



384 ARLINGTON

PRELIMINARY ONE PLANET ACTION PLAN

PREPARED BY:

**URBAN
EQUATION**

INSPIRED BY:



AUGUST 2022

The City of Ottawa honours the peoples and land of the Algonquin Anishinabe Nation. The City of Ottawa honours all First Nations, Inuit and Métis peoples and their valuable past and present contributions to this land.

TABLE OF CONTENTS

4	SECTION 1 INTRODUCTION
6	SECTION 2 PROJECT CONTEXT
10	SECTION 3 WHAT MAKES 384 ARLINGTON UNIQUE
12	SECTION 4 ONE PLANET ACTION PLAN
24	SECTION 5 OUR APPROACH



SECTION 1 INTRODUCTION

Overview

384 Arlington is a collaboration between Windmill Developments and the Ottawa Korean Community Church (OKCC).

Based in Ottawa's West Centretown neighbourhood, the OKCC has been serving the local community since its purchase of the 19th century Methodist Church in 2008, delivering religious services as well as a wide-reaching outreach program.

Having outgrown its current home, the OKCC is building a larger, more modern facility outside of the downtown area. The sale and redevelopment of the existing Church will ensure the OKCC can expand its community programming, while retaining a footprint in West Centretown through a new purpose-built residential building, enabling the OKCC's legacy of social service to continue.

Humanity is at a crossroads.

In North America, we are consuming at a rate that far exceeds our planet's resources. We are consuming as if we have not **one** planet, but **five**.

As we enter what many call the defining decade to address our warming climate, the outlook remains bleak. If all the pledges made by global governments were fulfilled, we would still fall short of limiting warming to 1.5C. The heat waves, floods and wildfires of 2021 clearly signal that action is needed to avoid a climate tipping point.

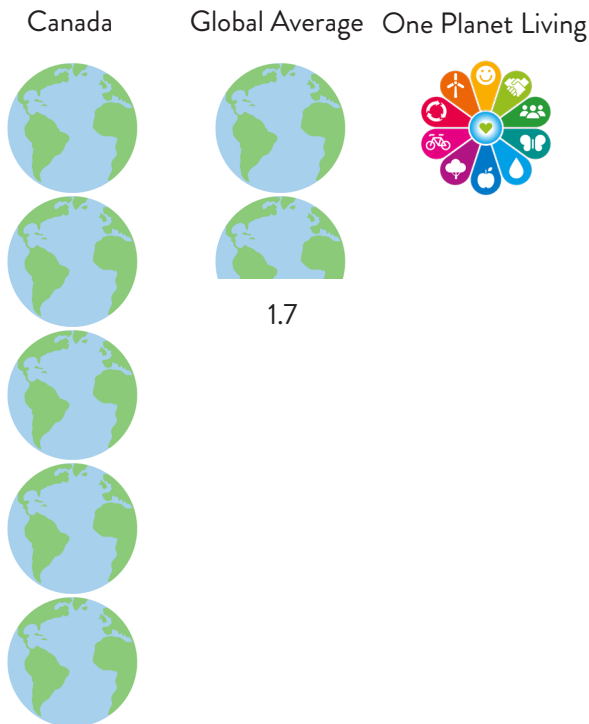
Moreover, we are under delivering on many of our social foundations, adding growing social discontent and widening inequality to our list of challenges. As a result, we are witnessing unprecedented upheaval in life as we know it.

A bold, new vision to ensure our future.

While Canada’s commitment to the Paris Accord is a good start, reducing our carbon emissions is no longer enough. We need to actively regenerate the living systems on which we depend, and for that we need a bold, new vision.

That vision is “one planet living”. At its heart, one planet living is a vision of a future where it is both attractive and affordable for people to live happy, healthy lives within the finite limits of our one planet’s resources. It is a world view that allows us not only to reconnect with and live in balance with nature but to actually regenerate nature. It also allows us to regenerate our relationships with one another.

One planet living is the type of bold vision we need to align universal principles of social and environmental sustainability with the way we design, build, and interact with our communities.



One Planet Living®: A framework for sustainability.

As well as being a world view, one planet living—or One Planet Living®—is also a framework to help citizens, companies and governments create a sustainable future. At 384 Arlington, One Planet Living is being used to guide our approach to developing a complete and comprehensive plan that will tackle climate change, build resilient communities, and regenerate the living systems around us.

One Planet Living® is unique in that it is universal. Its 10 Guiding Principles cover all aspects of social, economic, and environmental sustainability. It addresses all phases of a project, from design to construction, through to operations, programming, and personal lifestyle choices. In this way, One Planet Living embeds sustainability into a projects’ DNA rather than making it a stand-alone topic.

It also reminds us that sustainability is a journey that doesn’t end when the doors to a new building open. As we get deeper into the decade that will define the legacy we leave future generations, it’s now more important than ever that we find ways to collaborate and walk this journey together.





SECTION 2 PROJECT CONTEXT

This preliminary One Planet Action Plan is a product of this projects' local context. Current site conditions, local policy, best practice, etc. have all influenced this project by acting as filters through which the Plan has been developed. In short, they have led to a customized response to sustainability that addresses the opportunities the project presents.

The Site

Korean Church.

The project is located at 384 Arlington Avenue, Ottawa. The site is currently owned and occupied by the Ottawa Korean Community Church (OKCC), a religious organization and place of worship.

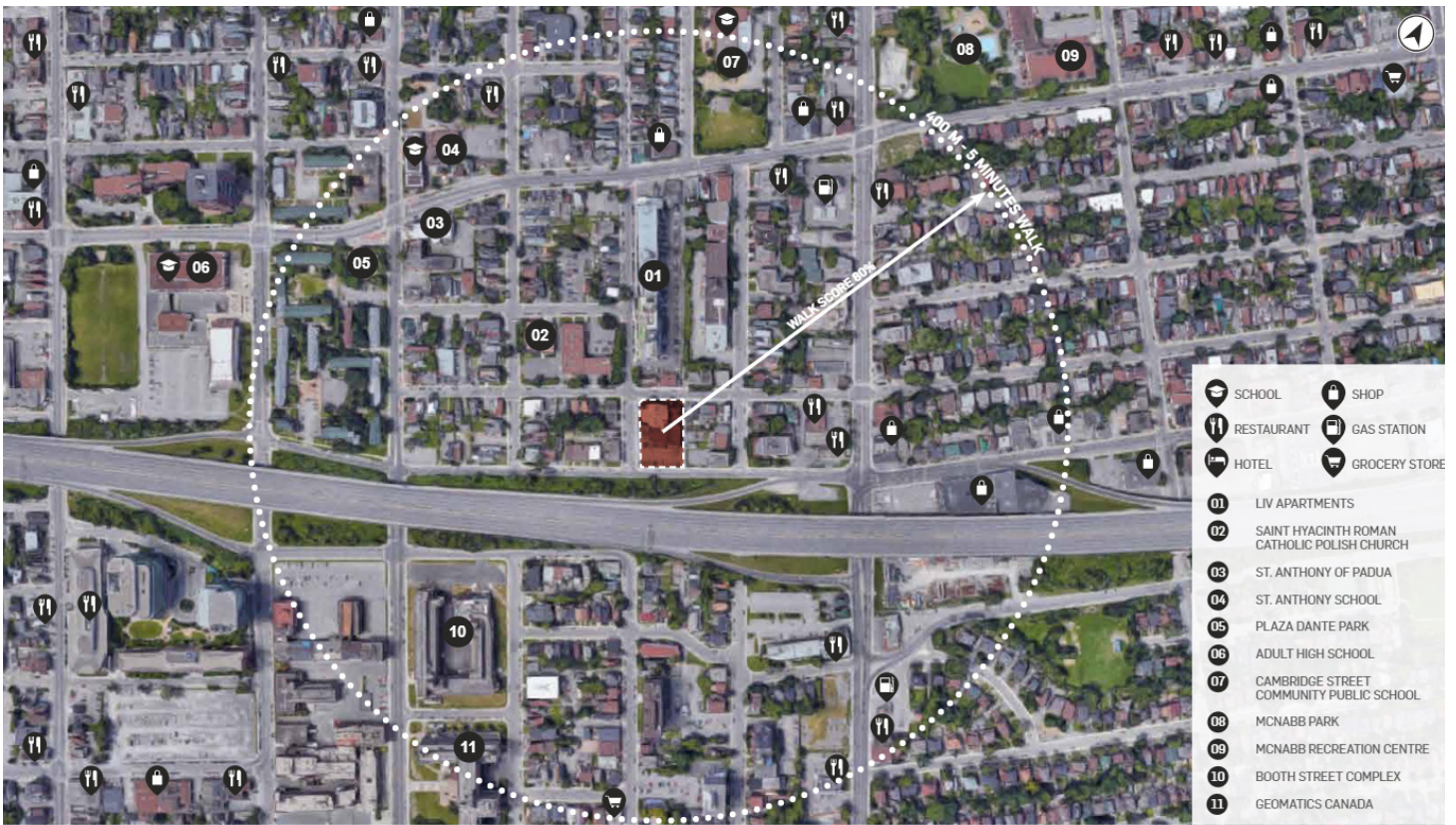
The site has been owned by OKCC since 2008, before which it was under the ownership of United Church for over a century. The building is currently on the Ottawa Heritage Registry and was frequented by the City's "founding fathers", whose donation plaques still stand inside the building.

The late 19th century building is currently in disrepair and the OKCC is developing a new facility to continue and expand its services in a more accommodating space. The will ensure the OKCC has sufficient funds to develop its new facility and expand its outreach programs.

Design

The project consists of a 275,126 sq. ft. mixed-use rental development featuring 3 stories behind the Church, a 4-storey podium, and 8-storey mid-podium and a 24 floor tower toward Queensway Drive. The development will retain the Church's North and West facades to maintain the current site's heritage context, and will include programmable community space on the ground floor as well as a community garden.

The current design totals 274 residential units.



Community Context

Neighbourhoods and amenities.

Situated a short distance away from some of Ottawa’s most popular and culturally significant neighbourhoods, such as Little Italy, Chinatown, The Glebe, and Hintonburg, 384 Arlington is at the doorstep of abundant local amenities. Just a 10 minute walk away from the site, Preston Street in particular features a variety of international restaurants, cafes, bars and entertainment.

Nature and recreation.

384 Arlington is located within walking distance of a number of natural and recreational amenities, including:

- McNabb Park
- Glebe Memorial Park
- Dalhousie Community Centre Park
- Plouffe Park
- Dominion Arboretum
- Dow’s Lake
- Ottawa River
- Fletcher Wildlife Garden
- The Plant Recreation Centre
- McNabb Recreation Centre
- Dow’s Lake Pavilion

Local Paths and trail networks

384 Arlington is located within a 5-minute walk from sixteen bus stops, with Bronson and Catherine and Raymond and Lebreton being the closest. The site is located 900m, or a 12-minute walk from the future Corso Italia LRT stop. According to walkscore.com, the site has a transit score of 70 (“Excellent Transit”).

384 Arlington is well connected to a robust network of bike-friendly roads and dedicated cycling paths, lending the site to a bike score of 91 (“Biker’s Paradise”). Similarly, the site’s central location allows for easy pedestrian travel, with the location having a walk score of 79 (“Very Walkable”). From 384 Arlington, pedestrians or cyclists are able to travel South to Dow’s Lake and the Rideau Canal, North to Little Italy, East toward The Glebe, and West toward Hintonburg.

Policy Context

Ottawa Official Plan.

In October 2021, the City of Ottawa approved a new Official Plan that will guide growth and redevelopment in Ottawa for the next 25 years. The Plan centers around five big moves and is supported by several other plans that provide additional layers of detail around the City's ambitions.

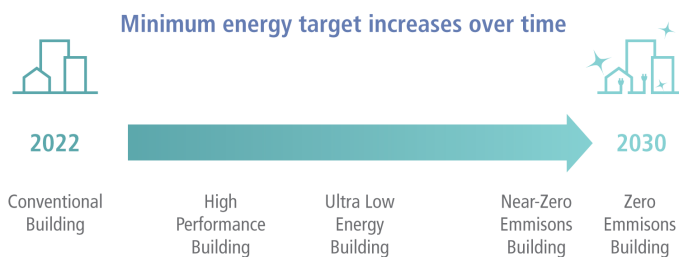
Energy Evolution.

Energy Evolution is Ottawa's action plan toward reducing greenhouse gas emissions to zero by 2040 within the corporation, and by 2050 city-wide. Its vision is to transform Ottawa into a thriving city powered by clean, renewable energy.

Energy Evolution is one of eight priorities in the Climate Change Master Plan – the City's overarching framework to reduce greenhouse gas emissions and respond to climate change imperatives.

Ottawa High Performance Development Standard (HPDS).

Stemming from the Official Plan, the HPDS was recently approved by Ottawa City Council. The HPDS establishes performance targets for new construction that will help the City achieve sustainable development and climate change goals. While the 384 Arlington project is not obligated to comply with the HPDS because pre-consultation took place prior to the program being approved, the development team is planning to shadow the program as much as possible.



Demographic Context

Socioeconomic and demographic context.

Located in West Centretown, the project site is characterized by a notable low-income population.

According to the Ottawa Neighbourhood Study (2021):

- 28% of West Centretown residents are considered low income (vs. 13% in Ottawa)
- 71% of WC residents are renters (vs. 34% in Ottawa)
- 25% of tenants in West Centretown live in subsidized housing (vs. 16% in Ottawa)
- 40% of housing in West Centretown is considered unaffordable (vs. 24% in Ottawa)

Cultural Context

First Nations.

The site is located on unceded Algonquin Anishinaabe land.

A multicultural community.

384 Arlington is situated in Ottawa's West Centretown neighbourhood - one of the city's most demographically diverse communities.

According to the Ottawa Neighbourhood Study (2021):

- 33% of the West Centretown population is racialized (vs. 26% in Ottawa)
- 32% of West Centretown residents are first generation immigrants (vs. 26% in Ottawa)
- 4% of West Centretown residents are newcomers (2011-2016) (vs. 3% in Ottawa)
- 8% of West Centretown residents are refugees (vs. 4% in Ottawa)

Development Context

While there are many factors that go into development, the following are notable for the impact they have had on shaping this Action Plan.

Climate Change.

The climate crisis is significantly shaping the way we talk about, and plan, our communities. Ottawa is increasingly experiencing warmer, wetter and more unpredictable weather, with more extreme heat, wind, rain and snow recorded in recent years. Under a high-emission scenario, the City is projected to experience four times as many days over 30 degrees Celsius by the 2050s – that’s an increase to 43 days per year from the current 11 (The Climate Projections for the National Capital Region Study).

Transit-oriented development.

Phase 2 of Ottawa’s Light Rail Transit (LRT) is currently being constructed, with a future station planned at Corso Italia (known as Gladstone during development). LRT is leading to densification across the City where stations are being planned or recently opened as part of Phase I.

Other development trends

- **Affordable Housing.** There are growing calls to action for equity, justice and anti-racism, including the provision of more affordable housing.
- **COVID Pandemic.** The global pandemic highlighted the need for good quality outdoor spaces and the importance of indoor air quality.



New Corso Italia Train Station

Windmill Development Group

Windmill was conceived from a belief that there must be a way to both inspire and exemplify the net positive eco-social impact possible by applying a holistic sustainability lens to development.

With a commitment to pursuing One Planet Living (OPL) endorsement across its projects and an internal ‘impact standard’ to guide its work, Windmill continues to lead the way in sustainable development.

384 Arlington presents an opportunity for Windmill to continue its journey towards advancing better outcomes for the environment and our communities, and further differentiate itself as a leader in sustainable development.



Context Filters



SECTION 3 WHAT MAKES 384 ARLINGTON UNIQUE

384 Arlington is not just an urban infill project. Its broader goal is to create a sustainable community that both compliments and integrates in to the community.

To guide our path to sustainability, we are using the One Planet Living (OPL) sustainability framework. One Planet Living ensures sustainability is considered from a triple bottom line perspective – people, planet and prosperity. One Planet Living helps create thriving, ecologically responsible communities through the development of an Action Plan.

Building on the site's context and dedicated to delivering on these opportunities, this preliminary One Planet Action Plan has been created to inspire the community, our stakeholders and the design team. It also establishes direction for the project.

One Planet Community

384 Arlington is pursuing international endorsement as a One Planet Living community. This Plan will eventually be submitted to Bioregional, the third-party verifier of One Planet Living community plans, who will evaluate the project's outcomes, indicators, targets and performance requirements.

If Bioregional endorses the project's One Planet Action Plan, 384 Arlington will become only the third One Planet Living community in Canada.

Our Guiding Themes

While the ten One Planet Living Principles ensure a strong sustainable foundation for 384 Arlington, it is the Big Moves that will give it a unique identity. The Big Moves act as the project's north star, influencing how we design and build the project, how it should be operated, and how the project can influence the lifestyle choices and behaviour of future residents. The Big Moves are Innovative Mobility, Zero Carbon Living, and Flourishing Community.



Innovative Mobility

The project is situated in one of Ottawa’s best-connected neighbourhoods. Building on existing and planned transit infrastructure, the new project will create a community that enjoys unparalleled access to transportation options. With a focus on active and innovative mobility solutions, the new community will improve health outcomes and reduce transportation related emissions for residents and visitors alike.

Under this Big Move, the project will explore:

- Transit subsidies for residents
- Low parking ratio
- E-bike/bicycle share program
- Car share program
- Minimum 1:1 bike parking to unit ratio

Zero Carbon Living

The project will develop and implement an ambitious zero carbon strategy that shows leadership in reducing greenhouse gas emissions over the life of the project – including embodied, operational, transportation, and lifestyle-related emissions.

Under this Big Move, the project will explore:

- On-site geothermal energy
- Solar generation (BIPV) on South and West facades
- Air filtration reduction
- Lower emission concrete
- Bio-based materials
- Sewage heat recovery

Flourishing Community

The project is part of a vibrant multicultural community with roots reaching back to the late 19th century. Steps away from Ottawa’s historic Chinatown, Little Italy, Hintonburg and The Glebe, the project will preserve and enhance the site’s unique character while delivering benefits to the community.

Under this Big Move, the project will explore:

- Restoring the existing church façade
- Affordable housing through CMHC
- Rooftop gardens
- Supporting Korean Church’s new construction
- Community space

SECTION 4

ONE PLANET ACTION PLAN

One Planet Living is one of the most holistic sustainability frameworks available around the globe. By encouraging projects to consider sustainability from a triple bottom line perspective – people, planet and prosperity – and across all project phases – design, construction, operation, community living – One Planet Living helps create thriving, ecologically responsible communities.

As part of our effort toward achieving One Planet Living, Windmill Developments has prepared this preliminary One Planet Action Plan (OPAP). The OPAP delivers on our Big Moves, outlines the anticipated outcomes we aim to accomplish across the project, and highlights strategies that could be used to get us there.

This is a living document that will evolve with planning and design. Eventually the OPAP will be updated to include strategies that address design, construction, operations, and community life. When complete, it will serve as the roadmap for the design team, ensuring sustainability is integrated in to planning, design and construction processes.

Furthermore, it will also ensure the project complies with Ottawa’s new High Performance Development Standard, in addition to other standards such as One Planet Living and LEED.

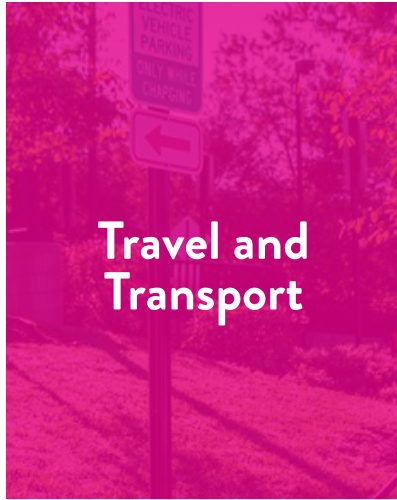
Outcomes and Topic Areas

The One Planet Action Plan consists of suggested outcomes, targets, and performance requirements for each of the One Planet Living Principles. Although there is a clear separation of principle by color, the developed outcomes and topic areas are not as linear. Each of the principles and proposed strategies influence one another and are designed in cohesion to create a system that is connected and prosperous. This idea of coherent principles is represented through the multiple micro One Planet Living petals on each topic area.





**Equity and
Local Economy**



**Travel and
Transport**



**Culture and
Community**



**Land and
Nature**



**Sustainable
Water**



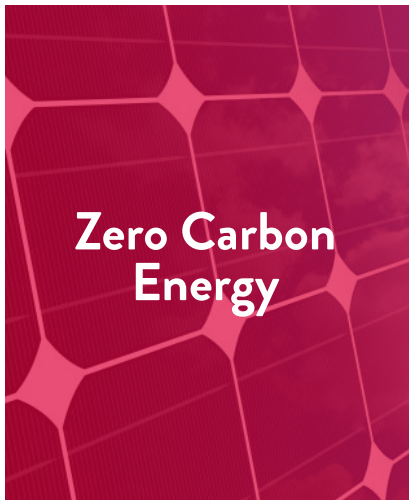
**Health and
Happiness**



**Materials and
Products**



**Local and
Sustainable Food**



**Zero Carbon
Energy**



Zero Waste



HEALTH AND HAPPINESS

Encouraging active, social, meaningful lives to promote good health and wellbeing.

OUTCOMES

Residents are among the most physically active in Canada.

POTENTIAL TOPIC AREA



PHYSICAL HEALTH

Residents are among the happiest in Canada.



MENTAL HEALTH



SOCIAL WELLBEING



HEALTHY LIVING

Indoor and outdoor spaces are healthy, welcoming and comfortable.



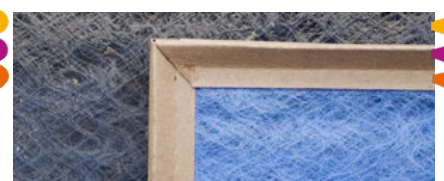
NATURAL LIGHT



FRESH/AIR/VENTILATION



THERMAL COMFORT



ENHANCED AIR QUALITY



EQUITY AND LOCAL ECONOMY

Creating safe, equitable places to live and work which support local prosperity and international fair trade.

OUTCOMES

Affordable and accessible options are available to all.

POTENTIAL TOPIC AREA



AFFORDABLE HOUSING



UNIVERSAL DESIGN

Economic development opportunities are available to equity-seeking groups.



LOCAL TRADES



DIVERSIFIED ECONOMY

Residents and contractors engage in environmentally and socially responsible procurement practices.



JOB OPPORTUNITIES



CULTURE AND COMMUNITY

Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living.

OUTCOMES

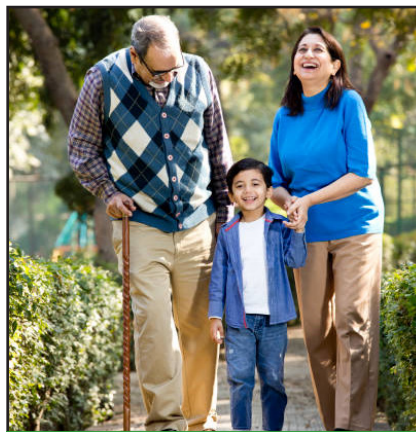
There is a culture of sustainability that is rooted in indigenous traditional knowledge and wisdom.

POTENTIAL TOPIC AREA



EDUCATION AND AWARENESS

The design embodies indigenous oral history to reveal its local narratives.



PUBLIC REALM



PLACEMAKING



LAND ACKNOWLEDGEMENT

All residents feel a sense of belonging, regardless of physical ability, ethnic identity, age, or economic means.



SOCIAL GATHERING SPACES



LAND USE AND NATURE

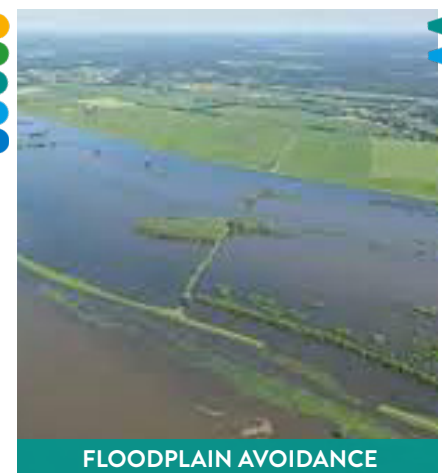
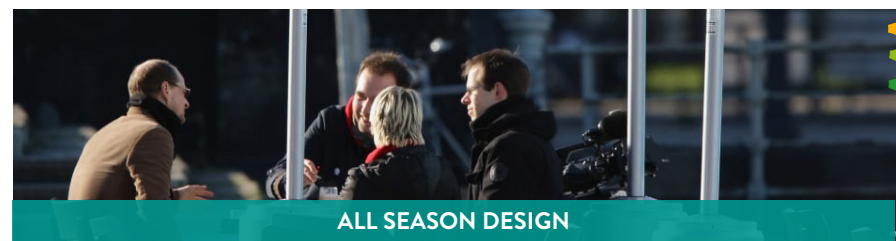
Protecting and restoring land and marine systems for the benefit of people and wildlife.

OUTCOMES

The natural cycles and resource flows of the local ecosystems are respected and regenerated.

Connections to the surrounding natural beauty and landscape create a love of nature.

POTENTIAL TOPIC AREA





SUSTAINABLE WATER

Using water efficiently, protecting local water resources, and reducing flooding and drought.

OUTCOMES

The residents use less potable water.

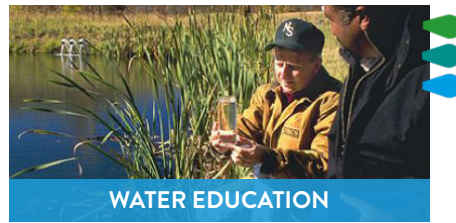
POTENTIAL TOPIC AREA



OUTDOOR WATER USE



INDOOR WATER USE



WATER EDUCATION



RAINWATER CAPTURE

Groundwater and surface water are protected.



STORMWATER MANAGEMENT



RESTORATION

Water is celebrated as the source of life.



WATER AWARENESS



LOCAL AND SUSTAINABLE FOOD

Promoting sustainable, humane farming and healthy diets that are high in local, seasonal, organic food and vegetable protein.

OUTCOMES

Residents and visitors have access to affordable, healthy, local food.

POTENTIAL TOPIC AREA



URBAN AGRICULTURE



FOOD SECURITY

The carbon footprint associated with food is minimized.



CIRCULAR ECONOMY



FOOD WASTE



COMPOSTING

Community spirit is fostered through food.



FOOD GATHERINGS



CELEBRATE FOOD



EDUCATION



COMMUNITY GARDEN



TRAVEL AND TRANSPORT

Reduce the need to travel, and encourage walking, cycling and low carbon transport.

OUTCOMES

Low-carbon transportation options are the primary means of transport for residents.

POTENTIAL TOPIC AREA



PUBLIC TRANSIT (LRT)



PEDESTRIAN FOCUSED



CYCLING PATHWAYS



EV'S

Parking infrastructure is adaptable and flexible for future re-use and growth.



PARKING



ADAPTABLE PARKING INFRASTRUCTURE



MATERIALS AND PRODUCTS

Using materials from sustainable sources and promoting products which help people reduce consumption.

OUTCOMES

Embodied carbon is reduced.

POTENTIAL TOPIC AREA



CERTIFIED TROPICAL WOOD



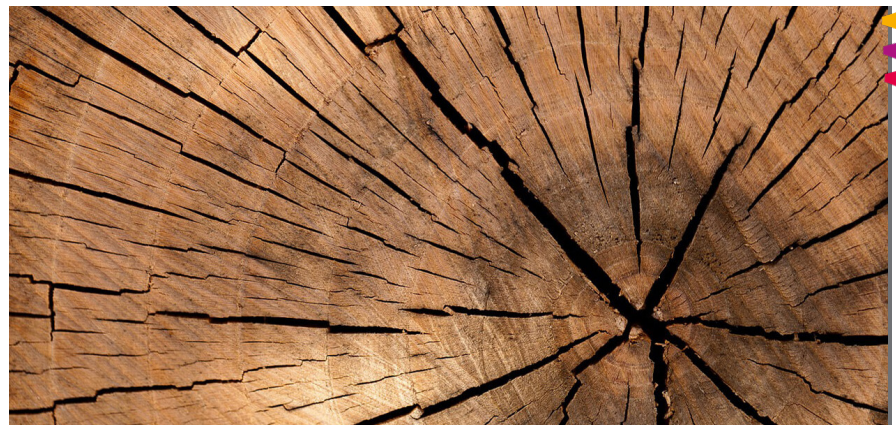
WASTE MANAGEMENT



CERTIFIED
ENVIRONMENTAL
PRODUCT DECLARATION

ENVIRONMENTAL PRODUCT DISCLOSURE

Building materials are culturally appropriate and provide a healthy indoor environment for all occupants.



RESILIENT MATERIALS

Materials for building construction and operations are selected to minimize their lifecycle impact.



CROSS-LAMINATED TIMBER



ZERO WASTE

Reducing consumption, reusing and recycling to achieve zero waste and zero pollution.

OUTCOMES

Residents generate less waste.

POTENTIAL TOPIC AREA



COMPOSTING



EDUCATION



RECYCLING



COMMUNITY SHARING

The construction process generates less waste.



CONSTRUCTION WASTE



WASTE MANAGEMENT PLAN

A sharing culture is developed and supported by residents.



CIRCULAR ECONOMY



ZERO CARBON ENERGY

Making buildings energy efficient and supplying all energy with renewables.

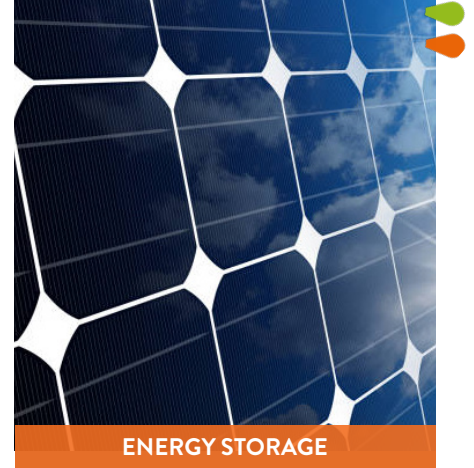
OUTCOMES

There are zero operational greenhouse gas emissions.

POTENTIAL TOPIC AREA



OPERATIONAL CARBON



ENERGY STORAGE

Renewable energy is generated on-site.



GEOHERMAL

Building occupants enjoy superior indoor thermal comfort year-round.



PASSIVE DESIGN



LOW AIR LEAKAGE



DAYLIGHT



HEAT ISLAND EFFECT



SECTION 5 OUR APPROACH

Our Approach

The 384 Arlington One Planet Action Plan is a living Plan. Once rezoning has been approved, technical performance requirements will be updated based on the emerging design, and feedback from the City. It will also continue to reflect new thinking, technological innovations, and local and global trends where possible. In this way, Windmill will ensure the Plan stays meaningful, relevant, and impactful.

More exciting to us than creating the 384 Arlington One Planet Action Plan is the collaborations it can foster and the actions it could inspire in everyone involved. We hope this Plan inspires local innovators, businesspersons, and civic and community actors in helping us deliver a model sustainable community at 384 Arlington. In doing so, we can create a community where residents can live happy, healthy, and sustainable lives.

Be part of our One Planet Living journey.

Seeking solutions requires a holistic process in which the whole is more than the sum of its parts. In this systems-based approach, we work with nature and people rather than against them. This approach values and enhances the health and wellness of the people that live in their communities. It is one that welcomes and celebrates our differences while seeing the big picture.

From day one, bringing together an ecosystem of aligned partners is the foundation to collaboration. To enhance the vibrancy and diversity of our future community, development must be done by the community for the community. These are the voices we seek out, engage with, and listen to.

Contributions from many people.

This Plan reflects input and ideas from many different people. The outcomes were identified early in the process and are largely based on internal engagement, project experience, past engagement with stakeholder and the need to build our communities differently.

A living plan.

This One Planet Action Plan is the guiding document for 384 Arlington. It will be used throughout the development process to check that sustainability goals for the development are meaningfully addressed.

This document is a living Plan. The outcomes noted in this Plan are aspirational goals that 384 Arlington will strive to achieve. As the design progresses, the outcomes and targets may evolve to reflect new opportunities and constraints. The Plan will also be adapted over time to reflect new thinking, technological innovations, and emerging local and global trends.

As the project moves beyond the design phase, the Plan will also evolve to include strategies that address construction, operations and community life.



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