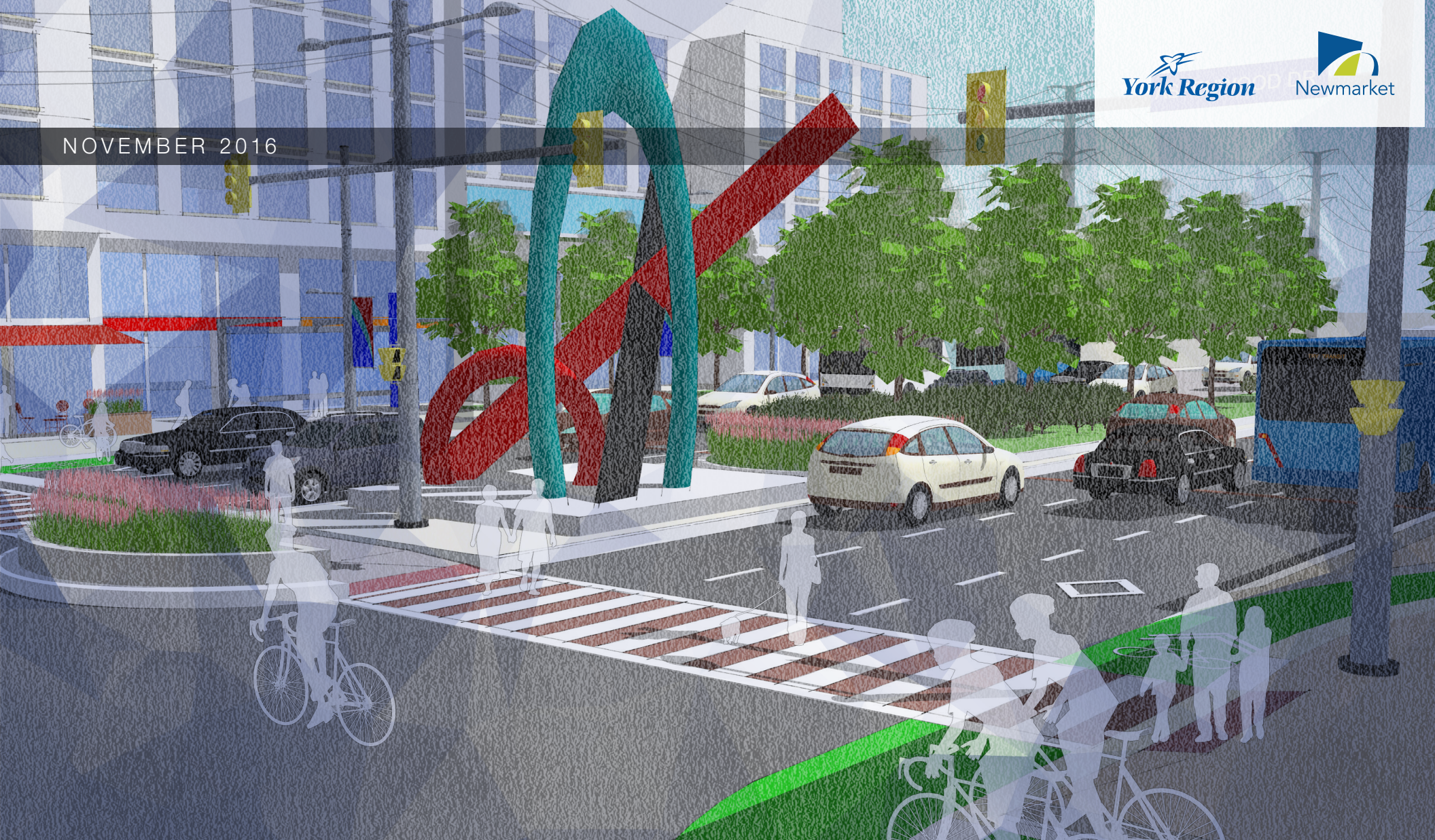


NOVEMBER 2016



YONGE STREET & DAVIS DRIVE STREETScape MASTER PLAN

EXECUTIVE SUMMARY

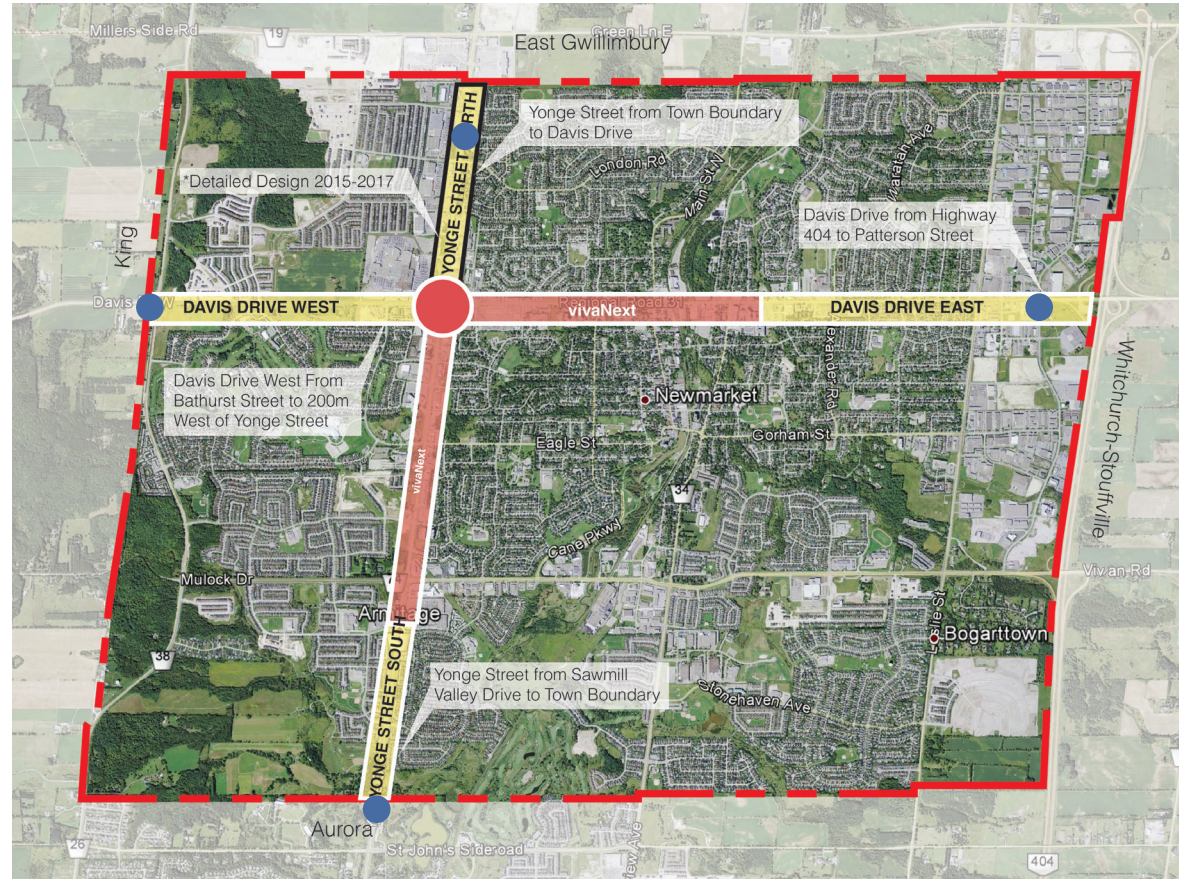
FINAL

INTRODUCTION

Yonge Street and Davis Drive have been identified as key locations for intensification, growth and development in the Town of Newmarket. A major transformation of these corridors is imminent, with public and private sector projects already in the works. The Streetscape Master Plan (Plan) focuses on the segments of Yonge Street and Davis Drive outside of the vivaNext corridors. The Plan defines how primarily car-oriented corridors could be transformed into a walking, cycling and transit-oriented community space. The Plan will guide streetscape development and provide recommendations to strengthen place making in the Town of Newmarket. The Plan will contribute to an atmosphere that is livable and promotes social interaction and community engagement.

STREETSCAPE MASTER PLAN OBJECTIVES

1. Establish a vision incorporating urban design principles.
2. Develop a bold and unified streetscape vision for the Town of Newmarket that responds to the local context.
3. Create a hierarchy of spaces/streetscape typologies.
4. Provide pedestrian accessibility.
5. Develop placemaking opportunities.
6. Visually tie into vivaNext streetscape and Town of Newmarket Gateways.
7. Establish a strong wayfinding strategy.



● Streetscape Gateways
Project Limits

THE VISION

The vision for the Yonge Street & Davis Drive Streetscape Master Plan is to create Vibrant, Green & Active Streetscape.

As the Town of Newmarket transforms from its suburban past to its urbanized future, an attractive public realm will encourage people to live, work and play in these newly-developed communities and public spaces. Wide sidewalks, safe bike lanes and convenient public transit will provide options for community transportation. The new streetscape will act as a catalyst for development and subsequently enhance the activities in the adjacent private lands.

The focus at the visioning stage was to develop a streetscape plan for Yonge Street and Davis Drive that builds on the transformation of the public realm through a placemaking approach incorporating urban design principles that:

- Foster a lively and livable street
- Inspire high quality design
- Embrace art and culture
- Create a climate of economic success
- Cultivate a sustainable environment

YONGE STREET & DAVIS DRIVE STREETScape MASTER PLAN VISION



STREETScape DESIGN PRINCIPLES

ARCHITECTURAL BUILT FORM, PLACEMAKING, PUBLIC ART



Architectural & Streetscape Design Interface

Built form should encourage an animated street front and contain visual interest.

Theming & Corridor Identity

Each corridor should possess a unique context sensitive identity that caters to its specific conditions.

Streetscape Transition

The streetscape should transition into adjacent streetscapes gracefully.

Screening

Landscape screening should be used to provide a visual buffer where appropriate.

Transit Stops & Coordinated Street Furniture

A cohesive design and material should be used throughout the corridors.

Outdoor Space & Public Art

High quality open spaces should aid in creating a strong sense of place.



GREEN STREETS AND ENVIRONMENTALLY PROGRESSIVE DESIGN



Environmentally Progressive Design

Strategies that reduce the urban heat island effect, reduce stormwater runoff and enhance natural features should be employed.

Street Trees

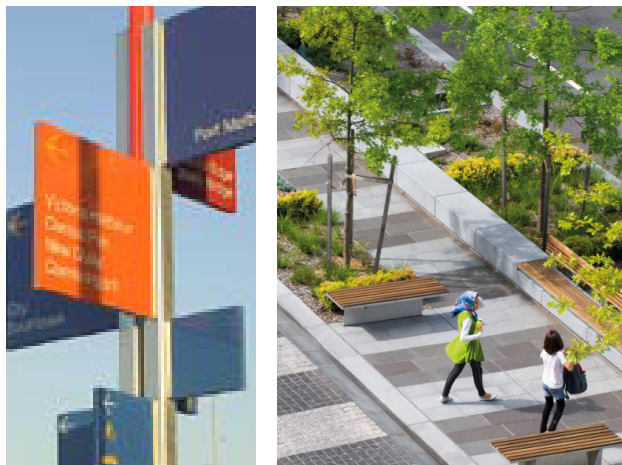
Context-appropriate street trees should be implemented to optimize the urban canopy.

Paving

Paving should be environmentally sustainable and enhance placemaking.



ACCESS AND WAYFINDING



Barrier-Free Access

Paths should be continuous, safe, unobstructed and AODA compliant.

Wayfinding

Unique and accessible wayfinding strategies should be used.

Pedestrian Linkages

Unobstructed pedestrian sidewalks should connect local destinations.

Cycling Infrastructure

Context-appropriate cycling infrastructure should encourage safe transit.

Crosswalks

Crosswalks should cater to all users.

FUNDAMENTALS OF PUBLIC REALM DESIGN



Multi-Modal

Balance the needs of all users: pedestrians, cyclists, transit users and motorists.

Safety

Active transportation infrastructure should maximize safety and security.

Utilities

Minimize the visual impact of utilities through undergrounding and screening techniques

Lighting

Coordinated unique lighting should enhance placemaking.

IMPLEMENTATION AND MAINTENANCE*



Policy Updates

Development Review

Public Utilities Coordination Committee

Town of Newmarket Public Art Policy and Plan

Collaboration between York Region and Town of Newmarket

Capital Construction

Funding Strategies

* Refer to page 20 for further detail

STREETScape MASTER PLAN

The Plan provides a context-sensitive approach that supports mixed-use environments with attractive streets, high quality urban design and a distinct sense of place. The Yonge Street & Davis Drive Streetscape Master Plan design advances the following design objectives:

- Create a Complete Street that caters to all users, not just motorists
- Provide safe accessible pedestrian sidewalks
- Design safe and continuous cycling infrastructure
- Expand the urban forest
- Improve community identity and pride
- Implement Low Impact Development sustainable strategies within the public realm

Boulevard Cycle Tracks in Urban Areas



Street Trees Define the Boulevard Edge



Multi-Use Path in Low Density Areas



Corridors Accessible for All Users

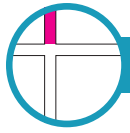


Landscape Buffers the Multi-Use Path



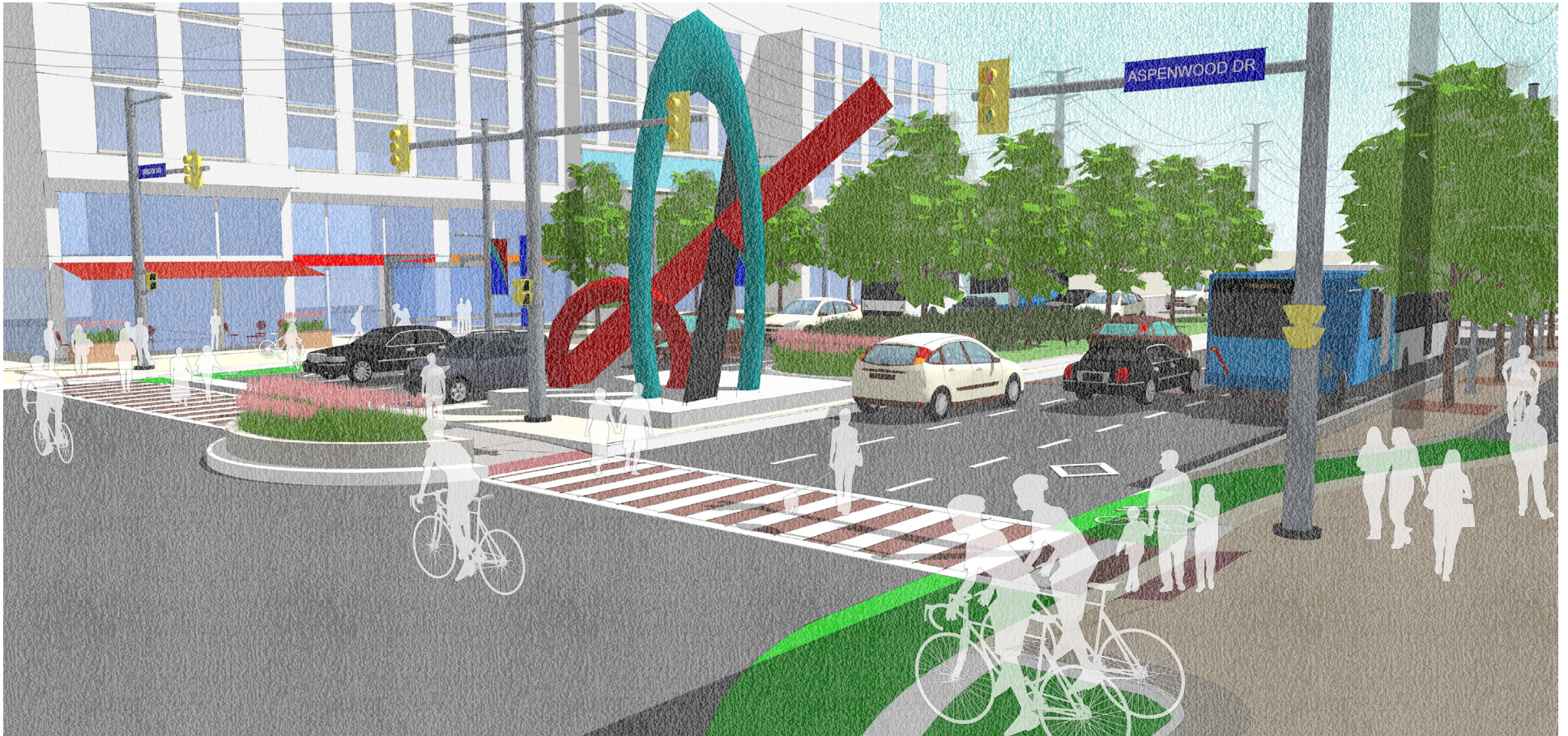
Animated Public Realm



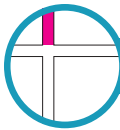


Yonge Street North STREETScape

The **Yonge Urban Streetscape Typology** is applicable for the length of the Yonge Street North corridor. Characterized by distinctive urban placemaking elements such as cycle tracks, street trees in grates and public art, this design responds to the urbanized future of the Town of Newmarket.



Perspective rendering of the Yonge Street North Gateway at Aspenwood Drive



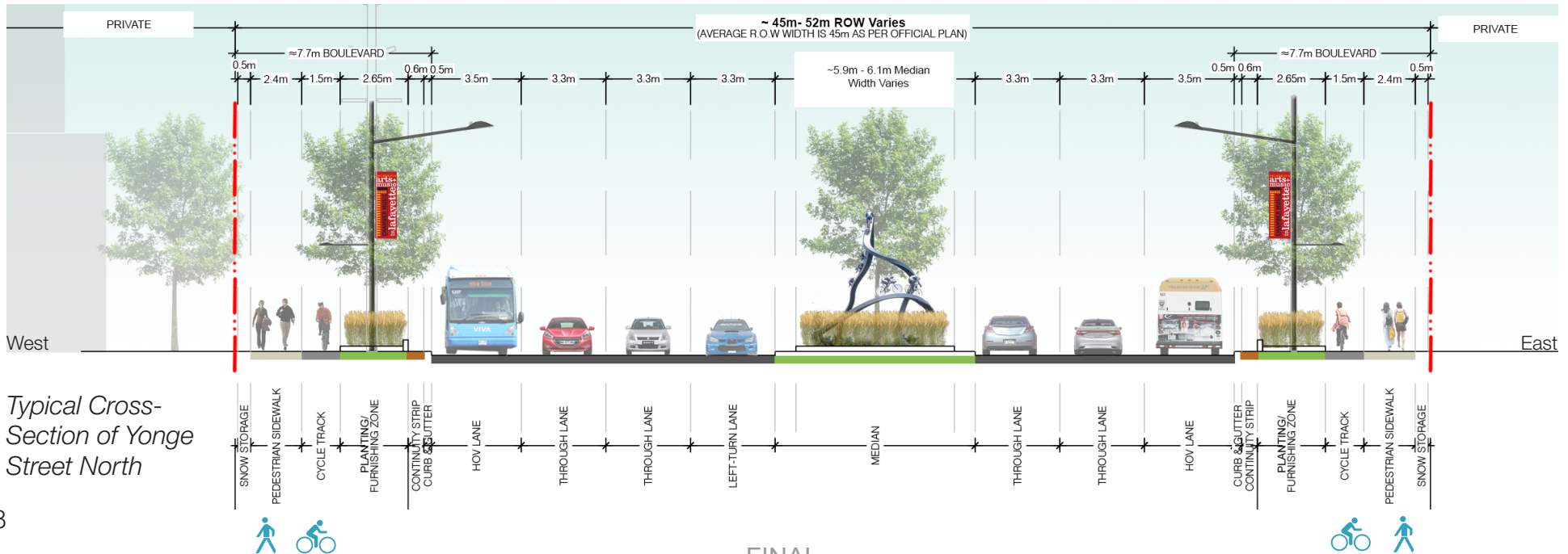
Yonge Street North URBAN STREETScape TYPOLOGY

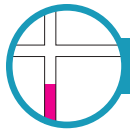
KEY FEATURES

- Interim condition which protects the median for the future vivaNext BRT
- Planted median with public art to establish a strong sense of place
- Street trees with understorey planting
- Pedestrian amenities including benches, trash receptacles and lighting
- Raised cycle track promotes active transportation
- Clear pedestrian routes
- Right Size geometry:
 - 3.3 metre through lane
 - 3.5 metre curbside lane
 - 3.3 metre turn lane
 - 2.4 metre sidewalk
 - 1.5 metre bike lane



Plan of the Yonge Street North Gateway at Aspenwood Drive



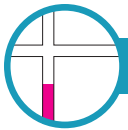


Yonge Street South STREETScape

The **Green Streetscape Typology** is applicable for the length of the Yonge Street South corridor. The corridor is characterized by enhanced green infrastructure such as street trees with understory planting flanking a multi-use path that connects into the local trail system.



Perspective rendering of the Yonge Street South at the Nokiidaa Trail



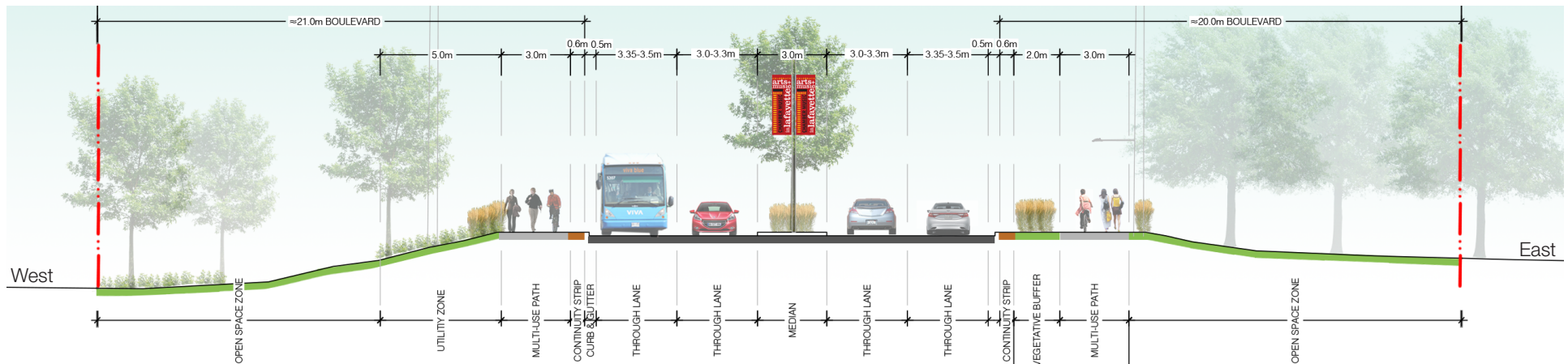
Yonge Street South GREEN STREETScape TYPOLOGY

KEY FEATURES

- Street trees in softscape with understorey planting
- Pedestrian amenities including benches, trash receptacles and transit shelters
- Planted median with shrubs and trees
- Two through lanes in either direction
- Multi-use path
- Landscape buffer segregates cyclists and pedestrians using the multi-use path from vehicular traffic
- Banners provide visual interest and a space for conveying information about Town events
- Signature lighting provides illumination for pedestrians, cyclists and vehicles
- Right Size geometry:
 - 3.0- 3.3 metre through lane
 - 3.35-3.5 metre curbside lane
 - 3.0 metre turn lane
 - 3.0 metre MUP

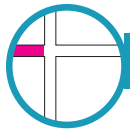


Plan of the Yonge Street South Gateway at St. Johns Sideroad



Typical Cross-Section of Yonge Street South





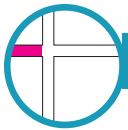
Davis Drive West STREETScape

Davis Drive West uses two streetscape typologies in order to respond to the surrounding context: Green and Davis Urban Streetscape Typology.

The rendering illustrates the gateway at Bathurst Street and Davis Drive, which employs the Green Streetscape typology with canopy trees planted in a bed of ornamental grasses.



Perspective rendering of the Davis Drive West Gateway at Bathurst Street

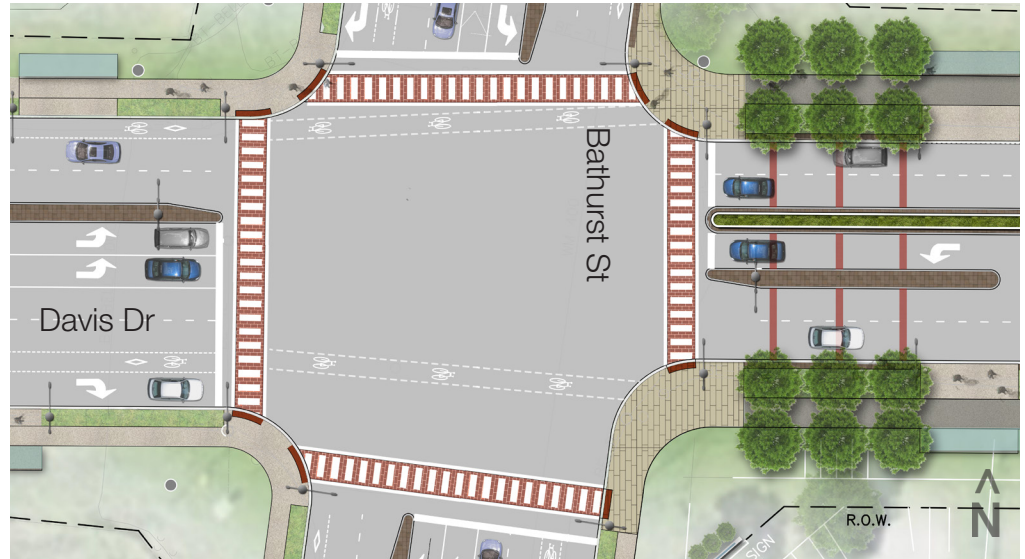


Davis Drive West GREEN STREETScape TYPOLOGY (BATHURST STREET TO WEST OF EAGLE STREET)

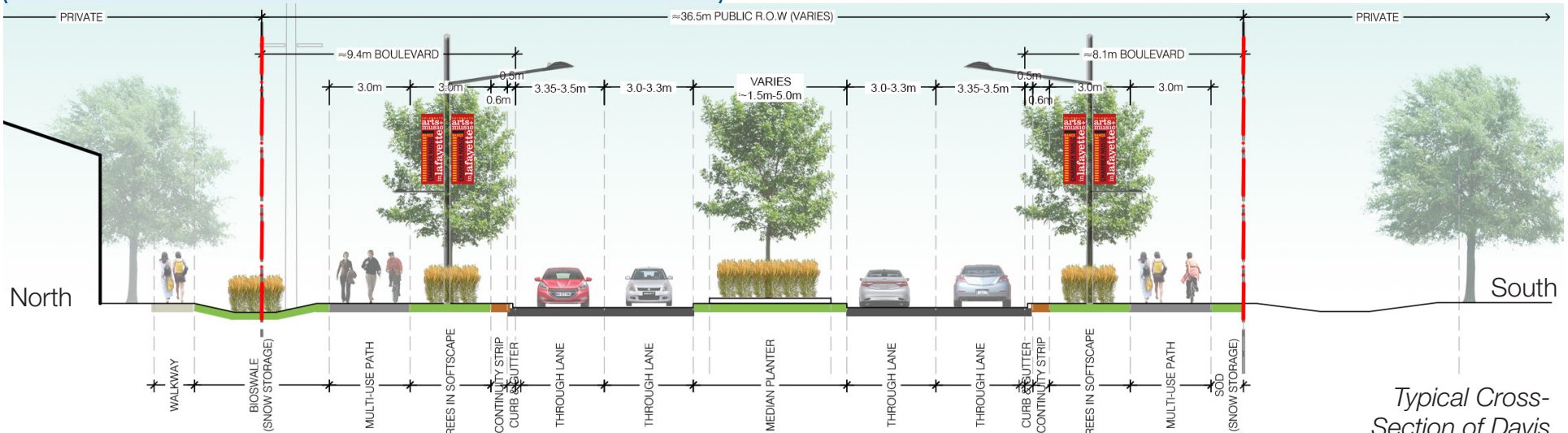
The **Green Streetscape Typology** includes a multi-use path with a landscape buffer to serve the surrounding low-density residential neighbourhoods.

KEY FEATURES

- Multi-use path with landscaped buffer encourages active transportation
- Street trees with understorey planting
- Pedestrian amenities including benches, trash receptacles, lighting, and transit shelters
- Planted median minimizes the scale of the expansive right-of-way
- Two through lanes in either direction
- Right Size geometry:
 - 3.0- 3.3 metre through lane
 - 3.35-3.5 metre curbside lane
 - 3.0 metre turn lane
 - 3.0 metre MUP

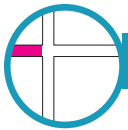


Plan of the Davis Drive West Gateway at Bathurst Street and Davis Drive



Typical Cross-Section of Davis Drive West





Davis Drive West

DAVIS URBAN STREETScape TYPOLOGY (WEST OF EAGLE STREET TO YONGE STREET)

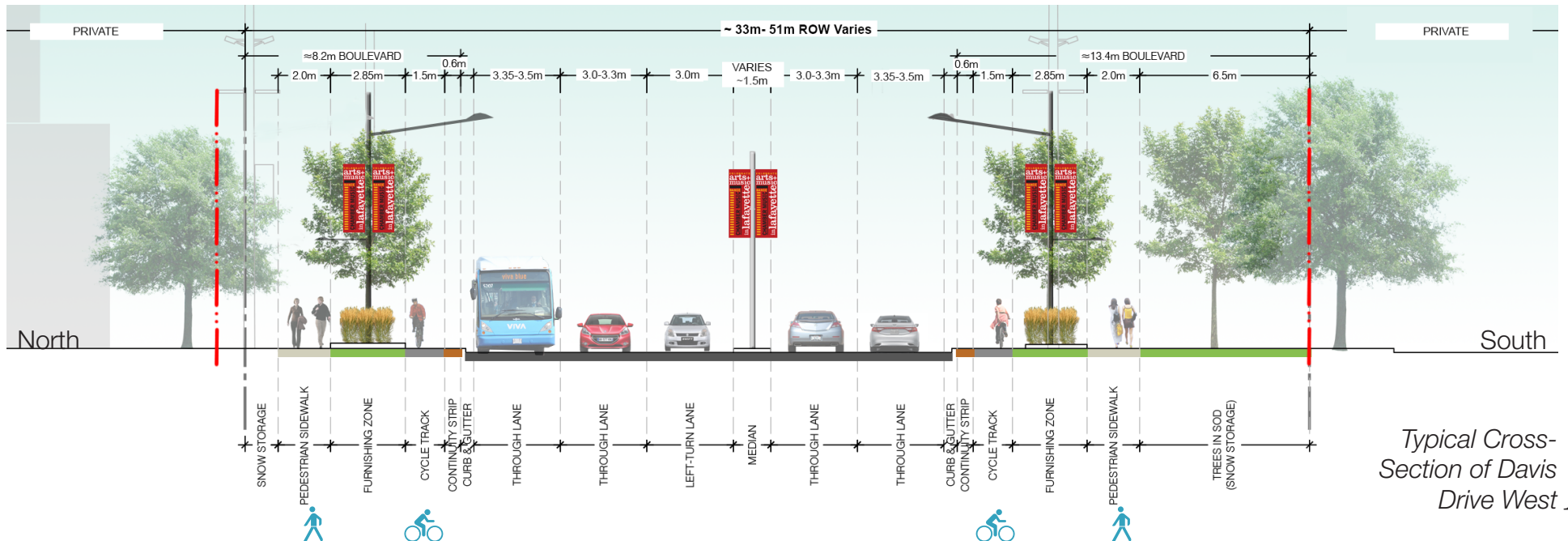
The **Davis Urban Streetscape Typology** contains a pedestrian sidewalk and a raised cycle track, separated by a planting/furnishing zone.

Plan of a signalized intersection along the Davis Urban segment of Davis Drive West



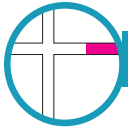
KEY FEATURES

- Street trees in grates and planters with understorey planting
- Cycle track with a landscape buffer from pedestrian sidewalk minimizes conflict
- Cycle track extends from Yonge Street to west of Eagle Street to the GO Bus Terminal driveway
- Public realm transitions seamlessly with private realm
- Right Size geometry:
 - 3.0- 3.3 metre through lane
 - 3.35-3.5 metre curbside lane
 - 3.0 metre turn lane
 - 2.0 metre sidewalk
 - 1.5 metre bike lane with a 0.6 metre buffer



Typical Cross-Section of Davis Drive West

FINAL



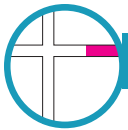
Davis Drive East STREETScape

Davis Drive East uses two streetscape typologies in order to respond to the surrounding context: Green and Davis Urban Streetscape Typology.

The rendering illustrates the Green Streetscape typology with canopy trees planted in a bed of ornamental grasses. The plant material provides a green buffer for pedestrians and cyclists from roadway traffic.



Perspective rendering of the Davis Drive East in a low density residential neighbourhood



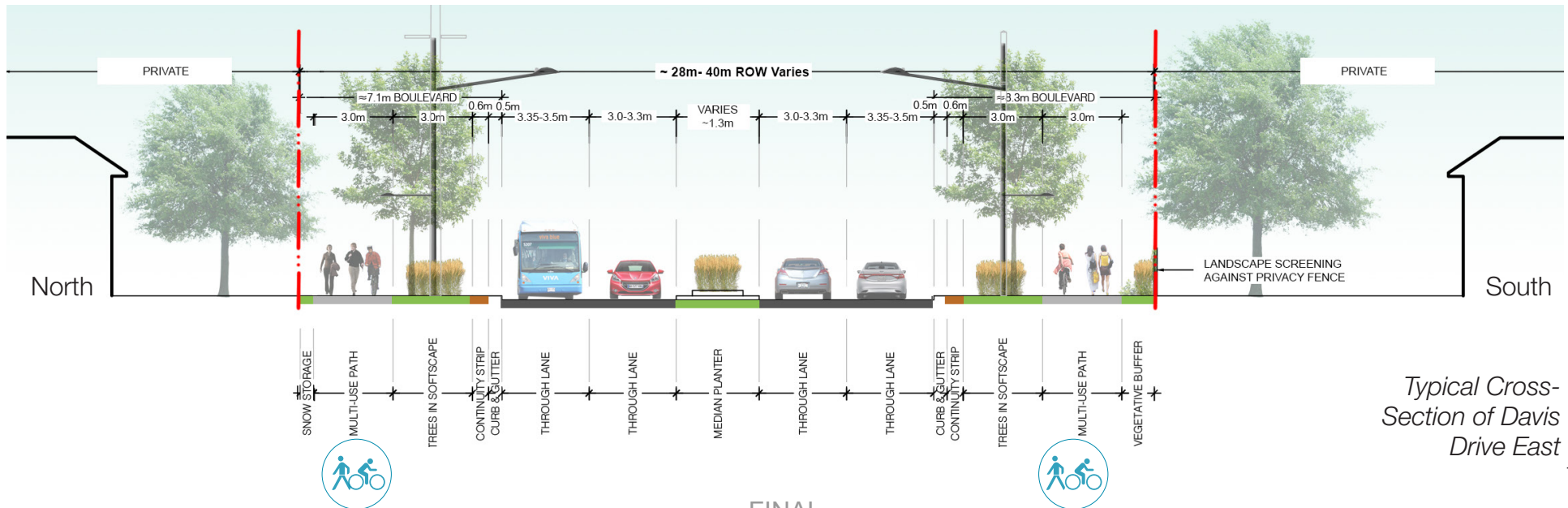
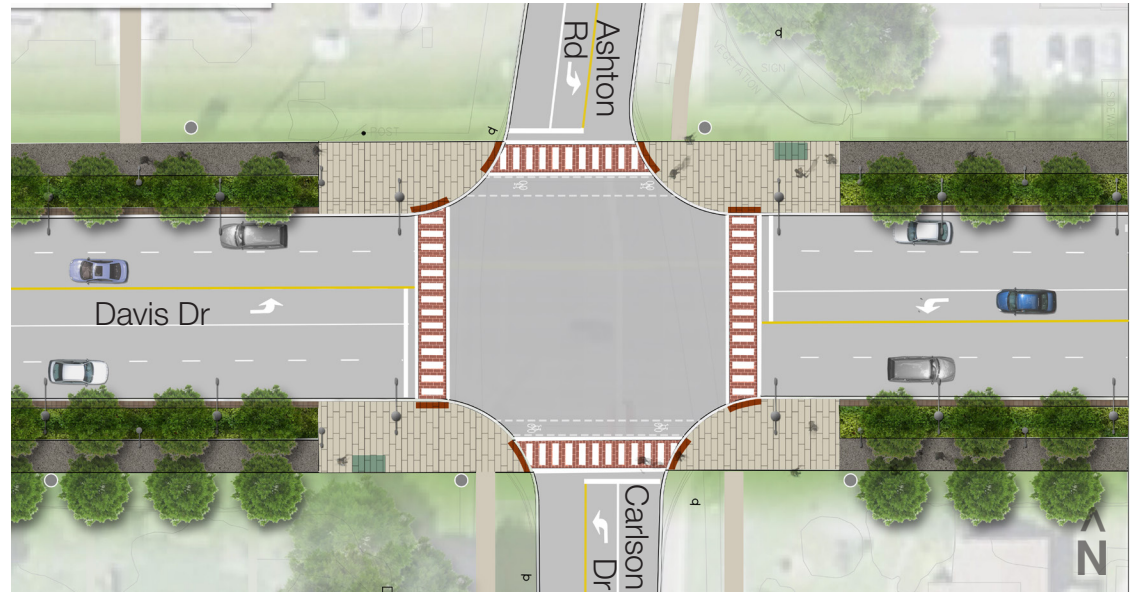
Davis Drive East GREEN STREETScape TYPOLOGY (PATTERSON STREET TO LESLIE STREET)

The **Green Streetscape Typology** contains a multi-use path with a landscape buffer to serve the surrounding low-density residential neighbourhoods.

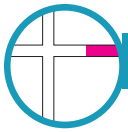
Plan of a signalized intersection along the Green segment of Davis Drive East

KEY FEATURES

- Multi-use path for pedestrians and cyclists with vegetated buffer from vehicular traffic
- Street trees in softscape with understory planting
- Landscape screening of varied privacy fences creates visual cohesion along rear lot residential properties
- Right Size geometry:
 - 3.0- 3.3 metre through lane
 - 3.35-3.5 metre curbside lane
 - 3.0 metre turn lane
 - 3.0 metre MUP



Typical Cross-Section of Davis Drive East



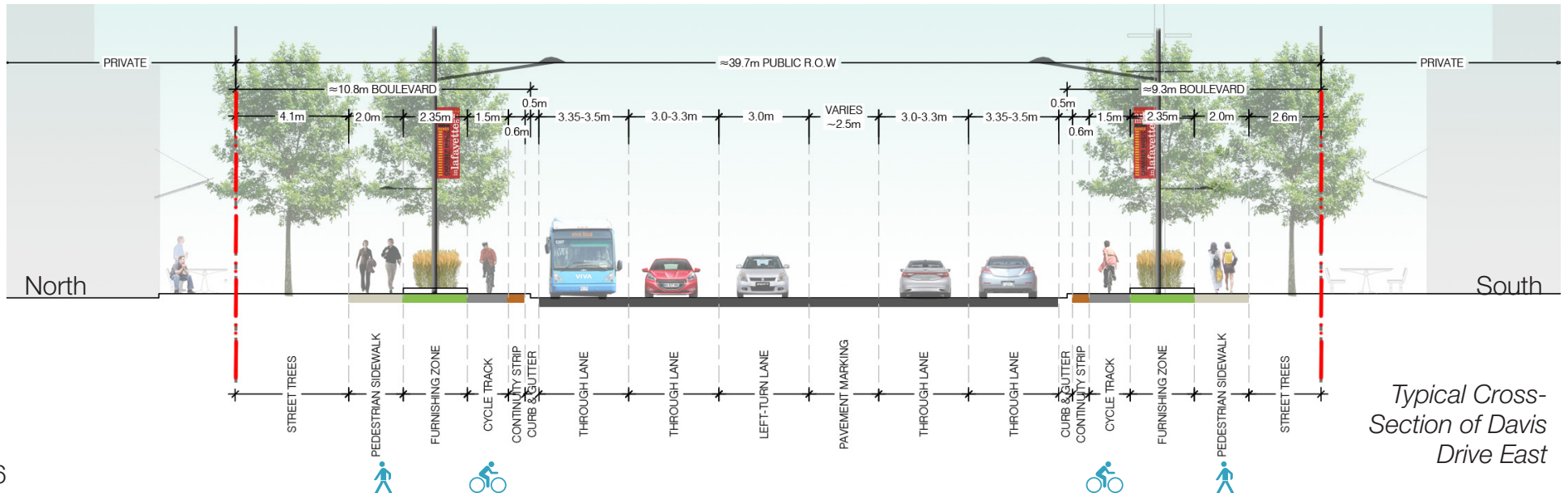
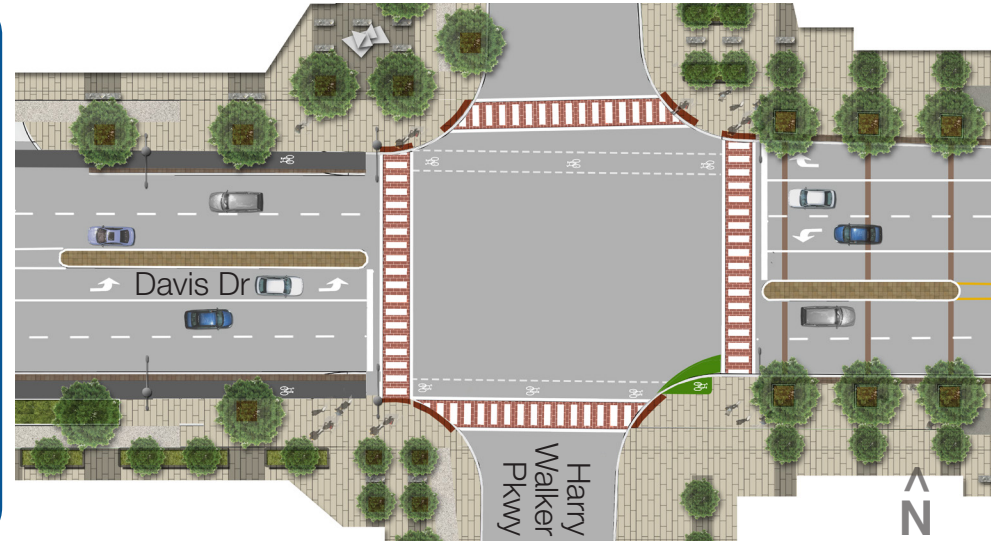
Davis Drive East DAVIS URBAN STREETScape TYPOLOGY (LESLIE STREET TO HIGHWAY 404)

The **Davis Urban Streetscape Typology** contains a pedestrian sidewalk and a raised cycle track, separated by a planting/furnishing zone.

KEY FEATURES

- Curbside raised cycle track with buffer
- Street trees in grates and planters with understorey planting
- Furnishing/planting zone buffer between cycle track and pedestrian sidewalk
- Right Size geometry:
 - 3.0- 3.3 metre through lane
 - 3.35-3.5 metre curbside lane
 - 3.0 metre turn lane
 - 2.0 metre sidewalk
 - 1.5 metre bike lane with a 0.6 metre buffer

Plan of the Davis Drive East Gateway at Harry Walker Parkway



Typical Cross-Section of Davis Drive East

MATERIAL PALETTE

The Streetscape Master Plan provides a cohesive material palette that promotes Low Impact Development through such elements as permeable surfaces and context-appropriate planting.



*Lighting image courtesy of Technilum
Streetscape furnishing images courtesy of KDA*

PRELIMINARY CAPITAL COSTS (IN 2016 DOLLARS) BY STREETScape CORRIDOR

Preliminary Capital Costs by streetscape corridor:

STREETScape CORRIDOR	LENGTH (KM)	AVERAGE COST/ KM**	CORRIDOR COST
Yonge Street North	1.8	\$7,368,000	\$13,262,400
Yonge Street South	1.7	\$4,353,000	\$ 7,400,100
Davis Drive West	1.9	\$4,728,000	\$ 8,983,200
Davis Drive East	2.5	\$4,737,000	\$ 11,842,500

TOTAL COST: \$41,488,200

The Preliminary Capital Costs includes:

- Material and installation of boulevard and median streetscape elements
- Gateway elements
- Street lighting
- Streetscape furniture including benches, trash receptacles and bike parking

The Preliminary Capital Costs does **not** include:

- Roadway elements
- Utility relocation**
- Traffic signals
- Bus shelters

* All figures have been rounded, for detailed Order of Magnitude Costing, refer to the Phase 5 Report, section 3

** Average Cost of Streetscape Typologies along corridor

*** The preliminary cost for undergrounding hydro is approximately \$ 3,500/ linear metre or \$ 3.5 million/ kilometre (not including the relocation of other utilities). The preliminary cost for the relocation of a hydro pole is approximately \$30,000 each.

CAPITAL COSTS COMPARISON

The Capital Costs for the Yonge Street & Davis Drive Streetscape Master Plan compared with other streetscape Capital Costs within York Region.

STREETScape	AVERAGE COST (MILLION) / KM
Yonge Street & Davis Drive Streetscape Master Plan	\$5.3 M
South Yonge Street Corridor Streetscape Master Plan	\$8.2 M
vivaNext Streetscape	\$6.6 M

PRELIMINARY MAINTENANCE AND OPERATIONS COSTS (IN 2016 DOLLARS) BY STREETScape CORRIDOR

Order of Magnitude Maintenance and Operations Capital Costs for each streetscape corridor:

STREETScape CORRIDOR	LENGTH (KM)	AVERAGE COST/ KM/ YEAR**	CORRIDOR COST/ YEAR
Yonge Street North	1.8	\$194,000	\$349,200
Yonge Street South	1.7	\$ 88,000	\$149,600
Davis Drive West	1.9	\$144,000	\$273,600
Davis Drive East	2.5	\$143,000	\$357,500

TOTAL COST: \$1,129,900

The Order of Magnitude Maintenance and Operations Costs assumes four season maintenance of the boulevard and median including:

- Cleaning and wet vacuum sweeping of boulevard hardscape surfaces
- Routine snow removal of boulevard surfaces
- Irrigation of boulevard and median planting
- Trees and shrub maintenance
- Repair of special features (planters, banners, gateway banding, etc.)
- Crosswalk pavement markings

The Order of Magnitude Maintenance and Operations Costs does **not** include:

- Snow removal in the roadway
- Maintenance of traffic signals and street lights
- Roadway maintenance and repair

* All figures have been rounded, for detailed Order of Magnitude Costing, refer to the Phase 5 Report, section 4

** Average Cost of Streetscape Typologies along corridor

MAINTENANCE AND OPERATIONS COSTS COMPARISON

The Order of Magnitude Maintenance and Operations Capital Costs for the Yonge Street & Davis Drive Streetscape Master Plan compared with other streetscape Maintenance and Operations Capital Costs within York Region.

STREETScape	AVERAGE COST/KM/ YEAR
Yonge Street & Davis Drive Streetscape Master Plan	\$144,000
South Yonge Street Corridor Streetscape Master Plan	\$300,000
vivaNext Streetscape (Highway 7)	\$190,000

IMPLEMENTATION

Achieving the Plan requires commitment and partnerships for its design, implementation and ongoing maintenance. Public realm improvements create vibrant walkable communities and will encourage people to want to live, work and play in the Town of Newmarket.

Implementation requires a coordinated approach between York Region, the Town of Newmarket and stakeholders, including vivaNext, York Region Transit, Newmarket Hydro, utility companies, Ministry of Transportation of Ontario, Lake Simcoe Region Conservation Authority, local businesses, developers and private land owners.

Key points for implementation include the following:

POLICY

Strategy

- Official Plan and Zoning By-law Updates
- Development Charges By-law Updates

Initiatives

- Tax Increment Funding
- Federal Gas Tax Fund

Design/Construction

- Special Area Development Charges By-laws

DEVELOPMENT

Strategy

- Private developers shall be required to contribute to enhancement of the public realm and streetscape.



Visioning Workshop

UTILITIES

Strategy

- Buried hydro poles allow a smaller lot line setback that ultimately increases the developable area and can create a return on investment to developers.
- A Public Utilities Coordinating Committee (PUCC) can establish long term strategic coordination of utility locations including hydro, gas, telecommunications and existing utility re-locations.

Initiatives

- York Region and the Town of Newmarket may consider developing a Special Policy Area By-law outlining hydro installation standards for new areas of intensification on Yonge Street and Davis Drive through a cost-sharing plan with Newmarket Hydro and private developers.

Design/Construction

- In the preliminary engineering stage, it is important to identify and protect an ideal duct bank location along the corridor for the purposes of burying hydro. The proposed duct bank location should be situated to minimize disruption to the executed streetscape elements in the future as the corridor intensifies and funding becomes available to underground electrical services.

PUBLIC ART

Strategy

- The Town has a Public Art Policy and Plan that will guide the installation of public art along the Yonge Street and Davis Drive corridors.

Initiatives

- Section 37 of the Planning Act may be used as an implementation strategy for public art.

Design/Construction

- Detailed design of the public realm should provide public art of civic scale in highly visible locations along the Yonge Street and Davis Drive corridors.

COLLABORATION

It is important the various departmental decision makers work closely to ensure the design, implementation, and maintenance of capital and redevelopment projects along the Yonge and Davis corridors are being met in accordance with the Yonge Street & Davis Drive Streetscape Master Plan.

CAPITAL CONSTRUCTION

There are two capital projects underway that currently correspond with this streetscape study:

- Yonge Street (Davis Drive to Green Lane)
- Bathurst Street and Davis Drive intersection improvements

The implementation of the Yonge Street & Davis Drive Streetscape Master Plan will be integrated with Yonge Street North and Bathurst Street capital projects with support from York Region Municipal Streetscape Partnership Program in order to optimize construction scheduling and costs.

FUNDING STRATEGIES

Funding is an integral aspect to the realization of this Master Plan. The Streetscape will likely employ a number of different funding sources including some or all of the following:

- York Region Municipal Streetscape Partnership Program
- Public Private Partnerships
- Development Charges
- Section 37- Ontario Planning Act
- Site Plan Approval
- Business Improvement Area funding
- Ministry of Transportation of Ontario
- Private sector sponsors
- Lake Simcoe Region Conservation Authority



Visioning Workshop 21