CITY OF BILLINGS
SAFE ROUTES TO SCHOOL STUDY
BILLINGS, MONTANA

W.O. 09-21 - PHASE I

W.O. 10-13 - PHASE 2

Prepared for
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EXECUTIVE SUMMARY

This report presents a summary of the evaluation and recommendations for a two-phase Safe Routes to School (SRTS) study covering twenty-two elementary schools in Billings, Montana. The Phase 1 study began in the fall of 2009 and included Arrowhead, Beartooth, Bench, Bitterroot, Boulder, Eagle Cliffs, Meadowlark, Newman, Poly Drive, Ponderosa, and Washington Elementary Schools. These schools were selected for Phase 1 by the City of Billings based on percentage of existing sidewalk on arterial and collector roadways within a half-mile radius of the school. The remaining eleven elementary schools were evaluated in the second phase of the SRTS study, which began in the fall of 2010. The Phase 2 study included Alkali Creek, Big Sky, Broadwater, Burlington, Central Heights, Highland, McKinley, Miles Avenue, Orchard, Rose Park, and Sandstone Elementary Schools.

The goals of the Billings SRTS Study are to 1) enhance the safety of students traveling to and from school and 2) increase the number of students walking or bicycling to school. This project has been a collaborative effort between Sanderson Stewart, the City of Billings Engineering Division, the City-County Planning Department, Billings Public Schools, Yellowstone Valley PTA, the Billings Police Department, and RiverStone Health. In fact, representatives from each of these departments/organizations have served on the steering committee for this project and have provided valuable input throughout the process. Project tasks have consisted of a thorough inventory of the City's GIS information relative to school routes, on-site observations at each of the schools, many meetings with steering committee members and school representatives, development of walking route maps for each school, and the determination of recommended improvements and implementation strategies.

SRTS efforts generally consist of the 5 E's – Engineering, Enforcement, Encouragement, Education and Evaluation. Due to the limited budget available for this project and the number of schools evaluated, this study focuses primarily on Engineering improvements. The following projects were identified as priorities for improvement at each of the elementary schools. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be

an immediate, low cost solution. A total of $6.2 million dollars in priority projects have been identified for the twenty-two elementary schools included in this study.

PHASE 1 SCHOOLS (CITY OF BILLINGS W.O. 09-21)

Arrowhead Elementary School

- ARR PP-1: Install a signed/marked crosswalk with curb extensions on 38th Street West between Rimrock Road and Poly Drive.
- ARR PP-2: Install safety railing along the pedestrian refuge island for the new Shiloh Road crossing north of Poly Drive.
- ARR PP-3: Construct and maintain a hard-surface multi-use trail from Shiloh Road through Mission Ridge property to Arrowhead School.
- ARR PP-4: Install sidewalks along both sides of Poly Drive from 38th Street West to Zimmerman Trail.

Beartooth Elementary School

- BEA PP-1: Construct separate access loop and/or parking lot along east side of school to further separate bus and parent/visitor traffic and reduce congestion on Elaine Street.
- BEA PP-2: Install a crosswalk on Barrett Road at Linden Drive and install a new sidewalk or multi-use trail along the south side of Barrett and the west side of the alley. This will require coordination with Yellowstone County on segments that fall under their jurisdiction. Installation of sidewalk will likely require private property easements from adjacent landowners.
- BEA PP-3: Install sidewalk along the east side of Bitterroot Drive from Cherry Creek Estates to Wicks Lane with a school crosswalk at Wicks Lane and the access to Emma Jean Estates Subdivision. Installation of sidewalk will likely require private property easements from adjacent landowners.
- BEA IP-1: Restripe crosswalks at Elaine/Bitterroot and Elaine/Columbine.
- BEA IP-2: Sign alley adjacent to school one-way northbound.

Bench Elementary School

- BEN PP-1: New crossing guard at Lake Elmo Drive and Uinta Park Drive after Lake Elmo reconstruction is complete.
- BEN PP-2: Install an east-west sidewalk or trail connection to the north end of school property along Lola Lane. This connection would shorten the walking distance coming from the north on Lake Elmo Drive.
- BEN PP-3: Install sidewalks on Rex Lane.

Bitterroot Elementary School

- BIT PP-1: Construct pedestrian path connection and crossing over the Holling Drain from residential area to the east.
- BIT PP-2: Construct additional parking area east of existing building and parking lot.
- BIT PP-3: Install sidewalk or pedestrian path along Barrett Road. Installation of sidewalk will likely require private property easements from adjacent landowners.
- BIT IP-1: Install fluorescent yellow school crossing signs and ladder-style crosswalk at the multi-use trail crossing on Barrett Road.

Boulder Elementary School

- BOU PP-1: Install sidewalks and curb and gutter along Boulder Avenue.
- BOU PP-2: Consider installing a flasher on the existing school zone speed limit sign.
- BOU PP-3: Install sidewalks on Poly Drive west of 32nd Street West.
- BOU PP-4: Fix drainage problems at intersections of Poly Drive/32nd Street West and Boulder Avenue/32nd Street West.

Eagle Cliffs Elementary School

- EAG PP-1: Construct a trail connection from the intersection of Constitution Avenue and Kootenai Avenue to Marias Drive. Permission must be obtained from DNRC.
- EAG IP-1: Remove "8 AM – 5 PM" supplemental plaques on the school speed limit signs and replace with "When Children are Present" supplemental plaques.
- EAG IP-2: Install "Do Not Block Intersection" signs at the intersection of Kootenai Avenue and Marias Drive.

Meadowlark Elementary School

- MEA PP-1: Install enhanced school crossing with curb extensions or pedestrian refuge island on 32nd Street West near the intersection with St. Johns Avenue.
- MEA PP-2: Fix drainage problems along 29th Street West and Howard Avenue, in particular at the east side of the intersection of 29th Street West and Cook Avenue.
- MEA IP-1: Refresh yellow curb paint along 29th Street West and Howard Avenue.

Newman Elementary School

- NEW PP-1: Improve Newman Lane adjacent to the school (approximately from Stone Street to Ruth Avenue), install sidewalks and improve crossing at Phillip Street with new ADA ramps, signage and striping.
- NEW PP-2: Expand existing parking lot to the east and improve alley.
- NEW PP-3: Install sidewalks where missing along Calhoun Lane.
- NEW PP-4: Install sidewalks where missing along east-west side streets.
- NEW IP-1: Improve maintenance of Newman Lane and alley south of the school. These are recommended interim improvements until priority projects above are completed.
- NEW IP-2: Adjust timing on the speed limit flashers on South Billings Boulevard to better coincide with peak arrival and departure times.

Poly Drive Elementary School

- POL PP-1: Eliminate the loop roadway exit in front of school, reconfigure the parking lot, and install curb extensions at the Poly Drive/Arvin Road crossing. Drainage issues within loop roadway should be addressed with these improvements.
- POL PP-2: Install sidewalks on Rimrock Road.
- POL PP-3: Stripe bike lanes on Poly Drive.
- POL PP-4: Install a signed/marked crosswalk with curb extensions on the east leg of the intersection of Rimrock Road and Silverwood Street as an interim improvement prior to installing sidewalks on Rimrock Road. From this location, students can walk along the existing sidewalk easement to Pryor Lane and then along Poly Drive.
- POL IP-1: Remove "No Parking – Bus Zone" signs on Poly Drive. Allow on-street parking, with restrictions near access approaches and the crosswalk at Poly Drive/Arvin Road.

Ponderosa Elementary School

- PON PP-1: Improve the landing/pedestrian storage area on the northeast corner of King Avenue East and Hallowell Lane.
- PON PP-2: Reconfigure intersection of Hallowell, Arlington, and school access to reduce pedestrian conflicts and improve traffic operations.
- PON PP-3: Install trail connection and ditch crossing between Kings Green Subdivision and south end of school property.
- PON PP-4: Construct a pedestrian path along King Avenue East.
- PON IP-1: Trim trees/shrubs adjacent to pedestrian crossing area at bus access.
- PON IP-2: Install signing/striping at pedestrian crossing at bus access.

Washington Elementary School

- WAS PP-1: Relocate bus loading to south side of school with one-way road from St. Johns Avenue cul-de-sac on southeast side of school through playground to 11th Street West. School bus loading would then take place on the playground, similar to the configuration that was successfully implemented at Boulder Elementary School. This would be a short-term solution to separating parent and bus loading zones and providing more on-street space for parent loading on 11th Street West.
- WAS PP-2: Construct a new staff parking lot on the east side of the school, between the school and the Young Families building to the east. This would be a long-term solution that would open up the entire block of Cook Avenue on the north side of the school for parent loading.
- WAS PP-3: Evaluate the need for traffic control improvements at the intersection of Cook Avenue and 11th Street West and consider an additional crossing guard in this location.

PHASE 2 SCHOOLS (CITY OF BILLINGS W.O. 10-13)

Alkali Creek Elementary School

- ALK PP-1: Install separate drop-off loop for parent loading. Either install new one-way road through center island in existing parking lot or install new one-way loop around back side of school and intersecting Alkali Creek Road north of the school.

- ALK PP-2: Install sidewalk along south side of Alkali Creek Road northwest of school.
- ALK PP-3: Install sidewalk along Pinon Drive just west of Alkali Creek Road.
- ALK PP-4: Install sidewalk along south side of Indian Trail.
- ALK IP-1: Improve snow removal and corresponding location of snow storage along Indian Trail and Alkali Creek Road.

Big Sky Elementary School

- BIG PP-1: Enhance crossing at 32nd Street West and Lampman Drive or move crossing to Granger Avenue and signalize. Complete signal warrant study at 32nd Street West and Granger Avenue.
- BIG PP-2: Install crosswalk markings on the south leg of the intersection of Monad Road and 36th Street West. Enhance existing crossing on west leg.
- BIG PP-3: Install signing and striping for a new crosswalk on the north leg of 30th Street West and Lampman Drive. If 32nd Street crossing is relocated to Granger Avenue as noted above, this crossing should be moved to the intersection of 30th Street West and Stillwater Drive.

Broadwater Elementary School

- BRO PP-1: Install curb extensions at the intersection of 4th Street West and Wyoming Avenue.
- BRO PP-2: Increase minimum green time for pedestrians and install ladder style crosswalks at the intersection of 5th Street West and Broadwater Avenue.
- BRO PP-3: Improve loading zone through alley by defining entry to separate from local business, improve sight distance around corner, reducing the exit to a single lane and providing physical separation between the walking area and the parking area.

Burlington Elementary School

- BUR PP-1: Install curb extensions at the intersection of Lewis Avenue and 22nd Street West.
- BUR PP-2: Install signing, striping and curb extensions for midblock crossing on 22nd Street West directly in front of main school entrance and consider requiring students to use this entrance.

- BUR IP-1: Use cones or temporary barricade to prevent parents from pulling through staff parking lot at north end of school and encourage exit to Burlington Avenue.
- BUR IP-2: Move bus loading zone to Lewis Avenue.

Central Heights Elementary School

- CEN PP-1: Widen sidewalks on Lexington Drive, Alamo Drive, and Pueblo Drive, and install curb extensions at mid-block crossings on Alamo Drive and Lexington Drive.
- CEN PP-2: Install curb extensions at intersection of Lexington Drive and Eldorado Drive and marked crosswalk on east leg. Install curb extensions or another form of traffic calming at Santa Fe Drive and Eldorado Drive.
- CEN PP-3: Install curb extensions for crosswalk at Monad Road/Monterey Drive.
- CEN IP-1: Eliminate bus zone on Pueblo Drive and require all primary and intermediate bus pickup to occur on Alamo Drive. This will separate bus and parent loading during dismissal of intermediate grades.

Highland Elementary School

- HIG PP-1: Implement remote drop-off locations.
- HIG PP-2: Install sidewalks and curb extensions at the intersection of O'Malley Drive and Virginia Lane.
- HIG PP-3: Install crosswalks with enhancements to shorten crossing distance at Rimrock Road/Missouri Street and Rimrock Road/Virginia Lane.
- HIG PP-4: Install sidewalk and/or a bike lane on Virginia Lane from Rimrock Road to Parkhill Drive.
- HIG IP-1: Trim trees at Woodland Drive/Virginia Lane.
- HIG IP-2: Trim shrubs at O'Malley Drive/Virginia Lane.
- HIG IP-3: Explore options to further discourage parents from using Beverly Hill Boulevard as a drop off area because there is no good place to turn around.

McKinley Elementary School

- MCK PP-1: Install pedestrian crossings and enhancements at the intersections of Parkhill Drive/North 32nd Street and 11th Avenue North/North 32nd Street.
- MCK PP-2: Install curb extensions at 9th Avenue North/North 31st Street.

- MCK PP-3: Install curb extensions at 8th Avenue North/North 31st Street.
- MCK PP-4: Install curb extensions at 8th Avenue North/North 32nd Street.
- MCK IP-1: Install flexible delineators on existing curb extensions at 9th Avenue North/North 32nd Street.

Miles Avenue Elementary School

- MIL PP-1: Install curb extensions and storm drain improvements at 16th Street West and Miles Avenue.
- MIL PP-2: Install sidewalk connections from north and south ends of school to alley.
- MIL PP-3: Install pull-out area along east side of alley to enhance loading zone and move loading away from pedestrian traffic.
- MIL IP-1: Sign alley "one-way" northbound, but allow exception for garbage trucks.

Orchard Elementary School

- ORC PP-1: Install sidewalks along Jackson Street (City project this summer).
- ORC PP-2: Install curb extensions and crosswalk enhancements on Jackson Street crossings.
- ORC PP-3: Implement a walking school bus program to ease safety concerns and encourage walking.
- ORC IP-1: Install "No Parking" signs on north side of Frances Avenue.

Rose Park Elementary School

- ROS PP-1: Install curb extensions and storm drain improvements at 19th Street West/Avenue E; eliminate crosswalk on south leg of this intersection and south leg of Avenue F intersection.
- ROS PP-2: Install traffic calming improvements on 19th Street West to slow traffic speeds.
- ROS PP-3: Complete curb on Parkhill Drive to provide continuous walking route, including traffic calming improvements at corner; would also prevent most U-turns.
- ROS IP-1: Relocate existing school crossing sign on 17th Street West from south side of Avenue F to north side of Avenue F.

Sandstone Elementary School

- SAN PP-1: Install sidewalks on neighborhood streets southeast of Babcock Boulevard.
- SAN PP-2: Install sidewalks on neighborhood streets north of Wicks Lane.
- SAN PP-3: Consolidate crosswalks on Nutter Boulevard in front of school to the north location and restripe as a ladder style crosswalk.
- SAN IP-1: Work with School District and City maintenance forces to coordinate snow removal on streets and sidewalks.
- SAN IP-2: Improved enforcement of City codes prohibiting parking on sidewalks and requiring homeowners to remove snow in winter.
- SAN IP-3: With new bike lanes on Nutter Boulevard, school should encourage biking. Consider enhancing or installing new bike racks.

Additional information regarding school route conditions and priority projects is provided throughout this report. Appendix A and B provide a summary of priority projects, including timeframe for implementation, estimated cost, and funding sources. This report also provides general recommendations related to the other four E's of SRTS, addresses the big picture issues affecting the ability to walk or bike to school, outlines strategies for determining city-wide priority projects, and summarizes the next steps for creating an on-going SRTS program in Billings.

INTRODUCTION

The City of Billings recently received two separate grants through Montana's Safe Routes to School (SRTS) program to complete a SRTS study of Billings elementary schools. The twenty-two elementary schools in the Billings Public School system were split between the two phases as follows:

Phase 1

- Arrowhead Elementary School
- Beartooth Elementary School
- Bench Elementary School
- Bitterroot Elementary School
- Boulder Elementary School
- Eagle Cliffs Elementary School
- Meadowlark Elementary School
- Newman Elementary School
- Poly Drive Elementary School
- Ponderosa Elementary School
- Washington Elementary School

Phase 2

- Alkali Creek Elementary School
- Big Sky Elementary School
- Broadwater Elementary School
- Burlington Elementary School
- Central Heights Elementary School
- Highland Elementary School
- McKinley Elementary School
- Miles Avenue Elementary School
- Orchard Elementary School
- Rose Park Elementary School
- Sandstone Elementary School

The schools included in the first phase were selected by the City of Billings based on the percentage of existing sidewalk on arterial and collector roadways within a half-mile radius of the school. The eleven schools with the lowest percentage of existing sidewalk were selected for the first phase of the study. The remaining eleven schools were included in the second phase. The Title I schools (high rate of low income and at-risk students) were fairly evenly distributed across both phases of the study.

Figure 1 on the following page provides a map of the school district attendance boundaries. It shows the general location and attendance boundary of the schools included in each phase of the study. Also for reference, Figure 1 shows a half-mile radius around each school, which generally delineates the main focus area for improvements.

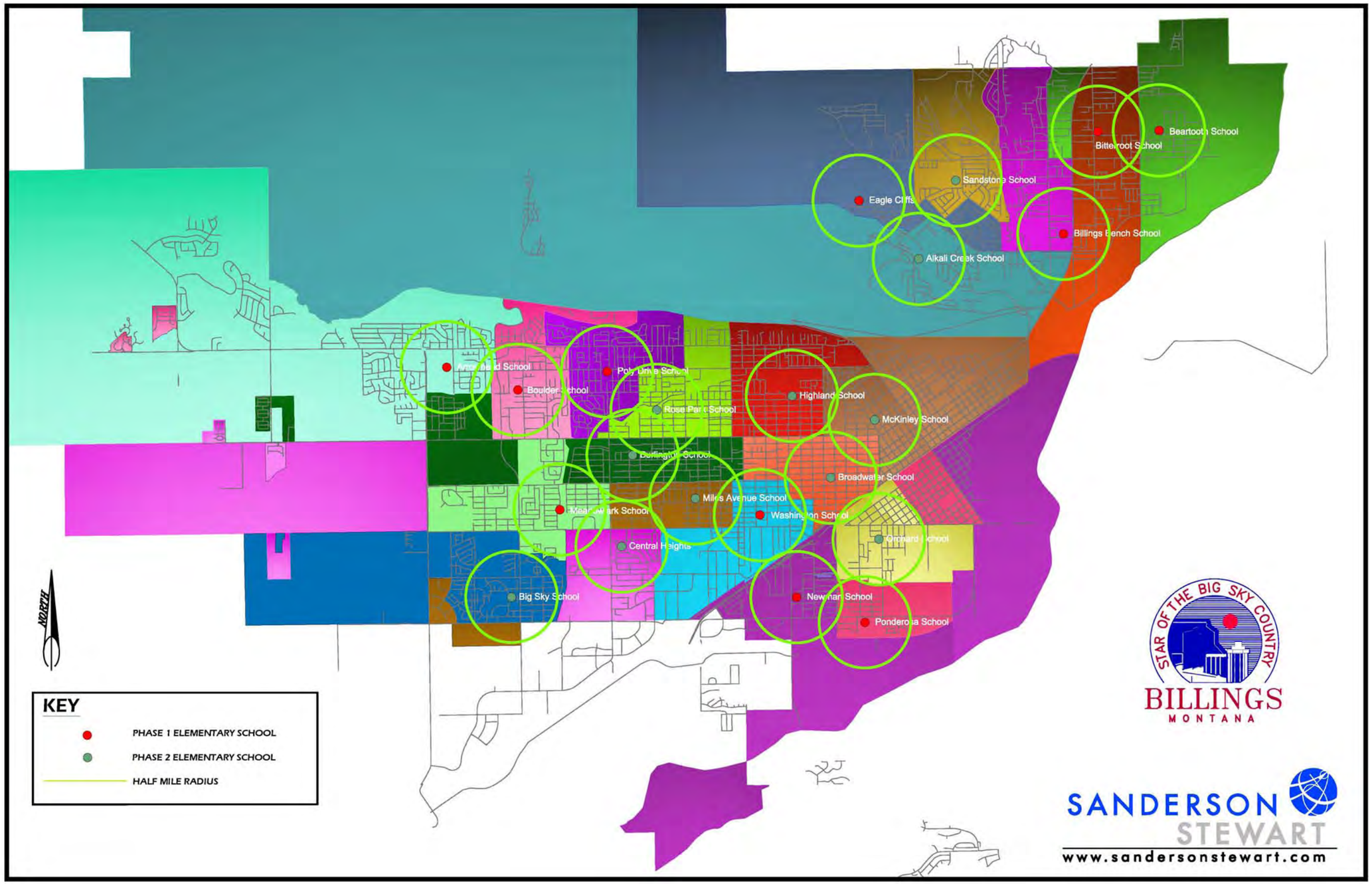
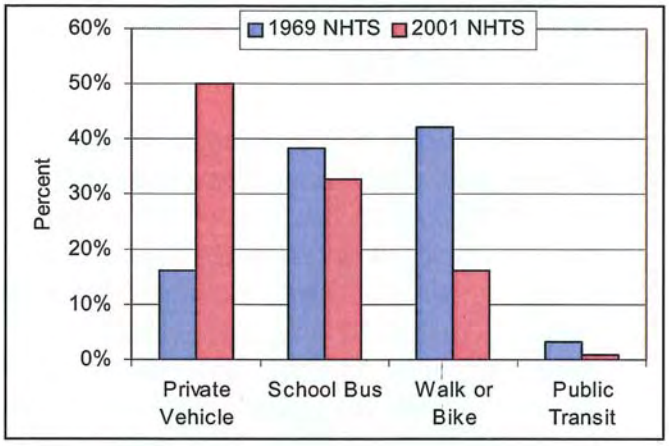


FIGURE 1. BILLINGS PUBLIC SCHOOLS ATTENDANCE BOUNDARIES

NATIONAL TRENDS IN SCHOOL TRAVEL

At the national level, fewer students walk or bike to school today than a generation ago. Figure 2 presents a comparison of nation-wide mode of travel to school from 1969 and 2001, based on data from the National Household Travel Survey (NHTS). In 1969, 42% of students walked or biked to school compared to only 16% in 2001. The opposite trend has taken place with the number of students that arrive by private vehicle with half of all school children being driven to school in 2001. The current lifestyle in the United States has created a population that is more sedentary than ever, which is causing a wide range of health problems including obesity, diabetes, heart disease, and respiratory problems.

Figure 2. Mode of Arrival to School by Students Ages 6-12



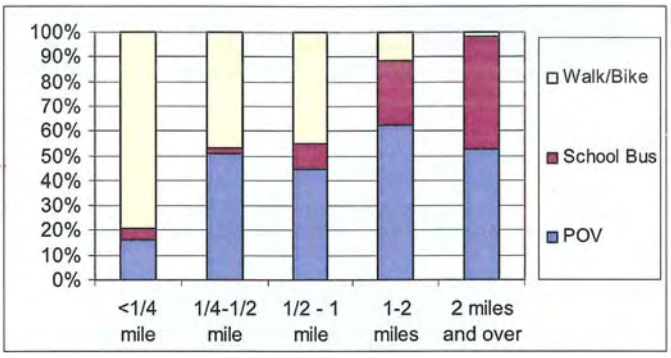
Source: NHTS Data Series, 1969 and 2001

The nation's sedentary lifestyle is not the only issue that impacts how students travel to and from school. Changes in school size and location have also had an adverse affect. Over the last 30 years, schools have been moving to the edge of town where land is less expensive and more readily available. This trend has resulted in students living farther away from their schools. In fact, only 20% of students lived less than a mile from school in 2001 compared to 35% in 1969.

Not surprisingly, the mode of travel to school has changed significantly with the increase in distance from school. Figure 3 illustrates mode of travel to school by distance for students ages 6 to 12 based on 2001 NHTS data. It shows that 50% or more of students walk or bike to school if they live within a mile from the school. Beyond that distance, the percentage of students that walk or bike drops off dramatically.

Communities throughout the United States report that as much as 25% of morning traffic is being generated by parents driving their children to school. Increases in traffic volumes and congestion result in fewer students walking or biking to school. As more students are driven, more parents become convinced that traffic conditions make it unsafe for biking or walking, thereby compounding the problem. Conversely, if more students walked or biked to school, it would reduce the number of cars around the school, which would reduce traffic congestion and make it safer for walkers and bikers.

Figure 3. Mode of Travel to School by Distance for Students Ages 6-12



Source: 2001 NHTS Data Series

SAFE ROUTES TO SCHOOL BACKGROUND

The SRTS program was initiated in Denmark during the 1970s in an effort to address the high child mortality rates reported in Western Europe. This movement was specifically focused on the safety of students walking and biking to and from school. Denmark experienced groundbreaking results for 45 schools in the city of Odense, and other countries were soon inspired to follow in their footsteps. By the 1980s, England began to implement SRTS projects, and by 1997, pilot programs were started in The Bronx, NY. With continued success, Congress funded two pilot programs in Marin County, CA and Arlington, MA with $50,000 grants from the National Highway Traffic Safety Administration.

As word spread about the success of these pilot programs, interest increased, and in 2005, Congress passed federal legislation that established a national SRTS program. A bill was signed into law in August of 2005 that has dedicated a total of $612 million towards SRTS projects from 2005 to 2009. These funds have been distributed to different states based on

student enrollment; however, no state receives less than $1 million per year. The money from these funds can be used for infrastructure projects or non-infrastructure programs and activities. With the federal SRTS program in place, and the anticipated funding reauthorization approaching, a significant increase in funds is expected along with institutional support to help implement more programs and projects across the country.

SRTS efforts are bringing schools and communities together to make walking and bicycling to school safer and more convenient. The overriding goal of SRTS is to increase the number of students that walk or bike to school along safe routes. SRTS programs help change behaviors by combining aspects of health, fitness, safety, environmental awareness, and a reduction in traffic congestion. The most successful plans typically include strategies related to each of the 5 E's, which are discussed in greater detail below.

Engineering: These strategies consist of the actual implementation of infrastructure projects that result in operational changes or physical improvements around schools. The goal of these strategies is to bring about a reduction in motor vehicle speeds, a reduction in conflicts between pedestrians and motor vehicle traffic, and safer and more accessible sidewalks, trails, and street crossings.

Enforcement: Components of these tasks include a partnership with local law enforcement to ensure that traffic laws (including speed limits, yielding to pedestrians in crosswalks, and proper walking/bicycling behavior) are obeyed within the vicinity of schools under a zero-tolerance policy. The enforcement component may also include implementation or expansion of existing crossing guard programs.

Encouragement: These strategies consist of programs or activities that can be implemented by schools or communities that encourage bicycling and walking to school. Examples include the creation of a Walking School Bus or participation in the International Walk to School Day.

Education: Educational components are often directed at students, but can also be provided for parents and other drivers. These tactics can include education on the broad

range of transportation choices, education on the health and environmental benefits of bicycling and walking, and launching driver safety campaigns in the vicinity of schools.

Evaluation: These tasks consist of collecting data and evaluating conditions before and after SRTS projects are constructed or activities are introduced. This provides a measure of performance to ensure that efforts are effective in achieving program objectives.

Non-infrastructure projects typically include activities associated with **Enforcement, Encouragement, Education and Evaluation** strategies. Infrastructure projects are focused on the implementation of specific facilities (sidewalks, trails, and crosswalks) and are therefore associated with the **Engineering** strategy. While each of these strategies provides safety benefits on their own, it's typically the combination of multiple strategies that will result in the most successful SRTS program.

Due to the limited budget available for this project and the number of schools evaluated, this study focuses primarily on **Engineering** improvements. However, the City of Billings and the Billings Public Schools are strongly encouraged to work toward implementing the other 4 E's in order to provide for a well-rounded and successful SRTS program in Billings. General recommendations related to other 4 E's are provided toward the end of this document.

GOALS & OBJECTIVES

The goals of the Billings SRTS Study were discussed in detail during the kickoff meeting for the Phase 1 project. The two overriding goals include the following:

1. Enhance the safety of students traveling to and from school.
2. Increase the number of students walking or bicycling to school.

These goals will be an important component of future SRTS efforts in Billings. They will provide the basis for evaluating the success of all SRTS projects, including both infrastructure projects and non-infrastructure programs or activities. Evaluation measures, as they relate to these fundamental goals, will be discussed in greater detail later in this report.

EVALUATION PROCESS

The City of Billings SRTS Study has been a collaborative effort between Sanderson Stewart, the City of Billings Engineering Division, the City-County Planning Department, Billings Public Schools, Yellowstone Valley PTA, the Billings Police Department, and RiverStone Health. In fact, representatives from each of these departments/organizations have served on the steering committee for this project and have provided valuable input throughout the process.

After a project kickoff meeting was held in November 2009, the Phase 1 project began with a thorough inventory of the City's GIS information related to existing vs. missing sidewalk segments, signage, striping, and other roadway characteristics. The majority of this inventory was completed by Billings Police Department volunteers. Within the same timeframe, Sanderson Stewart completed on-site observations at each of the eleven elementary schools to evaluate access conditions, site circulation, the functionality of parent and bus loading areas, driver behavior within school zones, pedestrian facilities, etc.

The project was introduced to Phase 1 school representatives through a letter sent to each of the school principals in November 2009. The letter provided background information on the SRTS program, outlined a plan for stakeholder involvement, and requested preliminary input. With each site visit, Sanderson Stewart also met with school principals or other representatives to introduce the project, make them aware of our presence on campus, and request input on concerns and potential improvements.

Once the inventory and evaluation process was complete, school walking route maps were developed based on field-verified City GIS information. One-page summaries of conditions at each school were also prepared. The summaries addressed site characteristics, observed issues and concerns, barriers to walking and biking to school, big picture issues, and potential improvements. The walking route maps and one-page summaries were posted for comment on the City's website and were distributed to each school for review prior to two large group meetings with the schools in April 2010. Input from those meetings, as well as comments received by phone and email, were ultimately used to determine the recommended improvements and priority projects.

A draft of the Phase 1 report was posted for comment on the City's website and distributed to all school representatives and steering committee members for review and comment. Findings and recommendations were presented during a final steering committee meeting in June 2010. Comments from all of the project representatives have been incorporated into this final document.

The same process was followed for Phase 2 of the SRTS study with the majority of the activities occurring between November 2010 and July 2011.

RELATIONSHIP TO OTHER DOCUMENTS

Several documents and past projects have been completed that apply to or complement the City of Billings SRTS Study. They include the following:

Survey about Walking and Biking to School, Yellowstone City-County Health Department, October 2007. This document provides a summary of the results of a parent survey about walking and biking to school administered to parents of students in kindergarten through sixth grade in Yellowstone County, Montana. It included all of the Billings Public Schools elementary schools, as well as several schools in surrounding rural areas. The survey was based on the parent survey provided by the National Center for Safe Routes to School with some slight modifications to better capture the data desired for Yellowstone County. A summary of the results of this survey for each specific school is highlighted under the Specific School Findings and Recommendations section of this report.

School Route Priority Study, City of Billings and Kadrmas, Lee and Jackson, October 2007. This study focuses on prioritizing missing sidewalk segments within the Billings city limits. It utilized a weighted ranking system consisting of nine criteria, including functional classification, speed limit, pedestrian/bicycle accident history, amount of public improvements required, school support of a particular route, proximity to other pedestrian generators, proximity to elementary school, length of missing route, and zoned dwelling units per acre. Implementation of the priority projects in this study are funded by a yearly allocation of just under $500,000 in the City of Billings Capital Improvement Program (CIP). This priority study will be referenced in several locations throughout the remainder of this document regarding how it relates to particular priority projects.

School Zone Traffic Control Policy, City of Billings, June 2001. This document is a policy statement that addresses where school crossings should be located and what other traffic control devices may be appropriate for a given school zone or crossing. This document is available on the City's website at http://ci.billings.mt.us/DocumentView.aspx?DID=1494. The recommended improvements in this SRTS study are consistent with this adopted policy and should be further evaluated against this policy prior to implementation.

INVENTORY AND SITE OBSERVATIONS

VERIFICATION OF CITY GIS INFORMATION

As discussed previously, one of the tasks for this project consisted of the verification of the City's GIS information relating to missing sidewalk links, school zone signage/striping, and other roadway characteristics. The verification of this information was completed almost entirely by volunteers organized by the Billings Police Department. The resulting information was used to develop base maps for each school, which were ultimately used to prepare walking route maps and figures illustrating recommended improvements.

SCHOOL SITE OBSERVATIONS

During the winter of 2009 (Phase 1) and 2010 (Phase 2), site observations were conducted at each of the elementary schools. Sanderson Stewart observed and evaluated school access conditions, parent and bus loading zone operations, site circulation, driver behaviors within school zones, pedestrian facilities, etc. More specifically, the site observations included an evaluation of the following items:

Pedestrian Access

- Do the majority of pedestrians appear to be coming from a particular direction or neighborhood?
- Are there adequate pedestrian facilities (sidewalks and trails) along the school frontage?
- Are there any sections of sidewalk missing in the immediate vicinity of the school?
- Are pedestrians crossing in locations without marked crosswalks?
- Were there crossing guards at the main crosswalks used for access to school?
- Are school crosswalks clearly delineated with signs and pavement markings?
- Are there any obvious modifications to pedestrian routes that can be made to avoid conflicts with vehicles (at access points or through parking lots/loading zones)?
- Are the pedestrian facilities in compliance with ADA standards?

Adjacent Roadway Traffic Operations

- Does there appear to be a significant amount of speeding and/or aggressive drivers?
- Do drivers stop for pedestrians?

- Are there operational problems or significant queues at any of the adjacent intersections?
- Do school access approaches function well in conjunctions with adjacent streets?

Parent Parking/Loading Zones

- Where are they located (curb loading and/or parking stalls)?
- Is there an adequate number of parking stalls or length of curb loading?
- How well do these areas function?
- Are there long on-site or off-site queues of parents waiting to leave or enter the site?
- Are there any one-way accesses to the school site (enter or exit only)?
- Are there any loading zones or parking lot aisles with one-way circulation?
- Is there a particular area designated for teacher/staff parking?

Bus Loading Zones

- Where are they located?
- Are they in a location where kids do not have to walk between buses?
- Are they separated from parent loading areas?
- Does the loading zone function well?
- How many buses utilize the loading zone?
- Are there conflicts with parent vehicles when they are leaving or arriving (i.e. do parents get in the way of the buses)?

This information was used to develop one-page summaries of observations, issues, and potential improvements for each school. Each of the site visits also included a short meeting with the school principal or other school representative available at the time of the site visit to discuss issues/concerns and potential improvements. Site observation notes from each of the school visits are summarized in the Specific School Findings and Recommendations section of this report.

BARRIERS TO WALKING AND BIKING TO SCHOOL

In addition to site observations, potential barriers affecting the ability to walk or bike to school were also identified. These types of barriers may include Interstate 90, arterial roadways with high traffic volumes or speeds, waterways, railroads, and substantial changes

in topography. Significant barriers identified for each school are listed in the Specific School Findings and Recommendations section of this report.

SPECIFIC SCHOOL FINDINGS AND RECOMMENDATIONS

The following pages present a summary of characteristics, observations and recommended improvements for each of the schools included in this study. The recommended improvements make up the engineering recommendations of this study, which are the infrastructure improvements discussed in the Safe Routes to School Background section of this report.

The priority projects listed on these pages are based on input received from school representatives. They correspond directly to those outlined in the summary of priority projects included in Appendix A and B. Immediate, low cost solutions have also been identified in this section and in Appendix A and B.

The following pages also include walking route maps, identifying the best routes currently available for walking or biking to each of the schools. The walking route maps illustrate existing vs. missing sidewalk links, existing traffic control, and school zone signage and striping. Finally, a figure identifying the recommended priority improvement projects is provided for each school.

PHASE 1 SCHOOLS (CITY OF BILLINGS W.O. 09-21)

ARROWHEAD ELEMENTARY SCHOOL

Site Characteristics

- Located at 2510 38th Street West, which is classified as a collector roadway.
- Served by 5 regular school buses.
- Crossing guards and marked crosswalks at Rimrock/38th and Shiloh/Poly.
- Marked crosswalk at 38th Street West/Poly Drive, just south of school access.
- 15 mph school speed zone with flashers on Rimrock Road (reduced from 35 mph), which not in compliance with current State law.
- 25 mph speed limit on 38th Street West, which is not further reduced for the school zone.
- Parent and bus loading are both provided within the one-way loop road in front of the school.
- Visitor parking is located east of school adjacent to the one-way loop road.
- Staff parking is located in a separate lot south of the school.
- Arrowhead has an agreement with Mission Ridge to allow school kids to walk along the gravel trail from the Shiloh Road crossing near Poly Drive to the northwest side of the school.
- A new raised median pedestrian refuge crossing was recently constructed on Shiloh Road just north of Poly Drive as part of the Shiloh Road Corridor project. The crossing was moved from the intersection of Shiloh/Poly to the north to line up with the existing walkway behind Mission Ridge. The crossing includes a pedestrian-activated rectangular rapid flash beacon system, but no railings within the median.
- Sidewalks were installed on Poly Drive west of Shiloh with a recent CTEP project.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 22%
- Bike – 5%

- School Bus – 24%
- Family Vehicle – 40%
- Carpool – 6%
- Daycare Van – 3%

Issues/Concerns

- There isn't a clear distinction between parent and bus loading zones.
- Long vehicle queues on 38th Street West caused by parents waiting to enter site.
- Parents stop too close to the entrance, making it difficult for others to enter behind them.
- Insufficient sidewalk width/surface conditions at the existing High Ditch crossing on 38th Street West.
- There is a significant safety concern associated with the goat heads (weeds with thorns) that grow along the gravel trail through Mission Ridge.
- The lack of railings on the new median crossing on Shiloh Road is a big concern for parents and school officials.
- Citizens have complained to the City of Billings that the 15 mph reduced speed zone on Rimrock Road is unrealistic.

Barriers/Big Picture Issues

- Barriers include Shiloh Road, Rimrock Road, the High Ditch and the Big Ditch.
- Students residing in new developments within the Arrowhead attendance boundary attend other schools because they do not have room at Arrowhead.
- All kindergarteners within the Arrowhead attendance boundary are bused to Boulder Elementary School because they do not have room at Arrowhead.
- Kids within easy walking distance to Arrowhead (such as Circle 50 and Hancock-Grand Subdivisions) are being bused to Burlington Elementary School instead.

Priority Projects

The following projects were identified as priorities for improvement at Arrowhead Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For

the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- ARR PP-1: Install a signed/marked crosswalk with curb extensions or some other form of crosswalk enhancement on 38th Street West between Rimrock Road and Poly Drive.
- ARR PP-2: Install safety railing along the pedestrian refuge island for the new Shiloh Road crossing north of Poly Drive.
- ARR PP-3: Construct and maintain a hard-surface multi-use trail from Shiloh Road through Mission Ridge property to Arrowhead School.
- ARR PP-4: Install sidewalks along both sides of Poly Drive from 38th Street West to Zimmerman Trail.

Other Recommended Improvements

The following projects were also identified as potential improvements at Arrowhead Elementary School, but were not considered priority projects at the time of this report.

- Separate bus loading and parent loading zones.
- Crosswalk enhancements at Rimrock Road and 38th Street West.
- Install sidewalks on Rimrock Road.
- Install sidewalks on east side of 38th Street West in coordination with development plans for Poly Vista Subdivision.
- Upgrade existing High Ditch crossing on 38th Street West to provide a wider/more accessible route for pedestrians.

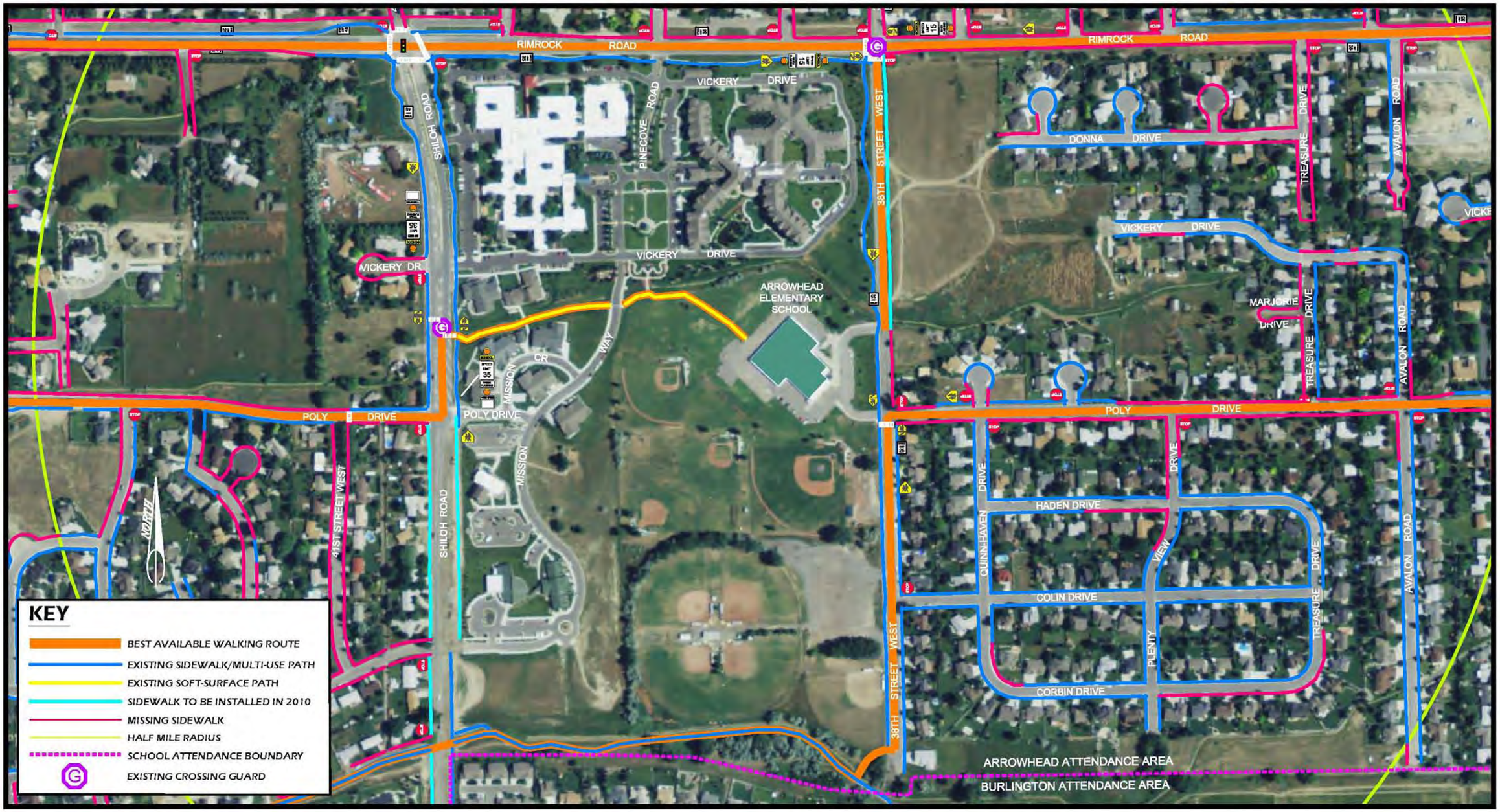


FIGURE 4. ARROWHEAD ELEMENTARY SCHOOL – WALKING ROUTE MAP

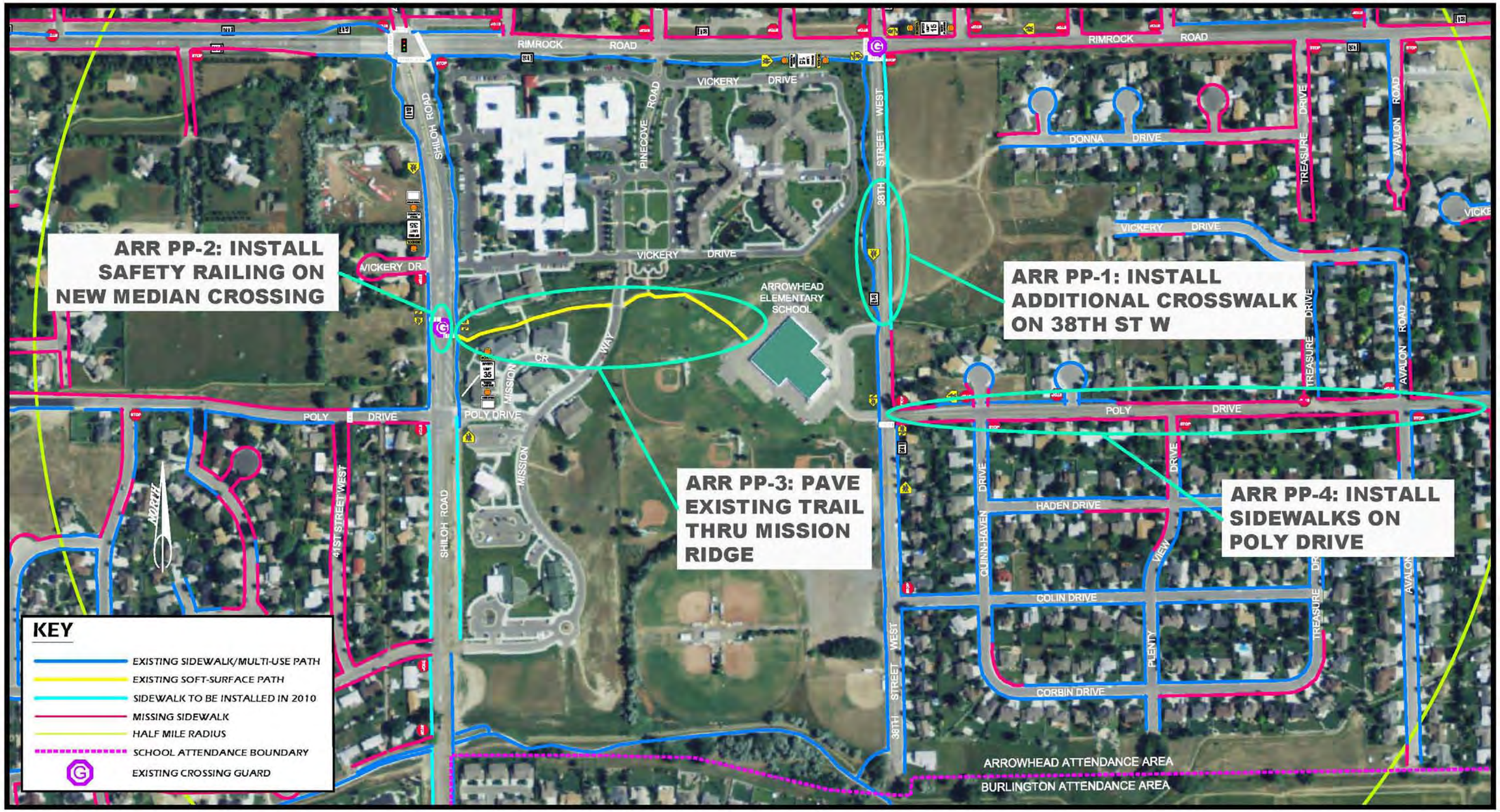


FIGURE 5. ARROWHEAD ELEMENTARY SCHOOL – PRIORITY PROJECTS

BEARTOOTH ELEMENTARY SCHOOL

Site Characteristics

- Located at 1345 Elaine Street, which is classified as a local street.
- Served by 3-4 school buses (including 1 regular bus and 2-3 special education or pre-school buses).
- No crossing guards
- Marked crosswalks at Bitterroot Drive/Elaine Street and at Elaine Street/Columbine Drive.
- There is a 20 mph school speed zone on Elaine Street (8 AM-5 PM), which is reduced from 25 mph.
- Posted speed limit of 35 mph on Bitterroot Drive and 25 mph on Barrett Road.
- School bus loading takes place within the access loop in front of the school. This loop is closed to parent/visitor traffic.
- Parent loading takes place along Elaine Street and in the alley on the east side of the school.
- Off-street parking is very limited. Staff generally park in the lot located along the southwest side of the building.
- Sidewalks are not available along several major streets in the area, including along Wicks Lane, Bitterroot Drive, Barrett Road, and Hawthorne Lane, as well as various local streets.
- A segment of Barrett Road is unpaved west of Bitterroot Drive and in very poor condition. Barrett Road falls mostly under Yellowstone County jurisdiction within the vicinity of the school.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Survey data not available for Beartooth Elementary School.

Issues/Concerns

- Not all parents respect the prohibition of parent loading within the bus loading zone (access loop).

- Before and after-school periods are chaotic, with parents dropping off kids along Elaine Street, within the alley along the east property boundary, or in the bus loading zone in front of the school. It appeared that the majority of kids were driven to school on the day of our observations.
- Lack of sidewalk along Barrett Road in combination with irrigation ditch along north shoulder causes kids to walk on the roadway.
- Speeds on Bitterroot Drive and Barrett Road seem to be in excess of the posted speed limit.
- PTA group has requested that alley along east property boundary be signed and enforced as one-way northbound.

Barriers/Big Picture Issues

- Barriers include Bitterroot Drive, Barrett Road/irrigation ditch, and Wicks Lane.
- Attendance boundary is split with a portion of the boundary located on the west side of Main Street.

Priority Projects

The following projects were identified as priorities for improvement at Beartooth Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- BEA PP-1: Construct separate access loop and/or parking lot along east side of school to further separate bus and parent/visitor traffic and reduce congestion on Elaine Street.
- BEA PP-2: Install a crosswalk on Barrett Road at Linden Drive and install a new sidewalk or multi-use trail along the south side of Barrett and the west side of the alley. This will require coordination with Yellowstone County on segments that fall under their jurisdiction. Installation of the sidewalk will likely require private property easements from adjacent landowners along both Barrett Road and the alley.
- BEA PP-3: Install sidewalk along the east side of Bitterroot Drive from Cherry Creek Estates to Wicks Lane with a school crosswalk at Wicks Lane and the access to Emma Jean Estates Subdivision.

- BEA IP-1: Restripe crosswalks at Elaine/Bitterroot and Elaine/Columbine.
- BEA IP-2: Sign alley adjacent to the school one-way with the appropriate direction to be determined upon further evaluation.

Other Recommended Improvements

The following projects were also identified as potential improvements at Beartooth Elementary School, but were not considered priority projects at the time of this report.

- Evaluate the need for crosswalk enhancements on Bitterrot Drive at Elaine Street and Elaine Street at Columbine Drive.
- Pave Barrett Road and install sidewalks and additional school crossings. This will require coordination with the County on segments that fall under their jurisdiction.
- Install sidewalks along Bitterroot Drive where missing, particularly along the west side from Wicks Lane to Elaine Street.
- Install sidewalks along Hawthorne Lane and Wicks Lane.
- Install sidewalk on north side of Maurine Street from Hawthorne Lane to Primrose Drive to reduce the number of kids crossing at the uncontrolled intersection of Maurine Street and Primrose Drive.
- Install sidewalks on additional neighborhood streets with priority based on proximity to school.
- Increased enforcement for speeding traffic and parents blocking crosswalks/side streets near loading zone.

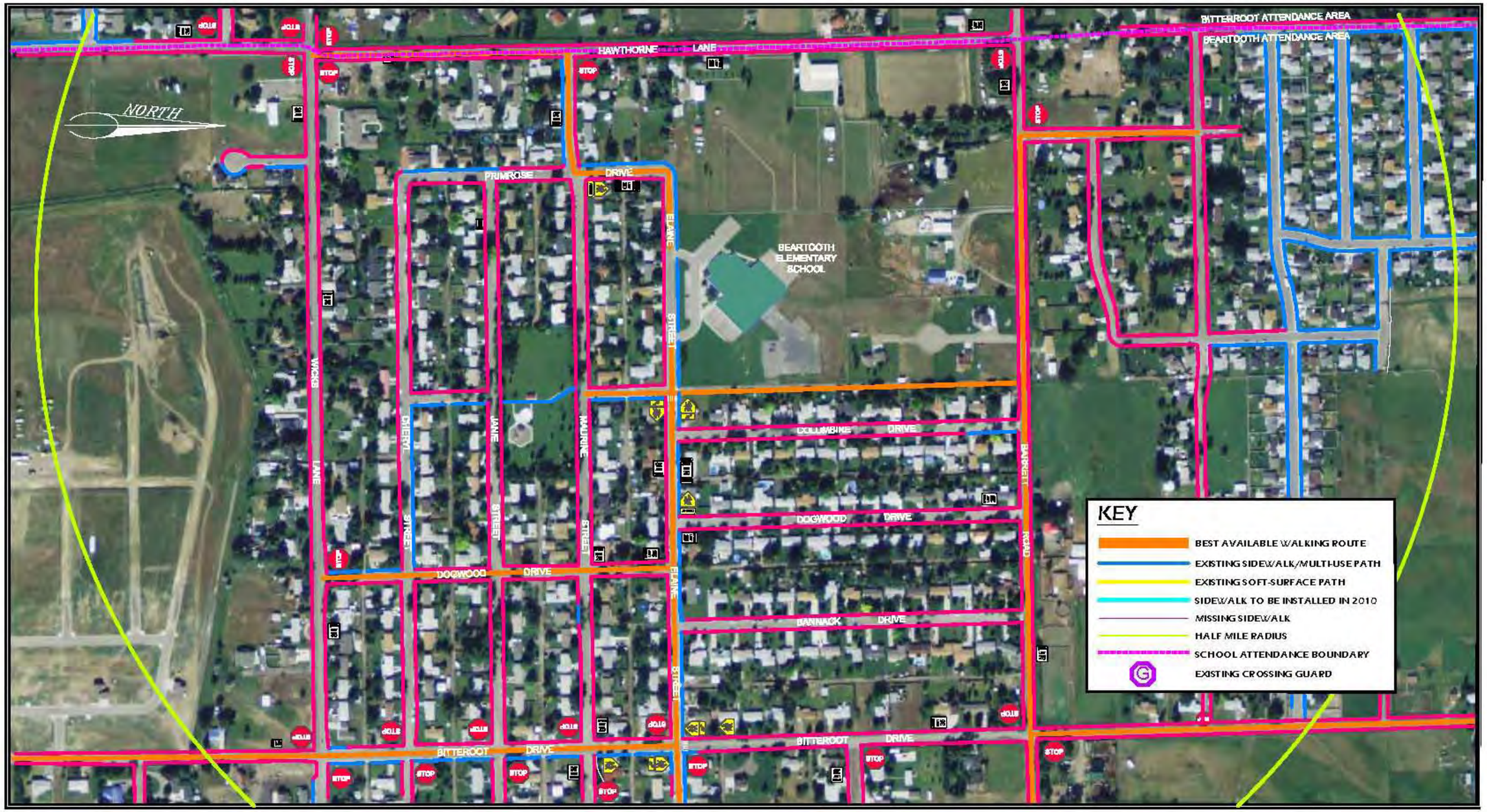


FIGURE 6. BEARTOOTH ELEMENTARY SCHOOL – WALKING ROUTE MAP

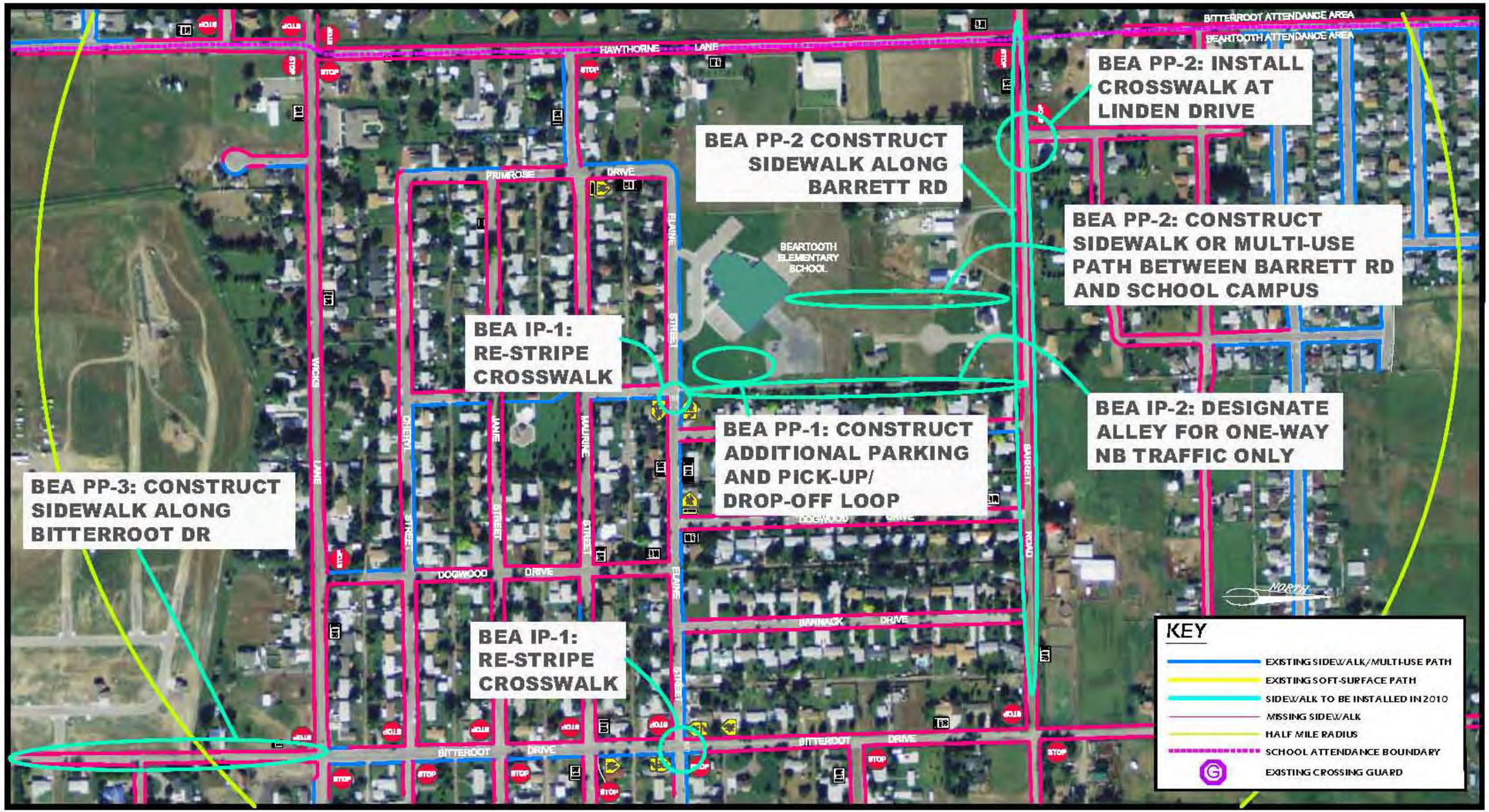


FIGURE 7. BEARTOOTH ELEMENTARY SCHOOL – PRIORITY PROJECTS

BENCH ELEMENTARY SCHOOL

Site Characteristics

- Located at 505 Milton Road, which is classified as a local street.
- Served by 3 regular school buses, as well as special education and day care vans.
- Crossing guard and marked crosswalks at Milton/Lake Elmo/Prince of Wales (north leg and east leg).
- Marked crosswalks at Milton Road and Rex Lane (north leg and east leg)
- 20 mph school speed zone on Milton Road (no flashers), which is reduced from 25 mph.
- Parent loading takes place on Rex Lane, in teacher lot on east side of school, and on Milton Road just south of teacher lot.
- Bus loading takes place in new loop on Milton Road just south of school.
- Staff parking is located in large lot southeast of the school.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 10%
- Bike – 0%
- School Bus – 44%
- Family Vehicle – 31%
- Carpool – 2%
- Daycare Van – 13%

Issues/Concerns

- There are no sidewalks on Lake Elmo Drive, which is by far the school's biggest concern. However, sidewalks will be installed with the Lake Elmo reconstruction project, which will begin summer 2010. This project will also construct crosswalks across Lake Elmo Drive at Uinta Park Drive, as well as on the north, west, and east legs of the intersection of Lake Elmo/Milton/Prince of Wales.
- Observed several instances where parent parked on the south side of Milton and walked with their kids across Milton mid-block.
- Lack of east-west connections within attendance area – all kids have to walk down Lake Elmo Drive to Milton Road to get to the school.

- Seems like a lack of space for parent loading, but didn't observe any significant queues.

Barriers/Big Picture Issues

- Lake Elmo Drive is a major barrier. Safety bussing could be eliminated with the installation of sidewalks on Lake Elmo Drive.
- Wicks Lane is also a barrier, but kids can cross at the signal at Wicks Lane and Lake Elmo Drive once sidewalks are installed on Lake Elmo Drive. However, once you get beyond one mile from the school, distance may actually be a bigger barrier than crossing Wicks Lane.
- As the area continues to develop, another school will eventually be needed north of Wicks Lane and west of Main Street to adequately serve this area within a reasonable walking distance.

Priority Projects

The following projects were identified as priorities for improvement at Bench Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- BEN PP-1: New crossing guard at Lake Elmo Drive and Uinta Park Drive after Lake Elmo reconstruction is complete.
- BEN PP-2: Install an east-west sidewalk or trail connection to north end of school property along Lola Lane. This connection would shorten the walking distance coming from the north on Lake Elmo Drive.
- BEN PP-3: Install sidewalks on Rex Lane.

Other Recommended Improvements

The following projects were also identified as potential improvements at Bench Elementary School, but were not considered priority projects at the time of this report.

- Education for all the students that will start walking to school once Lake Elmo reconstruction is complete.
- Consider another future connection to the north end of the school with a north-south trail connection between Josephine Drive and the school property.

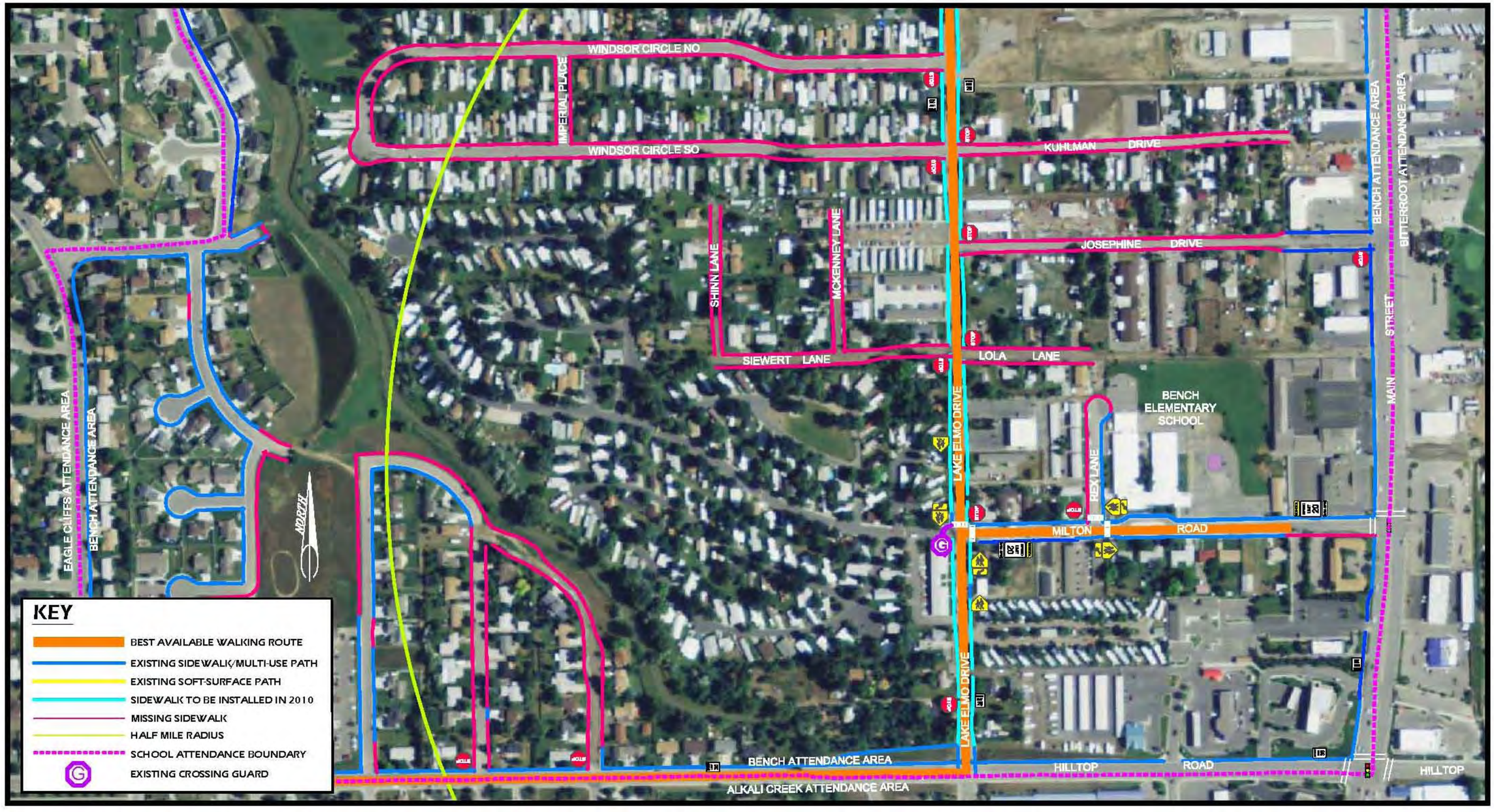


FIGURE 8. BENCH ELEMENTARY SCHOOL – WALKING ROUTE MAP

FIGURE 9. BENCH ELEMENTARY SCHOOL – PRIORITY PROJECTS

BITTERROOT ELEMENTARY SCHOOL

Site Characteristics

- Located at 1801 Bench Boulevard, which is classified as a principal arterial.
- No regular bussing.
- Crossing guard at multi-use path crossing of Wicks Lane between Linda Lane and Wiloma Drive. Crossing guard at Bench Boulevard and Kyhl Lane in the afternoon only.
- Marked crosswalks at Bench Boulevard/Kyhl Lane intersection and at Bench Boulevard/Jaque Lane intersection.
- Posted speed limit of 35 mph on Bench Boulevard with a 25 mph school speed zone with flashers.
- Posted speed limit of 35 mph on Wicks Lane. Advanced warning signs (school crossing) for multi-use path crossing.
- Posted speed limit of 25 mph on Barrett Road. Advanced warning signs (bike crossing) for multi-use path crossing.
- Parent loading occurs in access loop along Kyhl Lane, as well as in pullout along Bench Boulevard to the north of the main building.
- Off-street parking is very limited. Most parking is on-street.
- Sidewalks are limited along Bench Boulevard and Wicks Lane.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 15%
- Bike – 4%
- School Bus – 5%
- Family Vehicle – 49%
- Carpool – 12%
- Daycare Van – 15%

Issues/Concerns

- Lack of sidewalks along Bench Boulevard causes kids to walk on shoulder of road. Bridge crossings of drainage ditches cause kids to have to cross Bench Boulevard at those locations.

- Lack of connection to multi-use path across the Holling Drain from the subdivision to the east forces kids out toward Barrett Road and/or Wicks Lane to get to school.
- Lack of sidewalk along Barrett Road in combination with irrigation ditch along north shoulder causes kids to walk on the roadway. Speeds also appear to be higher than the posted speed limit on Barrett Road given the open, rural nature of the street.
- Limited signing and no school zone near multi-use path crossing of Barrett Road at the Holling Drain.
- Speeds and drivers' lack of awareness are issues on Wicks Lane in the area of the multi-use path crossing.
- Kyhl Lane (and intersection with Bench Boulevard) are very congested during pick-up/drop-off periods.
- The First Student, Inc. bus contracted by the Boys & Girls Club pulls up to the school curbside instead of just stopping on Bench Boulevard with flashers running. According to school representatives, there have been several close calls and one crash caused by this bus pulling back onto the street. Because this bus is not contracted by Billings Public Schools, they are not able to stop in the middle of the street with warning flashers.

Barriers/Big Picture Issues

- Barriers include Bench Boulevard, Barrett Road/irrigation ditch, Wicks Lane, Holling Drain.

Priority Projects

The following projects were identified as priorities for improvement at Bitterroot Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- BIT PP-1: Construct pedestrian path connection and crossing over the Holling Drain from residential area to the east.
- BIT PP-2: Construct additional parking area east of existing building and parking lot.
- BIT PP-3: Install sidewalk or pedestrian path along Barrett Road. Installation of sidewalk will likely require private property easements from adjacent landowners.

- BIT IP-1: Install fluorescent yellow school crossing signs and ladder-style crosswalk at the multi-use trail crossing on Barrett Road.

Other Recommended Improvements

The following projects were also identified as potential improvements at Bitterroot Elementary School, but were not considered priority projects at the time of this report.

- Coordinate with MDT to ensure sidewalks and pedestrian bridges are included in active Bench Boulevard reconstruction project.
- With future widening of Wicks Lane, install enhanced crossing treatment at multi-use path crossing.
- Install sidewalks on Wicks Lane.
- Evaluate the need for additional crossing enhancements at multi-use path crossing of Barrett Road.
- Provide appropriate signage and strict enforcement for a curbside loading area for the Boys & Girls Club bus or provide an off-street loading area.

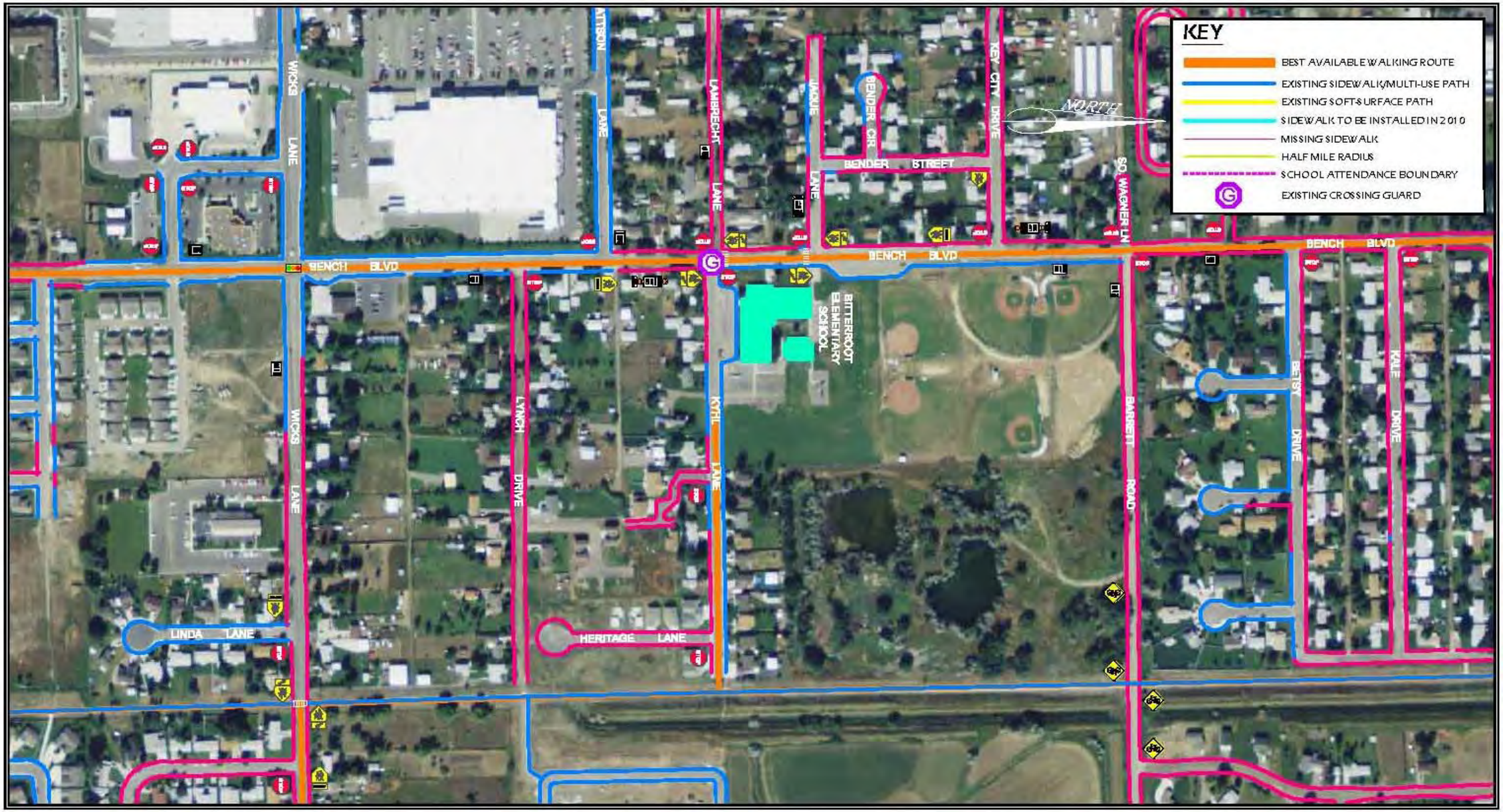


FIGURE 10. BITTERROOT ELEMENTARY SCHOOL – WALKING ROUTE MAP

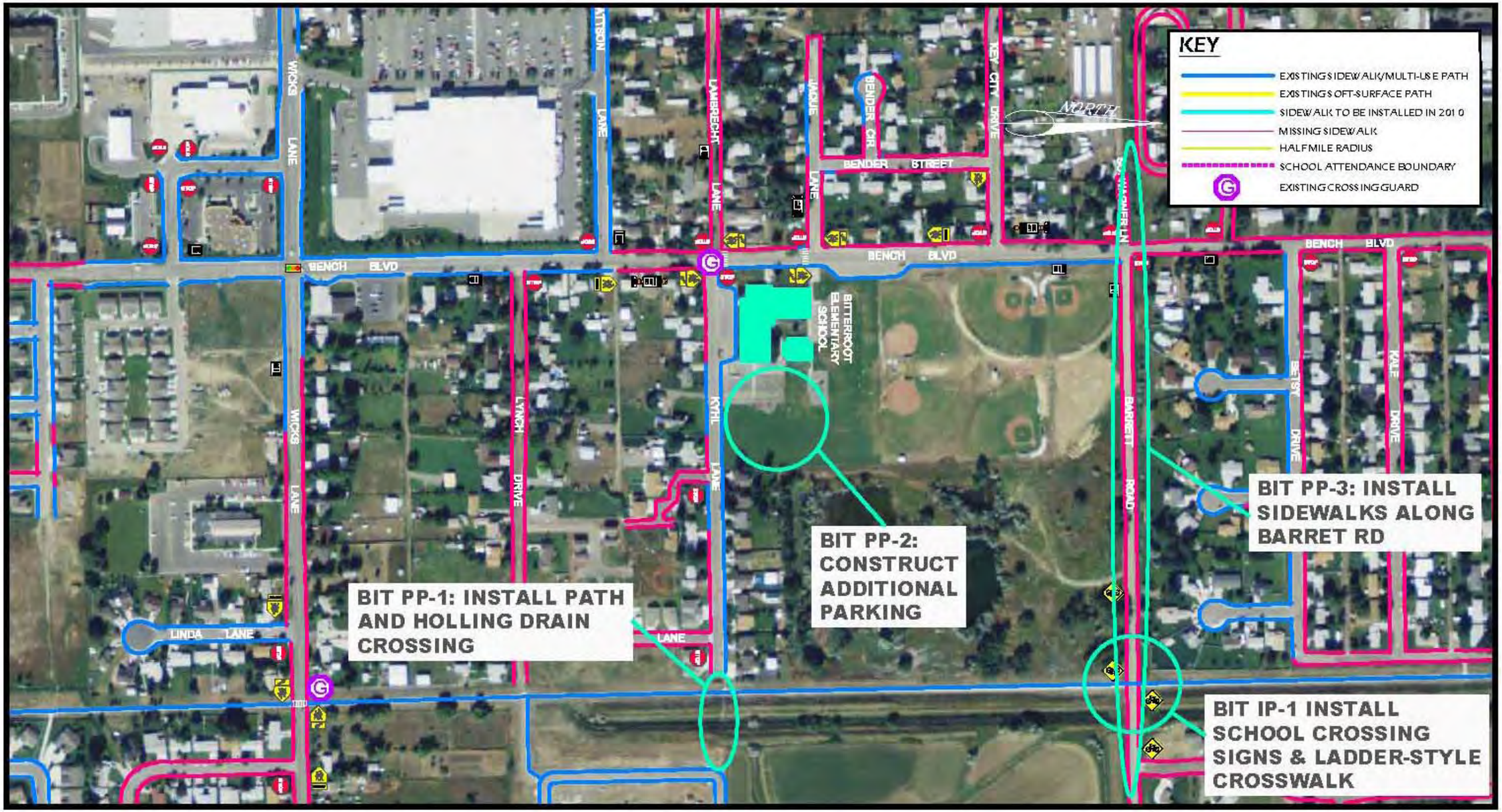


FIGURE 11. BITTERROOT ELEMENTARY SCHOOL – PRIORITY PROJECTS

BOULDER ELEMENTARY SCHOOL

Site Characteristics

- Located at 2202 32nd Street West, which is a local street, but has higher volumes/speeds than many local streets.
- Served by 7 school buses, consisting mostly of special education and kindergarteners being bused from the Arrowhead attendance boundary.
- Crossing guards and marked crosswalks at 32nd/Boulder Ave, 32nd/Poly, and Beartooth/Rimrock.
- Marked crosswalk at 32nd/Colton, just south of school. A Sidewalk Sammy is placed within this crosswalk during morning and afternoon peaks.
- School crossing with traffic signal at Rehberg/Colton.
- 15 mph school speed zone on 32nd Street West (no flashers), which is reduced from 25 mph. This school speed zone is not in compliance with the current State law.
- The parent loading zone is located on-street on 32nd Street West mainly on the west side in front of school and just north of school, but some also park on east side and cross at Boulder Avenue crossing.
- The bus loading zone is south of school along playground through gated access for buses only.
- The small parking lot on the north side of the school is reserved for staff parking. Access to this lot is roped off before/after school to prevent parents from using it for loading. Some teachers also park on-street.
- New curb extensions were installed approximately 5 years ago at crosswalks on 32nd Street West.
- Boulder Avenue is signed "no parking during school hours."

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 29%
- Bike – 0%
- School Bus – 8%
- Family Vehicle – 48%
- Carpool – 8%

- Daycare Van – 7%

Issues/Concerns

- Congestion on 32nd Street West due to parent loading, waiting for a prime loading spot, proximity to crosswalk with a high number of crossings (only a few vehicles get through at a time before stopped by crossing guard), some double park or only pull in half way and block through traffic. It's also difficult to get back out of an on-street parking space because of the congestion.
- Speeding traffic on 32nd Street West isn't a problem during before/after school rush because it's too congested to speed then, but it is a concern the rest of the school day.
- Lack of sidewalks on Boulder Avenue combined with high pedestrian volume.
- Drainage issues at 32nd Street West/Boulder Avenue (facetiously called "Boulder Lake") – ponding on the southeast corner that blocks ramp and crosswalk.
- Drainage issues at 32nd Street West/Poly Drive – ponding blocks sidewalk and crosswalk.
- Staff parking lot is too small.
- Issues with school-related traffic parking on Boulder Avenue, even though it's signed "no parking during school hours."

Barriers/Big Picture Issues

- Barriers include Rimrock Road, Poly Drive, and Rehberg Lane.
- All kindergarteners within Arrowhead attendance boundary are bused to Boulder Elementary.

Priority Projects

The following projects were identified as priorities for improvement at Boulder Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- BOU PP-1: Install sidewalks and curb and gutter along Boulder Avenue.

- BOU PP-2: Consider installing a flasher on the existing school zone speed limit sign.
- BOU PP-3: Install sidewalks on Poly Drive west of 32nd Street West.
- BOU PP-4: Fix drainage problems at intersections of Poly Drive/32nd Street West and Boulder Avenue/32nd Street West.

Other Recommended Improvements

The following projects were also identified as potential improvements at Boulder Elementary School, but were not considered priority projects at the time of this report.

- Expand existing staff parking lot.
- Explore options for on-site parent loading or a remote drop-off location.
- Increase enforcement of parking restrictions on Boulder Avenue as short-term solution to lack of sidewalks.
- Increase enforcement of double parking issues in loading zones.
- Explore additional options for reducing speeds on 32nd Street West.
- Encourage parents to park along entire park frontage for pick up and drop off.

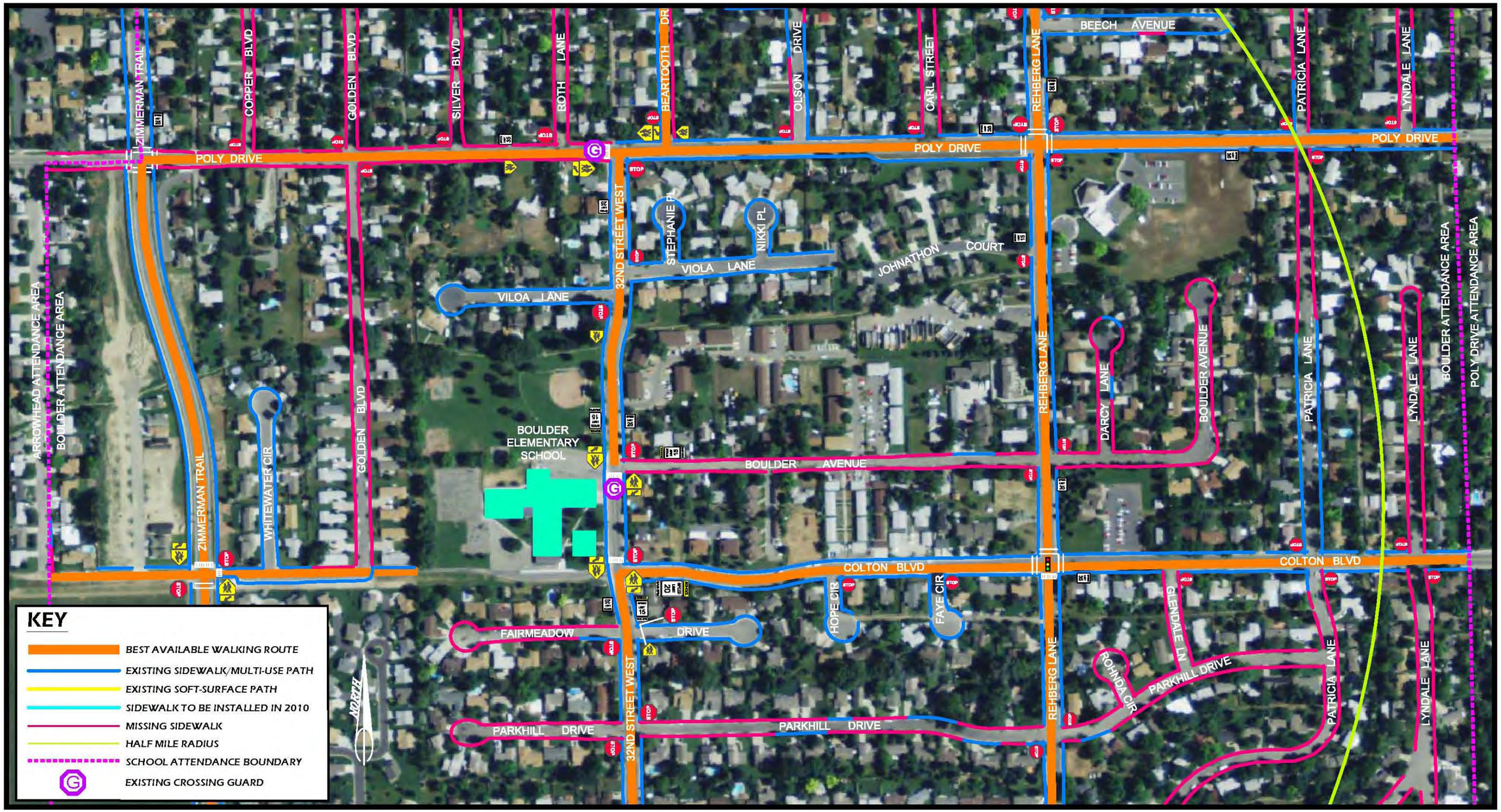


FIGURE 12. BOULDER ELEMENTARY SCHOOL – WALKING ROUTE MAP

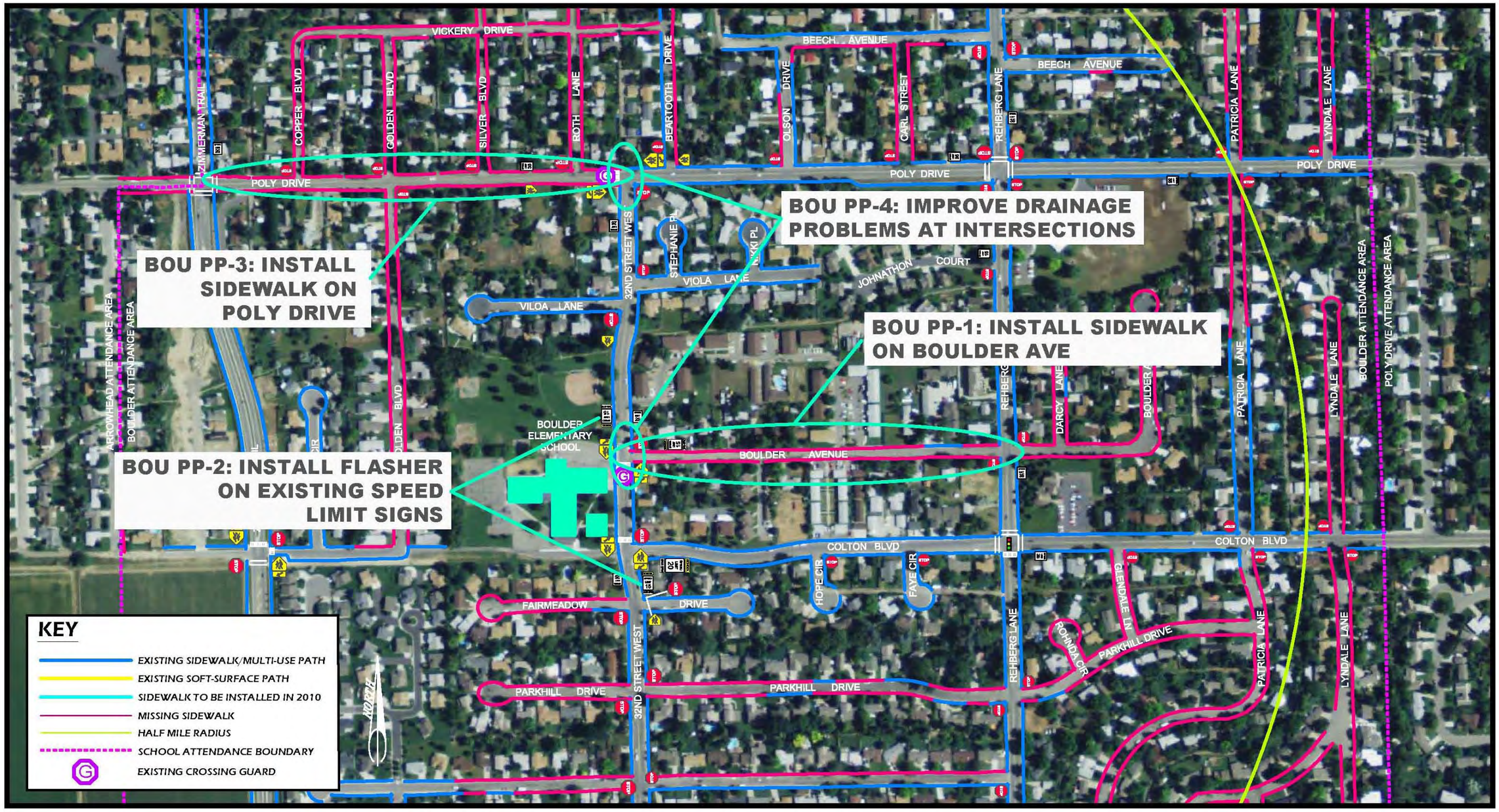


FIGURE 13. BOULDER ELEMENTARY SCHOOL – PRIORITY PROJECTS

EAGLE CLIFFS ELEMENTARY SCHOOL

Site Characteristics

- Located at 1201 Kootenai Avenue, which is classified as a local street. Constitution Avenue is classified as a collector.
- No regular school buses, just special education buses and daycare vans.
- Crossing guards and marked crosswalks at Kootenai/Marias and Constitution/Governors.
- 15 mph school speed zone on Kootenai Avenue reduced from 25 mph, which is not in conformance with state law.
- Parent loading provided within the one-way loop road on south side of the school, some also load along Marias Drive.
- Bus loading provided within the parking lot/loop road on the east side of the school.
- Visitors park on the east side of the school and staff park in the lots on the east and north sides of the school.
- Staggered dismissal times (2:20 pm and 3:00 pm) help ease congestion in the afternoon.
- Very few areas with missing sidewalk.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 15%
- Bike – 4%
- School Bus – 28%
- Family Vehicle – 40%
- Carpool – 9%
- Daycare Van – 4%

Issues/Concerns

- The parent drop off loop on the south side of the school seems to work well (one-way with parking lane and bypass lane, counter-clockwise circulation, separate from buses, etc.), but a very long queue of parent vehicles develops on Kootenai Avenue.

Although the length of the queue is a concern, it does not appear to block other neighborhood traffic.

- For parents that load/unload on Marias Drive, it's difficult to make the southbound left-turn back onto Kootenai Avenue because of the queue of vehicles waiting to enter the parent loading area directly to the west. There is also a pedestrian crosswalk at this intersection, adding to the confusion, but it does have a crossing guard.
- Have had issues with neighbors backing out of their driveways and not watching for students in sidewalk.
- Principal Wolverton indicated they would prefer to have flashers on the school zone speed limit signs on Kootenai Avenue with a "when flashing" plaque instead of the time plaque.

Barriers/Big Picture Issues

- Barriers include Wicks Lane, Governors Boulevard, and the large undeveloped property directly north of the school (Skyview Ridge Subdivision owned by DNRC).

Priority Projects

The following projects were identified as priorities for improvement at Eagle Cliffs Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- EAG PP-1: Construct a trail connection from the intersection of Constitution Avenue and Kootenai Avenue to Marias Drive. Permission must be obtained from DNRC.
- EAG IP-1: Remove "8 AM – 5 PM" supplemental plaques on the school speed limit signs and replace with "When Children are Present" supplemental plaques. This recommendation is based on multiple complaints received by the school. The recommended change is not consistent with current City policy, so it would require an exception.
- EAG IP-2: Install "Do Not Block Intersection" signs at the intersection of Kootenai Avenue and Marias Drive.

Other Recommended Improvements

The following projects were also identified as potential improvements at Eagle Cliffs Elementary School, but were not considered priority projects at the time of this report.

- Consider constructing a loop roadway from the existing end of Constitution Avenue (where it intersects Kootenai Avenue) around to the north end of Marias Drive to provide an alternate route for loading on Marias Drive and ease congestion on Kootenai Avenue. An alternate loop location would be around the north side of the school from Marias Drive to Looking Glass Drive. Either route should be coordinated with development plans for Skyview Ridge and permission must be granted from DNRC.
- Explore opportunities for constructing a trail through the Skyview Ridge property to the north to provide pedestrian access to neighborhoods north of Wicks Lane. This would be a temporary trail along a future roadway right-of-way. The trail alignment should be coordinated with development plans for Skyview Ridge and permission must be granted from DNRC.
- Consider providing educational information for neighbors to warn them to watch for kids walking in the sidewalks when they're backing out of their driveways.

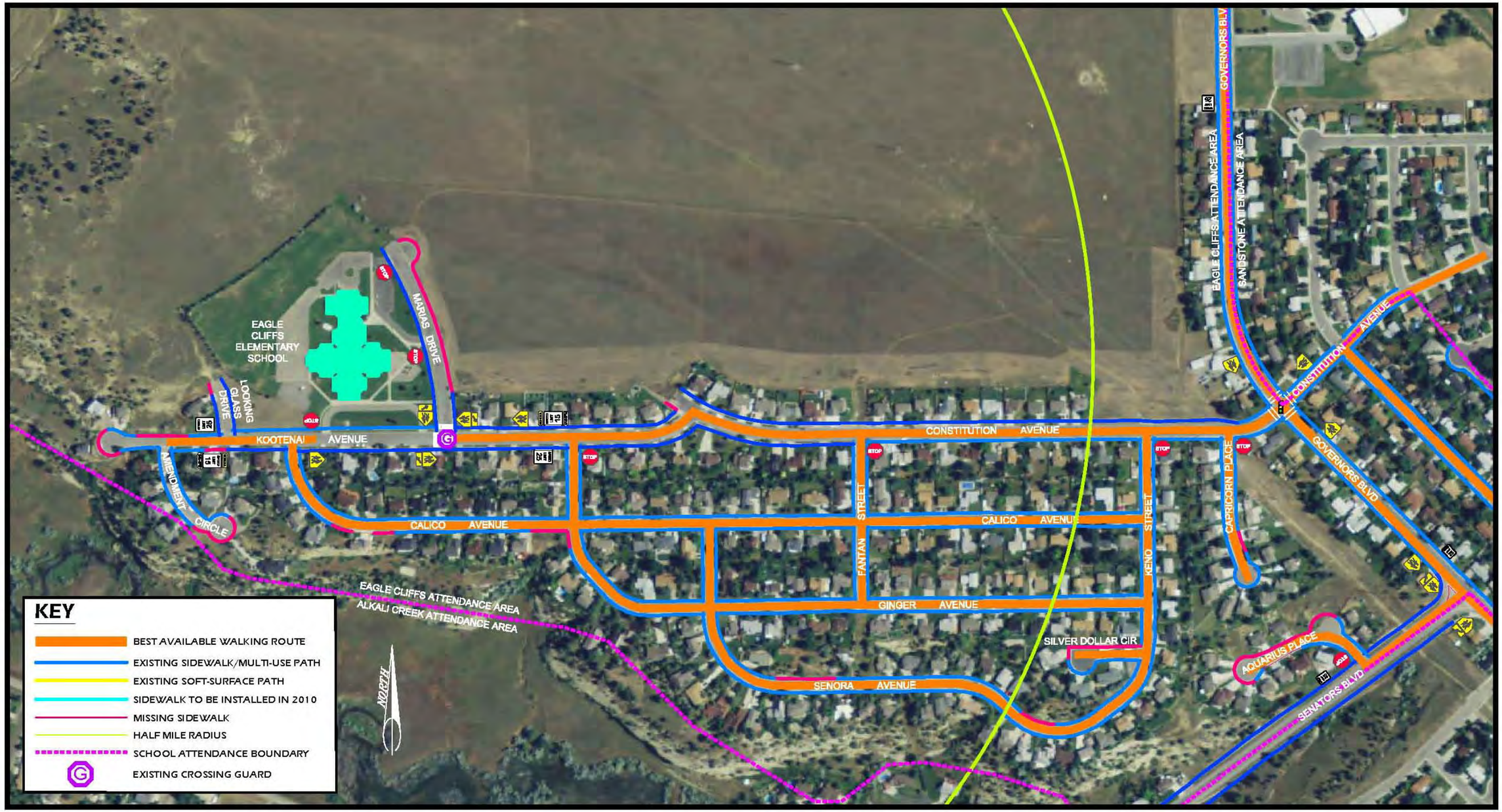


FIGURE 14. EAGLE CLIFFS ELEMENTARY SCHOOL – WALKING ROUTE MAP

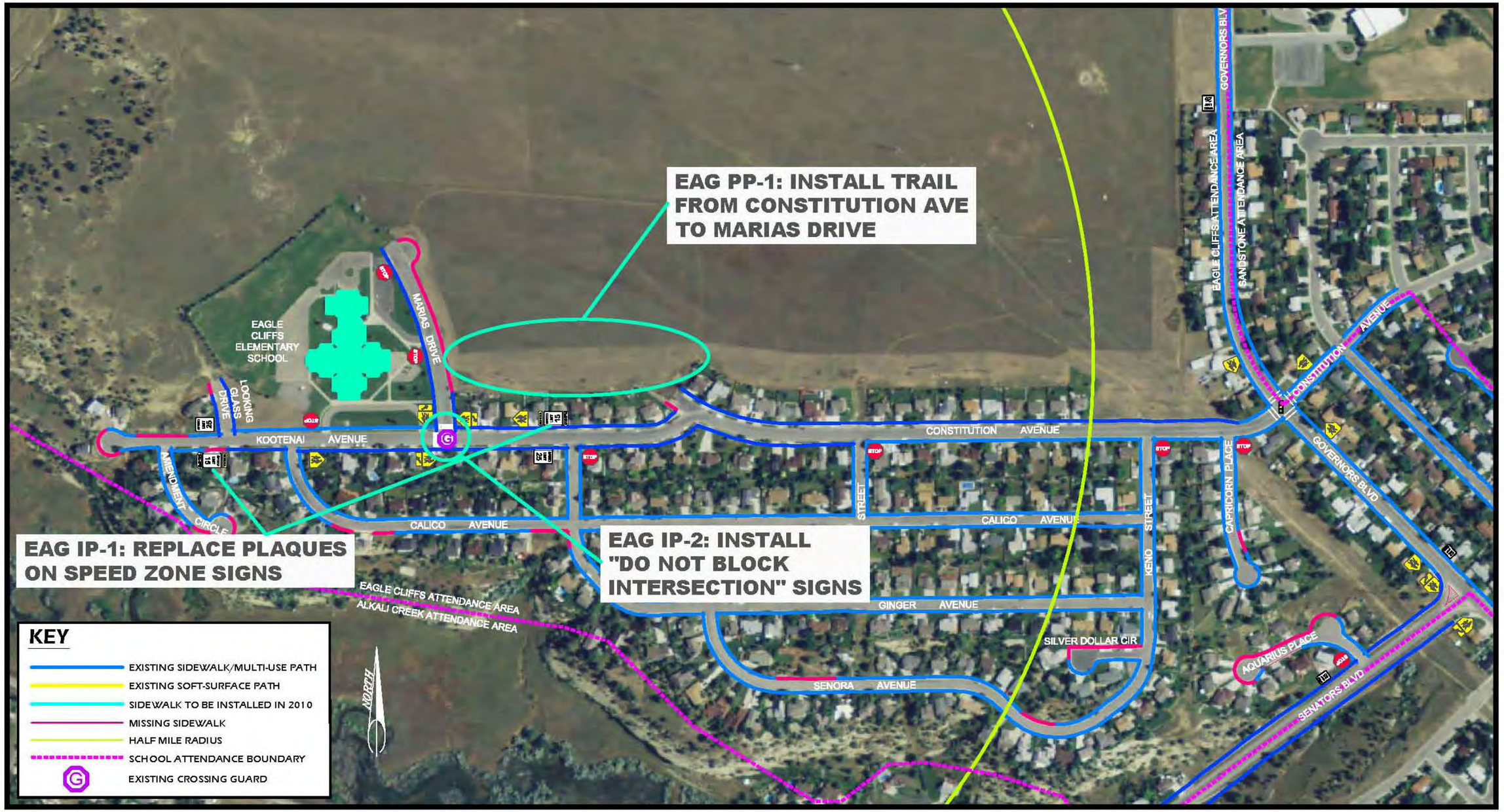


FIGURE 15. EAGLE CLIFFS ELEMENTARY SCHOOL – PRIORITY PROJECTS

MEADOWLARK ELEMENTARY SCHOOL

Site Characteristics

- Located at 221 29th Street West, which is classified as a local street, but with higher volumes than many other local streets.
- One safety school bus route for students that live south of Central or west of 32nd Street West and one school-to-school shuttle for kindergarteners from the Burlington attendance boundary.
- Marked crosswalk and crossing guard on 29th Street West just south of Cook Avenue, at 29th/Howard, and at Broadwater/Vermillion (traffic signal).
- 15 mph school speed zones on 29th Street West and side streets approaching 29th Street West near the school, which are not in compliance with the current State law.
- Staff arrives early and parks in access loop/parking lot in front of school. Lot is then closed off with cones, so parents can't use it for loading, because of safety concerns with kids walking between vehicles.
- Bus loading takes place in the separate parking lot loop to the south.
- Parking is limited such that parents and visitors must generally park on-street on a typical school day.
- Existing pedestrian bridge over BBWA canal provides access to neighborhoods east of the canal and a connection to the north-south Descro Park trail.
- Billings Public Schools has made "Safety Bussing" available for kids south of Central (biggest growing area for school) and west of 32nd Street West. Costs $75/semester to have kids bused from these areas, but not all parents are willing to pay for it.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 34%
- Bike – 0%
- School Bus – 3%
- Family Vehicle – 42%
- Carpool – 7%
- Daycare Van/Other – 14%

Issues/Concerns

- Heavy traffic in school zone, but speeds are low and congestion is on local street.
- Problems with parents blocking crosswalks in loading zone or parking in other prohibited areas.
- Northwest corner of Howard/29th has a 5-foot parallel accessibility ramp, but no detectible warning. There is no "waiting area" for kids to stand and wait behind crosswalk, so they wait on the adjacent lawn or along the back of curb close to the roadway.
- Drainage is a problem along 29th Street West, Howard Avenue, etc. During site observations, sidewalks were not visible in several places due to ice. Northwest corner of Howard/29th is a low spot without an inlet, so ice blocks crosswalk during winter.
- Principal Croff reported safety concerns over crossings of Central Avenue (at 29th/Brookshire) and 32nd Street West (at St. Johns).
- Crossing Central Avenue at 29th Street West is difficult. Although a refuge island crossing is available to the east, kids often will not detour to use it. A crossing guard was considered here to direct kids to the refuge crossing, but safety busing was implemented instead.
- No sidewalk or curb & gutter along north side of Central Avenue west of 29th Street West. This is a major concern, especially in winter.
- No sidewalk along Brookshire. This is a private street, so the City does not have the authority to require sidewalk installation.

Barriers/Big Picture Issues

- Barriers include Central Avenue, Broadwater Avenue, 32nd Street West, and BBWA Canal (although there is a pedestrian bridge just east of the school).
- Kindergartners from the Burlington Elementary School area attend Meadowlark Elementary School.

Priority Projects

The following projects were identified as priorities for improvement at Meadowlark Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For

the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- MEA PP-1: Install enhanced school crossing with curb extensions on 32nd Street West near the intersection with St. Johns Avenue.
- MEA PP-2: Fix drainage problems along 29th Street West and Howard Avenue, in particular at the east side of the intersection of 29th Street West and Cook Avenue.
- MEA IP-1: Refresh yellow curb paint along 29th Street West and Howard Avenue.

Other Recommended Improvements

The following projects were also identified as potential improvements at Meadowlark Elementary School, but were not considered priority projects at the time of this report.

- Crossing upgrades at Howard Avenue/29th Street West including drainage improvements, ramp upgrades, and consideration of a "waiting area" on the northwest corner.
- Install curb and gutter and sidewalk or multi-use trail along north side of Central Avenue.
- Evaluate the need for stop control at intersection of Howard Avenue/30th Street West.
- Evaluate the need for a traffic signal at Central Avenue/29th Street West.
- Install new sidewalks along Brookshire for access to neighborhoods to the south.
- Alternatives to the combined project of a signal at Central Avenue/29th Street West and a new sidewalk along Brookshire include a connection to the Stewart Park Trail from neighborhoods south of Central Avenue (including an easement and canal crossing) or adjusting district boundaries so the small area south of Central Avenue would be included in another attendance boundary.

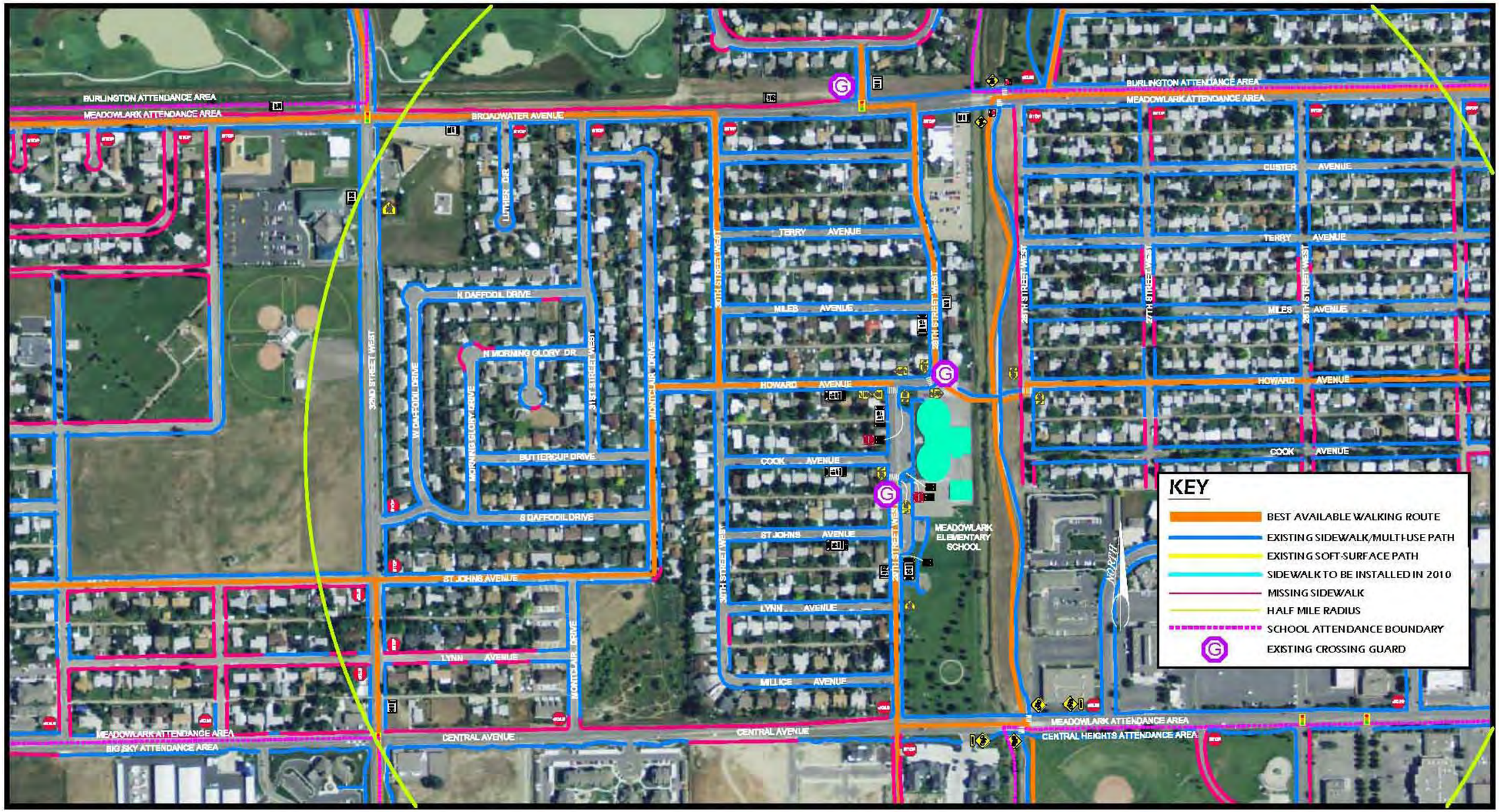


FIGURE 16. MEADOWLARK ELEMENTARY SCHOOL – WALKING ROUTE MAP

FIGURE 17. MEADOWLARK ELEMENTARY SCHOOL – PRIORITY PROJECTS

NEWMAN ELEMENTARY SCHOOL

Site Characteristics

- Located at 605 South Billings Boulevard, which is classified as a principal arterial.
- Served by four regular school buses for areas east of South 27th Street, south of I-90, and school-to-school shuttle for kindergarteners that attend Ponderosa Elementary School.
- Crossing guard and marked crosswalk at South Billings Boulevard/Simpson Street.
- Marked crosswalks at Newman Lane/Phillip Street, Calhoun Lane/Phillip Street.
- 25 mph school speed zone with flashers on South Billings Boulevard, which is reduced from 35 mph.
- 15 mph school speed zones on Newman Lane, Simpson Street, Phillip Street and Stone Street, reduced from 25 mph, which is not in conformance with state law.
- Bus loading takes place within the one-way loop road on west side of school along South Billings Boulevard.
- Parent loading takes place on Newman Lane.
- Staff and visitors park in the lot on the south side of the school.
- Visitors may also park in the 15-minute parking pullout on the west side of South Billings Boulevard (signed for 15-minute parking from 7 AM – 10 PM).
- The loading zone at the front of the school, the new trail on South Billings Boulevard, and the enhanced crossing at Simpson Street were all recently implemented with the South Billings Boulevard reconstruction project.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 24%
- Bike – 0%
- School Bus – 32%
- Family Vehicle – 29%
- Carpool – 2%
- Daycare Van – 13%

Issues/Concerns

- Flashers on the speed limit signs on South Billings Boulevard come on at 7:30 AM, which appears to be about 15 minutes too late given the activity observed around the school.
- The school is concerned that 25 mph is too fast for the school zone.
- Parking lot south of school has combined access with bus loop and adjacent alley. Alley is signed one-way eastbound, which requires vehicles to exit the parking lot to Newman Lane. Alley is in poor condition so staff members often exit to South Billings Boulevard against one-way signage.
- Existing parking lot is very cramped. Visitors are forced to park either in the 15-minute zone across South Billings Boulevard or illegally in the bus loop. For school events, people park across South Billings Boulevard in the empty City lot, which isn't paved or even set up for parking.
- Problem with some parents using the new bus loop for loading.
- Parents are supposed to load on Newman Lane, but it's still signed as no parking any time for bus loading zone only.
- Newman Lane isn't paved and becomes extremely muddy during wet weather. Surface is in poor condition, though City does occasionally re-stripe the crosswalk at Phillip Street.
- Northeast corner of Newman Lane/Phillip Street has sidewalk, but no accessibility ramp.
- There are several areas along Newman Lane, Calhoun Lane and east-west side streets where there is no sidewalk.

Barriers/Big Picture Issues

- Barriers include South Billings Boulevard, King Avenue East and I-90.
- The attendance boundary includes areas south of I-90 and even some areas on the southeast side of downtown.
- Kindergartners from the Newman Elementary School area attend Ponderosa Elementary School.

Priority Projects

The following projects were identified as priorities for improvement at Newman Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- NEW PP-1: Improve Newman Lane adjacent to the school (approximately from Stone Street to Ruth Avenue), install sidewalks and improve crossing at Phillip Street with new ADA ramps, signage and striping.
- NEW PP-2: Expand existing parking lot to the east and improve alley.
- NEW PP-3: Install sidewalks where missing along Calhoun Lane.
- NEW PP-4: Install sidewalks where missing along east-west side streets.
- NEW IP-1: Improve maintenance of Newman Lane and alley south of the school. These are recommended interim improvements until priority projects above are completed.
- NEW IP-2: Adjust timing on the speed limit flashers on South Billings Boulevard to better coincide with peak arrival and departure times.

Other Recommended Improvements

The following projects were also identified as potential improvements at Newman Elementary School, but were not considered priority projects at the time of this report.

- Install a trail connection from Streeter Bros. Subdivision (west of Amend Park) to the existing trail on the north side of Amend Park.

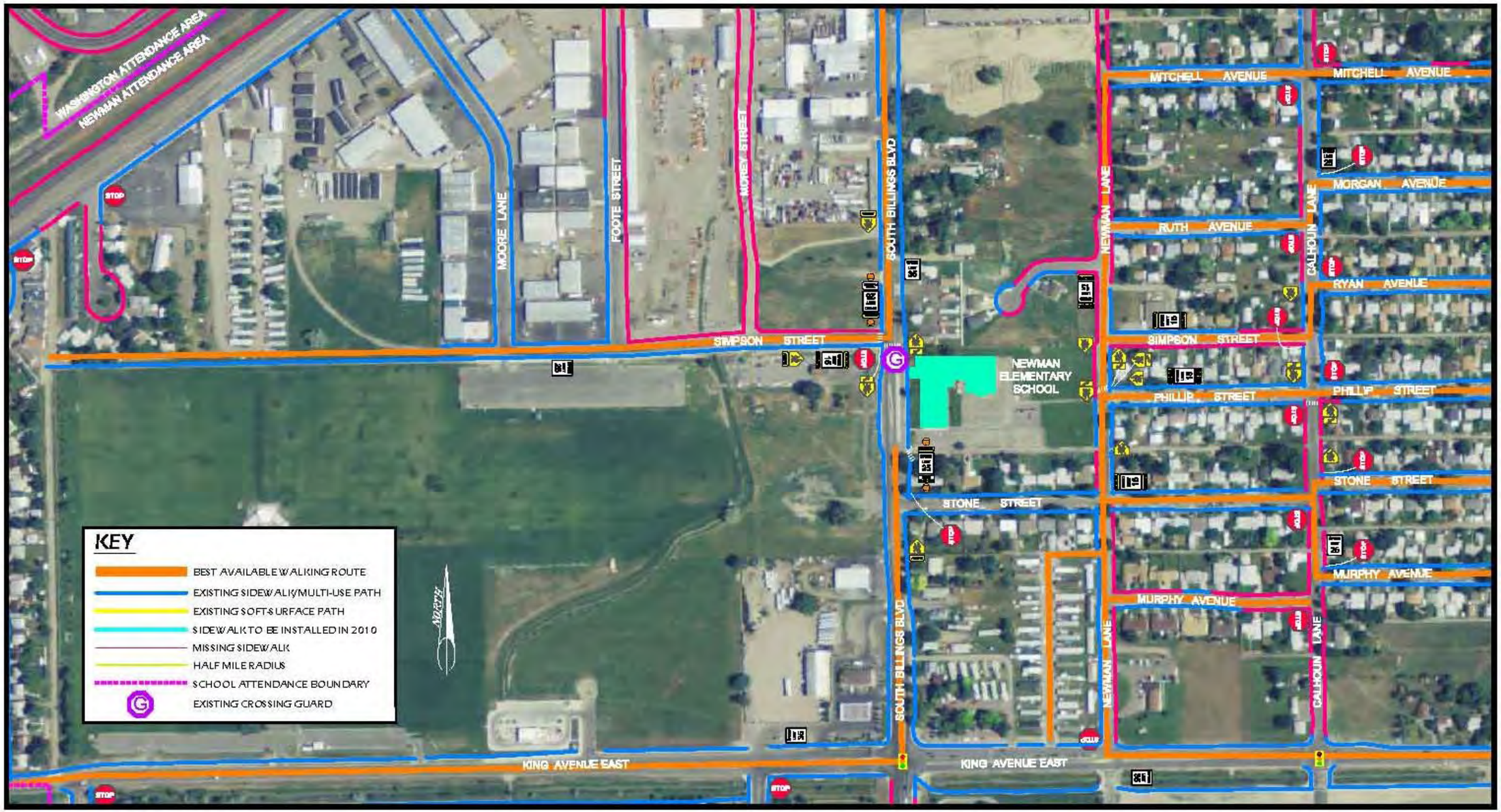


FIGURE 18. NEWMAN ELEMENTARY SCHOOL – WALKING ROUTE MAP

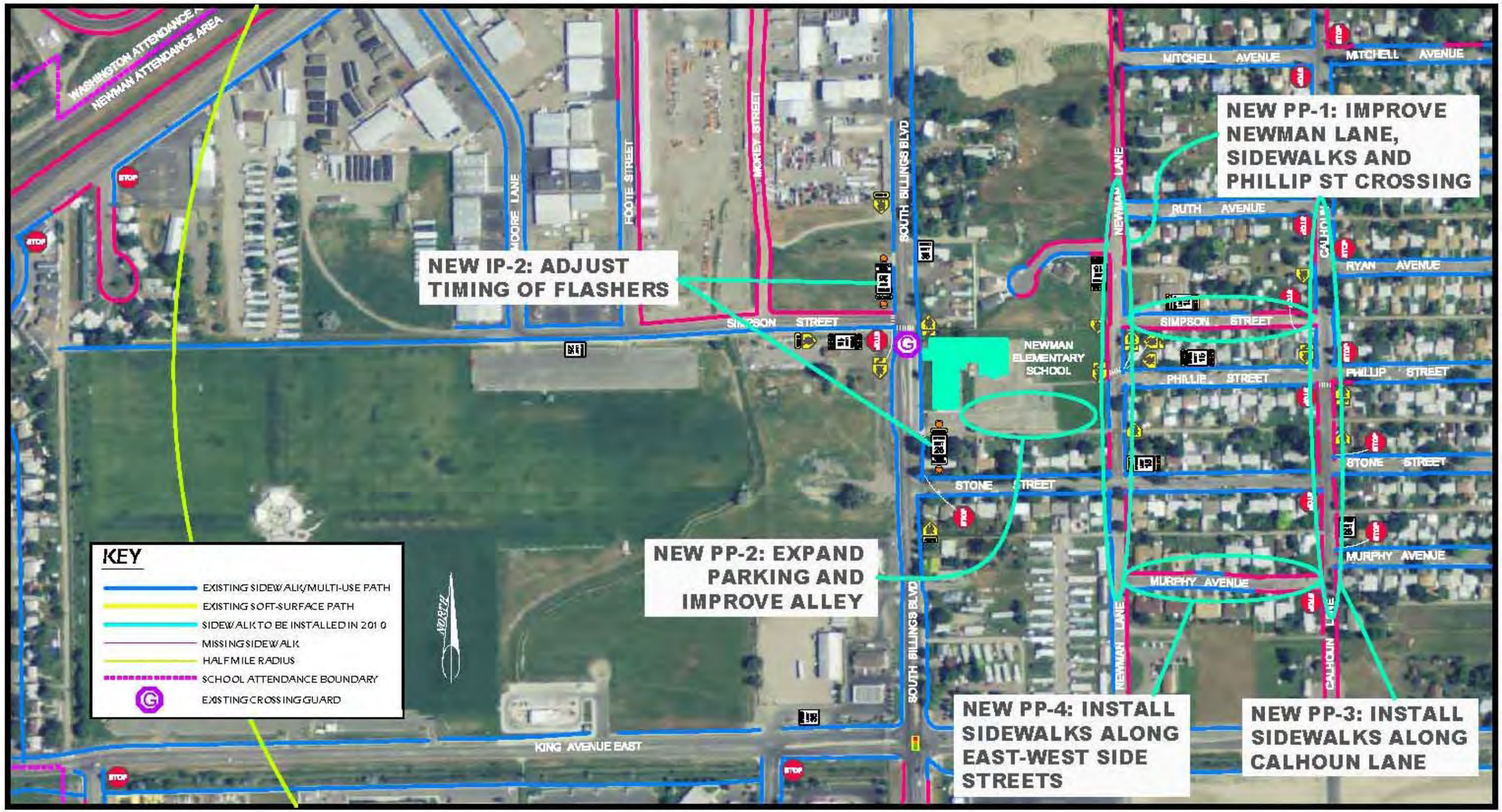


FIGURE 19. NEWMAN ELEMENTARY SCHOOL – PRIORITY PROJECTS

POLY DRIVE ELEMENTARY SCHOOL

Site Characteristics

- Located at 2410 Poly Drive, which is classified as a minor arterial.
- No regular school buses.
- Crossing guards and marked crosswalks at Poly/Arvin and Rimrock/Arvin.
- Marked crosswalks at Poly/Downer and Colton/Orange.
- 15 mph school speed zone with flashers on Poly Drive, reduced from 35 mph, which is not in conformance with State law.
- Parent loading takes places mostly within the alley to the east of the school, which is signed one-way northbound.
- School staff park in the lot east of the school along the alley and in spaces on the north side of the loop road.
- Visitors park in loop road throughout the day, but it's blocked during before/after school peak periods.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 43%
- Bike – 4%
- School Bus – 2%
- Family Vehicle – 40%
- Carpool – 7%
- Daycare Van – 4%

Issues/Concerns

- Concern about close proximity between entrance to the loop roadway and private drive to the west. Parents often pull into private drive for loading and snow from the loop roadway has been piled in front of the private drive before.
- Concern about close proximity between the exit of loop roadway, alley to the east, and crosswalk in between. Major conflicts with northbound turning movements and pedestrians in crosswalk.

- Access loop is closed off before/after school due to concerns about conflicts with loop traffic and pedestrian crossings.
- Drainage issues within the loop roadway, which create big accumulations of ice in the winter.
- Alley becomes congested before/after school due to high volume of parent vehicles that use it for loading.
- Some parents use the north end of 24th Street West for loading, which causes congestion and irritates property owners on that street.
- Concern about speeding traffic on Poly Drive.
- Concern about speeding traffic on Rimrock Road, vehicles do not yield to pedestrians in crosswalk, and through vehicles still get around turning traffic at Arvin in spite of raised median.
- Missing sidewalk along Rimrock Road.
- Kids appear to be confused when crossing at the all-way stop at 24th Street West/Colton Boulevard.
- Ramp on north side of the Rimrock Road/Arvin Road crosswalk does not line up with crosswalk.

Barriers/Big Picture Issues

- Barriers include Poly Drive, Colton Boulevard and Rimrock Road.

Priority Projects

The following projects were identified as priorities for improvement at Poly Drive Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- POL PP-1: Eliminate the loop roadway exit in front of school, reconfigure the parking lot, and install curb extensions at the Poly Drive/Arvin Road crossing. Drainage issues within loop roadway should be addressed with these improvements.
- POL PP-2: Install sidewalks on Rimrock Road.
- POL PP-3: Stripe bike lanes on Poly Drive.

- POL PP-4: Install a signed/marked crosswalk with curb extensions on the east leg of the intersection of Rimrock Road and Silverwood Street as an interim improvement prior to installing sidewalks on Rimrock Road. From this location, students can walk along the existing sidewalk easements within Woodbine Subdivision to Magnolia Place and then along Poly Drive.
- POL IP-1: Remove "No Parking – Bus Zone" signs on Poly Drive. Allow on-street parking, with restrictions near access approaches and the crosswalk at Poly Drive/Arvin Road.

Other Recommended Improvements

The following projects were also identified as potential improvements at Poly Drive Elementary School, but were not considered priority projects at the time of this report.

- Change alley to one-way southbound and widen at south end of site to provide a place where parents can pull over to drop off students, while allowing others to get around. Needs to be one-way southbound so they can drop off on the right-hand side.
- Other options for parent loading zone improvements would be to install a new loop roadway from the north end of 24th Street West into the site and out the alley or along the south end of the site along the Lyman Avenue right-of-way.
- Another option for separating west access and private drive to the west would be to extend the fence to the sidewalk.
- Move crosswalk at Rimrock Road/Arvin Road so it lines up with curb ramps and consider other enhancements.
- Stripe crosswalks at 24th Street West/Colton Boulevard and/or educate kids on how to cross at an all-way stop-controlled intersection.

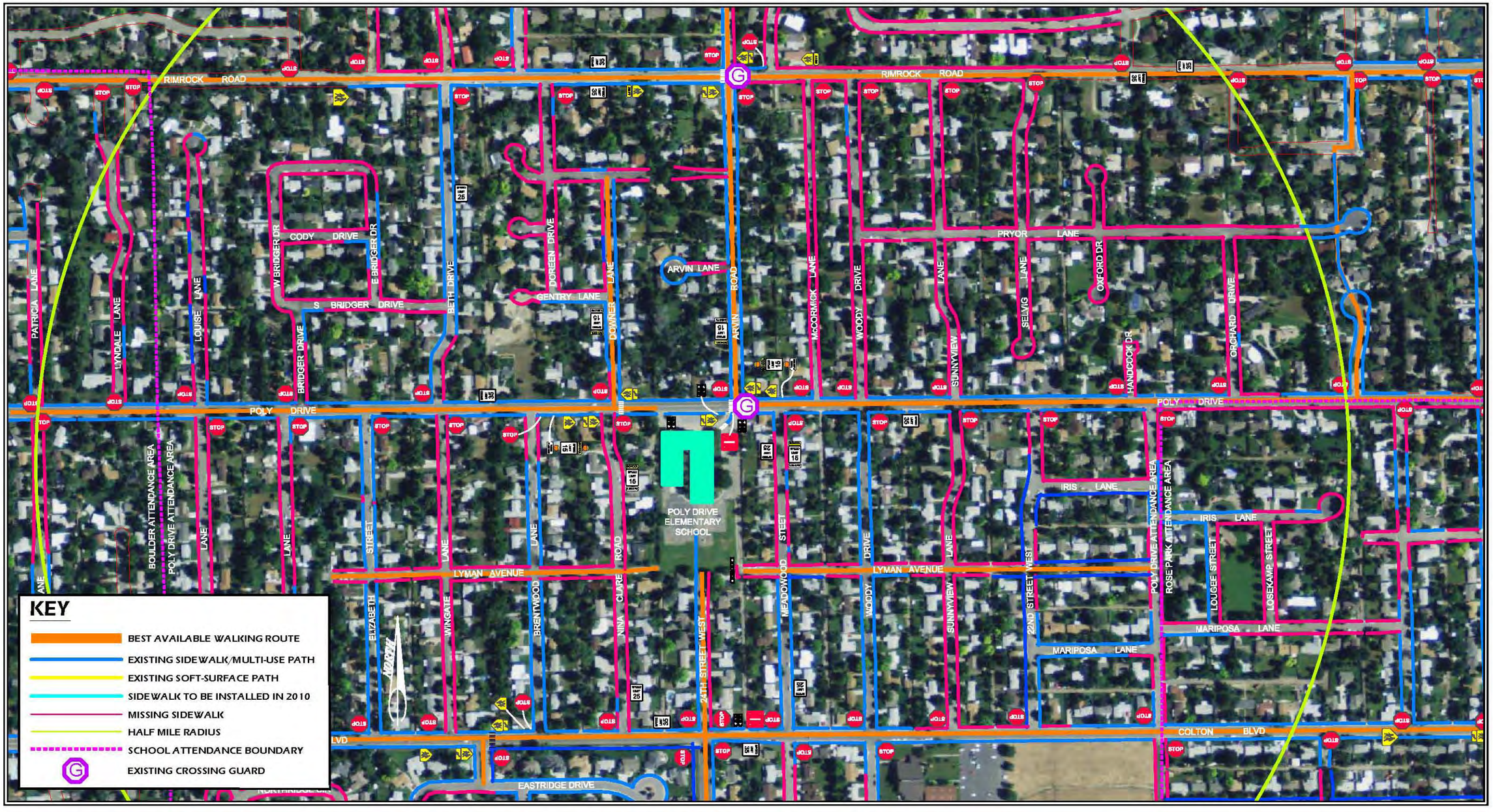


FIGURE 20. POLY DRIVE ELEMENTARY SCHOOL – WALKING ROUTE MAP

FIGURE 21. POLY DRIVE ELEMENTARY SCHOOL – PRIORITY PROJECTS

PONDEROSA ELEMENTARY SCHOOL

Site Characteristics

- Located at 4188 King Avenue East, which is classified as a minor arterial.
- Served by 3 safety bus routes from the old Garfield attendance area and a school-to school shuttle for kindergartners from the Newman attendance area.
- Marked crosswalk and crossing guard at east side of King Avenue East/Hallowell Lane/Arlington Avenue intersection. Marked crosswalk on south approach as well, but no crossing guard.
- Posted speed limit of 35 mph on King Avenue East and a 25 mph school speed zone with flashers.
- Buses enter campus via a separate private access road at the east side of the property. The bus entrance is gated.
- Parents generally park in one-way loop main lot (mixed with staff parking) and walk kids across parking lot to the building. Curb in front of school is coned off to allow for loading, but parents do not use it much because it's striped for diagonal parking. Parents also load along King or Hallowell to avoid congested access loop area.
- No sidewalk along south side of King Avenue East. Kids walk on berm along City-County Drain.
- There is an existing pedestrian bridge just north of the school that has been blocked off, presumably due to safety concerns or a desire to discourage parent loading on King Avenue East.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 24%
- Bike – 1%
- School Bus – 38%
- Family Vehicle – 29%
- Carpool – 1%
- Daycare Van/Other – 7%

Issues/Concerns

- Poor sight distance from north approach of the King Avenue East/Hallowell Lane intersection, which causes vehicles to inch forward and impede the unmarked crosswalk area. Kids that walk up the west side of Hallowell Lane and need to cross to the east side at the intersection (to where the crossing guard is) are hesitant because vehicles pull so far forward.
- Northeast corner of King Avenue East/Hallowell Lane intersection does not have an accessibility ramp or an appropriate landing area for kids to wait. An old luminaire pole is situated in the sidewalk, further cramping this space. Marked crosswalk across King Avenue East does not line up with opposing (SE) corner.
- The South approach of the intersection is marked with a transverse-style crosswalk. A couple of kids cross here in order to wait on the southwest corner of the intersection for MET Riverside bus. There is a high potential for pedestrian-vehicular conflict in this location because of high traffic volumes and heavy turning movements through the crosswalk during peak school periods. There is not a paved landing area on the southwest corner, nor is there a "bus stop" so kids just wait on the berm.
- There is a stop sign posted for traffic exiting school grounds at Arlington Avenue. This seems awkward during peak periods, because the much-higher volume approach is required to stop. Also, because of the 90-degree turn in Arlington Avenue at the driveway, the school traffic has a straight movement, while the traffic on the public roadway has turning movements.
- Students that walk to school from the east typically walk on dirt path located along the south side of the City-County Drain and enter site through a chain link pedestrian alley that separates pedestrians from the bus loop area and directs them to the north side of the building. Concern that kids may dart out in front of bus traffic.
- Since buses do not use the main access loop in front of the school, the curbside area should be available for student loading. However, it is striped for angled parking, so parents do not use the area as a loading zone.

Barriers/Big Picture Issues

- Barriers include King Avenue East and the City-County Drain.

- Attendance boundary is split with a portion of the boundary located on the south side of downtown (other side of Orchard Elementary School).
- Kindergartners from the Newman Elementary School area attend Ponderosa Elementary School.

Priority Projects

The following projects were identified as priorities for improvement at Ponderosa Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- PON PP-1: Improve the landing/pedestrian storage area on the northeast corner of King Avenue East and Hallowell Lane.
- PON PP-2: Reconfigure intersection of Hallowell, Arlington, and school access to reduce pedestrian conflicts and improve traffic operations.
- PON PP-3: Install trail connection and ditch crossing between Kings Green Subdivision and south end of school property.
- PON PP-4: Construct a pedestrian path along King Avenue East.
- PON IP-1: Trim trees/shrubs adjacent to pedestrian crossing area at bus access.
- PON IP-2: Install signing/striping at pedestrian crossing at bus access.

Other Recommended Improvements

The following projects were also identified as potential improvements at Ponderosa Elementary School, but were not considered priority projects at the time of this report.

- Trim/remove trees and relocate power pole to improve clear vision triangle for north approach of King/Hallowell. Stripe crosswalk on north approach.
- Extend recommended Kings Green trail to connect to the east end of Carlton Avenue and provide a north/south trail connection to existing school sidewalks.
- Consider re-striping curbside area in main access loop so that parents can use it for curbside loading. Evaluate the need for these parking spaces prior to re-striping.
- A potential long-term improvement would be to install an improved parent loading zone on King Avenue East and repair the pedestrian bridge to bring it back into use.

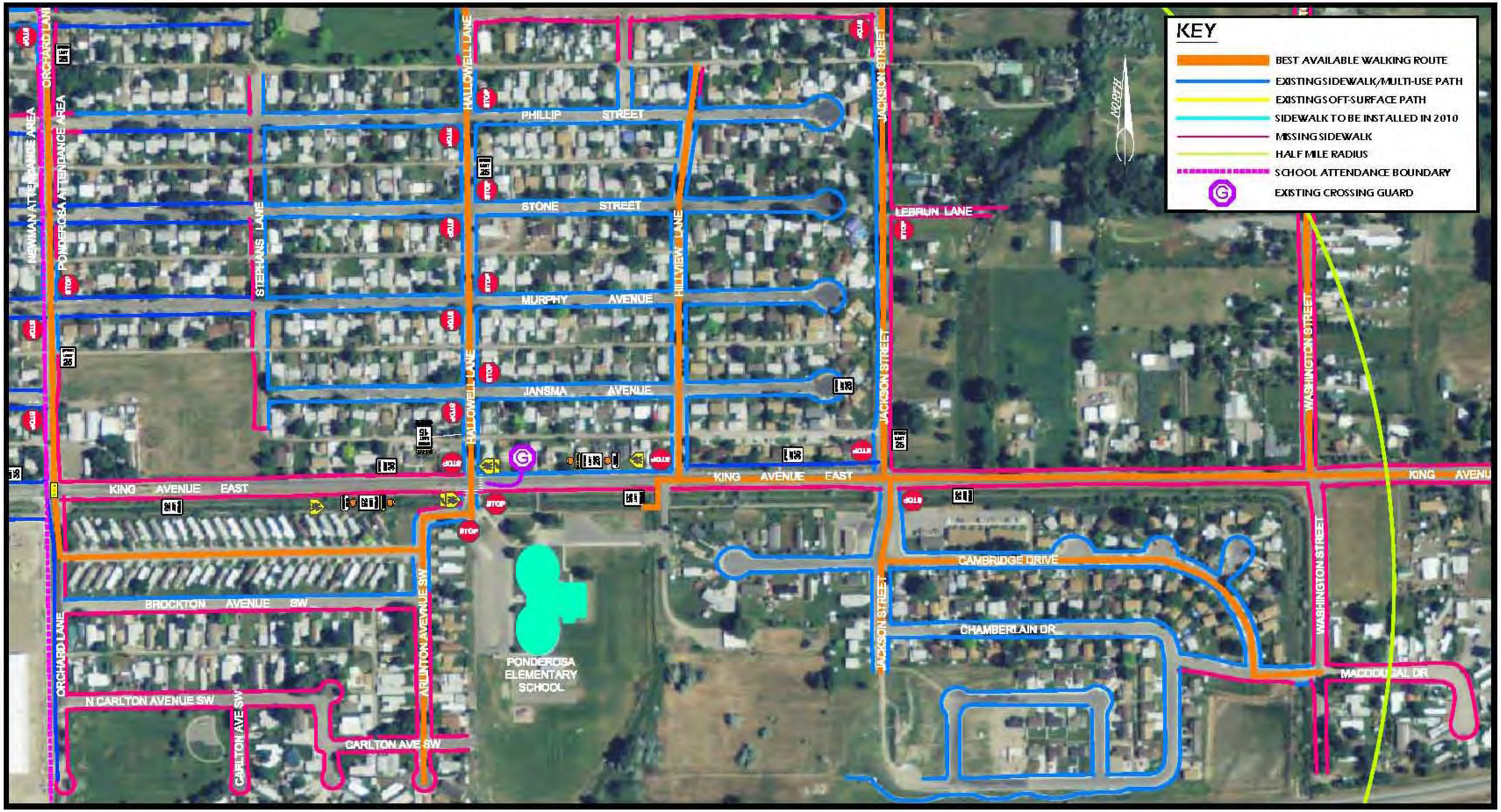


FIGURE 22. PONDEROSA ELEMENTARY SCHOOL – WALKING ROUTE MAP

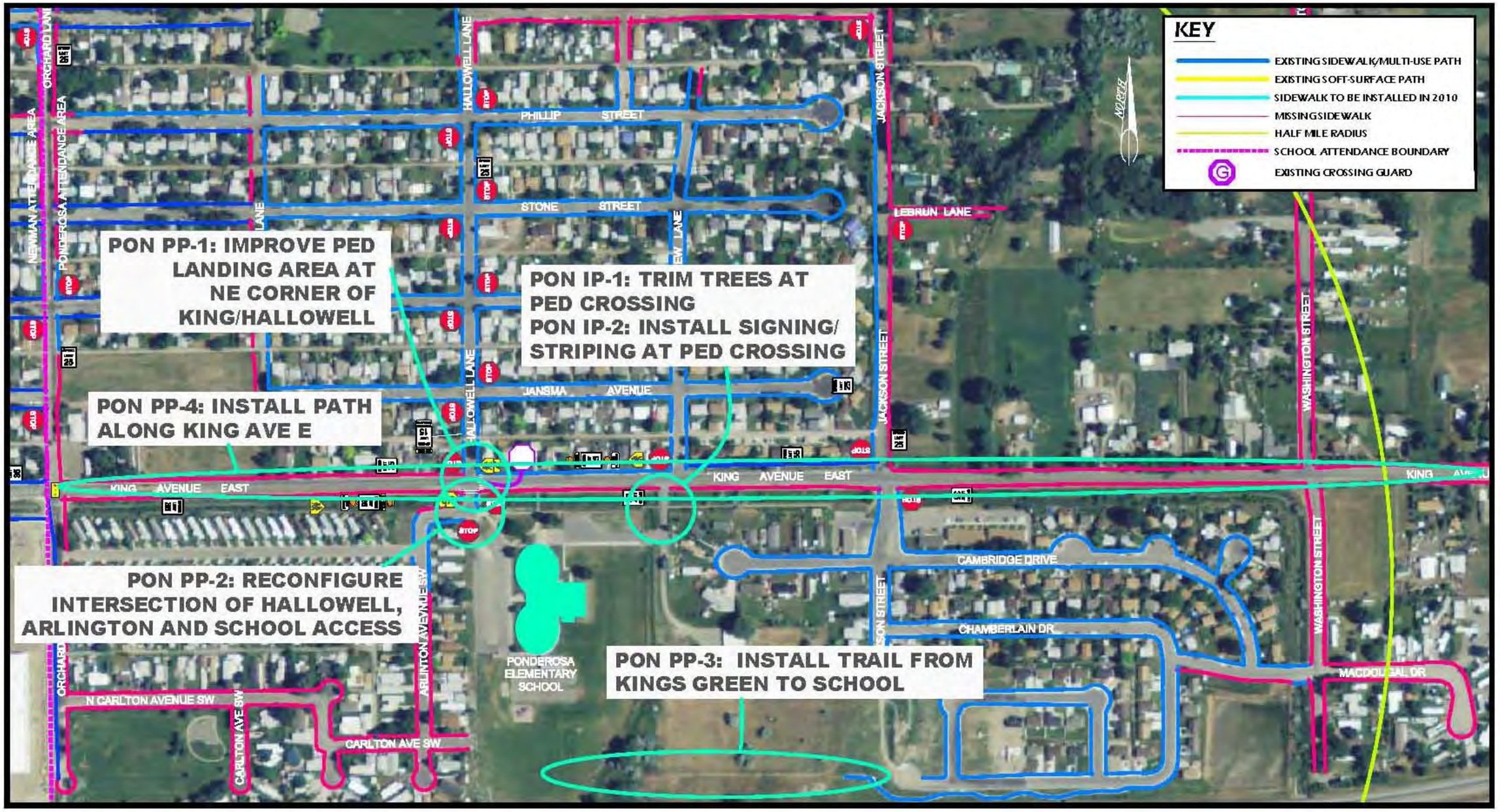


FIGURE 23. PONDEROSA ELEMENTARY SCHOOL – PRIORITY PROJECTS

WASHINGTON ELEMENTARY SCHOOL

Site Characteristics

- Located at 1044 Cook Avenue on the corner of Cook Avenue and 11th Street West, both of which are classified as local streets.
- Served by 7 school buses, made up of kindergarteners bused from the McKinley attendance boundary, special education buses and daycare vans.
- Crossing guard and marked crosswalks at Central Avenue/12th Street West and St. Johns Avenue/11th Street West. One of the crossing guards was previously located at Cook Avenue/8th Street West, but was recently moved to St. Johns Avenue/11th Street West.
- Marked crosswalks exist at Cook Avenue/12th Street West, Cook Avenue/11th Street West, Cook Avenue/10th Street West, and Cook Avenue/8th Street West.
- 15 mph school speed zones on Cook Avenue and 11th Street West, both reduced from 25 mph, which is not in compliance with the current State law.
- Parent loading zones are located on east side of 11th Street West south of St. Johns Avenue and on the west side of 11th Street West north of St. Johns Avenue.
- Bus loading zone is on west side of school on 11th Street West between St. Johns Avenue and Cook Avenue.
- Staff parking is located mostly on-street on Cook Avenue immediately north of the school, with a limited number of on-site spaces available southwest of the school.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 35%
- Bike – 3%
- School Bus – 5%
- Family Vehicle – 36%
- Carpool – 4%
- Daycare Van – 17%

Issues/Concerns

- There is inadequate space available for parent loading. Multiple instances were observed where parents double parked to let their kids out, which results in congestion on 11th Street West, kids walking between cars, crossing mid-block, etc.
- Vehicular traffic traveling to and from Young Families also creates conflict with school-related traffic.
- The crosswalk at 11th/St. Johns often gets blocked by parents and sometimes even buses loading along 11th Street West. The school places Sidewalk Sammies across the adjacent driveway to prevent parents from pulling into the site to drop off kids and recently added a crossing guard to help alleviate these problems
- The uncontrolled intersection of Cook Avenue and 11th Street West becomes confusing for drivers and pedestrians during peak periods when there's a lot of turning traffic and pedestrian crossings.
- At least one parent has expressed concern over the recent removal of the crossing guard at Cook/8th.
- North-south streets south of Central Avenue lack continuous sidewalks and often require students to walk in the street.

Barriers/Big Picture Issues

- Barriers include Central Avenue and 8th Street West.

Priority Projects

The following projects were identified as priorities for improvement at Washington Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- WAS PP-1: Relocate bus loading to south side of school with one-way road from St. Johns Avenue cul-de-sac on southeast side of school through playground to 11th Street West. School bus loading would then take place on the playground, similar to the configuration that was successfully implemented at Boulder Elementary School. This would be a short-term solution to separating parent and bus loading zones and providing more on-street space for parent loading on 11th Street West.

- WAS PP-2: Construct a new staff parking lot on the east side of the school, between the school and the Young Families building to the east. This would be a long-term solution that would open up the entire block of Cook Avenue on the north side of the school for parent loading.
- WAS PP-3: Evaluate the need for traffic control improvements at the intersection of Cook Avenue and 11th Street West and consider an additional crossing guard in this location.

Other Recommended Improvements

The following projects were also identified as potential improvements at Washington Elementary School, but were not considered priority projects at the time of this report.

- Consider moving staff parking to west side of 11th Street West to open up south side of Cook Avenue for parent loading. This would eliminate a number of street crossings by kids whose parents currently drop them off on west side of 11th Street West. This is an alternative short-term improvement that would address safety concerns related to the parent loading zone.
- Consider crossing enhancements at Cook Avenue/8th Street West (curb extensions, median refuge, etc.) and/or consider reposting a crossing guard in this location.
- An alternative would be to consider an attendance boundary adjustment to include the small area east of 8th Street West and south of Cook Avenue in the Broadwater attendance boundary.
- Install sidewalks along north-south streets south of Central Avenue.

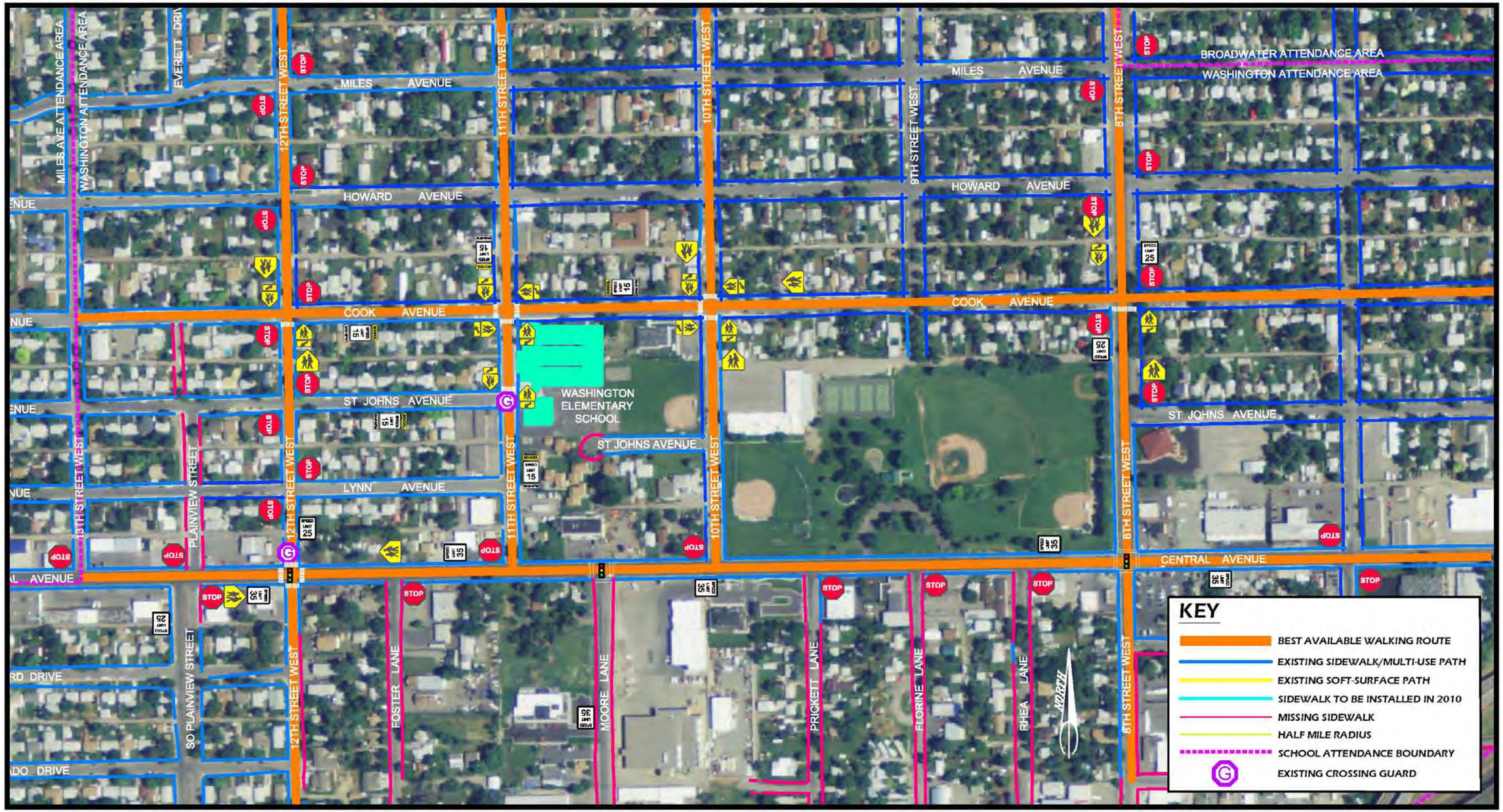


FIGURE 24. WASHINGTON ELEMENTARY SCHOOL – WALKING ROUTE MAP

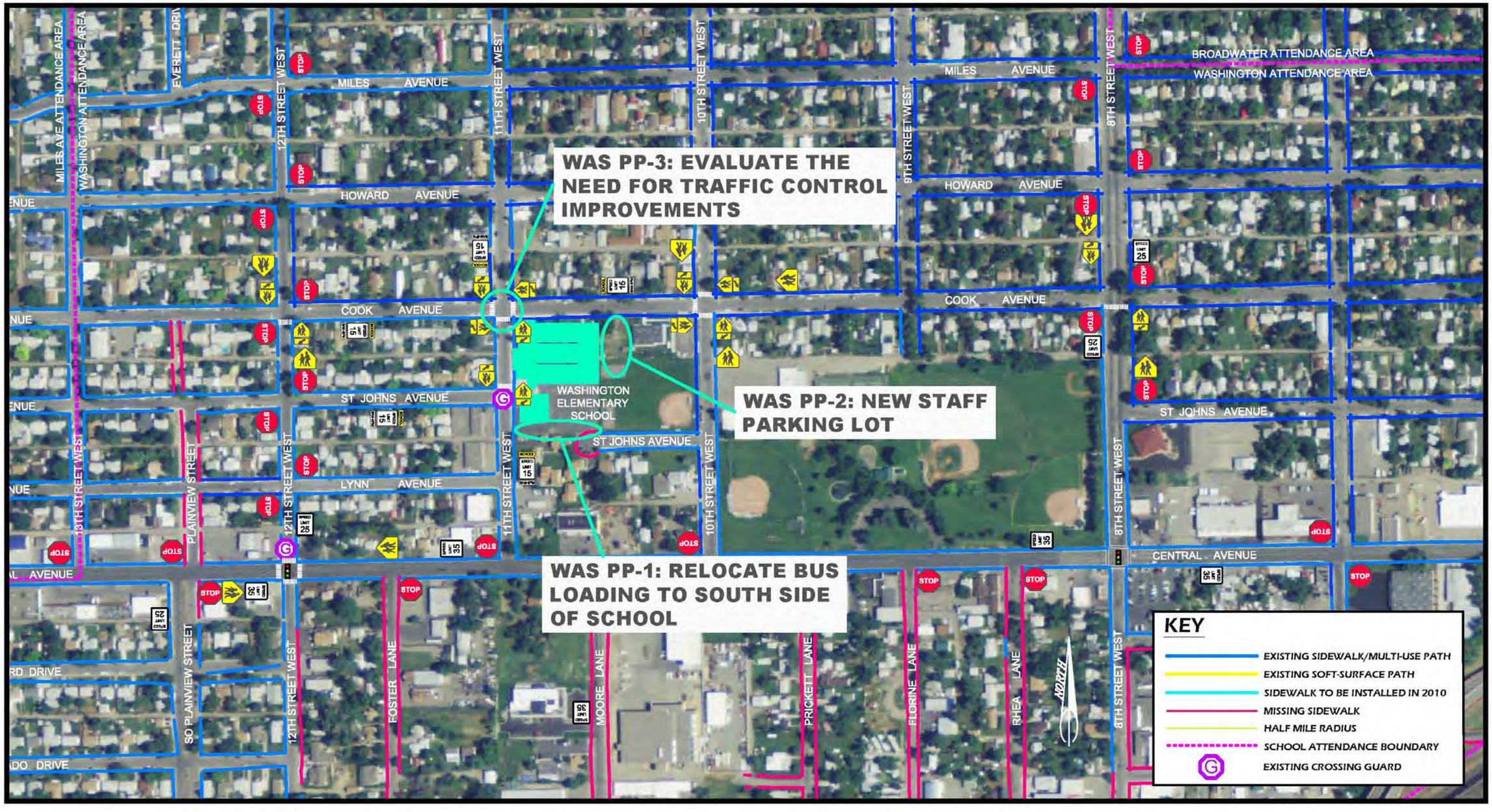


FIGURE 25. WASHINGTON ELEMENTARY SCHOOL – PRIORITY PROJECTS

PHASE 2 SCHOOLS (CITY OF BILLINGS W.O. 10-13)

ALKALI CREEK ELEMENTARY SCHOOL

Site Characteristics

- 681 Alkali Creek Road. Bordered by Alkali Creek Road (principal arterial) and Indian Trail (local street).
- 25 mph school speed zone with flashers on Alkali Creek Road (reduced from 35 mph).
- Wide walkway/trail exists on north and east sides of Alkali Creek Road from Black Pine Street to Senators Boulevard.
- Marked crosswalks with crossing guard at Alkali Creek Road/Indian Trail. Marked crosswalk on north leg with curb extension on west side. Marked crosswalk on east leg with stop control. Crossing guard helps kids across both legs.
- Curb loading area in one-way loop in front of school is reserved for bus loading only. Nine school buses in the AM, fewer in the PM due to staggered release times.
- Parent loading provided on Indian Trail south of school, on Alkali Creek Road northwest of school and in limited areas within loop in front of school. Other locations identified by school for parent loading include along Moon Valley Road and Tumbleweed Drive. Principal sends out map showing parent loading zones in newsletter at the beginning of each school year.
- Staff parking provided in main lot on southwest side of school.
- School Resource Officer helps kids cross bus loading area and drive aisle at marked crossing from front door to parents parked in inside of loop. Also helps by discouraging parents from double parking alongside buses.
- Kids meet on playground north of school in the AM, so those that are walking or dropped off on Alkali Creek Road head to the back side of the school. This reduces the number of kids that walk through the congested area in front of school.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 13%

- Bike – 2%
- School Bus – 36%
- Family Vehicle – 34%
- Carpool – 5%
- Public Transit – 2%
- Daycare Van – 8%

Issues/Concerns

- As many as half of students attending Alkali Creek Elementary live on top of the Rims northeast of school without a good route to walk or bike to school. Parents have organized a private bus to school from this area.
- Loop road has one-way signage, but no "wrong way" signage and 90-deg parking encourages two-way travel; width of drive aisle allows double parking.
- Parents tend to use bus loading area before buses arrive and after they leave; double park along buses for loading and kids walk between buses, making it difficult for buses to get in and out.
- Kids walk between buses and across drive aisle to get to parents parked on inside of loop. They have been instructed to cross where the crosswalk is marked, but this doesn't always happen.
- Queue of parent vehicles waiting to enter the site backs up to Alkali Creek Road in the AM due to on-site congestion.
- Significant queuing on-site and along Indian Trail for parents waiting to exit in both AM and PM, mostly due to vehicles waiting to turn left onto Alkali Creek Road.
- For on-street parking on Alkali Creek Road, many parents pull over to the south of where the on-street parking zone actually begins. This blocks the northbound thru lane and results in southbound vehicles in the two-way left-turn lane (TWLTL) not being able to get all the way into the turn lane, which in turn blocks the southbound thru lane. Neighbors have complained to the school that this has been a problem ever since the TWLTL was installed.
- Need better snow removal on Indian Trail. Many on-street spaces were not accessible at time of observation because of large snow piles that had partially turned into ice.

- Need better snow removal on Alkali Creek Road. Snow piles along west side often block on-street parking and sidewalk.
- Missing sidewalk on south and west side of Alkali Creek Road (north of Moon Valley Road), along both sides of Moon Valley Road, and along both sides of Tumbleweed Drive and Pinon Drive.

Barriers/Big Picture Issues

- Barriers include Alkali Creek Road, Senators Boulevard, and Alkali Creek and Rimrocks to the north and east of school.
- Significant amount of busing.

Priority Projects

The following projects were identified as priorities for improvement at Alkali Creek Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- ALK PP-1: Install separate drop-off loop for parent loading. Either install new one-way road through center island in existing parking lot or install new one-way loop around back side of school and intersecting Alkali Creek Road north of the school.
- ALK PP-2: Install sidewalk along south side of Alkali Creek Road northwest of school.
- ALK PP-3: Install sidewalk along Pinon Drive just west of Alkali Creek Road.
- ALK PP-4: Install sidewalk along south side of Indian Trail.
- ALK IP-1: Improve snow removal and corresponding location of snow storage along Indian Trail and Alkali Creek Road.

Other Recommended Improvements

The following projects were also identified as potential improvements at Alkali Creek Elementary School, but were not considered priority projects at the time of this report.

- Install trail connection across Alkali Creek and connecting to top of Rims.
- Install sidewalks on Moon Valley Road and Tumbleweed Drive.
- Consider options for consolidating bus routes.

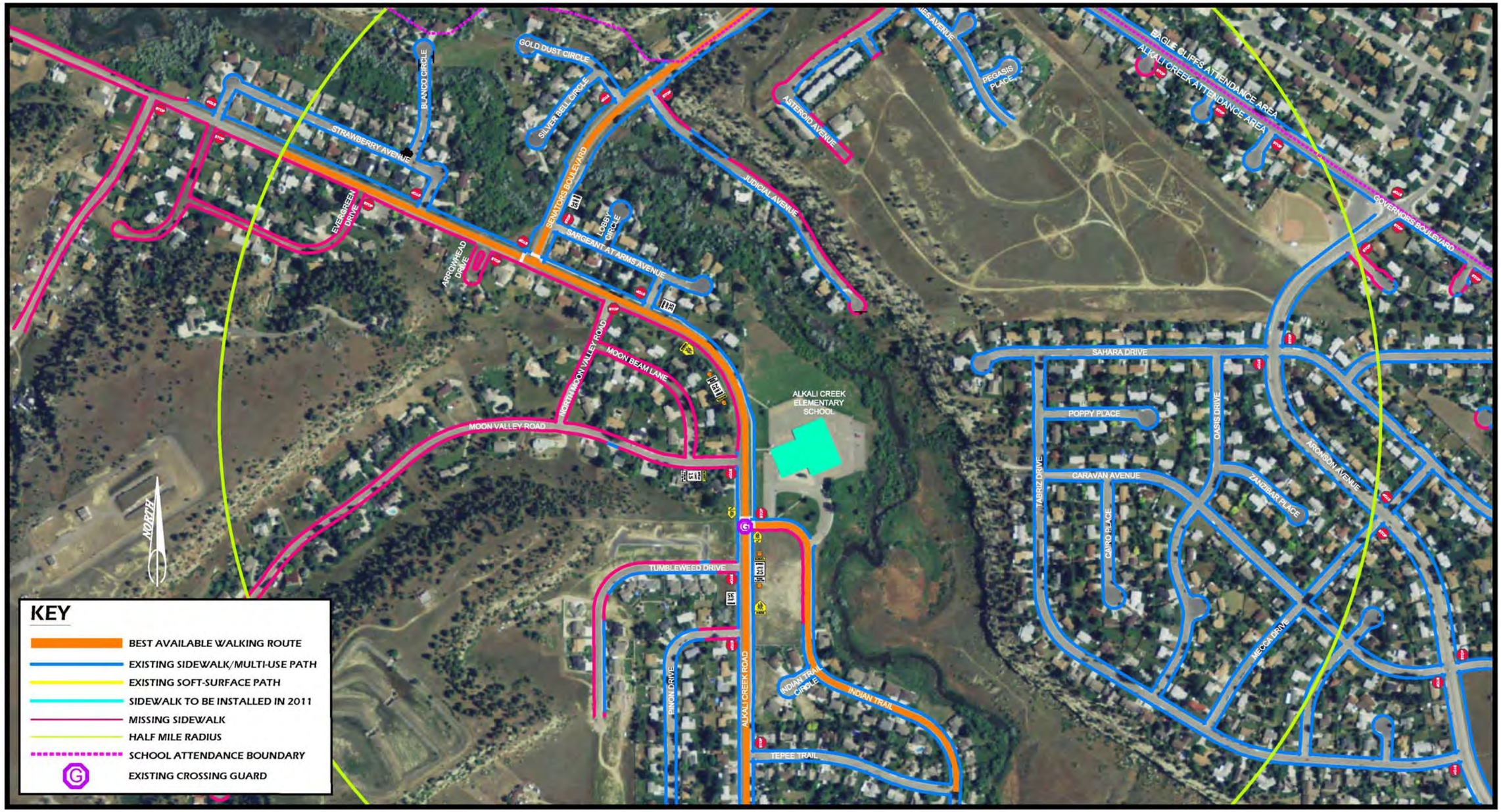


FIGURE 26. ALKALI CREEK ELEMENTARY SCHOOL – WALKING ROUTE MAP

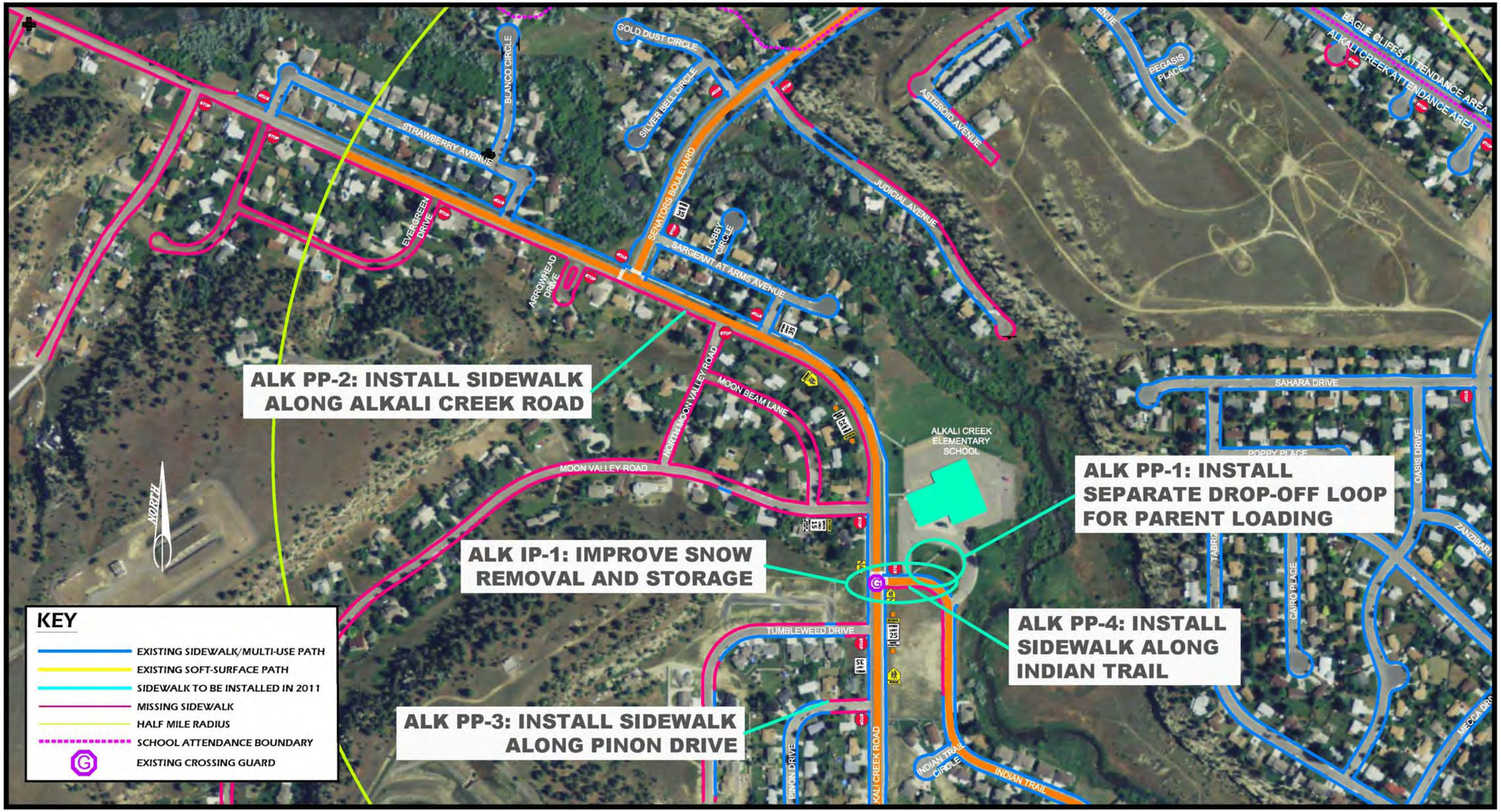


FIGURE 27. ALKALI CREEK ELEMENTARY SCHOOL – PRIORITY PROJECTS

BIG SKY ELEMENTARY SCHOOL

Site Characteristics

- 3231 Granger Avenue (local street)
- 15 mph school speed zone on Granger Avenue (not in compliance with State law).
- Marked crosswalk with crossing guard at 32nd Street West/Lampman Drive. Advance crossing signs with flashers, but no reduced speed limit, just north of Granger Avenue/Stillwater Drive for northbound traffic and just south of Canyon Drive for southbound traffic. Flashers operate during before and after school peaks.
- Marked crosswalks at Granger Avenue/Barley Circle, Granger Avenue/Rosebud Drive and many other trail crossings on neighborhood streets.
- Parent loading provided within the one-way loop/parking lot on east side of school and within one-way loop south of school. Also observed several parents parking on-street, even in areas signed "no stopping, standing or parking."
- Bus loading on curb south of school between east lot and south loop –2 full-size buses used for 1 disabled student each. YMCA bus loads on far side of south loop.
- Day care van loading provided in south loop.
- Visitor and staff parking in main lot east of school.
- Recently installed railings along curb loading area south of school because parents would drive over curb.
- Good trail access from north and west sides of school.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 28%
- Bike – 4%
- School Bus – 0%
- Family Vehicle – 48%
- Carpool – 8%
- Daycare Van – 12%

Issues/Concerns

- East parking lot signed right-turn only for southbound traffic at exit. This change has helped the congestion at 32nd Street West/Granger Avenue, but right-only signage is not obeyed by all parents.
- Parents appear to ignore the "No stopping, standing or parking" signs on Granger Avenue.
- Lack of sidewalks along Granger Avenue and neighborhood streets east of 32nd Street West. Sufficient right-of-way is not available for sidewalk installation.
- South loop signed no-left turn for northbound entering traffic. This sign is confusing.
- School zone signage is inconsistent and confusing. It is not in conformance with MUTCD standards in many locations.
- School representatives are concerned about high traffic volumes and speeds on 32nd Street West.
- School representatives are concerned about kids crossing 32nd Street West when the crossing guard isn't present because the crossing gets a lot of use during off-peak times.
- School representatives are concerned about safety of crossings on Monad Road north and west of school.
- School representatives are concerned about the safety of kids crossing 30th Street West at Lampman Drive.
- Traffic volumes have increased on 36th Street West and may be considered a barrier by some parents.

Barriers/Big Picture Issues

- Barriers include 32nd Street West, 36th Street West, Monad Road and Shiloh Road.
- Kids within easy walking distance to Big Sky (Olympic Village and trailer park south of King Avenue) are being bused to Miles Avenue.

Priority Projects

The following projects were identified as priorities for improvement at Big Sky Elementary School based on input received from school representatives. The first three letters in the

numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- BIG PP-1: Enhance crossing at 32nd Street West and Lampman Drive or move crossing to Granger Avenue and signalize. Complete signal warrant study at 32nd Street West and Granger Avenue.
- BIG PP-2: Install crosswalk markings on the south leg of the intersection of Monad Road and 36th Street West. Enhance existing crossing on west leg.
- BIG PP-3: Install signing and striping for a new crosswalk on the north leg of 30th Street West and Lampman Drive. If 32nd Street crossing is relocated to Granger Avenue as noted above, this crossing should be moved to the intersection of 30th Street West and Stillwater Drive.

Other Recommended Improvements

The following projects were also identified as potential improvements at Big Sky Elementary School, but were not considered priority projects at the time of this report.

- Acquire necessary right-of-way and install sidewalks where missing on Granger Avenue near the school.
- Consider adding a crossing guard at Monad Road and 36th Street West crossing.
- Consider crosswalk enhancements at midblock crossing just south of 36th Street West/Granger Avenue.
- Upgrade school zone signage on Granger Avenue and within on-site loading zones to reduce confusion and bring into conformance with MUTCD.

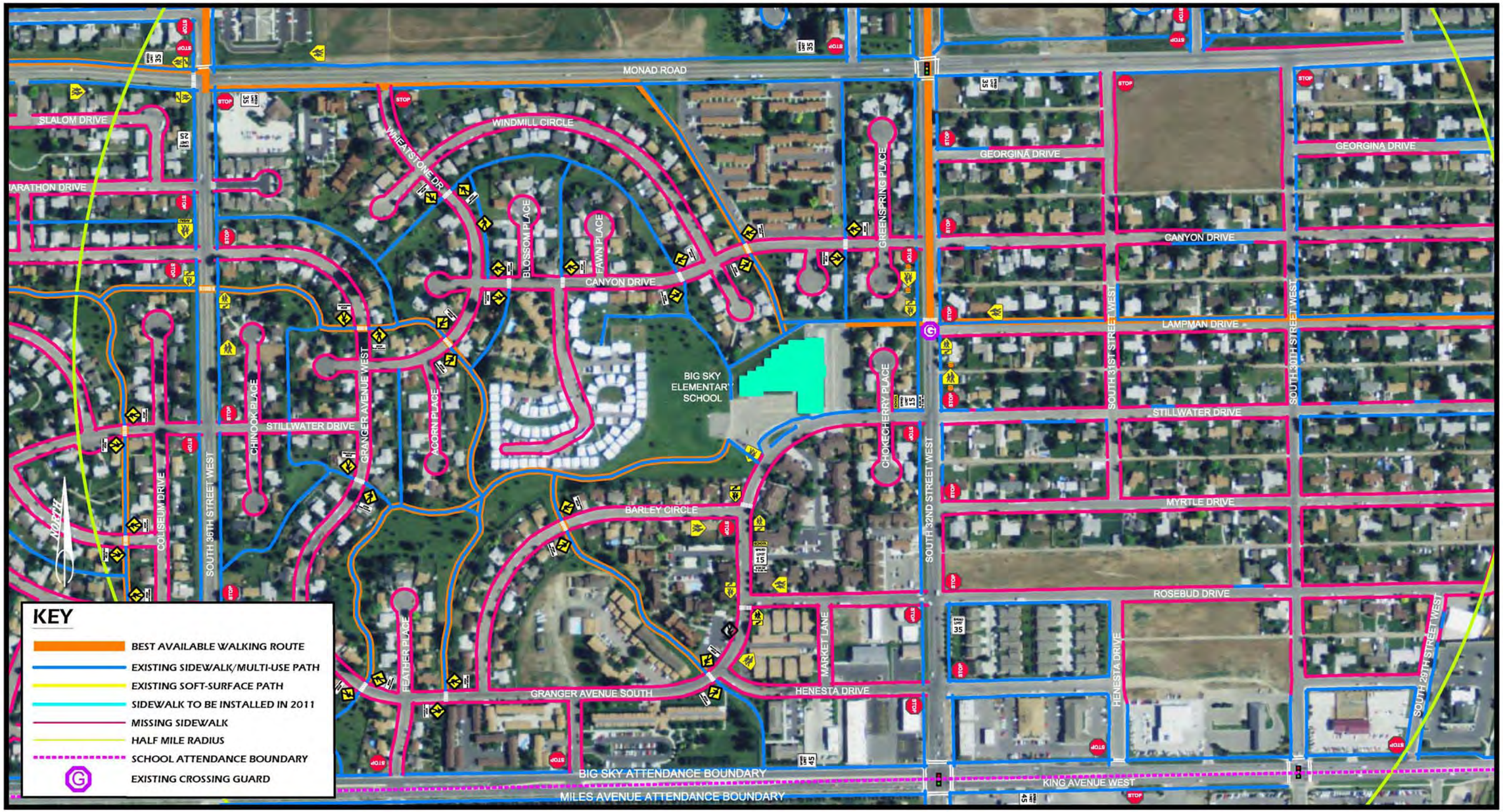


FIGURE 28. BIG SKY ELEMENTARY SCHOOL – WALKING ROUTE MAP

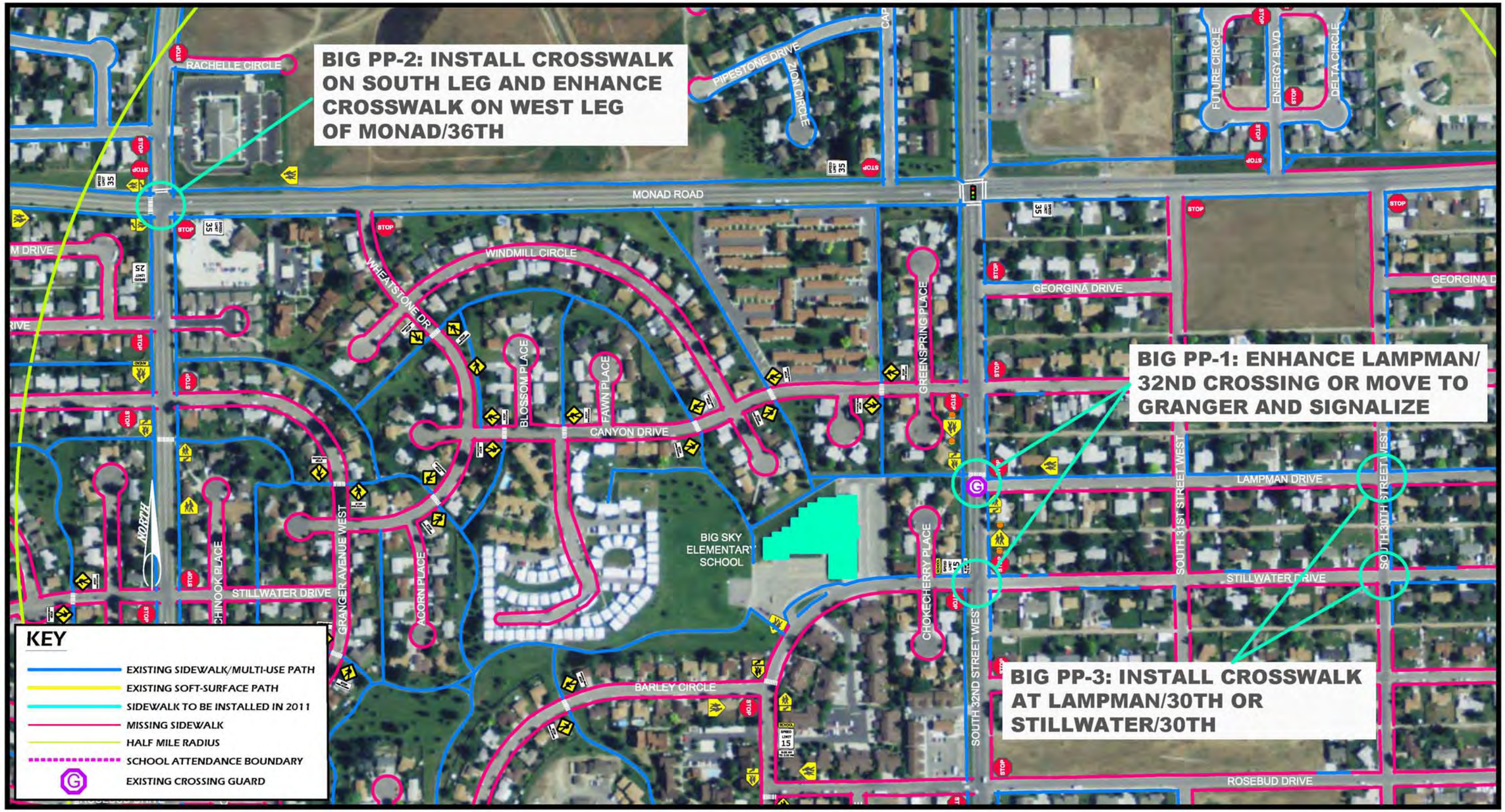


FIGURE 29. BIG SKY ELEMENTARY SCHOOL – PRIORITY PROJECTS

BROADWATER ELEMENTARY SCHOOL

Site Characteristics

- 415 Broadwater Avenue. Bordered by Broadwater Avenue (principal arterial) 4th Street West (local), and Wyoming Avenue (local).
- Crosswalks at 4th Street West/Wyoming Avenue, 5th Street West/Wyoming Avenue, and 4th Street West/Lewis Avenue intersections.
- On Broadwater Avenue (principal arterial), traffic signals with crosswalks at 5th Street West and 6th Street West; 5th Street West/Broadwater Avenue is signed as a school crossing.
- Right-turn-on-red is prohibited during school hours for northbound traffic at 5th Street West/Broadwater Avenue because of school crossing.
- Crossing guards at 5th Street West/Wyoming Avenue, 4th Street West/Wyoming Avenue, 5th Street West/Broadwater Avenue, and 4th Street West/Lewis Avenue.
- 15 mph speed zone on Wyoming Avenue and 4th Street West (no flashers), reduced from 25 mph (not in compliance with State law); and 25 mph zone on Broadwater Avenue (with flashers).
- School property is fenced along Broadwater Avenue, Wyoming Avenue, and 4th Street West frontage, with a small access opening through fence near the 4th Street West/Wyoming Avenue intersection.
- "One-way" alley drop off (with diagonal parking) from alley access on 5th Street West to midblock exit onto Wyoming Avenue.
- Parent loading occurs mainly through alley. Alley has 90-degree turn with limited sight distance at the corner.
- Bus loading/unloading occurs on Wyoming Avenue and 4th Street West.
- Available staff parking limited to alley diagonal spots; staff therefore parks along Wyoming Avenue.
- Good sidewalk access on neighborhood streets.
- Approximately 150 kids arrive early for breakfast.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 33%
- Bike – 3%

- School Bus – 0%
- Family Vehicle – 49%
- Carpool – 7%
- Daycare Van – 8%

Issues/Concerns

- 4th Street West frontage is relatively unused for loading; most activity was concentrated at corner of 4th Street West/Wyoming Avenue where there is a break in the fence.
- Alley drive allows two conflicting entry paths off of 5th Street West and the fence creates two parallel exit paths onto Wyoming Avenue, which also creates conflicting paths between turning vehicles.
- Limited parking for staff requires some to park along Wyoming Avenue in front of neighboring properties, which could otherwise be used for loading.
- Issues/complaints regarding speeding traffic on 4th Street West, which have been addressed previously by the City.
- School representatives expressed concern about speeding traffic on Wyoming Avenue.

Barriers/Big Picture Issues

- Barriers include Broadwater Avenue and 5th Street West.

Priority Projects

The following projects were identified as priorities for improvement at Broadwater Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- BRO PP-1: Install curb extensions at the intersection of 4th Street West and Wyoming Avenue.
- BRO PP-2: Increase minimum green time for pedestrians and install ladder style crosswalks at the intersection of 5th Street West and Broadwater Avenue.

- BRO PP-3: Improve loading zone through alley by defining entry to separate from local business, improve sight distance around corner, reducing the exit to a single lane and providing physical separation between the walking area and the parking area.

Other Recommended Improvements

The following projects were also identified as potential improvements at Broadwater Elementary School, but were not considered priority projects at the time of this report.

- Install gates in fence (potentially only open during drop off/pick up times) at mid-block locations along Wyoming Avenue and 4th Street West to encourage drop off at these locations.
- Consider eliminating parent loading in alley.
- Move bus loading to 4th Street West and encourage parent loading along Wyoming Avenue.
- Encourage staff parking on the other side of the street to reduce parent loading congestion.
- Consider partnership with Church to allow staff parking in their lot or a remote drop-off location.
- Evaluate the need for additional 15 mph speed zones on neighborhood streets near school.

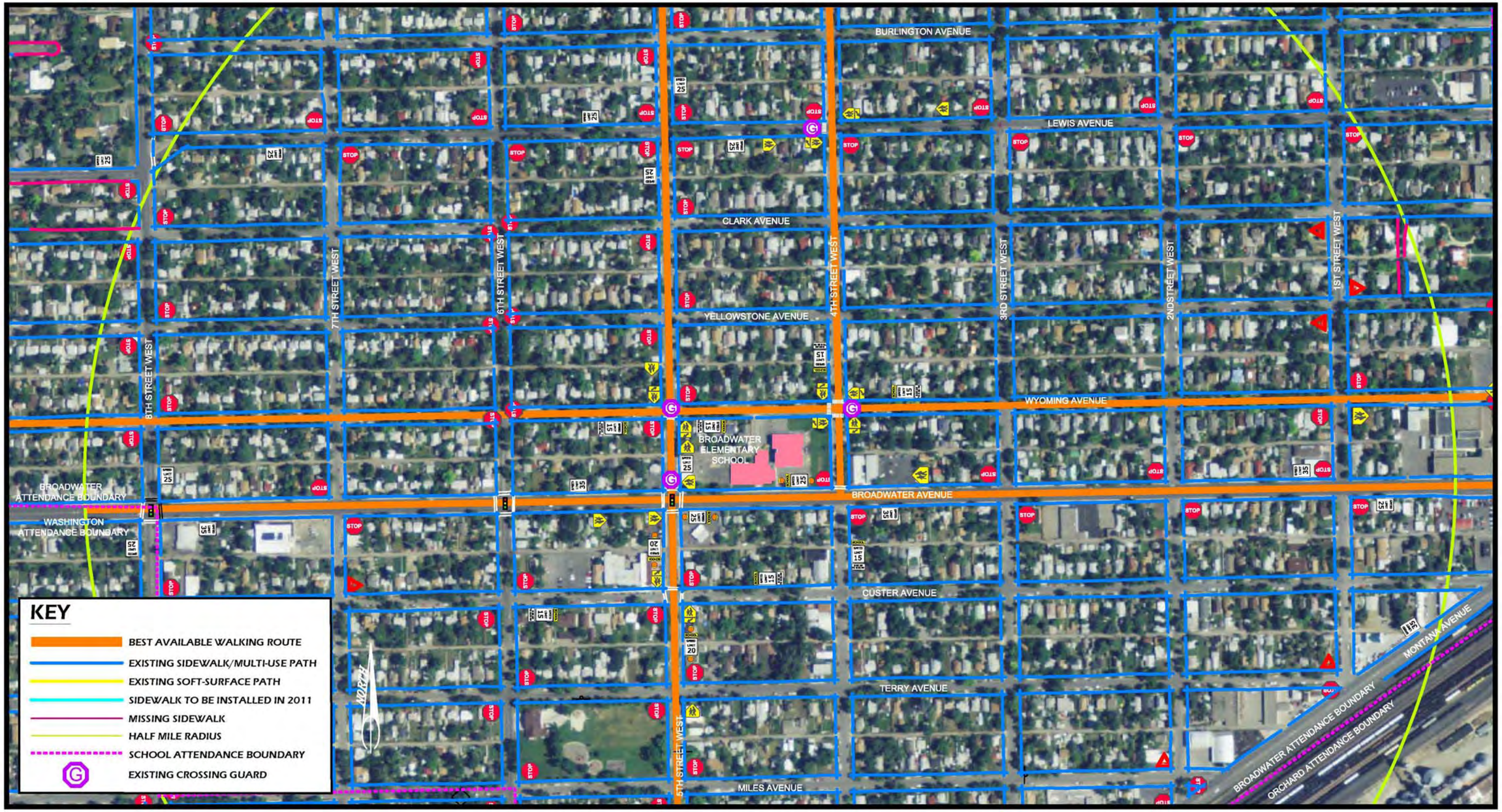


FIGURE 30. BROADWATER ELEMENTARY SCHOOL – WALKING ROUTE MAP

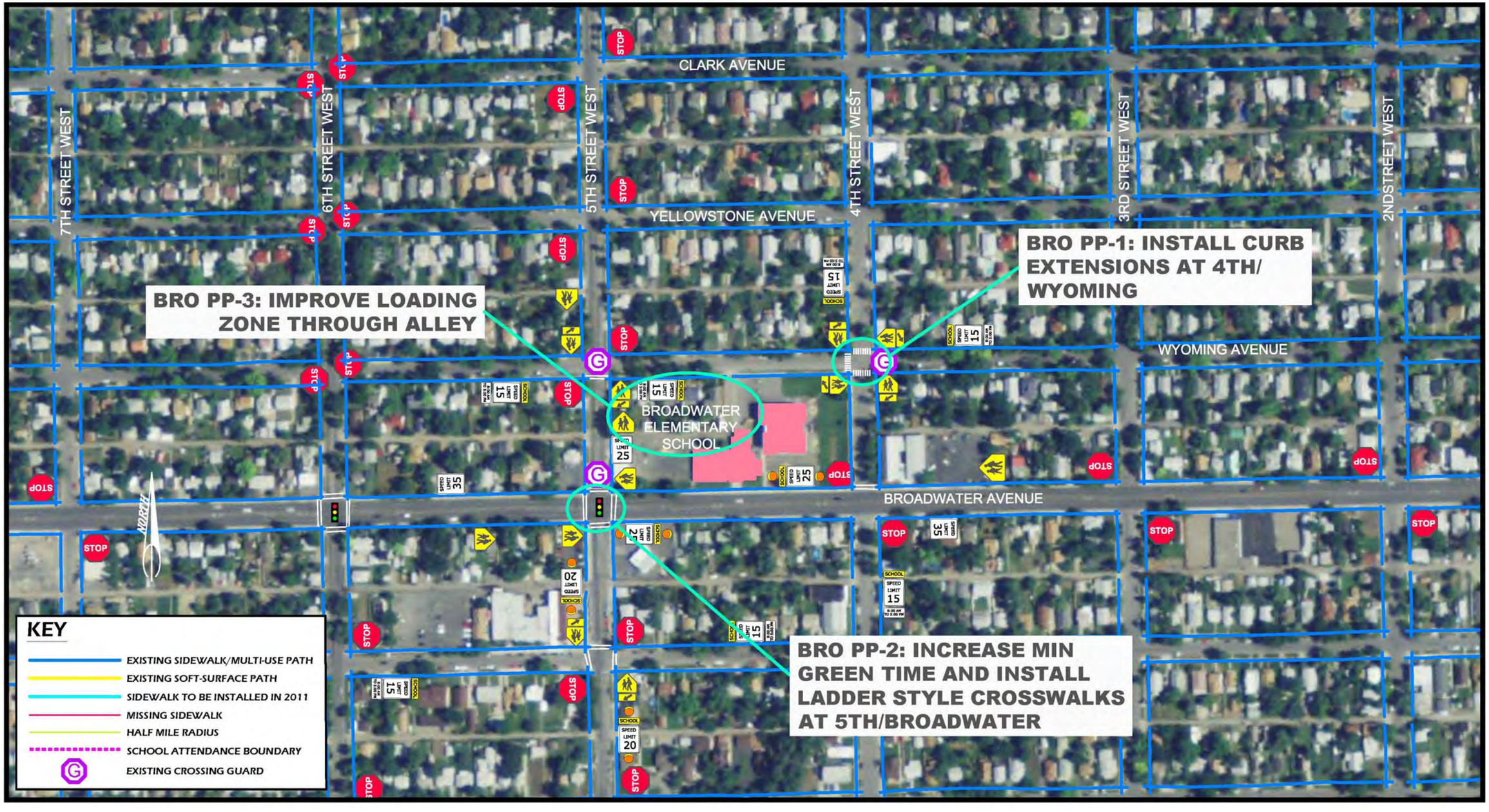


FIGURE 31. BROADWATER ELEMENTARY SCHOOL – PRIORITY PROJECTS

BURLINGTON ELEMENTARY SCHOOL

Site Characteristics

- 2135 Lewis Avenue. Bordered by Lewis Avenue (collector) and 22nd Street West (local)
- 15 mph school zone with flashers on Lewis Avenue, reduced from 25 mph (not in compliance with State law).
- 15 mph school speed zone (no flashers) on 22nd Street West, reduced from 25 mph (not in compliance with State law).
- Marked crosswalk with crossing guard at Lewis Avenue/22nd Street West. Crossing guard helps kids across both legs of intersection.
- Crossing guard places orange construction cones on centerline of Lewis Avenue during pickup/drop-off.
- Other crossing guard located at traffic signal at 24th Street West/Lewis Avenue. City recently upgraded the school crosswalk at the request of parents and crossing guard.
- Bus loading zone located on west side of school along 22nd Street West. The bus zone is marked with two signs. Three to four buses arriving, but not all at the same time.
- Parent loading occurs on west side of school along 22nd Street West. Parents were observed using bus zone for drop off.
- Parents are also using west side of 22nd Street West so kids and parents were observed crossing mid-block.
- No bus or parent loading areas designated on Lewis Avenue.
- Many students exit north doors of building. Thus parents also use small staff parking lot to load and as a turn-around. Several drivers were observed turning around at the north end of the street by backing up.
- Limited staff parking provided in small lot at northeast corner of school; staff parking is not adequate so most use on-street parking including on the west side of 22nd Street West.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 38%
- Bike – 0%

- School Bus – 13%
- Family Vehicle – 35%
- Carpool – 6%
- Public Transit – 1%
- Daycare Van – 7%

Issues/Concerns

- Mid-block crossings observed amid congested parent/bus loading zone.
- Insufficient staff parking.
- Staff parking area being used for pickup/drop-off and as a turn-around.
- BPD volunteers noted a number of failing sidewalks with tripping hazards throughout the surrounding neighborhood.
- Lack of good pedestrian access from north (Alderson Avenue).
- Neighbors/parents have expressed concern in the past about perceived speeding traffic on Lewis Avenue.

Barriers/Big Picture Issues

- Barriers include Lewis Avenue and 24th Street West.
- Kindergartners from the Burlington Elementary School area attend Meadowlark Elementary School.

Priority Projects

The following projects were identified as priorities for improvement at Burlington Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- BUR PP-1: Install curb extensions at the intersection of Lewis Avenue and 22nd Street West.
- BUR PP-2: Install signing, striping and curb extensions for midblock crossing on 22nd Street West directly in front of main school entrance and consider requiring students to use this entrance.

- BUR IP-1: Use cones or temporary barricade to prevent parents from pulling through staff parking lot at north end of school and encourage exit to Burlington Avenue.
- BUR IP-2: Move bus loading zone to Lewis Avenue.

Other Recommended Improvements

The following projects were also identified as potential improvements at Burlington Elementary School, but were not considered priority projects at the time of this report.

- Install cul-de-sac turnaround at north end of 22nd Street West.
- Enhance signing and marking of bus loading zone, either in current location or new location on Lewis Avenue.
- Build additional on-site parking for staff, which would free up street parking for loading.
- Improve sidewalk maintenance and enforcement in neighborhood.
- Construct sidewalks on 21st Street West, 20th Street West, and Burlington Avenue east of the school site, and consider constructing pathway across park from end of Burlington Avenue.
- Evaluate opportunities for pedestrian connections to Alderson Avenue neighborhood north of school.
- Consider crosswalk markings and crossing guard at 4-way stop at Lewis Avenue/19th Street West.

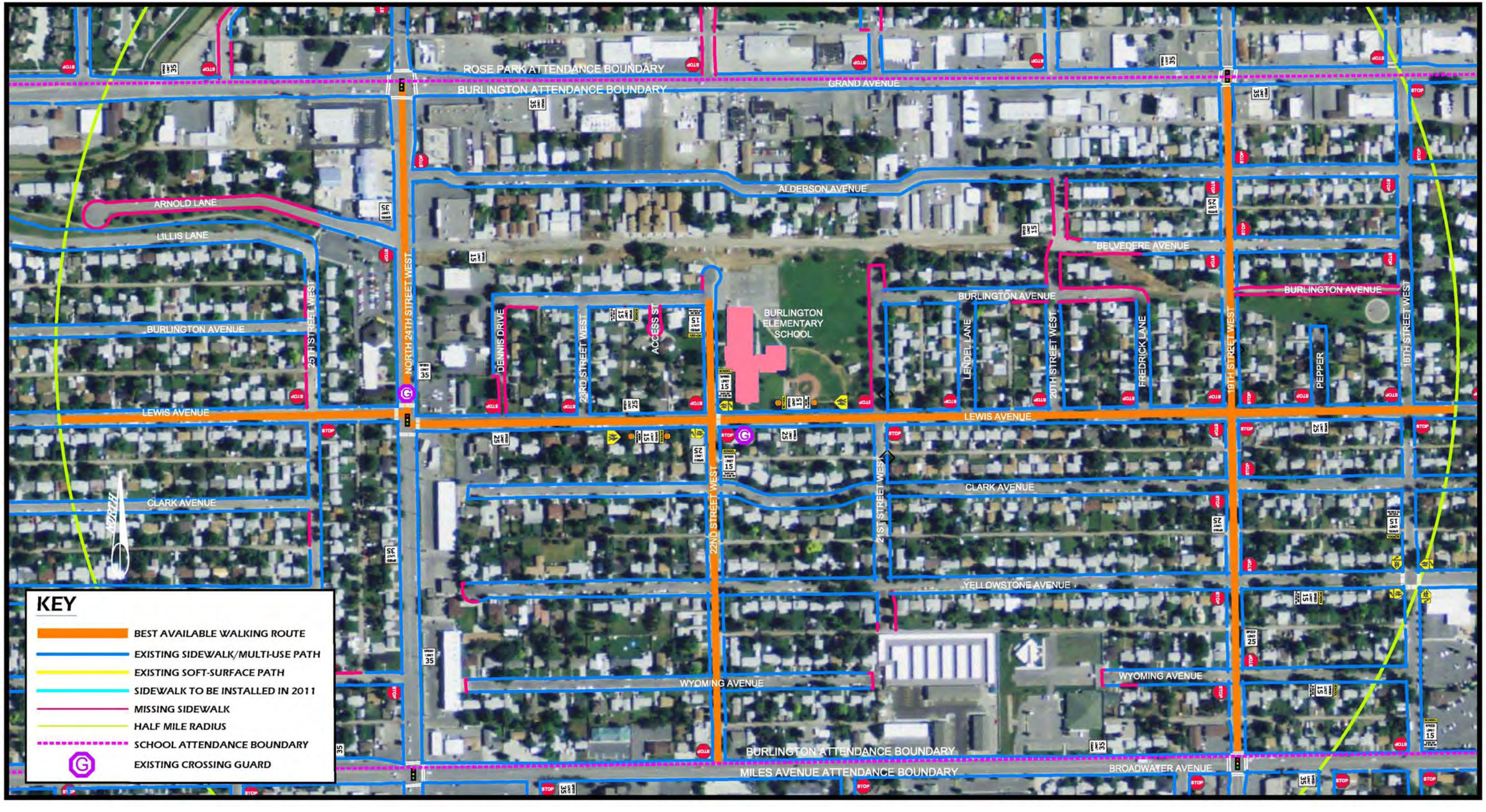


FIGURE 32. BURLINGTON ELEMENTARY SCHOOL – WALKING ROUTE MAP

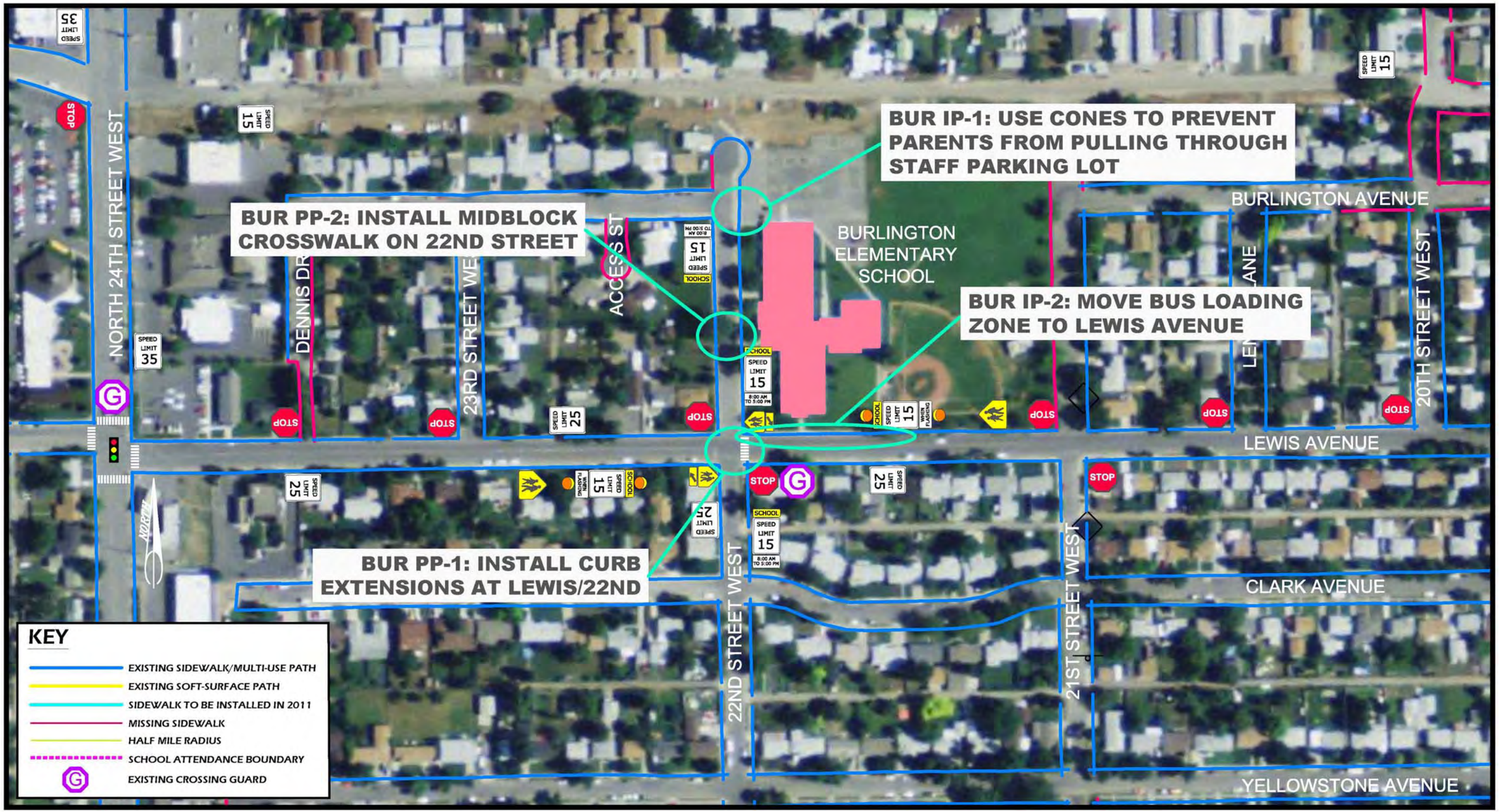


FIGURE 33. BURLINGTON ELEMENTARY SCHOOL – PRIORITY PROJECTS

CENTRAL HEIGHTS ELEMENTARY SCHOOL

Site Characteristics

- 120 Lexington Drive, bordered by Lexington Drive, Pueblo Drive, Eldorado Drive, and Alamo Drive (all local streets)
- Commercial development along north side of Eldorado Drive across from school.
- Good sidewalk access on neighborhood streets, except street layout can cause long walking routes.
- Two marked mid-block crosswalks on Alamo Drive and Lexington Drive, and one marked crosswalk on south approach of Lexington Drive and Eldorado Drive intersection. Alamo Drive crossing has advance warning signs. There are no crossing guards at crossings adjacent to the school.
- Additional marked crosswalk with advance warning signs on Monad Road at Monterey Drive. Crossing guard posted at this location.
- 15 mph speed zone on Pueblo Drive, Lexington Drive, and Eldorado Drive (no flashers). All are reduced from 25 mph (not in compliance with State law).
- "No Parking Bus Stop" signs located along Alamo Drive.
- Parent loading takes place on Lexington Drive (Primary grades) and Pueblo Drive (Intermediate grades). On Pueblo Drive, parents pickup on both sides causing kids to jaywalk between parked cars/buses.
- Bus loading zones on Alamo Drive and Pueblo Drive. Central Heights has the most buses in the district (west end, special education, preschool, and special programs). Special education bus loads on Lexington Drive. Bus and parent loading conflict with each other on Pueblo Drive.
- Busing provided for students living west of 24th Street West in Casa Village.
- Staff parking provided in parking lot on northeast corner of property near Lexington Drive/Eldorado Drive intersection; number of spaces is mostly adequate.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 24%
- Bike – 3%
- School Bus – 40%
- Family Vehicle – 20%

- Carpool – 2%
- Daycare Van – 11%

Issues/Concerns

- Although busing provided to Casa Village, some students walk and have to cross 24th Street West.
- No north-south crosswalk on Lexington Drive at Eldorado Drive.
- Congestion, primarily on Pueblo Drive, that causes midblock jaywalking to parents picking up on opposite side of the street.
- Large queues witnessed at 24th Street West/Eldorado Drive which back up to Pueblo Drive where buses and parents cause congestion after pickup.
- Higher speeds on Monad Road (posted 35mph) where existing crosswalk is located at Monterey Drive.
- School Principal expressed concern that sidewalks around school block aren't wide enough and no boulevard to provide a buffer from traffic.

Barriers/Big Picture Issues

- Barriers include Monad Road and South 24th Street West.
- Significant amount of busing from outside boundary and special programs.

Priority Projects

The following projects were identified as priorities for improvement at Central Heights Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- CEN PP-1: Widen sidewalks on Lexington Drive, Alamo Drive, and Pueblo Drive, and install curb extensions at mid-block crossings on Alamo Drive and Lexington Drive.
- CEN PP-2: Install curb extensions at intersection of Lexington Drive and Eldorado Drive and marked crosswalk on east leg. Install curb extensions or another form of traffic calming at Santa Fe Drive and Eldorado Drive.
- CEN PP-3: Install curb extensions for crosswalk at Monad Road/Monterey Drive.

- CEN IP-1: Eliminate bus zone on Pueblo Drive and require all primary and intermediate bus pickup to occur on Alamo Drive. This will separate bus and parent loading during dismissal of intermediate grades.

Other Recommended Improvements

The following projects were also identified as potential improvements at Central Heights Elementary School, but were not considered priority projects at the time of this report.

- Provide crossing guard at Lexington Drive/Eldorado Drive.
- Evaluate crossing alternatives for students living west of 24th Street West, or evaluate district boundary adjustment.
- Consider traffic control changes (e.g. "Right-turn Only") at Eldorado Drive/24th Street West to reduce peak hour queues.

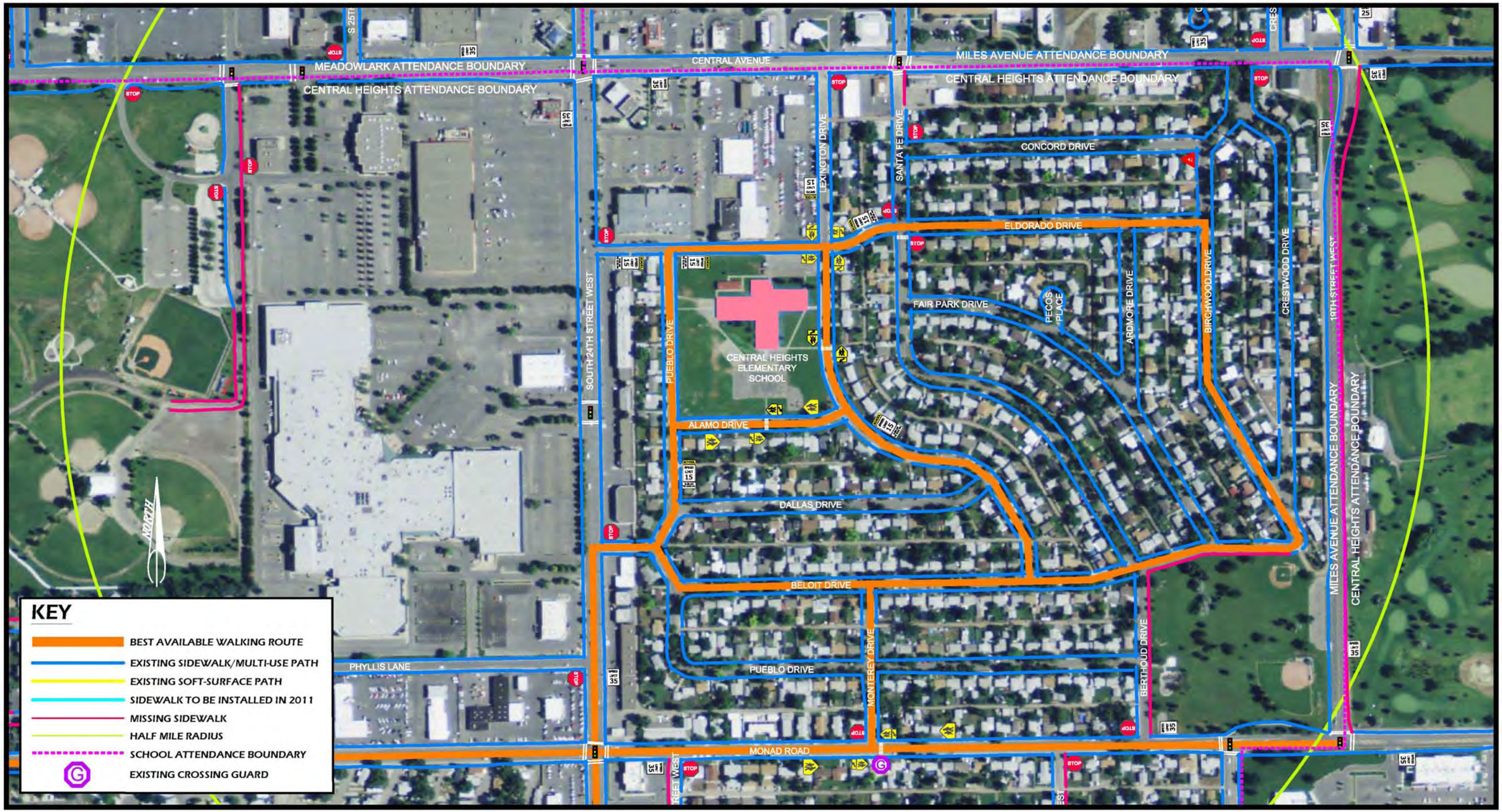


FIGURE 34. CENTRAL HEIGHTS ELEMENTARY SCHOOL – WALKING ROUTE MAP

FIGURE 35. CENTRAL HEIGHTS ELEMENTARY SCHOOL – PRIORITY PROJECTS

HIGHLAND ELEMENTARY SCHOOL

Site Characteristics

- 729 Parkhill Drive. Bordered by Parkhill Drive (collector) and Beverly Hill Boulevard (local street).
- 15 mph school speed zone with flashers on Parkhill Drive, reduced from 25 mph (not in compliance with State law).
- 25 mph school speed zone with flashers on Poly Drive, reduced from 35 mph.
- Bus loading takes place on east side of school. They access the site through the gated entrance off of Beverly Hill Boulevard to the north and exit onto Parkhill Drive.
- Parent loading takes place within curb-side loading zone on Parkhill Drive along school frontage.
- Staff parking provided in main lot on east side of school.
- Marked crosswalks with crossing guards at Parkhill Drive/8th Street West, Rimrock Road/13th Street West, Poly Drive/11th Street West, and Virginia Lane/Poly Drive.
- An enhanced crossing treatment with curb extensions was recently installed at the Poly Drive/11th Street West crossing.
- Marked crosswalk with school crossing signs at Virginia Lane/Beverly Hill Boulevard.
- Highland has had success in encouraging walking and biking by opening up the rear access to the school for pedestrians. Out of respect for their neighbors, they have discouraged parents from using the rear access for vehicle drop off.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 37%
- Bike – 9%
- School Bus – 1%
- Family Vehicle – 37%
- Carpool – 9%
- Daycare Van – 7%

Issues/Concerns

- Some parents use the south side of Parkhill Drive for loading, most of which will get out of their vehicles and walk across Parkhill Drive midblock with their children. A portion of those that drop off on the south side will let their kids out near the crossing guard at 8th Street West.
- Several parents dropped their kids off curbside on the north side of Parkhill Drive then made a u-turn out of the loading area to head back toward downtown.
- Also observed a couple of parents who were heading eastbound on Parkhill Drive and pulled up to the curbside loading zone facing the wrong direction so they could let their kids out on the north side without having to turn around.
- There appeared to be adequate space available for parent loading until the last 5 minutes before school started, then parents started double parking, letting their kids out in the street, blocking other cars from getting out, blocking the entrance to the parking lot, etc.
- Principal expressed concern about fading curb markings that designate handicap parking and no-parking zones. Parents tend to overlap into these areas, especially as the curb markings fade out.
- Observed drainage issues along the handicap parking pullout.
- The extents of the loading zone signage and curb markings were confusing.
- Principal expressed concern about close proximity between where kids enter from the north and bus entrance.
- Missing sidewalk on a few neighborhood streets.

Barriers/Big Picture Issues

- Barriers include Rimrock Road and Poly Drive.
- Hilands Golf Course is also a barrier for students that live north of Poly Drive.

Priority Projects

The following projects were identified as priorities for improvement at Highland Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- HIG PP-1: Implement remote drop-off locations.
- HIG PP-2: Install sidewalks and curb extensions at the intersection of O'Malley Drive and Virginia Lane.
- HIG PP-3: Install crosswalks with enhancements to shorten crossing distance at Rimrock Road/Missouri Street and Rimrock Road/Virginia Lane.
- HIG PP-4: Install sidewalk and/or a bike lane on Virginia Lane from Rimrock Road to Parkhill Drive.
- HIG IP-1: Trim trees at Woodland Drive/Virginia Lane.
- HIG IP-2: Trim shrubs at O'Malley Drive/Virginia Lane.
- HIG IP-3: Explore options to further discourage parents from using Beverly Hill Boulevard as a drop off area because there is no good place to turn around.

Other Recommended Improvements

The following projects were also identified as potential improvements at Highland Elementary School, but were not considered priority projects at the time of this report.

- Reinforce that main curb-side loading zone is for loading only. Parents that wish to walk into school with their kids should park further east on Parkhill Drive.
- Consider updating the signage showing the extents of the loading zone to reduce confusion.
- Refresh curb paint for no parking zones on a more regular basis to improve compliance.
- Install additional sidewalk where missing on neighborhood streets.

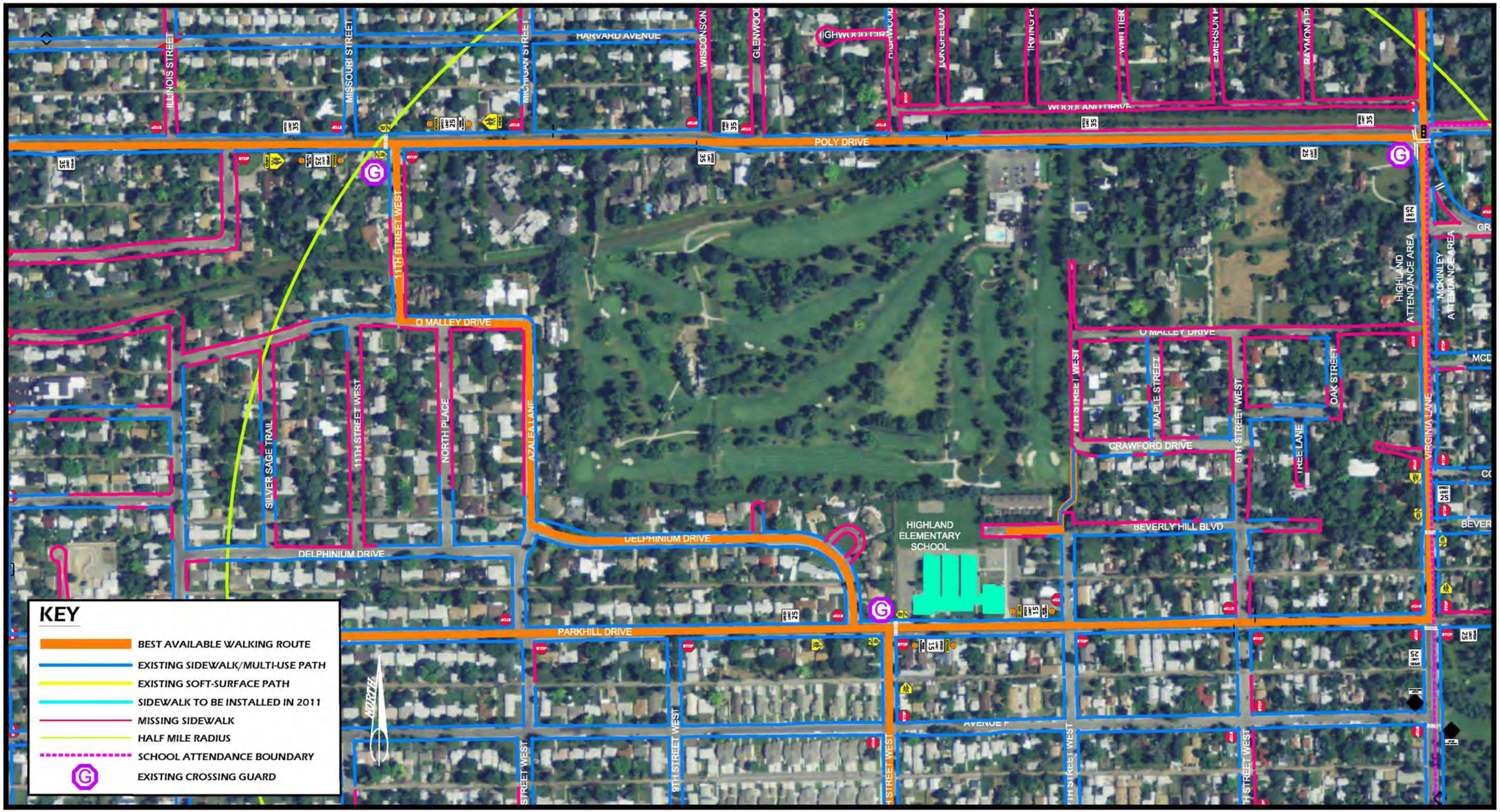


FIGURE 36. HIGHLAND ELEMENTARY SCHOOL – WALKING ROUTE MAP

FIGURE 37. HIGHLAND ELEMENTARY SCHOOL – PRIORITY PROJECTS

MCKINLEY ELEMENTARY SCHOOL

Site Characteristics

- 820 North 31st Street (local street). Also bordered by 9th Avenue North (collector), North 32nd Street (collector north of 9th Avenue North, local street south of 9th Avenue North), and 8th Avenue North (local street).
- 15 mph school speed zones on North 31st Street, North 32nd Street, 8th Avenue North, 9th Avenue North, and Avenue C. All are reduced from 25 mph (not in compliance with State law).
- Bus loading takes place on-street along North 31st Street adjacent to school.
- Daycare vans load on North 32nd Street adjacent to school.
- Parent loading mostly takes place along North 32nd Street, but some occurs on the other perimeter streets.
- Staff parking on-street on 8th Avenue North, 9th Avenue North and other neighborhood streets.
- Marked crosswalk with curb extensions and crossing guard at 9th Avenue North/North 32nd Street (crossing guard in AM only).
- Marked crosswalk with crossing guard at Avenue C/North 32nd Street (crossing guard at this location in PM only).
- Marked crosswalks with crossing guards at 9th Avenue North/North 30th Street (signalized intersection). Crossing guard walks with the kids in front of Billings Clinic.
- Marked crosswalk with overhead flasher and side-mounted school crossing signs at 9th Avenue North/North 31st Street.
- Marked crosswalks with school crossing signs at 8th Avenue North/North 32nd Street, 8th Avenue North/North 31st Street, 9th Avenue North/North 29th Street, and 9th Avenue North/North 28th Street.
- Good sidewalk access on neighborhood streets.
- There has been discussion about a possible building expansion, but the project is on hold indefinitely. Some potential site improvements associated with that project may include curb extensions and diagonal parking.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 24%
- Bike – 0%
- School Bus – 39%
- Family Vehicle – 32%
- Carpool – 2%
- Daycare Van – 3%

Issues/Concerns

- There is not enough on-street loading space adjacent to the school for all parents, so many have to park across the street. Most walk across the street with their kids or have them cross with the crossing guard. This isn't a significant concern, since most of the students at McKinley walk or ride the bus.
- One of the crossing guards expressed some concerns related to the curb extensions at 9th Avenue North/North 32nd Street. She's concerned that it's difficult for larger vehicles to turn at the intersection and difficult to see the curb during winter months. She agreed that it would help if the curb extensions were marked with delineators or object markers like the curb extensions near Billings Clinic.
- Principal really likes the curb extensions at 9th Avenue North/North 32nd Street because they have resulted in slower speeds through the school zone and forced truck traffic to take an alternate route.
- Offset intersection of Parkhill Drive/North 32nd Street/11th Avenue North results in high turning speeds for vehicles turning right on North 32nd Street and then making an immediate left. Safety is a concern for pedestrians at these intersections.
- Students from North Park Neighborhood are bused rather than walking and having to cross North 27th Street. A small number of students still walk.

Barriers/Big Picture Issues

- Barriers include North 30th Street, North 27th Street and Grandview Boulevard.
- Other downtown streets may also present a barrier for students walking to/from the core downtown area.

- McKinley accommodates two full kindergarten classes. If more kindergartners sign up in a given year than can be accommodated within those two classes, they will attend another nearby school. This has often been the case in the past.

Priority Projects

The following projects were identified as priorities for improvement at McKinley Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- MCK PP-1: Install pedestrian crossings and enhancements at the intersections of Parkhill Drive/North 32nd Street and 11th Avenue North/North 32nd Street.
- MCK PP-2: Install curb extensions at 9th Avenue North/North 31st Street.
- MCK PP-3: Install curb extensions at 8th Avenue North/North 31st Street.
- MCK PP-4: Install curb extensions at 8th Avenue North/North 32nd Street.
- MCK IP-1: Install flexible delineators on existing curb extensions at 9th Avenue North/North 32nd Street.

Other Recommended Improvements

The following projects were also identified as potential improvements at McKinley Elementary School, but were not considered priority projects at the time of this report.

- Re-evaluate current staff parking areas and parent loading zones. Consider asking staff to park across the street to open up more curb-side bus loading.
- Explore opportunity for partnership with Billings Clinic for shared parking in their existing lots west of North 30th Street.
- Consider options for closing off North 32nd Street adjacent to school to provide additional staff parking and reduce cut-thru traffic.

FIGURE 38. MCKINLEY ELEMENTARY SCHOOL – WALKING ROUTE MAP

FIGURE 39. MCKINLEY ELEMENTARY SCHOOL – PRIORITY PROJECTS

MILES AVENUE ELEMENTARY SCHOOL

Site Characteristics

- 1601 Miles Avenue. Bordered by Miles Avenue (local street) and 16th Street West (local street)
- Crosswalks and crossing guard located at 16th Street West/Miles Avenue intersection
- Signalized school crossing at 19th Street West/Miles Avenue (no crossing guard).
- Two other crosswalks, midblock crossing on 16th Street West and crossing at Miles Avenue/Van Bramer Drive on south side of school, both with advance warning signs.
- 15 mph speed zone marked on both Miles Avenue and 16th Street West (flashers on 16th Street only), reduced from 25 mph (not in compliance with State law).
- Drop off lane accessed off of 16th Street West marked "bus loading/unloading only" but is used by both parents and buses. This is also the access to staff parking area. Currently have 6 buses, but some are going to be re-assigned next year.
- Parent loading also takes place along Miles Avenue and in the alley directly west of school. Principal encourages parents to use alley and to use the alley as one-way northbound.
- Staff parking provided in parking lot on south end of bus drop off lane. Principal said there is only about half of required parking, so staff fills on-street spaces along 16th Street West.
- There is generally good sidewalk access in the neighborhood.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 40%
- Bike – 0%
- School Bus – 12%
- Family Vehicle – 34%
- Carpool – 6%
- Public Transit – 1%
- Daycare Van – 7%

Issues/Concerns

- Both parents and buses using same drop off area.
- Exit from bus drop off/parking area is too close to 16th Street West intersection.
- Poor drainage at 16th Street West/Miles Avenue intersection with ice buildup in winter.
- Narrow alley not marked one-way and allows two-way traffic; if alley is too heavily used for drop off could generate complaints from neighbors. Garbage trucks go opposite way (southbound) down alley.
- Inadequate on-site staff parking.
- No crossing guard at 19th Street West and Miles Avenue.
- Buses have a difficult time making left turn on Miles Avenue because of parked cars.
- Concern with buses and parents holding up thru traffic on 16th Street West.

Barriers/Big Picture Issues

- 19th Street West (collector) and 15th Street West (arterial).

Priority Projects

The following projects were identified as priorities for improvement at Miles Avenue Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- MIL PP-1: Install curb extensions and storm drain improvements at 16th Street West and Miles Avenue.
- MIL PP-2: Install sidewalk connections from north and south ends of school to alley.
- MIL PP-3: Install pull-out area along east side of alley to enhance loading zone and move loading away from pedestrian traffic.
- MIL IP-1: Sign alley "one-way" northbound, but allow exception for garbage trucks.

Other Recommended Improvements

The following projects were also identified as potential improvements at Miles Avenue Elementary School, but were not considered priority projects at the time of this report.

- Prevent buses from turning left out of loop roadway in front of school.
- Consider eliminating bus and/or parent loading adjacent to school in drive lane; move bus loading to 16th Street West, parent loading to Miles Avenue and alley.
- Evaluate locations for sidewalks and crosswalks from 16th Street West across boulevard to school (not needed if all drop-offs eliminated from driveway adjacent to school).
- Consider using 90-degree parking in staff lot and closing off driveway onto Miles Avenue.
- Consider constructing additional on-site parking for staff by extending existing parking area along 16th Street West frontage.
- Consider a crossing guard at 19th Street West/Miles Avenue.

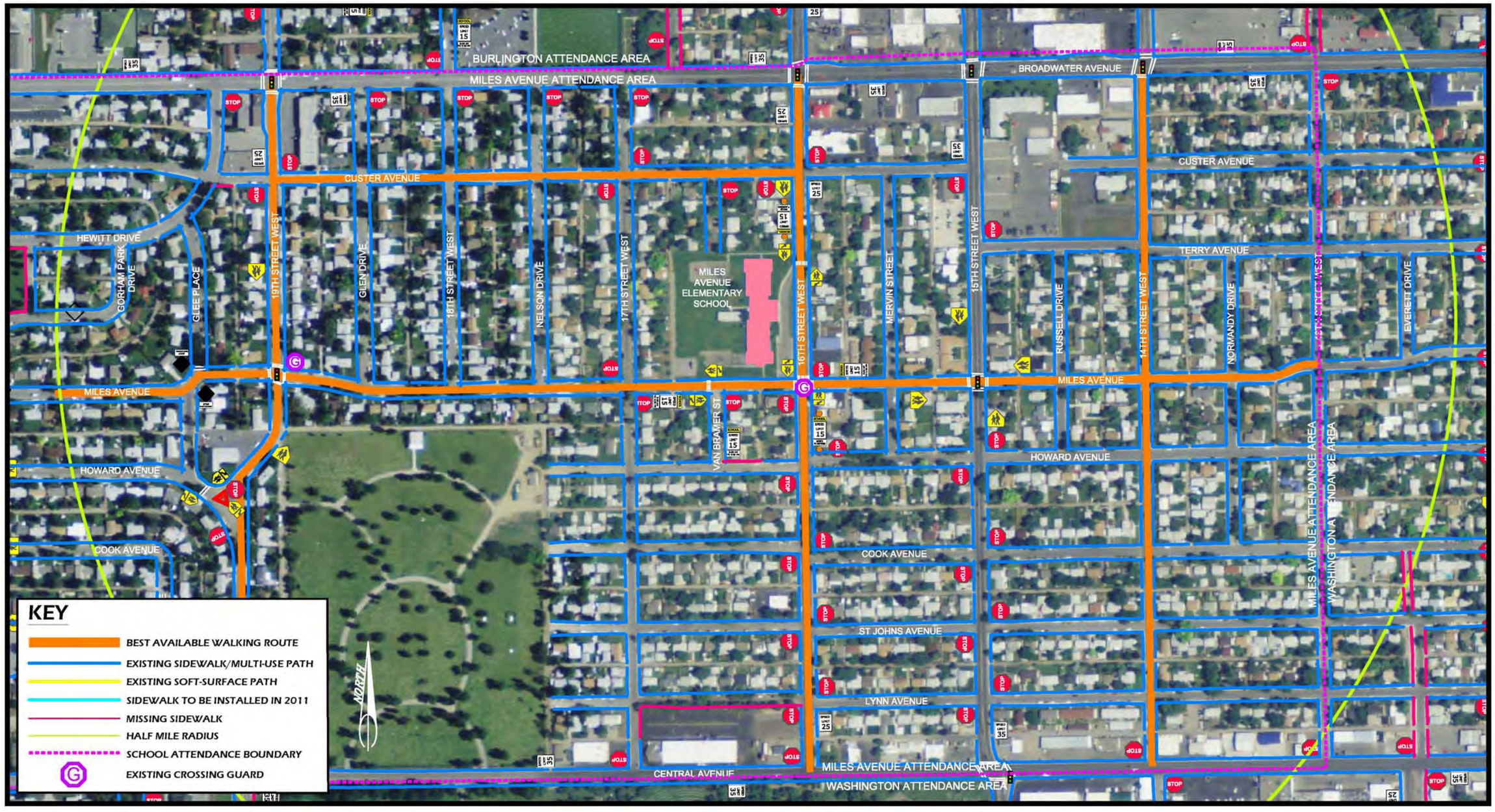


FIGURE 40. MILES AVENUE ELEMENTARY SCHOOL – WALKING ROUTE MAP

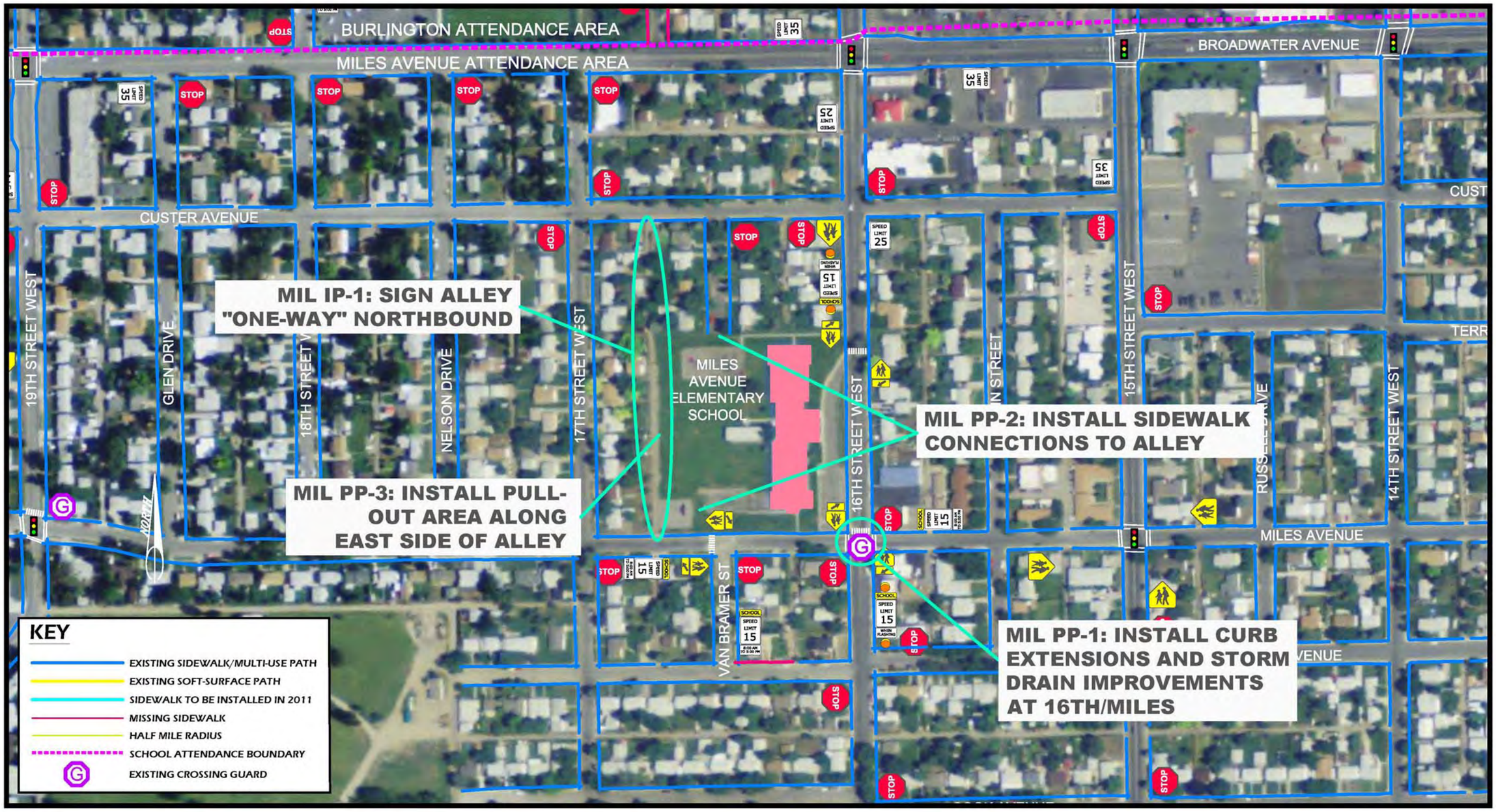


FIGURE 41. MILES AVENUE ELEMENTARY SCHOOL – PRIORITY PROJECTS

ORCHARD ELEMENTARY SCHOOL

Site Characteristics

- 120 Jackson Street. Bordered by Roosevelt Avenue (local street), Frances Avenue (local street) and Jackson Street (collector).
- 15 mph school speed zone with flashers on Jackson Street, reduced from 25 mph (not in compliance with State law).
- 15 mph school speed zone on Roosevelt Avenue, reduced from 25 mph (not in compliance with State law).
- Bus loading zone signage on Roosevelt Avenue north of school, but school doesn't currently have any regular School District busing.
- Parent loading takes place mostly within east loop south of school off of Frances Avenue. Some use west loop and others use Roosevelt Avenue.
- Staff parking provided within west loop/parking lot on south side of school, in small lot on northwest side of school, and on-street along Roosevelt Avenue.
- Marked crosswalks with crossing guards at Jackson Street/Frances Avenue and Jackson Street/State Avenue.
- Marked crosswalk with crossing guard at Madison Avenue/Washington Street (in front of Riverside Middle School).
- Marked crosswalk with school crossing signs at Jackson Street/Roosevelt Avenue.
- Trail access from west side of school to Hallowell Lane.
- Some sidewalk not constructed in new subdivision directly southwest of school.
- The City of Billings has a sidewalk project under construction at the time of this report that will install sidewalks along west side of Jackson Street from Frances Avenue to Ryan Avenue.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 35%
- Bike – 1%
- School Bus – 0%
- Family Vehicle – 38%
- Carpool – 7%
- Daycare Van – 19%

Issues/Concerns

- Concern over lack of sidewalk along west side of Jackson Street. Students that walk from trailer park to the south have to either walk along west side with no sidewalk or cross the street twice to walk along east side. This concern should be addressed by sidewalk project currently under construction.
- According to Principal, most students walk to/from the south to trailer park and other president streets.
- A significant number also walk to/from north side of State Avenue. This area has decent pedestrian accommodations, but the school is concerned about it being a high crime area.
- Some parents use the west loop/parking lot for loading, which causes a lot of congestion/turning traffic between the four accesses on Frances Avenue. Principal has blocked access with cones to prevent parents from using this area for loading.
- Problem with congestion/turning traffic at 4 accesses on Frances Avenue is further complicated by sight distance issues associated with on-street parking on north side of Frances Avenue. Vehicles mostly belong to neighbors on the south side.
- Missing sidewalk on several other neighborhood streets.
- School representatives expressed concern over speeding traffic along Jackson Street. Concerned about the school speed limit changing from 15 to 20 mph, perception is that traffic is already too fast.
- Riverside kids also walk to school on Jackson Street, causing issues. If Orrel Avenue was a safe alternative route for the older children, they may enter Riverside on that street instead of Madison Avenue. Orrel Avenue is currently an alley along a very rough neighborhood with a fence that doesn't allow access to school grounds.
- There is a high concentration of registered sex offenders in the neighborhood. Very concerned about students walking alone.
- Crossing South 39th Street/4th Avenue South intersection (just north of the State Street) is confusing and perceived by parents as dangerous.
- Neighborhood is generally dirty and littered with hypodermic needles, alcohol bottles, etc. along sidewalks, paths and on playground.

- School zone flasher still comes on at noon as a carryover from half-day kindergarten. Needs to only come on at drop off and pickup times.
- Poor sight distance at intersection of Roosevelt Avenue and Jackson Street. Kids north of Roosevelt Avenue will not walk down to Frances Avenue to cross, so need to have a crossing there too.

Barriers/Big Picture Issues

- Barriers include Jackson Street, State Avenue, and Hallowell Lane.
- Concern over high crime rates in the area may also present a barrier to walking/biking to school.

Priority Projects

The following projects were identified as priorities for improvement at Orchard Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- ORC PP-1: Install sidewalks along Jackson Street (City project this summer).
- ORC PP-2: Install curb extensions and crosswalk enhancements on Jackson Street crossings.
- ORC PP-3: Implement a walking school bus program to ease safety concerns and encourage walking.
- ORC IP-1: Install "No Parking" signs on north side of Frances Avenue.

Other Recommended Improvements

The following projects were also identified as potential improvements at Orchard Elementary School, but were not considered priority projects at the time of this report.

- Evaluate options for improving school zone signage with additional warning signs, flashers, etc.
- School representatives expressed a desire to reroute truck traffic to Hallowell Lane away from school zones on Jackson Street and Washington Street. This may not be feasible due to functional classification of these roadways, but options should be considered.

- Increase enforcement (bike cop or cop on foot) to watch over kids walking to and from school.
- Move all bus and van (daycare, Boys & Girls Club, Friendship House, etc.) loading to Roosevelt Avenue.
- Consider replacing sidewalk/curb and gutter between loading zone and parking lot on Frances Avenue with raised crosswalk/fencing to consolidate driveways and crossing locations.
- Install sidewalk and ADA ramps where missing on other neighborhood streets.

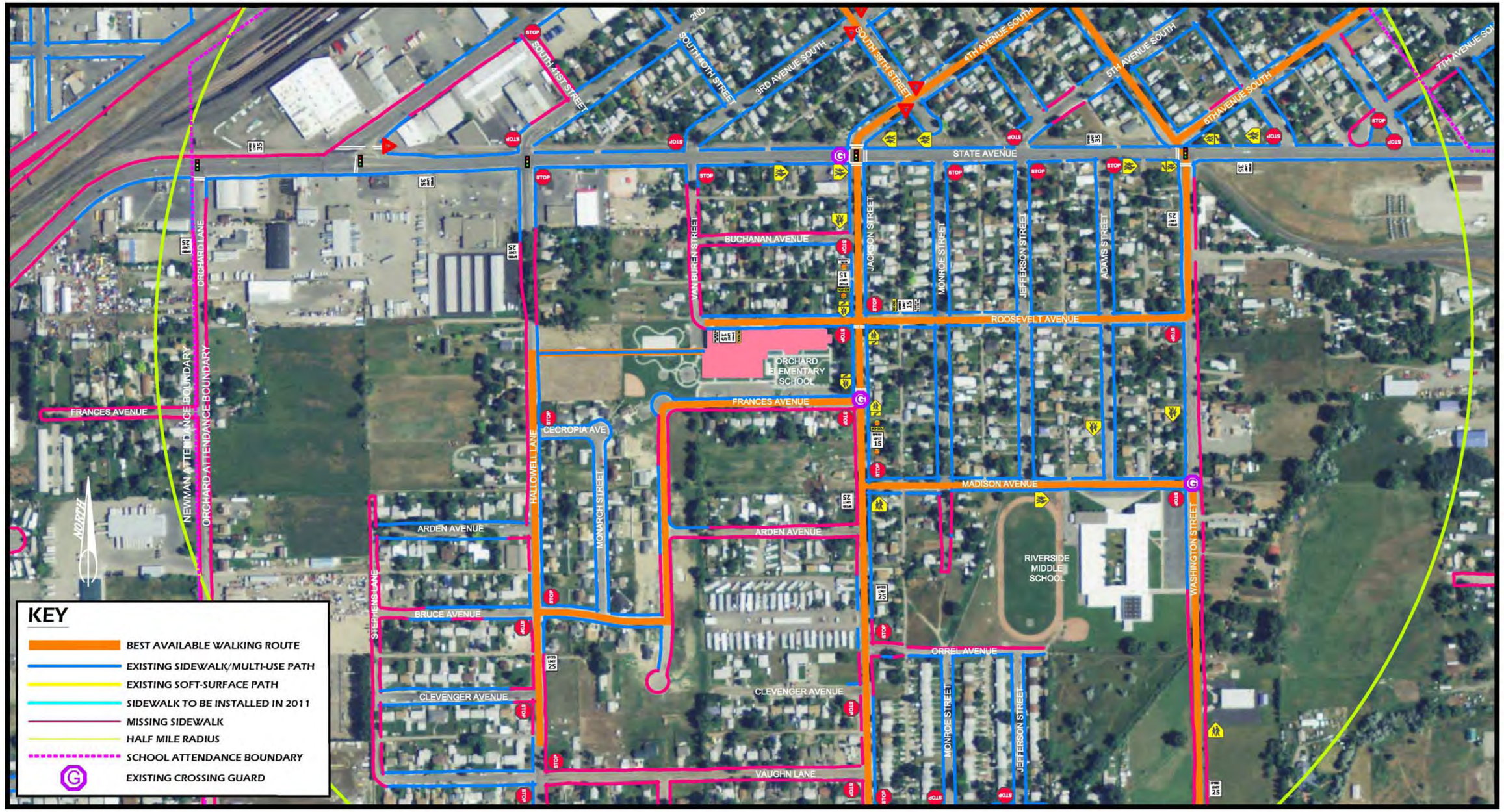


FIGURE 42. ORCHARD ELEMENTARY SCHOOL – WALKING ROUTE MAP

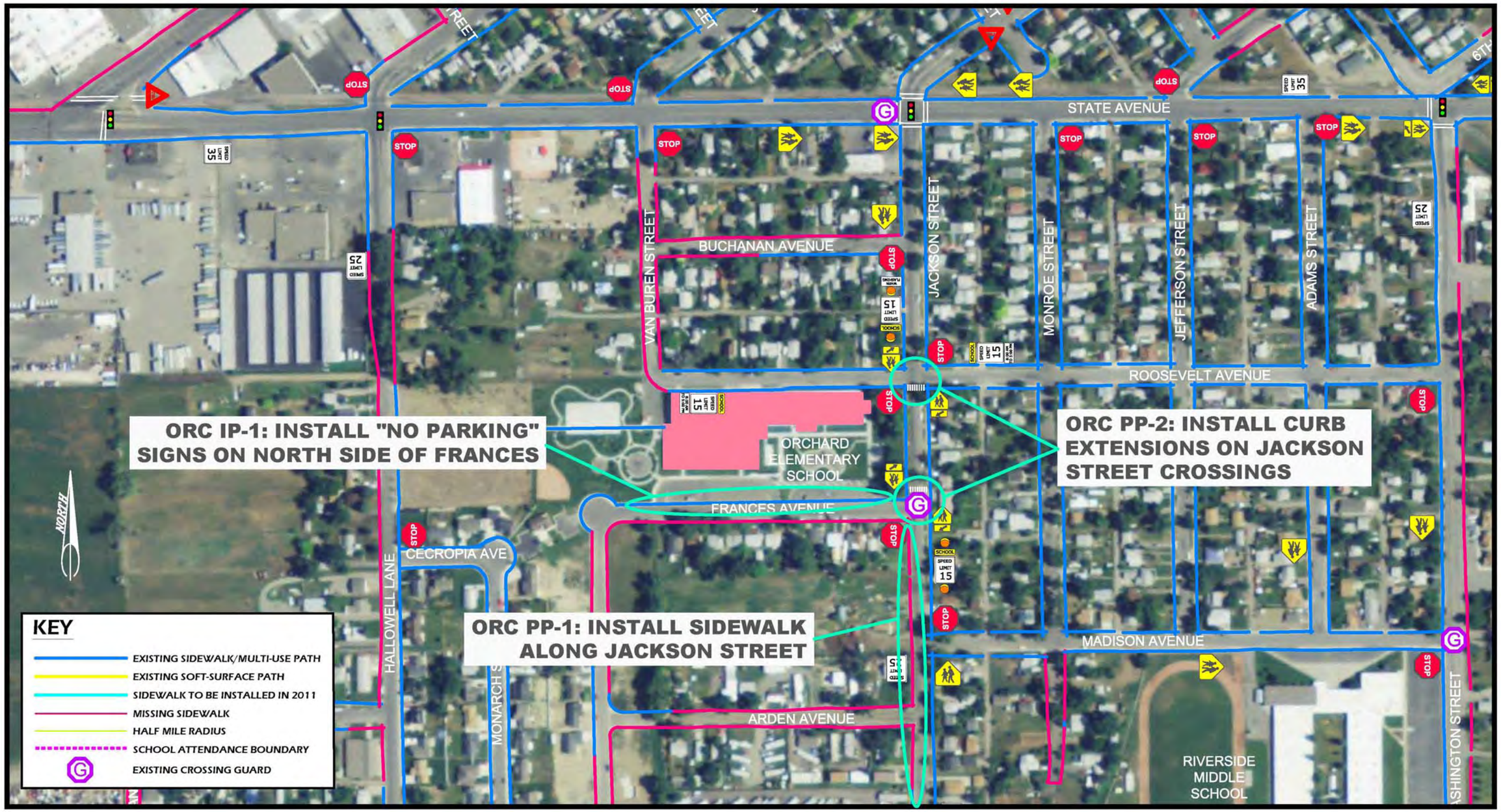


FIGURE 43. ORCHARD ELEMENTARY SCHOOL – PRIORITY PROJECTS

ROSE PARK ELEMENTARY SCHOOL

Site Characteristics

- 1812 19th Street West, intersection of 19th Street West (collector) and Avenue E (local street).
- Two marked crosswalks at 19th Street West/Avenue E with advance school crossing signs (kids encouraged to cross at north side crosswalk); marked crosswalk at 19th Street West/Avenue F with advance signs.
- Crossing guard stationed at 19th Street West/Avenue E assists children crossing both 19th Street West and Avenue E.
- Crossing guard places orange construction cones in crosswalk during pickup/drop off times.
- School crossing with crossing guard at Hoover Avenue (19th Street West)/Colton Boulevard.
- School crossing signs are located in advance of the traffic signal at 17th Street West/Parkhill Drive.
- 15 mph speed zone on Parkhill Drive, Avenue F, Avenue E, and 19th Street West (no flashers). All are reduced from 25 mph (not in compliance with State law).
- Pedestrian bridge across BBWA Canal at north end of 19th Street West provides primary walking access to neighborhoods north of the canal; bridge also located at 21st Street West, which provides walking access through Rose Park or along Canal right-of-way.
- Some pedestrians observed using the alley on the south side of school site.
- Bus loading zone is on 19th Street West between Avenue E and Avenue F.
- Parent loading takes place on 19th Street West, both sides of the street. Some drop-offs were observed mid-street.
- PTA has encouraged parents with some success to not utilize the area between the crosswalks and the bus loading zone for pickup/drop off, although some was observed.
- Staff parking provided in parking lot south of school with access through alley.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 50%

- Bike – 1%
- School Bus – 0%
- Family Vehicle – 32%
- Carpool – 5%
- Daycare Van – 12%

Issues/Concerns

- Multiple conflict points between turning vehicles and double crosswalks at Avenue E.
- Parent loading occurring between crosswalks and in bus zone.
- In-street drop offs (observed cars passing stopped cars on the left).
- Inlet located in the middle of primary (north side) crosswalk at 19th Street West/Avenue E; winter drainage issues cause significant ice buildup in crosswalk.
- Marked crosswalk at Avenue F located in congested drop off area with no crossing guard. Crosswalk is believed to be left over from when designated school crossing at 17th Street West was at Avenue F.
- U-turning traffic observed at Parkhill Drive/19th Street West corner.
- Some fencing missing along canal (per PD volunteers).
- School Crossing sign on 17th Street West located south of Avenue F, but no crosswalk at Avenue F.
- Principal expressed concerns about speeds on 19th Street West and around Parkhill Drive corner. Parents have expressed desire for a flasher.
- Parent parking in alley for student pickup and drop-off has been an issue in the past; this did not appear to be a problem at time of observations.

Barriers/Big Picture Issues

- Barriers include 17th Street West, Colton Boulevard and the BBWA Canal

Priority Projects

The following projects were identified as priorities for improvement at Rose Park Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For

the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- ROS PP-1: Install curb extensions and storm drain improvements at 19th Street West/Avenue E; eliminate crosswalk on south leg of this intersection and south leg of Avenue F intersection.
- ROS PP-2: Install traffic calming improvements on 19th Street West to slow traffic speeds.
- ROS PP-3: Complete curb/gutter and sidewalk on Parkhill Drive at 19th Street West to provide continuous walking route, calm traffic speeds and prevent U-turns.
- ROS IP-1: Relocate existing school crossing sign on 17th Street West from south side of Avenue F to north side of Avenue F.

Other Recommended Improvements

The following projects were also identified as potential improvements at Rose Park Elementary School, but were not considered priority projects at the time of this report.

- Investigate need for marked school crossing with crossing guard at 17th Street West/Avenue E.
- Construct path and improve fencing along south side of BBWA between bridges.

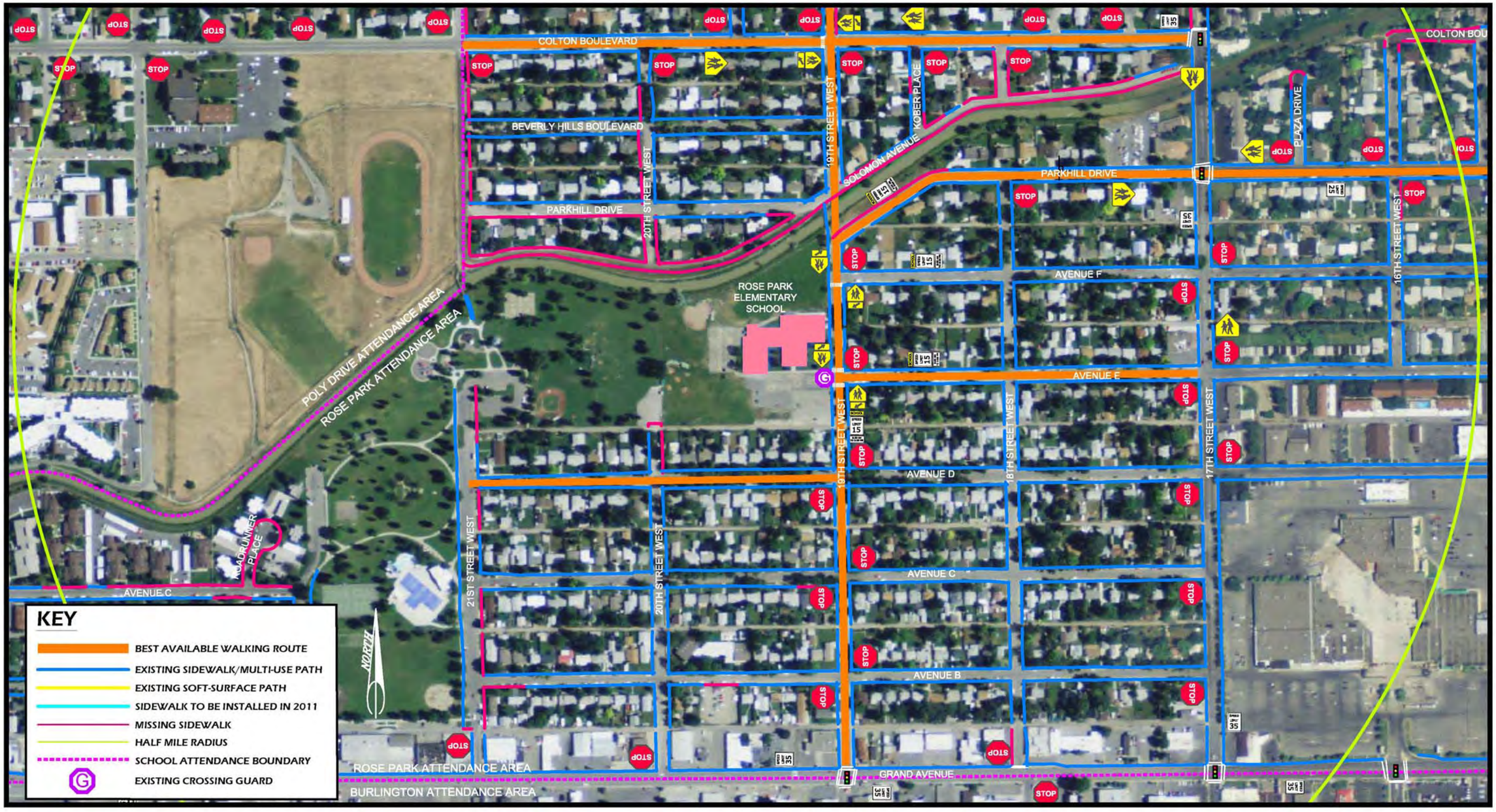


FIGURE 44. ROSE PARK ELEMENTARY SCHOOL – WALKING ROUTE MAP

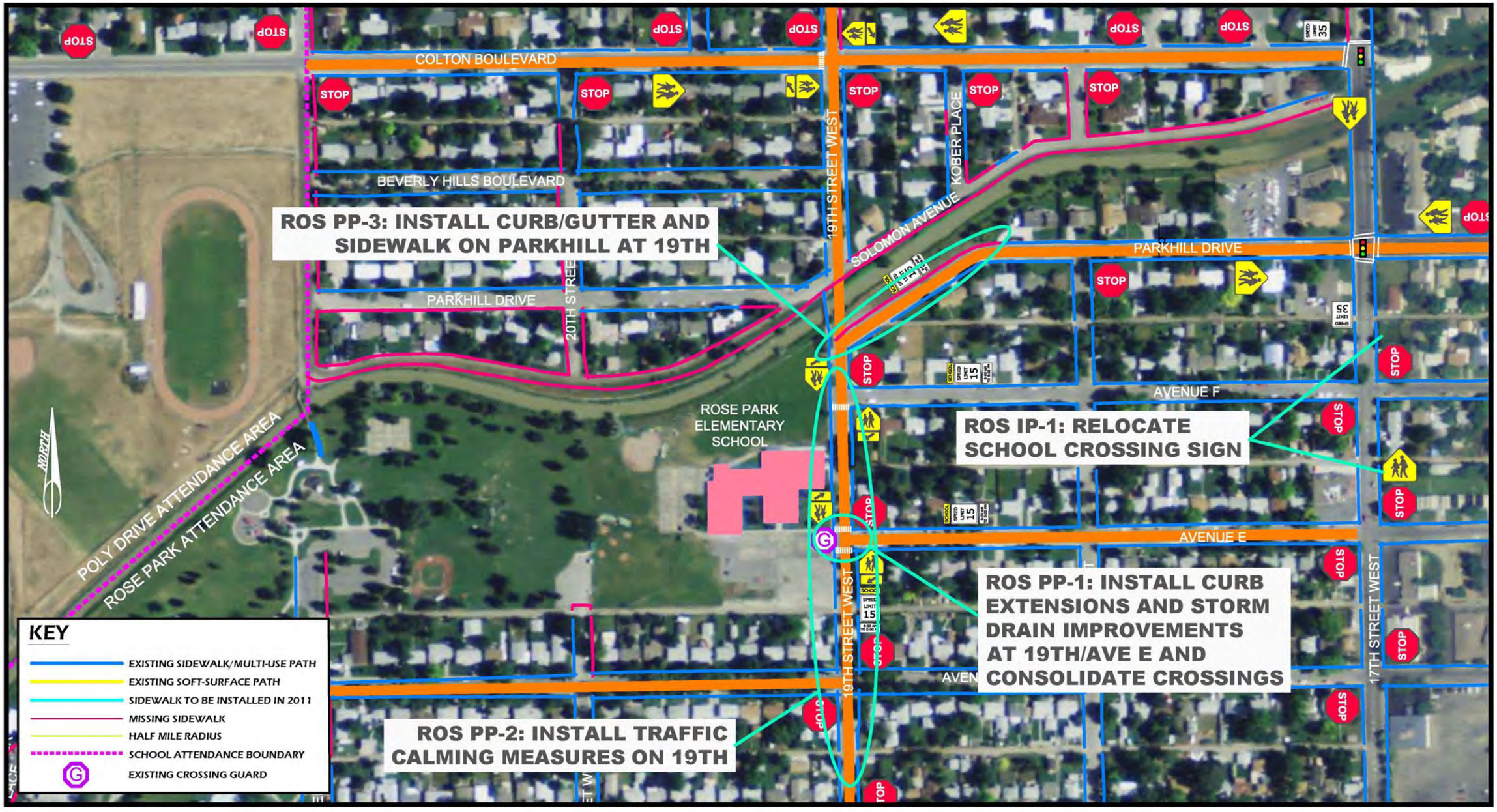


FIGURE 45. ROSE PARK ELEMENTARY SCHOOL – PRIORITY PROJECTS

SANDSTONE ELEMENTARY SCHOOL

Site Characteristics

- 1400 Nutter Boulevard (collector)
- 15 mph school speed zone with flashers on Nutter Boulevard, reduced from 25 mph (not in compliance with State law).
- 15 mph school speed zone on Prospectors Lane, reduced from 25 mph (not in compliance with State law).
- Bus loading takes place in front of school within (one-way) loop roadway. Do not currently have any regular busing, just one YMCA bus and an occasional temporary bus for homeless busing.
- Daycare vans load curbside within loop roadway. Currently have a signed reserved loading zone for daycare vans that begins immediately west of entrance.
- Parent loading takes place within loop roadway (visitor parking spaces and curbside along far end of loop) and along both sides of Nutter Boulevard.
- Staff parking takes place within designated lot immediately south of school.
- A nearby daycare to the north on Nutter Boulevard walks with a large group of students after school. Another large group of students walk together to/from Castle Rock Middle School to the west.
- Marked crosswalks with crossing guard at Nutter Boulevard/Wicks Lane (signalized intersection).
- Marked crosswalks with school crossing signs on Nutter Boulevard immediately north of loop entrance and immediately south of loop exit. Marked crosswalks with school crossing signs at Constitution Avenue/Breeds Hill Street and Babcock Boulevard/Prospectors Lane.
- On-street bike lanes recently striped on Nutter Boulevard from Wicks Lane to Hilltop Road.

School Travel Mode Split from 2007 Survey about Walking and Biking to School

- Walk – 26%
- Bike – 1%
- School Bus – 2%
- Family Vehicle – 56%

- Carpool – 8%
- Public Transit – 5%
- Daycare Van – 2%

Issues/Concerns

- Many of the parents that park on Nutter Boulevard walk up to the school to meet their kids, but many cross midblock to get to/from their vehicles, even when they had their kids with them.
- Observed several occasions where drivers made a u-turn out of their on-street parking space on Nutter Boulevard.
- Crosswalks on Nutter Boulevard in front of school are striped with two transverse lines instead of ladder style, like most school crossings in Billings.
- Queues form on Nutter Boulevard in front of school during before and after school peaks, making it difficult for parents parked on-street to get out of their parking spaces.
- Westchester Square area east of school has sidewalks, but they are often blocked by parked cars, snow or poorly maintained landscaping, so students are often forced to walk within roadway.
- Principal receives complaints about lack of snow removal on sidewalks. Many occasions where the School District has cleared the sidewalks and then the City clears the roadways afterwards, piling snow back on sidewalks.
- Several missing sidewalks on neighborhood streets southeast of Babcock Boulevard and north of Wicks Lane.

Barriers/Big Picture Issues

- Barriers include Wicks Lane, Nutter Boulevard, and Babcock Boulevard.

Priority Projects

The following projects were identified as priorities for improvement at Sandstone Elementary School based on input received from school representatives. The first three letters in the numbering system correspond to the first three letters in the school name. For the next two letters, PP stands for Priority Project and IP stands for Immediate Project, which is considered to be an immediate, low cost solution.

- SAN PP-1: Install sidewalks on neighborhood streets southeast of Babcock Boulevard.
- SAN PP-2: Install sidewalks on neighborhood streets north of Wicks Lane.
- SAN PP-3: Consolidate crosswalks on Nutter Boulevard in front of school to the north location and restripe as a ladder style crosswalk.
- SAN IP-1: Work with School District and City maintenance forces to coordinate snow removal on streets and sidewalks.
- SAN IP-2: Improved enforcement of City codes prohibiting parking on sidewalks and requiring homeowners to remove snow in winter.
- SAN IP-3: With new bike lanes on Nutter Boulevard, school should encourage biking. Consider enhancing or installing new bike racks.

Other Recommended Improvements

The following projects were also identified as potential improvements at Sandstone Elementary School, but were not considered priority projects at the time of this report.

- Consider a crossing guard and/or curb extensions at north crosswalk on Nutter Boulevard.
- Re-evaluate current parent and daycare loading zones for potential improvements.
- Consider wider sidewalks or boulevard walks along school frontage to improve safety and provide additional space for snow storage.

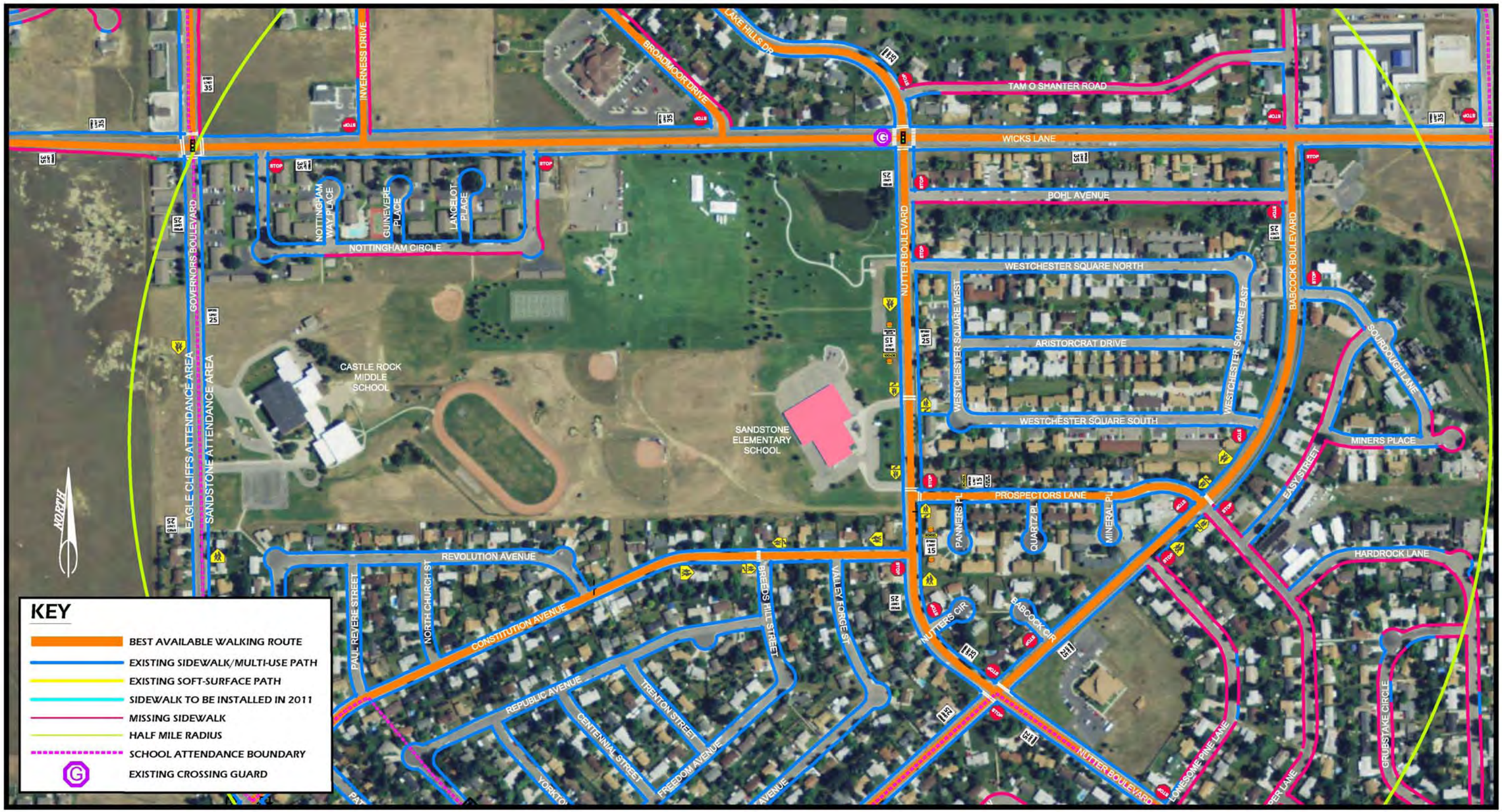


FIGURE 46. SANDSTONE ELEMENTARY SCHOOL – WALKING ROUTE MAP

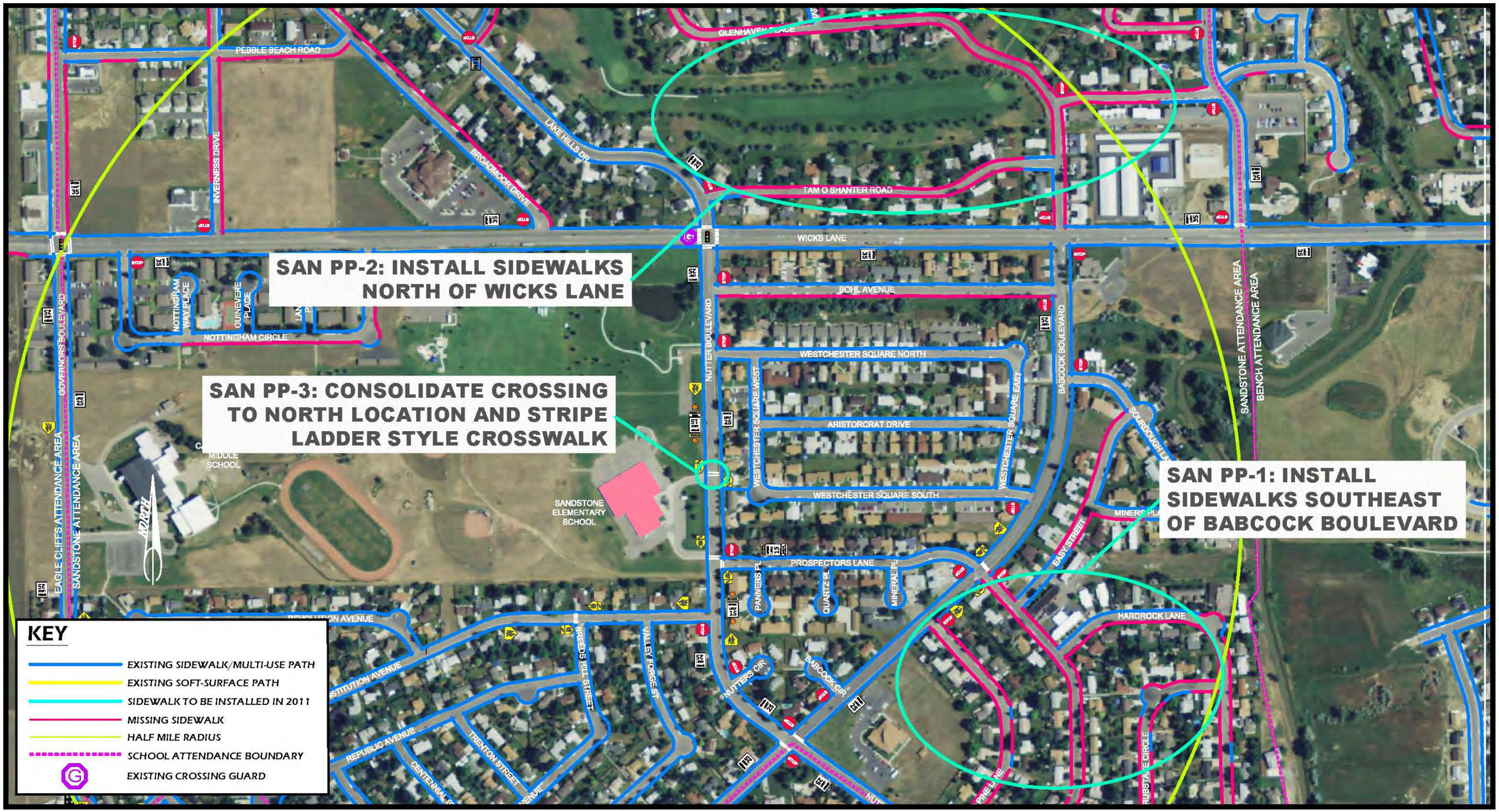


FIGURE 47. SANDSTONE ELEMENTARY SCHOOL – PRIORITY PROJECTS

ENFORCEMENT

As discussed previously, enforcement components of SRTS often include a partnership with law enforcement to ensure that traffic laws are obeyed within school zones. The following paragraphs outline some common recommendations related to enforcement.

Increase Police Enforcement

Compliance with traffic laws in school zones can be greatly improved through increased police enforcement during before and after school peak periods. Not all school zone issues are related to inadequate infrastructure. Many are related to inappropriate driver behaviors, often times by parents within school zones. The majority of these issues could be greatly improved through increased enforcement. Often times the biggest hurdle to increasing enforcement is the lack of funding available in law enforcement budgets. The majority of these enforcement-related activities are eligible for SRTS funding. In addition, the National Highway Traffic Safety Administration (NHTSA) recently announced the launch of a new web-based resource for law enforcement officers. The Safe Routes to School for Law Enforcement Web site, www.saferoutesinfo.org/lawenforcement, provides tips, tools and other materials to help law enforcement officers get involved in SRTS activities.

Permanent Radar Signs or Portable Speed Trailers

Issues related to speeding traffic in school zones may be addressed using permanent post-mounted radar signs or portable speed trailers to visually display drivers real-time speeds compared to the posted speed limit. These devices are particularly effective at reducing vehicle speeds when they're first installed, but opinions vary on their effectiveness over time. They are most effective when implemented such that the driver's speed flashes if it's over the speed limit. The efficacy of these signs is also greatly increased when paired with consistent yet random enforcement activity. There is an existing post-mounted radar sign on Shiloh Road near Arrowhead Elementary School's crosswalk at Poly Drive. The City of Billings Police

Photo Source: www.radarsign.com

Department also uses a portable speed trailer in school zones on a fairly regular basis. The speed trailer is rotated to various locations throughout Billings on a request basis, with preference given to school zones during the school year. These requests can be submitted to the Crime Prevention Office at 406-247-8590. Additional information on the different types of radar signs and speed trailers is available on suppliers' websites, such as www.radarsign.com and www.speedtrailers.net.

School Crossing Guards

Crossing guards promote safe behaviors at school crosswalks by making pedestrians more visible to drivers and helping students get safely across the street. Many elementary schools in Billings already have several crossing guards, but additional locations were identified where crossing guards may be desirable. The decision to use crossing guards at additional locations should be based on the Billings Public School's established School Crossing Guard Criteria, which are available at http://ci.billings.mt.us/DocumentView.aspx?DID=1493. Additional school crossing guard guidelines can be found in the Manual on Uniform Traffic Control Devices (MUTCD) at http://mutcd.fhwa.dot.gov/pdfs/2009/part7.pdf or on the website hosted by the National Center for Safe Routes to School at http://www.saferoutesinfo.org/guide/crossing_guard/index.cfm.

Loading Zone Monitors

Similar to crossing guards, loading zone monitors are adult volunteers or teachers that help students and their parents negotiate the loading zone area during before and after school peak periods. They can help to make sure vehicles do not park where they shouldn't and help students cross vehicle paths safely. These curb-side assistants can help organize and speed up the loading process, as well as increase safety. They eliminate the need for parents to get out of their vehicles and they show students the best path to get from the vehicle directly to the sidewalk. Monitors should wear safety vests and the program should be well-communicated to parents prior to implementation, such as through a school newsletter. Ultimately, the success of this type of program depends greatly upon parent cooperation.

Sidewalk Sammies

Also known as "Slow Down Sammy", this eye-catching figure will help notify motorists to slow down and watch for students. They are most effective if they're put out only when

students are present. They stand approximately 32-inches high and include a red warning flag and a large "SLOW" sticker. Many schools in Billings are already using them near school driveways or at school crossings to increase visibility and provide an extra warning to notify drivers that students may be present. These may be particularly effective in additional locations where crossing guards aren't warranted, but increased visibility and awareness are desired. As with all school zone signing applications, effectiveness may become reduced with overuse, so it's recommended that they only be used in one to two high-activity locations at each school. In addition, they are not considered an official traffic control device under the Manual on Uniform Traffic Control Devices and should therefore not be placed with the street itself.

EDUCATION

Educational components of SRTS are often directed at students, but can also be provided for parents and other drivers. These tactics can include education on the broad range of transportation choices, education on the health and environmental benefits of bicycling and walking, and launching driver safety campaigns in the vicinity of schools. More specific details are outlined in the following paragraphs.

Strategies for Educating Students

Key topics to include in education programs for students are pedestrian safety skills, bicycle safety skills, personal safety, and the health and environmental benefits associated with walking and bicycling to school. The key messages under each of these topics can be delivered through one-time instruction, classroom or physical education lessons, parent involvement, or a structured skills course, such as a Bicycle Rodeo. The most successful SRTS programs typically include a combination of these methods. Additional information related to educating students about SRTS can be found at

www.saferoutesinfo.org/guide/education/children.cfm. It includes specific information related to key messages, educational methods and additional resources for content on each topic.

Strategies for Educating Parents

Key topics to include in education measures directed towards parents are related to their role as teachers of safety behaviors, as drivers on the school campus during peak periods, and as drivers near the school. These messages can be delivered through a variety of educational strategies including print materials (school websites or newsletters), media stories (local news or newspaper stories) and training (classes on how to teach safety skills to their children). The implementation of these strategies will be a great way to include parents in SRTS activities, and they'll go a long way toward improving the safety of students walking or bicycling to school. Additional information related to educating parents can be found at www.saferoutesinfo.org/guide/education/parents.cfm. It includes key messages and strategies for reaching parents, as well as sources for additional information.

Strategies for Educating Neighbors and Other Drivers

In addition to parents, there are many other community members that drive near schools during peak periods, so it's important that all drivers are educated about school-zone safety. Failure to comply with traffic laws and posted speed limits are examples of driving behaviors that result in unsafe conditions for students. Drivers can help to create a safe environment by watching for and yielding to pedestrians and bicyclists, obeying school zone speed limits, coming to a complete stop at stop signs, and not blocking crosswalks. The best time to provide safety messages to drivers is while they are near school zones using signage, enforcement, and media. Sign messages such as, "Give our Kids a Brake" can help to increase awareness and remind drivers to slow down. Additional messages for neighbors along school routes can provide reminders to keep pets on a leash or keep sidewalks clear for use by pedestrians and bicyclists. Additional information for educating other drivers can be found at www.saferoutesinfo.org/guide/education/all_drivers_near_the_school.cfm. This web page provides key messages and strategies for reaching neighbors and other drivers, as well as sources for additional information.

ENCOURAGEMENT

Encouragement strategies consist of programs or activities that can be implemented by schools or communities that promote bicycling and walking to school. The following paragraphs include some specific ideas for encouraging walking and biking to school in Billings.

Special Events

Special events are activities that celebrate walking and biking to school and they usually consist of designated days when families or groups of students walk or bike to school together. They are often one-day events planned around International Walk to School Day, which is held each year in early October. Special events can also be monthly or weekly events where students walk or bike to school on particular days, such as "Walk and Wheel Wednesdays" or "Footloose Fridays." Additional information and event registration for International Walk to School Day is available at www.walktoschool-usa.org.

Mileage Clubs

Mileage clubs or contests make walking and biking to school fun and rewarding. They typically consist of students tracking the amount of miles they walk or bike to school during a given time period. At the end of the time period, they have the opportunity to win a prize for reaching a certain mileage goal. Mileage clubs and contests can be set up so each child tracks their miles individually or as a competition between classrooms or schools. In order to be most effective, incentives or rewards should be given multiple times over an extended period of time, rather than just once at the end of the school year. These types of programs could also be coordinated with other special events. For example, Lincoln Elementary School in Elmhurst, IL developed a Frequent Walker/Rider Program in conjunction with their monthly Walk to School Days. Each student receives a punch on their punch card each time they participate. Participants are recognized with small prizes throughout the year and then again at a big year-end event. These types of clubs or contests have shown to be very effective in getting students to walk or bike to school on a regular basis. As an example,

a free online program for tracking mileage is available at http://www.peclogit.org/logit.asp. To find more information on how to set up a mileage program, school staff can visit http://www.saferoutesinfo.org/guide/encouragement/mileage_clubs_and_contests.cfm.

Walking School Bus or Bicycle Train

A walking school bus or a bicycle train consists of groups of students accompanied by an adult that walk or bike a pre-planned route to school. They often originate from a particular neighborhood and students from other areas can be picked up along the route to school. Walking school buses and bicycle trains can be informal or highly organized. They can be as simple as a group of parents from a particular neighborhood deciding to walk or bike together. More formal programs will require a coordinator who organizes participants and creates schedules and walking routes. Although they require more effort, the more organized programs allow the opportunity to involve more students. Additional information about how to organize a walking school bus or bicycle train is available at www.saferoutesinfo.org/guide/encouragement/walking_school_bus_or_bicycle_train.cfm or www.walkingschoolbus.org.

Park and Walk Programs

Park and walk programs, or remote drop-off locations, consist of identifying a particular parking lot where parents can drop off their kids or park and walk with their kids the remaining distance to school. They have the potential to reduce traffic congestion around schools and encourage physical activity for students and their parents. This strategy is an effective way to include families that live too far from school to walk or bike, which greatly benefits rural areas.

School-Related Walking Activities

Walking can be incorporated into the school day by establishing on-campus walking activities during recess or gym class. They can also be incorporated by planning walking field trips. This is another way to encourage students that live a long way from school to

participate in SRTS activities and miles earned during these types of activities could count toward mileage club totals.

Carpool Incentives

Carpool incentives, similar to mileage clubs and contests, can be offered to students that carpool to school. Prizes can be offered to individual students that participate, but parents can also be given incentives, such as a preferred parking or drop-off area for carpools. As with the two programs mentioned above, carpool incentives would be a good way to include families that live a long way from school in SRTS activities. Carpool incentive programs cannot be funded by SRTS dollars, so alternate funding sources would need to be identified.

EVALUATION

Evaluation (the last of the 5 E's) is an essential component of all successful SRTS efforts. This study has consisted of documentation of existing conditions and an identification of existing barriers to walking and bicycling to school. These efforts will serve as the baseline for before-and-after evaluations of SRTS activities and projects. Evaluation of the programs recommended in this study should also be conducted periodically throughout its duration to gauge success along the way. This is an important component of the program that will help Billings to identify areas of improvement and determine if the recommended infrastructure projects or programs are having the desired results.

As discussed previously, the goals of this study are to enhance the safety of students traveling to and from school and increase the number of students walking or biking to school. A key component of the evaluation process will be the parent surveys that were conducted by the Yellowstone City-County Health Department in October 2007. They can be conducted periodically throughout the duration of particular programs, as well as upon completion of a major infrastructure project. Other suggestions for measuring the success of SRTS efforts in Billings are outlined in Table 1 on the following page.

The information gained from evaluation efforts can be used to help target changes in SRTS activities and establish new or different directions for future activities. The results of the

evaluation process should be consistently communicated to parents and other community members to increase awareness and support for future projects.

Table 1. Measures of Success

Goal/Measure of Success	Method of Measurement
Enhance the safety of students traveling to and from school	Number of new infrastructure projects, parent surveys, observations, walkabouts, interviews with parents and school staff
Increase the number of students walking or bicycling to school	Student tally sheets, parent surveys, peak hour traffic and pedestrian counts near schools

BIG PICTURE ISSUES AND RECOMMENDATIONS

In addition to site-specific characteristics, there are many big picture issues that may be affecting students' ability to walk or bike to school in Billings. Some of these big picture issues are unique to Billings, but most are not. These issues are much larger than what can be accomplished with the recommendations of this study, but it's important to address how some of these issues relate to SRTS.

Neighborhood Schools

The concept of the neighborhood school is a critical component of SRTS efforts on a national scale. The movement of schools away from neighborhoods to the edge of town, often referred to as "school sprawl," has had a dire affect on the ability to walk or bike to school on a national level. It results in schools being even more dependent on buses and parent vehicles. Many factors contribute to the decline of neighborhood schools, including acreage requirements, state reimbursement policies, potential conflicts between community planning and school planning, and building codes. Appropriately-sized, neighborhood-centered schools have been recognized across the country as being better for students, better for learning and better for communities. As Billings Public Schools evaluates future school

sites, it would be valuable to consider the benefits of neighborhood schools and how they relate to the ability to walk or bike to school.

School Attendance Boundaries

There are many factors that affect the determination of elementary school attendance boundaries in Billings. Barriers that affect students' ability to walk or bike to school are just one component. These barriers include arterial roadways with high traffic volumes or speeds, waterways, railroads, and substantial changes in topography. Attendance boundaries would ideally fall directly on major barriers, so that students attending school in the attendance boundaries on either side do not have to cross the barrier to walk or bike to school. Billings Public Schools has successfully implemented this practice in many locations. However, the Specific School Findings and Recommendations section of this report identifies several instances where these barriers are located within particular attendance boundaries.

Other areas that are cause for concern related to walking and biking to school are those areas where attendance boundaries are split or islands of one boundary area are completely surrounded by another boundary. As shown in Figure 1, examples include the attendance boundary for Ponderosa Elementary School, where a portion of the boundary is located on the other side of the Orchard Elementary School boundary (the old Garfield Elementary School boundary), and the attendance boundary for Beartooth Elementary School, where a portion of the boundary is located on the other side of the Bitterroot Elementary School attendance boundary on the west side of Main Street. These breaks in attendance boundaries are particularly detrimental to the ability to walk or bike to school and if possible, should be avoided as boundaries are updated in the future.

Also related to attendance boundaries is the fact that entire grades from particular schools have been relocated to other schools because of a lack of space. More specifically, all kindergartners from the Arrowhead Elementary School attendance boundary actually attend Boulder Elementary School for kindergarten, but will go back to Arrowhead Elementary School for first grade. A similar situation has taken place with Burlington Elementary School kindergartners attending Meadowlark Elementary School. It is understandable that these types of accommodations need to be made in order to make the best use of the space

available, but they also make it difficult to walk or bike to school and often result in parents dropping their children off at two separate schools. The elimination of these types of situations will also be desirable for future attendance boundary adjustments.

Because of the many factors involved in determining attendance boundaries, it is not the intent of this study to recommend where specific boundaries should be relocated, but rather to simply encourage Billings Public Schools to strongly consider these factors the next time boundary adjustments take place. It should be noted that Billings Public Schools has recently purchased a new software program that will help with updating attendance boundaries and accounting for these and many other factors.

Safety Busing

Montana has a State statute that requires schools to provide busing for students that live over three miles from school. Billings Public Schools also contracts for additional buses for safety busing within the three-mile radius for areas where traffic-related barriers cause concern about the safety of students walking or biking to school. Examples of safety busing include the following:

- Arrowhead Elementary School – safety busing has been provided for neighborhoods along Rimrock Road west of Shiloh Road. With the new trail recently installed on the north side of Rimrock Road, Billings Public Schools will begin to phase out safety busing for students north of Rimrock Road, but will continue to provide it for those on the south side of Rimrock Road.
- Beartooth Elementary School – safety busing is provided for the attendance area on the west side of Main Street.
- Bench Elementary School – safety busing has been provided so students do not have to walk along or across Lake Elmo Drive. It was anticipated that this safety busing would be eliminated with recent Lake Elmo Drive improvements, but it will be maintained for at least one more year and then reevaluated.
- Burlington Elementary School – safety busing is provided for students that live on the north side of Grand Avenue.
- Central Heights Elementary School – safety busing is provided for students that live on the west side of 24th Street West.

- McKinley Elementary School – safety busing is provided for students that live on the east side of North 27th Street or within the core downtown area.
- Meadowlark Elementary School – safety busing is provided for the students that live on the south side of Central Avenue or the west the side of 32nd Street West.
- Newman Elementary School – safety busing is provided for the students that live on the south side of Interstate 90.
- Ponderosa Elementary School – safety busing was provided for the old Garfield Elementary School attendance area when the school closed and those students first started attending Ponderosa, and has been provided ever since.

City-wide, these safety bus routes cost Billings Public Schools a significant amount of money on an annual basis. While these programs only have the best intentions for improving the safety of students traveling to school, they are counterproductive to encouraging walking and biking to school. As the infrastructure improvements needed to provide a safe route for walking and biking are implemented, many of these safety busing routes can likely be eliminated. Some may be eliminated with potential attendance boundary adjustments, while others will likely remain in effect indefinitely.

Another concern related to busing on a city-wide level is the common use of full-size buses to transport a small number of students. Throughout the process of completing this study, several occasions were observed where a full-size bus dropped off or picked up a single student. It is recommended that options be considered for using smaller buses or vans for these types of situations to improve efficiency and reduce unnecessary congestion in school zones.

Loading Zone and Parking Recommendations

This document provides several recommendations regarding parent loading zone improvements that may seem counterintuitive to increasing the number of students that walk or bike to school. The intent of this study is to achieve a minimum standard of loading zone safety, not to make it more convenient for parents to drive their kids to school. As an example, the lack of space available for parent loading at Washington School is a concern, not for parent convenience, but for the safety of kids being dropped off in the loading zone and for kids walking or biking in the vicinity of the loading zone. Along the same lines,

recommendations related to parking lot improvements or expansions are not meant to make it more convenient to drive to school, but rather to improve the overall safety of traffic conditions around schools. Many of the loading zone and parking lot improvements that are recommended in this study will not be eligible for SRTS funding for implementation, but should be considered as other funding sources become available.

IMPLEMENTATION STRATEGIES

In order to begin implementing the SRTS recommendations, it is important to develop a list of strategies and key action items. This section of the report provides the City of Billings, Billings Public Schools, and individual schools with a list of priority projects, budget level cost estimates, and potential funding sources. This section also provides a list of strategies for determining city-wide priority projects.

PRIORITY PROJECTS

Based on the level of existing safety concerns and input from school representatives, the projects identified in Appendix A (Phase 1) and Appendix B (Phase 2) should be considered the top priority projects for implementation at each school. These tables identify short-term and long-term projects, as well as immediate low-cost solutions. The project numbering directly corresponds to the project numbering in the Specific School Findings and Recommendations section of this report. Appendix A and B also present a summary of budget-level cost estimates and potential funding sources for each of the priority projects.

The projects outlined in Appendix A and B provide some direction for where initial efforts should be focused, but any and all opportunities to install the other infrastructure projects recommended in this report should be pursued as they arise. The process for the implementation of these infrastructure projects, as well as the program recommendations, will depend greatly on the availability of resources. In most instances, focusing on low-cost and easy to accomplish tasks is the best way to begin implementation efforts. Making small, but immediate changes and publicizing positive outcomes can help to create the momentum and support needed to implement more costly improvements in the future. However,

getting the necessary infrastructure in place will open the door to pursuing the other opportunities for improving safety and encouraging students to walk or bike to school.

STRATEGIES FOR DETERMINING CITY-WIDE PRIORITY PROJECTS

With three or more priority projects identified for each school, this study provides a significant number of recommended improvements. The determination of which of these projects should be installed first in order to provide the most effective use of limited infrastructure funds can be a daunting task. In addition, the process used to determine priority projects should be easily explained in funding applications and to the public. The following key factors should be considered by the City of Billings and Billings Public Schools as a practical way to prioritize the recommended improvements on a city-wide basis.

1. **Crash History** – Evaluate pedestrian crash history within a half-mile radius of school or immediate vicinity of the proposed priority project.
2. **Current and Potential Pedestrian Use** – Acquire existing pedestrian count data, estimate pedestrian volumes, or evaluate the number of students living in nearby neighborhoods that would use the route if the proposed priority project was constructed. Logically, improvements near a particular school will almost always affect a higher number of students than those located further away from the school. Current and potential use by other users (not just school traffic) may also be considered.
3. **Traffic Volume** – Acquire existing peak hour or average weekday traffic volumes at or adjacent to the proposed priority project. Traffic volumes can be estimated as needed to provide a relative comparison between projects. Different types of projects may need to be evaluated based on different types of volume data.
4. **Traffic Speed** – Evaluate existing posted speed limits at or adjacent to the proposed priority project. Input from school representatives regarding perceived problems with speeding traffic may also be considered.
5. **Existing Infrastructure and Crossings** – Evaluate the number of existing sidewalks, trails, and street crossings that could be connected or enhanced through construction of the proposed priority project.
6. **Cost** – Evaluate the overall cost of the proposed project using cost estimates provided in Appendix A and B. While expensive improvements may have some benefit, the same

funds may be better spent on implementing less expensive improvements at many locations.

7. **Consistency with Other City-Wide Plans** – Projects that are consistent with recommended improvements in other city-wide planning documents (Transportation Plan, Bikeway and Trail Master Plan, etc.) should receive priority over other projects.
8. **Safety Busing** – The opportunity for eliminating existing safety bus routes through implementation of the proposed project should be evaluated as part of the prioritization process.
9. **SRTS Eligibility** – Whether or not the proposed project is eligible for SRTS funding could also be considered when determining city-wide priorities. For example, many of the recommended loading zone and parking lot improvements are not eligible for SRTS funding and would therefore not be considered as high of a priority during this process.
10. **Non-Infrastructure Program Efforts** – The level of effort being put forth by a given school on non-infrastructure programs should be considered in setting priority projects. For example, if a particular school has put forth a significant amount of effort to impelement education or encouragement programs, they should receive higher priority for their infrastructure projects. This will provide an incentive for schools to focus on the non-infrastructure side of SRTS.

This list of criteria provides several options for consideration in determining priority projects. They will ultimately need to be evaluated on a project-by-project basis to determine the appropriate thresholds and/or weighting for each criteria. Point values could be assigned to ranges of volume data as necessary to provide a relative comparison between projects without collecting specific volume data. Actual pedestrian volumes, traffic volumes and traffic speeds can be used if readily available, but it is not necessary to collect new data for the purposes of the prioritization process. Collecting actual data for such a significant number of projects would be very labor intensive and would take too long with only a short window available in the fall and spring.

It is recommended that this process take place with considerable input from Billings Public Schools and the city-wide SRTS task force. Among many other things, they can provide the input needed to estimate existing or potential pedestrian volumes or preceived problems related to speeding traffic in school zones.

POTENTIAL FUNDING SOURCES

Many of the projects and programs recommended in this study would require little or no funding for implementation. On the other hand, most of the infrastructure improvements will require a significant amount of funding for design and construction. Many sources of funding are available for these types of projects, including the following examples:

- Montana SRTS Program
- Montana Community Transportation Enhancement Program (CTEP)
- City of Billings Capital Improvement Program
- General Obligation Bonds
- Yellowstone County Funds
- School District Funds
- Montana Fish, Wildlife & Parks Recreational Trails Program
- Federal Programs
    - Congestion Mitigation and Air Quality Improvement Program
    - Surface Transportation Program
    - Recreational Trails Program
    - Land and Water Conservation Fund Program
- Private Funding
    - BikeNet
    - Bikes Belong Coalition
    - National Trails Fund
    - Kodak American Greenways Awards Program
    - Developer Donations
    - Donations from Local Businesses
    - Donations from Private Corporations and Foundations

Potential funding strategies for specific projects are noted in Appendix A and B. Although it's not required for SRTS funding, many of the other State and Federal funding sources will require local matching funds.

STEPS TO CREATING AN ONGOING SRTS PROGRAM

Building upon the efforts required to complete this study, it is recommended that the City of Billings, in cooperation with Billings Public Schools, develop an ongoing SRTS program. The following steps are recommended by the National Center for Safe Routes to School and additional information is available at http://www.saferoutesinfo.org/guide/steps/index.cfm.

1. Bring together the right people

An important first step in creating a lasting SRTS program in Billings will be to bring people together to create a SRTS task force for the Billings community. It is recommended that this be a school district-wide group that can help ensure that all 5 E's are implemented across the community in the form of programs or policies. Billings should look for existing groups where the SRTS program would be a natural fit, such as existing PTA's, safety groups or wellness committees.

Communities with flourishing SRTS programs attribute their success in part to having a SRTS champion. This is an individual who has the enthusiasm and time to provide the necessary leadership to the SRTS committee or task force. Other potential task force members include school administrators, parents and students, teachers, the school district facilities director or transportation director, crossing guards, bicycle and pedestrian advocates, local planners and engineers, public health professionals, and law enforcement representatives. This committee may also include representatives from the Healthy Places committee, Bike and Pedestrian Advisory Committee, Traffic Control Board, Neighborhood Task Forces, the Chamber of Commerce Trails Committee, and the Yellowstone Valley PTA. A desirable cross-section for this group would be very similar to the group serving as the steering committee for this study.

This group should also coordinate with the existing Statewide Safe Routes to School Network and the Montana Safe Routes to School Coordinator to ensure that efforts are not being duplicated by state-level policies and activities.

2. Hold a kick-off meeting

A kick-off meeting should be held with potential SRTS task force members and other community representatives. The two main goals of this meeting should be to create a vision and determine next steps. A presentation on the SRTS program should be provided, including an overview of strategies related the 5 E's. The group can then discuss the appropriate next steps and form committees for individual tasks.

3. Gather information and identify issues

This task consists of identifying current walking and biking conditions for students, reviewing existing policies that relate to walking and biking to school, and determining how many students currently walk or bike to school. The majority of the work required for this step has been completed through the development of this SRTS study and by way of the Survey about Walking and Biking to School completed by the Yellowstone City-County Health Department in 2007.

4. Identify solutions

Solutions to improving the safety of students walking and biking to school should be identified. Many of the engineering solutions have been identified in this document, and several ideas for the other 4 E's have also been presented. The SRTS task force will be responsible for taking the recommendations from this document and continuously updating priorities as infrastructure projects are constructed and as non-infrastructure programs are developed and implemented.

5. Make a plan

This document provides a SRTS plan for all of the elementary schools in Billings. The SRTS task force should focus on implementing immediate, low cost solutions early to build momentum and support for the program. They should determine how to implement fun activities related to encouragement and education to build community support for the program.

6. Fund the plan

Several of the engineering recommendations identified in this study will cost very little money. Many of the potential activities will also be inexpensive. For example, most Walk to School Day coordinators say they spend less than $100 on their events. On the other hand, many of the infrastructure improvements will require a significant amount of funding. Common funding sources for these types of improvements have been identified in this report, and potential sources for specific projects are outlined in the priority project summary tables in Appendix A and B.

7. Act on the plan

This study provides a list of strategies for determining priority projects on a city-wide basis. While waiting for these projects to be identified and funding to be secured, Billings can start other SRTS activities right away by holding kick-off events when school starts in the fall or by participating in International Walk to School Day in October.

8. Evaluate, make improvements and keep moving

Careful monitoring after the program begins will help Billings to identify which strategies are increasing the number of students safely walking and biking to school. The Evaluation section of this report provides some specific recommendations related to measuring program success. The task force should also consider how to keep the momentum of the program going by identifying additional SRTS champions, effectively communicating the successes of program through local media and school newsletters, publicizing activities, and encouraging policy changes that support walking and biking.

These steps provide a framework for establishing an ongoing SRTS program based on what has worked in other communities. Billings may choose to take a slightly different approach, but some form of an ongoing program must be established for long-term success. Completion of this document is an important first step toward improving conditions for walking and biking to school in Billings.

SANDERSON STEWART

APPENDIX A

SUMMARY OF PHASE 1 PRIORITY PROJECTS

Appendix A. Summary of Phase 1 Priority Projects

School	Priority Project Number*	Project Description	Timeframe for Implementation	Estimated Cost	Funding Options**
Arrowhead Elementary School	ARR PP-1	Install a signed/marked crosswalk with curb extensions and accessibility ramps on 38th St W between Rimrock Rd and Poly Dr.	Short-term	$ 32,000.00	SRTS, CTEP, School District Funds
	ARR PP-2	Install safety railing along the pedestrian refuge island for the new Shiloh Rd Crossing north of Poly Dr.	Short-term	$ 20,000.00	SRTS
	ARR PP-3	Construct a multi-use trail from Shiloh Rd through Mission Ridge property to Arrowhead School.	Long-term	$ 70,000.00	SRTS, CTEP, Private (Mission Ridge).
	ARR PP-4	Install sidewalks along both sides of Poly Dr from 38th St W to Zimmerman Trail.	Long-term	$137,500 of a $1 Million Street Project	SRTS, CTEP, Property Owner Assessments, CIP project for FY 2013
Beartooth Elementary School	BEA PP-1	Construct separate access loop and/or parking along east side of school.	Long-term	$ 150,000.00	School District Funds
	BEA PP-2	Install a crosswalk on Barret Rd at Linden Dr and install a new sidewalk or multi-use trail along the south side of Barrett and between Barrett Rd and school campus.	Long-term	$ 90,000.00	SRTS, CTE, Property Owner Assessments
	BEA PP-3	Install sidewalk along the east side of Bitterroot Dr from Cherry Creek Estates to Wicks Lane with crosswalks at Wicks Ln and Emma Jean Estates.	Long-term	$ 68,000.00	SRTS, CTEP, Property Owner Assessments
	BEA IP-1	Restripe crosswalks at Elaine/Bitterroot and Elaine/Columbine.	Immediate	Low cost	City Maintenance Forces
	BEA IP-2	Designate alley one-way northbound traffic only.	Immediate	Low cost	City Maintenance Forces
Bench Elementary School	BEN PP-1	Additional crossing guard on Lake Elmo at Uinta Park Drive or Wicks Lane after completion of Lake Elmo reconstruction.	Short-term	$8640/year	SRTS, School District Funds.
	BEN PP-2	Install east-west sidewalk or trail connection to north end of school property along Lola Lane.	Long-term	$ 38,000.00	SRTS, CTEP, Property Owner Assessments, Annual CIP funds for School Route Sidewalks. Priority #183 in School Route Priority Study. Estimate does not incl. R/W or easement costs.
	BEN PP-3	Install sidewalks along Rex Lane.	Long-term	$ 22,000.00	SRTS, CTEP, Property Owner Assessments, Annual CIP funds for School Route Sidewalks. Priority #32 (highest for Bench) in School Route Priority Study.
Bitterroot Elementary School	BIT PP-1	Construct pedestrian path connection and bridge across Holling Drain from residential area to the east.	Short-term	$ 48,500.00	SRTS, CTEP
	BIT PP-2	Construct additional parking area to east of existing building and parking lot.	Long-term	$ 150,000.00	School District Funds
	BIT PP-3	Install sidewalk or pedestrian path along Barrett Road.	Long-term	$ 295,000.00	SRTS, CTEP, Property Owner Assessments
	BIT IP-1	Install fluorescent yellow school crossing signs and ladder-style crosswalk at the multi-use crossing on Barrett Road.	Immediate	Low cost	City Maintenance Forces
Boulder Elementary School	BOU PP-1	Install sidewalks, curb and gutter along Boulder Avenue.	Short-term	$75,000 of a $475,000 Street Project	Consider an SID with supplemental funds from SRTS or CTEP and reduce cost by allowing a narrow street section with parking on one side.
	BOU PP-2	Consider installing a flasher on the existing reduced speed limit signs.	Short-term	$ 8,000.00	SRTS
	BOU PP-3	Install sidewalks on Poly west of 32nd.	Long-term	$90,000 of a $567,000 Street Project	Consider an SID to fund a complete street reconstruction or install sidewalks without curb and gutter as an interim improvement.
	BOU PP-4	Fix drainage problems at intersections of Poly/32nd and Boulder/32nd.	Long-term	$ 35,000.00	Incorporate into street projects noted above or fix using annual storm drain funds.

School	Priority Project Number*	Project Description	Timeframe for Implementation	Estimated Cost	Funding Options**
Eagle Cliffs Elementary School	EAG PP-1	Construct a trail connection from Constitution/Kootenai to Marias Drive.	Long-term	$ 68,000.00	SRTS, CTEP
	EAG IP-1	Remove "8 AM – 5 PM" plaques on the school speed zones signs and replace with "When Children are Present" plaques.	Immediate	Low cost	City Maintenance Forces
	EAG IP-2	Install "Do Not Block Intersection" signs at Kootenai and Marias.	Immediate	Low cost	City Maintenance Forces
Meadowlark Elementary School	MEA PP-1	Install enhanced school crossing with curb extensions or pedestrian refuge island on 32nd St W near the intersection of St. Johns.	Short-term	$ 40,000.00	SRTS, CTEP
	MEA PP-2	Fix drainage problems along 29th, in particular east side of intersection of 29th/Cook.	Short-term	$ 45,000.00	Annual Storm Drain Funds
	MEA IP-1	Refresh yellow curb paint along 29th St W and Howard.	Immediate	Low cost	City Maintenance Forces
Newman Elementary School	NEW PP-1	Improve Newman Lane, install sidewalks and crossing at Phillip St with new ADA ramps, signage and striping.	Long-term	$ 380,000.00	SID, CDBG, TIFD, Property Owner Assessments
	NEW PP-2	Expand existing parking lot to the east and improve alley.	Long-term	$ 166,800.00	School District Funds
	NEW PP-3	Install sidewalks where missing along Calhoun Lane.	Short-term	$65,000 of a $380,000 Street Project	SRTS, CTEP, Property Owner Assessments
	NEW PP-4	Install sidewalks where missing along east-west side streets.	Short-term	$ 58,000.00	SRTS, CTEP, Property Owner Assessments
	NEW IP-1	Improve maintenance of Newman Lane and the alley south of the school.	Immediate	Low cost	City Maintenance Forces
	NEW IP-2	Adjust the timing on the speed limit flashers on S Billings Blvd.	Immediate	Low cost	City Maintenance Forces
Poly Drive Elementary School	POL PP-1	Eliminate the loop roadway exit, reconfigure parking, and install curb extensions at Poly/Arvin crossing.	Short-term	$ 48,000.00	SRTS, School District Funds
	POL PP-2	Install sidewalks on Rimrock Road.	Long-term	$400,000 of a $5.2 Million Street Project	SRTS, CTEP, Property Owner Assessments. Street project identified as a CIP project for FY 2010-2014.
	POL PP-3	Stripe bike lanes on Poly Drive.	Short-term	$ 62,200.00	Included in City's active CTEP project for Poly from 13th to 32nd to be completed summer 2010.
	POL PP-4	Install a signed/marked crosswalk with curb extensions on east leg of intersection of Rimrock Road and Silverwood Street.	Short-term	$ 40,000.00	SRTS, CTEP, School District Funds
	POL IP-1	Remove "No Parking - Bus Zone" signs on Poly Dr.	Immediate	Low cost	City Maintenance Forces
Ponderosa Elementary School	PON PP-1	Improve the landing/pedestrian storage on the northeast corner of King Ave E and Hallowell Ln.	Short-term	$ 5,000.00	SRTS, Annual ADA Replacement
	PON PP-2	Reconfigure intersection of Hallowell, Arlington, and school access to reduce pedestrian conflicts and improve traffic operations.	Short-term	$ 25,000.00	SRTS, School District Funds
	PON PP-3	Install trail connection and ditch crossing between Kings Green Subdivision and the school.	Short-term	$ 140,000.00	CDBG, TIFD. CIP project for FY 2012.
	PON PP-4	Construct a pedestrian path along King Ave E.	Long-term	$ 530,000.00	CTEP, SRTS, CDBG, TIFD
	PON IP-1	Trim trees/shrubs adjacent to pedestrian crossing at bus access.	Immediate	Low cost	School District Mainteneance Forces
	PON IP-2	Install signing/striping at pedestrian crossing at bus access.	Immediate	Low cost	School District Mainteneance Forces

School	Priority Project Number*	Project Description	Timeframe for Implementation	Estimated Cost	Funding Options**
Washington Elementary School	WAS PP-1	Relocate bus loading to south side of school with one-way road from St. Johns Ave cul-de-sac on southeast side of school through playground to 11th St W.	Short-term	$ 10,000.00	School District Funds
	WAS PP-2	Construct a new staff parking lot on the east side of the school, between the school and the Young Families building to the east.	Long-term	$ 130,000.00	School District Funds
	WAS PP-3	Evaluate the need for traffic control improvements at Cook Ave/11th St W and consider an additional crossing guard.	Short-term	$ 5,000.00	SRTS, School District Funds

* The first three letters of the project numbers consist of the first three letters of the school name, IP = Immediate Project (identifying low cost, immediate solutions), and PP = Priority Project (identifying top-ranked projects for which funding has been or will need to be secured).

** CTEP = Community Transportation Enhancement Program, SRTS = Safe Routes to School, CDBG = Community Development Block Grant, TIFD = Tax Increment Finance District, SID = Subdivision Improvements District, and CIP = Capital Improvement Program. See pages 78-79 for more information on these potential funding sources.

SANDERSON STEWART

APPENDIX B

SUMMARY OF PHASE 2 PRIORITY PROJECTS

Appendix B. Summary of Phase 2 Priority Projects

School	Priority Project Number*	Project Description	Timeframe for Implementation	Estimated Cost	Funding Options**
Alkali Creek Elementary School	ALK PP-1	Install separate drop-off loop for parent loading.	Long-term	$ 100,000.00	School District Funds
	ALK PP-2	Install sidewalk along south side of Alkali Creek Road northwest of school.	Long-term	$ 140,000.00	SRTS, CTEP, Property Owner Assessments
	ALK PP-3	Install sidewalk along Pinon Drive just west of Alkali Creek Road.	Short-term	$ 22,000.00	SRTS, CTEP, Property Owner Assessments
	ALK PP-4	Install sidewalk along south side of Indian Trail.	Short-term	$ 38,000.00	SRTS, CTEP, Property Owner Assessments
	ALK IP-1	Improve snow removal and corresponding location of snow storage along Indian Trail and Alkali Creek Road.	Immediate	Low cost	City Maintenance Forces
Big Sky Elementary School	BIG PP-1	Enhance crossing at 32nd Street West and Lampman Drive or move crossing to Granger Avenue and signalize. Complete signal warrant study at 32nd Street West and Granger Avenue.	Short-term	$ 52,000.00	SRTS, CTEP, School District Funds
	BIG PP-2	Install crosswalk markings on the south leg of the intersection of Monad Road and 36th Street West. Enhance existing crossing on west leg.	Short-term	$ 54,000.00	SRTS, CTEP, School District Funds
	BIG PP-3	Install signing and striping for a new crosswalk on the north leg of 30th Street West and Lampman Drive. If 32nd Street crossing is relocated to Granger Avenue as noted above, this crossing should be moved to the intersection of 30th Street West and Stillwater Drive.	Short-term	$ 10,000.00	SRTS, CTEP, School District Funds
Broadwater Elementary School	BRO PP-1	Install curb extensions at the intersection of 4th Street West and Wyoming Avenue.	Short-term	$ 100,000.00	SRTS, CTEP, School District Funds
	BRO PP-2	Increase minimum green time for pedestrians and install ladder style crosswalks at the intersection of 5th Street West and Broadwater Avenue.	Short-term	$ 3,000.00	SRTS, School District Funds, City Maintenance Forces
	BRO PP-3	Improve loading zone through alley by defining entry to separate from local business, improve sight distance around corner, reducing the exit to a single lane and providing physical separation between the walking area and the parking area.	Long-term	$ 150,000.00	School District Funds
Burlington Elementary School	BUR PP-1	Install curb extensions at the intersection of Lewis Avenue and 22nd Street West.	Short-term	$ 54,000.00	SRTS, CTEP, School District Funds
	BUR PP-2	Install signing, striping and curb extensions for midblock crossing on 22nd Street West directly in front of main school entrance and consider requiring students to use this entrance.	Short-term	$ 22,000.00	SRTS, CTEP, School District Funds
	BUR IP-1	Use cones or temporary barricade to prevent parents from pulling through staff parking lot at north end of school and encourage exit to Burlington Avenue.	Immediate	Low cost	School District Funds
	BUR IP-2	Move bus loading zone to Lewis Avenue.	Immediate	Low cost	City Maintenance Forces
Central Heights Elementary School	CEN PP-1	Widen sidewalks on Lexington Drive, Alamo Drive, and Pueblo Drive, and install curb extensions at mid-block crossings on Alamo Drive and Lexington Drive.	Short-term	$ 120,000.00	SRTS, CTEP, School District Funds
	CEN PP-2	Install curb extensions at intersection of Lexington Drive and Eldorado Drive and marked crosswalk on east leg. Install curb extensions or another form of traffic calming at Santa Fe Drive and Eldorado Drive.	Long-term	$ 120,000.00	SRTS, CTEP, School District Funds
	CEN PP-3	Install curb extensions for crosswalk at Monad Road/Monterey Drive.	Short-term	$ 42,000.00	SRTS, CTEP, School District Funds
	CEN IP-1	Eliminate bus zone on Pueblo Drive and require all primary and intermediate bus pickup to occur on Alamo Drive. This will separate bus and parent loading during dismissal of intermediate grades.	Immediate	Low cost	City Maintenance Forces

School	Priority Project Number*	Project Description	Timeframe for Implementation	Estimated Cost	Funding Options**
Highland Elementary School	HIG PP-1	Implement remote drop-off locations.	Short-term	$ 5,000.00	SRTS, School District Funds
	HIG PP-2	Install sidewalks and curb extensions at the intersection of O'Malley Drive and Virginia Lane.	Short-term	$ 52,000.00	SRTS, CTEP, Property Owner Assessments
	HIG PP-3	Install crosswalks with enhancements to shorten crossing distance at Rimrock Road/Missouri Street and Rimrock Road/Virginia Lane.	Long-term	$ 85,000.00	SRTS, CTEP, School District Funds
	HIG PP-4	Install sidewalk and/or a bike lane on Virginia Lane from Rimrock Road to Parkhill Drive.	Long-term	$ 68,000.00	SRTS, CTEP, Property Owner Assessments
	HIG IP-1	Trim trees at Woodland Drive/Virginia Lane.	Immediate	Low cost	City Maintenance Forces
	HIG IP-2	Trim shrubs at O'Malley Drive/Virginia Lane.	Immediate	Low cost	City Maintenance Forces
	HIG IP-3	Explore options to further discourage parents from using Beverly Hill Boulevard as a drop off area because there is no good place to turn around.	Immediate	Low cost	City Maintenance Forces
McKinley Elementary School	MCK PP-1	Install pedestrian crossings and enhancements at the intersections of Parkhill Drive/North 32nd Street and 11th Avenue North/North 32nd Street.	Short-term	$ 100,000.00	SRTS, CTEP, School District Funds
	MCK PP-2	Install curb extensions at 9th Avenue North/North 31st Street.	Short-term	$ 52,000.00	SRTS, CTEP, School District Funds
	MCK PP-3	Install curb extensions at 8th Avenue North/North 31st Street.	Long-term	$ 52,000.00	SRTS, CTEP, School District Funds
	MCK PP-4	Install curb extensions at 8th Avenue North/North 32nd Street.	Long-term	$ 52,000.00	SRTS, CTEP, School District Funds
	MCK IP-1	Install flexible delineators on existing curb extensions at 9th Avenue North/North 32nd Street.	Immediate	Low cost	City Maintenance Forces
Miles Avenue Elementary School	MIL PP-1	Install curb extensions and storm drain improvements at 16th Street West and Miles Avenue.	Short-term	$ 55,000.00	SRTS, CTEP, School District Funds
	MIL PP-2	Install sidewalk connections from north and south ends of school to alley.	Short-term	$ 25,000.00	SRTS, School District Funds
	MIL PP-3	Install pull-out area along east side of alley to enhance loading zone and move loading away from pedestrian traffic.	Long-term	$ 15,000.00	School District Funds
	MIL IP-1	Sign alley "one-way" northbound, but allow exception for garbage trucks.	Immediate	Low cost	City Maintenance Forces
Orchard Elementary School	ORC PP-1	Install sidewalks along Jackson Street (City project this summer).	Short-term		
	ORC PP-2	Install curb extensions and crosswalk enhancements on Jackson Street crossings.	Long-term	$ 80,000.00	SRTS, CTEP, School District Funds
	ORC PP-3	Implement a walking school bus program to ease safety concerns and encourage walking.	Short-term	$ 2,000.00	SRTS, School District Funds
	ORC IP-1	Install "No Parking" signs on north side of Frances Avenue.	Immediate	Low cost	City Maintenance Forces
Rose Park Elementary School	ROS PP-1	Install curb extensions and storm drain improvements at 19th Street West/Avenue E; eliminate crosswalk on south leg of this intersection and south leg of Avenue F intersection.	Short-term	$ 56,000.00	SRTS, CTEP, School District Funds
	ROS PP-2	Install traffic calming improvements on 19th Street West to slow traffic speeds.	Long-term	$ 80,000.00	SRTS, School District Funds
	ROS PP-3	Complete curb on Parkhill Drive to provide continuous walking route, including traffic calming improvements at corner; would also prevent most U-turns.	Short-term	$ 58,000.00	SRTS, School District Funds
	ROS IP-1	Relocate existing school crossing sign on 17th Street West from south side of Avenue F to north side of Avenue F.	Immediate	Low cost	City Maintenance Forces

School	Priority Project Number*	Project Description	Timeframe for Implementation	Estimated Cost	Funding Options**
Sandstone Elementary School	SAN PP-1	Install sidewalks on neighborhood streets southeast of Babcock Boulevard.	Long-term	$ 270,000.00	SRTS, CTEP, Property Owner Assessments
	SAN PP-2	Install sidewalks on neighborhood streets north of Wicks Lane.	Long-term	$ 430,000.00	SRTS, CTEP, Property Owner Assessments
	SAN PP-3	Consolidate crosswalks on Nutter Boulevard in front of school to the north location and restripe as a ladder style crosswalk.	Short-term	$ 6,000.00	SRTS, School District Funds
	SAN IP-1	Work with School District and City maintenance forces to coordinate snow removal on streets and sidewalks.	Immediate	Low cost	City Maintenance Forces
	SAN IP-2	Improved enforcement of City codes prohibiting parking on sidewalks and requiring homeowners to remove snow in winter.	Immediate	Low cost	City Maintenance Forces
	SAN IP-3	With new bike lanes on Nutter Boulevard, school should encourage biking. Consider enhancing or installing new bike racks.	Immediate	Low cost	School District Funds

* The first three letters of the project numbers consist of the first three letters of the school name, IP = Immediate Project (identifying low cost, immediate solutions), and PP = Priority Project (identifying top-ranked projects for which funding has been or will need to be secured).

** CTEP = Community Transportation Enhancement Program, SRTS = Safe Routes to School, CDBG = Community Development Block Grant, TIFD = Tax Increment Finance District, SID = Subdivision Improvements District, and CIP = Capital Improvement Program. See pages 78-79 for more information on these potential funding sources.

SANDERSON STEWART

APPENDIX C

SCHOOL MEETING ATTENDANCE

SAFE ROUTES TO SCHOOL STUDY
CITY OF BILLINGS W.O. 09-21
SIGN-IN SHEET

Date: **Wednesday, April 21, 2010** Time: **6:30 P.M.**

Location: **Lincoln Center Board Room**

Name: (Please Print)	*Organization:*	*E-mail Address or Phone Number:*
Nancy Ruby	Newman School	281-6215
Amy Seward	Bitterroot School	281-6985
Greg Senitte	Bitterroot School	281-6205
Lori Booke	Ponderosa	281-6218
MICHAEL SANDERSON	SANDERSON STEWART	6576-525
Hillary Harris	RiverStone Health	651-6462
Lon Wahrt	Eagle Cliffs	281-6210
Angie Stokes	Beartooth	534-2391
Darrell Schaaf	Sanderson Stewart	
DJ Clark	Sanderson Stewart	
Terry Smith	City of Billings	
Debi Meling	City of Billings	
Kathy Aragon	School Board/Parent	

SAFE ROUTES TO SCHOOL STUDY
CITY OF BILLINGS W.O. 09-21
SIGN-IN SHEET

Date: **Monday, April 26, 2010** Time: **6:30 P.M.**

Location: **Will James Cafeteria**

Name: (Please Print)	*Organization:*	*E-mail Address or Phone Number:*
Jenifer Beauto	Arrowhead PTA	jenbeauto@bresnan.net
Annette Patterson	Poly Drive PTA	jandapatterson@bresnan.net
Jay Lemelin	Boulder Elem. School	281-6206
Robin Bedford	Arrowhead	bedfordre billings.k12.mt.us
Mike Leo	Poly	mikeo@iqc.org
Pam Meier	Poly Dr.	meierpe billings.k12.mt.us
Kevin Croff	Meadowlark	croffkr@billings.k12.mt.us
Rebecca Brockel	Meadowlark	j.brockel@bresnan.net
DJ Clark	Sanderson Stewart	
Danielle Schaf	Sanderson Stewart	
Michael Sanderson	Sanderson Stewart	
Terry Smith	City of Billings	
Erin Claunch	City of Billings	
Colleen Nichols	Yellowstone Valley PTA	

SAFE ROUTES TO SCHOOL STUDY, PHASE 2
CITY OF BILLINGS W.O. 10-13
SIGN-IN SHEET

Date: **Tuesday, May ~~23~~ 24, 2011** Time: **6:00 P.M.**

Location: **Lincoln Center Board Room**

Name: (Please Print)	*School/Organization:*	*E-mail Address or Phone Number:*
Clay Herron	Central Heights Elem.	herronc@billingsschools.org
Shanna Henry	Miles Avenue	henrys@billingsschools.org
Kristina Stiles	Miles Avenue	stilesk@billingsschools.org
Kyra Stark	Big Sky Elem.	KStark@bresnan.net
Bob Barone	Central Hts	baroneb@billingsschools.org
Kelly Farnsworth	Central Heights	Alkyseller@msn.com
Dianne Elliott	Big Sky Elem	delliott@billingsclinic.org
DIANE MORLEDGE-HAMPTON	ROSE PARK	dineymom@yahoo.com
Sandie Mammenga	Big Sky Elem	smammenga@billingsschools.org
MICHAEL		
JOEY		
TERRY SMITH		

SAFE ROUTES TO SCHOOL STUDY, PHASE 2
CITY OF BILLINGS W.O. 10-13
SIGN-IN SHEET

Date: **Tuesday, May 31, 2011** Time: **6:00 P.M.**

Location: **Lincoln Center Board Room**

Name: (Please Print)	*School/Organization:*	*E-mail Address or Phone Number:*
Patricia Parsons	Orchard Elementary	591-4785 (c)
Chrislynn Padgett	Orchard Elementary	896-0030
Vonni M. Casey	Alkali Creek Elem.	254-8584
Rose Duchesneau	Orchard	281-6663
TOM HINTHORNE	BROADWATER ELM	698-9782
Carol Stade	Broadwater ELM	534-1024
Sheryl Alpers	Broadwater Elem	256-7095
Kristin Hammler	Alkali Creek	254-9875 kchammler@hotmail.com
Kyra Gaskill	Burlington	281-6651
Stacy Lemelin	Sandstone	281-6220
Justin King	Broadwater Elementary	281-6452
BERT REYES	MCKINLEY	281-6212
Nicole Chakos	Highland	651-5355 nchakos@bresnan.net
Joy Honea	McKinley	jcrissey@juno.com
Paige Dancer	Highland	paige@myhpu.com
Kathy Aragon	Highland	2455616