



GRAND FORKS/ EAST GRAND FORKS SCHOOL SAFETY STUDY SUMMARY



M.P.O.
M.P.O.
M.P.O.

Grand Forks - East Grand Forks
Metropolitan Planning Organization



Contents

Introduction.....	4
2004 Century Elementary School.....	5
Short-Term Improvements.....	5
Long-Term Improvements.....	6
Raised Crosswalk Design Detail.....	7
2006 Viking Elementary School.....	8
Short-Term Improvements.....	8
Medium-Term Improvements	9
Viking Elementary School Existing Conditions and Enhancements.....	11
2006 Ben Franklin Elementary School.....	12
Short-Term Improvements.....	12
Medium-Term Improvements	12
Ben Franklin Elementary School Existing Conditions with Enhancements.....	14
2006 Kelly Elementary School	15
Short-Term Improvements.....	15
Medium-Term Improvements	16
Kelly Elementary School Existing with Enhancements	17
2008 Phoenix Elementary School	18
Short-Term Improvements.....	18
Long-Term Improvements.....	19
Phoenix Elementary School Existing Conditions with Enhancements.....	20
2008 South Middle School.....	21
Short-Term Improvements.....	21
Long-Term Improvements.....	21
South Middle School Existing with Changes.....	23
South Middle School Geometric Changes	24
2008 Lake Agassiz Elementary School	25
Short-Term Improvements.....	25

Medium/Long-Term Improvements	25
Lake Agassiz Elementary School Existing with Changes	27
Lake Agassiz Elementary School Geometric Changes 1	28
Lake Agassiz Elementary School Geometric Changes 2	29
Lake Agassiz Elementary School Geometric Changes 3	30
Lake Agassiz Elementary ICON	31
2009 Lewis & Clark Elementary School.....	32
Short-Term Improvements	32
Medium/Long-Term Improvements	33
Lewis and Clark Elementary School Existing Conditions with Changes	34
Lewis and Clark Elementary School Geometric Changes	35
2009 West Elementary School.....	36
Short-Term Improvements	36
Medium/Long-Term Improvements	37
West Elementary School Existing Conditions with Changes.....	38
West Elementary School Geometric Changes	39
2009 New Heights Elementary School	40
Short-Term Improvements	40
Long-Term Improvements.....	41
New Heights Elementary Existing with Changes	42
New Heights Elementary Geometric Changes	43
2010 Winship Elementary School.....	44
Short-Term Improvements	44
Long-Term Improvements.....	44
Winship Elementary School Existing with Changes	46
Winship Elementary School Geometric Changes	47
2010 Wildier Elementary School.....	48
Short-Term Improvements	48
Long-Term Improvements.....	48
Wildier Elementary School Existing with Changes	50
Wildier Elementary School Geometric Changes	51

2010 St. Michael's Elementary School	52
Short-Term Improvements	52
Long-Term Improvements	52
St. Michael's Elementary School Existing with Changes	53
St. Michael's Elementary School Geometric Changes	54
2012 Schroeder Middle School	55
Short-Term Improvements	55
Long-Term Improvements	56
Schroeder Middle School Proposed	58
2012 Valley Middle School	59
Short-Term Improvements	59
Long-Term Improvements	60
Valley Middle School Proposed	61
2012 South Point Elementary School	62
Short-Term Improvements	62
Long-Term Improvements	63
South Point Elementary School Proposed	65

Introduction

The Grand Forks – East Grand Forks metropolitan area has seen an increase in safety concerns at its schools. In order to address these ongoing concerns, The Grand Forks – East Grand Forks Metropolitan Planning Organization provided funding for school safety studies. The Advanced Traffic Analysis Center (ATAC) was contacted to conduct pedestrian safety and traffic circulation evaluations and to recommend appropriate engineering improvements/mitigation measures.

The main objectives of the study were to evaluate pedestrian safety and traffic circulation at each school and provide short and long-term improvements. Areas of analysis include traffic control (pavement markings and signage), pedestrian activity, parking issues, and pick-up/drop-off areas. Site visits were conducted at each school to document the existing conditions and observe the pedestrian/vehicle activity. A number of meetings with school and other involved officials were conducted to gather valuable input regarding existing conditions and known issues.

2004 Century Elementary School

Short-Term Improvements

	ATAC	Feedback	Progress
Safety Education	The school administration and the Safe Kids program have been very active in promoting safety; however, more needs to be done in this area, especially for parents.	Safe Kids had conducted school-wide assemblies, provided classroom curriculum, and helped facilitate encouragement programs.	ON GOING
Increased Enforcement	To assist with speed compliance, yielding to pedestrians in crosswalks, and parking, a greater police presence would benefit the school area. Although it may be difficult to provide police personnel at the school, requests should be made to enforce safety measures.	The GFPD has periodically enforced 'No Parking' zones and pedestrian ordinances. They consistently set up the speed trailer and have patrol officers monitoring speeds on 17 th Avenue.	ON GOING
Pedestrian Crosswalks	Repainting the crosswalk and providing School Crosswalk Warning Signs would make the crosswalk more defined. Crossing guards should wear highly-visible retro reflective clothing and use a STOP paddle.	Crosswalks on school property and on streets surrounding the school are repainted each summer. Parent volunteers and school staff serve as crossing guards at three locations on a daily basis in the afternoon.	ON GOING
Pick-up and drop-off along east side of 34th street	Only allow parking on the east side of 34 th Street between the existing bus entrance and the passenger car entrance to the north parking lot. Prohibiting parking south of the bus entrance. Remove the two closest parking spaces to 34 th Street to also improve sight distance.	Parents are picking up students on the east side of 34 th Street and the north south side of 17 th Avenue. Parking has been prohibited on both sides.	COMPLETED

Long-Term Improvements

	ATAC	Feedback	Progress
Modify north parking lot access and bus loading area	<p>If the geometry was modified to restrict the pavement width and move the 90-degree parking away from the pick-up/drop-off area, more efficient and safer traffic circulation would occur. North parking lot access can be closed since the access creates problems. The current bus access would be changed to only allow passenger cars and would create more storage space for pick-up/drop-off.</p> <p>A bus loading zone would be setup in the south parking lot.</p>		COMPLETED
New north parking lot 90-degree parking	Incorporate 90-degree parking stalls provide 36 spaces and two entrance/exits.		COMPLETED
Construct additional exit lane for north access	The current design of the north exit at 17 th Avenue south provides one lane each for entering and exiting. Considerable queues occur when motorists leave the school. The addition of another lane exiting the parking lot would reduce delays.		COMPLETED
Raised crosswalk for north loading/unloading area	The construction of raised crosswalk for the school's main entrance could make safer crossing for pedestrians by reducing speeds and deterring parking over the crosswalk.	\$7,500 - \$15,000 Estimated 2014 Cost	NOT COMPLETED

Raised Crosswalk Design Detail

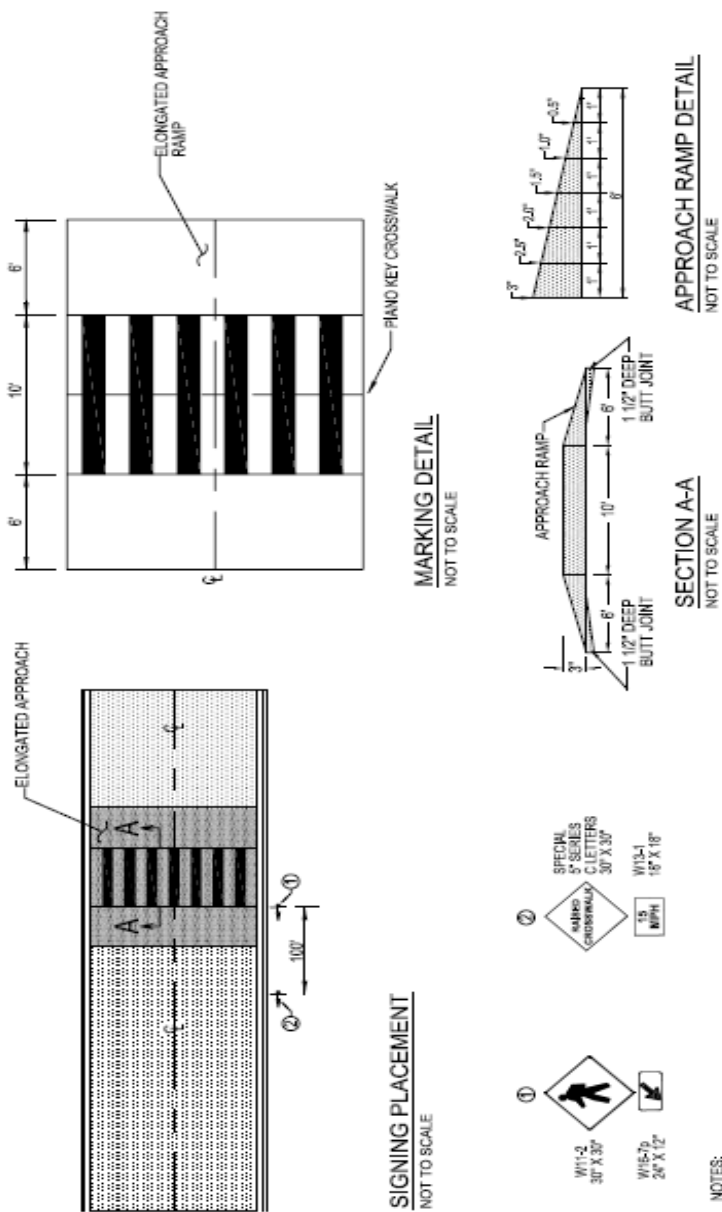


Figure 18: Design Detail of a Raised Crosswalk.

2006 Viking Elementary School

Short-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Switch School Advance Warning signs and School Speed Limit signs along 24th Ave. South	The posted speed limits for roadways entering the school area 25mph. Speed limits reduced to 20mph along Oak Street and 24 th Ave South when children are present. Overhead flashing beacons are used to reduce the speed to 15mph during school start and end times.	These need to be updated at many schools. School signage is updated to the current 2009 MUTCD. All the schools are also under review for the signage.	ON GOING
Modify School Crosswalk signs at Oak Street and 23rd Ave South	Traffic cones were placed along the west side of Oak Street near the crosswalk at 23 rd Ave South and South of 22 nd Ave South along the bus loading zone. The cones helped to keep these areas free from vehicles.	These need to be updated at many schools.	UNDER REVIEW
Install School Advance Warning sign and School Speed Limit signs along Oak Street prior to entering the school area	Intersections near Viking are controlled primarily by stop signs. Two-way stop control exists at all the intersections bordering the school. The crosswalk markings around Viking Elementary School showed significant signs of wear.		COMPLETED
Prohibit vehicle parking near the intersection of Oak Street and 22nd Ave. South	The intersection of 22 nd Ave S and Oak St. becomes congested during the dismissal time. Parents park and wait very close to the intersection, creating unsafe conditions for pedestrians and vehicles. Install no parking signs along the east & west	City Ordinance covers this; enforcement has taken care of this issue	COMPLETED
Restrict parking and loading along the east side of Oak St.	Students primarily departed from the east doors of Viking Elementary School. Most of the		COMPLETED

during school hours	pedestrian and vehicle activity was concentrated along Oak Street. A lot of parents parked in the church parking lot east of Viking and walked over to the school to pick-up their children. In addition, parents parked along both sides of Oak Street even within the bus loading zone. Most of the students accessing vehicles parked on the east side of Oak Street did not use a crosswalk.		
Modify North parking lot to one-way circulation and restrict access to only school staff	The traffic safety report noted that parents blocked staff from exiting their parking stalls within the north parking lot. To eliminate this occurrence, the parking lot could be restricted to only school staff.		COMPLETED

Medium-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Expand the North Parking lot to the west	Have vehicles enter the lot from the east driveway and exit from the west driveway. In addition, a handicap bus parking stall could be added to the North parking lot. The parking lot could also be expanded to the west, providing approximately 18 more parking stalls.		NOT COMPLETED
Move school bus/van parking to 22nd Ave South (west of parking lot) and Oak Street (south of 23rd Ave South)	Parking for the large school buses can be moved to the south side of 22 nd Ave South and west of the parking lot. In addition, school bus/van parking can exist along the west side of Oak Street South of 23 rd Ave. South.		NOT COMPLETED
Construct a loading turnout lane along the west side of Oak	Traffic flow along Oak Street is impeded especially during the dismissal time. This can be attributed to allowing parking on		NOT COMPLETED

Street	<p>both sides of the two-way streets. It is recommended to prohibit parking/loading along the east side of the street during school hours. This option would eliminate midblock crossings by students accessing vehicles. Since it was recommended to move the school bus/van parking, the west side of Oak Street between 22nd Ave South area would provide safer loading zone.</p>		
---------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--

Removed or Restricted
Additional or Allowed

Viking Elementary School

22nd Ave. S.

23rd Ave. S.

24th Ave. S.

10th St.

ATAC

School Safety Study for Ben Franklin, Kelly, and Viking Elementary Schools

Viking : Existing Conditions with Enhancements
 Figure 22
 Page 28

2006 Ben Franklin Elementary School

Short-Term Improvements

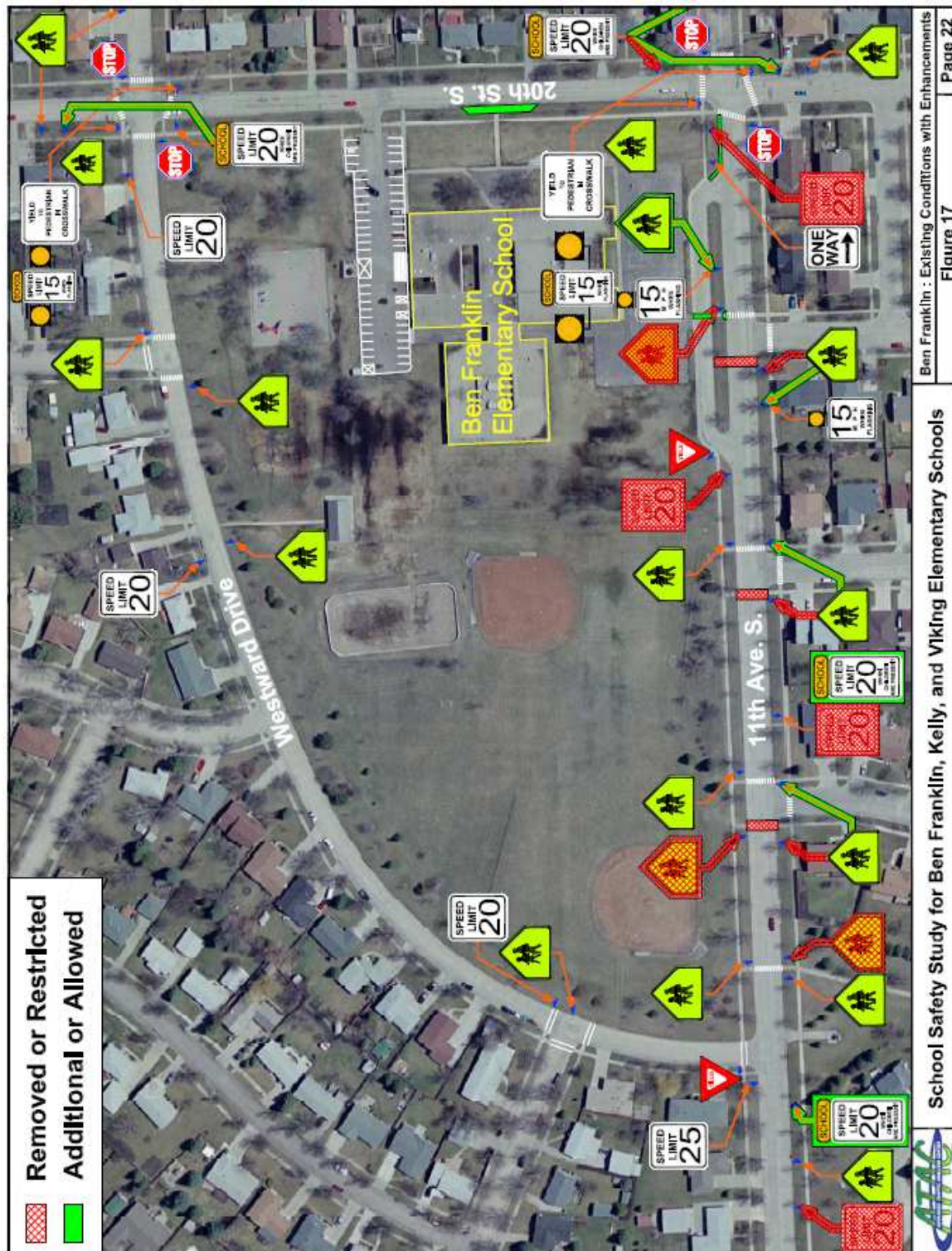
	ATAC	FEEDBACK	PROGRESS
Move the 20th Street South School Speed Limit signs further away from the school	School zone speed limit signs are intended to warn drivers about upcoming school area. Therefore, these signs should be installed in advance of the school property, as prescribed in the MUTCD	All the schools are also under review for the signage.	COMPLETED
Reduce crosswalks and signs along 11th Ave South	11 th Ave South has seven pedestrian crosswalks between 20 th Street and Westward Dr., providing motorists with an abundance of school crossing signs.		COMPLETED
Remove the west sidewalk and crosswalk within turnout lane	In addition to removing the west crosswalk within the turnout lane, the west sidewalk should also be removed. This would assist in reducing the number of vehicle/pedestrian conflicts that could occur in this area.	The crosswalk was removed. Cannot remove carriage walk, this provides ADA access at the adjoining intersection	COMPLETED
Paint the curb along the 11th Ave South near the turnout entrance	Painting the curb along the north side of 11 th Ave South from 21 st to the turnout entrance could also help discourage motorists from parking within this area		ON GOING

Medium-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Construct a speed table and curb ramps for turnout	To assist pedestrian safety within the turnout area, a raised pedestrian crosswalk could be constructed at the west driveway of the playground. Curb ramps should be installed at the east sidewalk within the boulevard.		COMPLETED

<p>Construct bus loading turnout lane along 20th Street</p>	<p>Travel lanes along 20th Street can be restricted when vehicles are parked along the east side and buses are parking along the west side of the street. A bus turnout lane at the current bus loading zone would provide an additional level of safety for school children.</p>		<p>NOT COMPLETED</p>
-------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	----------------------

Ben Franklin Elementary School Existing Conditions with Enhancements



Ben Franklin : Existing Conditions with Enhancements
Figure 17

School Safety Study for Ben Franklin, Kelly, and Viking Elementary Schools



2006 Kelly Elementary School

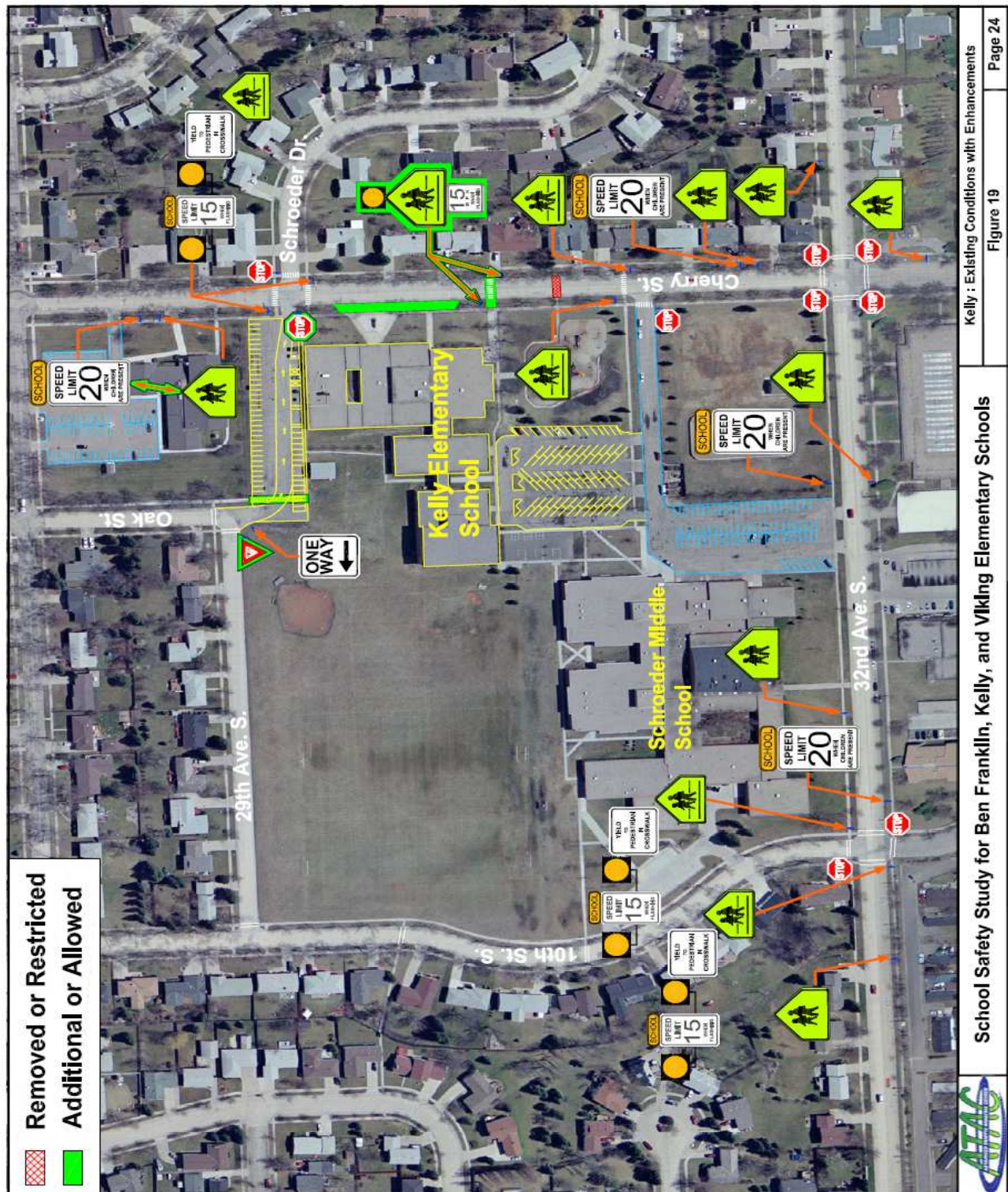
Short-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Switch School Advance Warning sign and School Speed Limit sign north of the school along Cherry Street	The School Speed Limit sign and School Advance Warning sign along Cherry Street should be switched to follow the MUTCD sign sequence.	These need to be updated at many schools based on the Ulteig recommendations. School signage is updated to the current 2009 MUTCD. All the schools are also under review for the signage.	ON GOING
Install a YIELD sign for 29th Ave South at the intersection with Oak Street	The north parking lot is used by numerous parents for picking up and dropping off students, traffic flow entering and exiting this parking lot is important. Since Oak Street aligns with the parking lot entrance, this movement should be considered the major movement. Therefore, it is recommended to install a YIELD sign along 29 th Ave South at the intersection of Oak Street.		COMPLETED
Install a STOP sign for vehicles exiting the north parking lot	Some confusion was evident to who had the right-of-way. Therefore, it is recommended to install a STOP sign at the exit of the parking lot, which is the minor street approach.		COMPLETED
Add a mid-block crosswalk and flashing beacons between Schroeder Drive and the access road	To assist in pedestrian safety crossing Cherry Street it is recommended to create a mid-block crosswalk south of the bus loading zone. The crossing can also incorporate a speed reduction and beacon.	Want to discourage mid-block crossing.	UNDER REVIEW

	ATAC	FEEDBACK	PROGRESS
Modify the crosswalk in the north parking lot	A crosswalk is painted within the north parking lot. Not only does the crosswalk paint match the parking stall paint, it is also located within a parking stall. At a minimum, the pedestrian crossing should be painted white and the parking stall should be removed.		
Construct a bus turnout lane along the west side of Cherry Street	The turnout lane along with proper signs should reduce the number of illegal parking occurrences and improve pedestrian/vehicle safety.		NOT COMPLETED
Remove the playground crosswalk located north of the access road	The crossing is in close proximity to both the proposed mid-block crossing and access road crossing and it has not been maintained very well.		COMPLETED

Medium-Term Improvements

Kelly Elementary School Existing with Enhancements



Kelly : Existing Conditions with Enhancements

Figure 19

Page 24

School Safety Study for Ben Franklin, Kelly, and Viking Elementary Schools



2008 Phoenix Elementary School

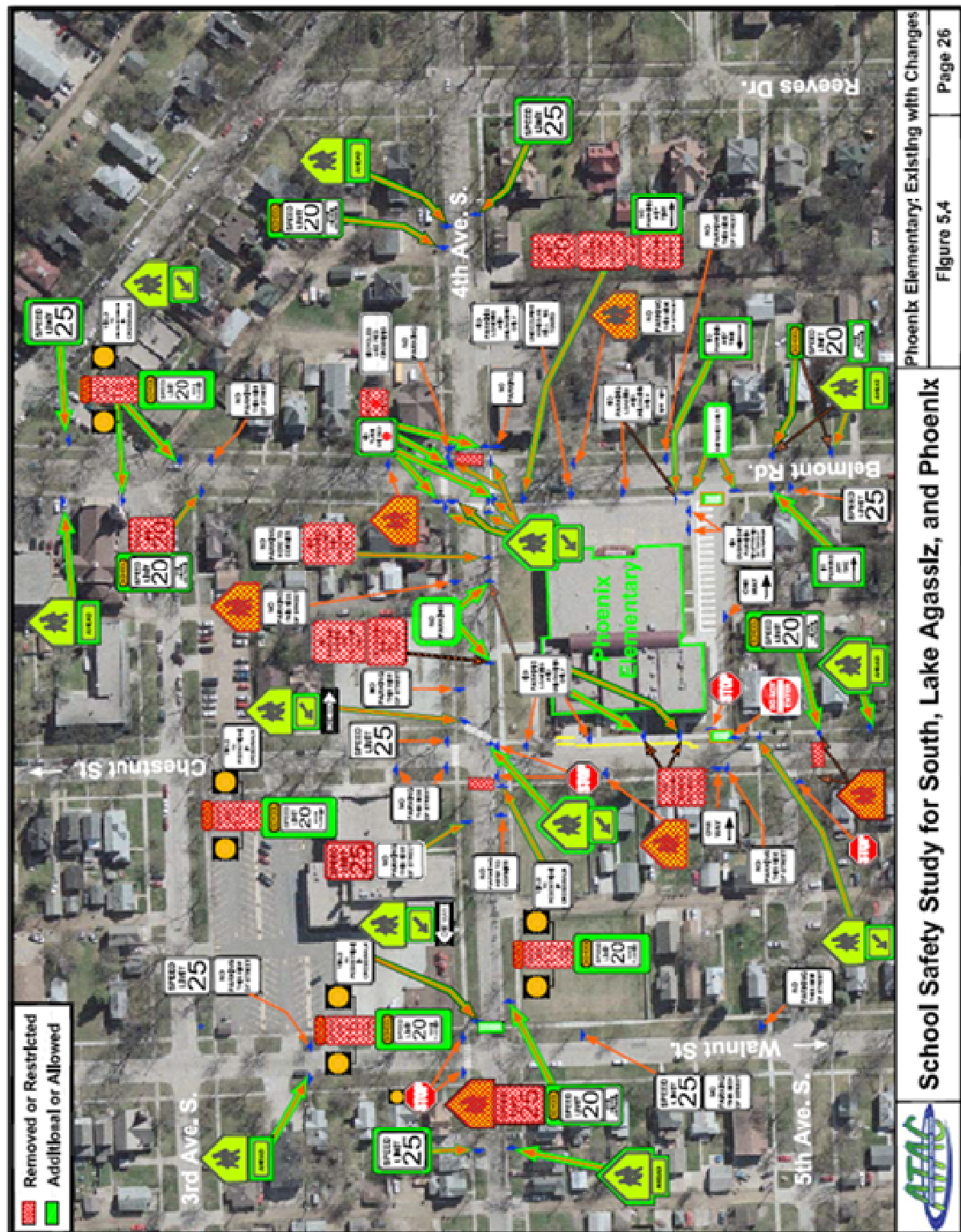
Short-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Update signs and pavement markings	Several signs in proximity to the school need to be removed or replace. The current loading and unloading zone on the south side of 4 th Ave South should be removed and all daycare/handicapped busses should pick up students on Chestnut St. to the west of the school. In addition, an effort should be made to ensure that the sign posts are straight and the heights are uniform.	School signage is updated to the current 2009 MUTCD. All the schools are also under review for the signage.	ON GOING
Change the orientation of the parking stalls in the south parking lot	A site obstruction was observed at the exit of the south parking lot when turning on to Chestnut St. There is a fence and shrub on the property to the south of the driveway which extends to the sidewalk. This obstructs the view of oncoming vehicles and pedestrians, and vehicles exiting the parking lot need to pull onto the crosswalk to see oncoming traffic. A short-term improvement would be to remove or lower the fence/bush to improve the sight distance at this intersection.		COMPLETED

Long-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Add a turn-out lane on Belmont Road next to the school	This would provide a safer parking option for parents during dismissal period, & help to reduce blockage of passing vehicles	\$11,250 - \$16,750 Estimated 2014 Cost	NOT COMPLETED
Add additional lane to the driveway exiting the south parking lot onto Chestnut Street	Adjust the angle of the parking in the south parking lot from 90 to 60. This would encourage a none-way flow in the parking lot, and improve the sight of drivers when backing out. Add an additional lane exiting the south parking lot to the west and create a double right turn at the intersection. Due to the one-way operation of Chestnut St. it may be difficult for vehicles to exit the south parking lot. A two-way operation could improve traffic flow exiting the school.	The school has made other changes that were not in the recommendations that have improved traffic flow at the school. \$34,250 - \$40,000 Estimated 2014 Cost	NOT COMPLETED

Phoenix Elementary School Existing Conditions with Enhancements



2008 South Middle School

Short-Term Improvements

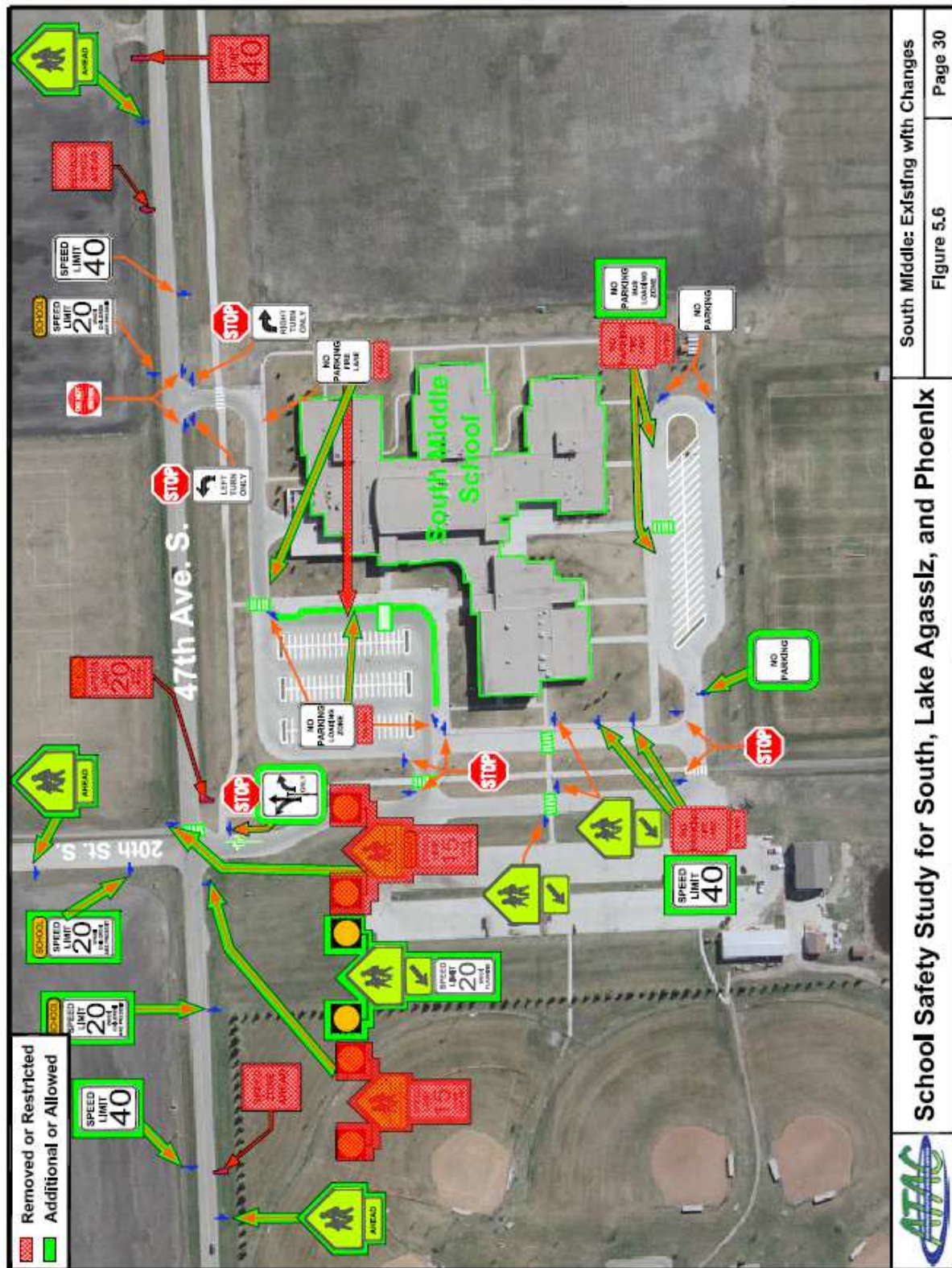
	ATAC	FEEDBACK	PROGRESS
Update signs and pavement markings	<p>Uniformity of the signage and pavement markings used. Also speed limits and school warning/crossing signs need to be added/changed along 47th Ave S. to meet compliance with the MUTCD.</p> <p>Three different types of crosswalk delineation are used. It is recommended that these be changed to reflect uniform markings throughout school grounds.</p>	<p>School signage is updated to the current 2009 MUTCD.</p> <p>All the schools are also under review for the signage.</p>	ON GOING
Dismiss grade 6 to the north (main entrance) of the school, and dismiss grades 7 and 8 to the south side of the school	<p>This should force more parents to use the south parking lot which would improve the operation of the north parking lot</p>	<p>This is encouraged but not enforced.</p>	NEEDS IMPROVEMENT

Long-Term Improvements

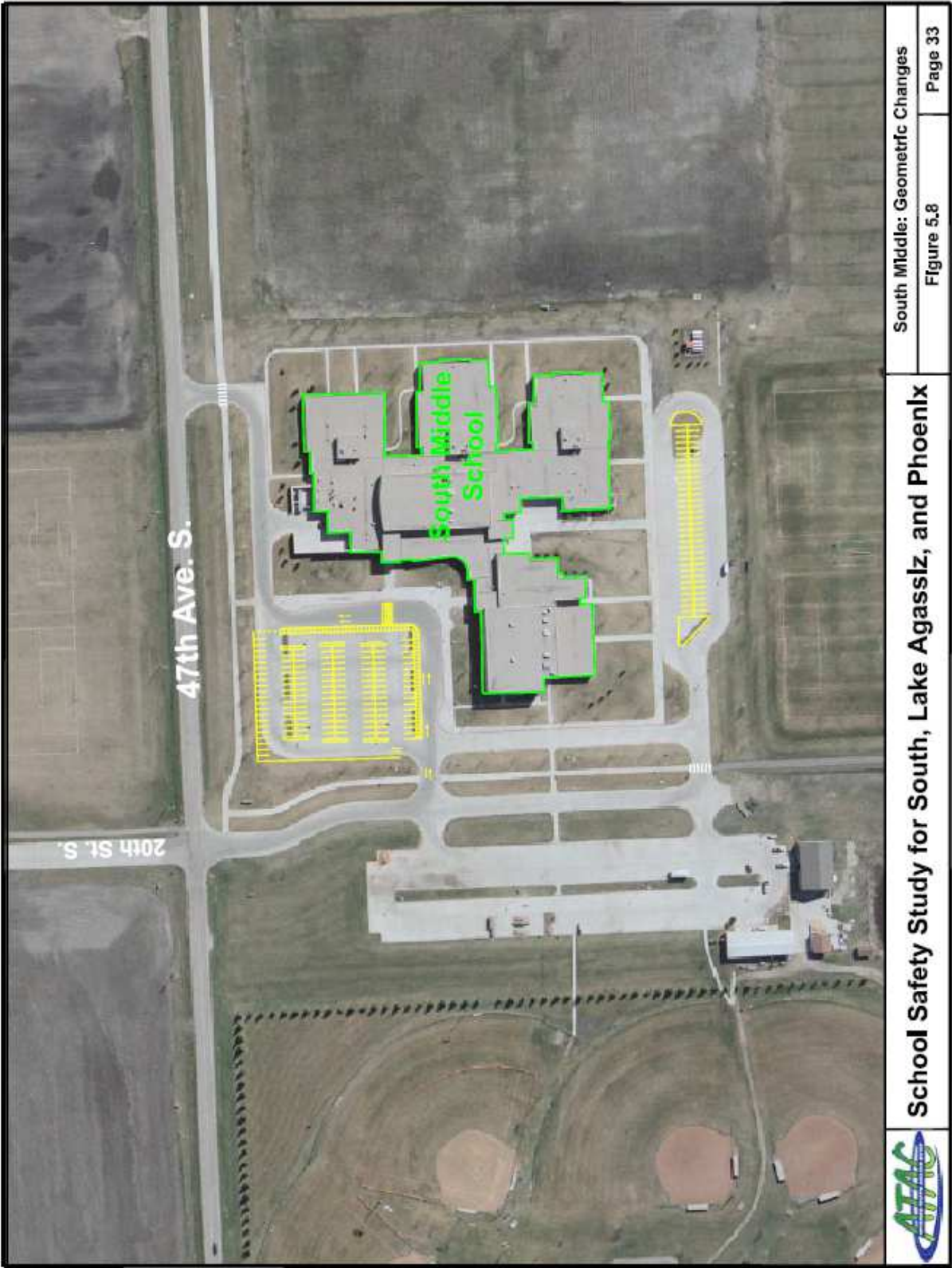
	ATAC	FEEDBACK	PROGRESS
Add a curb/sidewalk and border to the north parking lot along with a raised crosswalk from the main entrance. Change the vehicle flow to a one-way along the entire side of the school	<p>Add a curb/border and sidewalk to the north parking lot to channelize traffic flow. The raised crosswalk could be added to provide a more visible crossing into the parking lot, and discourage parking on the crosswalk. This will increase the number of parents willing to park in the parking lot, after which they can exit to the west. Bollards can be placed at the northeast corner</p>	<p>\$31,500 - \$37,250 Estimated 2014 Cost</p>	NOT COMPLETED

	of the parking lot which can be removed during special events and snow removal.		
Change the orientation of the south parking lot to a 90° alignment	So drivers can access the parking stalls easier, but still maintain the channelized flow around the parking lot.	<p>Parking remains at a 60°; however, it's now in the same direction as traffic flow.</p> <p>The school also instituted a new drop off procedure in the morning due to near misses at crosswalk. Drivers are prevented from creating multiple lanes of traffic.</p> <p>\$11,750 - \$15,750 Estimated 2014 Cost</p>	

South Middle School Existing with Changes



South Middle School Geometric Changes



2008 Lake Agassiz Elementary School

Short-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Update signs and pavement markings	Although a site visit was not conducted at Lake Agassiz Elementary School, data was collected regarding the existing traffic control signs, pavement markings and geometrical characteristics in and around school grounds.	School signage is updated to the current 2009 MUTCD. All the schools are also under review for the signage.	ON GOING

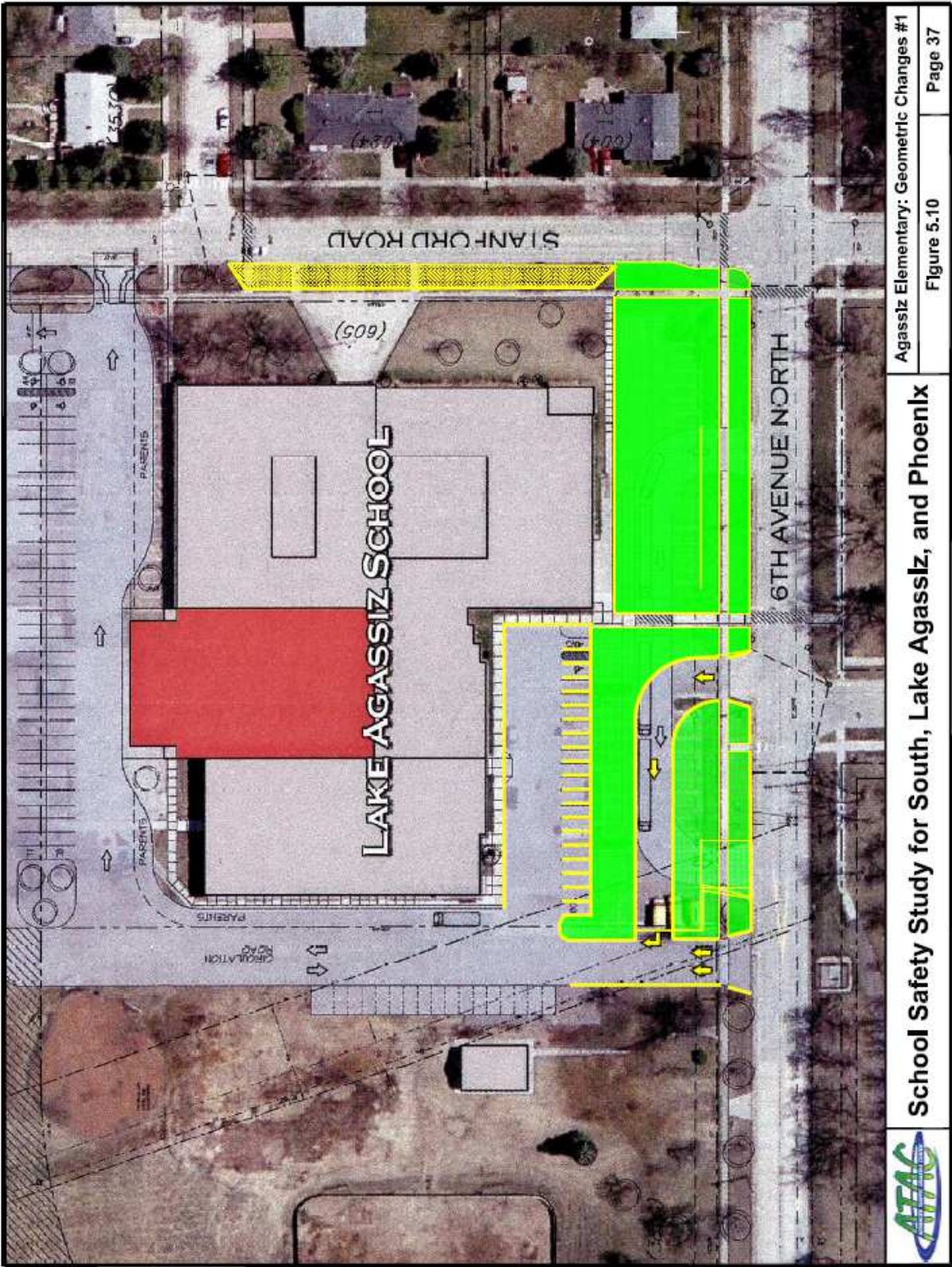
Medium/Long-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Add a turn-out lane on Stanford Road next to the school	Also, the access road is changed to a northbound one-way to reduce any potential vehicle conflicts. A turn-out lane is also added to Stanford Road on the near side of the school to provide a safer loading and unloading zone for students.		COMPLETED
Reduce the size of the bus lane and join with the one-way access road on the west side of the school	Move the driveway farther away from the intersection of 6 th Ave. N and Stanford Road and joins the bus lane with the access road to the west.		COMPLETED
Remove the bus lane and increase the capacity of the southwest parking lot	Since a loading zone is already provided along the access road. The southeast parking lot is also removed, but the capacity of the southwest parking lot is increased.	\$58,250- \$71,500 Estimated 2014 Cost	
Remove the bus lane and join both parking lots on the south	Join both of the south parking lots and removes the east driveway to be in compliance with the city	\$34,700 - \$45,900 Estimated 2014 Cost	

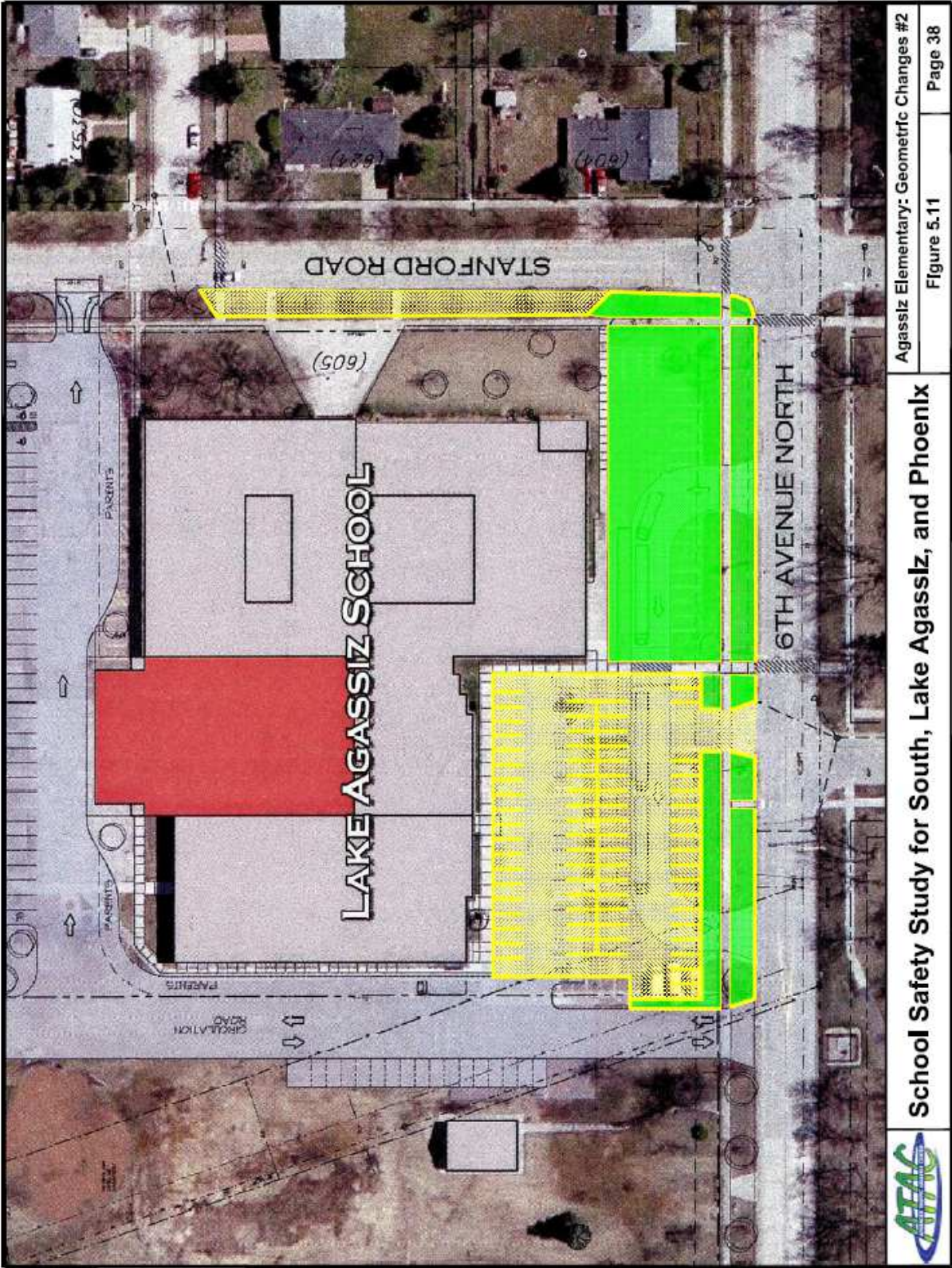
side	specifications. A turn-out lane is also added to Stanford Road. This option provides the most parking capacity while still maintaining traffic flow around the school.		
Make the access road a one-way operation and combine the north approaches	Utilizes a bus lane on the south side of the school, which is situated to account for access control issues. It also provides a one-way movement on the access road to the west of the school, and combines the two approaches in the north parking lot.	The school was in the process of expanding when the study was done. These recommendations were incorporated into the new parking lot.	

[illegible]

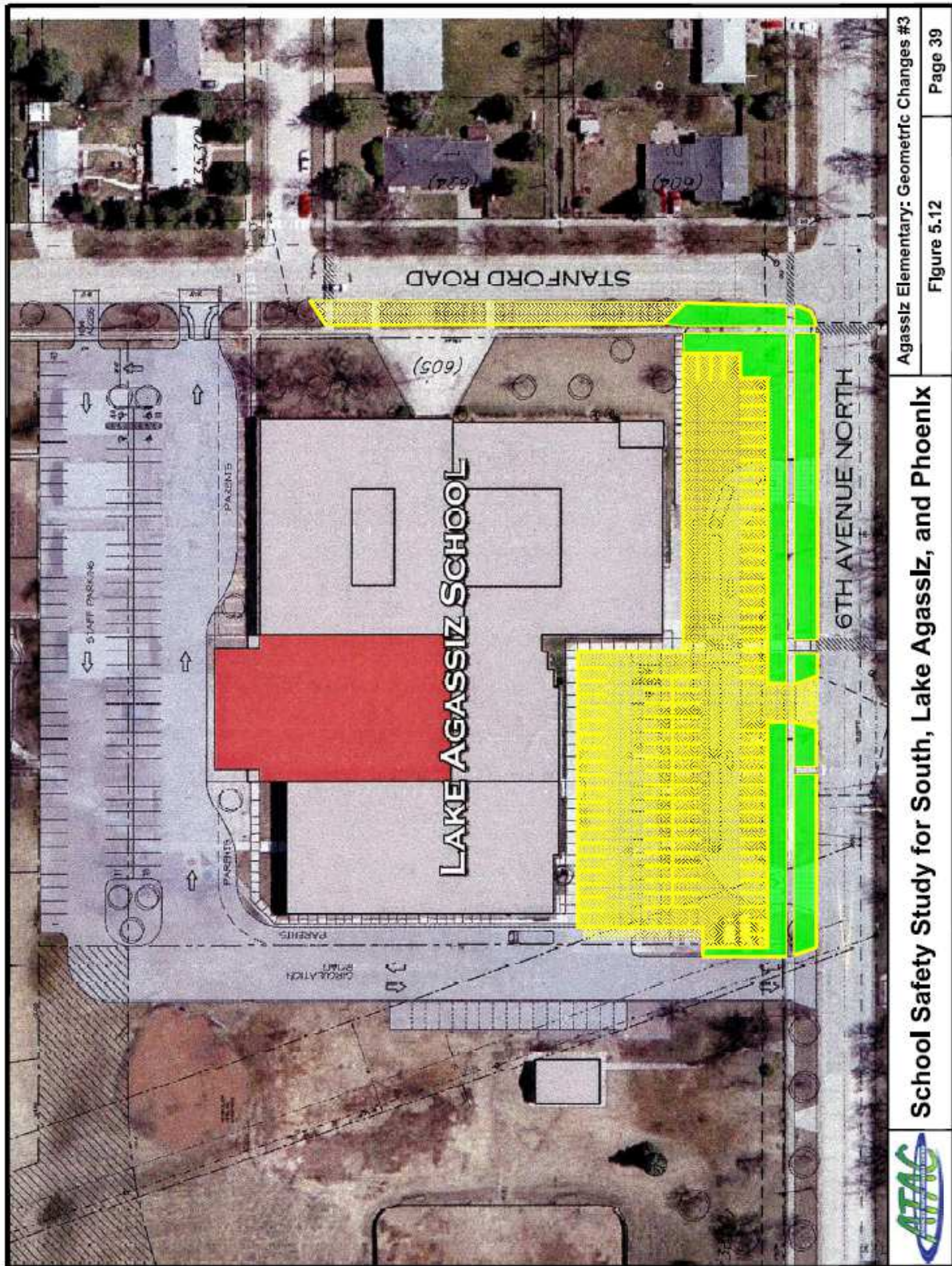
Lake Agassiz Elementary School Geometric Changes 1



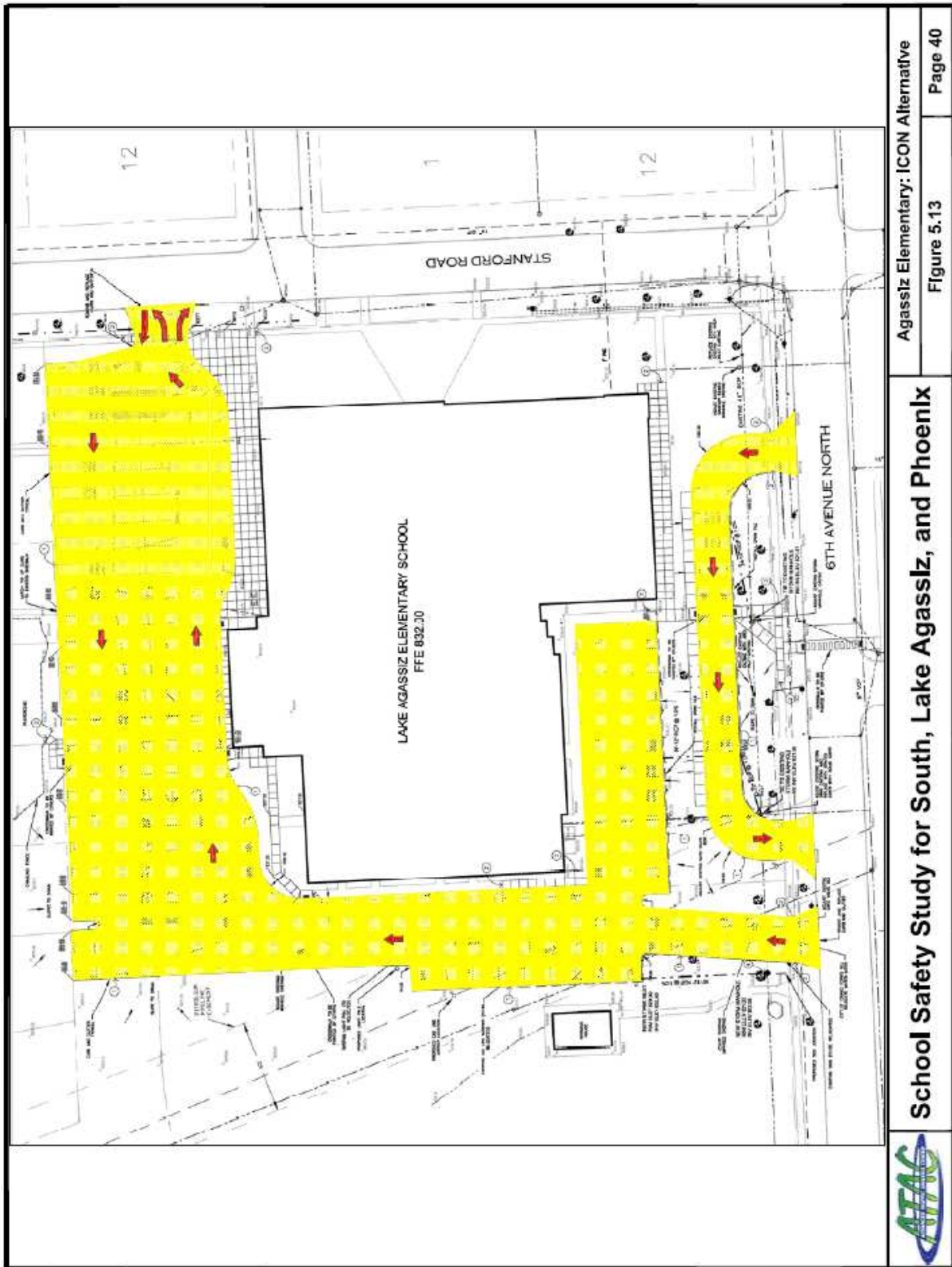
Lake Agassiz Elementary School Geometric Changes 2



Lake Agassiz Elementary School Geometric Changes 3



Lake Agassiz Elementary ICON



2009 Lewis & Clark Elementary School

Short-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Update signs and pavement markings	12 th Ave S does not have any posted parking signs. No vehicles were observed parking along the north side of the street, but there could potentially be an issue if vehicles park along both the north and south side of 12 th Ave S. Concerns were brought up regarding the location of the compost collection site be moved to a more feasible location to eliminate excess traffic in the area.	School signage is updated to the current 2009 MUTCD. All the schools are also under review for the signage.	ON GOING
Encourage all staff serving as crossing guards to wear reflective fluorescent safety vests	Both crossing guards at the intersection of 13 th Ave S and 11 th Street were wearing fluorescent safety vests, and carried stop signs to warn oncoming vehicles of pedestrian activity. On the north side of the school, the crossing guard also had a stop sign, but was not wearing a safety vest. It is recommended that all crossing guards at the school wear reflective, fluorescent, and safety vests.	Supplies have been provided to the staff.	NEEDS IMPROVEMENT
Eliminate dismissal from the west doors	Current dismissal practices the School involve the use of three exits. To minimize the dispersion of students, it is recommended that dismissal from the west doors will improve safety, as there are currently no crossing guards located to the west of the school.		COMPLETED
Encourage the use of the Elks Pool parking lot	School officials continue to encourage parents to use the parking lot at the Elks Pool. The use of this parking lot has several advantages such as, eliminating		ON GOING

	the need for students to cross a street, potentially removing a significant number of vehicles from the school grounds, and providing relatively easy access to the school.		
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--

Medium/Long-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Increase the capacity of the staff parking lot, with a drive-through lane around the perimeter	Increasing the capacity will free up the parking lot can be expanded to increase capacity. Increasing the capacity will free up the parking space along the streets, which is currently being used by staff members. Along with the expansion of the parking lot, a second driveway was added to provide better access. To keep vehicle flow uniform in the parking lot, the driveways utilize one-way operations. A second geometric change is to provide a drive-through area around the perimeter of the staff parking lot, with a raised curb to separate the parking lot from the drive-through. This would provide a loading and unloading area for parents, and would alleviate the parking on 12 th Ave S.	\$239,750 - \$312,750 Estimated 2014 Cost	

Removed or Restricted
Additional or Allowed

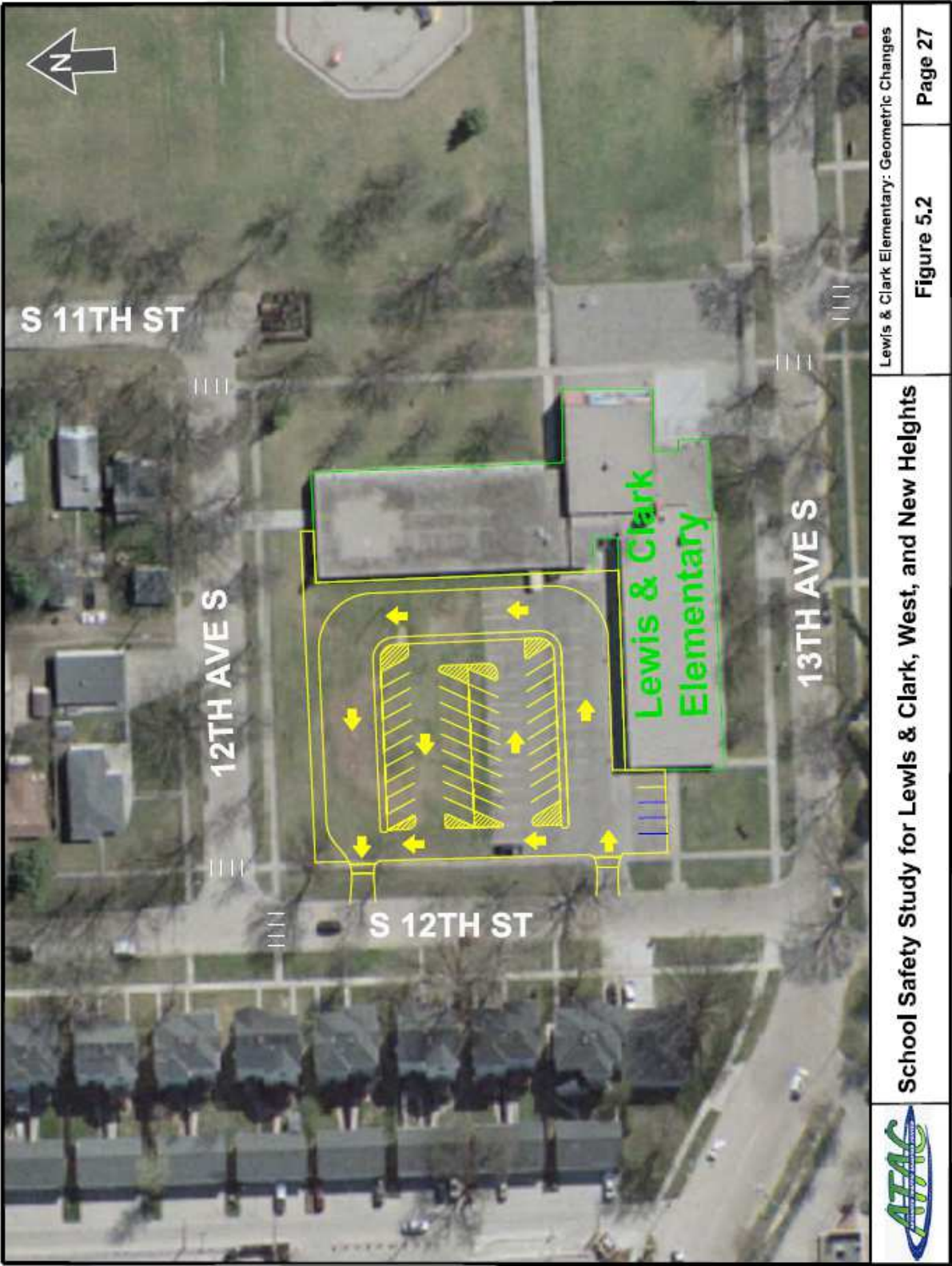
School Safety Study for Lewis & Clark, West, and New Heights

Lewis & Clark: Existing Conditions with Changes

Figure 5.1

Page 25

Lewis and Clark Elementary School Geometric Changes



2009 West Elementary School

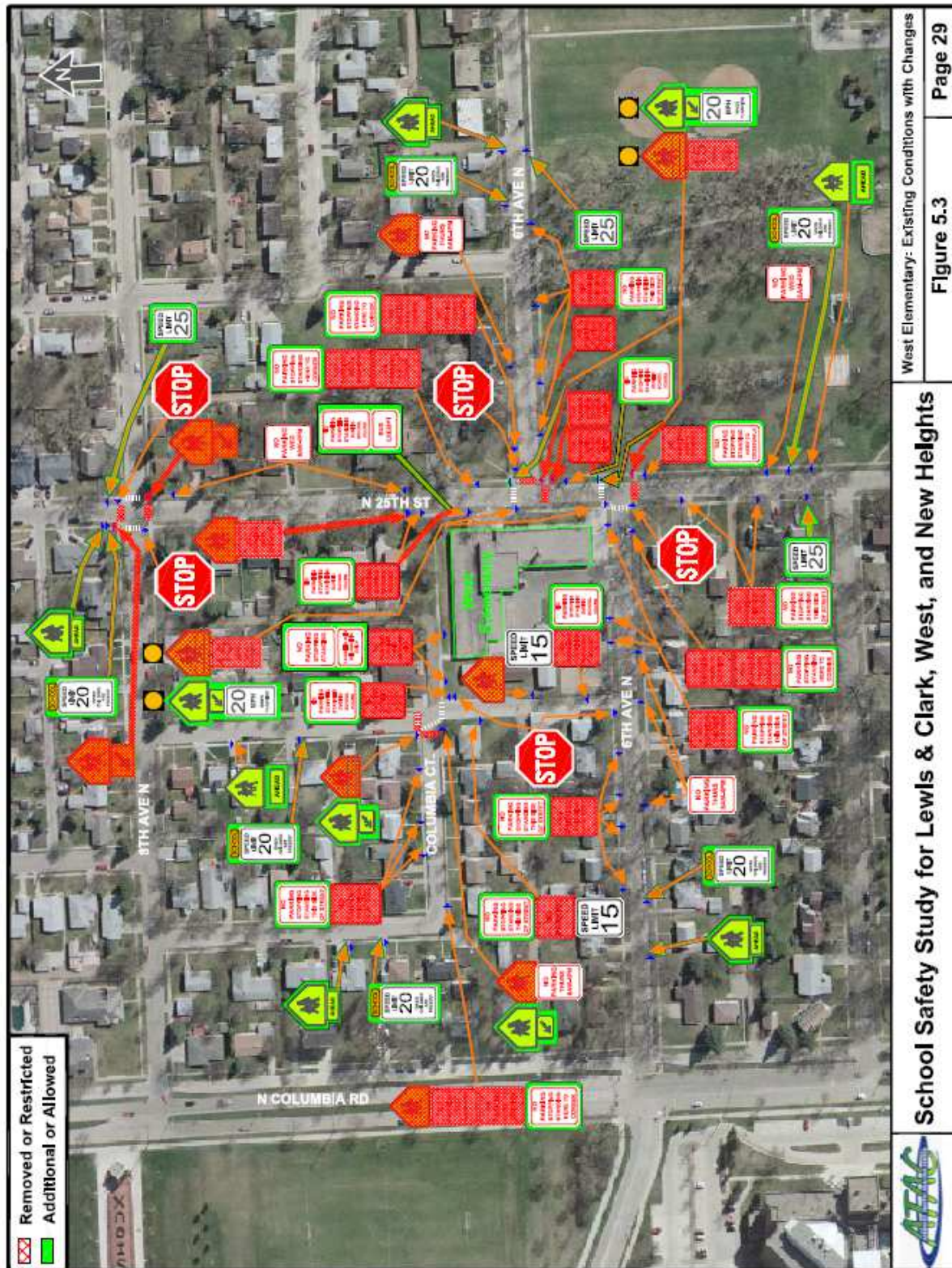
Short-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Update signs and pavement markings	Currently, no parking is allowed on any of the nearside curbs adjacent to the school. In addition, parking is restricted on Thursdays for east-west streets, and on Wednesdays for north-south streets. It was also noticed that there is a lack of consistency among the types of parking restriction signage that is being used. This can potentially cause some confusion for drivers, and may cause drivers to ignore parking restrictions. Along with meeting compliance with the MUTCD regarding speed limits and school warning/crossing signs.	School signage is updated to the current 2009 MUTCD. All the schools are also under review for the signage.	ON GOING
Remove the extra crosswalk in Columbia Court	Several crosswalk exits at the intersection of Columbia Ct. and alleys to the west and the north of the school. Two crosswalks are located on the west approach. One of the crosswalks is perpendicular to the road, and the second angles to the southeast. During the site visit and observation of the dismissal activity, it was noticed that only the angled crosswalk was used by pedestrians. Drivers appeared to disregard the second crosswalk, and in several instances parked on it.		COMPLETED
Move the bus loading zone to the east side of the school	This location provides the most ideal safety conditions with regard to pedestrians and passing vehicles.	They no longer have a regular school bus.	COMPLETED

Medium/Long-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Increase the capacity of the current staff parking lot	Expanding the parking lot to the west will provide sufficient parking for all staff, which will improve the parking capacity in the streets. In addition, adding a curb/border to the parking lot will help in maintaining a separation between the parking lot and the adjacent playground.	\$41,500 - \$60,750 Estimated 2014 Cost	
Pave the east-west section of the alleyway on the north side of the school and extend to the east as an access road to N 25th Street with parking along the north side of the school	This extension will provide additional access to N 25 th Street and will serve as an alternative to the alleyway which extends to the north. The one-way operation will help to maintain efficient traffic flow around the school. In addition, diagonal parking is proposed along the north side of the school, accessed by the new roadway. This will provide additional parking for school faculty and staff.	\$71,000 - \$100,000 Estimated 2014 Cost No longer a bus loading area. Improvements need to be requested by owners.	ON GOING
Add a bus turn-out lane in west alley for loading/unloading	The re-location of the bus loading to the west side of the school creates a safer environment for students, as the busses are moves from surrounding roadways.	\$20,500 - \$28,500 Estimated 2014 Cost	NOT COMPLETED

West Elementary School Existing Conditions with Changes



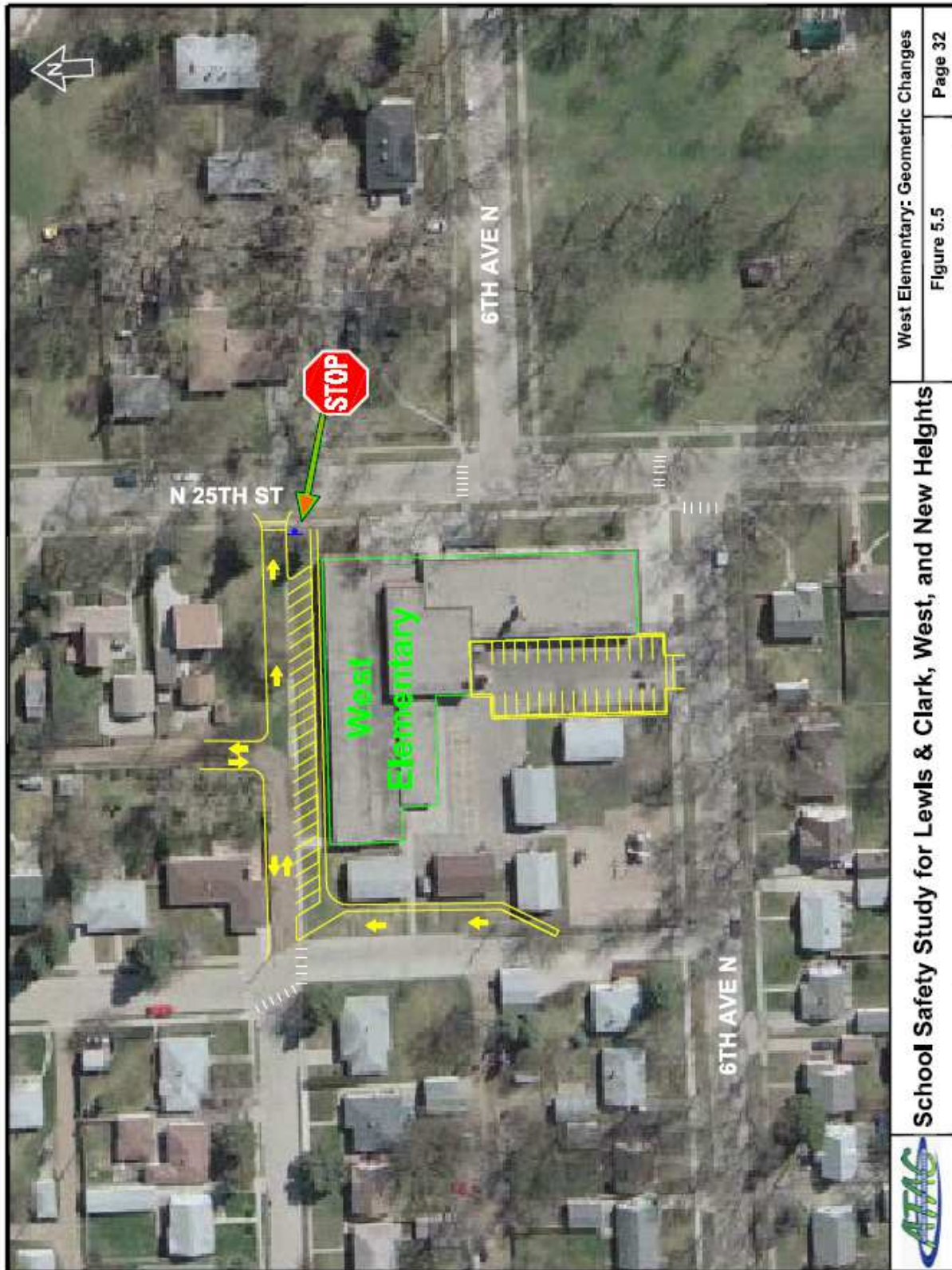
West Elementary: Existing Conditions with Changes

Page 29

School Safety Study for Lewls & Clark, West, and New Heights



West Elementary School Geometric Changes



2009 New Heights Elementary School

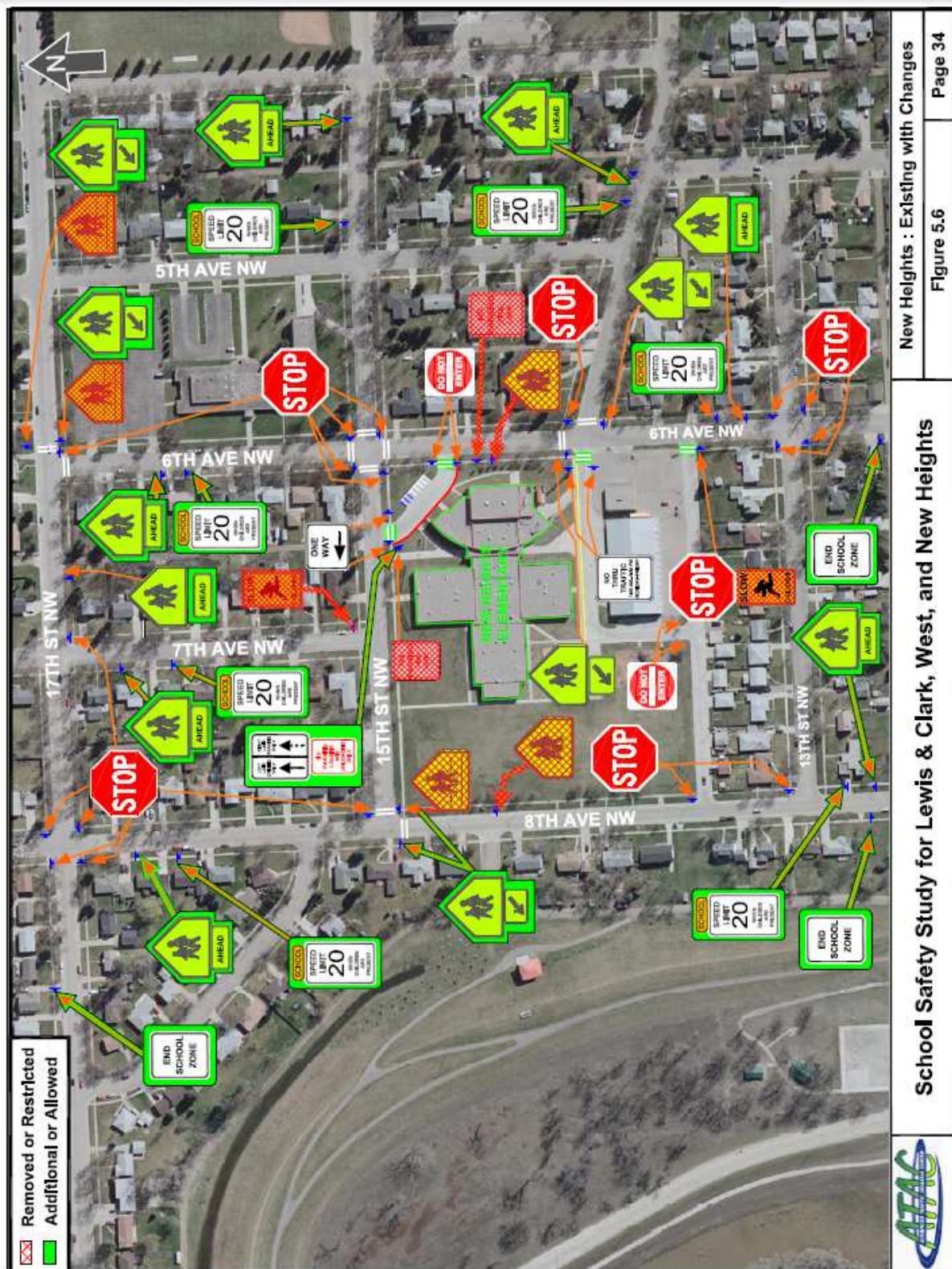
Short-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Update signs and pavement markings	There were only two parking restriction signs found within a one-block radius of the school, and they were both temporary signs on school property. No speed limit signs were found in the vicinity of the school. To maintain compliance with the MUTCD several signs need to be installed around the school. The required signs are speed limit signs, advanced school warning signs, and school crossing signs.	Majority of signs and markings have been updated by Public Works. Adding new crossing at 15 th Street NW	ON GOING
Discuss proper parking procedures with parents using the North drive-through	Parents double/ triple parking and exiting their cars. Parking in approach to the drive-through and blocking the sidewalk. In order to maintain efficient operations in the drive-through, parents should be reminded to not block the driving lane. In addition it is recommended that the sidewalk be outlined at the entrance and exit of the drive-through to increase the visibility.	Needs to addressed by school, have some cones but needs presence.	ON GOING
Encourage parents to use the south side of the school for pick-up/drop-off	Encourage more parents to drop off their children on the south side of the school.		ON GOING
Shift faculty/staff parking to the west	Instruct school faculty/staff to park on 8 th Ave. NW and the west end of 15 th St. NW. This would free-up a significant amount of curb space on the east end of 15 th St. NW, particularly around the entrance to the drive-through area.		

Long-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Add a staff parking lot to the northwest side of the school	<p>Current staff parking is limited to the surrounding streets and adjacent to the bus garage on the south side of the school. The addition of a staff parking lot will significantly improve the parking capacity on the surrounding streets, primarily along the near-side curb on 15th St. NW. This will allow parents increased access to the school during pick-up and drop-off activities, and could potentially reduce the number of vehicles using the drive-through area.</p>	<p>\$153,000 - \$206,750 Estimated 2014 Cost</p>	<p>NOT COMPLETED</p>

New Heights Elementary Existing with Changes



New Heights : Existing with Changes

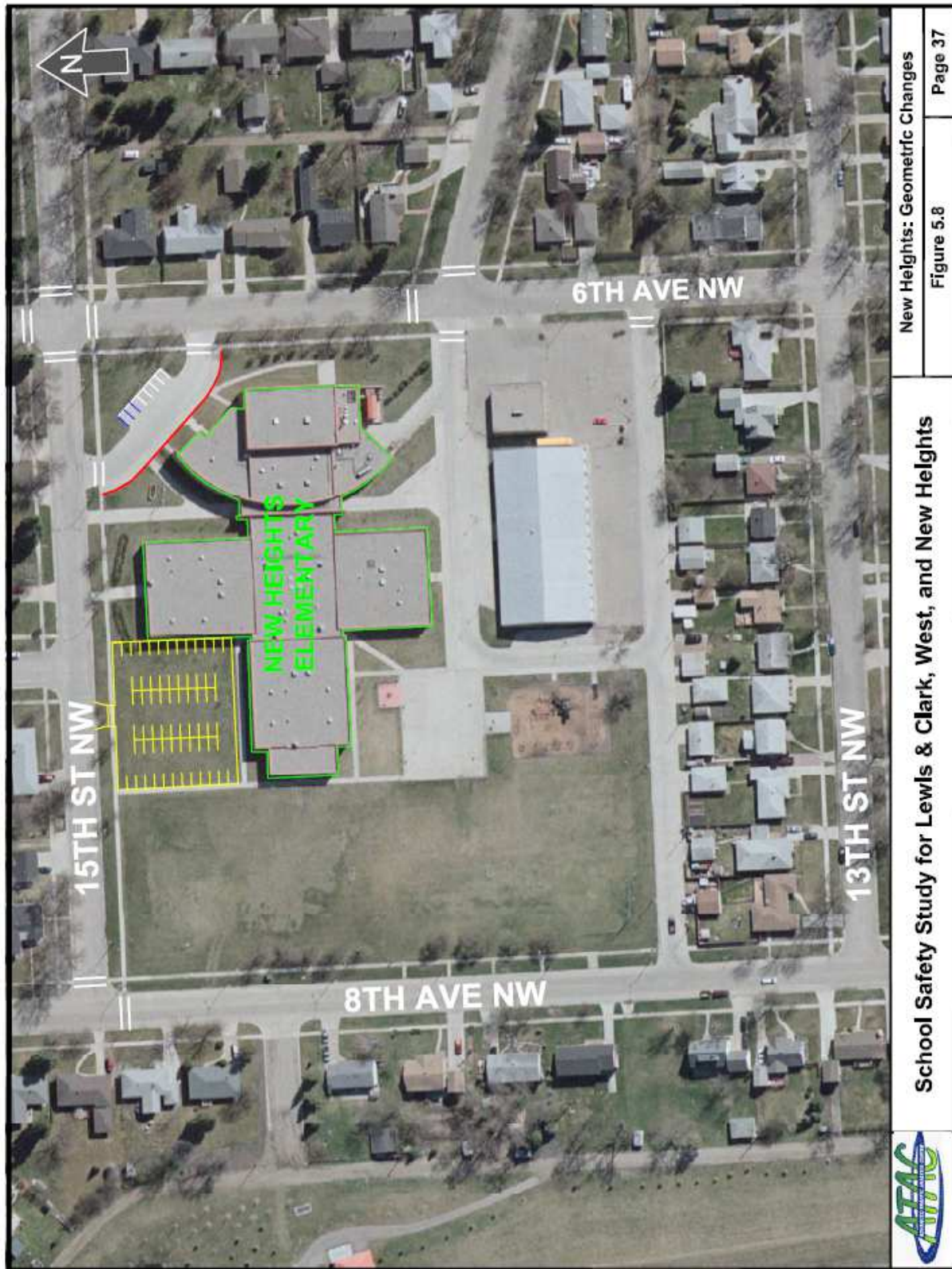
Page 34

Figure 5.6

School Safety Study for Lewis & Clark, West, and New Heights



New Heights Elementary Geometric Changes



	<p>School Safety Study for Lewls & Clark, West, and New Heights</p>	<p>New Heights: Geometric Changes Figure 5.8 Page 37</p>
---------------------------------------------------------------------------------------	--------------------------------------------------------------------------------	------------------------------------------------------------------

2010 Winship Elementary School

Short-Term Improvements

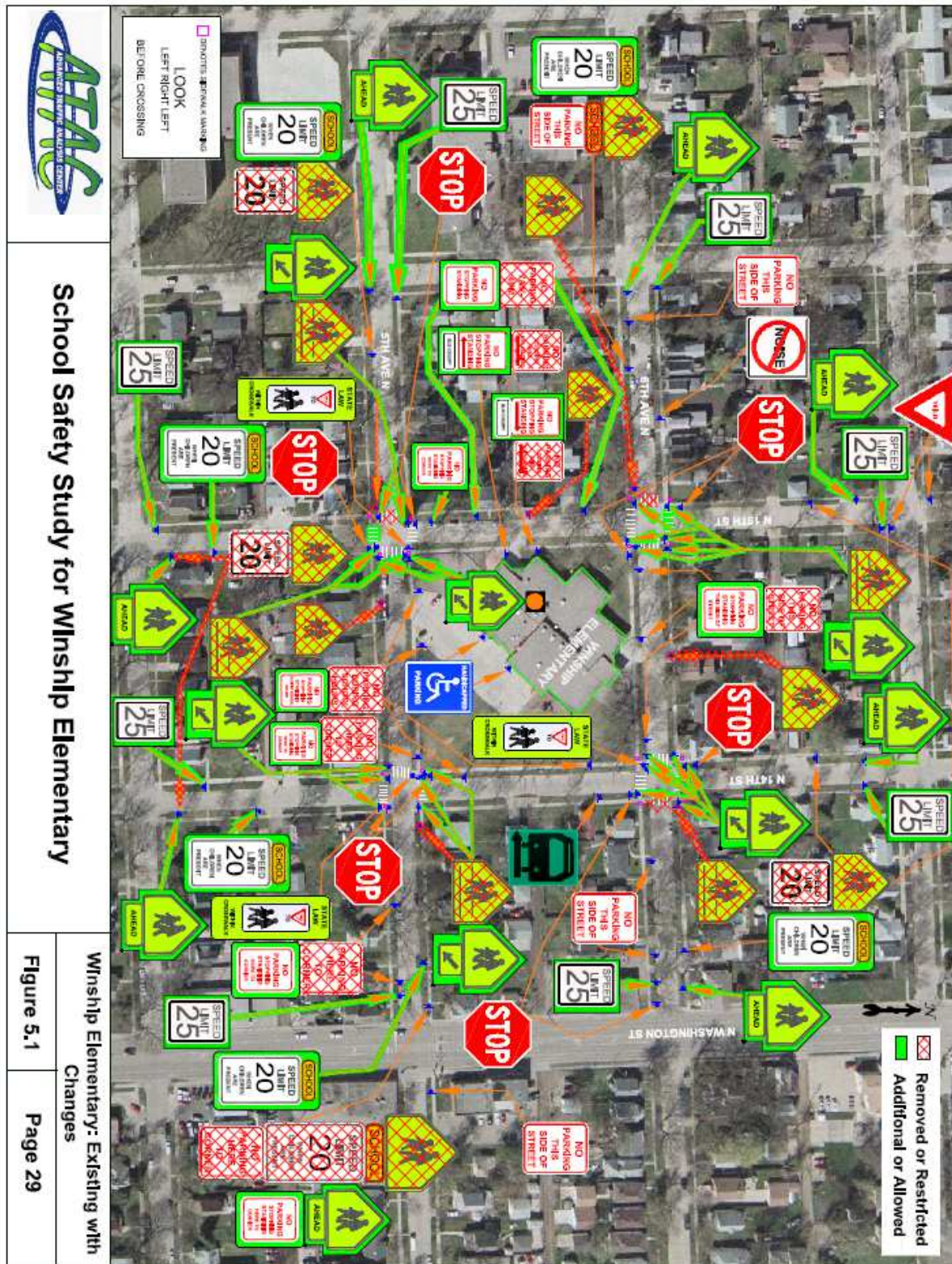
	ATAC	FEEDBACK	PROGRESS
Update signs and pavement markings		School signage is updated to the current 2009 MUTCD. All the schools are also under review for the signage.	ON GOING
Encourage parents/staff to serve as crossing guards at intersections with the highest pedestrian volumes	It is recommended that staff members monitor the crosswalks adjacent to the school, primarily at the intersection of 6 th Ave N and N 15 th St. and 5 th Ave N and N 15 th St. This practices has been implemented by other elementary schools in Grand Forks, and not only increases the safety for the students, but also provides additional awareness to parents and other drivers.		
Encourage staff to enforce parking restrictions and to take a proactive approach to education parents on safe practices	The parking restrictions currently in place around the school are relatively consistent; however it is recommended that parking signs in the vicinity of the school state that parking, stopping and standing be restricted. Also that the parking on N 15 th St. be removed to the east side. Shift the parking on N 15 th St. it should benefit pedestrians at Winship Elementary School.		

Long-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Add a turn-out lane to the west and north sides of the school	This will help to expand N 15 th St and reduce congestion caused by parents parking along both sides of the street. A turn-out lane was		

	provided on the south side of 6 th Ave N which should provide additional on-street parking for parents and help to minimize congestion on N 15 th Street.		
Add an additional one-way access to the staff parking lot from North 4th Street	This would allow parents to have and off-street means of picking up the students being dismissed from the south door adjacent to the staff parking lot. It should be noted that implementing this option would require an increased level of enforcement by school staff to ensure safety of students using the greenspace/playground on the east side of the school after dismissal.	\$51,500 Estimated 2014 Cost	

Winship Elementary School Existing with Changes



Winship Elementary School Geometric Changes



2010 Wildier Elementary School

Short-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Update signs and pavement markings	Lack of consistency among the types of parking restriction signage that are being used. Several school crossing signs are in place around the school. There was a variation between the outdated and updated crossing signs. Along with meeting compliance with the MUTCD.	School signage is updated to the current 2009 MUTCD. All the schools are also under review for the signage.	ON GOING
Encourage parents/staff to serve as crossing guards at intersections with the highest pedestrian volumes	Although staff members were present during dismissal, it was noted that the school did not implement the use of crossing guards/monitors on the streets adjacent to the school.		
Encourage staff to enforce parking restrictions and to take proactive approach to educating parents on safe practices	The enforcement strategies should place an emphasis on communication with parents when issues are observed. If recurring issues occur, requests can be made to law enforcement officials.		

Long-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Increase the capacity of the current staff parking lot	The parking lot capacity is insufficient for the number of staff at the school and the overflow of parking scattered among the surrounding streets. Expanding the parking lot to the northeast will provide sufficient parking for all staff. It will provide more room for the bus loading area.	\$9,250 Estimated 2014 Cost	

<p>Add a turn-out lane on North 4th Street and 10th Ave North</p>	<p>On N 4th Street is a none-way and parents are parking along both sides of the street, it is recommended that a turn-out lane be added on the east side of the street to help reduce congestion and keep both lanes open.</p>	<p>\$40,250 Estimated 2014 Cost</p>	
------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------	--

Wildier Elementary School Existing with Changes



Wildier Elementary School Geometric Changes



2010 St. Michael's Elementary School

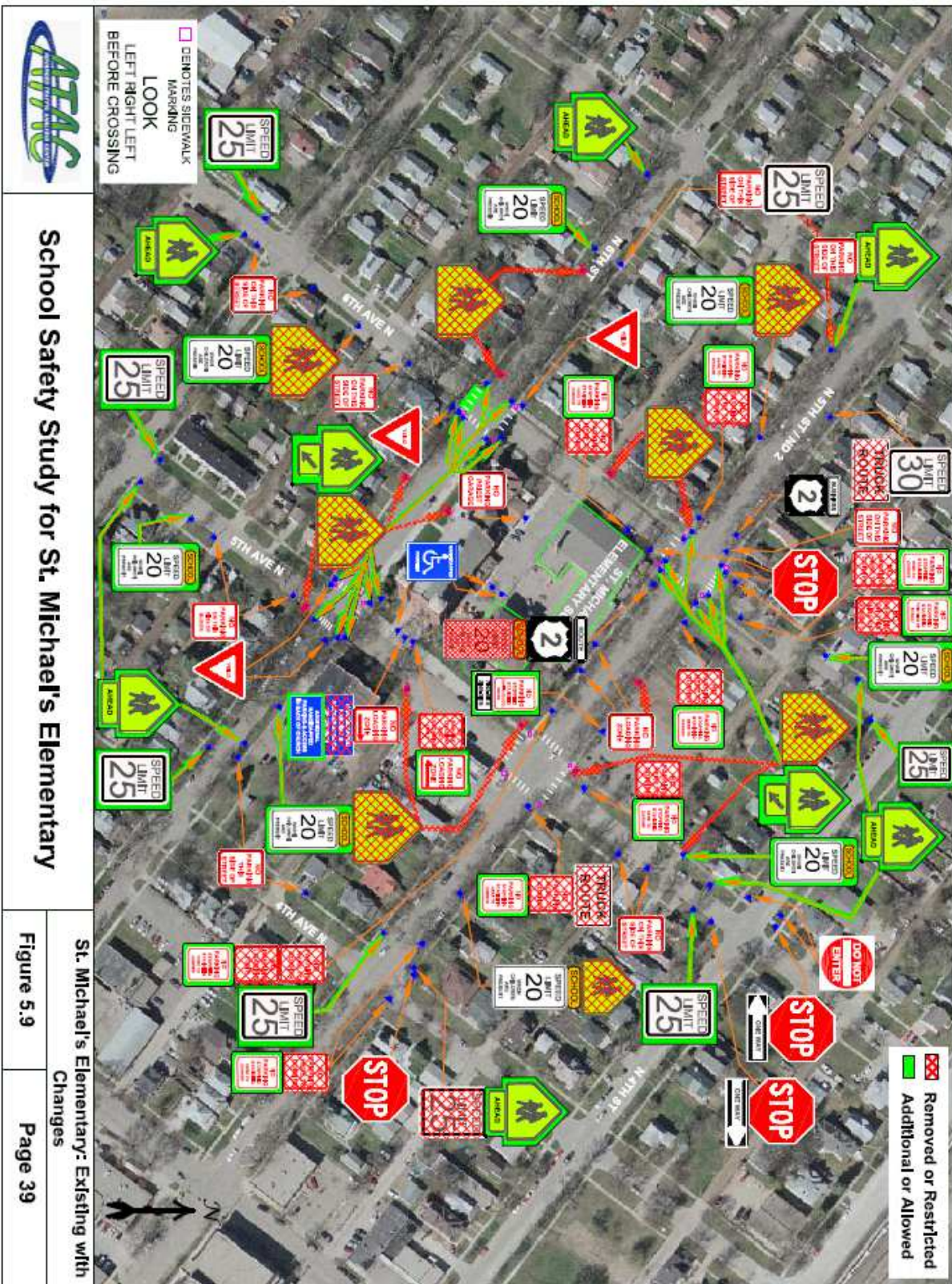
Short-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Update signs and pavement markings	It was observed that a number of signs in use were partially obscured by trees. To maintain compliance with the MUTCD several signs need to be installed around the school. The required signs are speed limit signs, advanced school warning signs, and school crossing signs.	School signage is updated to the current 2009 MUTCD. All the schools are also under review for the signage.	ON GOING
Encourage parents/staff to serve as crossing guards at the intersections with the highest pedestrian volumes	It would be beneficial for a staff member or parent to serve as a crossing guard/monitor at the intersection of 5 th Ave N and N 5 th Street as an added safety measure		

Long-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Encourage parents to use the parking lot to the east of the school	There is minimal space around the school for parking facilities; the parking lot across the street to the east has ample space for both staff and parents. It is recommended that parents be encouraged to use this parking lot to reduce the number of on-street parking adjacent to the school.		
Encourage staff to enforce parking restrictions and to take a proactive approach to educating parents on safe practices	The enforcement strategies should place an emphasis on communication with parents when issues are observed. If recurring issues occur, requests can be made to law enforcement officials.		

St. Michael's Elementary School Existing with Changes



St. Michael's Elementary School Geometric Changes



2012 Schroeder Middle School

Short-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Update signs and pavement markings	Dynamic Vehicle Speed Feedback signs be installed in conjunction with the school speed limit signs. The pavement markings on the exit driveway should be put in only after widening the driveway. Fire lanes in and around the parking lots/driveways should be clearly marked.	School signage is updated to the current 2009 MUTCD. All the schools are also under review for the signage.	ON GOING
Widen the exit driveway of south-east parking lot (on 32nd Ave south) and mark dedicated left and right turn lanes	The south exit driveway be widened to accommodate two lanes of exiting vehicles. The exit must be marked for right turn lane only and left turn only lanes respectively		COMPLETED
Encourage members of the staff to educate and to help enforce parking restrictions	That during dismissal, members of the staff help enforce parking restrictions in and around the school.		
Encourage vehicles exiting the south parking lot to do so in an orderly fashion without any distractions as recommended	It is expected that the practice of placing the in-street sign reminding drivers to yield to pedestrians will be continued even after widening the driveway.		
Encourage carpooling among parents/guardians as well as by members of the staff	Parents may carpool and pick-up or drop-off their neighbor's kids along with their own, with previously decided and trustworthy plans. Members of the staff should also be encouraged to carpool as this can result in year-long savings.		
Encourage cellphone lot/waiting area type	It will disperse the peak period congestion and distribute it between		

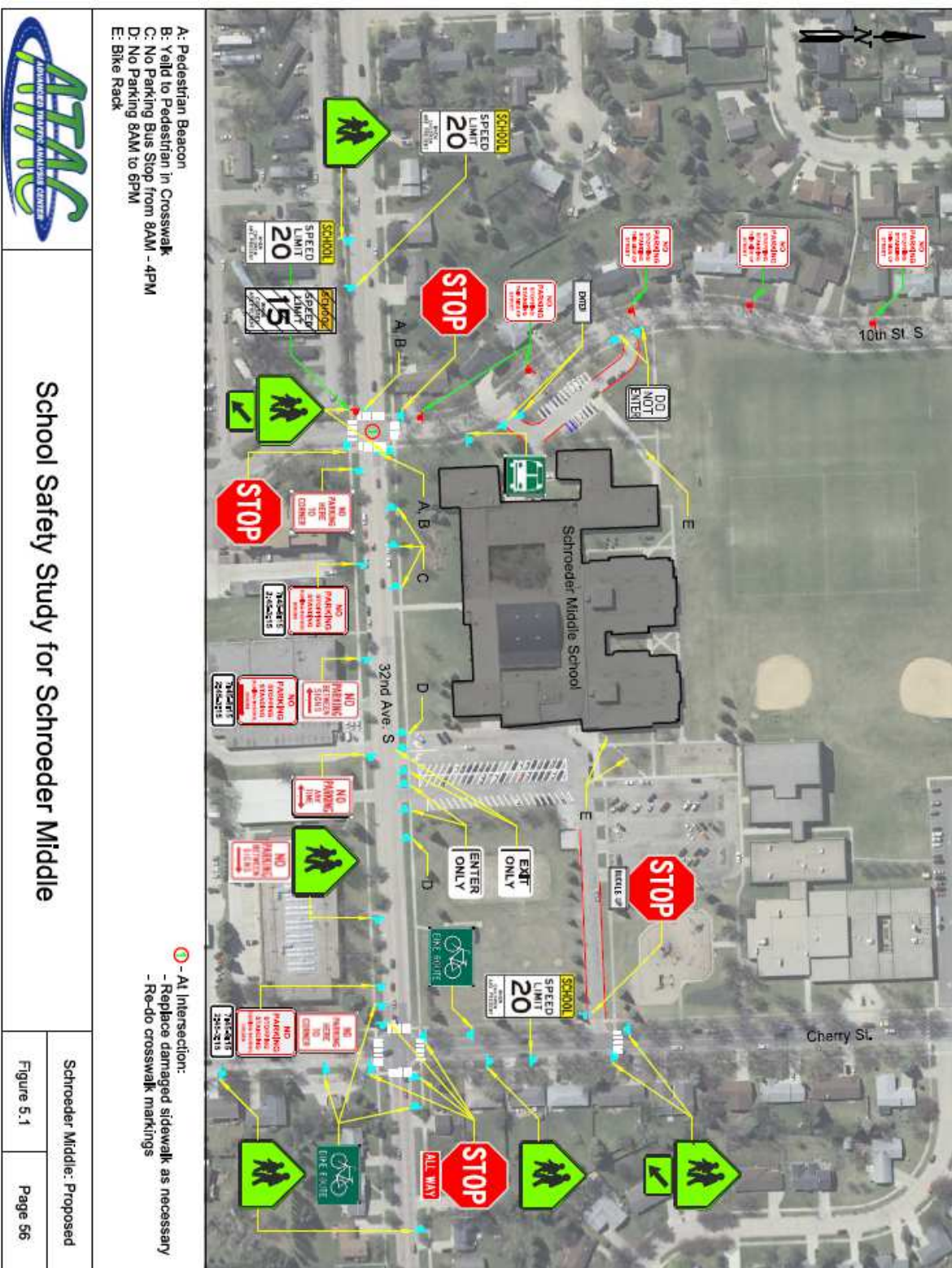
parking among parents/guardians	the school and the Waiting Area location(s).		
Continue encouraging kids to safely walk or bike to school	This would have multiple benefits as already demonstrated by Safe Kids to School.	Worked with students during the 2011-2012 school year through a Safe Kids Worldwide grant, promoting safety education with students, staff and parents. There is still extensive and consistent education, encouragement and enforcement activities that could be done at the school	
Encourage members of the staff to serve as crossing guards along 32nd Ave South and South 10th Street	It is recommended that members of the staff monitor the crosswalks adjacent to the school, primarily along 32 nd Ave S and S 10 th Street.		

Long-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Repair/replace the faulted sidewalk around the intersection of 32nd Ave South and South 10th Street	The stretch of faulted sidewalk around the intersection 32 nd Ave S and S 10 th Street be repaired or replaced as necessary.		COMPLETED
Consider installing Pedestrian Hybrid beacons if allowed per MUTCD guidelines	It is recommended that the intersections around Schroeder Middle School that currently have flashing pedestrian beacons be studied as per the MUTCD to check if they meet the warrant for Pedestrian Hybrid Beacons.	\$21,750 Estimated 2014 Cost Cannot be installed at intersections per MUTCD 2009	NOT APPLICABLE
Targeted enforcement is recommended as and when deemed necessary by the concerned Law Enforcement	The public needs to be re-educated on safe use of the roadway network especially while walking or biking. The public should be encouraged to share the road while on pedal-cycles and not go against the traffic. The use of safety gear such as		NOT COMPLETED

Agencies	helmets, knee pads, elbow pads etc. should be encouraged.		
-----------------	--------------------------------------------------------------	--	--

Schroeder Middle School Proposed



2012 Valley Middle School

Short-Term Improvements

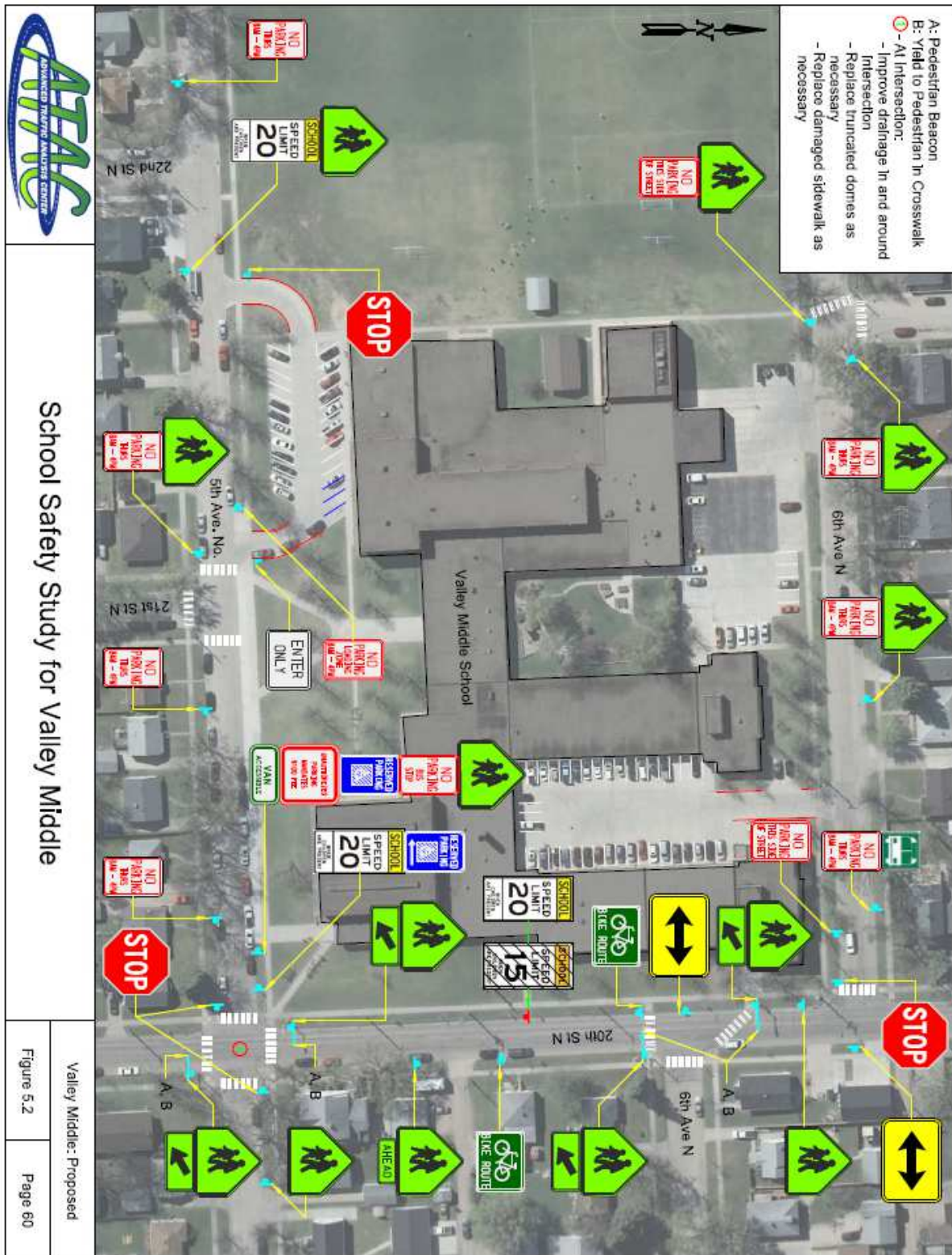
	ATAC	FEEDBACK	PROGRESS
Update signs and pavement markings as well as the graffiti issues	<p>It is recommended that Dynamic Vehicle Speed Feedback signs be installed in conjunction with and on the same support as the school speed limit signs.</p> <p>The signs with graffiti must be replaced or the graffiti removed from them.</p>	<p>School signage is updated to the current 2009 MUTCD.</p> <p>All the schools are also under review for the signage.</p>	ON GOING
Encourage members of the staff to serve as crossing guards on 32nd Ave South and South 10th Street	Members of the staff monitor the crosswalk adjacent to the school, primarily along 5 th Ave N, which experiences most of the dismissal activity.		
Encourage carpooling among parents/guardians as well as members of the staff	Carpooling can drastically reduce the level of congestion currently experienced at the school especially during the dismissal.		
Encourage cellphone lot/waiting area type parking among parents/guardians as well as by members of the staff	Two parking locations are recommended for consideration: University Park and University Lutheran Church.		
Further encourage kids to safely walk or bike to school	Additional bike racks be provided for organized and convenient parking of the bikes.		
Encourage kids to use all exits of the school in safe and organized manner	Most of the students exit through doors on the south side of the premises. It is recommended that other exits of the school also be used during dismissal as it will divide the congestion further.		
Encourage members of the staff to			

educate and to help enforce parking restrictions			
--------------------------------------------------	--	--	--

Long-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Repair/replace the faulted sidewalk around the intersection of North 20th Street and 5th Ave North	The sidewalk and crosswalk near the intersection of S 20 th Street and 5 th Ave North has faulted and cracked	Property owners are responsible for the sidewalk adjacent to their property. Referred to sidewalk replacement program	COMPLETED
Improve drainage conditions around the intersection of North 20th Street and 5th Ave North	The intersection of S 20 th Street and 5 th Ave North.	Referred to sidewalk replacement program	
Add a parking lot in the Southwest corner of the school premises	To solve the lack of parking spaces, it is recommended that an additional parking lot be constructed in the south-west of the school premises.		NOT COMPLETED
Consider installing Pedestrian Hybrid Beacons if allowed per MUTCD guidelines in the near future	The flashing pedestrian beacons be studied per the MUTCD to check if it meets the warrant for Pedestrian Hybrid Beacons.	Cannot be installed at intersections per MUTCD 2009. All the schools are also under review for the signage.	NOT APPLICABLE
Targeted enforcement is recommended as and when deemed necessary by the concerned Law Enforcement agencies			NOT COMPLETED

Valley Middle School Proposed



2012 South Point Elementary School

Short-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Update signs and pavement markings		Signage on Bygland Road needs to be changed	
Encourage members of the staff and students from nearby schools to serve as crossing guards along 13 th Street SE	The practice of using crossing guards/monitors is recommended. Volunteers from nearby schools may also be deployed to assist students in determining when it is safe to cross the street.		
Encourage members of the staff to educate and to help enforce parking restrictions especially around the traffic circle within the school premises	Targeted educational efforts be undertaken so that not only the pedestrians but also the drivers are made aware of the correct interpretation of different modes of the newly installed signs.		
Encourage carpooling among parents/guardians as well as by members of the staff	Parents as well as members of the staff should be encouraged to carpool the numerous benefits you get are huge.		
Continue encouraging kids to safely walk or bike to school	The efforts of encouraging students to walk or bike to school, the outstanding results of which were observed during the site visit, must be continued.		ON GOING
Move the bike racks to the west side of the main entrance of the school. Add more bike racks.	The current location of the bike racks encourages unsafe maneuvers by students arriving on bicycles as noted earlier. It is recommended that the bike racks be moved to the west side of the main entrance to the school. Also, additional bike racks must be installed as the current ones do not provide enough spaces for	More bike racks have been added but they have not moved the bike racks.	

	organized and safe bike parking.		
Discourage students from using the eastern driveway when on foot or on bike	Students should be discouraged from using the driveway on the east end of the school. This driveway is mainly used by buses.	Students rarely use this driveway anymore	ON GOING
Review the lighting conditions at the intersection of Bygland Road SE and 13th Street	It is recommended that the current lighting at the intersection of Bygland Road SE and 13 th St SE be re-evaluated in order to ensure that enough luminance is made available for safe crossing of the highway during dark early mornings.	New LED lighting has been installed	COMPLETED
Remove temporary control devices that are no longer needed along Bygland Road	Construction related temporary control devices that are no longer needed along Bygland Road SE must be removed.		COMPLETED
Move the Dynamic Speed Display sign located along Bygland Road to a safer location	The dynamic speed display sign placed on the pavement itself must be moved so that it does not block the roadway or the sidewalk when moved.	We have ordered additional dynamic speed displays with upcoming SRTS grants.	

*Many of these recommendations are being reviewed and implemented through our EGF SRTS grant work.

Long-Term Improvements

	ATAC	FEEDBACK	PROGRESS
Add a parking lot on the east end of the school premises	It is recommended that the new parking lot be located on the east side of the school premises.		NOT COMPLETED
Redesign the two narrow driveways	The current throat width of the two driveways occasionally forces vehicles to stop/yield until the driveway has been cleared by the oncoming vehicle. The driveway leading to the circle in front of the main entrance should also be		NOT COMPLETED

	widened similar to the two driveways.		
Targeted enforcement is recommended as and when deemed necessary by the concerned law enforcement agencies			ON GOING

South Point Elementary School Proposed

