

BARRINGTON VILLAGE CENTER

BARRINGTON VILLAGE CENTER CONNECTIVITY STUDY

PREPARED FOR:
The Town of Barrington



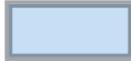
January 2014

PREPARED BY:
Birchwood Design Group
SurfaceMatter Design



surfaceMATTER DESIGN
BRAND COMMUNICATIONS | ENVIRONMENTAL GRAPHIC DESIGN

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LETTER OF INTRODUCTION

January 2014

Mr. Philip Hervey
Barrington Town Planner
283 County Road
Barrington, Rhode Island 02806

Subject: Barrington Village Connectivity Plan

Dear Mr. Hervey:

Birchwood Design Group (BDG) is pleased to present this study to you and your Steering Committee. We look forward to presenting to the Town Council and seeing the improvements phased into the Village Area.

The Barrington Shopping Center and Village Center area is a vibrant shopping district and government center centrally located in the Town of Barrington. The business development occurs along the major arterial County Road that connects to Providence and points north and connects to Warren and points south through the East Bay. It is a highly traveled road by local residents, commuters and visitors. The Town has made headway in developing guidelines and implementing zoning changes since 2000 to encourage and promote business and the pedestrian/motorist experience. This is evident through the redevelopment of County Road and the establishment of new buildings, sidewalks, signage, parking and biking amenities.

It is the Town's mission to continue to strengthen this business core and to expand beyond the County Road experience to allow for small business growth along Maple Avenue, West Street, Waseca Avenue and Wood Street. Through the town zoning changes, the properties along these streets allow for residential and business development. The Town's continued interest in encouraging shoppers to travel these streets and experience these diverse shops is evident in the following conceptual study package.

The purpose of this study is to understand the needs of the businesses and to assist the Town in conceptualizing safety, wayfinding and circulation improvements that can be implemented within the public rights of way to meet today's needs and future development.

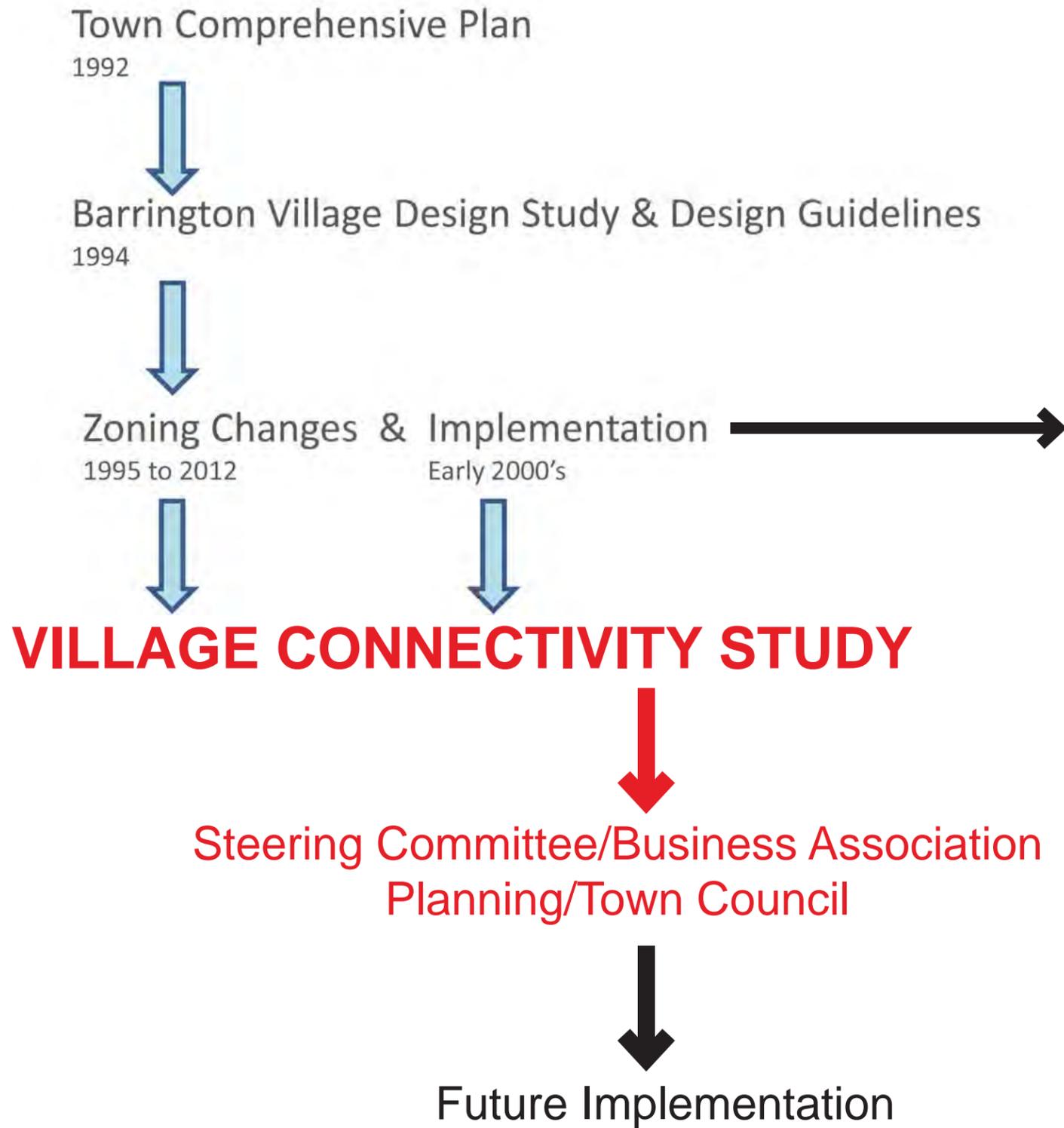
This planning study will give the Town of Barrington a renewed sense of direction as they expand their Village Center.

Sincerely,

A handwritten signature in blue ink that reads "Kris M. Bradner". The signature is fluid and cursive, with a long horizontal flourish at the end.

Kris M. Bradner, RLA
Principal
Birchwood Design Group

HISTORY



BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

INFORMATION GATHERING

APRIL 2013



**TOWN OF BARRINGTON
REQUEST FOR PROPOSALS**

**TOWN OF BARRINGTON
REQUEST FOR PROPOSALS
CONSULTANT SERVICES:
BARRINGTON VILLAGE CENTER
CONNECTIVITY PLAN**

1. PURPOSE
The Town of Barrington is soliciting Proposals from qualified design professionals interested in providing Consultant Services to complete a "Barrington Village Center Connectivity Plan" to include:

- A streetscape improvement plan for a mixed-use district in Barrington, to include rebuilt and new sidewalks, crosswalks, street trees, street furniture and on-street parking, where feasible;
- A wayfinding signage plan for the County Road/Maple Avenue area, and the East Bay Bike Path, for motorists, pedestrians and cyclists; and,
- A conceptual plan for the extension of Wood Avenue, providing a vehicular to the Barrington Shopping Center as an alternate north-south route to County Road.

**JULY 17TH
STEERING COMMITTEE
KICKOFF MEETING**

**AUGUST 22ND
MEETING
WITH DEPARTMENT HEADS**

**SEPTEMBER 10TH
BUSINESS ASSOCIATION
MEETING**

**SEPTEMBER 30TH
MEETING WITH DPW**

News | Business
Merchants Briefed on 'Village Center' for Barrington
Consultants look for feedback from the Barrington Business Association on the creation of a 'village center' between Maple, Wood, Waseca avenues and West Street.
Posted by William Rupp (Editor) , September 10, 2013 at 09:53 PM



Kris Bradner of Birchwood Design Group and John Seeley of Surface Matter Design speak to Barrington merchants.

Public Walk-About and Design Workshop
Saturday, September 21, 2013
9:00am-12:00pm

School Committee Room
1st Floor of Town Hall
School Administration Entrance
283 County Rd, Barrington RI

PLEASE JOIN US FOR A SITE WALK, FOLLOWED BY
A DESIGN WORKSHOP
COFFEE & SNACKS WILL BE SERVED

**SEPTEMBER 21, 2013
PUBLIC WALK-ABOUT**

WOOD AVENUE CONNECTION
• OCTOBER 2ND MEETING REGARDING PARCEL 250 RITE-AID
• OCTOBER 17TH MEETING REGARDING PARCEL 47& 23RD ACP SHOPPING CENTER



COORDINATION WITH DOT

**OCTOBER 28TH
PRESENTATION
TO STEERING
COMMITTEE**

**NOVEMBER 5TH
& DECEMBER 3RD
PLANNING BOARD**

**JANUARY 6, 2014
TOWN COUNCIL
PRESENTATION**

BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

SECTION 2 - PLANNING & DEVELOPMENT

STUDY AREA



- PROJECT GOALS**
1. CREATE A VISION FOR A VIBRANT VILLAGE SHOPPING DISTRICT.
 2. PROMOTE CONNECTIVITY BETWEEN COMMUNITY AMENITIES AND COMMERCE.
 3. CREATE A LEGIBLE AND INSPIRED WAYFINDING SYSTEM.



BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

EXISTING CONDITIONS ANALYSIS



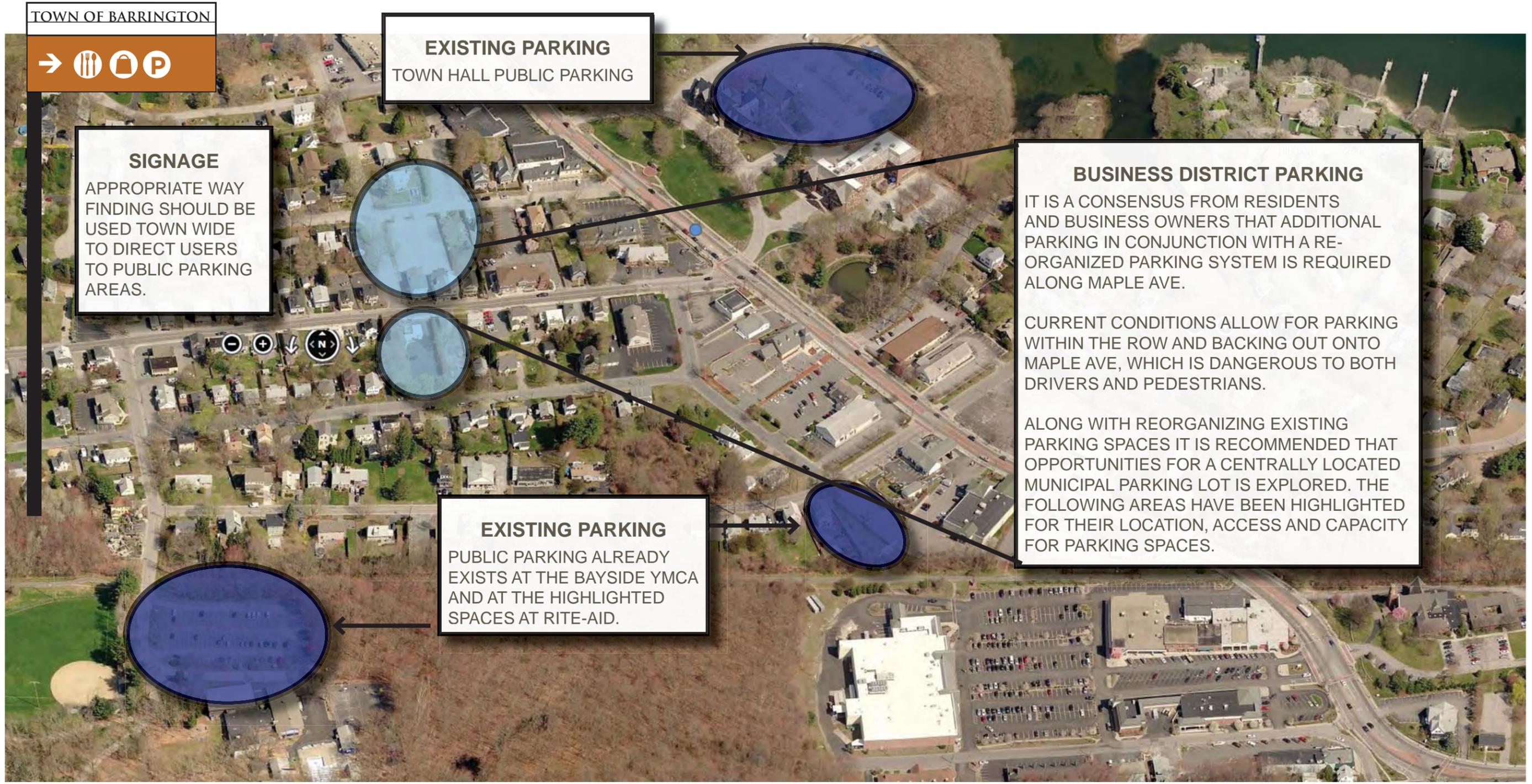
LEGEND

-  LANDMARK/ DESTINATION
-  INTERSECTION WITHIN STUDY AREA
-  CONNECTION OFF BIKE PATH
-  EAST BAY BIKE PATH
-  BUSINESS/ RETAIL CONCENTRATION
-  OPEN SPACE



BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

MUNICIPAL PARKING LOT OPPORTUNITIES



SIGNAGE
 APPROPRIATE WAY FINDING SHOULD BE USED TOWN WIDE TO DIRECT USERS TO PUBLIC PARKING AREAS.

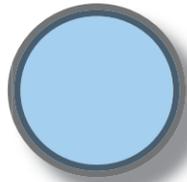
EXISTING PARKING
 TOWN HALL PUBLIC PARKING

EXISTING PARKING
 PUBLIC PARKING ALREADY EXISTS AT THE BAYSIDE YMCA AND AT THE HIGHLIGHTED SPACES AT RITE-AID.

BUSINESS DISTRICT PARKING
 IT IS A CONSENSUS FROM RESIDENTS AND BUSINESS OWNERS THAT ADDITIONAL PARKING IN CONJUNCTION WITH A RE-ORGANIZED PARKING SYSTEM IS REQUIRED ALONG MAPLE AVE.

 CURRENT CONDITIONS ALLOW FOR PARKING WITHIN THE ROW AND BACKING OUT ONTO MAPLE AVE, WHICH IS DANGEROUS TO BOTH DRIVERS AND PEDESTRIANS.

 ALONG WITH REORGANIZING EXISTING PARKING SPACES IT IS RECOMMENDED THAT OPPORTUNITIES FOR A CENTRALLY LOCATED MUNICIPAL PARKING LOT IS EXPLORED. THE FOLLOWING AREAS HAVE BEEN HIGHLIGHTED FOR THEIR LOCATION, ACCESS AND CAPACITY FOR PARKING SPACES.



MUNICIPAL PARKING LOT OPPORTUNITIES

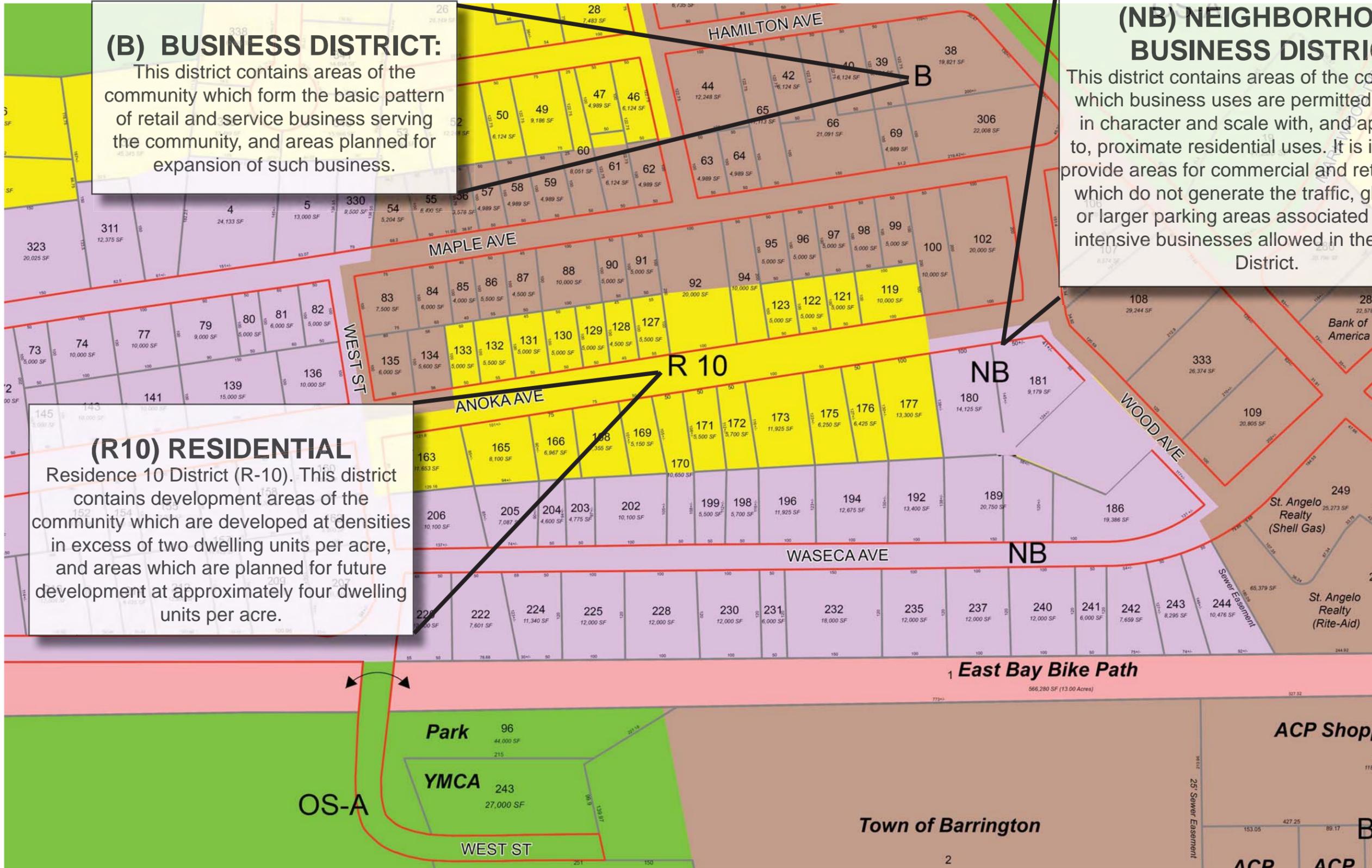


EXISTING PUBLIC PARKING



NORTH

ZONING MAP



(B) BUSINESS DISTRICT:
 This district contains areas of the community which form the basic pattern of retail and service business serving the community, and areas planned for expansion of such business.

(NB) NEIGHBORHOOD BUSINESS DISTRICT:
 This district contains areas of the community in which business uses are permitted which are in character and scale with, and appropriate to, proximate residential uses. It is intended to provide areas for commercial and retail activities which do not generate the traffic, glare, noise or larger parking areas associated with more intensive businesses allowed in the Business District.

(R10) RESIDENTIAL
 Residence 10 District (R-10). This district contains development areas of the community which are developed at densities in excess of two dwelling units per acre, and areas which are planned for future development at approximately four dwelling units per acre.

BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

CONCEPT STUDY



BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

SECTION 4 - STREETSCAPE VISION

MAPLE AVENUE

DESIGN RECOMMENDATIONS:

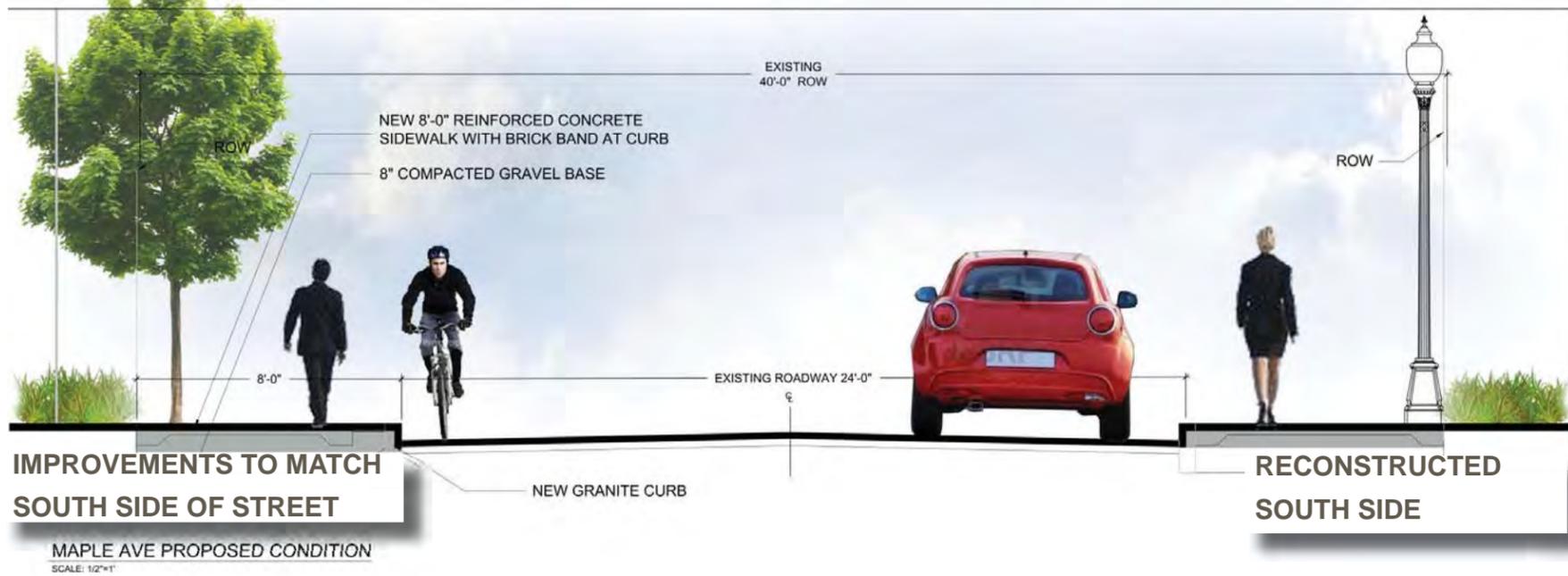
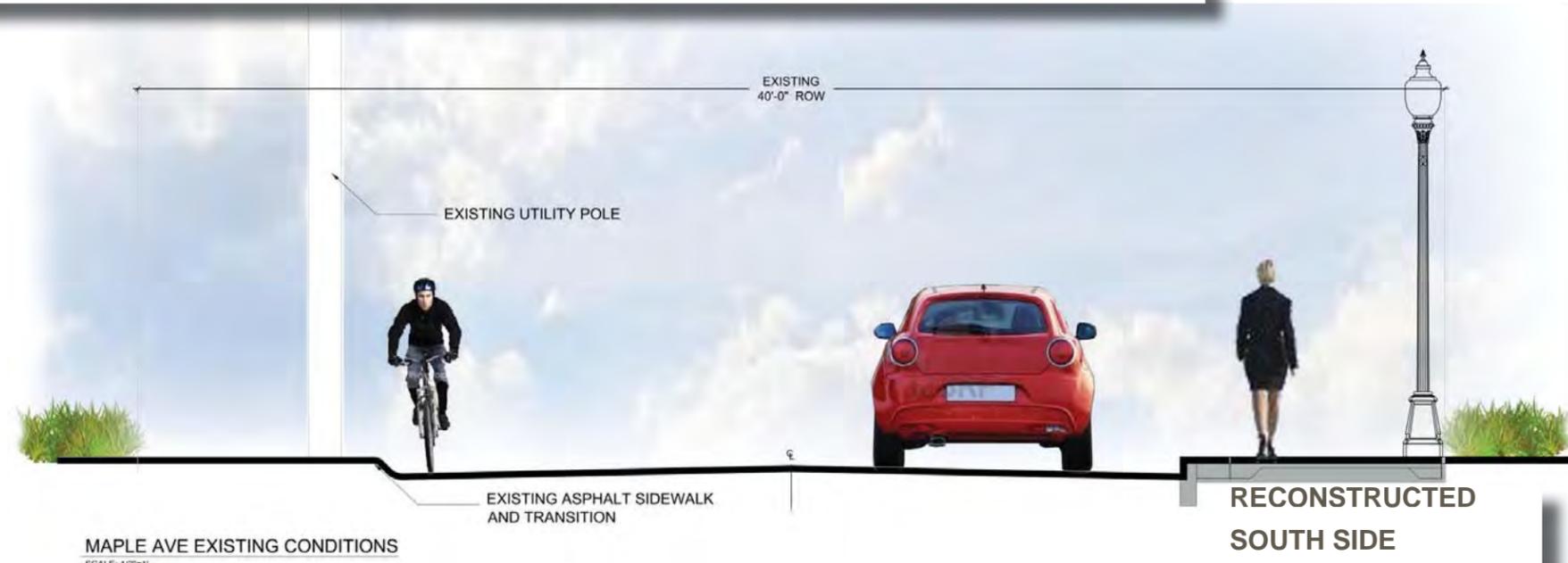
- CREATE A SIDEWALK ON THE SOUTH SIDE OF MAPLE TO CREATE SAFER PEDESTRIAN CIRCULATION AND BETTER ACCESS TO BUSINESSES.
- ELIMINATE ILLEGAL PARKING WITHIN THE R.O.W.
- USE TEXTURED OR RAISED CROSSWALKS TO SLOW TRAFFIC AND CREATE SAFER PEDESTRIAN CROSSINGS.
- CREATE A UNIFIED STREETScape TO BETTER IDENTIFY THE VILLAGE CENTER



EXISTING CONDITION: NORTH SIDE OF MAPLE



EXISTING CONDITION: SOUTH SIDE OF MAPLE



BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

COTTAGE STREET



COTTAGE STREET CONCEPT SKETCH

DESIGN RECOMMENDATIONS:

- REDUCE ROAD WIDTH FROM 26' TO 24'.
- CREATE A SIDEWALK CONNECTION FROM HAMILTON AVE TO MAPLE AVE
- BETTER DEFINE & INCREASE PARKING BY CREATING PERPENDICULAR OR ANGLED SPACES AT THE SOUTH END OF COTTAGE STREET. PUBLIC/PRIVATE AGREEMENT SHOULD BE CONSIDERED AND SHOULD INCLUDE LONG-TERM MAINTENANCE RESPONSIBILITIES
- UTILIZE PERVIOUS PAVERS TO REDUCE ASPHALT AND FACILITATE DRAINAGE.
- CREATE A CROSSWALK AND PLAZA SPACE AT THE INTERSECTION OF HAMILTON AND MAPLE.



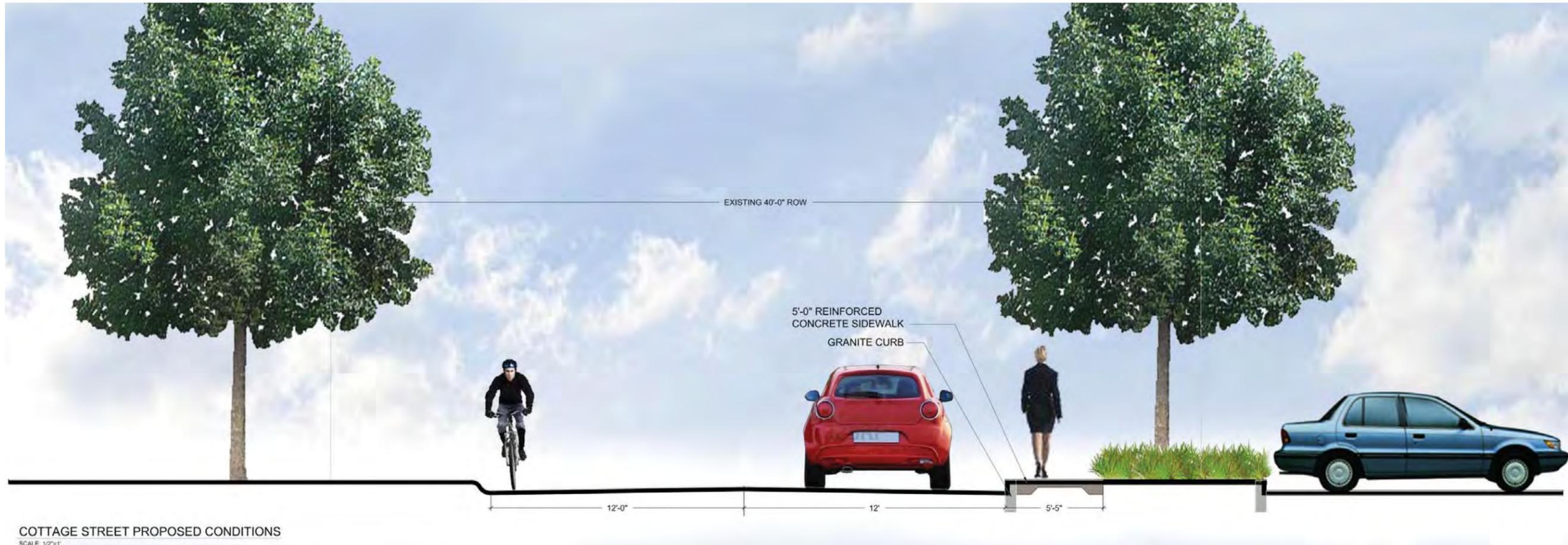
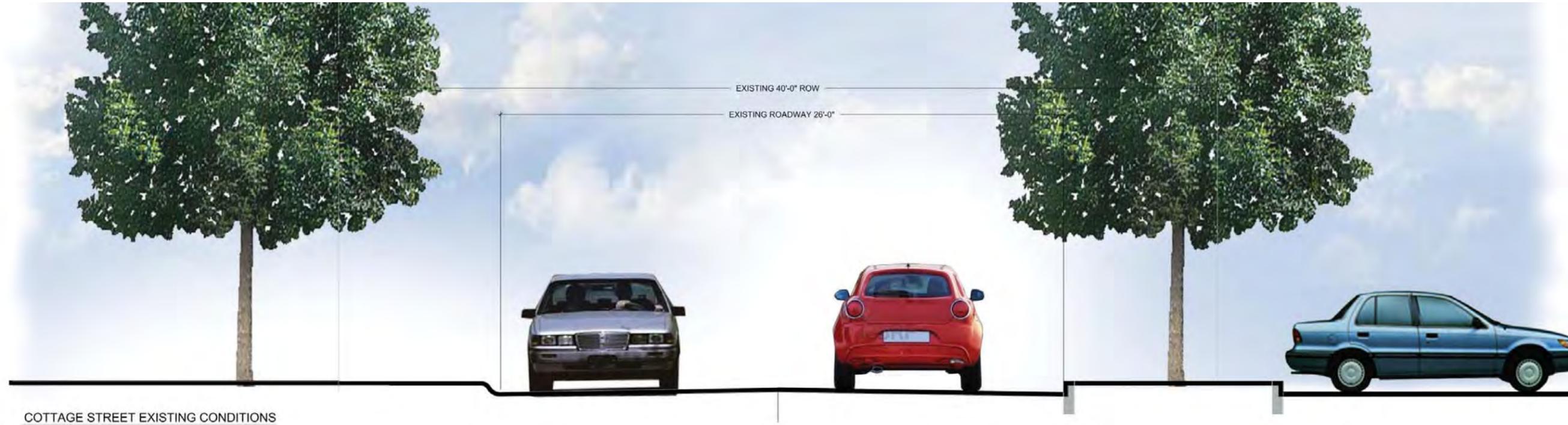
INTERSECTION OF COTTAGE AND MAPLE CONCEPT SKETCH



EXISTING INTERSECTION OF COTTAGE AND MAPLE

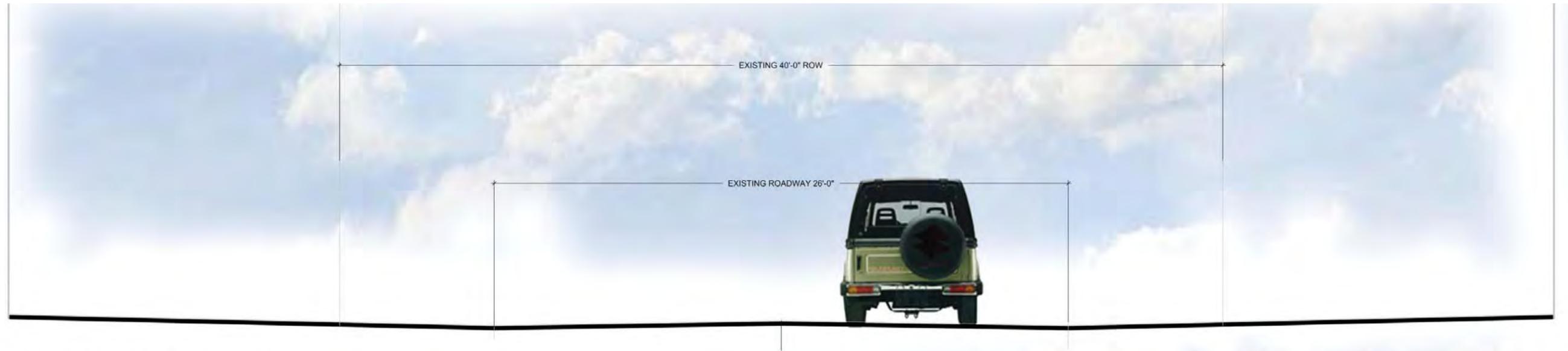
BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

COTTAGE STREET: SECTION A-A'

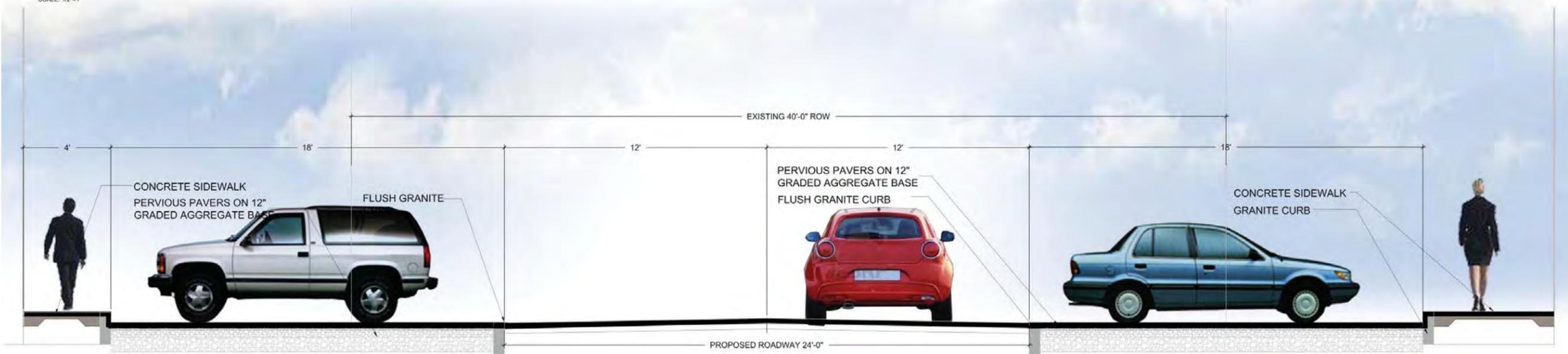


BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

COTTAGE STREET: SECTION B-B'



COTTAGE STREET EXISTING CONDITIONS
SCALE: 1/2"=1'



COTTAGE STREET PROPOSED CONDITIONS
SCALE: 1/2"=1'

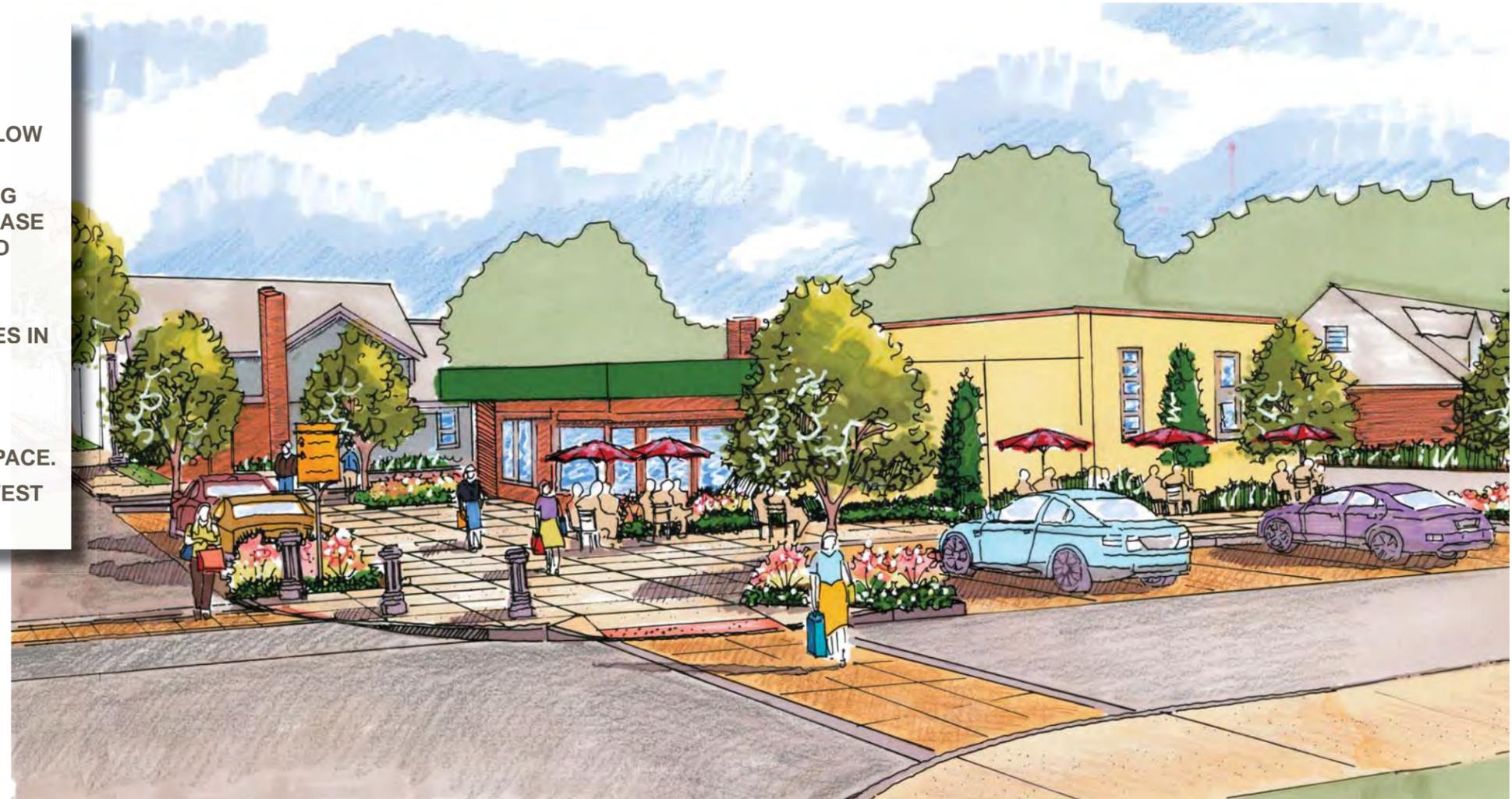
WEST STREET

DESIGN RECOMMENDATIONS:

- REDUCE ROAD WIDTH FROM 30' TO 24'
- CREATE A RAISED CROSSWALK ACROSS MAPLE TO SLOW TRAFFIC AND IDENTIFY ENTRANCE TO THE VILLAGE
- CREATE PERPENDICULAR OR ANGLED PARKING ALONG EAST SIDE OF WEST FROM MAPLE TO ANOKA TO INCREASE PARKING COUNT. PUBLIC/PRIVATE AGREEMENT SHOULD BE CONSIDERED AND SHOULD INCLUDE LONG-TERM MAINTENANCE RESPONSIBILITIES
- WHERE POSSIBLE CREATE PARALLEL PARKING SPACES IN FRONT OF BAKERY ON MAPLE AVE
- UTILIZE PERVIOUS PAVERS TO REDUCE ASPHALT AND FACILITATE DRAINAGE
- REDUCE CURB CUTS TO CREATE OUTDOOR EATING SPACE.
- CREATE CONTINUOUS SIDEWALK ON EAST SIDE OF WEST STREET FROM MAPLE TO BAYSIDE YMCA.



INTERSECTION OF WEST AND MAPLE



INTERSECTION CONCEPT SKETCH



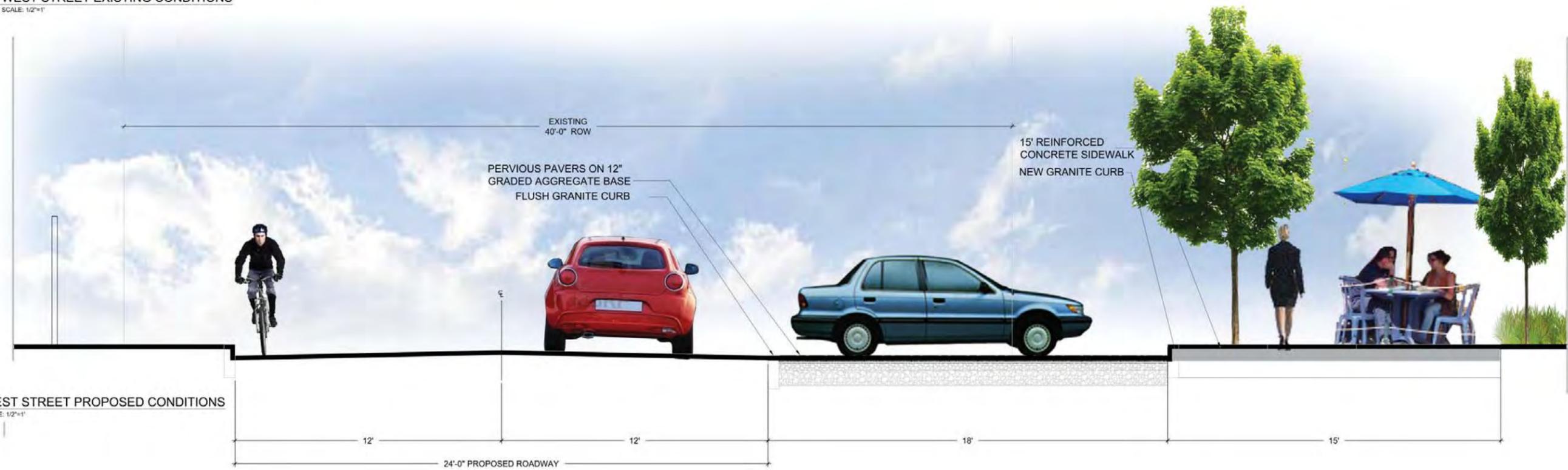
EXISTING INTERSECTION

BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

WEST STREET SECTION C-C'



WEST STREET EXISTING CONDITIONS
SCALE: 1/2"=1'



WEST STREET PROPOSED CONDITIONS
SCALE: 1/2"=1'

BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

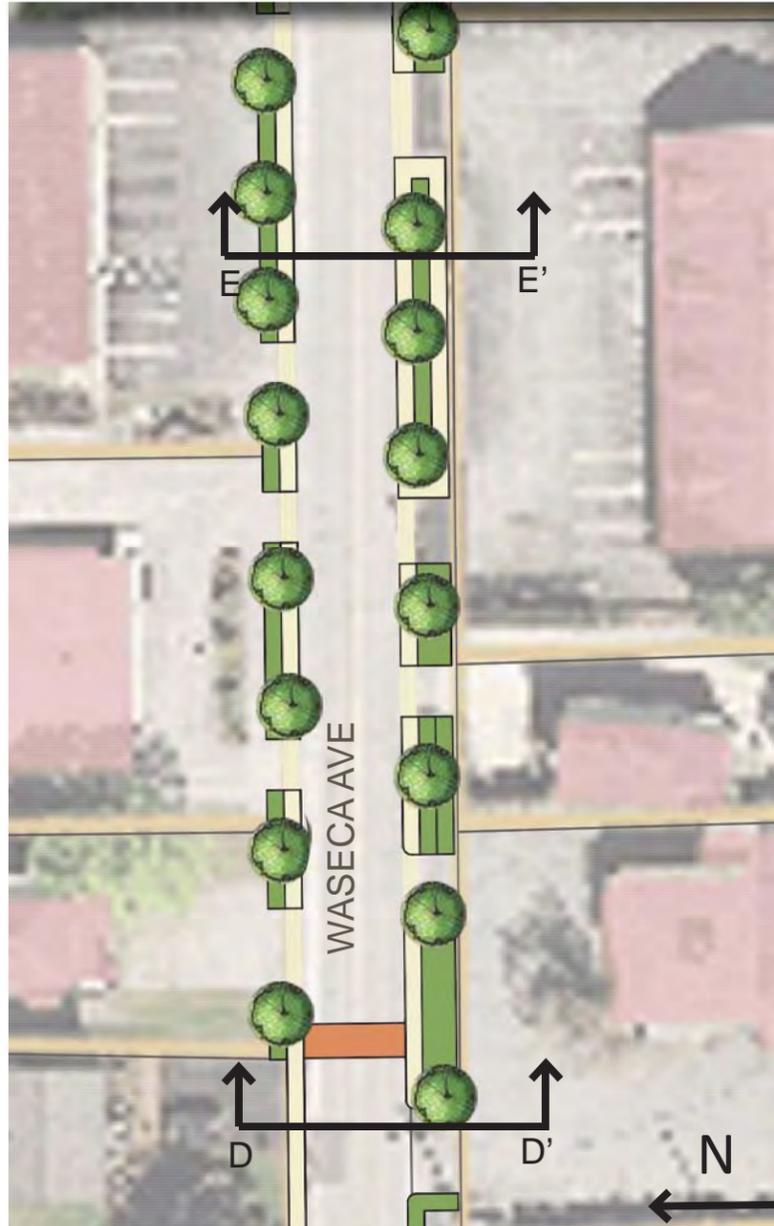
WASECA AVENUE

DESIGN RECOMMENDATIONS:

- REDUCE ROAD WIDTH FROM 30' TO 24'.
- CREATE A SIDEWALK ALONG NORTH SIDE OF WASECA FROM WEST STREET TO WOOD AVE.
- IN AREA WITH GREATER DEVELOPMENT OF BUSINESS CREATE SIDEWALKS ON BOTH SIDES.
- UTILIZE REDUCED ROAD WIDTH TO ADD GREEN SPACE AND STREET TREES



WASECA AVENUE CONCEPT SKETCH



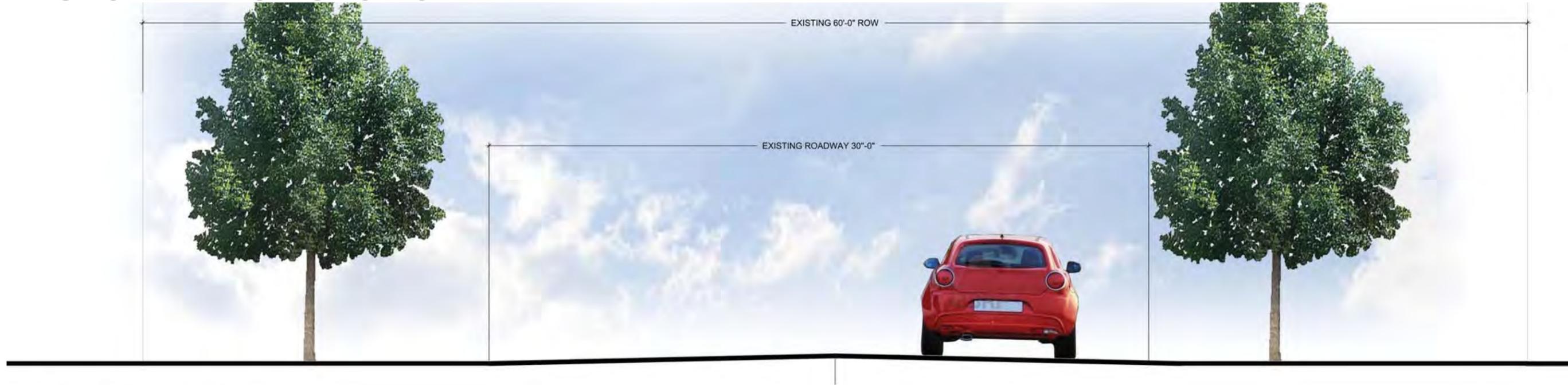
WASECA AVENUE CONCEPT SKETCH



EXISTING STREETScape

BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

WASECA AVENUE SECTION D-D'



WASECA AVE EXISTING CONDITIONS

SCALE: 1/2"=1'



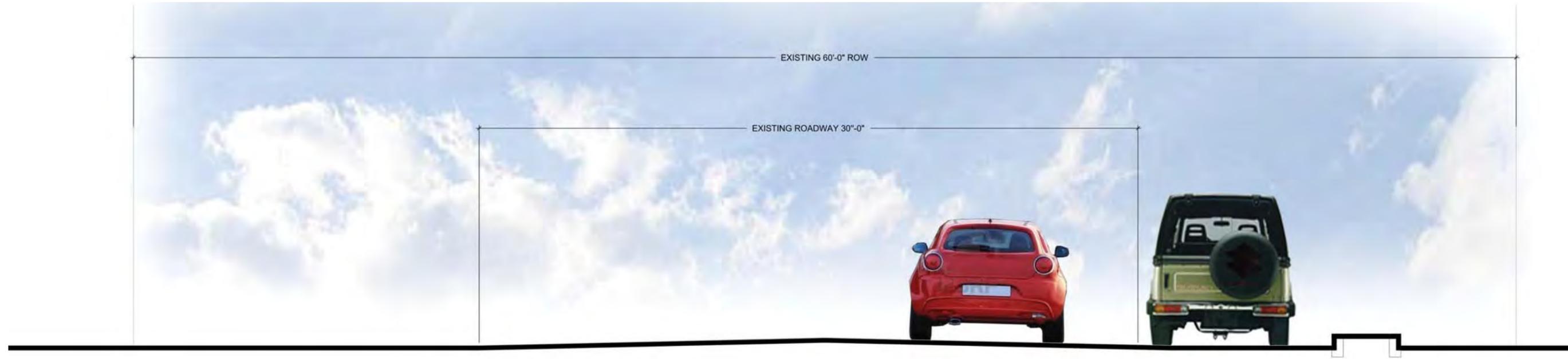
WASECA AVE PROPOSED CONDITIONS

SCALE: 1/2"=1'

BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

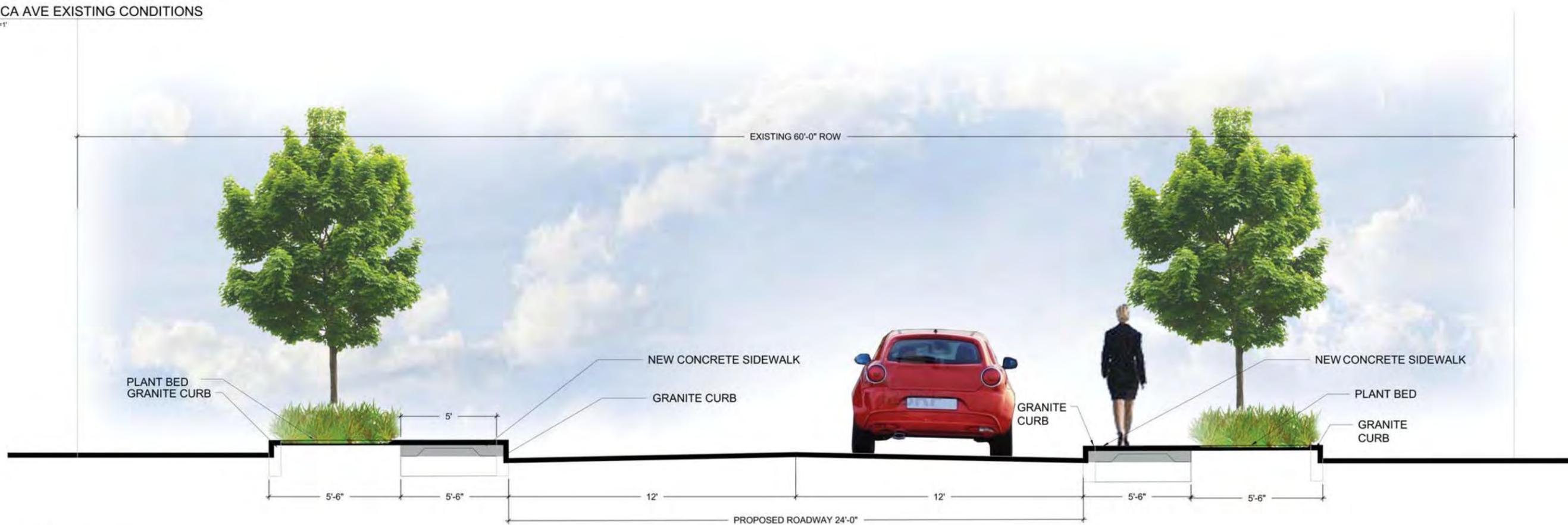
30'-0" EXISTING ROADWAY

WASECA AVENUE SECTION E-E'



WASECA AVE EXISTING CONDITIONS

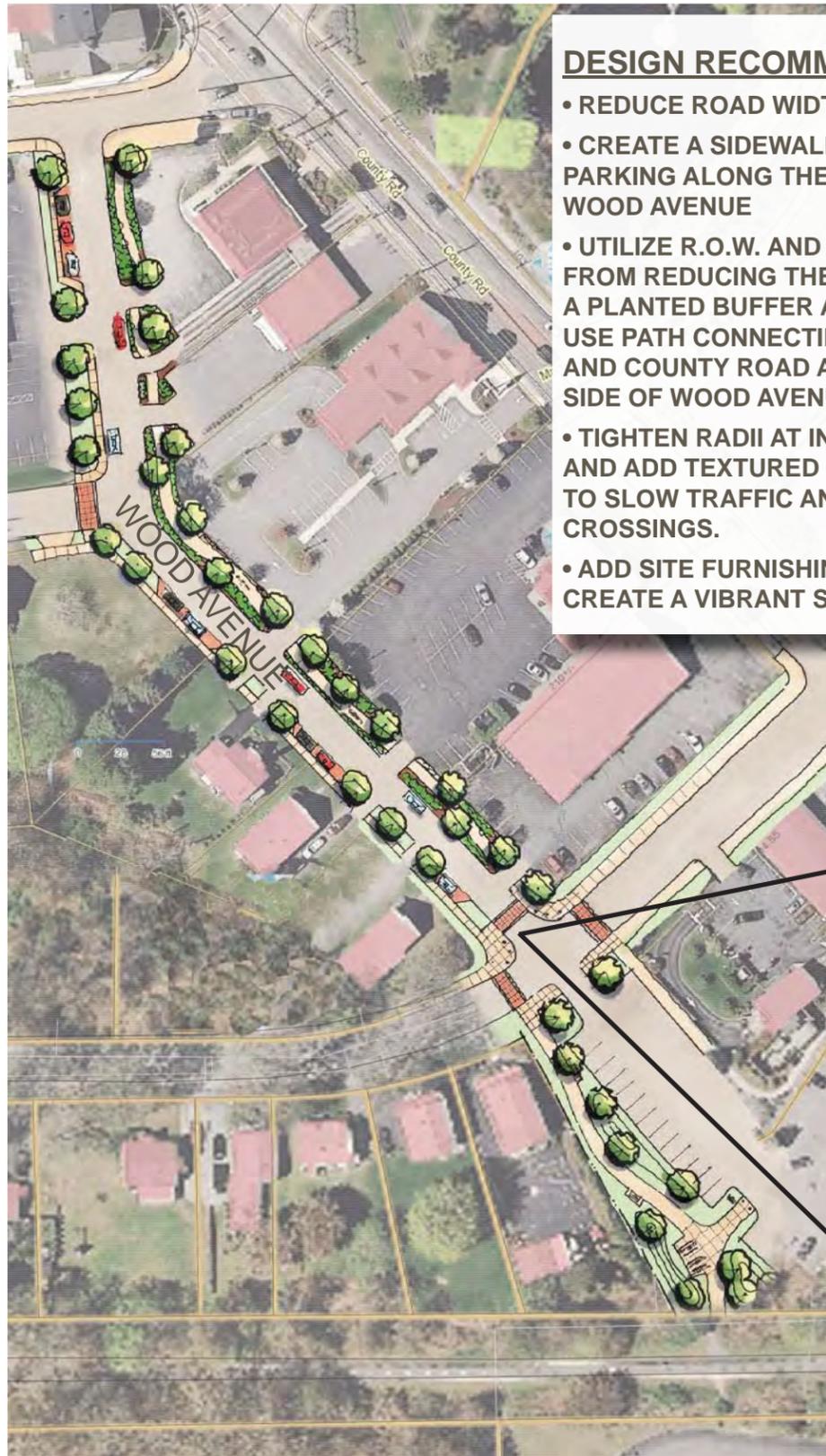
SCALE: 1/2"=1'



WASECA AVE EXISTING CONDITIONS

SCALE: 1/2"=1'

BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN



DESIGN RECOMMENDATIONS:

- REDUCE ROAD WIDTH FROM 30' TO 24'.
- CREATE A SIDEWALK & ON-STREET PARKING ALONG THE WEST SIDE OF WOOD AVENUE
- UTILIZE R.O.W. AND WIDTH GAINED FROM REDUCING THE ROAD TO CREATE A PLANTED BUFFER AND 8' SHARED USE PATH CONNECTING THE BIKE PATH AND COUNTY ROAD ALONG THE EAST SIDE OF WOOD AVENUE
- TIGHTEN RADII AT INTERSECTIONS AND ADD TEXTURED CROSSWALKS TO SLOW TRAFFIC AND CREATE SAFE CROSSINGS.
- ADD SITE FURNISHINGS & LIGHTING TO CREATE A VIBRANT STREETSCAPE



LOOKING NORTH ON WOOD AVE TOWARD ANOKA AVE

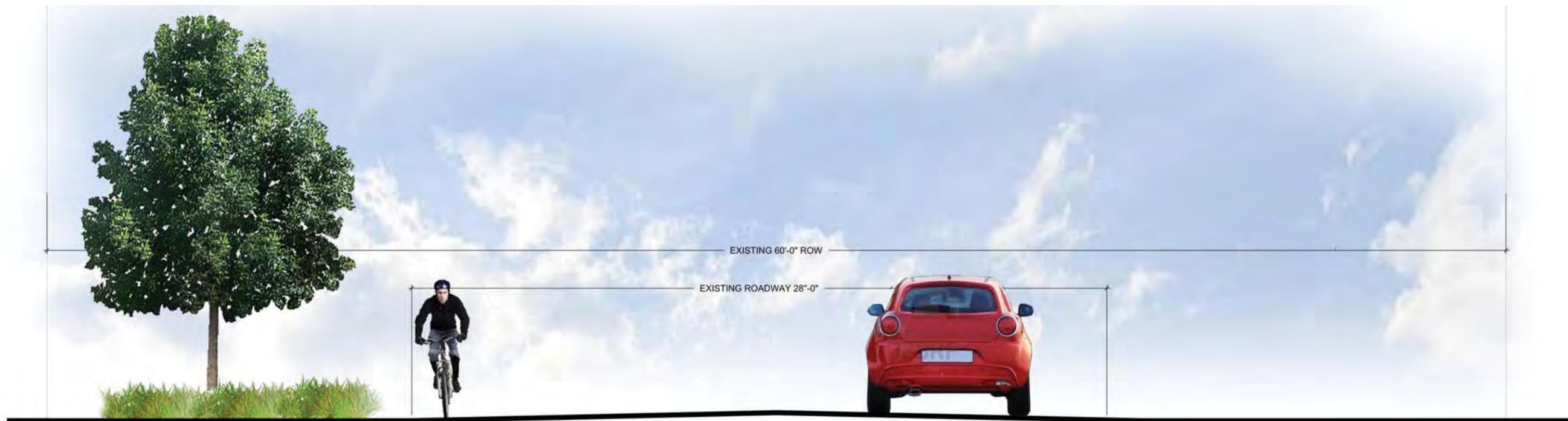


PROPOSED SHARED USE PATH LOOKING NORTH ON WOOD AVE

WOOD AVENUE

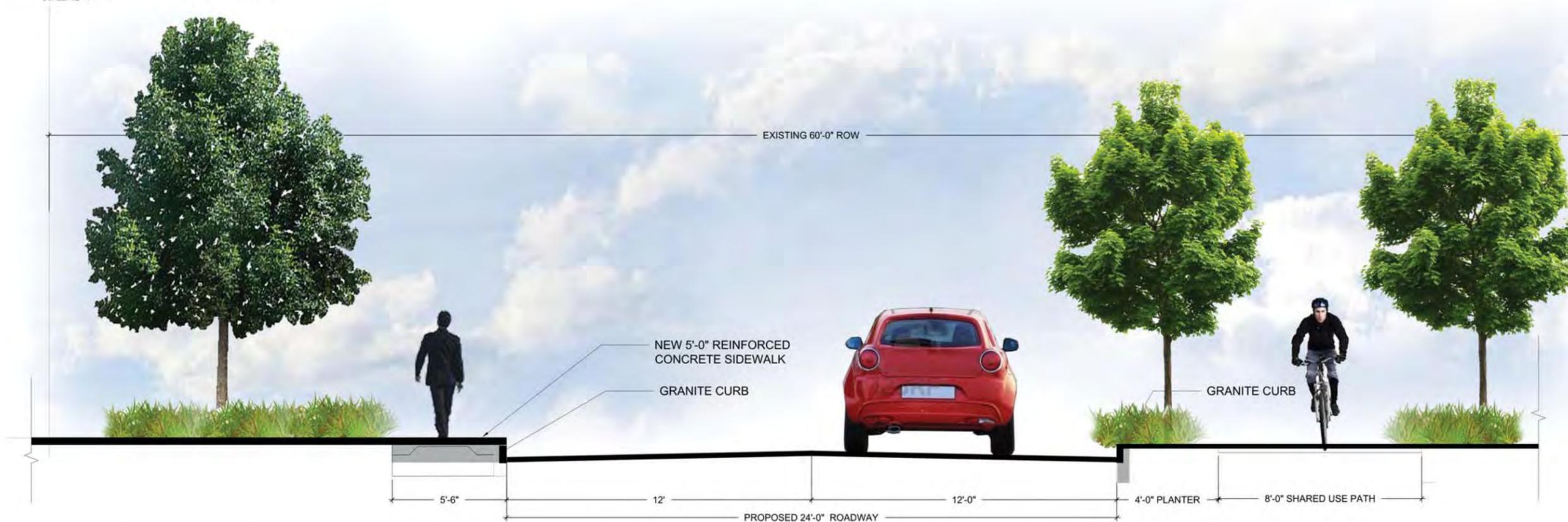


BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN



WOOD AVE EXISTING CONDITIONS

SCALE: 1/2"=1'



WOOD AVE PROPOSED CONDITIONS

SCALE: 1/2"=1'

WOOD AVENUE TYPICAL SECTION

BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN



WOOD AVE EXTENSION

1. CONNECTION IS NEEDED AS A RELEASE FOR TRAFFIC ON COUNTY ROAD.
2. CONNECTION WILL PROMOTE BUSINESS BOTH ON BOSWORTH STREET, THE SHAWS SHOPPING CENTER AND IN THE VILLAGE BY PROVIDING A DIRECT EXTENSION OF WOOD AVENUE.
3. CREATES A THIRD CROSSING ON THE BIKE PATH SO A SAFE CROSSING DESIGN WILL BE NECESSARY.

WOOD AVENUE EXTENSION: PREFERRED OPTION
 BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN



PROCESS OUTLINE FOR NEW BIKE PATH CROSSING

1. GAIN CONSENSUS FROM PROPERTY OWNERS ON BOTH SIDES OF BIKE PATH. TOWN TO SET UP TASK FORCE.

↓

2. SUBMIT LETTER AND GENERAL PLAN TO RIDOT REAL ESTATE DIVISION (contact: Ann Holland)

↓

3. RIDOT WILL RESPOND WITH REQUIREMENTS SUCH AS PHYSICAL ALTERATION PERMIT, AGREEMENT BETWEEN PRIVATE LANDOWNERS ETC.

↓

4. REVIEW OF DOCUMENTS BY DOT OPERATING DIVISIONS INCLUDING DESIGN, ENGINEERING, LEGAL & INTER-MODEL PLANNING.

↓

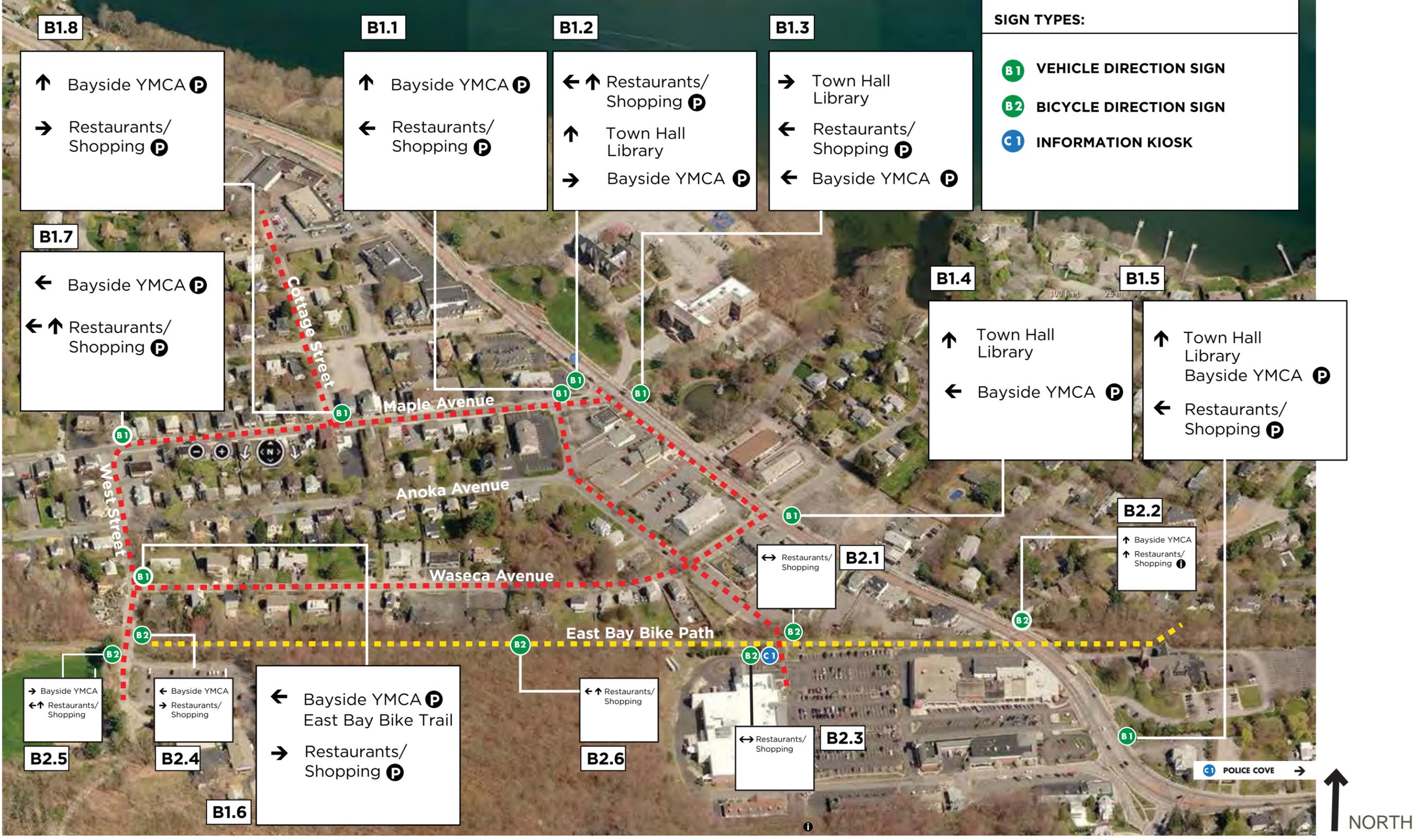
5. RIDOT WILL REVIEW ORIGINAL EASEMENT INFORMATION WITH RAILROAD AND RI PUBLIC UTILITIES COMMISSION (PUC)

WOOD AVENUE EXTENSION: OPTION 2

BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

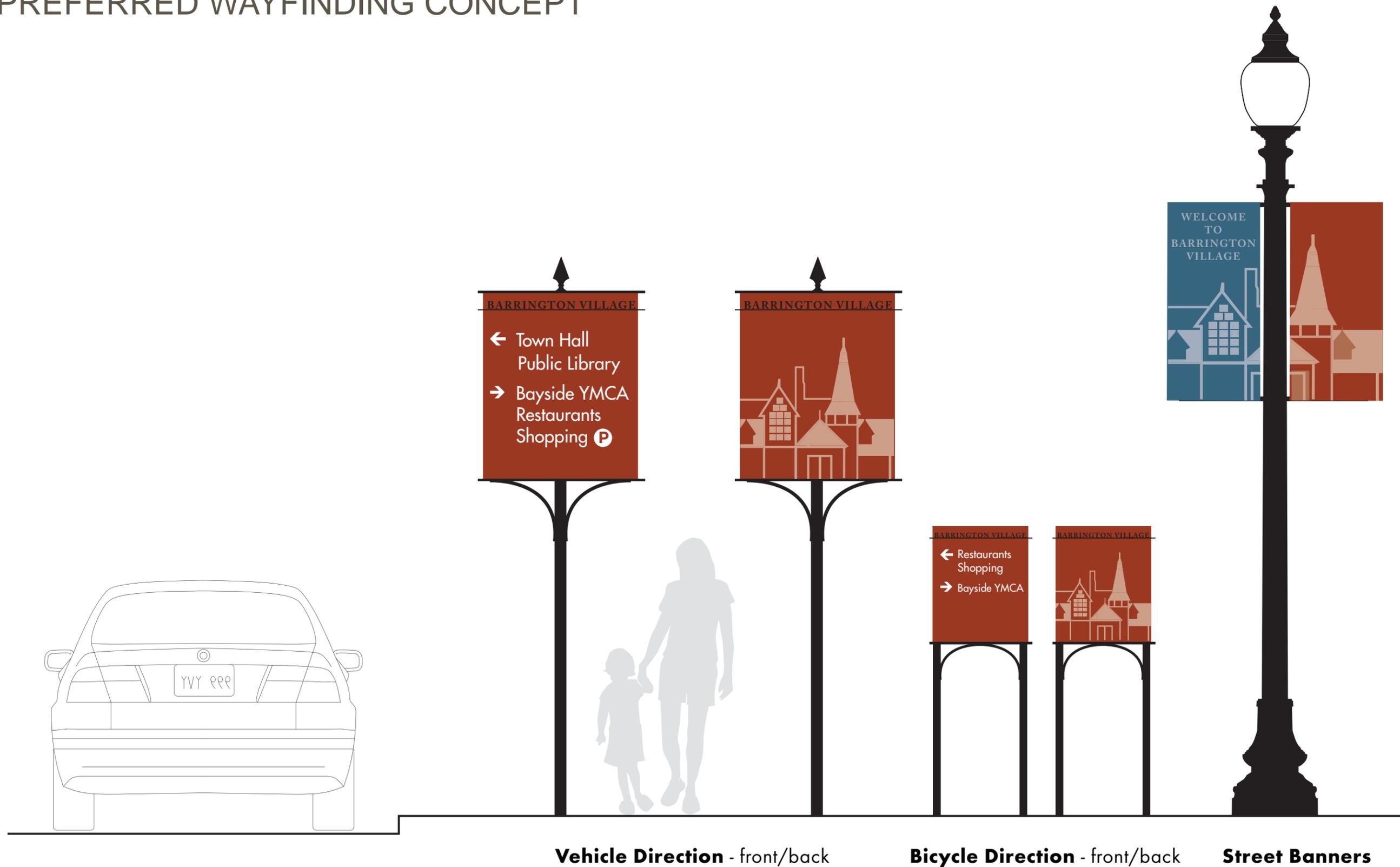


DIRECTIONAL SIGN LOCATION PLAN

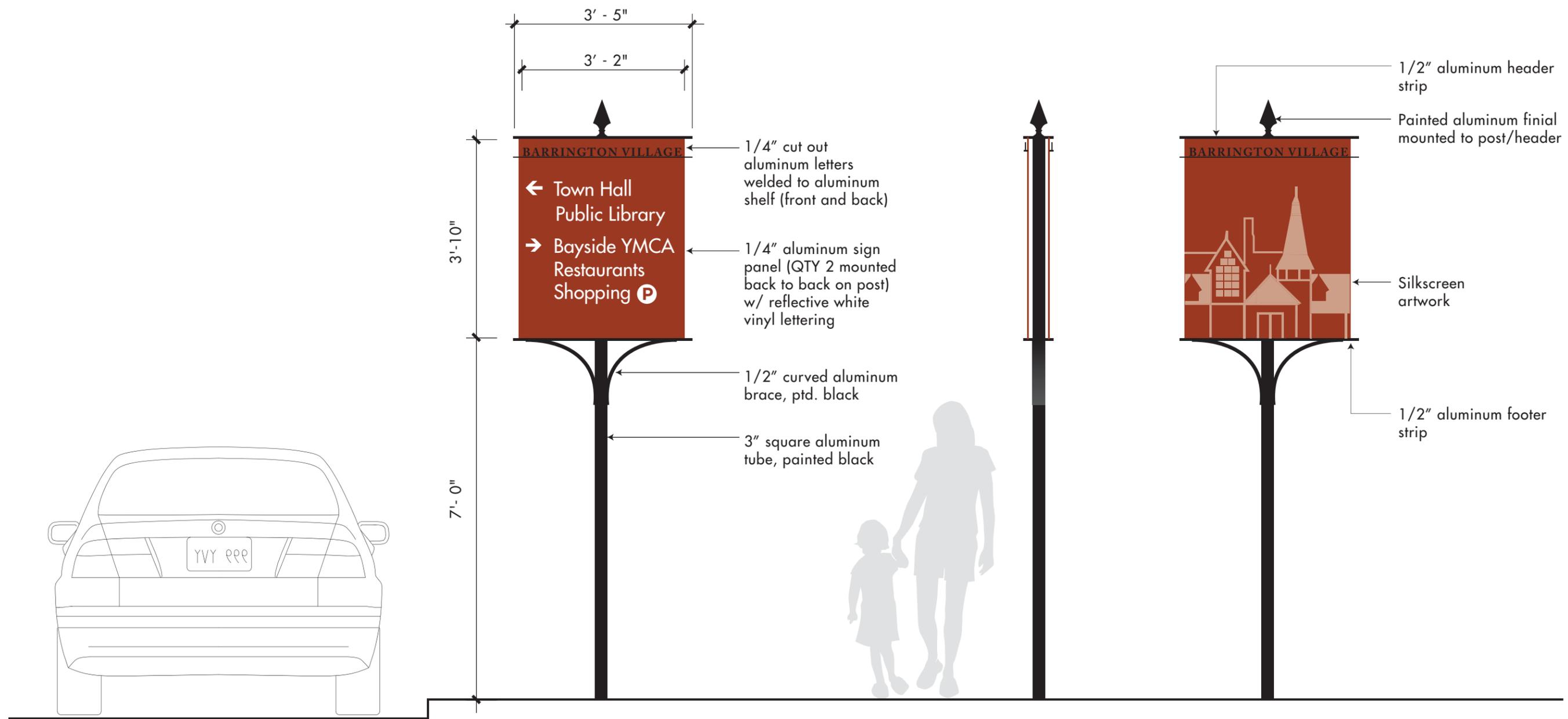


BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

PREFERRED WAYFINDING CONCEPT



B1-VEHICLE DIRECTION SIGN



VEHICLE DIRECTION SIGN - FRONT ELEVATION
SCALE 1/2" = 1'-0"

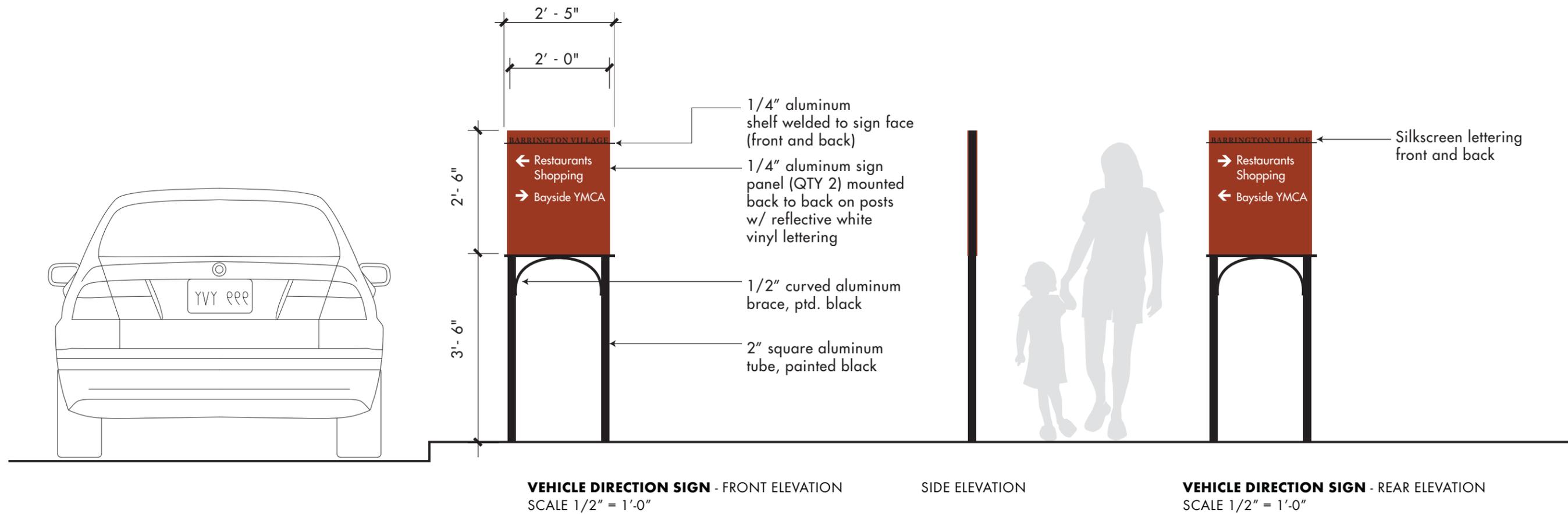
SIDE ELEVATION

VEHICLE DIRECTION SIGN - REAR ELEVATION
SCALE 1/2" = 1'-0"

BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

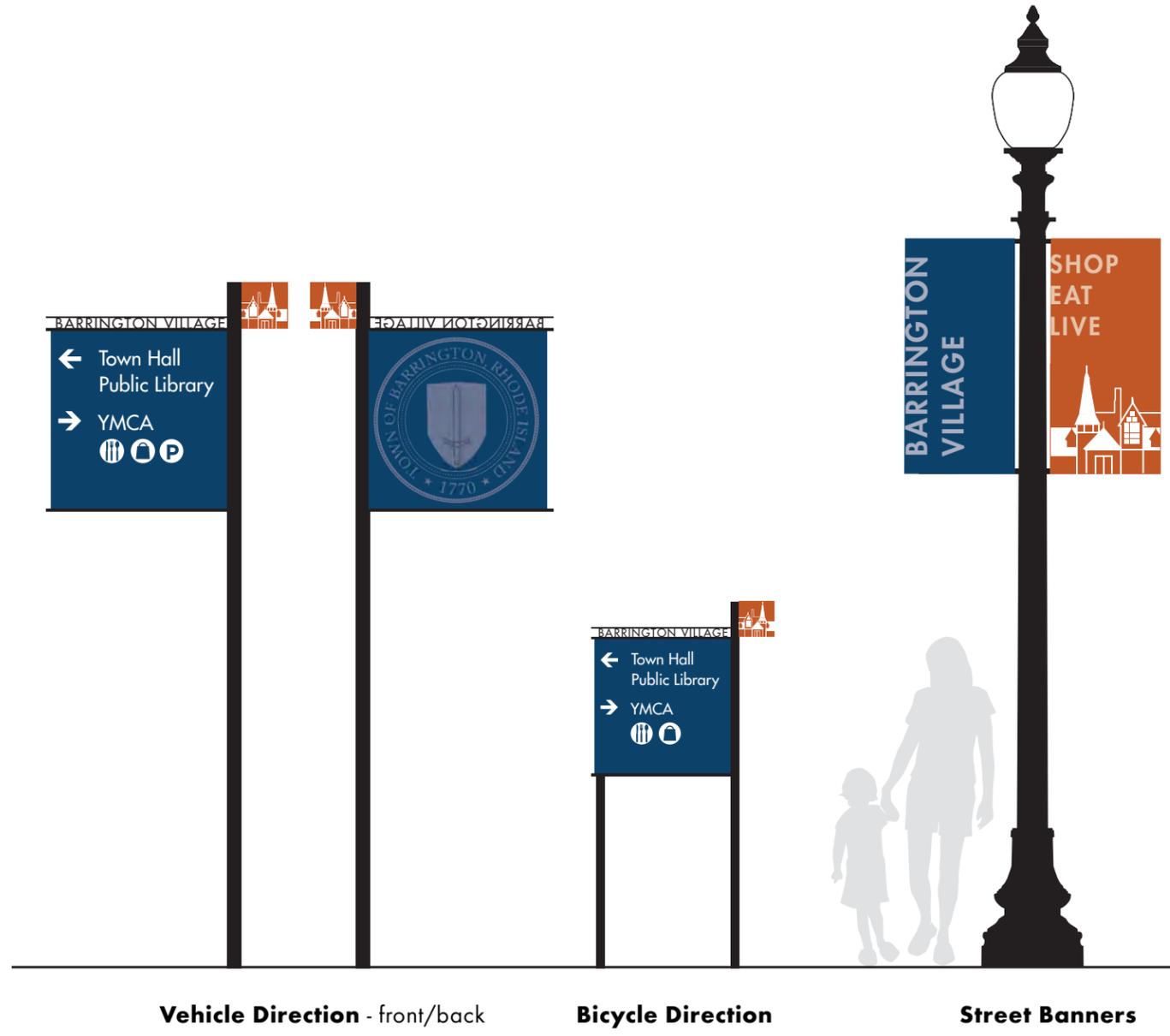
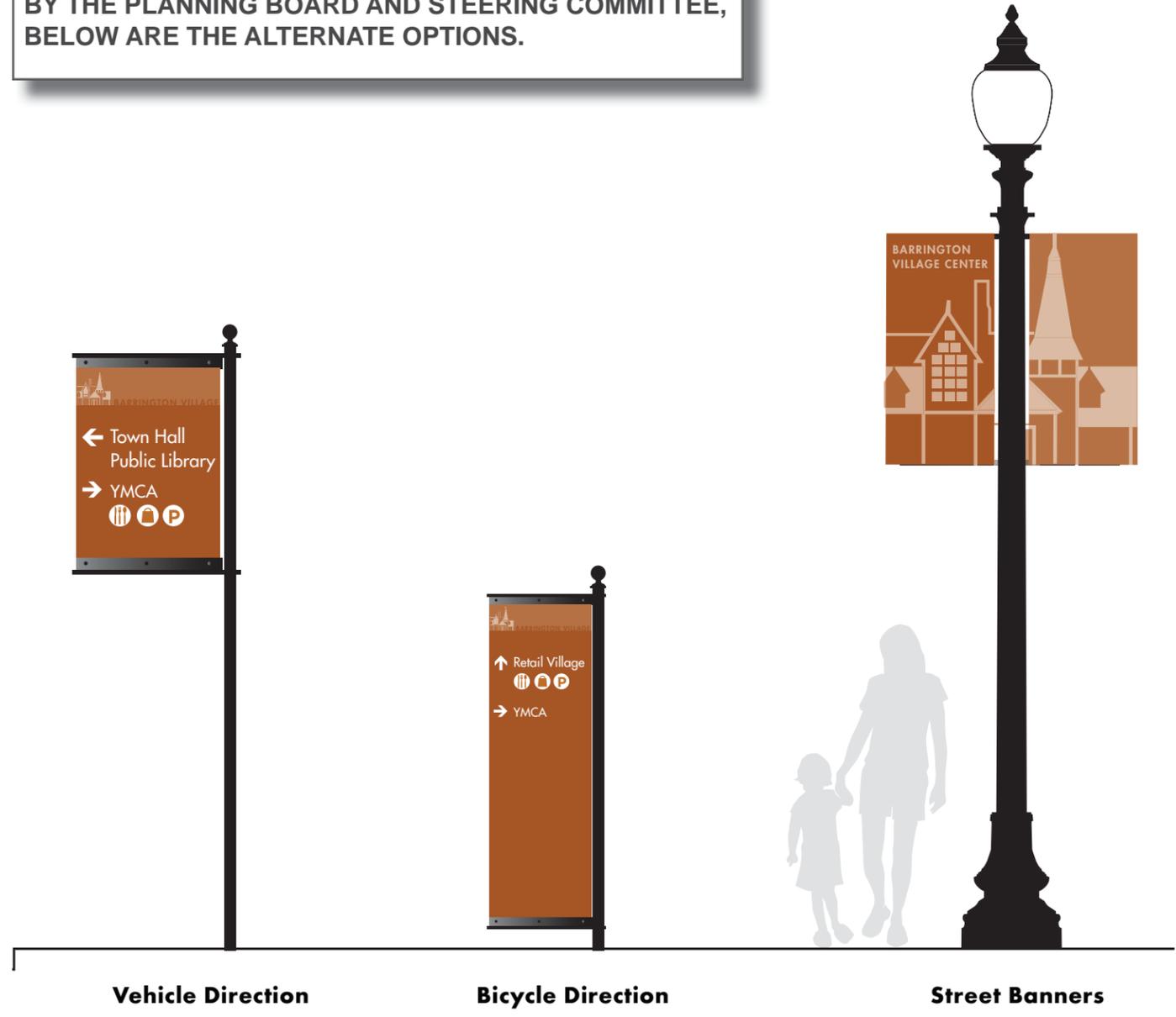
B2-BICYCLE DIRECTION SIGN

NOTE: DRAWING DETAILS ARE SCHEMATIC ONLY. ACTUAL ENGINEERED DETAILS BY FABRICATOR AND MAY CHANGE ACCORDINGLY. DESIGNER TO REVIEW ALL SHOP DRAWINGS AND SUBMITTALS BY FABRICATOR.



PREVIOUSLY STUDIED CONCEPTS

THREE WAYFINDING CONCEPTS WERE INITIALLY PRESENTED. THE PREFERRED OPTION WAS SELECTED BY THE PLANNING BOARD AND STEERING COMMITTEE, BELOW ARE THE ALTERNATE OPTIONS.

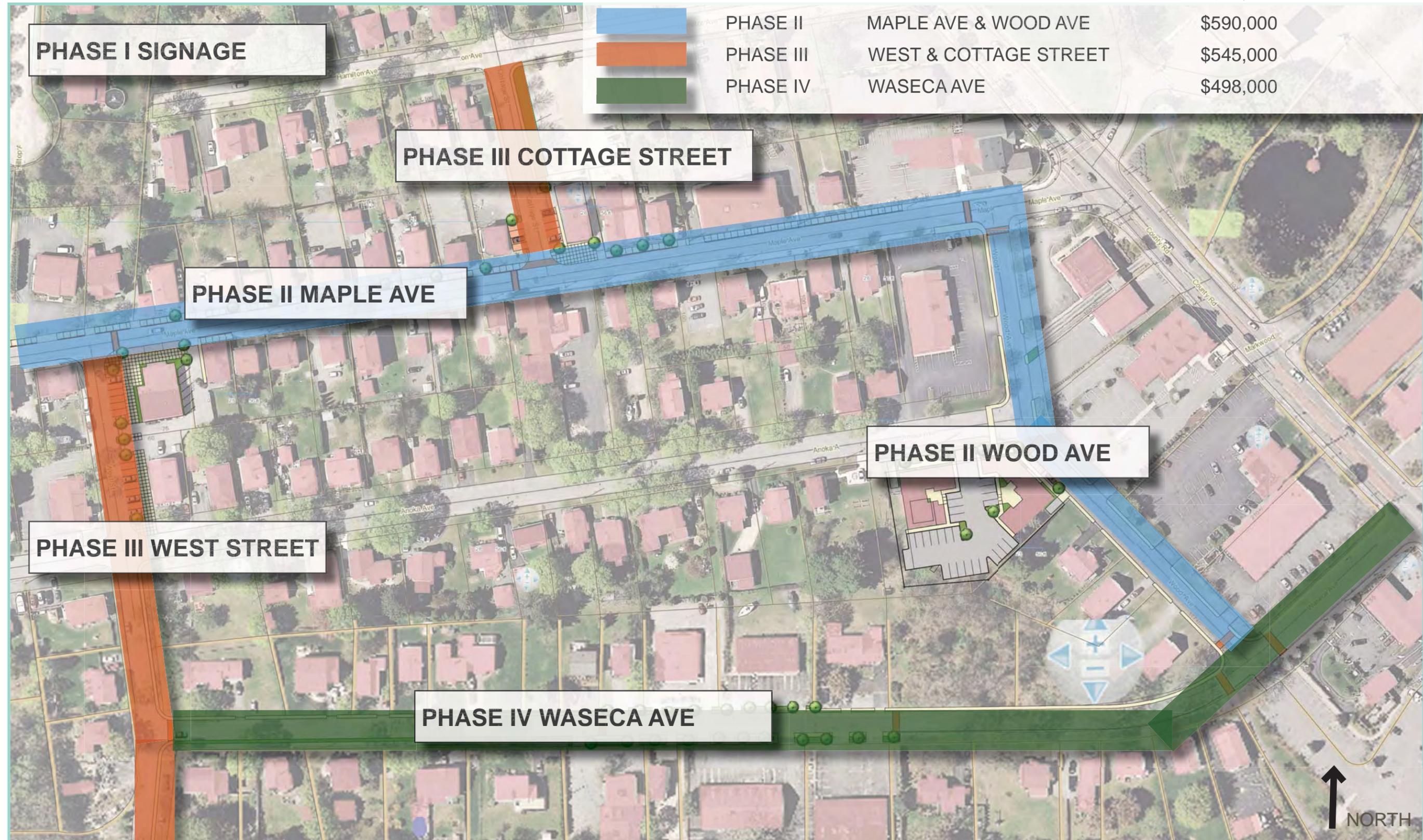


BARRINGTON VILLAGE CENTER

RETAIL		RESTAURANTS & CAFÉ'S	SERVICES
<ul style="list-style-type: none"> ☐ Ace Hardware ☐ Alfred's of Barrington ☐ Ann Taylor Loft ☐ Art is in You ☐ Aveda Spa ☐ Balance Fitness ☐ Bank of America ☐ Bank of Newport ☐ Barrington Radio & Electronic ☐ Brickyard Wine & Spirits ☐ Center Barber ☐ Cigar Emporium ☐ Citizens Bank ☐ CVS ☐ Daisy Diggins ☐ DK Fabrics ☐ Edward Jones ☐ Emilie's Nails ☐ Feminine Fancies ☐ Grapes & Grains ☐ Grasmere ☐ Gray's Jewelers ☐ Hair Empressions ☐ Hair Today ☐ Hidden Gardens ☐ Hollies ☐ Kitchen & Design ☐ K.L. Hair Design ☐ McHale's Nails 	<ul style="list-style-type: none"> ☐ Milan Clothiers ☐ Oakwold Nursery ☐ Picket Fence ☐ Persimmon Provisions ☐ Rite Aid ☐ Santander Bank ☐ Serenity Nails ☐ Shaw's Grocery ☐ Staples ☐ Style Unleashed ☐ Supercuts ☐ Sweet Lorraine's ☐ Sweet Shop ☐ Talbot's ☐ TD Bank ☐ Teddy Bearskins ☐ Tiffany's Men ☐ Tiffany's Salon ☐ UPS Store ☐ Verizon ☐ Wallis Seafood ☐ Webster Bank ☐ Wildflower ☐ ZuZu's 	<ul style="list-style-type: none"> ☐ Bagels Etc. ☐ Barrington Pizzeria ☐ Chiazza ☐ Daily Scoop ☐ DeAngelo's ☐ Dunkin Donuts ☐ Golden Bowl ☐ Kozy Kitchen ☐ Madigans Cafe ☐ Mangia Piza ☐ Newport Creamery ☐ Piezoni ☐ Sushi Express ☐ Starbucks ☐ Tong D Restaurant ☐ Trendy's Pizza ☐ Kozy Kitchen ☐ Vienna Bakery 	<ul style="list-style-type: none"> ☐ Account Eze ☐ Allstate ☐ Barrington Ballet ☐ Benchmark ☐ International ☐ BP ☐ Casual Catering ☐ Catanzaro & Sons ☐ Coldwell Banker ☐ Coleman Realty ☐ Grandma's Cleaners ☐ Hall Capital ☐ HCC Marketing ☐ Kumon ☐ Lepre Physical Therapy ☐ Oceanpoint Insurance ☐ Pilgrim Title Insurance ☐ Re/Max ☐ Residential Propertiers ☐ Shell Station ☐ Spinal Health & Rehab Center
			MUNICIPAL & RECREATION
			<ul style="list-style-type: none"> ☐ Barrington Public Library & Peck Center ☐ Barrington Town Hall ☐ Bayside YMCA ☐ East Bay Bicycle Trail

KIOSK MAP IS A DRAFT AND WILL BE REVIEWED BY THE STEERING COMMITTEE TO FINALIZE BUSINESSES LISTED ON THE DIRECTORY PRIOR TO PRINTING.

PHASING PLAN



BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

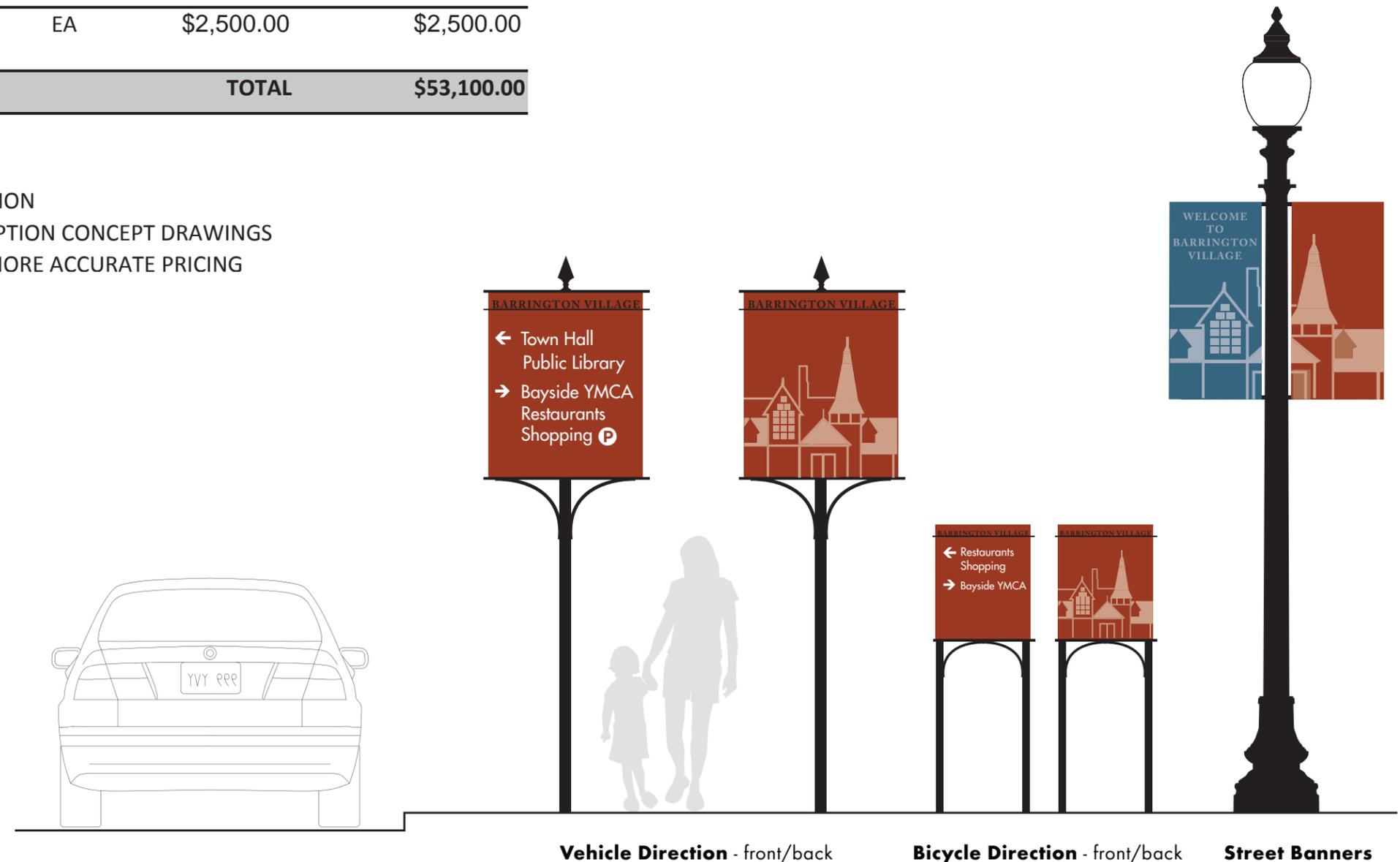
PHASE I WAYFINDING - KIOSK MAP AND SIGNAGE

SIGNAGE ESTIMATE: Order of Magnitude Cost Estimate

TYPE	DESCRIPTION	QUANTIT	UNIT	COST	TOTAL
B1	VEHICLE DIRECTION SIGN	8	EA	\$4,000.00	\$32,000.00
B2	BICYCLE DIRECTION SIGN	6	EA	\$3,000.00	\$18,000.00
CI	INFORMATION KIOSK MAPS				
	PRINTED INSERTS ONLY	2	EA	\$300.00	\$600.00
	REPLACE EXISTING TWO SIDED DISPLAY ENCLOSURE	1	EA	\$2,500.00	\$2,500.00
TOTAL					\$53,100.00

NOTES:

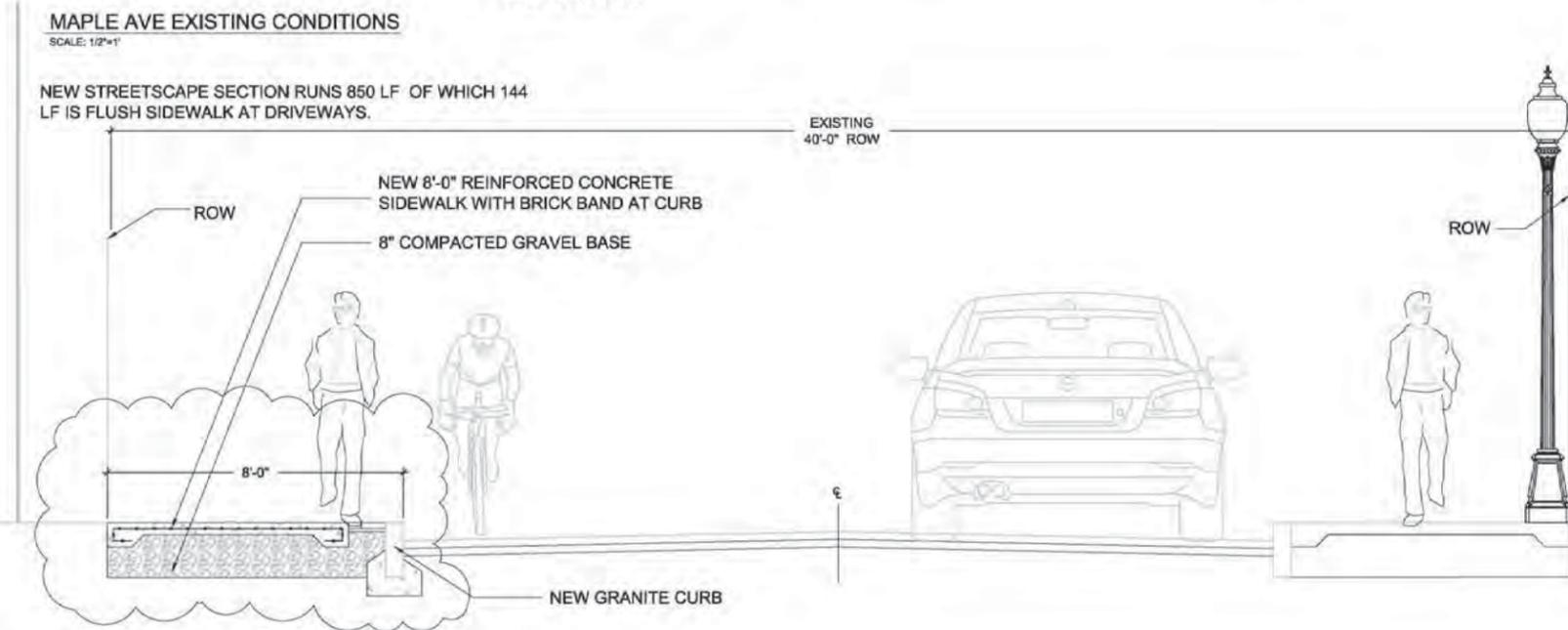
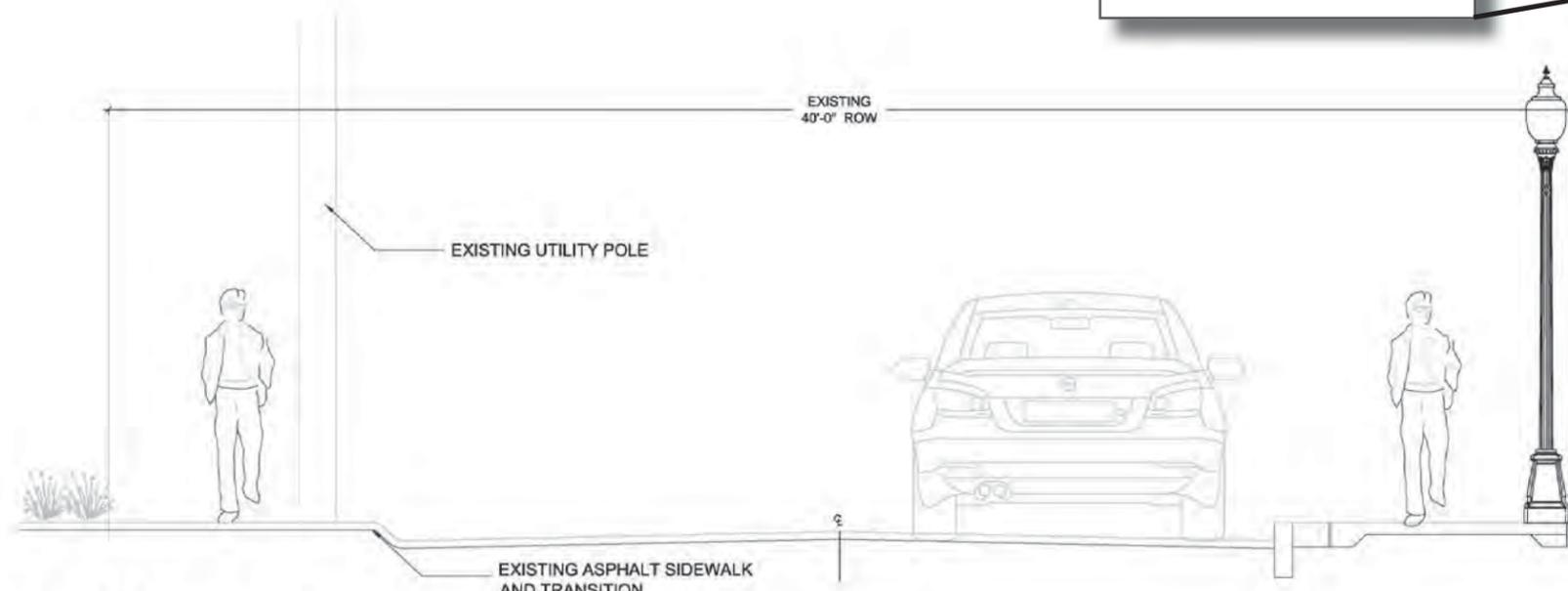
1. UNIT COSTS INLCUDE FABRICATION AND INSTALLATION
2. COSTS ARE APPROXIMATE BASED ON PREFERRED OPTION CONCEPT DRAWINGS
3. SIGNS CAN BE COST ENGINEERED IN PHASE 2 FOR MORE ACCURATE PRICING



BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

PHASE II MAPLE AVENUE

**PHASE II
MAPLE AVENUE**



MAPLE AVE PROPOSED CONDITION
SCALE: 1/2"=1'

MAPLE AVENUE: Order of Magnitude Cost Estimate

	Quantity	Unit	Cost	Total
Site Improvements				
Site Preparation	850	LF	\$ 22.00	\$ 18,700.00
Roadway Construction	850	LF	\$ 11.00	\$ 9,350.00
Sidewalk Construction	850	LF	\$ 95.00	\$ 80,750.00
			Subtotal	\$ 108,800.00
Site Amenities				
Raised Concrete Paver or Stamped Conc Crosswalks	2	EA	\$ 7,500.00	\$ 15,000.00
Flush Concrete or Stamped Concrete Crosswalk	1	EA	\$ 5,000.00	\$ 5,000.00
Lighting	3	EA	\$ 7,000.00	\$ 21,000.00
Bollards	7	EA	\$ 1,000.00	\$ 7,000.00
Benches	2	EA	\$ 2,500.00	\$ 5,000.00
Street Trees	12	EA	\$ 625.00	\$ 7,500.00
			Subtotal	\$ 60,500.00
			Site Improvements/Amenities Subtotal	\$ 169,300.00
Utilities/Construction				
Drainage	15%		\$	25,395.00
Utilities	5%		\$	8,465.00
Maintenance & Protection of Traffic	25%		\$	42,325.00
Traffic Signals	0%		\$	-
Signage and Striping	5%		\$	8,465.00
Landscaping	3%		\$	5,079.00
			Subtotal	\$ 89,729.00
			Roadway Subtotal	\$ 259,029.00
Mobilization (RI TAC 6/17/1999)	5%		\$	12,951.45
Maintenance and Movement of Traffic Protection	3%		\$	7,770.87
Engineer & Construction Contingency	15%		\$	38,854.35
			Subtotal	\$ 59,576.67
			Preliminary Construction Subtotal	\$ 318,605.67
Police Detail	5%		\$	15,930.28
			PRELIMINARY CONSTRUCTION TOTAL	\$ 334,535.95
Alternates				
Utility Pole Relocation/Removal	10	EA	\$ 25,000.00	\$ 250,000.00
Mill & Overlay	30,000	SF	\$ 2.60	\$ 78,000.00

Notes:

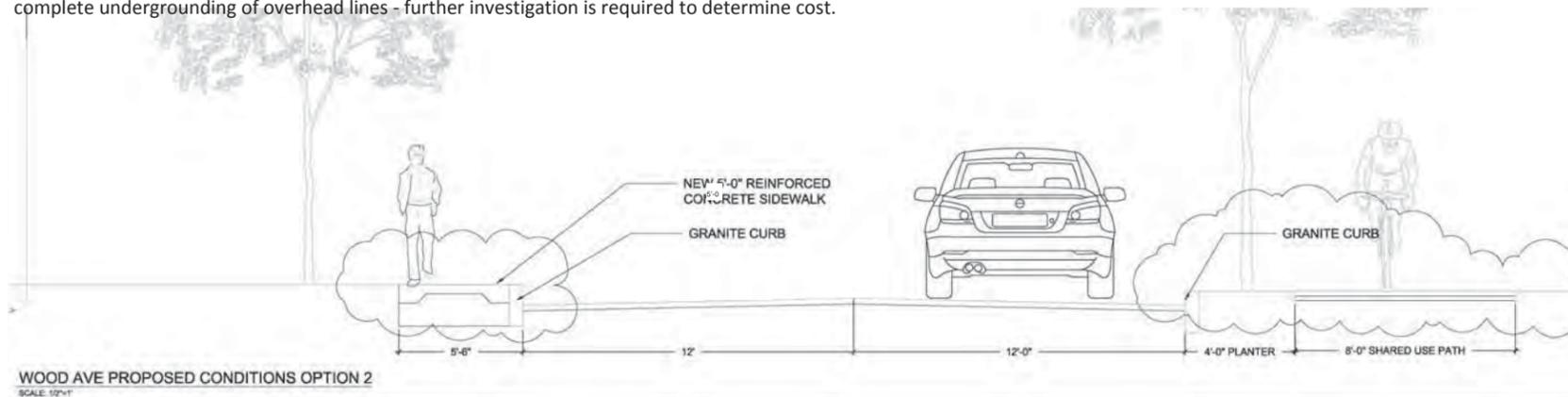
1. Site Preparation includes: R&D sidewalks, R&D flexible pavement, earth excavation, trimming and fine grading.
2. Roadway Construction Includes: Gravel borrow base, bituminous surface course, tack coat, concrete curb locks.
3. Sidewalk Construction includes: Standard sidewalk, granite curb, brick banding, loam & seed.
4. Utility Pole Relocation/Removal includes: Average only, price can vary based on existing conditions. This does not include complete undergrounding of overhead lines - further investigation is required to determine cost.

WOOD AVENUE: Order of Magnitude Cost Estimate

	Quantity	Unit	Cost	Total
Site Improvements				
Site Preparation	650	LF	\$ 26.00	\$ 16,900.00
Roadway Construction	650	LF	\$ 24.00	\$ 15,600.00
Sidewalk Construction	650	LF	\$ 112.00	\$ 72,800.00
			Subtotal	\$ 105,300.00
Site Amenities				
Raised Conc. Paver or Stamped Conc. Crosswalks	0	EA	\$ 7,500.00	\$ -
Flush Concrete or Stamped Concrete Crosswalk	3	EA	\$ 5,000.00	\$ 15,000.00
Lighting	0	EA	\$ 7,000.00	\$ -
Bollards	0	EA	\$ 1,000.00	\$ -
Benches	1	EA	\$ 2,500.00	\$ 2,500.00
Street Trees	10	EA	\$ 625.00	\$ 6,250.00
			Subtotal	\$ 23,750.00
			Site Improvements/Amenities Subtotal	\$ 129,050.00
Utilities/Construction				
Drainage	15%		\$	19,357.50
Utilities	5%		\$	6,452.50
Maintenance & Protection of Traffic	25%		\$	32,262.50
Traffic Signals	0%		\$	-
Signage and Striping	5%		\$	6,452.50
Landscaping	3%		\$	3,871.50
			Subtotal	\$ 68,396.50
			Roadway Subtotal	\$ 197,446.50
Mobilization (RI TAC 6/17/1999)	5%		\$	9,872.33
Maintenance and Movement of Traffic Protection	3%		\$	5,923.40
Engineer & Construction Contingency	15%		\$	29,616.98
			Subtotal	\$ 45,412.70
			Preliminary Construction Subtotal	\$ 242,859.20
Police Detail	5%		\$	12,142.96
PRELIMINARY CONSTRUCTION TOTAL				\$ 255,002.15
Alternates				
Utility Pole Relocation/Removal	1	EA	\$ 25,000.00	\$ 25,000.00
Mill & Overlay	14000	SF	\$ 2.60	\$ 36,400.00

Notes:

1. Site Preparation includes: R&D sidewalks, R&D flexible pavement, earth excavation, trimming and fine grading.
2. Roadway Construction Includes: Gravel borrow base, bituminous surface course, tack coat, concrete curb locks.
3. Sidewalk Construction includes: Standard sidewalk, granite curb, shared-use path, loam & seed.
4. Utility Pole Relocation/Removal includes: Average only, price can vary based on existing conditions. This does not include complete undergrounding of overhead lines - further investigation is required to determine cost.



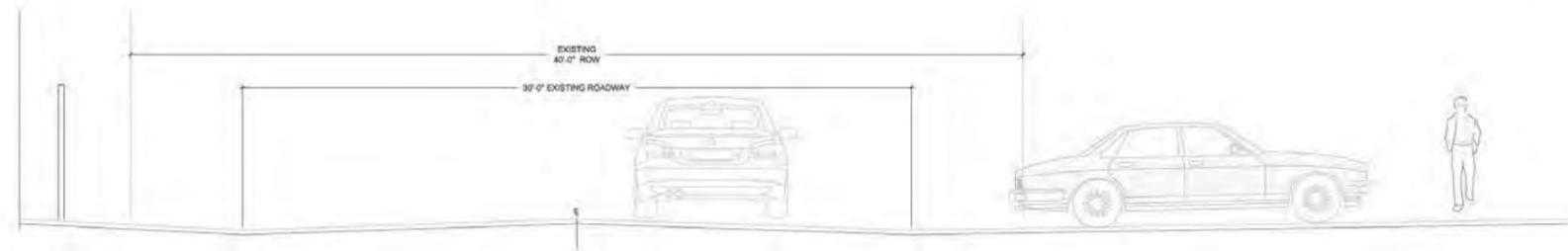
PHASE II WOOD AVENUE

**PHASE II
WOOD AVE**

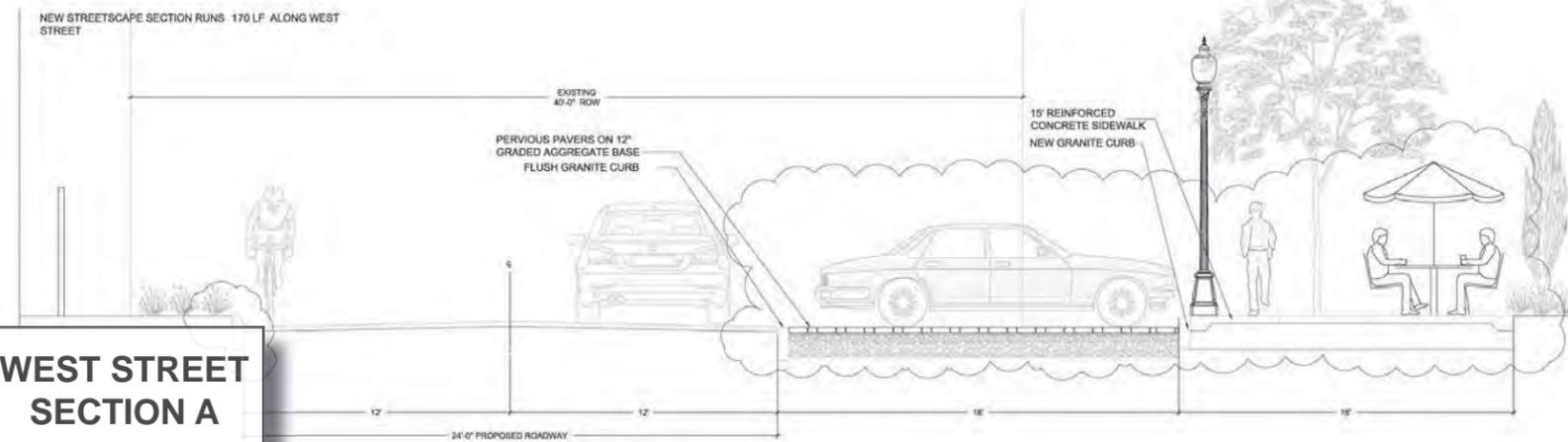


PHASE III WEST STREET

PHASE III WEST STREET SECTION A

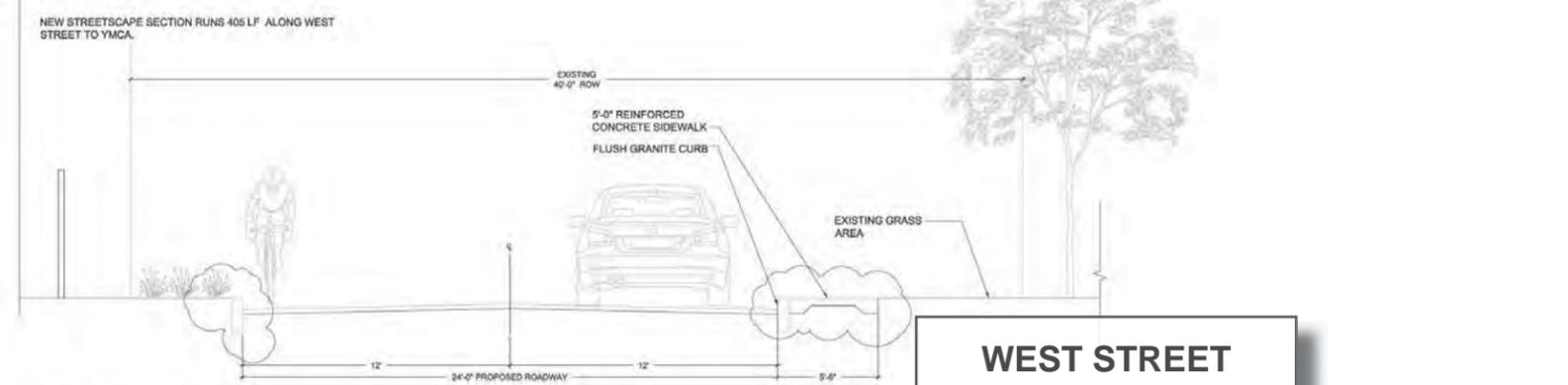


WEST STREET EXISTING CONDITIONS
SCALE: 1/2"=1'



WEST STREET SECTION A

WEST STREET PROPOSED CONDITIONS
SCALE: 1/2"=1'



WEST STREET SECTION B

WEST STREET PROPOSED CONDITIONS
SCALE: 1/2"=1'

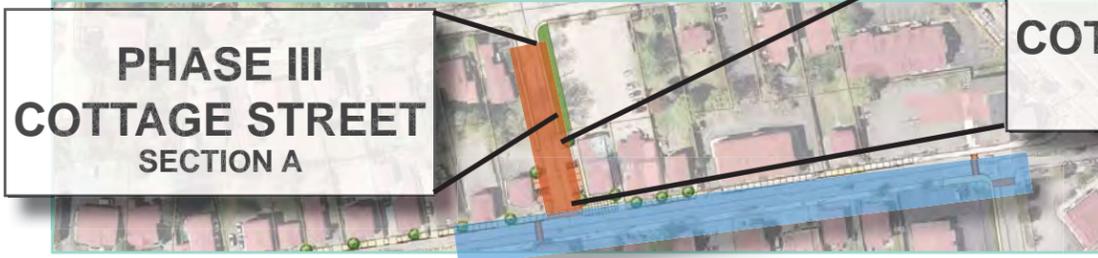
WEST STREET: Order of Magnitude Cost Estimate

	Quantity	Unit	Cost	Total
Site Improvements				
Site Preparation (Section A)	170	LF	\$ 71.00	\$ 12,070.00
Roadway Construction (Section A)	170	LF	\$ 30.00	\$ 5,100.00
Sidewalk Construction (Section A)	170	LF	\$ 554.00	\$ 94,180.00
Site Preparation (Section B)	405	LF	\$ 16.00	\$ 6,480.00
Roadway Construction (Section B)	405	LF	\$ 15.00	\$ 6,075.00
Sidewalk Construction (Section B)	405	LF	\$ 106.00	\$ 42,930.00
			Subtotal	\$ 166,835.00
Site Amenities				
Raised Concrete Paver or Stamped Conc. Crosswalks	0	EA	\$ 7,500.00	\$ -
Flush Concrete or Stamped Concrete Crosswalk	2	EA	\$ 5,000.00	\$ 10,000.00
Lighting	1	EA	\$ 7,000.00	\$ 7,000.00
Bollards	0	EA	\$ 1,000.00	\$ -
Benches	1	EA	\$ 2,500.00	\$ 2,500.00
Street Trees	5	EA	\$ 625.00	\$ 3,125.00
			Subtotal	\$ 22,625.00
			Site Improvements/Amenities Subtotal	\$ 189,460.00
Utilities/Construction				
Drainage	15%		\$	28,419.00
Utilities	5%		\$	9,473.00
Maintenance & Protection of Traffic	25%		\$	47,365.00
Traffic Signals	0%		\$	-
Signage and Striping	5%		\$	9,473.00
Landscaping	3%		\$	5,683.80
			Subtotal	\$ 100,413.80
			Roadway Subtotal	\$ 289,873.80
			Mobilization (RI TAC 6/17/1999)	\$ 14,493.69
			Maintenance and Movement of Traffic Protection	\$ 8,696.21
			Engineer & Construction Contingency	\$ 43,481.07
			Subtotal	\$ 66,670.97
			Preliminary Construction Subtotal	\$ 356,544.77
			Police Detail	\$ 17,827.24
			PRELIMINARY CONSTRUCTION TOTAL	\$ 374,372.01
Alternates				
Utility Pole Relocation/Removal	1	EA	\$ 25,000.00	\$ 25,000.00
Mill & Overlay	15500	SF	\$ 2.60	\$ 40,300.00

Notes:

1. Site Preparation includes: R&D sidewalks, R&D flexible pavement, earth excavation, trimming and fine grading.
2. Roadway Construction Includes: Gravel borrow base, bituminous surface course, tack coat, concrete curb locks.
3. Sidewalk Construction includes: Standard sidewalk, granite curb, plaza (Section A only), loam & seed.
4. Utility Pole Relocation/Removal includes: Average only, price can vary based on existing conditions. This does not include complete undergrounding of overhead lines - further investigation is required to determine cost.

PHASE III COTTAGE STREET



PHASE III COTTAGE STREET SECTION B

PHASE III COTTAGE STREET SECTION A

COTTAGE STREET: Order of Magnitude Cost Estimate

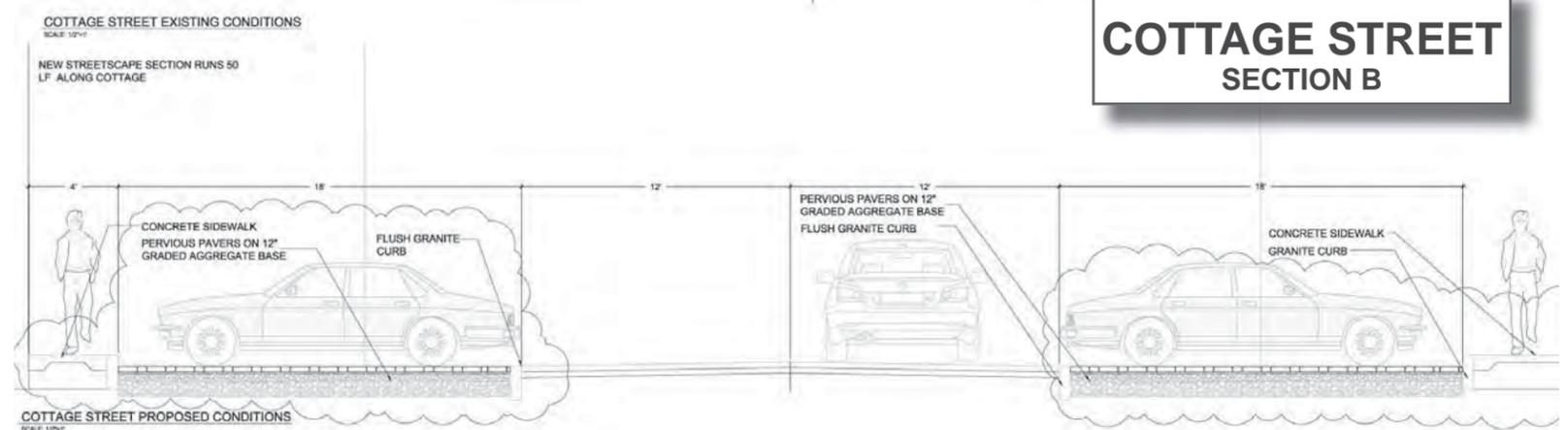
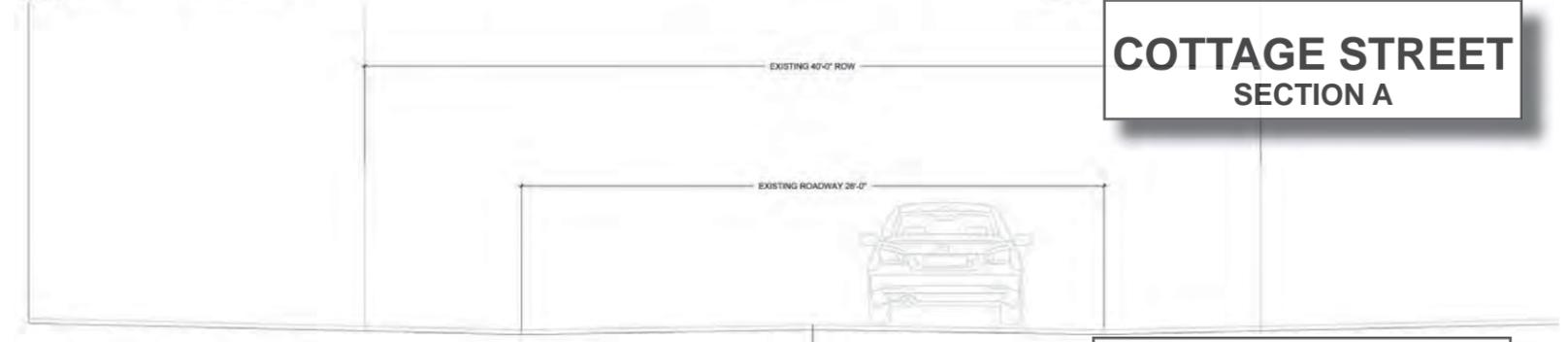
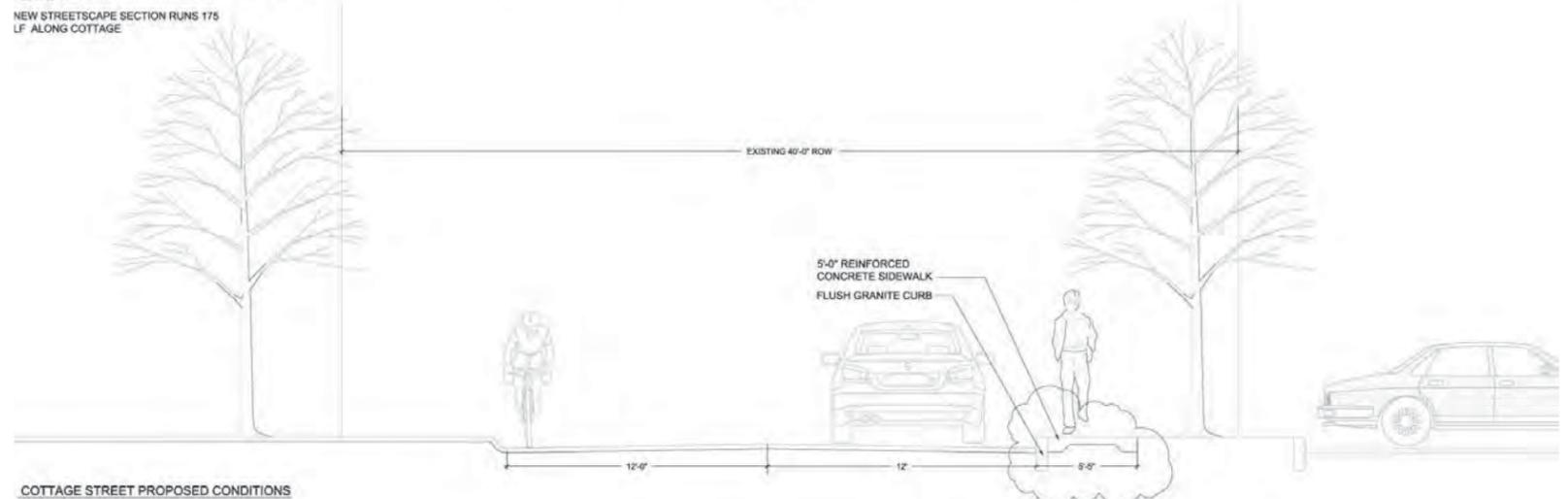
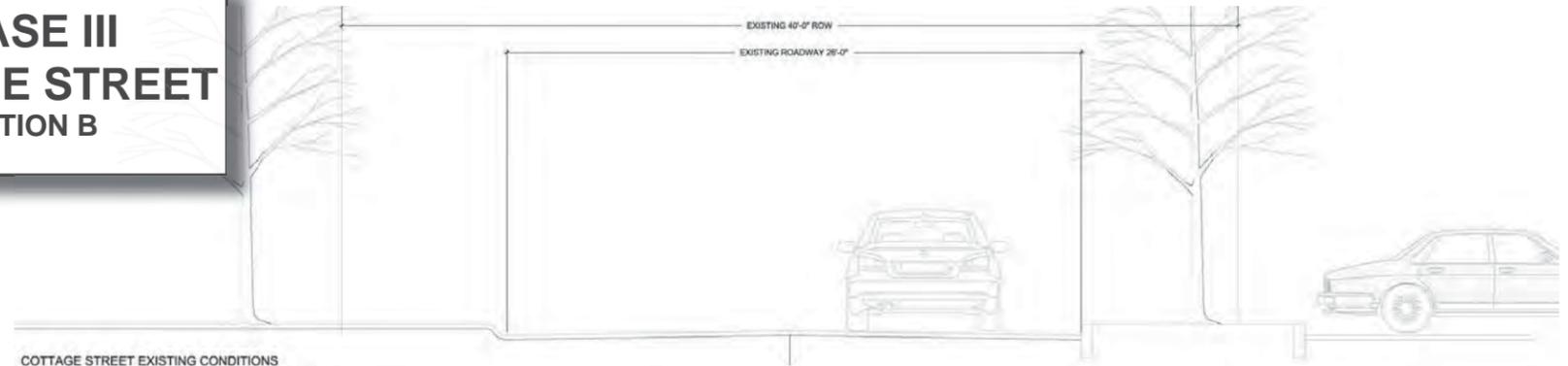
	Quantity	Unit	Cost	Total
Site Improvements				
Site Preparation (Section A)	175	LF	\$ 10.00	\$ 1,750.00
Roadway Construction (Section A)	175	LF	\$ 9.00	\$ 1,575.00
Sidewalk Construction (Section A)	175	LF	\$ 66.00	\$ 11,550.00
Site Preparation (Section B)	50	LF	\$ 85.00	\$ 4,250.00
Roadway Construction (Section B)	50	LF	\$ 34.00	\$ 1,700.00
Sidewalk Construction (Section B)	50	LF	\$ 942.00	\$ 47,100.00
			Subtotal	\$ 67,925.00
Site Amenities				
Raised Conc. Paver or Stamped Conc. Crosswalk	0	EA	\$ 7,500.00	\$ -
Flush Concrete or Stamped Concrete Crosswalk	1	EA	\$ 5,000.00	\$ 5,000.00
Lighting	1	EA	\$ 7,000.00	\$ 7,000.00
Bollards	0	EA	\$ 1,000.00	\$ -
Benches	1	EA	\$ 2,500.00	\$ 2,500.00
Street Trees	5	EA	\$ 625.00	\$ 3,125.00
			Subtotal	\$ 17,625.00
			Site Improvements/Amenities Subtotal	\$ 85,550.00
Utilities/Construction				
Drainage	15%		\$	12,832.50
Utilities	5%		\$	4,277.50
Maintenance & Protection of Traffic	25%		\$	21,387.50
Traffic Signals	0%		\$	-
Signage and Striping	5%		\$	4,277.50
Landscaping	3%		\$	2,566.50
			Subtotal	\$ 45,341.50
			Roadway Subtotal	\$ 130,891.50
Mobilization (RI TAC 6/17/1999)	5%		\$	6,544.58
Maintenance and Movement of Traffic Protection	3%		\$	3,926.75
Engineer & Construction Contingency	15%		\$	19,633.73
			Subtotal	\$ 30,105.05
			Preliminary Construction Subtotal	\$ 160,996.55
Police Detail	5%		\$	8,049.83
PRELIMINARY CONSTRUCTION TOTAL				\$ 169,046.37

Alternates

Utility Pole Relocation/Removal	0	EA	\$ 25,000.00	\$ -
Mill & Overlay	5500	SF	\$ 2.60	\$ 14,300.00

Notes:

1. Site Preparation includes: R&D sidewalks, R&D flexible pavement, earth excavation, trimming and fine grading.
2. Roadway Construction Includes: Gravel borrow base, bituminous surface course, tack coat, concrete curb locks.
3. Sidewalk Construction includes: Standard sidewalk, granite curb, loam & seed.
4. Utility Pole Relocation/Removal includes: Average only, price can vary based on existing conditions. This does not include complete undergrounding of overhead lines - further investigation is required to determine cost.



BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

PHASE IV WASECA AVENUE



WASECA AVENUE: Order of Magnitude Cost Estimate

	Quantity	Unit	Cost	Total
Site Improvements				
Site Preparation (Section A)	380	LF	\$ 24.00	\$ 9,120.00
Roadway Construction (Section A)	380	LF	\$ 34.00	\$ 12,920.00
Sidewalk Construction (Section A)	380	LF	\$ 209.00	\$ 79,420.00
Site Preparation (Section B)	1250	LF	\$ 15.00	\$ 18,750.00
Roadway Construction (Section B)	1250	LF	\$ 9.00	\$ 11,250.00
Sidewalk Construction (Section B)	1250	LF	\$ 66.00	\$ 82,500.00
			Subtotal \$	213,960.00

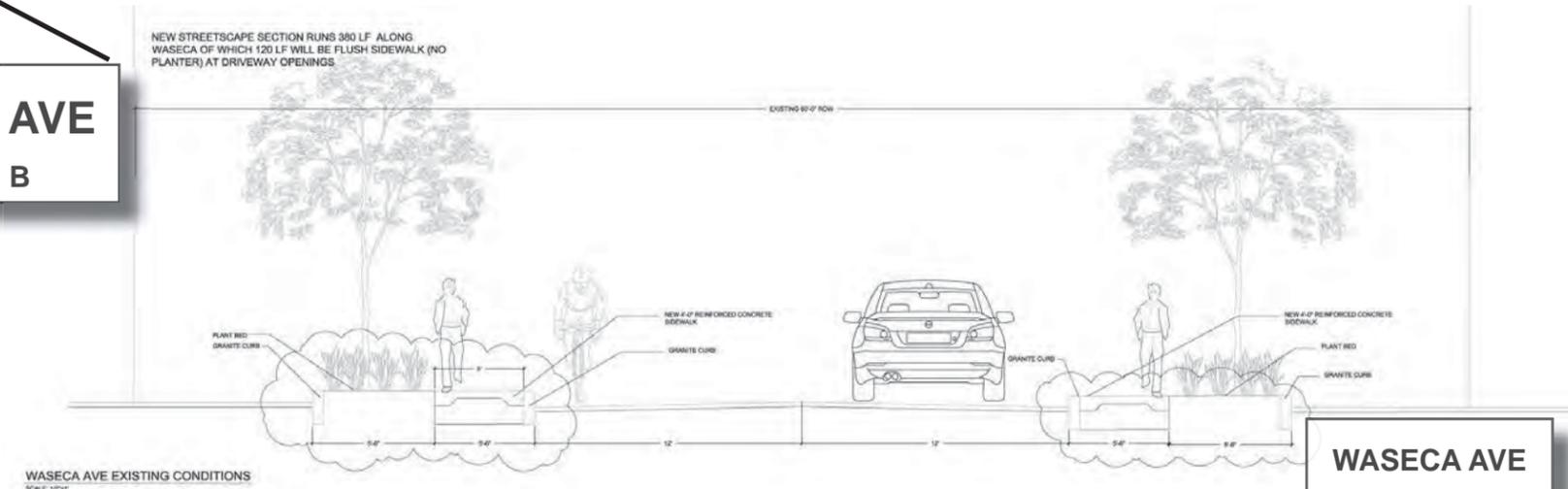
Site Amenities				
Raised Concrete Paver or Stamped Conc. Crosswalks	0	EA	\$ 7,500.00	\$ -
Flush Concrete or Stamped Concrete Crosswalk	3	EA	\$ 5,000.00	\$ 15,000.00
Lighting	2	EA	\$ 7,000.00	\$ 14,000.00
Bollards	0	EA	\$ 1,000.00	\$ -
Benches	1	EA	\$ 2,500.00	\$ 2,500.00
Street Trees	10	EA	\$ 625.00	\$ 6,250.00
			Subtotal \$	37,750.00
			Site Improvements/Amenities Subtotal \$	251,710.00

Utilities/Construction			
Drainage	15%		\$ 37,756.50
Utilities	5%		\$ 12,585.50
Maintenance & Protection of Traffic	25%		\$ 62,927.50
Traffic Signals	0%		\$ -
Signage and Striping	5%		\$ 12,585.50
Landscaping	3%		\$ 7,551.30
			Subtotal \$ 133,406.30
			Roadway Subtotal \$ 385,116.30

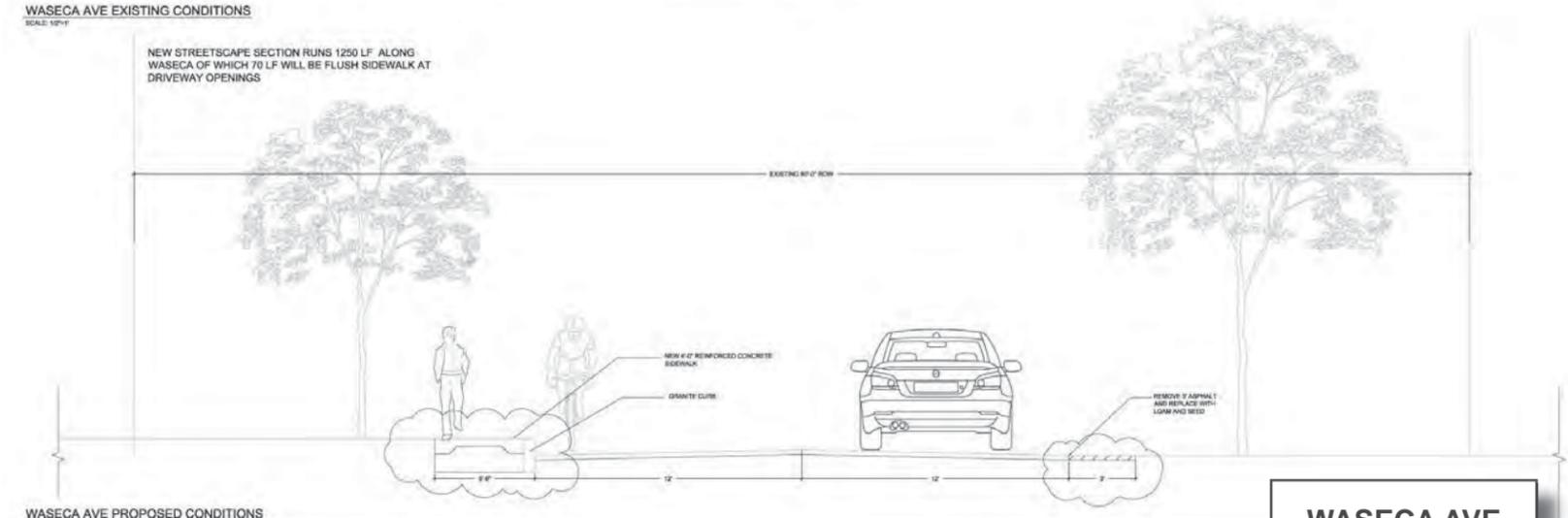
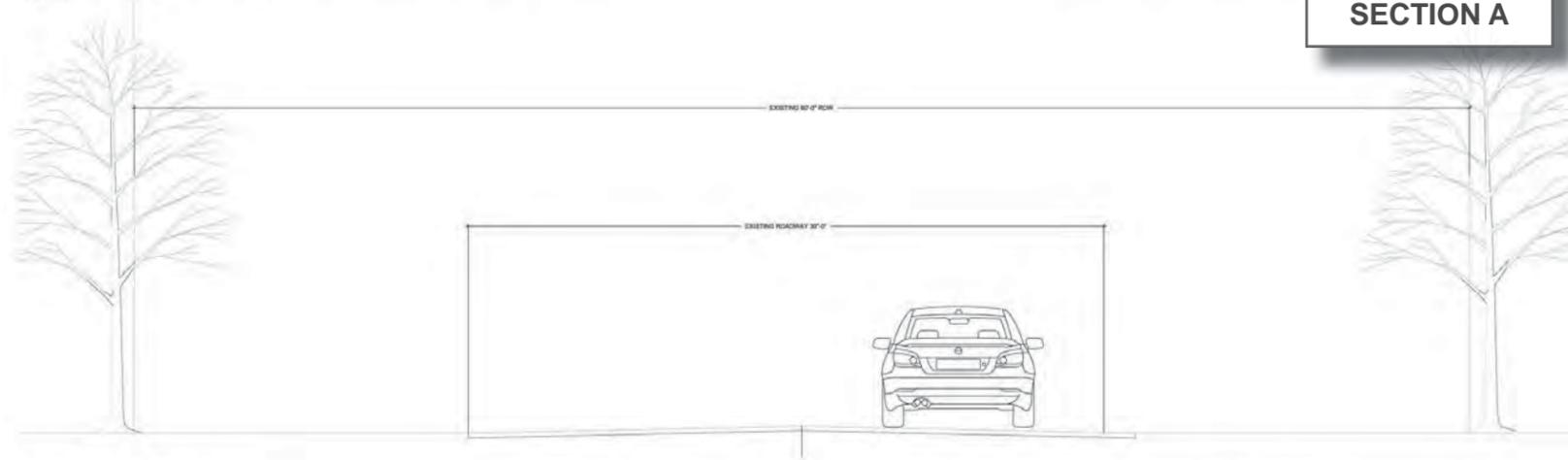
Mobilization (RI TAC 6/17/1999)	5%		\$ 19,255.82
Maintenance and Movement of Traffic Protection	3%		\$ 11,553.49
Engineer & Construction Contingency	15%		\$ 57,767.45
			Subtotal \$ 88,576.75
			Preliminary Construction Subtotal \$ 473,693.05
Police Detail	5%		\$ 23,684.65
			PRELIMINARY CONSTRUCTION TOTAL \$ 497,377.70

Alternates				
Utility Pole Relocation/Removal	0	EA	\$ 25,000.00	\$ -
Mill & Overlay	38000	SF	\$ 2.60	\$ 98,800.00

- Notes:**
1. Site Preparation includes: R&D sidewalks, R&D flexible pavement, earth excavation, trimming and fine grading.
 2. Roadway Construction Includes: Gravel borrow base, bituminous surface course, tack coat, concrete curb locks.
 3. Sidewalk Construction includes: Standard sidewalk, granite curb, raised linear planters, loam & seed.
 4. Utility Pole Relocation/Removal includes: Average only, price can vary based on existing conditions. This does not include complete undergrounding of overhead lines - further investigation is required to determine cost.



WASECA AVE SECTION A



WASECA AVE SECTION B

BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

VISIONING IMAGES



WALKABLE STREETS

VILLAGE SPACES



BARRINGTON VILLAGE CENTER CONNECTIVITY PLAN

VISIONING IMAGES

BEST MANAGEMENT PRACTICES



STREET EDGE BIOSWALE

TRENCH DRAIN



ROAD DIET



PERMEABLE PAVING



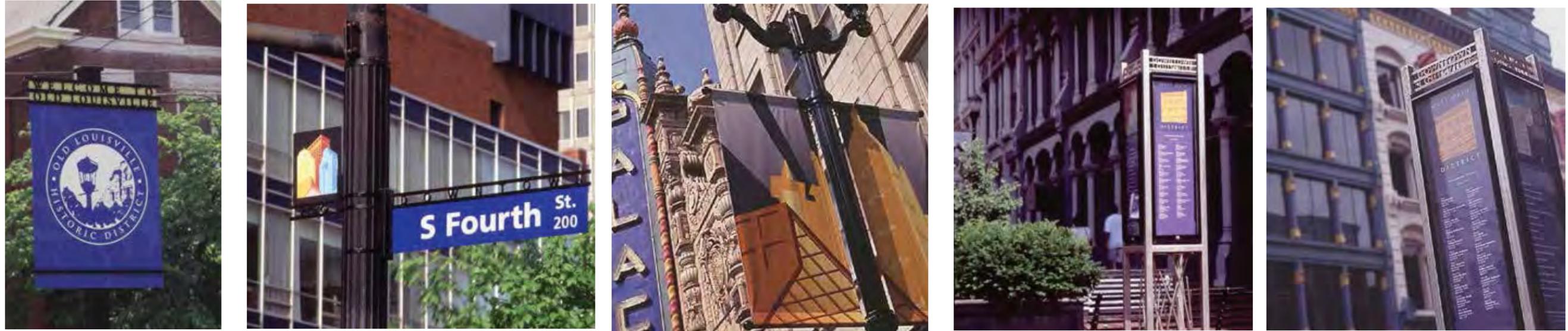
AT-GRADE CROSSWALK



RAISED CROSSWALKS

CROSSWALKS

VISIONING IMAGES



EXAMPLES OF ICONIC WAYFINDING AND DIRECTIONAL SIGNAGE