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TRAFFIC CALMING REPORT

BOROUGH OF JENKINTOWN

Prepared for:

Jenkintown Borough
700 Summit Avenue
Jenkintown, PA 19046

June 25, 2007
JENK 0601

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I. TRAFFIC CALMING

A. *INTRODUCTION*

The Borough of Jenkintown, one of the older Boroughs of Montgomery County, is located just outside of Philadelphia along the Route 611 corridor between Abington and Cheltenham Townships. Jenkintown Borough is approximately .58 square miles and is the home to approximately 4,500 residents. The Borough is a mainly a residential community that is separated into an east section and a west section by the Central Business District that runs along and surrounds the Route 611 (York Road) corridor.

Over the past several years, Jenkintown Borough has focused much of its time and resources to revitalization with many of its goals and objectives focused on transportation mobility, efficiency and safety. Jenkintown Borough is a pedestrian oriented community in which residents walk to stores, the Post Office, Church, school, and patrons are able to easily walk throughout the Central Business District. The revitalization efforts completed to date include the implementation of streetscape improvements, increased public parking and shared parking, and various traffic calming enhancements.

As a reflection of Jenkintown Borough's commitment to continue revitalization, a comprehensive traffic calming study was completed to address traffic concerns in residential areas of the Borough, such as speeding and cut-through traffic. The primary goal of the study is to promote the preservation of the residential character of the Borough's neighborhoods and improve the overall quality of life.

B. JENKINTOWN BOROUGH'S ROADWAY SYSTEM

Jenkintown Borough's roadway system, as illustrated in **FIGURE 1** is comprised of several types of roadways.

York Road (SR 0611) is classified as a principal arterial. By definition, a principal arterial carries the majority of vehicle trips entering and exiting an area as well as the majority of the through movements desiring to bypass an area. In addition, intra-area travel, such as travel throughout the Central Business District and the nearby residential areas should be served by the principal arterial system. York Road provides access into the Borough at its intersection with Washington Lane at the southern boundary and at its intersection with Rodman Avenue at the northern boundary. The posted speed limit within the Borough's boundaries is 25 mph. In general, the roadway is comprised of four 10-foot lanes.

Greenwood Avenue (SR 2021) / West Avenue (SR 2021) / Walnut Street (SR 2021) are classified as minor arterials interconnecting with York Road (S.R. 0611) at Greenwood Avenue (SR 2021) and West Avenue (SR 2021). By definition, a minor arterial interconnects and augments a principal arterial and provides service to trips of moderate length at a lower level of travel mobility than principal arterials. The posted speed limit on all roadways within the Borough's boundaries is 25 mph. Route 2021 provides access into the Borough at its intersection with Washington Lane at the eastern boundary and at its intersection with Runnymede Avenue at the western boundary. The width of the roadway varies throughout the Borough. Greenwood Avenue (SR 2021), between York Road (SR 0611) and Washington Lane, is one-way eastbound. In addition, West Avenue (SR 2021) is one-way westbound on its 700 block, between York Road (SR 0611) and Leedom Street.

Washington Lane is classified as a minor arterial, interconnecting with York Road (SR 0611) near the eastern Borough boundary. In general, Washington Lane has a two lane cross-section. The posted speed limit within the Borough's boundaries is 25 mph. Washington Lane provides access into the Borough at its intersection with Greenwood Avenue (SR 2021) at the eastern boundary and Township Line Road (SR 2054) at the southern boundary.

Township Line Road (SR 2054) is classified as a minor arterial providing access into the Borough at its intersection with Washington Lane at the southern boundary and at its intersection with Summit Avenue at the western boundary. In general, Township Line Road (SR 2054) has a two lane cross-section and a posted speed limit of 35 mph.

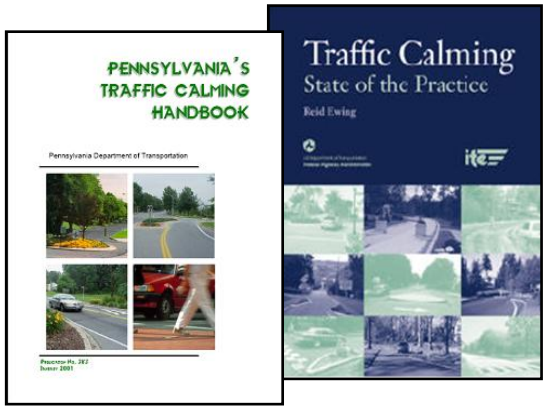
The Borough owned sections of **Greenwood Avenue** and **Walnut Street** are classified as urban collector roadways. These sections include Greenwood Avenue between York Road (SR 0611) and Township Line Road (SR 2054) and Walnut Street between West Avenue (SR 2021) and Washington Lane. By definition, a collector street collects traffic from local streets in residential neighborhoods and channels it into the arterial system. Greenwood Avenue is one-way eastbound on its 500, 600 and 700 blocks. In general, Greenwood Avenue and Walnut Street have a two lane cross-section and a posted speed limit of 25 mph within the Borough's boundaries.

All other roadways are Borough-owned and mainly residential. As illustrated in **FIGURE 1**, access into and out of the Borough is also present at the intersections of Washington Lane and Newbold Road and Rydal Road and Newbold Road.

C. OVERVIEW OF TRAFFIC CALMING

Traffic calming, as defined by the Institute of Transportation Engineers (ITE), is "the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users." In the development of the comprehensive traffic calming plan, the following goals of the Borough were incorporated:

- Achieve safe, slow speeds for motor vehicles;
- Reduce transient traffic;
- Improve the safety and the perception of safety on the street;
- Reduce and redirect the need for traffic police enforcement; and
- Reduce crash frequency and severity.



Two main traffic calming resources were consulted during the development of Jenkintown Borough's comprehensive traffic calming plan. These resources include PennDOT Publication 383, "Pennsylvania's Traffic Calming Handbook" and ITE Publication "Traffic Calming – State of the Practice." As indicated in these resources, there are several advantages to implementing a traffic calming plan, many of which coincide with the Borough's revitalization goals. These advantages include:

- Increased Safety for Motorists, Pedestrians, and Bicyclists;
- Improved Quality of Life in the Neighborhood;
- Can Enhance the Neighborhood's Appearance;
- Most Measures are "Self-Policing" by Slowing Vehicles in the Absence of Enforcement.

However, before a traffic calming plan is implemented, PennDOT has defined a three-step process which should be followed to determine when traffic calming measures are appropriate. The three steps include:

1. Education
2. Enforcement
3. Engineering

The **Education** phase includes providing information to the community about the negative effects of offensive driving actions, such as speeding. The information is often distributed through brochures or neighborhood newsletters and may contain information on speeding fines (particularly in school zones), pedestrian and bicycle safety tips, and information on average speeds in the neighborhood.

The **Enforcement** phase involves a more intense police presence and a greater allocation of time toward monitoring vehicle speeds. Visible consistent enforcement is effective in gaining motorists' respect for the posted speed limit.

The **Engineering** phase includes the implementation of traffic calming measures. Engineering should not be initiated until Education and Enforcement have been unsuccessful in achieving the desired traffic calming goals.

In addition, several items must be considered before implementing a comprehensive traffic calming plan. These items include:

- Funding;
- Landscaping Maintenance Costs;
- Snow Removal;
- Possible New Drainage Patterns;
- Pedestrian Measures Must Meet ADA Requirements;
- Potential Decrease in Emergency Response Times and Inconvenience for Emergency Service Providers.

Two other important items to consider when implementing traffic calming measures is where to employ the measures and which measures are the most appropriate to employ at the designated locations.

Traffic calming measures may be implemented on local residential streets, collector streets with predominantly residential land uses, and arterial roads within downtown districts or commercial areas (with posted speeds of 40 mph or less) that are local or State-owned. Pennsylvania and U.S. Routes that mainly serve through traffic, and routes that contain truck volumes of 5 percent or greater are usually inappropriate locations for traffic calming measures.

Selecting the most appropriate measure to implement at a specified location is generally based on the following three (3) items:

- A measure's potential to address volume or speed issues at a location in relation to what the traffic calming goal is for that particular location
- Type of roadway
- Actual site conditions

TRAFFIC CALMING MEASURES

In order to select an appropriate traffic calming measure, the various measures are categorized based upon their primary function. These categories include:

- Horizontal Deflection
- Vertical Deflection
- Physical Obstructions

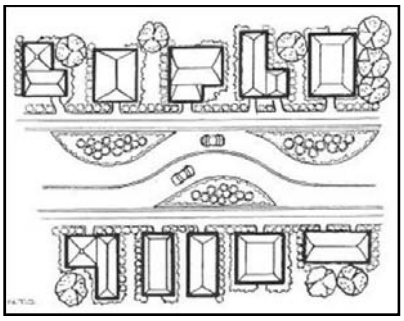
Horizontal Deflection includes the following two types of traffic calming measures:

- Horizontal Shift of Roadway - hinders the driver's ability to drive in a straight line by creating a horizontal shift in the roadway. The shifts force vehicles to slow down to safely navigate the measures.
- Narrowing Width of Travel Lane - reduces the usable surface of the roadway causing vehicles to slow down to maintain an acceptable level of comfort.

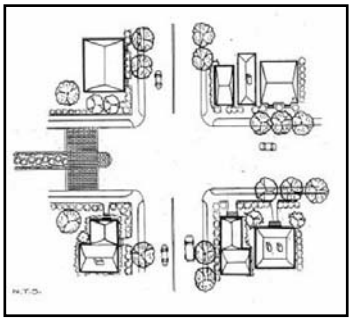
Horizontal deflection measures are generally used to address speeding concerns. However, they can also be used to improve pedestrian safety by reducing the width of a pedestrian crossing. The most commonly used horizontal deflection measures are:

Curb Extension/Bulb-Outs/Bump-Outs

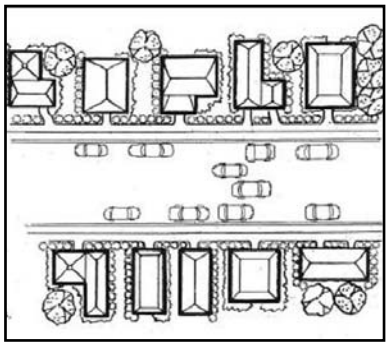
Chicanes



Gateways



On-Street Parking



Raised Median Islands

Traffic Circles

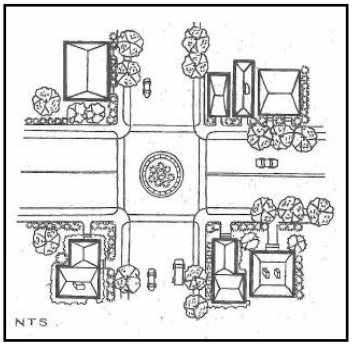
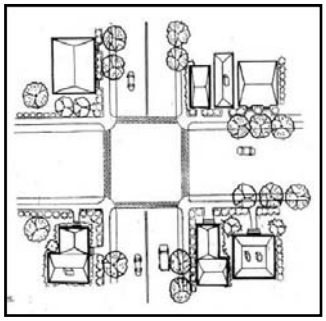


TABLE 1
HORIZONTAL DEFLECTION MEASURES

MEASURE	ADVANTAGES	DISADVANTAGES
Curb Extensions/Bulb-Outs/Bump-Outs	• Improves pedestrian safety • May reduce travel speeds • Prevents illegal parking close to intersections • Can improve Borough appearance with addition of landscaping	• Can result in loss of on-street parking • May prevent right turns at an intersection when another vehicle is stopped at the stop bar
Chicanes	• Reduces vehicle speeds • Reduces traffic volumes • Can improve Borough appearance with addition of landscaping	• Will require loss of on-street parking • With two-lane chicane, motorists may attempt to increase travel speeds by crossing the centerline to maintain a straight line of travel
Gateways	• Emphasize a change in environment from an arterial to a residential street • Create added streetscape area for landscaping	• If textured pavements are used, some noise may result
On-Street Parking	• May reduce travel speeds • Parked vehicles provide a buffer between traffic and pedestrians on the sidewalk	• Can reduce visibility between pedestrians and vehicles
Raised Median Islands	• Separates opposing vehicle travel lanes and prevents passing movements • Allows pedestrians to cross half of the street at a time • Vehicle speeds may decrease	• May require removal of on-street parking to create space for median • May restrict access to driveways from one direction
Traffic Circles	• Reduces vehicle speeds • Can significantly reduce motor vehicle collisions (particularly right-angle collisions) • Can improve Borough appearance with addition of landscaping	• May be difficult for emergency vehicles, buses and trucks to turn left • May require removal of on-street parking

Vertical Deflection measures create a change in height of the roadway and cause vehicles to slow down when traveling over the measures in order to avoid unpleasant bumps. Vertical deflection measures are also generally used to address speeding concerns, but they can also be used to improve safety at pedestrian crossings. The most commonly used measures are:

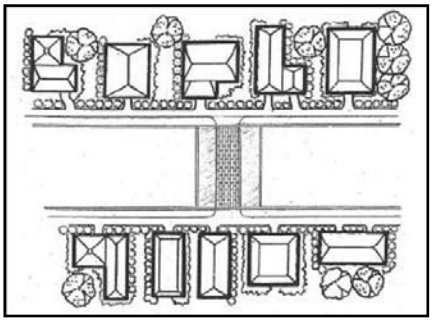
Textured Crosswalks



Speed Humps

Speed Cushions

Raised Crosswalks



Raised Intersections

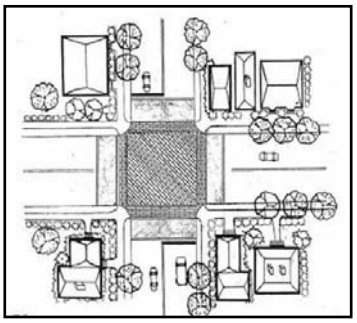
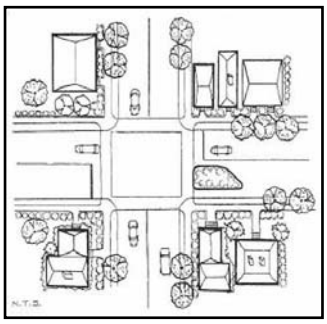


TABLE 2
VERTICAL DEFLECTION MEASURES

MEASURE	ADVANTAGES	DISADVANTAGES
Textured Crosswalks	• Improves street appearance, enhances other traffic calming measures • Alerts motorists of possible presence of pedestrians	• No effect on reducing vehicle speeds or volumes • Extra noise may be produced from vehicles passing over the textured surface • Textured surface may present a traction problem for bicyclists, wheelchairs or disabled pedestrians
Speed Humps/Speed Cushions	• Reduces vehicle speeds • Relatively inexpensive to install and maintain • Can reduce motor vehicle conflicts	• Will require loss of on-street parking • Should be avoided on major transit routes • Drainage should be considered • May slow emergency response time
Raised Crosswalks	• Reduces vehicle speeds • Improves visibility for pedestrians • Improves visibility of pedestrians • May reduce volumes	• Slows emergency response times • Require more maintenance than traditional crosswalks • May generate noise
Raised Intersections	• Reduce vehicle-pedestrian conflicts by providing better visibility for pedestrians • May reduce vehicle speeds	• Expensive to construct and maintain • May slow emergency response time

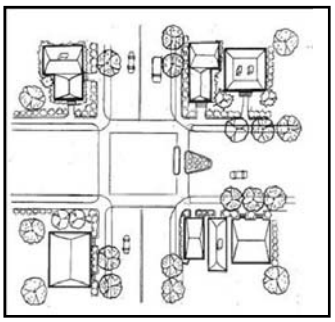
Physical Obstructions prevent certain vehicular movements, thus discouraging or eliminating cut-through traffic. The most commonly used physical obstructions are:

Semi-Diverters

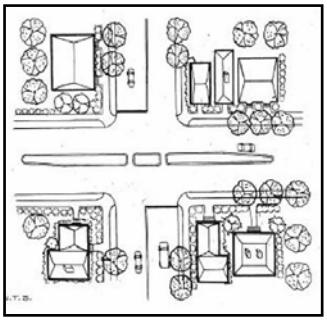


Diagonal Diverters

Right-In/Right-Out Islands



Raised Medians Through Intersections



Street Closures

One-Way Streets

TABLE 3
PHYSICAL OBSTRUCTION MEASURES

MEASURE	ADVANTAGES	DISADVANTAGES
Semi-Diverters	• Reduce cut-through traffic • May reduce vehicle speeds • Can improve Borough appearance with addition of landscaping	• Could be violated, especially in the late evening and on low volume roadways • May require loss of on-street parking • Reduces resident access and convenience
Diagonal Diverters	• Reduces vehicle volumes • Reduces potential for accidents by eliminating conflicting traffic movements • Can improve Borough appearance with addition of landscaping • May reduce vehicle speeds	• Reduces resident access and convenience
Right-In/Right-Out Islands	• Reduces through traffic on local streets • Can improve pedestrian safety by reducing crossing distances and providing refuge areas	• Reduces resident access and convenience
Raised Medians Through Intersections	• Reduces vehicle volumes • Improves intersection safety by removing conflicting movements • Can improve Borough appearance with addition of landscaping	• May affect emergency vehicle access and response times
Street Closures	• Eliminates cut-through traffic • May reduce vehicle speeds • Can improve Borough appearance with addition of landscaping	• May affect emergency vehicle access and response time • Reduces resident access and convenience
One-Way Streets	• May reduce cut-through traffic • Simplifies and improves circulation of traffic • Provides more on-street parking • Simplifies crossings for pedestrians who must only look for traffic in one direction • Reduces the number of conflict points at an intersection	• Could result in increased speeds if roadway is overly wide, requiring additional traffic calming measures • Can increase the travel distance and time for motorists • Reduces resident access and convenience

Landscaping, such as trees, bushes, shrubbery and/or other plant materials, is often installed in conjunction with several traffic calming to prevent drivers from driving around the traffic calming features. Landscaping also helps to reinforce the narrowed pavement width that encourages drivers to reduce travel speeds. In addition, raised curbing is installed to help protect the landscaping.

D. TRAFFIC CALMING EFFORTS COMPLETED IN RECENT YEARS

Through the Borough's efforts to achieve the goals outlined in the Jenkintown Revitalization Master Plan, dated April 15, 2002, several transportation initiatives have been completed in recent years. These initiatives include:

- Increased Parking
- Streetscape Projects
- York Road (SR 0611) Pedestrian Traffic Signal
- Implementation of Multiple One-Way Streets
- Washington Lane & Wyncote Road Flashing Warning Device
- Installation of Americans with Disabilities Act (ADA) Compliant Curb Ramps
- West Avenue & Walnut Street Traffic Signal Modernization

Many of these transportation initiatives have served to calm traffic and improve pedestrian facilities and accommodations. Furthermore, these initiatives contribute to creating the Jenkintown Vision, as stated in the Revitalization Master Plan,

"Jenkintown is and should remain a diverse, tree-lined community with family-friendly neighborhoods, quality schools, and a small-town atmosphere. By working together, the residents, businesses, property owners, and government of Jenkintown can improve upon our inherent strengths while developing and promoting a vibrant, diverse, and economically strong central business district that reaches its full potential as an attractive and walkable retail, professional, and entertainment destination."

INCREASED PARKING:

The primary concern of residents and business owners, based on a survey completed by the Jenkintown Community Alliance (JCA), was the need for increased parking. The Borough has actively pursued alternatives to increase parking for residents and business owners. Some of the recent and ongoing efforts to increase parking are noted below:

- **One-Way Streets:** Restricting roadways from two-way traffic to one-way traffic to allow for parking on both sides of the roadway, where sufficient roadway width exists.
- **Removed Parking Restrictions:** The 400 block of Cedar Street now has parking permitted on both sides of the street by removing the daily parking time restrictions as requested by the residents.
- **Residential Permit Parking:** Implemented for the sole purpose of providing on-street parking for Borough residents. (i.e., 400 Cedar Street, 300 Cottman Street, 100 & 200 Summit Avenue). Since this is a relatively new Borough initiative, we recommend that information is provided to the residents on the Borough's webpage regarding the policies and procedures of the program. Sample "Questions & Answers" related to residential permit parking are included in ***APPENDIX A***.
- **Public-Private Partnership**: The Borough should continue to purse shared parking agreements with property owners to create additional off-street parking. Shared parking

agreements are most effective when the public and private participants have alternating peak demand times and when both parties abide by the policies laid out in the agreement.

- **Parking Garage**: As has been discussed in the Borough, a long term solution to increase parking is the construction of a parking garage due to the limited locations for surface parking lots.
- **Increased Enforcement**: As recommended, the Borough has increased the enforcement of the parking time limits to reduce meter-feeding, which subsequently increases the available short-term parking spaces. A sliding-scale parking violation has also been implemented to target repeat offenders.

Increasing parking in a Borough, such as Jenkintown, is a difficult task given the narrow roadways, high residential density, and absence of undeveloped land. However, this is a difficult task that the Borough has shown they are dedicated to continuing to pursue a variety of alternatives to increase parking for the residents and visitors. **FIGURE 2** is a map showing the existing locations of on-street parking within the Borough.

STREETSCAPE PROJECTS:

The Borough has obtained construction funding for Streetscape improvements along a section of York Road (SR 0611) as recommended in the Jenkintown Revitalization Master Plan. The Borough will continue to pursue additional funding to expand the limits of the streetscape improvements including applying for funding from the County, State, and Federal Government.

In addition, the Borough has successfully completed streetscape projects along the 700 block of West Avenue, the 200 and 300 blocks of Leedom Street, the 400 block of Johnson Street and York Way Place within the Central Business District. The projects included curb bump-outs, new sidewalk, high visibility pedestrian crosswalks, pedestrian/street lighting, traffic signal modifications, and utility relocation. These streetscape improvements helped to calm traffic speeds and promote pedestrian safety.

YORK ROAD (SR 0611) PEDESTRIAN TRAFFIC SIGNAL:

As recommended in the Revitalization Master Plan, a pedestrian traffic signal was installed on York Road (SR 0611) between Vista Road and Homestead Avenue to improve pedestrian accommodations to cross York Road. The Borough worked for months with local officials, the Montgomery County Planning Commission and PennDOT to justify the need for a full traffic signal for the sole purpose of providing a safe pedestrian crossing across York Road in the vicinity of Vista Road. The Borough was successful in November of 2003 when they received a permit from PennDOT for the installation. The signal was installed shortly thereafter in accordance with the recommendations of the Revitalization Master Plan.

IMPLEMENTATION OF MULTIPLE ONE-WAY STREETS:

One-way restrictions were implemented for key roadway segments in the Borough for various reasons including insufficient roadway width, potential increase in on-street parking, reduced vehicular conflict points at intersections, sight distance limitations, and improved circulation through the Borough. The following Borough streets recently had one-way restrictions implemented on one or more roadway segments:

- Cedar Street
- Willow Street
- Thomas Street
- Greenwood Avenue

FIGURE 1 shows the streets in the Borough that are currently restricted to one-way flow. For roadways with sufficient roadway width, on-street parallel parking was permitted on one or both sides of the roadway.

WASHINGTON LANE AND WYNCOTE ROAD FLASHING WARNING DEVICE:

A red flashing warning device was installed at the multi-way stop controlled intersection of Washington Lane and Wyncote Road. The flasher was installed to address the problem of motorists routinely traveling through the intersection without stopping at the stop sign on both approaches of Washington Lane. In addition, the flasher was installed to mitigate accidents at this intersection, which was identified as a “high accident” location by the Borough Police Department before the flasher was installed.

INSTALLATION OF AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANT CURB RAMPS

The Borough has obtained funding from Montgomery County to install Americans with Disabilities Act (ADA) compliant curb ramps throughout the Borough. The ADA compliant curb ramps contain detectable warnings comprised of raised truncated domes to inform citizens in wheelchairs and disabled pedestrians that they are entering a roadway containing vehicular traffic. The Borough should continue to pursue its efforts to obtain funding to install ADA curb cut ramps at additional intersections throughout the Borough.

WEST AVENUE AND WALNUT STREET TRAFFIC SIGNAL MODERNIZATION (SCHEDULED TO BE COMPLETED IN NEAR FUTURE)

The intersection of West Avenue and Walnut Street was identified as a critical location within the Borough, containing incomplete crosswalks and a challenging geometry. The intersection is one of the highest pedestrian volume intersections, consisting mainly of students attending the adjacent Elementary School and High School. To significantly improve the pedestrian accommodations at this intersection, the Borough has received approval from PennDOT to install curb bump-outs on the northeast and southeast corners of the intersection to slow turning traffic and increase the available sidewalk width for pedestrians. In addition, the traffic signal will be fully modernized with countdown pedestrian signal heads and high visibility crosswalks.

E. SAMPLE TRAFFIC CALMING POLICY

A sample traffic calming policy was developed, as recommended by PennDOT Publication 383, "Pennsylvania's Traffic Calming Handbook", to initiate the establishment of a procedure for the Borough to follow when residents and business owners request a traffic calming study on their street. Because community involvement is critical in the development of a successful traffic calming program, a traffic calming policy is a great tool for the Borough to utilize to appropriately and effectively address concerns. Some advantages of a traffic calming policy are:

- Additional Community Involvement
- Evaluates and Focuses on Specific Areas of Resident Concerns
- Does Not Affect Past Initiatives Installed by the Borough for the Purpose of Traffic Calming

The following nine (9) steps are recommended during the execution of a Traffic Calming Program under a traffic calming policy:

1. **Inquiry:** Initial contact made by residents inquiring about traffic calming; petitions, forms, and other documents will be available for distribution.
2. **Informational Presentation:** If requested by 5% of the specifically affected property owners, staff will schedule a preliminary public meeting to present background information on traffic calming and explain the Borough's traffic calming policy. This will be an open public meeting.
3. **Petition:** After staff reviews minimum petition requirements (***50% of generally affected property owners***) with residents, petition submitted.
4. **Traffic studies:** Accident history is reviewed and speed and volume traffic studies are performed.
5. **Develop Plan:** Neighborhood traffic calming plan developed by Borough staff.
6. **Adjacent Property Owners Agreement:** Property owners adjacent to each proposed traffic calming feature are contacted to obtain agreement.
7. **Public meeting:** Once public information meeting held with all generally affected residents to disseminate information on proposed traffic calming plan and receive input, after which the neighborhood traffic calming plan will be finalized.
8. **Vote:** Specifically affected property owners vote. ***Minimum return of 50% of ballots required, and of those 60% must vote in favor of project*** to proceed with implementation.
9. **Construction:** If result of vote is favorable, neighborhood traffic calming plan is placed on a schedule for the installation of the traffic calming features.

A sample traffic calming policy also provides a project ranking system for the Borough to prioritize potential projects based on travel speeds, volume, accident history, and cut through traffic. Based on PennDOT Publication 383, it is recommended that the project ranking system is based upon a point system. The point total or rank received will determine the priority for the allocation of funding and the scheduling construction of traffic calming projects. A minimum point criterion should be set which indicates the required threshold for a traffic calming petition to be considered for traffic calming. The priority list of projects will be maintained by the Borough and reassessed each year.

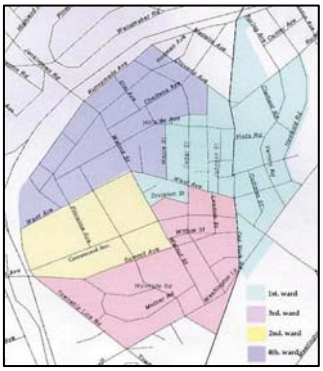
With the development of a traffic calming policy residents and business owners are involved in the plan preparation and ultimately vote to determine if traffic calming measures will be installed on their street. A copy of the sample traffic calming policy is provided in ***APPENDIX B***.

F. TRAFFIC CALMING DATA COLLECTION

Several efforts have been made in Jenkintown Borough to date to initiate the traffic calming implementation process and obtain the necessary input from Borough residents. These efforts include:

- Traffic Calming Workshops
- Traffic Calming Questionnaires
- Traffic Workshops
- Collection of Field Data
    - Speed Data
    - Volume Data
    - Accident Data

TRAFFIC CALMING WORKSHOPS



Four (4) traffic calming workshops were held throughout November 2006 to provide Borough residents, business owners and emergency service providers an opportunity to express their traffic concerns, learn about traffic calming methods and offer suggestions for improving traffic flow throughout the Borough. The workshops were broken down by ward to most effectively focus on the traffic issues in each area of the Borough.

TRAFFIC CALMING QUESTIONNAIRES

TRAFFIC CALMING WORKSHOP

Is there excessive traffic on your street? Do cars travel at a high rate of speed on your street? Would you like to see traffic calming measures implemented on your street? Do you have ideas on how to improve traffic in the Borough? If so, we need your vision and input at the upcoming Traffic Calming Workshop. Please join us for the Traffic Calming Workshop workshops at Jenkintown Borough Hall, 700 Summit Avenue, Jenkintown, PA 19046 to discuss the impacts of vehicular traffic on the residents in the four wards on the following dates:

Ward: 1	November 1, 2006	7:00 p.m. to 9:00 p.m.
Ward: 2	November 16, 2006	7:00 p.m. to 9:00 p.m.
Ward: 3	November 2, 2006	7:00 p.m. to 9:00 p.m.
Ward: 4	November 9, 2006	7:00 p.m. to 9:00 p.m.

Jenkintown Borough has engaged Pennoni Associates to work with Jenkintown residents to identify speeding and other traffic related concerns within the Borough and determine potential traffic calming measures for implementation. Since resident input is an essential part of the study, the above noted public meetings will be held to provide an opportunity for the residents to express their traffic concerns. In addition, general information on "traffic calming" will be presented at the meeting. This will be an interactive workshop and your participation is vital to the success of any actions taken to mitigate the impact of traffic in your neighborhood.

If you are unable to attend the meeting, comments can be sent to the Borough of Jenkintown via the mailing or email addresses below. Please indicate "Traffic Calming" on envelope or in subject line.

Mail: Jenkintown Borough
P.O. Box 2179
Jenkintown, PA 19046
E-mail: boroinfo@jenkintownboro.com

Please provide the following information with your comments.

Name: _____

Address: _____

Traffic Concern on the Street Adjacent to Your House:

_____

_____

_____

Additional Traffic Related Comments:

_____

_____

_____

Please submit your comments before November 17th, 2006. Thank you for your participation.

In combination with the traffic calming workshops, questionnaires were circulated throughout the Borough to allow residents, business owners and emergency service providers not only an opportunity to verbally express their traffic concerns through the workshops, but also an opportunity to document their concerns. The information received from the traffic calming workshops and questionnaires, along with information received from the Police Department and Borough staff, was compiled to identify areas of concern for speeding and cut-through traffic. Furthermore, this information was utilized to dictate the various locations within the Borough where field data should be collected.

TRAFFIC WORKSHOPS

Similar to the traffic calming workshops, traffic workshops are also held monthly to identify traffic concerns on specific streets with the Borough. Each workshop is open to all residents and focuses on specific blocks of streets. The subject streets on the each workshop's agenda are determined by resident input along with input from the Police Department and Borough staff.

COLLECTION OF FIELD DATA

In accordance with PennDOT's Publication 383, "Pennsylvania's Traffic Calming Handbook," speed data and volume data was collected throughout the Borough to provide evidence that a traffic problem does exist in areas where traffic problems may be perceived.

SPEED DATA COLLECTION

In order to identify areas where excessive vehicular speeding exists, spot speed studies were completed throughout the Borough using a radar gun. The speed study locations were developed primarily based on the results of the resident questionnaires, along with input from the Borough's Staff and Police Department who are familiar with the problem areas where speeding is most prevalent.

Several principles were employed during the speed data collection:

- **Only Free Flow Speeds Were Recorded** – Speeds were *not* recorded for vehicles that slowed down for vehicles turning ahead of them
    - Speeds were *not* recorded for vehicles that were aware of the location of the radar gun
    - Speeds were *not* recorded for vehicles slowing down for traffic signal or stop sign queuing
- **Data Was Collected During Clear Weather Conditions** – Rain and snow tend to slow vehicle speeds
- **Speed Data Was Collected At Mid-Block Locations** – Speed data was collected at mid-block locations before vehicles began to slow down for stop signs and after vehicles had accelerated to their intended travel speed

TABLE 4 identifies the various locations of the spot speed studies, along with the average and 85th percentile speeds at the locations. The 85th percentile speed is defined as the speed at which 85% of the free flowing vehicles are traveling. **FIGURE 3** also illustrates the spot speed study locations, along with the average and 85th percentile speeds at each location.

TABLE 4
SPEED STUDY RESULTS

	LOCATION	AVERAGE SPEED (MPH)	85th PERCENTILE SPEED (MPH)
1	**100 Block of Cedar Street**	**26**	**31**
2	400 Block of Cedar Street	21	25
3	**500 Block of Cheltena Avenue**	**26**	**30**
4	**100 Block of Greenwood Avenue**	**28**	**31**
5	600 Block of Greenwood Avenue	21	24
6	Greenwood Avenue (between York Road & Washington Lane)	23	26
7	**400 Block of Hillside Avenue**	**27**	**30**
8	400 Block of Maple Street	21	24
9	**400 Block Newbold Road**	**27**	**33**
10	400 Block of Rodman	25	28
11	**200 Block of Runnymede Avenue**	**26**	**30**
12	**400 Block of Runnymede Avenue**	**28**	**31**
13	**200 Block of Summit Avenue**	**28**	**32**
14	100 Block of Township Line Road (between Summit Ave. & Mather Rd.)[1]	34	38
15	**100 Block of Township Line Road (between Greenwood Ave. & West Ave.)**	**26**	**30**
16	300 Block of Vernon Road	21	24
17	**100 Block of Walnut Street**	**30**	**35**
18	200 Block of Walnut Street	24	27
19	300 Block of Walnut Street	27	29
20	**500 Block of Walnut Street**	**30**	**35**
21	**200 Block of Washington Lane**	**34**	**38**
22	700 Block of Washington Lane	22	26
23	100 Block of York Road	22	24
24	**400 Block of York Road**	**27**	**30**
25	**500 Block of York Road**	**34**	**37**
26	**700 Block of York Road**	**28**	**31**

[1] Posted Speed Limit is 35 mph

As can be seen in **TABLE 4,** fifteen (15) of the twenty-six (26) speed study locations have 85th percentile speeds that are at least five (5) mph above the Borough speed limit of 25 mph (locations indicated by **bold** lettering).

VOLUME DATA COLLECTION

Volume data was collected at various intersections and roadway segments throughout the Borough to identify areas where excessive traffic volumes and excessive cut-through volumes exist. The volume data collection locations were also determined based on the results of the resident questionnaires, along with input from the Borough's Staff and Police Department who are familiar with the problem areas where high volumes and cut-through traffic is most prevalent. Volume data was collected at intersections by completing manual turning movement counts to record the quantity of left, through and right turns for each intersection approach. Volume data was collected at the following intersections during the morning and afternoon peak hours:

1. **York Road (SR 0611) & Cloverly Avenue/Rydal Road**
2. **York Road (SR 0611) & West Avenue (SR 2021)**
3. **Walnut Street (SR 2021) & West Avenue (SR 2021)**
4. **West Avenue & Runnymede Avenue**
5. **Walnut Street & Summit Avenue**
6. **Washington Lane & Vernon Road**

In addition to the volume data collected at the intersections above, volume data collected throughout the Borough since the year 2000 was reviewed. **TABLE 5** indicates the various intersections where manual turning movement counts have been completed, along with the date of the traffic count.

TABLE 5
VOLUME DATA COLLECTION LOCATIONS (2000 – 2006)

	LOCATION	TRAFFIC COUNT DATE
1	York Road (SR 0611) & Washington Lane	8/24/2006
2	York Road (SR 0611) & Greenwood Avenue	1/8/2004
3	Washington Lane & Greenwood Avenue	11/28/2000
4	Greenwood Avenue & Leedom Street	1/8/2004
5	Greenwood Avenue & Cedar Street	1/8/2004
6	Greenwood Avenue & Walnut Street	1/11/2005
7	Greenwood Avenue & Highland Avenue	1/11/2005
8	Greenwood Avenue & Florence Avenue	1/11/2005
9	Summit Avenue & Wyncote Road	1/11/2001
10	West Avenue & Highland Avenue	1/11/2005
11	West Avenue & Leedom Street	1/8/2004

In addition to the volume data collected at intersections throughout the Borough, Average Annual Daily Traffic (AADT) volumes, or roadway link volumes, were also collected utilizing the following methods:

- PennDOT's Internet Traffic Monitoring System (ITMS) – AADT volumes were obtained for the State Route roadway segments within the Borough.
- Deployment of Automatic Traffic Recorders (ATRs) – ATRs consist of pneumatic tubes that are placed across the roadway to count the number of vehicles that travel on a particular roadway segment over a period of twenty-four (24) hours. ATRs were deployed by the Borough's Police Department for several roadway segments within the Borough.

FIGURE 3 illustrates the manual turning movement count data collected for each of the six (6) intersections, along with the current AADT along each of the State Routes and roadways where ATRs were deployed. In addition, **FIGURE 4** contains volume data collected throughout the Borough since the year 2000.

ACCIDENT DATA

Accident data was requested from the Borough's Police Department for high accident locations within the Borough. The Police Chief indicated that since the deployment of the traffic calming initiatives, as identified in Section D, the number of accidents at the high accident locations have been significantly reduced. Therefore, accident data containing the number of reportable and non-reportable accidents was only provided for York Road (SR 0611) from the years 2004 through the current time in 2007.

The accident data provided indicates that there are approximately 100 to 120 accidents on York Road (SR 0611) per year. Furthermore, it was noted that the highest number of accidents each year occurred in the vicinity of York Road (SR 0611) & Greenwood Avenue and York Road (SR 0611) & West Avenue. In addition, the highest number of accidents occurred along the 400 block of York Road (SR 0611), from West Avenue to Hillside Avenue, over the cumulative period of 2004 through 2006.

G. RECOMMENDED TRAFFIC CALMING MEASURES

Based on the speed and volume data that was collected throughout the Borough and presented in Section F, we have identified various roadway segments and intersections that should be considered for additional traffic calming measures. A variety of traffic calming measures were considered to address the specific issues identified during the data collection phase of this project as noted in this Section. The following traffic calming measures were considered:

- Speed Humps
- Center Flush Medians
- Raised Pedestrian Crossings
- Curb Bump-Outs
- Modern Roundabouts
- Future Streetscape Projects
- 15 MPH School Zones
- Three Lane Cross-Sections
- Americans with Disabilities Act (ADA) Compliant Curb Ramps
- Increased Police Enforcement
- High Visibility Painted Crosswalks
- In-Roadway Pedestrian Signs
- Installation of Additional Traffic Signs
- Centerline and Edgeline Pavement Markings
- Sign Replacement
- Increased Use of Speed Trailers

A comprehensive traffic calming map showing the various measures recommended throughout the Borough can be found in **FIGURE 5** and are described in detail below.

MID-BLOCK SPEEDING:

The majority of the unsignalized intersections in the Borough are 'multiway stop' controlled, requiring all approaches to stop at the intersection. As a result, the majority of the concerns with vehicle speeds are motorists traveling between the stop signs. State-owned roadways within the Borough are generally free-flow or signalized at intersections with Borough-owned roadways.

From our field observations and feedback from residents, we noted that many motorists do not bring their vehicle to a full stop before proceeding through the intersection. This is a common result of all-way stop controlled intersections in the Borough where motorists are aware that approaching vehicles are required to stop at the intersection. Increased police presence and enforcement is recommended to address this issue and require motorists to obey the traffic control device by bringing their vehicle to a complete stop.

As identified in Section F, fifteen (15) of the twenty-six (26) speed study locations had a 85th percentile speed that was at least five (5) mph above the Borough speed limit of 25 mph. Traffic calming measures, as presented in **FIGURE 5**, are recommended to mitigate speeding at these locations. At the majority of the residential roadways identified, we recommend that the Borough

consider the installation of preformed rubber or asphalt speed humps. Speed humps are an effective tool to reinforce the posted speed limits and are relatively easy to deploy in a short period of time compared with other traffic calming measures. It should be noted that there are certain roadways where traffic calming measures are proposed to address speeding although the 85th percentile speeds were recorded at less than 30 MPH. These roadways are locations where traffic would likely 'cut-through' to avoid traffic calming measures that are proposed on adjacent parallel roadways. For example, if speed humps were installed on Runnymede Avenue and not on Rodman Avenue, vehicles would likely avoid Runnymede Avenue and use Rodman Avenue to reach their destination. As such, speed humps are proposed on Rodman and Runnymede Avenues.

Before installation, the Borough may wish to have a formal vote taken among the property owners on the specific roadway (block) that the hump is proposed to be installed. A conceptual cost estimate for the installation of preformed speed humps throughout the Borough is provided in ***APPENDIX C.***

Alternative traffic calming measures to address speeding were considered for the 300 block of Walnut Street (between West Avenue and Greenwood Avenue) due to the steep grade of the roadway. A relatively low cost measure to give the perception of narrow lanes would be to reinstall a double yellow centerline and white edgeline pavement marking to delineate the travel lanes and parking/shoulder area. This concept of 'narrowing' the roadway to reduce vehicle speeds could be further emphasized by installing narrow flush medians at key locations along the steep sections of Walnut Street as shown in **FIGURE 6**. The medians could be constructed with paver blocks, stamped concrete or through the use of a StreetPrint® type material in the asphalt roadway. The median would encourage motorists to slow down to remain within the travel lane, but would be flush with the roadway to minimally disrupt traffic flow, turns and parking maneuvers. A white edgeline along the curb on the west side of the 300 block of Walnut Street would give the perception of a wider sidewalk for pedestrians. A conceptual cost estimate for the traffic calming measures, as recommended for the 300 Block of Walnut Street, can be found in ***APPENDIX C.***

TRAIN STATION PEDESTRIAN CROSSING:

Township Line Road, in the vicinity of Greenwood Avenue and West Avenue, contains a large pedestrian volume comprised mainly of commuters traveling to and from the SEPTA train station. Existing pedestrian accommodations include a ladder style crosswalk, pedestrian crossing warning signs (PennDOT Series W11-2) and flashing yellow beacons. Despite the presence of these measures, it was noted during field observations that vehicles routinely do not yield to pedestrians in the crosswalk. Furthermore, speed data collected along this roadway segment indicates that the 85th percentile speed is 30 mph, while the posted speed limit is 25 MPH.

In order to calm the traffic and improve the safety of the pedestrian crossing, a raised crosswalk is recommended at this location. A raised crosswalk is similar to a speed hump; however the top section is flat for pedestrian traffic.

To increase the effectiveness of the raised crosswalk, advanced signage and pavement markings are recommended on Township Line Road to further define the mid-block pedestrian crossing. The Pedestrian Crossing signs (PennDOT Series W11-2) should be replaced with Raised Pedestrian Crossing (PennDOT Series W11-2A) signs with high intensity reflective sheeting and a fluorescent yellow-green background. In accordance with new PennDOT requirements, the signs should to be supplemented with the Directional Downward Pointing Arrow Plaque (PennDOT Series W16-7P). Another recommended enhancement to the existing flashing warning device is the replacement of the standard incandescent bulbs in the yellow flashing indications with Light Emitting Diode's (LED's). LEDs use 1/10th of the energy compared with the incandescent bulbs, have a much longer life expectancy, and have a greater intensity to draw motorist's attention to the pedestrian crossing sign and crosswalk. The use of LED's in place of incandescent bulbs in now a PennDOT standard for traffic control signals. A sketch of these recommendations can be seen in **FIGURE 7.** In addition, a conceptual cost estimate for the installation of a raised pedestrian crossing at the train station is provided in ***APPENDIX C.***

A short term option to improve the safety of the train station pedestrian crossing is the use of "In-Street Pedestrian Crossing Signs", which are effective in slowing traffic by being placed in the center of the roadway directly on the double yellow pavement markings. The sign reads, "STATE LAW YIELD TO PEDESTRIANS WITHIN CROSSWALK."

CUT-THROUGH TRAFFIC:

"Cut-through" traffic is the result of congested intersections or roadways where motorists decide to travel alternative routes, typically through residential neighborhoods, to avoid congestion and reduce the travel time to their destination. Jenkintown Borough is unique, when compared with other larger municipalities, in that most of the intersections are controlled by a multiway stop condition or traffic signal (See **FIGURE 1**). This requires motorists to make frequent stops when traveling on Borough roads, which discourages motorists from using these roads as 'cut-throughs'.

In addition, the majority of the roadways are residential in nature. Even higher volume roadways (i.e. collector/minor arterial roadways) such as Walnut Street and West Avenue have a high residential density. In fact, the only principal arterial roadway in the Borough is York Road, State Route 611. This leaves little option of reducing cut-through traffic by encouraging motorists to stay on major, non-residential, roadways in the Borough.

The traffic volume data collected showed that the majority of the roadways and intersections in the Borough operate at acceptable levels of service and delays. The areas of greater congestion are, as expected, primarily state owned roadways including York Road (SR 0611), Township Line Road (SR 2054), Walnut Street (SR 2021) and West Avenue (SR 2021). The higher volumes are consistent with the classification of the roadways, since they are designed to accommodate additional traffic compared with the local residential roadways.

Due to the existing roadway network and traffic control devices in the Borough, the majority of the traffic calming measures are proposed to reduce vehicle speeds at key roadways in the Borough. However, it is important to note that the majority of the traffic calming measures proposed to reduce vehicle speeds may have a secondary benefit of discouraging and reducing cut-through traffic.

In summary, we believe that the existing conditions, along with the recommended traffic calming measures, will present the most effective deterrent to cut-through traffic, short of road closures and diverters.

CURB BUMP-OUTS:

Curb bump-outs are an effective traffic calming measure that could be considered at most intersections in the Borough, especially locations where on-street parallel parking is permitted. The side or sides of the road with on-street parking could be bumped out on the corners of the intersections. The bump outs not only reduce the speeds of turning vehicles and reduce the width of pedestrian crossings, they also eliminate the problem of motorists parking too close to the intersection which results in restricted corner sight distances.

The following two intersections were identified as priority locations to consider curb bump-outs:

1. West Avenue & Runnymede Avenue
2. York Road (SR 0611) & Greenwood Avenue

WEST AVENUE & RUNNYMEDE AVENUE:

The southbound approach of Runnymede Avenue is stop controlled at its intersection with West Avenue. West Avenue is free flow and has a relatively wide cartway width of 30 feet. In addition, the southeast and southwest corners of the intersection have larger curb radii, which allow motorists to complete turning movements at greater speeds from West Avenue on to Runnymede Avenue, when compared with other 5-foot radii in the Borough.

Based on volume data collected at the intersection, along with concerns expressed by residents, Runnymede Avenue has relatively high peak hour volumes comprised of motorists traveling to and from the train station and Cheltenham and Abington Townships.

In order to reduce travel speeds at this intersection, curb bump-outs are recommended as can be seen in **FIGURE 8**. In addition, curb bump-outs will reduce the length of the pedestrian crossings at the intersection thereby improving pedestrian safety.

YORK ROAD (SR 0611) & GREENWOOD AVENUE

The signalized intersection of York Road (SR 0611) and Greenwood Avenue has a unique alignment with the two approaches of Greenwood Avenue offset from each other. Greenwood Avenue is one-way eastbound from Walnut Street to Washington Lane.

The eastern leg of Greenwood Avenue is wide, with a cartway width of approximately 60 feet at its intersection with York Road (SR 0611). The width of

Greenwood Avenue and the large curb radius at the northeast corner allow for motorists to complete turns at higher speeds than desired. Curb bump-outs are therefore recommended at the northeast corner of the intersection to reduce turning speeds (See **FIGURE 9**). In addition, curb bump-outs will reduce the length of the pedestrian crossing on Greenwood Avenue, improving pedestrian safety and increasing the usable sidewalk width at the corners. Furthermore, curb bump-outs will allow the left turn lane for the southbound approach of York Road (SR 0611) to be extended further into the intersection thereby providing additional stacking length for vehicles between West Avenue and Greenwood Avenue.

Conceptual cost estimates for the installation of curb bump-outs at the locations mentioned above are provided in ***APPENDIX C***.

MODERN ROUNDABOUTS:

The following two unsignalized intersections were identified to have unique/undesirable alignment, which results in driver confusion for those unfamiliar with the intersection:

1. Vista Road and Vernon Road
2. Newbold Road and West Avenue

Given the existing alignment and relatively wide intersection footprint, the potential to install a modern roundabout exists at these locations. Modern roundabouts are becoming more common in Pennsylvania and are effective in reducing vehicle speeds through the intersection by requiring vehicles to slow down and travel counter-clockwise around a small circular median.

VISTA ROAD & VERNON ROAD:

The intersection of Vista Road and Vernon Road has a center median island that causes motorist confusion when they approach the intersection. We noted a few vehicles during field observations that traveled the wrong way around the center grass median. A short term alternative to clarify the proper travel lanes is to install additional signage and pavement markings in and around the intersection. A long term recommendation, as shown in **FIGURE 10**, would be the installation of a modern roundabout. In combination with the roundabout, we recommend that concrete islands and curb bump-outs are installed to narrow the lane widths around the roundabout, reducing travel speeds and promoting proper vehicular circulation around the median.

NEWBOLD ROAD & WEST AVENUE:

The intersection of Newbold Road and West Avenue is relatively wide, which allows motorists to travel through the intersection at higher speeds. In addition, there are wide travel lanes on Newbold Road on either side of the landscaped median between West Avenue and Washington Lane. In order to reduce the travel speeds through the intersection, we recommend a modern roundabout be considered at the intersection of West Avenue and Newbold Road. In addition to the roundabout, as shown in **FIGURE 11**, we propose the narrowing of the travel lanes on Newbold Road and curb bump-outs at the intersection of Washington Lane. The roadway narrowing and curb bump-outs at Washington Lane will further define this gateway to the Borough and inform motorists that they are entering a residential area.

Conceptual cost estimates for the installation of modern roundabouts at the locations mentioned above are provided in ***APPENDIX C***.

SIGHT DISTANCE CONCERNS:

The available corner sight distances at the following intersections were evaluated in accordance with PennDOT requirements.

WALNUT STREET & HILLSIDE AVENUE:

The approaches of Hillside Avenue at Walnut Street are controlled by stop signs while Walnut Street is free flow. As such, the available sight distance on both approaches of Hillside Avenue was reviewed in the field. It was observed that the available sight distance to the left for vehicles stopped on the westbound approach of Hillside Avenue is restricted by a stone retaining wall. In addition, the available sight distance to the right for vehicles stopped on the eastbound approach of Hillside Avenue is restricted by a stone retaining wall.

We recommended that the following alternatives are further studied to improve the visibility at this intersection:

- Installation of stop signs on Walnut Street to create a multi-way stop intersection;
- Installation of curb bump-outs at the four corners of the intersection;
  - Will allow vehicles on Hillside Avenue to pull closer to Walnut Street for increased sight distance.
  - Will slow speeds on Walnut Street by narrowing the roadway.
- Implement one-way restriction on Hillside Avenue away from Walnut Street;

This section of Walnut Street is a State Route and therefore, any improvements made to the intersection will require PennDOT review and approval.

WALNUT STREET & WASHINGTON LANE:

The southbound approach of Walnut Street is stop controlled at its intersection with Washington Lane. Washington Lane is free flow through the intersection of Walnut Street. The available sight distance for vehicles stopped on Walnut Street desiring to turn right onto Washington Lane is restricted by landscaping close to Washington Lane. Therefore, the landscaping that interferes with the clear sight line should be removed to provide the required sight distance.

FUTURE STREETSCAPE PROJECTS:

Streetscape projects, although implemented for pedestrian and aesthetic reasons, are also effective traffic calming measures. In addition to the plans for streetscape improvements along York Road (See Section IV), we recommend that the Borough pursue future projects to extend their streetscape efforts already completed in the downtown areas of West Avenue, Leedom Street, Johnson Street and Yorkway Place. The following blocks were identified as the next logical sections to be considered for streetscape improvements:

600 BLOCK OF WEST AVENUE (BETWEEN LEEDOM STREET AND CEDAR STREET):

The Borough recently completed a streetscape project on the 700 block of West Avenue that included curb bump outs, high visibility crosswalks, pedestrian scale street lights and widened sidewalks. These streetscape elements would be extended further west along the 600 Block of West Avenue beyond the Post Office. A streetscape project on this block is recommended to slow travel speeds and increase pedestrian safety for residents, patrons, and students walking to and from the Post Office, Businesses, and Church/School.

The project would also look to improve the alignment for vehicles traveling on West Avenue through the intersection of Cedar Street. Currently, motorists are required to transition their vehicles through this intersection since on street parking switches from the north side of the 600 block of West Avenue to the south side of the 500 block of West Avenue. In the short-term, we recommend that the Borough request PennDOT approval to install additional pavement markings to guide motorists through the intersection (See **FIGURE 12**).

700 BLOCK OF GREENWOOD AVENUE (BETWEEN LEEDOM STREET AND YORK ROAD):

The 700 Block of Greenwood Avenue has a relatively wide travelway that could be reduced to increase the sidewalk width and narrow the roadway to reduce travel speeds and increase pedestrian safety. The increased sidewalk width will allow for additional streetscape elements.

SCHOOL ZONES:

Another concern noted by residents was that vehicles are unsatisfactorily exceeding the posted speed limit on Walnut Street during the morning and afternoon peak school arrival and departure times. As a result, the Borough should consider applying to PennDOT for permission to install a new 15 MPH school zone speed limit on Walnut Street along the school property since Walnut Street is a primary walking route that students use to get to and from school.

In addition, one of the conditions of approval placed on the School District by the Borough with the school expansion project was to modernize and improve the existing 15 MPH school zone on West Avenue and Highland Avenue. These improvements should be coordinated with the School District and should include installation of high intensity, florescent yellow-green school signs along West Avenue, Walnut Street, and Highland Avenue, to emphasize to motorists that they are along school property.

Upgrading the existing 15 MPH school zone on West Avenue and applying for a new 15 MPH school zone on Walnut Street should help calm traffic around the school, while students are walking to and from the school.

A conceptual cost estimate for the installation of a 15 MPH school zone on Walnut Street is provided in ***APPENDIX C.***

YORK ROAD (SR 0611) TRAFFIC CALMING:

Given the roadway characteristics and the high traffic volumes on York Road (SR 0611), the traffic calming measures that could be considered for York Road are limited. The width of York Road within the Borough is 40 feet from curb to curb, consisting of four 10' wide travel lanes. Therefore, there is no option to narrow the lanes in an attempt to reduce vehicle speeds. There is also limited or no option to widen York Road to provide a center left turn lane given the location of the buildings and limited width of the sidewalk in the downtown area.

In order to calm the traffic on York Road (SR 0611) and improve the pedestrian accommodations of the Borough's "main street", a three lane cross-section was considered for York Road from Washington Lane to Rydal Road/Cloverly Avenue (See **FIGURES 13** and **14**). The three lane cross-section would consist of one through lane in each direction (each 10' wide) and a shared center left turn lane (10' lane). The shared left turn lane would be transitioned into a dedicated left turn lane approaching the signalized intersections. The remaining roadway width would be designated as a 5' wide bike lane/shoulder along each curb-line.

The York Road (SR 0611) three lane cross-section proposal is consistent with the Jenkintown Revitalization Master Plan and the Montgomery County Comprehensive Plan. One of the top revitalization goals of the Borough's Master Plan was to "create a quality pedestrian environment that encourages strolling along and crossing York Road."

Based on our field observations, York Road essentially operates as a three-lane roadway whenever a vehicle desires to make a left turn at a driveway or roadway since dedicated left turn lanes are not provided. Furthermore, in an effort to avoid left turning vehicles, other motorists change lanes or stack in the curbside lane to avoid getting stuck behind a left turning vehicle. The implementation of a center left turn lane would effectively remove left turning vehicles from the through traffic and provide a sheltered location for vehicles to wait for an appropriate gap to make the turn. Similarly, delivery services were commonly observed parking their trucks in front of businesses on York Road blocking a lane for the duration of the delivery.

York Road (SR 0611) is a state owned roadway and therefore any changes to the roadway will require PennDOT's approval**.** As noted previously in this report, York Road is classified as a principal arterial roadway which carries an average of 26,000-28,000 vehicles per day. The high volume of vehicular and truck traffic makes it difficult to balance the desire of

PennDOT to move traffic and the Borough's desire to make State Route 611 more accommodating for pedestrians and bicyclist. The key advantages and disadvantages of a three lane cross-section are as follows:

ADVANTAGES OF THREE LANE CROSS-SECTION

1. **Increased buffer between Pedestrians on the Sidewalks and Vehicles on York Road (SR 0611) –** The existing York Road (SR 0611) cross-section forces pedestrians to travel directly alongside vehicles on the roadway. The bike lanes included in the three-lane concept will provide an additional 5-foot buffer between the pedestrians on the sidewalks and vehicles on York Road (SR 0611). This buffer will provide an increased level of comfort for pedestrians that desire to walk along York Road (SR 0611).

2. **Less Travel Lanes for Pedestrians to Cross York Road (SR 0611)** – The existing layout on York Road (SR 0611) requires pedestrians to cross four (4) lanes of through traffic (40 feet). With the implementation of the three lane cross-section, pedestrians will only be required to travel across two (2) lanes of through traffic (30 feet).

3. **Improved Effectiveness of Left Turn Advance Phase** – The operation of the left turn advance phase at intersections such as York Road & Greenwood Avenue is currently inefficient due to the fact that the left turn advance arrow is activated every cycle, whether or not there are vehicles desiring to make a left turn at the traffic signal. This causes unnecessary delay for the northbound traffic on York Road. With the implementation of the three lane cross-section, left turn storage lanes will be provided at each traffic signal on York Road (SR 0611), along with in-roadway detectors that will actuate and extend the left turn arrow based on the number of left turning vehicles. The left turn arrow will effectively service left turning vehicles only. This operation will allow for additional green time to be allocated to the northbound traffic on York Road when there are little or no left turn vehicles waiting to turn onto Greenwood Avenue.

4. **Improved Sight Line for Left Turning Vehicles –** The existing lane arrangement on York Road (SR 0611) requires left turning vehicles to complete left turn movements from the through lane since dedicated left turn lanes are not provided along this section of York Road in the Borough. When there are opposing left turns at intersections such as West Avenue, the sight distance is restricted by the waiting left turn vehicles, making it difficult to see the opposing on coming through traffic. With the implementation of the three lane cross-section, left turn storage lanes would be provided directly opposing each other thereby improving the sight distance of on-coming vehicles while waiting to complete a left turn.

5. **Potential Reduction of Side Swipe and Rear End Accidents –** Side swipe and rear end accidents are more common on roadways that do not have designated left turn storage lanes. By providing designated turn lanes there should in turn be a reduced number of side swipe accidents resulting from lane changes to travel around left turn vehicles and a reduction in rear-end accidents resulting from motorists not expecting a vehicle to stop in a through lane to turn left.

6. **Implementation of Bike Lanes Consistent with Goals Outlined in Montgomery County Comprehensive Plan** – The Montgomery County Comprehensive Plan has defined York Road (SR 0611) as a primary bicycle route. Based on the "Standards for Bikeable Roads", as defined in the Comprehensive Plan, a roadway with an Average Motor Vehicle Operating Speed (AMVOS) of less than 40 mph and an Average Annual Daily Traffic (AADT) greater than 10,000 vehicles requires 5'-6' designated bike lanes. Therefore, the implementation of bike lanes along York Road (SR 0611) is proposed in accordance with the Bicycle Mobility goals as outlined in the Montgomery County Comprehensive Plan.

7. **Improved Traffic Control during Emergency Situations & Accommodations for Emergency Vehicles** – As indicated by emergency service providers, under the existing layout of York Road (SR 0611) an emergency vehicle utilizes one 10' through lane and a portion of the adjacent 10' through lane when parked along the roadway during an emergency situation. Therefore, when vehicles attempt to navigate around the emergency vehicles they are often forced to enter into the opposing lanes. With the implementation of the three-lane cross-section, emergency vehicles can utilize the bike lanes along with the 10' through lane which leaves the center left turn lane available for motorists to travel around the emergency vehicle. In addition, flagging operations will be simplified with one through lane in each direction on State Route 611.

8. **Potential Improvement to Local Delivery Operation on York Road –** With the implementation of the three-lane cross-section, delivery trucks would be encouraged and/or required to utilize side streets and/or parking lots off street to make deliveries as opposed to stopping on York Road. If delivery trucks do stop along York Road, the bike lanes will allow for the trucks to park partially out of the main travel lane and vehicles would need to travel into the center left turn lane to navigate around the delivery trucks. The potential to prohibit deliveries on York Road should be reviewed with PennDOT.

ADDITIONAL ITEMS TO CONSIDER:

1. **York Road (SR 0611) Vehicular Capacity –** During the peak traffic times of morning and afternoon rush, there will be increased delay and queuing with the implementation of a three lane section on York Road given the significant amount of commuter traffic that travels on York Road to reach a regional destination. The majority of the delay would be experienced where the roadway transitions from the 5 lanes to 3 lanes entering the Borough from the north and south.

   One recommendation to offset the reduced capacity of a three lane cross-section is the installation of a closed-loop interconnected traffic signal system along York Road. By interconnecting the traffic signals and installing a closed-loop system, the efficiency of the traffic signals could be increased. The signals would be coordinated to provide progression of vehicle platoons through multiple signalized intersections. Currently, the signals to the north and south of the Borough are being interconnected as part of a PennDOT project. Extending this interconnection through the Borough would complete the regional interconnected signal system along York Road.

2. **Transition Points (5 lanes to 3 lanes to 5 lanes)** – Of primary concern, from a traffic capacity standpoint, are the points of transition from the 5 lane section of York Road to 3 lanes. This transition is proposed at York Road and Washington Lane for northbound traffic and at Cloverly Avenue and Rydal Road for southbound traffic where currently York Road transitions to four lanes.

   An alternative to reduce the queues at the transition point for northbound traffic is shown in **FIGURE 15.** Washington Lane would be restricted to one-way travel in the westbound direction from York Road to Wyncote Road. This would require the

eastbound traffic on Washington Lane to turn right onto Wyncote Road and turn left at the traffic signal at York Road. By restricting Washington Lane to one-way westbound for this section of roadway, additional green time at the traffic signal at York Road and Washington Lane could be allocated to York Road since this would eliminate an existing phase of the traffic signal.

3. **Increased Cut-Through Traffic** – A concern with reducing York Road to three lanes is traffic finding alternate routes, potentially through residential areas as a result of increased delay during peak commuter times. Typically, motorists will take the quickest route to get to their destination. The adjacent roadways that could be used to avoid this section of York Road are not convenient 'cut-through' routes given the roadway alignments, turn restrictions (i.e. no left turns from Walnut Street onto Washington Lane), and multiway stop controlled intersections in the Borough. The available alternate routes would not likely result in a reduced travel time for motorists desiring to travel through the Borough on York Road. As such, the majority of traffic is expected to remain on York Road if a three lane section is implemented through the Borough on York Road.

In summary, a three lane cross-section on York Road through the heart of Jenkintown Borough would improve pedestrian safety and satisfy many goals of the Borough's Revitalization Master Plan. In addition, bicyclist accommodations would be provided along York Road in the Borough as recommended in Montgomery County's Comprehensive Plan. The Borough needs to determine if the advantages of this concept overshadow the reduced capacity of the roadway during peak periods. However, it is important to note that the decision to implement the three lane cross-section will ultimately depend on receiving approval from PennDOT.

INSTALLATION OF ADDITIONAL AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANT CURB RAMPS

As a continuation of the installation of Americans with Disabilities Act (ADA) compliant curb ramps, currently funded by Montgomery County, it is recommended that the Borough continue to pursue additional funding to install ramps throughout the remaining areas of the Borough. As previously mentioned, ADA compliant curb ramps contain detectable warnings comprised of raised truncated domes to inform citizens in wheelchairs and disabled pedestrians that they are entering a roadway containing vehicular traffic.

The installation of ADA compliant curb ramps will improve accessibility and safety for disabled pedestrians. A conceptual cost estimate to install ADA compliant curb ramps at the four (4) corners of one intersection is provided in ***APPENDIX C.***

LOW-COST TRAFFIC CALMING MEASURES:

In addition to the traffic calming measures identified, there are several relatively low cost alternatives that can be implemented to address the issues of speeding and cut-through traffic and improve efficiency, intersection safety and pedestrian accommodations. These measures include:

- Increased Police Enforcement
- High Visibility Painted Crosswalks
- In-Roadway Pedestrian Signs
- Cross Traffic Does Not Stop Signs
- Painted Parking Stalls
- Centerline and Edgeline Pavement Markings
- Sign Replacement
- Increased Use of Speed Trailer

INCREASED POLICE ENFORCEMENT:

As discussed at each public workshop and reiterated in the resident questionnaires, increased police enforcement is recommended throughout the Borough. There was significant concern with speeding and motorists disrespect for various traffic control devices. Increased police presence, including issuing warnings and citations, will show the traveling public that the traffic laws are enforced in Jenkintown Borough. As done in other communities, the police chief could report on the number of traffic stops, warnings, and citations each month to Borough Council, if not already done, to publicly present the efforts of the Police Department.

It is important to note that traffic calming measures should only be considered after increased police enforcement was determined to be unsuccessful in addressing the problem.

HIGH VISIBILITY PAINTED CROSSWALKS:

As discussed at all four workshops and noted in multiple resident questionnaires, pedestrian safety at intersections is a primary concern of the residents. To address this concern, we recommend the installation of high visibility ladder style crosswalk pavement markings.

We would like to point out that the Borough Public Works Department has been working to install the high visibility crosswalks at key intersections as weather permits. This installation process should continue to provide the ladder style crosswalks at the main intersections around the schools and business district.

The crosswalk pavement markings inform motorists that pedestrian crossings should be expected, and reinforce that Jenkintown Borough is a walkable community that promotes pedestrian activity. In addition, the crosswalks identify the proper location for pedestrians to cross the roadway by encouraging pedestrian crossings at

controlled intersections and not at mid-block locations. A conceptual cost estimate to install high visibility ladder style crosswalks at four (4) pedestrian crossings at one intersection can be found in ***APPENDIX C.***

IN-ROADWAY PEDESTRIAN SIGNS:

It is recommended that the Borough consider use of "In-Street Pedestrian Crossing Signs", which are effective in slowing traffic by being placed in the center of the roadway directly on the double yellow pavement marking. The sign reads, "STATE LAW YIELD TO PEDESTRIANS WITHIN CROSSWALK". There are several locations in the downtown business district and around the school where the signs could be deployed. In order to not increase the responsibility of the Borough's Public Works staff, we recommend that the signs be placed in the roadway and taken down on a daily basis by school representatives (i.e. crossing guard), local business owners, and/or residents who support their use. A conceptual cost estimate to deploy In-Roadway Pedestrian Signs at the two (2) main street pedestrian crossings, as identified above, can be found in ***APPENDIX C.***

CROSS TRAFFIC DOES NOT STOP SIGNS

As previously noted, the majority of the unsignalized intersections in the Borough are 'multiway stop' controlled, requiring all approaches to stop at the intersection. However, there are some intersections that are one-way or two-way stop controlled. As indicated by several residents, these types of intersections are such a rarity throughout the Borough that they often present a safety concern for vehicles which anticipate that the cross traffic will stop. Specific locations of concern include the following intersections:

- Vernon Road & Clement Road – One-way stop controlled on Vernon Road
- Rodman Avenue & Elm Avenue – Two-way stop controlled on Rodman Avenue

The installation of "CROSS TRAFFIC DOES NOT STOP" signs (R1-1C) is recommended to increase motorists' awareness of the traffic control conditions at the intersection. A conceptual cost estimate to install Cross Traffic Does Not Stop signs at one intersection with two stopped approaches is provided in ***APPENDIX C.***

PAINTED PARKING STALLS:

As noted in PennDOT's "Sign and Pavement Marking Handbook for Local Municipalities", the marking of parking space limits encourages a more orderly and efficient use of limited parking space. Painted parking stalls also prevent intrusion on sidewalks, fire hydrant zones, mid-block pedestrian crossings, bus stops, loading zones and approaches to intersections. The Borough has begun efforts to install painted parking stalls in various locations throughout the Borough and should continue to implement them in additional locations where on-street parking issues, as noted above frequently occur. As seen in the photo, on the 400 Block of Walnut Street (SR 2021) vehicles often park partially on the sidewalk. For example, the installation of painted parking stalls on the 400 Block of Walnut Street (SR 2021) would delineate the width of the roadway that is designated for parking from the designated travel lane.

CENTERLINE AND EDGELINE PAVEMENT MARKINGS:

Two locations where the centerline (double yellow) and edgeline pavement markings should be considered include Walnut Street and Highland Avenue from Greenwood to the Cul-de-sac.

The double yellow centerline and white edge line pavement markings along Walnut Street are faded and should be reapplied. The pavement markings help to reduce the number of motorists that drive around vehicles completing parking maneuvers and help to define the travel ways and parking areas. The white edge lines should clearly show the parking limit near intersections along Walnut Street to discourage motorists from parking too close to the intersection which restricts the sight distance. A conceptual cost estimate to install pavement markings along Walnut Street, as identified above, is provided in ***APPENDIX C.***

The recommendation of a centerline pavement marking on Highland Avenue is in response to resident concerns since the cul-de-sac was installed on Highland Avenue. The yellow centerline is proposed to identify the travel lanes and discourage the parking on the west side of Highland Avenue in the No Parking zone (See **FIGURE 16**). There are multiple times of the day during the morning, evening, and during various school events where the high traffic volumes result in traffic flow issues on this section of Highland Avenue. In order to improve traffic flow and circulation on Highland Avenue, we recommend the installation of a yellow centerline and painted parking stalls.

SIGN REPLACEMENT/REMOVAL:

Although not directly related to traffic calming, the Borough should continue their efforts to replace faded, damaged, and missing signs throughout the Borough. Clean and visible signs are necessary for traffic signs to be effective. A new requirement of PennDOT is that all regulatory and warning signs be retro-reflective to improve visibility, especially at night. The Borough should develop a program to replace the existing signs that are standard engineering grade sheeting with the high intensity reflective sheeting. In addition, the Borough is replacing their Street Name Signs to be in conformance with the new PennDOT standards, which have increased letter heights. These signs will help to inform motorists of the cross streets and get them to their destination.

During the sign replacement program, existing signs that are not required or warranted should be removed. This will reduce sign clutter and increase the focus on warranted signs.

A training session was held at the Borough with the Publics Works Department to review state requirements for sign placement, clearance requirements, and installation procedures.

INCREASED USE OF SPEED TRAILER:

One of the most effective tools of the Borough's Police Department is their mobile speed trailer. The speed trailer should be regularly deployed throughout the Borough at different locations to maintain its effectiveness. Speed trailers have been documented to deter the majority of speeders, and help to remind motorists of their operating speed and the posted speed limit. The trailer is a valuable tool that is already owned by the Borough and can be set up in a timely manner. The Police Department should consider enforcing the speed on the roadway that the trailer is located to give motorist the perception that the trailer is used with enforcement.

II. TRAFFIC SIGNAL AND SCHOOL FLASHER ASSESSMENT

In the state of Pennsylvania, municipalities own and maintain the traffic signals and flashing warning devices within their municipality. In order to assist the Borough with the maintenance of the traffic signals, we completed conformance inspections at each signalized intersection and flashing warning device in Jenkintown Borough.

A detailed review of each traffic signal and flashing warning device was completed to verify conformance with the latest PennDOT approved Traffic Signal Permit Plan (Condition Diagram). Items that were reviewed include signage, pavement markings, signal indications, pedestrian accommodations, vehicle detection, and critical timings (Yellow & All-Red Clearance Times). All deficiencies and non-conformities were documented and submitted in a report to the Borough.

The items of priority were identified in the letter, which need to be addressed by the Borough in a timely manner. Other items of lower priority need to be addressed, but are not as time sensitive or critical as the priority items.

III. WAYFINDING SIGNAGE PLAN

A Wayfinding Signage Plan was developed, through close consultation with representatives of Borough Council, Staff, and the Jenkintown Community Alliance (JCA), as another relatively low cost initiative to improve traffic flow and identify major attractions in the Borough. The Wayfinding Signage Plan involves the installation of aesthetically pleasing and easily visible signs that create a better sense of identity for the Borough and its Business District/Town Center. This plan is consistent with the Jenkintown Revitalization Master Plan, which recommended Wayfinding signage to, "…encourage greater utilization of Uptown by directing visitors and customers to parking and shopping destinations while contributing to the visual attractiveness of Uptown."

Several different types of signs are recommended to be installed as part of the Wayfinding Signage Plan. The types of signs include:

- **Wayfinding Signs** – Wayfinding signs are recommended for installation throughout the Business District to direct motorists and pedestrians to the focal points or "attractions" in Jenkintown including public parking lots. The signs will provide direct travel routes for visitors to get to their destination, while identifying the major attractions to passing motorists.
- **Gateway Signs** – Gateway signs recommended at the major entrances to the Borough. These signs are proposed to inform motorists that they are entering Jenkintown Borough. The signs will not only provide a greater sense of identity for the Borough as a whole, but they also effectively alert the public that they are entering a Borough and should reduce their vehicle's speed.
- **Destination Signs** – Destination signs are recommended at the Borough's defined "attractions", including parking lots, to inform the public that they have reached their desired destination. These signs will also help to reduce motorist confusion which often results in erratic stops and turns.
- **Parking Signs** – Parking signs are recommended to be installed to clearly identify public parking lots and the hours of operation. Since parking is limited in the Borough, it is important to identify the public parking lots to residents, patrons, and visitors. This includes future public/private parking arrangements.

The development of the Wayfinding Signage Plan involved the detailed design of customized signs that would clearly and effectively guide motorists and pedestrians to the Borough's attractions. The following six (6) locations were identified as major "Borough Attractions":

1. Borough Hall
2. Hiway Theater
3. Town Square
4. Post Office
5. Library
6. Train Station

In order for Wayfinding signs to be effective, the number of attractions must be limited to allow the motorist to read the sign. In this case, the proposed Wayfinding signs are shown with no more than four (4) attractions per sign.

The Wayfinding Signage Plan was developed throughout the Business District and along the major routes of the Borough to guide motorists and pedestrians from each gateway entrance to each attraction. The signs were primarily placed on the State Routes and the main thoroughfares, such as York Road (SR 0611), West Avenue (SR 2021), Township Line Road (SR 2054) and Washington Lane, to discourage motorists unfamiliar with the area from entering adjacent residential streets to travel to their destination. Wayfinding signs were placed near each gateway entrance to guide motorists and pedestrians in the direction of the main attractions near York Road (SR 0611). Supplemental signs are shown where vehicles are required to turn to travel to their desired destination.

In addition to the existing Gateway sign located at the Borough entrance from Greenwood Avenue, three (3) additional entrances to the Borough were recommended for gateway signs. These include the northbound approach of York Road (SR 0611) at Washington Lane, the southbound approach of York Road (SR 0611) at Rydal Road/Cloverly Avenue and the eastbound approach of Washington Lane at Township Line Road. Gateway signs are recommended at each of these locations to visually alert motorists that they are entering Jenkintown Borough. A fifth location for consideration is the southeastbound approach of Walnut Street at Runnymede Avenue.

The graphical design of the signs, including the color scheme, shape, size and the font style, was completed by Art270, Inc., a professional graphic design firm located on Yorkway Place within the Borough. A rendering of each sign type can be seen in ***APPENDIX D.***

A map identifying the Borough's attractions and the proposed locations of the signs can be seen in **FIGURE 1.** In addition, detail sketches of the individual signs can be found in ***APPENDIX E.*** A conceptual cost estimate for the installation of the signs, as indicated on the map, is also provided in ***APPENDIX F.***

Prior to the implementation of the Wayfinding Signage Plan, PennDOT approval will be necessary for each sign located within the PennDOT owned right-of-way. Furthermore, the signs must be installed on PennDOT approved break-away support posts. To maximize the unobstructed width of the sidewalk, we recommend that the sign posts be limited to one post per sign whenever installed along walking routes.

LIST OF REFERENCES

1. Jenkintown Borough Webpage, www.jenkintownboro.com.

2. PennDOT District 6-0 County Functional Class Maps, http://www.dot.state.pa.us/Internet/Bureaus/pdPlanRes.nsf/PlanningAndResearchHomePage?OpenFrameset&Frame=main&src=HomePageHighwayStatistics?ReadForm.

3. PennDOT Publication 383, "Pennsylvania's Traffic Calming Handbook".

4. Institute of Transportation Engineers Publication, "Traffic Calming – State of Practice".

5. "Jenkintown Revitalization Master Plan", Kise Straw & Kolodner, April 15, 2002.

6. "Code of Federal Regulations, Excerpt from 28 CFR Part 36: ADA Standards for Accessible Design", Department of Justice, 7-1-94 Edition.

7. "Shaping Our Future: A Comprehensive Plan for Montgomery County", *Transportation Plan*, Montgomery County Planning Commission, 2005.

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

APPENDIX A

Residential Permit Parking Questions & Answers

BOROUGH OF JENKINTOWN
700 SUMMIT AVENUE
JENKINTOWN, PA 19046
215.885.0700

Residential Permit Parking Program

The Borough of Jenkintown has established a Residential Permit Parking Program to provide residents with the greater opportunity to park their vehicles on the street near their homes at targeted locations in the Borough. Currently, permit parking is in effect on the following roadways:

- **Summit Avenue** (between Township Line Road and Wyncote Road)
- **Cottman Street** (between West Avenue and Nice Avenue) – west side only
- **Cedar Street** (Between West Avenue and Hillside Avenue) – west side only

Residential Permit Parking Zones: Permit parking zones could be established in the Borough. Currently, all permits are the same in the Borough since the program is relatively new and in the experimental stage. There are two main purposes to establish permit parking zones:

1. Allows residents to park on neighboring blocks. For example, if a permit parking zone was established on the 100 block of Summit Avenue, residents from the 200 block of Summit Avenue, Wyncote Road and Highland Avenue could be permitted to parking on the 100 block. Currently, only residents of the 100 block of Summit Avenue can park on this block.

2. Eliminates problem of residents with permits parking in other permit parking areas. The permits issued by the Borough would have a designated zone (i.e. color, letter) that would permit them to park within the zone near their house only. If multiple areas of the Borough are designated with permit parking, zones should be considered to maintain the goals of the permit parking.

Multiple workshop meetings have been held at Borough Hall with residents, staff, and Council to discuss Permit Parking on various roadways. Residents have been invited to discuss the permit parking program and request permit parking on their roadway for consideration.

BOROUGH OF JENKINTOWN
700 SUMMIT AVENUE
JENKINTOWN, PA 19046
215.885.0700

In order to provide residents with a better understanding of residential permit parking, we have prepared the following information that could be handed out and posted on the Borough's webpage to answer some common questions.

Where can I get a parking permit?

A Resident Parking Permit can be obtained from the Borough Hall located at the following address:

700 Summit Avenue
Jenkintown, PA 19046
Hours: Monday – Friday, 8:00 AM - 4:00 PM

How much do I have to pay for a parking permit?

A Resident Parking Permit is available at **no cost** to the residents of the Borough.

Who is eligible to obtain a parking permit?

Residents that live on a street or zone designated for permit parking in the Borough's Vehicles and Traffic Code, Chapter 172 are eligible to obtain parking permits.

What documents do I need to obtain a parking permit?

To acquire a Residential Parking Permit you must fill out an application form. Once the form is completed bring it to the Borough Hall with a vehicle registration and current proof of residency. A Resident Parking Permit will only be issued to vehicles that are registered in the State of Pennsylvania.

Following documents are required for Leased and Company Vehicles:

- **Leased vehicles:** A copy of the lease agreement from an authorized leasing agent showing proof that the vehicle is leased to the resident
- **Company Vehicles:** You must present a letter on Company letterhead stating that you are an employee of the company and are required to use the vehicle on a regular basis

Does a permit guarantee me a parking space?

A Resident Parking Permit does not guarantee a parking space; however, it will provide residents with a greater opportunity to park near their homes without suffering the unnecessary burden of competing for these parking spaces with nonresidential and commercial vehicles parking in the neighborhood.

How do I display my permit?

Resident Parking Permits must be affixed displayed clearly on the lower left-hand corner (driver side) of the front windshield.

BOROUGH OF JENKINTOWN
700 SUMMIT AVENUE
JENKINTOWN, PA 19046
215.885.0700

How do I add another vehicle to my permit or change information on an existing permit?

To add another vehicle to a Resident Parking Permit, a separate application form must be filled out and submitted with the documents required to obtain a parking permit.

How do I modify the vehicle information assigned to my permit?

To modify vehicle information, a separate form must be filled out. Forms for modifying information are available at the Borough Hall.

I am a visitor, what are my parking options?

Visitor parking permits are available at the Borough Hall.

How do I renew my parking permit?

Parking Permits expire on an annual basis. Each year residents my renew their permit with the Borough.

What streets currently have Permit Parking:

Following are locations where parking permits are required for long-term parking:

- Summit Avenue (between Township Line Road and Wyncote Road) – east side
- Cottman Street (between West Avenue and Nice Avenue) – west side only
- Cedar Street (Between West Avenue and Hillside Avenue) – west side only

How do I apply for Permit Parking on my street?

Resident's may request permit parking on their street by submitting a request to the Borough for consideration. Many factors are considered to determine if a street is eligible for permit parking including parking demand, parking occupancy, impact to adjacent streets, surrounding land use (residential/commercial/institutional).

Is there a map that shows the various permit parking zones in the Borough?

Yes, a permit parking map showing the various zones is available at the Jenkintown Borough Hall.

APPENDIX A

RANKING SYSTEM

The following are criteria to be used for the evaluation of traffic data in neighborhoods petitioning for traffic calming. Each roadway will be analyzed individually within the petitioning neighborhood area according to the below criteria. The highest point value received on an individual roadway segment within the area petitioning for traffic calming will be the point total assigned to the neighborhood petition for the purposes of ranking and prioritizing.

Vehicular Travel Speeds:

85th Percentile Speeds on an average weekday

POINTS	85th % SPEED
0.5	26 to 28 mph
1	29 to 30 mph
1.5	31 to 33 mph
2	34 to 35 mph
2.5	36 to 37 mph
3	38 mph or greater

Motor Vehicle Traffic Volumes:

Average Daily Traffic (ADT) over 24-hours on average weekday

POINTS	ADT VOLUME
0.5	100 to 250 vehicles per day
1	251 to 500 vpd
1.5	501 to 1000 vpd
2	1001 vpd or greater

Crash Report History:

Review of reported traffic crashes over a three year period. Crashes reported at intersections of the boundary area for a neighborhood receive half weight. Reportable crashes (as defined by PENNDOT) will receive double weight.

POINTS	AVG. CRASHES ANNUALLY
1	0.51 to 1.00
2	1.01 to 1.25
3	1.26 to 1.50
4	1.51 to 2.00
5	2.01 to 2.50
6	2.51 or greater

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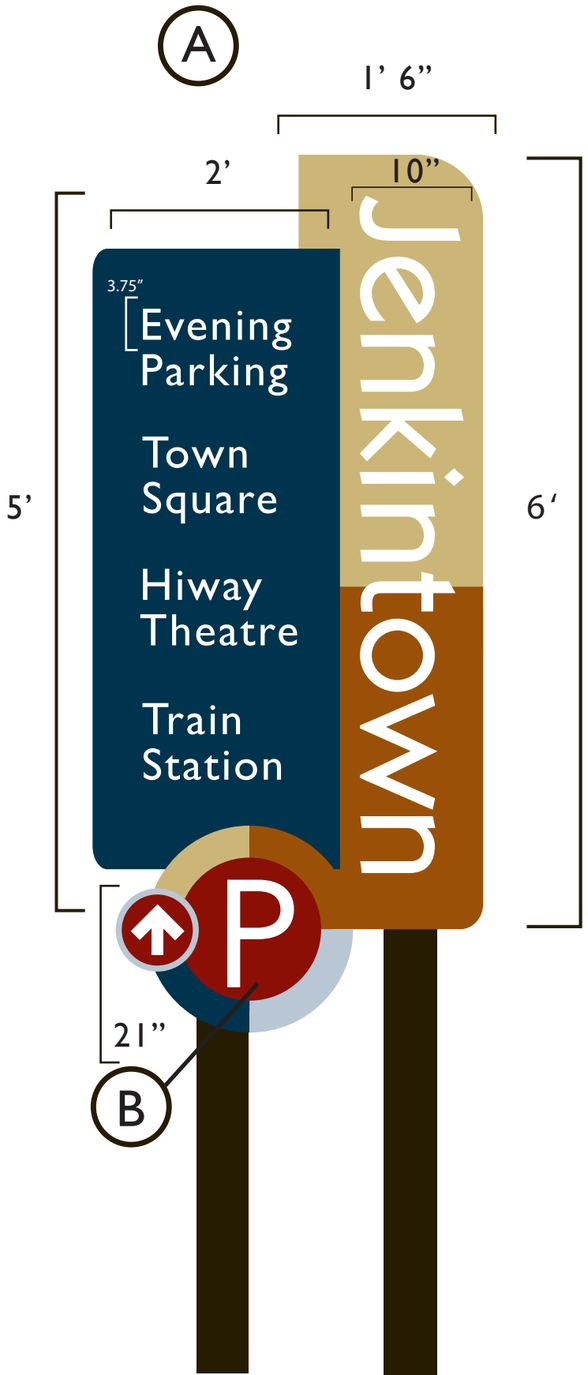
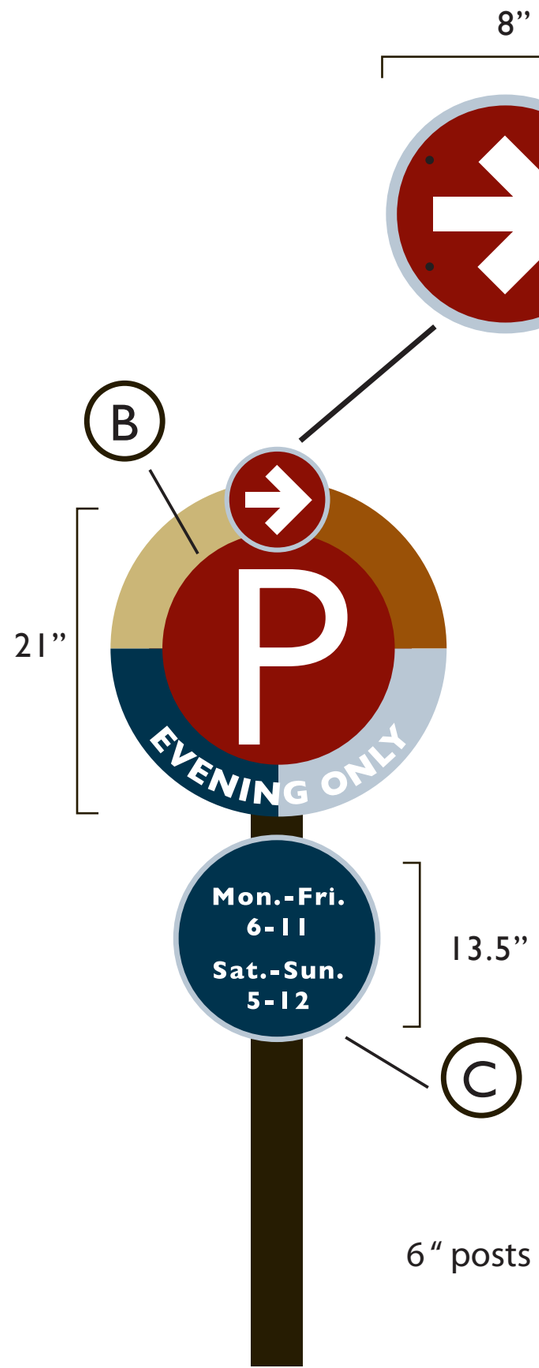
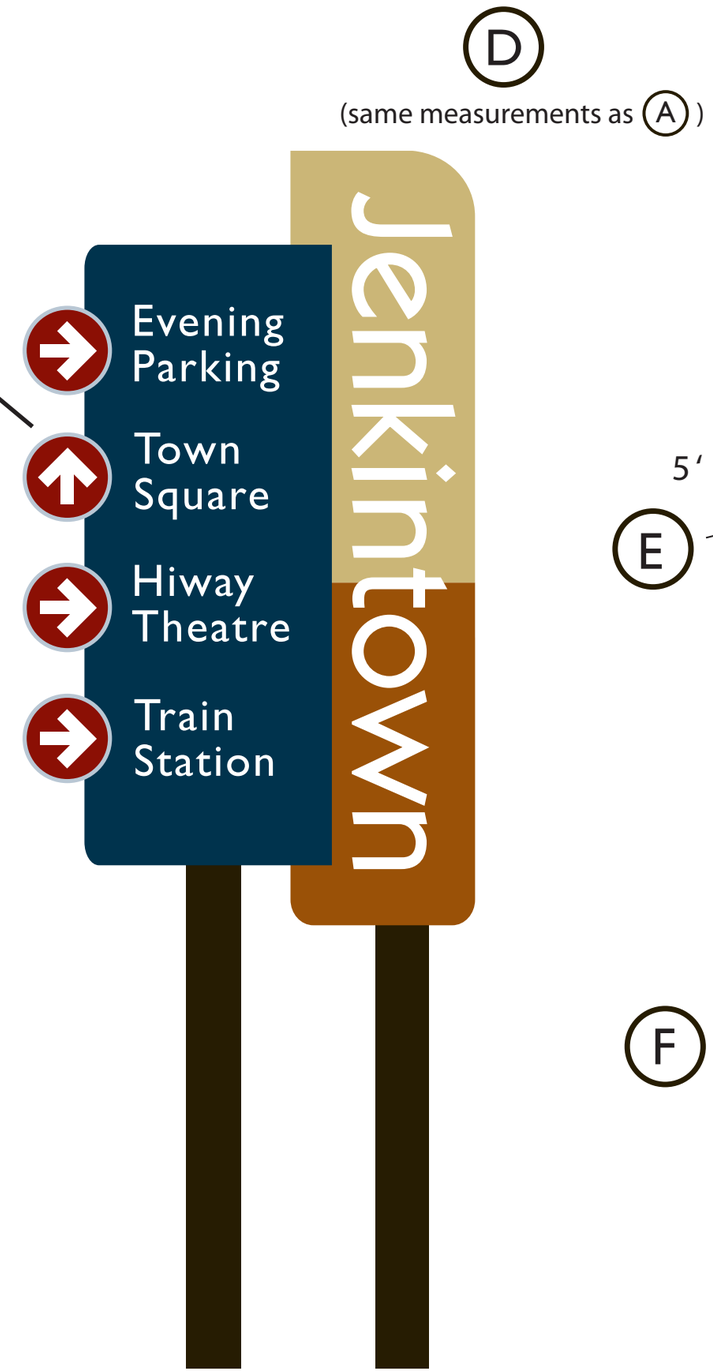
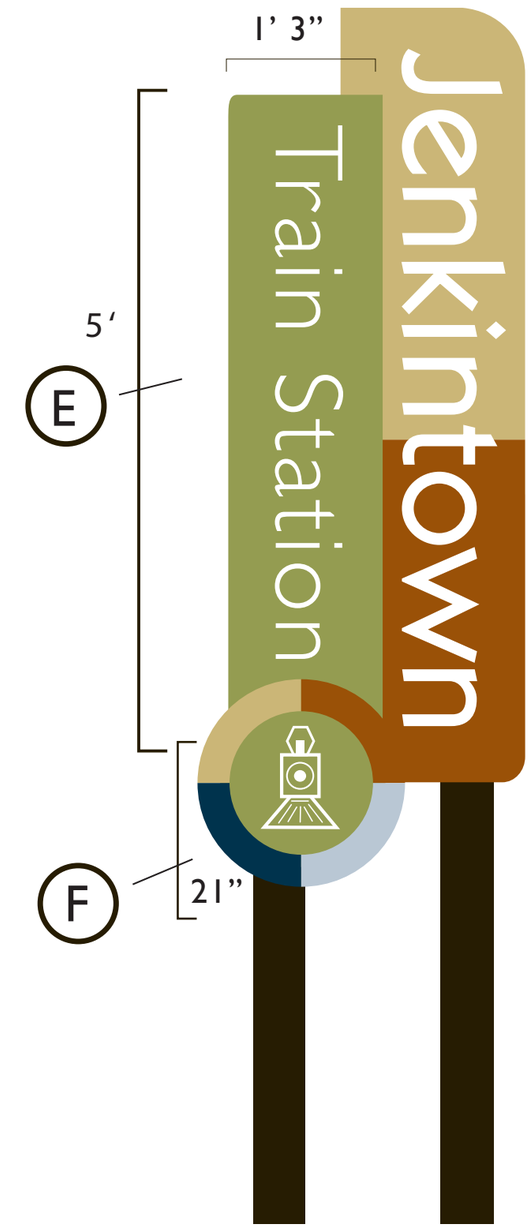
APPENDIX D

Art270, Inc. Renderings of Wayfinding Signs


A
1' 6"
2'
10"
3.75"
Evening Parking
Town Square
Hiway Theatre
Train Station
Jenkintown
5'
6'
21"
B


8"
B
21"
EVENING ONLY
Mon.-Fri.
6-11
Sat.-Sun.
5-12
13.5"
C
6" posts

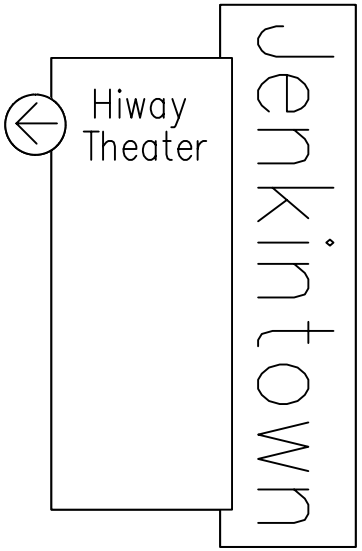

D
(same measurements as A)
Evening Parking
Town Square
Hiway Theatre
Train Station
Jenkintown


1' 3"
5'
E
Train Station
Jenkintown
F
21"

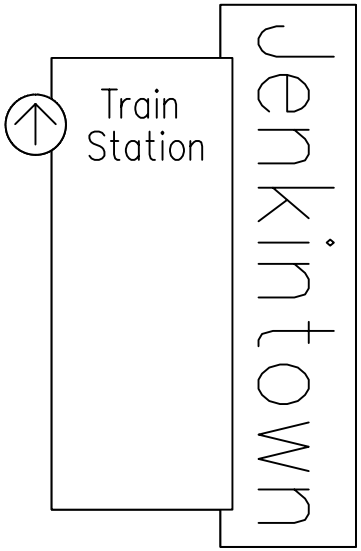
PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

APPENDIX E

Wayfinding Sign Details



Sign W1



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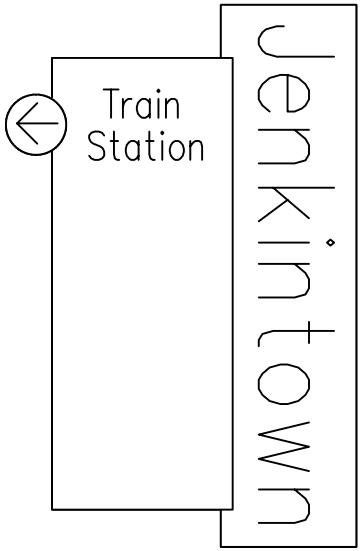
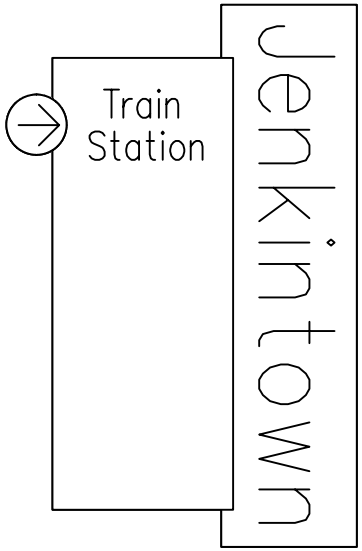
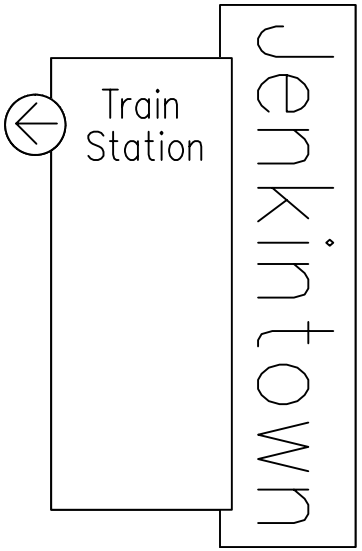


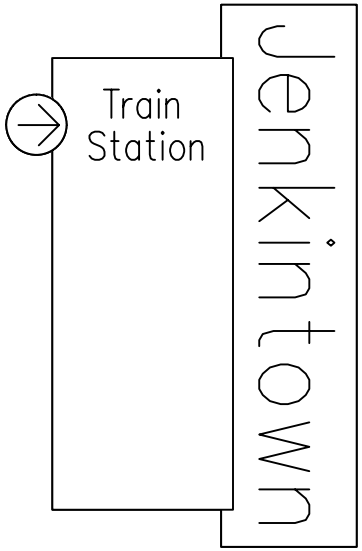
Sign W3



Sign W4



Sign W5



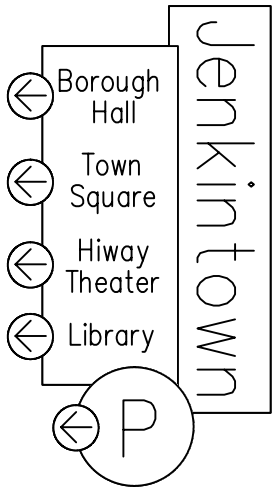
Sign W6

Pennoni

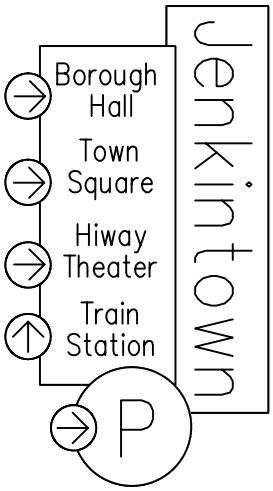
BOROUGH OF JENKINTOWN
MONTGOMERY COUNTY

WAYFINDING SIGNAGE
DETAILS

06/07/2007 JENK 0601



Sign WP1



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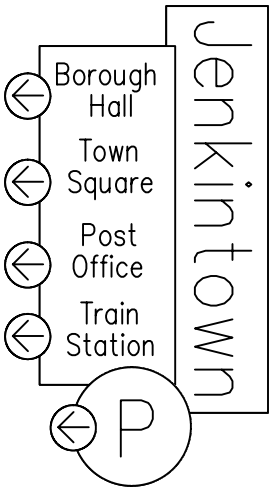
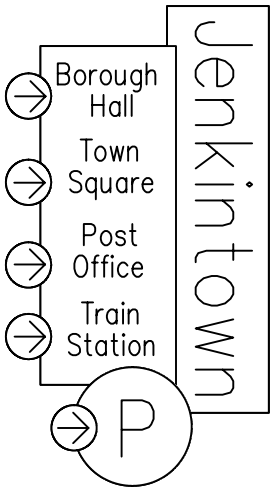
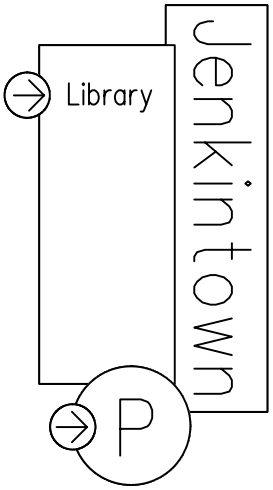


Sign WP3



Sign WP4



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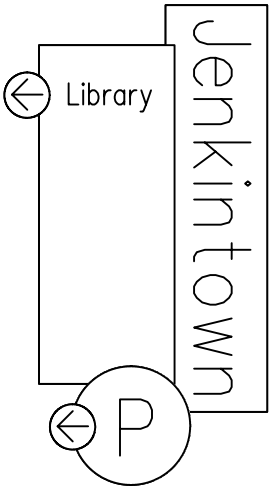

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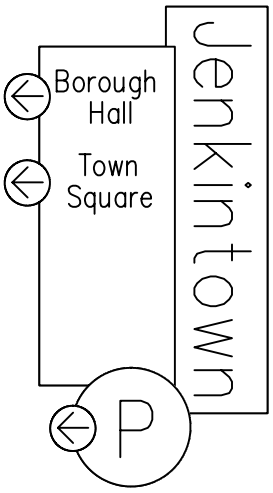

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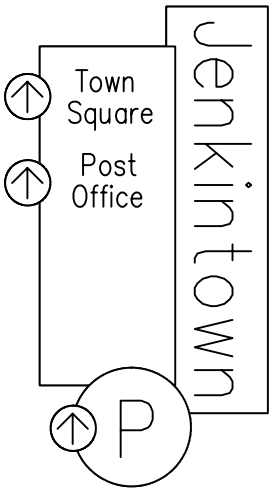

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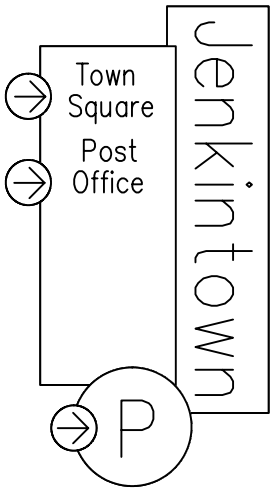

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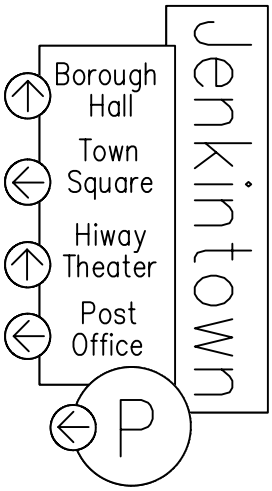


Sign WP10

Pennoni

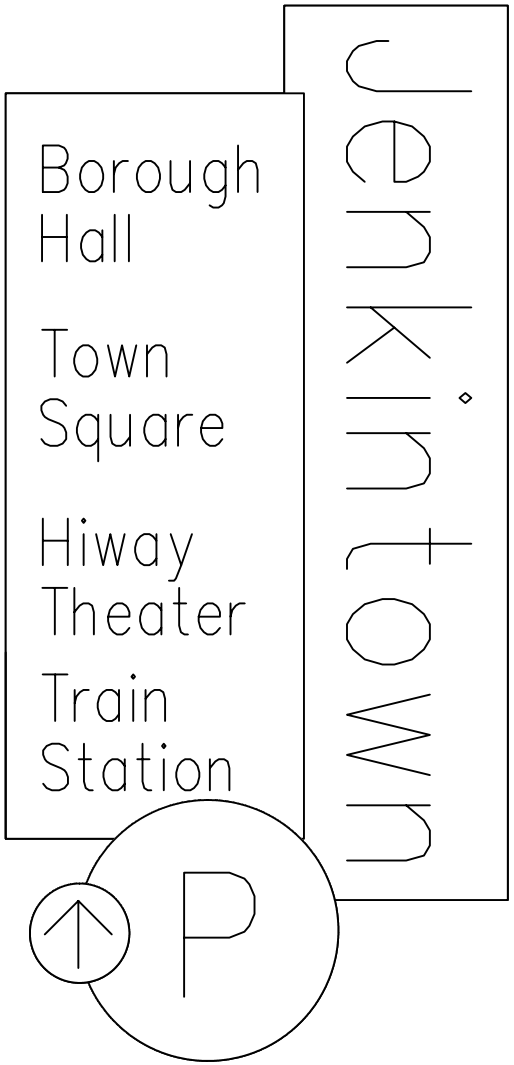
BOROUGH OF JENKINTOWN
MONTGOMERY COUNTY

WAYFINDING SIGNAGE DETAILS

06/07/2007 JENK 0601

Sign G1

Sign G2



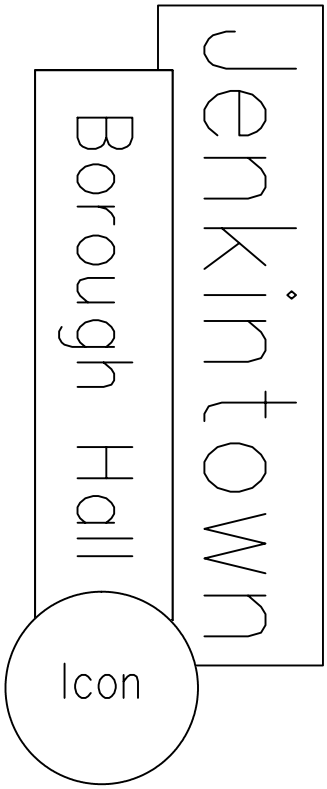
Sign G3

Pennoni

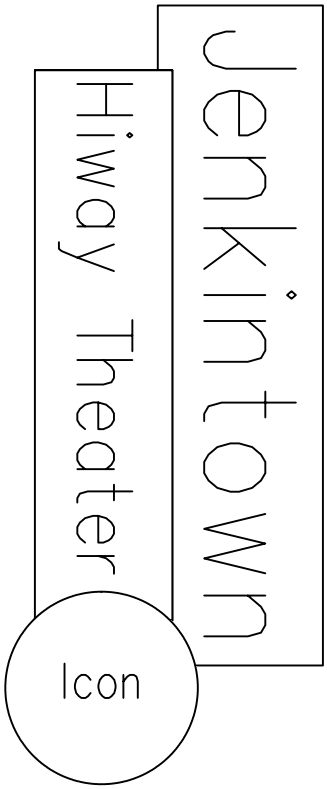
BOROUGH OF JENKINTOWN
MONTGOMERY COUNTY

WAYFINDING SIGNAGE
DETAILS

06/07/2007 JENK 0601



Sign D1



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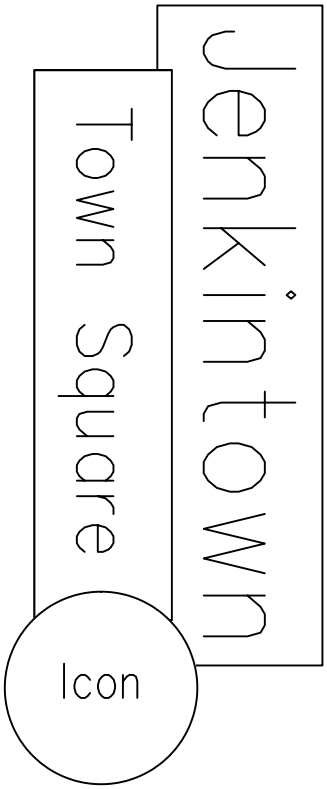

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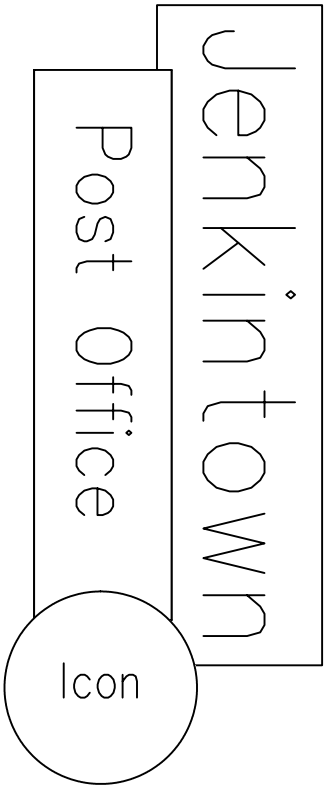

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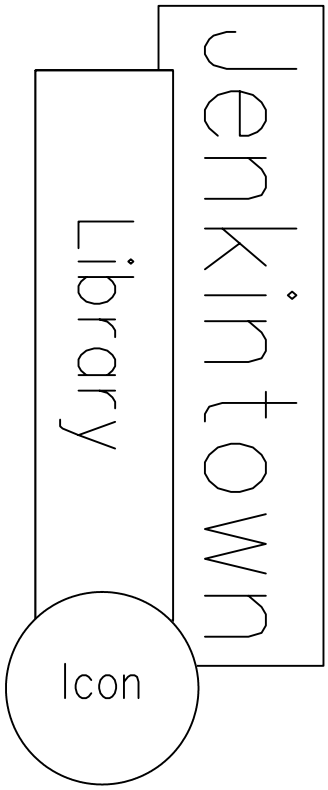

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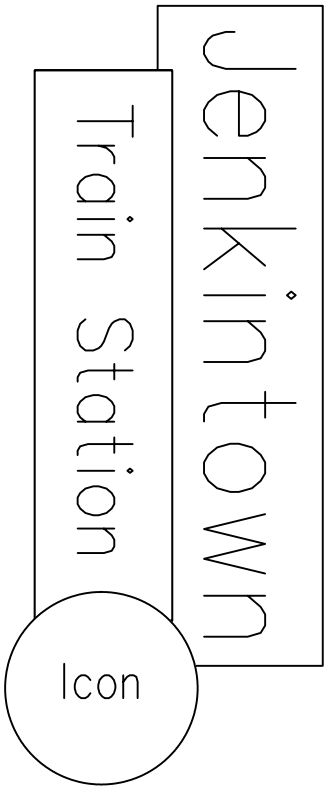


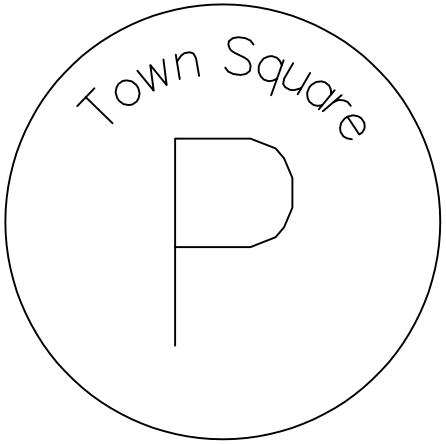
Sign D6

Pennoni

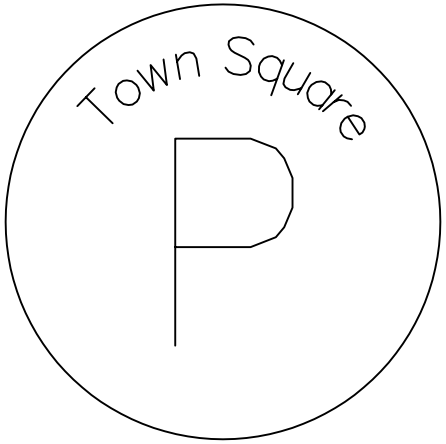
BOROUGH OF JENKINTOWN
MONTGOMERY COUNTY

WAYFINDING SIGNAGE
DETAILS

06/07/2007 JENK 0601



Sign P1



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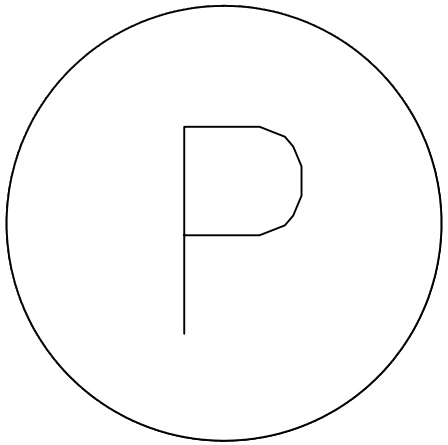

Sign P3

Pennoni

BOROUGH OF JENKINTOWN
MONTGOMERY COUNTY

WAYFINDING SIGNAGE
DETAILS

06/07/2007 JENK 0601

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

APPENDIX F

Conceptual Cost Estimate for Wayfinding Signs

CONCEPTUAL COST ESTIMATES FOR WAYFINDING SIGNAGE PLAN

A conceptual cost estimate was completed for the proposed wayfinding signage plan in order to provide a magnitude of cost. It is important to point out that the estimates were completed based on Art270 Inc.'s Cost Proposal dated May 21, 2007.

Conceptual Cost Estimate for Transportation Improvements

Location: Jenkintown Borough, Montgomery County
Project: Wayfinding Signage Installation **(FIGURE 1)**

Item #	Description		Sign Designation	Quantity	U/M	Unit Price	Estimated Cost
1	Gateway Sign		G	3	Each	$ 4,360.00	$ 13,080.00
2	Wayfinding Sign		W	6	Each	$ 4,360.00	$ 26,160.00
3	Wayfinding Sign with Parking Panel		WP	10	Each	$ 4,800.00	$ 48,000.00
4	Parking Sign		P	3	Each	$ 2,200.00	$ 6,600.00
5	Destination Sign		D	6	Each	$ 4,660.00	$ 27,960.00
Construction cost							$ 121,800.00
6	Maintenance and protection of traffic	10% of construction cost					$ 12,180.00
7	Mobilization and insurance	5% of construction cost					$ 6,090.00
8	Contingencies for the conceptual estimate	15% of construction cost					$ 18,270.00
Construction and contingencies cost							$ 158,340.00
9	Engineering	20% of total cost					$ 31,668.00
10	Inspection	10% of total cost					$ 15,834.00
Total Cost Estimate for entire intersection*							**$ 205,842.00**

* The above costs are indicated in 2007 dollars and have not been escalated to allow for future inflation.

* Cost estimate based on Art270's Cost Proposal dated 5/21/2007

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

APPENDIX H

Conceptual Cost Estimate for York Road (SR 0611) Streetscape Improvements

Conceptual Cost Estimate for Transportation Improvements

Location: York Road (SR 0611) from Washington Lane to Rydal Road/Cloverly Avenue
Jenkintown Borough, Montgomery County
Project: Pedestrian-Oriented Streetscape Improvements

Item #	Description		Quantity	U/M	Unit Price	Estimated Cost
1	Street Trees (*including tree grate and factor for removals)*		135	Each	$ 2,200.00	$ 297,000.00
2	Pedestrian Lighting (*incl. pole, footing, new elec., etc.*)		90	Each	$ 10,000.00	$ 900,000.00
3	Curbing, Concrete (*remove and replace entirely*)		5500	L.F.	$ 50.00	$ 275,000.00
4	Sidewalk Paving (*remove/replace with new concrete/decorative paver*)		38000	S.F.	$ 16.00	$ 608,000.00
5	Street Furnishings (*benches, trash cans, bike racks, etc.*)		70	Each	$ 1,000.00	$ 70,000.00
6	Buffer Surface Parkings Lots (*Add hard/soft edge*)		500	L.F.	$ 125.00	$ 62,500.00
7	Identity Elements (*Banners or other design elements*)		1	L.S.	$ 40,000.00	$ 40,000.00
8	Hanging Baskets (*Double flower baskets each ped pole*)		90	Each	$ 500.00	$ 45,000.00
9	Enhanced Landscaping (*Curbside planters and containers)*		1	L.S.	$ 100,000.00	$ 100,000.00
10	Bus Shelters (*Shelter structure/enhanced waiting area*)		6	Each	$ 10,000.00	$ 60,000.00
11	Plaza Area (*Small Landscaped Seating Area*)		1	L.S.	$ 100,000.00	$ 100,000.00
12	Decorative Crosswalks (*side streets, per crossing*)		10	Each	$ 8,000.00	$ 80,000.00
Construction cost						$ 2,637,500.00
5	Maintenance and protection of traffic	10% of construction cost				$ 263,750.00
6	Mobilization and insurance	5% of construction cost				$ 131,875.00
7	Contingencies for the conceptual estimate	15% of construction cost				$ 395,625.00
Construction and contingencies cost						$ 3,428,750.00
8	Engineering	20% of total cost				$ 685,750.00
9	Inspection	10% of total cost				$ 342,875.00
Total Cost Estimate for entire intersection*						**$ 4,457,375.00**

* The above costs are indicated in 2007 dollars and have not been escalated to allow for future inflation.

Conceptual Cost Estimate for Transportation Improvements

Location: York Road (SR 0611) from Summit Avenue to Cherry Street
Jenkintown Borough, Montgomery County
Project: Pedestrian-Oriented Streetscape Improvements

Item #	Description		Quantity	U/M	Unit Price	Estimated Cost
1	Street Trees (*including tree grate and factor for removals)*		50	Each	$ 2,200.00	$ 110,000.00
2	Pedestrian Lighting (*incl. pole, footing, new elec., etc.*)		40	Each	$ 10,000.00	$ 400,000.00
3	Curbing, Concrete (*remove and replace entirely*)		2400	L.F.	$ 50.00	$ 120,000.00
4	Sidewalk Paving (*remove/replace with new concrete/decorative paver*)		16000	S.F.	$ 16.00	$ 256,000.00
5	Street Furnishings (*benches, trash cans, bike racks, etc.*)		35	Each	$ 1,000.00	$ 35,000.00
6	Buffer Surface Parkings Lots (*Add hard/soft edge*)		200	L.F.	$ 125.00	$ 25,000.00
7	Identity Elements (*Banners or other design elements*)		1	L.S.	$ 20,000.00	$ 20,000.00
8	Hanging Baskets (*Double flower baskets each ped pole*)		40	Each	$ 500.00	$ 20,000.00
9	Enhanced Landscaping (*Curbside planters and containers)*		1	L.S.	$ 30,000.00	$ 30,000.00
10	Bus Shelters (*Shelter structure/enhanced waiting area*)		3	Each	$ 10,000.00	$ 30,000.00
11	Plaza Area (*Small Landscaped Seating Area*)		1	L.S.	$ 100,000.00	$ 100,000.00
12	Decorative Crosswalks (*side streets, per crossing*)		7	Each	$ 8,000.00	$ 56,000.00
Construction cost						$ 1,202,000.00
5	Maintenance and protection of traffic	10% of construction cost				$ 120,200.00
6	Mobilization and insurance	5% of construction cost				$ 60,100.00
7	Contingencies for the conceptual estimate	15% of construction cost				$ 180,300.00
Construction and contingencies cost						$ 1,562,600.00
8	Engineering	20% of total cost				$ 312,520.00
9	Inspection	10% of total cost				$ 156,260.00
Total Cost Estimate for entire intersection*						**$ 2,031,380.00**

* The above costs are indicated in 2007 dollars and have not been escalated to allow for future inflation.