

Kanata North

Concept Plan.

Fourth Submission.

November 2020.

2559688 Ontario Inc.





PREPARED FOR



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Section A. Context & Analysis



Kanata Context.



Kanata North Context.



Site Analysis.

Section B. Neighbourhood Design



Vision & Design Principles.



Neighbourhood Master Plan.



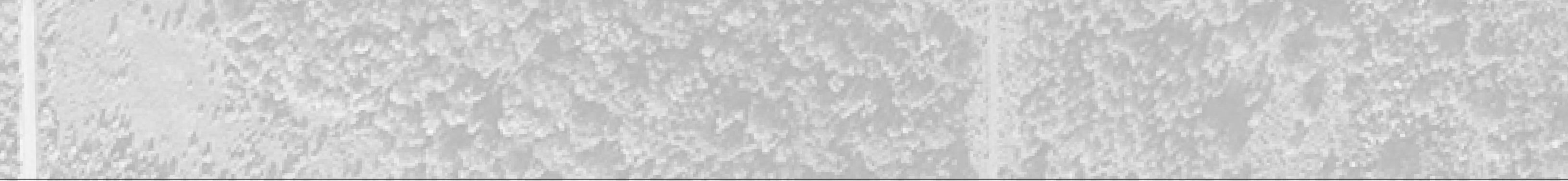
Built Form.



Open Space.



Road Network.



Context & Analysis.

Section A.

- 1 Kanata Context.
- 2 Kanata North Context.
- 3 Site Analysis.

As one of the largest suburbs of Ottawa, Kanata is experiencing an increased demand for residential development. In order to accommodate and plan for the projected growth Kanata and other suburbs within Ottawa will experience, the City has designated 11 areas as Urban Expansion Study Areas. One of these selected areas is the Kanata North Urban Expansion Area (KNUEA), a 181.0 hectare (447.6 acres) area bordered by a decommissioned CN rail corridor to the east, Hillsvie Estate Subdivision to the north, the Marchbrook Circle and Panandrick subdivisions to the west, and the established communities of Morgan’s Grant, Briarbrook, and Brookside to the south. The area is now considered part of the General Urban Area, with policy directives for growth contained with the Kanata North Community Design Plan.

Legend

-  Subject Lands
-  KNUEA
-  NCC Greenbelt
-  Ottawa River
-  Major Roads & Highways

Figure 1 Kanata Context Map

Kanata North Urban
Expansion Area

KANATA NORTH

2559688 Ontario Inc.



Ottawa River

ALYMER

NCC Greenbelt

KANATA

9

49

38

417

61

36

59

61

12

32

416

16



Kanata North Context. 2

Minto Kanata North, 48.22 hectares (119.15 acres), is located within the southeast quadrant of the Kanata North Urban Expansion Area (KNUEA), as set forth by the Kanata North Community Design Plan (CDP). The lands are accessible from March Road and are surrounded by a variety of uses, including existing residential, agricultural land, a decommissioned CN rail corridor, a tributary, and future retail/commercial. Permitted land uses have therefore been forecasted to complement the existing uses, including various residential typologies and retail/commercial.

As Kanata continues to expand, sufficient services and infrastructure must be provided to accommodate growth. March Road represents the main north-south corridor that provides access to and from the KNUEA and has been classified as a major urban arterial. More infrastructure improvements are therefore being planned for the March Road Corridor to accommodate the safe and efficient movement of goods and people, including high-order transit in the form of a bus rapid transit service.

Legend

- Multi-Unit Residential
- Street-Oriented Residential
- Privately Serviced Residential
- Retail and Commercial
- Undeveloped Urban
- Enterprise Area
- Institutional
- Subject Site
- KNUEA Quadrant Boundary
- KNUEA

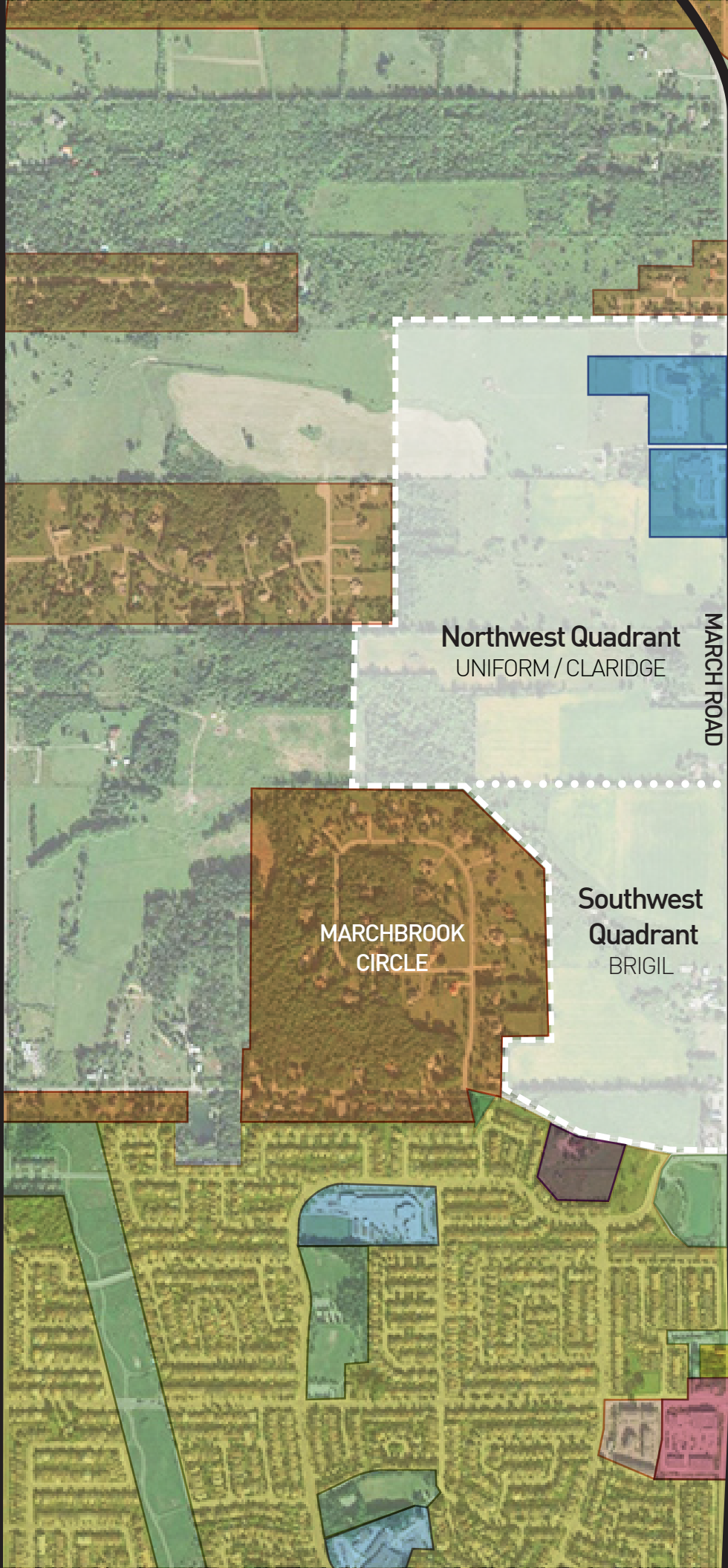


RURAL



OLD SECOND LINE

RURAL



Northwest Quadrant
UNIFORM / CLARIDGE

Southwest Quadrant
BRIGIL

MARCH ROAD

MARCHBROOK
CIRCLE



HILLSVIEW

Northeast Quadrant
VALECRAFT

**KANATA
NORTH**
Southeast Quadrant

2559688 Ontario Inc.



FUTURE
COMMERCIAL

FUTURE
COMMERCIAL

DECOMMISSION CN RAIL CORRIDOR

MARCH VALLEY

BROOKSIDE

NCC
GREENBELT

Area Summary

Kanata North Urban
Expansion Area
181.0ha (447.6ac)

Minto Communities
48.2ha (119.2ac)
6.9ha (17.0ac) Outside the Urban Boundary

2559688 Ontario Inc.
9.4ha (23.1ac)

Existing features present both opportunities and constraints to the development at Kanata North. As mentioned previously, the subject lands are bounded by a variety of land uses. Adjacencies have therefore been acknowledged and integrated into the planning and design of the neighbourhood.

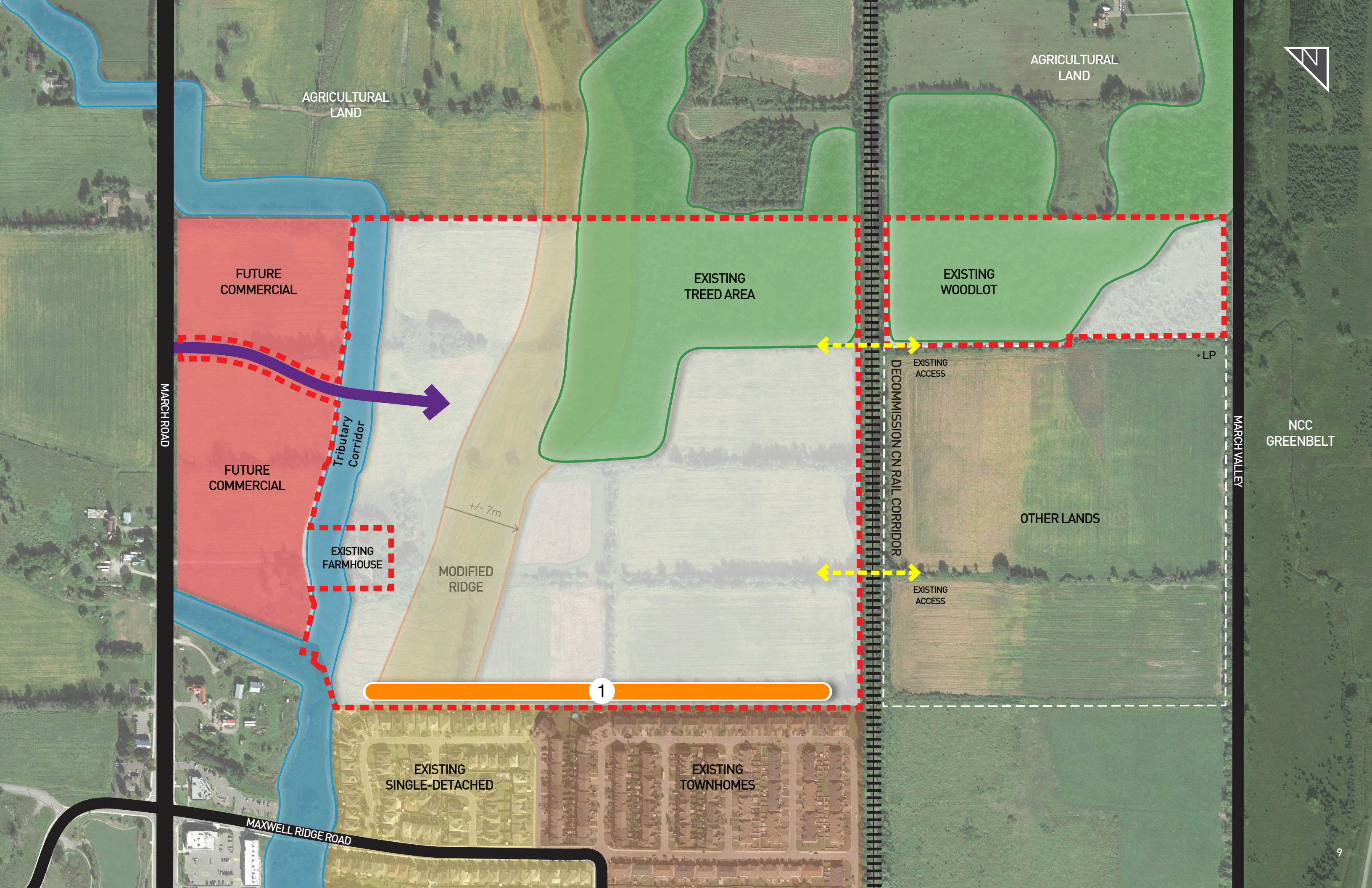
A portion of the Shirley's Brook Tributary 2 runs north-south along the western edge of the site. This corridor, which will be conveyed to the City through the plan of subdivision approval, is designated as an Urban Natural Feature within the City of Ottawa's Official Plan. Due to its classification and sensitivity, a 40m buffer surrounds this natural feature to accommodate vegetation and minimize adverse impacts from adjacent land uses. A portion of this corridor has been retained by 2559688 Ontario Inc. for access to the existing farmhouse.

Additional depth and vegetative buffering will also be provided in areas that abut existing residential lands for transitional and privacy considerations. The decommissioned CN rail corridor running along the east boundary of the site will also present a unique interface for the incoming neighbourhood. Although the corridor has yet to be re-designated, its future potential presents a valuable asset to the overall community.

Lastly, an existing woodlot and a proposed stormwater management pond east of the site, currently outside of the Urban Boundary, will be conveyed to the City through the draft plan process.

Legend

- Existing Woodlot / Treed Area
- Tributary Corridor
- Future Commercial
- Existing Single-Detached
- Existing Townhomes
- Subject Site
- Decommissioned CN Rail Corridor
- Major Roads
- Neighbourhood Entry Road
- Existing Access
- 1 Adjacent Existing Residential



MARCH ROAD

FUTURE COMMERCIAL

FUTURE COMMERCIAL

Tributary Corridor

EXISTING FARMHOUSE

MODIFIED RIDGE

+/- 7m

1

EXISTING SINGLE-DETACHED

EXISTING TOWNHOMES

MAXWELL RIDGE ROAD

AGRICULTURAL LAND

AGRICULTURAL LAND

EXISTING TREED AREA

EXISTING WOODLOT

DECOMMISSION CN RAIL CORRIDOR

EXISTING ACCESS

EXISTING ACCESS

+LP

OTHER LANDS

MARCH VALLEY

NCC GREENBELT







Neighbourhood Design.

Section B.

- 4 Vision & Design Principles.
- 5 Neighbourhood Master Plan.
- 6 Built Form.
- 7 Open Space.
- 8 Road Network.



Through the creation of a mindful, integrated, and cohesive network of parks, open spaces, roads, and pathways, Minto Kanata North will be an identifiable neighbourhood respectful of the regional charm, and complementary to the surrounding communities.





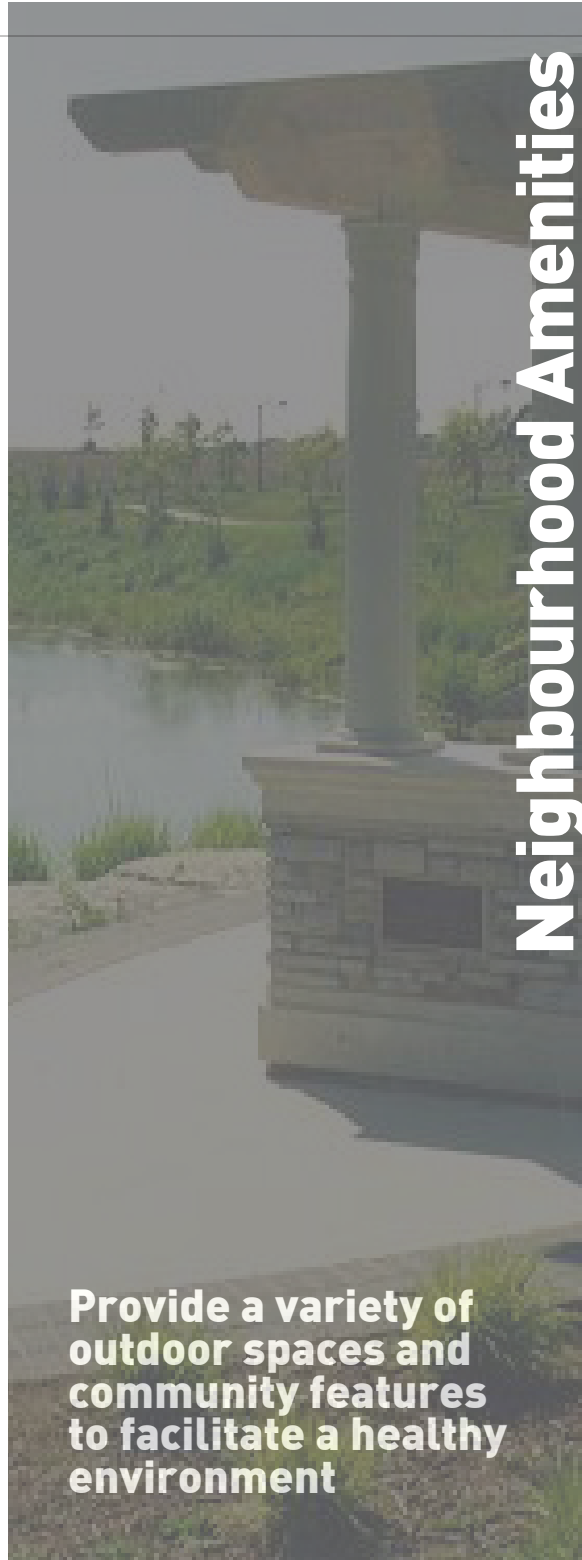
Compatibility of Built Form

Offer housing types and forms that are consistent with the surrounding neighbourhoods and entire Kanata North Community



Accessible Open Space

Strategically place parks and open spaces within the neighbourhood that will benefit all residents



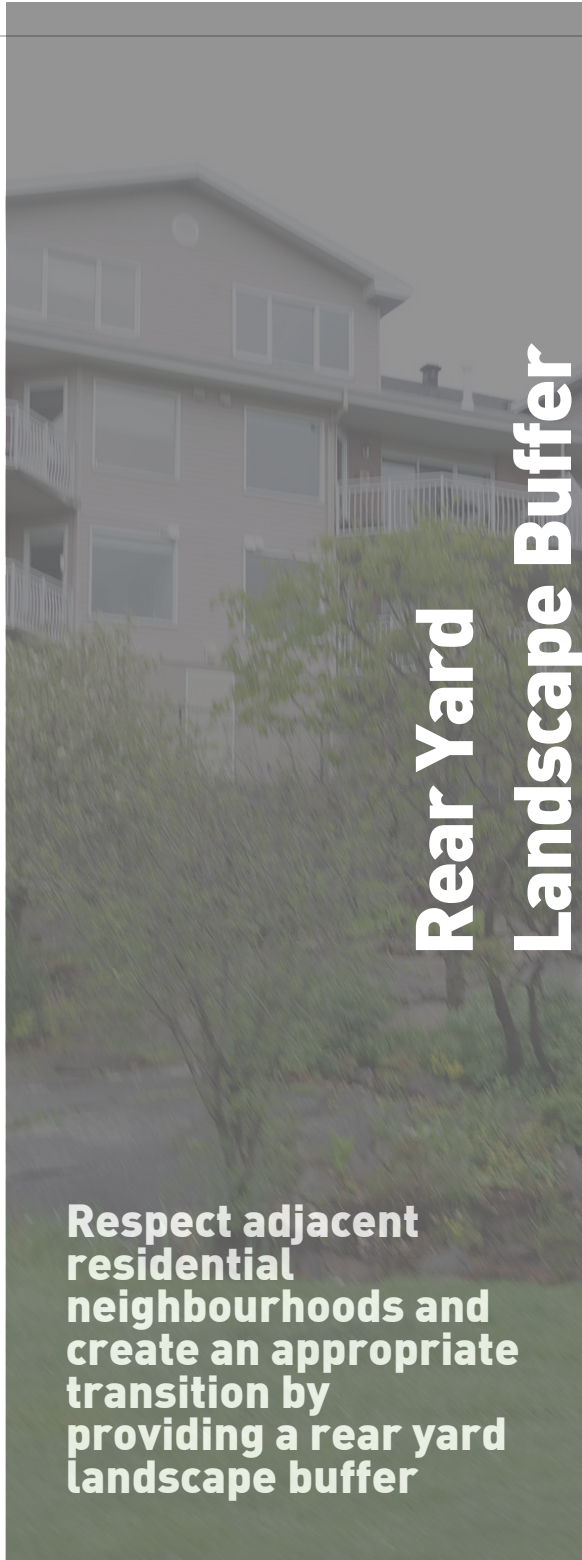
Neighbourhood Amenities

Provide a variety of outdoor spaces and community features to facilitate a healthy environment



Strong Street Presence & Pathway Connectivity and Linkages

Create a network of pathways and linkages throughout the neighbourhood that connect key features



Rear Yard Landscape Buffer

Respect adjacent residential neighbourhoods and create an appropriate transition by providing a rear yard landscape buffer

The Minto Kanata North Neighbourhood will be designed with the intent of providing thorough connectivity and accessibility for residents and visitors throughout the community. The presented road pattern features both collectors and local roads that allow for easy access to the school, neighbourhood park, parkette, and future commercial sites. This network of streets has also been designed to improve walkability and connectivity to neighbourhood amenities, with pathways situated throughout to increase access to existing and future developments and open spaces.

The main neighbourhood entry, directly off of March Road, will include aesthetically enhanced gateway features and an improved collector road streetscape to provide a 'sense of arrival' for both residents and visitors. The design and character of these features will also be reflected in various landscape components, markers, and fencing treatments to create a consistent theme throughout the neighbourhood.

Homes backing onto the existing residential neighbourhood to the south have been designed to complement the existing built form typologies and will have additional depth to accommodate a landscape buffer. Please note, landscape buffer subject to a Tree Conservation Report (TCR).

Another key component of the plan is the network of integrated parks and open spaces. These strategically placed amenities, located along major roads and at key terminations, will cater to the surrounding population and offer opportunities for both passive and active outdoor activities. Additionally, the tributary corridor to the west will further improve north-south connectivity through the creation of a recreational pathway (3m Tributary Corridor Trail).

Overall, Minto Kanata North will provide a distinct neighbourhood identity that respects, preserves, and enhances existing open spaces and natural features.

Legend












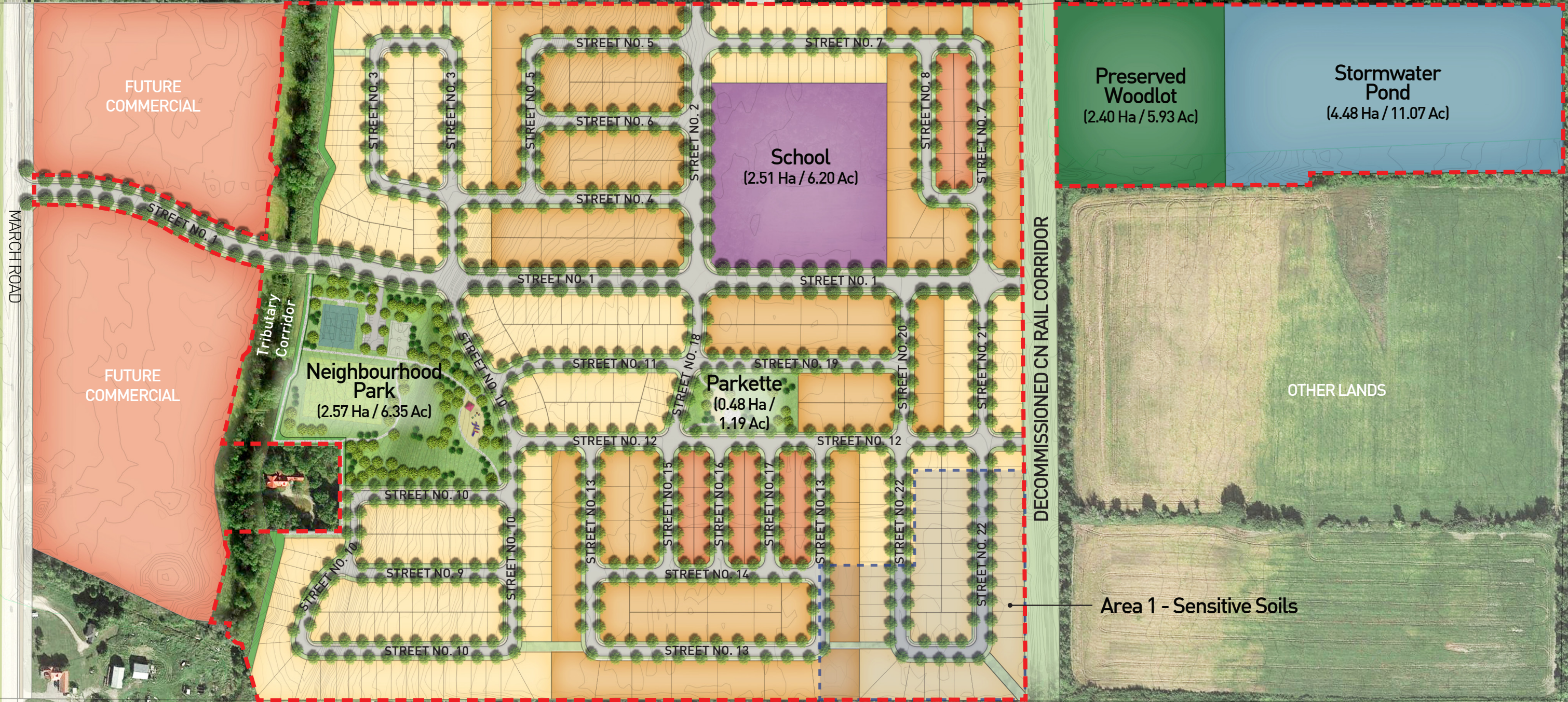
-  Single-Detached
-  Front Drive Townhomes
-  Back-To-Back Townhomes
-  Future Commercial
-  School
-  Stormwater Pond
-  Parks & Open Space
-  Recreational Pathway
-  Rail Corridor
-  Woodlot
-  Tributary

Figure 4 Kanata North Master Plan



**FUTURE
COMMERCIAL**

**FUTURE
COMMERCIAL**

**Neighbourhood
Park**
(2.57 Ha / 6.35 Ac)

School
(2.51 Ha / 6.20 Ac)

Parkette
(0.48 Ha /
1.19 Ac)

**Preserved
Woodlot**
(2.40 Ha / 5.93 Ac)

**Stormwater
Pond**
(4.48 Ha / 11.07 Ac)

OTHER LANDS

Area 1 - Sensitive Soils

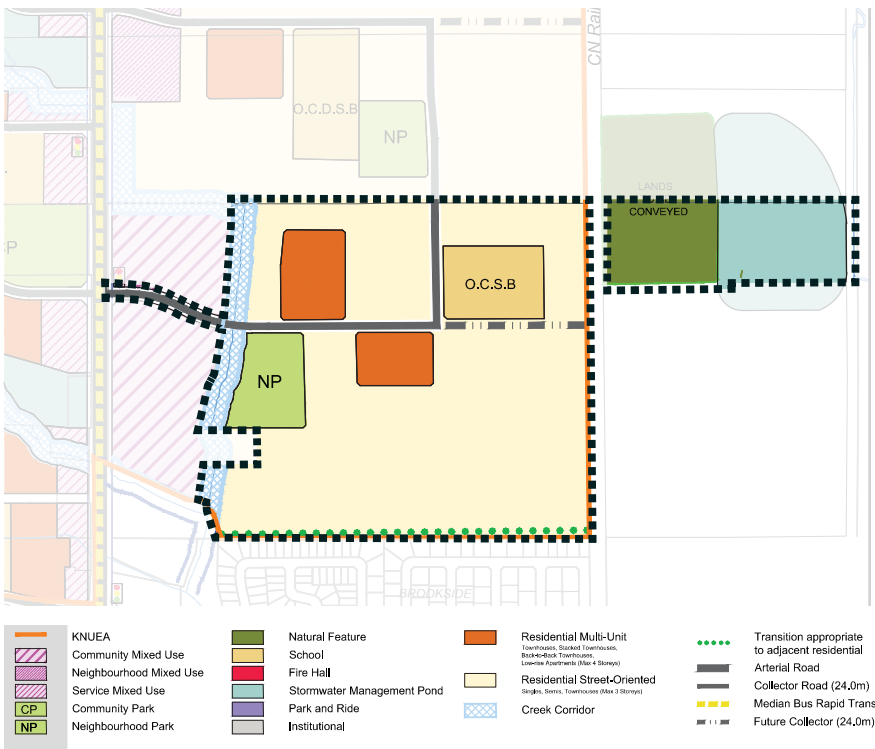
MARCH ROAD

MARCH VALLEY

DECOMMISSIONED CN RAIL CORRIDOR

In conformity with the CDP, housing that will be incorporated in Minto Kanata North include single-detached homes, front drive townhomes, and back-to-back townhomes, all having a maximum of three storeys. These typologies are consistent with the existing neighbourhood to the south. Blocks backing onto this development will benefit from having deeper lot depths that reflect the adjacent residential conditions and create an appropriate transition/buffer.

The subject lands will also contain a 2.51 hectare school site, a 2.57 hectare neighbourhood park, and a smaller 0.48 hectare parkette, all of which are of acceptable size and in conformance with the CDP.



Kanata North - CDP Land Use Plan

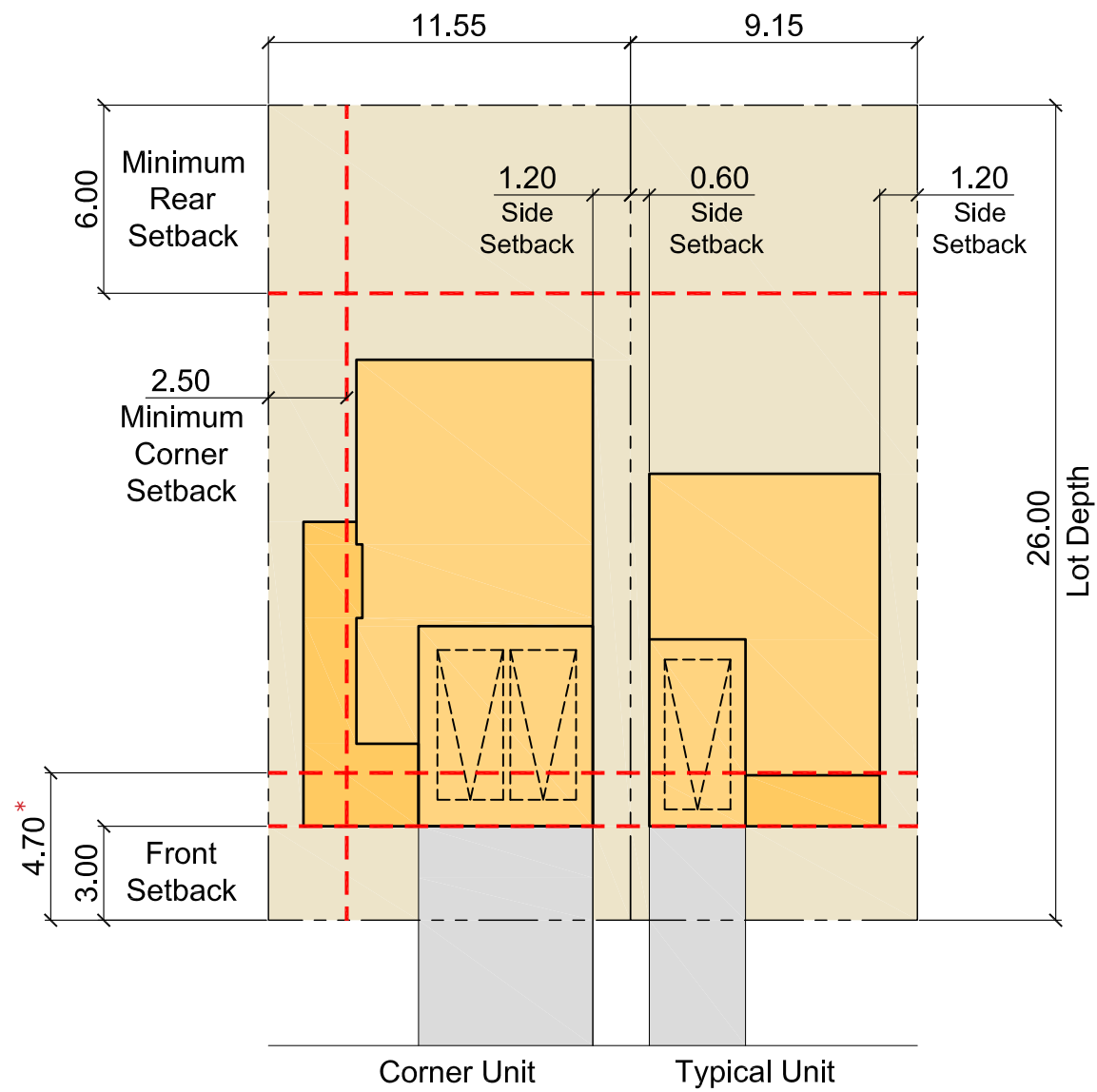
Figure 5 Land Use Map



36.00 KNUEA Average Density
(units per gross hectare)
Minimum

Unit Count	Number of Units	% of Total	DENSITY 41.8 UPH
Single-Detached	324	35%	
Front Drive Townhome	481	53%	
Back-To-Back Townhome	110	12%	
Total	915	100%	

30' Single-Detached Home



* 4.7m Front Setback For Sensitive Soils
 ** 5.0m Rear Yard Setback For Lots Abutting Existing Residential

Figure 6 30' Single-Detached Home Lotting Standard and Measurements



Traditional Style



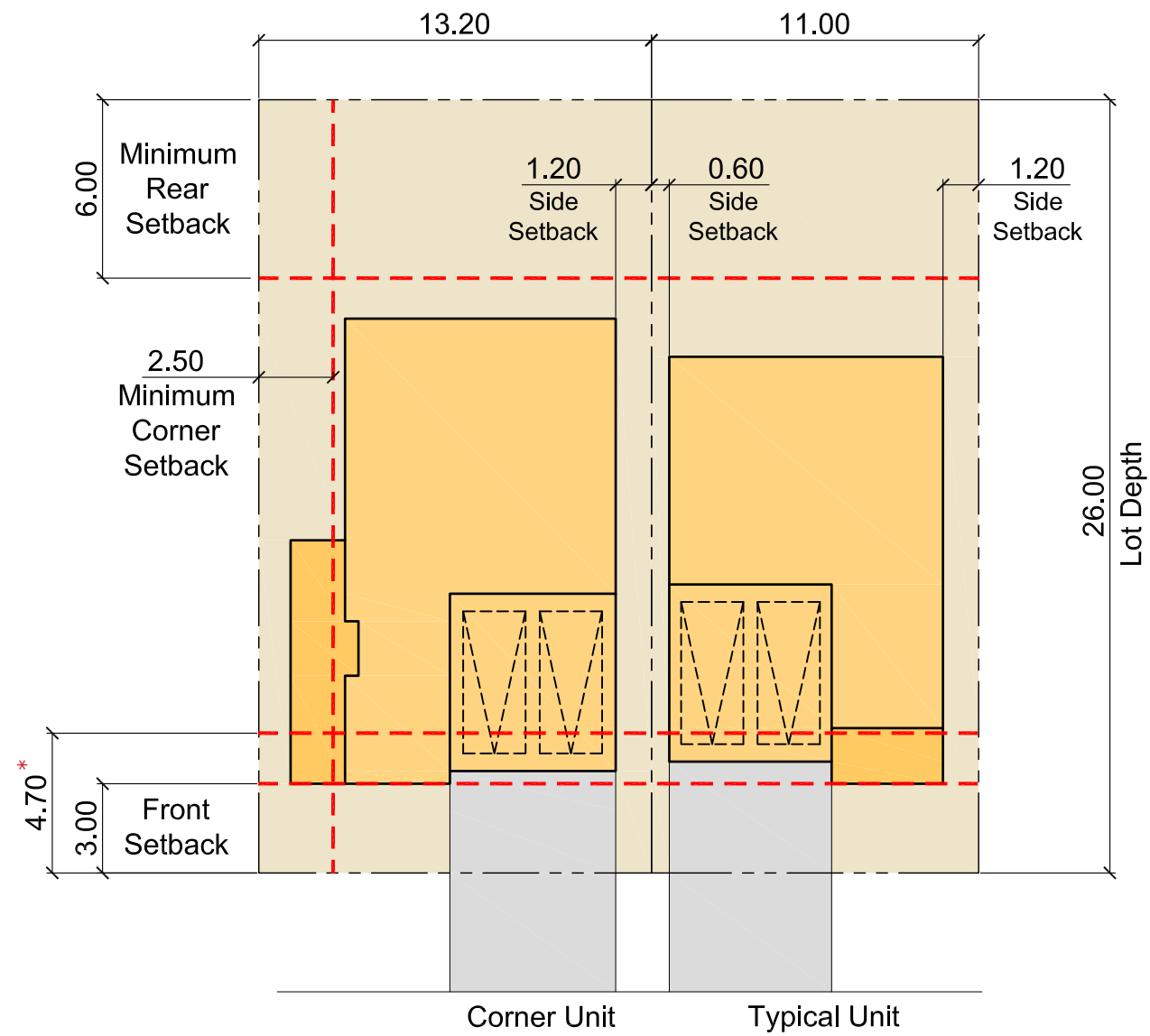
Traditional Style



Contemporary Corner Product

Figure 7 Conceptual Architectural Renderings - 30' Single-Detached Home

36' Single-Detached Home ■



* 4.7m Front Setback For Sensitive Soils
 ** 5.0m Rear Yard Setback For Lots Abutting Existing Residential

Figure 8 36' Single-Detached Home Lotting Standard and Measurements



Contemporary Style



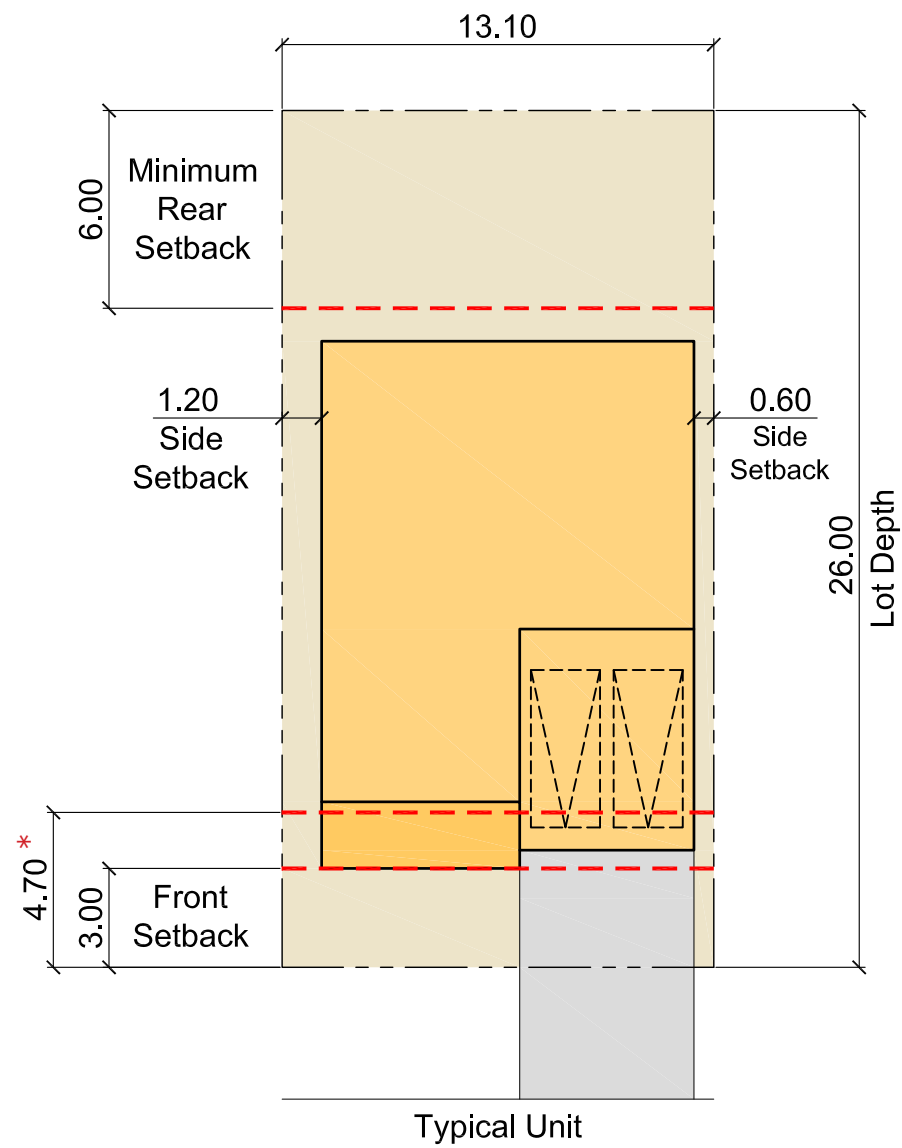
Traditional Style



Traditional Corner Product

Figure 9 Conceptual Architectural Renderings - 36' Single-Detached Home

43' Single-Detached Home



* 4.7m Front Setback For Sensitive Soils
 ** 5.0m Rear Yard Setback For Lots Abutting Existing Residential

Figure 10 43' Single-Detached Home Lotting Standard and Measurements



Traditional Style



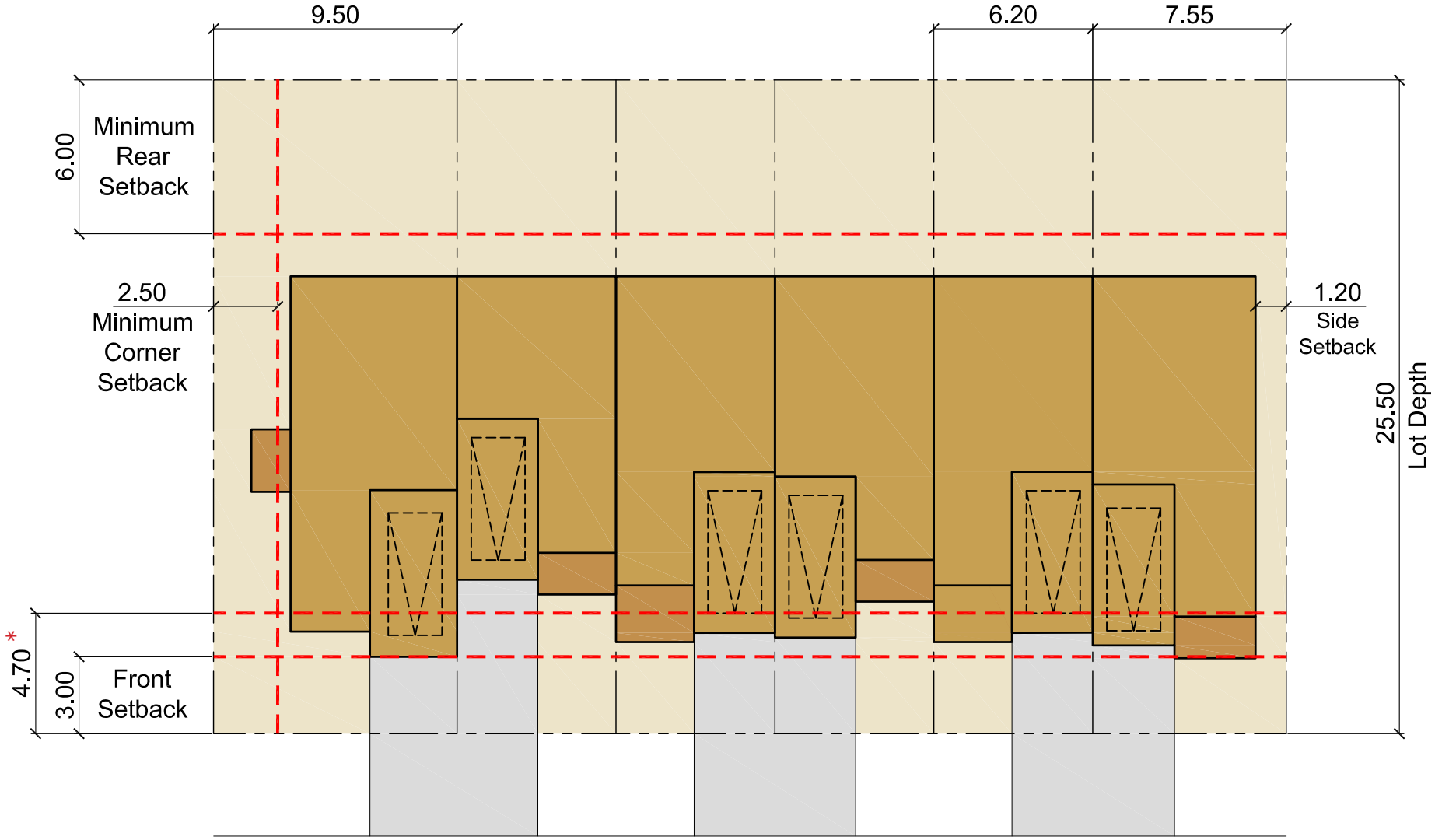
Traditional Style



Contemporary Style

Figure 11 Conceptual Architectural Renderings - 43' Single-Detached Home

Front Drive Townhome



* 4.7m Front Setback For Sensitive Soils
 ** 5.0m Rear Yard Setback For Lots Abutting Existing Residential

Figure 12 Front Drive Townhomes Lotting Standard and Measurements



Traditional Style



Contemporary Style

Figure 13 Conceptual Front Drive Townhomes Renderings

Back-To-Back Townhome

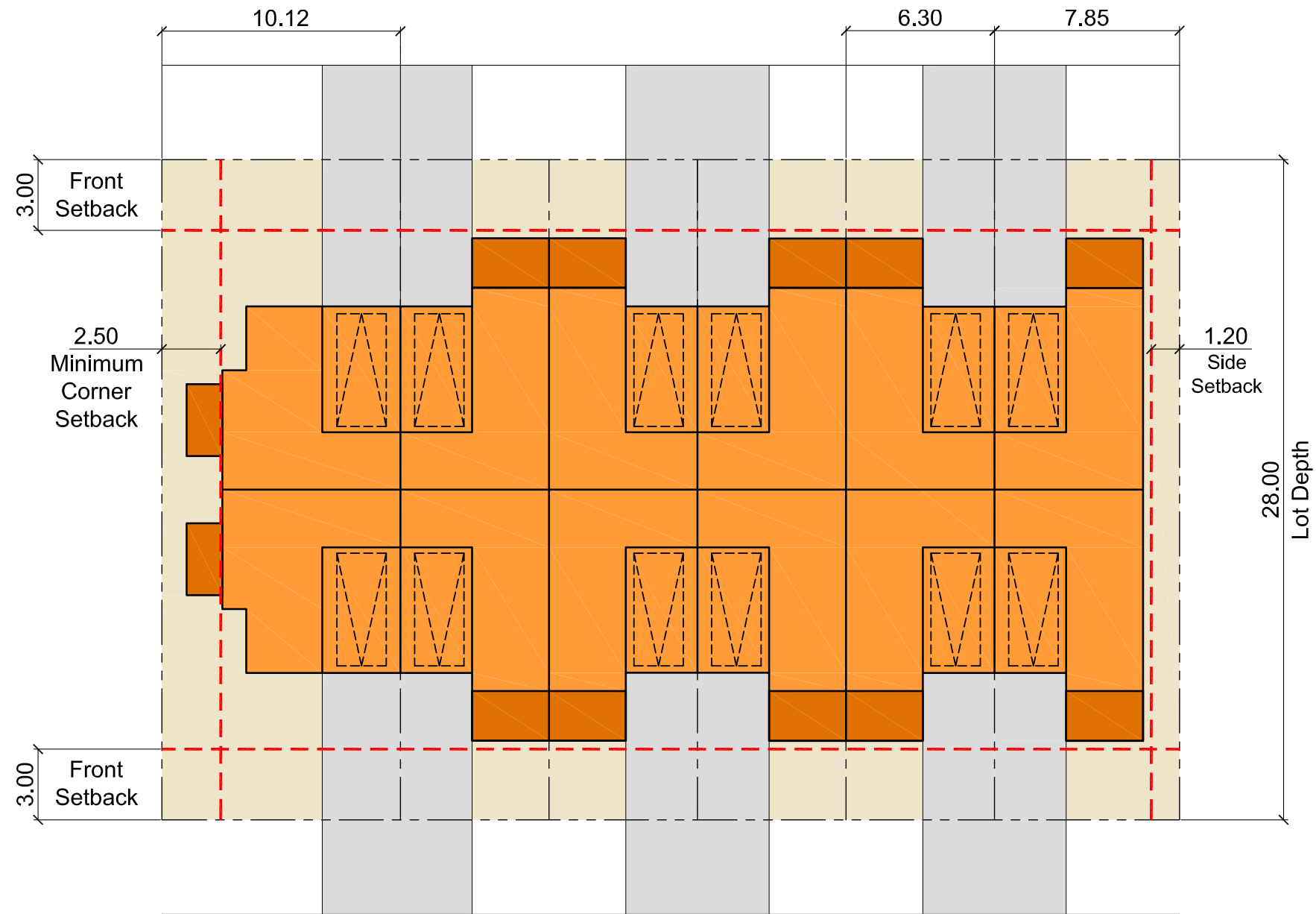


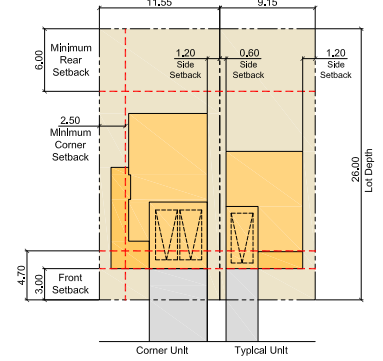
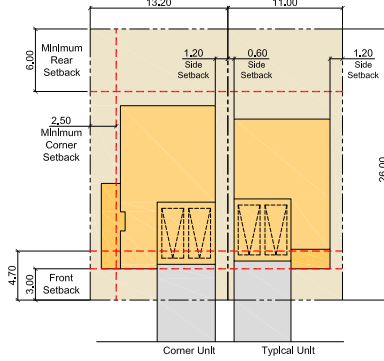
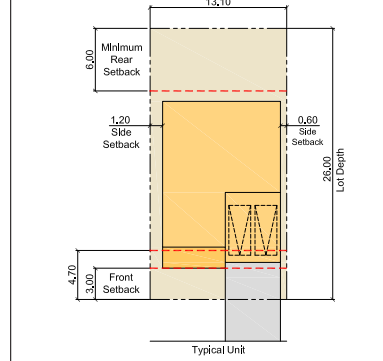
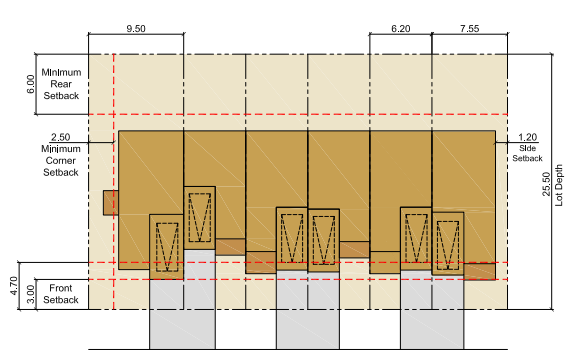
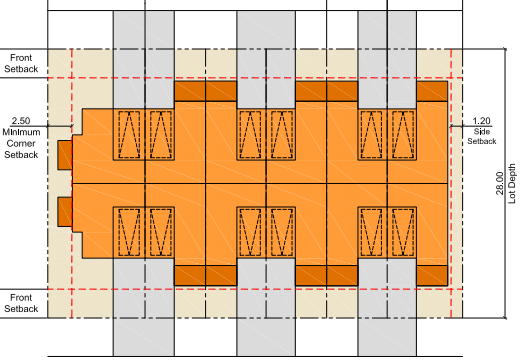
Figure 14 Back-To-Back Townhomes Lotting Standard and Measurements



Traditional Style

Figure 15 Conceptual Back-To-Back Townhomes Rendering

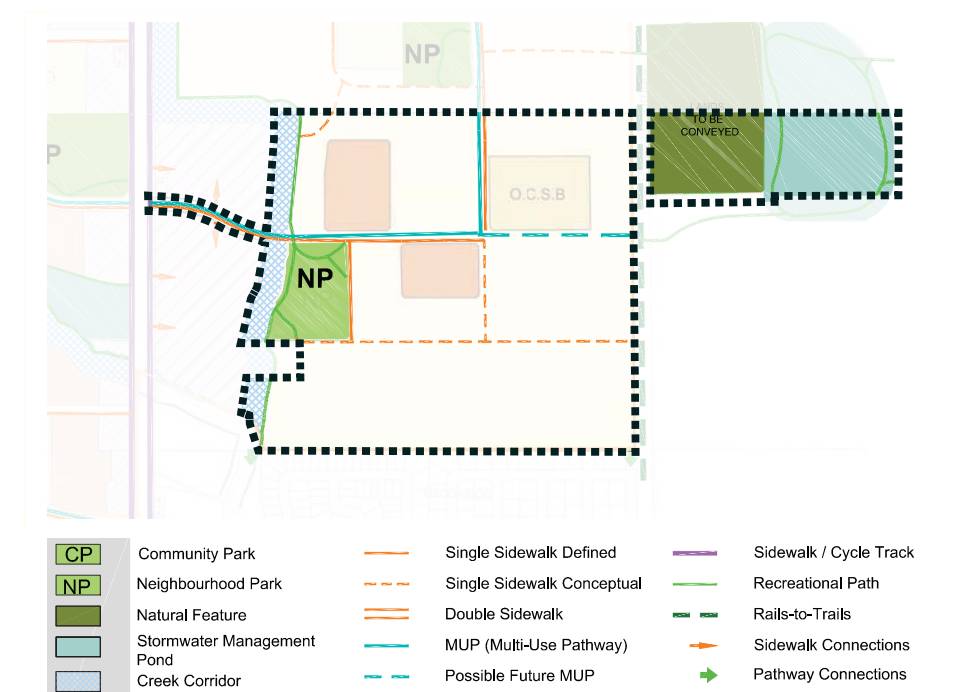
Setback Summary

Product	30' Singles	36' Singles	43' Singles	Product	Front Drive Townhomes	Back-To-Back Townhomes
Single-Detached				Townhomes		
Front Yard Setback	3.00m	3.00m	3.00m	Front Yard Setback	3.00m	3.00m
	4.70m (for sensitive soils)	4.70m (for sensitive soils)	4.70m (for sensitive soils)		4.70m (for sensitive soils)	-
Rear Yard Setback	6.00m	6.00m	6.00m	Rear Yard Setback	6.00m	-
	5.00m (abutting existing residential)	5.00m (abutting existing residential)	5.00m (abutting existing residential)		5.00m (abutting existing residential)	-
Interior Side Yard Setback	1.80m (with the min on one side at least 0.6)	1.80m (with the min on one side at least 0.6)	1.80m (with the min on one side at least 0.6)	Interior Side Yard Setback	1.20m	1.20m
Corner Side Yard Setback	2.50m	2.50m	2.50m	Corner Side Yard Setback	2.50m	2.50m

As fundamental and valued elements of Minto Kanata North, parks, open spaces, and natural features will be strategically located to cater to the recreational needs of residents and visitors. Depending on final grading permissions, where appropriate, these open spaces will be embedded with Low Impact Development principles and practices such as swales, rain gardens, and permeable surfaces. The preserved woodlot and stormwater pond will provide additional open space and trails while adding to the overall diversity of the neighbourhood. Overall, parks, open spaces, and natural features will be publicly accessible, visible, and located along primary roads.

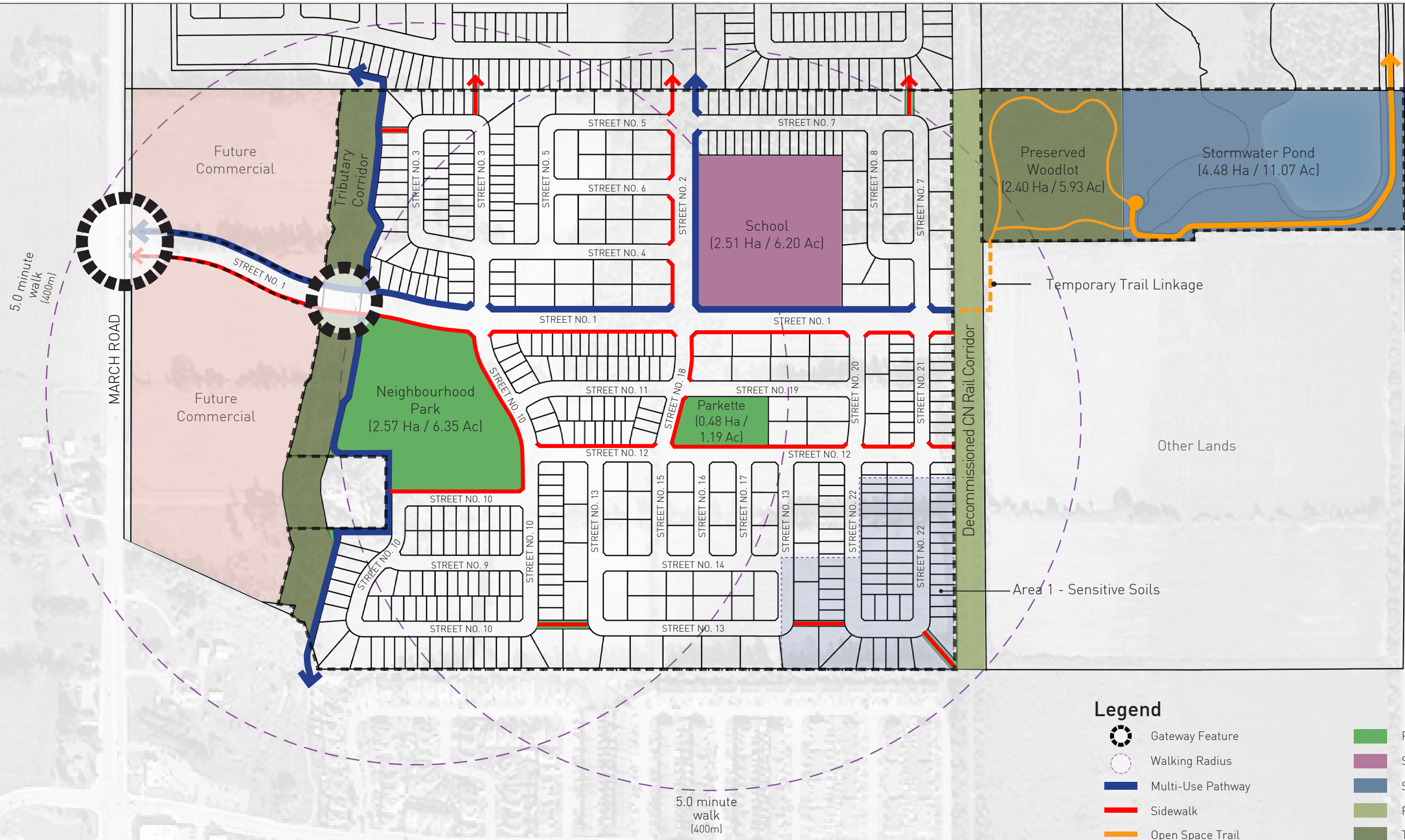
The parks are categorized into two typologies:

- Neighbourhood Park (1.20 - 3.20 ha) - Active/passive park space with play equipment, shade structures, sports fields, multi-purpose courts, and seating areas.
- Parkette (0.40 - 1.20 ha) - Active/passive park space with small playground equipment and seating areas.



Kanata North - CDP Parks and Open Space Plan

Figure 16 Open Space Diagram



Landscape Features



Figure 17 Landscape Features Diagram



Community Gateway



Neighbourhood Gateway

Pedestrian Typologies



Legend

- █ Multi-Use Pathway
- █ 2.0m Sidewalk
- █ 1.8m Sidewalk
- █ Walkway Block
- █ Open Space Trail
- █ Tributary Corridor Trail (MUP)



Figure 18 Trails and Pathways Diagram



Multi-Use Pathway



Neighbourhood Sidewalk



Open Space Trail

Neighbourhood Park Fit Plan



*Conceptual design subject to final detail design and grading

Amenity Space & Playground



Tennis & Basketball Courts



Neighbourhood Park Cross Sections

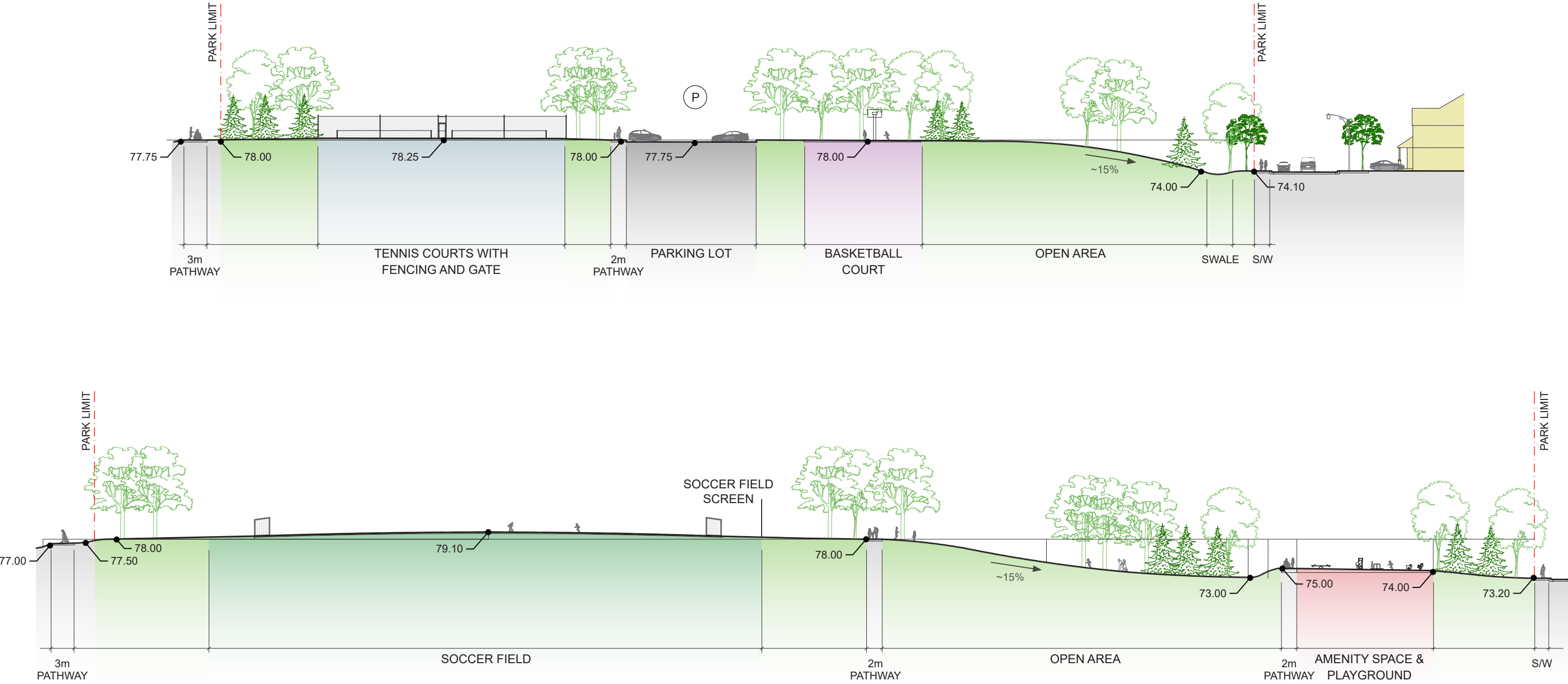


Figure 20 Neighbourhood Park Cross Sections

Parkette Fit Plan



*Conceptual design subject to final detail design and grading



Playground & Pathways



Open Lawn / Play



Park Programming Possibilities



Legend

- █ Multi-Use Pathway
- █ Sidewalk
- █ Open Space Trail
- █ Parks & Open Space
- █ Storm Pond
- █ Rail Corridor
- █ Tributary / Woodlot

Figure 22 Parks & Trails Diagram



Potential Neighbourhood Park Programming

- Tennis Court (w. lights)
- Basketball Courts
- Intermediate Soccer Field
- Open Lawn / Area
- Playground
- Shade Shelter
- Benches / Seating
- Picnic Tables

- Bike Racks
- Waste Receptacles
- New Trees Planted
- Parking Lot

Potential Parkette Programming

- Open Lawn / Area
- Playground
- Benches / Seating
- Picnic Tables
- Bike Racks
- Waste Receptacles
- New Trees Planted

Rear Yard Buffer Section

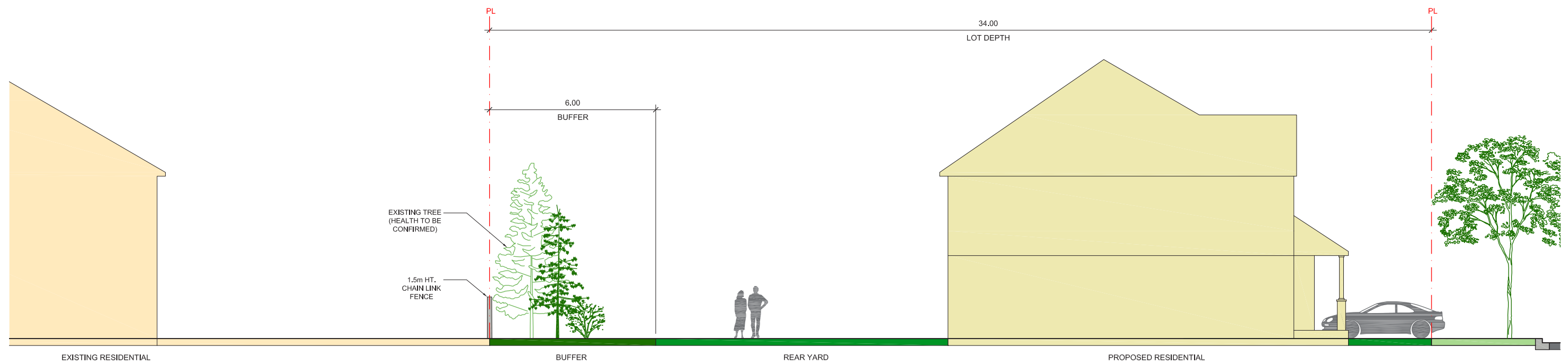


Figure 23 Rear Yard Buffer Section

Due to the existing neighbourhood to the south of Minto Kanata North, the CDP contains guidelines for appropriate transitions between new and existing neighbourhoods. Proposed residential blocks that abut the existing community will be provided with additional depth to accommodate a 6m landscape buffer for retention of an existing treed area, the health of which is to be confirmed by the EIS.



Tributary Corridor Section

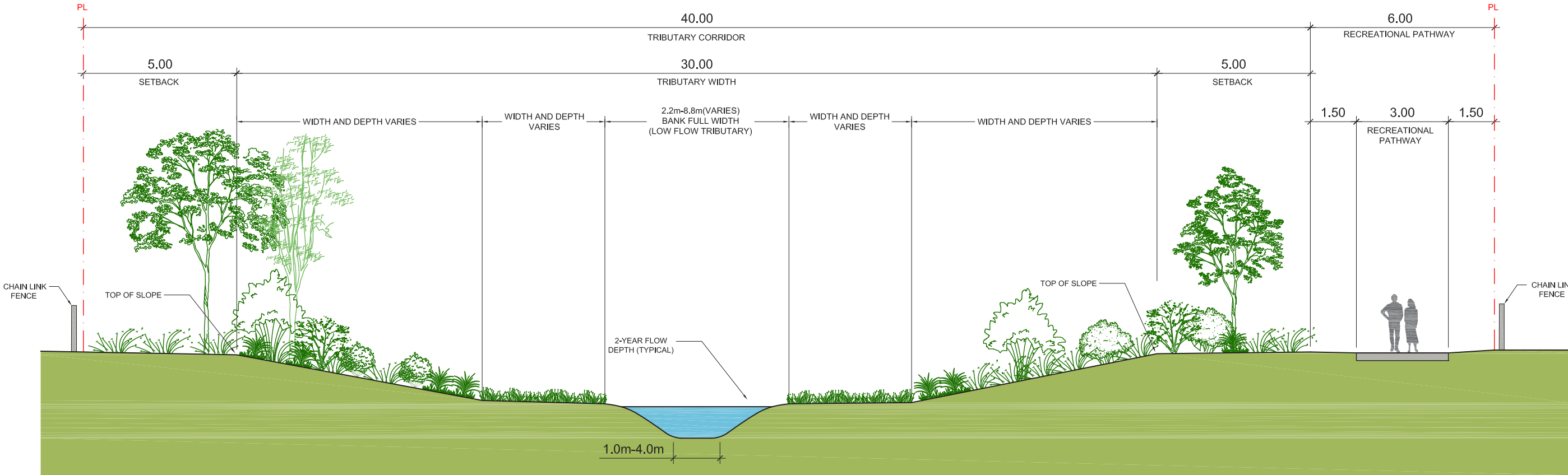
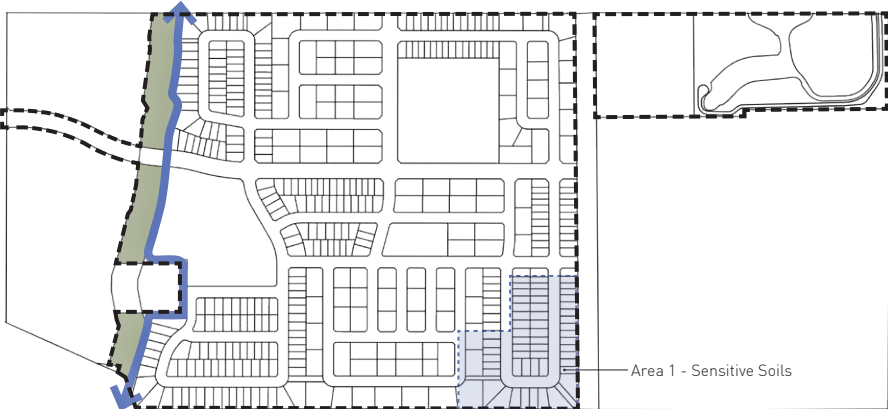


Figure 24 Tributary Corridor Section

Shirley’s Brook Tributary 2 is designated as an Urban Natural Feature that runs north-south along the west side of the site. The 40.0m tributary corridor will include a selection of vegetation suitable to the conditions. As outlined in the CDP, just east of the tributary will be a 6.0m recreational pathway allowing for access and views to the natural feature. The corridor will also be directly accessible from the abutting neighbourhood park and various walkway blocks.



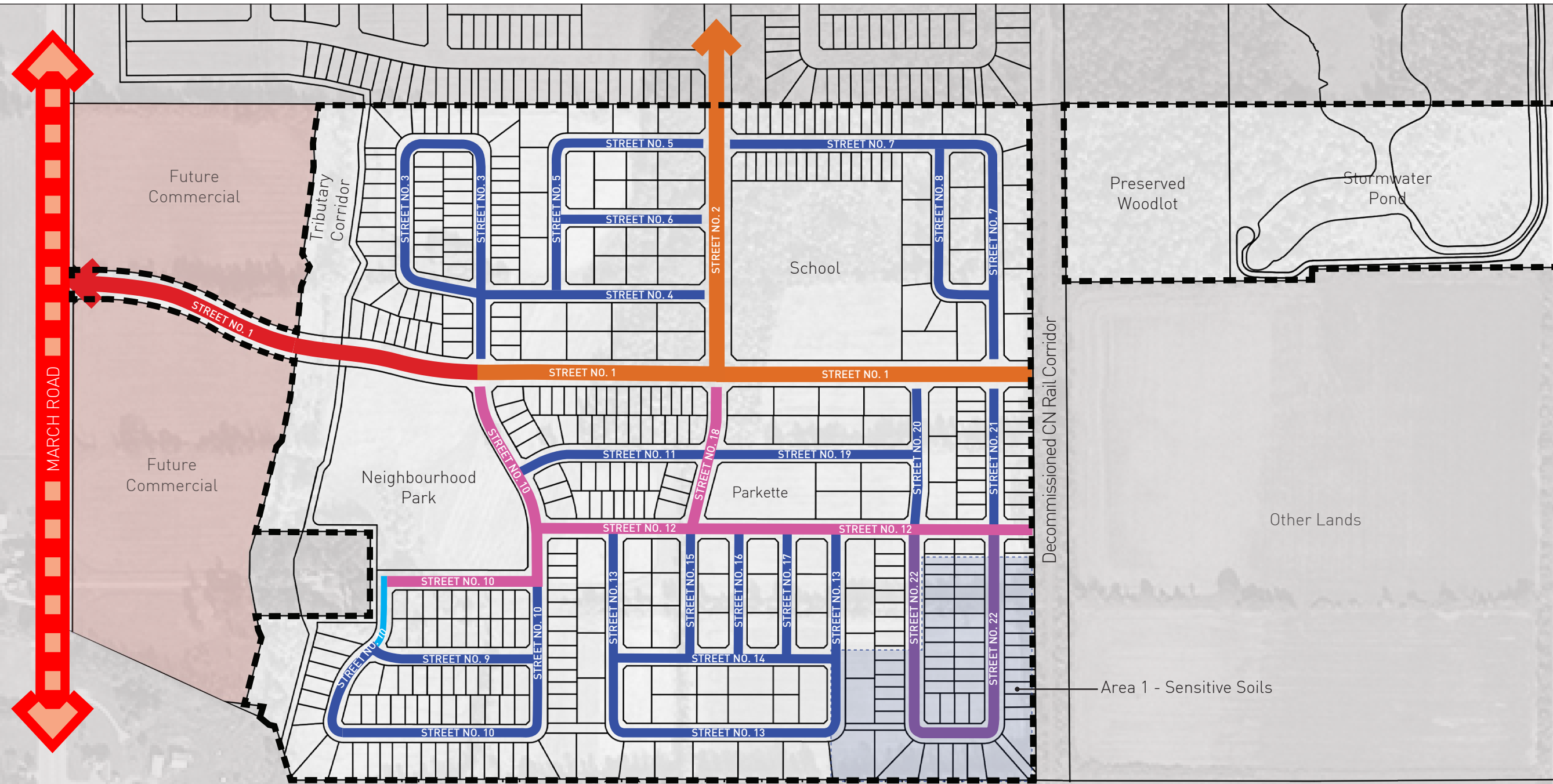
Minto Kanata North will consist of five road typologies that will improve overall connectivity and enhance the character of the neighbourhood. A 26.0m Major Neighbourhood Collector will serve as the main gateway between the residential area and March Road, and a 24.0m Minor Neighbourhood Collector will act as the main 'spine' through the development providing access to any future development north of the site and east of the decommissioned railway corridor. The 18.0m, 16.5m & 14.0m Local Roads will serve as connectors to the Minor Collector, their varying widths associated in response to their specific surroundings and environment. This network of roads will be functional for pedestrians, cyclists, and vehicles while providing terminating views and vistas towards parks and natural features.

As mentioned previously, running north-south along the March Road arterial will be the proposed Kanata North Transitway, a bus rapid transit corridor running between Klondike Road and the terminal Park & Ride Station north of the subject lands.



Kanata North - CDP Demonstration Plan

Figure 25 Street Hierarchy Diagram



Legend

-  26.0m Major Collector Road
-  24.0m Minor Collector Road
-  18.0m Local Road - Area 1
-  18.0m Local Road - Area 2
-  16.5m Local Road
-  14.0m Local Road
-  Proposed Bus Rapid Transit Route

Major Neighbourhood Collector Section (26.0m ROW)

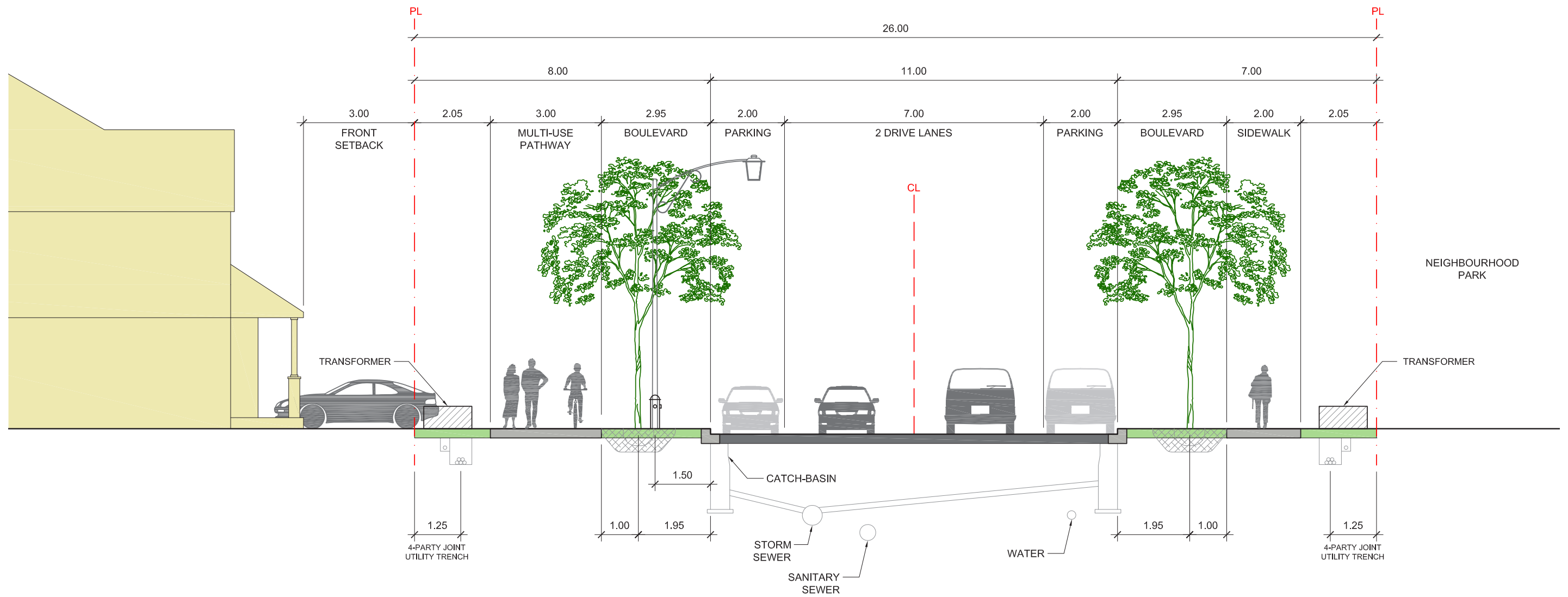


Figure 26 Major Neighbourhood Collector (Typical 26.0m ROW)

The Major Neighbourhood Collector (26.0m) serves as the main gateway road connecting Minto Kanata North with March Road to the west, cutting through the future commercial lands, as highlighted in the CDP. It will consist of the following elements: 3.0m multi-use pathway, 2.0m sidewalk, double-sided on-street parking, and street trees within the boulevard.



Minor Neighbourhood Collector Section (24.0m ROW)

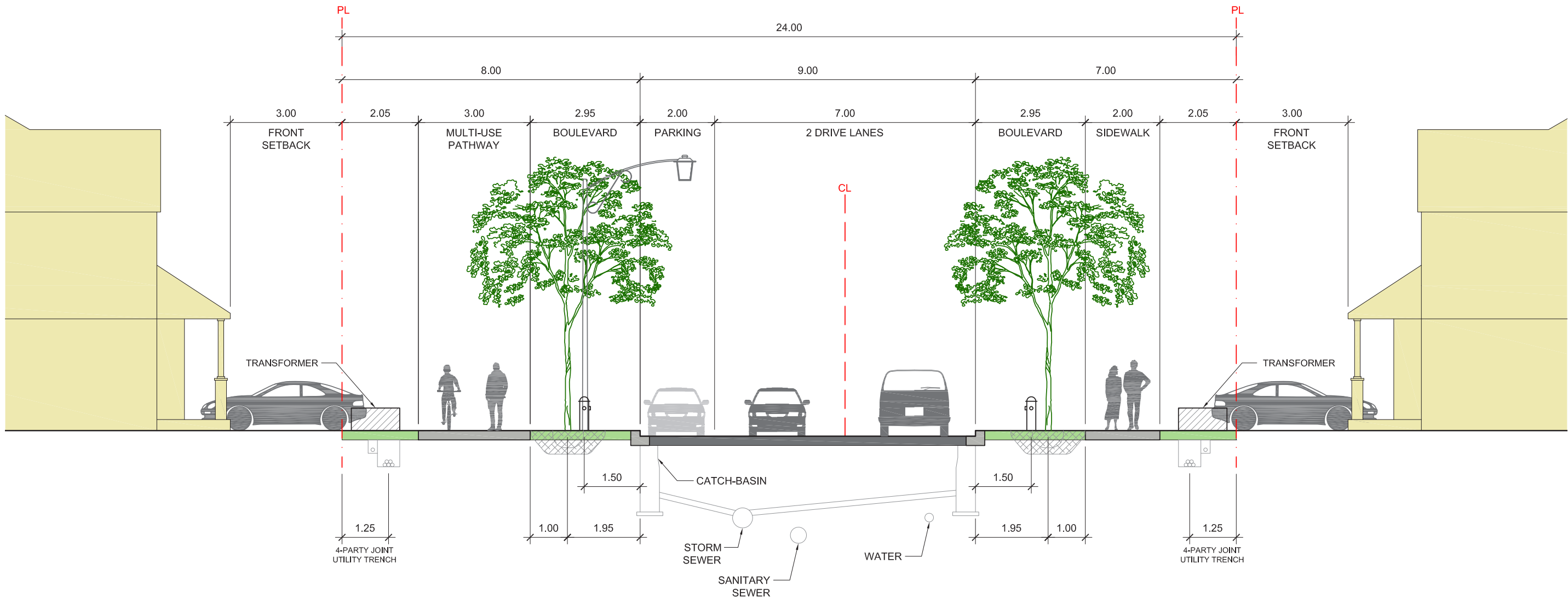
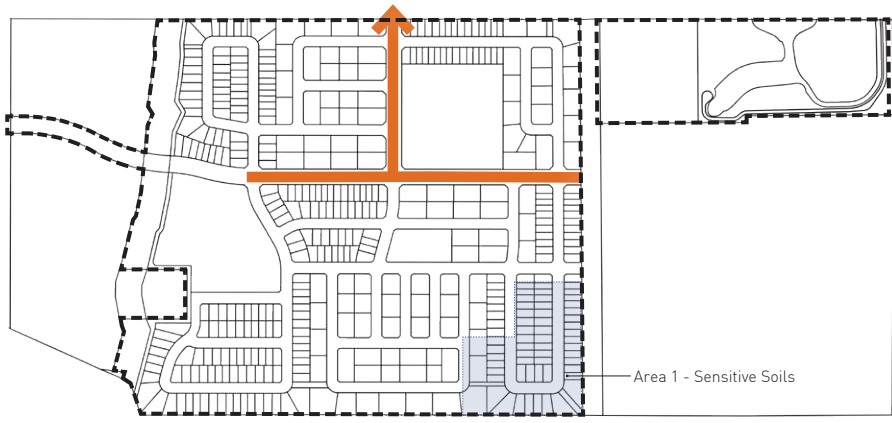


Figure 27 Minor Neighbourhood Collector (Typical 24.0m ROW)

The Minor Neighbourhood Collector (24.0m) serves as the primary thoroughfare connecting the 26.0m Major Collector to the decommissioned CN rail corridor on the east, as well as the future residential development (Valecraft Homes) to the north, as highlighted in the CDP. The 24.0m Minor Collector will be fronted and flanked onto by a mix of single-detached houses and front drive townhomes. It will consist of the following elements: 3.0m multi-use pathway, 2.0m sidewalk, single-sided on-street parking, and street trees within the boulevard.



Local Road Section (18.0m ROW) ■

Area 1 - High Plasticity Soils

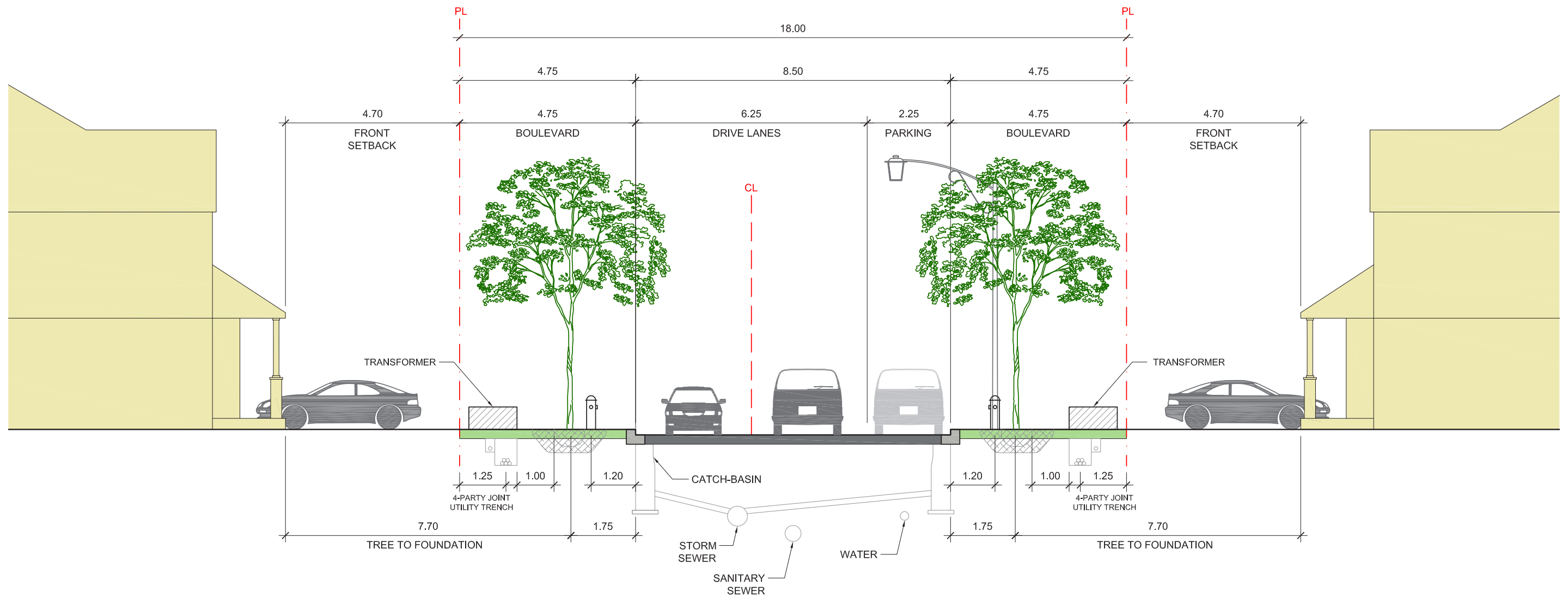
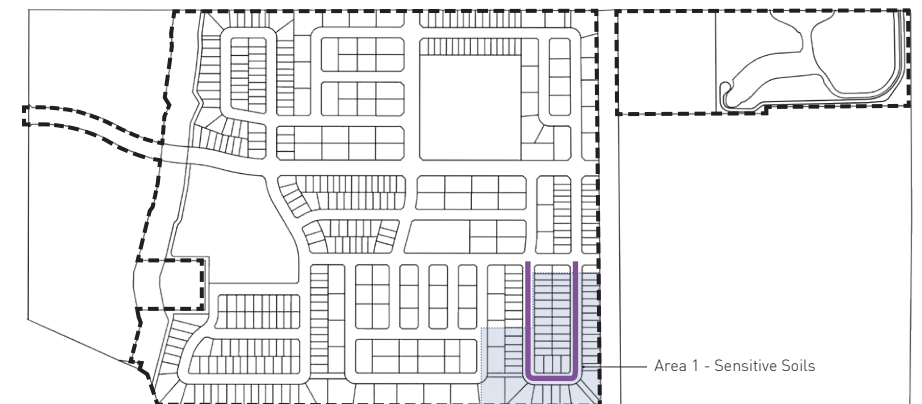


Figure 28 Local Road (Typical 18.0m ROW - Area 1)

A Local Road (18.0m) without sidewalk will serve as the primary street within Area 1, the portion of the site containing high plasticity soils. This extra width, along with a 4.70m front setback, will allow for significant tree growth to take place (7.70m tree to foundation separation). The Local Road (18.0m) - Area 1 will consist of the following elements: single-sided on-street parking and street trees within the boulevard.



Local Road Section (18.0m ROW)

Area 2 - Low to Medium Plasticity Soils

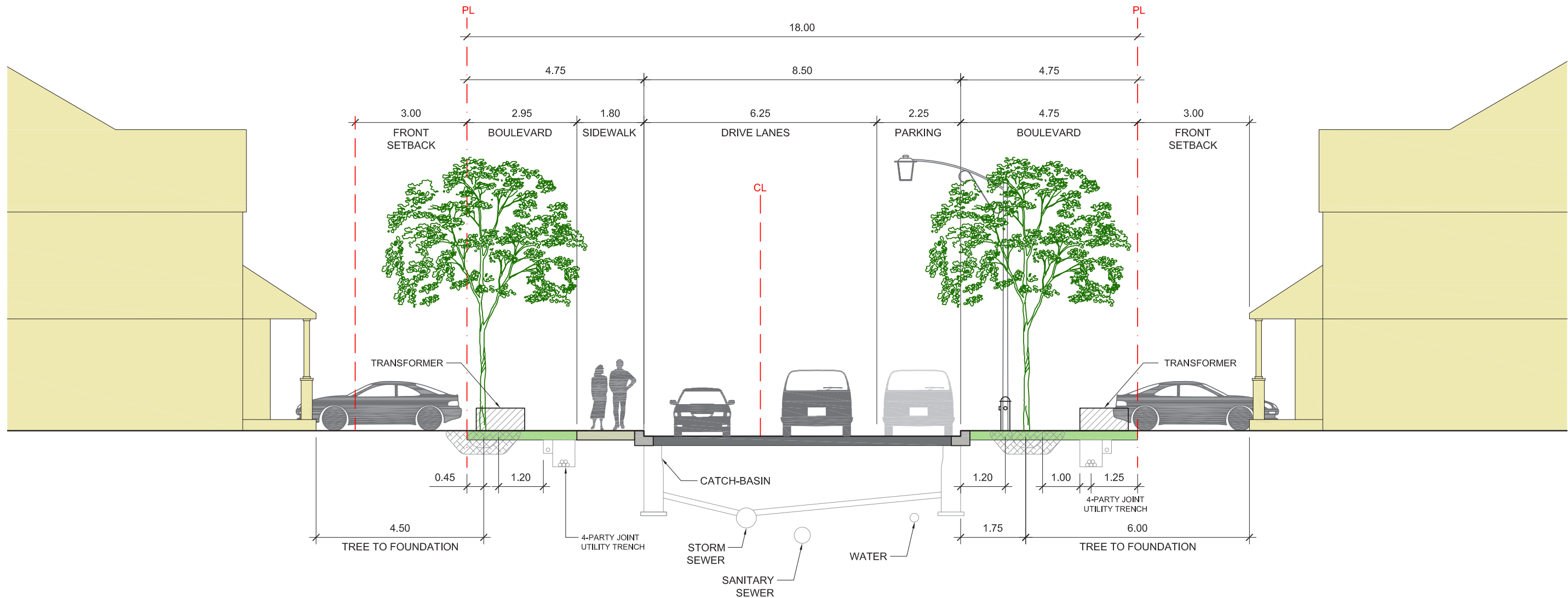
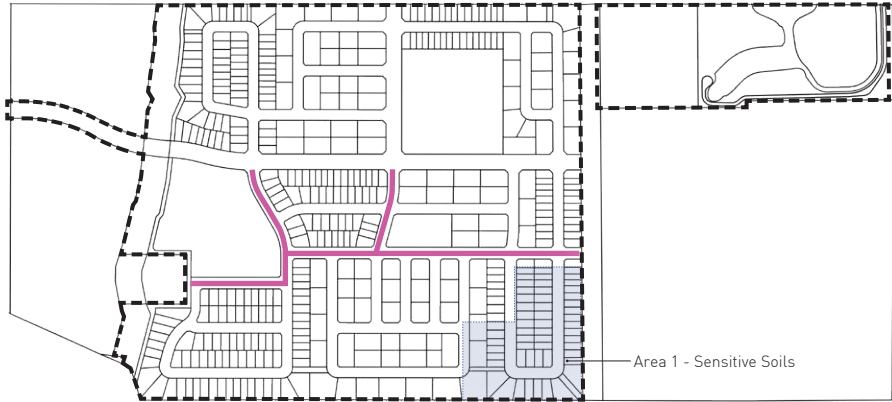


Figure 29 Local Road (Typical 18.0m ROW - Area 2)

Within Area 2, the Local Road (18.0m) with sidewalks will serve as the primary local roads within the neighbourhood, providing residents a safe means of connecting to all trails, parks, and open spaces. The Local Road (18.0m) Area 2 will consist of the following elements: single-sided on-street parking, street trees within the boulevard, and a 1.8m single curb-face sidewalk.



Local Road Section (16.5m ROW)

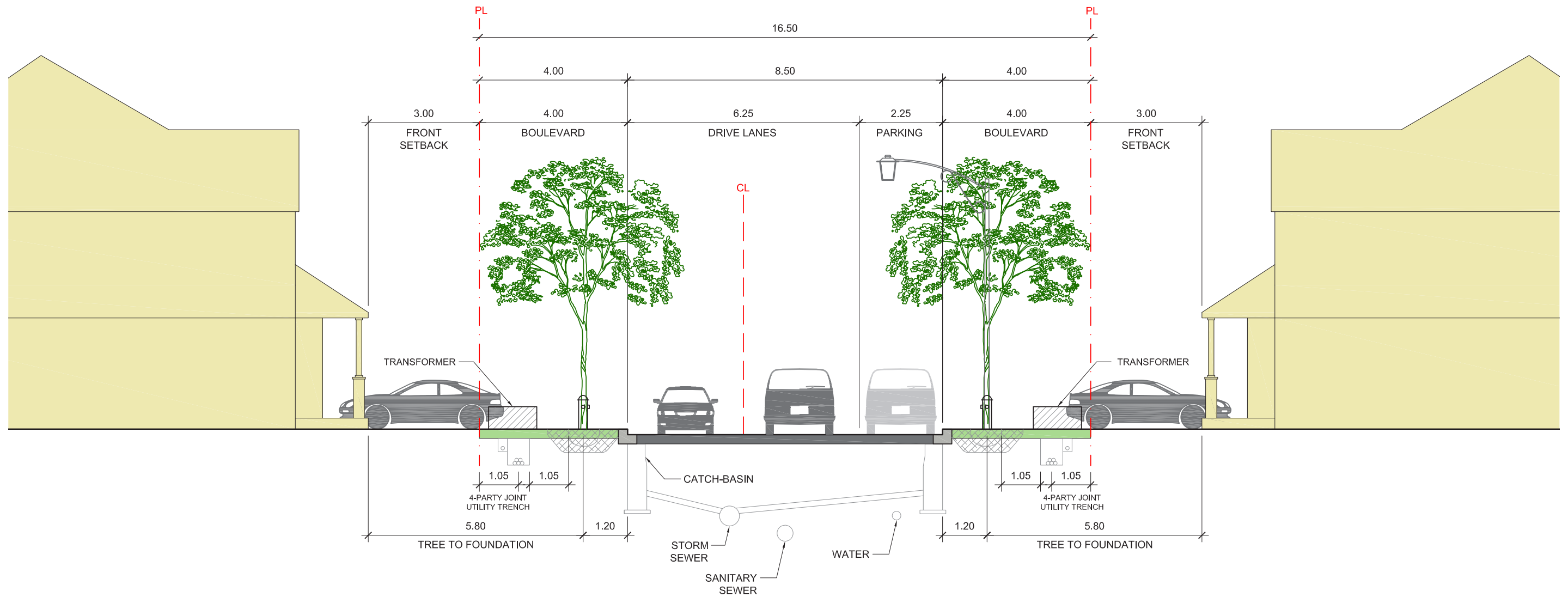
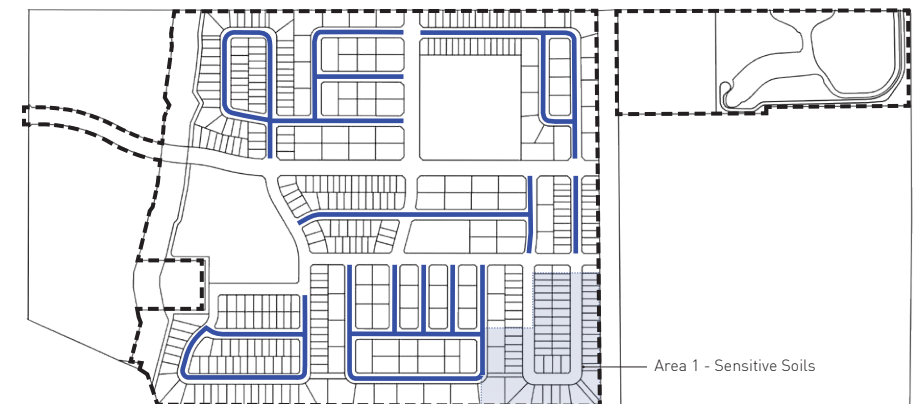


Figure 30 Local Road (Typical 16.5m ROW)

The Local Roads (16.5m) will also serve as a secondary right-of-way within the neighbourhood. As highlighted in the CDP, these streets will further improve connectivity to the neighbourhood's parks, open spaces, and school site, and future development to the east of the subject site. The Local Road (16.5m) will consist of the following elements: single-sided on-street parking and street trees.



Local Road Section (14.0m ROW)

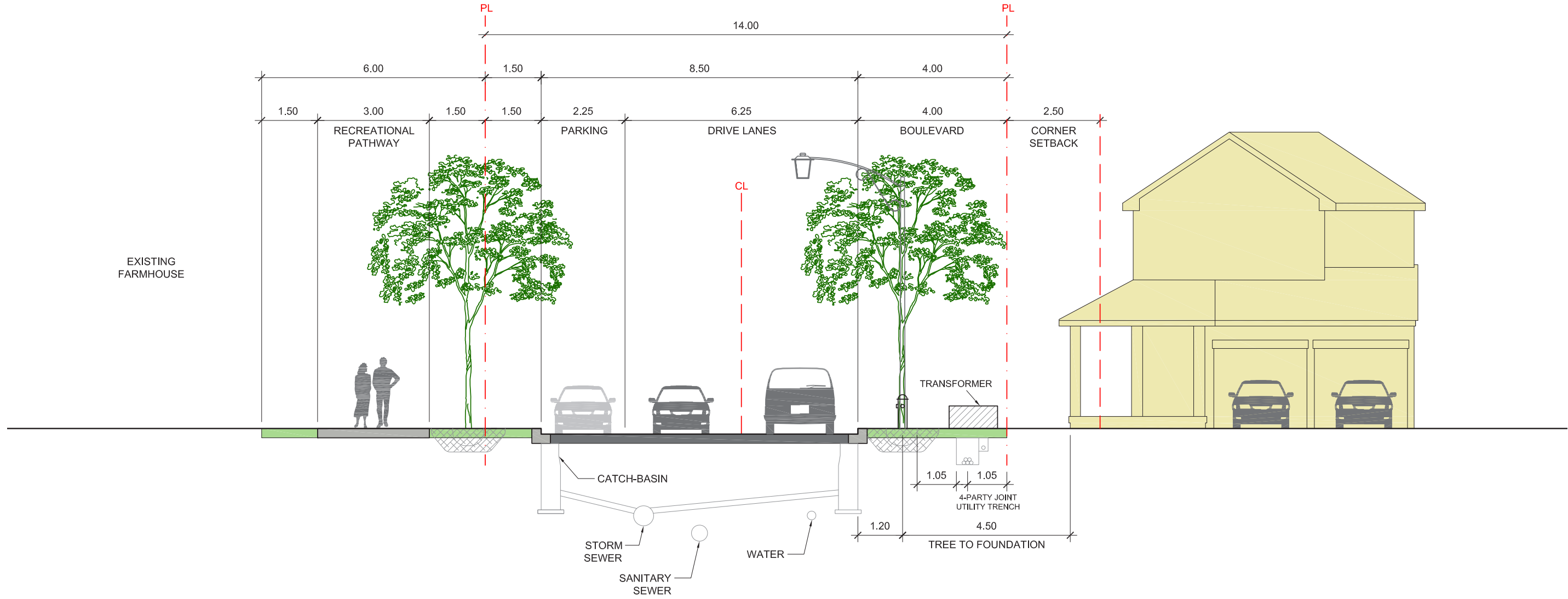
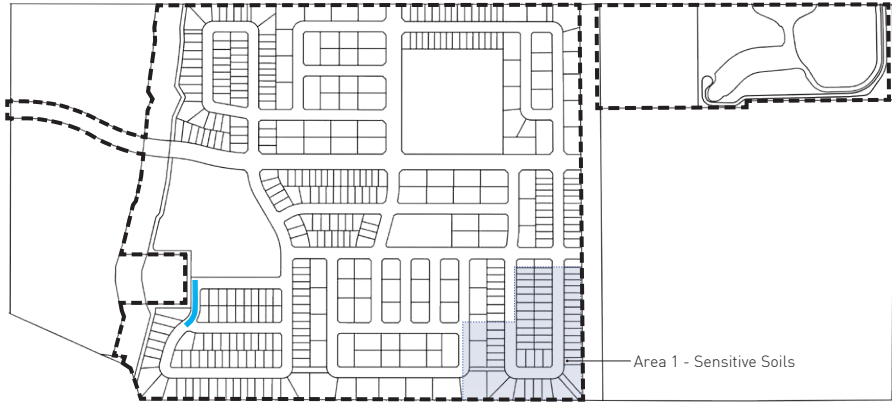


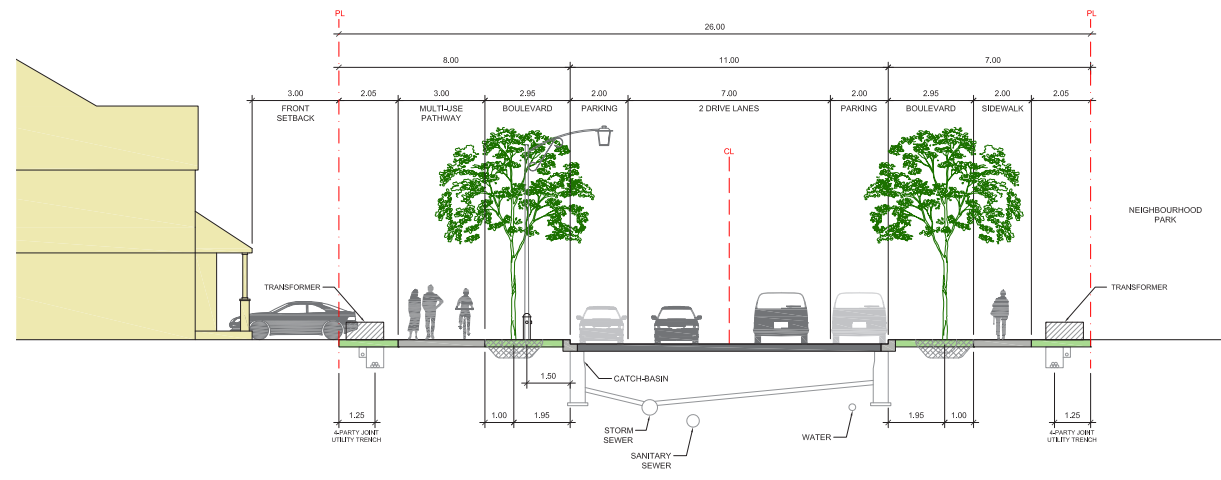
Figure 31 Local Road (Typical 14.0m ROW)

The Local Road (14.0m) serves as a short window street along the western edge of the site, connecting residents in the south to the neighbourhood park. Flanked by an existing farmhouse and the tributary corridor recreational pathway to the west, with single-detached homes to the east, it will consist of the following elements: single-sided on-street parking and street trees within the boulevard on one side.

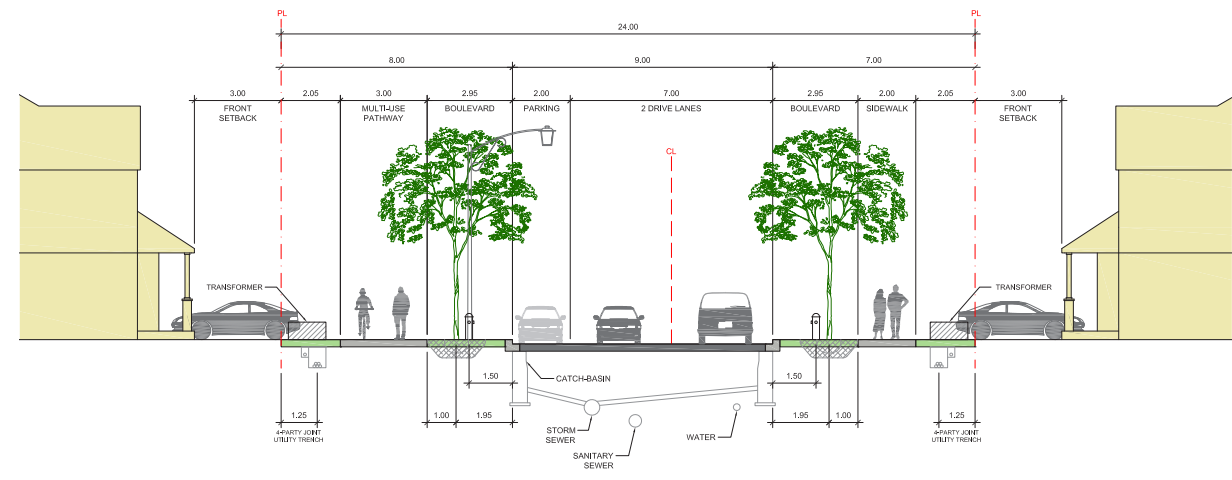


Road Network Summary

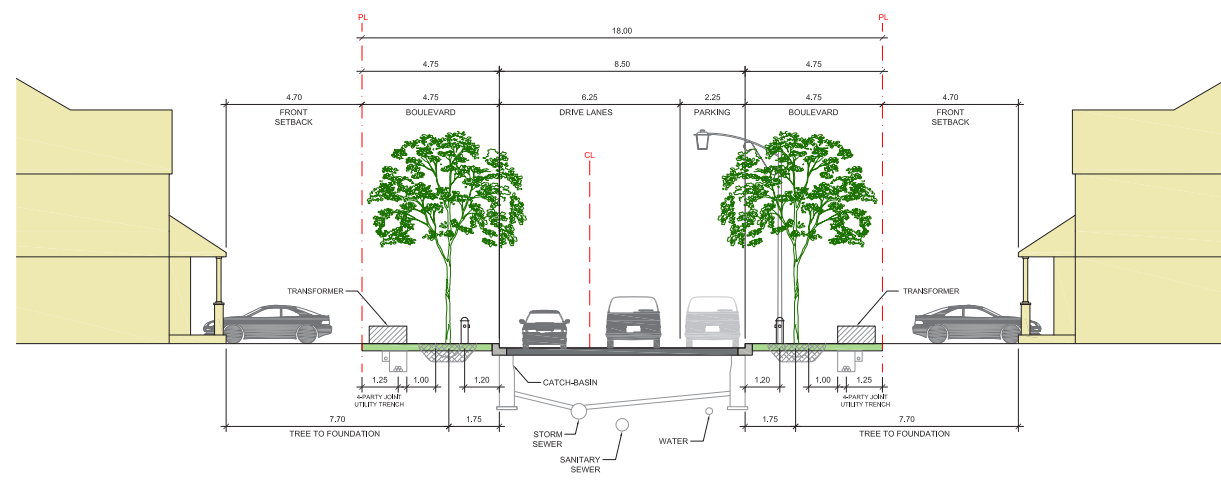
Major Neighbourhood Collector Section (26.0m ROW)



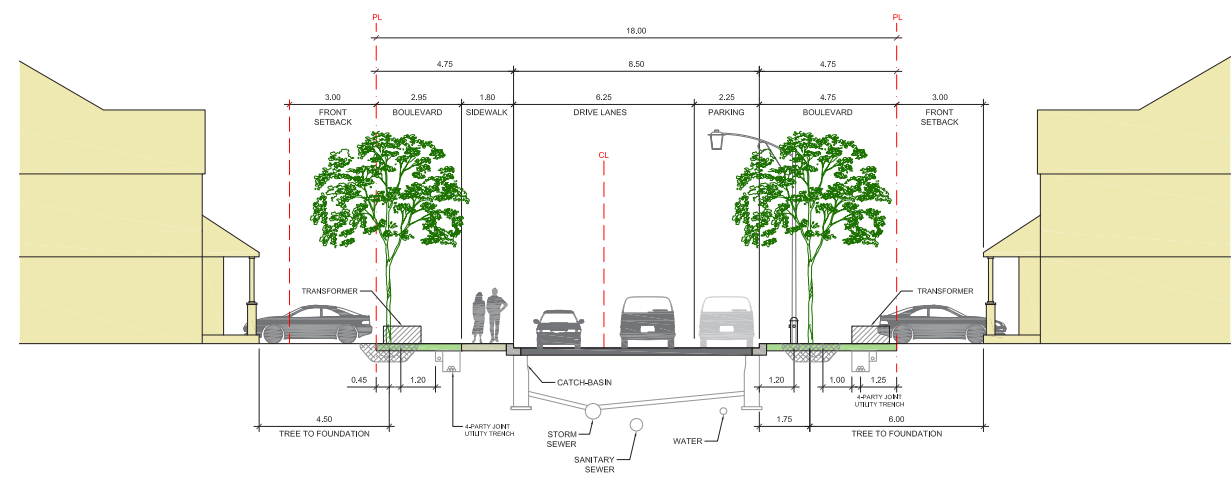
Minor Neighbourhood Collector Section (24.0m ROW)



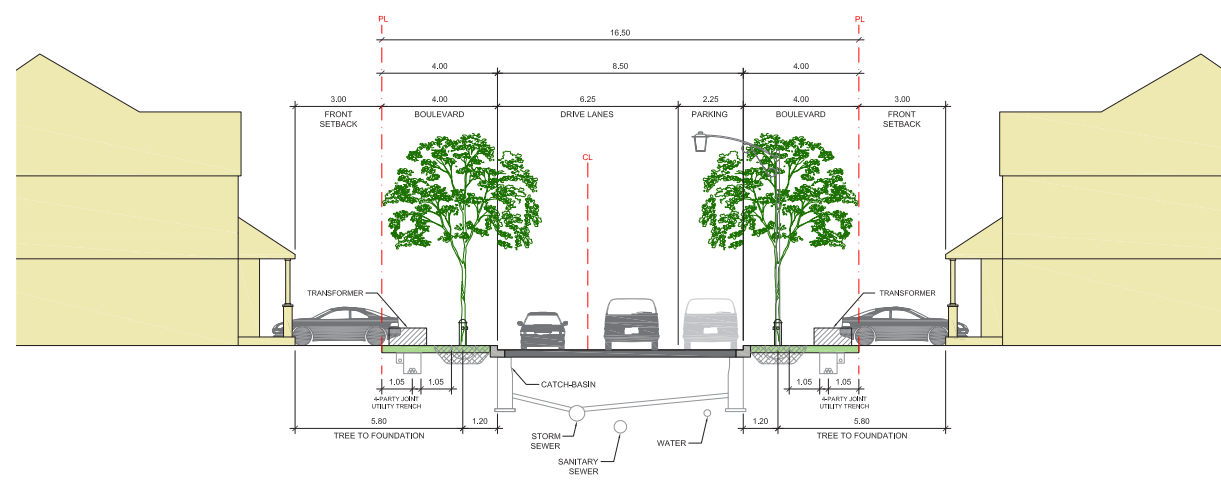
Local Road Section (18.0m ROW - Area 1)



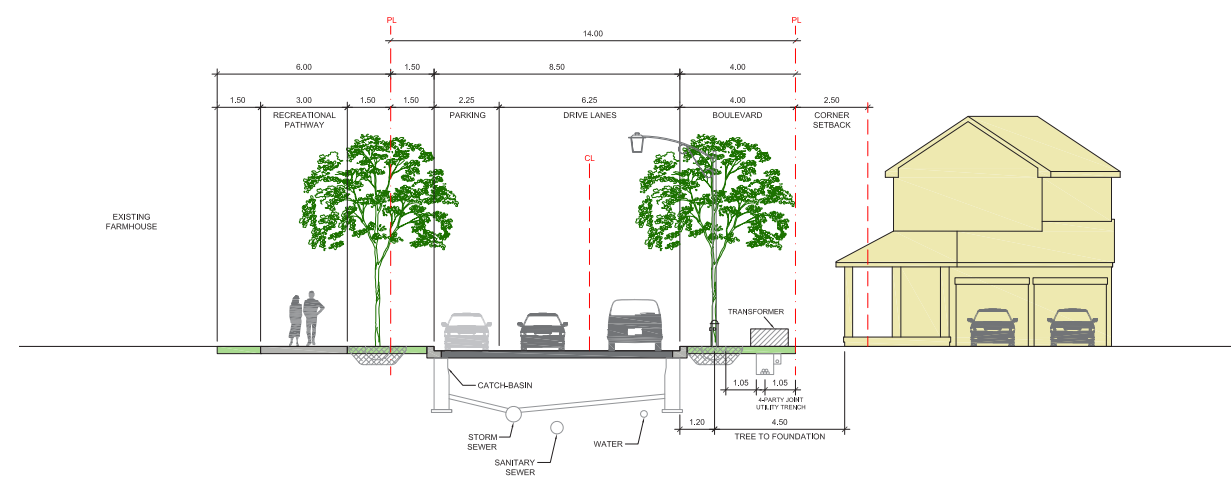
Local Road Section (18.0m ROW - Area 2)



Local Road Section (16.5m ROW)



Local Road Section (14.0m ROW)



Local Road (16.5m ROW) Street Tree Demonstration .

Separated Driveways

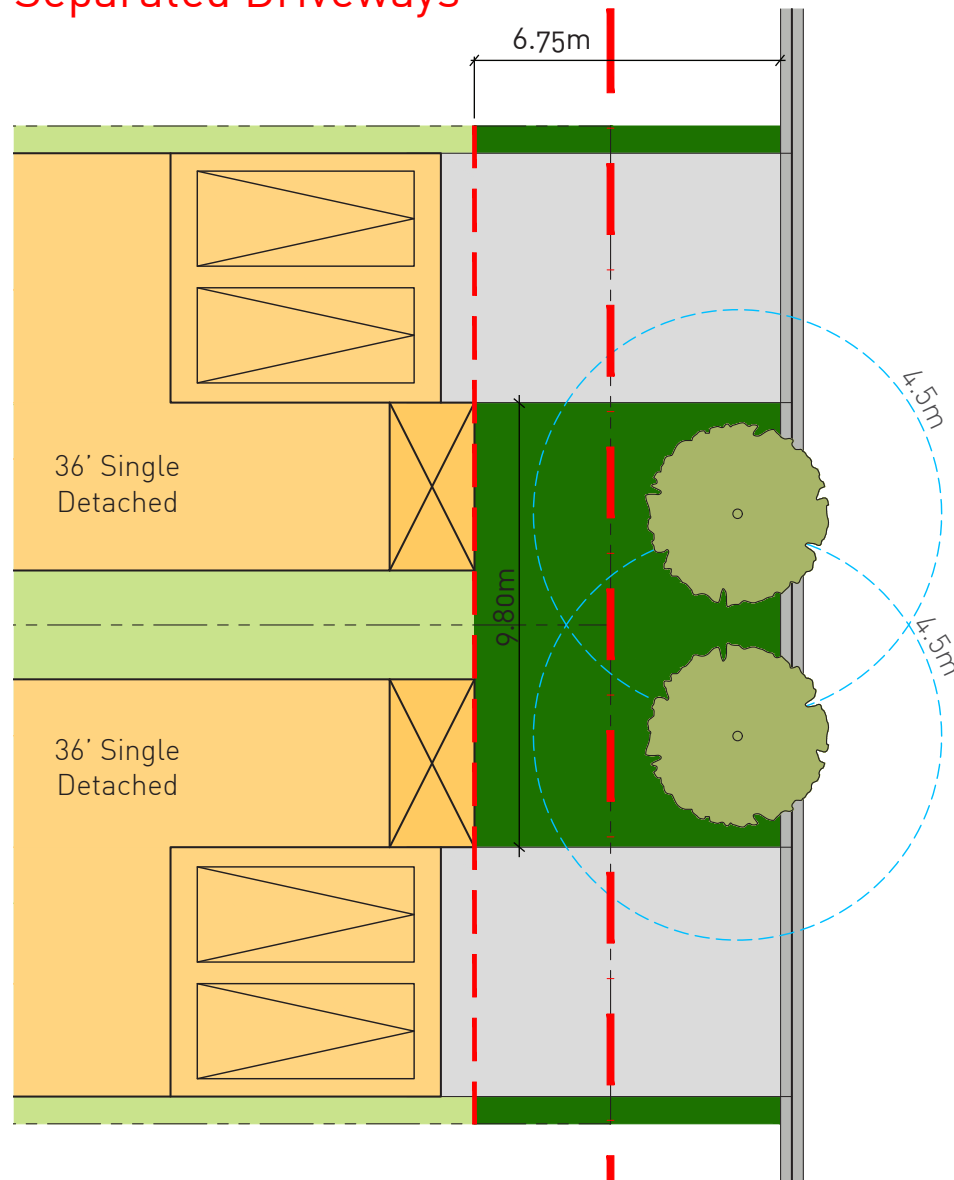


Figure 32 Separated Driveways

Length: 9.80m
Width: 6.75m
Depth: 1.50m

99.2 m³
Soil Volume

Alternating Driveways

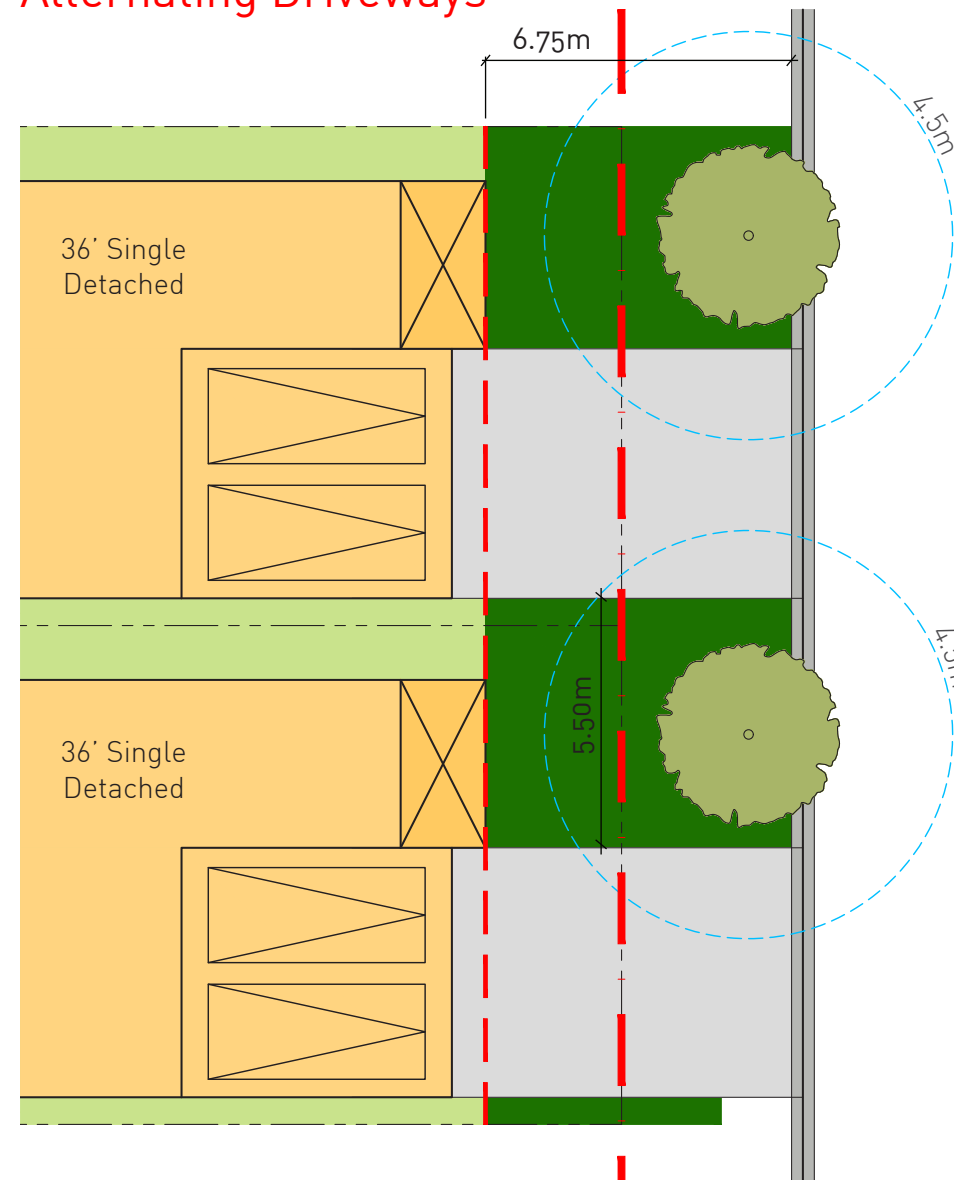


Figure 33 Alternating Driveways

Length: 5.50m
Width: 6.75m
Depth: 1.50m

55.7 m³
Soil Volume

Front Drive Townhomes

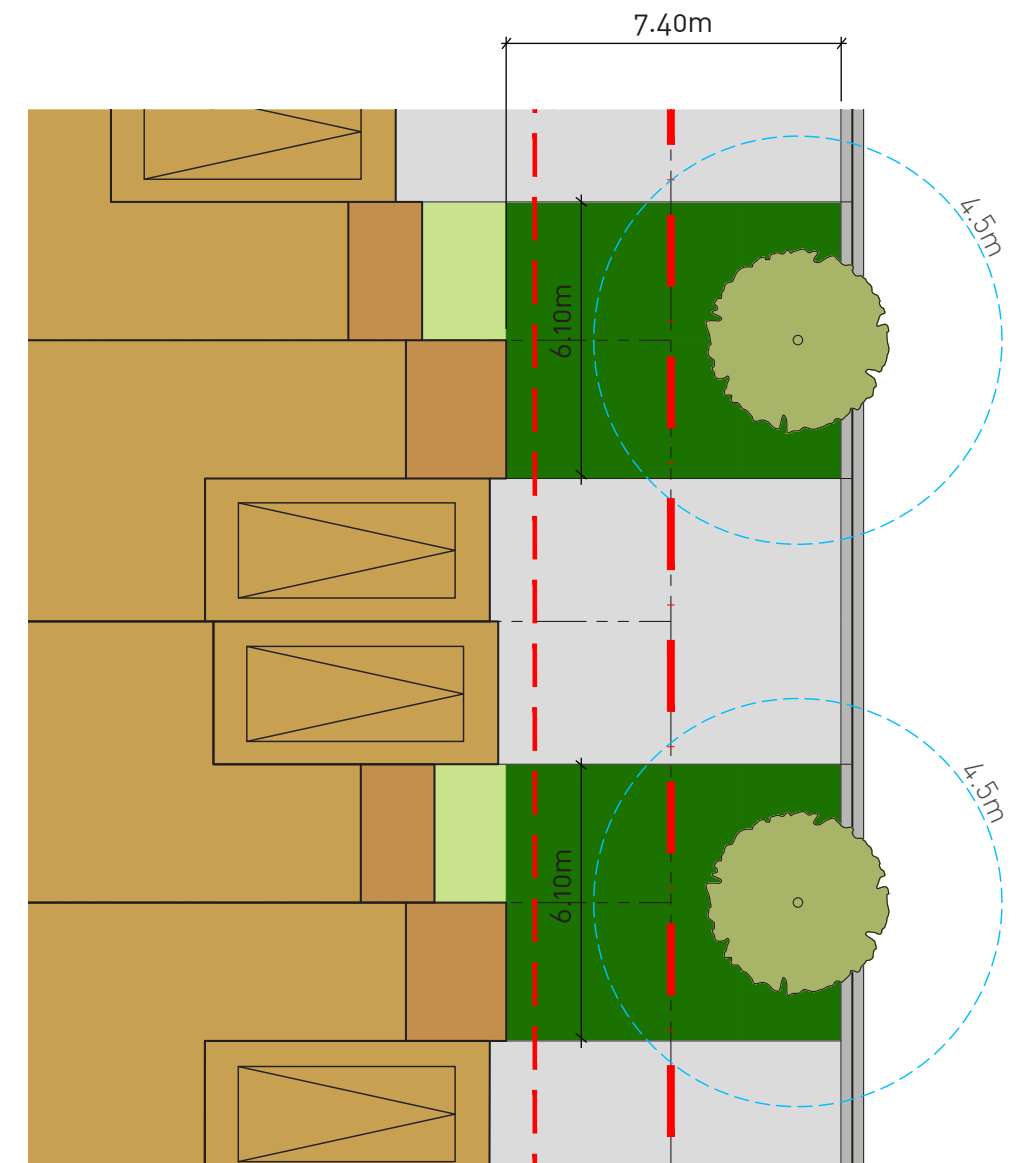


Figure 34 Paired Driveways

Length: 6.10m
Width: 7.40m
Depth: 1.50m

67.7 m³
Soil Volume

*Minimum soil volume required for medium sized trees = 30m³
**Final streetscape design to be completed at the detail design stage

Local Road (18.0m ROW) Street Tree Demonstration

Area 1 - High Plasticity Soils

Separated Driveways

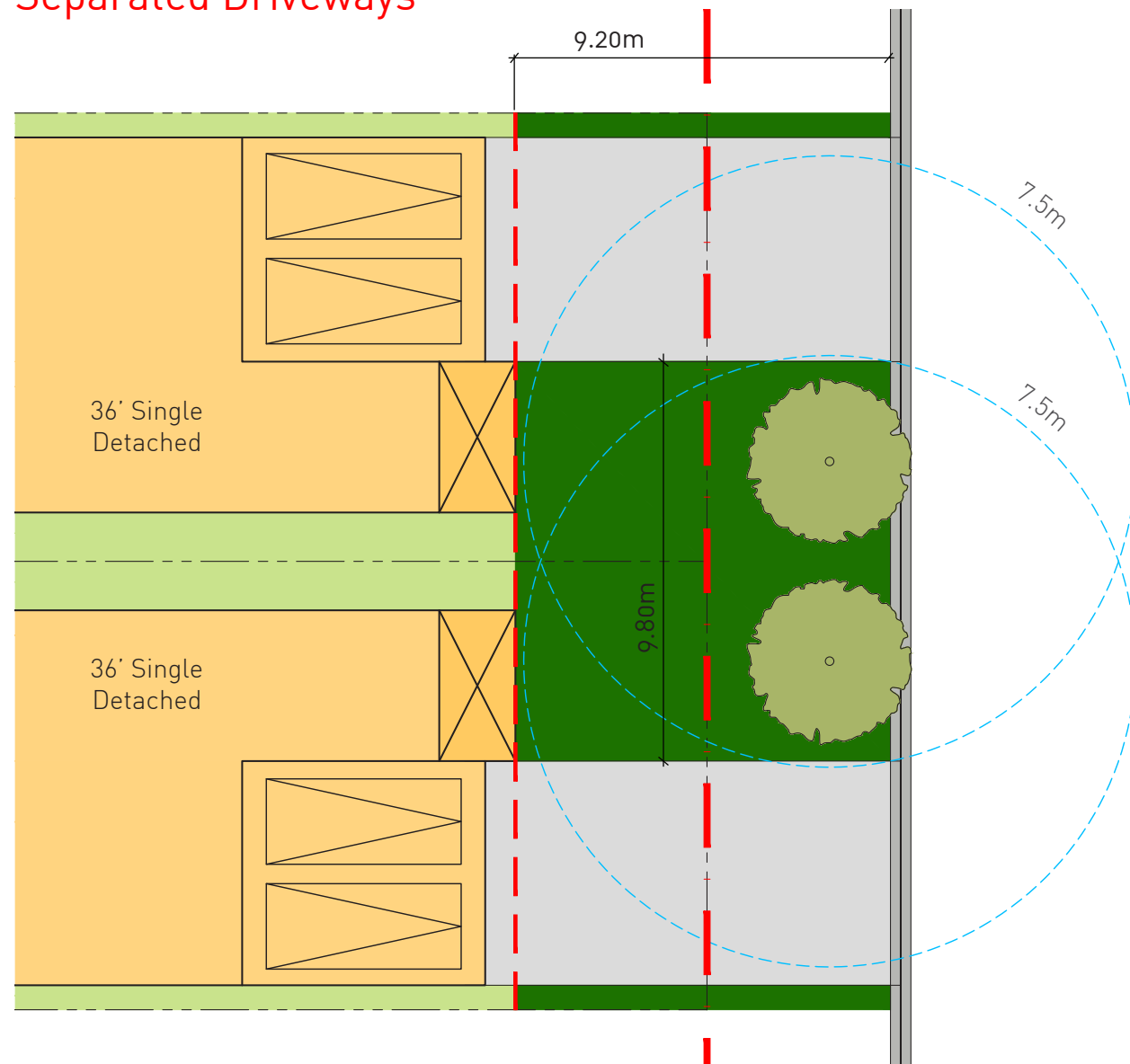


Figure 35 Separated Driveways

Length: 9.80m
 Width: 9.20m
 Depth: 1.50m

135.2 m³
 Soil Volume

Alternating Driveways

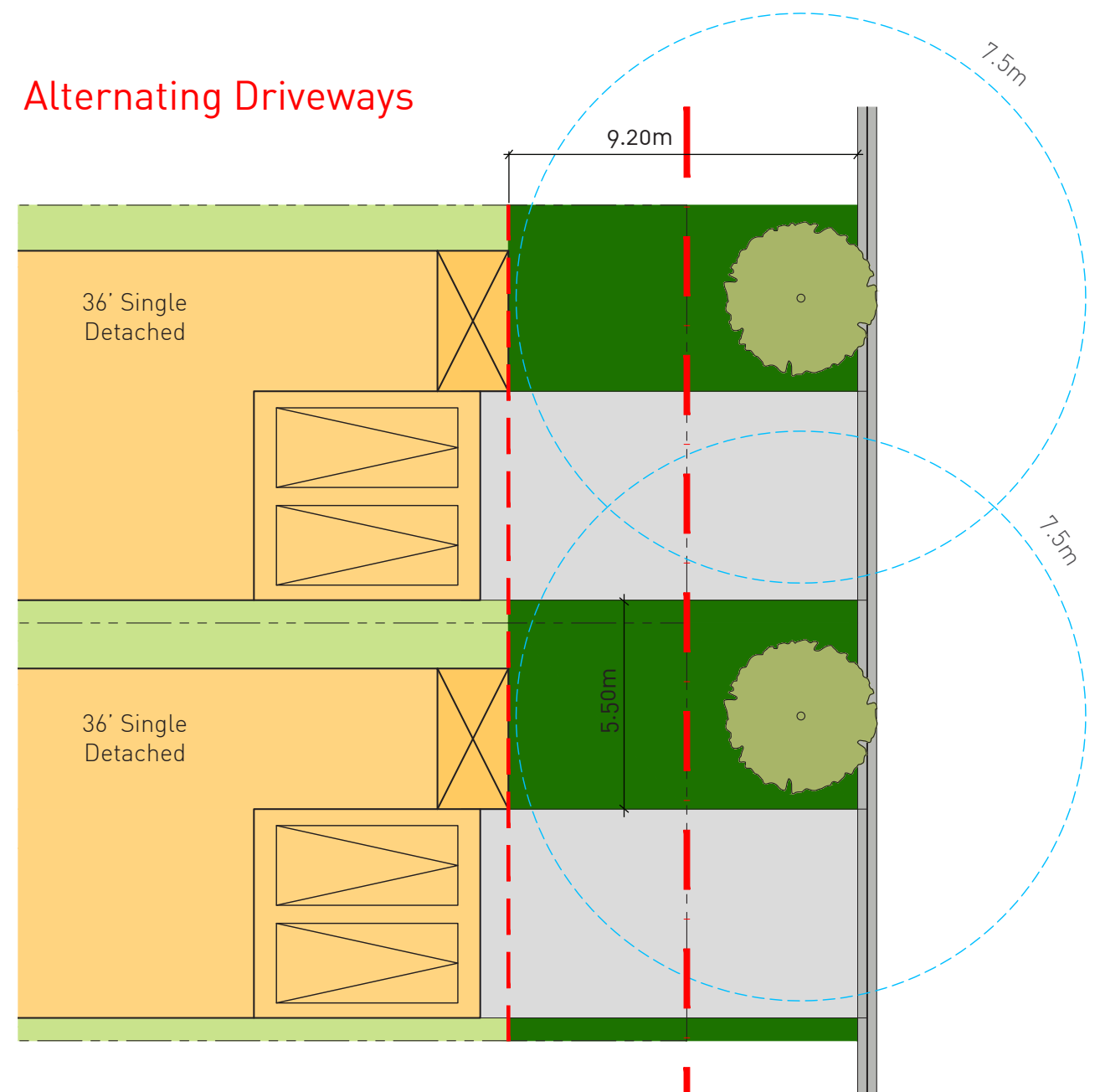


Figure 36 Alternating Driveways

Length: 5.50m
 Width: 9.20m
 Depth: 1.50m

75.9 m³
 Soil Volume

*Minimum soil volume required for medium sized trees = 30m³
 **Final streetscape design to be completed at the detail design stage

Local Road (18.0m ROW) Street Tree Demonstration

Area 2 - Low to Medium Plasticity Soils

Separated Driveways

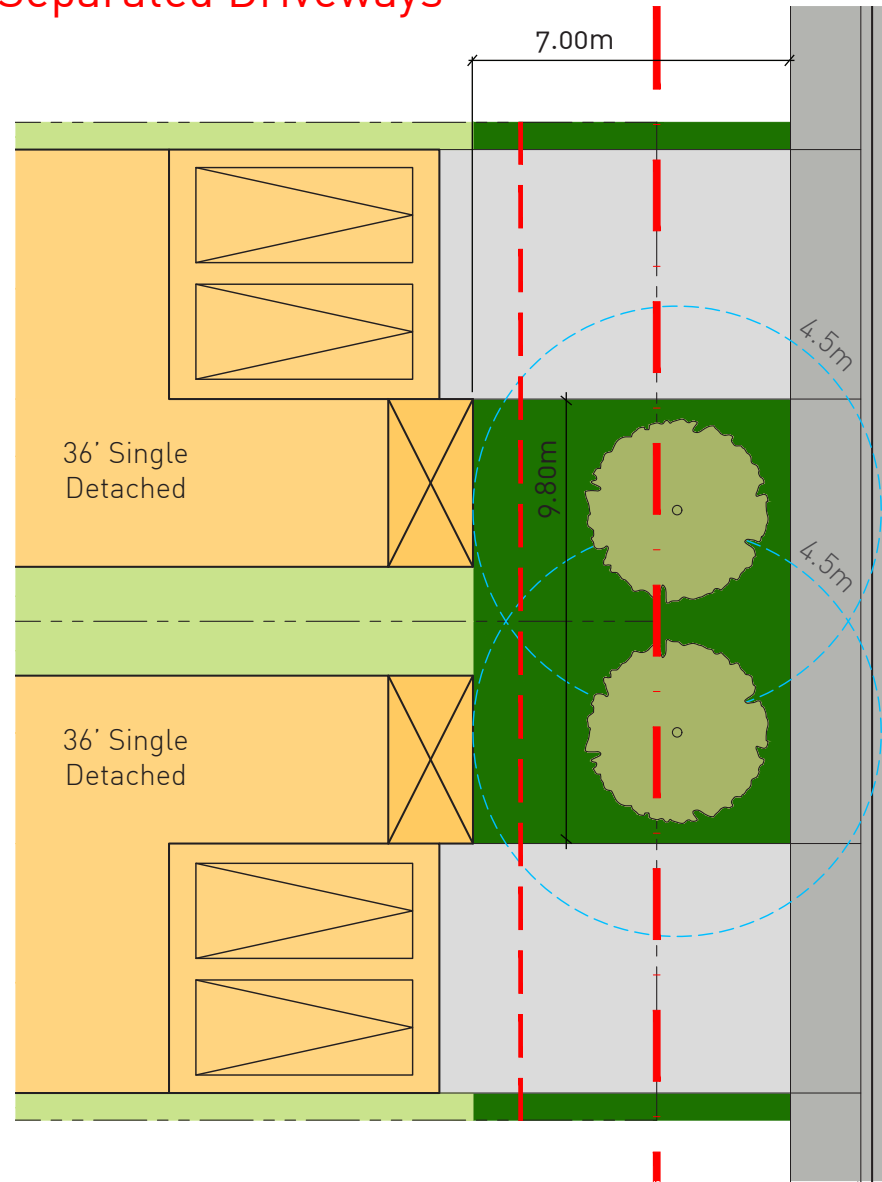


Figure 37 Separated Driveways

Length: 9.80m
Width: 7.00m
Depth: 1.50m

102.9 m³
Soil Volume

Alternating Driveways

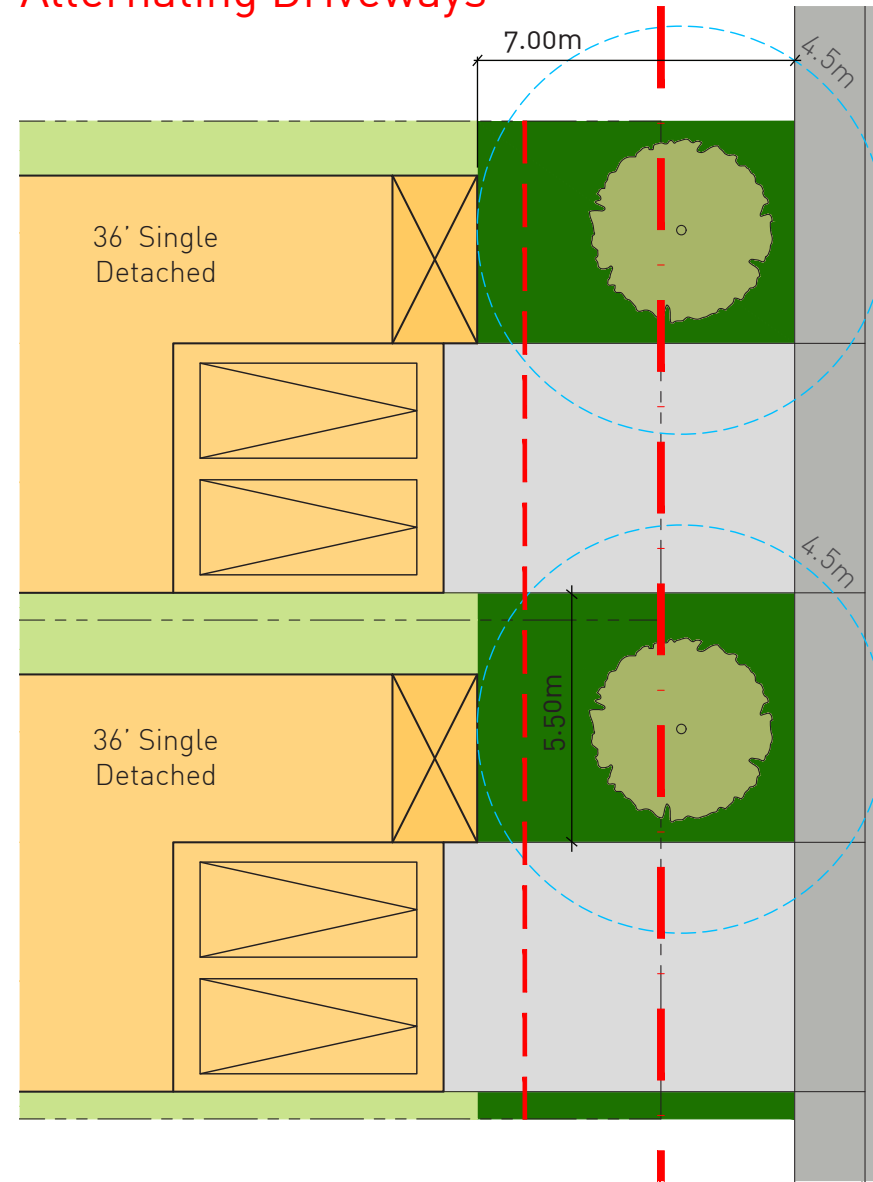


Figure 38 Alternating Driveways

Length: 5.50m
Width: 7.00m
Depth: 1.50m

57.8 m³
Soil Volume

Front Drive Townhomes

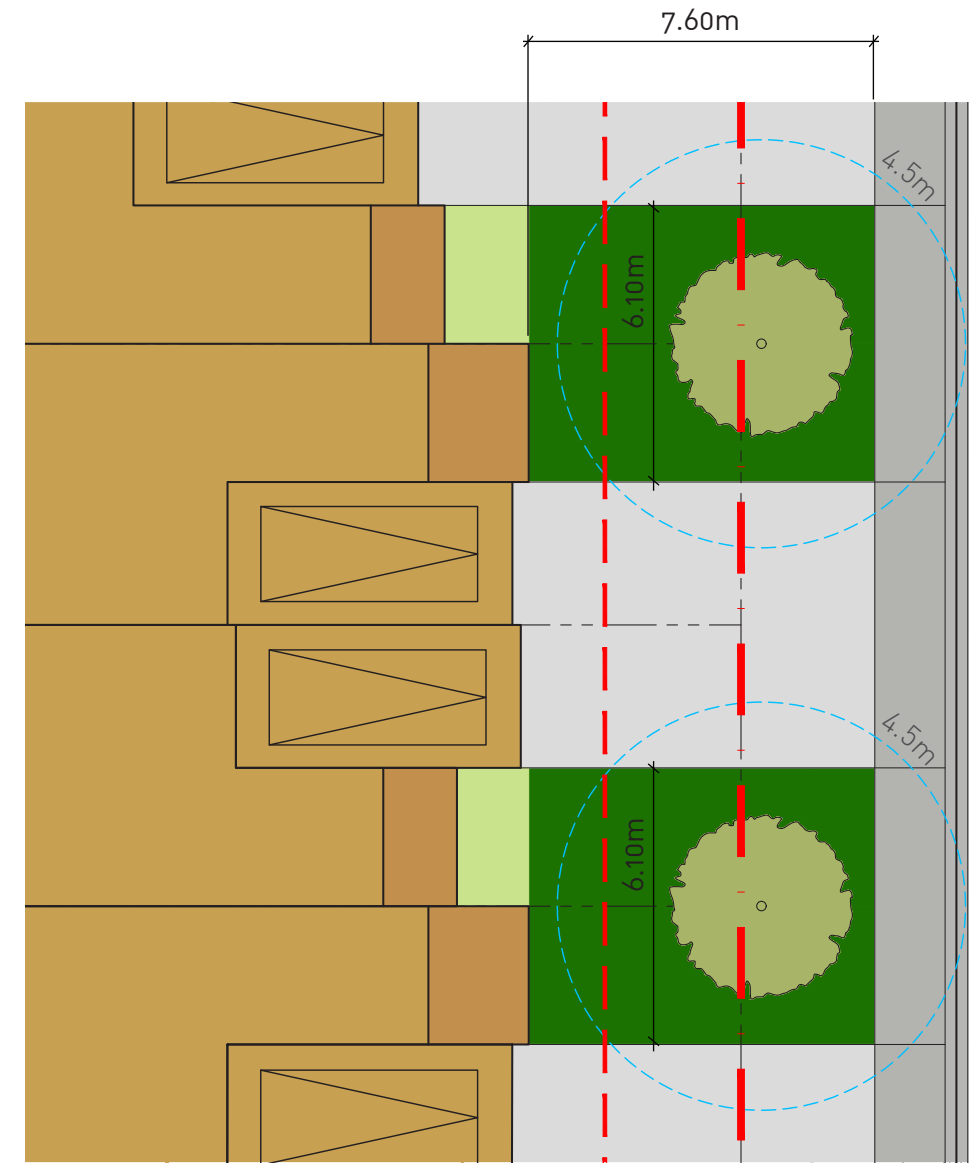


Figure 39 Paired Driveways

Length: 6.10m
Width: 7.60m
Depth: 1.50m

69.5 m³
Soil Volume

*Minimum soil volume required for medium sized trees = 30m³
**Final streetscape design to be completed at the detail design stage

Local Road (16.5m ROW) Parking Demonstration

Single-Detached Streetscape

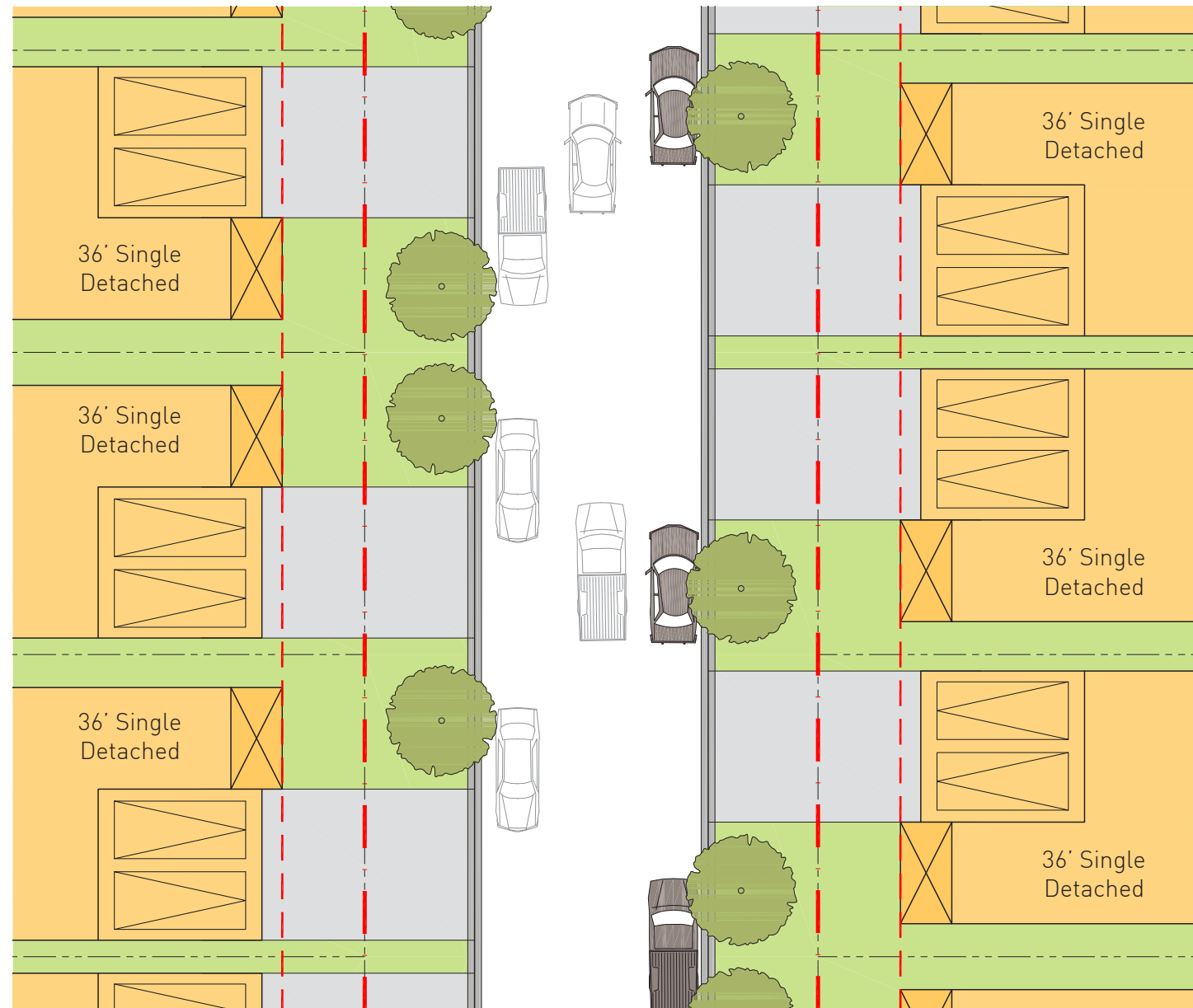


Figure 40 Single-Detached On-Street Parking Configuration

Front Drive Townhomes Streetscape

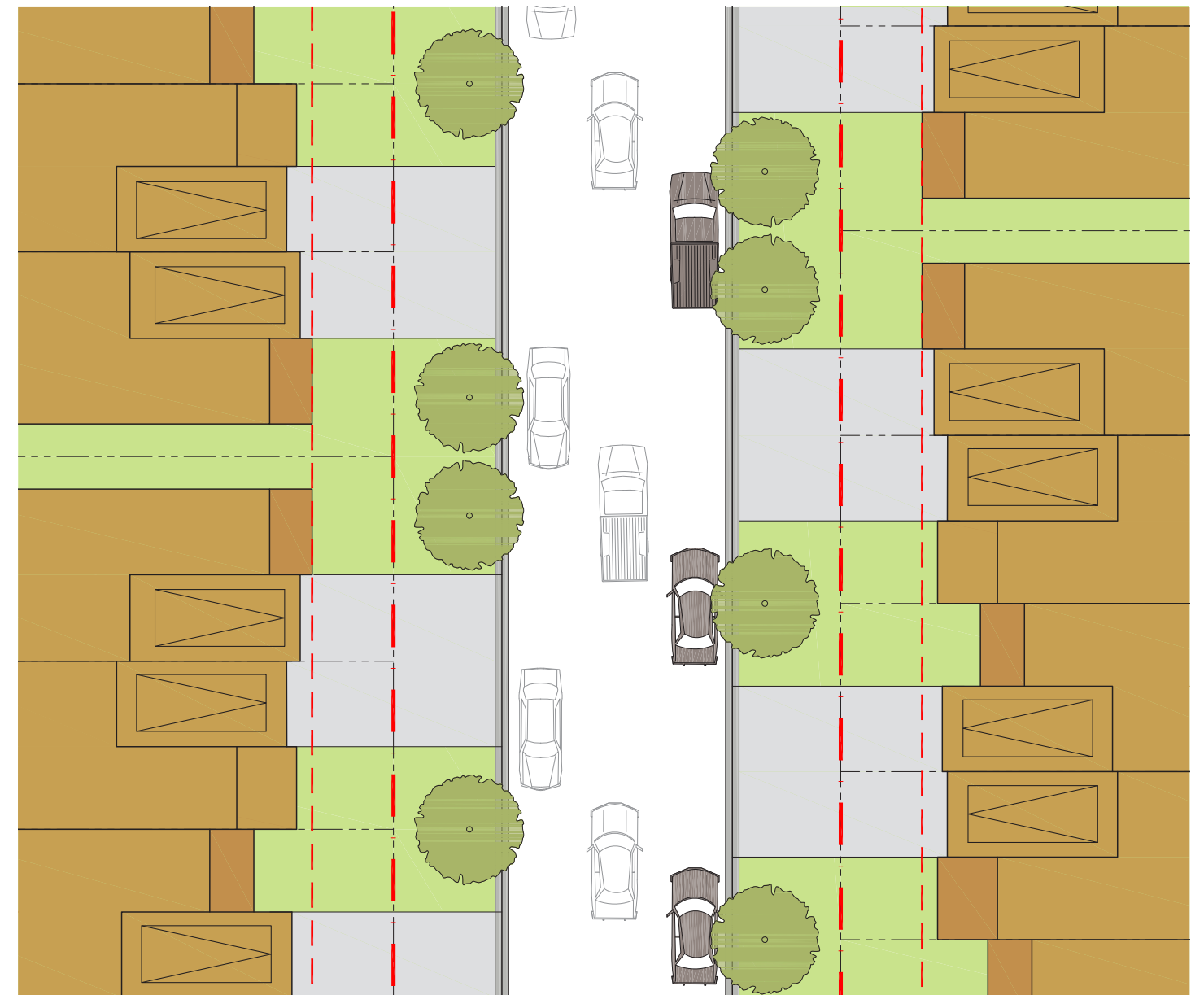


Figure 41 Front Drive Townhomes On-Street Parking Configuration

*Final streetscape design to be completed at the detail design stage

Local Road (18.0m ROW) Parking Demonstration.

Single-Detached Streetscape

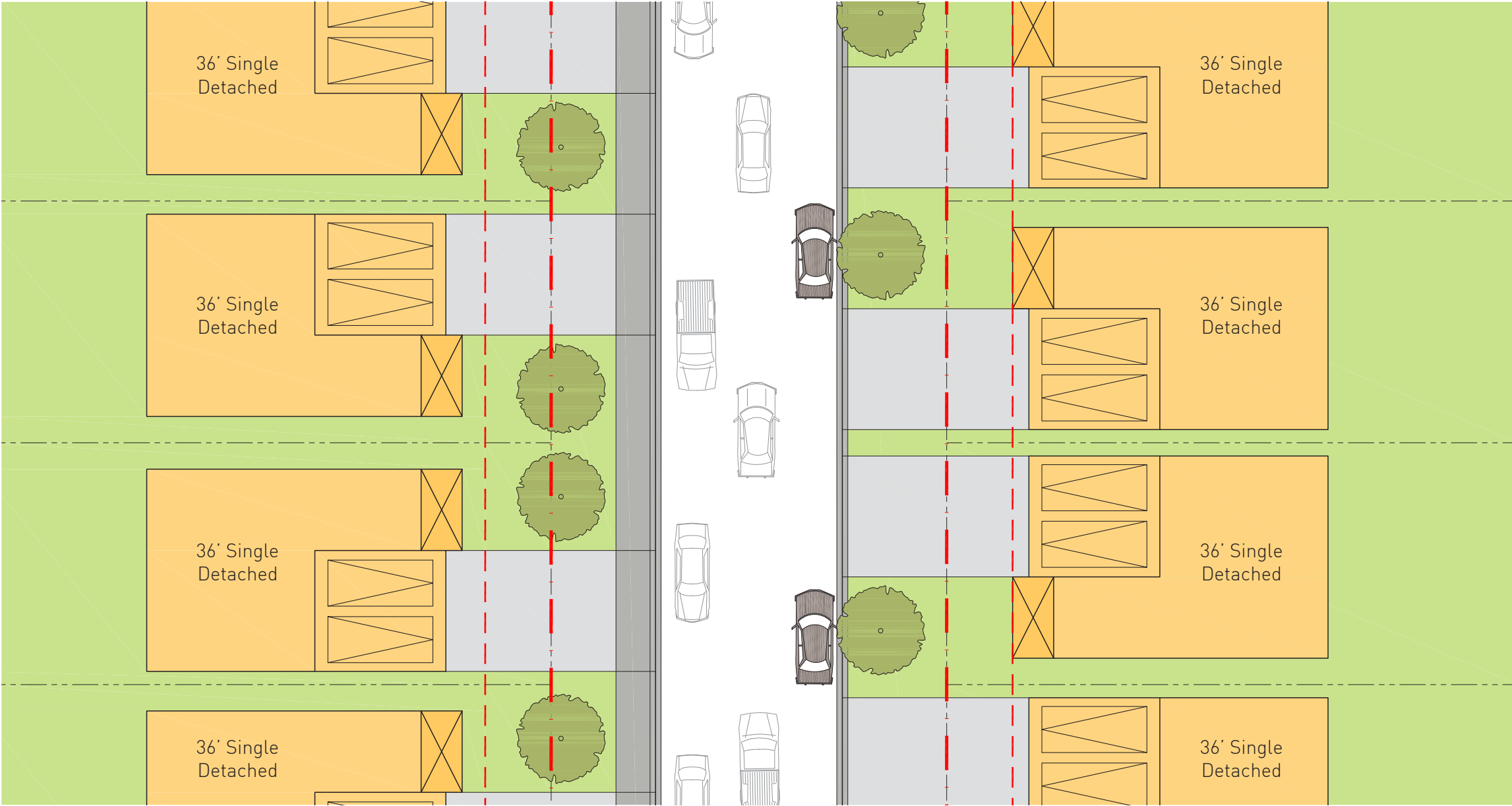
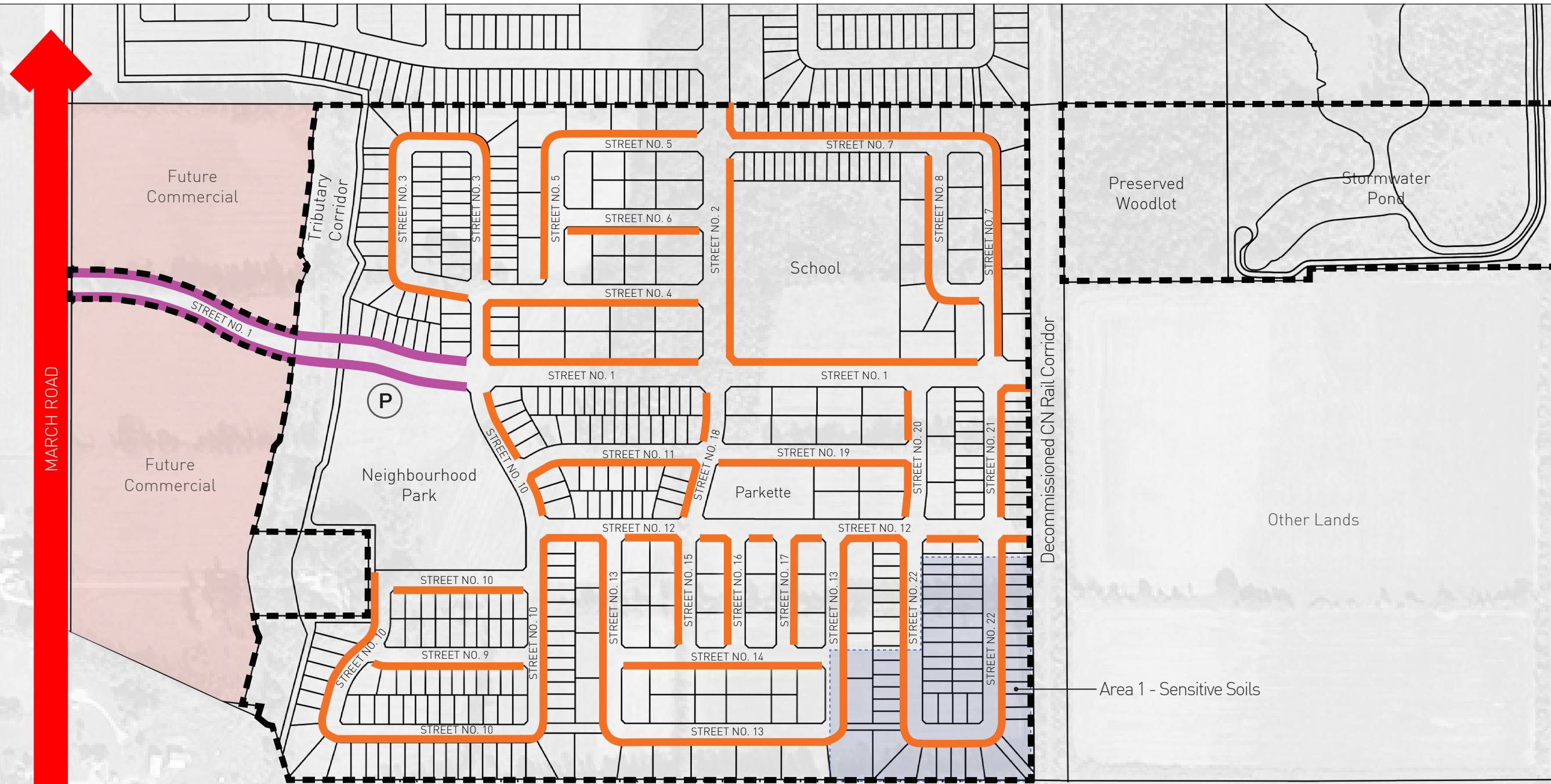





Figure 42 Single-Detached On-Street Parking Configuration

*Final streetscape design to be completed at the detail design stage

Parking Plan



Legend

-  Double-Sided On-Street Parking
-  Single-Sided On-Street Parking
-  Parking Lot

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Communities
