# Calgary West Segment - Long-Term Concept Option 1 Retains four lanes on 16 Avenue N.W.

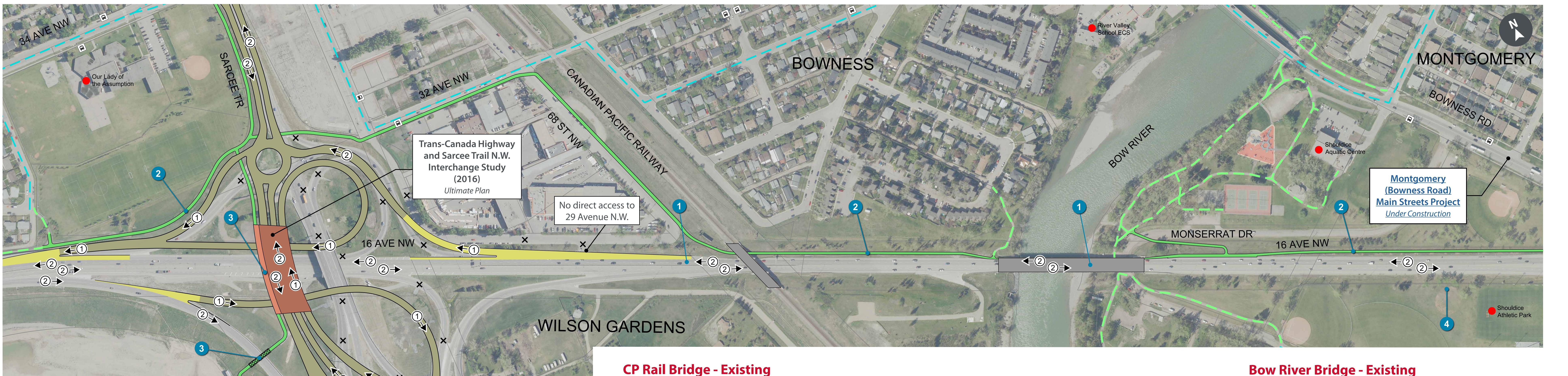
**ABBREVIATIONS** 

SHLD - SHOULDER

Community places of interest

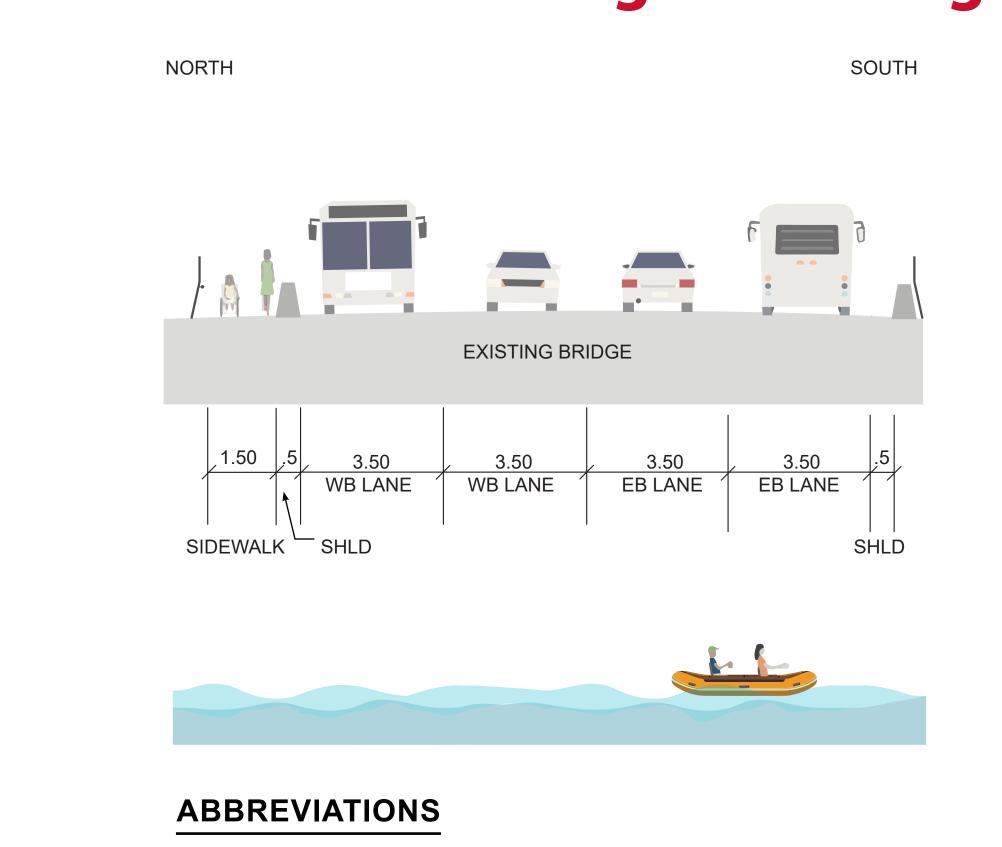
WB LANE - WESTBOUND LANE

EB LANE - EASTBOUND LANE



3.70 3.70 3.70 3.70 WB LANE WB LANE EB LANE

# **Bow River Bridge - Existing**



SHLD - SHOULDER

WB LANE - WESTBOUND LANE

EB LANE - EASTBOUND LANE

# **Location Map**



- Minimizes changes to existing infrastructure at CP Rail and Bow River bridges
- Avoids impacts to critical water and sanitary sewer pipes along 16 Avenue N.W.
- Retains direct access to Bowdale Crescent N.W.
- No impacts to properties
- Lower cost than west segment concept option 2

# **Trade-Offs**

- Removes direct access to 29 Avenue N.W.
- Does not improve existing narrow pathway on Bow River bridge
- Four core lanes of travel along 16 Avenue N.W. may not match the rest of the corridor and limit long-term growth in the city
- Does not improve existing narrow shoulders and lane widths at the Bow River and CP Rail bridges

# **Design Features**

# **Mobility and Functionality**

- 1 Provides four core lanes of travel along 16 Avenue N.W.
- Connects Shouldice Park, Bowness, and Montgomery with continuous pathway north of 16 Avenue N.W.
- 3 Connects Trinity Hills, Wilson Gardens, and Bowness with continuous pathway over 16 Avenue N.W. at Sarcee Trail

# **Character and Identity**

4 Creates a visual transition to Montgomery in the gateway zone with trees, street furniture, banners, displays or other elements

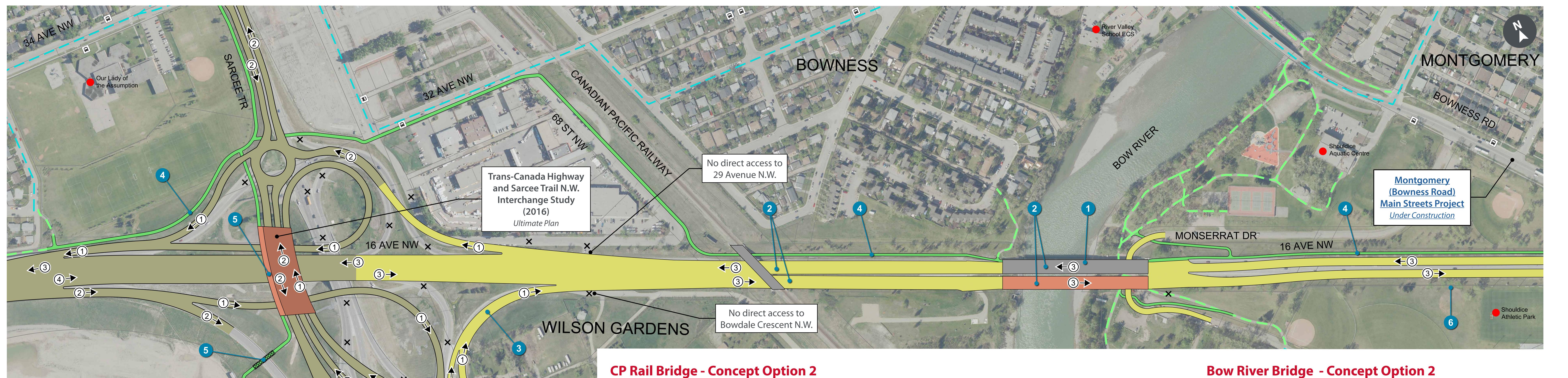
### calgary.ca/16avenuenw | contact 311

0 20 40 60 80 m

TRINITY HILLS

Proposed bike route from previous plan

# Calgary West Segment - Long-Term Concept Option 2 Provides six lanes on 16 Avenue N.W.



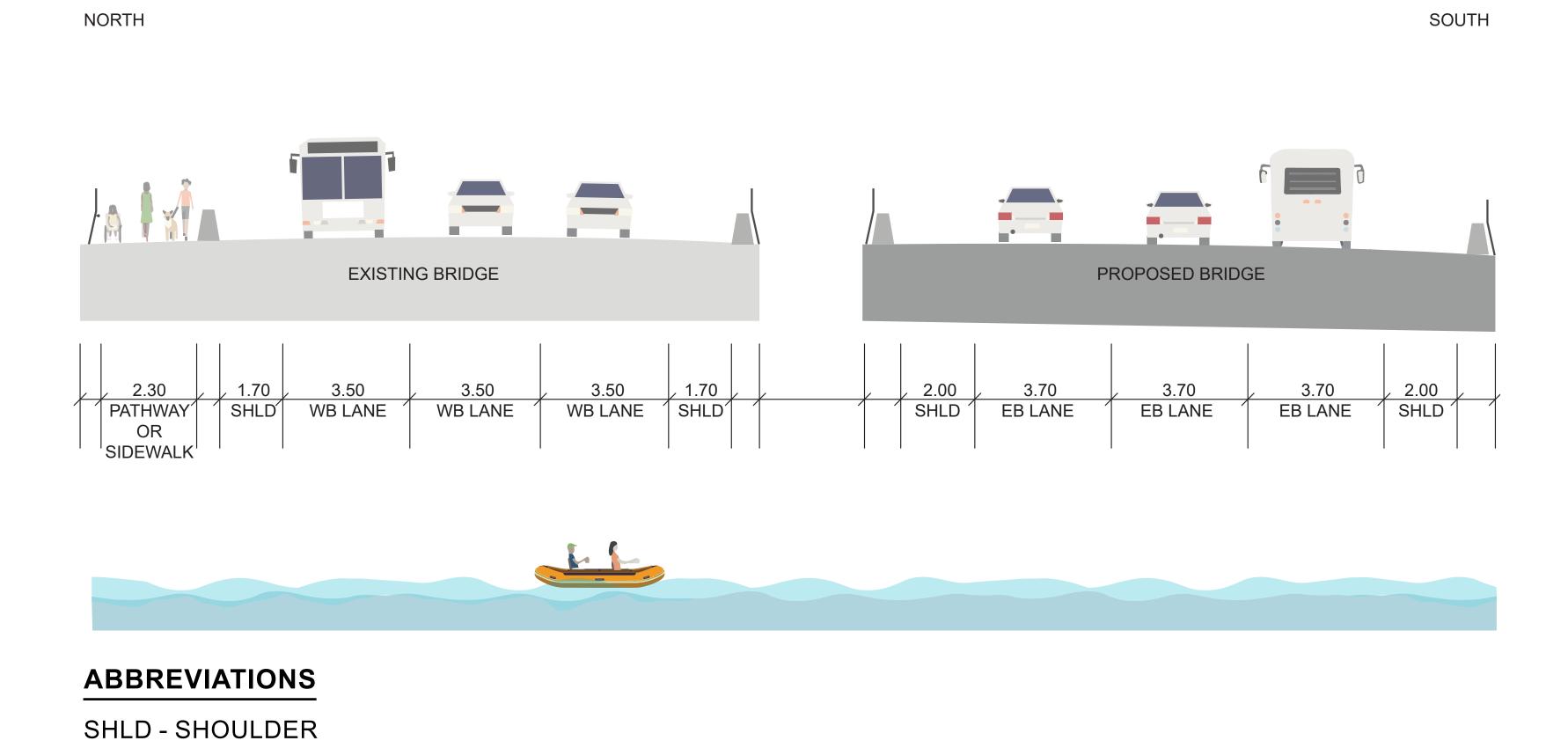
**ABBREVIATIONS** 

SHLD - SHOULDER

WB LANE - WESTBOUND LANE

EB LANE - EASTBOUND LANE

# **Bow River Bridge - Concept Option 2**



WB LANE - WESTBOUND LANE EB LANE - EASTBOUND LANE



- Retains existing CP Rail bridge
- Retains existing Bow River bridge and pathway connection on north side
- Constructs new Bow River bridge for eastbound traffic
- Repurposes existing bridges where possible to avoid cost of widening or replacing those bridges
- Avoids impacts to critical water and sanitary sewer pipes along 16 Avenue N.W.

# **Trade-Offs**

- Potential grading impacts to properties south of 16 Avenue N.W. and west of the CP Rail bridge.
- Shifts 16 Avenue N.W. slightly to the south
- Removes some trees to the south of 16 Avenue N.W. near the Bow River bridge
- Removes direct access to 29 Avenue N.W. and Bowdale Crescent N.W.

# **Design Features**

# Social and Healthy Lifestyle

1 Widen existing north pathway over the Bow River bridge

# **Mobility and Functionality**

- 2 Provides additional core lane in each direction for six core lanes of travel along 16 Avenue N.W.
- 3 Makes merge from northbound Sarcee Trail to eastbound 16 Avenue N.W. longer to improve safety

- 4 Connects Shouldice Park, Bowness, and Montgomery with continuous pathway north of 16 Avenue N.W.
- Connects Trinity Hills, Wilson Gardens, and Bowness with continuous pathway over 16 Avenue N.W. at Sarcee Trail

# **Character and Identity**

6 Creates a visual transition to Montgomery in the gateway zone with trees, street furniture, banners, displays or other elements

1 p = -

0 20 40 60 80 m

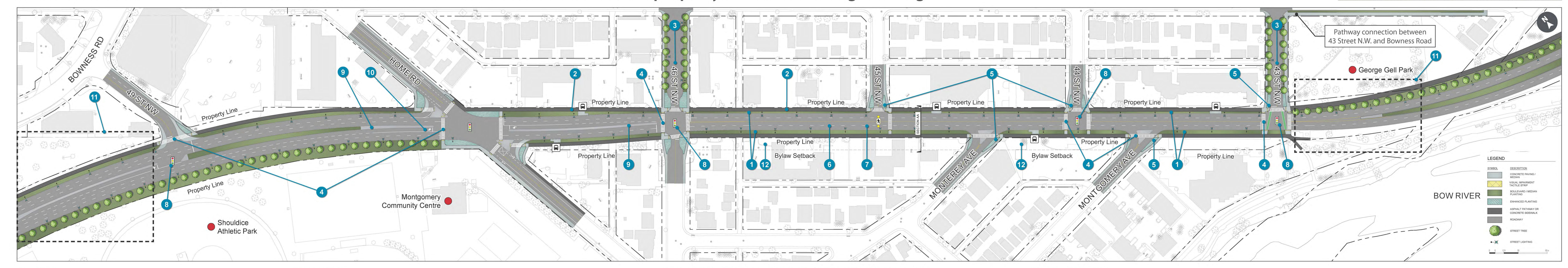
TRINITY HILLS

Proposed bike route from previous plan

# Calgary Main Street Segment – Long-Term Concept Option 1



Retain four lanes on 16 Avenue N.W. with limited or no use of setback area between property lines and existing buildings



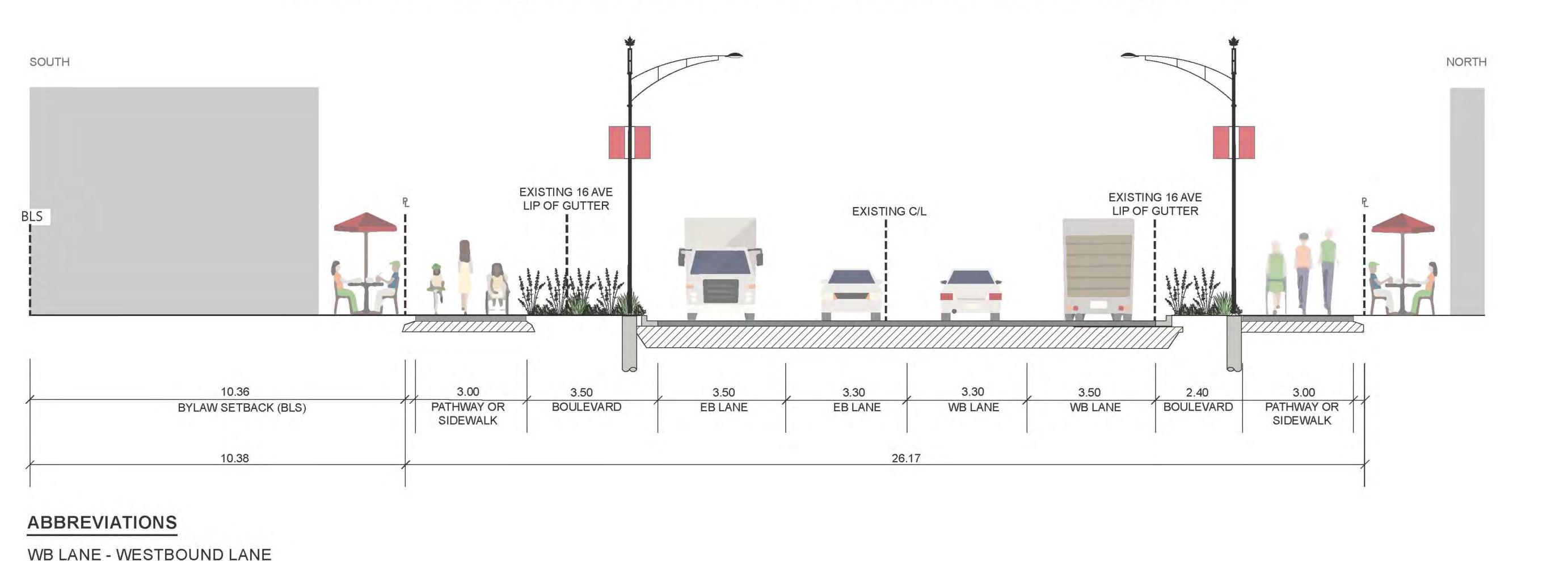
## **Benefits:**

- Maintains current width and community character of 16 Avenue N.W. through Montgomery
- Maintains existing lot depth on south side of 16 Avenue N.W. east of 46 Street N.W.
- Limited or no property impacts allows highest redevelopment opportunity of existing parcels
- Shortest pedestrian crossing distance of the three Main Streets concept options
- 3.0m pathway or sidewalk on both sides of 16 Avenue N.W.
- Lowest cost to implement of the three Main Street concept options

## **Trade-Offs:**

- New trees cannot be accommodated in the north or south boulevard due to utility conflicts
- No new street parking
- No median between Home Road N.W. and 43 Street N.W. to provide access management which may warrant closure of local street and business accesses
- Less efficient transit and traffic operations will constrain future growth in N.W. Calgary and result in significant peakhour congestion compared to Main Street concept option 3

# Main Street Option 1, east of 46 Street N.W., looking west



# **Design Features**

# Social and Healthy Lifestyle

- 1) Plant greenery and add lighting in north and south boulevards
- 2 Separate people who walk and wheel from vehicles on a wider pathway or sidewalk with a landscaped boulevard
- 3 Enhance connections to Bowness Road N.W. on 43 and 46 Streets N.W.

# **Mobility and Functionality**

- 4 Enhance pavement markings at crosswalks to improve visibility
- Construct curb extensions on side streets with planting
- 6 Narrower vehicle lanes to encourage slower vehicle speeds
- 7 Retain four lanes of vehicle travel

- 8 Install new traffic signals at pedestrian crossings and local street accesses
- 9 Separate left-turn bays with a median west of 46 Street N.W.
- 10 New protected left turn at Home Road N.W.

# **Character and Identity**

111 Create visual transition to Montgomery in gateway zone with trees, street furniture, displays or other elements

# **Economic Vitality**

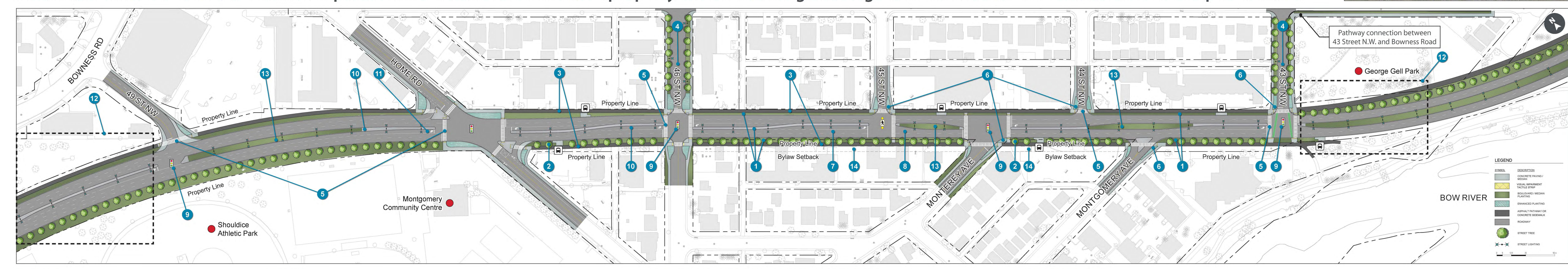
12 Limited or no use of setback areas between the property line and the existing buildings

# Main Street Segment - Long-Term Concept Option 2

**Location Map** 



Retain four lanes on 16 Avenue N.W. with partial use of setback area between property line and existing buildings to accommodate a median and enhanced public realm



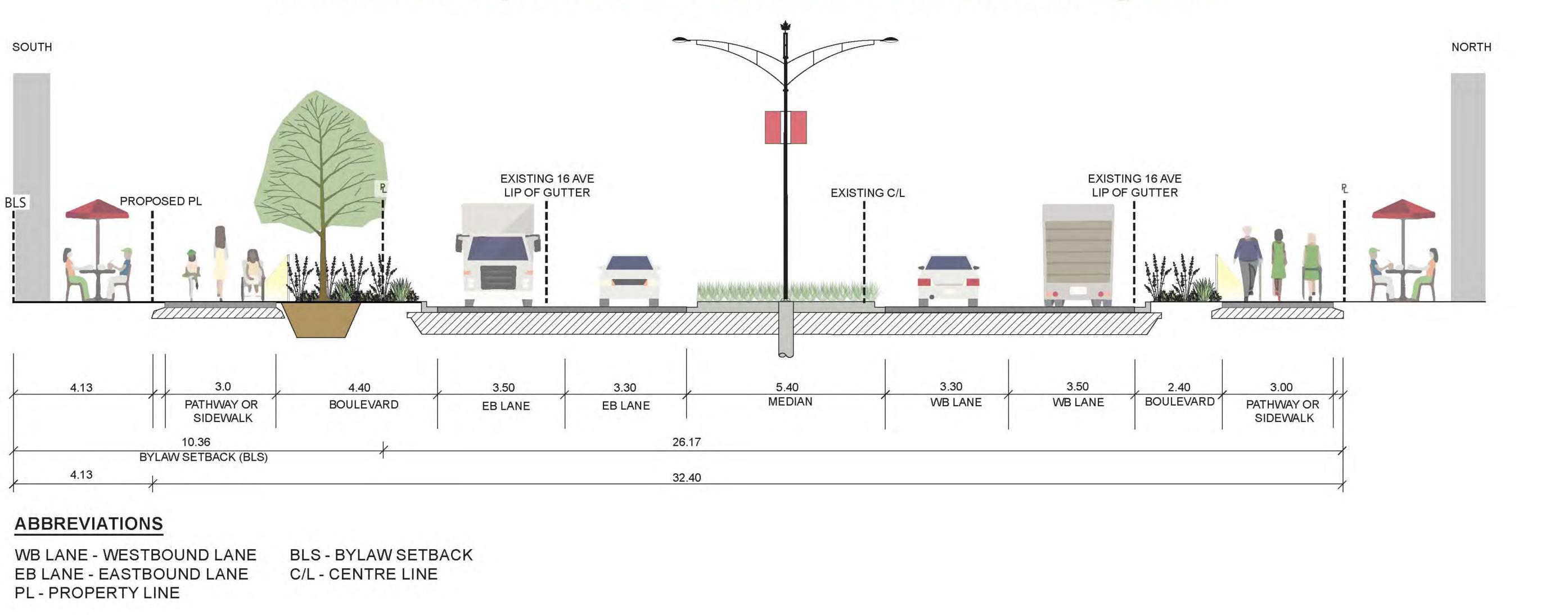
# **Benefits:**

- Maintains current width and community character of 16 Avenue N.W. through Montgomery
- Trees in boulevard on south side of 16 Avenue N.W.
- Planted boulevard on north side of 16 Avenue N.W. and in median where possible
- Shorter pedestrian crossings than six-lane concept option 3
- 3.0 m pathway or sidewalk on both sides of 16 Avenue N.W.
- Median allows for left-turn bays and right-in, rightout access to and from local streets and businesses

## **Trade-Offs:**

- New trees cannot be accommodated in the north boulevard due to utility conflicts
- Property impacts on the south side of 16 Avenue N.W.
- Reduced lot depth on the south side of 16 Avenue N.W. from use of setback could limit future redevelopment options for the lot
- No new street parking
- Less efficient transit and traffic operations will constrain future growth in N.W. Calgary and result in significant peak-hour congestion compared to Main Street concept option 3
- Higher cost to implement than concept option 1, and lower cost than concept option 3

# Main Street Option 2, east of 46 Street N.W., looking west



# Design Features

# Social and Healthy Lifestyle

- 1 Plant greenery and add lighting in north and south boulevards and medians
- 2 Plant trees on south boulevard
- 3 Separate people who walk and wheel from vehicles on a wider pathway or sidewalk with a landscaped boulevard
- 43 and 46 Streets N.W.

# **Mobility and Functionality**

- 5 Enhance pavement markings at crosswalks to improve visibility
- 6 Construct curb extensions on side streets with planting
- 7 Narrower vehicle lanes to encourage slower vehicle speeds

- 8 Retain four lanes of vehicle travel
- Install new traffic signals at pedestrian crossings and local street accesses
- 10 Separate left-turn bays with medians
- 111 New protected eastbound left turn at Home Road N.W.

## **Character and Identity**

- Create visual transition to Montgomery in gateway zone with trees, street furniture, banners, displays or other elements
- 13 Provide opportunity in medians for community banners or other displays

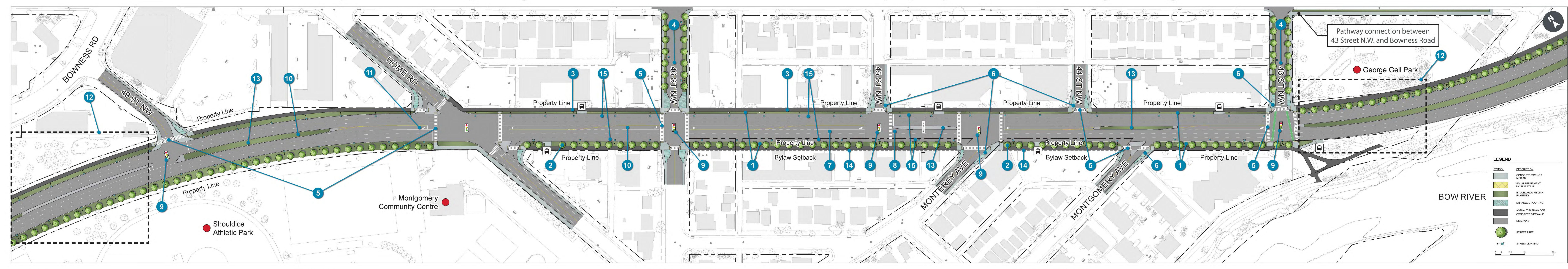
# **Economic Vitality**

Some use of setback areas south of the property line on the south side of 16 Avenue N.W.

# Main Street Segment - Long-Term Concept Option 3



Widen 16 Avenue N.W. to six lanes with off-peak hour street parking and full use of the setback areas between the property line and the existing buildings

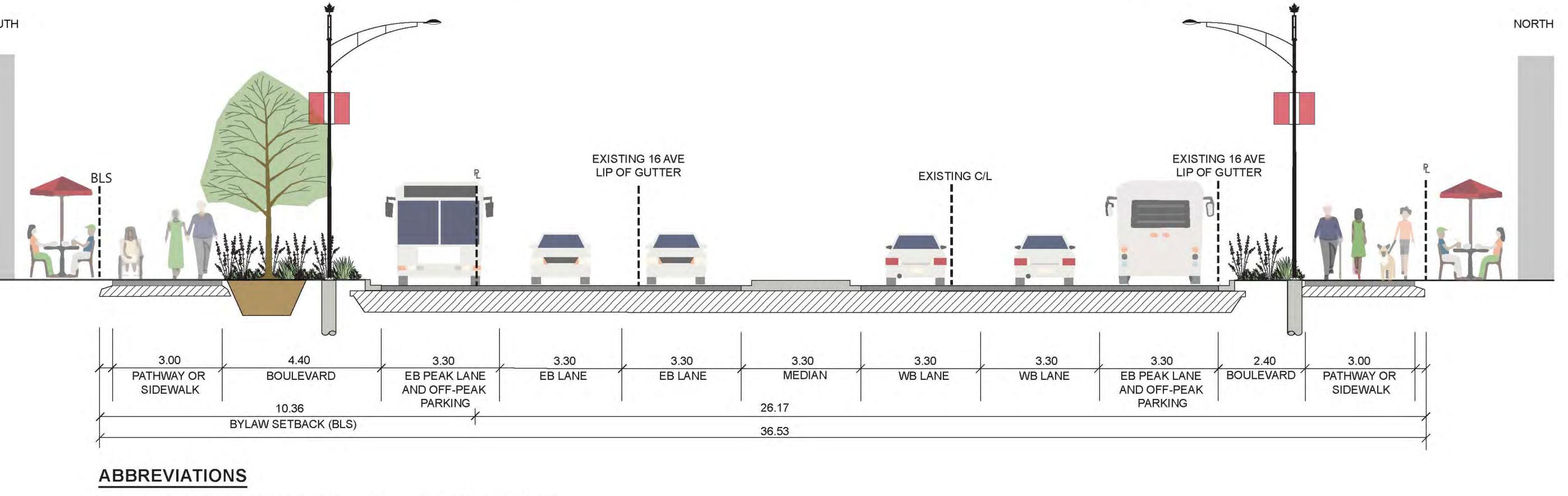


- Trees in boulevard on south side of 16 Avenue N.W.
- Planted boulevard on north side of 16 Avnenue N.W.
- 3.0 m pathway or sidewalk on both sides of 16 Avenue N.W.
- Median allows for left-turn bays and right-in, right-out access to and from some local streets
- On-street parking during off-peak hours
- Potential High Occupancy Vehicle (HOV) and or transit priority lanes during peak hours
- Improved transit and traffic operations compared four-lane concept options to support planned future development, city-wide network and forecasted traffic volumes

# **Trade-Offs**

- Widening 16 Avenue N.W. creates greater separation of north and south sides of Montgomery
- New trees cannot be accommodated in the north boulevard due to utility conflicts
- Property impacts on the south side of 16 Avenue N.W.
- Reduced lot depth from use of setback could limit future redevelopment options on the south side of 16 Avenue N.W.
- Longer pedestrian crossings than four-lane concept options 1 and 2
- Highest cost to implement of the three Main Street concept options

# Main Street Option 3, east of 46 Street N.W., looking west



# EB LANE - EASTBOUND LANE C/L - CENTRE LINE

# **Design Features**

# Social and Healthy Lifestyle

- 1 Plant greenery and add lighting in north and south boulevards
- 2 Plant trees on south boulevard
- 3 Separate people who walk and wheel from vehicles on a wider 11 New protected eastbound left turn at Home Road N.W. pathway or sidewalk with a landscaped boulevard
- 4 Enhance connections to Bowness Road N.W. on 43 and 46 Streets N.W.

# **Mobility and Functionality**

- 5 Enhance pavement markings at crosswalks to improve visibility
- 6 Construct curb extensions on side streets with planting
- Narrower vehicle lanes to encourage slower vehicle speeds
- 8 Accommodate six lanes of vehicle travel

- 9 Install new traffic signals at pedestrian crossings and local
- 10 Separate left-turn bays with medians

# **Character and Identity**

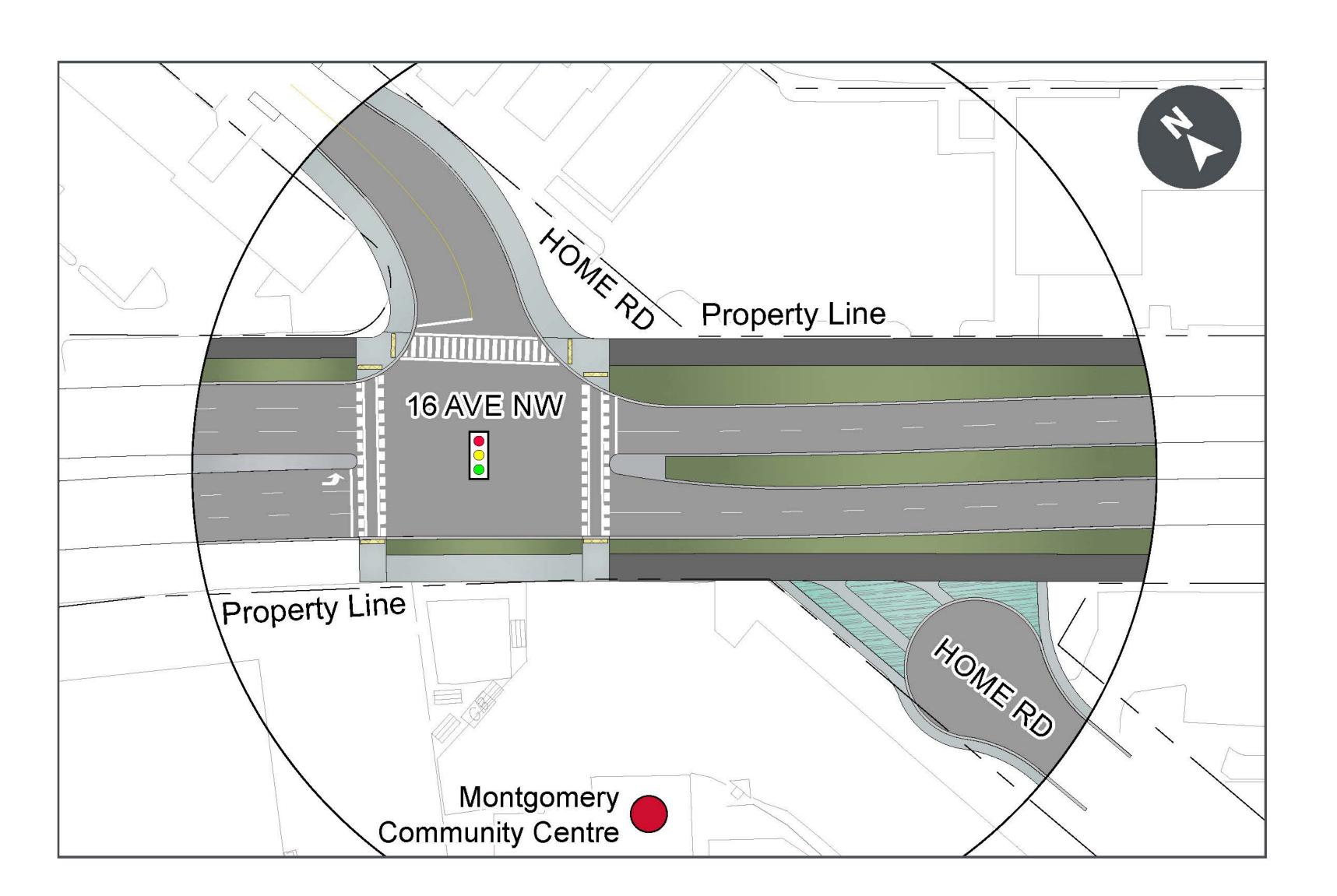
- 12 Create visual transition to Montgomery in gateway zone with trees, street furniture, banners, displays or other elements
- 13 Provide opportunity in medians for community banners or other displays

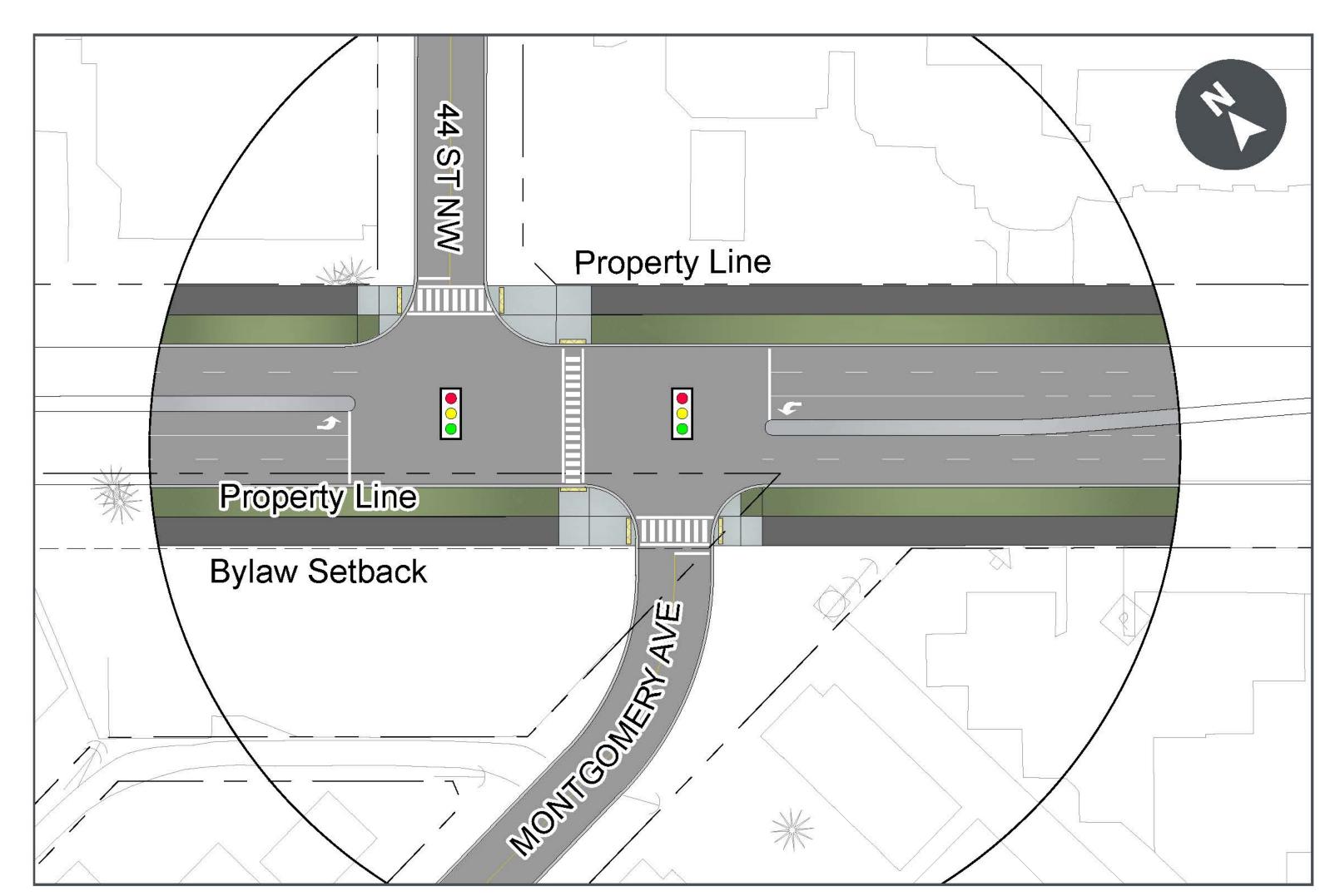
# **Economic Vitality**

- 14 Full use of setback area south of the property line on the south side of 16 Avenue N.W.
- 15 On-street parking during off-peak hours

# Main Street Segment Alternate Long-Term Intersection Concept Options

Retaining four lanes on 16 Avenue N.W. provides less efficient traffic and transit operations than widening to six lanes. To improve traffic flow and safety in concept options with four lanes, potential changes to the intersections of 16 Avenue N.W. at Home Road N.W. and 44 Street N.W. are being considered.





# Alternate Home Road N.W. Intersection: South leg of Home Road N.W. and 16 Avenue N.W. intersection is closed

## **Benefits**

- Improves traffic flow on 16 Avenue N.W. by limiting the number of directions of travel through the intersection.
- Decreases the number conflicts between those who drive and those who walk and wheel
- Provides a more squared-off intersection at Home Road N.W. and 16 Avenue N.W. to improve pedestrian and traffic safety
- Maintains existing wheeling-route on Home Road N.W.
   with multi-use pathways across 16 Avenue N.W.

## **Trade-Offs**

- Removes vehicle access to Home Road N.W. south of 16 Avenue N.W., people who drive would need to use 46 Street N.W.
- Removes access from Home Road N.W. to property on S.E. corner of intersection, retains access from 16 Avenue N.W.
- Access to Montgomery Community
   Association and Shouldice Park from 46 Street N.W. only

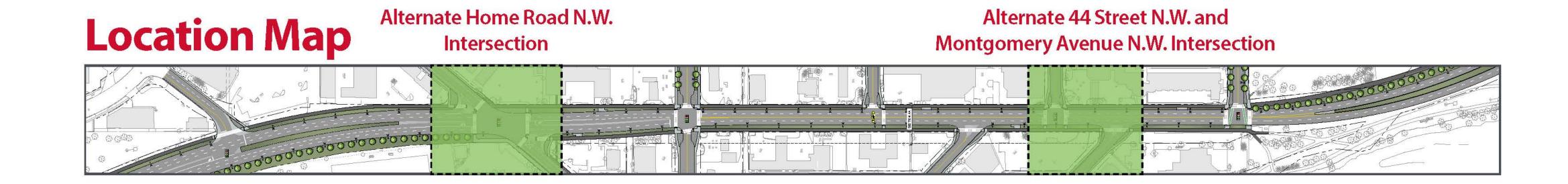
# Alternate Intersection at 44 Street N.W. and Montgomery Avenue N.W.: Offset intersection on the north and south sides of 16 Avenue N.W.

## **Benefits**

- Consolidates movements to and from both
   44 Street N.W. and Montgomery Avenue N.W. into one offset intersection
- Allows for realignment of Montgomery Avenue N.W. to improve the skew of the intersection at 16 Avenue N.W. to improve pedestrian and traffic safety

### **Trade-Offs**

 Requires acquisition of private property through the existing parking lot and constrains potential future development of the parcel





# **East Segment - Long-Term Concept Option**

Retain six lanes on 16 Avenue N.W., connect existing transportation plans and provide missing pathway connections



# Location Ma



Previous plans for 16 Avenue east of 43 Street N.W. have been approved by Council, with some recommendations already implemented. The focus for this transportation corridor study is to join the 2018 South Shaganappi and 2017 Crowchild Trail Studies, connect to the Main Street Segment, and fill in missing pathway connections.

# **Design Features**

# **Mobility and Functionality**

- 1 Provides additional pathway connection from Shaganappi Trail to West Campus Boulevard N.W. north of 16 Avenue N.W.
- 2 Provides additional pathway connection from West Campus Boulevard N.W. to 29 Street N.W. north of 16 Avenue N.W.
- Provides additional pathway connection from Bowness Road and 41 Street N.W. to 16 Avenue N.W.

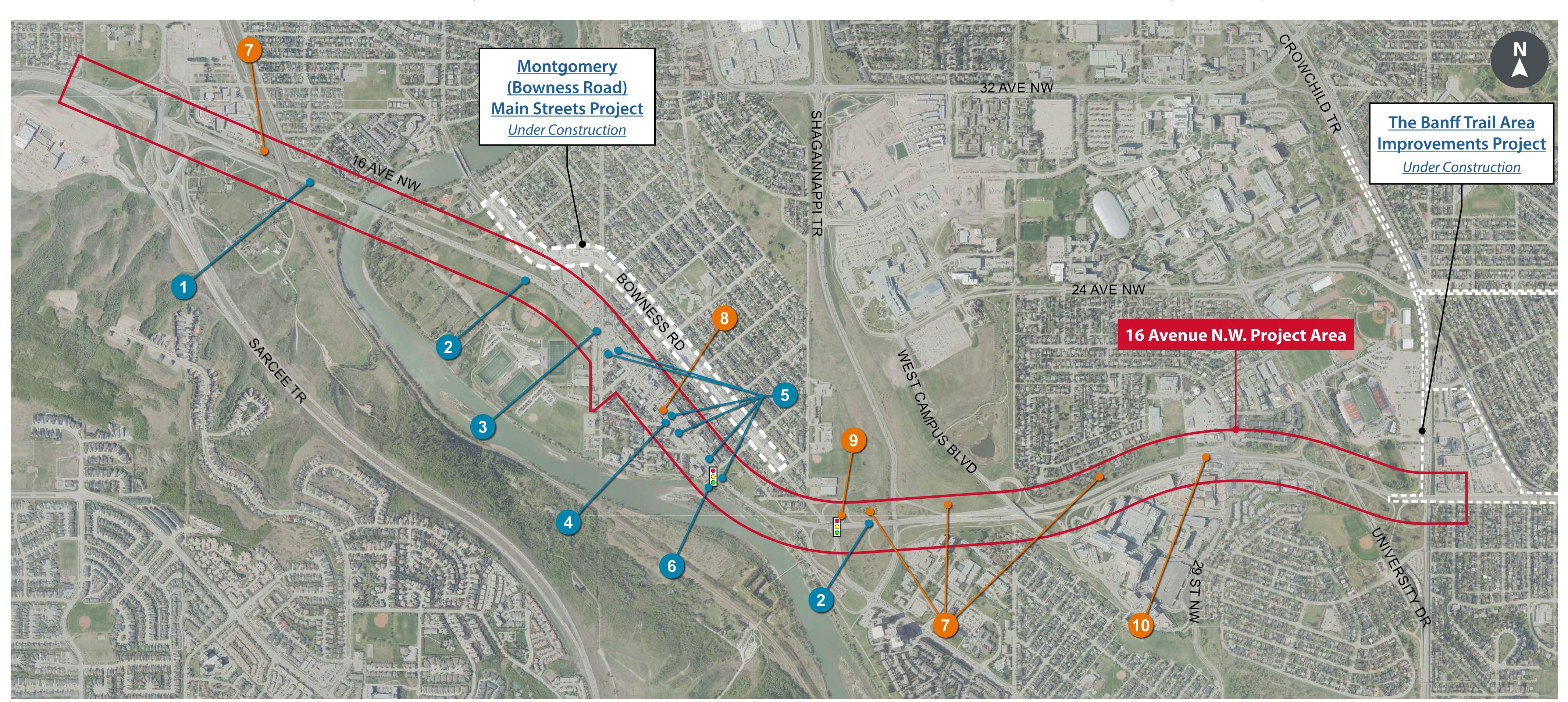
- Provides six core lanes along
  16 Avenue N.W. to accommodate
  long-term traffic growth
- Maintains current configuration of intersection at Bowness Road and Shaganappi Trail N.W.

# **Character and Identity**

6 Create visual transition to
Montgomery in gateway zone with
trees, street furniture, banners,
displays or other elements

# **Short- and Medium-Term Improvements**

Following a safety review along the corridor combined with the development of long-term concept options, improvements that could potentially be implemented in the short- and medium-term were identified by the project team as shown below



### **Short-Term Improvements for Potential Implementation within 1 to 2 years**

- 1 Construct median barrier from Sarcee Trail to 49 Street N.W.
- 2 Shift 50 km/h speed limit farther out from community core, to provide lower-speed approaches to new traffic signals and community Main Street area
- Modify existing traffic signal to provide protected eastbound left-turn at Home Road
- Improved pedestrian crossing at Monterey Avenue N.W.
- 5 Improved bus stops and amenities (benches, shelters)
- 6 Add traffic signal at 43 Street N.W.

### Medium-Term Improvements for Potential Implementation within 5 to 20 Years

- Additional pathway connections in the West and East Segments
- 8 Plant greenery in the boulevard north of 16 Avenue N.W.
- Short-term improvements from <u>South Shaganappi Study</u> including new traffic signal to improve merge onto 16 Avenue N.W. from Bowness Road N.W.
- 10 Construct pedestrian overpass west of 29 Street N.W.