

53 WACHUSETT STREET DESIGN

JOHN BONINA

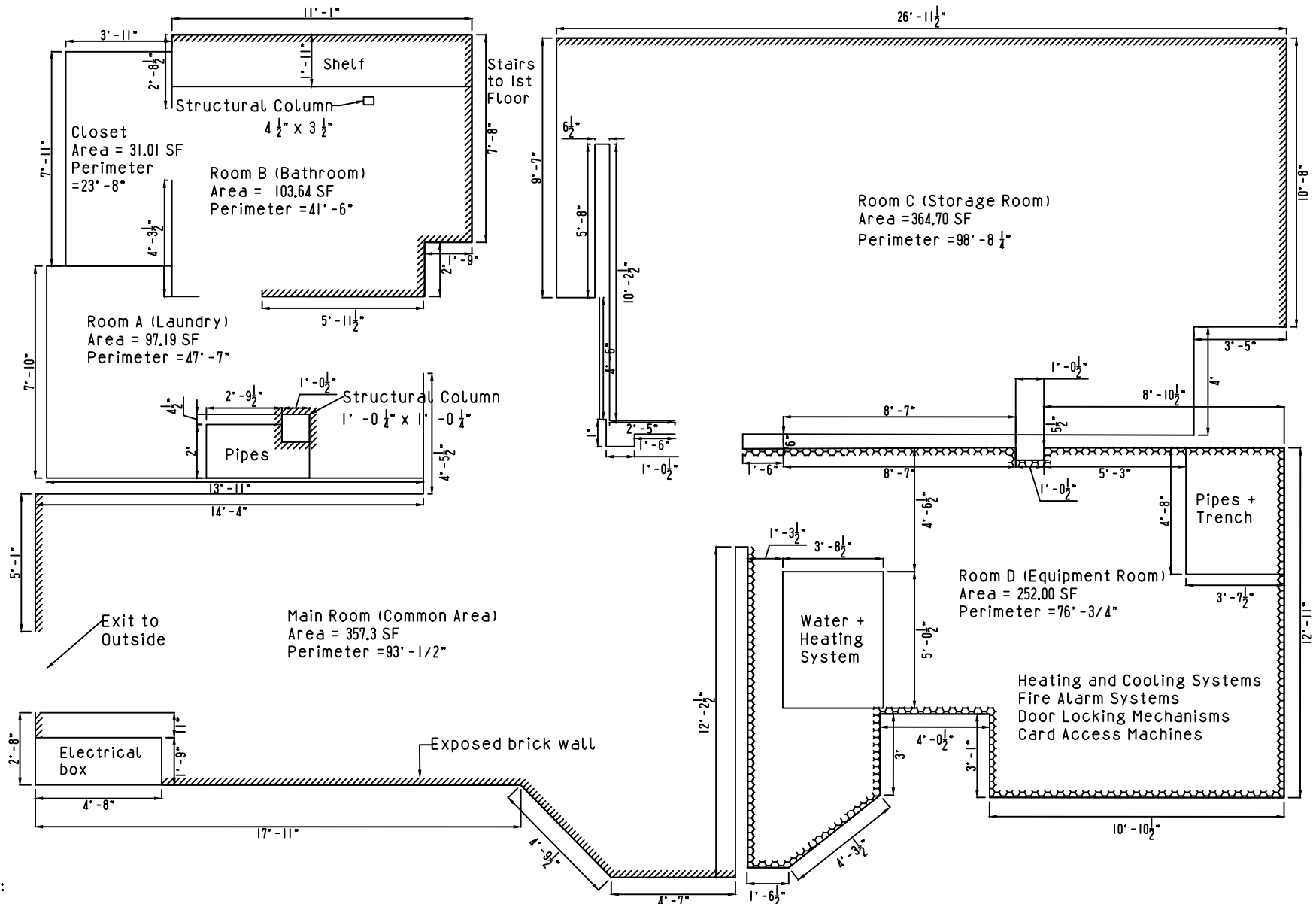
MATTHEW RABASCO

JAMES RIOS

ADVISOR: PROF. LEONARD ALBANO

DESIGN 1 OF 2: BUILDING RENOVATION

NOTE: This is a student project and does not reflect the views of Professional Engineers.



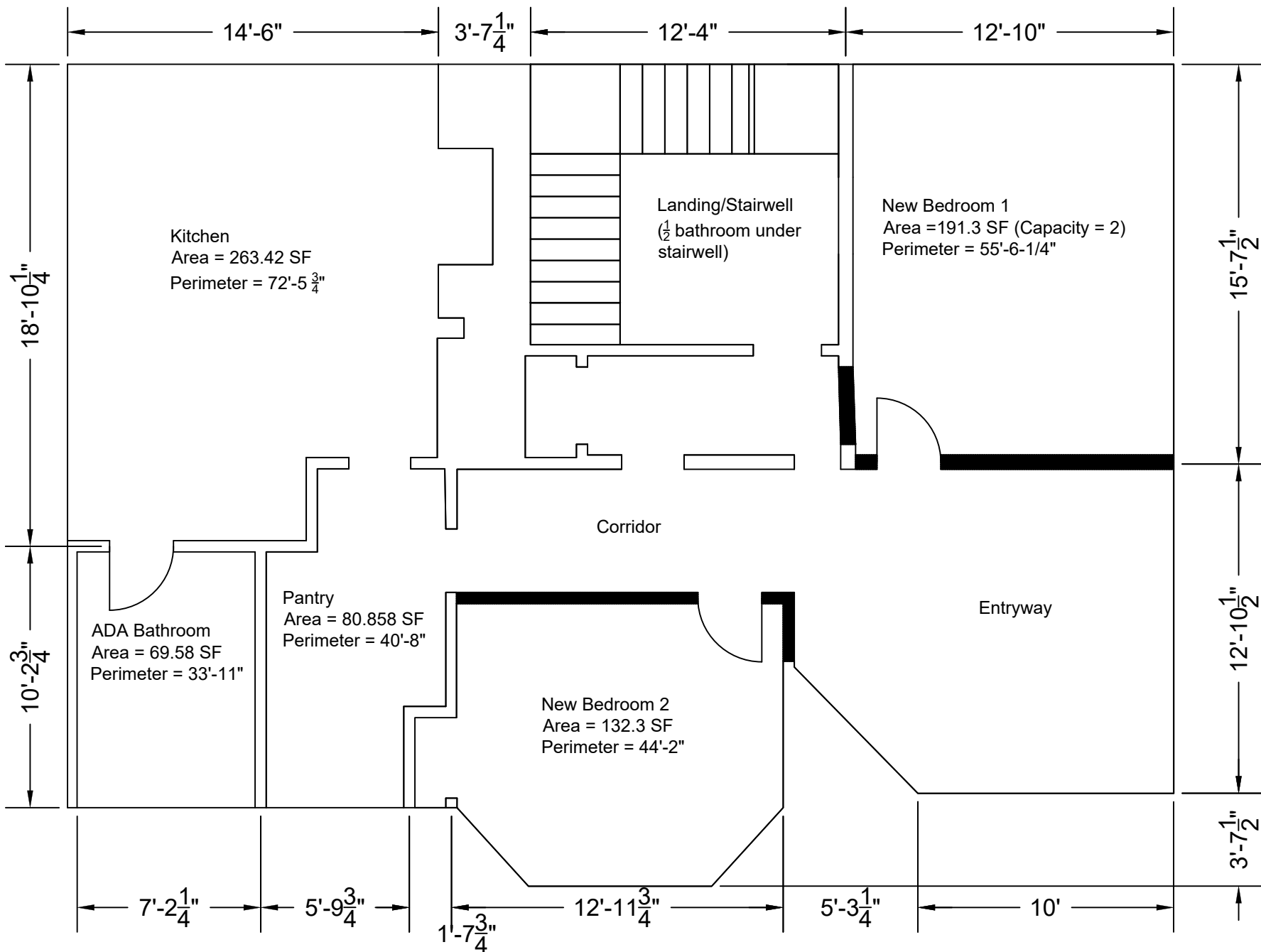
LEGEND:
 Exposed brick
 Unfinished wall

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 M. Rabasco
 J. Rios

DRAWING TITLE
 Basement Layout

DWG NO:
 A - 001

PAGE NO:
 SCALE: 3/16" = 1'-0"
 DRAWN BY: Matt Rabasco



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- J. Rios

DRAWING TITLE

PROPOSED FIRST FLOOR LAYOUT

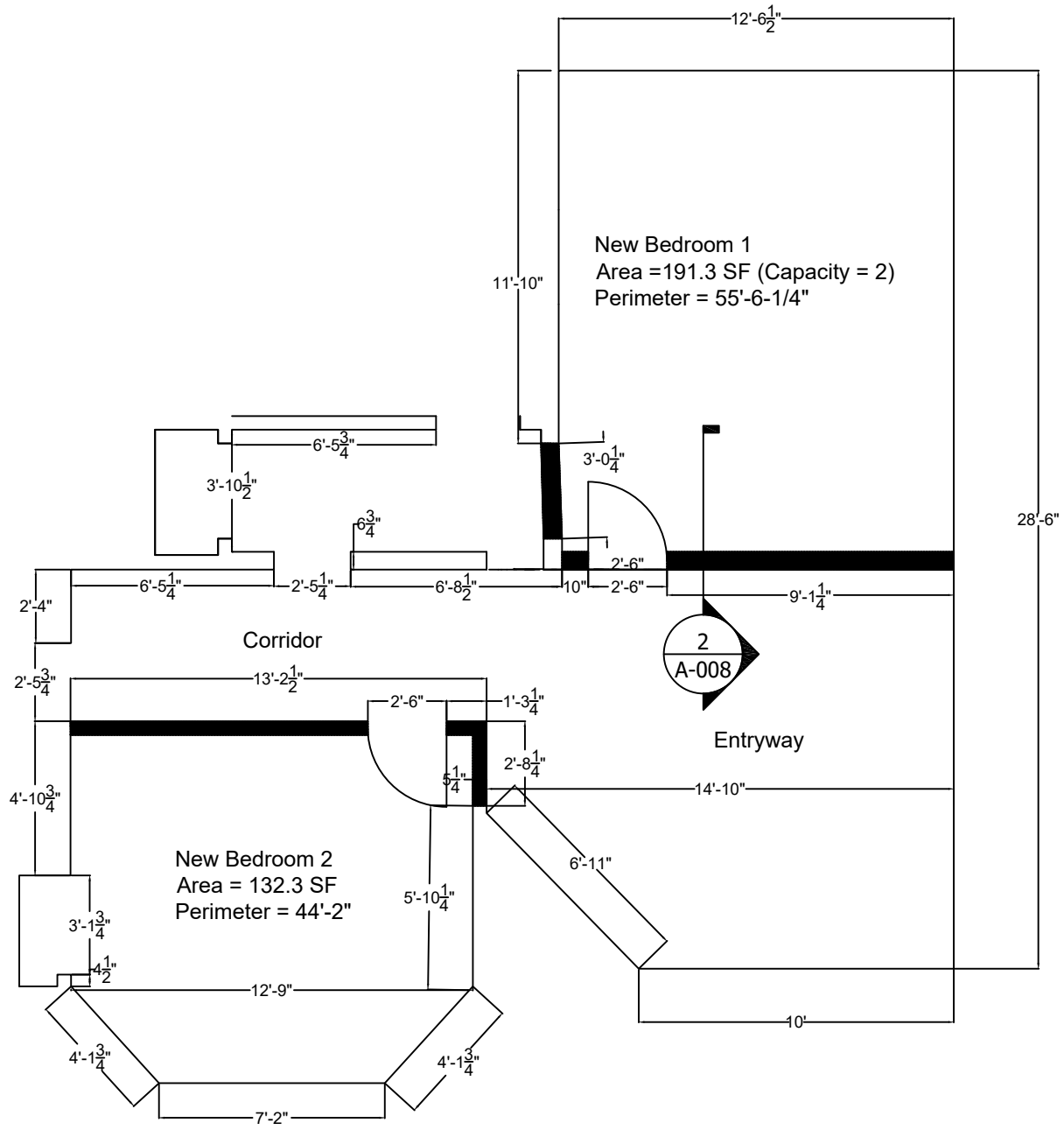
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DRAWING TITLE

LIVING ROOM/DINING AREA
PROPOSED DETAIL LAYOUT

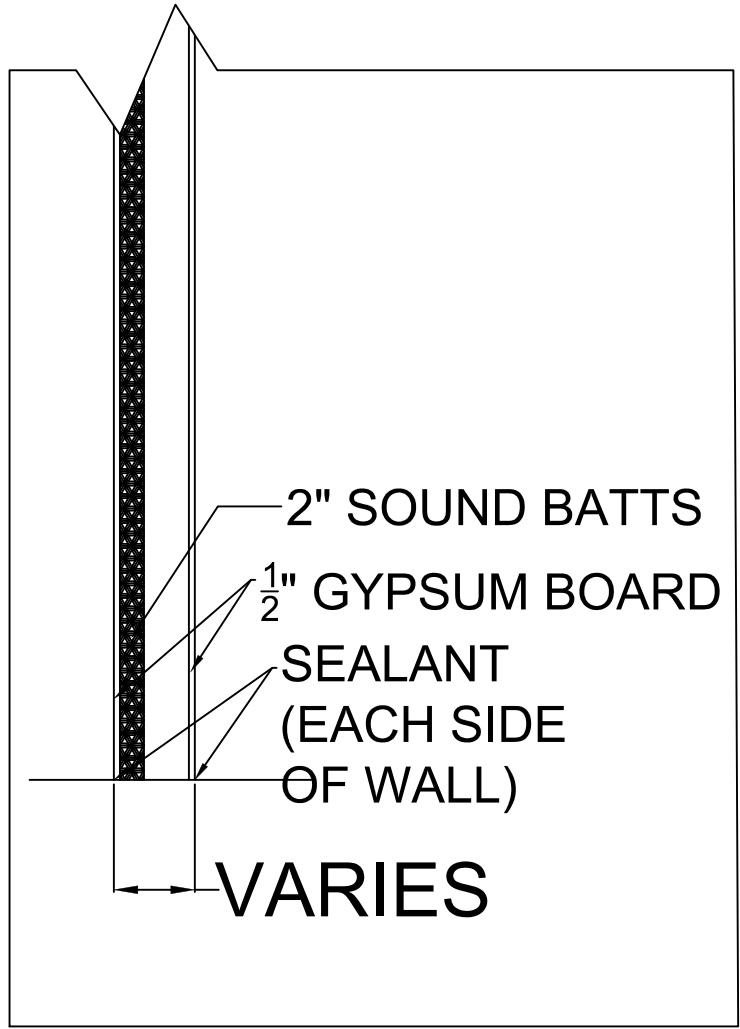
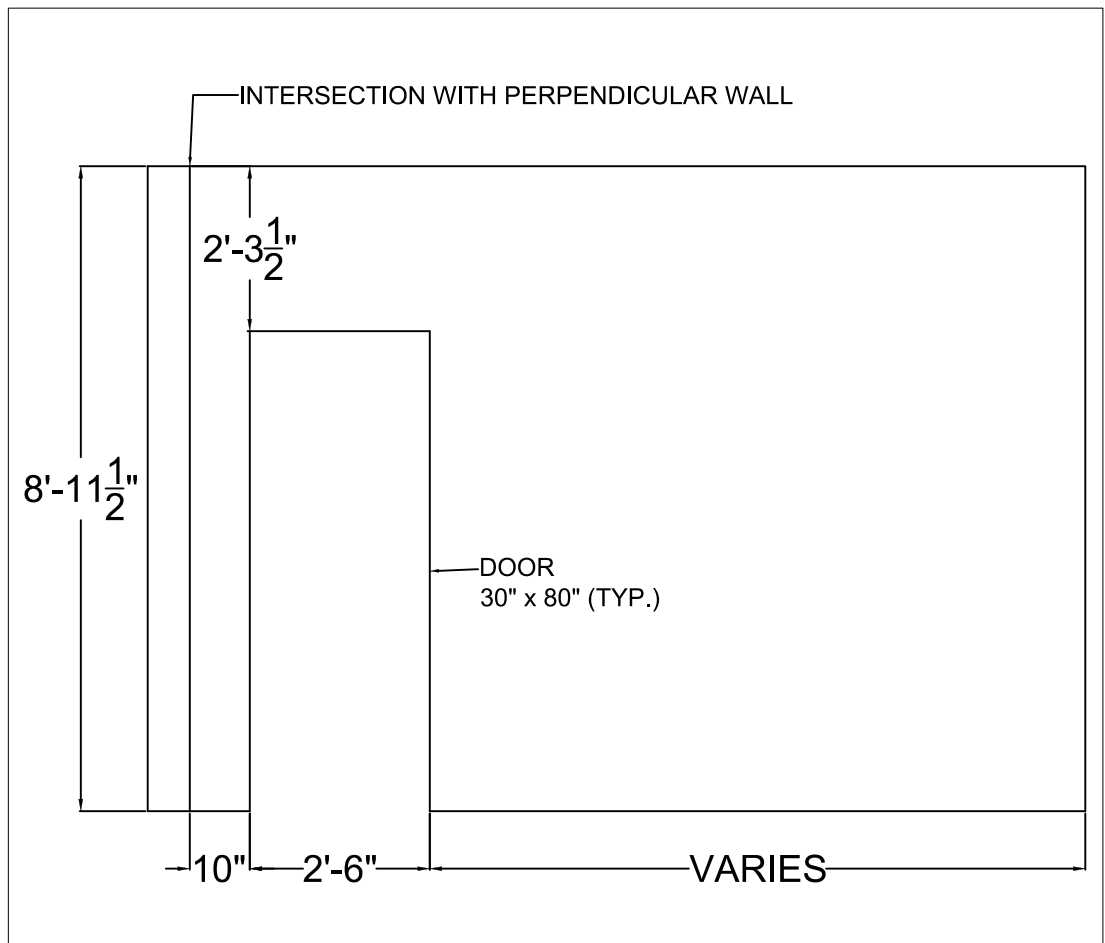
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DRAWN BY: James Rios



1

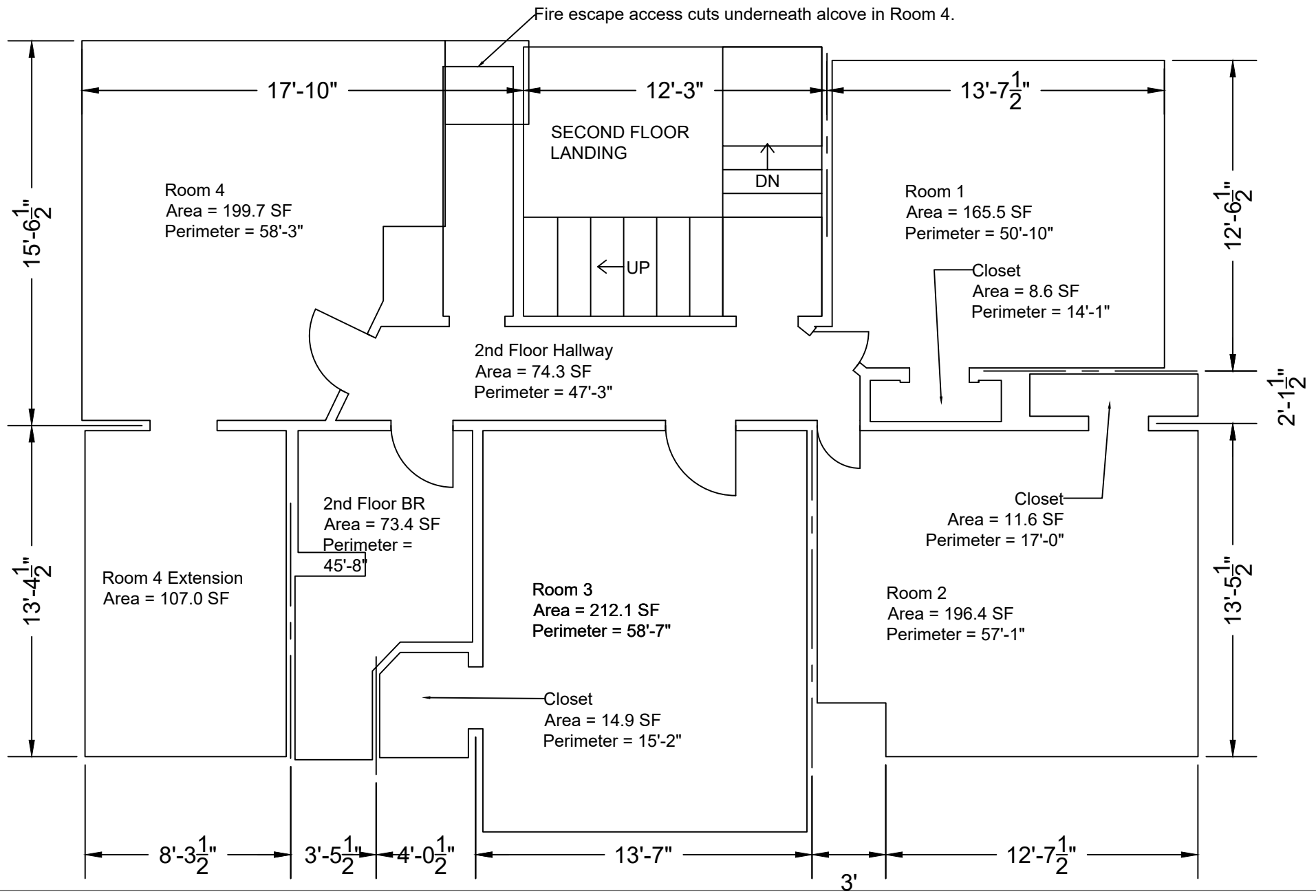
NEW WALL ELEVATION (TYP.)

Scale: 3/8" = 1'-0"

2

NEW WALL SECTION (TYP.)

Scale: 3/4" = 1'-0"

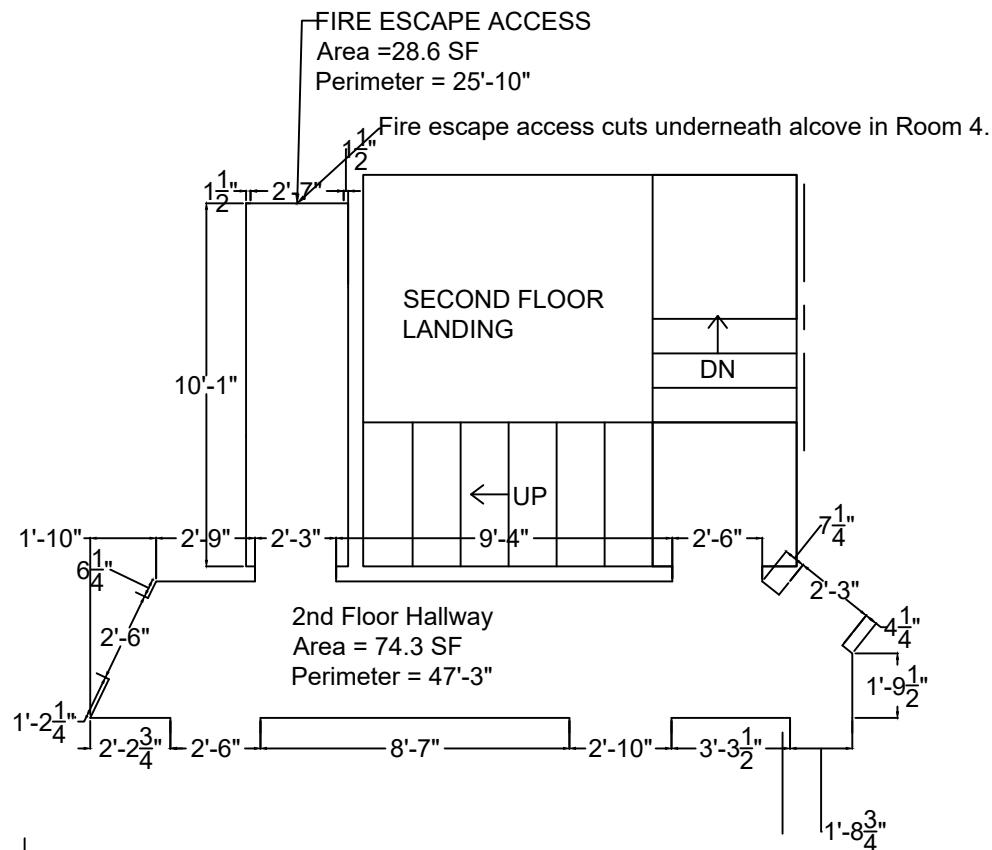
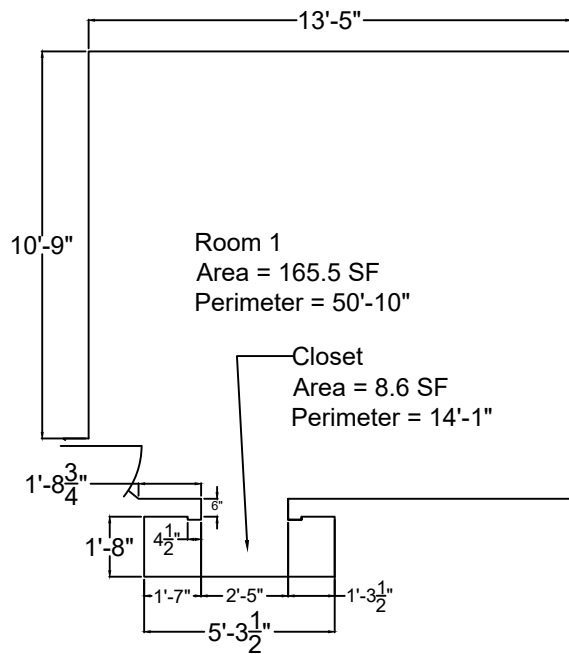


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 SECOND FLOOR: PLAN VIEW

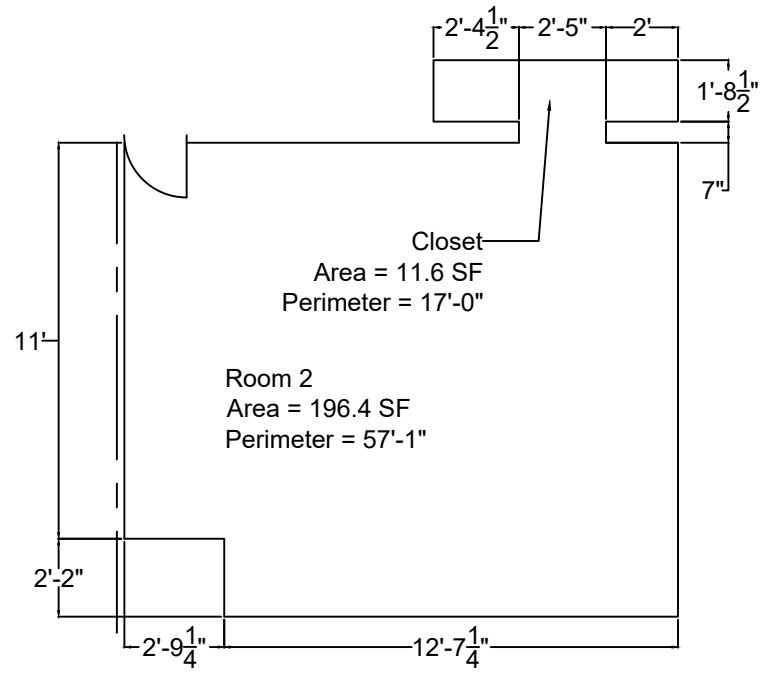
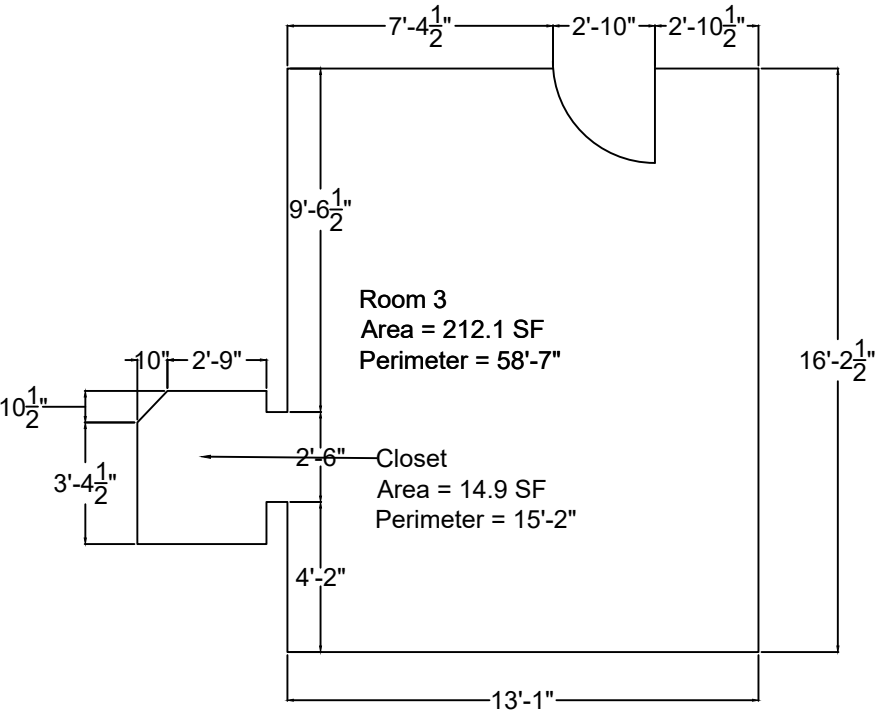
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 A-200

PAGE NO: 8
 SCALE: 3/16" = 1'-0"
 DRAWN BY: J. Bonina



A Room 1 Plan
SCALE: 3/16" = 1'-0"

B Second Floor Hallway Plan
SCALE: 3/16" = 1'-0"



A Room 3 Plan
SCALE: 3/16" = 1'-0"

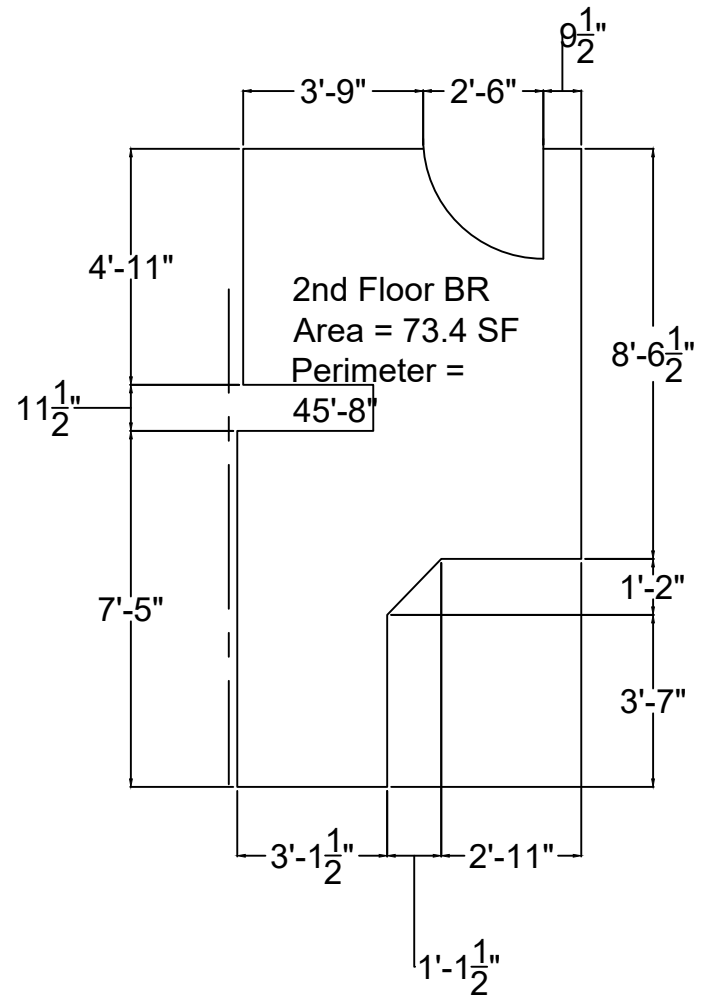
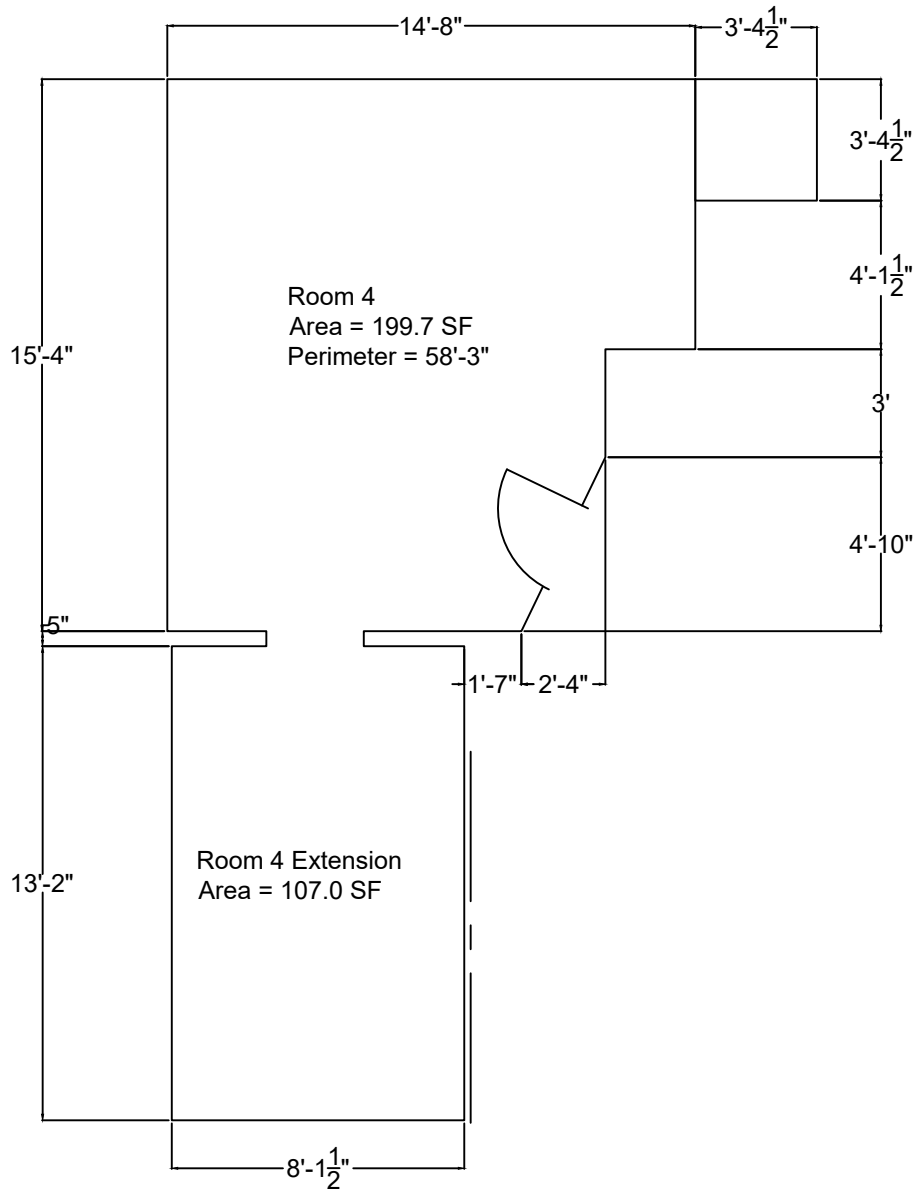
B Room 2 Plan
SCALE: 3/16" = 1'-0"

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DRAWING TITLE
LAYOUT DRAWINGS:
ROOM 3 AND ROOM 2

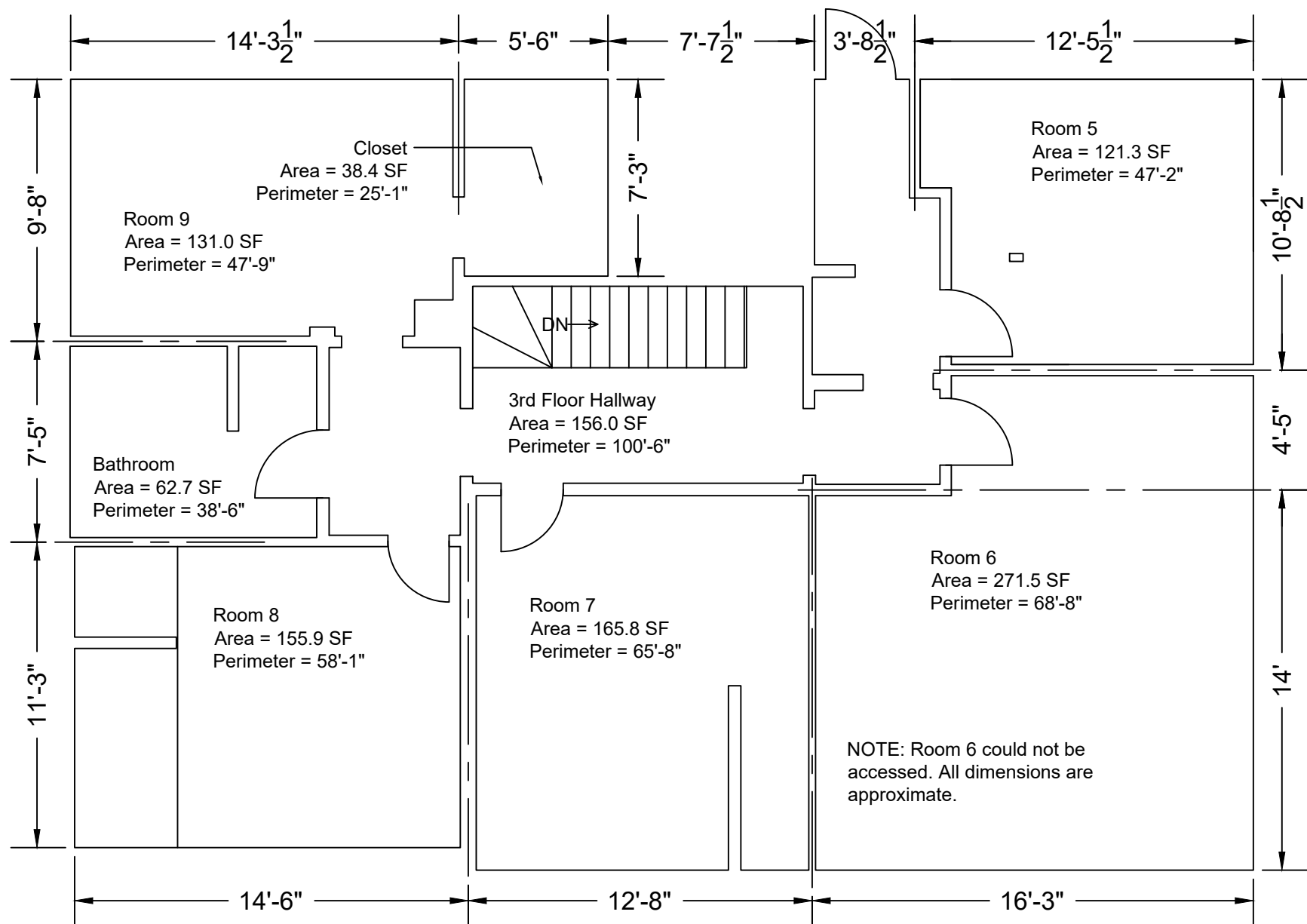
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A-202

PAGE NO: 10
SCALE: AS SHOWN
DRAWN BY: J. Bonina



A Room 4 Plan
SCALE: 3/16" = 1'-0"

B 2nd Floor Bathroom Plan
SCALE: 1/4" = 1'-0"



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THIRD FLOOR LAYOUT

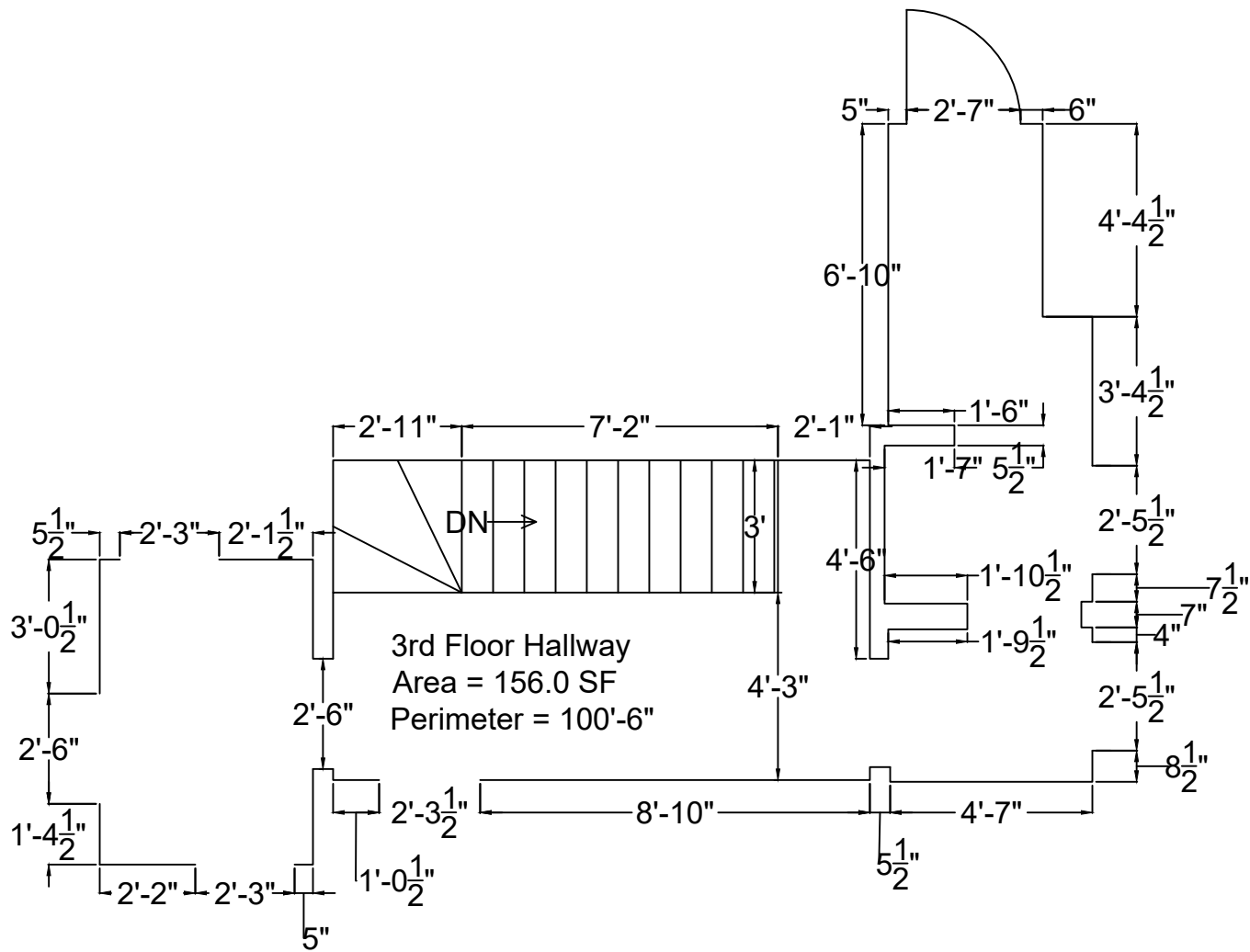
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A - 300

PAGE NO: 12

SCALE: 3/16" = 1' - 0"

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THIRD FLOOR HALLWAY

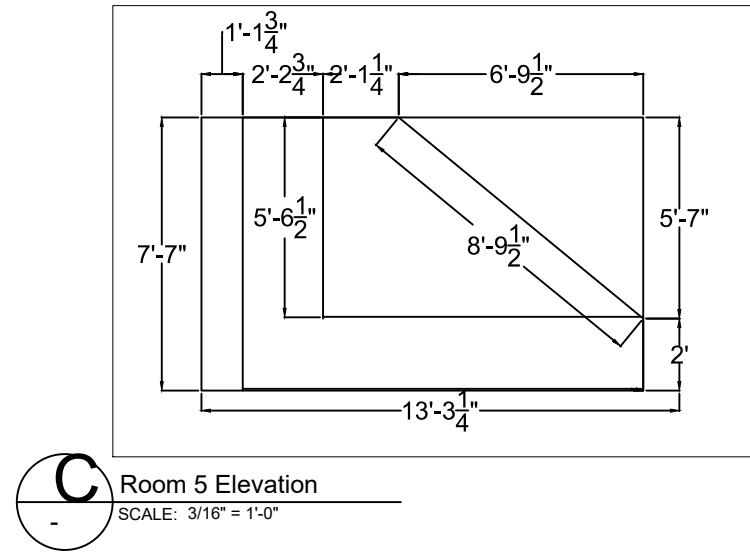
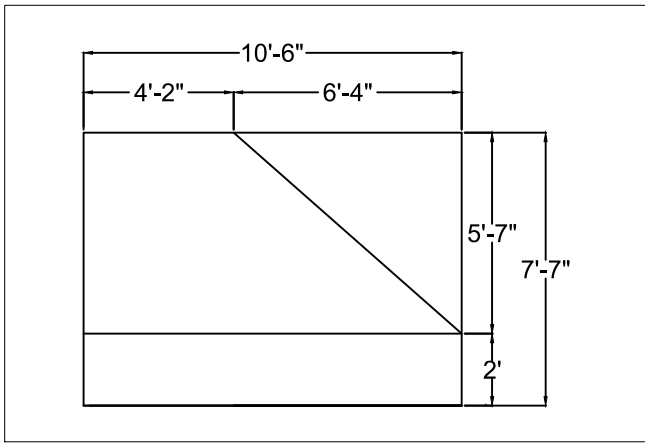
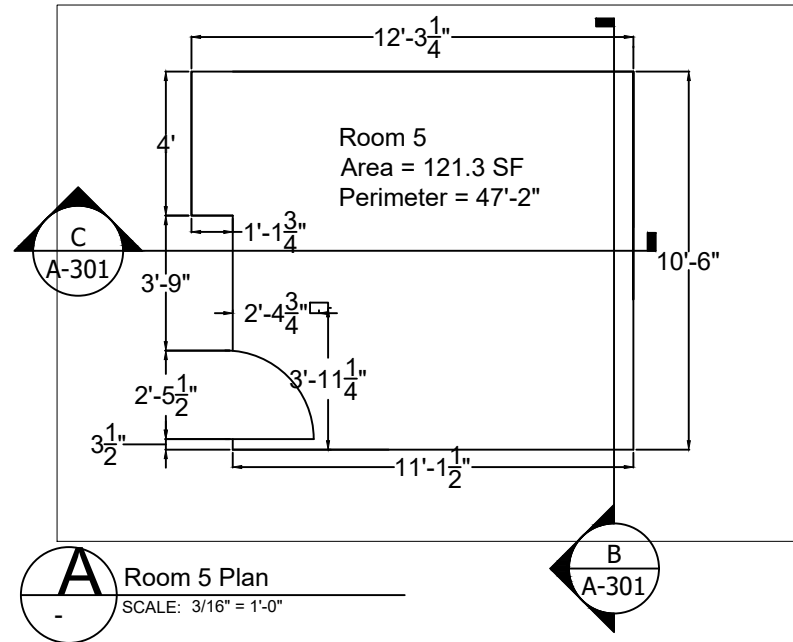
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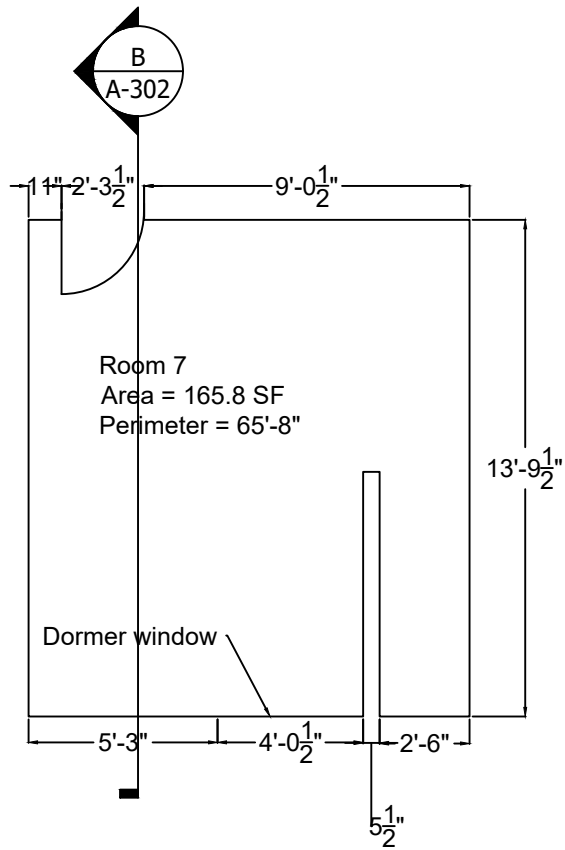
A - 301

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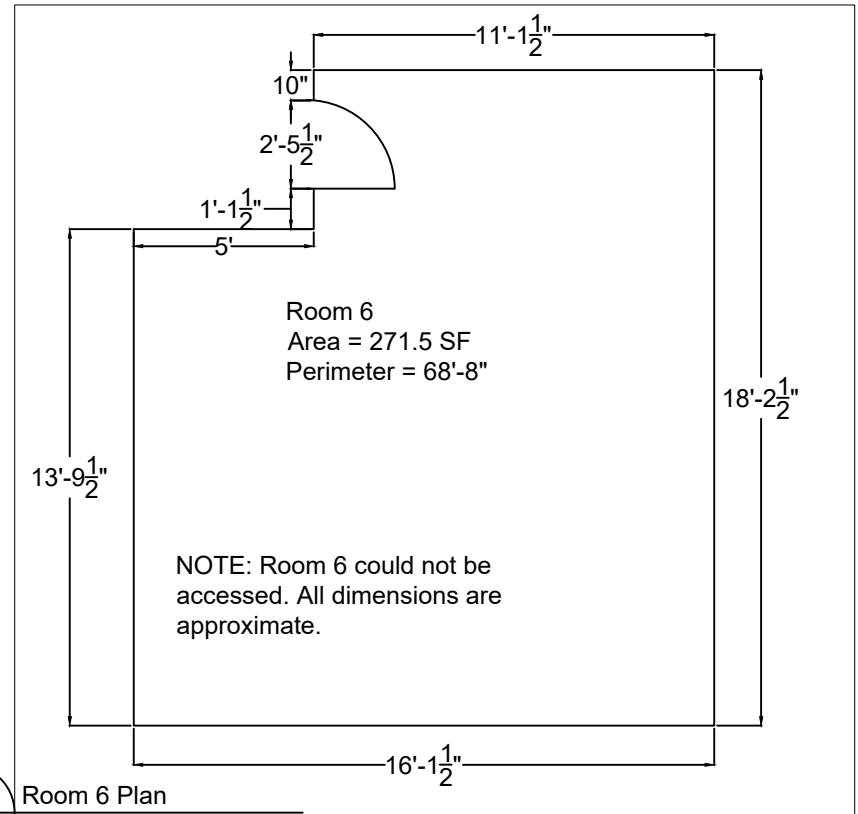
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DRAWN BY: J. Bonina

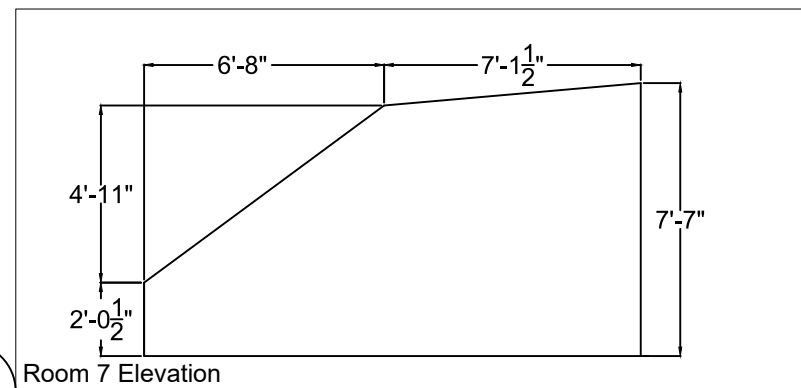




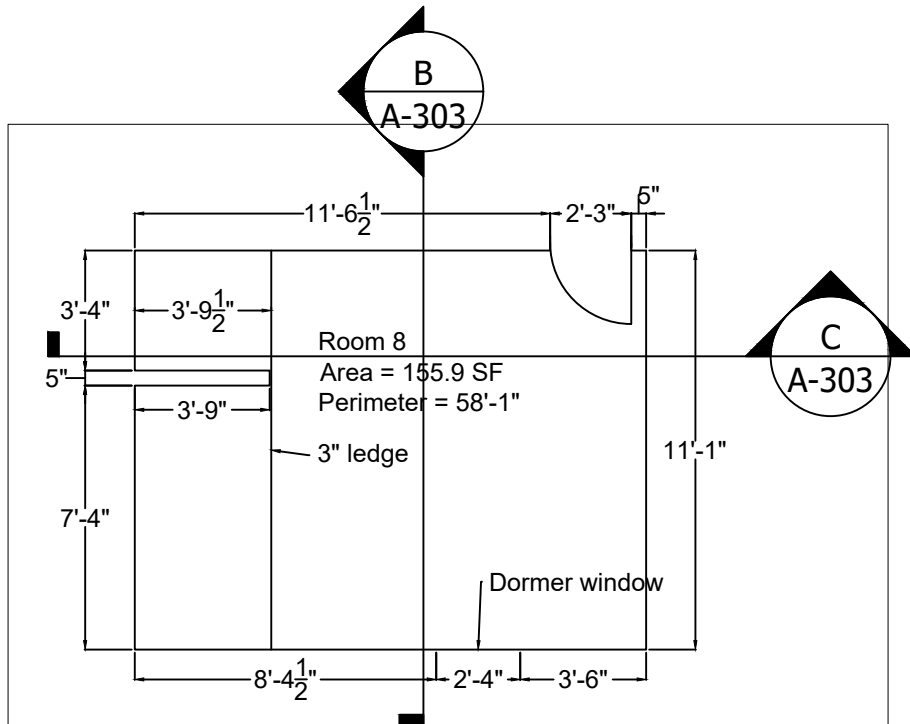
A Room 7 Plan
SCALE: 3/16" = 1'-0"



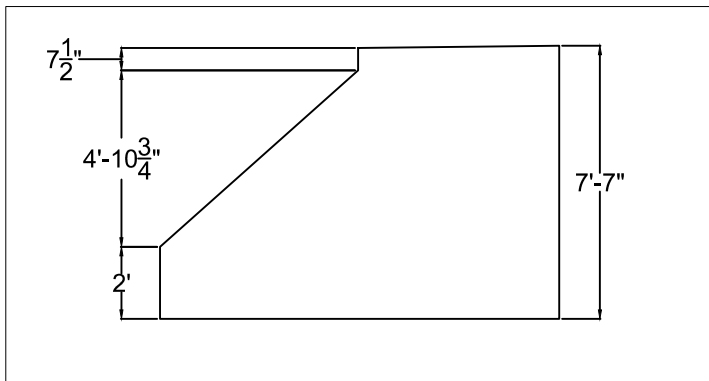
C Room 6 Plan
SCALE: 3/16" = 1'-0"



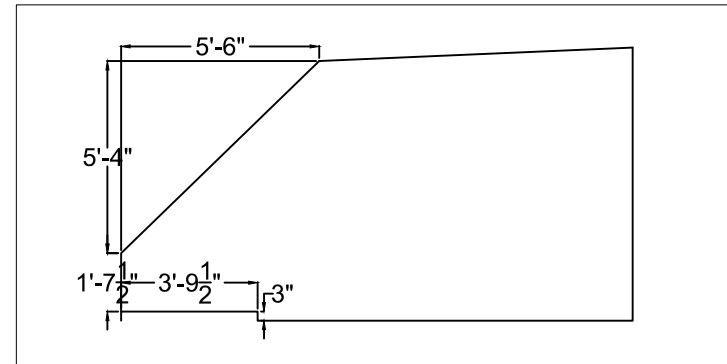
B Room 7 Elevation
SCALE: 3/16" = 1'-0"



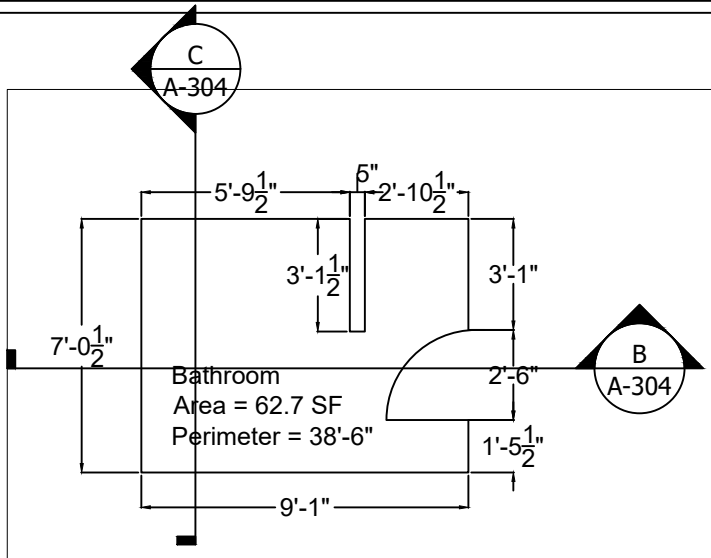
A Room 8 Plan
SCALE: 3/16" = 1'-0"



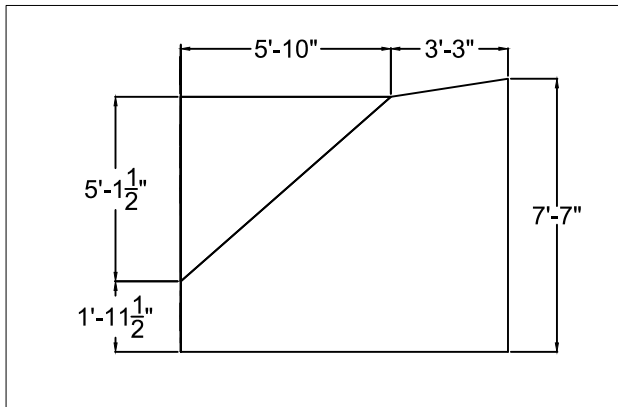
B Room 8 Elevation
SCALE: 3/16" = 1'-0"



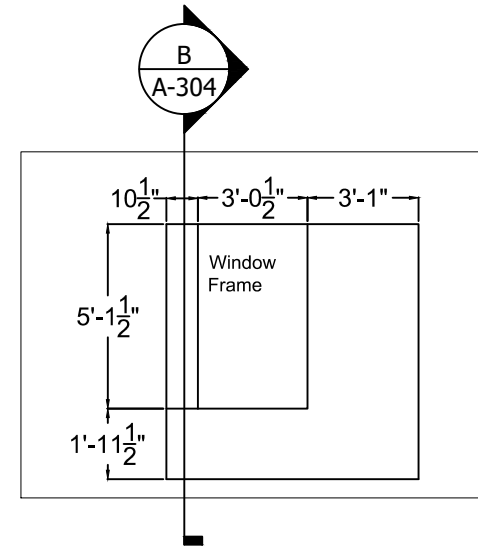
C Room 8 Section
SCALE: 3/16" = 1'-0"



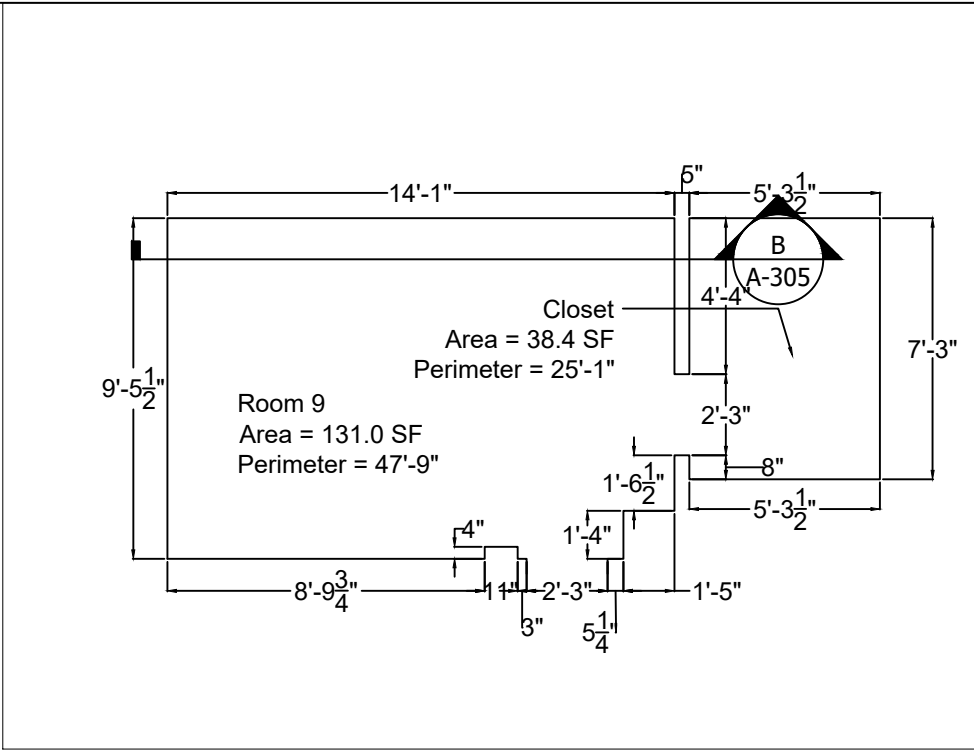
A 3rd Floor Bathroom Plan
 SCALE: 3/16" = 1'-0"



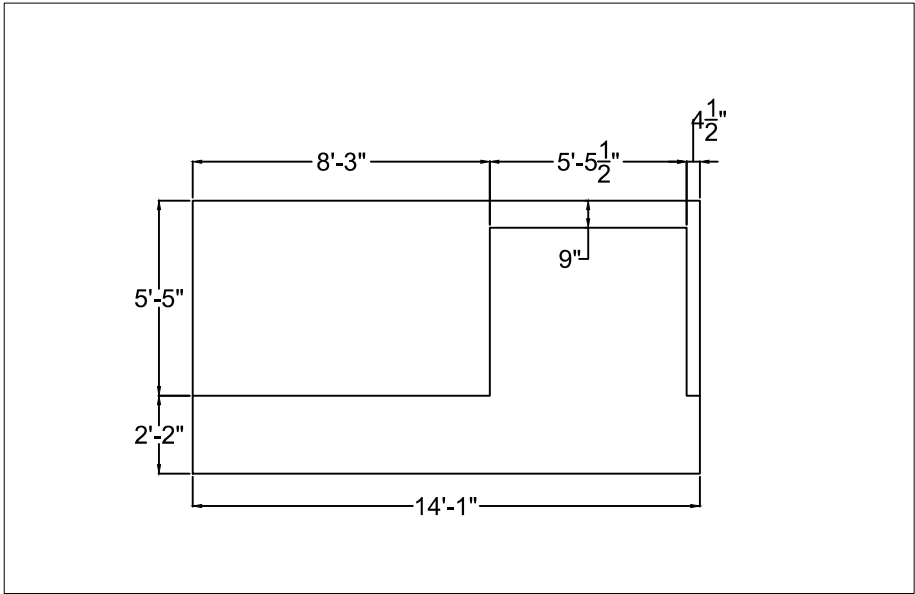
B 3rd Floor Bathroom Elevation
 SCALE: 3/16" = 1'-0"



C 3rd Floor Bathroom Section
 SCALE: 3/16" = 1'-0"



A Room 9 Plan
SCALE: 3/16" = 1'-0"



B Room 9 Section
SCALE: 3/16" = 1'-0"

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01	A-051	EXISTING SITE PLAN	3/32" = 1'-0"
02	A-052	NEW SITE PLAN	3/16" = 1'-0"
03	A-053	NEW SITE ELEVATIONS	3/16" = 1'-0"
04	S-051	NEW SITE PLAN PLANK LAYOUT	1/4" = 1'-0"
05	S-052	NEW SITE PLAN WOOD SCHEDULE	1/4" = 1'-0"

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TABLE OF CONTENTS
FIRST FLOOR RAMP ADDITION

DWG NO:

G-000

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

DRAWN BY: John Bonina

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01	G-001	TABLE OF CONTENTS BASEMENT RAMP ADDITION	N/A
02	G-002	SUMMARY OF QUANTITIES	N/A
03	G-003	QUANTITY CALCULATIONS	N/A
04	G-004	SUGGESTED SEQUENCE OF CONSTRUCTION	N/A
05	A-400	EXISTING SITE PLAN	1/16" = 1'-0"
06	A-401	EXISTING EXIT PLAN AND ELEVATION	1/2" = 1'-0"
07	A-402	EXISTING EXIT SECTION	1/2" = 1'-0"
08	A-410	PROPOSED SITE PLAN	3/32" = 1'-0"
09	A-411	NEW EXIT PLAN AND ELEVATION	AS SHOWN
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TABLE OF CONTENTS
BASEMENT RAMP ADDITION

DWG NO:

G-001

PAGE NO: 01

SCALE: N/A

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BILL OF MATERIALS

WORK ITEM	QUANTITY	UOM
EXCAVATE SOIL	1057.630	Cubic ft.
BACKFILL SOIL	199.300	Cubic ft.
PAVE WALKWAY (4" THICK)	201.000	Sq. ft.
INSTALL RETAINING WALL	123.260	ft.
INSTALL RAILING	107	ft.
INSTALL EXPANSION JOINT	136.170	ft.
REMOVE METAL + ROOFING MATERIAL FROM OVERHANG	16.434	Sq. ft.
REMOVE WOODEN OVERHANG STRUCTURE	19.405	Cubic ft.
REMOVE BRICK OVERHANG FOUNDATIONS	1.150	Cubic ft.

NOTE:
See DWG G-003 for calculations and justification for quantity takeoffs.

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SUMMARY OF QUANTITIES

DWG NO:

G-002

PAGE NO: 02

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	Start Depth (in.)	End Depth (in.)	Run (in.)	Width (in.)	Backfill Volume (ft.^3)	Length (ft.) for Retaining wall	Concrete Pavement Calculations			
							Slope Length (in.)	Conc. Area (SF)	Conc. thickness (in.)	Conc. Volume (CF)
Excavation Zone A										
Segment 1	51 3/4	18 1/4	402	38.5	150	67.00	403.39	107.85	4	35.95
Basement Entrance	51 3/4	51 3/4	86.25	38.5	0	14.38	86.25	23.06	4	7.69
Stairs	51 3/4	0	66	38.5	32	11.00	66	17.65	7	10.29
Deductions for existing stairs					0					
Total					182	92.38		149		53.93
Excavation Zone B										
Segment 2	18 1/4	0	83.25	38.5	17	13.88	85.23	22.79	4	7.60
Midway Landing	18 1/4	18 1/4	98.5	42	0	17.00	98.50	28.73	4	9.58
Total					17	30.88		52		17.17

Excavation Additions	Depth (in.)	Run (in.)	Width (in.)	Volume (ft.^3)
New Stairs				
Base	51.75	0	38.5	0.000
Step 1	43.25	11	38.5	10.600
Step 2	34.75	11	38.5	8.517
Step 3	26.25	11	38.5	6.433
Step 4	17.75	11	38.5	4.350
Step 5	9.25	11	38.5	2.267
Step 6	0.75	11	38.5	0.184

Excavation Deductions	Depth (in.)	Run (in.)	Width (in.)	Volume (ft.^3)
Existing Stairs				
Base	28.25	9.5	39	6.06
Step 1	21.75	11	39	5.40
Step 2	15	11	39	3.72
Step 3	8.25	11	39	2.05
Step 4	1.5	8	39	0.27

Excavation Areas	Area (SF)	Depth (in.)	Volume (ft.^3)
Segment 1 + Stairs	201.8	51.75	870.26
Landing + Segment 2	123.2	18.25	187.37
Total			1057.63

Outer Railing	55.65 ft
Inner Railing	42.23 ft
Landing Railing	9.375 ft
Stair Railing	ft
Total Railing	107.25 ft

Expansion Joints	Perimeter (ft.)
Bottom Landing	20.79
Ramp Segment 1	36.82
Midway Landing	23.42
Ramp Segment 2	14.20
Top of Ramp	21.69
Stairs	19.25
Total	136.17

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QUANTITY CALCULATIONS

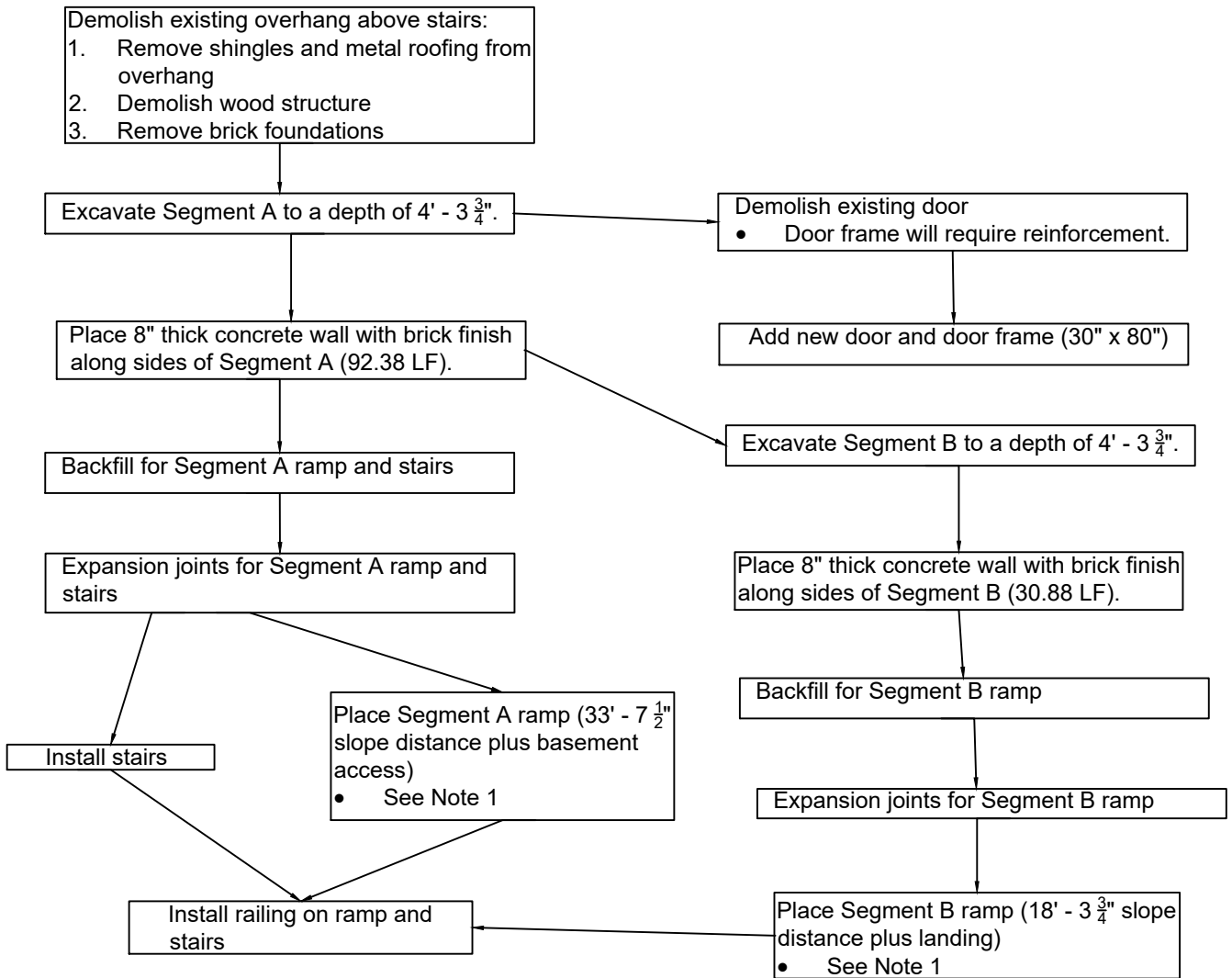
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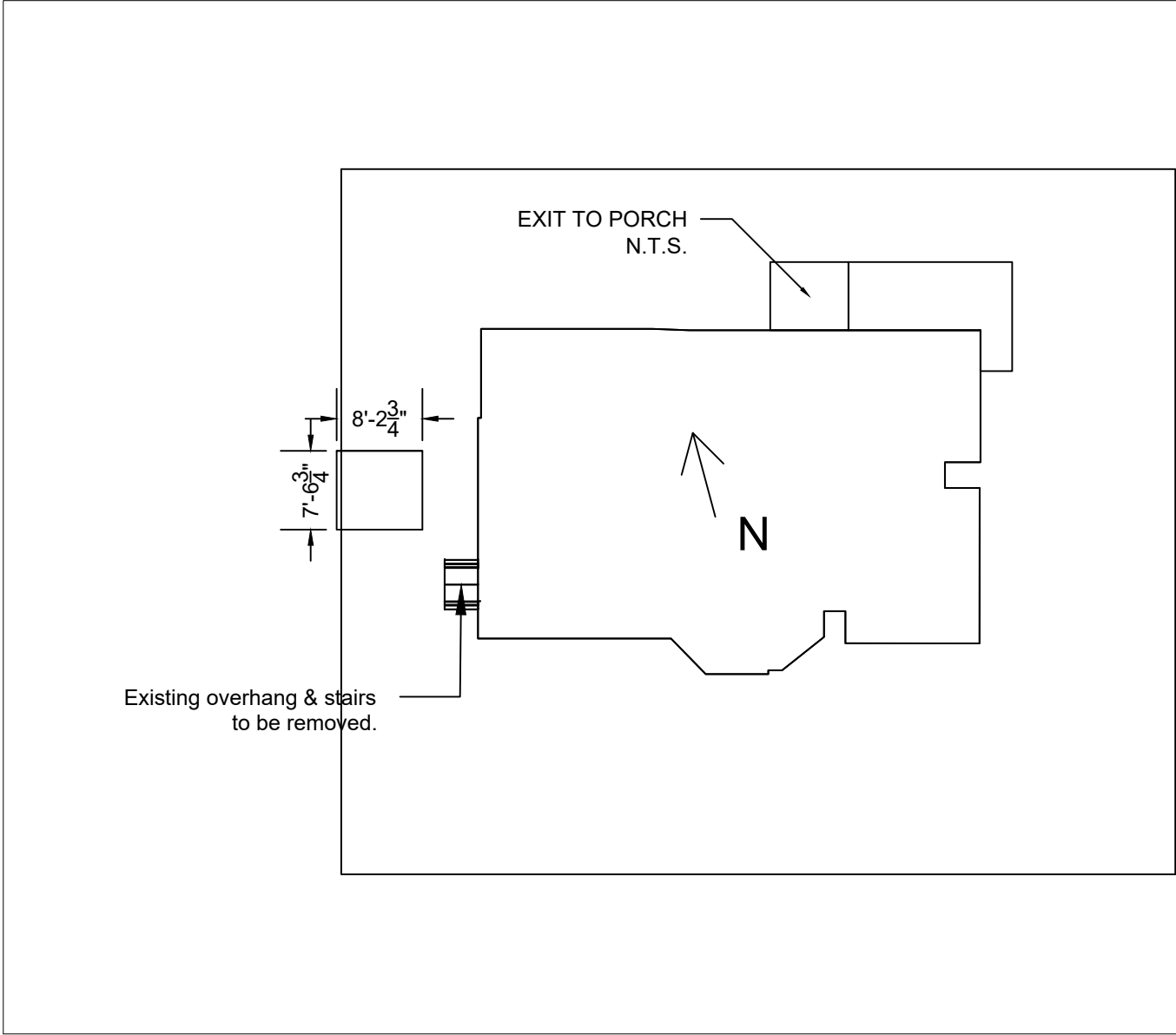
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- NOTES:
- Concrete ramps and landings shall be 4" thick cast-in-place.
 - For boundaries of Segment A and Segment E refer to DWGs A-410 and A-411.

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EXISTING SITE PLAN

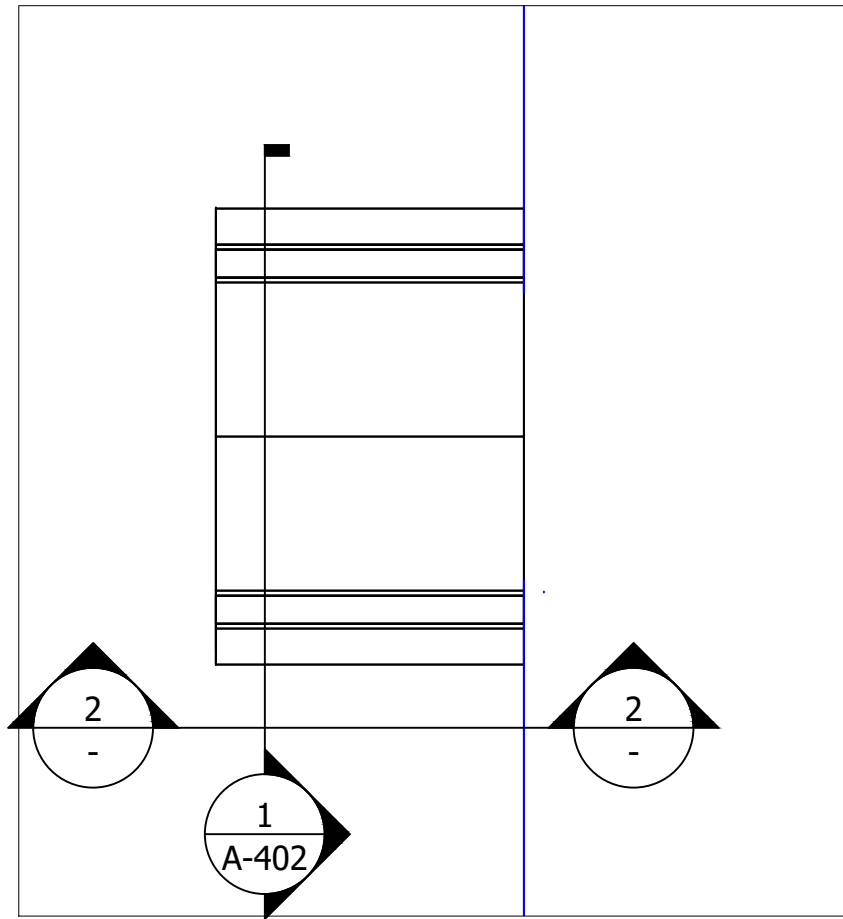
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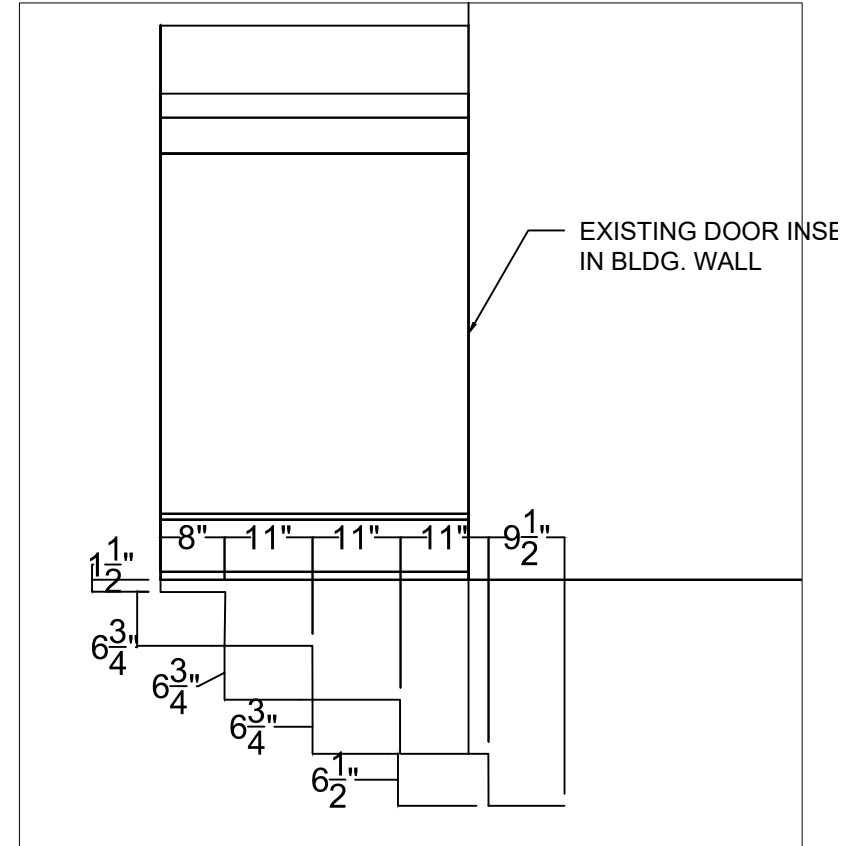
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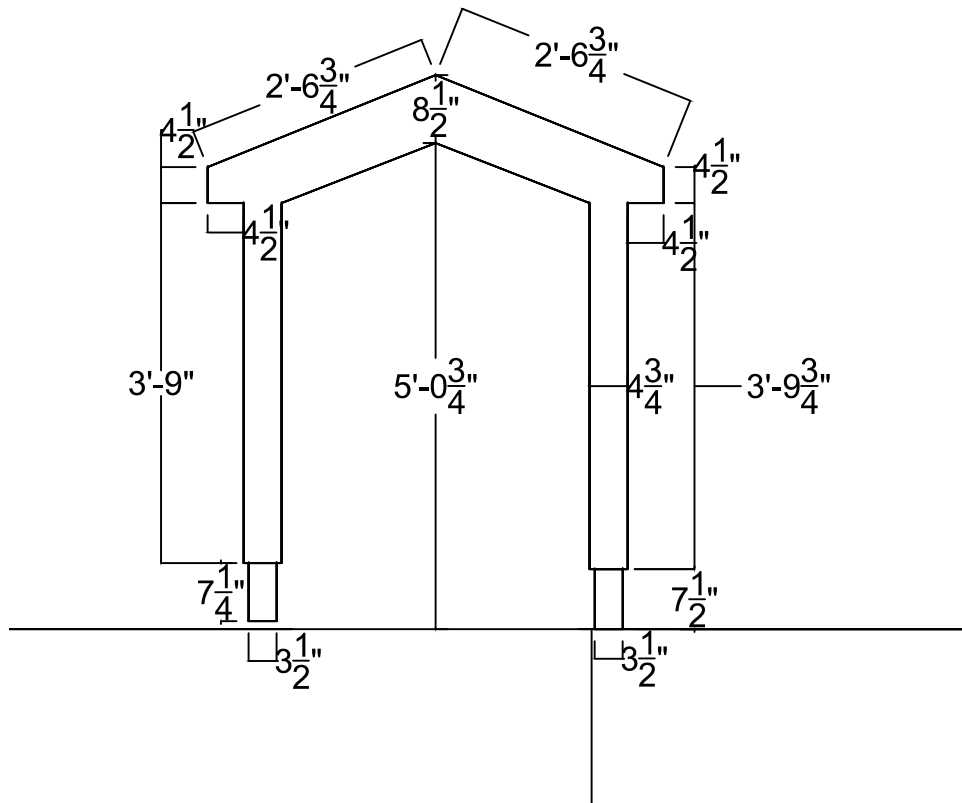
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1 BASEMENT EXIT - PLAN
Scale: 1/2" = 1'-0"



2 BASEMENT EXIT - ELEVATION
Scale: 1/2" = 1'-0"



1

BASEMENT ENTRANCE - SECTION

Scale: 1/2" = 1'-0"

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EXISTING EXIT
SECTION

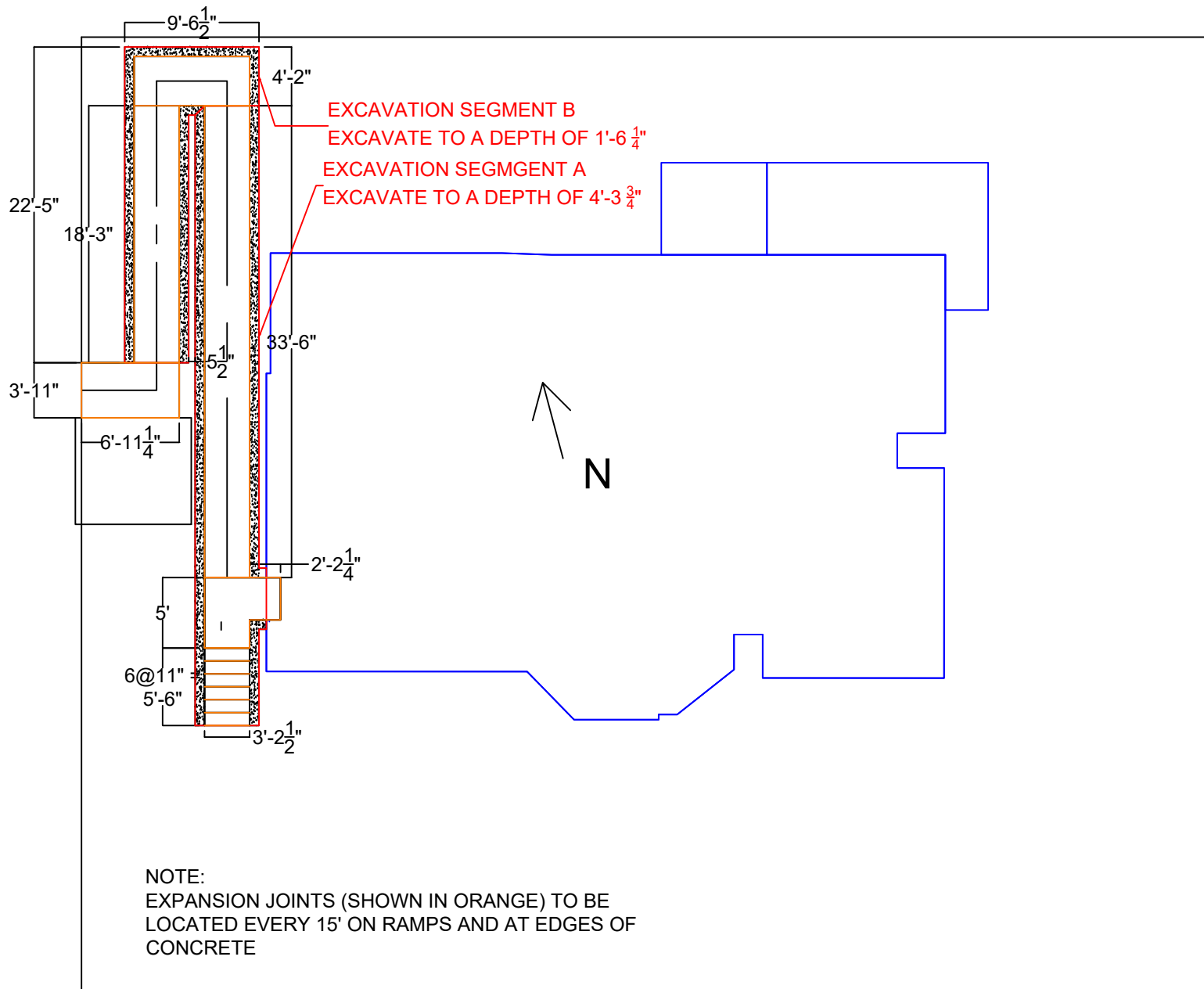
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A-402

PAGE NO: 07

SCALE: 1/2" = 1'-0"

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PROPOSED SITE PLAN

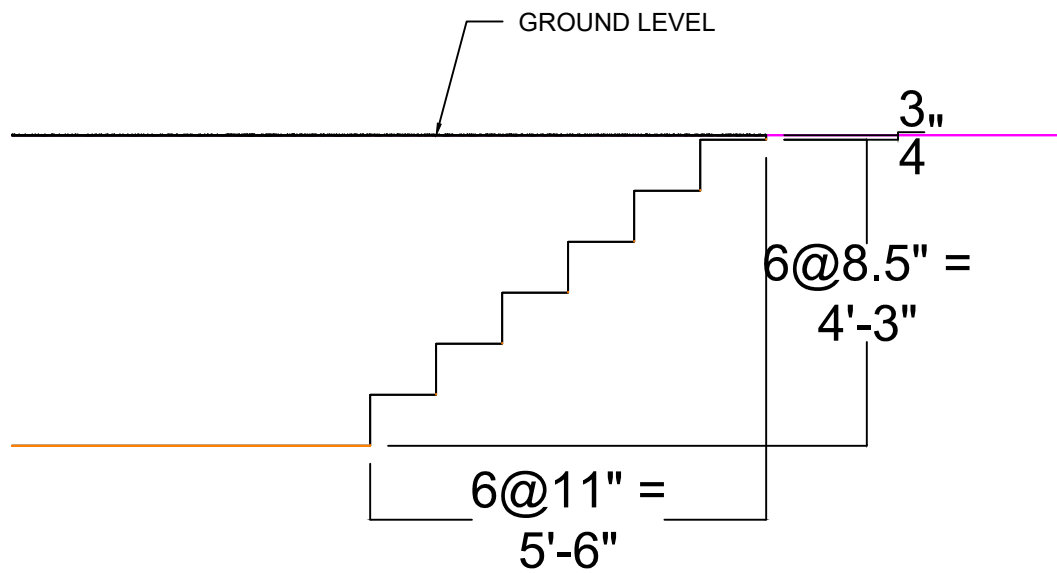
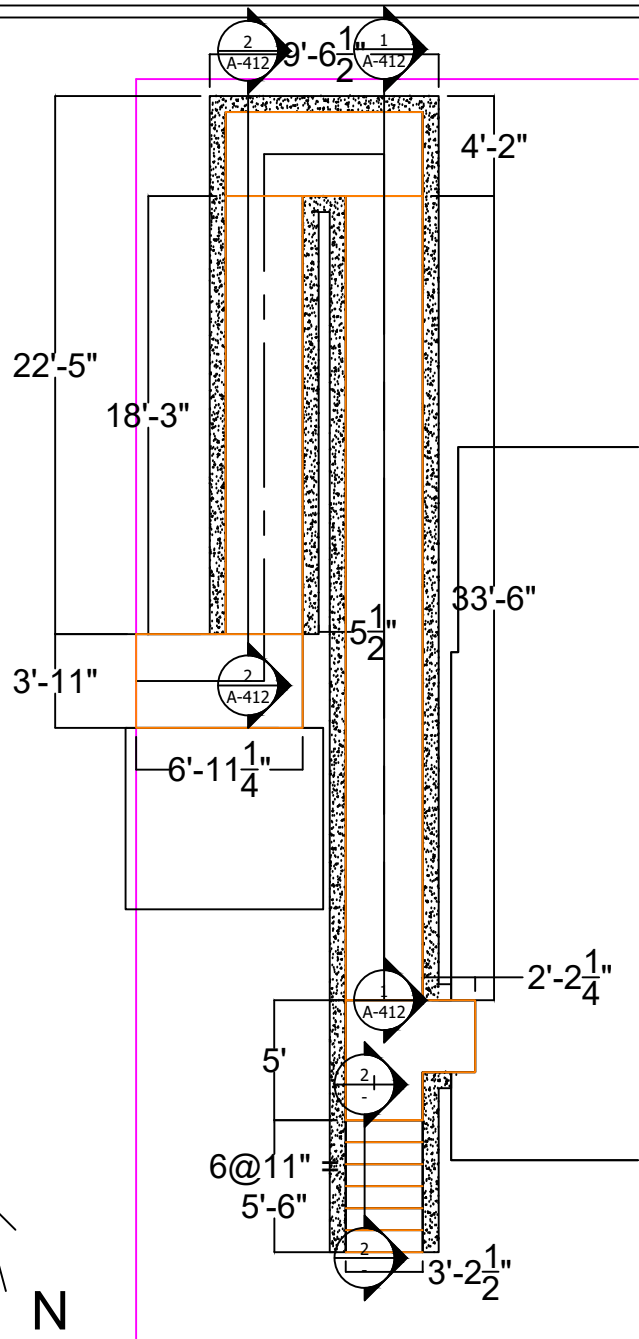
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A-410

PAGE NO: 08

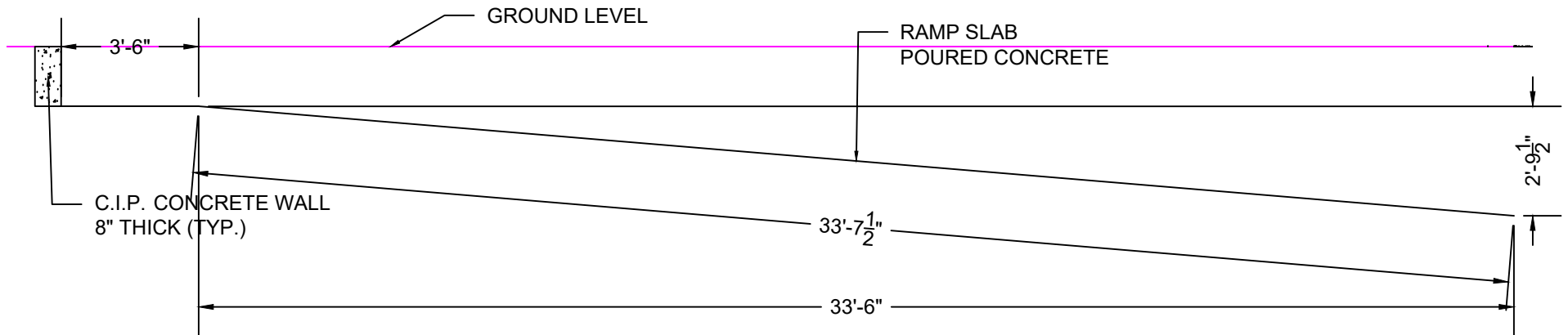
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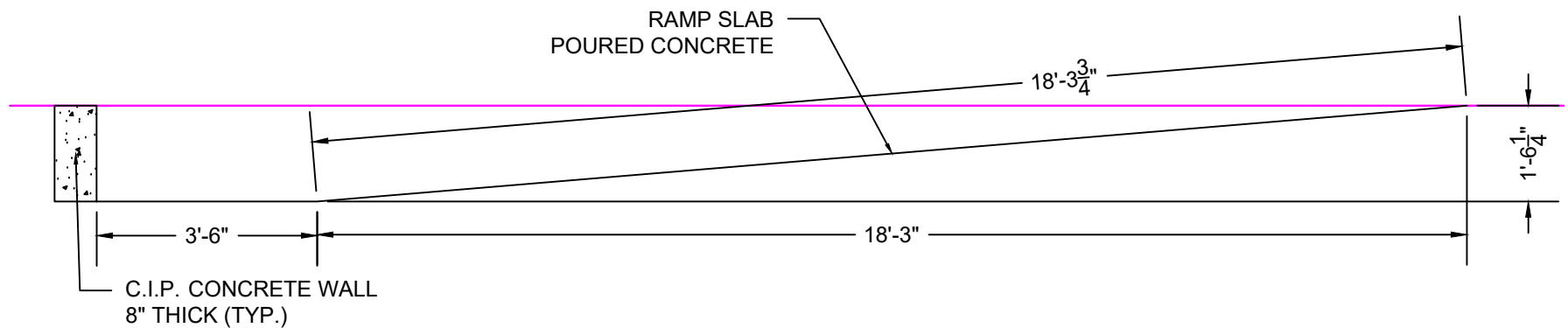


2 PROPOSED STAIR EXIT - ELEVATION
 Scale: 3/8" = 1'-0"

53 Wachusett Street Design MQP J. Bonina M. Rabasco J. Rios	DRAWING TITLE <p style="text-align: center;">NEW EXIT PLAN AND ELEVATION</p>	DWG NO: <p style="text-align: center; font-size: 24pt;">A-411</p>	PAGE NO: 09 SCALE: AS SHOWN DRAWN BY: John Bonina
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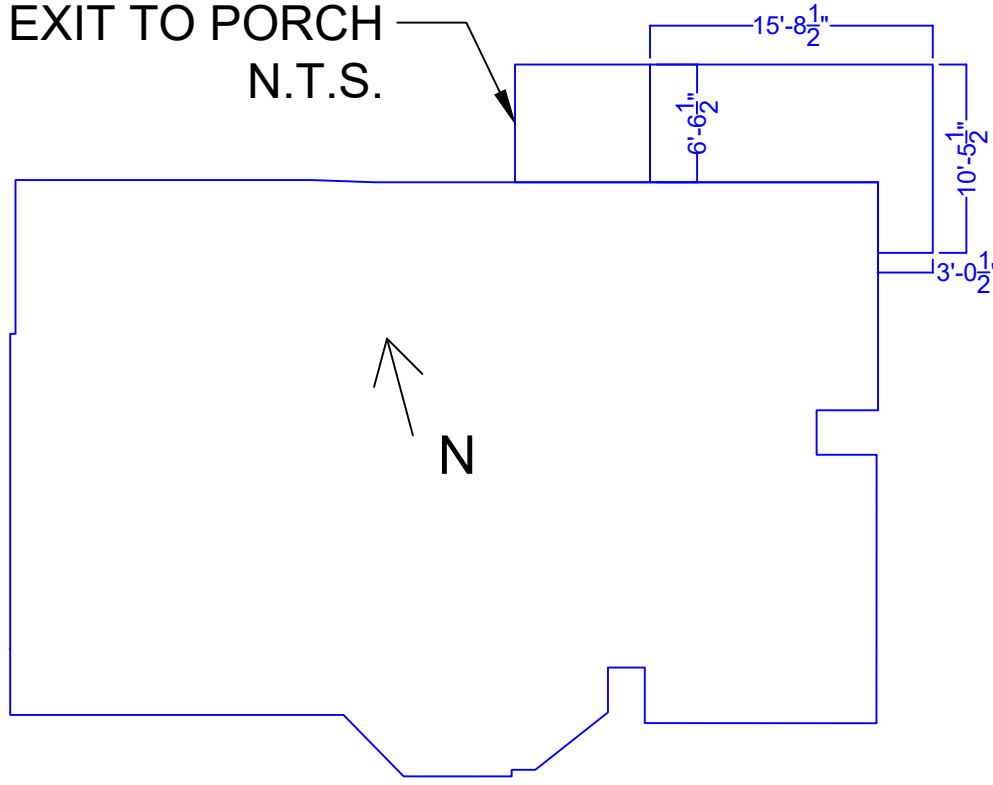


1 RAMP SEGMENT 1 - ELEVATION
 Scale: 1/4" = 1'-0"



2 RAMP SEGMENT 2 - ELEVATION
 Scale: 3/8" = 1'-0"

EXIT TO PORCH
N.T.S.



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EXISTING SITE PLAN

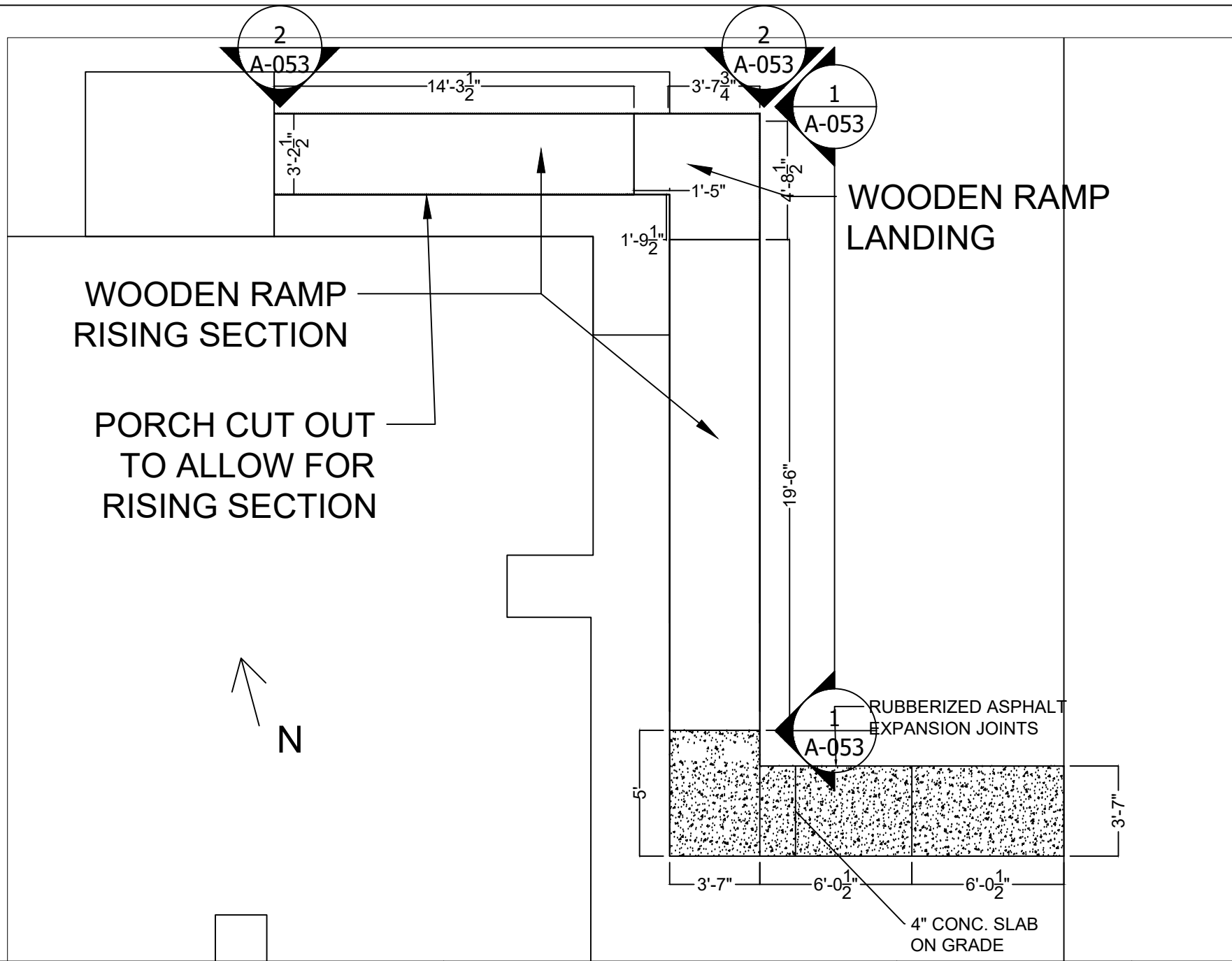
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A-051

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NEW SITE PLAN

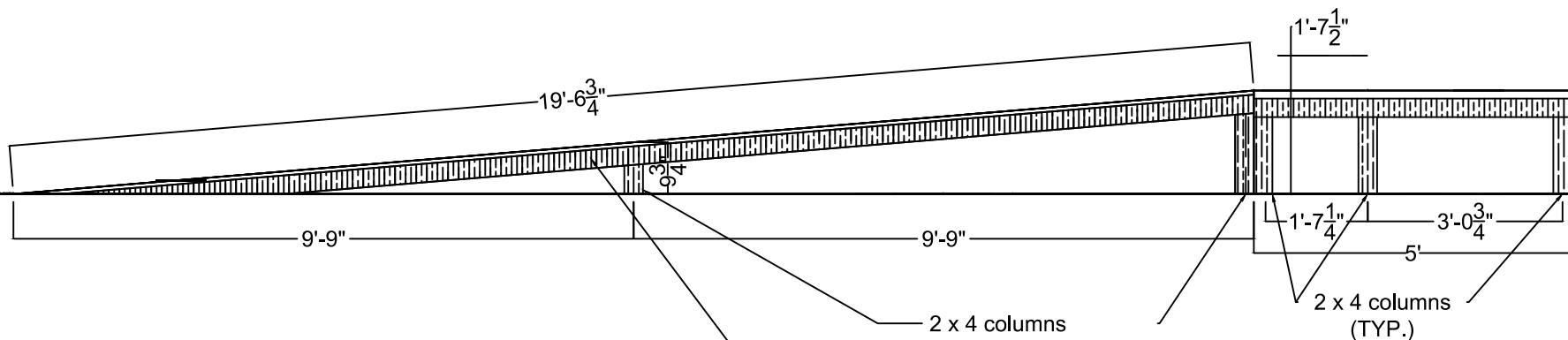
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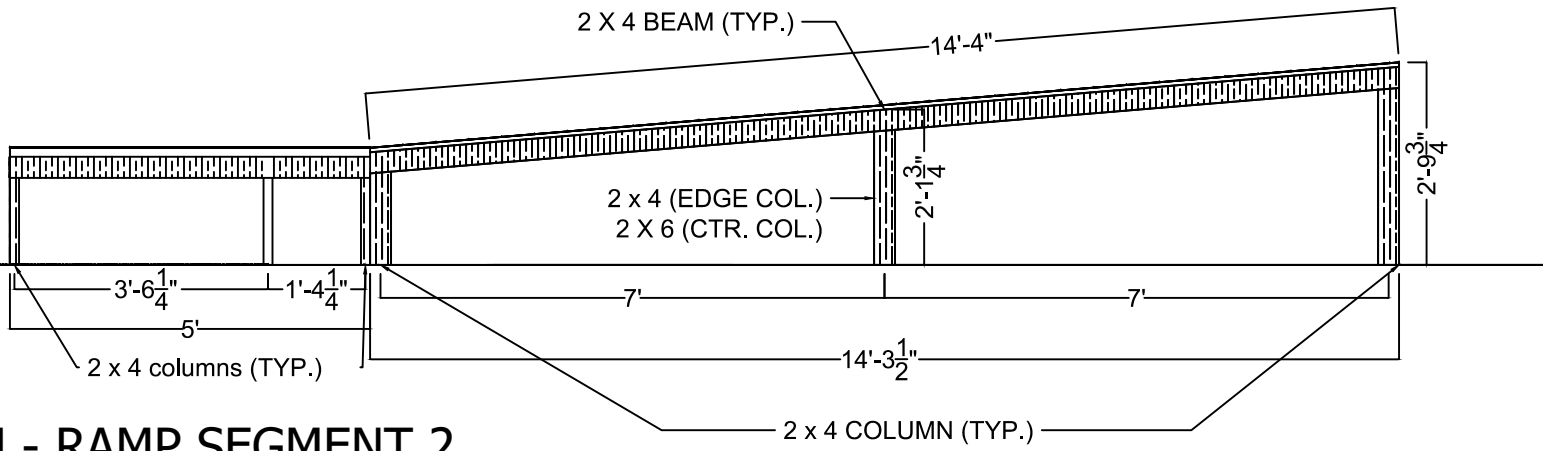
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1 ELEVATION - RAMP SEGMENT 1
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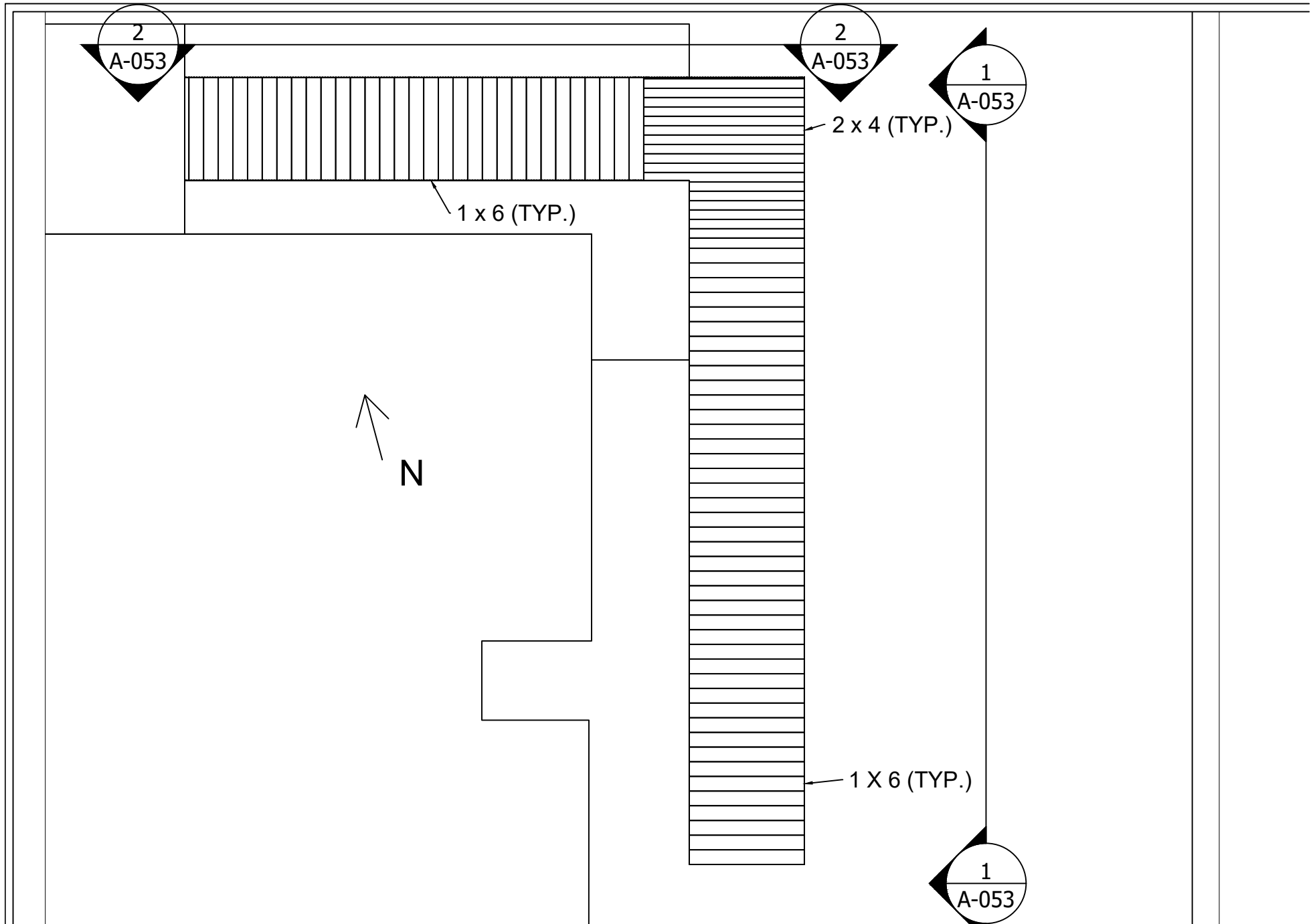
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NEW SITE ELEVATIONS

DWG NO:
A-053

PAGE NO: 03
SCALE: 3/16" = 1'-0"
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NEW SITE PLAN
 PLANK LAYOUT

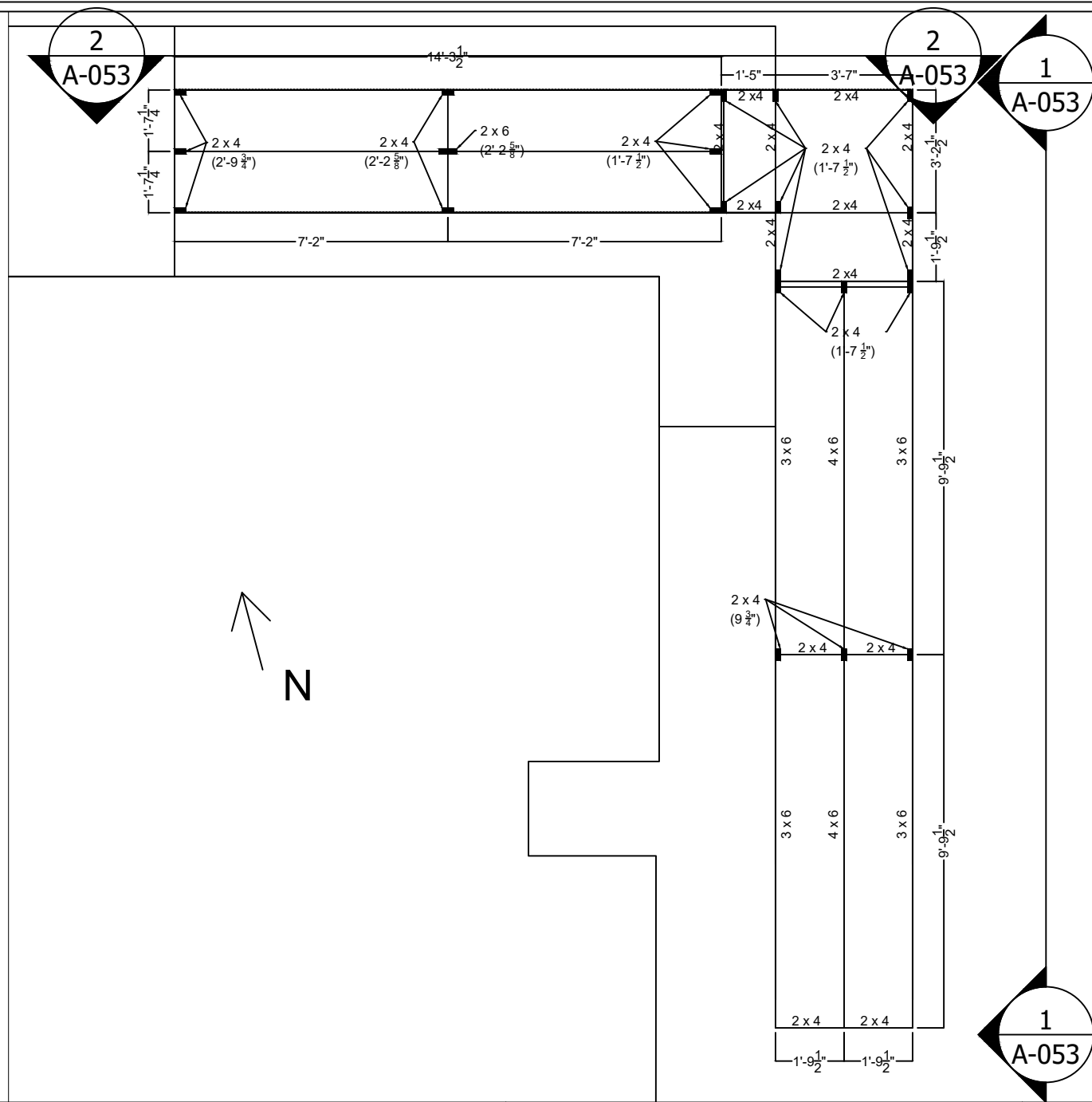
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S-051

PAGE NO: 04

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

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DRAWING TITLE

NEW SITE PLAN
WOOD SCHEDULE

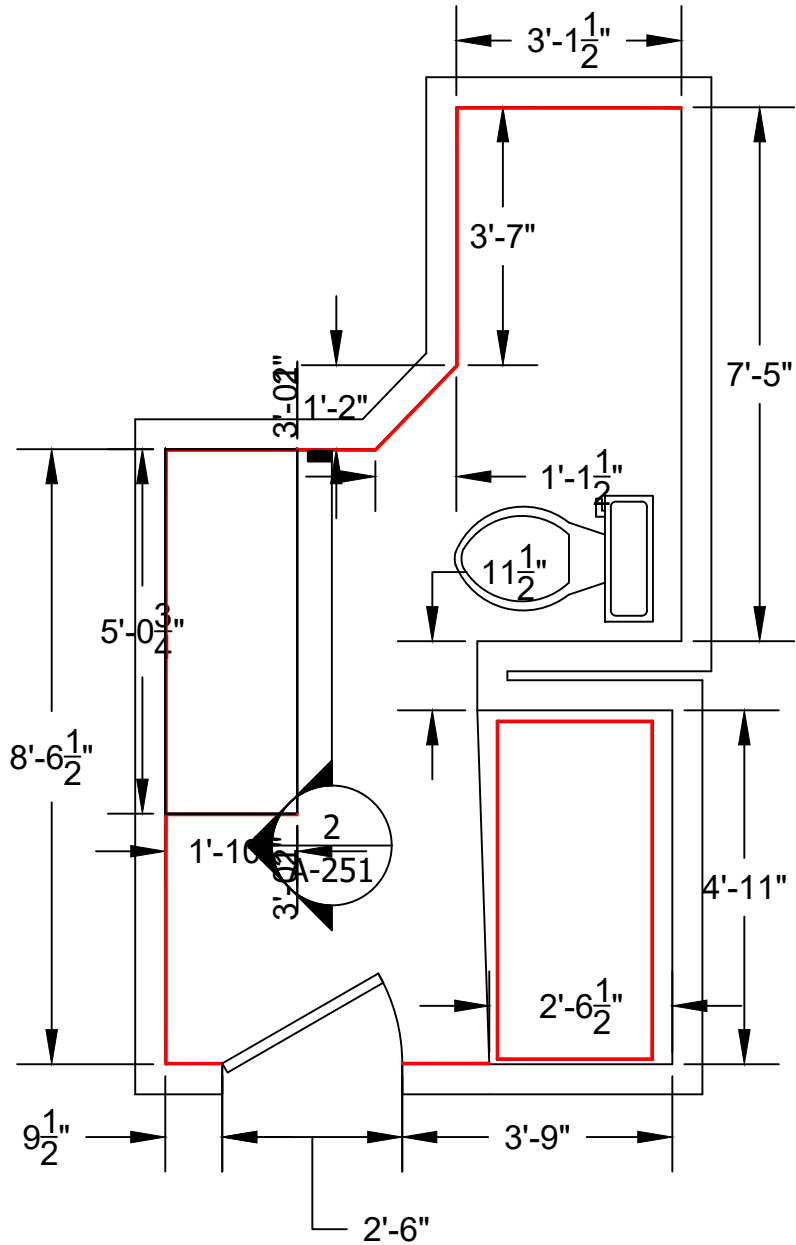
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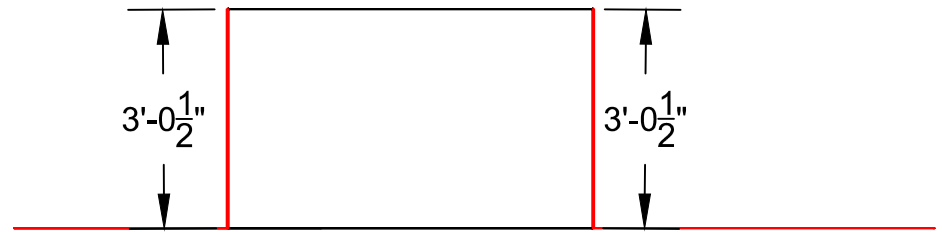
PAGE NO: 05

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

DRAWN BY: John Bonina



1. PLAN VIEW



2. SINK ELEVATION

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2ND FLOOR BATHROOM
 PROPOSED RENOVATIONS

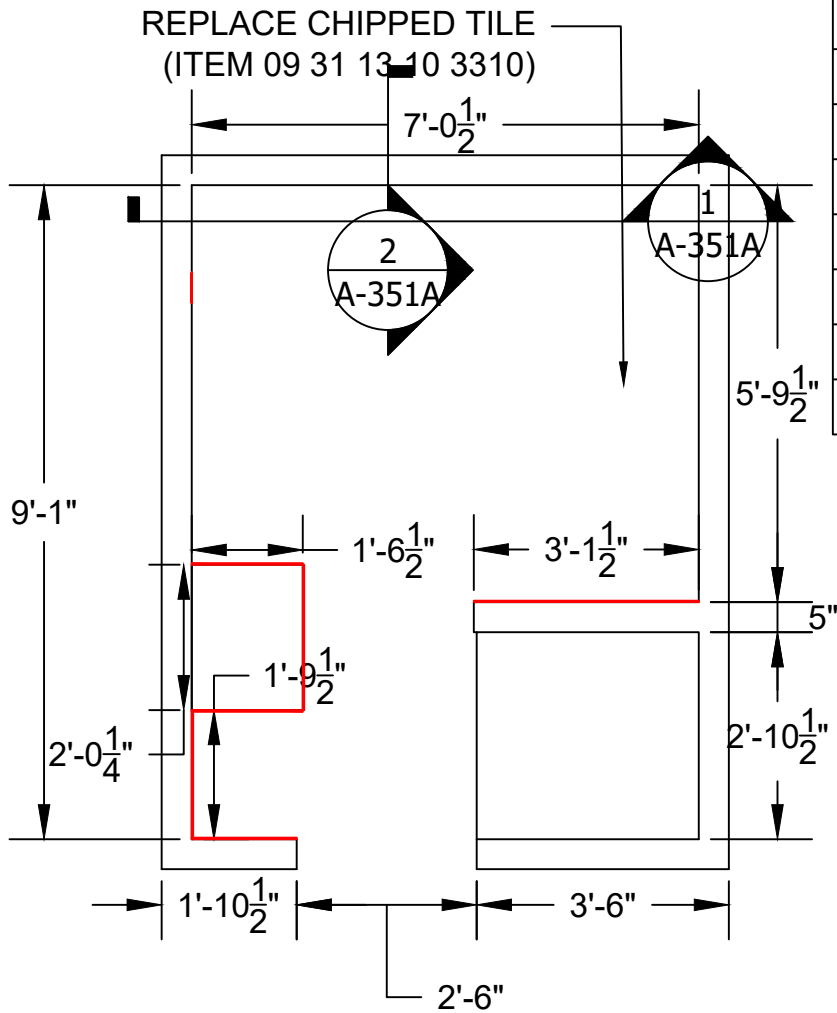
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PAGE NO:

SCALE: 3/8" = 1'-0"

DRAWN BY: J. BONINA



RUBBER FILLER (ITEM 07 91 26.10 4360)

Count	Name	d1	Column
1	Butyl Rubber Filler	1'-5 1/2"	1.46
2	Butyl Rubber Filler	1'-6 1/2"	3.08
1	Butyl Rubber Filler	1'-9 1/2"	1.79
1	Butyl Rubber Filler	2'-0 1/4"	2.02
1	Butyl Rubber Filler	3'-1 1/2"	3.13
			11.48

1

3RD FLOOR BATH PLAN

Scale: 3/8" = 1'-0"

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M. Rabasco
J. Rios

DRAWING TITLE

3RD FLOOR BATHROOM
PROPOSED RENOVATIONS
PLAN VIEW

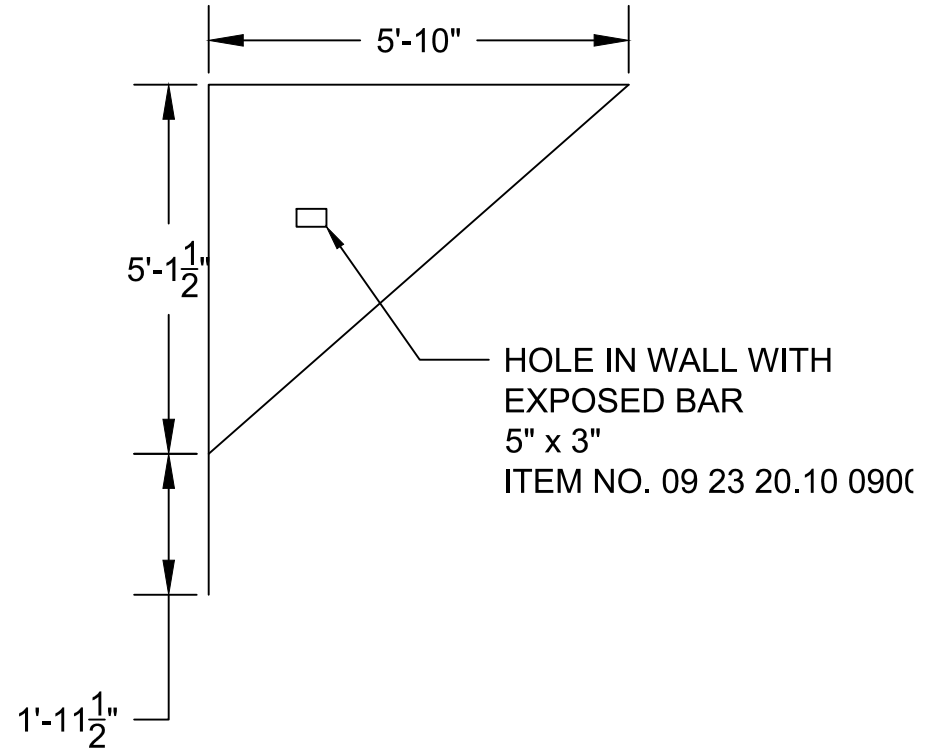
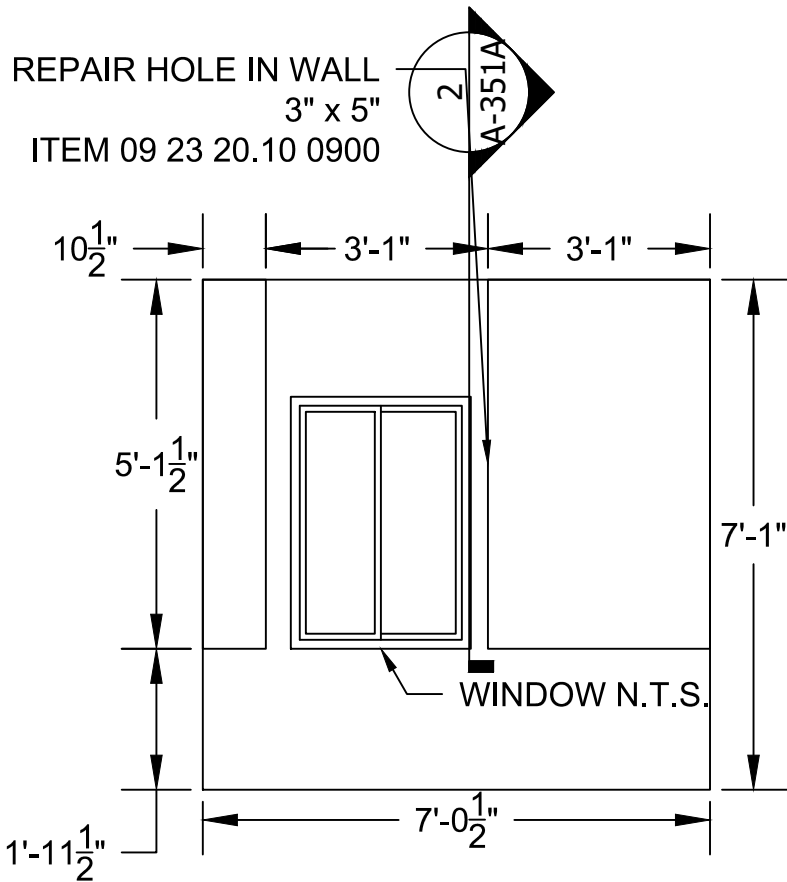
DWG NO:

A-351

PAGE NO:

SCALE: 3/8" = 1'-0"

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1 3RD FLOOR BATH ELEVATION
Scale: 3/8" = 1'-0"

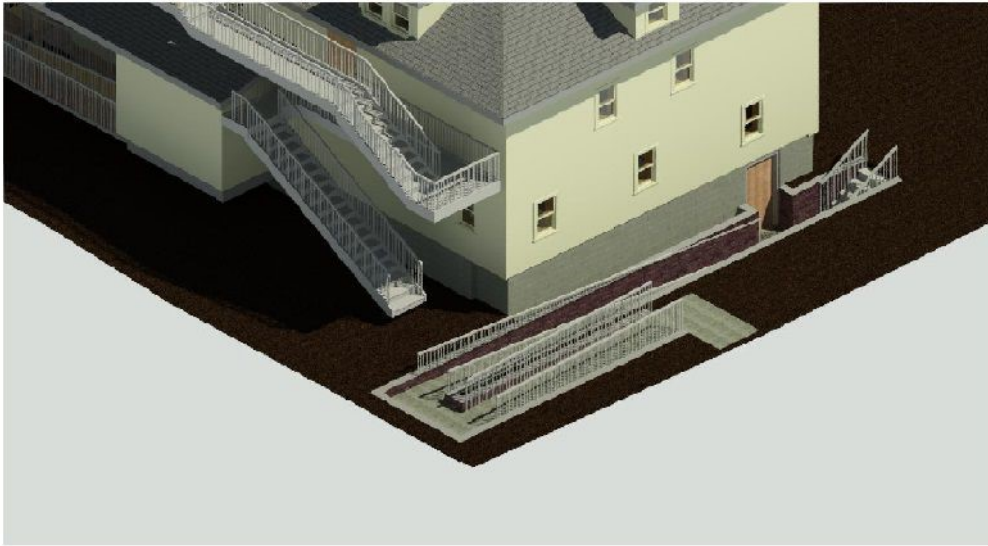
2 3RD FLOOR BATH SECTION
Scale: 3/8" = 1'-0"

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DRAWING TITLE
THIRD FLOOR BATHROOM
PROPOSED RENOVATIONS
ELEVATION AND SECTION

DWG NO:
A-351A

PAGE NO:
SCALE:
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1

Render - Exit Ramp

Scale: N/A



2

Render - Basement Common Room

Scale: N/A

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DRAWING TITLE

Exit Ramp and Common
Room Renders

DWG NO:

A-71

PAGE NO: 03

SCALE: N/A

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3

Render - Single Bedroom

Scale: N/A



4

Render - Double Bedroom

Scale: N/A

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DRAWING TITLE
 Single and Double Bedrooms

DWG NO:
 A-72

PAGE NO: 04
 SCALE: N/A
 DRAWN BY: James Rios