



NewCAL

Design Progress
Design Review Commission
December 15, 2021





HIGHLAND AVENUE

WALNUT STREET

WASHINGTON PARK

WALNUT PLACE

First Floor



NEWTON CENTER
FOR ACTIVE LIVING
First Floor Plan

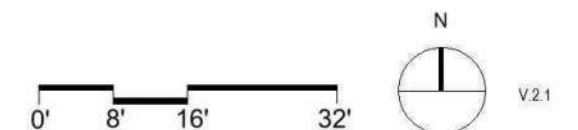
Bargmann Hendrie + Archetype, Inc.
9 Channel Center Street, Suite 300, Boston, MA. 02210
11/18/2021

Second Floor

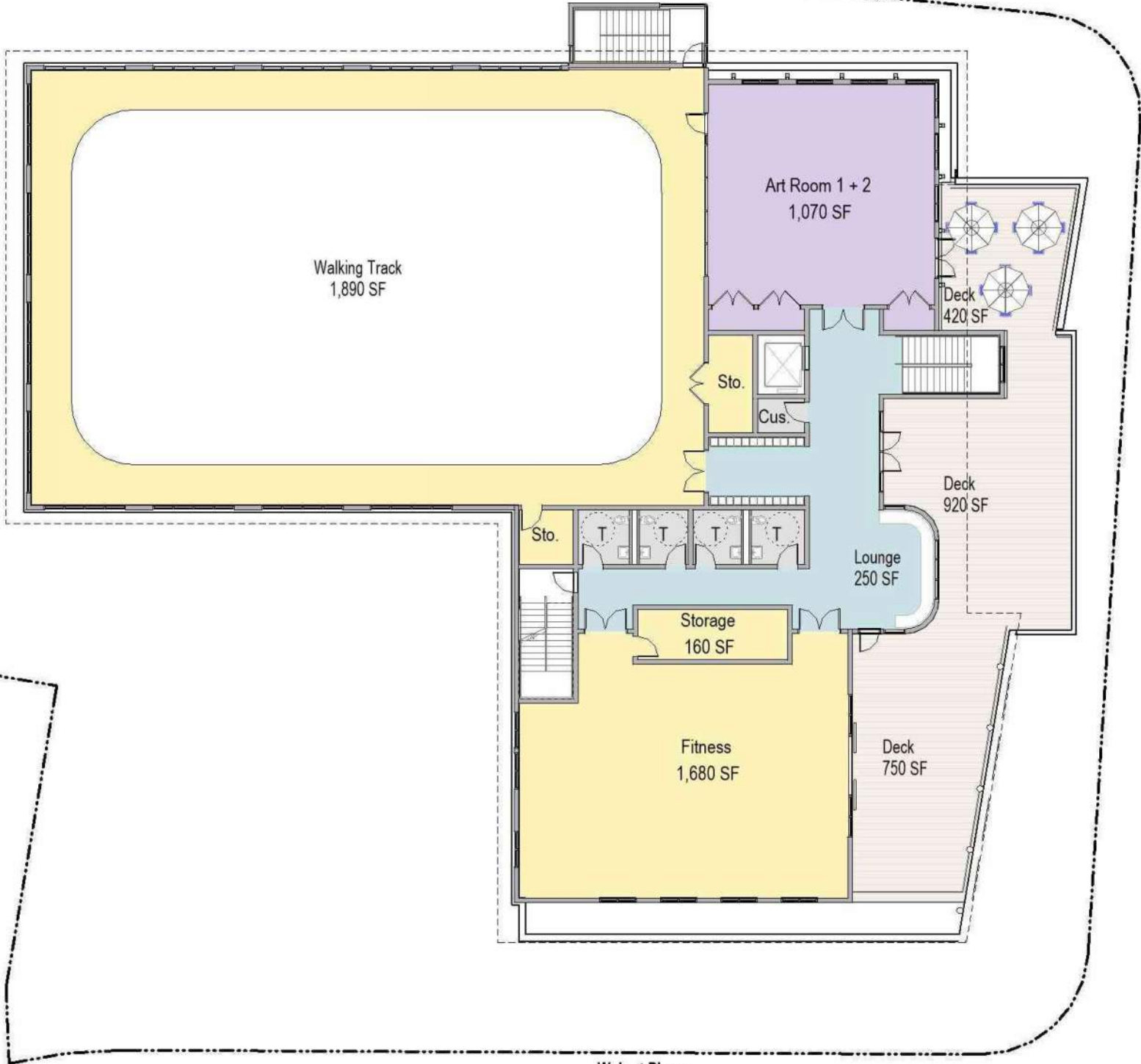


**NEWTON CENTER
FOR ACTIVE LIVING**
Second Floor Plan

Bargmann Hendrie + Archetype, Inc.
9 Channel Center Street, Suite 300, Boston, MA. 02210
11/18/2021

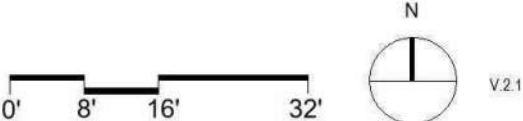


Third Floor



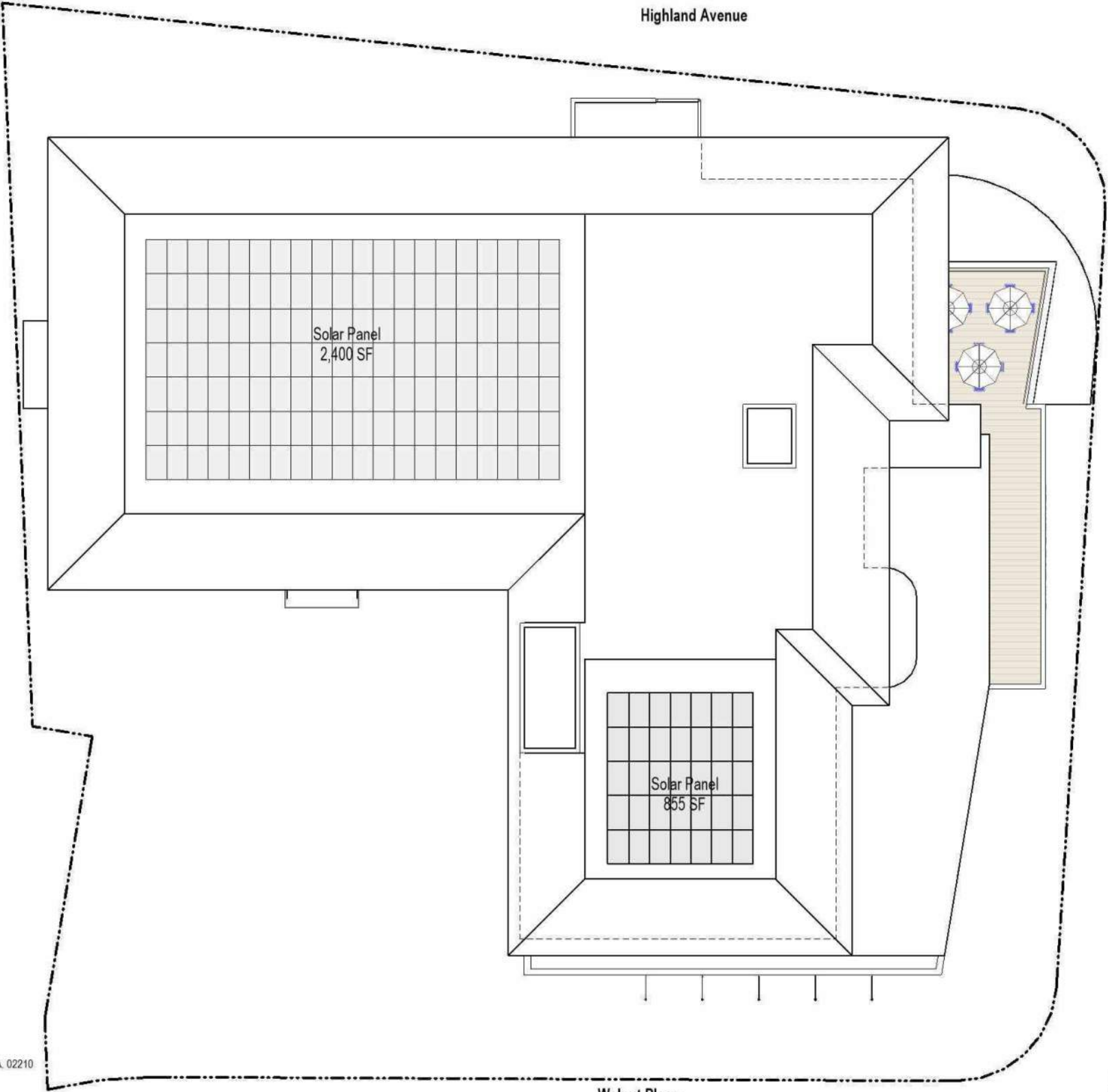
NEWTON CENTER
FOR ACTIVE LIVING
Third Floor Plan

Bargmann Hendrie + Archetype, Inc.
9 Channel Center Street, Suite 300, Boston, MA. 02210
11/18/2021



V.2.1

Roof Plan



**NEWTON CENTER
FOR ACTIVE LIVING**
Roof Plan

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11/18/2021

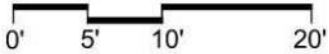


Glazing to Wall Analysis

Glazing Area – North Elevation



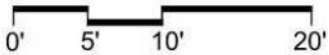
Glazing Area 1,646 sf



Glazing Area – East Elevation

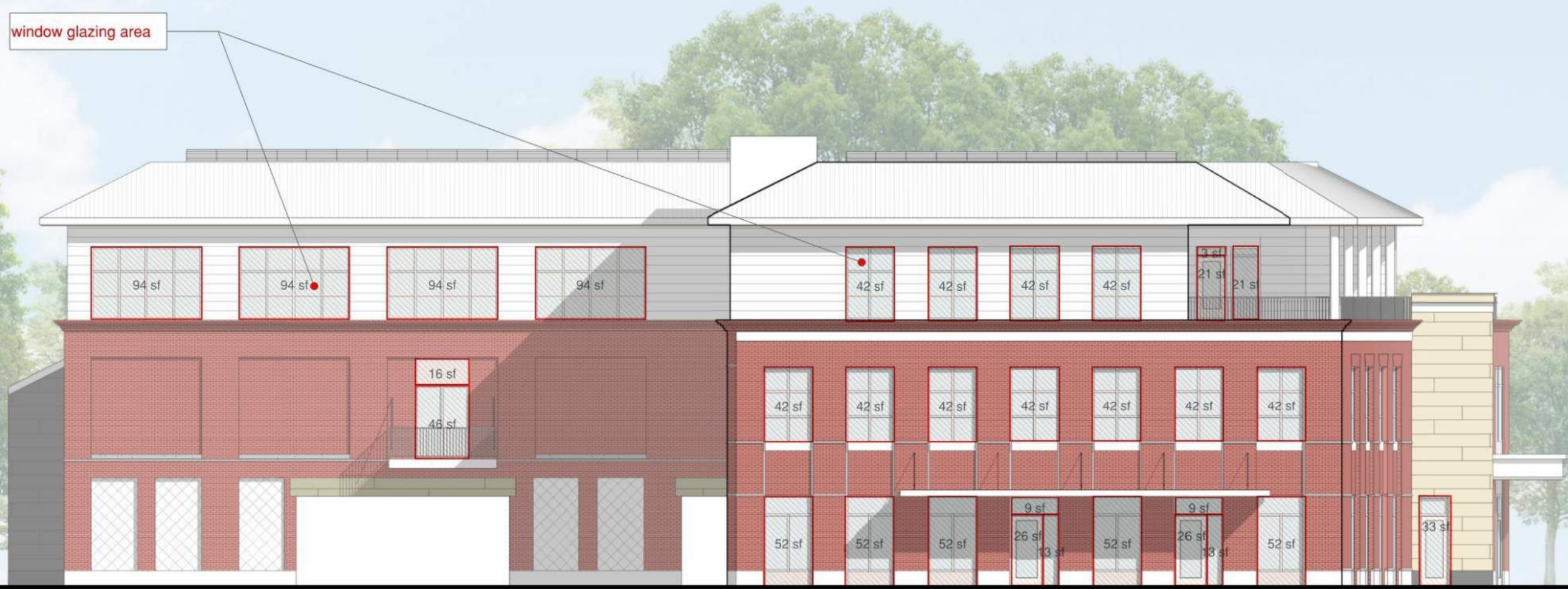


Glazing Area 2,168 sf

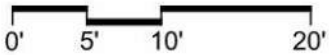


Glazing Area – South Elevation

window glazing area



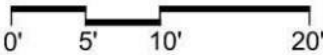
Glazing Area 1,335 sf



Glazing Area – West Elevation

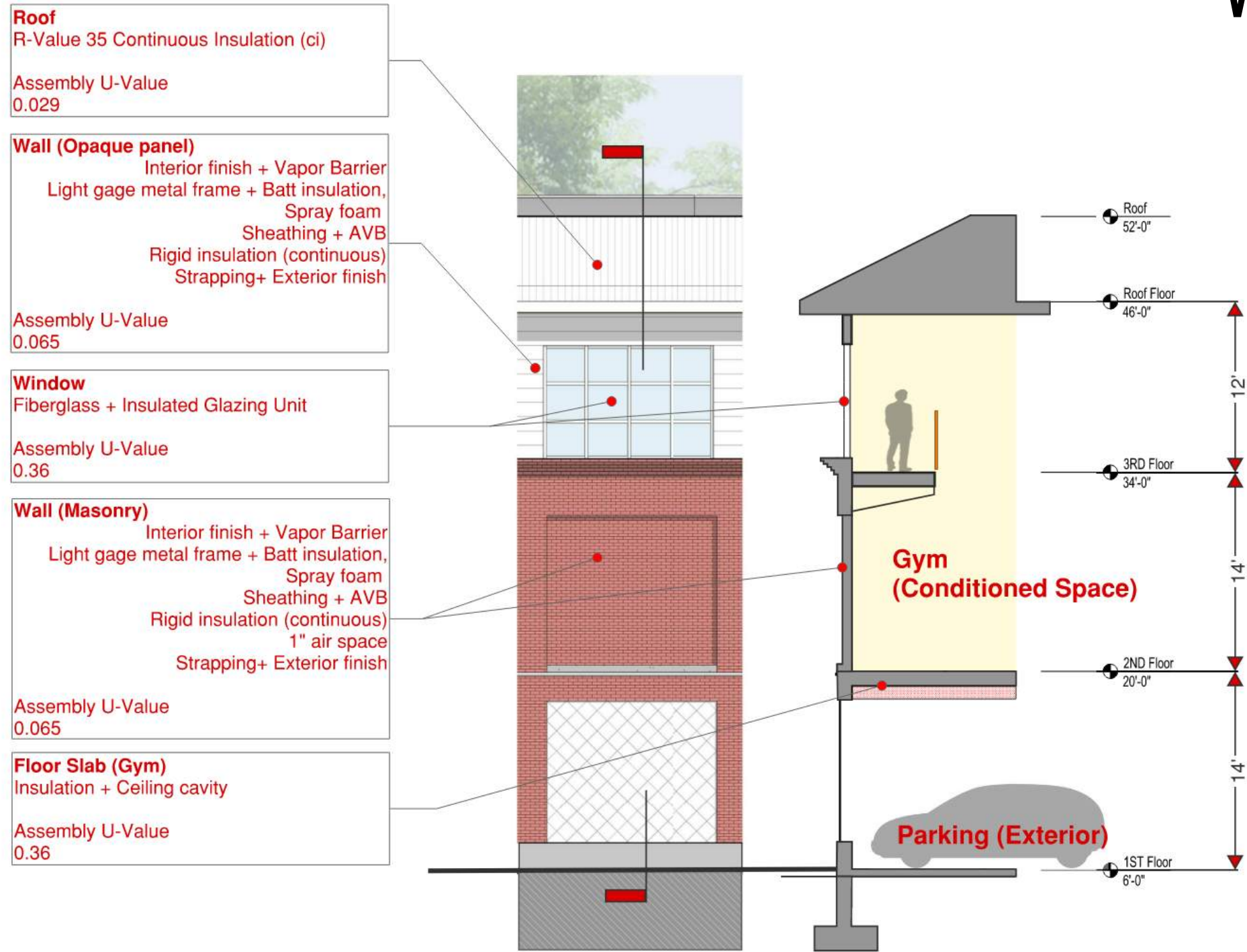


Glazing Area 826 sf



Wall and Roof Construction Analysis

Wall Section Diagram



Wall Section Diagram

Roof
R-Value 35 Continuous Insulation (ci)

Assembly U-Value
0.029

Wall (Opaque panel)
Interior finish + Vapor Barrier
Light gage metal frame + Batt insulation,
Spray foam
Sheathing + AVB
Rigid insulation (continuous)
Strapping+ Exterior finish

Assembly U-Value
0.065

Window
Fiberglass + Insulated Glazing Unit

Assembly U-Value
0.36

Wall (Masonry)
Interior finish + Vapor Barrier
Light gage metal frame + Batt insulation,
Spray foam
Sheathing + AVB
Rigid insulation (continuous)
1" air space
Strapping+ Exterior finish

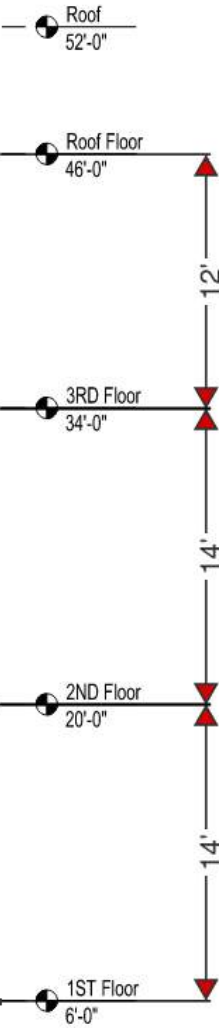
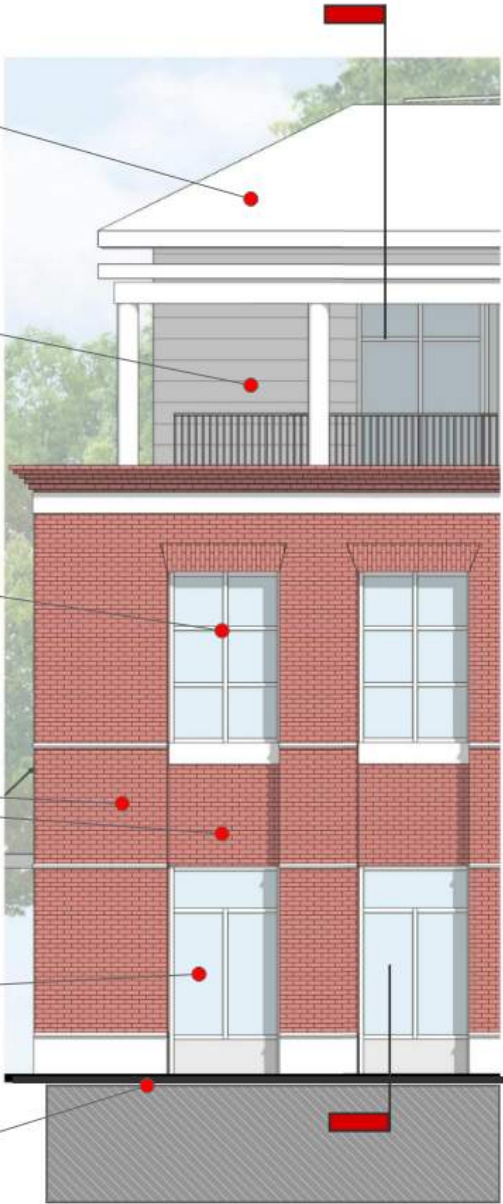
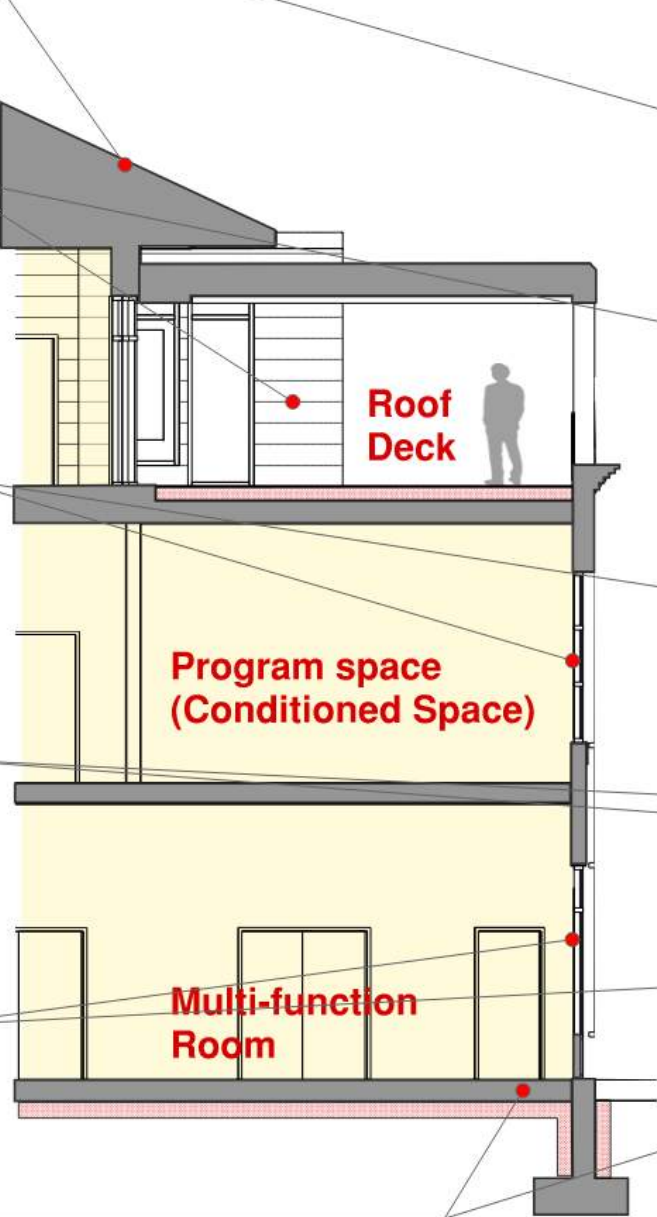
Assembly U-Value
0.065

Curtainwall system

Assembly U-Value
0.36

Floor Slab on Grade
R-10 Continuous Insulation (24")

F-Factor
0.54



5% Safety Factor

COMcheck Guidance	
ENVELOPE BACKSTOP COMPLIANCE	
A+B+C+D+E	-152
Pass	

C406.8 ENHANCED ENVELOPE COMPLIANCE	
A+B+C+D+E	-129
Pass C402.1.5	

DOER Guidance	
ENVELOPE BACKSTOP COMPLIANCE	
A+B+C+D+E	-543
Pass	

ENVELOPE BACKSTOP COMPLIANCE	
A+B+C+D+E	-461
Pass	

Envelope Inputs:

Cell Type:

User Input
Calculation
User Input - Thermal Performance

WWR	Design Case		Baseline
	25%		30%

Envelope Component	Design Case			Baseline	
	Area / Perimeter	U / F / C Factor		Area / Perimeter	U / F / C Factor
Wall + Window (Area)	22,555	NA	Equivalent R-Value	22,555	NA
Roof	12,270	0.029	34.5	12,270	0.032
Wall	16,818	0.064	15.6	15,789	0.064
Glazing Assembly	5,737	0.360		6,767	0.38
Slab on Grade	560	0.54		560	0.54
Below Grade Wall	2,240	0.119		2,240	0.119
Skylight	-	#DIV/0!		368	0.5

Newton Center for Active Living
12/10/2021

Glazing to Wall Summary

Wall/Surface	Glazing and curtainwall	
	1,646 sf	North
	1,335 sf	South
	2,168 sf	East
	826 sf	West
16,568 sf	5,975 sf	

22,543 sf	26.5%	Total Wall + Glazing
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12,260 sf	Roof
560 lf	Foundation wall perimeter
2,240 sf	Under slab wall area

QUESTIONS & COMMENTS