



NYC Parks

RECONSTRUCTION OF BUS STOPS AND PERIMETER SIDEWALKS ON RIVERSIDE DRIVE

From West 97th Street to West 129th Street in Riverside Park,
Borough of Manhattan

LPC Review
August 9th, 2016
Quennell Rothschild & Partners

GOALS

- Improve pedestrian safety at bus stop locations
- New ADA-compliant bus access
- New paved bus loading areas
- New paved sidewalks
- Repair uneven paving & curbs
- Update bus stops locations
- Replace historic paving details at monuments
- Repair landscape areas adjacent to bus stops

TOTAL BUDGET: \$1.875 million
TEA 21 1.5 M Federal Grant, \$375 local match DPR/DOT

PROJECT SIZE: 0.85 acres



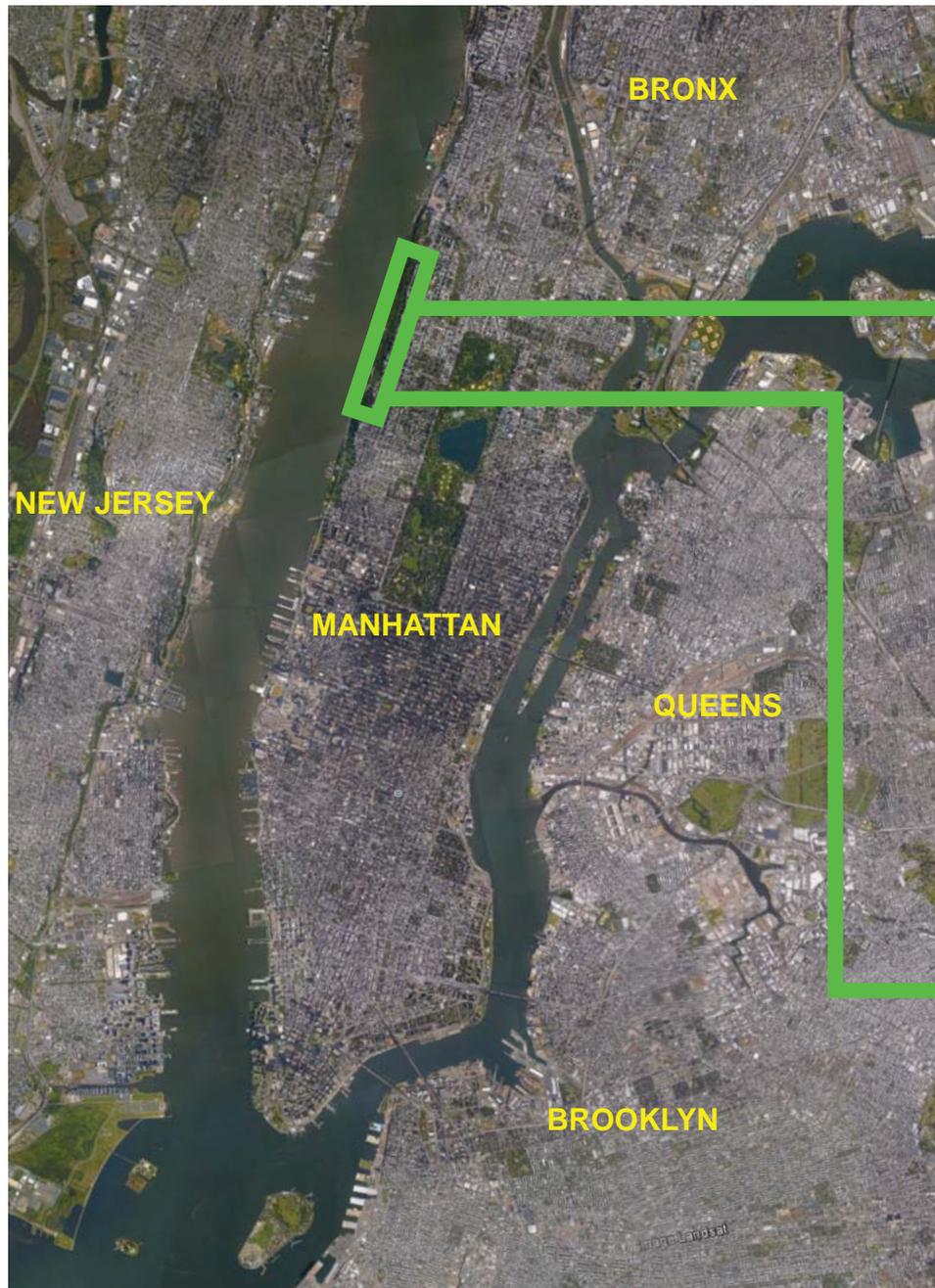
Scope meeting was held on July 15th, 2015 and attended by NYCDPR, Quennell Rothschild and Partners, CB7 and CB9.

COMMENTS FROM SCOPE MEETING:

The group physically surveyed sites between 100 St. and 108th St. and reviewed design drawings of the remaining sites. Their biggest concerns for bus stop improvement design include:

- Repair of dangerous tripping hazards at bus stops and on approaches to bus loading areas including settled and broken pavement and curbs.
- Remove bus stops from areas where they overlap with pedestrian crosswalks.
- Design in keeping with surrounding monument paving and views.
- Adding ADA access at each of the bus stops in the project area including ADA ramps at crosswalks and paved access to bus loading areas.
- Minimize parking area removal at bus bump-outs.
- Provide safe vehicular navigation around stopped buses.





Borough

0' 10000'



NYC Parks

RIVERSIDE DRIVE BUS STOPS | Project Location



Neighborhood

0' 500'



LEGEND

— Riverside Dr.





LEGEND

- — — — — Riverside Dr.
- 5 min. walk
- 10 min. walk

FREDERICK DOUGLASS PLAYGROUND
playground, soccer field, basketball field

STRAUS PARK
community garden

WEST 111TH ST PEOPLE'S GARDEN
community garden

SAKURA PARK
community garden

RIVERSIDE PARK
waterfront park



RIVERSIDE DRIVE BUS STOPS | Neighborhood Context



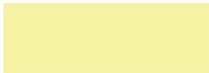
HUDSON RIVER

LEGEND

— Riverside Dr.



LEGEND

- | | | | | | | | |
|---|----------------------------|--|--------------------|---|--------------------------|---|-------------|
|  | 1 and 2 Family Residential |  | Outdoor Recreation |  | Industrial |  | Vacant Lots |
|  | Multi-family Residential |  | Commercial |  | Parking | | |
|  | Mixed Use |  | Institutional |  | Transportation/Utilities | | |



RIVERSIDE DRIVE BUS STOPS | Land Use

HUDSON RIVER

LEGEND

--- Riverside Dr.

RIVERSIDE DRIVE BUS STOPS

LEGEND

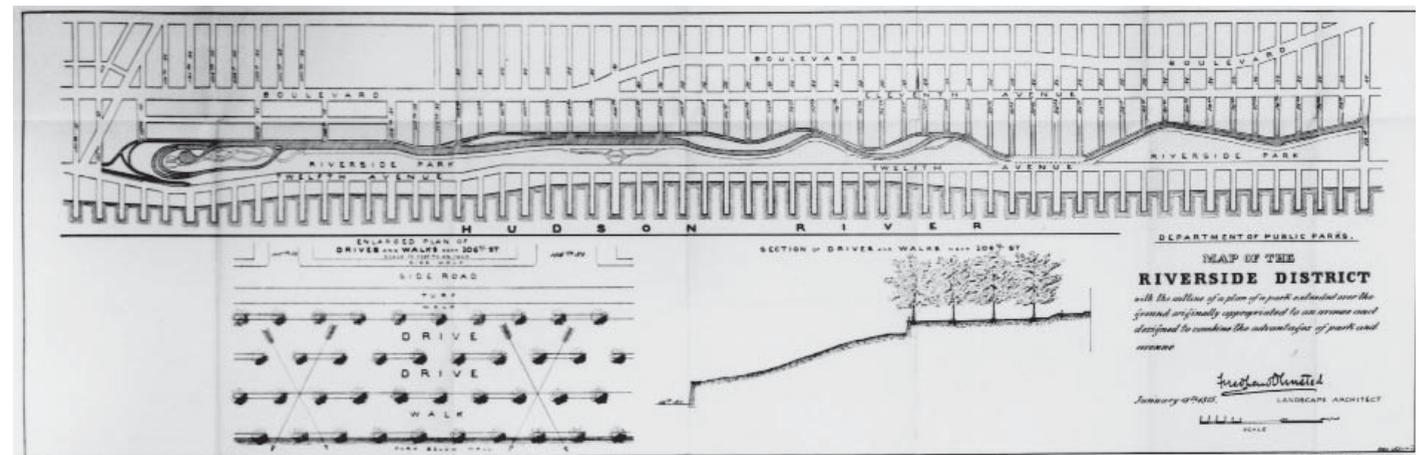
- 100 Year Flood Zone
- 100 Year Flood Zone with Velocity Hazard
- Outside 500 Year Flood Zone



RIVERSIDE DRIVE BUS STOPS | Flood Risk



Clockwise from Left:
 Reconstruction c. 1934,
 Postcard c.1915,
 Schematic Plan by Frederick Law Olmsted,1875





Bus Stop clearance too short. Stopped bus blocks crosswalk

Bus loading area settlement

Pavement heaving & settlement

Curb heaved and cracked

Pavement settlement

No ADA access to loading area

Existing Raised Bus Platform looking East





Existing tree inhibits bus stop extension

Bus stop clearance too short. Stopped bus blocks crosswalk

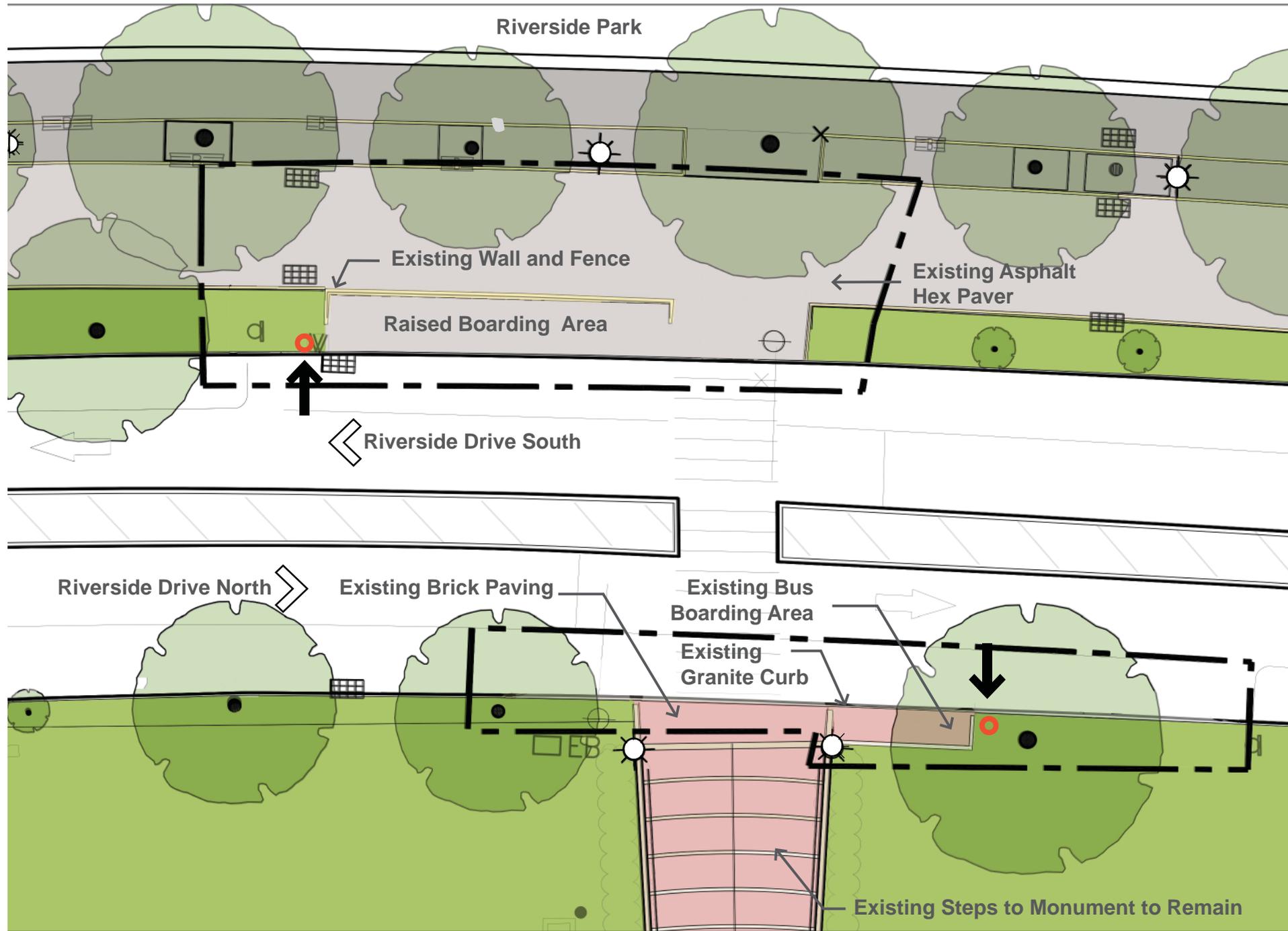
Bus stop impacts historic monument

Existing traffic pole

No ADA accessible ramp

Existing Bus Stop at Monument & Existing Tree



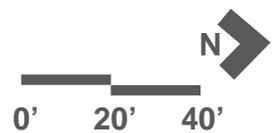


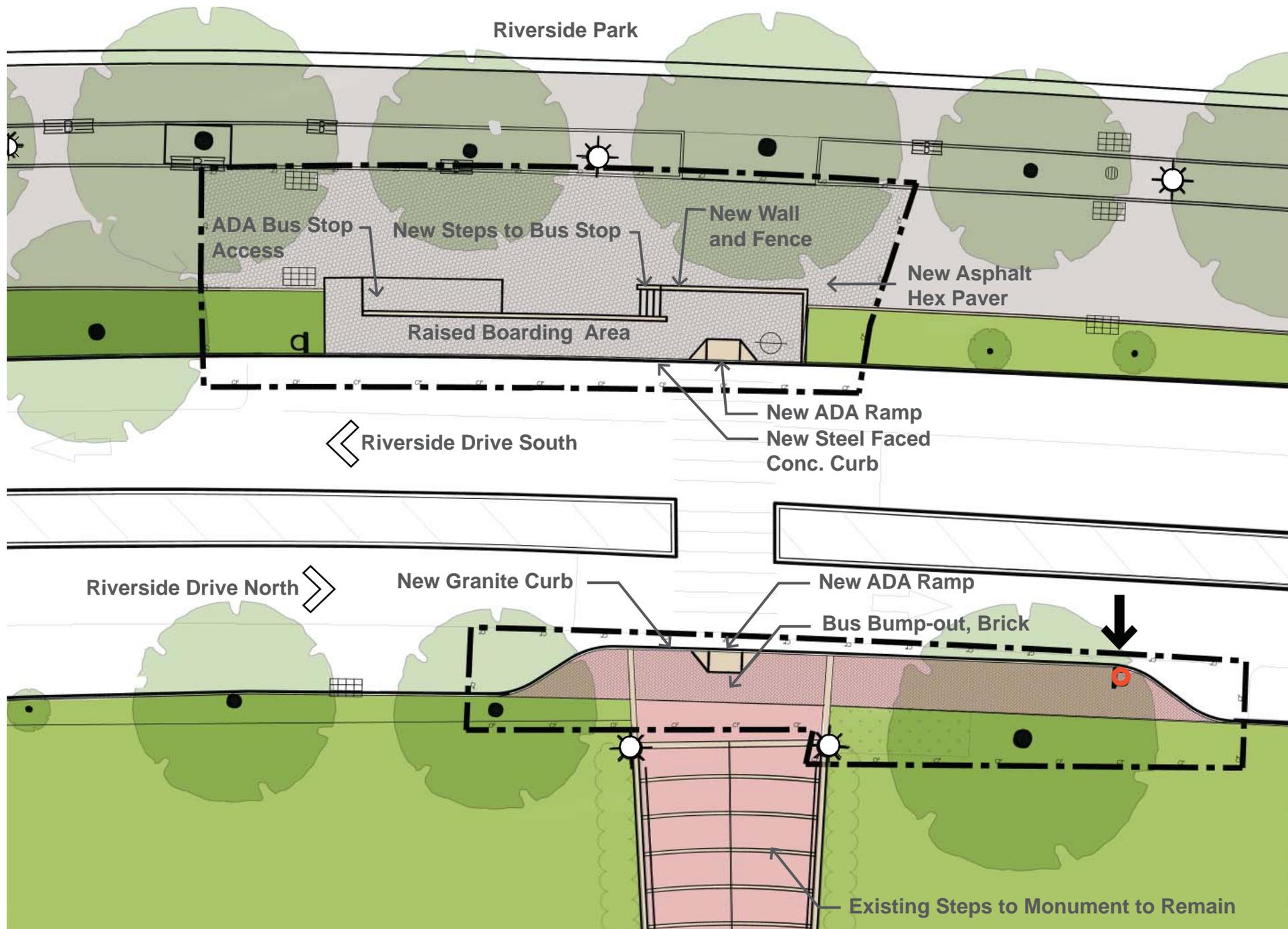
LEGEND

-  Project area
-  Exist. Bus Stop
-  Existing Tree
-  Proposed Tree
-  Existing Street Light Post
-  Existing Inlet
-  Existing Lawn
-  Asphalt Block - Existing
-  Concrete Paving/Curbs
-  Brick Paving - Existing
-  Granite Paving/Curbs
-  Paving Various



RIVERSIDE DRIVE BUS STOPS | Existing Plan - 100 St. Northbound & Southbound



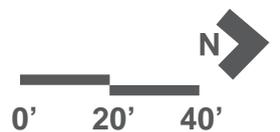


LEGEND

-  Project area
-  8' x 5' DOT Alighting Area
-  New Bus Stop
-  Existing Tree
-  Proposed Tree
-  Existing Street Light Post
-  Existing Inlet
-  Existing Lawn
-  Asphalt Block - Existing
-  Asphalt Block - New
-  Concrete Paving/Curbs
-  Brick Paving - Existing
-  Brick Paving - New
-  Granite Paving/Curbs
-  Paving Various



RIVERSIDE DRIVE BUS STOPS | Schematic Plan - 100 St. Northbound & Southbound





Bus stop to be relocated

Trees located in proposed new sidewalk zone

Curbs heaved and cracked

Pavement settlement

Non-standard ADA ramp

Existing Raised Bus Platform looking West





**Non-standard
ADA ramp**

Path width varies

**Bus stop clearance
too short
Stopped bus blocks
crosswalk**

**Curb heaving
and cracking**

Existing Bus Stop Boarding Area





Catch basin to be relocated

Planted median stops short of crosswalk and provides no pedestrian protection

Crosswalk provides no safe stopping zone for pedestrians during dual road crossing

View of Planted Island on South side of Intersection



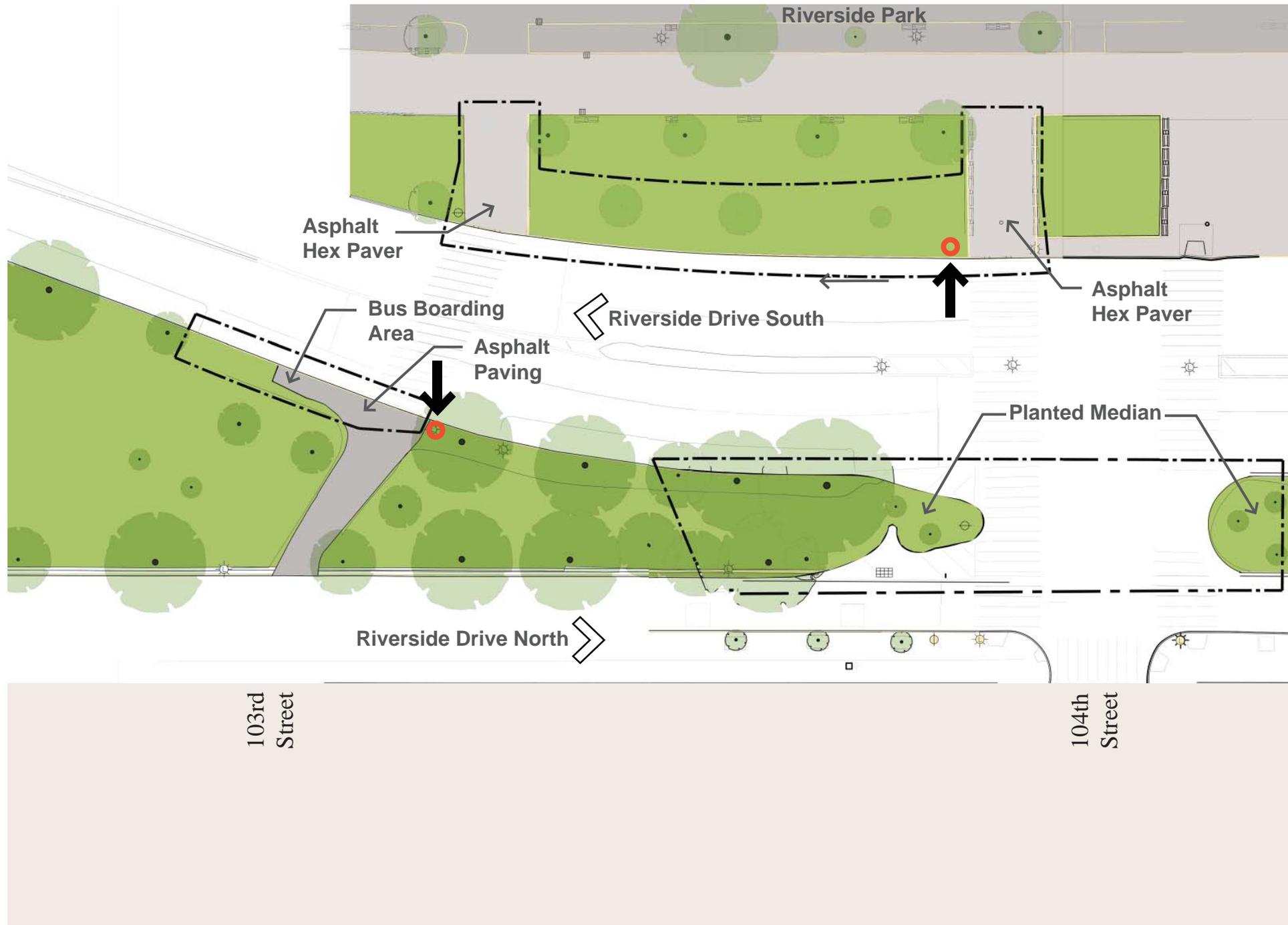


Crosswalk provides no safe stopping zone for pedestrians during dual road crossing

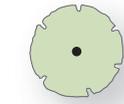
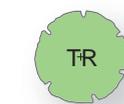
Planted median stops short of crosswalk and provides no pedestrian protection

View of Planted Island on North side of Intersection



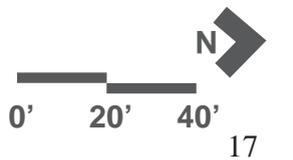


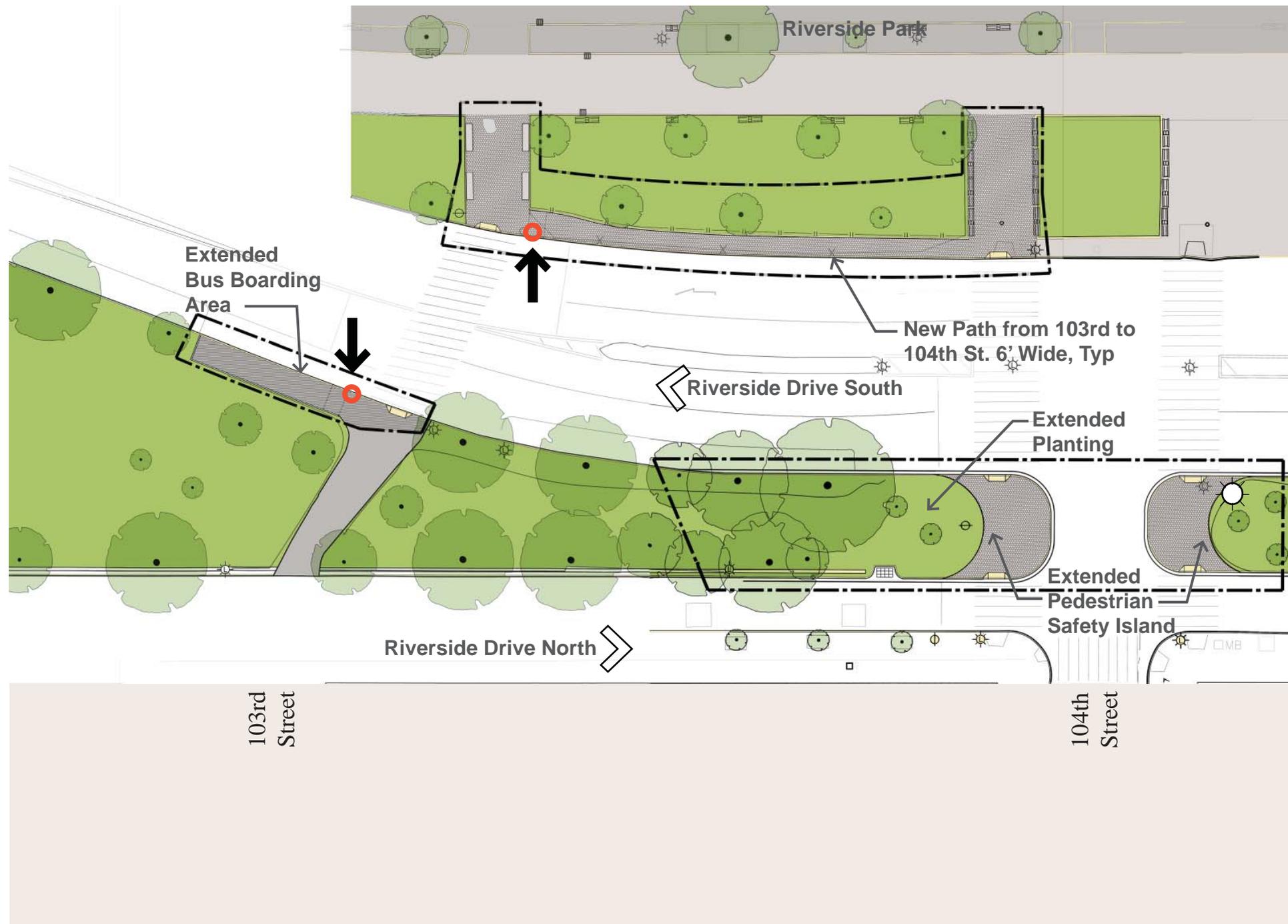
LEGEND

-  Project area
-  New Bus Stop
-  Existing Tree
-  Proposed Tree
-  Transplanted Tree
-  Existing Street Light Post
-  Existing Inlet
-  Existing Lawn
-  Asphalt Block Paving
-  Asphalt Block - New
-  Concrete Paving/Curbs
-  Paving Various

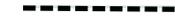
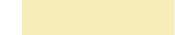


RIVERSIDE DRIVE BUS STOPS | Existing Plan - 103-104th St. Northbound & Southbound



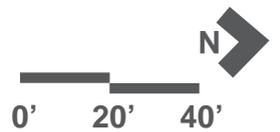


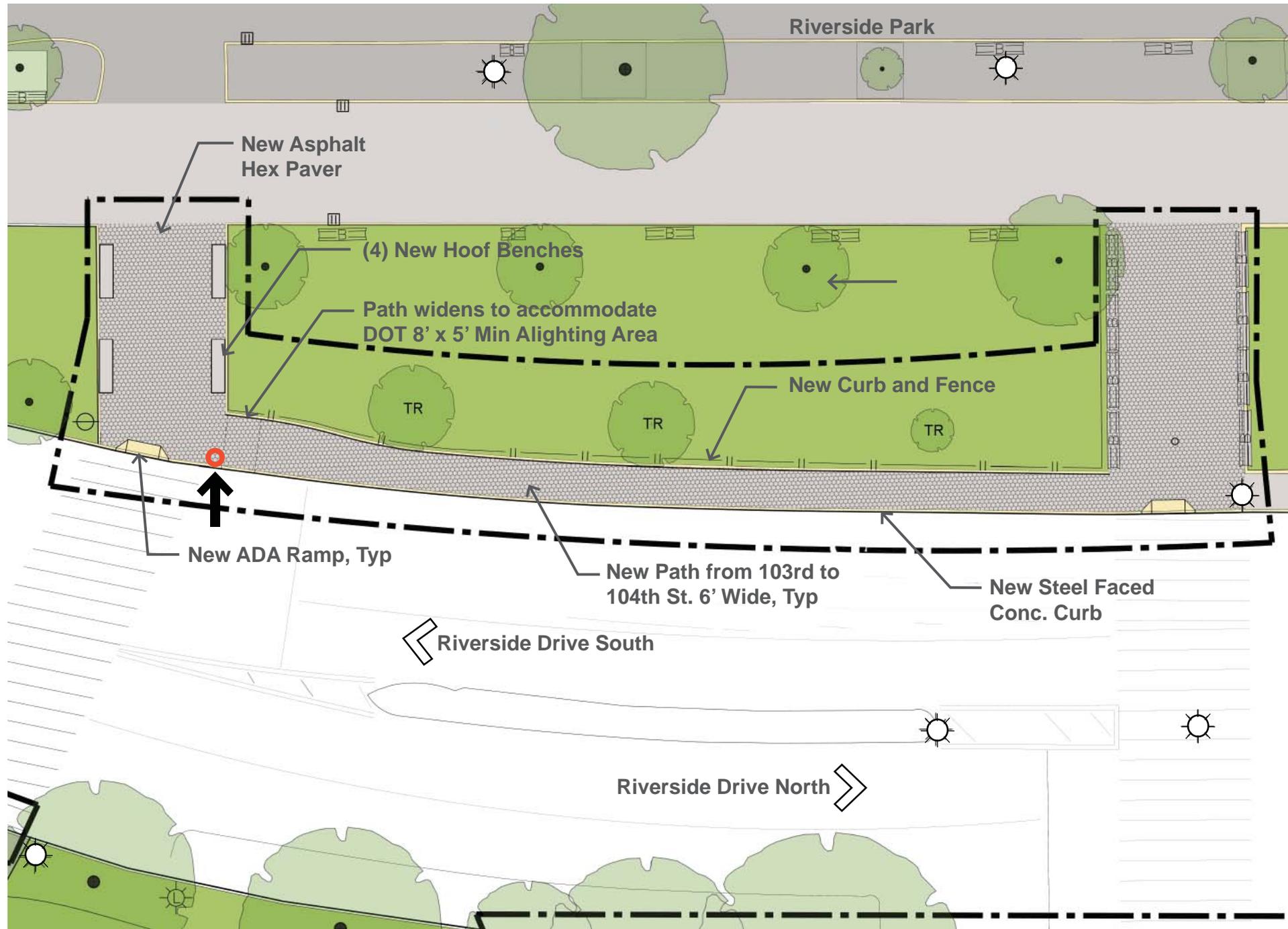
LEGEND

-  Project area
-  8' x 5' DOT Alighting Area
-  New Bus Stop
-  Existing Tree
-  Proposed Tree
-  Transplanted Tree
-  Existing Street Light Post
-  Existing Inlet
-  Existing Lawn
-  Asphalt Block Paving
-  Asphalt Block - New
-  Concrete Paving/Curbs
-  Paving Various

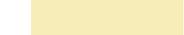


RIVERSIDE DRIVE BUS STOPS | Schematic Plan - 103-104th St. Northbound & Southbound



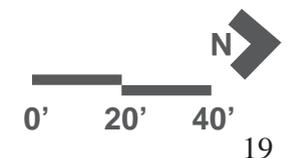


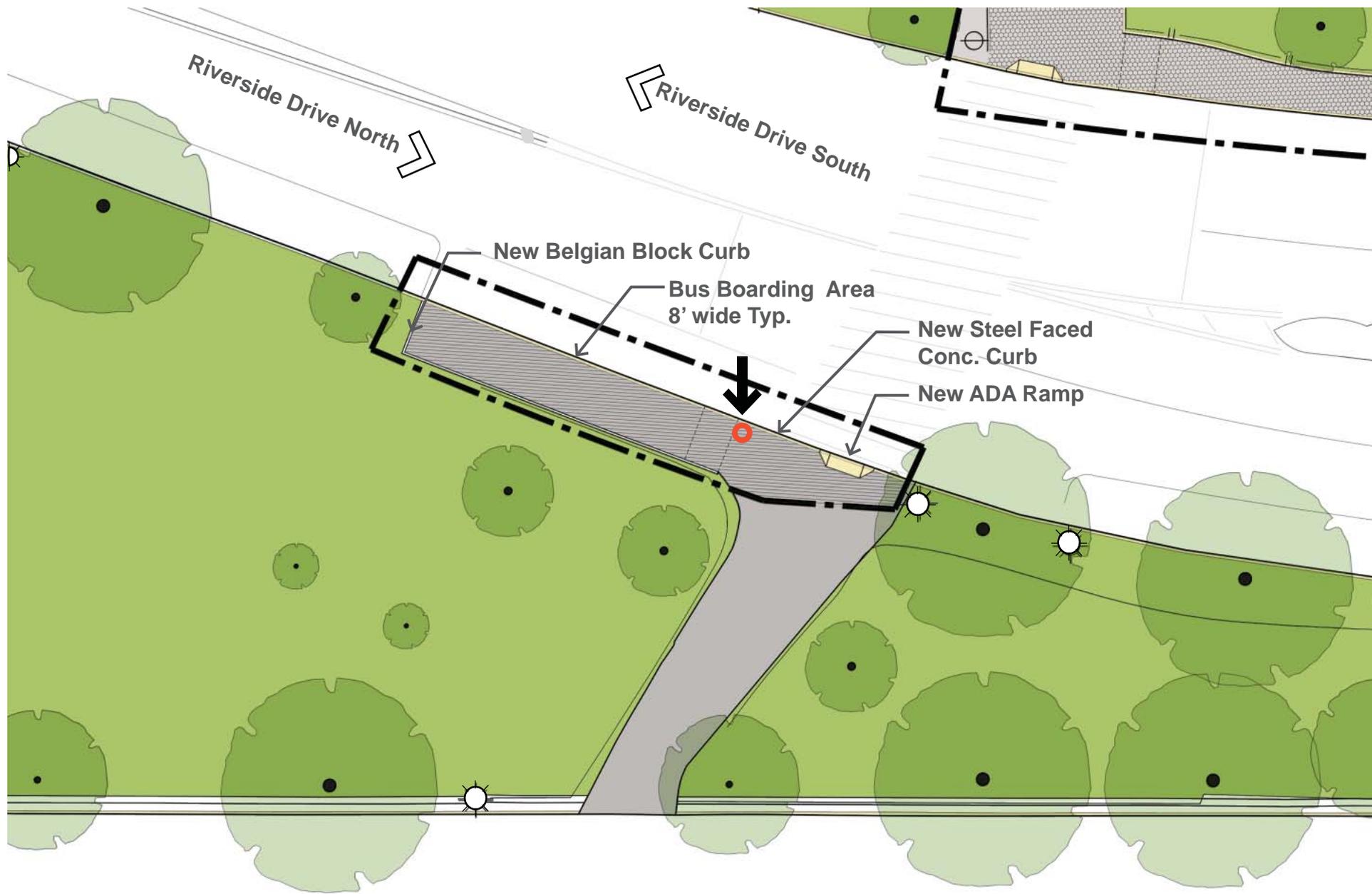
LEGEND

-  Project area
-  8' x 5' DOT Alighting Area
-  New Bus Stop
-  Existing Tree
-  Proposed Tree
-  Transplanted Tree
-  Existing Street Light Post
-  Existing Inlet
-  Existing Lawn
-  Asphalt Block Paving
-  Asphalt Block - New
-  Concrete Paving/Curbs
-  Paving Various



RIVERSIDE DRIVE BUS STOPS | Schematic Plan - 103 St. Southbound - Enlargement



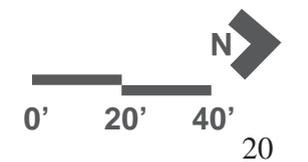


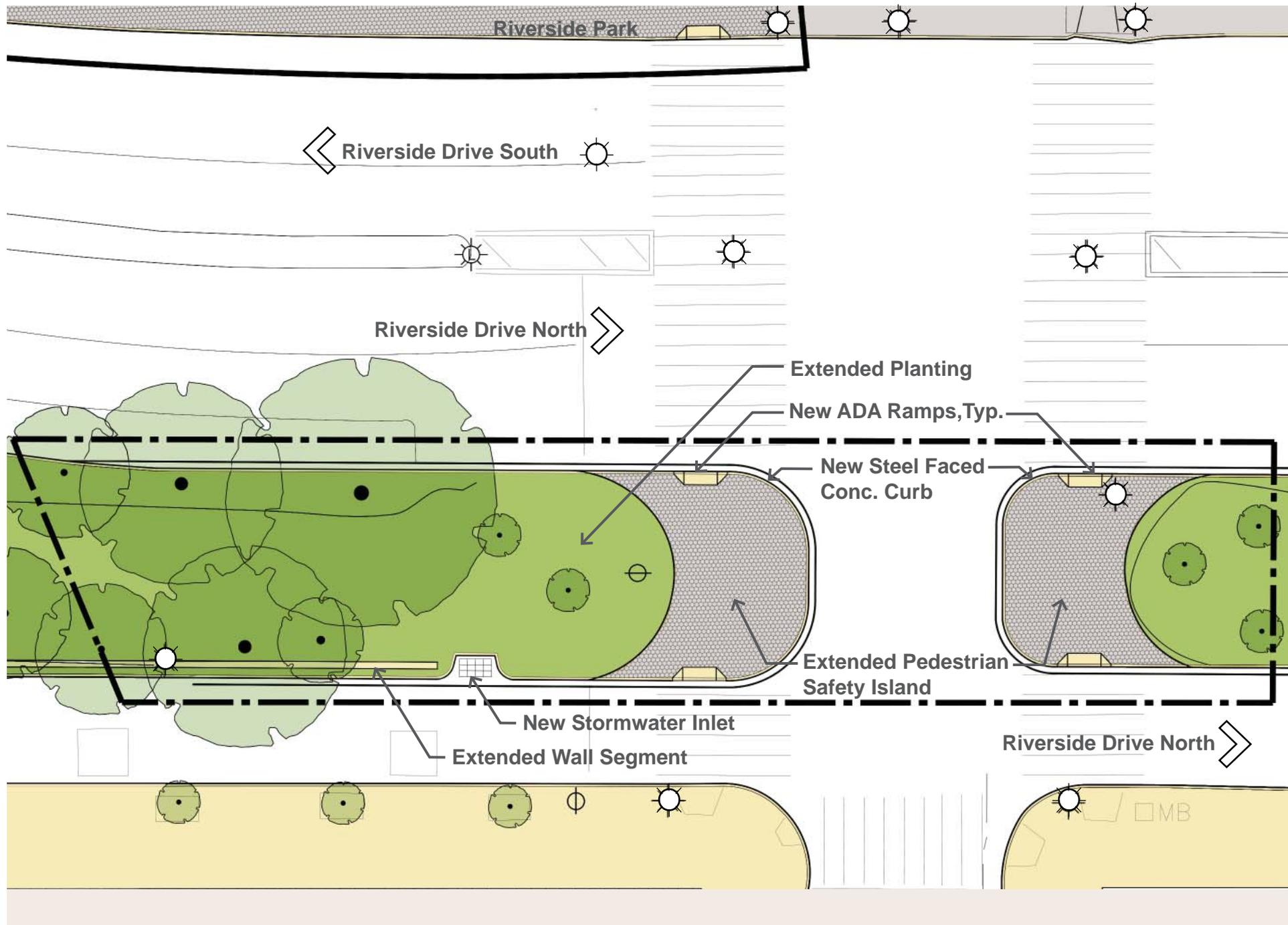
LEGEND

-  Project area
-  8' x 5' DOT Alighting Area
-  New Bus Stop
-  Existing Tree
-  Proposed Tree
-  Existing Street Light Post
-  Existing Inlet
-  Existing Lawn
-  Asphalt - Existing
-  Asphalt - New
-  Asphalt Block - New
-  Concrete Paving/Curbs
-  Paving Various

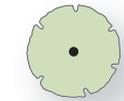
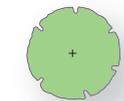


RIVERSIDE DRIVE BUS STOPS | Schematic Plan - 103 St. Northbound - Enlargement



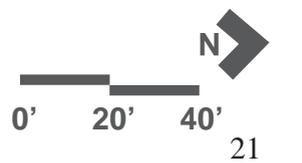


LEGEND

-  Project area
-  New Bus Stop
-  Existing Tree
-  Proposed Tree
-  Existing Street Light Post
-  Existing Inlet
-  Existing Lawn
-  Asphalt Block Paving
Asphalt Block - New
-  Concrete Paving/Curbs



RIVERSIDE DRIVE BUS STOPS | Schematic Plan - 104 St. Northbound & Southbound - Enlargement





Plants on slope spread into paved area

Bluestone pavers heaved, cracked and missing

Bus stop impacts historic monument

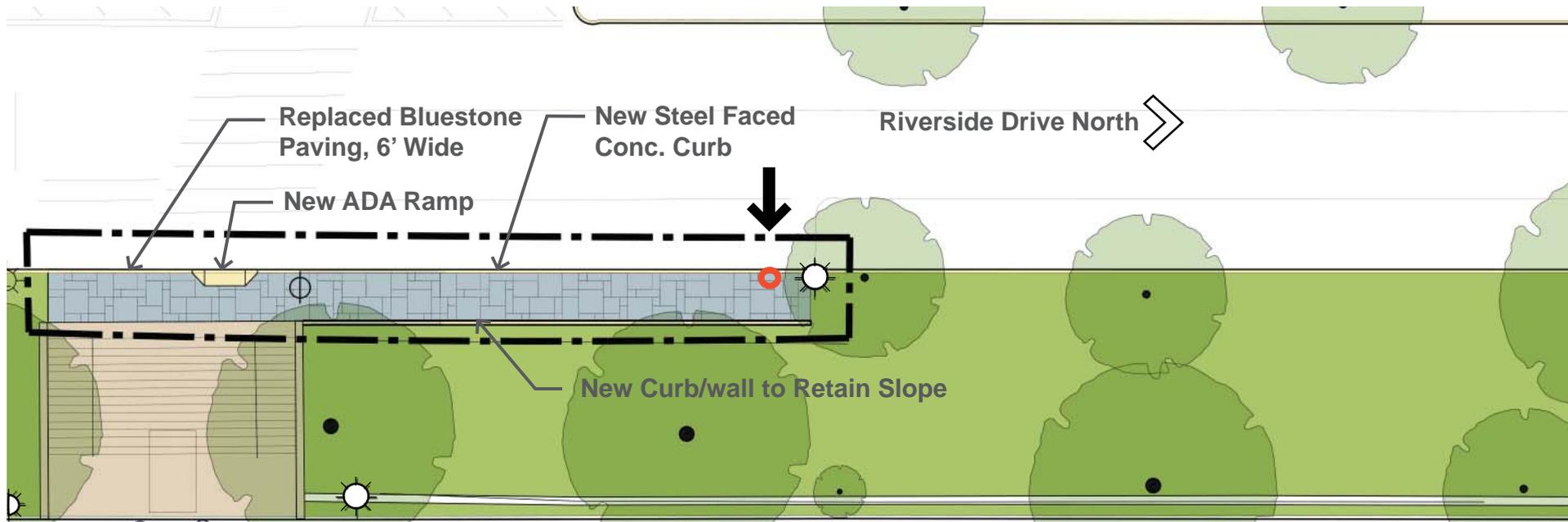
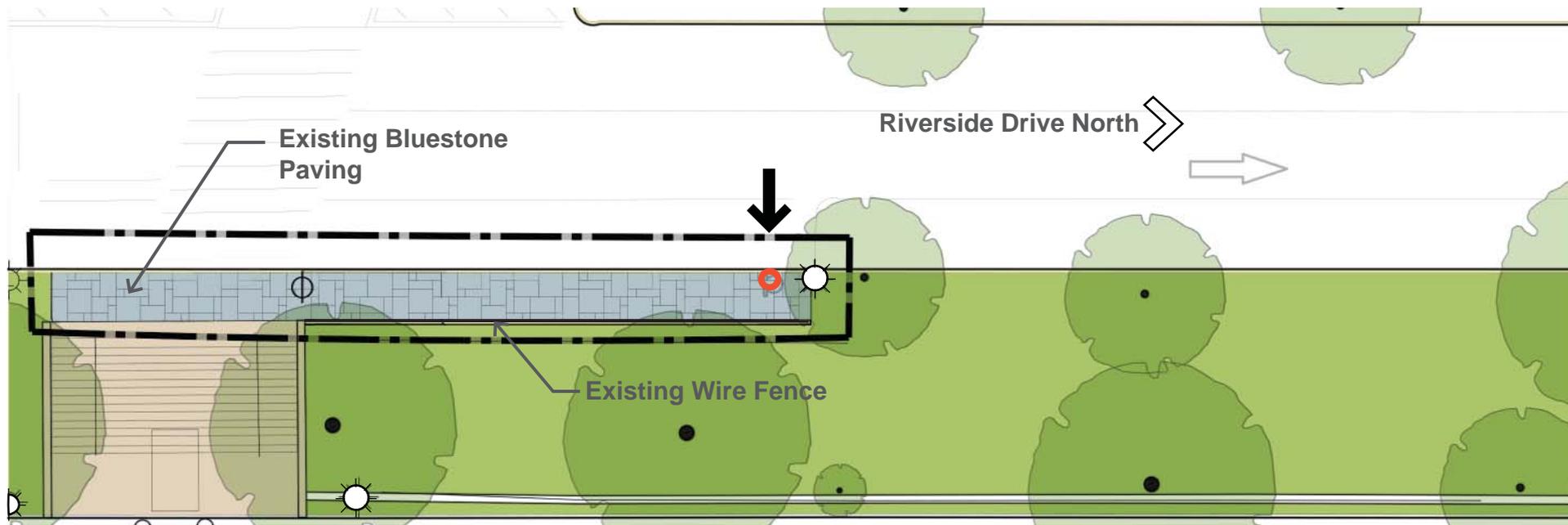
Signal box blocks min. 3' clearance needed for ADA access to bus stop

No ADA accessible ramp

Curb heaved and cracked

Existing Bus Stop Boarding Area



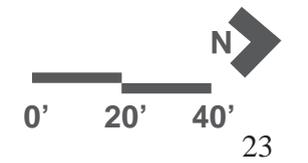


LEGEND

-  Project area
-  New Bus Stop
-  Existing Tree
-  Proposed Tree
-  Existing Street Light Post
-  Existing Inlet
-  Existing Lawn
-  Concrete Paving/Curbs
-  Bluestone Paving
-  Granite Paving/Curbs



RIVERSIDE DRIVE BUS STOPS | Existing and Schematic Plans - 106 St. Northbound





Remove bus stop

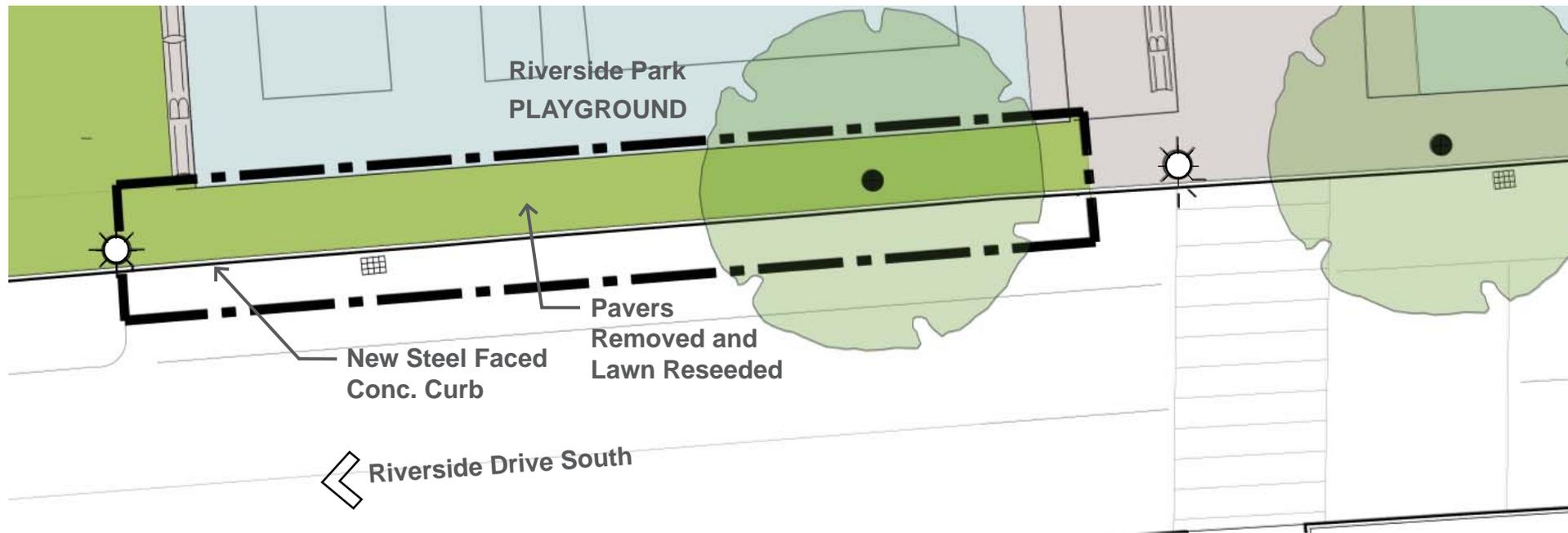
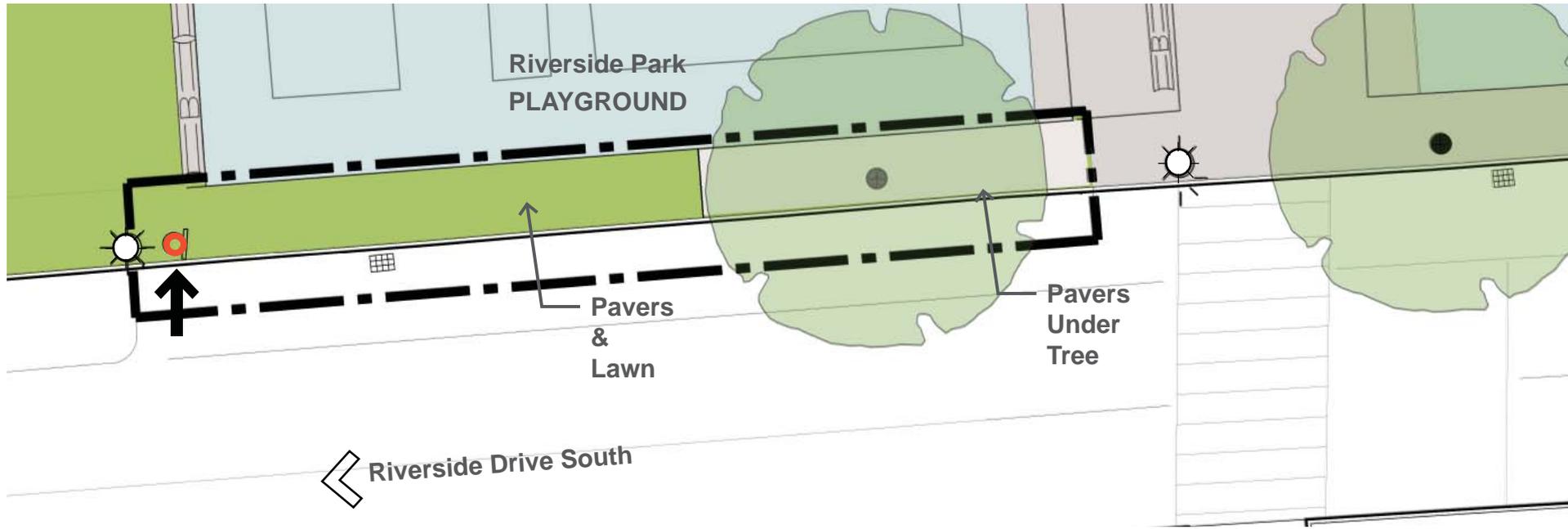
Pavement spotty,
landscape compacted
and unsightly

Existing tree
negatively impacted
by surrounding
pavement

Curb heaved and
cracked

Existing Bus Stop & Tree



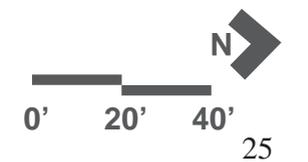


LEGEND

-  Project area
-  New Bus Stop
-  Existing Tree
-  Proposed Tree
-  Existing Street Light Post
-  Existing Inlet
-  Lawn
-  Asphalt Block Paving
-  Safety Surface



RIVERSIDE DRIVE BUS STOPS | Existing and Schematic Plans - 112 St. Southbound





New bus stop location

No ADA accessible ramp

Existing Intersection

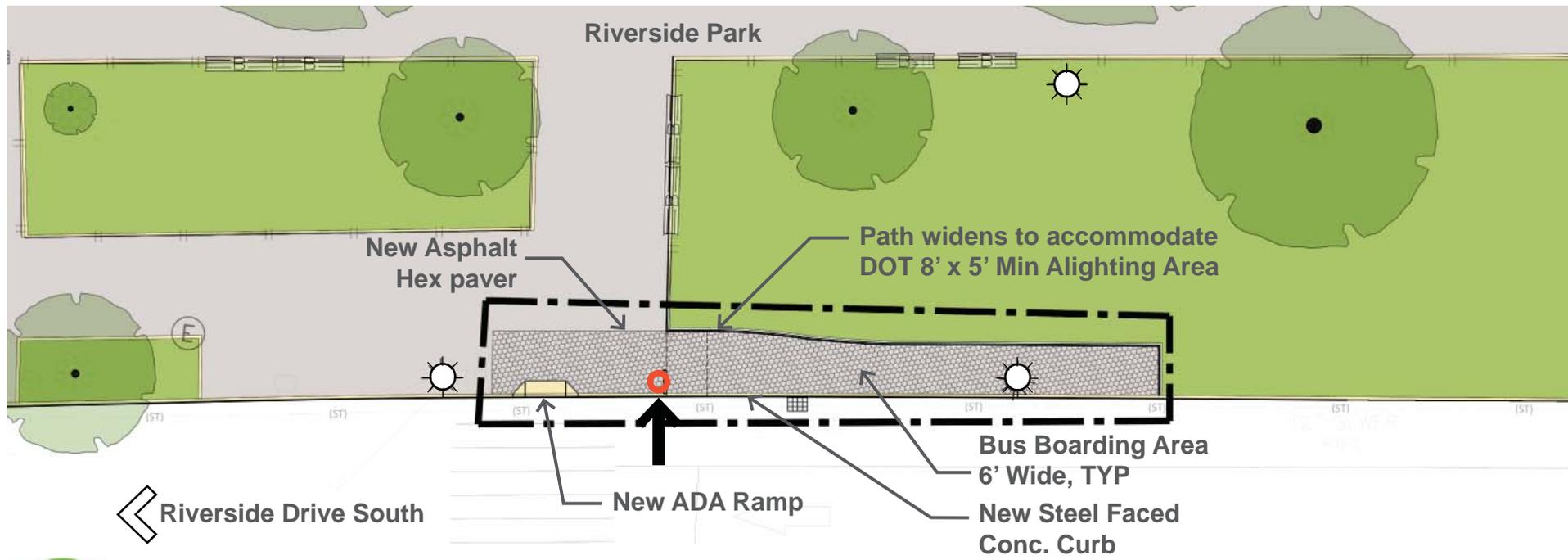


RIVERSIDE DRIVE BUS STOPS | Site Analysis - 113th Street Southbound

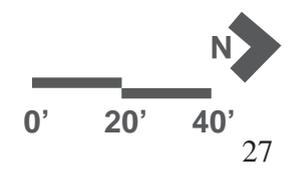


LEGEND

-  Project area
-  8' x 5' DOT Alighting Area
-  New Bus Stop
-  Existing Tree
-  Proposed Tree
-  Existing Street Light Post
-  Existing Inlet
-  Existing Lawn
-  Asphalt Block Paving
-  Asphalt Block - New
-  Concrete Paving/Curbs



RIVERSIDE DRIVE BUS STOPS | Existing and Schematic Plans - 113 St. Southbound





Remove bus stop

Existing Bus Stop



RIVERSIDE DRIVE BUS STOPS | Site Analysis - 114th Street Southbound

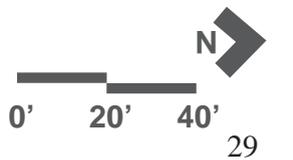


LEGEND

-  Project area
-  Existing Tree
-  Proposed Tree
-  Existing Street Light Post
-  Existing Inlet
-  Existing Lawn
-  Asphalt Block Paving
-  Asphalt Block - New
-  Concrete Paving/Curbs



RIVERSIDE DRIVE BUS STOPS | Existing and Schematic Plans - 114 St. Southbound



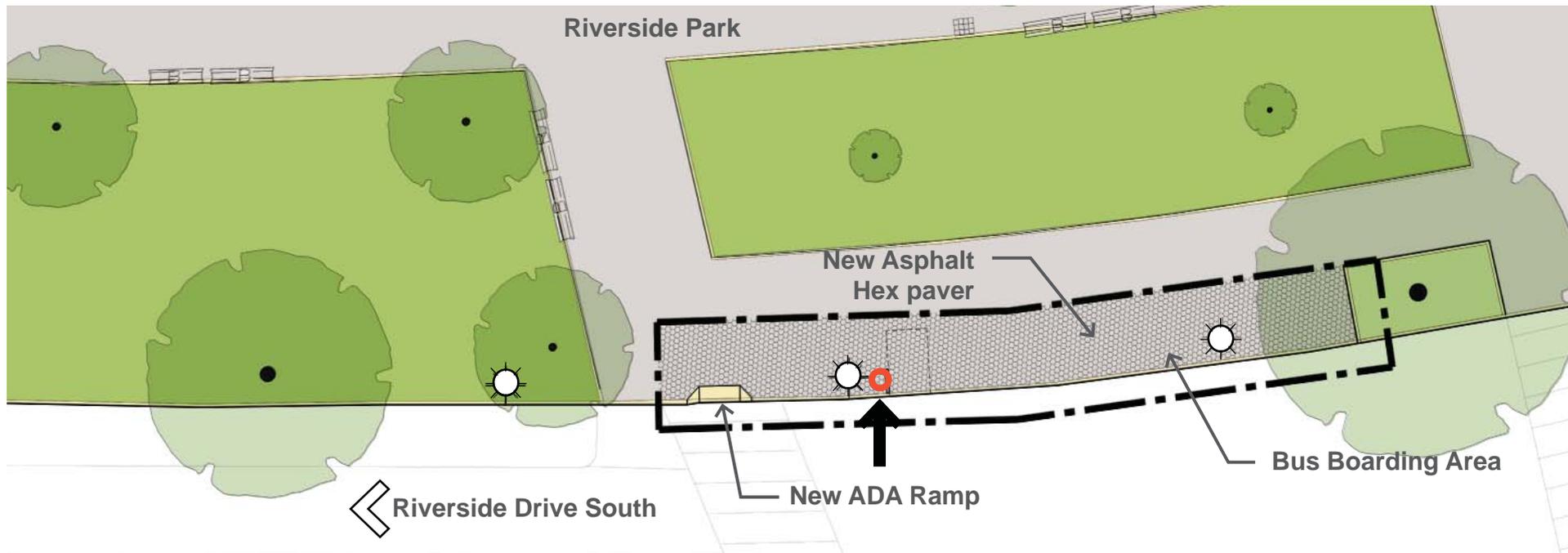
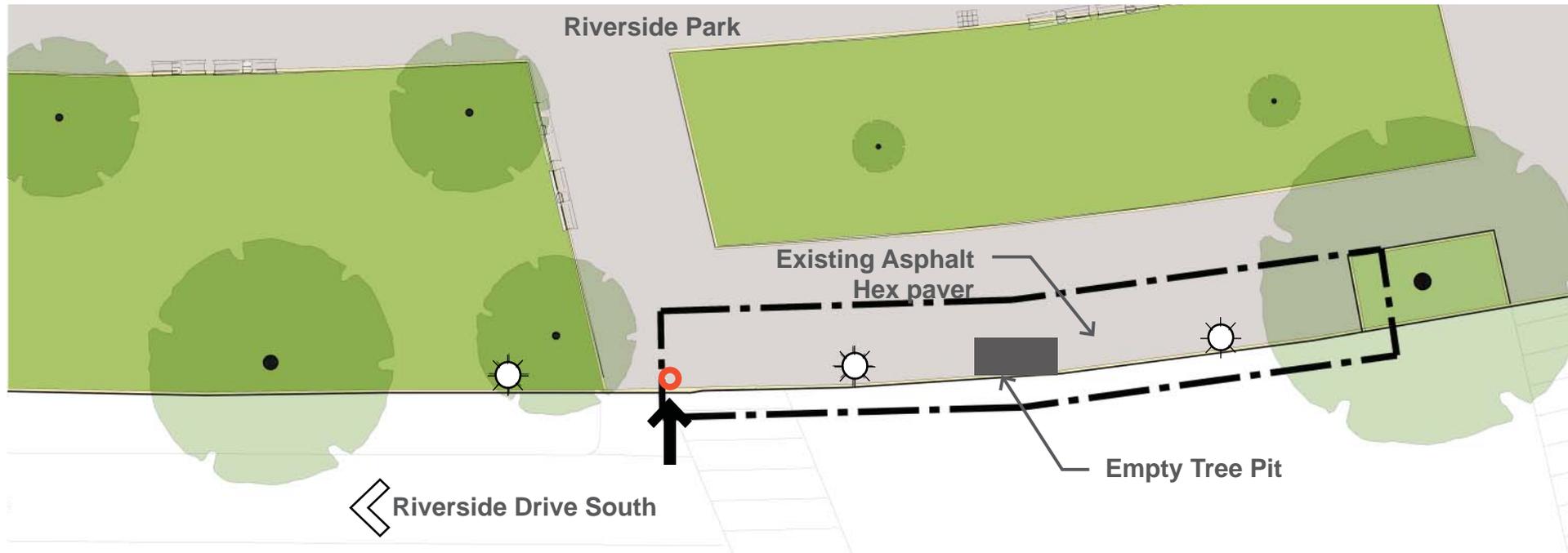
**Bus stop clearance
too short. Stopped
bus blocks
crosswalk**

**No ADA
accessible ramp**

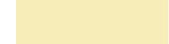


Existing Bus Stop



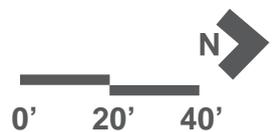


LEGEND

-  Project area
-  8' x 5' DOT Alighting Area
-  New Bus Stop
-  Existing Tree
-  Proposed Tree
-  Existing Street Light Post
-  Existing Inlet
-  Existing Lawn
-  Asphalt Block Paving
-  Asphalt Block - New
-  Concrete Paving/Curbs



RIVERSIDE DRIVE BUS STOPS | Existing and Schematic Plans - 116 St. Southbound



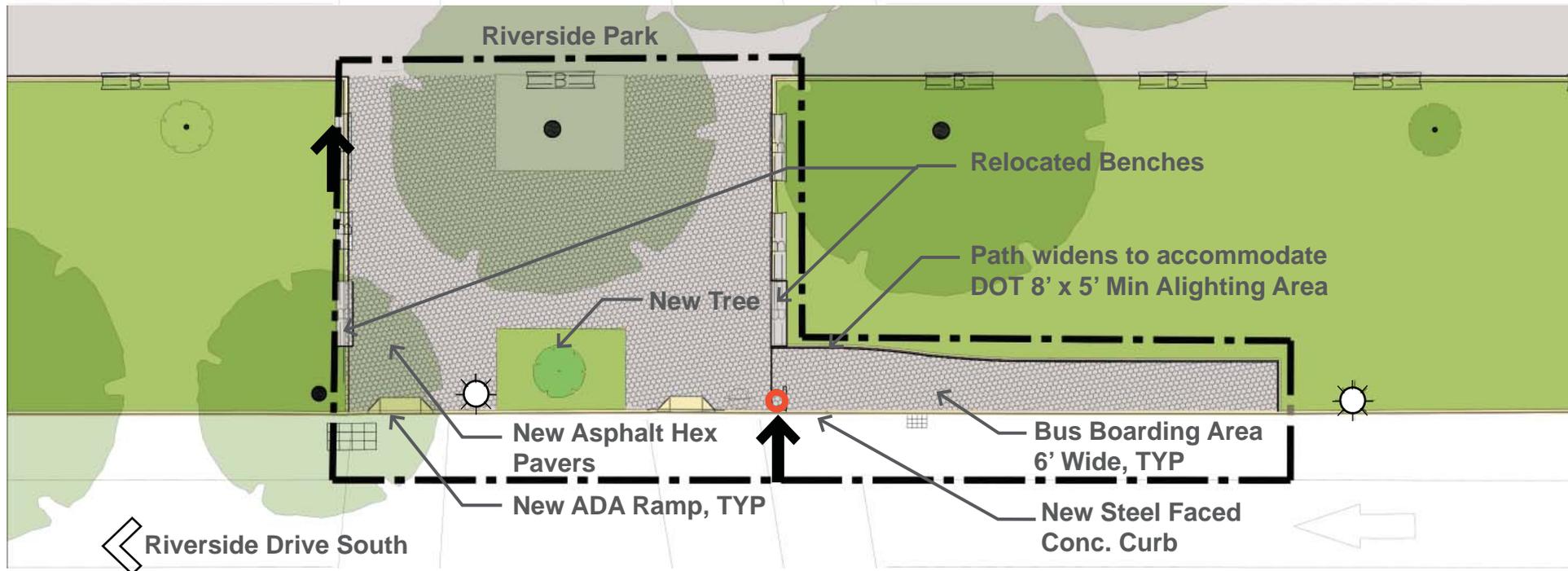
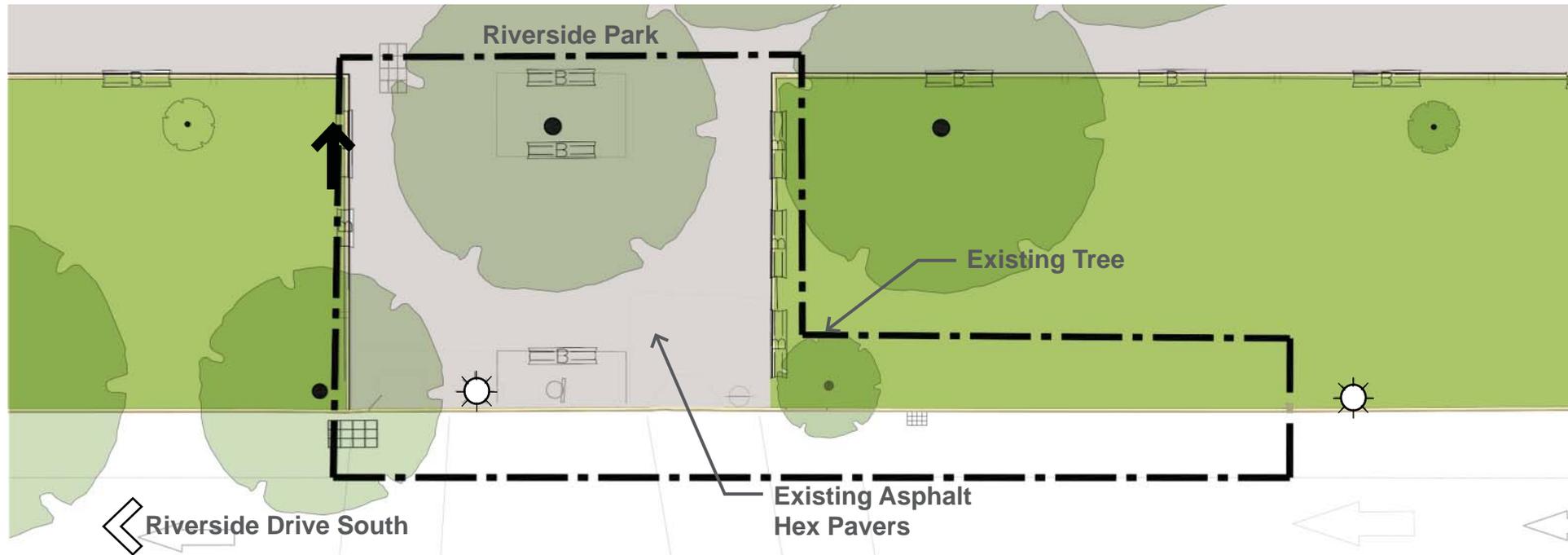


- ← Tree located in proposed bus boarding area
- ← Bench located in proposed bus boarding area
- ← Non-standard ADA ramp
- ← Curb heaved and cracked

Existing Intersection



RIVERSIDE DRIVE BUS STOPS | Site Analysis - 119th Street Southbound

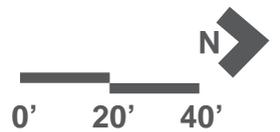


LEGEND

-  Project area
-  8' x 5' DOT Alighting Area
-  New Bus Stop
-  Existing Tree
-  Proposed Tree
-  Existing Street Light Post
-  Existing Inlet
-  Existing Lawn
-  Asphalt Block Paving
-  Asphalt Block - New
-  Concrete Paving/Curbs
-  Paving Various



RIVERSIDE DRIVE BUS STOPS | Existing and Schematic Plans - 119 St. Southbound



Remove bus stop & CEMUSA shelter

Curb tied to concrete foundation



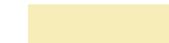
Existing Bus Stop



RIVERSIDE DRIVE BUS STOPS | Site Analysis - 120th Street Southbound



LEGEND

-  Project area
-  New Bus Stop
-  Existing Tree
-  Proposed Tree
-  Existing Street Light Post
-  Existing Inlet
-  Existing Lawn
-  Asphalt Block Paving
-  Concrete Paving/Curbs
-  Paving Various



RIVERSIDE DRIVE BUS STOPS | Existing and Schematic Plans - 120 St. Southbound



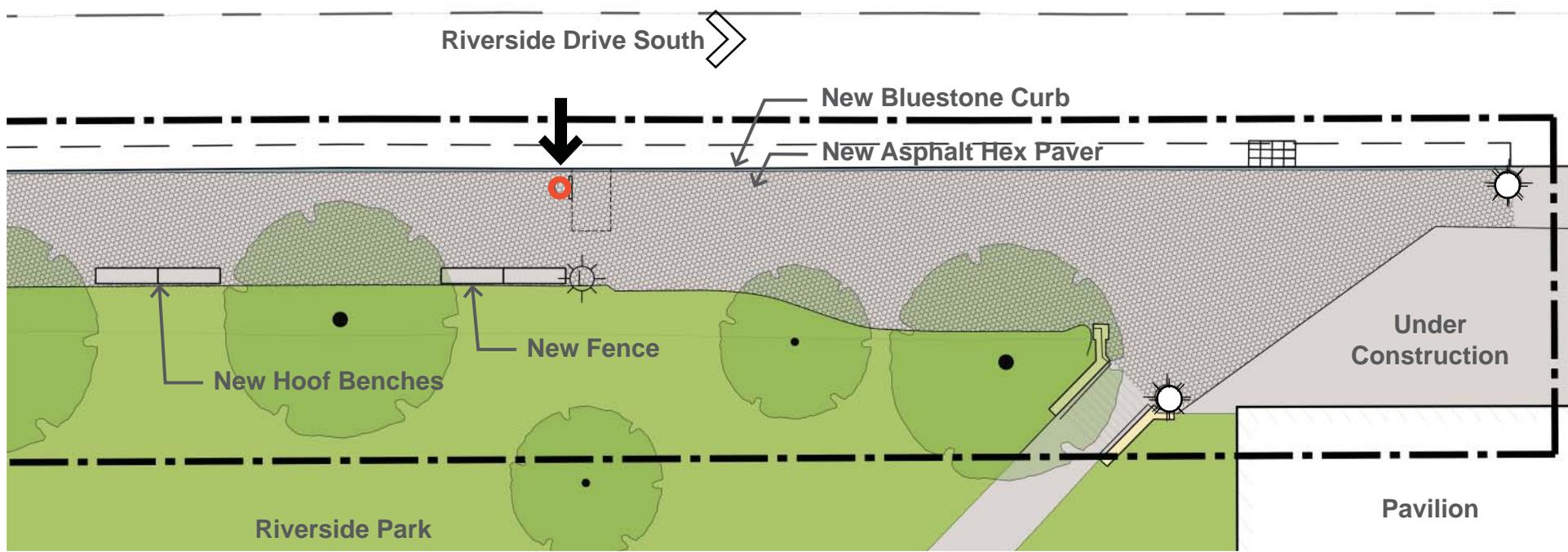
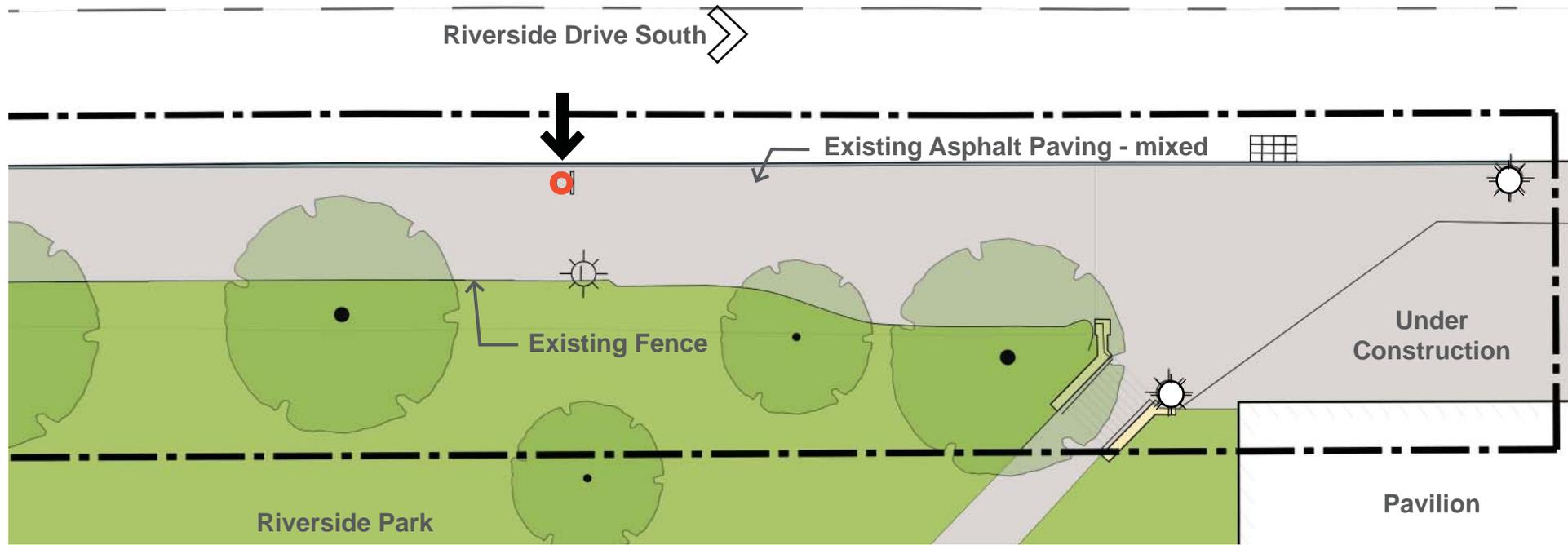


Pavement settled and heaved

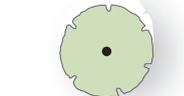
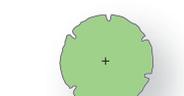
Curb heaved, cracked and missing

Pavement trenched and patched

View South of Existing Bus Stop

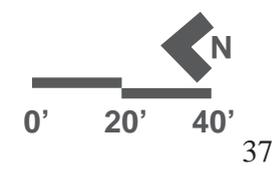


LEGEND

-  Project area
-  8' x 5' DOT Alighting Area
-  New Bus Stop
-  Existing Tree
-  Proposed Tree
-  Existing Street Light Post
-  Existing Inlet
-  Existing Lawn
-  Asphalt Block Paving
-  Asphalt Block - New
-  Bluestone Curbs



RIVERSIDE DRIVE BUS STOPS | Existing and Schematic Plans - 122 St. Southbound





ASPHALT PAVERS



BRICK



NEW YORK BLUESTONE



SPARTA PINK GRANITE



POMPTON LAKES GRANITE CURB



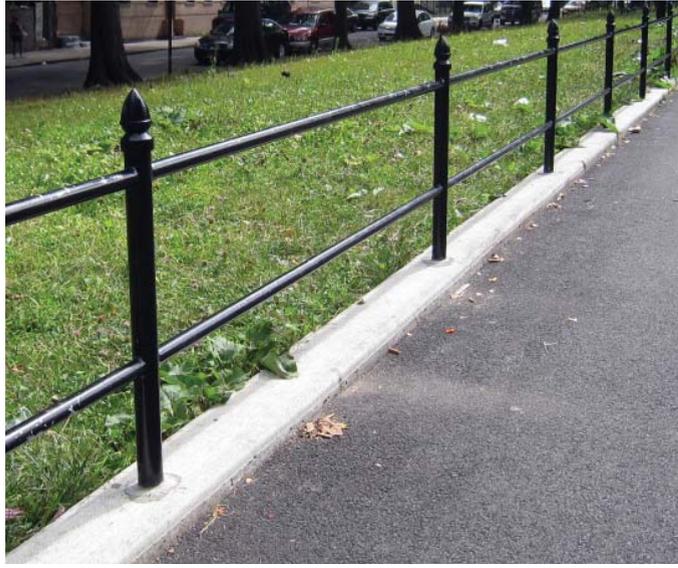
BLUESTONE CURB



BELGIAN BLOCK CURB



RIVERSIDE DRIVE BUS STOPS | Site Materials - All to match existing



PIPE RAIL FENCE



RIVERSIDE - STEEL FENCE 3'-0"



HOOF BENCH



RIVERSIDE DRIVE BUS STOPS | Site Materials - All to match existing

PLANTING VS. PAVING TALLY

Location	Direction	Planting	Paving
100 St.	N & S	144	133
103-104 St.	N & S	470	1097
106 St.	N	No Change	
112 St.	S	238	0
113 St.	S	0	416
114 St.	S	No Change	
116 St.	S	0	60
119 St.	S	125	402
120 St.	S	180	0
122 St.	S	No Change	
TOTALS		1157	2108

