

Downtown Pedestrian & Vehicular Access Improvement Project



Public Meeting

February 13, 2023

GPI



Project Team

City of Dover

- Donna Benton – Director of Planning & Community Development
- Kenneth Mavrogeorge – City Engineer
- Chris Parker – Deputy City Manager
- Jillian Semprini – Assistant City Engineer

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- Steve Babalis – Traffic and Intersection Design
- Mark Debowski – Project Manager
- Kyle Higgins – Roadway Design
- Robert White – Landscape Design

Agenda

Project Background

Existing Conditions

Traffic

Roundabouts

The Design

Project Schedule

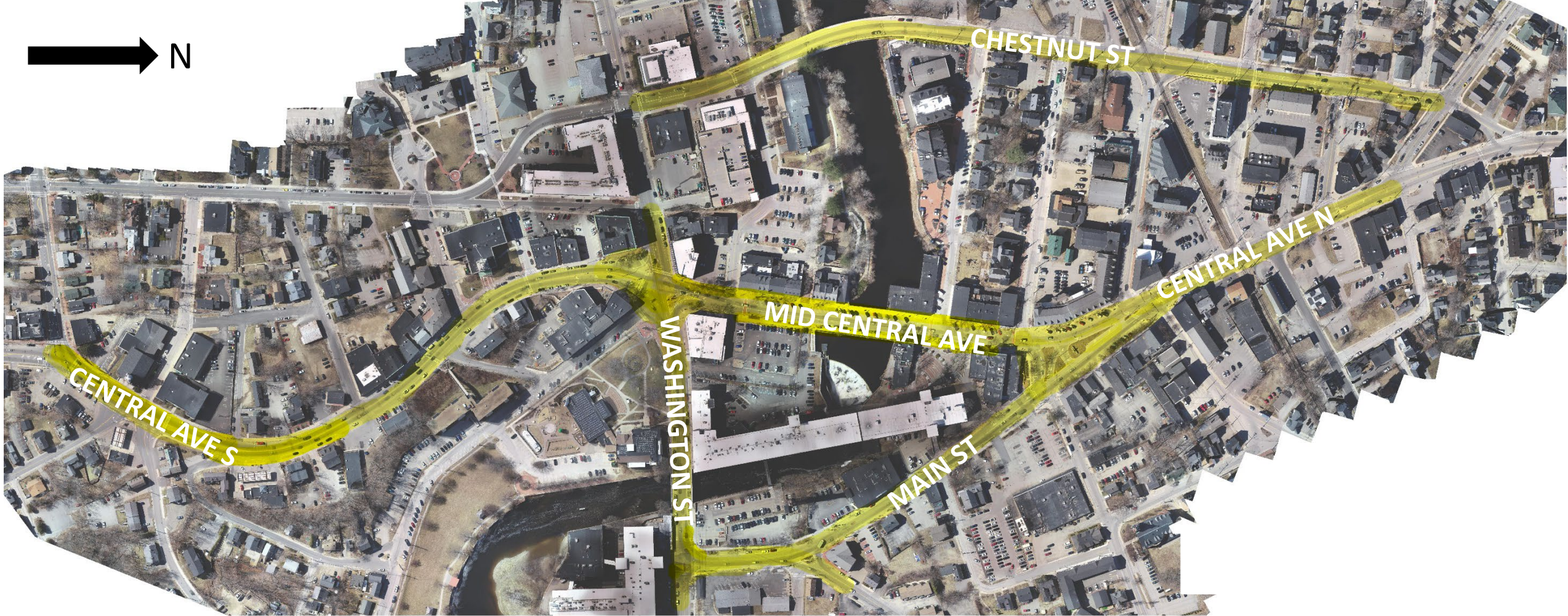
Plans Available

Questions

Table Discussions

Project Background

Project Area



Project Purpose

The purpose of this project is to create streets and ways that can be operated safely and are accessible for all users regardless of age, physical ability, or mode of transport.

The design should incorporate the elements and principles laid out in the City of Dover Complete Streets and Traffic Calming Guidelines.

Project Purpose

Safety

Connectivity

Social Impact

Economic Development

Aesthetics

Meeting Purpose



Explain the current status of the project.



Learn what is important to you.

How did we get here?

2014–2015

Cecil Group Study

- Primary Recommendation: Two-way vehicle circulation in downtown on Main, Washington, and Central

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- Developing design from Study
- Modifications
- Alternatives

February 2022 – Present

Existing Conditions

Existing Conditions - Wide Pavement and Long Pedestrian Crossings



Existing Conditions - Confusing Vehicle Paths



Existing Conditions - Unsafe Parking Situations



Existing Conditions - Unsafe Parking Situations



Existing Conditions - Deteriorating Surfaces



Existing Conditions - Deteriorating Surfaces

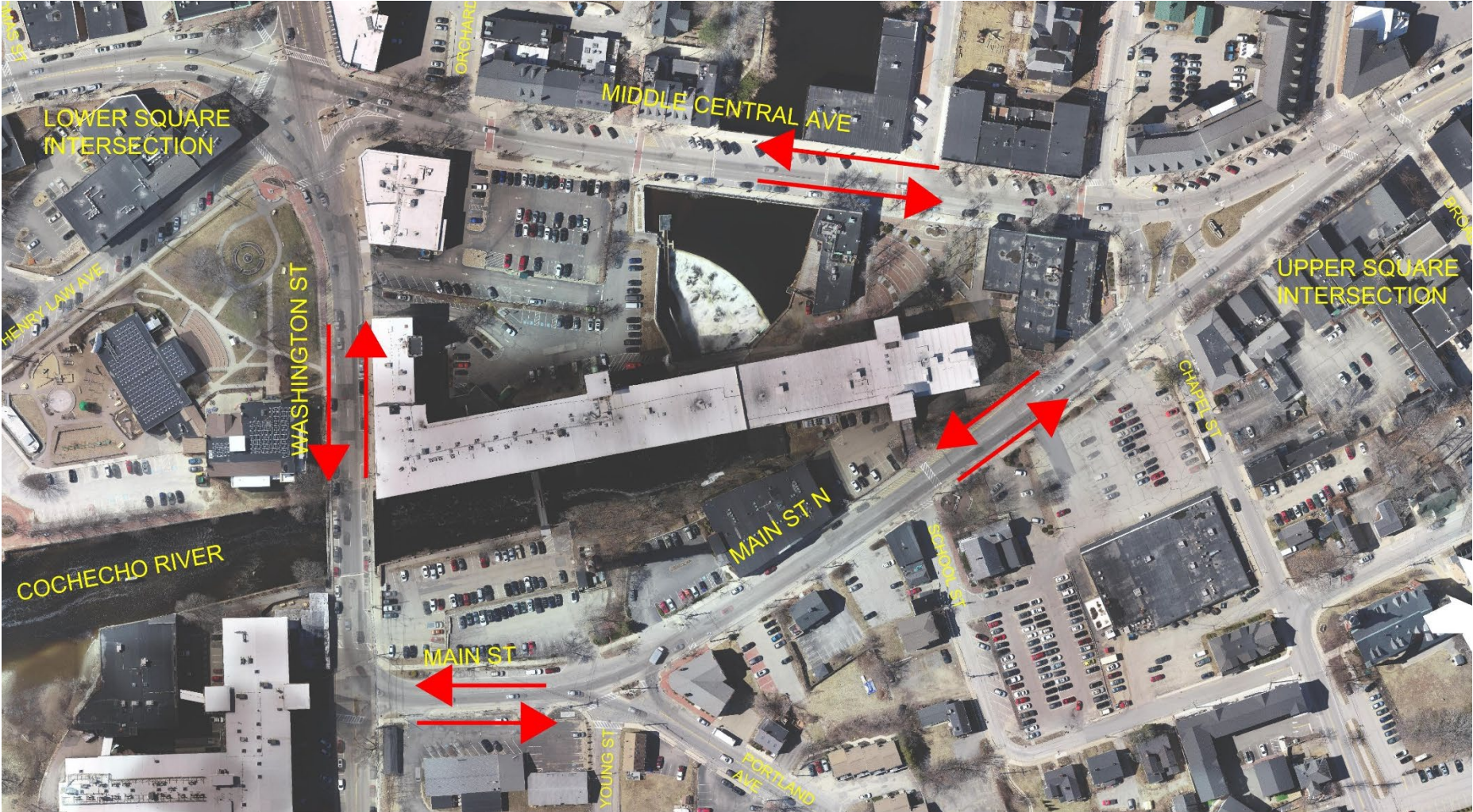


Existing Conditions - Street Trees



Traffic

Proposed Two-Way Traffic



Benefits of Two-Way Traffic Downtown on Main, Central, and Washington

Increases safety

Circulation clearer and more convenient

More access to businesses, residences, and parking

Expands transit options

Eliminates the possibility of wrong-way travel on one-way roads

Roundabouts

A Roundabout Is Not a Rotary



Portsmouth Traffic Circle (Rotary)

- High speeds
- Large circle
- Lane changes often required



Silver Street Roundabout

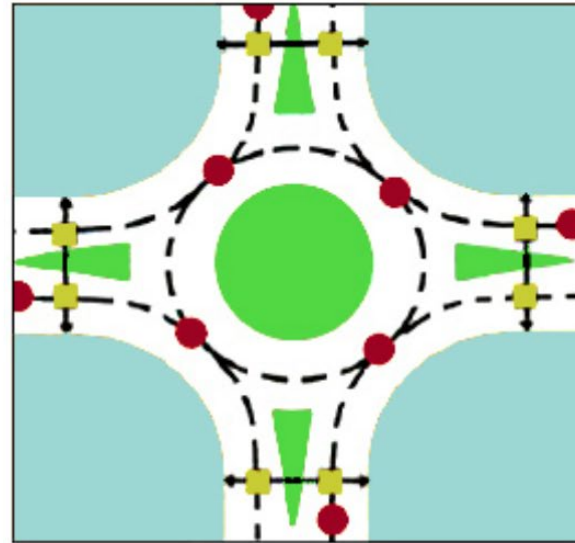
- Lower speeds
- Small circle
- No lane changes

A Roundabout is Not a Rotary

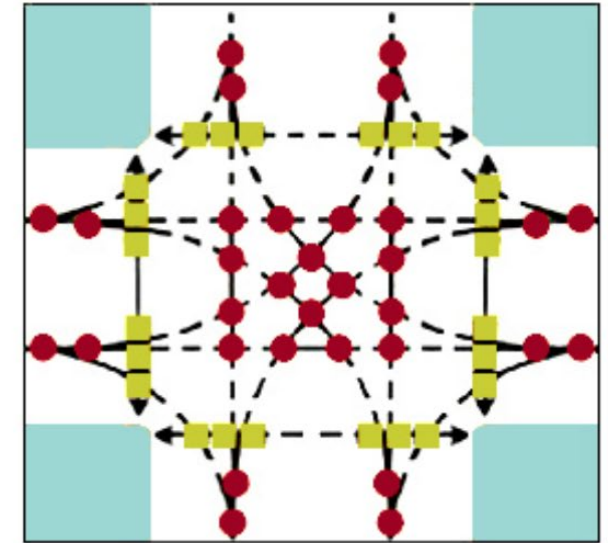


The Benefits of Roundabouts

- Safety is Increased
- Traffic flow
- Aesthetics
- Rolling queues
- Safer pedestrian crossings
- Gateway
- U-Turns



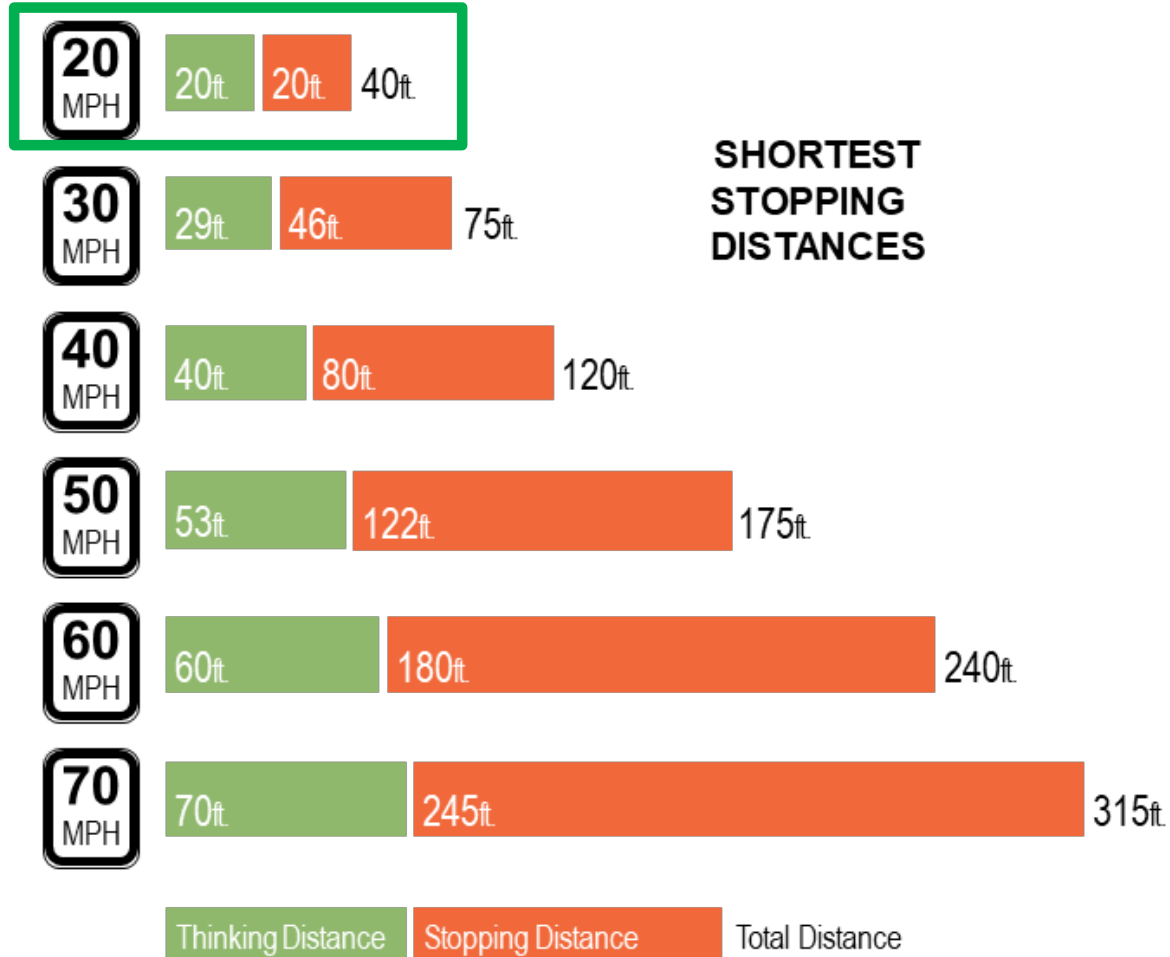
● 8 Vehicle conflicts



● 32 Vehicle conflicts

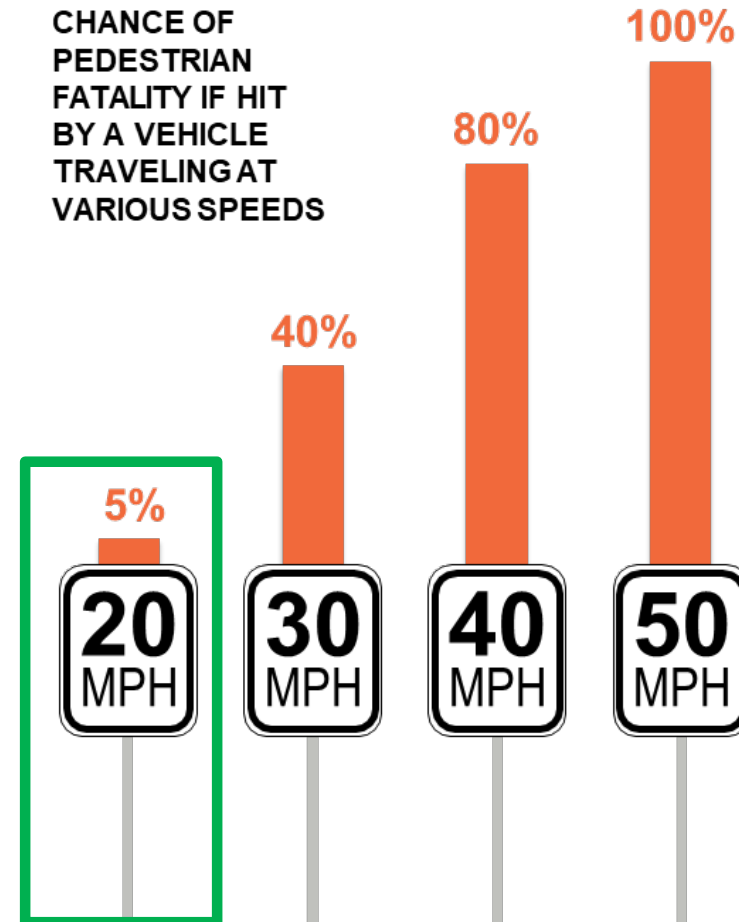
nextstl.com

The Benefits of Roundabouts



Source: Killing Speed Saving Lives

CHANCE OF PEDESTRIAN FATALITY IF HIT BY A VEHICLE TRAVELING AT VARIOUS SPEEDS



Source: Leaf, W. A. and D. F. Preusser. Literature Review on Vehicle Travel Speeds and Pedestrian Injuries. Final Report DOT HS 809 021. National Highway Traffic Safety Administration, Department of Transportation, Washington, D.C., October 1999

The Design

Planned Improvements

Intersection
Improvements

Parking

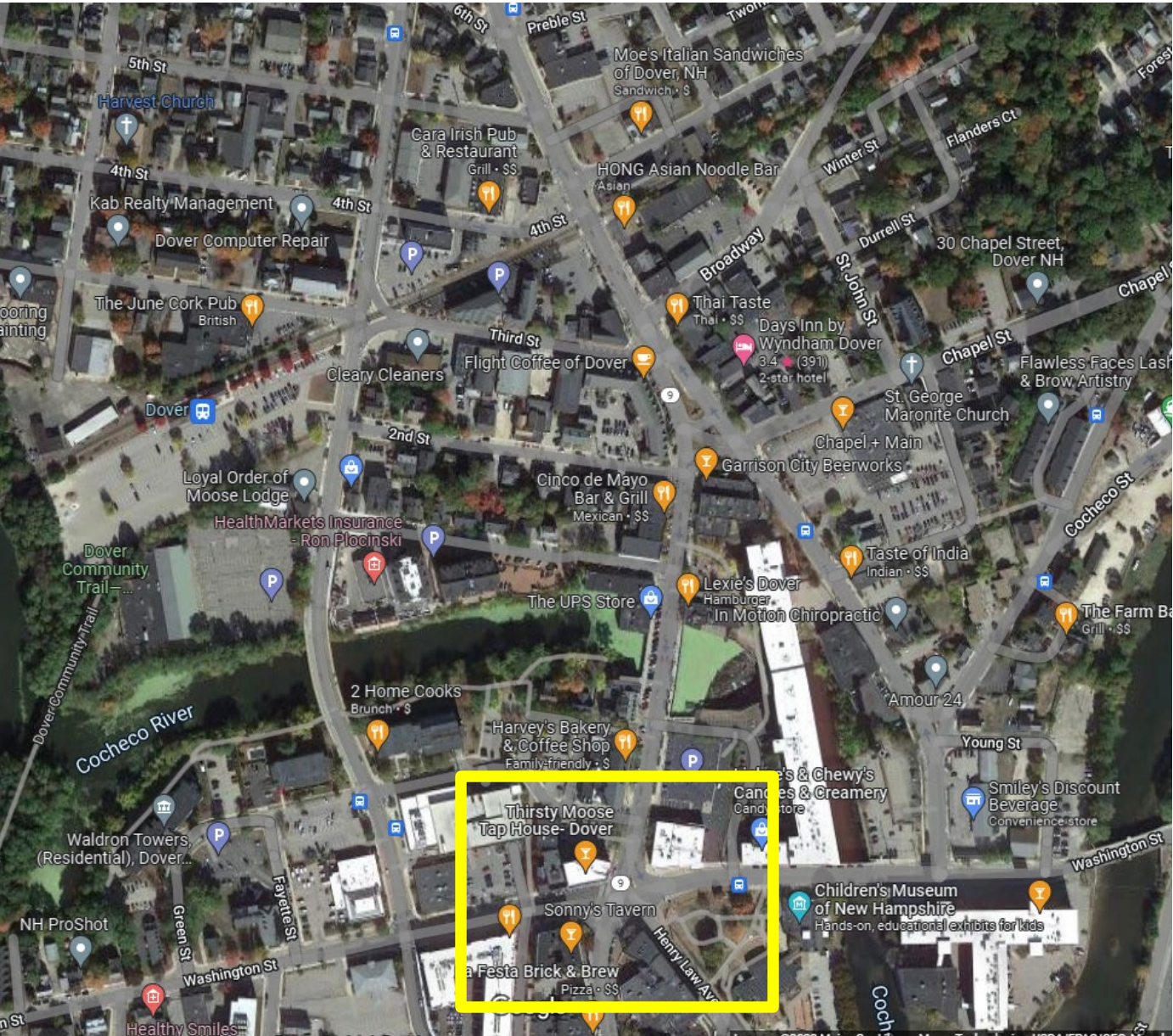
Sidewalks

Bicycle Safety

Streetscape /
Landscaping
and Lighting

Placemaking

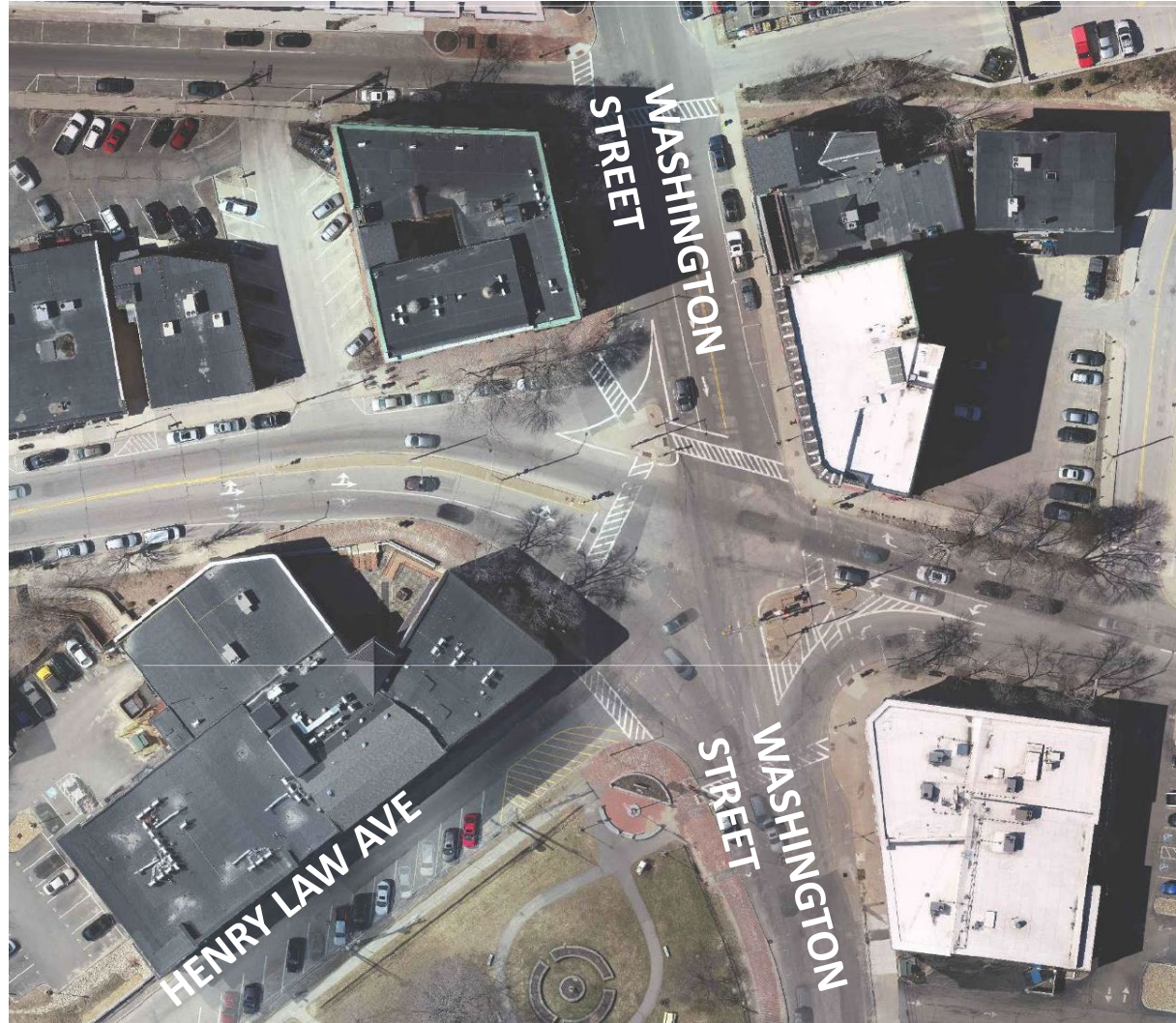
Focus Area - Lower Square / Central Square



Focus Area - Lower Square / Central Square



CENTRAL AVE



CENTRAL AVE

Proposed Lower Square Option 1



CENTRAL AVE



CENTRAL AVE

Historic Lower Square / Central Square



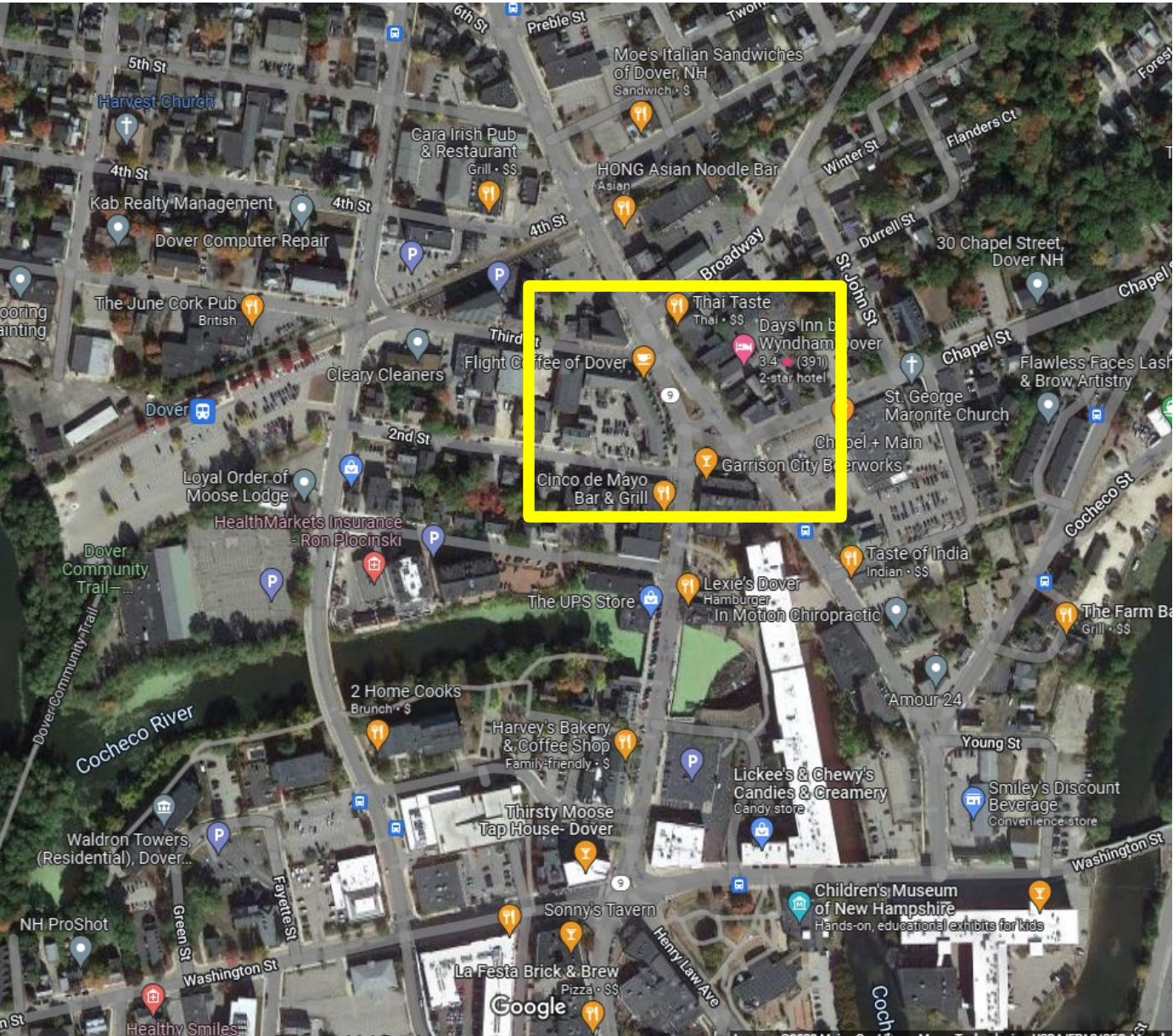
Proposed Lower Square Option 2



CENTRAL AVE



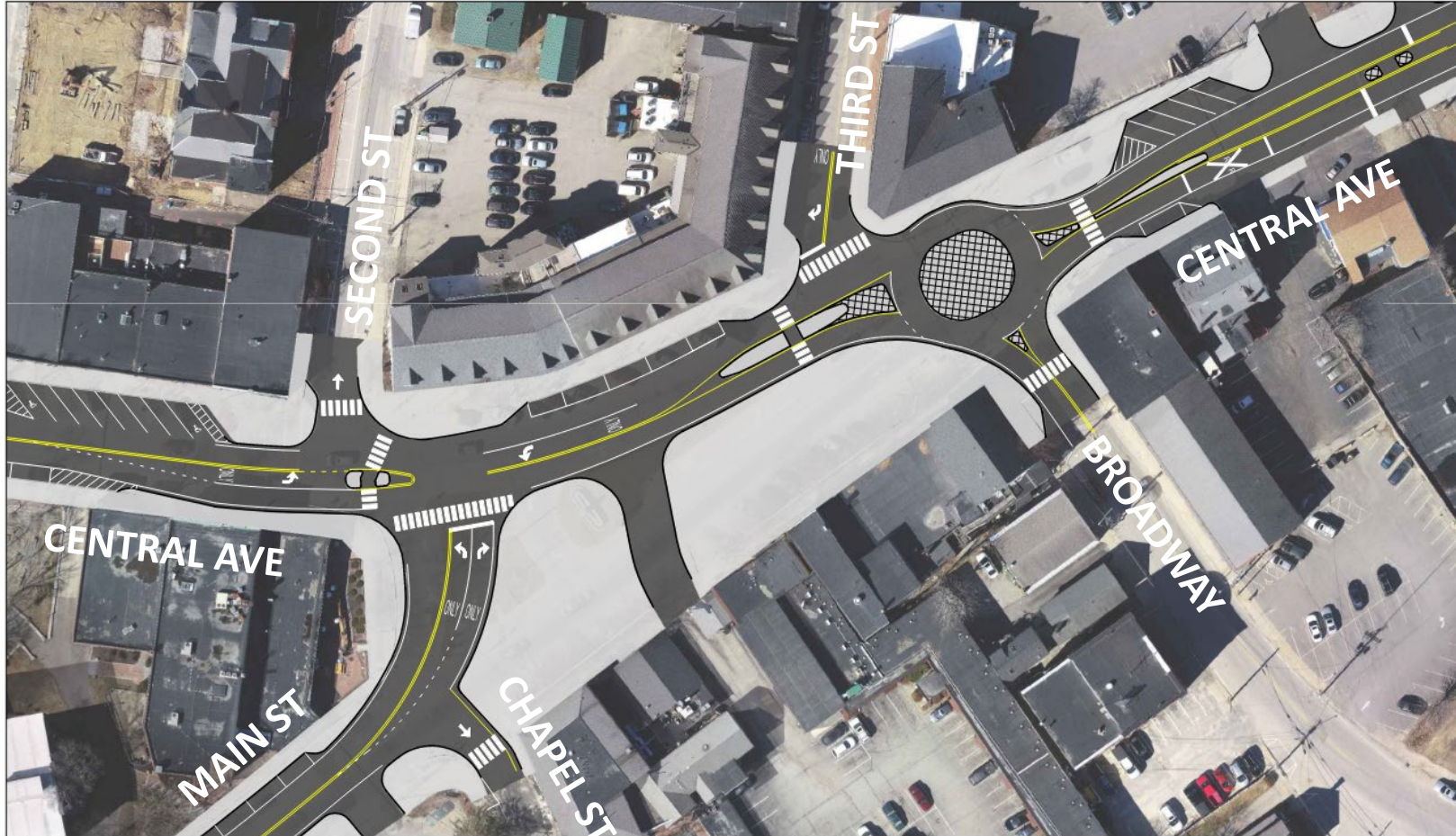
Focus Area - Upper Square / Franklin Square



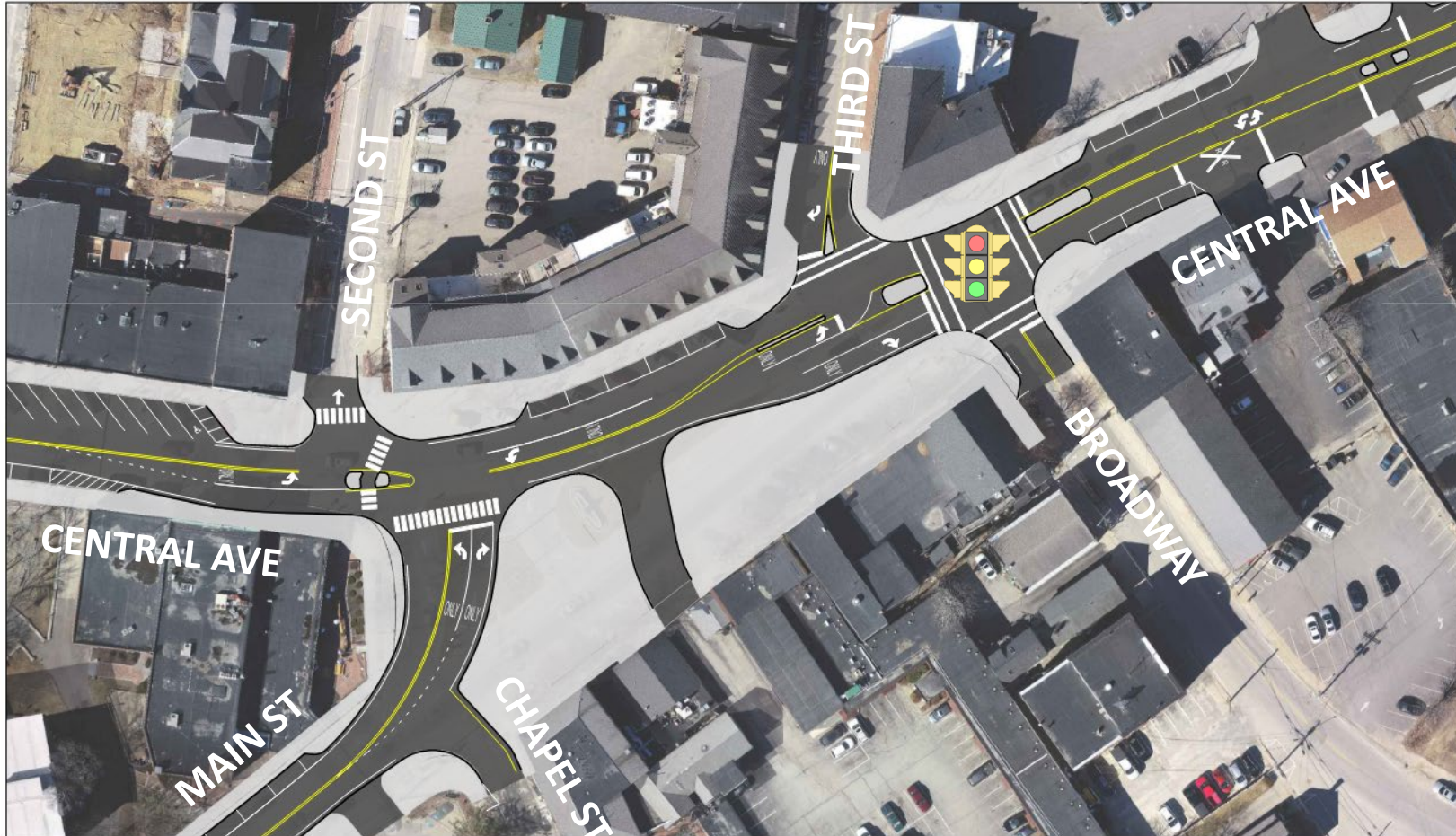
Focus Area - Upper Square / Franklin Square



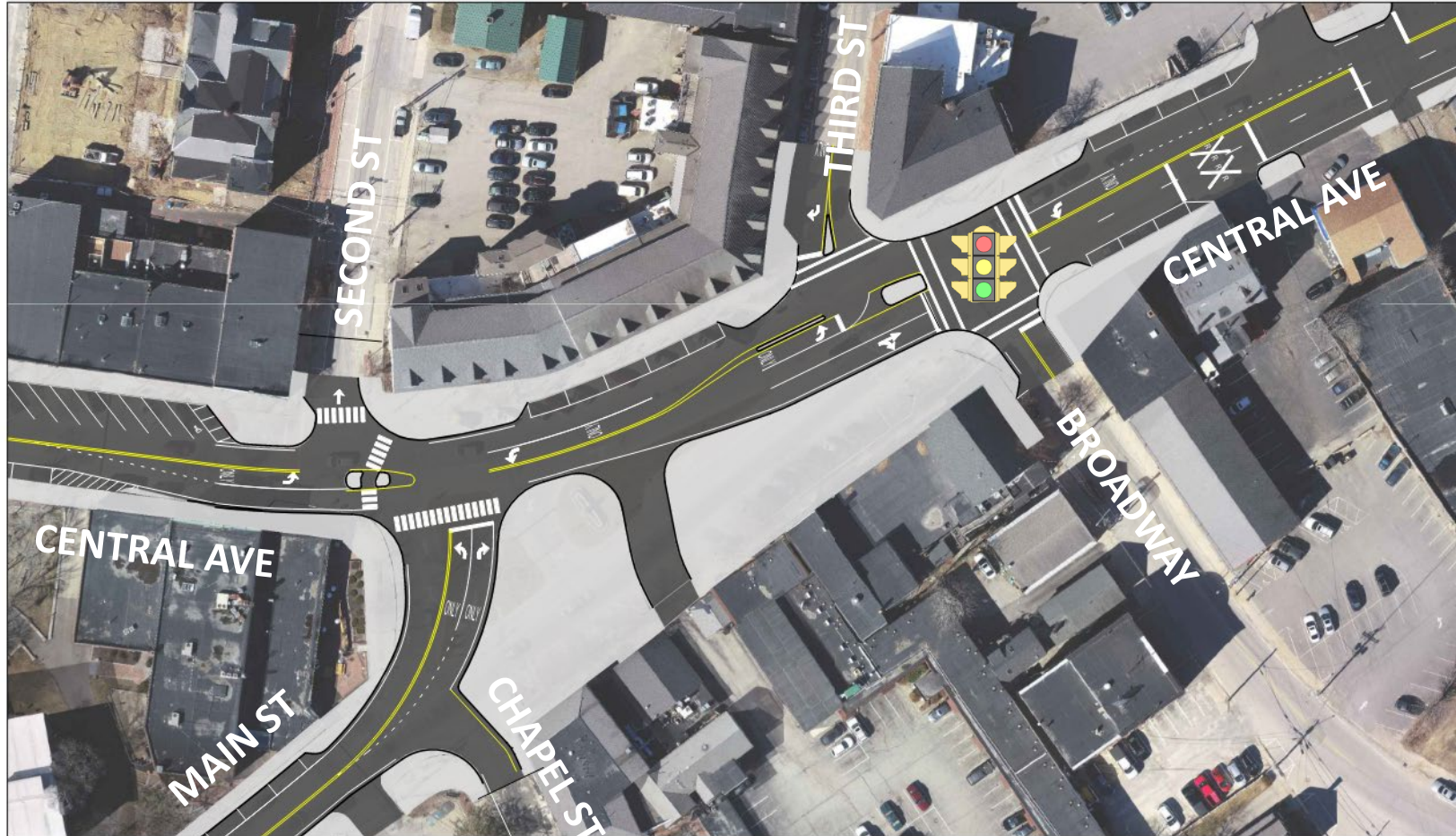
Proposed Upper Square Option 1



Proposed Upper Square Option 2



Proposed Upper Square Option 3



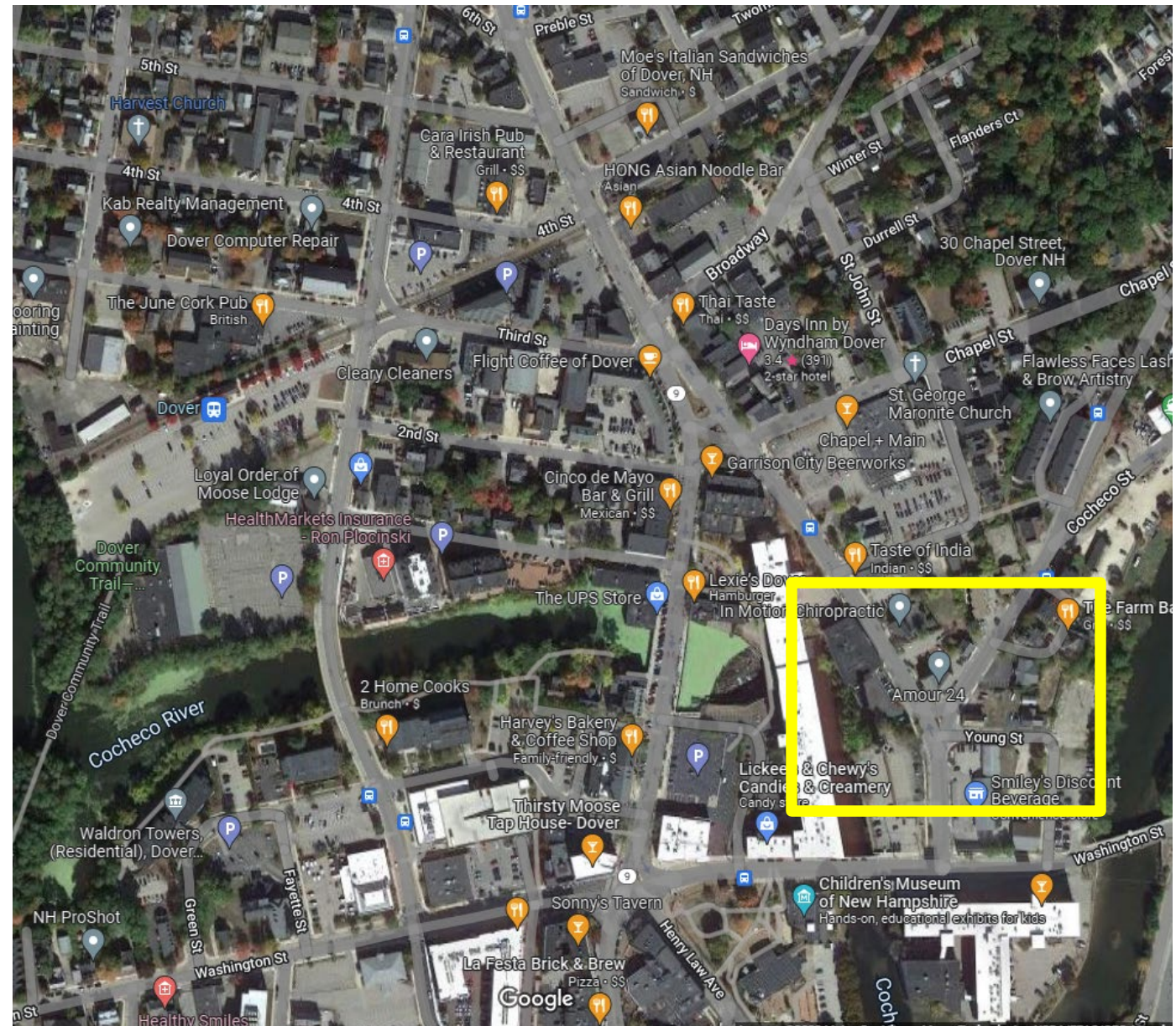
Proposed Upper Square Parking Area - Parking Option



Proposed Upper Square Parking Area - Park Option



Focus Area - Main Street & Portland Avenue



Focus Area - Main Street & Portland Ave.



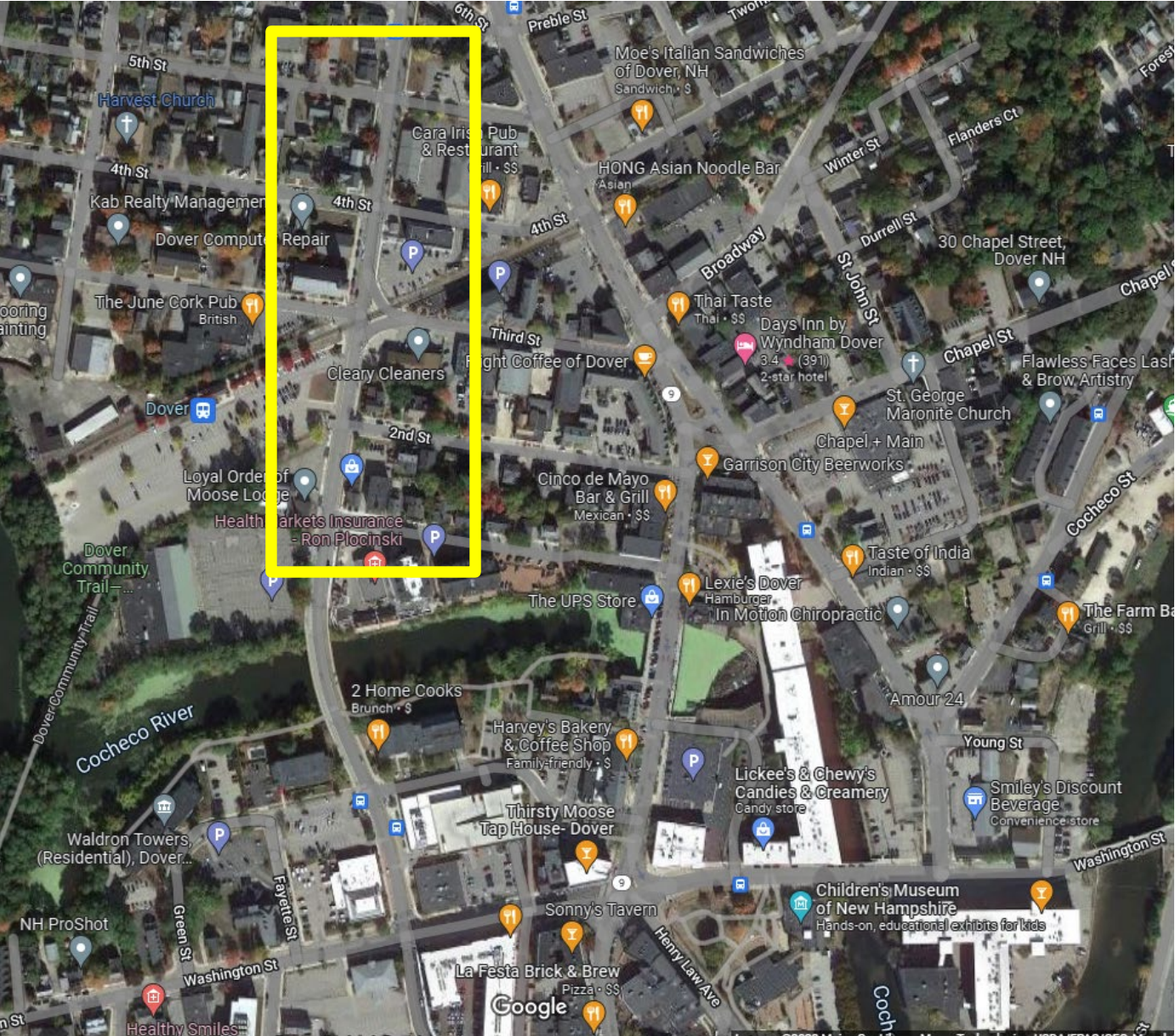
Main Street & Portland Ave. - Steep Grade



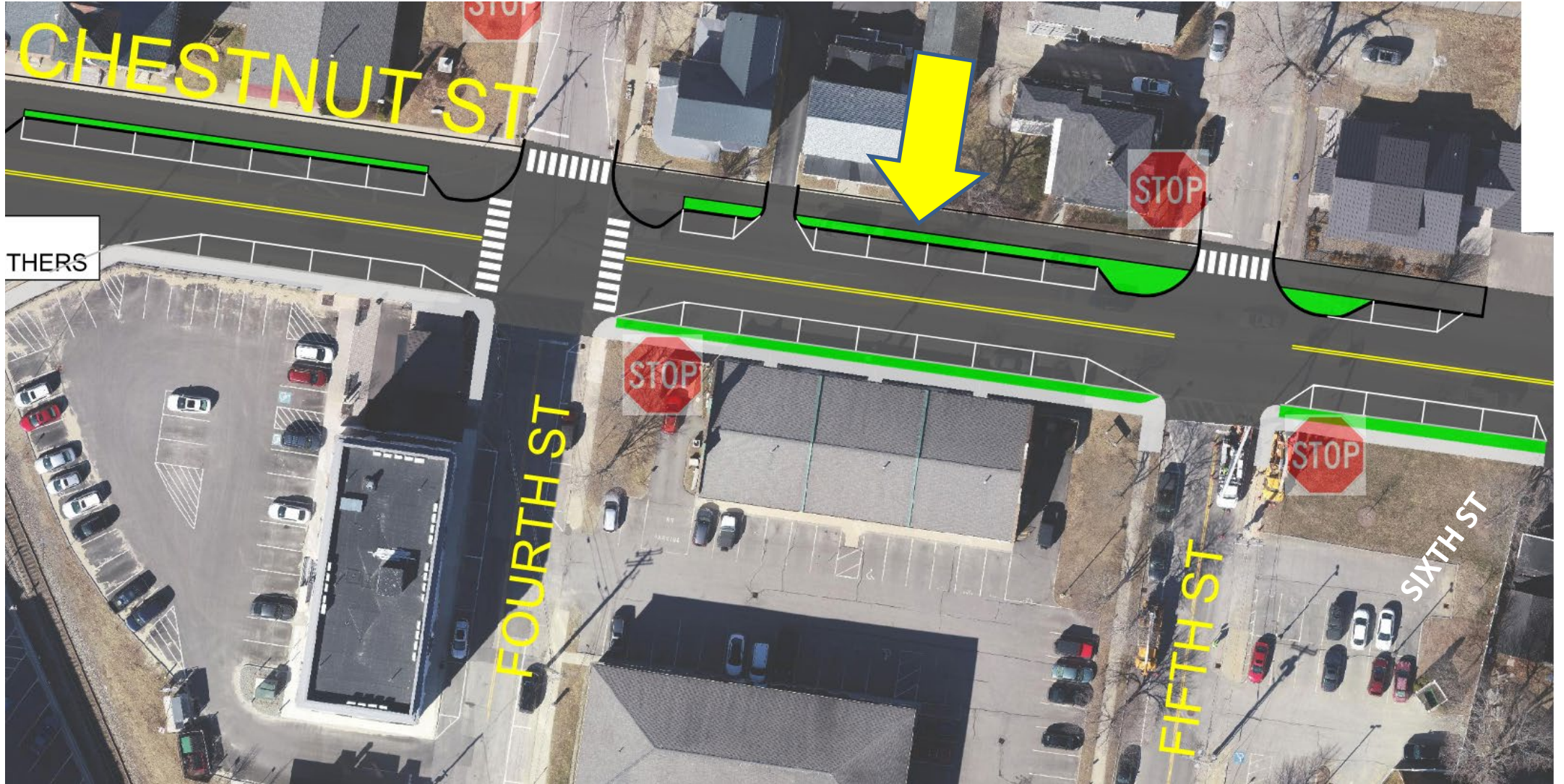
Proposed Main Street & Portland Ave.



Focus Area - Chestnut Street



Focus Area - Chestnut Street



Landscape Architecture - River Ecology Concept



Landscape Architecture - Historic/Industrial Concept



Design Challenges

Steep Grades

Fitting the Setting

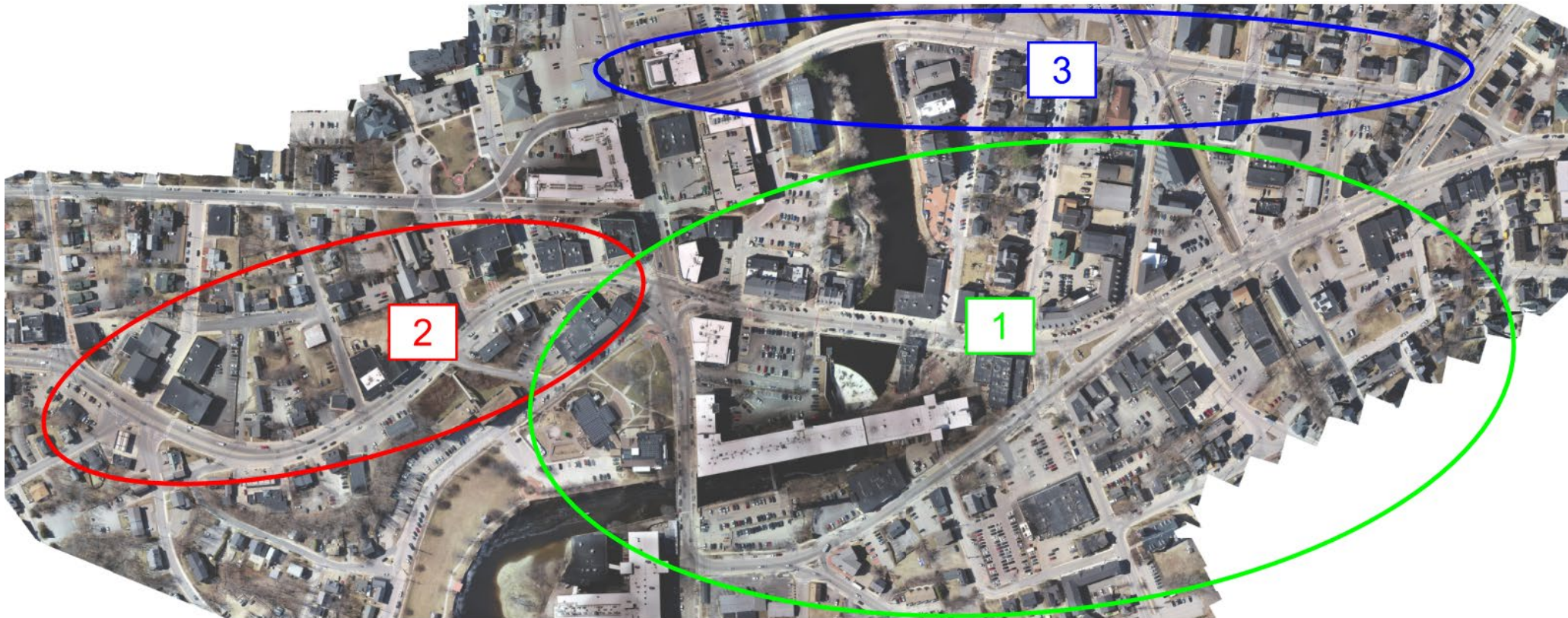
Traffic Control During Construction

Construction Phasing

Maintaining Parking (Safety Concerns with Existing Spaces)

Recommended Construction Phases

- **Phase 1: Central Avenue Middle & North, Washington Street & Main Street**
- **Phase 2: Central Avenue South**
- **Phase 3: Chestnut Street**



Project Schedule

Schedule



Following this meeting – Selection of the preferred alternative



Spring/Summer 2023 - Public Meeting #2



May – December 2023 – Final Design



Construction – TBD

Plans Available

Engineering Plan

NOTE: PRELIMINARY DESIGN, SUBJECT TO CHANGE.



Lower Square Alternative 2



Typical Section - Central Ave (South & North), Washington Street, & Main Street

Typical Section - Middle Central Ave

Typical Section - Chestnut Street

Upper Square Parking Lot Option

Upper Square Alternative 2



Upper Square Alternative 3



DOVER, NH
DOWNTOWN PEDESTRIAN AND VEHICULAR
ACCESS IMPROVEMENTS PROJECT
ROLL PLAN

January 25, 2023
PUBLIC MEETING
ROLL PLAN
1 OF 1

Landscape Architecture Plans



Materials: Large concrete pavers, crushed granite, and river-stone mulch in planters



Rocks: Adding a bit of fun and bringing the river materials up to the street



Opportunities to bring green infrastructure into the street scape



Native hardy plantings of grasses and perennials mimic a riverbank experience



RIVER - ECOLOGY CONCEPT

DOVER, NEW HAMPSHIRE
 DOWNTOWN PEDESTRIAN AND VEHICULAR ACCESS IMPROVEMENT PROJECT
 STREET-SCAPE ROLL PLAN

JANUARY 2023



GPI
 Many Talents One Firm

Questions

Table Discussions

Parking

Project Section	Existing # of Spaces	Proposed # of Spaces (Alternative 1)	Difference	Notes
Central Avenue South	54	53	-1	Spaces reduced to 22' where possible. Bus pull-offs retained at their existing length.
Central Avenue Middle	74	56	-18	45 degree angled head-in parking increases safety, allows less spaces.
Central Avenue North	8	10	+2	A few spaces added through access management.
Washington Street	27	24	-3	Introduction of Mid-block crossing and curb extensions limits spaces.
Main Street	18	29	+11	Curb lines revised to maximize parking. 22' spaces used.
Chestnut Street	45	56	+11	Proposed two-lane section allows for additional parking spaces.
Roadway Subtotal	226	228	+2	
Lower Square Area	15	0	-15	Spots within roundabout footprint cannot be retained.
Upper Square Area	40	36	-4	Count reflects parking lot option (25 spaces)
Intersection Subtotal*	55	36	-19	
Totals	281	264	-17	6.1% Reduction in Spots

*Main Street and Portland Ave Intersection counts included in the Main & Washington sections above