

932 SHEPHERD ST
NW WASHINGTON DC
20011

LOT: 0839 SQUARE: 2906

RESIDENTIAL ROW
BUILDING

PROJECT CODE -

OWNER
1124 MORSE LLC

OWNER ADDRESS
41649 WHITE YARROW CT
ASHBURN VA 20148

PROPERTY ADDRESS
932 SHEPHERD ST NW
WASHINGTON DC 20011

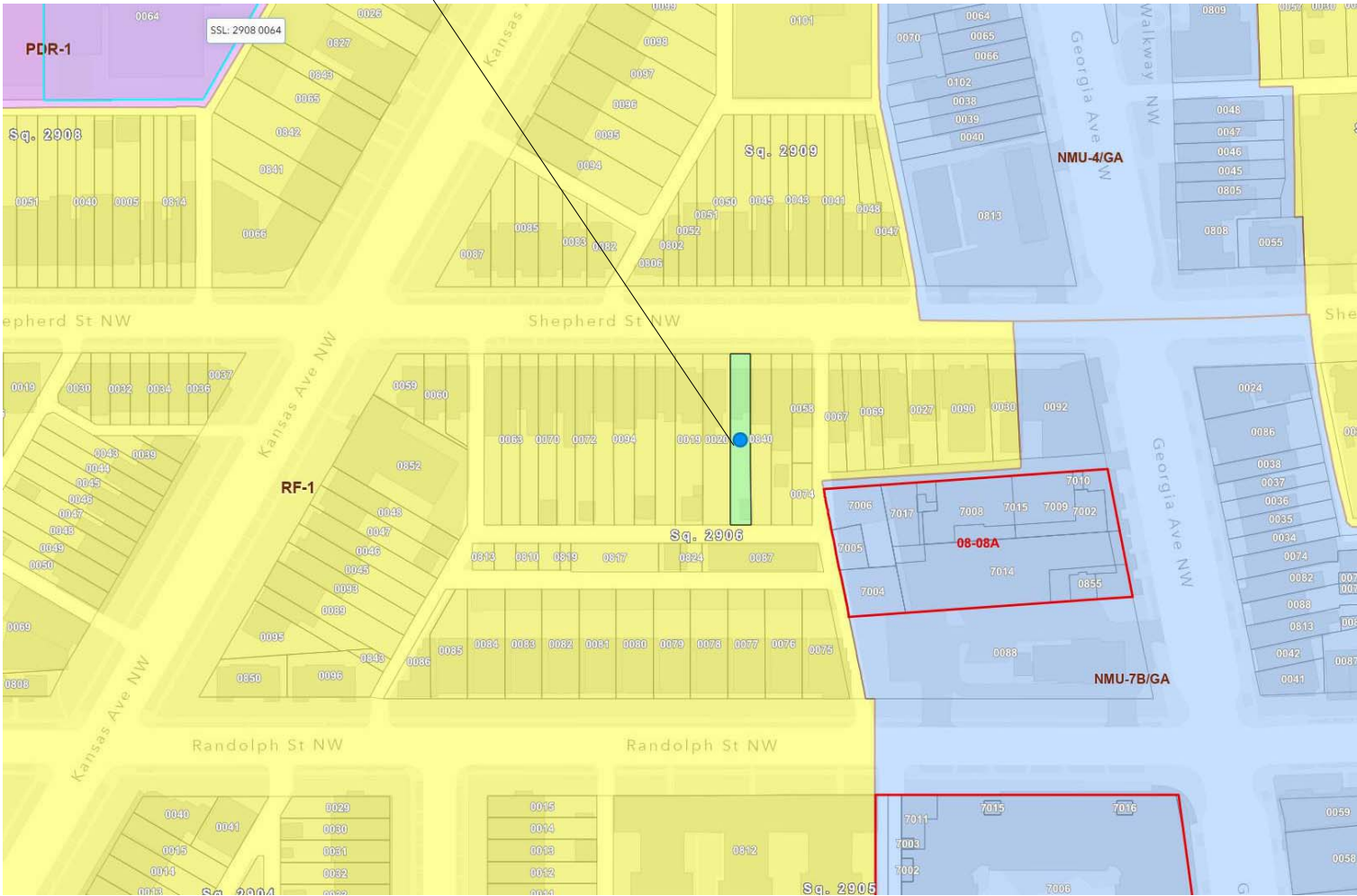
Square, Suffix, Lot
2906 0839

PROJECT DESIGN TEAM
ONE DESIGN SERVICES

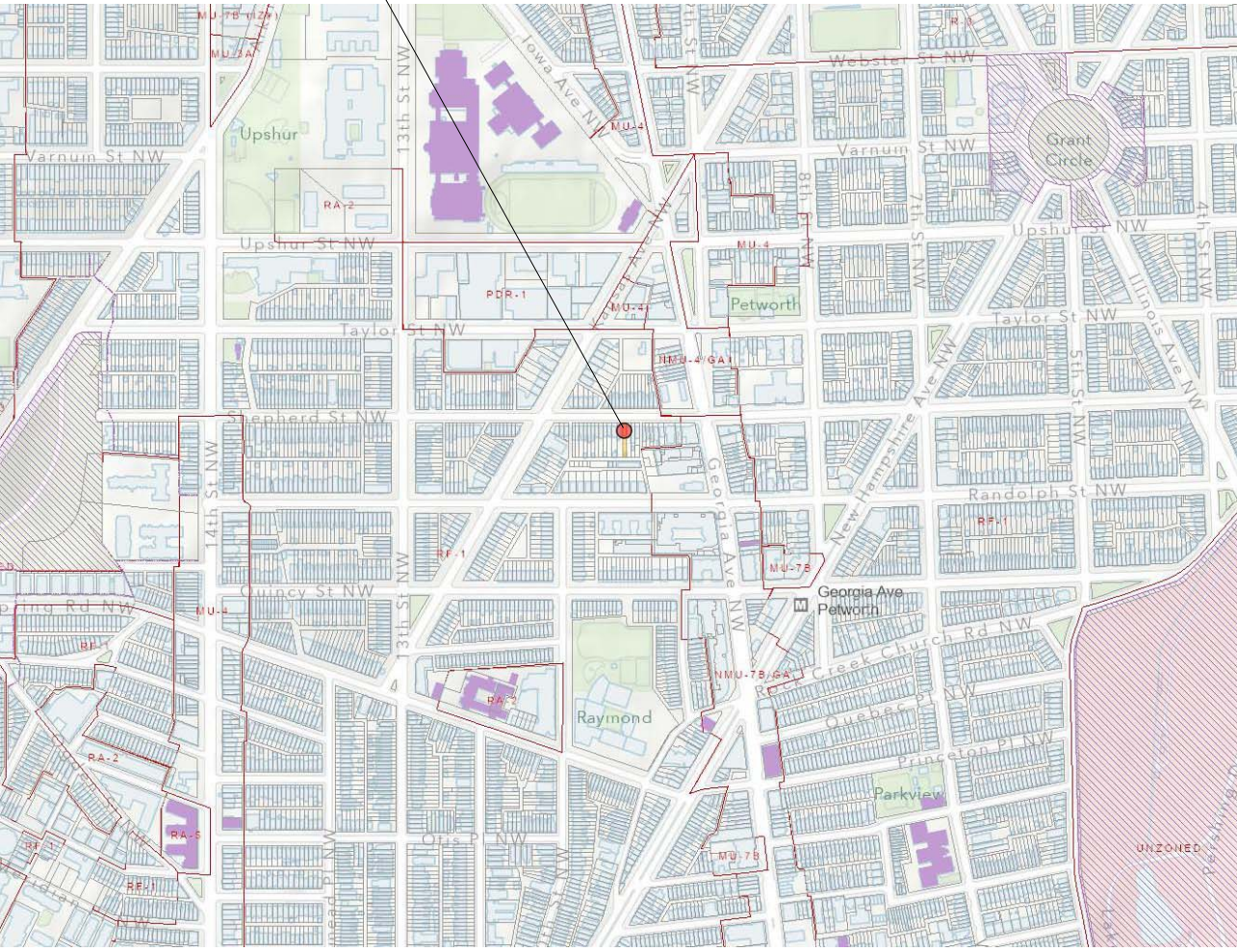
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BZA PACKAGE

LOCATION



VICINITY MAP



SYMBOLS

ABBREVIATIONS

PLAN DETAIL REFERENCE DETAIL REFERENCE SHEET NUMBER ELEVATION REFERENCE DETAIL REFERENCE SHEET NUMBER SECTION REFERENCE DETAIL REFERENCE SHEET NUMBER EXISTING WALL TO BE REMOVED EXISTING WALL TO REMAIN NEW BRICK WALL NEW CMU WALL NEW STUD WALL	DOOR DESIGNATION WINDOW DESIGNATION PARTITION TYPE KEY NOTE ROOM NUMBER FIXTURE TYPE ELEVATION MARKER INTERIOR ELEVATION DESIGNATION ROOF SLOPE DIRECTION	AFF ABOVE FINISH FLOOR AA ALL AROUND ACOUS ACOUSTICAL AOT ACOUSTICAL CEILING TILE ADJ ADJUSTABLE ALUM ALUMINUM ANOD ANODIZED BD BOARD BLKG BLOCKING BS BOTH SIDES < CENTER LINE < CLG CEILING CMU CONCRETE MASONRY UNIT CONT CONTINUOUS DIA DIAMETER DIM DIMENSION DN DOWN DOUG DOUGLAS DR DOOR DTL DETAIL DWG DRAWING ELEC ELECTRICAL ELEV ELEVATION EQ EQUAL EQUIP EQUIPMENT EXST. EXISTING FF FINISH FLOOR FIXT FIXTURE FLR FLOOR FLUOR FLUORESCENT GFI GROUND FAULT INTERRUPTER GC GENERAL CONTRACTOR GL GLAZING GYP GYPSUM GWB GYPSUM WALL BOARD HDWR HARDWARE HM HOLLOW METAL MAT MATERIAL MAX MAXIMUM MC MILLWORK CONTRACTOR MDF MEDIUM DENSITY FIBERBOARD MDO MEDIUM DENSITY OVERLAY MECH MECHANICAL MIN MINIMUM MISC MISCELLANEOUS MOLDG MOLDING MO MOUNTED MTD MOUNTED MTL METAL ON CENTER ON CENTER OPP OPPOSITE PLYWD PLYWOOD PL PLATE POL POLISHED PTD PAINTED RCP REFLECTED CEILING PLAN RND ROUND RO ROUGH OPENING SC SOLID CORE SIM SIMILAR SHT SHEET STND STAINED STL STEEL STOR STORAGE TEL TELEPHONE TYP TYPICAL TME TO MATCH EXISTING UON UNLESS OTHERWISE NOTED VOT VINYL COMPOSITION TILE VERT VERTICAL VERNEE VENEER VIF VERIFY IN FIELD VWC VINYL WALL COVERING W/ WITH
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SCOPE OF WORKS

ADDITION, ALTERATION AND REPAIR ON A RESIDENTIAL ROW BUILDING. TO CONVERT UNIT TO 3 UNITS RESIDENTIAL.

- TO CONSTRUCT REAR ADDITION
- TO CONSTRUCT REAR DECK AND STAIR.
- TO CONSTRUCT THIRD FLOOR ADDITION AND ROOF DECK.
- TO UNDERPIN EXISTING CELLAR.
- TO INSTALL MEP ENTIRELY.
- TO CONSTRUCT PARKING PAD IN THE REAR YARD.
- TO REPLACE EXISTING FLOOR JOISTS IN PLACE.

DRAWING INDEX

Sheet List	
Sheet Number	Sheet Name
01	COVER
02	SITE PLANS
03	EXISTING DEMO LAYOUTS
04	PROPOSED LAYOUTS
05	PROPOSED LAYOUTS
06	ELEVATIONS
07	ELEVATIONS
08	SECTION
09	AREA PLAN
10	LANDSCAPE SITE PLAN
11	SHADE ANALYSIS
12	SUMMER SOLSTICE SHADOW STUDY -
13	FALL & SPRING EQUINOX SHADOW
14	WINTER SOLSTICE SHADOW STUDY
15	PROJECTIONS

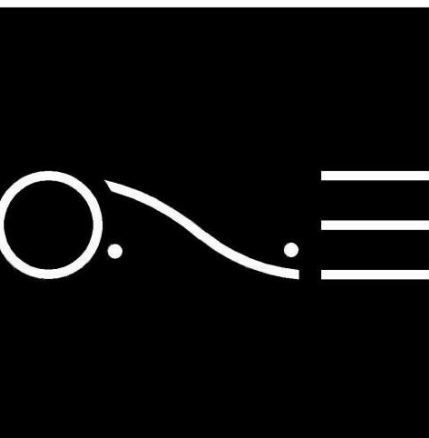
FRONT PHOTO



ARIAL PHOTO



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MAY 2025

COVER

01

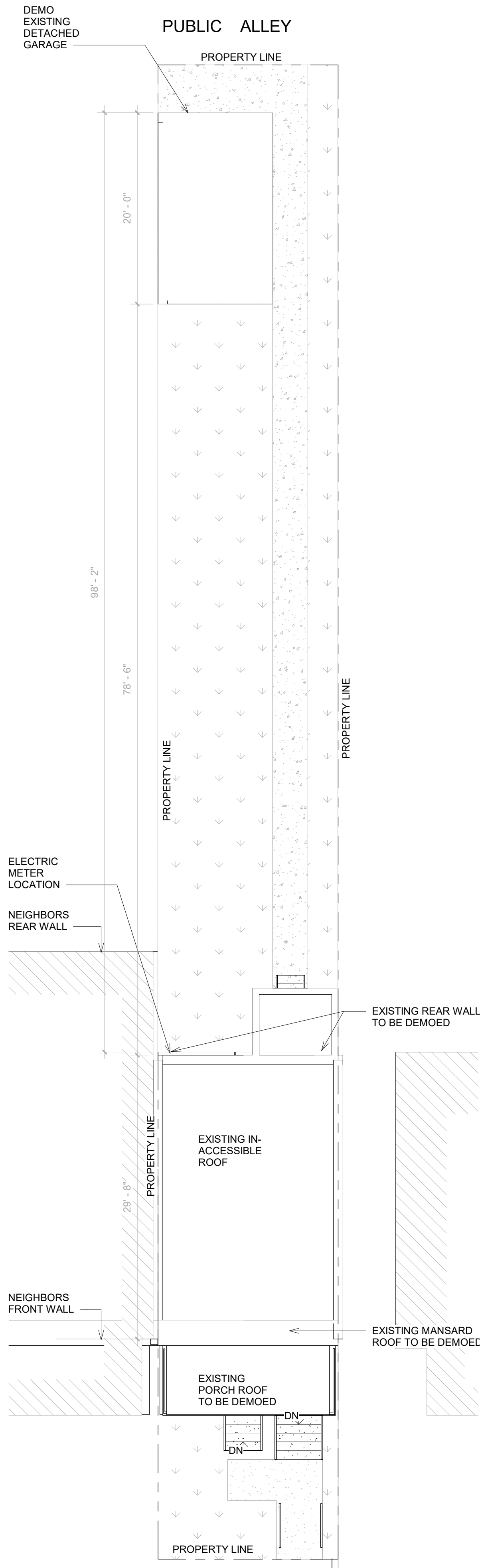
Board of Zoning Adjustment
District of Columbia
CASE NO. 21396
EXHIBIT NO. 408

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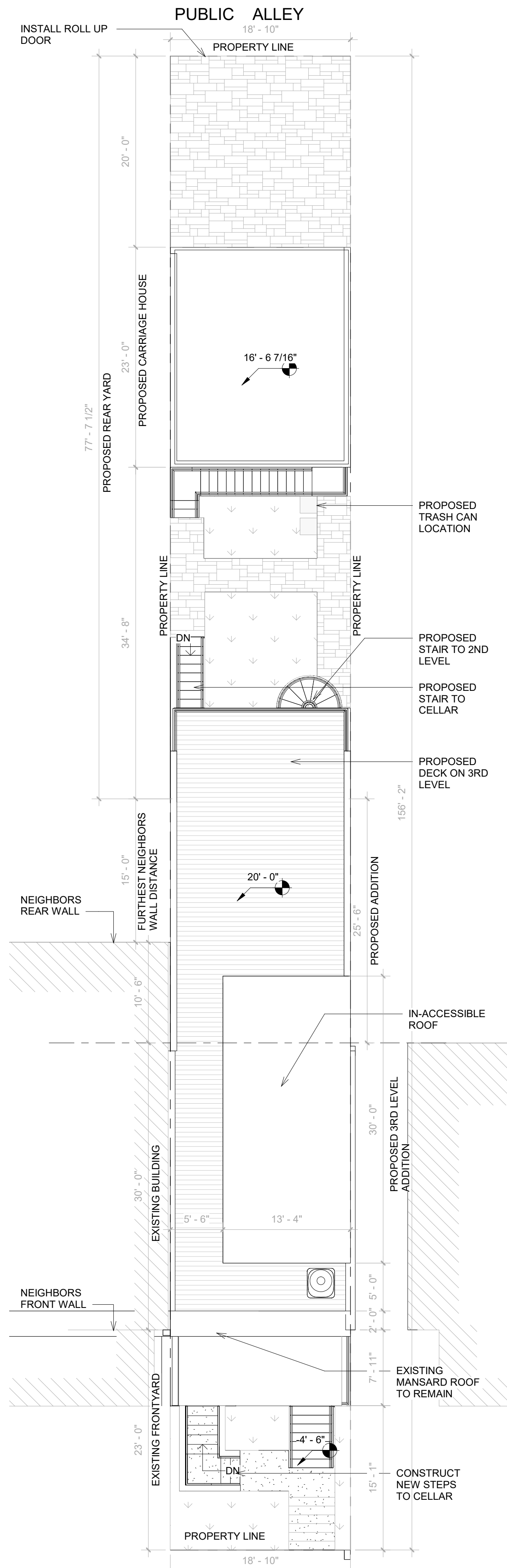
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SHEPHERD STREET, N.W.

① SITE PLAN EXISTING
1/8" = 1'-0"



SHEPHERD STREET, N.W.

② SITE PLAN
1/8" = 1'-0"



GENERAL NOTES

GENERAL INFORMATION	EXISTING LOT	PROPOSED BUILDING
USE GROUP	R3	R3
TYPE OF CONSTRUCTION	VB	VB
FULLY SUPPRESSED (SPRINKLED)	NO	NO
LOT AREA	2939	2939
BUILDING FOOTPRINT	775	1630

TOTAL SITE SF	ABOVE GRADE:	1ST - PRINCIPAL 1048 SF
BUILDING FOOTPRINT		ACCESSORY 358 SF
GREEN AREA		TOTAL - 1400SF
PERMEABLE PAVEMENT		2ND - PRINCIPAL 1048 SF
		ACCESSORY 433 SF
		TOTAL - 1481 SF
		3RD - 400 SF
		TOTAL = 3281 SF

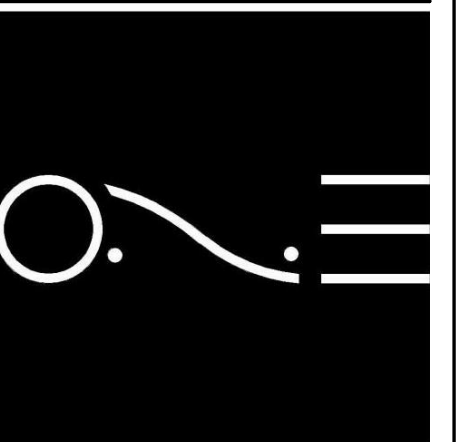
CELLAR - 1140 SF
GFA = 4421 SF

BUILDING HEIGHT	2 story	34' - 0" / 3 STORIES
NUMBER OF EXITS	3	3
SOUND TRANSMISSION	-	STC 52
SMOKE DETECTORS	YES	YES
CO DETECTORS	YES	YES
SPRINKLER	NO	YES
INSULATION		YES; EXTERIOR WALLS @ R19; ROOF @ R-49

GENERAL NOTES / ZONING CODE ANALYSIS		932 SHEPHERD ST NW WASHINGTON DC 20011	
ZONING DISTRICT	RF-1	TOTAL LOT AREA	2939_SF
USE GROUP	R-3	TOTAL LOT WIDTH	156.15' -DEPTH & 18.82' WIDTH
LOT	0839		
SQUARE	2906		

REQUIREMENT	EXISTING	ALLOWABLE / REQUIRED	PROPOSED
LOT OCCUPANCY	775 SF (24%)	1763 SF (60%)	1766 SF (60%)
HEIGHT	24 FT	35 FT (3 STORIES)	34 FT
SIDEYARD WIDTH	N/A	5 FT	N/A
REAR YARD SETBACK	78'-2"	20 FT MIN	77' - 7 1/2"
PARKING	1	1	2
FRONT YARD	23 FT	WITHIN RANGE OF EX.	23 FT
DWELLING UNITS	1	2	3

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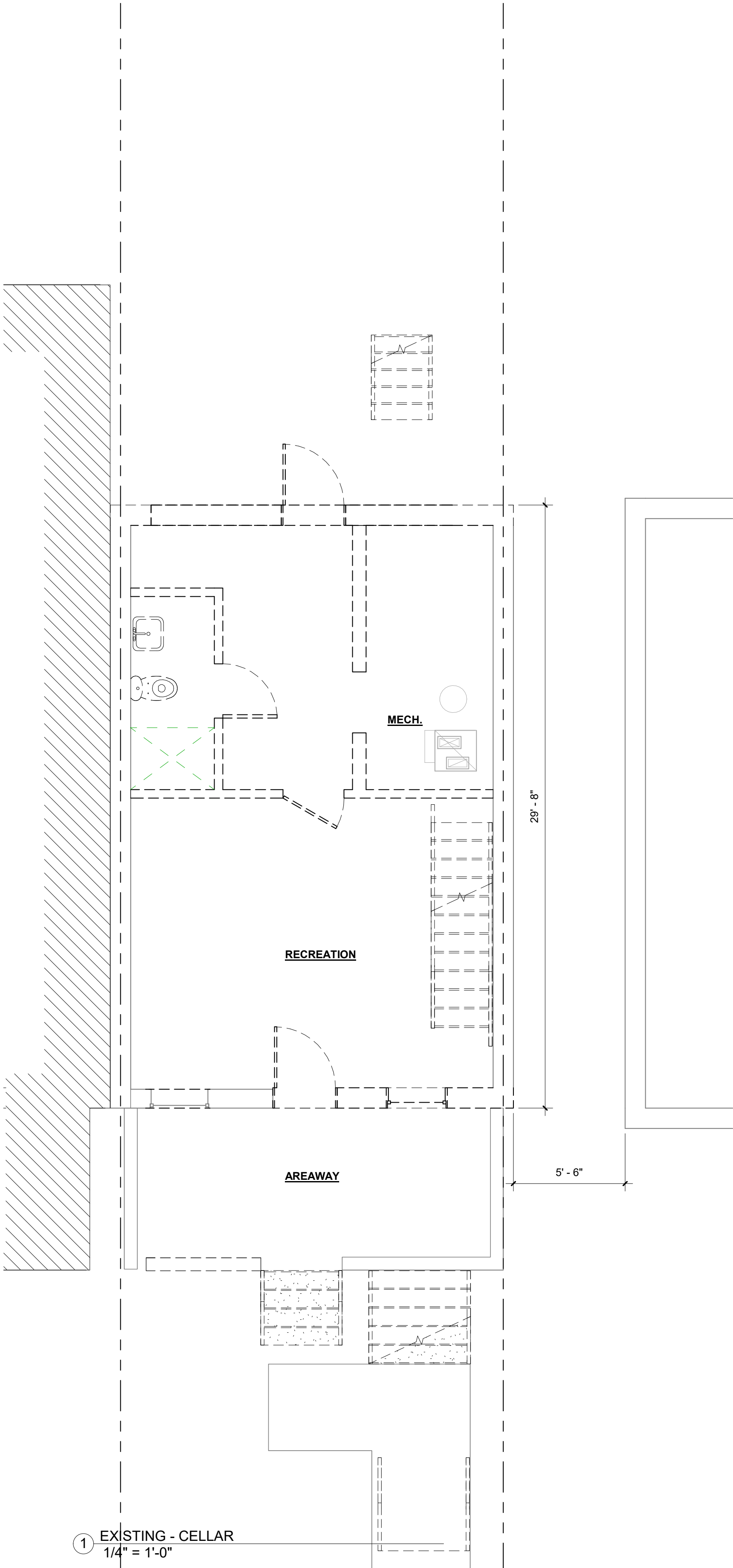
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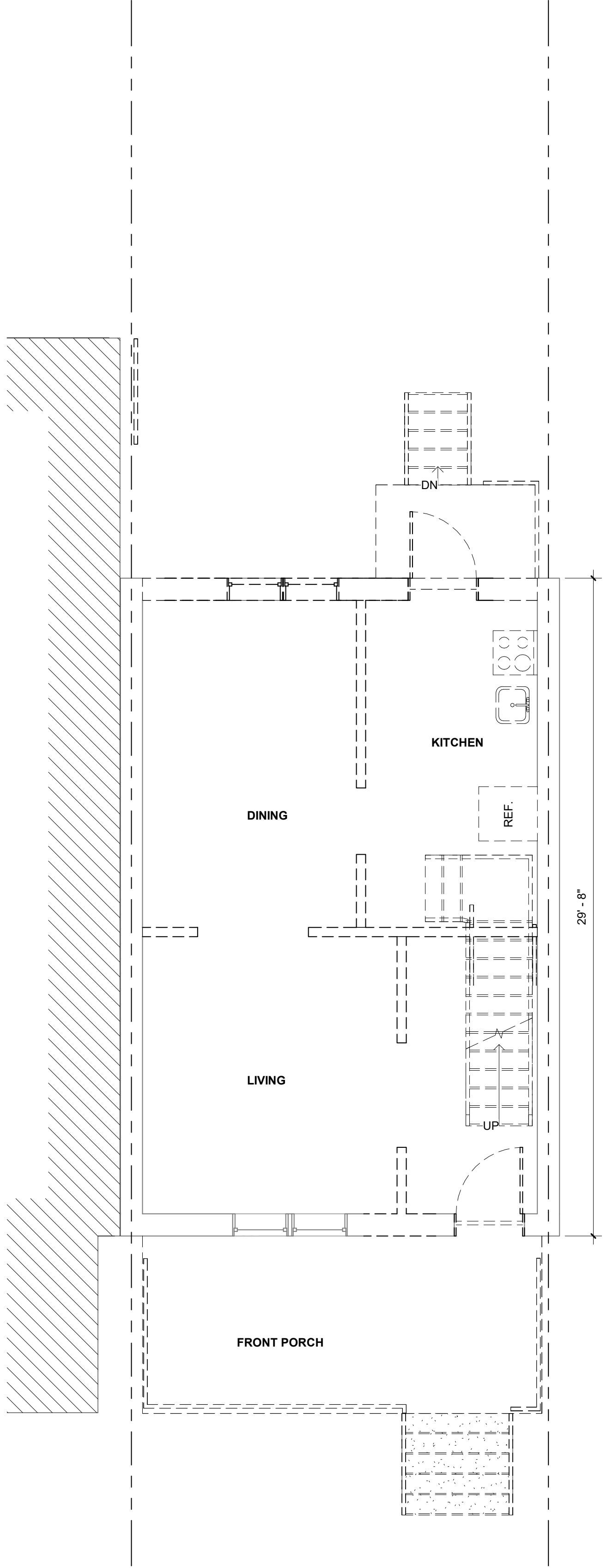
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SITE PLANS

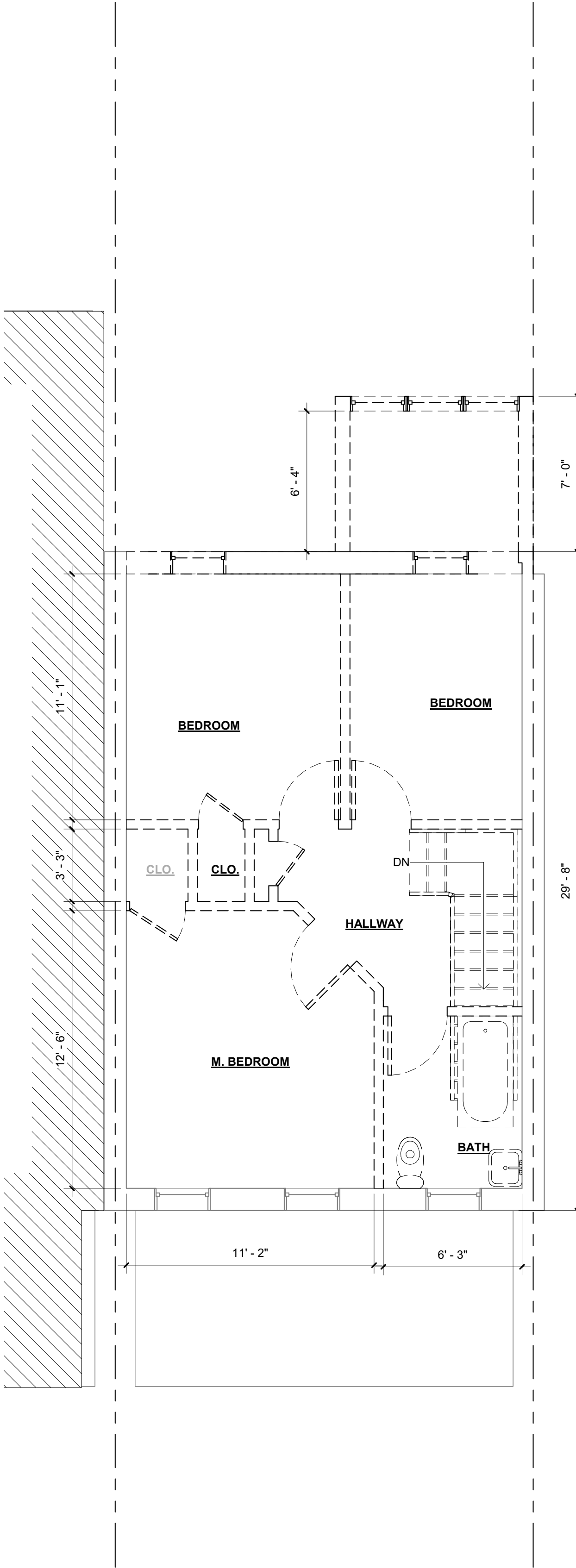
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① EXISTING - CELLAR
1/4" = 1'-0"

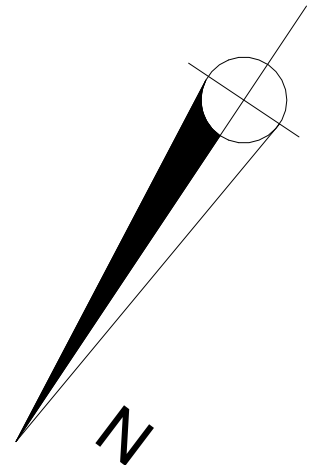


② EXISTING - FIRST LEVEL Copy 1
1/4" = 1'-0"

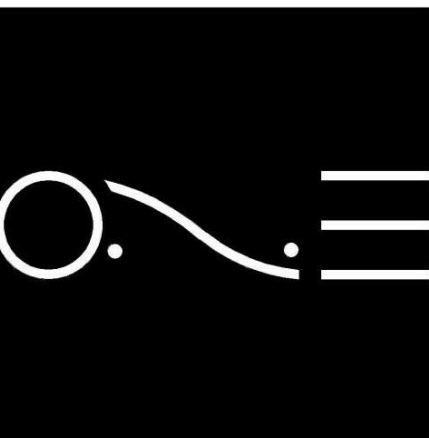


③ EXISTING - SECOND FLOOR
1/4" = 1'-0"

	DEMO WALL
	NEW WALL
	EXISTING WALL
	EXISTING BRICK WALL
	EXISTING DOOR
	PROPOSED DOOR
	EXISTING WINDOW
	PROPOSED WINDOW



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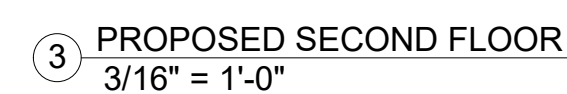
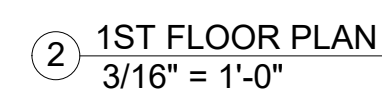
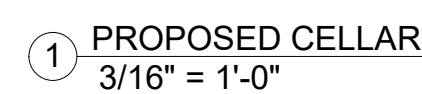


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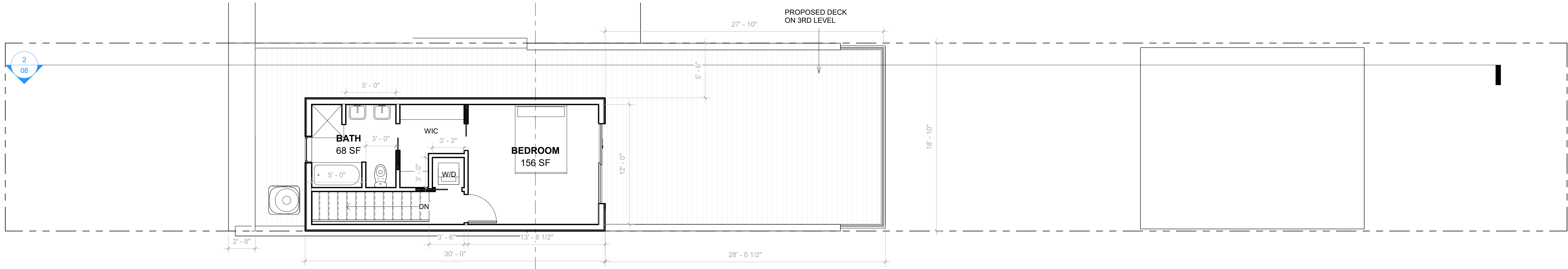
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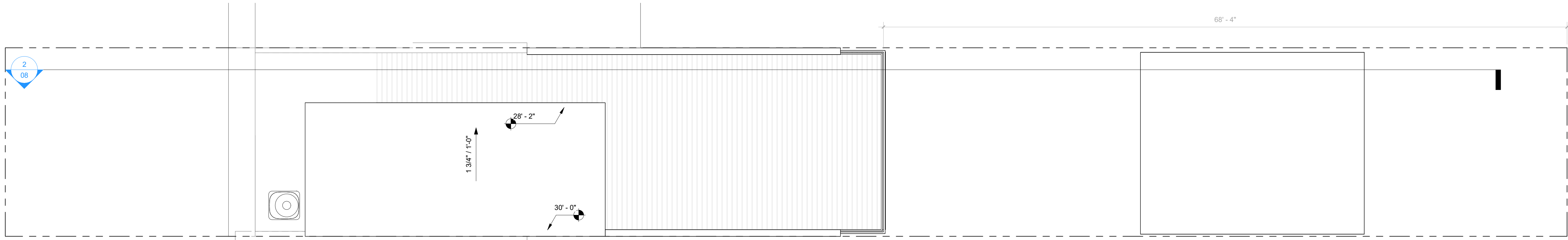
EXISTING
DEMO
LAYOUTS



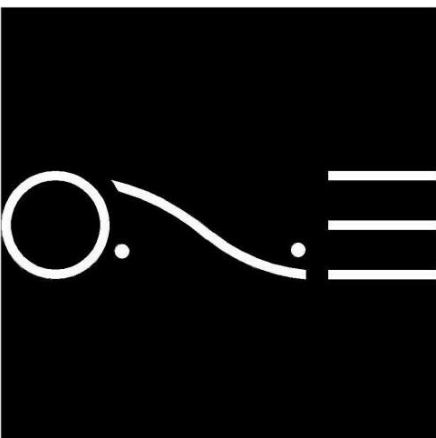
1 PROPOSED THIRD LEVEL
3/16" = 1'-0"



2 PROPOSED ROOF
3/16" = 1'-0"



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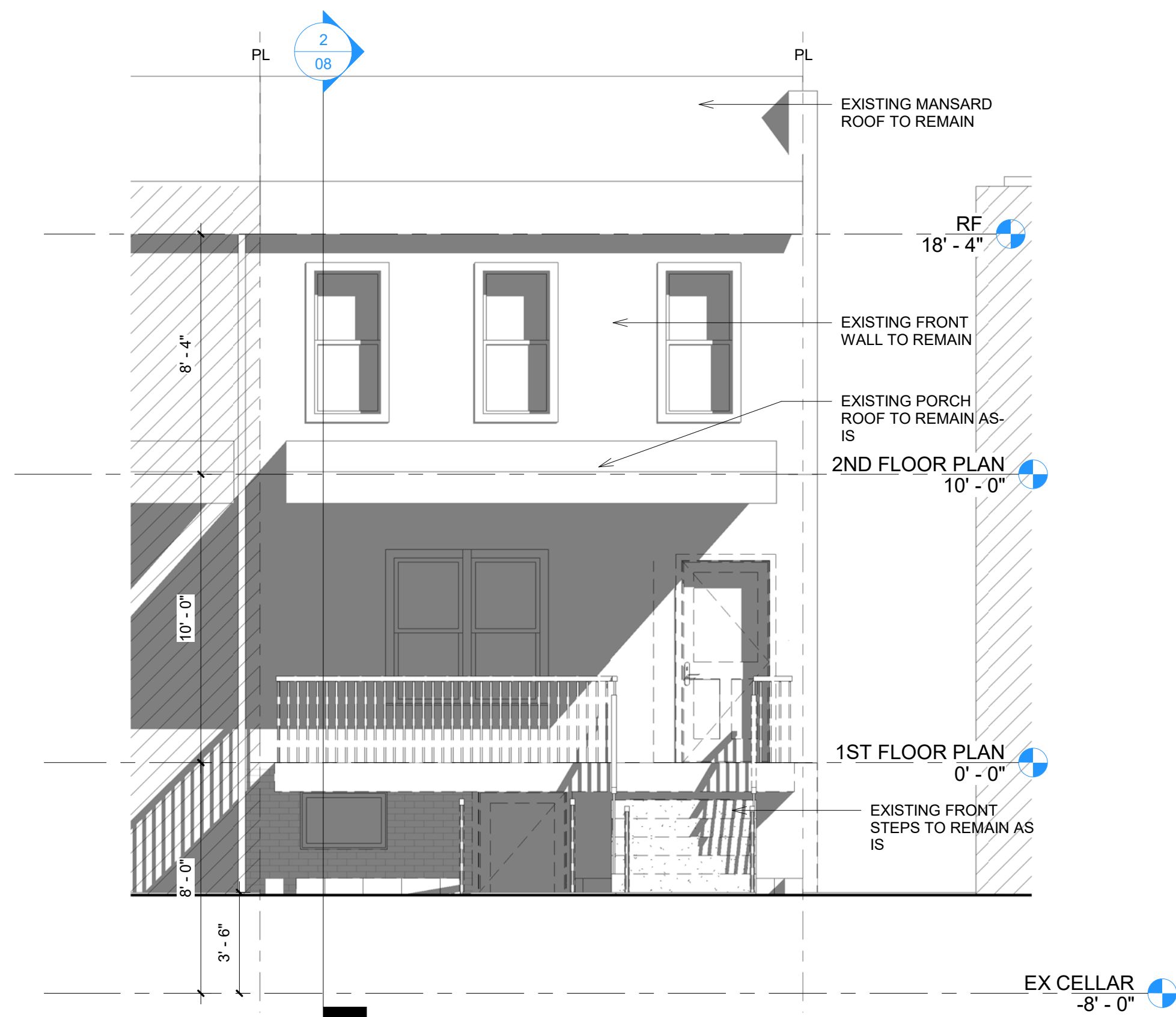
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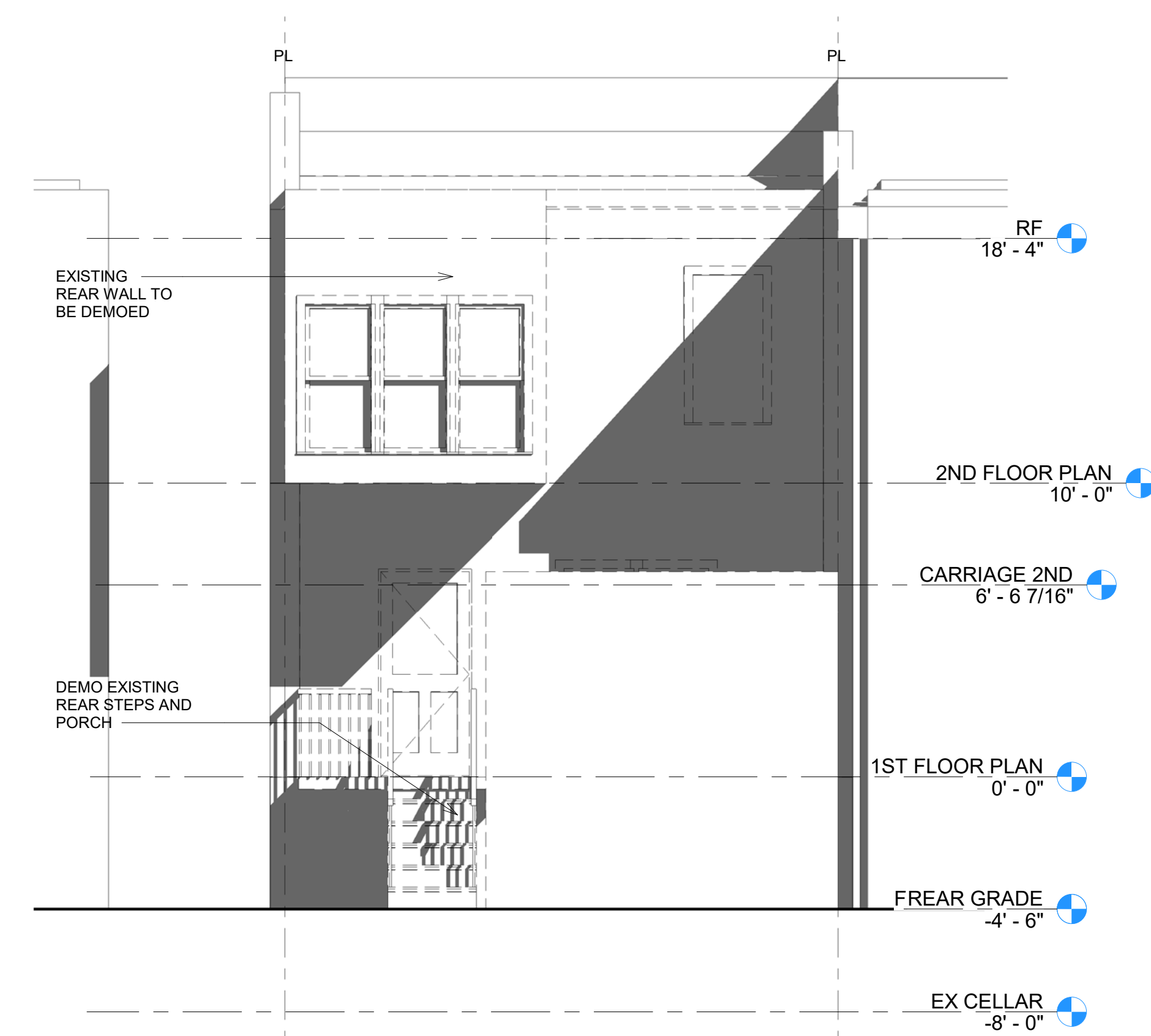
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PROPOSED
LAYOUTS

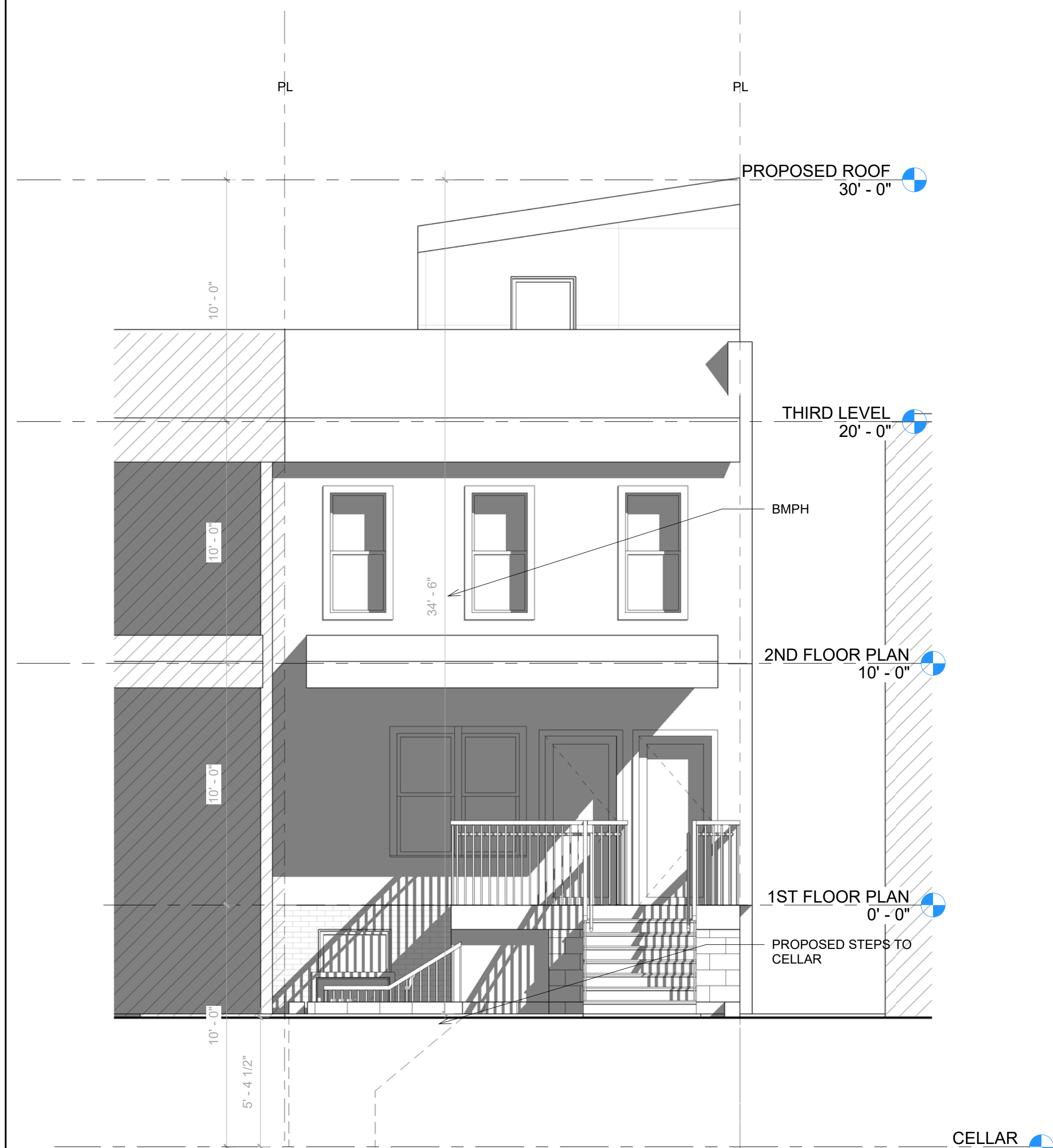
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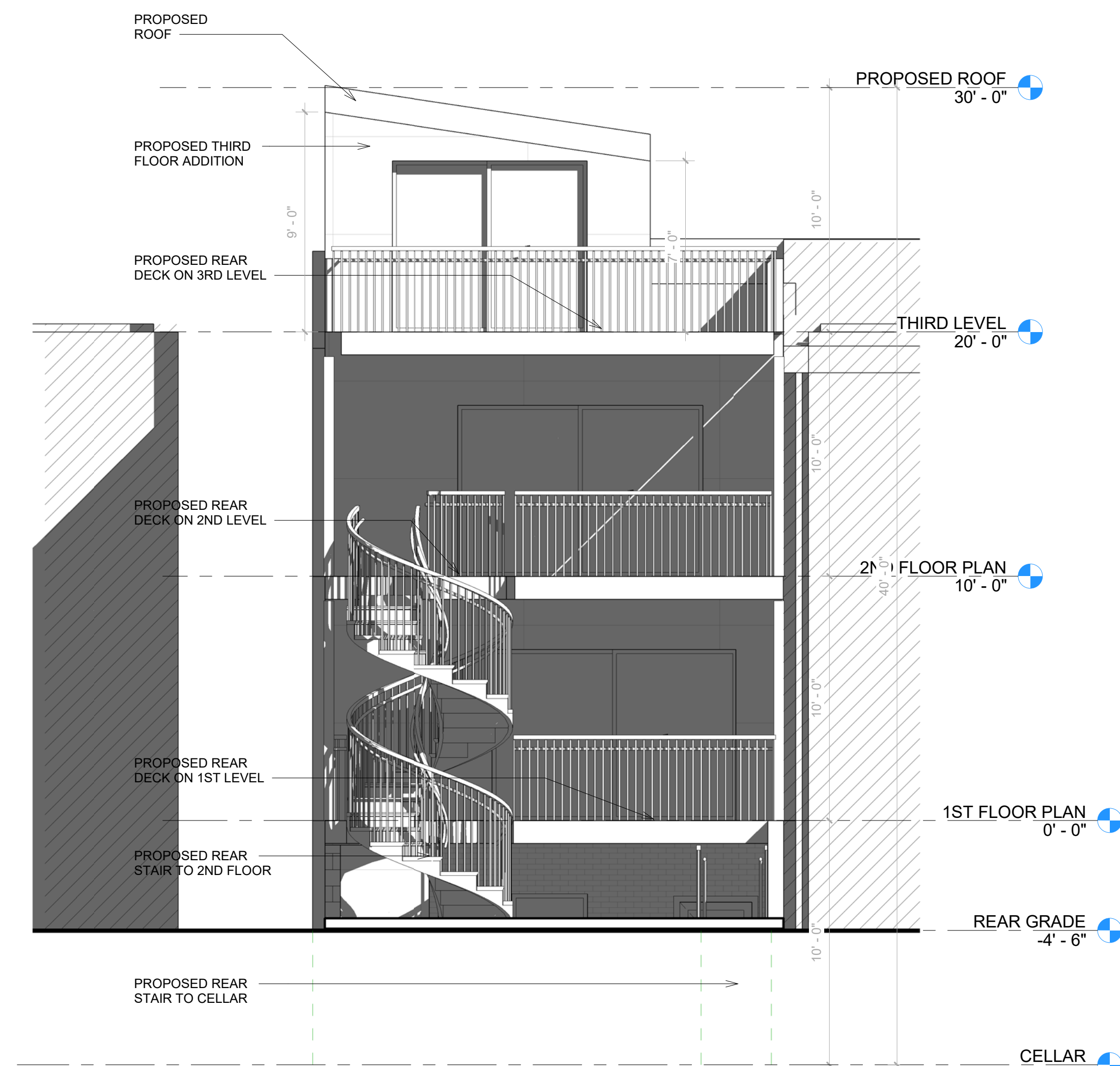
① EXISTING FRONT ELEVATION
1/4" = 1'-0"



③ EXISTING REAR ELEVATION
1/4" = 1'-0"

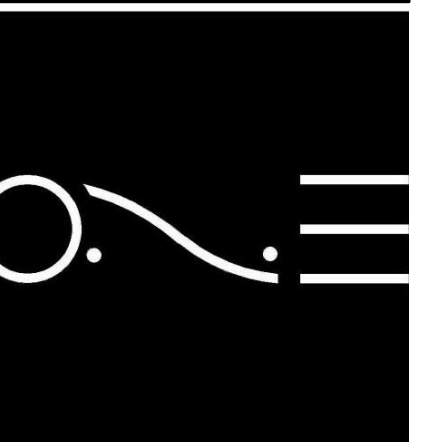


② PROPOSED FRONT ELEVATION
1/4" = 1'-0"



④ PROPOSED REAR ELEVATION Copy 1
1/4" = 1'-0"

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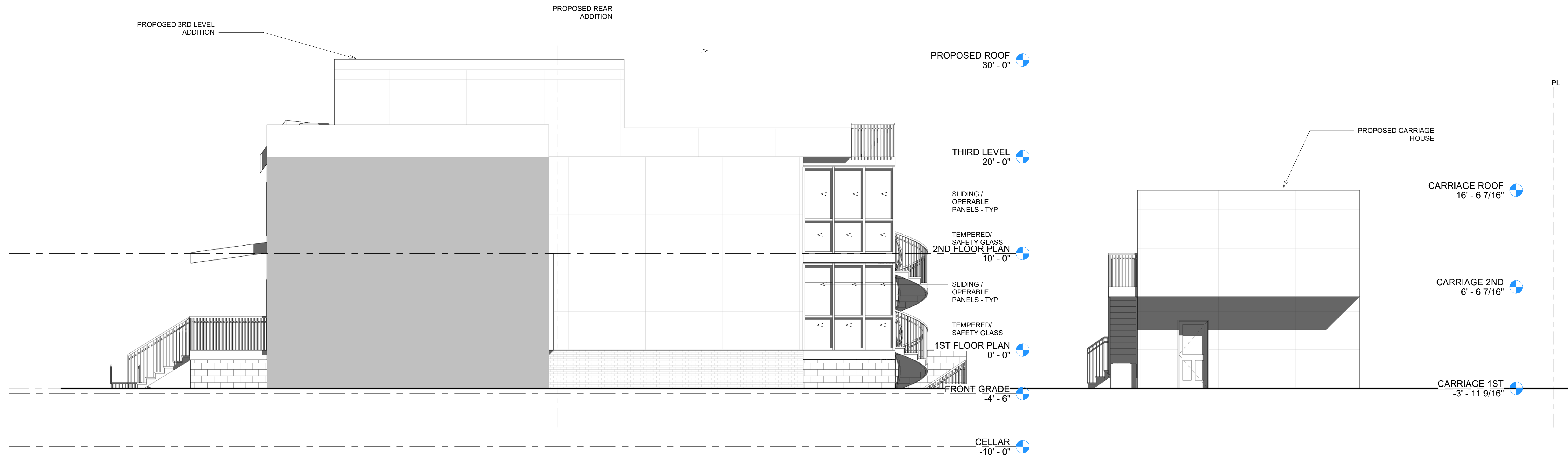
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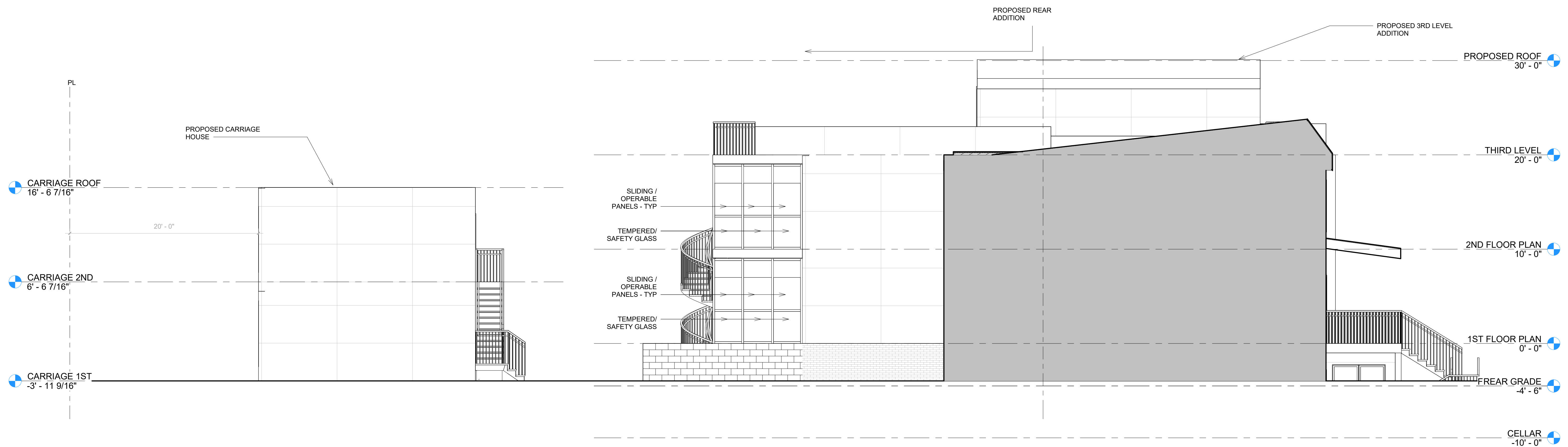
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ELEVATIONS

06

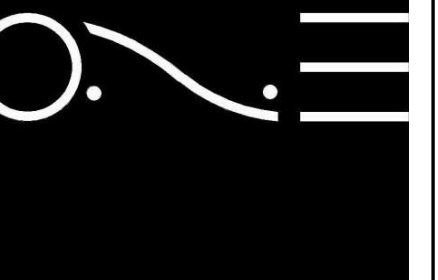


① RIGHT SIDE ELEVATION
3/16" = 1'-0"



② LEFT SIDE ELEVATION
3/16" = 1'-0"

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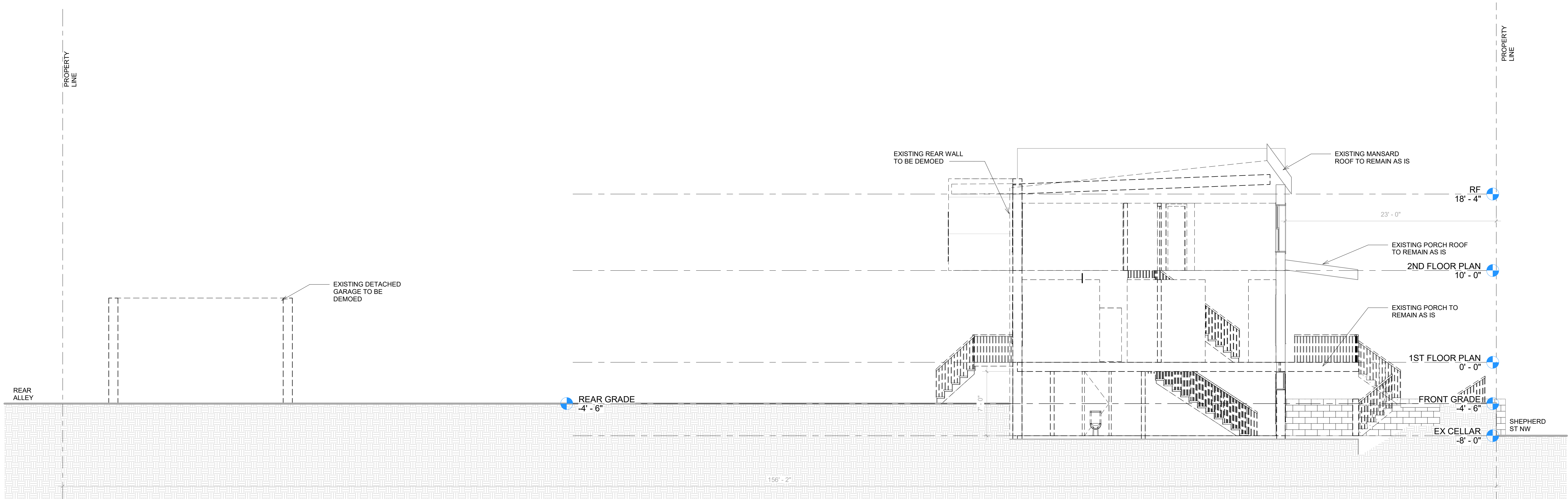
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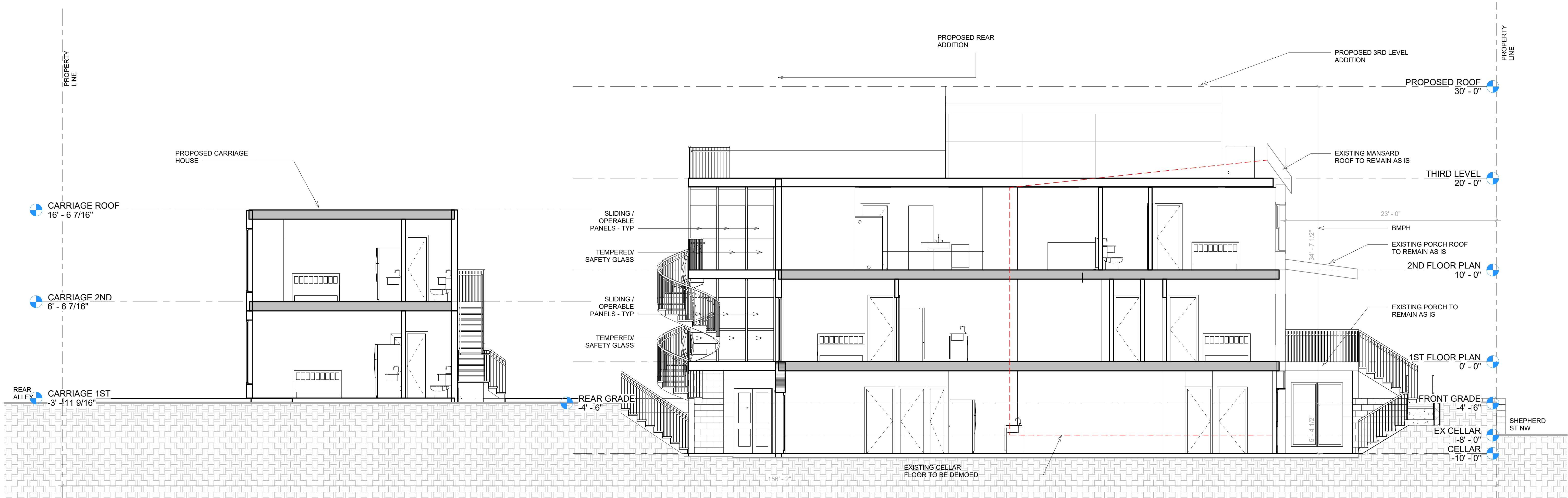
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ELEVATIONS

07



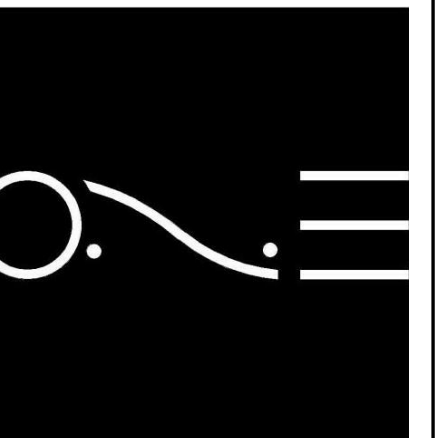
② LONGITUDINAL SECTION EXISTING
3/16" = 1'-0"



① LONGITUDINAL SECTION
3/16" = 1'-0"

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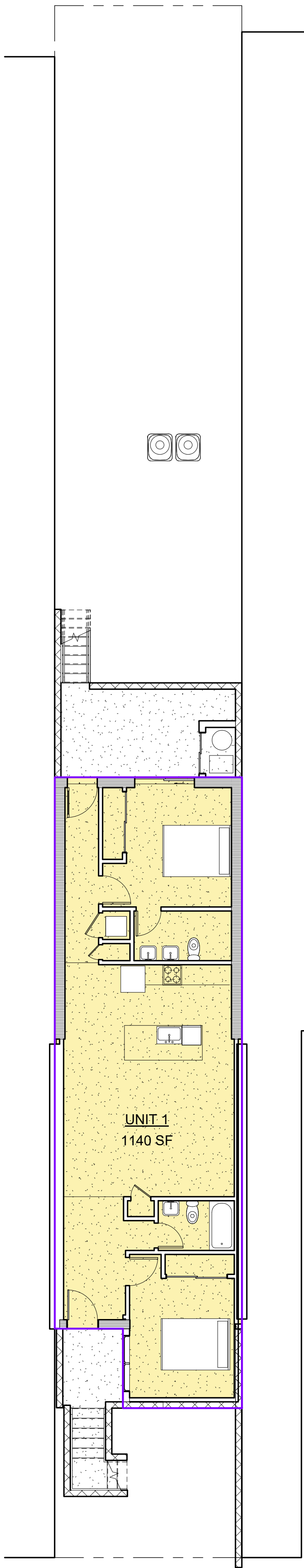
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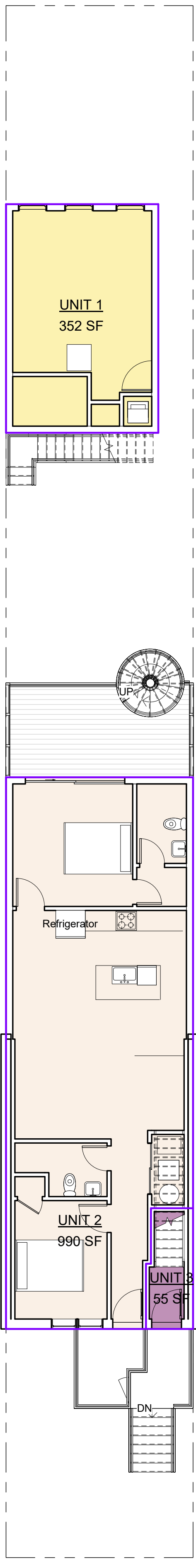
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SECTION

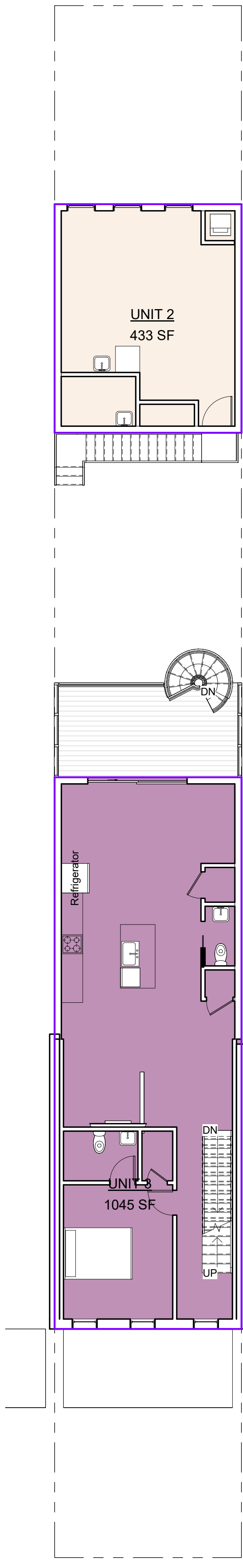
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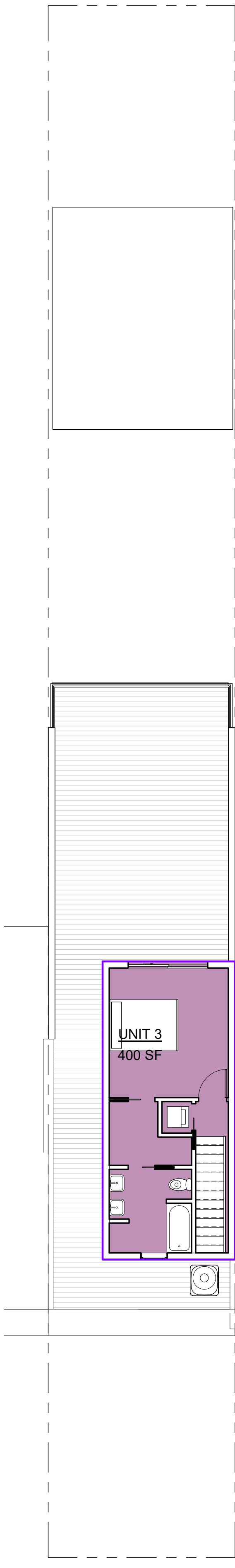
① CELLAR
1/8" = 1'-0"



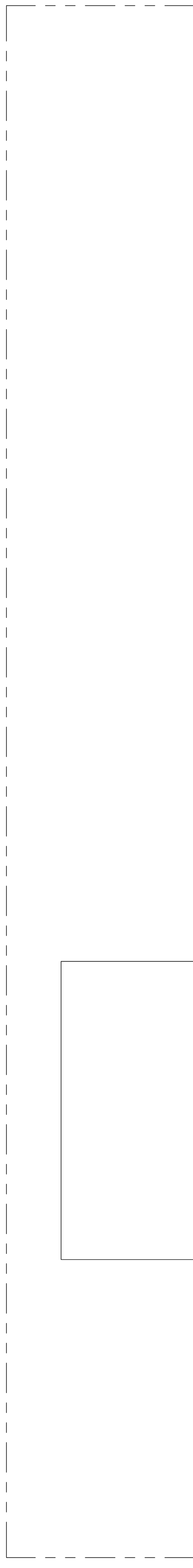
② 1ST FLOOR PLAN
1/8" = 1'-0"



③ 2ND FLOOR PLAN
1/8" = 1'-0"



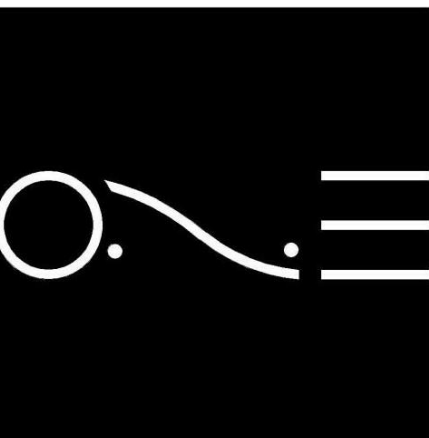
④ THIRD LEVEL
1/8" = 1'-0"



⑤ ROOF
1/8" = 1'-0"

UNITS AREA		
Name	Area	Level
UNI 3	Not Placed	Not Placed
UNIT 1	1140 SF	CELLAR
UNIT 1	352 SF	1ST FLOOR PLAN
UNIT 2	990 SF	1ST FLOOR PLAN
UNIT 2	433 SF	2ND FLOOR PLAN
UNIT 3	55 SF	1ST FLOOR PLAN
UNIT 3	1045 SF	2ND FLOOR PLAN
UNIT 3	400 SF	THIRD LEVEL

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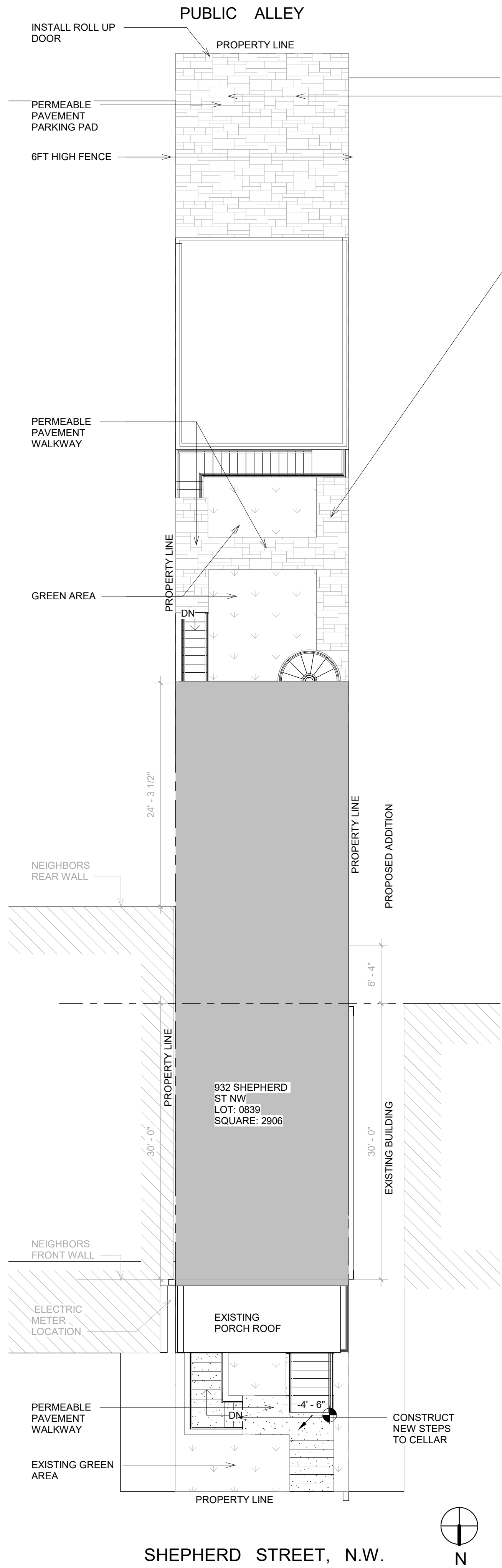
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AREA PLAN

09

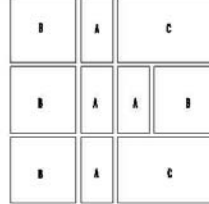


PERMEABLE PAVEMENT SPECIFICATION



BLU 80 mm
DESCRIPTION: Paver TEXTURE: Smooth

PALLET OVERVIEW



Specifications per pallet	Imperial	Metric
Cubing	84.96 ft³	790 m³
Weight	3 095 lbs	1 404 kg
Number of rows	8	
Coverage per row	10.62 ft²	0.99 m²
Linear coverage per row	9.75 lin. ft	2.97 lin. m

NOTES

See page 44 to 47 for more technical information. When used in a permeable pavement application, see page 82 to 89 for more technical information.

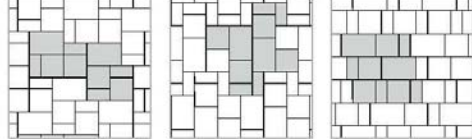
JOINT WIDTH: 9/32" (7 mm)
% OF SURFACE OPENING: 3.0 %

Unit dimensions	in	mm	Units / pallet
Height	3 1/4	80	32 units
Depth	13	330	
Length	6 1/2	165	

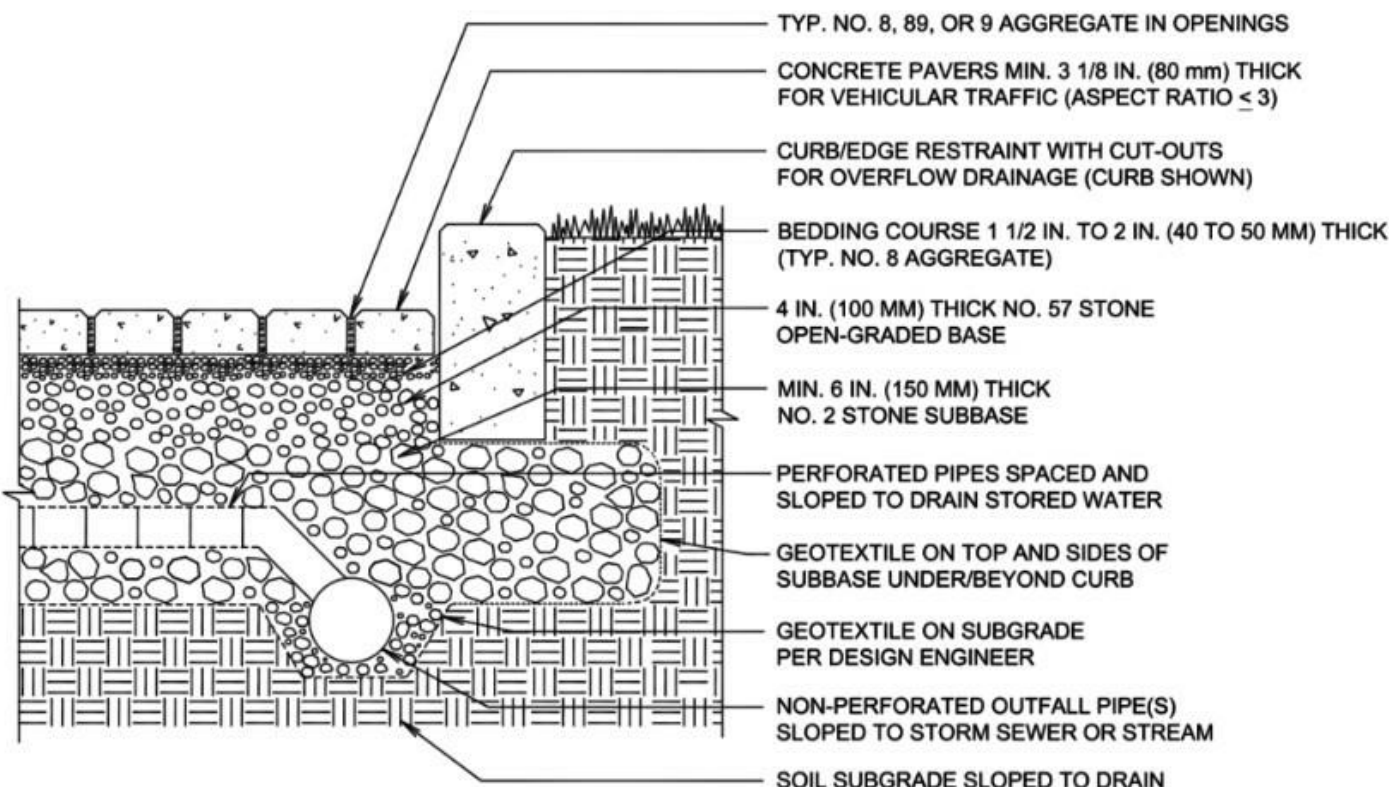
1	Height	3 1/4	80	32 units
	Depth	13	330	
	Length	13	330	

2	Height	3 1/4	80	16 units
	Depth	13	330	
	Length	19 1/2	495	

01 | Modular pattern 02 | Modular pattern 03 | Linear pattern



Patterns are for design inspiration only. The installer is responsible to calculate & purchase the correct amount of material.



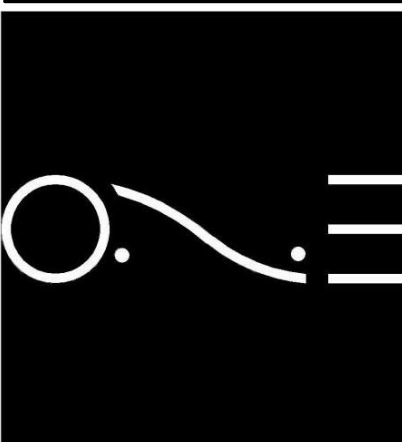
- NOTES:
- 2 3/8 IN. (60 MM) THICK PAVERS MAY BE USED IN PEDESTRIAN AND RESIDENTIAL APPLICATIONS.
 - NO. 2 STONE SUBBASE THICKNESS VARIES WITH DESIGN. CONSULT ICP PERMEABLE INTERLOCKING CONCRETE PAVEMENT MANUAL.
 - NO. 2 STONE MAY BE SUBSTITUTED WITH NO.3 OR NO.4 STONE.

PERMEABLE PAVER / CURB DETAIL

SITE PLAN LEGEND

- PROPOSED BUILDING
- PROPOSED PERMEABLE PAVERS
- GREEN AREA
- EXISTING CONCRETE PAD

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**LANDSCAPE
SITE PLAN**

10

THE SYSTEM PRODUCE 7,190 KW ANNUAL WITHOUT SHADE

THE SYSTEM PRODUCE 6,985 KW ANNUAL WITH SHADE< 5%

Season Percentage Estimated Production

Winter	16%	≈ 1,150 kWh
Spring	28%	≈ 2,013 kWh
Summer	32%	≈ 2,301 kWh
Fall	24%	≈ 1,726 kWh

$$S_{\text{winter}} = \frac{E_{\text{unshaded winter}} - E_{\text{shaded winter}}}{E_{\text{unshaded winter}}} \times 100\%$$

$$S_{\text{winter}} = \frac{1,150 - 1095}{1,150} \times 100 = 4.7$$

TOTAL AFFECIENY AFFECTED BY SHADE DURING WINTER = 4.7% > 5%

$$S_{\text{Spring}} = \frac{E_{\text{unshaded Spring}} - E_{\text{shaded Spring}}}{E_{\text{unshaded Spring}}} \times 100\%$$

$$S_{\text{Spring}} = \frac{2,013 - 1,963}{2,013} \times 100\% = 2.7 \%$$

TOTAL AFFECIENY AFFECTED BY SHADE DURING SPRING = 2.7% < 5%

$$S_{\text{Summer}} = \frac{E_{\text{unshaded Summer}} - E_{\text{shaded Summer}}}{E_{\text{unshaded Summer}}} \times 100\%$$

$$S_{\text{Summer}} = \frac{2,301 - 0}{2,301} \times 100 = 100\%$$

TOTAL AFFECIENY AFFECTED BY SHADE DURING SUMMER = 0% < 5%

$$S_{\text{Fall}} = \frac{E_{\text{unshaded Fall}} - E_{\text{shaded Fall}}}{E_{\text{unshaded Fall}}} \times 100\%$$

$$S_{\text{Fall}} = \frac{1,726 - 1,963}{1,726} \times 100\% = 2.6 \%$$

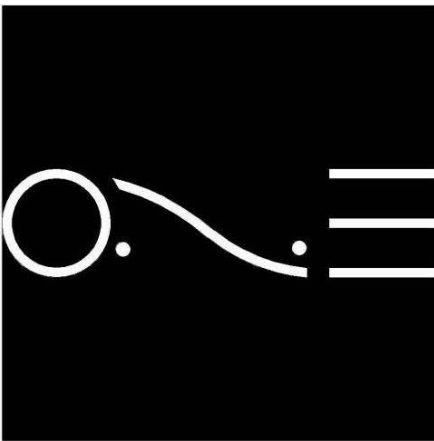
TOTAL AFFECIENY AFFECTED BY SHADE DURING FALL = 2.6% < 5%

TOTAL AFFECIENY AFFECTED BY SHADE ANNUALLY:

$$\frac{4.7+2.7+0+2.6}{4} = 2.5\% < 5\%$$

Winter seasonal shading analysis indicates an estimated 4.7 % reduction in solar energy generation due to obstruction during low solar altitude periods

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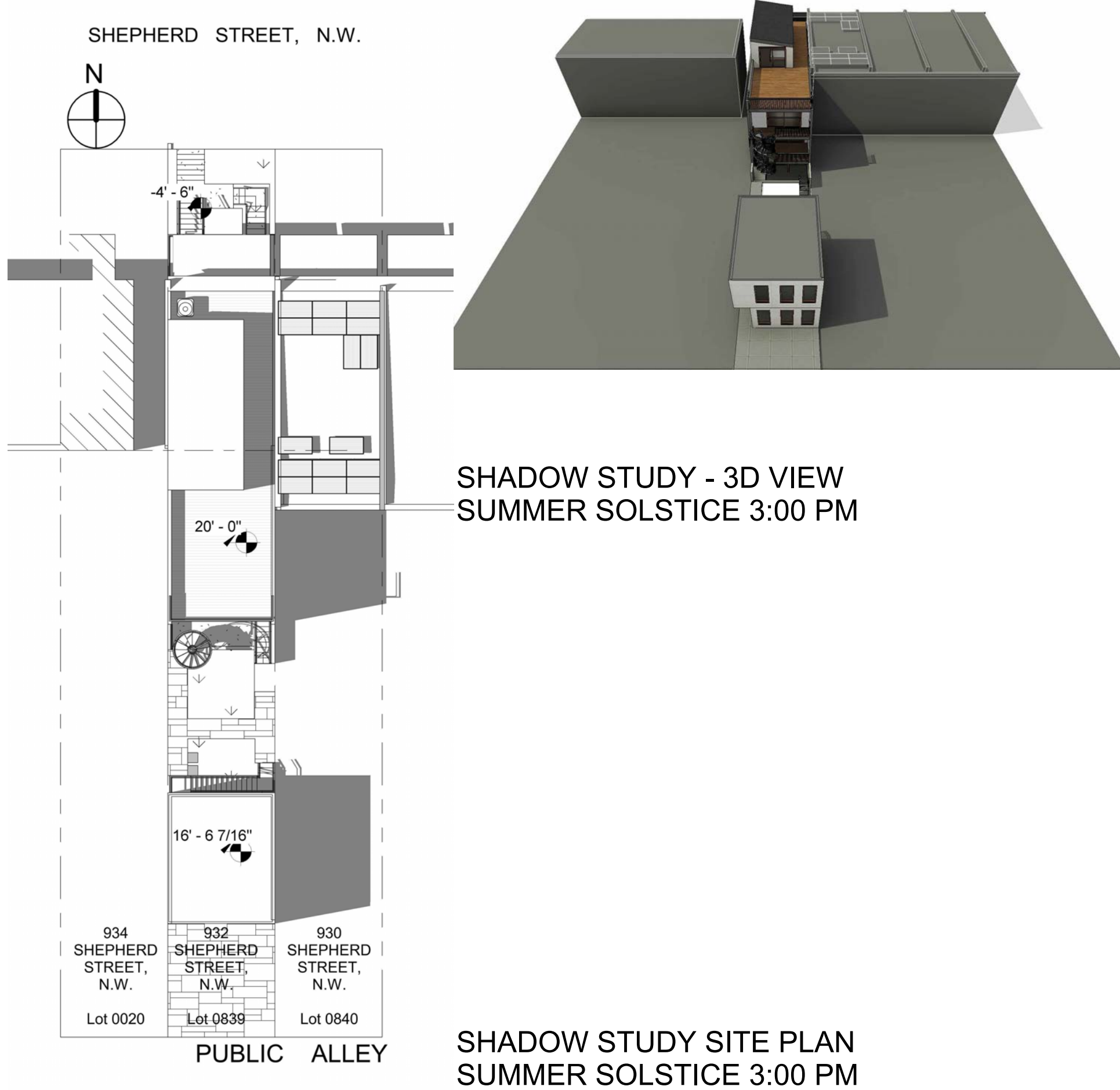
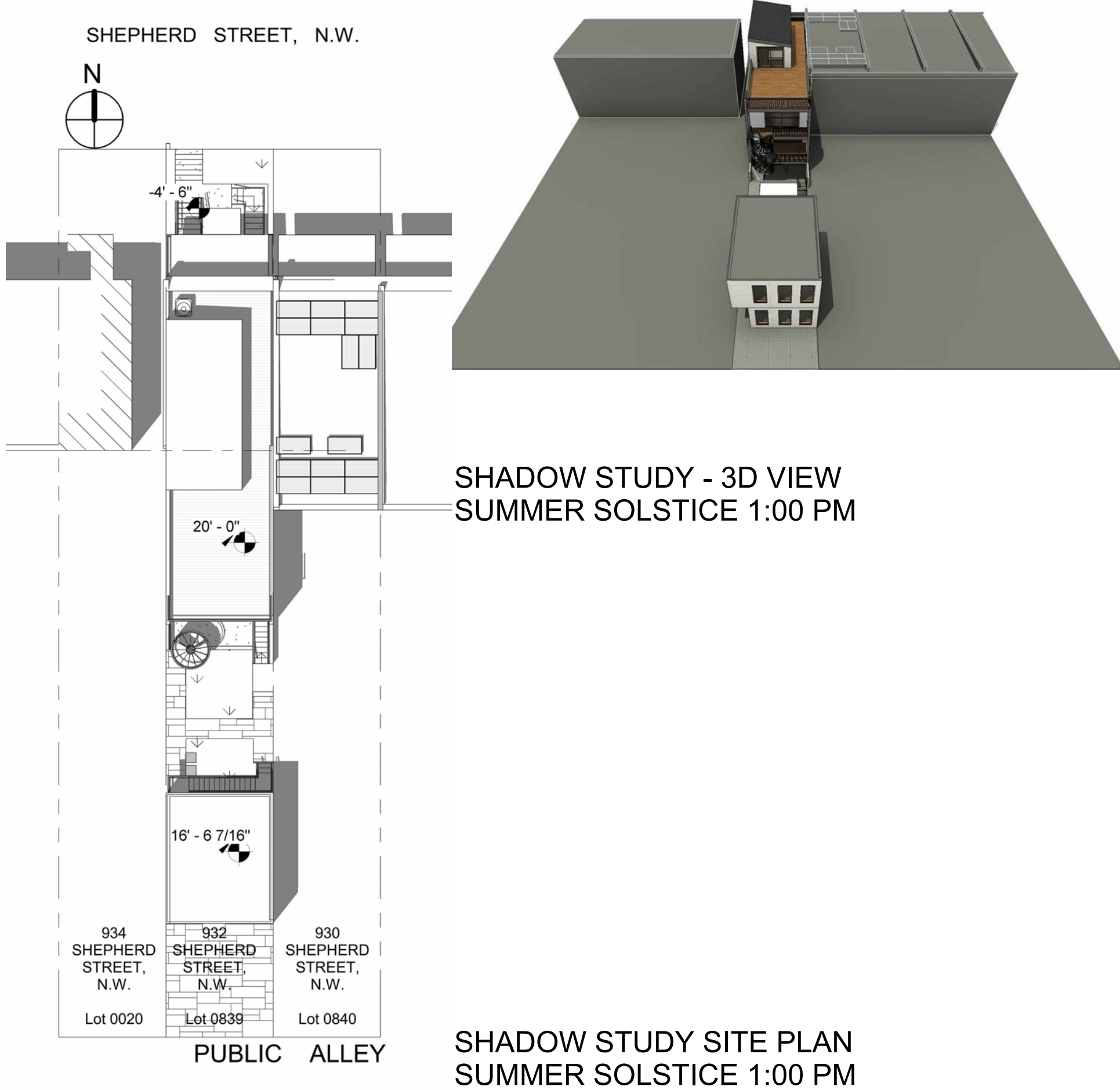
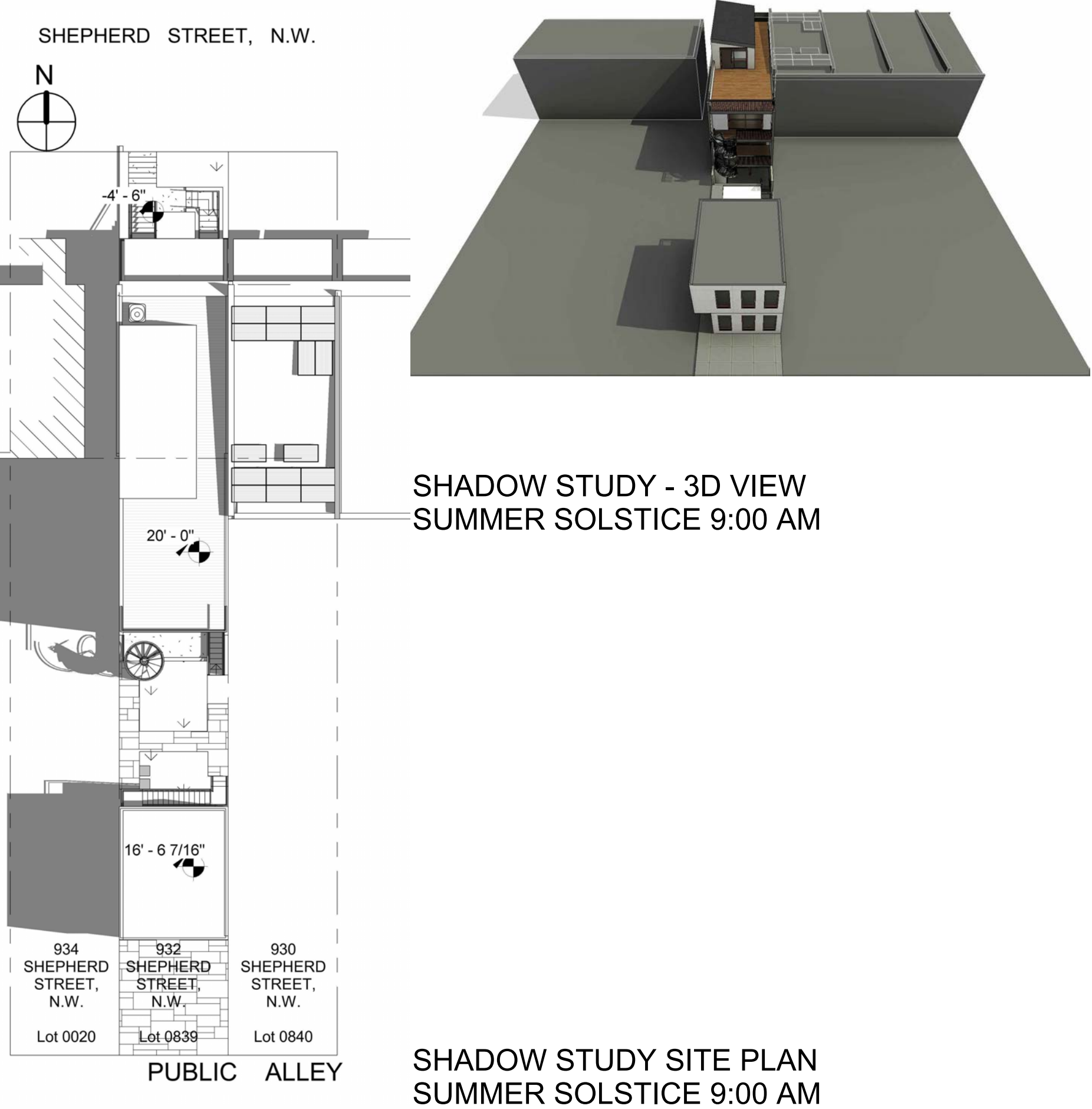


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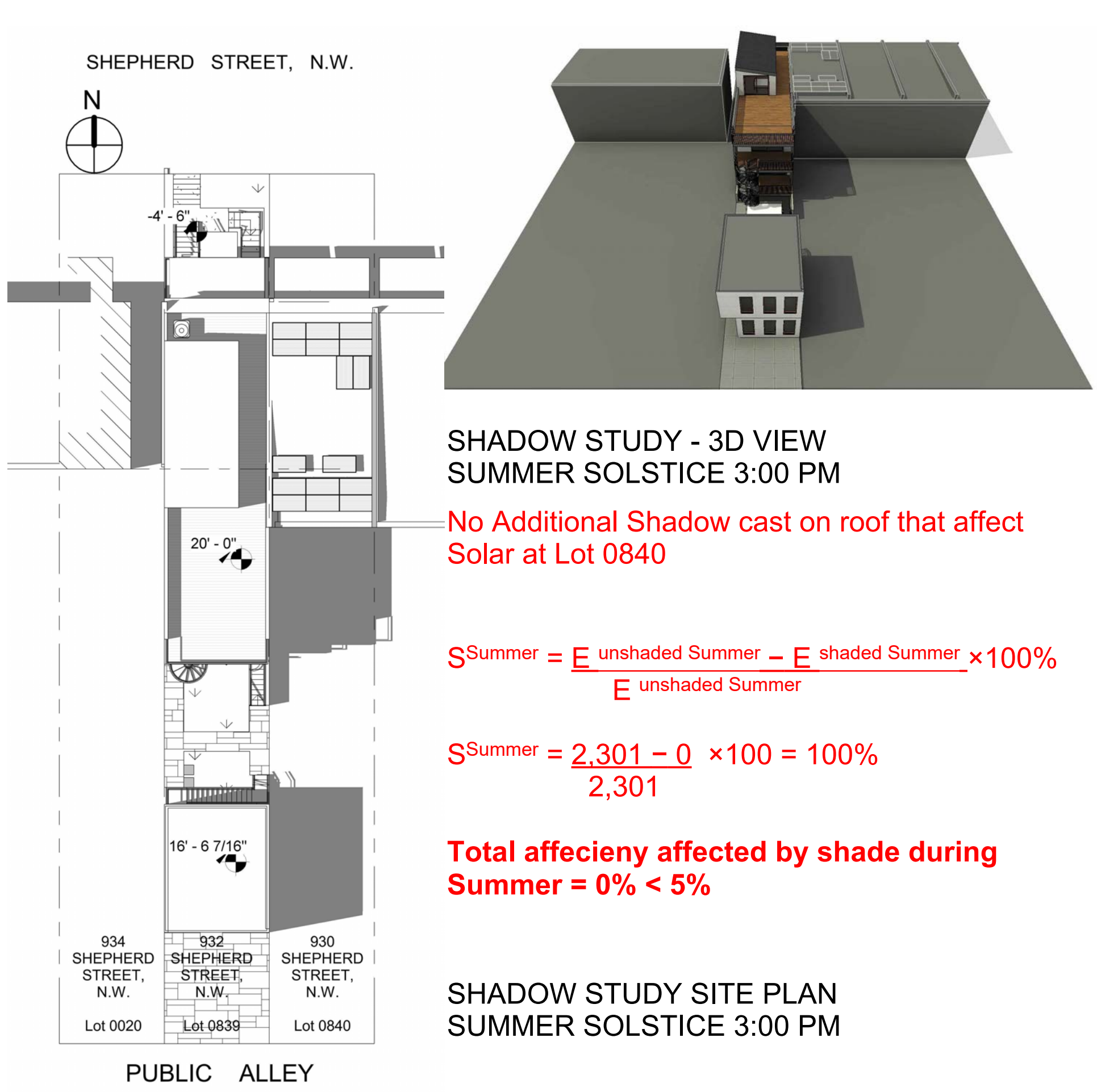
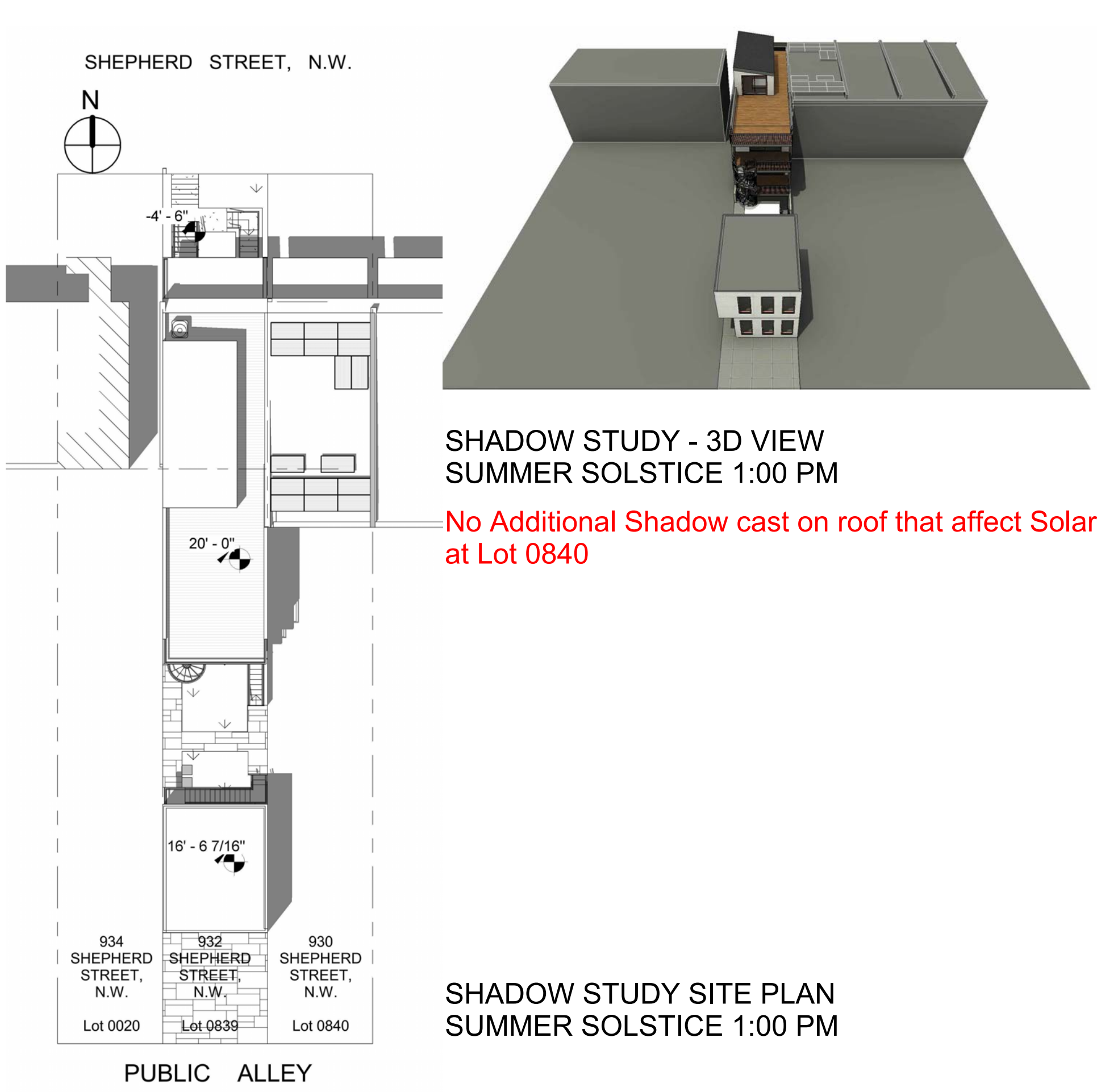
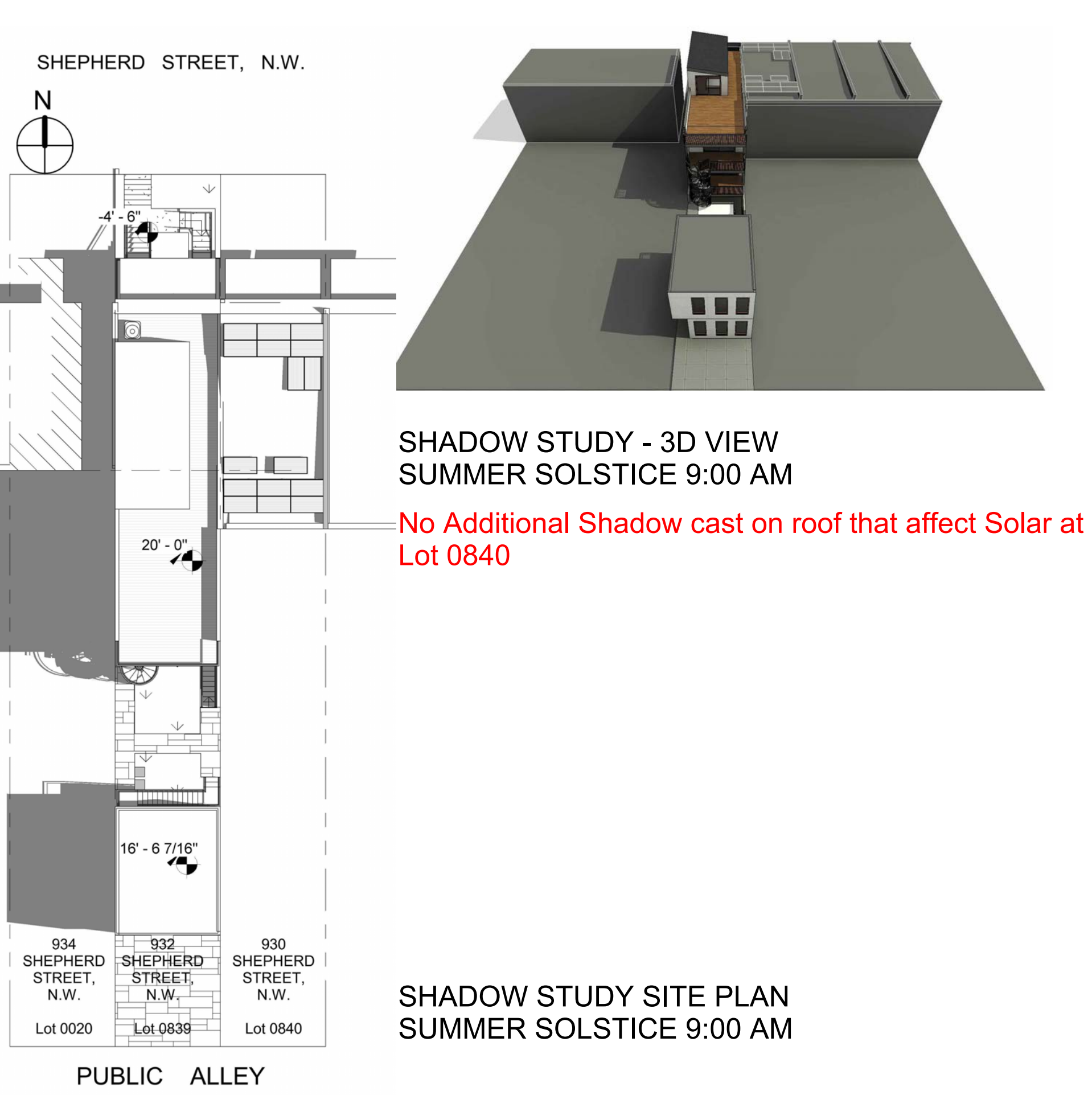
11

SHADOW STUDY SITE PLAN
SUMMER SOLSTICE **BY RIGHT**



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SHADOW STUDY SITE PLAN
SUMMER SOLSTICE **PROPOSED 15 FEET ADDITION**



$$S_{\text{Summer}} = \frac{E_{\text{unshaded Summer}} - E_{\text{shaded Summer}}}{E_{\text{unshaded Summer}}} \times 100\%$$

$$S_{\text{Summer}} = \frac{2,301 - 0}{2,301} \times 100 = 100\%$$

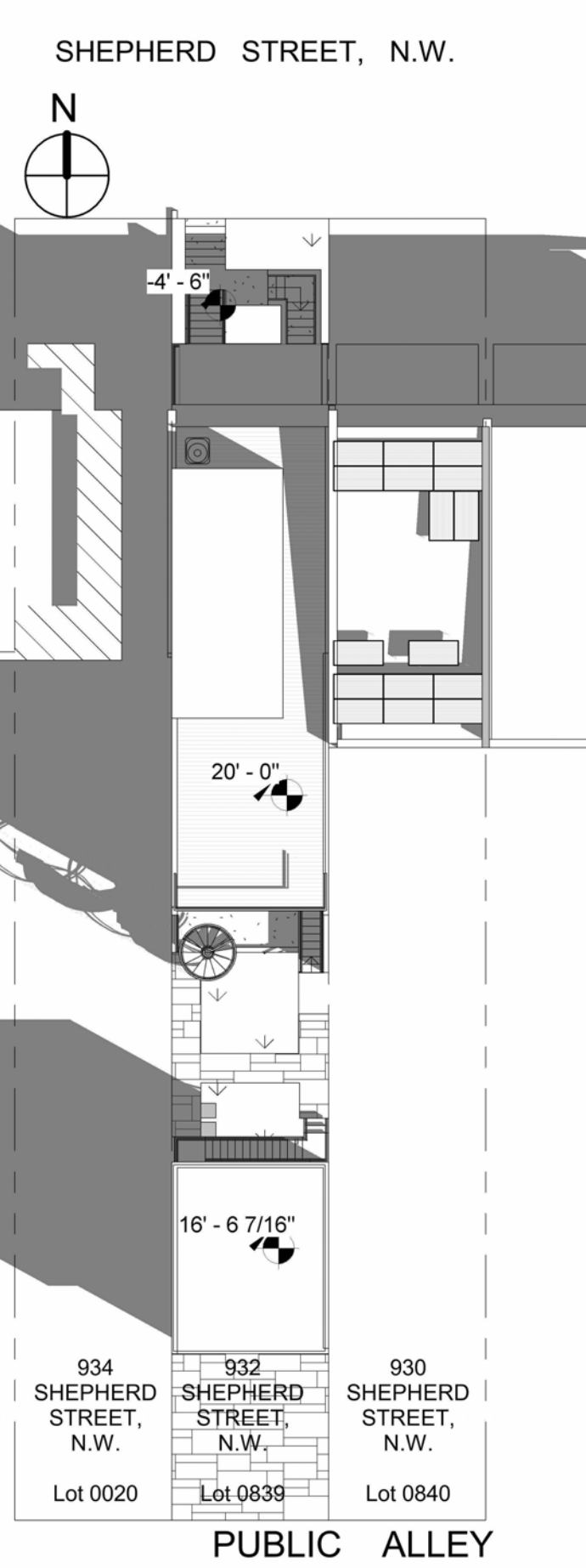
Total affeciency affected by shade during Summer = 0% < 5%

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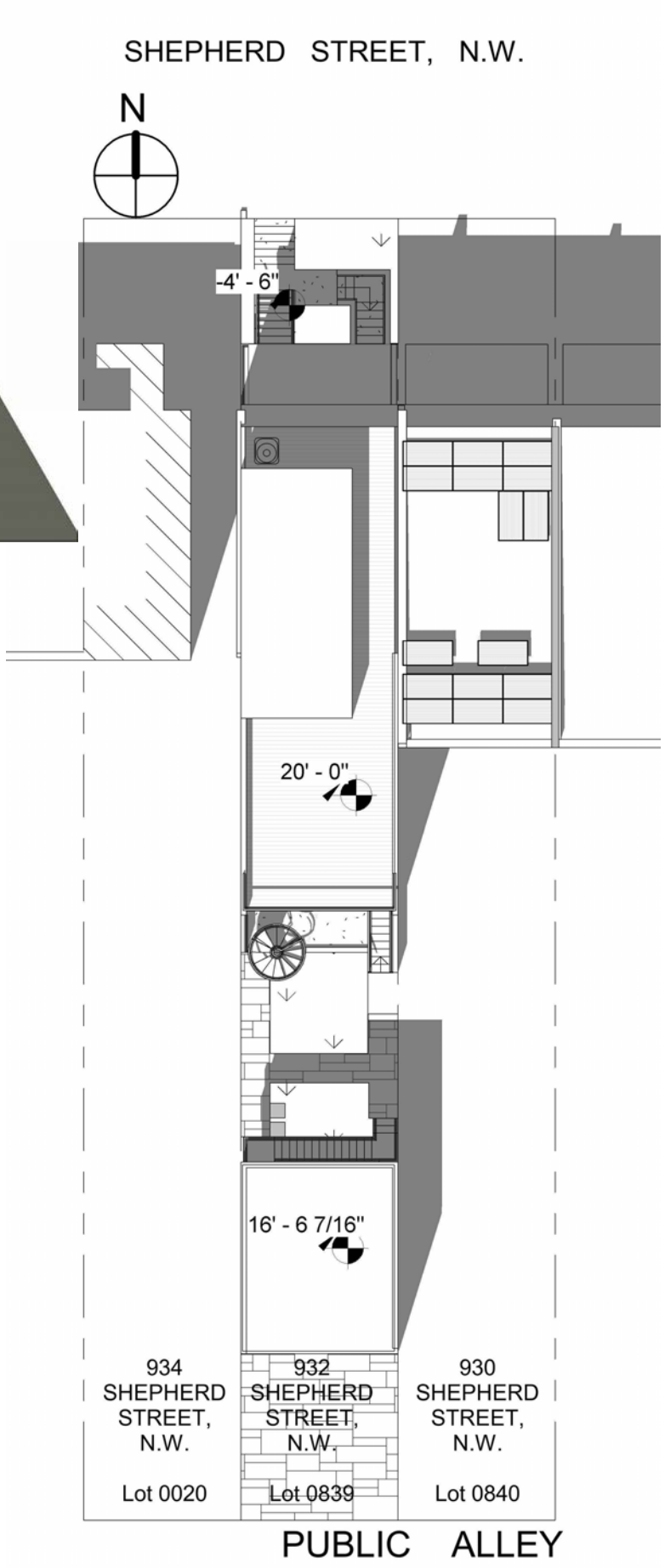
**SHADOW STUDY -
SUMMER SOLSTICE**

SHADOW STUDY SITE PLAN
FALL - SPRING EQUINOX **BY RIGHT**



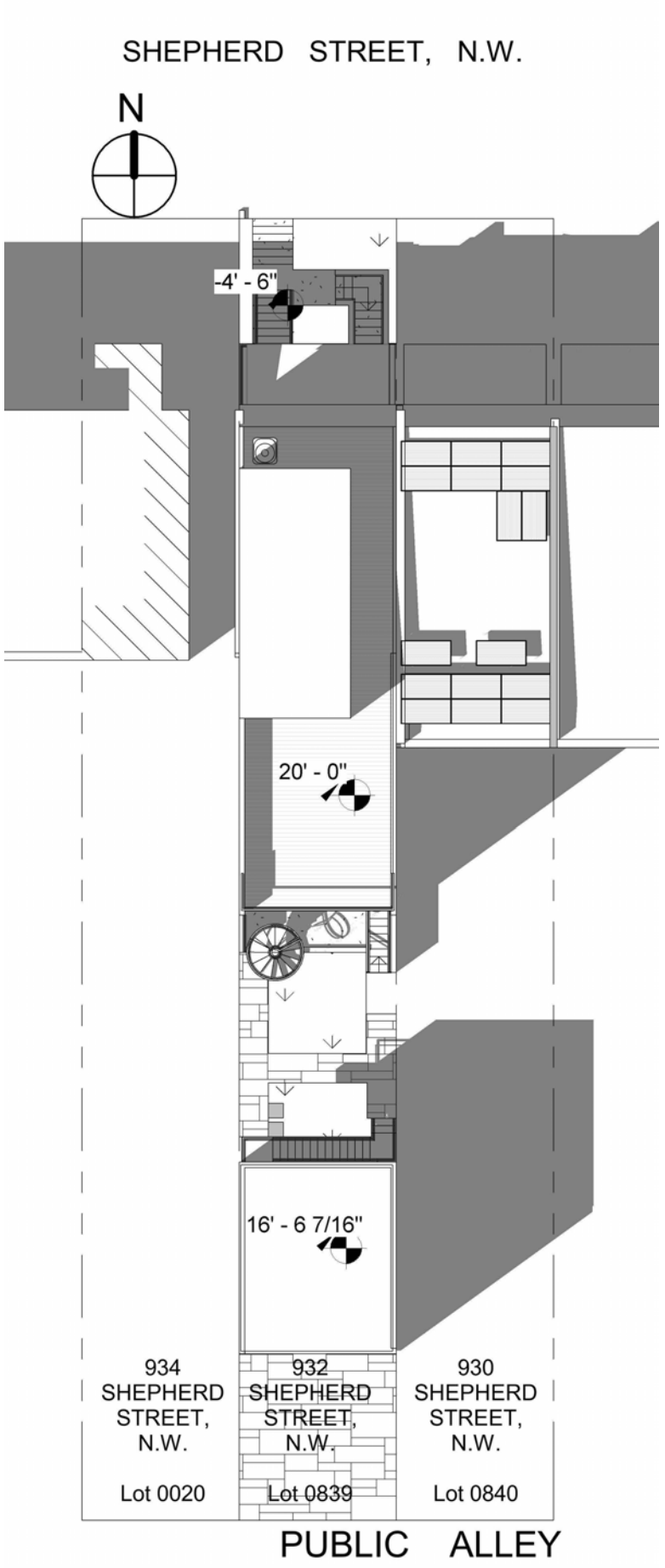
SHADOW STUDY - 3D VIEW
FALL - SPRING EQUINOX 9:00 AM

SHADOW STUDY SITE PLAN
FALL - SPRING EQUINOX 9:00 AM



SHADOW STUDY - 3D VIEW
FALL - SPRING EQUINOX 1:00 PM

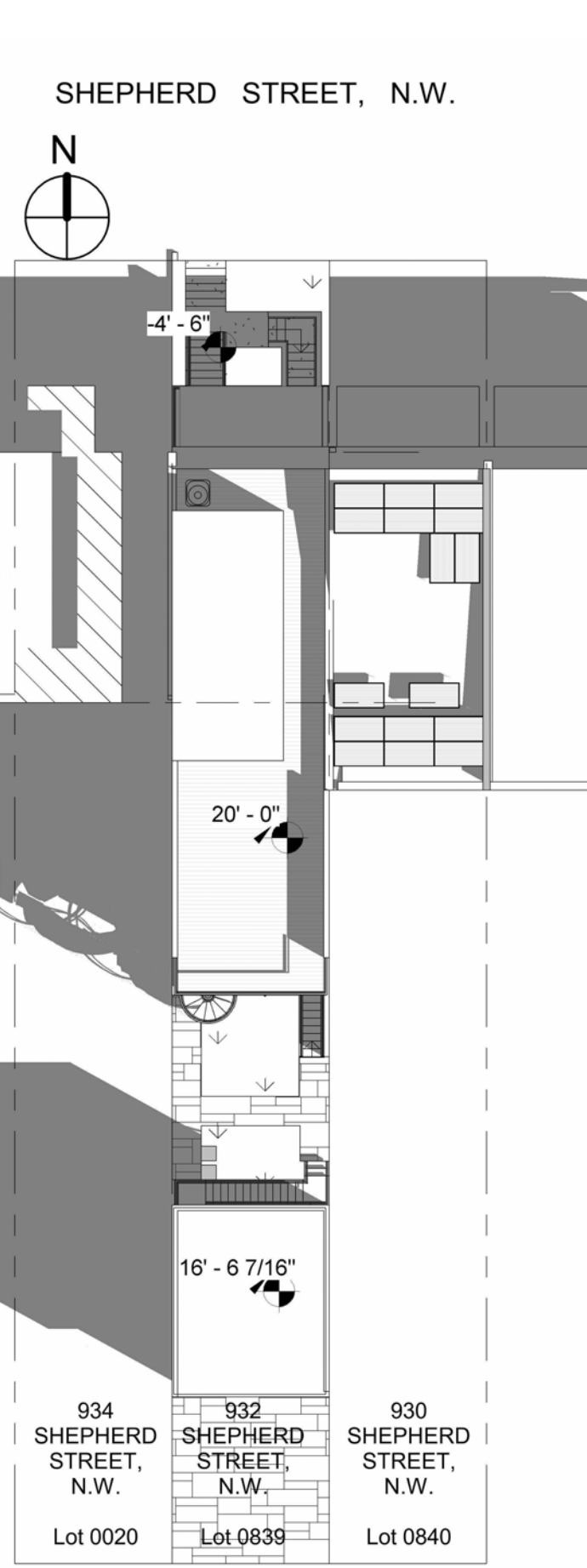
SHADOW STUDY SITE PLAN
FALL - SPRING EQUINOX 1:00 PM



SHADOW STUDY - 3D VIEW
FALL - SPRING EQUINOX 3:00 PM

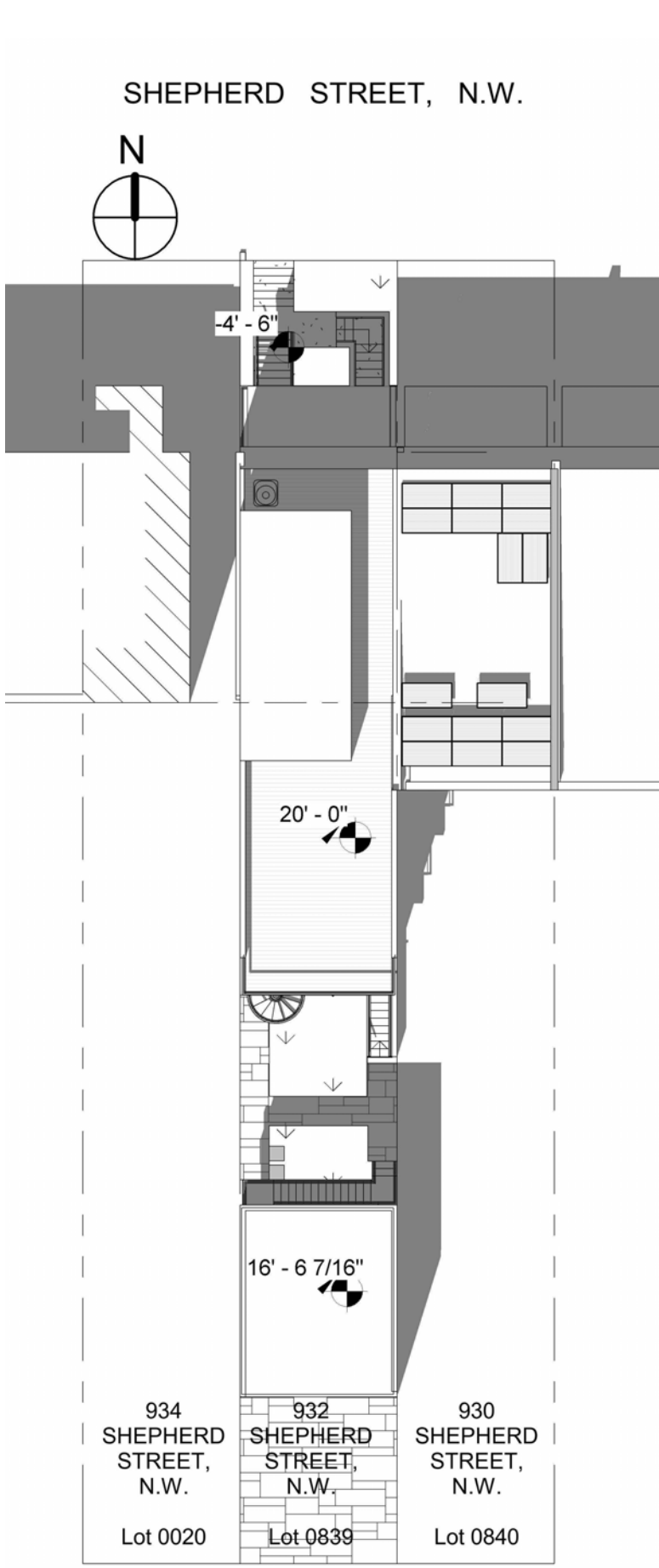
SHADOW STUDY SITE PLAN
FALL - SPRING EQUINOX 3:00 PM

SHADOW STUDY SITE PLAN
FALL - SPRING EQUINOX **PROPOSED 15 FEET ADDITION**



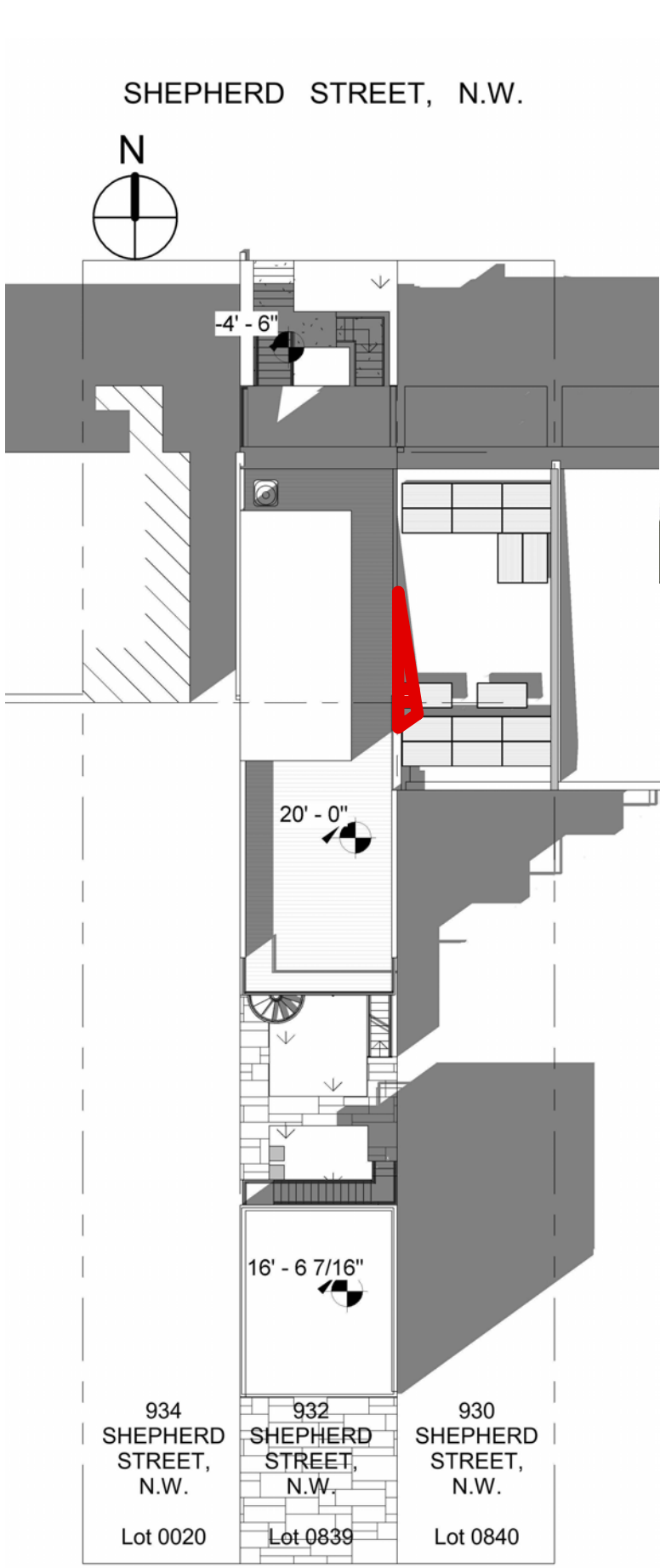
SHADOW STUDY - 3D VIEW
FALL - SPRING EQUINOX 9:00 AM
No Additional Shadow cast on roof that affect Solar at Lot 0840

SHADOW STUDY SITE PLAN
FALL - SPRING EQUINOX 9:00 AM



SHADOW STUDY - 3D VIEW
FALL - SPRING EQUINOX 1:00 PM
No Additional Shadow cast on roof that affect Solar at Lot 0840

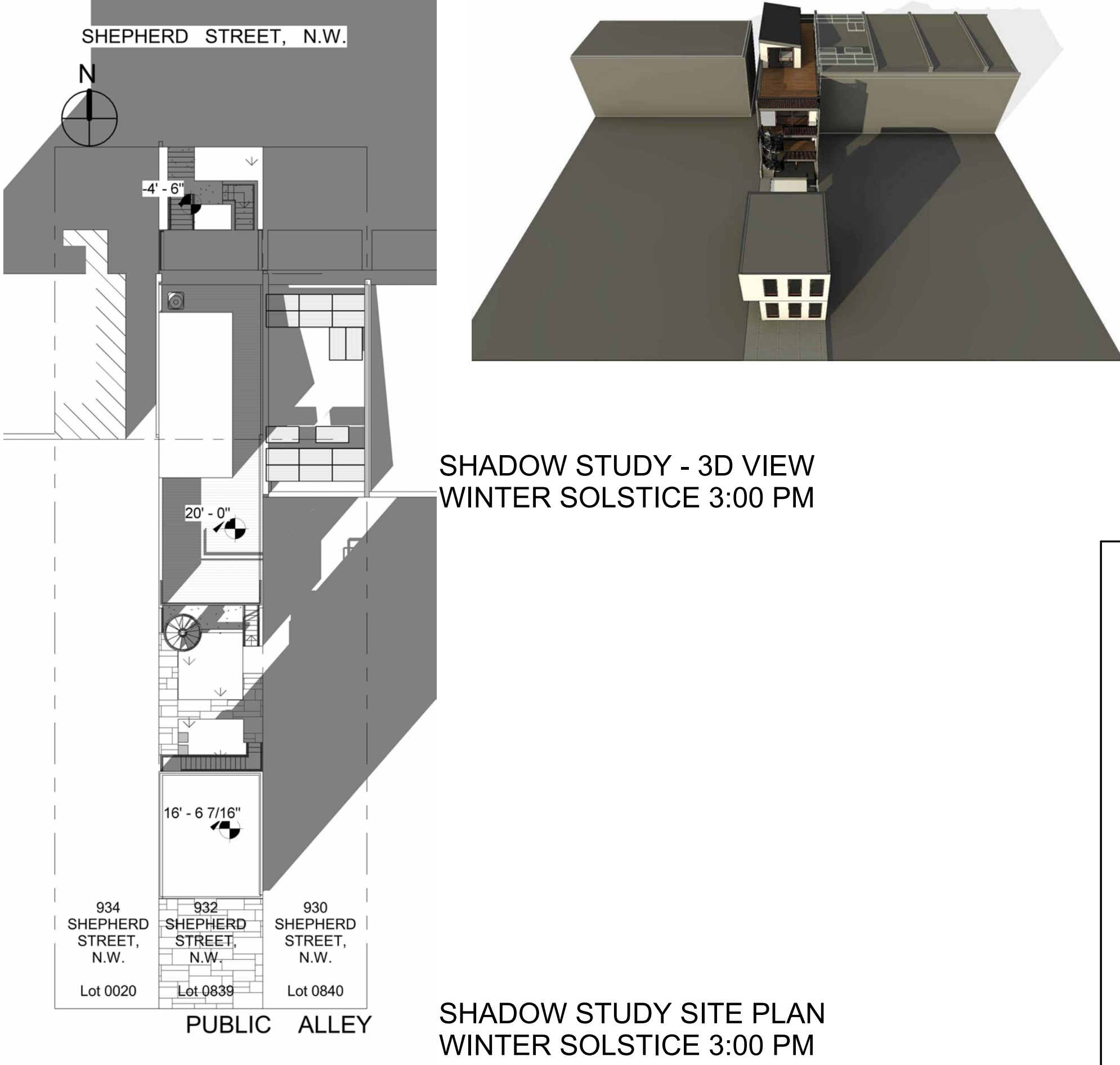
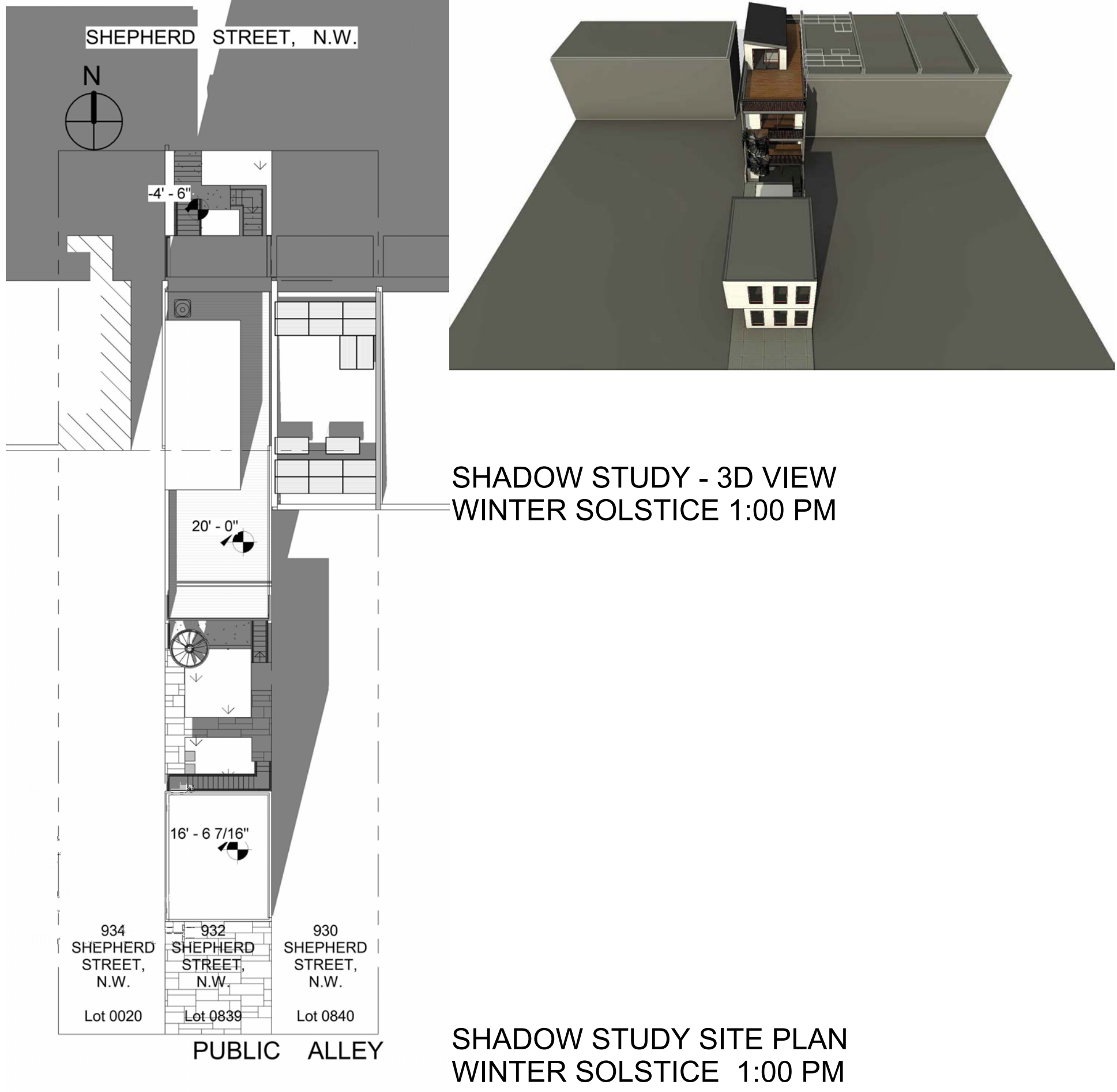
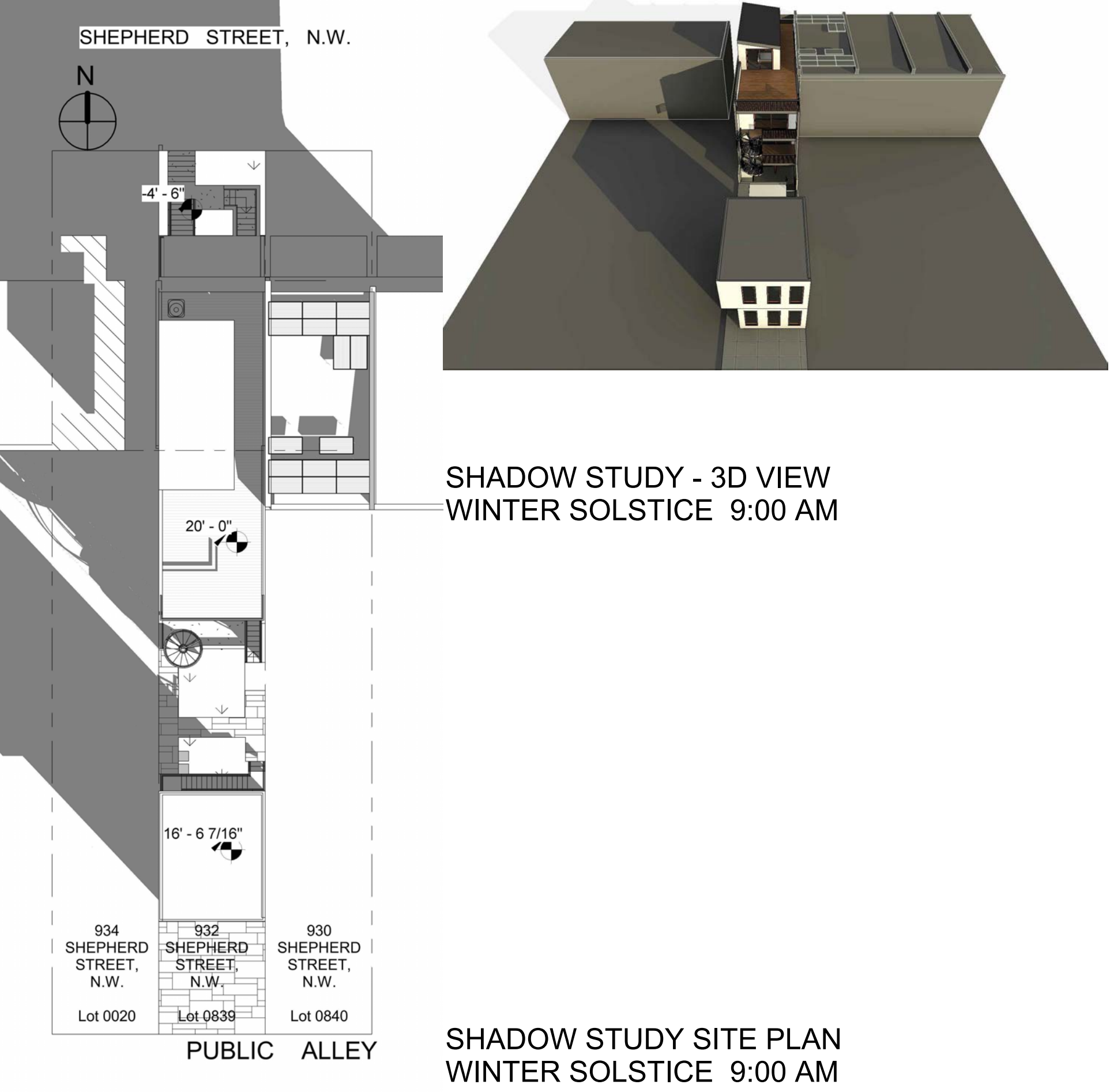
SHADOW STUDY SITE PLAN
FALL - SPRING EQUINOX 1:00 PM



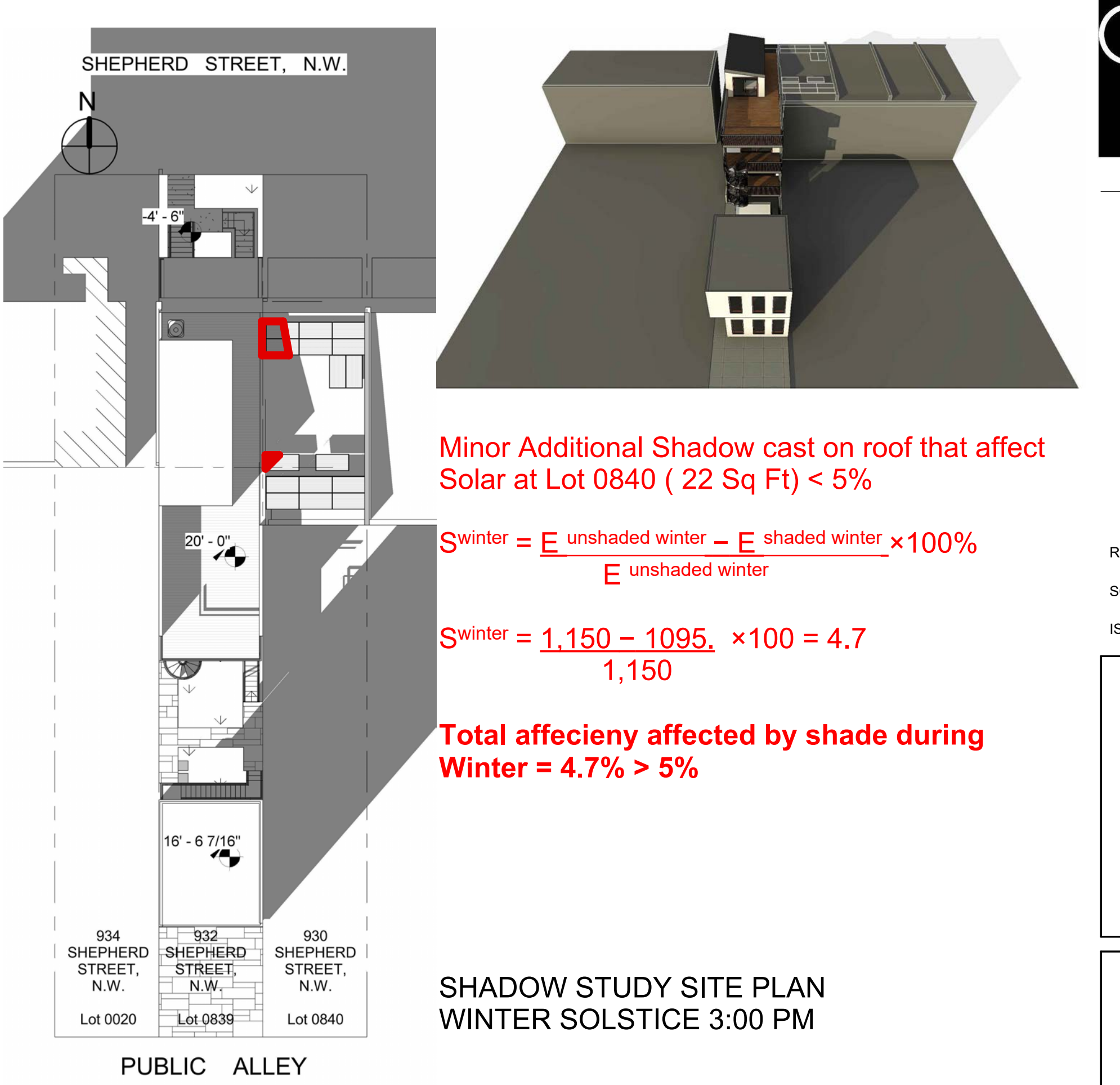
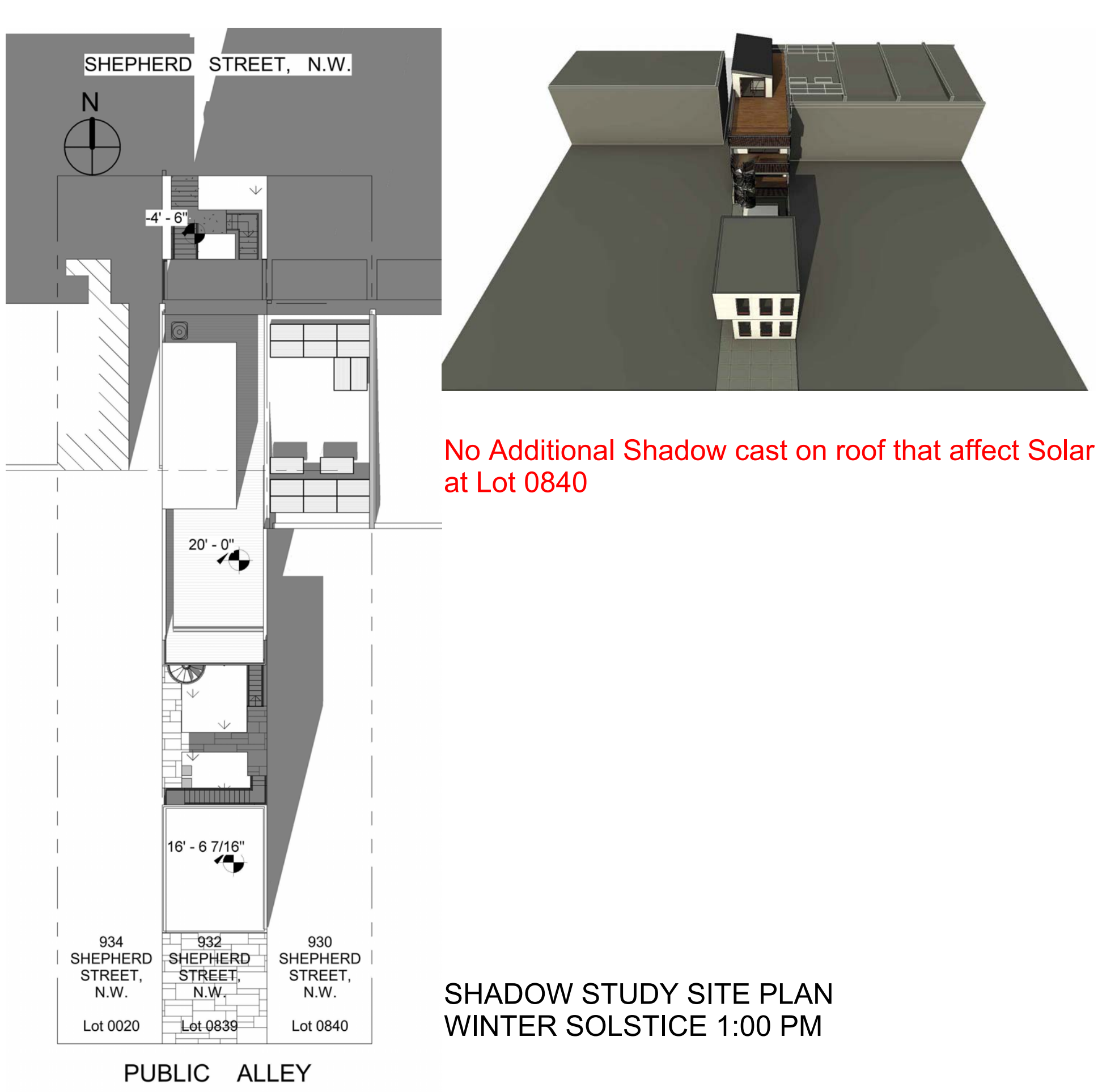
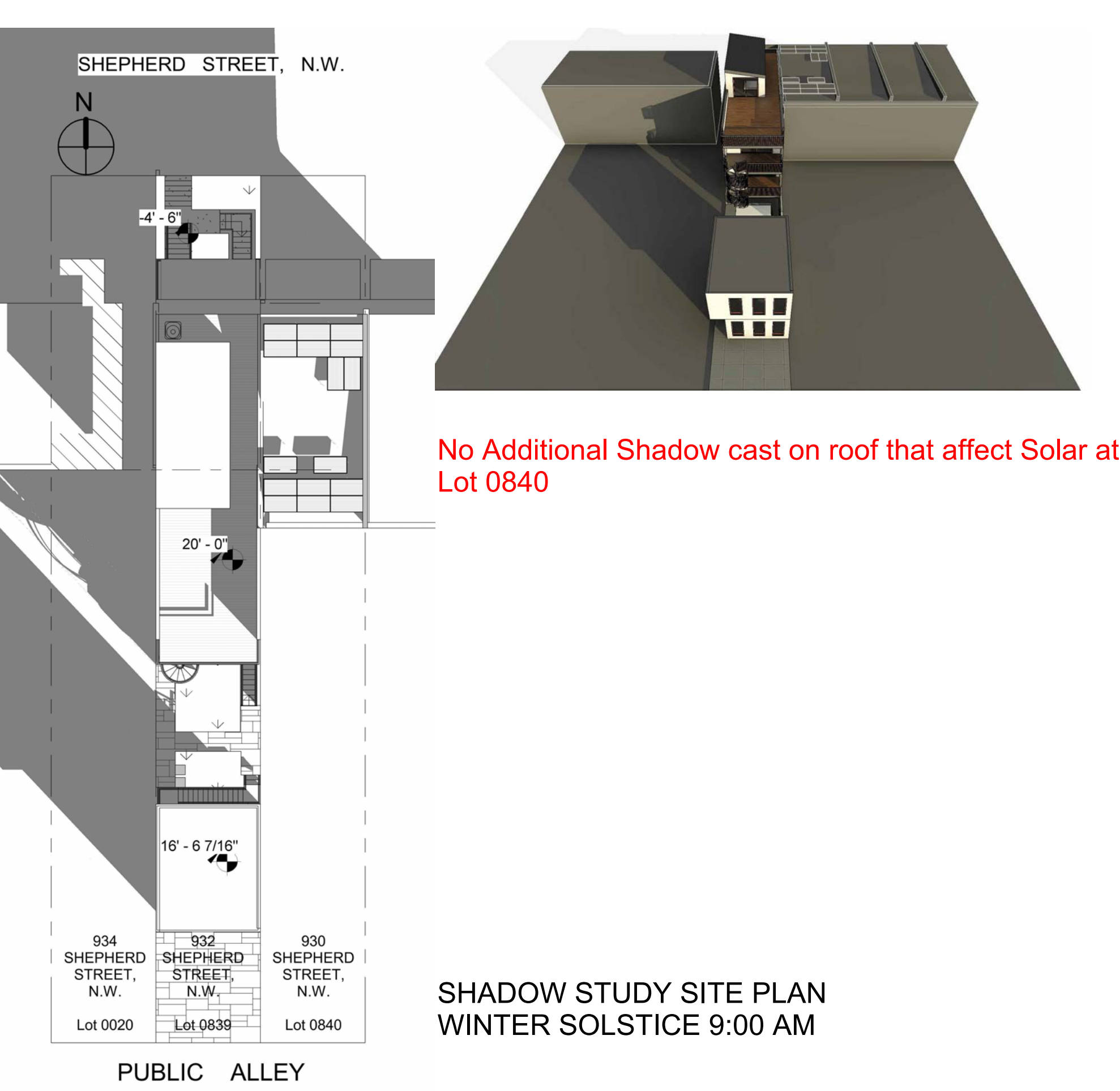
SHADOW STUDY - 3D VIEW
FALL - SPRING EQUINOX 3:00 PM
Minor Additional Shadow cast on roof that affect Solar at Lot 0840 (8 Sq Ft) < 5%
 $S_{Spring} = \frac{E_{unshaded Spring} - E_{shaded Spring}}{E_{unshaded Spring}} \times 100\%$
 $S_{Spring} = \frac{2,013 - 1,963}{2,013} \times 100\% = 2.7\%$
Total affeciency affected by shade during Spring = 2.7% < 5%
 $S_{Fall} = \frac{E_{unshaded Fall} - E_{shaded Fall}}{E_{unshaded Fall}} \times 100\%$
 $S_{Fall} = \frac{1,726 - 1,963}{1,726} \times 100\% = 2.6\%$
Total affeciency affected by shade during Fall = 2.6% < 5%

SHADOW STUDY SITE PLAN
FALL - SPRING EQUINOX 3:00 PM

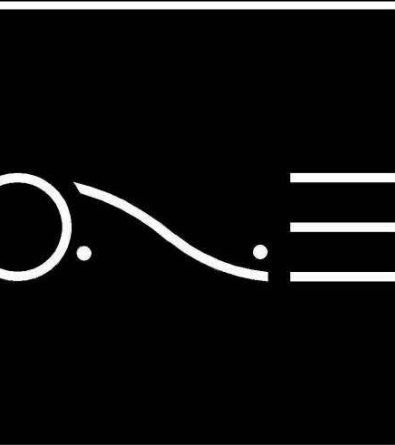
SHADOW STUDY SITE PLAN
WINTER SOLSTICE **BY RIGHT**



SHADOW STUDY SITE PLAN
WINTER SOLSTICE **PROPOSED 15 FEET ADDITION**



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**SHADOW
STUDY -
WINTER
SOLSTICE**



EXISTING SITUATION REAR SIDE



③ ACCESSORY REAR



① BUILDING REAR

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REAR SIDE 3D
PROJECTIONS