

ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

PROJECT: NEW APARTMENT COMPLEX: **ASI No.:** 1
RIVERS RIDGE LUXURY APTS.
Red Wing, MN 55066

DATE OF ISSUANCE: December 2, 2016

OWNER: Keller-Baartman Properties, IV, LLC **ARCHITECT:** HMA Architects, Ltd.
1489 Hay Creek Valley Road 700 W. St. Germain Street
PO Box 31 Suite 200
Red Wing, MN 55066 St. Cloud, MN 56301-3507

TO CONTRACTOR: Lumber One Avon **ARCHITECT'S**
101 Second Street NW **PROJECT NO.:** 1602
PO Box 7
Avon, MN 56310

CONTRACT FOR: General Construction

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Proceeding with the Work in accordance with these instructions indicates your acknowledgement that there will be no change in the Contract Sum or Contract Time.

Description:

SHEET A2.14 thru A2.21

1. Revise Wall Type 10 and 10A to use 2x6 wood studs on both sides of 2-hour wall assembly.

SHEET A5.1

2. Revise exterior wall assembly batt insulation from R-19 to **R-21** and omit CONTINUOUS INSULATION (R7.5), and add **6 MIL. POLY VAPOR BARRIER**.
3. Revise roof assembly insulation from R-38 to **R-49**.
4. Detail 2/A5.1-Wall Section: Revise Floor/Ceiling assembly to omit 5/8" FIRECODE GYP. BD TYPE C at finished side of corridor and replace with **ACOUSTICAL CEILING TILE** to correspond with Reflected Ceiling Plans. Maintain requirements for 1-hour UL-Design listing.

SHEET A5.2

5. Revise roof assembly insulation from R-38 to **R-49**.

SHEET A5.3

6. Revise roof assembly insulation from R-38 to **R-49**.

SHEET A5.4

7. Revise exterior wall assembly batt insulation from R-19 to **R-21** and omit CONTINUOUS INSULATION (R7.5), and add **6 MIL. POLY VAPOR BARRIER**.
8. Revise roof assembly insulation from R-38 to **R-49**.

SHEET A5.5

9. Revise exterior wall assembly batt insulation from R-19 to **R-21** and omit CONTINUOUS INSULATION (R7.5), and add **6 MIL. POLY VAPOR BARRIER**.
10. Revise roof assembly insulation from R-38 to **R-49**.

SHEET A6.1

11. Detail 13 & 14: Omit continuous rigid insulation and revise batt insulation to **R-21**.

CHANGES TO STRUCTURAL DRAWINGS:

SHEET S100

12. Omit step footings at front entry.

SHEET S101

13. Revise T.O. FTG. at piers adjacent to overhead door.

SHEET S102

14. Add wall around stair at Grid Line 8.
15. Revise note in elevator shaft as shown.

SHEET S103

16. Install bearing column in stair wall to be fully within wall assembly.

SHEET S104

17. Add note BALCONIES BY OTHERS.
18. Revise center stair framing as shown.

SHEET S105

19. Add note BALCONIES BY OTHERS.
20. Install bearing column in stair wall to be fully within wall assembly.

SHEET S106

21. Add note BALCONIES BY OTHERS.
22. Install bearing column in stair wall to be fully within wall assembly.

SHEET S107

23. Add note BALCONIES BY OTHERS.

SHEET S108

24. Add note BALCONIES BY OTHERS.
25. Note appearance of wall type for elevator shaft.

SHEET S109

26. Add note BALCONIES BY OTHERS.

SHEET S110

27. Add reference detail bubbles as shown.

SHEET S111

28. Add reference detail bubbles as shown.

SHEET S400

29. Add revised reference detail bubbles as shown.

SHEET S401

30. Add revised reference detail bubbles as shown.

SHEET S402

31. See revised notes as shown.

SHEET S502

32. Detail 1: See revised notes as shown.
33. Detail 7: See revised notes as shown.
34. Detail 12: See revised notes as shown.

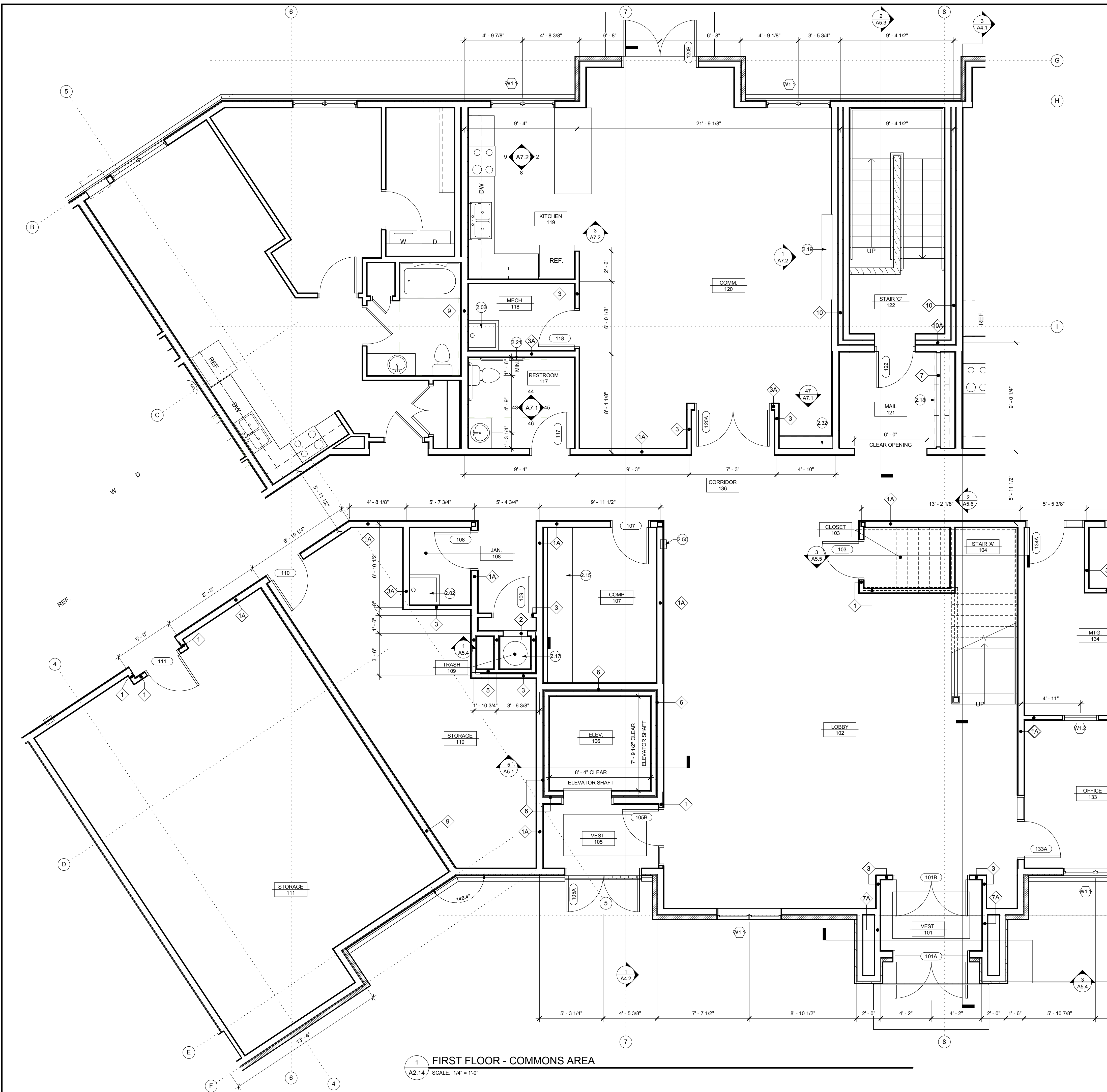
Attachments: A2.14, A2.15, A2.16, A2.17, A2.18, A2.19, A2.21, A5.1, A5.2, A5.3, A5.4, A5.5, A6.1, S100, S101, S102, S103, S104, S105, S106, S107, S108, S109, S110, S111, S400, S401, S402, S502

ISSUED BY:

A handwritten signature in black ink, appearing to read 'Dean A. Stienessen', is written over a set of three horizontal lines. The signature is fluid and cursive.

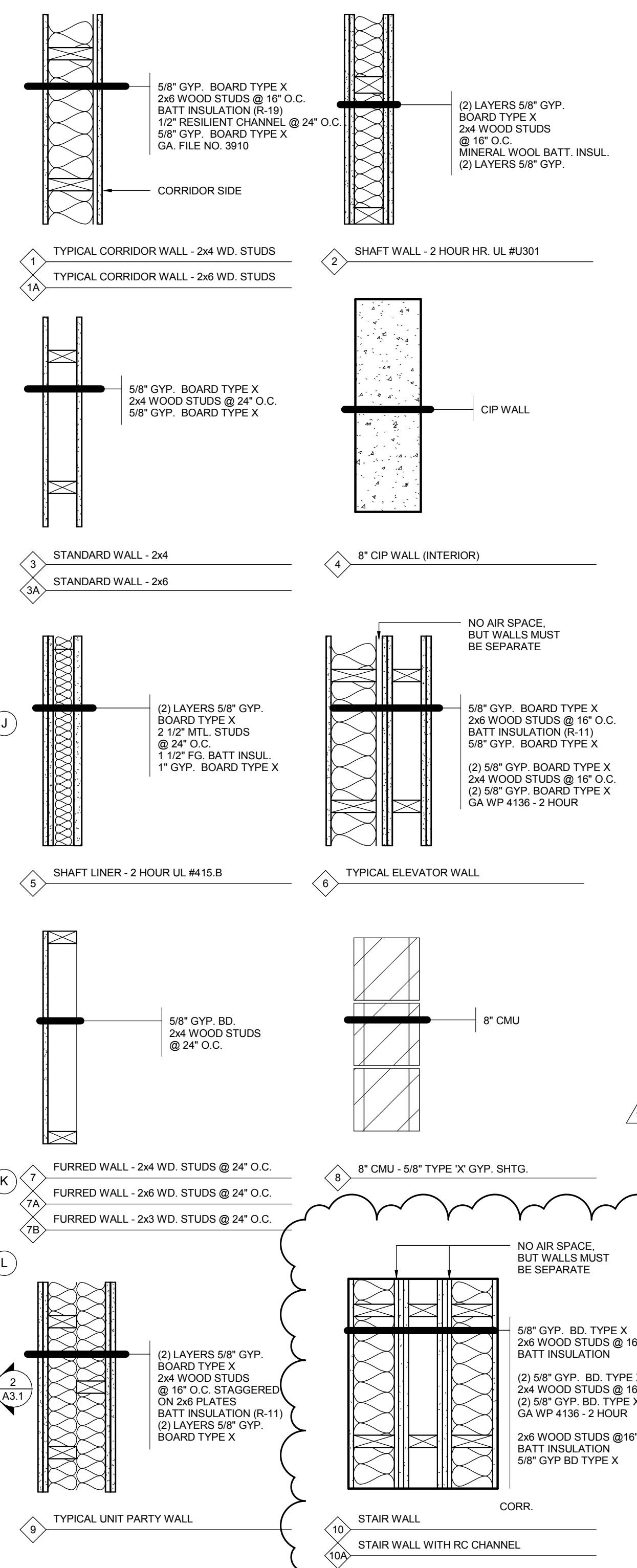
Dean Stienessen, Sr. Project Manager
HMA Architects, Ltd.

Cc: Lumber One Avon



- FLOOR PLAN - KEY NOTES**
- 2.02 24" X 24" FLOOR MOUNTED FIBERGLASS JANITORS SINK BY MECHANICAL.
 - 2.15 PLAM COUNTERTOP 36" A.F.F.
 - 2.17 TRASH CHUTE.
 - 2.18 FRONT LOADING MAILBOXES.
 - 2.19 FIREPLACE AS SELECTED BY OWNER.
 - 2.21 GRAB BARS.
 - 2.32 12" DEEP WIRE SHELF WITH ROD AT 5'-0" A.F.F.
 - 2.50 APPROXIMATE LOCATION OF 4-A RATED FIRE EXTINGUISHER AND RECESSED MOUNTED CABINET

- GENERAL NOTES:**
- A. ALL DIMENSIONS ON FLOOR PLANS ARE TAKEN FROM OUTSIDE FACE OF SHEATHING OR CENTERLINE OF STUDS OR FACE OF CONCRETE.
 - B. PROVIDE ESCUTCHEON PLATES AT ALL PLUMBING PIPE PENETRATIONS.
 - C. PROVIDE NECESSARY BLOCKING FOR KITCHEN CABINETS, WINDOW TREATMENTS, HANDRAILS, TOWEL BARS, GRAB BARS, FUTURE GRAB BARS, CLOSET SHELVING, ETC.
 - D. ALL PENETRATIONS IN UNIT PARTY WALLS (1-HOUR TYP.) SHALL BE FIRE STOPPED IN ACCORDANCE WITH FIRE STOP ASSEMBLIES LISTED WITH APPROVED TESTING AGENCIES AND APPROVED BY THE BUILDING OFFICIAL.
 - E. INSTALL FIRE BLOCKING IN ACCORDANCE WITH THE BUILDING CODE. FOR EXAMPLE:
 - CONCEALED STUD WALL AND PARTITIONS, INCLUDING FURRED SPACES AT THE CEILING AND FLOOR LEVELS AND AT 10 FOOT INTERVALS BOTH VERTICALLY AND HORIZONTALLY.
 - AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES (SOFFITS, DROPPED CEILINGS, COVERED CEILINGS, ETC.)
 - IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, AND SIMILAR OPENINGS.
 - F. SEE SHEET A2.20 FOR TYPICAL DOOR SCHEDULE AND ROOM FINISH SCHEDULE.
 - G. ALL INTERIOR APARTMENT UNIT WALLS ARE WALL TYPE 3 UNLESS NOTED OTHERWISE.
 - H. PROVIDE FIRE SPRINKLER PROTECTION TO ALL EXTERIOR BALCONIES.
 - I. PROVIDE PAINTED NUMBERS AT EACH PARKING STALL. COORDINATE WITH OWNER.



Lumber One, Avon
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Larson Engineering, Inc.
 3524 Lorene Road
 Winnetka, MN 55110-5126
 651-481-9120 Fax: 651-481-9201
 www.larsoneng.com

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision & that I am a duly Licensed Architect under the laws of the State of Minnesota

Signature: *Murray A. Mack*
 Printed Name: Murray A. Mack
 License No.: 18686
 Date: 09/30/2016

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 Drawn By: SR, BW, BZ
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1	11/08/2016	ASI-1

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New Apartment Complex:

**Rivers Ridge
 Luxury
 Apartments**

Red Wing, MN

First Floor Commons Area

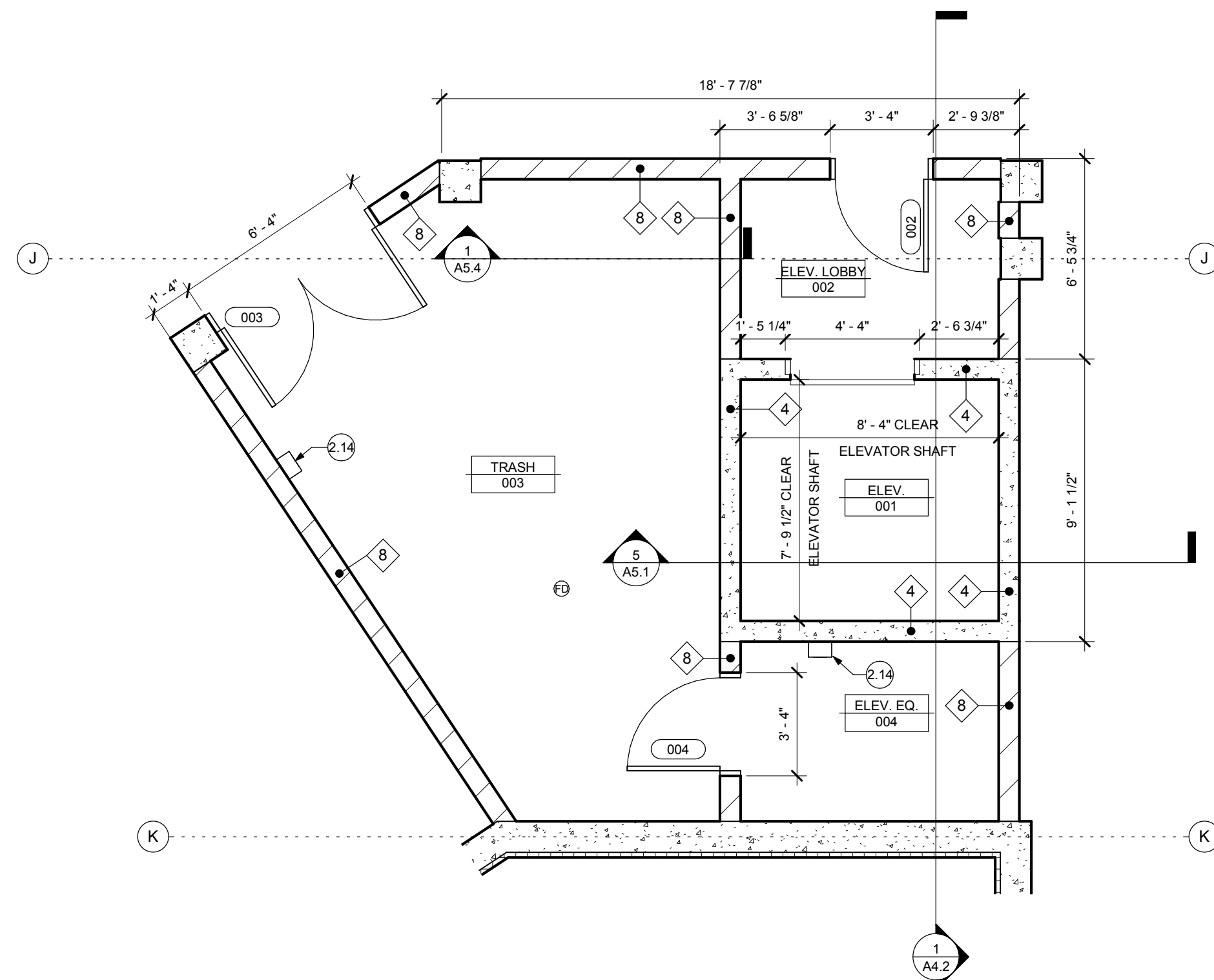
A2.14

FLOOR PLAN - KEY NOTES

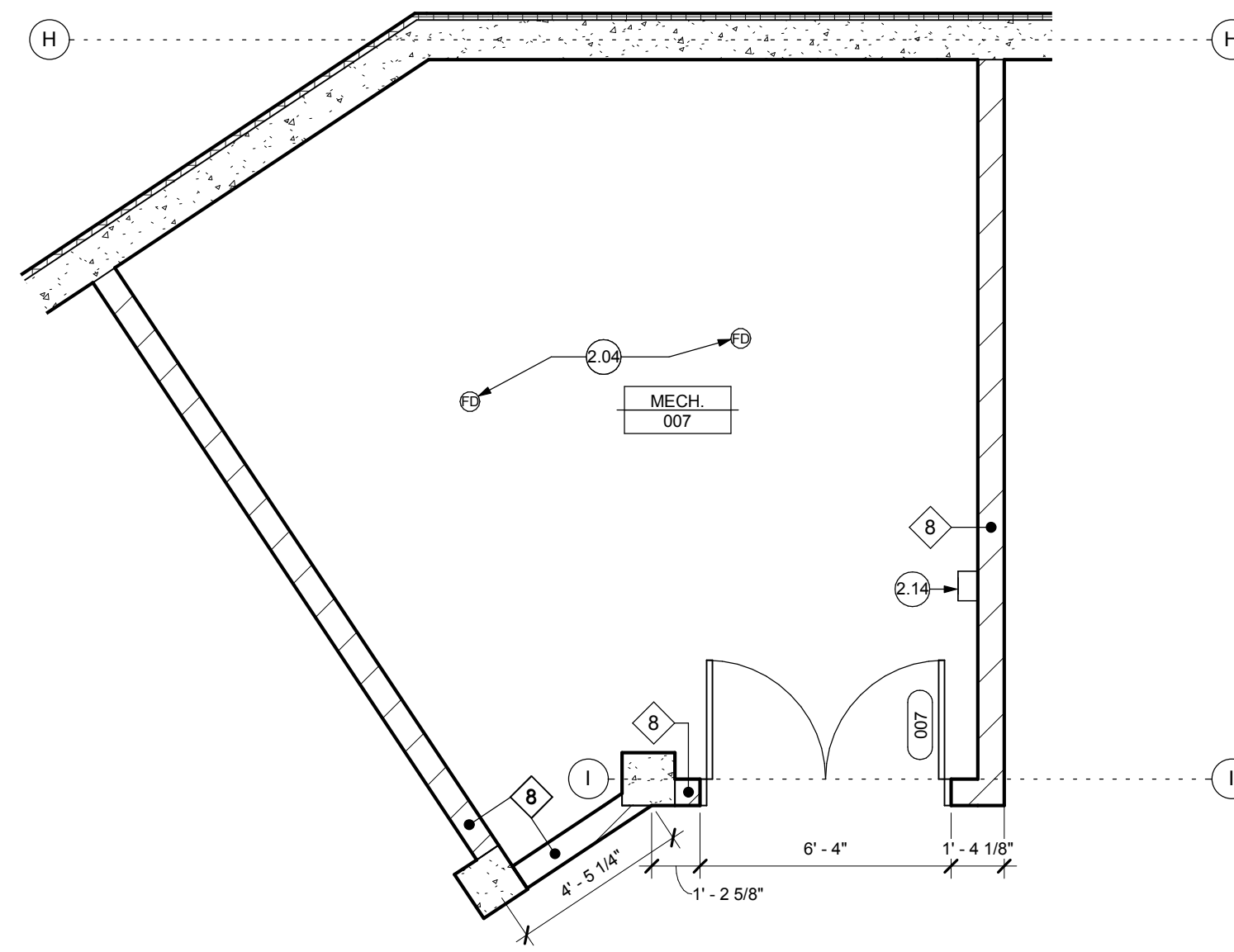
- 2.04 FLOOR DRAIN. SEE MECHANICAL.
- 2.14 APPROXIMATE LOCATION OF 4-A RATED FIRE EXTINGUISHER AND SURFACE MOUNTED CABINET.

GENERAL NOTES:

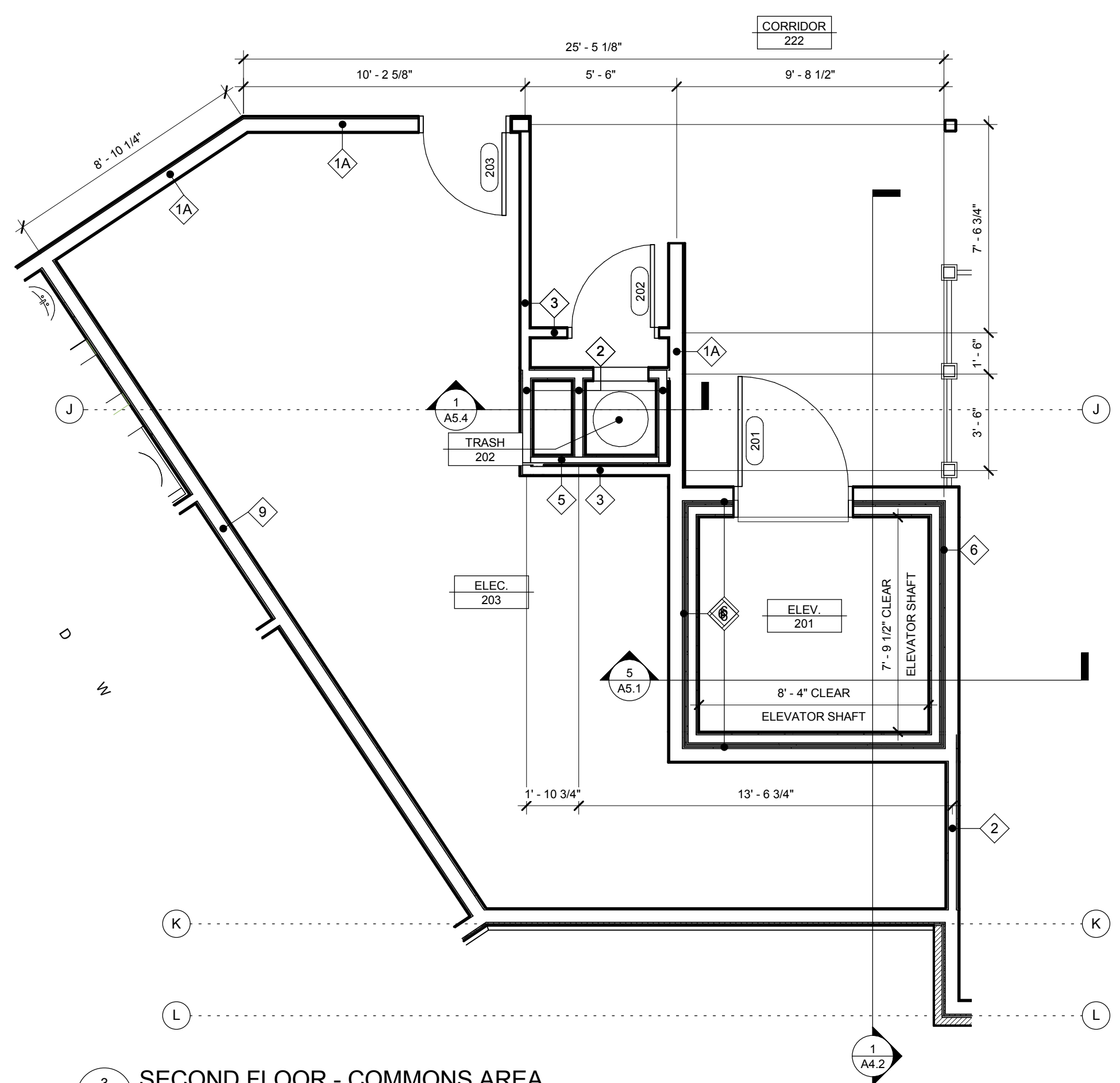
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- I. PROVIDE PAINTED NUMBERS AT EACH PARKING STALL. COORDINATE WITH OWNER.



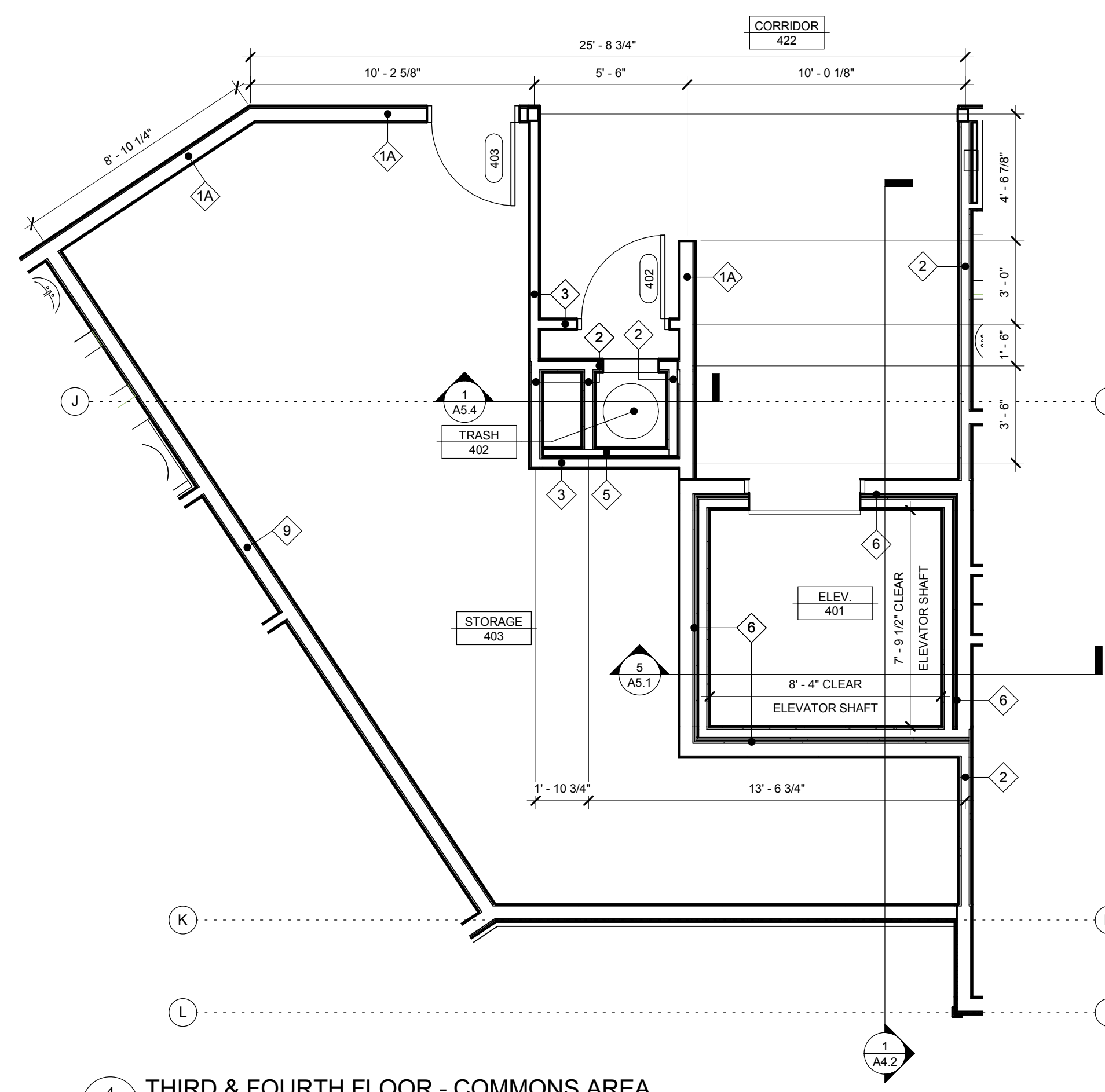
1 PARKING LEVEL - COMMONS AREA
A2.15 SCALE: 1/4" = 1'-0"



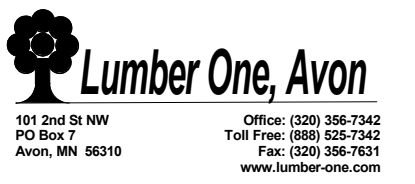
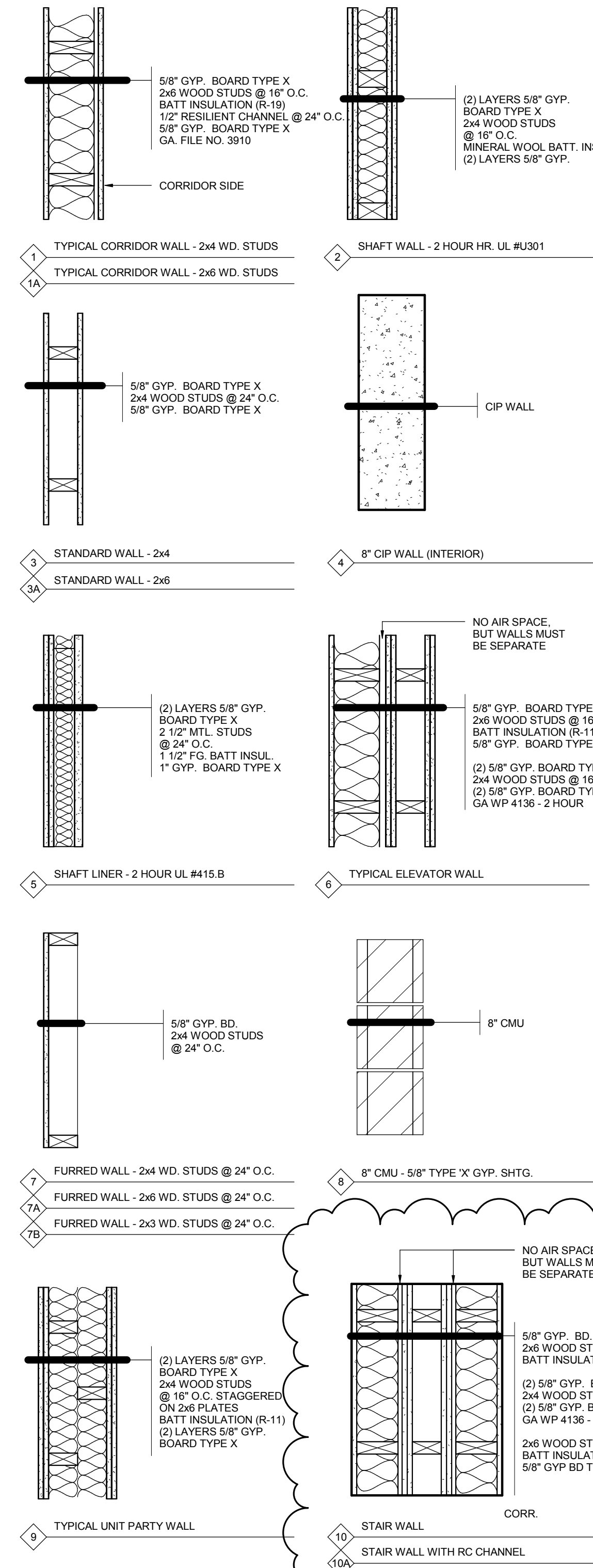
2 PARKING LEVEL - MECHANICAL ROOM
A2.15 SCALE: 1/4" = 1'-0"



3 SECOND FLOOR - COMMONS AREA
A2.15 SCALE: 1/4" = 1'-0"



4 THIRD & FOURTH FLOOR - COMMONS AREA
A2.15 SCALE: 1/4" = 1'-0"



I hereby certify that this plan, specification or report was prepared by me or under my direct supervision & that I am a duly Licensed Architect under the laws of the State of Minnesota.

Signature: *Murray A. Mack*
 Printed Name: Murray A. Mack
 License No.: 18686
 Date: 09/30/2016

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 Project Manager: DAS
 Drawn By: SR, BW, BZ
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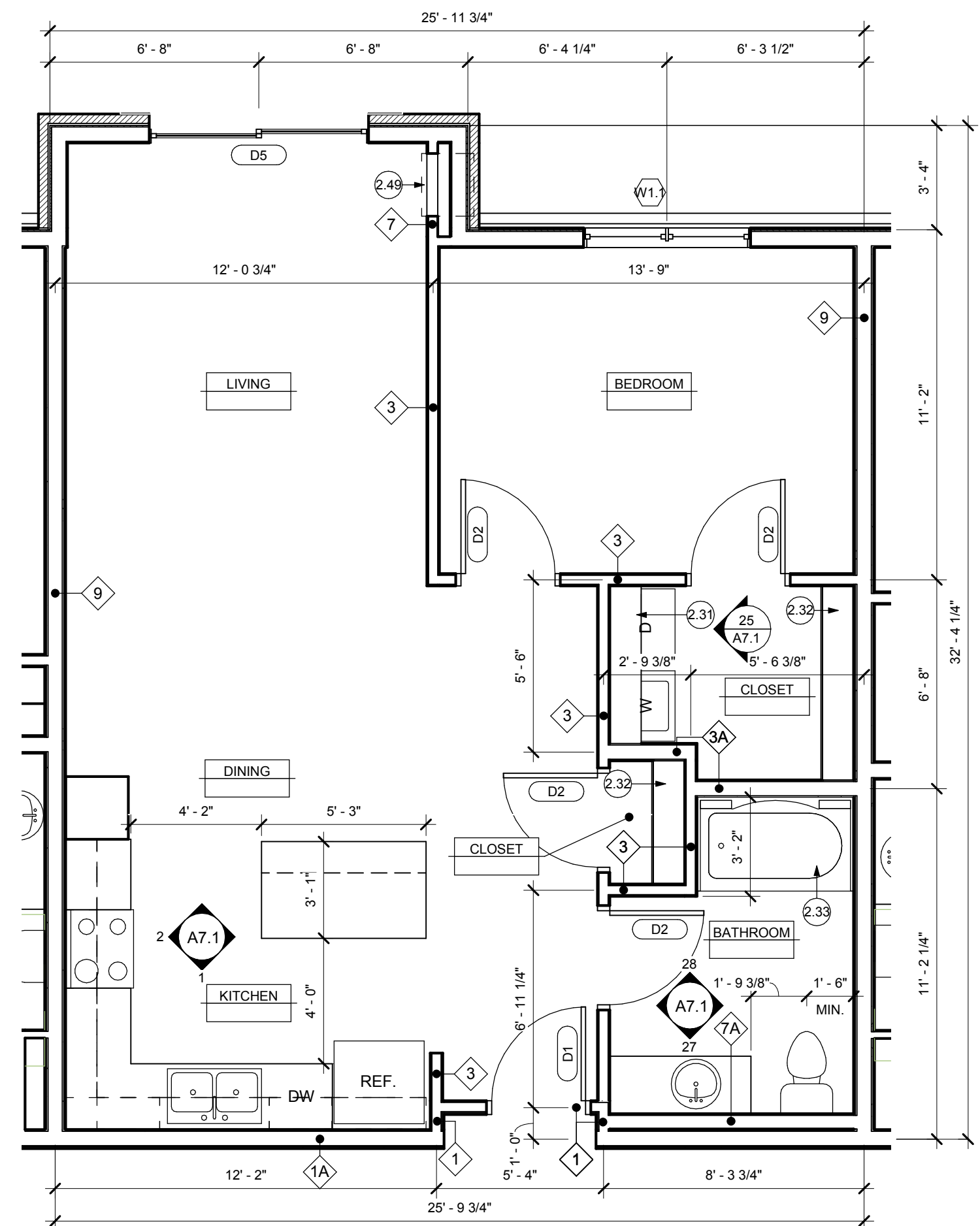
New Apartment Complex:

**Rivers Ridge
 Luxury
 Apartments**

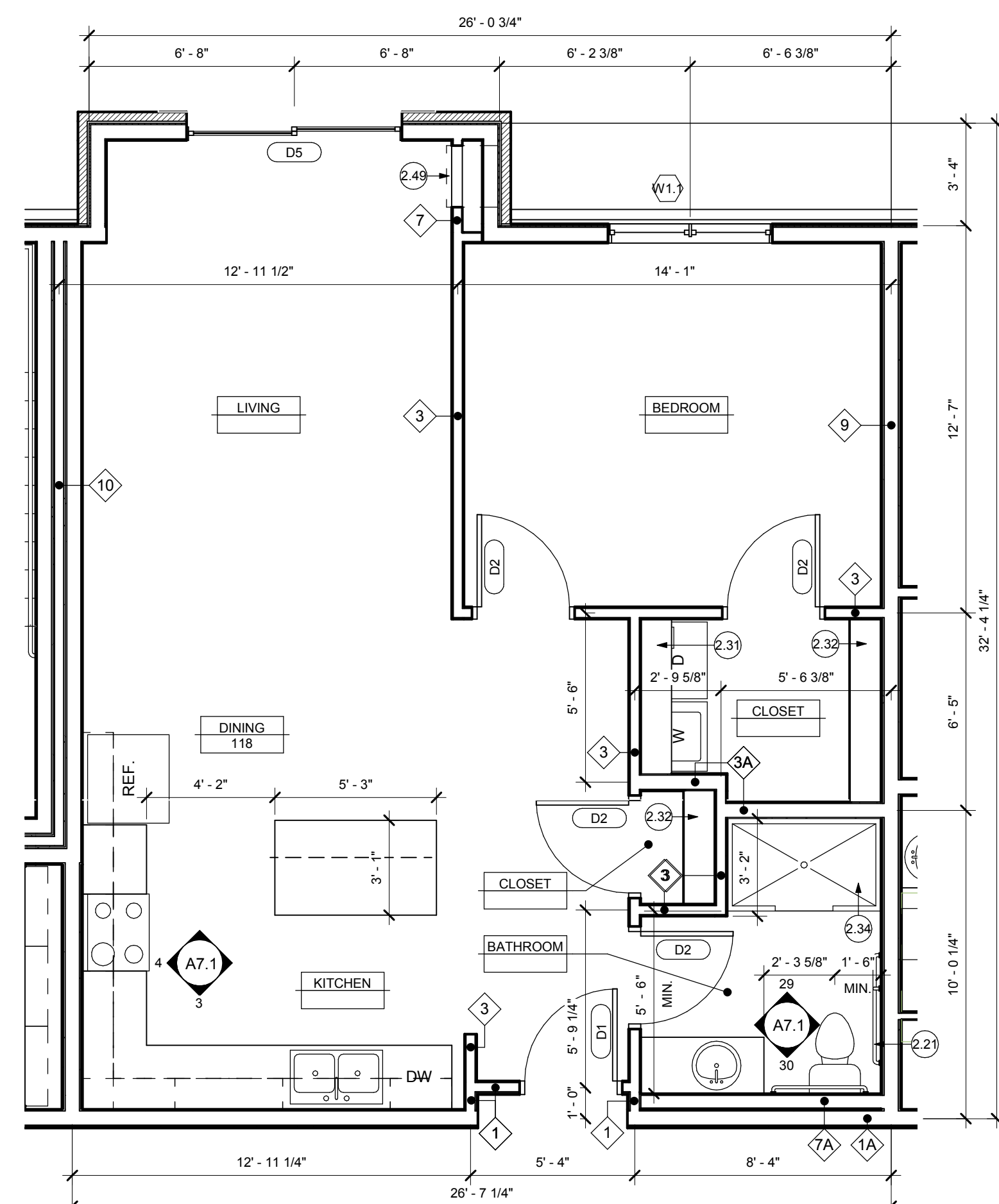
Red Wing, MN

Commons Areas

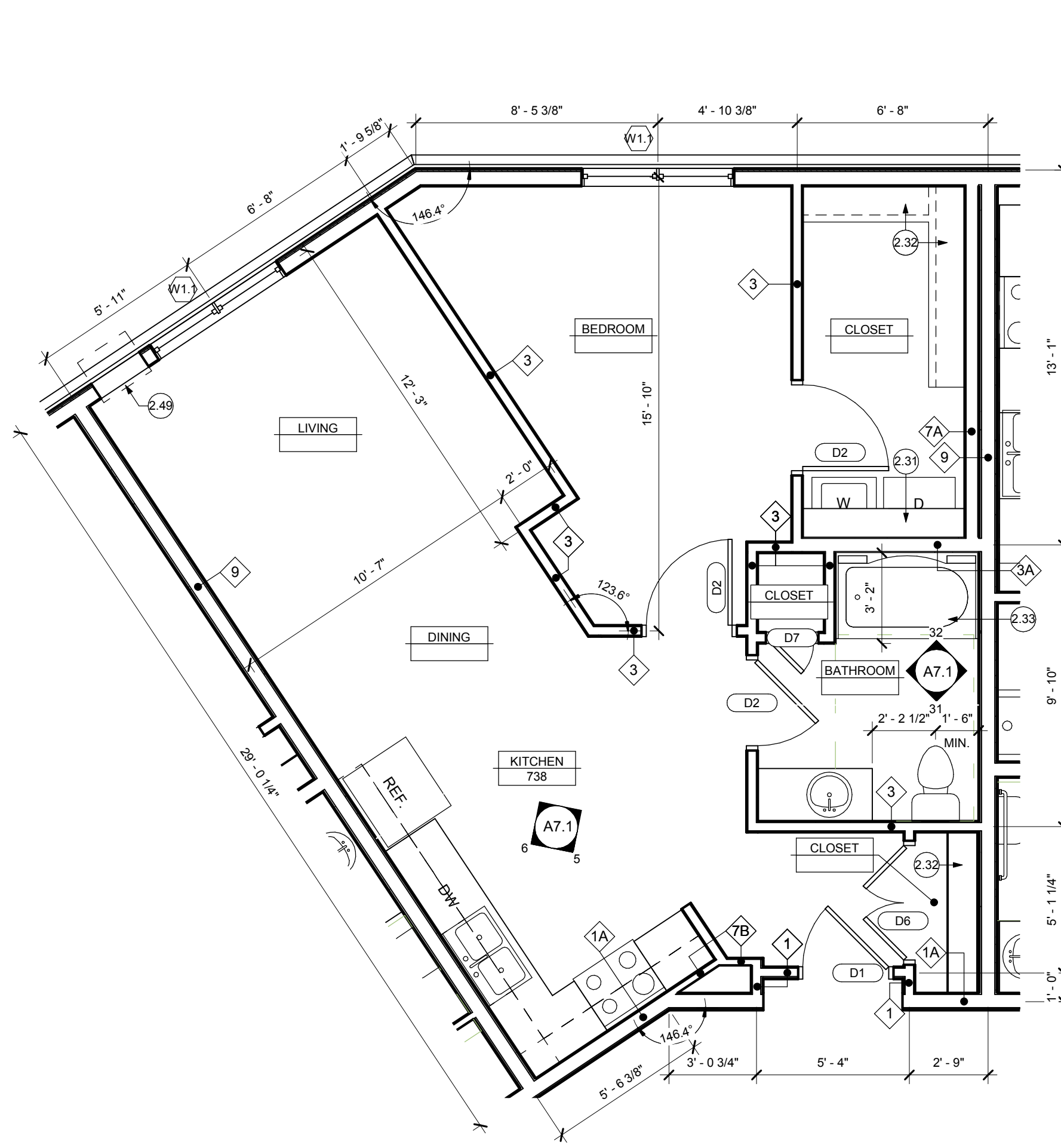
A2.15



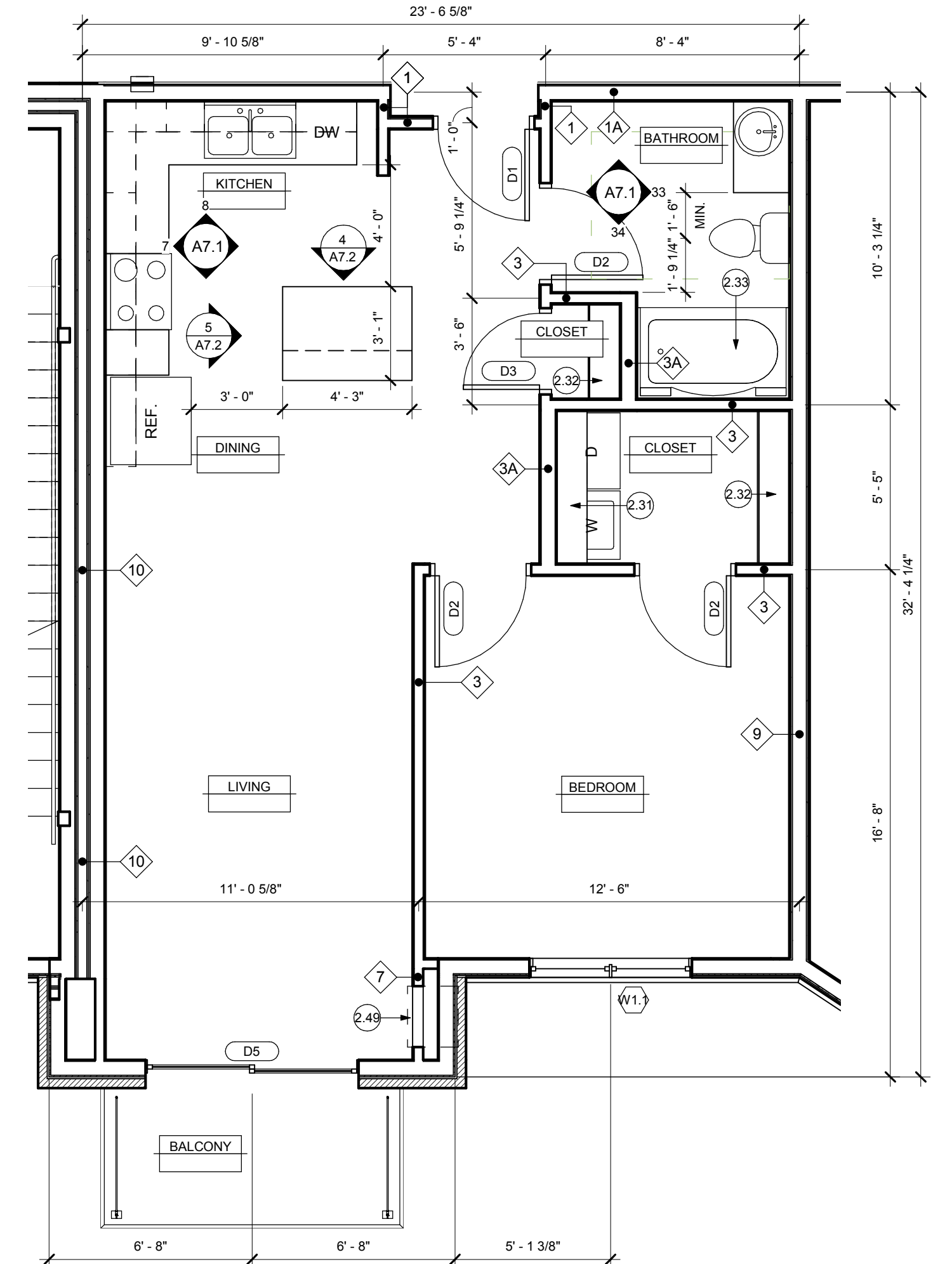
1 UNIT 1A - 1 BED / 1 BATH
794 SF.
A2.16 SCALE: 1/4" = 1'-0" (8 Thus)



2 UNIT 1B - 1 BED / 1 BATH (TYPE A)
830 SF.
A2.16 SCALE: 1/4" = 1'-0" (1 Thus)



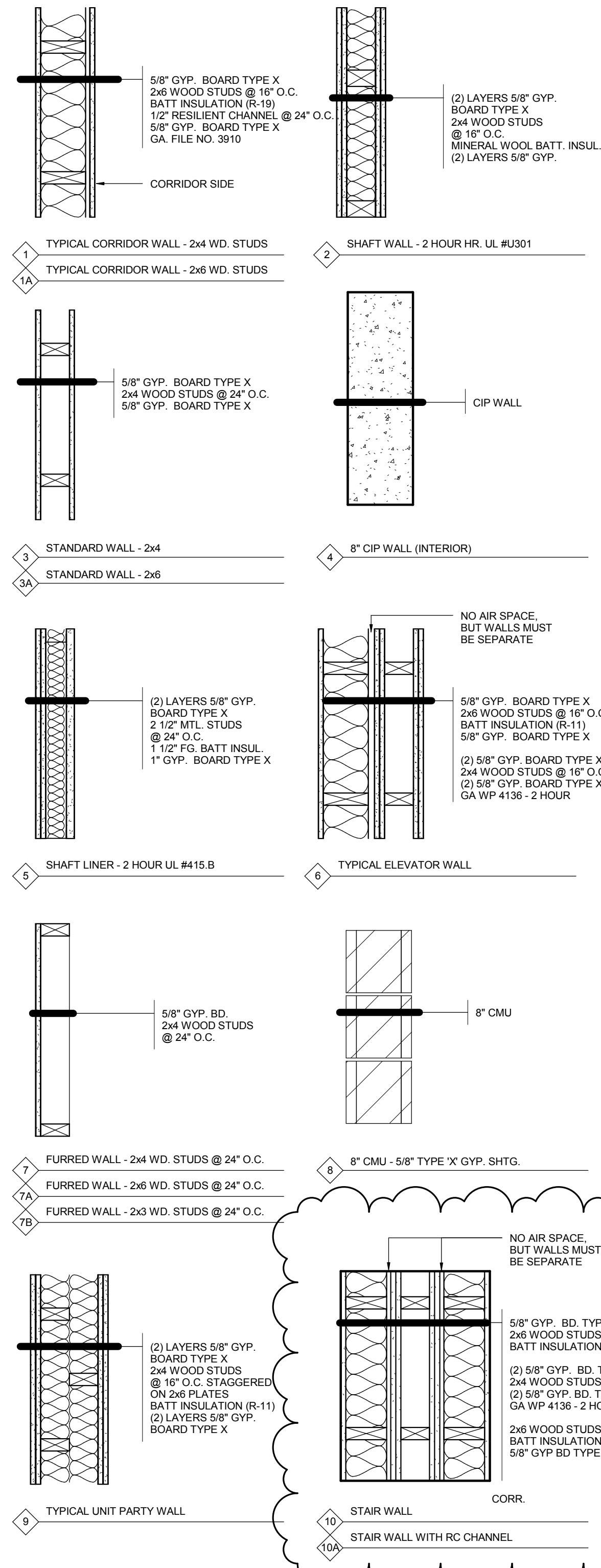
3 UNIT 1C - 1 BED / 1 BATH
766 SF.
A2.16 SCALE: 1/4" = 1'-0" (4 Thus)



4 UNIT 1D - 1 BED / 1 BATH
785 SF.
A2.16 SCALE: 1/4" = 1'-0" (3 Thus)

- UNIT PLAN - KEY NOTES**
- 2.21 GRAB BARS.
 - 2.31 12" DEEP WIRE SHELF AT 5'-0" A.F.F.
 - 2.32 12" DEEP WIRE SHELF WITH ROD AT 5'-0" A.F.F.
 - 2.33 60" TUB/SHOWER. PROVIDE 5'-1 1/4" CLEAR DIMENSION FROM FACE OF STUD TO FACE OF STUD.
 - 2.34 30" X 60" HANDICAP ACCESSIBLE ROLL-IN SHOWER. PROVIDE 5'-1 1/4" CLEAR DIMENSION FROM FACE OF STUD TO FACE OF STUD.
 - 2.49 WALL MOUNT A/C

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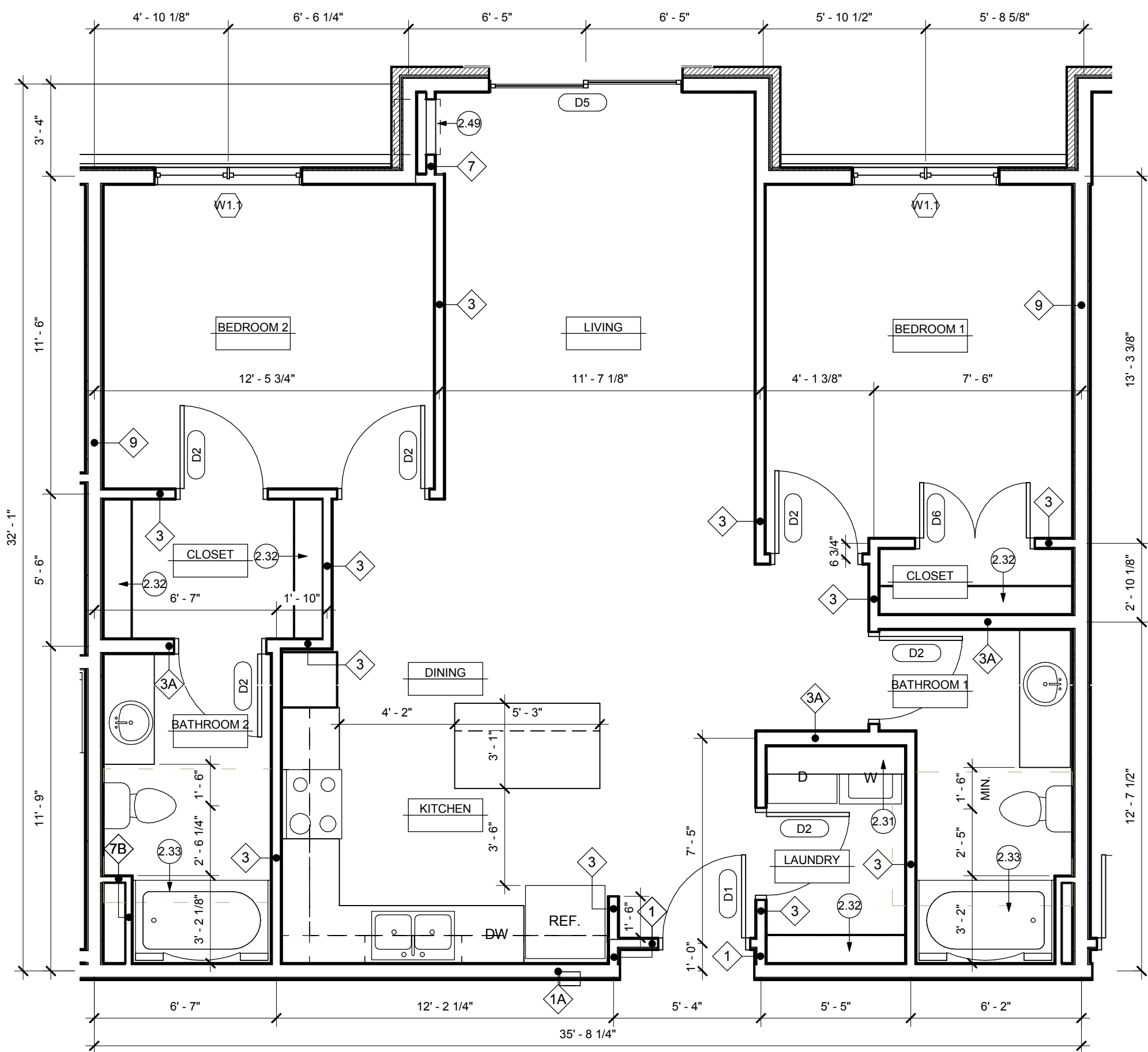
New Apartment Complex:

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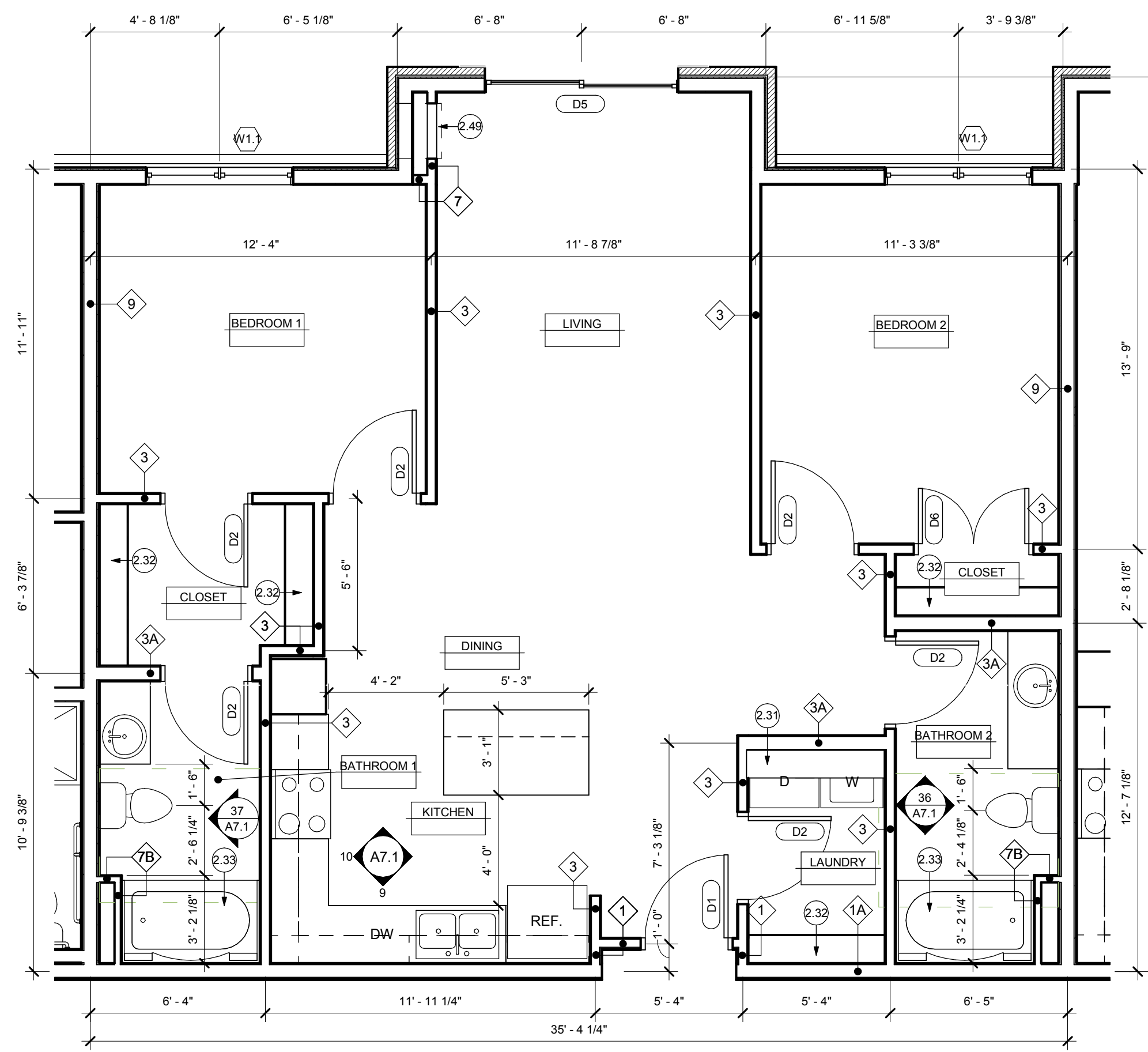
Red Wing, MN

Unit Plans 1A - 1D

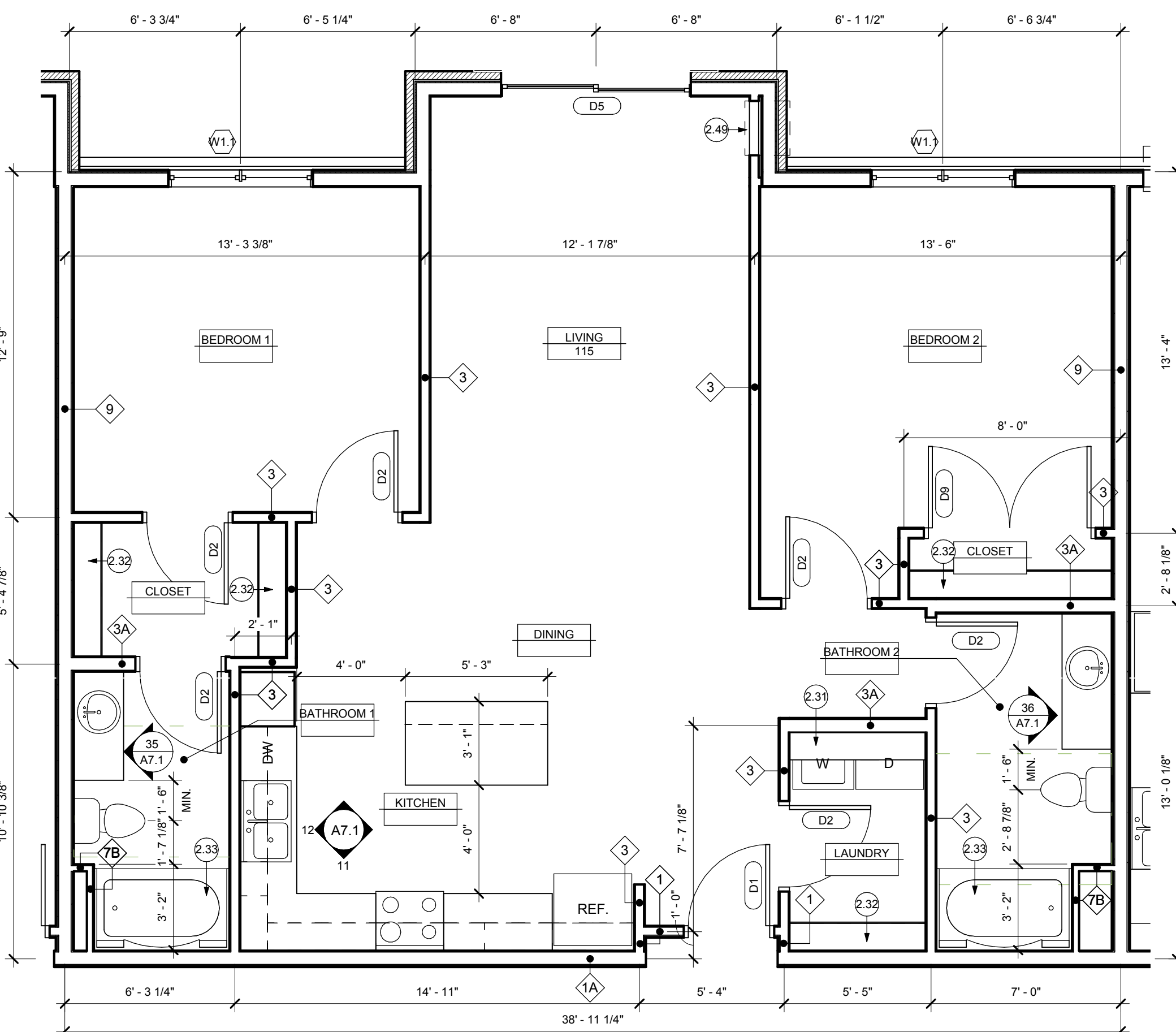
A2.16



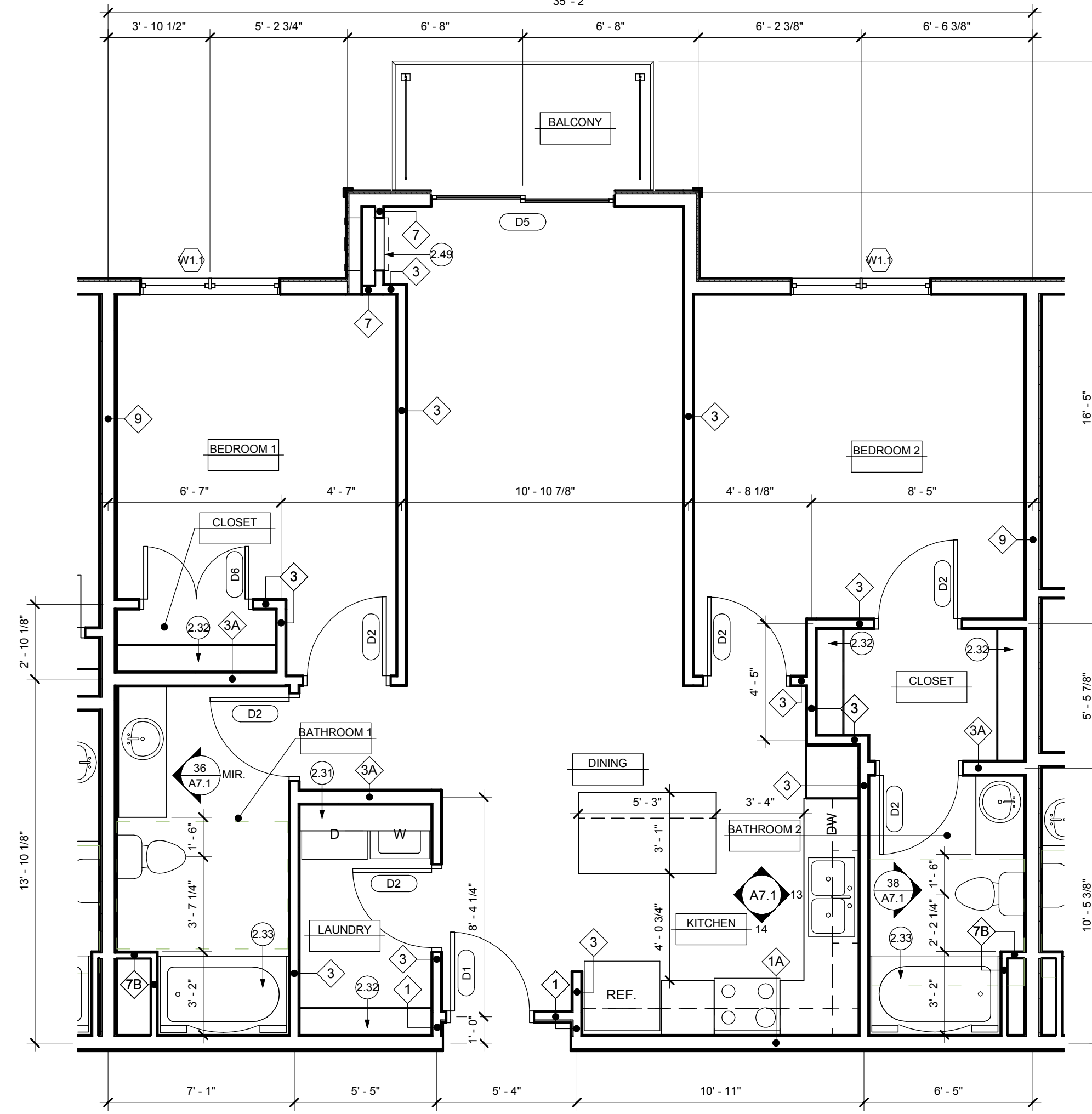
1 UNIT 2A - 2 BED/2 BATH
 A2.17 SCALE: 1/4" = 1'-0" (6 Thus)



2 UNIT 2B - 2 BED / 2 BATH
 1074 SF. (4 Thus)
 A2.17 SCALE: 1/4" = 1'-0"



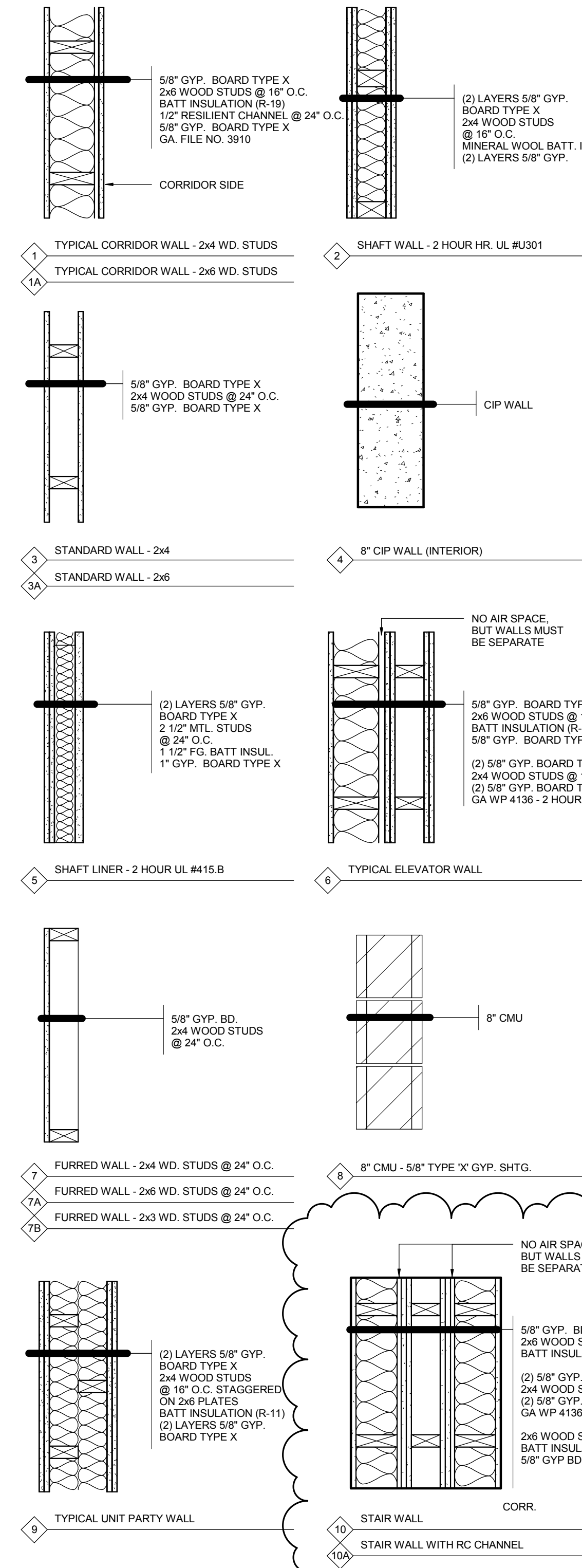
3 UNIT 2C - 2 BED / 2 BATH
 1180 SF. (4 Thus)
 A2.17 SCALE: 1/4" = 1'-0"



4 UNIT 2D - 2 BED / 2 BATH
 1091 SF. (2 Thus)
 A2.17 SCALE: 1/4" = 1'-0"

- UNIT PLAN - KEY NOTES**
- 2.31 12" DEEP WIRE SHELF AT 5'-0" A.F.F.
 - 2.32 12" DEEP WIRE SHELF WITH ROD AT 5'-0" A.F.F.
 - 2.33 60" TUB/SHOWER, PROVIDE 5'-1 1/4" CLEAR DIMENSION FROM FACE OF STUD TO FACE OF STUD.
 - 2.49 WALL MOUNT A/C

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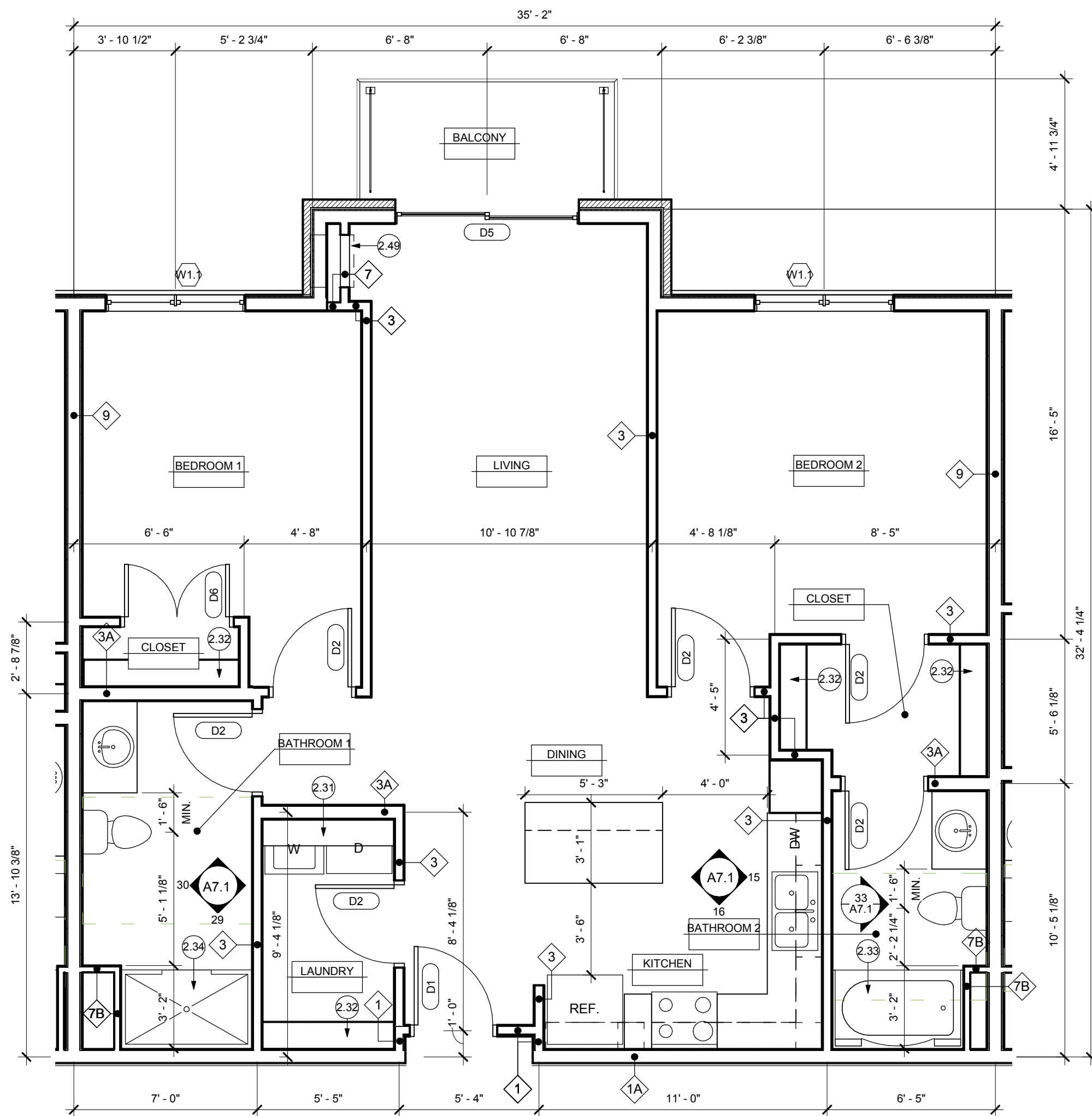
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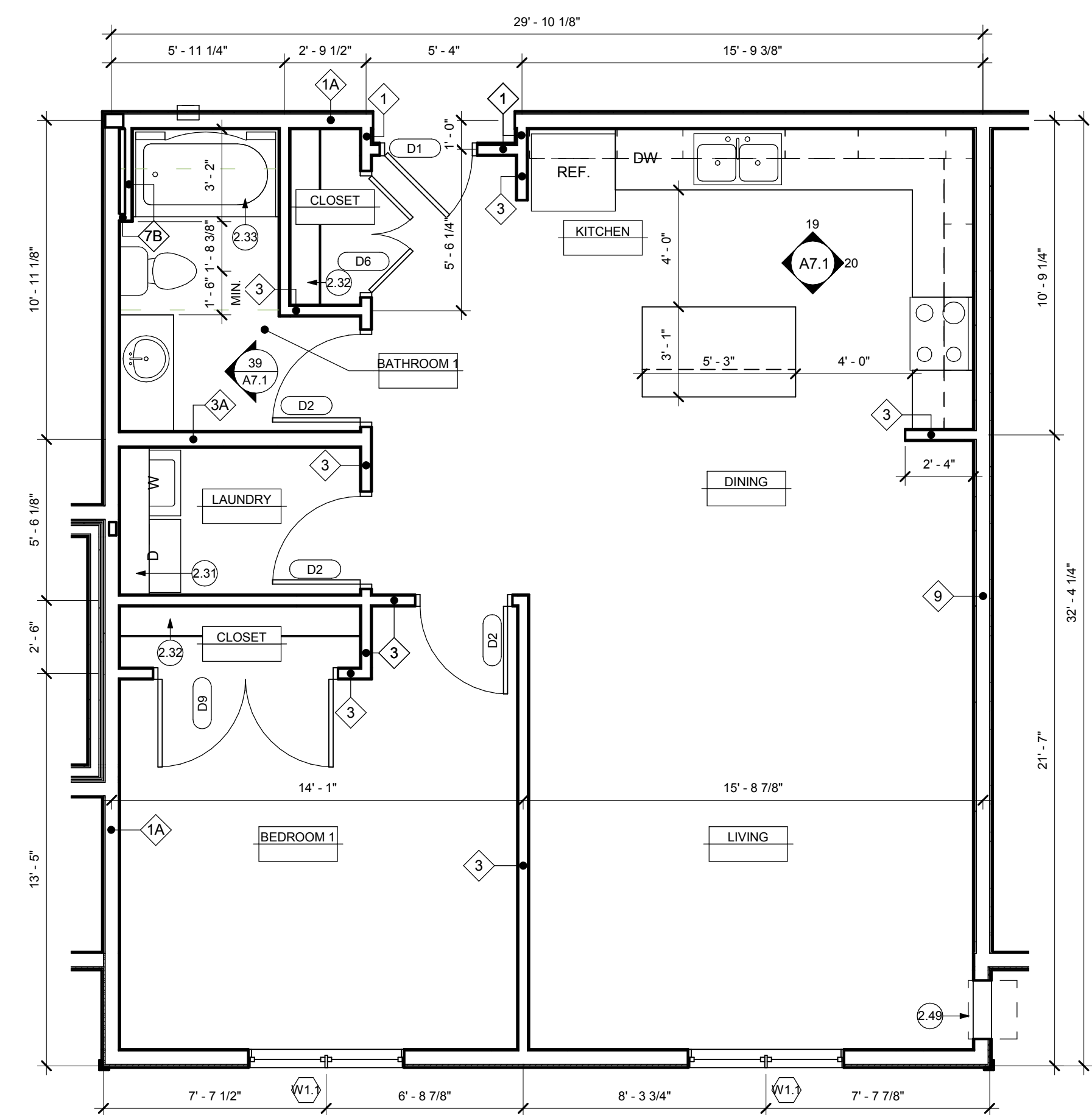
Red Wing, MN

Unit Plans 2A - 2D

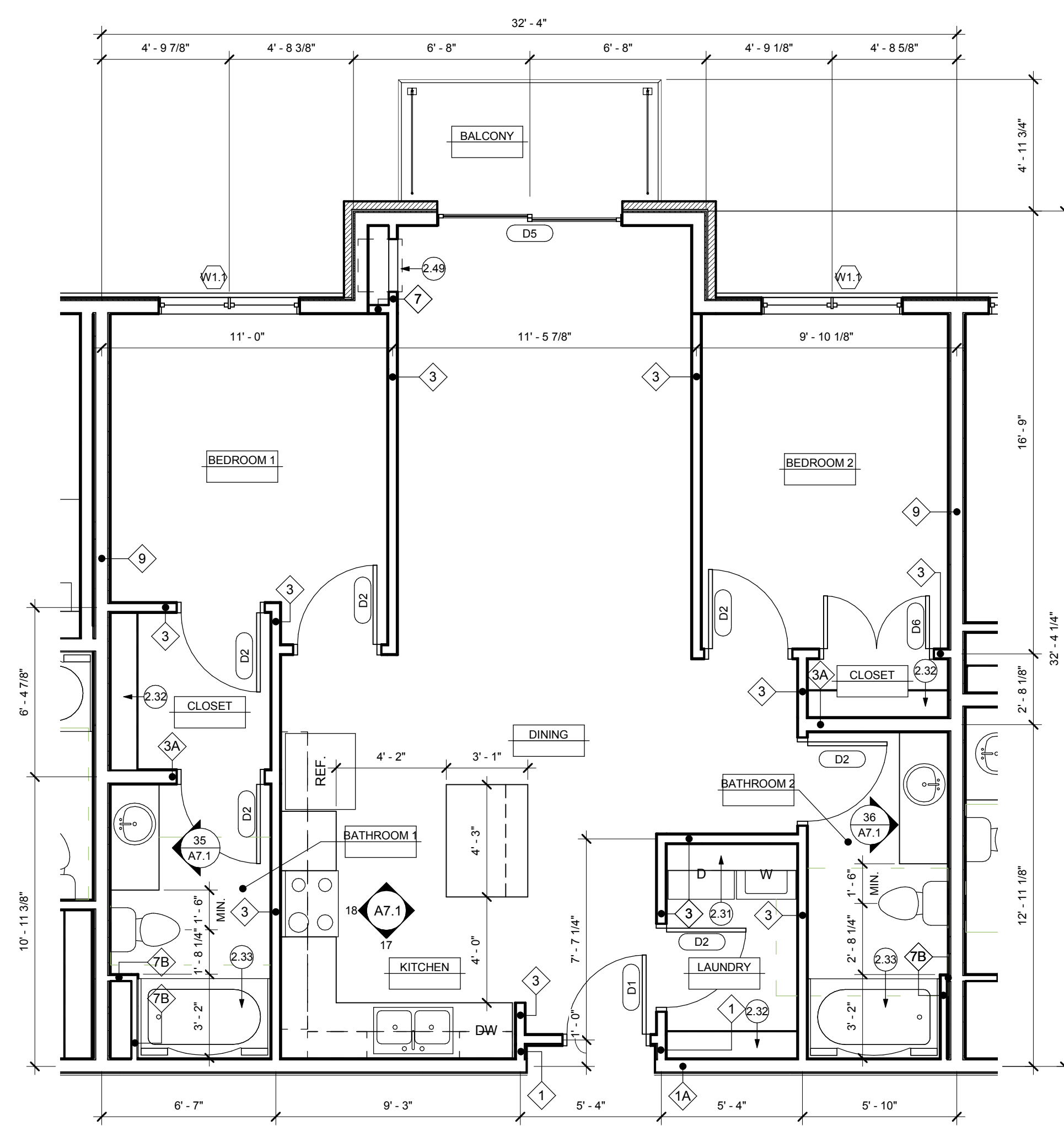
A2.17



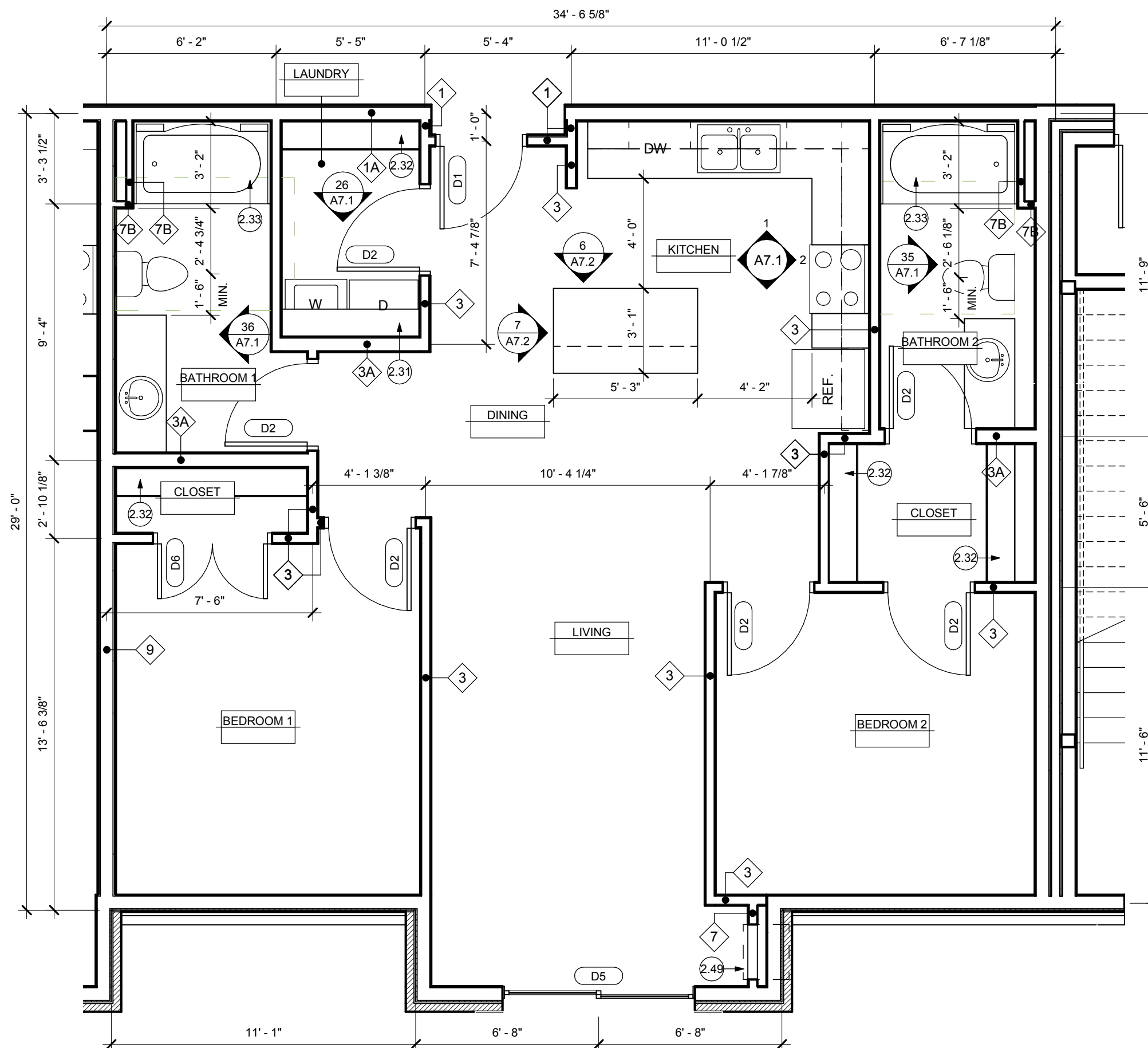
1 UNIT 2D - 2 BED / 2 BATH (TYPE A) 1097 SF.
A2.18 SCALE: 1/4" = 1'-0" (1 Thus)



3 UNIT 2F - 1 BED / 1 BATH 994 SF.
A2.18 SCALE: 1/4" = 1'-0" (2 Thus)



2 UNIT 2E - 2 BED / 2 BATH 998 SF.
A2.18 SCALE: 1/4" = 1'-0" (3 Thus)



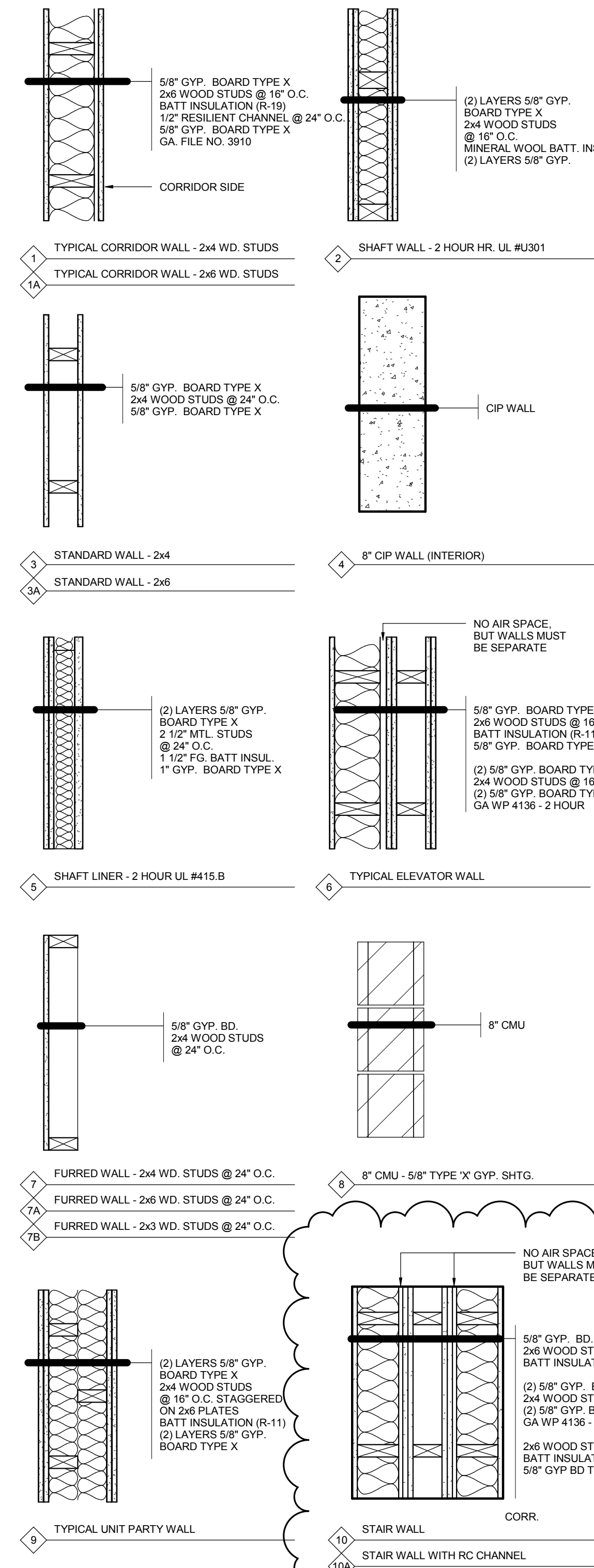
4 UNIT 2G - 2 BED / 2 BATH 1086 SF.
A2.18 SCALE: 1/4" = 1'-0" (4 Thus)

UNIT PLAN - KEY NOTES

- 2.31 12" DEEP WIRE SHELF AT 5'-0" A.F.F.
- 2.32 12" DEEP WIRE SHELF WITH ROD AT 5'-0" A.F.F.
- 2.33 60" TUB/SHOWER, PROVIDE 5'-1 1/4" CLEAR DIMENSION FROM FACE OF STUD TO FACE OF STUD.
- 2.34 30" X 60" HANDICAP ACCESSIBLE ROLL-IN SHOWER, PROVIDE 5'-1 1/4" CLEAR DIMENSION FROM FACE OF STUD TO FACE OF STUD.
- 2.49 WALL MOUNT A/C

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- C. PROVIDE NECESSARY BLOCKING FOR KITCHEN CABINETS, WINDOW TREATMENTS, HANDRAILS, TOWEL BARS, GRAB BARS, FUTURE GRAB BARS, CLOSET SHELVING, ETC.
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- G. ALL INTERIOR APARTMENT UNIT WALLS ARE WALL TYPE 3 UNLESS NOTED OTHERWISE.
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- I. PROVIDE PAINTED NUMBERS AT EACH PARKING STALL. COORDINATE WITH OWNER.



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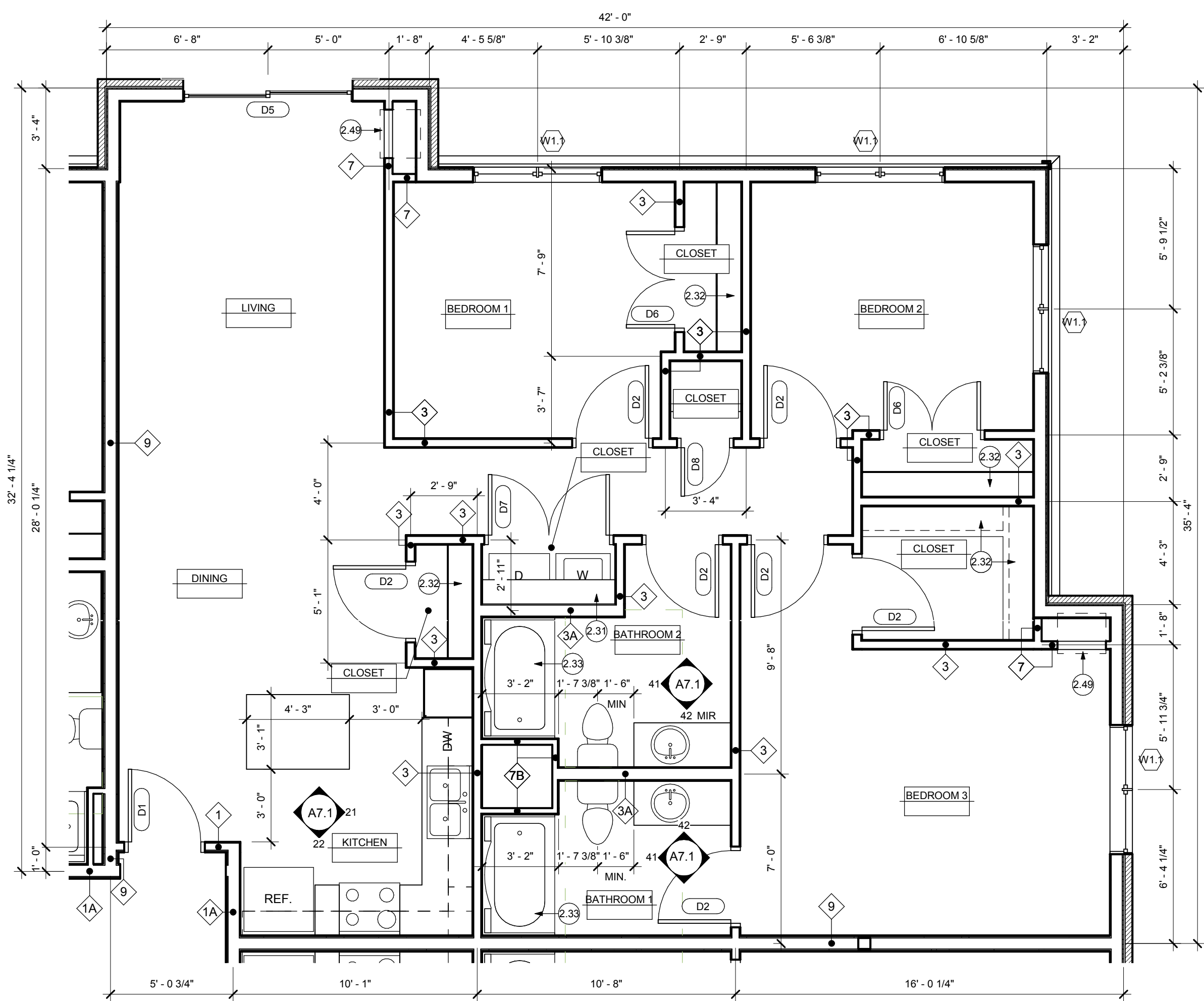
New Apartment Complex:

Rivers Ridge
Luxury
Apartments

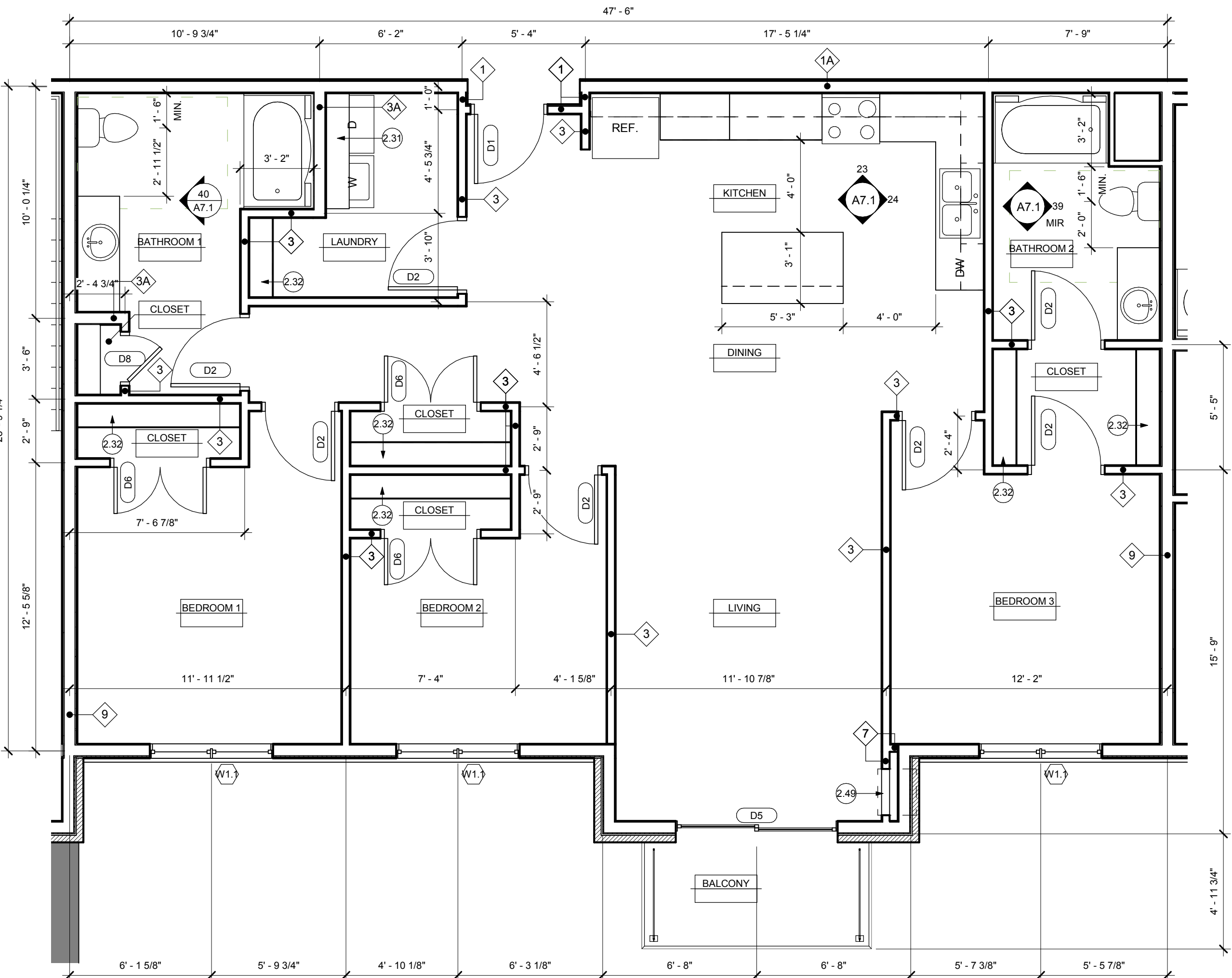
Red Wing, MN

Unit Plans 2D (Type A) - 2G

A2.18



1 UNIT 3A - 3 BED / 2 BATH
 1335 SF
 (16 THUS)
 SCALE: 1/4" = 1'-0"



2 UNIT 3B - 3 BED / 2 BATH
 1450 SF
 (2 THUS)
 SCALE: 1/4" = 1'-0"

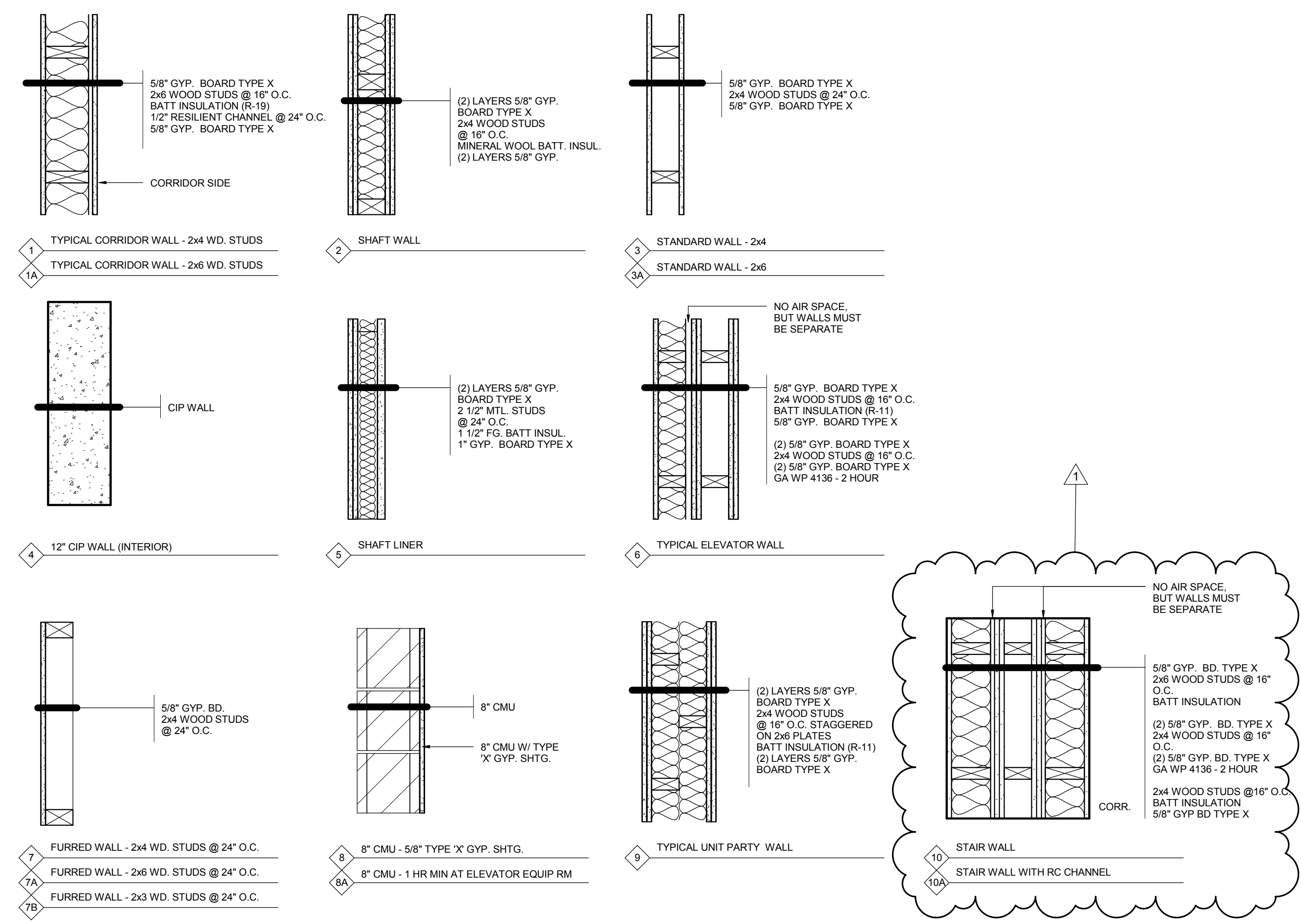
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 - PROVIDE PAINTED NUMBERS AT EACH PARKING STALL. COORDINATE WITH OWNER.
- UNIT PLAN - KEY NOTES**
- 12" DEEP WIRE SHELF AT 5'-0" A.F.F.
 - 12" DEEP WIRE SHELF WITH ROD AT 5'-0" A.F.F.
 - 60" TUB/SHOWER. PROVIDE 5'-1 1/4" CLEAR DIMENSION FROM FACE OF STUD TO FACE OF STUD.
 - WALL MOUNT A/C

UNIT ROOM FINISH SCHEDULE										
ROOM NAME	FLOOR			WALLS			CEILING			NOTES
	MATL	FIN	BASE	MATL	FIN	MATL	FIN	HT		
BATHROOM	GYP	SV	WD	GB	PT	GB	PT	8'-0"		
BEDROOM	GYP	CPT	WD	GB	PT	GB	PT	8'-0"	1	
CLOSET	GYP	CPT	WD	GB	PT	GB	PT	8'-0"		
DINING	GYP	SV	WD	GB	PT	GB	PT	8'-0"		
KITCHEN	GYP	SV	WD	GB	PT	GB	PT	8'-0"		
LAUNDRY	GYP	SV	WD	GB	PT	GB	PT	8'-0"		
LIVING	GYP	CPT	WD	GB	PT	GB	PT	8'-0"		

ABBREVIATIONS:				REFERENCED NOTES:			
ACT	ACOUSTICAL TILE CEILING	FM	FLOOR MAT	UNF	UNFINISHED	1.	SV FLOOR FINISH AT ALL ENTRY AND BATHROOM CLOSETS.
CONC	CONCRETE	GB	GYP/STUM BOARD	V	VINYL		
CPT	CARPET	FOR	PORCELAIN TILE	VCT	VINYL COMPOSITION TILE		
		PT	PAINT				
		SV	SHEET VINYL				

UNIT DOOR AND FRAME SCHEDULE												
DOOR TYPE	OPENING SIZE		THK	DOOR TYPE	DOOR MATL	DOOR GLAZING TYPE	FRAME TYPE	FRAME MATL	FIRE RATING	T TEMP	HDWR GRP	NOTES
	WIDTH	HEIGHT										
D1	3'-0"	6'-8"	1 3/4"	1	WD	--	A	KD	20 MIN.	--	--	
D2	3'-0"	7'-0"	1 3/4"	1	WD	--	A	WD	--	--	--	
D3	2'-6"	7'-0"	1 3/4"	1	WD	--	A	WD	--	--	--	
D4	1'-6"	7'-0"	1 3/4"	1	WD	--	A	WD	--	--	--	
D5	7'-0"	6'-8"	1 3/4"	5	VIN	1" T/TEMP	FULL	VIN	--	--	--	
D6	4'-0"	7'-0"	1 3/4"	1	WD	--	C	WD	--	--	--	
D7	5'-0"	7'-0"	1 3/4"	1	WD	--	C	WD	--	--	--	
D8	2'-0"	7'-0"	1 3/4"	1	WD	--	A	WD	--	--	--	
D9	6'-0"	7'-0"	1 3/4"	1	WD	--	A	HM	--	--	--	

ABBREVIATIONS:				REFERENCED NOTES:			
ALUM	ALUMINUM	KD	KNOCK DOWN	T	TINTED	1.	
HM	HOLLOW METAL	INS	INSULATED	VIN	VINYL		
WD	WOOD	TEMP	TEMPERED				



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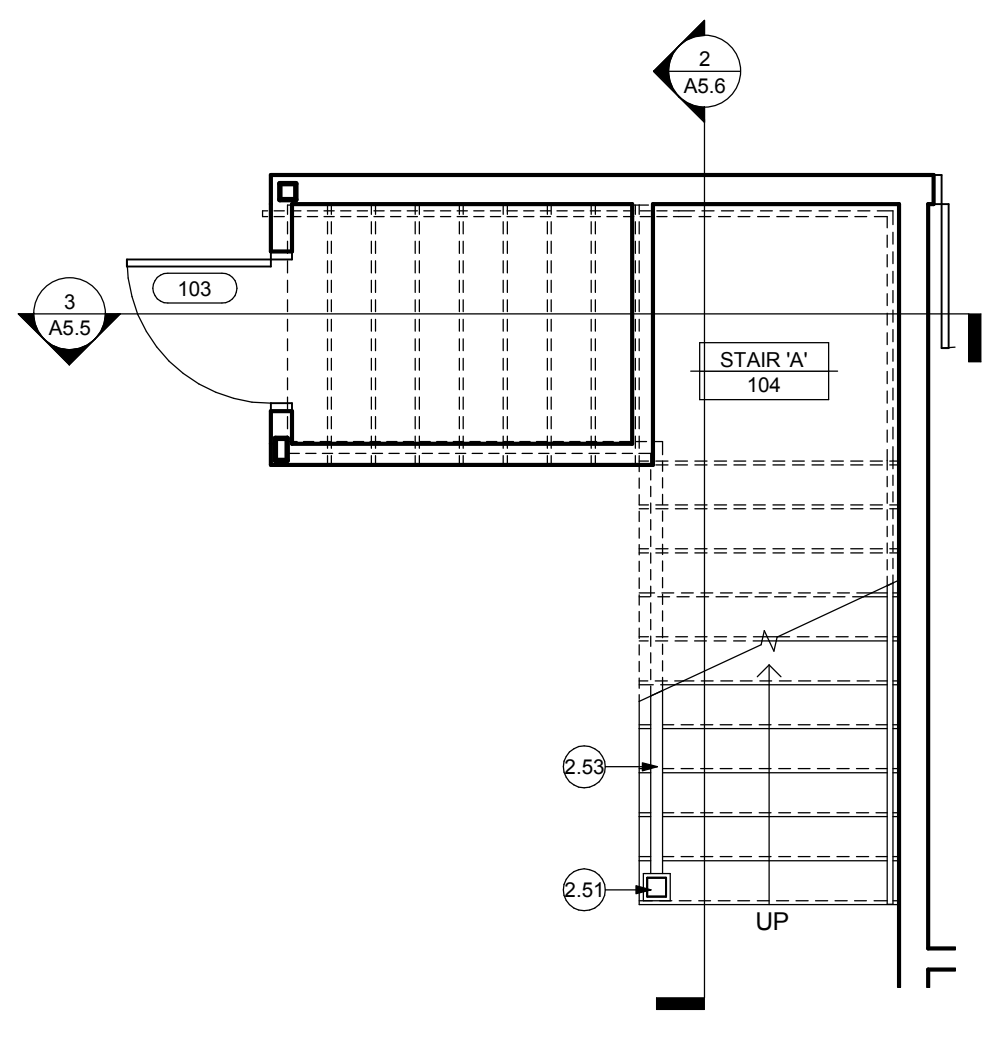
New Apartment Complex:

**Rivers Ridge
 Luxury
 Apartments**

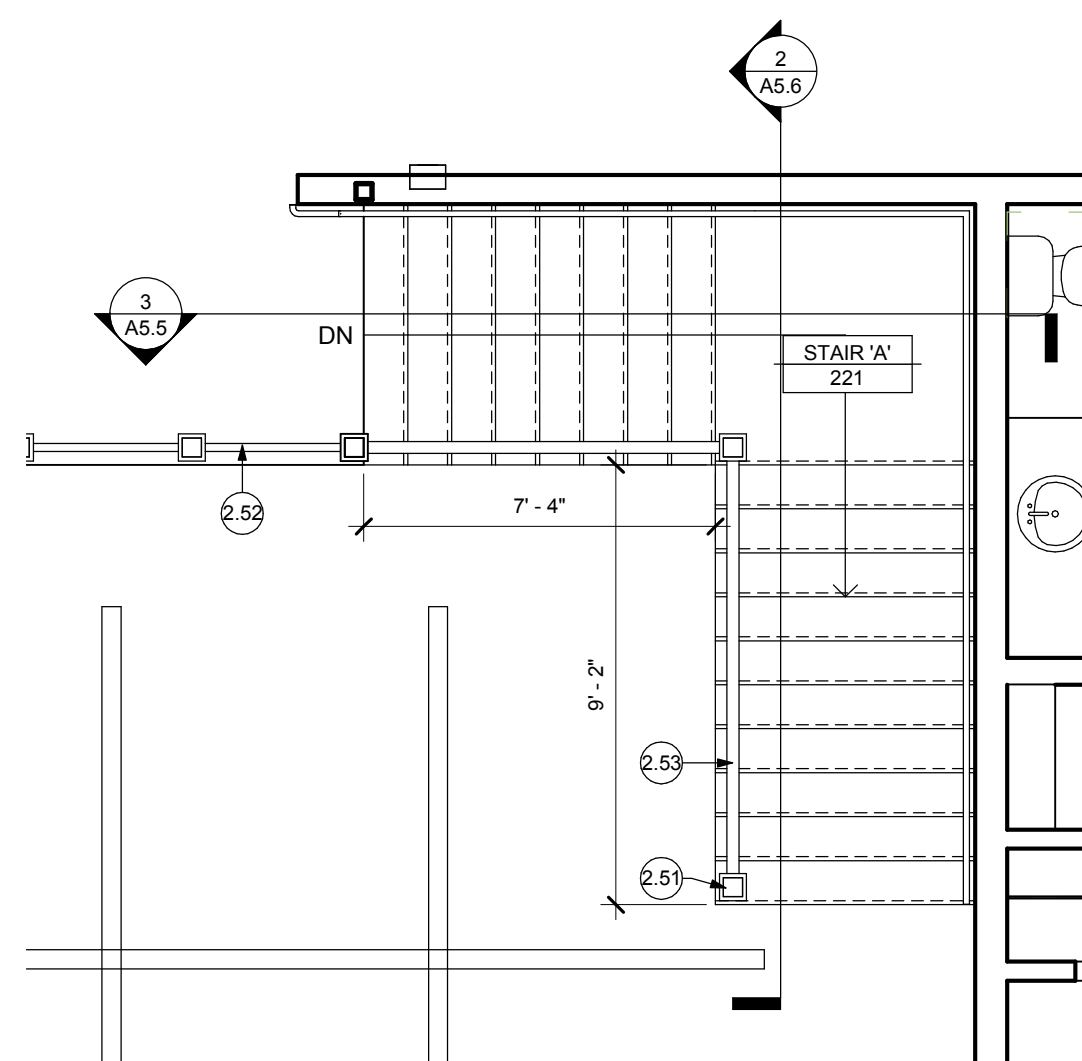
Red Wing, MN

Unit Plans 3A - 3B

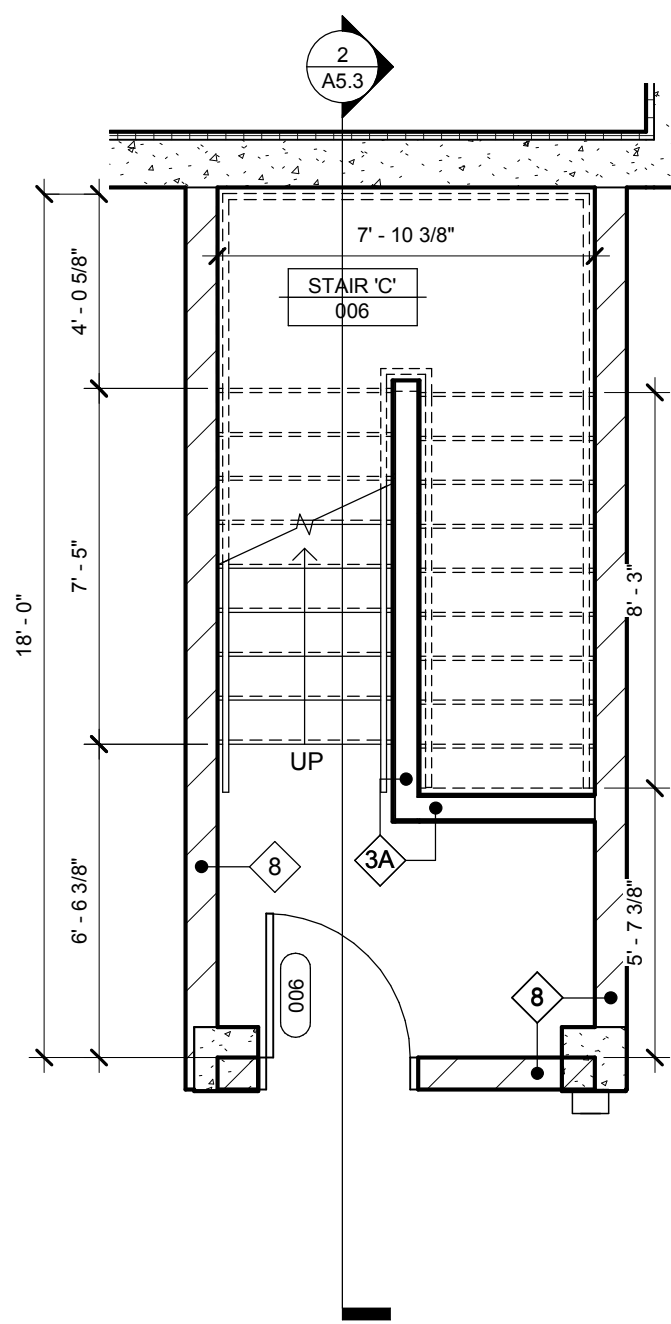
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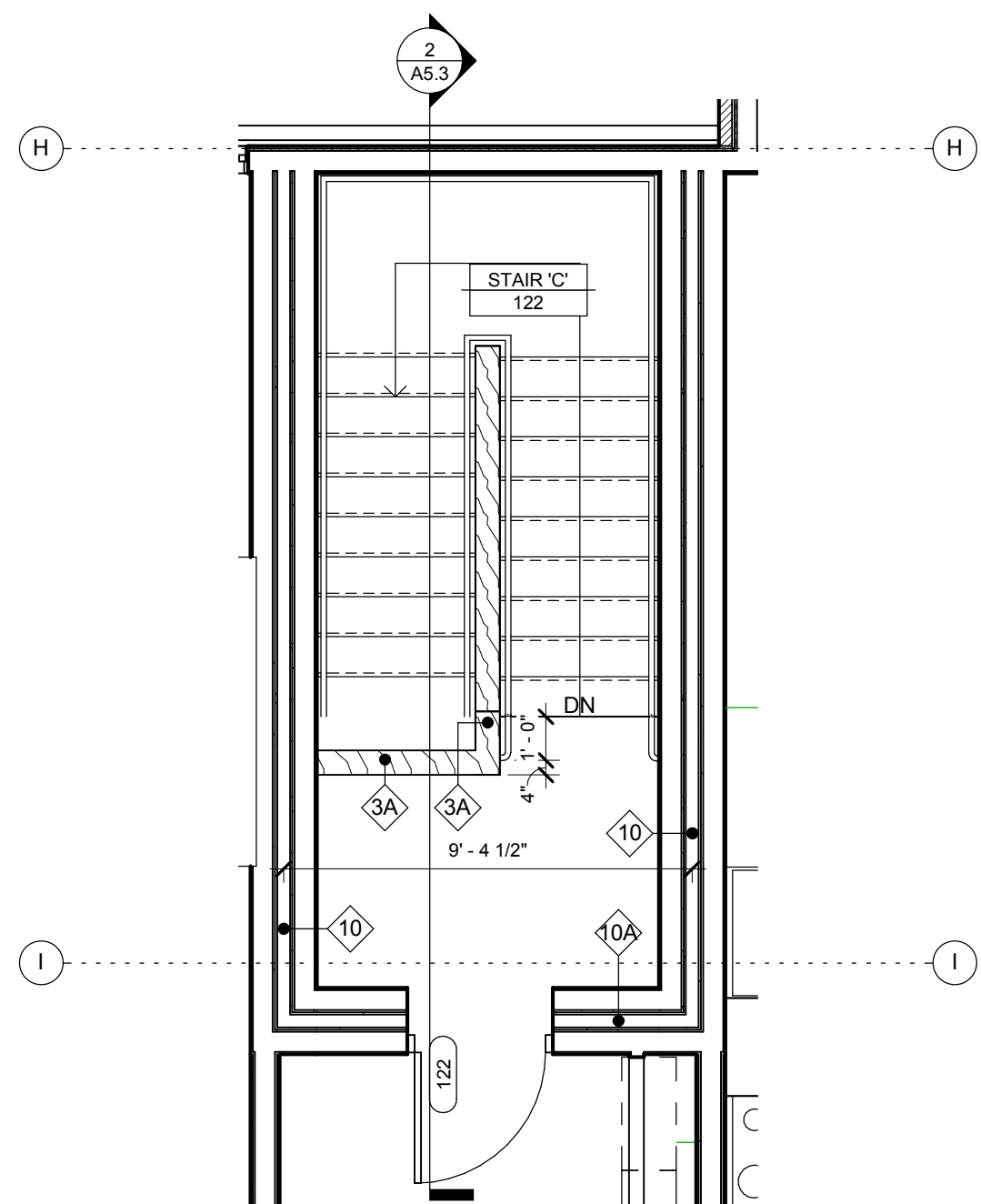
1 FIRST FLOOR - STAIR 'A'
A2.21 SCALE: 1/4" = 1'-0"



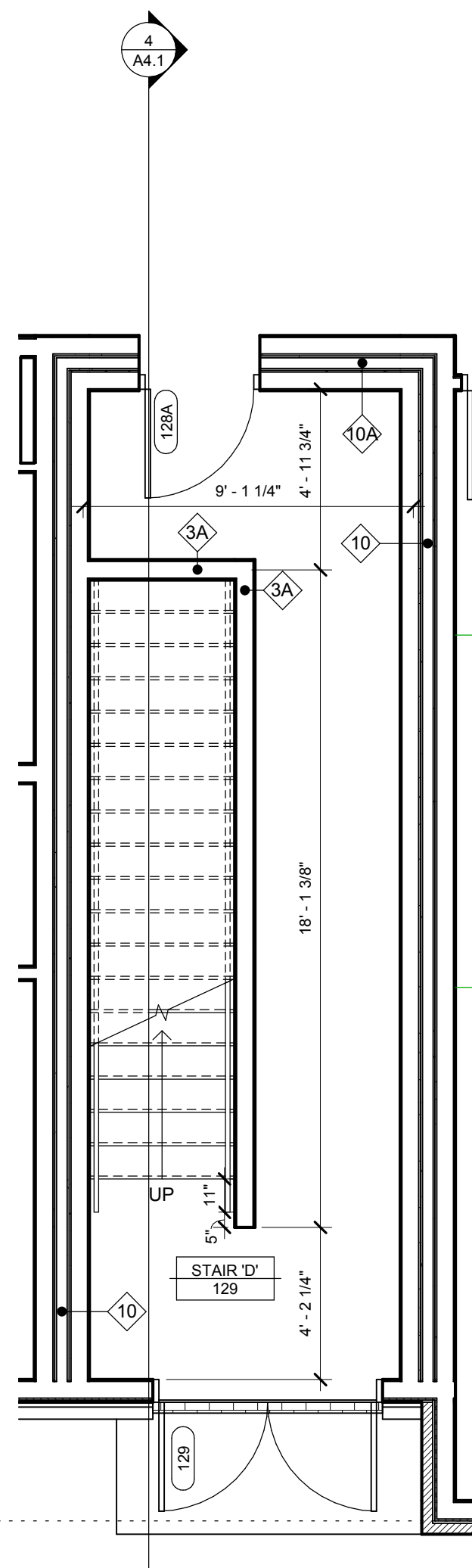
2 SECOND FLOOR - STAIR 'A'
A2.21 SCALE: 1/4" = 1'-0"



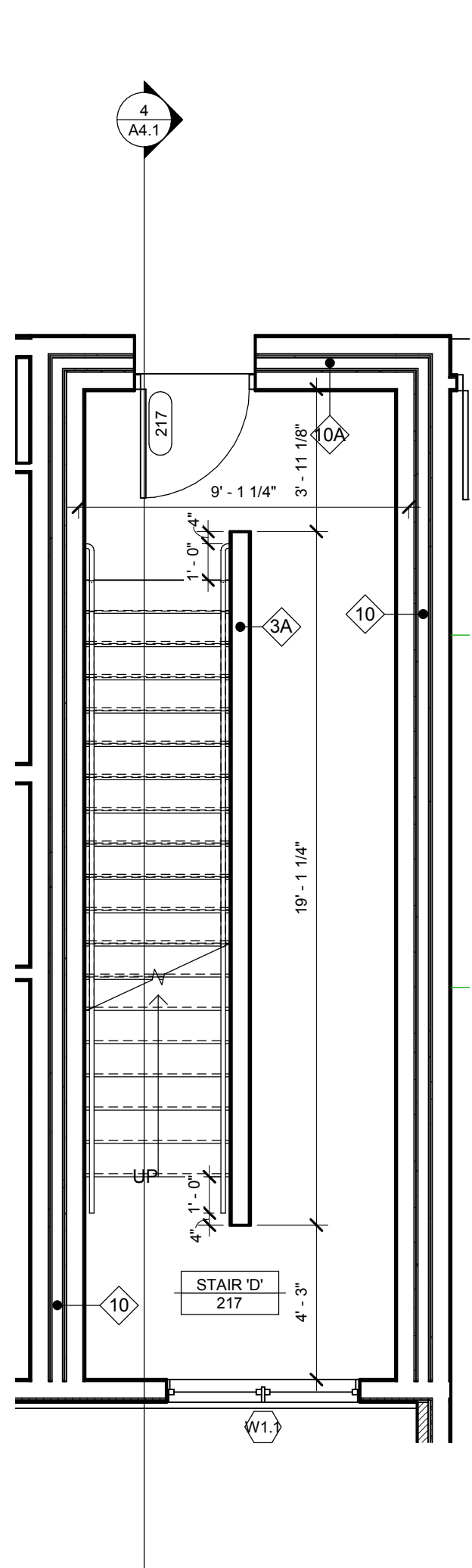
3 PARKING LEVEL - STAIR 'C'
A2.21 SCALE: 1/4" = 1'-0"



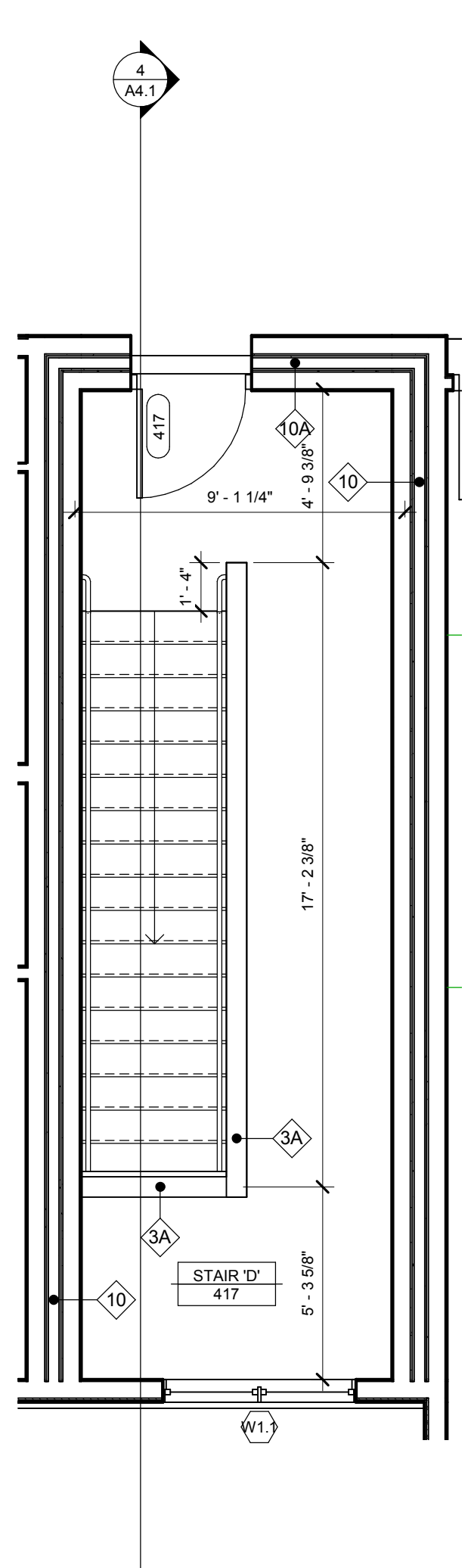
4 FIRST FLOOR - STAIR 'C'
A2.21 SCALE: 1/4" = 1'-0"



5 FIRST FLOOR - STAIR 'D'
A2.21 SCALE: 1/4" = 1'-0"



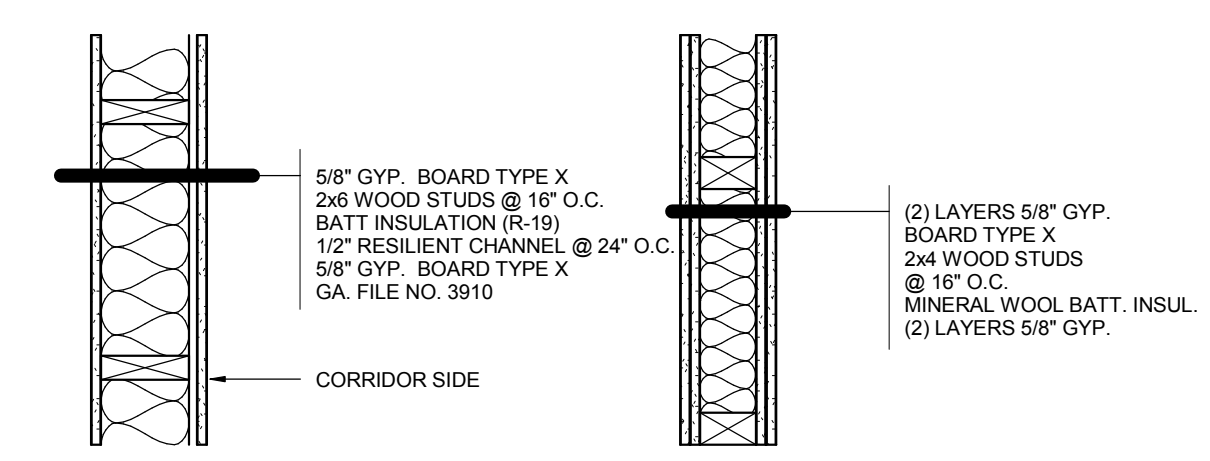
6 SECOND/THIRD FLOOR - STAIR 'D'
A2.21 SCALE: 1/4" = 1'-0"



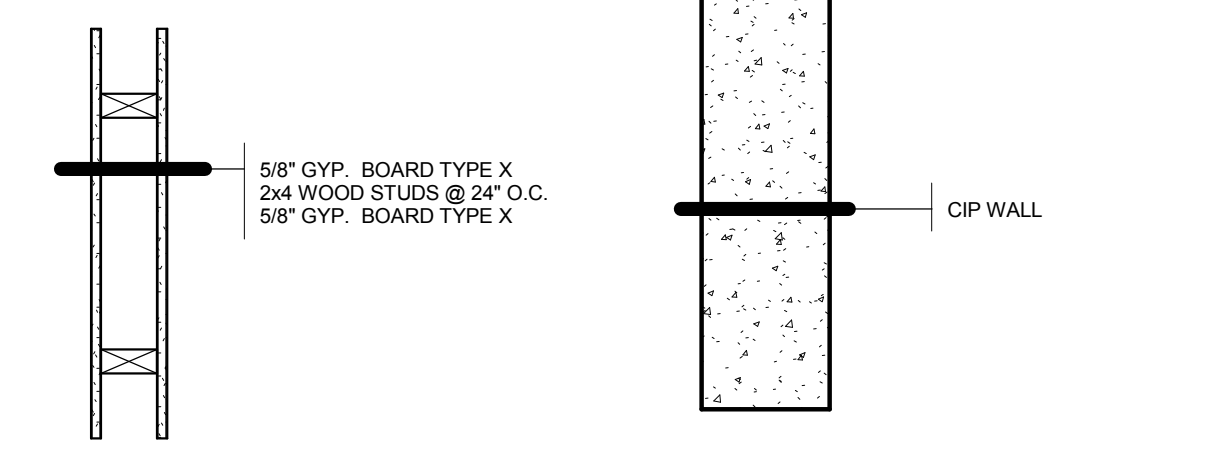
7 FOURTH FLOOR - STAIR 'D'
A2.21 SCALE: 1/4" = 1'-0"

FLOOR PLAN - KEY NOTES
2.51 WOOD NEWEL POST
2.52 42" HIGH WOOD GUARDRAIL & SPINDELS
2.53 WOOD HANDRAIL

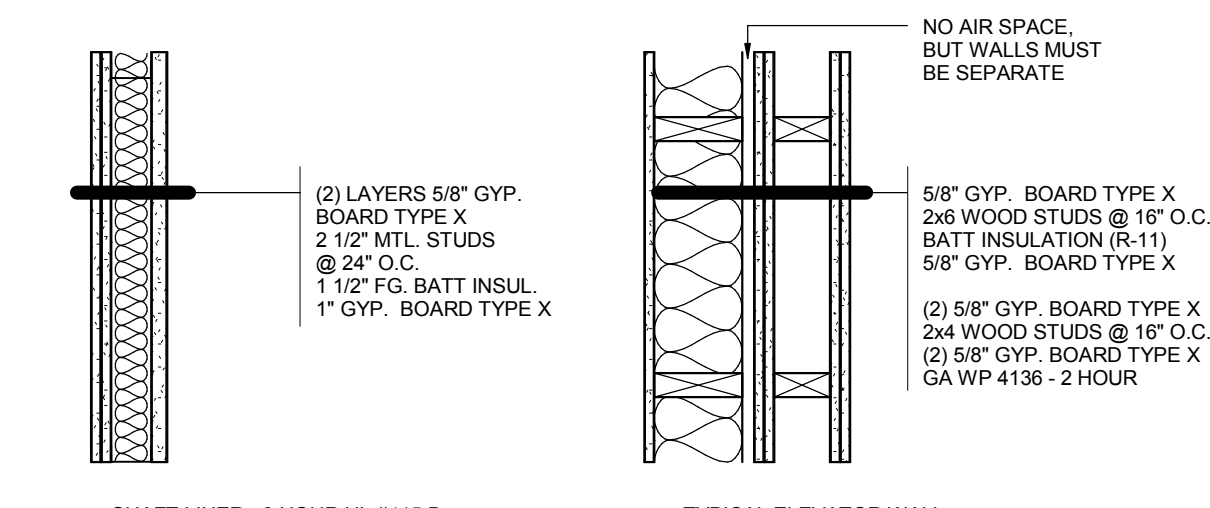
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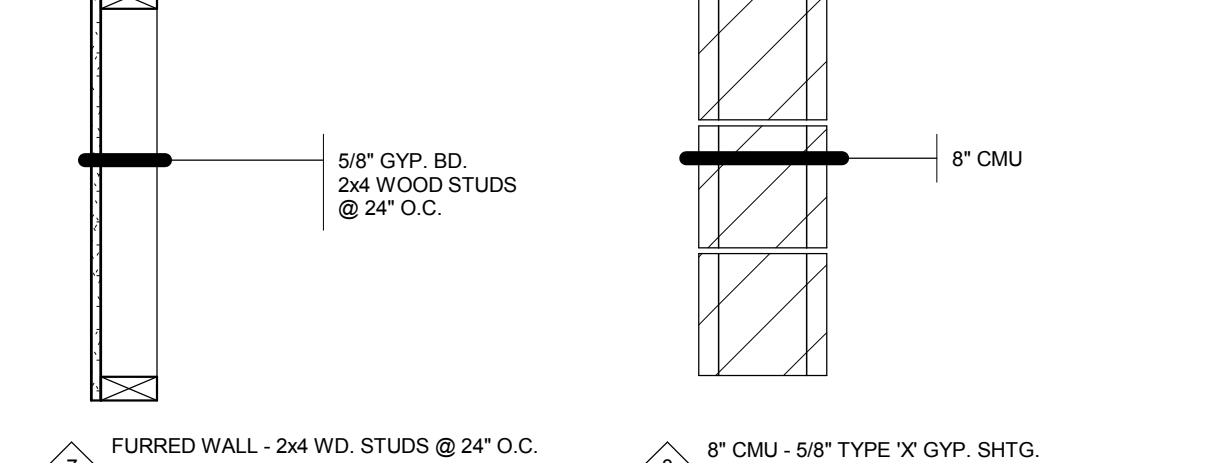
7 TYPICAL CORRIDOR WALL - 2x4 WD. STUDS
7A TYPICAL CORRIDOR WALL - 2x6 WD. STUDS
2 SHAFT WALL - 2 HOUR HR. UL #U301



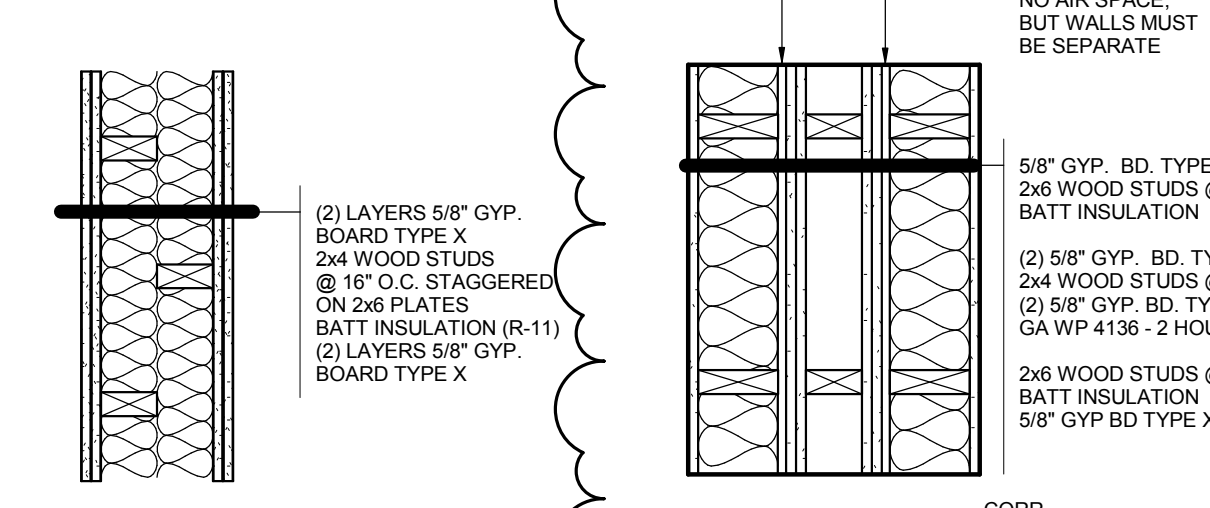
3A STANDARD WALL - 2x4
4 8" CIP WALL (INTERIOR)



5 SHAFT LINER - 2 HOUR UL #415.B
6 TYPICAL ELEVATOR WALL



7 FURRED WALL - 2x4 WD. STUDS @ 24" O.C.
7A FURRED WALL - 2x6 WD. STUDS @ 24" O.C.
7B FURRED WALL - 2x3 WD. STUDS @ 24" O.C.
8 8" CMU - 5/8" TYPE 'X' GYP. SHGT.



9 TYPICAL UNIT PARTY WALL
10 STAIR WALL
10A STAIR WALL WITH RC CHANNEL

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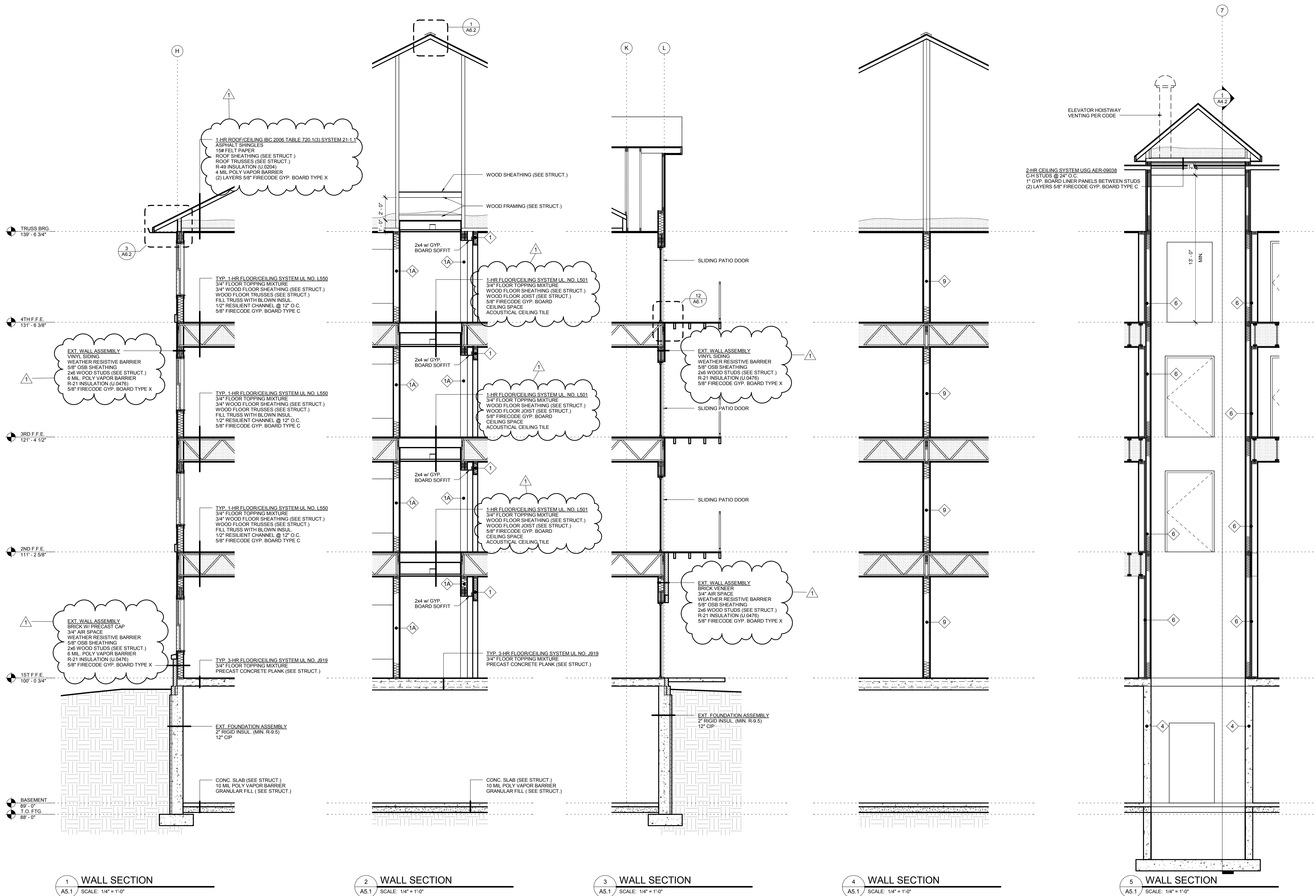
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New Apartment Complex:
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Red Wing, MN

Enlarged Stair Plans
A2.21



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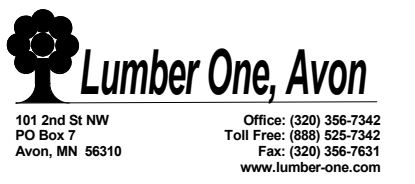
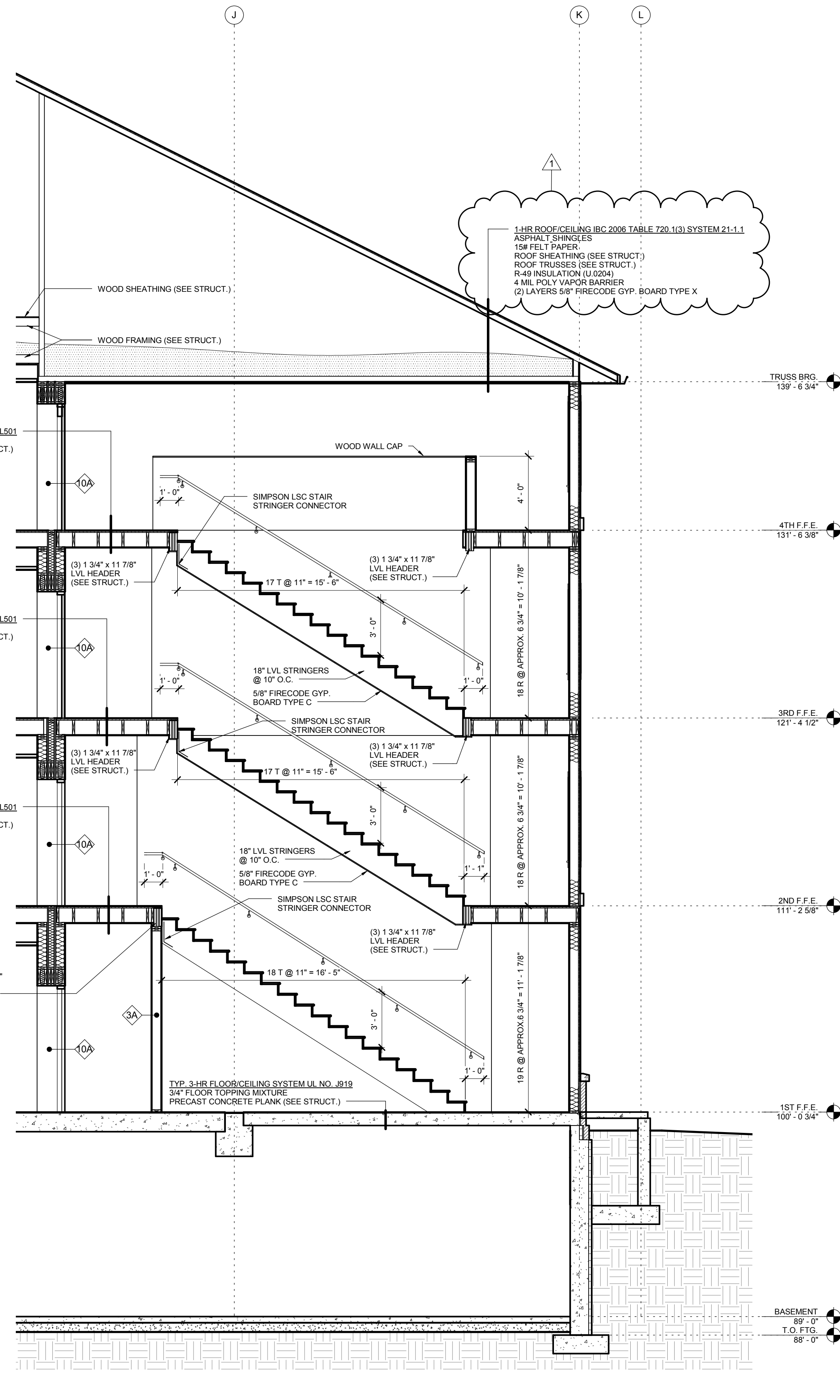
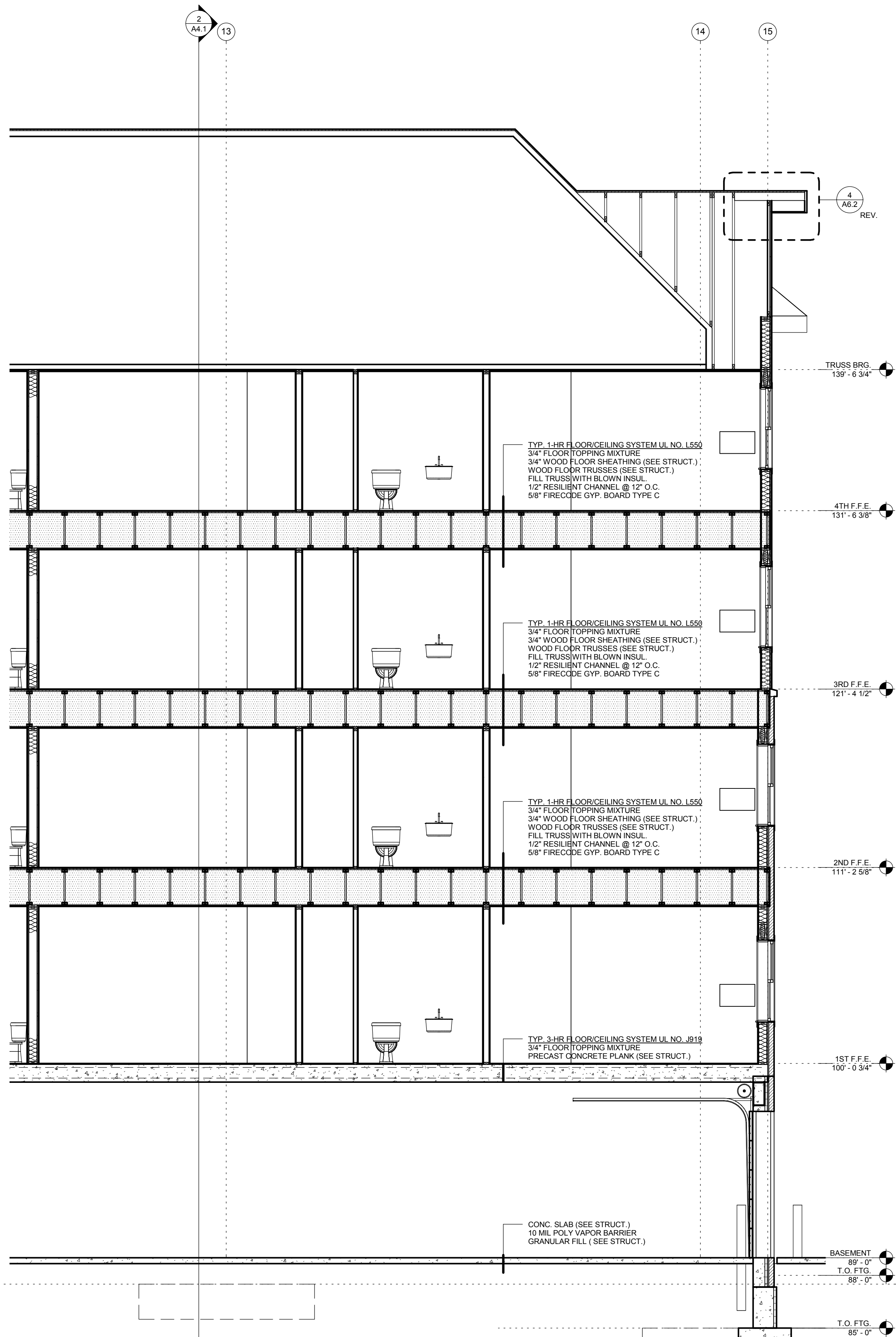
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Red Wing, MN

Wall Sections

A5.1



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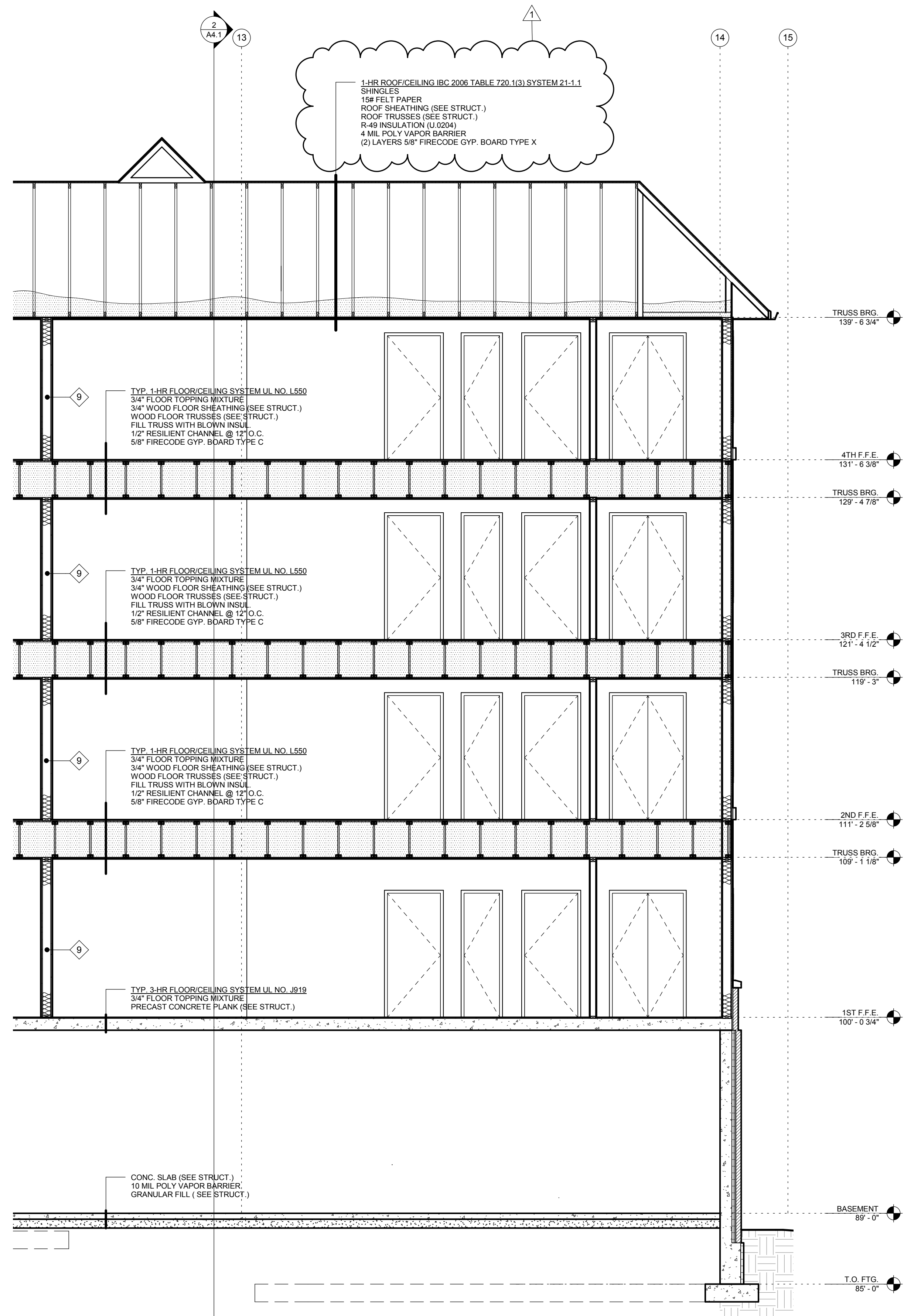
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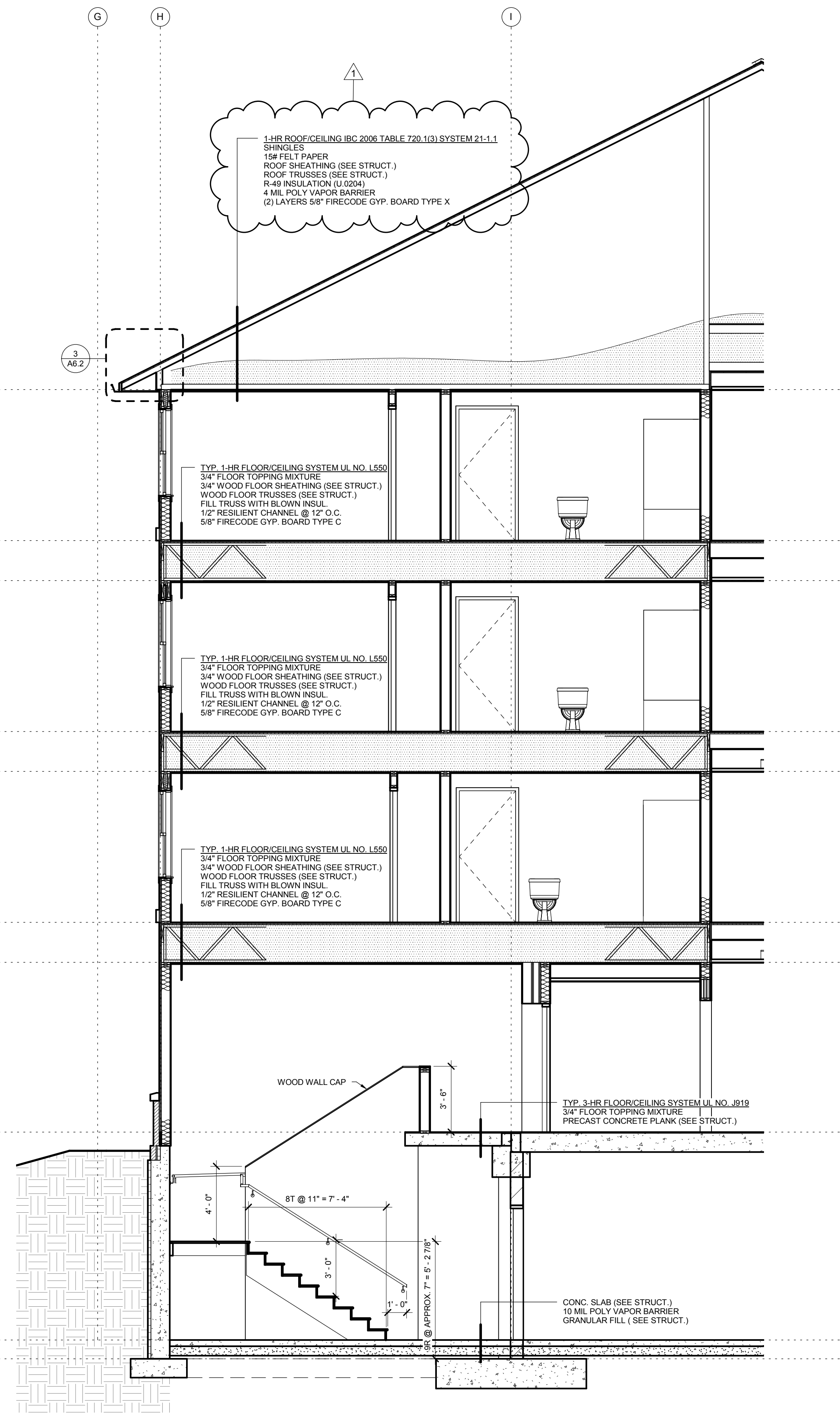
Red Wing, MN

Wall Sections

A5.2



1 WALL SECTION
A5.3 SCALE: 1/4" = 1'-0"



2 WALL SECTION
A5.3 SCALE: 1/4" = 1'-0"



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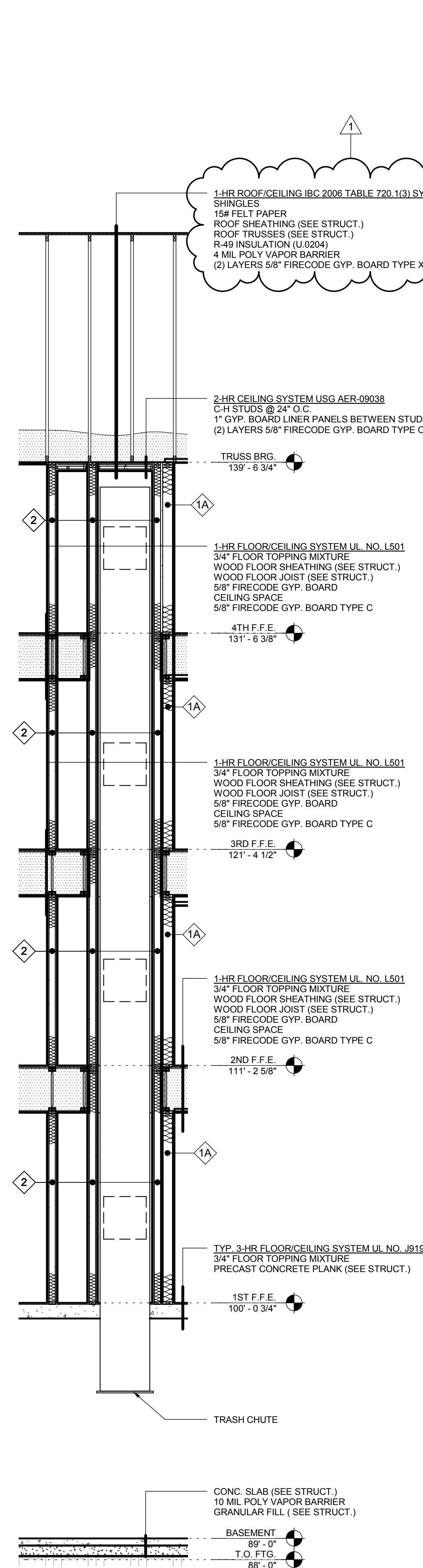
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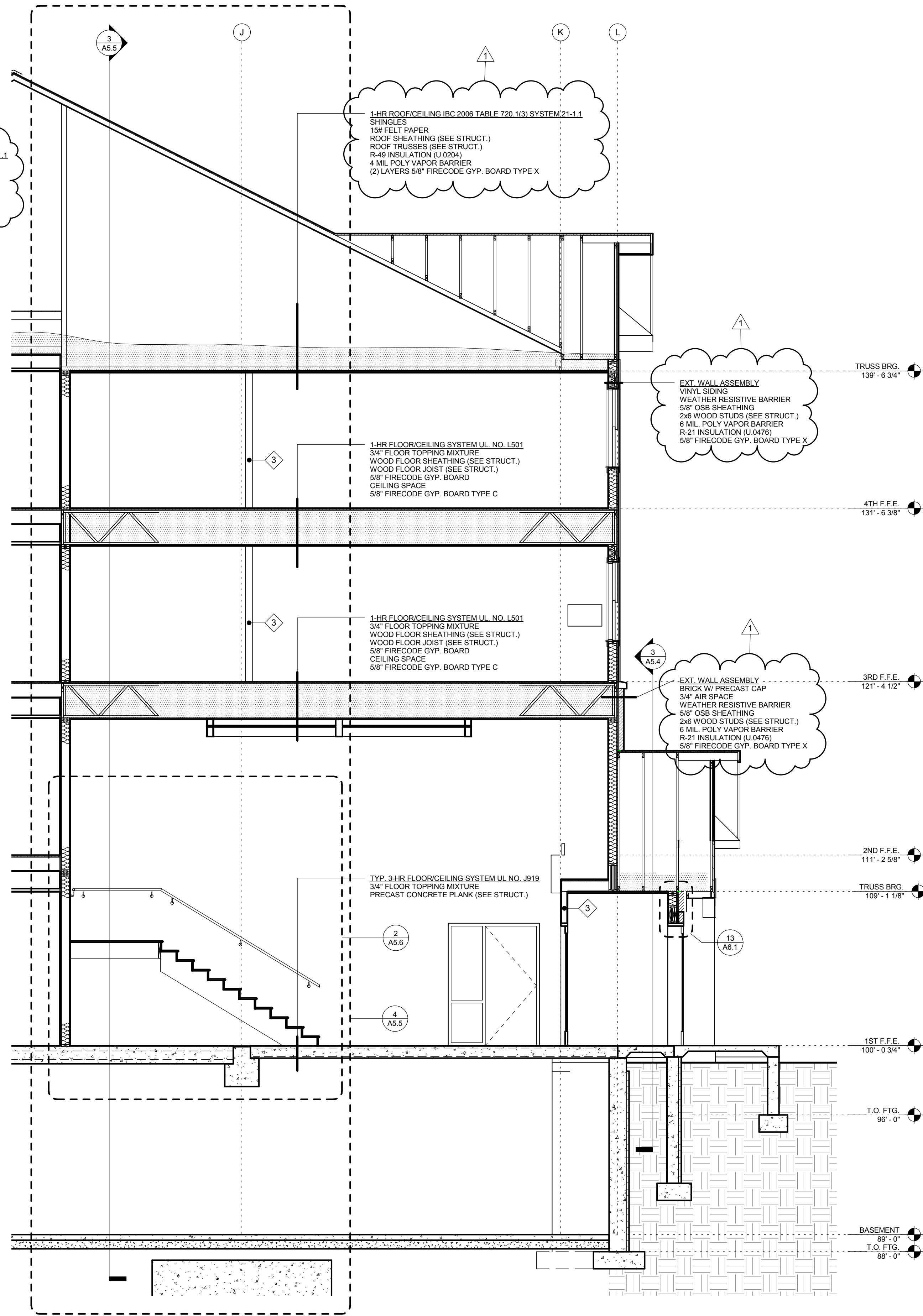
Red Wing, MN

Wall Sections

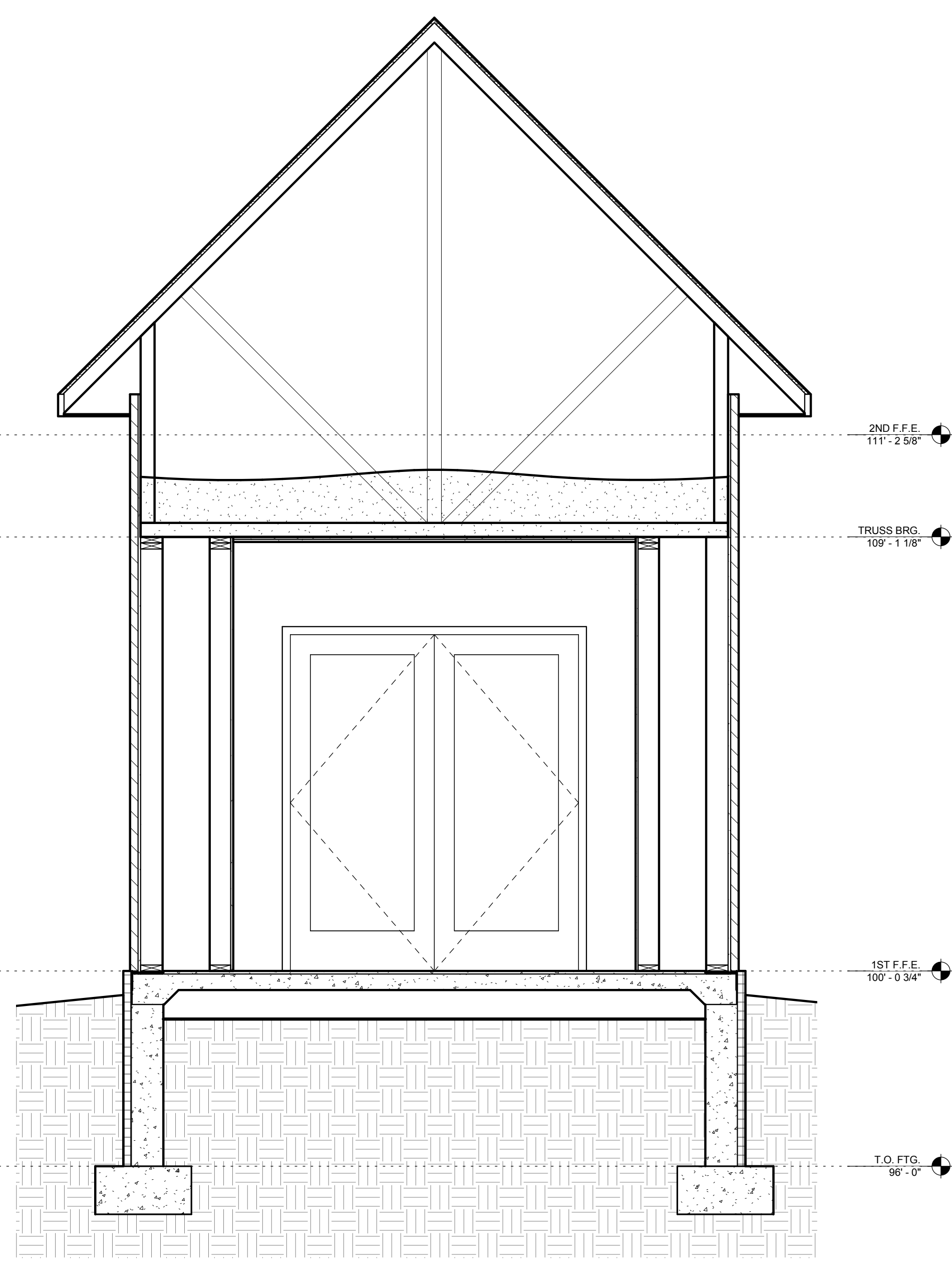
A5.3



1 WALL SECTION
A5.4 SCALE: 1/4" = 1'-0"



2 WALL SECTION
A5.4 SCALE: 1/4" = 1'-0"



3 WALL SECTION
A5.4 SCALE: 1/2" = 1'-0"

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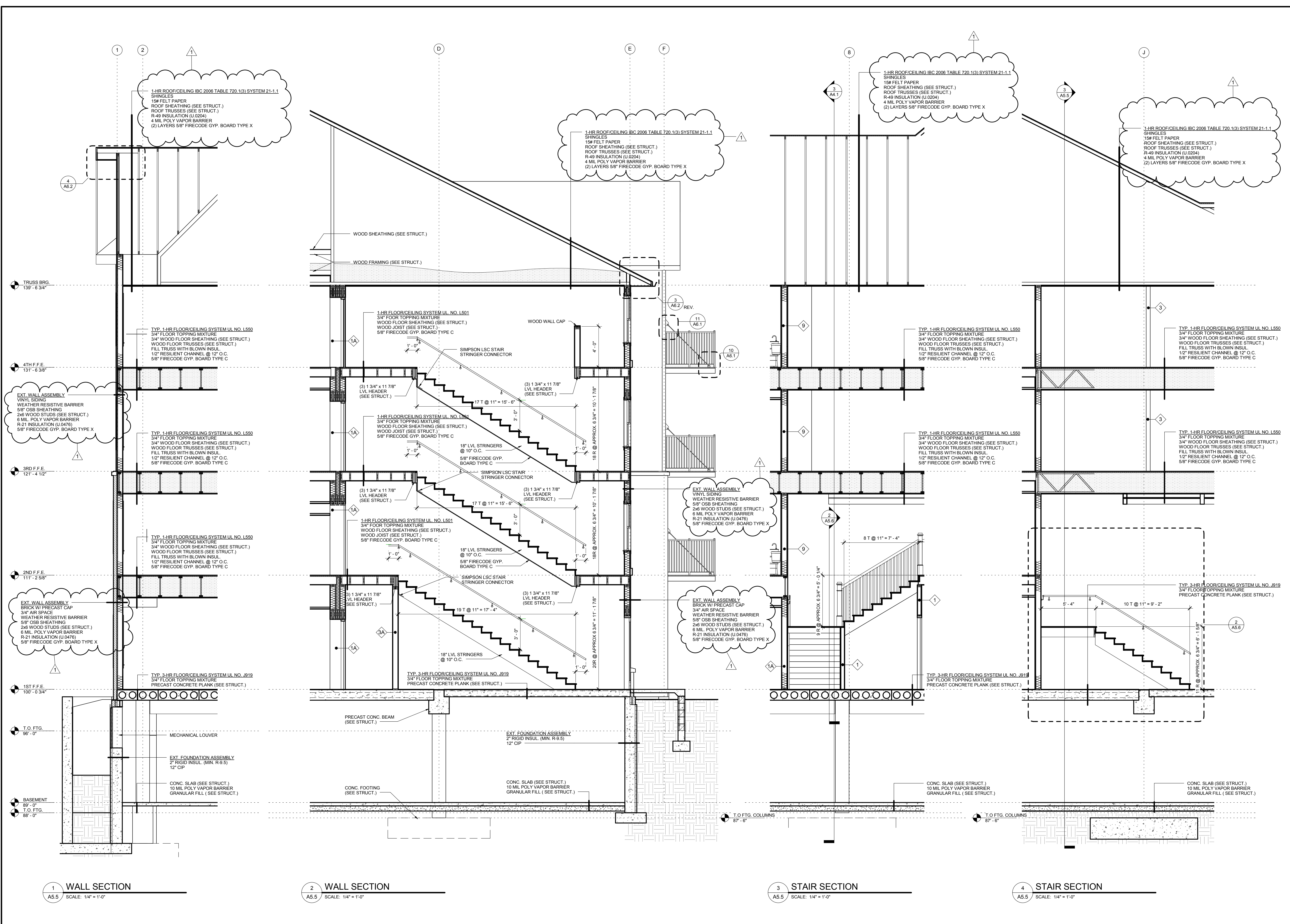
New Apartment Complex:

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Luxury
Apartments**

Red Wing, MN

Wall Sections

A5.4



1 WALL SECTION
A5.5 SCALE: 1/4" = 1'-0"

2 WALL SECTION
A5.5 SCALE: 1/4" = 1'-0"

3 STAIR SECTION
A5.5 SCALE: 1/4" = 1'-0"

4 STAIR SECTION
A5.5 SCALE: 1/4" = 1'-0"



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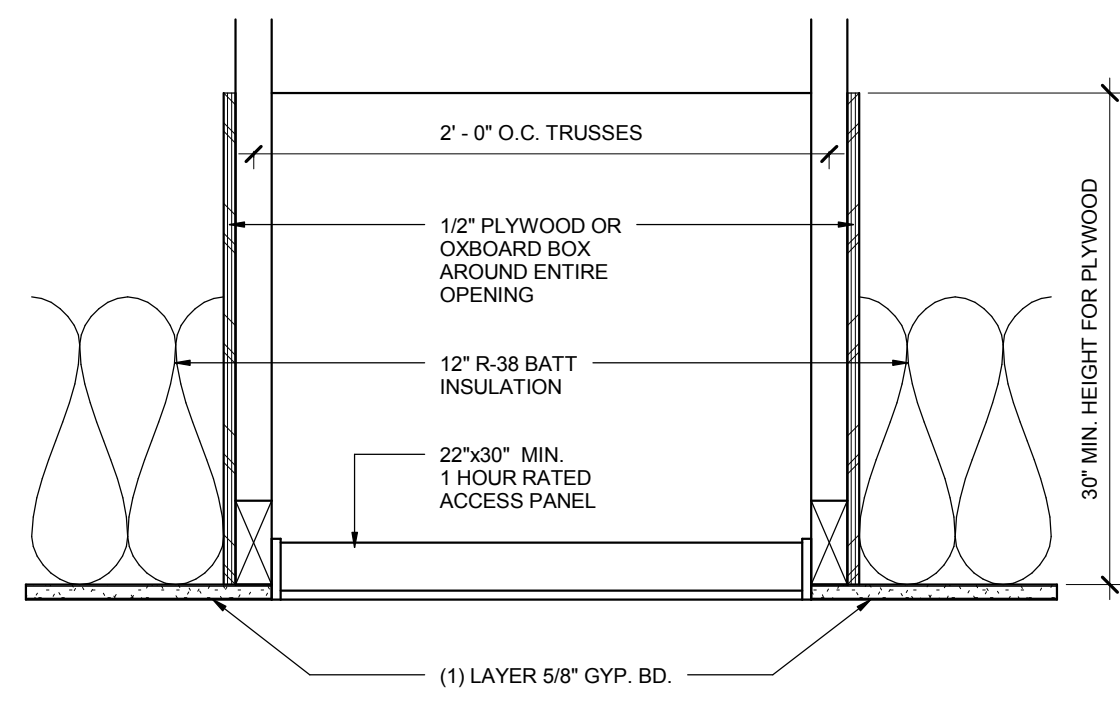
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Apartments

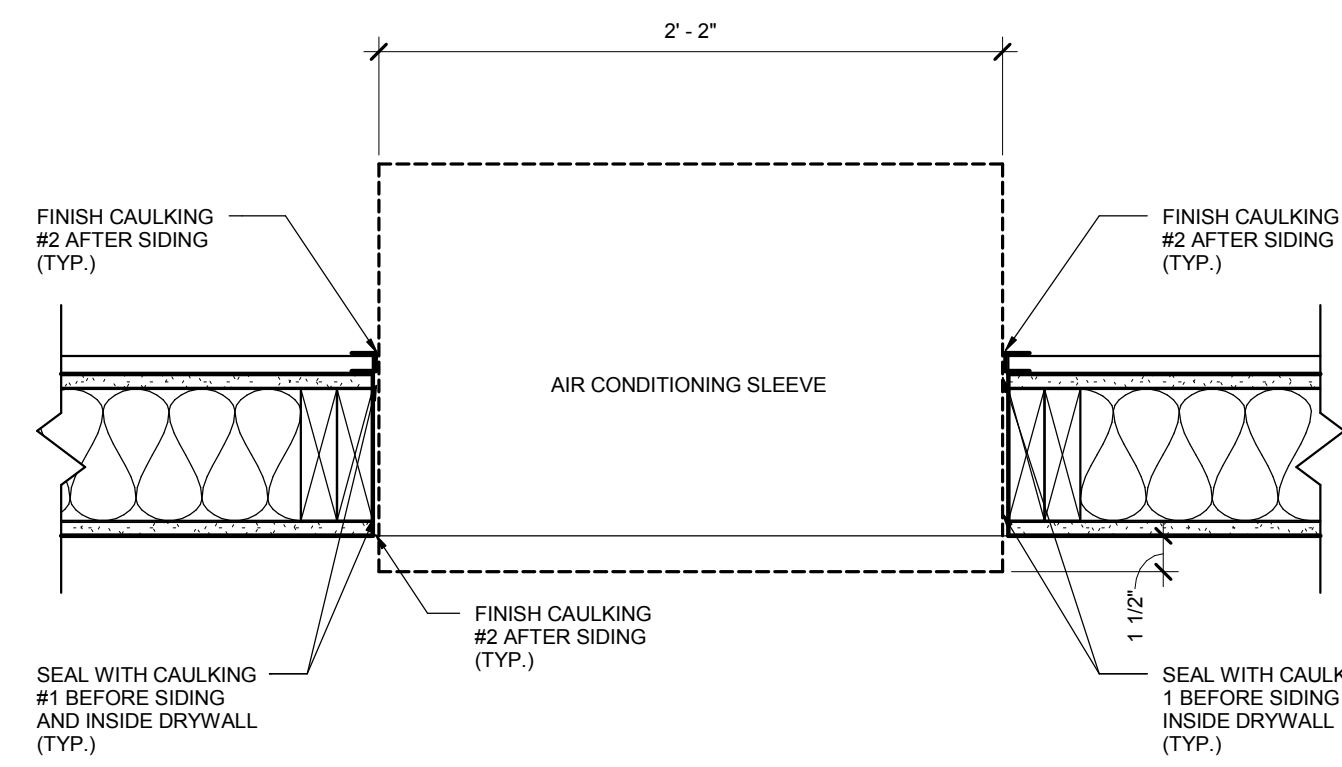
Red Wing, MN

Wall Sections

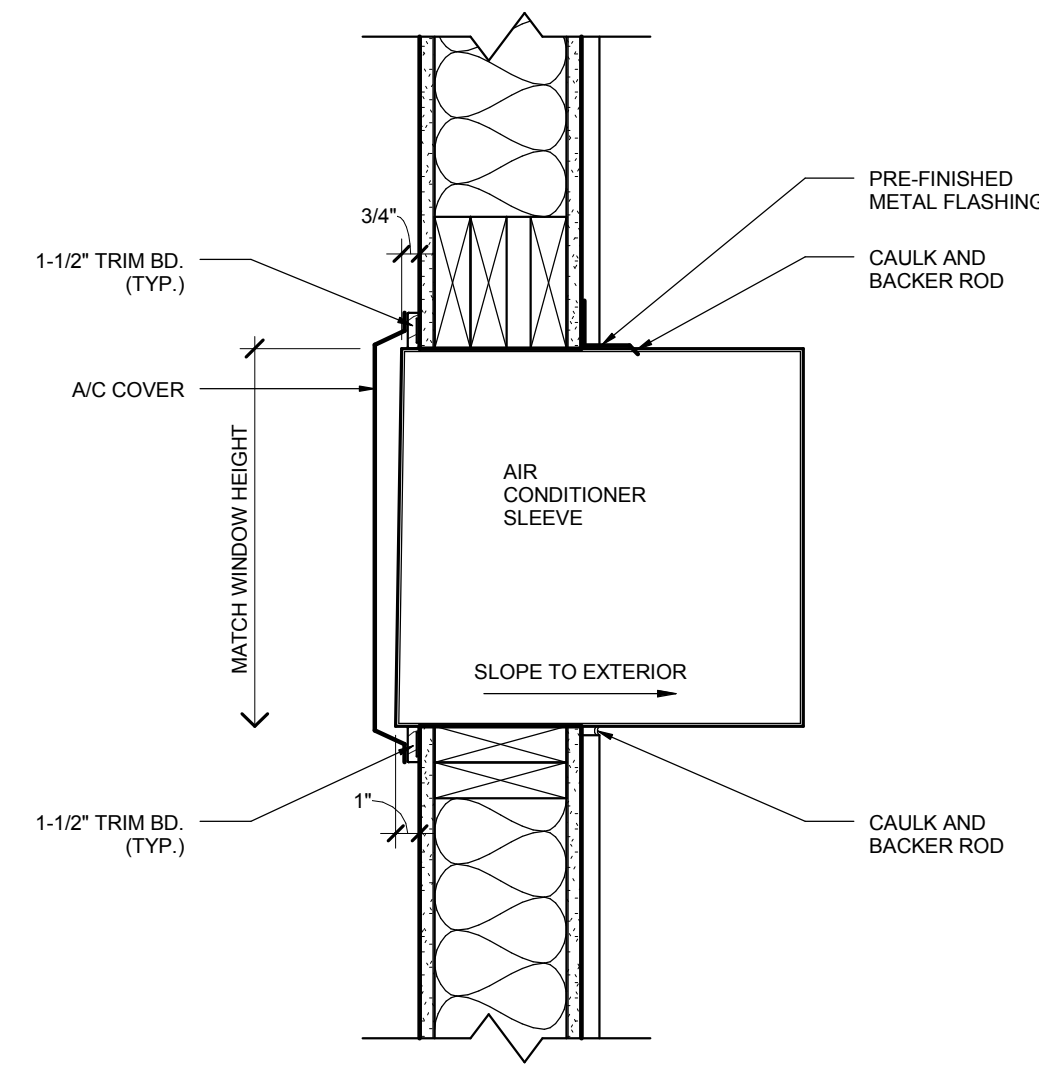
A5.5



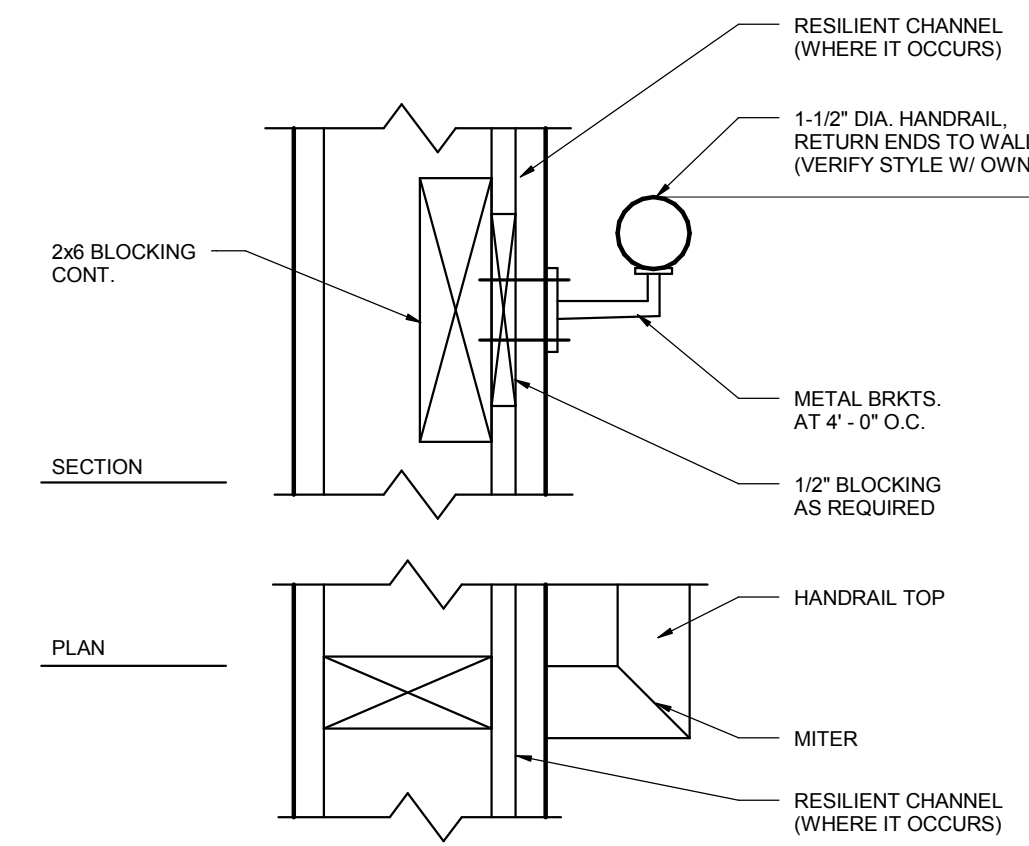
1 ATTIC ACCESS
A6.1 SCALE: 1 1/2" = 1'-0"



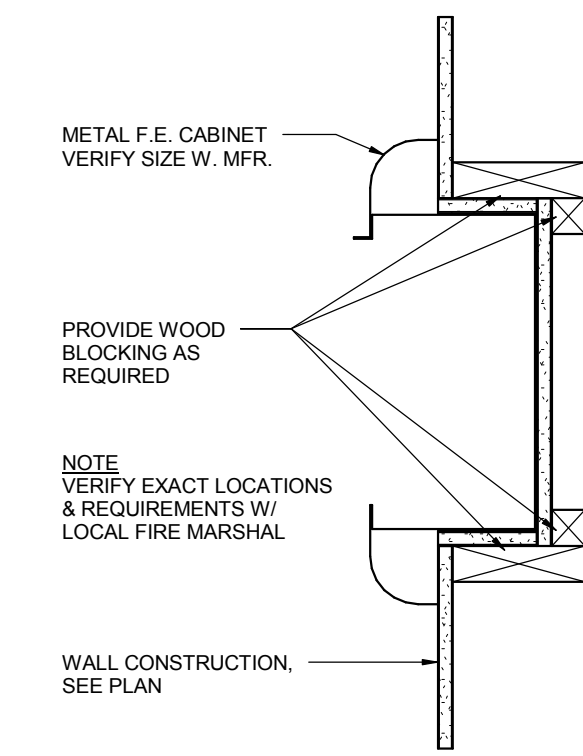
2 A/C SLEEVE
A6.1 SCALE: 1 1/2" = 1'-0"



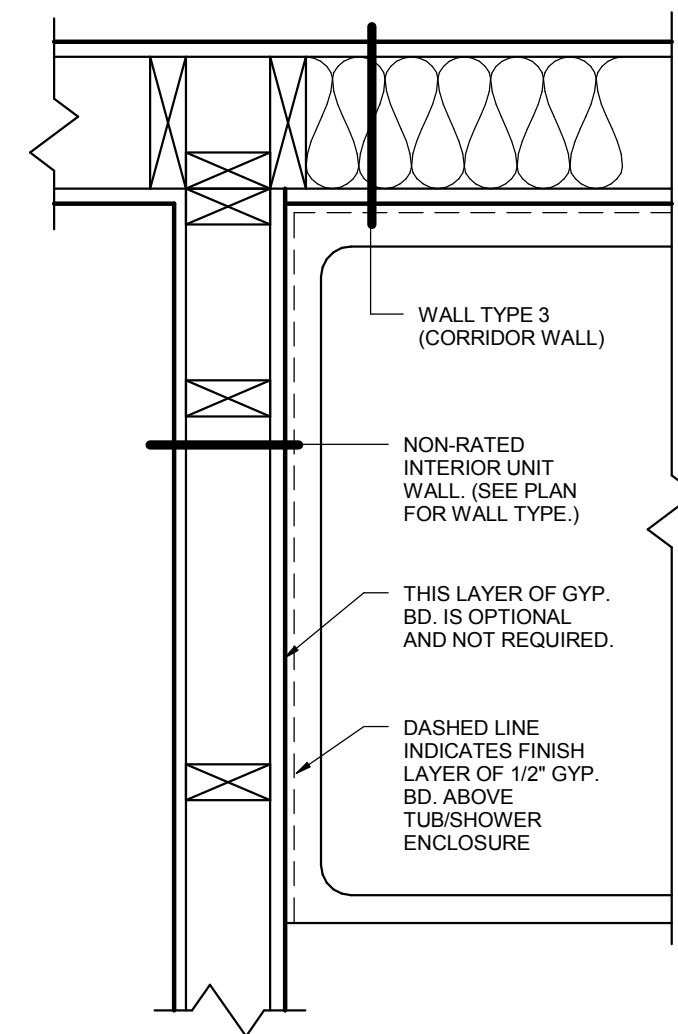
3 A/C SLEEVE
A6.1 SCALE: 1 1/2" = 1'-0"



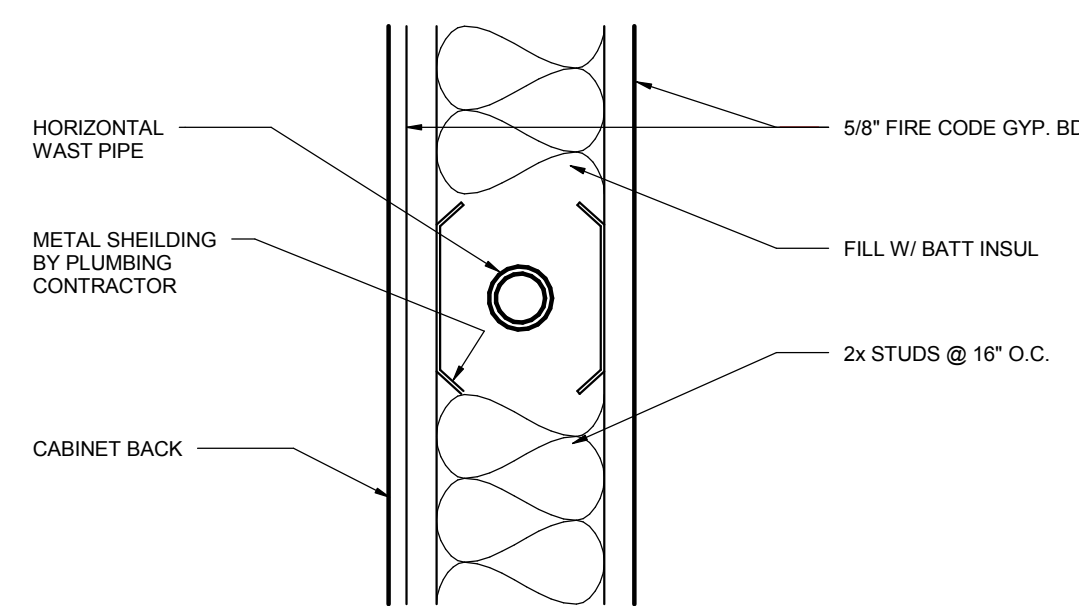
4 HANDRAIL DETAIL
A6.1 SCALE: 1 1/2" = 1'-0"



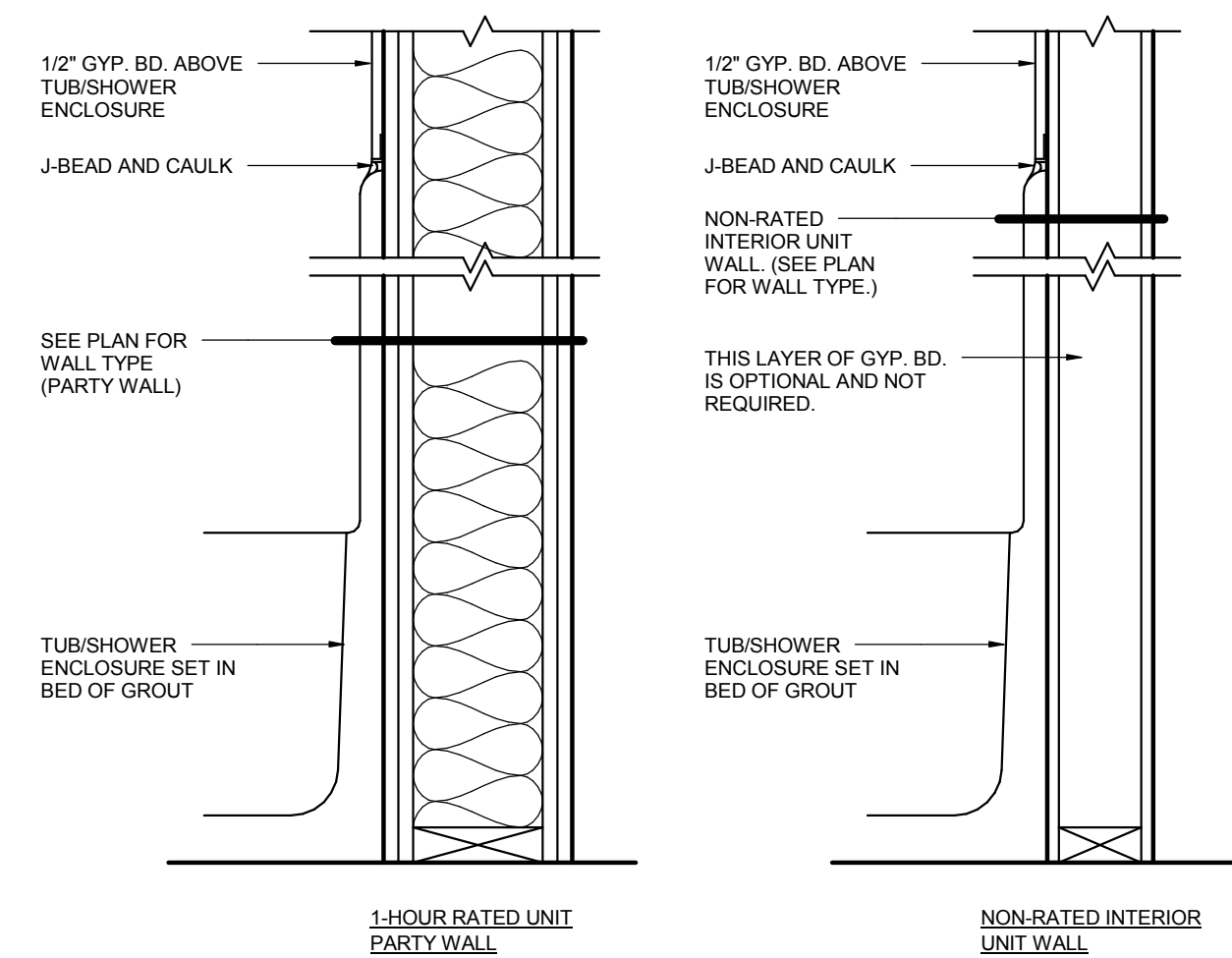
5 F.E. CABINET DETAIL
A6.1 SCALE: 1 1/2" = 1'-0"



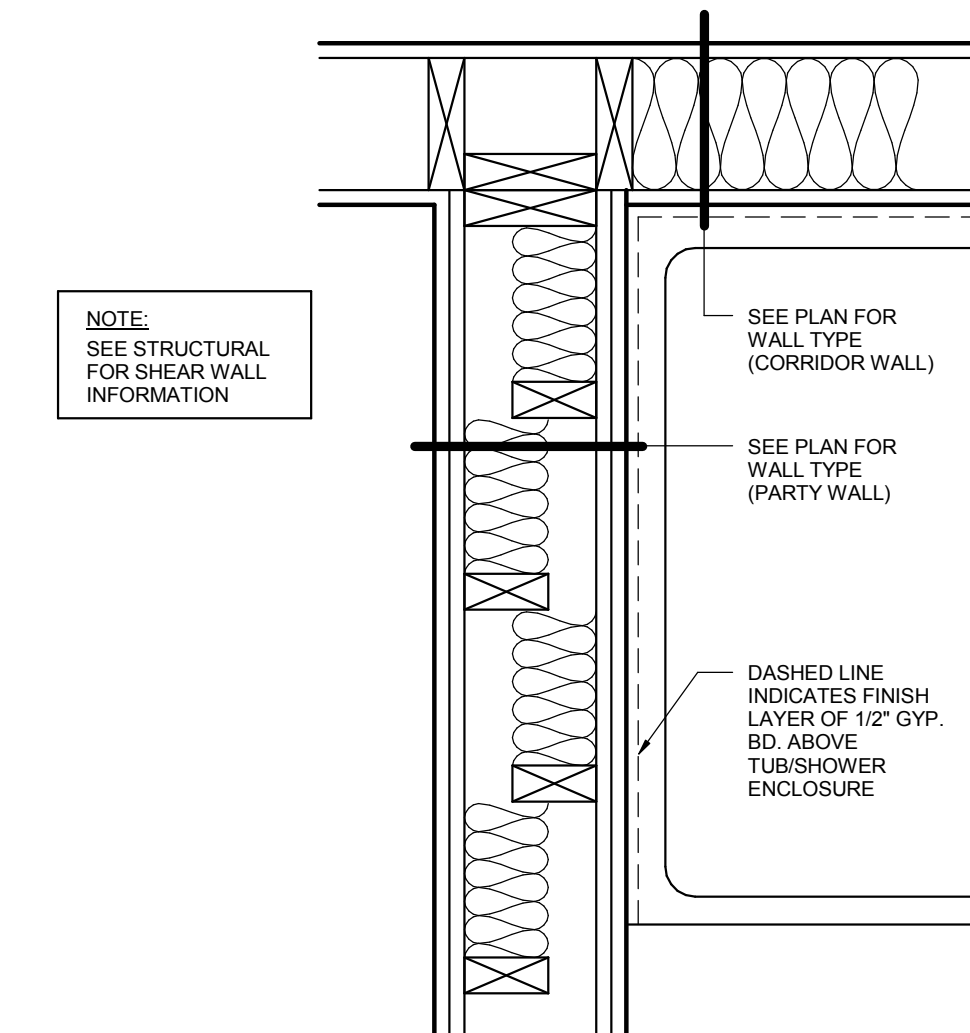
6 TUB/SHOWER DETAIL - PLAN
A6.1 SCALE: 1 1/2" = 1'-0"



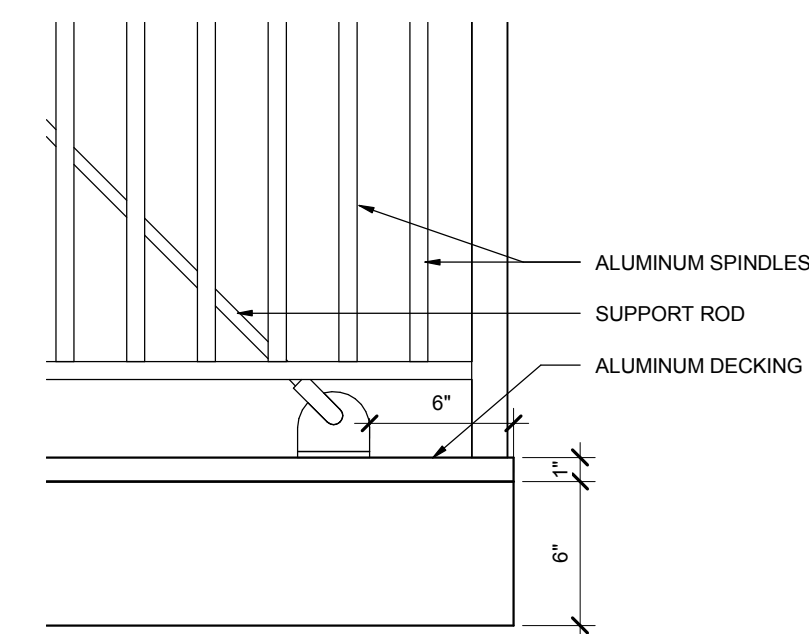
7 WASTE PIPE DETAIL
A6.1 SCALE: 1 1/2" = 1'-0"



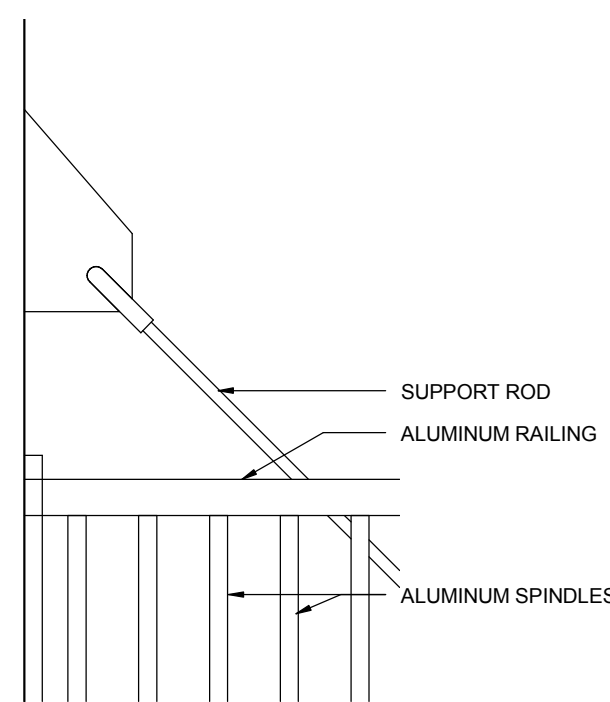
8 TUB/SHOWER DETAIL - SECTION
A6.1 SCALE: 1 1/2" = 1'-0"



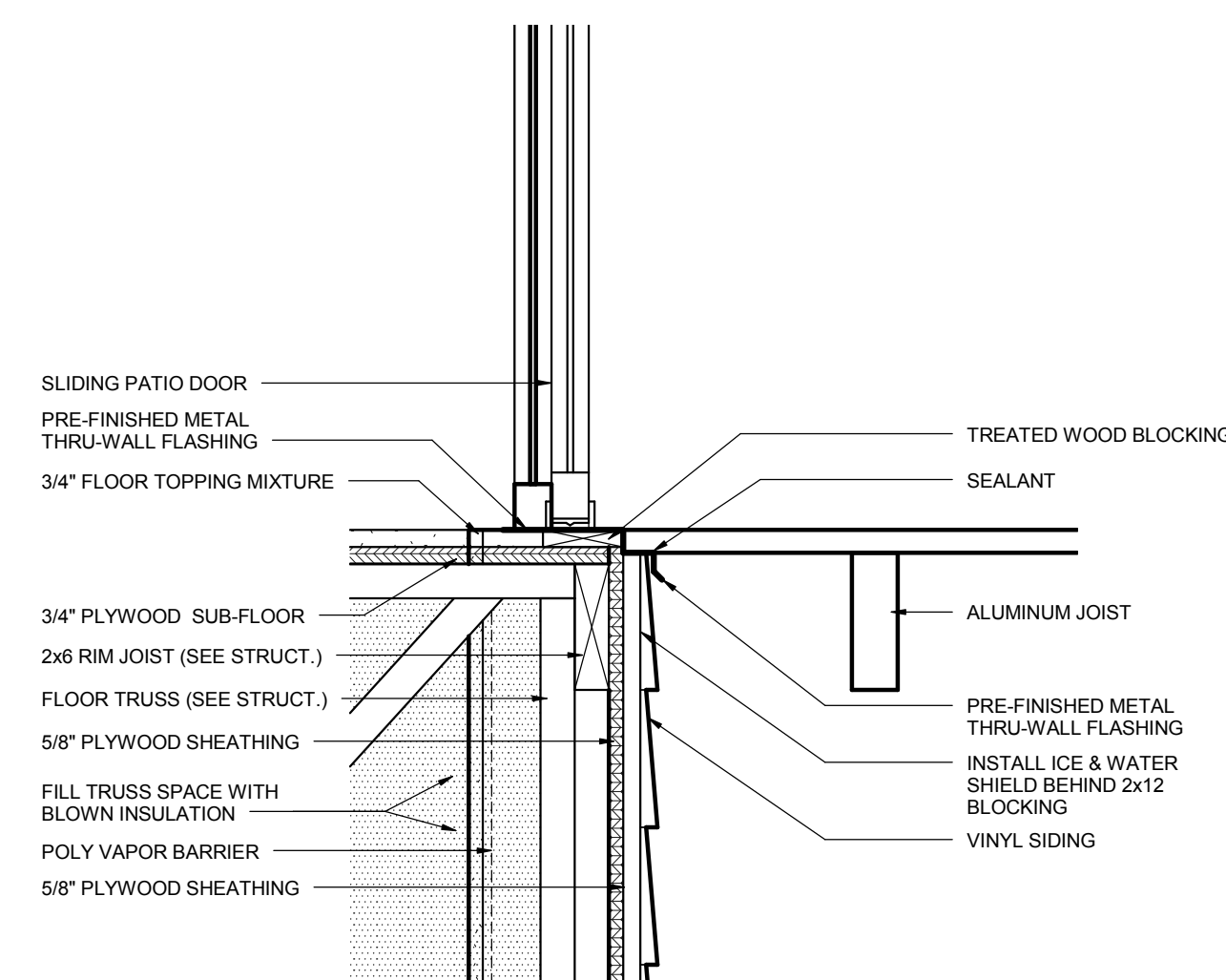
9 TUB/SHOWER - PLAN PARTY WALL
A6.1 SCALE: 1 1/2" = 1'-0"



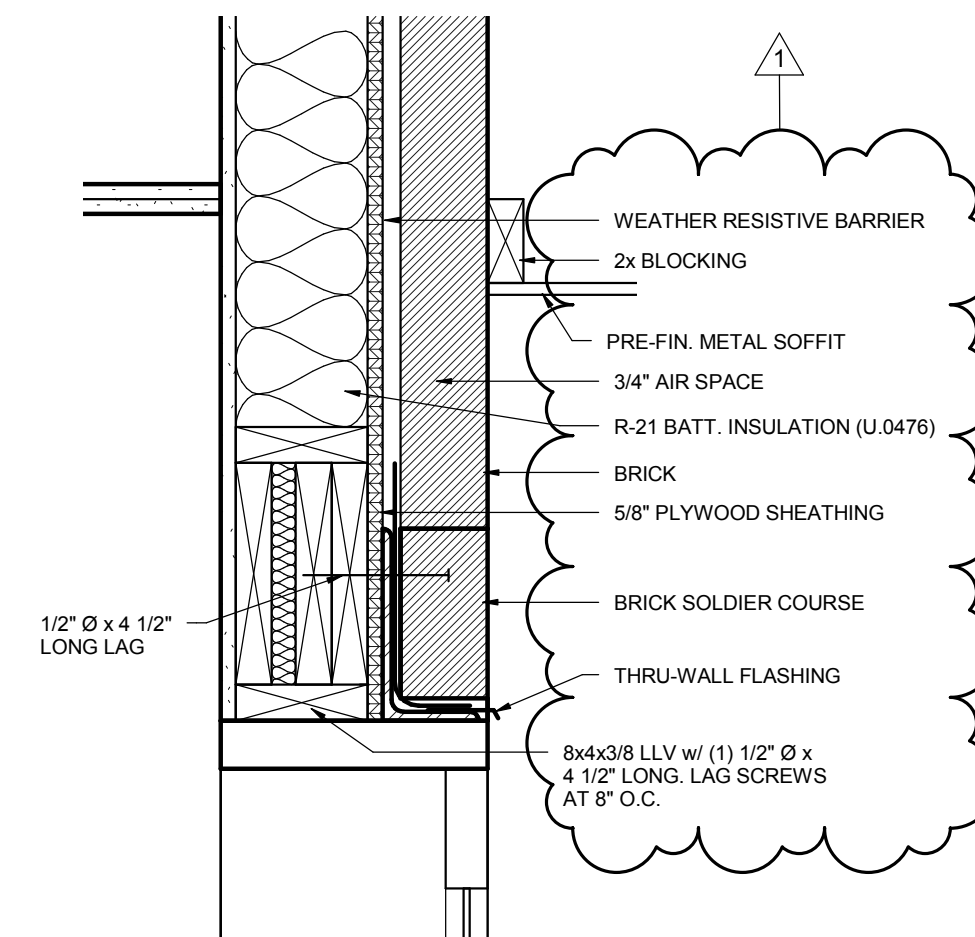
10 BALCONY DETAIL
A6.1 SCALE: 1 1/2" = 1'-0"



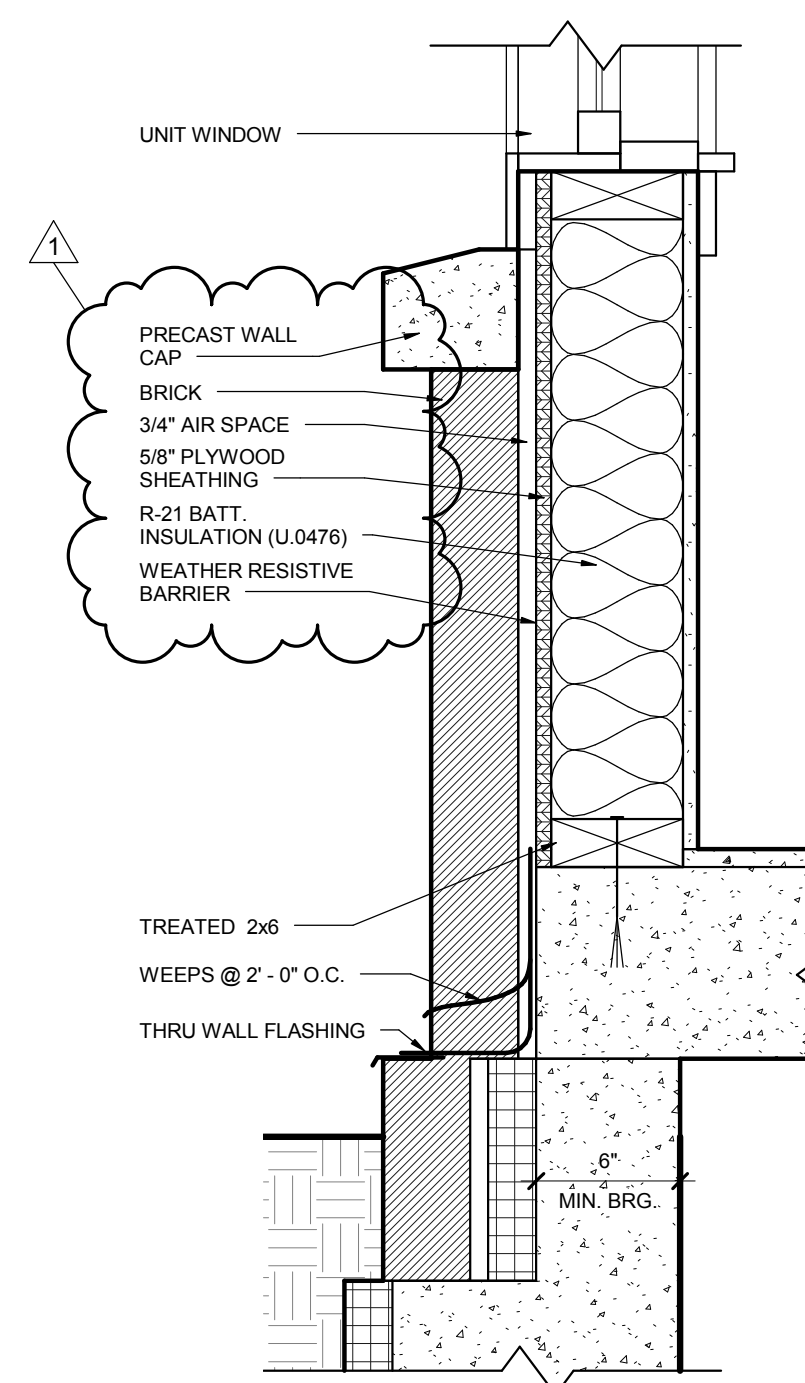
11 BALCONY DETAIL
A6.1 SCALE: 1 1/2" = 1'-0"



12 BALCONY DETAIL
A6.1 SCALE: 1 1/2" = 1'-0"



13 DETAIL
A6.1 SCALE: 1 1/2" = 1'-0"



14 DETAIL
A6.1 SCALE: 1 1/2" = 1'-0"

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I hereby certify that this plan, specification or report was prepared by me or under my direct supervision & that I am a duly Licensed Architect under the laws of the State of Minnesota.

Signature: *Murray A. Mack*
Printed Name: Murray A. Mack
License No.: 18686
Date: 09/30/2016

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Project No: 1602
Project Manager: DAS
Drawn By: SR
Date: 09/30/2016

Rev	Date	Description
1	11/08/2016	ASI-1

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New Apartment Complex:

**Rivers Ridge
Luxury
Apartments**

Red Wing, MN

Details

A6.1

GENERAL STRUCTURAL NOTES

1. BUILDING CODES USED FOR DESIGN:

- a. MINNESOTA BUILDING CODE, 2015 EDITION. (IBC 2012)

2. FOUNDATIONS:

- a. ALL FOOTINGS SHALL BEAR ON NATURAL UNDISTURBED SOIL OR ON COMPACTED GRANULAR FILL. ALL FOOTINGS ARE DESIGNED USING AN ALLOWABLE SOIL BEARING PRESSURE OF 3000 PSF. (SEE SOIL REPORT #SP-05-03233 BY BRAUN INTEREC CORPORATION). THE SOILS ENGINEER SHALL CONFIRM THESE BEARING VALUES AT THE TIME OF EXCAVATION.
- b. GRANULAR FILL SHALL BE COMPACTED TO 98% STANDARD DENSITY (ASTM D698-91).
- c. IF SOIL AT BOTTOM OF FOOTINGS AS DETAILED IS OF QUESTIONABLE BEARING VALUE, THE ARCHITECT/ENGINEER SHALL BE NOTIFIED AT ONCE.
- d. IN LIEU OF SOIL BORINGS, FOOTINGS HAVE BEEN DESIGNED FOR A MAXIMUM SOIL BEARING PRESSURE OF 1500 PSF. IT WILL BE THE RESPONSIBILITY OF OTHERS TO VERIFY THIS BEARING CAPACITY, TO INSURE THAT DAMAGING DIFFERENTIAL SETTLEMENT WILL NOT OCCUR.
- e. WALL FOOTING ELEVATION CHANGES SHALL BE STEPPED AT A RATIO OF 1 (VERTICAL) TO 2 (HORIZONTAL). MAXIMUM VERTICAL STEP SHALL BE 1'-4" UNLESS OTHERWISE NOTED.
- f. ALL EXTERIOR WALL FOOTINGS SHALL HAVE A MINIMUM SOIL COVER OF 3'-6" MEASURED FROM BOTTOM OF FOOTING UNLESS OTHERWISE NOTED.
- g. SEE SOILS REPORT FOR ANTICIPATED SETTLEMENT VALUES. THE OWNER SHOULD VERIFY THAT THIS SETTLEMENT CRITERIA WILL NOT BE DETRIMENTAL TO THE BUILDING OR ITS OPERATION.
- h. PROVIDE A 6" SUB-BASE OF COMPACTIBLE GRANULAR FILL AND A POLY VAPOR BARRIER BENEATH ALL SLABS ON GRADE. COMPACT GRANULAR FILL WITH MECHANICAL EQUIPMENT TO +0' TO -1/2" OF CORRECT ELEVATIONS. THE VAPOR BARRIER SHALL BE PLACED DIRECTLY BENEATH THE SLAB. THE SLAB SHALL BE MOST CURED TO PREVENT CURLING.
- i. SUB-BASE FOR SLABS ON GRADE SHALL BE REASONABLY WELL GRADED SAND (SW OR SP) CLEAN AND FREE OF ORGANIC MATERIAL WITH NOT MORE THAN 5% BY WEIGHT, PASSING A NO. 200 SIEVE AND LESS THAN 40% BY WEIGHT, PASSING THE #40 SIEVE. COARSE AGGREGATE SHALL NOT EXCEED 3/4".

3. DESIGN LOADS:

a.	a.	WIND LOADS: (2012 IBC or later)	
		BASIC WIND SPEED, Vult	= 115 MPH
		RISK CATEGORY	= II
		EXPOSURE CATEGORY	= B
		WIND TOPOGRAPHIC FACTOR, Kzt	= 1.0
	b.	SNOW LOAD CRITERIA	
		GROUND SNOW LOAD:	Pg = 50
		SNOW LOAD IMPORTANCE FACTOR	Is = 1.0
		SNOW LOAD EXPOSURE FACTOR	Ce = 1.0
		SLOPED ROOF/FLAT ROOF FACTOR	Cs = 1.0
		WIND FACTOR	Ce = 1.0
		ROOF SNOW LOAD Ps = Pg(I)(Is)(Ce)(Cs)(Ct)	= 38.5 PSF
		SEE PLANS FOR SNOW DRIFT DIAGRAMS	
	c.	LIVE LOADS:	
		PUBLIC AREAS, CORRIDORS AND STAIRS	100 PSF
		OFFICE AREAS	20' x 60 PSF
		COMPUTER	150 PSF
		LIBRARIES	125 PSF
		STORAGE	125 PSF
		MECHANICAL	125 PSF
		RESIDENTIAL FLOOR	40 PSF
		* PARTITION LOAD	
		** OR EQUIPMENT WEIGHT IF HEAVIER	
	d.	DEAD LOADS	
		FLOOR DEAD LOAD	20 PSF
		ROOF DEAD LOAD	20 PSF

4. DESIGN STRESSES:

a.	CONCRETE:	
	STRENGTH AT 28 DAYS (PSI)	TYPE MIX
	3000	STANDARD WEIGHT
	4000	STD. WT. AIR-ENTRAINED
	3000	STANDARD WEIGHT
	4000	STANDARD WEIGHT
	b.	MASONRY PRISM STRENGTH
		Fm = 1,500 PSI (@ 28 DAYS)
	c.	MASONRY UNITS
		Fc = 1,900 PSI (@ 28 DAYS)
	d.	MASONRY GROUT
		Fg = 3,000 PSI (@ 28 DAYS)
	e.	NON-SHRINK GROUT
		Fg = 10,000 PSI (@ 28 DAYS)
	f.	REINFORCEMENT
		Fy = 60,000 PSI ASTM A615
	g.	STRUCTURAL STEEL
		1. WIDE FLANGE SHAPES
		ALL OTHER SHAPES
		Fy = 50,000 PSI ASTM A992
		Fy = 30,000 PSI ASTM A36
	h.	RECTANGULAR HSS
		Fy = 46,000 PSI ASTM A500 GRADE B
	i.	PLATES
		Fy = 36,000 PSI ASTM A36
	j.	BOLTS
		Fu = 120,000 PSI ASTM A325
		Fu = 58,000 PSI ASTM F1554 GRADE36
		WELD ELECTRODE
		Fy = 70,000 PSI
		ASTM A185

5. CONCRETE COVERAGE FOR REINFORCEMENT:

a.	FOOTINGS	3" FROM BOTTOM
b.	PIERCEMENTS	2" TO TIES
c.	FOUNDATION WALLS	EXTERIOR FACE 2"
		INTERIOR FACE 1"
d.	COLUMNS	1 1/2" TO EX
e.	STRUCTURAL SLAB	1" TOP AND BOTTOM
f.	BEAMS	1 1/2" TO STIRRUPS
g.	JOISTS	1" TOP AND BOTTOM
h.	EXPOSED EXTERIOR CONCRETE	2"
i.	GRADE BEAMS	2" SIDES, 3" BOTTOM
j.	SLAB ON GRADE	1" FROM TOP

6. MASONRY COVERAGE FOR REINFORCEMENT:

a.	WALLS	3 1/2"
b.	PILASTERS	3" TO TIES

7. REINFORCING STEEL:

- a. THE REINFORCING STEEL CONTRACTOR SHALL FABRICATE ALL REINFORCEMENT AND FURNISH ALL ACCESSORIES, CHAIRS, SPACER BARS, AND SUPPORTS NECESSARY TO SECURE THE REINFORCEMENT UNLESS SHOWN OTHERWISE ON THE PLANS AND/OR DETAILS.
- b. CONCRETE REINFORCEMENT SHALL BE PLACED ACCORDING TO THE CRSI "RECOMMENDED PRACTICE FOR PLACING REINFORCING BARS".
- c. COMPRESSION AND TENSION LAP SPLICES FOR CAST-IN-PLACE CONCRETE SHALL BE 38 BAR DIAMETERS MINIMUM UNLESS NOTED OTHERWISE.
- d. TENSION LAP SPLICES FOR REINFORCED MASONRY SHALL BE 48 BAR DIAMETERS MINIMUM FOR #5 BARS OR SMALLER AND 64 BAR DIAMETERS MINIMUM FOR #6 BARS OR LARGER, UNLESS NOTED OTHERWISE.
- e. HORIZONTAL REINFORCING STEEL IN FOOTINGS AND CONCRETE WALLS SHALL BE CONTINUOUS AROUND CORNERS.
- f. ALL LAPS IN WWF SHOULD BE ONE MESH PLUS TWO INCHES AT SPLICES.
- g. TOP BARS SHALL BE HOOKED AT END SPANS.
- h. REINFORCING BARS MAY NOT BE WELDED WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER. ONLY ASTM A706 REINFORCEMENT MAY BE WELDED.

8. CONCRETE:

- a. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301.
- b. EACH CONCRETE MIX SHALL BE DESIGNED BY A REGISTERED ENGINEER. A STAMPED COPY OF EACH MIX DESIGN SHALL BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.
- c. COMPLY WITH ACI 304 FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE.
- d. COMPLY WITH ACI 306 FOR HOT WEATHER CONCRETING.
- e. COMPLY WITH ACI 308 FOR COLD WEATHER CONCRETING.
- f. UNLESS SPECIFIED OTHERWISE, CONCRETE MUST REACH THE FOLLOWING PERCENTAGES OF ITS 28 DAY COMPRESSIVE STRENGTH (F_c) BEFORE FORMS MAY BE REMOVED:
 - 1. WALLS, COLUMNS AND BEAM SIDES 40 PERCENT
 - 2. JOIST PANS AND BEAM BOTTOMS 70 PERCENT
 - 3. FLOOR SYSTEMS 80 PERCENT

9. REINFORCED MASONRY:

- a. HOLLOW LOAD BEARING MASONRY UNITS SHALL CONFORM TO ASTM C90 TYPE I, IN ADDITIONS TO THE REQUIREMENTS OF THE QUALITY CONTROL STANDARDS OF THE CONCRETE MASONRY ASSOCIATION. MINIMUM REQUIRED COMPRESSIVE STRENGTH OF BLOCK UNITS = 1,900 PSI (BASED ON NET AREA). MINIMUM FACE THICKNESS TO BE 1 1/4" FOR 8" BLOCK, 1 3/8" FOR 10" BLOCK, AND 1 1/2" FOR 12" BLOCK.
- b. MASONRY UNITS SHALL NOT BE CURED FOR NOT LESS THAN 28 DAYS WHEN PLACED IN THE STRUCTURE.
- c. THE USE OF ADMIXTURES WILL NOT BE PERMITTED IN THE GROUT OR MORTAR UNLESS SUBSTANTIATED DATA IS SUBMITTED TO AND APPROVED BY THE STRUCTURAL ENGINEER OR THE ARCHITECT.
- d. GROUT FOR VERTICALLY REINFORCED MASONRY WALLS AND BOND BEAMS SHALL BE PROPORTIONED AS FOLLOWS: 1 PORTLAND CEMENT; 2 1/2 FINE AGGREGATE; 2 PEA GRAVEL; F_{o-3} 900 PSI AT 28 DAYS; GROUT SLUMP SHALL BE 7" TO 10".
- e. ALL MASONRY WALLS SHALL HAVE HORIZONTAL REINFORCING CONSISTING OF GALVANIZED STANDARD WEIGHT #9 GA. "DUR-O-WALL" OR EQUAL (TRUSS TYPE) CONFORMING TO ASTM A651. REINFORCING SHALL BE LOCATED EVERY OTHER COURSE.
- f. DOWELS AS SHOWN SHALL MATCH SIZE AND NUMBER OF REINFORCING UNLESS NOTED OTHERWISE. HOOK INTO FOOTING AND LAP 30 DIAMETERS WITH MAIN STEEL.
- g. MORTAR SHALL BE TYPE M OR S. MASONRY CEMENT IS NOT PERMITTED. SPEC MIX MORTAR IS ACCEPTABLE.
- h. SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND DETAIL OF VERTICAL CONTROL JOINTS.
- i. MAXIMUM SPACING FOR CONTROL JOINTS IN BLOCK WALLS SHALL NOT EXCEED 24'-0" O.C.
- j. ALL STEEL BEAMS BEARING ON MASONRY SHALL BE WELDED TO BEARING PLATE AND HAVE 2 CORES MINIMUM FILLED WITH GROUT DIRECTLY BELOW THE BEARING POINT EXCEPT AS NOTED ON THE PLANS.
- k. BOND BEAMS 8" OR SMALLER USE (1) #5 CONTINUOUS, BOND BEAMS 10" OR LARGER USE (2) #5 CONTINUOUS UNLESS NOTED OTHERWISE.
- l. CONTRACTOR TO PROVIDE A 1'-4" x 8" STRIP FOOTING OR THICKENED SLAB WITH (1) #5 BAR CONTINUOUS UNDER ALL MASONRY WALLS. UNLESS NOTED OTHERWISE.
- m. REINFORCEMENT SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY WIRE POSITIONERS OR OTHER SUITABLE DEVICES AT INTERVALS NOT EXCEEDING 200 BAR DIAMETERS. REINFORCEMENT SHALL BE PLACED PRIOR TO GROUTING. GROUT SHALL BE CONSOLIDATED BY MECHANICAL VIBRATION DURING PLACEMENT AND RECONSOLIDATED BY MECHANICAL VIBRATION TO MINIMIZE VOIDS DUE TO WATER LOSS.
- n. COMPLIANCE WITH: UNIT STRENGTH METHOD.
- o. INTERWEATHER REQUIREMENTS: DO NOT USE FROZEN MATERIALS MIXED OR COATED WITH ICE OR FROST. DO NOT BUILD ON FROZEN SUBSTRATES. REMOVE AND REPLACE UNIT MASONRY DAMAGED BY FROST OR BY FREEZING CONDITIONS. COMPLY WITH COLD-WEATHER CONSTRUCTION REQUIREMENTS CONTAINED IN ACI 530.1 (LATEST EDITION). COLD-WEATHER CLEANING: USE LIQUID CLEANING METHODS ONLY WHEN AIR TEMPERATURE IS 40 °F AND ABOVE AND WILL REMAIN SO UNTIL MASONRY HAS DRIED, BUT NOT LESS THAN 7 DAYS AFTER COMPLETING CLEANING.
- p. HOT-WEATHER REQUIREMENTS: PROTECT UNIT MASONRY WORK WHEN TEMPERATURE AND HUMIDITY CONDITIONS PRIOR TO EXCESSIVE EVAPORATION OF WATER FROM MORTAR AND GROUT. PROVIDE ARTIFICIAL SHADE AND WIND BREAKS AND USE COOLED MATERIALS AS REQUIRED. WHEN AMBIENT TEMPERATURE EXCEEDS 100 °F, OR 90 °F WITH A WIND VELOCITY GREATER THAN 4 MPH, DO NOT SPREAD MORE THAN 48' AHEAD OF COURSE. SET MASONRY UNITS WITHIN ONE MINUTE OF SPREADING MORTAR.

10. DIMENSION LUMBER:

- a. DIMENSION LUMBER TO BE NORTHERN SPF NO. 2 (OR BETTER).
- b. ALL MEMBER SIZES GIVEN ON PLAN ARE NOMINAL DIMENSIONS.
- c. WOOD LINTELS SHALL HAVE A FULL 3" LENGTH OF BEARING AT EACH END UNLESS NOTED OTHERWISE.
- d. ALL NAILING SHALL CONFORM TO IBC TABLE 2304.9.1 "FASTENING SCHEDULE" UNLESS NOTED OTHERWISE ON THE PLANS.
- e. SPACING OF BRIDGING FOR FLOOR AND ROOF JOISTS SHALL NOT EXCEED 6' OR 6 TIMES THE NOMINAL JOIST DEPTH (WHICHEVER IS GREATER).
- f. DOUBLE ALL JOISTS UNDER PARALLEL PARTITIONS.
- g. ALL WOOD CONNECTORS SHALL BE BY USP LUMBER CONNECTORS OR "SIMPSON STRONG-TIE". ALL JOISTS AND BEAMS NOT BEARING ON A SUPPORTING MEMBER SHALL BE FRAMED WITH AN APPROPRIATE WOOD CONNECTOR.
- h. WOOD STUD BEARING WALLS SHALL HAVE AT LEAST ONE #6 COURSE OF CONCRETE BLOCK BETWEEN THE BOTTOM OF THE SILL PLATE AND THE TOP OF THE FOOTING.
- i. WOOD JOISTS SHALL BEAR ON THE FULL WIDTH OF SUPPORTING MEMBER (STUD WALLS, BEAMS, ETC.), UNLESS NOTED OTHERWISE.
- j. PROVIDE SOLID BLOCKING BELOW ALL JAMB/TRIMMER/CRIPPLE STUDS (TYPICAL AT ALL FLOORS).
- k. ALL FOUNDATION PLATES, SILLS, AND SLEEPERS ON CONCRETE OR MASONRY FOUNDATION WALLS, SHALL BE TREATED WOOD.
- l. FOR ALL WOOD TREATED WITH PRESERVATIVES, CONNECTORS AND FASTENERS MUST BE COATED WITH ONE OF THE FOLLOWING:
 - 1. HOT DIPPED GALVANIZED PER ASTM A123 FOR CONNECTORS AND ASTM A153 FOR FASTENERS.
 - 2. MECHANICALLY GALVANIZED PER ASTM A666, CLASS 55 OR GREATER.
 - 3. TRIPLE ZINC G185 HDG PER ASTM A653 OR EQUAL.

11. ENGINEERED LUMBER:

- a. LAMINATED VENEER LUMBER (LVL)
 - ALL LVL MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
 - ALLOWABLE BENDING STRESS Fb = 2,800 PSI
 - ALLOWABLE SHEAR STRESS Fv = 285 PSI
 - MODULUS OF ELASTICITY E = 1,900,000 PSI
- b. LAMINATED STRAND LUMBER (LSL)
 - ALL LSL STUDS AND COLUMNS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
 - (2x6 OR SMALLER) (2x8 OR LARGER)
 - ALLOWABLE BENDING STRESS Fb = 1,700 PSI Fb = 2,250 PSI
 - ALLOWABLE SHEAR STRESS Fv = 400 PSI Fv = 400 PSI
 - MODULUS OF ELASTICITY E = 1,300,000 PSI E = 1,600,000 PSI
 - COMPRESSION PARALLEL TO GRAIN FcI = 1,400 PSI FcI = 1,950 PSI
- c. PARALLEL STRAND LUMBER (PSL)
 - ALL PSL BEAMS AND COLUMNS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:
 - (BEAMS) (COLUMNS)
 - ALLOWABLE BENDING STRESS Fb = 2,900 PSI Fb = 2,400 PSI
 - ALLOWABLE SHEAR STRESS Fv = 290 PSI N/A
 - MODULUS OF ELASTICITY E = 2,000,000 PSI E = 1,800,000 PSI
 - COMPRESSION PARALLEL TO GRAIN FcI = 2,900 PSI FcI = 2,500 PSI
- d. MULTI-PLY MEMBERS SHALL BE FASTENED TOGETHER ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

12. ROOF AND FLOOR TRUSSES:

- a. TRUSSES SHALL BE DESIGNED TO MEET ALL LOADING AND SPANS AS INDICATED ON THE PLANS.
- b. TRUSSES SHALL BE DESIGNED AND CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER.
- c. ALL PERMANENT BRACING FOR INDIVIDUAL TRUSS COMPRESSION ELEMENTS SHALL BE PROVIDED AS INDICATED ON THE TRUSS SHOP DRAWINGS. THE DESIGN OF THIS BRACING IS THE RESPONSIBILITY OF THE TRUSS SUPPLIER.
- d. THE CONTRACTOR SHALL INSTALL ALL NECESSARY TEMPORARY BRACING AS REQUIRED BY BC91 1-03 (BY WCA AND TP) AND BE FULLY RESPONSIBLE FOR THE STABILITY OF THE TRUSSES DURING ERECTION.
- e. CONNECTOR PLATES SHALL BE MADE OF GRADE "A" GALVANIZED STEEL, MINIMUM 20 GAUGE PER LATEST TP SPECIFICATIONS.
- f. ALL CONNECTED HARDWARE SHALL BE DESIGNED AND FURNISHED BY THE TRUSS SUPPLIER UNLESS NOTED OTHERWISE ON THE PLANS.
- g. SCISSOR TRUSSES SHALL BE DESIGNED SUCH THAT HORIZONTAL LIVE LOAD DEFLECTIONS DO NOT EXCEED 1/2". WALLS ARE NOT DESIGNED TO RESIST A HORIZONTAL TRUSS REACTION.
- h. THE STRUCTURE IS DESIGNED ACCORDING TO THE TRUSS LAYOUT INDICATED ON THE PLANS. THE TRUSS SUPPLIER SHALL NOT DEVIATE FROM THIS LAYOUT WITHOUT PERMISSION FROM THE ENGINEER OF RECORD.
- i. ROOF TRUSSES SHALL BE DESIGNED FOR UNBALANCED SNOW LOADS IN ACCORDANCE WITH ASCE 7, SECTION 7.6.
- j. TRUSSES SHALL BE DESIGNED FOR A TOP CHORD DEAD LOAD OF 10 PSF AND A BOTTOM CHORD DEAD LOAD OF 10 PSF UNLESS NOTED OTHERWISE ON THE PLANS.
- k. FLOOR TRUSSES SHALL BE DESIGNED FOR A MAXIMUM LIVE LOAD DEFLECTION OF L/480.

13. PRECAST PRESTRESSED CONCRETE:

- a. PRECAST CONCRETE PLANK, COLUMNS AND BEAMS SHALL BE DESIGNED BY A STRUCTURAL ENGINEER AND CONSTRUCTED TO SAFELY SUSTAIN THE LIVE LOADS LISTED AND ALL SUPERIMPOSED DEAD LOADS IN ACCORDANCE WITH ACI 318-LATEST EDITION CODE.
- b. ALL CONNECTIONS SHALL BE DESIGNED, FABRICATED AND INSTALLED BY THE PRECAST SUPPLIER.
- c. WELDING REQUIRED OF PLATES, BARS, INSERTS, ANCHORS ETC. SHALL CONFORM TO THE AWS D1.1 RECOMMENDED PRACTICES FOR WELDING REINFORCING STEEL, METAL INSERTS & CONNECTIONS IN REINFORCED CONCRETE CONSTRUCTION.
- d. ALL MEMBERS SHALL HAVE FIRE RESISTIVE RATINGS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODES. DO NOT USE FROZEN MATERIALS MIXED OR COATED WITH ICE OR FROST. DO NOT BUILD ON FROZEN SUBSTRATES. REMOVE AND REPLACE UNIT MASONRY DAMAGED BY FROST OR BY FREEZING CONDITIONS. COMPLY WITH COLD-WEATHER CONSTRUCTION REQUIREMENTS CONTAINED IN ACI 530.1 (LATEST EDITION). COLD-WEATHER CLEANING: USE LIQUID CLEANING METHODS ONLY WHEN AIR TEMPERATURE IS 40 °F AND ABOVE AND WILL REMAIN SO UNTIL MASONRY HAS DRIED, BUT NOT LESS THAN 7 DAYS AFTER COMPLETING CLEANING.
- e. HOT-WEATHER REQUIREMENTS: PROTECT UNIT MASONRY WORK WHEN TEMPERATURE AND HUMIDITY CONDITIONS PRIOR TO EXCESSIVE EVAPORATION OF WATER FROM MORTAR AND GROUT. PROVIDE ARTIFICIAL SHADE AND WIND BREAKS AND USE COOLED MATERIALS AS REQUIRED. WHEN AMBIENT TEMPERATURE EXCEEDS 100 °F, OR 90 °F WITH A WIND VELOCITY GREATER THAN 4 MPH, DO NOT SPREAD MORE THAN 48' AHEAD OF COURSE. SET MASONRY UNITS WITHIN ONE MINUTE OF SPREADING MORTAR.
- f. PRECAST SUPPLIER SHALL PROVIDE SHOP DRAWING AND STRUCTURAL CALCULATIONS SIGNED BY A REGISTERED STRUCTURAL ENGINEER IN THE STATE OF THE PROJECT.

14. STRUCTURAL STEEL:

- a. FABRICATION & ERECTION OF STRUCTURAL STEEL MEMBERS ARE TO BE IN ACCORDANCE WITH A.I.S.C. CODE OF STANDARD PRACTICE.
- b. ALL CONNECTIONS SHALL BE BOLTED OR WELDED. EACH CONNECTION SHALL BE ADEQUATE TO SUPPORT ONE HALF THE TOTAL UNIFORM LOAD CAPACITY OF THE BEAM, UNLESS NOTED OTHERWISE ON THE PLANS. BOLTED CONNECTIONS SHALL HAVE A MINIMUM OF TWO BOLTS.
- c. ALL WELDERS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS D1.1 (LATEST EDITION).
- d. WELDING OF GALVANIZED PARTS IS NOT PERMITTED WITHOUT ENGINEER'S APPROVAL.
- e. ALL WELDING SHALL CONFORM TO THE STANDARDS OF AWS D1.1 (LATEST EDITION).
- f. ELECTRODES FOR ALL FIELD AND SHOP WELDING SHALL CONFORM TO MATCHING FILLER METAL REQUIREMENTS OF AWS D1.1 (LATEST EDITION).
- g. FIELD CONNECTIONS ARE TO BE BOLTED. Use 1/2" DIA. HIGH STRENGTH BOLTS AND NUTS (A325) UNLESS SHOWN OTHERWISE ON PLANS.
- h. STEEL COLUMN BASE PLATES SHALL BE SIZES SHOWN ON PLAN WITH (F1554 GRADE 36) ANCHOR RODS AND 1" NON-SHRINK GROUT FOR UNIFORM BEARING.
- i. UNLESS OTHERWISE NOTED, STRUCTURAL STEEL SUPPLIER IS TO FURNISH 3/4" x 3/4" x 1/2" SHOP WELDED ANCHOR FRAMES AT ALL ROOF OPENINGS. VERIFY SIZE AND LOCATION WITH MECHANICAL CONTRACTOR.
- j. ALL STRUCTURAL STEEL AND MISCELLANEOUS METALS SHALL BE PRIME PAINTED WITH ONE COAT OF THE MFC-200 PRIMER OR EQUAL, TOUCH UP ALL DISTURBED AREAS AFTER ERECTION.
- k. CUTS, HOLES (OPENINGS), ETC. REQUIRED IN STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES SHALL NOT BE ALLOWED, EXCEPT BY WRITTEN PERMISSION FROM THE ENGINEER.
- l. ALL STRUCTURAL BEAM BEARING PLATES AND COLUMN BASE PLATES SHALL BE NON-SHRINK AND SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 10,000 PSI. MISCELLANEOUS STEEL FRAMING (STAIRS, RAILS, ETC.) SHALL BE DESIGNED BY THE FABRICATOR. THE FABRICATOR SHALL SUBMIT DOCUMENTATION THAT THE DESIGN HAS BEEN REVIEWED AND APPROVED BY A LICENSED ENGINEER.

15. BACKFILLING:

- a. NO BACKFILLING AND COMPACTING OF EARTH SHALL BE PERMITTED AGAINST FOUNDATION WALLS UNTIL SUPPORTING FLOOR SYSTEMS HAVE BEEN PLACED AND HAVE REACHED 75% OF THEIR DESIGN STRENGTH OR UNLESS ADEQUATE BRACING IS PROVIDED.
- b. BOTH SIDES OF FOUNDATION WALLS SHALL BE BACKFILLED SIMULTANEOUSLY SO AS TO PREVENT OVERTURNING OR LATERAL MOVEMENT OF WALLS.
- c. ALL GRADE BEAMS SHALL BE ADEQUATELY BRACED TO PREVENT LATERAL MOVEMENT DURING BACKFILLING AND COMPACTION.

16. CONSTRUCTION AND CONTRACTION JOINTS IN CONCRETE:

- a. CONSTRUCTION JOINTS SHALL BE AS DETAIL ON THE DRAWINGS.
- b. MAXIMUM SPACING FOR CONTROL JOINTS IN SLABS ON GRADE SHALL BE 15'-0".
- c. A 15'-0" MAXIMUM SPACING OF CONTROL JOINTS MAY NOT INSURE COMPLETE CONTROL OF SHRINKAGE CRACKS. A CLOSER SPACING MAY BE USED BY REQUEST OF OWNER IF MORE COMPLETE SHRINKAGE CRACK CONTROL IS DESIRED. CONTRACTOR TO VERIFY WITH OWNER.
- d. CONSTRUCTION JOINTS IN CONCRETE FOUNDATION WALLS SHALL BE LOCATED SO NO SINGLE FOUR (4) IS LONGER THAN 40 FEET.

17. DRILLED ANCHORS:

- a. ALL EXPANSION BOLTS SHALL BE HILTI "KWIK-BOLTS". SIMPSON "WEDGE-ALL" OR RAMSTEADHEAD "TRUBOLT" UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- b. ADHESIVE ANCHORAGE FOR DRILLED REBAR DOWELS SHALL BE HILTI HIT HY 150 ADHESIVE OR SIMPSON "EPOXY-TIE" OR SIMPSON "ACRYLIC-TIE" UNLESS NOTED OTHERWISE ON THE DRAWINGS.

18. CONSTRUCTION PROCEDURES:

- a. THE STRUCTURE SHALL BE ADEQUATELY BRACED AND SHORED DURING ERECTION AGAINST WIND AND ERECTION LOADS. STRUCTURAL MEMBERS ARE DESIGNED FOR IN-PLACE LOADS.
- b. COMPLY WITH ALL APPLICABLE CITY, COUNTY, STATE, AND FEDERAL LAWS, INCLUDING THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND REGULATIONS ADOPTED PURSUANT THERETO.
- c. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS NOTED OTHERWISE, THEY DO NOT INDICATE THE MEANS OR METHOD OF CONSTRUCTION. PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKMEN, OR OTHER PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, SHORING FOR EARTH BANKS, FORMS, SCAFFOLDING, PLANKING, SAFETY NETS, SUPPORT AND BRACING FOR CRANES, AND GIN POLES, ETC.
- d. ENGAGE PROPERLY QUALIFIED PERSONS TO DETERMINE WHERE AND HOW TEMPORARY PRECAUTIONARY MEASURES SHALL BE USED AND INSPECT SAME IN THE FIELD. OBSERVATION VISITS TO THE SITE BY ENGINEER'S FIELD REPRESENTATIVE SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
- e. SUPERVISE AND DIRECT THE WORK SO AS TO MAINTAIN SOLE RESPONSIBILITY FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES, AS A PART OF THIS RESPONSIBILITY. RETAIN THE SERVICES OF A LICENSED STRUCTURAL ENGINEER TO DESIGN AND SUPERVISE ANY SCAFFOLDING FOR WORKMEN, AND ALL SHORING OF FORMS, AND ELEMENTS OF THE CONSTRUCTION.

19. MISCELLANEOUS:

- a. PLACEMENT OF ANCHOR BOLT, PIPE SLEEVES, PADS, AND OPENINGS FOR EQUIPMENT SHALL BE COORDINATED BETWEEN THE GENERAL CONTRACTOR AND THE OTHER SUBCONTRACTORS.
- b. ALL CORE DRILLING SHALL BE DONE UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. NO REINFORCING SHALL BE CUT. VERIFY LOCATION OF REINFORCING BEFORE CORE DRILLING. THERE SHALL NOT BE ANY CORE DRILLINGS THROUGH BEAMS OR COLUMNS. MAXIMUM CORE HOLE THROUGH SLABS SHALL BE PIPE DIAMETER PLUS 1".

20. COORDINATION WITH ARCHITECTURAL DRAWINGS:

- a. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. WHERE DISCREPANCIES OCCUR IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ARCHITECT PRIOR TO CONSTRUCTION.

21. SHOP DRAWINGS:

- a. SHOP DRAWINGS, UNLESS NOTED OTHERWISE, SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION.
- b. SHOP DRAWINGS SHALL BE PREPARED UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER, AND INCLUDE COMPLETE DETAILS, SCHEDULES, PROCEDURES, AND DIAGRAMS FOR FABRICATION AND ASSEMBLY OF STRUCTURAL MEMBERS.
- c. FABRICATORS SHALL DRAW THEIR OWN ERECTION PLANS, COPYING STRUCTURAL PLANS AND USING THEM AS ERECTION DRAWINGS IS NOT ACCEPTABLE.
- d. PRIOR TO SUBMITTAL, THE CONTRACTOR SHALL REVIEW THE SHOP DRAWINGS AND MAKE ANY CORRECTIONS REQUIRED. THE CONTRACTOR SHALL STAMP AND SIGN THE DRAWINGS AS EVIDENCE THAT HE HAS REVIEWED THEM.
- e. SHOP DRAWINGS SHALL BE FURNISHED FOR ALL STRUCTURAL COMPONENTS.
- f. TURN AROUND TIME FOR SHOP DRAWINGS SHALL BE TWO WEEKS FROM DATE RECEIVED IN THE ENGINEER'S OFFICE.

22. SPECIAL INSPECTIONS:

- SPECIAL INSPECTIONS SHALL BE PROVIDED IN ACCORDANCE WITH IBC SECTION 1704, AS OUTLINED BELOW. THE SPECIAL INSPECTOR SHALL BE EMPLOYED BY THE OWNER. SHALL BE THOROUGHLY KNOWLEDGEABLE OF IBC SPECIAL INSPECTION REQUIREMENTS AND SHALL DEMONSTRATE COMPETENCE TO THE SATISFACTION OF THE BUILDING OFFICIAL (IBC 1704.1). THE CONTRACTOR SHALL CONTACT THE SPECIAL INSPECTOR DURING APPROPRIATE PHASES OF CONSTRUCTION SO THAT INSPECTIONS CAN BE MADE IN A TIMELY MANNER. THE SPECIAL INSPECTOR SHALL SUBMIT WRITTEN INSPECTION REPORTS TO THE ENGINEER OF RECORD'S OFFICE. WITHIN 3 WORKING DAYS OF EACH INSPECTION, ANY PROBLEMS SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR. THE FOLLOWING ITEMS WILL REQUIRE SPECIAL INSPECTION:

- a. STEEL
 - SPECIAL INSPECTIONS ARE NOT REQUIRED FOR WORK DONE IN AN APPROVED FABRICATING SHOP. THE STEEL FABRICATOR MUST BE REGISTERED AND APPROVED BY THE BUILDING OFFICIAL TO PERFORM THE WORK WITHOUT SPECIAL INSPECTIONS. (IBC 1704.2.2.)
 - HIGH STRENGTH BOLTING: CONTINUOUS INSPECTIONS ARE REQUIRED FOR SUP-CRITICAL CONNECTIONS. PERIODIC INSPECTIONS ARE REQUIRED FOR NON-CRITICAL CONNECTIONS.
 - FIELD WELDING: CONTINUOUS INSPECTIONS ARE REQUIRED FOR COMPLETE AND PARTIAL PENETRATION GROOVE WELDS, MULTI-PASS FILLET WELDS AND SINGLE PASS FILLET WELDS GREATER THAN 5/16". PERIODIC INSPECTIONS ARE REQUIRED FOR FLOOR AND ROOF DECK WELDS AND SINGLE-PASS FILLET WELDS SMALLER THAN OR EQUAL TO 5/16". CORRECT WELD FILLER MATERIAL SHALL BE VERIFIED IN ALL CASES.
- b. STEEL ERECTION: PERIODIC INSPECTIONS SHALL BE MADE TO VERIFY COMPLIANCE WITH THE DESIGN DRAWINGS.
- c. MATERIALS: THE STEEL MANUFACTURERS CERTIFIED MILL TEST REPORTS SHALL BE SUBMITTED TO THE SPECIAL INSPECTOR OR TO THE ENGINEER OF RECORD.

CONCRETE

- REINFORCEMENT: REINFORCING STEEL SHALL BE INSPECTED ON A PERIODIC BASIS. WELDING OF REINFORCEMENT SHALL BE CONTINUOUSLY INSPECTED. ONLY ASTM A706 REINFORCEMENT MAY BE WELDED.
- ANCHOR BOLTS: ANCHOR BOLTS PLACEMENT SHALL BE CONTINUOUSLY INSPECTED FOR THE FOLLOWING ANCHOR BOLTS: (N/A)
- SAMPLING AND TESTING: CONTINUOUS INSPECTIONS SHALL BE PROVIDED DURING SLUMP TESTS, AIR CONTENT TESTS AND WHEN DETERMINING THE TEMPERATURE OF FRESH CONCRETE AT THE TIME OF MAKING SPECIMENS FOR STRENGTH TESTS.
- CONCRETE PLACEMENT: CONTINUOUS INSPECTION REQUIRED.
- COLD AND HOT WEATHER CONCRETING: PERIODIC INSPECTION OF COMPLIANCE IS REQUIRED.

MASONRY

- BEGINNING OF CONSTRUCTION: PERIODIC INSPECTION SHALL BE MADE OF MORTAR PROPORTIONS, CONSTRUCTION OF MORTAR JOINTS AND REINFORCEMENT LOCATION AND CONNECTORS.
- ONGOING CONSTRUCTION: PERIODIC INSPECTION SHALL BE PROVIDED TO VERIFY SIZE AND LOCATION OF STRUCTURAL ELEMENTS, SIZE AND LOCATION OF ANCHORS, SIZE AND TYPE OF REINFORCEMENT AND COMPLIANCE WITH HOT OR COLD WEATHER REQUIREMENTS.
- GROUTING: PERIODIC INSPECTION SHALL BE PROVIDED TO VERIFY THAT THE GROUT SPACE IS PROPERLY POSITIONED AND SITE PREPARED GROUT IS PROPERLY PROPORTIONED. CONTINUOUS INSPECTION IS REQUIRED OF GROUT PLACEMENT.
- TEST SPECIMENS: CONTINUOUS INSPECTION SHALL BE MADE DURING PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS AND PRISMS.

SOILS

- THE SPECIAL INSPECTOR SHALL DETERMINE COMPLIANCE WITH THE SOIL REPORT FOR SITE PREPARATION, FILL PLACEMENT AND DENSITY TESTS.

23. TESTING REQUIREMENTS:

FASTENING SCHEDULE (IBC TABLE 2304.9.1)			
CONNECTION DESCRIPTION	FASTENING ^{a,m}	LOCATION	
1. JOIST TO SILL OR GIRDER	3- 8d COMMON (2 1/2" x 0.131") 3- 3" x 0.131" NAILS 3- 3" 14 GAGE STAPLES	TOENAIL	
2. BRIDGING TO JOIST	2- 8d COMMON (2 1/2" x 0.131") 2- 3" x 0.131" NAILS 2- 3" 14 GAGE STAPLES	TOENAIL EACH END	
3. 1" x 6" SUBFLOOR OR LESS TO EACH JOIST	2- 8d COMMON (2 1/2" x 0.131")	FACE NAIL	
4. WIDER THAN 1" x 6" SUBFLOOR EACH JOIST	3- 8d COMMON (2 1/2" x 0.131")	FACE NAIL	
5. 2" SUBFLOOR TO JOIST OR GIRDER	2- 16d COMMON (3 1/2" x 0.162")	BLIND AND FACE NAIL	
6. SOLE PLATE TO JOIST OR BLOCKING	16d (3 1/2" x 0.135") AT 16" O.C. 4" x 0.131" NAIL AT 8" O.C. 3" 14 GAGE STAPLE AT 12" O.C.	TYPICAL FACE NAIL	
SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANEL	3- 16d (3 1/2" x 0.135") AT 16" O.C. 4- 3" x 0.131" NAILS AT 16" O.C. 4- 3" 14 GAGE STAPLES AT 16" O.C.	BRACED WALL PANELS	
7. TOP PLATE TO STUD	2- 16d COMMON (3 1/2" x 0.162") 2- 3" x 0.131" NAILS 3- 3" 14 GAGE STAPLES	END NAIL	
8. STUD TO SOLE PLATE	4- 8d COMMON (2 1/2" x 0.131") 4- 3" x 0.131" NAILS 3- 3" 14 GAGE STAPLES	TOE NAIL	
	2- 16d COMMON (3 1/2" x 0.162") 2- 3" x 0.131" NAILS 3- 3" 14 GAGE STAPLES	END NAIL	
9. DOUBLE STUDS	16d (3 1/2" x 0.135") AT 24" O.C. 3" x 0.131" NAIL AT 8" O.C. 3" 14 GAGE STAPLE AT 12" O.C.	FACE NAIL	
10. DOUBLE TOP PLATES	16d (3 1/2" x 0.135") AT 16" O.C. 3" x 0.131" NAIL AT 12" O.C. 3" 14 GAGE STAPLE AT 12" O.C.	TYPICAL FACE NAIL	
DOUBLE TOP PLATES	8- 16d COMMON (3 1/2" x 0.162") 12- 3" x 0.131" NAILS 12- 3" 14 GAGE STAPLES	LAP SPLICE	
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	3- 8d COMMON (2 1/2" x 0.131") 3- 3" x 0.131" NAILS 3- 3" 14 GAGE STAPLES	TOENAIL	
12. RIM JOIST TO TOP PLATE	8d (2 1/2" x 0.115") AT 8" O.C. 3" x 0.131" NAIL AT 8" O.C. 3" 14 GAGE STAPLE AT 8" O.C.	TOENAIL	
13. TOP PLATES, LAPS, AND INTERSECTIONS	2- 16d COMMON (3 1/2" x 0.162") 3- 3" x 0.131" NAILS 3- 3" 14 GAGE STAPLES	FACE NAIL	
14. CONTINUOUS HEADER, TWO PIECES	16d COMMON (3 1/2" x 0.162")	16" O.C. ALONG EDGE	
15. CEILING JOISTS TO PLATE	3- 8d COMMON (2 1/2" x 0.131") 5- 3" x 0.131" NAILS 5- 3" 14 GAGE STAPLES	TOENAIL	
16. CONTINUOUS HEADER TO STUD	4- 8d COMMON (2 1/2" x 0.131")	TOENAIL	
17. CEILING JOISTS, LAPS OVER PARTITIONS (SEE SECTION 2308.10.4.1, TABLE 2308.10.4.1)	3- 16d COMMON MINIMUM, TABLE 2308.10.4.1 4- 3" x 0.131" NAILS 4- 3" 14 GAGE STAPLES	FACE NAIL	
18. CEILING JOISTS TO PARALLEL RAFTERS (SEE SECTION 2308.10.4.1, TABLE 2308.10.4.1)	3- 16d COMMON MINIMUM, TABLE 2308.10.4.1 4- 3" x 0.131" NAILS 4- 3" 14 GAGE STAPLES	FACE NAIL	
19. RAFTER TO PLATE (SEE SECTION 2308.10.4.1, TABLE 2308.10.4.1)	3- 8d COMMON (2 1/2" x 0.131") 3- 3" x 0.131" NAILS 3- 3" 14 GAGE STAPLES	TOENAIL	
20. 1" DIAGONAL BRACE TO EACH STUD AND PLATE	2- 8d COMMON (2 1/2" x 0.131") 2- 3" x 0.131" NAILS 3- 3" 14 GAGE STAPLES	FACE NAIL	
21. 1" x 8" SHEATHING TO EACH BEARING WALL	3- 8d COMMON (2 1/2" x 0.131")	FACE NAIL	
22. WIDER THAN 1" x 8" SHEATHING TO EACH BEARING WALL	3- 8d COMMON (2 1/2" x 0.131")	FACE NAIL	
23. BUILT-UP CORNER STUDS	16d COMMON (3 1/2" x 0.162") 2" x 0.131" NAIL 3" 14 GAGE STAPLE	24" O.C. 16" O.C. 16" O.C.	
24. BUILT-UP GIRDER AND BEAMS	20d COMMON (4" x 0.192") AT 32" O.C. 3" x 0.131" NAIL AT 24" O.C. 3" 14 GAGE STAPLE AT 24" O.C.	FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDE	
	2- 20d COMMON (4" x 0.192") 3- 3" x 0.131" NAILS 3- 3" 14 GAGE STAPLES	FACE NAIL AT ENDS AND AT EACH SPLICE	
25. 2" PLANKS	16d COMMON (3 1/2" x 0.162")	AT EACH BEARING	
26. COLLAR TIE TO RAFTER	3- 10d COMMON (3" x 0.148") 4- 3" x 0.131" NAILS 4- 3" 14 GAGE STAPLES	FACE NAIL	
27. JACK RAFTER TO HIP	3- 10d COMMON (3" x 0.148") 4- 3" x 0.131" NAILS 4- 3" 14 GAGE STAPLES	TOENAIL	
	2- 16d COMMON (3 1/2" x 0.162") 3- 3" x 0.131" NAILS 3- 3" 14 GAGE STAPLES	FACE NAIL	
28. ROOF RAFTER TO 2-BY RIDGE BEAM	2- 16d COMMON (3 1/2" x 0.162") 3- 3" x 0.131" NAILS 3- 3" 14 GAGE STAPLES	TOENAIL	
	2- 16d COMMON (3 1/2" x 0.162") 3- 3" x 0.131" NAILS 3- 3" 14 GAGE STAPLES	FACE NAIL	
29. JOIST TO BAND JOIST	3- 16d COMMON (3 1/2" x 0.162") 4- 3" x 0.131" NAILS 4- 3" 14 GAGE STAPLES	FACE NAIL	
30. LEDGER STRIP	3- 16d COMMON (3 1/2" x 0.162") 4- 3" x 0.131" NAILS 4- 3" 14 GAGE STAPLES	FACE NAIL	
31. WOOD STRUCTURAL PANELS AND PARTICLEBOARD ⁹ SUBFLOOR, ROOF, AND WALL SHEATHING (TO FRAMING)	1/2" AND LESS 6d ¹ 2 3/8" x 0.115" NAIL ⁶ 1 3/4" 16 GAGE STAPLE ⁶ 8d ⁹ OR 8d ⁹ 2 3/8" x 0.115" NAIL ⁶ 2" 16 GAGE STAPLE ⁶ 7/8" TO 1" 8d ⁹ 1 1/8" TO 1 1/4" 10d ⁹ OR 8d ⁹ 3/4" AND LESS 6d ⁸ 7/8" TO 1" 8d ⁸ 1 1/8" TO 1 1/4" 10d ⁸ OR 8d ⁸	FACE NAIL	
SINGLE FLOOR (COMBINATION SUBFLOOR-UNDERLAYMENT TO FRAMING)	1/2" OR LESS 6d ¹ 8d ¹	FACE NAIL	
32. PANEL SIDING (TO FRAMING)	1/2" OR LESS 6d ¹ 8d ¹	FACE NAIL	
33. FIBERBOARD SHEATHING ⁹	1/2" NO. 11 GAGE ROOFING NAIL ^h 6d COMMON NAIL (2" x 0.115") NO. 16 GAGE STAPLE ⁹ 25/32" NO. 11 GAGE ROOFING NAIL ^h 8d COMMON NAIL (2 1/2" x 0.131") NO. 16 GAGE STAPLE ⁹	FACE NAIL	
34. INTERIOR PANELING	1/4" 4d ¹ 3/8" 6d ¹	FACE NAIL	

- a. COMMON OR BOX NAILS ARE PERMITTED TO BE USED EXCEPT WHERE OTHERWISE STATED.
b. NAILS SPACED AT 6 INCHES ON CENTER AT EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS EXCEPT 6 INCHES AT SUPPORTS WHERE SPANS ARE 48 INCHES OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2305. NAILS FOR WALL SHEATHING ARE PERMITTED TO BE COMMON, BOX, OR CASING.
c. COMMON OR DEFORMED SHANK (6d - 2" x 0.115"; 8d - 2 1/2" x 0.131"; 10d - 3" x 0.148").
d. COMMON (6d - 2" x 0.115"; 8d - 2 1/2" x 0.131"; 10d - 3" x 0.148").
e. DEFORMED SHANK (6d - 2" x 0.115"; 8d - 2 1/2" x 0.131"; 10d - 3" x 0.148").
f. CORROSION - RESISTANT SIDING (6d - 1 7/8" x 0.106"; 8d - 2 3/8" x 0.128") OR CASING (6d - 2" x 0.099"; 8d - 2 1/2" x 0.115").
g. FASTENERS SPACED 3 INCHES ON CENTER AT EXTERIOR EDGES AND 6 INCHES ON CENTER AT INTERMEDIATE SUPPORTS, WHEN USED AS STRUCTURAL SHEATHING. SPACING SHALL BE 6 INCHES ON CENTER ON THE EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS FOR NONSTRUCTURAL APPLICATIONS.
h. CORROSION - RESISTANT ROOFING NAILS WITH 7/16 INCH DIAMETER HEAD AND 1 1/2 INCH LENGTH FOR 1/2 INCH SHEATHING AND 1 3/4 INCH LENGTH FOR 25/32 INCH SHEATHING.
i. CORROSION - RESISTANT STAPLES WITH NOMINAL 7/16 INCH CROWN OR 1 INCH CROWN AND 1 1/4 INCH LENGTH FOR 1/2 INCH SHEATHING AND 1 1/2 INCH LENGTH FOR 25/32 INCH SHEATHING. PANEL SUPPORTS AT 16 INCHES (20 INCHES IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED).
j. CASING OR FINISH NAILS SPACED 8 INCHES ON EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS.
k. PANEL SUPPORTS AT 24 INCHES. CASING OR FINISH NAILS SPACED 6 INCHES ON PANEL EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS.
l. FOR ROOF SHEATHING APPLICATIONS, 8d NAILS ARE THE MINIMUM REQUIRED FOR WOOD STRUCTURAL PANELS.
m. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16 INCH.
n. FOR ROOF SHEATHING APPLICATIONS, FASTENERS SPACED 4 INCHES ON CENTER AT EDGES, 8 INCHES AT INTERMEDIATE SUPPORTS.
o. FASTENERS SPACED 4 INCHES ON CENTER AT EDGES, 8 INCHES AT INTERMEDIATE SUPPORTS FOR SUBFLOOR AND WALL SHEATHING AND 3 INCHES ON CENTER AT EDGES, 6 INCHES AT INTERMEDIATE SUPPORTS FOR ROOF SHEATHING.
p. FASTENERS SPACED 4 INCHES ON CENTER AT EDGES, 8 INCHES AT INTERMEDIATE SUPPORTS.

LINTEL SCHEDULE				
TYPE MARK	DESCRIPTION	NO OF JAMBS 1ST-2ND	NO OF JAMBS 2ND-3RD	NO OF JAMBS 3RD-4TH
L1	(2) 2x10	(3) 2x6 BRG (2) 2x6 KING	(2) 2x6 BRG (2) 2x6 KING	(2) 2x6 BRG (2) 2x6 KING
L2	(3) 2x10	(3) 2x6 BRG (2) 2x6 KING	(3) 2x6 BRG (2) 2x6 KING	(2) 2x6 BRG (2) 2x6 KING
L3	(2) 2x10	(2) 2x6 BRG (2) 2x6 KING	(2) 2x6 BRG (2) 2x6 KING	(2) 2x6 BRG (2) 2x6 KING
L4	(3) 2x12	(2) 2x6 BRG (2) 2x6 KING	(2) 2x6 BRG (2) 2x6 KING	(2) 2x6 BRG (2) 2x6 KING
L5	(2) 1-3/4x8-1/2 LVL 2.0E	(6) 2x6 BRG (2) 2x6 KING	(4) 2x6 BRG (2) 2x6 KING	(3) 2x6 BRG (2) 2x6 KING
L6	(3) 2x10	(4) 2x6 BRG (1) 2x6 KING	(3) 2x6 BRG (1) 2x6 KING	(2) 2x6 BRG (1) 2x6 KING
L9	(3) 2x10	(4) 2x6 BRG (1) 2x6 KING	(3) 2x6 BRG (1) 2x6 KING	(2) 2x6 BRG (1) 2x6 KING
L11	(2) 2x10	(3) 2x6 BRG (1) 2x6 KING	(2) 2x6 BRG (1) 2x6 KING	(2) 2x6 BRG (1) 2x6 KING
L12	(2) 1-3/4x8-1/2 LVL 2.0E	(3) 2x6 BRG (1) 2x6 KING	(2) 2x6 BRG (1) 2x6 KING	(2) 2x6 BRG (1) 2x6 KING
L13	(2) 1-3/4x8-1/2 LVL 2.0E	SEE PLAN (1) 2x6 KING		
L14	(3) 1-3/4x11-7/8 LVL 2.0E	(3) 2x6 BRG (1) 2x6 KING	(2) 2x6 BRG (1) 2x6 KING	(2) 2x6 BRG (1) 2x6 KING
L15	(3) 1-3/4x11-7/8 LVL 2.0E	(4) 2x6 BRG (1) 2x6 KING	(3) 2x6 BRG (1) 2x6 KING	(2) 2x6 BRG (1) 2x6 KING
L16	(3) 1-3/4x18 LVL 2.0E	(4) 1 3/4 X 7 1/4 1.55E LSL BRG	(4) 1-3/4 X 7 1/4 LVL 2.0E KING	
L17	(3) 2x10	(2) 2x6 BRG (2) 2x6 KING		
L18	(2) 2x10	(3) 1 3/4 X 7 1/4 1.55E LSL BRG (3)	(2) 1 3/4 X 7 1/4 1.55E LSL BRG	
L19	(3) 2x10	(3) 1 3/4 X 7 1/4 2.0E LVL KING	(3) 1 3/4 X 7 1/4 2.0E LVL KING	
L19	CIP BM 18" DP (MIN) W/ (2) #6 TOP AND BOTL. (EXTEND 1'-6" INTO WALL EA SIDE) & #3 TIES @ 10" O.C.			

FOOTING SCHEDULE			
TYPE MARK	TYPE	TYPE COMMENTS	
CF1.8	1'-8" x 1'-0" CONT FTG	(2) #5 CONT. BOTL	
CF2.0	2'-0" x 1'-0" CONT FTG	(2) #5 CONT. BOTL	
CF3.0	3'-0" x 1'-0" CONT FTG	(3) #5 CONT. AND #5 AT 12" O.C.	
F6.0	6'-0" x 6'-0" x 1'-2"	(7) #5 EACH WAY, BOTL.	
F7.0	7'-0" x 7'-0" x 1'-5"	(6) #6 EACH WAY, BOTL.	
F8.0	8'-0" x 8'-0" x 1'-7"	(6) #7 EACH WAY, BOTL.	
F10.0	10'-0" x 10'-0" x 2'-0"	(9) #7 EACH WAY, BOTL.	
F10.5	10'-6" x 10'-6" x 2'-1"	(10) #7 EACH WAY, BOTL.	

COLUMN SCHEDULE		
TYPE MARK	TYPE	TYPE COMMENTS
C1	16x16 PC COL	
C2	HSS3X3X1/4	6" X 6" X 3/4" BP
C3	HSS5X5X1/4	6" X 6" X 3/4" BP

BEAM SCHEDULE		
TYPE MARK	DESCRIPTION	REMARKS
B1	(3) 1-3/4x16 LVL	
B2	W14x61	2x TOP PL W/ 1/2" DIA THRU BOLTS @ 48" OC STAGGERED
B3	(3) 1-3/4x8-1/2 LVL	
B4	(3) 1-3/4x14 LVL	
B5	(3) 1-3/4x11-7/8 LVL	
B6	W8x15	W/ 3/4" X 6" X 8" BRG PLATE (8" BRG EA SIDE) W/ (2) 1/2" DIA X 4" LG WELD STUDS W/ CONT 1/4" FILLET WELD TO BEAM (BOTH SIDES).
B7	HSS16x8x3/8	W/ 3/8" BOTL PLATE & 3/4" X 10" X 8" BRG PLATE (8" BRG EA SIDE) W/ (2) 1/2" DIA X 4" LG WELD STUDS W/ CONT FLARE WELD TO TUBE (BOTH SIDES).
B8	L8x6x7/16	W/ 3/4" X 6" X 8" BRG PLATE (8" BRG EA SIDE) W/ (2) 1/2" DIA X 4" LG WELD STUDS W/ CONT 1/4" FILLET WELD TO BEAM (BOTH SIDES).

PIER SCHEDULE		
TYPE MARK	TYPE	TYPE COMMENTS
P1	24x24 PC COL	24" x 24" W/ (8) #6 & (3) TIES @ 12" O.C.
P2	10x24 PC COL	24" x 10" (8) #6 & 3 TIES @ 10" OC EXTEND ALL REINF. FULL HGHT. OF WALL OR TO BRG. PLATE ELEVATION

STAIR STRINGER SCHEDULE		
SPAN	TYPE	TYPE COMMENTS
4'-0" - 12'-6"	1 3/4" x 14" 1.55E LSL	12" O.C. USE STRAP HANGERS
12'-6" - 15'-6"	1 3/4" x 16" 1.55E LSL	12" O.C. USE STRAP HANGERS

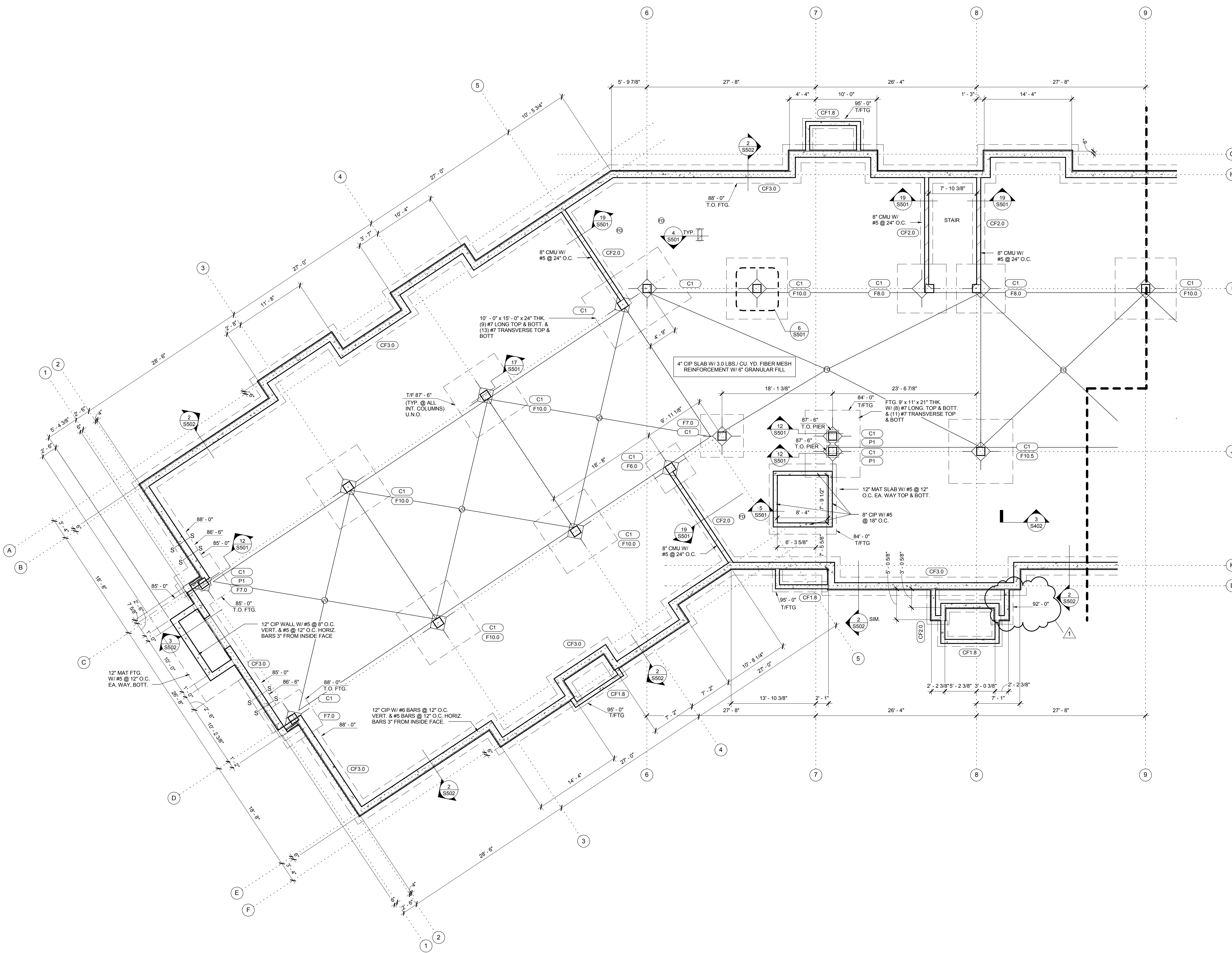
BRICK LINTEL SCHEDULE		
SPAN	TYPE	REMARKS
0'-6" - 4'-0"	L4 x 3 1/2 x 5/16	8" BEARING EACH END
4'-4" - 6'-4"	L6 x 3 1/2 x 5/16	8" BEARING EACH END
6'-4" - 8'-0"	L8 x 4 x 1/2	8" BEARING EACH END

STRUCTURAL ABBREVIATIONS			
AB	ANCHOR BOLT	MATL	MATERIAL
ADDL	ADDITIONAL	MAU	MAKE-UP AIR UNIT
ADJ	ADJACENT	MAX	MAXIMUM
AF	ABOVE FINISHED FLOOR	MECH	MECHANICAL
AHU	AIR HANDLING UNIT	MEZZ	MEZZANINE
ALT	ALTERNATE	MFR	MANUFACTURER
ALUM	ALUMINUM	MID	MIDDLE
APPROX	APPROXIMATE/APPROXIMATELY	MIN	MINIMUM
ARCH	ARCHITECT/ARCHITECTURAL	MISC	MISCELLANEOUS
		MS	MASONRY OPENING
		MTL	METAL
BP	BASE PLATE/BEARING PLATE	NA	NOT APPLICABLE
BDO	BOTTOM OF BUILDING	NO	NUMBER
BLK	BLOCK	NS	NEAR SIDE
BLKG	BLOCKING	NTS	NOT TO SCALE
BM	BEAM		
BOTT	BOTTOM	OC	ON CENTER
BRG	BEARING	OH	OVERHEAD
BTWN	BETWEEN	OD	OUTSIDE DIAMETER
		OF	OUTSIDE FACE
CANT	CANTILEVER	OP	OPENING
CIP	CAST-IN-PLACE CONCRETE	OPNG	OPENING
CJ	CONTROL JOINT/CONSTRUCTION JOINT	OSB	ORIENTED STRAND BOARD
CJP	COMPLETE JOINT PENETRATION WELD		
CL	CENTER LINE	PAP	POWDER ACTUATED FASTENER
CLR	CLEAR	PC	PRECAST
CMU	CONCRETE MASONRY UNIT	PCF	POUNDS PER CUBIC FOOT
COL	COLUMN	PIL	PLASTER
CONC	CONCRETE	PL	PARTIAL JOINT PENETRATION WELD
CONN	CONNECT/CONNECTION	PLT	PLATE
CONT	CONTINUE/CONTINUOUS	PFL	POUNDS PER LINEAR FOOT
COORD	COORDINATE	PLYW	PLYWOOD
		PREFAB	PREFABRICATED
DBL	DOUBLE	PROJ	PROJECTION
DEMO	DEMOLITION	PSF	POUNDS PER SQUARE FOOT
DTL	DETAIL	PSI	POUNDS PER SQUARE INCH
DIA	DIAMETER	PSL	PARALLEL STRAND LUMBER
DIAG	DIAGONAL	PT	POST TENSIONED
DIM	DIMENSION(S)		
DL	DEAD LOAD		
DN	DOWN	QTY	QUANTITY
DEEP	DEEP	R	RADIUS
DWG	DRAWING	RD	ROOF DRAIN
DWL	DOWEL	REF	REFERENCE
		REIN	REINFORCED REINFORCEMENT
EA	EACH	REQD	REQUIRED
EF	EACH FACE	REV	REVISED/REVISION
ELEV	ELEVATION	RO	ROUGH OPENING
ELEV	ELEVATOR	RTU	ROOF TOP UNIT
EMBED	EMBEDDED/EMBEDMENT		
ENGR	ENGINEER	SCHED	SCHEDULE
EQ	EQUIPMENT	SECT	SECTION
EQ	EQUAL	SF	SQUARE FOOT
EQUIP	EQUIPMENT	SHT	SHEET
EXIST	EXISTING	SIM	SIMILAR
EXP	EXPANSION	SL	SNOW LOAD
EXT	EXTERIOR	SOG	SLAB ON GRADE
		SPEC	SPECIFICATION(S)
FAB	FABRICATOR/FABRICATION	SQ	SQUARE
FDN	FLOOR DRAIN	SS	STAINLESS STEEL
FD	FOUNDATION	STD	STANDARD
FEE	FINISHED FLOOR ELEVATION	STIFF	STIFFENER
FLR	FLOOR	STL	STEEL
FS	FAR SIDE	STRUCT	STRUCTURAL
FT	FOOT	SYM	SYMMETRICAL
FTG	FOOTING		
		TO	TOP OF
GA	GAUZE	T&B	TOP AND BOTTOM
GALV	GALVANIZED	T&G	TONGUE AND GROOVE
GC	GENERAL CONTRACTOR	TEMP	TEMPORARY
GLULAM	GLUE LAMINATED WOOD	THK	THICKNESS
GB	GRADE BEAM	TOTL	TOTAL LOAD
GIR	GIRDER TRUSS	TRANS	TRANSVERSE
GYP	GYPSUM	TYP	TYPICAL
HORIZ	HORIZONTAL	UNO	UNLESS NOTED OTHERWISE
HT	HEIGHT	VERT	VERTICAL
ID	INSIDE DIAMETER		
IF	INSIDE FACE	W	WITH
INFO	INFORMATION	WO	WITHOUT
INSUL	INSULATION	WL	WIND LOAD
INT	INTERIOR	WP	WORKING POINT

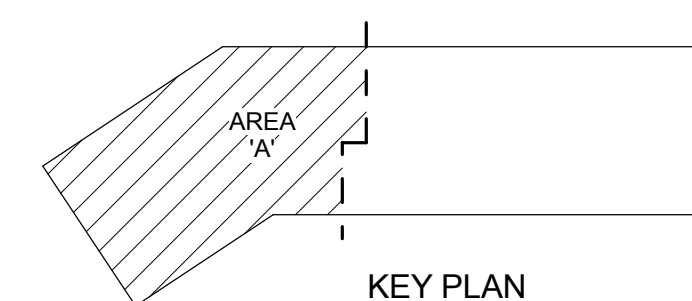
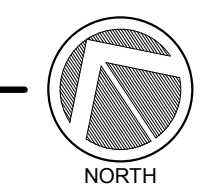
FOUNDATION PLAN - GENERAL NOTES @ EXTERIOR WALLS:

1. T/FTG = 88'-0" UNO.
2. EXTERIOR WALL FOOTINGS SHALL BE CF3.0 UNO.
3. STOOP WALL FOOTINGS SHALL BE CF1.8 UNO.
4. SEE DETAILS 1/SS01 AND 2/SS01 FOR CONSTRUCTION AND CONTROL JOINTS FOR SLAB ON GRADE.
5. SLAB ON GRADE: 4" CONCRETE SLAB WITH FIBER MESH REINFORCEMENT. PROVIDE 6" COMPACTED GRANULAR FILL. T/S LAB = 89'-0" U.N.O.
6. SEE DETAIL 3/SS01 FOR STEP FOOTING DETAIL.
7. SEE ARCHITECTURAL DRAWINGS FOR ALL SLAB SLOPES AND FLOOR DRAINS.
8. SEE SHEET S000 FOR GENERAL STRUCTURAL NOTES.
9. SEE SHEET S001 FOR SCHEDULES AND ABBREVIATIONS.
10. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS.

ALL STEEL IN CONTACT WITH TREATED WOOD (CONNECTORS, JOIST HANGERS, NAILS, SCREWS, ANCHOR BOLTS ETC.) SHALL BE STAINLESS STEEL OR GALVANIZED TO THE REQUIREMENTS LISTED IN THE WOOD SECTION OF THE STRUCTURAL NOTES.



1 FOUNDATION PLAN - AREA 'A'
S100 SCALE: 1/8" = 1'-0"



I hereby certify that this plan, specification or report was prepared by me or under my direct supervision & that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature: *Kesh Ramdular*
Printed Name: Kesh Ramdular
License No.: 16256
Date: 09/30/2016

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Project No: 1602
Project Manager: DAS
Drawn By: SR
Date: 09/30/2016

Date	Description
1 11/08/2016	ASI-1



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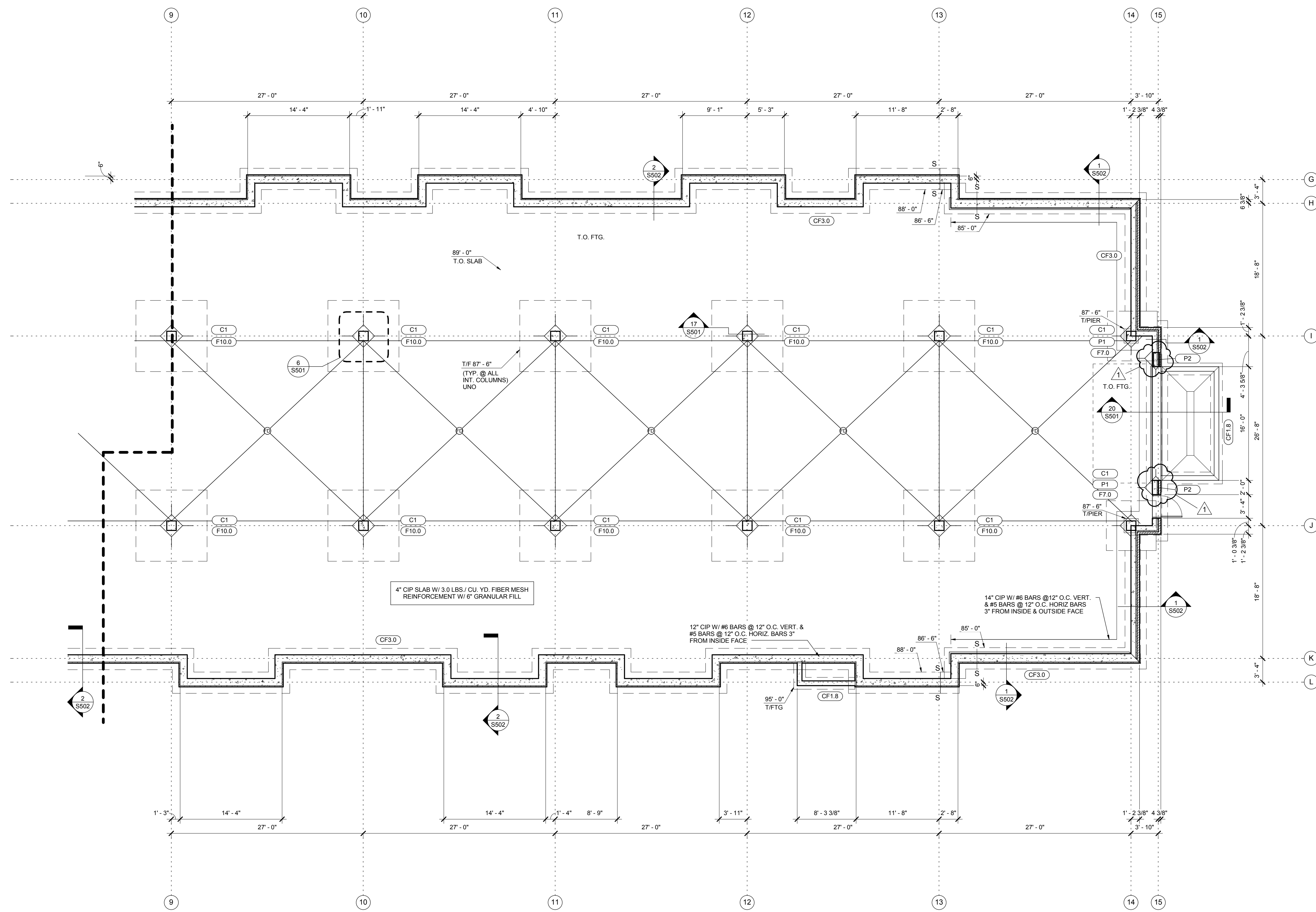
New Apartment Complex:

Rivers Ridge
Luxury
Apartments

Red Wing, MN

Foundation Plan - Area A

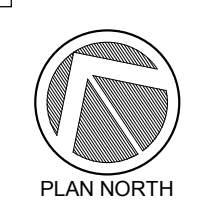
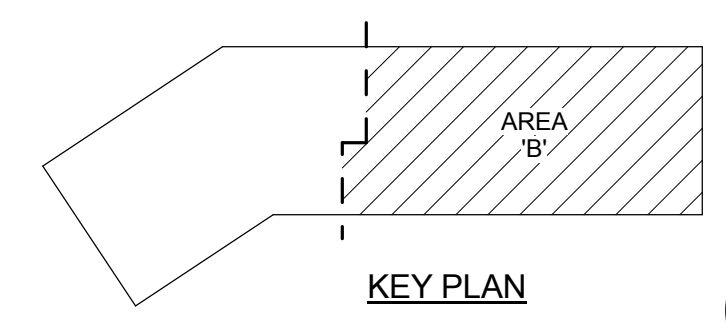
S100



- FOUNDATION PLAN - GENERAL NOTES @ EXTERIOR WALLS:**
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 3. STOOP WALL FOOTINGS SHALL BE CF1.8, UNO.
 4. SEE DETAILS 1/S501 AND 2/S501 FOR CONSTRUCTION AND CONTROL JOINTS FOR SLAB ON GRADE.
 5. SLAB ON GRADE: 4" CONCRETE SLAB WITH FIBER MESH REINFORCEMENT. PROVIDE 6" COMPACTED GRANULAR FILL. T/SLAB = 89'-0", U.N.O.
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 7. SEE ARCHITECTURAL DRAWINGS FOR ALL SLAB SLOPES AND FLOOR DRAINS.
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1 FOUNDATION PLAN - AREA 'B'
S101 SCALE: 1/8" = 1'-0"



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181 2nd St NW
PO Box 7
Avon, MN 56310
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Toll Free: (888) 522-7342
Fax: (320) 356-7351
www.lumber-one.com

Larson Engineering, Inc.
3524 Labore Road
Winnetonka, MN 55110-5126
651 481 9120 Fax: 651 481 9201
www.larsoneng.com

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Signature: *Kesh Ramdular*
Printed Name: Kesh Ramdular
License No.: 16256
Date: 09/30/2016

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Project No: 1602
Project Manager: DAS
Drawn By: SR
Date: 09/30/2016

Date	Description
11/08/2016	ASI-1

hma ARCHITECTS

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New Apartment Complex:

**Rivers Ridge
Luxury
Apartments**

Red Wing, MN

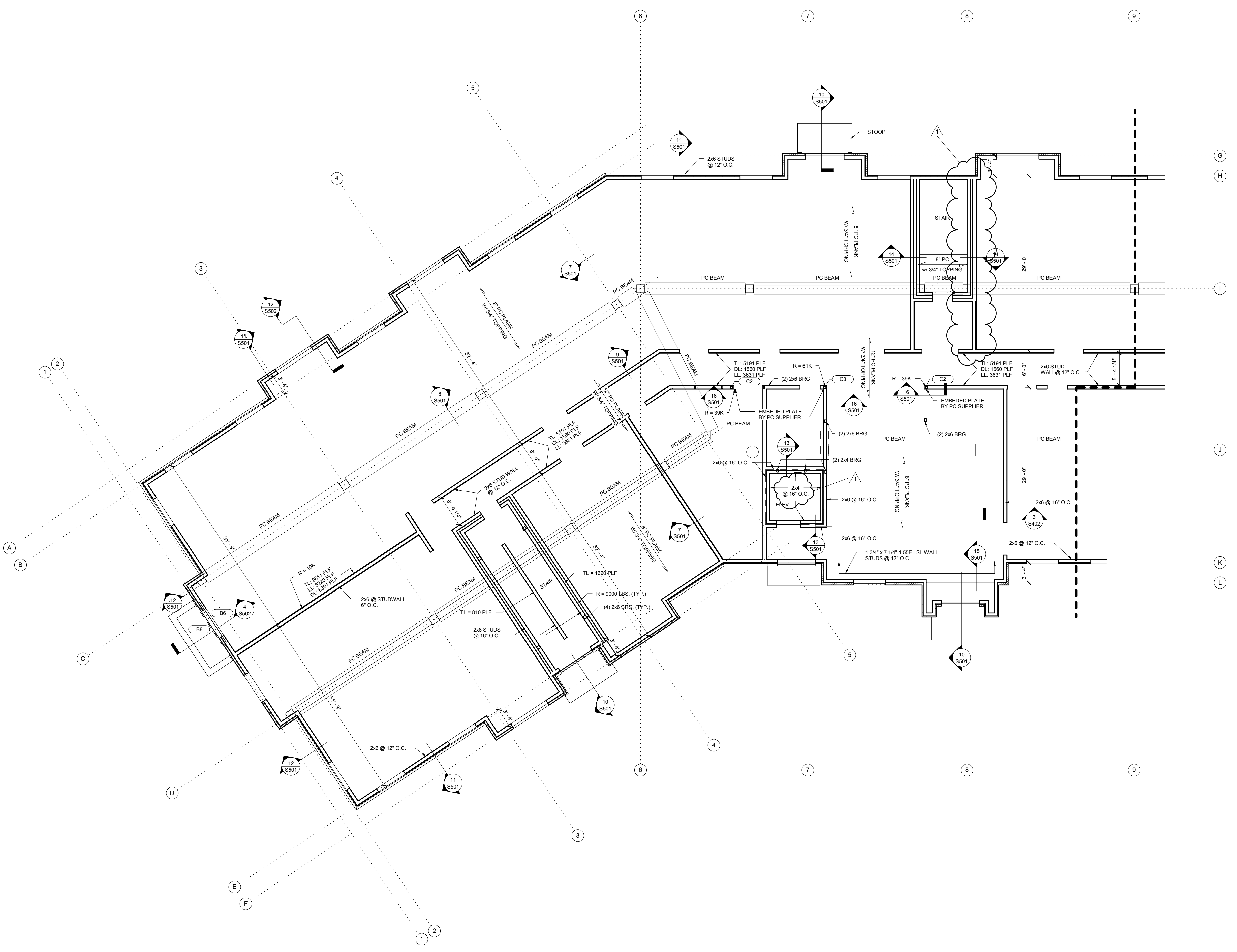
Foundation Plan - Area B

S101

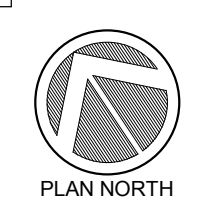
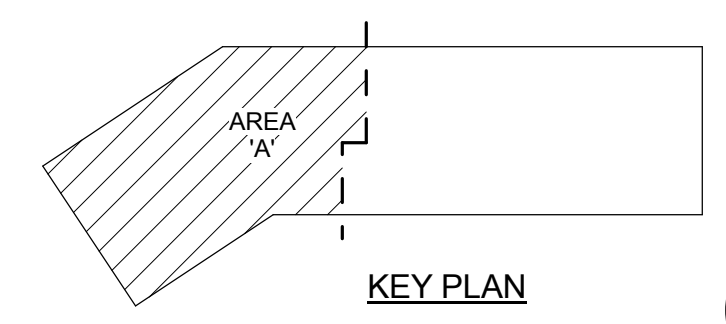
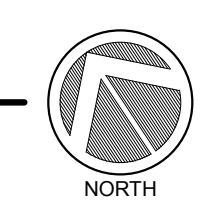
FLOOR FRAMING PLAN NOTES:

- 1ST FLOOR TOP OF PLANK = 100'-0"
- 2ND FLOOR TOP OF SHEATHING = 111'-1 7/8"
- 3RD FLOOR TOP OF SHEATHING = 121'-3 3/4"
- 4TH FLOOR TOP OF SHEATHING = 131'-8 5/8"
- FLOOR SHEATHING TO BE 3/4" TONGUE AND GROOVE PLYWOOD GLUED AND NAILED. (SEE SPECIFICATIONS)
- ALL FLOOR AREA TO HAVE 3/4" GYPCRETE, UNO. (SEE ARCH)
- PROVIDE BRIDGING FOR FLOOR TRUSSES ACCORDING TO MANUFACTURER'S RECOMMENDATION.
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- ALL INTERIOR STEEL BEAMS TO HAVE 2x WOOD TOP PLATES WITH 1/2" DIA THROUGH BOLTS AT 48" O.C., STAGGERED.
- COORDINATE ALL TRUSSES WITH PLUMBING LOCATIONS.
- ADJUST TRUSS SPACING AS NECESSARY FOR LOAD AND DEFLECTION REQUIREMENTS (MAX 24" O.C.)
- ALL TRUSSES AND/OR ENGINEERED FLOORS TO BE DESIGNED FOR:
a. LIVE LOAD DEFLECTION OF L480 FOR RESIDENTIAL UNITS.
b. LIVE LOAD DEFLECTION OF L360 FOR 100 PSF LOAD AREAS.
- SEE DETAIL 2/5501 FOR CONT BLOCKING REQUIREMENTS IN TRUSS SPACE
- SEE SHEET 3000 FOR IRC NAILING SCHEDULE.
- PROVIDE CONT 2x12 RIBBON AT INTERIOR CORRIDOR.
- PROVIDE CONT 2x6 RIBBON AT EXTERIOR WALLS.
- EXTERIOR SHEATHING SHALL BE 7/16" APA RATED SHEATHING NAILS @ 6" OC AT EDGE & 12" OC FIELD UNO
- BEARING STUDS TO BE CONTINUOUS DOWN TO FOUNDATION LEVEL

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1 FIRST FLOOR FRAMING PLAN - AREA 'A'
S102 SCALE: 1/8" = 1'-0"



I hereby certify that this plan, specification or report was prepared by me or under my direct supervision & that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature: *Kesh Ramdular*
 Printed Name: Kesh Ramdular
 License No.: 16256
 Date: 09/30/2016

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 Project Manager: DAS
 Drawn By: SR
 Date: 09/30/2016

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1 11/08/2016	ASI-1



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New Apartment Complex:

Rivers Ridge
 Luxury
 Apartments

Red Wing, MN

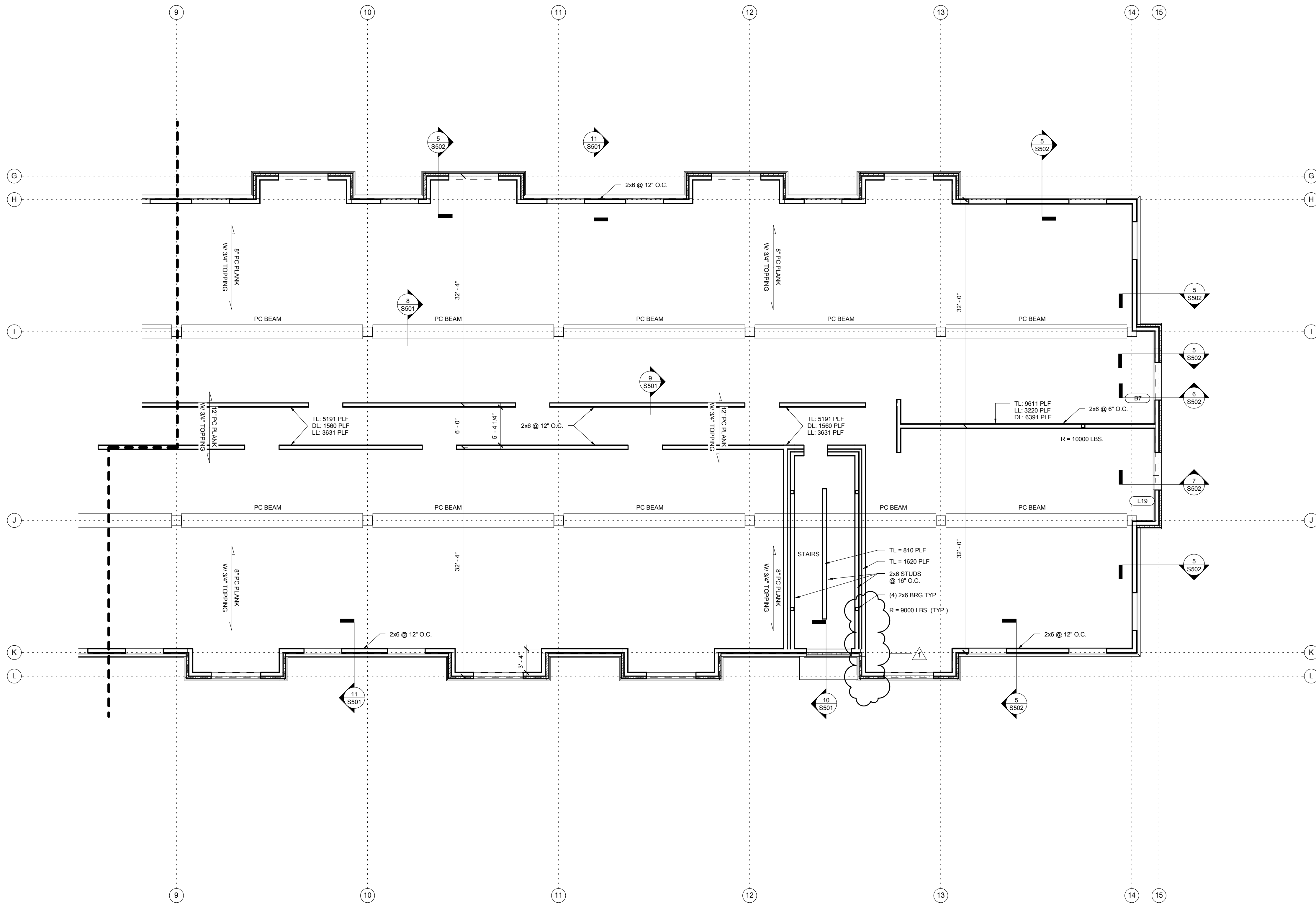
First Floor Framing Plan -
 Area A

S102

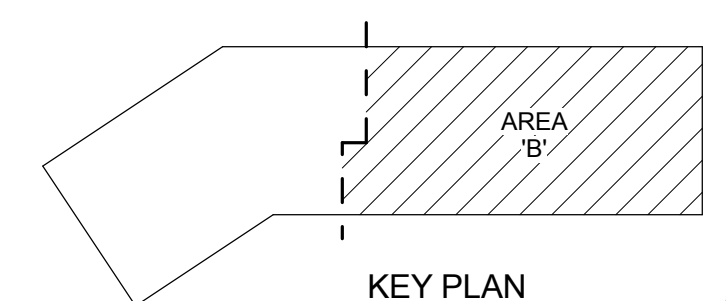
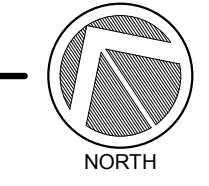
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 - DEAD LOAD DEFLECTION OF L/360 FOR 100 PSF LOAD AREAS.
- SEE DETAIL 2/SS01 FOR CONT. BLOCKING REQUIREMENTS IN TRUSS SPACES.
- SEE SHEET 3000 FOR IRC NAILING SCHEDULE.
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1 FIRST FLOOR FRAMING PLAN - AREA 'B'
S103 SCALE: 1/8" = 1'-0"



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Signature: *Kesh Ramdular*
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New Apartment Complex:

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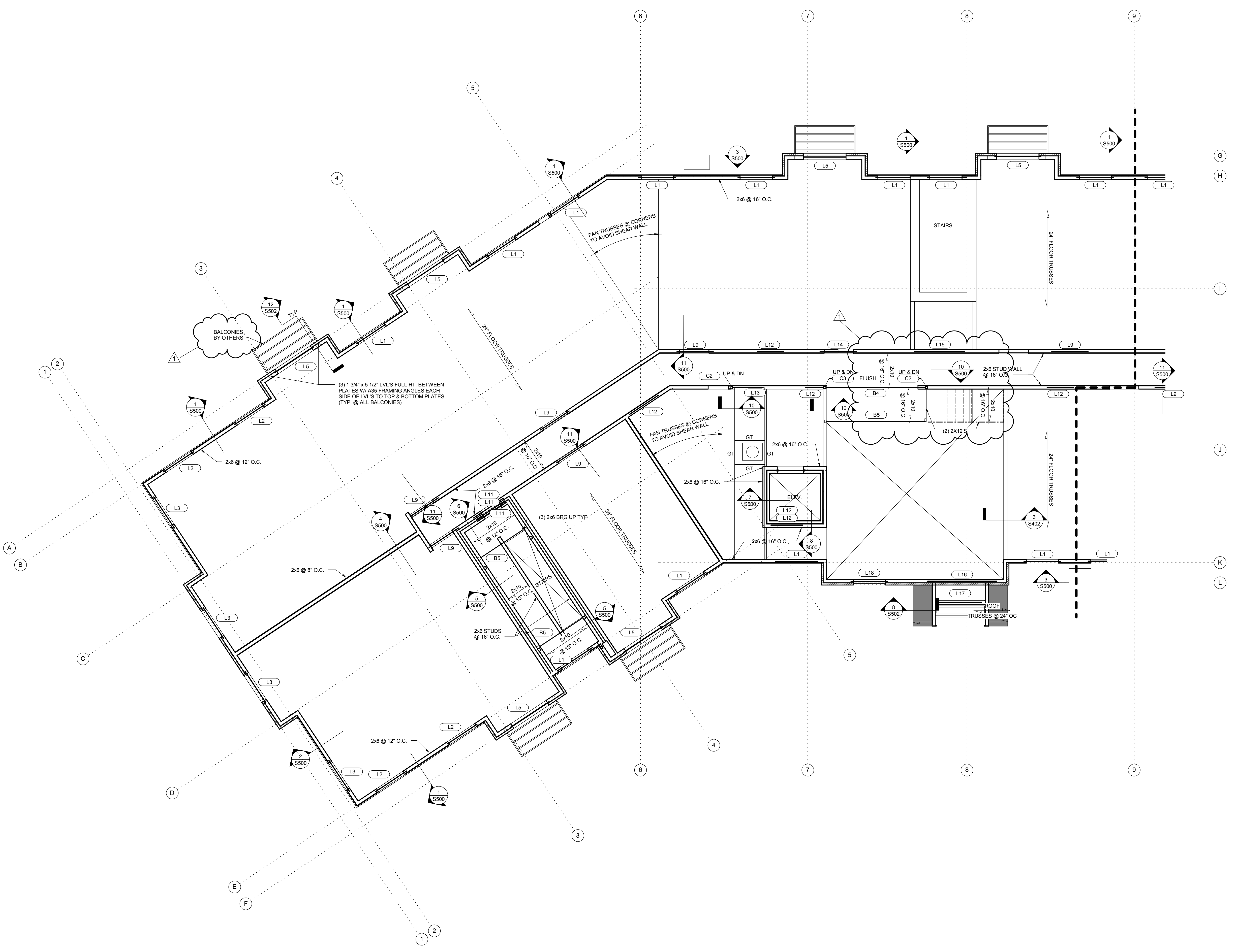
First Floor Framing Plan -
Area B

S103

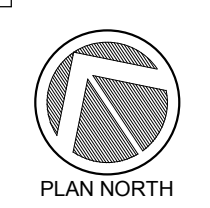
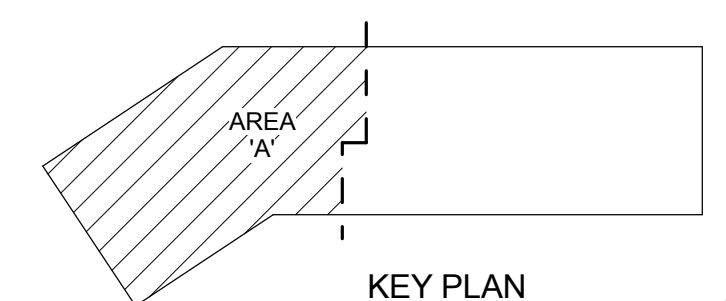
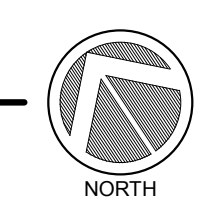
FLOOR FRAMING PLAN NOTES:

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- PROVIDE BRIDGING FOR FLOOR TRUSSES ACCORDING TO MANUFACTURER'S RECOMMENDATION.
- DIMENSIONAL LUMBER FLOOR JOISTS TO HAVE BRIDGING AT INTERVALS NOT TO EXCEED 8'-0"
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 - b. LIVE LOAD DEFLECTION OF L360 FOR 100 PSF LOAD AREAS.
- SEE DETAIL 2/SS00 FOR CONT. BLOCKING REQUIREMENTS IN TRUSS SPACE
- SEE SHEET 3000 FOR IRC NAILING SCHEDULE.
- PROVIDE CONT 2x12 RIBBON AT INTERIOR CORRIDOR.
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1 SECOND FLOOR FRAMING PLAN - AREA 'A'
S104 SCALE: 1/8" = 1'-0"



I hereby certify that this plan, specification or report was prepared by me or under my direct supervision & that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature: *Kesh Ramdular*
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 Project Manager: DAS
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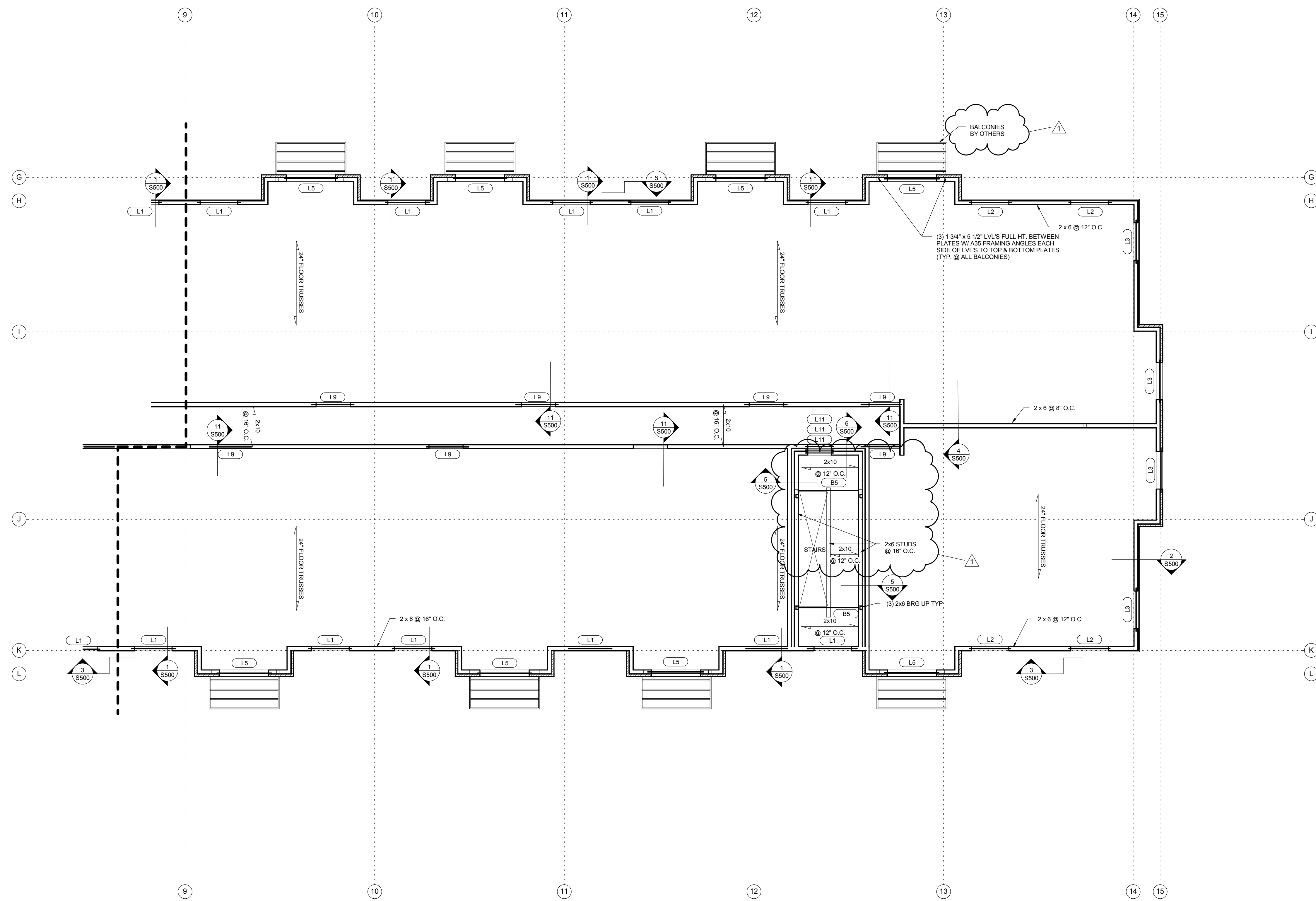
New Apartment Complex:

Rivers Ridge
 Luxury
 Apartments

Red Wing, MN

Second Floor Framing
 Plan - Area A

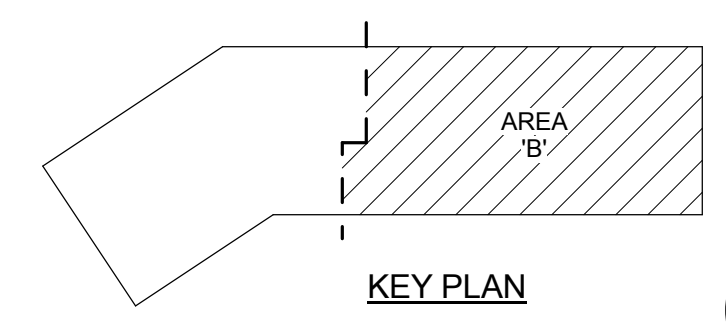
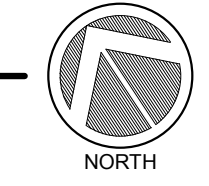
S104



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 - 3RD FLOOR TOP OF SHEATHING = 121'-3 3/4"
 - 4TH FLOOR TOP OF SHEATHING = 131'-5 5/8"
 - FLOOR SHEATHING TO BE 3/4" TONGUE AND GROOVE PLYWOOD GLUED AND NAILED. (SEE SPECIFICATIONS).
 - ALL FLOOR AREA TO HAVE 3/4" GYPCRETE, UNO. (SEE ARCH).
 - PROVIDE BRIDGING FOR FLOOR TRUSSES ACCORDING TO MANUFACTURER'S RECOMMENDATION.
 - DIMENSIONAL LUMBER FLOOR JOISTS TO HAVE BRIDGING AT INTERVALS NOT TO EXCEED 8'-0".
 - SEE ARCH FOR ALL OPENING SIZES AND LOCATIONS.
 - ALL INTERIOR STEEL BEAMS TO HAVE 2x WOOD TOP PLATES WITH 1/2" DIA THROUGH BOLTS AT 48" O.C., STAGGERED.
 - COORDINATE ALL TRUSSES WITH PLUMBING LOCATIONS.
 - ADJUST TRUSS SPACING AS NECESSARY FOR LOAD AND DEFLECTION REQUIREMENTS (MAX 24" O.C.).
 - ALL TRUSSES AND/OR ENGINEERED FLOORS TO BE DESIGNED FOR:
 - LIVE LOAD DEFLECTION OF L480 FOR RESIDENT UNITS.
 - DEAD DEFLECTION OF L360 FOR 100 PSF LOAD AREAS.
 - SEE DETAIL 2/SS00 FOR CONT BLOCKING REQUIREMENTS IN TRUSS SPACES.
 - SEE SHEET 3000 FOR IRC NAILING SCHEDULE.
 - PROVIDE CONT 2x12 RIBBON AT INTERIOR CORRIDOR.
 - PROVIDE CONT 2x6 RIBBON AT EXTERIOR WALLS.
 - EXTERIOR SHEATHING SHALL BE 7/16" APA RATED SHEATHING NAILS @ 6" OC AT EDGE & 12" OC FIELD UNO.
 - BEARING STUDS TO BE CONTINUOUS DOWN TO FOUNDATION LEVEL.

ALL STEEL IN CONTACT WITH TREATED WOOD (CONNECTORS, JOIST HANGERS, NAILS, SCREWS, ANCHOR BOLTS ETC.) SHALL BE STAINLESS STEEL OR GALVANIZED TO THE REQUIREMENTS LISTED IN THE WOOD SECTION OF THE STRUCTURAL NOTES.

1 SECOND FLOOR FRAMING PLAN - AREA 'B'
S105 SCALE: 1/8" = 1'-0"



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Signature: *Kesh Ramdular*
Printed Name: Kesh Ramdular
License No.: 16256
Date: 09/30/2016

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Project No: 1602
Project Manager: DAS
Drawn By: SR
Date: 09/30/2016

Date	Description
1 11/08/2016	ASI-1

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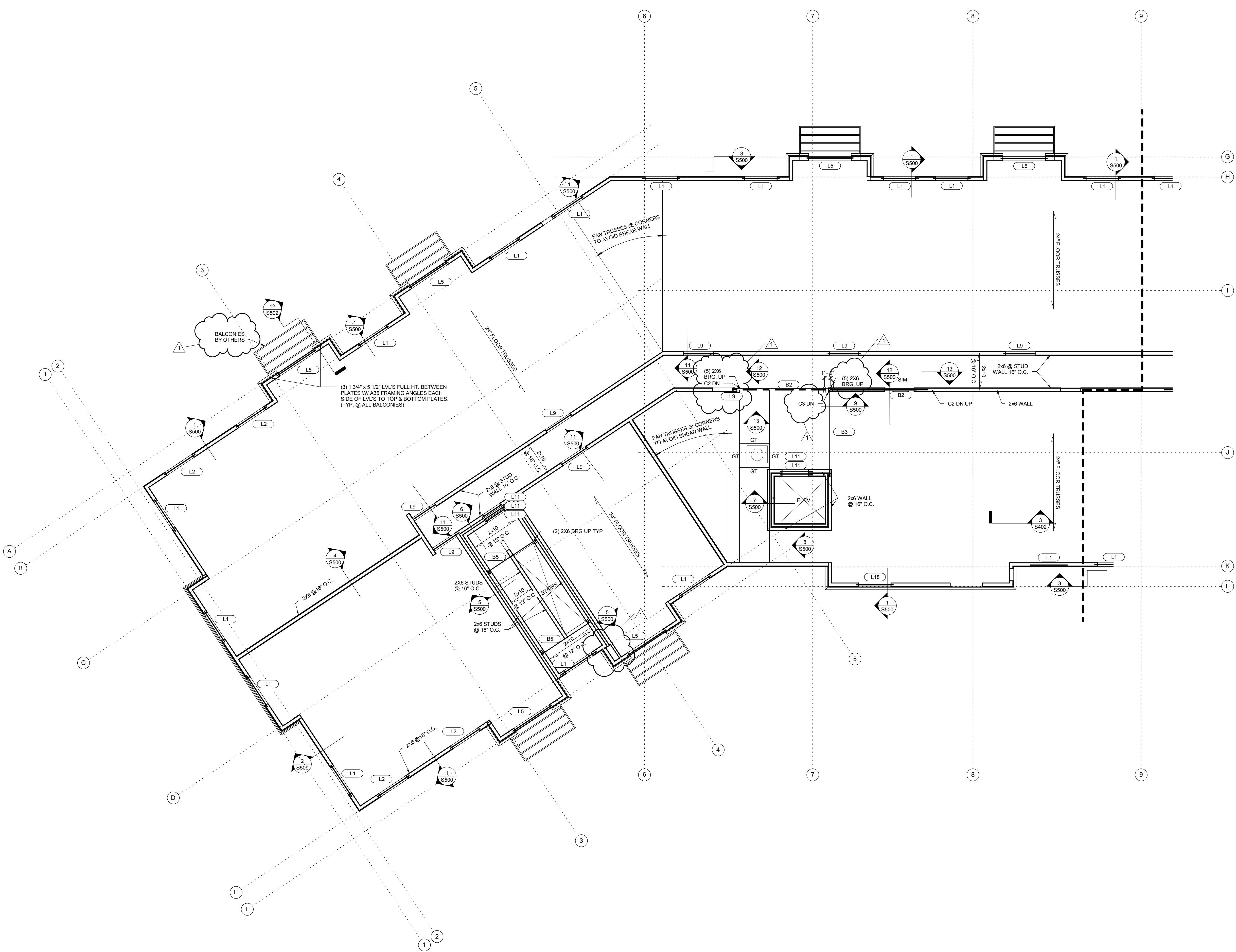
New Apartment Complex:

**Rivers Ridge
Luxury
Apartments**

Red Wing, MN

Second Floor Framing
Plan - Area B

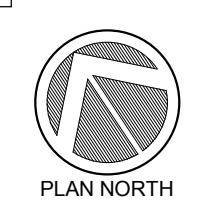
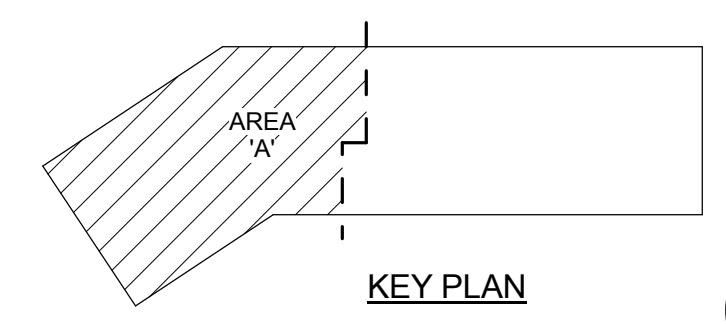
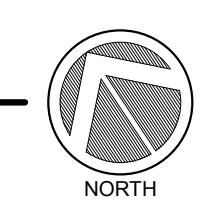
S105



- FLOOR FRAMING PLAN NOTES:**
- 1ST FLOOR TOP OF PLANK = 100' - 0"
 - 2ND FLOOR TOP OF SHEATHING = 111' - 1 7/8"
 - 3RD FLOOR TOP OF SHEATHING = 121' - 3 3/4"
 - 4TH FLOOR TOP OF SHEATHING = 131' - 5 5/8"
 - FLOOR SHEATHING TO BE 3/4" TONGUE AND GROOVE PLYWOOD GLUED AND NAILED. (SEE SPECIFICATIONS).
 - ALL FLOOR AREA TO HAVE 3/4" GYPCRETE, UNO. (SEE ARCH).
 - PROVIDE BRIDGING FOR FLOOR TRUSSES ACCORDING TO MANUFACTURER'S RECOMMENDATION.
 - DIMENSIONAL LUMBER FLOOR JOISTS TO HAVE BRIDGING AT INTERVALS NOT TO EXCEED 8' - 0".
 - SEE ARCH FOR ALL OPENING SIZES AND LOCATIONS.
 - ALL INTERIOR STEEL BEAMS TO HAVE 2x WOOD TOP PLATES WITH 1/2" DIA THROUGH BOLTS AT 48" O.C., STAGGERED.
 - COORDINATE ALL TRUSSES WITH PLUMBING LOCATIONS.
 - ADJUST TRUSS SPACING AS NECESSARY FOR LOAD AND DEFLECTION REQUIREMENTS (MAX 24" O.C.).
 - ALL TRUSSES AND/OR ENGINEERED FLOORS TO BE DESIGNED FOR:
 - a. LIVE LOAD DEFLECTION OF L480 FOR RESIDENT UNITS.
 - b. LIVE LOAD DEFLECTION OF L360 FOR 100 PSF LOAD AREAS.
 - SEE DETAIL 2/S500 FOR CONT. BLOCKING REQUIREMENTS IN TRUSS SPACE.
 - SEE SHEET 3060 FOR IRC NAILING SCHEDULE.
 - PROVIDE CONT 2x12 RIBBON AT INTERIOR CORRIDOR.
 - PROVIDE CONT 2x6 RIBBON AT EXTERIOR WALLS.
 - EXTERIOR SHEATHING SHALL BE 7/16" APA RATED SHEATHING NAILS @ 6" OC AT EDGE & 12" OC FIELD UNO.
 - BEARING STUDS TO BE CONTINUOUS DOWN TO FOUNDATION LEVEL.

ALL STEEL IN CONTACT WITH TREATED WOOD (CONNECTORS, JOIST HANGERS, NAILS, SCREWS, ANCHOR BOLTS ETC.) SHALL BE STAINLESS STEEL OR GALVANIZED TO THE REQUIREMENTS LISTED IN THE WOOD SECTION OF THE STRUCTURAL NOTES.

1 THIRD FLOOR FRAMING PLAN - AREA 'A'
S106 SCALE: 1/8" = 1'-0"



I hereby certify that this plan, specification or report was prepared by me or under my direct supervision & that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature: *Kesh Ramdular*
 Printed Name: Kesh Ramdular
 License No.: 16256
 Date: 09/30/2016

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 Project Manager: DAS
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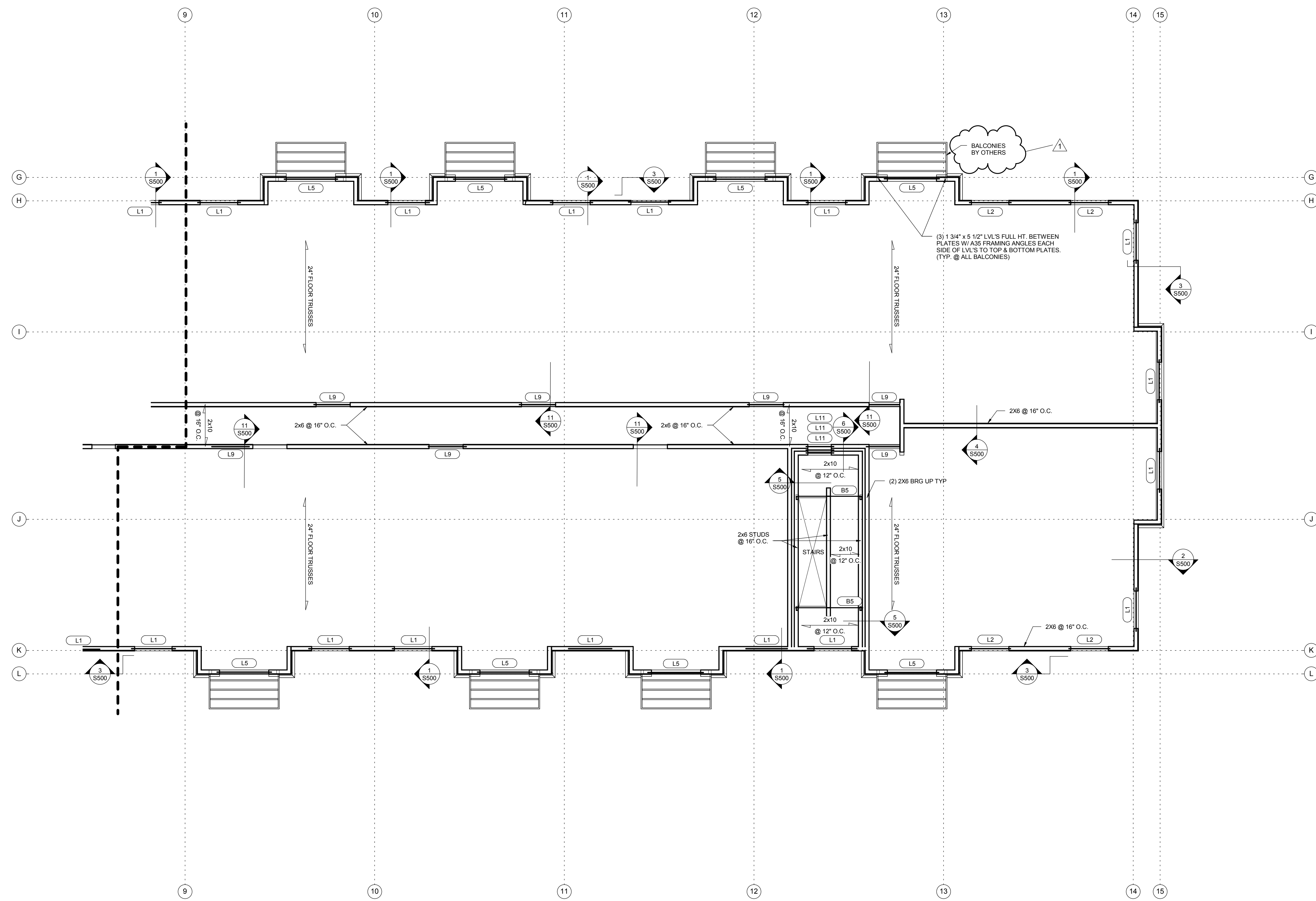
New Apartment Complex:

**Rivers Ridge
 Luxury
 Apartments**

Red Wing, MN

Third Floor Framing Plan -
 Area A

S106



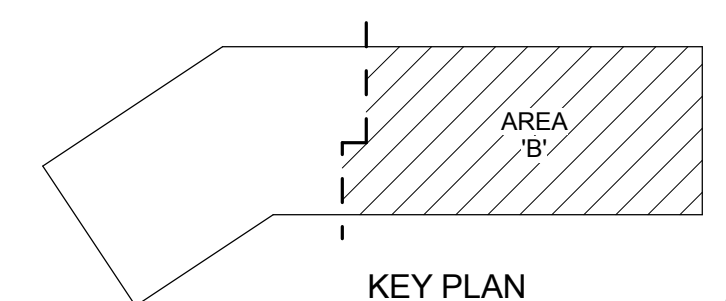
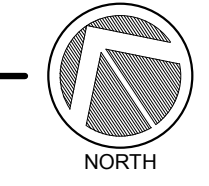
FLOOR FRAMING PLAN NOTES:

1. 1ST FLOOR TOP OF PLANK = 100'-0"
2. 2ND FLOOR TOP OF SHEATHING = 111'-1 7/8"
3. 3RD FLOOR TOP OF SHEATHING = 121'-3 3/4"
4. 4TH FLOOR TOP OF SHEATHING = 131'-5 5/8"
5. FLOOR SHEATHING TO BE 3/4" TONGUE AND GROOVE PLYWOOD GLUED AND NAILED. (SEE SPECIFICATIONS).
6. ALL FLOOR AREA TO HAVE 3/4" GYPCRETE, UNO. (SEE ARCH).
7. PROVIDE BRIDGING FOR FLOOR TRUSSES ACCORDING TO MANUFACTURER'S RECOMMENDATION.
8. DIMENSIONAL LUMBER FLOOR JOISTS TO HAVE BRIDGING AT INTERVALS NOT TO EXCEED 8'-0".
9. SEE ARCH FOR ALL OPENING SIZES AND LOCATIONS.
10. ALL INTERIOR STEEL BEAMS TO HAVE 2x WOOD TOP PLATES WITH 1/2" DIA THROUGH BOLTS AT 48" O.C., STAGGERED.
11. COORDINATE ALL TRUSSES WITH PLUMBING LOCATIONS.
12. ADJUST TRUSS SPACING AS NECESSARY FOR LOAD AND DEFLECTION REQUIREMENTS (MAX 24" O.C.).
13. ALL TRUSSES AND/OR ENGINEERED FLOORS TO BE DESIGNED FOR:
 - a. LIVE LOAD DEFLECTION OF L480 FOR RESIDENT UNITS.
 - b. LIVE LOAD DEFLECTION OF L360 FOR 100 PSF LOAD AREAS.
14. SEE DETAIL 2/5500 FOR CONT BLOCKING REQUIREMENTS IN TRUSS SPACES.
15. SEE SHEET 3000 FOR IRC NAILING SCHEDULE.
16. PROVIDE CONT 2x12 RIBBON AT INTERIOR CORRIDOR.
17. PROVIDE CONT 2x6 RIBBON AT EXTERIOR WALLS.
18. EXTERIOR SHEATHING SHALL BE 7/16" APA RATED SHEATHING NAILS @ 6" OC AT EDGE & 12" OC FIELD UNO.
19. BEARING STUDS TO BE CONTINUOUS DOWN TO FOUNDATION LEVEL.

ALL STEEL IN CONTACT WITH TREATED WOOD (CONNECTORS, JOIST HANGERS, NAILS, SCREWS, ANCHOR BOLTS ETC.) SHALL BE STAINLESS STEEL OR GALVANIZED TO THE REQUIREMENTS LISTED IN THE WOOD SECTION OF THE STRUCTURAL NOTES.

(3) 1 3/4" x 5 1/2" LVL'S FULL HT. BETWEEN PLATES W/ A35 FRAMING ANGLES EACH SIDE OF LVL'S TO TOP & BOTTOM PLATES. (TYP. @ ALL BALCONIES)

1 THIRD FLOOR FRAMING PLAN - AREA 'B'
S107 SCALE: 1/8" = 1'-0"



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Project Manager: DAS
Drawn By: SR
Date: 09/30/2016

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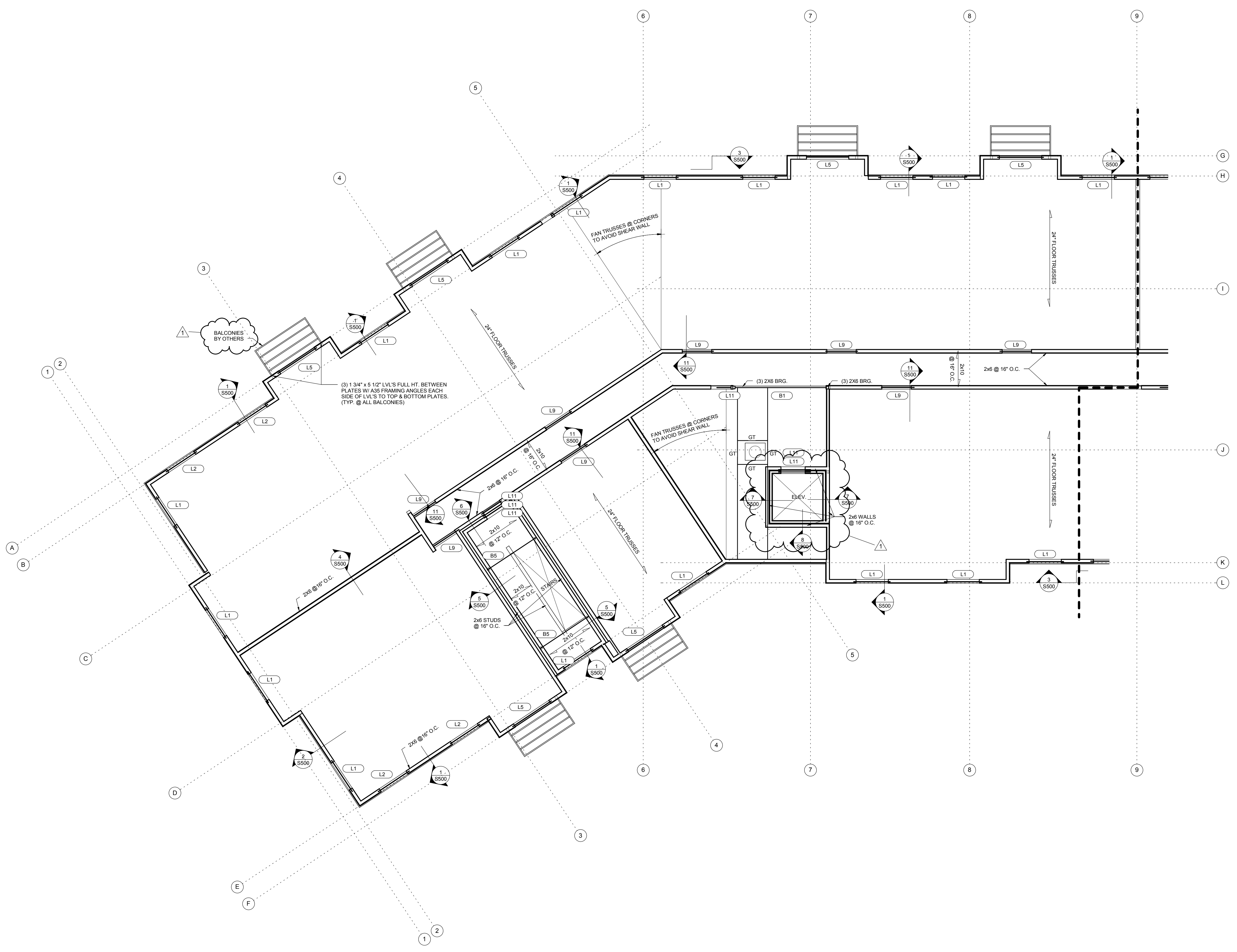
New Apartment Complex:

**Rivers Ridge
Luxury
Apartments**

Red Wing, MN

Third Floor Framing Plan - Area B

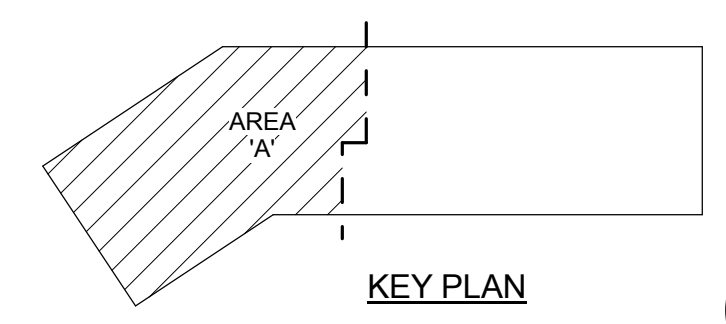
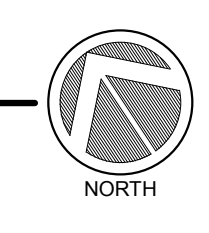
S107



- FLOOR FRAMING PLAN NOTES:**
- 1ST FLOOR TOP OF PLANK = 100'-0"
 - 2ND FLOOR TOP OF SHEATHING = 111'-1 7/8"
 - 3RD FLOOR TOP OF SHEATHING = 121'-3 3/4"
 - 4TH FLOOR TOP OF SHEATHING = 131'-8 5/8"
 - FLOOR SHEATHING TO BE 3/4" TONGUE AND GROOVE PLYWOOD GLUED AND NAILED. (SEE SPECIFICATIONS).
 - ALL FLOOR AREA TO HAVE 3/4" GYPCRETE, UNO. (SEE ARCH).
 - PROVIDE BRIDGING FOR FLOOR TRUSSES ACCORDING TO MANUFACTURER'S RECOMMENDATION.
 - DIMENSIONAL LUMBER FLOOR JOISTS TO HAVE BRIDGING AT INTERVALS NOT TO EXCEED 8'-0"
 - SEE ARCH FOR ALL OPENING SIZES AND LOCATIONS.
 - ALL INTERIOR STEEL BEAMS TO HAVE 2x WOOD TOP PLATES WITH 1/2" DIA THROUGH BOLTS AT 48" O.C., STAGGERED.
 - COORDINATE ALL TRUSSES WITH PLUMBING LOCATIONS.
 - ADJUST TRUSS SPACING AS NECESSARY FOR LOAD AND DEFLECTION REQUIREMENTS (MAX 24" O.C.).
 - ALL TRUSSES AND/OR ENGINEERED FLOORS TO BE DESIGNED FOR:
 - LIVE LOAD DEFLECTION OF L480 FOR RESIDENT UNITS.
 - LIVE LOAD DEFLECTION OF L360 FOR 100 PSF LOAD AREAS.
 - SEE DETAIL 2/5500 FOR CONT. BLOCKING REQUIREMENTS IN TRUSS SPACE.
 - SEE SHEET 3000 FOR IRC NAILING SCHEDULE.
 - PROVIDE CONT 2x12 RIBBON AT INTERIOR CORRIDOR.
 - PROVIDE CONT 2x6 RIBBON AT EXTERIOR CORRIDOR.
 - EXTERIOR SHEATHING SHALL BE 7/16" APA RATED SHEATHING NAILS @ 6" OC AT EDGE & 12" OC FIELD UNO.
 - BEARING STUDS TO BE CONTINUOUS DOWN TO FOUNDATION LEVEL.

ALL STEEL IN CONTACT WITH TREATED WOOD (CONNECTORS, JOIST HANGERS, NAILS, SCREWS, ANCHOR BOLTS ETC.) SHALL BE STAINLESS STEEL OR GALVANIZED TO THE REQUIREMENTS LISTED IN THE WOOD SECTION OF THE STRUCTURAL NOTES.

1 FOURTH FLOOR FRAMING PLAN - AREA A
S108 SCALE: 1/8" = 1'-0"



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Signature: *Kesh Ramdular*
 Printed Name: Kesh Ramdular
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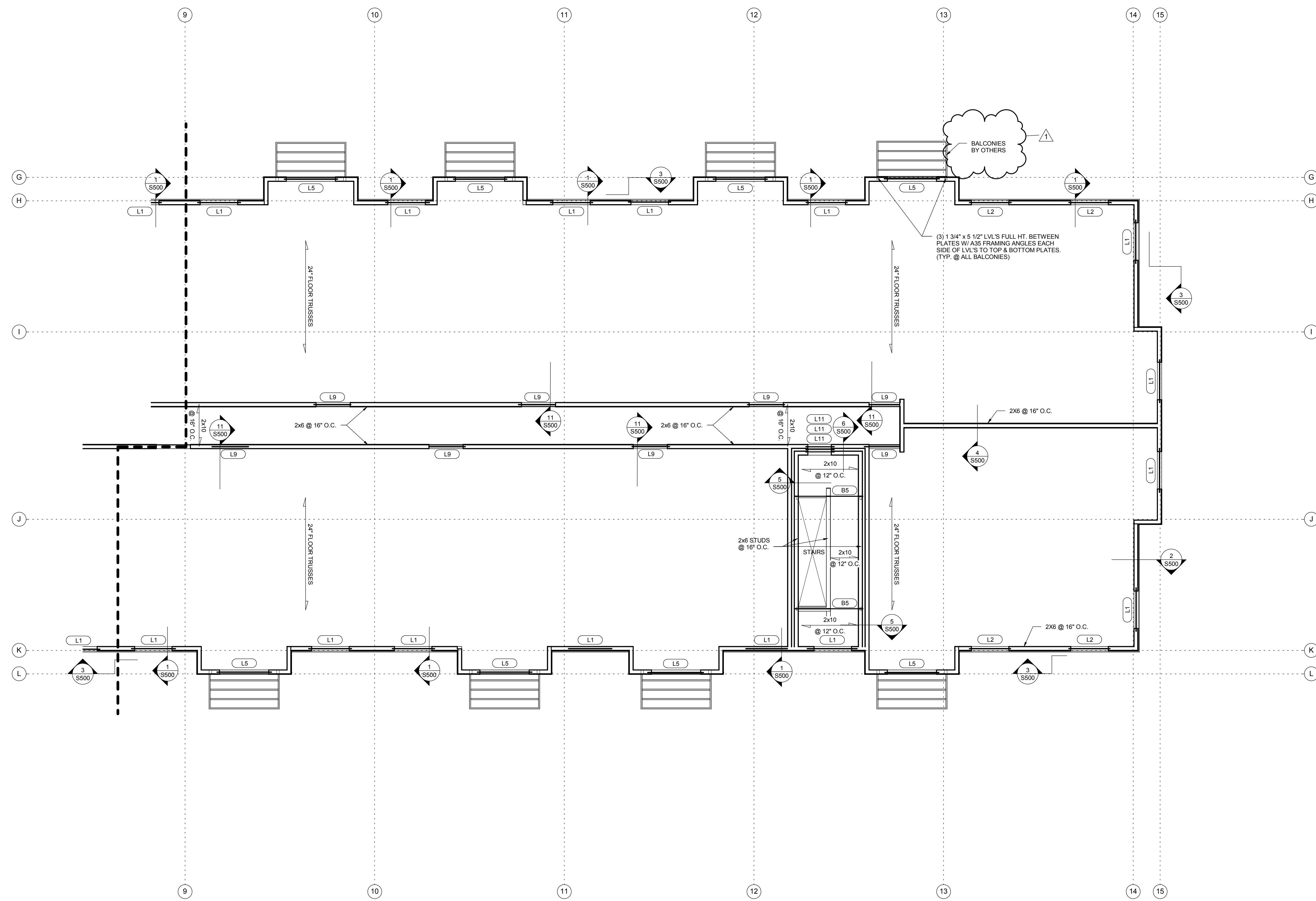
New Apartment Complex:

Rivers Ridge
 Luxury
 Apartments

Red Wing, MN

Fourth Floor Framing Plan
 - Area A

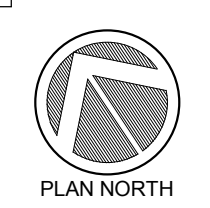
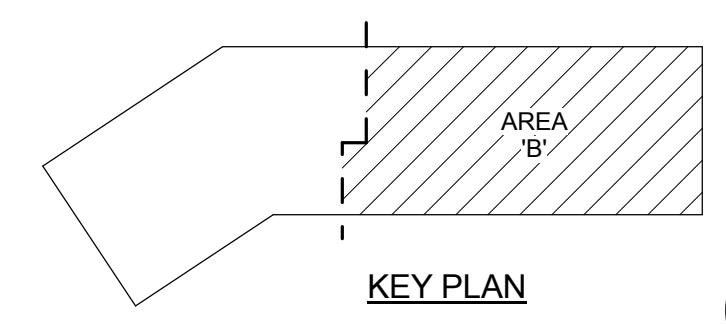
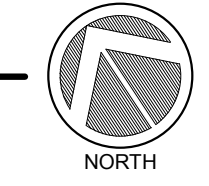
S108



- FLOOR FRAMING PLAN NOTES:**
- 1ST FLOOR TOP OF PLANK = 100'-0"
 - 2ND FLOOR TOP OF SHEATHING = 111'-1 7/8"
 - 3RD FLOOR TOP OF SHEATHING = 121'-3 3/4"
 - 4TH FLOOR TOP OF SHEATHING = 131'-5 5/8"
 - FLOOR SHEATHING TO BE 3/4" TONGUE AND GROOVE PLYWOOD GLUED AND NAILED. (SEE SPECIFICATIONS).
 - ALL FLOOR AREA TO HAVE 3" GYPCRETE, UNO. (SEE ARCH).
 - PROVIDE BRIDGING FOR FLOOR TRUSSES ACCORDING TO MANUFACTURER'S RECOMMENDATION.
 - DIMENSIONAL LUMBER FLOOR JOISTS TO HAVE BRIDGING AT INTERVALS NOT TO EXCEED 8'-0".
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 - COORDINATE ALL TRUSSES WITH PLUMBING LOCATIONS.
 - ADJUST TRUSS SPACING AS NECESSARY FOR LOAD AND DEFLECTION REQUIREMENTS (MAX 24" O.C.).
 - ALL TRUSSES AND/OR ENGINEERED FLOORS TO BE DESIGNED FOR:
 - LIVE LOAD DEFLECTION OF L480 FOR RESIDENT UNITS.
 - LIVE LOAD DEFLECTION OF L360 FOR 100 PSF LOAD AREAS.
 - SEE DETAIL 25500 FOR CONT. BLOCKING REQUIREMENTS IN TRUSS SPACE.
 - SEE SHEET 3006 FOR IRC NAILING SCHEDULE.
 - PROVIDE CONT 2x12 RIBBON AT INTERIOR CORRIDOR.
 - PROVIDE CONT 2x6 RIBBON AT EXTERIOR WALLS.
 - EXTERIOR SHEATHING SHALL BE 7/16" APA RATED SHEATHING NAILS @ 6" OC AT EDGE & 12" OC FIELD UNO.
 - BEARING STUDS TO BE CONTINUOUS DOWN TO FOUNDATION LEVEL.

ALL STEEL IN CONTACT WITH TREATED WOOD (CONNECTORS, JOIST HANGERS, NAILS, SCREWS, ANCHOR BOLTS ETC.) SHALL BE STAINLESS STEEL OR GALVANIZED TO THE REQUIREMENTS LISTED IN THE WOOD SECTION OF THE STRUCTURAL NOTES.

1 FOURTH FLOOR FRAMING PLAN - AREA 'B'
S109 SCALE: 1/8" = 1'-0"



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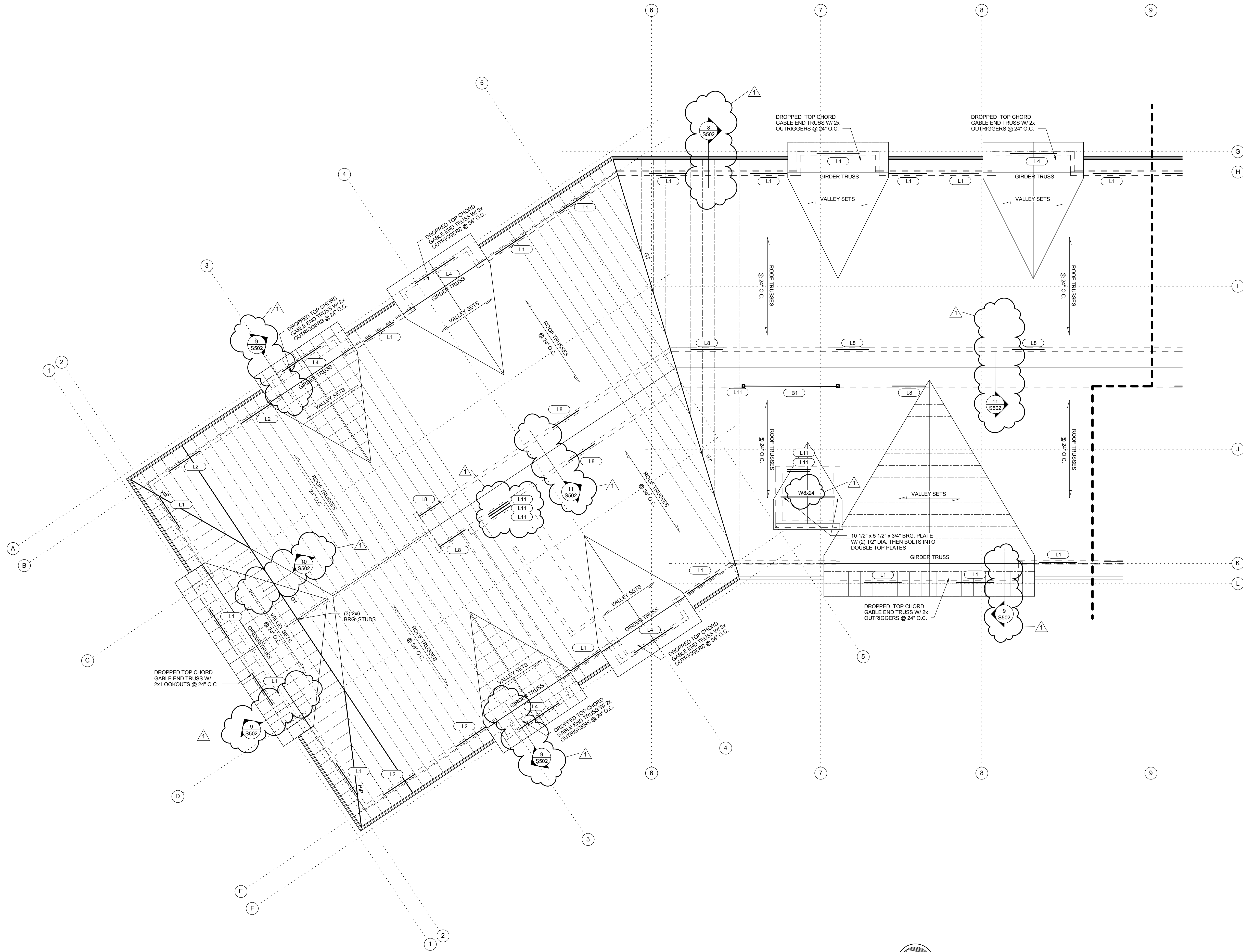
New Apartment Complex:

**Rivers Ridge
Luxury
Apartments**

Red Wing, MN

Fourth Floor Framing Plan
- Area B

S109



- GENERAL NOTES:**
1. TRUSS BEARING = 130' - 6.34", UNLESS NOTED OTHERWISE.
 2. PROVIDE BRIDGING FOR ROOF TRUSSES ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
 3. DIMENSIONAL LUMBER ROOF JOISTS TO HAVE BRIDGING AT INTERVALS NOT TO EXCEED 8' - 0".
 4. TIE NON-BEARING WALLS TO BOTTOM CHORD OF ROOF TRUSS AT 3' - 0" O.C.
 5. ALL BEARING STUDS AT GIRDERS AND OPENINGS CONTINUOUS DOWN TO THE FOUNDATION.
 6. ROOF SHEATHING TO BE 1/2" APA RATED SHEATHING. SEE DETAIL -S502 FOR NAILING PATTERN.
 7. END JOINT OF SHEATHINGS SHALL BE STAGGERED AND NAILING PATTERN SHALL BE ACCORDING TO THE IBC. SEE SHEET S001 FOR IBC NAILING SCHEDULE.
 8. PLYWOOD CLIPS SHALL BE USED WHEN SUPPORTING MEMBERS ARE SPACED GREATER THAN 16' O.C.
 9. SEE ARCHITECTURAL DRAWINGS FOR ATTIC ACCESS OPENING AND WALL SEPARATION LOCATIONS.
 10. SEE ARCHITECTURAL DRAWINGS FOR ROOF SLOPES.
 11. VERIFY ALL OVERHANGS AND EAVE CONDITIONS WITH ARCHITECTURAL DRAWINGS.
 12. SEE SHEET S001 FOR SCHEDULES AND ABBREVIATIONS.
 13. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
 14. PROVIDE MINIMUM (2) BRG. STUDS AT ALL GIRDER TRUSSES UNO.

ALL STEEL IN CONTACT WITH TREATED WOOD (CONNECTORS, JOIST HANGERS, WALLS, SCREWS, ANCHOR BOLTS ETC.) SHALL BE STAINLESS STEEL OR GALVANIZED TO THE REQUIREMENTS LISTED IN THE WOOD SECTION OF THE STRUCTURAL NOTES.

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New Apartment Complex:

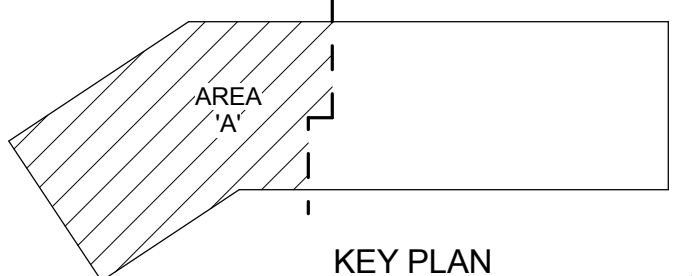
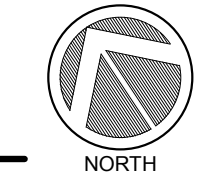
**Rivers Ridge
 Luxury
 Apartments**

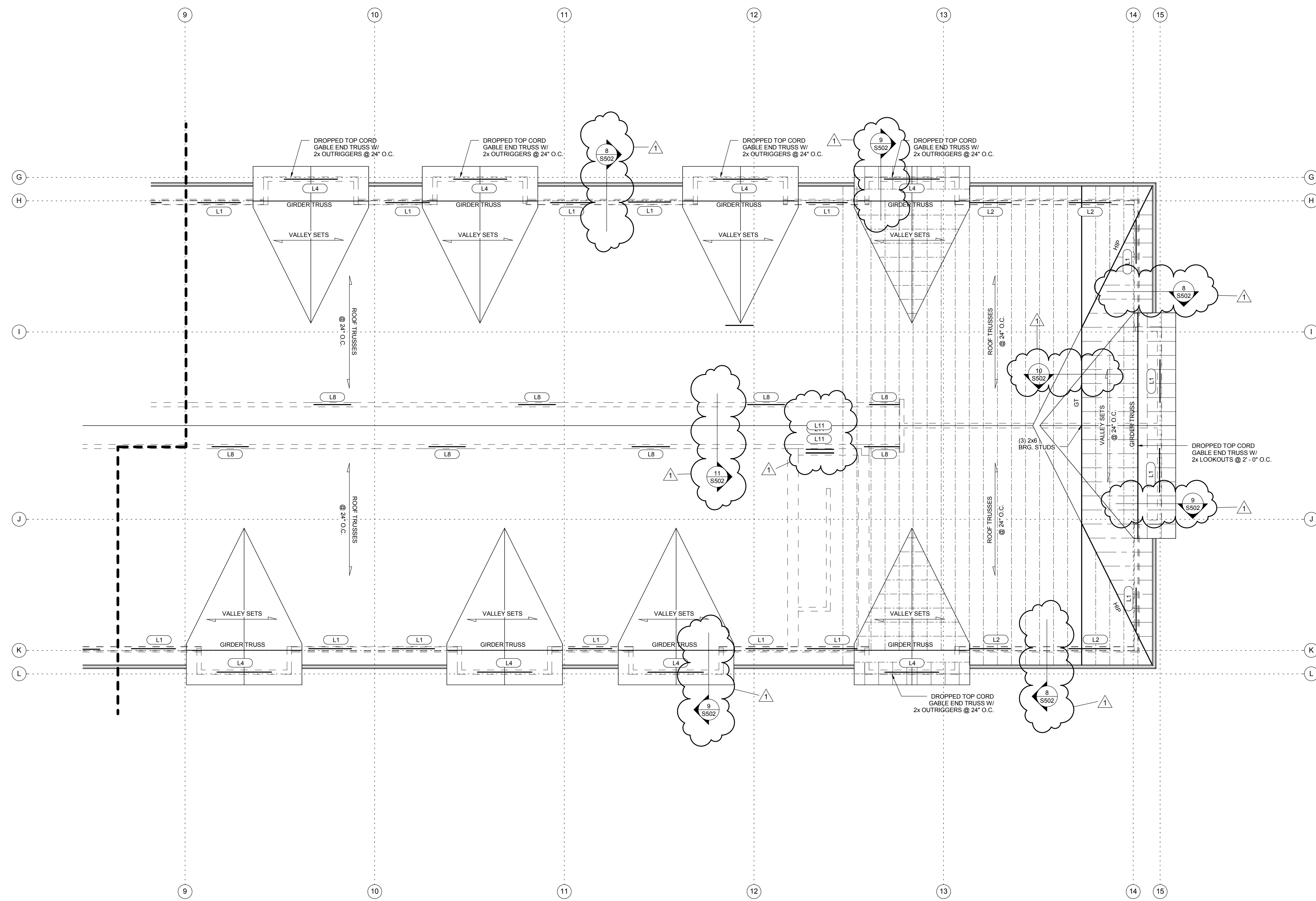
Red Wing, MN

Roof Framing Plan - Area A

S110

1 ROOF FRAMING PLAN - AREA 'A'
 S110 SCALE: 1/8" = 1'-0"

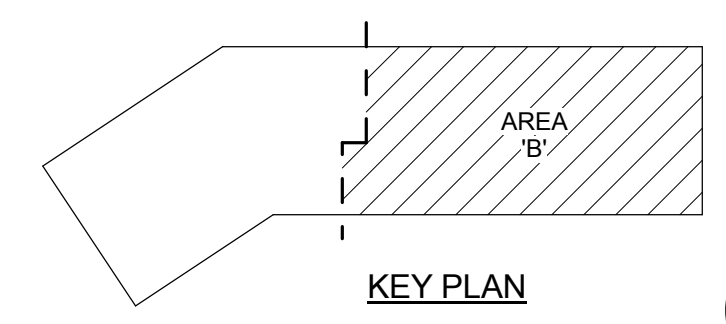




- GENERAL NOTES:**
1. TRUSS BEARING = 136' - 6.34", UNLESS NOTED OTHERWISE.
 2. PROVIDE BRIDGING FOR ROOF TRUSSES ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
 3. DIMENSIONAL LUMBER ROOF JOISTS TO HAVE BRIDGING AT INTERVALS NOT TO EXCEED 8' - 0".
 4. THE NON-BEARING WALLS TO BOTTOM CHORD OF ROOF TRUSS AT 3' - 0" O.C.
 5. ALL BEARING STUDS AT GIRDERS AND OPENINGS CONTINUOUS DOWN TO THE FOUNDATION.
 6. ROOF SHEATHING TO BE 1/2" APA RATED SHEATHING. SEE DETAIL -S502 FOR NAILING PATTERN.
 7. END JOINT OF SHEATHING SHALL BE STAGGERED AND NAILING PATTERN SHALL BE ACCORDING TO THE IBC. SEE SHEET S001 FOR IBC NAILING SCHEDULE.
 8. PLYWOOD CLIPS SHALL BE USED WHEN SUPPORTING MEMBERS ARE SPACED GREATER THAN 16' O.C.
 9. SEE ARCHITECTURAL DRAWINGS FOR ATTIC ACCESS OPENING AND WALL SEPARATION LOCATIONS.
 10. SEE ARCHITECTURAL DRAWINGS FOR ROOF SLOPES.
 11. VERIFY ALL OVERHANG AND EAVE CONDITIONS WITH ARCHITECTURAL DRAWINGS.
 12. SEE SHEET S001 FOR SCHEDULES AND ABBREVIATIONS.
 13. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
 14. PROVIDE MINIMUM (2) BRG. STUDS AT ALL GIRDER TRUSSES UNO.

ALL STEEL IN CONTACT WITH TREATED WOOD (CONNECTORS, JOIST HANGERS, NAILS, SCREWS, ANCHOR BOLTS ETC.) SHALL BE STAINLESS STEEL OR GALVANIZED TO THE REQUIREMENTS LISTED IN THE WOOD SECTION OF THE STRUCTURAL NOTES.

1 ROOF FRAMING PLAN - AREA 'B'
S111 SCALE: 1/8" = 1'-0"



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Signature: *Kesh Ramdular*
Printed Name: Kesh Ramdular
License No.: 16256
Date: 09/30/2016

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Project No: 1602
Project Manager: DAS
Drawn By: SR
Date: 09/30/2016

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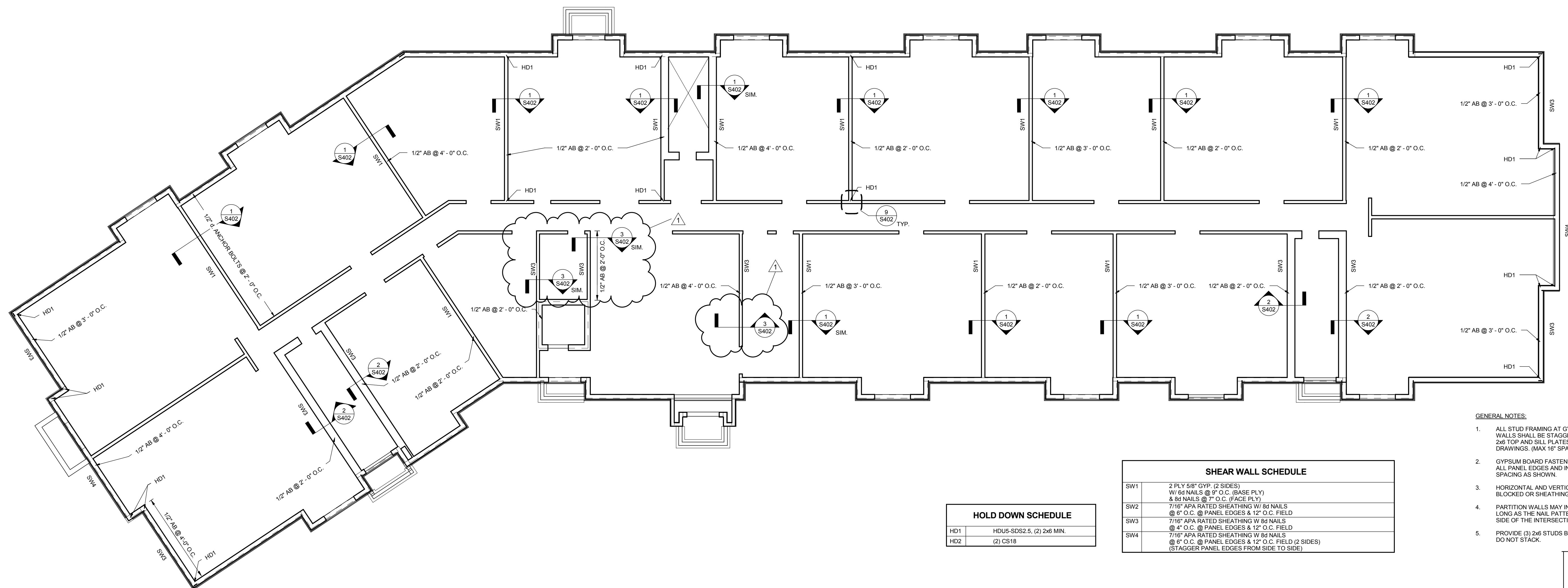
New Apartment Complex:

**Rivers Ridge
Luxury
Apartments**

Red Wing, MN

Roof Framing Plan - Area B

S111

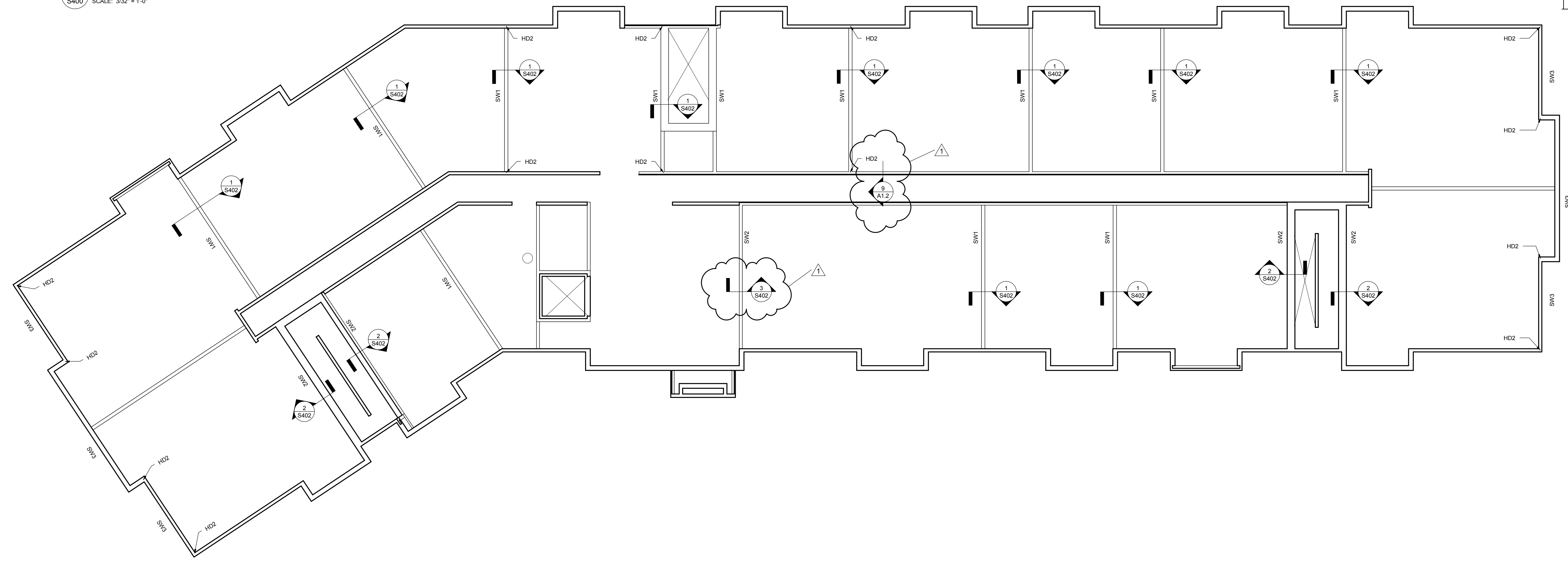
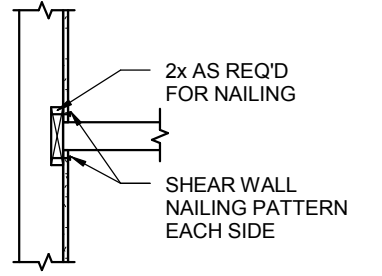


1 FIRST FLOOR SHEAR WALL PLAN
S400 SCALE: 3/32" = 1'-0"

HOLD DOWN SCHEDULE	
HD1	HDU5-SDS2.5, (2) 2x6 MIN.
HD2	(2) CS18

SHEAR WALL SCHEDULE	
SW1	2 PLY S40 GYP (2 SIDES) W/ 8d NAILS @ 7" O.C. (BASE PLY) & 8d NAILS @ 7" O.C. (FACE PLY)
SW2	7/16" APA RATED SHEATHING W/ 8d NAILS @ 6" O.C. @ PANEL EDGES & 12" O.C. FIELD
SW3	7/16" APA RATED SHEATHING W/ 8d NAILS @ 4" O.C. @ PANEL EDGES & 12" O.C. FIELD
SW4	7/16" APA RATED SHEATHING W/ 8d NAILS @ 6" O.C. @ PANEL EDGES & 12" O.C. FIELD (2 SIDES) (STAGGER PANEL EDGES FROM SIDE TO SIDE)

- GENERAL NOTES:**
- ALL STUD FRAMING AT GYPSUM BOARD SHEAR WALLS SHALL BE STAGGERED 2x4 AT 16" O.C. WITH 2x6 TOP AND SILL PLATES. SEE ARCHITECTURAL DRAWINGS. (MAX 16" SPACING OF 2x4s)
 - GYPSUM BOARD FASTENERS SHALL BE PROVIDED AT ALL PANEL EDGES AND INTERMEDIATE STUDS WITH SPACING AS SHOWN.
 - HORIZONTAL AND VERTICAL JOINTS MUST BE BLOCKED OR SHEATHING APPLIED VERTICALLY.
 - PARTITION WALLS MAY INTERSECT SHEAR WALLS AS LONG AS THE NAIL PATTERN IS FOLLOWED ON EACH SIDE OF THE INTERSECTION AS SHOWN BELOW.
 - PROVIDE (3) 2x6 STUDS BELOW ALL SHEAR WALLS THAT DO NOT STACK.



2 SECOND FLOOR SHEAR WALL PLAN
S400 SCALE: 3/32" = 1'-0"



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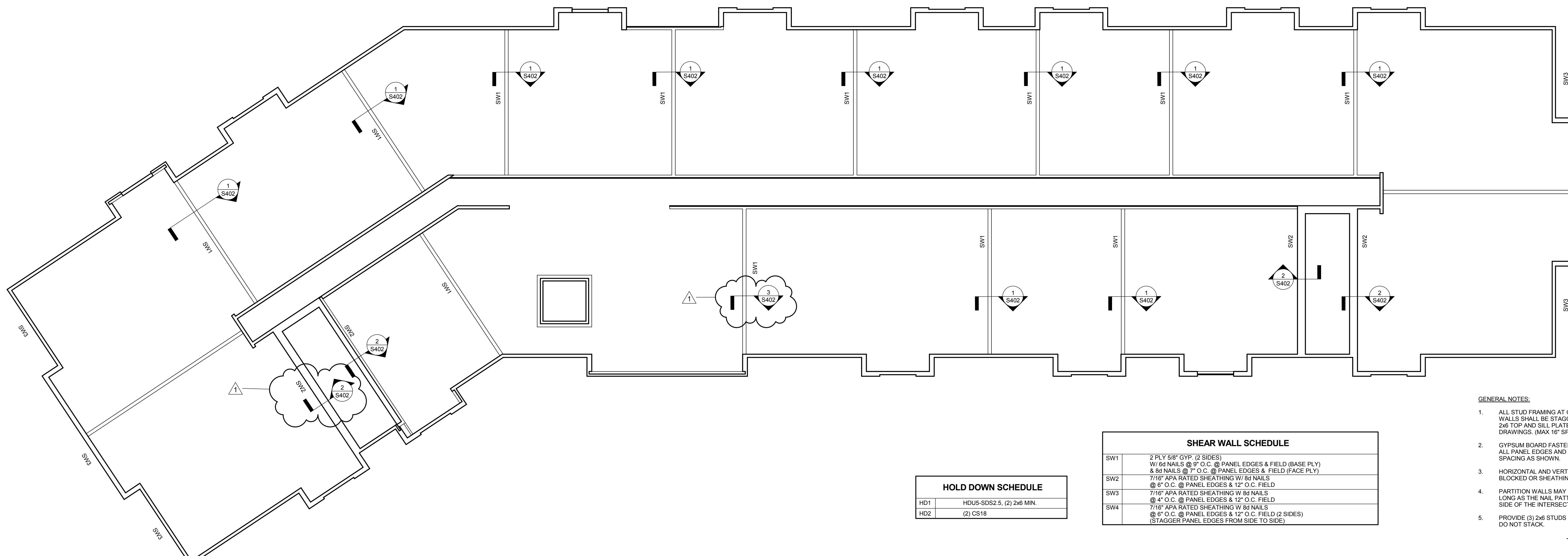
New Apartment Complex:

**Rivers Ridge
Luxury
Apartments**

Red Wing, MN

Shear Wall Plans

S400

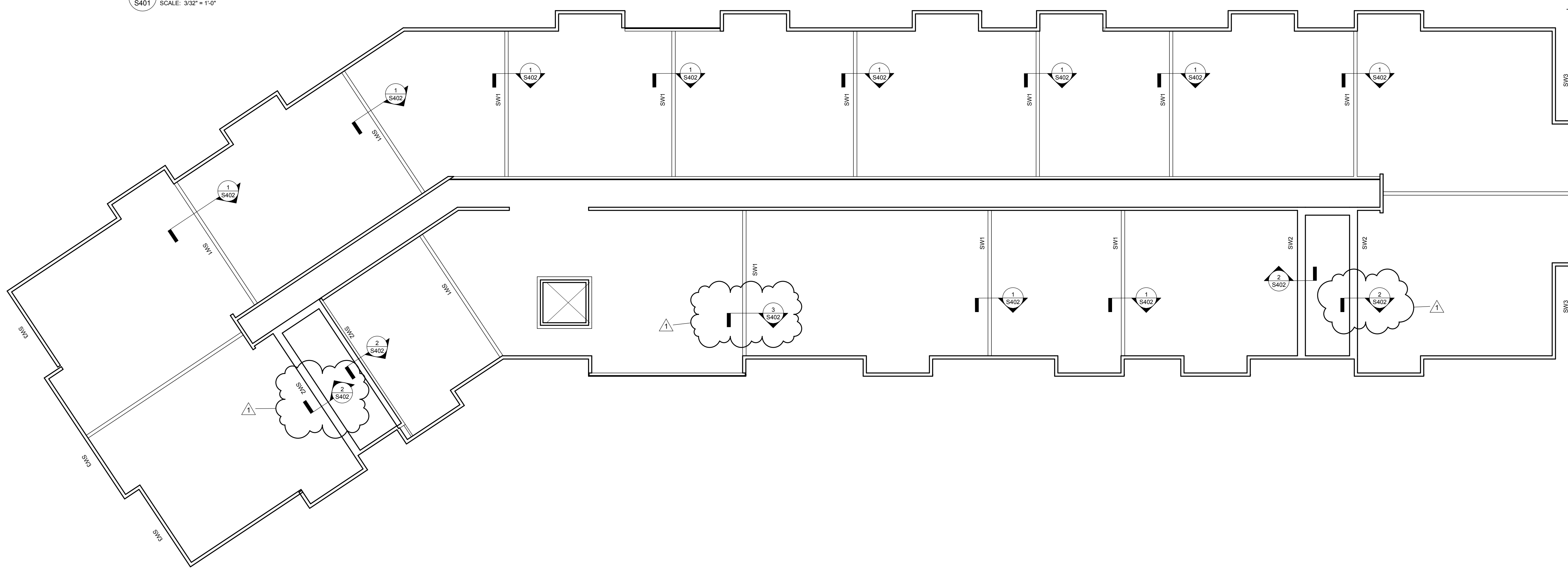
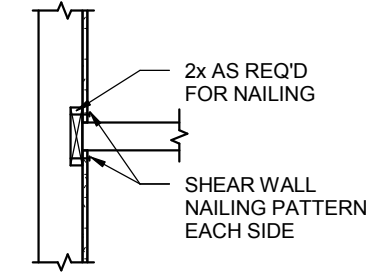


1 THIRD FLOOR SHEAR WALL PLAN
SCALE: 3/32" = 1'-0"

HOLD DOWN SCHEDULE	
HD1	HDU5-SDS2.5, (2) 2x6 MIN.
HD2	(2) CS18

SHEAR WALL SCHEDULE	
SW1	2 PLY 5/8" GYP (2 SIDES) W/ 8d NAILS @ 9" O.C. @ PANEL EDGES & FIELD (BASE PLY) & 8d NAILS @ 7" O.C. @ PANEL EDGES & FIELD (FACE PLY)
SW2	7/16" APA RATED SHEATHING W/ 8d NAILS @ 8" O.C. @ PANEL EDGES & 12" O.C. FIELD
SW3	7/16" APA RATED SHEATHING W/ 8d NAILS @ 4" O.C. @ PANEL EDGES & 12" O.C. FIELD
SW4	7/16" APA RATED SHEATHING W/ 8d NAILS @ 8" O.C. @ PANEL EDGES & 12" O.C. FIELD (2 SIDES) (STAGGER PANEL EDGES FROM SIDE TO SIDE)

- GENERAL NOTES:**
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 - GYPSUM BOARD FASTENERS SHALL BE PROVIDED AT ALL PANEL EDGES AND INTERMEDIATE STUDS WITH SPACING AS SHOWN.
 - HORIZONTAL AND VERTICAL JOINTS MUST BE BLOCKED OR SHEATHING APPLIED VERTICALLY.
 - PARTITION WALLS MAY INTERSECT SHEAR WALLS AS LONG AS THE NAIL PATTERN IS FOLLOWED ON EACH SIDE OF THE INTERSECTION AS SHOWN BELOW.
 - PROVIDE (3) 2x6 STUDS BELOW ALL SHEAR WALLS THAT DO NOT STACK.



2 FOURTH FLOOR SHEAR WALL PLAN
SCALE: 3/32" = 1'-0"



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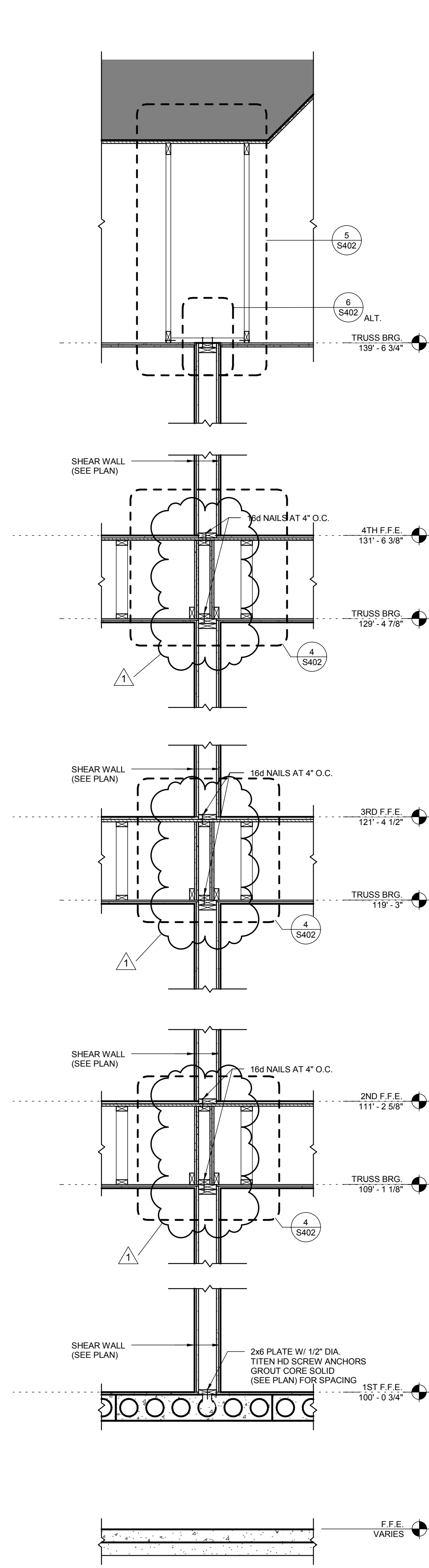
New Apartment Complex:

**Rivers Ridge
Luxury
Apartments**

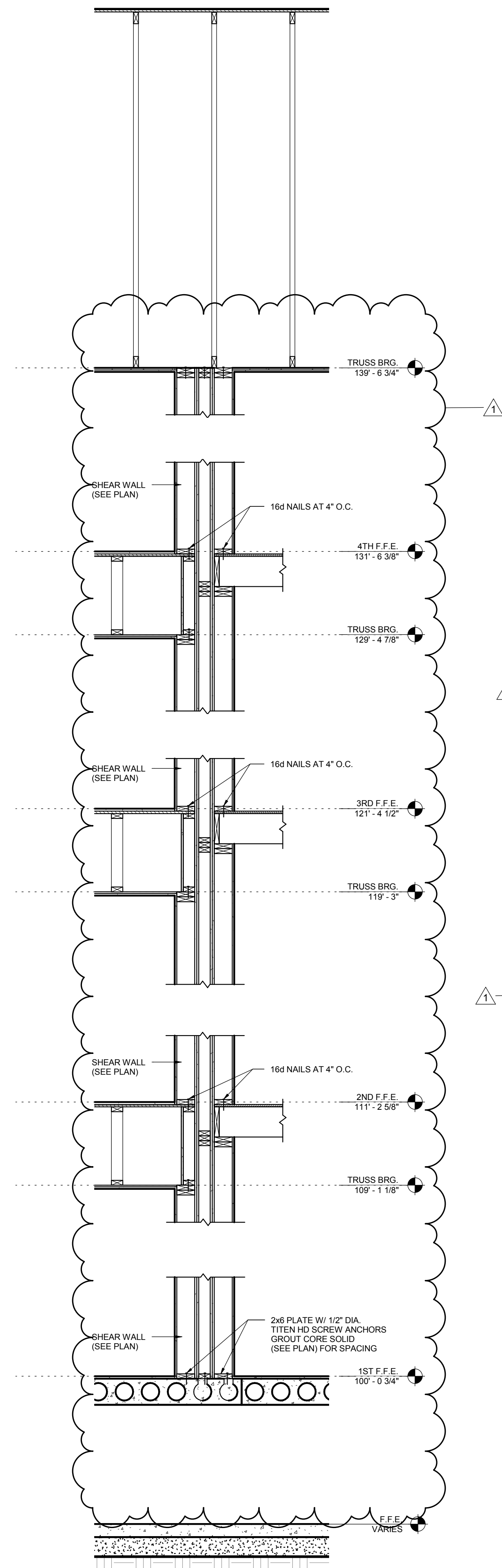
Red Wing, MN

Shear Wall Plans

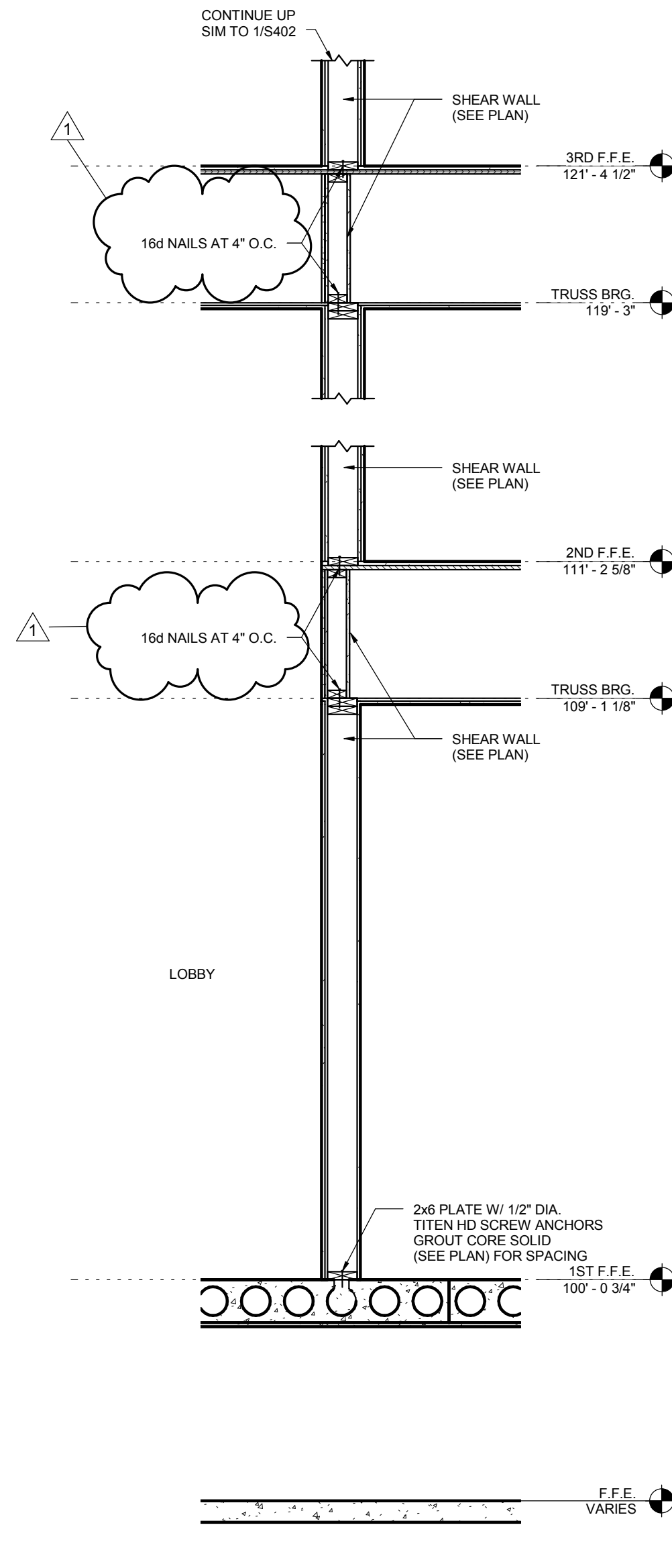
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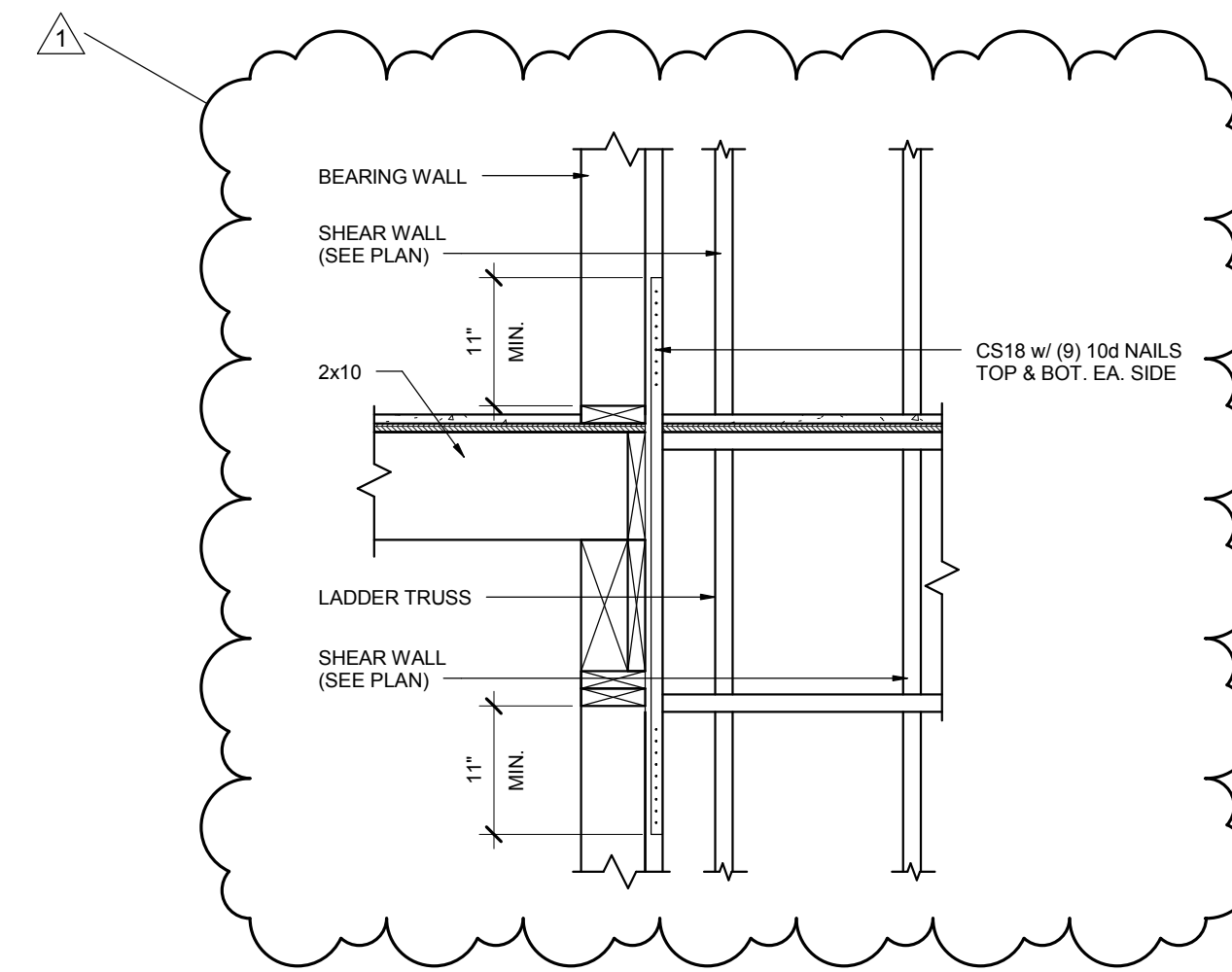
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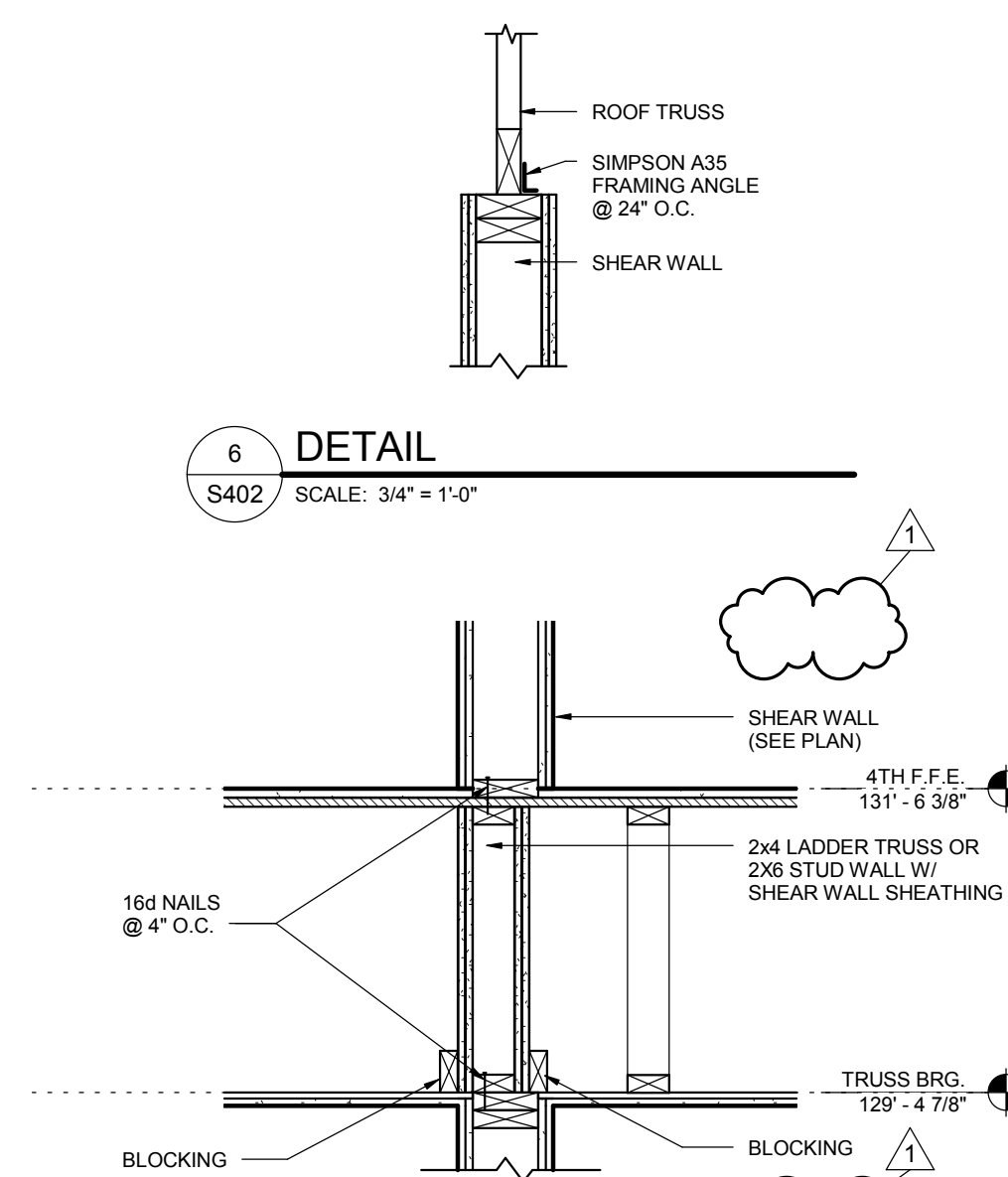
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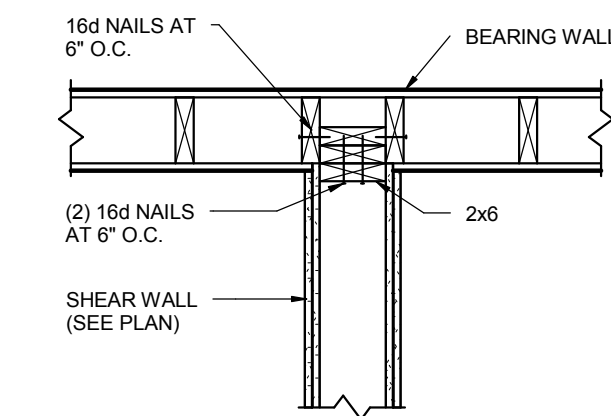
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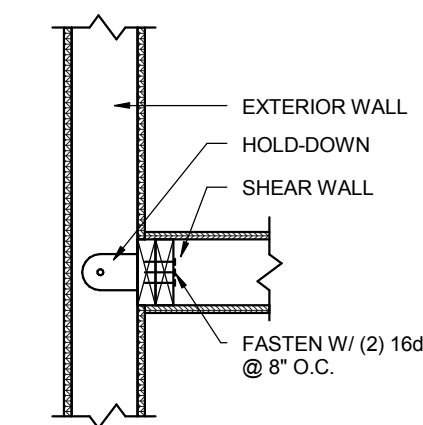
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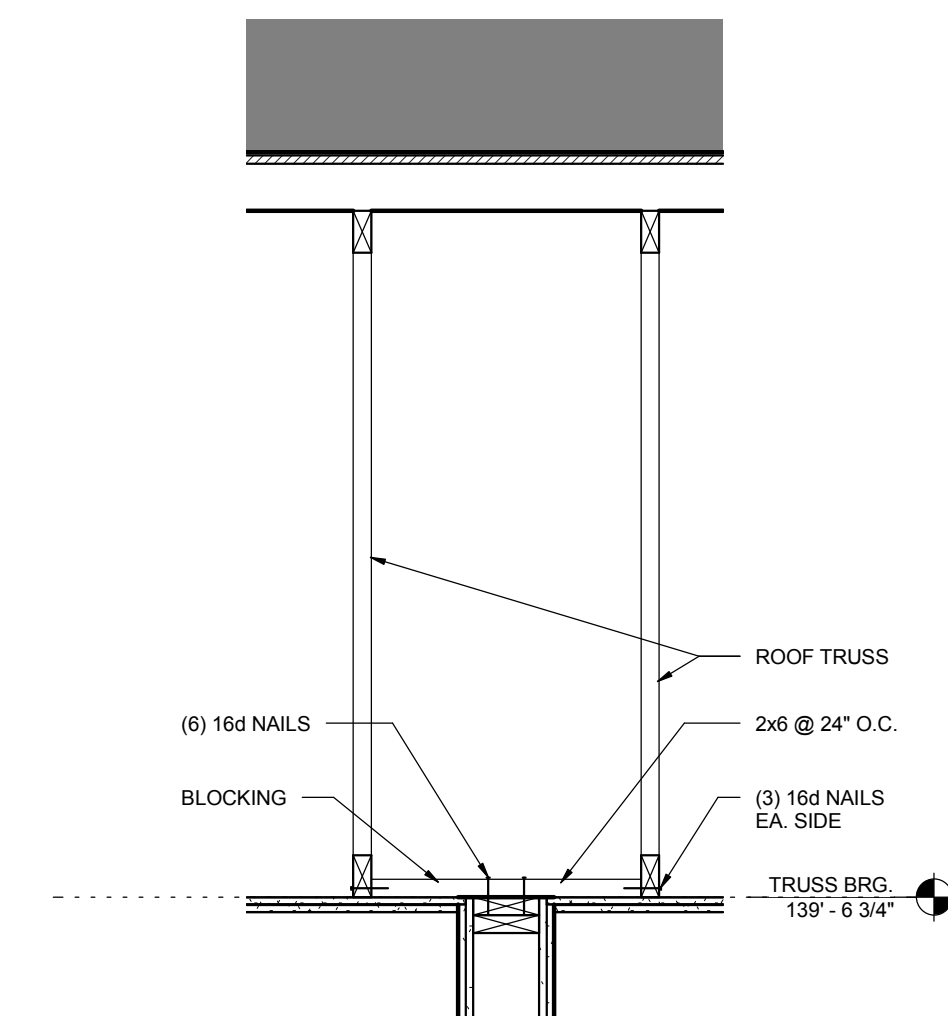
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S402 SCALE: 3/4" = 1'-0"



6 DETAIL
S402 SCALE: 3/4" = 1'-0"



7 DETAIL
S402 SCALE: 3/4" = 1'-0"



8 DETAIL
S402 SCALE: 3/4" = 1'-0"

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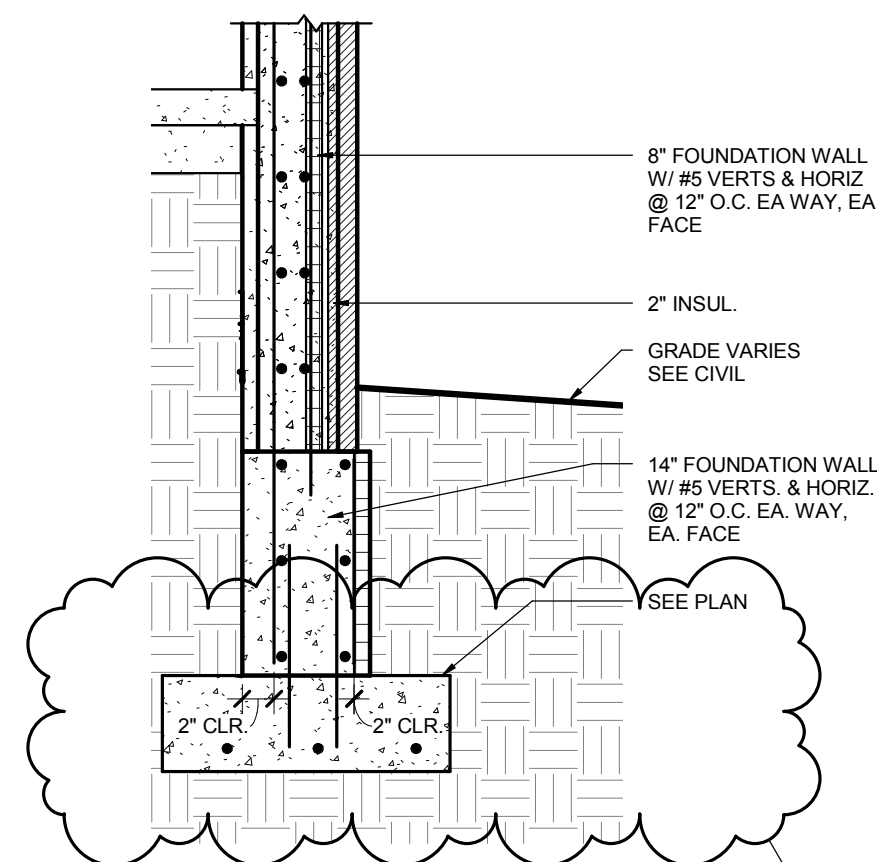
New Apartment Complex:

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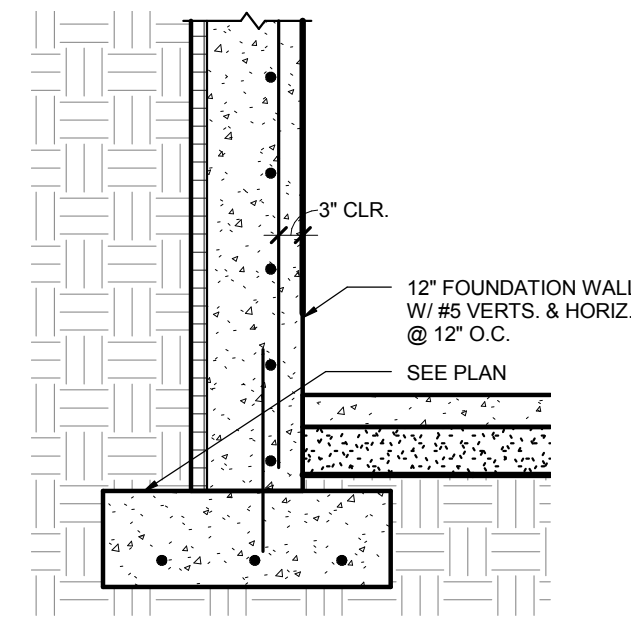
Red Wing, MN

Shear Wall Details

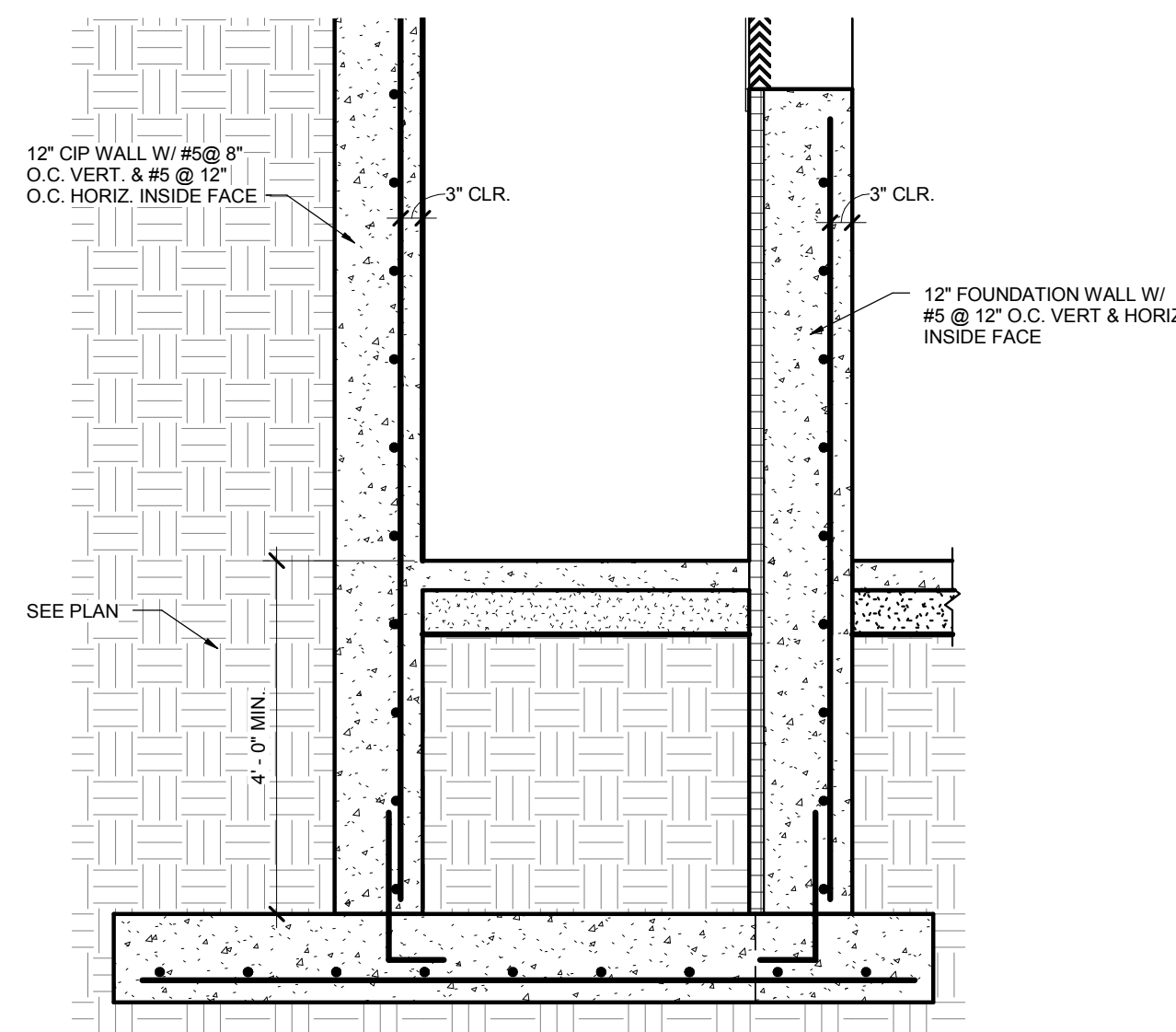
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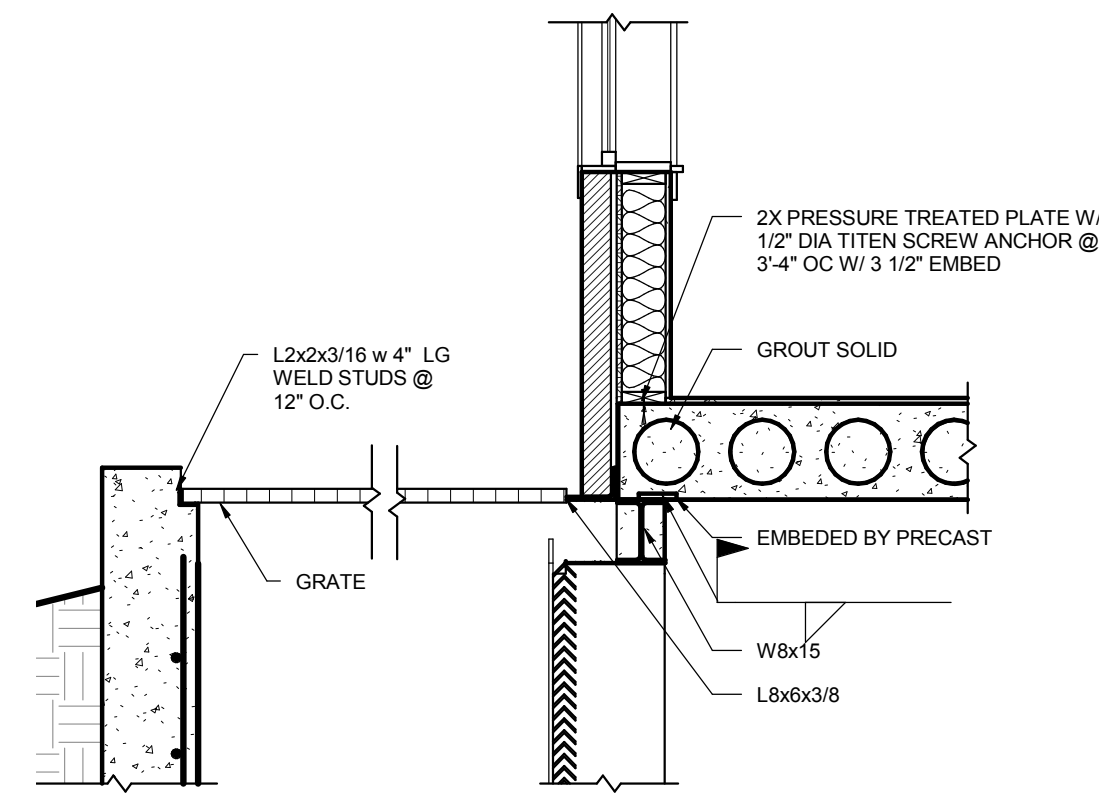
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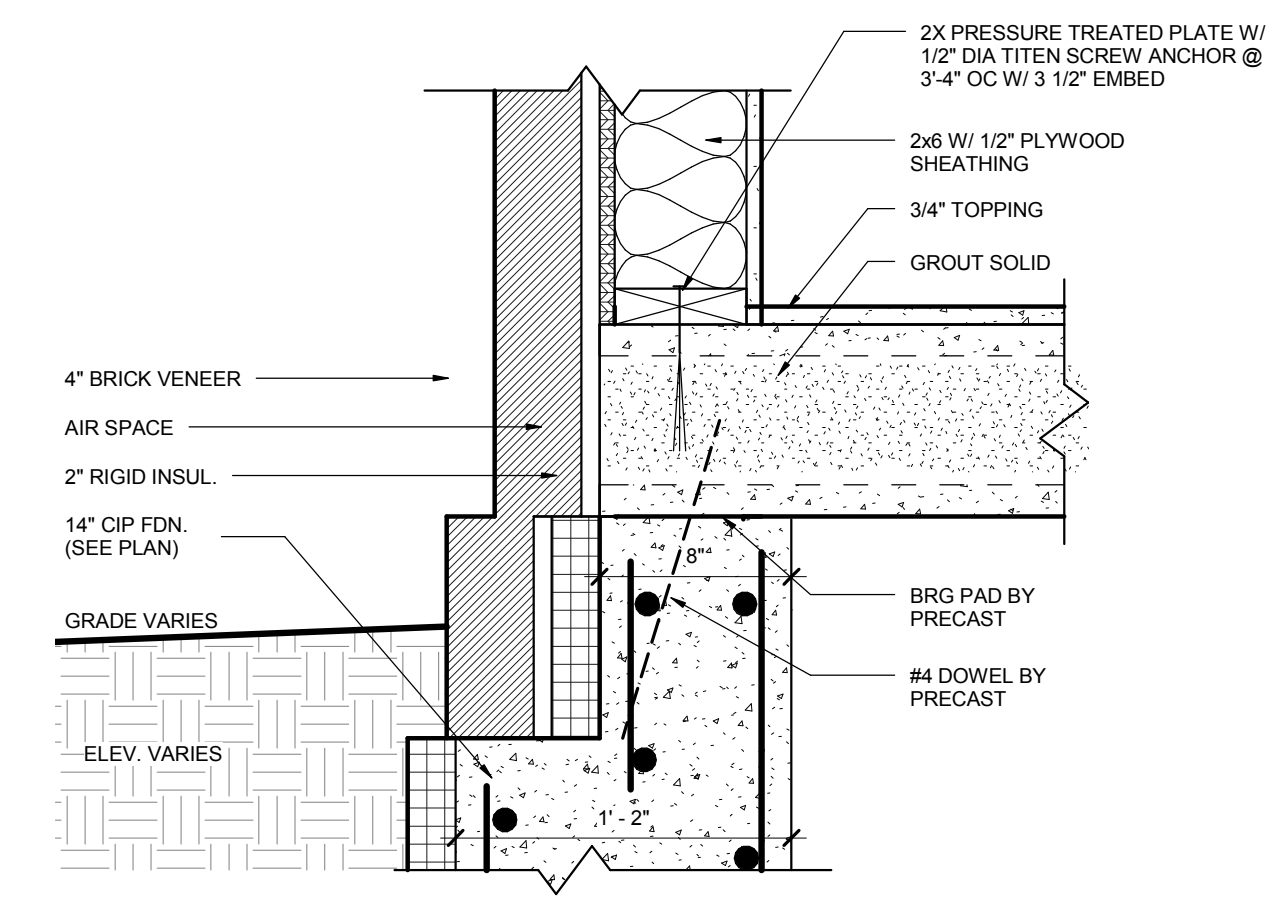
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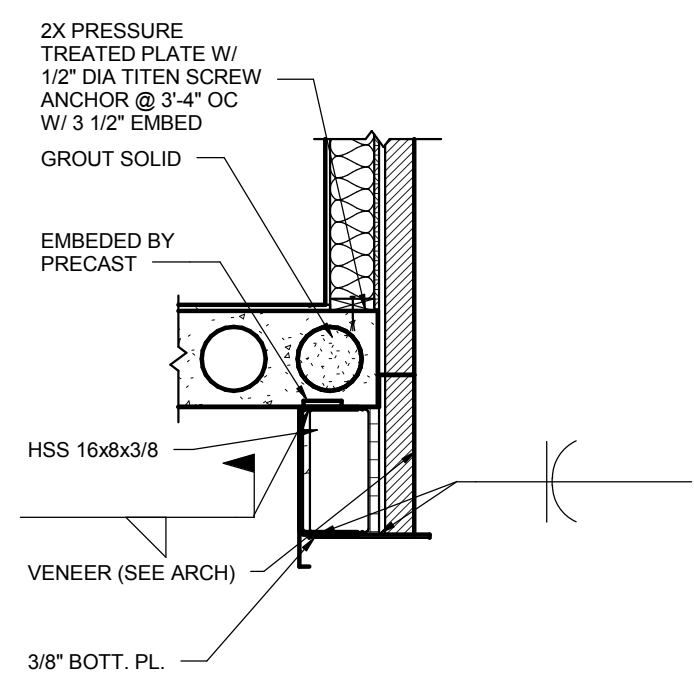
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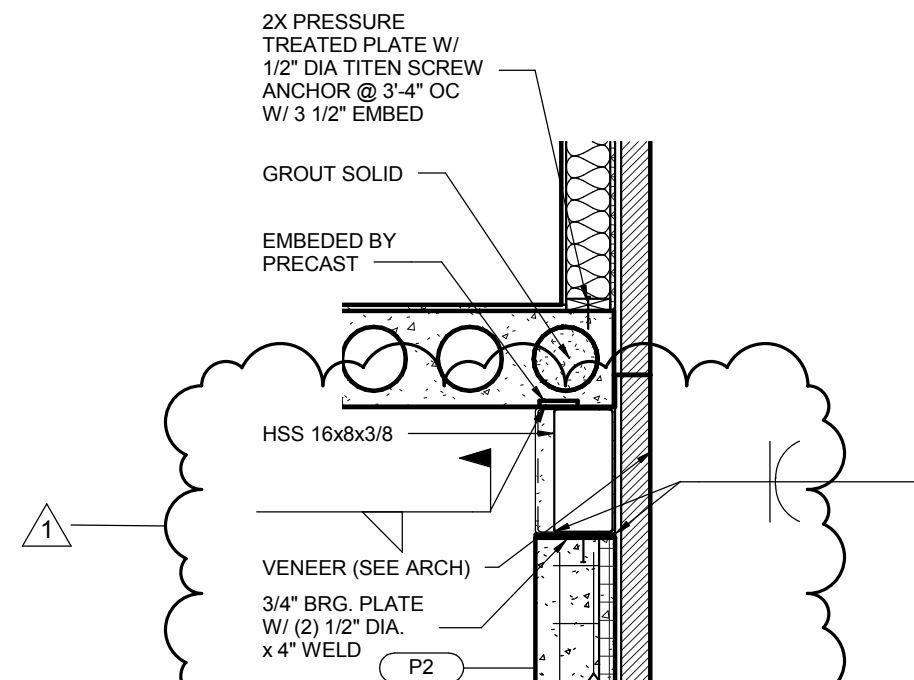
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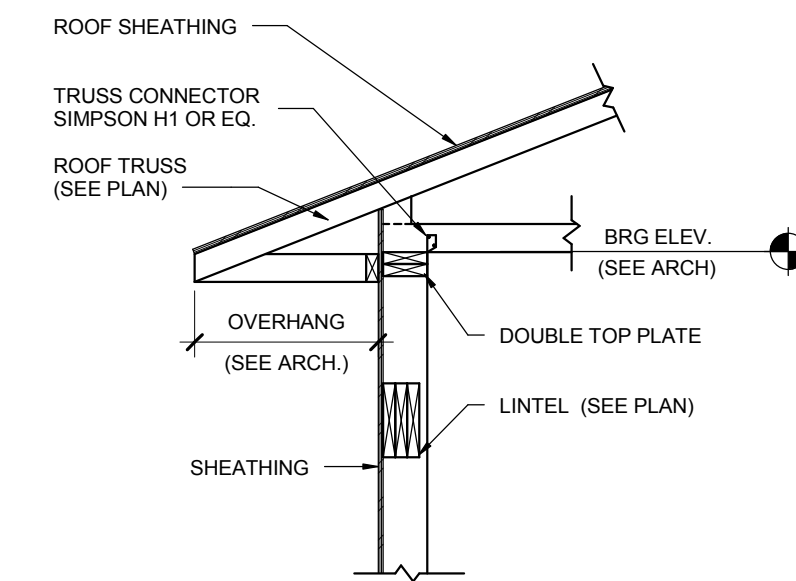
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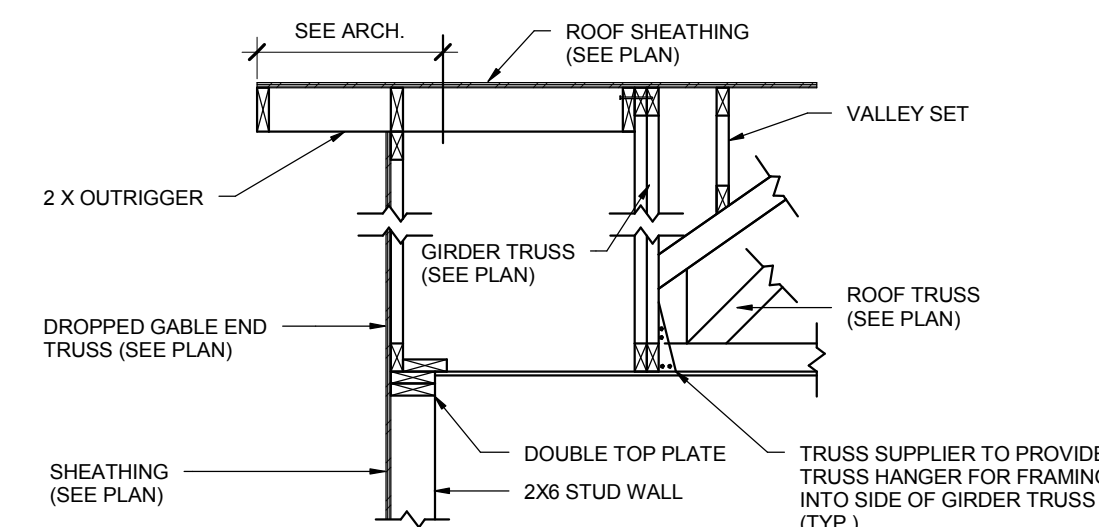
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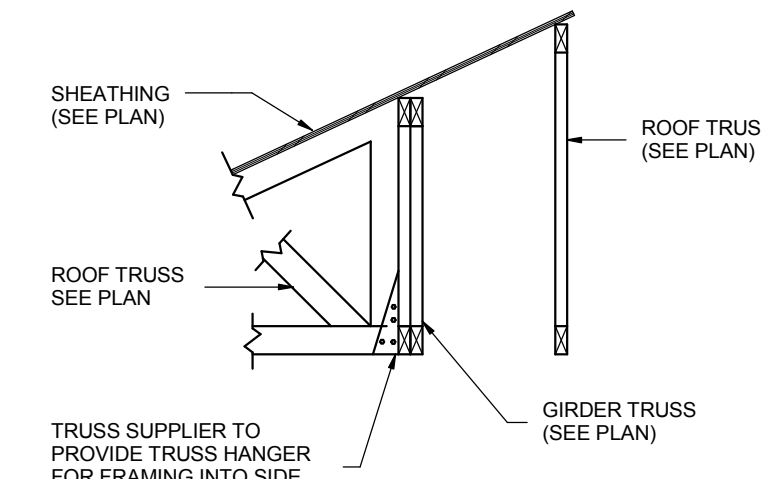
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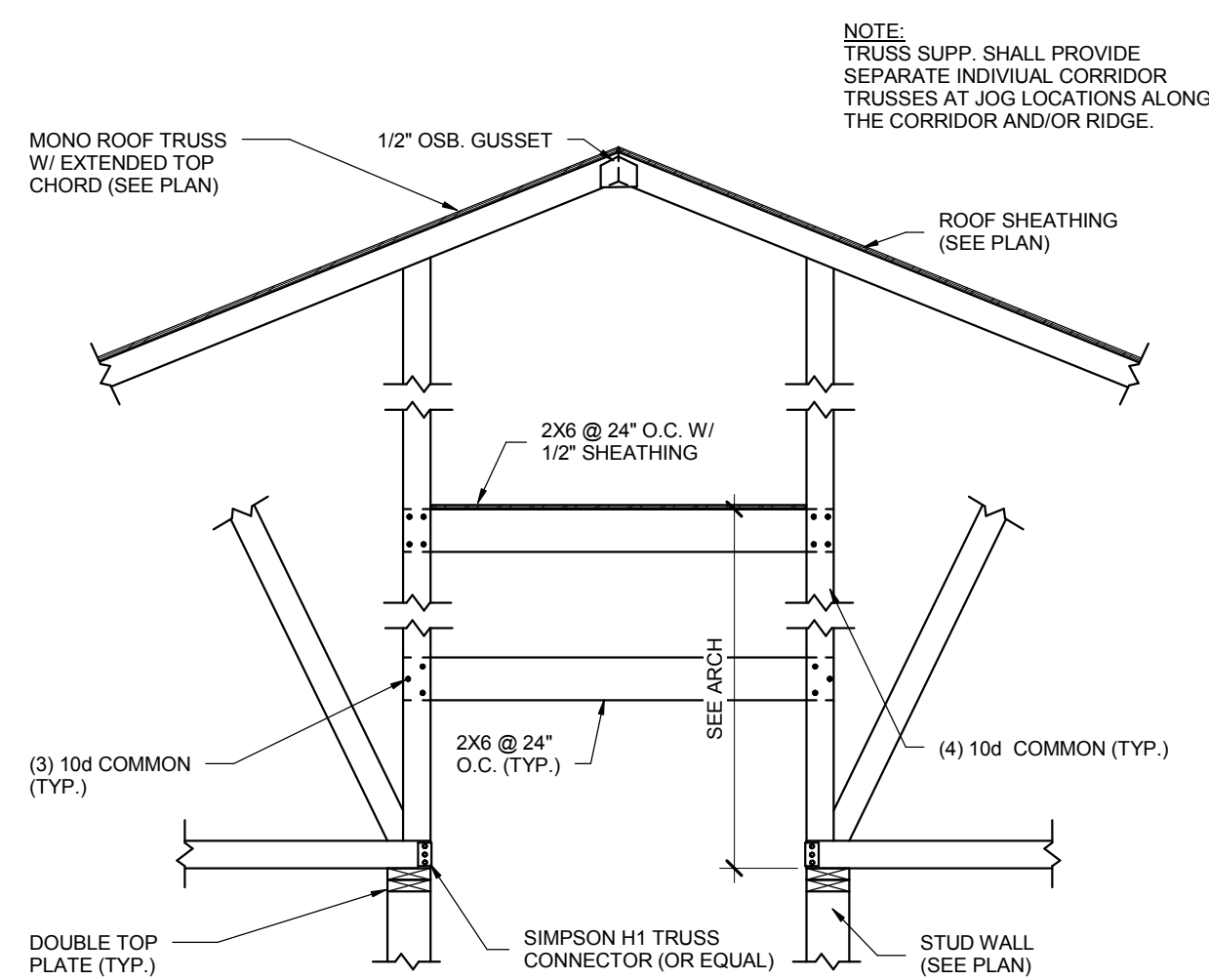
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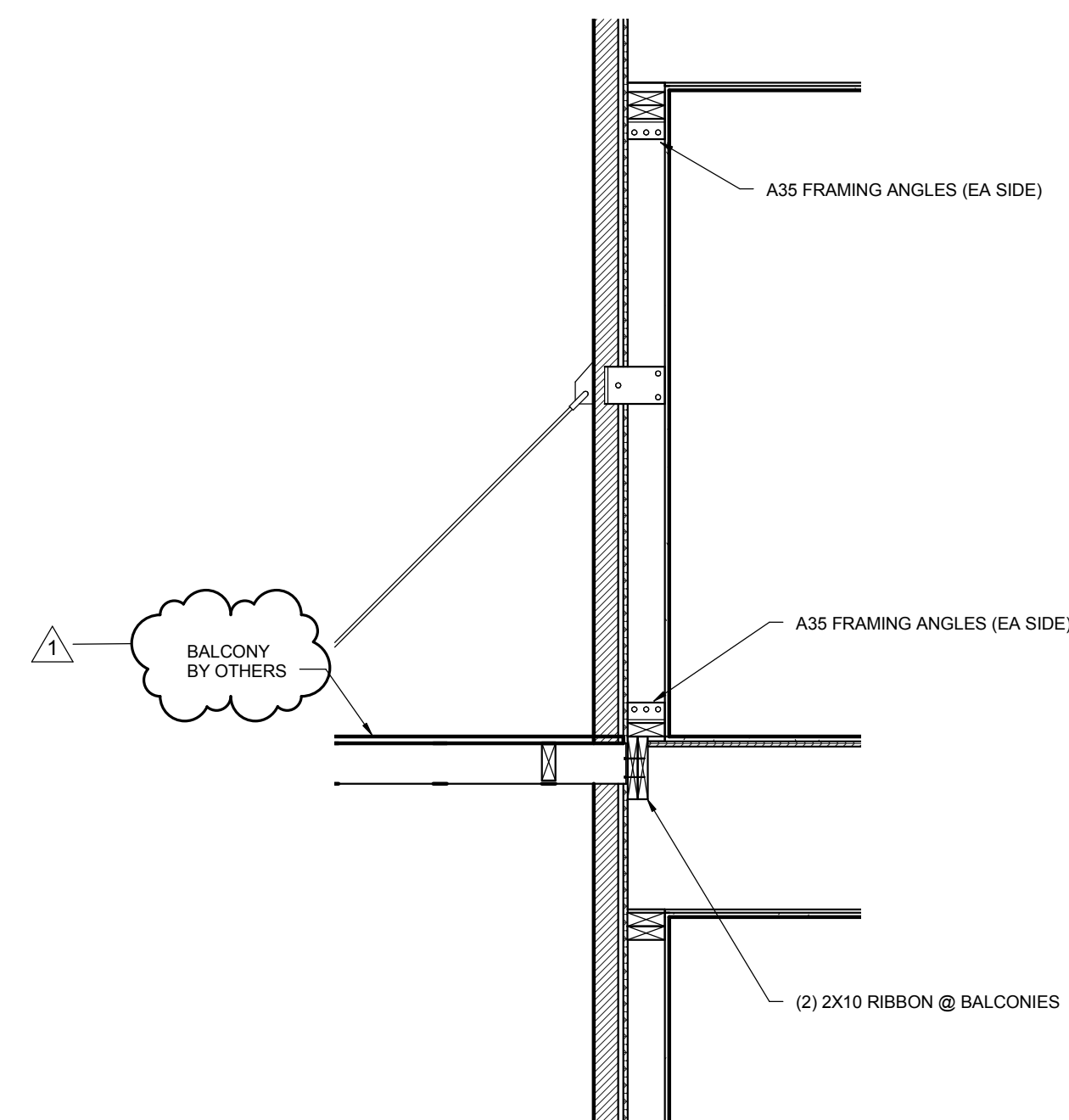
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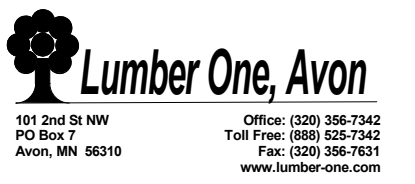
10 DETAIL
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11 DETAIL
S502 SCALE: 1/2" = 1'-0"



12 DETAIL
S502 SCALE: 1/2" = 1'-0"



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Details

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