

MD 410 (Ethan Allen Avenue) at Elm Avenue Safety Improvements

December 9, 2021

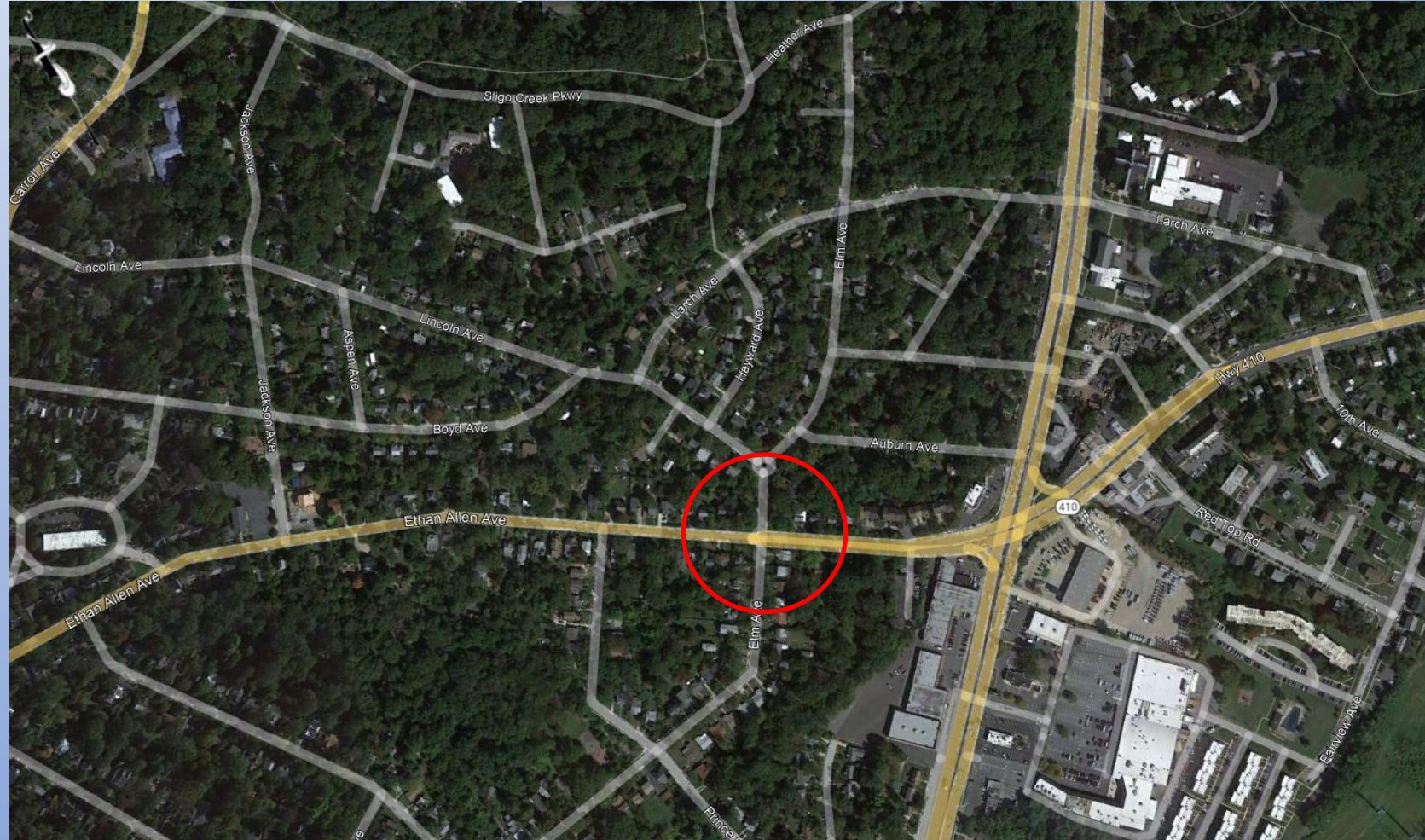
Joseph Moges

Consultant Project Manager
MDOT State Highway Administration
District 3 Traffic

MD 410 (Ethan Allen Avenue) at Elm Avenue - Safety Improvements

Project Description

- This project is located in the City of Takoma Park
- MD 410 at Elm Ave (MU390)
- All Way Stop Control (AWSC) requested
- Alternative intersection design proposed

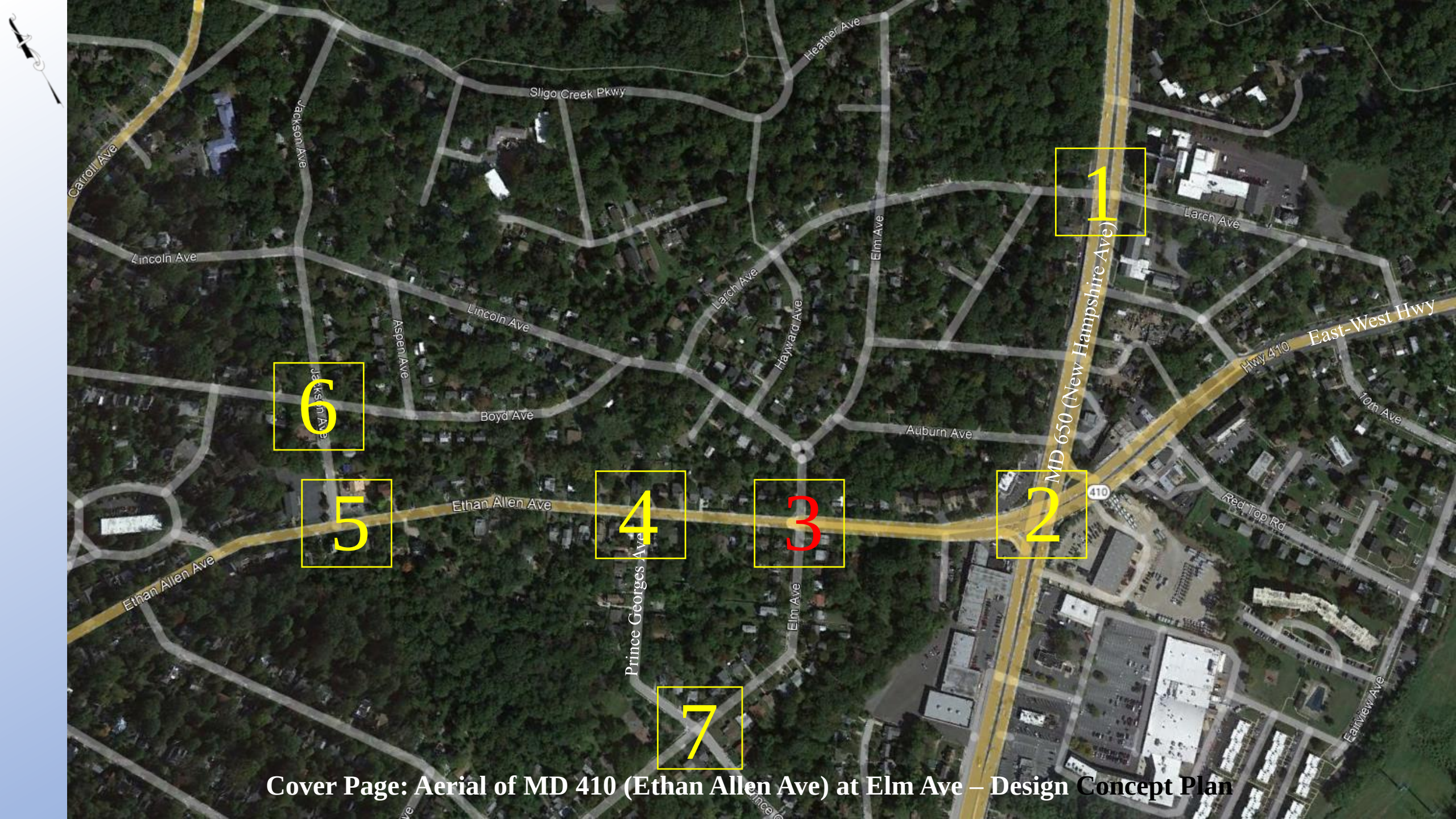


MD 410 (Ethan Allen Avenue) at Elm Avenue - Safety Improvements

Safety Improvements Include:

- Restrict left turns from MD 410 approaches onto Elm Ave
- Restrict all access to MD 410 from Elm Ave
- Only permit right turns from MD 410 approaches onto Elm Ave
- Install new High Visibility Continental Crosswalk markings on all three (3) existing crosswalks on Elm Ave.
- Install double yellow centerline markings along MD 410 through Elm Ave
- Install new curb system atop proposed double yellow centerline markings along MD 410.
- Install new signs to reinforce left turn restriction along MD 410
- Install new curb system or flex posts to reinforce access restriction from Elm Ave approaches onto MD 410.
- Redirect affected motorists from Elm Ave to MD 410





Cover Page: Aerial of MD 410 (Ethan Allen Ave) at Elm Ave – Design Concept Plan



Intersection 3: Aerial of MD 410 (Ethan Allen Ave) at Elm Ave - Restrictions

MD 410 (Ethan Allen Avenue) at Elm Avenue - Safety Improvements

Elm Avenue Turn Restriction Design

Pros:

- No Impact to Major Utilities
- No ROW Impacts
- Improved safety
- Improved operations

Cons

- Direct access from Elm Avenue onto MD 410 restricted
- Left turn access from MD 410 onto Elm Avenue restricted





Cover Page: Aerial of MD 410 (Ethan Allen Ave) at Elm Ave – Design Concept Plan



MD 410 (Ethan Allen Ave)

MD 410 (Ethan Allen Ave)

+10 Left +45 Right

Prince Georges Ave

Intersection 4: Aerial of MD 410 (Ethan Allen Ave) at Prince Georges Ave



Cover Page: Aerial of MD 410 (Ethan Allen Ave) at Elm Ave – Design Concept Plan



Jackson Ave

+2 Right +23 Left

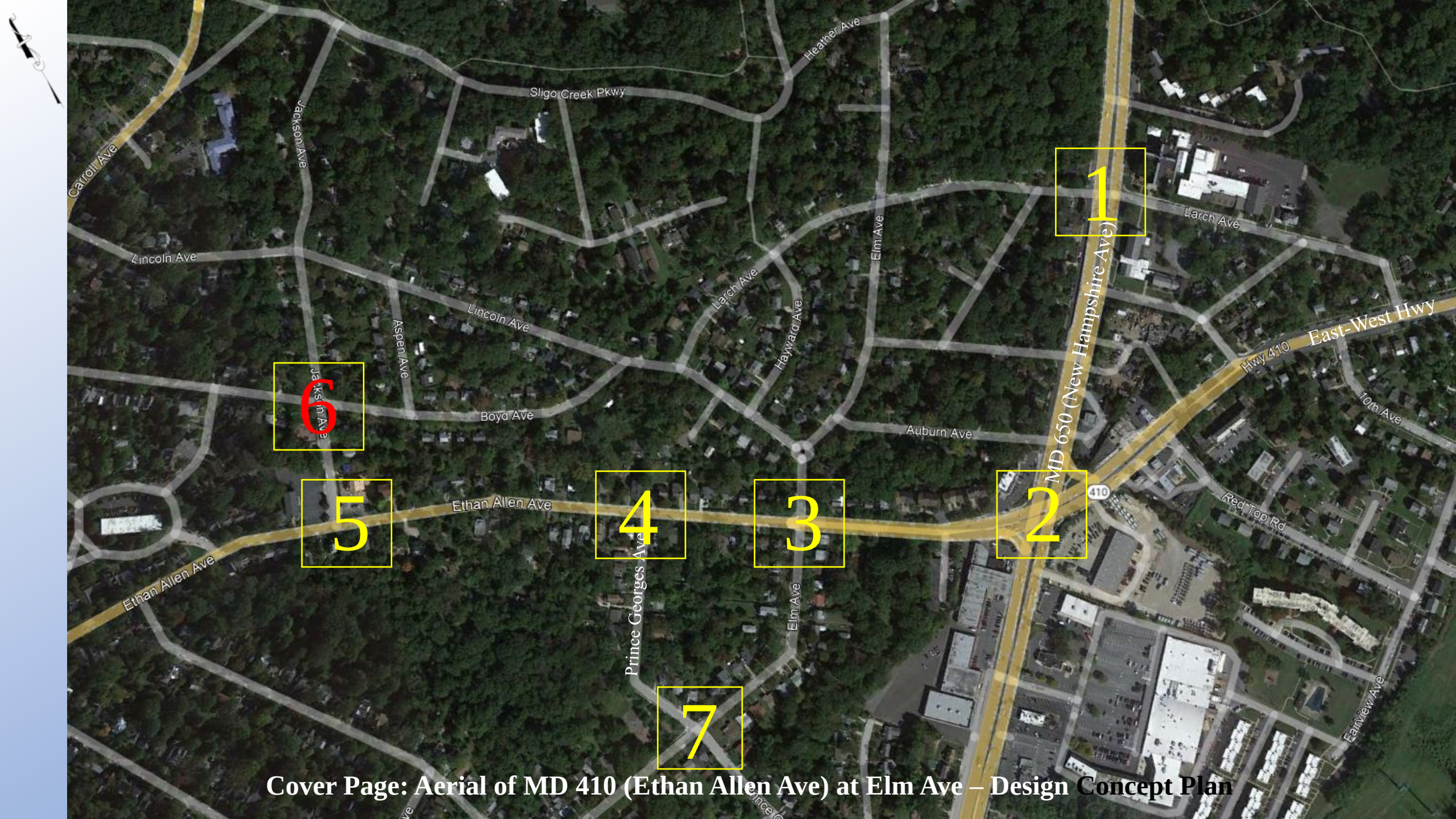
MD 410 (Ethan Allen Ave)

+5 Left

+8 Right

MD 410 (Ethan Allen Ave)

Intersection 5: Aerial of MD 410 (Ethan Allen Ave) at Prince Georges Ave



Cover Page: Aerial of MD 410 (Ethan Allen Ave) at Elm Ave – Design Concept Plan

Boyd Ave

Jackson Ave

Aspen Ave



+24 Left

+12 Right

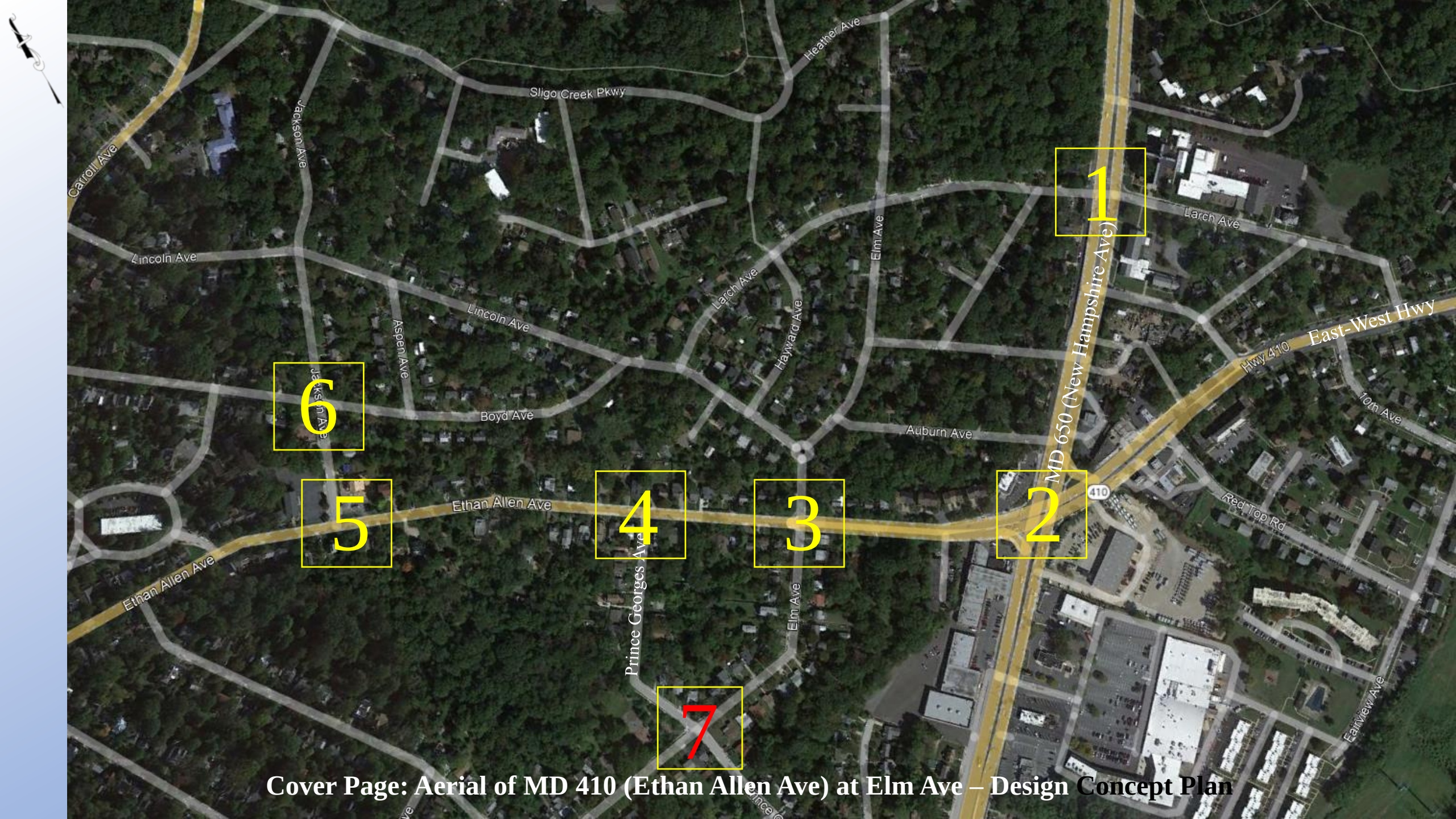
Boyd Ave



Jackson Ave



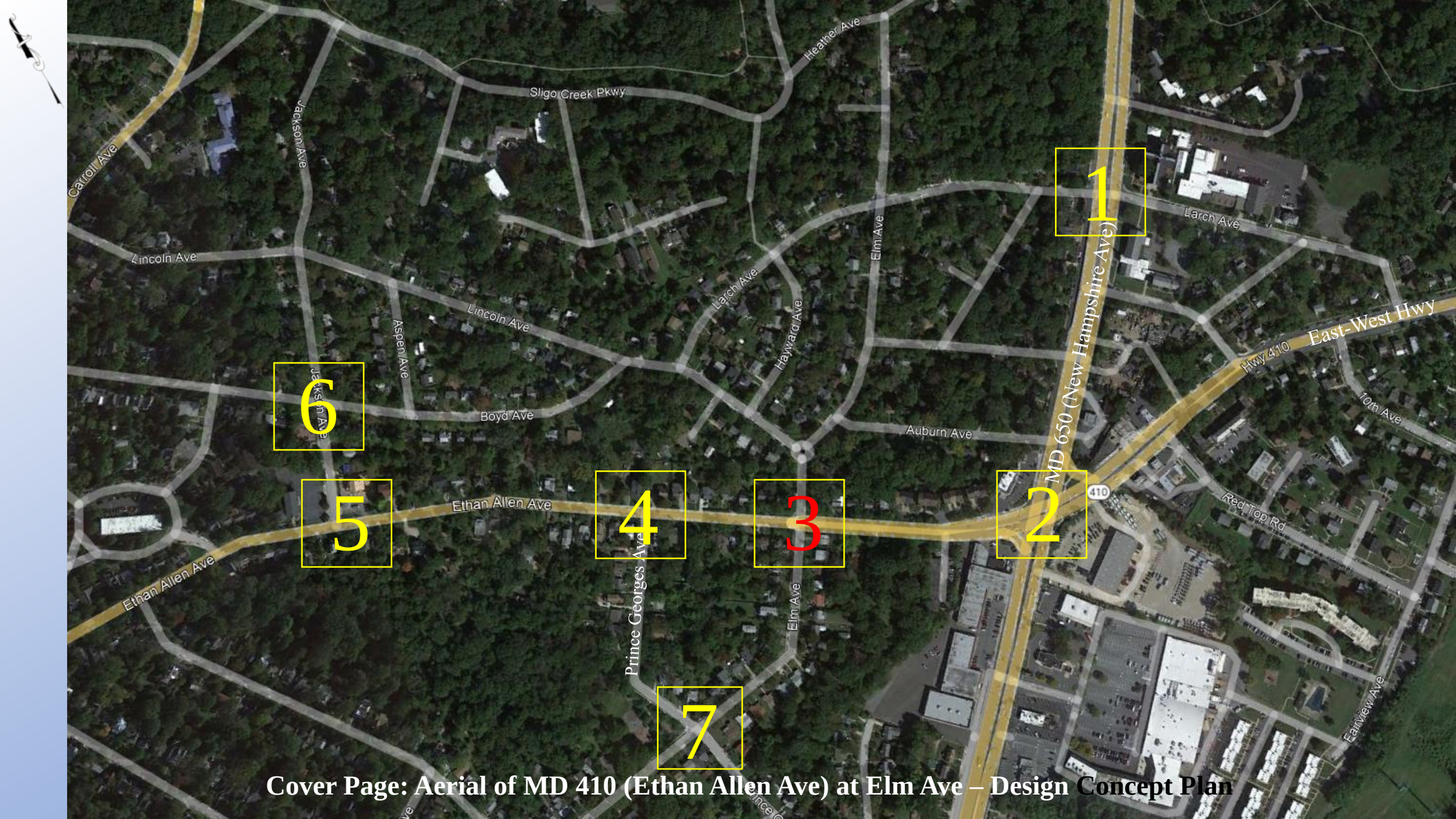
Intersection 6: Aerial of Jackson Ave at Boyd Ave



Cover Page: Aerial of MD 410 (Ethan Allen Ave) at Elm Ave – Design Concept Plan



Intersection 7: Aerial of MD 410 (Ethan Allen Ave) at Prince Georges Ave



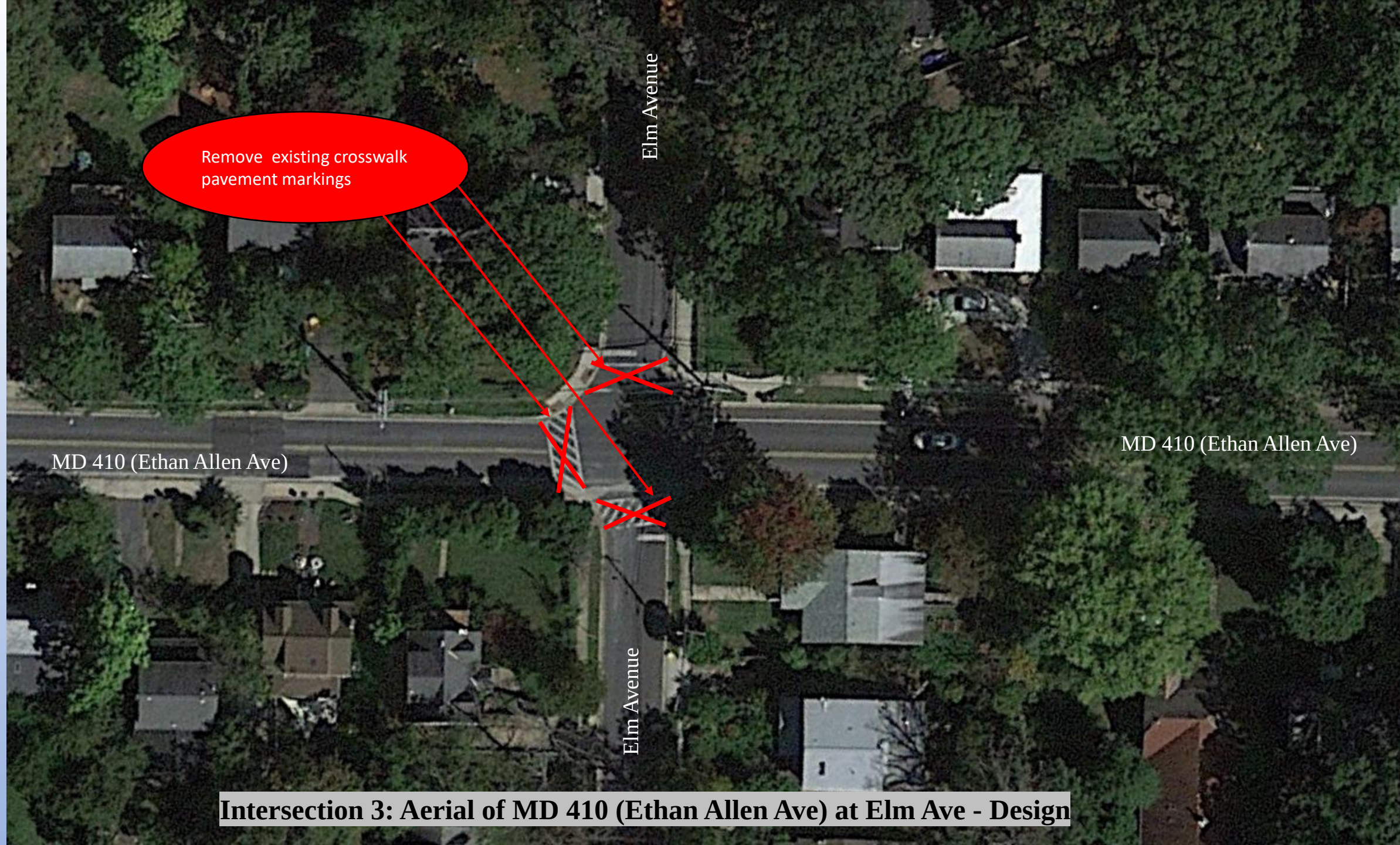
Cover Page: Aerial of MD 410 (Ethan Allen Ave) at Elm Ave – Design Concept Plan

MD 410 (Ethan Allen Avenue) at Elm Avenue - Safety Improvements

Safety Improvements Include:

- Restrict left turns from MD 410 approaches onto Elm Ave
- Restrict all access to MD 410 from Elm Ave
- Only permit right turns from MD 410 approaches onto Elm Ave
- Install new High Visibility Continental Crosswalk markings on all three (3) existing crosswalks on Elm Ave.
- Install double yellow centerline markings along MD 410 through Elm Ave
- Install new curb system atop proposed double yellow centerline markings along MD 410.
- Install new signs to reinforce left turn restriction along MD 410
- Install new curb system or flex posts to reinforce access restriction from Elm Ave approaches onto MD 410.





Remove existing crosswalk pavement markings

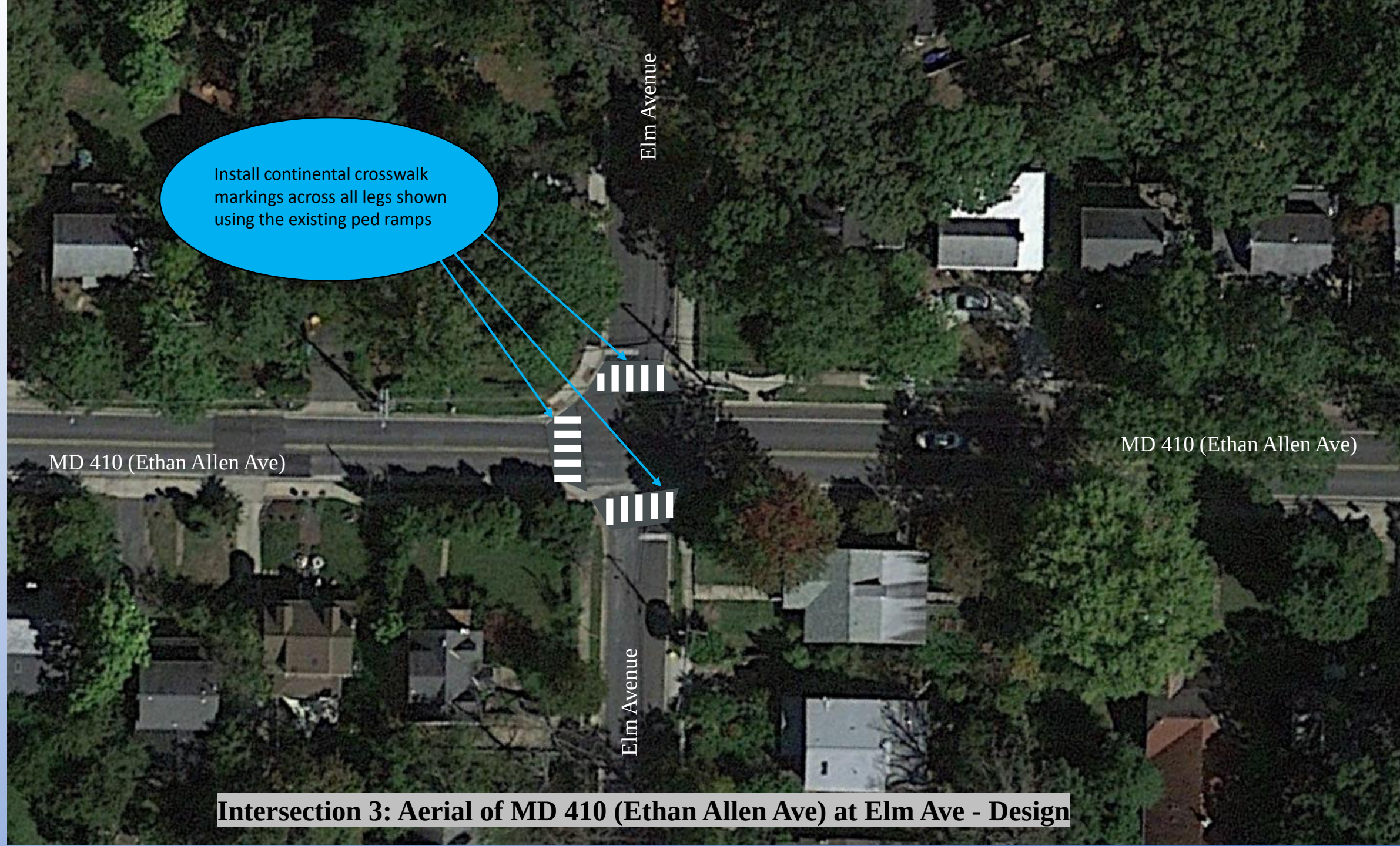
Elm Avenue

MD 410 (Ethan Allen Ave)

MD 410 (Ethan Allen Ave)

Elm Avenue

Intersection 3: Aerial of MD 410 (Ethan Allen Ave) at Elm Ave - Design



Install continental crosswalk markings across all legs shown using the existing ped ramps

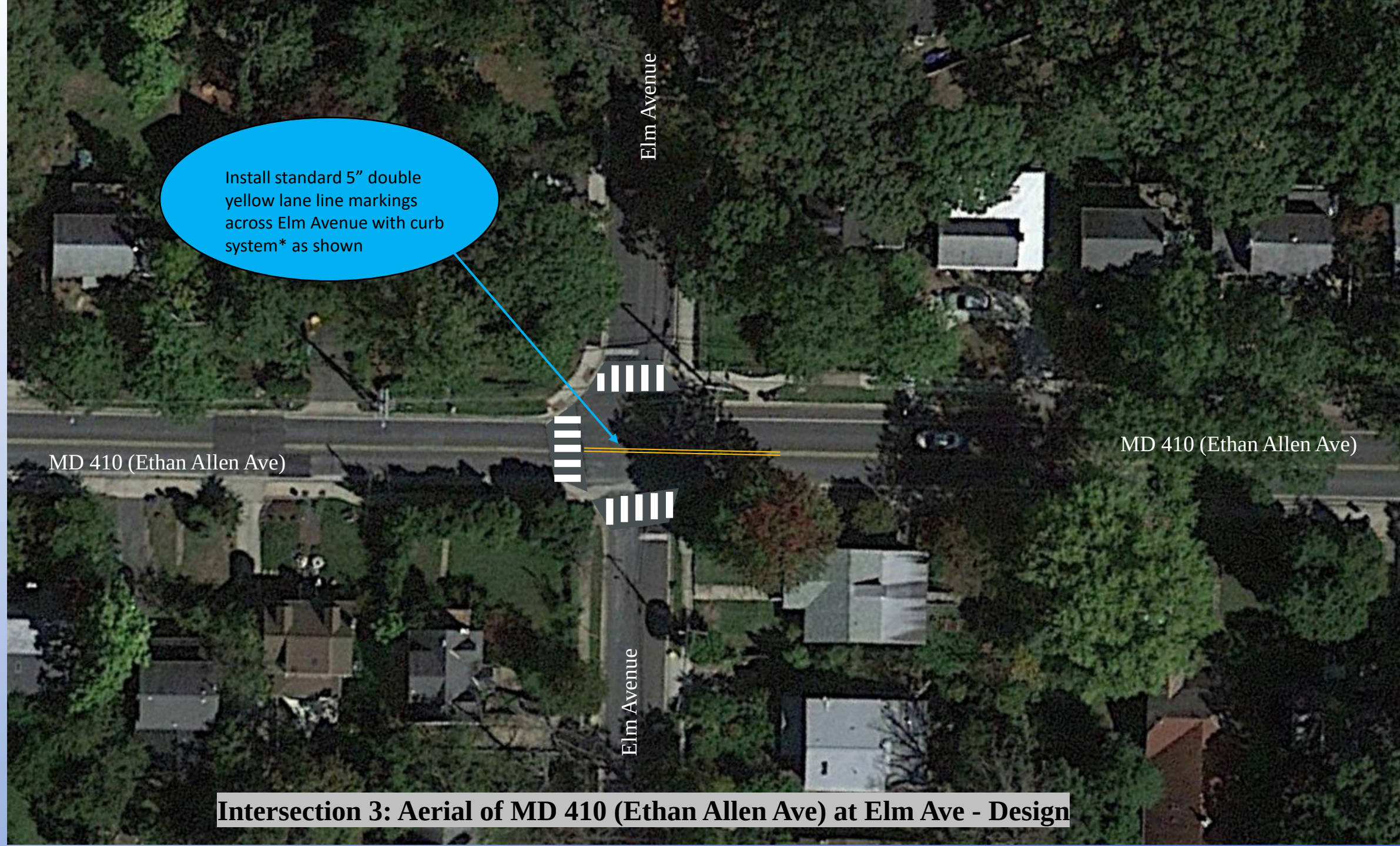
Elm Avenue

MD 410 (Ethan Allen Ave)

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Elm Avenue

Intersection 3: Aerial of MD 410 (Ethan Allen Ave) at Elm Ave - Design



Install standard 5" double yellow lane line markings across Elm Avenue with curb system* as shown

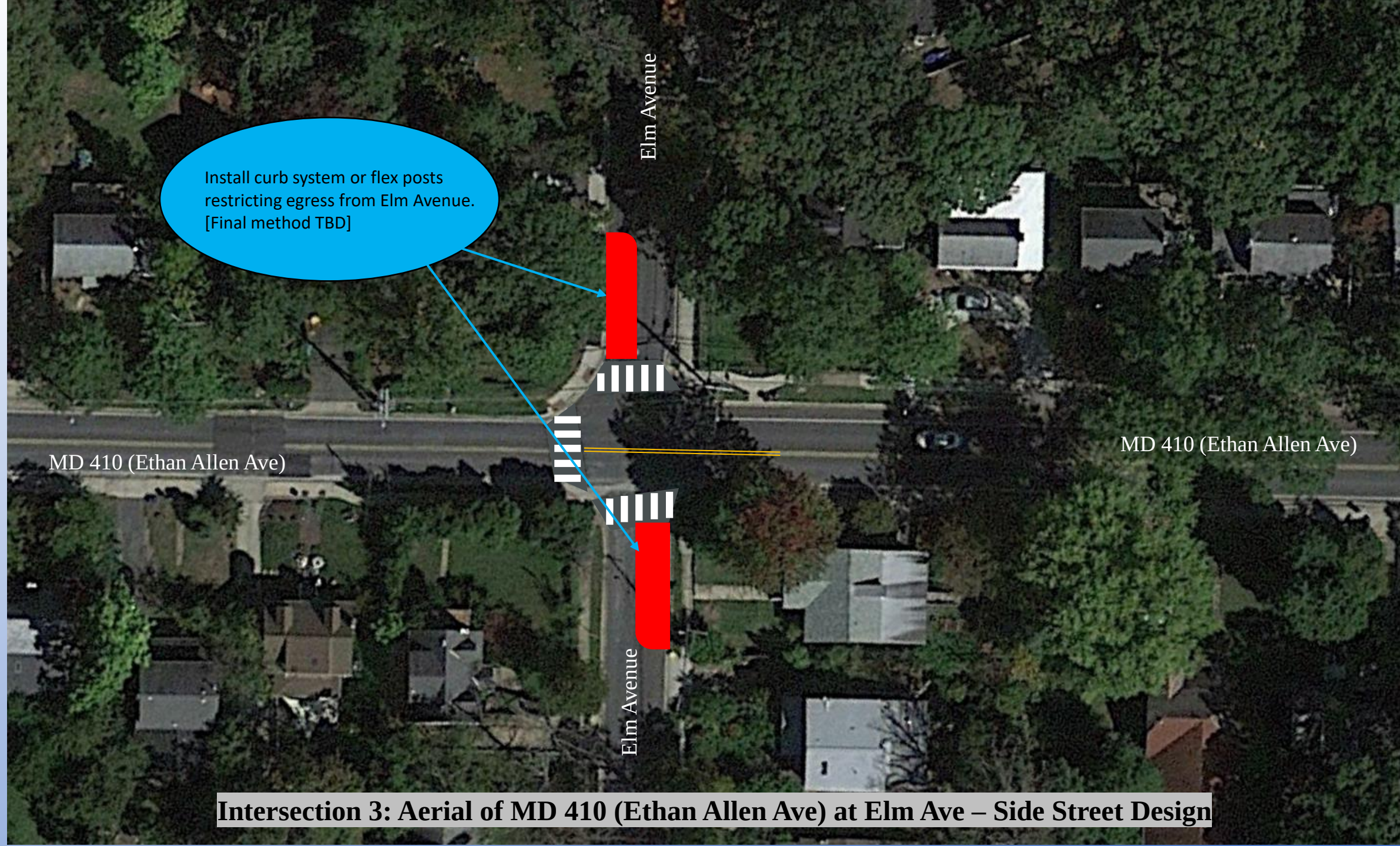
Elm Avenue

MD 410 (Ethan Allen Ave)

MD 410 (Ethan Allen Ave)

Elm Avenue

Intersection 3: Aerial of MD 410 (Ethan Allen Ave) at Elm Ave - Design



Install curb system or flex posts
restricting egress from Elm Avenue.
[Final method TBD]

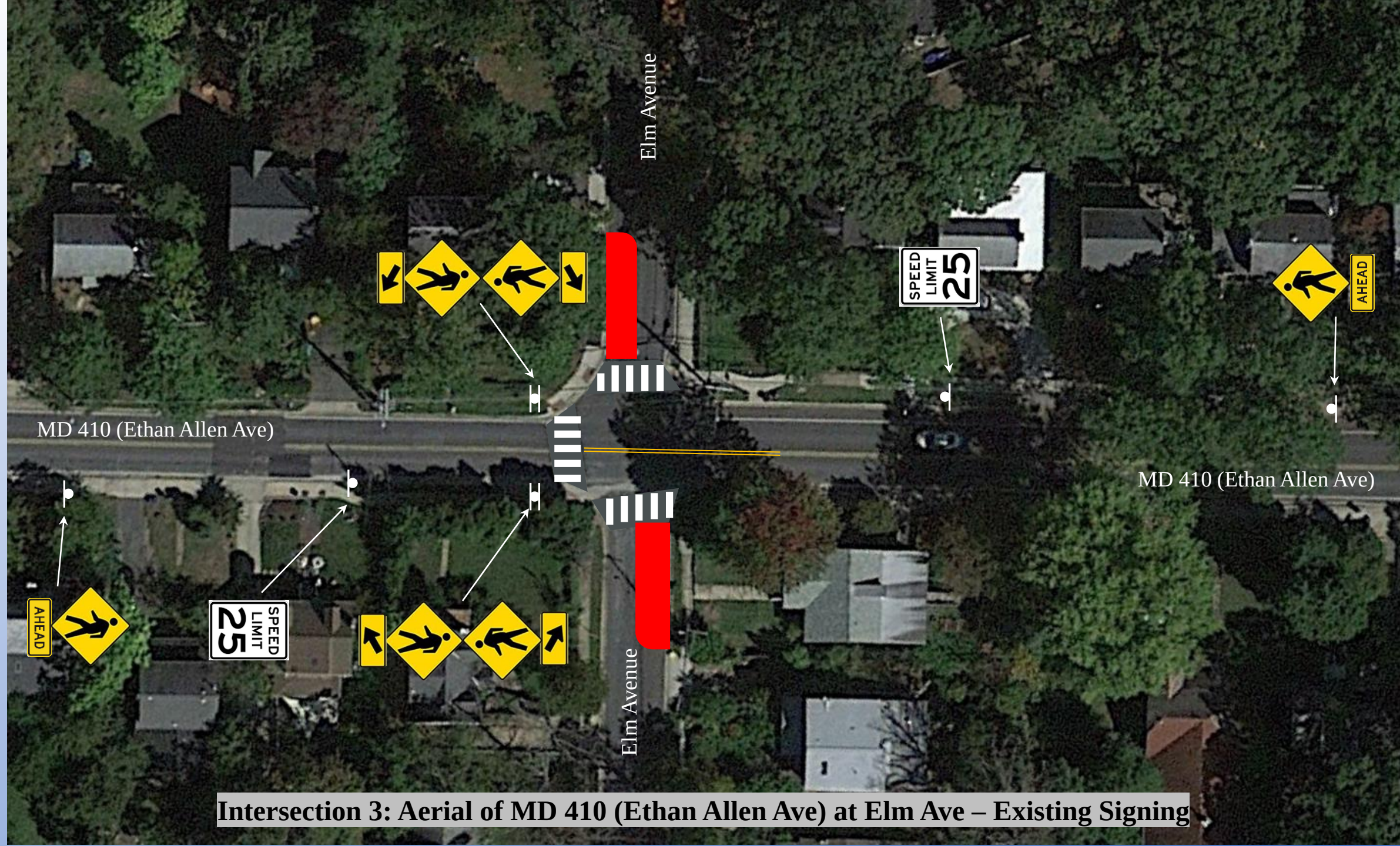
Elm Avenue

MD 410 (Ethan Allen Ave)

MD 410 (Ethan Allen Ave)

Elm Avenue

Intersection 3: Aerial of MD 410 (Ethan Allen Ave) at Elm Ave – Side Street Design



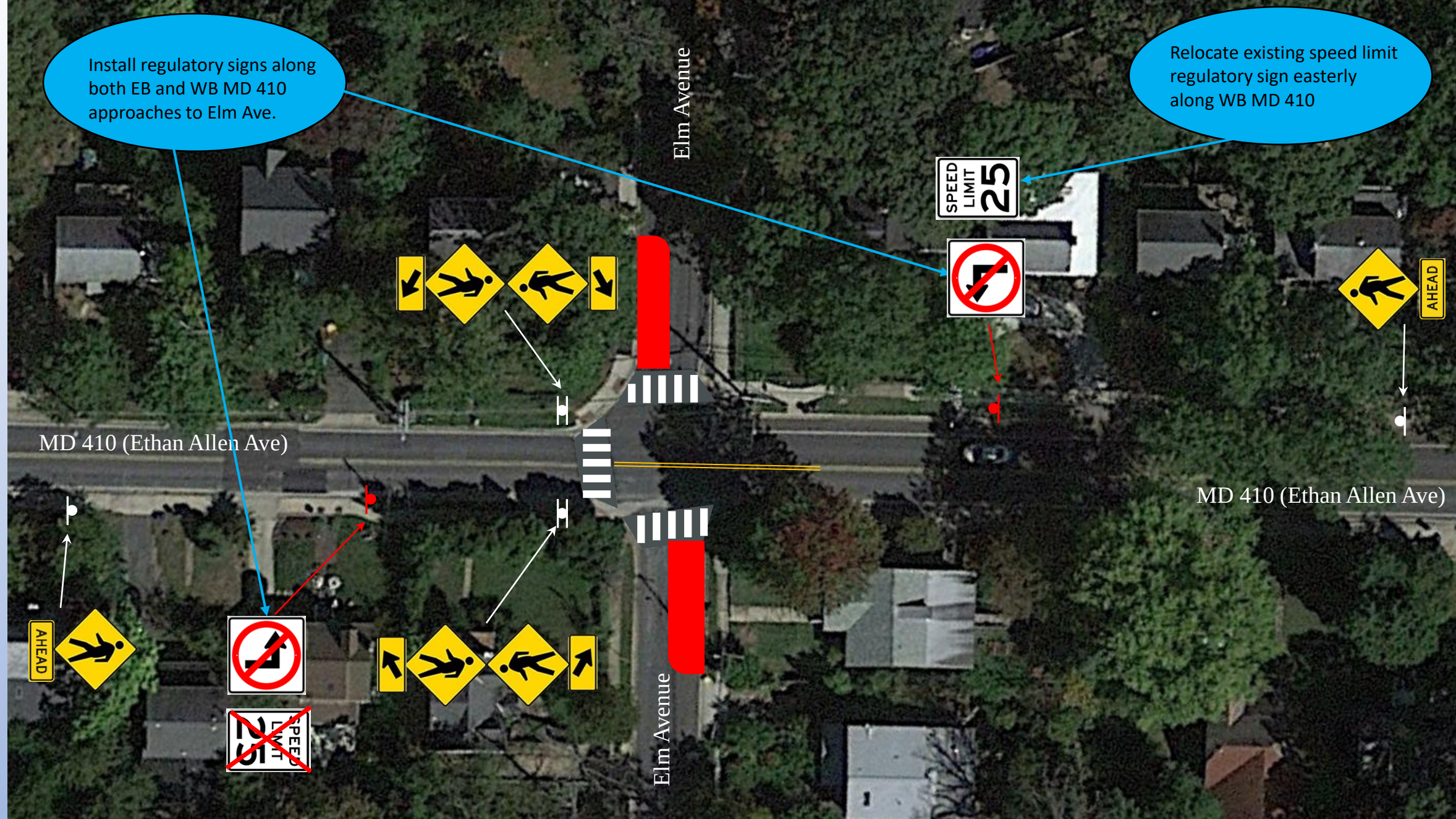
Elm Avenue

MD 410 (Ethan Allen Ave)

MD 410 (Ethan Allen Ave)

Elm Avenue

Intersection 3: Aerial of MD 410 (Ethan Allen Ave) at Elm Ave – Existing Signing



Intersection 3: Aerial of MD 410 (Ethan Allen Ave) at Elm Ave – Proposed Signing



Intersection 3: MD 410 (Ethan Allen Ave) at Elm Ave – Existing Pavement Markings



Intersection 3: MD 410 (Ethan Allen Ave) at Elm Ave – Proposed Pavement Markings



Intersection 3: MD 410 (Ethan Allen Ave) at Elm Ave – Proposed Channelization

MD 410 (Ethan Allen Avenue) at Elm Avenue - Safety Improvements

Questions?

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