

III. EXISTING CONDITIONS, IMPACTS AND MITIGATION

K. Traffic and Transportation

K. Traffic and Transportation

This section evaluates the potential traffic impacts associated with the redevelopment of proposed site which is located on the north side of NYS Route 35/U.S. Route 202, west of the Taconic State Parkway and opposite Mohansic Avenue. The site currently contains an abandoned motel, an auto service facility and the Zino's Nursery. The site is proposed to be redeveloped with an approximately 151,092 s.f. Costco Warehouse Club with a fueling facility for club members only. As shown on Exhibit No. III.K-1, access to the development is proposed via a reconstructed full movement driveway connection to NYS Route 35/U.S. Route 202 opposite Mohansic Avenue and a right turn entry and right turn exit driveway at the westerly end of the site near the proposed fueling facility. A Design Year of 2013 has been utilized in completing the traffic analysis in order to evaluate future traffic conditions associated with this proposed development.

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was King Gate
+ 2 residences.

The following identifies current and future traffic operating conditions on the surrounding roadway network to assess the potential traffic impacts of the proposed Costco as per the requirements of the adopted Scoping Document for the project, dated December 13, 2010.

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 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 2010 Existing Traffic Volumes representing existing traffic conditions in the vicinity of the site.

The Year 2010 Existing Traffic Volumes were then projected to the 2013 Design Year to take into account background traffic growth. In addition, traffic for other specific potential or approved developments in the area as outlined in the Scoping Document were estimated and then added to the Projected Traffic Volumes to obtain the Year 2013 No-Build Traffic Volumes.

Estimates were then made of the potential traffic that the proposed Costco would generate (see Section K.III.3.a for further discussion). The resulting site generated traffic volumes were then added to the roadway system and combined with the Year 2013 No-Build Traffic Volumes resulting in the Year 2013 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 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.

1. Existing Conditions

a. Description of Existing Roadway Network (Exhibit No. III.K-1 through 2A)

As shown on Exhibits No. III.K.1, and 1A, the proposed Costco will be accessed from NYS Route 35/U.S. Route 202 via a main driveway to be located opposite Mohansic Avenue and a secondary right turn entry/exit driveway located further west. The following is a brief description of the roadways located within the study area including the Taconic State Parkway. Exhibits No. III.K-2 and 2A summarize the lane geometry, lane widths, posted speed limits, traffic control, etc. for each of the studied intersections. In addition, Section III.K.3.e 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" of the Traffic Impact Study contains copies of the capacity analyses which indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied.

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- i. 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 immediate 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 to the north. 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

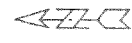
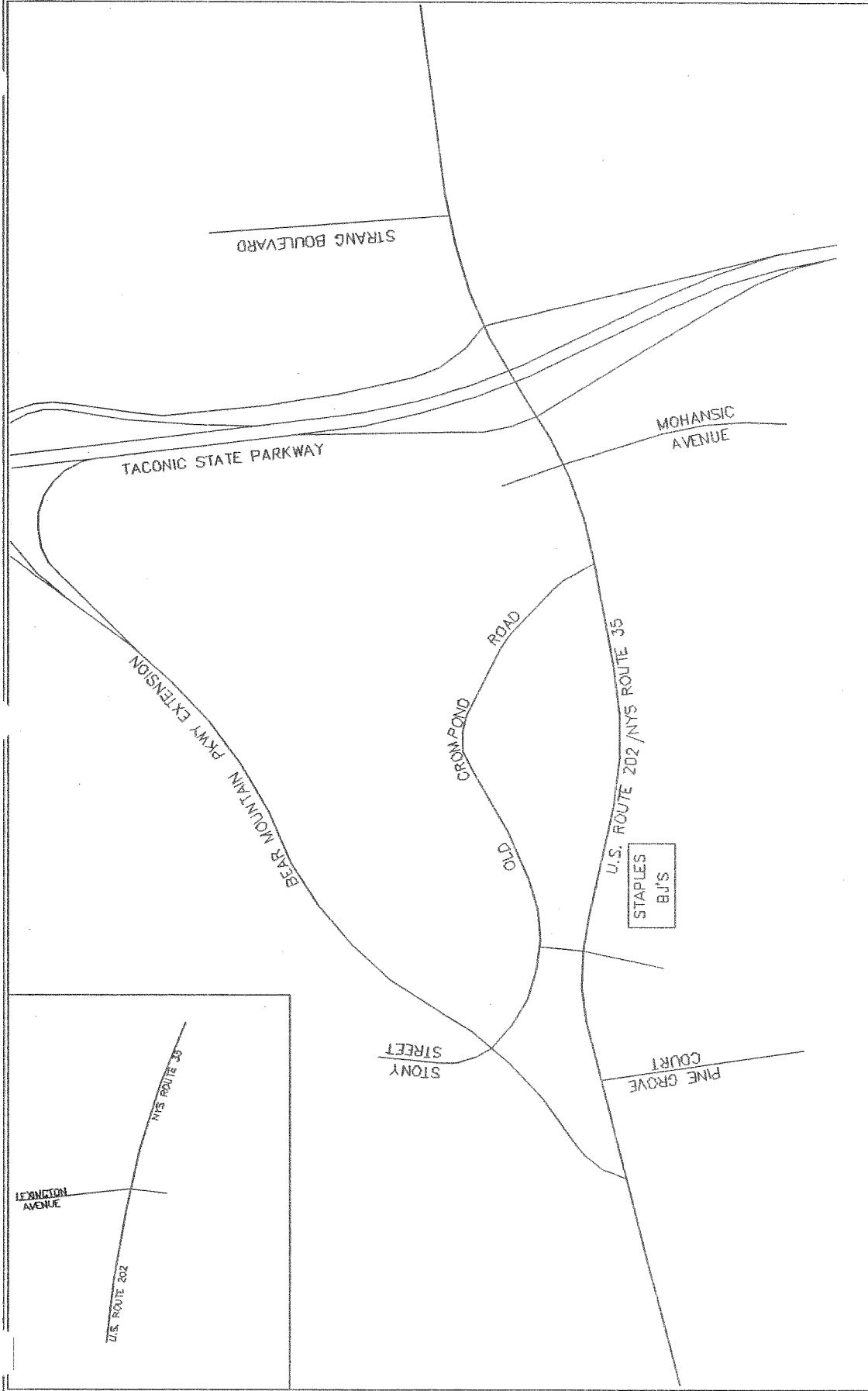


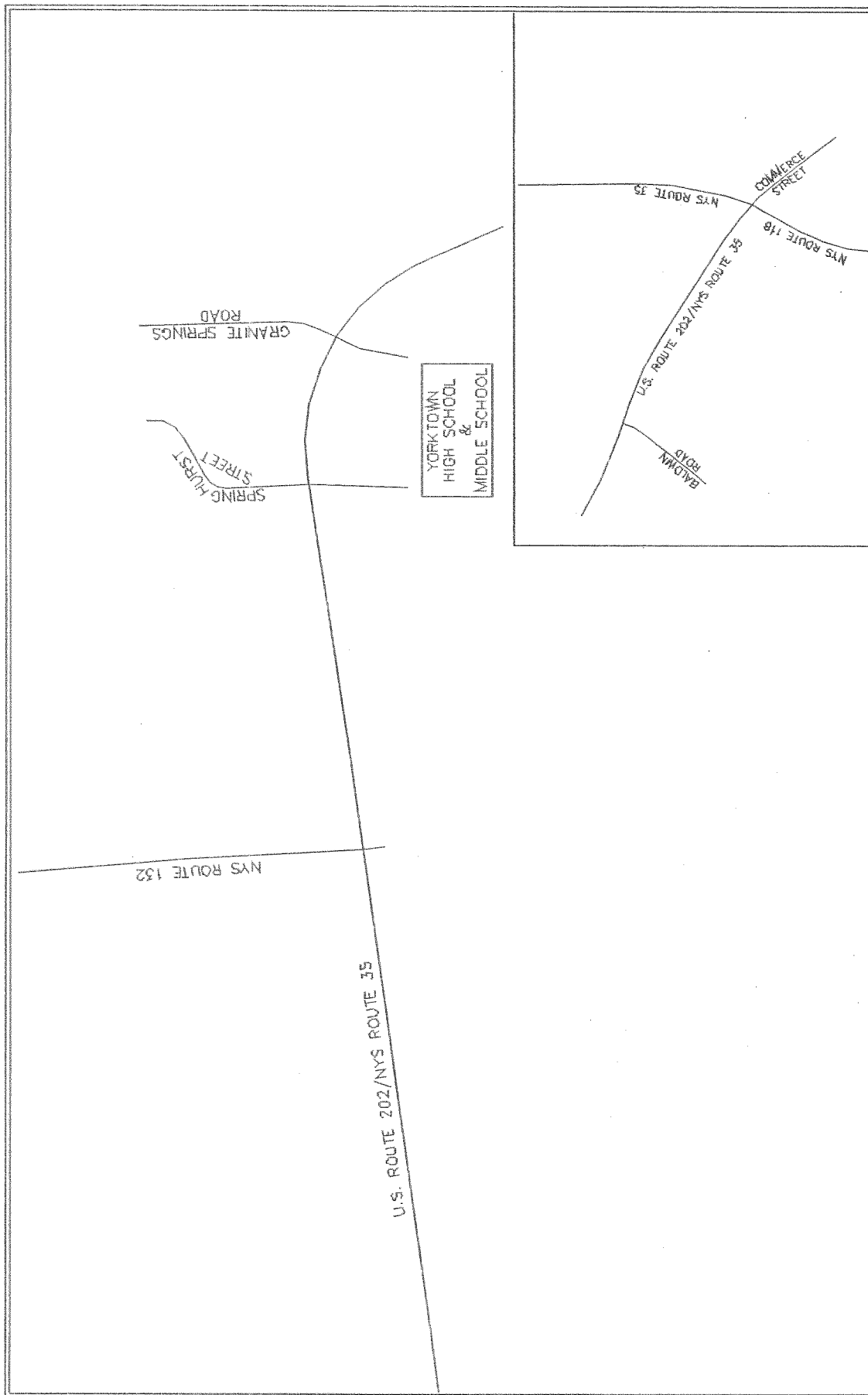
Exhibit III.K-1
Site Location Map

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Town of Yorktown, New York



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7 Sylvania Drive
Hawthorne, New York 10532

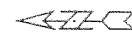
Source: John Collins Engineers, P.C.



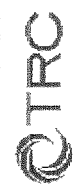
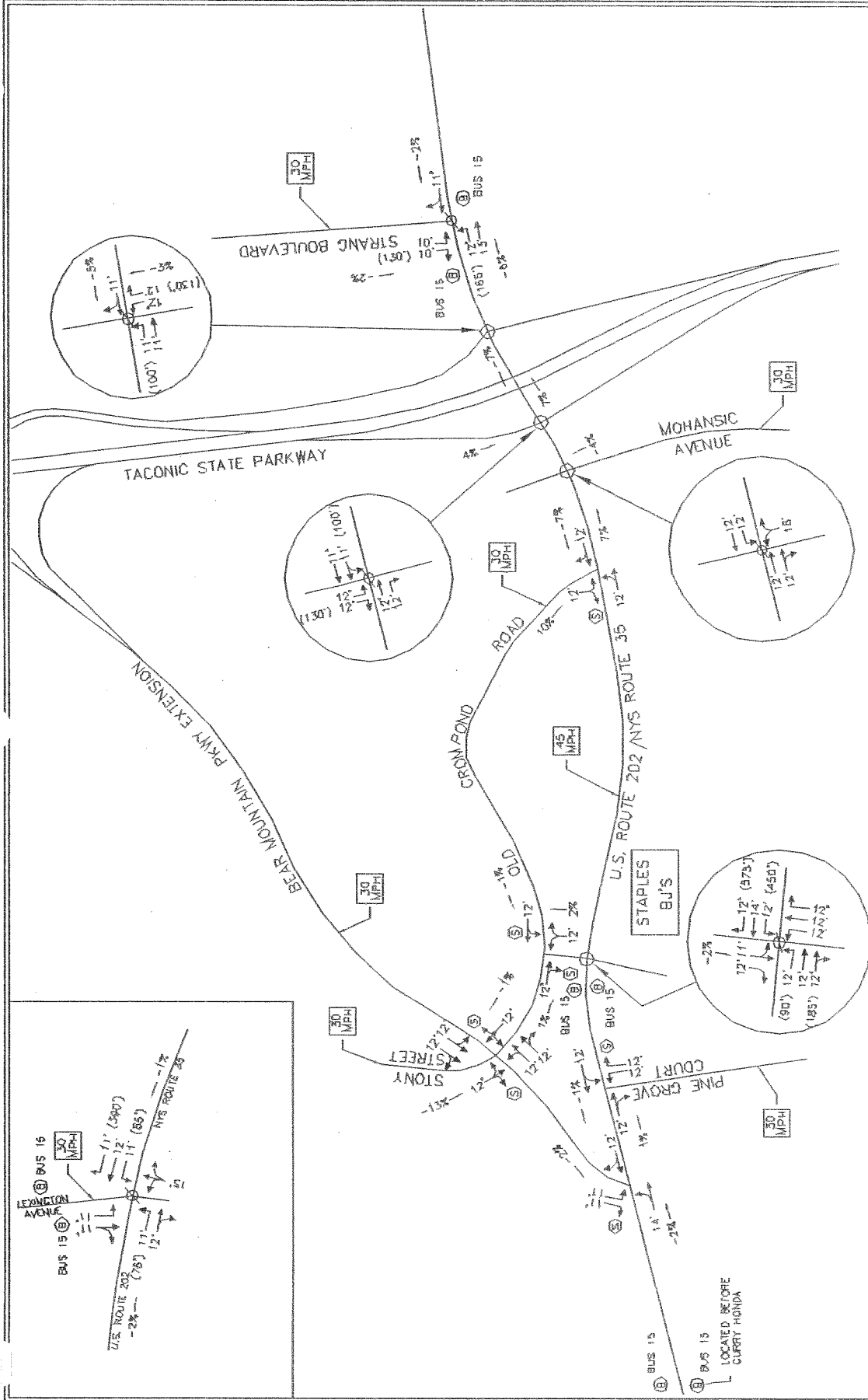
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Source: John Collins Engineers, P.C.

Exhibit III.K-1A Site Location Map

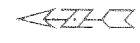


COSTCO WHOLESAL
Town of Yorktown, New York



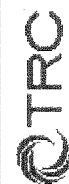
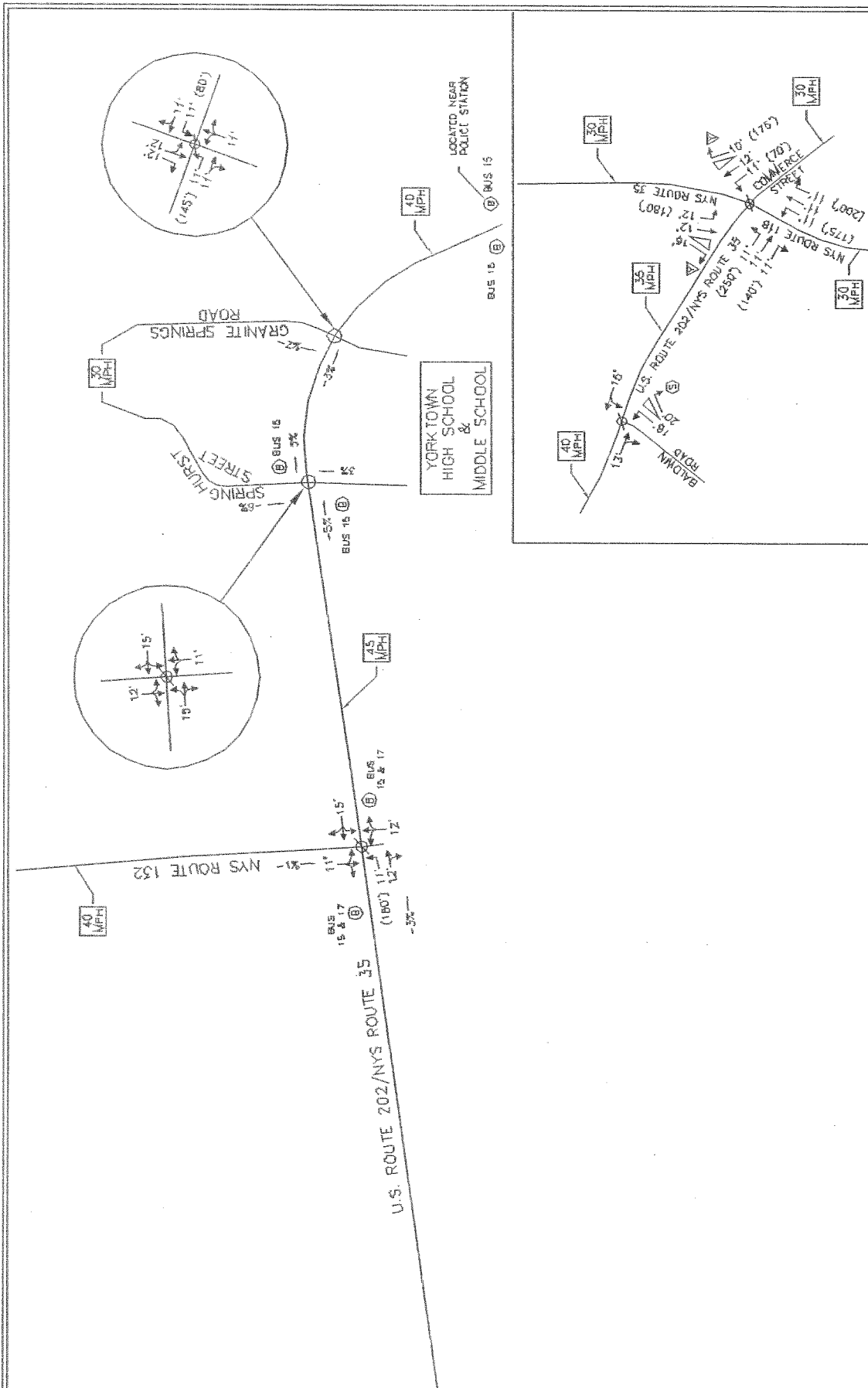
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Exhibit III.K-2 Existing Geometry



COSTCO WHOLESALE
Town of Yorktown, New York

Source: John Collins Engineers, P.C.



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Exhibit III.K-2A Existing Geometry

COSTCO WHOLESALE
Town of Yorktown, New York

Source: John Collins Engineers, P.C.

- ii. 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, Stony Street and the BJ's/Staples Plaza, Mohansic Avenue, the Taconic State Parkway Northbound and Southbound Ramps and Strang Boulevard. Further east it has signalized intersections with NYS Route 132, Springhurst Street and the Yorktown High School Driveway, Granite Springs Road and the Mildred E. Strang Middle School Driveway, Baldwin Road, and NYS Route 118/Commerce Street. The roadway also has unsignalized intersections with the Bear Mountain Parkway Extension, Pine Grove Court, and Old Crompond Road. The posted speed limit, in the vicinity of the site, is 45 mph. Currently, the pavement east of the Taconic State Parkway interchange is in very poor 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 and also at the U.S. Route 202/NYS Route 35/NYS Route 118 and Commerce Street intersection, there are currently no other existing sidewalks along NYS Route 35/U.S. Route 202.

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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.K.2.c 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 as well as the proposed construction schedule are discussed in detail in Section III.K.2.b.

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. There are also stops at the BJ's-Staples Plaza intersection, the Strang Boulevard intersection, the NYS Route 132 intersection, near the Yorktown Police station and between Baldwin Road and NYS Route 118. The Route 15 Bus also stops along NYS Route 35/U.S. Route 202 at the

already stated

intersection with NYS Route 132. The closest bus stops to the site for the Bee-Line Bus System are located near Strang Boulevard.

- iii. 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.

- iv. 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. The roadway consists of two lanes in each direction and has a posted speed limit of 40 MPH. 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. No parking is permitted along this roadway.

- v. Stony Street intersects with NYS Route 35/U.S. Route 202 opposite the BJ's/Staples Plaza driveway at a full movement, signalized intersection. Stony Street is generally a north/south road and also intersects with Old Crompond Road and then with the Bear Mountain Parkway Extension at a full movement unsignalized intersection. It also intersects with several other local roadways before terminating at East Main Street in the Shrub Oak area of Yorktown. The posted speed limit is 30 mph. No parking is permitted along this section of Stony Street.

- vi. Old Crompond Road is a Town roadway which intersects NYS Route 35/U.S. Route 202 at an unsignalized "T" shaped intersection. It runs west from here, generally parallel to NYS Route 35/U.S. Route 202 to its terminus at an unsignalized "T" intersection with Stony Street. The roadway generally serves residential homes as well as the Adrian Auto body Property. The roadway, which consists of a single lane in each direction, has a speed limit of 30 MPH. It should be noted that occasionally during the PM Peak Hour when there is a more significant queue at the Pine Grove Court or the Staples Plaza intersection, the westbound traffic on NYS Route

35/U.S. Route 202 does divert from NYS Route 35/U.S. Route 202 onto Old Crompond Road and travels west to the Stony Street intersection. (See Section III.K.3.e for a more a detailed discussion of this item.) No sidewalks currently exist on this roadway. *Parking?*

- vii. Mohansic Avenue intersects with NYS Route 35/U.S. Route 202 at a signalized, "T" type intersection. Mohansic Avenue is a narrow two lane roadway, which generally runs in a north/south direction and other than providing access to the Mobil Gas Station provides access to residential homes and to other local residential roads. It also provides access to Wilken's Farm and has an entry only access to the Taconic State Parkway southbound. The posted speed limit is 30 mph. No on-street parking is permitted along the main roadway. No sidewalks currently exist on this roadway.
- viii. Strang Boulevard intersects with NYS Route 35/U.S. Route 202 at a signalized, "T" type intersection. Strang Boulevard is a generally north/south road and provides access to Mercy College, other offices and other residential local roads. The posted speed limit is 30 mph. Some vehicles currently park along the east side of this roadway immediately north of NYS Route 35/U.S. Route 202. No sidewalks currently exist on this roadway.
- ix. NYS Route 132 (Old Yorktown Road) intersects NYS Route 35/U.S. Route 202 opposite a driveway to the Downing Park Parking Lot forming a signalized, full movement intersection. NYS Route 132 travels in a northerly direction between this intersection and an intersection with U.S. Route 6 to the north. The roadway generally serves residential land uses and provides access to other local residential roads. The posted speed limit is 40 mph. No provisions for on-street parking exist along this roadway. No sidewalks currently exist on this roadway.
- x. Springhurst Street is a Town road which intersects NYS Route 35/U.S. Route 202 opposite the Yorktown High School driveway to form a signalized, full movement intersection. Continuing north from this intersection, Springhurst Street serves residential land uses and connects to other local roads. It terminates at an intersection with Deerfield Avenue. The posted speed limit is 30 mph. No sidewalks currently exist on this roadway. *Parking?*
- xi. Granite Springs Road intersects NYS Route 35/U.S. Route 202 opposite the Mildred E. Strang Middle School driveway to form a signalized, full movement intersection. Granite Springs Road travels in a generally east/west direction between this intersection and an intersection with NYS Route 118/U.S. Route 202 near the Amawalk Reservoir in Somers, NY. The roadway primarily serves residential land uses and connects with other

residential local roads but does serve as a significant collector road for these and other through traffic trips. The posted speed limit is 30 mph. No parking is permitted along this roadway. No sidewalks exist along this roadway.

- xii. Baldwin Road intersects with NYS Route 35/U.S. Route 202 at a signalized, "T" shaped intersection. Baldwin Road travels in southwesterly direction to an interchange with the Taconic State Parkway. It terminates at an intersection with Underhill Avenue further to the south. The roadway serves residential and commercial land uses as well as the French Hill School and several other local roadways. The posted speed limit is 30 mph. There are no provisions for on-street parking. No sidewalks exist along this roadway.

b. 2010 Existing Traffic Volumes (Exhibits No. III.K.-3 through 5A)

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. Continuous traffic counts were also conducted along NYS Route 35/U.S. Route 202 near the proposed site area and along Old Crompond Road by Automatic Traffic Recorder Machines (ATR). The ATR machines were installed on October 9, 2010 and allowed to record data until October 25, 2010. 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 2010 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.

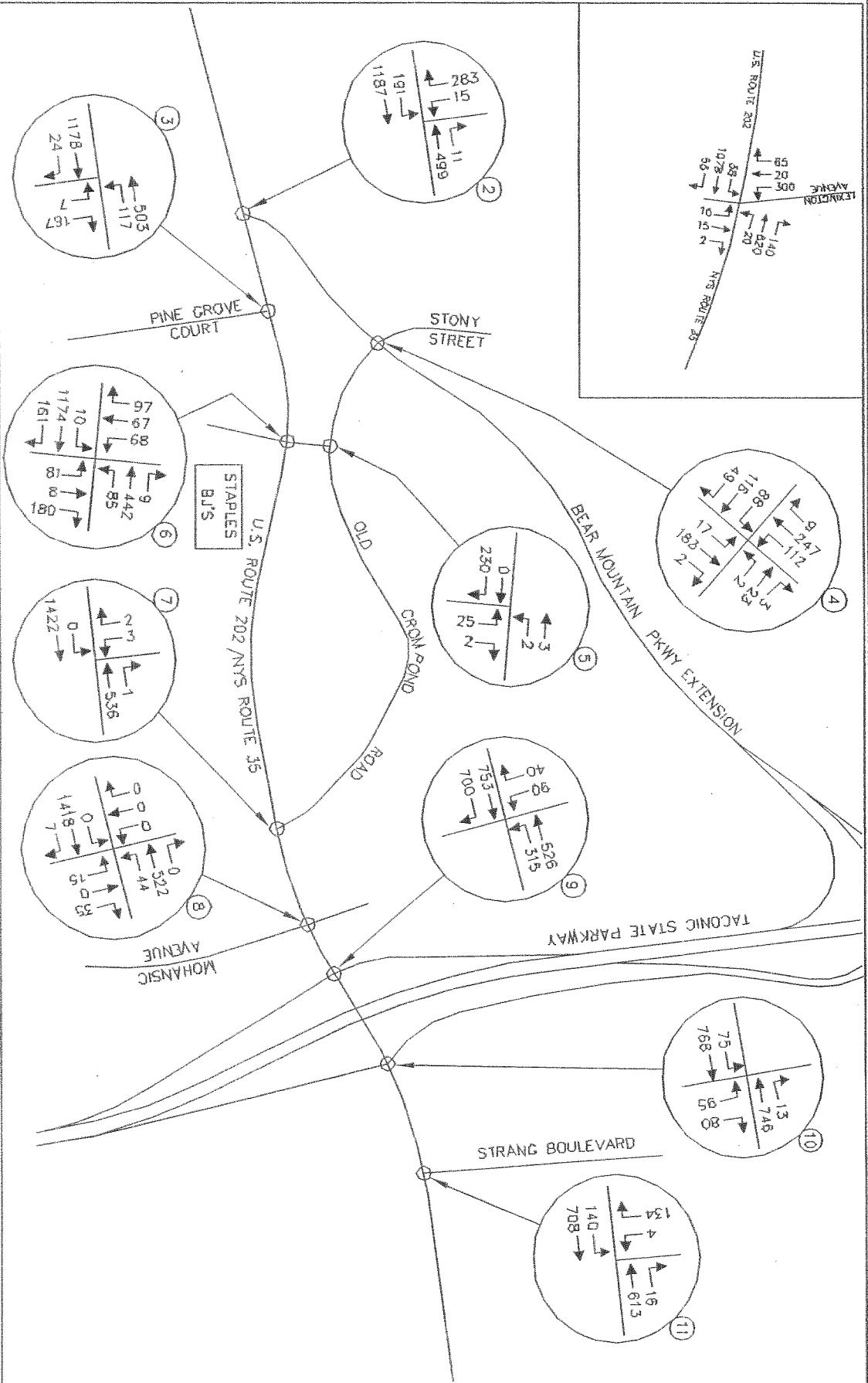
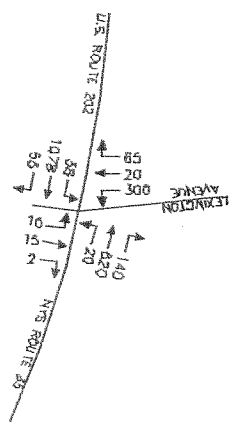
- NYS Route 35/U.S. Route 202 and Lexington Avenue
- NYS Route 35/U.S. Route 202 and Bear Mountain Extension
- NYS Route 35/U.S. Route 202 and Pine Grove Court
- Bear Mountain Extension and Stony Street
- Stony Street and Old Crompond Road
- NYS Route 35/U.S. Route 202 and Stony Street/BJ's-Staples Plaza Driveway
- NYS Route 35/U.S. Route 202 and Old Crompond Road
- NYS Route 35/U.S. Route 202 and Mohansic Avenue
- NYS Route 35/U.S. Route 202 and Taconic State Parkway SB On/Off Ramp

- NYS Route 35/U.S. Route 202 and Taconic State Parkway NB On/Off Ramp
- NYS Route 35/U.S. Route 202 and Strang Boulevard
- NYS Route 35/U.S. Route 202 and NYS Route 132
- NYS Route 35/U.S. Route 202 and Springhurst Street/Yorktown High School Driveway
- NYS Route 35/U.S. Route 202 and Granite Springs Road/MESMS Driveway
- NYS Route 35/U.S. Route 202 and Baldwin Road
- NYS Route 35/U.S. Route 202 and NYS Route 118 and Commerce Street

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 2010 Existing Traffic Volumes are shown on Exhibits No. III.K-3 and 3A for the Weekday Peak AM Hour, Exhibits No. III.K-4 and 4A for the Weekday Peak PM Hour and Exhibits No. III.K-5 and 5A for the Saturday Peak Hour. Note that during the AM conditions, there is a spike in traffic near the Yorktown High School between approximately 7:00AM and 7:30AM. *where would I find this?*



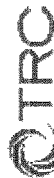
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Exhibit III.K-3
2010 Existing Traffic Volumes
Weekday Peak AM Hour

Source: John Collins Engineers, P.C.

COSTCO WHOLESALE
TOWN OF YORKTOWN, NEW YORK





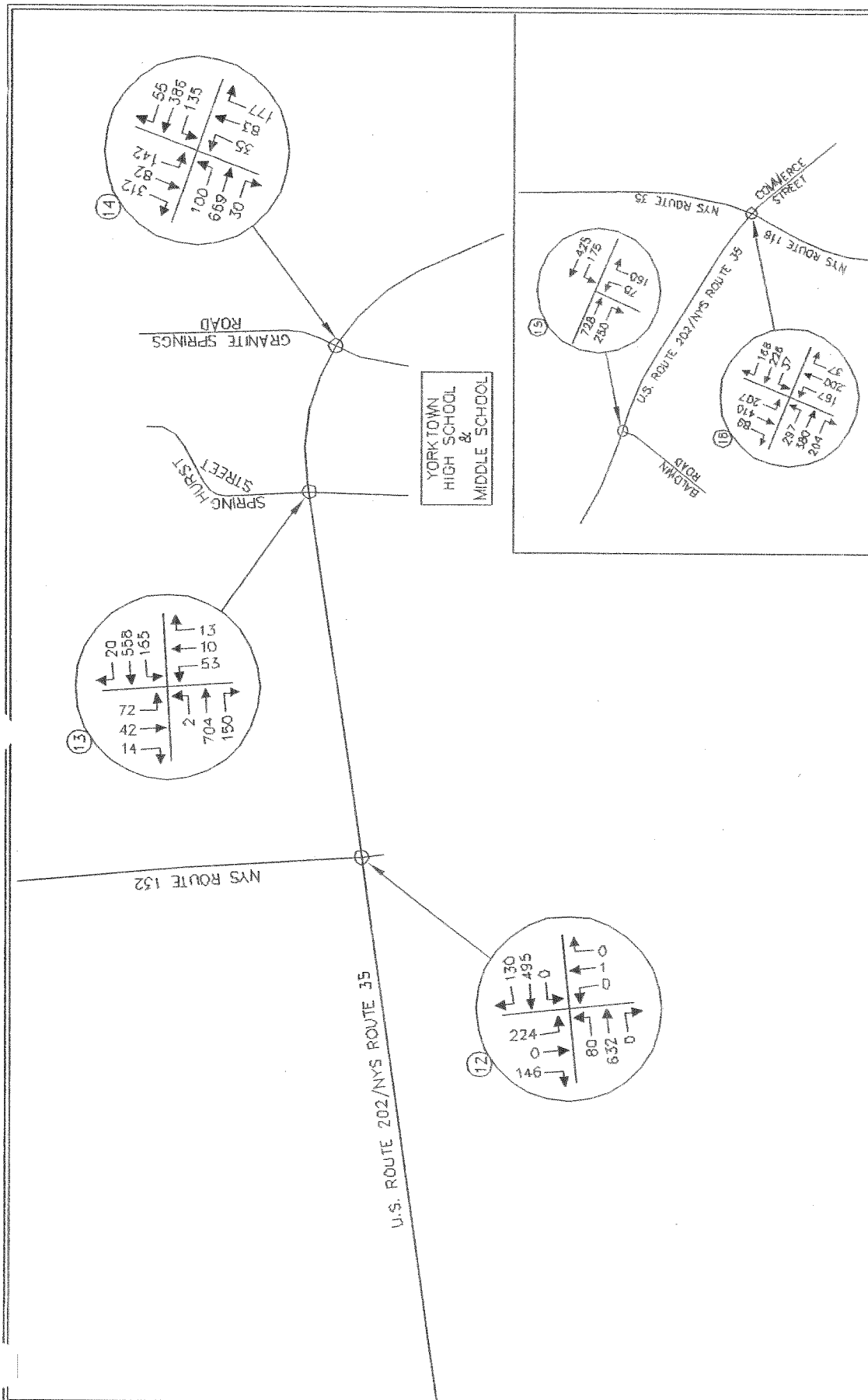
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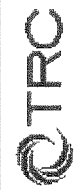
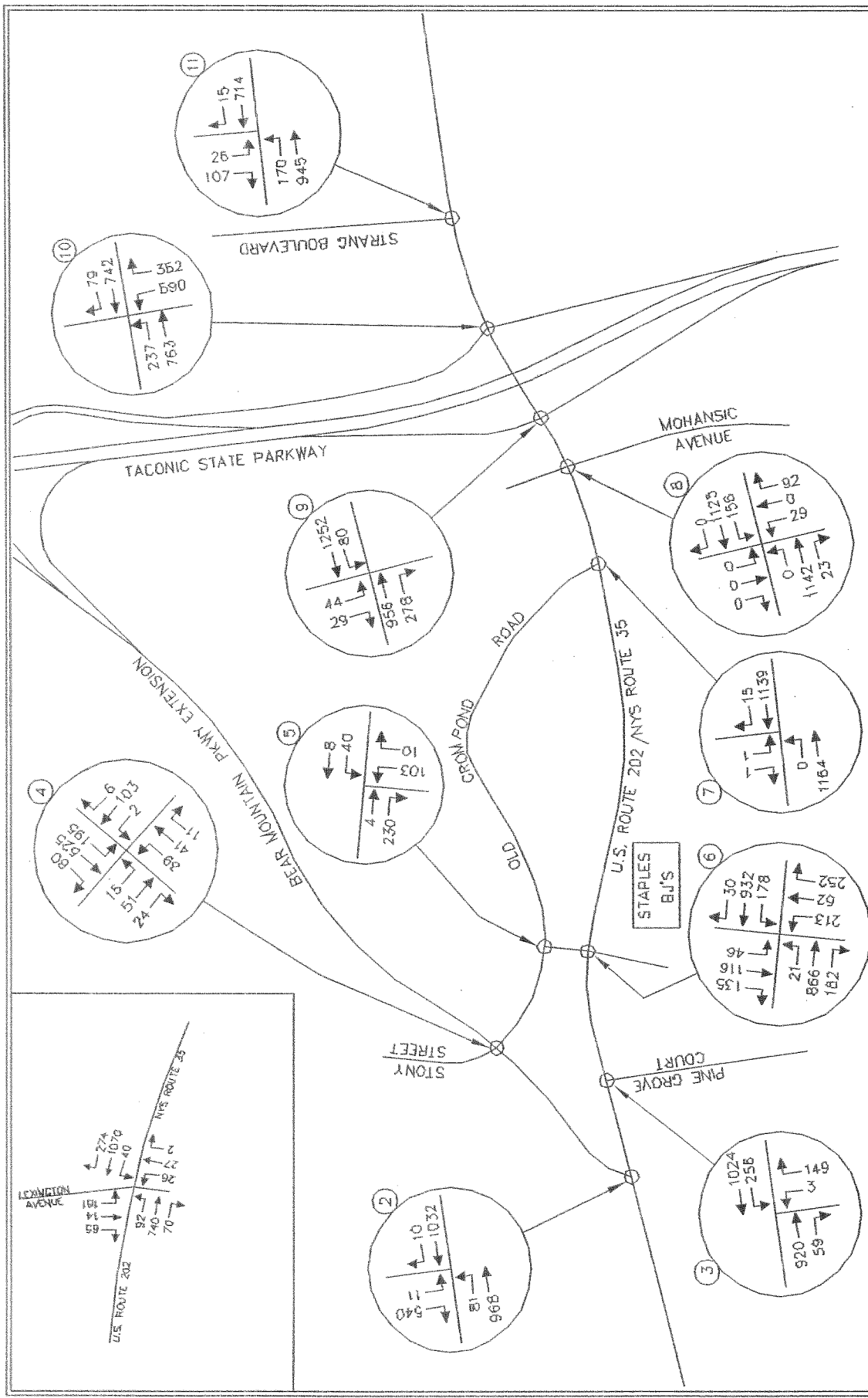
Source: John Collins Engineers, P.C.

Exhibit III.K-3A

2010 Existing Traffic Volumes Weekday Peak AM Hour

COSTCO WHOLESALE
Town of Yorktown, New York

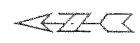




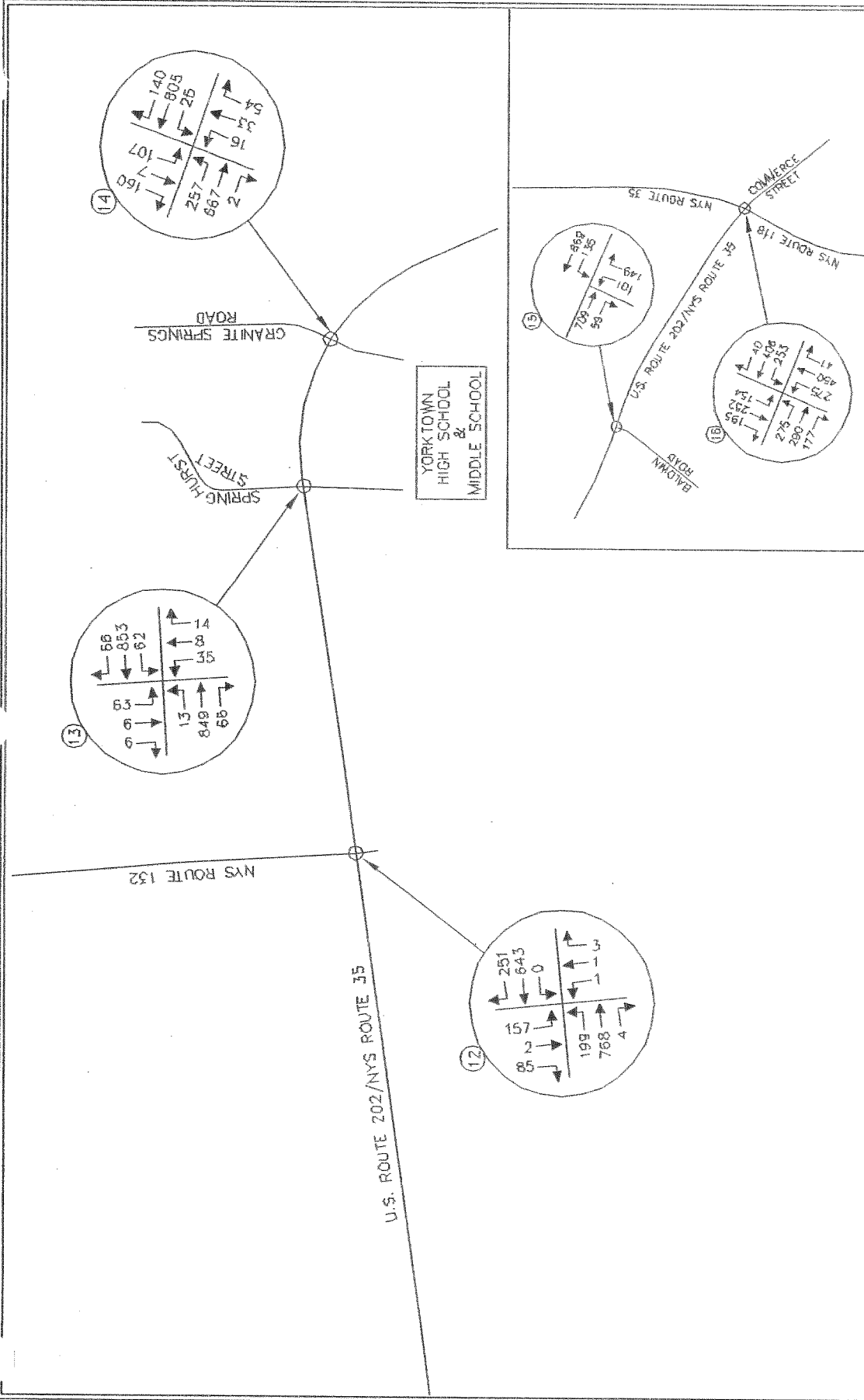
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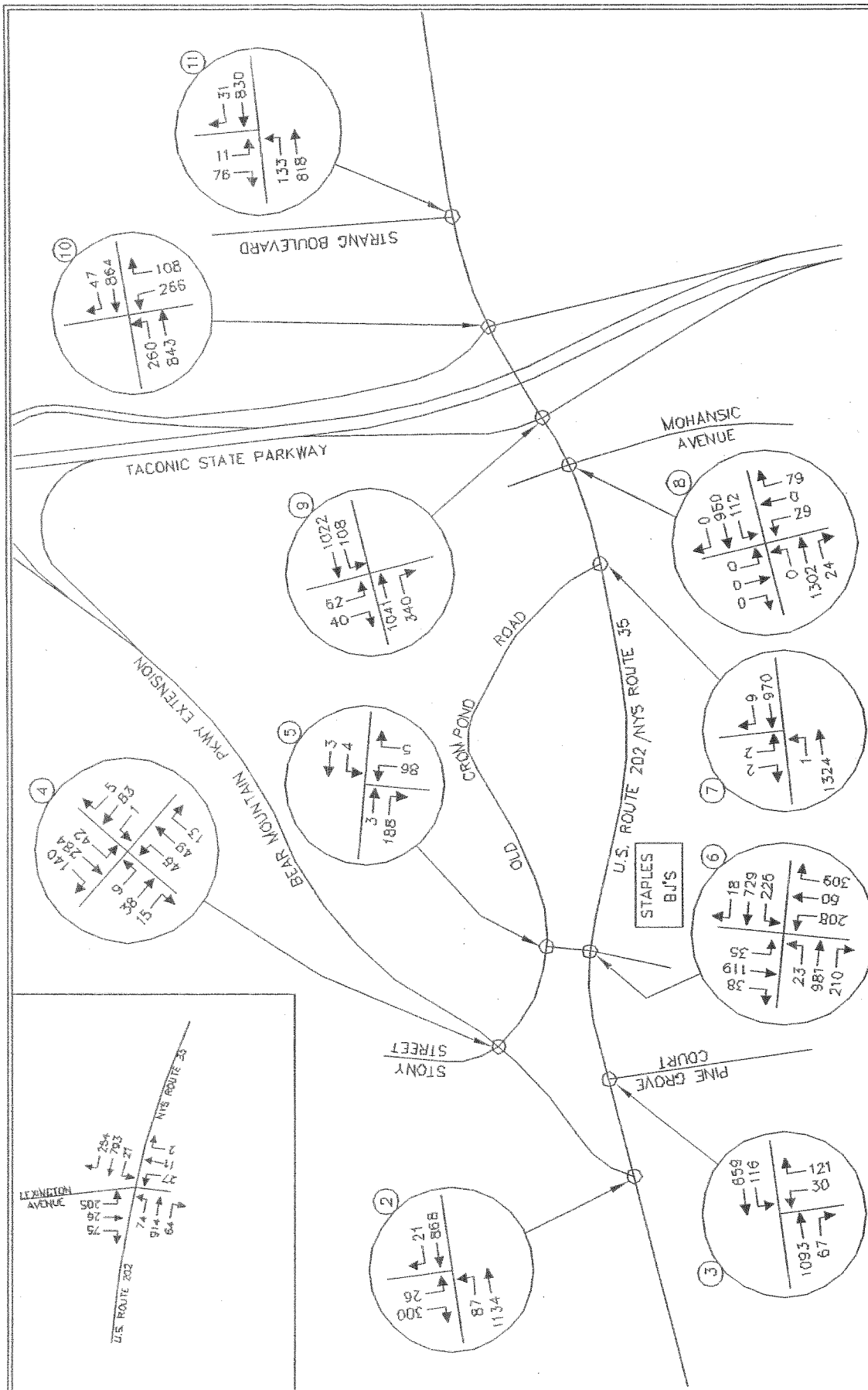
Source: John Collins Engineers, P.C.

Exhibit III.K-4 2010 Existing Traffic Volumes Weekday Peak PM Hour



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Exhibit III.K-5 2010 Existing Traffic Volumes Weekend Peak Saturday Hour

COSTCO WHOLESALE
Town of Yorktown, New York

Source: John Collins Engineers, P.C.

c. Existing Public Transportation Services

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 Exhibits No. III.K-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 project located at the intersection of NYS Route 35/U.S. Route 202 and Strang Boulevard. 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 the Traffic Impact Study.

Two other Westchester County Bee-Line buses provide service in the study area. These include the Route 10 Bus and the Route 77 Express Bus. However, these buses 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. Within the study area it has scheduled stops at the intersection of NYS Route 132 and NYS Route 35/U.S. Route 202 as well as along Commerce Street near the intersection with Downing Drive in Yorktown Heights. 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.

d. Accident Data (Table A)

A Priority Investigation Location (PIL) has been identified by the New York State Department of Transportation along NYS Route 35/U.S. Route 202 in the vicinity of the site. A Highway Safety Investigation (HSI) was requested as part of the traffic analysis and is contained herein.

Appendix on the Traffic Impact Study

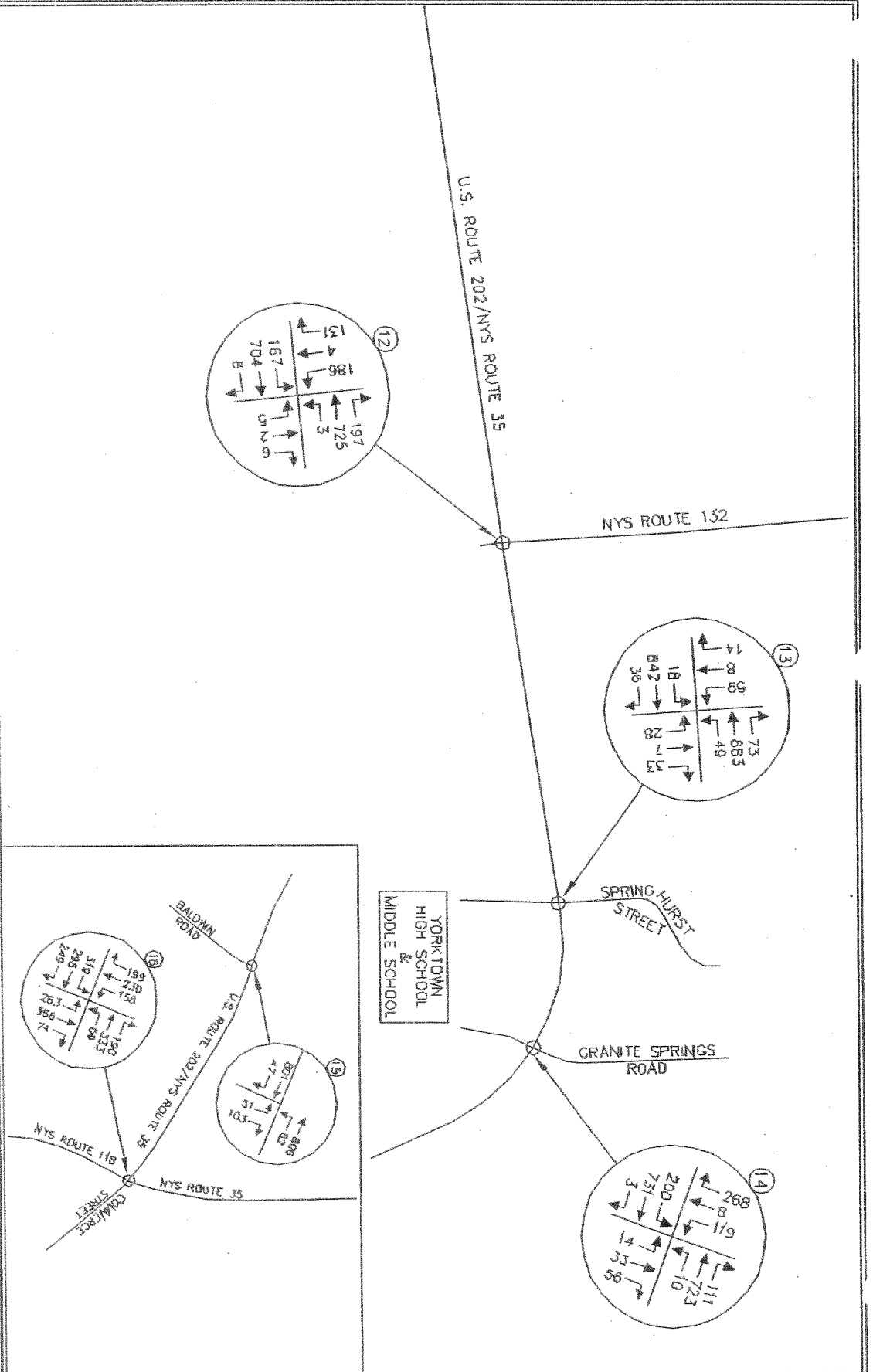


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Source: John Collins Engineers, P.C.

Exhibit III.K-5A
2010 Existing Traffic Volumes
Weekend Peak Saturday Hour

COSTCO WHOLESALE
Town of Yorktown, New York



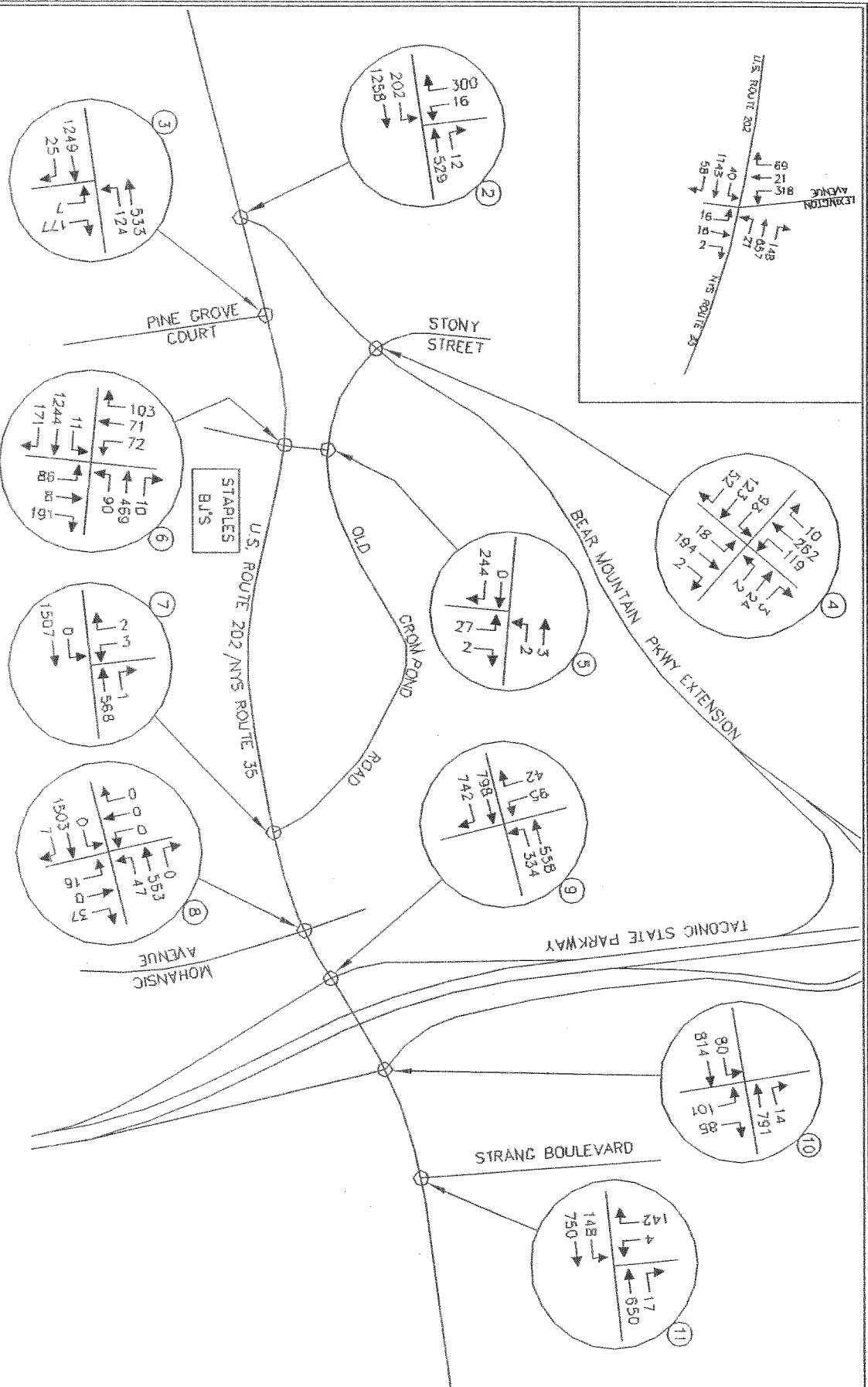
The PIL location extends from reference marker 35 8701 2038 (approximately 200 feet west of Old Crompond Road) to reference marker 35 8701 2042 (approximately 160 feet east of Strang Boulevard). All available accident reports for this section of NYS Route 35/U.S. Route 202 were obtained from the New York State Department of Motor Vehicles for the latest three year period (2007 to 2010) and are summarized in Table A. The accidents are also summarized by type and location for each intersection along this stretch on Exhibits A-1 through A-5. Table "A" and Exhibits A-1 through A-5 are contained in Appendix "E" of the Traffic Impact Study.

A review of the accident reports indicate that the type of accidents are typical type accidents for this type of roadway, which include rear end and left turn type accidents with contributing factors such as driver inattention, following too closely and weather related conditions. The quantity and severity of the accidents at each intersection are high for this type of roadway and can most likely be contributed to the travel speeds and congestion experienced along the roadway. As part of the Costco project, this section of NYS Route 35/U.S. Route 202 is proposed to be constructed to include an additional through lane and turning lanes. The traffic signals along this corridor will also be upgraded to provide improved coordination. These improvements should help to alleviate the existing congestion issues and also help reduce the quantity and severity of the accidents that occur in this segment. The proposed improvements are discussed in more detail in Sections III.K.2.b, III.K.2.c and III.K.3.e.

2. No-Build Analysis

a. Year 2013 No-Build Traffic Volumes (Exhibits No. III.K-6 through 14A)

The Year 2010 Existing Traffic Volumes were increased by a growth factor of 2% per year to account for general background growth resulting in the Year 2013 Projected Traffic Volumes shown on Exhibits No. III.K-6, 6A, 7, 7A, 8 and 8A. 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 potential Pulte Homes development 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 Exhibits No. III.K-9, 9A, 10, 10A, 11, and 11A for each of the peak hours. These volumes were added to the 2013 Projected Traffic Volumes resulting in the Year 2013 No-Build Traffic Volumes which are shown on Exhibits No. III.K-12 and 12A for the Weekday Peak AM Hour, Exhibits No. III.K-13 and 13A for the Weekday Peak PM Hour and Exhibits No. III.K-14 and 14A for the Saturday Peak Hour.



COSTCO WHOLESALE
TOWN of Yorktown, New York

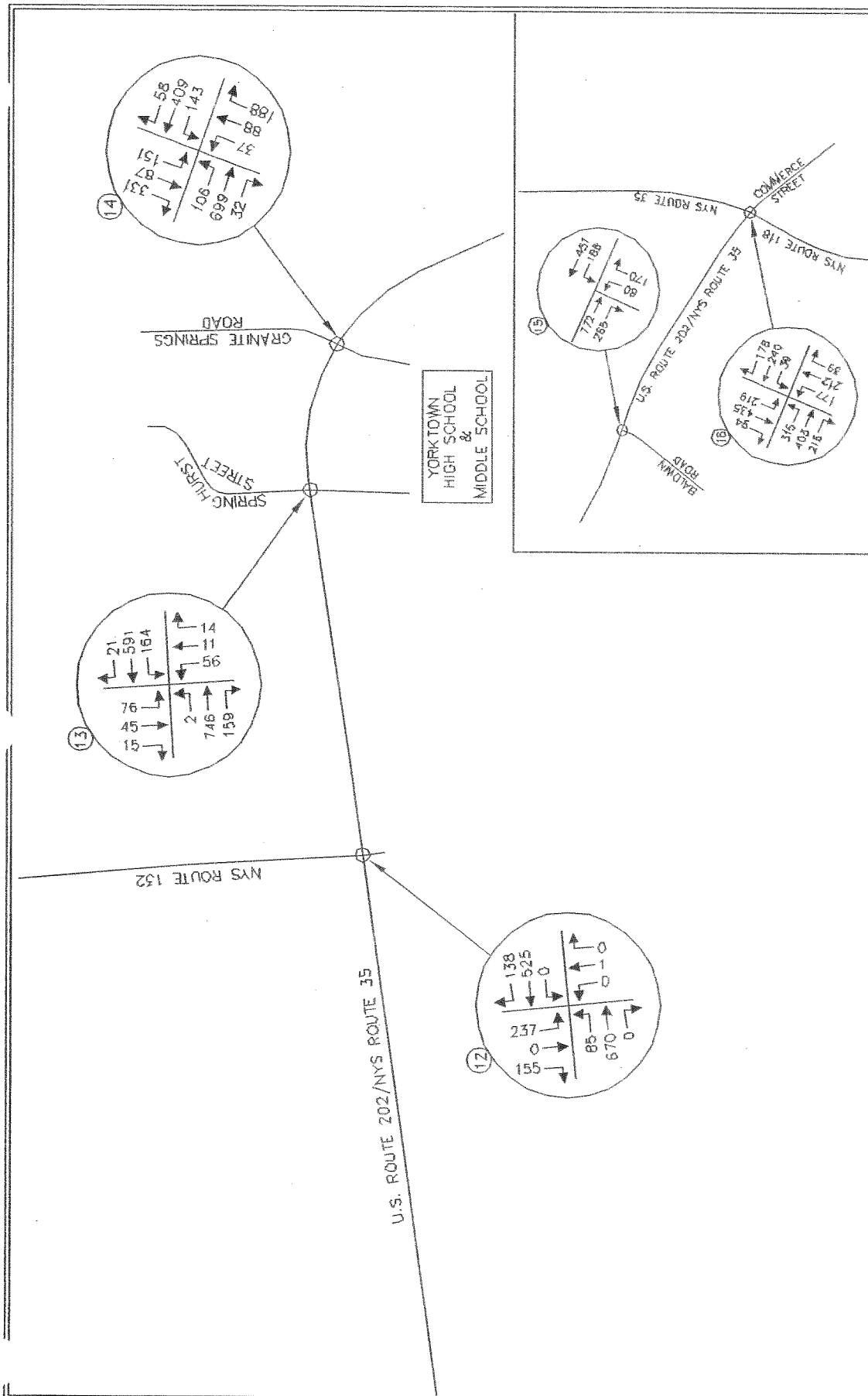
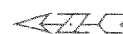


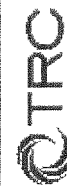
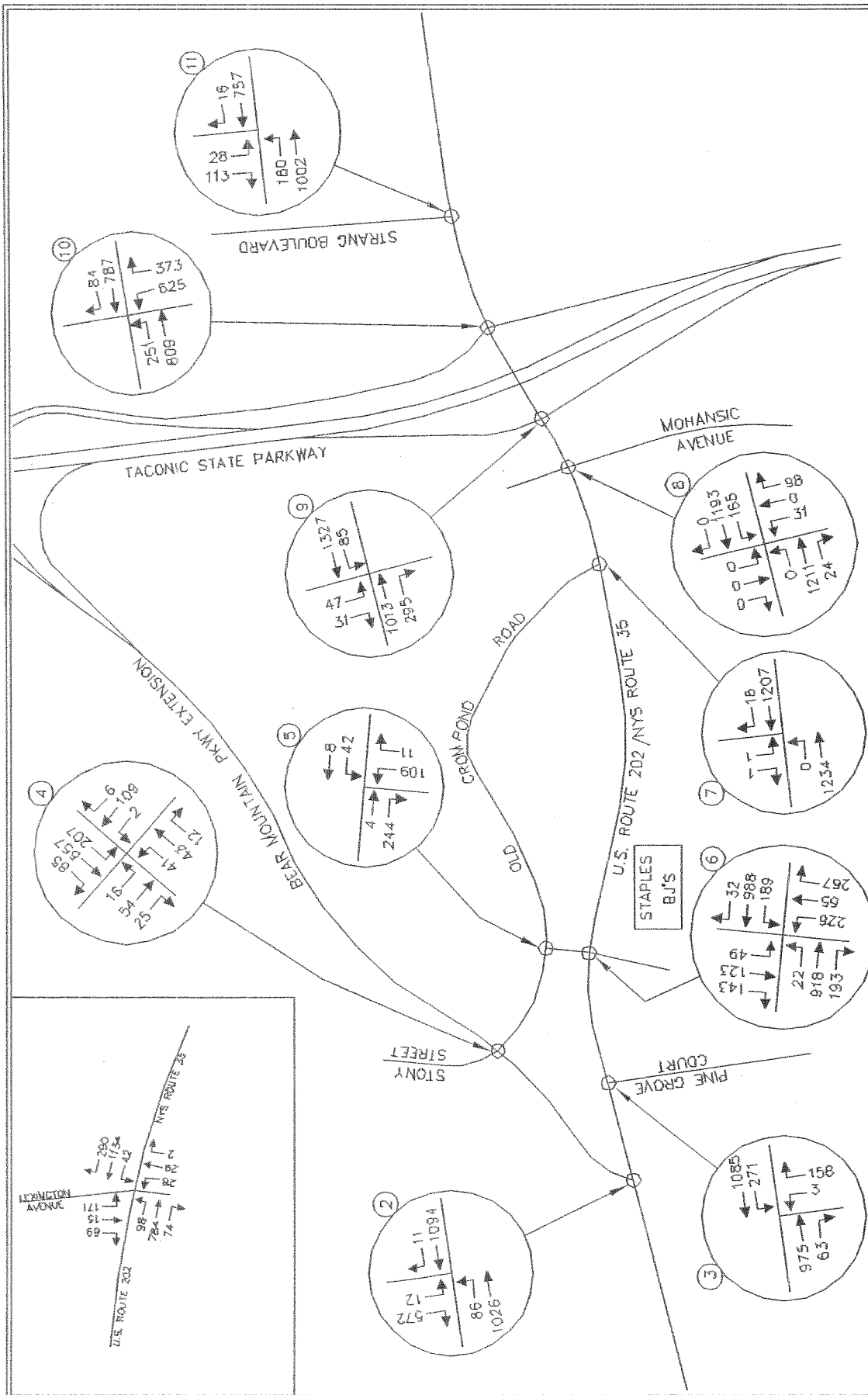
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Source: John Collins Engineers, P.C.

Exhibit III.K-6A
2013 Projected Traffic Volumes
Weekday Peak AM Hour

COSTCO WHOLESAL
Town of Yorktown, New York



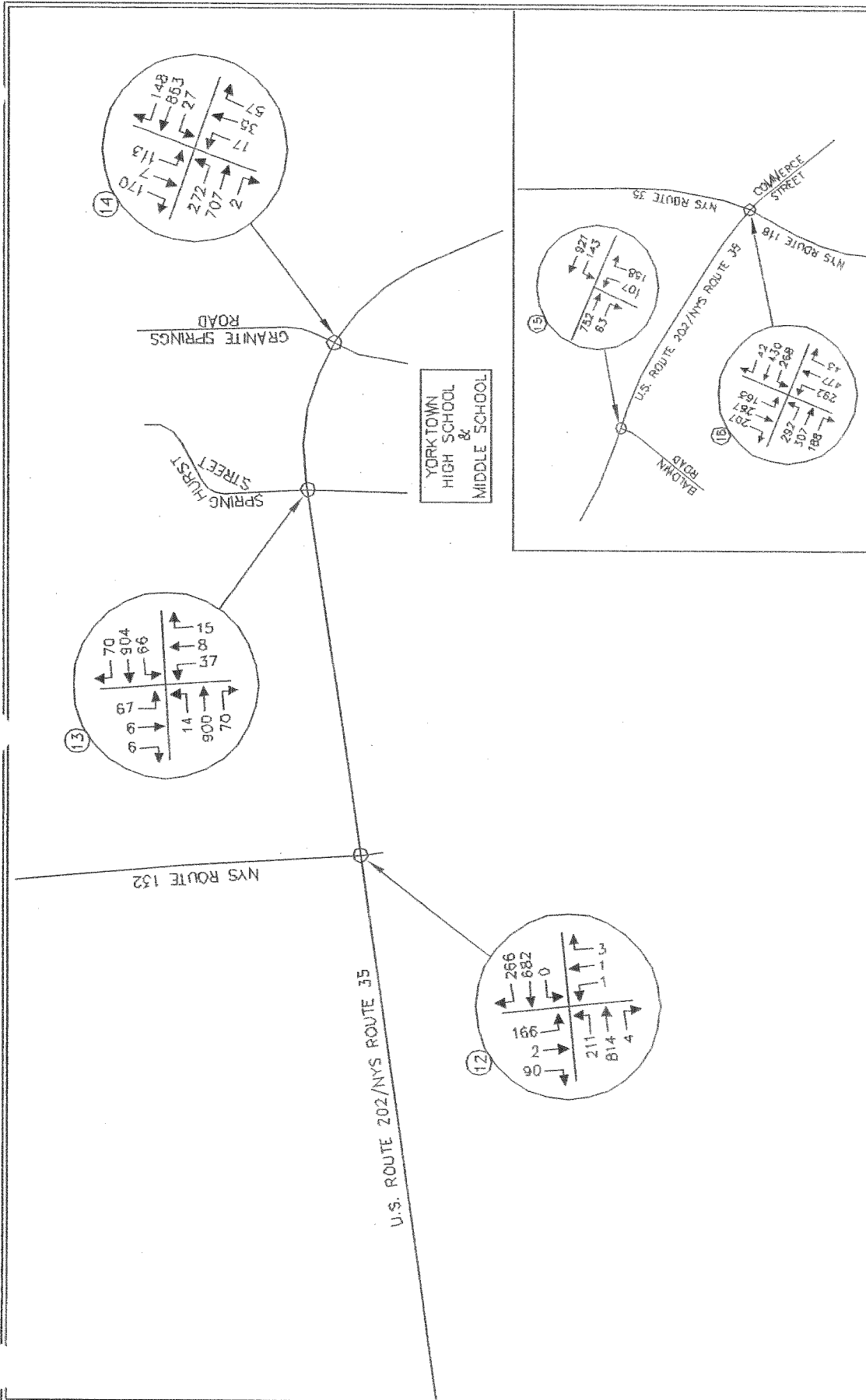


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Source: John Collins Engineers, P.C.

Exhibit III.K-7 2013 Projected Traffic Volumes Weekday Peak PM Hour

COSTCO WHOLESAL
Town of Yorktown, New York

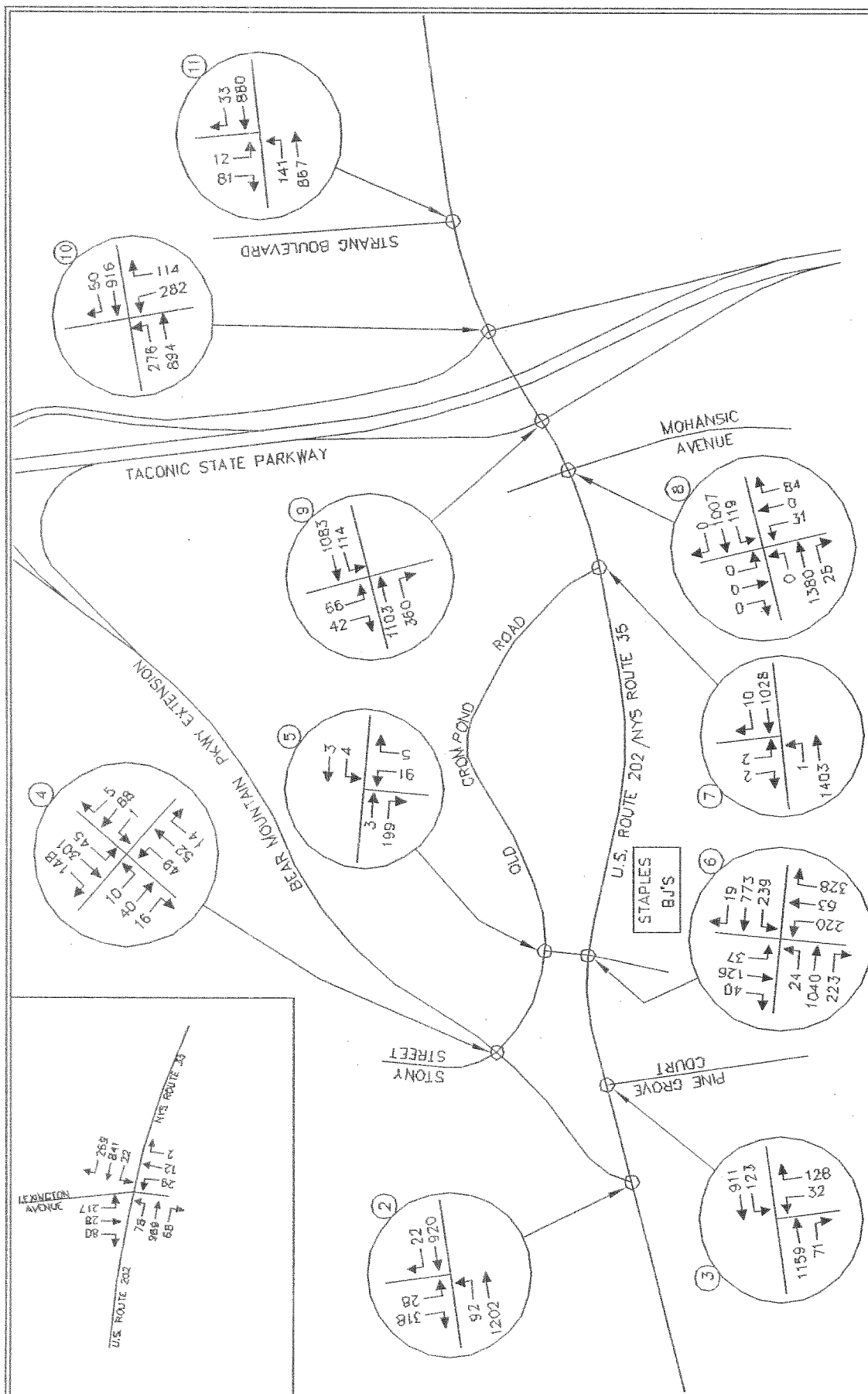


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Hawthorne, New York 10532

Source: John Collins Engineers, P.C.

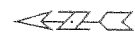
Exhibit III.K-7A 2013 Projected Traffic Volumes Weekday Peak PM Hour

COSTCO WHOLESALE
Town of Yorktown, New York



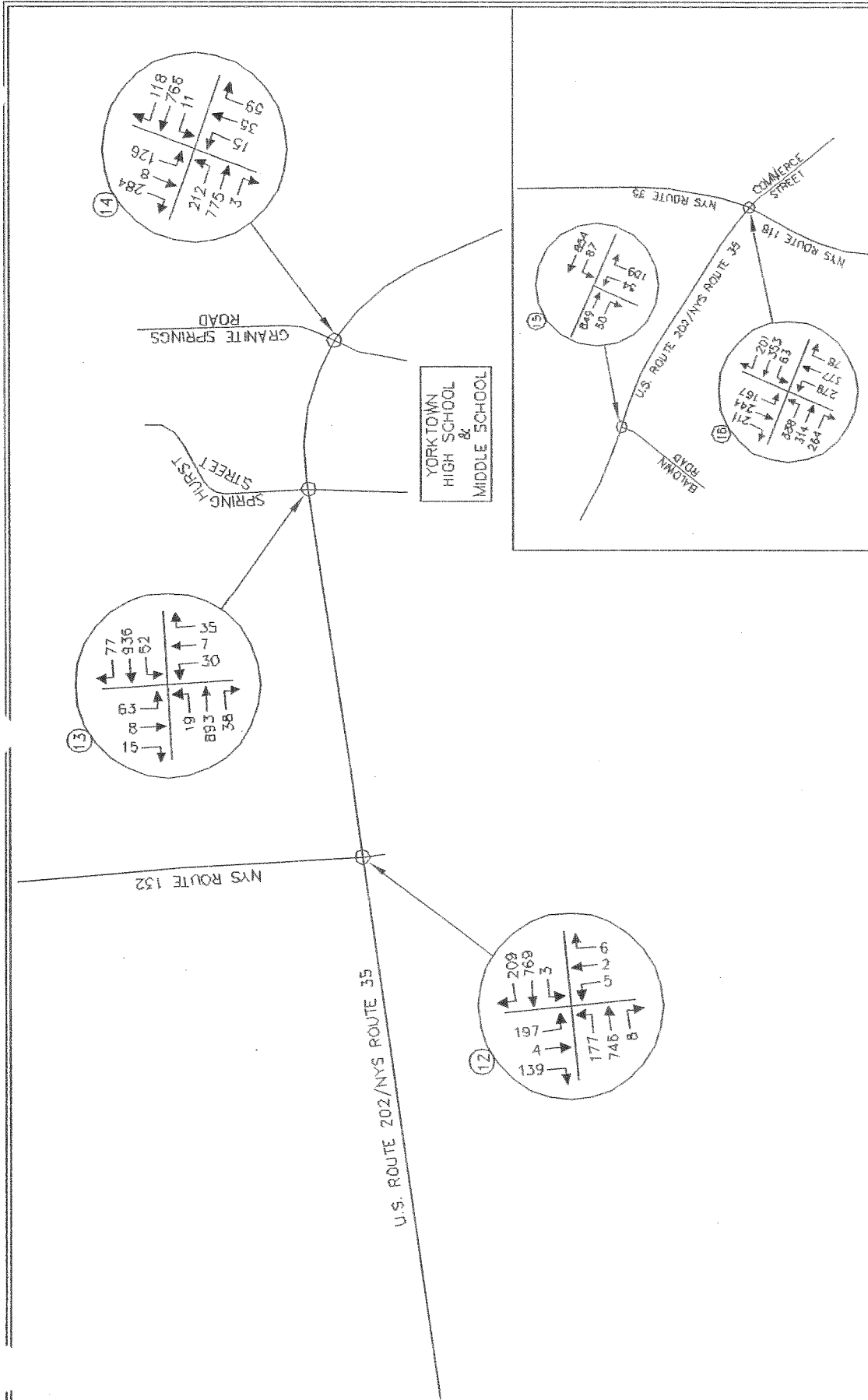
TRC Engineers, Inc.
7 Sylvania Drive
Hawthorne, New York 10532

Exhibit III.K-8 2013 Projected Traffic Volumes Weekend Peak Saturday Hour



COSTCO WHOLESALE
Town of Yorktown, New York

Source: John Collins Engineers, P.C.

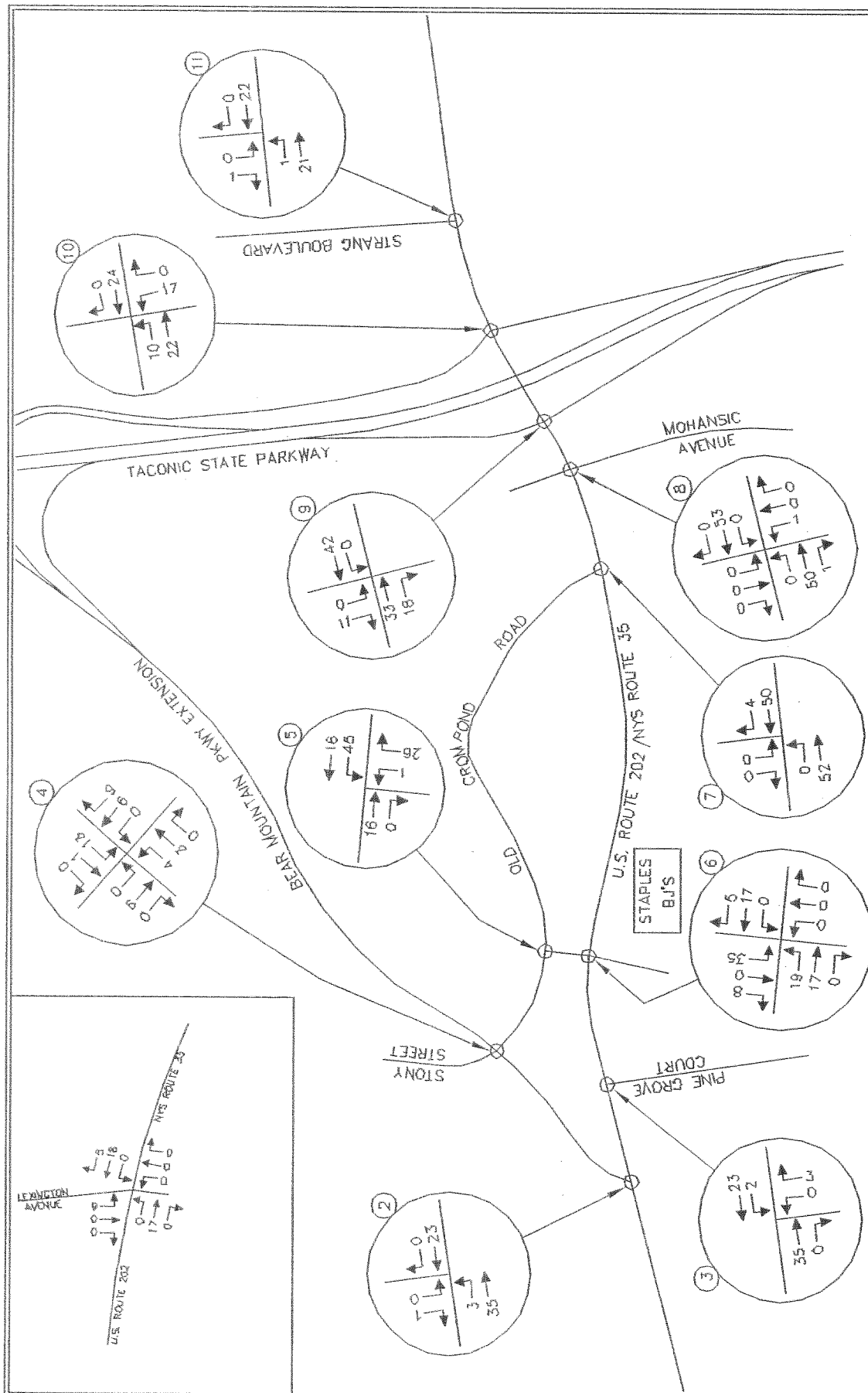


TRC Engineers, Inc.
7 Skyline Drive
Hawthorne, New York 10532

Exhibit III.K-8A 2013 Projected Traffic Volumes Weekend Peak Saturday Hour

COSTCO WHOLESALE
Town of Yorktown, New York

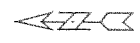
Source: John Collins Engineers, P.C.



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7 Slaying Drive
Hawthorne, New York 10532

Source: John Collins Engineers, P.C.

Exhibit III.K-9 Other Development Traffic Volumes Weekday Peak AM Hour



COSTCO WHOLESALE
Town of Yorktown, New York

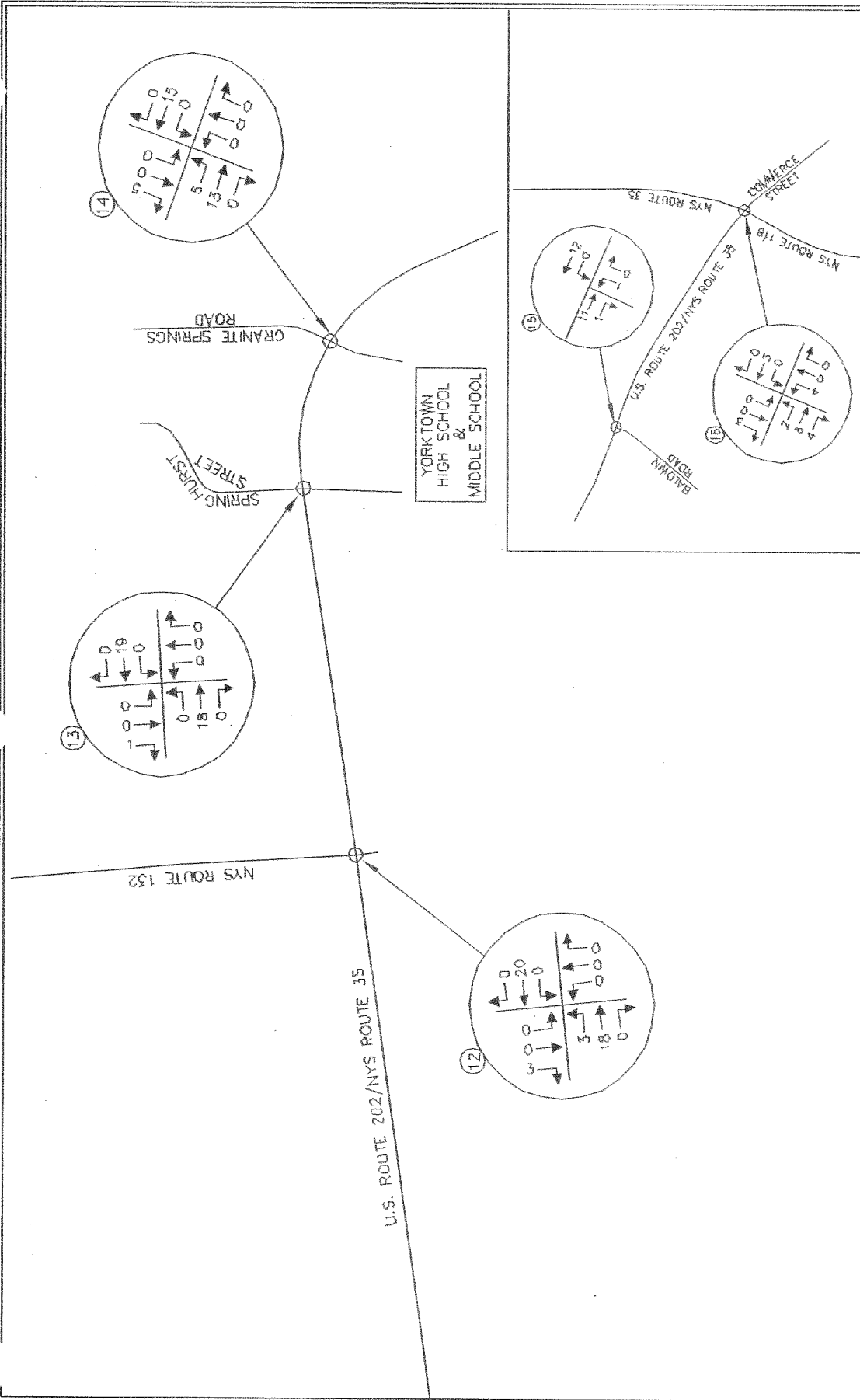
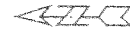


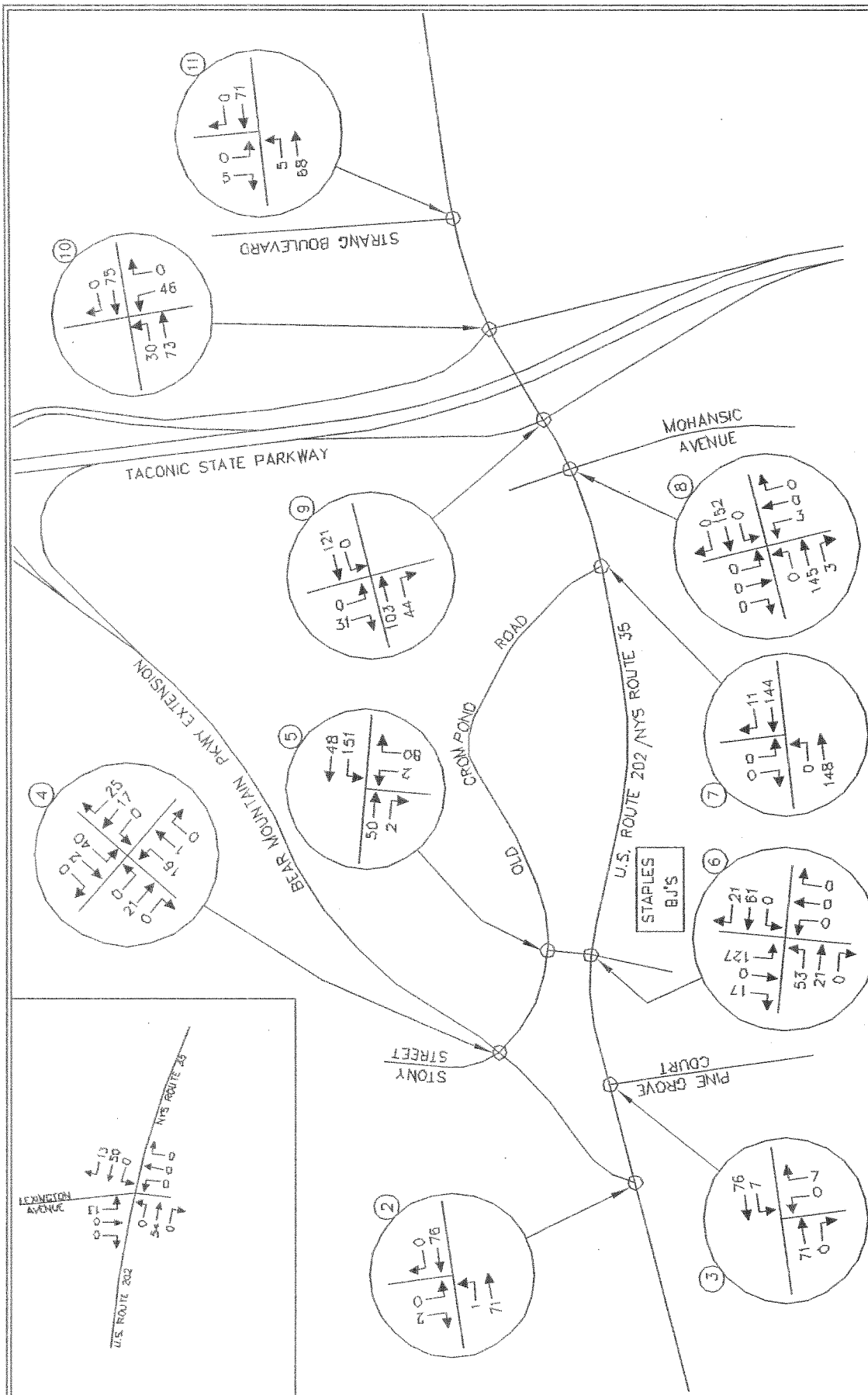
TRC Engineers, Inc.
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Hawthorne, New York 10532

Source: John Collins Engineers, P.C.

Exhibit III.K-9A
Other Development Traffic Volumes
Weekday Peak AM Hour

COSTCO WHOLESAL
Town of Yorktown, New York



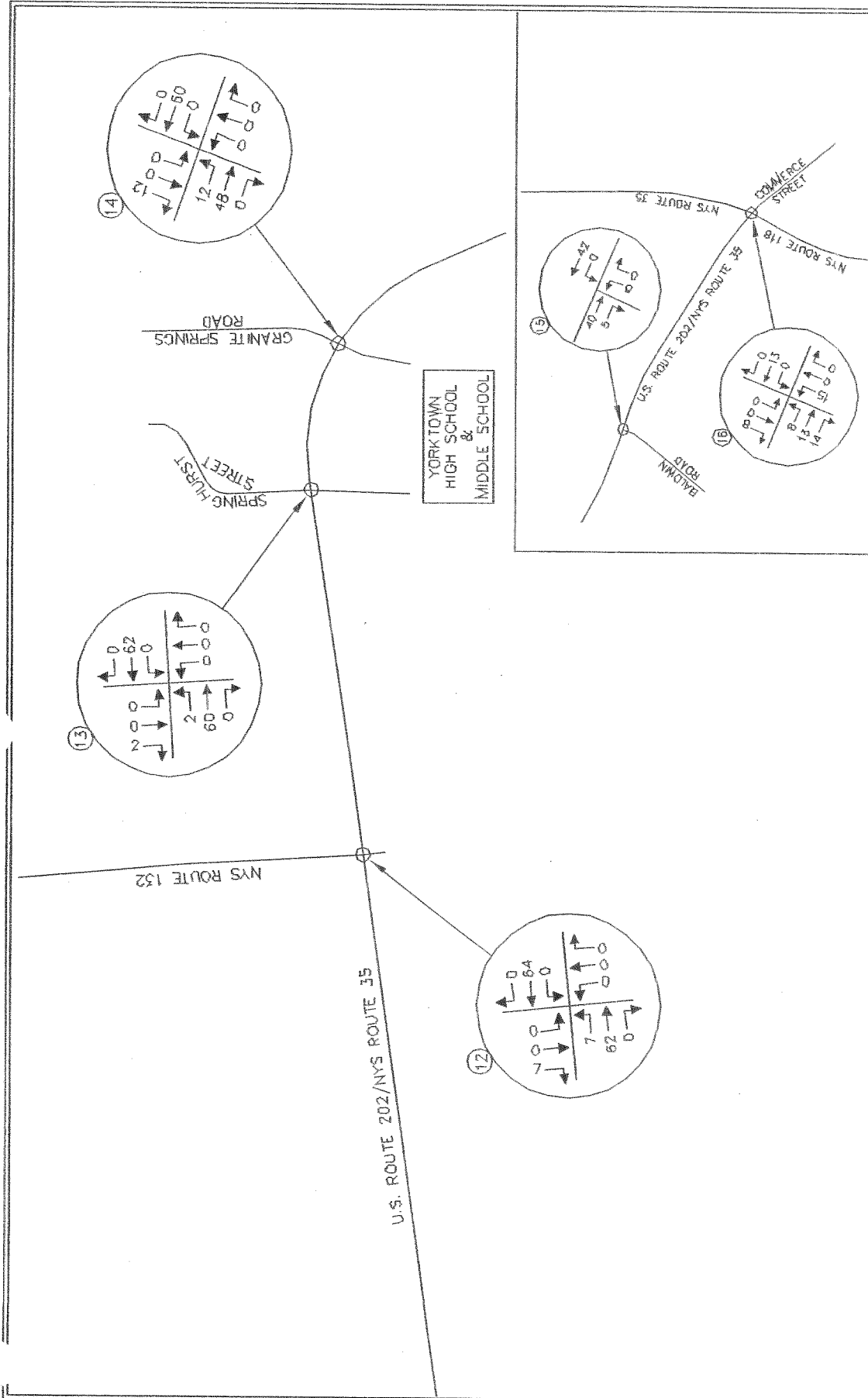


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Source: John Collins Engineers, P.C.

Exhibit III.K-10 Other Development Traffic Volumes Weekday Peak PM Hour

COSTCO WHOLESALE
Town of Yorktown, New York

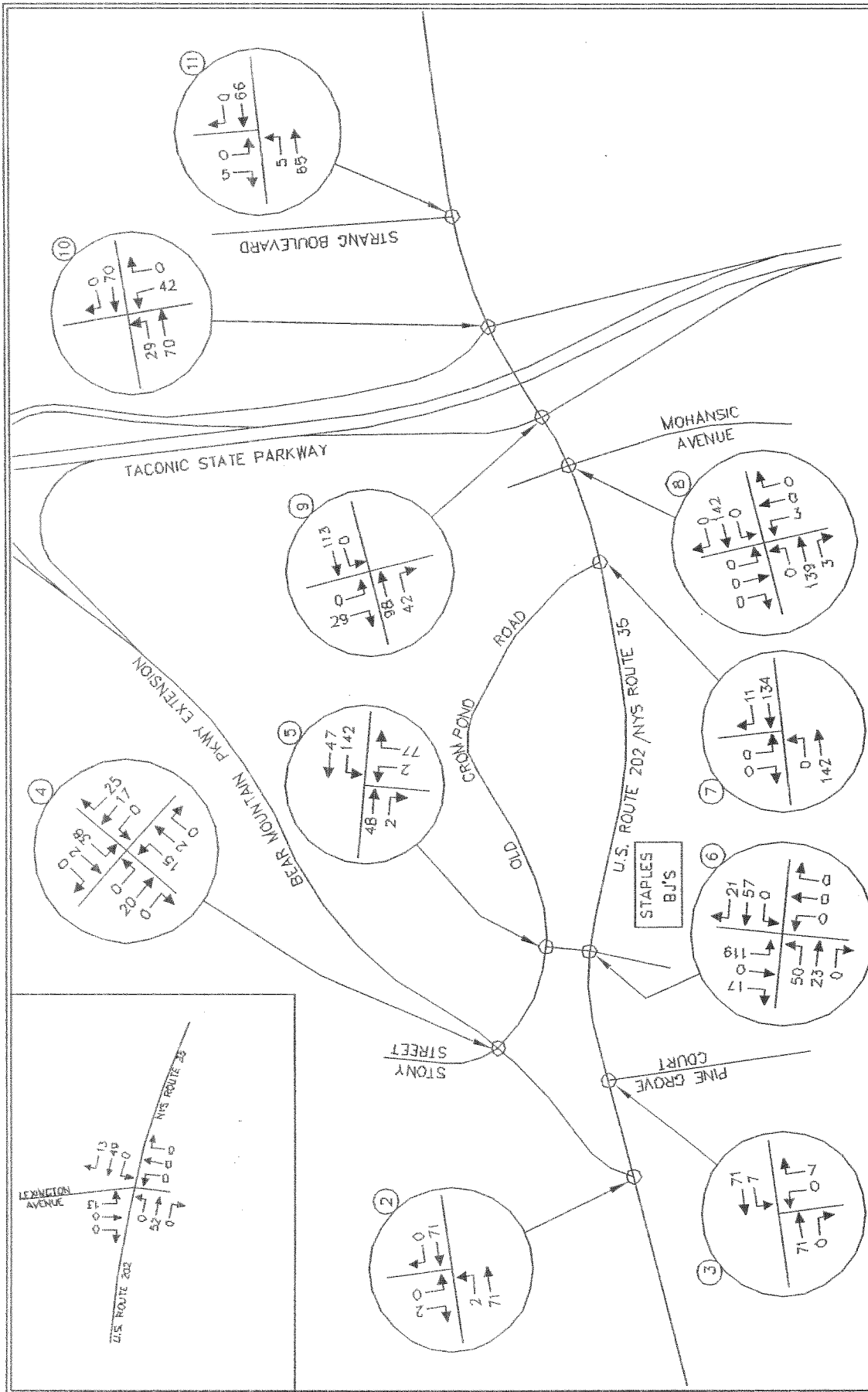


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Source: John Collins Engineers, P.C.

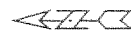
Exhibit III.K-10A Other Development Traffic Volumes Weekday Peak PM Hour

COSTCO WHOLESALE
Town of Yorktown, New York



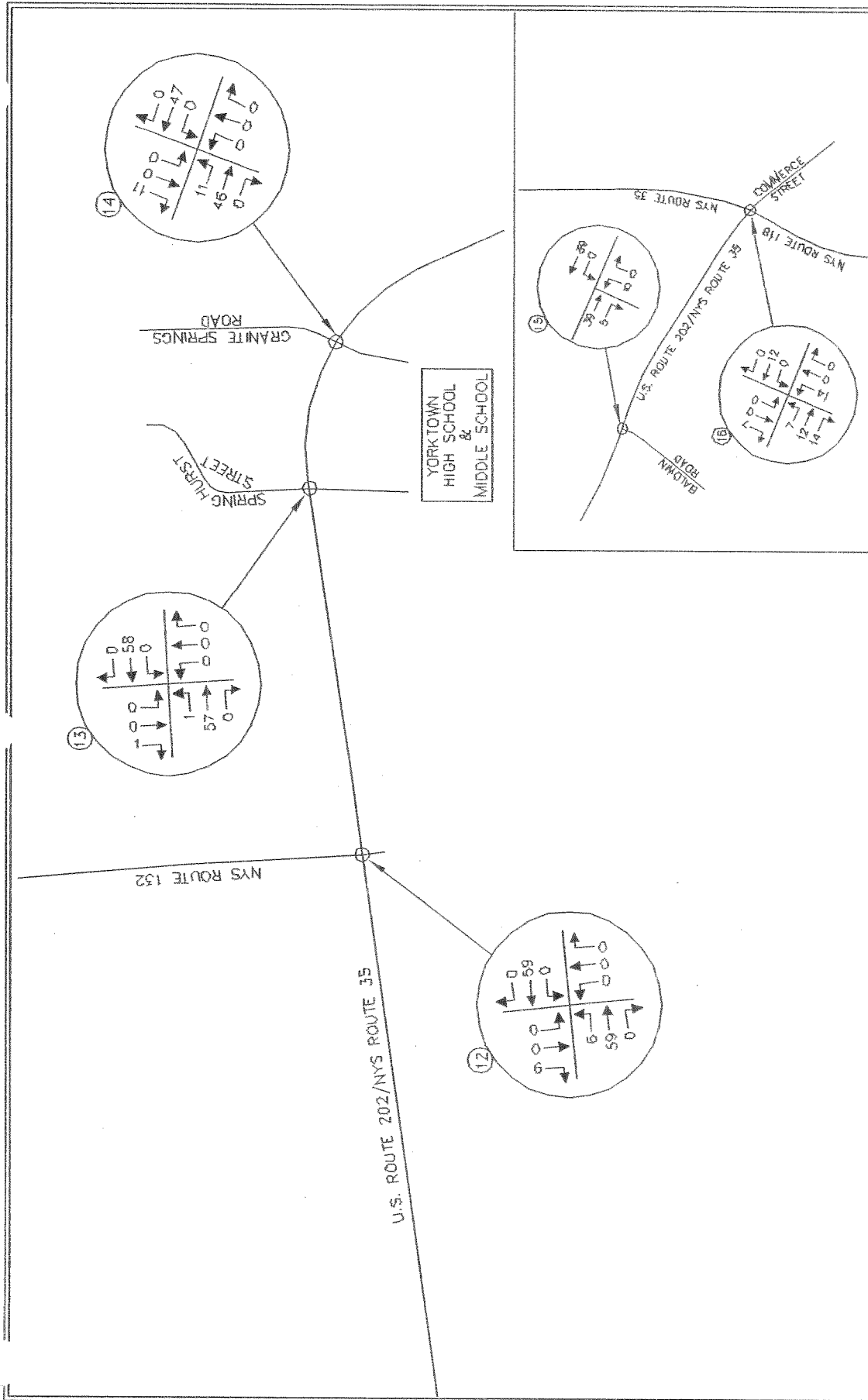
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Hawthorne, New York 10532

Exhibit K.III-11 Other Development Traffic Volumes Weekend Peak Saturday Hour



COSTCO WHOLESALE
Town of Yorktown, New York

Source: John Collins Engineers, P.C.

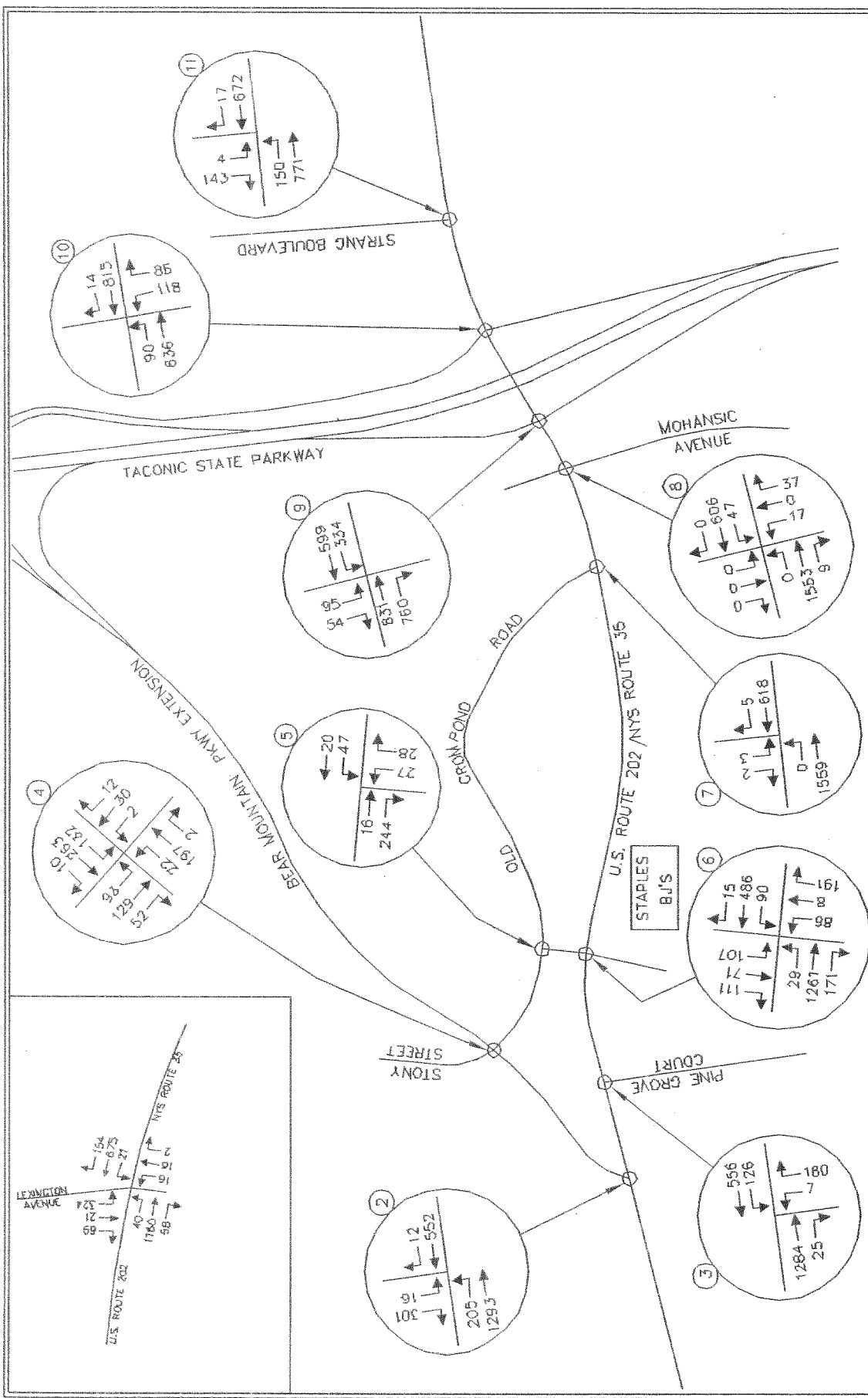


COSTCO WHOLESALE
Town of Yorktown, New York

Exhibit III.K-11A Other Development Traffic Volumes Weekend Peak Saturday Hour

TRC
TRC Engineers, Inc.
7 Skyline Drive
Hawthorne, New York 10532

Source: John Collins Engineers, P.C.



TRC Engineering, Inc.
7 Skyline Drive
Hawthorne, New York 10532

Source: John Collins Engineering, P.C.

Exhibit III.K-12 2013 No-Build Traffic Volumes Weekday Peak AM Hour

COSTCO WHOLESALE
Town of Yorktown, New York

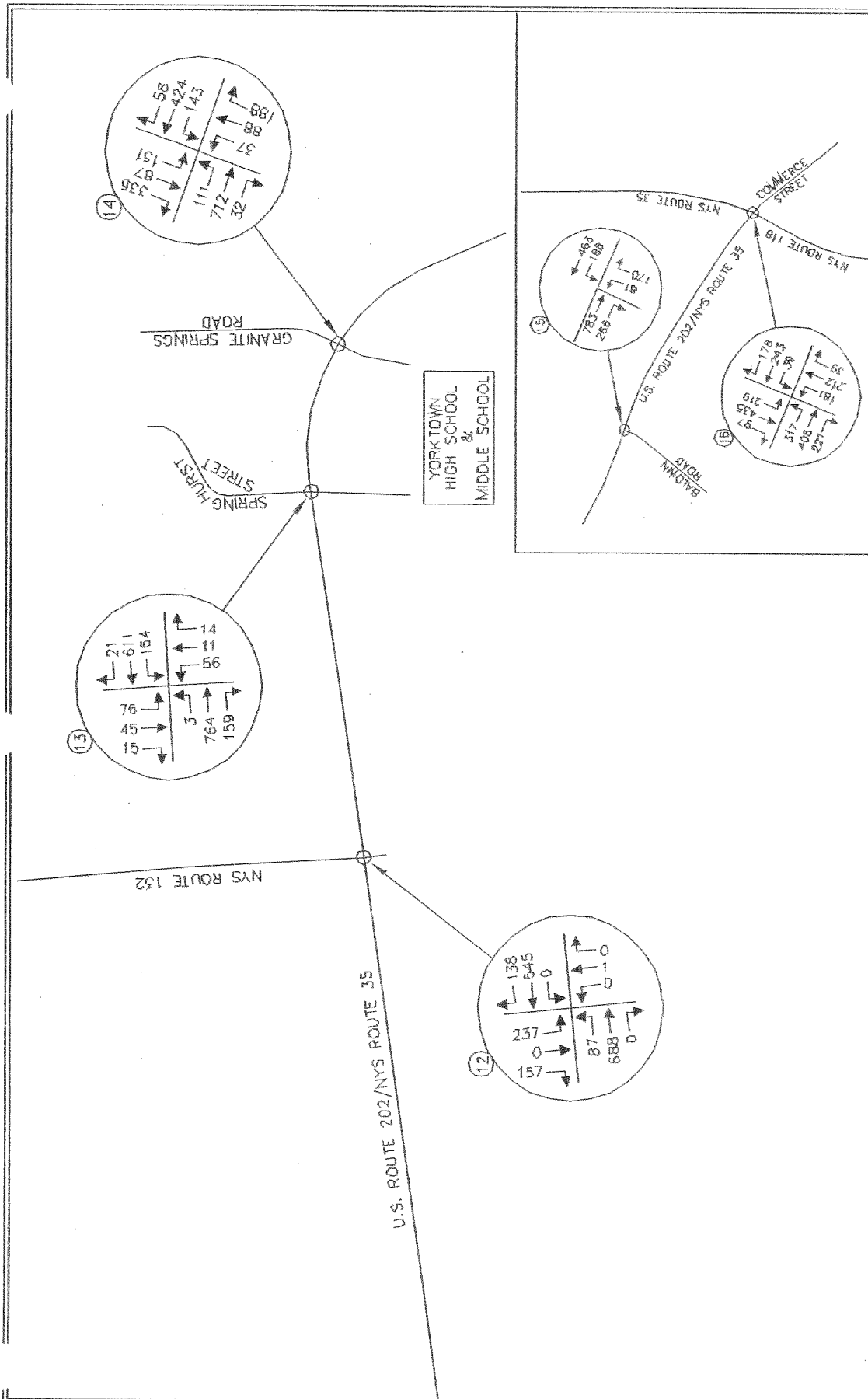


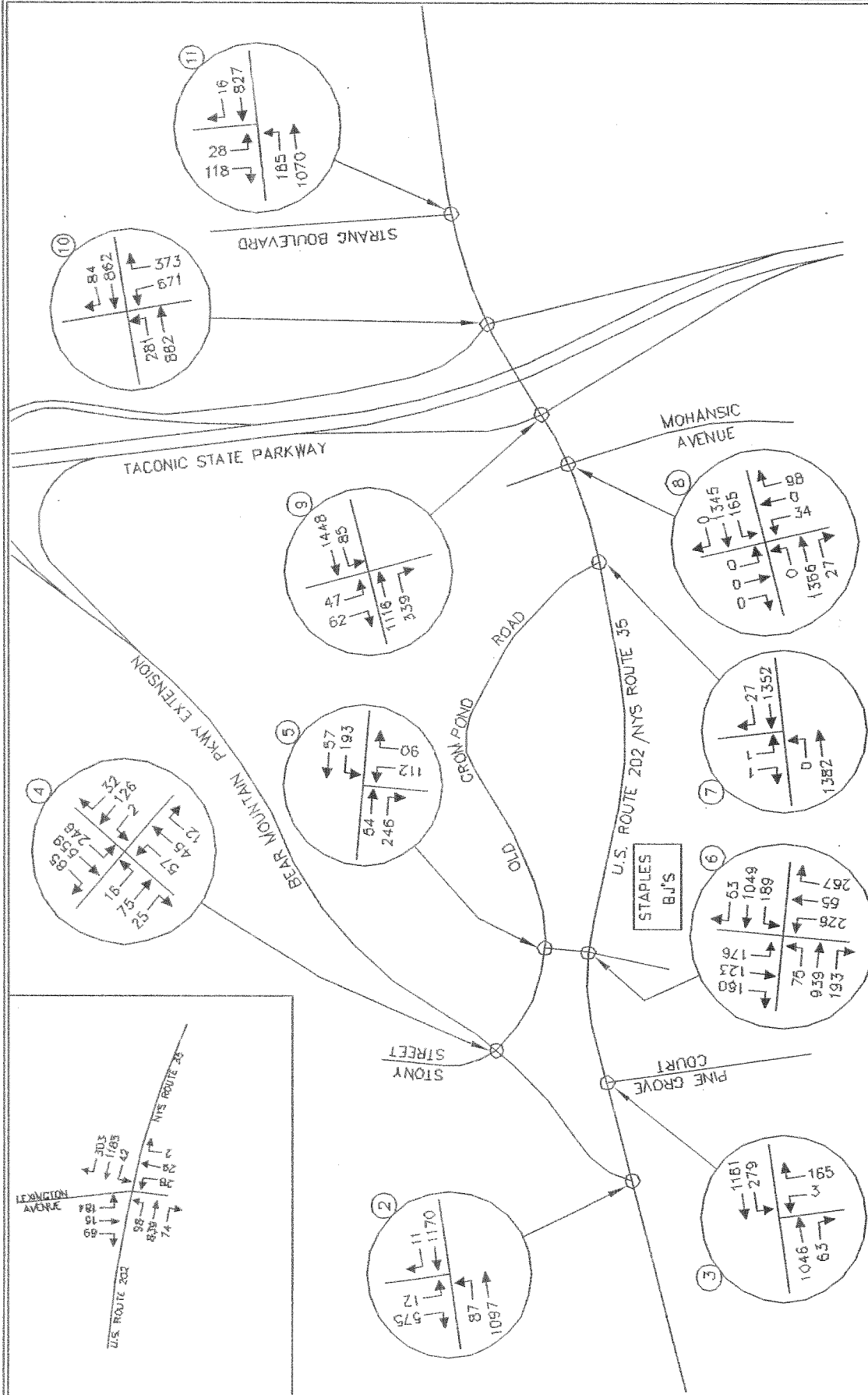
TRC Engineers, Inc.
7 Skyline Drive
Hawthorne, New York 10532

Source: John Collins Engineers, P.C.

Exhibit III.K-12A 2013 No-Build Traffic Volumes Weekday Peak AM Hour

COSTCO WHOLESALE
Town of Yorktown, New York



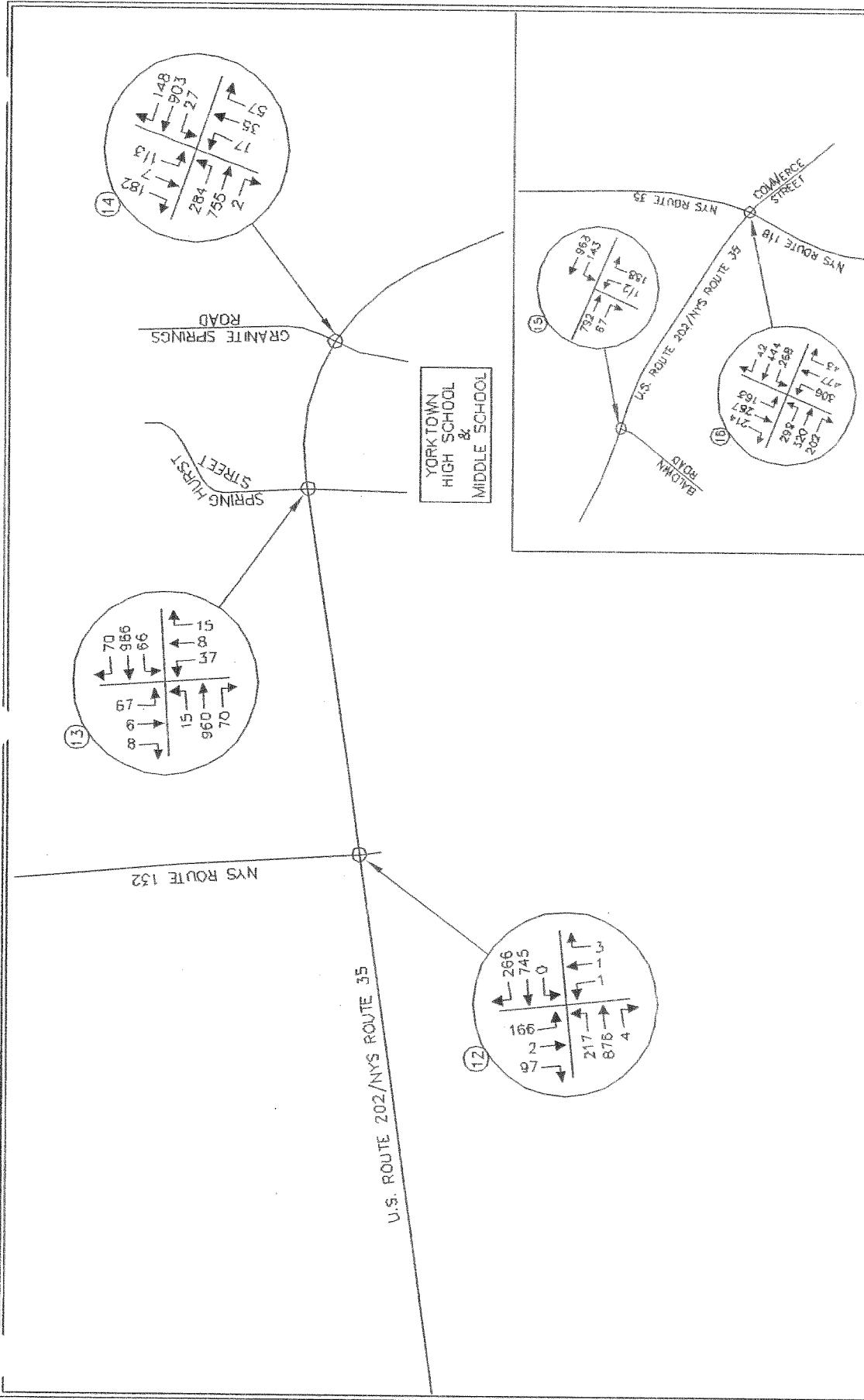


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Exhibit III.K-13 2013 No-Build Traffic Volumes Weekday Peak PM Hour

Source: John Collins Engineers, P.C.

COSTCO WHOLESALE
Town of Yorktown, New York

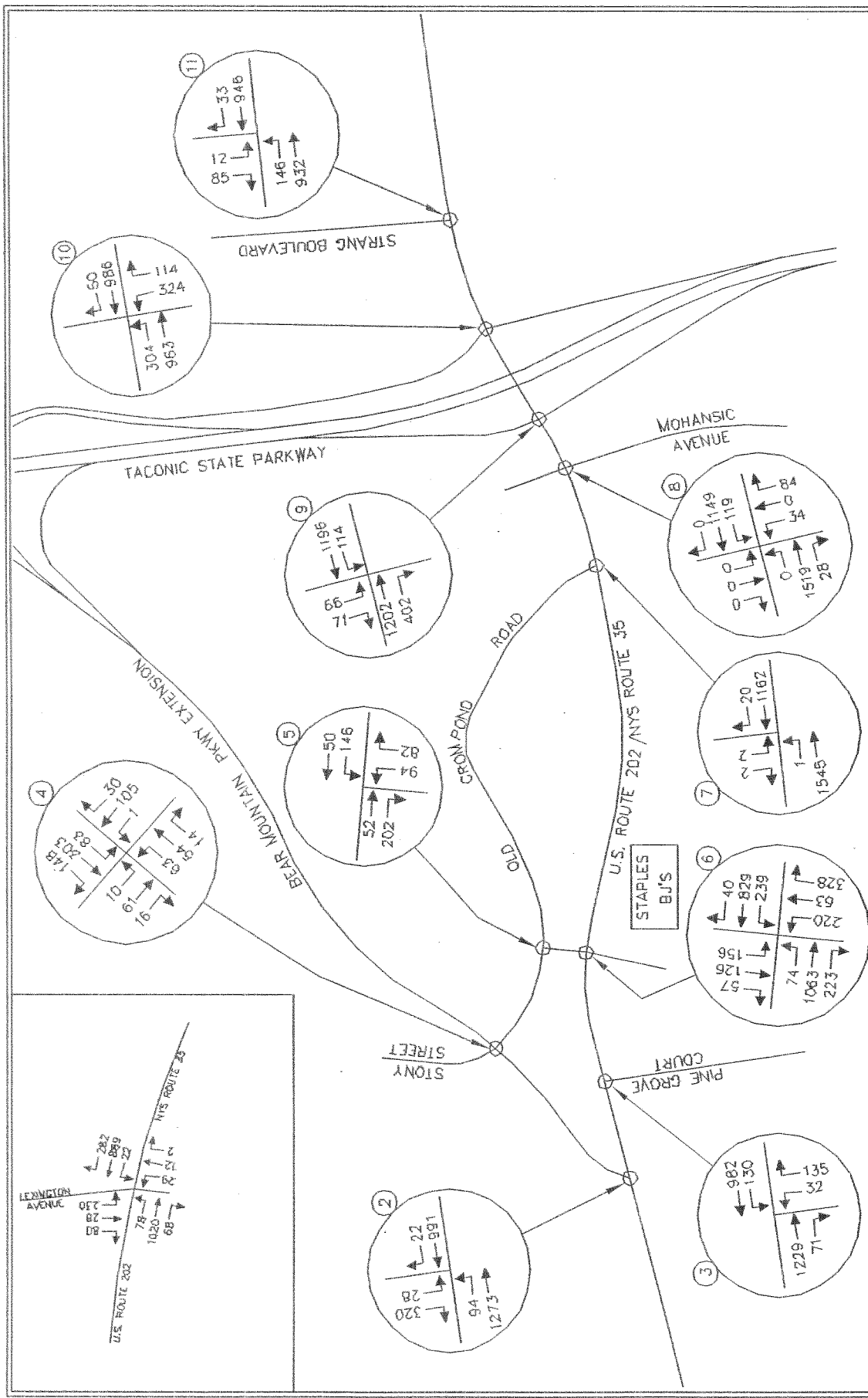


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Exhibit III.K-13A 2013 No-Build Traffic Volumes Weekday Peak PM Hour

Source: John Collins Engineers, P.C.

COSTCO WHOLESALE
Town of Yorktown, New York



TRC Engineers, Inc.
7 Skyline Drive
Hawthorne, New York 10532

Source: John Collins Engineers, P.C.

Exhibit III.K-14 2013 No-Build Traffic Volumes Weekend Peak Saturday Hour

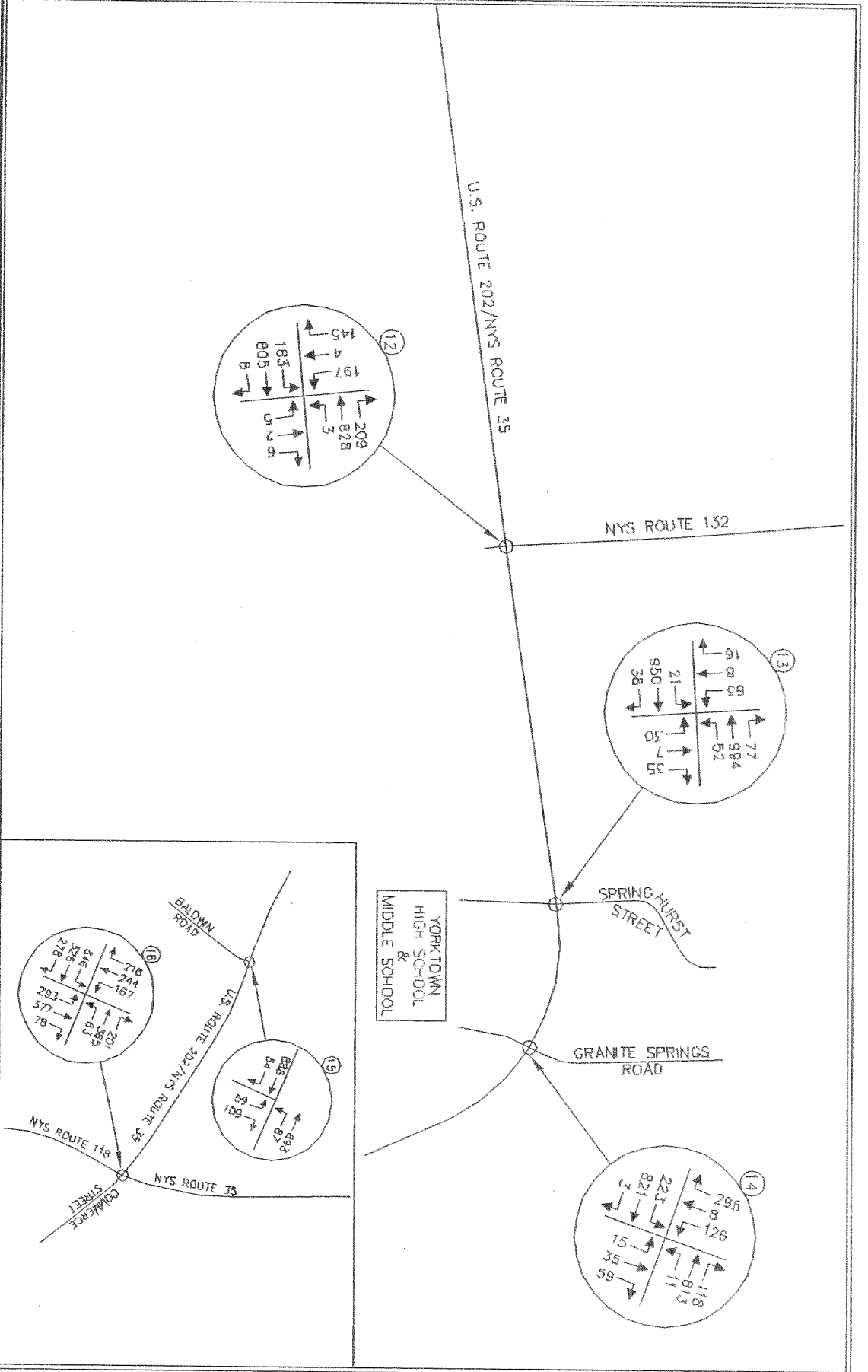
COSTCO WHOLESALE
Town of Yorktown, New York



TRC ENGINEERS, INC.
7 Sylvania Drive
Hawthorne, New York 10532

Source: John Collins Engineers, P.C.

Exhibit III.K-14A
2013 No-Build Traffic Volumes
Weekend Peak Saturday Hour



COSTCO WHOLESALE
Town of Yorktown, New York

b. Proposed NYSDOT NYS Route 35/U.S. Route 202 BMP 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, 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 exhibit 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 and a separate left turn lane westbound. The northbound approach will remain unchanged. 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 intersection 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 fall of 2011/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 by the summer of 2012. Construction is then expected to begin in the fall of 2012 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.

c. **Other Potential Transportation Improvements**

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 202 corridor. 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 schedule for the completion of these 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 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.

Town of Yorktown Comprehensive Plan

The Town of Yorktown adopted a 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. The improvements that apply to the NYS Route 35/U.S. Route 202 corridor are described below.

i. NYS Route 35/U.S. Route 202 and NYS Route 132

The improvements recommended for this intersection in the Comprehensive Plan include the extension of the existing eastbound left turn lane, the construction of a full westbound right turn lane and the construction of a separate right turn lane southbound on NYS Route 132. There are currently no plans for the State to make these improvements

The analysis for this intersection conducted in this report, which will be presented in the following section, indicates that the intersection will require the addition of a southbound right turn lane along NYS Route 132 in the future. The right-of-way in this area will have to be determined to verify if this improvement can be completed. There is a steep slope on the west side of NYS Route 132 which will require a retaining wall for any type of widening to be completed. Also signal timing improvements are recommended to improve the overall efficiency of this intersection. As noted by the Comprehensive Plan, these improvements will be required in the future regardless of the proposed Costco project.

ii. NYS Route 35/U.S. Route 202 and Granite Springs Road

The Comprehensive Plan indicated both short term and long term improvements for this intersection. The short term improvements include the addition of separate left turn lanes, which already exist in the eastbound and westbound directions, and the addition of a protected left turn signal phase. In the long term the Comprehensive Plan indicated that improvements to the intersection should be coordinated with the proposal

to turn the High School/Middle School driveways into a one-way pair. It was also recommended that the reconstruction of the intersection into a roundabout using the former Old Crompond Road right-of way, which is located near this intersection, be explored.

iii. NYS Route 35/U.S. Route 202 and NYS Route 118/Commerce Street

Several improvements were recommended for this intersection and the surrounding area as part of the Comprehensive Plan. These include prohibiting left turns at the intersection in as many directions as possible to reduce turning conflicts. This would require the ability for vehicles to make these left turns at other adjacent intersections. The Comprehensive Plan also recommends the reduction in potential turning movements at adjacent intersections to prevent queues that could interfere with traffic flow at this intersection. As part of this the Hallock's Mill Road/Ridge Street intersection with NYS Route 118 is recommended to be signalized and left turns prohibited from Route 118. It is anticipated that this would also reduce the number of cut-through vehicles along Hallock's Mill Road. Finally the Comprehensive Plan recommends the relocation of existing bus stops to the far side of the intersection to increase the capacity of the intersection.

The analysis for this intersection conducted in this report, which will be presented in the following section, indicates that the intersection will at a minimum require traffic signal timing improvements to provide additional green time for the northbound and southbound approaches. This will improve the overall efficiency of the intersection. These signal timing modifications will be required in the future regardless of the proposed Costco project.

3. Potential Impacts

a. **Site Generated Traffic Volumes (Table No. 1)**

Estimates of the amount of traffic to be generated by the proposed development during each of the peak hours were developed based on information published by the Institute of Transportation Engineers (ITE) as contained in the report entitled "Trip Generation", 8th Edition, 2008, based on Land Use Category – 857 Discount Club. Table No. 1 summarizes the trip generation rates and corresponding site generated traffic volumes for the Weekday Peak AM, Peak PM and Saturday 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.

In addition to this and the ITE data, information provided by Costco was also referenced. The data was compiled for other existing Costco stores and summarized and presented to the Pennsylvania Department of Transportation. A copy of the approved trip generation rates from PENNDOT is contained in Appendix "G" of the Traffic Impact Study. Comparing these rates to the ITE rates it was found that the ITE rates were either comparable or slightly higher than the actual observed Costco rates. The higher rates shown in Table No. 1 were utilized in the evaluation of this report, which therefore are somewhat conservative. The Costco facility is proposed to be open for club members seven days a week (Monday to Friday from 10:00AM to 8:30PM and Saturday from 9:30AM to 6:00PM and Sunday from 10:00AM to 6:00PM). The fueling facility will be open 6:00AM to 9:00PM but is only available to club members. See Appendix G of the Traffic Impact Study for other information regarding truck deliveries.

TABLE NO. 1

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

| COSTCO WHOLESALE YORKTOWN, NY | ENTRY | | | EXIT | | |
|----------------------------------|-------|--------|--------------|-------|--------|--------------|
| | HTGR* | VOLUME | NEW TRIPS | HTGR* | VOLUME | NEW TRIPS |
| DISCOUNT CLUB (151,092 S.F.) | | | | | | |
| PEAK AM HOUR | 0.40 | 60 | 45 | 0.17 | 25 | 19 |
| PEAK PM HOUR | 2.12 | 320 | 240 | 2.12 | 320 | 240 |
| PEAK SATURDAY HOUR | 3.42 | 517 | 388 | 3.42 | 517 | 388 |

NOTES:

- 1) * THE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 8TH EDITION, 2008. ITE LAND USE CODE - 857 - DISCOUNT CLUB.

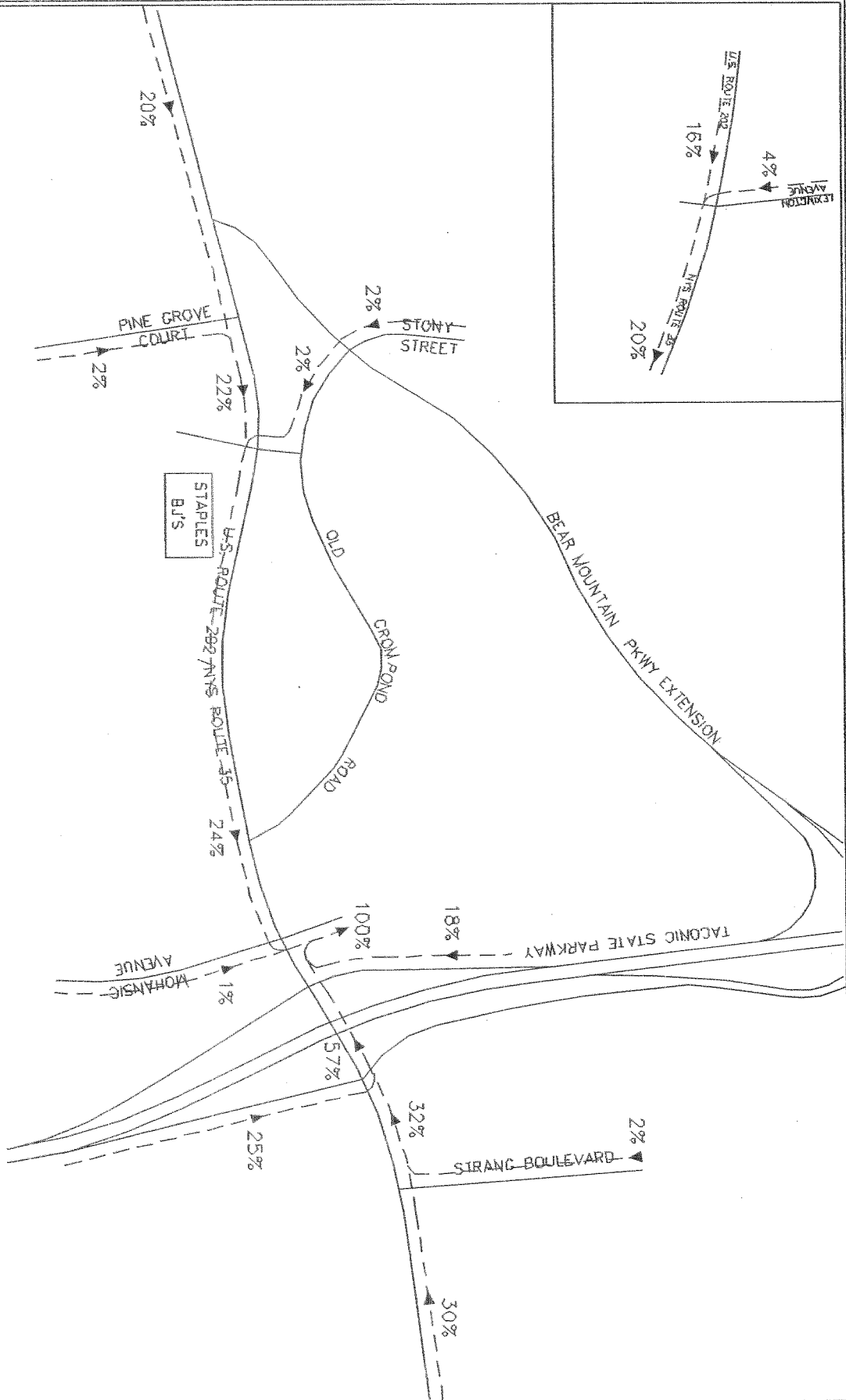
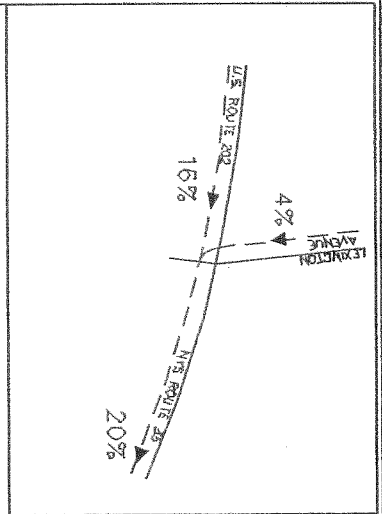
b. Arrival/Departure Distributions (Exhibits No. III.K-15 through 16A)

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 together with trade area data provided by Costco (see Appendix G of the Traffic Study), the distributions were identified. The anticipated arrival distribution is shown on Exhibits No. III.K-15 and 15A while the departure distribution is shown on Exhibits No. III.K-16 and 16A.

Truck deliveries and the arrival/departure distribution of truck traffic to the site were also considered. Based on information obtained from Costco, deliveries generally occur between 6:30 PM and 10:00AM. The Costco will open at 10:00 AM and the delivery schedule ensures that all trucks have departed the site by the time the store opens. Generally there will be between 4 and 5 loads delivered to the site each day using Kenworth (day cab) and 53ft dry and refrigerated trailers. Gas deliveries will occur while the gas station is open which is from 6:00AM to 9:00PM. The number of gas deliveries, which can vary from 1 to 5 deliveries daily, depends on the sales volume of the gas station. Information regarding truck deliveries obtained from Costco is contained in Appendix "G" of the Traffic Impact Study.

c. Year 2013 Build Traffic Volumes (Exhibits No. III.K-17 through 22A)

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 Exhibits No. III.K-17, 17A, 18, 18A, 19 and 19A for each of the peak hours, respectively. The site generated traffic volumes were then added to the Year 2013 No-Build Traffic Volumes (Exhibits No. III.K-12 through 14A) to obtain the Year 2013 Build Traffic Volumes. The resulting Year 2013 Build Traffic Volumes are shown on Exhibits No. III.K-20 and 20A for the Weekday Peak AM Hour, Exhibits No. III.K-21 and 21A for the Weekday Peak PM Hour and Exhibits No. III.K-22 and 22A for the Saturday Peak Hour.



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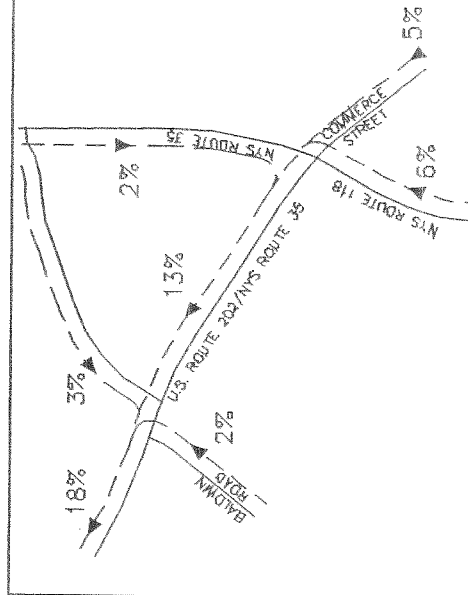
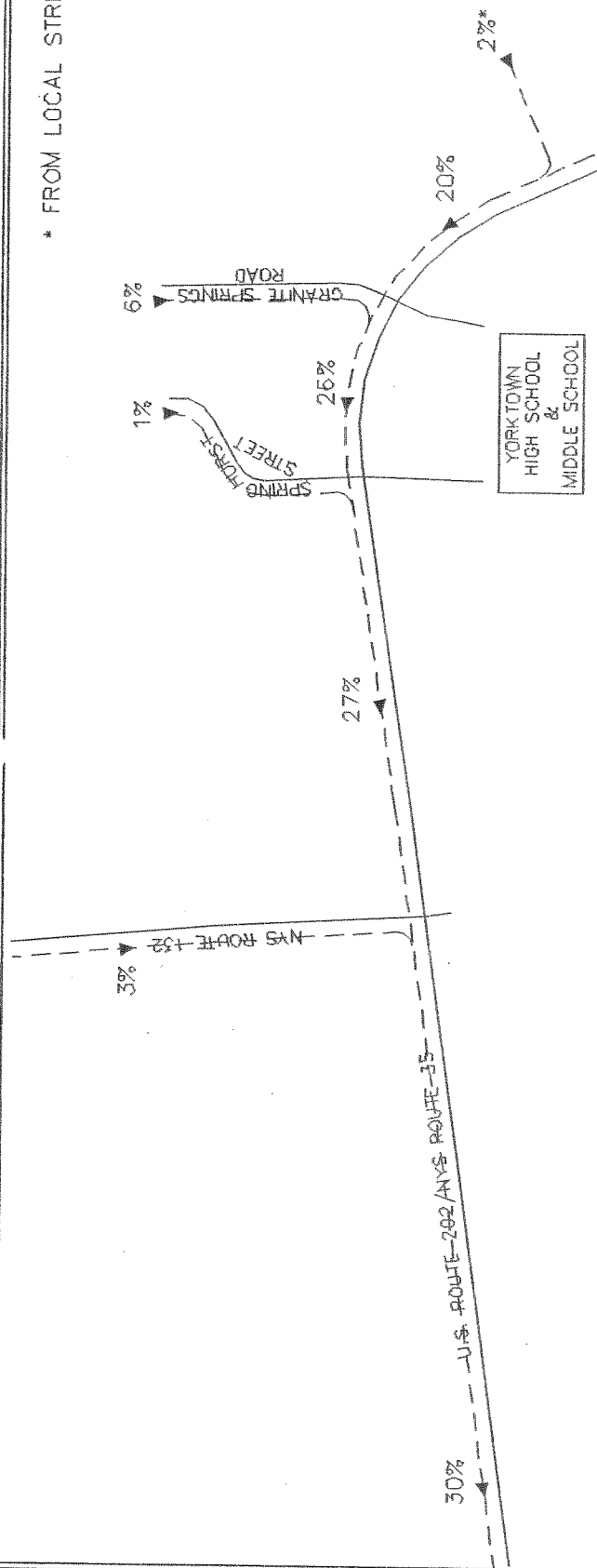
Source: John Collins Engineers, P.C.

Exhibit III.K-15
Arrival Distribution

COSTCO WHOLESALE
Town of Yorktown, New York

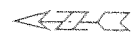


* FROM LOCAL STREETS



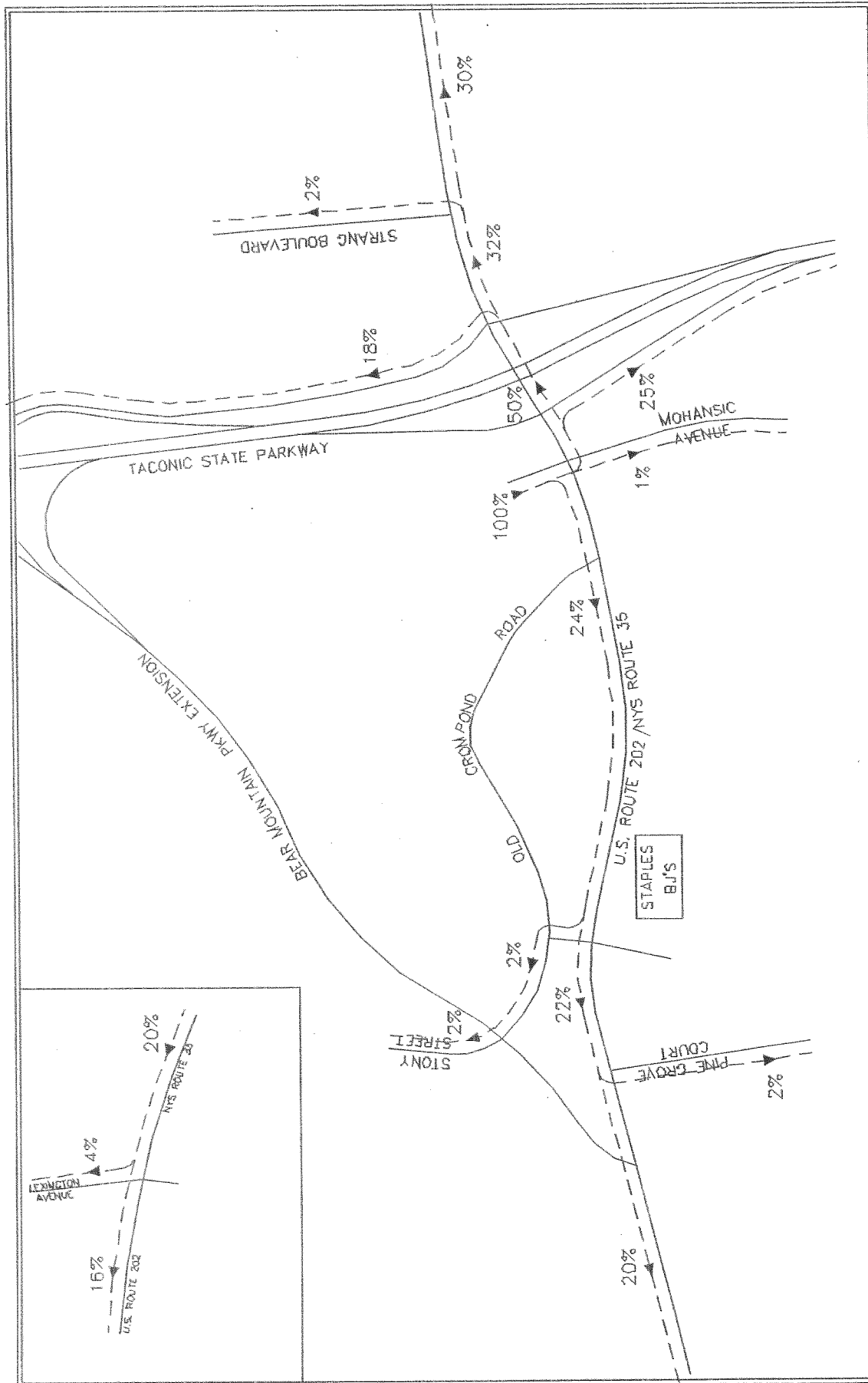
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Exhibit III.K-15A
Arrival Distribution



COSTCO WHOLESALE
Town of Yorktown, New York

Source: John Collins Engineers, P.C.

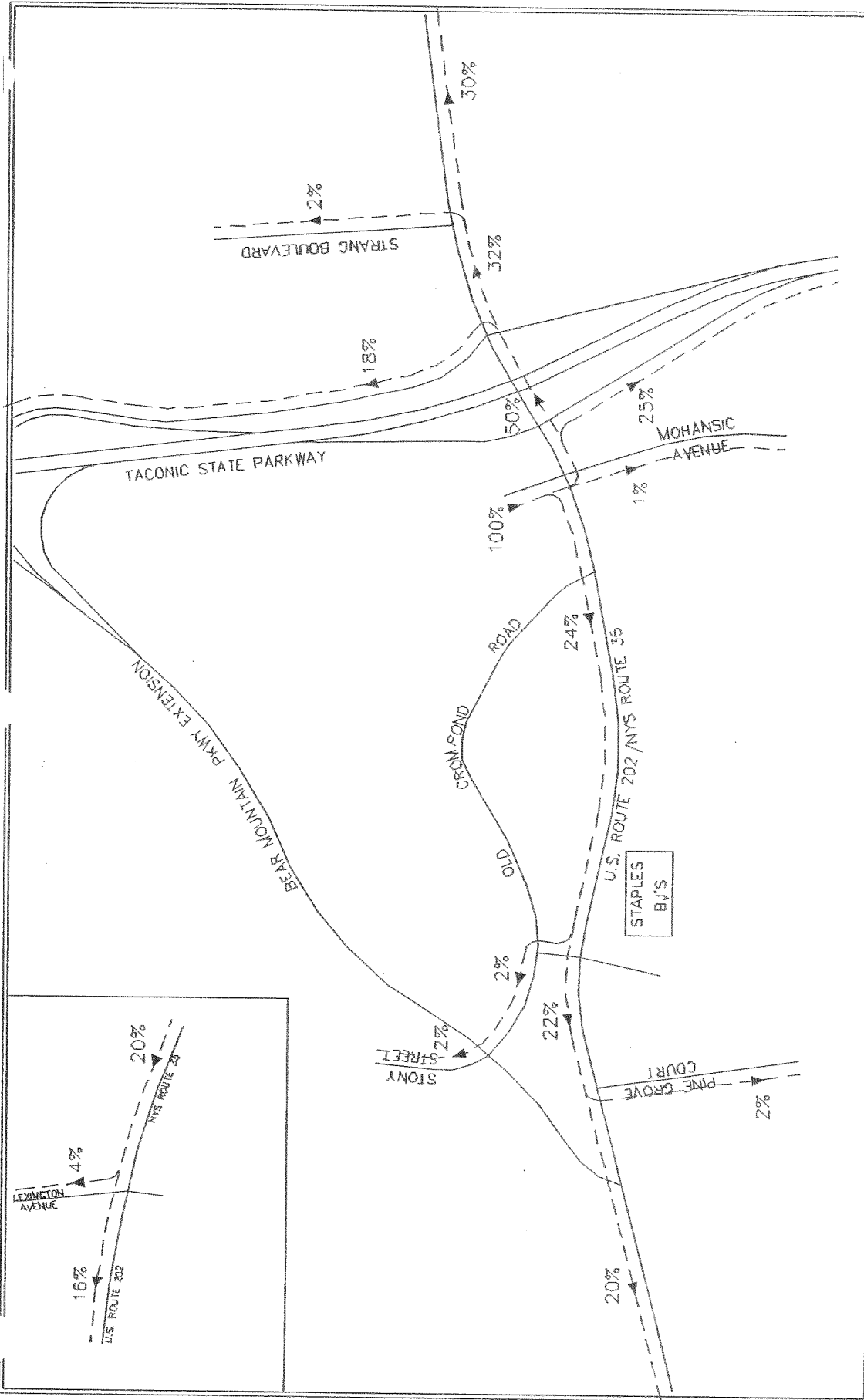


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Exhibit III.K-16 Departure Distribution

COSTCO WHOLESALE
Town of Yorktown, New York

Source: John Collins Engineers, P.C.

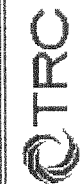
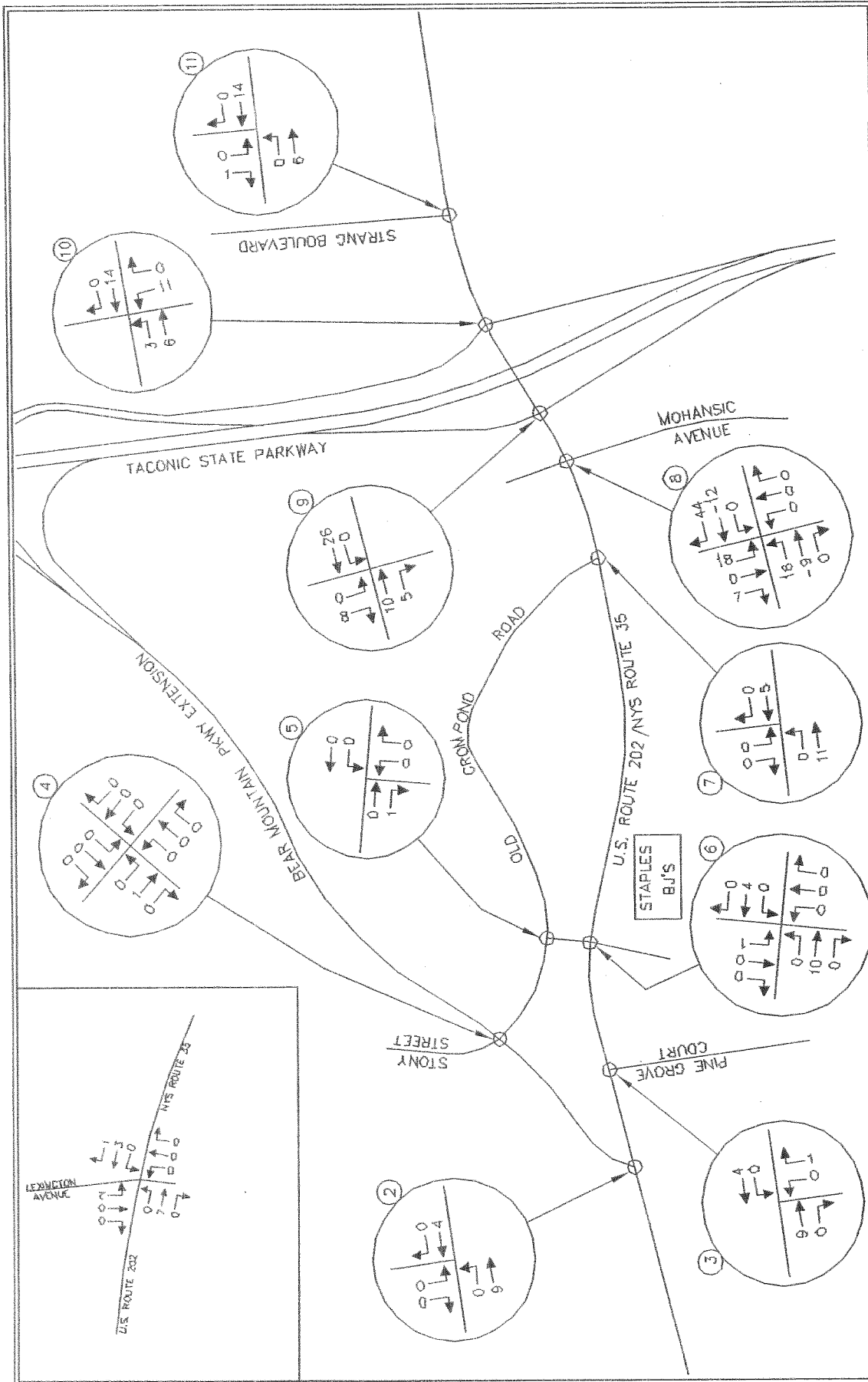


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Flawitham, New York 10532

Source: John Collins Engineers, P.C.

Exhibit III.K-16 Departure Distribution

COSTCO WHOLESALE
Town of Yorktown, New York



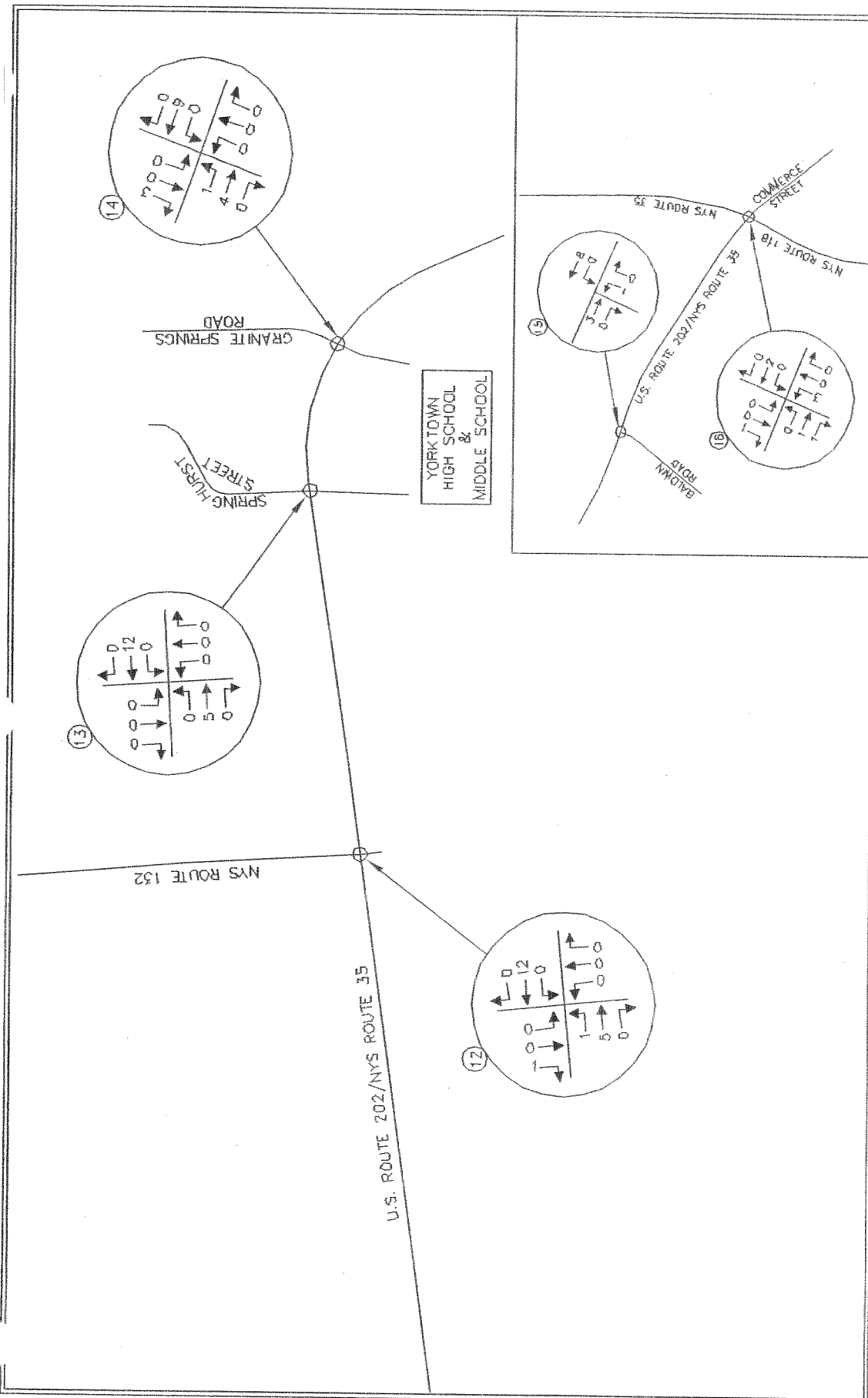
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Exhibit III.K-17 Site Generated Traffic Volumes Weekday Peak AM Hour



COSTCO WHOLESALE
Town of Yorktown, New York

Source: John Collins Engineers, P.C.

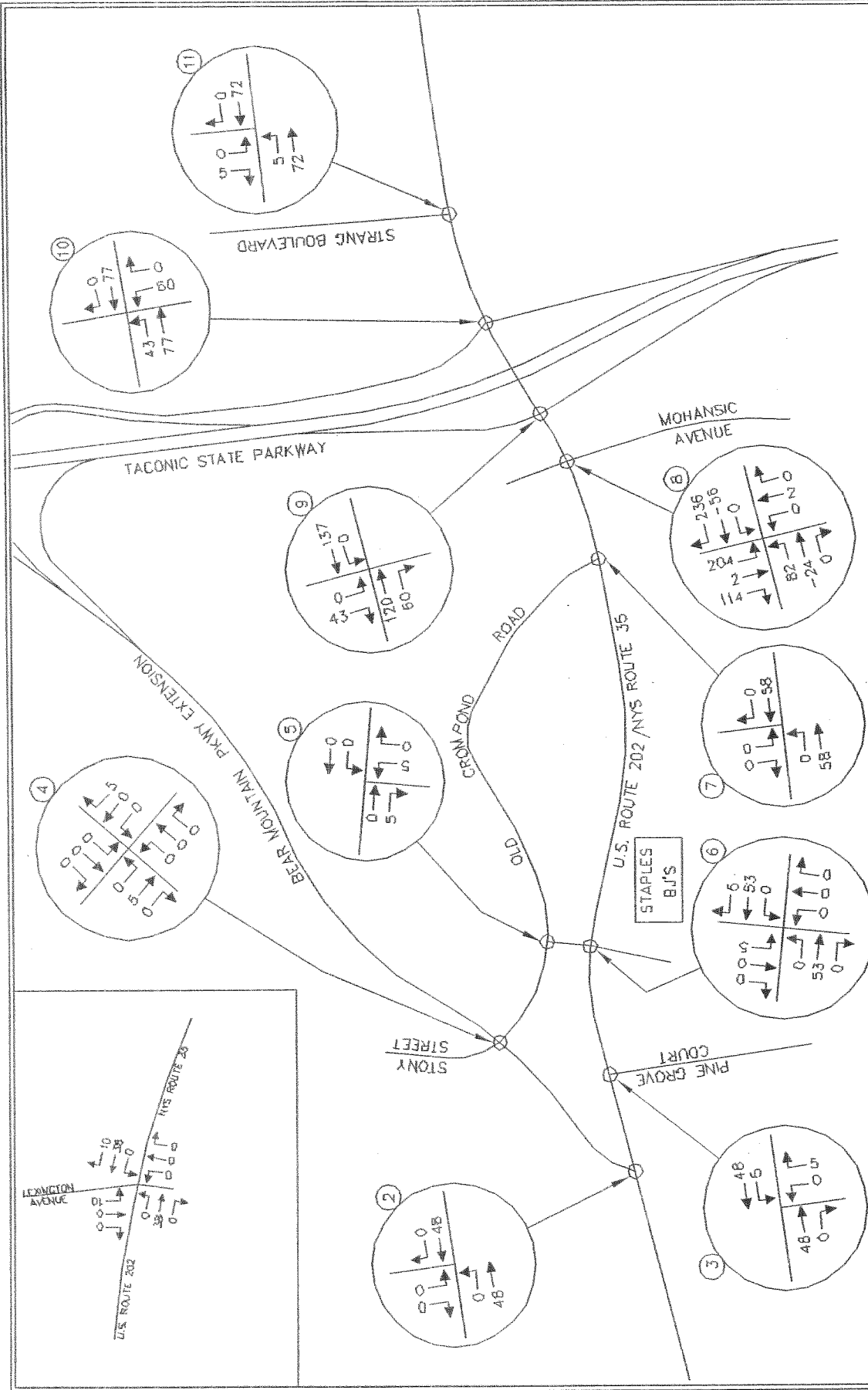


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Hawthorne, New York 10532

Exhibit III.K-17A Site Generated Traffic Volumes Weekday Peak AM Hour

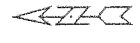
COSTCO WHOLESAL
Town of Yorktown, New York

Source: John Collins Engineers, P.C.



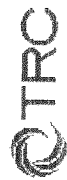
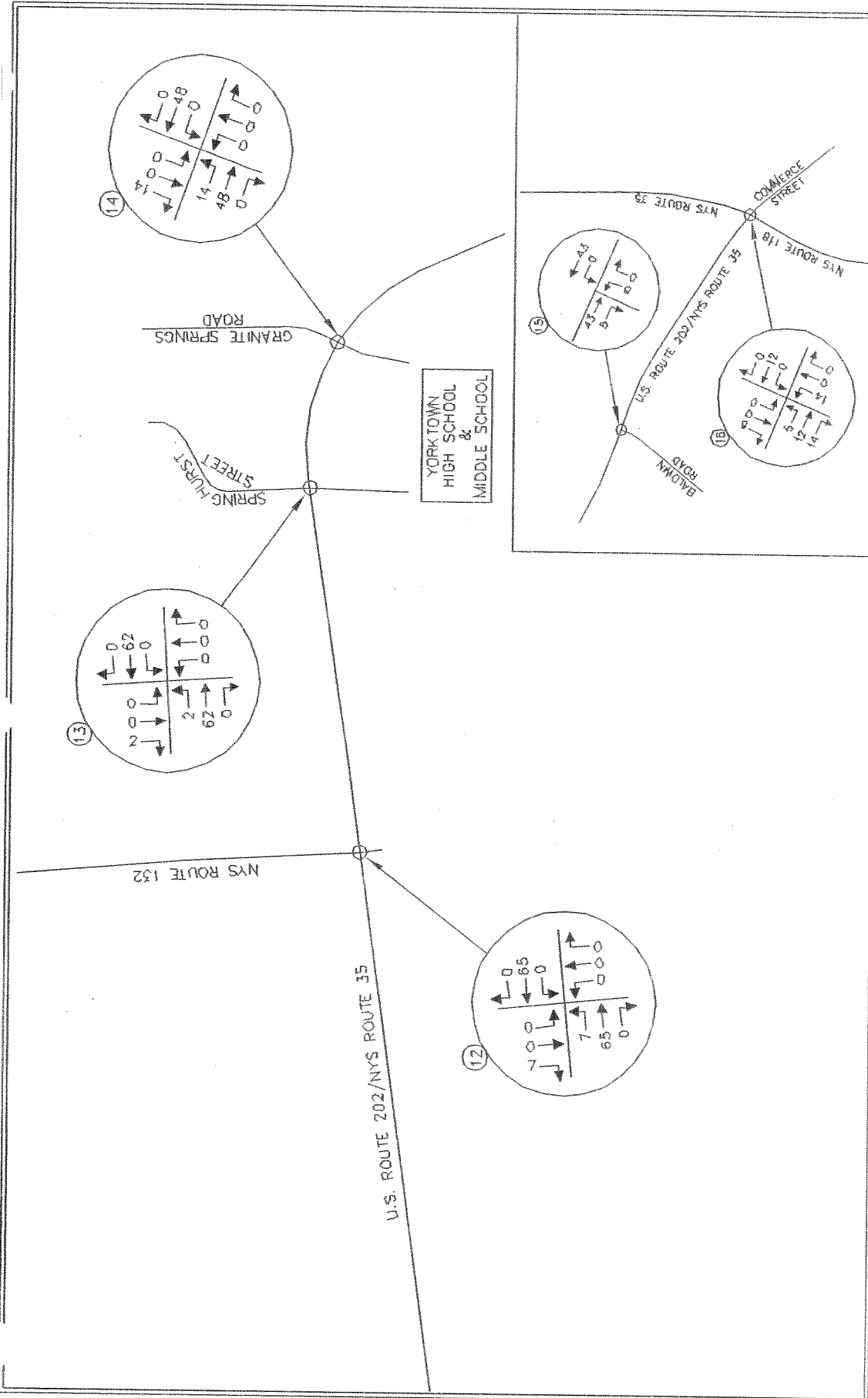
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Hawthorne, New York 10532

Exhibit III.K-18 Site Generated Traffic Volumes Weekday Peak PM Hour



COSTCO WHOLESALE
Town of Yorktown, New York

Source: John Collins Engineers, P.C.

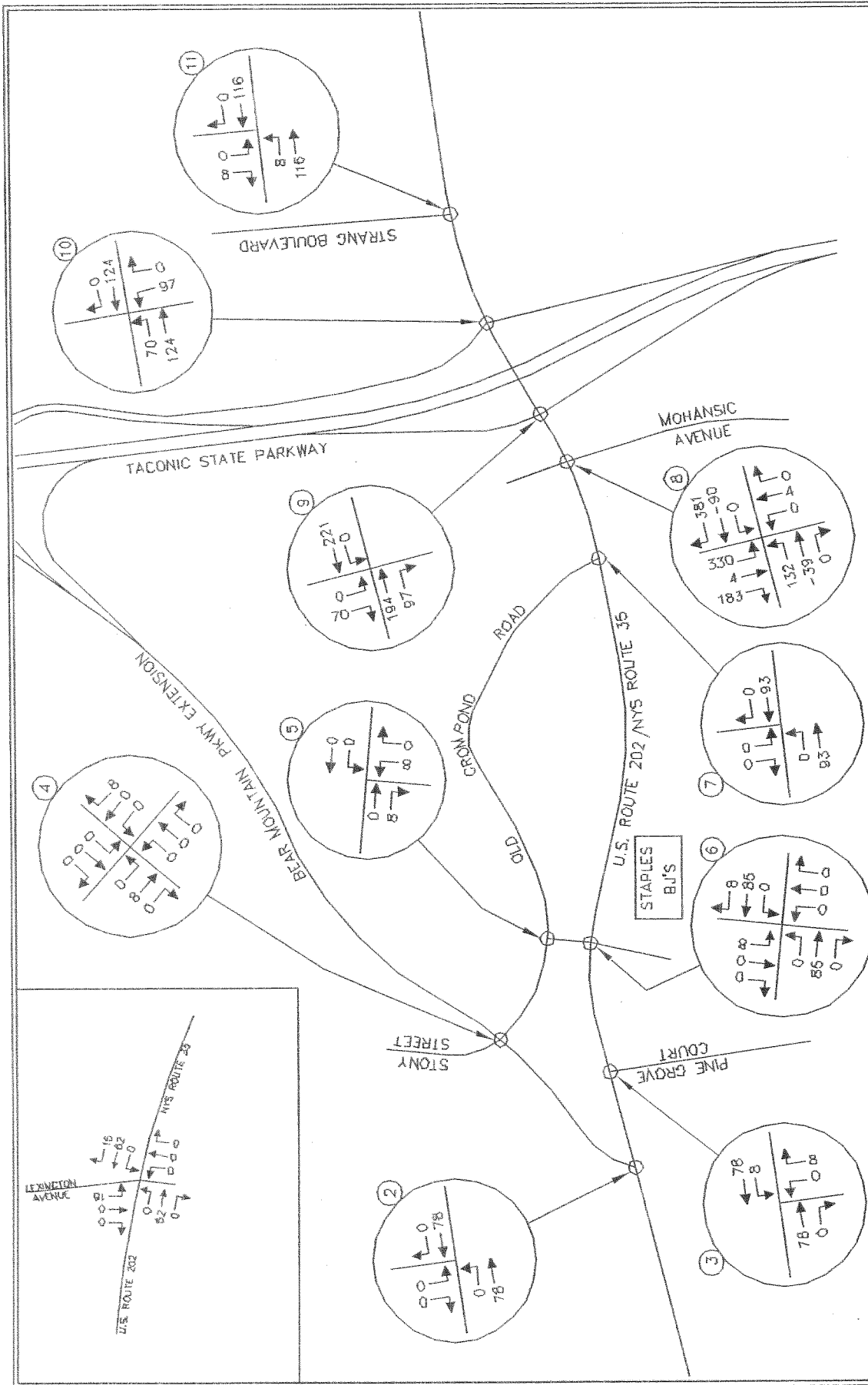


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Exhibit III-18A Site Generated Traffic Volumes Weekday Peak PM Hour

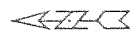
COSTCO WHOLESALE
Town of Yorktown, New York

Source: John Collins Engineers, P.C.



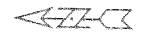
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Exhibit III.K-19 Site Generated Traffic Volumes Weekend Peak Saturday Hour



COSTCO WHOLESALE
Town of Yorktown, New York

Source: John Collins Engineers, P.C.



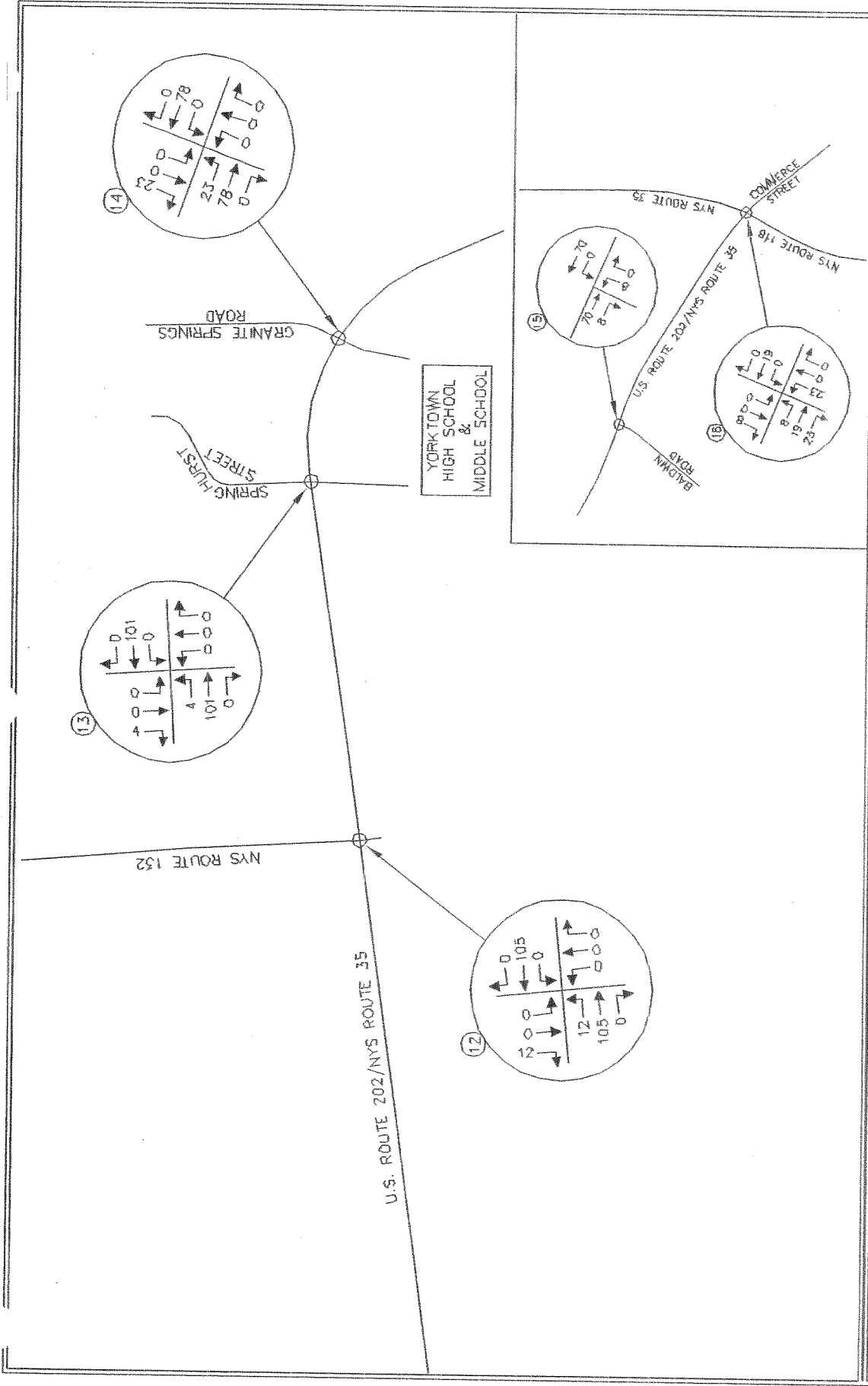
COSTCO WHOLESALE
Town of Yorktown, New York

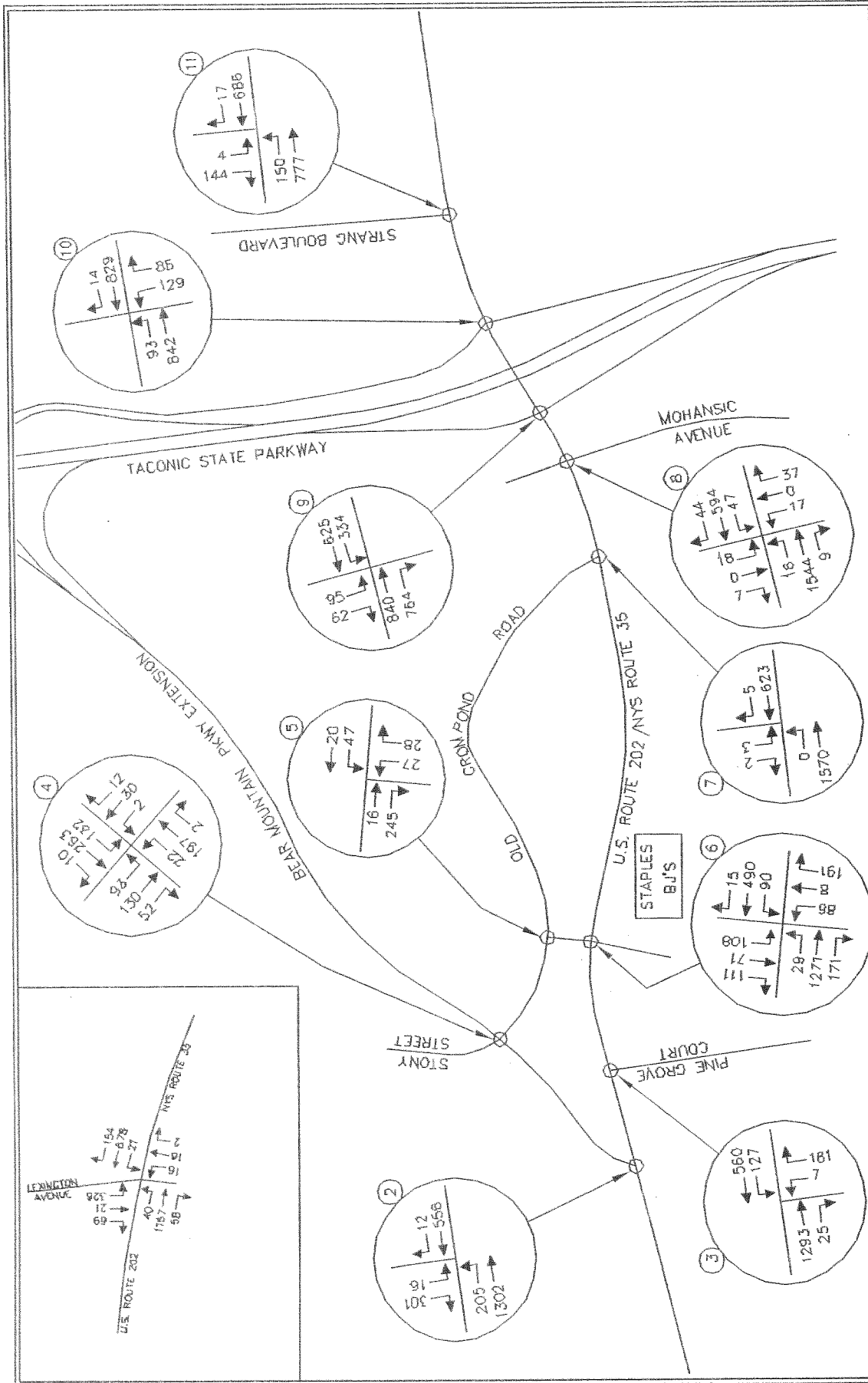
Exhibit III.K-19A
Site Generated Traffic Volumes
Weekend Peak Saturday Hour



TRC Engineers, Inc.
7 Skyline Drive
Hawthorne, New York 10532

Source: John Collins Engineers, P.C.



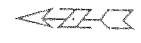


TRC Engineers, Inc.
7 Slaying Drive
Hawthorne, New York 10532

Exhibit III.K-20 2013 Build Traffic Volumes Weekday Peak AM Hour

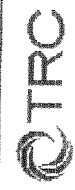
COSTCO WHOLESALE
Town of Yorktown, New York

Source: John Collins Engineers, P.C.



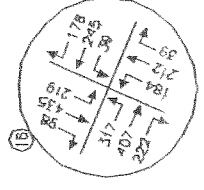
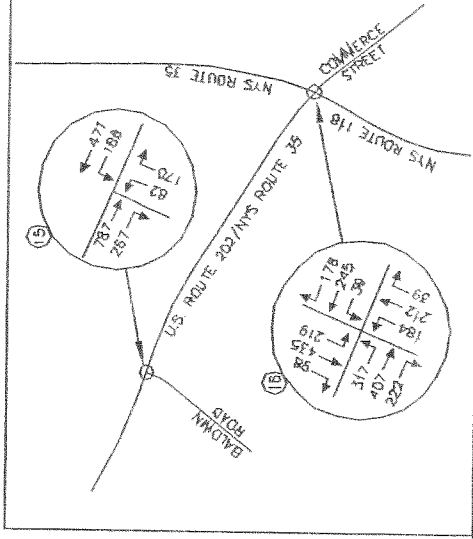
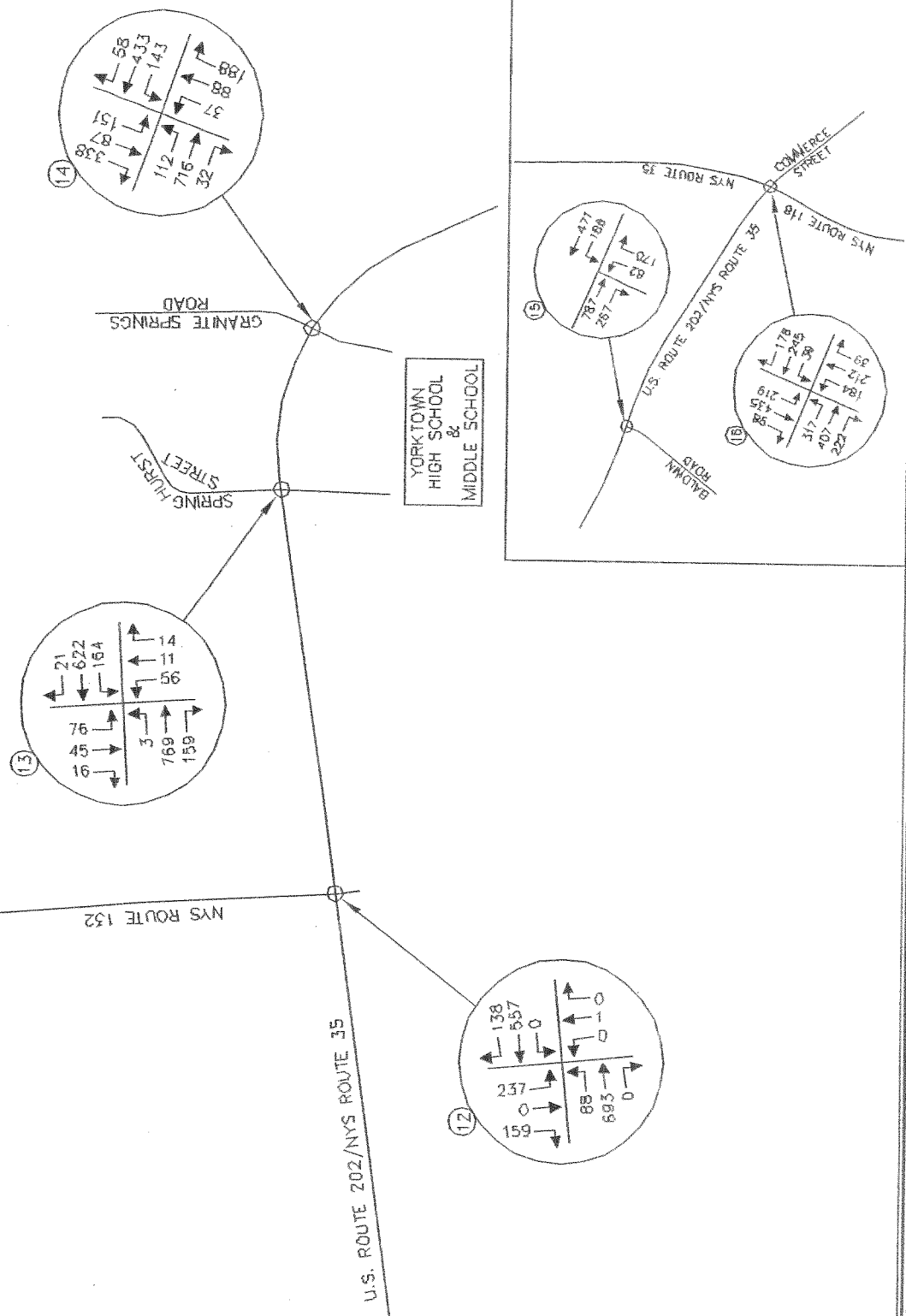
COSTCO WHOLESALÉ
Town of Yorktown, New York

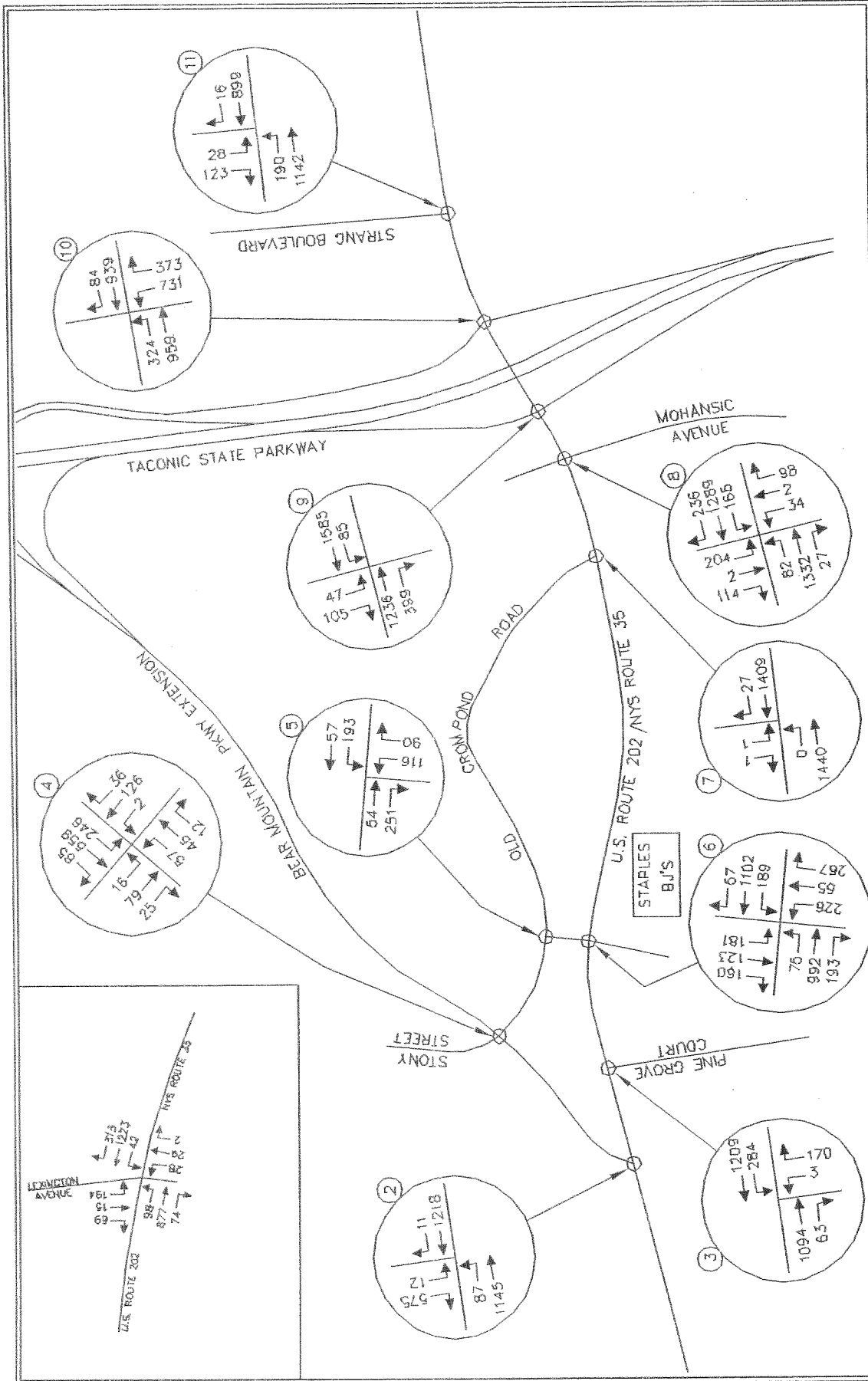
Exhibit III.K-20A
2013 Build Traffic Volumes
Weekday Peak AM Hour



TRC Engineers, Inc.
7 Skyline Drive
Hawthorne, New York 10532

Source: John Collins Engineers, P.C.



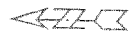


TRC Engineers, Inc.
7 Skyline Drive
Hawthorne, New York 10532

Exhibit III.K-21 2013 Build Traffic Volumes Weekday Peak PM Hour

COSTCO WHOLESALE
Town of Yorktown, New York

Source: John Collins Engineers, P.C.



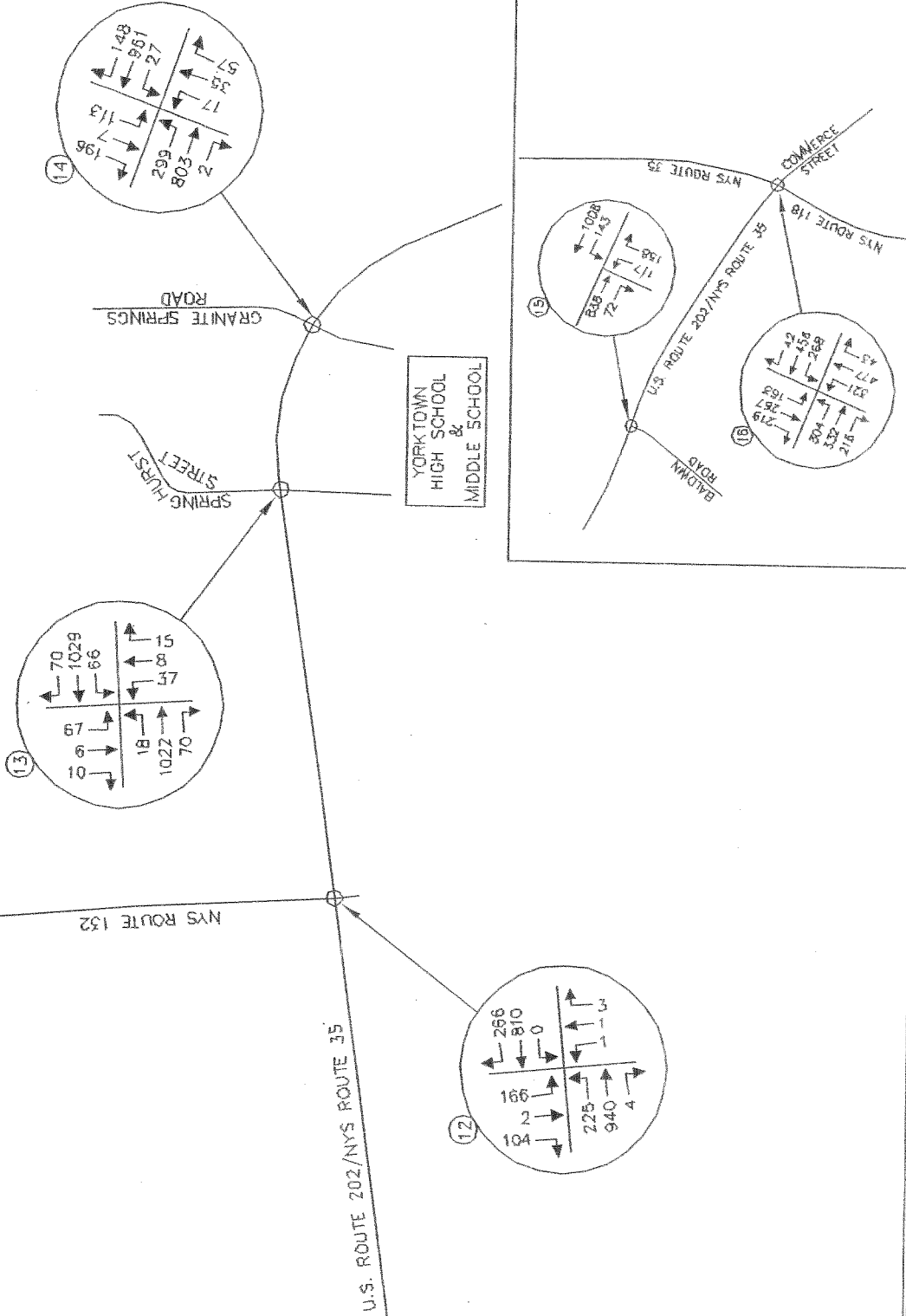
COSTCO WHOLESALE
Town of Yorktown, New York

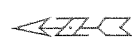
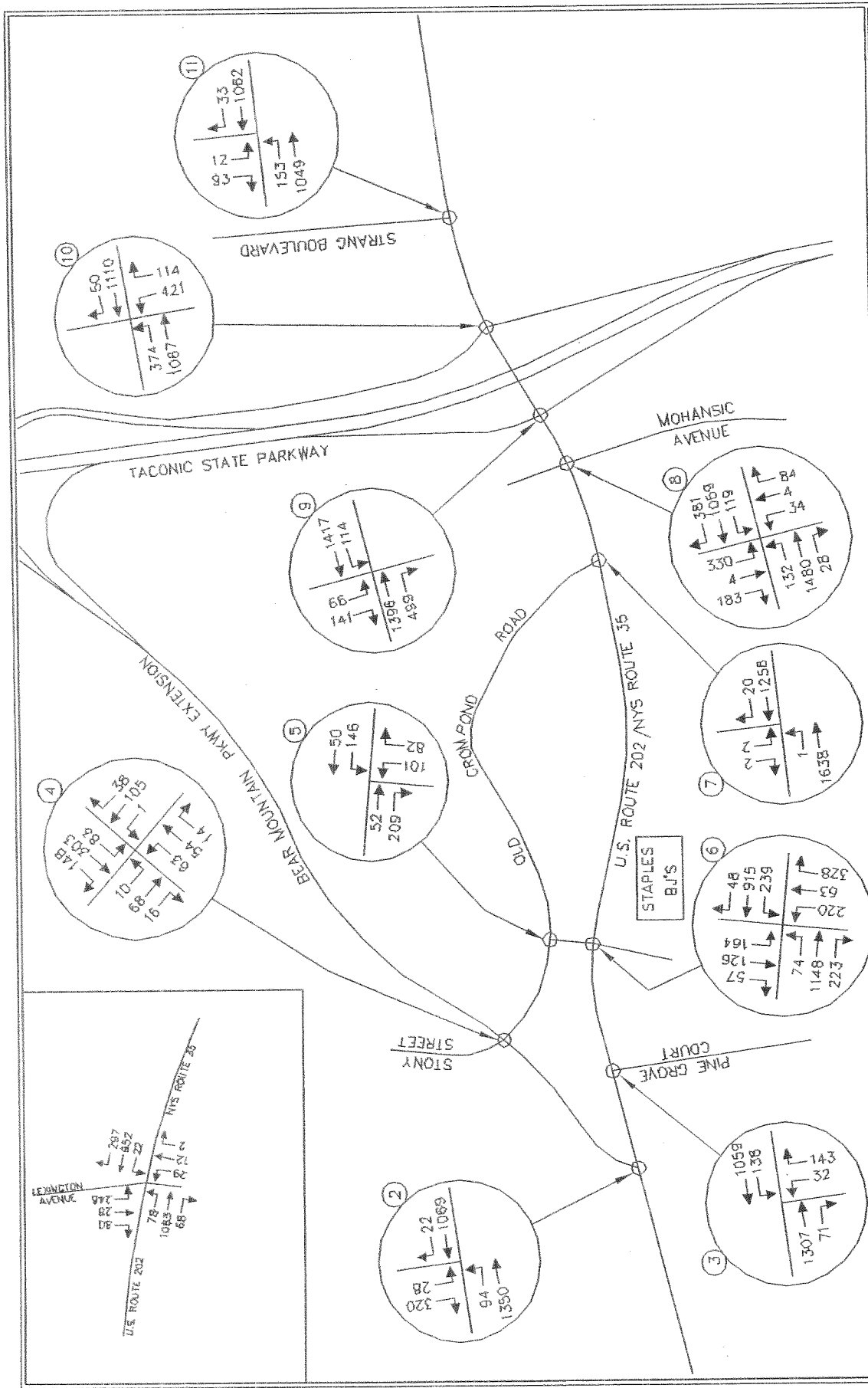
Exhibit III.K-21A
2013 Build Traffic Volumes
Weekday Peak PM Hour



TRC Engineers, Inc.
7 Skyline Drive
Hawthorne, New York 10512

Source: John Collins Engineers, P.C.





TRC Engineers, Inc.
7 Skyline Drive
Hawthorne, New York 10532

Exhibit III.K-22 2013 Build Traffic Volumes Weekend Peak Saturday Hour

COSTCO WHOLESALE
Town of Yorktown, New York

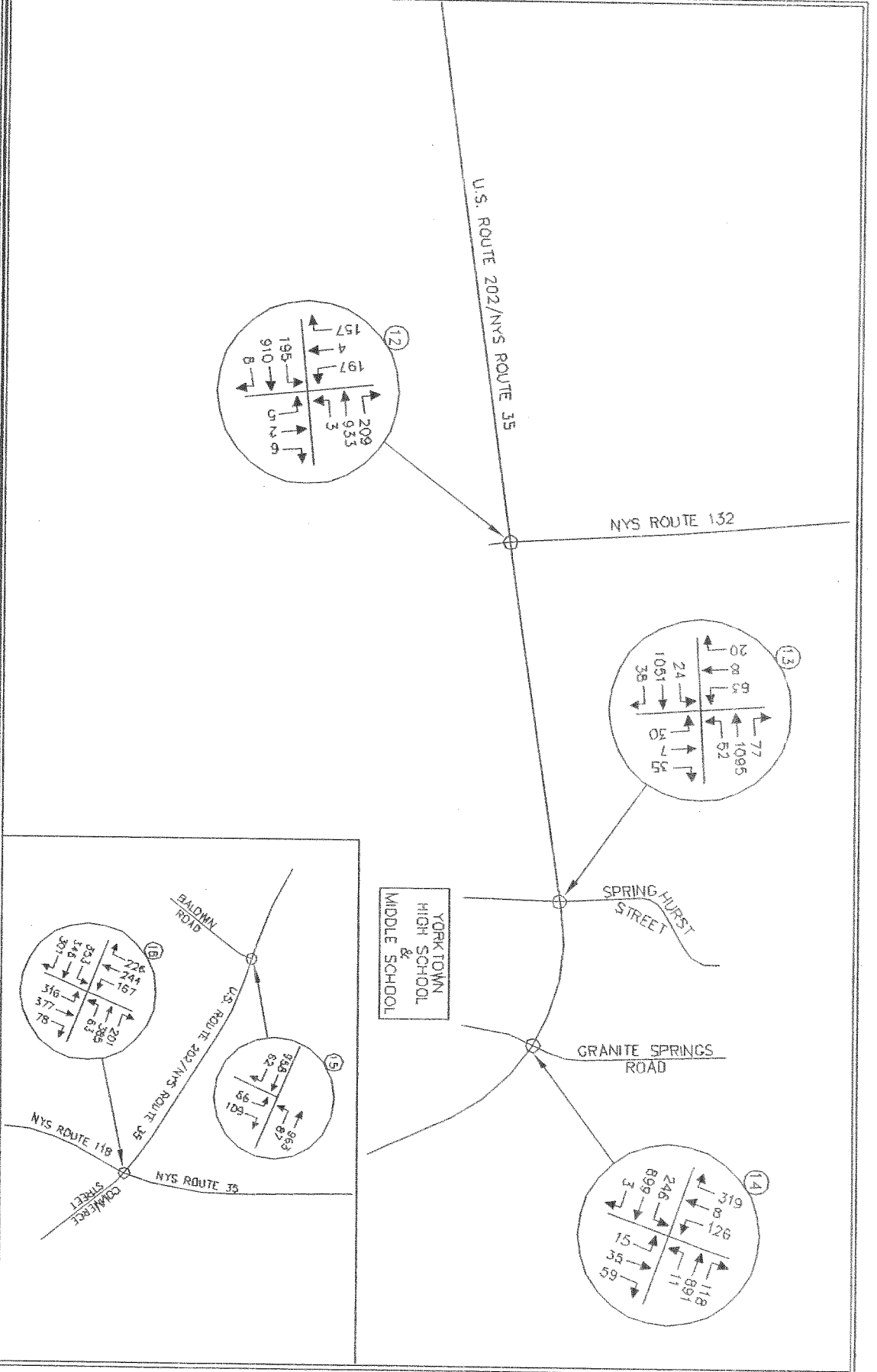
Source: John Collins Engineers, P.C.



CTRC Engineers, Inc.
7 Slaying Drive
Hawthorne, New York 10532

Source: John Collins Engineers, P.C.

Exhibit III.K-22A
2013 Build Traffic Volumes
Weekend Peak Saturday Hour



COSTCO WHOLESALE
Town of Yorktown, New York



d. 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 2000 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.

- 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 2000 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 the Traffic Impact Study.

e. 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 2010 Existing, Year 2013 No-Build and Year 2013 Build Conditions. Appendix "C" of the Traffic Impact Study contains copies of the capacity analysis which also indicate the existing geometrics (including lane widths) and other characteristics for each of the individual intersections studied. In addition a SYNCHRO system analysis was performed for the study area intersections to model the existing and future coordination of traffic signals along the corridor. The SYNCHRO analysis was used to generate the Highway Capacity Analysis results presented in Appendix "C" of the Traffic Impact Study. Copies of the SYNCHRO analysis are available for review upon request.

TABLE 2
LEVEL OF SERVICE SUMMARY TABLE

| | | | 2010 EXISTING | | | | | | 2010 NO-BUILD | | | | | | 2010 BUILD | | | | | |
|---|---|--------------|---------------|----------|----------|---------|----------|----------|---------------|----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|----------|
| | | | AM | | PM | | SAT | | AM | | PM | | SAT | | AM | | PM | | SAT | |
| | | | LOS | | LOS | | LOS | | LOS | | LOS | | LOS | | LOS | | LOS | | LOS | |
| 1 | NYS ROUTE 35/U.S. ROUTE 202 & LEXINGTON AVENUE | SIGNALIZED | L | A[6.7] | B[18.1] | B[16.6] | A[8.1] | B[18.2] | B[17.8] | A[8.2] | B[18.2] | B[17.8] | A[8.2] | B[18.2] | B[17.8] | A[8.2] | B[18.2] | B[17.8] | A[8.2] | B[17.8] |
| | | | TR | F[151.1] | D[43.1] | F[91.4] | F[192.1] | F[80.5] | F[142.6] | F[194.8] | F[93.2] | F[142.6] | F[194.8] | F[93.2] | F[173.5] | F[194.8] | F[93.2] | F[173.5] | F[194.8] | F[173.5] |
| | | | L | B[17.2] | B[15.9] | B[17.0] | B[17.2] | B[17.3] | B[17.0] | B[17.2] | B[17.3] | B[17.0] | B[17.2] | B[17.3] | B[17.0] | B[17.2] | B[17.3] | B[17.0] | B[17.2] | B[17.0] |
| | | | T | C[23.1] | F[181.9] | E[56.2] | C[26.2] | F[244.9] | F[97.6] | C[26.4] | F[265.8] | F[97.6] | C[26.4] | F[265.8] | F[130.2] | C[26.4] | F[265.8] | F[130.2] | C[26.4] | F[265.8] |
| | | | R | B[12.1] | B[13.1] | B[13.1] | B[12.1] | B[13.3] | C[28.0] | B[12.0] | B[13.5] | C[28.1] | B[12.0] | B[13.5] | B[13.4] | B[12.0] | B[13.5] | B[13.4] | B[12.0] | B[13.4] |
| | | | LTR | D[47.4] | C[27.7] | D[44.8] | D[52.8] | C[28.0] | C[28.0] | D[52.8] | C[28.1] | C[28.0] | D[52.8] | C[28.1] | C[28.1] | D[52.8] | C[28.0] | C[28.1] | C[28.1] | C[28.1] |
| | | | LT | F[-] | C[34.2] | D[44.8] | F[-] | D[37.7] | E[67.4] | F[-] | D[40.0] | E[68.1] | F[-] | D[40.0] | E[68.1] | F[-] | D[40.0] | E[68.1] | F[-] | E[68.1] |
| | | | R | B[19.5] | B[16.7] | B[16.4] | B[19.6] | B[16.8] | B[16.5] | B[19.6] | B[16.9] | B[16.5] | B[19.6] | B[16.9] | B[16.6] | B[19.6] | B[16.9] | B[16.6] | B[19.6] | B[16.6] |
| | | | OVERALL | F[156.3] | F[100.2] | E[64.8] | F[186.3] | F[140.1] | F[102.3] | F[189.6] | F[153.4] | F[102.3] | F[189.6] | F[153.4] | F[128.0] | F[189.6] | F[153.4] | F[128.0] | F[189.6] | F[128.0] |
| | WITH TIMING IMPROVEMENTS | EB | L | - | - | - | B[12.9] | C[25.7] | B[19.6] | B[13.0] | C[25.7] | B[19.6] | B[13.0] | C[25.7] | C[20.4] | B[13.0] | C[25.7] | C[20.4] | B[13.0] | C[20.4] |
| | | | TR | - | - | - | D[63.1] | D[35.8] | F[101.5] | D[54.6] | D[36.0] | F[101.5] | D[54.6] | D[36.0] | F[107.9] | D[54.6] | D[36.0] | F[107.9] | D[54.6] | F[107.9] |
| | | | L | - | - | - | C[30.1] | B[16.8] | B[19.9] | C[30.1] | B[18.9] | B[19.9] | C[30.1] | B[18.9] | B[19.9] | C[30.1] | B[18.9] | B[19.9] | C[30.1] | B[19.9] |
| | | | T | - | - | - | D[51.2] | F[142.5] | E[66.3] | D[52.0] | F[159.8] | E[66.3] | D[52.0] | F[159.8] | E[70.1] | D[52.0] | F[159.8] | E[70.1] | D[52.0] | E[70.1] |
| | | | R | - | - | - | B[17.4] | A[9.0] | B[10.3] | B[17.1] | A[9.1] | B[10.5] | B[17.1] | A[9.1] | B[10.5] | B[17.1] | A[9.1] | B[10.5] | B[17.1] | B[10.5] |
| | | | LTR | - | - | - | C[32.0] | C[31.2] | C[28.0] | C[32.0] | C[31.4] | C[28.0] | C[32.0] | C[31.4] | C[28.1] | C[32.0] | C[31.4] | C[28.1] | C[32.0] | C[28.1] |
| | | | LT | - | - | - | F[185.0] | D[49.3] | E[67.5] | F[187.7] | D[54.8] | E[67.5] | F[187.7] | D[54.8] | E[68.1] | F[187.7] | D[54.8] | E[68.1] | F[187.7] | E[68.1] |
| | | | R | - | - | - | B[14.3] | C[22.2] | B[19.9] | B[14.3] | C[22.2] | B[19.9] | B[14.3] | C[22.2] | B[19.9] | B[14.3] | C[22.2] | B[19.9] | B[14.3] | B[19.9] |
| | | | OVERALL | - | - | - | E[88.6] | F[81.2] | E[75.1] | E[89.1] | F[89.1] | E[75.1] | E[89.1] | F[89.1] | E[79.2] | E[89.1] | F[89.1] | E[79.2] | E[89.1] | E[79.2] |
| | NYS ROUTE 35/U.S. ROUTE 202 & BEAR MOUNTAIN PARKWAY EXT. | UNSIGNALIZED | L | A[9.5] | C[16.3] | B[11.6] | A[10.0] | C[22.6] | B[13.8] | B[10.0] | D[25.8] | B[13.8] | B[10.0] | D[25.8] | C[16.0] | B[10.0] | D[25.8] | C[16.0] | B[10.0] | C[16.0] |
| | | | EB | F[183.1] | F[-] | F[-] | F[-] | F[-] | F[-] | F[-] | F[-] | F[-] | F[-] | F[-] | F[-] | F[-] | F[-] | F[-] | F[-] | F[-] |
| | | | SB | C[17.9] | F[-] | E[41.7] | C[21.2] | F[-] | F[-] | C[21.4] | F[-] | F[-] | C[21.4] | F[-] | F[211.2] | C[21.4] | F[-] | F[211.2] | C[21.4] | F[211.2] |
| | | | OVERALL | - | - | - | A[9.6] | B[12.9] | B[10.6] | A[9.7] | B[13.4] | B[10.6] | A[9.7] | B[13.4] | B[11.1] | A[9.7] | B[13.4] | B[11.1] | A[9.7] | B[11.1] |

TABLE 2
LEVEL OF SERVICE SUMMARY TABLE

| | | | 2010 EXISTING | | | | | | 2010 NO-BUILD | | | | | | 2010 BUILD | | | | | |
|---|--|--------------------------|---------------|-----|----------|---------|---------|------|---------------|---------|---------|----------|---------|----------|------------|---------|---------|----------|---------|---------|
| | | | AM | | PM | | SAT | | AM | | PM | | SAT | | AM | | PM | | SAT | |
| | | | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS |
| 3 | NYS ROUTE 35/U.S. ROUTE 202 & PINE GROVE COURT | UNSIGNALIZED | WB | LT | B[13.9] | B[13.8] | B[13.2] | F[-] | C[15.5] | C[16.5] | C[15.1] | C[15.7] | C[17.7] | C[16.5] | F[-]* | F[-]* | C[17.7] | C[16.5] | F[-]* | F[-]* |
| | | | NB | LR | F[113.9] | F[-]* | - | - | F[267.7] | F[-]* | - | F[278.8] | - | - | - | - | - | - | - | - |
| | | WITH NYSDOT IMPROVEMENTS | EB | TR | - | - | - | - | C[20.1] | B[13.9] | B[16.5] | C[20.3] | B[14.4] | B[17.6] | B[13.9] | B[14.4] | B[14.4] | B[17.6] | B[13.9] | B[17.6] |
| | | | WB | L | - | - | - | - | B[11.7] | B[17.7] | B[10.3] | B[11.8] | C[24.3] | B[12.7] | B[11.7] | C[24.3] | C[24.3] | B[12.7] | B[11.7] | B[12.7] |
| | | | T | - | - | - | - | - | A[4.4] | A[5.7] | A[4.8] | A[4.4] | A[5.9] | A[5.9] | A[4.4] | A[5.9] | A[5.9] | A[5.9] | A[5.9] | A[5.9] |
| | | | NB | L | - | - | - | - | C[25.7] | C[30.5] | C[31.2] | C[25.7] | C[30.5] | C[31.2] | C[25.7] | C[30.5] | C[30.5] | C[31.2] | C[25.7] | C[31.2] |
| | | | R | - | - | - | - | - | B[17.1] | C[21.1] | D[35.6] | B[17.2] | C[21.2] | D[36.5] | B[17.2] | C[21.2] | C[21.2] | D[36.5] | D[36.5] | D[36.5] |
| | | | OVERALL | - | - | - | - | - | B[15.4] | B[11.0] | B[13.1] | B[15.5] | B[11.9] | B[13.8] | B[15.5] | B[11.9] | B[11.9] | B[13.8] | B[15.5] | B[13.8] |
| | | UNSIGNALIZED | EB | LTR | E[46.4] | F[66.5] | C[15.0] | - | F[96.4] | B[17.4] | B[13.3] | B[11.6] | B[13.4] | F[102.0] | B[11.6] | B[17.4] | B[13.4] | F[102.0] | B[11.6] | B[13.4] |
| | | | WB | LTR | C[17.2] | F[76.9] | C[18.4] | - | C[17.8] | B[16.1] | B[12.7] | A[9.7] | B[16.1] | C[18.2] | A[9.7] | B[16.1] | B[12.7] | C[18.2] | A[9.7] | B[12.7] |
| 4 | BEAR MOUNTAIN PARKWAY EXT. & STONY STREET | UNSIGNALIZED | NB | LTR | A[7.8] | A[9.1] | A[8.3] | - | A[7.9] | A[16.1] | B[13.6] | A[9.9] | B[13.7] | A[7.9] | A[16.1] | B[13.6] | B[13.7] | A[7.9] | A[16.1] | B[13.7] |
| | | | SB | LTR | A[7.9] | A[7.7] | A[7.4] | - | A[7.9] | A[16.1] | B[13.6] | A[9.9] | B[13.7] | A[7.9] | A[16.1] | B[13.6] | B[13.7] | A[7.9] | A[16.1] | B[13.7] |
| | | WITH NYSDOT IMPROVEMENTS | EB | LT | - | - | - | - | B[11.7] | B[17.4] | B[13.3] | B[11.6] | B[13.4] | B[11.6] | B[17.4] | B[13.3] | B[13.4] | B[11.6] | B[17.4] | B[13.3] |
| | | | R | - | - | - | - | - | A[9.7] | B[16.1] | B[12.7] | A[9.7] | B[16.1] | A[9.7] | B[16.1] | B[12.7] | B[16.1] | A[9.7] | B[16.1] | B[12.7] |
| | | | WB | LTR | - | - | - | - | A[9.9] | B[17.9] | B[13.6] | A[9.9] | B[18.0] | A[9.9] | B[17.9] | B[13.6] | B[18.0] | A[9.9] | B[17.9] | B[13.6] |
| | | | NB | L | - | - | - | - | B[10.1] | A[8.4] | A[9.9] | B[10.1] | A[8.4] | B[10.1] | A[8.4] | A[9.9] | A[8.4] | B[10.1] | A[8.4] | A[9.9] |
| | | | TR | - | - | - | - | - | B[11.7] | A[5.9] | A[8.5] | B[11.7] | A[5.9] | B[11.7] | A[5.9] | A[8.5] | A[5.9] | B[11.7] | A[5.9] | A[8.5] |
| | | | L | - | - | - | - | - | B[12.6] | A[8.3] | A[9.0] | B[12.6] | A[8.3] | B[12.6] | A[8.3] | A[9.0] | A[8.3] | B[12.6] | A[8.3] | A[9.0] |
| | | | OVERALL | - | - | - | - | - | B[12.7] | B[12.4] | B[12.9] | B[12.7] | B[12.4] | B[12.7] | B[12.9] | B[12.4] | B[12.9] | B[12.7] | B[12.4] | B[12.9] |
| | | UNSIGNALIZED | NB | LR | A[7.3] | A[7.4] | A[7.4] | - | A[7.3] | A[7.4] | B[12.1] | B[12.0] | B[12.1] | A[7.3] | A[7.4] | B[12.1] | B[12.0] | A[7.3] | A[7.4] | B[12.1] |
| | | | OVERALL | - | - | - | - | - | A[7.3] | A[7.4] | B[12.1] | B[12.0] | B[12.1] | A[7.3] | A[7.4] | B[12.1] | B[12.0] | A[7.3] | A[7.4] | B[12.1] |
| 5 | STONY STREET & OLD CROMPOD ROAD | UNSIGNALIZED | NB | LR | A[7.3] | A[7.4] | A[7.4] | - | A[7.3] | A[7.4] | A[7.4] | A[7.3] | A[7.5] | A[7.3] | A[7.4] | A[7.4] | A[7.5] | A[7.3] | A[7.4] | A[7.5] |

TABLE 2
LEVEL OF SERVICE SUMMARY TABLE

| | | 2010 EXISTING | | | | | | 2010 NO-BUILD | | | | | | 2010 BUILD | | | | | |
|--------------------------|--|---------------|----|---------|---------|----------|----------|---------------|----------|----------|---------|----------|----------|------------|----------|---------|--|-----|--|
| | | AM | | PM | | SAT | | AM | | PM | | SAT | | AM | | PM | | SAT | |
| | | LOS | | LOS | | LOS | | LOS | | LOS | | LOS | | LOS | | LOS | | LOS | |
| 6 | NYS ROUTE 35/U.S. ROUTE 202 & STONY STREET/BJ'S | SIGNALIZED | EB | L | A[4.9] | B[14.3] | B[10.3] | A[5.4] | B[17.4] | B[14.8] | A[5.4] | B[17.4] | A[5.4] | B[17.4] | B[14.9] | | | | |
| | | | | TR | C[20.8] | B[16.1] | B[18.1] | C[24.0] | B[19.2] | C[24.0] | B[19.2] | C[22.2] | | | | | | | |
| | | | WB | L | B[10.2] | A[8.1] | C[21.5] | B[11.7] | B[13.1] | B[19.2] | B[19.2] | B[19.2] | C[31.7] | | | | | | |
| | | | | T | B[14.4] | D[44.2] | C[24.0] | B[15.2] | F[86.1] | C[34.7] | B[15.3] | F[108.1] | D[56.2] | | | | | | |
| | | | NB | R | A[9.6] | A[9.7] | A[9.6] | A[9.6] | B[11.0] | A[9.7] | A[9.6] | B[11.0] | A[9.7] | F[107.3] | | | | | |
| | | | | L | C[28.4] | F[179.4] | F[150.4] | C[30.9] | F[107.3] | F[107.3] | C[31.0] | F[107.3] | F[107.3] | | | | | | |
| | | OVERALL | T | C[25.7] | C[26.5] | C[26.5] | C[25.7] | C[27.4] | C[26.5] | C[25.7] | C[27.4] | C[26.5] | C[26.5] | | | | | | |
| | | | R | B[16.9] | B[17.4] | B[18.6] | B[17.1] | B[19.4] | B[19.4] | B[17.2] | B[19.4] | B[19.4] | B[19.7] | | | | | | |
| | | | LT | C[28.7] | C[29.5] | C[28.8] | C[33.2] | E[73.8] | F[96.8] | C[33.3] | E[78.8] | F[107.3] | F[107.3] | | | | | | |
| | | | R | B[15.1] | B[15.9] | B[15.0] | B[15.2] | B[17.9] | B[15.0] | B[15.2] | B[17.9] | B[15.1] | B[15.1] | | | | | | |
| | | | | B[19.5] | D[38.0] | C[30.3] | C[21.9] | F[88.5] | F[83.9] | C[22.2] | F[97.6] | F[88.3] | F[88.3] | | | | | | |
| | | | 11 | | | | | | | | | | | | | | | | |
| | WITH TIMING IMPROVEMENTS | EB | L | - | - | - | - | - | B[17.5] | B[17.5] | B[17.5] | - | B[17.5] | - | B[17.5] | B[17.6] | | | |
| | | | TR | - | - | - | - | - | C[26.4] | D[98.0] | D[98.0] | - | C[28.2] | D[50.7] | D[50.7] | | | | |
| | | WB | L | - | - | - | - | - | C[29.7] | F[87.6] | F[87.6] | - | C[30.2] | F[88.1] | F[135.1] | | | | |
| | | | T | - | - | - | - | - | F[158.6] | F[97.9] | F[97.9] | - | F[174.5] | F[135.1] | F[135.1] | | | | |
| | | NB | R | - | - | - | - | - | B[14.1] | B[14.5] | B[14.5] | - | B[14.2] | B[14.7] | B[14.7] | | | | |
| | | | L | - | - | - | - | - | F[134.4] | F[82.0] | F[82.0] | - | F[142.4] | F[88.8] | F[88.8] | | | | |
| | | SB | LT | - | - | - | - | - | C[21.4] | C[20.7] | C[20.7] | - | C[20.7] | C[20.7] | C[20.7] | | | | |
| | | | R | - | - | - | - | - | B[15.6] | B[15.9] | B[15.9] | - | B[15.6] | B[15.9] | B[15.9] | | | | |
| OVERALL | L | - | - | - | - | - | C[30.6] | C[27.2] | C[27.2] | - | C[31.2] | C[27.8] | C[27.8] | C[27.8] | | | | | |
| | TR | - | - | - | - | - | B[14.3] | B[12.6] | B[12.6] | - | B[14.3] | B[12.6] | B[12.6] | B[12.6] | | | | | |
| | | - | - | - | - | - | E[71.9] | E[55.5] | E[55.5] | - | E[78.3] | E[71.0] | E[71.0] | E[71.0] | | | | | |
| | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | | |
| WITH NYSDOT IMPROVEMENTS | EB | L | - | - | - | - | - | A[3.4] | B[15.4] | B[13.4] | A[3.4] | B[16.0] | A[3.4] | B[16.0] | B[14.5] | | | | |
| | | T | - | - | - | - | - | B[12.8] | B[17.9] | C[28.7] | B[12.9] | B[19.3] | C[34.3] | C[34.3] | C[34.3] | | | | |
| | | R | - | - | - | - | - | A[7.6] | B[19.3] | B[11.8] | A[7.6] | B[19.3] | B[11.8] | B[11.8] | B[11.8] | | | | |
| | | L | - | - | - | - | - | A[7.6] | B[19.4] | F[85.7] | A[7.7] | C[23.3] | F[86.4] | F[86.4] | F[86.4] | | | | |
| | | TR | - | - | - | - | - | A[8.0] | C[29.3] | C[25.3] | A[8.0] | C[31.3] | C[27.3] | C[27.3] | C[27.3] | | | | |
| | | L | - | - | - | - | - | C[33.7] | E[63.2] | D[45.5] | C[34.0] | E[66.8] | D[49.0] | D[49.0] | D[49.0] | | | | |
| | WB | L | - | - | - | - | - | C[25.2] | B[18.0] | B[18.0] | C[25.2] | B[18.0] | B[18.0] | B[18.0] | B[18.0] | | | | |
| | | T | - | - | - | - | - | C[20.2] | B[12.5] | B[13.4] | C[20.2] | B[12.5] | B[13.4] | B[13.4] | B[13.4] | | | | |
| | | R | - | - | - | - | - | D[36.3] | D[52.6] | D[49.4] | D[36.8] | D[54.4] | D[54.0] | D[54.0] | D[54.0] | | | | |
| | | LT | - | - | - | - | - | B[17.9] | B[18.1] | B[17.2] | B[17.9] | B[18.1] | B[17.2] | B[17.2] | B[17.2] | | | | |
| | | R | - | - | - | - | - | B[14.3] | C[27.4] | C[32.0] | B[14.4] | C[29.0] | C[34.8] | C[34.8] | C[34.8] | | | | |
| | | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |

TABLE 2
LEVEL OF SERVICE SUMMARY TABLE

| | | | 2010 EXISTING | | | | 2010 NO-BUILD | | | | 2010 BUILD | | | |
|---|--|--------------|---------------|-----|----------|---------|---------------|----------|----------|----------|------------|----------|----------|-----|
| | | | AM | | PM | | SAT | | AM | | PM | | SAT | |
| | | | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS |
| 7 | NYS ROUTE 35/U.S. ROUTE 202 & OLD CROMPOND ROAD | UNSIGNALIZED | EB | LT | A[8.7] | C[21.1] | C[20.3] | A[9.0] | F[57.9] | D[34.5] | A[9.0] | C[23.4] | C[19.6] | |
| | | | SB | LR | E[40.6] | D[30.2] | D[29.7] | F[56.4] | F[-] | F[-] | F[57.1] | F[-] | F[-] | |
| | | | EB | LT | - | - | - | - | - | - | A[5.9] | A[9.9] | B[10.1] | |
| | | | SB | LR | - | - | - | - | - | - | F[57.9] | F[148.7] | F[171.0] | |
| 8 | NYS ROUTE 35/U.S. ROUTE 202 & MOHANSIC AVENUE | SIGNALIZED | EB | L | - | - | - | - | - | - | B[16.9] | B[14.7] | B[15.5] | |
| | | | TR | TR | F[107.8] | D[41.4] | E[76.4] | F[155.4] | F[94.8] | F[150.4] | F[152.1] | E[77.7] | F[136.4] | |
| | | | WB | L | B[14.1] | B[16.0] | B[16.6] | B[14.1] | B[17.4] | B[17.0] | B[14.5] | B[14.5] | B[14.7] | |
| | | | T | T | A[9.6] | D[41.2] | B[16.5] | B[11.8] | F[141.0] | E[63.5] | B[10.5] | F[-] | F[283.3] | |
| | | | R | R | - | - | - | - | - | - | A[9.5] | B[17.0] | B[18.9] | |
| | | | LTR | LTR | C[24.4] | C[25.8] | C[25.6] | C[24.5] | C[26.1] | C[25.8] | C[23.7] | C[25.5] | C[23.6] | |
| | | | SB | L | - | - | - | - | - | - | C[23.2] | C[32.8] | E[57.3] | |
| | | | TR | TR | - | - | - | - | - | - | C[22.9] | C[23.2] | C[23.6] | |
| | | | OVERALL | | E[78.6] | D[39.0] | D[48.5] | F[110.9] | F[114.2] | F[105.6] | F[105.6] | F[199.9] | F[150.9] | |
| | | | EB | TR | - | - | - | - | - | - | B[11.3] | B[18.3] | C[20.1] | |
| | | | WB | TR | - | - | - | - | - | - | D[41.2] | C[34.4] | D[51.9] | |
| | | | NB | L | - | - | - | - | - | - | B[18.7] | C[22.4] | B[19.2] | |
| | | | SB | T | - | - | - | - | - | - | A[1.1] | D[54.0] | C[31.5] | |
| | | | OVERALL | | - | - | - | - | - | - | D[35.2] | D[37.5] | C[23.6] | |
| | | | | LT | - | - | - | - | - | - | D[36.1] | D[49.5] | D[38.7] | |
| | | | | R | - | - | - | - | - | - | D[35.3] | C[34.3] | D[52.0] | |
| | | | | L | - | - | - | - | - | - | C[34.9] | C[32.6] | D[36.0] | |
| | | | OVERALL | TR | - | - | - | - | - | - | C[29.4] | D[42.4] | D[40.7] | |

TABLE 2
LEVEL OF SERVICE SUMMARY TABLE

| | | | 2010 EXISTING | | | | 2010 NO-BUILD | | | | 2010 BUILD | | | |
|----|--|------------|-----------------------------|---------|----------|----------|---------------|----------|----------|----------|------------|----------|----------|----------|
| | | | AM | | PM | | SAT | | AM | | PM | | SAT | |
| | | | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS |
| 9 | NYS ROUTE 35/U.S. ROUTE 202 & TACONIC STATE PARKWAY SB RAMPS | SIGNALIZED | T | F[94.2] | F[247.0] | F[288.7] | F[147.1] | F[-] | F[-] | F[153.5] | F[-] | F[-] | F[-] | F[-] |
| | | | | A[8.2] | A[4.4] | A[4.6] | A[9.5] | A[4.7] | A[4.9] | A[9.6] | A[5.0] | A[5.3] | A[5.3] | A[5.3] |
| | | | | C[32.8] | - | - | D[38.3] | - | - | D[38.3] | - | - | - | - |
| | | | WB | DEFU | LT | A[1.4] | D[46.6] | A[7.7] | C[31.5] | A[1.8] | F[176.9] | F[96.1] | F[96.1] | F[96.1] |
| | | | LT | | | | | | | | | | | |
| | | | L | | | | | | | | | | | |
| | | | SB | C[24.2] | C[23.4] | C[23.7] | C[24.3] | C[23.5] | C[23.8] | C[24.3] | C[23.5] | C[23.8] | C[23.8] | C[23.8] |
| | | | R | C[22.8] | C[23.2] | C[23.4] | C[23.0] | C[23.3] | C[24.0] | C[23.1] | C[24.3] | C[24.2] | C[24.2] | C[24.2] |
| | | | OVERALL | D[37.7] | F[114.0] | F[121.2] | E[55.3] | F[193.7] | F[173.1] | E[57.1] | F[247.2] | F[250.2] | F[250.2] | F[250.2] |
| | | | EB | - | - | - | - | - | - | D[52.8] | F[126.5] | F[182.2] | F[182.2] | F[182.2] |
| | | | WITH ADDITIONAL WB LANE | - | - | - | - | - | - | A[9.5] | A[3.2] | A[2.6] | A[2.6] | A[2.6] |
| 10 | NYS ROUTE 35/U.S. ROUTE 202 & TACONIC STATE PARKWAY NB RAMPS | SIGNALIZED | L | C[20.1] | C[29.3] | E[57.8] | C[22.4] | D[39.3] | F[80.5] | C[22.9] | E[64.3] | F[99.2] | F[99.2] | F[99.2] |
| | | | | A[7.9] | A[8.6] | D[36.5] | B[12.9] | B[14.4] | E[55.6] | B[13.3] | C[26.2] | E[64.4] | E[64.4] | E[64.4] |
| | | | | D[54.3] | F[125.8] | F[126.2] | F[82.4] | F[185.4] | F[196.2] | F[88.5] | F[227.1] | F[273.5] | F[273.5] | F[273.5] |
| | | | WB | L | C[24.2] | D[37.1] | C[24.6] | F[227.6] | E[57.0] | C[24.8] | F[282.1] | F[41.7] | F[41.7] | F[41.7] |
| | | | NB | | | | | | | | | | | |
| | | | R | C[23.0] | C[27.4] | C[23.4] | C[23.1] | C[28.5] | C[23.6] | C[23.1] | C[26.5] | C[23.3] | C[23.3] | C[23.3] |
| | | | OVERALL | C[33.6] | F[81.0] | E[74.1] | D[44.6] | F[118.0] | F[113.1] | D[47.5] | F[149.1] | F[144.1] | F[144.1] | F[144.1] |
| | | | EB | - | - | - | - | - | - | B[13.6] | D[39.9] | D[54.8] | D[54.8] | D[54.8] |
| | | | WITH ADDITIONAL WB LANE (3) | - | - | - | - | - | - | B[13.3] | D[49.8] | D[46.2] | D[46.2] | D[46.2] |
| | | | WB | - | - | - | - | - | - | B[16.4] | C[26.8] | C[27.8] | C[27.8] | C[27.8] |
| | | | NB | - | - | - | - | - | - | C[24.8] | F[113.8] | D[53.6] | D[53.6] | D[53.6] |
| | TWO NORTHBOUND LEFT TURN LANES (NOT PROPOSED BY PROJECT) | OVERALL | L | - | - | - | - | - | - | - | D[54.2] | D[41.0] | D[41.0] | D[41.0] |
| | | | | - | - | - | - | - | - | B[13.6] | D[38.9] | D[40.1] | D[40.1] | D[40.1] |
| | | | | - | - | - | - | - | - | B[14.4] | C[23.8] | D[36.9] | D[36.9] | D[36.9] |
| | | | EB | - | - | - | - | - | - | B[16.4] | B[17.5] | C[23.2] | C[23.2] | C[23.2] |
| | | | WB | - | - | - | - | - | - | C[23.7] | D[35.7] | C[32.8] | C[32.8] | C[32.8] |
| | | | NB | - | - | - | - | - | - | C[23.1] | D[36.6] | C[27.5] | C[27.5] | C[27.5] |
| | | | OVERALL | - | - | - | - | - | - | B[16.0] | C[27.3] | C[31.4] | C[31.4] | C[31.4] |
| | | | EB | - | - | - | - | - | - | - | - | - | - | - |
| | | | WB | - | - | - | - | - | - | - | - | - | - | - |
| | | | NB | - | - | - | - | - | - | - | - | - | - | - |

TABLE 2
LEVEL OF SERVICE SUMMARY TABLE

| | | 2010 EXISTING | | | | | | 2010 NO-BUILD | | | | | | 2010 BUILD | | | | | |
|----|---|---------------|-----|-----|---------|----------|----------|---------------|----------|----------|---------|----------|----------|------------|----------|----------|---------|----------|----------|
| | | AM | | PM | | SAT | | AM | | PM | | SAT | | AM | | PM | | SAT | |
| | | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS |
| 11 | NYS ROUTE 35/U.S. ROUTE 202 & STRANG BOULEVARD | SIGNALIZED | EB | L | B[13.1] | B[13.2] | B[15.4] | B[14.0] | B[16.9] | B[17.5] | B[14.3] | B[16.1] | B[17.0] | B[14.3] | B[16.1] | B[17.0] | B[14.3] | B[16.1] | B[17.0] |
| | | | TR | T | C[23.3] | B[18.2] | A[7.2] | C[25.0] | C[29.8] | C[27.0] | C[25.2] | D[45.5] | C[31.7] | C[25.2] | D[45.5] | C[31.7] | C[25.2] | D[45.5] | C[31.7] |
| | | | WB | TR | D[54.2] | F[101.4] | F[174.4] | F[60.8] | F[173.6] | F[251.3] | F[86.4] | F[220.8] | F[-] | F[86.4] | F[220.8] | F[-] | F[86.4] | F[220.8] | F[-] |
| | | | SB | L | C[22.8] | C[23.2] | C[22.9] | C[22.8] | C[23.2] | C[22.9] | C[22.8] | C[23.2] | C[22.9] | C[22.8] | C[23.2] | C[22.9] | C[22.8] | C[23.2] | C[22.9] |
| | | OVERALL | EB | R | B[11.0] | B[11.1] | B[11.0] | B[11.3] | B[11.5] | B[11.2] | B[11.3] | B[11.6] | B[11.4] | B[11.3] | B[11.6] | B[11.4] | B[11.3] | B[11.6] | B[11.4] |
| | | | TR | R | C[35.0] | D[49.3] | F[86.2] | D[46.5] | F[82.8] | F[129.7] | D[49.0] | F[109.0] | F[167.4] | D[49.0] | F[109.0] | F[167.4] | D[49.0] | F[109.0] | F[167.4] |
| | | | WB | L | - | - | - | B[12.4] | A[8.5] | A[6.3] | B[12.6] | A[9.5] | A[7.2] | B[12.6] | A[9.5] | A[7.2] | B[12.6] | A[9.5] | A[7.2] |
| | | | SB | TR | - | - | - | C[25.0] | B[11.4] | B[10.7] | C[25.2] | B[14.2] | B[11.5] | C[25.2] | B[14.2] | B[11.5] | C[25.2] | B[14.2] | B[11.5] |
| | | OVERALL | EB | L | - | - | - | D[42.3] | D[35.7] | D[36.5] | D[45.7] | D[53.2] | D[50.2] | D[45.7] | D[53.2] | D[50.2] | D[45.7] | D[53.2] | D[50.2] |
| | | | TR | R | - | - | - | C[22.8] | C[29.4] | C[32.4] | C[22.8] | C[29.4] | C[32.4] | C[22.8] | C[29.4] | C[32.4] | C[22.8] | C[29.4] | C[32.4] |
| 12 | NYS ROUTE 35/U.S. ROUTE 202 & NYS ROUTE 132/DOWNING PARK | SIGNALIZED | EB | L | B[14.0] | D[38.8] | C[22.6] | B[14.5] | E[55.1] | D[35.3] | B[14.4] | E[62.9] | D[41.3] | B[14.4] | E[62.9] | D[41.3] | B[14.4] | E[62.9] | D[41.3] |
| | | | TR | TR | B[15.6] | C[26.3] | B[19.7] | B[18.1] | D[52.3] | E[55.0] | B[18.4] | D[76.2] | E[62.2] | B[18.4] | D[76.2] | E[62.2] | B[18.4] | D[76.2] | E[62.2] |
| | | | WB | LTR | D[37.0] | F[113.9] | F[124.4] | D[50.3] | F[186.5] | F[196.1] | D[54.3] | F[223.3] | F[262.4] | D[54.3] | F[223.3] | F[262.4] | D[54.3] | F[223.3] | F[262.4] |
| | | | SB | LTR | B[13.8] | B[13.9] | B[13.9] | B[13.8] | B[13.9] | B[13.9] | B[13.8] | B[13.9] | B[13.9] | B[13.8] | B[13.9] | B[13.9] | B[13.8] | B[13.9] | B[13.9] |
| | | OVERALL | EB | L | C[24.0] | B[17.0] | B[19.9] | C[27.0] | B[17.5] | C[21.5] | C[27.3] | B[17.6] | C[22.1] | C[27.3] | B[17.6] | C[22.1] | C[27.3] | B[17.6] | C[22.1] |
| | | | TR | TR | C[25.1] | E[61.1] | E[62.5] | C[31.7] | F[102.6] | F[106.1] | C[33.4] | F[128.2] | F[138.2] | C[33.4] | F[128.2] | F[138.2] | C[33.4] | F[128.2] | F[138.2] |
| | | | WB | L | - | - | - | - | D[49.3] | C[30.2] | - | D[51.9] | C[34.2] | - | D[51.9] | C[34.2] | - | D[51.9] | C[34.2] |
| | | | SB | TR | - | - | - | - | B[13.7] | B[19.7] | - | B[17.7] | C[22.7] | - | B[17.7] | C[22.7] | - | B[17.7] | C[22.7] |
| | | OVERALL | EB | L | - | - | - | - | E[55.5] | F[97.5] | - | E[57.0] | F[133.4] | - | E[57.0] | F[133.4] | - | E[57.0] | F[133.4] |
| | | | TR | TR | - | - | - | - | C[20.9] | B[18.0] | - | C[20.1] | B[18.0] | - | C[20.1] | B[18.0] | - | C[20.1] | B[18.0] |
| | WITH SOUTHBOUND RIGHT TURN LANE | SIGNALIZED | EB | L | - | - | - | - | D[42.4] | D[43.6] | - | D[36.6] | D[47.1] | - | D[36.6] | D[47.1] | - | D[36.6] | D[47.1] |
| | | | TR | TR | - | - | - | - | D[36.9] | E[55.7] | - | D[36.7] | E[72.7] | - | D[36.7] | E[72.7] | - | D[36.7] | E[72.7] |
| | | | WB | L | - | - | - | - | D[38.0] | C[20.4] | B[14.8] | D[44.2] | C[29.7] | B[14.8] | D[44.2] | C[29.7] | B[14.8] | D[44.2] | C[29.7] |
| | | | SB | TR | - | - | - | - | B[11.1] | B[10.1] | B[18.4] | B[13.7] | B[12.1] | B[18.4] | B[13.7] | B[12.1] | B[18.4] | B[13.7] | B[12.1] |
| | | OVERALL | EB | L | - | - | - | - | C[32.8] | C[28.3] | D[54.7] | D[50.6] | D[54.8] | D[54.7] | D[50.6] | D[54.8] | D[54.7] | D[50.6] | D[54.8] |
| | | | TR | TR | - | - | - | - | C[21.7] | C[21.9] | B[13.8] | C[21.7] | C[21.9] | B[13.8] | C[21.7] | C[21.9] | B[13.8] | C[21.7] | C[21.9] |
| | | | WB | L | - | - | - | - | C[30.5] | D[42.0] | B[18.1] | C[30.5] | D[42.0] | B[18.1] | C[30.5] | D[42.0] | B[18.1] | C[30.5] | D[42.0] |
| | | | SB | TR | - | - | - | - | C[21.7] | C[21.8] | B[14.1] | C[21.7] | C[21.8] | B[14.1] | C[21.7] | C[21.8] | B[14.1] | C[21.7] | C[21.8] |
| | | OVERALL | EB | L | - | - | - | - | C[30.4] | C[24.2] | C[32.4] | C[33.2] | C[34.7] | C[32.4] | C[33.2] | C[34.7] | C[32.4] | C[33.2] | C[34.7] |
| | | | TR | TR | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

TABLE 2
LEVEL OF SERVICE SUMMARY TABLE

| | | | 2010 EXISTING | | | | 2010 NO-BUILD | | | | 2010 BUILD | | | |
|----|--|---------------------------------|---------------|----------|---------|----------|---------------|----------|---------|----------|------------|----------|----------|-----|
| | | | AM | | PM | | AM | | PM | | AM | | PM | |
| | | | LOS | SAT | LOS | SAT | LOS | SAT | LOS | SAT | LOS | SAT | LOS | SAT |
| 13 | NYS ROUTE 35/U.S. ROUTE 202 & SPRINGHURST STREET/ YORKTOWN HIGH SCHOOL DRIVEWAY | SIGNALIZED | A[5.4] | A[6.5] | A[5.4] | A[6.0] | A[6.3] | A[8.7] | A[6.0] | A[6.0] | A[6.4] | B[11.4] | A[6.0] | |
| | | EB | B[17.3] | A[5.7] | B[11.3] | C[27.6] | C[27.0] | C[26.9] | C[27.6] | D[54.1] | D[40.1] | D[55.0] | D[54.1] | |
| | | WB | LTR | C[22.2] | C[22.0] | C[22.1] | C[22.3] | C[22.3] | C[22.2] | C[22.0] | C[23.1] | C[22.2] | C[22.2] | |
| | | NB | LTR | C[23.0] | C[22.1] | C[22.1] | C[23.1] | C[22.2] | C[22.2] | C[23.1] | C[22.2] | C[22.2] | C[22.2] | |
| | | SB | | A[7.2] | A[9.4] | B[17.8] | C[20.8] | B[18.2] | B[17.8] | C[32.9] | C[22.2] | C[32.9] | C[30.9] | |
| | | OVERALL | | | | | | | | | | | | |
| 14 | NYS ROUTE 35/U.S. ROUTE 202 & GRANITE SPRINGS ROAD/ M.E.S. MIDDLE SCHOOL DRIVEWAY | SIGNALIZED | A[5.6] | F[93.8] | D[36.4] | F[132.1] | A[6.1] | F[132.1] | E[55.4] | A[6.1] | F[141.1] | F[141.1] | E[80.0] | |
| | | EB | C[20.6] | B[18.7] | C[27.7] | C[23.2] | C[24.9] | C[23.2] | D[40.2] | C[24.9] | C[26.7] | C[26.7] | E[94.1] | |
| | | WB | L | A[8.0] | B[10.3] | B[10.1] | B[14.1] | B[10.1] | B[12.6] | B[14.1] | B[11.7] | B[11.7] | B[13.3] | |
| | | TR | B[10.2] | F[93.6] | D[48.5] | F[147.9] | B[14.4] | F[147.9] | F[87.4] | B[14.4] | F[175.9] | F[175.9] | F[124.8] | |
| | | LTR | F[91.0] | C[22.7] | C[22.7] | C[22.8] | F[148.9] | C[22.8] | C[22.8] | F[148.9] | C[23.0] | C[23.0] | C[22.8] | |
| | | NB | LT | F[108.5] | C[23.6] | C[24.0] | F[156.2] | C[23.9] | C[24.7] | F[156.2] | C[24.1] | C[24.7] | C[24.7] | |
| | | SB | C[21.5] | C[21.0] | C[22.1] | C[21.2] | C[21.9] | C[21.2] | C[23.1] | C[21.9] | C[21.8] | C[21.8] | C[24.1] | |
| | | R | D[36.7] | E[61.3] | D[36.0] | F[91.1] | D[51.1] | F[91.1] | E[57.3] | D[51.1] | F[105.6] | F[105.6] | F[82.4] | |
| | | OVERALL | | | | | | | | | | | | |
| | | WITH SIGNAL TIMING IMPROVEMENTS | | | | | | | | | | | | |
| | | EB | L | - | - | F[92.2] | A[8.1] | F[92.2] | E[55.0] | A[8.2] | F[114.5] | F[114.5] | E[76.4] | |
| 15 | NYS ROUTE 35/U.S. ROUTE 202 & BALDWIN ROAD | SIGNALIZED | B[15.2] | A[9.5] | B[10.8] | B[11.2] | B[19.0] | B[11.2] | B[13.3] | B[19.3] | B[12.3] | B[12.3] | B[16.4] | |
| | | EB | LT | D[52.1] | B[15.0] | F[102.2] | F[108.1] | F[102.2] | C[25.8] | F[112.4] | F[129.8] | F[129.8] | D[42.4] | |
| | | WB | LR | D[36.0] | C[32.8] | D[48.0] | D[37.6] | D[48.0] | C[33.6] | D[37.7] | D[49.6] | D[49.6] | C[34.1] | |
| | | NB | | D[36.5] | B[13.7] | E[60.4] | D[51.9] | E[60.4] | C[20.2] | D[53.7] | E[74.3] | E[74.3] | C[29.6] | |
| | | OVERALL | | | | | | | | | | | | |
| | | WITH WESTBOUND LEFT TURN LANE | | | | | | | | | | | | |
| | | EB | TR | - | - | C[21.3] | D[48.9] | C[21.3] | D[36.1] | D[50.2] | C[24.7] | C[24.7] | D[43.8] | |
| | | WB | L | - | - | A[8.4] | B[12.4] | A[8.4] | A[6.8] | B[12.5] | A[8.8] | A[8.8] | A[7.3] | |
| | | T | - | - | - | B[10.4] | A[4.4] | B[10.4] | A[7.2] | A[4.4] | B[11.5] | B[11.5] | A[8.2] | |
| | | LR | - | - | - | D[43.8] | D[43.8] | D[43.8] | C[35.4] | D[43.8] | D[42.3] | D[42.3] | D[35.7] | |
| | | OVERALL | | | | | | | | | | | | |

TABLE 2
LEVEL OF SERVICE SUMMARY TABLE

| 16 | NYS ROUTE 35/U.S. ROUTE 202 & NYS ROUTE 118 & COMMERCE STREET | SIGNALIZED | 2010 EXISTING | | | 2010 NO-BUILD | | | 2010 BUILD | | |
|--------------------------|--|------------|---------------|----------|----------|---------------|----------|----------|------------|----------|----------|
| | | | AM | PM | SAT | AM | PM | SAT | AM | PM | SAT |
| | | | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS | LOS |
| WITH TIMING IMPROVEMENTS | EB | L | B[18.7] | C[28.4] | C[28.4] | C[20.3] | D[35.0] | C[32.0] | C[20.5] | D[36.5] | C[35.1] |
| | | T | C[22.6] | C[20.9] | C[21.1] | C[23.2] | C[21.4] | C[21.6] | C[23.2] | C[21.6] | C[21.9] |
| | | R | B[11.6] | B[11.3] | B[11.9] | B[11.8] | B[11.6] | B[12.2] | B[11.8] | B[11.7] | B[12.4] |
| | | L | B[17.9] | B[19.9] | B[15.5] | B[19.0] | C[21.8] | B[16.7] | B[19.0] | C[22.5] | B[17.2] |
| | WB | T | B[19.8] | C[22.8] | C[21.5] | C[20.1] | C[23.7] | C[22.1] | C[20.1] | C[24.0] | C[22.4] |
| | | R | A[0.0] | A[0.0] | A[0.0] | A[0.0] | A[0.0] | A[0.0] | A[0.0] | A[0.0] | A[0.0] |
| | | L | D[53.8] | F[128.4] | F[114.0] | E[57.4] | F[171.5] | F[152.3] | E[58.2] | F[193.1] | F[185.5] |
| | | T | D[43.8] | F[177.0] | F[88.4] | D[44.8] | F[206.9] | F[104.1] | D[44.8] | F[206.9] | F[104.1] |
| | SB | R | C[26.0] | C[26.0] | C[26.0] | C[26.0] | C[26.9] | C[27.6] | C[26.0] | C[26.9] | C[27.6] |
| | | L | D[41.9] | D[49.8] | D[52.0] | D[44.3] | D[51.1] | D[53.5] | D[44.3] | D[51.1] | D[53.5] |
| | | TR | F[213.2] | F[196.8] | F[196.1] | F[252.4] | F[238.9] | F[240.0] | F[253.5] | F[246.9] | F[254.3] |
| | | OVERALL | E[64.1] | F[87.6] | E[69.1] | E[73.1] | F[102.9] | F[81.8] | E[73.4] | F[106.1] | F[87.6] |
| | EB | L | - | - | - | D[40.3] | E[72.8] | E[63.2] | D[40.5] | E[75.8] | E[76.3] |
| | | T | - | - | - | D[37.0] | D[43.2] | C[30.8] | D[37.1] | D[44.4] | C[31.6] |
| | | R | - | - | - | B[19.5] | B[19.6] | B[15.1] | B[19.5] | B[19.8] | B[15.4] |
| | | L | - | - | - | C[32.7] | D[42.1] | C[25.7] | C[32.8] | D[43.5] | C[26.7] |
| | WB | T | - | - | - | C[29.9] | E[66.4] | C[31.8] | C[30.0] | E[71.9] | C[32.7] |
| | | R | - | - | - | A[0.0] | A[0.0] | A[0.0] | A[0.0] | A[0.0] | A[0.0] |
| | | L | - | - | - | D[52.6] | E[71.5] | F[98.7] | D[53.3] | F[84.4] | F[104.0] |
| | | T | - | - | - | C[29.5] | E[57.0] | D[46.1] | C[29.5] | E[57.0] | D[46.1] |
| | SB | R | - | - | - | B[17.6] | B[15.7] | C[20.9] | B[17.6] | B[15.7] | C[20.9] |
| | | L | - | - | - | C[26.5] | D[41.7] | D[40.2] | C[26.5] | D[41.7] | D[40.2] |
| | | TR | - | - | - | D[50.4] | E[57.6] | F[84.6] | D[50.6] | E[59.4] | F[90.5] |
| | | OVERALL | - | - | - | C[35.0] | E[66.1] | D[51.2] | D[35.2] | E[59.1] | D[64.6] |

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[H] INDICATES THE DELAY EXCEEDS 300 SECONDS.
3. SEE DRAWING CP-1

i. 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 2010 Existing Traffic Volumes. The analysis results indicate that the intersection is currently operating at an overall Level of Service "F" is during the AM and PM Peak Hours while an overall Level of Service "E" 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.

The capacity analysis was recomputed using the 2013 No-Build and Build Traffic volumes. These results indicate that the intersection is expected to continue to experience similar Levels of Service during the AM and PM Peak Hours under future conditions. During the Saturday Peak Hour the intersection is expected to operate at Level of Service "F" under future conditions. Both the eastbound and westbound approaches will experience the longest delays during these peak hours.

Timing improvements at this intersection will help to improve the overall efficiency of the intersection. With these timing improvements it is expected that the intersection will operate at an overall Level of Service "E" during the AM and Saturday Peak Hours, while an overall Level of Service "F" will be experienced during the PM Peak Hour but with average delays less than the existing conditions.

As previously discussed in Section III.K.2.c, 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.

ii. 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 2010 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 "C" or better 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. This intersection was reanalyzed using the 2013 No-Build and Build Traffic Volumes. The results indicate that similar Levels of Service and operating conditions will be experienced during peak hours under future conditions.

The NYSDOT improvements in this area, as discussed in more detail in Section III.K.2.b, propose 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 2013 Build Traffic Volumes indicates that this intersection will operate at a Level of Service "A" for the eastbound left turn movement during the AM Peak Hour and at a Level of Service "B" during both the PM and Saturday Peak Hours. The southbound right turn movements from the BMP will be a free flow movement onto NYS Route 35/U.S. Route 202.

The NYSDOT improvement of the BMP connection to NYS Route 35/U.S. Route 202 should eliminate the extensive queues which currently occur during peak hours especially during the Weekday PM Peak Hour. This increase in capacity should make the direct movement from the TSP northbound to the BMP to NYS Route 35/U.S. Route 202 westbound more efficient and a more desirable path which would help divert some of the traffic which currently uses the TSP northbound ramp at NYS Route 35/U.S. Route 202. The Town should coordinate with the state to upgrade the current signing on the northbound Taconic State Parkway to better direct

motorists destined to Cortlandt and Peekskill and points further west. Note that the analysis contained herein takes no credit for the redistribution of these vehicles from the northbound ramp to the reconstructed BMP intersection. This would reduce the westbound traffic volumes at Intersections vi, vii, viii, ix and x.

iii. 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.K.2.b. 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 along with signalization of the intersection. With the completion of the improvements, an overall Level of Service "C" or better will be obtained at this location during peak periods.

iv. 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 "E" 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. Similar operating conditions are also expected in the future. 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 consist 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. With these improvements the intersection is expected to

operate at an overall Level of Service "C" or better during the AM, PM and Saturday Peak Hours.

v. Stony Street and Old Crompond Road

This intersection is currently a "T" intersection with all approaches consisting of one lane. It is controlled by "Stop" signs on the eastbound Stony Street approach and the westbound Old Crompond Road approach. The intersection currently operates at a Level of Service "A" during peak periods. The analysis indicates that under future No-Build and Build conditions, similar Levels of Service are expected. Restriping of the approaches at this location including new stop bars and centerline striping should be completed under existing conditions. It is expected that these will be coordinated with the improvements planned in association with the proposed Crompond Crossing project whose access is proposed in this vicinity.

vi. 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 Existing Traffic Volumes indicates that an overall Level of Service "D" or better is currently experienced during the Weekday Peak AM, Weekday Peak PM and Saturday Peak Hours.

Capacity analysis conducted utilizing the Year 2013 No-Build and Build Traffic Volumes indicates an overall Level of Service "C" will be experienced during the Weekday Peak AM Hour, while an overall Level of Service "F" will be experienced during the 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. Capacity analysis conducted utilizing the Year 2013 Build Traffic Volumes indicates an overall Level of Service "B" will be experienced during the AM Peak Hour, while an overall Level of Service "C" will be experienced during the PM and Saturday Peak Hour.

vii. NYS Route 35/U.S. Route 202 and Old Crompond Road

Old Crompond road and NYS Route 35/U.S. Route 202 intersect at an unsignalized "T" shaped intersection. The eastbound approach consists of two through lanes while the westbound approach is a single lane approach. The southbound Old Crompond Road approach consists of a single lane and is controlled by a "Stop" sign. Capacity analysis indicates that this intersection currently operates at a Level of Service "E" or better during the AM, PM and Saturday Peak Hours. It is expected that this intersection will experience a Level of Service "F" during each of the Peak Hours under future conditions both with and without the proposed project. It should be noted that these Levels of Service are only experienced for the eastbound left turn and southbound left turn movements.

As part of the improvements associated with the proposed Costco project, an additional westbound through lane will be provided at this intersection. With these improvements the intersection is still expected to experience a Level of Service "F" however this will reduce delays on the Old Crompond Road approach as compared to No-Build conditions.

It should also be noted that currently during the PM Peak Hour, when backups occur at Pine Grove Court and affect the westbound traffic flow on NYS Route 35/U.S. Route 202, traffic has been found to use Old Crompond Road to Stony Street to avoid the queues. This does not occur on a daily basis but the traffic counts show a significant increase when there is a more significant backup at Pine Grove Court and/or the Staples intersection. The NYSDOT improvements for those intersections are expected to alleviate this condition. In addition, the Scoping Document required an evaluation of the potential closure of this intersection. From a capacity standpoint, this roadway could be terminated or reconstructed as a right turn in/right turn out access to NYS Route 35/U.S. Route 202. However, since it serves as an emergency evacuation route, this would have to be coordinated with the Town and the County. Based on the analyses, the NYSDOT improvements at Pine Grove Court and the Stony Street intersections should eliminate the need for the diversion of traffic from the NYS Route 35/U.S. Route 202 corridor onto Old Crompond Road.

viii. NYS Route 35/U.S. Route 202 and Mohansic Avenue/Site Access

Mohansic Avenue intersects with NYS Route 35/U.S. Route 202 at a signalized, "T" shaped intersection. The NYS Route 35/U.S. Route 202 eastbound approach consists of one through lane and a separate right turn lane. This right turn lane also accommodates vehicles traveling through the intersection and continuing as a right turn lane onto the Taconic State Parkway Southbound entry ramp. The NYS Route 35/U.S. Route 202 westbound approach consists of two lanes in the form of a separate left turn lane and a separate through lane. The Mohansic Avenue northbound approach consists of a single lane for left and right turn movements. Capacity analysis conducted utilizing the Existing Traffic Volumes indicates that an overall Level of Service "D" is currently experienced during the Weekday Peak PM and Saturday Peak Hours while an overall Level of Service "E" is experienced during the AM Peak Hour.

The intersection was reanalyzed utilizing the 2013 No-Build Traffic Volumes. The results of these capacity analyses indicate an overall Level of Service "F" will be experienced during each of the Peak Hours.

As indicated previously, access to the development is proposed via a driveway connection to NYS Route 35/U.S. Route 202 opposite Mohansic Avenue. Associated with this development, a separate eastbound left turn lane for traffic entering the site will be constructed and the driveway approach (southbound approach) will be constructed to consist of two lanes in the form of a separate left turn lane and a shared through/right turn lane. In addition, the Mohansic Avenue northbound approach will have to be widened to two lanes in the form of a shared through/left turn lane and a separate right turn lane. The westbound approach should also be widened to provide an additional through/right turn lane. These will also be coordinated with improvements at the Taconic State Parkway Interchange. Corresponding signal improvements will be made to accommodate the new intersection geometrics and interconnected with the adjacent Taconic State Parkway Ramp intersection. (See Drawing CP-1)

Capacity analysis conducted utilizing the Year 2013 Build Traffic Volumes indicates an overall Level of Service "C" will be experienced during the Weekday Peak AM Hour while an overall Level of Service "D" will be maintained during the Weekday Peak PM and Saturday Peak Hours.

Based on field measurements the existing sight distance from the proposed access driveway is approximately 700 ft. looking to the left and approximately 750 ft. looking to the right. Based on the posted speed limit of 40 MPH a stopping sight distance of 305 ft. and an intersection sight distance of 445 ft. is recommended by AASHTO. Therefore, the sight distance at this access is adequate. Note that, as previously mentioned, this

intersection will be controlled by a traffic signal where sight distance requirements generally do not apply.

ix. NYS Route 35/U.S. Route 202 and Taconic State Parkway Southbound Ramps

The Taconic State Parkway southbound off ramp intersects with NYS Route 35/U.S. Route 202 at a signalized intersection. The NYS Route 35/U.S. Route 202 eastbound approach consists of two lanes in the form of a separate through lane and a separate channelized right turn lane and the NYS Route 35/U.S. Route 202 westbound approach consists of two lanes in the form of a separate left turn lane and a separate through lane. The Taconic State Parkway southbound ramp consists of two lanes in the form of a separate left turn lane and a separate right turn lane. Capacity analysis conducted utilizing the Existing Traffic Volumes indicates that an overall Level of Service "D" is currently experienced during the Weekday Peak AM Hour while overall Level of Service "F" is experienced during the Weekday Peak PM and Saturday Peak Hours. It should be noted however that under existing conditions during peak hours, this intersection is affected by vehicle queues at the Northbound Ramp intersection.

The intersection was reanalyzed utilizing the 2013 Build Traffic Volumes. The results of these capacity analyses indicate an overall Level of Service "F" will be experienced during each of the Peak Hours. The construction of an added westbound lane described above, which will also continue through this intersection and through the Mohansic Avenue intersection, will be necessary to improve this condition.

Capacity Analyses conducted utilizing the Year 2013 Build Traffic Volumes with the added westbound lane indicate that the intersection will operate at an overall Level of Service "C" during the Weekday Peak AM Hour, at an overall Level of Service "D" during the Weekday Peak PM Hour and at an overall Level of Service "E" during the Saturday Peak Hours.

x. NYS Route 35/U.S. Route 202 and Taconic Parkway Northbound Ramps

The Taconic Parkway northbound ramps intersect with NYS Route 35/U.S. Route 202 at a signalized intersection. The NYS Route 35/U.S. Route 202 eastbound approach consists of two lanes in the form of a separate left turn lane and separate through lane and the NYS Route 35/U.S. Route 202 westbound approach consists of one lane in the form of a shared through/right turn lane. The Taconic State Parkway northbound ramp consists of two lanes in the form of a separate left turn lane and a separate right turn lane. Capacity analysis conducted utilizing the Existing Traffic Volumes indicates that an overall Level of Service "C" is currently experienced during the Weekday Peak AM Hour, an overall Level of Service "F" is currently experienced during the Weekday Peak PM Hour and an overall Level of Service "E" is experienced during the Saturday Peak

Hour. During the PM Peak Hour, westbound traffic on NYS Route 35/U.S. Route 202 sometimes extends past the NYS Route 132 intersection. The northbound off ramp left turn movement also extends back to the Taconic State Parkway gore area with vehicle queues in excess of 25 vehicles. The *Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study* has previously identified improvements for this intersection and the adjacent intersection to help alleviate these conditions. The NYSDOT currently does not have any near term plans to improve this condition.

Capacity analysis conducted utilizing the Year 2013 No-Build Traffic Volumes indicates that an overall Level of Service "F" will be experienced during the Weekday Peak PM and Saturday Peak Hours in the future.

Therefore, the Applicant for the Costco development has identified certain improvements which would be implemented in association with the new store. These would include the reconstruction of the area between Strang Boulevard and Old Crompond Road to provide an addition westbound through lane. The existing traffic signal will have to be upgraded to reflect the improved geometry. This improvement will also allow a reallocation of the signal green time to help alleviate existing queuing problems at this intersection. (See Drawing CP-1 for the plan)

With the completion of these improvements, improved Levels of Service will be experienced during both the Weekday Peak PM and Saturday Peak Hours.

Also, note that as requested in the Scoping Document, an additional evaluation was completed to identify the benefit of a dual left turn on the Taconic State Parkway Northbound Off Ramp. While not required for the Costco traffic, as a result of the construction of the additional westbound through lane, NYS Route 35/U.S. Route 202 would be wide enough to accommodate a dual left turn exit from the ramp. In order to accomplish this, the ramp approach would have to be upgraded from a two lane to a three lane cross section. The results are summarized in Table No. 2. This improvement is not proposed by the Costco Development but could be pursued in the future by the Town with NYSDOT and/or other applicants.

xi. NYS Route 35/U.S. Route 202 and Strang Boulevard

Strang Boulevard intersects with NYS Route 35/U.S. Route 202 at a signalized, "T" shaped intersection. The NYS Route 35/U.S. Route 202 eastbound approach consists of two lanes in the form of a separate left turn lane and a separate through lane while the westbound approach consists of one lane for through and right turn movements. The Strang Boulevard southbound approach consists of two lanes in the form of a separate left turn lane and a separate right turn lane. Capacity analysis conducted utilizing the Existing Traffic Volumes indicates that an overall Level of Service "D" or

better is currently experienced during the Weekday Peak AM and PM Hours and an overall Level of Service "F" is experienced during the Saturday Peak Hour. It should be noted however that under existing conditions during peak hours, this intersection is typically impacted by the vehicle queues at the Taconic State Parkway Northbound Ramp intersection. These are expected to be improved after the completion of the improvements on NYS Route 35/U.S. Route 202 at the Taconic State Parkway Interchange, as described above.

Capacity analysis conducted utilizing the Year 2013 No-Build Traffic Volumes indicates an overall Level of Service "D" will be experienced during the AM Peak Hour while an overall Level of Service "F" will be experienced during the Weekday Peak PM and Saturday Peak Hours. Similar Levels of Service are also expected under Build conditions

It is recommended that the traffic signal timings be modified to improve the operation of this intersection. An analysis conducted with improved traffic signal timings indicates that the intersection will operate at an overall Level of Service "C" during each of the peak hours.

xii. NYS Route 35/U.S. Route 202 and NYS Route 132

NYS Route 132 intersects with NYS Route 35/U.S. Route 202 opposite the driveway to a parking lot for Downing Park to form a full movement signalized intersection. The eastbound approach to the intersection consists of a separate left turn lane and a shared through/right turn lane. The westbound approach consists of a single lane for all movements and an approximately 8 ft. wide paved shoulder. It should be noted that although the shoulder is striped to restrict its use, it is currently used by vehicles making right turns onto NYS Route 132 to bypass queues in the westbound direction. The southbound and northbound approaches are both single lane approaches.

Capacity analysis was conducted for this intersection utilizing the 2010 Existing Traffic Volumes. The results of these analyses indicate that the intersection currently operates at an overall Level of Service "E" or better during each of the Peak Hours.

The intersection was reanalyzed with the 2013 No-Build and Build Traffic Volumes. The results indicate that an overall Level of Service "F" will be experienced during the PM and Saturday Peak Hours in the future. The traffic signal timings at this intersection could be modified to improve the overall operating conditions during the PM and Saturday Peak Hours. With these timing improvements the capacity analysis indicates that the intersection would operate at an overall Level of Service "D" during the PM Peak Hour and at an overall Level of Service "E" during the Saturday Peak Hour.

As previously discussed in Section III.K.2.c, the Town of Yorktown Comprehensive Plan had identified the need for improvements at this location including the provision of a separate right turn lane on the NYS Route 132 Southbound approach and possibly a westbound right turn lane. The southbound turn lane along with signal timing improvements will reduce overall delays at the intersection. Capacity analysis conducted with these improvements indicates that an overall Level of Service "C" will be experienced during each of the peak hours under the No-Build and Build conditions.

xiii. NYS Route 35/U.S. Route 202 and Springhurst Street/Yorktown High School Driveway

Springhurst Street intersects with NYS Route 35/U.S. Route 202 opposite the driveway to the Yorktown High School forming a full movement signalized intersection. The eastbound and westbound approaches to the intersection each consist of one lane with 6-8 ft. shoulders. The southbound Springhurst Street approach consists of one lane approximately 15 ft. wide. The northbound Yorktown High School Driveway approach also consists of a single lane. Capacity analysis conducted for this intersection utilizing the 2010 Existing Traffic Volumes indicates that the intersection currently operates at a Level of Service "B" or better during each of the Peak Hours.

The intersection was also analyzed using the 2013 No-Build and Build Traffic Volumes. The results indicate that the intersection will operate at an overall Level of Service "C" during each of the Peak Hours with the completion of signal timing changes.

xiv. NYS Route 35/U.S. Route 202 and Granite Springs Road/Mildred E. Strang Middle School

Granite Springs Road intersects NYS Route 35/U.S. Route 202 opposite the Mildred E. Strang Middle School Driveway to form a full movement signalized intersection. The eastbound and westbound approaches both consist of a separate left turn lane and a shared through/right turn lane. The northbound Middle School Driveway approach consist of a single lane while the southbound Granite Springs Road approach consists of a shared left turn/through lane and a separate right turn lane. Capacity analysis conducted utilizing the 2010 Existing Traffic Volumes indicates that the intersection is currently operating at an overall Level of Service "E" during the PM Peak Hour, while an overall Level of Service "D" is experienced during the AM and Saturday Peak Hour.

The intersection was reanalyzed using the 2013 No-Build Traffic Volumes which indicate that the intersection can be expected to operate at similar Levels of Service during the AM Peak Hour while an overall Level of Service "F" will be experienced during the PM Peak Hour and an overall

Level of Service "E" will be experienced during the Saturday Peak Hour. The intersection was also analyzed with the 2013 Build Traffic Volumes indicating that the intersection will experience similar Levels of Service to No-Build Conditions.

It is recommended that the traffic signal timings at this intersection be modified to improve the efficiency of the traffic movements and reduce delays currently experienced on the NYS Route 35/U.S. Route 202 approaches. With these traffic signal timing improvements the intersection is expected to operate at an overall Level of Service "C" during the AM Peak Hour, at an overall Level of Service "E" during the PM Peak Hour and at an overall Level of Service "D" during the Saturday Peak Hour.

xv. NYS Route 35/U.S. Route 202 and Baldwin Road

NYS Route 35/U.S. Route 202 and Baldwin Road intersect at a signalized "T" shaped intersection. The eastbound and westbound approaches are both single lane approaches. The northbound Baldwin Road approach consists of a single lane with a channelized right turn that is controlled by a "Stop" sign. The capacity analysis conducted for this intersection utilizing the 2010 Existing Traffic Volumes indicates that an overall Level of Service "C" is experienced during the AM Peak hour, an overall Level of Service "D" is currently experienced during the PM Peak Hour and an overall Level of Service "B" is experienced during the Saturday Peak Hour. It should be noted that during the AM and PM Peak Hours longer delays are experienced on the westbound approach due to insufficient gaps in traffic for left turn vehicles.

The analysis was recomputed using the 2013 No-Build and Build Traffic Volumes. The results indicate that the intersection will operate at an overall Level of Service "D" during the AM Peak Hour, at an overall Level of Service "E" during the PM Peak Hour and at an overall Level of Service "C" during the Saturday Peak Hour.

The Town of Yorktown has previously identified the need for potential improvements at this intersection including the provision of a separate left turn lane on the westbound approach. This turn lane along with traffic signal timing improvements will reduce total delay at the intersection. The analysis indicates that the intersection will operate at an overall Level of Service "C" or better during the AM, PM and Saturday Peak Hours.

xvi. NYS Route 35/U.S. Route 202 and NYS Route 118/Commerce Street

NYS Route 35/U.S. Route 202, NYS Route 118 and Commerce Street all intersect to form a full movement signalized intersection. The eastbound approach consists of a separate left turn lane, a separate through lane and a separate right turn lane. The westbound approach has a similar configuration although the right turn lane is a channelized right turn that is

controlled by a “Yield” sign. The northbound NYS Route 118 approach consists of a separate left turn lane, a separate through lane and a separate right turn lane. The southbound approach consists of a separate left turn lane and shared through/right turn lane with a channelized right turn movement controlled by a “Yield” sign. Capacity analysis conducted for the intersection utilizing the 2010 Existing Traffic Volumes indicates that the intersection currently operates at an overall Level of Service “F” during the PM Peak Hour and at an overall Level of Service “E” during the AM and Saturday Peak Hours.

The intersection was reanalyzed using the 2013 No-Build and Build Traffic Volumes. The results of these analyses indicate that the intersection will operate at an overall Level of Service “F” during each of the peak hours under future conditions.

Signal timing improvements which provide more green time to the northbound and southbound (NYS Route 118 and NYS Route 35) approaches are recommended to improve operating conditions at this intersection. With these signal timing improvements the capacity analysis indicates that the intersection will operate at an overall Level of Service “E” during the PM Peak Hour while an overall Level of Service “D” will be experienced during the AM and Saturday Peak Hours under No-Build and Build Conditions.

f. Other Considerations

i. Site generated truck traffic

As discussed in Section III.K.3.b, the site generated truck traffic is expected to primarily occur outside of the peak traffic hours. This traffic is expected to arrive via the NYS Route 35/U.S. Route 202 corridor with some arriving from Route 9 and others from Route 100 and from the I-684 corridor.

ii. Potential Project Impacts on Bee-Line Bus Service

The addition of a bus stop in front of the site is being explored with Bee-Line and the site is being designed to accommodate a bus on site and bus stop within the site. Improvements to public transportation will lead to reductions in traffic congestion and air emissions, including carbon and should continue to be coordinated with the County.

iii. Consideration of Bike and Pedestrian Traffic at TSP

According to information obtained from the Sustainable Development Study, the Town of Yorktown Comprehensive Plan and the Westchester County Planning website there is a plan for a walking/bicycle path to connect Yorktown Heights with the Bear Mountain Parkway Annsville Circle. The western portion of the trail will be built on Bear Mountain Parkway and Bear Mountain Parkway Extension right-of-way land. Near the

Taconic State Parkway it will utilize an existing pedestrian overpass to connect to Strang Boulevard. The path will continue along Strang Boulevard to the south to connect with FDR State Park. From here the path will join a Town spur that will connect with the North County Trailway via Downing Drive. Associated with road widening in the vicinity of the TSP interchange, the provision of a sidewalk and a bikeway on NYS Route 35/U.S. Route 202 connecting to Strang Boulevard with a pedestrian signal controlled crosswalk to the FDR State Park will be provided subject to review and approval by NYSDOT.

iv. Construction Related Traffic

Construction related traffic will generally use the NYS Route 35/U.S. Route 202 corridor to access the site. Construction workers will access the site using similar routes to typical customers (i.e. Taconic State Parkway, NYS Route 35/118 and Bear Mountain Parkway). Construction related truck traffic, which cannot use the Taconic State Parkway, will access the site via Route 9 and the Bear Mountain Parkway to the west or I-684 and NYS Route 35/118 to the east. For more information on construction related traffic refer to Section O: Building Demolition and Construction.

4. Proposed Mitigation

a. Summary of Findings and Recommendations

Based on the results of the capacity analyses as presented in Section III.K.3.e, the following is a summary of the recommended improvements for the Costco Project. As noted previously, most of these are required regardless of the project (see Sections III.K.2.b and III.K.2.c). However, the following specific items should be completed to accommodate the Project.

- i. Under Future No-Build and Future Build Conditions, the operation of the existing signalized intersections could be improved by minor signal phasing/timing changes and improved coordination between the existing traffic signals. This work should be undertaken with NYSDOT as part of the Highway Work Permit process.
- ii. This section of NYS Route 35/U.S. Route 202 through the Taconic State Parkway interchange experiences long traffic delays during the Weekday Peak PM Hours especially in the westbound direction. This is exacerbated especially when sun glare impacts the visibility for westbound drivers. During these time periods, the westbound vehicle queues can extend in an easterly direction beyond the NYS Route 132 intersection. The provision of the added westbound through/right turn lane through the interchange area and past the site driveway should be provided to alleviate this condition. (See Drawing CP-1) The traffic signal should also be modified to

accommodate the new intersection geometrics and signal timing adjustments be made to help alleviate existing vehicle queues. With these improvements, improved Levels of Service will be experienced during both the Weekday Peak PM and Saturday Peak Hours. These improvements will be coordinated with the NYSDOT as part of the Highway Work Permit process.

- iii. As indicated previously, access to the development is proposed via a main driveway connection to NYS Route 35/U.S. Route 202 opposite Mohansic Avenue. Associated with this development, a separate eastbound left turn lane for traffic entering the site should be constructed and the driveway approach (southbound approach) should be constructed to consist of three lanes in the form of a separate left turn lane, separate left/through lane and separate right turn lane. In addition, the Mohansic Avenue northbound approach should be widened to two lanes in the form of a separate left turn lane and a shared through/right turn lane. (See Drawing CP-1) Corresponding signal improvements will be required to accommodate the new intersection geometrics.
- iv. The NYSDOT improvements for the NYS Route 35/U.S. Route 202, Pine Grove Court, Stony Street and Bear Mountain Parkway intersections (see Section III.K.2.b) should be implemented to alleviate these capacity and safety constraints.
- v. Several other intersections which had been identified for potential improvements as part of the *Route 202/35/6 and Bear Mountain Parkway Sustainable Development Study* and the Town of Yorktown Comprehensive Plan (see Section III.K.2.c) should continue to be explored by the Town of Yorktown and NYSDOT to ensure that these improvements are completed in the future to accommodate additional traffic in the area.
- vi. The Site Plan also proposes a separate right turn entry and exit driveway to the site in the vicinity of the fueling facility. Based on field measurements, the sight distances at this intersection are approximately 650 ft. looking to the left and 545 feet looking to the right. Based on AASHTO a stopping sight distance of 305 ft. and an intersection sight distance 445 ft. is recommended for a speed limit of 40 MPH. Note that because this is a right turn entry/right exit only driveway only the sight distance looking to the right is significant. Based on this the sight distance at this intersection is adequate.

5. Summary and Conclusions

Based on the analysis contained in this report, similar Levels of Service and delays will be experienced under the future No-Build and future Build Conditions with the completion of the improvements outlined in Section III.K.4.a. In fact,

the completion of the westbound lane and signal improvements described above along NYS Route 35/U.S. Route 202 at the Taconic State Parkway Ramps will improve overall peak hour operating conditions with the Project as compared to Existing and No-Build Conditions. With these improvements, safe and efficient access to the proposed Costco will be provided without any significant negative impact on traffic operations in the vicinity of the site.