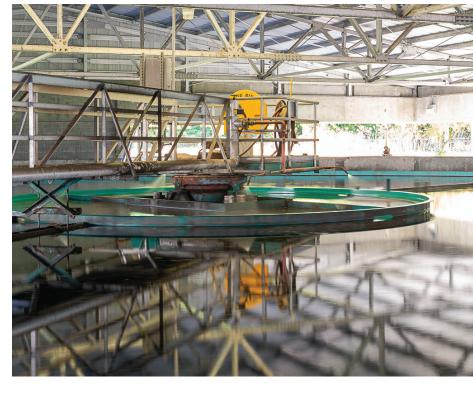
# Public Works

## **OPERATIONS CAMPUS**









Progress and Essential Service Contributions Toward Vancouver's Climate Action Framework





# **Buildings & Energy**

#### **Strategies**

- Increase use and storage of renewable energy while reducing consumption.
- Decarbonize homes, businesses, and other buildings.

#### **Actions**

Action #5: 100% renewable energy for municipal buildings

Action #6: Natural gas demand management Action #7: Green building policy (public sector)

Action #9: Resilient energy grid

Action #10: Municipal energy and water savings

#### **Project Approach**

- Meet the requirement for energy use 15% below WA Clean Buildings Act
- Meet the applicable criteria of Clean Buildings Performance Standard
- Anticipated Green Building policy strategies currently incorporated into the project include energy efficient HVAC systems, drought-tolerant plantings, energy efficient lighting, Dark Skies compliant lighting and on-site renewable energy generation.
- Design for resiliency includes backup power on-site with lower carbon fuels, design for passive functionality in case of outage, and priority backup of EOC operations across the site.
- Include renewable energy generated on-site via Photovoltaics per code.

#### **Public Works Essential Services**

Public Works Operations Campus will be the City of Vancouver Emergency Operations Center (EOC).

### **Next Steps**

- Refine EUI goals, Photovoltaic calculations, and strategies to maximize energy efficiency.
- Analysis on cost/benefit/ timing for additional onsite PV and Solar-ready infrastructure.
- Review and address City of Vancouver Green Building Policy when applicable.
- Analysis of possible battery storage and lode shedding.

## Challenges

Cost effective strategies to balance designing performance to the CAF goals with the required capital investments, ongoing maintenance and equipment life cycles.



# Transportation & Land Use

#### **Strategies**

- Create neighborhoods that support clean models of transportation.
- Shift driving trips to clean, active modes of transportation.
- Decarbonize and electrify vehicles.

#### **Actions**

Action #5: Parking management plan

Action #8: Improved pedestrian infrastructure Action #9: Transit ridership improvements Action #13: Improved bicycling infrastructure

Action #14: Modal hierarchy

Action #15: Shared Mobility Options

Action #19: EV infrastructure planning and implementation

Action #23: Alternative fueling and charging options at gas stations

#### **Project Approach**

- Right-sized parking, based on City Fleet and Public Works essential operations, overlaid with anticipated remote work, swing shifts, and carpooling, as feasible.
- Design of public spaces and pedestrian areas will include lighting, biking paths and future transit connections.
- Include biking facilities for both public visitors & employees. Bike parking will meet City of Vancouver standards.
- Biking amenities for employees include secure long-term bike parking, E-bike charging included, and access to showers, lockers and changing rooms.
- Meet 25% EV parking goals for employee & visitor stalls.
- On site fuel stations will include alternative fuels, as applicable, for City fleet.

#### Public Works Essential Services:

Includes Transportation/Streets/ Sidewalk divisions and Fleet Services

# **Next Steps**

- Determination of quantity of bike parking desired on-site.
- Meeting with C-TRAN in 2024 to understand future system service expansions.
- Transportation demand manager consultation with Public Works Department regarding commuting options for employees.
- Quantity of EV-ready stalls to be determined.

#### Challenges

Building a long-term facility during a time of emerging technology and uncertainty on the commute patterns of future employees.



# Natural Systems & Water Resources

#### **Strategies**

- Increase carbon storage in trees, vegetation and soil.
- Improve ecosystem resilience.
- Conserve water resources.

#### **Actions**

Action #1: Native and climate-resilient planting in municipal projects

Action #4: Carbon sequestration on public lands

Action #7: Habitat restoration for new development

Action #8: Tree canopy recommendations

Action #9: Community water conservation

Action #10: Rainwater capture incentives

#### **Project Approach**

- Plant selections will prioritize native, resilient and drought-tolerant species.
- On track to meet Silver Leaf Tree Canopy goal (15%) per TreeCAP.
- No high-maintenance turf in landscape design.
- Includes stormwater control and infiltration measures 100% on-site.
- Biofiltration systems for infiltration offer additional planting areas and heat island reduction.
- Will meet all state policies regarding habitat restoration.
- Provide pollinator habitat plantings where feasible.
- All existing trees have been evaluated for health and contribution to tree canopy. The approach is retention of significant existing trees, relocate some significant trees within site, and supplement with additional tree canopy.
- Project includes water efficient fixtures throughout all buildings and water recycling at vehicle wash station.

## Public Works Essential Services:

Includes Water; Greenways; Surface Water; Grounds; Environmental Resources/Urban Forestry Divisions

#### **Next Steps**

- Project plant selections will explore options for plant-based carbon sequestration across the site.
- Discussions on additional strategies around water reuse and efficiency.
- Evaluation of rainwater capture and reuse as part of water system strategies on site, as feasible.
- Light-colored pavement and light-colored roofs materials.

#### Challenges

- Safety issues between industrial on site uses and a heavily landscaped or tree canopied site.
- Resource capacity to manage naturalized landscapes.



# **Solid Waste & Wastewater**

#### **Strategies**

- Required recycling and organic material management.
- Zero out emissions from wastewater operations.

#### **Actions**

Action #2: Municipal recycling and composting collection Action #5: Construction and demolition incentives

#### **Project Approach**

Project is currently exploring Design for Disassembly and best practices.

#### **Public Works Essential Services**

Provides Solid Waste and Wastewater Management/Treatment Services

## **Next Steps**

 The Design team plans to include recycled materials in the building design.





# City Governance

#### **Strategies**

Mainstream sustainability at the City, including staff capacity.

#### **Actions**

Action #3: Regular updates of GHG inventory and CAF strategies

Action #4: Environmentally Preferable Purchasing program

Action #6: Reduce vehicle trips by municipal employees.

#### **Project Approach**

Project Team tracks compliance with the Climate Action Framework as the project progresses.

#### **Public Works Essential Services**

Public Works continues to innovate and deliver sustainable essential services.

## **Next Steps**

- Project Team continues to track compliance with the Climate Action Framework as the project progresses.
- Project will comply with Environmentally Preferable Purchasing Policy once established.

