

Volusia County MPO

June 2009



Volusia Pines Elementary School

Bicycle and Pedestrian School Safety Review Study

Phase 3C



Volusia County MPO



Transportation
Planning

www.VolusiaCountyMPO.com

Hoke
Design, Inc.

School Summary

Volusia Pines Elementary School is located within the City of Lake Helen. Of the 711 students attending this school, 140 live within the designated walk zone area. During the 2008/2009 school year, approximately 25 of these students walked or rode bicycles to school.

There is a multi-use trail within the Mitchell Brothers Sports Complex that connects the rear of the school to Ohio Avenue. A second bicycle rack is located at the rear of the school to serve students who use this access point.

At the time of this Study, there was one crossing guard location serving Volusia Pines Elementary School students. There were no reported pedestrian crashes during estimated school travel times involving an elementary school age child within the walk zone from 2005 to 2007.

A sidewalk on the east side of Lake Helen-Osteen Road from Kicklighter Road to Parma Drive is recommended as a Priority Project for this school.



Volusia Pines Elementary School – Summary Sheet

School Address: 500 East Kicklighter Road
Lake Helen, Florida 32744

School Principal: Dorothy Taylor
Phone: 386-575-4125
Email: dtaylor@volusia.k12.fl.us

Volusia County School District Representative: Saralee Morrissey, AICP
Phone: 386-947-8786, ext. 50772
Email: smorriss@volusia.k12.fl.us

Volusia County Public Works Traffic Engineering: Jon Cheney, P.E., Director
Phone: 386-736-5968 ext. 2709
Email: jcheney@co.volusia.fl.us

Crossing Guard Supervisor: Susan Brennan
Phone: (386) 668-3830
Email: sbrennan@vcso.us

City Representative: Don Findell, City Administrator, City of Lake Helen
Phone: 386-228-2121
Email: donfindell@aol.com

Volusia County MPO: Stephan Harris, Bicycle and Pedestrian Coordinator
Phone: 386-226-0422 ext. 34
Email: scharris@co.volusia.fl.us

Consultant Representative: Ginger Hoke, RLA, Hoke Design, Inc.
Phone: 407-923-6027
Email: ginger@hokedesign.com

Site Visit Observation Date: February 25, 2009 (weather: clear, seasonal)

Meeting Attendees:

- Dorothy Taylor
- Susan Brennan
- Don Findell
- Stephan Harris
- Ginger Hoke

Number of Enrolled Students (2008 data): 711

Estimated Number of Students Living in Walk Zone: 140

Number of School Buses: 6

Number of Aftercare Buses/Vans: 4

Estimated Number of Walkers/Bicycle Riders: 15 to 30

Number of Bicycles on Site: 10 bicycles, one scooter (2 bicycle racks), students are allowed to store skateboards in the classroom

Number of Bicycle Helmets (stored with bicycle): 0 (2 riders observed wearing helmets)

Staggered Student Dismissal: Yes, bus riders leave at 2:00pm and all others leave at 2:05pm

Estimated Number of Students Attending Breakfast: 350

Number of Students for School Site Aftercare: 40

Teachers Assisting in Arrival and Dismissal Safety:

Arrival: 10 **Dismissal:** 10

Title One School: (2008/2009): No, 51%

Backpack Policy: No rolling backpacks allowed

Bicycle/Pedestrian Safety Education Programs: The school includes a week of bicycle safety and training. One year, the school sponsored a bike repair event

Summary of Principal Comments:

- The loss of crossing guards is not having a large impact because of the low number of students crossed at those locations
- Students need bicycle locks

Crossing Guard Location:

- Kicklighter Road and Lake Helen Osteen Road

Recently Closed Crossing Guard Locations (2008/2009):

- Kicklighter Road and Pleasant Street
- Ohio Avenue and Pleasant Street
- Ohio Avenue and Orange Avenue

Summary of Crossing Guard Supervisor Comments:

- Need sidewalk on Lake Helen Osteen Road

Number of Bicycle/Pedestrian Crash Events within the Existing Walk Zone (elementary age, during estimated school travel times, 2005-2007): 0

Planned Road, Sidewalk, or other Improvements: Summit Avenue is planned for incremental construction using CDBG funding. At this time, plans do not include sidewalks.

Planned Stimulus Recovery Projects:

- Main Street Sidewalk/Multi-purpose trail (south side of Main Street from Summit Avenue to 1-4 Interchange)
- Main Street Sidewalk/Multi-purpose trail (south side of Main Street from High Street to Lakeview Drive)
- Main Street Sidewalk replacement (north side of Main Street from Lakeview Drive to Summit Avenue)
- Macy Avenue (CR 4139)
 - sidewalk/multi-purpose trail (Ohio Avenue to Kicklighter Road)
 - sidewalk replacement (Washington Avenue to Main Street)
 - resurfacing
- Resurfacing of Prevatt Avenue (Kicklighter Road to Lake Pearl Drive)
- Resurfacing of Lake Helen-Osteen Road (Howland Boulevard to Kicklighter Road)

Planned Development in Walk Zone: The County plans to improve Lake Colby Park, including paved, multi-use trails

The City of Lake Helen feels there is a need for a sidewalk on the east side of Lakeview Drive and along Pleasant Street

City use of GIS: No

Number of Students Transported (Designated as Hazardous): 0

Votran Route in Walk Zone: No

Findings and Recommendations

Finding: Pedestrian routes from the two parking lots to the building are not barrier-free. Accessible parking is provided.

Recommendation: During the design phase of each school campus, care should be taken to provide barrier-free access along all pedestrian routes.



The crosswalk does not align with curb ramps

Finding: There is a continuous pedestrian route from Ohio Avenue to Kicklighter Road that includes access to the rear of Volusia Pines Elementary School. Portions of this connection include a paved trail through the Mitchell Brothers Sports Complex. This connects to a 5 foot wide sidewalk along the east side of school property.

Recommendation: If fencing along the east side of the school is replaced, the School District should consider shifting the fence to the west to allow additional walk zone clearance. If possible, the width of this sidewalk should be increased to provide a continuous multi-use trail.



The trail behind school property looking west



The sidewalk along the school property looking north

Findings: Loose dirt and gravel from the access road (Orange Avenue) to the Mitchell Brothers Sports Complex covers portions of the existing trail co-located with the access drive. The trail surface may be unsafe for trail users and requires frequent maintenance.

Additionally, parked vehicles and equipment often encroach onto the trail surface and the adjacent business crosses a section of this trail to access its site from Orange Avenue.

Recommendation: The City of Lake Helen should consider paving the park access drive from the entrance to beyond the point where the trail separates from the road. Provide a grass buffer between the road and the trail.

Differentiate the trail from the wide driveway along the business frontage. Increase enforcement to reduce encroachment by parked vehicles.



The trail along Orange Avenue south of Ohio Avenue



The concrete trail is covered with dirt in front of the business along Orange Avenue

Findings: There is no sidewalk along the east side of Lake Helen-Osteen Road within the walk zone. Students living east of Lake Helen-Osteen Road and south of Kicklighter Road cross Kicklighter Road at various locations to use the sidewalk on the west side.

Recommendation: Construct a minimum 5 foot wide sidewalk along the east side of Lake Helen-Osteen Road from Kicklighter Road to Parma Drive. This project is recommended as a Priority Project and is further described at the end of this chapter.



Lake Helen-Osteen Road looking north

Findings: Pleasant Street provides a north-south vehicular connection. Access to Mitchell Brothers Sports Complex is located on the east side of this roadway. Right of way for this road is prescriptive.

There is a large turning radius at Pleasant Street and Kicklighter Road, resulting in a 75' long crosswalk over Pleasant Street.

Due to budget reductions, the crossing guard location at this intersection recently closed.

Recommendations: To provide students and residents with an alternate bicycle and pedestrian connection, a minimum 5 foot wide sidewalk should be constructed along either side of Pleasant Street.

The wide radius at the intersection of Pleasant Street and Kicklighter Road should be reviewed to determine if the crosswalk length over Pleasant Street can be reduced. The minimum bus radius should be considered. Additionally, the City should emphasize the crosswalk with pavement marking and signage.



Pleasant Street looking north



Pleasant Street crosswalk at Kicklighter Road

Finding: Most of the roadways (paved and unpaved) in the Cassadaga area serve motorists, bicyclists and pedestrians simultaneously. The roadways are narrow and with the exception of Macy Avenue, there is very little traffic. Macy Avenue is the road connecting Cassadaga to Lake Helen. Currently, the right of way along both sides of the roadway contains obstacles for pedestrians and bicyclists. Macy Avenue is a county road and is designated for stimulus funding to add sidewalks and to resurface the road. Traffic speeds appear to exceed the 30 mph speed limit. It is unlikely that students will use Macy Avenue between Kicklighter Road and Ohio Avenue.



Macy Avenue looking south

Recommendation: Sidewalks separated from the road on both sides of the road are preferred. A sidewalk along Marion Street (Macy Avenue south of Kicklighter Road) may be useful to students who prefer a roadside sidewalk to the trail through Lake Colby Park.

Finding: Volusia County plans to improve the Lake Colby Park facility, including the paving of existing trails. Students living in the Cassadaga area may use these trails as a travel route to and from school.

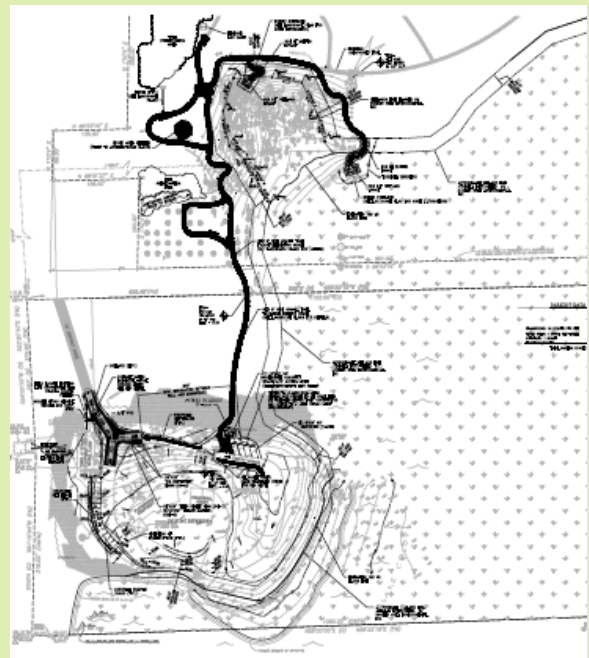
The crossing guard at the location of Pleasant Street and Kicklighter Road recently closed and students using Lake Colby Park as part of their transportation route will likely cross this intersection unaided.

Recommendation: At this time, few students live in the Cassadaga area. A connection from Cassadaga Road to Kicklighter Road through the park will provide an alternate route to Macy Avenue.

The intersection of Pleasant Street and Kicklighter Road should be reviewed for a crossing guard location if student numbers increase and funds allow.



Lake Colby Park near Cassadaga Road



Lake Colby Park Plans (County)

Findings: The intersection of Kicklighter Road with Macy Avenue is a 4-way stop. However, there are no painted crosswalks and the stop bars are faded or missing.

Recommendation: Provide painted crosswalks and pedestrian crossing signage.



Kicklighter Road and Macy Avenue

Findings: Using Community Development Block Grant funding, the City of Lake Helen plans to incrementally pave Summit Avenue from Kicklighter Road to Ohio Avenue. Current plans do not include sidewalks or bicycle lanes.

Recommendations: The City should include a minimum 5 foot wide sidewalk on at least one side of Summit Avenue from Kicklighter Road to Ohio Avenue. If right of way is limited, the City should consider the possibility of shifting the roadway within the right of way to allow for construction of a sidewalk on one side of the road.



Summit Avenue looking north

Finding: Kicklighter Road west of Macy Avenue is paved to Summit Avenue. The City of Lake Helen plans to pave Summit Avenue

Recommendation: The City of Lake Helen should plan for a sidewalk along Kicklighter Road to connect to the recommended sidewalk along Summit Avenue. Terrain and right of way restrictions, especially near the cemetery, may result in the sidewalk being located on the south side of this road.



Kicklighter Road looking east near Summit Avenue

Finding: The sidewalk along the west side of Euclid Avenue does not connect to the sidewalk along the north side of Ohio Avenue.

Recommendation: Construct a 5' wide by 300' long sidewalk connection from the end of the existing sidewalk along Euclid Avenue to the sidewalk on Ohio Avenue.



Euclid Avenue looking south near Water Street

Findings: The new trail at the intersection of Pleasant Street and Washington Avenue includes a free-standing curb that may create a trip hazard.

Recommendations: Remove the curb or create a raised sidewalk with curb ramps at this intersection. As an interim measure, paint the curb yellow.



Pleasant Street and Washington Avenue

Finding: Stop bars and crosswalks are missing or are faded at some intersections.

Recommendation: The City should repaint stop bars and crosswalks at intersections within the Volusia Pines Elementary School walk zone.



Students cross Pleasant Street at Ohio Avenue

Master Plan

The following Bicycle and Pedestrian Master Plan specifies a network of sidewalks and trails that, if implemented, will greatly increase the convenience and safety of travel for pedestrians and bicyclists. A 24"x36" fold-out Bicycle and Pedestrian Master Plan is included as a deliverable with this Study.

The Master Plan includes the following information:

Existing Conditions:

- Existing Walk Zone area from School District GIS (shaded tan)
- Student Home Locations from School District (dark blue dot)
- Existing Trails from County GIS and field review (solid green line)
- Existing Wide Sidewalk 6-8' from field review (solid blue line)
- Existing Sidewalks 3-5' from field review (solid red line)
- Existing Crossing Guard Locations from County GIS and field observations (green cross for existing to remain and yellow cross for recently closed)
- Existing Votran Routes and stops from Volusia County MPO (yellow lines along roadway centerline with yellow squares at bus stops).

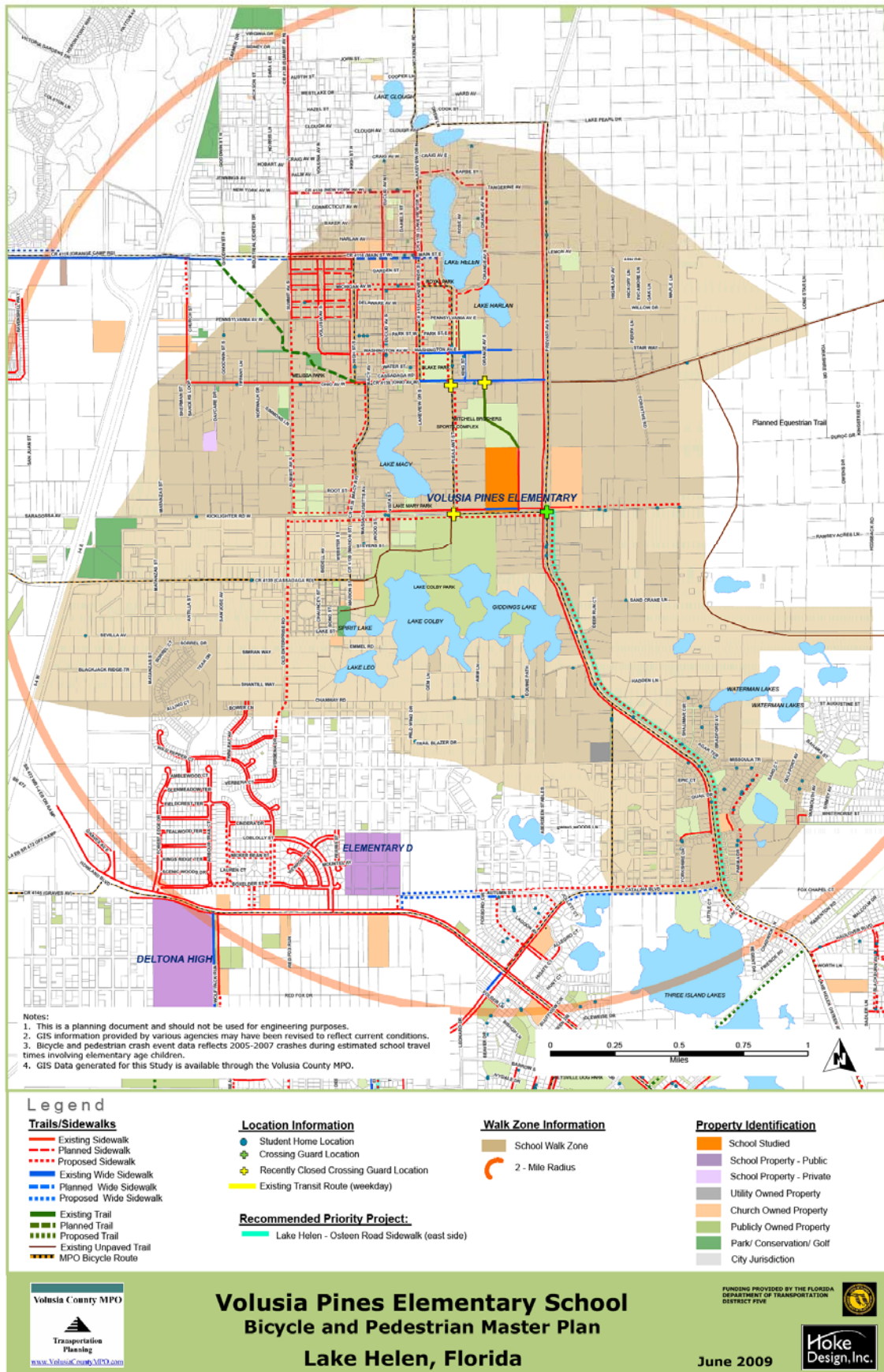
Planned Conditions:

- Planned trail (long dashed dark green line)
- Planned wide sidewalk (long dashed blue line)
- Planned sidewalk (long dashed red line)

Recommendations of this Study:

- Proposed Trails (dashed dark green line)
- Proposed Sidewalks 6-8' wide (dashed blue line)
- Proposed Sidewalks 5' (dashed red line)
- Blue Highlighted sidewalk is a recommended Priority Project

This Master Plan and supplemental information supplied within the Implementation Report are meant as a guideline for sidewalk and trail planning. The Master Plan is not an engineering document.



Recommended Priority Project

Lake Helen – Osteen Road Sidewalk (east side)

School Served: Volusia Pines Elementary School

Project Location: East side of Lake Helen-Osteen Road from Kicklighter Rd. to Parma Drive

Project Description: A minimum 5 foot wide sidewalk, 1.74 miles long

Findings: There is no sidewalk along the east side of Lake Helen-Osteen Road within the walk zone. Students living east of Lake Helen-Osteen Road and south of Kicklighter Road cross Kicklighter Road at various locations to reach the sidewalk on the west side.

There is a sidewalk along the west side of Lake Helen-Osteen Road/Prevatt Avenue from Yorkshire Road to north of the walk zone.

This section of Lake Helen Osteen Road may receive stimulus finding for resurfacing.

Recommendation: Construct a minimum 5 foot wide sidewalk along the east side of Lake Helen-Osteen Road from Kicklighter Road to Parma Drive.

Maintaining Agency: Volusia County is the maintaining agency. Portions of the road are within the City of Lake Helen, unincorporated Volusia County and the City of Deltona.

Potential Constraints:

- Minor drainage in some sections
- More coordination may be required to work with multiple agencies
- Right of way appears to be available but may vary by jurisdiction

Potential Opportunities:

- Funding partners may be possible with multiple agencies
- More students may walk or bicycle to school
- Fewer driveways and roadway intersections may lower construction costs

Estimated Project Cost (not including right of way costs, if applicable): \$870,000



Lake Helen-Osteen Road looking north toward the intersection of Kicklighter Road



Lake Helen-Osteen Road looking north

Note: The Priority Project is highlighted in blue on the corresponding Bicycle and Pedestrian Master Plan.



Key

City of Lake Helen: Shaded Pink
City of Deltona: Shaded Yellow
Unincorporated Volusia County: No Color (white)