



Rochester Community School District

School Transportation Study: Policy and Walking Routes





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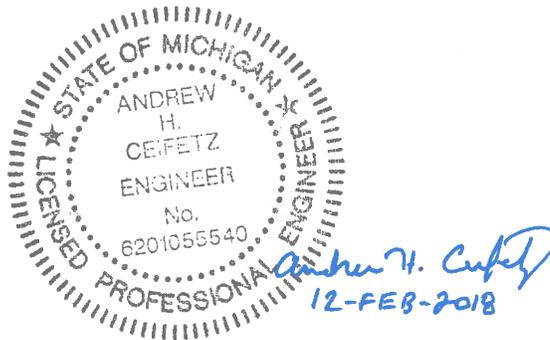
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Telephone: +1 248 539 2222

Date: February 2018
Reference: H-U0640.00
Status: Final



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1 Executive Summary

The Rochester Community School District (RCSD) commissioned an impartial, third-party review of their transportation policies and the geographic limits of the areas not served by busses for each school.

The policy review looked at associated legislation, federal programs, state guidelines, the current policies of the Rochester Community School District, and the policies of over a dozen other school districts in Macomb, Oakland, and Wayne Counties similar in size and/or geography to the RCSD.

The review of each school's walk/bike limits considered the available roadways, sidewalks, non-motorized paths and trails, marked and signalized crosswalks, and locations where a crossing guard was designated to aid at crossings.

The transportation policies are consistent with other districts reviewed.

The Rochester Community School District's policy on transportation is similar to other districts in that the distance beyond which a student will be provided transportation is clearly defined. The RCSD transportation policy is unique in that the policy includes a process to request alternate accommodations or appeal a transportation department decision regarding busing.

Minor spelling and grammatical errors were found in some of the current policy documents. It is our understanding that the RCSD is reviewing and updating their forms and guidance documents to be presented for approval by the school board.

The current walking boundaries are generally consistent with the associated legislation.

Variations in the walker boundary have been consistently applied across school classifications – with the outcome of providing transportation to areas that are otherwise within a potential walking area.

No routes were identified that should be changed because of safety concerns.

For some school facilities, small areas were identified that would warrant transportation that are not currently serviced by bus stops. Other locations were identified where students are provided transportation but there are no current impediments to the contiguous walking routes.

Recommendations for improvements to non-motorized facilities which would improve connectivity are noted in this report. At least one location on school property (the north entrance to Rochester High School on Walton Boulevard) is in the process of being corrected by the installation of a paved walking path, as a direct result of identification during this study.

2 Introduction

The Rochester Community School District wished to confirm that their policies regarding school transportation for students met current guidelines and incorporated any identified best practices that may have superseded the policy as written. Opus International Consultants was retained to review other districts' policies, and current research into safe and appropriate walking routes for students.

The RCSD has elected to provide transportation for students meeting certain criteria, and therefore a study of the areas where transportation is not provided was required to identify any changes or gaps in the network.

This review framed the requirements for identifying the areas that would not require transportation by the school district. Consideration of roadway classification, non-motorized facilities, and crossing points were some of the variables used to select the areas where walking and biking to school is feasible.

3 Policy Review

This section discusses the relevant legislation, other resources, and other districts' policies used to benchmark the RCSD. Recommendations are made for language which may strengthen the district's policies. It is our understanding that the RCSD is reviewing and updating their forms and guidance documents to be presented for approval by the school board.

3.1 Other Resources

3.1.1 Legislation

Currently, the defining document governing school transportation in Michigan is the Attorney General's Opinion #5933, from July 23, 1981, which clearly defines how to measure the distances for purposes of state school aid transportation reimbursement (as described in 1979 PA 94), noting that the Legislature has provided that:

'[Reimbursement] shall not be granted for the transportation of pupils living within 1 ½ miles of the schools which the pupils attend, except for handicapped pupils, as defined by rules promulgated by the state board, whom the department determines cannot safely walk the distance, or for pupils in attendance at alternative education programs for pregnant persons. Transportation distances shall be measured along public streets and highways.'

Broadly speaking, school districts have held to this rule for middle- and high-school students, and have provided transportation for elementary students further than one-mile as measured based on the above Act.

These rules, however, govern transportation when a district *elects* to provide transportation to students – school districts are *not* required by law to transport regular education children¹.

3.1.2 Safe Routes to School (SR2S) – Michigan

Safe Routes to School (SRTS) is an international movement – and now a federal program – to make it safe, convenient, and fun for children, including those with disabilities, to bicycle and walk to school². SRTS is able to provide guidance on how to develop a plan to implement better walking habits, as well as a competitive grant process to help fund improvements. Some suggestions from SRTS include:

¹ http://www.michigan.gov/mde/0,4615,7-140-6530_6569_38338-137337--,00.html

² <http://saferoutesmichigan.org/>

- Schedule a Walk to School Day event which often occurs the first week of October
- Build a SR2S team of multidisciplinary members including concerned citizens and community agency representatives
- Survey students and parents to identify barriers to walking and bicycling to school.
- Identify and designate safe routes also referred to as “a walking school bus program”
- Use survey information and audit information to develop a SR2S Action Plan the includes short and long-term objectives.
- Apply for funding

SRTS provides resources to help students, parents, and educators make safer decisions when walking or biking, as well as helping them identify safe behaviors as a pedestrian.

3.1.3 Michigan Department of Education

The Michigan Department of Education maintains a webpage with resources outlining school transportation procedures and the establishment of bus stops, but notes that “no law specifies the maximum distance a student may walk to the bus stop” and that “it is the responsibility of the parent or legal guardian to see that a child gets safely to and from the bus stop.”³

The Michigan Department of Education does not otherwise discuss students walking to or from school.

3.2 Other School Districts

Many school districts make their transportation policies publicly available. A review of several districts similar – in size and/or geography – follow.

3.2.1 Rochester Community Schools

The Rochester Community School District shares their documents regarding school transportation, noting that “students living beyond the following walking limits shall be entitled to bus transportation.” These limits are set at one-mile for grades K through 5, and 1.5 miles for grades 6 through 12⁴. The RCSD also clearly outlines many of the common questions regarding bus transportation and bus stops⁵.

Criteria for establishing bus stop locations are also clearly defined⁶.

³ http://www.michigan.gov/mde/0,4615,7-140-6530_6569_38338---,00.html

⁴ <http://media.rochester.k12.mi.us/download/63401>

⁵ <http://media.rochester.k12.mi.us/download/64553>

⁶ <http://media.rochester.k12.mi.us/download/63434>

3.2.2 Hamtramck Public Schools

The Hamtramck Public Schools has a Parent Engagement Plan which includes a section on Safe Routes to School⁷. There is no other documentation discussing school transportation or non-motorized access.

3.2.3 Avondale School District, Auburn Hills

The Avondale School District notes that “it is the Board of Education policy to provide transportation for those students, residing in the District, of any age, whose distance from their school makes this service necessary within the limitations established by State law and the regulations of the State Board of Education.”⁸ It does not otherwise directly address walking or distances which would require transportation.

3.2.4 Troy School District

The Troy School District notes that “the District **may** elect to provide bus transportation for eligible students [emphasis added].”⁹ The eligibility requirements include that “The Board has determined that elementary students residing one mile or more from their school of attendance or who must cross a main road (i.e., Rochester Road, Square Lake, Livernois, etc.) are eligible for bus transportation, if provided. All other students residing one and one-half miles or more from their school of attendance are also eligible. The District will not provide transportation for open enrollment students, or students admitted to the Troy School District through any schools of choice program.”

3.2.5 Utica Community Schools

Utica Community Schools transportation page indicates that “Students are eligible for transportation service if their residence is 1.5 miles or farther from the school. Elementary students should not walk further than 0.5 mile to reach a bus stop and secondary students should not walk further than one mile.”¹⁰

3.2.6 Warren Consolidated Schools

Warren Consolidated schools also discusses eligibility for bussing in that “Elementary students living 1.0 mile and secondary students living 1.5 miles or more from school are eligible to ride a bus to and from school. Students can be expected to walk up to one mile to a bus stop.”¹¹

3.2.7 Farmington Public Schools

Farmington Public Schools notes that “A school district is not required to transport or pay for transportation of a resident pupil living within 1-1/2 miles, by the nearest traveled route, to the public or state approved nonpublic school in which the pupil is enrolled. A school district is not required to transport or pay for the transportation of a resident pupil attending a nonpublic school who lives in an area less than 1- 1/2 miles from a

⁷

http://www.hamtramckschools.com/UserFiles/Servers/Server_129989/File/Parent%20Engagement/District%20Parent%20Engagement%20Policy%20_2008-2012_.pdf

⁸ <http://www.neola.com/avondale-mi/search/policies/po8600.htm>

⁹ <https://l.cdn.edl.io/wHMwOdC5cTdMICw3Fmmsj08gNvI9wHe3qlCzD8dfwybIXq4.pdf>

¹⁰ <http://www.uticak12.org/cms/One.aspx?portalId=578321&pageId=3647657>

¹¹ <http://www.wcs.k12.mi.us/Departments/Transportation/index.html>

public school in which public school pupils are not transported, except that the school district is required to transport or pay for the transportation of the resident pupil from the public school within the area to the nonpublic school the pupil attends.¹²”

They also specifically discuss how they measure the distance from school:

“Normally, the District’s routing software will be used to determine distances. When distances are close to 1.5 miles, county composite aerials will be used to measure distances. When not available, a measurement wheel will be used.¹³”

3.2.8 Southfield Public Schools

The Southfield Public Schools transportation page states that “By Board of Education policy, elementary and middle school students who live more than a mile and high school students who live more than a mile and a half from school are eligible for transportation.¹⁴”

3.2.9 Birmingham Public Schools

Birmingham Public Schools quotes the same statement as the Avondale School District, in that “It is the policy of the Board of Education to provide transportation for those students, of any age, whose distance from their school makes this service necessary within the limitations established by State law and the regulations of the State Board of Education.¹⁵”

BPS additionally discusses the distance from schools that the bus stops shall be located in that “A pattern of designated bus stops shall be established around each elementary, middle and high school. The nearest stops shall be located one (1) mile away from each elementary and middle school and one and one-half (1 1/2) miles from each high school. Additional elementary and/or middle school bus stops will be established to accommodate traffic and/or road conditions.” There is no discussion as to how far a student must walk either to school or to a bus stop.

3.2.10 Chippewa Valley Schools

Chippewa Valley Schools Pupil Transportation Department maintains a Frequently Asked Questions document which states that “If you live within 1½ miles of the school where your child attends and your child does not have to cross any main thoroughfares without the assistance of adult crossing guards, chances are you live in a non-bussing area and are not eligible for transportation services to and from school.¹⁶”

¹²

<https://www.farmington.k12.mi.us/cms/lib/M101808718/Centricity/domain/96/board%20policies%20and%20procedures/500/5119P.pdf>

¹³

<https://www.farmington.k12.mi.us/cms/lib/M101808718/Centricity/domain/96/board%20policies%20and%20procedures/500/5119P.pdf#page=3>

¹⁴ <http://www.southfieldk12.org/departments/transportation/>

¹⁵ <http://www.neola.com/birmingham-mi/search/policies/po8600.htm>

¹⁶ http://www.chippewavalleyschools.org/downloads/transportation/2017-18_frequently_asked_questions.pdf

CVS also discusses transportation related to new subdivision developments:

Bus stops are not located within newly developing subdivisions until the construction is at least 90% complete. We have found it very difficult to navigate in subdivisions still under construction as we compete with contractors and their equipment. Therefore, bus stops will be located on the main roads at the entrance to the subdivision for all students while construction is taking place. As with all bus stops, it is each parent's responsibility to get her/his student to and from the bus safely.¹⁷

Their Transportation Board Policies mention walking and road crossings such that "Kindergarten through eighth grade students residing within the District, attending a school within the District boundaries and living one and one-half (1 1/2) walking distance miles or more from the school they attend may be eligible for transportation with the following exceptions ... Kindergarten through eighth grade students who would otherwise be required to cross a major thoroughfare as the only route to school without the benefit of a crossing guard or public sidewalk, respectively, but who resides less than one and one-half (1 1/2) miles walking distance from school will be eligible for transportation."¹⁸

Changes to eligibility are covered in that "It is the intent to provide reasonable notice (normally ninety (90) days written notice) to children who receive bus transportation but who will no longer be eligible due to, but not limited to, the addition of sidewalks, public walkways, crossing guards, or a change in Board Policy."

3.2.11 Mt. Clemens Community School District

Mt. Clemens shares language with Avondale and Birmingham referencing Board of Education policy¹⁹. Walking limits are discussed such that:

Children living beyond the following walking limits shall be entitled to bus transportation:

- | | |
|-----------------------------------------|-----------------|
| A. Kindergarten at Noon | All transported |
| B. Kindergarten in morning or afternoon | 1 mile |
| C. Grades 1 through 5 | 1 mile |
| D. Grades 6 through 12 | 1.5 mile |

3.2.12 Fraser Public Schools

Fraser Public Schools only mentions the Board of Education Policy referenced previously²⁰.

3.2.13 Walled Lake Consolidated Schools

WLCS discusses Student Transportation Management in that "The district intends to comply with the state of Michigan transportation eligibility criteria which indicate that 'a school district shall not be required to

¹⁷ http://www.chippewavalleyschools.org/downloads/transportation/2017-18_frequently_asked_questions.pdf#page=2

¹⁸ <http://www.chippewavalleyschools.org/departments/transportation/boardpolicies/>

¹⁹ <http://www.neola.com/mtclemens-mi/search/policies/po8600.htm>

²⁰ <http://www.neola.com/fraserpub-mi/search/policies/po8600.htm>

transport ... a resident pupil living within one and one-half miles by the nearest traveled route to the public ... school in which the pupil is enrolled.²¹ “

They further discuss distance eligibility:

The measurement of the distance to determine student eligibility for transportation service shall be one (1.0) mile for elementary and one and one-half (1.5) miles for secondary. The distance will be measured from the point at which the student’s driveway meets the public thoroughfare to the point of intersection of the center of the public street with the nearest school door. Students attending the LATE Program are excluded from eligibility for transportation.²²

Safety is addressed in that

However, where unusual traffic and other hazards exist, the supervisor of transportation is directed to study the situation and determine the most appropriate resolution which both reasonably ensures the safety of the student(s) involved and is cost effective. Appeals of the supervisor’s decision may be made to the director of operations who will, as appropriate, work with the consultation services of public safety officers with jurisdiction for that geographic area.

Finally, changes to walking and transportation routes are discussed:

The transportation department is directed to continually study routing and revise school district bus routes so as to require students to walk reasonable distances to pick-up points, reduce the total miles traveled by school buses, eliminate transportation of students to school buildings where walking distances are reasonable, and reduce the cost incurred by the district.

3.3 Summary

Few districts directly address students walking or biking to school, inferring that since bus transportation is not required by law, any student not directly covered by existing transportation policies must otherwise make their own arrangements to attend school, whether by private vehicle or on foot or bike.

The Rochester Community School District’s policy on transportation is largely similar to other districts in that they clearly define the distance beyond which a student will be provided transportation. They also provide a process to request alternate accommodations or appeal a decision.

²¹ http://board-policy.wlcsd.org/E-Facilities_Management/ed.htm

²² http://board-policy.wlcsd.org/E-Facilities_Management/ed-r.htm

4 School Reviews

A part of this study was an initiative to confirm the current walking routes for the schools in the Rochester Community School District, evaluate potential gaps or changes, and prepare maps for each school building showing the limits of the walkable network. A description of the process used to evaluate the network is followed by a discussion of the findings for each school.

4.1 Background

The general guidelines governing acceptable criteria for determining school transportation in Michigan was opined by the State’s Attorney General in 1981 (#5933); as such students closer than limits indicated for bussing are expected to provide their own transportation – whether that be on foot, bicycle, or by private vehicle. However, over time, temporary changes (e.g. because of road construction) or new developments have been added to the district and may not currently necessitate the accommodations made.

The schools identified for review were:

Table 1 – Schools Reviewed

Elementary	Middle	High
Brewster	Hart	Rochester Adams
Brooklands	Reuther	Rochester
Delta Kelly	Van Hoosen	Stoney Creek
Hamlin	West	
Hampton		
Long Meadow		
McGregor		
Meadow Brook		
Musson		
North Hill		
University Hills		

Baldwin Elementary, Hugger Elementary, and A.C.E. High School were not included in this review as all students at these facilities are bussed owing to the largely rural road and lack of sidewalk facilities in the vicinity of these elementary schools, and the specialized nature of A.C.E. High.

4.2 Process

An initial meeting was held with RCSD officials to discuss the study scope and confirm the facilities for which walking reviews should be completed.

The AG noted that “the point of beginning should be the point of intersection of the center line of the public street or road with the center of the nearest schoolhouse doorway.” While the center lines of the roadways are identifiable from other mapping sources, confirmation of which doors are accessible to students to enter each school building was needed.

For example, Long Meadow Elementary has multiple doors around the periphery of the building:



Figure 1 – Long Meadow Elementary School

A representative from each school was contacted and provided an aerial image of the building. Each door open for entry during the morning hours was clearly identified by school personnel. As an example, here is the marked entries for Long Meadow Elementary:



Figure 2 – Long Meadow Elementary School - Access Points

These points of entry were translated to a GIS layer so they could be buffered at a radius of one-mile (elementary) or 1.5-mile (middle and high schools).

Initially, the entire road network was considered for suitability, using the current Open Street Map²³ repository downloaded to a GIS shapefile. For elementary schools, walking one mile is permissible, while walking 1.5 miles is permissible for middle- and high-schools. A one mile radius around the access points for each school was plotted, for example:

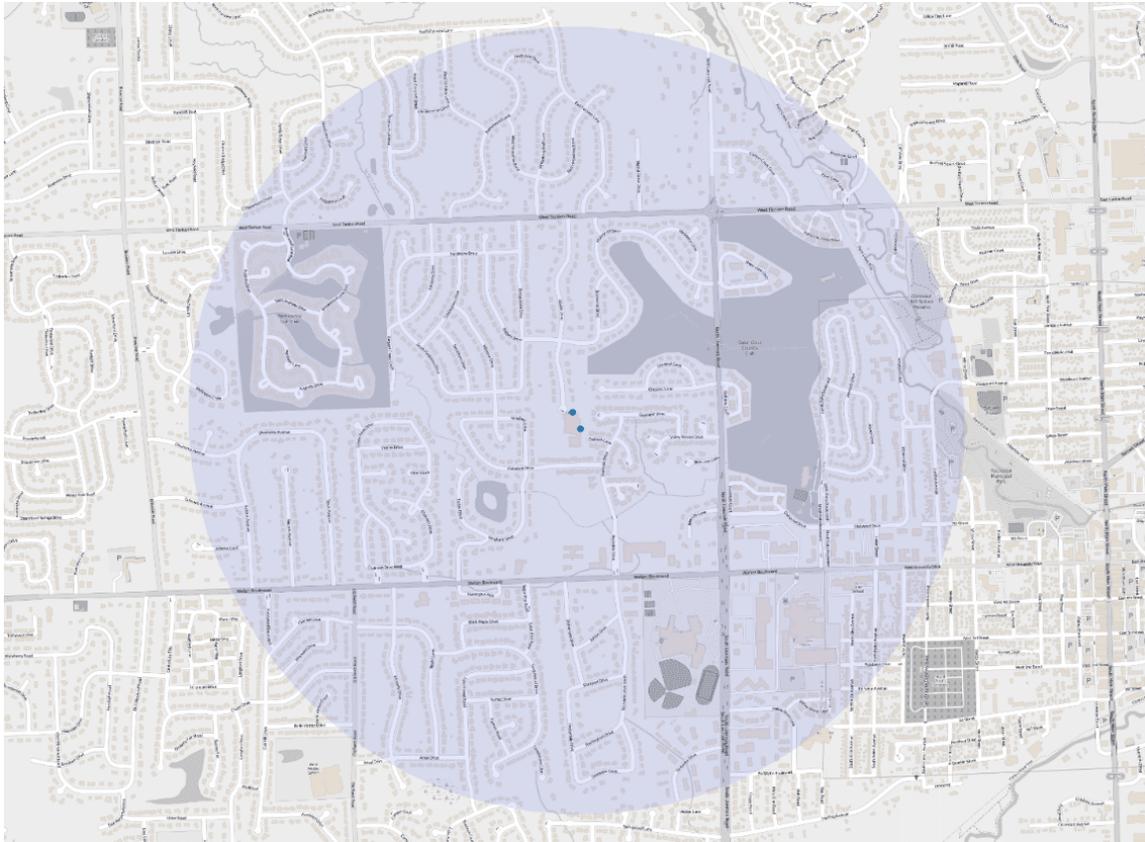


Figure 3 – Long Meadow Elementary - One-Mile Radius

²³ <https://www.openstreetmap.org/copyright/>.

While any student outside this radius would not be considered for walking, the walking distance is based on the available roads or paths that may be utilized, and these do not normally follow straight lines radiating outward from a school. Additionally, school boundaries may also truncate the area to be considered:

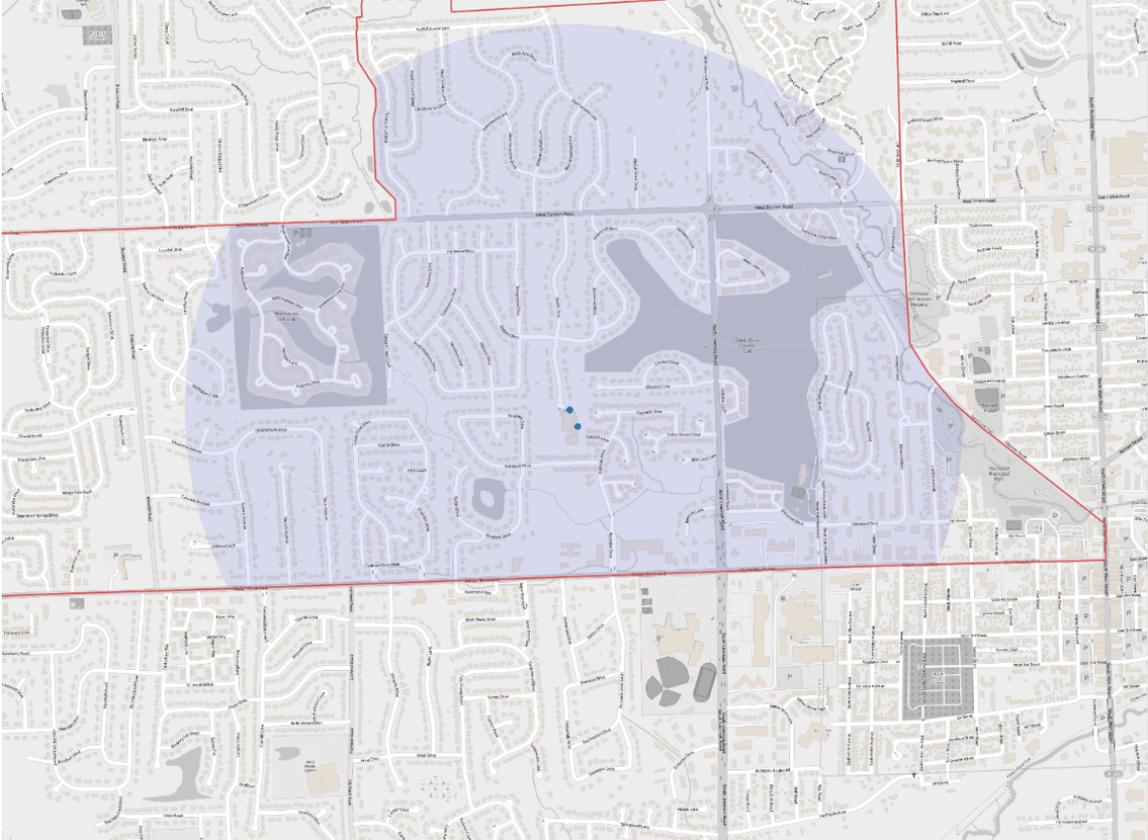


Figure 4 – Long Meadow Elementary – Boundaries

Most maps generally show a roadway following the centerline of the road, however, it would obviously not be appropriate for a student to walk down the center of a primary roadway such as Livernois Road. Therefore, **only residential roadways were considered for walking.** This necessitated adding sidewalks and multi-use trails to the potential network, as well as new developments (construction identified on aerial maps) that had not been formally added to the available maps. These were aggregated from known trail maps and aerial imagery. Crossing locations – those marked with a cross walk (mid-block locations, stop-controlled intersections) or a crosswalk and signal (at signalized intersections) – were added as well. Areas of concern were verified from field visits (e.g. sidewalks under tree cover). In Figure 5, all residential roadways and sidewalks/trails within the boundary of Long Meadow Elementary are shown in light green.

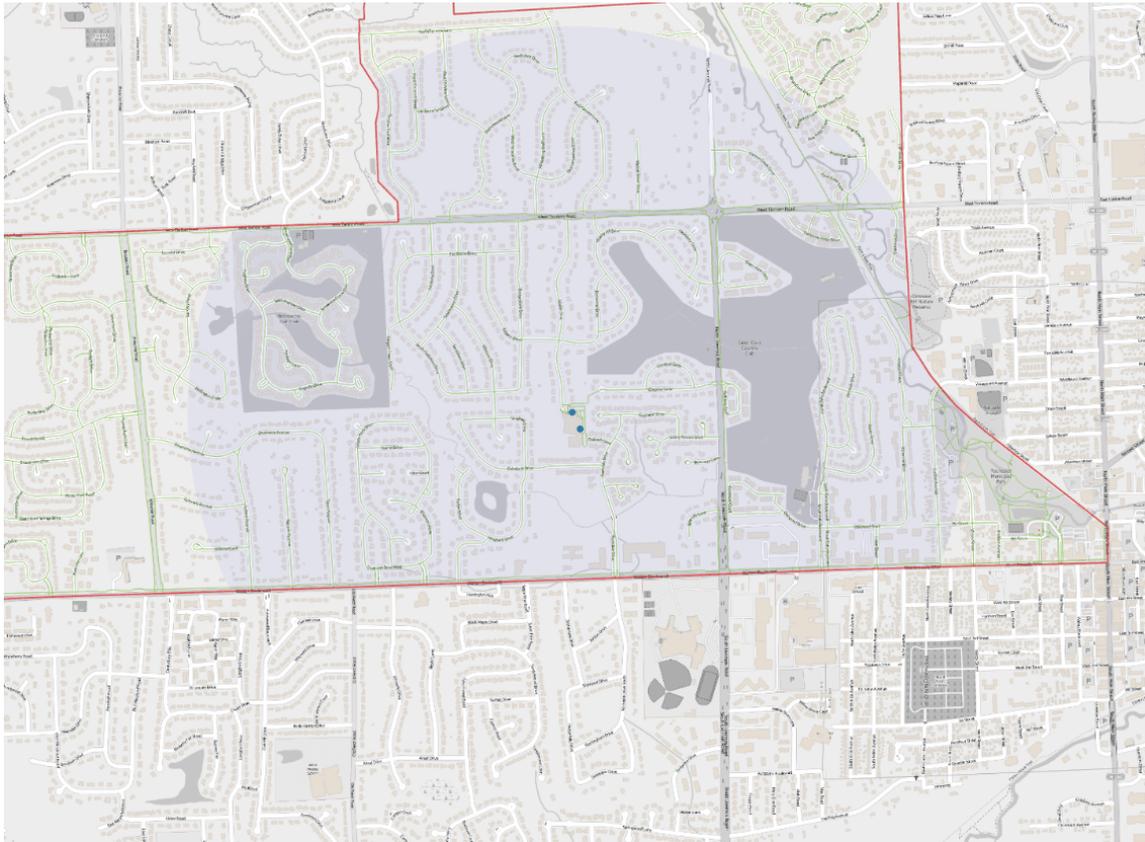


Figure 5 – Potential Walkable Routes (shown in green)

An isodistance map has lines which indicate equal distance from a given point. All potential walkable routes were mapped, where the walking distance is less than or equal to the one- or 1.5-mile limit. As shown in Figure 6, the walkable distance less than one mile (for Long Meadow Elementary, shown in orange) is significantly less than the roads and paths within the one-mile radius (shown in darker green).

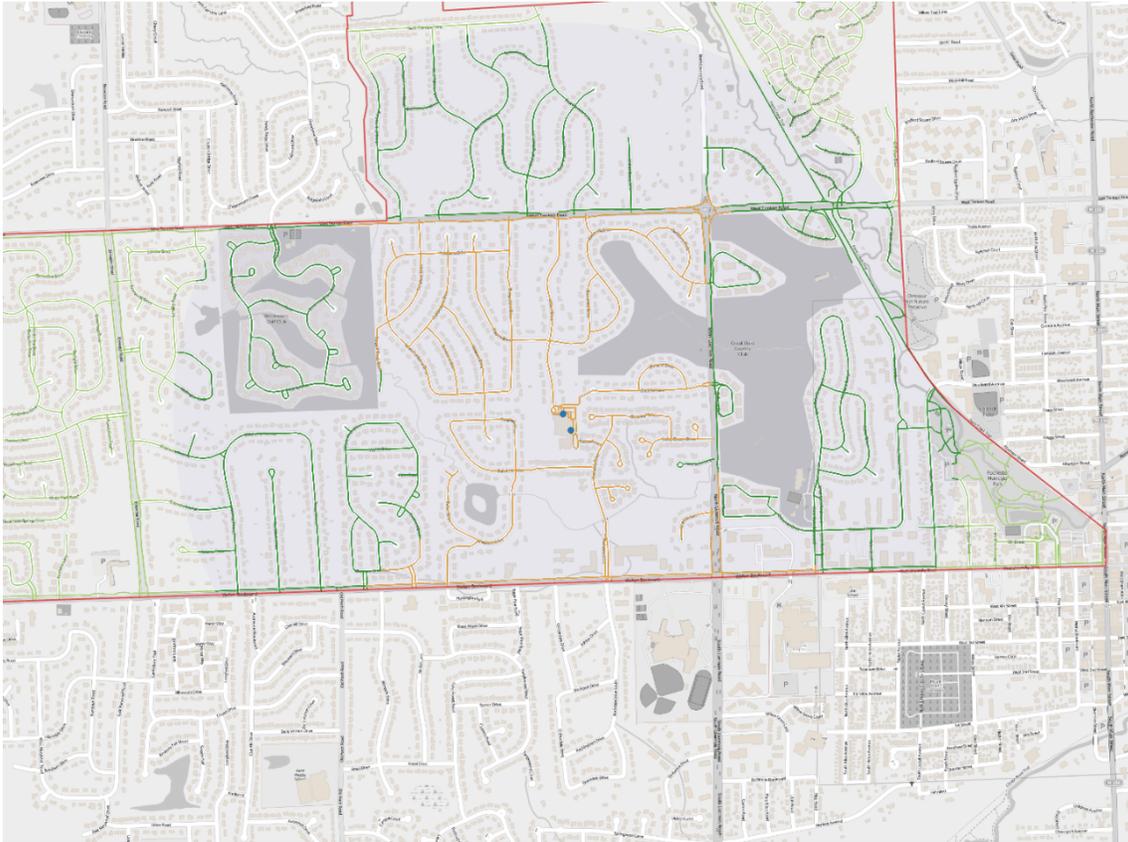


Figure 6 – One-mile Isodistant routes

In discussion with school district transportation officials, it was noted that certain intersections have been deemed by the school board to be less desirable for students to cross, and that transportation would be provided for students living beyond these crossing locations. These locations currently include roundabouts and crosswalks across six or more contiguous lanes (e.g. Rochester Road at Tienken Road). These crossing locations were removed from the potential walking routes and the maps were updated accordingly. These variances have been consistently applied across school types.

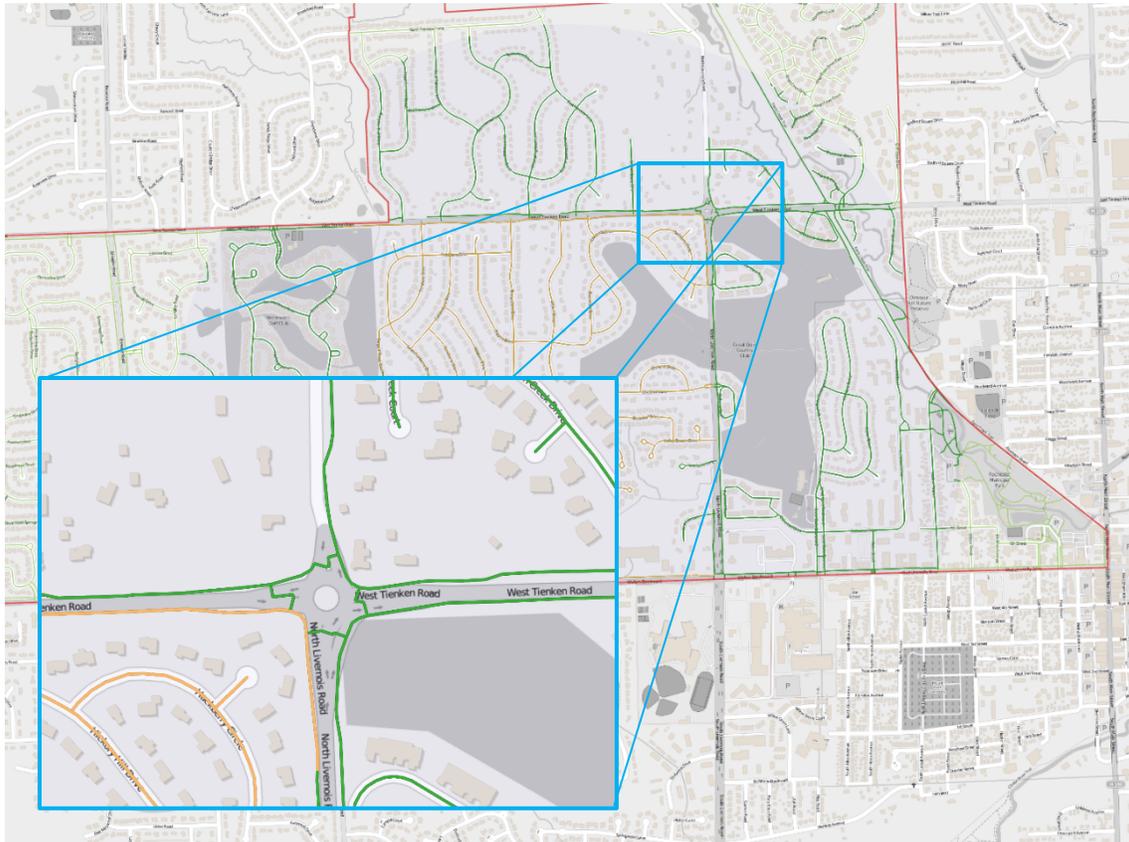


Figure 7 – One-mile Isodistant routes with variances applied

The final maps for each school indicate the roadways and sidewalks which are potentially walkable (light green), those within the one- or 1.5-mile radius, but greater than the allowable distance **along the route** (blue), those within the one- or 1.5-mile radius but not otherwise connected to the walking network (dark green), and the walkable routes colored from red (closest) to yellow (furthest) that are within the allowable walking distance.

These maps were provided back to RCSD as large-format (24"x36") PDF maps, as well as electronic shapefile data for integration into RCSD GIS applications. Copies of these maps are included as an appendix to this report in 11"x17" size. Insets of each map (the walking areas) are included in the following sections.

4.3 Findings

Discussions regarding each of the reviewed schools follow. The schools are discussed in alphabetical order.

4.3.1 Adams High School



Figure 8 – Adams High Walking Map (1.5 Mile)

All students north of Dutton Road are bussed.

Two locations along the southern boundary (in the Waltonshire and Foxboro subdivisions) of the school area were identified where students are currently walking a distance greater than 1.5 miles. These locations are being reviewed for inclusion in the RCSD bus routes.

4.3.2 Brewster Elementary

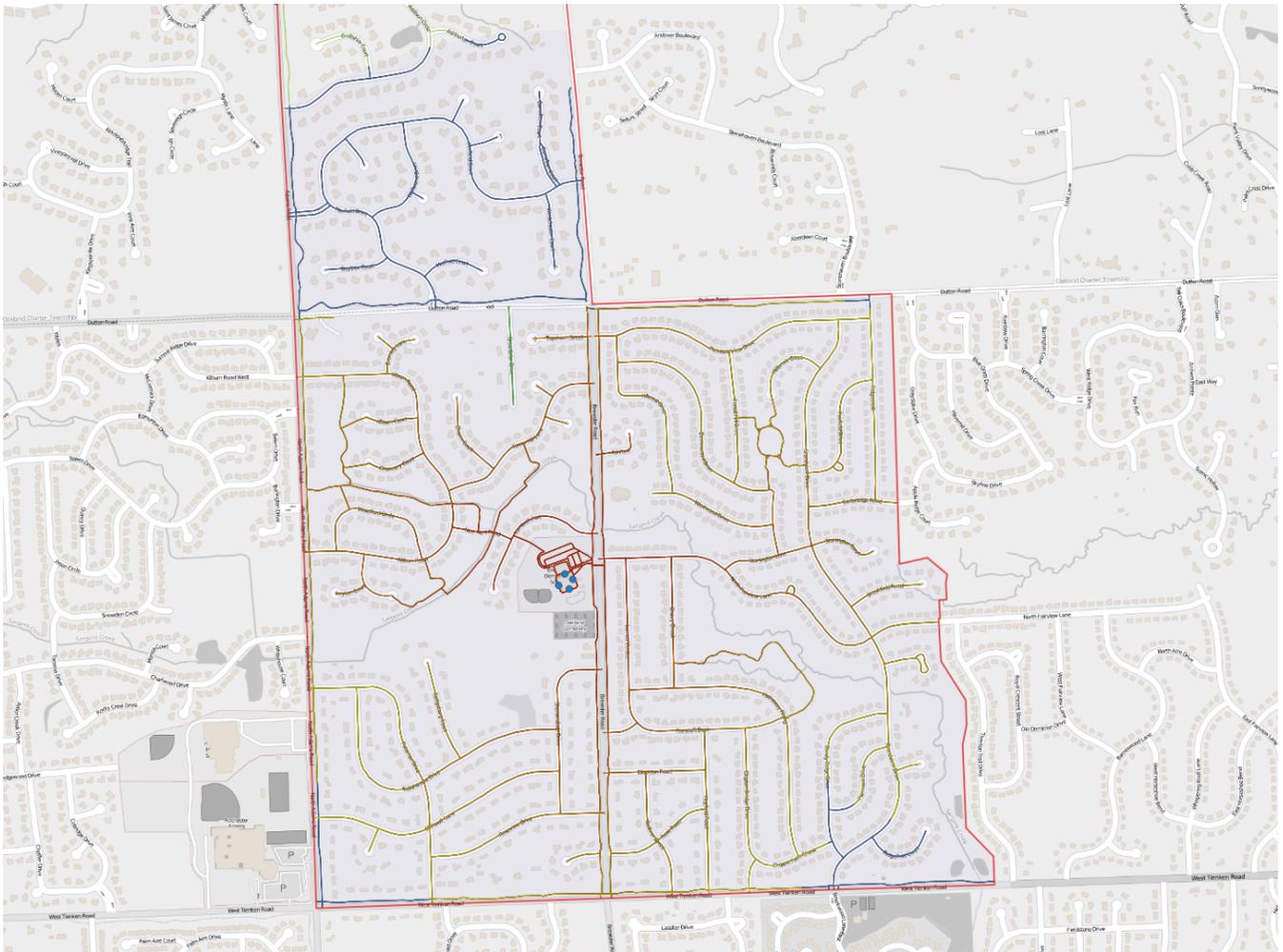


Figure 9 – Brewster Elementary Walking Map (1.0 Mile)

All students north of Dutton Road are provided transportation.

Houses along West Tienken Road and Adams Road in the southwestern corner of the school boundary were identified as requiring transportation however they were currently considered by the district to be within the walking limits. These houses do not currently have students in residence, however, these portions of the streets will be included in bus maps for potential future students.

In the southeastern portion of the school boundary portions of the Chichester East subdivision were identified as requiring bussing. The exact limits (based on bus stop locations) will be identified by school transportation officials and the walking and bus route maps will be updated.

4.3.3 Brooklands Elementary

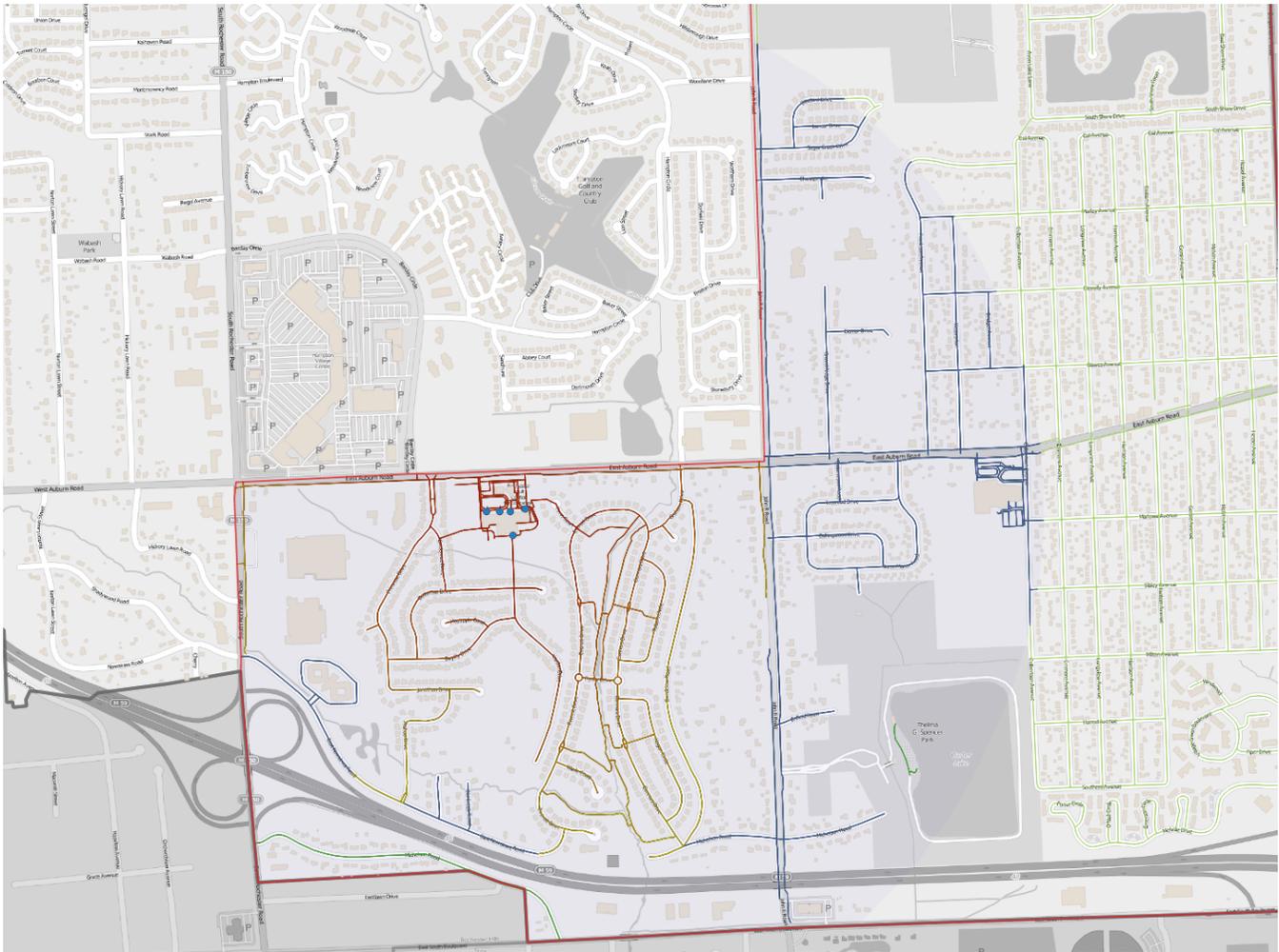


Figure 10 – Brooklands Elementary Walking Map (1.0 Mile)

All students east of John R Road and south of M-59 are provided transportation.

Certain houses along East Nawakwa Road and the west side of John R road are provided transportation because of the distance along the walking network.

Completing the sidewalk along the west side of John R Road (south of East Auburn Road) would allow several more homes to be able to walk to school, but many homes would still be at a greater distance than allowable.

4.3.4 Delta Kelly Elementary

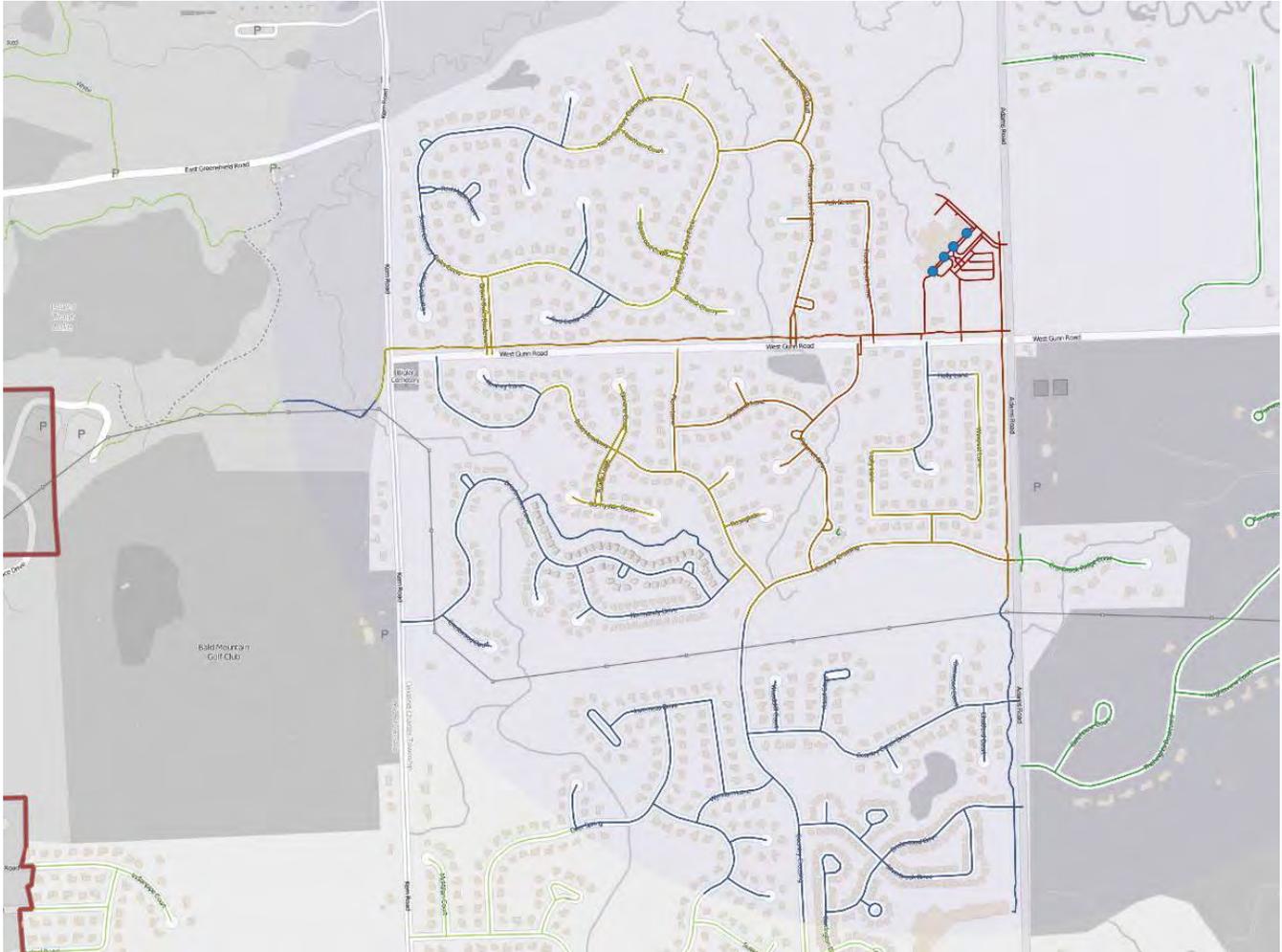


Figure 11 – Delta Kelly Elementary Walking Map (1.0 Mile)

Marked crosswalks are present along West Gunn on the west leg of the Adams Road intersection and at Calumet Drive.

Kierney Lane and the west portion of Bold Meadows are outside the walker boundary, which may necessitate additional busing.

A portion of Holly Lane and Wincrest Lane, while just across West Gunn Road from the school, require busing because there are no sidewalk facilities along West Gunn Road between the crosswalks at Calumet Drive and Adams Road. Walking south through the subdivision to Country Crossing, and either west to Calumet Drive or east to Adams Road, would require a walk greater than one mile in length.

4.3.5 Hamlin Elementary

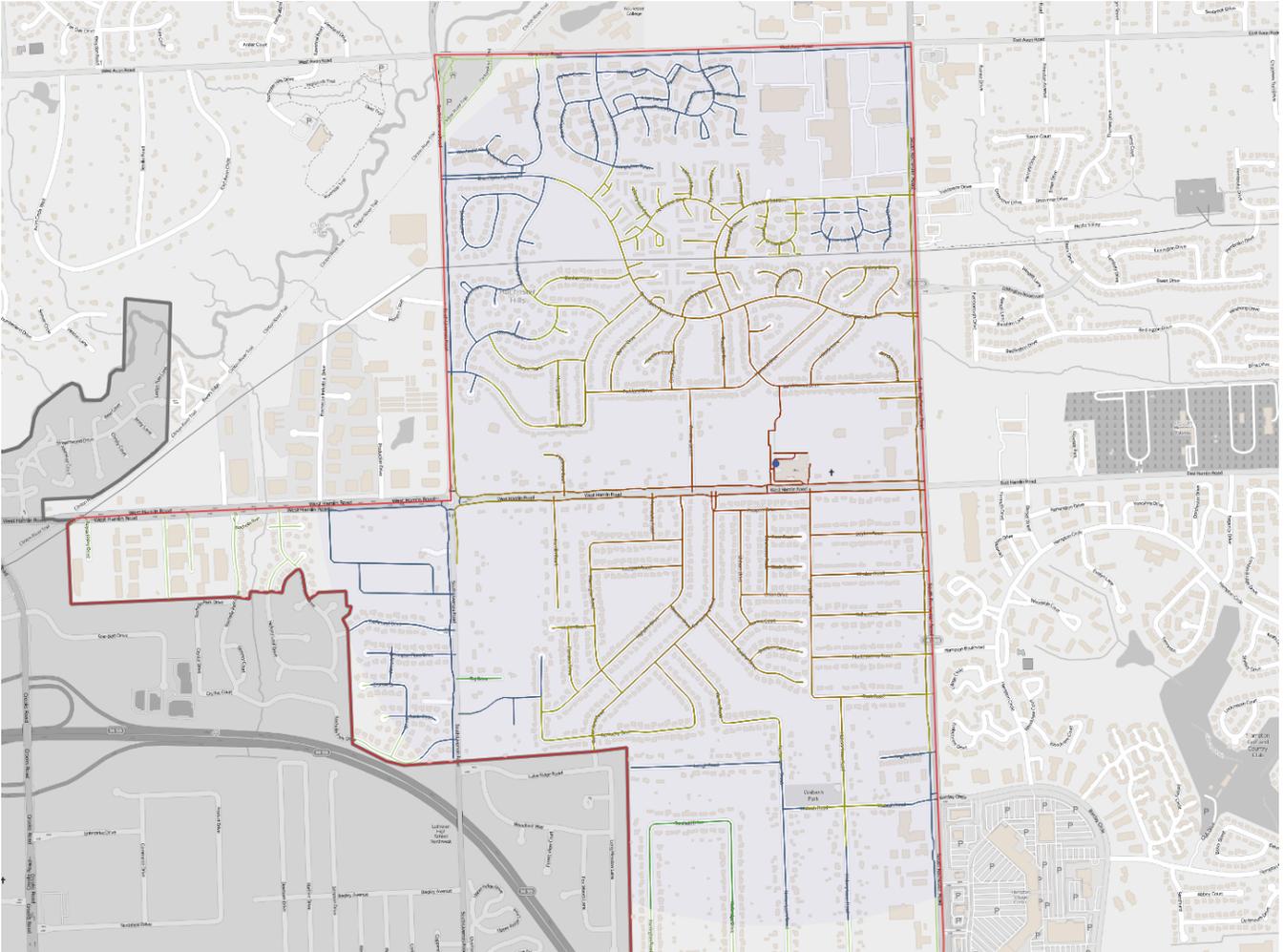


Figure 12 – Hamlin Elementary Walking Map (1.0 Mile)

All students west of Livernois are bussed.

A crossing guard aides the crossing of West Hamlin Road at Hamlin Elementary School.

Some of the homes located in the Meadowfield development (on Meadow Lane Circle and Meadow Wood Drive) and on the West side of Avon Hills Village are outside the walker boundary, which may necessitate additional busing.

4.3.6 Hampton Elementary

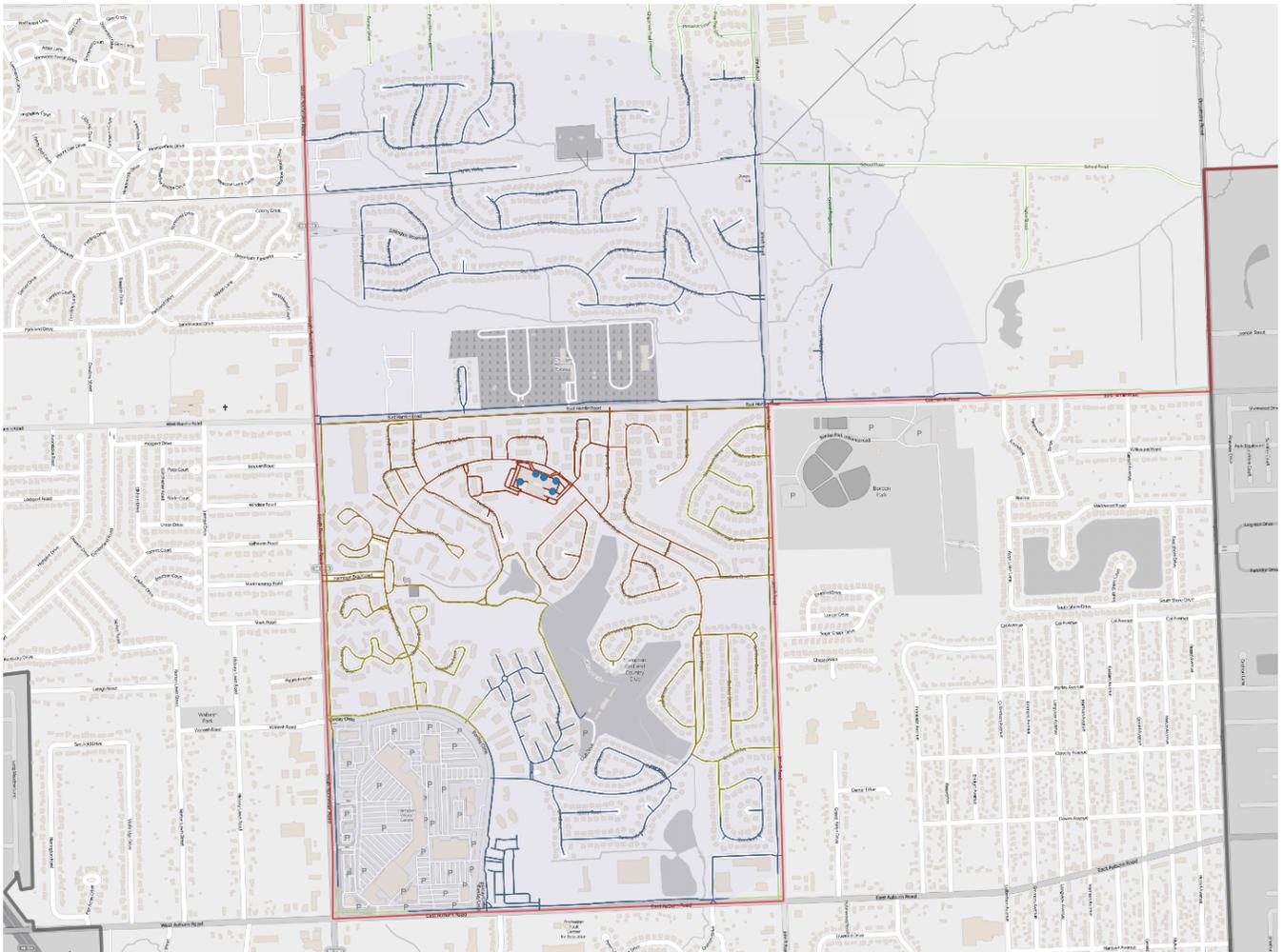


Figure 13 – Hampton Elementary Walking Map (1.0 Mile)

All students north of East Hamlin Road are bussed.

4.3.7 Hart Middle

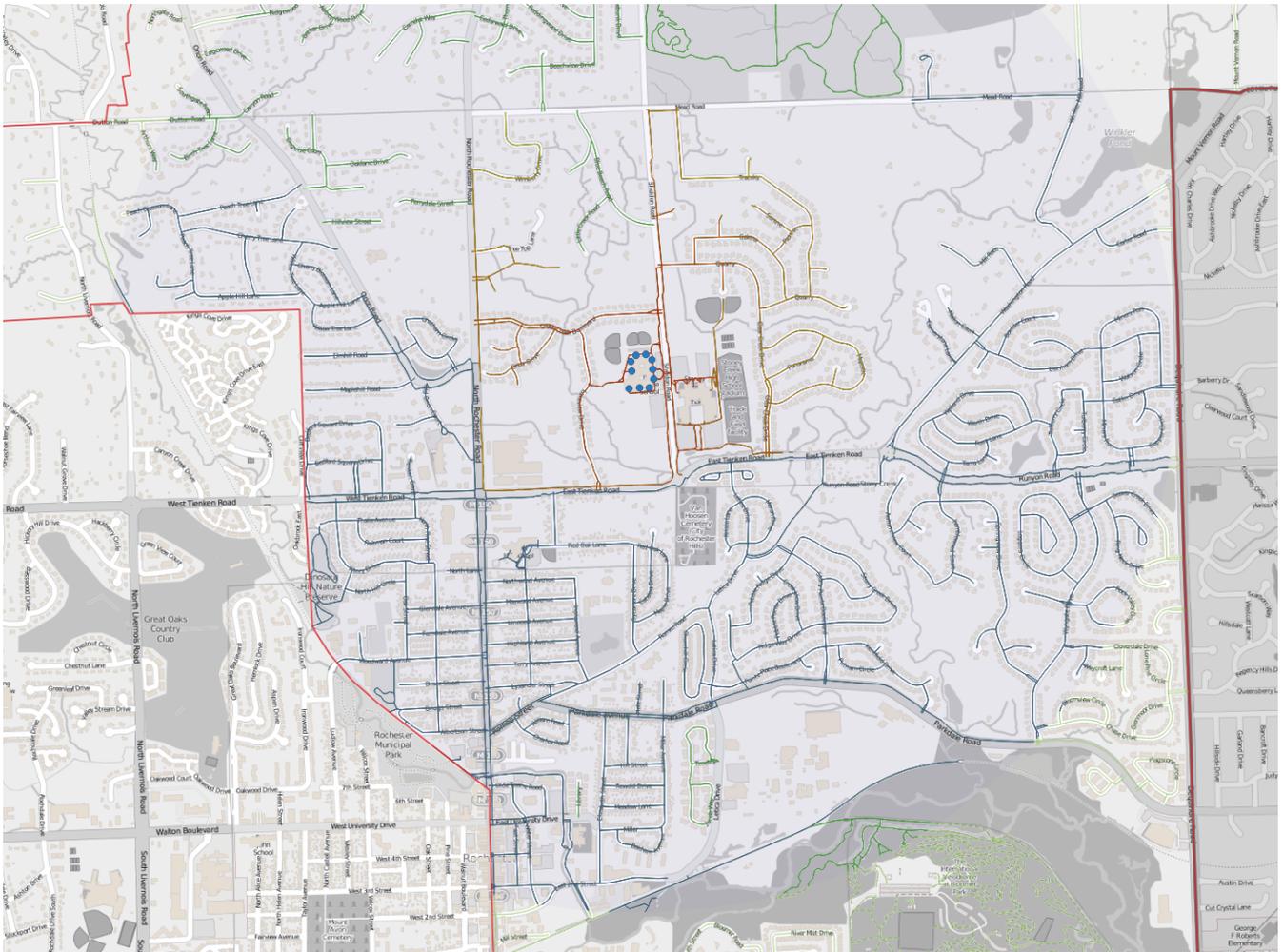


Figure 14 – Hart Middle Walking Map (1.5 Mile)

All students west of Rochester Road and South of Tienken Road are bused.

The path between Tranquility Court and the athletic fields – while gated – does not remove any houses from the current walking area.

4.3.8 Long Meadow Elementary

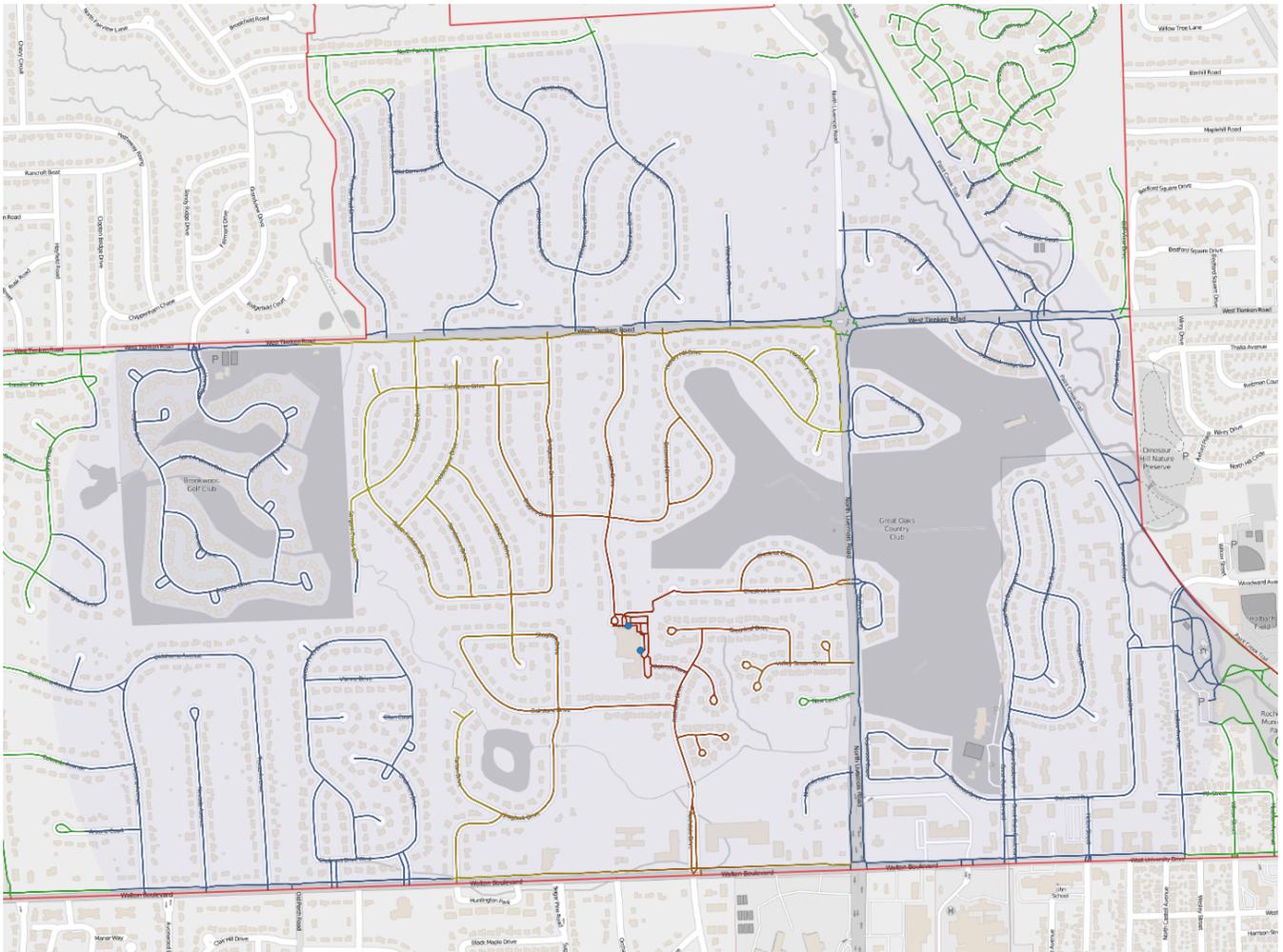


Figure 15 – Long Meadow Elementary Walking Map (1.0 Mile)

All students north of Tienken Road and east of Livernois Road are bussed.

Completing the sidewalk along the west side of Livernois from New Life Lane north to Valley Stream Drive would enable all current and future residents on New Life Lane and New Love Lane to walk to Long Meadow Elementary. Currently, residents along New Love Lane are not connected to the sidewalk network, and residents along New Life Lane would need to walk south along Livernois, west along Walton, and through the subdivision via Rockdale Drive, though this route is too long of an allowable distance.

4.3.9 McGregor Elementary

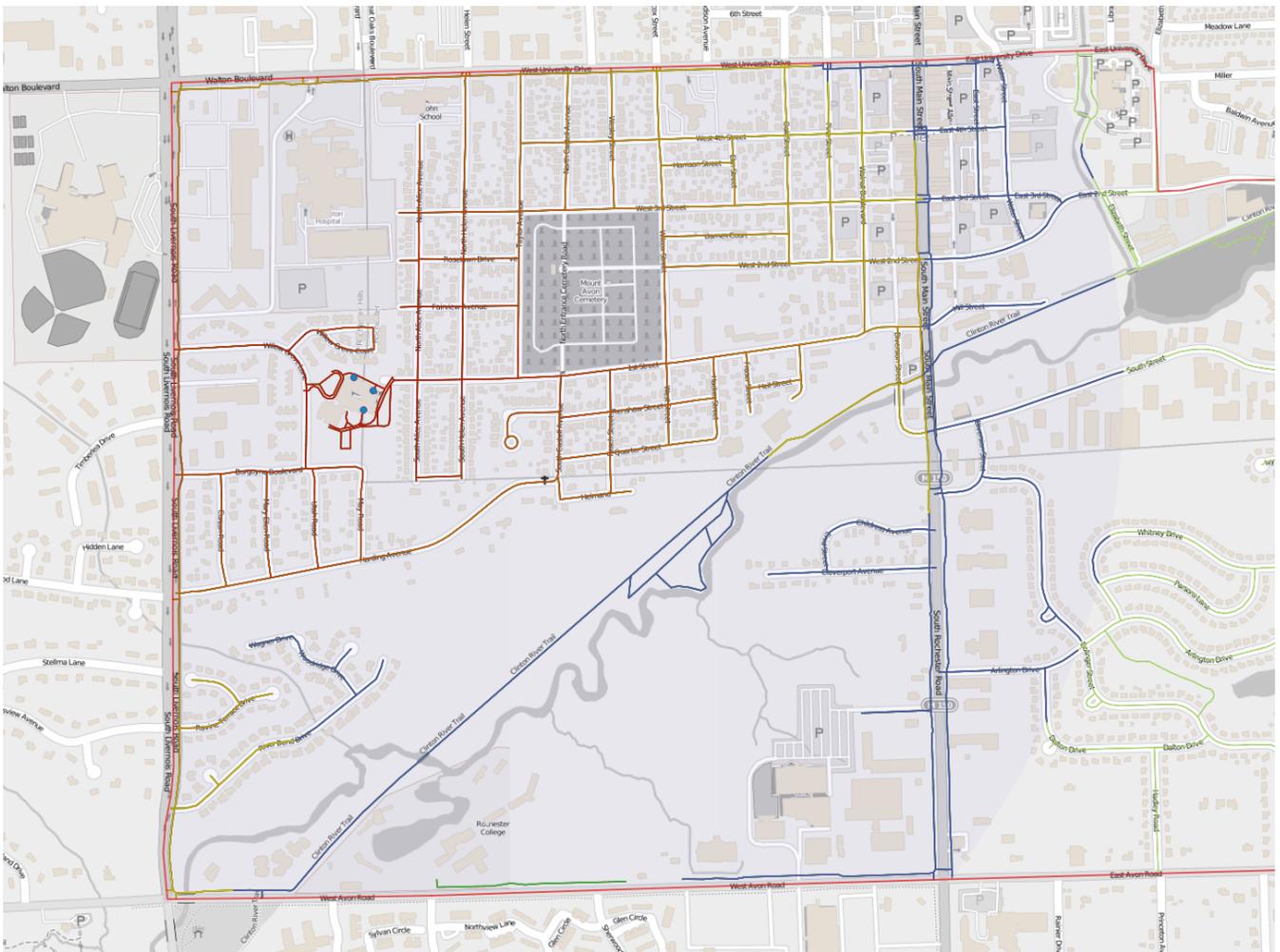


Figure 16 – McGregor Elementary Walking Map (1.0 Mile)

All students east of Main Street are bussed.

Some of the homes located on River Bend Drive (off Livernois north of Avon) are located inside the walker boundary, but currently receive busing. Busing began when there were gaps in the walking path. The area continued to receive busing after the gap in the walking path had been closed. The walking and bussing maps will be updated based on the current walkable network distance.

4.3.10 Meadow Brook Elementary

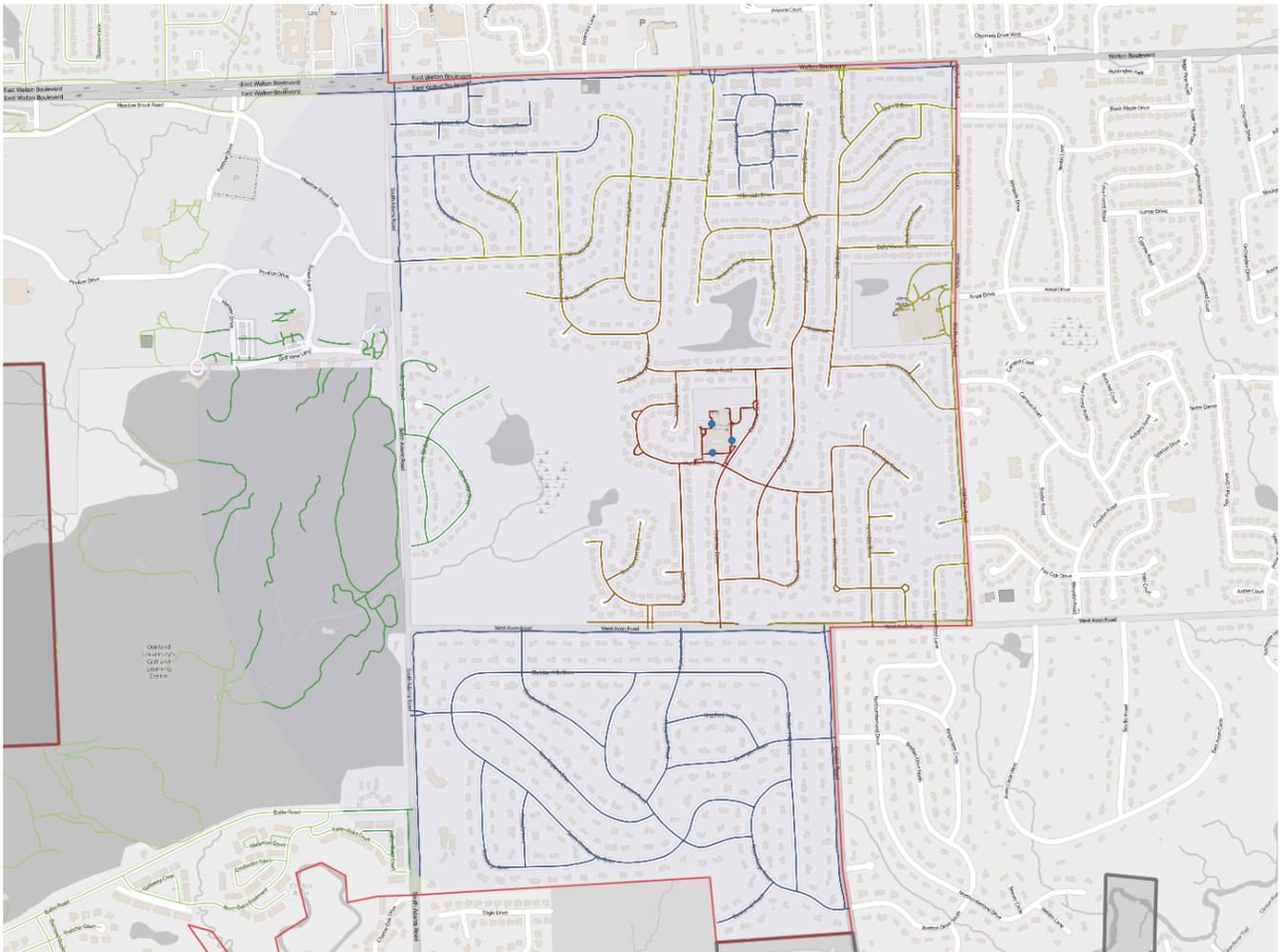


Figure 17 – Meadow Brook Elementary Walking Map (1.0 Mile)

All students south of Avon Road are currently bussed.

A single house on the north side of Avon Road (east of Castlebar Drive) does not currently have sidewalk access. While houses to the east do have an available route to walk, completing this gap in the sidewalk network would shorten the required walking distance for other homes to the east.

4.3.11 Musson Elementary

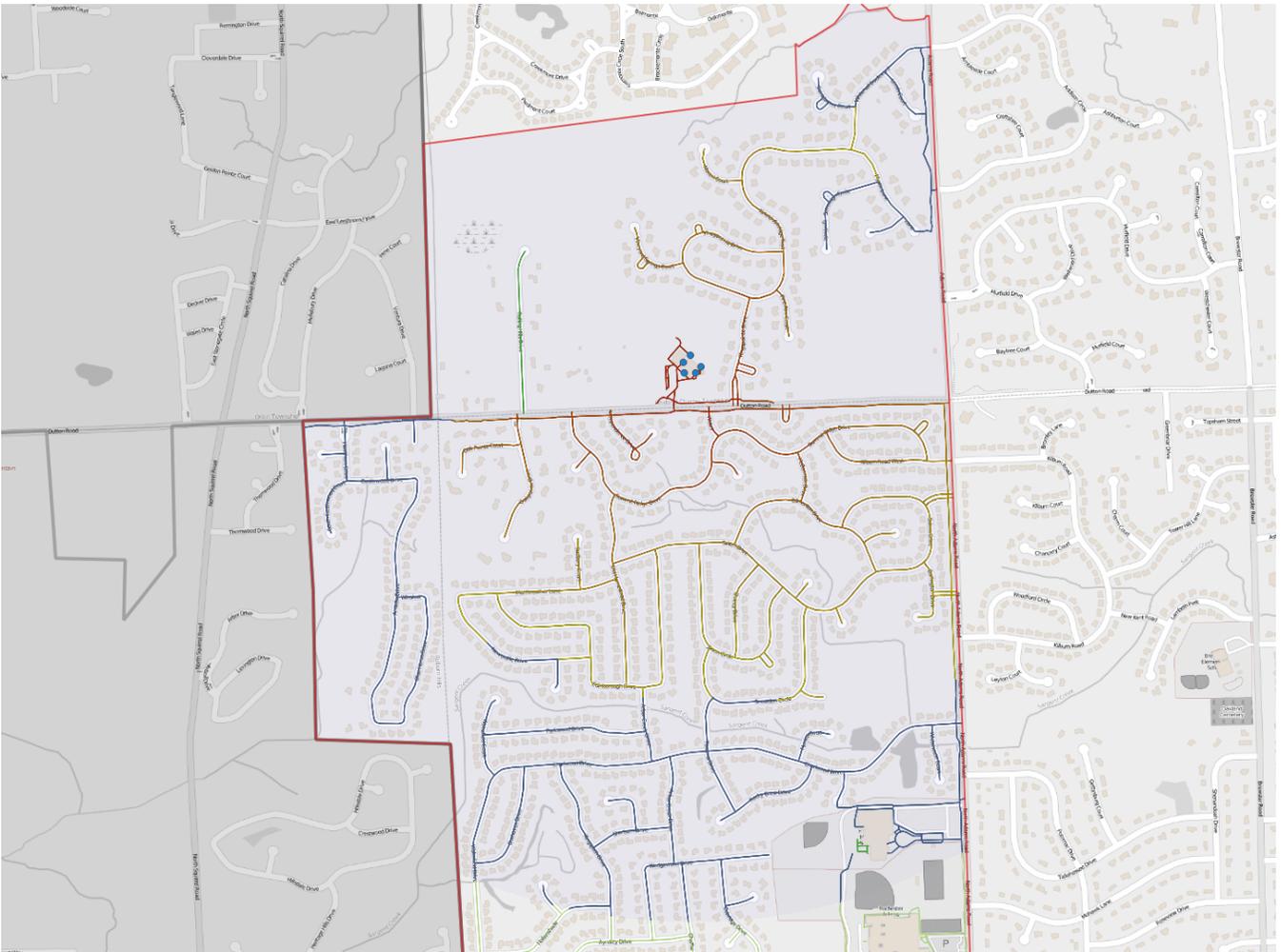


Figure 18 – Musson Elementary Walking Map (1.0 Mile)

We are in the process of analyzing the bussing/walking boundaries for the Kingsridge Reserve subdivision in the northeast part of the attendance area. The walking and bussing maps will be updated to reflect the available network.

Portions of Newcastle Drive, Newcastle Court, Snowden Circle, and Tacoma Drive were identified as requiring bussing. The transportation routes will be changed to provide bussing for these homes.

Completing a paved path between Kingspointe Drive and the back of Musson Elementary would allow the current homes in the area north and east of the elementary school to walk.

4.3.12 North Hill Elementary

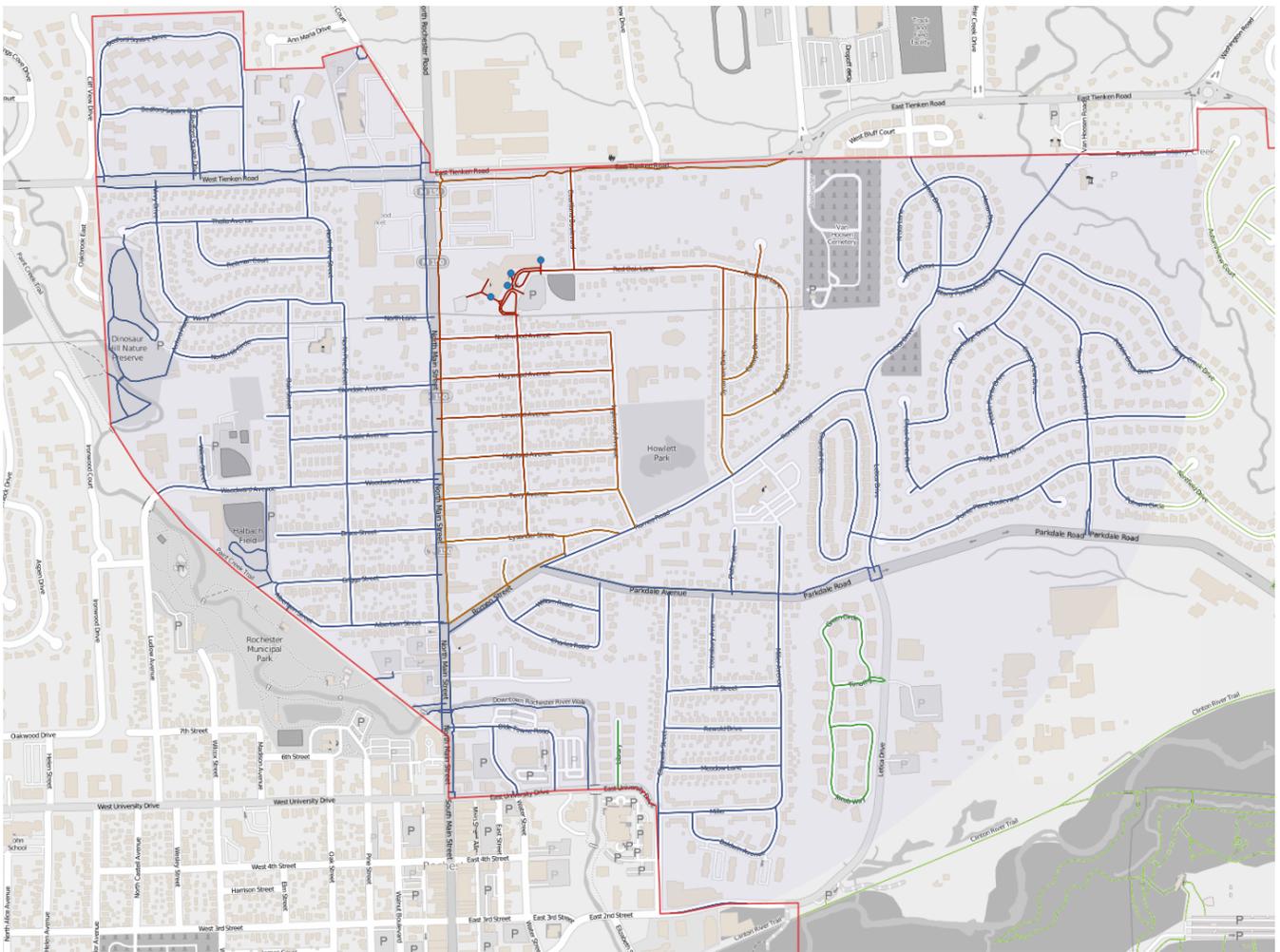


Figure 19 – North Hill Elementary Walking Map (1.0 Mile)

All students north of Tienken and west of Main street are currently bussed.

4.3.13 Reuther Middle

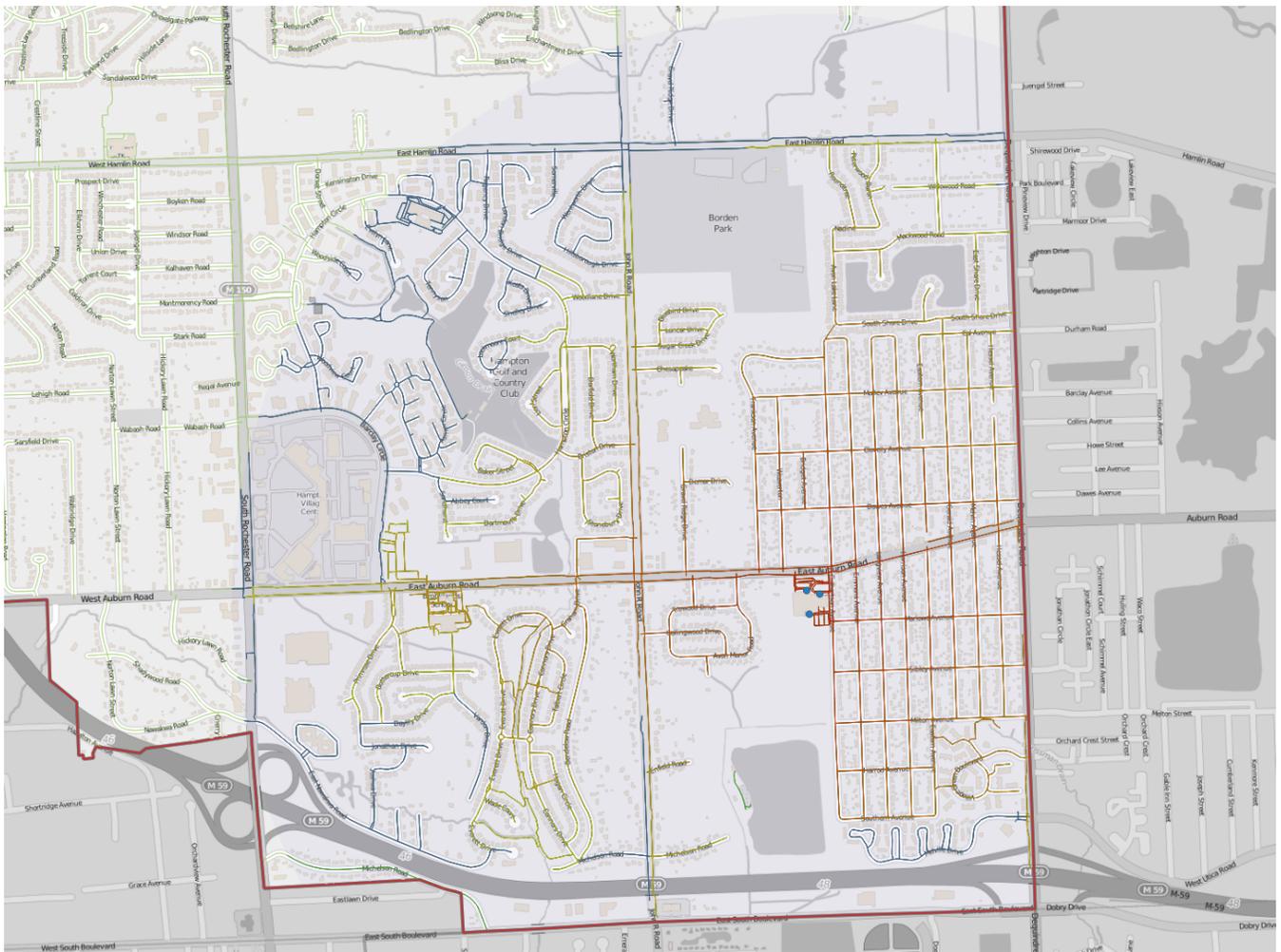


Figure 20 – Reuther Middle Walking Map (1.5 Mile)

A portion of Vardon Drive was identified to be requiring transportation. This will be added to the bus routes.

Completing the sidewalk along the west side of John R Road south of Auburn Road would reduce the need for busses along John R.

4.3.14 Rochester High

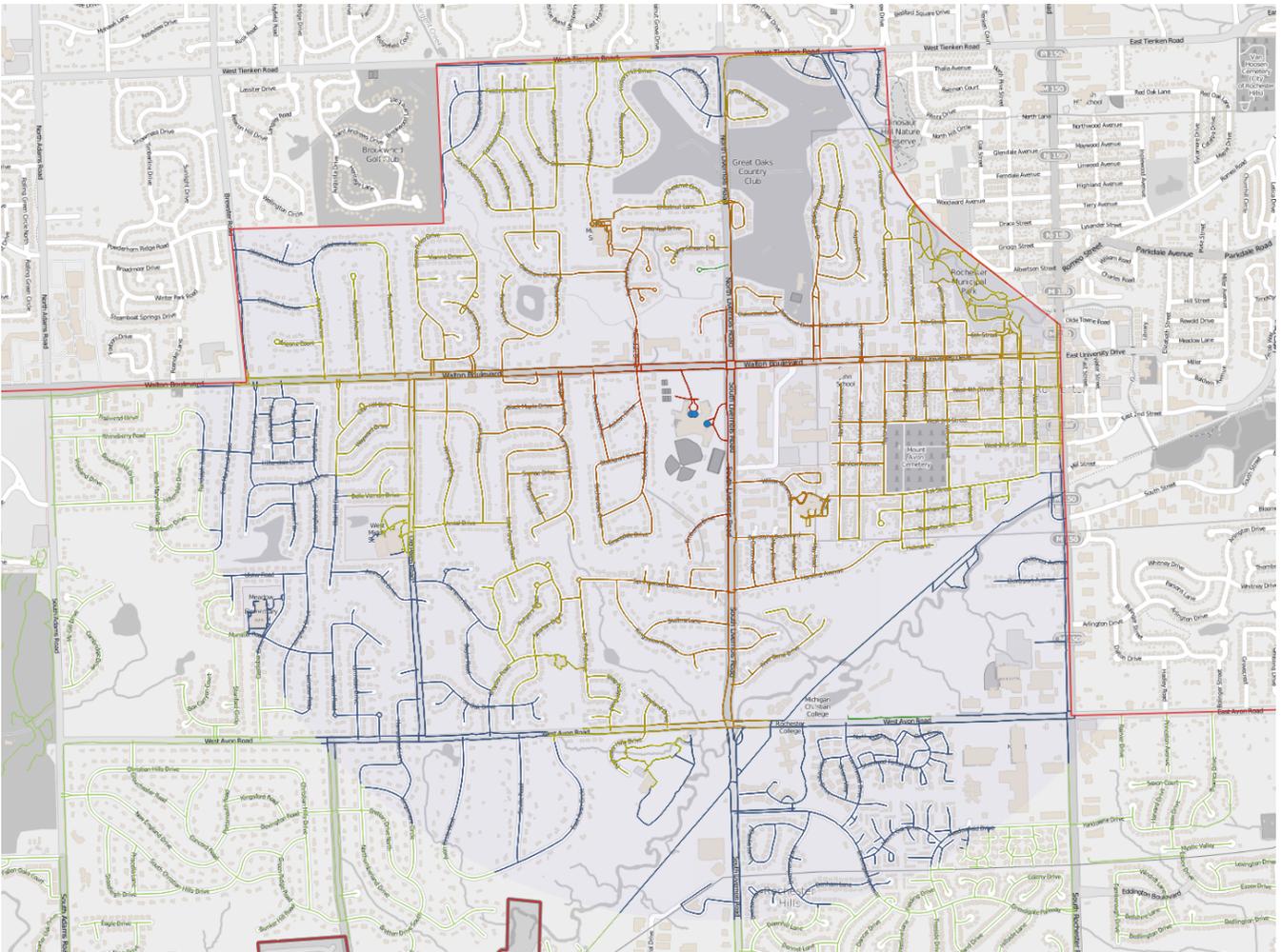


Figure 21 – Rochester High Walking Map (1.5 Mile)

As part of this study, it was noted that a sidewalk or path was not currently installed along the north driveway from the high school to Walton Boulevard.

4.3.15 Stoney Creek High

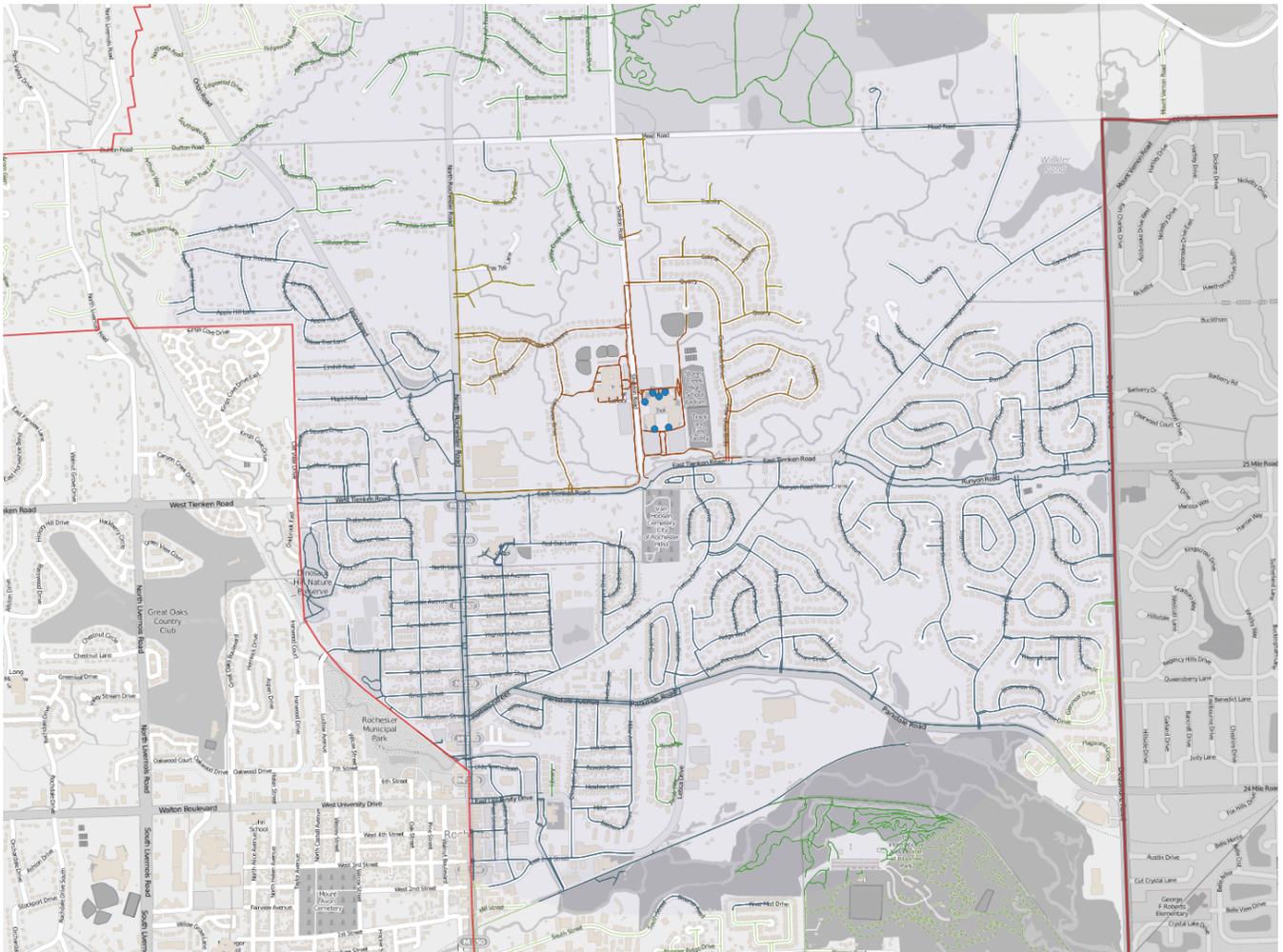


Figure 22 – Stoney Creek High Walking Map (1.5 Mile)

All students west of Rochester Road and south of Tienken Road are provided bus transportation.

Constructing sidewalk along the south side of Mead Road between Wimberly Drive and Blue Beech Road, and continuing the sidewalk along the west side of Sheldon Road from Clear Creek Drive north to Blue Beech Road, would grant all the current homes between Rochester Road and Sheldon Road, from Tienken Road to Mead Road, a walkable network.

The path between Tranquility Court and the athletic fields – while gated – does not remove any houses from the current walking area.

4.3.16 University Hills Elementary

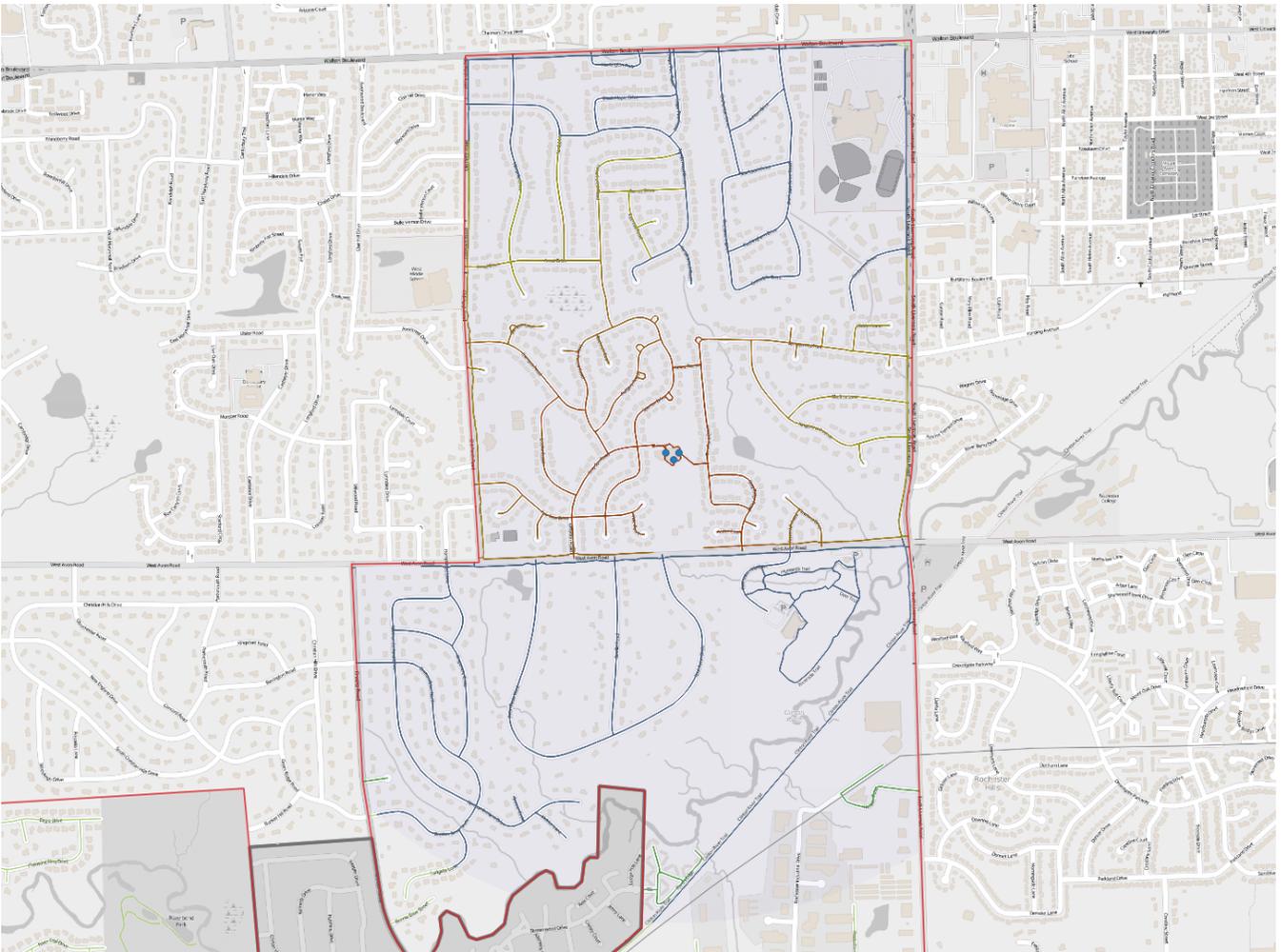


Figure 23 – University Hills Elementary Walking Map (1.0 Mile)

All students south of Avon Road are currently bussed.

A crossing guard and crosswalk at Croydon Road along Avon Road would allow the homes along Avon Circle West, Avon Circle East, and Seville Road access to the walking network.

4.3.17 Van Hoosen Middle



Figure 24 – Van Hoosen Middle Walking Map (1.5 Mile)

All students north of Dutton Road are currently bussed.

Three locations were identified where students are currently walking, but should be provided transportation; one is the southwestern-most portion of the service area (north of Raintree Drive and west of Firewood Drive). The second is Lakewood Drive (east of Firewood Drive). The final area includes portions of Oak Pointe Drive and Oak Pointe Court, south of Dutton Road.

If the pathway behind Adams High and Van Hoosen Middle Schools is completed, and an access point is available at the southwestern corner of the middle school, then all students south of Tienken Road would have access to the walking network.

4.3.18 West Middle



Figure 25 – West Middle Walking Map (1.5 Mile)

Currently all students are bussed north of Walton Boulevard.

Signalized crosswalks are available along the west and south legs of the intersection at Crooks Road and West Avon Road. A large portion of the Christian Hills subdivision has access to the walking network to West Middle School using these facilities, and should be considered for walking to reduce the need for bus transportation.

Completing the sidewalk gap along the north side of Avon Road west of Crooks Road would allow all the homes along Stanford Circle and most homes along Box Canyon Court to walk to school.

A crosswalk and crossing guard are located on Old Perch Road in front of the school.

5 Recommendations

5.1 Walking Networks

Gaps and Suggestions for Improvement

Gaps are identified - suggestions for improvements to walking facilities (e.g. sidewalk gaps, mid-block crossings) and how that would impact the walking maps. Those specific to each school are discussed previously.

Recommendations

Review the walking maps on a defined schedule

Setting a defined period to review and potentially update the walking maps would communicate a commitment to recognizing the continual changes that are helping to grow the community. As roads are paved, widened, or constructed, there will be impacts to the potential road and trail network that may necessitate changing school boundaries or transportation plans. A three- to five-year schedule may balance the effort required to review the routes with the benefits of enlarging the walking network.

If new school facilities are opened, then the areas of all schools affected (the new school and those schools that are losing part of their student population) should be reviewed for impacts.

Confirm a policy for unpaved (gravel) roads

Many gravel roads are largely residential and only differ from other subdivision streets in that they are not paved, even if they are classified as residential. Defining whether gravel roads are considered walkable or require transportation may need to be codified.

Develop a process for adding new streets/subdivisions

As new developments are added to the district, the potential for new students increases. Advanced notice of these developments would help the RCSD identify the appropriate routes to facilitate these students walking to school, as well as identify the need for changes to bussing and the addition of school bus stops. Consider a Memorandum of Understanding with the relevant Planning Departments to automatically be notified of potential developments that may necessitate additional students.

Reconsider the prohibition regarding crossing at roundabouts

As roundabouts have become more ubiquitous in our transportation network, consideration should be given to modifying or removing the prohibition against crossing the legs of these intersections. As refuge islands separate the traffic streams, traffic is only able to approach the crossing location from one direction at a time, allowing students and other walkers the ability to cross portions of the road independently. Single-lane roundabouts (where only one lane of traffic would need to be crossed at a time), or multi-lane roundabouts where pedestrian signals are installed, could be evaluated to allow for crossing. Removing these impediments would potentially allow a greater number of students to walk to school, and decrease the need to provide alternate transportation.

Identify opportunities to infill walking facilities

Improvements to walking facilities have a broad benefit, providing safe locations to exercise, as well as providing means to walk to school with the commensurate reduction in required bussing. Paths on school property (e.g. the back of Musson Elementary School or along the west service road behind Van Hoosen Middle and Rochester Adams High Schools) may be directly under the influence of the school district. Working with City and Township officials to complete other gaps in the sidewalk and trail network (e.g. along the west side of Livernois Road between New Love Lane and Valley Stream Drive) would also facilitate walking. These engineering improvements may be eligible for other grants and funding sources such as Safe Routes to School.

5.2 Policies

The RCSD may wish to adopt some of the language contained in other districts' policies or more clearly note that transportation is *not* guaranteed by law, e.g. "School districts are NOT required by law to transport regular education children. Michigan Compiled Law (MCL) 380.1321 outlines the obligations of the school district IF its board of education elects to provide transportation."

The Troy School District states when elementary students would not be expected to walk the full mile allowable: "The Board has determined that elementary students residing one mile or more from their school of attendance or who must cross a main road (i.e., Rochester Road, Square Lake, Livernois, etc.) are eligible for bus transportation, if provided." This could be extended to include the other variations the RCSD applies including crossing at roundabouts, and not crossing large (e.g. six-lane) roadways.

Chippewa Valley Schools' change to eligibility is also clearly stated ("normally ninety (90) days written notice). CVS also discusses when bus stops will be established for new subdivision developments. The District may want to consider a shorter time frame for temporary changes due to construction, etc.

Farmington Public Schools states how they will measure the distances (routing software, aerial maps, and lastly a wheel) which may help clarify the measurement calculation. GIS software is also an excellent tool for measuring distances between two points.

Some typos are noted on the RCSD School Bus Transportation General Information document²⁴:

- The heading at the top of the page currently says "SCHOL BUS TRANSPORTATION"; and,
- The ninth item is not grammatically correct, "Pick-up and delivery at a baby-sitter is determined by local policy" may be better stated as "Pick-up and delivery *by* a baby-sitter is determined by local policy [emphasis added]".

²⁴ <http://media.rochester.k12.mi.us/download/64553>

6 Summary

This study reviewed the transportation policies of the Rochester Community School District, other associated legislation, federal programs, state guidelines, and the policies of over a dozen other school districts in Macomb, Oakland, and Wayne Counties similar in size and/or geography to the RCSD.

The review of each school's walk/bike limits considered the available roadways, sidewalks, non-motorized paths and trails, marked and signalized crosswalks, and locations where a crossing guard was designated to aid at crossings.

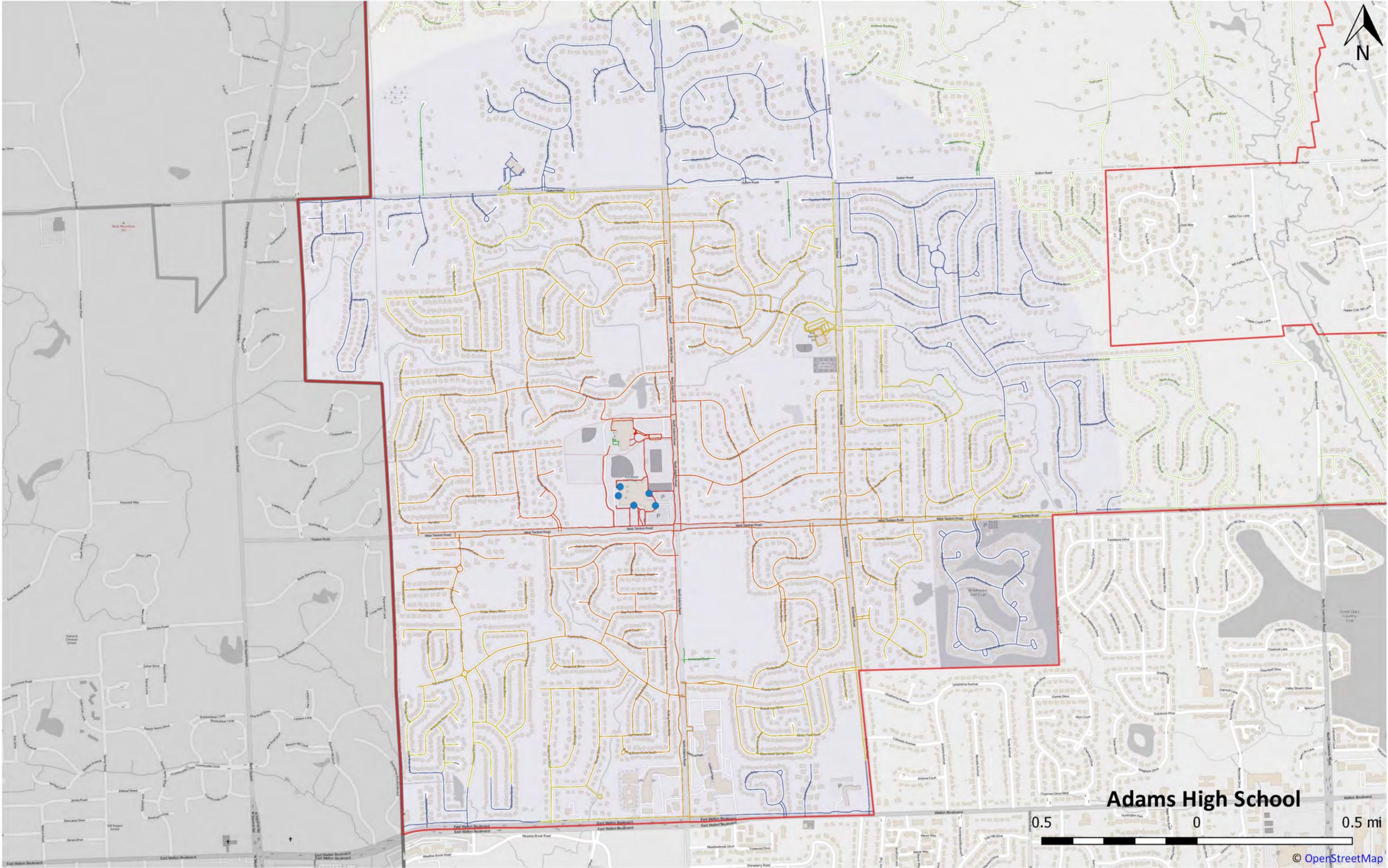
While the transportation policies are generally consistent with other districts reviewed, recommendations for language which may help minimize questions or confusion have been suggested.

The current walking boundaries are generally consistent with the associated legislation, and variations have been consistently applied across school classifications – with the outcome of providing transportation to areas that are otherwise within a potential walking area.

For some school facilities, areas were identified that would warrant transportation that were not currently serviced by bus stops. Other locations were identified where homes are provided transportation but do not have current impediments to contiguous walking routes. These are being reviewed for changes to bus routes and to ensure that all eligible students are provided transportation in accordance with RCSD policies.

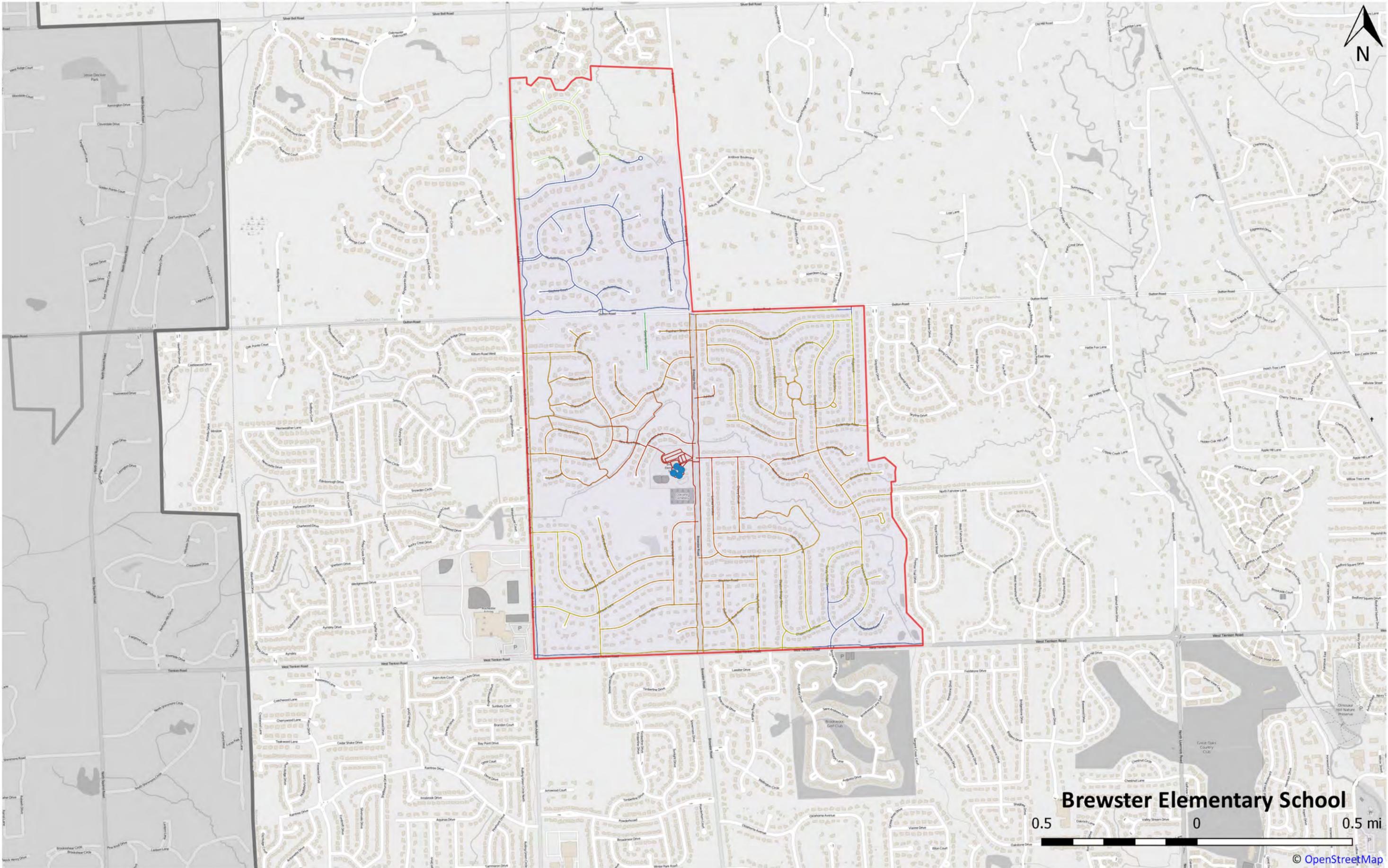
Recommendations for improvements to non-motorized facilities which would improve connectivity are noted, along with suggestions regarding future review and changes to the walking networks.

Appendices



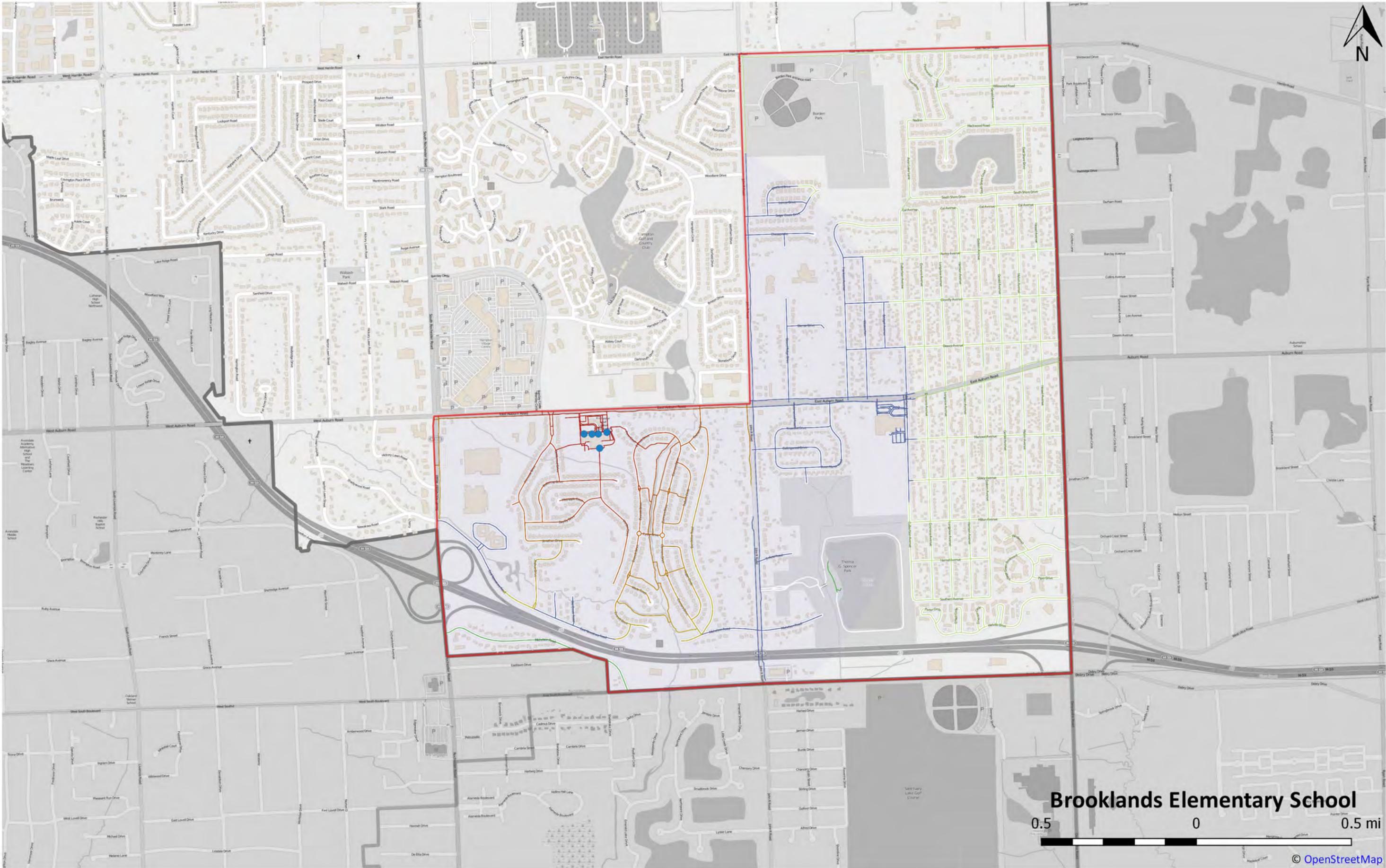
Adams High School





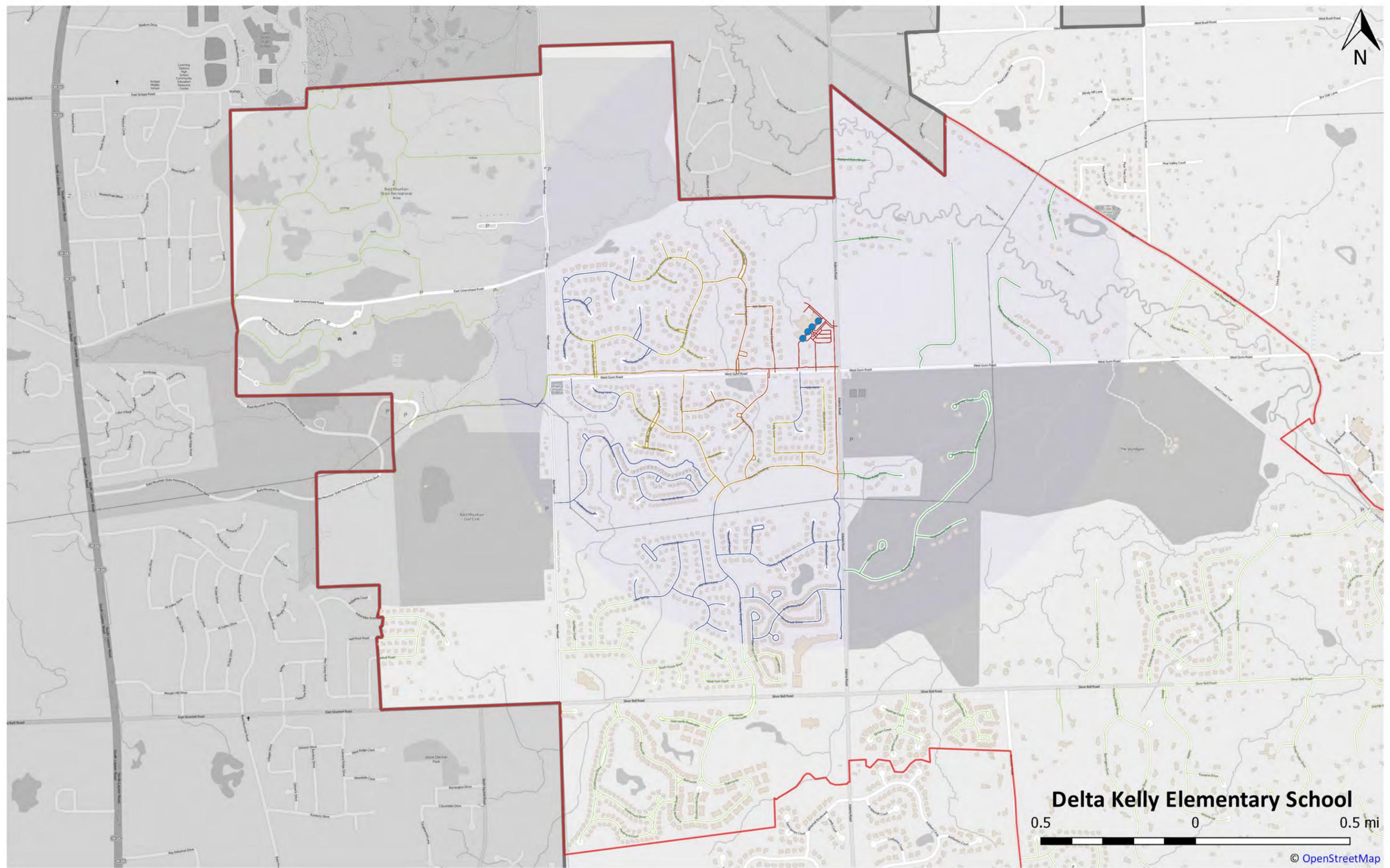
Brewster Elementary School

0.5 0 0.5 mi



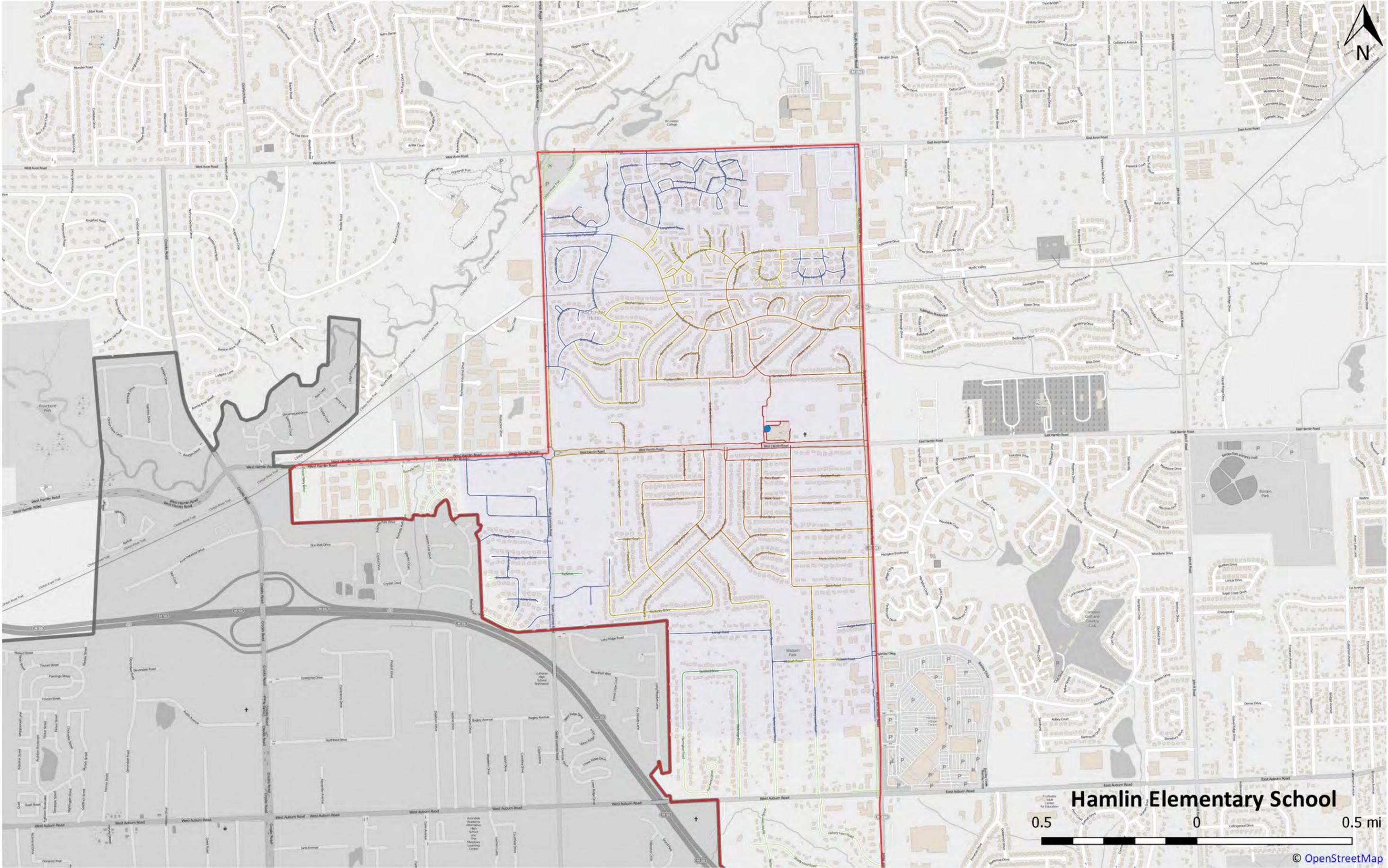
Brooklands Elementary School

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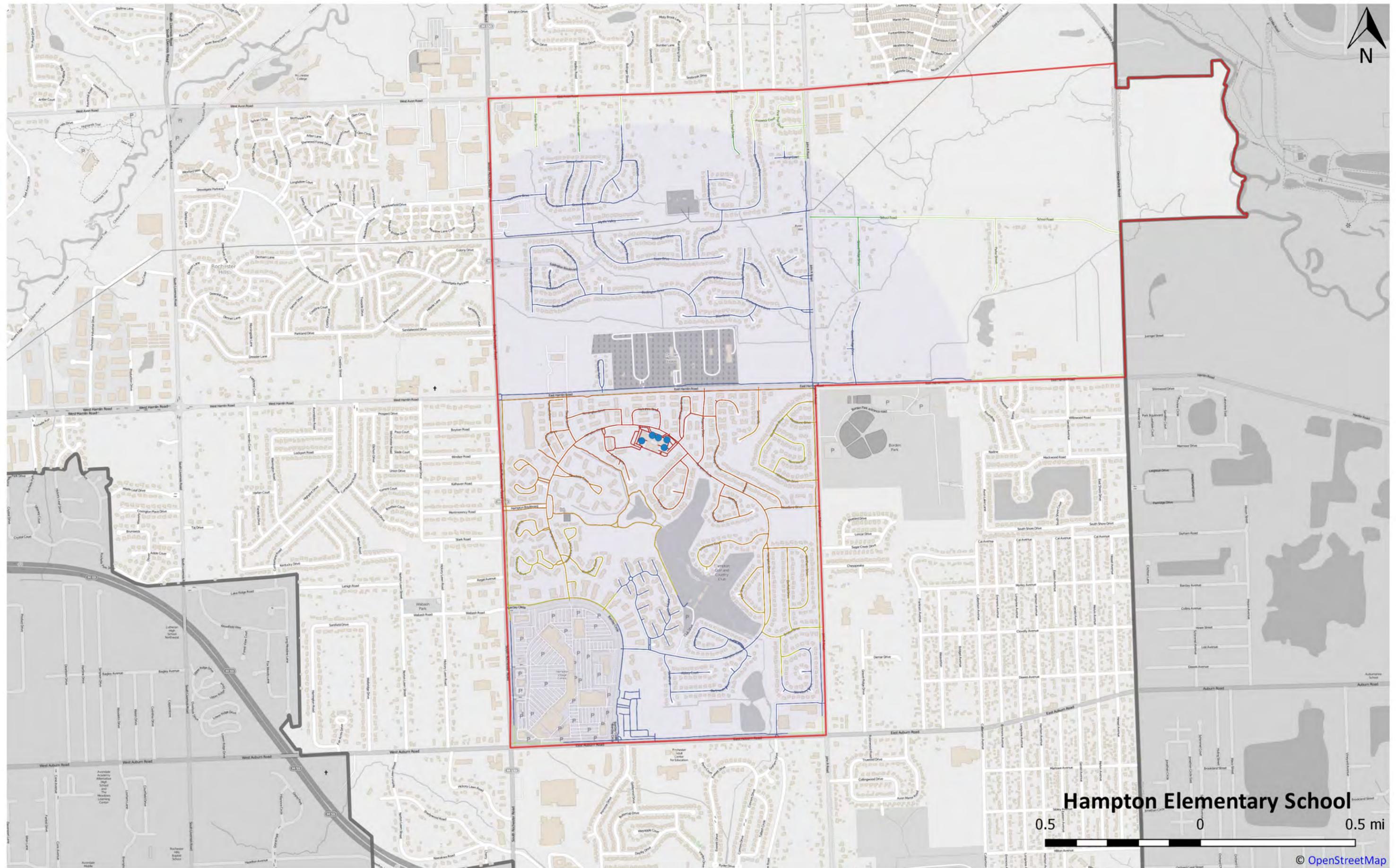
Delta Kelly Elementary School





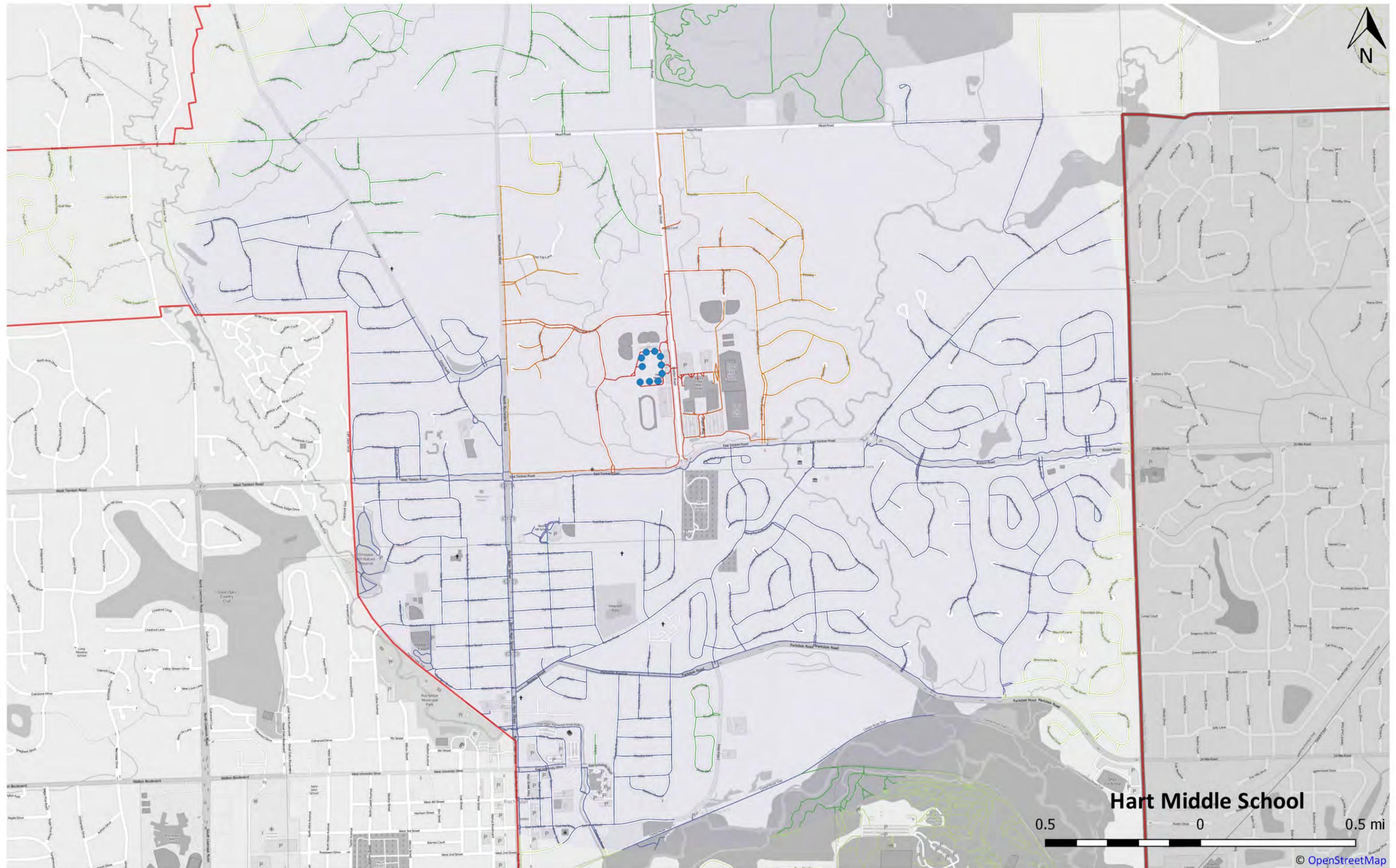
Hamlin Elementary School





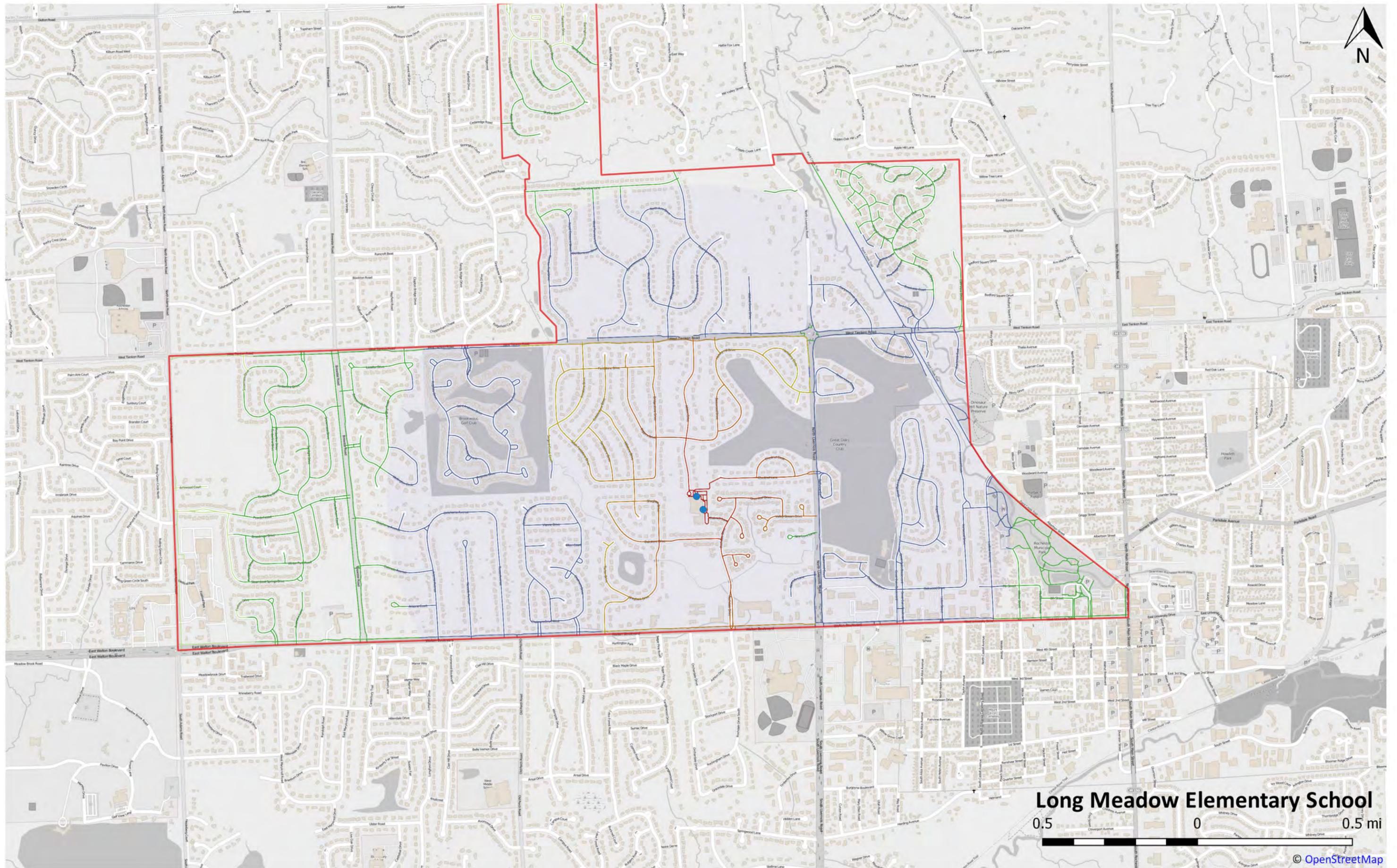
Hampton Elementary School



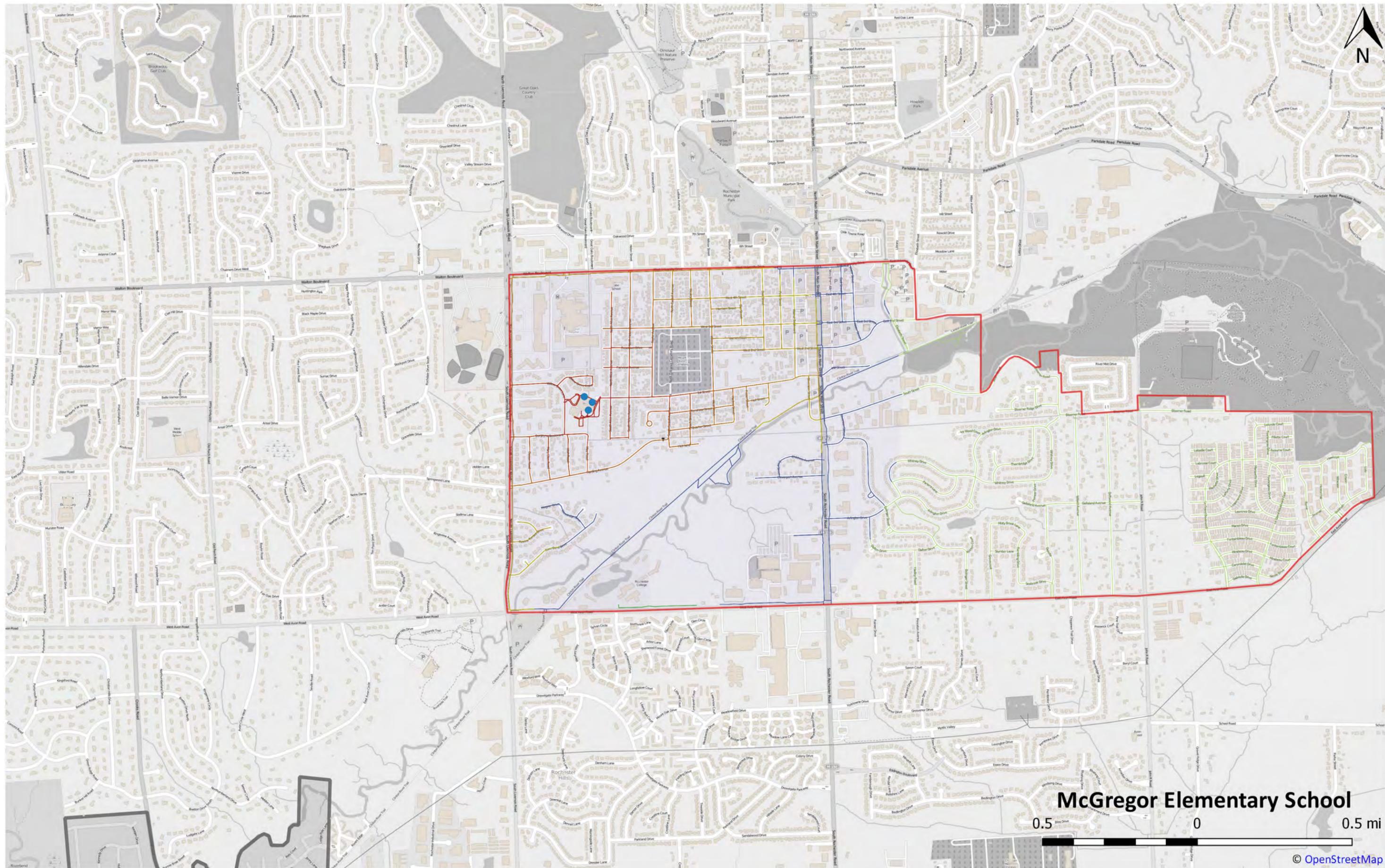


Hart Middle School



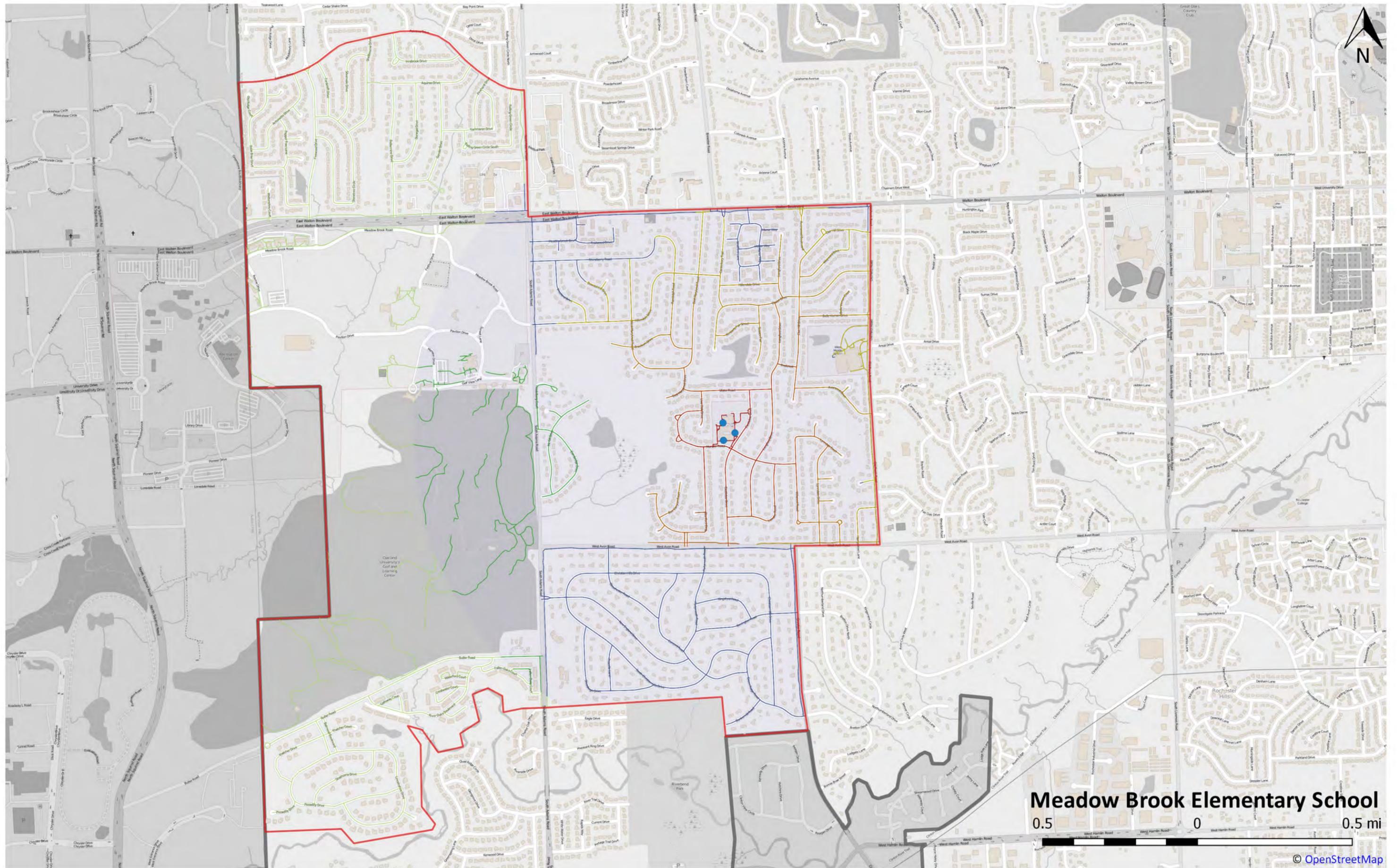


Long Meadow Elementary School
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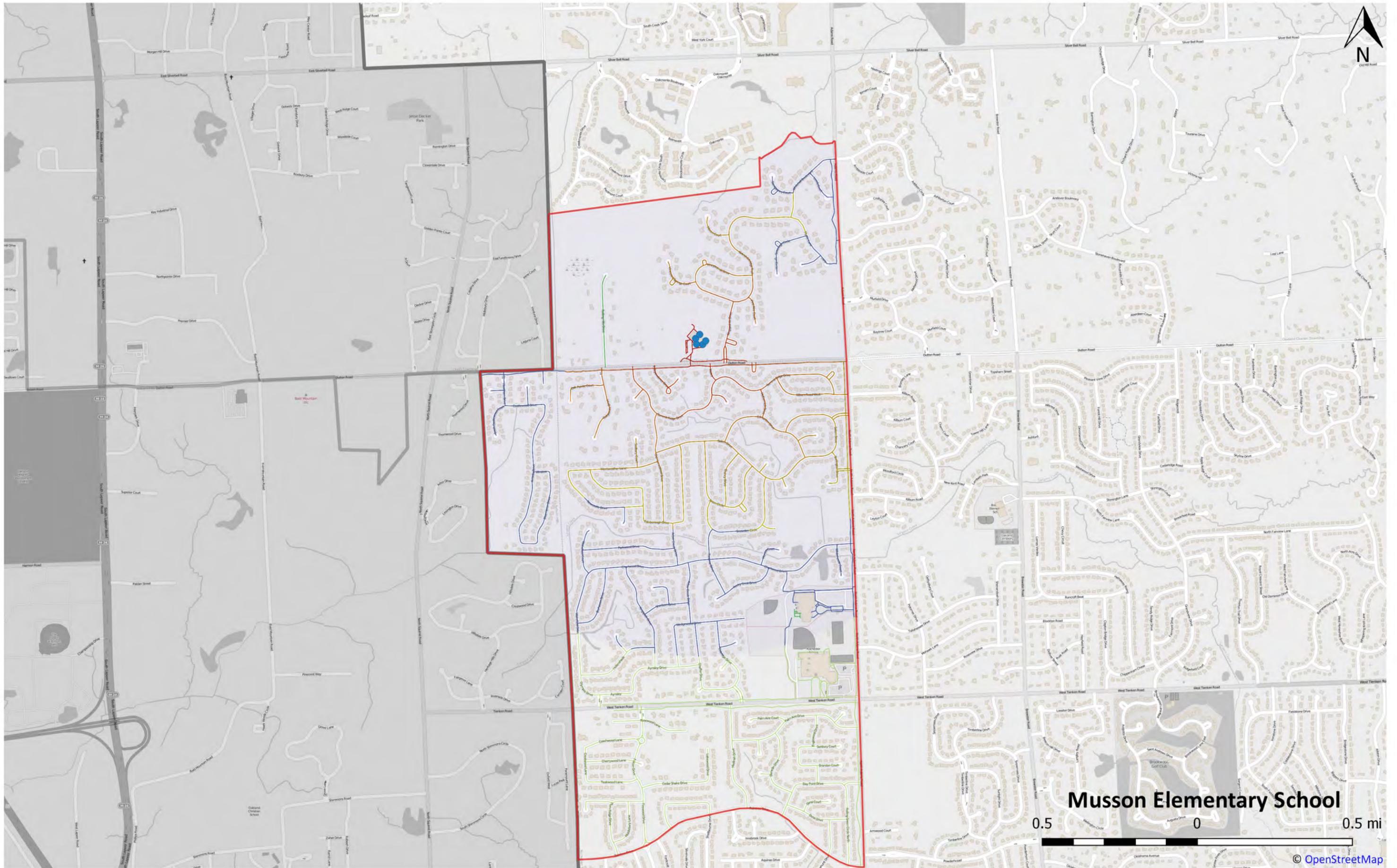


McGregor Elementary School

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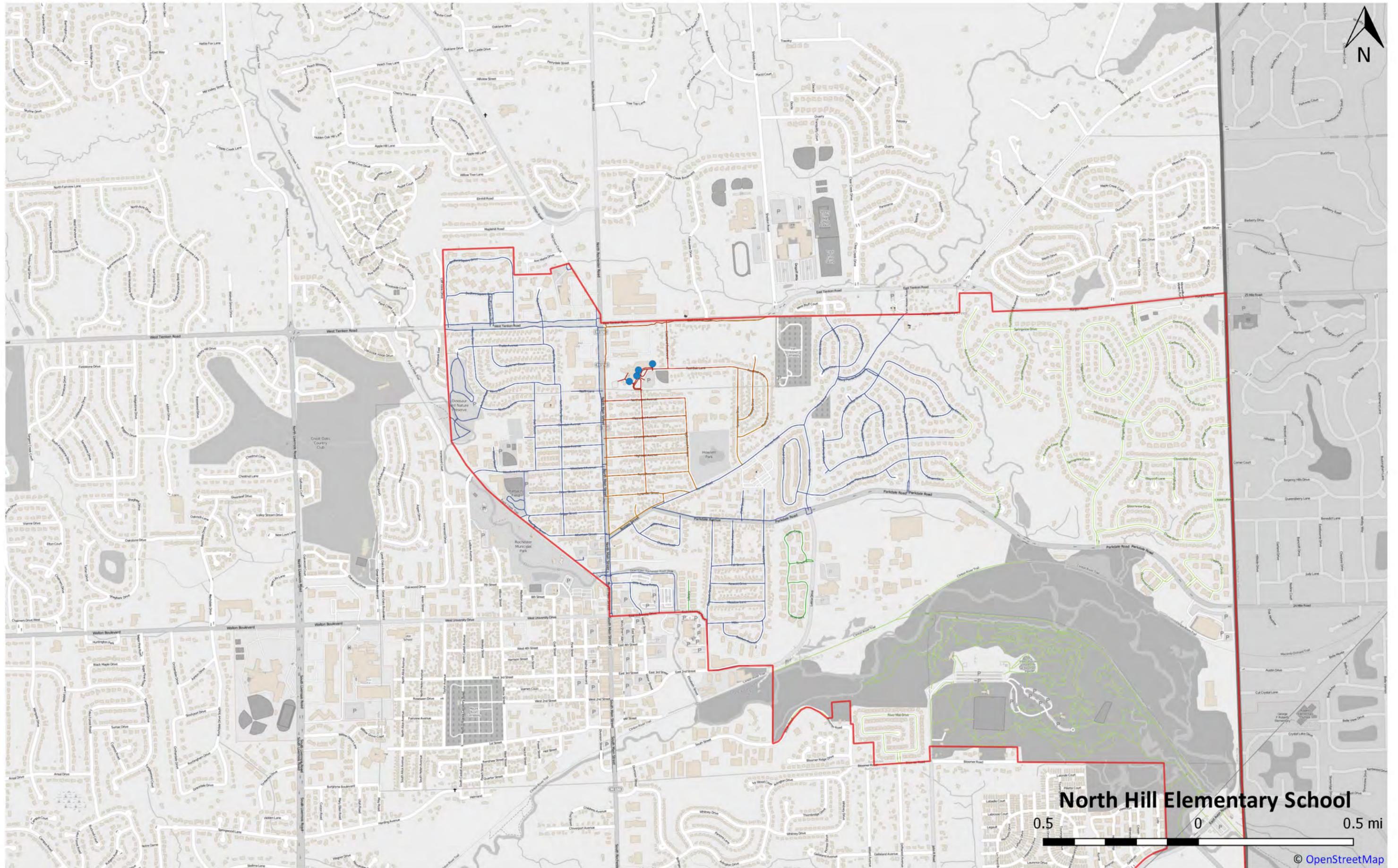


Meadow Brook Elementary School
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Musson Elementary School

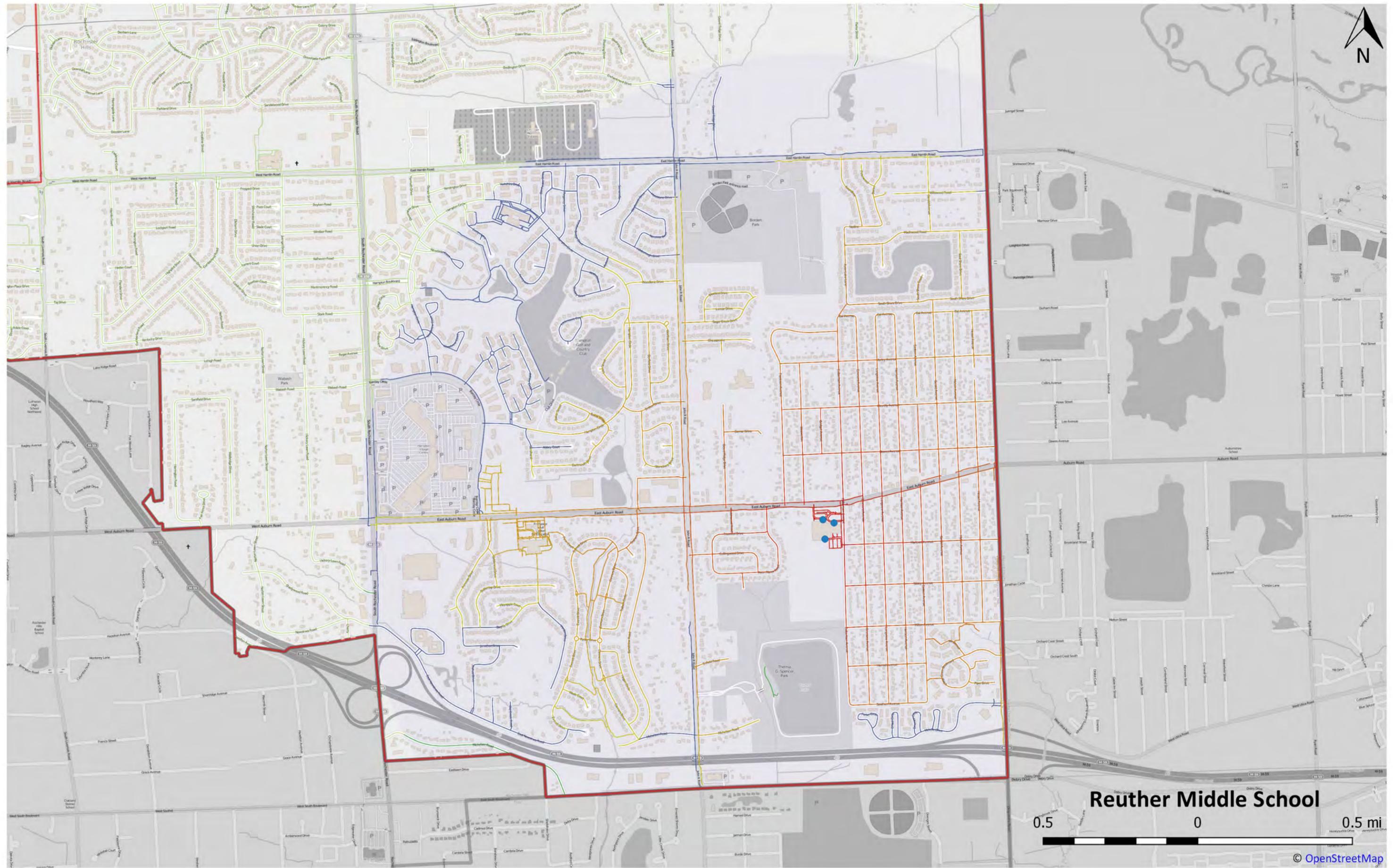
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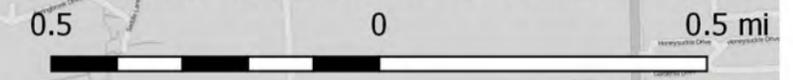
North Hill Elementary School

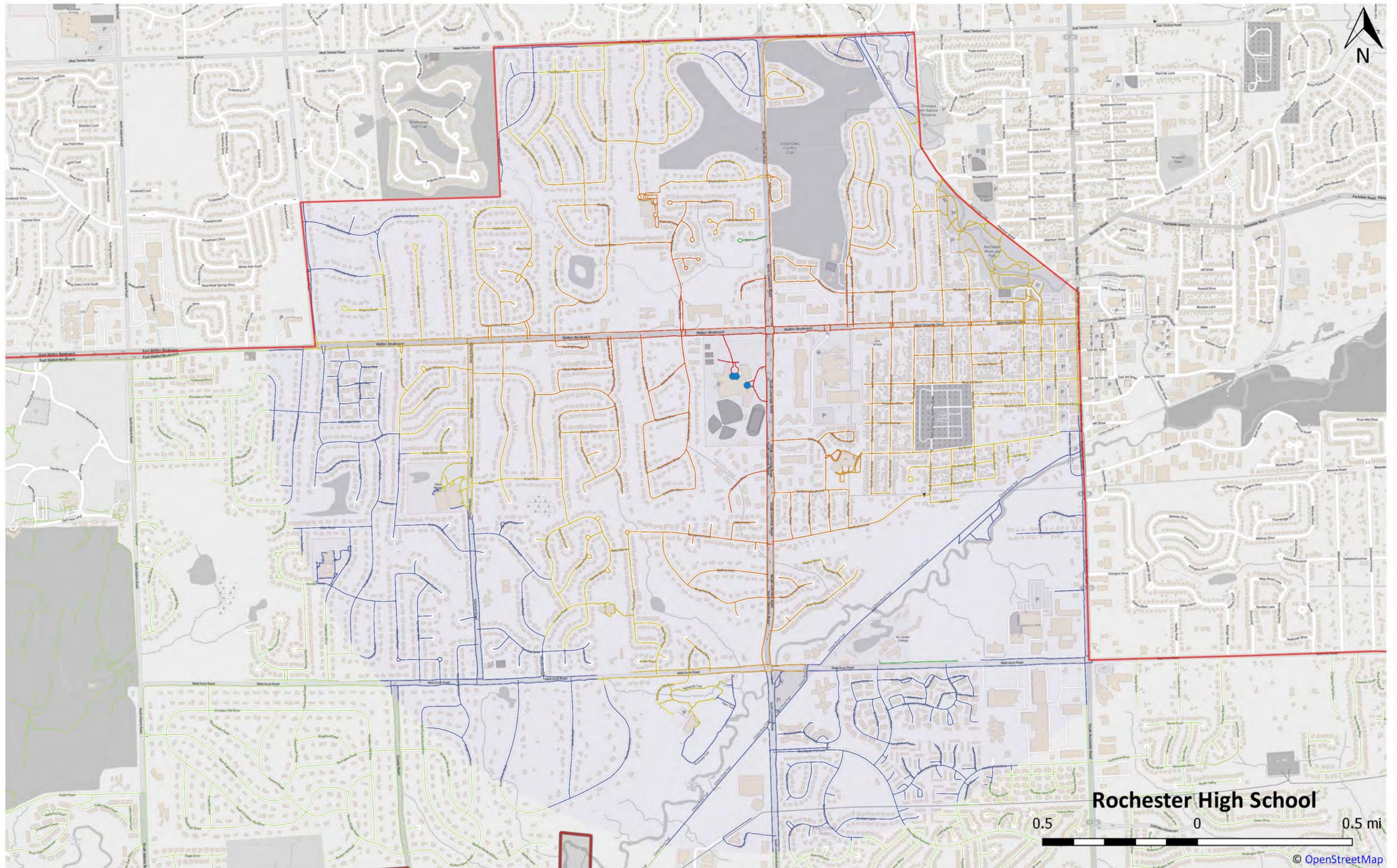
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© OpenStreetMap



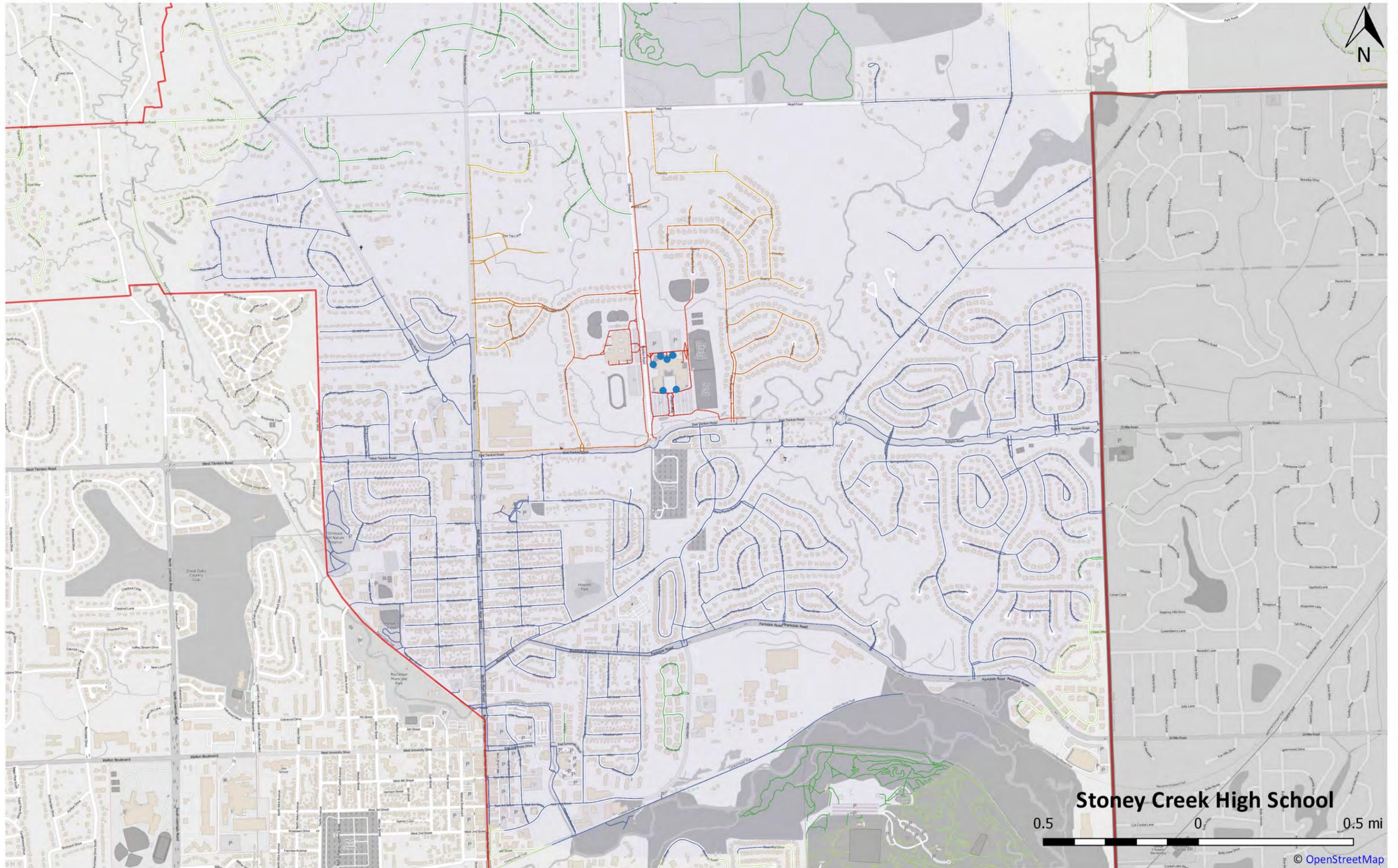
Reuther Middle School





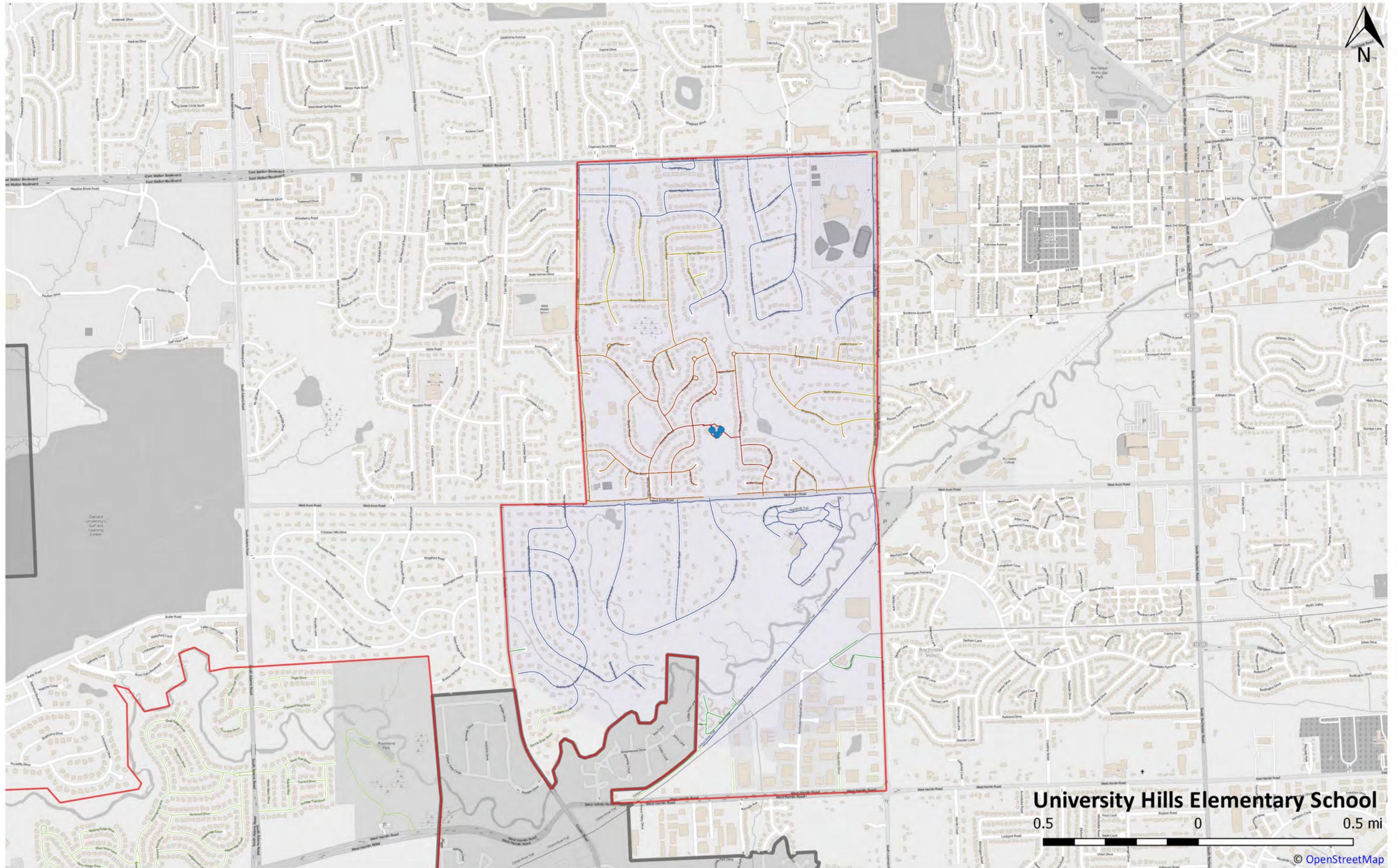
Rochester High School





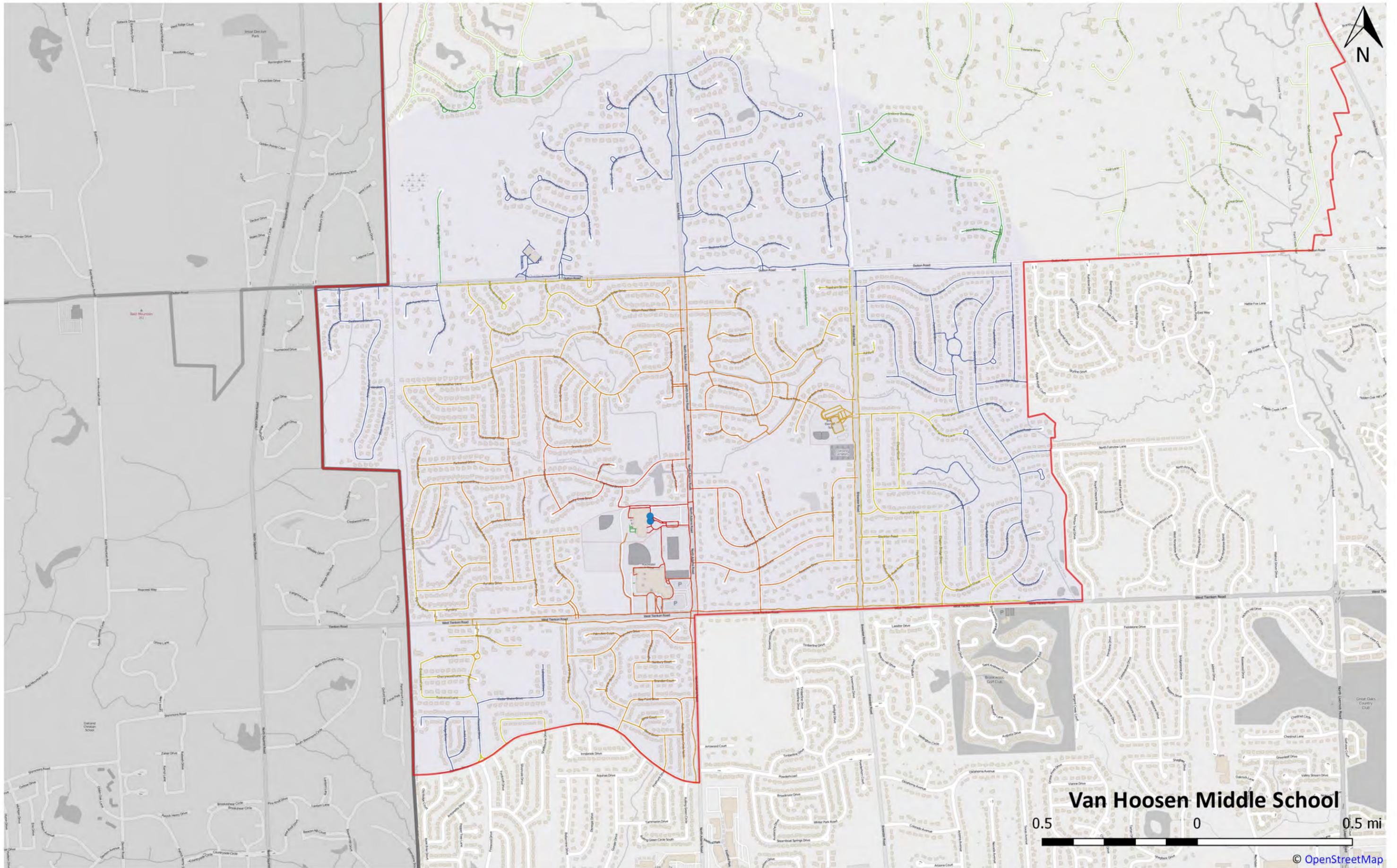
Stoney Creek High School





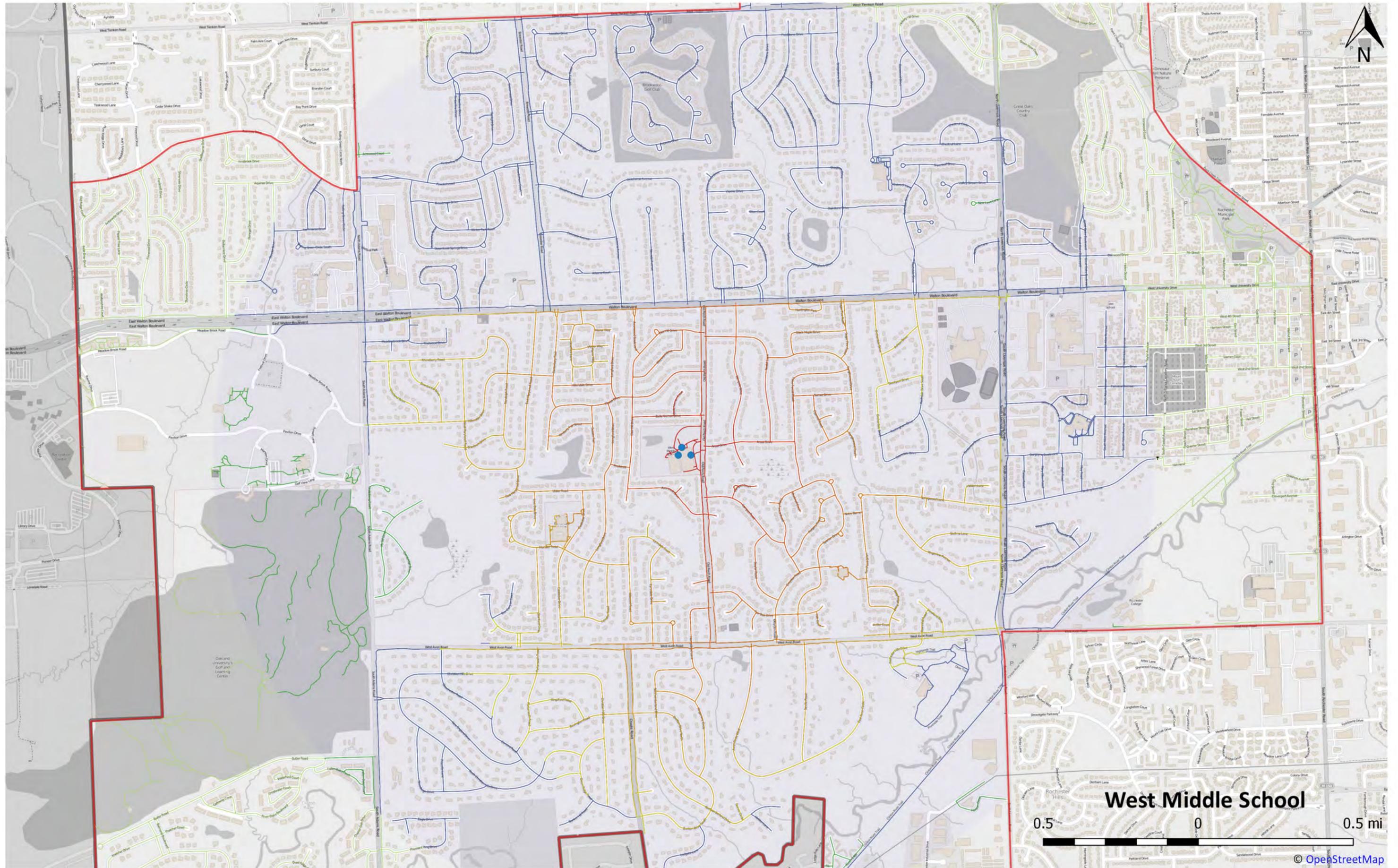
University Hills Elementary School

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Van Hoosen Middle School

0.5 0 0.5 mi



West Middle School





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