

# Safe Routes to School

*Proposed Lafayette Avenue & Spring Street  
Sidewalk Improvement Project*



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October 8, 2015

# Federal Highway Administration's Federal Aid Program – Safe Routes to Schools

## *Program Goals*

- To enable and encourage children in grades K-8, including those with disabilities, to walk and bicycle to school;
- To make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and,
- To facilitate the planning, development and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption and air pollution in the vicinity of schools.

# Federal Highway Administration's Federal Aid Program – Safe Routes to Schools

## *Program Objectives*

- Improve Children's Safety While Walking and Bicycling
- Promote Physical Activity & a Healthy, Active, Lifestyle
- Reduce Vehicle Trips to Relieve Traffic Congestion & Improve Air Quality
- Increase the Independence of Seniors, Youth, and Others Without Access to Cars
- Foster greater social cohesion and a sense of community

# Chatham Township Initiatives

## *Safe Routes to School*

- **International Walk to School Day – October 2011**
- **District-wide walk/bike to school week – April 23-27, 2012**
- **Safe Routes to School display at the Green Fair of the Chathams – September 22, 2012**
- **District-Wide Bike Rodeo (Chatham Borough Police) – October 6, 2012**
- **Monthly ‘Walk to School Days’ for K-5 Students by Parent Volunteers – Spring 2012 to Present**
- **District-Wide Bike Road & Pedestrian Safety Event with the Chatham Twp. Police– October 5, 2013 & May 3, 2014.**
- **Data Collection by TransOptions – Fall 2011 through Fall 2014**
- **Parent Survey by Rutgers Transportation Center – Fall 2012**
- **Biking Curriculum Introduced by TransOption biking specialist –Spring 2013**
- **Biking Curriculum continued by Physical Education Teachers – Spring 2014**
- **Chatham Police Participation in Lafayette School's Walk to School Day – October 2014**
- **Participation in National Walk to School Day – October 2015**
- **Washington Ave. School - Received Gold Award from NJ Safe Routes to School – October 2015**
- **Chatham SRTS on Film: <http://www.saferoutesnj.org/chatham-srts-on-film/>**

# Chatham Township Initiatives

## *Safe Routes to School Implementation*

- 2008 – Constructed bike path from Southern Blvd. School to Rolling Hill Neighborhood
- 2011 – Sidewalk Repairs on western Lafayette Ave. sidewalk
- 2012 – Vegetation Removal for Physical & Site Obstruction at the curve of Longwood Ave.
- 2012 – New Crosswalks at Crestwood Dr. & Lafayette Ave.
- 2012 – Installed a 4-Way Stop sign at School St. & Floral Ave. intersection
- 2012 – Sidewalk Repairs on Southern Blvd.
- 2012 – Crossing Guard added at Maple & Lafayette Ave. Intersection
- 2013 – Vegetation Removal for Physical & Site Obstructions at the corner of Lafayette Ave. & Fairview Ave.
- 2013 – Asphalt sidewalk from Fairview Ave. to Lafayette Ave. School Entrance Driveway on Lafayette Ave.
- 2013- Pedestrian Crosswalk Warning Signs added at 3 Locations (Lafayette Ave./Longwood, Lafayette Ave./Crestwood, & Longwood/Dellwood)
- 2013 – Parking Regulations on Dale Drive from Robert Drive to Spring Street
- 2014 – Shunpike Sidewalk to Cougar Field

# School District of the Chathams Policy

## *Policy 8681*

### For Pupils Walking To and From School

- Adopted: January 28, 2013
- Support of Safe Routes to School Programs
- Promote student well-being
- Use of crosswalks, sidewalks, crossing guards, etc.
- Bicycle racks present at each of the schools

# Travel Plans: What Are they?

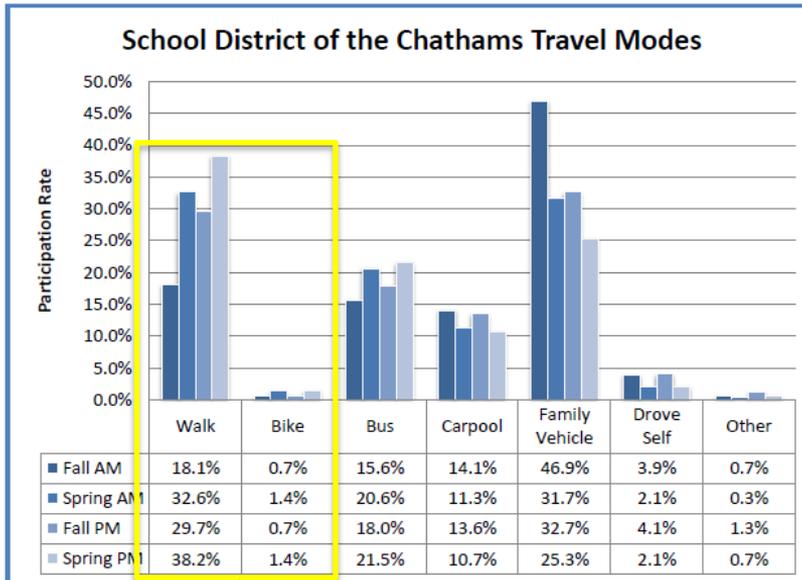
## *Safe Routes to School Travel Plans by TransOptions*

- NJDOT partnered with TransOptions, Inc., to administer a statewide education and encouragement program for SRTS
- Goal of Travel Plan – Create safer routes for pedestrian and bike travel by identifying problem areas and proposing solutions
- Contains: Walking/Biking Barriers, Opportunities for Walking/Biking, Map of Neighborhood, Goals & Actions, Program Evaluation & Monitoring

# Travel Plans: Statistics

## Safe Routes to School Travel Plan by TransOptions

Overall:



Avg.: 30.7% Walk/Bike to School\*



Southern Boulevard School (PK – 3) – 490 Students

Lafayette Avenue School (4 – 5) – 634 Students

Milton Avenue School (PK – 3) – 344 Students

Washington Avenue School (K – 3) – 447 Students

Chatham Middle School (6 – 8) – 962 Students

Chatham High School (9 – 12) – 1145 Students

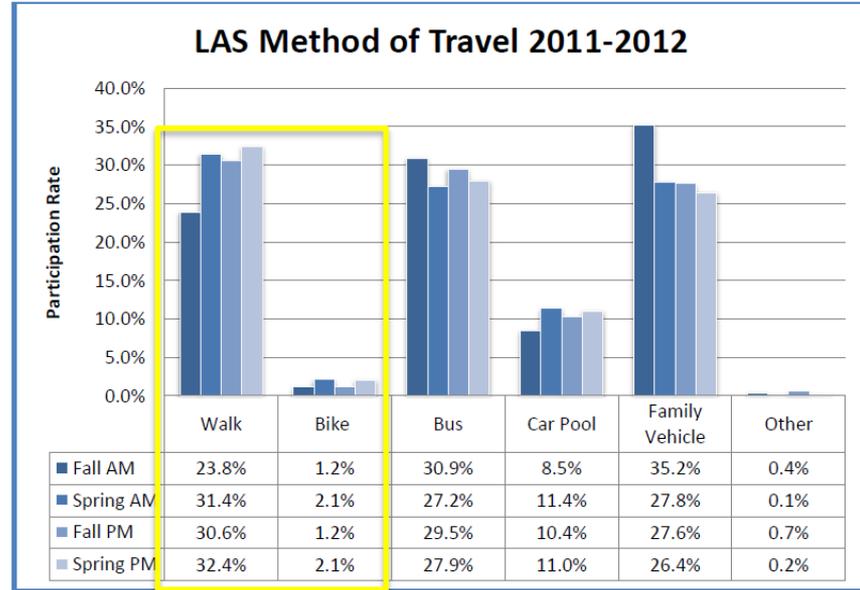
# Travel Plans: Statistics

## Safe Routes to School Travel Plan by TransOptions

### Lafayette Avenue School

Lafayette Avenue School 4 - 5		
Distance to School	Percentage	Count
0.25 Mi.	0.5%	3
0.5 Mi.	6.3%	37
0.75 Mi.	16.9%	67
1 Mi.	28.2%	72
1.01-1.5 Mi.	54.9%	169
1.51-2.0 Mi.	77.3%	142
>2.0 Mi.	100.0%	140
<b>Total</b>		<b>634</b>

28.2% of Students Live within a 1 mile radius



Avg.: 31.2% Walk/Bike to School, (Avg. of before & after SRTS encouragement)

\*Source: Student Travel Tally conducted at each school in the Fall of 2011 & Spring of 2012, created by TransOption using the "Show-of-hands" collection method

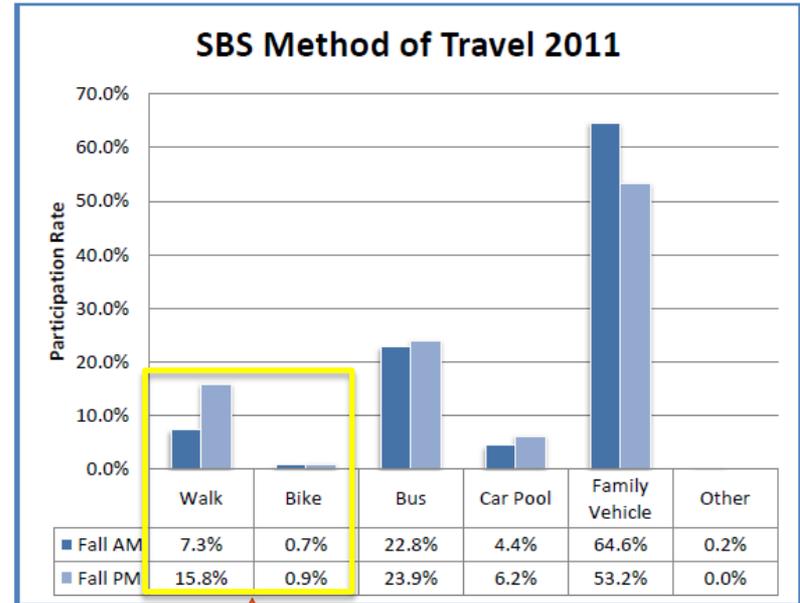
# Travel Plans: Statistics

## Safe Routes to School Travel Plan by TransOptions

### Southern Boulevard School

Southern Boulevard School K - 3		
Distance to School	Percentage	Count
0.25 Mi.	1.8%	9
0.5 Mi.	10.6%	43
0.75 Mi.	26.3%	77
1 Mi.	43.7%	85
1.01-1.5 Mi.	67.6%	117
1.51-2.0 Mi.	77.6%	49
>2.0 Mi.	100.0%	110
<b>Total</b>		490

43.7% of Students Live within a 1 mile radius



Avg.: 12.4% Walk/Bike to School, Prior to SRTS Encouragement

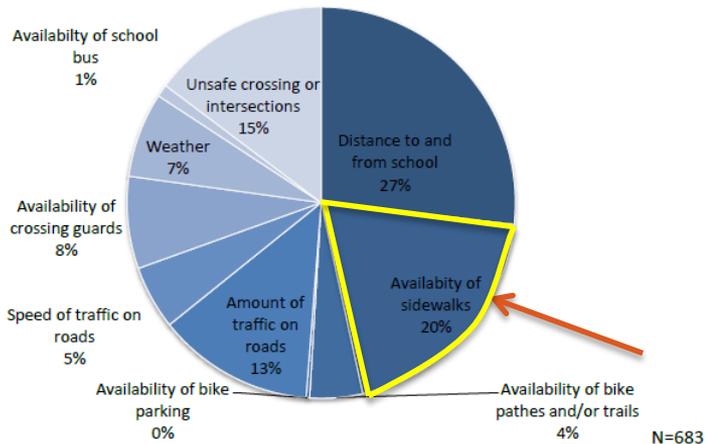


\*Source: Student Travel Tally conducted at each school in the Fall of 2011, created by TransOption using the "Show-of-hands" collection method

# Travel Plans: Recommendations

## Safe Routes to School Travel Plan by TransOptions

Most Important Factor for If Child Walks/Bikes to School or Not



### Sidewalks Requested:

Busy traffic roads a priority; between SBS, LAS, Colony and CHS a priority

1. Lafayette Ave: Lafayette Ave School to Fairview Ave
2. Lafayette Ave east side: Lafayette Ave School to Shunpike
3. Spring Street: Lafayette Ave corner to path at high-tension wires.
4. Shunpike South Side : Cougar Field to Noe (#1) and Noe to Lafayette (only Falmouth to Lafayette has sidewalk now)
5. Longwood Ave: from Dellwood to Longwood gate of high school or all of Longwood.
6. Dale Drive from Robert Drive to SBS back path or on curve all the way to Spring Street
7. Lafayette Ave.: Chatham High School driveway to Longwood

# Chatham Township Master Plan Documents

## *Safe & Accessible Routes*

Three plan elements that address the overall need for safe & accessible alternative modes of transportation

1. Circulation Plan (1999) – Sidewalks Not mentioned
2. Walkway/Bikeway Plan (2009) – Dedicated sidewalks are the preferred pedestrian facility on roadways
3. Open Space Plan (2010) – Sidewalks Not mentioned

# Regulatory Policies:

## State: New Jersey Residential Site Improvement Standards (RSIS)

### Lafayette Avenue – Major Collector

- Approx. 6,000 ADT (Avg. Daily Traffic)
- 50-ft Right of Way

### Spring Street – Minor Collector

- Low Intensity
- 50-ft Right of Way

#### Definitions per RSIS:

Major Collector: 3,501-7,500 ADT

Minor Collector: 1,501-3,500 ADT

#### Intensity:

Low – Less than or equal to 4 dwelling units / gross acre

Medium – More than 4 and less than or equal to 8 dwelling units / gross acre

High – More than 8 dwelling units / gross acre

STREET TYPE <sup>a</sup>	TOTAL AVG. DAILY TRAFFIC	TRAV-ELED WAY	NO. OF PARKING LANES <sup>b</sup>	PARKING LANE WIDTH	CART-WAY WIDTH	CURB OR SHOULDER <sup>h</sup>	SIDE-WALK OR GRADED AREA <sup>i</sup>	RIGHT-OF-WAY WIDTH <sup>i</sup>
<b>MINOR COLLECTOR<sup>i</sup></b>	3,500							
Low intensity <sup>d</sup> with no parking		20'	0	0'	20'	None	1 SW 1 GA	50'
Low intensity with one parking lane		21'	1	7'	28'	Curb	1 SW 1 GA	50'
Medium and high intensities with one parking lane		21'	1	7'	28'	Curb	2 SW	50'
Medium and high intensities with two parking lanes		22'	2	14'	36'	Curb	2 SW	60'
Medium and high intensities with off-street parking		22'	0	0'	22'	Curb or shoulder	2 SW	50'
<b>MAJOR COLLECTOR<sup>i</sup></b>	7,500							
Low intensity		24'	0	0'	24'	None	2 SW	50'
Medium and high intensities		24'	0	0'	24'	Curb or shoulder	2 SW	50' if curb, 54' if shoulder

# Regulatory Policies:

*Federal: SafeRoutesToSchool.org*

“Where feasible, sidewalks should be provided on both sides of the street. A sidewalk on only one side forces pedestrians to either walk in the street or cross the street twice to get to the side with a sidewalk and back again.”

“Sidewalks also need to provide a continuous path. Just as streets are designed and built to provide a continuous network, sidewalks too should provide users with a continuous path.”

# New Jersey Statewide Initiative:

## *Safe Routes to School*

### **2012 NJ Safe Routes to School Strategic Plan Mission:**

“Empower communities to identify and overcome barriers to walking and cycling to school through the creation of partnerships and implementation of projects and programs that make walking and biking to and from school an appealing and safe daily activity.”

# Project Need

## Safety

Sidewalks significantly reduce pedestrian collisions with motor vehicles: DOT study found that in residential areas pedestrian crashes were more than two times as likely to occur at locations without sidewalks than would be expected on the basis of exposure. \*

(\*Source: Knoblauch RL, Tustin BH, Smith SA, Pietrucha MT. Investigation of Exposure-Based Pedestrian Accident Areas: Crosswalks, Sidewalks, Local Streets, and Major Arterials. DOT publication FHWA-RD-87-038. Washington, DC: US Dept of Transportation; 1987. Killing Speed and Saving Lives, U.K. Department of Transportation, London, 1987.)

# What Are The Risks?

## High Risk Areas:

- Pedestrians crossing mid-block
- Left turning motorist accidents
- Unexpected conflicts at driveways & intersections (i.e. Backing out, turns, etc.)
- “Dead-End” Sidewalks ending Abruptly

# Public Opinions

## *Against:*

- No Need for Project
- Alternatives are Available (Sidewalk already on other side of roadway)
- Removal of trees, vegetation, & landscaping (Changing the Character of the Community)
- Impact on Property Values
- Dangerous Crossings Parallel to Lafayette (at Fairview, Oak, & Chandler)
- Maintenance/Liability
- Stormwater Impacts

# Public Opinions

*For:*

- Support of SRTS Initiatives
- Relieve congestion on Spring St. during after-school pick-up
- Improve Intersection Crossing Safety
- Connectivity of residential communities, and community gathering places (i.e. Colony Pool)
- Removes “Dead End” Sidewalk at Fairview Ave.
- Supported by Chatham Borough & Board of Education

# Alternatives



# Alternatives:

## *Proposed Grant Project*

### Proposed Grant Project – Spring St. Sidewalk (Eastern Side) & Lafayette Ave. Sidewalk:

- Cost
  - Grant – 100% (Construction Cost Only)
  - Local – \$100,000 +/-
- Implementation – Long Term Capital Improvement
- Risk Reduction – Highly Effective (Reduces Trips Crossing the Street)

# Physical Impacts/Challenges

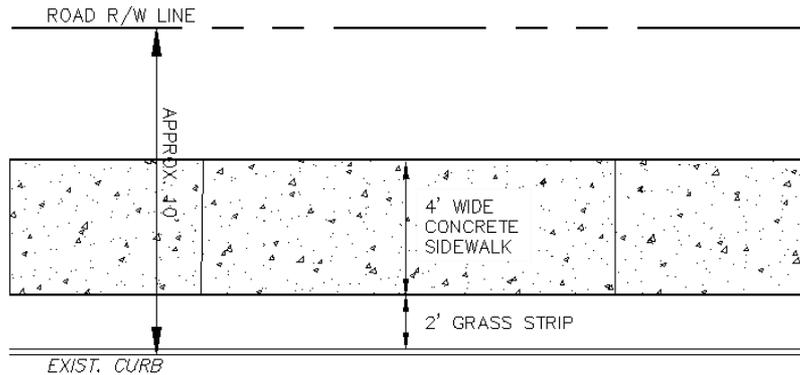
## *Proposed Grant Project*

- Tree Removal
- Landscaping Features
- Irrigation Systems
- Utility Poles
- Decorative Driveway Aprons
- Stormwater Impacts



# Construction Layout

*Proposed Grant Project*

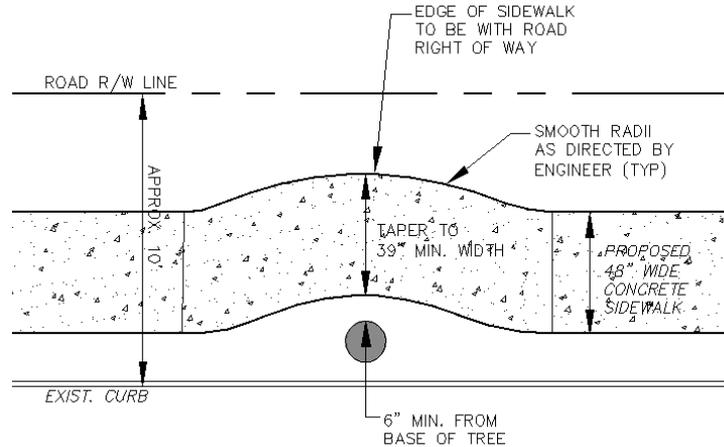


## STRAIGHT SIDEWALK ALIGNMENT

NOT TO SCALE

## Typical Layout:

- 2' Wide Grass Strip
- 4' Wide Concrete Sidewalk



### NOTES:

1. NOT TO SCALE, SETBACK FROM CURB VARIES AT EACH TREE LOCATION.
2. BUTTRESS ROOTS 3" IN DIAMETER OR GRATER SHALL NOT BE SEVERED BUT MAY BE SHAVED UP TO  $\frac{1}{2}$  OF THEIR DIAMETER.

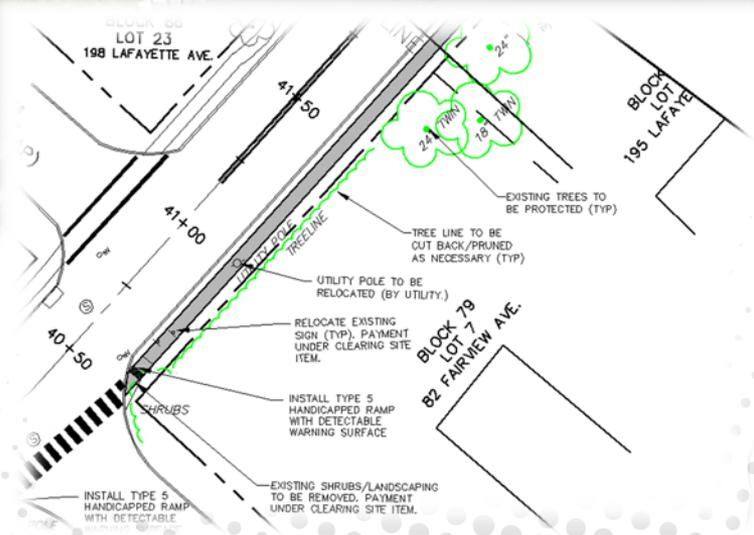
## SIDEWALK TREE RADIUS DETAIL

NOT TO SCALE

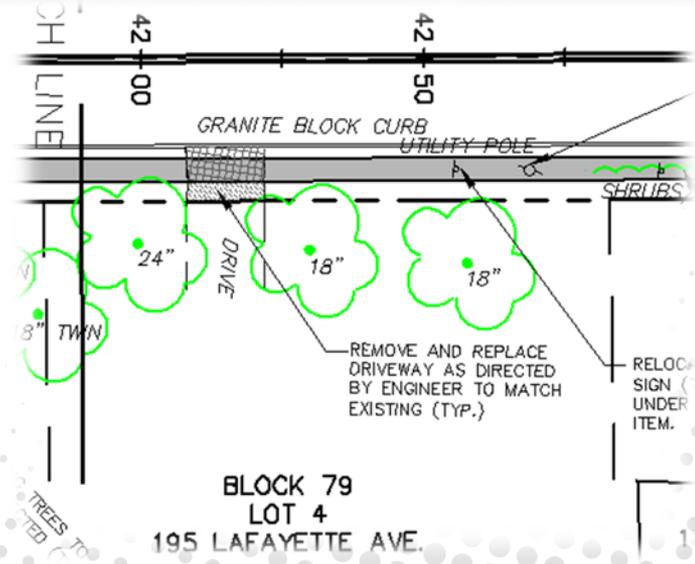




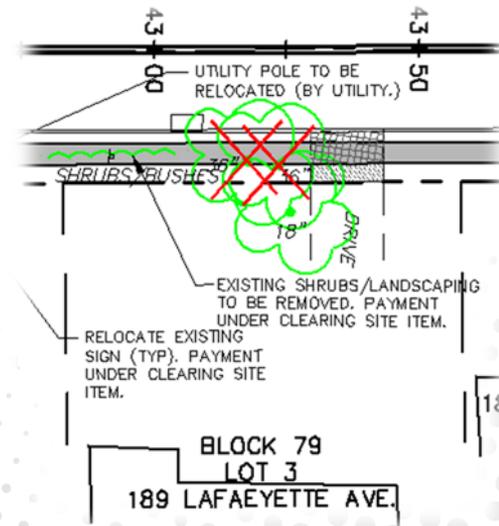
# 82 Fairview Avenue



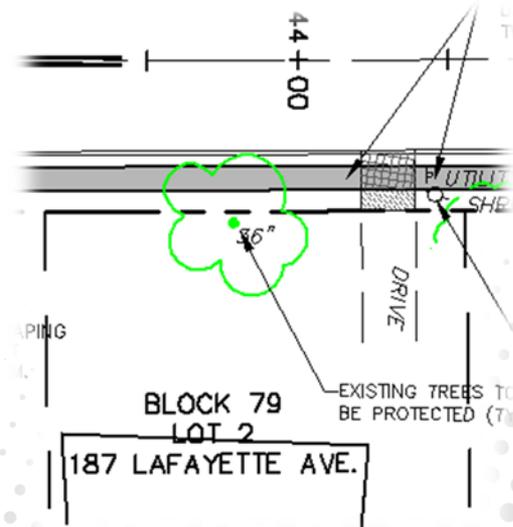
# 195 Lafayette Avenue



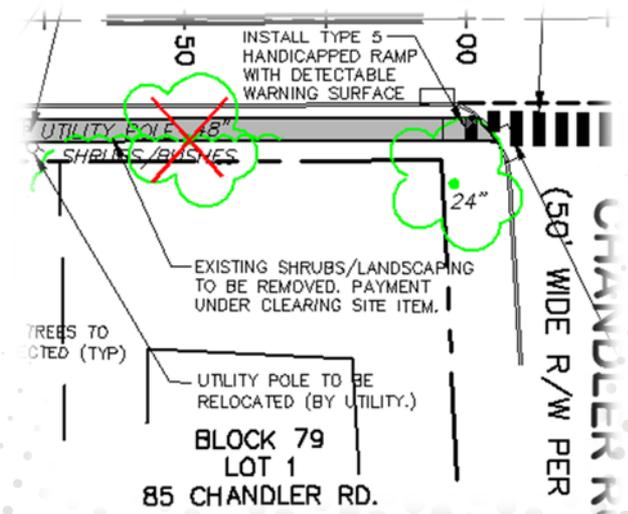
# 189 Lafayette Avenue



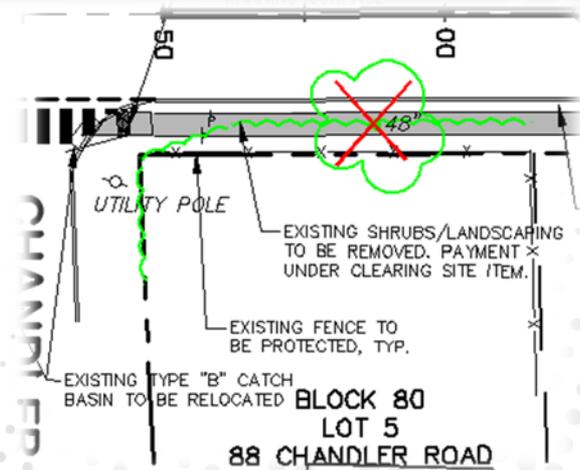
# 187 Lafayette Avenue



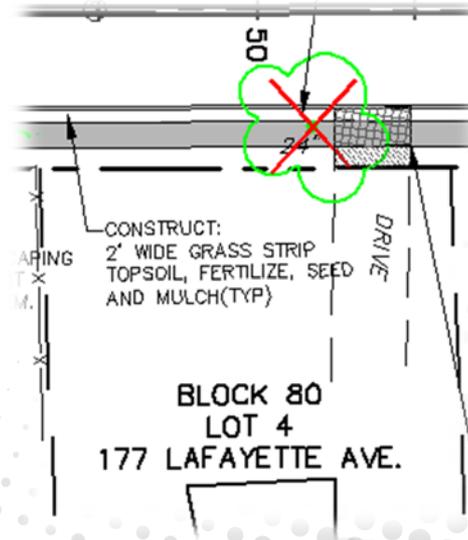
# 85 Chandler Road



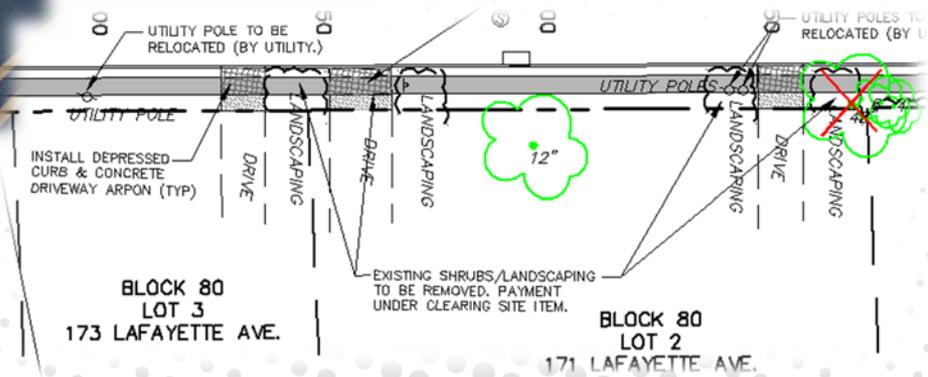
# 88 Chandler Road



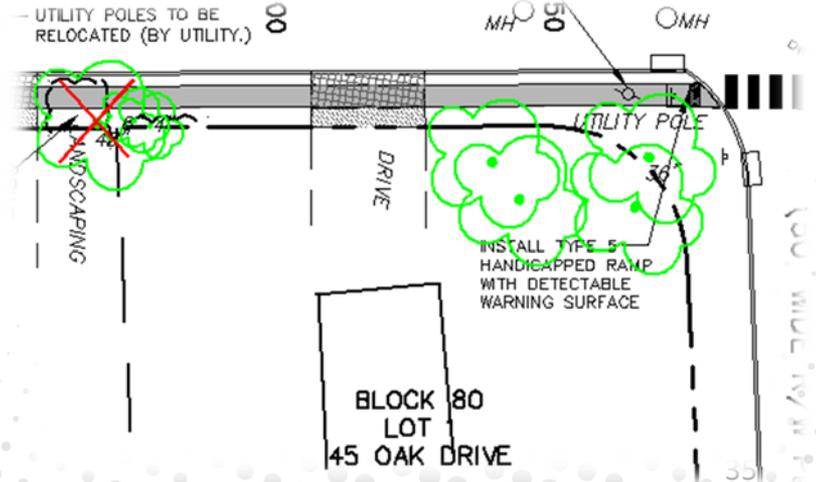
# 177 Lafayette Avenue



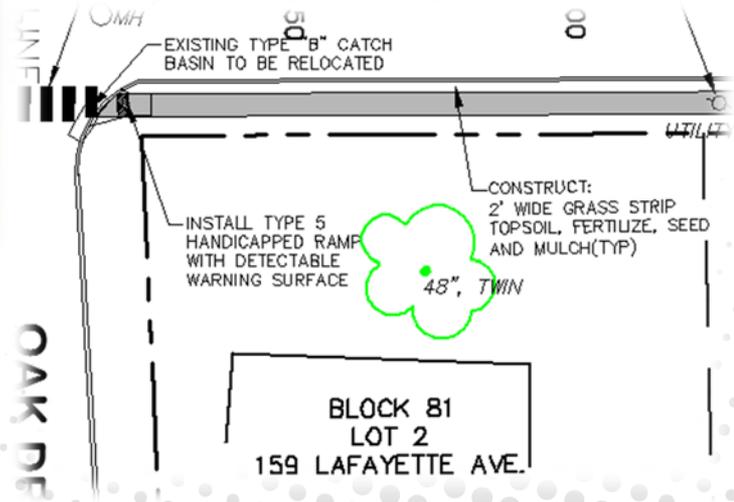
# 171 & 173 Lafayette Avenue



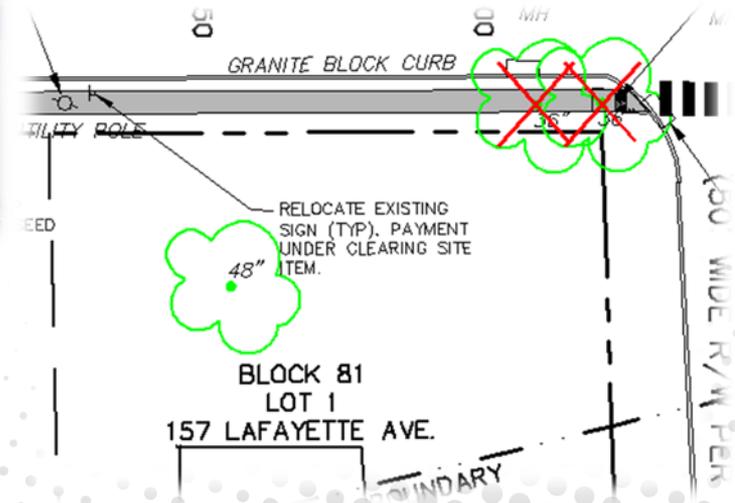
# 45 Oak Drive



# 159 Lafayette Avenue



# 157 Lafayette Avenue



# 50 Inwood Road

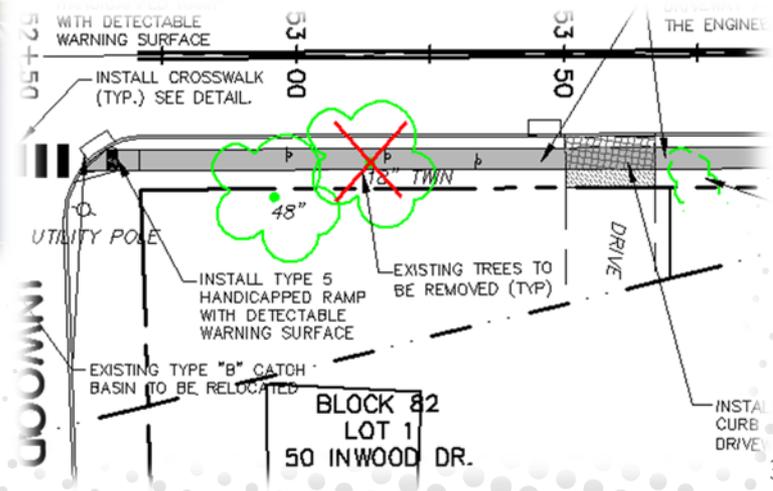


Google earth



©2013 Google

Google earth



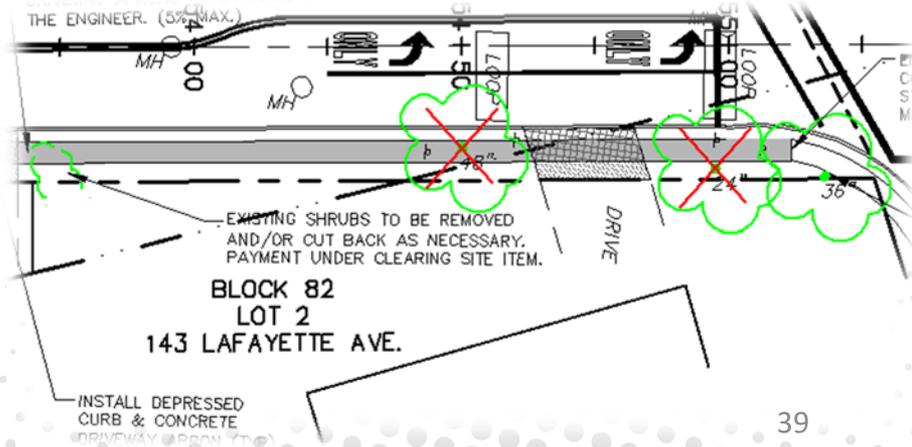
# 143 Lafayette Avenue



Google earth

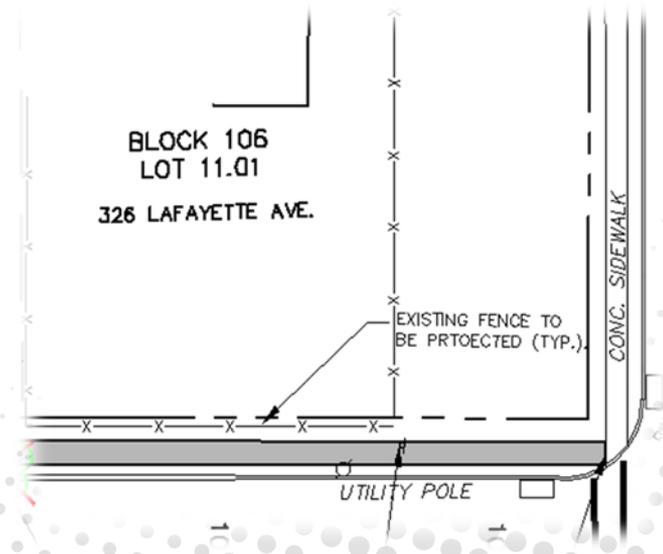


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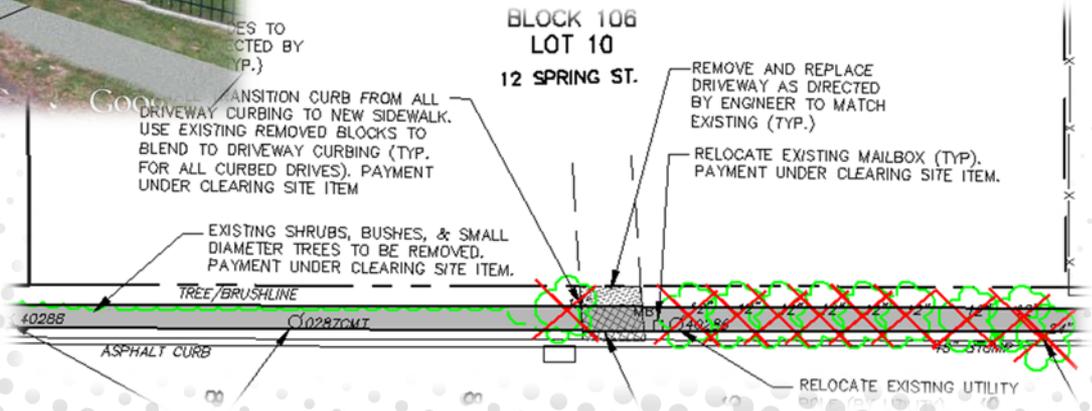




# 326 Lafayette Avenue



# 12 Spring Street



# Alternatives:

## *7 Spring Street*



# Alternatives:

## *11 Spring Street*



# Alternatives:

*15 Spring Street*



# Alternatives:

## *19 Spring Street*



# Alternatives:

## *21 Spring Street*

21 Spring St  
Chatham Township, New Jersey  
Street View - Sep 2013



# Alternatives:

## *25 Spring Street*



# Alternatives:

## *29 Spring Street*



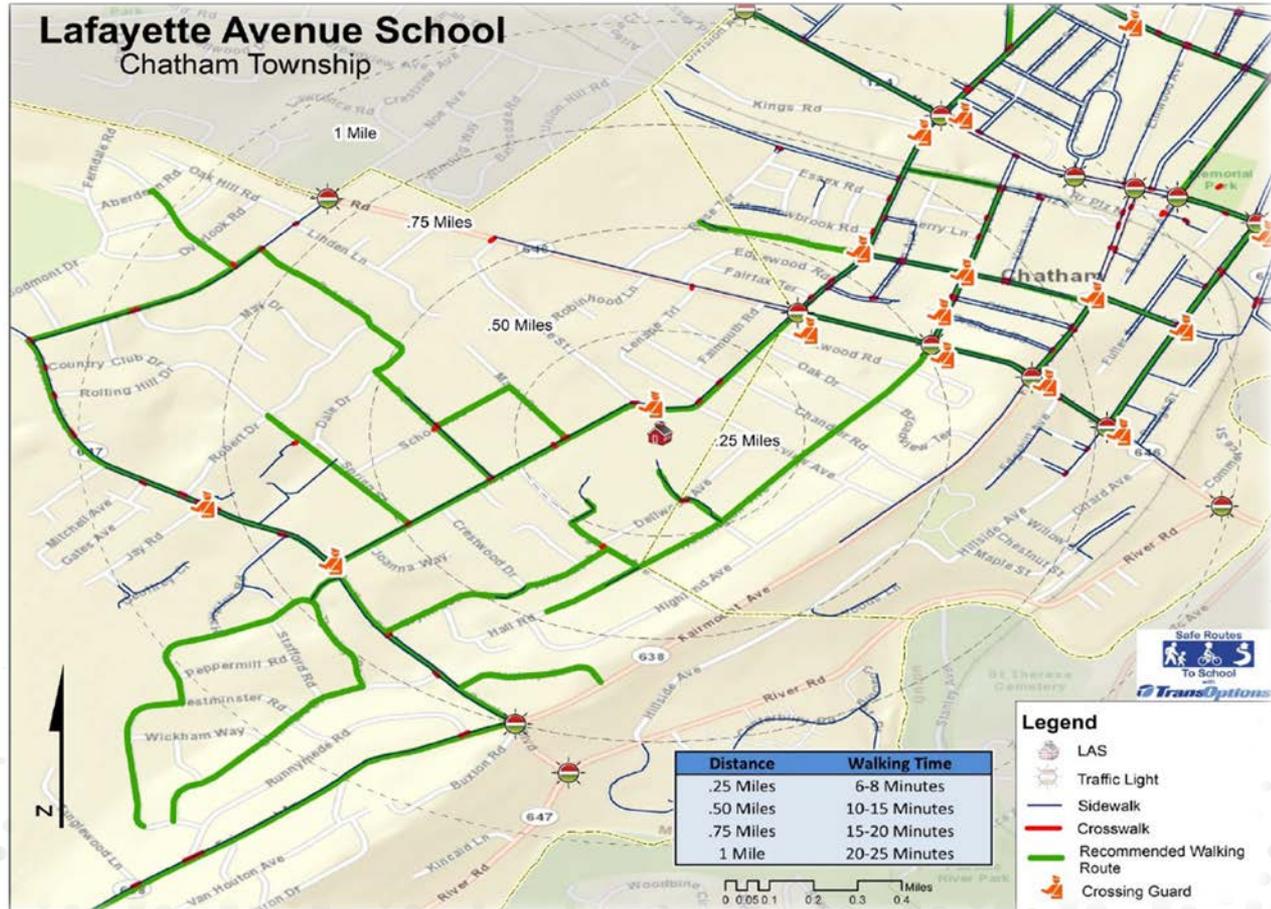
# Alternatives:

## *Neighborhood Striping & Signage (Education & Encouragement)*

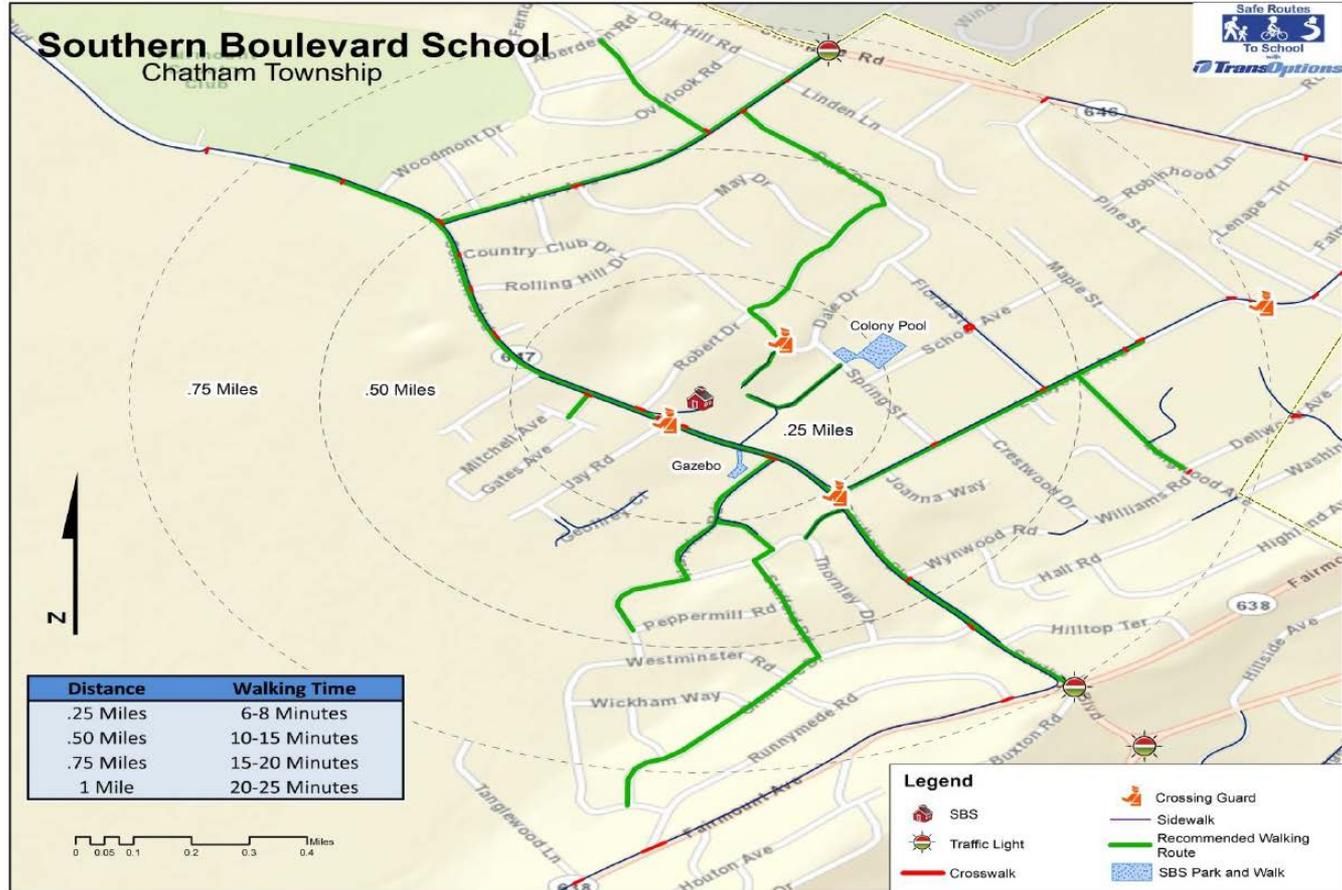
### Neighborhood Striping & Signage (Education & Encouragement):

- Cost
  - Grant - \$0 (Not an Eligible use of Grant Funding)
  - Local – Minimal
- Implementation – Requires Continuous Public Outreach
- Risk Reduction – Will Vary

# Alternatives



# Alternatives



# Alternatives:

## *Enforcement: Changing Driver, Walker, & Biker Behavior*

Enforcement: Changing Driver, Walker, & Biker Behavior;  
Changing speed limit from 35 MPH to 25 MPH (Lafayette)

- Cost
  - Grant - \$0 (Not an Eligible use of Grant Funding)
  - Local – \$5,000 (Speed Indicator) and Limited Resources available (New Hire?)
- Implementation – Requires Continuous Monitoring
- Risk Reduction – Effective but May Be Short Term

# Alternatives:

*New Crosswalks: Chandler Road, Oak Drive, & Inwood Road*

## New Crosswalks: Chandler Road, Oak Drive, & Inwood Road

- Cost
  - Grant - \$0
  - Local – \$25,000 (ADA Ramps & Lighted Signs)
- Implementation – Permanent Capital Improvement
- Risk Reduction – Highly Effective; Risk is further reduced with Sidewalks

# Alternatives:

## *Parking Restriction on Spring Street*

### Parking Restriction on Spring Street:

- Cost
  - Grant - \$0
  - Local – Minimal
- Implementation – Focus on Pick-up/Drop-off
- Activities Risk Reduction - Effective

# Project Schedule/Deadline for Grant

*2-year Grant Eligibility*

Grant Awarded: Spring 2015

Per the NJDOT: The project must receive Federal Authorization for construction/implementation within two years of the award date. (Needs to be Federally approved by Spring 2017) Bidding phase, award, & construction scheduled to be approved by NJDOT.

# Federal Requirements

## *Federal Aid Program*

1. Preparation of Policies & Procedures Manual\*
2. Questionnaire & Agreements\*
3. Preparation of Environmental Document\*
4. NJDOT DBE/ESBE Participation & Trainee Goals\*
5. Preparation of plans, specifications & cost estimates
6. Permit Certification (SESC)
7. Right-of-Way Certification
8. Utility Certification

\*Requires extensive NJDOT review

# Project Schedule/Deadline

## *Projected Construction Schedule*

Design/Permit: Winter 2015 – Spring 2016

NJDOT Document Reviews: Fall 2015-Winter 2016

Federal Authorization: Winter 2016

Advertise/Award Construction Contract: Spring 2017

Construction: Summer-Fall 2017

Close-out: Winter 2018

# Questions?