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CAOLO & BIENIEK ASSOCIATES, INC.

ARCHITECTURE • PLANNING • INTERIOR DESIGN

March 27, 2018

City of Easthampton
Attn: Mayor Nicole LaChapelle
50 Payson Avenue
Easthampton, MA 01027

Re: Park Street Traffic Analysis at White Brook Middle School

Dear Mayor LaChapelle,

I am writing in reference to the proposed, consolidated prekindergarten through grade 8 school project at the White Brook Middle School campus, and specifically with regard to the project's impact on the traffic conditions surrounding the school's entrance on Park Street.

On Monday, this week, our office received and reviewed the attached Traffic Impact and Access Study, dated March 23, 2018 and prepared by the Berkshire Design Group. This report is based on actual traffic data collection, taken in December of 2017. Using the data collected during peak hours, the intersection was evaluated for both 'no-build' and 'proposed construction' scenarios. For each scenario, the traffic conditions were assigned a Level of Service (LOS) grade, ranging from A to F, for the White Brook Entrance as well as the adjacent intersections at Button and South Streets. The Level of Service rating is a measure of the control delay experienced by stopped vehicles at an intersection, with A representing a very low delay and F representing a delay of more than 50 seconds. According to the Massachusetts Department of Transportation, LOS ratings of A through D are considered acceptable for an urban/ suburban setting, while F is considered unacceptable.

Analysis of the data shows that, with the exception of left turns, out of White Brook, the LOS at all intersections is within the acceptable LOS ratings of A-D. The LOS rating for left turns exiting the White Brook School is established as an F, for both the 'no build' and 'proposed school' options, which indicates that the challenges of this intersection preexist the proposed school project. Having established this preexisting condition, it is acknowledged that the proposed school significantly adds to the delay time in seconds for vehicles turning left out of White Brook.

In recognizing the preexisting Park Street traffic challenges encountered between South Street and Button, as well as the increased impact a consolidated school will have on the LOS rating, the Design Team is preparing a study of potential mitigation strategies for review by the City and School Building Committee. The study will provide a base map of the three intersections, using on-line sources, with scaled layouts of geometric concepts and supporting graphics to demonstrate each mitigation option investigated. In addition, order-of magnitude costs and a matrix of pluses and minuses will be included for each option. The mitigation options being developed include traffic light control and a traffic circle, both of which will likely require land acquisition from one or more abutters to the White Brook entrance. Additionally, in response to feedback received at the March 20, 2018 Public Information

Session, we have asked our Traffic Engineer to provide an estimated unit cost, and opinion of effectiveness for adding speed humps to Park Street, as a means of slowing traffic along the road.

I anticipate formal delivery of the mitigation strategies no later than mid-April so that they may be evaluated by the City and School Building Committee well in advance of the May 22 vote. While the focus of the report and forthcoming traffic mitigation options are focused on the section of Park Street surrounding White Brook Middle School, it is noted that currently undesirable traffic conditions at the existing Center, Pepin and Maple Street Elementary Schools will be eliminated with the proposed consolidation of the elementary and middle school populations.

Should you have any questions regarding the attached Traffic Impact and Access Study, or with the proposed scope to investigate mitigation strategies, please feel free to contact me at your convenience.

Sincerely,
CAOLO & BIENIEK ASSOCIATES, INC.

Bertram W. Gardner IV AIA, NCARB
Project Architect

Encl.: Traffic Impact and Access Study (prepared by The Berkshire Design Group, March 23, 2018)

Cc: Tom Brown, School Building Committee Chair
Nancy Follansbee, Superintendent of Schools
Alan Minkus, Colliers International
Mark Darnold, The Berkshire Design Group
Project file

TRAFFIC IMPACT AND ACCESS STUDY
White Brook Elementary School Site
Easthampton, Massachusetts

March 23, 2018

Prepared for:
Caolo & Bieniek Architects

&

The Town of Easthampton

Prepared by:

The Berkshire Design Group, Inc.

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TRAFFIC IMPACT AND ACCESS STUDY
Easthampton Schools at Park Street/White Brook Site
March 23, 2018

The Berkshire Design Group, Inc. has prepared this Traffic Impact and Assessment Study which quantifies the existing and proposed traffic conditions at the White Brook Middle School site located at 200 Park Street, Easthampton, MA. The purpose of this study is to provide a summary of the current traffic conditions at the site, and also that of a future condition with the proposed expansion of the school. This study is not intended to provide mitigation measures and or designs to address traffic impacts.

The existing Middle School serves grades 5 through 8 and has an enrollment of 450 students. It is proposed to close three existing Pre-K through grade 4 elementary schools and move that student population to a new facility to be constructed on the White Brook campus site. The student populations of the existing elementary schools consists of 53 Pre-K students and 644 grade K-5 students. The projected enrollment for the proposed Pre-K through grade 8 school at the White Brook campus is 1,063 students and would be distributed as follows:

Middle School (Grade 6-8):	337 Students
Grammar School (Pre-K through grade-5):	726 Students

Park Street consists of one twelve foot travel lane in each direction, with a variable shoulder width of 2 to 3 feet. Park Street has a posted speed limit of 35 MPH north bound , 30 MPH southbound and with a 20 MPH school zone designated by a flashing SCHOOL ZONE sign immediately in front of the school. There is a sidewalk along the easterly side of Park Street. With the exception of a 100 foot section just south of South Street, there are no sidewalks along the westerly side of the road.

The existing White Brook Middle School is accessed off of Park Street through a divided driveway, which traverses over 1,200 feet before entering the formal campus and parking area. The entry portion of the drive is a single lane, and the exit portion of the drive consists of a left and right turn lane. The drive functions as a three legged un-signalized intersection with stop control. This study also examined the South Street /Park Street intersection located northerly of the School drive, and also the Button Street/Park Street intersection which is located south of the School drive. Both of these intersections also function as a three legged un-signalized intersection with stop control. South Street is a connector

street and Button Road is a dead end residential street which services approximately 90 residential homes/apartments.

Intersection Sight Distance

Intersection Sight Distance (ISD) is the sight distance required so drivers can enter the roadway safely. The determination of acceptable intersection sight distance is provided by the AASHTO Policy on Geometric Design for Streets and Highways, i.e. the Green Book, and is dependent upon the speed of the traffic utilizing the intersection. The ISD at the school drive is approximately 330 ft to the north and 700 ft to the south.

The speed limit posted on Park Street is 35 MPH northbound and 30 MPH southbound; however, the area is classified as a School Zone with flashing 20 MPH School Zone speed limit signs. The required ISD for a 20 MPH zone is 195 ft for right turns and 225 ft for left turns. For the right turns, the approach speed limit is 35 MPH which results in a required ISD of 335 ft for right turns. For the left turns, the approach speed limit is 30 MPH, which results in a required ISD of 335 ft for left turns.

The ISD at the school drive exceeds the recommended ISD for all conditions; however it just makes it for the left turn condition with a 30 MPH approach speed limit.

Traffic Volume Data Collection

Turning Count Movements (TMC's) were conducted at the intersections of:

- Park Street at South Street,
- Park Street at White Brook School drive
- Park Street at Button Road.

The counts were conducted at all three noted intersections when school was in session, on Thursday, December 14, 2017, during a weekday morning peak traffic period (7:30-10:30 a.m.) and on a weekday evening peak traffic period (12:00 Noon--5:30 p.m.). Traffic counts and Level of Service calculations are typically conducted during peak hours of the adjacent roadway, (i.e.: Park Street), and not necessarily during peak hours of the generator, (i.e. the schools). This is done so that periods when the intersection is experiencing the maximum traffic loads can be evaluated.

Traffic Generation

The TMCs were performed in December. A review of traffic rates in the region demonstrates that December is a typical month and so no seasonal adjustments were made to the traffic counts. A review of regional traffic indicates a growth factor of less that 1% per year. The recorded traffic counts were adjusted to accommodate the 1% growth rate in order to more accurately predict the traffic conditions for the design year, (5 years from now in 2023). An estimate was prepared for the projected (year 2023) peak hour traffic volume on Park Street assuming no new development (i.e. the NO BUILD condition). Traffic estimates were made for a weekday AM and PM peak hour period at the three intersections noted. Utilizing this traffic data, a capacity analysis was performed for those three intersections under the NO BUILD condition.

The traffic generation for the proposed development for the weekday morning peak hour trips and weekday afternoon peak hour trips was generated. Traffic generated from the Middle School was assumed to remain constant; however, additional traffic will be generated due to the proposed addition of students and staff from the three existing schools.

For the projected 2023 traffic counts for the build condition, the existing counts from the middle School were added to projected counts for the addition of a 613 pre-K thru grade 5 students. Traffic generation for the proposed 613 new students was evaluated based on the ITE Trip Generation Report.

The peak hour traffic turning movements under current conditions are shown on the attached FIGURE 1 for all three intersections, and indicate the traffic during the AM and also the PM peak hour periods. FIGURE 2 indicates the traffic in five years, (2023) under the "NO-BUILD" condition, i.e. assuming the site remains unchanged. The slight increase in traffic is due to historical increase in traffic of approximately 1% per year. FIGURE 3 indicates the peak hour traffic assuming the new school project is constructed.

It should be noted that the traffic counts which were conducted in December revealed very few pedestrians at the three intersections, (At the School drive location, only 1 during the AM peak period and 1 during the PM peak hour period). If it is anticipated that the addition of the elementary and pre-school children will increase the pedestrian count, or that there will be seasonal changes in the pedestrian counts, then those factors could also affect the function of the intersections.

Capacity Analysis

A capacity analysis of traffic during the peak periods of the day was conducted to determine the relative quality of traffic operation, defined as Level of Service (LOS), for traffic at the study area intersections. The Level of Service was determined by the methodology of the "Highway Capacity Manual" published by the Transportation Research Board to describe the operating condition of an unsignalized intersection.

For unsignalized intersection capacity analyses, LOS provides a description of the delay and operational characteristics of the movements from the minor street (stop sign controlled) and left turns from the major street to the minor street. Major street through and right turn vehicles do not experience delay; therefore they are not rated with a LOS.

LOS is a measure of the Control Delay experienced by stopped vehicles at an intersection, which is rated on a scale from A to F, with each letter grade assigned a range of delay values in seconds per vehicle. LOS A describes a condition of very low delay (less than 10 seconds per vehicle), and LOS F describes a condition where delays will exceed 50 seconds per vehicle. Control Delay measures the time accumulated when a motorist approaches an intersection including the initial deceleration, queue move up time, stopped delay, and final acceleration delay. Therefore, intersections with longer Control Delay

times are less acceptable to most drivers. Mass Department of Transportation (MassDOT) considers LOS A, B, C and D as acceptable LOS in urban/suburban settings, and LOS E and F as unacceptable.

The results are shown in the summary table according to delay (sec.), and level of service.

Intersection/ movement	AM Peak				PM Peak			
	2023 No- Build		2023 Build		2023 No- Build		2023Build	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
South Street								
South Street EB - L&R	13.0	B	15.5	C	13.0	B	13.4	B
Park Street NB-L	8.1	A	8.4	A	8.3	A	8.4	A
School Drive								
Drive WB - L	**64.1**	**F**	**767.5**	**F**	18.8	C	27.6	D
Drive WB - R	16.4	C	27.9	D	10.4	B	10.8	B
Park Street SB - L	10.3	B	12.6	B	8.1	A	8.4	A
Button Road								
Button WB-L&R	14.4	B	16.1	C	12.1	B	12.4	B
Park Street SB - L	8.8	A	9.1	A	7.9	A	8.0	A

The above table demonstrates that the introduction of the additional students and staff at the White Brook site will not significantly change the level of service at the South Street and Button Road intersections. At the school drive, there will be a significant decrease in the Level of Service (LOS) primarily for the vehicles attempting to exit the drive and make a left hand, (south-bound) turn.

Summary

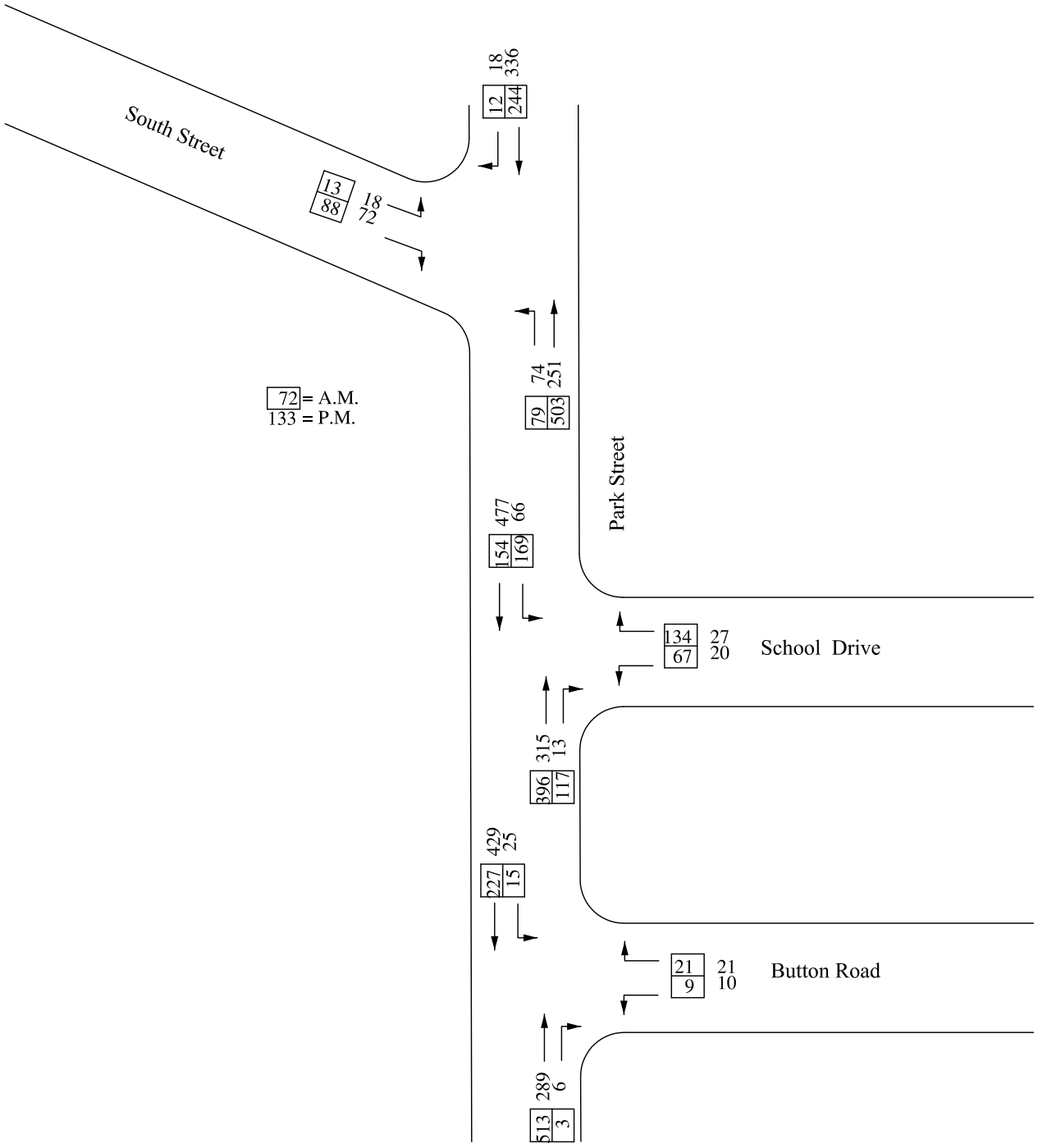
This traffic analysis demonstrates that the existing and proposed traffic conditions at the South Street/Park Street and the Button Road/Park Street intersections will not see a significant change in the LOS and as such should function in a satisfactory manner after the new school is constructed and operational. The traffic on Park Street will also function in a satisfactory manner after the new school is operational.

The intersection sight distance is satisfactory, and is will be important to maintain the sight distance to ensure the safety of the intersection.

The analysis indicates that there will be a severe impact to the vehicles exiting the school drive, particularly during the morning peak hours. Under the No-build - AM scenario, vehicles exiting the school drive and turning left, (south) experience a 64 second delay, with a LOS of F. Under the Build - AM scenario, the delay increases to 767 seconds and a LOS of F. Although this No-Build movement was at a level of service F, the future Build scenario with a theoretical delay of over 12 minutes constitutes an unacceptable condition. Given this condition, it is anticipated that drivers would chose to turn right, (northbound), and then locate a site whereby they could reverse direction or choose an alternate route to their original destination. Although this severe a situation does not occur throughout the entire day, and is actually at acceptable levels during the PM peak hour, it still represents a situation that warrants addressing.

Mitigation measure(s) should be undertaken to address the increased traffic generated by the project and to ensure the operation and safety of the intersection is maintained. The most appropriate mitigation measure(s) could be determined through analysis of alternative mitigation methods, (such as changes in schedules at the school), in combination with possible new intersection designs to determine which method would provide the best resolution of potential impact to the traffic conditions.

NO-Build 2023



The Berkshire Design Group, Inc.

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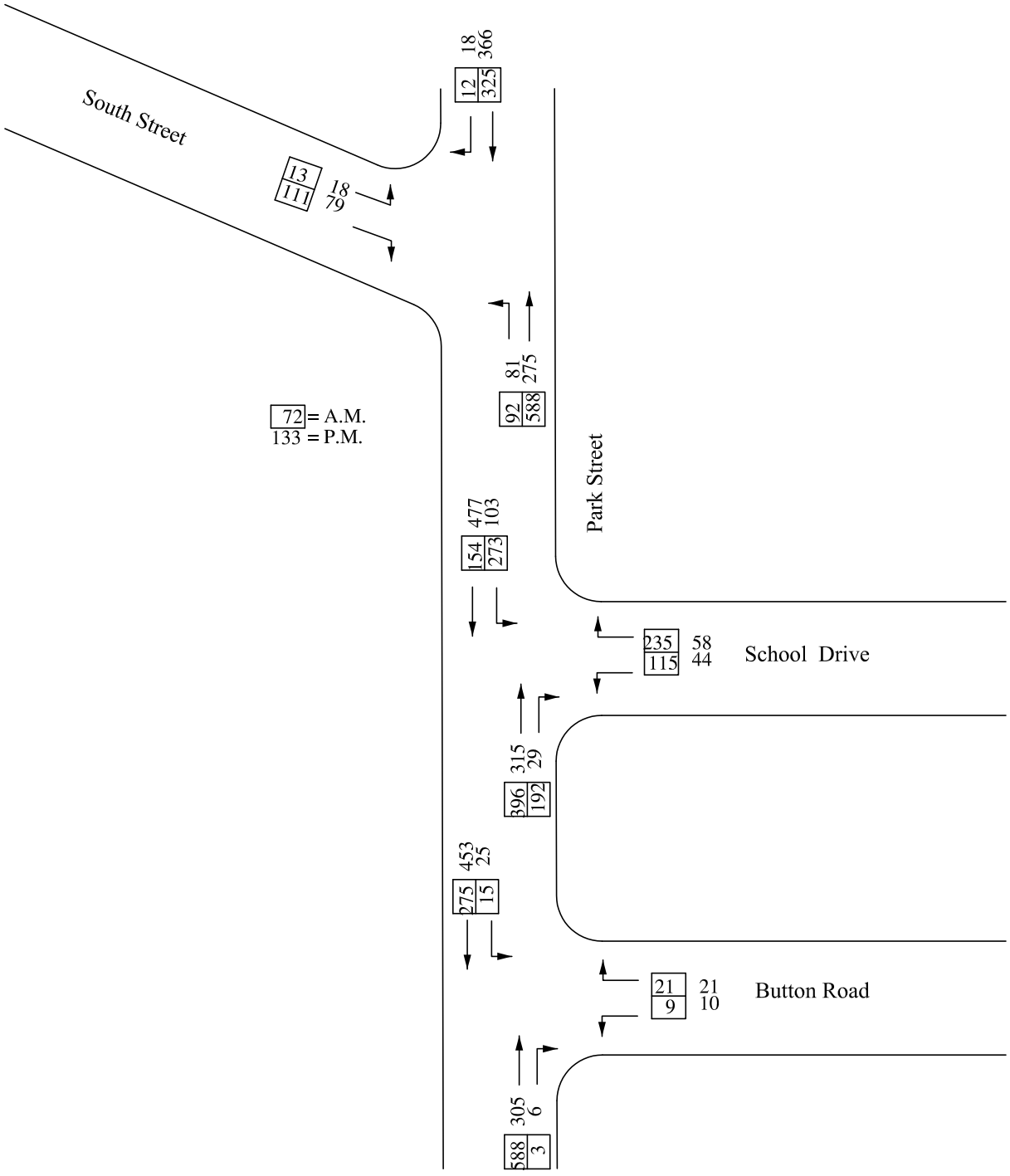
Traffic Study Figure 2

Whitebrook School Site
Easthampton, MA

SCALE: Not to scale DATE: January 12, 2018

2

Build 2023



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Traffic Study Figure 3

Whitebrook School Site
Easthampton, MA

SCALE: Not to scale DATE: January 12, 2018

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Mark B, Darnold, P.E.*	Intersection	
Agency/Co.	*Berkshire Design Group, Inc.*	Jurisdiction	
Date Performed	*1/5/17*	Analysis Year	*2023*
Analysis Time Period	*AM Peak No Build*		
Project Description			
East/West Street:	*South Street*	North/South Street:	*Park Street*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*74*	*503*	*0*	*0*	*244*	*12*
Peak-Hour Factor, PHF	*0.82*	*0.82*	*0.82*	*0.82*	*0.82*	*0.82*
Hourly Flow Rate, HFR	*90*	*613*	*0*	*0*	*297*	*14*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*13*	*0*	*88*
Peak-Hour Factor, PHF	*0.82*	*0.82*	*0.82*	*0.82*	*0.82*	*0.82*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*15*	*0*	*107*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*2*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*90*						*122*	
C (m) (vph)	*1261*						*572*	
v/c	*0.07*						*0.21*	
95% queue length	*0.23*						*0.80*	
Control Delay	*8.1*						*13.0*	
LOS	*A*						*B*	
Approach Delay	--	--					*13.0*	
Approach LOS	--	--					*B*	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Mark B, Darnold, P.E.*	Intersection	
Agency/Co.	*Berkshire Design Group, Inc.*	Jurisdiction	
Date Performed	*1/5/17*	Analysis Year	*2023*
Analysis Time Period	*AM Peak Build*		
Project Description			
East/West Street: *South Street*		North/South Street: *Park Street*	
Intersection Orientation: *North-South*		Study Period (hrs): *0.25*	

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*92*	*588*	*0*	*0*	*325*	*12*
Peak-Hour Factor, PHF	*0.82*	*0.82*	*0.82*	*0.82*	*0.82*	*0.82*
Hourly Flow Rate, HFR	*112*	*717*	*0*	*0*	*396*	*14*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*13*	*0*	*111*
Peak-Hour Factor, PHF	*0.82*	*0.82*	*0.82*	*0.82*	*0.82*	*0.82*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*15*	*0*	*135*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*112*						*150*	
C (m) (vph)	*1160*						*492*	
v/c	*0.10*						*0.30*	
95% queue length	*0.32*						*1.28*	
Control Delay	*8.4*						*15.5*	
LOS	*A*						*C*	
Approach Delay	--	--				*15.5*		
Approach LOS	--	--				*C*		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Mark B, Darnold, P.E.*	Intersection	
Agency/Co.	*Berkshire Design Group, Inc.*	Jurisdiction	
Date Performed	*1/5/17*	Analysis Year	*2023*
Analysis Time Period	*PM Peak No-Build*		
Project Description			
East/West Street:	*South Street*	North/South Street:	*Park Street*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*74*	*251*	*0*	*7*	*336*	*18*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR	*80*	*272*	*0*	*0*	*365*	*19*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*18*	*0*	*72*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*19*	*0*	*78*
Percent Heavy Vehicles	*0*	*0*	*0*	*3*	*0*	*10*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*80*						*97*	
C (m) (vph)	*1186*						*547*	
v/c	*0.07*						*0.18*	
95% queue length	*0.22*						*0.64*	
Control Delay	*8.3*						*13.0*	
LOS	*A*						*B*	
Approach Delay	--	--					*13.0*	
Approach LOS	--	--					*B*	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Mark B, Darnold, P.E.*	Intersection	
Agency/Co.	*Berkshire Design Group, Inc.*	Jurisdiction	
Date Performed	*1/5/17*	Analysis Year	*2023*
Analysis Time Period	*PM Peak Build*		
Project Description			
East/West Street: *South Street*		North/South Street: *Park Street*	
Intersection Orientation: *North-South*		Study Period (hrs): *0.25*	

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*81*	*275*	*0*	*0*	*366*	*18*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR	*88*	*298*	*0*	*0*	*397*	*19*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*18*	*0*	*79*
Peak-Hour Factor, PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*19*	*0*	*85*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*88*						*104*	
C (m) (vph)	*1154*						*533*	
v/c	*0.08*						*0.20*	
95% queue length	*0.25*						*0.72*	
Control Delay	*8.4*						*13.4*	
LOS	*A*						*B*	
Approach Delay	--	--					*13.4*	
Approach LOS	--	--					*B*	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Mark B, Darnold, P.E.*	Intersection	
Agency/Co.	*Berkshire Design Group, Inc.*	Jurisdiction	
Date Performed	*1/5/2018*	Analysis Year	*2023*
Analysis Time Period	*AM Peak No-Build*		
Project Description			
East/West Street: *School Drive*		North/South Street: *Park Street*	
Intersection Orientation: *North-South*		Study Period (hrs): *0.25*	

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*396*	*117*	*161*	*147*	*0*
Peak-Hour Factor, PHF	*0.74*	*0.74*	*0.74*	*0.74*	*0.74*	*0.74*
Hourly Flow Rate, HFR	*0*	*535*	*158*	*217*	*198*	*0*
Percent Heavy Vehicles	*0*	--	--	*4*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*64*	*0*	*130*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.74*	*0.74*	*0.74*	*0.74*	*0.74*	*0.74*
Hourly Flow Rate, HFR	*86*	*0*	*175*	*0*	*0*	*0*
Percent Heavy Vehicles	*8*	*0*	*2*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*	*L*		*R*			
v (vph)		*217*	*86*		*175*			
C (m) (vph)		*893*	*141*		*489*			
v/c		*0.24*	*0.61*		*0.36*			
95% queue length		*0.95*	*3.20*		*1.61*			
Control Delay		*10.3*	*64.1*		*16.4*			
LOS		*B*	*F*		*C*			
Approach Delay	--	--	*32.1*					
Approach LOS	--	--	*D*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Mark B, Darnold, P.E.*	Intersection	
Agency/Co.	*Berkshire Design Group, Inc.*	Jurisdiction	
Date Performed	*1/5/2018*	Analysis Year	*2023*
Analysis Time Period	*AM Peak Build*		
Project Description			
East/West Street: *School Drive*		North/South Street: *Park Street*	
Intersection Orientation: *North-South*		Study Period (hrs): *0.25*	

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*396*	*192*	*273*	*154*	*0*
Peak-Hour Factor, PHF	*0.74*	*0.74*	*0.74*	*0.74*	*0.74*	*0.74*
Hourly Flow Rate, HFR	*0*	*535*	*259*	*368*	*208*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*115*	*0*	*235*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.74*	*0.74*	*0.74*	*0.74*	*0.74*	*0.74*
Hourly Flow Rate, HFR	*155*	*0*	*317*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*	*L*		*R*			
v (vph)		*368*	*155*		*317*			
C (m) (vph)		*836*	*65*		*464*			
v/c		*0.44*	*2.38*		*0.68*			
95% queue length		*2.27*	*15.10*		*5.07*			
Control Delay		*12.6*	*767.5*		*27.9*			
LOS		*B*	*F*		*D*			
Approach Delay	--	--	*270.8*					
Approach LOS	--	--	*F*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Mark B, Darnold, P.E.*	Intersection	
Agency/Co.	*Berkshire Design Group, Inc.*	Jurisdiction	
Date Performed	*1/5/2018*	Analysis Year	*2023*
Analysis Time Period	*PM Peak No-Build*		
Project Description			
East/West Street:	*School Drive*	North/South Street:	*Park Street*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*315*	*13*	*29*	*477*	*0*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*0*	*350*	*14*	*32*	*530*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*20*	*0*	*27*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*22*	*0*	*30*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*	*L*		*R*			
v (vph)		*32*	*22*		*30*			
C (m) (vph)		*1206*	*283*		*692*			
v/c		*0.03*	*0.08*		*0.04*			
95% queue length		*0.08*	*0.25*		*0.14*			
Control Delay		*8.1*	*18.8*		*10.4*			
LOS		*A*	*C*		*B*			
Approach Delay	--	--	*14.0*					
Approach LOS	--	--	*B*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Mark B, Darnold, P.E.*	Intersection	
Agency/Co.	*Berkshire Design Group, Inc.*	Jurisdiction	
Date Performed	*1/5/2018*	Analysis Year	*2023*
Analysis Time Period	*PM Peak Build*		
Project Description			
East/West Street: *School Drive*		North/South Street: *Park Street*	
Intersection Orientation: *North-South*		Study Period (hrs): *0.25*	

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*315*	*29*	*103*	*477*	*0*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*0*	*350*	*32*	*114*	*530*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*44*	*0*	*58*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*48*	*0*	*64*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*1*	*0*	*1*	*0*	*0*	*0*
Configuration	*L*		*R*			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*	*L*		*R*			
v (vph)		*114*	*48*		*64*			
C (m) (vph)		*1188*	*207*		*684*			
v/c		*0.10*	*0.23*		*0.09*			
95% queue length		*0.32*	*0.87*		*0.31*			
Control Delay		*8.4*	*27.6*		*10.8*			
LOS		*A*	*D*		*B*			
Approach Delay	--	--	*18.0*					
Approach LOS	--	--	*C*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Mark B, Darnold, P.E.*	Intersection	
Agency/Co.	*Berkshire Design Group, Inc.*	Jurisdiction	
Date Performed	*1/5/2018*	Analysis Year	*2023*
Analysis Time Period	*AM Peak No-Build*		
Project Description			
East/West Street:	*Button Road*	North/South Street:	*Park Street*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*513*	*3*	*15*	*227*	*0*
Peak-Hour Factor, PHF	*0.84*	*0.84*	*0.84*	*0.84*	*0.84*	*0.84*
Hourly Flow Rate, HFR	*0*	*610*	*3*	*17*	*270*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*9*	*0*	*21*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.84*	*0.84*	*0.84*	*0.84*	*0.84*	*0.84*
Hourly Flow Rate, HFR	*10*	*0*	*25*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*17*		*35*				
C (m) (vph)		*976*		*418*				
v/c		*0.02*		*0.08*				
95% queue length		*0.05*		*0.27*				
Control Delay		*8.8*		*14.4*				
LOS		*A*		*B*				
Approach Delay	--	--		*14.4*				
Approach LOS	--	--		*B*				

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Mark B, Darnold, P.E.*	Intersection	
Agency/Co.	*Berkshire Design Group, Inc.*	Jurisdiction	
Date Performed	*1/5/2018*	Analysis Year	*2023*
Analysis Time Period	*AM Peak Build*		
Project Description			
East/West Street: *Button Road*		North/South Street: *Park Street*	
Intersection Orientation: *North-South*		Study Period (hrs): *0.25*	

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*588*	*3*	*15*	*275*	*0*
Peak-Hour Factor, PHF	*0.84*	*0.84*	*0.84*	*0.84*	*0.84*	*0.84*
Hourly Flow Rate, HFR	*0*	*700*	*3*	*17*	*327*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*9*	*0*	*21*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.84*	*0.84*	*0.84*	*0.84*	*0.84*	*0.84*
Hourly Flow Rate, HFR	*10*	*0*	*25*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*17*		*35*				
C (m) (vph)		*904*		*359*				
v/c		*0.02*		*0.10*				
95% queue length		*0.06*		*0.32*				
Control Delay		*9.1*		*16.1*				
LOS		*A*		*C*				
Approach Delay	--	--		*16.1*				
Approach LOS	--	--		*C*				

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Mark B, Darnold, P.E.*	Intersection	
Agency/Co.	*Berkshire Design Group, Inc.*	Jurisdiction	
Date Performed	*1/5/2018*	Analysis Year	*2023*
Analysis Time Period	*PM Peak No-Build*		
Project Description			
East/West Street:	*Button Road*	North/South Street:	*Park Street*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*289*	*6*	*25*	*429*	*0*
Peak-Hour Factor, PHF	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*
Hourly Flow Rate, HFR	*0*	*307*	*6*	*26*	*456*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*10*	*0*	*21*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*
Hourly Flow Rate, HFR	*10*	*0*	*22*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*26*		*32*				
C (m) (vph)		*1259*		*540*				
v/c		*0.02*		*0.06*				
95% queue length		*0.06*		*0.19*				
Control Delay		*7.9*		*12.1*				
LOS		*A*		*B*				
Approach Delay	--	--		*12.1*				
Approach LOS	--	--		*B*				

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*Mark B, Darnold, P.E.*	Intersection	
Agency/Co.	*Berkshire Design Group, Inc.*	Jurisdiction	
Date Performed	*1/5/2018*	Analysis Year	*2023*
Analysis Time Period	*PM Peak Build*		
Project Description			
East/West Street: *Button Road*		North/South Street: *Park Street*	
Intersection Orientation: *North-South*		Study Period (hrs): *0.25*	

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*305*	*6*	*25*	*453*	*0*
Peak-Hour Factor, PHF	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*
Hourly Flow Rate, HFR	*0*	*324*	*6*	*26*	*481*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*10*	*0*	*21*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*	*0.94*
Hourly Flow Rate, HFR	*10*	*0*	*22*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration		*LR*				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*26*		*32*				
C (m) (vph)		*1241*		*519*				
v/c		*0.02*		*0.06*				
95% queue length		*0.06*		*0.20*				
Control Delay		*8.0*		*12.4*				
LOS		*A*		*B*				
Approach Delay	--	--		*12.4*				
Approach LOS	--	--		*B*				

Innovative Data, LLC

PO Box 468
Belchertown, Massachusetts
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N / S: Park Street
E / W: Button Road
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : AM Peak - Park @ Button
Site Code : 3
Start Date : 12/14/2017
Page No : 1

Groups Printed- PCs and Peds - Heavy Vehicles - Bicycles

	Park From North					Button From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:30 AM	0	54	4	0	58	3	0	2	0	5	3	135	0	0	138	0	0	0	1	1	202
07:45 AM	0	42	4	0	46	2	0	1	0	3	0	120	0	0	120	0	0	0	2	2	171
Total	0	96	8	0	104	5	0	3	0	8	3	255	0	0	258	0	0	0	3	3	373
08:00 AM	0	70	3	0	73	9	0	5	0	14	0	138	0	0	138	0	0	0	0	0	225
08:15 AM	0	50	3	0	53	6	0	0	0	6	0	96	0	0	96	0	0	0	0	0	155
08:30 AM	0	26	0	0	26	8	0	2	0	10	1	90	0	0	91	0	0	0	0	0	127
08:45 AM	0	38	3	0	41	7	0	1	0	8	1	64	0	0	65	0	0	0	1	1	115
Total	0	184	9	0	193	30	0	8	0	38	2	388	0	0	390	0	0	0	1	1	622
09:00 AM	0	39	1	0	40	4	0	2	0	6	1	48	0	0	49	0	0	0	0	0	95
09:15 AM	0	47	3	0	50	1	0	2	0	3	1	62	0	0	63	0	0	0	0	0	116
09:30 AM	0	25	5	0	30	4	0	0	0	4	1	45	0	0	46	0	0	0	0	0	80
09:45 AM	0	42	2	0	44	3	0	0	0	3	1	52	0	0	53	0	0	0	0	0	100
Total	0	153	11	0	164	12	0	4	0	16	4	207	0	0	211	0	0	0	0	0	391
10:00 AM	0	32	5	0	37	2	0	3	0	5	1	57	0	0	58	0	0	0	3	3	103
10:15 AM	0	27	4	0	31	0	0	1	0	1	1	42	0	0	43	0	0	0	0	0	75
Grand Total	0	492	37	0	529	49	0	19	0	68	11	949	0	0	960	0	0	0	7	7	1564
Apprch %	0	93	7	0		72.1	0	27.9	0		1.1	98.9	0	0		0	0	0	100		
Total %	0	31.5	2.4	0	33.8	3.1	0	1.2	0	4.3	0.7	60.7	0	0	61.4	0	0	0	0.4	0.4	
PCs and Peds	0	469	37	0	506	49	0	19	0	68	11	929	0	0	940	0	0	0	7	7	1521
% PCs and Peds	0	95.3	100	0	95.7	100	0	100	0	100	100	97.9	0	0	97.9	0	0	0	100	100	97.3
Heavy Vehicles	0	23	0	0	23	0	0	0	0	0	0	19	0	0	19	0	0	0	0	0	42
% Heavy Vehicles	0	4.7	0	0	4.3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2.7
Bicycles	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0.1

	Park From North					Button From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 10:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	54	**4**	0	58	3	0	2	0	5	**3**	135	0	0	**138**	0	0	0	1	1	202
07:45 AM	0	42	4	0	46	2	0	1	0	3	0	120	0	0	120	0	0	0	**2**	**2**	171
08:00 AM	0	**70**	3	0	**73**	**9**	0	**5**	0	**14**	0	**138**	0	0	138	0	0	0	0	0	**225**
08:15 AM	0	50	3	0	53	6	0	0	0	6	0	96	0	0	96	0	0	0	0	0	155
Total Volume	0	216	14	0	230	20	0	8	0	28	3	489	0	0	492	0	0	0	3	3	753
% App. Total	0	93.9	6.1	0		71.4	0	28.6	0		0.6	99.4	0	0		0	0	0	100		
PHF	.000	.771	.875	.000	.788	.556	.000	.400	.000	.500	.250	.886	.000	.000	.891	.000	.000	.000	.375	.375	.837
PCs and Peds																					
% PCs and Peds	0	94.9	100	0	95.2	100	0	100	0	100	100	97.8	0	0	97.8	0	0	0	100	100	97.1
Heavy Vehicles	0	11	0	0	11	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	22
% Heavy Vehicles	0	5.1	0	0	4.8	0	0	0	0	0	0	2.2	0	0	2.2	0	0	0	0	0	2.9
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Innovative Data, LLC

PO Box 468
Belchertown, Massachusetts
Innovativedatallc.com or 1.413.668.5094

N / S: Park Street
E / W: Button Road
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : AM Peak - Park @ Button
Site Code : 3
Start Date : 12/14/2017
Page No : 1

Groups Printed- Heavy Vehicles

	Park From North					Button From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:30 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
07:45 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Total	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
08:00 AM	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	8
08:15 AM	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	8
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	4
08:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	9	0	0	9	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	21
09:00 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
09:15 AM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
09:30 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	0	7	0	0	7	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	11
10:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:15 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Grand Total	0	23	0	0	23	0	0	0	0	0	0	19	0	0	19	0	0	0	0	0	42
Apprch %	0	100	0	0		0	0	0	0		0	100	0	0		0	0	0	0		
Total %	0	54.8	0	0	54.8	0	0	0	0	0	0	45.2	0	0	45.2	0	0	0	0	0	

	Park From North					Button From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 10:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
08:00 AM	0	3	0	0	3	0	0	0	0	0	0	**5**	0	0	**5**	0	0	0	0	0	**8**
08:15 AM	0	**5**	0	0	**5**	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	8
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	4
Total Volume	0	9	0	0	9	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	23
% App. Total	0	100	0	0		0	0	0	0		0	100	0	0		0	0	0	0		
PHF	.000	.450	.000	.000	.450	.000	.000	.000	.000	.000	.000	.700	.000	.000	.700	.000	.000	.000	.000	.000	.719

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Belchertown, Massachusetts
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N / S: Park Street
E / W: South Street
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : AM Peak - Park @ South
Site Code : 1
Start Date : 12/14/2017
Page No : 1

Groups Printed- PCs and Peds - Heavy Vehicles - Bicycles

	Park From North					From East					Park From South					South From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:30 AM	4	65	0	0	69	0	0	0	1	1	0	119	17	0	136	14	0	1	0	15	221
07:45 AM	3	53	0	0	56	0	0	0	0	0	0	106	18	2	126	20	0	2	0	22	204
Total	7	118	0	0	125	0	0	0	1	1	0	225	35	2	262	34	0	3	0	37	425
08:00 AM	3	73	0	0	76	0	0	0	0	0	0	137	26	0	163	32	0	5	0	37	276
08:15 AM	1	41	0	0	42	0	0	0	0	0	0	117	14	0	131	18	0	4	0	22	195
08:30 AM	5	29	0	0	34	0	0	0	0	0	0	100	14	0	114	4	0	4	0	8	156
08:45 AM	0	34	0	0	34	0	0	0	1	1	0	60	10	0	70	9	0	2	0	11	116
Total	9	177	0	0	186	0	0	0	1	1	0	414	64	0	478	63	0	15	0	78	743
09:00 AM	8	33	0	0	41	0	0	0	0	0	0	47	8	0	55	13	0	0	0	13	109
09:15 AM	1	39	0	0	40	0	0	0	0	0	0	55	13	0	68	11	0	1	0	12	120
09:30 AM	1	21	0	0	22	0	0	0	0	0	0	45	4	0	49	10	0	2	0	12	83
09:45 AM	3	28	0	0	31	0	0	0	0	0	0	50	8	0	58	19	0	0	0	19	108
Total	13	121	0	0	134	0	0	0	0	0	0	197	33	0	230	53	0	3	0	56	420
10:00 AM	2	27	0	0	29	0	0	0	0	0	0	45	17	0	62	14	0	3	0	17	108
10:15 AM	3	18	0	0	21	0	0	0	0	0	0	38	6	0	44	14	0	1	0	15	80
Grand Total	34	461	0	0	495	0	0	0	2	2	0	919	155	2	1076	178	0	25	0	203	1776
Apprch %	6.9	93.1	0	0		0	0	0	100		0	85.4	14.4	0.2		87.7	0	12.3	0		
Total %	1.9	26	0	0	27.9	0	0	0	0.1	0.1	0	51.7	8.7	0.1	60.6	10	0	1.4	0	11.4	
PCs and Peds	34	442	0	0	476	0	0	0	2	2	0	899	152	2	1053	172	0	25	0	197	1728
% PCs and Peds	100	95.9	0	0	96.2	0	0	0	100	100	0	97.8	98.1	100	97.9	96.6	0	100	0	97	97.3
Heavy Vehicles	0	19	0	0	19	0	0	0	0	0	0	19	3	0	22	6	0	0	0	6	47
% Heavy Vehicles	0	4.1	0	0	3.8	0	0	0	0	0	0	2.1	1.9	0	2	3.4	0	0	0	3	2.6
Bicycles	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0.1

	Park From North					From East					Park From South					South From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 10:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	**4**	65	0	0	69	0	0	0	**1**	**1**	0	119	17	0	136	14	0	1	0	15	221
07:45 AM	3	53	0	0	56	0	0	0	0	0	0	106	18	**2**	126	20	0	2	0	22	204
08:00 AM	3	**73**	0	0	**76**	0	0	0	0	0	0	**137**	**26**	0	**163**	**32**	0	**5**	0	**37**	**276**
08:15 AM	1	41	0	0	42	0	0	0	0	0	0	117	14	0	131	18	0	4	0	22	195
Total Volume	11	232	0	0	243	0	0	0	1	1	0	479	75	2	556	84	0	12	0	96	896
% App. Total	4.5	95.5	0	0		0	0	0	100		0	86.2	13.5	0.4		87.5	0	12.5	0		
PHF	.688	.795	.000	.000	.799	.000	.000	.000	.250	.250	.000	.874	.721	.250	.853	.656	.000	.600	.000	.649	.812
PCs and Peds																					
% PCs and Peds	100	96.6	0	0	96.7	0	0	0	100	100	0	98.1	97.3	100	98.0	97.6	0	100	0	97.9	97.7
Heavy Vehicles	0	8	0	0	8	0	0	0	0	0	0	9	2	0	11	2	0	0	0	2	21
% Heavy Vehicles	0	3.4	0	0	3.3	0	0	0	0	0	0	1.9	2.7	0	2.0	2.4	0	0	0	2.1	2.3
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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PO Box 468
Belchertown, Massachusetts
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N / S: Park Street
E / W: South Street
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : AM Peak - Park @ South
Site Code : 1
Start Date : 12/14/2017
Page No : 1

Groups Printed- Heavy Vehicles

	Park From North					From East					Park From South					South From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:30 AM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
Total	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	7
08:00 AM	0	4	0	0	4	0	0	0	0	0	0	3	1	0	4	2	0	0	0	2	10
08:15 AM	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	4
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	5
08:45 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	7	0	0	7	0	0	0	0	0	0	10	2	0	12	2	0	0	0	2	21
09:00 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	4
09:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	3
09:30 AM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	3
09:45 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	5
Total	0	6	0	0	6	0	0	0	0	0	0	5	1	0	6	3	0	0	0	3	15
10:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:15 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3
Grand Total	0	19	0	0	19	0	0	0	0	0	0	19	3	0	22	6	0	0	0	6	47
Apprch %	0	100	0	0		0	0	0	0		0	86.4	13.6	0		100	0	0	0		
Total %	0	40.4	0	0	40.4	0	0	0	0	0	0	40.4	6.4	0	46.8	12.8	0	0	0	12.8	

	Park From North					From East					Park From South					South From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 10:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
08:00 AM	0	**4**	0	0	**4**	0	0	0	0	0	0	**3**	**1**	0	**4**	**2**	0	0	0	**2**	**10**
08:15 AM	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	4
Total Volume	0	8	0	0	8	0	0	0	0	0	0	9	2	0	11	2	0	0	0	2	21
% App. Total	0	100	0	0		0	0	0	0		0	81.8	18.2	0		100	0	0	0		
PHF	.000	.500	.000	.000	.500	.000	.000	.000	.000	.000	.000	.750	.500	.000	.688	.250	.000	.000	.000	.250	.525

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PO Box 468
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N / S: Park Street
E / W: White Brook Middle School
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : AM Peak - Park @ White Brook Middle School
Site Code : 2
Start Date : 12/14/2017

Groups Printed- PCs and Peds - Heavy Vehicles - Bicycles

	Park From North					School From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:30 AM	0	49	28	0	77	12	0	6	1	19	15	110	0	0	125	0	0	0	0	0	221
07:45 AM	0	33	41	0	74	28	0	9	1	38	27	92	0	0	119	0	0	0	0	0	231
Total	0	82	69	0	151	40	0	15	2	57	42	202	0	0	244	0	0	0	0	0	452
08:00 AM	0	34	63	0	97	62	0	34	1	97	56	86	0	0	142	0	0	0	0	0	336
08:15 AM	0	31	29	0	60	28	0	15	0	43	13	89	0	0	102	0	0	0	0	0	205
08:30 AM	0	24	9	0	33	18	0	2	0	20	4	86	0	0	90	0	0	0	0	0	143
08:45 AM	0	39	4	0	43	2	0	1	1	4	0	69	0	0	69	0	0	0	0	0	116
Total	0	128	105	0	233	110	0	52	2	164	73	330	0	0	403	0	0	0	0	0	800
09:00 AM	0	41	6	0	47	2	0	0	0	2	0	50	0	0	50	0	0	0	0	0	99
09:15 AM	0	47	4	0	51	5	0	2	1	8	1	66	0	0	67	0	0	0	0	0	126
09:30 AM	0	27	3	0	30	2	0	2	0	4	0	48	0	0	48	0	0	0	0	0	82
09:45 AM	0	43	3	0	46	1	0	0	0	1	0	51	0	0	51	0	0	0	0	0	98
Total	0	158	16	0	174	10	0	4	1	15	1	215	0	0	216	0	0	0	0	0	405
10:00 AM	0	39	2	0	41	0	0	1	0	1	1	59	0	0	60	0	0	0	0	0	102
10:15 AM	0	27	3	0	30	3	0	0	0	3	0	35	0	0	35	0	0	0	0	0	68
Grand Total	0	434	195	0	629	163	0	72	5	240	117	841	0	0	958	0	0	0	0	0	1827
Apprch %	0	69	31	0		67.9	0	30	2.1		12.2	87.8	0	0		0	0	0	0		
Total %	0	23.8	10.7	0	34.4	8.9	0	3.9	0.3	13.1	6.4	46	0	0	52.4	0	0	0	0	0	
PCs and Peds	0	417	185	0	602	159	0	64	5	228	114	821	0	0	935	0	0	0	0	0	1765
% PCs and Peds	0	96.1	94.9	0	95.7	97.5	0	88.9	100	95	97.4	97.6	0	0	97.6	0	0	0	0	0	96.6
Heavy Vehicles	0	17	10	0	27	4	0	8	0	12	3	19	0	0	22	0	0	0	0	0	61
% Heavy Vehicles	0	3.9	5.1	0	4.3	2.5	0	11.1	0	5	2.6	2.3	0	0	2.3	0	0	0	0	0	3.3
Bicycles	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0.1

	Park From North					School From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 10:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	**49**	28	0	77	12	0	6	**1**	19	15	**110**	0	0	125	0	0	0	0	0	221
07:45 AM	0	33	41	0	74	28	0	9	1	38	27	92	0	0	119	0	0	0	0	0	231
08:00 AM	0	34	**63**	0	**97**	**62**	0	**34**	1	**97**	**56**	86	0	0	**142**	0	0	0	0	0	**336**
08:15 AM	0	31	29	0	60	28	0	15	0	43	13	89	0	0	102	0	0	0	0	0	205
Total Volume	0	147	161	0	308	130	0	64	3	197	111	377	0	0	488	0	0	0	0	0	993
% App. Total	0	47.7	52.3	0		66	0	32.5	1.5		22.7	77.3	0	0		0	0	0	0		
PHF	.000	.750	.639	.000	.794	.524	.000	.471	.750	.508	.496	.857	.000	.000	.859	.000	.000	.000	.000	.000	.739
PCs and Peds																					
% PCs and Peds	0	95.9	95.7	0	95.8	97.7	0	92.2	100	95.9	98.2	96.8	0	0	97.1	0	0	0	0	0	96.5
Heavy Vehicles	0	6	7	0	13	3	0	5	0	8	2	12	0	0	14	0	0	0	0	0	35
% Heavy Vehicles	0	4.1	4.3	0	4.2	2.3	0	7.8	0	4.1	1.8	3.2	0	0	2.9	0	0	0	0	0	3.5
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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PO Box 468
Belchertown, Massachusetts
Innovativedatallc.com or 1.413.668.5094

N / S: Park Street
E / W: White Brook Middle School
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : AM Peak - Park @ White Brook Middle School
Site Code : 2
Start Date : 12/14/2017
Page No : 1

Groups Printed- Heavy Vehicles

	Park From North					School From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:30 AM	0	2	1	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
07:45 AM	0	0	2	0	2	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	6
Total	0	2	3	0	5	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	10
08:00 AM	0	1	4	0	5	2	0	2	0	4	2	4	0	0	6	0	0	0	0	0	15
08:15 AM	0	3	0	0	3	1	0	2	0	3	0	4	0	0	4	0	0	0	0	0	10
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	4
08:45 AM	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	7	5	0	12	3	0	4	0	7	2	12	0	0	14	0	0	0	0	0	33
09:00 AM	0	4	1	0	5	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	6
09:15 AM	0	0	1	0	1	1	0	2	0	3	1	1	0	0	2	0	0	0	0	0	6
09:30 AM	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
09:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	0	5	2	0	7	1	0	3	0	4	1	3	0	0	4	0	0	0	0	0	15
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Grand Total	0	17	10	0	27	4	0	8	0	12	3	19	0	0	22	0	0	0	0	0	61
Apprch %	0	63	37	0		33.3	0	66.7	0		13.6	86.4	0	0		0	0	0	0		
Total %	0	27.9	16.4	0	44.3	6.6	0	13.1	0	19.7	4.9	31.1	0	0	36.1	0	0	0	0	0	

	Park From North					School From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 10:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	2	1	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
07:45 AM	0	0	2	0	2	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	6
08:00 AM	0	1	**4**	0	**5**	**2**	0	**2**	0	**4**	**2**	**4**	0	0	**6**	0	0	0	0	0	**15**
08:15 AM	0	**3**	0	0	3	1	0	2	0	3	0	4	0	0	4	0	0	0	0	0	10
Total Volume	0	6	7	0	13	3	0	5	0	8	2	12	0	0	14	0	0	0	0	0	35
% App. Total	0	46.2	53.8	0		37.5	0	62.5	0		14.3	85.7	0	0		0	0	0	0		
PHF	.000	.500	.438	.000	.650	.375	.000	.625	.000	.500	.250	.750	.000	.000	.583	.000	.000	.000	.000	.000	.583

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N / S: Park Street
E / W: Button Road
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : PM Peak - Park @ Button
Site Code : 3
Start Date : 12/14/2017
Page No : 1

Groups Printed- PCs and Peds - Heavy Vehicles - Bicycles

	Park From North					Button From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	0	41	0	0	41	5	0	0	0	5	1	41	0	0	42	0	0	0	0	0	88
12:15 PM	0	43	3	0	46	3	0	0	0	3	0	62	0	0	62	0	0	0	0	0	111
12:30 PM	0	39	6	0	45	4	0	0	0	4	3	56	0	0	59	0	0	0	0	0	108
12:45 PM	0	43	3	0	46	5	0	0	0	5	2	44	0	0	46	0	0	0	0	0	97
Total	0	166	12	0	178	17	0	0	0	17	6	203	0	0	209	0	0	0	0	0	404
01:00 PM	0	44	3	0	47	3	0	0	0	3	1	41	0	0	42	0	0	0	0	0	92
01:15 PM	0	53	2	0	55	3	0	2	0	5	0	53	0	0	53	0	0	0	1	1	114
01:30 PM	0	46	6	0	52	3	0	1	0	4	0	35	0	0	35	0	0	0	1	1	92
01:45 PM	0	44	6	0	50	7	0	1	0	8	3	63	0	0	66	0	0	0	0	0	124
Total	0	187	17	0	204	16	0	4	0	20	4	192	0	0	196	0	0	0	2	2	422
02:00 PM	0	79	10	0	89	4	0	1	0	5	0	52	0	0	52	0	0	0	1	1	147
02:15 PM	0	46	5	0	51	7	0	3	0	10	2	66	0	0	68	0	0	0	1	1	130
02:30 PM	0	99	3	0	102	3	0	0	0	3	2	79	0	0	81	0	0	0	0	0	186
02:45 PM	1	71	8	0	80	7	0	2	0	9	1	56	0	0	57	0	0	0	5	5	151
Total	1	295	26	0	322	21	0	6	0	27	5	253	0	0	258	0	0	0	7	7	614
03:00 PM	0	78	3	0	81	5	0	1	0	6	0	50	0	0	50	0	0	0	0	0	137
03:15 PM	0	88	3	0	91	5	0	0	0	5	1	47	0	0	48	0	0	0	2	2	146
03:30 PM	0	83	8	0	91	2	0	1	0	3	0	49	0	0	49	0	0	0	0	0	143
03:45 PM	0	89	4	0	93	6	0	3	0	9	3	75	0	0	78	0	0	0	0	0	180
Total	0	338	18	0	356	18	0	5	0	23	4	221	0	0	225	0	0	0	2	2	606
04:00 PM	0	75	4	0	79	3	0	0	0	3	4	60	0	0	64	0	0	0	0	0	146
04:15 PM	0	89	6	0	95	3	0	2	0	5	3	70	0	0	73	0	0	0	1	1	174
04:30 PM	0	111	5	0	116	6	0	6	0	12	2	67	0	0	69	0	0	0	0	0	197
04:45 PM	0	99	5	0	104	7	0	1	0	8	1	82	0	0	83	0	0	0	0	0	195
Total	0	374	20	0	394	19	0	9	0	28	10	279	0	0	289	0	0	0	1	1	712
05:00 PM	0	110	8	0	118	4	0	0	0	4	0	56	0	0	56	0	0	0	0	0	178
05:15 PM	0	95	2	0	97	4	0	5	0	9	1	57	0	0	58	0	0	0	0	0	164
Grand Total	1	1565	103	0	1669	99	0	29	0	128	30	1261	0	0	1291	0	0	0	12	12	3100
Apprch %	0.1	93.8	6.2	0		77.3	0	22.7	0		2.3	97.7	0	0		0	0	0	100		
Total %	0	50.5	3.3	0	53.8	3.2	0	0.9	0	4.1	1	40.7	0	0	41.6	0	0	0	0.4	0.4	
PCs and Peds	1	1533	103	0	1637	96	0	27	0	123	26	1229	0	0	1255	0	0	0	12	12	3027
% PCs and Peds	100	98	100	0	98.1	97	0	93.1	0	96.1	86.7	97.5	0	0	97.2	0	0	0	100	100	97.6
Heavy Vehicles	0	32	0	0	32	3	0	2	0	5	4	32	0	0	36	0	0	0	0	0	73
% Heavy Vehicles	0	2	0	0	1.9	3	0	6.9	0	3.9	13.3	2.5	0	0	2.8	0	0	0	0	0	2.4
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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N / S: Park Street
E / W: Button Road
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : PM Peak - Park @ Button
Site Code : 3
Start Date : 12/14/2017

	Park From North					Button From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	89	6	0	95	3	0	2	0	5	**3**	70	0	0	73	0	0	0	**1**	**1**	174
04:30 PM	0	**111**	5	0	116	6	0	**6**	0	**12**	2	67	0	0	69	0	0	0	0	0	**197**
04:45 PM	0	99	5	0	104	**7**	0	1	0	8	1	**82**	0	0	**83**	0	0	0	0	0	195
05:00 PM	0	110	**8**	0	**118**	4	0	0	0	4	0	56	0	0	56	0	0	0	0	0	178
Total Volume	0	409	24	0	433	20	0	9	0	29	6	275	0	0	281	0	0	0	1	1	744
% App. Total	0	94.5	5.5	0		69	0	31	0		2.1	97.9	0	0		0	0	0	100		
PHF	.000	.921	.750	.000	.917	.714	.000	.375	.000	.604	.500	.838	.000	.000	.846	.000	.000	.000	.250	.250	.944
PCs and Peds																					
% PCs and Peds	0	99.8	100	0	99.8	100	0	88.9	0	96.6	66.7	100	0	0	99.3	0	0	0	100	100	99.5
Heavy Vehicles	0	1	0	0	1	0	0	1	0	1	2	0	0	0	2	0	0	0	0	0	4
% Heavy Vehicles	0	0.2	0	0	0.2	0	0	11.1	0	3.4	33.3	0	0	0	0.7	0	0	0	0	0	0.5
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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N / S: Park Street
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Client: Berkshire Design Group

File Name : PM Peak - Park @ Button
Site Code : 3
Start Date : 12/14/2017
Page No : 1

Groups Printed- Heavy Vehicles

	Park From North					Button From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
12:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
12:45 PM	0	1	0	0	1	1	0	0	0	1	1	2	0	0	3	0	0	0	0	0	5
Total	0	4	0	0	4	1	0	0	0	1	1	6	0	0	7	0	0	0	0	0	12
01:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
01:30 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
01:45 PM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
Total	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	11
02:00 PM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
02:15 PM	0	2	0	0	2	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	7
02:30 PM	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	7
02:45 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
Total	0	12	0	0	12	1	0	0	0	1	0	10	0	0	10	0	0	0	0	0	23
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
03:15 PM	0	6	0	0	6	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	8
03:30 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
03:45 PM	0	2	0	0	2	1	0	0	0	1	1	4	0	0	5	0	0	0	0	0	8
Total	0	10	0	0	10	1	0	0	0	1	1	10	0	0	11	0	0	0	0	0	22
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2	0	0	0	0	0	3
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	32	0	0	32	3	0	2	0	5	4	32	0	0	36	0	0	0	0	0	73
Apprch %	0	100	0	0		60	0	40	0		11.1	88.9	0	0		0	0	0	0		
Total %	0	43.8	0	0	43.8	4.1	0	2.7	0	6.8	5.5	43.8	0	0	49.3	0	0	0	0	0	

	Park From North					Button From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 01:45 PM																					
01:45 PM	0	1	0	0	1	0	0	0	0	0	0	**4**	0	0	**4**	0	0	0	0	0	5
02:00 PM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
02:15 PM	0	2	0	0	2	**1**	0	0	0	**1**	0	4	0	0	4	0	0	0	0	0	**7**
02:30 PM	0	**5**	0	0	**5**	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	7
Total Volume	0	11	0	0	11	1	0	0	0	1	0	12	0	0	12	0	0	0	0	0	24
% App. Total	0	100	0	0		100	0	0	0		0	100	0	0		0	0	0	0		
PHF	.000	.550	.000	.000	.550	.250	.000	.000	.000	.250	.000	.750	.000	.000	.750	.000	.000	.000	.000	.000	.857

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N / S: Park Street
E / W: South Street
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : PM Peak - Park @ South
Site Code : 1
Start Date : 12/14/2017
Page No : 1

Groups Printed- PCs and Peds - Heavy Vehicles - Bicycles

	Park From North					From East					Park From South					South From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	2	36	0	0	38	0	0	0	0	0	2	35	9	1	47	8	0	2	0	10	95
12:15 PM	1	44	0	0	45	0	0	0	0	0	0	54	13	0	67	6	0	0	0	6	118
12:30 PM	0	37	0	0	37	0	0	0	0	0	0	44	11	0	55	10	0	2	0	12	104
12:45 PM	1	32	0	0	33	0	0	0	0	0	0	43	15	1	59	13	0	1	0	14	106
Total	4	149	0	0	153	0	0	0	0	0	2	176	48	2	228	37	0	5	0	42	423
01:00 PM	1	40	0	0	41	0	0	0	0	0	0	48	8	0	56	14	0	6	0	20	117
01:15 PM	2	38	0	0	40	0	0	0	0	0	0	36	11	0	47	17	0	2	0	19	106
01:30 PM	1	46	0	0	47	0	0	0	2	2	0	35	9	0	44	13	0	2	0	15	108
01:45 PM	4	41	0	0	45	0	0	0	0	0	0	50	16	0	66	12	0	10	0	22	133
Total	8	165	0	0	173	0	0	0	2	2	0	169	44	0	213	56	0	20	0	76	464
02:00 PM	9	79	0	0	88	0	0	0	0	0	0	49	11	0	60	18	0	5	0	23	171
02:15 PM	2	56	0	0	58	0	0	0	1	1	0	47	14	0	61	28	0	4	0	32	152
02:30 PM	1	60	0	0	61	0	0	0	0	0	0	75	18	0	93	25	0	1	0	26	180
02:45 PM	3	59	0	0	62	0	0	0	4	4	0	84	32	0	116	21	0	6	0	27	209
Total	15	254	0	0	269	0	0	0	5	5	0	255	75	0	330	92	0	16	0	108	712
03:00 PM	3	66	0	0	69	0	0	0	0	0	0	54	15	0	69	10	0	1	0	11	149
03:15 PM	3	77	0	0	80	0	0	0	0	0	0	53	9	2	64	21	0	4	0	25	169
03:30 PM	9	76	0	0	85	0	0	0	0	0	0	44	9	0	53	25	0	4	0	29	167
03:45 PM	2	80	0	0	82	0	0	0	0	0	0	66	16	0	82	19	0	2	0	21	185
Total	17	299	0	0	316	0	0	0	0	0	0	217	49	2	268	75	0	11	0	86	670
04:00 PM	3	71	0	0	74	0	0	0	0	0	0	64	15	0	79	14	0	7	0	21	174
04:15 PM	3	66	0	0	69	0	0	0	0	0	0	57	17	0	74	21	0	2	0	23	166
04:30 PM	7	90	0	0	97	0	0	0	1	1	0	55	21	0	76	18	0	3	0	21	195
04:45 PM	4	93	0	0	97	0	0	0	0	0	0	63	18	0	81	16	0	6	0	22	200
Total	17	320	0	0	337	0	0	0	1	1	0	239	71	0	310	69	0	18	0	87	735
05:00 PM	3	94	0	0	97	0	0	0	0	0	0	53	19	0	72	23	0	3	0	26	195
05:15 PM	7	84	0	0	91	0	0	0	0	0	0	61	16	0	77	20	0	4	0	24	192
Grand Total	71	1365	0	0	1436	0	0	0	8	8	2	1170	322	4	1498	372	0	77	0	449	3391
Apprch %	4.9	95.1	0	0		0	0	0	100		0.1	78.1	21.5	0.3		82.9	0	17.1	0		
Total %	2.1	40.3	0	0	42.3	0	0	0	0.2	0.2	0.1	34.5	9.5	0.1	44.2	11	0	2.3	0	13.2	
PCs and Peds	71	1343	0	0	1414	0	0	0	8	8	2	1135	317	4	1458	364	0	75	0	439	3319
% PCs and Peds	100	98.4	0	0	98.5	0	0	0	100	100	100	97	98.4	100	97.3	97.8	0	97.4	0	97.8	97.9
Heavy Vehicles	0	22	0	0	22	0	0	0	0	0	0	35	5	0	40	8	0	2	0	10	72
% Heavy Vehicles	0	1.6	0	0	1.5	0	0	0	0	0	0	3	1.6	0	2.7	2.2	0	2.6	0	2.2	2.1
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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PO Box 468
Belchertown, Massachusetts
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N / S: Park Street
E / W: South Street
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : PM Peak - Park @ South
Site Code : 1
Start Date : 12/14/2017

	Park From North					From East					Park From South					South From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 04:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	3	71	0	0	74	0	0	0	0	0	0	**64**	15	0	79	14	0	**7**	0	21	174
04:15 PM	3	66	0	0	69	0	0	0	0	0	0	57	17	0	74	**21**	0	2	0	**23**	166
04:30 PM	**7**	90	0	0	**97**	0	0	0	**1**	**1**	0	55	**21**	0	76	18	0	3	0	21	195
04:45 PM	4	**93**	0	0	97	0	0	0	0	0	0	63	18	0	**81**	16	0	6	0	22	**200**
Total Volume	17	320	0	0	337	0	0	0	1	1	0	239	71	0	310	69	0	18	0	87	735
% App. Total	5	95	0	0		0	0	0	100		0	77.1	22.9	0		79.3	0	20.7	0		
PHF	.607	.860	.000	.000	.869	.000	.000	.000	.250	.250	.000	.934	.845	.000	.957	.821	.000	.643	.000	.946	.919
PCs and Peds																					
% PCs and Peds	100	100	0	0	100	0	0	0	100	100	0	99.2	100	0	99.4	97.1	0	88.9	0	95.4	99.2
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	0	2	0	4	6
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0	0.6	2.9	0	11.1	0	4.6	0.8
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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N / S: Park Street
E / W: South Street
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : PM Peak - Park @ South
Site Code : 1
Start Date : 12/14/2017
Page No : 1

Groups Printed- Heavy Vehicles

	Park From North					From East					Park From South					South From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
12:15 PM	0	1	0	0	1	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	6
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	4
Total	0	3	0	0	3	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	12
01:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
01:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	5
Total	0	3	0	0	3	0	0	0	0	0	0	7	1	0	8	0	0	0	0	0	11
02:00 PM	0	3	0	0	3	0	0	0	0	0	0	1	2	0	3	1	0	0	0	1	7
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
02:30 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	6
02:45 PM	0	2	0	0	2	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	7
Total	0	8	0	0	8	0	0	0	0	0	0	8	3	0	11	4	0	0	0	4	23
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	4
03:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	3
03:30 PM	0	3	0	0	3	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	4
03:45 PM	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
Total	0	8	0	0	8	0	0	0	0	0	0	7	1	0	8	1	0	0	0	1	17
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	3
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	0	2	0	4	6
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	2
Grand Total	0	22	0	0	22	0	0	0	0	0	0	35	5	0	40	8	0	2	0	10	72
Apprch %	0	100	0	0		0	0	0	0		0	87.5	12.5	0		80	0	20	0		
Total %	0	30.6	0	0	30.6	0	0	0	0	0	0	48.6	6.9	0	55.6	11.1	0	2.8	0	13.9	

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N / S: Park Street
E / W: South Street
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : PM Peak - Park @ South
Site Code : 1
Start Date : 12/14/2017

	Park From North					From East					Park From South					South From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 04:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 02:00 PM																					
02:00 PM	0	**3**	0	0	**3**	0	0	0	0	0	0	1	**2**	0	3	1	0	0	0	1	**7**
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
02:30 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	**3**	0	0	0	**3**	6
02:45 PM	0	2	0	0	2	0	0	0	0	0	0	**4**	1	0	**5**	0	0	0	0	0	7
Total Volume	0	8	0	0	8	0	0	0	0	0	0	8	3	0	11	4	0	0	0	4	23
% App. Total	0	100	0	0		0	0	0	0		0	72.7	27.3	0		100	0	0	0		
PHF	.000	.667	.000	.000	.667	.000	.000	.000	.000	.000	.000	.500	.375	.000	.550	.333	.000	.000	.000	.333	.821

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N / S: Park Street
E / W: White Brook Middle School
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : PM Peak - Park @ White Brook Middle School
Site Code : 2
Start Date : 12/14/2017

Groups Printed- PCs and Peds - Heavy Vehicles - Bicycles

	Park From North					School From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	0	39	6	0	45	4	0	0	0	4	3	45	0	0	48	0	0	0	0	0	97
12:15 PM	0	45	7	0	52	6	0	0	0	6	3	64	0	0	67	0	0	0	1	1	126
12:30 PM	0	46	9	0	55	15	0	3	0	18	2	61	0	0	63	0	0	0	0	0	136
12:45 PM	0	46	3	0	49	6	0	2	0	8	0	44	0	0	44	0	0	0	0	0	101
Total	0	176	25	0	201	31	0	5	0	36	8	214	0	0	222	0	0	0	1	1	460
01:00 PM	0	49	2	0	51	5	0	0	0	5	0	45	0	0	45	0	0	0	0	0	101
01:15 PM	0	58	2	0	60	0	0	1	0	1	0	55	0	0	55	0	0	0	0	0	116
01:30 PM	0	44	3	0	47	2	0	0	0	2	0	38	0	0	38	0	0	0	0	0	87
01:45 PM	0	51	2	0	53	3	0	1	0	4	4	72	0	0	76	0	0	0	0	0	133
Total	0	202	9	0	211	10	0	2	0	12	4	210	0	0	214	0	0	0	0	0	437
02:00 PM	0	81	15	0	96	0	0	1	1	2	2	52	0	0	54	0	0	0	0	0	152
02:15 PM	0	47	32	0	79	4	0	1	0	5	14	53	0	0	67	0	0	0	0	0	151
02:30 PM	0	55	31	0	86	69	0	39	1	109	22	51	0	0	73	0	0	0	0	0	268
02:45 PM	0	68	10	0	78	19	0	8	10	37	1	55	0	0	56	0	0	0	0	0	171
Total	0	251	88	0	339	92	0	49	12	153	39	211	0	0	250	0	0	0	0	0	742
03:00 PM	0	84	6	0	90	7	0	3	0	10	0	56	0	0	56	0	0	0	0	0	156
03:15 PM	0	87	8	0	95	6	0	4	0	10	3	53	0	0	56	0	0	0	2	2	163
03:30 PM	0	89	11	0	100	13	0	9	0	22	3	51	0	0	54	0	0	0	0	0	176
03:45 PM	0	81	7	0	88	11	0	10	0	21	4	72	0	0	76	0	0	0	0	0	185
Total	0	341	32	0	373	37	0	26	0	63	10	232	0	0	242	0	0	0	2	2	680
04:00 PM	0	76	6	0	82	5	0	3	0	8	4	66	0	0	70	0	0	0	0	0	160
04:15 PM	0	87	0	0	87	4	0	1	0	5	4	74	0	0	78	0	0	0	0	0	170
04:30 PM	0	110	4	0	114	5	0	2	0	7	0	76	0	0	76	0	0	0	0	0	197
04:45 PM	0	108	15	0	123	1	0	0	0	1	11	85	0	0	96	0	0	0	0	0	220
Total	0	381	25	0	406	15	0	6	0	21	19	301	0	0	320	0	0	0	0	0	747
05:00 PM	0	125	6	0	131	19	0	16	0	35	1	66	0	0	67	0	0	0	0	0	233
05:15 PM	0	111	3	0	114	1	0	1	0	2	0	73	0	0	73	0	0	0	0	0	189
Grand Total	0	1587	188	0	1775	205	0	105	12	322	81	1307	0	0	1388	0	0	0	3	3	3488
Apprch %	0	89.4	10.6	0		63.7	0	32.6	3.7		5.8	94.2	0	0		0	0	0	100		
Total %	0	45.5	5.4	0	50.9	5.9	0	3	0.3	9.2	2.3	37.5	0	0	39.8	0	0	0	0.1	0.1	
PCs and Peds	0	1564	181	0	1745	194	0	104	12	310	74	1281	0	0	1355	0	0	0	3	3	3413
% PCs and Peds	0	98.6	96.3	0	98.3	94.6	0	99	100	96.3	91.4	98	0	0	97.6	0	0	0	100	100	97.8
Heavy Vehicles	0	23	7	0	30	11	0	1	0	12	7	26	0	0	33	0	0	0	0	0	75
% Heavy Vehicles	0	1.4	3.7	0	1.7	5.4	0	1	0	3.7	8.6	2	0	0	2.4	0	0	0	0	0	2.2
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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N / S: Park Street
E / W: White Brook Middle School
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : PM Peak - Park @ White Brook Middle School
Site Code : 2
Start Date : 12/14/2017

	Park From North					School From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	110	4	0	114	5	0	2	0	7	0	76	0	0	76	0	0	0	0	0	197
04:45 PM	0	108	**15**	0	123	1	0	0	0	1	**11**	**85**	0	0	**96**	0	0	0	0	0	220
05:00 PM	0	**125**	6	0	**131**	**19**	0	**16**	0	**35**	1	66	0	0	67	0	0	0	0	0	**233**
05:15 PM	0	111	3	0	114	1	0	1	0	2	0	73	0	0	73	0	0	0	0	0	189
Total Volume	0	454	28	0	482	26	0	19	0	45	12	300	0	0	312	0	0	0	0	0	839
% App. Total	0	94.2	5.8	0		57.8	0	42.2	0		3.8	96.2	0	0		0	0	0	0		
PHF	.000	.908	.467	.000	.920	.342	.000	.297	.000	.321	.273	.882	.000	.000	.813	.000	.000	.000	.000	.000	.900
PCs and Peds																					
% PCs and Peds	0	99.6	100	0	99.6	100	0	100	0	100	100	99.3	0	0	99.4	0	0	0	0	0	99.5
Heavy Vehicles	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
% Heavy Vehicles	0	0.4	0	0	0.4	0	0	0	0	0	0	0.7	0	0	0.6	0	0	0	0	0	0.5
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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File Name : PM Peak - Park @ White Brook Middle School
Site Code : 2
Start Date : 12/14/2017
Page No : 1

Groups Printed- Heavy Vehicles

	Park From North					School From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	1	0	1	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	5
12:30 PM	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:45 PM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	4
Total	0	3	2	0	5	1	0	0	0	1	0	6	0	0	6	0	0	0	0	0	12
01:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
01:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
01:45 PM	0	0	0	0	0	2	0	0	0	2	2	3	0	0	5	0	0	0	0	0	7
Total	0	3	0	0	3	2	0	0	0	2	2	4	0	0	6	0	0	0	0	0	11
02:00 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
02:15 PM	0	1	1	0	2	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	4
02:30 PM	0	5	4	0	9	7	0	1	0	8	3	1	0	0	4	0	0	0	0	0	21
02:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	9	5	0	14	7	0	1	0	8	4	5	0	0	9	0	0	0	0	0	31
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
03:15 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
03:30 PM	0	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	3
03:45 PM	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	7
Total	0	6	0	0	6	1	0	0	0	1	1	9	0	0	10	0	0	0	0	0	17
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Grand Total	0	23	7	0	30	11	0	1	0	12	7	26	0	0	33	0	0	0	0	0	75
Apprch %	0	76.7	23.3	0		91.7	0	8.3	0		21.2	78.8	0	0		0	0	0	0		
Total %	0	30.7	9.3	0	40	14.7	0	1.3	0	16	9.3	34.7	0	0	44	0	0	0	0	0	

Innovative Data, LLC

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N / S: Park Street
E / W: White Brook Middle School
City, State: Easthampton, Massachusetts
Client: Berkshire Design Group

File Name : PM Peak - Park @ White Brook Middle School
Site Code : 2
Start Date : 12/14/2017
Page No : 2

	Park From North					School From East					Park From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 01:45 PM																					
01:45 PM	0	0	0	0	0	2	0	0	0	2	2	**3**	0	0	**5**	0	0	0	0	0	7
02:00 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
02:15 PM	0	1	1	0	2	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	4
02:30 PM	0	**5**	**4**	0	**9**	**7**	0	**1**	0	**8**	**3**	1	0	0	4	0	0	0	0	0	**21**
Total Volume	0	8	5	0	13	9	0	1	0	10	6	7	0	0	13	0	0	0	0	0	36
% App. Total	0	61.5	38.5	0		90	0	10	0		46.2	53.8	0	0		0	0	0	0		
PHF	.000	.400	.313	.000	.361	.321	.000	.250	.000	.313	.500	.583	.000	.000	.650	.000	.000	.000	.000	.000	.429