PORTFOLIO

MATTHEW LYNN | 2026

01

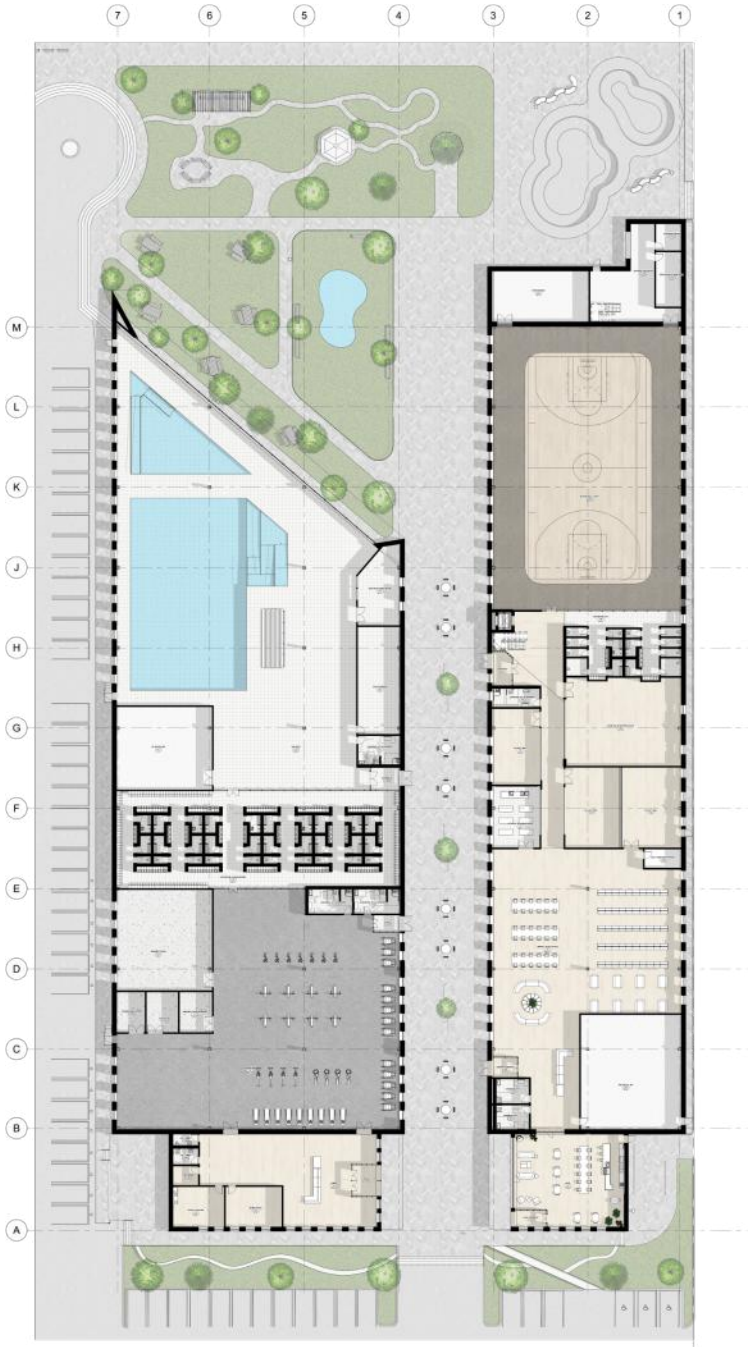
110 Carrier Community Centre

Year: 2025
Building Size: 7000 m²
Location: Etobicoke, Ontario

Project Objective:

To transform a former trade school into a sustainable, multi-functional community centre that provides inclusive recreational, educational, and social amenities — fostering connection, well-being, and shared purpose for people of all ages. This was intended to be an adaptive re-use of the existing builiding.

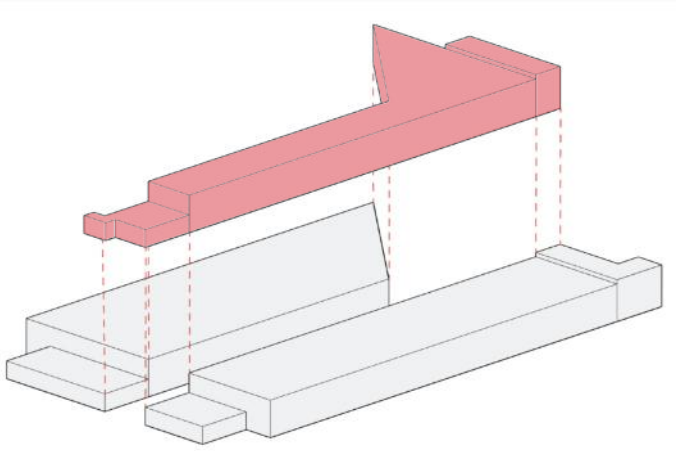
FRONT ENTRANCE | **D5 RENDERING**



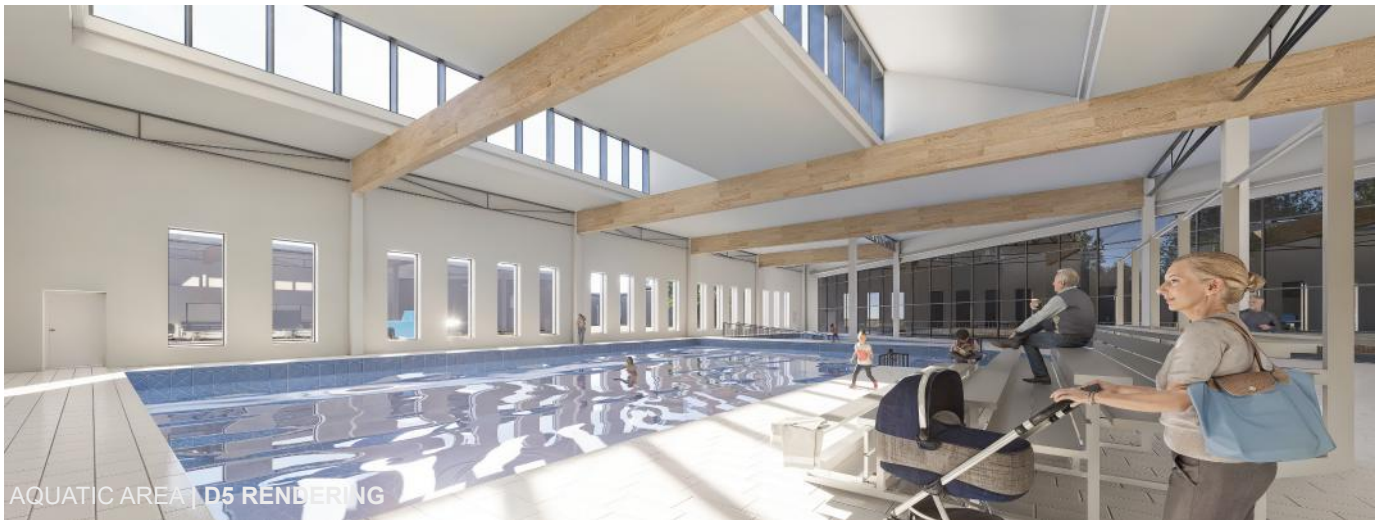
FLOOR PLAN | **REVIT & PHOTOSHOP**

Working directly in SketchUp with the original building as a foundation, I developed a concept driven by two core objectives: introducing natural light into the interior of the building, and organizing the building's program into two distinct functional zones. The result reflects a design process that responded to what already existed taking into account the constraints of the existing structure as the starting point for a purposeful transformation. From there, the floor plan and overall building layout were developed in Revit and refined in Photoshop to produce a presentation-ready drawing — the kind of polished, client-facing plan suited for showrooms and design presentations.

The diagram below illustrates how the concept was conceived by taking the original form of the existing building, removing a corridor down the centre, and removing the angled portion at the rear — the angle of which was determined by the structural grid.



CONCEPT BLOCK DIAGRAM | **SKETCH UP & PHOTOSHOP**

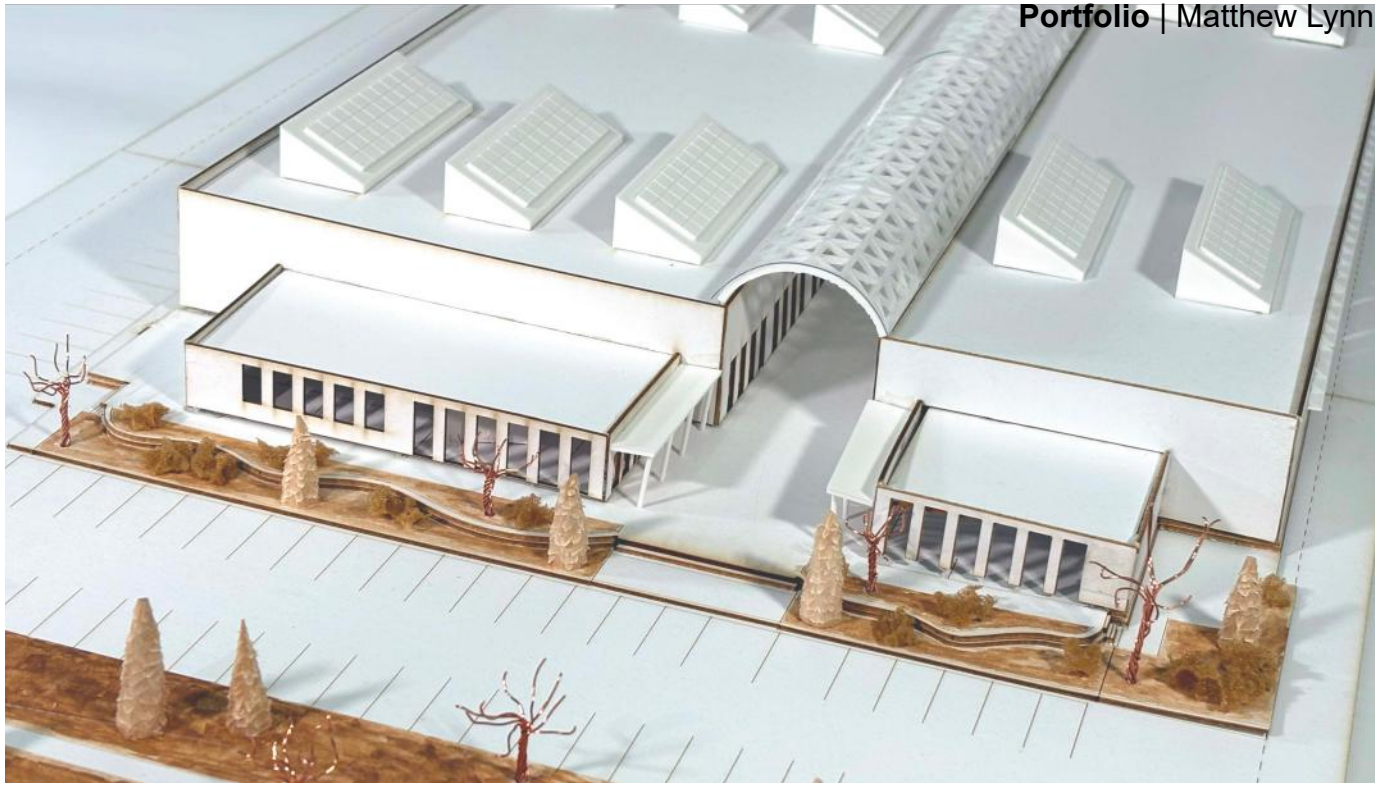

AQUATIC AREA | **D5 RENDERING**

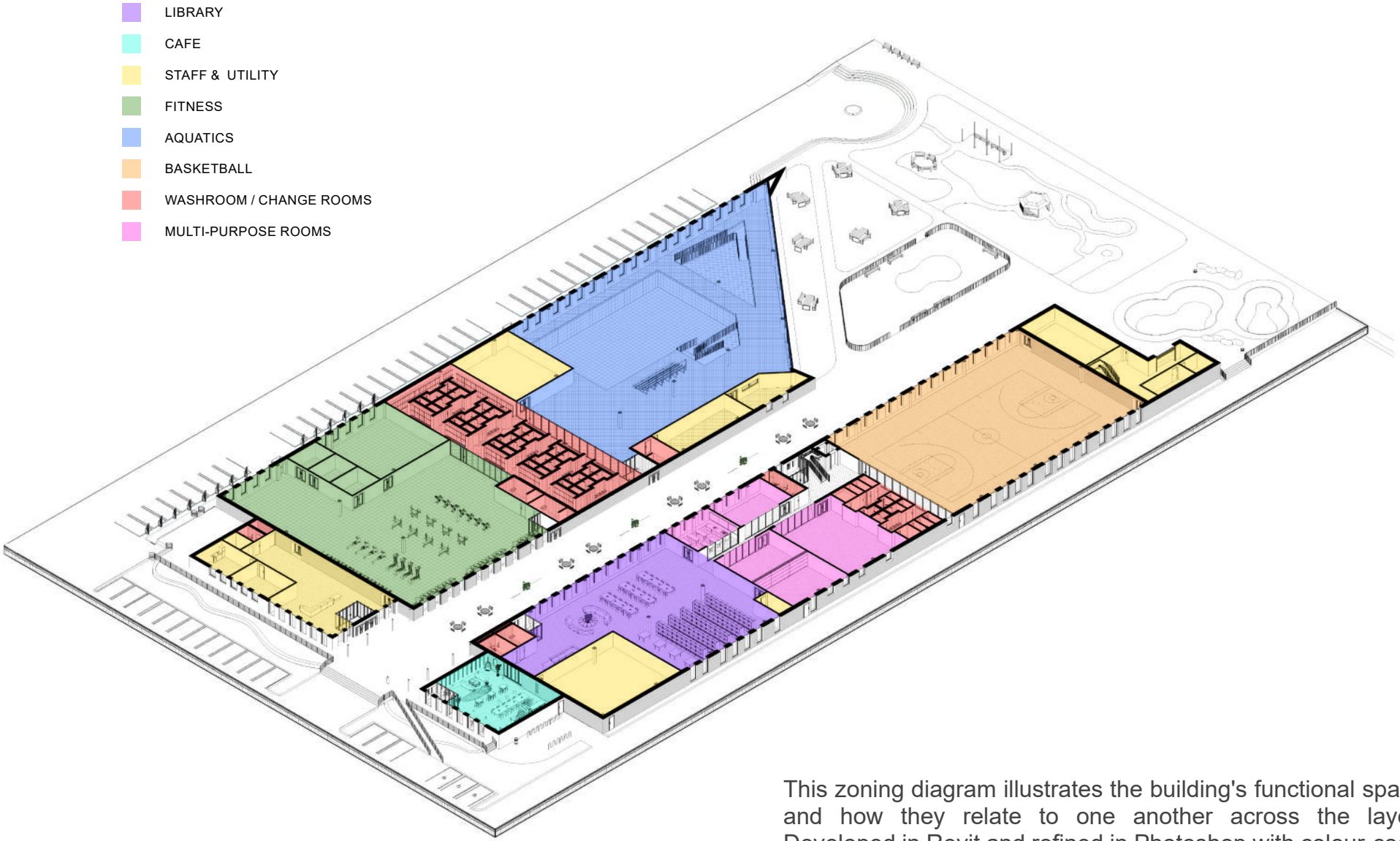

BASKETBALL COURT & RUNNING TRACK | **D5 RENDERING**


FITNESS AREA | **D5 RENDERING**

To bring the design to life for presentation, I produced rendered views of the building in use, demonstrating the space as it would be experienced by the users. The renders were created using Revit in combination with D5, showcasing my ability to produce realistic, presentation-quality visuals.

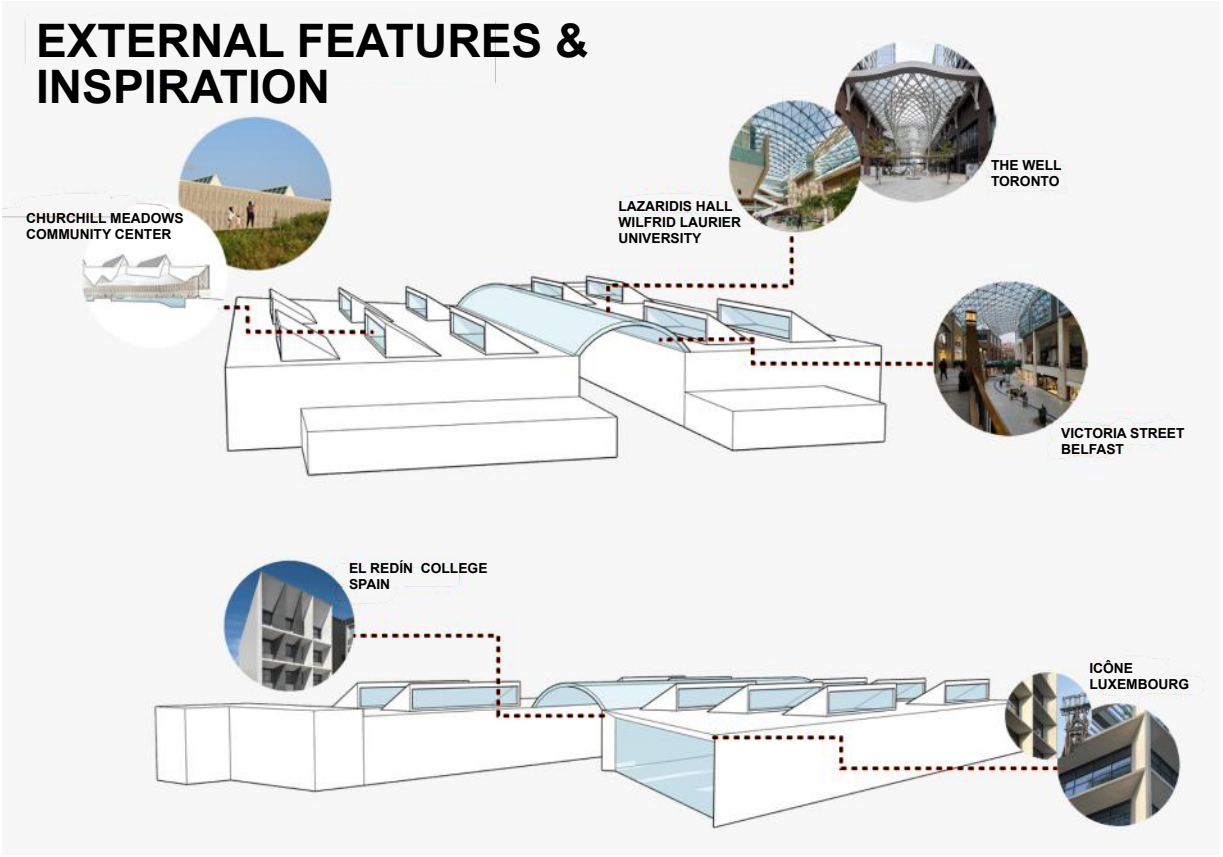
To support the presentation and aid in spatial understanding, I built a physical model using a combination of methods and materials. The majority of the model was constructed from card stock cut on a laser cutter, with select components designed in Fusion 360 and 3D printed. Additional detail was added through hand-crafted elements — trees whittled from wood dowels and others formed from twisted wire — bringing a tactile, handmade quality to the finished model.





ZONING DIAGRAM | **REVIT & PHOTOSHOP**

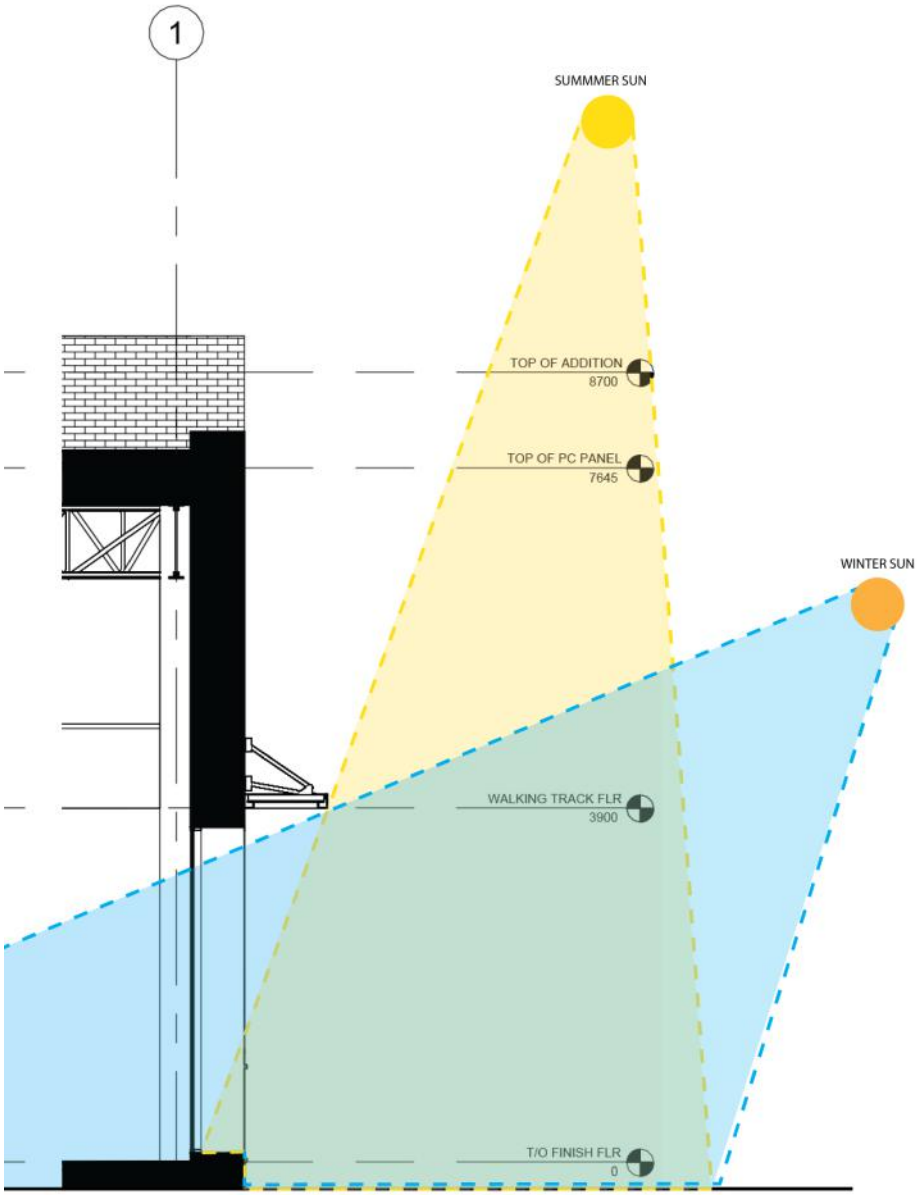
This zoning diagram illustrates the building's functional spaces and how they relate to one another across the layout. Developed in Revit and refined in Photoshop with colour-coded zones and labels, it reflects my understanding of spatial organization and my ability to communicate zoning clearly in a presentation context.



EXTERNAL FEATURES & INSPIRATION DIAGRAM | **SKETCHUP & PHOTOSHOP**

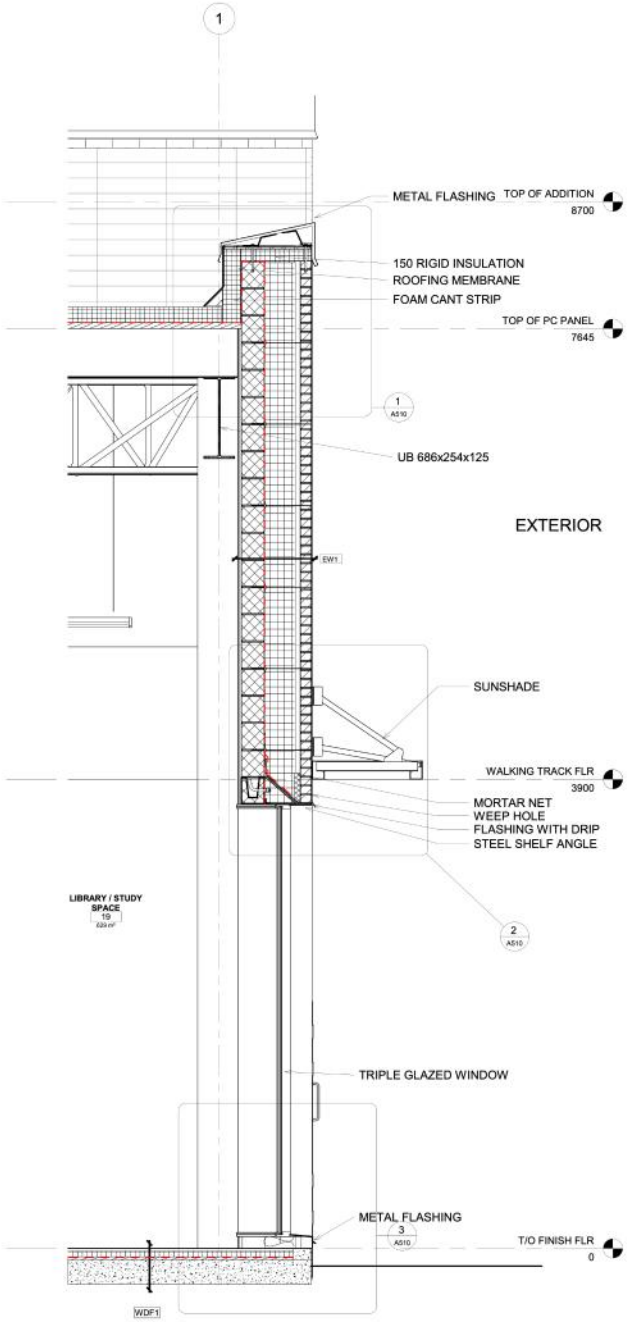
To provide some background, I researched concept ideas by reviewing projects from around the world that specifically dealt with public spaces. These projects featured a range of elements that I was able to incorporate into my own design, with a focus on sustainability, improved lighting, and enhanced outdoor spaces.

This sequence documents the full development of the sun louver, from research through to a detailed construction drawing. The process began with a sun angle analysis using a rough section modelled in Revit alongside the site's location to determine the summer and winter solstice angles and establish the optimal louver sizing. From there, a physical model was constructed to demonstrate how the louver would be built, combining 3D printing with woodworking techniques. The process concluded with a detailed wall section produced in Revit, illustrating the louver's integration into the building assembly.



SOLAR SHADING ANALYSIS | **REVIT & ILLUSTRATOR**

WALL SECTION | **PHYSICAL MODEL**



WALL DETAIL SECTION | **REVIT**

CEILING ASSEMBLIES

EXC1	EXC1 - EXPOSED CEILING
ACP1	ACP1 - GWB ON METAL FURRING ON METAL STUDS
GBC2	GBC2 - GWB ON M. FURRING ON M. STUDS ON CEMENT FIBER STRUCTURAL BOARD ON GLASS FIBER REINFORCED GYPSUM
GC1	GC1 - GWB ON M. FURRING ON M. STUD

LIGHTING LEGEND

L1	L1 - HANGING PENDANT CLARA 64128
L2	L2 - SUSPENDED LIGHT XBAY46 WHITE
L3	L3 - ROUND SURFACE TASK 450
L4	L4 - SUSPENDED LINEAR MLINE
L5	L5 - SUSPENDED LINEAR MEA14/2SLDS

FLOOR ASSEMBLIES

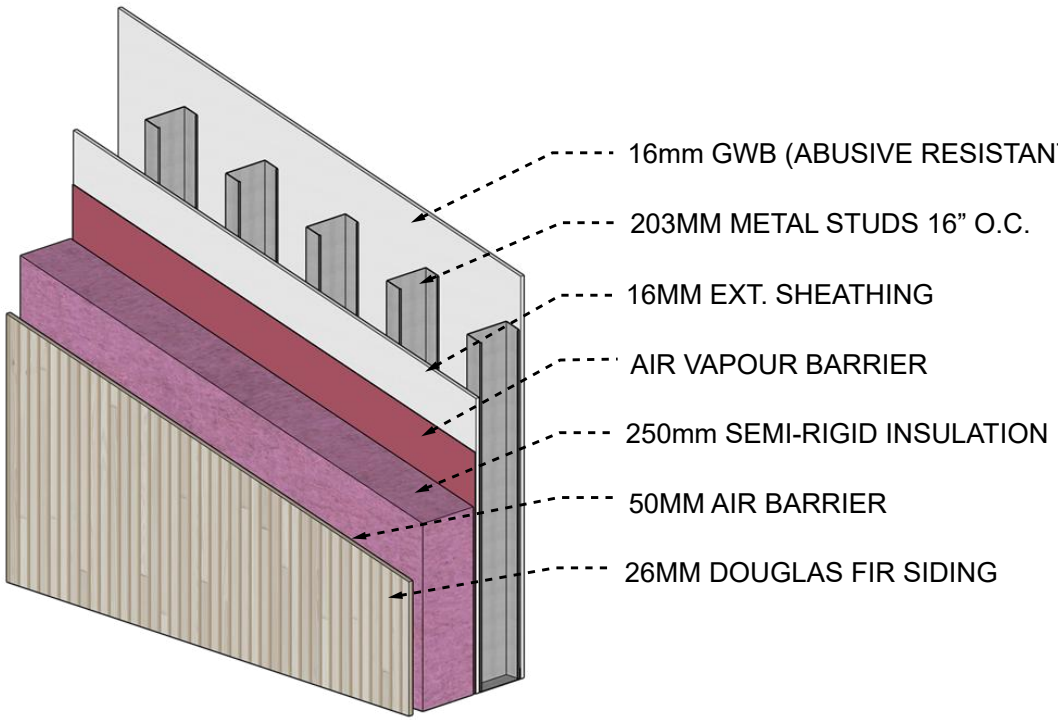
CS1	CS1 - CONCRETE SLAB -40mm POURED CONCRETE -200mm CONCRETE SLAB
IP1	IP1 - INTERLOCK PAVER -40mm INTERLOCK PAVER -200mm CONCRETE SLAB
CT1	CT1- CERAMIC TILE -19mm WHITE CERAMIC TILE -5mm MORTAR -12.7mm CEMENT BOARD -5mm MORTAR -19mm PLYWOOD -179mm CONCRETE SLAB
VFL1	VFL1 - VINYL FLOORING -3mm VINYL FLOOR -25.5mm PLYWOOD -11mm RUBBER -AVB -200mm CONCRETE SLAB
WDFL1	WDFL1 - WOOD FLOOR -20mm OAK FLOORING -20mm PLYWOOD -AVB -200mm CONCRETE SLAB
WDFL2	WDFL2 - BASKETBALL COURT WOOD FLOOR -20mm OAK FLOORING -19mm PLYWOOD -15mm RUBBER -AVB -186 CONCRETE SLAB

FLOOR TRANSITIONS

WDFL1	CT1	
WDFL1	CS1	
WDFL1		
WDFL1	VFL1	
WDFL1		
WDFL1	WDFL2	
CT1		
CT1	CS1	
CT1	VFL1	

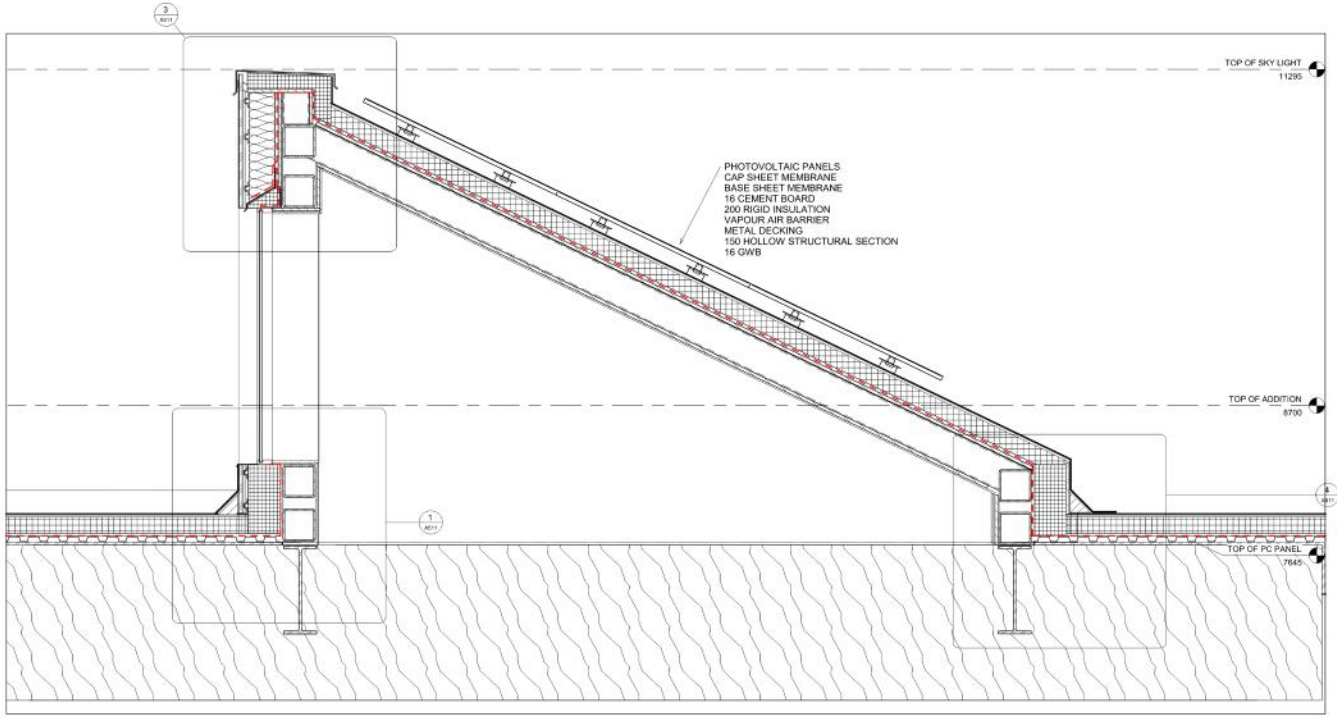
WALL ASSEMBLIES

	**EW1 - EXTERIOR BRICK ON CMU** -90 NORMAN BRICK -50 AIR SPACE -250 MINERAL WOOL INSULATION -AVB -190 CMU -22 METAL FIRRING -16 GWB
	**EW2 - EXTERNAL ACP ON METAL STUDS** -29 ALUMINUM COMPOSITE PANEL W/ WOOD-LIKE FINISH (DOUGLAS FIR APPEARANCE) -50 AIR SPACE -250 MINERAL WOOL INSULATION -AVB -16 CEMENTITIOUS PANEL -203 METAL STUDS @ 400 O.C. -16 GWB
	IW1 - TYP. STUD WALL ULCW407 1HR STC 49 -16 GWB -156 METAL STUDS @ 400 O.C. -16 GWB
	IW2 - INTERIOR CMU WALL -16 GWB -190 CMU -16 GWB
	**IW3 - INTERNAL PLUMBING CHASE** -10 CERAMIC TILES -140 CMU -100 AIR SPACE -140 CMU -10 CERAMIC TILES
	GW1 - IGU2 FEATURE GLAZING WALL
	GW2 - INTERNAL STOREFRONT
	GW3 - CURTAIN WALL W/ MULLION INTERNAL



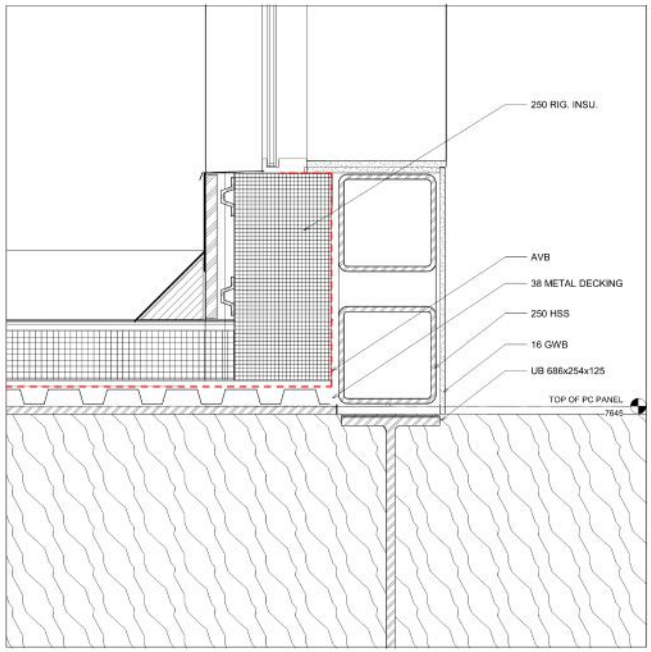
3D WALL ASSEMBLE | **SKETCHUP**

This sheet documents all building assemblies used throughout the project, referenced across drawings such as the detailed floor plan. A 3D wall assembly was also produced to help communicate the construction methodology to the reader.`

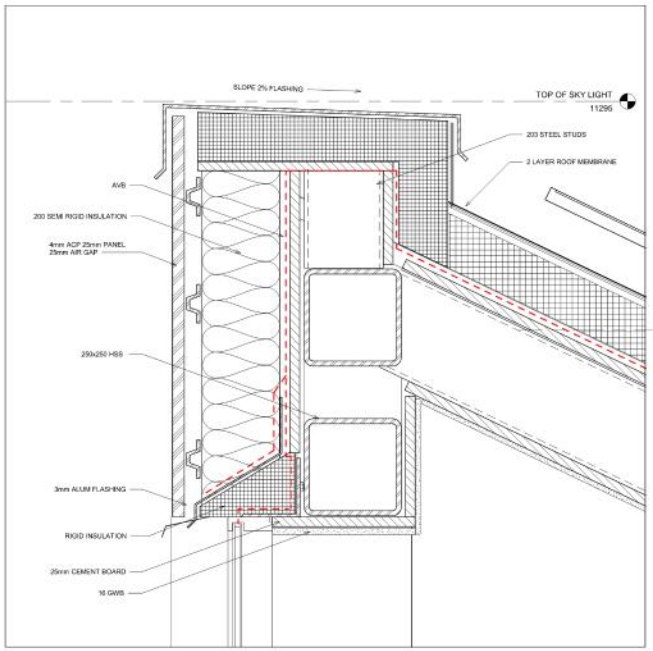


2 SKYLIGHT SECTION
1 : 15

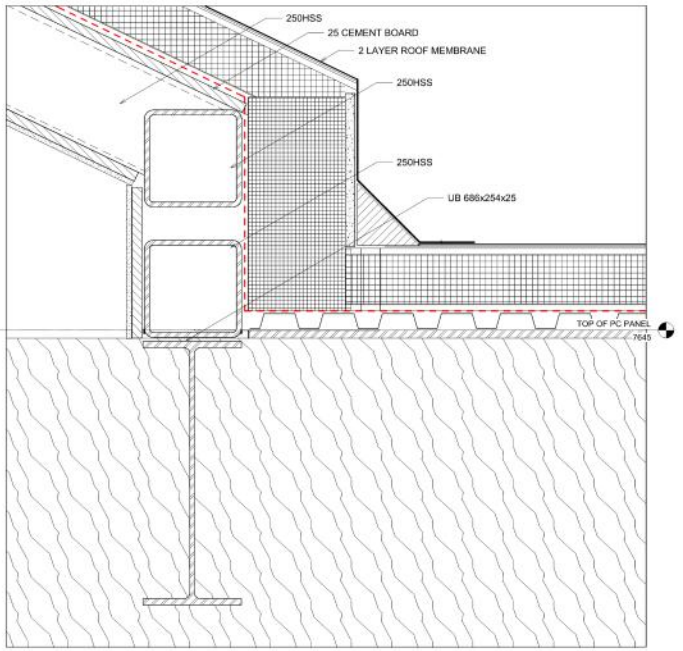
These detail drawings illustrate the construction of the skylights incorporating solar panels, documenting how the two systems are integrated within the building assembly. Produced entirely in Revit, it demonstrates my ability to develop and communicate complex architectural details with clarity and precision.



1 SKYLIGHT SECTION - WINDOW SILL
1 : 5



3 SKYLIGHT SECTION - TOP OF SKYLIGHT
1 : 5



4 SKYLIGHT SECTION - BOTTOM OF ROOF
1 : 5

02

35 FORTY FIRST STREET

Year: 2025
Building Size: 192 m²
Location: Long Branch, Toronto, Ontario

Project Objective:

To convert an existing single-family dwelling in Long Branch, Toronto, Ontario into two self-contained residential units within the existing building footprint. Each unit will feature private access, bright livable spaces, and full compliance with Long Branch zoning regulations and the Ontario Building Code (OBC). The design incorporates energy-efficient strategies — including improved insulation, high-efficiency HVAC, and energy-saving lighting — while excluding solar panels per client preference.


FRONT EXTERIOR | **D5 RENDERING**


REAR EXTERIOR | **D5 RENDERING**

INTERIOR | **D5 RENDERING**

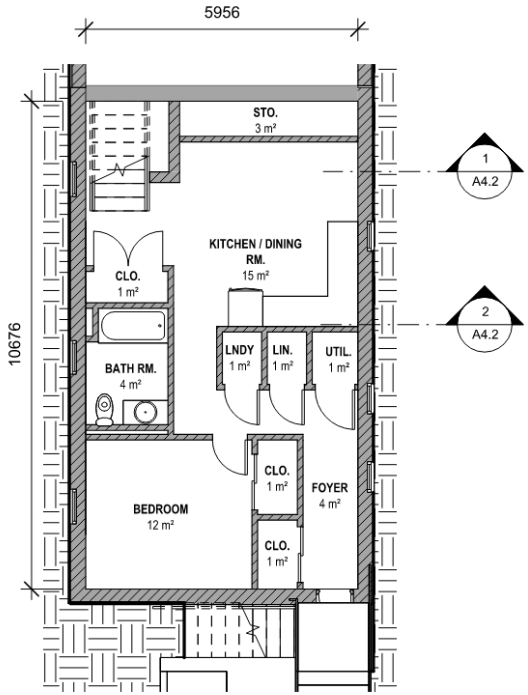
FRONT ISOMETRIC FEATURE DIAGRAM | **REVIT & PHOTOSHOP**

This diagram presents a comprehensive breakdown of the building's external features, grounded in evidence-based design decisions. Developed in Revit and refined in Photoshop, the diagram demonstrates the reasoning behind each external element in a visually clear and accessible format. I was responsible for the form of the addition and all external design work, from initial shaping through to the final composed diagram.

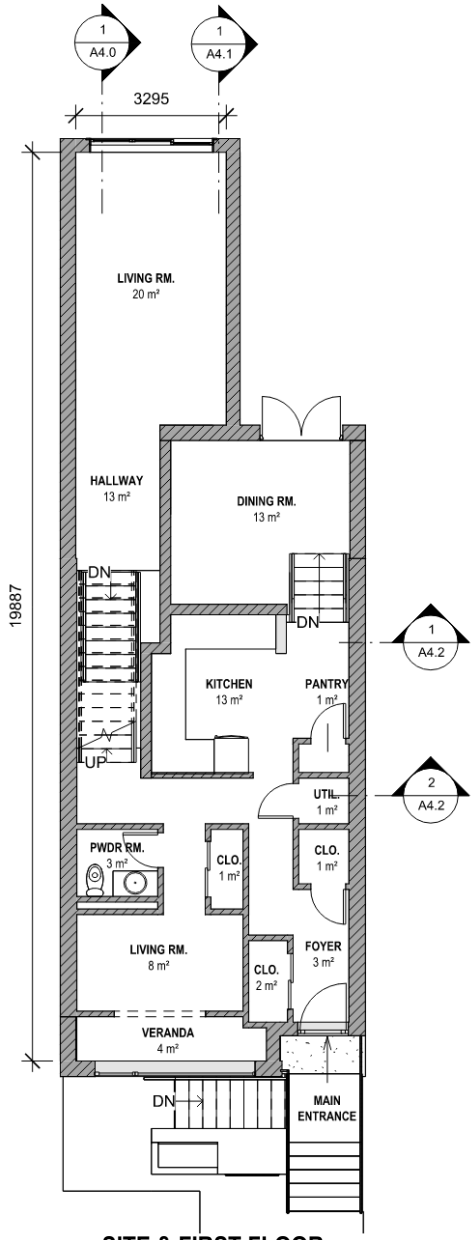
REAR ISOMETRIC FEATURE DIAGRAM | **REVIT & PHOTOSHOP**

STREET FACADE | **SKETCHUP & PHOTOSHOP**

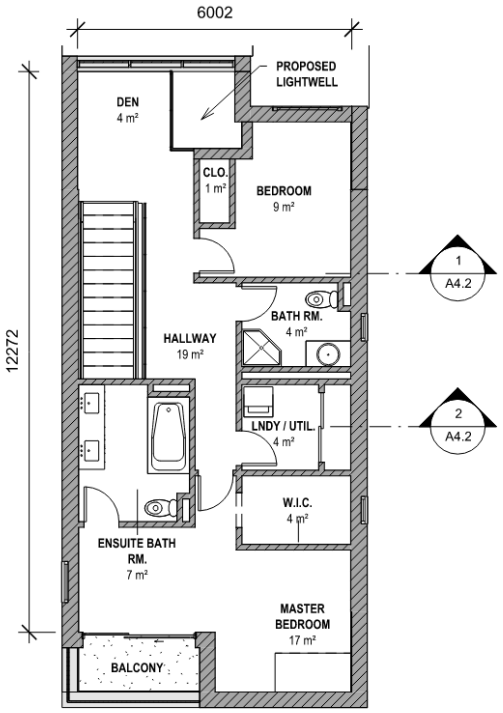
This streetscape elevation illustrates how the proposed facade integrates with the surrounding neighbourhood, and was used to demonstrate compliance with Long Branch by-laws. Using Google Street View as reference, I modelled the neighbouring buildings in SketchUp with accurate spacing sourced from Google Earth. The proposed house was then imported from Revit, and the final elevation was composed in Photoshop with added texture and landscaping to produce a clear, visually compelling presentation drawing.



BASEMENT



SITE & FIRST FLOOR



SECOND FLOOR

FLOOR PLANS | **REVIT**

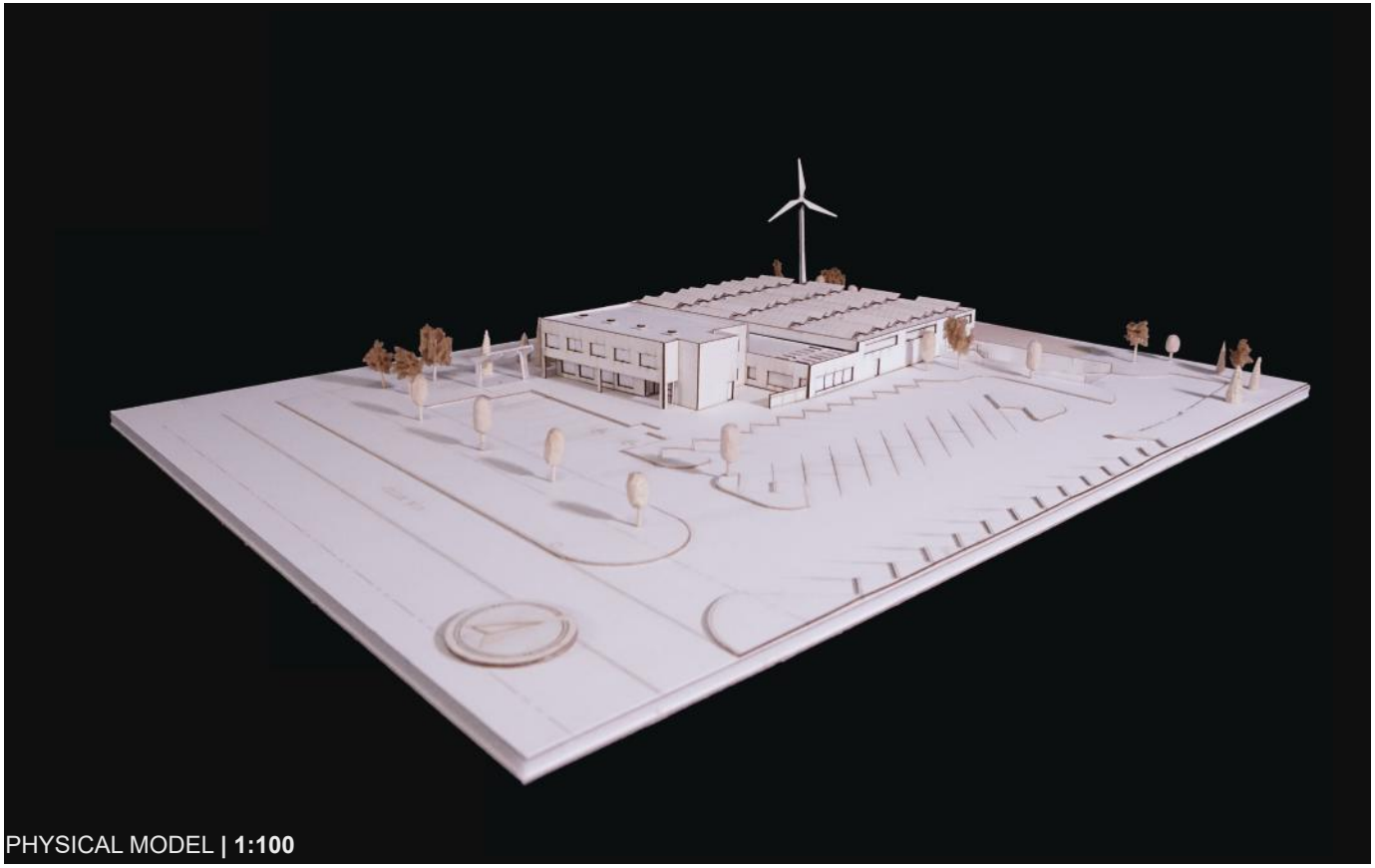
03

SDS FACTORY

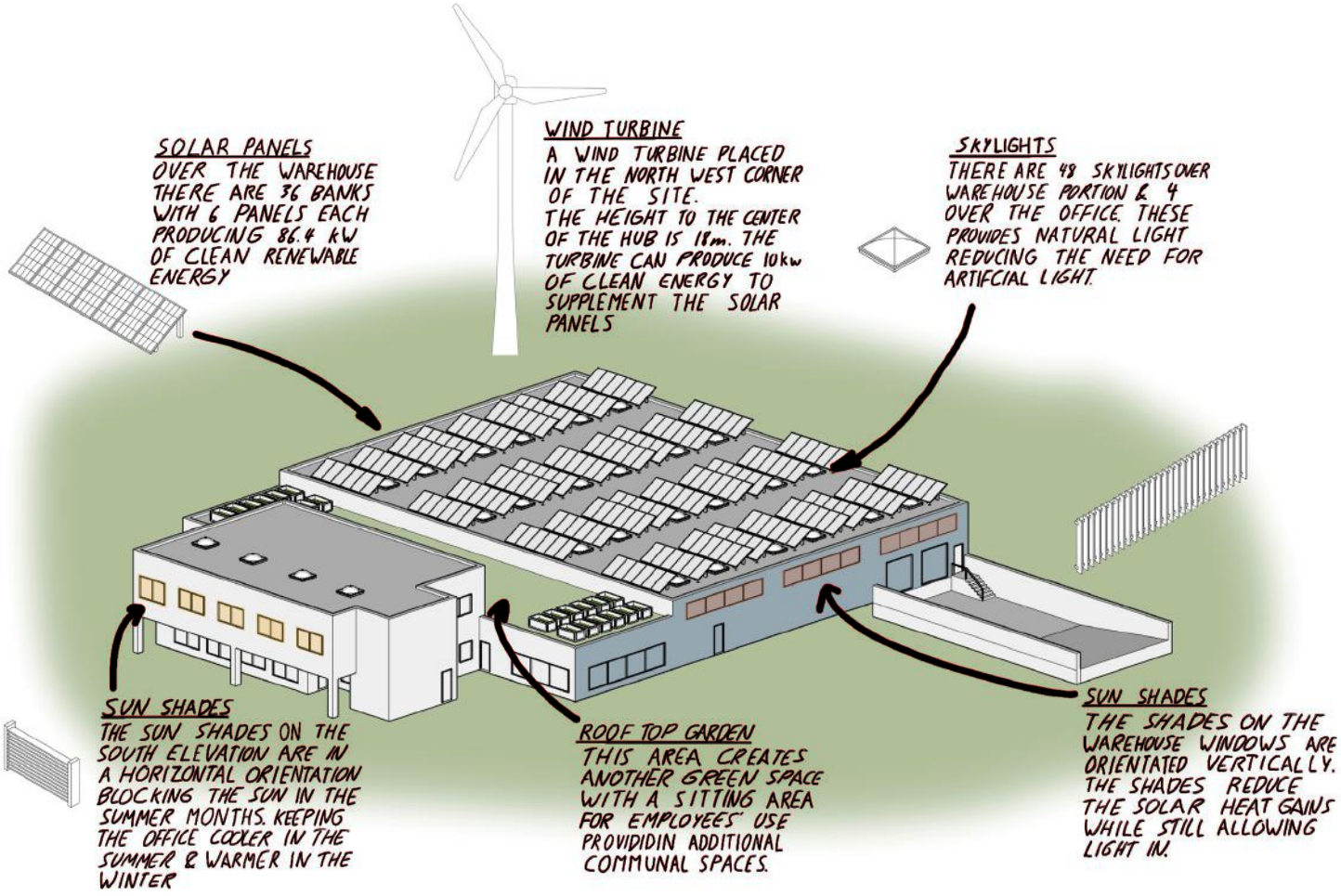
Year: 2023
Building Size: 2,100 m²
Location: North York, Ontario

Project Objective:

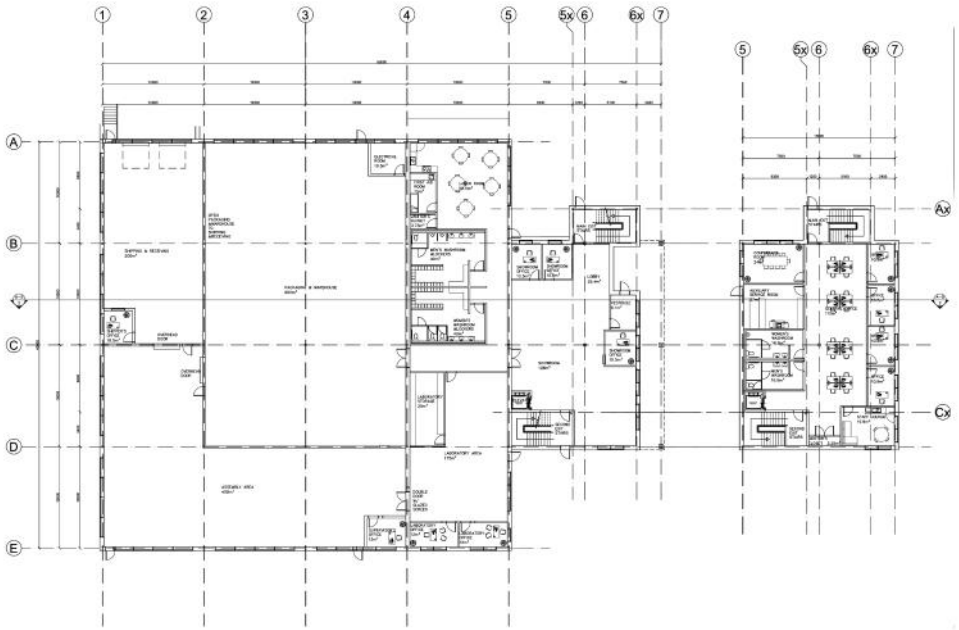
To design a multifunctional industrial facility integrating a plant, laboratory, office space, and showroom within a single cohesive steel frame and masonry structure. The design prioritizes sustainability through the incorporation of solar panels, skylights, and architectural sunshades to optimize energy performance and natural daylight. The site strategy reflects a commitment to environmental responsibility by preserving existing trees wherever possible, with relocation considered only when necessary.



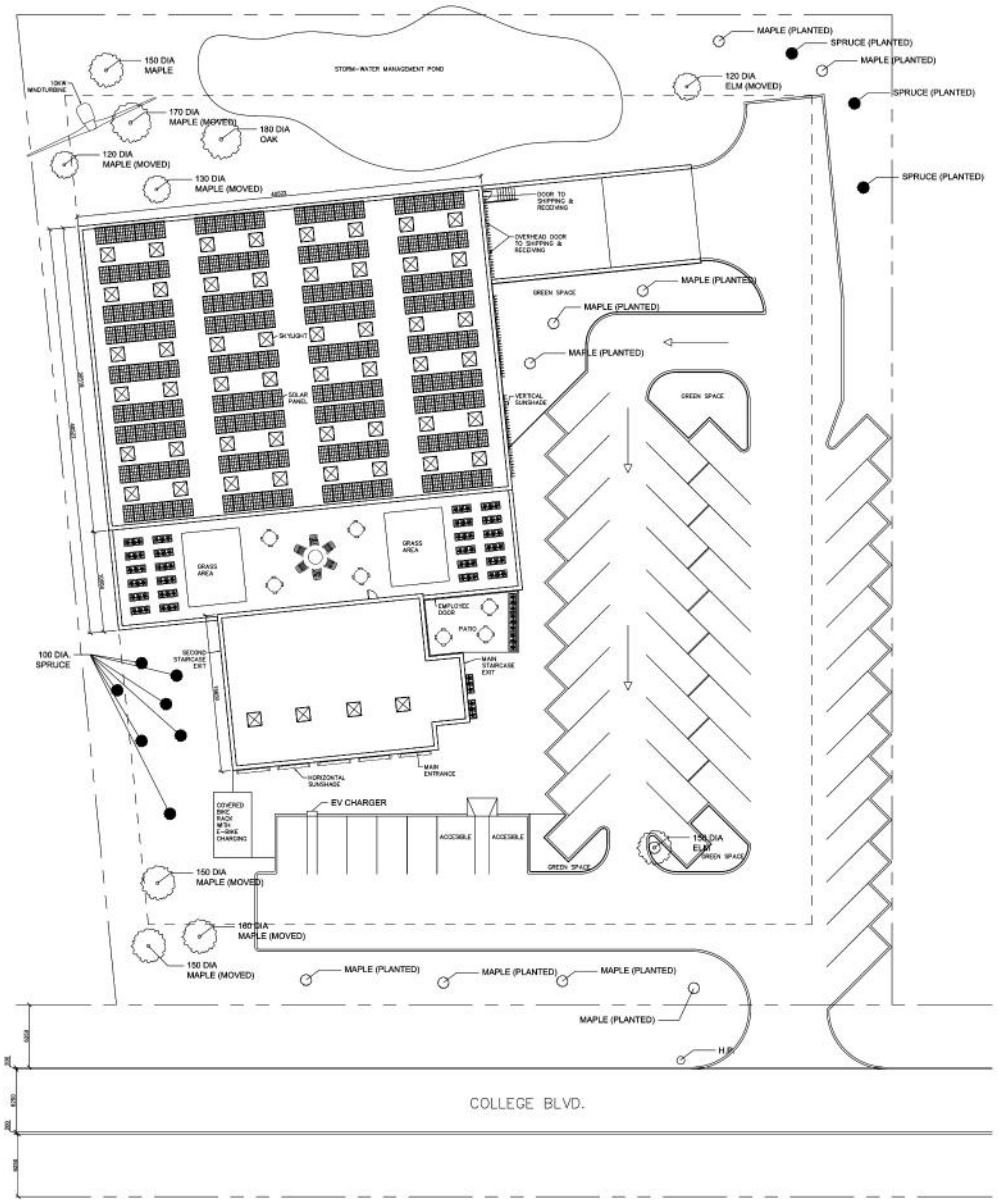
PHYSICAL MODEL | **1:100**



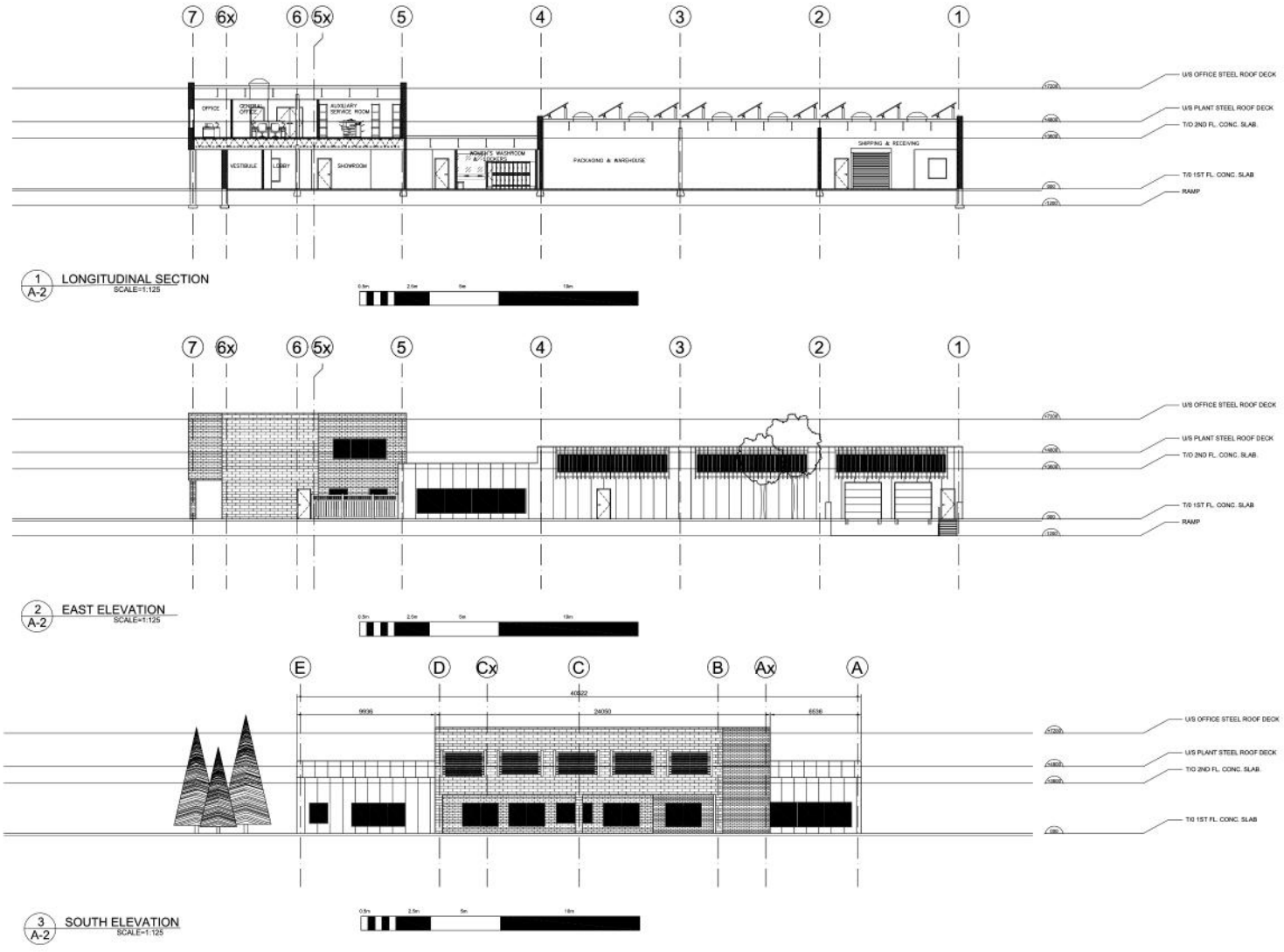
This diagram illustrates the sustainable features of the industrial facility, rendered using SketchUp and Procreate.



1st FLOOR PLAN **| AUTOCAD**



SITE PLAN **| AUTOCAD**



SECTION & ELEVAATIONS | **AUTOCAD**

04

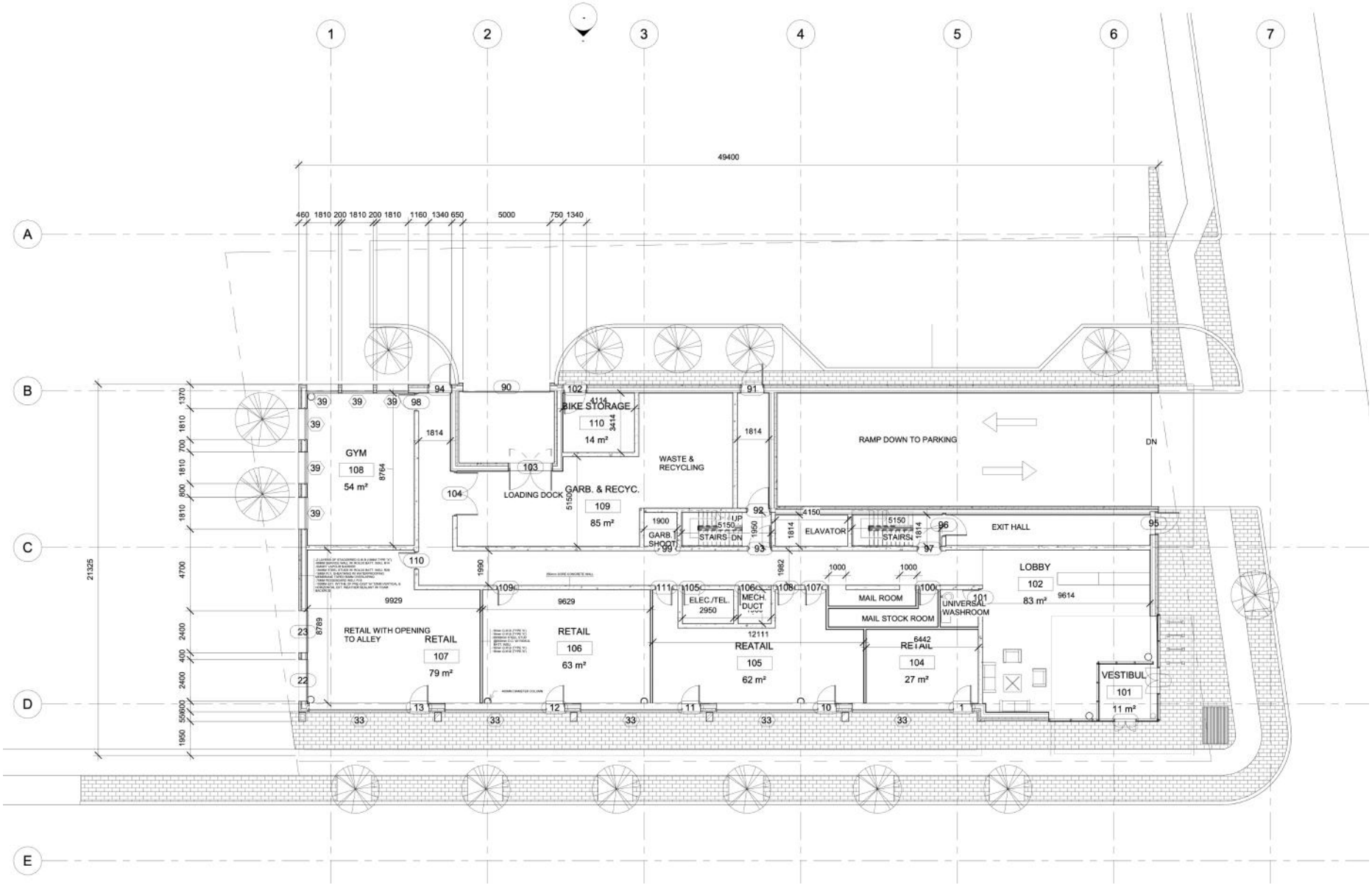
1161 WESTON ROAD

Year: 2022
Building Size: 7250m²
Location: Mount Dennis, Toronto, Ontario

Project Objective:

The project is a compliant midrise mixed-use building in Mount Dennis, located adjacent to a future subway station to support transit-oriented, inclusive living. A range of unit sizes accommodates a diverse residential community, while ground-floor retail — including an east-facing café or restaurant with street-accessible patio space — activates the streetscape and encourages community engagement. Fourteen new trees enhance the site's sustainability and green space. Material selections reflect the character of the surrounding neighbourhood, ensuring a contextually harmonious addition to the existing urban landscape.

STREET RENDER | **D5**



SITE PLAN | **REVIT**

SUSTAINABLE FEATURE DIAGRAM | **REVIT & D5**

1: Water Capture

The roof top has a water capture system which stores grey water to use for watering plants and flushing toilets.

2: Solar Panels

Panels are at a 30° angle facing south.

3: Louvres

The louvres are designed to block the peak summer sun and allow the sun in during the winder.

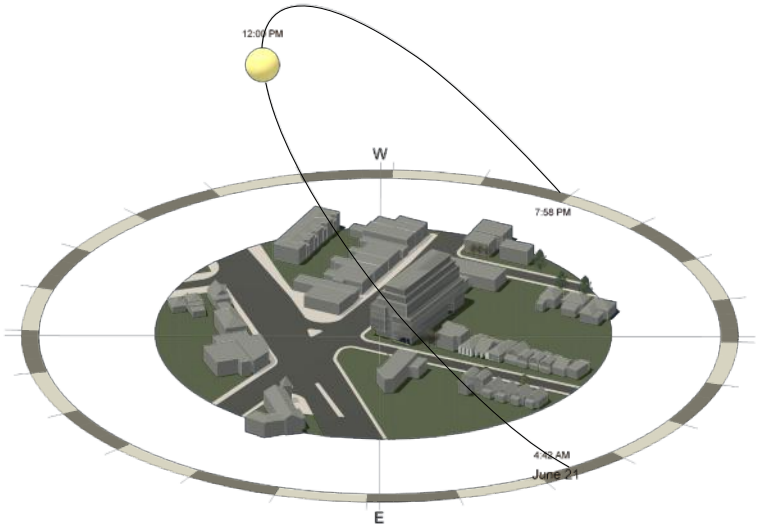
4: Vertical Windows

The vertical windows open which allows air to cycle through the units.

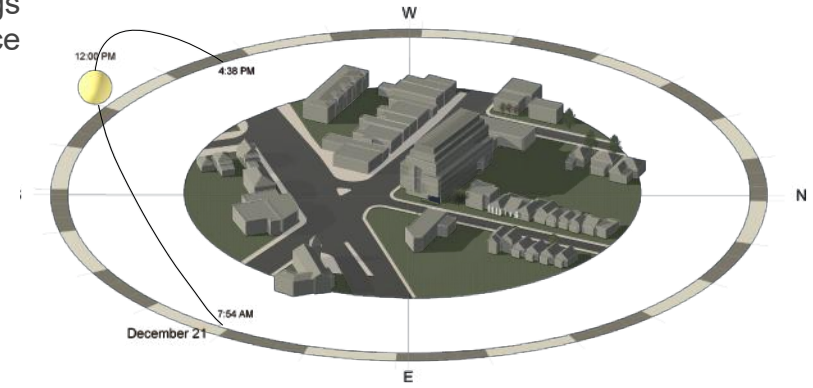
5: Bicycle Storage

By the front door there are bike racks and there is also a bycycle storage room for residents.

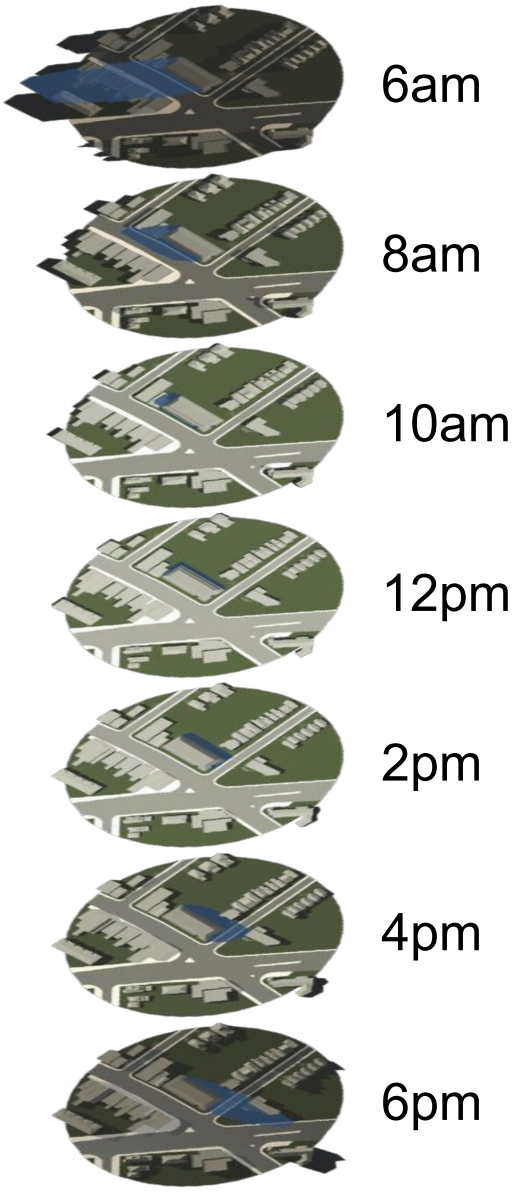
An additional area of research i undertook was to do a shadow and sun analysis. This analysis examines the impact of the proposed condo building on its surrounding neighbourhood, ensuring these areas would not be unduly shaded. Generated using Revit's sun analysis tools, the study tracks shadow patterns across key times of the day and year, presented in a visually clear format that communicates the findings effectively for review and compliance purposes.



SUMMER SUN STUDY | **REVIT & PHOTOSHOP**



WINTER SUN STUDY | **REVIT & PHOTOSHOP**



AVERAGE DAY SUN STUDY | **REVIT & PHOTOSHOP**

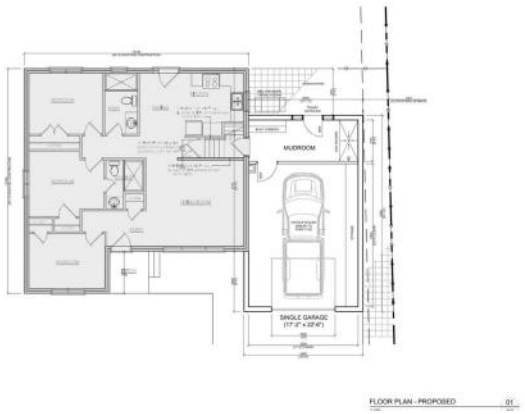
05

82 ARTHUR STREET

Year: 2026
Location: Newcastle, Ontario

Marketing Visualization for Garage & Mudroom Addition

The assignment was to design and produce marketing material for a residential addition to an existing house, including a new garage and mudroom, along with the surrounding landscaping. Starting from the AutoCAD construction drawings, I built 3D models in SketchUp and rendered them in D5 to visualize the finished addition. I used Photoshop to add material textures and integrate the landscaping into the renders, and developed a presentation package from the plans to communicate the design.




MUDROOM
PORCH
SINGLE GARAGE
82

06

45 SHADBERRY DRIVE

Year: 2026
Location: Toronto, Ontario

The assignment was to develop client-ready visuals from Adam's conceptual sketches for updating the facade of an existing house. My role was to take four conceptual sketches and enhance them with texture and material detail, then prepare them into a polished, presentation-ready format for the client.


45

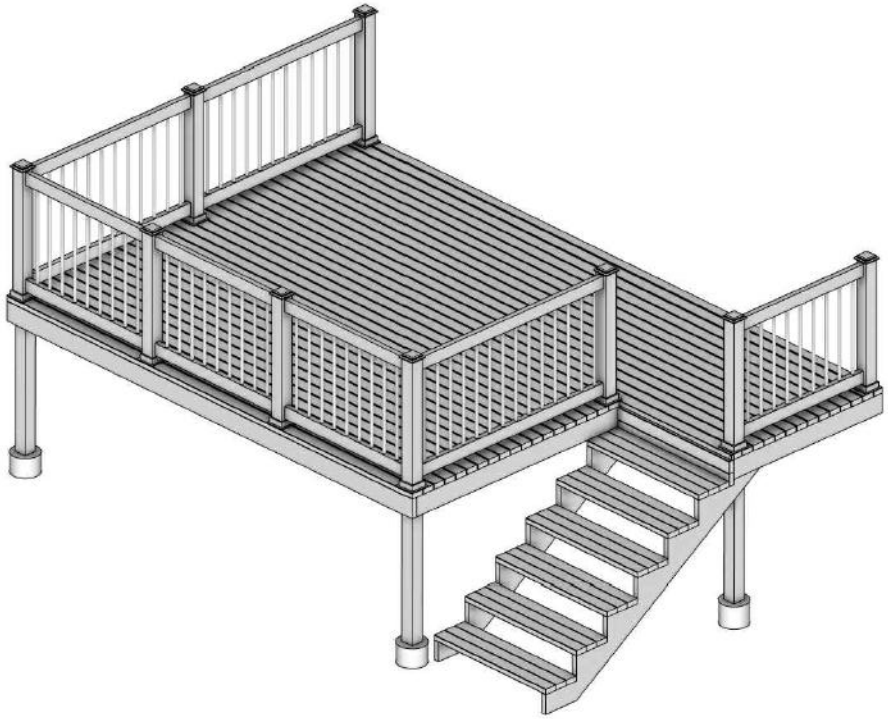

45

07.1

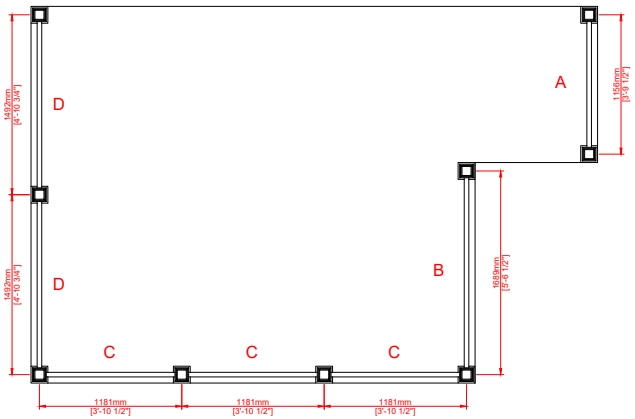
Deck Railing Project

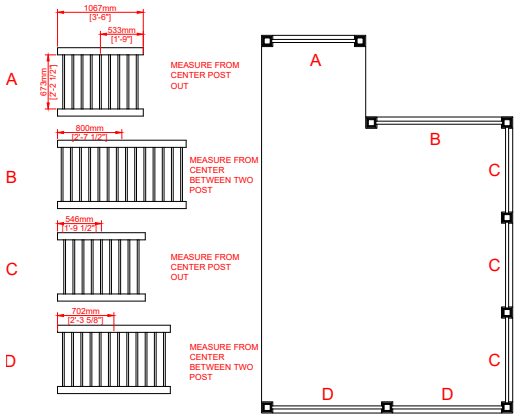
Year: 2025

Location: Newmarket, Ontario



A small residential project for a friend's family, where I designed and helped build a new deck railing. Using dimensions they provided, I put together a quick SketchUp model, then specced out materials using Home Depot's product catalogue. A big part of the design process was working out the spacing and length of each railing section to keep things even and structurally sound, while keeping material cost as low as possible. From there I put together a purchase list and took part in the build alongside my friend.





Part Name	Quantity	# of Packs Needed	Price per Unit	Price	Part number	URL
Pressure Treated 2 x 4 x 6' Wood Drilled Rail	14	14	CA$15.17	CA$212.38	10010140	https://www.home
Pressure Treated 4 x 4 x 54 Wood V-Groove Post	9	9	CA$28.65	CA$257.85	10010146	https://www.home
Veranda 15-pc Aluminum Baluster Kit with 34-inch Round Balusters, End Caps and Brackets for 6 ft. W x 42 in. H Deck Rails		7	CA$62.98	CA$440.86	681500	https://www.home
Peak 4-inch x 4-inch Composite Plastic Post Anchor in Black	9	9	CA$15.98	CA$143.82	4080	https://www.home
Paulin #8 x 3-inch Square Drive Flat Head Deck Screw UNC in Brown - 250pcs	1	1	CA$31.78	CA$31.78	1000109871	https://www.home
Pressure Treated 2 x 4 x 8' Premium Wood	2	2	CA$7.22	CA$14.44	1000789777	https://www.home
				CA$1,101.13		