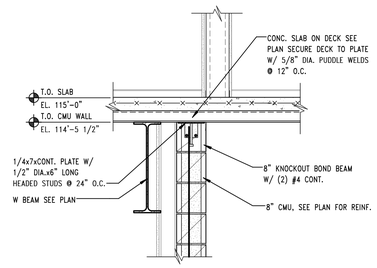


NOTE: SLAB ON OPPOSITE SIDE OF WALL NOT SHOWN FOR SIMILAR CONDITION, SEE 4/S4.01 FOR SLAB SUPPORT

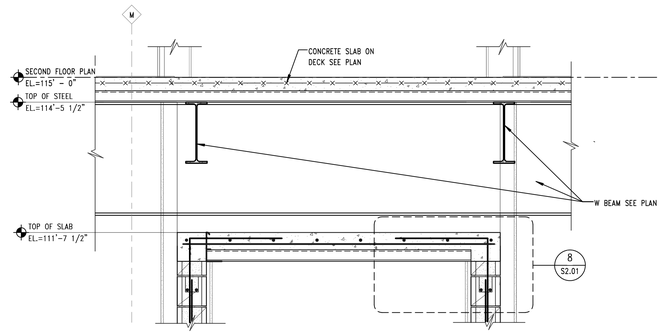
10 S4.01 DECK SHEAR TRANSFER TO CMU WALL DETAIL
3/4" = 1'-0"



11 S4.01 FLOOR DECK OVER CMU WALL
3/4" = 1'-0"



12 S4.01 DECK SUPPORTED BY CMU WALL PARALLEL TO BEAM
3/4" = 1'-0"



13 S4.01 STORM SHELTER LID CROSS SECTION
3/4" = 1'-0"

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10855 West Dodge Road, Suite 180
OMAHA, NEBRASKA 68154
(402)496-4750 FAX (402)496-1147

No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

CMU SECTIONS & DETAILS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15927
DATE: 04/01/16

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PROFESSIONAL STRUCTURAL ENGINEER
STATE OF NEBRASKA

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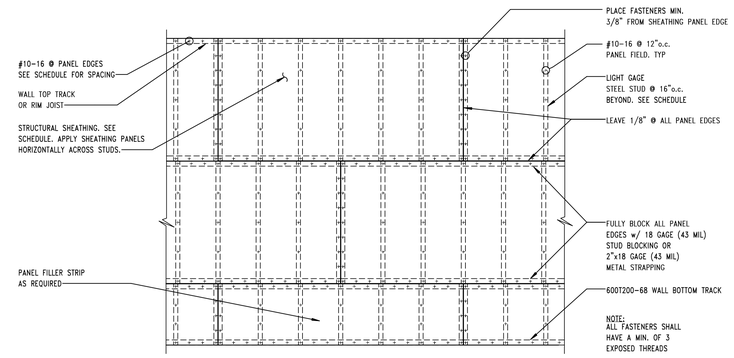
STRUCTURAL WALL SCHEDULE

WALL TYPE	STUDS (NOTE 7)	SHEARWALL SHEATHING	
		SHEARWALL DESCRIPTION	FASTENER SPACING @ PANEL EDGES/FIELD (NOTE 3)
S1	600S162-43 (33 KSI)	7/16" PLYWOOD SHEATHING ON ONE SIDE	6"/12"
S2	600S162-54 (50 KSI)	1/2" DENSGLASS SHEATHING ON OUTSIDE FACE	4"/8"
S3	600S162-54 (50 KSI)	7/16" PLYWOOD SHEATHING ON ONE SIDE	4"/12"
S4	600S162-43 (33 KSI)	NO STRUCTURAL SHEATHING	
S5	600S162-54 (50 KSI)	NO STRUCTURAL SHEATHING	
S6	600S162-43 (33 KSI)	1/2" DENSGLASS SHEATHING ON OUTSIDE FACE	4"/8"

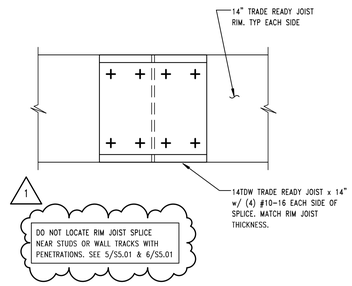
NOTES

1. SEE PLANS FOR WALL LOCATIONS. THE WALLS IN THIS SCHEDULE ARE GENERALLY BEARING WALLS, SHEAR WALLS, OR A COMBINATION OF BOTH. SEE ARCHITECTURAL DRAWINGS FOR STUD SIZE/SPACING AT NON-STRUCTURAL WALLS NOT INCLUDED IN THIS SCHEDULE.
2. WOOD SHEATHING SHALL BE CDX PLYWOOD OR OSB "APA RATED SHEATHING" WITH 24/16 SPAN RATING FOR 7/16" THICKNESS.
3. ALL SHEATHING FASTENERS SHALL BE #10-16 SCREWS. SCREWS SHALL HAVE A MIN. 3 THREADS EXPOSED BEYOND DEEPEST MEMBER. SCREWS SHALL BE LOCATED AT LEAST 3/8" FROM THE PANEL EDGES. SEE SCHEDULE FOR FASTENER SPACING ALONG EDGES AND INTERMEDIATE MEMBERS. LEAVE 1/8" GAP BETWEEN SHEATHING PANEL EDGES.
4. ALL SHEATHING PANEL JOINTS SHALL BE BLOCKED WITH 2-INCH NOMINAL OR WIDER MATERIAL. BLOCKING MATERIAL SHALL BE MIN. 18 GAGE (43 mil) 33ksi MATERIAL. SEE 2/S5.01.
5. VERTICAL JOINTS IN SHEATHING SHALL OCCUR OVER AND BE FASTENED TO COMMON STUDS.
6. PROVIDE TIE-DOWN RODS WITH BUILT-UP JAMB MEMBER. SEE S6/S.02 FOR TYPICAL BUILT-UP MEMBER @ TIE DOWN.
7. SEE HEADER SCHEDULE ON SHEET S5.01 FOR MULTIPLE STUDS AT JAMBS.
8. ALL STRUCUTRAL WALLS SHALL HAVE HORIZONTAL BRACING @ 4'-0"o.c. VERTICALLY. SEE 7/S5.01 FOR BRACING DETAILS.
9. (2) 1/4" DIA.x1 1/2" TAPCON SCREW ANCHORS @ 16" O.C. TO FASTEN BOTTOM TRACK TO 2ND FLOOR CONC. SLAB

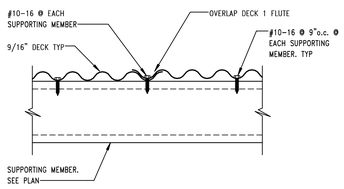
1 S5.01 — WALL SCHEDULE
3/4" = 1'-0"



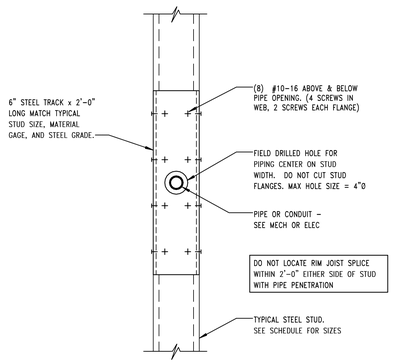
2 S5.01 — TYPICAL SHEATHING FASTENING DETAIL FOR UPPER RESIDNTIAL STRUCTURE WALLS
1/2" = 1'-0"



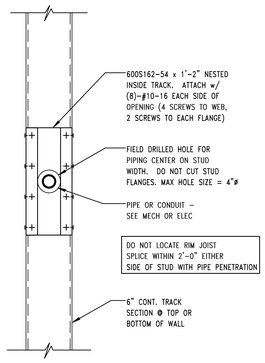
3 S5.01 — RIM JOIST SPLICE DETAIL
1 1/2" = 1'-0"



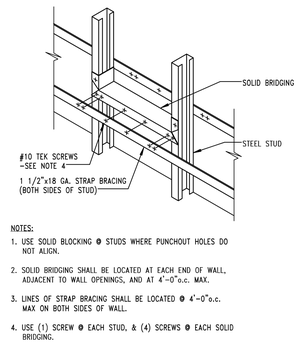
4 S5.01 — 9/16" DECK SIDELAP DETAIL
1 1/2" = 1'-0"



STUD REINFORCING @ PIPE OR CONDUIT PENETRATION
5 S5.01
1 1/2" = 1'-0"

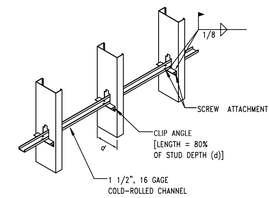


WALL TRACK REINFORCING @ PIPE OR CONDUIT PENETRATION
6 S5.01
1 1/2" = 1'-0"



NOTES:
1. USE SOLID BLOCKING @ STUDS WHERE PUNCHOUT HOLES DO NOT ALIGN.
2. SOLID BRIDGING SHALL BE LOCATED AT EACH END OF WALL, ADJACENT TO WALL OPENINGS, AND AT 4'-0"o.c. MAX.
3. LINES OF STRAP BRACING SHALL BE LOCATED @ 4'-0"o.c. MAX ON BOTH SIDES OF WALL.
4. USE (1) SCREW @ EACH STUD, & (4) SCREWS @ EACH SOLID BRIDGING.

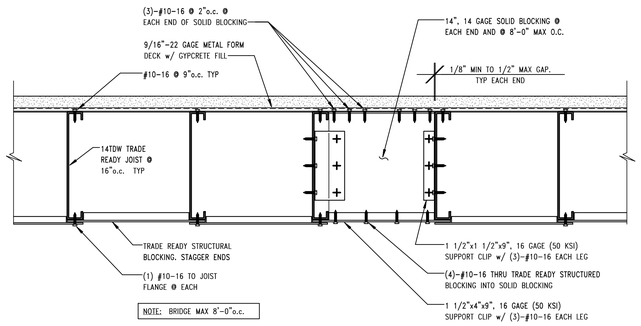
OR



NOTES:
1. USE @ STUDS WHERE PUNCHOUT HOLES ALIGN.

7 S5.01 — TYP. LOAD BEARING STEEL STUD BRACING (6" STUDS)
3/4" = 1'-0"

BRACING TYPICAL ALL LOAD BEARING STUD WALLS AND TRANSVERSE SHEAR WALLS WHETHER SHOWN ON INDIVIDUAL SECTIONS AND DETAILS OR NOT

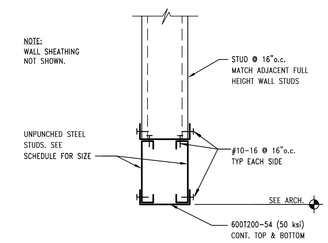


8 S5.01 — FLOOR JOIST BRIDGING
1 1/2" = 1'-0"

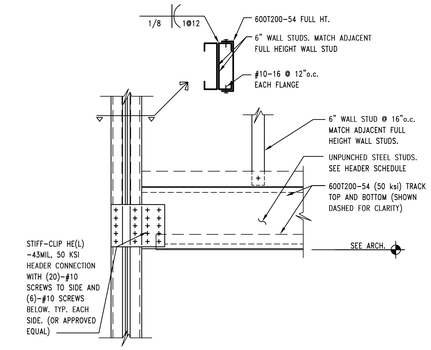
HEADER SCHEDULE

HEADER	MEMBERS	SECTION DETAIL	JAMB DETAIL
H-1	(2)-800S162-43 w/ (2)-600T200-54	10/S5.01	11/S5.01
H-2	(2)-1200S200-54 w/ (2)-600T200-54	10/S5.01	11/S5.01

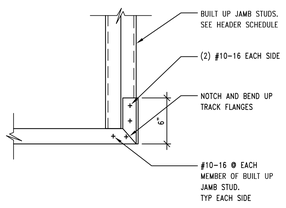
9 S5.01 — HEADER SCHEDULE
3/4" = 1'-0"



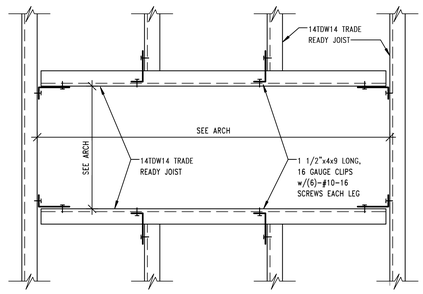
10 S5.01 — WALL HEADER
1 1/2" = 1'-0"



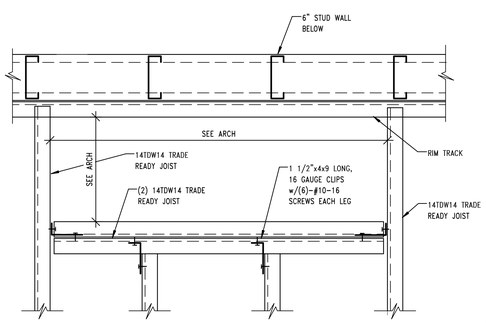
11 S5.01 — HEADER JAMB DETAIL
1 1/2" = 1'-0"



12 S5.01 — BASE DETAIL @ DOOR JAMB
1 1/2" = 1'-0"



13 S5.01 — FLOOR OPENING
1 1/2" = 1'-0"



14 S5.01 — FLOOR OPENING
1 1/2" = 1'-0"

1

NIELSEN-BAUMERT ENGINEERING, INC.
10855 West Dodge Road, Suite 180
OMAHA, NEBRASKA 68154
(402)496-4750 FAX (402)496-1147

No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FRAMING DETAILS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROFESSIONAL STRUCTURAL ENGINEER — STATE OF NEBRASKA — 4/21/16

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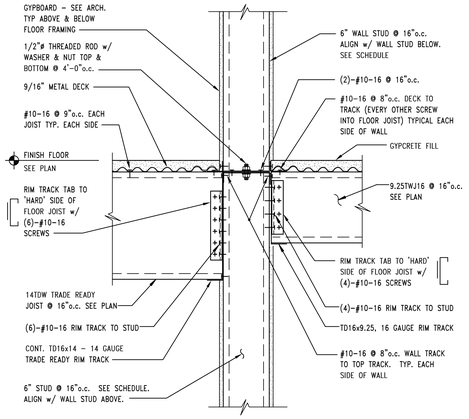
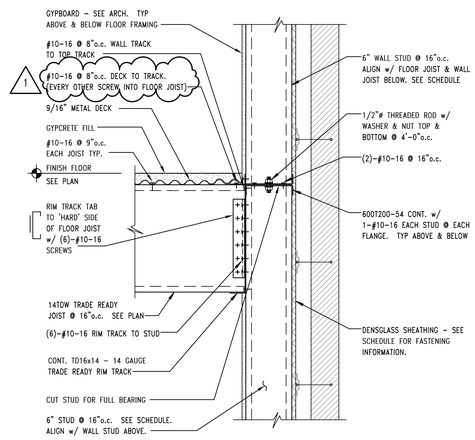
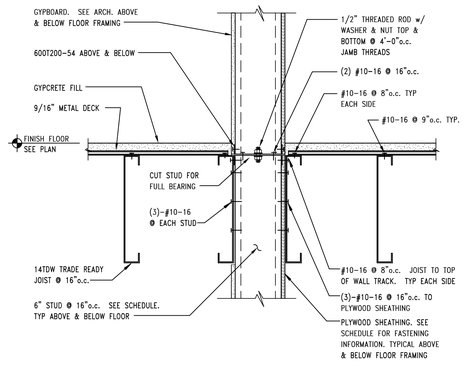


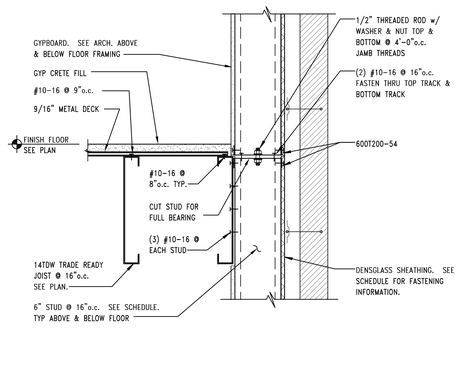
1 S5.02 SECTION
1 1/2" = 1'-0"



2 S5.02 SECTION
1 1/2" = 1'-0"



3 S5.02 TYPICAL DEMISING WALL
1 1/2" = 1'-0"



4 S5.02 SECTION
1 1/2" = 1'-0"

5 S5.02 TRANSVERSE SHEAR WALL END JAMB
1 1/2" = 1'-0"

6 S5.02 SHEAR WALL JAMB CONNECTION DETAIL
1 1/2" = 1'-0"

7 S5.02 SECTION
1 1/2" = 1'-0"

8 S5.02 SECTION
1 1/2" = 1'-0"

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(402)496-4750 FAX (402)496-1147

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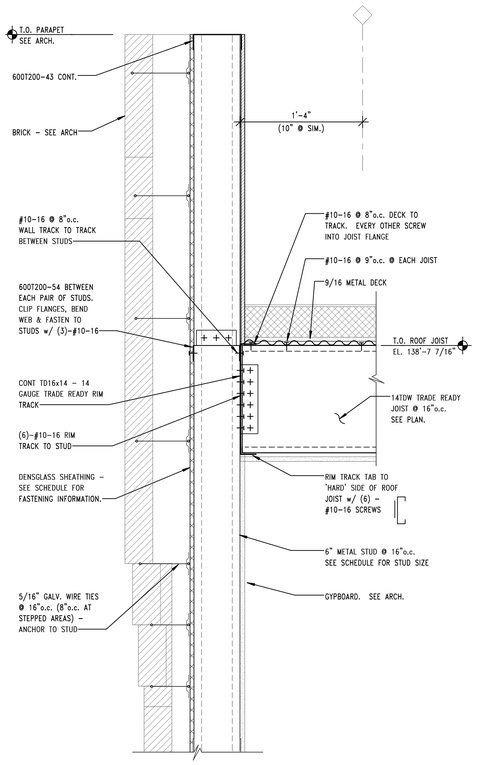
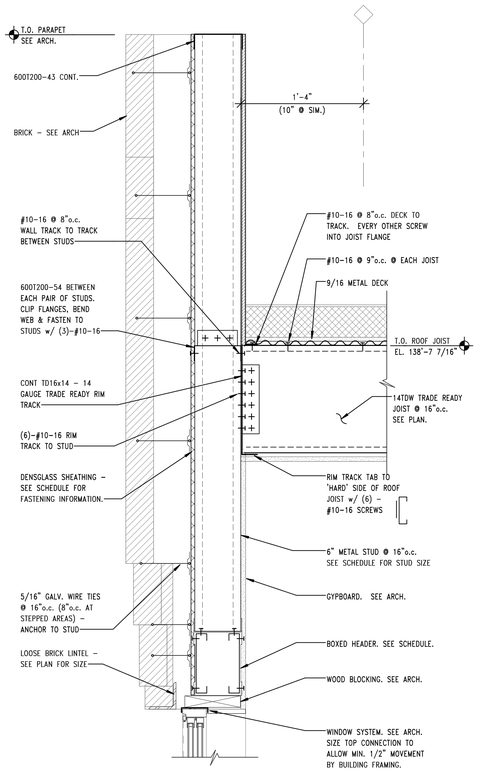
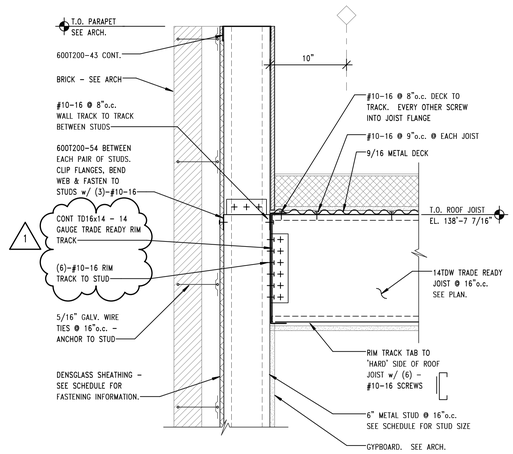


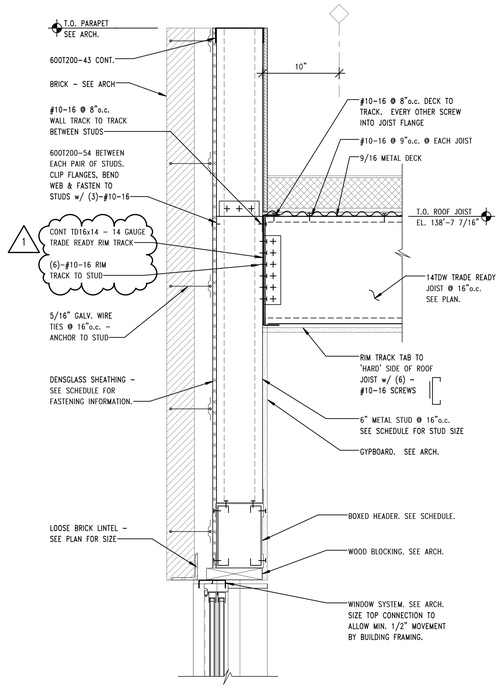
1 SECTION S5.03 — 1 1/2" = 1'-0"



2 SECTION S5.03 — 1 1/2" = 1'-0"



3 SECTION S5.03 — 1 1/2" = 1'-0"



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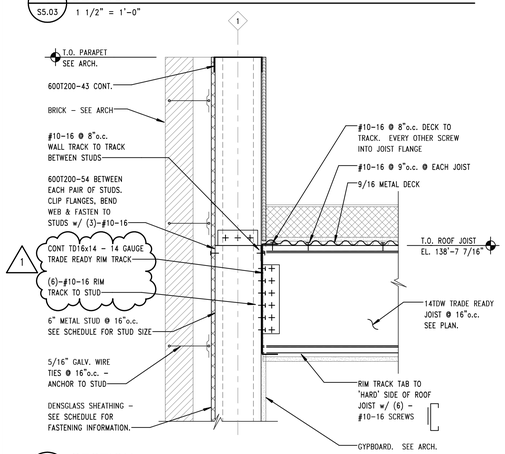
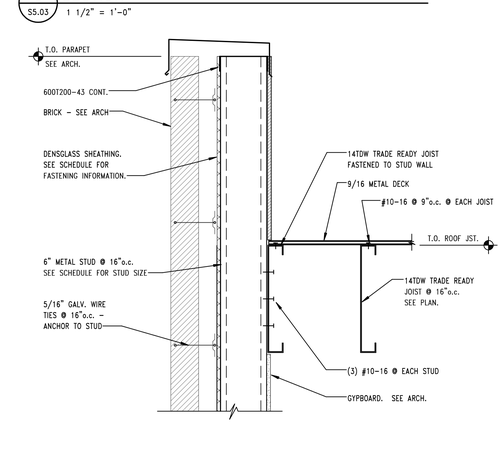
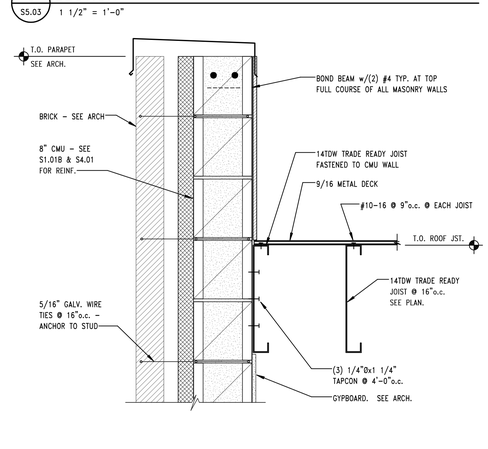


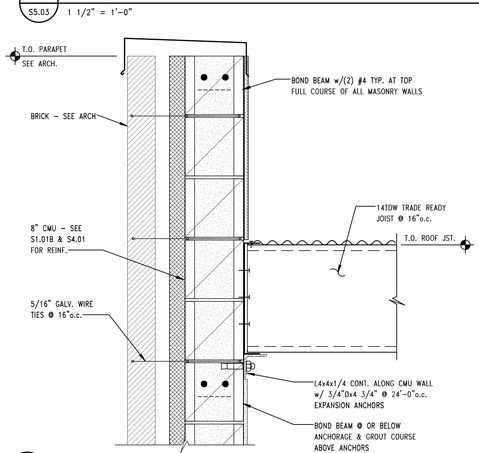
5 SECTION S5.03 — 1 1/2" = 1'-0"



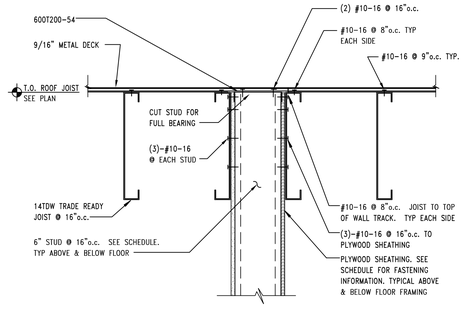
6 SECTION S5.03 — 1 1/2" = 1'-0"



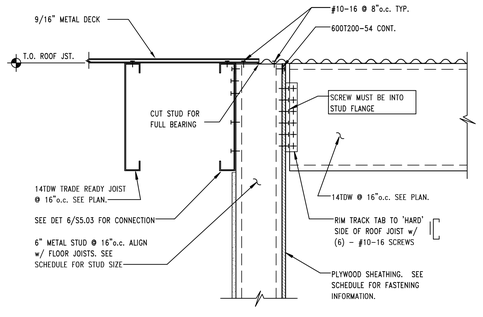
7 SECTION S5.03 — 1 1/2" = 1'-0"



8 SECTION S5.03 — 1 1/2" = 1'-0"



9 SECTION S5.03 — 1 1/2" = 1'-0"



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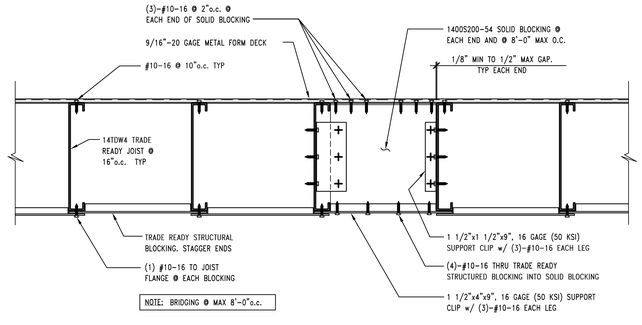
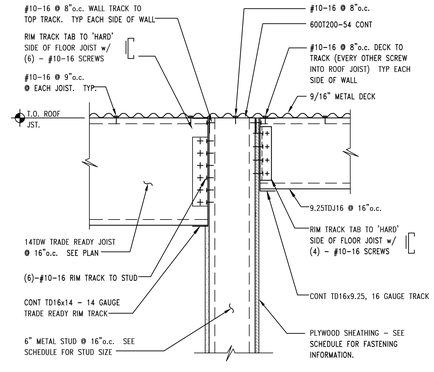


11 ROOF JOIST BRIDGING S5.03 — 1 1/2" = 1'-0"



12 SECTION S5.03 — 1 1/2" = 1'-0"

NIELSEN-BAUMERT ENGINEERING, INC.
10855 West Dodge Road, Suite 180
OMAHA, NEBRASKA 68154
(402)496-4750 FAX (402)496-1147

No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

ROOF FRAMING DETAILS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15927
DATE: 04/01/16

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SHEET: S5.03

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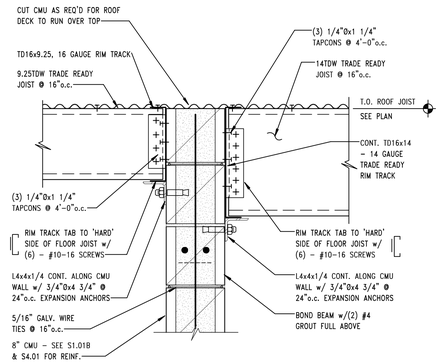
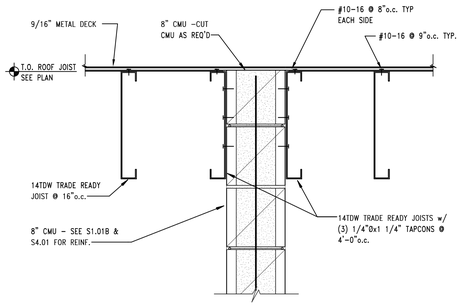


1 S5.04 SECTION
1 1/2" = 1'-0"



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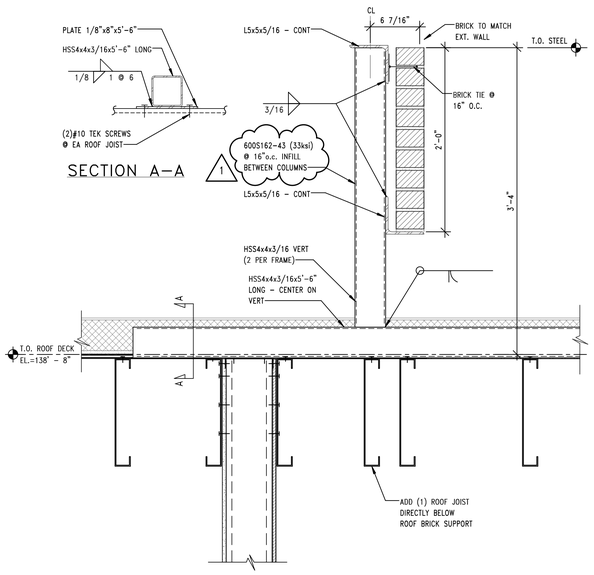
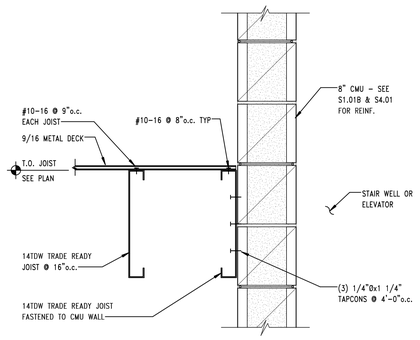


3 S5.04 SECTION
1 1/2" = 1'-0"



4 S5.04 SECTION
1 1/2" = 1'-0"

5 S5.04 SECTION
1 1/2" = 1'-0"

6 S5.04 SECTION
1 1/2" = 1'-0"

7 S5.04 SECTION
1 1/2" = 1'-0"

8 S5.04 SECTION
1 1/2" = 1'-0"

9 S5.04 SECTION
1 1/2" = 1'-0"

10 S5.04 SECTION AT RTU
1" = 1'-0"

11 S5.04 SECTION
1 1/2" = 1'-0"

NIELSEN-BAUMERT ENGINEERING, INC.
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OMAHA, NEBRASKA 68154
(402)496-4750 FAX (402)496-1147

No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

ROOF FRAMING DETAILS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15927
DATE: 04/01/16

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PROFESSIONAL STRUCTURAL ENGINEER
JOSEPH E. BAUMERT
E-14776
STATE OF NEBRASKA
4/1/16

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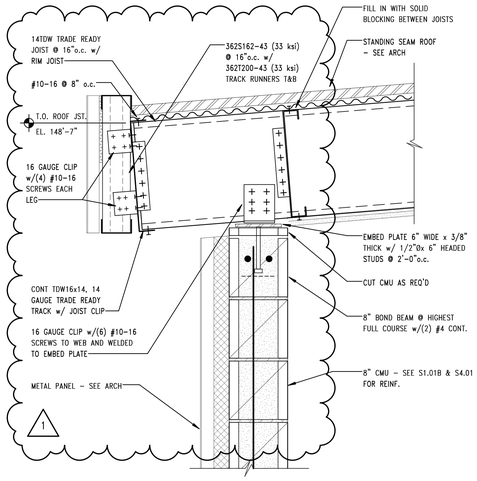
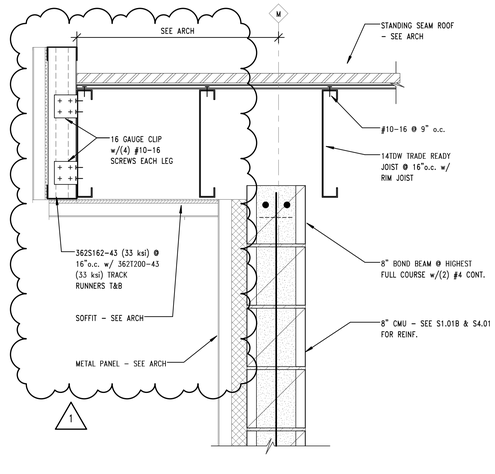


1 S5.05 SECTION AT HIGH ROOF
1 1/2" = 1'-0"



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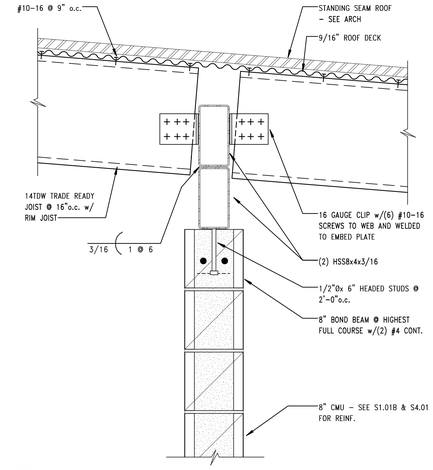

3 S5.05 SECTION
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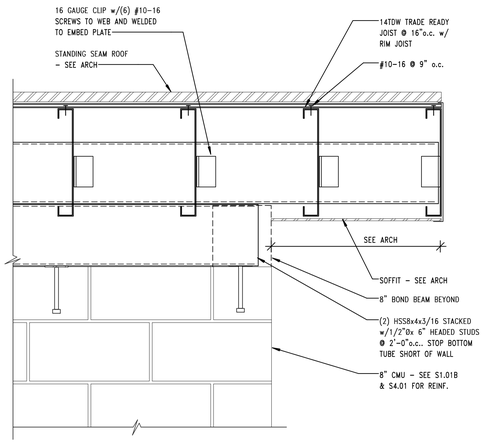

4 S5.05 SECTION
1 1/2" = 1'-0"

5 S5.05 SECTION
1 1/2" = 1'-0"

6 S5.05 SECTION
1 1/2" = 1'-0"

7 S5.05 SECTION
1 1/2" = 1'-0"

8 S5.05 SECTION
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9 S5.05 SECTION
1 1/2" = 1'-0"

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OMAHA, NEBRASKA 68154
(402)496-4750 FAX (402)496-1147

No.	Description	Date
1	ADDENDUM #1	4/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

HIGH ROOF FRAMING DETAILS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

PROJECT:15927
DATE: 04/01/16

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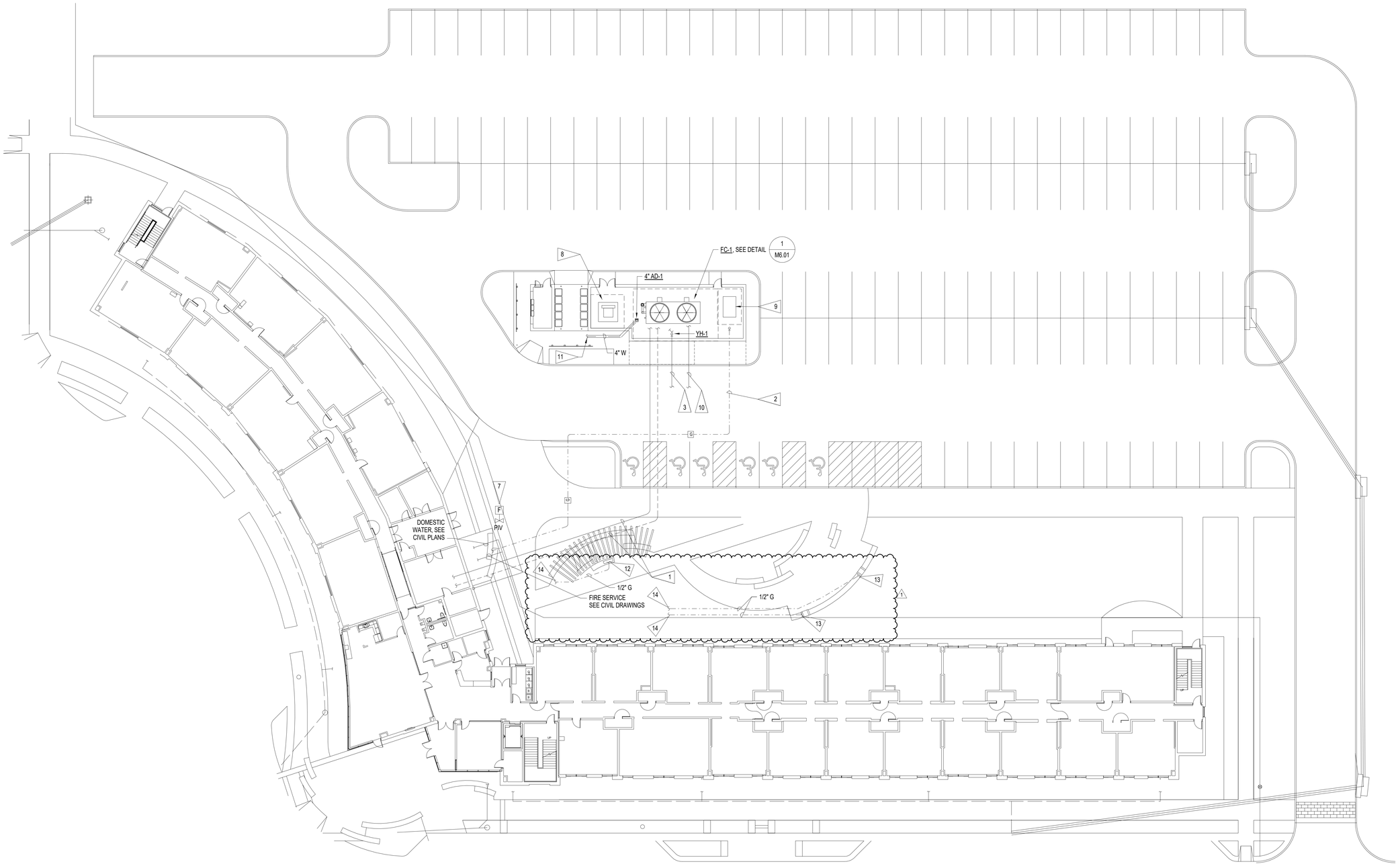


1 M1.00 Mech Site Plan - BASE

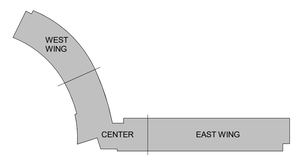
0' 4' 8' 16' 32'

GENERAL NOTES (ALL NOTES MAY NOT APPLY TO EACH SHEET)

1. PROVIDE ALL REQUIRED EXCAVATION, TRENCHING, BORING, SHORING, BACKFILL AND SURFACE REPAIR REQUIRED FOR INSTALLATION OF UTILITIES.
2. ALL EXCAVATION SHALL COMPLY WITH APPLICABLE OSHA STANDARDS AND STATE AND LOCAL CODES.
3. CALL BEFORE YOU DIG. CALL DIGGERS HOTLINE OF NEBRASKA: STATEWIDE (800) 331-5666
4. UTILITY LOCATIONS INDICATED ON DRAWINGS ARE APPROXIMATE AND THEMOST ACCURATE INFORMATION AVAILABLE AT THE TIME OF DESIGN. PRIOR TO EQUIPMENT AND PIPING INSTALLATION, COORDINATE EXACTINSTALLATION DETAILS AND MODIFY WORK PLAN ACCORDINGLY TO MEET UTILITY REQUIREMENTS. CORRESPOND WITH UTILITY COMPANY, OR OWNER FOR PRIVATE UTILITIES. PRIOR TO ANY SITE DEVELOPMENT THAT MAY IMPACT THE INSTALLATION SUCH AS IRRIGATION INSTALLATION, CONCRETE OR ASPHALT INSTALLATION, LANDSCAPING, ETC.
5. COORDINATE ALL GEOTHERMAL WELLS (IF APPLICABLE) AND PIPING WITH ALL FOOTINGS, SANITARY, STORM, WATER, AND ELECTRICAL SITE UTILITIES.
6. SEE SPECIFICATIONS SECTION 232115 - GROUND LOOP HEAT PUMP PIPING.

FLAG NOTES (ALL NOTES MAY NOT APPLY TO EACH SHEET)

1. COORDINATE ROUTING OF UNDERGROUND HEAT PUMP LOOP PIPING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
2. 3/4" NATURAL GAS LINE UNDERGROUND FROM BUILDING TO GENERATOR. PROVIDE GAS COCK, PRV, AND DIRT LEG PRIOR TO CONNECTION TO EQUIPMENT. MAKE FINAL CONNECTION TO GENERATOR PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION OF CONNECTION AND PIPE ROUTING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
3. 1" WATER LINE FROM MECHANICAL ROOM IN BUILDING TO YARD HYDRANT, (YH-1), WITHIN EQUIPMENT ENCLOSURE. COORDINATE EXACT LOCATION OF HYDRANT AND PIPE ROUTING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
4. SEE PREMANUFACTURED GEOTHERMAL VALVE VAULT DETAIL (HVAC ALTERNATE 03) 1 / MA3.02. (ALTERNATES ONLY)
5. 6" HPLS/R FROM VAULT TO BUILDING. (ALTERNATES ONLY)
6. SEE GEOTHERMAL HOLE BORE PIPING DETAIL 2 / MA03.02. (ALTERNATES ONLY)
7. POST INDICATOR VALVE. COORDINATE LOCATION WITH CIVIL PLANS.
8. UTILITY CO. TRANSFORMER, (SEE ELECTRICAL PLANS).
9. EMERGENCY GENERATOR, (SEE ELECTRICAL PLANS).
10. 1-1/2"" MAKE-UP WATER LINE FROM MECHANICAL ROOM IN BUILDING TO COOLING TOWER. COORDINATE EXACT LOCATION OF PIPE ROUTING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
11. 4" AREA DRAIN (AD-1) SERVING COOLING TOWER BLOW DOWN. ROUTE 4" SANITARY WASTE TO NEAREST SANITARY PIPING OF EQUAL OR GREATER SIZE ON SITE. COORDINATE EXACT PIPE ROUTING WITH CIVIL DRAWINGS, GENERAL CONTRACTOR AND ALL OTHER TRADES.
12. 1/2" G BELOW GRADE TO FIREPLACE. CONNECT PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE PRV, GAS COCK AND DIRT LEG PRIOR TO CONNECTION OF EQUIPMENT. COORDINATE VALVE OPERATION WITH ELECTRICAL CONTROL SWITCH. COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL DRAWINGS. COORDINATE ALL PIPING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
13. 1/2" G BELOW GRADE TO GRILLS. CONNECT PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE PRV, GAS COCK AND DIRT LEG PRIOR TO CONNECTION OF EQUIPMENT. COORDINATE VALVE OPERATION WITH ELECTRICAL CONTROL SWITCH. COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL DRAWINGS. COORDINATE ALL PIPING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
14. 1/2" G BELOW GRADE TO TO GAS HEADER. SEE SHEET M4.03 FOR CONTINUATION.



KEY PLAN

Diggers Hotline Of Nebraska
Statewide (800) 331-5666
Metro Omaha 344-3565
Call Before You Dig... Its The Law

MEI PROJECT NO: 15273

morrissey engineering inc
mechanical | electrical | lighting | technology | commissioning
4940 North 118th Street
Omaha, NE 68164
P: 402.491.4144
www.morrisseyengineering.com

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do not scale drawings. verify all dimensions and clearances from architectural, structural, shop and other appropriate drawings or at site. lay out and coordinate all work prior to installation to provide clearances required for operation, maintenance, and codes and verify non-interference with other work. do not fabricate prior to verification of clearance for all trades.

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

MECHANICAL SITE PLAN

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MECHANICAL — CHRISTOPHER P. REED — E-9156 — 04/01/16 — STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16
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SHEET: M1.00

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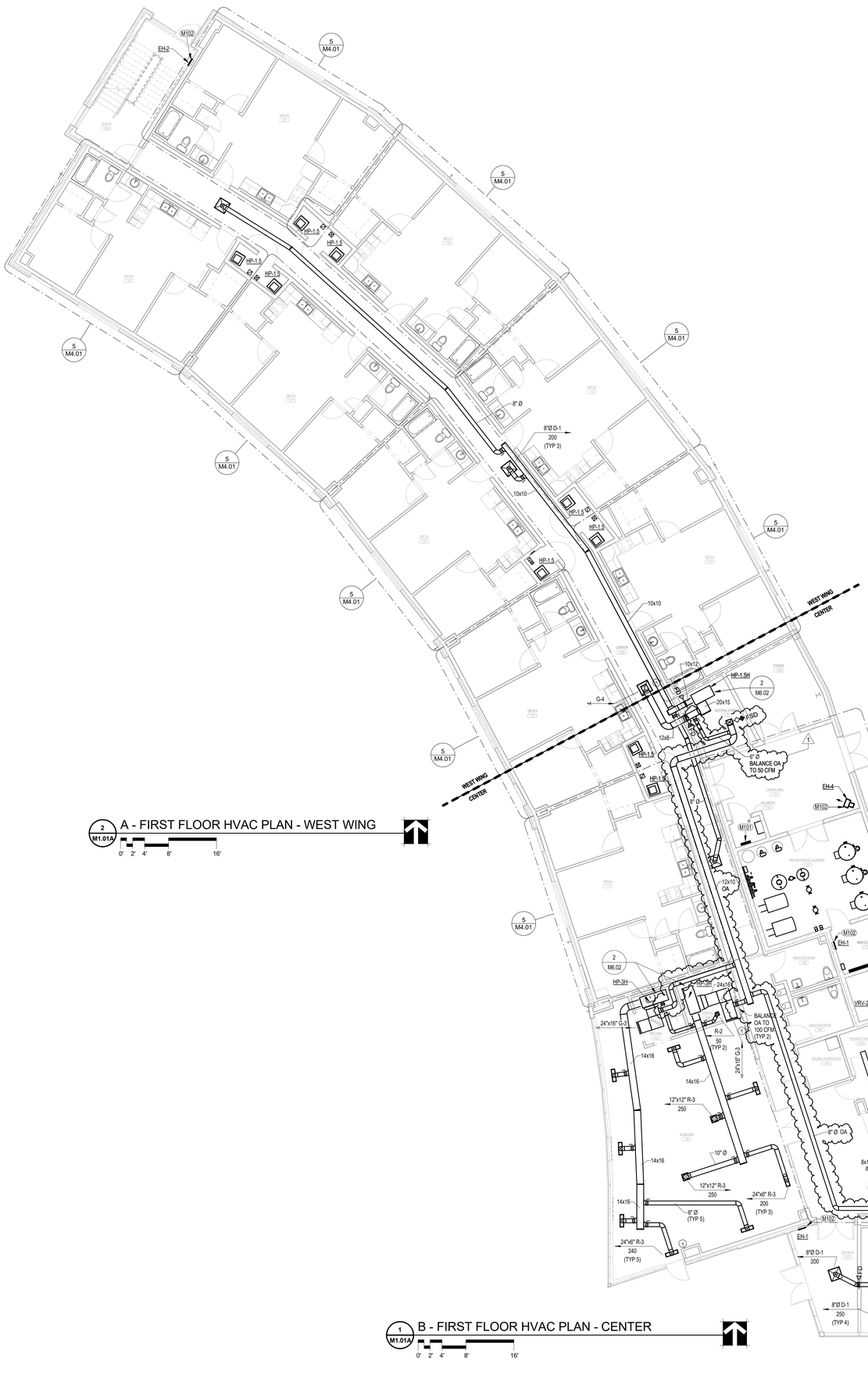

2 / M1.01A A - FIRST FLOOR HVAC PLAN - WEST WING

0' 2' 4' 8' 16'

1 / M1.01A B - FIRST FLOOR HVAC PLAN - CENTER

0' 2' 4' 8' 16'

GENERAL NOTES

1. DO NOT ROUTE DUCTWORK OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
2. SPACE ABOVE CEILINGS IS LIMITED. COORDINATE DUCT ROUTING WITH ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AS REQUIRED TO AVOID CONFLICTS.
3. PROVIDE RADIATION DAMPER WITH EACH DIFFUSER, REGISTER AND GRILLE LOCATED IN GYP. BOARD CEILING AT BOTTOM OF STRUCTURE. PROVIDE FIRE DAMPER IN RUN-OUT DUCT AT PENETRATION OF GYP. BOARD AT BOTTOM OF STRUCTURE. COORDINATE FIRE RATINGS WITH ARCHITECTURAL PLANS AND GENERAL CONTRACTOR.
4. PROVIDE FIRE DAMPERS AT ALL DUCTWORK PENETRATIONS THROUGH FIRE RATED WALLS AND ASSEMBLIES. CAULK AROUND ALL DUCTWORK PENETRATIONS THROUGH FULL HEIGHT WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR WALL CONSTRUCTION.
5. SPACE ABOVE CEILINGS IS LIMITED. COORDINATE DUCT AND PIPE ROUTING WITH ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AND PIPING AS REQUIRED TO AVOID CONFLICTS.
6. LOCATE FIRE DAMPERS, FIRE/SMOKE DAMPERS, VOLUME DAMPERS, ETC. IN ACCESSIBLE LOCATIONS. PROVIDE CEILING ACCESS PANELS AS REQUIRED IN GYP. BOARD CEILINGS TO SERVE DAMPERS. LOCATE DAMPERS ABOVE ACCESSIBLE LAY-IN TILE CEILINGS WHERE POSSIBLE. COORDINATE ALL LOCATIONS WITH REFLECTED CEILING PLANS, GENERAL CONTRACTOR AND ARCHITECT. MAINTAIN ACCESSIBILITY TO ALL DAMPERS.
7. CENTER DIFFUSERS, REGISTERS, AND GRILLES IN CEILING TILES WHERE 24X24 OR 24X12 CEILING DEVICES ARE NOT USED.
8. ROUND RUN-OUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS THE NECK UNLESS OTHERWISE NOTED. SEE DIFFUSER CONNECTION DETAIL 3 ON SHEET M6.02.

KEYNOTES

M101	DO NOT ROUTE DUCT OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN CODE REQUIRED CLEARANCE.
M102	ELECTRIC HEATER BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL PLANS.
M109	WALL MOUNTED VRV SPLIT-SYSTEM UNIT. SEE DETAIL 5, SHEET M6.01. INSTALL UNIT AS HIGH AS POSSIBLE PER MANUFACTURER'S RECOMMENDATIONS WHILE MAINTAINING REQUIRED CLEARANCES. COORDINATE EXACT LOCATION WITH ARCHITECT, STRUCTURE, AND ANY OTHER FIXTURES OR EQUIPMENT PRESENT. ROUTE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS FROM INDOOR UNIT THROUGH PIPING HOOD TO HEAT PUMP UNIT ON ROOF. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL NECESSARY REFRIGERANT PIPING SPECIALTIES AS RECOMMENDED BY THE MANUFACTURER. ROUTE CONDENSATE TO INDIRECT CONNECTION AT NEAREST FLOOR DRAIN OR MOP SINK. ROUTE ALL PIPING CONCEALED AS POSSIBLE ABOVE CEILINGS AND IN WALLS. COORDINATE PIPE ROUTING WITH STRUCTURAL FRAMING. PROVIDE ACCESSORIES AS RECOMMENDED BY MANUFACTURER.
M123	LOCATE CEILING MOUNTED R.A. GRILLES IN COORDINATION WITH STRUCTURE AND LIGHTING LAYOUT. COORDINATE EXACT LOCATIONS WITH GENERAL CONTRACTOR AND ARCHITECTURAL ELEMENTS.

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR HVAC PLAN - WEST WING & CENTER

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MEI PROJECT NO: 15273

morrissey engineering inc
mechanical | electrical | lighting | technology | commissioning
4940 North 118th Street
Omaha, NE 68164
P: 402.491.4144
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MECHANICAL CHRISTOPHER P. REED E-9156 04/01/16 STATE OF NEBRASKA

PROJECT: 15097
DATE: 04/01/16

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SHEET: M1.01A

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GENERAL NOTES

1. DO NOT ROUTE DUCTWORK OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
2. SPACE ABOVE CEILINGS IS LIMITED. COORDINATE DUCT ROUTING WITH ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AS REQUIRED TO AVOID CONFLICTS.
3. PROVIDE RADIATION DAMPER WITH EACH DIFFUSER, REGISTER AND GRILLE LOCATED IN GYP. BOARD CEILING AT BOTTOM OF STRUCTURE. PROVIDE FIRE DAMPER IN RUN-OUT DUCT AT PENETRATION OF GYP. BOARD AT BOTTOM OF STRUCTURE. COORDINATE FIRE RATINGS WITH ARCHITECTURAL PLANS AND GENERAL CONTRACTOR.
4. PROVIDE FIRE DAMPERS AT ALL DUCTWORK PENETRATIONS THROUGH FIRE RATED WALLS AND ASSEMBLIES. CAULK AROUND ALL DUCTWORK PENETRATIONS THROUGH FULL HEIGHT WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR WALL CONSTRUCTION.
5. SPACE ABOVE CEILINGS IS LIMITED. COORDINATE DUCT AND PIPE ROUTING WITH ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AND PIPING AS REQUIRED TO AVOID CONFLICTS.
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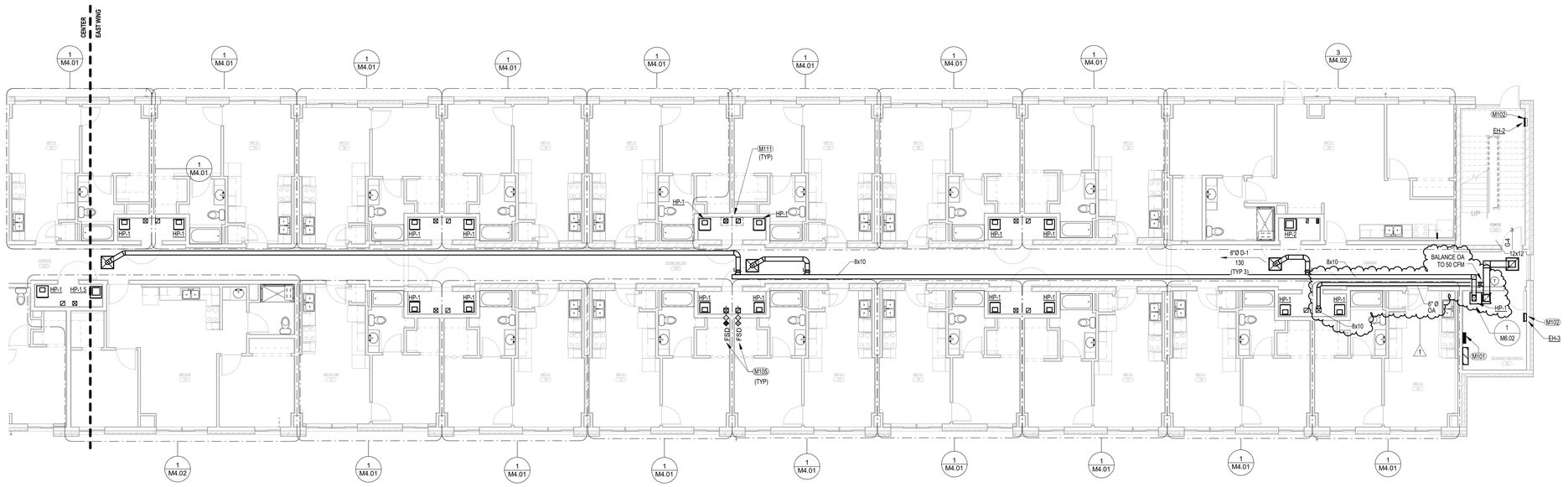
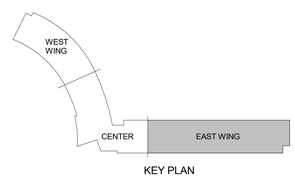
7. CENTER DIFFUSERS, REGISTERS, AND GRILLES IN CEILING TILES WHERE 24X24 OR 24X12 CEILING DEVICES ARE NOT USED.
8. ROUND RUN-OUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS THE NECK UNLESS OTHERWISE NOTED. SEE DIFFUSER CONNECTION DETAIL 3 ON SHEET M6.02.

KEYNOTES

M101	DO NOT ROUTE DUCT OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN CODE REQUIRED CLEARANCE.
M102	ELECTRIC HEATER BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL PLANS.
M105	FIRE / SMOKE DAMPER AT PENETRATION OF RATED SHAFT.
M111	ROUTE EXHAUST AND MAKEUP AIR DUCT UP INTO SHAFT ABOVE.





KEY PLAN

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR HVAC PLAN - EAST WING

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MEI PROJECT NO: 15273

morrissey engineering inc
mechanical | electrical | lighting | technology | commissioning
4940 North 118th Street
Omaha, NE 68164
P: 402.491.4144
www.morrisseyengineering.com

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MECHANICAL ENGINEER — CHRISTOPHER P. REED — E-9156 — 04/01/16 — STATE OF NEBRASKA

PROJECT: 15097
DATE: 04/01/16

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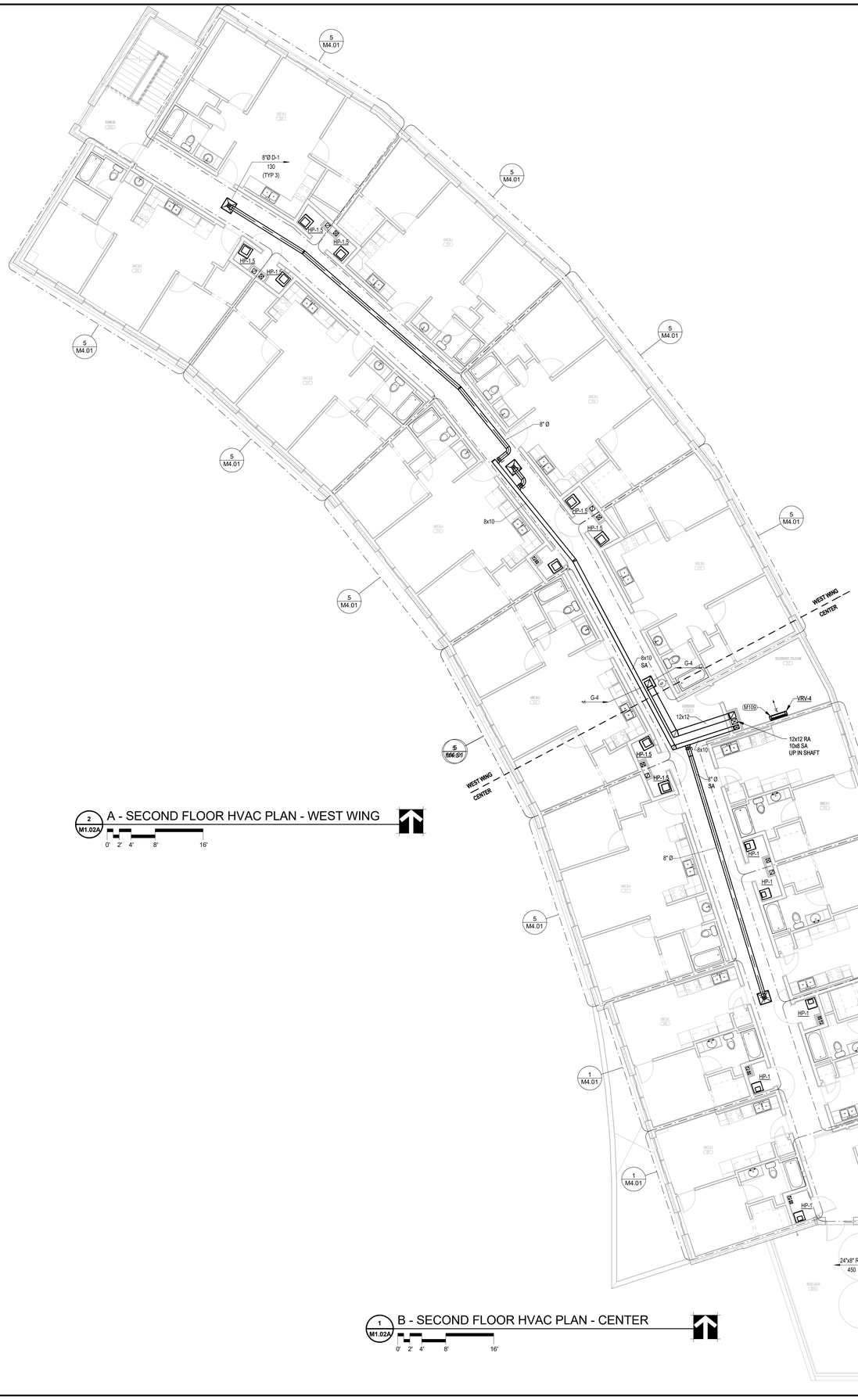
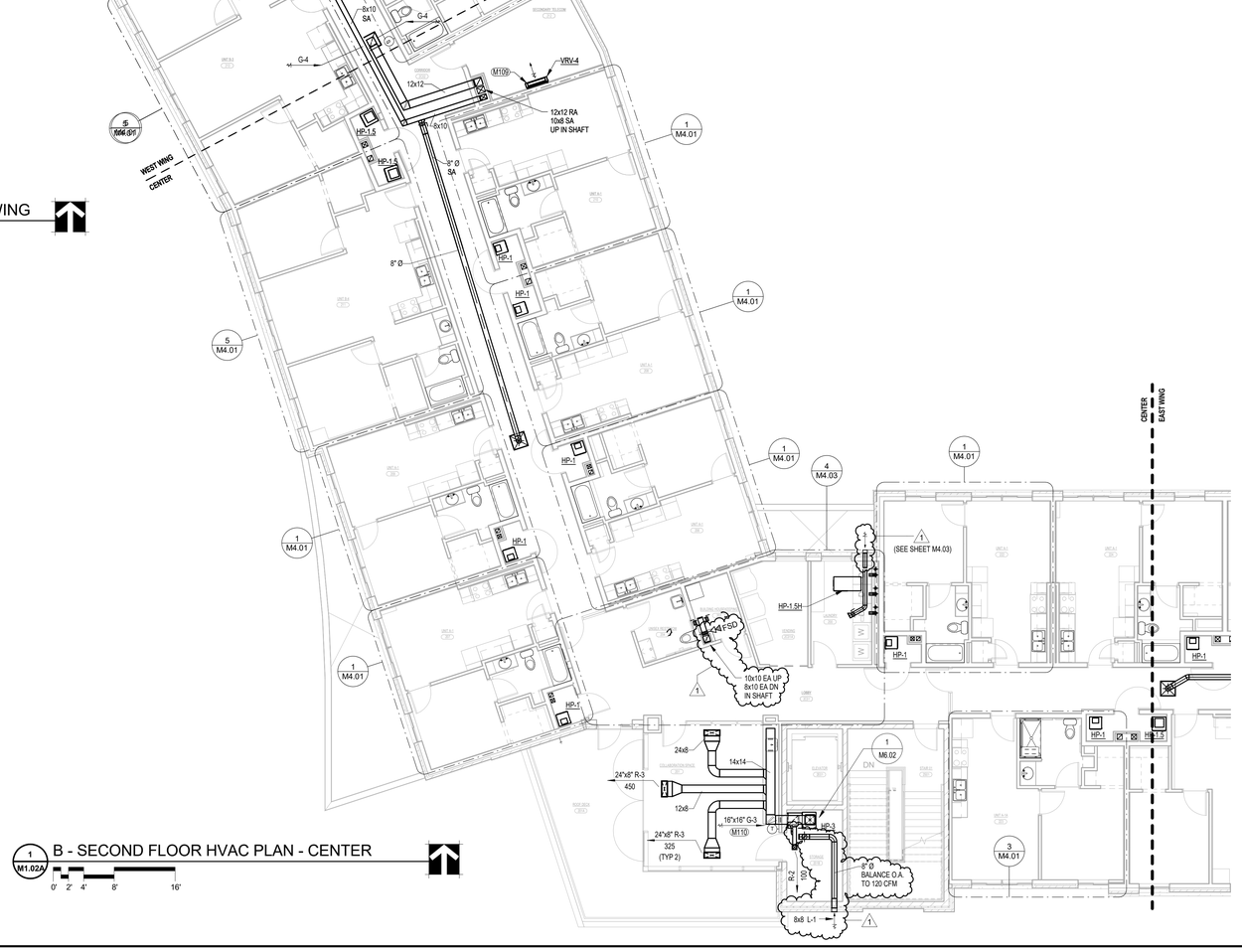


2 M1.02A A - SECOND FLOOR HVAC PLAN - WEST WING

0' 2' 4' 8' 16'



1 M1.02A B - SECOND FLOOR HVAC PLAN - CENTER

0' 2' 4' 8' 16'

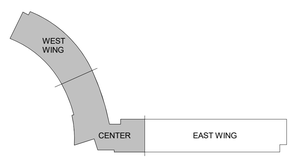
GENERAL NOTES

1. DO NOT ROUTE DUCTWORK OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
2. SPACE ABOVE CEILINGS IS LIMITED. COORDINATE DUCT ROUTING WITH ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AS REQUIRED TO AVOID CONFLICTS.
3. PROVIDE RADIATION DAMPER WITH EACH DIFFUSER, REGISTER AND GRILLE LOCATED IN GYP. BOARD CEILING AT BOTTOM OF STRUCTURE. PROVIDE FIRE DAMPER IN RUN-OUT DUCT AT PENETRATION OF GYP. BOARD AT BOTTOM OF STRUCTURE. COORDINATE FIRE RATINGS WITH ARCHITECTURAL PLANS AND GENERAL CONTRACTOR.
4. PROVIDE FIRE DAMPERS AT ALL DUCTWORK PENETRATIONS THROUGH FIRE RATED WALLS AND ASSEMBLIES. CAULK AROUND ALL DUCTWORK PENETRATIONS THROUGH FULL HEIGHT WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR WALL CONSTRUCTION.
5. SPACE ABOVE CEILINGS IS LIMITED. COORDINATE DUCT AND PIPE ROUTING WITH ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AND PIPING AS REQUIRED TO AVOID CONFLICTS.
6. LOCATE FIRE DAMPERS, FIRE/SMOKE DAMPERS, VOLUME DAMPERS, ETC. IN ACCESSIBLE LOCATIONS. PROVIDE CEILING ACCESS PANELS AS REQUIRED IN GYP. BOARD CEILINGS TO SERVE DAMPERS. LOCATE DAMPERS ABOVE ACCESSIBLE LAY-IN TILE CEILINGS WHERE POSSIBLE. COORDINATE ALL LOCATIONS WITH REFLECTED CEILING PLANS, GENERAL CONTRACTOR AND ARCHITECT. MAINTAIN ACCESSIBILITY TO ALL DAMPERS.
7. CENTER DIFFUSERS, REGISTERS, AND GRILLES IN CEILING TILES WHERE 24X24 OR 24X12 CEILING DEVICES ARE NOT USED.
8. ROUND RUN-OUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS THE NECK UNLESS OTHERWISE NOTED. SEE DIFFUSER CONNECTION DETAIL 3 ON SHEET M6.02.

KEYNOTES

M109 WALL MOUNTED VRV SPLIT-SYSTEM UNIT. SEE DETAIL 5, SHEET M6.01. INSTALL UNIT AS HIGH AS POSSIBLE PER MANUFACTURER'S RECOMMENDATIONS WHILE MAINTAINING REQUIRED CLEARANCES. COORDINATE EXACT LOCATION WITH ARCHITECT, STRUCTURE, AND ANY OTHER FIXTURES OR EQUIPMENT PRESENT. ROUTE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS FROM INDOOR UNIT THROUGH PIPING HOOD TO HEAT PUMP UNIT ON ROOF. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL NECESSARY REFRIGERANT PIPING SPECIALTIES AS RECOMMENDED BY THE MANUFACTURER. ROUTE CONDENSATE TO INDIRECT CONNECTION AT NEAREST FLOOR DRAIN OR MOP SINK. ROUTE ALL PIPING CONCEALED AS POSSIBLE ABOVE CEILINGS AND IN WALLS. COORDINATE PIPE ROUTING WITH STRUCTURAL FRAMING. PROVIDE ACCESSORIES AS RECOMMENDED BY MANUFACTURER.

M110 LOCATE DIFFUSERS, REGISTERS, AND/OR GRILLES SYMMETRICALLY WITH LIGHTING LAYOUT AND ARCHITECTURAL ELEMENTS.



KEY PLAN

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No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

SECOND FLOOR HVAC PLAN - WEST WING & CENTER

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

CHRISTOPHER D REED E-9156 04/01/16 MECHANICAL ENGINEER STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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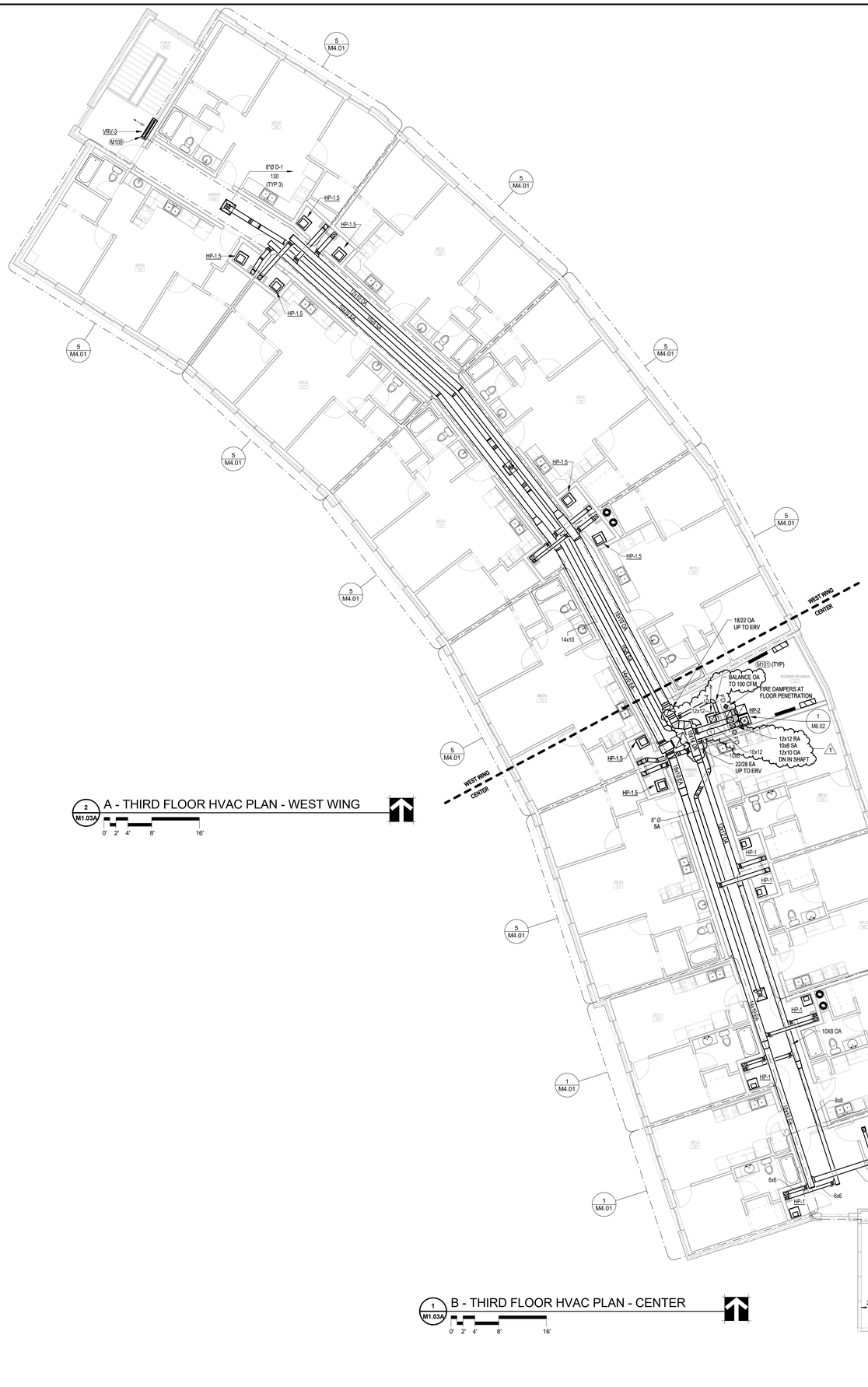

2 M1.03A A - THIRD FLOOR HVAC PLAN - WEST WING

0' 2' 4' 8' 16'

1 M1.03A B - THIRD FLOOR HVAC PLAN - CENTER

0' 2' 4' 8' 16'

GENERAL NOTES

1. DO NOT ROUTE DUCTWORK OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
2. SPACE ABOVE CEILINGS IS LIMITED. COORDINATE DUCT ROUTING WITH ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AS REQUIRED TO AVOID CONFLICTS.
3. PROVIDE RADIATION DAMPER WITH EACH DIFFUSER, REGISTER AND GRILLE LOCATED IN GYP. BOARD CEILING AT BOTTOM OF STRUCTURE. PROVIDE FIRE DAMPER IN RUN-OUT DUCT AT PENETRATION OF GYP. BOARD AT BOTTOM OF STRUCTURE. COORDINATE FIRE RATINGS WITH ARCHITECTURAL PLANS AND GENERAL CONTRACTOR.
4. PROVIDE FIRE DAMPERS AT ALL DUCTWORK PENETRATIONS THROUGH FIRE RATED WALLS AND ASSEMBLIES. CAULK AROUND ALL DUCTWORK PENETRATIONS THROUGH FULL HEIGHT WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR WALL CONSTRUCTION.
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7. CENTER DIFFUSERS, REGISTERS, AND GRILLES IN CEILING TILES WHERE 24X24 OR 24X12 CEILING DEVICES ARE NOT USED.
8. ROUND RUN-OUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS THE NECK UNLESS OTHERWISE NOTED. SEE DIFFUSER CONNECTION DETAIL 3 ON SHEET M6.02.

KEYNOTES

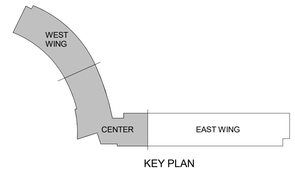
M101	DO NOT ROUTE DUCT OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN CODE REQUIRED CLEARANCE.
M105	FIRE / SMOKE DAMPER AT PENETRATION OF RATED SHAFT.
M109	WALL MOUNTED VRV SPLIT-SYSTEM UNIT. SEE DETAIL 5, SHEET M6.01. INSTALL UNIT AS HIGH AS POSSIBLE PER MANUFACTURER'S RECOMMENDATIONS WHILE MAINTAINING REQUIRED CLEARANCES. COORDINATE EXACT LOCATION WITH ARCHITECT, STRUCTURE, AND ANY OTHER FIXTURES OR EQUIPMENT PRESENT. ROUTE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS FROM INDOOR UNIT THROUGH PIPING HOOD TO HEAT PUMP UNIT ON ROOF. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL NECESSARY REFRIGERANT PIPING SPECIALTIES AS RECOMMENDED BY THE MANUFACTURER. ROUTE CONDENSATE TO INDIRECT CONNECTION AT NEAREST FLOOR DRAIN OR MOP SINK. ROUTE ALL PIPING CONCEALED AS POSSIBLE ABOVE CEILINGS AND IN WALLS. COORDINATE PIPE ROUTING WITH STRUCTURAL FRAMING. PROVIDE ACCESSORIES AS RECOMMENDED BY MANUFACTURER.
M137	LOCATE WALL-MOUNTED RETURN AIR GRILLES AS HIGH AS POSSIBLE AND CENTERED WITH ARCHITECTURAL ELEMENTS. COORDINATE EXACT LOCATIONS WITH GENERAL CONTRACTOR AND ARCHITECTURAL ELEMENTS.

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

THIRD FLOOR HVAC PLAN - WEST WING & CENTER



KEY PLAN

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MEI PROJECT NO: 15273

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DATE: 04/01/16

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GENERAL NOTES

1. DO NOT ROUTE DUCTWORK OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
2. SPACE ABOVE CEILINGS IS LIMITED. COORDINATE DUCT ROUTING WITH ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AS REQUIRED TO AVOID CONFLICTS.
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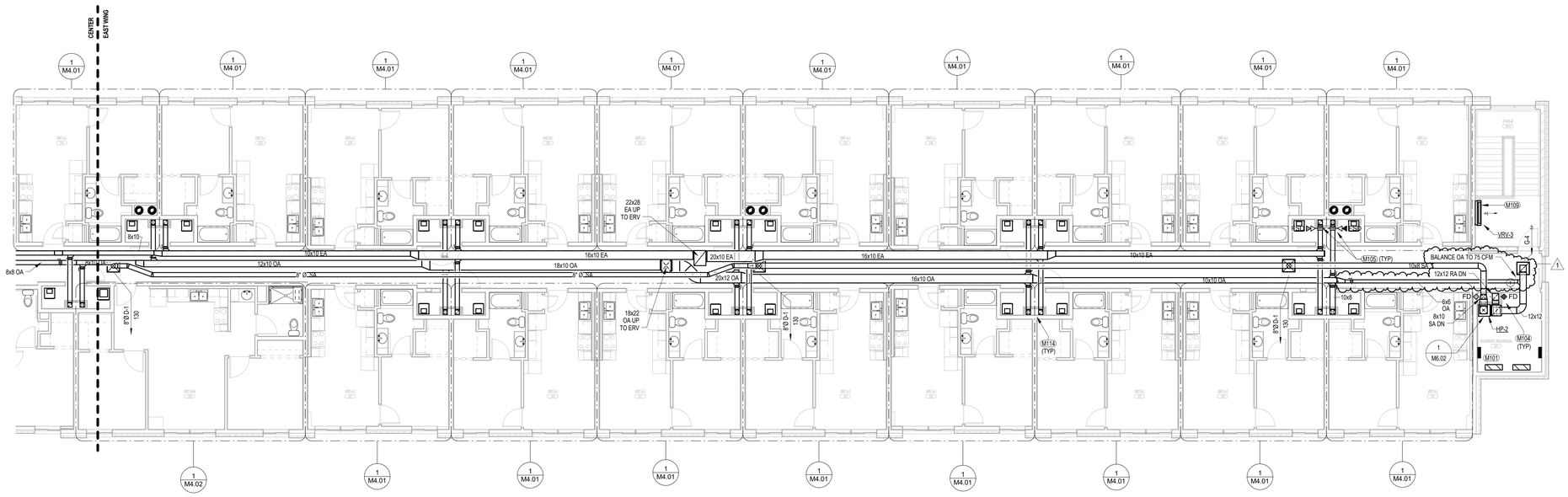
KEYNOTES

M101	DO NOT ROUTE DUCT OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN CODE REQUIRED CLEARANCE.
M104	FIRE DAMPER IN DUCT RUNOUT AT PENETRATION OF RATED ASSEMBLY.
M105	FIRE / SMOKE DAMPER AT PENETRATION OF RATED SHAFT.
M109	WALL MOUNTED VRV SPLIT-SYSTEM UNIT. SEE DETAIL 5, SHEET M6.01. INSTALL UNIT AS HIGH AS POSSIBLE PER MANUFACTURER'S RECOMMENDATIONS WHILE MAINTAINING REQUIRED CLEARANCES. COORDINATE EXACT LOCATION WITH ARCHITECT, STRUCTURE, AND ANY OTHER FIXTURES OR EQUIPMENT PRESENT. ROUTE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS FROM INDOOR UNIT THROUGH PIPING HOOD TO HEAT PUMP UNIT ON ROOF. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL NECESSARY REFRIGERANT PIPING SPECIALTIES AS RECOMMENDED BY THE MANUFACTURER. ROUTE CONDENSATE TO INDIRECT CONNECTION AT NEAREST FLOOR DRAIN OR MOP SINK. ROUTE ALL PIPING CONCEALED AS POSSIBLE ABOVE CEILINGS AND IN WALLS. COORDINATE PIPE ROUTING WITH STRUCTURAL FRAMING. PROVIDE ACCESSORIES AS RECOMMENDED BY MANUFACTURER.
M114	ROUTE EXHAUST AND MAKEUP AIR DUCT DNOWN INTO SHAFT.



1 M1.03B C - THIRD FLOOR HVAC PLAN - EAST WING

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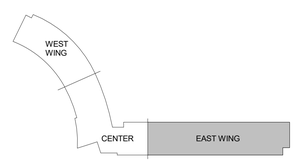

KEY PLAN

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

THIRD FLOOR HVAC PLAN - EAST WING

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MEI PROJECT NO: 15273

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MECHANICAL — CHRISTOPHER P. REED — E-9156 — 04/01/16 — STATE OF NEBRASKA — PROFESSIONAL ENGINEER

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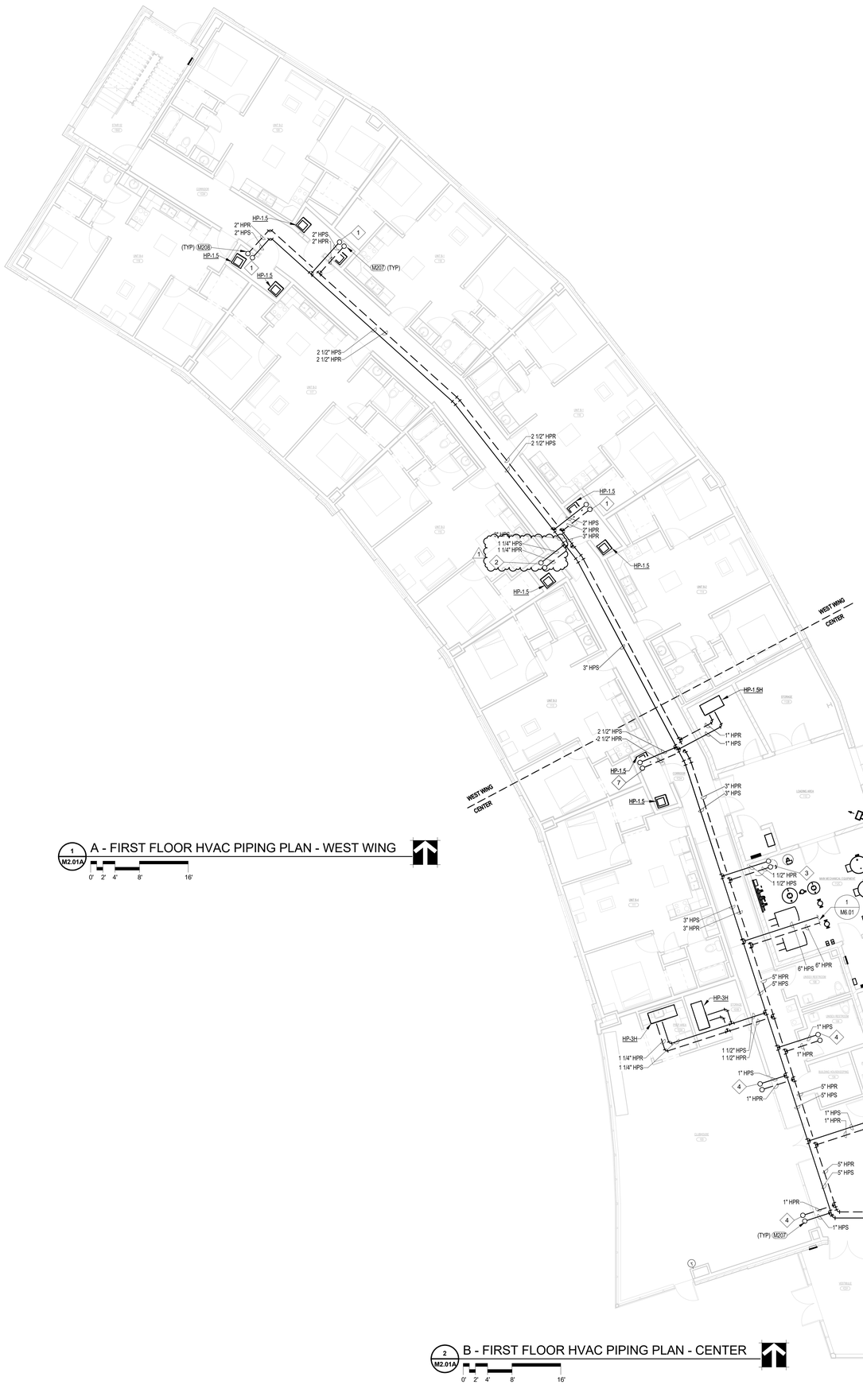

1 M2.01A A - FIRST FLOOR HVAC PIPING PLAN - WEST WING

0' 2' 4' 8' 16'

2 M2.01A B - FIRST FLOOR HVAC PIPING PLAN - CENTER

0' 2' 4' 8' 16'

GENERAL NOTES

1. DO NOT ROUTE DUCTWORK OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
2. SPACE ABOVE CEILINGS IS LIMITED. COORDINATE DUCT ROUTING WITH ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AS REQUIRED TO AVOID CONFLICTS.
3. PROVIDE RADIATION DAMPER WITH EACH DIFFUSER, REGISTER AND GRILLE LOCATED IN GYP. BOARD CEILING AT BOTTOM OF STRUCTURE. PROVIDE FIRE DAMPER IN RUN-OUT DUCT AT PENETRATION OF GYP. BOARD AT BOTTOM OF STRUCTURE. COORDINATE FIRE RATINGS WITH ARCHITECTURAL PLANS AND GENERAL CONTRACTOR.
4. PROVIDE FIRE DAMPERS AT ALL DUCTWORK PENETRATIONS THROUGH FIRE RATED WALLS AND ASSEMBLIES. CAULK AROUND ALL DUCTWORK PENETRATIONS THROUGH FULL HEIGHT WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR WALL CONSTRUCTION.
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8. ROUND RUN-OUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS THE NECK UNLESS OTHERWISE NOTED. SEE DIFFUSER CONNECTION DETAIL 3 ON SHEET M6.02.

KEYNOTES

M207 COORDINATE HPS/HPR PIPING IN MECHANICAL CLOSET WITH ALL OTHER TRADES.

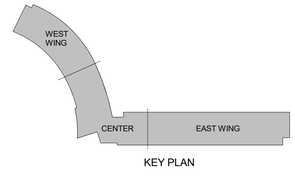
M208 REFER TO SHEET M5.02 FOR HEAT PUMP RISER DIAGRAMS AND RISER SIZING.

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR HVAC PIPING PLAN - WEST WING & CENTER



KEY PLAN

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GENERAL NOTES

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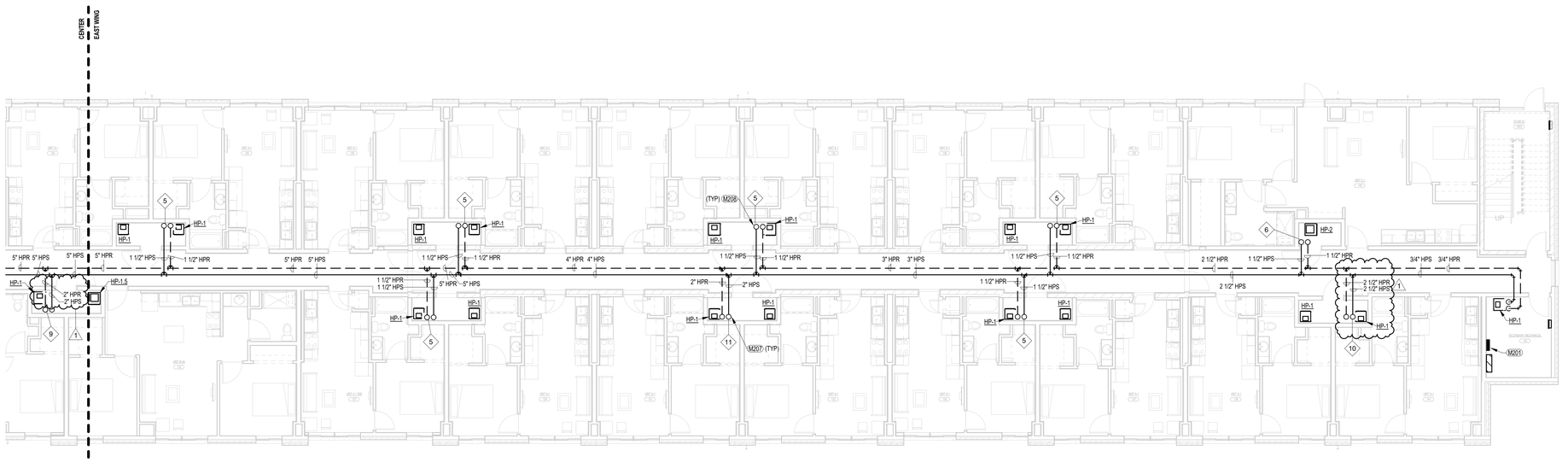
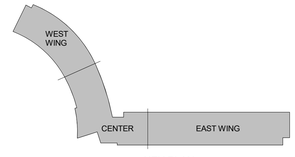
KEYNOTES

M201	DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS. MAINTAIN CODE REQUIRED CLEARANCES.
M207	COORDINATE HPS/HPR PIPING IN MECHANICAL CLOSET WITH ALL OTHER TRADES.
M208	REFER TO SHEET M5.02 FOR HEAT PUMP RISER DIAGRAMS AND RISER SIZING.



1 M2.01B C - FIRST FLOOR HVAC PIPING PLAN - EAST WING

0' 2' 4' 8' 16'



KEY PLAN

MEI PROJECT NO: 15273

morrissey engineering inc
mechanical | electrical | lighting | technology | commissioning
4940 North 118th Street
Omaha, NE 68164
P: 402.491.4144
www.morrisseyengineering.com

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No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR HVAC PIPING PLAN - EAST WING

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MECHANICAL ENGINEER
CHRISTOPHER P. READ
E-9156
04/01/16
STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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FIRE SPRINKLER GENERAL NOTES

A. ENTIRE BUILDING SHALL HAVE A WET PIPE FIRE PROTECTION SPRINKLER SYSTEM TO MEET THE REQUIREMENTS OF NFPA 13R AND AUTHORITY HAVING JURISDICTION. FIRST FLOOR MAINS SHALL BE SIZED PER NFPA 13 FOR FUTURE CONVERSION OF FIRST FLOOR TO COMMERCIAL RETAIL SPACE.

B. PROVIDE FIRE SERVICE ENTRANCE WITH DOUBLE CHECK BACKFLOW PREVENTER,ISOLATION VALVES, CHECK VALVES, FLOW SWITCH, ETC. AS REQUIRED BY NFPA 13R AND AUTHORITY HAVING JURISDICTION.

C. FIRE SPRINKLER PIPING SHALL BE ROUTED IN THE WALLS AND SIDEWALL SPRINKLERS SHALL BE UTILIZED WHEN POSSIBLE. DO NOT ROUTE WET PIPE SPRINKLER PIPING IN AREAS SUBJECT TO FREEZING. COORDINATE LOCATION OF SPRINKLER PIPING AND HEADS WITH LIGHTS, DUCTS, DIFFUSERS, GRILLES, AND CEILING SYSTEMS.

D. ROUTING AND SIZING OF FIRE SPRINKLER PIPING SHALL BE BY FIRE SPRINKLER CONTRACTOR.

E. CONTRACTOR SHALL VERIFY AVAILABLE PRESSURE AND FLOW.

F. SEE SPECIFICATION SECTION 211000 - WATER BASED FIRE SUPPRESSION SYSTEMS FOR ALLOWABLE PIPING MATERIALS AND SPRINKLER HEADS.

G. SUBMIT SHOP DRAWINGS ON 30"x42" SHEETS SHOWING COMPLETE PIPE LAYOUT, SPRINKLER HEAD LOCATIONS AND TYPE, ZONE VALVES, AND FLOW SWITCHES. SHOP DRAWINGS SHALL BE SUBMITTED TO ARCHITECT/ENGINEER FOR PRELIMINARY REVIEW PRIOR TO SUBMITTING TO AUTHORITY HAVING JURISDICTION FOR REVIEW AND APPROVAL. FINAL REVIEW SHALL THEN BE MADE BY ARCHITECT/ENGINEER.

H. COORDINATE LOCATION OF ALL SPRINKLER HEADS AND PIPING WITH ALL OTHER TRADES. IF CONFLICTS DO OCCUR SUCH THAT LIGHTS, DUCTWORK, OR CEILING SYSTEMS CANNOT BE INSTALLED DUE TO SPRINKLER PIPING INTERFERENCE, THE PIPING SHALL BE RELOCATED AT NO ADDITIONAL EXPENSE TO THE PROJECT.

GENERAL NOTES

A. DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.

B. SPACE ABOVE CEILINGS ARE LIMITED. COORDINATE PIPE ROUTING WITH ALL OTHER TRADES. PROVIDE ALL ADDITIONAL OFFSETS AND TRANSITIONS AS REQUIRED TO COMPLETE INSTALLATION.

C. ALL DOMESTIC WATER MAINS, FIRE SPRINKLER MAINS, AND GAS MAINS SHALL BE ROUTED ABOVE CEILINGS IN CENTRAL CORRIDORS.

D. INSTALL ALL ISOLATION VALVES AND BALANCING VALVES IN ACCESSIBLE LOCATIONS.

E. ALL PIPING SHOWN FOR CLARITY. ROUTE WASTE, VENT, WATER, AND GAS PIPING CONCEALED IN CHASES, IN WALLS, OR ABOVE CEILINGS AS REQUIRED. DO NOT ROUTE WATER PIPING IN ATTIC.

F. DO NOT ROUTE WATER PIPING IN EXTERIOR WALLS UNLESS OTHERWISE NOTED. PIPING ROUTED IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF INSULATION.

G. NOT ALL CLEANOUTS ARE SHOWN. PROVIDE CLEANOUTS PER UNIFORM PLUMBING CODE AND LOCAL AHJ. EXTEND CLEANOUTS TO WALLS WHERE APPLICABLE. COORDINATE CLEANOUT LOCATIONS WITH GENERAL CONTRACTOR.

H. COORDINATE ALL BELOW GRADE PIPING WITH STRUCTURAL FOOTINGS. SLEEVE PIPING AS REQUIRED. SEE STRUCTURAL DRAWINGS. COORDINATE WITH GENERAL CONTRACTOR.

I. DO NOT INSTALL COMBUSTIBLE MATERIALS WITHIN RETURN AIR PLENUM. ALL MATERIALS EXPOSED TO RETURN AIR PLENUM MUST BE PLENUM RATED AND MEET ALL LOCAL CODES. COORDINATE WITH HVAC DRAWINGS, MECHANICAL CONTRACTOR, AND GENERAL CONTRACTOR.

J. SEE FLOOR PLANS FOR HOT WATER CIRCULATION (HWC) MAIN SIZES. ALL HWC BRANCHES SHALL BE 1/2". ALL BALANCING VALVES SHALL BE AUTOMATIC BALANCING VALVES SET AT 2.0 GPM.

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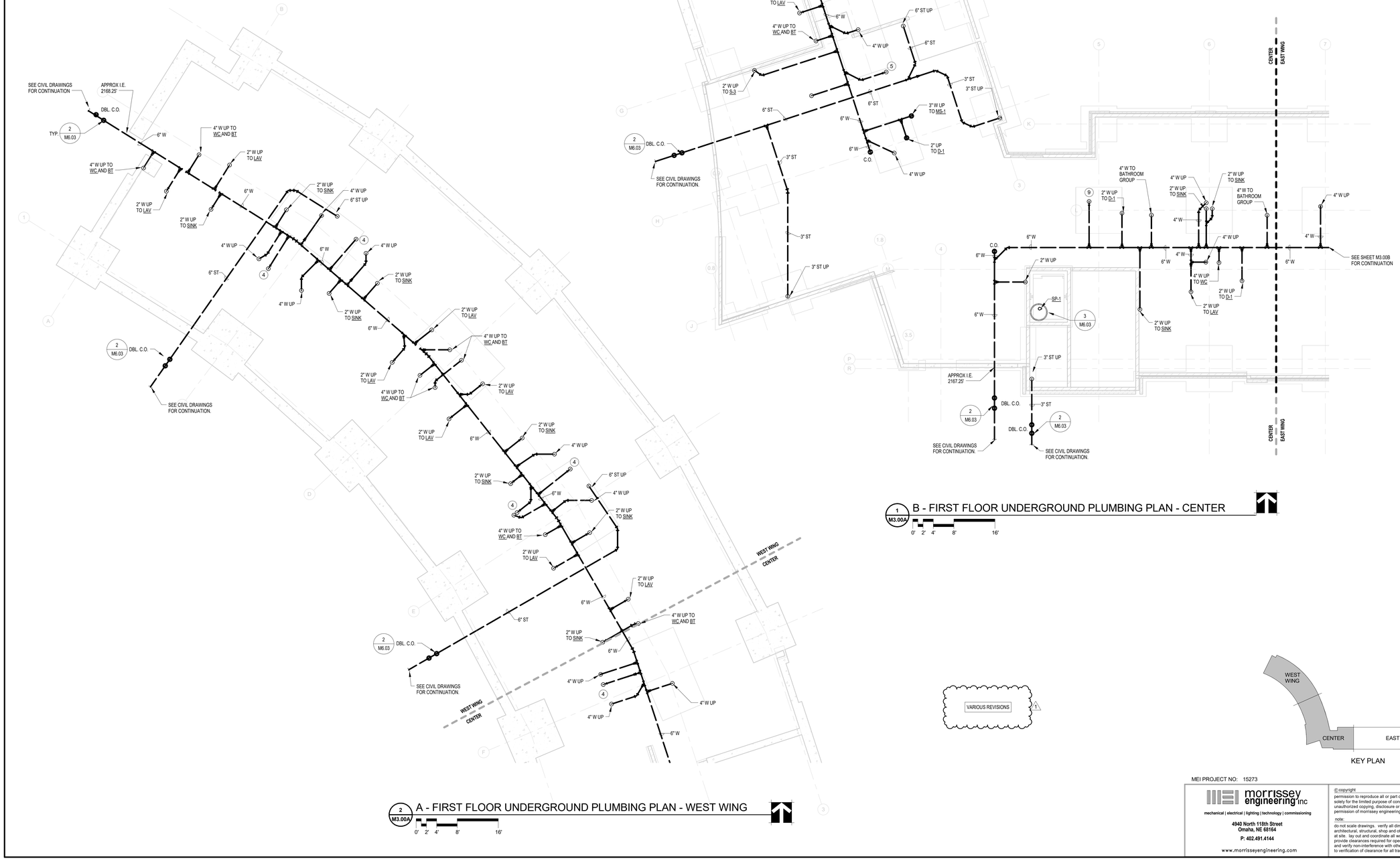
L. DOMESTIC WATER RISERS ARE DESIGNATED BY [X]. SEE DOMESTIC WATER RISER DIAGRAMS ON SHEET M5.01 FOR WATER RISER SIZES.

M. SEE PLUMBING FIXTURE SCHEDULE SHEET M7.03 FOR PLUMBING FIXTURE CONNECTION REQUIREMENTS.

O. PROVIDE CW AND HW ISOLATION VALVES FOR EACH GROUP OF PLUMBING FIXTURES. LOCATE ISOLATION VALVES IN ACCESSIBLE LOCATION ABOVE CORRIDOR LAY-IN TILE CEILING.

KEYNOTES



1 M3.00A B - FIRST FLOOR UNDERGROUND PLUMBING PLAN - CENTER

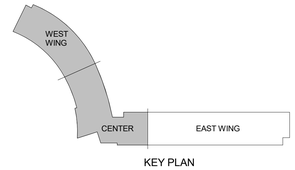
0' 2' 4' 8' 16'

2 M3.00A A - FIRST FLOOR UNDERGROUND PLUMBING PLAN - WEST WING

0' 2' 4' 8' 16'

No.	Description	Date
1	Addendum #1	04/21/16

VARIOUS REVISIONS 1



KEY PLAN

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR UNDERGROUND PLUMBING PLAN - WEST WING & CENTER

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MEI PROJECT NO: 15273

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MECHANICAL ENGINEER — CHRISTOPHER P. REED — E-9156 — 04/01/16 — STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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FIRE SPRINKLER GENERAL NOTES

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GENERAL NOTES

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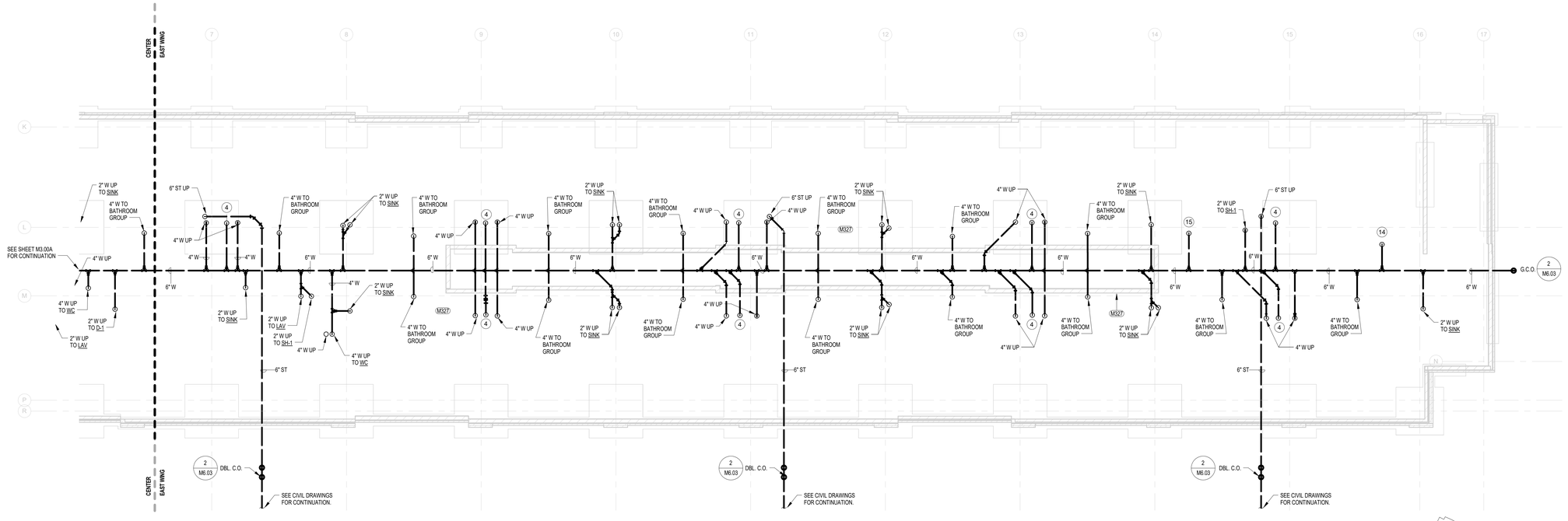
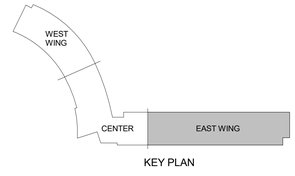
KEYNOTES

M327 COORDINATE BELOW GRADE PIPING WITH STORM SHELTER FOOTINGS.



1 M3.00B C - FIRST FLOOR UNDERGROUND PLUMBING PLAN - EAST WING

0' 2' 4' 8' 16'



KEY PLAN

VARIOUS REVISIONS 1

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR UNDERGROUND PLUMBING PLAN - EAST WING

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PROJECT:15097
DATE: 04/01/16

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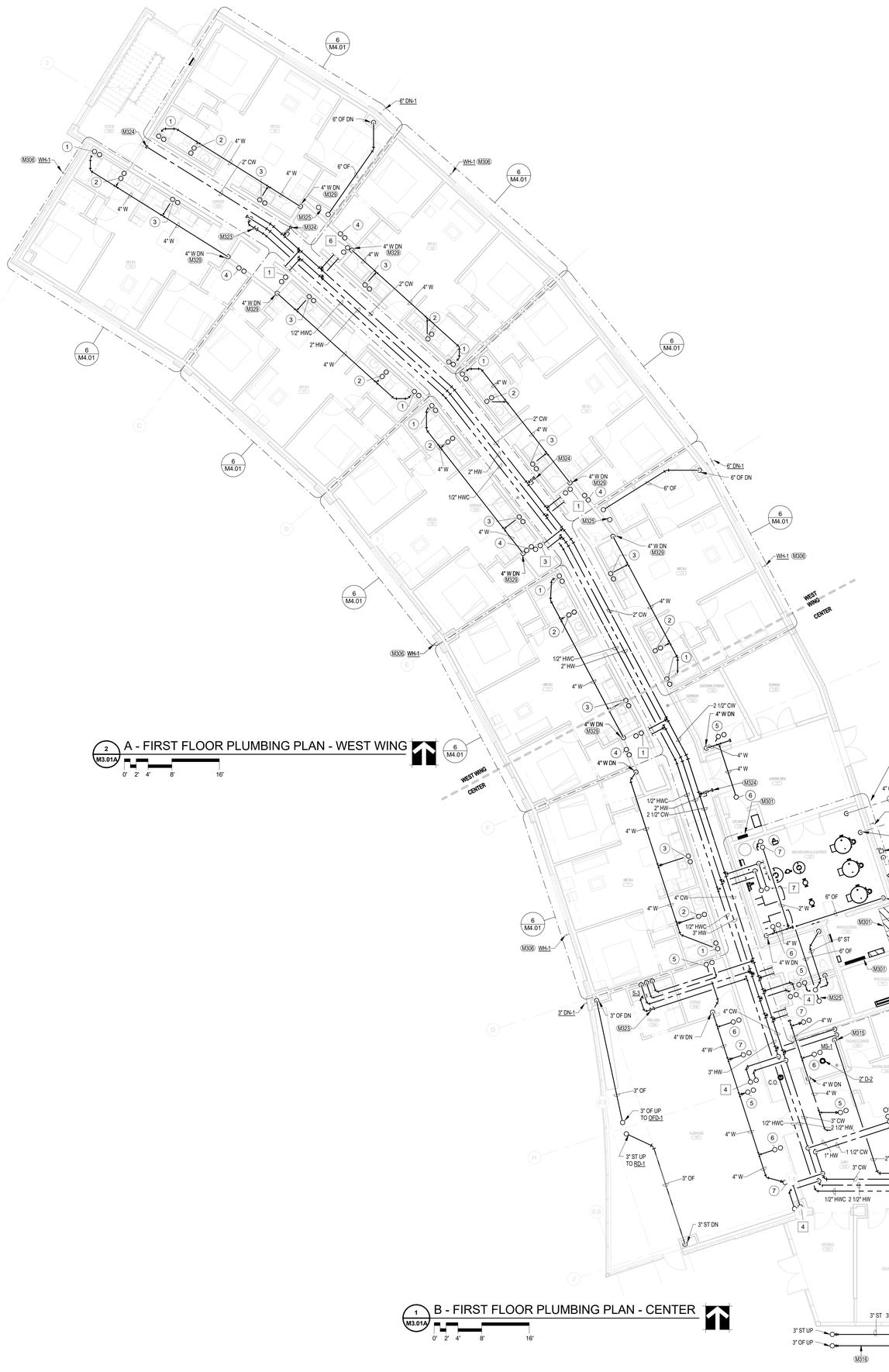

2 M3.01A A - FIRST FLOOR PLUMBING PLAN - WEST WING

0' 2' 4' 8' 16'

1 M3.01A B - FIRST FLOOR PLUMBING PLAN - CENTER

0' 2' 4' 8' 16'

ROUTE SANITARY RISERS FROM SECOND AND THIRD FLOORS HORIZONTALLY IN CEILING SPACE OF FIRST FLOOR TO NEAREST COLUMN TO ACCOMODATE FOR FUTURE RETAIL TENANT CONVERSION.

FIRE SPRINKLER GENERAL NOTES

A. SEE SHEET M3.00A.

GENERAL NOTES

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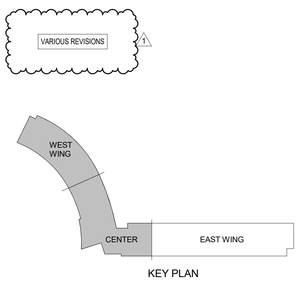
KEYNOTES

M301	DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS. MAINTAIN CODE REQUIRED CLEARANCES.
M302	1-1/4" CW, 1-1/4" HW, 1/2" HWC UP TO LAUNDRY ON SECOND AND THIRD FLOORS.
M303	2 LB GAS SERVICE AND METER PROVIDED BY LOCAL UTILITY COMPANY. COORDINATE EXACT LOCATION OF GAS METER WITH CONTRACTOR, OWNER AND LOCAL UTILITY COMPANY. 2" 2 PSI GAS SERVING APPROX. 6475 MBH @ EQUIVALENT LENGTH OF APPROX. 100'-0"
M306	3/4" CW TO WALL HYDRANT, WH-1. COORDINATE EXACT LOCATIONS WITH OWNER/ARCHITECT. CONNECT 3/4" CW TO SUPPLY IN MECHANICAL CLOSET.
M307	1-1/2" CW, 1" HW UP SERVING PUBLIC RESTROOM AND HOUSEKEEPING ROOMS.
M310	FIRE SPRINKLER WATER SERVICE ENTRANCE. FIRE SPRINKLER ROUTING AND SIZING BY FIRE PROTECTION CONTRACTOR PER NFPA 13. REFER TO CIVIL DRAWINGS FOR CONTINUATION AND LOCATION OF P/V.
M311	3/4" CW TO WALL HYDRANT, WH-1. COORDINATE EXACT LOCATIONS WITH OWNER/ARCHITECT.
M315	ROUTE 2" FORCED MAIN FROM SUMP PUMP, SP-1, TO NEAREST MOP SINK. DISCHARGE INDIRECTLY TO MOP SINK MAINTAINING CODE REQUIRED AIR GAP.
M316	PROVIDE HEAT TRACE AND INSULATION FOR STORM AND OVERFLOW PIPING LOCATED IN UNHEATED OVERHANGS. COORDINATE HEAT TRACE REQUIREMENTS WITH ELECTRICAL CONTRACTOR. PROVIDE HEAT TRACE ALARM LOCATED IN MAIN MECHANICAL ROOM. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
M323	HWC BALANCING VALVE. SET BALANCING VALVE TO 2.5 GPM.
M324	PROVIDE 2" CW STUB CAPPED AND VALVED FOR FUTURE RETAIL RENOVATION.
M325	6" STORM AND 6" OVERFLOW UP.
M328	FIRE DEPARTMENT CONNECTION (FDC). COORDINATE EXACT LOCATION WITH ARCHITECT AND AUTHORITY HAVING JURISDICTION (AHJ).
M329	ROUTE 4" WASTE PIPING FROM UPPER FLOOR STACKS AS CLOSE TO COLUMN LINES AS POSSIBLE FOR FUTURE RETAIL RETROFIT. PIPING SHOWN OFFSET FOR CLARITY.

No.	Description	Date
1	Addendum #1	04/21/16

VARIOUS REVISIONS

1



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FIRST FLOOR PLUMBING PLAN - WEST WING & CENTER

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Christopher D Reed — CHRISTOPHER D. REED E-9156 — 04/01/16 — LICENSED PROFESSIONAL ENGINEER — STATE OF NEBRASKA

PROJECT:15097

DATE: 04/01/16

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FIRE SPRINKLER GENERAL NOTES

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GENERAL NOTES

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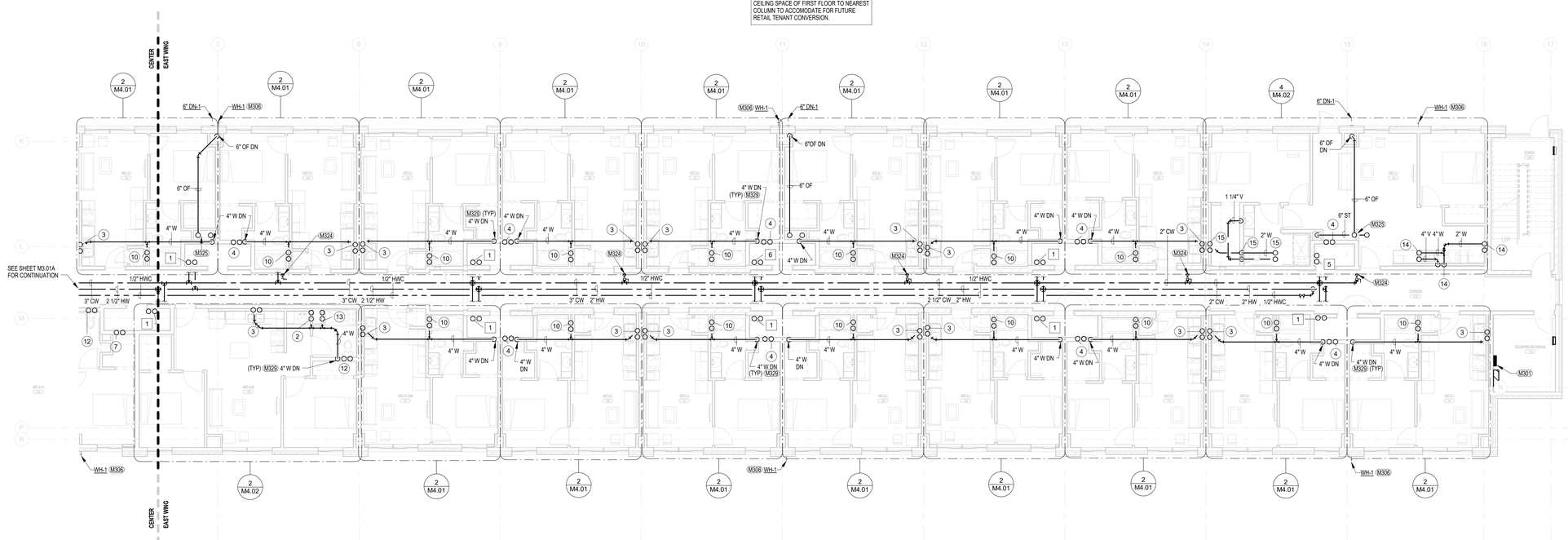
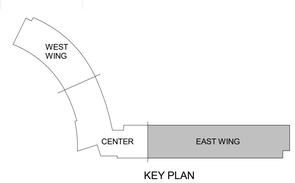


1 M3.01B C - FIRST FLOOR PLUMBING PLAN - EAST WING

0' 2' 4' 8' 16'



KEY PLAN

VARIOUS REVISIONS 1

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR PLUMBING PLAN - EAST WING

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MEI PROJECT NO: 15273

morrissey engineering inc
mechanical | electrical | lighting | technology | commissioning
4940 North 119th Street
Omaha, NE 68164
P: 402.491.4144
www.morrisseyengineering.com

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MECHANICAL ENGINEER — Christopher D Reed — CHRISTOPHER D. REED E-9156 — 04/01/16 — STATE OF NEBRASKA

PROJECT: 15097
DATE: 04/01/16

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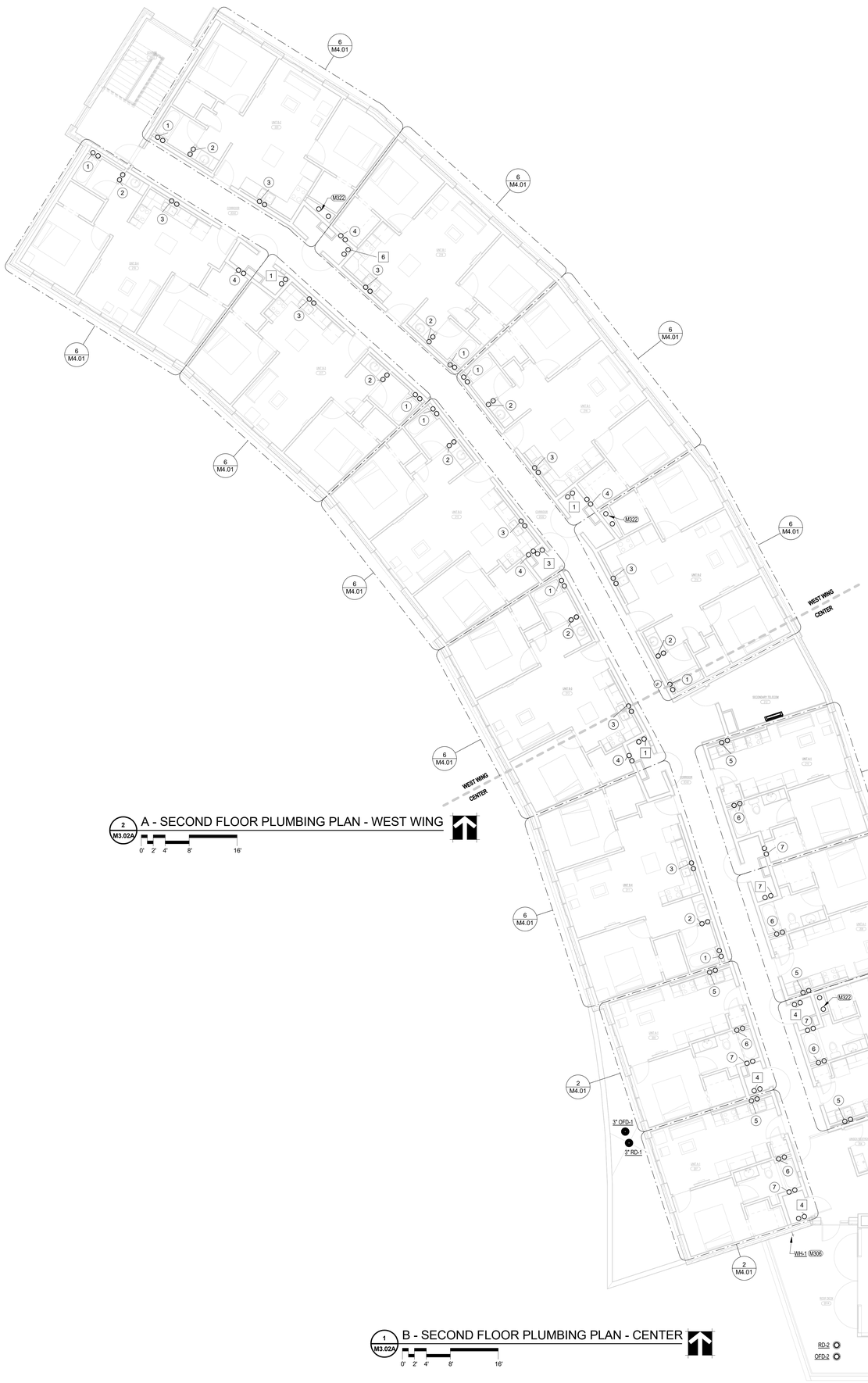

2 M3.02A A - SECOND FLOOR PLUMBING PLAN - WEST WING

0' 2' 4' 8' 16'

1 M3.02A B - SECOND FLOOR PLUMBING PLAN - CENTER

0' 2' 4' 8' 16'

FIRE SPRINKLER GENERAL NOTES

A. SEE SHEET M3.00A.

GENERAL NOTES

A. DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.

B. SPACE ABOVE CEILINGS ARE LIMITED. COORDINATE PIPE ROUTING WITH ALL OTHER TRADES. PROVIDE ALL ADDITIONAL OFFSETS AND TRANSITIONS AS REQUIRED TO COMPLETE INSTALLATION.

C. ALL DOMESTIC WATER MAINS, FIRE SPRINKLER MAINS, AND GAS MAINS SHALL BE ROUTED ABOVE CEILINGS IN CENTRAL CORRIDORS.

D. INSTALL ALL ISOLATION VALVES AND BALANCING VALVES IN ACCESSIBLE LOCATIONS.

E. ALL PIPING SHOWN FOR CLARITY. ROUTE WASTE, VENT, WATER, AND GAS PIPING CONCEALED IN CHASES, IN WALLS, OR ABOVE CEILINGS AS REQUIRED. DO NOT ROUTE WATER PIPING IN ATTIC.

F. DO NOT ROUTE WATER PIPING IN EXTERIOR WALLS UNLESS OTHERWISE NOTED. PIPING ROUTED IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF INSULATION.

G. NOT ALL CLEANOUTS ARE SHOWN. PROVIDE CLEANOUTS PER UNIFORM PLUMBING CODE AND LOCAL AHJ. EXTEND CLEANOUTS TO WALLS WHERE APPLICABLE. COORDINATE CLEANOUT LOCATIONS WITH GENERAL CONTRACTOR.

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J. SEE FLOOR PLANS FOR HOT WATER CIRCULATION (HWC) MAIN SIZES. ALL HWC BRANCHES SHALL BE 1/2". ALL BALANCING VALVES SHALL BE AUTOMATIC BALANCING VALVES SET AT 2.0 GPM.

K. WASTE AND VENT RISERS ARE DESIGNATED BY (X). SEE WASTE AND VENT RISER DIAGRAMS ON SHEET M5.01 FOR WASTE AND VENT PIPE SIZES.

L. DOMESTIC WATER RISERS ARE DESIGNATED BY [X]. SEE DOMESTIC WATER RISER DIAGRAMS ON SHEET M5.01 FOR WATER RISER SIZES.

M. SEE PLUMBING FIXTURE SCHEDULE SHEET M7.03 FOR PLUMBING FIXTURE CONNECTION REQUIREMENTS.

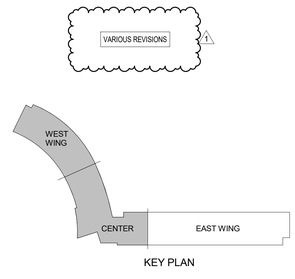
O. PROVIDE CW AND HW ISOLATION VALVES FOR EACH GROUP OF PLUMBING FIXTURES. LOCATE ISOLATION VALVES IN ACCESSIBLE LOCATION ABOVE CORRIDOR LAY-IN TILE CEILING.

KEYNOTES

M306	3/4" CW TO WALL HYDRANT, WH-1. COORDINATE EXACT LOCATIONS WITH OWNER/ARCHITECT. CONNECT 3/4" CW TO SUPPLY IN MECHANICAL CLOSET.
M308	1-1/4" HW, 1-1/4" CW AND 1/2" HWC DN. 1" HW, 1" CW AND 1/2" HWC UP.
M309	1" CW, 1" HW, 1/2" HWC UP SERVING LAUNDRY AREA ON THIRD FLOOR. CONNECT HOT AND COLD WATER SUPPLIES TO CLOTHES WASHERS PER MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO MAKE FINAL CONNECTIONS TO EQUIPMENT.
M322	6" STORM AND 6" OVERFLOW UP/DN.
M326	1/2" CW DN TO OB-1 SERVING ICE MACHINE.

No.	Description	Date
1	Addendum #1	04/21/16

VARIOUS REVISIONS 1



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MECHANICAL CHRISTOPHER P. REED E-9156 04/01/16 STATE OF NEBRASKA

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DATE: 04/01/16

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FIRE SPRINKLER GENERAL NOTES

A. SEE SHEET M3.00A.

GENERAL NOTES

A. DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.

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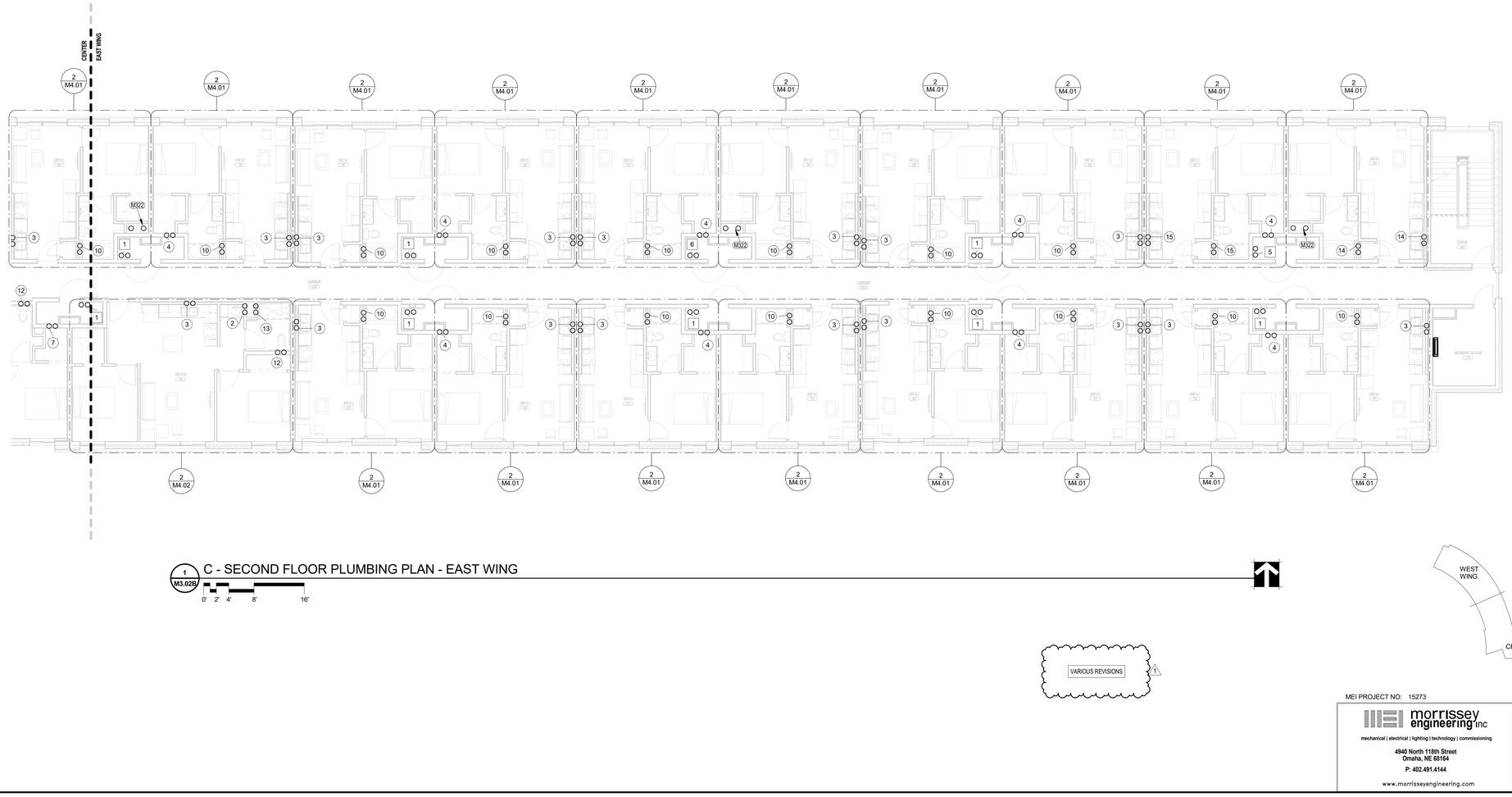
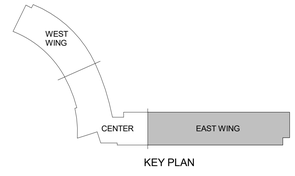
KEYNOTES

M322 6" STORM AND 6" OVERFLOW UP/DN.



1 / M3.02B C - SECOND FLOOR PLUMBING PLAN - EAST WING

0' 2' 4' 8' 16'



KEY PLAN

VARIOUS REVISIONS 1

No.	Description	Date
1	Addendum #1	04/21/16

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UNK UNIVERSITY VILLAGE STUDENT HOUSING

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HOLLAND BASHAM ARCHITECTS
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STEPHEN M. FARRINGTON E-11967 04/01/16 STATE OF NEBRASKA

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DATE: 04/01/16

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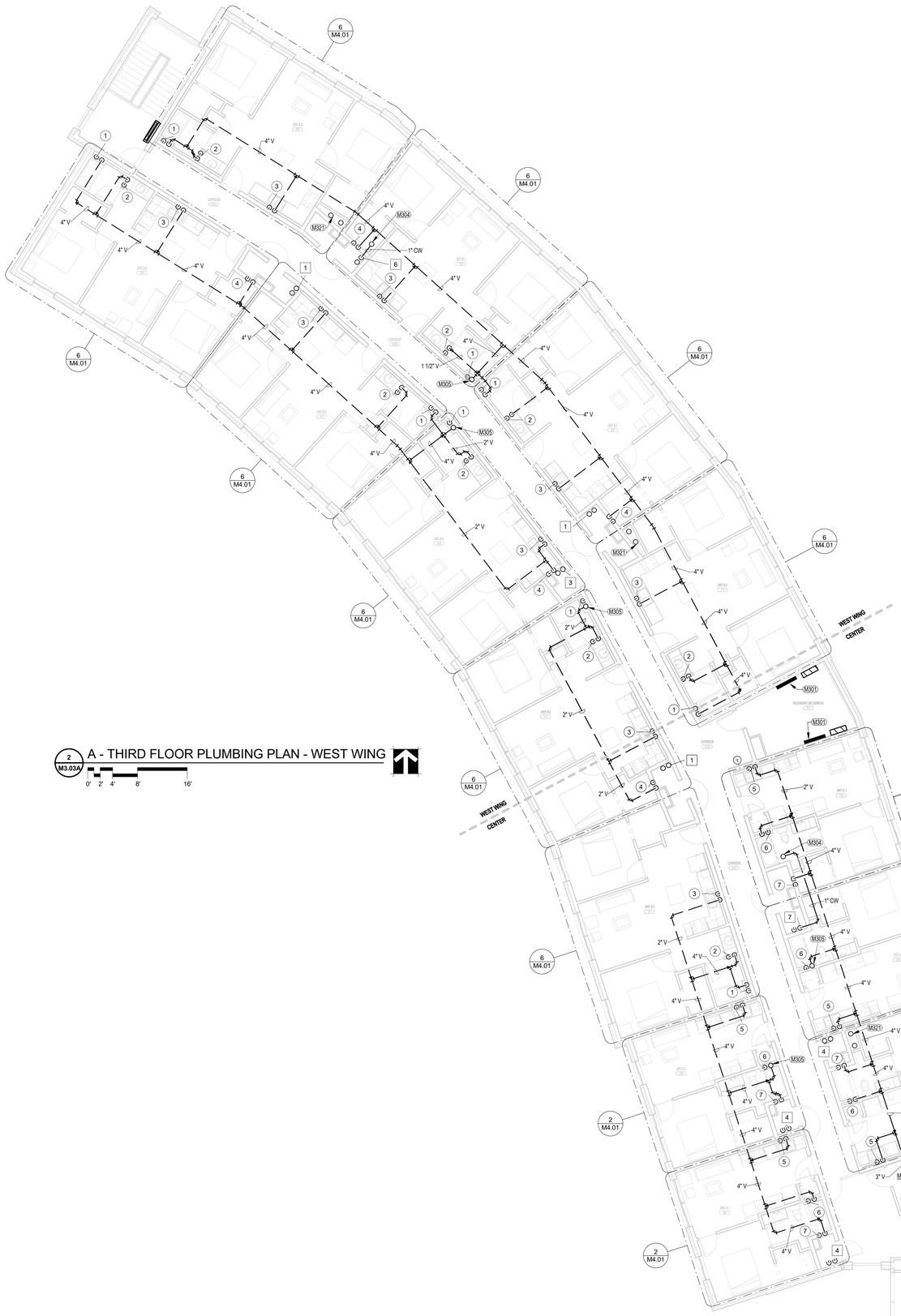

2 M3.03A A - THIRD FLOOR PLUMBING PLAN - WEST WING

0' 2' 4' 8' 16'

1 M3.03A B - THIRD FLOOR PLUMBING PLAN - CENTER

0' 2' 4' 8' 16'

FIRE SPRINKLER GENERAL NOTES

A. SEE SHEET M3.00A.

GENERAL NOTES

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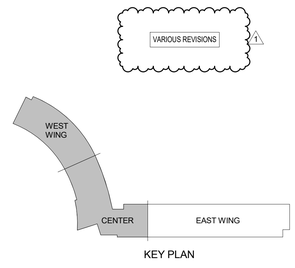
KEYNOTES

M301	DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS. MAINTAIN CODE REQUIRED CLEARANCES.
M304	1" CW UP TO ROOF HYDRANT, RH-1. SEE SHEETS M1.04A AND M104B FOR CONTINUATION. ROUTE DRAIN FROM ROOF HYDRANT TO NEAREST FLOOR DRAIN/MOP SINK IN NEAREST MECHANICAL CLOSET.
M305	4" VENT UP TO VTR. SEE SHEETS M1.04A AND M1.04B FOR CONTINUATION.
M321	6" STORM AND 6" OVERFLOW UP TO 6" RD-1 AND 6" OFD-1.
M323	HWC BALANCING VALVE. SET BALANCING VALVE TO 2.5 GPM.

No.	Description	Date
1	Addendum #1	04/21/16

VARIOUS REVISIONS 1



KEY PLAN

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

THIRD FLOOR PLUMBING PLAN - WEST WING & CENTER

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
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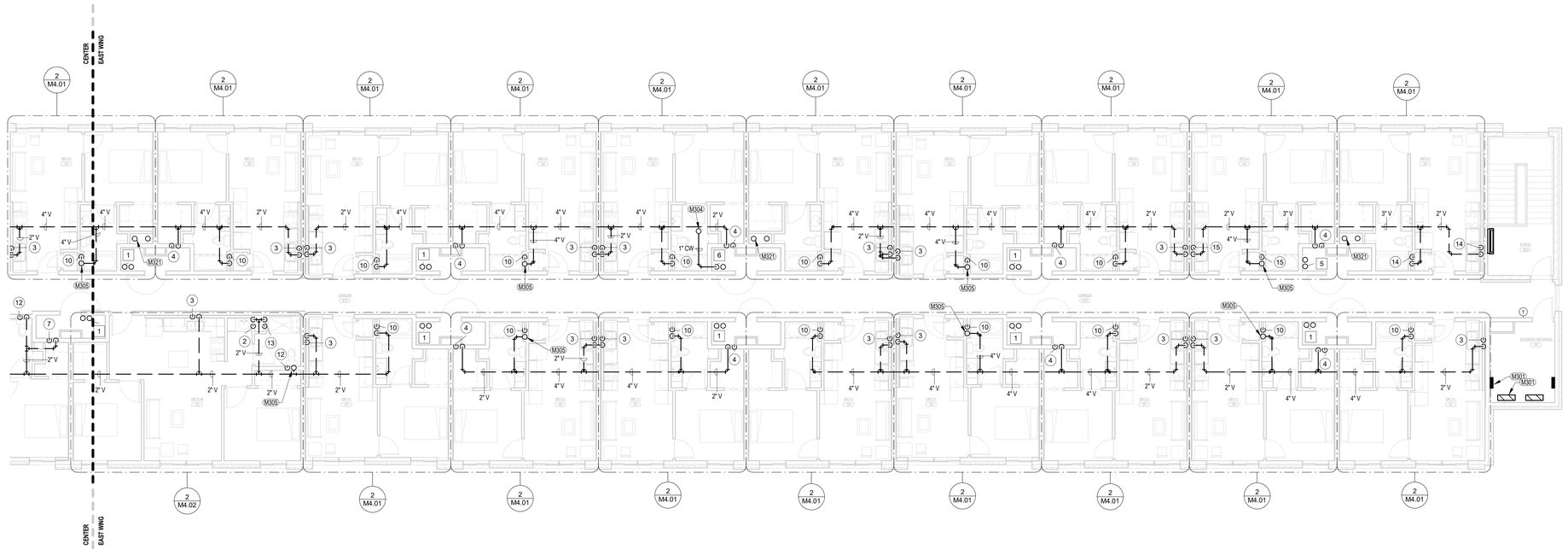

1 M3.03B C - THIRD FLOOR PLUMBING PLAN - EAST WING

0' 2' 4' 8' 16'

FIRE SPRINKLER GENERAL NOTES

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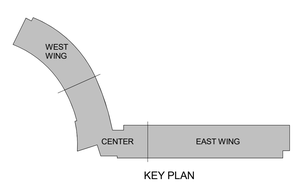

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MECHANICAL — Christopher D Reed — CHRISTOPHER D REED E-9156 — 04/01/16 — STATE OF NEBRASKA — PROFESSIONAL ENGINEER

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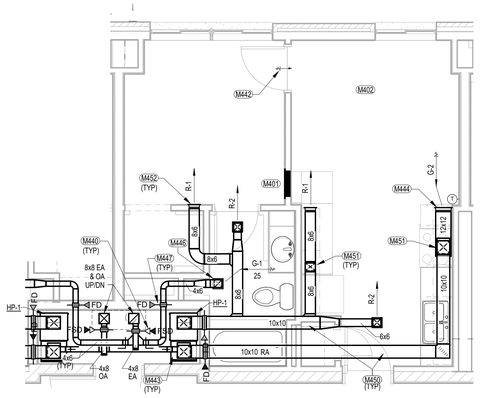

1 M4.01 UNIT TYPE A-1 - HVAC PLAN

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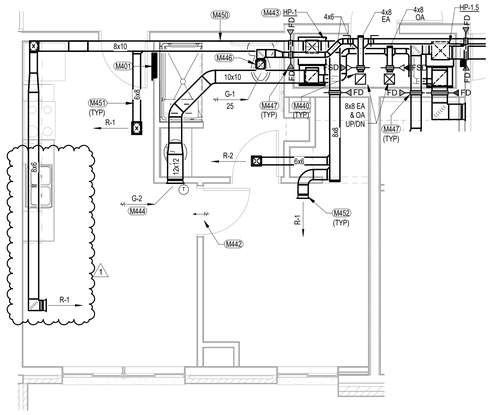
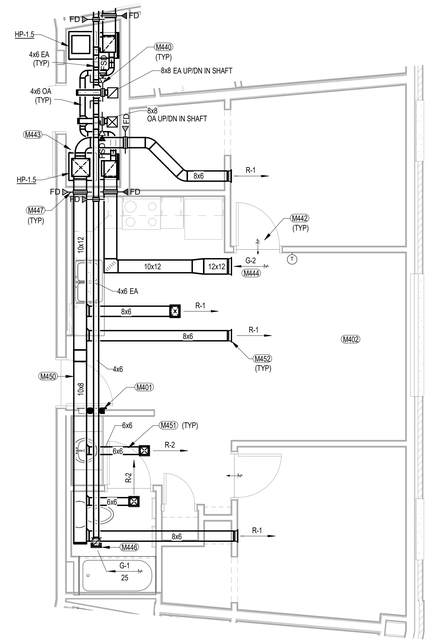


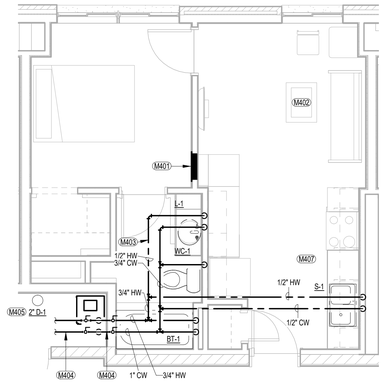
3 M4.01 UNIT TYPE A-1A - HVAC PLAN

0' 1' 2' 4' 8'



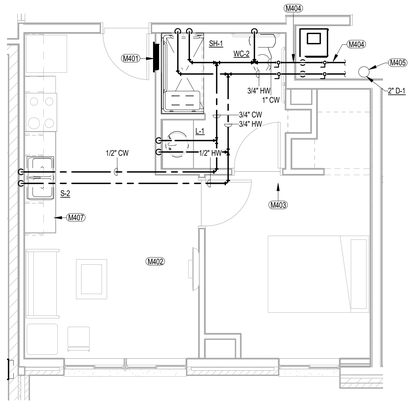
5 M4.01 UNIT TYPE B-1 - HVAC PLAN (TYPES B-2, B-3, B-4 SIMILAR)

0' 1' 2' 4' 8'



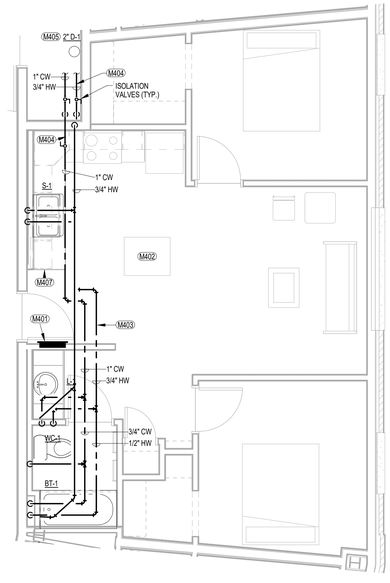
2 M4.01 UNIT TYPE A-1 - PLUMBING PLAN

0' 1' 2' 4' 8'



4 M4.01 UNIT TYPE A-1A - PLUMBING PLAN

0' 1' 2' 4' 8'



6 M4.01 UNIT TYPE B-1 - PLUMBING PLAN (TYPES B-2, B-3, B-4 SIMILAR)

0' 1' 2' 4' 8'

GENERAL NOTES

1. DO NOT ROUTE DUCTWORK OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
2. SPACE ABOVE CEILINGS IS LIMITED. COORDINATE DUCT ROUTING WITH ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AS REQUIRED TO AVOID CONFLICTS.
3. PROVIDE RADIATION DAMPER WITH EACH DIFFUSER, REGISTER AND GRILLE LOCATED IN GYP. BOARD CEILING AT BOTTOM OF STRUCTURE. PROVIDE FIRE DAMPER IN RUN-OUT DUCT AT PENETRATION OF GYP. BOARD AT BOTTOM OF STRUCTURE. COORDINATE FIRE RATINGS WITH ARCHITECTURAL PLANS AND GENERAL CONTRACTOR.
4. PROVIDE FIRE DAMPERS AT ALL DUCTWORK PENETRATIONS THROUGH FIRE RATED WALLS AND ASSEMBLIES. CAULK AROUND ALL DUCTWORK PENETRATIONS THROUGH FULL HEIGHT WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR WALL CONSTRUCTION.
5. SPACE ABOVE CEILINGS IS LIMITED. COORDINATE DUCT AND PIPE ROUTING WITH ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AND PIPING AS REQUIRED TO AVOID CONFLICTS.
6. LOCATE FIRE DAMPERS, FIRE/SMOKE DAMPERS, VOLUME DAMPERS, ETC. IN ACCESSIBLE LOCATIONS. PROVIDE CEILING ACCESS PANELS AS REQUIRED IN GYP. BOARD CEILINGS TO SERVE DAMPERS. LOCATE DAMPERS ABOVE ACCESSIBLE LAY-IN TILE CEILINGS WHERE POSSIBLE. COORDINATE ALL LOCATIONS WITH REFLECTED CEILING PLANS, GENERAL CONTRACTOR AND ARCHITECT. MAINTAIN ACCESSIBILITY TO ALL DAMPERS.
7. CENTER DIFFUSERS, REGISTERS, AND GRILLES IN CEILING TILES WHERE 24X24 OR 24X12 CEILING DEVICES ARE NOT USED.
8. ROUND RUN-OUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS THE NECK UNLESS OTHERWISE NOTED. SEE DIFFUSER CONNECTION DETAIL 3 ON SHEET M6.02.

KEYNOTES

M401	DO NOT ROUTE DUCTWORK OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN CODE REQUIRED CLEARANCES.
M402	LIVING UNIT PLAN MAY APPEAR IN BUILDING FLOOR PLANS AS A MIRROR OR ROTATED IMAGE OF THOSE SHOWN HERE. ADAPT THESE MECHANICAL DESIGNS ACCORDINGLY.
M403	ALL PIPING SHOWN FOR CLARITY. ROUTE PIPING ABOVE CEILINGS OR IN WALLS.
M404	1" CW TO COLD WATER RISER AND 3/4" HW TO HOT WATER RISER WITH ISOLATION VALVES ACCESSIBLE IN MECHANICAL CLOSET. SEE SHEET M5.01 FOR RISER SIZES.
M405	PROVIDE FLOOR DRAIN FOR HEAT PUMP CONDENSATE LINE. SEE WASTE AND VENT RISERS STARTING ON SHEET M5.01. COORDINATE LOCATION WITH EQUIPMENT, STRUCTURE, AND OTHER FLOOR PENETRATIONS.
M407	PROVIDE PLUMBING CONNECTIONS TO DISHWASHER / GARBAGE DISPOSAL. SEE DETAIL 6, SHEET M6.03.
M440	FIRE / SMOKE DAMPER AT PENETRATION OF RATED SHAFT.
M442	RETURN AIR THROUGH DOOR UNDERCUT. UNDERCUT MUST BE MINIMUM 1" ABOVE TOP OF FLOOR COVERING.
M443	SEE HEAT PUMP DETAIL 1, SHEET M6.02. SEE MECHANICAL PIPING SHEETS, M2.01-M2.03. PIPING MAY BE EXPOSED IN CORNER OF MECHANICAL ROOMS. CONNECT EXHAUST AIR AND OUTDOOR AIR TO RESPECTIVE VERTICAL SHAFTS AS SHOWN. PROVIDE FIRE/SMOKE DAMPERS AT PENETRATIONS OF RATED SHAFTS. COORDINATE OVERALL INSTALLATION AND FLOOR-TO-FLOOR PENETRATIONS WITH GENERAL CONTRACTOR, ARCHITECTURAL PLANS, AND OTHER TRADES.
M444	LOCATE WALL-MOUNTED RETURN AIR GRILLES AS HIGH AS POSSIBLE AND CENTERED WITH ARCHITECTURAL ELEMENTS. COORDINATE EXACT LOCATIONS WITH GENERAL CONTRACTOR AND ARCHITECTURAL ELEMENTS.
M446	EXHAUST GRILLE IN CEILING. COORDINATE EXACT LOCATION WITH STRUCTURE, LIGHTS, AND ARCHITECTURAL PLANS. ROUTE EXHAUST DUCT FROM GRILLE TO VERTICAL SHAFT AS SHOWN. COORDINATE EXACT ROUTING OF DUCT WITH STRUCTURE AND OTHER TRADES.
M447	PROVIDE FIRE DAMPER FOR ALL DUCT PENETRATIONS OF UNIT WALLS. MAINTAIN ACCESSIBILITY TO DAMPERS FOR TESTING AND MAINTENANCE. COORDINATE EXACT LOCATION OF WALL PENETRATIONS AND DAMPERS WITH STRUCTURE.
M450	ROUTE DUCT MAINS ABOVE LOWERED CEILING, KEEPING BELOW RATED ASSEMBLY ABOVE. COORDINATE EXACT ROUTING WITH STRUCTURE, GENERAL CONTRACTOR, AND OTHER TRADES.
M451	ROUTE SUPPLY AND RETURN AIR DUCT RUN-OUTS WITHIN SOFFIT SPACE. TRANSITION TO REGISTERS / GRILLES AS NECESSARY. COORDINATE EXACT ROUTING WITH STRUCTURE, GENERAL CONTRACTOR, AND OTHER TRADES. (TYP ALL)
M452	LOCATE ALL REGISTERS SYMMETRICALLY WITH ARCHITECTURAL ELEMENTS. COORDINATE EXACT LOCATIONS WITH STRUCTURE AND OTHER TRADES. ANY REGISTERS LOCATED IN GYP. CEILING ON STRUCTURE SHALL BE PROVIDED WITH RADIATION DAMPERS.

No.	Description	Date
1	Addendum #1	04/21/16

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MECHANICAL — CHRISTOPHER P. REED — E-9156 — 04/01/16 — STATE OF NEBRASKA — PROFESSIONAL ENGINEER

Christopher P. Reed

PROJECT: 15097
DATE: 04/01/16

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SHEET: M4.01

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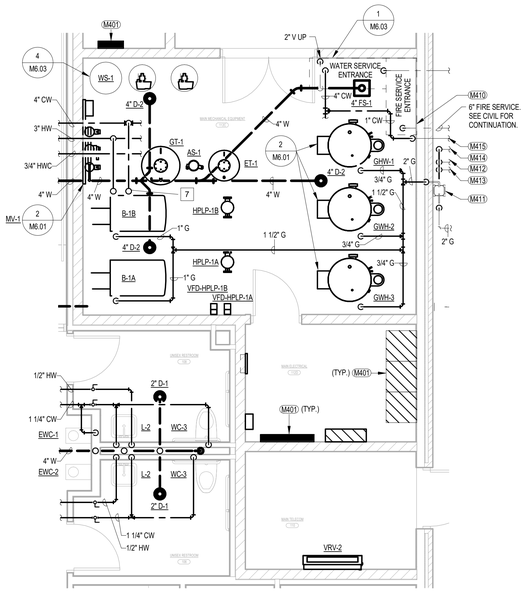
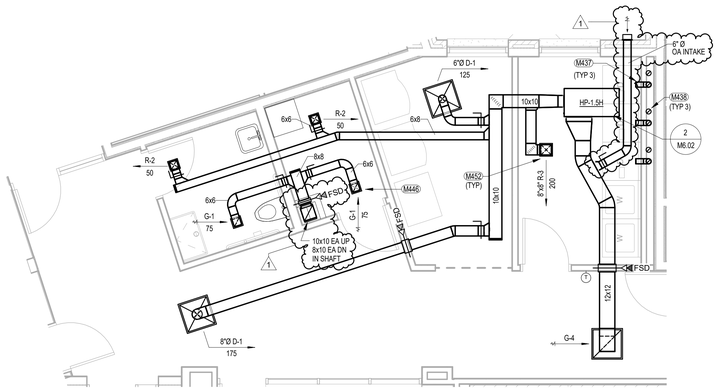


3 M4.03 LAUNDRY ROOM FIRST FLOOR - PLUMBING PLAN

0' 1' 2' 4' 8'

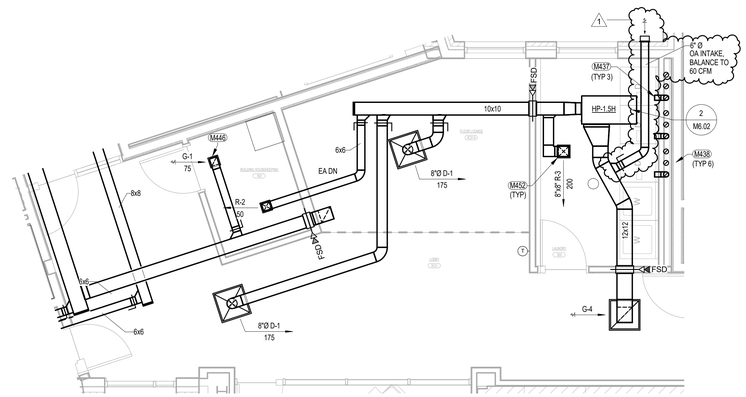
2 M4.03 MAIN MECHANICAL SPACE - PLUMBING

0' 1' 2' 4' 8'



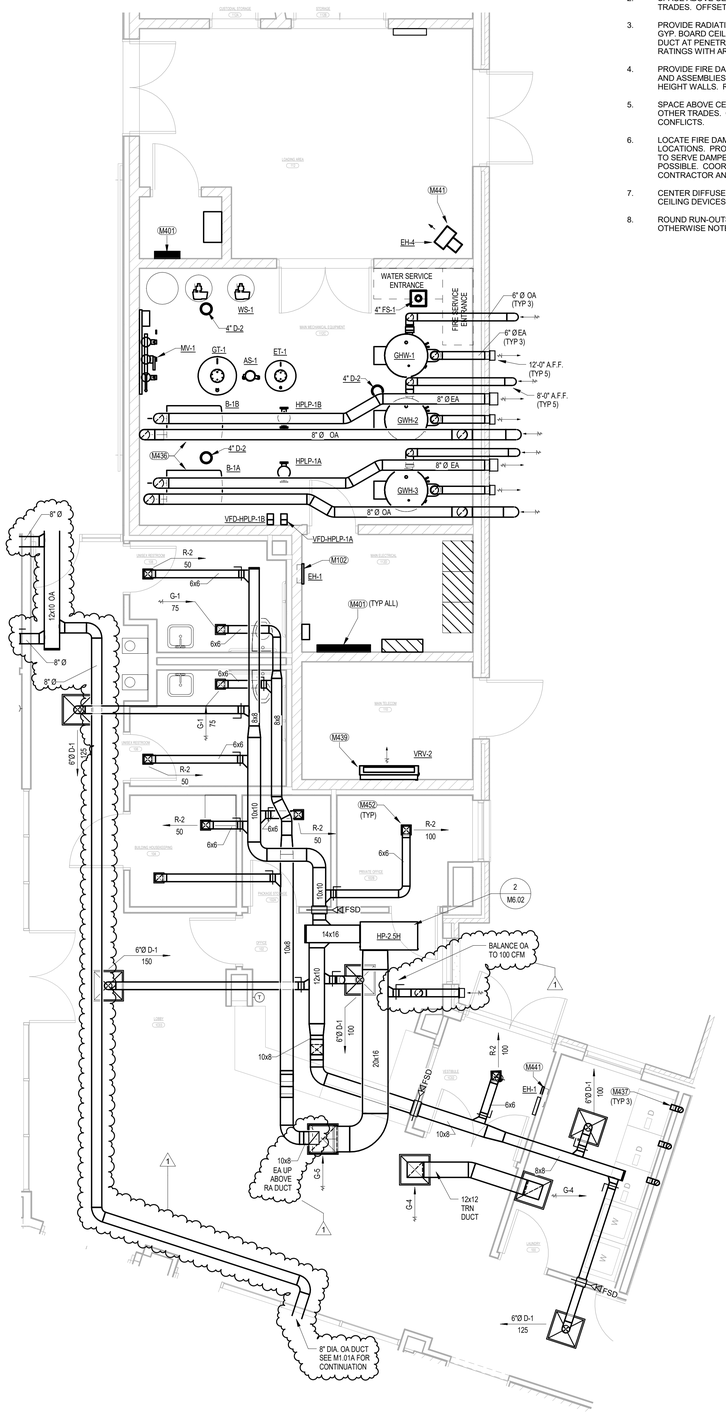
4 M4.03 LAUNDRY ROOM, SECOND FLOOR - HVAC PLAN

0' 1' 2' 4' 8'



5 M4.03 LAUNDRY ROOM, THIRD FLOOR - HVAC PLAN

0' 1' 2' 4' 8'



1 M4.03 FIRST FLOOR MAIN MECHANICAL SPACE - HVAC PLAN

0' 1' 2' 4' 8'

GENERAL NOTES

1. DO NOT ROUTE DUCTWORK OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
2. SPACE ABOVE CEILINGS IS LIMITED. COORDINATE DUCT ROUTING WITH ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AS REQUIRED TO AVOID CONFLICTS.
3. PROVIDE RADIATION DAMPER WITH EACH DIFFUSER, REGISTER AND GRILLE LOCATED IN GYP. BOARD CEILING AT BOTTOM OF STRUCTURE. PROVIDE FIRE DAMPER IN RUN-OUT DUCT AT PENETRATION OF GYP. BOARD AT BOTTOM OF STRUCTURE. COORDINATE FIRE RATINGS WITH ARCHITECTURAL PLANS AND GENERAL CONTRACTOR.
4. PROVIDE FIRE DAMPERS AT ALL DUCTWORK PENETRATIONS THROUGH FIRE RATED WALLS AND ASSEMBLIES. CAULK AROUND ALL DUCTWORK PENETRATIONS THROUGH FULL HEIGHT WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR WALL CONSTRUCTION.
5. SPACE ABOVE CEILINGS IS LIMITED. COORDINATE DUCT AND PIPE ROUTING WITH ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AND PIPING AS REQUIRED TO AVOID CONFLICTS.
6. LOCATE FIRE DAMPERS, FIRE/SMOKE DAMPERS, VOLUME DAMPERS, ETC. IN ACCESSIBLE LOCATIONS. PROVIDE CEILING ACCESS PANELS AS REQUIRED IN GYP. BOARD CEILINGS TO SERVE DAMPERS. LOCATE DAMPERS ABOVE ACCESSIBLE LAY-IN TILE CEILINGS WHERE POSSIBLE. COORDINATE ALL LOCATIONS WITH REFLECTED CEILING PLANS, GENERAL CONTRACTOR AND ARCHITECT. MAINTAIN ACCESSIBILITY TO ALL DAMPERS.
7. CENTER DIFFUSERS, REGISTERS, AND GRILLES IN CEILING TILES WHERE 24X24 OR 24X12 CEILING DEVICES ARE NOT USED.
8. ROUND RUN-OUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS THE NECK UNLESS OTHERWISE NOTED. SEE DIFFUSER CONNECTION DETAIL 3 ON SHEET M6.02.

KEYNOTES

M102	ELECTRIC HEATER BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL PLANS.
M401	DO NOT ROUTE DUCTWORK OR PIPING ABOVE ELECTRICAL PANELS. MAINTAIN CODE REQUIRED CLEARANCES.
M408	1-1/4" CW, 1-1/4" HW, 1/2" HWC UP TO LAUNDRY ON SECOND AND THIRD FLOORS.
M410	FIRE SPRINKLER WATER SERVICE ENTRANCE. FIRE SPRINKLER ROUTING AND SIZING BY FIRE PROTECTION CONTRACTOR PER NFPA 13.
M411	2 LB GAS SERVICE AND METER PROVIDED BY LOCAL UTILITY COMPANY. COORDINATE EXACT LOCATION OF GAS METER WITH CONTRACTOR. OWNER AND LOCAL UTILITY COMPANY. 2" 2 PSI GAS SERVING APPROX. 6475 MBH @ EQUIVALENT LENGTH OF APPROX. 1350'-0".
M412	ROUTE 1/2 2PSIG GAS BELOW GRADE TO FIREPITS. SEE CIVIL DRAWINGS FOR CONTINUATION. CONNECT TO FIREPIT PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE PRV, GAS COCK AND DIRT LEG PRIOR TO CONNECTION OF EQUIPMENT. COORDINATE VALVE OPERATION WITH ELECTRICAL CONTROL SWITCH. SEE ELECTRICAL DRAWINGS FOR REQUIREMENTS.
M413	ROUTE 1/2 2PSIG GAS BELOW GRADE TO GAS GRILLS. SEE CIVIL DRAWINGS FOR CONTINUATION. CONNECT TO GRILLS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE PRV, GAS COCK AND DIRT LEG PRIOR TO CONNECTION OF EQUIPMENT. COORDINATE VALVE OPERATION WITH ELECTRICAL CONTROL SWITCH. SEE ELECTRICAL DRAWINGS FOR REQUIREMENTS.
M414	ROUTE 3/4" 2 PSIG GAS BELOW GRADE TO GENERATOR. SEE MECHANICAL SITE PLAN AND CIVIL PLANS FOR GENERATOR LOCATION. PROVIDE PRV, GAS COCK AND DIRT LET PRIOR TO CONNECTION. CONNECT GAS PER MANUFACTURER'S RECOMMENDATIONS.
M415	1" CW DOWN BELOW GRADE TO YARD HYDRANT (YH-1) IN MECHANICAL ENCLOSURE ON SITE. SEE MECHANICAL SITE PLAN SHEET M1.00 FOR YARD HYDRANT LOCATION.
M436	SEE HEAT PUMP SYSTEM DETAIL 1 / SHEET M6.01. HEAT PUMP SYSTEM DETAIL IS SCHEMATIC. INSTALL EQUIPMENT AND PIPING PER MANUFACTURER'S REQUIREMENTS. COORDINATE EXACT EQUIPMENT PLOCATIONS AND PIPING LAYOUT WITH SPACE PROVIDED, GENERAL CONTRACTOR, AND OTHER TRADES.
M437	PROVIDE RECESSED METAL DRYER BOX (DRYERBOX BY IN-O-VATE TECHNOLOGIES OR EQUIVALENT) FOR CONNECTION OF DRYER TO RIGID EXHAUST DUCT IN WALL. SEE DETAIL 5, SHEET M6.02. COORDINATE EXACT LOCATION OF DRYER BOX WITH STRUCTURE AND GENERAL CONTRACTOR FOR BEST CONNECTION TO DRYER SPECIFIED. 4" DIA. DRYER EXHAUST UP IN WALL, CONNECTING TO LINT TRAP. SEE DETAIL 6, SHEET M6.02. ROUTE 4" DIA. DRYER EXHAUST UP FROM LINT TRAP TO ROOF. COORDINATE VERTICAL ROUTING WITH DUCT FROM ALL FLOORS. SEE ROOF PLAN, SHEET M1.04A FOR ROOF TERMINATION. *.. COORDINATE WITH GENERAL CONTRACTOR THE PLACEMENT OF A PERMANENT LABEL INDICATING DUCT LENGTH AND NUMBER OF BENDS IN DUCT RUN.
M438	DRYER DUCT ROUTING UP/DN FROM OTHER FLOORS.
M439	WALL MOUNTED VRV SPLIT-SYSTEM UNIT. SEE DETAIL 5, SHEET M6.01. INSTALL UNIT AS HIGH AS POSSIBLE PER MANUFACTURER'S RECOMMENDATIONS WHILE MAINTAINING REQUIRED CLEARANCES. COORDINATE EXACT LOCATION WITH ARCHITECT, STRUCTURE AND ANY OTHER FIXTURES OR EQUIPMENT PRESENT. ROUTE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS FROM INDOOR UNIT THROUGH PIPING HOOD TO HEAT PUMP UNIT ON ROOF. SEE ROOF PLANS (SHEETS M1.05 & M1.05). SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL NECESSARY REFRIGERANT PIPING SPECIALTIES AS RECOMMENDED BY THE MANUFACTURER. ROUTE CONDENSATE TO INDIRECT CONNECTION AT NEAREST FLOOR DRAIN OR MOP SINK. ROUTE ALL PIPING CONCEALED AS POSSIBLE ABOVE CEILINGS AND IN WALLS. COORDINATE PIPE ROUTING WITH STRUCTURAL FRAMING. PROVIDE ACCESSORIES AS RECOMMENDED BY MANUFACTURER.
M441	ELECTRIC HEATER BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL PLANS.
M446	EXHAUST GRILLE IN CEILING. COORDINATE EXACT LOCATION WITH STRUCTURE, LIGHTS, AND ARCHITECTURAL PLANS. ROUTE EXHAUST DUCT FROM GRILLE TO VERTICAL SHAFT AS SHOWN. COORDINATE EXACT ROUTING OF DUCT WITH STRUCTURE AND OTHER TRADES.
M452	LOCATE ALL REGISTERS SYMMETRICALLY WITH ARCHITECTURAL ELEMENTS. COORDINATE EXACT LOCATIONS WITH STRUCTURE AND OTHER TRADES. ANY REGISTERS LOCATED IN GYP. CEILING ON STRUCTURE SHALL BE PROVIDED WITH RADIATION DAMPERS.

No.	Description	Date
1	Addendum #1	04/21/16

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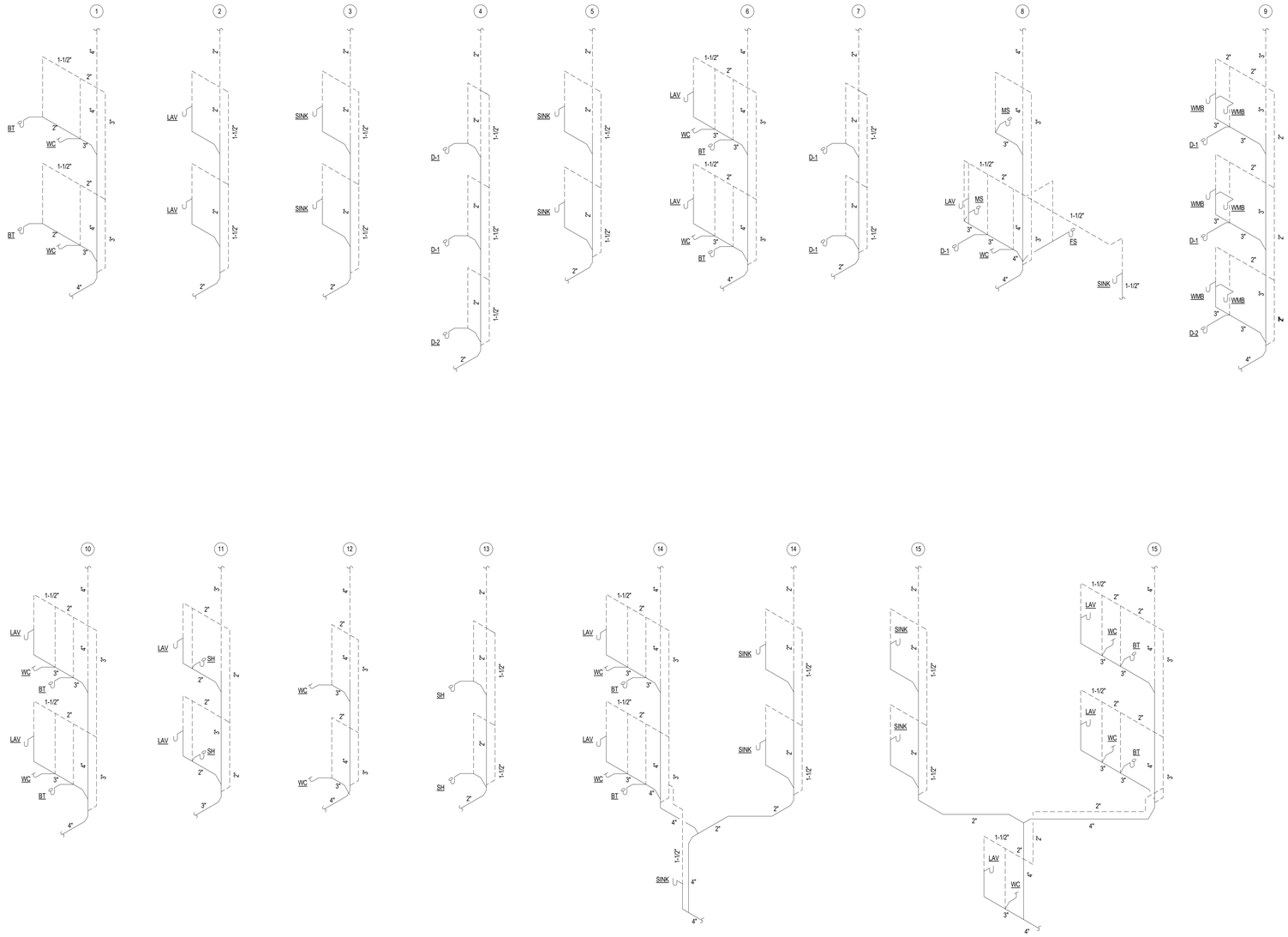
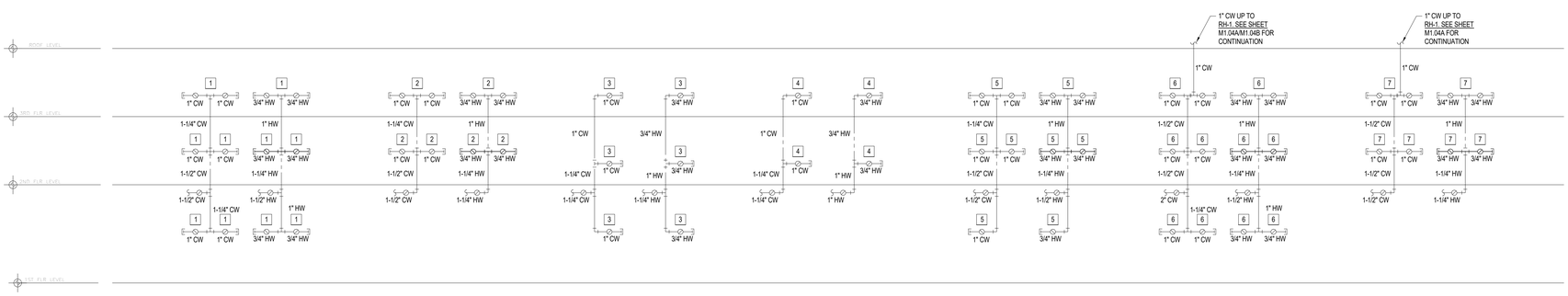


1 M5.01 WASTE AND VENT RISERS
NOT TO SCALE



2 M5.01 DOMESTIC WATER RISERS
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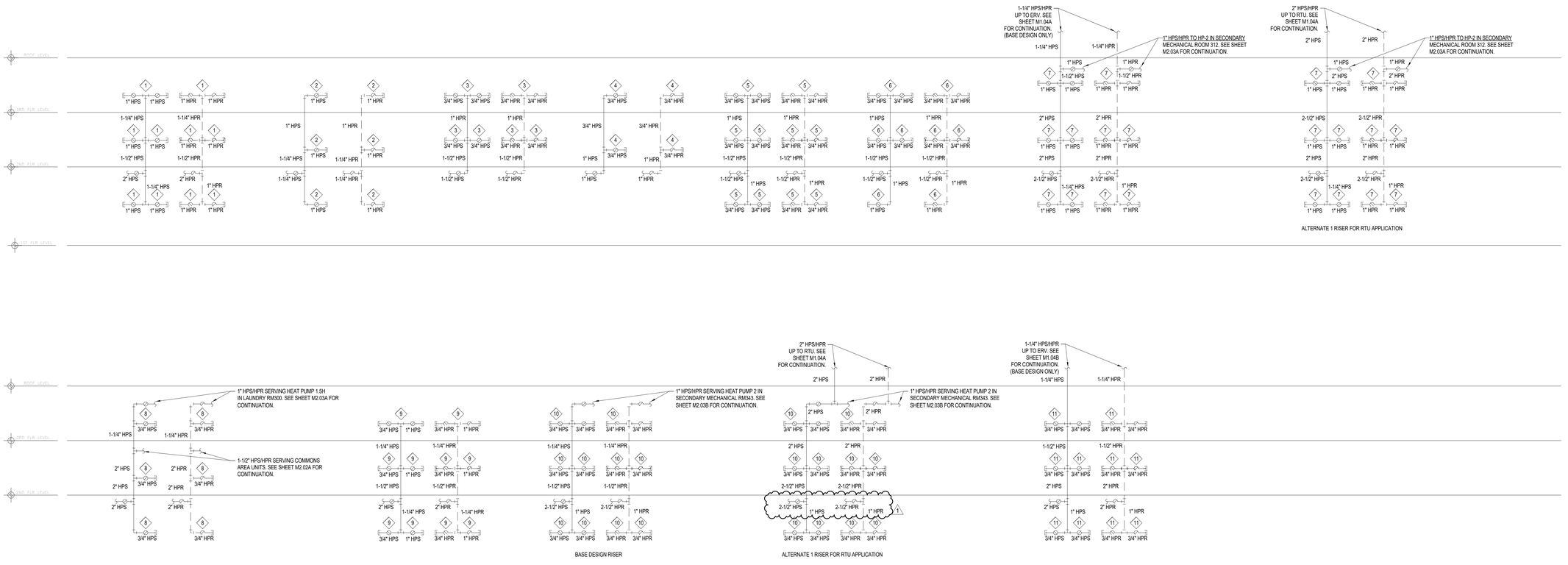

1 M5.02 HEAT PUMP LOOP RISER

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ALTERNATE 1 RISER FOR RTU APPLICATION

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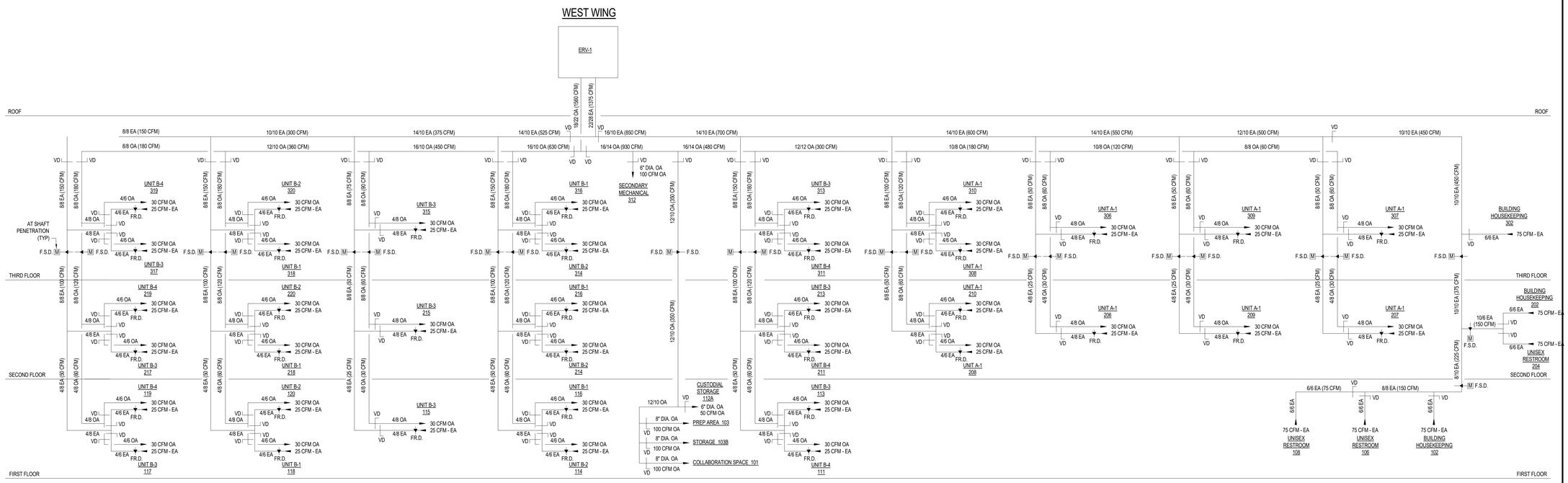

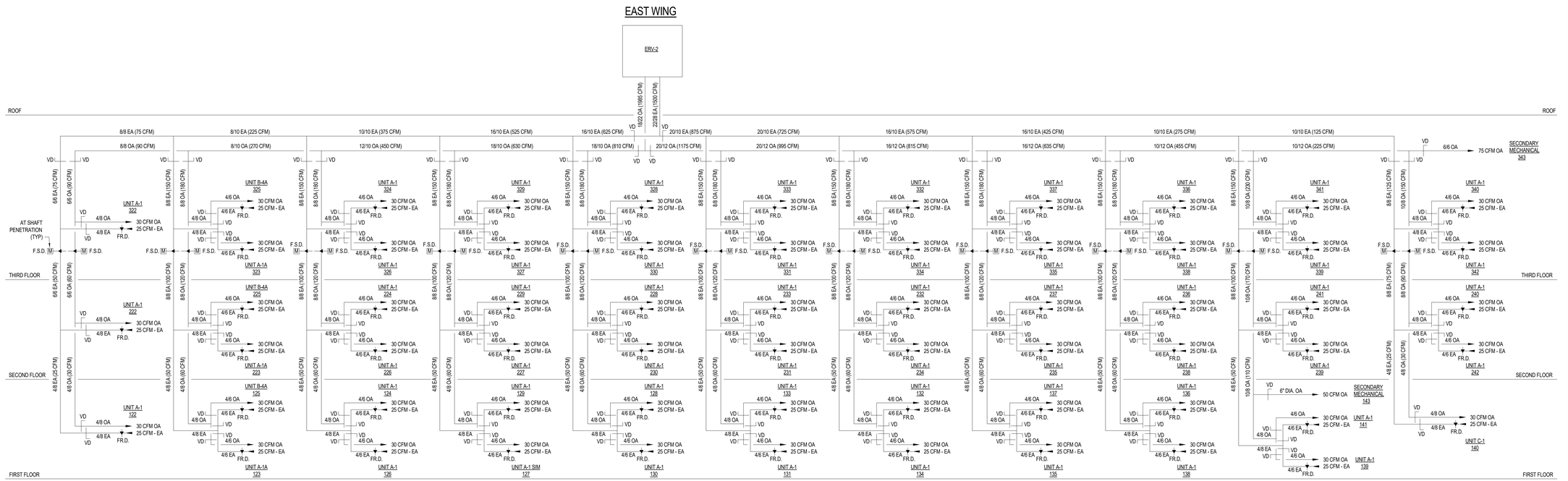

1 M5.03 ERV SUPPLY AND EXHAUST AIR RISER

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No.	Description	Date
1	Addendum #1	04/21/16

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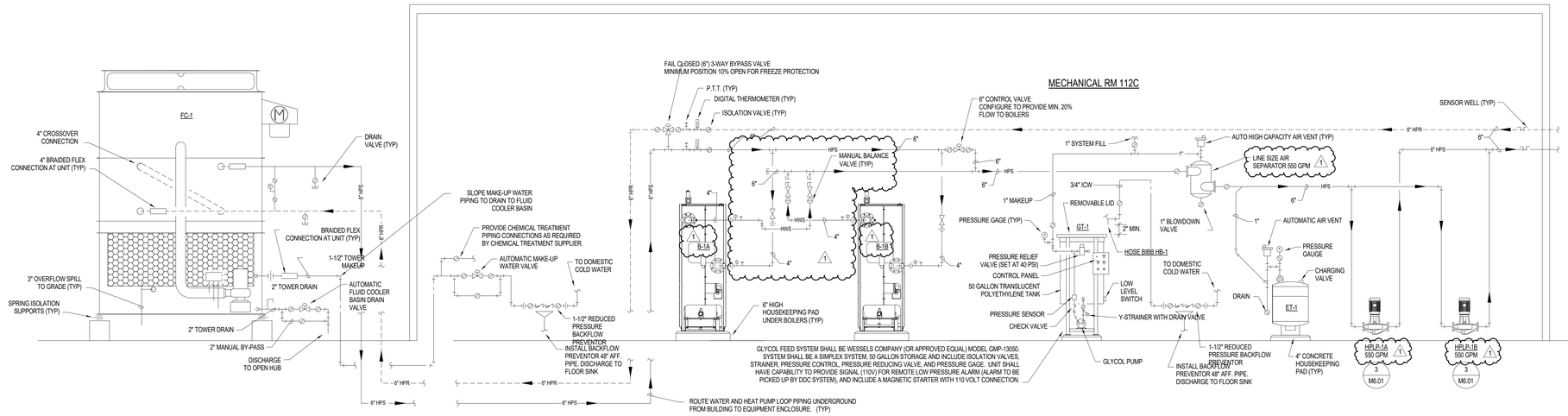

1 M6.01 HEAT PUMP SYSTEM DETAIL

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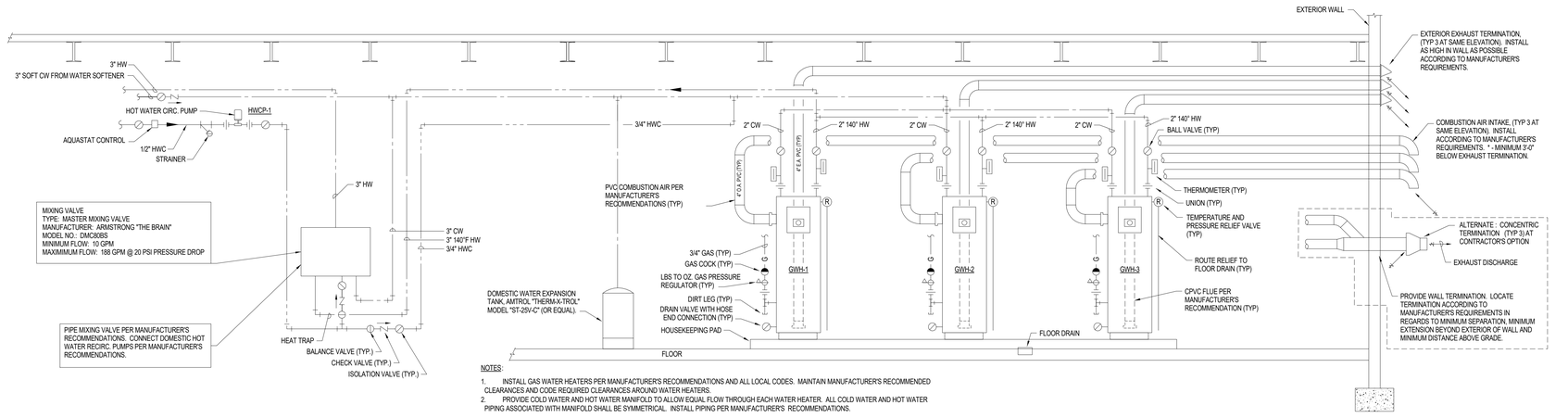
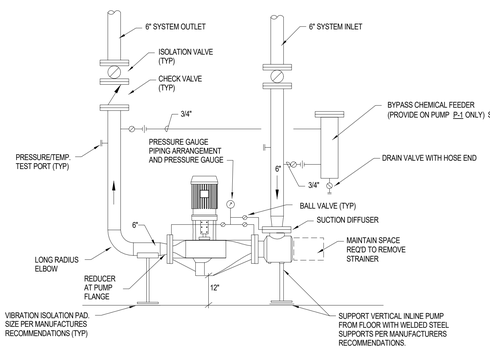


NOTES:

1. INSTALL GAS WATER HEATERS PER MANUFACTURER'S RECOMMENDATIONS AND ALL LOCAL CODES. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES AND CODE REQUIRED CLEARANCES AROUND WATER HEATERS.
2. PROVIDE COLD WATER AND HOT WATER MANIFOLD TO ALLOW EQUAL FLOW THROUGH EACH WATER HEATER. ALL COLD WATER AND HOT WATER PIPING ASSOCIATED WITH MANIFOLD SHALL BE SYMMETRICAL. INSTALL PIPING PER MANUFACTURER'S RECOMMENDATIONS.

2 M6.01 GAS WATER HEATER DETAIL

NOT TO SCALE

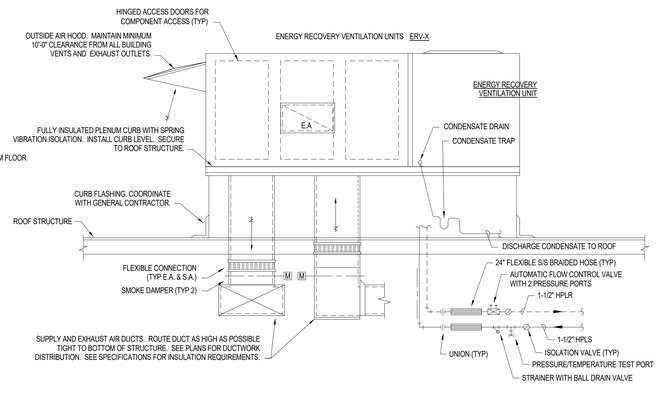


3 M6.01 PUMP PIPING DETAIL

NOT TO SCALE

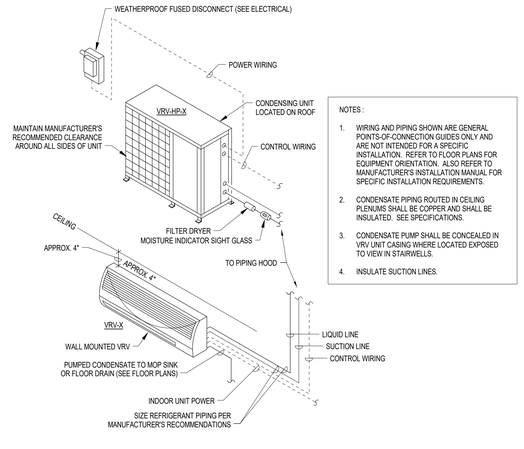
NOTES:

1. UNIT SHALL BE LOCATED ON ROOF. PROVIDE WITH VIBRATION ISOLATING CURB. UNIT HOUSING SHALL BE DESIGNED FOR EXTERIOR, ROOF MOUNTED OPERATION.
2. VERIFY EXACT LOCATION OF UNIT WITH GENERAL CONTRACTOR, STRUCTURE AND ACTUAL UNIT PROVIDED.
3. COORDINATE ALL ROOF WORK WITH GENERAL CONTRACTOR. SEAL ALL PENETRATIONS WEATHER TIGHT.
4. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES AROUND ALL SIDES OF ENERGY RECOVERY VENTILATOR.
5. MANUFACTURER'S STANDARD CONTROLS WITH INTERFACE TO HVAC BAS SYSTEM. SEE SPECIFICATIONS.
6. LOCATE HEAT PUMP PIPING AND AND HOSE KIT IN HEATED SPACE BELOW ROOF. ROUTE HEAT PUMP PIPING UP THROUGH CURB.



4 M6.01 ENERGY RECOVERY VENTILATOR DETAIL

NOT TO SCALE



5 M6.01 WALL-MOUNTED DUCTLESS SPLIT SYSTEM DETAIL

NOT TO SCALE

MEI PROJECT NO: 15273

morrissey engineering inc
mechanical | electrical | lighting | technology | commissioning
4940 North 118th Street
Omaha, NE 68164
P: 402.491.4144
www.morrisseyengineering.com

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note:
do not scale drawings. verify all dimensions and clearances from architectural, structural, shop and other appropriate drawings or at site. lay out and coordinate all work prior to installation to provide clearances required for operation, maintenance, and codes and verify non-interference with other work. do not fabricate prior to verification of clearance for all trades.

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

MECHANICAL DETAILS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

CHRISTOPHER P. REED E-9156 04/01/16 MECHANICAL ENGINEER STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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SHEET: M6.01

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PUMP SCHEDULE

GENERAL	PLAN TAG	HPLP-1A	HPLP-1B	HWCP-1	SP-1	
	MANUFACTURER	BELL & GOSSETT	BELL & GOSSETT	TACO	LIBERTY PUMP	
	MODEL NUMBER	80-SC-5x5x9.5B	80-SC-5x5x9.5B	0013	290	
	SERVES	HPS/R	HPS/R	HWC	ELEVATOR PIT	
	TYPE	INLINE (1)	INLINE (1)	IN-LINE (5)	SUBMERSIBLE	
	ACCESSORIES	-	-		(6)	
PUMP	FLOW (GPM)	550	550	10	50	
	TOTAL HEAD (FEET)	80	80	25	26	
	SHUT-OFF HEAD (FEET)	85	85	30	48	
	NPSH AVAILABLE (FEET)	-	-	-	-	
	MIN. EFFICIENCY	49	49	-	-	
	FLUID	(4)	(4)	WATER	WATER	
	SUCTION SIZE (IN)	5"	5"	1.5"	3450	
	DISCHARGE SIZE (IN)	5"	5"	1.5"	OPEN	
	MAX. IMPELLER DIA. (IN)	9.5	9.5	-	1-1/2"	
MOTOR	RPM	1750	1750	1750	3/4"	
	HP	20	20	1/6	3450	
	VOLTS	208	208	120	3/4	
	PHASE	3	3	1	115	
	TYPE	(2)	(2)	O.D.P.	1	
	CONTROL DEVICE	VFD-P1A	VFD-P1B	AQUASTAT	HERM. SEALED	
	REMARKS	(3)	(3)	-	(2)	
REMARKS					-	

1. VERTICAL INLINE PUMP, SPLIT COUPLED
2. INVERTER DUTY MOTOR FOR VFD APPLICATION
3. PUMPS SIZED FOR 100% EACH (LEAD LAG)
4. 30% PROPYLENE GLYCOL
5. ALL BRONZE FOR DOMESTIC WATER USE
6. PROVIDE ELEVATOR SUMP PUMP WITH FLOAT LEVEL CONTROL AND CORD AND PLUG POWER. PUMP SHALL HAVE STAINLESS STEEL BOTTOM SCREEN, STAINLESS STEEL ROTOR SHAFT, REMOTE "OILTECTOR" ALARM (OIL DETECTION), OIL/WATER DETECTION, AND EPOXY POWER COAT FINISH. SUMP PUMP SHALL BE ASME 17.1 COMPLIANT.
7. PUMP SHALL BE CONTROLLED BY PUMP FLOAT CONTROLS WITH HIGH WATER ALARM.

VARIABLE FREQUENCY DRIVE SCHEDULE

GENERAL	MARK	VFD-HPLP-1A	VFD-HPLP-1B	
	SERVES	HPLP-1A	HPLP-1B	
	LOCATION	(1)	(1)	
ELECTRICAL	MAX. DRIVE OUTPUT CURRENT (AMPS)	99	99	
	VOLTAGE	208	208	
	PHASE	3	3	
	CONNECTED MOTOR HP	20	20	
	MOTOR TYPE	O.D.P.	O.D.P.	
REMARKS		(2)	(2)	

REMARKS

1. SERVING HEAT PUMP LOOP PUMPS
2. VARIABLE FREQUENCY DRIVES SHALL BE SUITABLE FOR HVAC APPLICATIONS. DRIVE SHALL HAVE STANDARD VLT FEATURES PLUS FOLLOWING FEATURES: BYPASS, DISCONNECT, EMI, RFI FILTERS, INPUT AC LINE REACTORS AND AUTOMATIC RESET UPON LOSS OF POWER. SEE MECHANICAL SPECIFICATIONS.

TANK SCHEDULE

PLAN TAG	AS-1	ET-1	GT-1	
MANUFACTURER	SPIROTHERM	WESSELS	WESSELS	
MODEL NUMBER	VHN600	NLA - 200	GMP-13050	
SERVES	HPS/R	HP WATER	HP WATER	
CONFIGURATION	IN-LINE	(1)	(2)	
MAX. WEIGHT (LBS)	550	300	-	
SIZE (IN.)	6"	24"-DIA x 43"	28"-DIA x 42"	
TANK CAPACITY (GALS.)	-	53	50	
ACCEPTANCE CAPACITY (GALS.)	-	53	-	
REMARKS	(4)	-	(3)	

REMARKS

1. REPLACEABLE BLADDER TYPE PRESSURIZED EXPANSION TANK.
2. GLYCOL MAKE-UP PACKAGE. COMPLETE CONTROL SYSTEM INCLUDING PRESSURE CONTROL FOR MAKE-UP. COMPLETE WITH ISOLATION VALVES, STRAINER AND PRESSURE REDUCING VALVE. POLYETHYLENE SOLUTION TANK WITH LID. PUMP WITH 115V, 1-PH MOTOR.
3. COORDINATE 115V, 1-PH ELECTRICAL CONNECTIONS WITH ELECTRICAL CONTRACTOR.
4. COMBINATION AIR DIRT SEPARATOR WITH AUTOMATIC AIR VENT, 6" FLANGED CONNECTIONS. REMOVABLE LOWER HEAD TO FACILIATE REMOVAL OF INTERNAL MEDIA FOR INSPECTION OR CLEANING. MAXIMUM PRESSURE DROP AT 625 GPM / 4.0 FT WC.

DIFFUSER REGISTER AND GRILLE SCHEDULE

PLAN TAG	D - 1	R - 1	R - 2	R - 3	G - 1	G - 2	G - 3	G - 4	G - 5	L-1
MANUFACTURER	KRUEGER (1)	KRUEGER (1)	KRUEGER (1)	KRUEGER (1)	KRUEGER (1)	KRUEGER (1)	KRUEGER (1)	KRUEGER (1)	KRUEGER (1)	RUSKIN
MODEL NUMBER	PLQ	880H	880H	880H	S80H	S80H	S80H	6490	6490	ELF-375DX
FUNCTION	SUPPLY	SUPPLY	SUPPLY	SUPPLY	RETURN / EXH.	RETURN / EXH.	RETURN / EXH.	RETURN	RETURN	OUTSIDE AIR
DESCRIPTION	DIFFUSER	REGISTER	REGISTER	REGISTER	GRILLE	GRILLE	GRILLE	PERFORATED	PERFORATED	LOUVER
DEFLECTION	4-WAY	DOUBLE	DOUBLE	DOUBLE	FIXED - 35°	FIXED - 35°	FIXED - 35°	-	-	-
MAXIMUM STATIC PRESSURE (IN W.G.)	0.10	0.10	0.10"	0.10"	0.10	0.10	0.10	0.10	0.10	0.10
CONSTRUCTION MATERIAL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	ALUMINUM
FINISH	WHITE (2)	WHITE (2)	WHITE (2)	WHITE (2)	WHITE (2)	WHITE (2)	WHITE (2)	WHITE (2)	WHITE (2)	(7)
NECK SIZE (IN)	SEE PLANS	8" x 6"	6" x 6"	SEE PLANS	6" x 6"	12" x 12"	SEE PLANS	12" x 12"	22" x 22"	-
FACE SIZE (IN)	24" x 24"	NECK + 1-1/4"	NECK + 1-3/4"	NECK + 1-3/4"	NECK + 1-3/4"	NECK + 1-3/4"	NECK + 1-3/4"	24" x 24"	24" x 24"	SEE PLANS
ACCESSORIES	(5)	(5, 6)	(5, 6)	(5, 6)	(6)	(6)	(6)	(6)	(6)	-
REMARKS	(3, 4)	(3, 4)	(3, 4)	(3, 4)	(3, 4)	(3, 4)	(3, 4)	(3, 4)	(3, 4)	(8, 9, 10)

REMARKS

1. ACCEPTABLE MANUFACTURERS: KRUEGER, PRICE, TITUS, US AIRE, HART AND COOLEY
2. STANDARD FINISH SHALL BE WHITE, COORDINATE FINAL COLOR WITH ARCHITECT.
3. VERIFY CEILING/WALL CONSTRUCTION PRIOR TO FURNISHING MATERIAL. PROVIDE APPROPRIATE ACCESSORIES TO FOR SPECIFIC CEILING ASSEMBLIES.
4. NOISE CRITERIA (NC) SHALL BE LESS THAN 25 ON DIFFUSERS, REGISTERS AND GRILLES LOCATED IN OCCUPIED SPACES.
5. O.B. DAMPER
6. CEILING RADIATION DAMPER WHEN LOCATED IN RATED MEMBRANE.
7. COORDINATE COLOR AND FINISH WITH ARCHITECT.
8. BEGINNING POINT OF WATER PENETRATION (FACE VELOCITY) SHALL NOT EXCEED 800 FEET PER MINUTE.
9. COORDINATE EXACT SIZE WITH STRUCTURAL ELEMENTS.
10. INSTALLED IN EXTERIOR WALL. VERIFY WALL CONSTRUCTION BEFORE PROVIDING MATERIAL. MAINTAIN MESH ALUMINUM INSECT SCREEN PROVIDED AS STANDARD FEATURE WITH VENT / LOUVER.

WATER SOURCE HEAT PUMP SCHEDULE

GENERAL	PLAN TAG	HP-1	HP-1.5	HP-2	HP-2.5	HP-3	HP-1.5 H	HP-2.5 H	HP-3 H	HP-3.5 H
	MANUFACTURER	FHP	FHP	FHP	FHP	FHP	FHP	FHP	FHP	FHP
	MODEL NUMBER	LV 015-1-VT (1)	LV 018-1-VT (1)	LV 024-1-VT (1)	LV 030-1-VT (1)	LV 036-1-VT (1)	LV 018-1-HZ (1)	LV 030-1-HZ (1)	LV 036-1-HZ (1)	LV 042-1-HZ (1)
	SERVES	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS
	CONFIGURATION	(2)	(2)	(2)	(2)	(2)	(3)	(3)	(3)	(3)
	MAXIMUM SIZE (LxWxH)(IN)	22 x 22 x 33	22 x 22 x 33	22 x 22 x 40	22 x 22 x 40	26 x 22 x 44	22 x 43 x 17	22 x 43 x 17	22 x 55 x 19	22 x 55 x 19
	MAXIMUM WEIGHT (LBS.)	200	200	200	225	250	200	200	250	250
	REMARKS	(7, 8, 9)	(7, 8, 9)	(7, 8, 9)	(7, 8, 9)	(7, 8, 9)	(7, 8, 9, 10)	(7, 8, 9, 10)	(7, 8, 9, 10)	(7, 8, 9, 10)
WATER (9)	WATER FLOW (GPM)	4.0	5.0	6.0	7.0	9.0	5.0	7.0	9.0	10.0
	MAX. WATER PRESS. DROP HTG. (FEET)	21.0	18.5	16.6	14.0	12.5	18.5	14.0	12.5	15.2
	HOSE KIT SIZE (IN)	3/4"	3/4"	3/4"	1"	1"	3/4"	3/4"	3/4"	3/4"
AIRFLOW	TOTAL AIRFLOW (CFM) (BLOWER SPEED)	400 (4)	600 (4)	800 (4)	1000 (4)	1200 (4)	600 (4)	1000 (4)	1200 (4)	1400 (4)
	MINIMUM OUTSIDE AIRFLOW (CFM)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
	EXTERNAL STATIC PRESSURE (IN. WC)	0.65	0.65	0.50	0.51	0.51	0.65	0.65	0.65	0.65
ELECTRICAL	VOLTS	208	208	208	208	208	208	208	208	208
	PHASE	1	1	1	1	1	1	1	1	1
	MAXIMUM FUSE SIZE (AMPS)	15	15	15	25	30	15	25	30	35
	MINIMUM CIRCUIT AMPACITY (MCA)	9.8	10.9	12.1	15.2	20.4	10.9	15.2	20.4	23.0
	REMARKS	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)
COOLING (9)	ENTERING AIR TEMP. (DB/WB)(°F)	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67
	MINIMUM NET EER (ARI) (6)	13.8	14.0	13.5	15.0	16.0	15.0	16.0	16.0	16.0
	TOTAL COOLING (MBH)	14.2	20.8	24.1	31.5	38.0	20.8	31.5	38.0	42.0
	SENSIBLE COOLING (MBH)	11.1	14.8	17.7	23.9	28.4	14.8	23.9	28.4	31.4
	ENTERING WATER TEMP. (°F)	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0
	LEAVING WATER TEMP. (°F)	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
HEATING (9)	ENTERING AIR TEMP. (°F)	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
	MINIMUM HEATING CAPACITY (MBH)	10.7	18.0	21.5	26.6	33.9	18.0	26.6	33.9	39.3
	ENTERING WATER TEMP. (°F)	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
	LEAVING WATER TEMP. (°F)	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0

REMARKS

1. FLORIDA HEAT PUMP LV MODEL WATER SOURCE HEAT PUMP. ALTERNATE MANUFACTURERS ARE ALLOWED PER SPECIFICATIONS BUT MUST FIT IN THE CLOSETS AND STRUCTURAL SPACE AVAILABLE FOR THE PROJECT.
2. VERTICAL WATER SOURCE HEAT PUMP (R-410a REFRIGERANT) - SEE FLOOR PLANS FOR DUCT CONFIGURATION.
3. HORIZONTAL WATER SOURCE HEAT PUMP (R-410A REFRIGERANT) - SEE FLOOR PLANS FOR DUCT CONFIGURATION.
4. NOMINAL AIRFLOW INDICATED. SEE FLOOR PLAN FOR AIRFLOW.
5. OUTSIDE AIR SYSTEM SUPPLIES CONDITIONED OUTSIDE AIR TO THE RETURN AIR PLENUM TO MEET CODE REQUIRED VENTILATION REQUIREMENTS. BALANCE OUTSIDE AIR TO 30 CFM UNLESS NOTED OTHERWISE ON PLANS.
6. PROVIDE HEAT PUMP WITH SINGLE POINT ELECTRICAL CONNECTION AND INTEGRAL DISCONNECT. CONDENSATE PUMP, IF REQUIRED AT HEAT PUMP REQUIRES SEPARATE ELECTRICAL CONNECTION.
7. WATER PRESSURE DROP AND UNIT COOLING AND HEATING CAPACITIES ARE BASED ON 30% PROPYLENE GLYCOL.
8. PROVIDE CONDENSATE PUMP WITH EACH HEAT PUMP, LITTLE GIANT, VCMA20, 1/30 HP, 1.5 AMPS@115VOLT OR EQUAL WHERE REQUIRED FOR CONDENSATE DRAINAGE. SEE PLANS.
9. PROVIDE HEAT PUMP WITH THE FOLLOWING FEATURES / OPTIONS :
   - 9.1. INTEGRAL ELECTRICAL DISCONNECT
   - 9.2. EXTENDED TEMPERATURE RANGE FOR GEOTHERMAL OPERATION (ALL HVAC SYSTEM OPTIONS)
   - 9.3. 1/2" CASING INSULATION
   - 9.4. INTEGRAL CONDENSATE OVERFLOW SWITCH TO SHUTDOWN UNIT UPON DETECTION OF HIGH CONDENSATE LEVEL
   - 9.5. HANGING BRACKETS AND RUBBER ISOLATORS TO SUSPEND AND ISOLATE UNIT FROM BUILDING STRUCTURE FOR HORIZONTAL UNITS
   - 9.6. SINGLE POINT ELECTRICAL CONNECTION
   - 9.7. 2" FILTER RACK
   - 9.8. HOSE KIT (FLEXIBLE HOSES, P/T PORTED BALL VALVE, Y-STRAINER WITH BLOW DOWN VALVE AND HOSE CONNECTION, FLOW VALVE WITH INLET AND OUTLET P/T PORTS, BALL VALVE AND UNIONS), 2-POSITION CONTROL VALVE PROVIDED BY TEMPERATURE CONTROL CONTRACTOR (SLOW CLOSING/FAST OPENING). HOSES SHALL HAVE SWIVEL UNIONS INSTALLED ON HEAT PUMP CONNECTION SIDE. PROVIDE 2 POSITION ISOLATION VALVE.
   - 9.9. COMPRESSOR BLANKETS AND MASS PLATE UNDER COMPRESSOR
   - 9.10. BAS INTERFACE. SEE SPECIFICATION SECTIONS 20900 - HVAC INSTRUMENTATION AND CONTROLS AND 230933 - SEQUENCE OF OPERATION FOR HVAC CONTROLS.
   - 9.11. PROVIDE HEAT PUMP WITH 5-YEAR COMPRESSOR WARRANTY.
10. HEAT PUMP FAN TO RUN CONTINUOUSLY (ADJUSTABLE) DURING BUILDING OCCUPIED HOURS IN AREA B1/B2 (AREAS WITH VENTILATION SERVED BY ERV-1 & ERV-2 UNDER BASE DESIGN.)

BOILER SCHEDULE

GENERAL	PLAN TAG	B-1A & -1B	B-2A & -2B (7)	
	MANUFACTURER	AERCO	AERCO	
	MODEL NUMBER	BMK 2000	BMK 1000	
	SERVES	HPS/HPR	HPS/HPR	
	TYPE	CONDENSING	CONDENSING	
	MAXIMUM SIZE (WxLxH) (IN.)	28 x 56 x 78	28 x 25 x 78	
	MAXIMUM OPERATING WEIGHT (LBS)	1,900	1,000	
	DESIGN PRESSURE (PSIG)	160	160	
	REMARKS	(1, 4, 5)	(1, 4, 5)	
BURNER	FUEL	NAT. GAS	NAT. GAS	
	INPUT (MBH)	2,000	1,000	
	OUTPUT (MBH) @ (50°F EWT)	1,860	960	
	EFFICIENCY (AFUE)	(2)	(2)	
	VENT CONNECTION / INLET (IN.)	8	6	
	BURNER MOTOR HP	-	-	
	VOLTAGE/PHASE	120/1 (3)	120/1 (3)	

REMARKS

1. PROVIDE BOILER WITH MODULAR BOILER CONTROL PANEL. BOILER CONTROLS MUST INTERFACE WITH BUILDING AUTOMATION SYSTEM. SEE SPEC. 230900 - HVAC INSTRUMENTATION AND CONTOLS.
2. THERMAL EFFICIENCY = 94% (100%) INPUT @ 60°F RETURN WATER TEMPERATURE.
3. 9 AMP FLA
4. LISTINGS AND APPROVALS UL, CSD-1, ASME
5. PROVIDE 10:1 TURNDOWN RATIO (MINIMUM) AND CONDENSATE NEUTRALIZATION KIT.
6. WATER PRESSURE DROP AND PERFORMANCE BASED ON 30% PROPYLENE GLYCOL.
7. IF HVAC ALTERNATE 03 IS SELECTED, BOILERS (B-2A & B-2B) REPLACE BASE BID BOILERS (B-1A & B-1B).

FLUID COOLER SCHEDULE

GENERAL	PLAN TAG	FC-1	FC-2 (7)
	MANUFACTURER	EVAPCO	EVAPCO
	MODEL NUMBER	ATWB 9-4H21	ATWB 9-3I11-Z
	SERVES	HPLS / HPLR	HPLS / HPLR
	CONFIGURATION	(1)	(1)
	MAXIMUM SIZE (LxWxH) (FT.)	21' x 8'-6" x 13'	12' x 8'-6" x 11'-6"
	MAXIMUM WEIGHT (LBS.)	35,000	20,000
	ACCESSORIES	(2)	(2)
COOLING	NOMINAL CAPACITY (TONS)	225 (4, 5, 6)	120 (4, 5, 6)
	AMBIENT AIR TEMP. (WB/DB)(°F)	95° / 78°	95° / 78°
	AIRFLOW (CFM)	81,300	45,900
	WATER FLOW (GPM)	540	275
	ENTERING WATER TEMP. (°F)	95	95
	LEAVING WATER TEMP. (°F)	85	85
FAN MOTOR	RPM	-	-
	HP	2 @ 7.5 / EA	1 @ 10.0 / EA
	VOLTS	208	208
	PHASE	3	3
	TYPE	-	-
	CONTROL DEVICE	-	-
	REMARKS	-	-
PUMP MOTOR	RPM	-	-
	HP	1 @ 7.5	1 @ 3.0
	VOLTS	208	208
	PHASE	3	3
	TYPE	-	-
	CONTROL DEVICE	(3)	(3)
	REMARKS	-	-

REMARKS

1. INDUCED DRAFT, COUNTERFLOW, CLOSED CIRCUIT FLUID COOLER, WITH ABILITY TO RUN DRY, WITHOUT WATER TO PROVIDE FULL OR PARTIAL HEAT REJECTION
2. STAINLESS STEEL SUMP
3. PROVIDE CERUS TOWER IQ SINGLE POINT COOLING TOWER CONTROLLER OR EQUAL. CONTROLLER ALLOWS SINGLE POINT ELECTRICAL CONNECTION TO FLUID COOLING TOWER, HOA FOR FAN AND PUMP, STARTERS FOR PUMP AND FAN, INTEGRAL VFD FOR FAN, INTEGRAL DISCONNECT AND BYPASS. MUST BE COMPATIBLE WITH BUILDING HVAC INSTRUMENTATION AND CONTROLS SYSTEM.
4. FIN DESIGN TO ACCOMMODATE DRY OPERATION.
5. CAPABLE OF OPERATING WITHOUT WATER BELOW 46.9°F TO RECEIVE FULL LOAD COOLING. CAPABLE OF OPERATING WITH OUT WATER BELOW 61.1°F TO PROVIDE 320 GPM WATER FLOW, NOMINAL 100 TONS OF COOLING.
6. FLUID COOLING TOWER SIZED FOR USE WITH 30% PROPYLENE GLYCOL.
7. IF HVAC ALTERNATE 03 IS SELECTED, FLUID COOLER (FC-2) REPLACES BASE BID FLUID COOLER (FC-1).

ENERGY RECOVERY VENTILATION UNIT SCHEDULE

GENERAL	PLAN TAG	ERV-1	ERV-2	
	MANUFACTURER	VALENT	VALENT	
	MODEL NUMBER	VPRE-110	VPRE-110	
	SERVES	(1)	(1)	
	SIZE (LxWxH) (IN)	180 x 58 x 68	180 x 58 x 68	
	CONFIGURATION	(2, 7)	(2, 7)	
	REMARKS	(4, 5)	(4, 5)	
SUPPLY FAN	TOTAL AIRFLOW (CFM)	1,560	1,985	
	EXTERNAL STATIC PRESSURE (IN. W.C.)	1.00	1.00	
	MAXIMUM FAN RPM	1,953	2,067	
	MAXIMUM FAN BHP	0.88	1.07	
	REMARKS	(6)	(6)	
SUPPLY FAN MOTOR	RPM	1,953	2,067	
	HP	1.0	1.50	
	VOLTS	208	208	
	PHASE	3	3	
EXHAUST FAN	TOTAL AIRFLOW (CFM)	1,375	1,500	
	EXTERNAL STATIC PRESSURE (IN. W.C.)	1.00	1.00	
	MAXIMUM FAN RPM	1,865	1,943	
	MAXIMUM FAN BHP	0.43	0.50	
	REMARKS	(6)	(6)	
EXHAUST FAN MOTOR	RPM	1,865	1,943	
	HP	0.50	0.75	
	VOLTS	208	208	
	PHASE	3	3	
ERU COOLING AIR	ENTERING AIR TEMP DB/WB (°F)	95 / 78	95 / 78	
	LEAVING AIR TEMP DB/WB (°F)	83 / 70 (9)	83 / 70 (9)	
	RETURN AIR TEMP DB/WB (°F)	75 / 62	75 / 62	
	TOTAL CAPACITY (MBH)	-	-	
ERU HEATING AIR	ENTERING AIR TEMP (°F)	- 8	- 8	
	LEAVING AIR TEMP (°F)	38 (10)	38 (10)	
	RETURN AIR TEMP DB/WB (°F)	72 / 56	72 / 56	
	TOTAL CAPACITY (MBH)	-	-	
HEAT PUMP WATER	WATER FLOW (GPM)	15.0 (8)	15.0 (8)	
	MAX. WATER PRESS. DROP (FEET)	9.30	9.30	
	HOSE KIT SIZE (IN)	1"	1"	
HEAT PUMP COOLING	ENTERING AIR TEMP. (DB/WB)(°F)	83 / 70 (9)	83 / 70 (9)	
	MINIMUM NET EER (ARI)	-	-	
	TOTAL COOLING (MBH)	62.9	65.2	
	SENSIBLE COOLING (MBH)	39.1	42.1	
	ENTERING WATER TEMP. (°F)	85	85	
	LEAVING WATER TEMP. (°F)	96	96	
HEAT PUMP HEATING	ENTERING AIR TEMP. (°F)	38 (10)	38 (10)	
	MINIMUM HEATING CAPACITY (MBH)	47.9	48.3	
	ENTERING WATER TEMP. (°F)	70	70	
	LEAVING WATER TEMP. (°F)	62	62	
ELECTRICAL	VOLTS	208	208	
	PHASE	3	3	
	MAXIMUM FUSE SIZE (AMPS)	60	70	
	MINIMUM CIRCUIT AMPACITY (MCA)	53.6	56.1	
	REMARKS	(3)	(3)	

REMARKS

1. ERV-1 SERVES WEST WING ; ERV-2 SERVES EAST WING.
2. OUTSIDE AIR VENTILATION UNIT WITH EXHAUST FAN, SUPPLY FAN, ENERGY RECOVERY ENTHALPY WHEEL, INTEGRAL WATER SOURCE HEAT PUMP AND HOT GAS REHEAT.
3. PROVIDE WITH INTEGRAL DOOR INTERLOCKING DISCONNECT SWITCH, MOTOR STARTERS, CONTROL CIRCUIT FUSING, AND CONTROL TRANSFORMER FOR 24 VAC CIRCUIT AS STANDARD COMPONENTS IN THE CONTROL CENTER.
4. INTEGRAL CONTROLS TO MAINTAIN DISCHARGE AIR TEMPERATURE, HUMIDITY AND PROVIDE DEFROST CONTROL. UNIT SHALL RUN CONTINUOUSLY. CONTROLS SHALL INTERFACE WITH BUILDING HVAC INSTRUMENTATION AND CONTROLS. SEE SPECIFICATION 230900 - HVAC INSTRUMENTATION AND CONTROLS.
5. REMOTE LOCATED CONTROL PANEL WITH THE FOLLOWING :
   - A. DIRTY SUPPLY AND EXHAUST FILTER INDICATORS
   - B. UNIT ON/OFF INDICATOR
   - C. ROTATION SENSOR INDICATOR
   - D. FROST CONTROL INDICATOR
   - E. 2-POSITION ON/OFF SWITCH
   - F. INTERFACE WITH BUILDING TEMPERATURE CONTROL SYSTEM
6. PROVIDE THE FOLLOWING :
   - A. 2" PLEATED AIR FILTER
   - B. ENTHALPY TYPE ENERGY RECOVERY WHEEL
   - C. AIRFOIL FANS
   - D. MOTORIZED EXHAUST & OUTDOOR AIR INTAKE DAMPERS
7. UNIT HOUSING SHALL BE DESIGNED FOR EXTERIOR, ROOF MOUNTED OPERATION. PROVIDE WITH VIBRATION ISOLATING CURB.
8. HEAT PUMP WATER SHALL RUN CONTINUOUSLY THROUGH THE UNIT. NO CONTROL VALVE SHALL BE PROVIDED WITH THIS UNIT.
9. COOLING OPERATION TEMPERATURES :
   - 9.1. ENTERING ENERGY RECOVERY WHEEL: 95 DB/ 78 WB
   - 9.2. LEAVING ENERGY RECOVERY WHEEL: 83 DB/ 70 WB
   - 9.3. LEAVING HEAT PUMP COIL: 59 DB/ 57 WB
   - 9.4. SUPPLY TEMPERATURE: 70°F ADJUSTABLE (AFTER REHEAT)
10. HEATING OPERATION TEMPERATURES :
    - 10.1. ENTERING ENERGY RECOVERY WHEEL : -8°F DB
    - 10.2. LEAVING ENERGY RECOVERY WHEEL : 38°F DB
    - 10.3. LEAVING HEAT PUMP COIL : 78°F MAXIMUM ADJUSTABLE. INITIAL SETTING 70°F.

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

MECHANICAL SCHEDULES

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MEI PROJECT NO: 15273

morrissey engineering inc
mechanical | electrical | lighting | technology | commissioning
4940 North 118th Street
Omaha, NE 68164
P: 402.491.4144
www.morrisseyengineering.com

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ROOF-TOP UNIT SCHEDULE (ALTERNATE 01)

	PLAN TAG	RTU-1A & _1B		
GENERAL	MANUFACTURER	VALENT		
	MODEL NUMBER	VPRX-110-10H		
	SERVES	(1)		
	SIZE (LxWxH) (IN)	135 x 58 x 70		
	CONFIGURATION	(2, 3)		
	REMARKS	(5, 6)		
SUPPLY FAN	TOTAL AIRFLOW (CFM)	2,000		
	EXTERNAL STATIC PRESSURE (IN. W.C.)	1.00		
	MAXIMUM FAN RPM	1,849		
	MAXIMUM FAN BHP	0.84		
	REMARKS	(7)		
SUPPLY FAN MOTOR	RPM	1,849		
	HP	1.00		
	VOLTS	208		
	PHASE	3		
EXHAUST FAN	TOTAL AIRFLOW (CFM)	1,000		
	EXTERNAL STATIC PRESSURE (IN. W.C.)	1.15		
	MAXIMUM FAN RPM	1,936		
	MAXIMUM FAN BHP	0.29		
	REMARKS	(7)		
EXHAUST FAN MOTOR	RPM	1,936		
	HP	0.50		
	VOLTS	208		
	PHASE	3		
HEAT PUMP WATER	WATER FLOW (GPM)	30.0 (8)		
	MAX. WATER PRESS. DROP (FEET)	11.70		
	HOSE KIT SIZE (IN)	1.25"		
HEAT PUMP COOLING	ENTERING AIR TEMP. (DB/WB)(°F)	83 / 70 (9)		
	MINIMUM NET EER (ARI)	12.7		
	TOTAL COOLING (MBH)	121.5		
	SENSIBLE COOLING (MBH)	69.2		
	ENTERING WATER TEMP. (°F)	85		
	LEAVING WATER TEMP. (°F)	95		
HEAT PUMP HEATING	ENTERING AIR TEMP. (°F)	- 8 (10)		
	MINIMUM HEATING CAPACITY (MBH)	94.4		
	ENTERING WATER TEMP. (°F)	32		
	LEAVING WATER TEMP. (°F)	27		
ELECTRICAL	VOLTS	208		
	PHASE	3		
	MAXIMUM FUSE SIZE (AMPS)	80		
	MINIMUM CIRCUIT AMPACITY (MCA)	49.3		
	REMARKS	(4)		

REMARKS

1. RTU-1A SERVES EAST WING ; RTU-1B SERVES WEST WING.
2. PACKAGED ROOFTOP UNIT WITH SUPPLY FAN, INTEGRAL WATER SOURCE HEAT PUMP AND HOT GAS REHEAT.
3. UNIT HOUSING SHALL BE DESIGNED FOR EXTERIOR, ROOF MOUNTED OPERATION. PROVIDE WITH VIBRATION ISOLATING CURB.
4. PROVIDE WITH INTEGRAL DOOR INTERLOCKING DISCONNECT SWITCH, MOTOR STARTERS, CONTROL CIRCUIT FUSING, AND CONTROL TRANSFORMER FOR 24 VAC CIRCUIT AS STANDARD COMPONENTS IN THE CONTROL CENTER.
5. INTEGRAL CONTROLS TO MAINTAIN THERMOSTAT SETPOINT AND SPACE HUMIDITY SETPOINT. UNIT SHALL RUN CONTINUOUSLY. CONTROLS SHALL INTERFACE WITH BUILDING HVAC INSTRUMENTATION AND CONTROLS. SEE SPECIFICATION 230900 - HVAC INSTRUMENTATION AND CONTROLS.
6. REMOTE LOCATED CONTROL PANEL WITH THE FOLLOWING :
   A. DIRTY SUPPLY FILTER INDICATOR
   B. UNIT ON/OFF INDICATOR
   C. 2-POSITION ON/OFF SWITCH
   D. INTERFACE WITH BUILDING TEMPERATURE CONTROL SYSTEM
7. PROVIDE THE FOLLOWING :
   A. 2" PLEATED AIR FILTER
   B. AIRFOIL FANS
   C. MOTORIZED OUTDOOR AIR INTAKE DAMPER
8. HEAT PUMP WATER SHALL RUN CONTINUOUSLY THROUGH THE UNIT. NO CONTROL VALVE SHALL BE PROVIDED WITH THIS UNIT.
9. COOLING OPERATION TEMPERATURES :
   9.1. ENTERING UNIT: 95 DB/ 78 WB
   9.2. LEAVING HEAT PUMP COIL: 59 DB/ 57 WB
   9.3. REHEAT OPERATES AS NECESSARY IF THERMOSTAT SETPOINT IS SATISFIED TO REMOVE HUMIDITY
10. HEATING OPERATION TEMPERATURES :
   10.1. ENTERING UNIT : -8°F DB

FAN SCHEDULE (ALTERNATE 01)

	PLAN TAG	EF-1	EF-2	EF-3	EF-4	
GENERAL	MANUFACTURER	BROAN	GREENHECK	GREENHECK	GREENHECK	
	MODEL NUMBER	80RDF	CSP-A290	CSP-A200	SP-B110	
	SERVES	(1)	(4)	(5)	(6)	
	TYPE	CEILING	INLINE	INLINE	CEILING	
	MAXIMUM WEIGHT (LBS)	15	30	30	25	
	ROOF/WALL OPENING SIZE	12"X10"	-	-	-	
	ACCESSORIES	(2)	(8)	(8)	(8)	
FAN	AIRFLOW (CFM)	50	225	150	75	
	TOTAL SP (IN. W.C.)	0.50	0.50	0.50	0.50	
	CLASS	-	-	-	-	
	WHEEL TYPE	-	-	-	-	
	MINIMUM WHEEL DIA.	-	-	-	-	
	MAXIMUM SONES	2.5	4.0	2.0	2.0	
	MAXIMUM FAN RPM	-	-	-	-	
	MAXIMUM FAN BHP	-	-	-	-	
MOTOR	RPM	-	1050	900	950	
	HP	-	-	-	-	
	VOLTS	120	120	120	120	
	PHASE	1	1	1	1	
	TYPE	-	-	-	-	
	CONTROL DEVICE	(3)	(7)	(7)	(7)	
	REMARKS	-	-	-	-	

REMARKS

1. RESIDENTIAL UNIT BATHROOMS.
2. RADIATION DAMPER, PLASTIC INTAKE GRILLE, DISCHARGE DUCT COLLAR, INTEGRAL DISCONNECT, GRAVITY BACKDRAFT DAMPER, AND WALL OR ROOF CAP.
3. WALL SWITCH AND HUMIDITY SENSOR BY ELECTRICAL CONTRACTOR
4. VENTILATION ALTERNATE #1 - 1ST FLOOR CORE AREA, DWG 2, SHEET M1A.01.
5. VENTILATION ALTERNATE #1 - 2ND FLOOR CORE AREA, DWG 2, SHEET M1A.02.
6. VENTILATION ALTERNATE #1 - 3RD FLOOR CORE AREA, DWG 2, SHEET M1A.02.
7. CONTINUOUS OPERATION.
8. INTAKE AND DISCHARGE DUCT COLLARS, INTEGRAL DISCONNECT, GRAVITY BACKDRAFT DAMPER, AND WALL CAP.

WATER SOFTENER SCHEDULE

PLAN TAG	WS-1			
MANUFACTURER	CULLIGAN			
MODEL NUMBER	CTM-210-2			
SERVES	DOM. HOT WATER			
CONFIGURATION	(1)			
MAX. WEIGHT (LBS)	3490			
SIZE (LxWxH) (IN.)	(2)			
CONTINUOUS FLOW (GPM)	76			
PEAK FLOW (GPM)	102			
MAXIMUM WATER PRESSURE DROP (PSI) - CONTINUOUS	15			
MAXIMUM WATER PRESSURE DROP (PSI) - PEAK	25			
ACCESSORIES	(3)			
REMARKS	(4, 5)			

REMARKS

1. SKID MOUNTED, FULLY PRE-PIPED AND WIRED FOR SINGLE POINT FIELD UTILITY CONNECTION OF INLET, OUTLET, DRAIN, AND POWER SUPPLY. COMMERCIAL WATER SOFTENER SHALL CONSIST OF (2) ASME STEEL SOFTENER TANKS WITH INTERIOR EPOXY LINING AND (1) FIBERGLASS REINFORCED PLASTIC BRINE TANK.
2. SOFTENER TANK IS APPROXIMATELY 21"□ x 62" TALL. BRINE TANK IS APPROXIMATELY 30"□ x 60" TALL. SKID MOUNTED ASSEMBLY OVERALL DIMENSIONS OF APPROXIMATELY 82" x 21.5" x 88.5".
3. CONTRACTOR SHALL INSTALL WATER SOFTENER PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL NECESSARY PIPING AND PIPING SPECIALTIES (I.E. STRAINERS, ISOLATION VALVES, BYPASS, ETC.) NOT INCLUDED IN SKID MOUNTED ASSEMBLY.
4. PROVIDE WITH ASME RATED TANK, BRINE RECLAIM, AQUA SENOR CONTROL, PRESSURE GAUGES ON INLET AND OUTLET, SKID MOUNT WITH SINGLE POINT POWER CONNECTION (120 VOLT, 1□). PROVIDE A MINIMUM OF 1-YEAR WARRANTY ON DEFECTS AND 5-YEAR WARRANTY ON THE SOFTENER TANK. CONTROLS SHALL BE MICROPROCESSOR FOR AUTOMATICALLY CYCLING THE OPERATING VALVE THROUGH THE REGENERATION CYCLE. GRAVITY DRAIN SOFTENER DISCHARGE FROM WATER SOFTENER TO FLOOR SINK.
5. MINIMUM OF 140,000 GRAIN CAPACITY AT 42 LB SALT DOSAGE. MAXIMUM OF 210,000 GRAIN CAPACITY AT 105 LB SALT DOSAGE.

MIXING VALVE SCHEDULE

PLAN TAG	TMV-1	
MANUFACTURER	ARMSTRONG	
MODEL NUMBER	DMC80BS	
SERVES	DOM. 110°F HW	
GPM AT 10 (PSIG) SYSTEM PRESSURE DROP	133	
GPM AT 20 (PSIG) SYSTEM PRESSURE DROP	188	
INLET SIZES	3"	
OUTLET SIZE	3"	
MINIMUM GPM FLOW	10	
REMARKS	(1, 2, 3)	

REMARKS

1. DIGITAL RECIRCULATION MIXING VALVE WITH MANUAL BYPASS PRE-PIPED.
2. PROVIDE PIPING DIAGRAM SHOWING PIPING, VALVES AND ACCESSORIES.
3. DOMESTIC HOT WATER SYSTEM SHALL INCLUDE ELECTRONIC MIXING VALVE PACKAGE WITH THE FOLLOWING FEATURES"
   3.1. 110 TO 140-DEG F TEMPERATURE RANGE (ADJUSTABLE).
   3.2. VALVE SHALL PROVIDE AUTOMATIC SHUT OFF OF HOT WATER FLOW UPON COLD WATER SUPPLY FAILURE OR POWER FAILURE.
   3.3. MINIMUM FLOW RATE 10 GPM, MAXIMUM FLOW RATE 188 GPM AT 20 PSIG PRESSURE DROP.
   3.4. PROVIDE INTERFACE WITH BUILDING AUTMATION SYSTEM FOR MONITORING AND CONTROL OF ELECTRONIC MIXING VALVE. SEE SPECIFICATION 230933 SEQUENCE OF OPERATION FOR HVAC CONTROLS.
   3.5. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. CONFIGURE CIRCULATING HOT WATER PIPING AND PUMP WITH MIXING VALVE PER MANUFACTURER'S RECOMMENDATIONS.

DOMESTIC WATER HEATER

GENERAL	PLAN TAG	GWH-1-, 2, -3		
	MANUFACTURER	PVI		
	MODEL NUMBER	50-L-130A-GCL		
	SERVES	DOM. HOT WATER		
	RECOVERY (GPM@ 100°F RISE)	705		
TANK	TYPE	(1)		
	STORAGE CAPACITY (GAL.)	130		
	DIMENSIONS (LxWxH)(IN.)	52" x 34" x 81"		
	REMARKS	(2, 5)		
GAS FIRED	FUEL	NAT GAS		
	INPUT (MBH)	500		
	EFFICIENCY	94%		
	VENT CONNECTION	4" (4)		
	BURNER MOTOR HP	-		
	BURNER MOTOR VOLTS/PHASE	120 / 1		
	REMARKS	(3)		
ELECTRIC	VOLTAGE/PHASE	-		
	CAPACITY (KW)	-		
	NUMBER OF STAGES	-		
	KW PER STAGE	-		
	REMARKS	-		

REMARKS

1. ASME RATED, AQUAPLEX UNLINED DUPLEX ALLOY STORAGE TANK
2. PROVIDE WITH AGA RATED TEMPERATURE AND PRESSURE RELIEF VALVE, DRAIN VALVE, DRAFT REGULATOR, INSULATED TANK, ADJUSTABLE IMMERSION OPERATING THERMOSTATS, ASME RATED STORAGE TANK, AIR INTAKE ASSEMBLY FOR REMOTE COMBUSTION AIR, 5-YEAR HEAT EXCHANGER WARRANTY, CONDENSATE ACID NEUTRALIZATION KIT, AND ALL NECESSARY CONTROLS AND TRIM TO MEET THE REQUIREMENTS OF CSD-1 AND LOCAL BOILER CODES.
3. 120 VOLT, SINGLE PHASE, 2 AMP CONNECTION FOR CONTROL CIRCUIT AND 6 AMP ELECTRICAL CONNECTION REQUIRED.
4. SIZE FLUE AND COMBUSTION AIR INTAKE PER MANUFACTURER'S RECOMMENDATIONS. MATERIAL PER MANUFACTURER'S RECOMMENDATIONS.
5. PROVIDE WITH PRESSURE/TEMPERATURE VALVE

SPLIT-SYSTEM UNIT SCHEDULE

	PLAN TAG	VRV-1	VRV-2	VRV-3	VRV-4	
GENERAL	MANUFACTURER	MITSUBISHI (1)	MITSUBISHI (1)	MITSUBISHI (1)	MITSUBISHI (1)	
	MODEL NUMBER	PKA-A24KA	PKA-A24KA	PKA-A24KA	PKA-A18KA	
	SERVES	ELEV EQUIP RM	(11)	STAIRWELLS	(12)	
	CONFIGURATION	(2)	(2)	(2)	(2)	
	MAXIMUM SIZE (LxWxH)(IN)	47" x 12" x 15"	47" x 12" x 15"	47" x 12" x 15"	36" x 10" x 12"	
	REMARKS	(3, 4, 5, 6, 7)	(3, 4, 5, 6, 7)	(3, 4, 5, 6, 7, 13)	(3, 4, 5, 6, 7)	
FAN	AIRFLOW RANGE LOW-HIGH (CFM)	635 - 775	635 - 775	635 - 775	320 - 425	
	EXTERNAL STATIC PRESSURE (IN. W.C.)	-	-	-	-	
	MOTOR HP	-	-	-	-	
ELECTRICAL DATA	MAXIMUM CURRENT AMPS	18	18	18	13	
	MAXIMUM FUSE SIZE	30	30	30	20	
	VOLTS	208	208	208	208	
	PHASE	1	1	1	1	
	REMARKS	(9)	(9)	(9)	(10)	
COOLING & HEATING	ENTERING DB (°F)	80	80	80	80	
	ENTERING WB (°F)	67	67	67	67	
	LEAVING DB (°F)	-	-	-	-	
	LEAVING WB (°F)	-	-	-	-	
	TOTAL COOLING CAPACITY (MBH)	24.0	24.0	24.0	18.0	
	TOTAL HEATING CAPACITY (MBH)	18.4	18.4	18.4	12.2	
	REMARKS	(8, 9)	(8, 9)	(8, 9)	(8, 10)	

REMARKS

1. ACCEPTABLE MANUFACTURERS: CARRIER, DAIKIN, MITSUBISHI, TRANE, FUJITSU, TOSHIBA
2. HIGH WALL MOUNT AIR-COOLED SPLIT SYSTEM WITH OUTDOOR REMOTE CONDENSING UNIT OR OUTDOOR REMOTE HEAT PUMP WITH R-410A REFRIGERANT.
3. PROVIDE WITH CONDENSATE PUMP CAPABLE OF MINIMUM 6 FOOT OF HEAD. PUMP RESERVE SHALL HAVE HIGH LEVEL ALARM.
4. HEAT PUMP FOR VRVs (VRV-HP-X), LOCATED ON ROOF. PROVIDE ALL ADDITIONAL REFRIGERANT PIPING ACCESSORIES AS REQUIRED TO ACCOMMODATE REFRIGERANT LINE LENGTHS AND CONDENSING UNIT ELEVATION (SEE PLANS).
5. PROVIDE MANUFACTURER'S REMOTE WALL MOUNTED WIRED THERMOSTAT. COORDINATE WITH ARCHITECT IF T-STAT TO BE ENCLOSED IN CLEAR COVER.
6. PROVIDE COMPRESSOR WITH 5-YEAR WARRANTY.
7. PROVIDE MANUFACTURER'S WASHABLE FILTERS.
8. PROVIDE LOW AMBIENT KIT TO ALLOW COOLING DOWN TO -20°F.
9. PROVIDE MANUFACTURER'S OUTDOOR HEAT PUMP UNIT MODEL PUZ-A24NHA WITH INVERTER COMPRESSOR. POWER FOR INDOOR UNIT WIRED FROM OUTDOOR UNIT. (MCA = 18, MOCP = 30)
10. PROVIDE MANUFACTURER'S OUTDOOR HEAT PUMP UNIT MODEL PUZ-A18NHA WITH INVERTER COMPRESSOR. POWER FOR INDOOR UNIT WIRED FROM OUTDOOR UNIT. (MCA = 13, MOCP = 20)
11. MAIN TELECOM ROOM (110).
12. SECONDARY TELECOM ROOMS (212) & (243).
13. PROVIDE CONCEALED CONDENSATE PUMP FOR UNITS IN STAIRWELL.

MECHANICAL SYMBOLS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
TYPICAL PIPING			
	PIPE TEE / PIPE ELBOW		UNION
	ELBOW DN / ELBOW UP		STRAINER WITH BLOWDOWN
	ISOLATION VALVE (BALL OR BUTTERFLY)		CHECK VALVE (ARROW INDICATES FLOW)
	BALANCING VALVE		AUTOMATIC CONTROL VALVE TWO-WAY / THREE WAY
	GATE VALVE		PRESSURE REGULATING VALVE (PRV)
	GLOBE VALVE		PRESSURE GAUGE
P.T.T.	PRESSURE/TEMPERATURE TEST PORT		THERMOMETER
PLUMBING			
	DOMESTIC COLD WATER (CW)		GAS COCK
	DOMESTIC HOT WATER (HW) (NUMBER INDICATES TEMPERATURE)	2" D-1	FLOOR DRAIN - SIZE TYPE
	DOMESTIC HOT WATER CIRCULATION (HWC) (NUMBER INDICATES TEMPERATURE)	2" RD-1	ROOF DRAIN - SIZE TYPE
	SANITARY WASTE (BELOW GRADE)	2" OFD-1	OVERFLOW ROOF DRAIN - SIZE TYPE
	SANITARY WASTE (ABOVE GRADE)	HB	HOSE BIBB
	VENT PIPING	WH	WALL HYDRANT (NON-FREEZE)
ST	STORM PIPING (BELOW GRADE)	VTR	VENT THROUGH ROOF
ST	STORM PIPING (ABOVE GRADE)	I.E.	I.E. INVERT ELEVATION
OF	OVERFLOW STORM PIPING (BELOW GRADE)	F.L.	FLOW LINE
OF	OVERFLOW STORM PIPING (ABOVE GRADE)	WC	WATER CLOSET (SEE SPECIFICATIONS FOR TYPE)
AW	ACID WASTE PIPING (BELOW GRADE)	UR	URINAL (SEE SPECIFICATIONS FOR TYPE)
AW	ACID WASTE PIPING (ABOVE GRADE)	LAV	LAVATORY (SEE SPECIFICATIONS FOR TYPE)
AV	ACID VENT PIPING	S	SINK (SEE SPECIFICATIONS FOR TYPE)
A	COMPRESSED AIR PIPING	EWC	ELECTRIC WATER COOLER (SEE SPECIFICATIONS FOR TYPE)
G	NATURAL GAS PIPING	MS	MOP SINK (SEE SPECIFICATIONS FOR TYPE)
SAN	SITE SANITARY PIPING	DI	DUCTILE IRON
ST	SITE STORM PIPING	CI	CAST IRON
W	SITE WATER PIPING	PVC	POLY VINYL CLORIDE
HVAC			
6x6 R-1 100	SIDEWALL SUPPLY REGISTER OR GRILLE (NECK/SIZE (IN), TAG, AIRFLOW (CFM))	S	SENSOR
		T	THERMOSTAT
6x6 R-1 100	SIDEWALL RETURN OR EXHAUST REGISTER OR GRILLE (NECK/SIZE (IN), TAG, AIRFLOW (CFM))	H	HUMIDISTAT
		M	MOTORIZED CONTROL DAMPER WITH ACTUATOR
6"□ D-1 100	SUPPLY AIR REGISTER (NECK/SIZE (IN), TAG, AIRFLOW (CFM))	B.D.D.	BACKDRAFT DAMPER
		V.D.	VOLUME DAMPER
	SUPPLY AIR, OUTSIDE AIR OR MIXED AIR DUCT END OR RISER UP / RISER DN	F.R.D.	FIRE DAMPER WITH SLEEVE AND ACCESS DOOR
		S.D.	SMOKE DAMPER WITH SLEEVE AND ACCESS DOOR
	RETURN AIR, EXHAUST AIR OR RELEIF AIR DUCT END OR RISER UP / RISER DN	F.S.D.	FIRE/SMOKE DAMPER WITH SLEEVE AND ACCESS DOOR
		S.A.	SUPPLY AIR
12/8	RECTANGULAR DUCTWORK (WIDTH/DEPTH)(IN) (FIRST NUMBER IS SIDE SHOWN)	R.A.	RETURN AIR
		E.A.	EXHAUST AIR
12"□	ROUND DUCTWORK (DIAMETER)(IN) (SPIRAL DUCT IN EXPOSED AREAS)	RLF.A.	RELEIF AIR
		O.A.	OUTSIDE AIR
	TURNING VANES	M.A.	MIXED AIR
FIRE PROTECTION			
F	FIRE SPRINKLER PIPING	FH	FIRE HYDRANT
SP	STANDPIPE PIPING	PIV	POST INDICATER VALVE
	SPRINKLER BRANCH AND HEADS		ALARM CHECK VALVE
FHC	FIRE HOSE CABINET		O.S&Y VALVE
FVC	FIRE VALVE CABINET	FS	FLOW SWITCH
HYDRONIC HVAC PIPING			
HWS	HOT WATER SUPPLY PIPING	HPS	HEAT PUMP LOOP PIPING SUPPLY PIPING
HWR	HOT WATER RETURN PIPING	HPR	HEAT PUMP LOOP RETURN PIPING
CWS	CHILLED WATER SUPPLY PIPING	GWS	GLYCOL WATER SUPPLY PIPING
CWR	CHILLED WATER RETURN PIPING	GWR	GLYCOL WATER RETURN PIPING
CS	CONDENSER WATER SUPPLY PIPING		AIR VENT
CR	CONDENSER WATER RETURN PIPING	CD	COIL CONDENSATE DRAIN (SLOPE TO DRAIN)

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

MECHANICAL SCHEDULES

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MEI PROJECT NO: 15273

morrissey engineering inc
mechanical | electrical | lighting | technology | commissioning
4940 North 118th Street
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P: 402.491.4144
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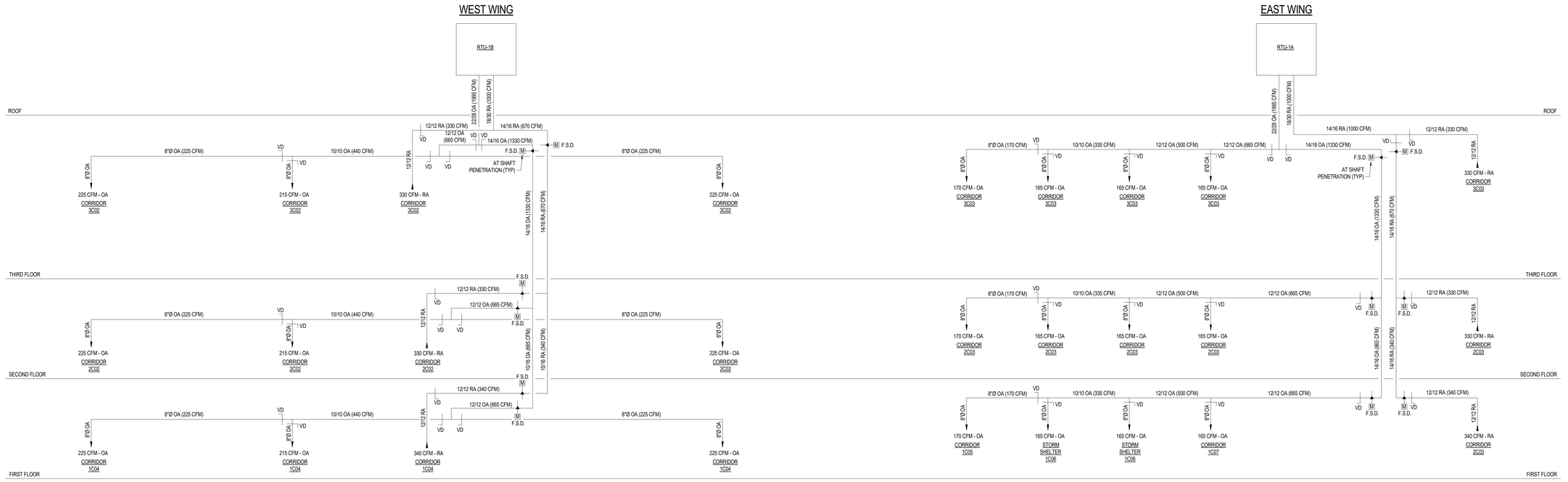

1 MA1.05 RTU SUPPLY AND RETURN AIR RISER

NOT TO SCALE

ADDED SHEET 1

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

MECHANICAL (ALT 1) - MECHANICAL RISERS

HOLLAND BASHAM ARCHITECTS
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PROJECT:15097
DATE: 04/01/16

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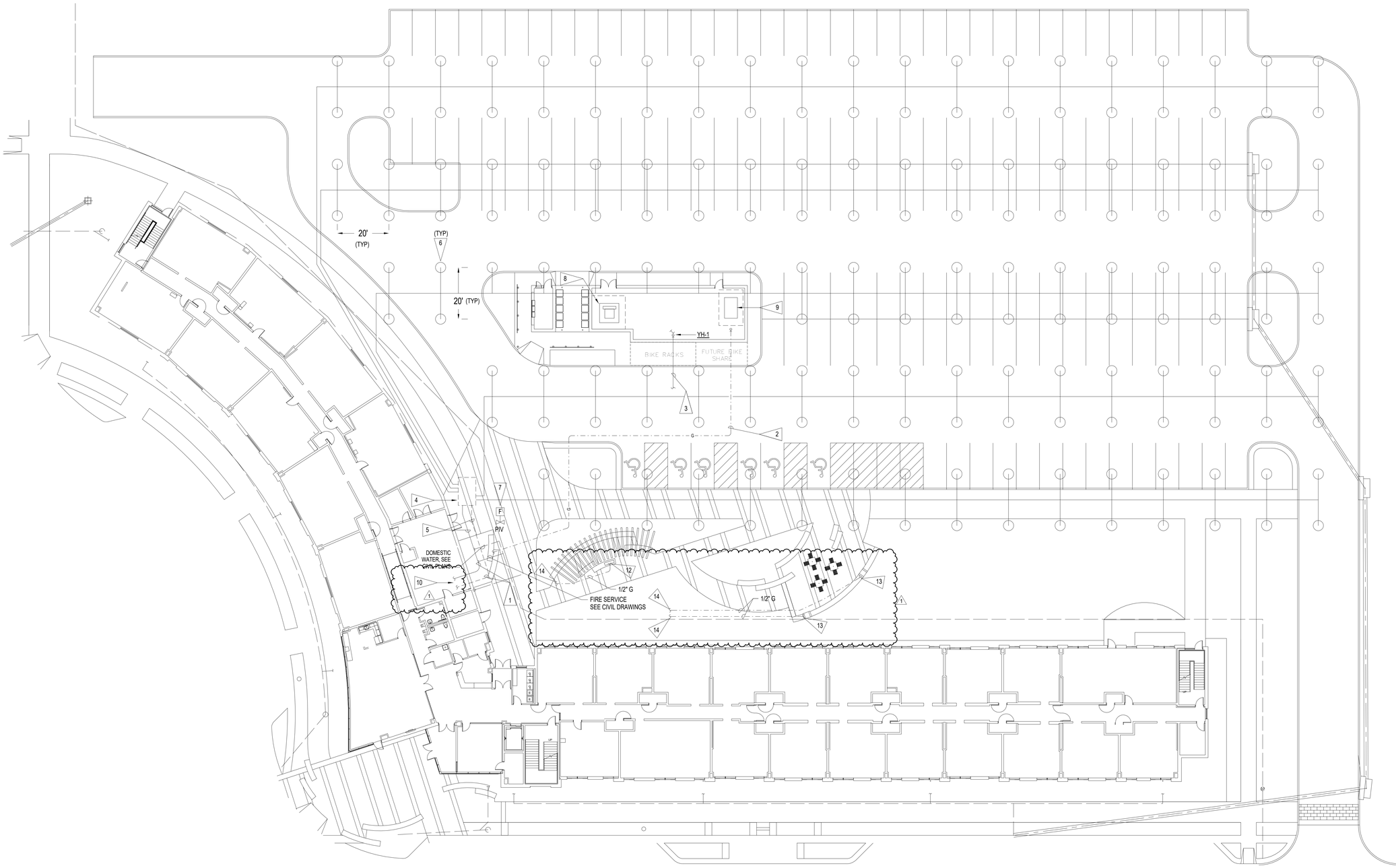


1 MA2.00 Mech Site Plan - ALTERNATE 02

0' 4' 8' 16' 32'

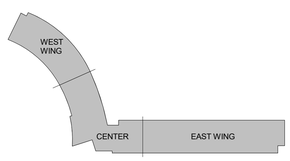
GENERAL NOTES (ALL NOTES MAY NOT APPLY TO EACH SHEET)

1. PROVIDE ALL REQUIRED EXCAVATION, TRENCHING, BORING, SHORING, BACKFILL AND SURFACE REPAIR REQUIRED FOR INSTALLATION OF UTILITIES.
2. ALL EXCAVATION SHALL COMPLY WITH APPLICABLE OSHA STANDARDS AND STATE AND LOCAL CODES.
3. CALL BEFORE YOU DIG. CALL DIGGERS HOTLINE OF NEBRASKA: STATEWIDE (800) 331-5666
4. UTILITY LOCATIONS INDICATED ON DRAWINGS ARE APPROXIMATE AND THEMOST ACCURATE INFORMATION AVAILABLE AT THE TIME OF DESIGN. PRIOR TO EQUIPMENT AND PIPING INSTALLATION, COORDINATE EXACINSTALLATION DETAILS AND MODIFY WORK PLAN ACCORDINGLY TO MEET UTILITY REQUIREMENTS. CORRESPOND WITH UTILITY COMPANY, OR OWNER FOR PRIVATE UTILITIES, PRIOR TO ANY SITE DEVELOPMENT THAT MAY IMPACT THE INSTALLATION SUCH AS IRRIGATION INSTALLATION, CONCRETE OR ASPHALT INSTALLATION, LANDSCAPING, ETC.
5. COORDINATE ALL GEOTHERMAL WELLS (IF APPLICABLE) AND PIPING WITH ALL FOOTINGS, SANITARY, STORM, WATER, AND ELECTRICAL SITE UTILITIES.
6. SEE SPECIFICATIONS SECTION 232115 - GROUND LOOP HEAT PUMP PIPING.

Diggers Hotline Of Nebraska
Statewide (800) 331-5666
Metro Omaha 344-3565
Call Before You Dig... Its The Law

FLAG NOTES (ALL NOTES MAY NOT APPLY TO EACH SHEET)

1. COORDINATE ROUTING OF UNDERGROUND HEAT PUMP LOOP PIPING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
2. 3/4" NATURAL GAS LINE UNDERGROUND FROM BUILDING TO GENERATOR. PROVIDE GAS COCK, PRV, AND DIRT LEG PRIOR TO CONNECTION TO EQUIPMENT. MAKE FINAL CONNECTION TO GENERATOR PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION OF CONNECTION AND PIPE ROUTING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
3. 1" WATER LINE FROM MECHANICAL ROOM IN BUILDING TO YARD HYDRANT, (YH-1), WITHIN EQUIPMENT ENCLOSURE. COORDINATE EXACT LOCATION OF HYDRANT AND PIPE ROUTING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
4. SEE PREMANUFACTURED GEOTHERMAL VALVE VAULT DETAIL (HVAC ALTERNATE 02) 3 / MA2.01.
5. 6" HPLS/R FROM VAULT TO BUILDING.
6. SEE GEOTHERMAL HOLE BORE PIPING DETAIL 4 / MA2.02
7. POST INDICATOR VALVE. COORDINATE LOCATION WITH CIVIL PLANS.
8. UTILITY CO. TRANSFORMER, (SEE ELECTRICAL PLANS).
9. EMERGENCY GENERATOR, (SEE ELECTRICAL PLANS).
10. SEE HEAT PUMP SYSTEM DETAIL (HVAC ALTERNATE 02) 1 / MA2.01.
12. 1/2" G BELOW GRADE TO FIREPLACE. CONNECT PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE PRV, GAS COCK AND DIRT LEG PRIOR TO CONNECTION OF EQUIPMENT. COORDINATE VALVE OPERATION WITH ELECTRICAL CONTROL SWITCH. COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL DRAWINGS. COORDINATE ALL PIPING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
13. 1/2" G BELOW GRADE TO GRILLS. CONNECT PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE PRV, GAS COCK AND DIRT LEG PRIOR TO CONNECTION OF EQUIPMENT. COORDINATE VALVE OPERATION WITH ELECTRICAL CONTROL SWITCH. COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL DRAWINGS. COORDINATE ALL PIPING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
14. 1/2" G BELOW GRADE TO TO GAS HEADER. SEE SHEET M4.03 FOR CONTINUATION.



KEY PLAN

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1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

MECHANICAL (ALT 02) - SITE PLAN

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MECHANICAL — CHRISTOPHER P. REED — E-9156 — 04/01/16 — STATE OF NEBRASKA — REGISTERED PROFESSIONAL ENGINEER

PROJECT:15097
DATE: 04/01/16

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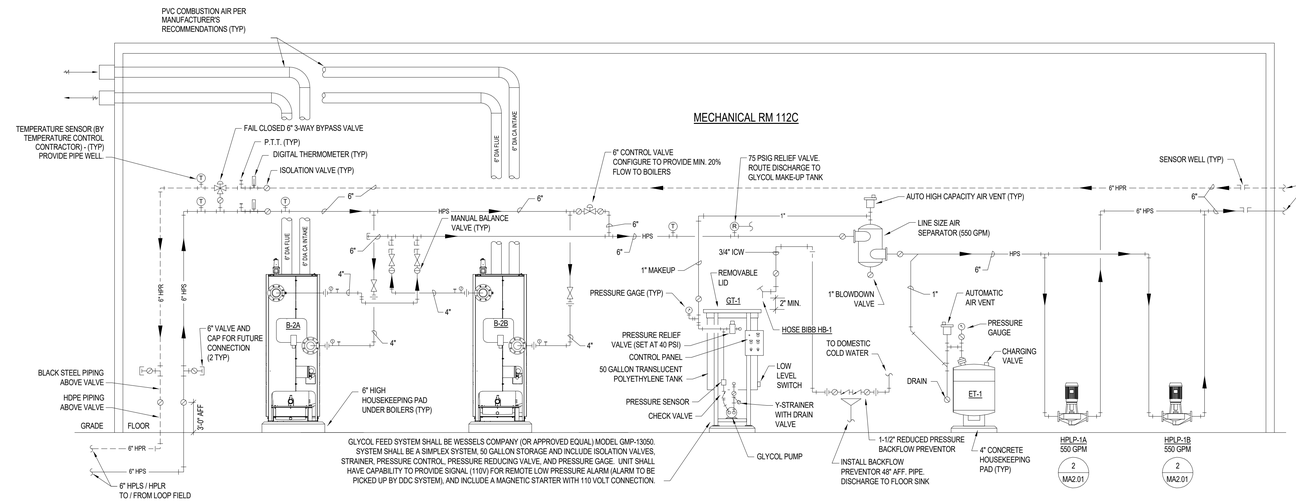
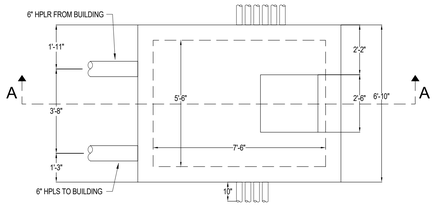


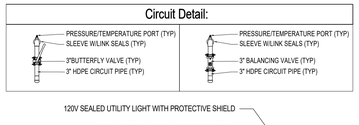
1 MA2.01 HEAT PUMP SYSTEM DETAIL

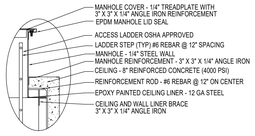
NOT TO SCALE

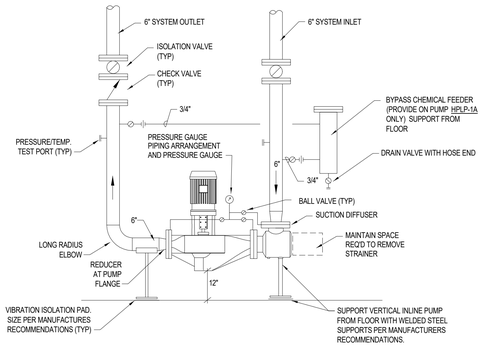
GENERAL NOTES

1. PROVIDE 4" CONCRETE HOUSEKEEPING PAD BELOW EACH PIECE OF MECHANICAL EQUIPMENT. COORDINATE EXACT PAD SIZES WITH ACTUAL EQUIPMENT DIMENSIONS. COORDINATE LOCATION OF PADS WITH GENERAL CONTRACTOR.
2. EQUIPMENT CONNECTIONS SHOWN ARE TYPICAL EACH PIECE OF EQUIPMENT. CONNECTIONS INDICATE MINIMUM REQUIREMENTS. VERIFY CONNECTION REQUIREMENTS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. NOTIFY ENGINEER IN CASE OF DISCREPANCY.
3. PROVIDE DRAIN VALVES AT ALL LOW POINTS OF PIPING TO ALLOW COMPLETE DRAINAGE OF ALL SYSTEMS. PROVIDE HOSE CONNECTION AT EACH DRAIN OR PIPE TO FLOOR DRAIN.
4. PROVIDE AIR VENTS AT ALL HIGH POINTS IN PIPING SYSTEMS.
5. INSTALL ALL VALVES, GAUGES, ETC. IN ACCESSIBLE LOCATIONS.
6. PROVIDE SENSOR WELLS AS REQUIRED FOR FOR TEMPERATURE CONTROL SYSTEM. COORDINATE REQUIREMENTS WITH TEMPERATURE CONTROL CONTRACTOR.
7. BOILER SYSTEM SHALL BE INSTALLED PER THE REQUIREMENTS OF CSD-1 AND AUTHORITY HAVING JURISDICTION. VERIFY REQUIREMENTS WITH AUTHORITY HAVING JURISDICTION.









2 MA2.01 PUMP PIPING DETAIL

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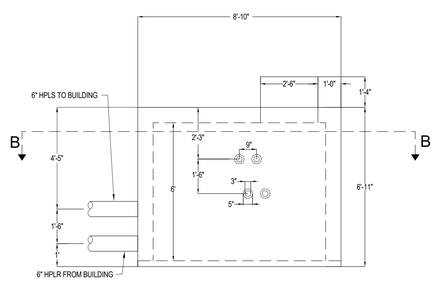
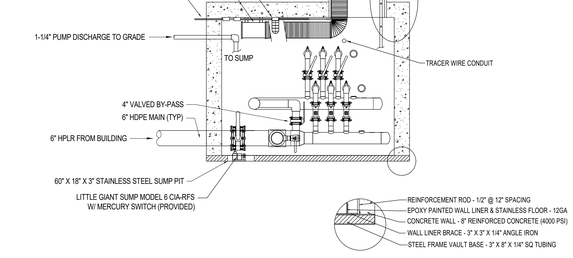
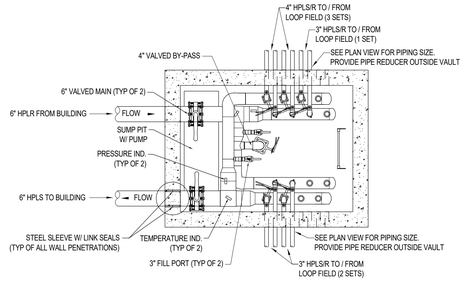


OUTSIDE VIEW



SECTION A-A



SECTION B-B

GENERAL NOTES

1. ALL VALVES AND ACCESSORIES PROVIDED WITH VAULT.
2. INSTALL VAULT PER MANUFACTURERS RECOMMENDATIONS.
3. SEE SPECIFICATIONS SECTION 232115.

3 MA2.01 PREMANUFACTURED GEOTHERMAL VALVE VAULT DETAIL

NOT TO SCALE

No.	Description	Date
1	Addendum #1	04/21/16

ADDED SHEET 1

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UNK UNIVERSITY VILLAGE STUDENT HOUSING

MECHANICAL DETAILS

HOLLAND BASHAM ARCHITECTS
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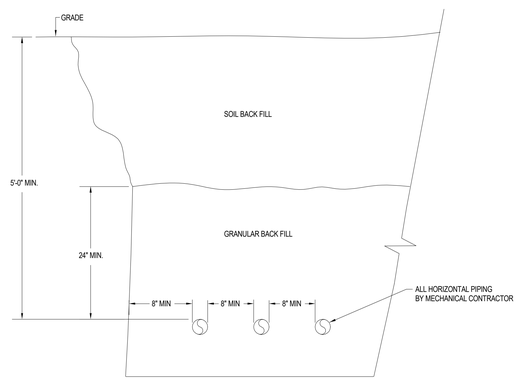

3 MA2.02 GEOTHERMAL HEAT PUMP LOOP TRENCH SPACING DETAIL

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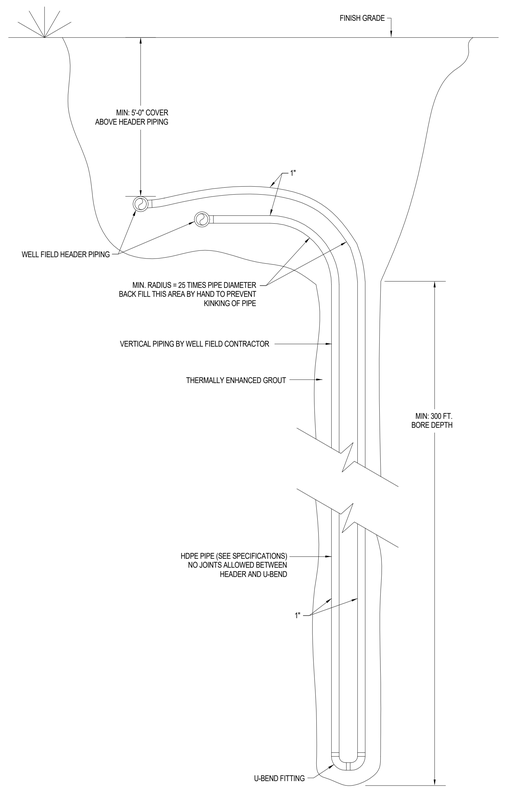
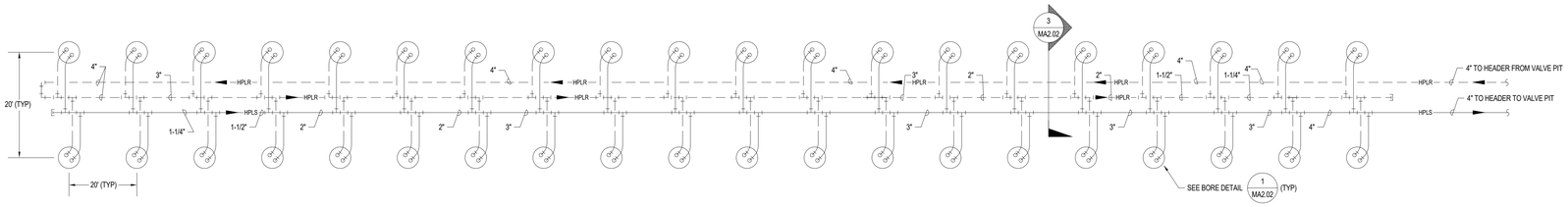


1 MA2.02 HEAT PUMP LOOP BORE DETAIL

NOT TO SCALE



NOTE: REFER TO MECHANICAL SITE PLAN, SHEET MA1.00 - BORES ARE OMITTED AS REQUIRED TO AVOID CONFLICTS WITH SITE UTILITIES - 178 TOTAL BORES.

4 MA2.02 HEAT PUMP SYSTEM DETAIL

NOT TO SCALE

ADDED SHEET 1

No.	Description	Date
1	Addendum #1	04/21/16

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UNK UNIVERSITY VILLAGE STUDENT HOUSING

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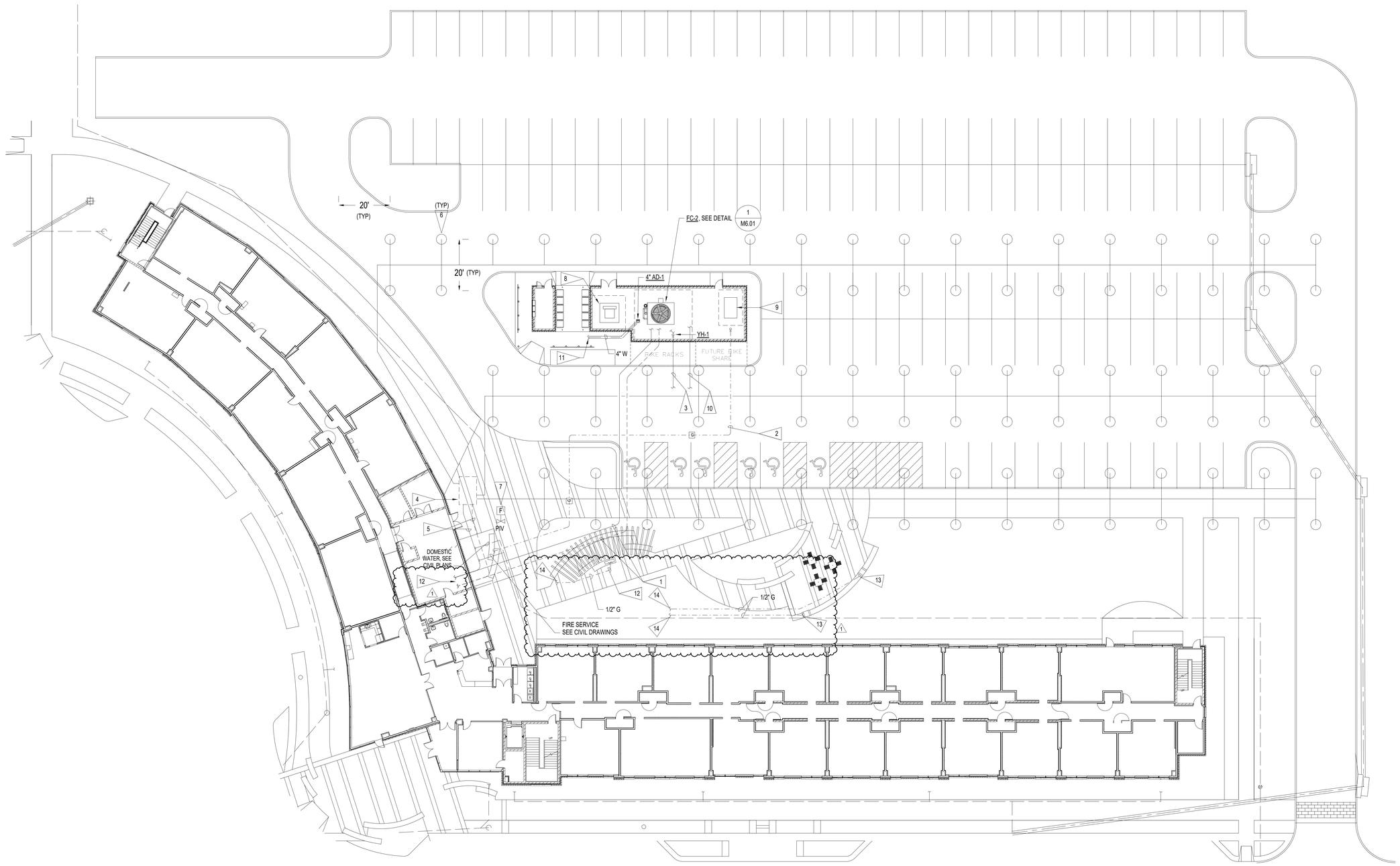

1 MA3.00 Mech Site Plan - ALTERNATE 03

0' 4' 8' 16' 32'

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Metro Omaha 344-3565
Call Before You Dig... Its The Law

FLAG NOTES (ALL NOTES MAY NOT APPLY TO EACH SHEET)

1. COORDINATE ROUTING OF UNDERGROUND HEAT PUMP LOOP PIPING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
2. 3/4" NATURAL GAS LINE UNDERGROUND FROM BUILDING TO GENERATOR. PROVIDE GAS COCK, PRV, AND DIRT LEG PRIOR TO CONNECTION TO EQUIPMENT. MAKE FINAL CONNECTION TO GENERATOR PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION OF CONNECTION AND PIPE ROUTING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
3. 1" WATER LINE FROM MECHANICAL ROOM IN BUILDING TO YARD HYDRANT, (YH-1). WITHIN EQUIPMENT ENCLOSURE. COORDINATE EXACT LOCATION OF HYDRANT AND PIPE ROUTING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
4. SEE PREMANUFACTURED GEOTHERMAL VALVE VAULT DETAIL (HVAC ALTERNATE 03) 3 / MA3.01. 1
5. 6" HPLS/R FROM VAULT TO BUILDING.
6. SEE GEOTHERMAL HOLE BORE PIPING DETAIL 4 / MA3.02 1
7. POST INDICATOR VALVE. COORDINATE LOCATION WITH CIVIL PLANS.
8. UTILITY CO. TRANSFORMER, (SEE ELECTRICAL PLANS).
9. EMERGENCY GENERATOR, (SEE ELECTRICAL PLANS).
10. 1-1/2"" MAKE-UP WATER LINE FROM MECHANICAL ROOM IN BUILDING TO COOLING TOWER. COORDINATE EXACT LOCATION OF PIPE ROUTING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
11. 4" AREA DRAIN (AD-1) SERVING COOLING TOWER BLOW DOWN. ROUTE 4" SANITARY WASTE TO NEAREST SANITARY PIPING OF EQUAL OR GREATER SIZE ON SITE. COORDINATE EXACT PIPE ROUTING WITH CIVIL DRAWINGS, GENERAL CONTRACTOR AND ALL OTHER TRADES.
12. SEE HEAT PUMP SYSTEM DETAIL (HVAC ALTERNATE 03) 1 / MA3.01. 1
12. 1/2" G BELOW GRADE TO FIREPLACE. CONNECT PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE PRV, GAS COCK AND DIRT LEG PRIOR TO CONNECTION OF EQUIPMENT. COORDINATE VALVE OPERATION WITH ELECTRICAL CONTROL SWITCH. COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL DRAWINGS. COORDINATE ALL PIPING WITH GENERAL CONTRACTOR AND ALL OTHER TRADES.
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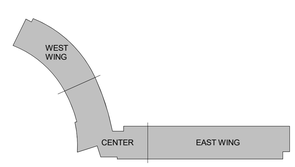
14. 1/2" G BELOW GRADE TO TO GAS HEADER. SEE SHEET M4.03 FOR CONTINUATION.



KEY PLAN

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5. COORDINATE ALL GEOTHERMAL WELLS (IF APPLICABLE) AND PIPING WITH ALL FOOTINGS, SANITARY, STORM, WATER, AND ELECTRICAL SITE UTILITIES.
6. SEE SPECIFICATIONS SECTION 232115 - GROUND LOOP HEAT PUMP PIPING.

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

MECHANICAL (ALT 03) - SITE PLAN

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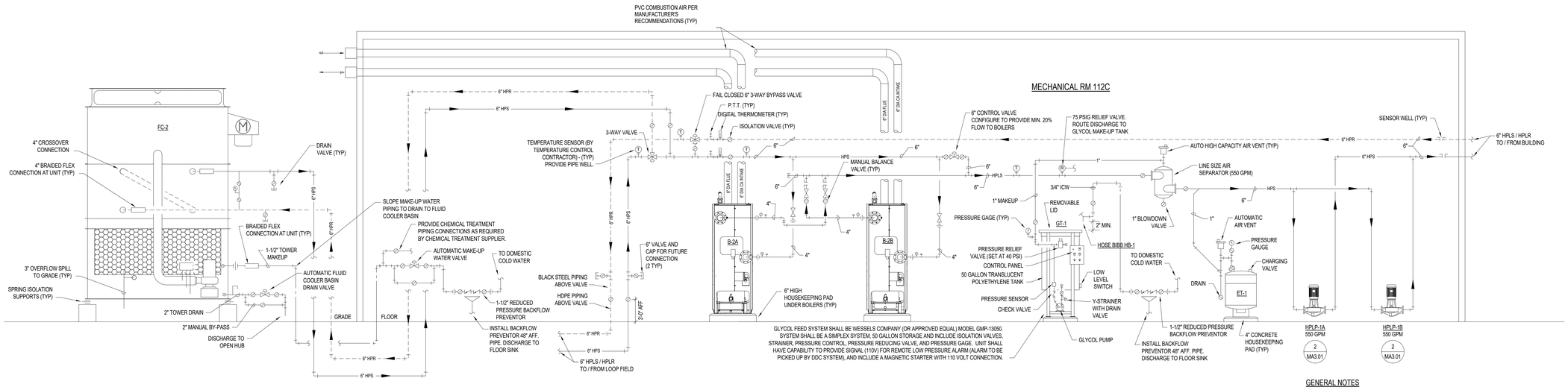
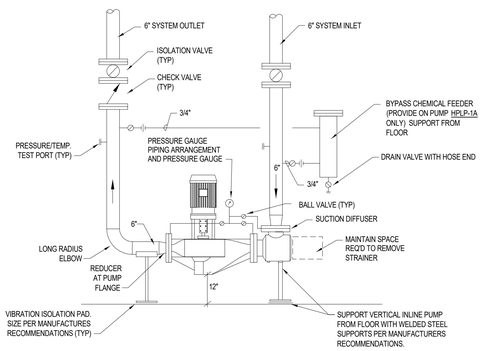


GENERAL NOTES

1. PROVIDE 4" CONCRETE HOUSEKEEPING PAD BELOW EACH PIECE OF MECHANICAL EQUIPMENT. COORDINATE EXACT PAD SIZES WITH ACTUAL EQUIPMENT DIMENSIONS. COORDINATE LOCATION OF PADS WITH GENERAL CONTRACTOR.
2. EQUIPMENT CONNECTIONS SHOWN ARE TYPICAL EACH PIECE OF EQUIPMENT. CONNECTIONS INDICATE MINIMUM REQUIREMENTS. VERIFY CONNECTION REQUIREMENTS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. NOTIFY ENGINEER IN CASE OF DISCREPANCY.
3. PROVIDE DRAIN VALVES AT ALL LOW POINTS OF PIPING TO ALLOW COMPLETE DRAINAGE OF ALL SYSTEMS. PROVIDE HOSE CONNECTION AT EACH DRAIN OR PIPE TO FLOOR DRAIN.
4. PROVIDE AIR VENTS AT ALL HIGH POINTS IN PIPING SYSTEMS.
5. INSTALL ALL VALVES, GAUGES, ETC. IN ACCESSIBLE LOCATIONS.
6. PROVIDE SENSOR WELLS AS REQUIRED FOR FOR TEMPERATURE CONTROL SYSTEM. COORDINATE REQUIREMENTS WITH TEMPERATURE CONTROL CONTRACTOR.
7. BOILER SYSTEM SHALL BE INSTALLED PER THE REQUIREMENTS OF CSD-1 AND AUTHORITY HAVING JURISDICTION. VERIFY REQUIREMENTS WITH AUTHORITY HAVING JURISDICTION.

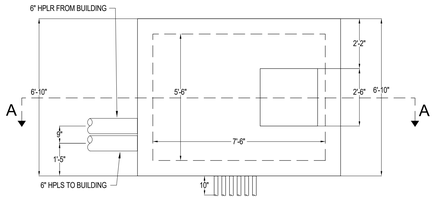
1 MA3.01 HEAT PUMP SYSTEM DETAIL

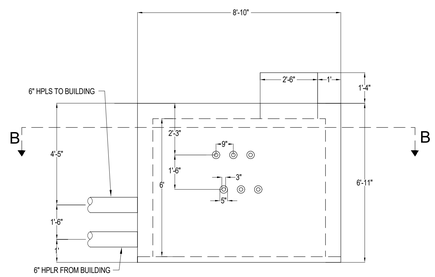
NOT TO SCALE



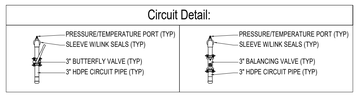
2 MA3.01 PUMP PIPING DETAIL

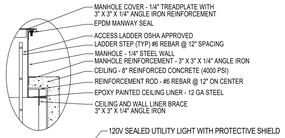
NOT TO SCALE

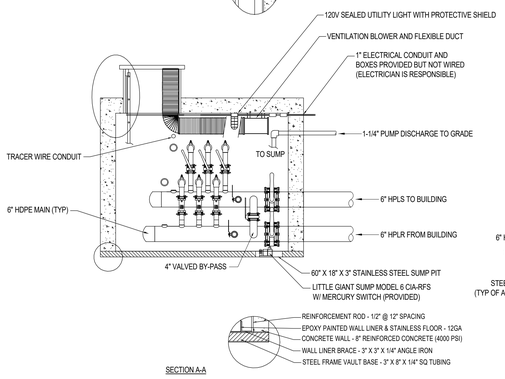




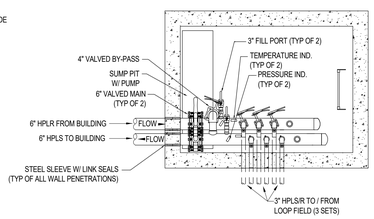
OUTSIDE VIEW







SECTION A-A



SECTION B-B

ADDED SHEET 1

3 MA3.01 PREMANUFACTURED GEOTHERMAL VALVE VAULT DETAIL

NOT TO SCALE

GENERAL NOTES

1. ALL VALVES AND ACCESSORIES PROVIDED WITH VAULT.
2. INSTALL VAULT PER MANUFACTURER'S RECOMMENDATIONS.
3. SEE SPECIFICATIONS SECTION 232115.

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

MECHANICAL DETAILS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MEI PROJECT NO: 15273

morrissey engineering inc
mechanical | electrical | lighting | technology | commissioning
4940 North 118th Street
Omaha, NE 68164
P: 402.491.4144
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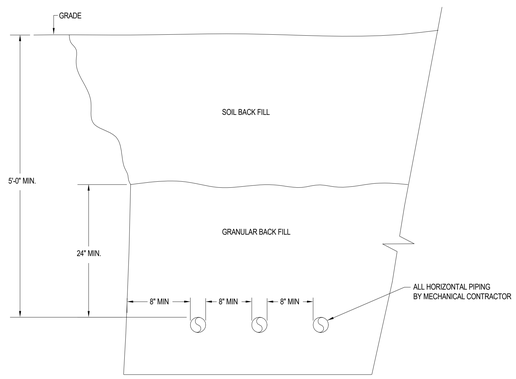
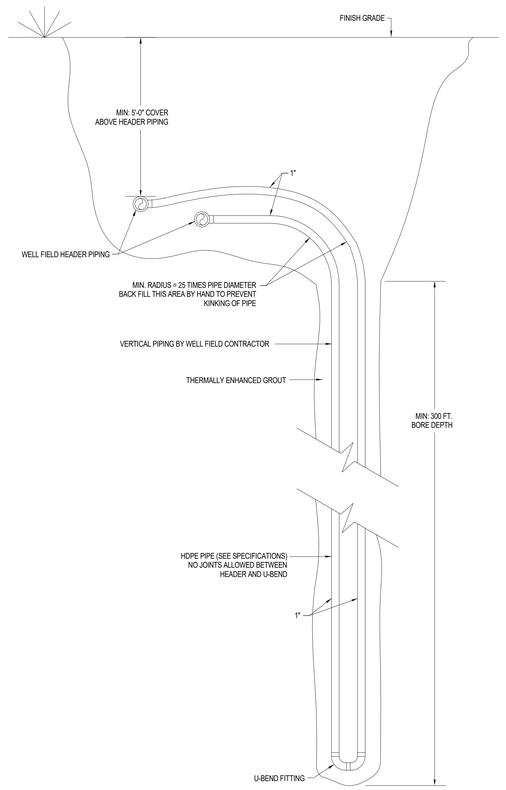


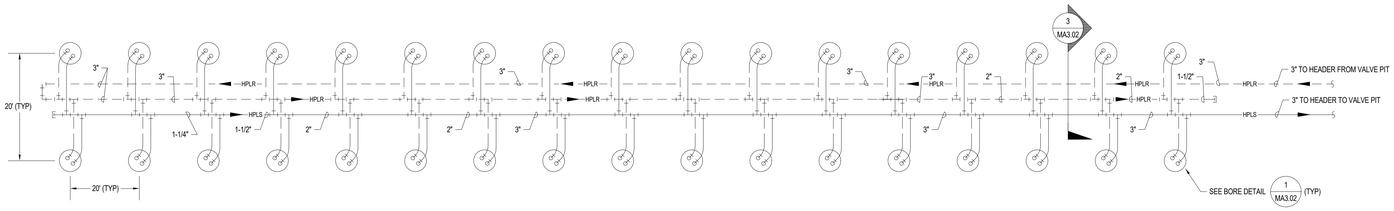
3 MA3.02 GEOTHERMAL HEAT PUMP LOOP TRENCH SPACING DETAIL

NOT TO SCALE



1 MA3.02 HEAT PUMP LOOP BORE DETAIL

NOT TO SCALE



NOTE: REFER TO MECHANICAL SITE PLAN, SHEET MA2.00 - BORES ARE OMITTED AS REQUIRED TO AVOID CONFLICTS WITH SITE UTILITIES - 98 TOTAL BORES.

4 MA3.02 HEAT PUMP SYSTEM DETAIL

NOT TO SCALE

ADDED SHEET 1

No.	Description	Date
1	Addendum #1	04/21/16

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MECHANICAL CHRISTOPHER P. REED E-9156 04/01/16 STATE OF NEBRASKA ENGINEER

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GENERAL LIGHTING NOTES:

A. SPACES ARE CONTROLLED BY EITHER STAND-ALONE CONTROL DEVICES OR AS PART OF THE RELAY LIGHTING CONTROL SYSTEM. SEE SPECIFICATIONS, DETAILS AND SCHEDULES FOR ADDITIONAL INFORMATION.

B. PROVIDE ALL POWER PACKS, SWITCH PACKS, ENTRY STATIONS, SENSORS, AND ALL LOW VOLTAGE CABLING REQUIRED TO CONNECT DEVICES PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

C. PROVIDE 0-10V CONTROL WIRING TO ALL FIXTURES SERVED BY 0-10V DIMMING DEVICES. IN NON-ACCESSIBLE CEILINGS AND IN EXPOSED UNFINISHED AREAS WITHOUT A CEILING, ROUTE ALL CONTROL WIRING IN SEPARATE 1/2" CONDUIT.

D. PROVIDE MINIMUM #10 WIRE SIZE FOR ALL EMERGENCY LIGHTING CIRCUITS AND ROUTE IN SEPARATE CONDUIT.

E. PROVIDE SENSING CONNECTIONS AS REQUIRED FOR OPERATION OF ALL EMERGENCY LIGHTING DEVICES.

F. THE MAJORITY OF THE CEILINGS ON THE PLANS ARE A PART OF A FIRE RATED ASSEMBLY. REFER TO ARCHITECTURAL FLOOR PLANS FOR MORE INFORMATION. PROVIDE A FIRE RATED COVER FOR EVERY LIGHT FIXTURE PENETRATING THE FIRE RATED ASSEMBLY. PROVIDE TENMAT (OR EQUAL) FIRE RATED LIGHT COVERS. PROVIDE SIZE AS APPROPRIATE FOR LIGHT FIXTURE.

GENERAL SPECIAL SYSTEMS NOTES:

A. ALL ROUGH-INS INDICATED ON THE SPECIAL SYSTEMS PLANS SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.

B. PROVIDE CONDUIT FROM ALL LOW VOLTAGE DEVICES ROUTED TO NEAREST ACCESSIBLE CEILING SPACE. PROVIDE PULLSTRING AND INSULATED BUSHINGS.

C. PROVIDE FACTORY CABLE DROP-OUTS FOR ANY CABLING ENTERING OR EXITING CABLE TRAY OR LADDER RUNWAY.

D. PROVIDE ALL SUGGESTED FACTORY MOUNTING BRACKETS FOR LADDER RUNWAY. PROVIDE END CLOSING KIT FOR ALL LADDER RUNWAY THAT DOES NOT TERMINATE TO A WALL.

E. BOND ALL SECTIONS OF LADDER RUNWAY WITH PANDUIT # GACBJ612U.

F. PROVIDE HILTI CP 653 X" SPEED SLEEVE, MECHANICAL FIRESTOP DEVICE FOR ALL CONDUIT SLEEVE PENETRATIONS. PROVIDE ADEQUATE QUANTITIES FOR 40% FILL.

G. PROVIDE TWO-HOLE, DOUBLE CRIMP, GROUNDING LUGS WITH VIEWING HOLES, SIZED TO MATCH CONDUCTORS.

H. PROVIDE STAINLESS STEEL MOUNTING HARDWARE FOR ALL GROUND CONNECTIONS.

I. MECHANICALLY LABEL ALL GROUND BARS AND CONNECTIONS TO GROUND BARS.

J. REFER TO ACCESS CONTROL ROUGH-IN DETAIL 7/E7.01. COORDINATE EXACT ROUGH-IN AND CABLING REQUIREMENTS WITH ARCHITECTURAL DOOR HARDWARE SPECIFICATIONS.

GENERAL FIRE ALARM NOTES:

A. PROVIDE FIRE ALARM WIRING TO POST-INDICATOR VALVE. PROVIDE FIRE ALARM WIRING TO EACH SPRINKLER SYSTEM FLOW AND TAMPER SWITCH. USE RGS CONDUIT WHERE EXPOSED ABOVE GRADE. COORDINATE QUANTITIES AND LOCATIONS WITH SPRINKLER CONTRACTOR AND MECHANICAL DRAWINGS.

1 B. IT SHALL BE ACCEPTABLE TO FREE-AIR FIRE ALARM WIRING CONCEALED ABOVE ACCESSIBLE CEILINGS. PROVIDE CONDUIT STUB UPS FROM WALL-MOUNTED DEVICES TO ABOVE ACCESSIBLE CEILINGS. CONDUIT FOR FIRE ALARM SHALL BE RED. IN EXPOSED STRUCTURE AREAS, ROUTE CONDUIT TIGHT TO STRUCTURE. CONDUIT SHALL BE ROUTED PARALLEL OR PERPENDICULAR TO STRUCTURE IN A NEAT MANNER.

C. PROVIDE 120V CIRCUIT FROM LIFE SAFETY PANEL TO SPRINKLER SYSTEM ALARM BELL.

D. ENSURE ALL PENETRATIONS ARE PROPERLY FIRESTOPPED.

E. PROVIDE ADDRESSABLE CONTROL MODULES AS REQUIRED FOR CONTROL OF ELECTRIC LOCKS/STRIKES ON EGRESS DOORS. DOORS SHALL BE UNLOCKED IN AN ALARM CONDITION. REFER TO ARCHITECTURAL DOOR HARDWARE SCHEDULE.

F. PROVIDE ELECTRICAL CONNECTION TO SMOKE AND FIRE/SMOKE DAMPERS INCLUDING POWER AND FIRE ALARM. ELECTRICAL CONTRACTOR SHALL PROVIDE 120V CONNECTION FROM FUSE IN NEAREST LIFE SAFETY GENERATOR PANEL WITH A MAXIMUM OF 6 PER 20A/1P CIRCUIT. VERIFY EXACT QUANTITY AND LOCATION OF DAMPERS WITH MECHANICAL DRAWINGS. SEE DETAIL 4 ON SHEET E7.01.

G. PROVIDE ADDRESSABLE RELAY MODULE TO CONNECT UNIT SMOKE DETECTORS

CONNECT ALL FIRE ALARM REMOTE POWER SUPPLIES AND ASSOCIATED EQUIPMENT TO SPARE FUSES IN NEAREST LIFE SAFETY GENERATOR PANEL ('E' PANELS).

GENERAL SITE NOTES:

A. PROVIDE ALL REQUIRED EXCAVATION, TRENCHING, BORING, SHORING, BACKFILL, AND SURFACE REPAIR REQUIRED FOR INSTALLATION OF NEW UTILITIES.

B. REFER TO CIVIL DRAWINGS FOR EXISTING AND NEW UTILITY LOCATIONS.

C. CALL BEFORE YOU DIG. CALL DIGGERS HOTLINE OF NEBRASKA: STATEWIDE (800) 331-5666.

D. UTILITY LOCATIONS INDICATED ON DRAWINGS ARE APPROXIMATE AND THE MOST ACCURATE INFORMATION AVAILABLE AT THE TIME OF DESIGN. PRIOR TO EQUIPMENT AND CONDUIT INSTALLATION, COORDINATE EXACT INSTALLATION DETAILS AND MODIFY WORK PLAN ACCORDINGLY TO MEET UTILITY REQUIREMENTS. CORRESPOND WITH UTILITY COMPANY AND OWNER FOR PRIVATE UTILITIES. PRIOR TO ANY SITE DEVELOPMENT THAT MAY IMPACT THE INSTALLATION SUCH AS IRRIGATION INSTALLATION, CONCRETE OR ASPHALT INSTALLATION, LANDSCAPING, ETC.

E. MINIMUM SIZE OF ALL EXTERIOR SITE UNDERGROUND CONDUIT SHALL BE 1". MINIMUM WIRE SIZE SHALL BE #10 AWG FOR ALL EXTERIOR UNDERGROUND SITE CIRCUITS.

F. WHERE POSSIBLE, ROUTE CONDUITS UNDER HARD SURFACE TO AVOID CONFLICTS WITH LANDSCAPING AND LAWN IRRIGATION.

GENERAL APARTMENT UNIT NOTES:

A. ALL KITCHEN RECEPTACLES SHALL BE GFI TYPE PER NEC 210.8.

B. ALL RECEPTACLES WITHIN 6'-0" OF WATER SHALL BE GFI TYPE PER NEC.

C. PROVIDE ALL CABLES WITH TERMINATIONS AS REQUIRED BY HARDWARE SHOWN.

D. VERIFY RECEPTACLE MOUNTING HEIGHTS WITH FINAL CASEWORK AND APARTMENT UNIT DRAWINGS.

E. MINIMUM SIZE FOR BRANCH CIRCUIT WIRING SHALL BE #12.

F. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT PER NEC 210.4(B).

G. UNITS INDICATED ARE TYPICAL. COORDINATE RECEPTACLE LOCATIONS WITH ACTUAL FIELD MEASUREMENTS TO COMPLY WITH NEC SPACING REQUIREMENTS. VERIFY KITCHEN APPLIANCE LOCATIONS WITH OWNER AND ADJUST ACCORDINGLY.

H. PROVIDE AFCI BREAKERS FOR ALL 15- AND 20-AMP BRANCH CIRCUITS PER NEC 210.12 (B).

I. DO NOT MOUNT DEVICES BACK-TO-BACK.

J. SMOKE DETECTORS SHALL NOT INSTALLED WITHIN 36" OF A HVAC DIFFUSER OR RETURN AIR GRILLE PER NFPA 72. COORDINATE REQUIREMENTS WITH FIRE MARSHAL.

GENERAL ELECTRICAL NOTES:

A. SEE SPECIAL SYSTEMS SHEETS FOR ADDITIONAL WORK TO COMPLETED BY ELECTRICAL CONTRACTOR.

B. MINIMUM SIZE CONDUIT FOR HOME RUNS SHALL BE 3/4" C. HOME RUNS AND WIRING IN AREAS WITH EXPOSED STRUCTURE (NO CEILINGS) SHALL BE INSTALLED IN CONDUIT.

C. MINIMUM SIZE FOR DATA, COMMUNICATIONS, TV, AND AV CONDUITS SHALL BE 1".

D. WIRING FOR OTHER MISCELLANEOUS LOW VOLTAGE SYSTEMS (BUILDING MANAGEMENT SYSTEM, ACCESS CONTROL, SECURITY CAMERAS, ETC.) IS REQUIRED TO BE INSTALLED IN CONDUIT IN AREAS WHERE EXPOSED AND CONCEALED WITHIN WALLS. FREE AIR WIRING IS ALLOWED ABOVE ACCESSIBLE CEILING SPACES.

E. IN EXPOSED STRUCTURE AREAS (NO CEILINGS), ROUTE CONDUIT TIGHT TO STRUCTURE. CONDUIT SHALL BE ROUTED PARALLEL OR PERPENDICULAR TO STRUCTURE IN A NEAT AND WORKMAN-LIKE MANNER. EXPOSED WIRING OF ANY TYPE WILL NOT BE ALLOWED IN FINISHED AREAS.

F. CONTRACTOR SHALL COORDINATE LOCATION OF LUMINAIRES, SPEAKERS, FIRE ALARM, ETC. WITH FIRE RATED WALLS AND CEILINGS AND PROVIDE ENCLOSURES AS REQUIRED TO MAINTAIN THE FIRE INTEGRITY RATING. COORDINATE EXACT LOCATIONS OF FIRE RATED WALLS AND CEILINGS WITH ARCHITECTURAL DRAWINGS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

G. LABELING FOR PANELBOARD DIRECTORIES, LIGHTING CONTROL SYSTEM, FIRE ALARM PANEL PROGRAMMING, ETC. SHALL USE ROOM NUMBERS ASSIGNED BY OWNER AND NOT ROOM NUMBERS LISTED ON DRAWINGS. LABELS ON PANELBOARD DIRECTORY SHALL INCLUDE A DESCRIPTION OF LOAD SUCH AS LIGHTS, RECEPTACLES, MECH. UNIT LOCATIONS, ETC.

H. ALL PANELBOARDS AND SERVICE ENTRANCE EQUIPMENT SHALL BE LABELED WITH AVAILABLE FAULT CURRENT AND ARC FLASH PER SPECIFICATIONS.

I. MULTIWIRE BRANCH CIRCUITS AS DEFINED BY THE NATIONAL ELECTRICAL CODE (CIRCUITS WITH COMMON NEUTRAL) SHALL NOT BE USED. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH CIRCUIT.

J. PROVIDE A GREEN INSULATED GROUND WIRE IN ALL LIGHTING, POWER, AND EQUIPMENT BRANCH CIRCUITS.

K. REFER TO ACCESS CONTROL DETAIL 7 ON SHEET E7.01 FOR DOOR HARDWARE ROUGH-IN REQUIREMENTS. COORDINATE WITH ARCHITECTURAL DOOR HARDWARE SCHEDULE AND EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.

L. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION OF DEVICES FOR ALL TVs WITH OWNER PRIOR TO ROUGH-IN.

M. COORDINATE LOCATION OF FOUR-PLEX RECEPTACLE AND ASSOCIATED DATA OUTLET IN ALL PRIVATE OFFICES WITH OWNER AND FURNITURE EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.

N. SEE DEVICE ALIGNMENT DETAIL 3 ON SHEET E7.01 FOR INSTALLATION LOCATION OF DEVICES.

O. ELECTRICAL CONTRACTOR TO PROVIDE ROUGH IN FOR ALL THERMOSTATS, SENSORS, CO2 SENSORS, ETC. ROUGH-IN TO INCLUDE 4" SQUARE BOX WITH SINGLE GANG MUD RING AND CONDUIT TO ABOVE ACCESSIBLE CEILING. TERMINATE WITH INSULATING BUSHING. LOCATE BOX AT 52" AFF ALIGNED VERTICALLY AND HORIZONTALLY WITH ADJACENT ELECTRICAL DEVICES. REFER TO MECHANICAL DRAWINGS FOR THERMOSTAT LOCATIONS.

ELECTRICAL SYMBOLS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	LIGHTING		
	LINEAR LIGHT FIXTURE		POLE FIXTURE(S)
1	NUMBER DENOTES FIXTURE TYPE. SEE CORRESPONDING NUMBER IN FIXTURE SCHEDULE		DECORATIVE POLE MOUNTED LIGHT FIXTURE
	SHADING DENOTES FIXTURE CONNECTED TO EMERGENCY CIRCUIT OR WITH BATTERY		SINGLE POLE SWITCH
	STRIP FIXTURE		DOUBLE POLE SWITCH
			3 - WAY SWITCH
			4 - WAY SWITCH
	CEILING FIXTURE		MOMENTARY CONTACT SWITCH
	WALL FIXTURE		WALL BOX DIMMER SWITCH (NUMBER INDICATES WATTAGE: "6"-600W, "10"-1000W, "15"-1500W, "20"-2000W)
	TRACK FIXTURE		
	EMERGENCY BATTERY PACK		CEILING MOUNTED MOTION SENSOR/SWITCH
	CEILING MOUNTED EXIT LIGHT WITH DIRECTIONAL ARROW - NUMBER INDICATES FIXTURE NUMBER IN SCHEDULE		WALL MOUNTED MOTION SENSOR/SWITCH
			ENTRY STATION, WALL SWITCH(ES)
	WALL OR END MOUNTED EXIT LIGHT WITH DIRECTIONAL ARROW - NUMBER INDICATES FIXTURE NUMBER IN SCHEDULE		OCCUPANCY SENSOR POWER PACK
			LOCKABLE SWITCH
	FIRE ALARM		
	FIRE ALARM SMOKE DETECTOR		FIRE ALARM HORN & STROBE COMBINATION
	FIRE ALARM HEAT DETECTOR		CEILING FIRE ALARM AND MASS NOTIFICATION SPEAKER & STROBE COMBINATION
	DUCT MOUNTED SMOKE DETECTOR		FIRE ALARM MINI-HORN & STROBE COMBINATION
	FIRE ALARM MANUAL PULL STATION		CEILING FIRE ALARM STROBE
	FIRE SPRINKLER VALVE TAMPER SWITCH		WALL FIRE ALARM STROBE
	FIRE SPRINKLER FLOW SWITCH		CEILING FIRE ALARM SPEAKER & STROBE
	FIRE ALARM CONTROL PANEL		WALL FIRE ALARM AND MASS NOTIFICATION SPEAKER & STROBE COMBINATION
	FIRE ALARM ANNUNCIATOR PANEL		FIRE ALARM BELL
	FIRE ALARM MAGNETIC DOOR HOLDER		CEILING FIRE ALARM SPEAKER
	FIRE FIGHTERS PHONE JACK		
	POWER		
	DUPLEX RECEPTACLE		FLOOR BOX - COMBINATION POWER & TELEPHONE
	"G" DENOTES GFCI TYPE		FLOOR BOX - COMBINATION POWER AND DATA
	TRIANGLE DENOTES ISOLATED GROUND TYPE		FLOOR BOX - COMBINATION POWER, TELEPHONE & DATA
	STAR DENOTES HIGH ABUSE TYPE		WALL CLOCK HANGER OUTLET
	"S" DENOTES SAFETY TYPE		MULTI-OUTLET ASSEMBLY - LENGTH AS INDICATED
	DOUBLE SHADING DENOTES RED DEVICE		MOTOR - NUMBER DENOTES HORSEPOWER
	SINGLE SHADING DENOTES SPLIT WIRED DEVICE		DISCONNECT SWITCH
	HORIZONTAL MOUNTED DUPLEX RECEPTACLE		THERMAL ELEMENT SWITCH
	CEILING MOUNTED DUPLEX RECEPTACLE		SWITCH & FUSE
	FLOOR MOUNTED DUPLEX RECEPTACLE		SWITCH & FUSTAT
	DOUBLE DUPLEX RECEPTACLE		COMBINATION MAGNETIC STARTER/DISCONNECT
	SINGLE RECEPTACLE		MOTOR CONTROL PUSHBUTTON STATION
	DRYER RECEPTACLE NEMA 14-30 (125/250V 30A)		RELAY
	RANGE RECEPTACLE NEMA 14-50 (125/250V 50A)		
	WELDER RECEPTACLE NEMA 6-50 (250V 50A)		
	SPECIAL PURPOSE RECEPTACLE (NEMA CONFIG. AS NOTED)		
	COMMUNICATION		
	TELEPHONE OUTLET		CEILING SPEAKER
	DATA OUTLET		WALL SPEAKER
	COMBINATION TELEPHONE/DATA OUTLET		WALL MICROPHONE OUTLET
	FLOOR TELEPHONE OUTLET		FLOOR MICROPHONE OUTLET
	FLOOR DATA OUTLET		VOLUME CONTROL
	FLOOR COMBINATION TELEPHONE/DATA OUTLET		CALL SWITCH
	TELEVISION/VIDEO OUTLET		INTERCOM OUTLET
	1" CONDUIT SLEEVE UNLESS NOTED ON PLANS		INTERCOM CONTROL PANEL
	SECURITY		
	CEILING MOUNTED SECURITY MOTION DETECTOR		VIDEO CAMERA ("W" INDICATES WALL MOUNTED)
	WALL MOUNTED SECURITY MOTION DETECTOR		SECURITY CARD READER
	DOOR POSITION SWITCH		SECURITY CONTROL PANEL
	GENERAL		
	LIGHTING PANEL		WALL MOUNTED JUNCTION BOX
	DISTRIBUTION PANEL		JUNCTION BOX ("F" INDICATES FLOOR, "C" INDICATES CEILING)
	TELEPHONE TERMINAL CABINET		PHOTOCELL
	BRANCH CIRCUIT EXPOSED		CONDUIT SEAL
	BRANCH CIRCUIT CONCEALED IN CEILING OR WALL		CIRCUIT DOWN
	BRANCH CIRCUIT CONCEALED IN FLOOR		CIRCUIT UP
	HOMERUN TO PANEL (QUANTITY OF ARROWS INDICATES QUANTITY OF CIRCUITS)		CONDUIT STUB-OUT
	SPECIAL PURPOSE HOMERUN AS INDICATED		CIRCUIT BREAK
	THERMOSTAT		CHIME
	BUZZER		BELL
(TYP.)	WHERE (TYP.) IS USED ON PLANS INDICATES A TYPICAL NOTE OR CONDITION		PUSH BUTTON
EP	SUBSCRIPT "EP" APPLIED TO ANY SYMBOL INDICATES EXPLOSION PROOF CLASS GROUP & DIVISION AS NOTED	RT	SUBSCRIPT "RT" APPLIED TO ANY SYMBOL INDICATES RAINTIGHT NEMA 3 OR EQUIVALENT
WP	SUBSCRIPT "WP" APPLIED TO ANY SYMBOL INDICATES WEATHERPROOF NEMA TYPE 4 OR EQUIVALENT	PD	SUBSCRIPT "PD" APPLIED TO ANY FLOOR OUTLET INDICATES PEDESTAL MOUNTED
E	SUBSCRIPT "E" ADDED TO ANY SYMBOL INDICATES EXISTING	P	SUBSCRIPT "P" ADDED TO ANY SYMBOL INDICATES PILOT LIGHT
K	SUBSCRIPT "K" ADDED TO ANY SYMBOL INDICATES KEY OPERATED	DL	SUBSCRIPT "DL" ADDED TO ANY SYMBOL INDICATES DIAMP LOCATION

No.	Description	Date
1	Addendum #1	04/21/16

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Metro Omaha 344-3565

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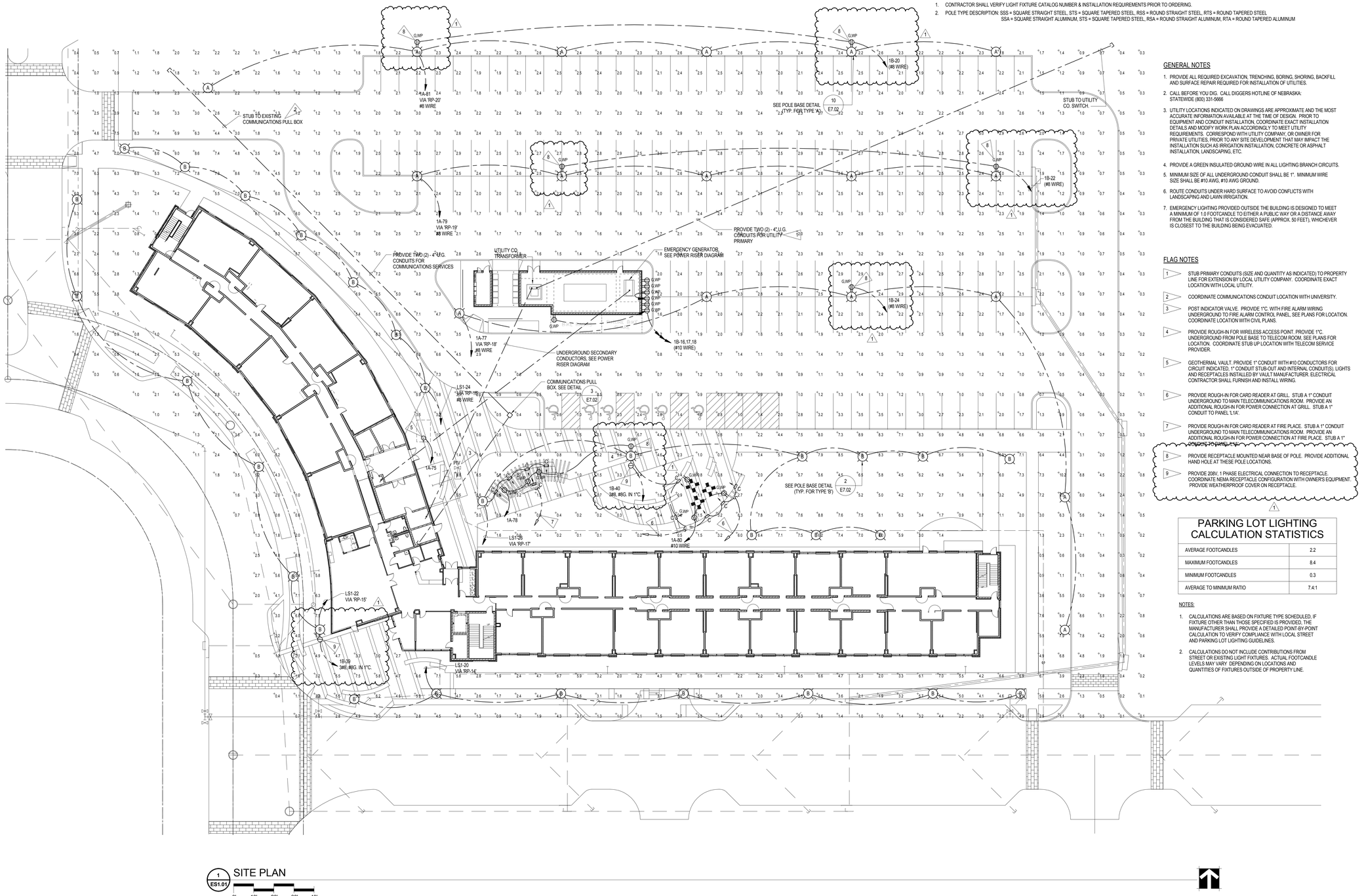
SITE LIGHTING SCHEDULE

FIXT #	MANUFACTURER	CATALOG NO. - NOTE 1	BEAM DIST.	LAMP DATA		VOLTAGE	QTY. PER POLE	POLE DESCRIPTION			DESCRIPTION	REMARKS
				SIZE	TYPE			TYPE NOTE 2	FINISH	HT. (FT.)		
A	CREE LIGHTING	ARE-EDR 3M R3 12 E UL BZ 525 40K	III	202W	LED	120	1	RSS	BZ	25'	POLE LIGHT	
B	CREE LIGHTING	ARE-EDR 3M R3 06 E UL BZ 700 40K	III	134W	LED	120	1	RSS	BZ	12'	PEDESTRIAN LIGHT	
C	JUNO LIGHTING	IC115LEDHSG IC115LEDPNM1K 837-BL		6.4	LED	120	--	--	--	TBD	STEP LIGHT	

NOTES:

1. CONTRACTOR SHALL VERIFY LIGHT FIXTURE CATALOG NUMBER & INSTALLATION REQUIREMENTS PRIOR TO ORDERING.
2. POLE TYPE DESCRIPTION: SSS = SQUARE STRAIGHT STEEL, STS = SQUARE TAPERED STEEL, RTS = ROUND TAPERED STEEL
   SSA = SQUARE STRAIGHT ALUMINUM, STS = SQUARE TAPERED STEEL, RSA = ROUND STRAIGHT ALUMINUM, RTA = ROUND TAPERED ALUMINUM



1 ES1.01 SITE PLAN

0' 10' 20' 30' 40'

GENERAL NOTES

1. PROVIDE ALL REQUIRED EXCAVATION, TRENCHING, BORING, SHORING, BACKFILL AND SURFACE REPAIR REQUIRED FOR INSTALLATION OF UTILITIES.
2. CALL BEFORE YOU DIG. CALL DIGGERS HOTLINE OF NEBRASKA: STATEWIDE (800) 331-5666
3. UTILITY LOCATIONS INDICATED ON DRAWINGS ARE APPROXIMATE AND THE MOST ACCURATE INFORMATION AVAILABLE AT THE TIME OF DESIGN. PRIOR TO EQUIPMENT AND CONDUIT INSTALLATION, COORDINATE EXACT INSTALLATION DETAILS AND MODIFY WORK PLAN ACCORDINGLY TO MEET UTILITY REQUIREMENTS. CORRESPOND WITH UTILITY COMPANY, OR OWNER FOR PRIVATE UTILITIES, PRIOR TO ANY SITE DEVELOPMENT THAT MAY IMPACT THE INSTALLATION SUCH AS IRRIGATION INSTALLATION, CONCRETE OR ASPHALT INSTALLATION, LANDSCAPING, ETC.
4. PROVIDE A GREEN INSULATED GROUND WIRE IN ALL LIGHTING BRANCH CIRCUITS.
5. MINIMUM SIZE OF ALL UNDERGROUND CONDUIT SHALL BE 1". MINIMUM WIRE SIZE SHALL BE #10 AWG, #10 AWG GROUND.
6. ROUTE CONDUITS UNDER HARD SURFACE TO AVOID CONFLICTS WITH LANDSCAPING AND LAWN IRRIGATION.
7. EMERGENCY LIGHTING PROVIDED OUTSIDE THE BUILDING IS DESIGNED TO MEET A MINIMUM OF 1.0 FOOTCANDLE TO EITHER A PUBLIC WAY OR A DISTANCE AWAY FROM THE BUILDING THAT IS CONSIDERED SAFE (APPROX. 50 FEET), WHICHEVER IS CLOSEST TO THE BUILDING BEING EVACUATED.

FLAG NOTES

1. STUB PRIMARY CONDUITS (SIZE AND QUANTITY AS INDICATED) TO PROPERTY LINE FOR EXTENSION BY LOCAL UTILITY COMPANY. COORDINATE EXACT LOCATION WITH LOCAL UTILITY.
2. COORDINATE COMMUNICATIONS CONDUIT LOCATION WITH UNIVERSITY.
3. POST INDICATOR VALVE. PROVIDE 1"C. WITH FIRE ALARM WIRING UNDERGROUND TO FIRE ALARM CONTROL PANEL, SEE PLANS FOR LOCATION. COORDINATE LOCATION WITH CIVIL PLANS.
4. PROVIDE ROUGH-IN FOR WIRELESS ACCESS POINT. PROVIDE 1"C. UNDERGROUND FROM POLE BASE TO TELECOM ROOM, SEE PLANS FOR LOCATION. COORDINATE STUB UP LOCATION WITH TELECOM SERVICE PROVIDER.
5. GEOTHERMAL VAULT. PROVIDE 1" CONDUIT WITH #10 CONDUCTORS FOR CIRCUIT INDICATED, 1" CONDUIT STUB-OUT AND INTERNAL CONDUIT(S). LIGHTS AND RECEPTACLES INSTALLED BY VAULT MANUFACTURER. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL WIRING.
6. PROVIDE ROUGH-IN FOR CARD READER AT GRILL. STUB A 1" CONDUIT UNDERGROUND TO MAIN TELECOMMUNICATIONS ROOM. PROVIDE AN ADDITIONAL ROUGH-IN FOR POWER CONNECTION AT GRILL. STUB A 1" CONDUIT TO PANEL 'L1A'.
7. PROVIDE ROUGH-IN FOR CARD READER AT FIRE PLACE. STUB A 1" CONDUIT UNDERGROUND TO MAIN TELECOMMUNICATIONS ROOM. PROVIDE AN ADDITIONAL ROUGH-IN FOR POWER CONNECTION AT FIRE PLACE. STUB A 1" CONDUIT TO PANEL 'L1A'.
8. PROVIDE RECEPTACLE MOUNTED NEAR BASE OF POLE. PROVIDE ADDITIONAL HAND HOLE AT THESE POLE LOCATIONS.
9. PROVIDE 208V, 1 PHASE ELECTRICAL CONNECTION TO RECEPTACLE. COORDINATE NEMA RECEPTACLE CONFIGURATION WITH OWNER'S EQUIPMENT. PROVIDE WEATHERPROOF COVER ON RECEPTACLE.

1

PARKING LOT LIGHTING CALCULATION STATISTICS

AVERAGE FOOTCANDLES	2.2
MAXIMUM FOOTCANDLES	8.4
MINIMUM FOOTCANDLES	0.3
AVERAGE TO MINIMUM RATIO	7.4:1

NOTES:

1. CALCULATIONS ARE BASED ON FIXTURE TYPE SCHEDULED, IF FIXTURE OTHER THAN THOSE SPECIFIED IS PROVIDED, THE MANUFACTURER SHALL PROVIDE A DETAILED POINT-BY-POINT CALCULATION TO VERIFY COMPLIANCE WITH LOCAL STREET AND PARKING LOT LIGHTING GUIDELINES.
2. CALCULATIONS DO NOT INCLUDE CONTRIBUTIONS FROM STREET OR EXISTING LIGHT FIXTURES. ACTUAL FOOTCANDLE LEVELS MAY VARY DEPENDING ON LOCATIONS AND QUANTITIES OF FIXTURES OUTSIDE OF PROPERTY LINE.

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

SITE PLAN

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MEI PROJECT NO: 15273

morrissey engineering inc
mechanical | electrical | lighting | technology | commissioning
4940 North 118th Street
Omaha, NE 68164
P: 402.491.4144
www.morrisseyengineering.com

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DATE: 04/01/16

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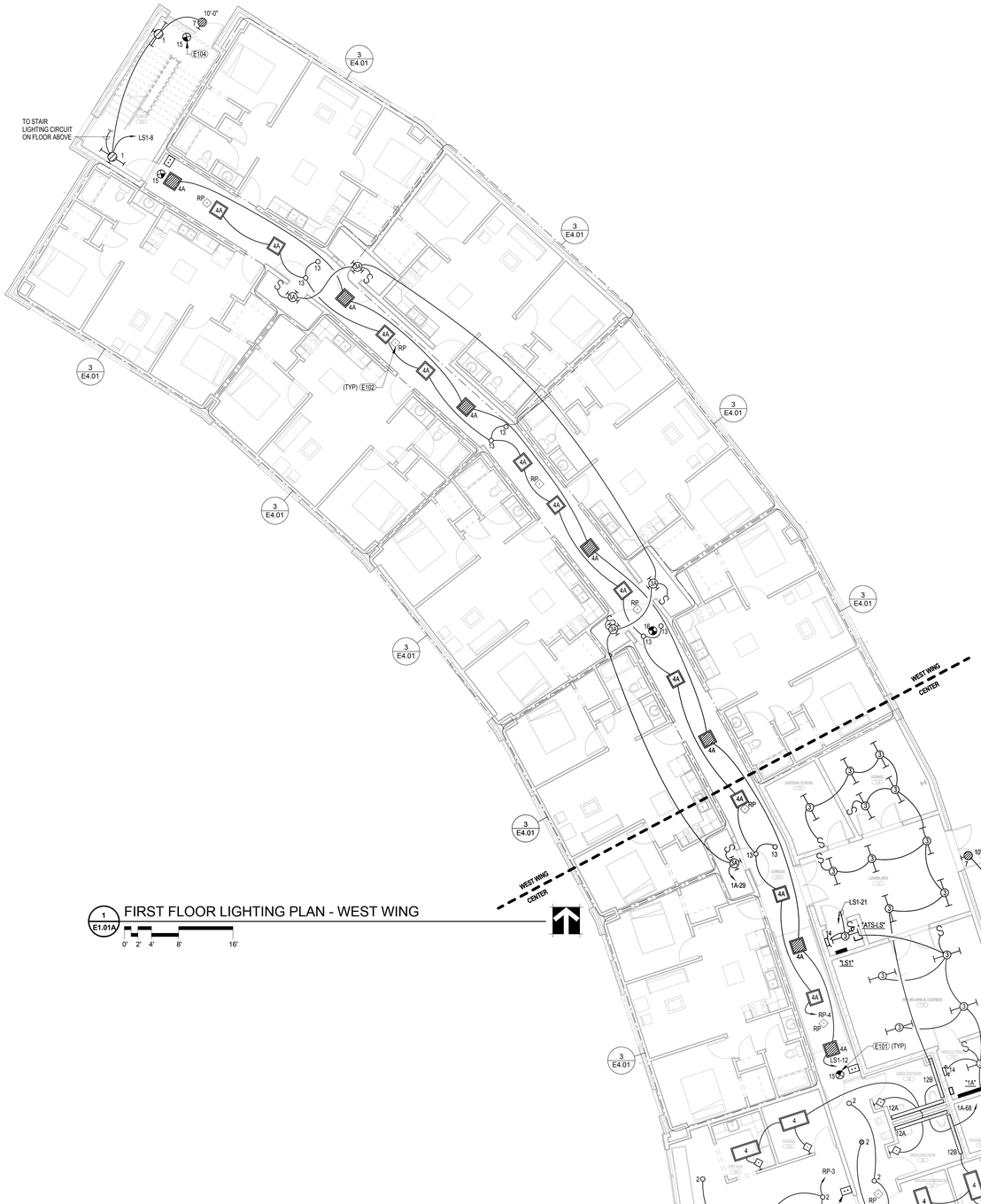
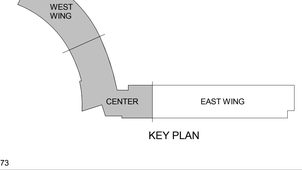


1 E1.01A FIRST FLOOR LIGHTING PLAN - WEST WING

0' 2' 4' 8' 16'

2 E1.01A FIRST FLOOR LIGHTING PLAN - CENTER

0' 2' 4' 8' 16'



KEY PLAN

GENERAL NOTES

REFER TO SHEET E0.01

KEYNOTES

E101	CONNECT ALL EXIT SIGNS ON THIS FLOOR TO A DEDICATED LOCKABLE CIRCUIT BREAKER IN PANEL 'LS1'. SEE PANEL SCHEDULE.
E102	CONNECT OCCUPANCY SENSORS INDICATED WITH SUBSCRIPT 'RP' TO RELAY CONTROL PANEL. PROGRAM TO CONTROL LIGHT FIXTURES WITHIN THE AREA IT IS LOCATED.
E103	LIGHTING CONTROL ENTRY STATION. CONNECT TO RELAY CONTROL PANEL TO CONTROL RELAYS WITHIN THIS ROOM/AREA. COORDINATE BUTTON CONFIGURATION WITH OWNER/ENGINEER.
E104	SURFACE MOUNT EXIT SIGN TO BOTTOM SIDE OF STAIR LANDING. LOCATE SIGN NEXT TO DOOR OPENING SUCH THAT EXIST SIGN SHALL BE CLEAR OF DOOR OPENING.
E105	CEILING MOUNTED OCCUPANCY SENSOR. SEE CONNECTION DETAIL SET ON SHEET E6.01.
E106	AUTOMATIC LOAD CONTROL RELAY, NINE 24 INC. CATALOG #BLTC-R-CI-120 (OR EQUAL). MOUNT IN ACCESSIBLE LOCATIONS. INSTALL PER MANUFACTURERS INSTRUCTIONS. EMERGENCY LIGHT FIXTURES (INDICATED BY HATCHING) SHALL BE SWITCHED WITH LIGHTING UNDER NORMAL CONDITIONS. UPON LOSS OF NORMAL POWER, EMERGENCY FIXTURES SHALL TURN "ON" AUTOMATICALLY.

1

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR LIGHTING PLAN - WEST WING & CENTER

HOLLAND BASHAM ARCHITECTS

119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MEI PROJECT NO: 15273

morrissey engineering inc

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Omaha, NE 68164

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STEVEN M. FARRINGTON E-11987 04/01/16 REGISTERED PROFESSIONAL ENGINEER

PROJECT:15097

DATE: 04/01/16

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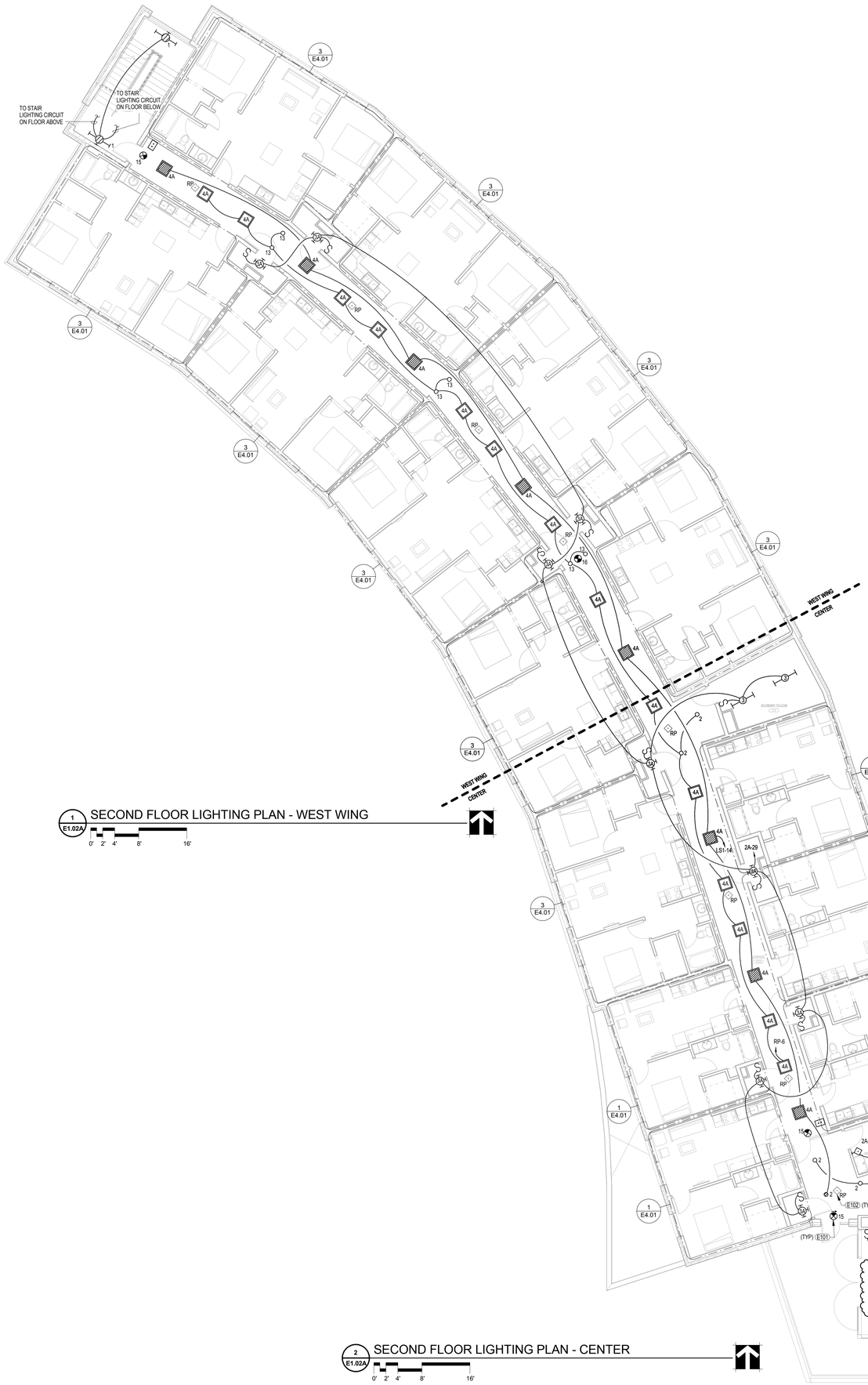
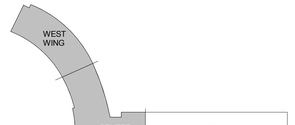


1 E1.02A SECOND FLOOR LIGHTING PLAN - WEST WING

0' 2' 4' 8' 16'

2 E1.02A SECOND FLOOR LIGHTING PLAN - CENTER

0' 2' 4' 8' 16'



KEY PLAN

GENERAL NOTES

REFER TO SHEET E0.01

KEYNOTES

E101	CONNECT ALL EXIT SIGNS ON THIS FLOOR TO A DEDICATED LOCKABLE CIRCUIT BREAKER IN PANEL 'LS1'. SEE PANEL SCHEDULE.
E102	CONNECT OCCUPANCY SENSORS INDICATED WITH SUBSCRIPT 'RP' TO RELAY CONTROL PANEL. PROGRAM TO CONTROL LIGHT FIXTURES WITHIN THE AREA IT IS LOCATED.
E103	LIGHTING CONTROL ENTRY STATION. CONNECT TO RELAY CONTROL PANEL TO CONTROL RELAYS WITHIN THIS ROOM/AREA. COORDINATE BUTTON CONFIGURATION WITH OWNER/ENGINEER.
E104	DELETED
E106	RELAY MOUNTED OCCUPANCY SENSOR. SEE CONNECTION DETAIL 4/E.08. AUTOMATIC LOAD CONTROL RELAY, NINE 24 INC. CATALOG #BLTC-R-CI-120 (OR EQUAL). MOUNT IN ACCESSIBLE LOCATIONS. INSTALL PER MANUFACTURERS INSTRUCTIONS. EMERGENCY LIGHT FIXTURES (INDICATED BY HATCHING) SHALL BE SWITCHED WITH LIGHTING UNDER NORMAL CONDITIONS. UPON LOSS OF NORMAL POWER, EMERGENCY FIXTURES SHALL TURN "ON" AUTOMATICALLY.

1

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

SECOND FLOOR LIGHTIN PLAN - WEST WING & CENTER

HOLLAND BASHAM ARCHITECTS

119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

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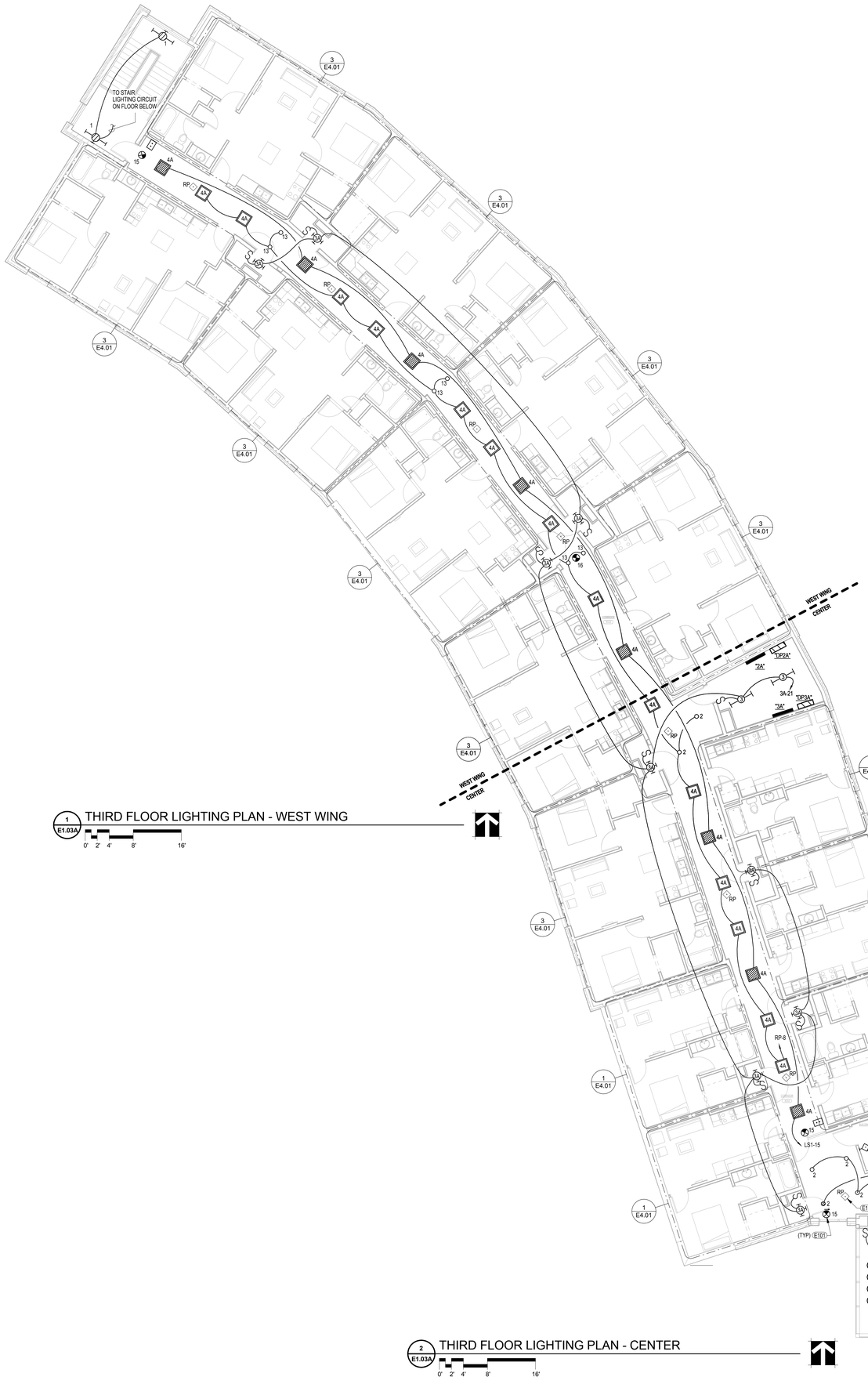


1 E1.03A THIRD FLOOR LIGHTING PLAN - WEST WING

0' 2' 4' 8' 16'

2 E1.03A THIRD FLOOR LIGHTING PLAN - CENTER

0' 2' 4' 8' 16'

GENERAL NOTES

REFER TO SHEET E0.01

KEYNOTES

E101	CONNECT ALL EXIT SIGNS ON THIS FLOOR TO A DEDICATED LOCKABLE CIRCUIT BREAKER IN PANEL 'LS1'. SEE PANEL SCHEDULE.
E102	CONNECT OCCUPANCY SENSORS INDICATED WITH SUBSCRIPT 'RP' TO RELAY CONTROL PANEL. PROGRAM TO CONTROL LIGHT FIXTURES WITHIN THE AREA IT IS LOCATED.
E103	LIGHTING CONTROL ENTRY STATION. CONNECT TO RELAY CONTROL PANEL TO CONTROL RELAYS WITHIN THIS ROOM/AREA. COORDINATE BUTTON CONFIGURATION WITH OWNER/ENGINEER.
E106	AUTOMATIC LOAD CONTROL RELAY, NINE 24 INC. CATALOG #BLTC-R-CI-120 (OR EQUAL). MOUNT IN ACCESSIBLE LOCATIONS. INSTALL PER MANUFACTURERS INSTRUCTIONS. EMERGENCY LIGHT FIXTURES (INDICATED BY HATCHING) SHALL BE SWITCHED WITH LIGHTING UNDER NORMAL CONDITIONS. UPON LOSS OF NORMAL POWER, EMERGENCY FIXTURES SHALL TURN "ON" AUTOMATICALLY.

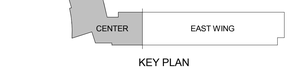
1

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

THIRD FLOOR LIGHTING PLAN - WEST WING & CENTER



KEY PLAN

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119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
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ELECTRICAL ENGINEER
STEVEN M. FARRINGTON
E-11987
04/01/16
STATE OF NEBRASKA

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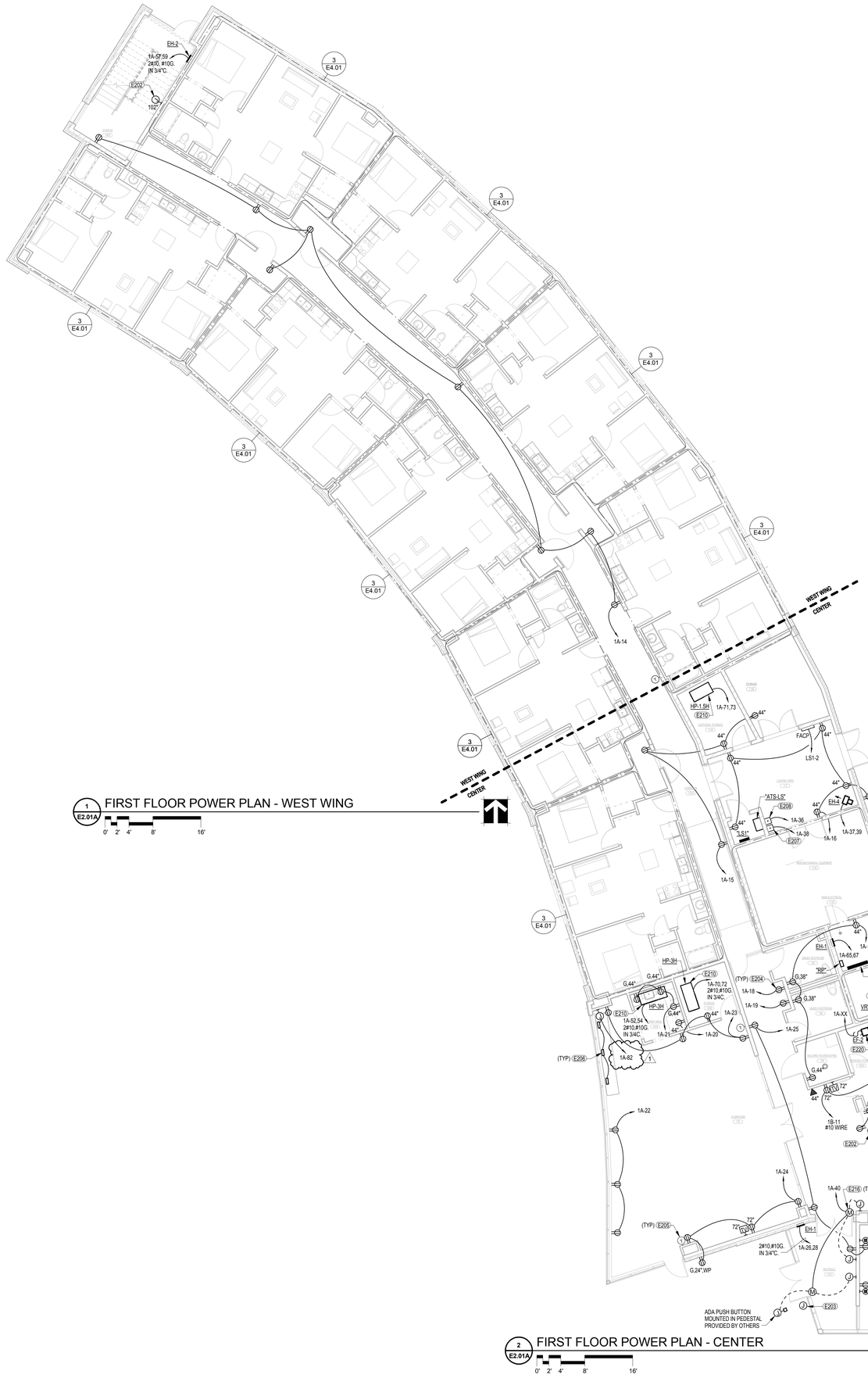

1 FIRST FLOOR POWER PLAN - WEST WING
E2.01A
0' 2' 4' 8' 16'

2 FIRST FLOOR POWER PLAN - CENTER
E2.01A
0' 2' 4' 8' 16'

GENERAL NOTES

REFER TO SHEET E0.01

KEYNOTES

E202	PROVIDE FLUSH MOUNT 2 GANG BOX WITH SINGLE GANG RING AND 1" CONDUIT ROUTED TO ACCESSIBLE CEILING IN CORRIDOR. PROVIDE PRESS-ON INSULATED BUSHINGS. COORDINATE FINAL MOUNTING HEIGHT WITH OWNER SECURITY TEAM PRIOR TO INSTALLATION.
E203	PROVIDE FLUSH MOUNT 2 GANG BOX, SINGLE GANG RING, WEATHER-RATED COVER AND 1" CONDUIT ROUTED TO ACCESSIBLE CEILING IN CORRIDOR. PROVIDE PRESS-ON INSULATED BUSHINGS. COORDINATE FINAL MOUNTING LOCATION WITH OWNER SECURITY TEAM PRIOR TO INSTALLATION.
E204	LOCATE RECEPTACLE FOR WATER COOLER SO THAT CORD AND PLUG ARE CONCEALED INSIDE OR BEHIND WATER COOLER. PROVIDE GFCI BREAKER IN PANEL INDICATED.
E205	PROVIDE 4" SQUARE BOX WITH SINGLE GANG PLASTER RING AND ONE (1) 3/4"C. CONCEALED IN WALL AND STUBBED UP ABOVE ACCESSIBLE CEILING FOR THERMOSTAT/SENSOR AND WIRING BY MECHANICAL. PROVIDE PRESS-ON BUSHING AND PULLSTRING. LOCATE BOX 44" A.F.F. ALIGN VERTICALLY AND HORIZONTALLY WITH ADJACENT DEVICES WHERE APPLICABLE. COORDINATE FINAL LOCATION WITH MECHANICAL CONTRACTOR AND OWNER PRIOR TO ROUGH-IN.
E206	PROVIDE ELECTRI-CABLE ASSEMBLIES VILLA II POWER BASE (#VIL2-41-U-DKO-B) AND GROMMET (#VIL-GROM-F-B) CUT INTO TOP OF WORK SURFACE. PROVIDE WITH HARDWIRE STARTER CABLE FROM JUNCTION BOX ON COLUMN AND INTERCONNECTING CABLES BETWEEN BOXES. FASTEN ALL CABLES TO BOTTOM OF WORKSURFACE.
E207	FLUSH MOUNTED EMERGENCY SHUTDOWN PUSHBUTTON WITH WIRING TO DISCONNECT POWER TO BOILERS IN MECHANICAL ROOM. SEE DETAIL 12/E7.02 FOR ADDITIONAL INFORMATION.
E208	FLUSH MOUNTED EMERGENCY SHUTDOWN PUSHBUTTON WITH WIRING TO DISCONNECT POWER TO GAS WATER HEATERS IN MECHANICAL ROOM. SEE DETAIL 13/E7.02 FOR ADDITIONAL INFORMATION.
E210	MECHANICAL EQUIPMENT PROVIDE WITH INTEGRAL DISCONNECT, SEE MECHANICAL SHEDULES FOR ADDITONAL INFORMATION.
E211	ELEVATOR POWER MODULE DISCONNECT SWITCH FUSED PER ELEVATOR MANUFACTURER'S RECOMMENDATIONS. COORDINATE LOCATION WITH ELEVATOR INSPECTOR. CONNECT TO "MSB" WITH 3#2, #6G. IN 1-1/4"C.
E212	FIRE ALARM JUNCTION BOX.
E213	PROVIDE LOCKABLE SWITCH FOR ELEVATOR CAB LIGHTING. CONNECT TO CIRCUIT EL-3
E214	PROVIDE MANUAL SWITCH FOR DAMPER AND RELAY AT TOP OF ELEVATOR SHAFT. COORDINATE SWITCH LOCATION WITH ELEVATOR MANUFACTURER. DAMPER AND RELAY BY OTHERS. CONNECT TO CIRCUIT EL-5
E215	PROVIDE 20 AMP SIMPLEX FOR CONNECTION OF SUMP PUMP SP-1. VERIFY RECEPTACLE CONFIGURATION WITH PUMP SUPPLIER. CONNECT TO PANEL INDICATED WITH 2 #10, #10G. IN 3/4" C.
E216	PROVIDE 120V CONNECTION TO HANDICAPPED DOOR OPERATOR BY OTHERS. CONCEAL CONNECTIONS IN WALL. COORDINATE CONNECTION REQUIREMENTS TO DOOR ACTUATOR PUSHBUTTON(S) WITH EQUIPMENT SUPPLIER.
E217	VRV UNIT IS FED FROM VRV-HP. PROVIDE 2#12, #12G IN 1/2"C. AS REQUIRED TO CONNECT VRV TO ASSOCIATED VRV-HP LOCATED ON ROOF. SEE MECHANICAL SHEDULES FOR ADDITIONAL INFORMATION.
E218	PROVIDE ELECTRICAL CONNECTION TO FIRE/SMOKE DAMPER. SEE PANEL SCHEDULES. INTERCONNECT TO DUCT DETECTOR IN MECHANICAL UNIT TO CLOSE ALL FIRE SMOKE DAMPERS IN EVENT OF DETECTOR ALARM. SEE DETAIL 4/ET.01.
E220	ALTERNATE BID #1 - PROVIDE CONNECTION TO EXHAUST FAN. CONNECT TO SPARE 20A, 1-POLE CIRCUIT BREAKER IN PANEL INDICATED. SEE ALTERNATE MECHANICAL SCHEDULES FOR ADDTION INFORMATION.
E222	PROVIDE HEAT TRACE ON STORM PIPING. REFER TO MECHANICAL DRAWINGS FOR MORE INFORMATION. PROVIDE RAYCHEM (OR EQUAL) SELF-REGULATING HEAT TRACE WITH TEMPERATURE SENSOR.

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR POWER PLAN - WEST WING & CENTER

KEY PLAN

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MEI PROJECT NO: 15273

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STEPHEN M. FARRINGTON E-11987 04/01/16

PROJECT:15097
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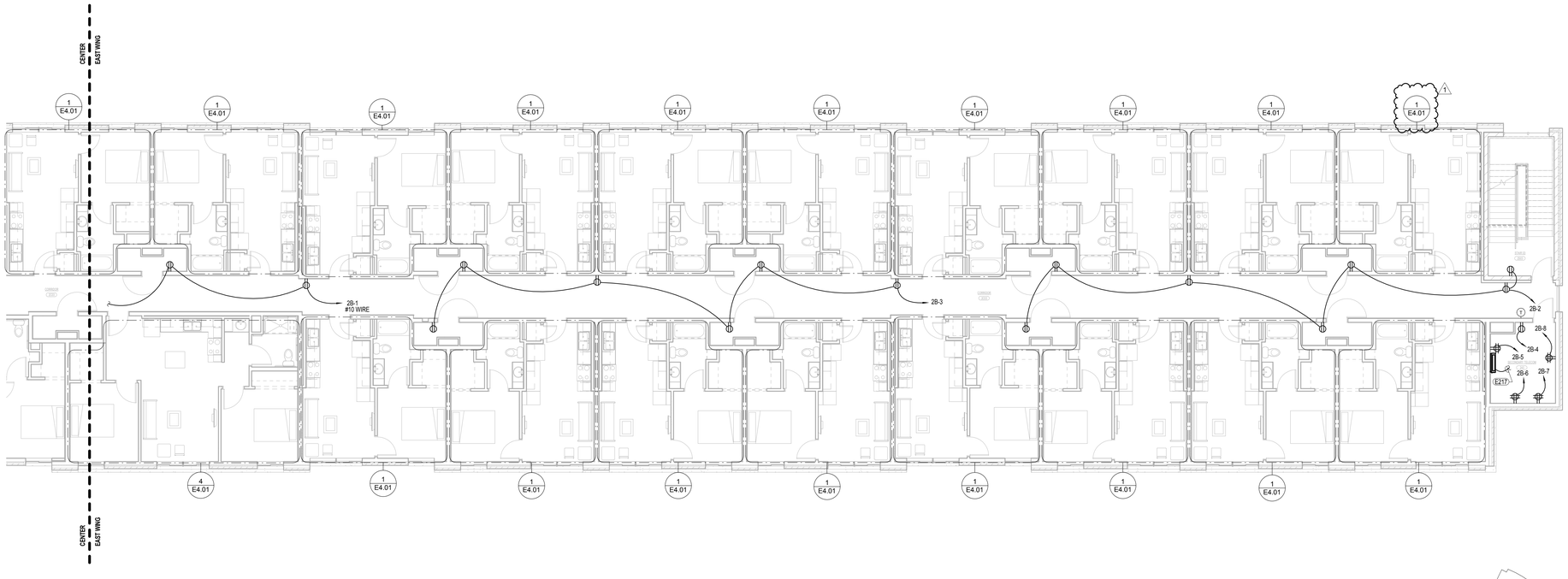

1 E2.02B SECOND FLOOR POWER PLAN - EAST WING

0' 2' 4' 8' 16'

KEY PLAN

GENERAL NOTES

REFER TO SHEET E0.01

KEYNOTES

E217 VRV UNIT IS FED FROM VRV-HP. PROVIDE 2#12, #12G IN 1/2"C. AS REQUIRED TO CONNECT VRV TO ASSOCIATED VRV-HP LOCATED ON ROOF. SEE MECHANICAL SHEDULES FOR ADDITIONAL INFORMATION.

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

SECOND FLOOR POWER PLAN - EAST WING

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
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DATE: 04/01/16

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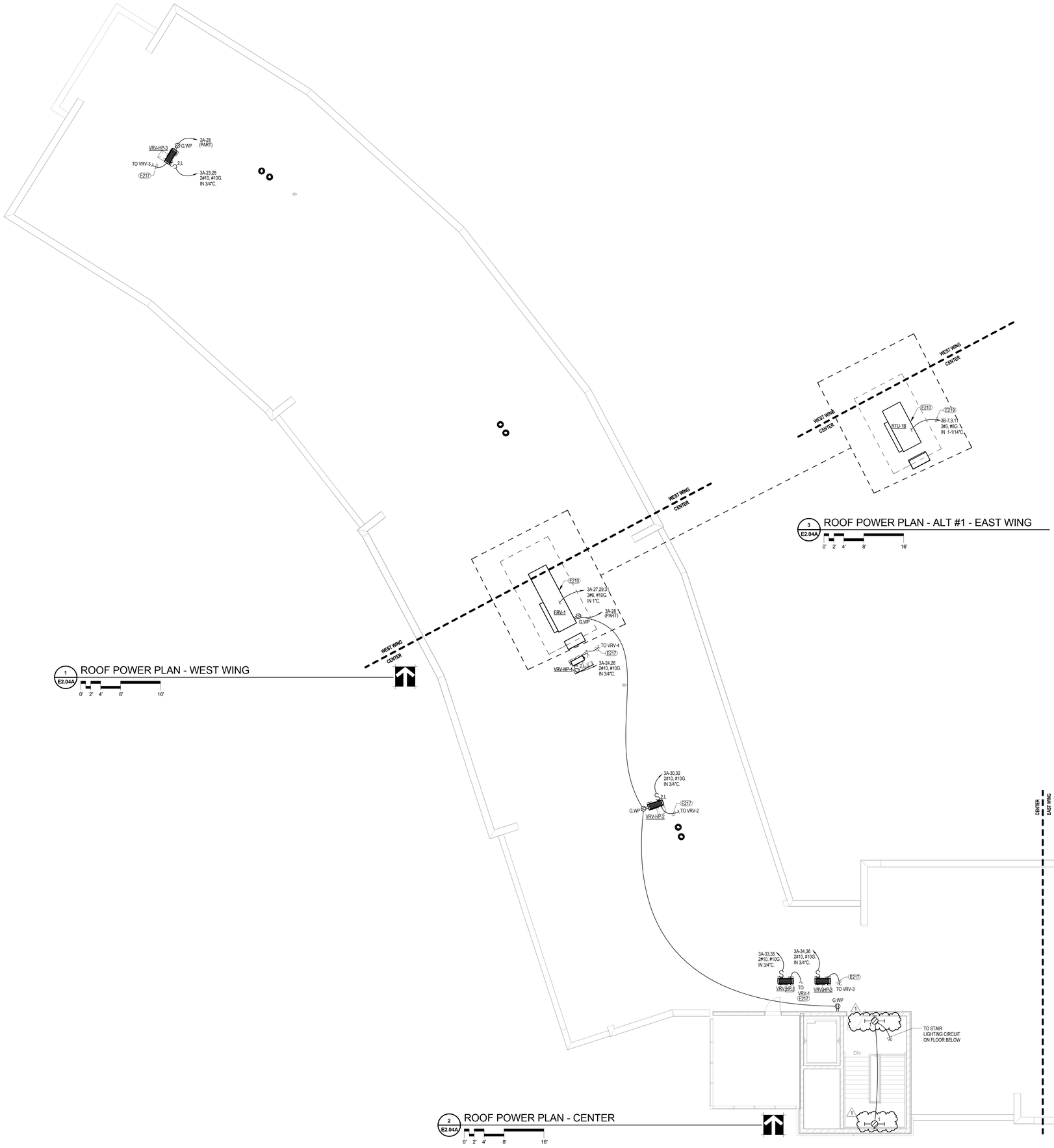

1 E2.04A ROOF POWER PLAN - WEST WING

0' 2' 4' 8' 16'

3 E2.04A ROOF POWER PLAN - ALT #1 - EAST WING

0' 2' 4' 8' 16'

2 E2.04A ROOF POWER PLAN - CENTER

0' 2' 4' 8' 16'

GENERAL NOTES

REFER TO SHEET E0.01

KEYNOTES

E210	MECHANICAL EQUIPMENT PROVIDE WITH INTEGRAL DISCONNECT, SEE MECHANICAL SHEDULES FOR ADDITONAL INFORMATION.
E217	VRV UNIT IS FED FROM VRV-HP. PROVIDE 2#12, #12G IN 1/2"C. AS REQUIRED TO CONNECT VRV TO ASSOCIATED VRV-HP LOCATED ON ROOF. SEE MECHANICAL SHEDULES FOR ADDITIONAL INFORMATION.
E219	ALTTERNATE BID #1 - PROVIDE 80A, 3-POLE CIRCUIT BREAKER FOR CIRCUIT SERVING MECHANICAL UNIT. SEE ALTERNATE MECHANICAL SCHEDULES FOR ADDITIONAL INFORMATION.

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

ROOF POWER PLAN - WEST WING & CENTER

KEY PLAN

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MEI PROJECT NO: 15273

morrissey engineering inc
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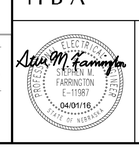

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DATE: 04/01/16

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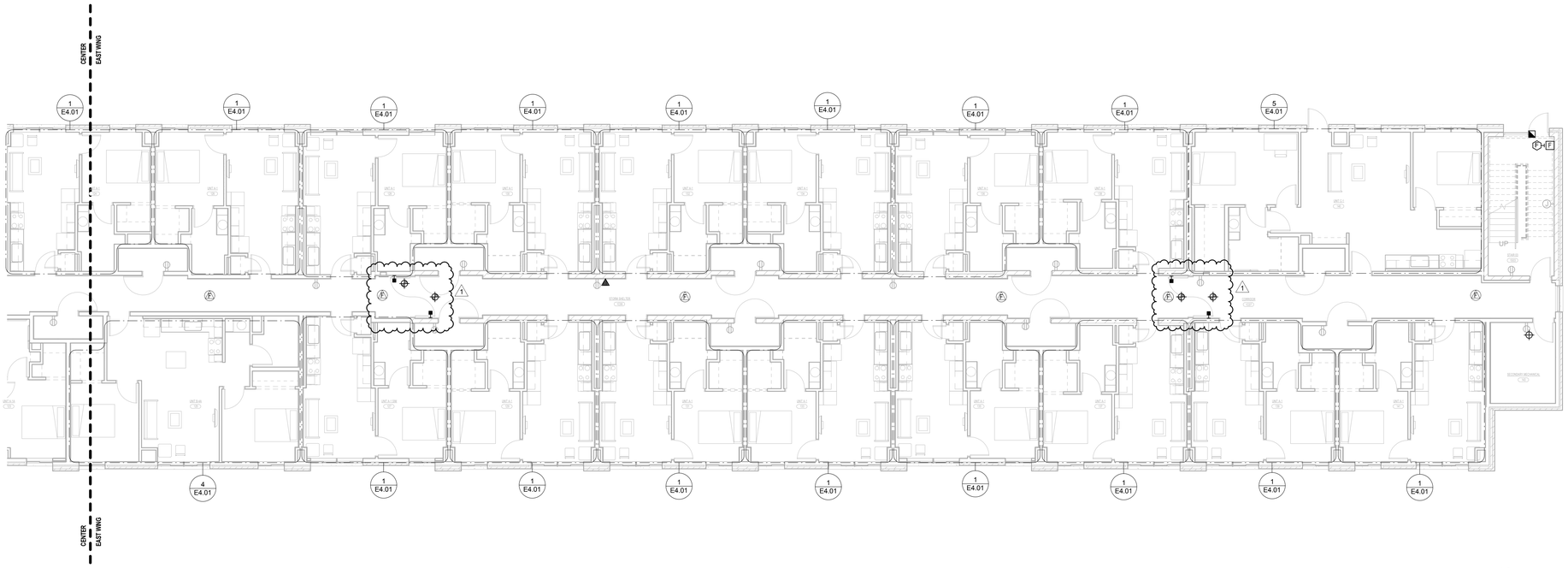
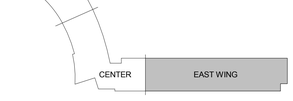


1 E3.01B FIRST FLOOR SPECIAL SYSTEMS - EAST WING

0' 2' 4' 8' 16'



KEY PLAN

GENERAL NOTES

REFER TO SHEET E0.01

KEYNOTES

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

FIRST FLOOR SPECIAL SYSTEMS PLAN - EAST WING

HOLLAND BASHAM ARCHITECTS
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OMAHA, NEBRASKA 68132
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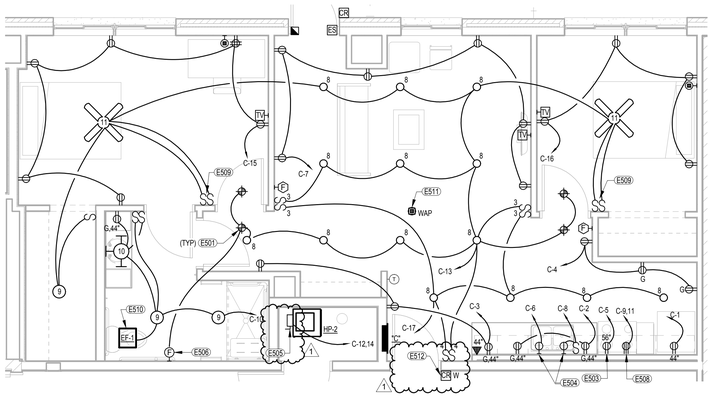
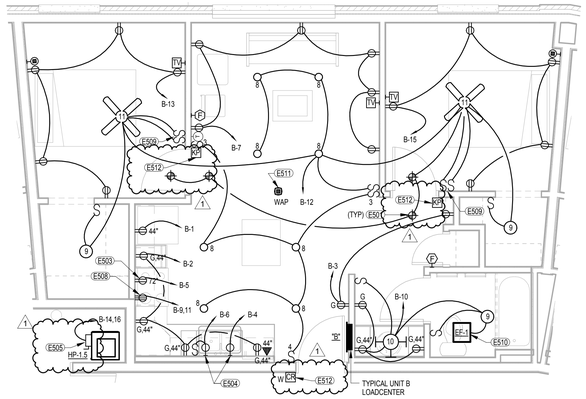


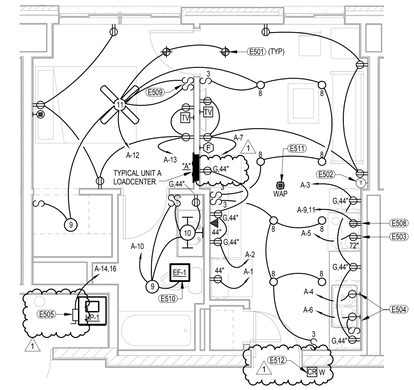
5 E4.01 UNIT TYPE C - ELECTRICAL PLAN

0' 1' 2' 4' 8'



3 E4.01 UNIT TYPE B-1 - ELECTRICAL PLAN (TYPE B-2, B-3, B-4 SIMILAR)

0' 1' 2' 4' 8'



1 E4.01 UNIT TYPE A-1 - ELECTRICAL PLAN

0' 1' 2' 4' 8'

4 E4.01 UNIT TYPE B-4A - ELECTRICAL PLAN

0' 1' 2' 4' 8'

2 E4.01 UNIT TYPE A-1A - ELECTRICAL PLAN

0' 1' 2' 4' 8'

GENERAL NOTES

REFER TO SHEET E0.01

KEYNOTES

E501	PROVIDE FLUSHED-MOUNTED FIRE ALARM SYSTEM ADDRESSABLE RELAY MODULE WITH WIRING / PROGRAMMING TO SHUTDOWN HVAC AND EXHAUST FAN IN THE EVENT OF ALARM CONDITION IN RESPECTIVE UNIT. PROVIDE INTERLOCK PER NFPA REQUIREMENTS. CONNECT TO MAIN FIRE ALARM CONTROL PANEL.
E502	PROVIDE 4" SQUARE J-BOX ROUGH-IN FOR MECHANICAL THERMOSTAT. PROVIDE 1/2" CONDUIT TO RESPECTIVE MECHANICAL UNIT. COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR.
E503	RECEPTACLE FOR MICROWAVE OR OTR HOOD. VERUFY EXACT MOUNTING HEIGHT WITH CABINETS AND APPLIANCES.
E504	CONNECTION FOR DISHWASHER/WASHER. SEE DETAIL 3/E7.01
E505	DISCONNECT SWITCH FURNISHED WITH MECHANICAL UNIT.
E506	120V SINGLE STATION FIRE ALARM STROBE. SEE SPECIFICATIONS.
E508	PROVIDE 3/4" RIGID 'N 1" CONDUIT.
E509	SWITCH NEAREST BEDROOM DOOR SHALL CONTROL LIGHT ON/OFF. SECOND SWITCH SHALL CONTROL CEILING FAN ON/OFF. FAN SPEED TO BE CONTROL VIA PULL CHAIN PROVIDED WITH CEILING FAN/LIGHT KIT.
E510	ALTERNATE BID #1 - PROVIDE CONNECTION TO EH-1 SUCH THAT EXHAUST FAN ON/OFF IS CONTROLLED WITH TOGGLE SWITCH FOR DOWN LIGHT IN BATHROOM.
E511	PROVIDE ROUGH-IN FOR A WIRELESS ACCESS POINT WALL MOUNTED AT SOFFIT. STUB 1" CONDUIT TO ABOVE ACCESSIBLE CEILING SPACE. TERMINATE WITH INSULATED BUSHING.
E512	THIS DOOR CONTAINS A WIRELESS CARD READER AND/OR KEYPAD. ELECTRICAL ROUGH-IN IS NOT REQUIRED.

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

ENLARGED ELECTRICAL PLANS - UNITS

HOLLAND BASHAM ARCHITECTS

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OMAHA, NEBRASKA 68132
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STEPHEN M. FARRINGTON E-11987 04/01/16

PROJECT:15097

DATE: 04/01/16

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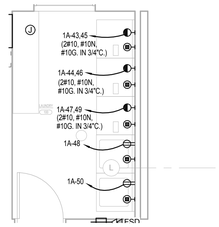
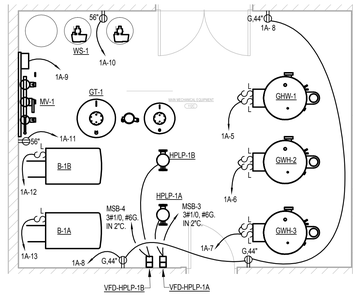


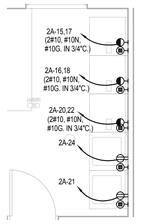
4 E4.02 ENLARGED LAUNDRY - FIRST FLOOR

0' 1' 2' 4' 8'



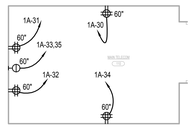
1 E4.02 ENLARGED MAIN MECHANICAL EQUIPMENT

0' 1' 2' 4' 8'



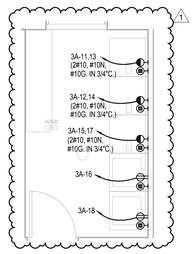
5 E4.02 ENLARGED LAUNDRY - SECOND FLOOR

0' 1' 2' 4' 8'



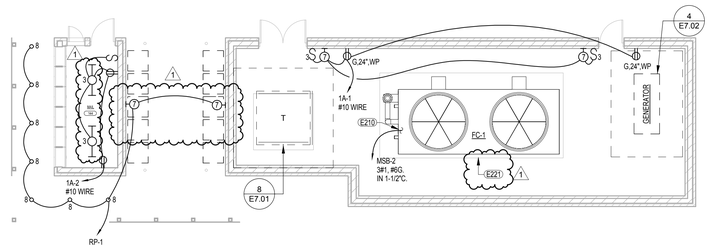
2 E4.02 ENLARGED MAIN TELECOM

0' 1' 2' 4' 8'



6 E4.02 ENLARGED LAUNDRY - THIRD FLOOR

0' 1' 2' 4' 8'



3 E4.02 ENLARGED MAIL BUILDING

0' 1' 2' 4' 8'

GENERAL NOTES

REFER TO SHEET E0.01

KEYNOTES

E210	MECHANICAL EQUIPMENT PROVIDE WITH INTEGRAL DISCONNECT, SEE MECHANICAL SCHEDULES FOR ADDITIONAL INFORMATION.
1 E221	ALTTERNATE BID #3 - 'FC-1' CHANGES TO:FC-2. PROVIDE 100A, 3-POLE CIRCUIT BREAKER IN MSB FOR FC-2. PROVIDE 3#2, #6G. IN 1-1/2" CONDUIT. SEE ALTERNATE MECHANICAL SCHEDULES FOR ADDITIONAL INFORMATION.

No.	Description	Date
1	Addendum #1	04/21/16

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Steven M. Farrington

ELECTRICAL PROJECT ENGINEER
STEVEN M. FARRINGTON
E-11987
04/01/16
STATE OF NEBRASKA

PROJECT:15097

DATE: 04/01/16

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TYPICAL LOADCENTER SCHEDULE

Panel: 1A — **A.I.C. Rating:** SERIES
Rating: 250 A — **Voltage:** 120/208 Wye
Mounting: Surface — **Phase:** 3
Type: MLO W/SUB FEED LUGS AND GND. BAR — **Wire:** 4
Remarks:

Circuit Description	O...	R	P	CKT	A	B	C	CKT	P	R	O...	Circuit Description
REC/LTG - EXTR. ENCLOSURE		20	1	1				2	1	20		REC/LTG -MAIL ROOM
LTG - MAIL CANOPY (VIA RP1)		20	1	3				4	1	20		LTG - LOBBY
GWH-1		20	1	5				6	1	20		GWH-2
GWH-3		20	1	7				8	1	20		REC - MECH. EQUIP.
MV-1		20	1	9				10	1	20		REC - WS-1
REC - GT-1		20	1	11				12	1	20		B-1
B-2		20	1	13				14	1	20		REC - WEST WING CORR.
REC - WEST WING CORR.		20	1	15				16	1	20		REC - LOADING AREA
REC - ELEC. RM., UNISEX R.R.		20	1	17				18	1	20	G	EWC
EWC	G	20	1	19				20	1	20	G	REFRIGERATOR - PREP 130A
REC -PREP COUNTER		20	1	21				22	1	20		REC - CLUB HOUSE 103
REC - CLUB HOUSE 103		20	1	23				24	1	20		REC - CLUB HOUSE 103
REC - LOBBY		20	1	25				26	2	20		EH-1 - VESTIBULE 1C01
REC - OFFICE102B		20	1	27				28				
LTG - 1st FLOOR WEST CORR...		20	1	29				30	1	20		PWR - MAIN TELECOM
PWR - MAIN TELECOM		20	1	31				32	1	20		PWR - MAIN TELECOM
REC - DATA RACK		20	2	33				34	1	20		PWR - MAIN TELECOM
				35				36	1	20		EPO WATER HEATERS
EH-4		40	2	37				38	1	20		EPO BOILERS
				39				40	1	20		DOOR OPERATOR VEST. 1C01
DOOR OPERATOR VEST. 1C02		20	1	41				42	1	20		HEAT TRACE
DRYER		30	2	43				44	2	30		DRYER
				45				46				
DRYER		30	2	47				48	1	20	G	WASHER
				49				50	1	20	G	WASHER
LTG - 1st FLOOR EAST...		20	1	51				52				
HP-2..5H		25	2	53				54	2	30		HP-3H
				55				56	1	20		HEAT TRACE
EH-2 - EAST STAIR TOWER		30	2	57				58	1	20	--	SPARE
				59				60	2	20		EH-1 - VESTIBULE 1C02
LTG -1st FLOOR CLUBHOUSE		20	1	61				62				
LTG - 1st FLOOR WEST...		20	1	63				64	2	30		EH-2 - STAIR 1S01
EH-1 - MAIN ELECTRICAL		20	2	65				66				
				67				68	1	20		LTG - 1st FLOOR...
SPARE	--	20	1	69				70	2	30		HP-3H
HP-1.5H		15	2	71				72				
				73				74	2	35		HP-3.5
GEOTHERMAL VAULT	--	20	1	75				76				
LTG - PARKING LOT S. ROW		20	1	77				78	1	20	--	REC - COURT YARD
LTG - PARKING LOT C. ROW		20	1	79				80	1	20	--	REC - COURT YARD
LTG - PARKING LOT N. ROW		20	1	81				82	1	20		PWR -
SPARE	--	20	1	83				84	1	20	--	SPARE

Notes:
G – GFCI type circuit breaker.
L – Locking handle type circuit breaker.
S – Shunt trip type circuit breaker.
G,S – Combination GFCI and shunt trip type circuit breaker.

LIGHTING PANEL SCHEDULE

Panel: 1B — **A.I.C. Rating:** SERIES
Rating: 150 A — **Voltage:** 120/208 Wye
Mounting: Surface — **Phase:** 3
Type: MLO W/SUB FEED LUGS AND GND. BAR — **Wire:** 4
Remarks:

Circuit Description	O...	R	P	CKT	A	B	C	CKT	P	R	O...	Circuit Description
EH-2 - STAIRS 03 1S03		30	2	1				2	1	20		REC - CORR. 1C07
				3				4	1	20		REC - CORR. 1C07
REC - CORR. 1C05		20	1	5				6	2	15		HP-1
EH-3		30	2	7				8				
				9				10	1	20		LTG - 1st FLOOR EAST CORR....
REC -LOBBY, HSK., PCK.STR.		20	1	11				12	1	20		REC - COPIER - LOBBY
REC - LOBBY OFFICE		20	1	13				14	1	20		REC - COLLABORATION_
REC - STAIR, LAUNDRY,...		20	1	15				16	1	20	--	REC - EXTERIOR ENCLOSURE
REC - EXTERIOR ENCLOSURE	--	20	1	17				18	1	20	--	REC - EXTERIOR ENCLOSURE
SPARE	--	20	1	19				20	1	20	--	REC - POLE LIGHTS
SPARE	--	20	1	21				22	1	20	--	REC - POLE LIGHTS
SPARE	--	20	1	23				24	1	20	--	REC - POLE LIGHTS
SPARE	--	20	1	25				26	1	20	--	SPARE
SPARE	--	20	1	27				28	1	20	--	SPARE
SPACE ONLY	--	--	--	29				30	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	31				32	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	33				34	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	35				36	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	37				38	--	--	--	SPACE ONLY
SITE RECEPTACLE	--	30	2	41				42	2	30	--	SITE RECEPTACLE

Notes:
G – GFCI type circuit breaker.
L – Locking handle type circuit breaker.
S – Shunt trip type circuit breaker.
G,S – Combination GFCI and shunt trip type circuit breaker.

LIGHTING PANEL SCHEDULE

Panel: 2A — **A.I.C. Rating:** SERIES
Rating: 150 A — **Voltage:** 120/208 Wye
Mounting: Surface — **Phase:** 3
Type: MLO W/SUB FEED LUGS AND GND. BAR — **Wire:** 4
Remarks:

Circuit Description	O...	R	P	CKT	A	B	C	CKT	P	R	O...	Circuit Description
REC - CORR. 2C02		20	1	1				2	1	20		REC - CORR. 2C02
REC - CORR. 2C02		20	1	3				4	1	20		REC - SEC. TELECOM 212
REC - SEC. TELECOM 212		20	1	5				6	1	20		REC - SEC. TELECOM 243
REC - SEC. TELECOM 212		20	1	7				8	1	20		REC - SEC. TELECOM 243
REC - LOBBY, R.R., HS, KP.		20	1	9				10	1	20		REC - COLLABORATION
REC - VENDING 2C01A	G	20	1	11				12	1	20	G	REC - VENDING 2C01A
REC - VENDING 2C01A	G	20	1	13				14	1	20		REC - VEND, LAUNDRY,STAIR
DRYER		30	2	15				16	2	30		DRYER
				17				18				
LTG - 2nd FLOOR WEST...		20	1	19				20	2	30		DRYER
REC - WASHER	G	20	1	21				22				
HP-3		30	2	23				24	1	20	G	REC - WASHER
				25				26	1	20		LTG - 2nd FLOOR EAST...
LTG - 2nd FLOOR LOBBY		20	1	27				28	2	15		HP-1.5H
LTG - 2nd FLOOR WEST COR...		20	1	29				30				
LTG - 2nd FLOOR EAST COR...		20	1	31				32	1	20		LTG - 2nd FLOOR...
				33				34	1	20	--	SPARE
SPARE	--	20	1	35				36	1	20	--	SPARE
SPARE	--	20	1	37				38	1	20	--	SPARE
SPARE	--	20	1	39				40	1	20	--	SPARE
SPACE ONLY	--	--	--	41				42	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	43				44	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	45				46	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	47				48	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	49				50	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	51				52	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	53				54	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	55				56	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	57				58	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	59				60	--	--	--	SPACE ONLY

Notes:
G – GFCI type circuit breaker.
L – Locking handle type circuit breaker.
S – Shunt trip type circuit breaker.
G,S – Combination GFCI and shunt trip type circuit breaker.

LIGHTING PANEL SCHEDULE

Panel: 2B — **A.I.C. Rating:** SERIES
Rating: 150 A — **Voltage:** 120/208 Wye
Mounting: Surface — **Phase:** 3
Type: MLO W/SUB FEED LUGS AND GND. BAR — **Wire:** 4
Remarks:

Circuit Description	O...	R	P	CKT	A	B	C	CKT	P	R	O...	Circuit Description
REC - CORR. 2C03		20	1	1				2	1	20		REC - CORR. 2C03
REC - CORR. 2C03		20	1	3				4	1	20		REC - SEC. TELECOM 243
REC - SEC. TELECOM 243		20	1	5				6	1	20		REC - SEC. TELECOM 243
REC - SEC. TELECOM 243		20	1	7				8	1	20		REC - SEC. TELECOM 243
SPARE	--	20	1	9				10	1	20	--	SPARE
SPARE	--	20	1	11				12	1	20	--	SPARE
SPARE	--	20	1	13				14	1	20	--	SPARE
SPACE ONLY	--	--	--	15				16	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	17				18	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	19				20	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	21				22	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	23				24	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	25				26	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	27				28	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	29				30	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	31				32	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	33				34	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	35				36	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	37				38	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	39				40	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	41				42	--	--	--	SPACE ONLY

Notes:
G – GFCI type circuit breaker.
L – Locking handle type circuit breaker.
S – Shunt trip type circuit breaker.
G,S – Combination GFCI and shunt trip type circuit breaker.

LIGHTING PANEL SCHEDULE

Panel: 3A — **A.I.C. Rating:** SERIES
Rating: 150 A — **Voltage:** 120/208 Wye
Mounting: Surface — **Phase:** 3
Type: MLO W/SUB FEED LUGS AND GND. BAR — **Wire:** 4
Remarks:

Circuit Description	O...	R	P	CKT	A	B	C	CKT	P	R	O...	Circuit Description
REC - CORR. 370		20	1	1				2	1	20		REC - CORR. 370
REC - CORR. 370		20	1	3				4	1	20		LTG - 3rd FLOOR WEST...
REC - SEC. MECH. 312		20	1	5				6	2	15		HP-2
REC - COLLABORATION		20	1	7				8				
REC - HSKP., LOBBY, STOR.		20	1	9				10	1	20		REC - FLOOR LOUNGE
DRYER		30	2	11				12	2	30		DRYER
				13				14				
DRYER		30	2	15				16	1	20	G	WASHER
				17				18	1	20	G	WASHER
LTG - 3rd FLOOR EAST...		20	1	19				20	1	20		LTG - 3rd FLOOR LOBBY
LTG - 3rd FLOOR WEST COR...		20	1	21				22	1	20		LTG - 3rd FLOOR EAST CORR...
VRV-HP-3 (VRV-3) - STAIR 3S02		30	2	23				24	2	30		VRV-HP-4 (VRV-4) - SECOND...
				25				26				
				27				28	1	20		REC - EXTERIOR ROOF
ERV-1 (ON ROOF		60	3	29				30	2	30		VRV-HP-2 (VRV-2) -...
				31				32				
VRV-HP-1 (VRV-1) - ELEVATO...		20	2	33				34	2	30		VRV-HP-3 (VRV-3) - STAIR...
				35				36				
LTG - 3rd FLOOR LAUNDRY		20	1	37				38	2	15		HP-1.5H
HP-2.5		25	2	39				40				
				41				42	1	20	--	SPARE
SPARE	--	20	1	43				44	1	20	--	SPARE
SPARE	--	20	1	45				46	1	20	--	SPARE
SPARE	--	20	1	47				48	1	20	--	SPARE
SPARE	--	20	1	49				50	1	20	--	SPARE
SPACE ONLY	--	--	--	51				52	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	53				54	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	55				56	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	57				58	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	59				60	--	--	--	SPACE ONLY

Notes:
G – GFCI type circuit breaker.
L – Locking handle type circuit breaker.
S – Shunt trip type circuit breaker.
G,S – Combination GFCI and shunt trip type circuit breaker.

LIGHTING PANEL SCHEDULE

Panel: 3B — **A.I.C. Rating:** SERIES
Rating: 150 A — **Voltage:** 120/208 Wye
Mounting: Surface — **Phase:** 3
Type: MLO W/SUB FEED LUGS AND GND. BAR — **Wire:** 4
Remarks:

Circuit Description	O...	R	P	CKT	A	B	C	CKT	P	R	O...	Circuit Description
REC - CORR. 371		20	1	1				2	1	20		REC - CORR. 371
REC - CORR. 371		20	1	3				4	2	15		HP-2
REC - EXTERIOR ROOF		20	1	5				6				
ERV-2 (ON ROOF)		70	3	7				8	2	30		VRV-HP-3 (VRV-3) STAIR 3S03)
				9				10				
				11				12	2	30		VRV-HP-4 (VRV-4) SECOND...
SPARE	--	20	1	13				14				
SPARE	--	20	1	15				16	1	20	--	SPARE
SPARE	--	20	1	17				18	1	20	--	SPARE
SPACE ONLY	--	--	--	19				20	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	21				22	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	23				24	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	25				26	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	27				28	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	29				30	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	31				32	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	33				34	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	35				36	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	37				38	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	39				40	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	41				42	--	--	--	SPACE ONLY

Notes:
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L – Locking handle type circuit breaker.
S – Shunt trip type circuit breaker.
G,S – Combination GFCI and shunt trip type circuit breaker.

LIGHTING PANEL SCHEDULE

Panel: EL — **A.I.C. Rating:** SERIES
Rating: 60 A — **Voltage:** 120/208 Wye
Mounting: Surface — **Phase:** 3
Type: MLO W/GND. BAR — **Wire:** 4
Remarks:

Circuit Description	O...	R	P	CKT	A	B	C	CKT	P	R	O...	Circuit Description
REC - SP-1		20	1	1				2	1	20	L	REC - ELEVATOR PIT
PWR - ELEV. DAMPER/RELAY		20	1	3				4	1	20		LGT - CAB LIGHTS
REC -ELEV EQUIP. 101A		20	1	5				6	2	20		EH-1
SPARE		20	1	7				8				
SPARE	--	20	1	9				10	1	20	--	SPARE
SPARE	--	20	1	11				12	1	20	--	SPARE
SPACE ONLY	--	--	--	13				14	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	15				16	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	17				18	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	19				20	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	21				22	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	23				24	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	25				26	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	27				28	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	29				30	--	--	--	SPACE ONLY

Notes:
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S – Shunt trip type circuit breaker.
G,S – Combination GFCI and shunt trip type circuit breaker.

FUSED COORDINATION PANEL SCHEDULE

Panel: LS1 — **A.I.C. Rating:** SERIES
Rating: 100 A — **Voltage:** 120/208 Wye
Mounting: Surface — **Phase:** 3
Type: MCB W/FEED THRU LUGS AND GND.BAR — **Wire:** 4
Remarks:

Circuit Description	O...	R	P	CKT	A	B	C	CKT	P	R	O...	Circuit Description
GENERATOR - BATT. HEATER	--	20	1	1				2	1	20	L	F.A.C.P.
GENERATOR - BATT. HEATER	--	20	1	3				4	1	20	L	LTG - 1st FLOOR EXIT LIGHTS
GENERATOR - BATT.	--	20	1	5				6	1	20	L	LTG - 2nd FLOOR EXIT LIGHTS
LTG - WEST STAIR TOWER		20	1	7				8	1	20	L	LTG - 3rd FLOOR EXIT LIGHTS
LTG - CENTRAL STAIR TOWER		20	1	9				10	1	20		LTG - EAST STAIR TOWER
LTG - 1st FLOOR LOBBY		20	1	11				12	1	20		LTG - 1st FLOOR WEST...
LTG - 2nd FLOOR EAST...		20	1	13				14	1	20		LTG - 2nd FLOOR WEST...
LTG - 3rd FLOOR WEST...		20	1	15				16	--	--	--	LTG - 3rd FLOOR LOBBY
LTG - 3rd FLOOR EAST...		20	1	17				18	1	20		LTG - 1st FLOOR EAST...
LTG - EXTERIOR LIGHTING		20	1	19				20	1	20		LTG - SOUTH PEDESTRIAN
LTG - ELEC. LIFE SAFETY		20	1	21				22	1	20		LTG - WEST PEDESTRIAN
MASS NOTIFICATION PANEL	--	20	1	23				24	1	20		LTG - NORTH PEDESTRIAN
SPARE	--	20	1	25				26	1	20		LTG - EAST PED., COURT...
SPARE	--	20	1	27				28	1	20	--	SPARE
SPARE	--	20	1	29				30	1	20	--	SPARE

Notes:
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S – Shunt trip type circuit breaker.
G,S – Combination GFCI and shunt trip type circuit breaker.

RELAY PANEL 'RP'

w/w1	LOAD DESCRIPTION	PANEL	CIRCUIT	VOLTAGE	EMERGENCY	NOTES
RP-1	MAIL ROOM	1A	3	120 V		
RP-3	LEVEL 1 CLUBHOUSE	1A	61	120 V		
RP-4	LEVEL 1 WEST CORRIDOR	1A	63	120 V		
RP-5	LEVEL 1 EAST CORRIDOR	1A	51	120 V		
RP-6	LEVEL 2 WEST CORRIDOR	2A	19	120 V		
RP-7	LEVEL 2 EAST CORRIDOR	2A	26	120 V		
RP-8	LEVEL 3 WEST CORRIDOR	3A	4	120 V		
RP-9	LEVEL 3 EAST CORRIDOR	3A	19	120 V		
RP-10	EXTERIOR LIGHTING	LS1	19	120 V	YES	
RP-11	LEVEL 1 LOBBY	1A	4	120 V		
RP-12	LEVEL 2 LOBBY	2A	27	120 V		
RP-13	LEVEL 3 LOBBY	3A	3	120 V		
RP-14	SITE PEDESTRIAN	LS1	20		YES	
RP-15	SITE PEDESTRIAN	LS1	22		YES	
RP-16	SITE PEDESTRIAN	LS1	24		YES	
RP-17	SITE PEDESTRIAN	LS1	26		YES	
RP-18	PARKING LOT	1A	77			
RP-19	PARKING LOT	1A	79			
RP-20	PARKING LOT	1A	81			
RP-21	SPARE					
RP-22	SPARE					
RP-23	SPARE					
RP-24	SPARE					

TYPICAL LOADCENTER SCHEDULE

Panel: UNIT A — **A.I.C. Rating:** SERIES
Rating: 125 A — **Voltage:** 120/208 Single
Mounting: Surface — **Phase:** 1
Type: MLO W/GND. BAR — **Wire:** 3
Remarks:

Circuit Description	O...	R	P	CKT	A	B	C	CKT	P	R	O...	Circuit Description
REC - REFRIGERATOR	G	20	1	1				2	1	20	G	REC - KITCHEN
REC - KITCHEN		20	1	3				4	1	20		REC - DISHWASHER
REC - KITCHEN (MICROWAVE)	G	20	1	5				6	1	20		GARBAGE DISPOSAL
REC - LIVING ROOM		20	1	7				8	1	20		LTG - KITCHEN
REC - RANGE		50	2	9				10	1	20		REC,LTG - BATHROOM
				11				12	1	20		LTG - BEDROOM , LIVING...
REC - BEDROOM		20	1	13				14	2	15		HP-1
SPARE	--	20	1	15				16				
SPARE	--	20	1	17				18	1	20	--	SPARE
SPACE ONLY	--	--	--	19				20	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	21				22	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	23				24	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	25				26	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	27				28	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	29				30	--	--	--	SPACE ONLY

Notes:
G – GFCI type circuit breaker.
L – Locking handle type circuit breaker.
S – Shunt trip type circuit breaker.
G,S – Combination GFCI and shunt trip type circuit breaker.

TYPICAL LOADCENTER SCHEDULE

Panel: UNIT A1 — **A.I.C. Rating:** SERIES
Rating: 125 A — **Voltage:** 120/208 Single
Mounting: Surface — **Phase:** 1
Type: MLO W/GND. BAR — **Wire:** 3
Remarks:

Circuit Description	OPT	R	P	CKT	A	B	CKT	P	R	OPT	Circuit Description
REC - REFRIGERATOR		20	1	1			2	1	20		REC - KITCHEN
KITCHEN (MICROWAVE)		20	1	3			4	1	20		REC - DISHWASHER
REC - LIVING ROOM		20	1	5			6	1	20		REC - DISPOSAL
REC - BEDROOM		20	1	7			8	1	20		LTG - KITCHEN
PWR - RANGE		50	2	9			10	1	20		REC,LTG - BATHROOM
				11			12	1	20		LTG - BEDROOM, LIVING ROOM
SPARE	--	20	1	13			14	2	15		HP-1.0
SPARE	--	20	1	15			16				
SPARE	--	20	1	17			18	1	20	--	SPARE
SPACE ONLY	--	--	--	19			20	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	21			22	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	23			24	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	25			26	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	27			28	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	29			30	--	--	--	SPACE ONLY

Notes:
G – GFCI type circuit breaker.
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S – Shunt trip type circuit breaker.
G,S – Combination GFCI and shunt trip type circuit breaker.

TYPICAL LOADCENTER SCHEDULE

Panel: Unit B — **A.I.C. Rating:** SERIES
Rating: 125 A — **Voltage:** 120/208 Single
Mounting: Surface — **Phase:** 1
Type: MLO W/GND. BAR — **Wire:** 3
Remarks:

Circuit Description	OPT	R	P	CKT	A	B	CKT	P	R	OPT	Circuit Description
REC - REFRIGERATOR	G	20	1	1			2	1	20		REC - KITCHEN
REC - KITCHEN		20	1	3			4	1	20		REC - DISHWASHER
REC - KITCHEN (MICROWAVE)		20	1	5			6	1	20		GARBAGE DISPOSAL
REC - LIVING ROOM		20	1	7			8	1	20		LTG - KITCHEN
REC - RANGE		50	2	9			10	1	20		REC,LTG - BATHROOM
				11			12	1	20		LTG - BEDROOM,LIVINGROOM
REC - BEDROOM		20	1	13			14	2	15		HP-1.5
REC - BEDROOM		20	1	15			16				
SPARE	--	0	1	17			18	1	0	--	SPARE
SPARE	--	0	1	19			20	1	0	--	SPARE
SPACE ONLY	--	--	--	21			22	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	23			24	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	25			26	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	27			28	--	--	--	SPACE ONLY
SPACE ONLY	--	--	--	29			30	--	--	--	SPACE ONLY

Notes:
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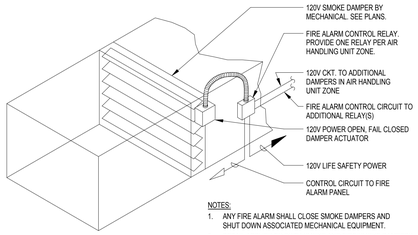
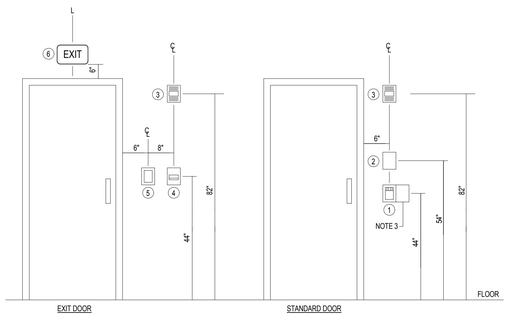
L – Locking handle type circuit breaker.
S – Shunt trip type circuit breaker.
G,S – Combination GFCI and shunt trip type circuit breaker.

TYPICA



NOTES:
1. ANY FIRE ALARM SHALL CLOSE SMOKE DAMPERS AND SHUT DOWN ASSOCIATED MECHANICAL EQUIPMENT.
2. DETAIL APPLIES TO BOTH SMOKE AND FIRE/SMOKE DAMPERS
3. VERIFY AIR HANDLING UNIT ZONES WITH MECHANICAL.
4. CONNECT TO SPARE 20 AMP, 1 POLE, 120V FUSE IN NEAREST LIFE SAFETY EMERGENCY PANEL.
5. QUANTITY OF UNITS CONNECTED PER CIRCUIT SHALL BE SUCH THAT VOLTAGE DROP DOES NOT EXCEED 2% TO ANY UNIT. VERIFY INPUT LOAD WITH MANUFACTURERS DATA.
6. PROVIDE BREAKER LOCK AT PANEL FOR 120V CIRCUIT.

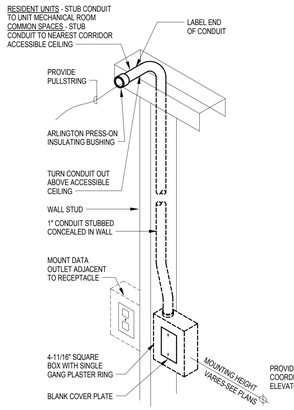
4 E7.01 SMOKE DAMPER CONNECTION DETAIL
NOT TO SCALE



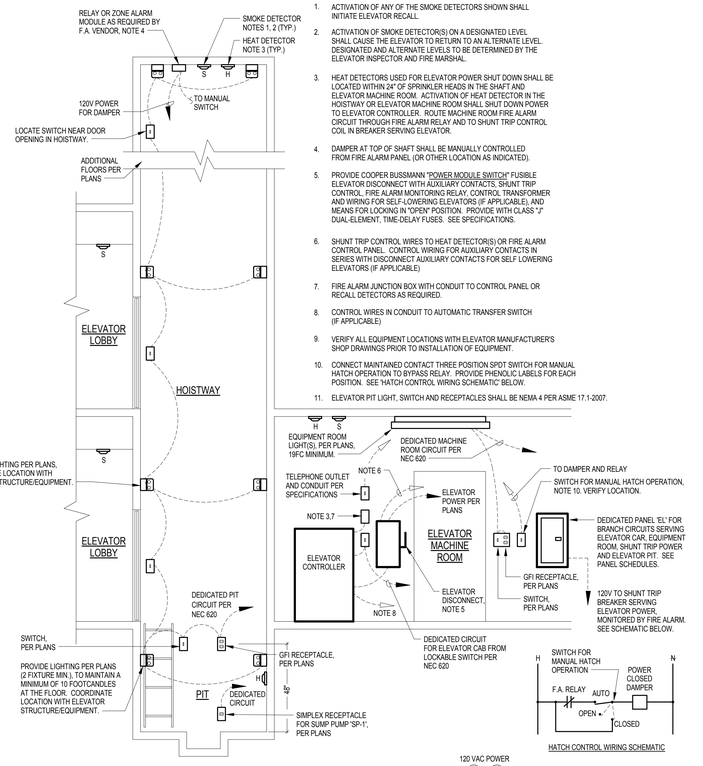
NOTES:
1. ALIGN DEVICES VERTICALLY AND HORIZONTALLY WHEREVER POSSIBLE.
2. NOT ALL DEVICE CONFIGURATIONS AND LOCATIONS ARE DEPICTED ON THIS DETAIL. ADDITIONAL CONFIGURATIONS MAY BE REQUIRED AND SHOULD BE COORDINATED WITH THE ENGINEER PRIOR TO ROUGH-IN. SEE FLOOR PLANS FOR INDIVIDUAL DOOR REQUIREMENTS.
3. WHERE MULTIPLE SWITCHES OR WALL BOX DIMMERS ARE GANGED TOGETHER, ALIGN FIRST GANG WITH DEVICES ABOVE AND ADD DEVICES TO THE RIGHT AS REQUIRED.
4. HORIZONTAL DIMENSIONS ARE TO BE MEASURED FROM OUTSIDE EDGE OF DOOR FRAME OR TRIM. WHERE SIDE LIGHT WINDOWS ARE PROVIDED AT DOORS, DIMENSIONS SHOULD BE MEASURED FROM OUTSIDE EDGE OR TRIM OF SIDE LIGHT WINDOW.

DEVICES
1. OCCUPANCY SENSOR, WALL SWITCH, OR WALL BOX DIMMER
2. THERMOSTAT ROUGH-IN
3. FIRE ALARM AUDIO/VISUAL INDICATING DEVICE
4. FIRE ALARM PULLSTATION
5. ACCESS CONTROL CARD READER ROUGH-IN
6. EXIT LIGHT

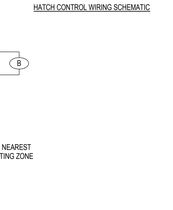
3 E7.01 DEVICE ALIGNMENT DETAIL
NOT TO SCALE



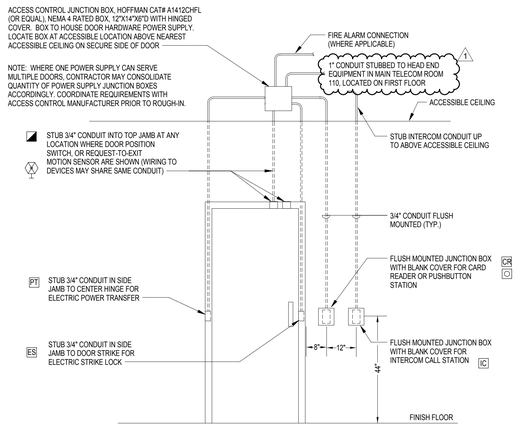
2 E7.01 DATA/COMM ROUGH-IN DETAIL
NOT TO SCALE



ELEVATOR NOTES:
1. ACTIVATION OF ANY OF THE SMOKE DETECTORS SHOWN SHALL INITIATE ELEVATOR RECALL.
2. ACTIVATION OF SMOKE DETECTOR(S) ON A DESIGNATED LEVEL SHALL CAUSE THE ELEVATOR TO RETURN TO AN ALTERNATE LEVEL. DESIGNATED AND ALTERNATE LEVELS TO BE DETERMINED BY THE ELEVATOR INSPECTOR AND FIRE MARSHAL.
3. HEAT DETECTORS USED FOR ELEVATOR POWER SHUT DOWN SHALL BE LOCATED WITHIN 24" OF SPRINKLER HEADS IN THE SHAFT AND ELEVATOR MACHINE ROOM. ACTIVATION OF HEAT DETECTOR IN THE HOISTWAY OR ELEVATOR MACHINE ROOM SHALL SHUT DOWN POWER TO ELEVATOR CONTROLLER. ROUTE MACHINE ROOM FIRE ALARM CIRCUIT THROUGH FIRE ALARM RELAY AND TO SHUNT TRIP CONTROL COIL IN BREAKER SERVING ELEVATOR.
4. DAMPER AT TOP OF SHAFT SHALL BE MANUALLY CONTROLLED FROM FIRE ALARM PANEL (OR OTHER LOCATION AS INDICATED).
5. PROVIDE COOPER BUSSMANN "POWER MODULE SWITCH" FUSIBLE ELEVATOR DISCONNECT WITH AUXILIARY CONTACTS, SHUNT TRIP CONTROL, FIRE ALARM MONITORING RELAY, CONTROL TRANSFORMER AND WIRING FOR SELF-LOWERING ELEVATORS (IF APPLICABLE), AND MEANS FOR LOCKING IN "OPEN" POSITION. PROVIDE WITH CLASS "J" DUAL-ELEMENT, TIME-DELAY FUSES. SEE SPECIFICATIONS.
6. SHUNT TRIP CONTROL WIRES TO HEAT DETECTOR(S) OR FIRE ALARM CONTROL PANEL. CONTROL WIRING FOR AUXILIARY CONTACTS IN SERIES WITH DISCONNECT AUXILIARY CONTACTS FOR SELF LOWERING ELEVATORS (IF APPLICABLE)
7. FIRE ALARM JUNCTION BOX WITH CONDUIT TO CONTROL PANEL OR RECALL DETECTORS AS REQUIRED.
8. CONTROL WIRES IN CONDUIT TO AUTOMATIC TRANSFER SWITCH (IF APPLICABLE)
9. VERIFY ALL EQUIPMENT LOCATIONS WITH ELEVATOR MANUFACTURER'S SHOP DRAWINGS PRIOR TO INSTALLATION OF EQUIPMENT.
10. CONNECT MAINTAINED CONTACT THREE POSITION SPDT SWITCH FOR MANUAL HATCH OPERATION TO BYPASS RELAY. PROVIDE PHENOLIC LABELS FOR EACH POSITION. SEE 'HATCH CONTROL WIRING SCHEMATIC' BELOW.
11. ELEVATOR PIT LIGHT, SWITCH AND RECEPTACLES SHALL BE NEMA 4 PER ASME 17.1-2007.

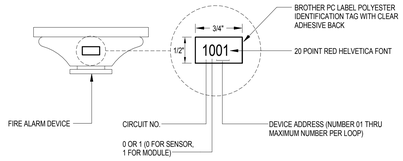


HATCH CONTROL WIRING SCHEMATIC

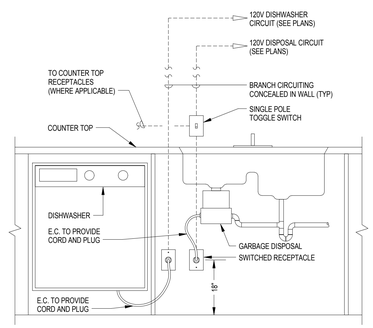


NOTES:
1. ROUGH-IN REQUIREMENTS AND LOCATIONS SIMILAR FOR DOUBLE DOORS.
2. NOT ALL DEVICES ROUGHED IN AT ALL DOORS, SEE PLANS FOR SPECIFIC DOOR ROUGH-IN REQUIREMENTS.
3. COORDINATE ACCESS CONTROL ROUGH-IN REQUIREMENTS WITH ARCHITECTURAL DOOR SCHEDULES.
4. COORDINATE ACCESS CONTROL ROUGH-IN REQUIREMENTS WITH SECURITY EQUIPMENT SUPPLIER.

7 E7.01 ACCESS CONTROL ROUGH-IN
NOT TO SCALE



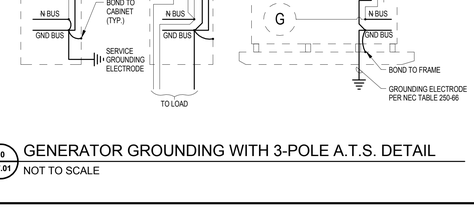
6 E7.01 DETECTOR LOCATION MARKER DETAIL
NOT TO SCALE



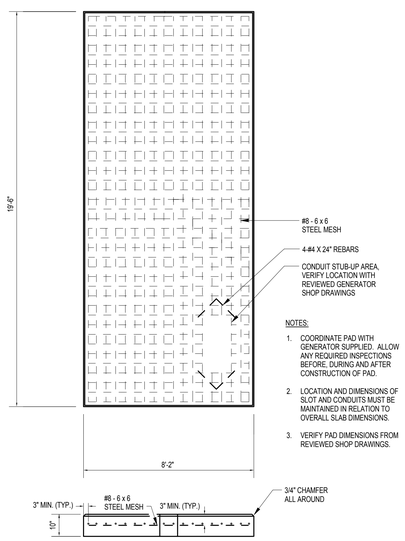
5 E7.01 DISHWASHER/DISPOSAL CONNECTION
NOT TO SCALE

SHUNT TRIP MONITORING SCHEMATIC

1 E7.01 ELEVATOR CONNECTION DETAIL
NOT TO SCALE

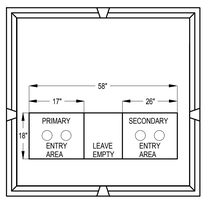


10 E7.01 GENERATOR GROUNDING WITH 3-POLE A.T.S. DETAIL
NOT TO SCALE



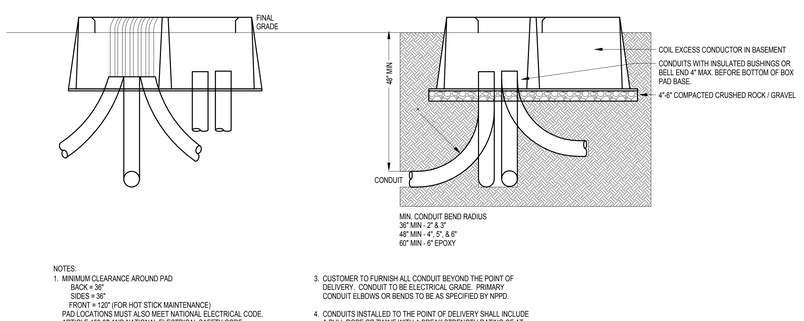
NOTES:
1. COORDINATE PAD WITH GENERATOR SUPPLIED. ALLOW ANY REQUIRED INSPECTIONS BEFORE, DURING AND AFTER CONSTRUCTION OF PAD.
2. LOCATION AND DIMENSIONS OF SLOT AND CONDUITS MUST BE MAINTAINED IN RELATION TO OVERALL SLAB DIMENSIONS.
3. VERIFY PAD DIMENSIONS FROM REVIEWED SHOP DRAWINGS.

9 E7.01 GENERATOR PAD
NOT TO SCALE



PRIMARY
4" NON-METALLIC CONDUIT(S) WITH 90° BENDS, 1" SEPARATION FOR PRIMARY CABLE.

SECONDARY
MAX. NO. CONDUCTORS: < 500KVA SIX (6) PER PHASE
MAX. NO. CONDUCTORS: ≥ 500KVA EIGHT (8) PER PHASE
MAX. CONDUCTOR SIZE: 750 KCMIL
SECONDARY CONDUIT MAY ONLY BE PLACED IN THE SECONDARY ENTRY AREA



NOTES:
1. MINIMUM CLEARANCE AROUND PAD
   BACK = 36"
   SIDES = 36"
   FRONT = 120" (FOR HOT STICK MAINTENANCE)
   PAD LOCATIONS MUST ALSO MEET NATIONAL ELECTRICAL CODE. ARTICLE 450-27 AND NATIONAL ELECTRICAL SAFETY CODE, SECTION 15, ARTICLE 152-A2. REFER TO SECTION D OF ESRM OR THE DISTRIBUTION DESIGN MANUAL FOR GUIDELINES REGARDING OUTDOOR LOCATION OF OIL INSULATED EQUIPMENT NEAR BUILDINGS.
2. TRANSFORMERS LOCATED IN AREAS EXPOSED TO VEHICULAR TRAFFIC SHALL BE PROTECTED WITH SUITABLE PIPE OR "I" BEAMS ON ALL EXPOSED SIDES SUPPLIED AND INSTALLED BY THE CUSTOMER AS PER DISTRIBUTION CONSTRUCTION STANDARD XXX (ESRM SECTION C)
3. CUSTOMER TO FURNISH ALL CONDUIT BEYOND THE POINT OF DELIVERY. CONDUIT TO BE ELECTRICAL GRADE. PRIMARY CONDUIT ELBOWS OR BENDS TO BE AS SPECIFIED BY NPPD.
4. CONDUITS INSTALLED TO THE POINT OF DELIVERY SHALL INCLUDE A PULL ROPE OR TWINE WITH A BREAK STRENGTH RATING OF AT LEAST 300 LBS.
5. SERVICE CONDUCTORS SHALL EXTEND AT LEAST SIX (6) FEET ABOVE THE MOUNTING SURFACE OF THE PAD.
6. NPPD TO SPECIFY TRANSFORMER SIZE.
7. CRUSHED ROCK / GRAVEL BASE MUST BE COMPACTED PRIOR TO SETTING THE BOX PAD.

8 E7.01 NPPD TRANSFORMER PAD DETAIL
NOT TO SCALE

No.	Description	Date
1	Addendum #1	04/21/16

UNIVERSITY OF NEBRASKA AT KEARNEY

UNK UNIVERSITY VILLAGE STUDENT HOUSING

ELECTRICAL DETAILS

HOLLAND BASHAM ARCHITECTS
119 SOUTH 49TH AVENUE
OMAHA, NEBRASKA 68132
(402)551-0800

MEI PROJECT NO: 15273

morrissey engineering inc
mechanical | electrical | lighting | technology | commissioning
4940 North 118th Street
Omaha, NE 68164
P: 402.491.4144
www.morrisseyengineering.com

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note:
do not scale drawings. verify all dimensions and clearances from architectural, structural, shop and other appropriate drawings or at site. lay out and coordinate all work prior to installation to provide clearances required for operation, maintenance, and codes and verify non-interference with other work. do not fabricate prior to verification of clearance for all trades.

ELECTRICAL ENGINEER — STEVEN M. FARRINGTON — E-11387 — 04/01/16 — STATE OF NEBRASKA

PROJECT:15097
DATE: 04/01/16

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