TRAFFIC IMPACT STUDY

PREPARED BY

JOHN COLLINS ENGINEERS, P.C.

JOHN COLLINS
ENGINEERS, P.C. TRAFFIC • TRANSPORTATION ENGINEERS
11 BRADHURST AVENUE • HAWTHORNE, N.Y. • 10532 • (914) 347-7500 • FAX (914) 347-7266

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STATE LAND DEVELOPMENT

NYS ROUTE 35/U.S. ROUTE 202 AT
BEAR MOUNTAIN PARKWAY EXTENSION
TOWN OF YORKTOWN, NEW YORK

JOB NO. 1841

MARCH 20, 2012

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SECTION I

INTRODUCTION

A. PROJECT DESCRIPTION AND LOCATION (Figure No.1)

This report has been prepared to evaluate the potential traffic impacts associated with the development of State Land Property located on the north side of NYS Route 35/U.S. Route 202 immediately west of the Bear Mountain Parkway Extension. The site is proposed to be developed with approximately 194,000 s.f. of retail. As shown on Figure No. 1, access to the development is proposed via a new full movement driveway connection to NYS Route 35/U.S. Route 202 opposite the existing access to the Parkside Corners Shopping Center.

A Design Year of 2015 has been utilized in completing the traffic analysis in order to evaluate future traffic conditions associated with this proposed development.

B. SCOPE OF STUDY

This study has been prepared to identify current and future traffic operating conditions on the surrounding roadway network and to assess the potential traffic impacts of the proposed rezoning to allow the development of the property as a commercial development.

Available traffic count data were obtained for the NYS Route 35/U.S. Route 202 Corridor from previous reports prepared by Jacobs-Edwards and Kelcey as part of the *Route 202/35/6 and Bear*

Mountain Parkway Sustainable Development Study. These data were supplemented with data from the Costco study and new traffic counts collected by representatives of John Collins Engineers, P.C. These data were also compared to count data obtained from the New York State Department of Transportation (NYSDOT) and count data contained in previous traffic studies conducted in the area. Together these data were utilized to establish the Year 2011 Existing Traffic Volumes representing existing traffic conditions in the vicinity of the site.

The Year 2011 Existing Traffic Volumes were then projected to the 2015 Design Year to take into account background traffic growth. In addition, traffic for other specific potential or approved developments in the area were estimated and then added to the Projected Traffic Volumes to obtain the Year 2015 No-Build Traffic Volumes.

Estimates were then made of the potential traffic that the proposed development would generate (see Section III-C for further discussion). The resulting site generated traffic volumes were then added to the roadway system and combined with the Year 2015 No-Build Traffic Volumes resulting in the Year 2015 Build Traffic Volumes.

The Existing, No-Build and Build Traffic Volumes were then compared to roadway capacities based on the procedures from the Highway Capacity Manual using the Synchro analysis software to determine existing and future Levels of Service and operating conditions. Recommendations for improvements were made where necessary to serve the existing and/or future traffic volumes.

SECTION II

EXISTING ROADWAY AND TRAFFIC CONDITIONS

A. DESCRIPTION OF EXISTING ROADWAY NETWORK (Figure No. 1)

As shown on Figures No. 1, the proposed State Land development will be accessed from NYS Route 35/U.S. Route 202 via a main driveway to be located opposite the Parkside Corners Shopping Center. The following is a brief description the roadways located within the study area. In addition, Section III-H provides a further description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service and any recommended improvements for each of the study area intersections. Appendix "C" contains copies of the capacity analyses which indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

1. Taconic State Parkway - The Taconic State Parkway is a major regional highway, which traverses throughout Westchester, Putnam, Dutchess and Columbia Counties running in a north/south direction. The Taconic State Parkway (TSP), in the vicinity of the site, is a six lane divided highway with paved shoulders and has a full diamond type interchange with NYS Route 35/U.S. Route 202 and a limited access interchange with the Bear Mountain Parkway Extension. It has a posted speed limit of 55 mph.

This portion of the Taconic State Parkway was reconstructed within the last decade including a new bridge structure over NYS Route 35/U.S. Route 202. This structure was designed to accommodate a future cross section on NYS Route 35/U.S. Route 202 of up to six lanes passing under the Taconic State Parkway.

2. NYS Route 35/U.S. Route 202 - is generally a two lane roadway with separate turning lanes at various intersections and is under the jurisdiction of the NYSDOT. NYS Route 35/U.S. Route 202 is a major east/west roadway which in Westchester County extends from Peekskill to the west, through the Town of Cortlandt, the Town of Yorktown and then the Town of Somers to the east. In the vicinity of the study area, this roadway intersects with Lexington Avenue and Stony Street and the BJ's/Staples Plaza at signalized intersections. The roadway also has unsignalized intersections with the Bear Mountain Parkway Extension and Pine Grove Court. The posted speed limit, in the vicinity of the site, is 45 mph. NYSDOT has recently completed a repaving project for this section of NYS Route 35/U.S. Route 202 and the pavement is in excellent condition. On-street parking is not permitted along NYS route 35/U.S. Route 202. Also, with the exception of the sections near the new Chase Bank/Staples Plaza, there are currently no other existing sidewalks along NYS Route 35/U.S. Route 202.

The *Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study* and the Town of Yorktown Comprehensive Plan identified improvements to the corridor to address current capacity issues and to accommodate future traffic growth in the area (see

Section III-F for more details). In addition, the NYSDOT is currently developing improvement plans for the intersections of NYS Route 35/U.S. Route 202 at BJ's/Staples Shopping Center, NYS Route 35/U.S. Route 202 at Pine Grove Court, NYS Route 35/U.S. Route 202 at Bear Mountain Parkway Extension, and Bear Mountain Parkway Extension at Stony Street (Project I.D. No. 8561.34), which will address major safety and capacity related conditions at these intersections. The various alternative plans for improvements were presented to the public by NYSDOT at a series of meetings in 2010. These currently proposed improvements and the proposed construction schedule for their completion are discussed in detail in Section III.E of this report. In addition, associated with the Costco development a separate westbound through lane is proposed to be completed on NYS Route 35/U.S. Route 202 from Strang Boulevard to Old Crompond Road

There are several Bee-Line bus stops located along the NYS Route 35/U.S. Route 202 corridor. The Route 15 Bus has stop locations near the existing Curry Honda between the Bear Mountain Parkway Extension and Lexington Avenue as well as at the BJ's-Staples Plaza intersection. The closest bus stops to the site for the Bee-Line Bus System are located near the existing Curry Honda.

3. Lexington Avenue – Lexington Avenue intersects with NYS Route 35/U.S. Route 202 opposite a driveway to the Hess Gas Station in the form of a full movement signalized intersection. The roadway traverses in a generally north/south direction between

NYS Route 35/U.S. Route 202 and U.S. Route 6 and Strawberry Road at the Yorktown/Cortlandt border. Lexington Avenue serves both commercial and residential land uses. The roadway, generally consists of one lane in each direction and has a posted speed limit is 30 MPH. The Bee-Line Bus System Route 15 bus stops on Lexington Avenue near the existing driveway to the Yorktown Golf and Baseball Center. No parking is permitted along this section of Lexington Avenue.

4. Bear Mountain Parkway Extension – The Bear Mountain Parkway Extension intersects with NYS Route 35/U.S. Route 202 to form an unsignalized "T" shaped intersection. The Bear Mountain Parkway serves as a connector road to and from the Taconic State Parkway northbound and southbound exit movements as well as Taconic State Parkway southbound entry movements. It also has an unsignalized full movement intersection with Stony Street which is proposed to be upgraded as part of the NYSDOT improvements in this area (see Section III.E). The roadway consists of two lanes in each direction and has a posted speed limit of 40 MPH. No parking is permitted along this roadway.

In addition, the New York State Department of Transportation has longer term plans for the extension of this roadway and/or upgrades to Routes 35/202 from this location west to the portion of the Bear Mountain Parkway located in the Town of Cortlandt. There is currently no specific time frame for the completion of this work. As shown on the site plan, the proposed State Land Development includes the provision of dedicating right-of-way to be used for this future extension of the Bear Mountain Parkway.

B. 2011 EXISTING TRAFFIC VOLUMES (Figures No. 2, 3, and 4)

Historical traffic count data for the NYS Route 35/U.S. Route 202 Corridor were obtained from the Jacobs-Edwards and Kelcey *Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study*. These count data were supplemented with new traffic counts collected during September 2009, October 2010, November 2010 and February 2011 by representatives of John Collins Engineers, P.C. These data were also compared to count data obtained from the New York State Department of Transportation (NYSDOT) and count data contained in other traffic studies conducted in the area.

Based on the above information, the Year 2011 Existing Traffic Volumes were established for the Weekday Peak AM, Weekday Peak PM and Saturday Peak Hours at the following study area intersections as identified in the project's Scoping Document.

1. NYS Route 35/U.S. Route 202 and Lexington Avenue
2. NYS Route 35/U.S. Route 202 and Bear Mountain Extension
3. NYS Route 35/U.S. Route 202 and Pine Grove Court
4. Bear Mountain Extension and Stony Street
5. NYS Route 35/U.S. Route 202 and Stony Street/BJ's-Staples Plaza Driveway

Based upon a review of the traffic counts, the peak hours were generally identified as follows:

- Weekday Peak AM Hour - 7:15 AM – 8:15 AM
- Weekday Peak PM Hour - 5:00 PM – 6:00 PM
- Saturday Peak Hour - 12:00 PM – 1:00 PM

The resulting Year 2011 Existing Traffic Volumes are shown on Figure No. 2 for the Weekday Peak AM Hour, Figures No. 3 for the Weekday Peak PM Hour and Figure No. 4 for the Saturday Peak Hour.

C. EXISTING PUBLIC TRANSPORTATION SERVICES (Appendix F)

Bus Service in the area is provided by the Westchester County Bee-Line Bus System operated by the Westchester County Department of Transportation. The locations of existing bus stops within the study area are shown on Figures No. 2 and 2A. Local service is provided along NYS Route 35/U.S. Route 202 via the Route 15 Bus with the nearest bus stop to the project located near the existing Curry dealership. The Route 15 Bus provides service from Downtown Peekskill continuing along Route 6 to Lexington Avenue and then continuing south to NYS Route 35/U.S. Route 202. The bus service continues to the east through the Town of Yorktown and continues south along Route 118 to Route 100 in Somers. It then connects with Route 9A further south. It terminates at the White Plains station (Metro-North Harlem Line). The Route 15 Bus Service is provided regularly during

the AM and PM Hours and limited service is provided on Saturday. The Route 15 Bus Schedule and Map are included in Appendix "F" of this report.

Two other Westchester County Bee-Line busses provide service in the study area. These include the Route 10 Bus and the Route 77 Express Bus. However these Busses do not serve the immediate area of the site. The Route 10 Bus provides commuter service between the Cortlandt Town Center and the Croton Harmon Train Station. The Route 77 Express Bus is also a commuter bus which runs between Carmel in Putnam County and White Plains. In the town of Yorktown the bus stops at several locations including FDR State Park and at the intersection of NYS Route 132 and U.S. Route 6 in Shrub Oak.

Based on conversations with the Westchester County Department of Transportation, no specific ridership data is currently available with respect to existing bus usage. However, the Westchester County Department of Transportation indicated that the Bee-Line bus routes in the area generally have available capacity and if ridership increases, bus service is adjusted accordingly.

SECTION III

EVALUATION OF FUTURE TRAFFIC CONDITIONS

A. YEAR 2015 NO-BUILD TRAFFIC VOLUMES (Figures No. 5 through 13)

The Year 2011 Existing Traffic Volumes were increased by a growth factor of 2% per year to account for general background growth resulting in the Year 2015 Projected Traffic Volumes shown on Figures No. 5, 6, and 7. In addition, traffic from other specific potential developments in the area including the recently completed Chase Bank, the planned Crompond Crossings Development, the potential commercial development of the Adrian Property and the proposed Costco were identified. Traffic from the Temple Israel, Adrain Auto Body addition and the Field Home Expansion was also considered. The resulting traffic volumes associated with these projects are shown on Figures No. 8, 9, and 10 for each of the peak hours. These volumes were added to the 2015 Projected Traffic Volumes resulting in the Year 2015 No-Build Traffic Volumes which are shown on Figure No. 11 for the Weekday Peak AM Hour, Figure No. 12 for the Weekday Peak PM Hour and Figure No. 13 for the Saturday Peak Hour.

B. SITE GENERATED TRAFFIC VOLUMES (Table No. 1)

The number of trips to be generated by the site during the AM, PM and Saturday Peak Hours were estimated using data published by the Institute of Transportation Engineers in there publication Trip Generation, 8th Edition dated 2008. Land Use 820: Shopping Center was used to conduct the

estimates. Table No. 1 (attached) contains a summary of the expected trip generation traffic volumes for the site during each of the peak hours.

It should be noted that a significant portion of the retail trip generation is typically attracted from the existing traffic stream as "pass-by" and/or "diverted link" trips. Based on ITE data and in consideration of the amount of existing traffic along the corridor, as much as 60% of the retail trips can be "pass-by" and/or "diverted link" trips. However, in order to provide a conservative analysis and in accordance with NYSDOT guidelines, a "pass-by" and/or "diverted link" credit of 25% was utilized herein.

C. ARRIVAL/DEPARTURE DISTRIBUTIONS (Figures No. 14 and 15)

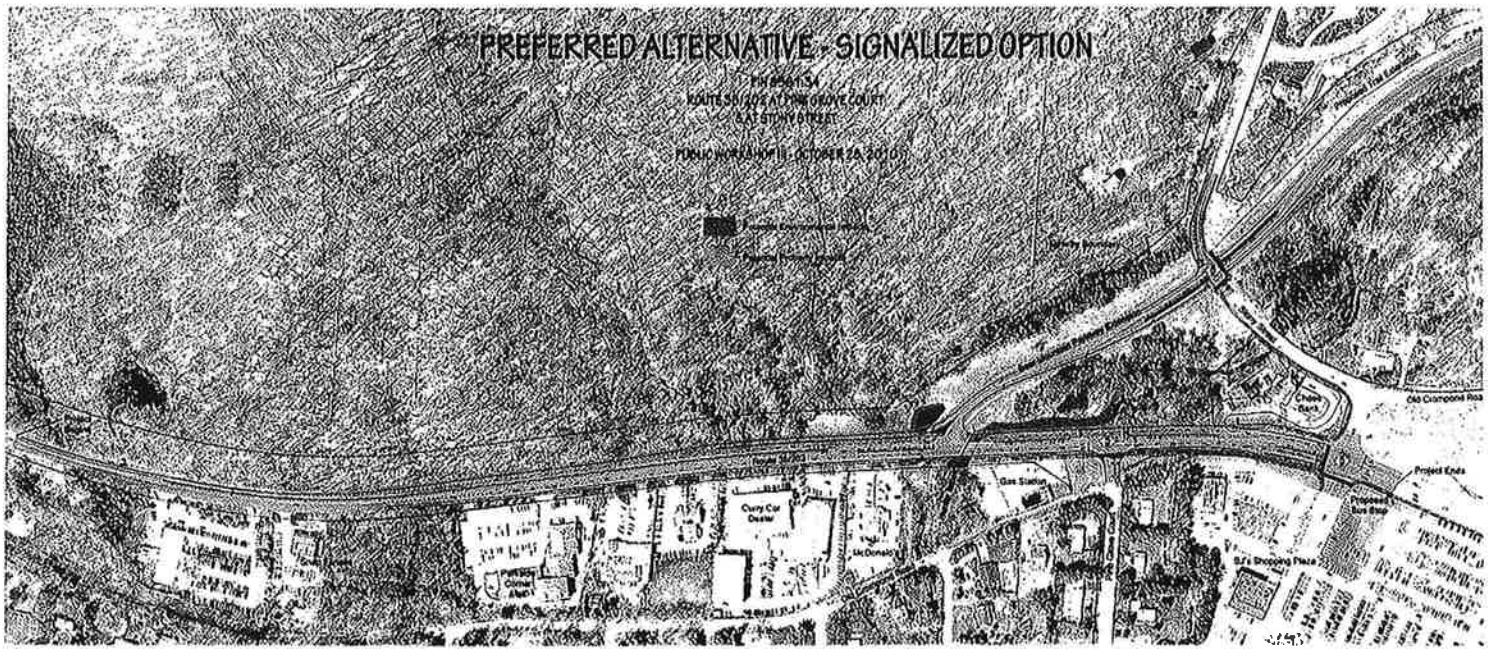
It was necessary to establish arrival and departure distributions to assign the site generated traffic volumes to the surrounding roadway network. Based on a review of the Existing Traffic Volumes and the expected travel patterns on the surrounding roadway network the distributions were identified. The anticipated arrival and departure distributions are shown on Figures No. 14 and 15, respectively.

D. YEAR 2015 BUILD TRAFFIC VOLUMES (Figures No. 16 through 21)

The site generated traffic volumes were assigned to the roadway network based on the arrival and departure distributions referenced above. The resulting site generated traffic volumes for each of the study area intersections are shown on Figures No. 16, 17, and 18 for each of the peak hours, respectively. The site generated traffic volumes were then added to the Year 2015 No-Build Traffic Volumes (Figures No. 11 through 13) to obtain the Year 2015 Build Traffic Volumes. The resulting Year 2015 Build Traffic Volumes are shown on Figure No. 19 for the Weekday Peak AM Hour, Figure No. 20 for the Weekday Peak PM Hour and Figures No. 21 for the Saturday Peak Hour.

E. PROPOSED NYSDOT NYS ROUTE 35/U.S. ROUTE 202 AND BEAR MOUNTAIN PARKWAY IMPROVEMENTS

The New York State Department of Transportation is currently in the Design Phase for proposed improvements to the intersections of NYS Route 35/U.S. Route 202 and Bear Mountain Parkway Extension (BMP), NYS Route 35/U.S. Route 202 and Pine Grove Court, NYS Route 35/U.S. Route 202 and Stony Street/BJ's-Staples Plaza, and Bear Mountain Parkway and Stony Street. The NYSDOT design team held three separate public outreach meetings with the residents of Yorktown during 2010. The first meeting was to get comments from the public regarding their concerns for the area. The second meeting presented three different design alternatives which again were commented on by the residents at the meeting. The third and final meeting presented the Preferred Design Alternative which is shown in the figure below.



The planned improvements will provide two through lanes in each direction on NYS Route 35/U.S. Route 202 beginning in the area of the existing Snap Fitness building to the west of the Bear Mountain Parkway Extension. The area between the BMP and Snap Fitness will also have a center turn lane providing a dedicated lane for left turns into the businesses located along the south side of NYS Route 35/U.S. Route 202. At the BMP intersection, NYS Route 35/U.S. Route 202 will have a separate left turn lane on the eastbound approach. The southbound approach will be modified from a two lane approach to a single lane and left turns will be prohibited. The southbound right turn movement will be channelized and an acceleration lane will be provided for vehicles entering the traffic stream along NYS Route 35/U.S. Route 202 westbound. This should enhance the ease of access for the BMP traffic destined to the west and eliminate the extensive queues, which currently exist at this location.

The intersection of NYS Route 35/U.S. Route 202 and Pine Grove Court will have two through lanes in each direction, a separate left turn lane westbound and a separate right turn lane on the eastbound approach. The northbound approach will remain as two exit lanes. This intersection will also be signalized.

The intersection of NYS Route 35/U.S. Route 202 and the BJ's/Staples Plaza and Stony Street will be modified to have an additional right turn lane in the eastbound direction. This will allow for two dedicated through lanes in this direction. In the westbound direction the existing dedicated right turn lane will be extended to a point approximately 100 ft. west of Old Crompond Road and will become a shared through/right turn lane and there will be two receiving lanes continuing in the westbound direction. The traffic signal at this intersection will also be upgraded and coordinated with the new signal at the Pine Grove Court Intersection.

The Stony Street and Bear Mountain Parkway will be improved by providing one lane in each direction along the BMP as well as dedicated left turn lanes at the intersection. The center median along the BMP will be eliminated to reduce conflicts at this intersection. The eastbound Stony Street approach will also be widened to provide a separate right turn lane. The intersection will be signalized. The preferred alternative also included an alternative for a possible roundabout at this intersection however, based on comments from the residents at the final public hearing it appears unlikely that this alternative will be chosen. It should also be noted that sidewalks will be provided with the improvements.

The project is currently in the detailed design phase. This is expected to last until the Spring of 2012. At this time the NYSDOT design team will decide if another Public Information Meeting is necessary to present the final design to the Town. The design is expected to be completed and the project bid in the Fall of 2012. Construction is then expected to begin in the late Fall of 2012 or Spring of 20123 with construction scheduled to last approximately 12 to 18 months. The total projected cost for the improvements is currently estimated at approximately $5,500,000.

Concerns from residents were expressed about possible interim improvements at the BMP/Stony Street intersection at each of the Public Information Meetings held by NYSDOT. NYSDOT informed the residents that "Intersection Ahead" signs were planned to be installed along BMP soon. No additional interim improvements are being considered at this time.

Finally, long term plans are in development by NYSDOT to connect the two ends of the Bear Mountain Parkway with a limited access roadway to alleviate congestion and safety issues through the NYS Route 35/U.S. Route 202 and Route 6 Corridors. No specific timetable for this work is scheduled.

F. OTHER POTENTIAL TRANSPORTATION IMPROVMENTS

a) ROUTE 202/35/6 AND BEAR MOUNTAIN PARKWAY SUSTAINABLE DEVELOPMENT STUDY IMPROVEMENTS

The *Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study* had identified a series of recommended roadway upgrade improvements as well as signal timing improvements to accommodate existing and future traffic volumes in the area. Some of those specific to the NYS Route 35/U.S. Route 202 corridor and the intersections analyzed in this report include the following.

i. Taconic State Parkway Interchange Improvements

When the Taconic State Parkway was reconstructed by NYSDOT, the bridge structure crossing NYS Route 35/U.S. Route 202 corridor was designed to accommodate up to six lanes crossing under the Taconic State Parkway on the NYS Route 35/U.S. Route 202corridor. The typical section included in the original construction drawings included two through lanes per direction plus two turn lanes. The *Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study* had considered these improvements as well as other ramp improvements. It also identified the need for additional eastbound and westbound through lanes at the Mohansic Avenue intersection. There is currently no time scheduled for the completion of these improvements. (See discussion below on proposed Costco roadway improvements).

ii. NYS Route 35/U.S. Route 202 Center Turn Lane

The *Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study* proposed the construction of a center turn lane or wide median that could contain left turn bays on NYS Route 35/U.S. Route 202 between the Bear Mountain Parkway in Cortlandt and the Taconic State Parkway Ramps in Yorktown. This turn lane would allow for access to the businesses and roadways along this section as well as improved through capacity by removing the left turn movements from the through lanes. As mentioned previously the NYSDOT Improvements propose the inclusion of a center turn lane between Pine Grove Court and the Snap Fitness Building to the west. There are currently no plans to extend this turn lane to the west to the Bear Mountain Parkway in Cortlandt.

iii. Bear Mountain Parkway Connection

As a long term future improvement the *Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study* identified the need to connect the eastern and western sections of the Bear Mountain Parkway with a limited access two lane roadway. This project (PIN 800404) is currently listed as a future development by the New York State Department of Transportation.

iv. Other Locations of Interest

Improvements for the area of NYS Route 35/U.S. Route 202 at Lafayette and Conklin Avenue (PIN No. 8561.25) are currently being advanced for construction this year. These improvements will provide turn lanes, signalization and drainage improvements adjacent to

the Hudson Valley Hospital Center.

b) PROPOSED COSTCO IMPROVEMENTS

Associated with the proposed Costco development located along NYS Route 35/U.S. Route 202 opposite Mohansic Avenue, roadway improvements are planned to address capacity and safety issues in the vicinity of the Taconic State Parkway Interchange. The proposed improvements will include an additional westbound through lane starting immediately west of Strang Boulevard and continuing through Old Crompond Road where it will match into the additional westbound through lane to be constructed as part of the NYSDOT improvements. In addition a new left turn lane will be constructed eastbound on NYS Route 35/U.S. Route 202 at the Costco site access as well as a new northbound right turn lane on Mohansic Avenue. Also, the traffic signals at Mohansic Avenue and the Taconic State Parkway northbound and southbound ramps will be upgraded and interconnected to provide improved traffic flow through this portion of the corridor.

c) TOWN OF YORKTOWN COMPREHENSIVE PLAN

The Town of Yorktown adopted at new comprehensive plan in 2010 which defined policies to be used in the planning and improving of the Town to support future growth. The transportation portion of the Comprehensive Plan restated many improvements recommended in the *Route*

202/35/6 and Bear Mountain Parkway Sustainable Development Study as well as making new recommendations for improvements throughout the Town.

G. DESCRIPTION OF ANALYSIS PROCEDURES

It was necessary to perform capacity analyses in order to determine existing and future Levels of Service and traffic operating conditions at the study area intersections. The following is a brief description of the analysis method utilized in this report:

- Signalized Intersection Capacity Analysis

  The capacity analysis for a signalized intersection was performed in accordance with the procedures described in the 2010 Highway Capacity Manual, published by the Transportation Research Board. The terminology used in identifying traffic flow conditions is Levels of Service. A Level of Service "A" represents the best condition and a Level of Service "F" represents the worst condition. A Level of Service "C" is generally used as a design standard while a Level of Service "D" is acceptable during peak periods. A Level of Service "E" represents an operation near capacity. In order to identify an intersection's Level of Service, the average amount of vehicle delay is computed for each approach to the intersection as well as for the overall intersection.

o Unsignalized Intersection Capacity Analysis

The unsignalized intersection capacity analysis method utilized in this report was also performed in accordance with the procedures described in the 2010 Highway Capacity Manual. The procedure is based on total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line. The average total delay for any particular critical movement is a function of the service rate or capacity of the approach and the degree of saturation. In order to identify the Level of Service, the average amount of vehicle delay is computed for each critical movement to the intersection.

Additional information concerning signalized and unsignalized Levels of Service can be found in Appendix "D" of this report.

H. RESULTS OF ANALYSES (Table No. 2)

Capacity analyses which take into consideration appropriate truck percentages, pedestrian activity and roadway grades and other factors were performed at the study area intersections utilizing the procedures described above to determine the Levels of Service and average vehicle delays. Summarized below are a description of the existing geometrics, traffic control and a summary of the existing and future Levels of Service as well as any recommended improvements. All existing signal timings for the study area intersections were obtained from the New York State Department of Transportation. These were also verified by manually timing the signals in the field. The signal timings presented in the analysis are those obtained from NYSDOT.

Table No. 2 summarizes the results of the capacity analysis for the 2011 Existing, Year 2015 No-Build and Year 2015 Build Conditions. Appendix "C" contains copies of the Synchro analysis which also indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied. The Synchro analysis, which also models the existing and future coordination of traffic signals along the corridor, use the latest methods for analyzing intersection capacity and Level of Service as provided by the 2010 Highway Capacity Manual.

1. NYS Route 35/U.S. Route 202 and Lexington Avenue/Hess Gas Station Driveway

Lexington Avenue intersects NYS Route 35/U.S. Route 202 opposite a driveway to an existing Hess Gas Station to form a signalized full movement intersection. This intersection has recently been reconstructed and the eastbound approach consists of a separate left turn lane and a shared through/right turn lane. The westbound approach consists of a separate left turn lane, a separate through lane and a separate right turn lane. The southbound Lexington Avenue approach consists of a shared left turn/through lane and a separate right turn lane. The northbound Hess driveway approach consists of a single lane approximately 15 feet wide.

Capacity analysis was conducted for this intersection utilizing the 2011 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "D" during the AM and PM Peak Hours while an overall Level of Service "C" is currently experienced during the Saturday Peak Hour. The westbound approach experiences the longest delays during the PM Peak Hour while the eastbound approach

experiences longer delays during the AM and Saturday Peak Hour.

To improve operating conditions at this intersection an additional westbound through lane would be required to alleviate delays in the westbound direction and allow for additional green time to be provided to the other intersection approaches. Analyzing the intersection with this improvement utilizing the 2015 No-Build and Build Traffic Volumes indicates that the intersection will operate at an overall Level of Service "E" during the AM Peak Hour, while a Level of Service "D" will be experience during the PM and Saturday Peak Hours

As previously discussed in Section III-F, the long term plans for improvements to this intersection as per the *Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study* include the construction of a by-pass road which will connect the east and west sections of the BMP, which will accommodate the through traffic on the corridor.

2. NYS Route 35/U.S. Route 202 and Bear Mountain Parkway Extension

The Bear Mountain Parkway Extension (BMP) intersects NYS Route 35/U.S. Route 202 at an unsignalized, "T" shaped intersection. The eastbound and westbound approaches to the intersection each consists of one lane with approximately 10 ft. wide shoulders. The southbound BMP approach consists of two lanes and is controlled by a "Stop" sign. The BMP also has two lanes traveling away from the intersection toward Stony Street.

A capacity analysis was conducted for this intersection utilizing the 2011 Existing Traffic Volumes. The results of this analysis indicate that the intersection is currently operating at a Level of Service "F" on the southbound approach during each of the Peak Hours, while a Level of Service "B" is experienced for the eastbound left turn movement. It should be noted that due to the delays on the southbound approach during the PM Peak Hour the queues generally extend to the BMP intersection with Stony Street.

The NYSDOT improvements in this area as discussed in more detail in Section III-E of this report, proposes to upgrade this intersection to improve operating conditions. With these improvements the eastbound approach will consist of a separate left turn lane and two through lanes. The westbound approach will consist of two through lanes with a shared right turn lane. The southbound BMP approach will consist of a single lane that will only allow right turn movements onto NYS Route 35/U.S. Route 202. This movement will be a fully channelized right turn movement with an acceleration lane in the westbound direction to NYS Route 35/U.S. Route 202 for merging traffic. Left turns from the BMP to NYS Route 35/U.S. Route 202 will be prohibited. Also, the traffic traveling away from the intersection destined eastbound on the BMP toward Stony Street will be reduced to one lane. These improvements are expected to be completed by 2013. Capacity analysis conducted for this intersection with the NYSDOT improvements utilizing the 2015 No-Build and Build Traffic Volumes indicates that this intersection will operate at a Level of Service "B" or better for the eastbound left turn movement during each of the peak hours. The southbound right turn movements from the BMP will be a free flow movement onto NYS Route 35/U.S. Route 202.

3. NYS Route 35/U.S. Route 202 and Pine Grove Court

This intersection is currently a "Stop" sign controlled "T" intersection. The Routes 35/202 approaches consist of one lane plus shoulders. The Pine Grove Court approach widens at the intersection with NYS Route 35/U.S. Route 202 and consists of two lanes. Under current conditions, this intersection experiences long delays and conflicts with left turning movements and through movements on Routes 35/202.

In consideration of this existing capacity and safety problem, the New York State Department of Transportation has initiated the plans for improvements as discussed in Section III-E of this report. The improvements call for the provision of an additional through lane in each direction along NYS Route 35/U.S. Route 202 as well as a separate left turn lane westbound and a separate right turn lane eastbound along with signalization of the intersection. Analysis conducted utilizing the 2015 No-Build and Build Traffic Volumes indicates that with the completion of these improvements, an overall Level of Service "B" or better will be obtained at this location during peak periods.

4. Bear Mountain Parkway Extension and Stony Street

The Bear Mountain Parkway Extension (BMP) and Stony Street intersect at an unsignalized full movement intersection. The BMP approaches each consist of two lanes which are offset by a full width median. The Stony Street approaches are each single lane approaches and are controlled by "Stop" signs. Capacity analysis conducted for this intersection utilizing the 2010 Existing Traffic Volumes indicates that the intersection is currently operating at a Level of

Service "C" during the AM Peak Hour, at a Level of Service "F" during the PM Peak Hour and at a Level of Service "C" or better during the Saturday Peak Hour. It should be noted that the queuing on the southbound BMP at the intersection with NYS Route 35/U.S. Route 202 impacts the operation of this intersection. This also affects the safety of this intersection as it has been identified as a high accident location.

As part of the planned improvements to be made by the New York State Department of Transportation, this intersection is proposed to be upgraded. The improvements will modify the geometry of the intersection such that the northbound and southbound approaches will now consists of one lane in each direction with separate left turn lanes and the median will be removed. The eastbound approach will consist of a shared left turn/through lane and a separate right turn lane while the westbound approach will remain as a single lane approach. A traffic signal will also be installed to control traffic at this intersection. Capacity analysis was conducted for this intersection utilizing the 2015 No-Build and Build Traffic Volumes with these improvements, which indicate that the intersection is expected to operate at an overall Level of Service "B" or better during the AM, PM and Saturday Peak Hours.

5. NYS Route 35/U.S. Route 202 and Stony Street/BJ'S - Staples Plaza

Stony Street intersects with NYS Route 35/U.S. Route 202 opposite the driveway to BJ's/Staples Plaza to form a full movement, signalized intersection. The NYS Route 35/U.S. Route 202 eastbound approach consists of three lanes in the form of a separate left turn lane, through lane and a shared through/right turn lane. The NYS Route 35/U.S. Route 202

westbound approach also consists of three lanes in the form of a separate left turn lane, a separate through lane and a separate right turn lane. The Stony Street southbound approach consists of two lanes in the form of a shared left/through lane and a separate right turn lane and the BJ'S/Staples Plaza driveway (northbound approach) consists of three lanes in the form of a separate left turn, separate through lane and a separate right turn lane. Associated with the recently approved Chase Bank, new crosswalks and pedestrian push buttons have recently been installed at this intersection. Capacity analysis conducted utilizing the 2011 Existing Traffic Volumes indicates that an overall Level of Service "C" or better is currently experienced during the Weekday Peak AM, Weekday Peak PM and Saturday Peak Hours.

As part of the New York State Department of Transportation Improvements this intersection is proposed to be upgraded with geometric improvements to eliminate the capacity constraint at the Pine Grove Court intersection, which currently impacts this intersection. An additional right turn lane will be added to the eastbound approach. This will require the relocation of the exiting bus stop at the south east corner of this intersection to the opposite side of the BJ'S-Staples Plaza driveway. Also the westbound approach will now have two through lanes as the existing right turn lane will be converted into a shared through/right turn lane and there will be two receiving lanes traveling away from the intersection in the westbound direction. Also, although not included in the NYSDOT improvements, since two through lanes will be provided in the westbound direction, based on the projected volumes the northbound BJ's/Staples driveway should be restriped to consist of a separate left turn lane, shared left/through lane and a separate right turn lane. Capacity analysis conducted utilizing the Year

2015 No-Build and Build Traffic Volumes indicates an overall Level of Service "C" will experienced during the AM Peak Hour, while an overall Level of Service "D" will be experienced during the PM and Saturday Peak Hour.

7. NYS Route 35/U.S. Route 202 and Site Access/Parkside Corners

The State Land development is proposed to be accessed via a new driveway connection to NYS Route 35/U.S. Route 202 opposite the existing driveway to the Parkside Corners shopping center for form a full movement intersection. The site exit driveway will consist of two left turn lanes and a shared through/right turn lane. The Parkside Corners driveway will remain unchanged with one lane entering, one lane exiting. This intersection will also be signalized.

As part of the NYSDOT improvements at Pine Grove Court, the two through lanes in each direction will continue to a point approximately 200 ft. past this proposed access location. As part of the State Land project it is proposed that the center turn lane proposed by the NYSDOT improvements be modified to provide a 200 ft. left turn lane in the eastbound direction and a 100 ft. left turn lane in the westbound direction at this new intersection. In addition the additional through lane in the westbound direction will be extended an additional 100 ft. (300 ft. total) past this intersection. It is also proposed that an additional right turn lane into the site be constructed. This will be accomplished by extending the acceleration lane from the Bear Mountain Parkway Extension intersection to the site access intersection where it will be dropped as a right turn only lane. These improvements are shown on the proposed site plan.

Capacity analysis conducted utilizing the 2015 Build Traffic Volumes indicates that this intersection can be expected to operate at an overall Level of Service "A" during the AM Peak Hour and at an overall Level of Service "C" during the PM and Saturday Peak Hours.

8. Other Considerations

Associated with the development of the property, the applicant proposes to dedicate a major portion of the site as parkland to the Town of Yorktown. A right-of-way will also be dedicated to the Town for the accommodation of the potential Bear Mountain Parkway Extension. A single point of access to this right-of-way would be maintained for the development for access to the site including the park land.

SECTION IV

SUMMARY AND CONCLUSION

Based on the analysis contained in this report, with the completion of the NYDOT improvements outlined in Section III-E similar Levels of Service and delays will be experienced under the future No-Build and future Build Conditions. Certain other improvements will have to be implemented by the development as described above. With these improvements, safe and efficient access to the proposed State Land Development will be provided without any significant negative impact on traffic operations in the vicinity of the site.

Respectfully submitted,

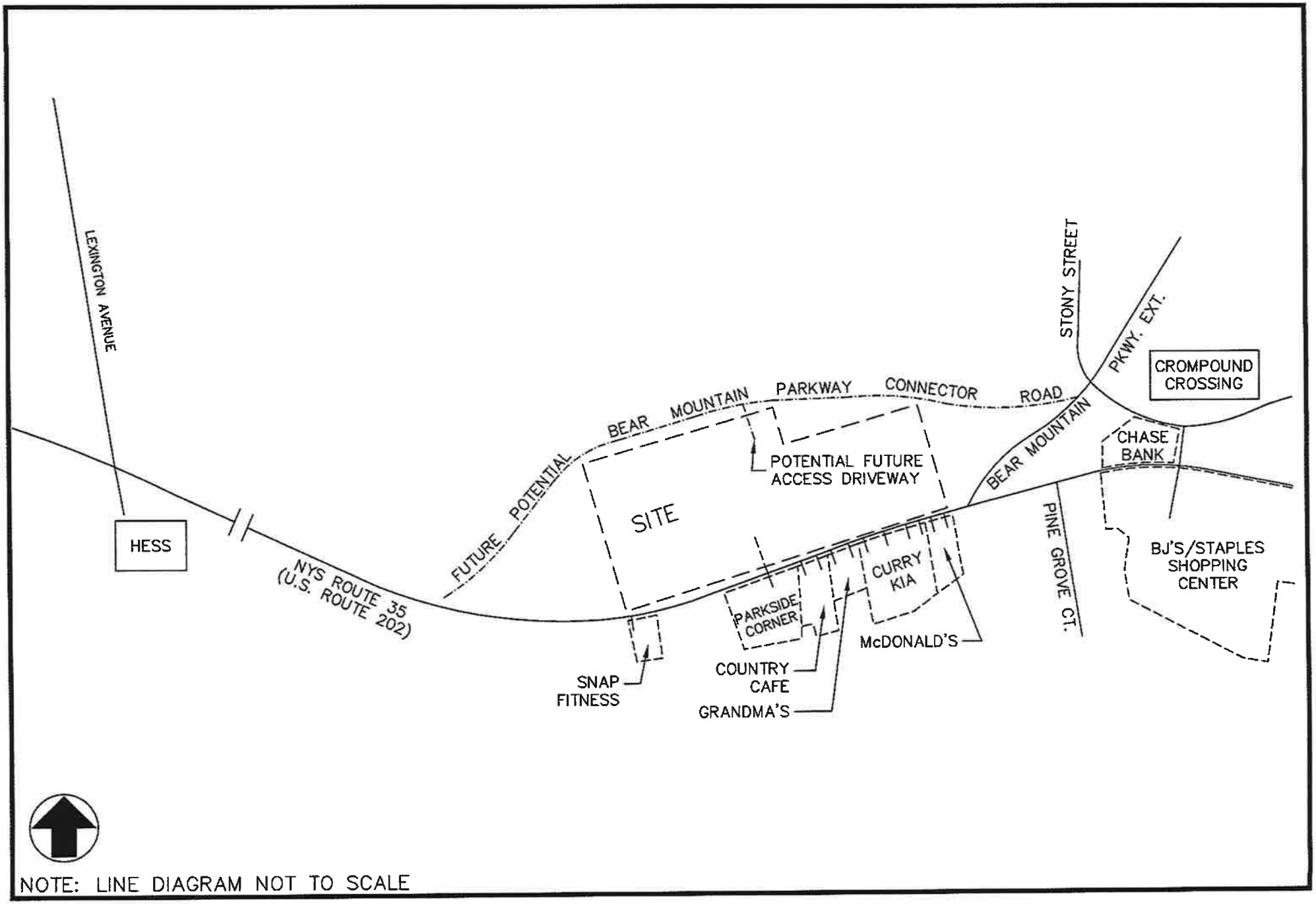
JOHN COLLINS ENGINEERS, P.C.

Philip J. Grealy, Ph.D., P.E.

Richard D. D'Andrea, P.E.

APPENDIX "A"

FIGURES

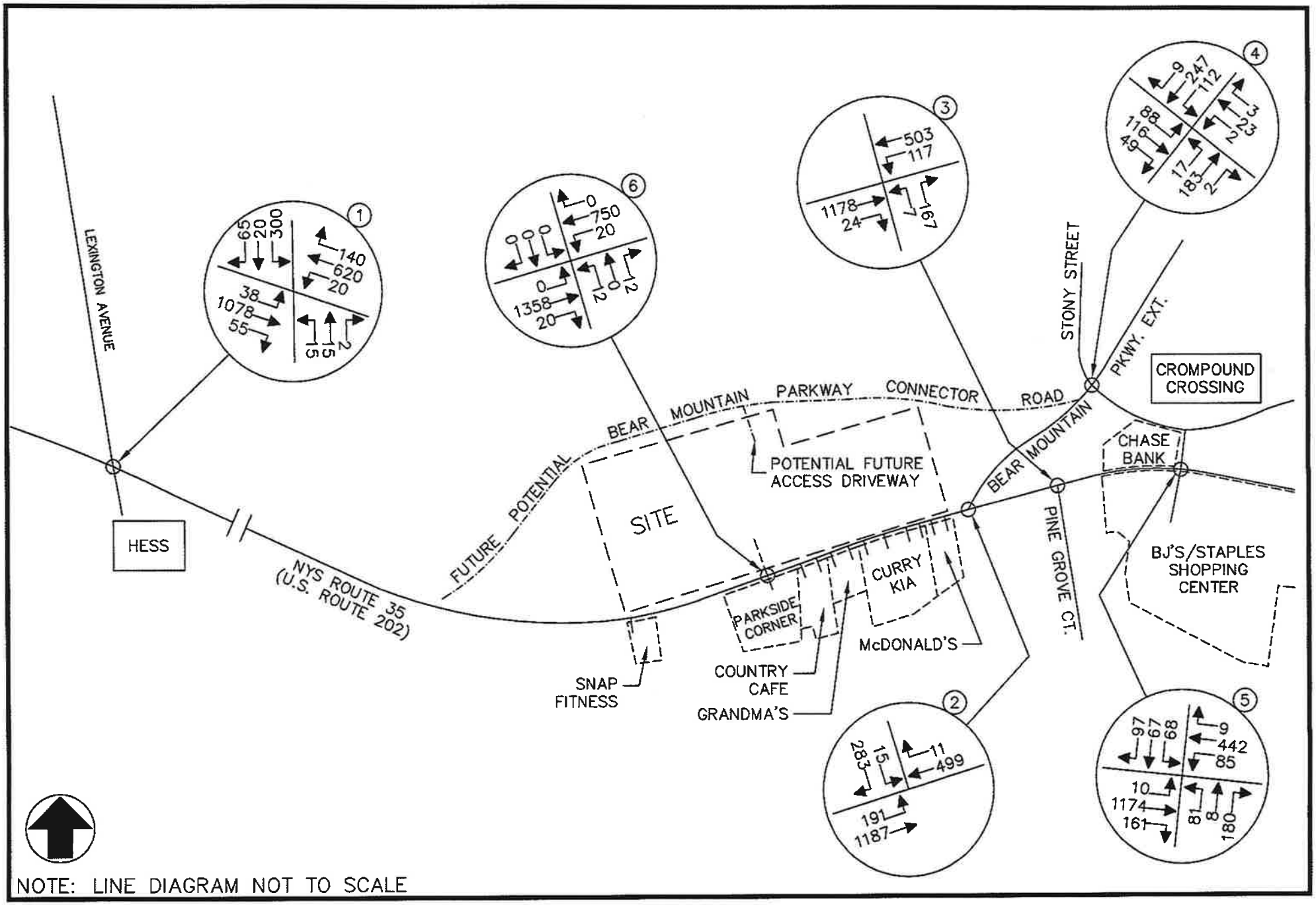


STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

SITE LOCATION MAP

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 1



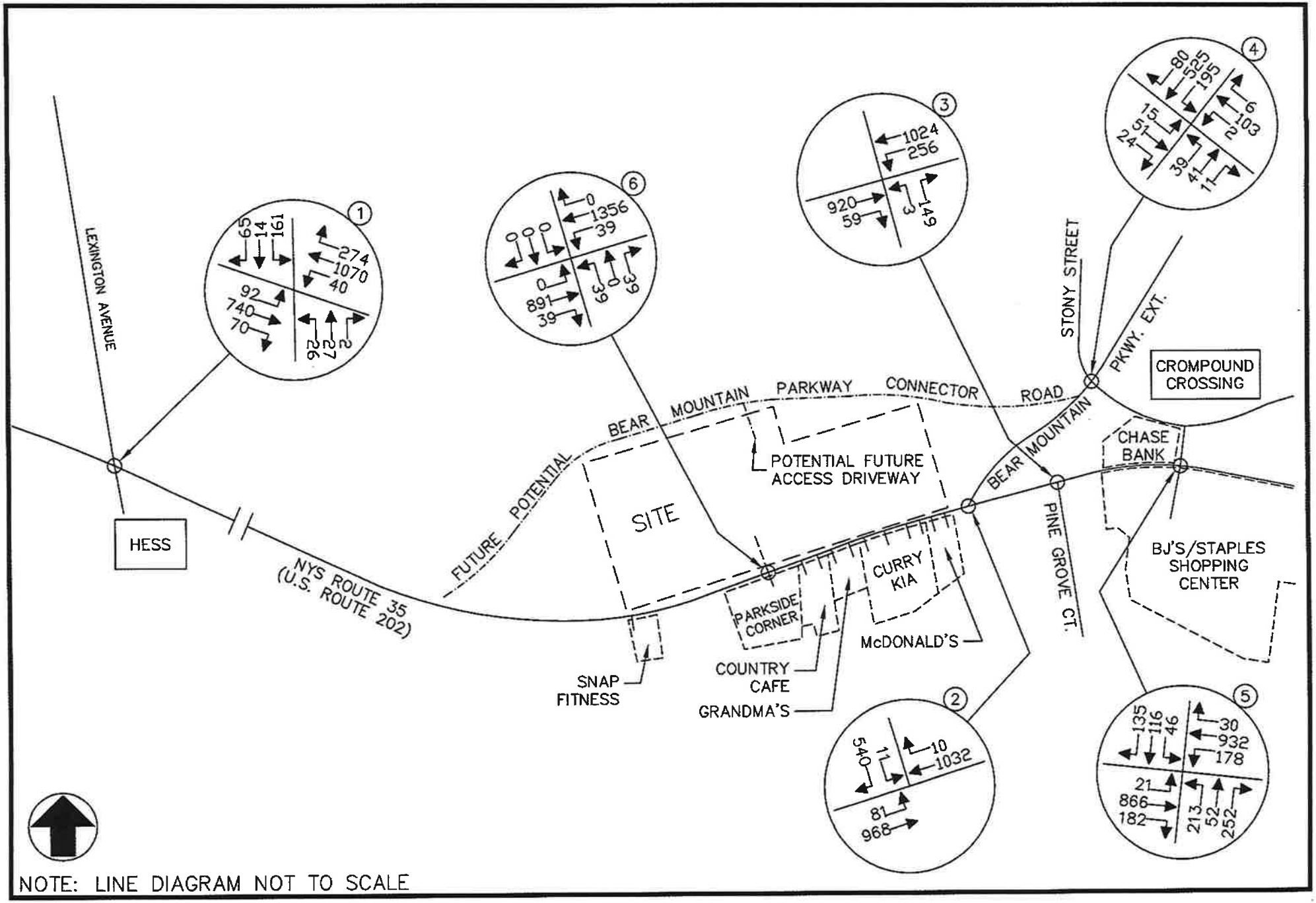
NOTE: LINE DIAGRAM NOT TO SCALE

STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

2011 EXISTING TRAFFIC VOLUMES
WEEKDAY PEAK AM HIGHWAY HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 2



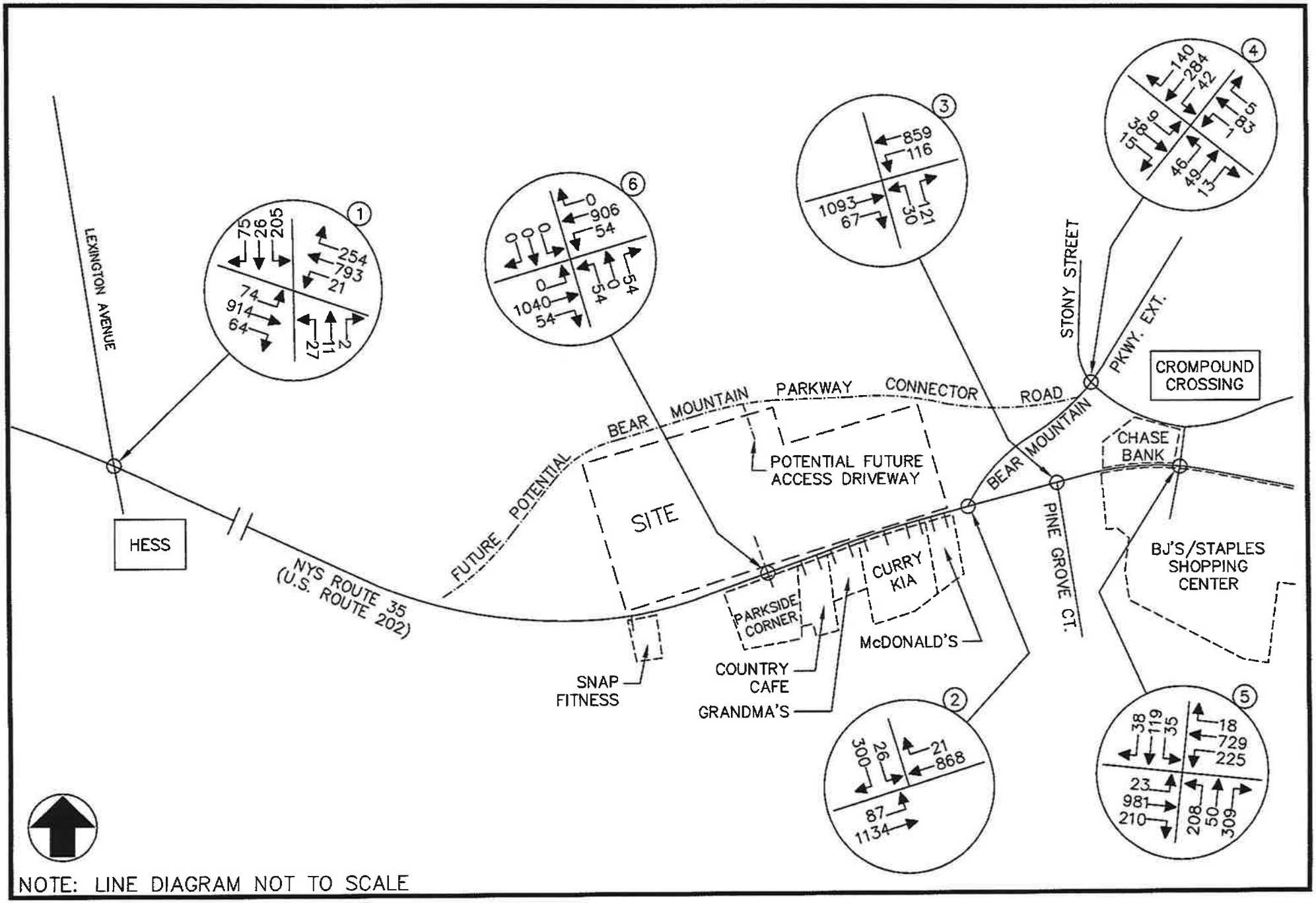
NOTE: LINE DIAGRAM NOT TO SCALE

STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

2011 EXISTING TRAFFIC VOLUMES
WEEKDAY PEAK PM HIGHWAY HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 3



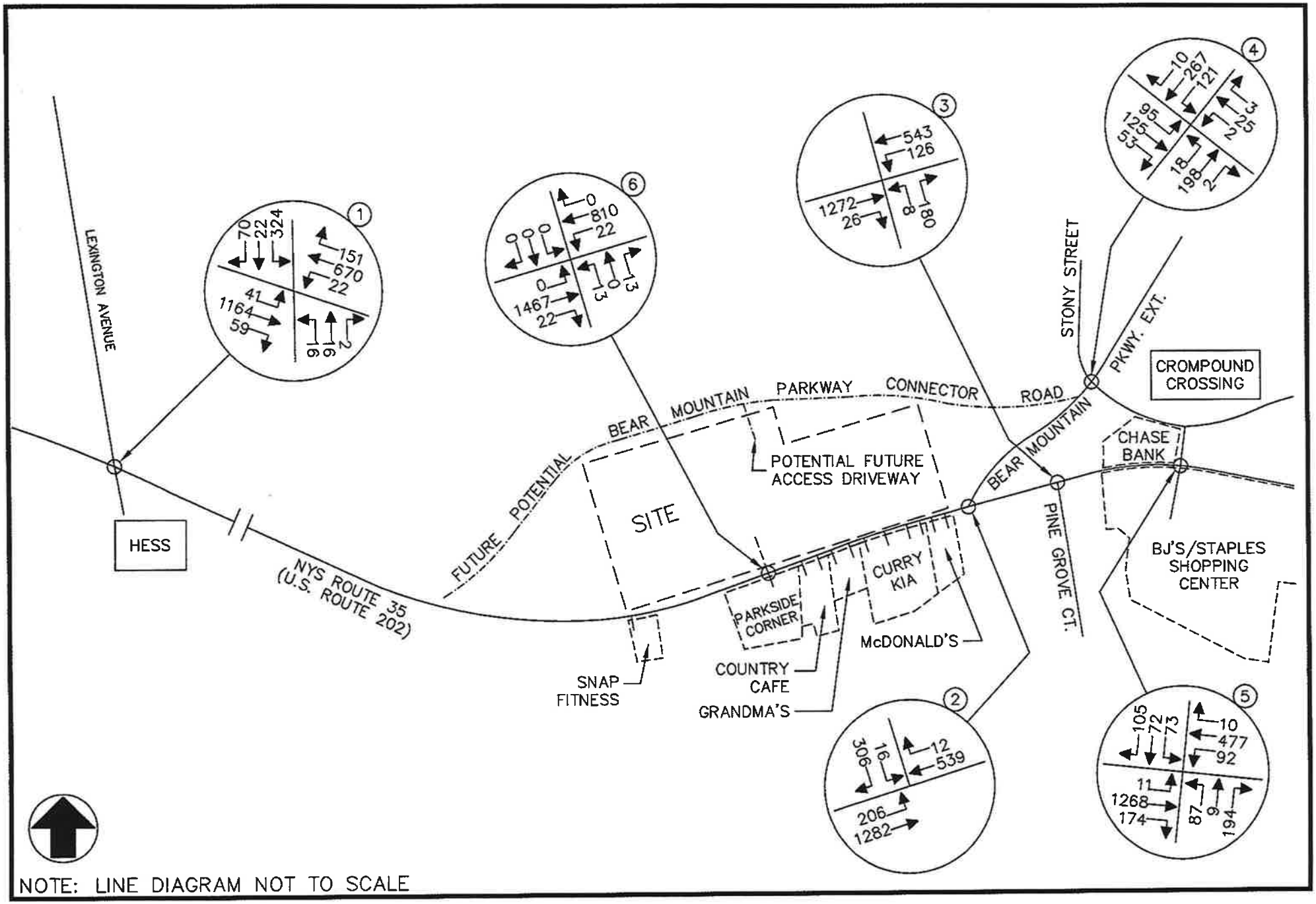
NOTE: LINE DIAGRAM NOT TO SCALE

STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

2011 EXISTING TRAFFIC VOLUMES
SATURDAY PEAK HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 4



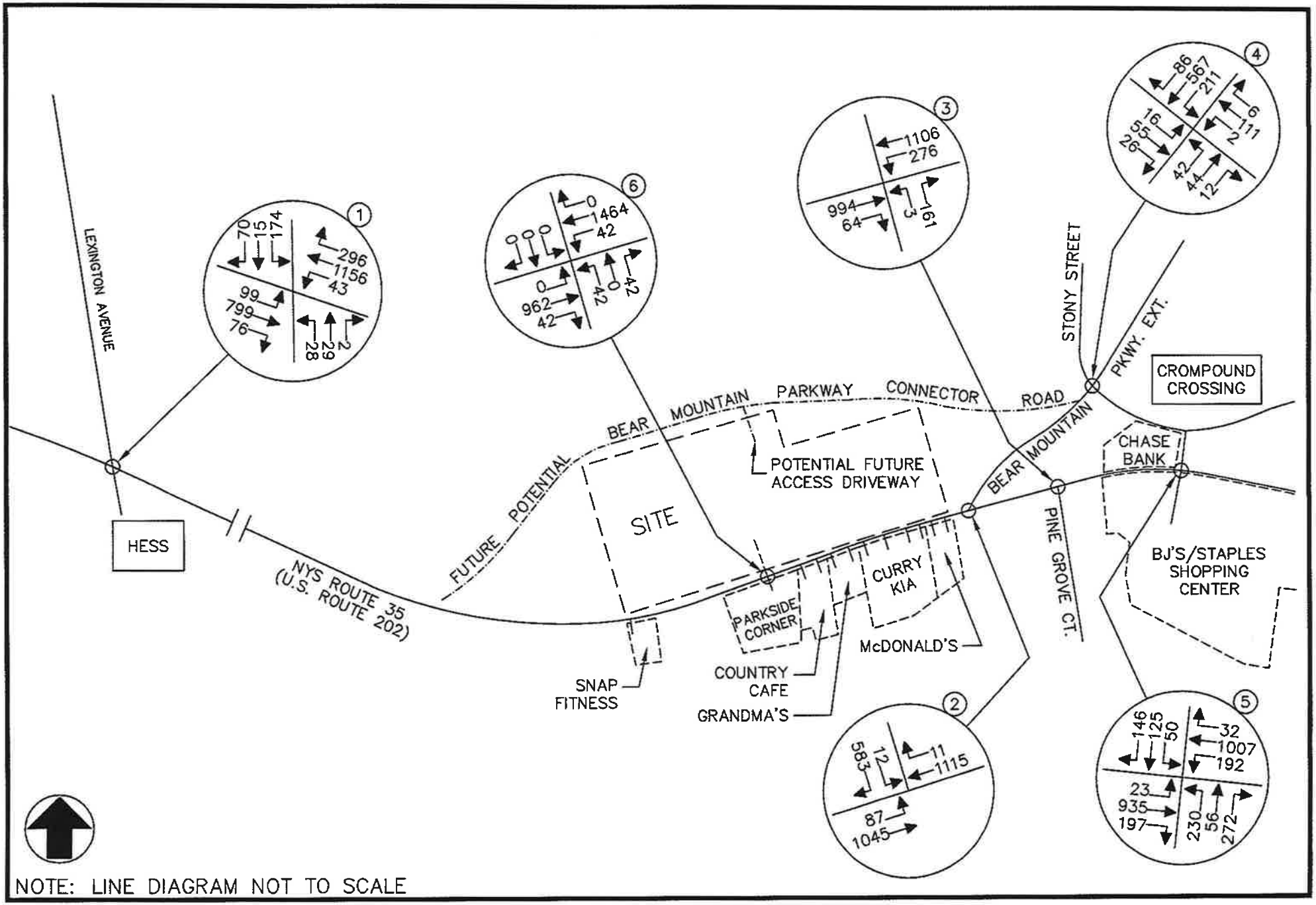
NOTE: LINE DIAGRAM NOT TO SCALE

STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

2015 PROJECTED TRAFFIC VOLUMES
WEEKDAY PEAK AM HIGHWAY HOUR

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 5

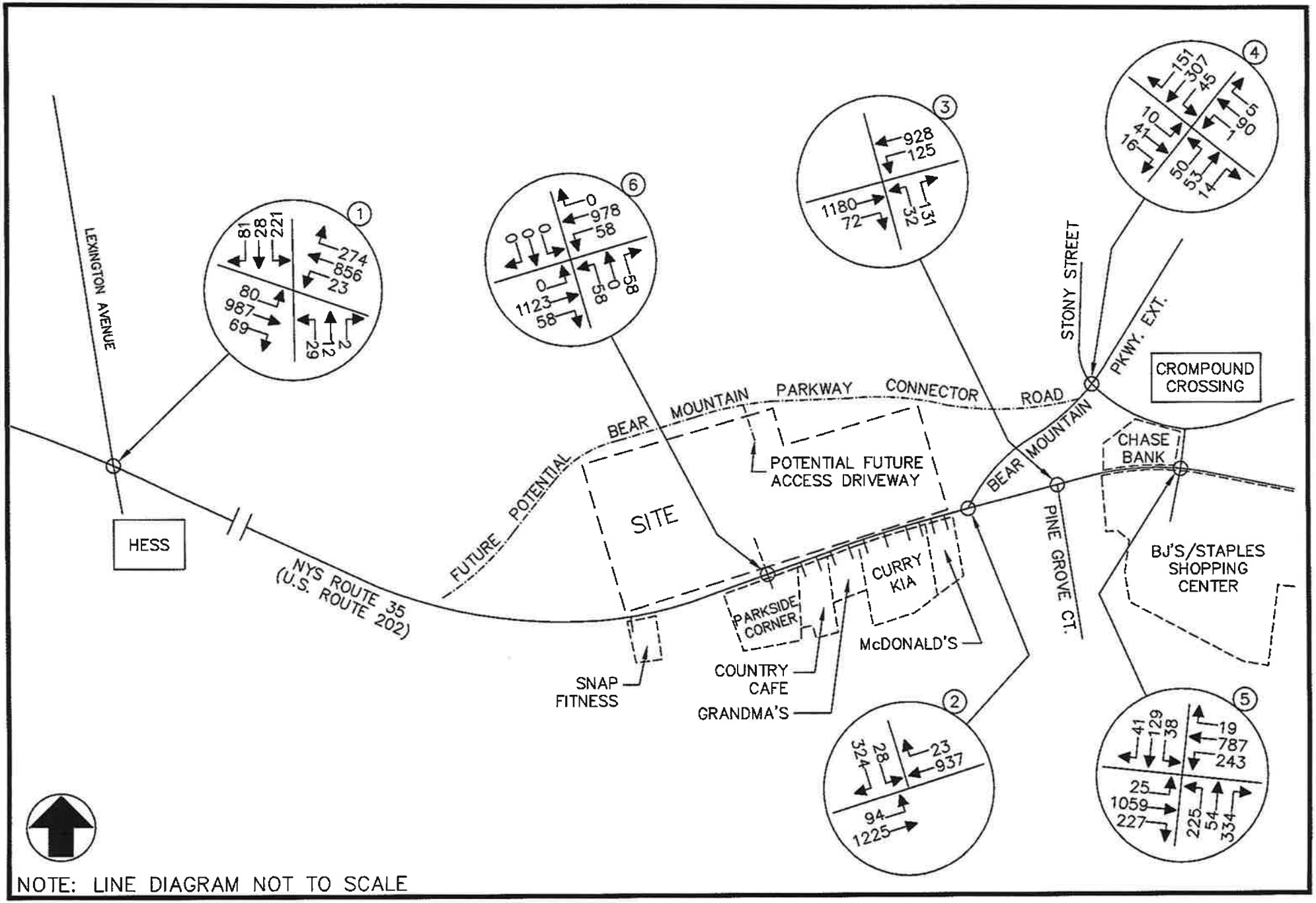


STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

2015 PROJECTED TRAFFIC VOLUMES
WEEKDAY PEAK PM HIGHWAY HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 6



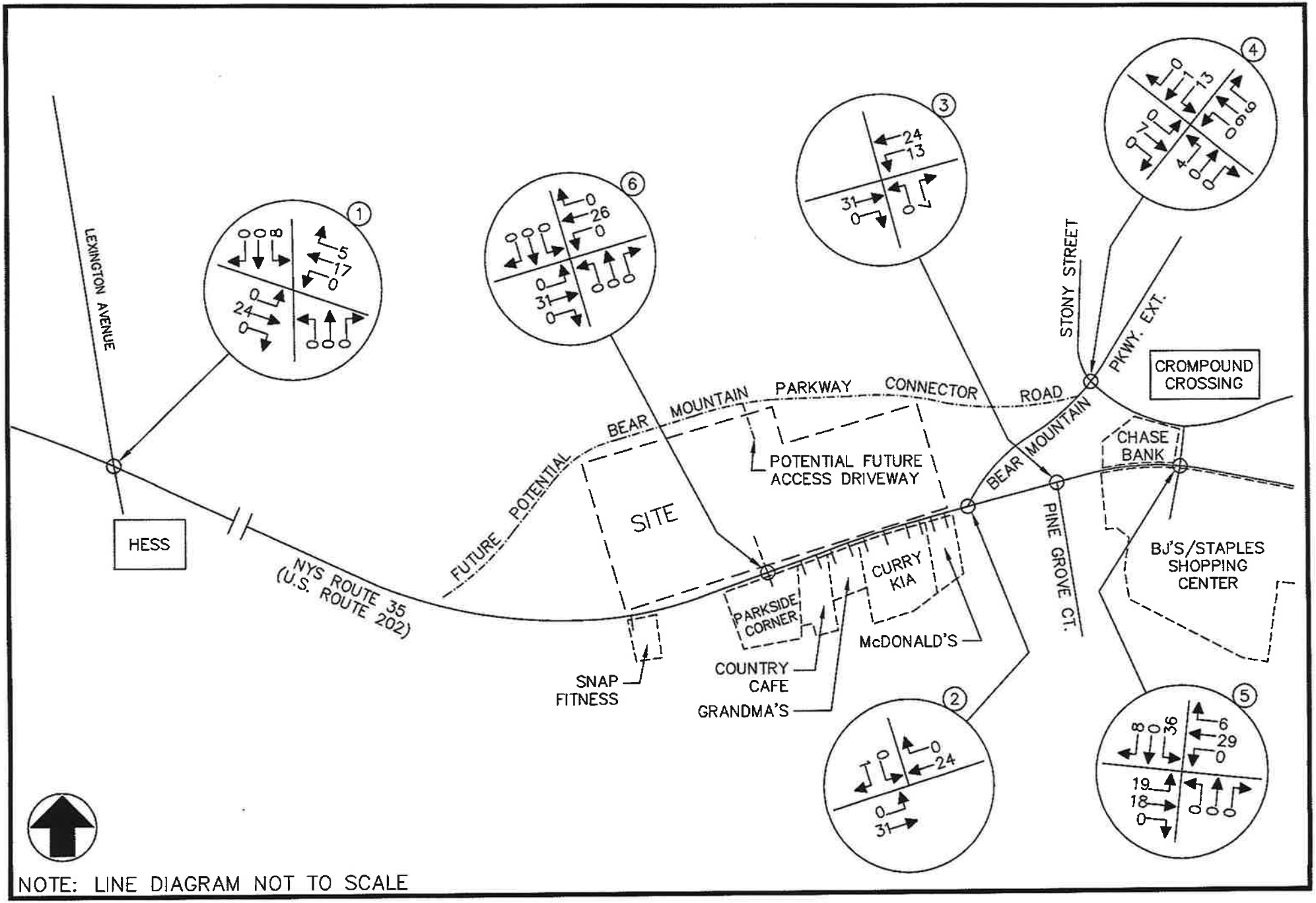
NOTE: LINE DIAGRAM NOT TO SCALE

STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

2015 PROJECTED TRAFFIC VOLUMES
SATURDAY PEAK HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 7

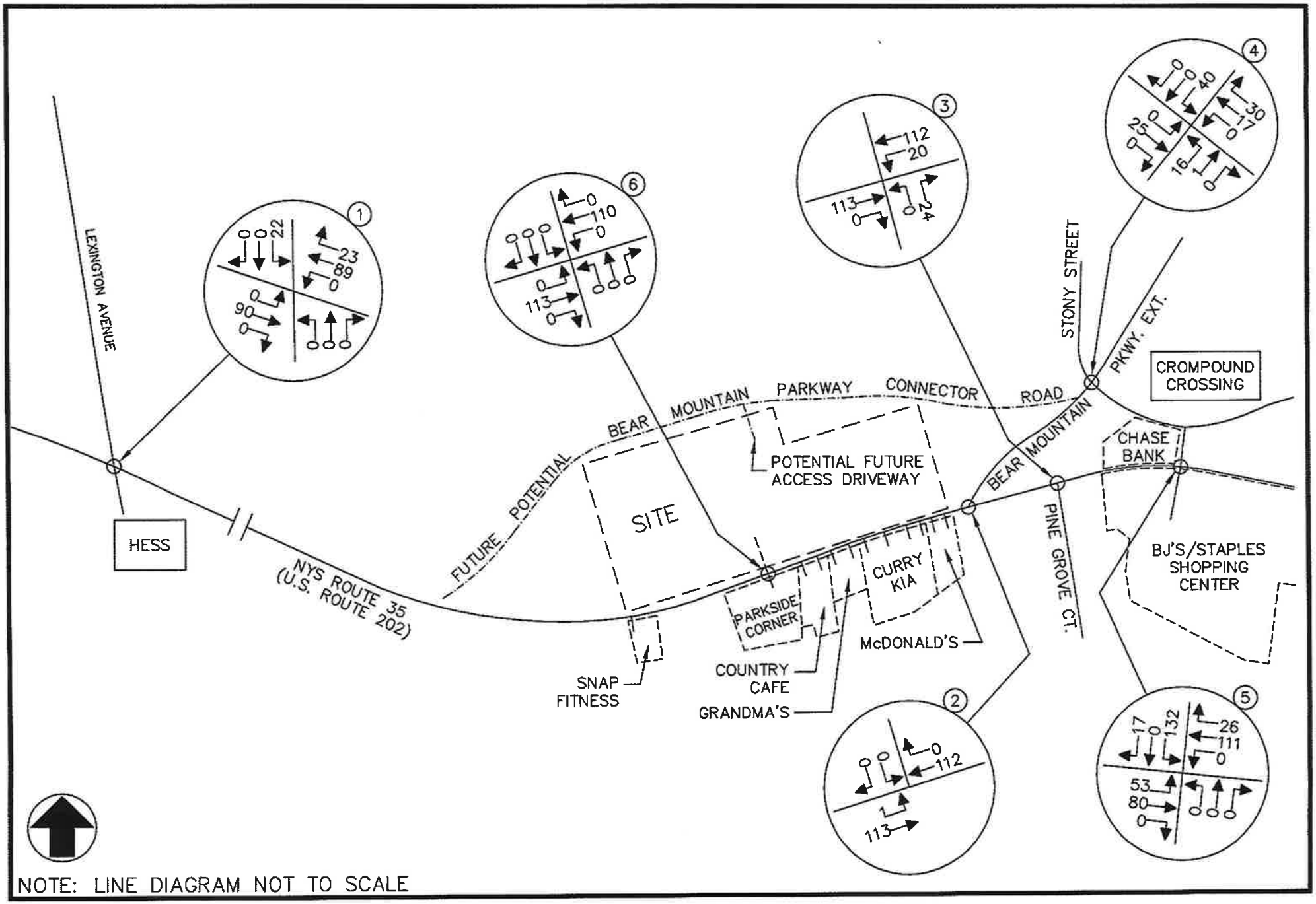


STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

OTHER DEVELOPMENT TRAFFIC VOLUMES
WEEKDAY PEAK AM HIGHWAY HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 8

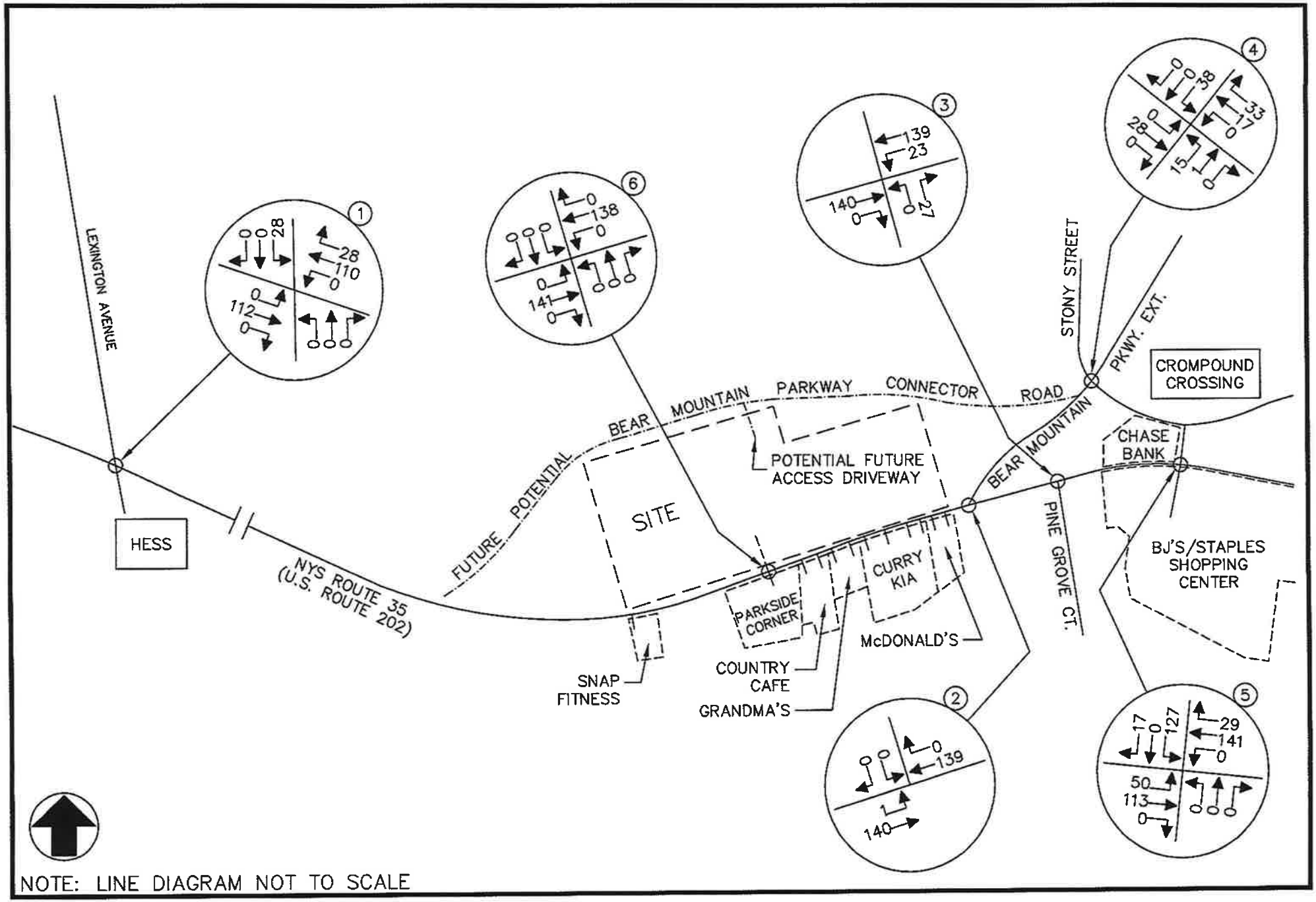


STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

OTHER DEVELOPMENT TRAFFIC VOLUMES
WEEKDAY PEAK PM HIGHWAY HOUR

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 9

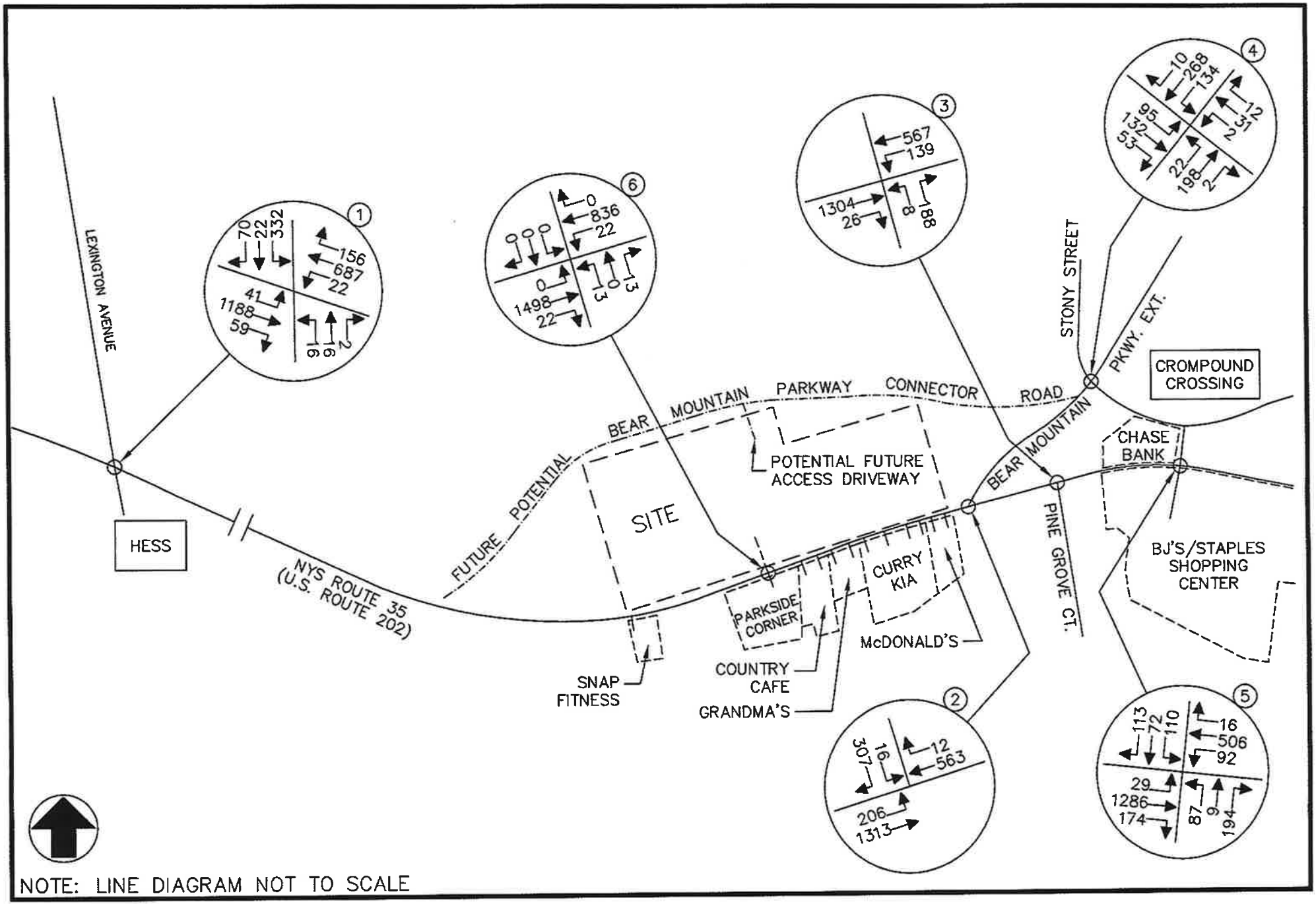


STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

OTHER DEVELOPMENT TRAFFIC VOLUMES
SATURDAY PEAK HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 10

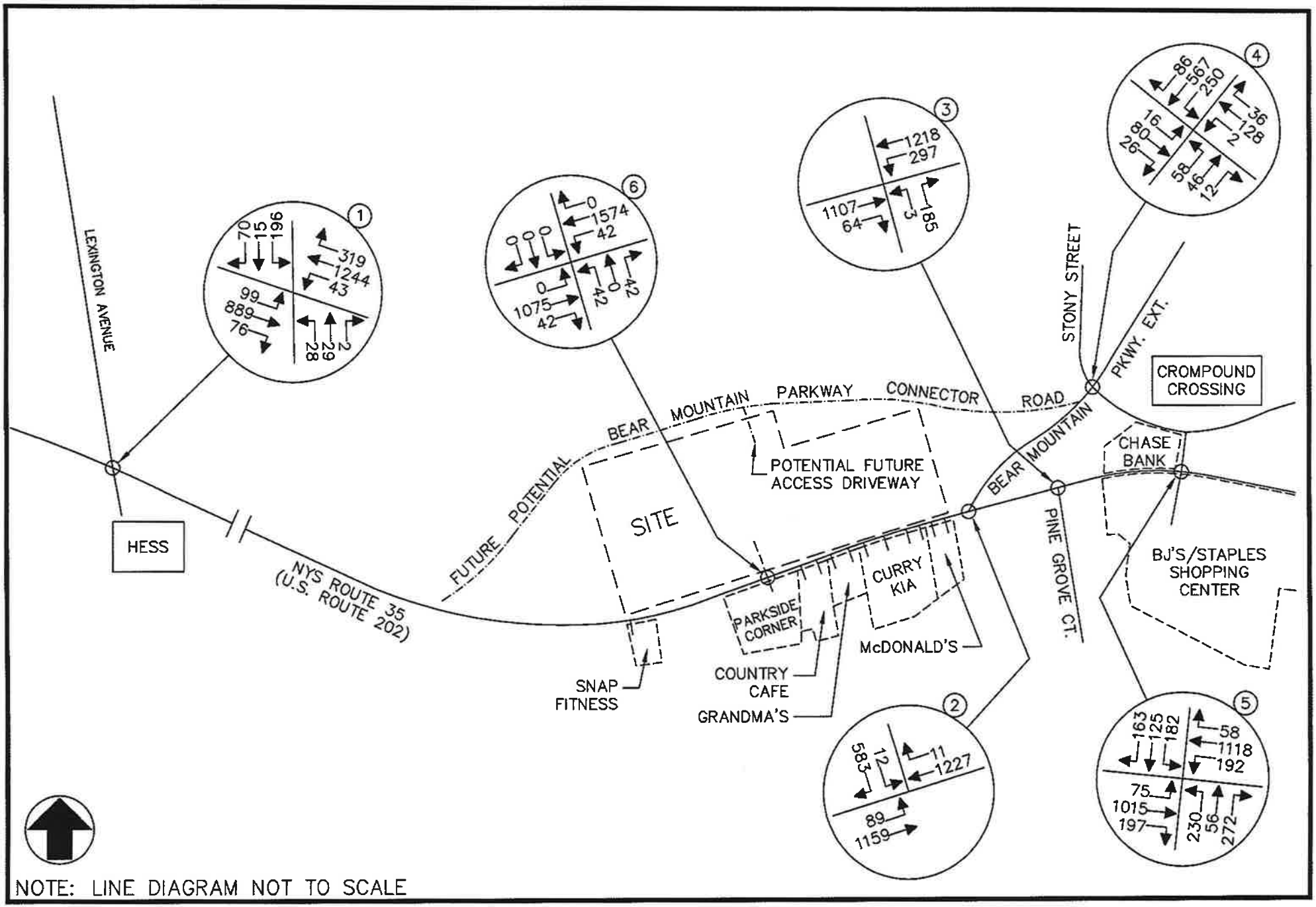


STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

2015 NO-BUILD TRAFFIC VOLUMES
WEEKDAY PEAK AM HIGHWAY HOUR

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 11



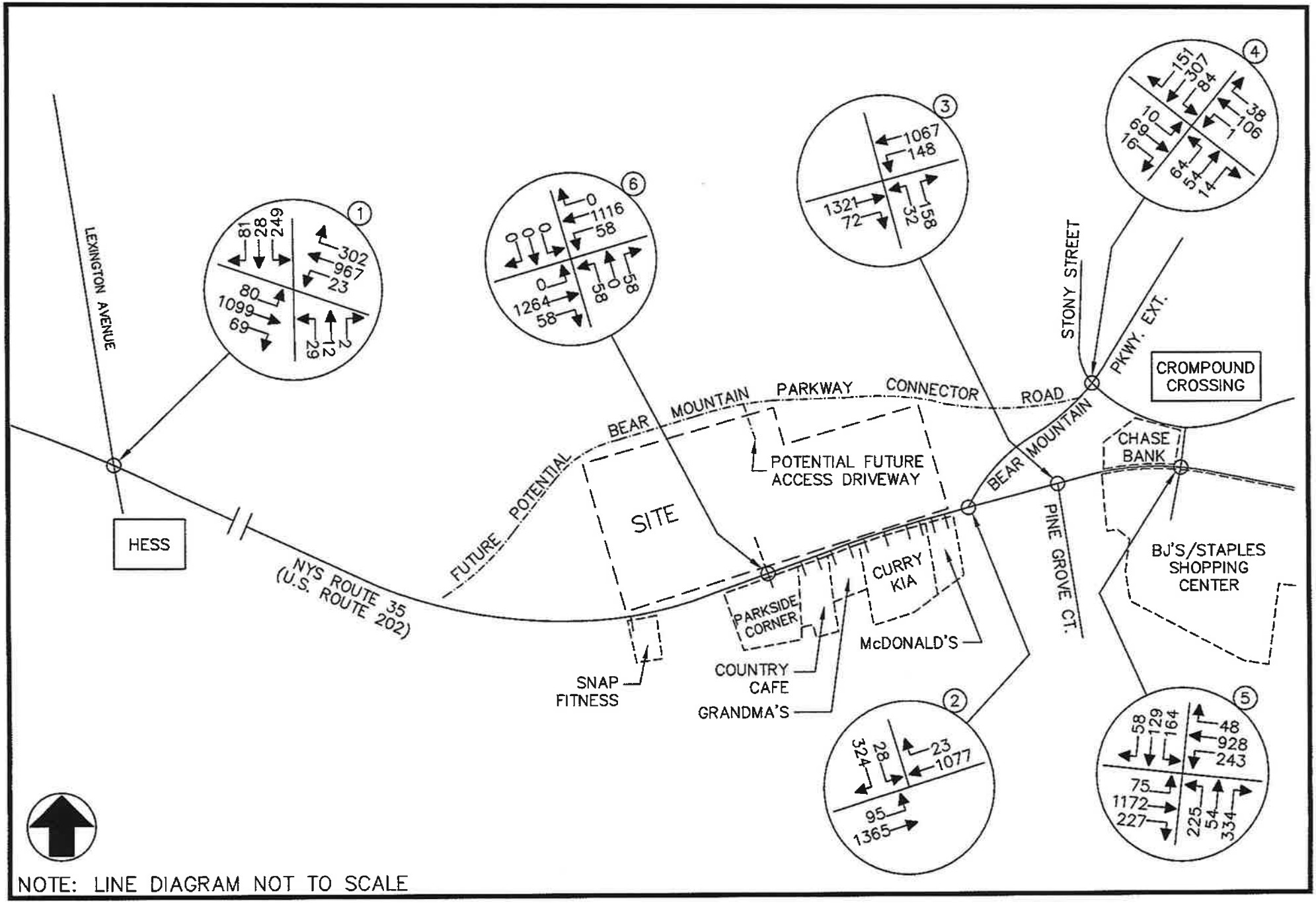
NOTE: LINE DIAGRAM NOT TO SCALE

STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

2015 NO-BUILD TRAFFIC VOLUMES
WEEKDAY PEAK PM HIGHWAY HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 12

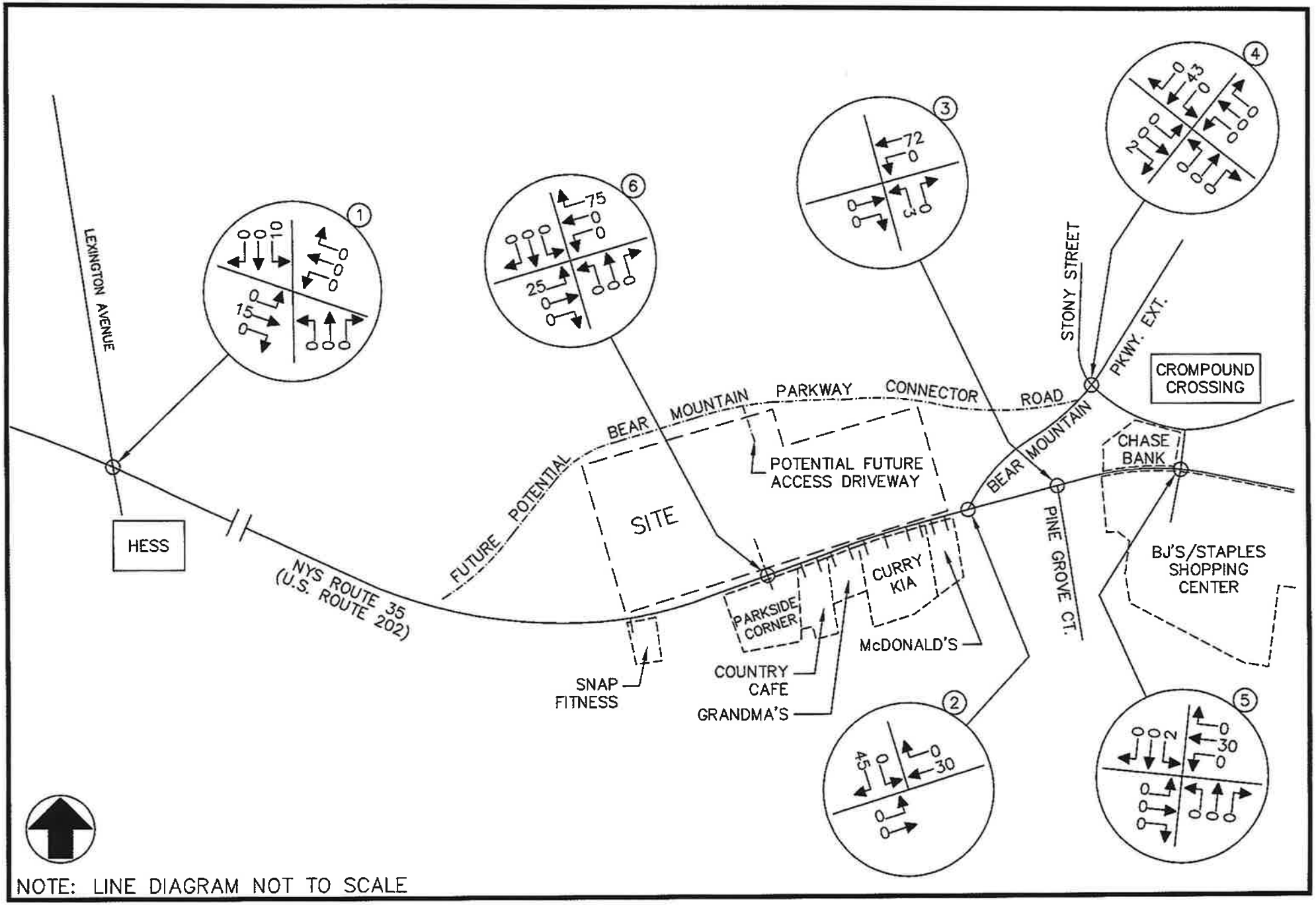


STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

2015 NO-BUILD TRAFFIC VOLUMES
SATURDAY PEAK HOUR

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 13

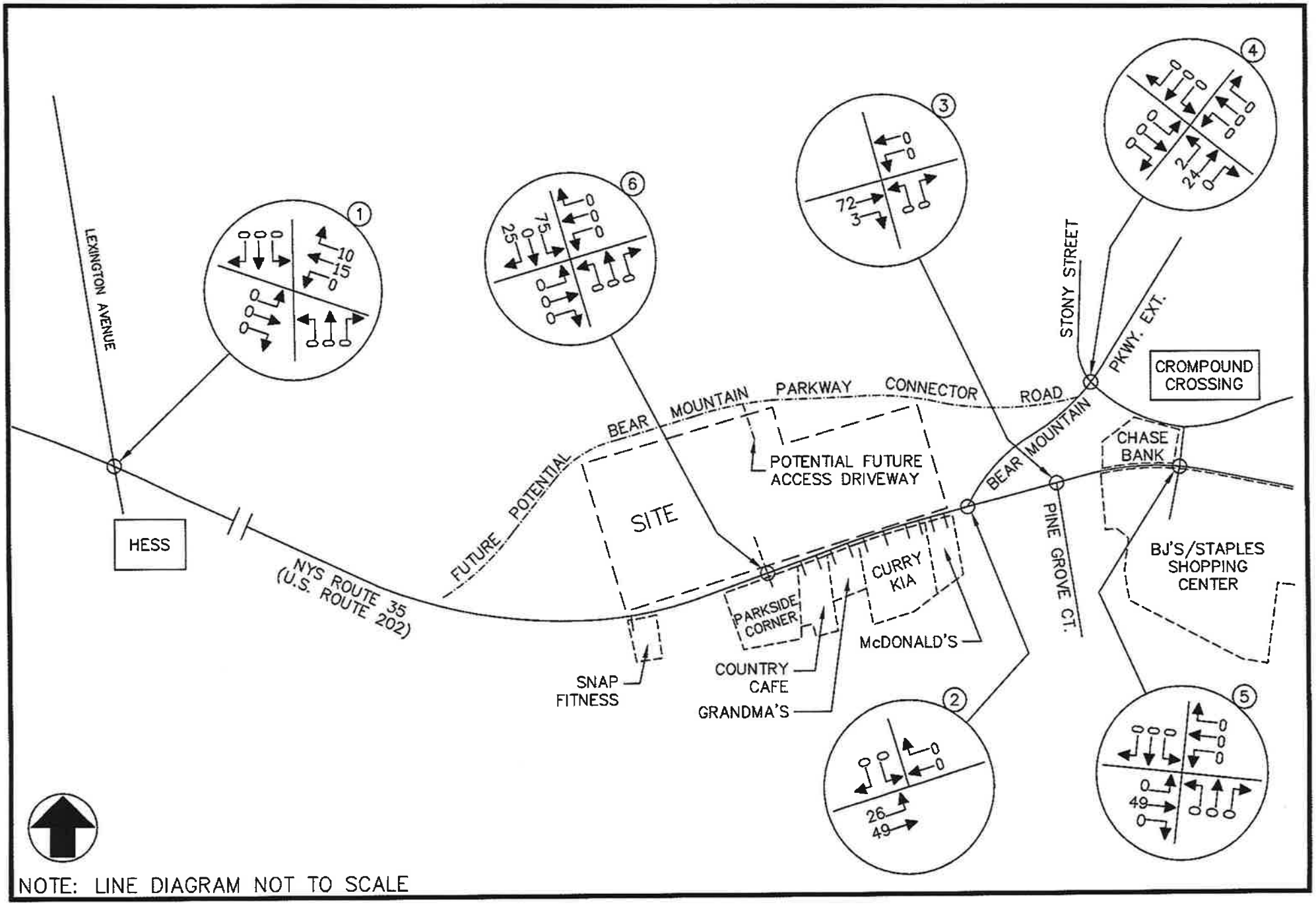


STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

ARRIVAL DISTRIBUTION
(EXPRESSED AS A %)

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 14



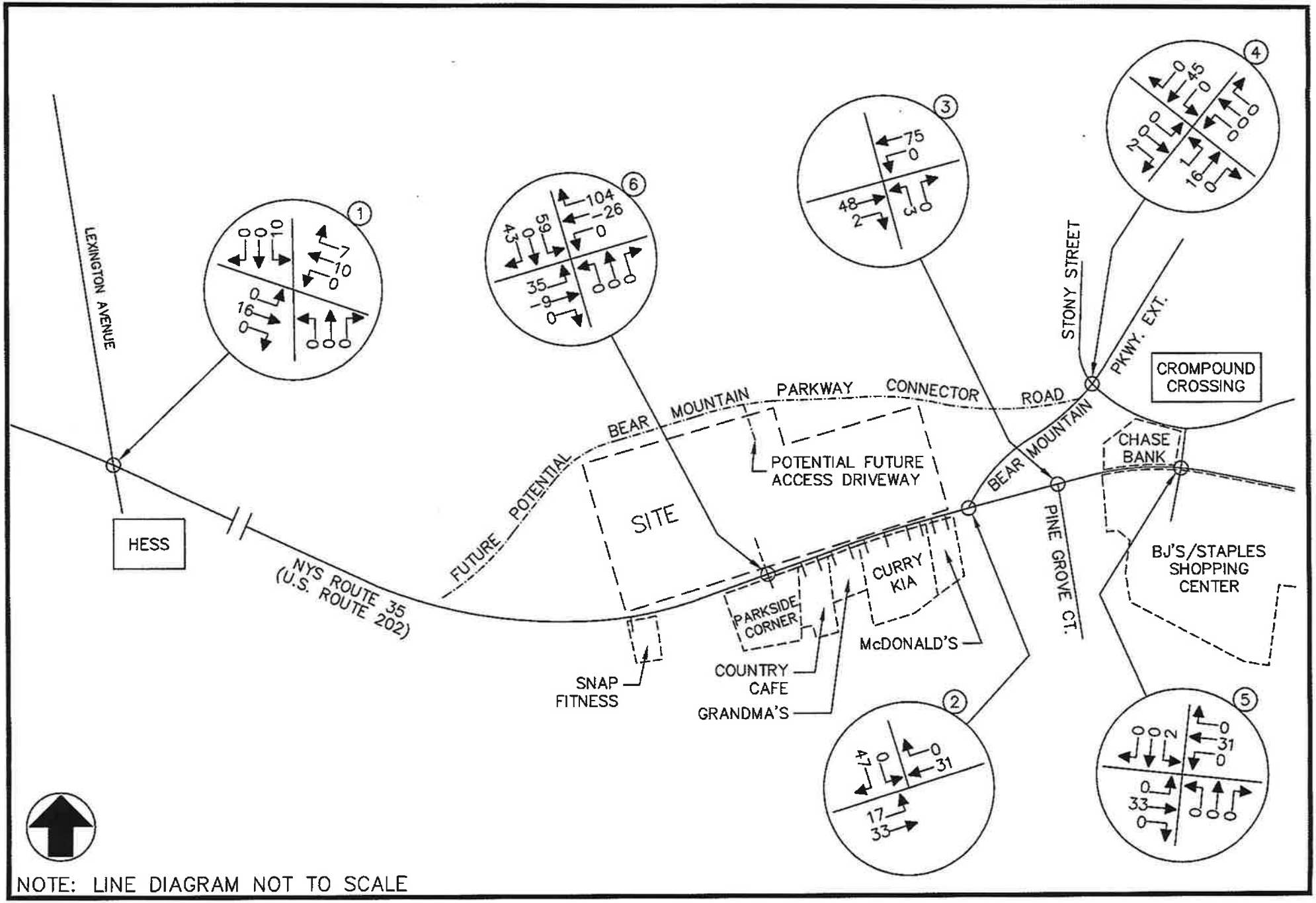
NOTE: LINE DIAGRAM NOT TO SCALE

STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

DEPARTURE DISTRIBUTION
(EXPRESSED AS A %)

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 15

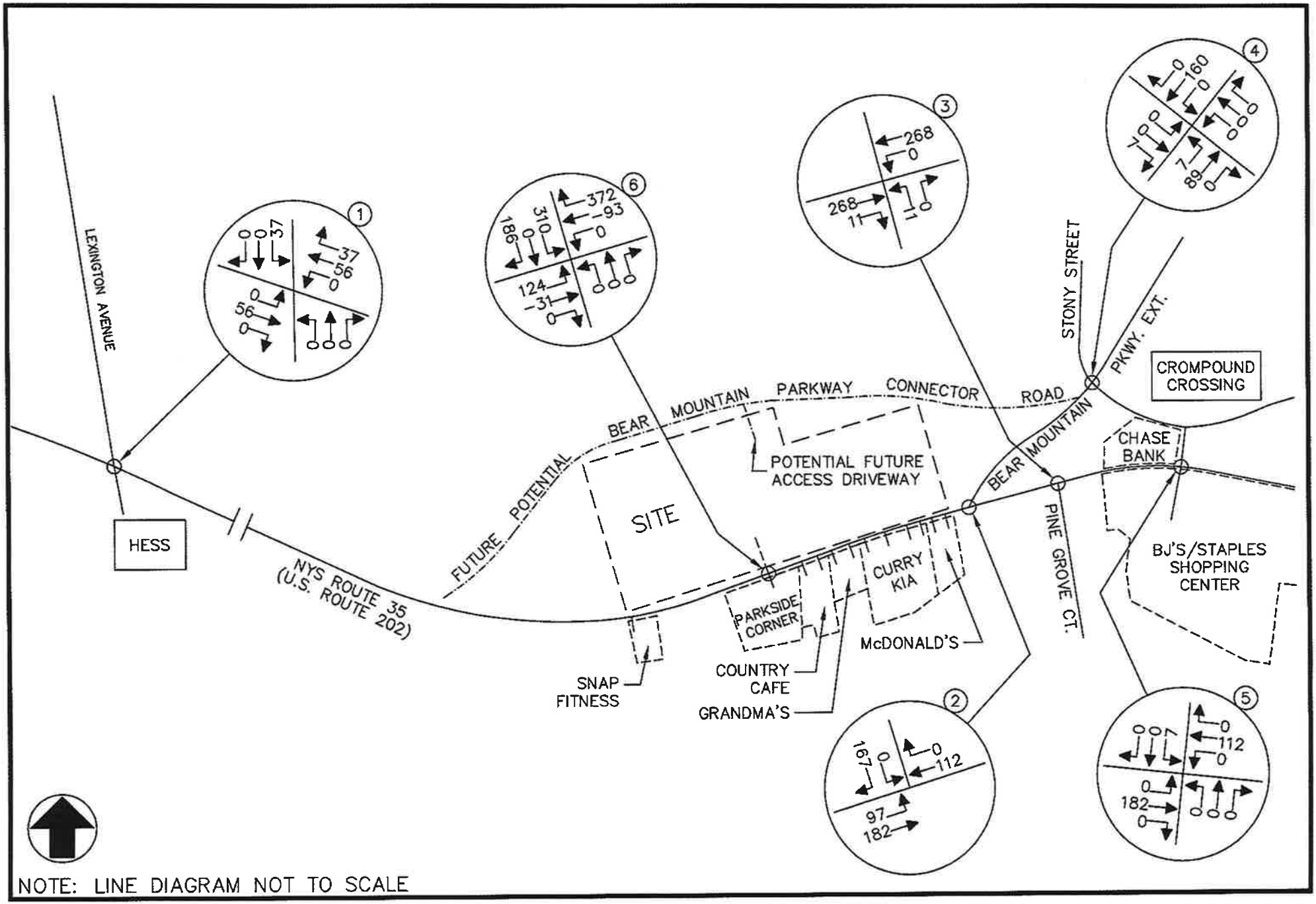


STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

SITE GENERATED TRAFFIC VOLUMES
WEEKDAY PEAK AM HIGHWAY HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE . NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 16

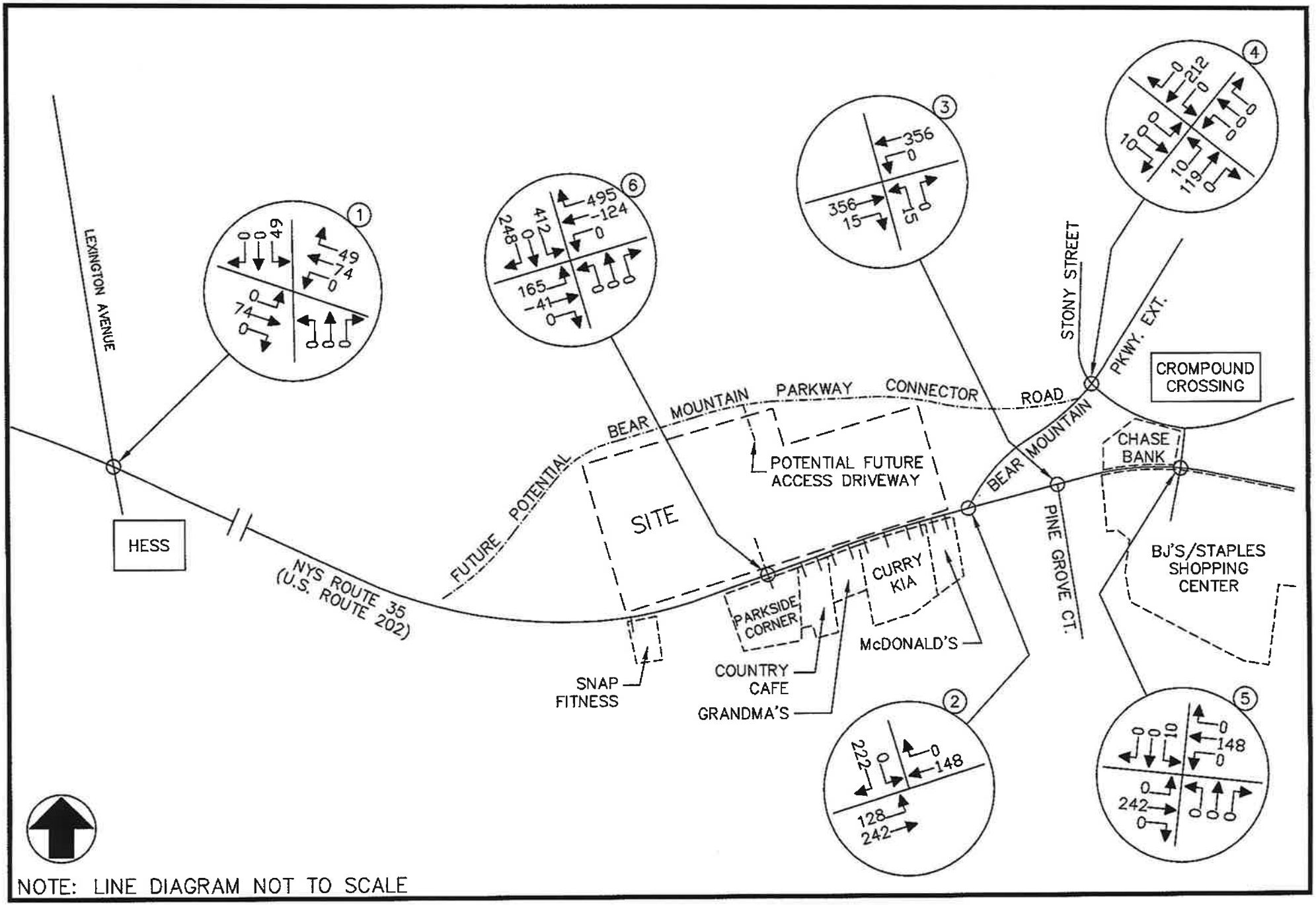


STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

SITE GENERATED TRAFFIC VOLUMES
WEEKDAY PEAK PM HIGHWAY HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 17

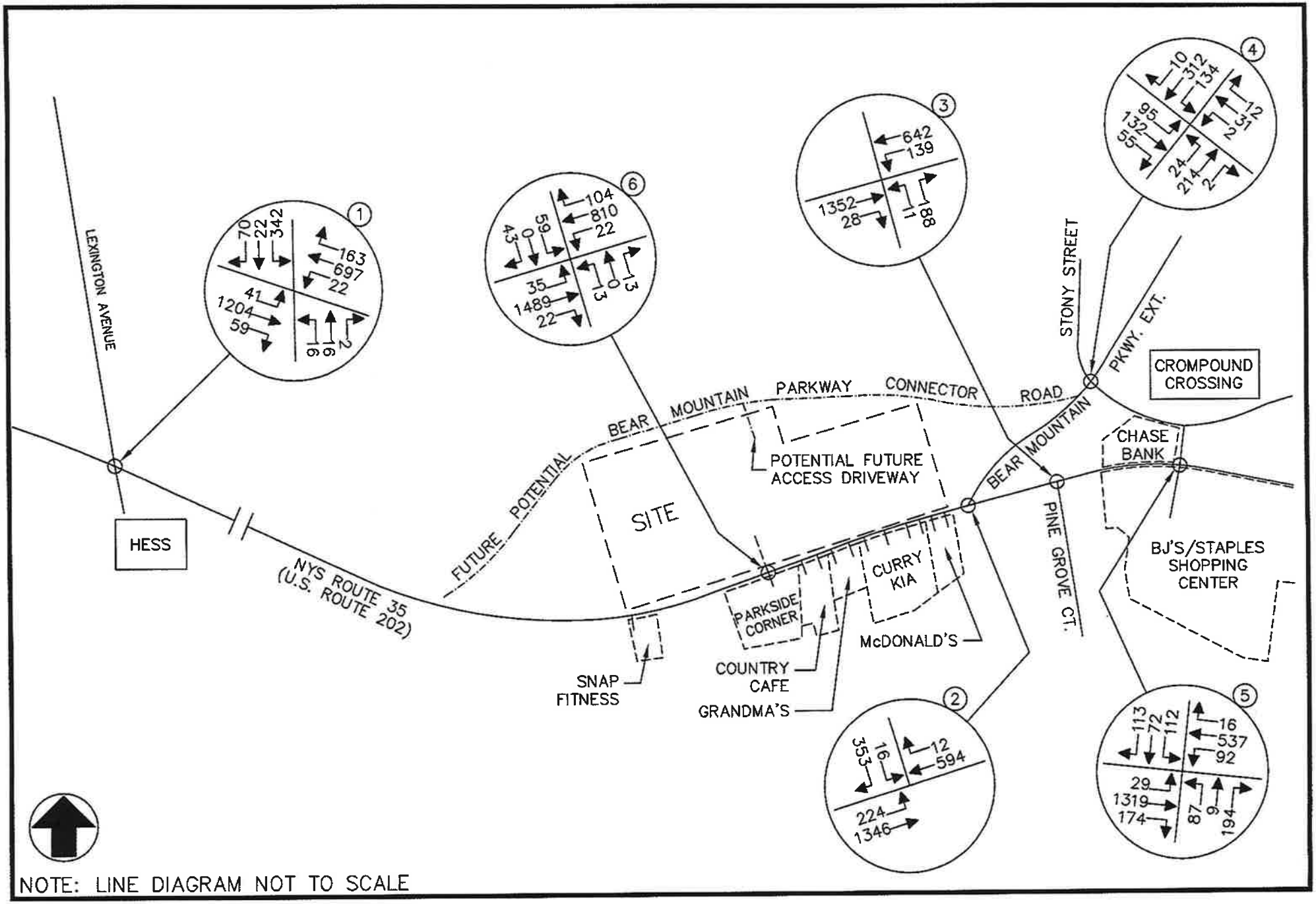


STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

SITE GENERATED TRAFFIC VOLUMES
SATURDAY PEAK HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 18

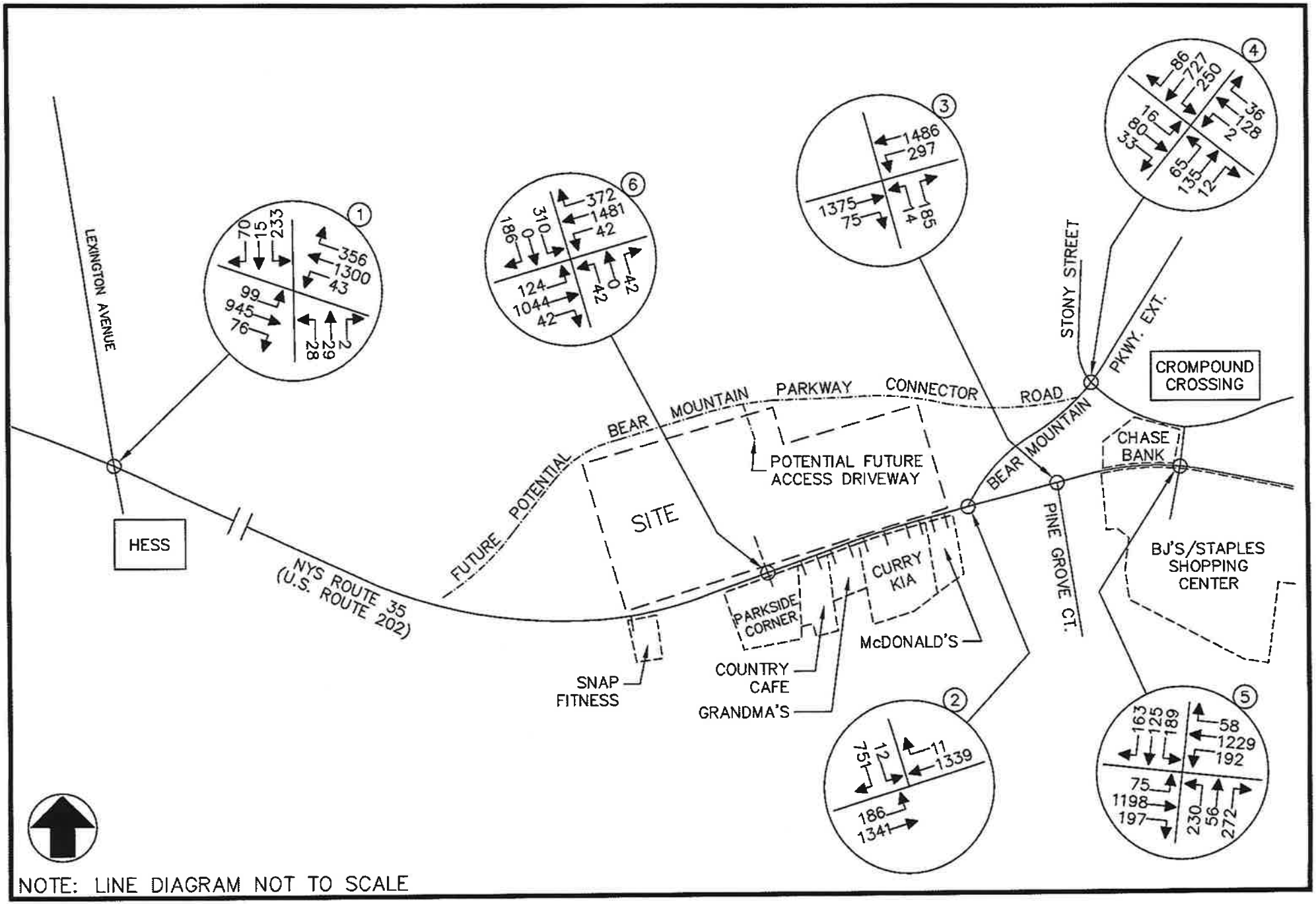


STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

2015 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK AM HIGHWAY HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 19



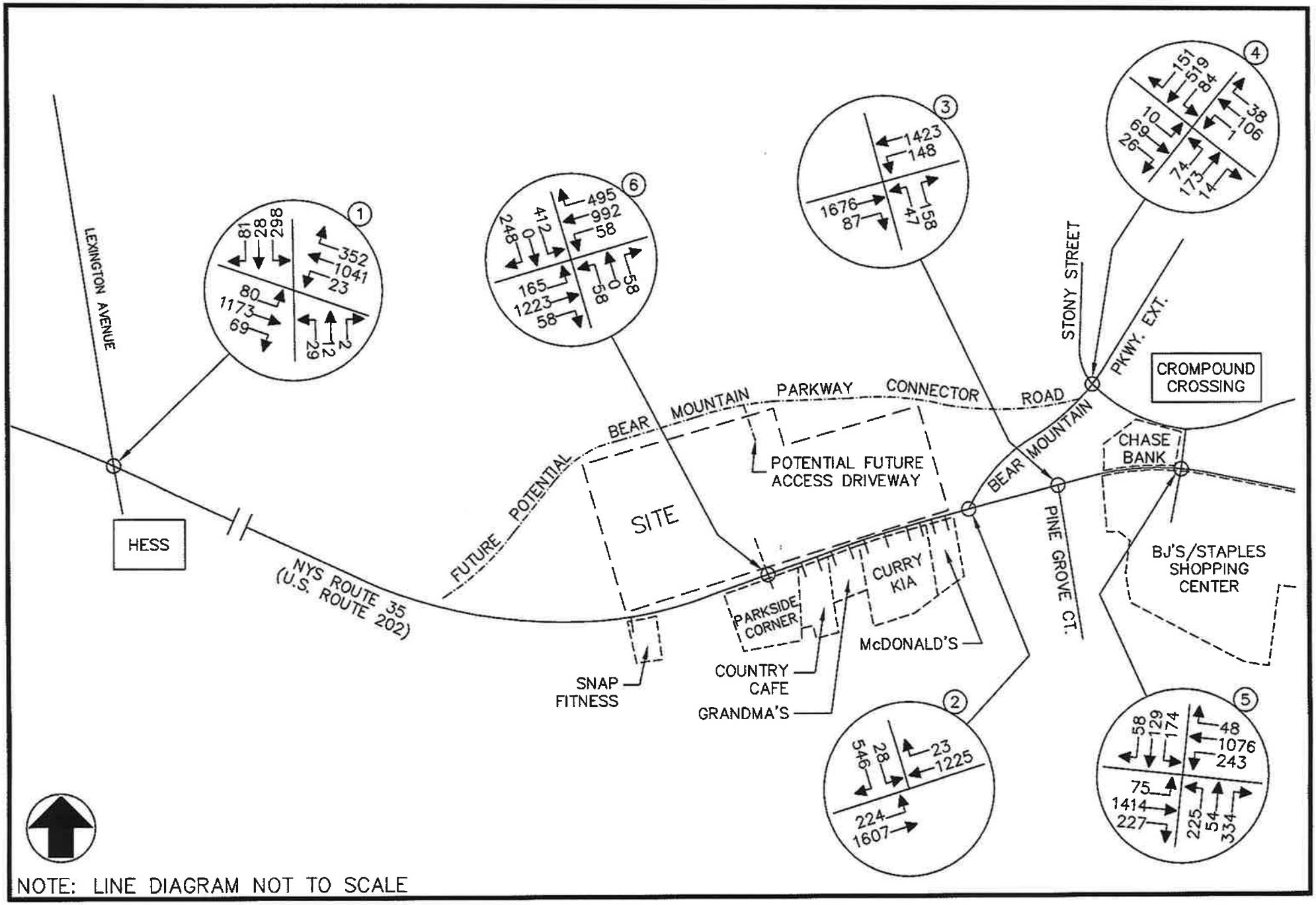
NOTE: LINE DIAGRAM NOT TO SCALE

STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE, NEW YORK

2015 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK PM HIGHWAY HOUR

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 20



NOTE: LINE DIAGRAM NOT TO SCALE

STATE LAND PROPERTY
TOWN OF YORKTOWN, NEW YORK

2015 BUILD TRAFFIC VOLUMES
SATURDAY PEAK HOUR

JOHN COLLINS ENGINEERS, P.C.
HAWTHORNE . NEW YORK

PROJECT NO. 1841 DATE: MARCH 2011 FIG. NO. 21

APPENDIX "B"

TABLES

TABLE 1

HOURLY TRIP GENERATION RATES (HTGR) AND ANTICIPATED
SITE GENERATED TRAFFIC VOLUMES

STATE LAND YORKTOWN, NEW YORK	ENTRY			EXIT		
	HTGR*	VOLUME	NEW TRIPS	HTGR*	VOLUME	NEW TRIPS
RETAIL SHOPPING CENTER (194,000 SQ. FT.)						
AM PEAK HOUR	0.72	139	104	0.46	89	67
PM PEAK HOUR	2.56	496	372	2.56	496	372
SATURDAY PEAK HOUR	3.40	659	494	3.40	659	494

NOTES:

1) * THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON THE DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 8TH EDITION, 2008.

2) THE NEW TRIPS INCLUDE A 25% CREDIT TO ACCOUNT FOR PASS-BY AND DIVERTED LINK TRIPS WHICH WILL BE ATTRACTED FROM THE EXISTING TRAFFIC STREAM.

TABLE 2

LEVEL OF SERVICE SUMMARY TABLE

			2011 EXISTING			2015 NO-BUILD			2015 BUILD		
			AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
1	NYS ROUTE 35/U.S. ROUTE 202 & LEXINGTON AVENUE	**SIGNALIZED**									
		EB	E[60.6]	B[19.7]	C[29.7]	F[98.5]	C[33.5]	D[50.4]	F[105.9]	D[48.1]	E[74.4]
		WB	B[14.4]	E[75.8]	C[23.0]	C[21.3]	C[27.2]	C[22.1]	C[21.6]	D[38.7]	C[24.1]
		NB	C[30.4]	C[27.6]	C[26.2]	E[61.9]	C[27.8]	D[51.7]	E[62.0]	C[27.9]	D[51.8]
		SB	F[113.7]	C[32.4]	D[39.1]	E[63.8]	D[37.9]	D[49.3]	E[66.9]	D[44.7]	E[69.0]
		OVERALL	**D[53.6]**	**D[51.0]**	**C[27.9]**	**E[66.8]**	**C[30.5]**	**D[37.9]**	**E[70.9]**	**D[42.4]**	**D[51.2]**
2	NYS ROUTE 35/U.S. ROUTE 202 & BEAR MOUNTAIN PARKWAY EXT.	**UNSIGNALIZED**									
		EBL	A[9.4]	B[11.4]	B[10.5]	-	-	-	-	-	-
		SBL	F[117.8]	F[-]	F[147.5]]	-	-	-	-	-	-
		SBR	C[19.1]	F[97.5]	F[64.0]	-	-	-	-	-	-
3	NYS ROUTE 35/U.S. ROUTE 202 & PINE GROVE COURT	**UNSIGNALIZED**									
		WBL	B[13.9]	B[13.9]	B[13.0]	-	-	-	-	-	-
		NBL	F[106.4]	F[281.7]	F[375.7]	-	-	-	-	-	-
		NBR	F[96.3]	D[31.7]	E[40.6]	-	-	-	-	-	-
	WITH NYSDOT IMPROVEMENTS SIGNALIZED	EB	-	-	-	B[10.9]	A[7.2]	B[10.4]	B[11.3]	A[8.9]	C[22.1]
		WB	-	-	-	A[2.8]	A[3.9]	A[4.0]	A[3.0]	A[6.1]	A[5.6]
		NB	-	-	-	C[25.8]	C[28.7]	B[17.6]	C[26.4]	C[28.6]	B[19.0]
		OVERALL	-	-	-	**A[9.6]**	**A[7.1]**	**A[8.2]**	**A[9.9]**	**A[8.7]**	**B[14.7]**
4	BEAR MOUNTAIN PARKWAY EXT. & STONY STREET	**UNSIGNALIZED**									
		EBL	C[18.4]	C[23.8]	B[12.0]	-	-	-	-	-	-
		WBL	C[17.3]	F[78.2]	C[19.3]	-	-	-	-	-	-
		NBL	A[7.8]	A[9.1]	A[8.4]	-	-	-	-	-	-
		SBL	A[7.9]	A[7.6]	A[7.4]	-	-	-	-	-	-
	WITH NYSDOT IMPROVEMENTS	EB	-	-	-	B[17.2]	B[18.7]	B[15.9]	B[17.1]	B[18.0]	B[17.4]
		WB	-	-	-	B[10.2]	C[23.9]	B[16.7]	B[10.2]	C[23.9]	B[16.6]
		NB	-	-	-	A[6.5]	A[5.1]	A[4.2]	A[6.6]	A[6.8]	A[4.7]
		SB	-	-	-	A[7.1]	A[7.8]	A[5.0]	A[7.5]	B[11.6]	A[6.9]
		OVERALL	-	-	-	**B[10.0]**	**B[10.6]**	**A[8.0]**	**B[10.0]**	**B[12.7]**	**A[8.3]**
5	NYS ROUTE 35/U.S. ROUTE 202 & STONY STREET/BJ'S	**SIGNALIZED**									
		EB	B[14.6]	B[13.8]	B[16.1]	C[21.7]	C[26.5]	B[17.1]	C[23.0]	D[44.9]	C[33.8]
		WB	A[9.1]	C[25.2]	B[15.3]	B[14.6]	D[43.7]	C[26.7]	B[15.0]	D[48.2]	C[29.6]
		NB	C[23.9]	E[72.3]	E[64.8]	C[26.3]	C[33.5]	D[43.4]	C[28.0]	C[34.0]	D[48.3]
		SB	C[23.9]	C[23.4]	C[28.1]	C[33.4]	D[43.5]	D[50.3]	D[35.9]	D[44.3]	D[52.9]
		OVERALL	**B[15.4]**	**C[29.4]**	**C[26.4]**	**C[21.9]**	**D[36.2]**	**C[28.2]**	**C[23.1]**	**D[44.5]**	**D[36.6]**
6	NYS ROUTE 35/U.S. ROUTE 202 & SITE ACCESS	**SIGNALIZED**									
		EB	-	-	-	-	-	-	A[9.9]	B[15.9]	C[32.8]
		WB	-	-	-	-	-	-	A[6.7]	B[17.8]	B[19.0]
		NB	-	-	-	-	-	-	C[29.0]	D[43.1]	C[33.5]
		SB	-	-	-	-	-	-	C[23.7]	D[36.6]	C[30.0]
		OVERALL	-	-	-	-	-	-	**A[9.5]**	**C[20.4]**	**C[26.7]**

NOTES:

1. THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND AVERAGE VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH APPROACH AS WELL AS FOR THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS AND FOR THE KEY APPROACHES FOR THE UNSIGNALIZED LOCATIONS. SEE APPENDIX FOR ADDITIONAL DETAILS.
2. * F[-] INDICATES THE DELAY EXCEEDS 300 SECONDS.
3. THE 2015 BUILD SCENARIO FOR INTERSCTION 1 INCLUDES AN ADDITIONAL WESTBOUND THROUGH LANE AND CORRESPONDING SIGNAL TIMING IMPRC
4. UNDER THE 2015 NO-BUILD AND 2015 BUILD SCENARIOS THE MOVEMENTS AT INTERSECTION 2 ARE FREE FLOW AND THERE DO NOT RESULT IN ANY DI OR CORRESPONDING LEVEL OF SERVICE.
5. THE 2015 NO-BUILD AND 2015 BUILD SCENARIOS INCLUDE THE NYSDOT IMPROVEMENTS FOR INTERSECTIONS 2, 3, 4 AND 5 AS DISCUSSED IN SECTION

TABLE 2-R

LEVEL OF SERVICE SUMMARY TABLE

			2011 EXISTING			2015 NO-BUILD			2015 BUILD		
			AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
1	NYS ROUTE 35/U.S. ROUTE 202 &	SIGNALIZED									
	LEXINGTON AVENUE	EB	E[60.6]	B[19.7]	C[29.7]	F[98.5]	C[33.5]	D[50.4]	F[105.9]	D[48.1]	E[74.4]
		WB	B[14.4]	E[75.8]	C[23.0]	C[21.3]	C[27.2]	C[22.1]	C[21.6]	D[38.7]	C[24.1]
		NB	C[30.4]	C[27.6]	C[26.2]	E[61.9]	C[27.8]	D[51.7]	E[62.0]	C[27.9]	D[51.8]
		SB	F[113.7]	C[32.4]	D[39.1]	E[63.8]	D[37.9]	D[49.3]	E[66.9]	D[44.7]	E[69.0]
		OVERALL	**D[53.8]**	**D[51.0]**	**C[27.9]**	**E[66.8]**	**C[30.5]**	**D[37.9]**	**E[70.9]**	**D[42.4]**	**D[51.2]**
2	NYS ROUTE 35/U.S. ROUTE 202 &	UNSIGNALIZED									
	BEAR MOUNTAIN PARKWAY EXT.	EBL	A[9.4]	B[11.4]	B[10.5]	-	-	-	-	-	-
		SBL	F[117.8]	F[-]	F[147.5]	-	-	-	-	-	-
		SBR	C[19.1]	F[97.5]	F[64.0]	-	-	-	-	-	-
3	NYS ROUTE 35/U.S. ROUTE 202 &	UNSIGNALIZED									
	PINE GROVE COURT	WBL	B[13.9]	B[13.9]	B[13.0]	-	-	-	-	-	-
		NBL	F[106.4]	F[281.7]	F[375.7]	-	-	-	-	-	-
		NBR	F[96.3]	D[31.7]	E[40.6]	-	-	-	-	-	-
	WITH NYSDOT IMPROVEMENTS	EB	-	-	-	B[10.9]	A[7.2]	B[10.4]	B[11.3]	A[8.9]	C[22.1]
	SIGNALIZED	WB	-	-	-	A[2.8]	A[3.9]	A[4.0]	A[3.0]	A[6.1]	A[5.6]
		NB	-	-	-	C[25.8]	C[28.7]	B[17.6]	C[26.4]	C[28.6]	B[19.0]
		OVERALL	**-**	**-**	**-**	**A[9.6]**	**A[7.1]**	**A[8.2]**	**A[9.9]**	**A[8.7]**	**B[14.7]**
4	BEAR MOUNTAIN PARKWAY EXT. &	UNSIGNALIZED									
	STONY STREET	EBL	C[18.4]	C[23.8]	B[12.0]	-	-	-	-	-	-
		WBL	C[17.3]	F[78.2]	C[19.3]	-	-	-	-	-	-
		NBL	A[7.8]	A[9.1]	A[8.4]	-	-	-	-	-	-
		SBL	A[7.9]	A[7.6]	A[7.4]	-	-	-	-	-	-
	WITH NYSDOT IMPROVEMENTS	EB	-	-	-	B[17.2]	B[18.7]	B[15.9]	B[17.1]	B[18.0]	B[17.4]
		WB	-	-	-	B[10.2]	C[23.9]	B[16.7]	B[10.2]	C[23.9]	B[16.6]
		NB	-	-	-	A[6.5]	A[5.1]	A[4.2]	A[6.6]	A[6.8]	A[4.7]
		SB	-	-	-	A[7.1]	A[7.8]	A[5.0]	A[7.5]	B[11.6]	A[6.9]
		OVERALL	**-**	**-**	**-**	**B[10.0]**	**B[10.6]**	**A[8.0]**	**B[10.0]**	**B[12.7]**	**A[8.3]**
5	NYS ROUTE 35/U.S. ROUTE 202 &	SIGNALIZED									
	STONY STREET/BJ'S	EB	B[14.6]	B[13.8]	B[16.1]	C[21.7]	C[26.5]	B[17.1]	C[23.0]	D[44.9]	C[33.8]
		WB	A[9.1]	C[25.2]	B[15.3]	B[14.6]	D[43.7]	C[26.7]	B[15.0]	D[48.2]	C[29.6]
		NB	C[23.9]	E[72.3]	E[64.8]	C[26.3]	C[33.5]	D[43.4]	C[28.0]	C[34.0]	D[48.3]
		SB	C[23.9]	C[23.4]	C[28.1]	C[33.4]	D[43.5]	D[50.3]	D[35.9]	D[44.3]	D[52.9]
		OVERALL	**B[15.4]**	**C[29.4]**	**C[26.4]**	**C[21.9]**	**D[36.2]**	**C[28.2]**	**C[23.1]**	**D[44.5]**	**D[36.6]**
6	NYS ROUTE 35/U.S. ROUTE 202 &	SIGNALIZED									
	PARKSIDE CORNERS/SITE ACCESS	EB	-	-	-	-	-	-	A[9.9]	B[15.9]	C[32.8]
		WB	B[13.4]	B[10.6]	B[11.8]	B[14.9]	B[11.9]	B[13.9]	A[6.7]	B[17.8]	B[19.0]
		NB	F[110.3]	F[-]	F[-]	D[30.7]	F[-]	F[52.6]	C[29.0]	D[43.1]	C[33.5]
		SB	-	-	-	-	-	-	C[23.7]	D[36.6]	C[30.0]
		OVERALL	**-**	**-**	**-**	**-**	**-**	**-**	**A[9.5]**	**C[20.4]**	**C[26.7]**
7	NYS ROUTE 35/U.S. ROUTE 202 &	SIGNALIZED									
	GARDEN LANE	WB	B[12.1]	B[10.6]	B[11.9]	B[13.1]	B[11.8]	B[13.9]	B[13.3]	B[12.5]	B[14.7]
		NB	D[32.6]	D[26.8]	D[32.1]	E[42.3]	D[33.5]	F[64.3]	E[45.1]	E[42.4]	F[96.6]

NOTES:

1. THE ABOVE REPRESENTS THE LEVEL OF SERVICE AND AVERAGE VEHICLE DELAY IN SECONDS, C [16.2], FOR EACH APPROACH AS WELL AS FOR THE OVERALL INTERSECTION FOR THE SIGNALIZED INTERSECTIONS AND FOR THE KEY APPROACHES FOR THE UNSIGNALIZED LOCATIONS. SEE APPENDIX "D" FOR ADDITIONAL DETAILS.
2. * F[-] INDICATES THE DELAY EXCEEDS 300 SECONDS.
3. THE 2015 BUILD SCENARIO FOR INTERSCTION 1 INCLUDES AN ADDITIONAL WESTBOUND THROUGH LANE AND CORRESPONDING SIGNAL TIMING IMPROVEMENT
4. UNDER THE 2015 NO-BUILD AND 2015 BUILD SCENARIOS THE MOVEMENTS AT INTERSECTION 2 ARE FREE FLOW AND THERE DO NOT RESULT IN ANY DELAY OR CORRESPONDING LEVEL OF SERVICE.
5. THE 2015 NO-BUILD AND 2015 BUILD SCENARIOS INCLUDE THE NYSDOT IMPROVEMENTS FOR INTERSECTIONS 2, 3, 4 AND 5 AS DISCUSSED IN SECTION III-E.

APPENDIX "C"

CAPACITY ANALYSIS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	1078	55	20	620	140	15	15	2	300	20	65
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1800	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	11	12	15	12	12	13	13
Grade (%)		-2%			-1%			0%			0%	
Storage Length (ft)	75		0	65		390	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				0.95
Frt		0.993				0.850		0.992				0.850
Flt Protected	0.950			0.950				0.977			0.955	
Satd. Flow (prot)	1728	1833	0	1661	1739	1457	0	2026	0	0	1831	1636
Flt Permitted	0.263			0.071				0.584			0.713	
Satd. Flow (perm)	478	1833	0	124	1739	1457	0	1205	0	0	1367	1559
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4				152		2				54
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		575			2015			185			802	
Travel Time (s)		8.7			30.5			4.2			18.2	
Confl. Peds. (#/hr)			10	10			10					10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	0%	0%	4%	2%	0%	0%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	1	0
Adj. Flow (vph)	41	1172	60	22	674	152	17	17	2	333	22	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	1232	0	22	674	152	0	36	0	0	355	72
Number of Detectors	1	1		1	1	1	1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			3			3	5
Permitted Phases	2			6		6	3			3		3
Detector Phase	5	2		1	6	6	3	3		3	3	5
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	3.0
Minimum Split (s)	9.0	16.0		9.0	16.0	16.0	10.0	10.0		10.0	10.0	9.0
Total Split (s)	15.0	60.0		15.0	60.0	60.0	25.0	25.0		25.0	25.0	15.0
Total Split (%)	15.0%	60.0%		15.0%	60.0%	60.0%	25.0%	25.0%		25.0%	25.0%	15.0%
Maximum Green (s)	10.0	54.0		10.0	54.0	54.0	20.0	20.0		20.0	20.0	10.0
Yellow Time (s)	4.0	5.0		4.0	5.0	5.0	4.0	4.0		4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-1.0		0.0	-1.0	-1.0		-1.0			-1.0	-1.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		4.0			4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	3.0	3.0		3.0	3.0	2.0
Recall Mode	None	Max		None	Max	Max	None	None		None	None	None
Walk Time (s)					8.0	8.0	8.0	8.0		8.0	8.0	
Flash Dont Walk (s)					12.0	12.0	10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)					0	0	0	0		0	0	
Act Effct Green (s)	61.6	59.3		59.1	55.1	55.1		21.0			21.0	27.3
Actuated g/C Ratio	0.66	0.63		0.63	0.59	0.59		0.22			0.22	0.29
v/c Ratio	0.11	1.06		0.14	0.66	0.16		0.13			1.15	0.14
Control Delay	5.5	62.4		6.8	17.4	2.1		30.4			134.8	9.9
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	5.5	62.4		6.8	17.4	2.1		30.4			134.8	9.9
LOS	A	E		A	B	A		C			F	A
Approach Delay		60.6			14.4			30.4			113.7	
Approach LOS		E			B			C			F	
Queue Length 50th (ft)	7	625		4	263	0		17			~260	7
Queue Length 95th (ft)	17	#1156		11	398	25		43			#437	37
Internal Link Dist (ft)		495			1935			105			722	
Turn Bay Length (ft)	75			65		390						100
Base Capacity (vph)	458	1166		249	1026	922		273			308	580
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.09	1.06		0.09	0.66	0.16		0.13			1.15	0.12

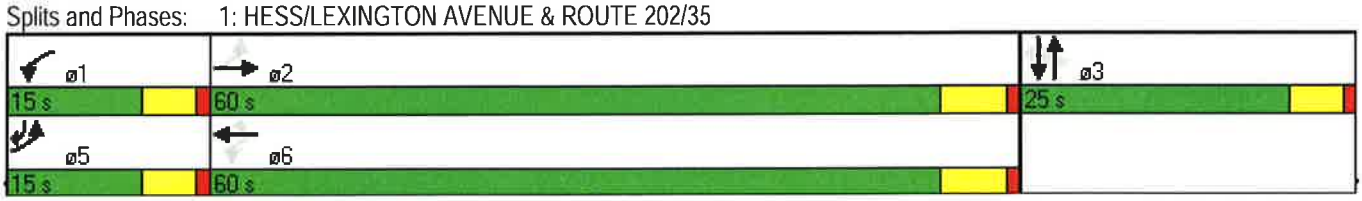
Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 93.4
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.15
Intersection Signal Delay: 53.8 Intersection LOS: D
Intersection Capacity Utilization 92.0% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: HESS/LEXINGTON AVENUE & ROUTE 202/35



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	191	1187	499	11	15	283
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	13	12	11	11
Grade (%)		-2%	-1%		-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997			0.850
Flt Protected		0.993			0.950	
Satd. Flow (prot)	0	1965	1893	0	1762	1577
Flt Permitted		0.993			0.950	
Satd. Flow (perm)	0	1965	1893	0	1762	1577
Link Speed (mph)		45	45		30	
Link Distance (ft)		1314	468		882	
Travel Time (s)		19.9	7.1		20.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	4%	0%	0%	0%
Adj. Flow (vph)	208	1290	542	12	16	308
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1498	554	0	16	308
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 113.3%		ICU Level of Service H	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	4.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	191	1187	499	11	15	283
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0			0	0	0
Median Width		0	0		11	
Grade (%)		-2%	-1%		-2%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles(%)	0	4	4	0	0	0
Movement Flow Rate	208	1290	542	12	16	308
Number of Lanes	0	1	1	0	1	1

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	554	0	0	0	2253	548
Stage 1	0	0	0	0	548	0
Stage 2	0	0	0	0	1705	0
Follow-up Headway	2.2	-	0	0	3.5	3.3
Pot Capacity-1 Maneuver	1025	-	-	-	59	557
Stage 1	-	-	-	-	620	-
Stage 2	-	-	-	-	197	-
Mov Capacity-1 Maneuver	1025	-	-	-	47	557
Mov Capacity-2 Maneuver	-	-	-	-	47	-
Stage 1	-	-	-	-	# 0	-
Stage 2	-	-	-	-	157	-

Approach	EB	WB	SB
HCM Control Delay (s)	1.3	0	24.068
HCM LOS	A	A	C

Lane	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (vph)					47	557
HCM Control Delay (s)	9.402	0	-	-	117.8	19.1
HCM Lane VC Ratio	0.203	-	0	-	0.347	0.552
HCM Lane LOS	A	-	-	-	F	C
HCM 95th Percentile Queue (veh)	0.756	-	0	-	1.211	3.342

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1178	24	117	503	7	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	1%			-1%	0%	
Storage Length (ft)		0	0		0	100
Storage Lanes		0	0		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.997					0.850
Flt Protected				0.991	0.950	
Satd. Flow (prot)	1813	0	0	1826	1770	1583
Flt Permitted				0.991	0.950	
Satd. Flow (perm)	1813	0	0	1826	1770	1583
Link Speed (mph)	45			45	30	
Link Distance (ft)	468			612	567	
Travel Time (s)	7.1			9.3	12.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Heavy Vehicles (%)	4%	2%	2%	4%	2%	2%
Adj. Flow (vph)	1280	26	127	547	8	186
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1306	0	0	674	8	186
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 109.7%		ICU Level of Service H	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	9.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	1178	24	117	503	7	167
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	0		0	100
Median Width	12			12	12	
Grade (%)	1%			-1%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Heavy Vehicles(%)	4	2	2	4	2	2
Movement Flow Rate	1280	26	127	547	8	186
Number of Lanes	1	0	0	1	1	1

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	0	0	1307	0	2094	1293
Stage 1	0	0	0	0	1293	0
Stage 2	0	0	0	0	801	0
Follow-up Headway	-	-	2.218	0	3.518	3.318
Pot Capacity-1 Maneuver	-	-	530	-	57	199
Stage 1	-	-	-	-	257	-
Stage 2	-	-	-	-	442	-
Mov Capacity-1 Maneuver	-	-	530	-	43.3	199
Mov Capacity-2 Maneuver	-	-	-	-	43.3	-
Stage 1	-	-	-	-	# 0	-
Stage 2	-	-	-	-	335.9	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	2.6	96.706
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	43	199				
HCM Control Delay (s)	106.4	96.3	-	-	13.924	0
HCM Lane VC Ratio	0.181	0.932	0	-	0.24	-
HCM Lane LOS	F	F	-	-	B	-
HCM 95th Percentile Queue (veh)	0.585	7.544	0	-	0.93	-

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	88	116	49	2	23	3	17	183	2	112	247	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-13%			-1%			0%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.974			0.987			0.999			0.996	
Flt Protected		0.983			0.997			0.996			0.985	
Satd. Flow (prot)	0	1899	0	0	1842	0	0	3592	0	0	3542	0
Flt Permitted		0.983			0.997			0.996			0.985	
Satd. Flow (perm)	0	1899	0	0	1842	0	0	3592	0	0	3542	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		758			444			882			768	
Travel Time (s)		17.2			10.1			20.0			17.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	98	129	54	2	26	3	19	203	2	124	274	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	281	0	0	31	0	0	224	0	0	408	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	7.2

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Volume (vph)	88	116	49	2	23	3	17	183	2	112	247	9
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		-13%			-1%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles(%)	2	2	2	2	2	2	0	0	0	0	0	0
Movement Flow Rate	98	129	54	2	26	3	19	203	2	124	274	10
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Major/Minor	Minor 1			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	680	771	142	693	775	103	284	0	0	206	0	0
Stage 1	528	528	0	242	7.29					0	0	0
Stage 2	152	243	0	451	7.29					0	0	0
Follow-up Headway	3.52	4.02	3.32	3.52	4.02	3.32	2.2	-	-	2.2	0	0
Pot Capacity-1 Maneuver	551	574	926	343	342	934	1287	-	-	1376	-	-
Stage 1	735	770	-	750	714	-	-	-	-	-	-	-
Stage 2	932	838	-	572	539	-	-	-	-	-	-	-
Mov Capacity-1 Maneuver	473.8	514.5	926	240.7	306.6	934	1287	-	-	1376	-	-
Mov Capacity-2 Maneuver	473.8	514.5	-	240.7	306.6	-	-	-	-	-	-	-
Stage 1	735	700.7	-	750	703.3	-	-	-	-	-	-	-
Stage 2	881.5	825.4	-	399.8	490.5	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay (s)	18.4	17.3	0.7	2.4
HCM LOS	C	C	A	A

Lane	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (vph)				324	545			
HCM Control Delay (s)	7.839	0	-	17.3	18.4	7.876	0	-
HCM Lane VC Ratio	0.015	-	-	0.096	0.516	0.09	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th Percentile Queue (veh)	0.045	-	-	0.316	2.935	0.298	-	-

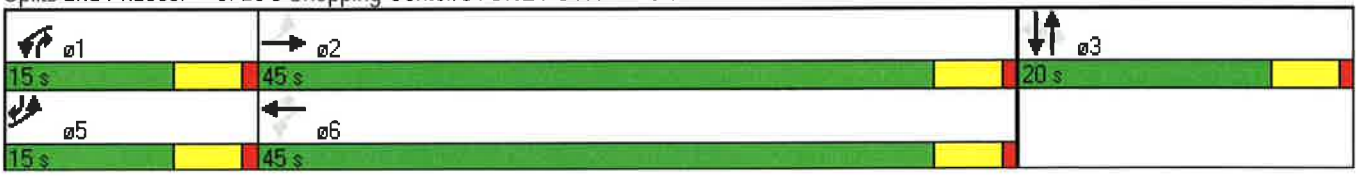
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	1174	161	85	442	9	81	8	180	68	67	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12	12	12	12	11	12	11
Grade (%)		0%			0%			0%			-2%	
Storage Length (ft)	90		185	450		575	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							0.98					0.96
Frt		0.982				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950				0.975	
Satd. Flow (prot)	1770	3417	0	1770	1925	1583	1770	1863	1583	0	1834	1546
Flt Permitted	0.439			0.098			0.575				0.836	
Satd. Flow (perm)	818	3417	0	183	1925	1583	1053	1863	1583	0	1573	1481
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27				10			38			108
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			992			289			200	
Travel Time (s)		9.3			15.0			6.6			4.5	
Confl. Peds. (#/hr)							10					10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	5	0	3	0	0	0	0	0	0	0
Adj. Flow (vph)	11	1276	175	92	480	10	90	9	200	76	74	108
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1451	0	92	480	10	90	9	200	0	150	108
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	5	2		1	6			3	1		3	5
Permitted Phases	2			6		6	3		3	3		3
Detector Phase	5	2		1	6	6	3	3	1	3	3	5
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0	10.0	5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	8.0	15.0		8.0	15.0	15.0	10.0	10.0	8.0	10.0	10.0	8.0
Total Split (s)	15.0	45.0		15.0	45.0	45.0	20.0	20.0	15.0	20.0	20.0	15.0
Total Split (%)	18.8%	56.3%		18.8%	56.3%	56.3%	25.0%	25.0%	18.8%	25.0%	25.0%	18.8%
Maximum Green (s)	10.0	40.0		10.0	40.0	40.0	15.0	15.0	10.0	15.0	15.0	10.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag			Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes			Yes			Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max		None	Max	Max	None	None	None	None	None	None
Walk Time (s)							7.0	7.0		7.0	7.0	
Flash Dont Walk (s)							11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)							0	0		0	0	
Act Effct Green (s)	46.8	41.1		49.7	44.2	44.2	11.8	11.8	22.5		11.8	17.5
Actuated g/C Ratio	0.65	0.57		0.69	0.62	0.62	0.16	0.16	0.31		0.16	0.24
v/c Ratio	0.02	0.74		0.33	0.40	0.01	0.52	0.03	0.38		0.58	0.24
Control Delay	3.8	14.7		7.0	9.6	4.2	38.6	24.9	17.3		37.1	5.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	3.8	14.7		7.0	9.6	4.2	38.6	24.9	17.3		37.1	5.7
LOS	A	B		A	A	A	D	C	B		D	A
Approach Delay		14.6			9.1			23.9			23.9	
Approach LOS		B			A			C			C	
Queue Length 50th (ft)	1	222		10	105	0	37	3	54		62	0
Queue Length 95th (ft)	6	363		26	193	6	81	15	105		119	32
Internal Link Dist (ft)		532			912			209			120	
Turn Bay Length (ft)	90			450		575						
Base Capacity (vph)	735	1971		377	1188	980	236	417	617		352	555
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.01	0.74		0.24	0.40	0.01	0.38	0.02	0.32		0.43	0.19

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 71.7
Natural Cycle: 55
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 15.4 Intersection LOS: B
Intersection Capacity Utilization 68.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 5: BJ's Shopping Center/STONEY STREET & ROUTE 202/35



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	92	740	70	40	1070	274	26	27	2	161	14	65
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1800	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	11	12	15	12	12	13	13
Grade (%)		-2%			-1%			0%			0%	
Storage Length (ft)	75		0	65		390	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99				0.96
Frt		0.987				0.850		0.996				0.850
Flt Protected	0.950			0.950				0.977			0.956	
Satd. Flow (prot)	1728	1823	0	1661	1739	1457	0	2034	0	0	1833	1636
Flt Permitted	0.084			0.170				0.809			0.756	
Satd. Flow (perm)	153	1823	0	297	1739	1457	0	1671	0	0	1449	1563
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				288		2				53
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		575			2015			185			802	
Travel Time (s)		8.7			30.5			4.2			18.2	
Confl. Peds. (#/hr)			10	10			10					10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	0%	0%	4%	2%	0%	0%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	1	0
Adj. Flow (vph)	97	779	74	42	1126	288	29	30	2	179	16	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	97	853	0	42	1126	288	0	61	0	0	195	72
Number of Detectors	1	1		1	1	1	1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			3			3	5
Permitted Phases	2			6		6	3			3		3
Detector Phase	5	2		1	6	6	3	3		3	3	5
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	3.0
Minimum Split (s)	9.0	16.0		9.0	16.0	16.0	10.0	10.0		10.0	10.0	9.0
Total Split (s)	15.0	50.0		15.0	50.0	50.0	25.0	25.0		25.0	25.0	15.0
Total Split (%)	16.7%	55.6%		16.7%	55.6%	55.6%	27.8%	27.8%		27.8%	27.8%	16.7%
Maximum Green (s)	10.0	44.0		10.0	44.0	44.0	20.0	20.0		20.0	20.0	10.0
Yellow Time (s)	4.0	5.0		4.0	5.0	5.0	4.0	4.0		4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-1.0		0.0	-1.0	-1.0		-1.0			-1.0	-1.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		4.0			4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	3.0	3.0		3.0	3.0	2.0
Recall Mode	None	Max		None	Max	Max	None	None		None	None	None
Walk Time (s)					8.0	8.0	8.0	8.0		8.0	8.0	
Flash Dont Walk (s)					12.0	12.0	10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)					0	0	0	0		0	0	
Act Effct Green (s)	52.9	48.7		49.8	45.6	45.6		16.4			16.4	23.9
Actuated g/C Ratio	0.66	0.61		0.62	0.57	0.57		0.20			0.20	0.30
v/c Ratio	0.43	0.77		0.15	1.14	0.30		0.18			0.66	0.14
Control Delay	13.4	20.4		6.5	97.2	2.4		27.6			41.4	8.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	13.4	20.4		6.5	97.2	2.4		27.6			41.4	8.2
LOS	B	C		A	F	A		C			D	A
Approach Delay		19.7			75.8			27.6			32.4	
Approach LOS		B			E			C			C	
Queue Length 50th (ft)	15	337		6	~711	0		25			93	6
Queue Length 95th (ft)	47	#651		18	#1052	38		59			168	33
Internal Link Dist (ft)		495			1935			105			722	
Turn Bay Length (ft)	75			65		390						100
Base Capacity (vph)	303	1110		369	988	952		445			384	582
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.32	0.77		0.11	1.14	0.30		0.14			0.51	0.12

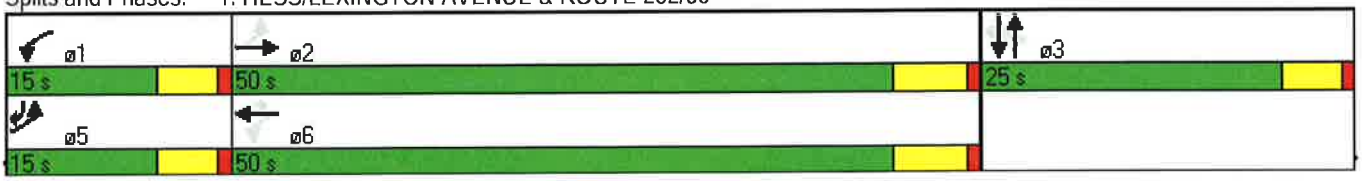
Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 80.3
Natural Cycle: 90
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.14
Intersection Signal Delay: 51.0 Intersection LOS: D
Intersection Capacity Utilization 92.5% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: HESS/LEXINGTON AVENUE & ROUTE 202/35



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	81	968	1032	10	11	540
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	13	12	11	11
Grade (%)		-2%	-1%		-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.999			0.850
Flt Protected		0.996			0.950	
Satd. Flow (prot)	0	1966	1896	0	1762	1577
Flt Permitted		0.996			0.950	
Satd. Flow (perm)	0	1966	1896	0	1762	1577
Link Speed (mph)		45	45		30	
Link Distance (ft)		1314	468		883	
Travel Time (s)		19.9	7.1		20.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	4%	4%	0%	0%	0%
Adj. Flow (vph)	85	1019	1086	11	12	568
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1104	1097	0	12	568
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 123.7%		ICU Level of Service H	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	104.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	81	968	1032	10	11	540
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0			0	0	0
Median Width		0	0		11	
Grade (%)		-2%	-1%		-2%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles(%)	0	4	4	0	0	0
Movement Flow Rate	85	1019	1086	11	12	568
Number of Lanes	0	1	1	0	1	1

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	1097	0	0	0	2281	1092
Stage 1	0	0	0	0	1092	0
Stage 2	0	0	0	0	1189	0
Follow-up Headway	2.2	-	0	0	3.5	3.3
Pot Capacity-1 Maneuver	644	-	-	-	57	# 280
Stage 1	-	-	-	-	366	-
Stage 2	-	-	-	-	333	-
Mov Capacity-1 Maneuver	644	-	-	-	49.5	# 280
Mov Capacity-2 Maneuver	-	-	-	-	49.5	-
Stage 1	-	-	-	-	# 0	-
Stage 2	-	-	-	-	289	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.9	0	$ 497.355
HCM LOS	A	A	F

Lane	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (vph)					50	280
HCM Control Delay (s)	11.441	0	-	-	97.5	$ 0
HCM Lane VC Ratio	0.132	-	0	-	0.232	2.03
HCM Lane LOS	B	-	-	-	F	F
HCM 95th Percentile Queue (veh)	0.455	-	0	-	0.778	41.223

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	920	59	256	1024	3	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	15	12	12
Grade (%)	1%			-1%	0%	
Storage Length (ft)		0	25		0	100
Storage Lanes		0	0		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.992					0.850
Flt Protected				0.990	0.950	
Satd. Flow (prot)	1805	0	0	2007	1770	1583
Flt Permitted				0.990	0.950	
Satd. Flow (perm)	1805	0	0	2007	1770	1583
Link Speed (mph)	45			45	30	
Link Distance (ft)	468			612	567	
Travel Time (s)	7.1			9.3	12.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.90	0.90
Heavy Vehicles (%)	4%	2%	2%	4%	2%	2%
Adj. Flow (vph)	968	62	269	1078	3	166
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1030	0	0	1347	3	166
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 133.4%		ICU Level of Service H	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	3.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	920	59	256	1024	3	149
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	25		0	100
Median Width	12			12	12	
Grade (%)	1%			-1%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.90	0.90
Heavy Vehicles(%)	4	2	2	4	2	2
Movement Flow Rate	968	62	269	1078	3	166
Number of Lanes	1	0	0	1	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	1031	0	2616	999
Stage 1	0	0	0	0	999	0
Stage 2	0	0	0	0	1617	0
Follow-up Headway	-	-	2.218	0	3.518	3.318
Pot Capacity-1 Maneuver	-	-	674	-	27	295
Stage 1	-	-	-	-	356	-
Stage 2	-	-	-	-	178	-
Mov Capacity-1 Maneuver	-	-	674	-	16.2	295
Mov Capacity-2 Maneuver	-	-	-	-	16.2	-
Stage 1	-	-	-	-	# 0	-
Stage 2	-	-	-	-	106.8	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	2.8	36.634
HCM LOS	A	A	E

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	16	295				
HCM Control Delay (s)	281.7	31.7	-	-	13.854	0
HCM Lane VC Ratio	0.208	0.561	0	-	0.4	-
HCM Lane LOS	F	D	-	-	B	-
HCM 95th Percentile Queue (veh)	0.578	3.203	0	-	1.925	-

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	15	51	24	2	103	6	39	41	11	195	525	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-13%			-1%			0%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.964			0.992			0.982			0.985	
Flt Protected		0.992			0.999			0.979			0.988	
Satd. Flow (prot)	0	1897	0	0	1855	0	0	3471	0	0	3513	0
Flt Permitted		0.992			0.999			0.979			0.988	
Satd. Flow (perm)	0	1897	0	0	1855	0	0	3471	0	0	3513	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		727			428			883			768	
Travel Time (s)		16.5			9.7			20.1			17.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	17	57	27	2	114	7	43	46	12	217	583	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	101	0	0	123	0	0	101	0	0	889	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	11.6

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Volume (vph)	15	51	24	2	103	6	39	41	11	195	525	80
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		-13%			-1%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles(%)	2	2	2	2	2	2	0	0	0	0	0	0
Movement Flow Rate	17	57	27	2	114	7	43	46	12	217	583	89
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Major/Minor	Minor 1			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	1228	1205	336	891	1244	29	672	0	0	58	0	0
Stage 1	1061	1061	0	138	138	0	0	0	0	0	0	0
Stage 2	167	144	0	753	1106	0	0	0	0	0	0	0
Follow-up Headway	3.52	4.02	3.32	3.52	4.02	3.32	2.2	-	-	2.2	0	0
Pot Capacity-1 Maneuver	326	436	745	249	185	1030	928	-	-	1579	-	-
Stage 1	515	643	-	857	787	-	-	-	-	-	-	-
Stage 2	923	862	-	384	302	-	-	-	-	-	-	-
Mov Capacity-1 Maneuver	110.1	358.6	745	182.9	152.2	1030	928	-	-	1579	-	-
Mov Capacity-2 Maneuver	110.1	358.6	-	182.9	152.2	-	-	-	-	-	-	-
Stage 1	515	554.9	-	857	750	-	-	-	-	-	-	-
Stage 2	740.6	821.5	-	286.9	260.6	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay (s)	23.8	78.2	3.9	1.9
HCM LOS	C	F	A	A

Lane	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (vph)				160	290			
HCM Control Delay (s)	9.069	0	-	78.2	23.8	7.642	0	-
HCM Lane VC Ratio	0.047	-	-	0.771	0.345	0.137	-	-
HCM Lane LOS	A	-	-	F	C	A	-	-
HCM 95th Percentile Queue (veh)	0.147	-	-	4.885	1.486	0.476	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	866	182	178	932	30	213	52	252	46	116	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12	12	12	12	11	12	11
Grade (%)		0%			0%			0%			-2%	
Storage Length (ft)	90		185	450		575	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							0.98					0.96
Frt		0.974				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950				0.986	
Satd. Flow (prot)	1770	3392	0	1770	1925	1583	1770	1863	1583	0	1855	1546
Flt Permitted	0.098			0.164			0.530				0.899	
Satd. Flow (perm)	183	3392	0	305	1925	1583	972	1863	1583	0	1691	1481
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		46				32			103			86
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			872			289			217	
Travel Time (s)		9.3			13.2			6.6			4.9	
Confl. Peds. (#/hr)							10					10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	5	0	3	0	0	0	0	0	0	0
Adj. Flow (vph)	22	912	192	187	981	32	237	58	280	51	129	150
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	1104	0	187	981	32	237	58	280	0	180	150
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	5	2		1	6			3	1		3	5
Permitted Phases	2			6		6	3		3	3		3
Detector Phase	5	2		1	6	6	3	3	1	3	3	5
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0	10.0	5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	8.0	15.0		8.0	15.0	15.0	10.0	10.0	8.0	10.0	10.0	8.0
Total Split (s)	15.0	45.0		15.0	45.0	45.0	20.0	20.0	15.0	20.0	20.0	15.0
Total Split (%)	18.8%	56.3%		18.8%	56.3%	56.3%	25.0%	25.0%	18.8%	25.0%	25.0%	18.8%
Maximum Green (s)	10.0	40.0		10.0	40.0	40.0	15.0	15.0	10.0	15.0	15.0	10.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag			Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes			Yes			Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max		None	Max	Max	None	None	None	None	None	None
Walk Time (s)							7.0	7.0		7.0	7.0	
Flash Dont Walk (s)							11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)							0	0		0	0	
Act Effct Green (s)	46.8	41.0		51.9	43.6	43.6	16.0	16.0	28.4		16.0	21.8
Actuated g/C Ratio	0.60	0.53		0.67	0.56	0.56	0.21	0.21	0.37		0.21	0.28
v/c Ratio	0.10	0.61		0.51	0.90	0.04	1.18	0.15	0.43		0.51	0.31
Control Delay	5.1	14.0		9.4	28.9	3.0	152.7	27.0	13.6		33.7	11.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	5.1	14.0		9.4	28.9	3.0	152.7	27.0	13.6		33.7	11.1
LOS	A	B		A	C	A	F	C	B		C	B
Approach Delay		13.8			25.2			72.3			23.4	
Approach LOS		B			C			E			C	
Queue Length 50th (ft)	3	172		26	387	0	~139	23	60		77	21
Queue Length 95th (ft)	9	250		46	#680	11	#283	55	123		144	64
Internal Link Dist (ft)		532			792			209			137	
Turn Bay Length (ft)	90			450		575						
Base Capacity (vph)	348	1818		419	1084	906	201	385	696		350	582
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.06	0.61		0.45	0.90	0.04	1.18	0.15	0.40		0.51	0.26

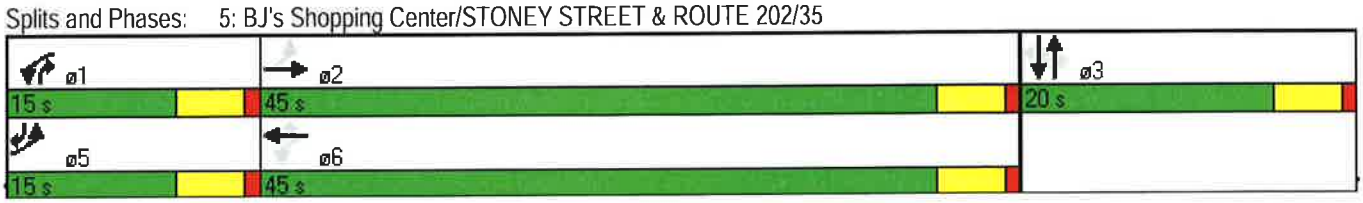
Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 77.4
Natural Cycle: 80
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.18
Intersection Signal Delay: 29.4 — Intersection LOS: C
Intersection Capacity Utilization 80.9% — ICU Level of Service D
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: BJ's Shopping Center/STONEY STREET & ROUTE 202/35



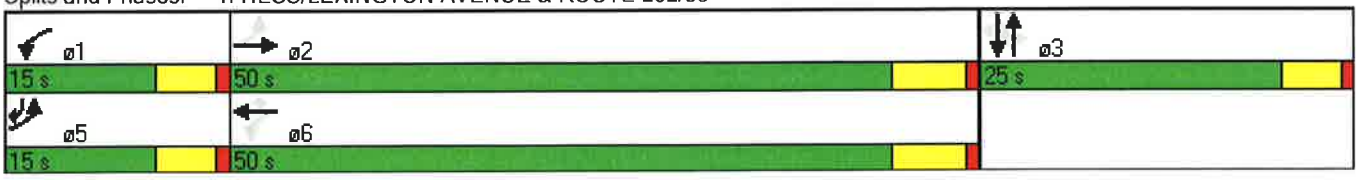
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	74	914	64	21	793	254	27	11	2	205	26	75
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1800	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	11	12	15	12	12	13	13
Grade (%)		-2%			-1%			0%			0%	
Storage Length (ft)	75		0	65		390	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99				0.96
Frt		0.990				0.850		0.994				0.850
Flt Protected	0.950			0.950				0.967			0.957	
Satd. Flow (prot)	1728	1828	0	1661	1739	1457	0	2009	0	0	1835	1636
Flt Permitted	0.132			0.086				0.688			0.719	
Satd. Flow (perm)	240	1828	0	150	1739	1457	0	1416	0	0	1378	1563
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				267		2				82
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		575			2015			185			802	
Travel Time (s)		8.7			30.5			4.2			18.2	
Confl. Peds. (#/hr)			10	10			10					10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	4%	0%	0%	4%	2%	0%	0%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	1	0
Adj. Flow (vph)	78	962	67	22	835	267	29	12	2	223	28	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	1029	0	22	835	267	0	43	0	0	251	82
Number of Detectors	1	1		1	1	1	1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			3			3	5
Permitted Phases	2			6		6	3			3		3
Detector Phase	5	2		1	6	6	3	3		3	3	5
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0	10.0	5.0	5.0		5.0	5.0	3.0
Minimum Split (s)	9.0	16.0		9.0	16.0	16.0	10.0	10.0		10.0	10.0	9.0
Total Split (s)	15.0	50.0		15.0	50.0	50.0	25.0	25.0		25.0	25.0	15.0
Total Split (%)	16.7%	55.6%		16.7%	55.6%	55.6%	27.8%	27.8%		27.8%	27.8%	16.7%
Maximum Green (s)	10.0	44.0		10.0	44.0	44.0	20.0	20.0		20.0	20.0	10.0
Yellow Time (s)	4.0	5.0		4.0	5.0	5.0	4.0	4.0		4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-1.0		0.0	-1.0	-1.0		-1.0			-1.0	-1.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		4.0			4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag						Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	3.0	3.0		3.0	3.0	2.0
Recall Mode	None	Max		None	Max	Max	None	None		None	None	None
Walk Time (s)					8.0	8.0	8.0	8.0		8.0	8.0	
Flash Dont Walk (s)					12.0	12.0	10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)					0	0	0	0		0	0	
Act Effct Green (s)	53.0	50.3		49.3	45.4	45.4		18.9			18.9	26.0
Actuated g/C Ratio	0.64	0.61		0.60	0.55	0.55		0.23			0.23	0.32
v/c Ratio	0.29	0.92		0.12	0.87	0.29		0.13			0.79	0.15
Control Delay	8.4	31.3		7.0	29.9	2.4		26.2			50.2	5.1
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	8.4	31.3		7.0	29.9	2.4		26.2			50.2	5.1
LOS	A	C		A	C	A		C			D	A
Approach Delay		29.7			23.0			26.2			39.1	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	14	390		4	395	0		17			127	0
Queue Length 95th (ft)	28	#863		11	#673	36		45			#245	27
Internal Link Dist (ft)		495			1935			105			722	
Turn Bay Length (ft)	75			65		390						100
Base Capacity (vph)	341	1121		283	961	925		367			356	632
Starvation Cap Reductn	0	0		0	0	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.23	0.92		0.08	0.87	0.29		0.12			0.71	0.13

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 82.2
Natural Cycle: 90
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 27.9 Intersection LOS: C
Intersection Capacity Utilization 83.4% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: HESS/LEXINGTON AVENUE & ROUTE 202/35



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	87	1134	868	21	26	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	13	12	11	11
Grade (%)		-2%	-1%		-2%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.997			0.850
Flt Protected		0.996			0.950	
Satd. Flow (prot)	0	1966	1893	0	1762	1577
Flt Permitted		0.996			0.950	
Satd. Flow (perm)	0	1966	1893	0	1762	1577
Link Speed (mph)		45	45		30	
Link Distance (ft)		1314	468		883	
Travel Time (s)		19.9	7.1		20.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	4%	4%	0%	0%	0%
Adj. Flow (vph)	92	1194	914	22	27	316
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1286	936	0	27	316
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 124.8%		ICU Level of Service H	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	9.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	87	1134	868	21	26	300
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0			0	0	0
Median Width		0	0		11	
Grade (%)		-2%	-1%		-2%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles(%)	0	4	4	0	0	0
Movement Flow Rate	92	1194	914	22	27	316
Number of Lanes	0	1	1	0	1	1

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	936	0	0	0	2302	925
Stage 1	7e29111855645927E-304	0	0	0	925	0
Stage 2	7e29111855645927E-304	0	0	0	1377	0
Follow-up Headway	2.2	-	0	0	3.5	3.3
Pot Capacity-1 Maneuver	740	-	-	-	56	346
Stage 1	-	-	-	-	432	-
Stage 2	-	-	-	-	276	-
Mov Capacity-1 Maneuver	740	-	-	-	49.1	346
Mov Capacity-2 Maneuver	-	-	-	-	49.1	-
Stage 1	-	-	-	-	# 0	-
Stage 2	-	-	-	-	241.8	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.8	0	70.66
HCM LOS	A	A	F

Lane	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (vph)					49	346
HCM Control Delay (s)	10.551	0	-	-	147.5	64
HCM Lane VC Ratio	0.124	-	0	-	0.559	0.913
HCM Lane LOS	B	-	-	-	F	F
HCM 95th Percentile Queue (veh)	0.422	-	0	-	2.125	9.157

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1093	67	116	859	30	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	1%			-1%	0%	
Storage Length (ft)		0	0		0	100
Storage Lanes		0	0		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.992					0.850
Flt Protected				0.994	0.950	
Satd. Flow (prot)	1805	0	0	1829	1770	1583
Flt Permitted				0.994	0.950	
Satd. Flow (perm)	1805	0	0	1829	1770	1583
Link Speed (mph)	45			45	30	
Link Distance (ft)	468			612	567	
Travel Time (s)	7.1			9.3	12.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.90	0.90
Heavy Vehicles (%)	4%	2%	2%	4%	2%	2%
Adj. Flow (vph)	1151	71	122	904	33	134
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1222	0	0	1026	33	134
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 126.5%		ICU Level of Service H	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	8.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	1093	67	116	859	30	121
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	0		0	100
Median Width	12			12	12	
Grade (%)	1%			-1%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.90	0.90
Heavy Vehicles(%)	4	2	2	4	2	2
Movement Flow Rate	1151	71	122	904	33	134
Number of Lanes	1	0	0	1	1	1

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	0	0	1221	0	2334	1186
Stage 1	0	0	0	0	1186	0
Stage 2	0	0	0	0	1148	0
Follow-up Headway	-	-	2.218	0	3.518	3.318
Pot Capacity-1 Maneuver	-	-	571	-	40	230
Stage 1	-	-	-	-	290	-
Stage 2	-	-	-	-	302	-
Mov Capacity-1 Maneuver	-	-	571	-	# 31.4	230
Mov Capacity-2 Maneuver	-	-	-	-	# 31.4	-
Stage 1	-	-	-	-	# 0	-
Stage 2	-	-	-	-	237.4	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	1.5	107.176
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	31	230				
HCM Control Delay (s)	$ 375.7	40.6	-	-	13.011	0
HCM Lane VC Ratio	1.075	0.585	0	-	0.214	-
HCM Lane LOS	F	E	-	-	B	-
HCM 95th Percentile Queue (veh)	3.684	3.306	0	-	0.805	-

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	9	38	15	1	83	5	46	49	13	42	284	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-13%			-1%			0%			0%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.967			0.992			0.982			0.955	
Flt Protected		0.993			0.999			0.979			0.995	
Satd. Flow (prot)	0	1905	0	0	1855	0	0	3471	0	0	3430	0
Flt Permitted		0.993			0.999			0.979			0.995	
Satd. Flow (perm)	0	1905	0	0	1855	0	0	3471	0	0	3430	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		686			456			883			768	
Travel Time (s)		15.6			10.4			20.1			17.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	10	42	17	1	92	6	51	54	14	47	316	156
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	69	0	0	99	0	0	119	0	0	519	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	4.4

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Volume (vph)	9	38	15	1	83	5	46	49	13	42	284	140
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		-13%			-1%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles(%)	2	2	2	2	2	2	0	0	0	0	0	0
Movement Flow Rate	10	42	17	1	92	6	51	54	14	47	316	156
Number of Lanes	0	1	0	0	1	0	0	2	0	0	2	0

Major/Minor	Minor 1			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	663	658	236	436	728	34	471	0	0	69	0	0
Stage 1	487	487	0	164	164	0	0	0	0	0	0	0
Stage 2	176	171	0	272	564	0	0	0	0	0	0	0
Follow-up Headway	3.52	4.02	3.32	3.52	4.02	3.32	2.2	-	-	2.2	0	0
Pot Capacity-1 Maneuver	560	615	832	516	363	1044	1101	-	-	1550	-	-
Stage 1	754	780	-	829	768	-	-	-	-	-	-	-
Stage 2	918	856	-	721	523	-	-	-	-	-	-	-
Mov Capacity-1 Maneuver	415	569.1	832	450.1	335.9	1044	1101	-	-	1550	-	-
Mov Capacity-2 Maneuver	415	569.1	-	450.1	335.9	-	-	-	-	-	-	-
Stage 1	754	756.6	-	829	732.7	-	-	-	-	-	-	-
Stage 2	761.5	816.6	-	647.1	507.3	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay (s)	12	19.3	3.6	0.7
HCM LOS	B	C	A	A

Lane	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (vph)				350	582			
HCM Control Delay (s)	8.429	0	-	19.3	12	7.395	0	-
HCM Lane VC Ratio	0.046	-	-	0.283	0.118	0.03	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th Percentile Queue (veh)	0.146	-	-	1.14	0.4	0.093	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	981	210	225	729	18	208	50	309	35	119	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12	12	12	12	11	12	11
Grade (%)		0%			0%			0%			-2%	
Storage Length (ft)	90		185	450		575	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor							0.98					0.96
Frt		0.974				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950				0.989	
Satd. Flow (prot)	1770	3392	0	1770	1925	1583	1770	1863	1583	0	1861	1546
Flt Permitted	0.250			0.120			0.537				0.922	
Satd. Flow (perm)	466	3392	0	224	1925	1583	984	1863	1583	0	1735	1481
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		46				19			74			42
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			777			289			201	
Travel Time (s)		9.3			11.8			6.6			4.6	
Confl. Peds. (#/hr)							10					10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	5	0	3	0	0	0	0	0	0	0
Adj. Flow (vph)	24	1033	221	237	767	19	231	56	343	39	132	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	1254	0	237	767	19	231	56	343	0	171	42
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	50	50		50	50	50	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	5	2		1	6			3	1		3	5
Permitted Phases	2			6		6	3		3	3		3
Detector Phase	5	2		1	6	6	3	3	1	3	3	5
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0	10.0	5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	8.0	15.0		8.0	15.0	15.0	10.0	10.0	8.0	10.0	10.0	8.0
Total Split (s)	15.0	45.0		15.0	45.0	45.0	20.0	20.0	15.0	20.0	20.0	15.0
Total Split (%)	18.8%	56.3%		18.8%	56.3%	56.3%	25.0%	25.0%	18.8%	25.0%	25.0%	18.8%
Maximum Green (s)	10.0	40.0		10.0	40.0	40.0	15.0	15.0	10.0	15.0	15.0	10.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag			Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes			Yes			Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Max		None	Max	Max	None	None	None	None	None	None
Walk Time (s)							7.0	7.0		7.0	7.0	
Flash Dont Walk (s)							11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)							0	0		0	0	
Act Effct Green (s)	46.9	41.0		54.5	48.5	48.5	16.0	16.0	29.5		16.0	21.8
Actuated g/C Ratio	0.60	0.52		0.69	0.62	0.62	0.20	0.20	0.38		0.20	0.28
v/c Ratio	0.06	0.70		0.69	0.64	0.02	1.15	0.15	0.54		0.48	0.09
Control Delay	4.6	16.3		21.2	13.8	3.5	142.9	27.4	18.3		33.3	7.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	4.6	16.3		21.2	13.8	3.5	142.9	27.4	18.3		33.3	7.0
LOS	A	B		C	B	A	F	C	B		C	A
Approach Delay		16.1			15.3			64.8			28.1	
Approach LOS		B			B			E			C	
Queue Length 50th (ft)	3	222		39	246	0	~137	23	99		75	0
Queue Length 95th (ft)	9	305		114	383	8	#275	54	177		137	21
Internal Link Dist (ft)		532			697			209			121	
Turn Bay Length (ft)	90			450		575						
Base Capacity (vph)	492	1795		372	1190	986	201	380	670		354	547
Starvation Cap Reductn	0	0		0	0	0	0	0	0		0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0		0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0		0	0
Reduced v/c Ratio	0.05	0.70		0.64	0.64	0.02	1.15	0.15	0.51		0.48	0.08

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 78.5
Natural Cycle: 55
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.15
Intersection Signal Delay: 26.4 — Intersection LOS: C
Intersection Capacity Utilization 74.5% — ICU Level of Service D
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: BJ's Shopping Center/STONEY STREET & ROUTE 202/35

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	1188	59	22	687	156	16	16	2	332	22	70
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1800	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	11	12	15	12	12	13	13
Grade (%)		-2%			-1%			0%			0%	
Storage Length (ft)	75		0	65		390	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99				0.97
Frt		0.993			0.972			0.993				0.850
Flt Protected	0.950			0.950				0.977			0.955	
Satd. Flow (prot)	1728	1833	0	1661	3224	0	0	2028	0	0	1831	1636
Flt Permitted	0.205			0.069				0.977			0.955	
Satd. Flow (perm)	373	1833	0	121	3224	0	0	2017	0	0	1831	1584
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			32			2				44
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		575			2015			185			802	
Travel Time (s)		8.7			30.5			4.2			18.2	
Confl. Peds. (#/hr)			10	10			10					10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	0%	0%	4%	2%	0%	0%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	1	0
Adj. Flow (vph)	45	1291	64	24	747	170	18	18	2	369	24	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	1355	0	24	917	0	0	38	0	0	393	78
Number of Detectors	1	1		1	1		1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	50
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		Perm	NA		Split	NA		Split	NA	pm+ov
Protected Phases	5	2			6		4	4		8	8	5
Permitted Phases	2			6								8
Detector Phase	5	2		6	6		4	4		8	8	5
Switch Phase												
Minimum Initial (s)	3.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	3.0
Minimum Split (s)	9.0	16.0		16.0	16.0		10.0	10.0		10.0	10.0	9.0
Total Split (s)	15.0	79.0		64.0	64.0		10.0	10.0		31.0	31.0	15.0
Total Split (%)	12.5%	65.8%		53.3%	53.3%		8.3%	8.3%		25.8%	25.8%	12.5%
Maximum Green (s)	10.0	73.0		58.0	58.0		5.0	5.0		26.0	26.0	10.0
Yellow Time (s)	4.0	5.0		5.0	5.0		4.0	4.0		4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-1.0		0.0	-1.0			-1.0			-1.0	-1.0
Total Lost Time (s)	5.0	5.0		6.0	5.0			4.0			4.0	4.0
Lead/Lag	Lead			Lag	Lag							Lead
Lead-Lag Optimize?	Yes			Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	2.0
Recall Mode	Max	Max		None	None		None	None		None	None	Max
Walk Time (s)				8.0	8.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)				12.0	12.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)				0	0		0	0		0	0	
Act Effct Green (s)	74.1	74.1		58.1	59.1			6.0			26.8	37.8
Actuated g/C Ratio	0.64	0.64		0.50	0.51			0.05			0.23	0.33
v/c Ratio	0.13	1.15		0.39	0.55			0.36			0.93	0.14
Control Delay	9.6	101.4		43.6	20.7			61.9			73.7	14.0
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	9.6	101.4		43.6	20.7			61.9			73.7	14.0
LOS	A	F		D	C			E			E	B
Approach Delay		98.5			21.3			61.9			63.8	
Approach LOS		F			C			E			E	
Queue Length 50th (ft)	13	~1277		12	247			28			303	17
Queue Length 95th (ft)	28	#1544		#51	312			65			#498	52
Internal Link Dist (ft)		495			1935			105			722	
Turn Bay Length (ft)	75			65								100
Base Capacity (vph)	356	1176		61	1662			107			428	552
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.13	1.15		0.39	0.55			0.36			0.92	0.14

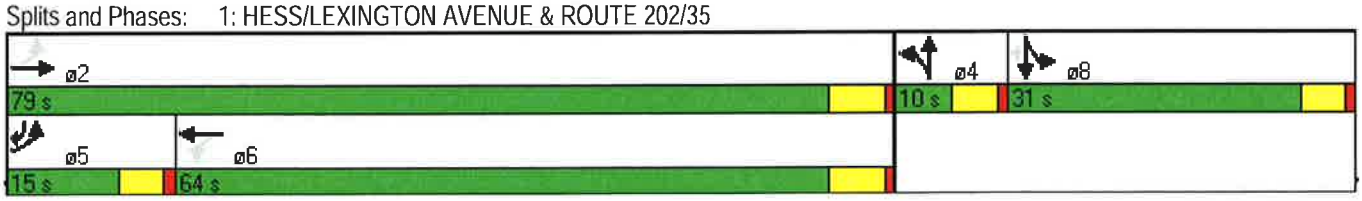
Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 115.7
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.15
Intersection Signal Delay: 66.8 Intersection LOS: E
Intersection Capacity Utilization 99.9% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: HESS/LEXINGTON AVENUE & ROUTE 202/35



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	206	1313	563	12	16	307
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	13	12	11	11
Grade (%)		-2%	-1%		-2%	
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.997			0.865
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1823	3740	3597	0	0	1605
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1823	3740	3597	0	0	1605
Link Speed (mph)		45	45		30	
Link Distance (ft)		576	468		875	
Travel Time (s)		8.7	7.1		19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	4%	0%	0%	0%
Adj. Flow (vph)	224	1427	612	13	17	334
Shared Lane Traffic (%)						
Lane Group Flow (vph)	224	1427	625	0	17	334
Sign Control		Free	Free		Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	206	1313	563	12	16	307
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length	150			0	0	0
Median Width		12	12		12	
Grade (%)		-2%	-1%		-2%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles(%)	0	4	4	0	0	0
Movement Flow Rate	224	1427	612	13	17	334
Number of Lanes	1	2	2	0	0	1

Major/Minor	Lane
Conflicting Flow Rate - All	Capacity (vph)
Stage 1	HCM Control Delay (s)
Stage 2	HCM Lane VC Ratio
Follow-up Headway	HCM Lane LOS
Pot Capacity-1 Maneuver	HCM 95th Percentile Queue (veh)
Stage 1	
Stage 2	
Mov Capacity-1 Maneuver	
Mov Capacity-2 Maneuver	
Stage 1	
Stage 2	

Approach
HCM Control Delay (s)
HCM LOS

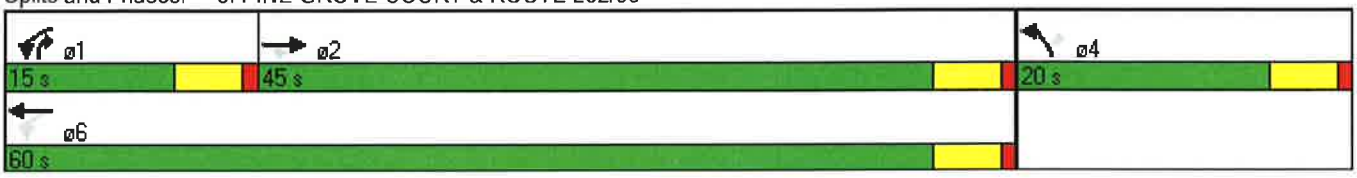
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1304	26	139	567	8	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	1%			-1%	0%	
Storage Length (ft)		75	300		0	100
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3454	1575	1778	3489	1770	1583
Flt Permitted			0.120		0.950	
Satd. Flow (perm)	3454	1575	225	3489	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		14				26
Link Speed (mph)	45			45	30	
Link Distance (ft)	468			612	567	
Travel Time (s)	7.1			9.3	12.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Heavy Vehicles (%)	4%	2%	2%	4%	2%	2%
Adj. Flow (vph)	1417	28	151	616	9	209
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1417	28	151	616	9	209
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	NA	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	2		1	6	4	1
Permitted Phases		2	6			4
Detector Phase	2	2	1	6	4	1
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0	9.0	21.0	20.0	9.0
Total Split (s)	45.0	45.0	15.0	60.0	20.0	15.0
Total Split (%)	56.3%	56.3%	18.8%	75.0%	25.0%	18.8%
Maximum Green (s)	40.0	40.0	10.0	55.0	15.0	10.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	0.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead			Lead

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lead-Lag Optimize?	Yes	Yes	Yes			Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Min	C-Min	None	C-Max	Min	None
Walk Time (s)	5.0	5.0		5.0		
Flash Dont Walk (s)	11.0	11.0		11.0		
Pedestrian Calls (#/hr)	0	0		0		
Act Effct Green (s)	51.4	50.4	65.0	65.0	7.0	20.6
Actuated g/C Ratio	0.64	0.63	0.81	0.81	0.09	0.26
v/c Ratio	0.64	0.03	0.41	0.22	0.06	0.49
Control Delay	11.0	4.8	6.2	1.9	34.0	25.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.0	4.8	6.2	1.9	34.0	25.4
LOS	B	A	A	A	C	C
Approach Delay	10.9			2.8	25.8	
Approach LOS	B			A	C	
Queue Length 50th (ft)	190	2	10	24	4	78
Queue Length 95th (ft)	322	13	35	37	18	128
Internal Link Dist (ft)	388			532	487	
Turn Bay Length (ft)		75	300			100
Base Capacity (vph)	2219	997	408	2834	354	466
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.03	0.37	0.22	0.03	0.45

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 7 (9%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 9.6 Intersection LOS: A
Intersection Capacity Utilization 57.1% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 3: PINE GROVE COURT & ROUTE 202/35



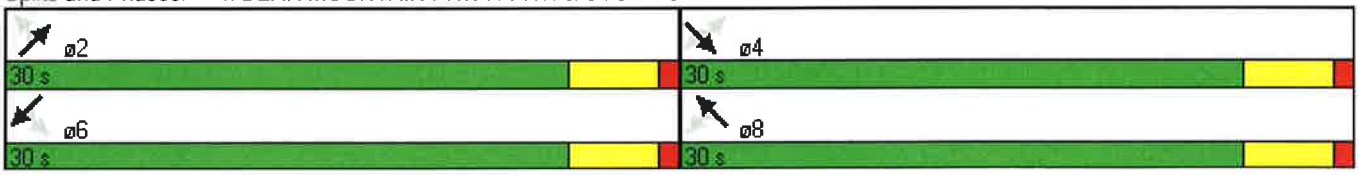
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	95	132	53	2	31	12	22	198	2	134	268	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-13%			-1%			0%			0%	
Storage Length (ft)	0		100	0		0	250		0	250		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.964			0.999			0.995	
Flt Protected		0.979			0.998		0.950			0.950		
Satd. Flow (prot)	0	1942	1686	0	1801	0	1805	1898	0	1805	1890	0
Flt Permitted		0.844			0.986		0.564			0.620		
Satd. Flow (perm)	0	1674	1686	0	1779	0	1072	1898	0	1178	1890	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			58		13			1			4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		689			426			875			768	
Travel Time (s)		15.7			9.7			19.9			17.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	103	143	58	2	34	13	24	220	2	149	298	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	246	58	0	49	0	24	222	0	149	309	0
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		-1.0	-1.0		-1.0		-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lead/Lag												

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Max	Max		Max	Max	
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)		13.3	13.3		13.3		28.8	28.8		28.8	28.8	
Actuated g/C Ratio		0.27	0.27		0.27		0.57	0.57		0.57	0.57	
v/c Ratio		0.56	0.12		0.10		0.04	0.20		0.22	0.28	
Control Delay		20.1	4.8		10.2		6.2	6.6		7.3	7.0	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		20.1	4.8		10.2		6.2	6.6		7.3	7.0	
LOS		C	A		B		A	A		A	A	
Approach Delay		17.2			10.2			6.5			7.1	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		56	0		7		3	26		17	37	
Queue Length 95th (ft)		108	18		25		12	66		52	92	
Internal Link Dist (ft)		609			346			795			688	
Turn Bay Length (ft)			100				250			250		
Base Capacity (vph)		875	909		937		616	1091		677	1087	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.28	0.06		0.05		0.04	0.20		0.22	0.28	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 50.1
Natural Cycle: 45
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.56
Intersection Signal Delay: 10.0 Intersection LOS: B
Intersection Capacity Utilization 46.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4: BEAR MOUNTAIN PKWY. EXT. & STONY STREET



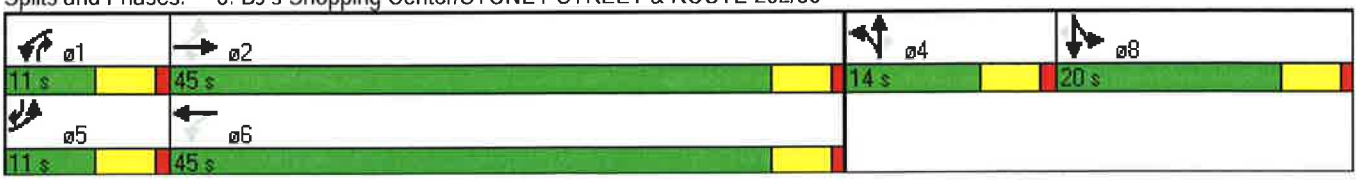
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	1286	174	92	506	16	87	9	194	110	72	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12	12	12	12	11	12	11
Grade (%)		0%			0%			0%			-2%	
Storage Length (ft)	90		90	450		575	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor							0.99					0.97
Frt			0.850		0.996				0.850			0.850
Flt Protected	0.950			0.950			0.950				0.971	
Satd. Flow (prot)	1770	3471	1552	1770	3668	0	1681	1770	1583	0	1827	1546
Flt Permitted	0.398			0.087			0.950				0.971	
Satd. Flow (perm)	741	3471	1552	162	3668	0	1662	1770	1583	0	1827	1505
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			87		4				135			126
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			880			289			194	
Travel Time (s)		9.3			13.3			6.6			4.4	
Confl. Peds. (#/hr)							10					10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	5	0	3	0	0	0	0	0	0	0
Adj. Flow (vph)	32	1398	189	100	550	17	97	10	216	122	80	126
Shared Lane Traffic (%)							0%					
Lane Group Flow (vph)	32	1398	189	100	567	0	97	10	216	0	202	126
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2		1	6		4	4	1	8	8	5
Permitted Phases	2		2	6					4			8
Detector Phase	5	2	2	1	6		4	4	1	8	8	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	10.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	8.0	15.0	15.0	8.0	15.0		10.0	10.0	8.0	10.0	10.0	8.0
Total Split (s)	11.0	45.0	45.0	11.0	45.0		14.0	14.0	11.0	20.0	20.0	11.0
Total Split (%)	12.2%	50.0%	50.0%	12.2%	50.0%		15.6%	15.6%	12.2%	22.2%	22.2%	12.2%
Maximum Green (s)	6.0	40.0	40.0	6.0	40.0		9.0	9.0	6.0	15.0	15.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0		-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)							7.0	7.0		7.0	7.0	
Flash Dont Walk (s)							11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)							0	0		0	0	
Act Effct Green (s)	52.4	46.3	46.3	53.7	46.9		9.0	9.0	14.6		14.0	20.1
Actuated g/C Ratio	0.58	0.51	0.51	0.60	0.52		0.10	0.10	0.16		0.16	0.22
v/c Ratio	0.06	0.78	0.23	0.46	0.30		0.57	0.06	0.58		0.71	0.29
Control Delay	8.4	23.8	8.7	17.5	14.0		52.3	36.7	14.2		50.1	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Delay	8.4	23.8	8.7	17.5	14.0		52.3	36.7	14.2		50.1	6.4
LOS	A	C	A	B	B		D	D	B		D	A
Approach Delay		21.7			14.6			26.3			33.4	
Approach LOS		C			B			C			C	
Queue Length 50th (ft)	7	367	33	23	100		55	5	26		109	0
Queue Length 95th (ft)	19	#486	74	58	143		108	22	67		180	39
Internal Link Dist (ft)		532			800			209			114	
Turn Bay Length (ft)	90		90	450								
Base Capacity (vph)	518	1784	840	225	1913		187	197	375		325	450
Starvation Cap Reductn	0	0	0	0	0		0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	0
Reduced v/c Ratio	0.06	0.78	0.23	0.44	0.30		0.52	0.05	0.58		0.62	0.28

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green, Master Intersection
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 21.9 Intersection LOS: C
Intersection Capacity Utilization 68.9% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: BJ's Shopping Center/STONEY STREET & ROUTE 202/35



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	889	76	43	1244	319	28	29	2	196	15	70
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1800	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	11	12	15	12	12	13	13
Grade (%)		-2%			-1%			0%			0%	
Storage Length (ft)	75		0	65		390	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				0.97
Frt		0.988			0.969			0.996				0.850
Flt Protected	0.950			0.950				0.977			0.956	
Satd. Flow (prot)	1728	1824	0	1661	3215	0	0	2034	0	0	1833	1636
Flt Permitted	0.084			0.088				0.743			0.742	
Satd. Flow (perm)	153	1824	0	154	3215	0	0	1540	0	0	1423	1592
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			51			2				32
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		575			2015			185			802	
Travel Time (s)		8.7			30.5			4.2			18.2	
Confl. Peds. (#/hr)			10	10			10					10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	0%	0%	4%	2%	0%	0%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	1	0
Adj. Flow (vph)	104	936	80	45	1309	336	31	32	2	218	17	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	1016	0	45	1645	0	0	65	0	0	235	78
Number of Detectors	1	1		1	1		1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	50
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			3			3	5
Permitted Phases	2			6			3			3		3
Detector Phase	5	2		1	6		3	3		3	3	5
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0		5.0	5.0		5.0	5.0	3.0
Minimum Split (s)	9.0	16.0		9.0	16.0		10.0	10.0		10.0	10.0	9.0
Total Split (s)	15.0	50.0		15.0	50.0		25.0	25.0		25.0	25.0	15.0
Total Split (%)	16.7%	55.6%		16.7%	55.6%		27.8%	27.8%		27.8%	27.8%	16.7%
Maximum Green (s)	10.0	44.0		10.0	44.0		20.0	20.0		20.0	20.0	10.0
Yellow Time (s)	4.0	5.0		4.0	5.0		4.0	4.0		4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-1.0		0.0	-1.0			-1.0			-1.0	-1.0
Total Lost Time (s)	5.0	5.0		5.0	5.0			4.0			4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	2.0
Recall Mode	None	Max		None	Max		None	None		None	None	None
Walk Time (s)					8.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)					12.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)					0		0	0		0	0	
Act Effct Green (s)	53.2	48.9		49.8	45.6			18.2			18.2	26.0
Actuated g/C Ratio	0.65	0.59		0.61	0.55			0.22			0.22	0.32
v/c Ratio	0.46	0.94		0.24	0.91			0.19			0.74	0.15
Control Delay	14.9	35.4		8.8	27.7			27.8			46.4	12.3
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	14.9	35.4		8.8	27.7			27.8			46.4	12.3
LOS	B	D		A	C			C			D	B
Approach Delay		33.5			27.2			27.8			37.9	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	18	~602		8	419			27			116	16
Queue Length 95th (ft)	52	#862		19	#646			63			#225	44
Internal Link Dist (ft)		495			1935			105			722	
Turn Bay Length (ft)	75			65								100
Base Capacity (vph)	295	1086		285	1804			399			368	595
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.35	0.94		0.16	0.91			0.16			0.64	0.13

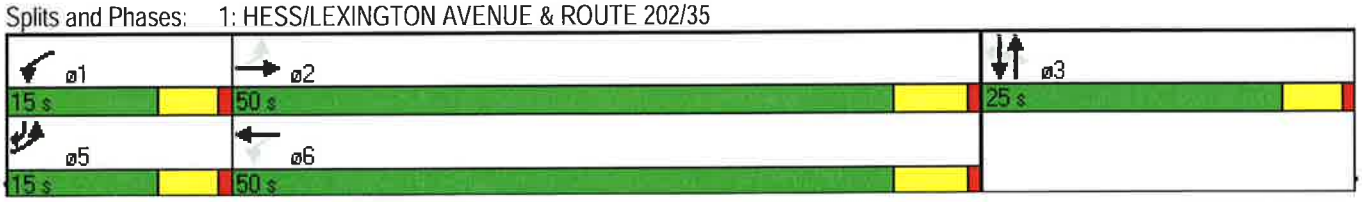
Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 82.3
Natural Cycle: 80
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 30.5 Intersection LOS: C
Intersection Capacity Utilization 84.8% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: HESS/LEXINGTON AVENUE & ROUTE 202/35



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	89	1159	1227	11	0	583
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	13	12	11	11
Grade (%)		-2%	-1%		-2%	
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.999			0.865
Flt Protected	0.950					
Satd. Flow (prot)	1823	3506	3602	0	0	1605
Flt Permitted	0.950					
Satd. Flow (perm)	1823	3506	3602	0	0	1605
Link Speed (mph)		45	45		30	
Link Distance (ft)		703	468		883	
Travel Time (s)		10.7	7.1		20.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	4%	0%	0%	0%
Adj. Flow (vph)	97	1260	1334	12	0	634
Shared Lane Traffic (%)						
Lane Group Flow (vph)	97	1260	1346	0	0	634
Sign Control		Free	Free		Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 77.0%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	89	1159	1227	11	0	583
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length	150			0	0	0
Median Width		12	12		12	
Grade (%)		-2%	-1%		-2%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles(%)	0	4	4	0	0	0
Movement Flow Rate	97	1260	1334	12	0	634
Number of Lanes	1	2	2	0	0	1

Major/Minor	Lane
Conflicting Flow Rate - All	Capacity (vph)
Stage 1	HCM Control Delay (s)
Stage 2	HCM Lane VC Ratio
Follow-up Headway	HCM Lane LOS
Pot Capacity-1 Maneuver	HCM 95th Percentile Queue (veh)
Stage 1	
Stage 2	
Mov Capacity-1 Maneuver	
Mov Capacity-2 Maneuver	
Stage 1	
Stage 2	

Approach
HCM Control Delay (s)
HCM LOS

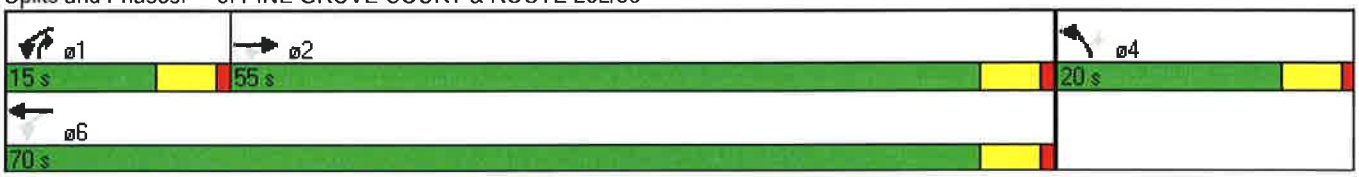
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱	↰	↑↑	↰	↱
Volume (vph)	1107	64	297	1218	3	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	1%			-1%	0%	
Storage Length (ft)		75	300		0	100
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3454	1575	1778	3489	1770	1583
Flt Permitted			0.192		0.950	
Satd. Flow (perm)	3454	1575	359	3489	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		40				75
Link Speed (mph)	45			45	30	
Link Distance (ft)	468			612	567	
Travel Time (s)	7.1			9.3	12.9	
Peak Hour Factor	0.97	0.97	0.92	0.92	0.80	0.80
Heavy Vehicles (%)	4%	2%	2%	4%	2%	2%
Adj. Flow (vph)	1141	66	323	1324	4	231
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1141	66	323	1324	4	231
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	NA	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	2		1	6	4	1
Permitted Phases		2	6			4
Detector Phase	2	2	1	6	4	1
Switch Phase						
Minimum Initial (s)	4.0	4.0	1.0	4.0	4.0	1.0
Minimum Split (s)	10.0	10.0	6.0	10.0	10.0	6.0
Total Split (s)	55.0	55.0	15.0	70.0	20.0	15.0
Total Split (%)	61.1%	61.1%	16.7%	77.8%	22.2%	16.7%
Maximum Green (s)	50.0	50.0	10.0	65.0	15.0	10.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	0.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead			Lead

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lead-Lag Optimize?	Yes	Yes	Yes			Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Min	C-Min	None	C-Max	None	None
Act Effct Green (s)	64.7	63.7	83.7	86.9	6.8	17.3
Actuated g/C Ratio	0.72	0.71	0.93	0.97	0.08	0.19
v/c Ratio	0.46	0.06	0.57	0.39	0.03	0.63
Control Delay	7.4	3.7	18.2	0.4	39.0	28.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.4	3.7	18.2	0.4	39.0	28.5
LOS	A	A	B	A	D	C
Approach Delay	7.2			3.9	28.7	
Approach LOS	A			A	C	
Queue Length 50th (ft)	108	3	68	0	2	83
Queue Length 95th (ft)	265	24	m105	m23	11	104
Internal Link Dist (ft)	388			532	487	
Turn Bay Length (ft)		75	300			100
Base Capacity (vph)	2481	1126	580	3370	315	374
Starvation Cap Reductn	0	0	0	183	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.06	0.56	0.42	0.01	0.62

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 7 (8%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.63
Intersection Signal Delay: 7.1 Intersection LOS: A
Intersection Capacity Utilization 60.4% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: PINE GROVE COURT & ROUTE 202/35



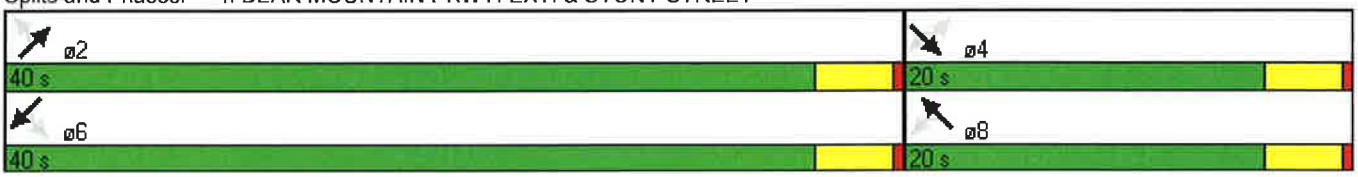
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	16	80	26	2	128	36	58	46	12	262	567	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-13%			-1%			0%			0%	
Storage Length (ft)	0		100	0		0	200		0	200		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.971			0.969			0.980	
Flt Protected		0.992			0.999		0.950			0.950		
Satd. Flow (prot)	0	1968	1686	0	1816	0	1805	1841	0	1805	1862	0
Flt Permitted		0.940			0.997		0.273			0.707		
Satd. Flow (perm)	0	1865	1686	0	1812	0	519	1841	0	1343	1862	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			32		23			16			23	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		650			445			883			768	
Travel Time (s)		14.8			10.1			20.1			17.5	
Peak Hour Factor	0.82	0.82	0.82	0.83	0.83	0.83	0.76	0.76	0.76	0.84	0.84	0.84
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	20	98	32	2	154	43	76	61	16	312	675	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	118	32	0	199	0	76	77	0	312	777	0
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	20.0	20.0	20.0	20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	20.0	20.0	20.0	20.0		40.0	40.0		40.0	40.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%		66.7%	66.7%		66.7%	66.7%	
Maximum Green (s)	16.0	16.0	16.0	16.0	16.0		36.0	36.0		36.0	36.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lead/Lag												

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Max	Max		Max	Max	
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)		10.9	10.9		10.9		39.0	39.0		39.0	39.0	
Actuated g/C Ratio		0.19	0.19		0.19		0.67	0.67		0.67	0.67	
v/c Ratio		0.34	0.09		0.56		0.22	0.06		0.34	0.62	
Control Delay		21.6	8.0		23.9		6.6	3.6		6.0	8.6	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		21.6	8.0		23.9		6.6	3.6		6.0	8.6	
LOS		C	A		C		A	A		A	A	
Approach Delay		18.7			23.9			5.1			7.8	
Approach LOS		B			C			A			A	
Queue Length 50th (ft)		33	0		52		8	6		35	111	
Queue Length 95th (ft)		63	14		92		24	17		82	229	
Internal Link Dist (ft)		570			365			803			688	
Turn Bay Length (ft)			100				200			200		
Base Capacity (vph)		518	491		520		350	1246		905	1262	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.23	0.07		0.38		0.22	0.06		0.34	0.62	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 57.9
Natural Cycle: 55
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 10.6 Intersection LOS: B
Intersection Capacity Utilization 63.1% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 4: BEAR MOUNTAIN PKWY. EXT. & STONY STREET



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	1015	197	192	1118	58	230	56	272	194	125	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	11
Grade (%)		0%			0%			0%			-2%	
Storage Length (ft)	90		90	450		575	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor							0.99	0.99				0.97
Frt			0.850		0.993				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.970			0.970	
Satd. Flow (prot)	1770	3471	1552	1770	3429	0	1681	1717	1583	0	1825	1546
Flt Permitted	0.122			0.117			0.950	0.970			0.970	
Satd. Flow (perm)	227	3471	1552	218	3429	0	1666	1707	1583	0	1825	1505
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			149		6				141			44
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			803			289			193	
Travel Time (s)		9.3			12.2			6.6			4.4	
Confl. Peds. (#/hr)							10					10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	5	0	3	0	0	0	0	0	0	0
Adj. Flow (vph)	79	1068	207	202	1177	61	256	62	302	216	139	181
Shared Lane Traffic (%)							40%					
Lane Group Flow (vph)	79	1068	207	202	1238	0	154	164	302	0	355	181
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	4	1	6		4	4	1	8	8	5
Permitted Phases	2		2	6					4			8
Detector Phase	5	2	4	1	6		4	4	1	8	8	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0		10.0	10.0	8.0	10.0	10.0	8.0
Total Split (s)	12.0	35.0	18.0	12.0	35.0		18.0	18.0	12.0	25.0	25.0	12.0
Total Split (%)	13.3%	38.9%	20.0%	13.3%	38.9%		20.0%	20.0%	13.3%	27.8%	27.8%	13.3%
Maximum Green (s)	7.0	30.0	13.0	7.0	30.0		13.0	13.0	7.0	20.0	20.0	7.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0		-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	C-Max	None	None	Max		None	None	None	None	None	None
Walk Time (s)			7.0				7.0	7.0		7.0	7.0	
Flash Dont Walk (s)			11.0				11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)			0				0	0		0	0	
Act Effct Green (s)	40.0	32.8	49.2	43.0	34.3		12.4	12.4	21.1		20.1	27.3
Actuated g/C Ratio	0.44	0.36	0.55	0.48	0.38		0.14	0.14	0.23		0.22	0.30
v/c Ratio	0.35	0.84	0.23	0.80	0.94		0.66	0.69	0.63		0.87	0.37
Control Delay	19.7	31.7	2.0	42.9	43.9		50.8	52.4	14.5		56.5	18.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Delay	19.7	31.7	2.0	42.9	43.9		50.8	52.4	14.5		56.5	18.1
LOS	B	C	A	D	D		D	D	B		E	B
Approach Delay		26.5			43.7			33.5			43.5	
Approach LOS		C			D			C			D	
Queue Length 50th (ft)	19	306	3	66	~400		87	92	41		193	54
Queue Length 95th (ft)	m61	#402	14	#193	#537		153	162	85		#338	105
Internal Link Dist (ft)		532			723			209			113	
Turn Bay Length (ft)	90		90	450								
Base Capacity (vph)	240	1266	941	254	1311		261	267	479		426	503
Starvation Cap Reductn	0	0	0	0	0		0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	0
Reduced v/c Ratio	0.33	0.84	0.22	0.80	0.94		0.59	0.61	0.63		0.83	0.36

Intersection Summary

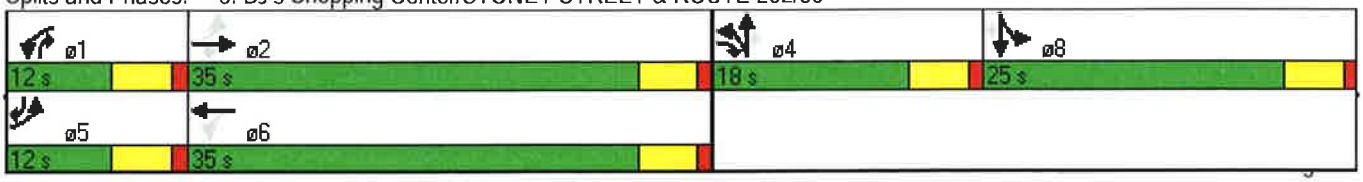
Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green, Master Intersection
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 36.2 Intersection LOS: D
Intersection Capacity Utilization 77.2% ICU Level of Service D
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: BJ's Shopping Center/STONEY STREET & ROUTE 202/35



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	1099	69	23	967	302	29	12	2	249	28	81
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1800	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	11	12	15	12	12	13	13
Grade (%)		-2%			-1%			0%			0%	
Storage Length (ft)	75		0	65		390	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99				0.97
Frt		0.991			0.964			0.994				0.850
Flt Protected	0.950			0.950				0.967			0.957	
Satd. Flow (prot)	1728	1830	0	1661	3201	0	0	2009	0	0	1835	1636
Flt Permitted	0.093			0.080				0.967			0.957	
Satd. Flow (perm)	169	1830	0	140	3201	0	0	1994	0	0	1835	1590
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			56			2				75
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		575			2015			185			802	
Travel Time (s)		8.7			30.5			4.2			18.2	
Confl. Peds. (#/hr)			10	10			10					10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	4%	0%	0%	4%	2%	0%	0%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	1	0
Adj. Flow (vph)	84	1157	73	24	1018	318	32	13	2	271	30	88
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	1230	0	24	1336	0	0	47	0	0	301	88
Number of Detectors	1	1		1	1		1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	50
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		Perm	NA		Split	NA		Split	NA	pm+ov
Protected Phases	5	2			6		4	4		8	8	5
Permitted Phases	2			6								8
Detector Phase	5	2		6	6		4	4		8	8	5
Switch Phase												
Minimum Initial (s)	3.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	3.0
Minimum Split (s)	9.0	16.0		16.0	16.0		10.0	10.0		10.0	10.0	9.0
Total Split (s)	15.0	67.0		52.0	52.0		10.0	10.0		23.0	23.0	15.0
Total Split (%)	15.0%	67.0%		52.0%	52.0%		10.0%	10.0%		23.0%	23.0%	15.0%
Maximum Green (s)	10.0	61.0		46.0	46.0		5.0	5.0		18.0	18.0	10.0
Yellow Time (s)	4.0	5.0		5.0	5.0		4.0	4.0		4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-1.0		0.0	-1.0			-1.0			-1.0	-1.0
Total Lost Time (s)	5.0	5.0		6.0	5.0			4.0			4.0	4.0
Lead/Lag	Lead			Lag	Lag							Lead
Lead-Lag Optimize?	Yes			Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	2.0
Recall Mode	None	Max		Max	Max		None	None		None	None	None
Walk Time (s)				8.0	8.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)				12.0	12.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)				0	0		0	0		0	0	
Act Effct Green (s)	62.3	62.3		49.8	50.8			6.0			18.4	25.8
Actuated g/C Ratio	0.65	0.65		0.52	0.53			0.06			0.19	0.27
v/c Ratio	0.39	1.03		0.33	0.77			0.36			0.85	0.18
Control Delay	12.6	52.9		31.8	22.0			51.7			61.1	8.7
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	12.6	52.9		31.8	22.0			51.7			61.1	8.7
LOS	B	D		C	C			D			E	A
Approach Delay		50.4			22.2			51.7			49.3	
Approach LOS		D			C			D			D	
Queue Length 50th (ft)	20	~884		9	346			28			187	6
Queue Length 95th (ft)	38	#1139		39	466			66			#334	40
Internal Link Dist (ft)		495			1935			105			722	
Turn Bay Length (ft)	75			65								100
Base Capacity (vph)	275	1197		73	1732			129			367	548
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.31	1.03		0.33	0.77			0.36			0.82	0.16

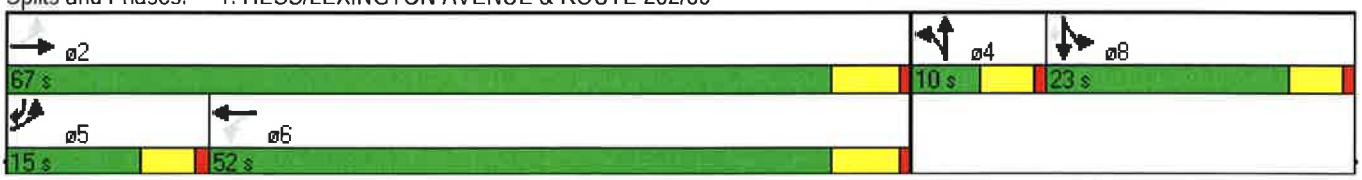
Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 95.4
Natural Cycle: 110
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 37.9 Intersection LOS: D
Intersection Capacity Utilization 93.7% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: HESS/LEXINGTON AVENUE & ROUTE 202/35



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	95	1365	1077	23	28	324
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	11	11
Grade (%)		-2%	-1%		-2%	
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.997			0.865
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1823	3506	3481	0	0	1605
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1823	3506	3481	0	0	1605
Link Speed (mph)		45	45		30	
Link Distance (ft)		700	468		871	
Travel Time (s)		10.6	7.1		19.8	
Peak Hour Factor	0.95	0.95	0.99	0.99	0.95	0.95
Heavy Vehicles (%)	0%	4%	4%	0%	0%	0%
Adj. Flow (vph)	100	1437	1088	23	29	341
Shared Lane Traffic (%)						
Lane Group Flow (vph)	100	1437	1111	0	29	341
Sign Control		Free	Free		Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization Err%		ICU Level of Service H	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	95	1365	1077	23	28	324
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length	150			0	0	0
Median Width		12	12		12	
Grade (%)		-2%	-1%		-2%	
Peak Hour Factor	0.95	0.95	0.99	0.99	0.95	0.95
Heavy Vehicles(%)	0	4	4	0	0	0
Movement Flow Rate	100	1437	1088	23	29	341
Number of Lanes	1	2	2	0	0	1

Major/Minor	Lane
Conflicting Flow Rate - All	Capacity (vph)
Stage 1	HCM Control Delay (s)
Stage 2	HCM Lane VC Ratio
Follow-up Headway	HCM Lane LOS
Pot Capacity-1 Maneuver	HCM 95th Percentile Queue (veh)
Stage 1	
Stage 2	
Mov Capacity-1 Maneuver	
Mov Capacity-2 Maneuver	
Stage 1	
Stage 2	

Approach
HCM Control Delay (s)
HCM LOS

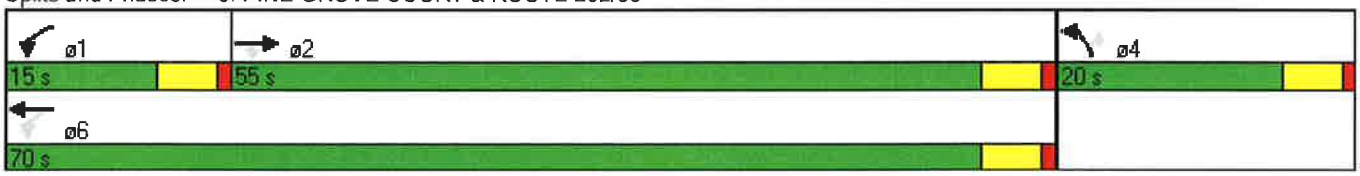
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1321	72	148	1067	32	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	1%			-1%	0%	
Storage Length (ft)		75	300		0	100
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3454	1575	1778	3489	1770	1583
Flt Permitted			0.126		0.950	
Satd. Flow (perm)	3454	1575	236	3489	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		37				176
Link Speed (mph)	45			45	30	
Link Distance (ft)	468			612	582	
Travel Time (s)	7.1			9.3	13.2	
Peak Hour Factor	0.93	0.93	0.96	0.96	0.90	0.90
Heavy Vehicles (%)	4%	2%	2%	4%	2%	2%
Adj. Flow (vph)	1420	77	154	1111	36	176
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1420	77	154	1111	36	176
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	NA	Perm	pm+pt	NA	NA	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2	6			4
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	1.0	4.0	1.0	1.0
Minimum Split (s)	10.0	10.0	6.0	10.0	6.0	6.0
Total Split (s)	55.0	55.0	15.0	70.0	20.0	20.0
Total Split (%)	61.1%	61.1%	16.7%	77.8%	22.2%	22.2%
Maximum Green (s)	50.0	50.0	10.0	65.0	15.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	0.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Min	C-Min	None	C-Max	Min	Min
Act Effct Green (s)	60.1	59.1	73.1	73.1	8.9	8.9
Actuated g/C Ratio	0.67	0.66	0.81	0.81	0.10	0.10
v/c Ratio	0.62	0.07	0.45	0.39	0.21	0.56
Control Delay	10.8	4.5	14.4	2.6	38.9	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.8	4.5	14.4	2.6	38.9	13.2
LOS	B	A	B	A	D	B
Approach Delay	10.4			4.0	17.6	
Approach LOS	B			A	B	
Queue Length 50th (ft)	195	7	21	25	19	0
Queue Length 95th (ft)	365	29	m94	123	46	56
Internal Link Dist (ft)	388			532	502	
Turn Bay Length (ft)		75	300			100
Base Capacity (vph)	2307	1047	387	2835	315	426
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.07	0.40	0.39	0.11	0.41

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 77 (86%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 8.2 Intersection LOS: A
Intersection Capacity Utilization 58.0% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: PINE GROVE COURT & ROUTE 202/35



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	10	69	16	1	106	38	64	54	14	84	307	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-13%			-1%			0%			0%	
Storage Length (ft)	0		100	0		0	200		0	200		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.964			0.968			0.951	
Flt Protected		0.994					0.950			0.950		
Satd. Flow (prot)	0	1972	1686	0	1805	0	1805	1839	0	1805	1807	0
Flt Permitted		0.962			0.998		0.458			0.708		
Satd. Flow (perm)	0	1908	1686	0	1801	0	870	1839	0	1345	1807	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			18		34			16			59	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		777			398			871			768	
Travel Time (s)		17.7			9.0			19.8			17.5	
Peak Hour Factor	0.88	0.88	0.88	0.91	0.91	0.91	0.90	0.90	0.90	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	78	18	1	116	42	71	60	16	88	323	159
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	18	0	159	0	71	76	0	88	482	0
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	26.0	26.0	26.0	26.0	26.0		34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%	43.3%	43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Maximum Green (s)	21.0	21.0	21.0	21.0	21.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		-1.0	-1.0		-1.0		-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lead/Lag												

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Max	Max		Max	Max	
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)		9.8	9.8		9.8		34.8	34.8		34.8	34.8	
Actuated g/C Ratio		0.20	0.20		0.20		0.70	0.70		0.70	0.70	
v/c Ratio		0.24	0.05		0.42		0.12	0.06		0.09	0.38	
Control Delay		17.5	8.2		16.7		4.9	3.6		4.5	5.1	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		17.5	8.2		16.7		4.9	3.6		4.5	5.1	
LOS		B	A		B		A	A		A	A	
Approach Delay		15.9			16.7			4.2			5.0	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		21	0		30		6	5		8	45	
Queue Length 95th (ft)		48	11		69		22	19		24	109	
Internal Link Dist (ft)		697			318			791			688	
Turn Bay Length (ft)			100				200			200		
Base Capacity (vph)		848	759		819		610	1293		942	1284	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.10	0.02		0.19		0.12	0.06		0.09	0.38	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 49.6
Natural Cycle: 45
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.42
Intersection Signal Delay: 8.0 — Intersection LOS: A
Intersection Capacity Utilization 49.7% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4: BEAR MOUNTAIN PKWY. EXT. & STONY STREET

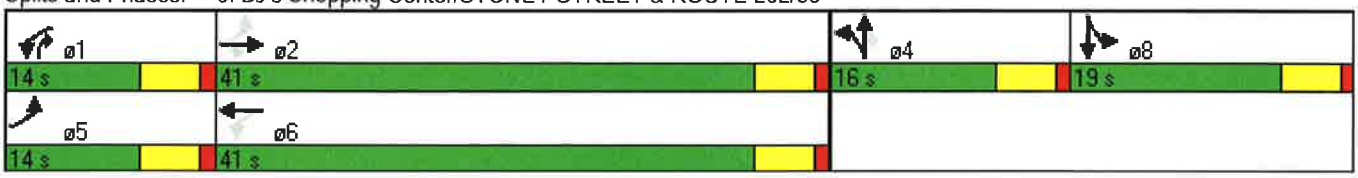
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	1172	227	243	928	48	225	54	334	164	129	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	11
Grade (%)		0%			0%			0%			-2%	
Storage Length (ft)	90		90	450		575	0		0	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor							0.98	0.99			0.99	
Frt			0.850		0.993				0.850		0.954	
Flt Protected	0.950			0.950			0.950	0.970		0.950		
Satd. Flow (prot)	1770	3471	1552	1770	3429	0	1681	1717	1583	1728	1778	0
Flt Permitted	0.192			0.094			0.950	0.970		0.950		
Satd. Flow (perm)	358	3471	1552	175	3429	0	1653	1698	1583	1728	1778	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			115		7				87		21	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			848			484			217	
Travel Time (s)		9.3			12.8			11.0			4.9	
Confl. Peds. (#/hr)							10					10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	5	0	3	0	0	0	0	0	0	0
Adj. Flow (vph)	79	1234	239	256	977	51	250	60	371	182	143	64
Shared Lane Traffic (%)							40%					
Lane Group Flow (vph)	79	1234	239	256	1028	0	150	160	371	182	207	0
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	5	2		1	6		4	4	1	8	8	
Permitted Phases	2		2	6					4			
Detector Phase	5	2	2	1	6		4	4	1	8	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0	10.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	
Minimum Split (s)	8.0	15.0	15.0	8.0	15.0		10.0	10.0	8.0	10.0	10.0	
Total Split (s)	14.0	41.0	41.0	14.0	41.0		16.0	16.0	14.0	19.0	19.0	
Total Split (%)	15.6%	45.6%	45.6%	15.6%	45.6%		17.8%	17.8%	15.6%	21.1%	21.1%	
Maximum Green (s)	9.0	36.0	36.0	9.0	36.0		11.0	11.0	9.0	14.0	14.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				Yes			
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Act Effct Green (s)	45.9	38.6	38.6	52.1	43.9		11.4	11.4	22.1	13.3	13.3	
Actuated g/C Ratio	0.51	0.43	0.43	0.58	0.49		0.13	0.13	0.25	0.15	0.15	
v/c Ratio	0.27	0.83	0.33	0.88	0.61		0.71	0.74	0.82	0.71	0.74	
Control Delay	7.6	20.6	4.1	52.6	20.3		56.6	58.9	31.4	52.0	48.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	7.6	20.6	4.1	52.6	20.3		56.6	58.9	31.4	52.0	48.7	
LOS	A	C	A	D	C		E	E	C	D	D	
Approach Delay		17.4			26.7			43.4			50.3	
Approach LOS		B			C			D			D	
Queue Length 50th (ft)	7	328	35	97	235		86	92	96	98	100	
Queue Length 95th (ft)	m14	#319	8	#250	319		#172	#187	#194	#168	#180	
Internal Link Dist (ft)		532			768			404			137	
Turn Bay Length (ft)	90		90	450								
Base Capacity (vph)	350	1489	732	291	1678		224	229	454	288	314	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.23	0.83	0.33	0.88	0.61		0.67	0.70	0.82	0.63	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green, Master Intersection
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 28.3 Intersection LOS: C
Intersection Capacity Utilization 77.5% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: BJ's Shopping Center/STONEY STREET & ROUTE 202/35



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	1204	59	22	697	163	16	16	2	342	22	70
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1800	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	11	12	15	12	12	13	13
Grade (%)		-2%			-1%			0%			0%	
Storage Length (ft)	75		0	65		390	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99				0.97
Frt		0.993			0.972			0.993				0.850
Flt Protected	0.950			0.950				0.977			0.955	
Satd. Flow (prot)	1728	1833	0	1661	3224	0	0	2028	0	0	1831	1636
Flt Permitted	0.198			0.069				0.977			0.955	
Satd. Flow (perm)	360	1833	0	121	3224	0	0	2017	0	0	1831	1584
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			33			2				42
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		575			2015			185			802	
Travel Time (s)		8.7			30.5			4.2			18.2	
Confl. Peds. (#/hr)			10	10			10					10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	0%	0%	4%	2%	0%	0%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	1	0
Adj. Flow (vph)	45	1309	64	24	758	177	18	18	2	380	24	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	1373	0	24	935	0	0	38	0	0	404	78
Number of Detectors	1	1		1	1		1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	50
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		Perm	NA		Split	NA		Split	NA	pm+ov
Protected Phases	5	2			6		4	4		8	8	5
Permitted Phases	2			6								8
Detector Phase	5	2		6	6		4	4		8	8	5
Switch Phase												
Minimum Initial (s)	3.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	3.0
Minimum Split (s)	9.0	16.0		16.0	16.0		10.0	10.0		10.0	10.0	9.0
Total Split (s)	15.0	79.0		64.0	64.0		10.0	10.0		31.0	31.0	15.0
Total Split (%)	12.5%	65.8%		53.3%	53.3%		8.3%	8.3%		25.8%	25.8%	12.5%
Maximum Green (s)	10.0	73.0		58.0	58.0		5.0	5.0		26.0	26.0	10.0
Yellow Time (s)	4.0	5.0		5.0	5.0		4.0	4.0		4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-1.0		0.0	-1.0			-1.0			-1.0	-1.0
Total Lost Time (s)	5.0	5.0		6.0	5.0			4.0			4.0	4.0
Lead/Lag	Lead			Lag	Lag							Lead
Lead-Lag Optimize?	Yes			Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	2.0
Recall Mode	Max	Max		None	None		None	None		None	None	Max
Walk Time (s)				8.0	8.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)				12.0	12.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)				0	0		0	0		0	0	
Act Effct Green (s)	74.1	74.1		58.1	59.1			6.0			27.0	38.1
Actuated g/C Ratio	0.64	0.64		0.50	0.51			0.05			0.23	0.33
v/c Ratio	0.13	1.17		0.40	0.56			0.36			0.95	0.14
Control Delay	9.6	109.0		43.7	21.0			62.0			77.1	14.6
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	9.6	109.0		43.7	21.0			62.0			77.1	14.6
LOS	A	F		D	C			E			E	B
Approach Delay		105.9			21.6			62.0			66.9	
Approach LOS		F			C			E			E	
Queue Length 50th (ft)	13	~1306		12	254			28			313	18
Queue Length 95th (ft)	28	#1573		#51	320			65			#517	53
Internal Link Dist (ft)		495			1935			105			722	
Turn Bay Length (ft)	75			65								100
Base Capacity (vph)	348	1173		60	1659			107			427	553
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.13	1.17		0.40	0.56			0.36			0.95	0.14

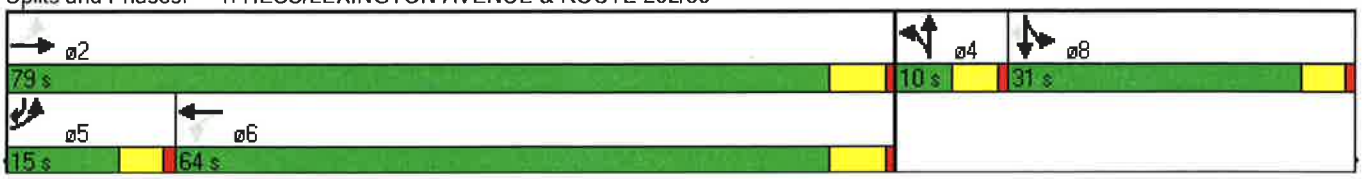
Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 116
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.17
Intersection Signal Delay: 70.9 Intersection LOS: E
Intersection Capacity Utilization 101.3% ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: HESS/LEXINGTON AVENUE & ROUTE 202/35



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	224	1346	594	12	0	353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	13	12	11	11
Grade (%)		-2%	-1%		-2%	
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.997			0.865
Flt Protected	0.950					
Satd. Flow (prot)	1823	3740	3597	0	0	1605
Flt Permitted	0.950					
Satd. Flow (perm)	1823	3740	3597	0	0	1605
Link Speed (mph)		45	45		30	
Link Distance (ft)		576	468		875	
Travel Time (s)		8.7	7.1		19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	4%	0%	0%	0%
Adj. Flow (vph)	243	1463	646	13	0	384
Shared Lane Traffic (%)						
Lane Group Flow (vph)	243	1463	659	0	0	384
Sign Control		Free	Free		Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	224	1346	594	12	0	353
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length	150			0	0	0
Median Width		12	12		12	
Grade (%)		-2%	-1%		-2%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles(%)	0	4	4	0	0	0
Movement Flow Rate	243	1463	646	13	0	384
Number of Lanes	1	2	2	0	0	1

Major/Minor	Lane
Conflicting Flow Rate - All	Capacity (vph)
Stage 1	HCM Control Delay (s)
Stage 2	HCM Lane VC Ratio
Follow-up Headway	HCM Lane LOS
Pot Capacity-1 Maneuver	HCM 95th Percentile Queue (veh)
Stage 1	
Stage 2	
Mov Capacity-1 Maneuver	
Mov Capacity-2 Maneuver	
Stage 1	
Stage 2	

Approach
HCM Control Delay (s)
HCM LOS

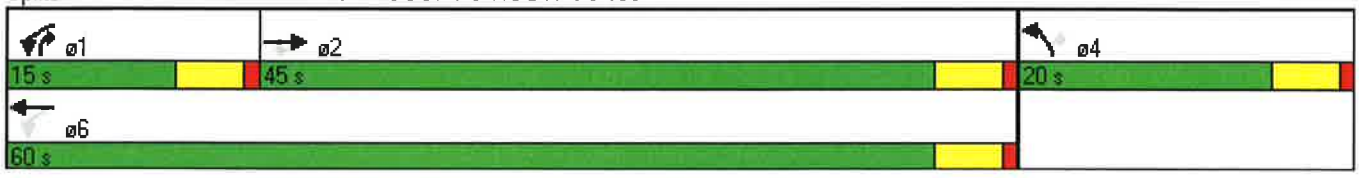
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1352	28	139	642	11	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	1%			-1%	0%	
Storage Length (ft)		75	300		0	100
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3454	1575	1778	3489	1770	1583
Flt Permitted			0.109		0.950	
Satd. Flow (perm)	3454	1575	204	3489	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		14				22
Link Speed (mph)	45			45	30	
Link Distance (ft)	468			612	567	
Travel Time (s)	7.1			9.3	12.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.90	0.90
Heavy Vehicles (%)	4%	2%	2%	4%	2%	2%
Adj. Flow (vph)	1470	30	151	698	12	209
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1470	30	151	698	12	209
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	NA	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	2		1	6	4	1
Permitted Phases		2	6			4
Detector Phase	2	2	1	6	4	1
Switch Phase						
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0	9.0	21.0	20.0	9.0
Total Split (s)	45.0	45.0	15.0	60.0	20.0	15.0
Total Split (%)	56.3%	56.3%	18.8%	75.0%	25.0%	18.8%
Maximum Green (s)	40.0	40.0	10.0	55.0	15.0	10.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	0.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead			Lead

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lead-Lag Optimize?	Yes	Yes	Yes			Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Min	C-Min	None	C-Max	Min	None
Walk Time (s)	5.0	5.0		5.0		
Flash Dont Walk (s)	11.0	11.0		11.0		
Pedestrian Calls (#/hr)	0	0		0		
Act Effct Green (s)	51.3	50.3	64.8	64.8	7.2	20.7
Actuated g/C Ratio	0.64	0.63	0.81	0.81	0.09	0.26
v/c Ratio	0.66	0.03	0.43	0.25	0.08	0.49
Control Delay	11.5	4.9	7.4	2.1	34.0	25.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.5	4.9	7.4	2.1	34.0	25.9
LOS	B	A	A	A	C	C
Approach Delay	11.3			3.0	26.4	
Approach LOS	B			A	C	
Queue Length 50th (ft)	203	3	10	28	6	80
Queue Length 95th (ft)	344	14	44	45	21	130
Internal Link Dist (ft)	388			532	487	
Turn Bay Length (ft)		75	300			100
Base Capacity (vph)	2216	996	392	2828	354	465
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.03	0.39	0.25	0.03	0.45

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 7 (9%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 9.9 Intersection LOS: A
Intersection Capacity Utilization 58.4% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 3: PINE GROVE COURT & ROUTE 202/35



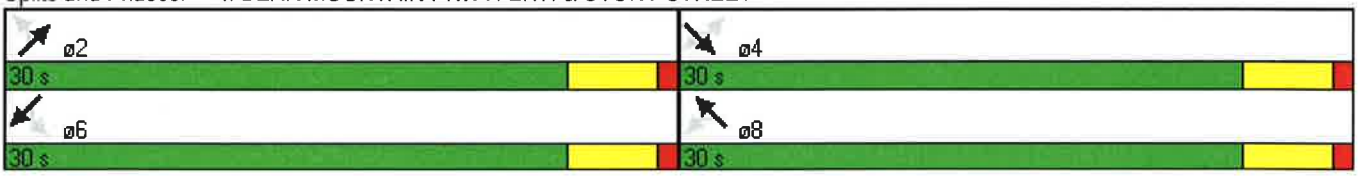
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	95	132	55	2	31	12	24	214	2	150	312	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-13%			-1%			0%			0%	
Storage Length (ft)	0		100	0		0	250		0	250		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.964			0.999			0.995	
Flt Protected		0.979			0.998		0.950			0.950		
Satd. Flow (prot)	0	1942	1686	0	1801	0	1805	1898	0	1805	1890	0
Flt Permitted		0.844			0.986		0.523			0.610		
Satd. Flow (perm)	0	1674	1686	0	1779	0	994	1898	0	1159	1890	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			60		13			1			3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		689			426			875			768	
Travel Time (s)		15.7			9.7			19.9			17.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	103	143	60	2	34	13	27	238	2	167	347	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	246	60	0	49	0	27	240	0	167	358	0
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	30.0	30.0	30.0	30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	25.0	25.0	25.0	25.0	25.0		25.0	25.0		25.0	25.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		-1.0	-1.0		-1.0		-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lead/Lag												

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Max	Max		Max	Max	
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)		13.3	13.3		13.3		28.8	28.8		28.8	28.8	
Actuated g/C Ratio		0.27	0.27		0.27		0.57	0.57		0.57	0.57	
v/c Ratio		0.56	0.12		0.10		0.05	0.22		0.25	0.33	
Control Delay		20.1	4.8		10.2		6.3	6.7		7.6	7.4	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		20.1	4.8		10.2		6.3	6.7		7.6	7.4	
LOS		C	A		B		A	A		A	A	
Approach Delay		17.1			10.2			6.6			7.5	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		56	0		7		3	28		20	45	
Queue Length 95th (ft)		108	18		25		13	72		59	108	
Internal Link Dist (ft)		609			346			795			688	
Turn Bay Length (ft)			100				250			250		
Base Capacity (vph)		875	910		937		571	1091		666	1087	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.28	0.07		0.05		0.05	0.22		0.25	0.33	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 50.1
Natural Cycle: 45
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.56
Intersection Signal Delay: 10.0 — Intersection LOS: A
Intersection Capacity Utilization 49.2% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 4: BEAR MOUNTAIN PKWY. EXT. & STONY STREET



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	1319	174	92	537	16	87	9	194	128	72	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12	12	12	12	11	12	11
Grade (%)		0%			0%			0%			-2%	
Storage Length (ft)	90		90	450		575	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor							0.99					0.97
Frt			0.850		0.996				0.850			0.850
Flt Protected	0.950			0.950			0.950				0.969	
Satd. Flow (prot)	1770	3471	1552	1770	3668	0	1681	1770	1583	0	1823	1546
Flt Permitted	0.377			0.088			0.950				0.969	
Satd. Flow (perm)	702	3471	1552	164	3668	0	1663	1770	1583	0	1823	1505
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		4				117			126
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			880			289			194	
Travel Time (s)		9.3			13.3			6.6			4.4	
Confl. Peds. (#/hr)							10					10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	5	0	3	0	0	0	0	0	0	0
Adj. Flow (vph)	32	1434	189	100	584	17	97	10	216	142	80	126
Shared Lane Traffic (%)							0%					
Lane Group Flow (vph)	32	1434	189	100	601	0	97	10	216	0	222	126
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2		1	6		4	4	1	8	8	5
Permitted Phases	2		2	6					4			8
Detector Phase	5	2	2	1	6		4	4	1	8	8	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	10.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	8.0	15.0	15.0	8.0	15.0		10.0	10.0	8.0	10.0	10.0	8.0
Total Split (s)	11.0	45.0	45.0	11.0	45.0		14.0	14.0	11.0	20.0	20.0	11.0
Total Split (%)	12.2%	50.0%	50.0%	12.2%	50.0%		15.6%	15.6%	12.2%	22.2%	22.2%	12.2%
Maximum Green (s)	6.0	40.0	40.0	6.0	40.0		9.0	9.0	6.0	15.0	15.0	6.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0		-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)							7.0	7.0		7.0	7.0	
Flash Dont Walk (s)							11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)							0	0		0	0	
Act Effct Green (s)	52.0	45.8	45.8	53.0	46.3		9.0	9.0	14.5		14.5	20.7
Actuated g/C Ratio	0.58	0.51	0.51	0.59	0.51		0.10	0.10	0.16		0.16	0.23
v/c Ratio	0.07	0.81	0.23	0.46	0.32		0.57	0.06	0.61		0.75	0.28
Control Delay	8.6	25.2	8.9	17.7	14.5		52.3	36.7	16.6		52.6	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Delay	8.6	25.2	8.9	17.7	14.5		52.3	36.7	16.6		52.6	6.4
LOS	A	C	A	B	B		D	D	B		D	A
Approach Delay		23.0			15.0			28.0			35.9	
Approach LOS		C			B			C			D	
Queue Length 50th (ft)	7	383	33	24	109		55	5	32		119	0
Queue Length 95th (ft)	19	#537	75	58	152		108	22	75		#212	39
Internal Link Dist (ft)		532			800			209			114	
Turn Bay Length (ft)	90		90	450								
Base Capacity (vph)	495	1766	831	222	1890		187	197	357		324	459
Starvation Cap Reductn	0	0	0	0	0		0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	0
Reduced v/c Ratio	0.06	0.81	0.23	0.45	0.32		0.52	0.05	0.61		0.69	0.27

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green, Master Intersection
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 23.1 Intersection LOS: C
Intersection Capacity Utilization 70.5% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: BJ's Shopping Center/STONEY STREET & ROUTE 202/35

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	35	1489	22	22	810	104	13	0	13	59	0	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-2%			0%			0%			0%	
Storage Length (ft)	200		0	100		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.998				0.850		0.932			0.850	
Flt Protected	0.950			0.950				0.976		0.950		
Satd. Flow (prot)	1787	3500	0	1770	3471	1583	0	1694	0	3433	1583	0
Flt Permitted	0.285			0.100				0.976		0.950		
Satd. Flow (perm)	536	3500	0	186	3471	1583	0	1694	0	3433	1583	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				113		14			451	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		317			518			294			337	
Travel Time (s)		4.8			7.8			6.7			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	38	1618	24	24	880	113	14	0	14	66	0	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	1642	0	24	880	113	0	28	0	66	48	0
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	10.0		8.0	10.0	10.0	10.0	10.0		10.0	10.0	
Total Split (s)	12.0	38.0		12.0	38.0	38.0	20.0	20.0		20.0	20.0	
Total Split (%)	13.3%	42.2%		13.3%	42.2%	42.2%	22.2%	22.2%		22.2%	22.2%	
Maximum Green (s)	8.0	34.0		8.0	34.0	34.0	16.0	16.0		16.0	16.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)	70.6	68.8		69.5	66.6	66.6		6.5		7.1	7.1	
Actuated g/C Ratio	0.78	0.76		0.77	0.74	0.74		0.07		0.08	0.08	
v/c Ratio	0.08	0.61		0.10	0.34	0.09		0.21		0.24	0.09	
Control Delay	4.1	10.1		4.7	7.3	2.1		29.0		40.6	0.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Delay	4.1	10.1		4.7	7.3	2.1		29.0		40.6	0.3	
LOS	A	B		A	A	A		C		D	A	
Approach Delay		9.9			6.7			29.0			23.7	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)	3	102		2	81	0		8		18	0	
Queue Length 95th (ft)	16	487		11	193	22		33		38	0	
Internal Link Dist (ft)		237			438			214			257	
Turn Bay Length (ft)	200			100								
Base Capacity (vph)	535	2674		287	2570	1201		313		610	652	
Starvation Cap Reductn	0	0		0	0	0		0		0	0	
Spillback Cap Reductn	0	0		0	0	0		0		0	0	
Storage Cap Reductn	0	0		0	0	0		0		0	0	
Reduced v/c Ratio	0.07	0.61		0.08	0.34	0.09		0.09		0.11	0.07	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 9.5 Intersection LOS: A
Intersection Capacity Utilization 56.7% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 6: PARKSIDE CORNERS/SITE ACCESS & ROUTE 202/35

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	945	76	43	1300	356	28	29	2	233	15	70
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1800	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	11	12	15	12	12	13	13
Grade (%)		-2%			-1%			0%			0%	
Storage Length (ft)	75		0	65		390	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						1.00				0.97
Frt		0.989			0.968			0.996				0.850
Flt Protected	0.950			0.950				0.977			0.955	
Satd. Flow (prot)	1728	1826	0	1661	3212	0	0	2034	0	0	1831	1636
Flt Permitted	0.084			0.088				0.690			0.737	
Satd. Flow (perm)	153	1826	0	154	3212	0	0	1431	0	0	1413	1592
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			55			2				27
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		575			2015			185			802	
Travel Time (s)		8.7			30.5			4.2			18.2	
Confl. Peds. (#/hr)			10	10			10					10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	0%	0%	4%	2%	0%	0%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	1	0
Adj. Flow (vph)	104	995	80	45	1368	375	31	32	2	259	17	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	1075	0	45	1743	0	0	65	0	0	276	78
Number of Detectors	1	1		1	1		1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	50
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			3			3	5
Permitted Phases	2			6			3			3		3
Detector Phase	5	2		1	6		3	3		3	3	5
Switch Phase												
Minimum Initial (s)	3.0	10.0		3.0	10.0		5.0	5.0		5.0	5.0	3.0
Minimum Split (s)	9.0	16.0		9.0	16.0		10.0	10.0		10.0	10.0	9.0
Total Split (s)	15.0	50.0		15.0	50.0		25.0	25.0		25.0	25.0	15.0
Total Split (%)	16.7%	55.6%		16.7%	55.6%		27.8%	27.8%		27.8%	27.8%	16.7%
Maximum Green (s)	10.0	44.0		10.0	44.0		20.0	20.0		20.0	20.0	10.0
Yellow Time (s)	4.0	5.0		4.0	5.0		4.0	4.0		4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-1.0		0.0	-1.0			-1.0			-1.0	-1.0
Total Lost Time (s)	5.0	5.0		5.0	5.0			4.0			4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag							Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							Yes
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	2.0
Recall Mode	None	Max		None	Max		None	None		None	None	None
Walk Time (s)					8.0		8.0	8.0		8.0	8.0	
Flash Dont Walk (s)					12.0		10.0	10.0		10.0	10.0	
Pedestrian Calls (#/hr)					0		0	0		0	0	
Act Effct Green (s)	53.1	48.7		49.7	45.4			19.7			19.7	27.5
Actuated g/C Ratio	0.63	0.58		0.59	0.54			0.24			0.24	0.33
v/c Ratio	0.46	1.01		0.24	0.99			0.19			0.83	0.14
Control Delay	15.2	51.3		9.0	39.5			27.9			53.5	13.2
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	15.2	51.3		9.0	39.5			27.9			53.5	13.2
LOS	B	D		A	D			C			D	B
Approach Delay		48.1			38.7			27.9			44.7	
Approach LOS		D			D			C			D	
Queue Length 50th (ft)	18	~673		8	~530			27			142	18
Queue Length 95th (ft)	52	#937		19	#709			63			#284	46
Internal Link Dist (ft)		495			1935			105			722	
Turn Bay Length (ft)	75			65								100
Base Capacity (vph)	289	1065		279	1768			364			358	610
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.36	1.01		0.16	0.99			0.18			0.77	0.13

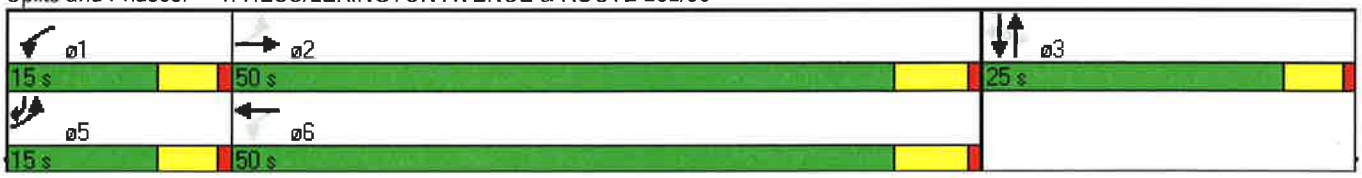
Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 83.7
Natural Cycle: 90
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.01
Intersection Signal Delay: 42.4 Intersection LOS: D
Intersection Capacity Utilization 89.8% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: HESS/LEXINGTON AVENUE & ROUTE 202/35



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	186	1341	1339	11	0	751
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	13	12	11	11
Grade (%)		-2%	-1%		-2%	
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.999			0.865
Flt Protected	0.950					
Satd. Flow (prot)	1823	3506	3602	0	0	1605
Flt Permitted	0.950					
Satd. Flow (perm)	1823	3506	3602	0	0	1605
Link Speed (mph)		45	45		30	
Link Distance (ft)		703	468		883	
Travel Time (s)		10.7	7.1		20.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	4%	4%	0%	0%	0%
Adj. Flow (vph)	202	1458	1455	12	0	816
Shared Lane Traffic (%)						
Lane Group Flow (vph)	202	1458	1467	0	0	816
Sign Control		Free	Free		Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 90.5%		ICU Level of Service E	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	186	1341	1339	11	0	751
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length	150			0	0	0
Median Width		12	12		12	
Grade (%)		-2%	-1%		-2%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles(%)	0	4	4	0	0	0
Movement Flow Rate	202	1458	1455	12	0	816
Number of Lanes	1	2	2	0	0	1

Major/Minor	Lane
Conflicting Flow Rate - All	Capacity (vph)
Stage 1	HCM Control Delay (s)
Stage 2	HCM Lane VC Ratio
Follow-up Headway	HCM Lane LOS
Pot Capacity-1 Maneuver	HCM 95th Percentile Queue (veh)
Stage 1	
Stage 2	
Mov Capacity-1 Maneuver	
Mov Capacity-2 Maneuver	
Stage 1	
Stage 2	

Approach
HCM Control Delay (s)
HCM LOS

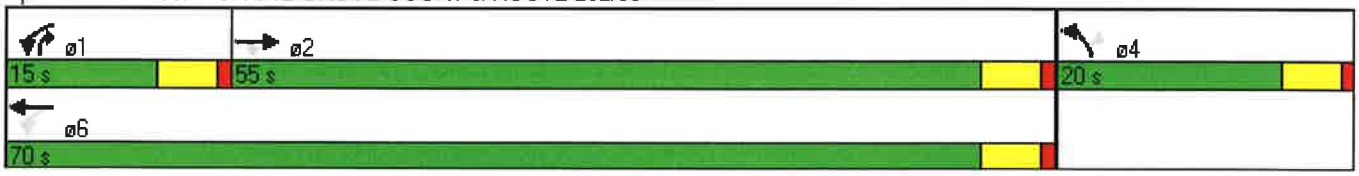
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱	↰	↑↑	↰	↱
Volume (vph)	1375	75	297	1486	14	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	1%			-1%	0%	
Storage Length (ft)		75	300		0	100
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3454	1575	1778	3489	1770	1583
Flt Permitted			0.113		0.950	
Satd. Flow (perm)	3454	1575	212	3489	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		37				37
Link Speed (mph)	45			45	30	
Link Distance (ft)	468			612	567	
Travel Time (s)	7.1			9.3	12.9	
Peak Hour Factor	0.97	0.97	0.92	0.92	0.80	0.80
Heavy Vehicles (%)	4%	2%	2%	4%	2%	2%
Adj. Flow (vph)	1418	77	323	1615	18	231
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1418	77	323	1615	18	231
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	NA	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	2		1	6	4	1
Permitted Phases		2	6			4
Detector Phase	2	2	1	6	4	1
Switch Phase						
Minimum Initial (s)	4.0	4.0	1.0	4.0	4.0	1.0
Minimum Split (s)	10.0	10.0	6.0	10.0	10.0	6.0
Total Split (s)	55.0	55.0	15.0	70.0	20.0	15.0
Total Split (%)	61.1%	61.1%	16.7%	77.8%	22.2%	16.7%
Maximum Green (s)	50.0	50.0	10.0	65.0	15.0	10.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	0.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead			Lead

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lead-Lag Optimize?	Yes	Yes	Yes			Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Min	C-Min	None	C-Max	None	None
Act Effct Green (s)	59.2	58.2	81.0	83.4	7.5	22.8
Actuated g/C Ratio	0.66	0.65	0.90	0.93	0.08	0.25
v/c Ratio	0.62	0.07	0.65	0.50	0.12	0.54
Control Delay	9.1	4.8	30.4	1.2	39.6	27.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.1	4.8	30.4	1.2	39.6	27.7
LOS	A	A	C	A	D	C
Approach Delay	8.9			6.1	28.6	
Approach LOS	A			A	C	
Queue Length 50th (ft)	98	3	110	0	10	101
Queue Length 95th (ft)	302	m17	m153	m41	27	124
Internal Link Dist (ft)	388			532	487	
Turn Bay Length (ft)		75	300			100
Base Capacity (vph)	2273	1032	500	3233	315	428
Starvation Cap Reductn	0	0	0	146	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.07	0.65	0.52	0.06	0.54

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 7 (8%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 8.7 Intersection LOS: A
Intersection Capacity Utilization 67.8% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: PINE GROVE COURT & ROUTE 202/35



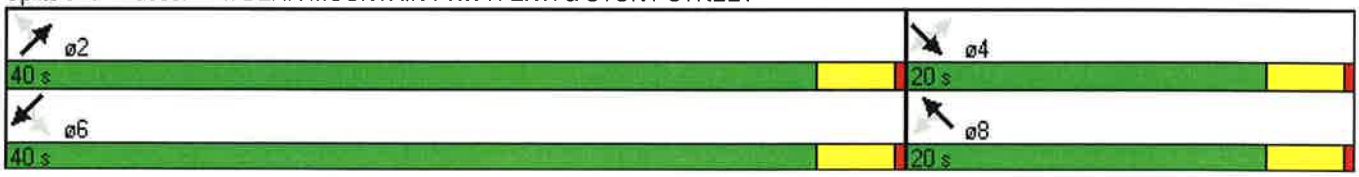
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	16	80	33	2	128	36	65	135	12	262	727	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-13%			-1%			0%			0%	
Storage Length (ft)	0		100	0		0	200		0	200		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.971			0.988			0.984	
Flt Protected		0.992			0.999		0.950			0.950		
Satd. Flow (prot)	0	1968	1686	0	1816	0	1805	1877	0	1805	1870	0
Flt Permitted		0.940			0.997		0.168			0.636		
Satd. Flow (perm)	0	1865	1686	0	1812	0	319	1877	0	1208	1870	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			40		23			13			18	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		650			445			883			768	
Travel Time (s)		14.8			10.1			20.1			17.5	
Peak Hour Factor	0.82	0.82	0.82	0.83	0.83	0.83	0.76	0.76	0.76	0.84	0.84	0.84
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	20	98	40	2	154	43	86	178	16	312	865	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	118	40	0	199	0	86	194	0	312	967	0
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	20.0	20.0	20.0	20.0	20.0		20.0	20.0		20.0	20.0	
Total Split (s)	20.0	20.0	20.0	20.0	20.0		40.0	40.0		40.0	40.0	
Total Split (%)	33.3%	33.3%	33.3%	33.3%	33.3%		66.7%	66.7%		66.7%	66.7%	
Maximum Green (s)	16.0	16.0	16.0	16.0	16.0		36.0	36.0		36.0	36.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lead/Lag												

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Max	Max		Max	Max	
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)		10.9	10.9		10.9		39.0	39.0		39.0	39.0	
Actuated g/C Ratio		0.19	0.19		0.19		0.67	0.67		0.67	0.67	
v/c Ratio		0.34	0.11		0.55		0.40	0.15		0.38	0.76	
Control Delay		21.6	7.5		23.9		12.7	4.2		6.6	13.2	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		21.6	7.5		23.9		12.7	4.2		6.6	13.2	
LOS		C	A		C		B	A		A	B	
Approach Delay		18.0			23.9			6.8			11.6	
Approach LOS		B			C			A			B	
Queue Length 50th (ft)		33	0		52		10	17		37	170	
Queue Length 95th (ft)		63	16		92		37	38		87	#359	
Internal Link Dist (ft)		570			365			803			688	
Turn Bay Length (ft)			100				200			200		
Base Capacity (vph)		518	497		520		215	1268		814	1265	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.23	0.08		0.38		0.40	0.15		0.38	0.76	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 57.9
Natural Cycle: 60
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 12.7 Intersection LOS: B
Intersection Capacity Utilization 71.7% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: BEAR MOUNTAIN PKWY. EXT. & STONY STREET



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	78	1198	197	192	1229	58	230	56	272	201	125	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	14	12	12	12	12	11	12	11
Grade (%)		0%			0%			0%			-2%	
Storage Length (ft)	90		90	450		575	0		0	0		0
Storage Lanes	1		1	1		0	1		1	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor							0.99	0.99				0.97
Frt			0.850		0.993				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.970			0.970	
Satd. Flow (prot)	1770	3471	1552	1770	3658	0	1681	1717	1583	0	1825	1546
Flt Permitted	0.122			0.117			0.950	0.970			0.970	
Satd. Flow (perm)	227	3471	1552	218	3658	0	1666	1707	1583	0	1825	1505
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			126		6				131			42
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			803			289			193	
Travel Time (s)		9.3			12.2			6.6			4.4	
Confl. Peds. (#/hr)							10					10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	5	0	3	0	0	0	0	0	0	0
Adj. Flow (vph)	82	1261	207	202	1294	61	256	62	302	223	139	181
Shared Lane Traffic (%)							40%					
Lane Group Flow (vph)	82	1261	207	202	1355	0	154	164	302	0	362	181
Number of Detectors	1	1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Split	NA	pm+ov	Split	NA	pm+ov
Protected Phases	5	2	4	1	6		4	4	1	8	8	5
Permitted Phases	2		2	6					4			8
Detector Phase	5	2	4	1	6		4	4	1	8	8	5
Switch Phase												
Minimum Initial (s)	3.0	10.0	5.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	3.0
Minimum Split (s)	8.0	15.0	10.0	8.0	15.0		10.0	10.0	8.0	10.0	10.0	8.0
Total Split (s)	12.0	35.0	18.0	12.0	35.0		18.0	18.0	12.0	25.0	25.0	12.0
Total Split (%)	13.3%	38.9%	20.0%	13.3%	38.9%		20.0%	20.0%	13.3%	27.8%	27.8%	13.3%
Maximum Green (s)	7.0	30.0	13.0	7.0	30.0		13.0	13.0	7.0	20.0	20.0	7.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0		-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag				Lead			Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			Yes
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	C-Max	None	None	Max		None	None	None	None	None	None
Walk Time (s)			7.0				7.0	7.0		7.0	7.0	
Flash Dont Walk (s)			11.0				11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)			0				0	0		0	0	
Act Effct Green (s)	39.9	32.7	49.1	42.7	34.1		12.4	12.4	21.0		20.3	27.5
Actuated g/C Ratio	0.44	0.36	0.55	0.47	0.38		0.14	0.14	0.23		0.23	0.31
v/c Ratio	0.36	1.00	0.23	0.80	0.98		0.66	0.69	0.64		0.88	0.37
Control Delay	20.5	53.2	6.5	44.0	48.9		50.8	52.4	15.5		57.4	18.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0
Total Delay	20.5	53.2	6.5	44.0	48.9		50.8	52.4	15.5		57.4	18.2
LOS	C	D	A	D	D		D	D	B		E	B
Approach Delay		45.2			48.2			34.0			44.3	
Approach LOS		D			D			C			D	
Queue Length 50th (ft)	26	~432	26	67	~451		87	92	44		197	54
Queue Length 95th (ft)	m53	#534	43	#193	#589		153	162	89		#348	106
Internal Link Dist (ft)		532			723			209			113	
Turn Bay Length (ft)	90		90	450								
Base Capacity (vph)	240	1262	929	251	1389		261	267	470		428	505
Starvation Cap Reductn	0	0	0	0	0		0	0	0		0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0		0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0		0	0
Reduced v/c Ratio	0.34	1.00	0.22	0.80	0.98		0.59	0.61	0.64		0.85	0.36

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green, Master Intersection
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.00
Intersection Signal Delay: 44.6 Intersection LOS: D
Intersection Capacity Utilization 82.6% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: BJ's Shopping Center/STONEY STREET & ROUTE 202/35

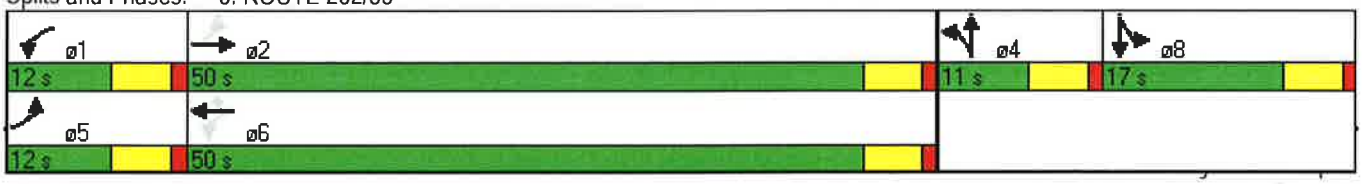
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	124	1044	42	42	1481	372	42	0	42	310	0	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-2%			0%			0%			0%	
Storage Length (ft)	200		0	100		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.994				0.850		0.932			0.850	
Flt Protected	0.950			0.950				0.976		0.950		
Satd. Flow (prot)	1787	3487	0	1770	3471	1583	0	1694	0	3433	1583	0
Flt Permitted	0.081			0.182				0.976		0.950		
Satd. Flow (perm)	152	3487	0	339	3471	1583	0	1694	0	3433	1583	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				392		43			189	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		199			413			311			316	
Travel Time (s)		3.0			6.3			7.1			7.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	131	1099	44	44	1559	392	47	0	47	344	0	207
Shared Lane Traffic (%)												
Lane Group Flow (vph)	131	1143	0	44	1559	392	0	94	0	344	207	0
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	9.0	21.0		9.0	21.0	21.0	10.0	10.0		10.0	10.0	
Total Split (s)	12.0	50.0		12.0	50.0	50.0	11.0	11.0		17.0	17.0	
Total Split (%)	13.3%	55.6%		13.3%	55.6%	55.6%	12.2%	12.2%		18.9%	18.9%	
Maximum Green (s)	7.0	45.0		7.0	45.0	45.0	6.0	6.0		12.0	12.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0		5.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		5.0			5.0	5.0						
Flash Dont Walk (s)		11.0			11.0	11.0						
Pedestrian Calls (#/hr)		0			0	0						
Act Effct Green (s)	56.7	52.5		54.0	47.7	47.7		5.9		11.7	11.7	
Actuated g/C Ratio	0.63	0.58		0.60	0.53	0.53		0.07		0.13	0.13	
v/c Ratio	0.60	0.56		0.15	0.85	0.38		0.62		0.77	0.56	
Control Delay	25.3	14.8		8.7	21.7	3.2		43.1		50.4	13.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Delay	25.3	14.8		8.7	21.7	3.2		43.1		50.4	13.7	
LOS	C	B		A	C	A		D		D	B	
Approach Delay		15.9			17.8			43.1			36.6	
Approach LOS		B			B			D			D	
Queue Length 50th (ft)	27	236		9	271	4		29		98	9	
Queue Length 95th (ft)	#93	311		m21	#427	48		#94		#156	73	
Internal Link Dist (ft)		119			333			231			236	
Turn Bay Length (ft)	200			100								
Base Capacity (vph)	223	2036		317	1840	1024		153		458	375	
Starvation Cap Reductn	0	0		0	0	0		0		0	0	
Spillback Cap Reductn	0	0		0	0	0		0		0	0	
Storage Cap Reductn	0	0		0	0	0		0		0	0	
Reduced v/c Ratio	0.59	0.56		0.14	0.85	0.38		0.61		0.75	0.55	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 12 (13%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 20.4 Intersection LOS: C
Intersection Capacity Utilization 80.9% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: ROUTE 202/35



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	1173	69	23	1041	352	29	12	2	298	28	81
Ideal Flow (vphpl)	1900	1900	1900	1800	1800	1800	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	11	12	11	12	15	12	12	13	13
Grade (%)		-2%			-1%			0%			0%	
Storage Length (ft)	75		0	65		390	0		0	0		100
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00						0.99				
Frt		0.992			0.962			0.994				0.850
Flt Protected	0.950			0.950				0.967			0.956	
Satd. Flow (prot)	1728	1832	0	1661	3195	0	0	2009	0	0	1833	1636
Flt Permitted	0.070			0.077				0.967			0.956	
Satd. Flow (perm)	127	1832	0	135	3195	0	0	1995	0	0	1833	1636
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			63			2				55
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		575			2015			185			802	
Travel Time (s)		8.7			30.5			4.2			18.2	
Confl. Peds. (#/hr)			10	10			10					10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	4%	0%	0%	4%	2%	0%	0%	0%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	1	0
Adj. Flow (vph)	84	1235	73	24	1096	371	32	13	2	324	30	88
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	1308	0	24	1467	0	0	47	0	0	354	88
Number of Detectors	1	1		1	1		1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	50
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	50	50		50	50		50	50		50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Turn Type	pm+pt	NA		Perm	NA		Split	NA		Split	NA	Prot
Protected Phases	5	2			6		4	4		8	8	8
Permitted Phases	2			6								
Detector Phase	5	2		6	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	3.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.0	16.0		16.0	16.0		10.0	10.0		10.0	10.0	10.0
Total Split (s)	15.0	67.0		52.0	52.0		10.0	10.0		23.0	23.0	23.0
Total Split (%)	15.0%	67.0%		52.0%	52.0%		10.0%	10.0%		23.0%	23.0%	23.0%
Maximum Green (s)	10.0	61.0		46.0	46.0		5.0	5.0		18.0	18.0	18.0
Yellow Time (s)	4.0	5.0		5.0	5.0		4.0	4.0		4.0	4.0	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	-1.0		0.0	-1.0			-1.0			-1.0	-1.0
Total Lost Time (s)	5.0	5.0		6.0	5.0			4.0			4.0	4.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Max		Max	Max		None	None		None	None	None
Walk Time (s)				8.0	8.0		8.0	8.0		8.0	8.0	8.0
Flash Dont Walk (s)				12.0	12.0		10.0	10.0		10.0	10.0	10.0
Pedestrian Calls (#/hr)				0	0		0	0		0	0	0
Act Effct Green (s)	62.2	62.2		51.8	52.8			6.0			19.1	19.1
Actuated g/C Ratio	0.65	0.65		0.54	0.55			0.06			0.20	0.20
v/c Ratio	0.44	1.10		0.33	0.82			0.37			0.97	0.24
Control Delay	17.1	78.1		32.3	24.0			51.8			81.7	17.6
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	0.0
Total Delay	17.1	78.1		32.3	24.0			51.8			81.7	17.6
LOS	B	E		C	C			D			F	B
Approach Delay		74.4			24.1			51.8			69.0	
Approach LOS		E			C			D			E	
Queue Length 50th (ft)	20	~989		9	409			28			~233	18
Queue Length 95th (ft)	51	#1249		#42	#601			66			#416	60
Internal Link Dist (ft)		495			1935			105			722	
Turn Bay Length (ft)	75			65								100
Base Capacity (vph)	249	1188		73	1787			128			364	369
Starvation Cap Reductn	0	0		0	0			0			0	0
Spillback Cap Reductn	0	0		0	0			0			0	0
Storage Cap Reductn	0	0		0	0			0			0	0
Reduced v/c Ratio	0.34	1.10		0.33	0.82			0.37			0.97	0.24

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 96
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.10
Intersection Signal Delay: 51.2 Intersection LOS: D
Intersection Capacity Utilization 97.4% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: HESS/LEXINGTON AVENUE & ROUTE 202/35

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	224	1607	1225	23	0	546
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	11	11
Grade (%)		-2%	-1%		-2%	
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.997			0.865
Flt Protected	0.950					
Satd. Flow (prot)	1823	3506	3480	0	0	1605
Flt Permitted	0.950					
Satd. Flow (perm)	1823	3506	3480	0	0	1605
Link Speed (mph)		45	45		30	
Link Distance (ft)		700	468		871	
Travel Time (s)		10.6	7.1		19.8	
Peak Hour Factor	0.95	0.95	0.99	0.99	0.95	0.95
Heavy Vehicles (%)	0%	4%	4%	0%	0%	0%
Adj. Flow (vph)	236	1692	1237	23	0	575
Shared Lane Traffic (%)						
Lane Group Flow (vph)	236	1692	1260	0	0	575
Sign Control		Free	Free		Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 75.1%		ICU Level of Service D	
Analysis Period (min) 15			

Intersection	
Intersection Delay (sec/veh):	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	224	1607	1225	23	0	546
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length	150			0	0	0
Median Width		12	12		12	
Grade (%)		-2%	-1%		-2%	
Peak Hour Factor	0.95	0.95	0.99	0.99	0.95	0.95
Heavy Vehicles(%)	0	4	4	0	0	0
Movement Flow Rate	236	1692	1237	23	0	575
Number of Lanes	1	2	2	0	0	1

Major/Minor	Lane
Conflicting Flow Rate - All	Capacity (vph)
Stage 1	HCM Control Delay (s)
Stage 2	HCM Lane VC Ratio
Follow-up Headway	HCM Lane LOS
Pot Capacity-1 Maneuver	HCM 95th Percentile Queue (veh)
Stage 1	
Stage 2	
Mov Capacity-1 Maneuver	
Mov Capacity-2 Maneuver	
Stage 1	
Stage 2	

Approach
HCM Control Delay (s)
HCM LOS

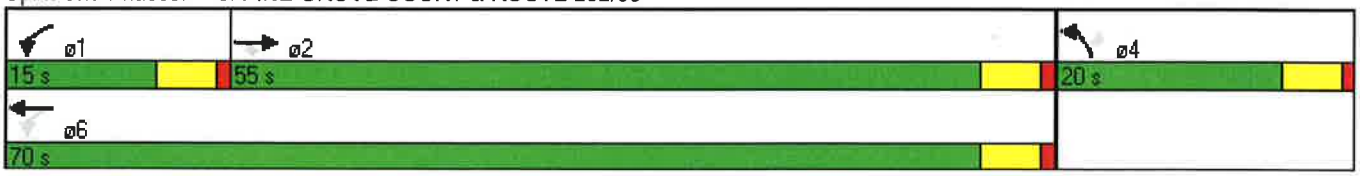
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱	↰	↑↑	↰	↱
Volume (vph)	1676	87	148	1423	47	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	1%			-1%	0%	
Storage Length (ft)		75	300		0	100
Storage Lanes		1	1		1	1
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3454	1575	1778	3489	1770	1583
Flt Permitted			0.063		0.950	
Satd. Flow (perm)	3454	1575	118	3489	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		36				176
Link Speed (mph)	45			45	30	
Link Distance (ft)	468			612	582	
Travel Time (s)	7.1			9.3	13.2	
Peak Hour Factor	0.93	0.93	0.96	0.96	0.90	0.90
Heavy Vehicles (%)	4%	2%	2%	4%	2%	2%
Adj. Flow (vph)	1802	94	154	1482	52	176
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1802	94	154	1482	52	176
Number of Detectors	1	1	1	1	1	1
Detector Template						
Leading Detector (ft)	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	50	50	50	50	50	50
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	NA	Perm	pm+pt	NA	NA	Perm
Protected Phases	2		1	6	4	
Permitted Phases		2	6			4
Detector Phase	2	2	1	6	4	4
Switch Phase						
Minimum Initial (s)	4.0	4.0	1.0	4.0	1.0	1.0
Minimum Split (s)	10.0	10.0	6.0	10.0	6.0	6.0
Total Split (s)	55.0	55.0	15.0	70.0	20.0	20.0
Total Split (%)	61.1%	61.1%	16.7%	77.8%	22.2%	22.2%
Maximum Green (s)	50.0	50.0	10.0	65.0	15.0	15.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	-1.0	0.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	4.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lead-Lag Optimize?	Yes	Yes	Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Min	C-Min	None	C-Max	Min	Min
Act Effct Green (s)	59.0	58.0	72.7	72.7	9.3	9.3
Actuated g/C Ratio	0.66	0.64	0.81	0.81	0.10	0.10
v/c Ratio	0.80	0.09	0.56	0.53	0.28	0.55
Control Delay	22.7	10.7	24.1	3.7	40.1	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.7	10.7	24.1	3.7	40.1	12.7
LOS	C	B	C	A	D	B
Approach Delay	22.1			5.6	19.0	
Approach LOS	C			A	B	
Queue Length 50th (ft)	530	24	52	114	28	0
Queue Length 95th (ft)	#646	m37	m100	195	60	56
Internal Link Dist (ft)	388			532	502	
Turn Bay Length (ft)		75	300			100
Base Capacity (vph)	2266	1029	309	2817	315	426
Starvation Cap Reductn	0	0	0	108	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.09	0.50	0.55	0.17	0.41

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 77 (86%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 14.7 Intersection LOS: B
Intersection Capacity Utilization 67.9% ICU Level of Service C
Analysis Period (min) 15
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: PINE GROVE COURT & ROUTE 202/35



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	10	69	26	1	106	38	74	173	14	112	519	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-13%			-1%			0%			0%	
Storage Length (ft)	0		100	0		0	200		0	200		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.964			0.988			0.966	
Flt Protected		0.994					0.950			0.950		
Satd. Flow (prot)	0	1972	1686	0	1805	0	1805	1877	0	1805	1835	0
Flt Permitted		0.961			0.998		0.319			0.628		
Satd. Flow (perm)	0	1906	1686	0	1801	0	606	1877	0	1193	1835	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			30		34			10			35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		777			398			871			768	
Travel Time (s)		17.7			9.0			19.8			17.5	
Peak Hour Factor	0.88	0.88	0.88	0.91	0.91	0.91	0.90	0.90	0.90	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	11	78	30	1	116	42	82	192	16	118	546	159
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	30	0	159	0	82	208	0	118	705	0
Number of Detectors	1	1	1	1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50		50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	26.0	26.0	26.0	26.0	26.0		34.0	34.0		34.0	34.0	
Total Split (%)	43.3%	43.3%	43.3%	43.3%	43.3%		56.7%	56.7%		56.7%	56.7%	
Maximum Green (s)	21.0	21.0	21.0	21.0	21.0		29.0	29.0		29.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		-1.0	-1.0		-1.0		-1.0	-1.0		-1.0	-1.0	
Total Lost Time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lead/Lag												

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Max	Max		Max	Max	
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)		9.7	9.7		9.7		34.6	34.6		34.6	34.6	
Actuated g/C Ratio		0.20	0.20		0.20		0.70	0.70		0.70	0.70	
v/c Ratio		0.24	0.08		0.42		0.19	0.16		0.14	0.54	
Control Delay		17.4	7.3		16.6		6.0	4.3		4.8	7.3	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		17.4	7.3		16.6		6.0	4.3		4.8	7.3	
LOS		B	A		B		A	A		A	A	
Approach Delay		14.9			16.6			4.7			6.9	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)		21	0		30		8	18		11	86	
Queue Length 95th (ft)		48	14		69		29	47		32	205	
Internal Link Dist (ft)		697			318			791			688	
Turn Bay Length (ft)			100				200			200		
Base Capacity (vph)		849	768		821		424	1317		835	1295	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.10	0.04		0.19		0.19	0.16		0.14	0.54	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 49.4
Natural Cycle: 55
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.54
Intersection Signal Delay: 8.3 — Intersection LOS: A
Intersection Capacity Utilization 61.4% — ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 4: BEAR MOUNTAIN PKWY. EXT. & STONY STREET

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	75	1414	227	243	1076	48	225	54	334	202	129	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	11	12	11
Grade (%)		0%			0%			0%			-2%	
Storage Length (ft)	90		90	450		575	0		0	0		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Ped Bike Factor							0.98	0.99			0.99	
Frt			0.850		0.994				0.850		0.954	
Flt Protected	0.950			0.950			0.950	0.970		0.950		
Satd. Flow (prot)	1770	3471	1552	1770	3432	0	1681	1717	1583	1728	1778	0
Flt Permitted	0.128			0.095			0.950	0.970		0.950		
Satd. Flow (perm)	238	3471	1552	177	3432	0	1653	1698	1583	1728	1778	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			95		6				58		21	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		612			848			484			217	
Travel Time (s)		9.3			12.8			11.0			4.9	
Confl. Peds. (#/hr)							10					10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	4%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	5	0	3	0	0	0	0	0	0	0
Adj. Flow (vph)	79	1488	239	256	1133	51	250	60	371	224	143	64
Shared Lane Traffic (%)							40%					
Lane Group Flow (vph)	79	1488	239	256	1184	0	150	160	371	224	207	0
Number of Detectors	1	1	1	1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50	50	50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	
Detector 1 Size(ft)	50	50	50	50	50		50	50	50	50	50	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	5	2		1	6		4	4	1	8	8	
Permitted Phases	2		2	6					4			
Detector Phase	5	2	2	1	6		4	4	1	8	8	
Switch Phase												
Minimum Initial (s)	3.0	10.0	10.0	3.0	10.0		5.0	5.0	3.0	5.0	5.0	
Minimum Split (s)	8.0	15.0	15.0	8.0	15.0		10.0	10.0	8.0	10.0	10.0	
Total Split (s)	14.0	41.0	41.0	14.0	41.0		16.0	16.0	14.0	19.0	19.0	
Total Split (%)	15.6%	45.6%	45.6%	15.6%	45.6%		17.8%	17.8%	15.6%	21.1%	21.1%	
Maximum Green (s)	9.0	36.0	36.0	9.0	36.0		11.0	11.0	9.0	14.0	14.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0		-1.0	-1.0	-1.0	-1.0	-1.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag				Lead			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				Yes			
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	
Act Effct Green (s)	45.5	38.1	38.1	50.9	42.9		11.4	11.4	21.6	14.3	14.3	
Actuated g/C Ratio	0.51	0.42	0.42	0.57	0.48		0.13	0.13	0.24	0.16	0.16	
v/c Ratio	0.32	1.01	0.34	0.91	0.72		0.71	0.74	0.88	0.81	0.69	
Control Delay	11.1	40.2	4.6	58.7	23.3		56.6	58.9	40.3	60.5	44.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	11.1	40.2	4.6	58.7	23.3		56.6	58.9	40.3	60.5	44.7	
LOS	B	D	A	E	C		E	E	D	E	D	
Approach Delay		34.2			29.6			48.3			52.9	
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	5	~504	21	97	291		86	92	108	123	100	
Queue Length 95th (ft)	m16	#607	m17	#248	391		#172	#187	#222	#237	#180	
Internal Link Dist (ft)		532			768			404			137	
Turn Bay Length (ft)	90		90	450								
Base Capacity (vph)	298	1471	712	281	1641		224	229	424	288	314	
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	
Reduced v/c Ratio	0.27	1.01	0.34	0.91	0.72		0.67	0.70	0.88	0.78	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green, Master Intersection
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.01
Intersection Signal Delay: 36.7 Intersection LOS: D
Intersection Capacity Utilization 84.7% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: BJ's Shopping Center/STONEY STREET & ROUTE 202/35

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	165	1223	58	58	992	495	58	0	58	412	0	248
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		-2%			0%			0%			0%	
Storage Length (ft)	200		0	100		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	2		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.993				0.850		0.932			0.850	
Flt Protected	0.950			0.950				0.976		0.950		
Satd. Flow (prot)	1787	3550	0	1770	3539	1583	0	1694	0	3433	1583	0
Flt Permitted	0.117			0.109				0.976		0.950		
Satd. Flow (perm)	220	3550	0	203	3539	1583	0	1694	0	3433	1583	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				538		47			315	
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		333			353			264			374	
Travel Time (s)		5.0			5.3			6.0			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	179	1329	63	63	1078	538	63	0	63	448	0	270
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	1392	0	63	1078	538	0	126	0	448	270	0
Number of Detectors	1	2		1	2	1	1	2		1	2	
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2		1	6		4	4		8	8	
Permitted Phases	2			6		6						
Detector Phase	5	2		1	6	6	4	4		8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Minimum Split (s)	9.0	10.0		9.0	10.0	10.0	10.0	10.0		10.0	10.0	
Total Split (s)	12.0	40.0		12.0	40.0	40.0	19.0	19.0		19.0	19.0	
Total Split (%)	13.3%	44.4%		13.3%	44.4%	44.4%	21.1%	21.1%		21.1%	21.1%	
Maximum Green (s)	7.0	35.0		7.0	35.0	35.0	14.0	14.0		14.0	14.0	
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0		5.0		5.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)	46.4	40.2		43.4	36.9	36.9		9.7		15.7	15.7	
Actuated g/C Ratio	0.52	0.45		0.48	0.41	0.41		0.11		0.17	0.17	
v/c Ratio	0.72	0.88		0.30	0.74	0.56		0.56		0.75	0.50	
Control Delay	33.4	32.7		15.1	25.9	5.6		33.5		44.5	5.8	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Delay	33.4	32.7		15.1	25.9	5.6		33.5		44.5	5.8	
LOS	C	C		B	C	A		C		D	A	
Approach Delay		32.8			19.0			33.5			30.0	
Approach LOS		C			B			C			C	
Queue Length 50th (ft)	51	~412		18	226	17		43		121	0	
Queue Length 95th (ft)	#156	#574		m31	310	89		94		#205	42	
Internal Link Dist (ft)		253			273			184			294	
Turn Bay Length (ft)	200			100								
Base Capacity (vph)	249	1588		221	1449	966		303		605	538	
Starvation Cap Reductn	0	0		0	0	0		0		0	0	
Spillback Cap Reductn	0	0		0	0	0		0		0	0	
Storage Cap Reductn	0	0		0	0	0		0		0	0	
Reduced v/c Ratio	0.72	0.88		0.29	0.74	0.56		0.42		0.74	0.50	

Intersection Summary

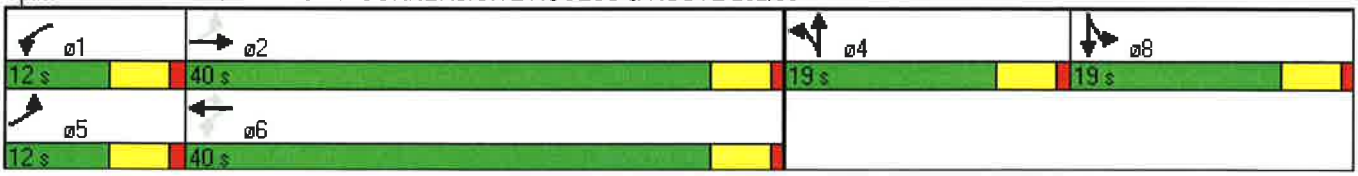
Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 12 (13%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 26.7 Intersection LOS: C
Intersection Capacity Utilization 77.8% ICU Level of Service D
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: PARKSIDE CORNERS/SITE ACCESS & ROUTE 202/35



APPENDIX "D"

STANDARDS

LEVEL OF SERVICE STANDARDS

LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

Level of Service (LOS) can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a measure of driver discomfort and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group.

LOS A describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

LOS B describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

LOS C describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate.

LOS D describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long.

LOS E describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long.

LOS F describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long.

A lane group can incur a delay less than 80 s/veh when the volume-to-capacity ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression is favorable, or both. As a result, both the delay and volume-to-capacity ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 s/veh represents failure from a delay perspective).

The Level of Service Criteria for signalized intersections are given in Exhibit 18-4 from the *2010 Highway Capacity Manual* published by the Transportation Research Board.

Exhibit 18-4

	LOS by Volume-to-Capacity Ratio	
Control Delay (s/veh)	**v/c ≤1.0**	**v/c >1.0**
≤10	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

For approach-based and intersectionwide assessments, LOS is defined solely by control delay.

LEVEL OF SERVICE CRITERIA
FOR TWO-WAY STOP-CONTROLLED (TWSC) UNSIGNALIZED INTERSECTIONS

Level of Service (LOS) for a two-way stop-controlled (TWSC) intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns. LOS is not defined for the intersection as a whole or for major-street approaches.

The Level of Service Criteria for TWSC unsignalized intersections are given in Exhibit 19-1 from the *2010 Highway Capacity Manual* published by the Transportation Research Board.

Exhibit 19-1

	LOS by Volume-to-Capacity Ratio	
Control Delay (s/veh)	**v/c ≤1.0**	**v/c >1.0**
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

The LOS criteria apply to each lane on a given approach and to each approach on the minor street.
LOS is not calculated for major-street approaches or for the intersection as a whole.

As Exhibit 19-1 notes, LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

The Level of Service Criteria for unsignalized intersections are somewhat different from the criteria for signalized intersections.

LEVEL OF SERVICE CRITERIA
FOR ALL-WAY STOP-CONTROLLED (AWSC) UNSIGNALIZED INTERSECTIONS

The Levels of Service (LOS) for all-way stop-controlled (AWSC) intersections are given in Exhibit 20-2. As the exhibit notes, LOS F is assigned if the volume-to-capacity (v/c) ratio of a lane exceeds 1.0, regardless of the control delay. For assessment of LOS at the approach and intersection levels, LOS is based solely on control delay.

The Level of Service Criteria for AWSC unsignalized intersections are given in Exhibit 20-2 from the *2010 Highway Capacity Manual* published by the Transportation Research Board.

Exhibit 20-2

	LOS by Volume-to-Capacity Ratio	
Control Delay (s/veh)	**v/c ≤1.0**	**v/c >1.0**
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

For approaches and intersectionwide assessment, LOS is defined solely by control delay.