



TRAFFIC CALMING

ENGINEERING AND PUBLIC WORKS



KNOX COUNTY
TENNESSEE

ENGINEERING AND PUBLIC WORKS

TRAFFIC ENGINEERING

CONTACT INFORMATION

TRAFFIC ENGINEERING TEAM

865-215-5800

traffic.calming@knoxcounty.org



People tend to feel passionately either towards or against traffic calming.

Please respect everyone's right to voice their opinion.





WHAT IS TRAFFIC CALMING?

The deliberate slowing of traffic in residential areas by building speed humps or other traffic calming measures.

OBJECTIVES

- Slower speeds for motor vehicles
- Reduce collision frequency
- Increase safety
- Reduce cut-through traffic

GOALS

- Increase quality of life
- Create safe streets
- Promote pedestrian and cycle use
- Incorporate the preferences of the people in the area

TRAFFIC CALMING MEASURES

POTENTIAL SOLUTIONS

Speed
Humps



Officer
Enforcement



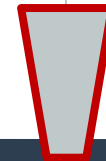
Speed
Tables



Raised
Intersections



Roadway
Narrowing



Education –
Newsletter or
Enhanced
Signage

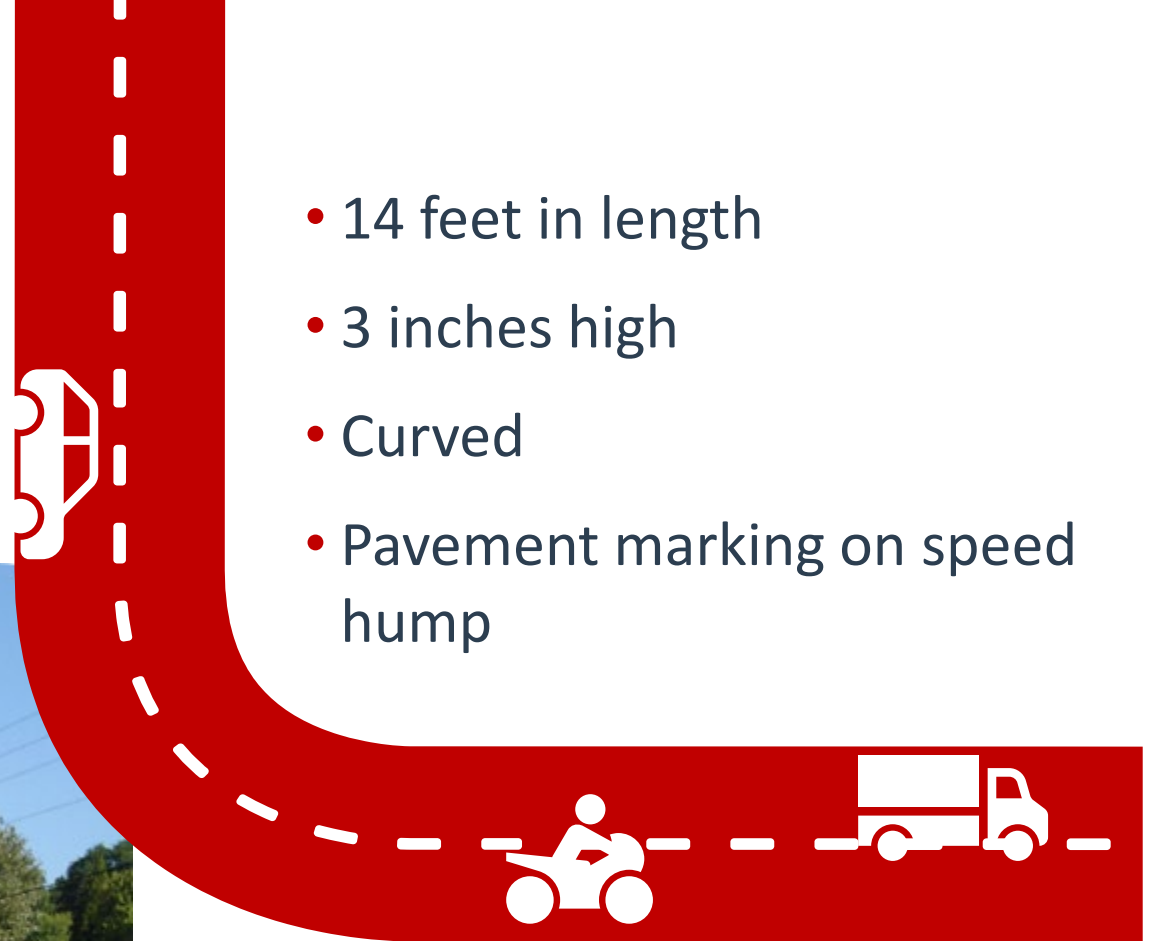




Based on research and experience, Knox County found speed humps to be the most efficient and cost-effective traffic calming measure while also being minimally intrusive.

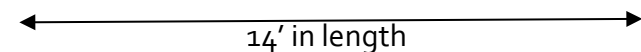
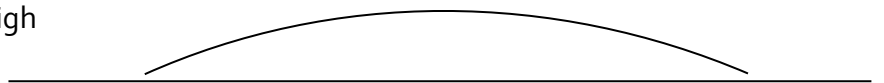


SPEED HUMP DESIGN





- 14 feet in length
- 3 inches high
- Curved
- Pavement marking on speed hump

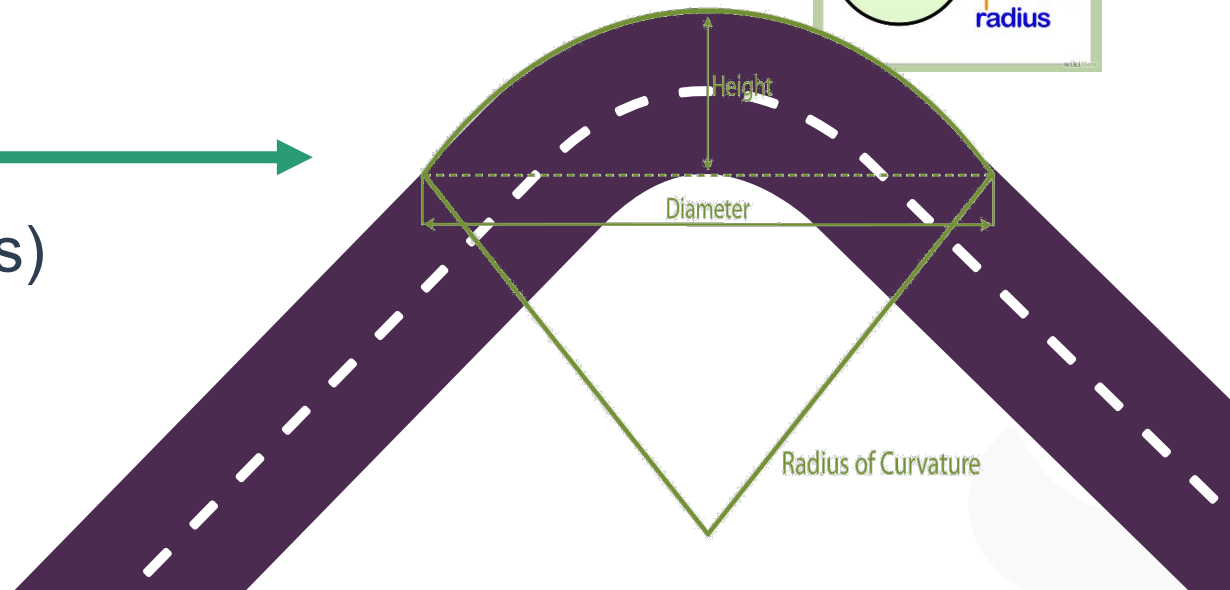
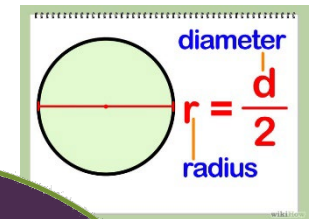
3" High



LOCATION CRITERIA FOR SPEED HUMPS



- Grade of less than 8% 
- 200 feet from major intersection
- 100 feet from a side street
- 300 – 600 feet spacing between humps desired
- 200 feet of centerline visibility
- 25 feet from driveways
- Avoid catch basins
- Outside of curves 
-(300 feet or less in radius)



Typical
crossing
speed of 21
MPH

No effect
on non-
emergency
access

STUDIES IMPACTS

SPEED HUMPS



Possible increase
in noise from
braking and
acceleration of
vehicles

Delay of 3-5 seconds
for firetrucks and up
to 10 seconds for
ambulance with
patient



FAQs

Q1: What is the impact on bicycles, wheelchairs, buses?

A1: Speed humps are traversable by all.

Q2: Can our street still be plowed when it snows?

A2: If a snowplow was to go over a speed hump it did not see, it would pop a piece loose, and Knox County would repair it.



FAQs

Q3: What is the difference between a speed hump and speed bump?

A3: Speed Hump



Speed Bump



Q4: How much does it cost?

A4: The subdivision does not pay for anything. Knox County will pay for the speed humps and signs.





QUESTIONS?



NEIGHBORHOOD SPECIFIC TRAFFIC ENGINEERING



CEDARCREST NORTH



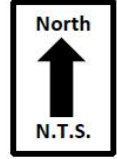
CEDARCREST NORTH TRAFFIC COUNT RESULTS

24 Hour Traffic Count Data – Cedarcrest North

- Data Collected in May 2024
- Highest 85th Percentile Speed: 34 mph
- Highest ADT*: 1,485 vehicles

Grading System Criteria	
Daily Traffic Volumes	
0 – 150	Not eligible
151 - 300	1
301 - 500	2
501 - 700	3
701 - 1000	4
1001 - 2000	5
2001+	Not eligible
85 th Percentile Speeds (over speed limit)	
0 – 4 mph	Not eligible
5 mph	1
6 mph	2
7 mph	3
8 mph	4
9 mph	5
≥ 10 mph	6

*ADT, or Average Daily Traffic, shows the total volume of cars who passed the counters in a 24-hour period



CEDARCREST NORTH TRAFFIC CRASH DIAGRAM

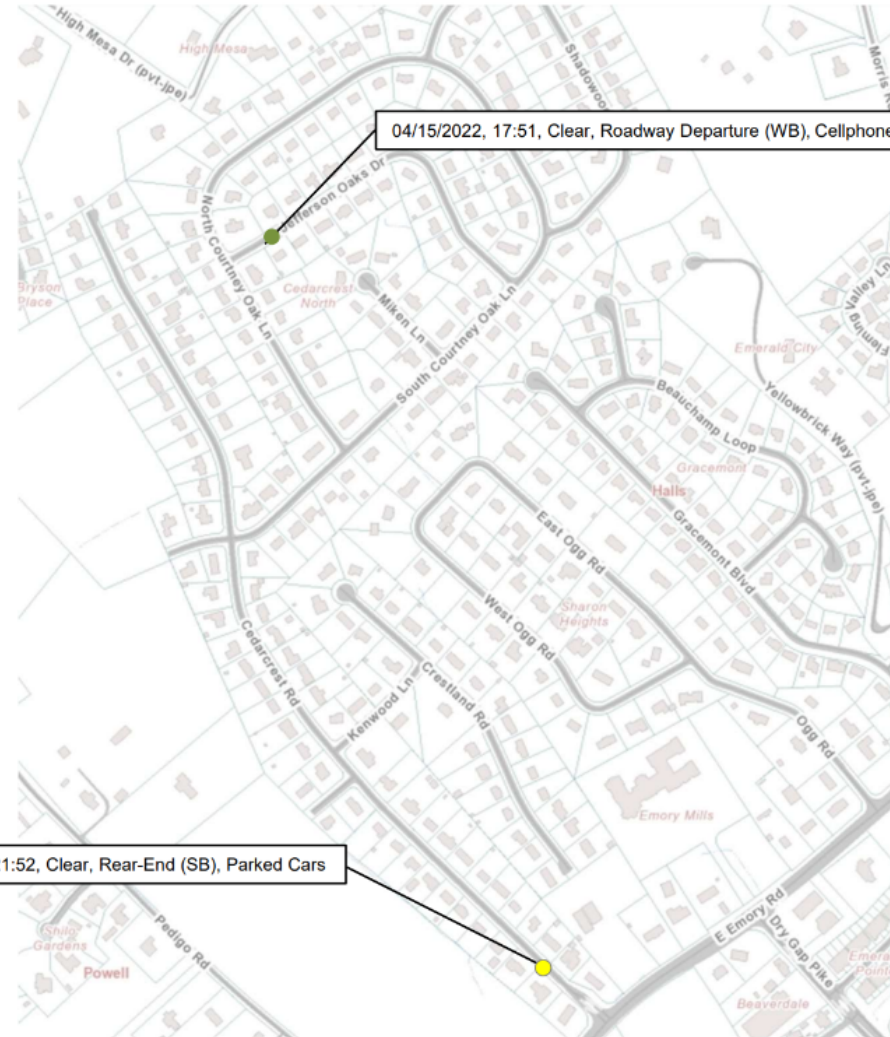
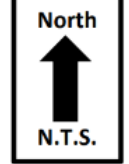
Knox County Department of Engineering and Public Works

Crash Diagram

Location: Cedar Crest North

Period: Jan 2020 – Oct 2024


Prepared by: JWR - 11/13/24



04/15/2022, 17:51, Clear, Roadway Departure (WB), Cellphone Involved

02/01/2022, 21:52, Clear, Rear-End (SB), Parked Cars





NEIGHBORHOOD FACTS

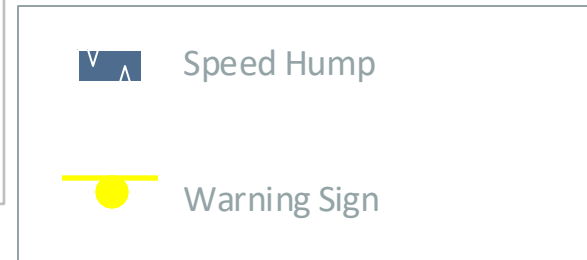
- Influence Area: 209 Parcels
- 85th Percentile Speed Counted: 34 MPH
- 14 speed humps proposed



PRELIMINARY SPEED HUMP AND SIGN LOCATIONS



North Side of Subdivision



PRELIMINARY SPEED HUMP AND SIGN LOCATIONS



South Side of Subdivision



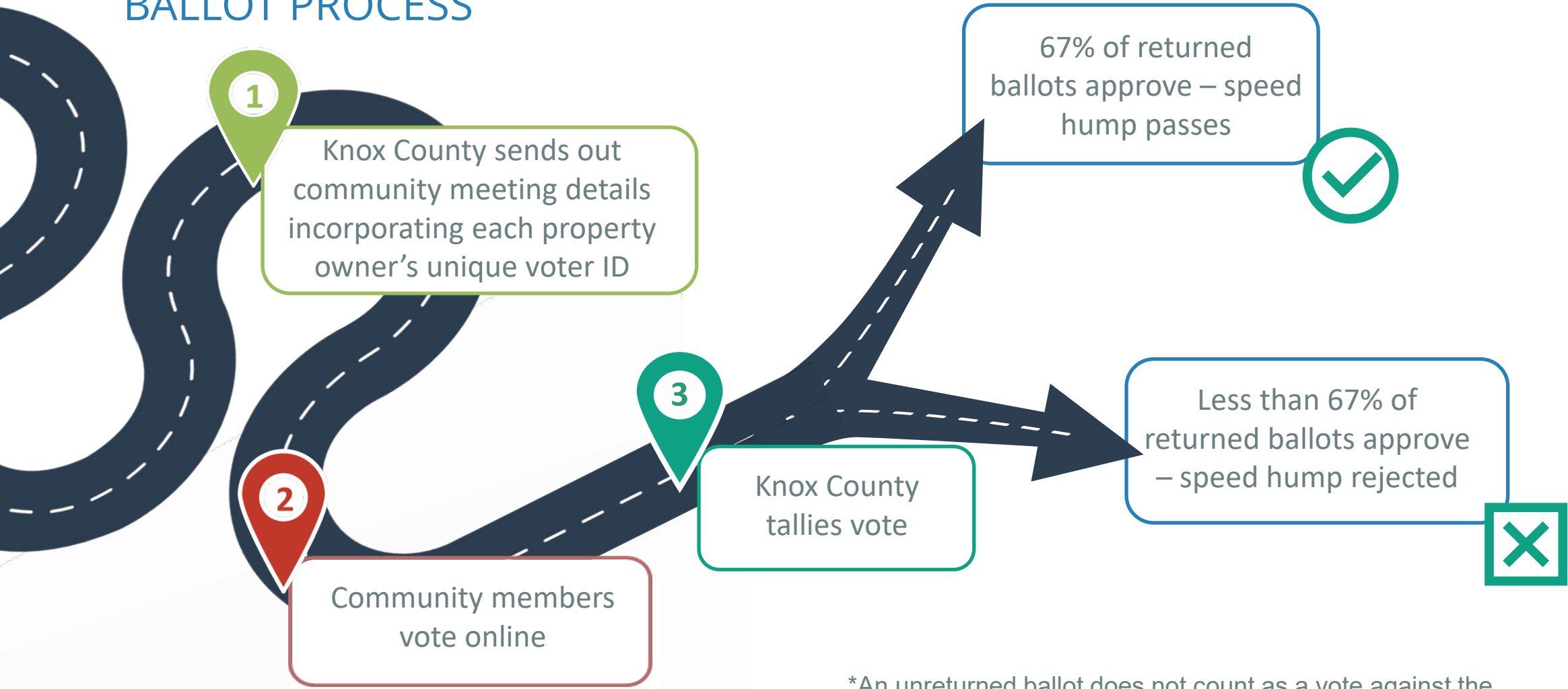
Speed Hump



Warning Sign

SPEED HUMP

BALLOT PROCESS



*An unreturned ballot does not count as a vote against the speed hump. Only returned ballots will be counted in the vote.

BALLOT COUNTING EXAMPLE



Knox County sends out 100 ballots

10 ballots are filled out and returned

7 ballots vote to move forward with the speed hump

Speed hump approved; Knox County will start procurement and construction





AFTER THE VOTE

PASSED

Knox County EPW will install the finalized traffic calming plan

REJECTED

Process Ends – Eligible to reapply in 2 years

VOTING IS TYPICALLY OPEN FOR 8 WEEKS.





QUESTIONS?



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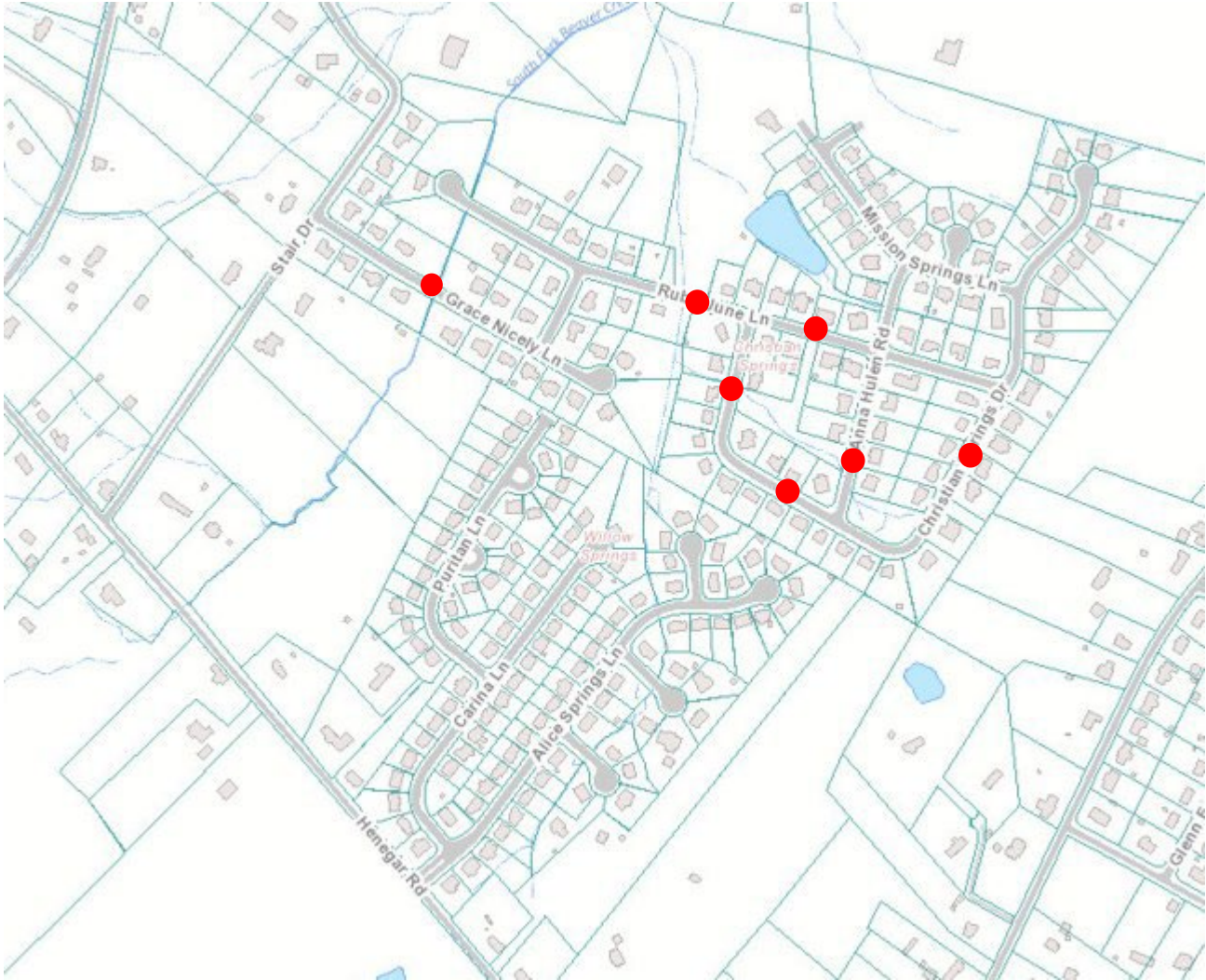
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SPEED HUMPS IN NORTHEAST KNOX COUNTY

CHRISTIAN SPRINGS SUBDIVISION



SPEED HUMPS IN NORTHEAST KNOX COUNTY

STONEWOOD CREEK SUBDIVISION



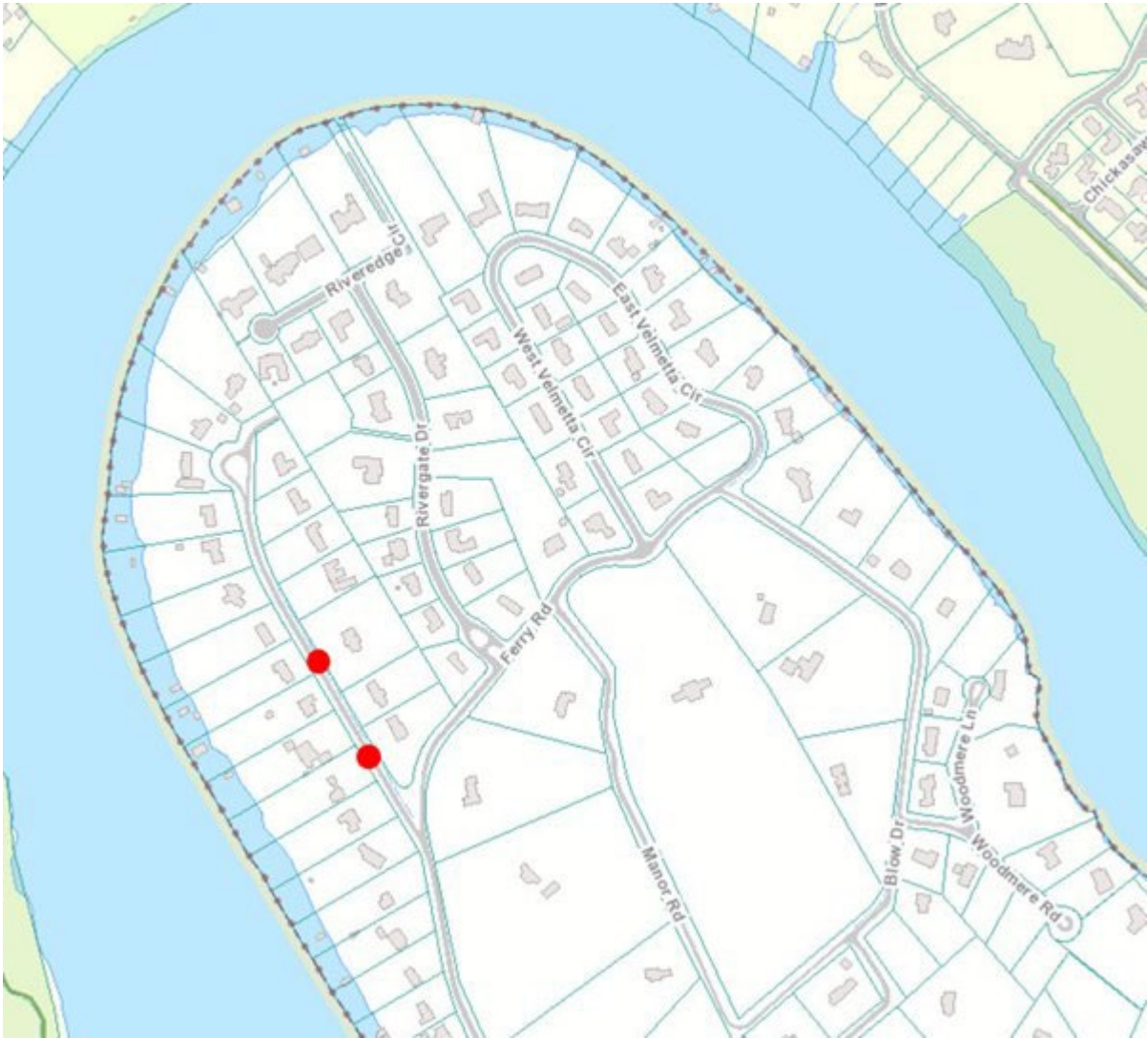
SPEED HUMPS IN SOUTHEAST KNOX COUNTY

CARTER MILL SUBDIVISION



SPEED HUMPS IN SOUTH KNOX COUNTY

MALONEY ROAD



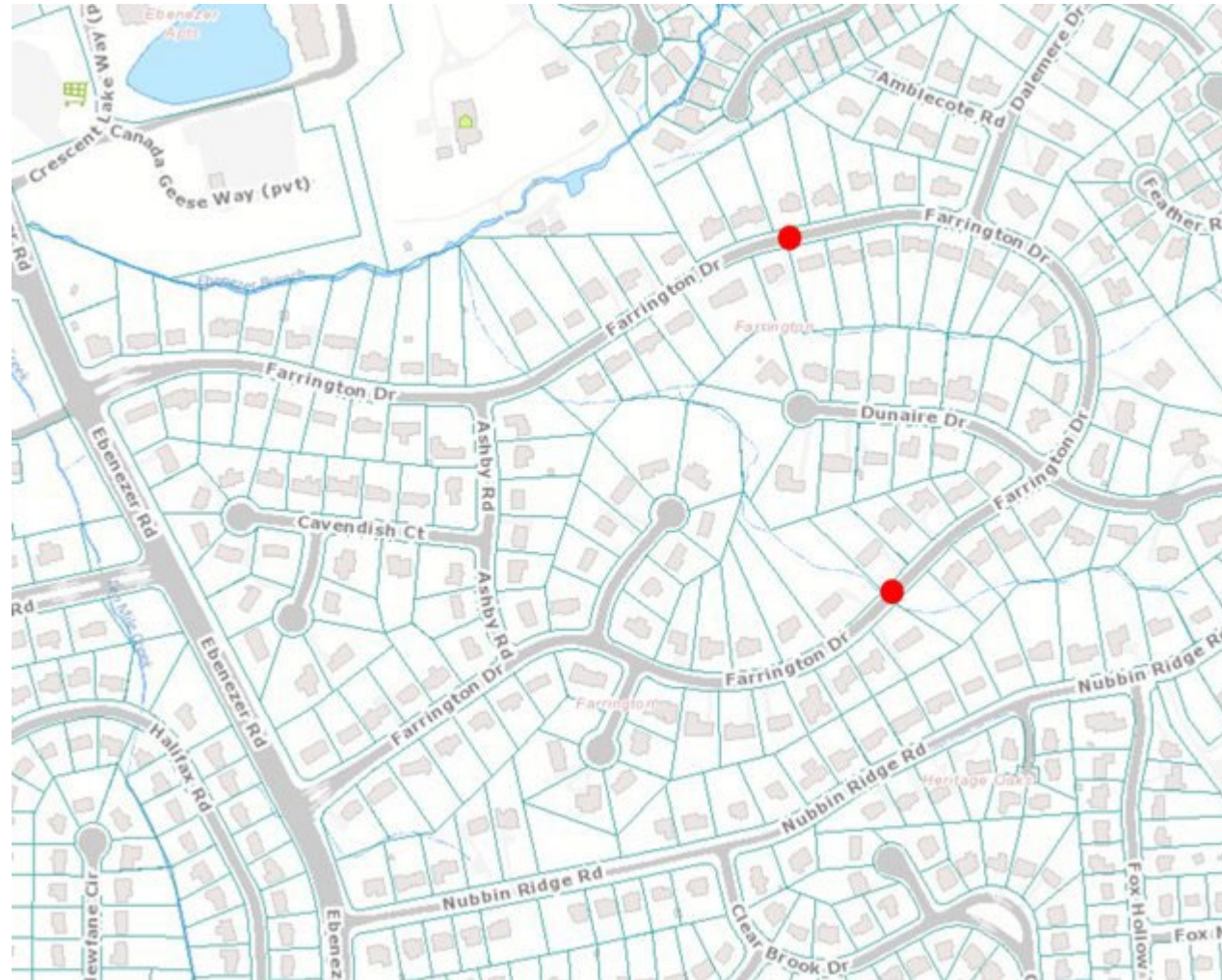
SPEED HUMPS IN SOUTHWEST KNOX COUNTY

CONCORD PARK



SPEED HUMPS IN SOUTHWEST KNOX COUNTY

FARRINGTON SUBDIVISION



SPEED HUMPS IN SOUTHWEST KNOX COUNTY

ROEFIELD SUBDIVISION



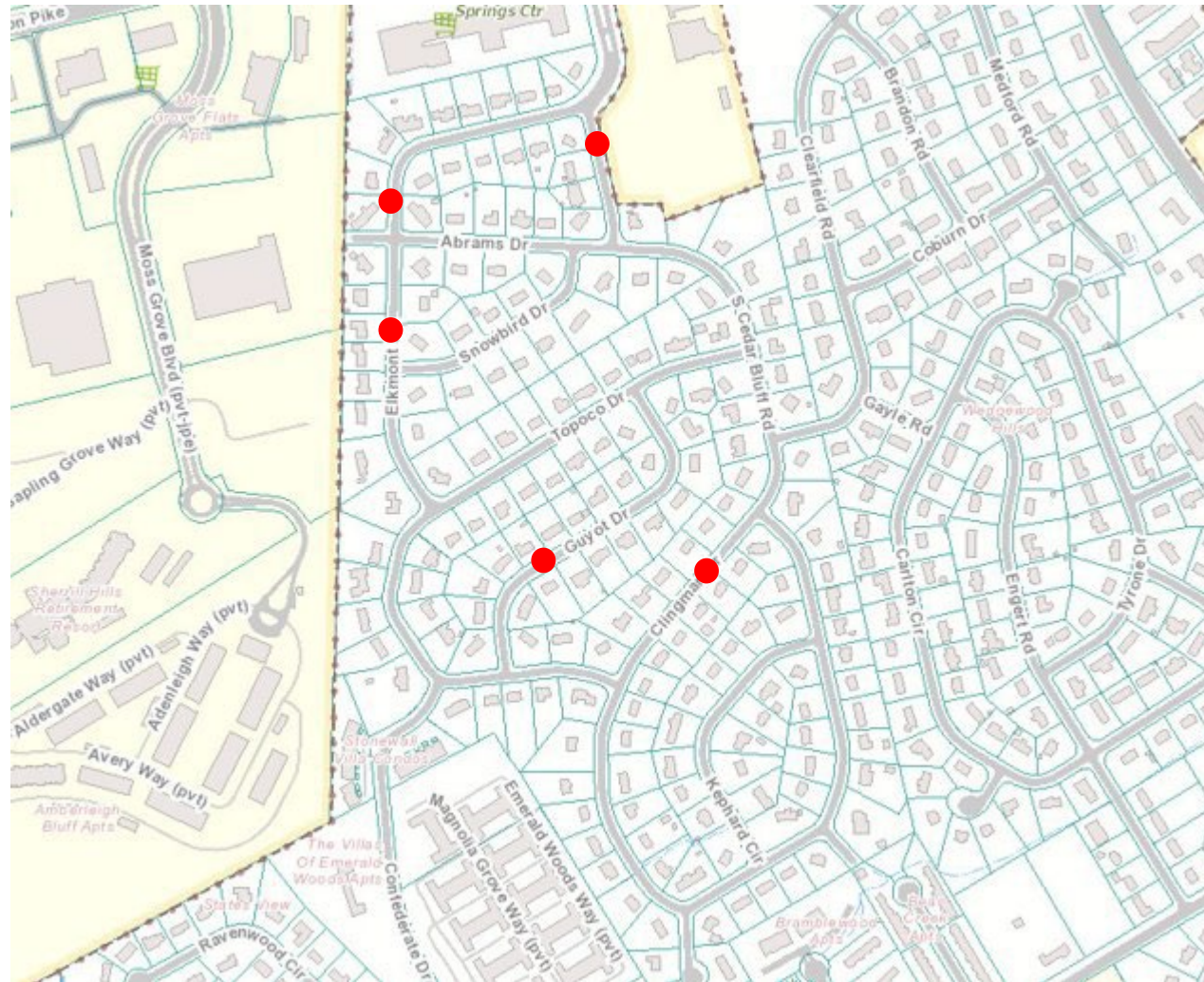
SPEED HUMPS IN SOUTHWEST KNOX COUNTY

KENSINGTON SUBDIVISION



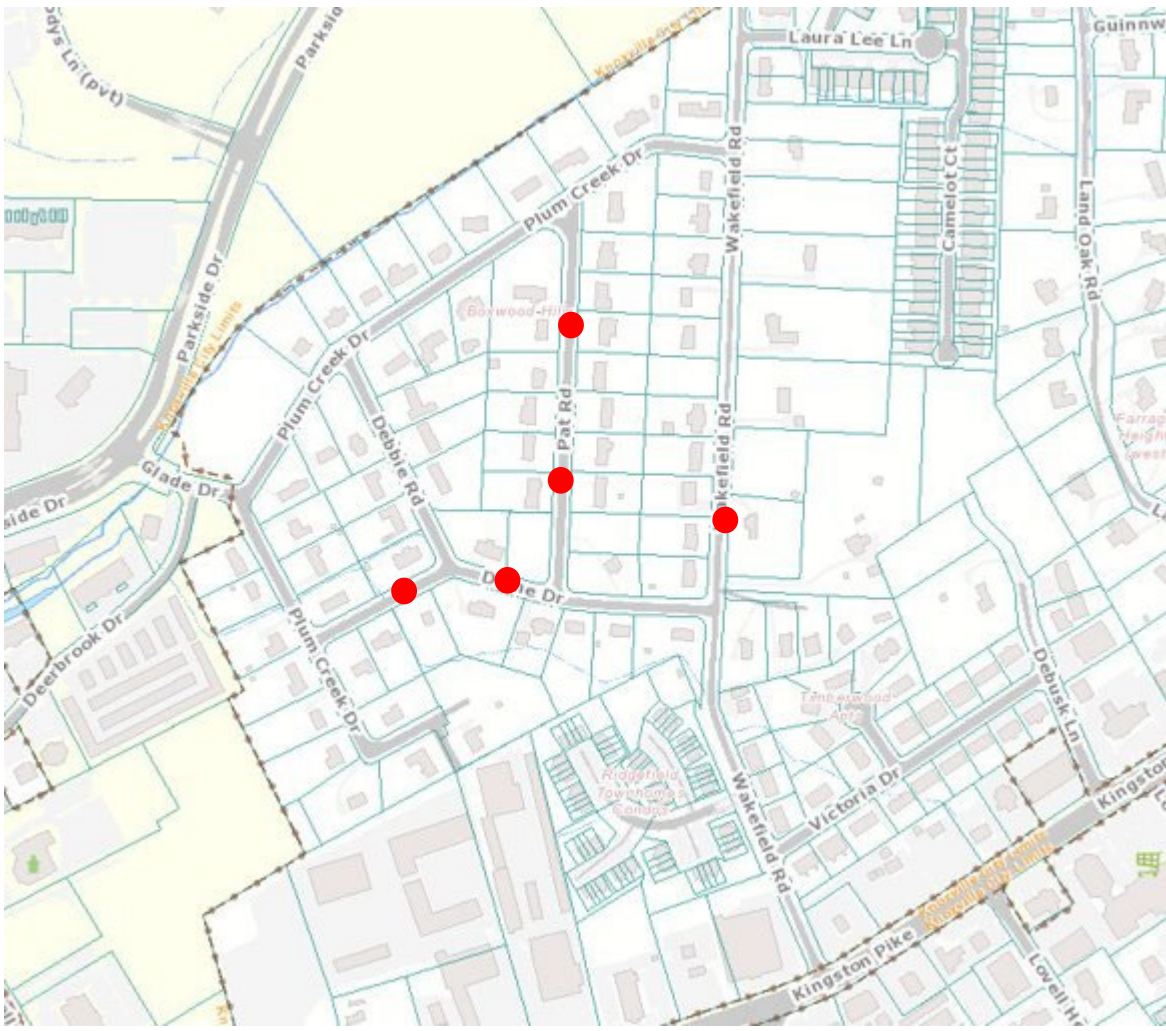
SPEED HUMPS IN SOUTHWEST KNOX COUNTY

WEDGEWOOD HILLS



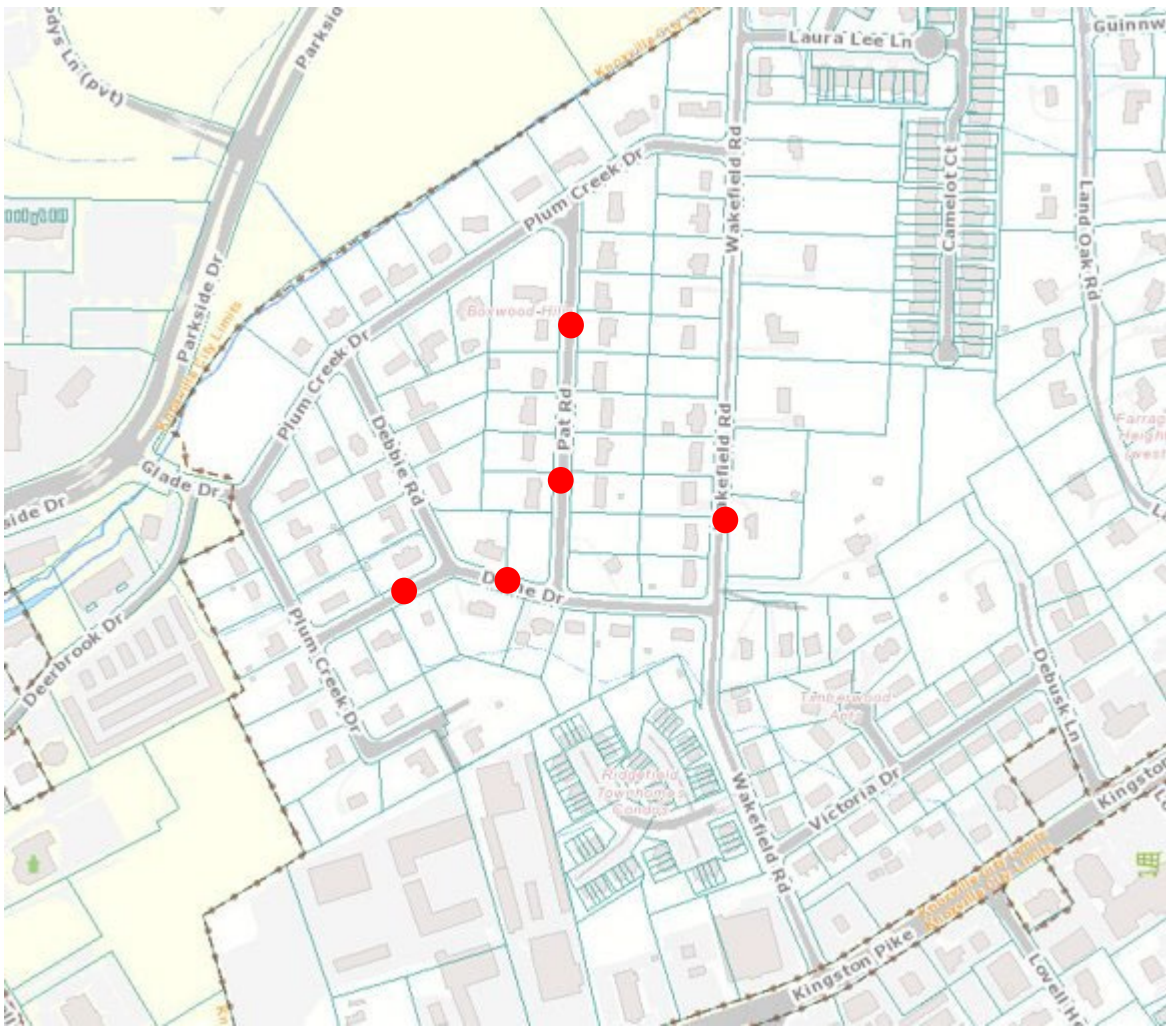
SPEED HUMPS IN SOUTHWEST KNOX COUNTY

BOXWOOD HILLS



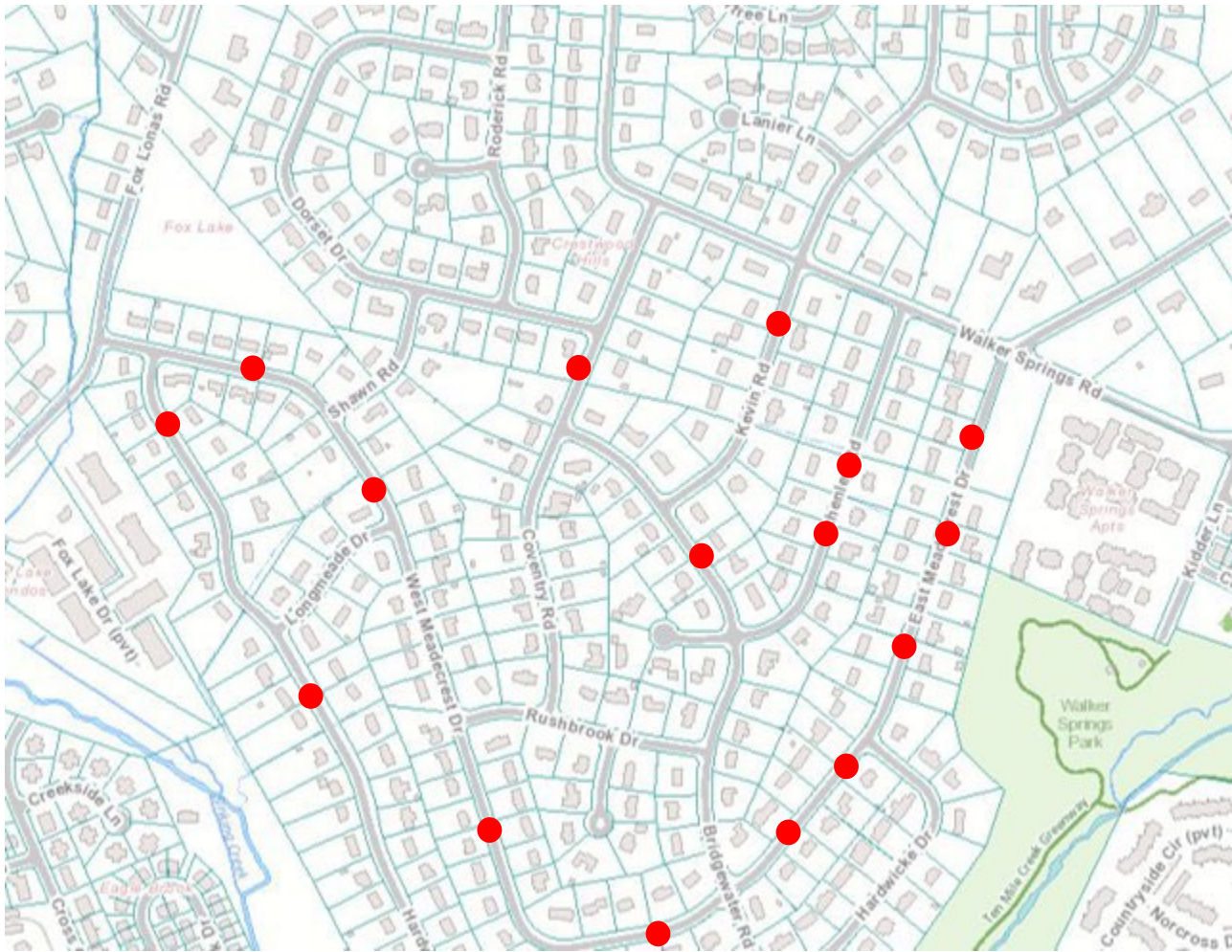
SPEED HUMPS IN NORTHWEST KNOX COUNTY

HIDDEN VALLEY SUBDIVISION



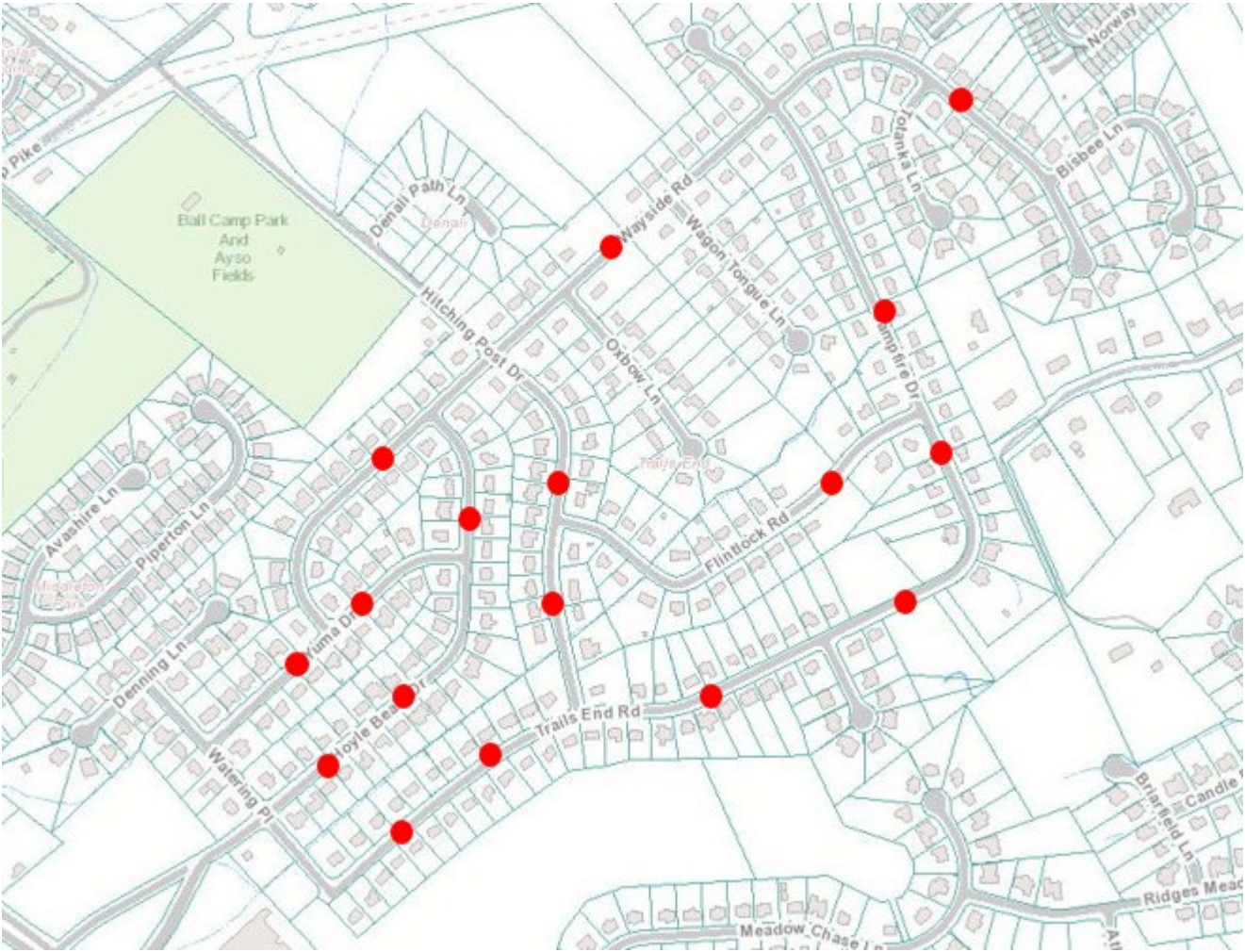
SPEED HUMPS IN NORTHWEST KNOX COUNTY

CRESTWOOD HILLS



SPEED HUMPS IN NORTHWEST KNOX COUNTY

TRAILS END SUBDIVISION



SPEED HUMPS IN NORTH KNOX COUNTY

TEMPLE ACRES SUBDIVISION



SPEED HUMPS IN SOUTHWEST KNOX COUNTY

CONCORD PARK

