



VILLAGE OF GARDEN CITY

# SATELLITE STUDY AND TRAFFIC CALMING MASTER PLAN

Special CAC Review  
April 27, 2023

# AGENDA

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- Project progress update
- Project schedule
- Review Traffic Calming principles
- Refined improvement locations
- Refined concept sketches
- Traffic Calming request protocol
- Traffic Calming prioritization process

# PROJECT UPDATE

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Since the last CAC Meeting:

- Additional feedback from Traffic Commission
- Refined concept sketches
- Proposed Traffic Calming request protocol
- Proposed prioritization process



# PROJECT SCHEDULE

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- September – Kick Off Meeting
- October – Existing Conditions & Survey 123
- November – CAC Meeting #1
- December – Research on Treatments
- January – Additional Data Collection
- February – Suitability Analysis & Concepts
- March – CAC Meeting #2
- Refine Concepts & Cost Estimates
- April – Special CAC Review Meeting
- May – Report and Presentation



# WHAT IS TRAFFIC CALMING?

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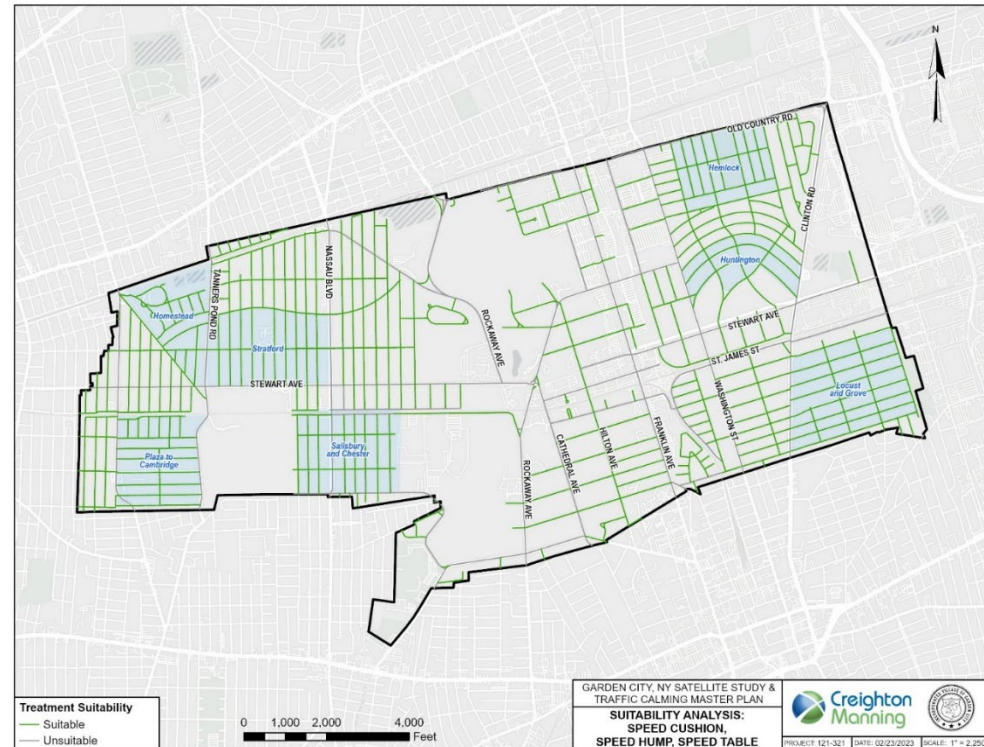
*The primary purpose of traffic calming is to support the livability and vitality of residential and commercial areas through improvements in non-motorist safety, mobility, and comfort. These objectives are typically achieved by reducing vehicle speeds or volumes on a single street or a street network. Traffic calming measures consist of horizontal, vertical, lane narrowing, roadside, and other features that use self-enforcing physical or psycho-perception means to produce desired effects.*

*- Federal Highway Administration (FHWA)*

- Aims to **reduce automobile speeds and traffic volumes** on neighborhood streets
- Used on streets to facilitate the **safe and efficient movement of all users**, especially pedestrians and cyclists.
- Although **mostly known as a neighborhood-specific initiative**, traffic calming **can be implemented on different street types** and in rural and commercial areas.
- Strategies are sometimes grouped into the three E's: **Education, Enforcement, Engineering and Planning**

# REVIEW OF SUITABILITY ANALYSIS

- Criteria used FHWA guidance and best practice to evaluate suitability for each treatment
- Traffic volumes are original counts or NYSDOT data
- Maps show initial suitability, not actual feasibility or planned projects



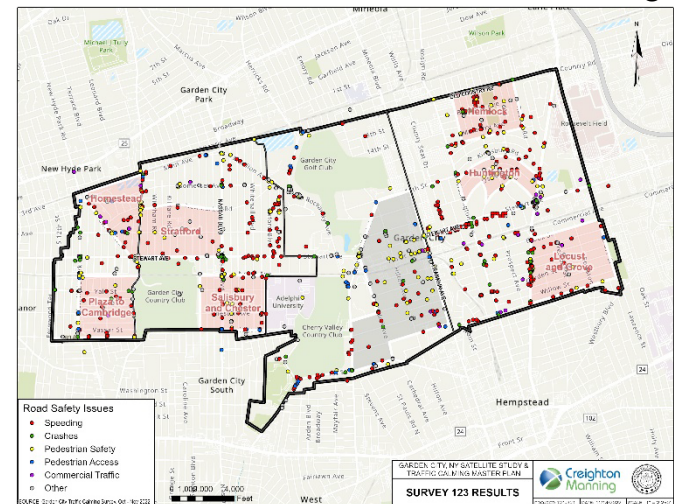
*Suitability analysis map for speed humps*

# SKETCH LOCATION SELECTION CONSIDERATIONS

- Public feedback (Survey 123)
- Review of existing crash and speed data
- Proximity to schools and/or school bus stops
- Engineering criteria
- Feedback from the Village
  - Traffic Commission members
  - Police Commissioner / Engineer
- Creation of traffic calming network



Public feedback from Kick Off meeting



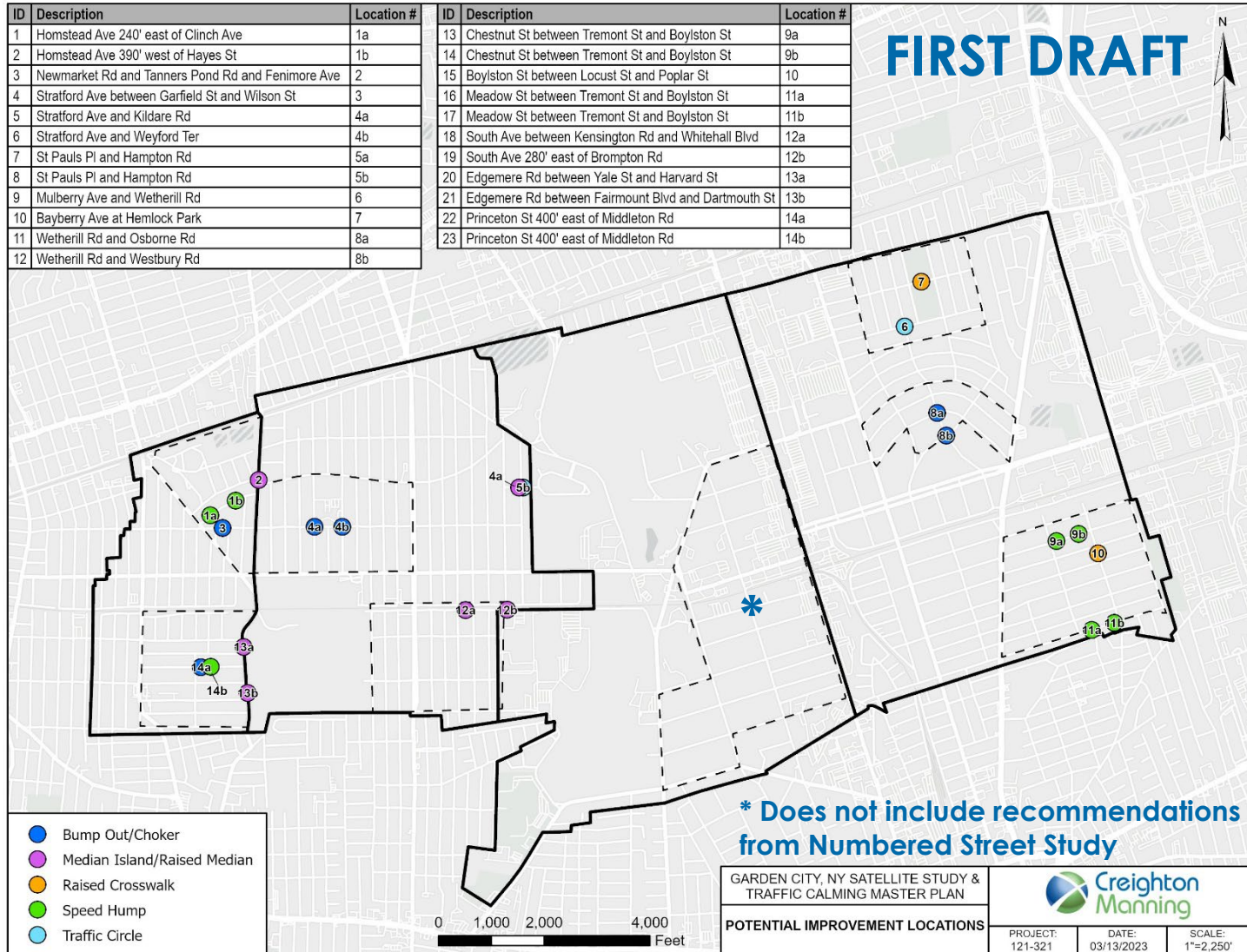
Map of pins from Survey 123 feedback



# TREATMENTS CHOSEN

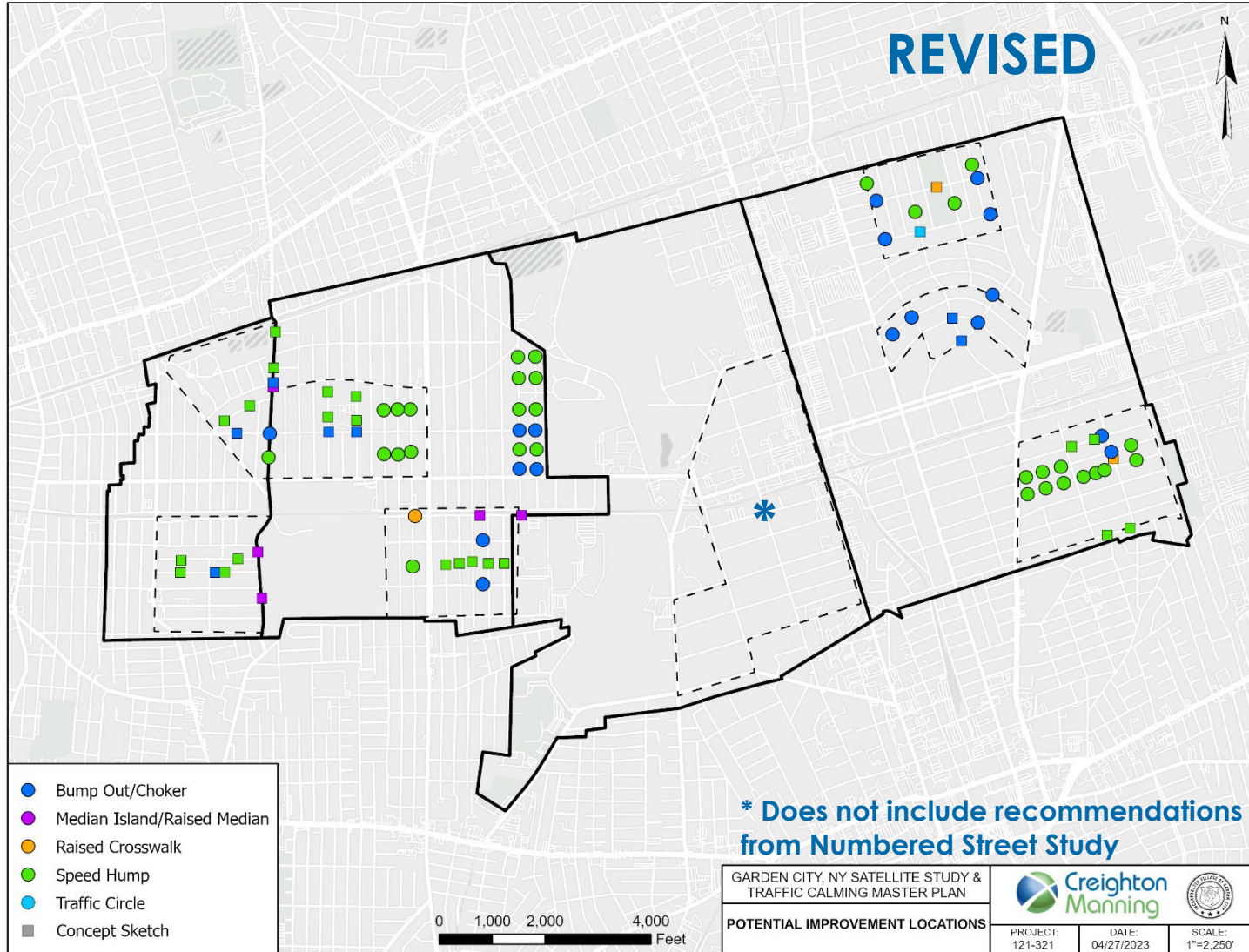


# POTENTIAL IMPROVEMENT LOCATIONS



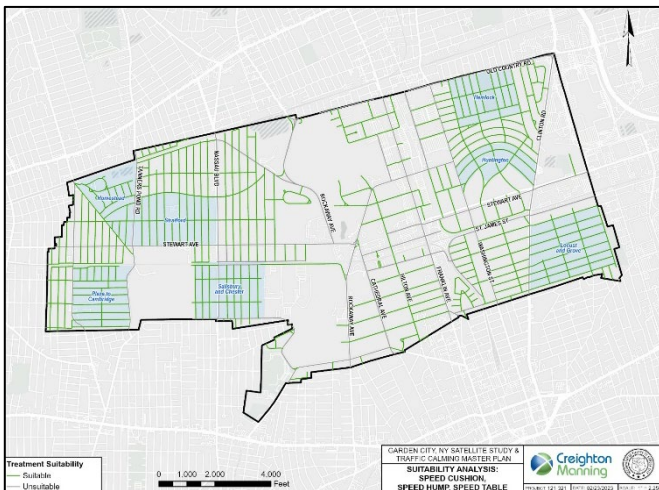


# POTENTIAL IMPROVEMENT LOCATIONS





# SPEED HUMPS



**Speed Humps** Used where AADT is  $<3500^*$  / posted speed  $<30\text{mph}$

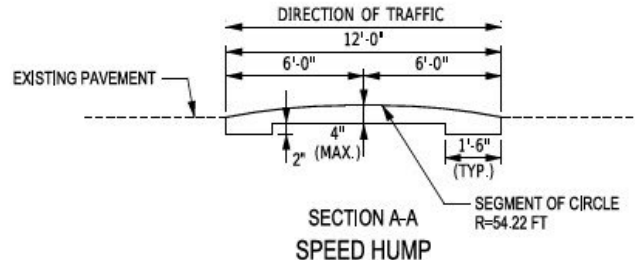
**Benefits:** Can reduce speeds and alert drivers in areas with high pedestrian traffic, discourages reckless driving

**Revised Concepts:** Developed networks for traffic calming which provide a more effective deterrent for speeding on multiple streets

**Suitability Analysis:** Speed humps are widely suitable based on factors like maximum vehicle volumes

\* Volume and speed table ranges are guide, not requirements

# CONCEPT SKETCHES – SPEED HUMPS



**DRAFT - For discussion purposes only**

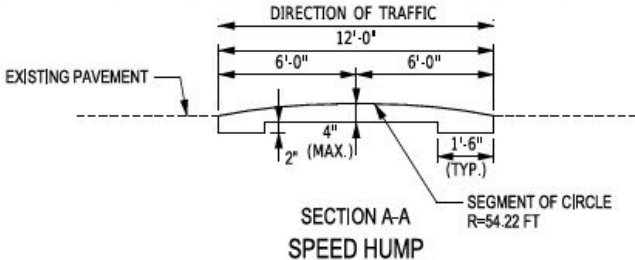


East Section

Proposed Concept



# CONCEPT SKETCHES – SPEED HUMPS



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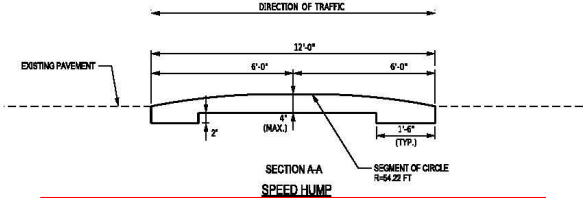


East Section

Proposed Concept

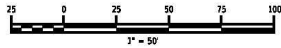


# CONCEPT SKETCHES – SPEED HUMPS



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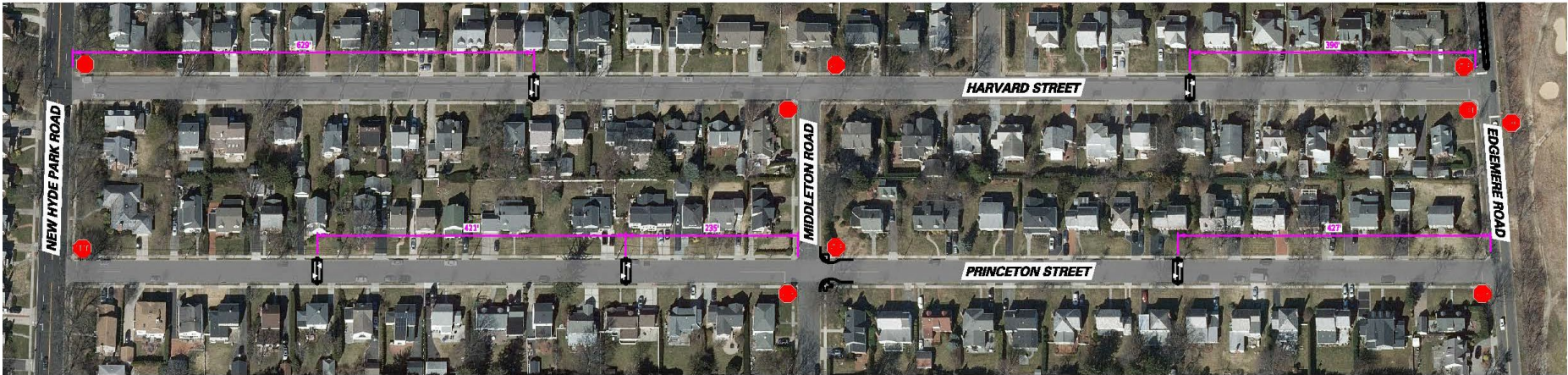
GARDEN CITY  
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PROJECT: 121-321 DATE: 4/2023



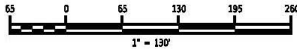
Estates Section

Proposed Concept

# CONCEPT SKETCHES – SPEED HUMPS (NETWORK)



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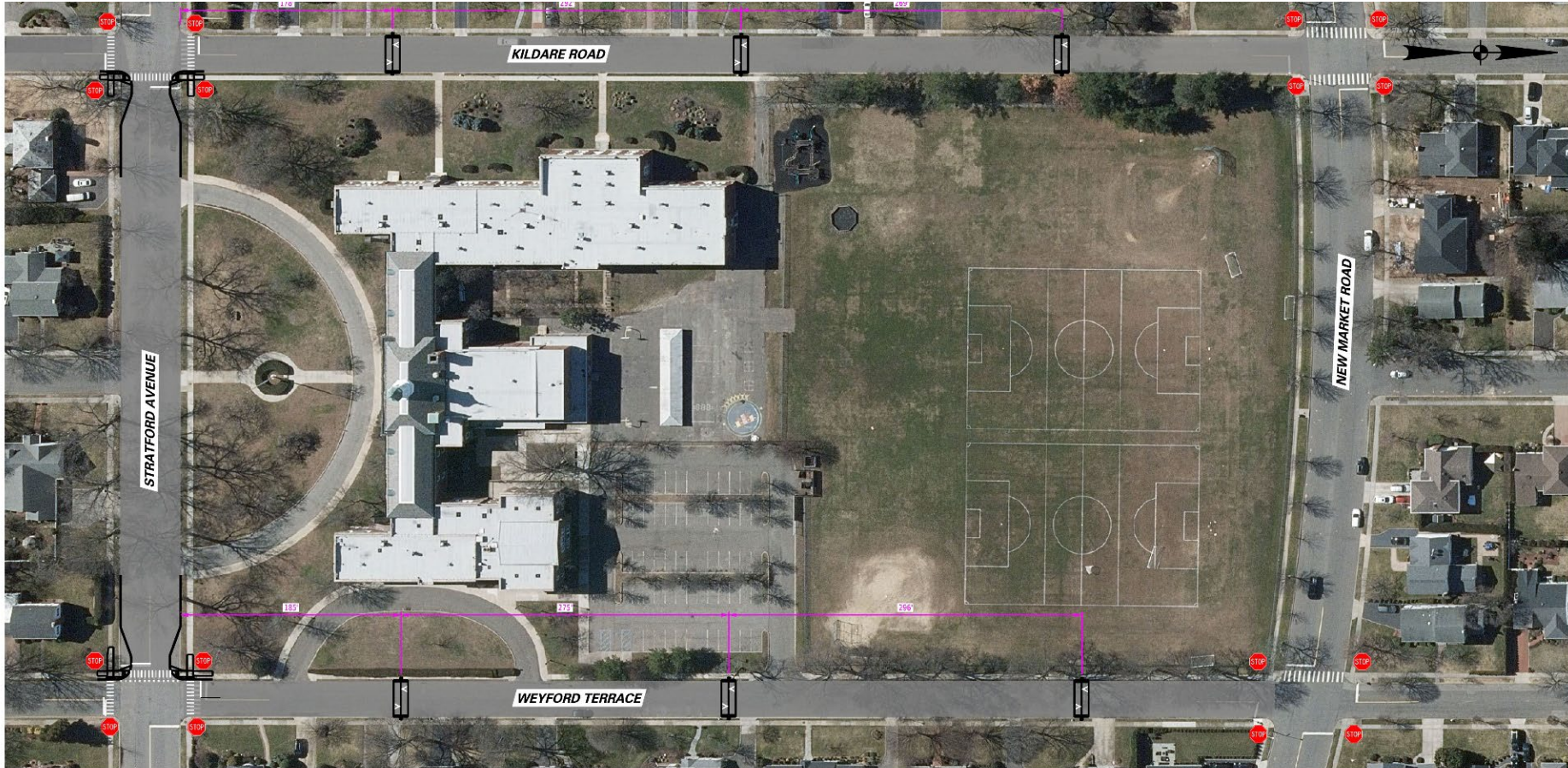


West Section

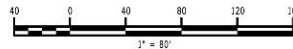
Proposed Concept



# CONCEPT SKETCHES – SPEED HUMPS (NETWORK)

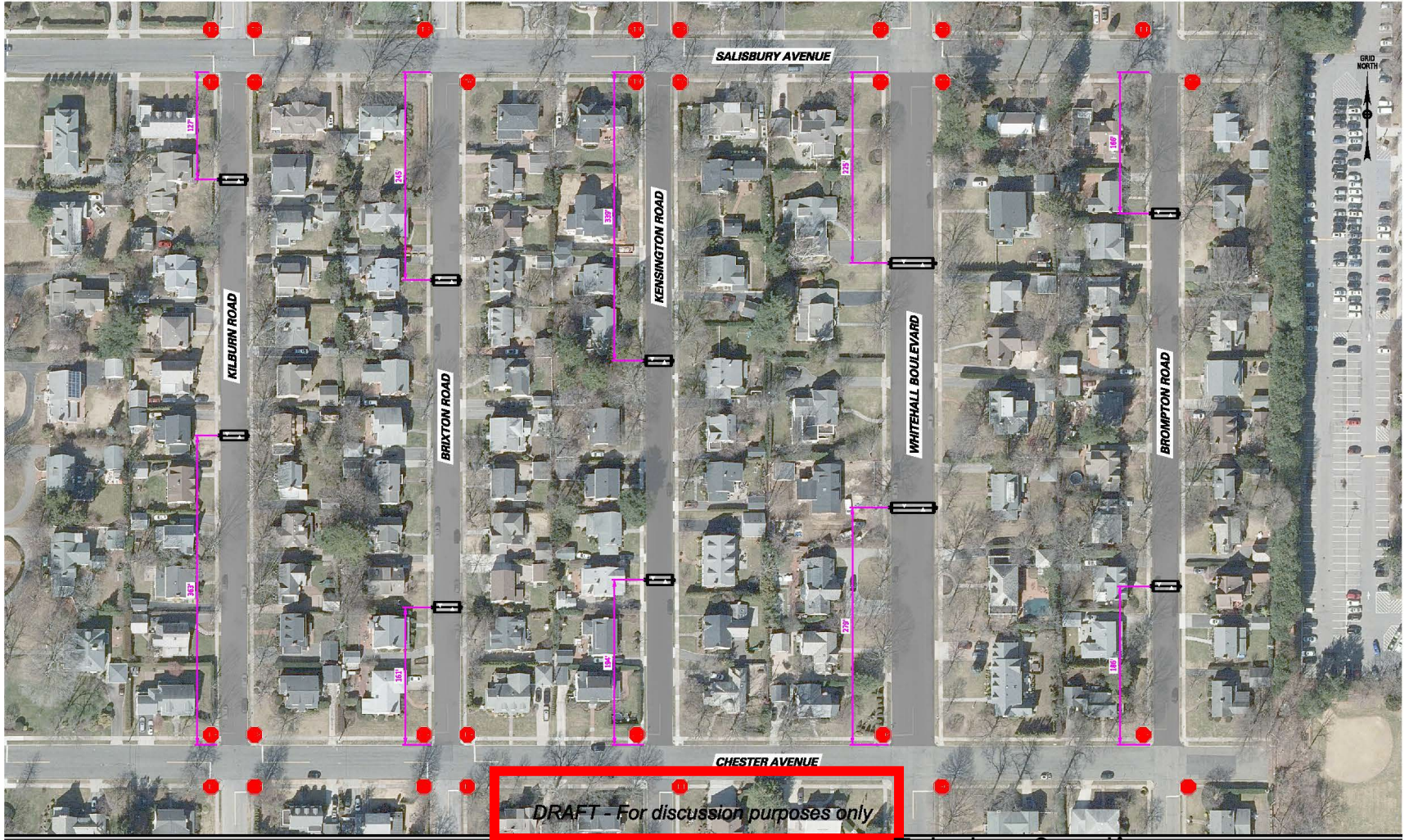


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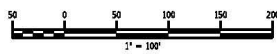
# CONCEPT SKETCHES – SPEED HUMPS (NETWORK)



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Creighton  
Manning

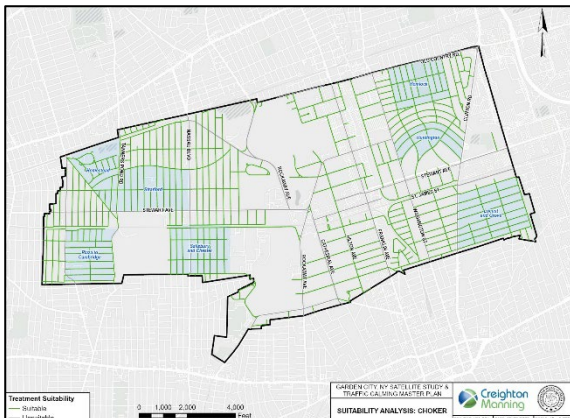
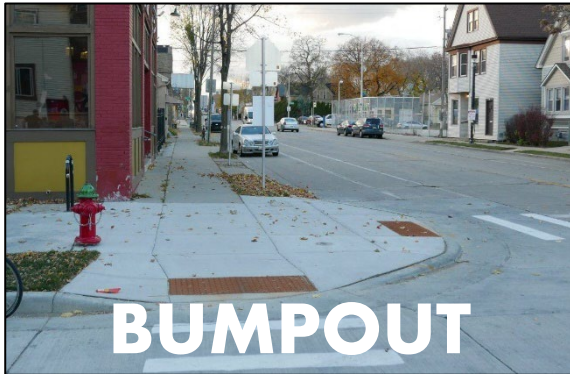


Estates Section

Proposed Concept



# BUMP OUT/CHOKER



## Bump Out/Choker

- Used where AADT 1000-6000\* / posted speed <40mph
- Called “Neckdowns” intersections
- Called “Choker” at mid-block

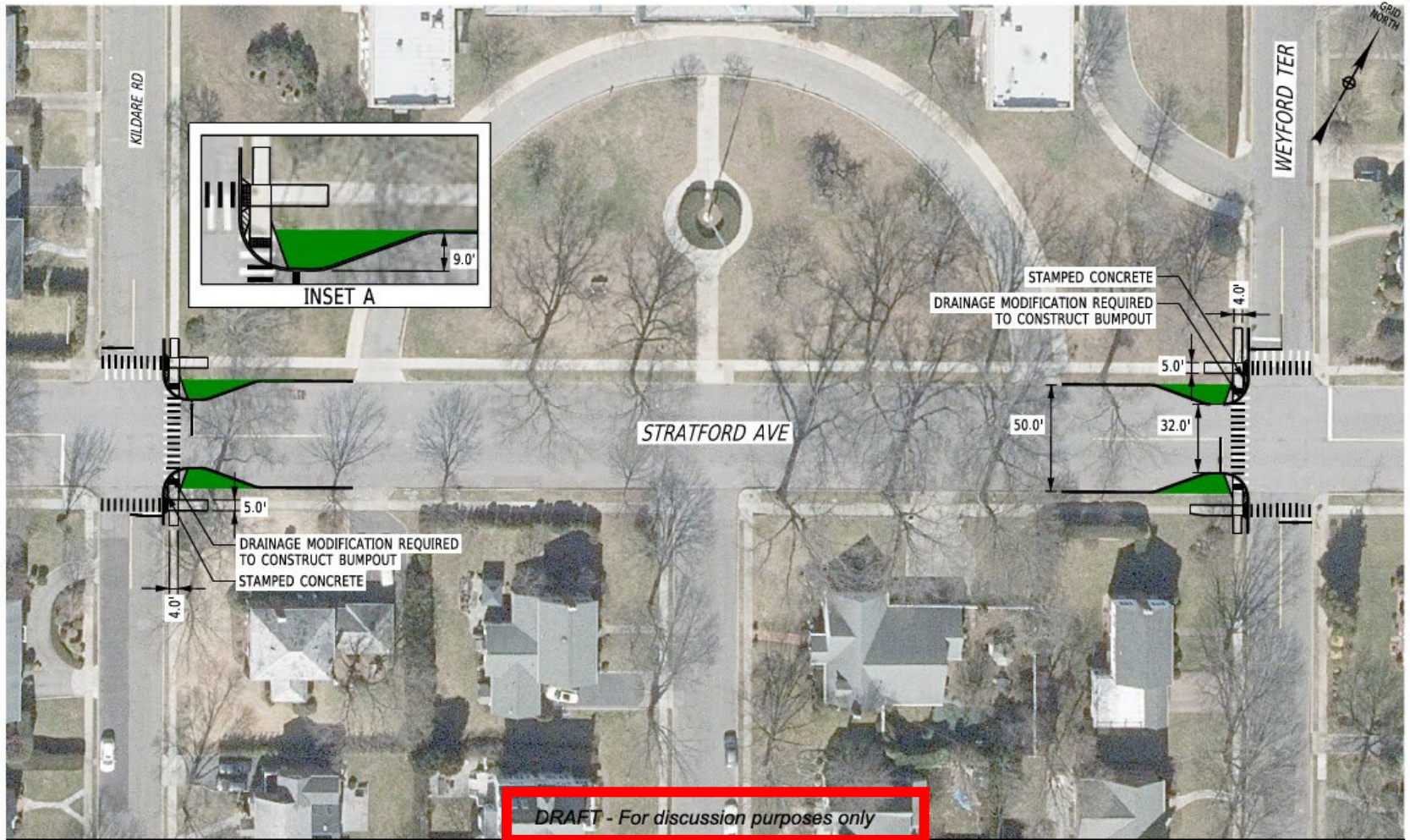
**Benefits:** Reduce speeds by restricting travel way; allows for roadside beautification

**Revised Concepts:** Employ chokers as gateway treatments to neighborhood traffic calming networks

**Suitability Analysis:** Bump outs/chokers are suitable based on factors like street width

\* Volume and speed ranges are guide, not requirements

# CONCEPT SKETCHES – BUMP OUT/CHOKER



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Estates Section

Proposed Concept



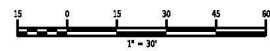




# CONCEPT SKETCHES – BUMP OUT/CHOKER



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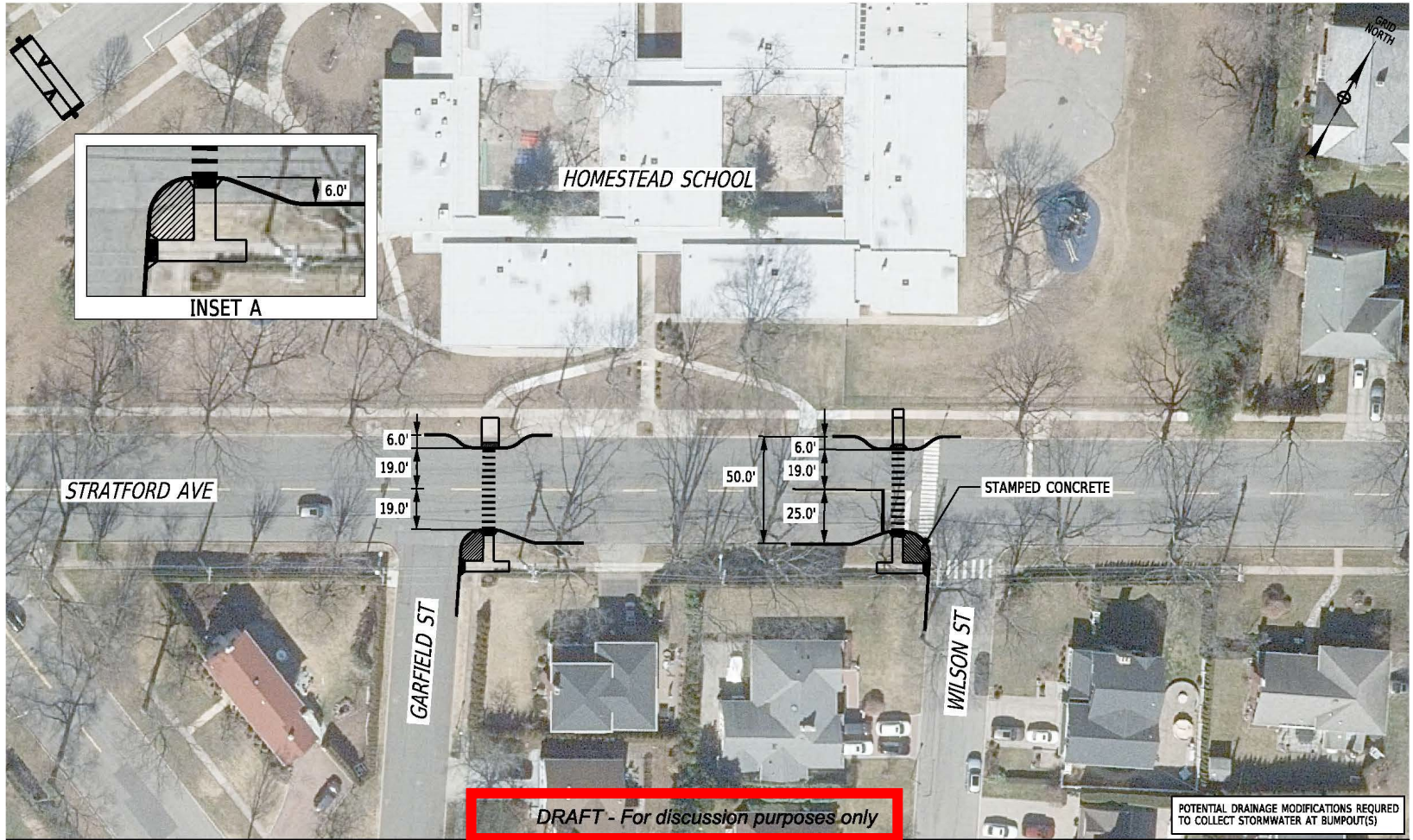
West Section

Proposed Concept

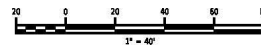
**This location has an alternative concept with raised median islands.**



# CONCEPT SKETCHES – BUMP OUT/CHOKER



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West Section

Proposed Concept

# RAISED CROSSWALK



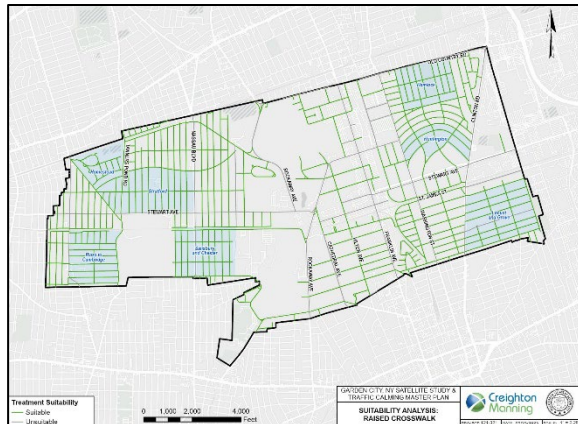
## Raised Crosswalk

- Used with low traffic volumes at approaches / speeds <35mph
- 3 to 6 inches above street level



**Benefits:** Slows motorists at crosswalks; like a speed table

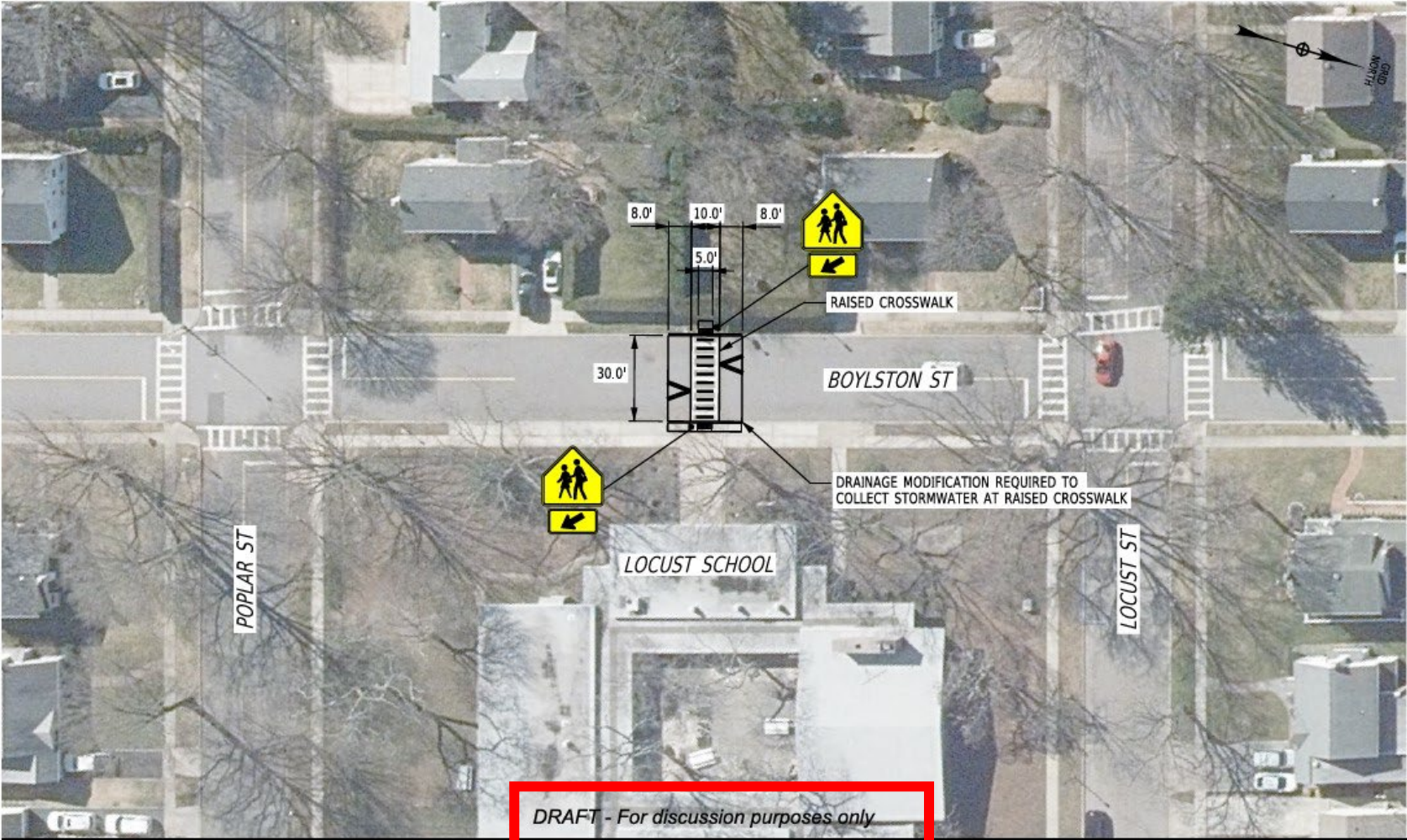
**Suitability Analysis:** Suitable based on factors like vehicle volumes, speeds, and location of existing crosswalks



\* Volume and speed ranges are guide, not requirements



# CONCEPT SKETCHES – RAISED CROSSWALK





# CONCEPT SKETCHES – RAISED CROSSWALK



East Section

Proposed Concept

# TRAFFIC CIRCLE

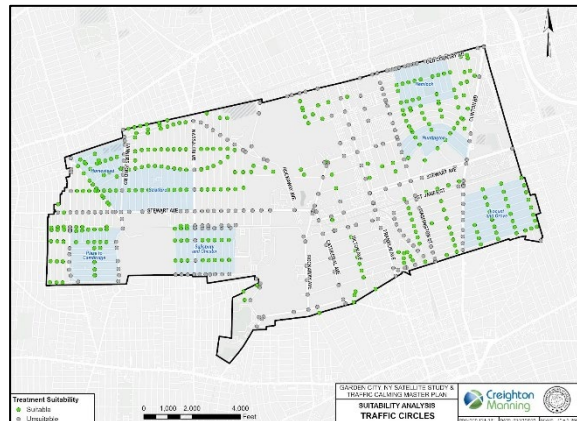


## Traffic Circle

- Use where posted speed  $<30$  , AADT on each leg is  $<3500$
- Installed at a junction of two local roads



**Benefits:** Reduces speed by directing drivers around the circle; reduces the number of angle and turning collisions; reduces conflict points. Can have Stop or Yield signs at approaches

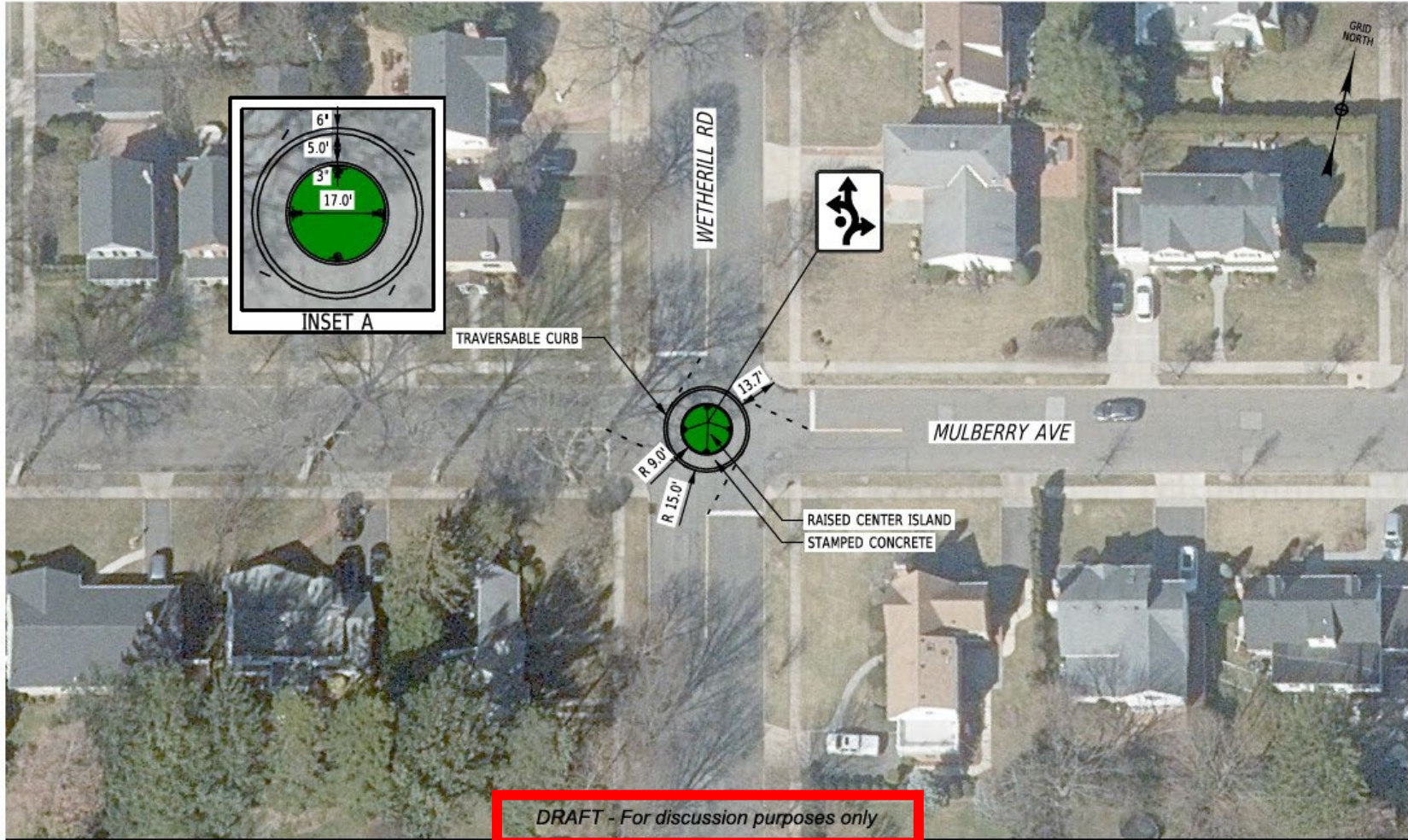


**Suitability Analysis:** Suitable based on factors like intersection geometry, vehicle volumes, and speeds

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# CONCEPT SKETCHES – TRAFFIC CIRCLE



*DRAFT - For discussion purposes only*

# RAISED MEDIAN/MEDIAN ISLAND



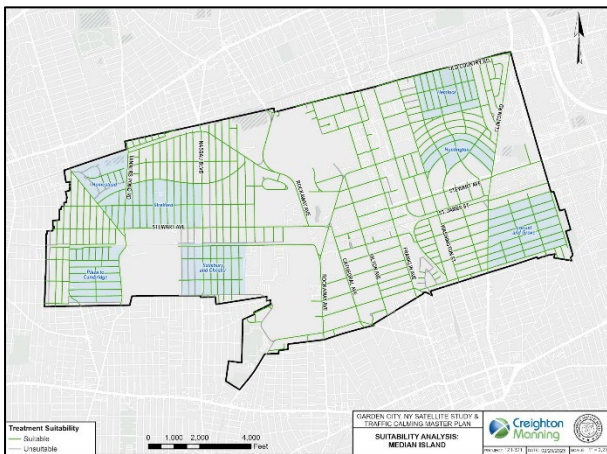
## Raised Median/Median Island

- Used with any traffic volume / posted speed <45mph
- a pedestrian island is required to be 6 feet wide, also called a “median island”



**Benefits:** Can be used mid-block, reduces speeds by narrowing roadway and alerts drivers of pedestrian crossing

**Suitability Analysis:** Suitable based on factors like roadway and intersection geometry



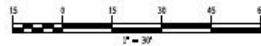
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# CONCEPT SKETCHES – MEDIAN ISLAND



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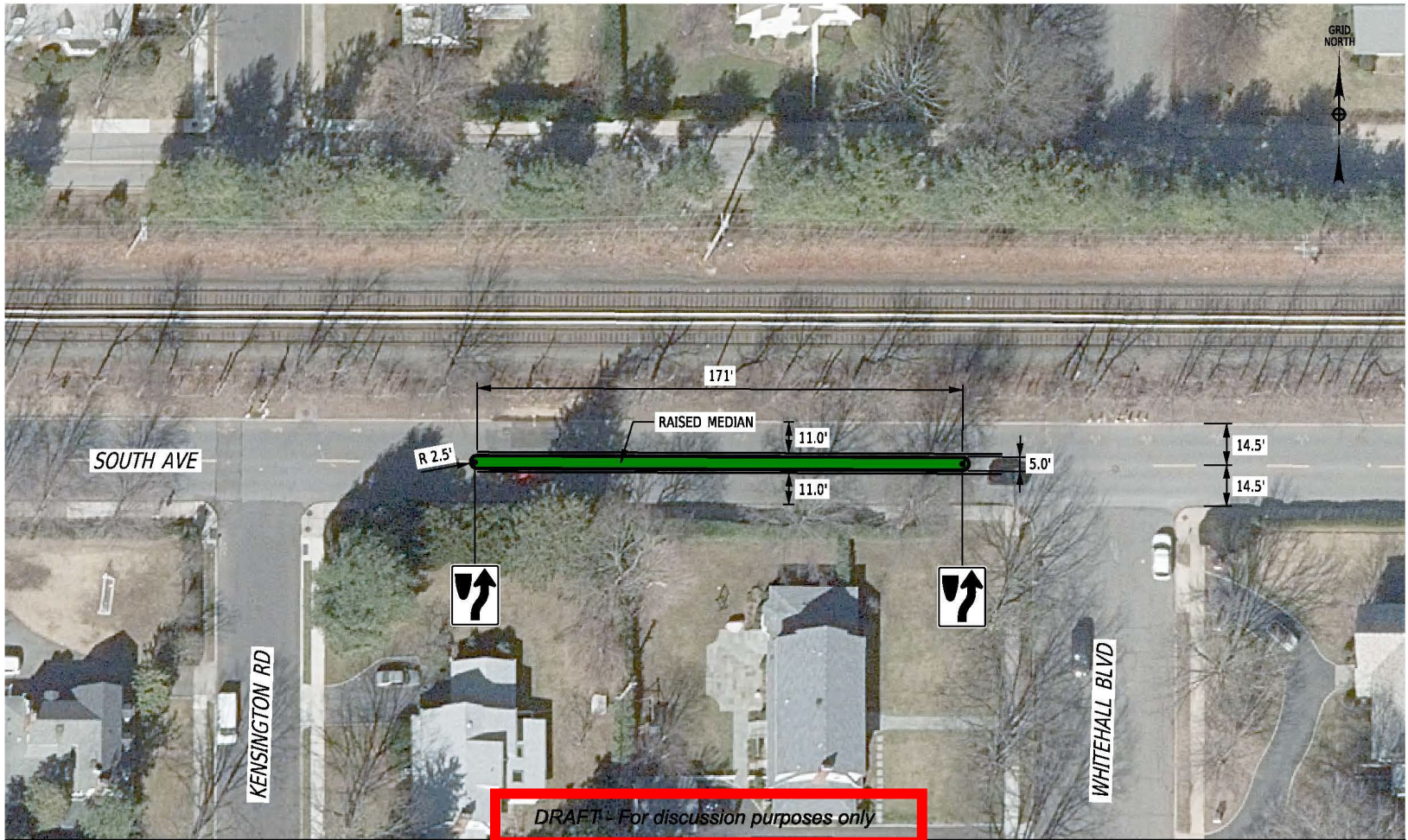


Estates Section

Proposed Concept



# CONCEPT SKETCHES – MEDIAN ISLAND



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VILLAGE OF GARDEN CITY

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Estates Section

Proposed Concept



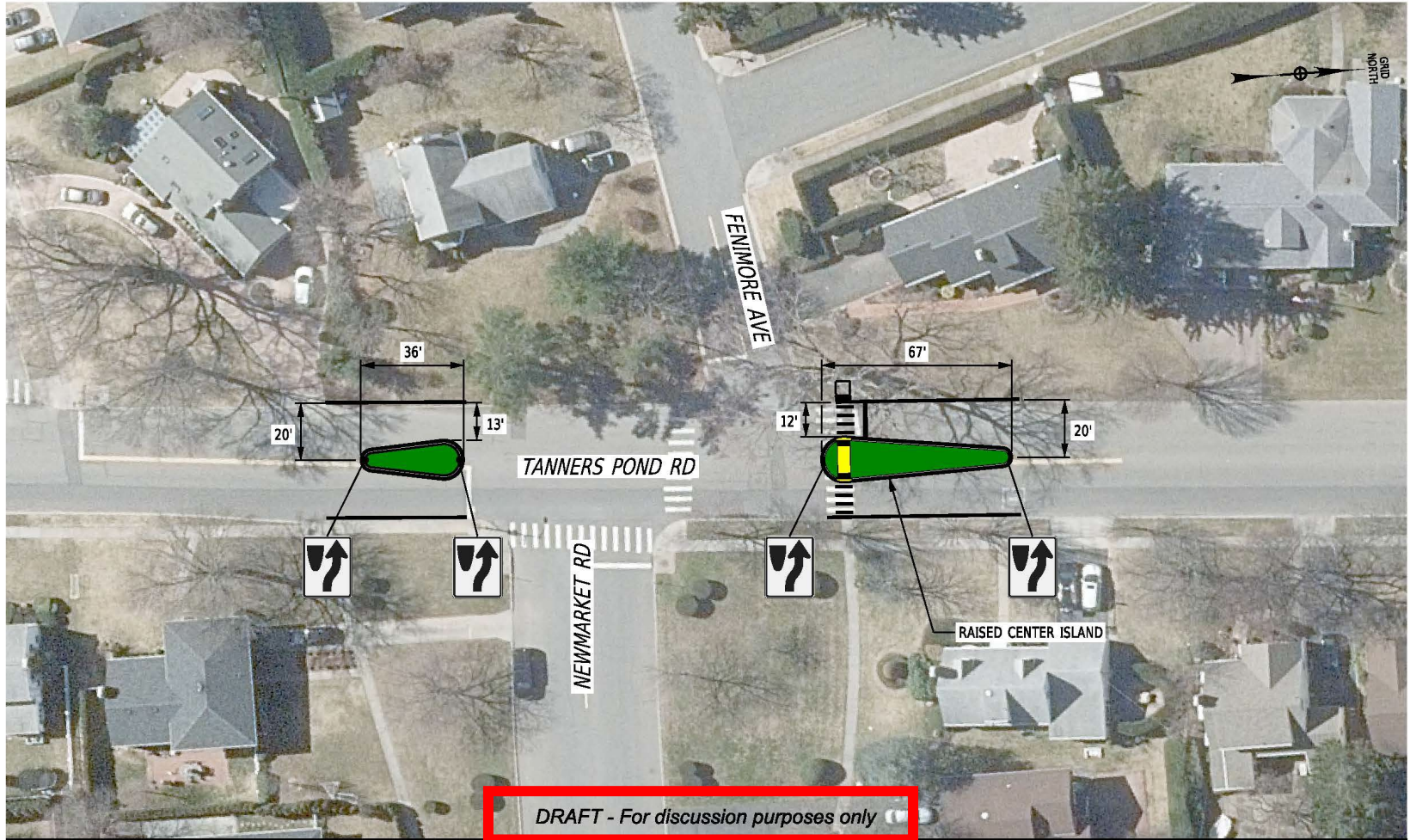
# CONCEPT SKETCHES – MEDIAN ISLAND







# CONCEPT SKETCHES – MEDIAN ISLAND



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West Section

Proposed Concept

***This location has an alternative concept with bump outs.***

# TRAFFIC CALMING REQUEST PROTOCOL

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## IDEAS FOR CONSIDERATION

- Reviewed examples (City of Albany, Village of Bronxville, Town of Rotterdam)
- Technical criteria include:
  - Speed, volume, crash history
  - Geometry, sight distance, grade
  - Input of emergency service providers
  - Other engineering factors
- The following are possible steps which could be part of a protocol process; details to be set by the Traffic Commission

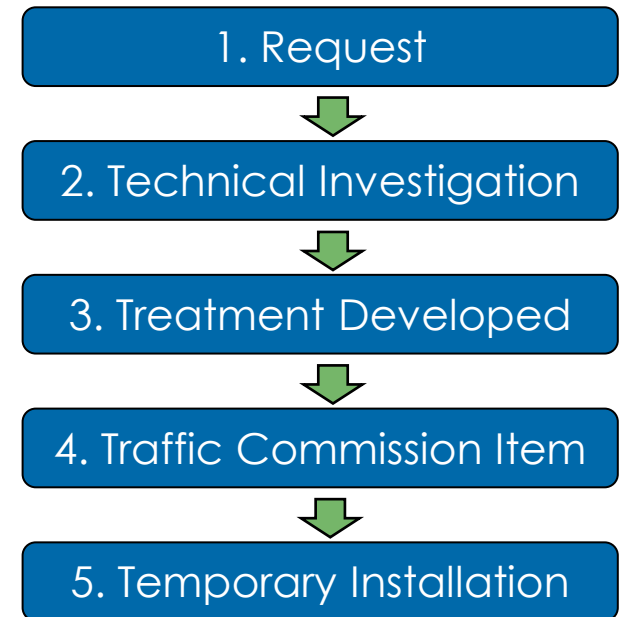


# TRAFFIC CALMING REQUEST PROTOCOL

## IDEAS FOR CONSIDERATION

Requesting a **Temporary** Neighborhood Traffic Calming Treatment (speed hump):

- **Request** to TC for traffic calming (specific treatment or general)
- If suitable, the location will be **investigated** to determine feasibility
- Petition in **support** of the treatment (75% approval of block residents, including adjacent property owners)
- Treatment **option developed**
- Traffic Commission **reviews/approves**
- **Temporary treatment installed**



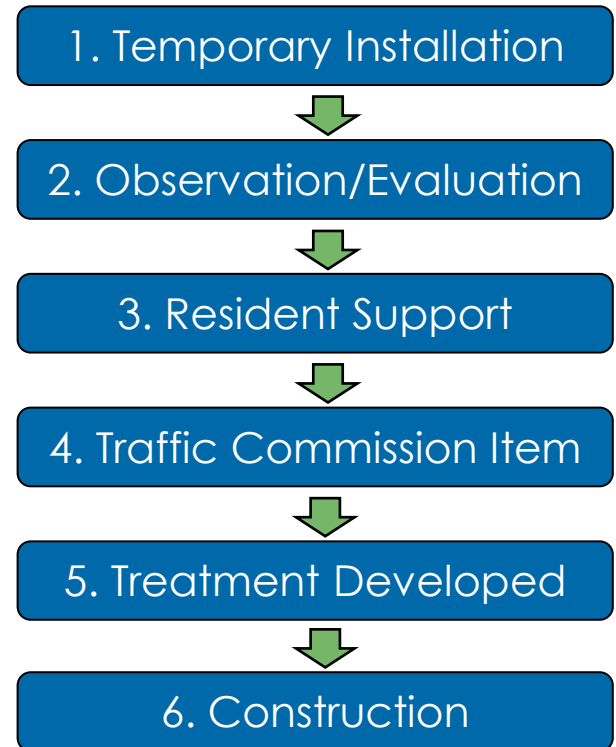
# TRAFFIC CALMING REQUEST PROTOCOL

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## IDEAS FOR CONSIDERATION

**Converting** a Temporary Installation into a **Permanent** Traffic Calming Treatment:

- Temporary treatment is **observed** and **evaluated** (clear benefits identified)
- Petition in **support** of the treatment (75% approval of block residents, including adjacent property owners)
- Traffic Commission **reviews/approves**
- **Plans developed** for permanent treatment
- **Permanent treatment constructed**



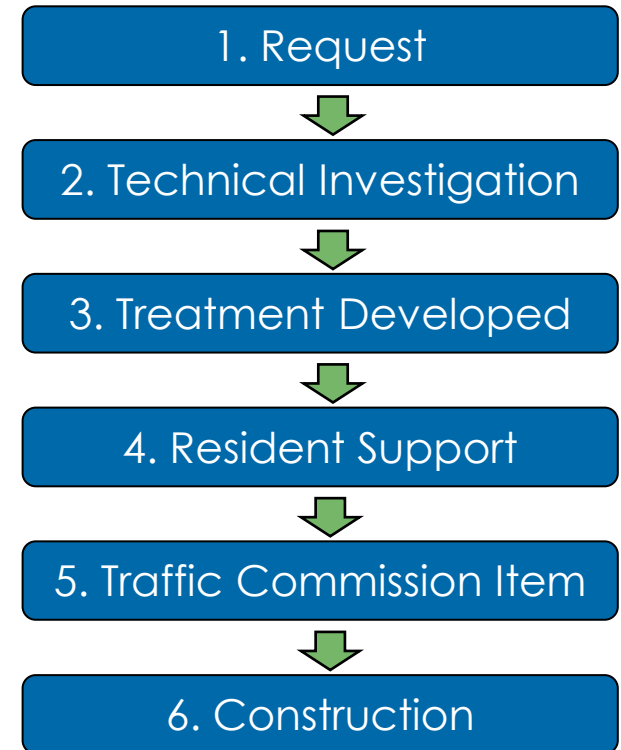


# TRAFFIC CALMING REQUEST PROTOCOL

## IDEAS FOR CONSIDERATION

Requesting a Permanent Neighborhood Traffic Calming Treatment:

- **Request** to TC for traffic calming (specific treatment or general)
- If suitable, the location will be **investigated** to determine feasibility
- **Plans developed** for treatment
- Petition in **support** of the treatment (75% approval of block residents, including adjacent property owners)
- Traffic Commission **reviews/approves**
- **Permanent treatment constructed**



# TRAFFIC CALMING REQUEST PROTOCOL

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## IDEAS FOR CONSIDERATION

Prioritization could be used for reviewing requests or acting on approved locations:

- Proximity to schools, parks, or other institutions
- High pedestrian traffic
- History of crashes, especially pedestrian
- High 85 percentile speeds recorded
- Level of resident support
- Opportunity to integrate with planned capital work



# TRAFFIC CALMING REMOVAL PROTOCOL

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## IDEAS FOR CONSIDERATION

Treatment removal after installation could be approved by the following criteria:

- 90% resident support for removal
- Removal will not make Neighborhood Traffic Calming Plan less effective
- Documented impediment to public safety
- 1 year since treatment installation

# OTHER ITEMS

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The Traffic Commission is also:

- Village-wide speed limit reduction
- Temporary speed humps on 4<sup>th</sup> Street
- Bump out / raised crosswalk on 7<sup>th</sup> Street
- Concepts Stewart Avenue
- Other items



# THANK YOU

## Contact Info

Creighton Manning Engineering, LLP

Michael Amabile, AICP – Project Manager



[mamabile@cmellp.com](mailto:mamabile@cmellp.com)



[www.cmellp.com](http://www.cmellp.com)



(914) 800-9207 (office)

