



TECHNICAL MEMORANDUM REPORT

3700 BARGER STREET

Town of Yorktown, Westchester County, New York

Prepared for

NY Fuel Distributors, LLC

**235 Mamaroneck Avenue
White Plains, New York**

Prepared by

Provident Design Engineering, PLLC

**7 Skyline Drive
Hawthorne, New York**

March 19, 2020

Last Revised September 2, 2020

PDE Project No. 20-008

Charles Holt

**Charles S. Holt, P.E., PTOE
New York P.E. #086668**

Managing Partner/Senior Project Manager

TABLE OF CONTENTS

<u>SECTION</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
SECTION 1 – INTRODUCTION		1
SECTION 2 – TRAFFIC VOLUME DEVELOPMENT		3
SECTION 3 – ANALYSIS AND RESULTS		7
SECTION 4 – SENSITIVITY ANALYSIS		14
SECTION 5 – CONCLUSIONS		20

ATTACHMENT A – FIGURES

ATTACHMENT B – TABLES

ATTACHMENT C – ANALYSIS REPORTS

ATTACHMENT D – PROPOSED HOTEL INFORMATION

SECTION 1 – INTRODUCTION

Provident Design Engineering (PDE) has prepared this Technical Memorandum Report to summarize the traffic study methodology and findings associated with the proposed redevelopment at 3700 Barger Street in the Town of Yorktown. The site is located just south of U.S. Route 6 in the southeast quadrant of the intersection of Barger Street, also known as New York State Route 132, and East Main Street. The attached Figure No. 1 (Attachment A) illustrates the site location.

The existing site previously operated as a gas station with six fueling positions¹ and a vehicle service center (former service station use), approximately 2,500 square feet in size. Access to the site was provided by two curb cuts along Barger Street and one curb cut along the eastern stub of East Main Street. The proposed redevelopment Project (Project) will consist of a gas station with eight fueling positions and a 2,000 square foot convenience store. Access to the Project would be provided with one curb cut along Barger Street, generally in the same area as the southernmost driveway for the former service station use, and one curb cut along the eastern stub of East Main Street, with the exception that the East Main Street curb cut is being reduced in size and more formalized with curbing. Additionally, a one-way circulation provision on-site will limit entering vehicles to the Barger Street access and exiting vehicles to the East Main Street access.

¹ Fueling positions are defined by the Institute of Transportation Engineers' "Trip Generation" publication as 'the maximum number of vehicles that can be fueled simultaneously'.

A previous version of the Site Plan for the Project originally maintained the two existing two-way flow access driveways along Barger Street. Although the analysis indicated that the Project's traffic would not have any significant traffic impact upon the adjacent roadway network under this original access scheme, based upon input and feedback from the Town, the current one-way access scheme was developed to limit impacts along Barger Street. By reducing the number of exit points from the site and providing a one-way vehicular flow operation, a safer condition will exist when compared to the former service center operation, whereby there was two-way flow permitted from all access driveways. Restricting vehicles to enter the Barger Street access driveway and exit the East Main Street access driveway reduces the number conflicts created along Barger Street if multiple two-way flow access driveways were provided, as was the case with the former service station use and the originally proposed access scheme for the Project.

This report summarizes the methodology and findings with respect to whether any significant traffic impacts could be anticipated, due to the Project. Additionally, the study considered a sensitivity analysis to include a proposed hotel use on an adjacent property.

SECTION 2 – TRAFFIC VOLUME DEVELOPMENT

In order to determine whether the Project would result in any significant traffic impacts, PDE utilized standard traffic engineering industry procedures and publications. Vehicles trips were estimated for the former service station use and the Project to determine the incremental difference in trips associated with the redevelopment of the site.

In order to develop base traffic volumes, PDE obtained existing peak hour traffic volume counts² conducted in 2019 at the intersection of Barger Street and East Main Street. It should be noted that the former service station use was not operational during the traffic count data collection in 2019 and therefore, trips generated by the site are not reflected in the existing peak hour traffic volume counts. The Existing Traffic Volumes are illustrated in the attached Figure No. 2. As illustrated in Figure No. 2, the intersection of Barger Street and East Main Street experiences a total of 812 vehicles passing through the intersection during the Peak AM Hour, 1,058 vehicles during the Peak PM Hour and 901 vehicles during the Peak Saturday Hour.

As the former service station use could be reinstated without any discretionary approvals (i.e. site plan approval), PDE conducted a trip generation analysis to determine the number of trips the former service station use would generate if it was still in operation, as well as the number of trips the Project will generate in the future. To better understand the changes in trip generation, PDE analyzed the trip generation characteristics of the former service station use, which are vehicular

² Traffic counts obtained from Maser Consulting P.A.

trips that would currently occur on the site if the former service station use were reinstated, versus the trip generation characteristics of the Project. A comparison between the former service station use and the Project was made to determine the incremental change in vehicular trips.

To perform this trip generation analysis, PDE consulted the Institute of Transportation Engineers' (ITE) publication entitled, "Trip Generation", 10th Edition. Utilizing Land Use Code 944 (Gasoline/Service Station) in ITE's Trip Generation Manual, PDE calculated the amount of entering and exiting trips for the former service station use during the Peak Weekday AM and PM Hours, as well as the Peak Saturday Hour.

To perform a trip generation analysis of the Project, PDE also consulted ITE's Trip Generation Manual. Utilizing Land Use Code 945 (Gasoline/Service Station with Convenience Market), the amount of entering and exiting trips for the Project were estimated for the same Peak Hours.

Not all traffic entering and exiting a site is necessarily new traffic added to the surrounding roadway system. For example, a gasoline/service station and convenience market are types of land uses that generally attract motorists already on the surrounding roadway system for a different trip purpose. These land uses attract a portion of their trips from traffic passing the site on the way from an origin to another ultimate destination. These trips are known as "Pass-By" trips that do not add new traffic to the surrounding roadway system. Utilizing the procedures described in ITE's Trip Generation Manual, PDE also calculated the number of "Pass-By" trips that the former service station use and Project would generate.

Table No. 1, contained in Attachment B, illustrates trips generated by the former service station use and the Project, including “Pass-By” trips, as well as the incremental change in total new site generated trips that could be anticipated with the Project. As can be seen in the Table, the total number of new trips decreases by a total of five trips during the Peak AM Hour (from 26 total trips for the former service station use to 21 total trips for the Project) and remains unchanged during the Peak PM Hour (49 total trips for both the former station use and the Project). The Peak Saturday Hour trips increase by only 23 total trips (from 45 total trips for the former service station use to 68 total trips for the Project). Generally, any increase of less than 100 vehicles in any peak hour is not considered substantial by the NYSDEC and NYSDOT.

Based on the foregoing, the Project has essentially no incremental impact to the adjacent roadway network and additional off-site traffic analysis is not necessary due to this nominal change in traffic volumes; however, an analysis of the intersection of Barger Street and East Main Street, as well as an analysis of the two site driveways along Barger Street, is being provided at the request of the Town.

Based on the existing travel patterns in the area, as derived from the 2019 existing traffic counts, PDE developed arrival and departure trip distributions for the site, which is shown on Figures No. 3 and 4. Utilizing these arrival and departure trip distributions, PDE distributed the former service station use’s traffic volumes to the roadway network, which are illustrated in Figure No. 5.

In order to develop future design year No-Build Traffic Volumes, the Existing Traffic Volumes were grown for two years at 2% per year to account for typical traffic growth. These grown traffic volumes were combined with the former service station use's traffic volumes (see Figure No. 5) to form the No-Build Traffic Volumes. The No-Build Traffic Volumes (with the former service station use traffic volumes) are illustrated in the attached Figure No. 6. As illustrated in Figure No. 6, the intersection of Barger Street and East Main Street experiences a total of 862 vehicles passing through the intersection during the Peak AM Hour, 1,136 vehicles during the Peak PM Hour and 971 vehicles during the Peak Saturday Hour.

In order to develop future design year Build Traffic Volumes, PDE first distributed the Project's traffic volumes to the roadway network utilizing the arrival and departure distributions discussed earlier. The arrival and departure distributions were adjusted to account for the reduction of driveways along Barger Street and the one-way vehicular circulation pattern proposed for the Project, and are illustrated on Figures No. 7 and 8, respectively. The difference between the Project's trips and the former service station use's trips were then calculated and are illustrated in Figure No. 9. These Project-generated trips were combined with the No-Build Traffic Volumes (Figure No. 6) to yield the Build Traffic Volumes illustrated on Figure No. 10. As illustrated in Figure No. 10, the intersection of Barger Street and East Main Street experiences a total of 874 vehicles passing through the intersection during the Peak AM Hour, 1,165 vehicles during the Peak PM Hour and 1,027 vehicles during the Peak Saturday Hour.

SECTION 3 – ANALYSIS AND RESULTS

The ability of a roadway network to accommodate traffic volume demand is measured by examining the capacity of key intersections to accommodate such demand. Capacity analysis is a procedure by which traffic volumes are used to calculate intersection capacities and delays to evaluate operating conditions. The Transportation Research Board presents the methodology in the Highway Capacity Manual (HCM). Capacity analyses were performed for the intersection of Barger Street and East Main Street, as well as the two site driveways along Barger Street, using Highway Capacity Software developed by the University of Florida, which is based on the methodologies presented in the HCM. Copies of the capacity analysis reports are contained in Attachment C.

The terminology "Level of Service" (LOS) is used to provide a qualitative evaluation based on certain quantitative calculations related to empirical values. Levels of Service for intersections are defined in terms of control delay, which includes deceleration, stopped time, and start-up time. Delay is used to reflect a measure of driver discomfort, frustration, efficiency, etc. Levels of Service range from A to F. Level of Service A represents the best traffic operating condition.

PDE conducted detailed capacity/Level of Service analyses for the intersection of Barger Street and East Main Street, as well as an analysis of the site driveways (two driveways along Barger Street in the Existing and No-Build conditions; one driveway along Barger Street and one driveway along East Main Street in the Build condition), with the 2019 Existing Traffic Volumes

to identify existing traffic conditions, the No-Build Traffic Volumes (with the former service station use trips) to identify future traffic conditions without the Project, and Build Traffic Volumes (with the Project-generated trips) to measure the traffic impact of the Project on the intersections. These impacts, if any, were quantified based on a comparison of the Level of Service results. Analyses were conducted for all three conditions during the Peak Weekday AM, Peak Weekday PM and Peak Saturday Hours.

The intersection of Barger Street and East Main Street consists of one shared left-turn/through/right-turn lane on each of the four approaches to the four-way intersection. The two East Main Street approaches are under STOP control. The Levels of Service results of the Barger Street and East Main Street intersection analysis are summarized in Table No. 2, contained in Attachment B. As can be seen in the Table, the Levels of Service/Delay for both Barger Street approaches will remain essentially unchanged during all Peak Hours. The eastbound East Main Street approach will experience increases in delay from the Existing to No-Build condition during all Peak Hours. When comparing the No-Build to Build Conditions, the delay on the eastbound East Main Street approach will remain essentially unchanged during the Peak AM Hour and will experience a slight increase in delay of less than 5 seconds during the Peak PM and Saturday hours. The westbound East Main Street approach, while not experiencing any delays in the Existing and No-Build Conditions due to the lack of existing vehicular activity on this approach, will experience delays in the range of LOS 'C' during all Peak Hours in the Build Condition.

During the Peak AM Hour, the northbound Barger Street approach ranges in delay of 8.3 seconds (LOS 'A') in the Existing Condition to 8.4 seconds (LOS 'A') in the No-Build and Build Conditions. The southbound Barger Street approach maintains a delay of 7.7 seconds (LOS 'A') in all Conditions. The eastbound East Main Street approach ranges in delay of 17.5 seconds (LOS 'C') in the Existing Condition to 19.3 seconds (LOS 'C') in the No-Build Condition and 19.2 seconds (LOS 'C') in the Build Condition. Since no vehicles were present on the westbound East Main Street approach during the Peak AM Hour, a Level of Service result is not provided for the Existing and No-Build Conditions. During the Build Condition, the westbound East Main Street approach will experience a delay of 15.1 seconds (LOS 'C').

During the Peak PM Hour, the northbound Barger Street approach ranges in delay of 8.3 seconds (LOS 'A') in the Existing Condition to 8.4 seconds (LOS 'A') in the No-Build and Build Conditions. The southbound Barger Street approach ranges in delay of 8.2 seconds (LOS 'A') in the Existing Condition to 8.3 seconds (LOS 'A') in the No-Build and Build Conditions. The eastbound East Main Street approach ranges in delay of 53.0 seconds (LOS 'F') in the Existing Condition to 85.3 seconds (LOS 'F') in the No-Build Condition and 90.2 seconds (LOS 'F') in the Build Condition. The westbound East Main Street approach ranges in delay of 10.9 seconds (LOS 'B') in the Existing Condition to 11.1 seconds (LOS 'B') in the No-Build and 22.4 seconds (LOS 'C') in the Build Conditions.

During the Peak Saturday Hour, the northbound Barger Street approach ranges in delay of 8.4 seconds (LOS 'A') in the Existing Condition to 8.5 seconds (LOS 'A') in the No-Build and Build

Conditions. The southbound Barger Street approach maintains a delay of 7.7 seconds (LOS 'A') in the Existing, No-Build and Build Conditions. The eastbound East Main Street approach ranges in delay of 26.5 seconds (LOS 'D') in the Existing Condition to 34.8 seconds (LOS 'D') in the No-Build Condition and 38.1 seconds (LOS 'E') in the Build Condition. Since no vehicles were present on the westbound East Main Street approach during the Peak Saturday Hour, a Level of Service result is not provided for the Existing and No-Build Conditions. During the Build Condition, the westbound East Main Street approach will experience a delay of 18.0 seconds (LOS 'C').

The existing intersections of Barger Street with the Site Driveways each consist of one shared left-turn/through lane on the southbound Barger Street approach, one shared through/right-turn lane on the northbound Barger Street approach, and one shared left-turn/right-turn on the Site Driveway approaches. The existing Site Driveways operate under STOP control. Under the proposed Project driveway layout, the northernmost Barger Street driveway would be eliminated, and the southernmost Barger Street driveway would be restricted to inbound traffic only. It should also be noted that in the vicinity of the site, the Barger Street approaches also contain shoulder lanes. While not accounted for in the analysis, the shoulder lane on the southbound Barger Street direction will allow vehicles to bypass any vehicles waiting to turn left into the site, while the shoulder lane on the northbound Barger Street direction will allow vehicles to exit the mainstream of traffic and slow down to turn right into the site. Therefore, the analysis is conservative as it does not take into account the effect that the shoulder lanes would have on the through traffic movements.

The Levels of Service results of the Barger Street and Site Driveway intersections analyses are summarized in Tables No. 4 and 5, contained in Attachment B. As can be seen in the Tables, the Levels of Service/Delays will remain essentially unchanged during all hours, with very minor increases in delay (less than 1 second) on the approaches. It should also be noted, as contained in the capacity analysis reports in Attachment C, that the queues for vehicles turning into (in the case of the Existing, No-Build and Build Conditions) or out of the site (in the case of the Existing and No-Build Conditions) never exceed more than one vehicle.

At the intersection of the Northern Site Driveway with Barger Street, during the Peak AM Hour, the southbound Barger Street approach ranges in delay of 7.7 seconds (LOS 'A') in the Existing Condition to 7.8 seconds (LOS 'A') in the No-Build Condition. The Northern Site Driveway exiting movement experiences a delay of 11.3 seconds (LOS 'B') in the No-Build Condition. As noted earlier, the site was not operational during the time of the existing traffic count data collection, and therefore a Level of Service result is not provided for the Existing Condition. During the Peak PM Hour, the southbound Barger Street approach ranges in delay of 8.5 seconds (LOS 'A') in the Existing Condition to 8.7 seconds (LOS 'A') in the No-Build Condition. The Northern Site Driveway exiting movement experiences a delay of 14.0 seconds (LOS 'B') in the No-Build Condition. During the Peak Saturday Hour, the southbound Barger Street approach ranges in delay of 7.9 seconds (LOS 'A') in the Existing Condition to 8.0 seconds (LOS 'A') in the No-Build Condition. The Northern Site Driveway exiting movement experiences a delay of 11.8 seconds (LOS 'B') in the No-Build Condition. Since the Project proposes to eliminate the Northern Site Driveway, Level of Service results are not provided for the Build Condition.

At the intersection of the Southern Site Driveway with Barger Street, during the Peak AM Hour, the southbound Barger Street approach ranges in delay of 7.7 seconds (LOS 'A') in the Existing Condition to 7.8 seconds (LOS 'A') in the No-Build and Build Conditions. The Southern Site Driveway exiting movement experiences a delay of 11.7 seconds (LOS 'B') in the No-Build Condition. As noted earlier, the site was not operational during the time of the existing traffic count data collection, and therefore a Level of Service result is not provided for the Existing Condition. Additionally, since the Project proposes to limit the Southern Site Driveway to inbound traffic only, a Level of Service result is not provided for the Build Condition. During the Peak PM Hour, the southbound Barger Street approach ranges in delay of 8.5 seconds (LOS 'A') in the Existing Condition to 8.6 seconds (LOS 'A') in the No-Build Condition and 8.8 seconds (LOS 'A') in the Build Condition. The Southern Site Driveway exiting movement experiences a delay of 13.5 seconds (LOS 'B') in the No-Build Condition. During the Peak Saturday Hour, the southbound Barger Street approach maintains a delay of 7.9 seconds (LOS 'A') in the Existing and No-Build Conditions and experiences a delay of 8.1 seconds (LOS 'A') in the Build Condition. The Southern Site Driveway exiting movement experiences a delay of 11.3 seconds (LOS 'B') in the No-Build Condition.

The intersection of East Main Street with the Site Driveway consists of one shared left-turn/through lane on the westbound East Main Street approach, one shared through/right-turn lane on the eastbound East Main Street approach, and one shared left-turn/right-turn on the Site Driveway approach. The existing Site Driveway operates under STOP control. Under the proposed Project driveway layout, the East Main Street driveway would be restricted to outbound

traffic only. Due to the lack of existing vehicular activity on East Main Street, and subsequently any conflicting movements with vehicles exiting the East Main Street driveway, Level of Service results are not provided for the Existing, No-Build and Build Conditions.

Based on the results of the analysis, the Project will not have any significant impact upon the traffic operating conditions in the area and thus no traffic mitigation is necessary.

SECTION 4 – SENSITIVITY ANALYSIS

PDE also conducted Sensitivity Analyses of the studied intersections, with consideration of a 110-room hotel being considered by the Town on the adjacent property immediately east of the Project. This site is currently proposed to be provided access through the dead-end portion of East Main Street. Analyses were conducted considering this use in addition to the Project's Build Traffic Volumes.

To perform the Sensitivity Analysis, PDE obtained trip estimates for the proposed hotel³. Since the trip estimates provided for the proposed hotel did not include data for the Peak Saturday Hour, PDE consulted ITE's Trip Generation Manual. Utilizing Land Use Code 310 (Hotel), the number of trips were estimated for the Peak Saturday Hour, which resulted in 45 entering trips and 35 exiting trips. The estimated hotel trips were then distributed to the surrounding roadway network utilizing the same arrival and departure distributions developed from the existing traffic count volumes. The proposed hotel trips were combined with the Build Traffic Volumes (Figure No. 10) to form the Sensitivity Analysis Traffic Volumes illustrated on Figure No. 11. As illustrated in Figure No. 11, the intersection of Barger Street and East Main Street experiences a total of 924 vehicles passing through the intersection during the Peak AM Hour, 1,222 vehicles during the Peak PM Hour and 1,108 vehicles during the Peak Saturday Hour.

³ Trip estimates obtained from Maser Consulting P.A. and contained in Attachment D.

Capacity analyses were conducted at the Barger Street and East Main Street intersection with and without a proposed conceptual improvement plan developed by Maser Consulting. The proposed intersection improvement plan prepared by Maser Consulting consisted of the addition of an exclusive left-turn lane on the southbound Barger Street approach and a two-way left-turn lane on the northbound Barger Street approach. A copy of the intersection improvement concept plan is contained in Attachment D.

The results of the analyses are summarized in Table No. 3. As can be seen in the Table, the additional traffic from the Hotel use would result in significant increases in delay on the eastbound East Main Street approach, during both the Peak PM and Peak Saturday hours, with failing Levels of Service, during these time periods. The proposed intersection improvement plan prepared by Maser Consulting would offset a portion of the incremental impacts from the proposed hotel use; however it would not bring it back to No-Build conditions. It is noted the plan prepared by Maser Consulting could be constructed without utilizing any property from the subject property, nor would it require modification of the curbing that exists within the subject property's Right-of-Way.

During the Peak AM Hour, the northbound and southbound Barger Street approaches maintain a delay of 8.4 seconds (LOS 'A') and 7.7 seconds (LOS 'A'), respectively, in the Build (without Hotel), Build with Hotel and Build with Hotel & Improvement Conditions. The eastbound East Main Street approach ranges in delay of 19.2 seconds (LOS 'C') in the Build Condition to 22.1 seconds (LOS 'C') in the Build with Hotel Condition and 21.9 seconds (LOS 'C') in the Build

with Hotel & Improvement Condition. The westbound East Main Street approach ranges in delay of 15.1 seconds (LOS 'C') in the Build Condition, 16.0 seconds (LOS 'C') in the Build with Hotel Condition, and 15.9 seconds (LOS 'C') in the Build with Hotel & Improvement Condition.

During the Peak PM Hour, the northbound and southbound Barger Street approaches maintain a delay of 8.4 seconds (LOS 'A') and 8.3 seconds (LOS 'A'), respectively, in the Build (without Hotel), Build with Hotel and Build with Hotel & Improvement Conditions. The eastbound East Main Street approach ranges in delay of 90.2 seconds (LOS 'F') in the Build Condition to 147.7 seconds (LOS 'F') in the Build with Hotel Condition and 135.5 seconds (LOS 'F') in the Build with Hotel & Improvement Condition. The westbound East Main Street approach ranges in delay of 22.4 seconds (LOS 'C') in the Build Condition to 27.0 seconds (LOS 'D') in the Build with Hotel Condition and 26.1 seconds (LOS 'D') in the Build with Hotel & Improvement Condition.

During the Peak Saturday Hour, the northbound Barger Street approach maintains a delay of 8.5 seconds (LOS 'A') in the Build (without Hotel), Build with Hotel and Build with Hotel & Improvement Conditions. The southbound Barger Street approach ranges in delay of 7.7 seconds (LOS 'A') in the Build (without Hotel) Condition to 7.8 seconds (LOS 'A') in the Build with Hotel and Build with Hotel & Improvement Conditions. The eastbound East Main Street approach ranges in delay of 38.1 seconds (LOS 'E') in the Build Condition to 65.7 seconds (LOS 'F') in the Build with Hotel Condition and 62.8 seconds (LOS 'F') in the Build with Hotel & Improvement Condition. The westbound East Main Street approach ranges in delay of 18.0 seconds (LOS 'C')

in the Build (without Hotel) Condition, 22.2 seconds (LOS ‘C’) in the Build with Hotel Condition, and 21.8 seconds (LOS ‘C’) in the Build with Hotel & Improvement Condition.

The increase in delays for the eastbound East Main Street approach are due to the additional trips travelling through the subject intersection. As the delays occur on the opposite side of Barger Street from the subject property (along the eastbound East Main Street approach), any solution to correct the delays would not involve Right-of-Way takings from the subject property. It is also noted that the delays are not associated or caused by the subject property, but the future development of the adjacent site.

Additionally, PDE conducted a traffic signal warrant analysis based upon the guidelines set forth in the Manual of Uniform Traffic Control Devices (MUTCD). Utilizing the Sensitivity Analysis Traffic Volumes illustrated on Figure No. 11, PDE conducted a Peak Hour Warrant analysis (Warrant No. 3 of the MUTCD) for the intersection of Barger Street and East Main Street. The results of the Warrant analysis are illustrated in Figure No. 12.

Based upon the results of the Peak Hour Warrant analysis, the subject intersection does not meet required peak hour traffic volumes thresholds for installation of a traffic signal. Furthermore, it should be noted that this Warrant is not necessarily applicable at this intersection since the Warrant is reserved for “locations near a facility that would attract or discharge large numbers of vehicles over a short time”, according to the MUTCD.

Capacity analyses were also conducted for the site driveways along Barger Street and East Main Street utilizing the Sensitivity Analysis Traffic Volumes. The results of the analyses are summarized in Tables No. 4, 5 and 6. As can be seen in the Tables, the additional traffic from the Hotel use would result in very minimal delay increases at the site driveway intersections.

Since the Project proposes to eliminate the Northern Site Driveway, Level of Service results are not provided for the Build (without Hotel) and Build with Hotel Conditions.

At the intersection of the Southern Site Driveway with Barger Street, during the Peak AM Hour, the southbound Barger Street approach maintains a delay of 7.8 seconds (LOS 'A') during the Build (without Hotel) and Build with Hotel Conditions. During the Peak PM Hour, the southbound Barger Street approach maintains a delay of 8.8 seconds (LOS 'A') during the Build (without Hotel) and Build with Hotel Conditions. During the Peak Saturday Hour, , the southbound Barger Street approach maintains a delay of 8.8 seconds (LOS 'A') during the Build (without Hotel) and Build with Hotel Conditions.

At the intersection of the Site Driveway with East Main Street, during the Peak AM Hour, the westbound East Main Street approach experiences a delay of 7.3 seconds (LOS 'A') and the northbound Site Driveway approach experiences a delay of 8.9 seconds (LOS 'A') during the Build with Hotel Condition. During the Peak PM Hour, the westbound East Main Street approach experiences a delay of 7.3 seconds (LOS 'A') and the northbound Site Driveway approach experiences a delay of 9.0 seconds (LOS 'A') during the Build with Hotel Condition. During the

Peak Saturday Hour, the westbound East Main Street approach experiences a delay of 7.3 seconds (LOS 'A') and the northbound Site Driveway approach experiences a delay of 9.3 seconds (LOS 'A') during the Build with Hotel Condition.

SECTION 5 – CONCLUSIONS

It is the professional opinion of Provident Design Engineering, PLLC that the Project will not have any significant traffic impact upon the adjacent roadway network. The proposed Project will result in a reduction in trips during the Peak AM Hour, no change in trips during the Peak PM Hour and a nominal increase in trips during the Peak Saturday Hour, when compared to the trip characteristics of the former service station use. Additionally, the capacity analyses conducted for the intersection of Barger Street and East Main Street, as well as the site driveways along Barger Street and East Main Street, indicate minimal changes in Levels of Service from the No-build (with former service station use) to Build Conditions (with Project).

The sensitivity analysis indicates that increases in delay will be experienced by the eastbound East Main Street approach at its intersection with Barger Street with the introduction of additional Hotel trips at the intersection. This increase in delay is due to increased traffic volumes traveling through the intersection along East Main Street and conflicting with both directions of Barger Street. Increases in delay will occur under the existing intersection geometry as well as under the geometry proposed in the conceptual intersection improvement plan prepared by Maser Consulting.

Q:\PROJECTS-20\20-008 3700 Barger Street\Reports\Traffic\Technical Memorandum Report_2020-09-02_REV-2 (one-way operation).docx

ATTACHMENT A

FIGURES

Q:\PROJECTS-20\20-008 3700 Barger Street\AutoCAD\Traffic\TrafficFigures 8.5x11 Portrait REV-3 Revised Site Plan 2020-08-19 (one-way operation).dwg



7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
TEL: (914) 592-4040 WWW.PDERESULTS.COM

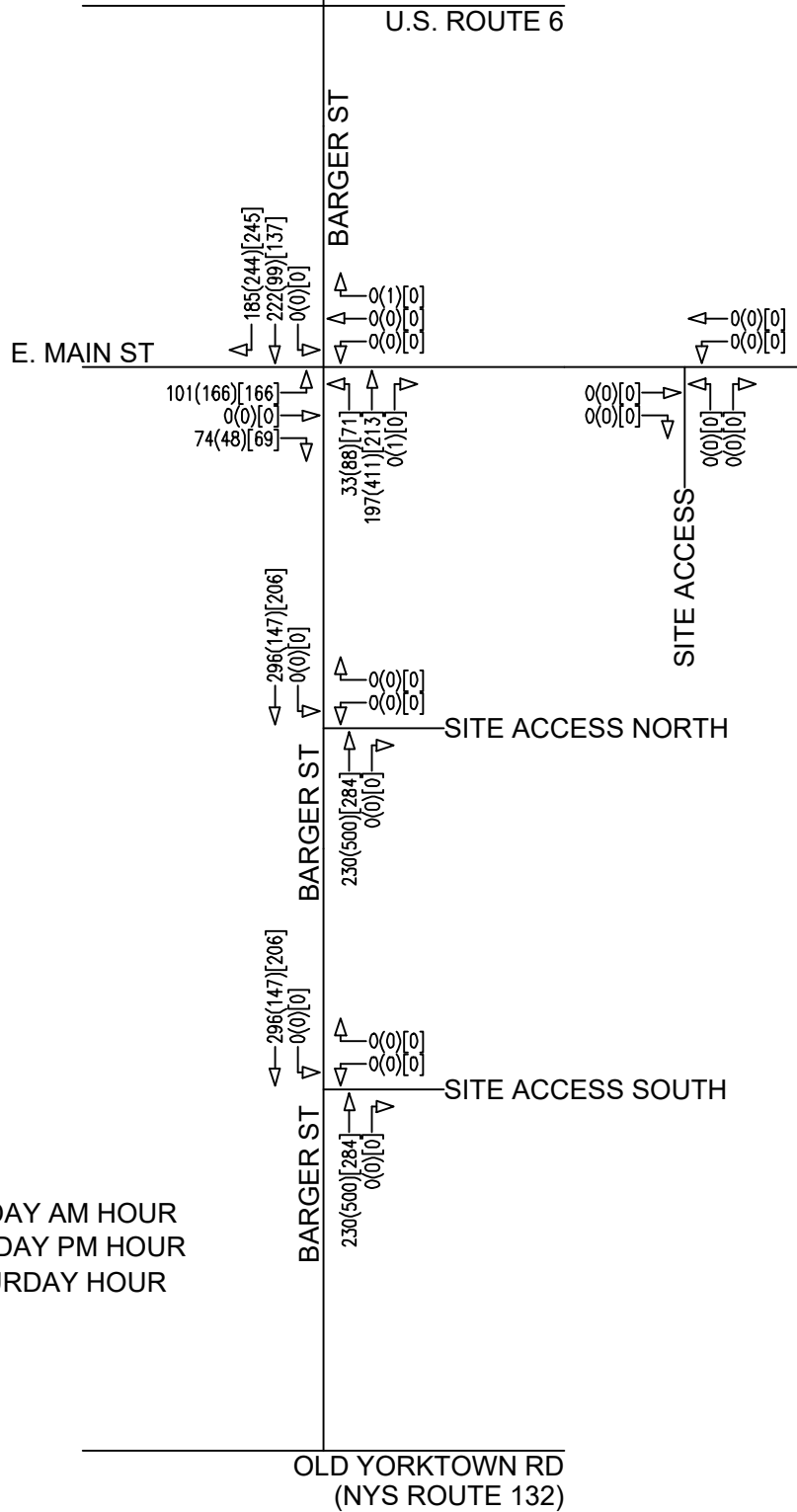
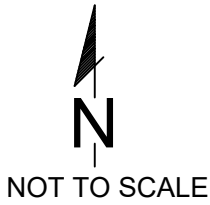
© PROVIDENT DESIGN ENGINEERING, PLLC

Site Location Map
3700 Barger Street
Yorktown, Westchester County, New York

Project No. 20-008
Not To Scale
August 2020

Figure No. 01

Q:\PROJECTS-20\20-008 3700 Barger Street\AutoCAD\Traffic\TrafficFigures 8.5x11 Portrait REV-3 Revised Site Plan 2020-08-19 (one-way operation).dwg



7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
 TEL: (914) 592-4040 WWW.PDERESULTS.COM

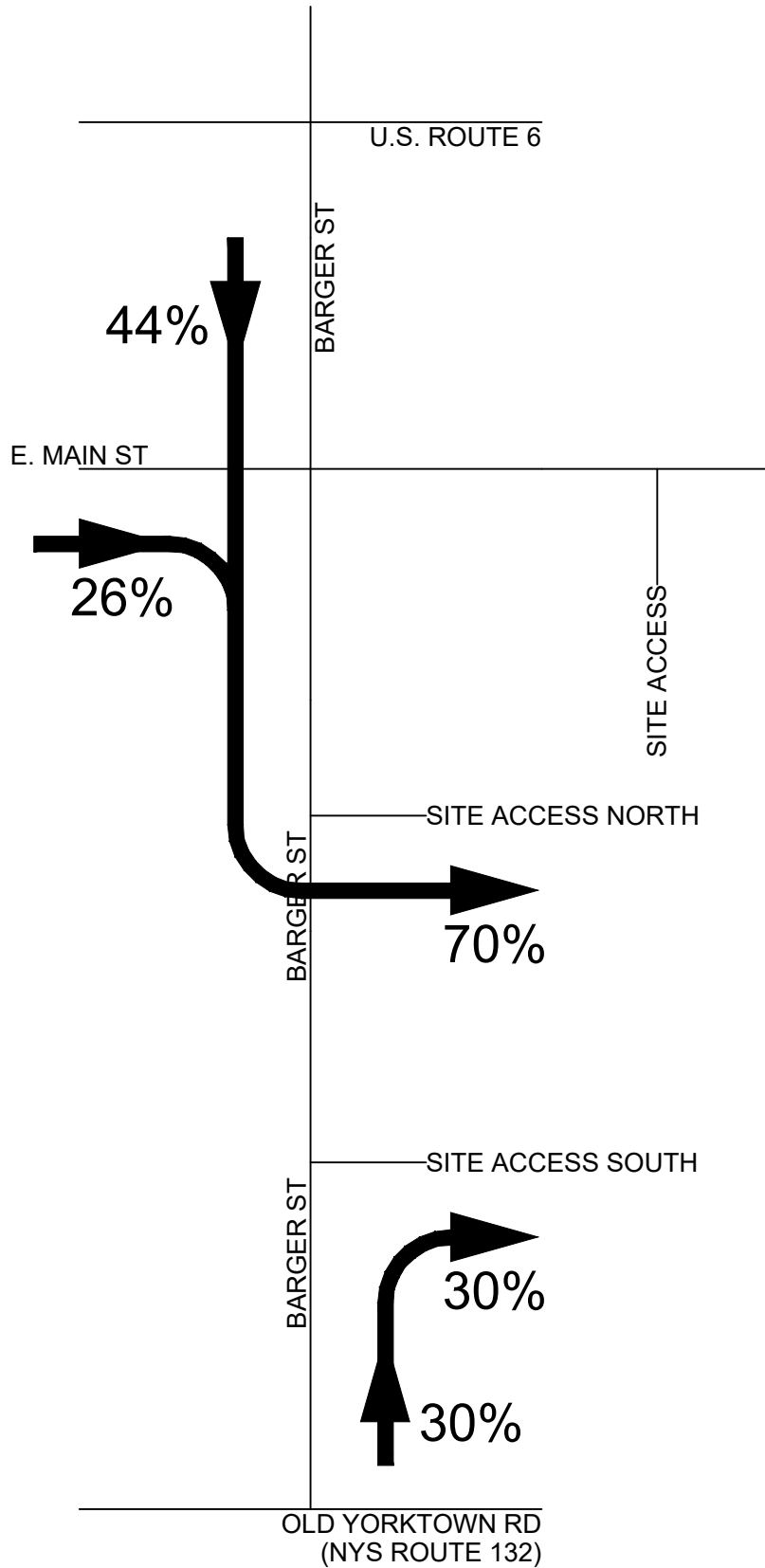
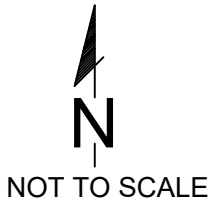
© PROVIDENT DESIGN ENGINEERING, PLLC

2019 Existing Traffic Volumes
 3700 Barger Street
 Yorktown, Westchester County, New York

Project No. 20-008
 Not To Scale
 August 2020

Figure No. 02

Q:\PROJECTS-20\20-008_3700 Barger Street\AutoCAD\Traffic\TrafficFigures_8.5x11.Porrait REV-3 Revised Site Plan_2020-08-19 (one-way operation).dwg



7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
TEL: (914) 592-4040 WWW.PDERESULTS.COM

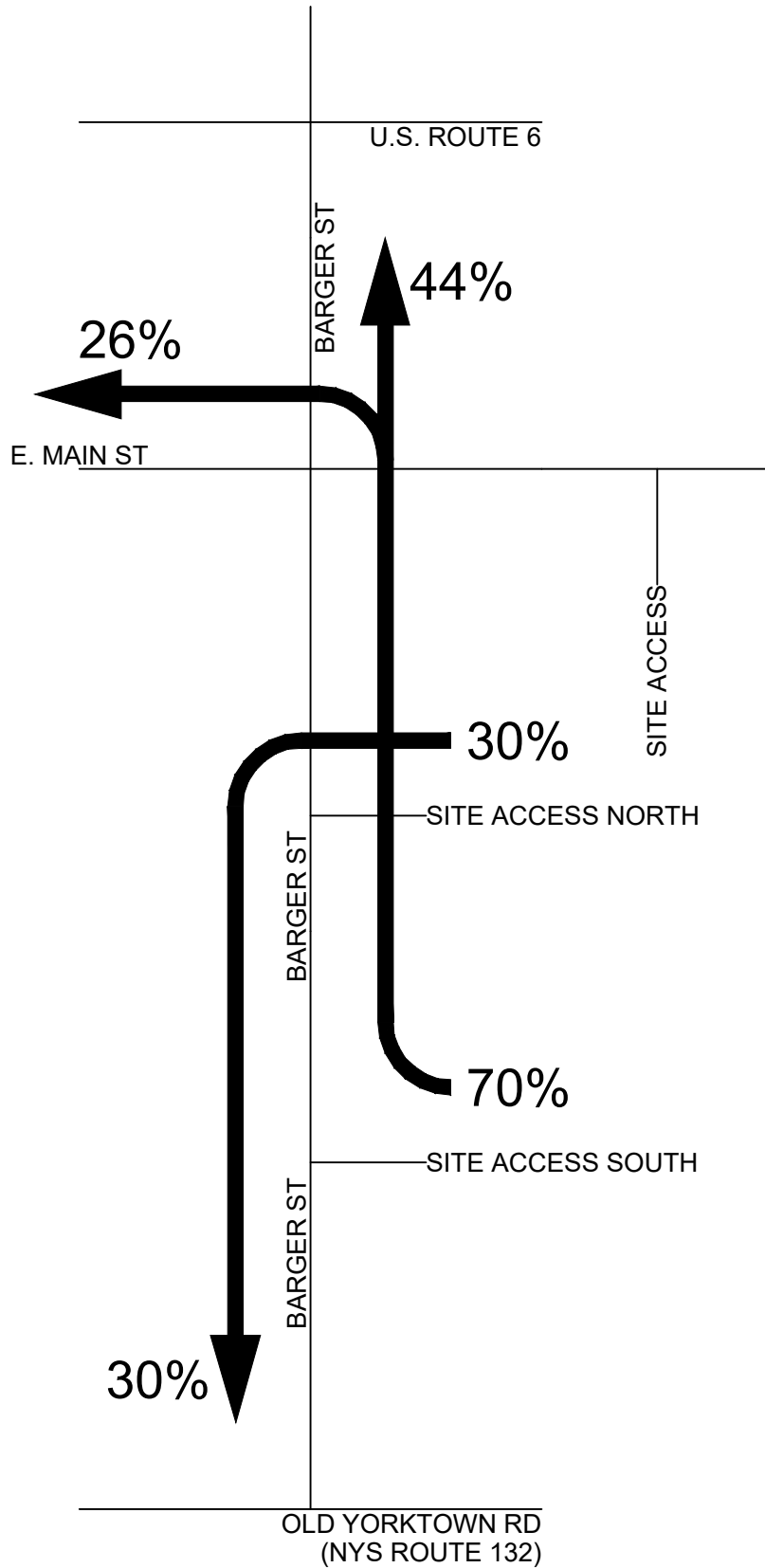
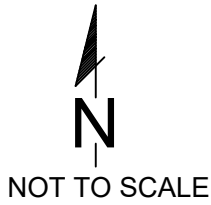
© PROVIDENT DESIGN ENGINEERING, PLLC

Arrival Distribution
3700 Barger Street
Yorktown, Westchester County, New York

Project No. 20-008
Not To Scale
August 2020

Figure No. 03

Q:\PROJECTS-20\20-008 3700 Barger Street\AutoCAD\Traffic\Figures 8.5x11 Portrait REV-3 Revised Site Plan 2020-08-19 (one-way operation).dwg



7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
TEL: (914) 592-4040 WWW.PDERESULTS.COM

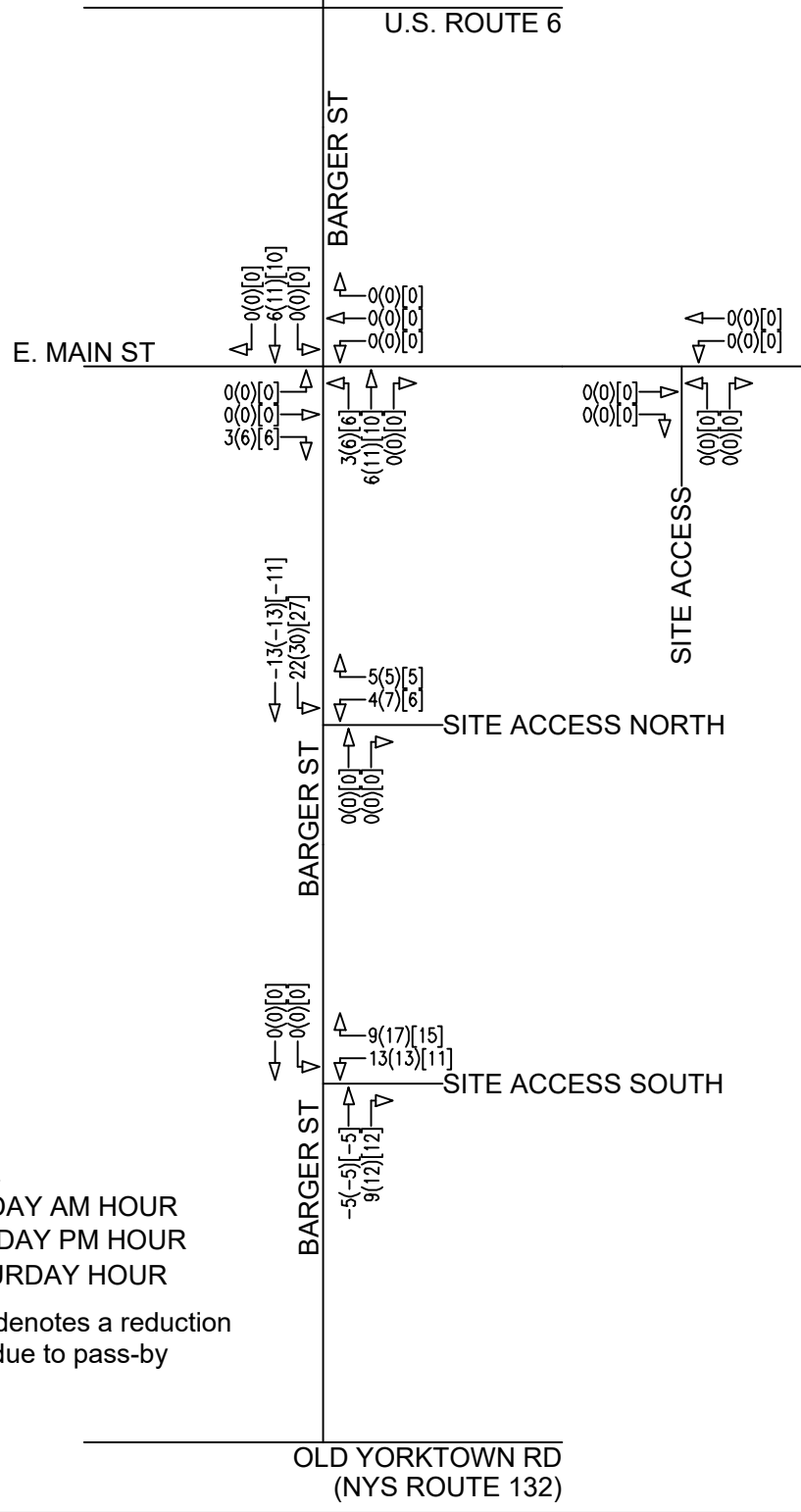
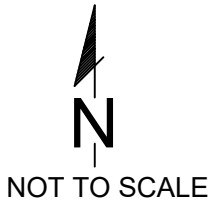
© PROVIDENT DESIGN ENGINEERING, PLLC

Departure Distribution
3700 Barger Street
Yorktown, Westchester County, New York

Project No. 20-008
Not To Scale
August 2020

Figure No. 04

Q:\PROJECTS-20\20-008 3700 Barger Street\AutoCAD\Traffic\Figures 8.5x11 Portrait REV-3 Revised Site Plan 2020-08-19 (one-way operation).dwg



7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
 TEL: (914) 592-4040 WWW.PDERESULTS.COM

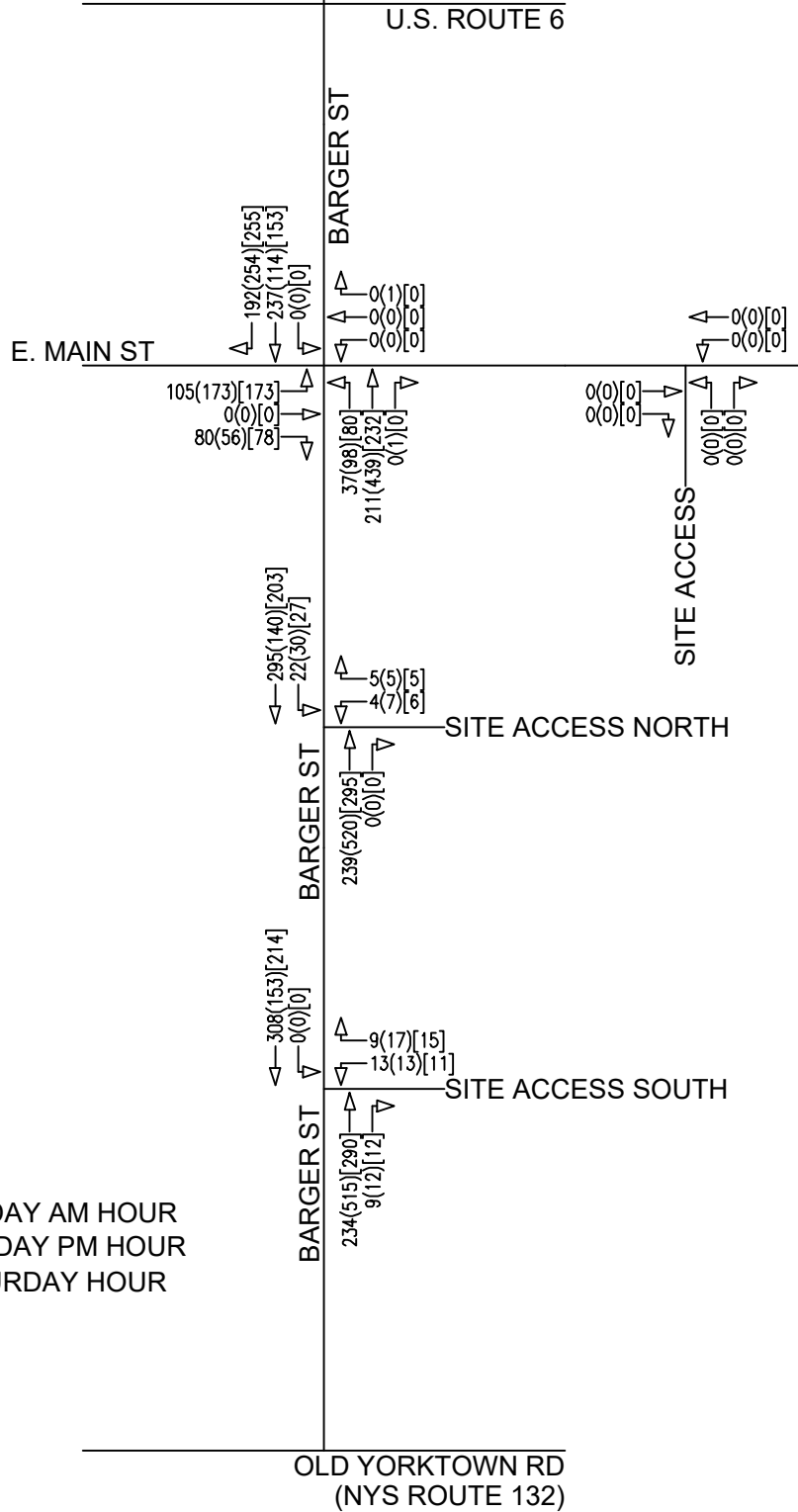
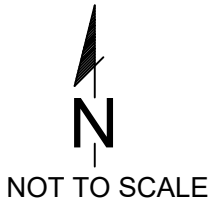
© PROVIDENT DESIGN ENGINEERING, PLLC

Former Service Station Traffic Volumes
 3700 Barger Street
 Yorktown, Westchester County, New York

Project No. 20-008
 Not To Scale
 August 2020

Figure No. 05

Q:\PROJECTS-20\20-008 3700 Barger Street\AutoCAD\Traffic\Figures 8.5x11 Portrait REV-3 Revised Site Plan 2020-08-19 (one-way operation).dwg



LEGEND

- 00 - VPH-PEAK WEEKDAY AM HOUR
- (00) - VPH-PEAK WEEKDAY PM HOUR
- [00] - VPH-PEAK SATURDAY HOUR



7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
TEL: (914) 592-4040 WWW.PDERESULTS.COM

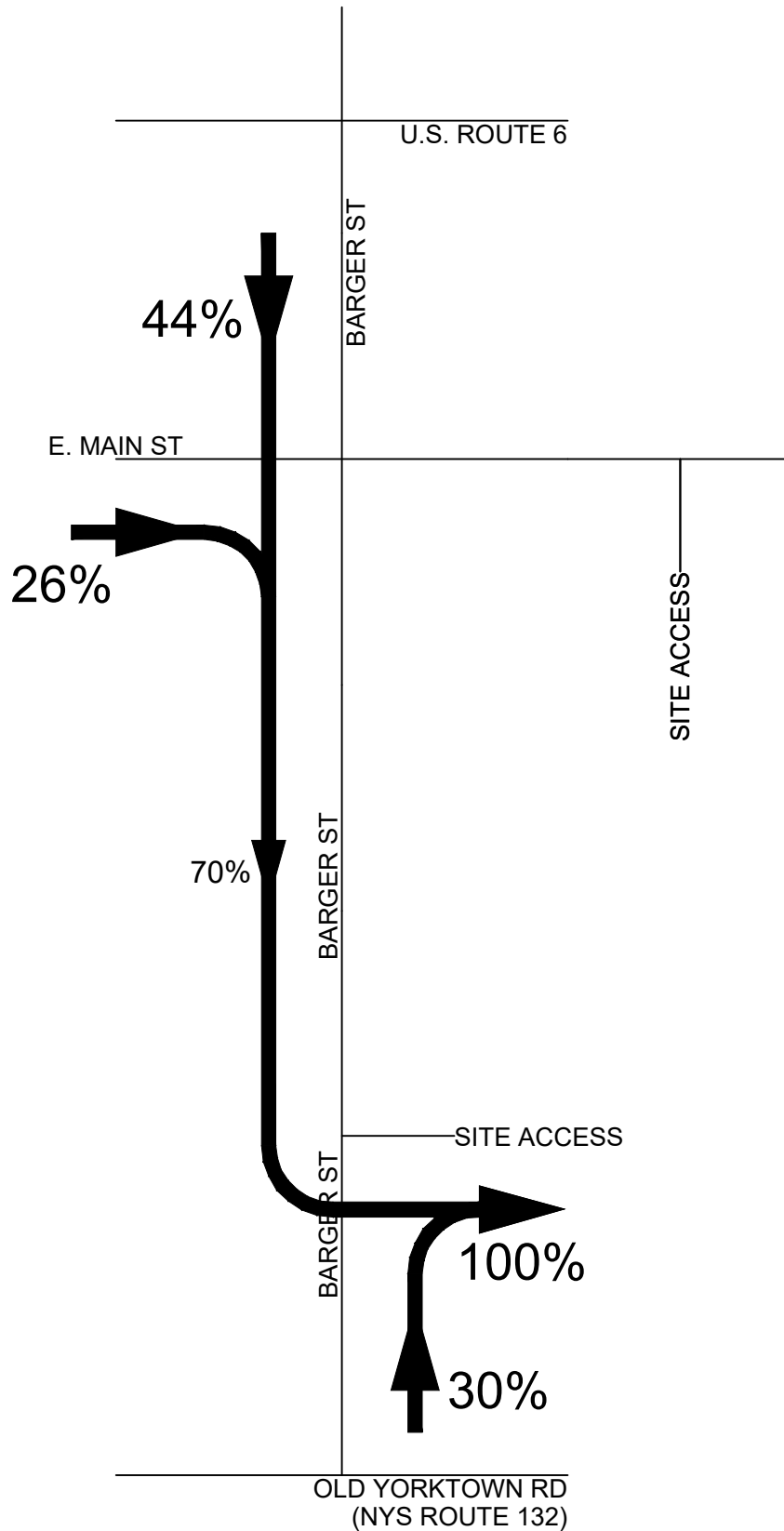
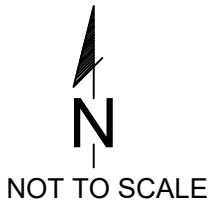
© PROVIDENT DESIGN ENGINEERING, PLLC

2021 No-Build Traffic Volumes
3700 Barger Street
Yorktown, Westchester County, New York

Project No. 20-008
Not To Scale
August 2020

Figure No. 06

Q:\PROJECTS-20\20-008_3700 Barger Street\AutoCAD\Traffic\Figures 8.5x11 Portrait REV-3 Revised Site Plan 2020-08-19 (one-way operation).dwg



7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
TEL: (914) 592-4040 WWW.PDERESULTS.COM

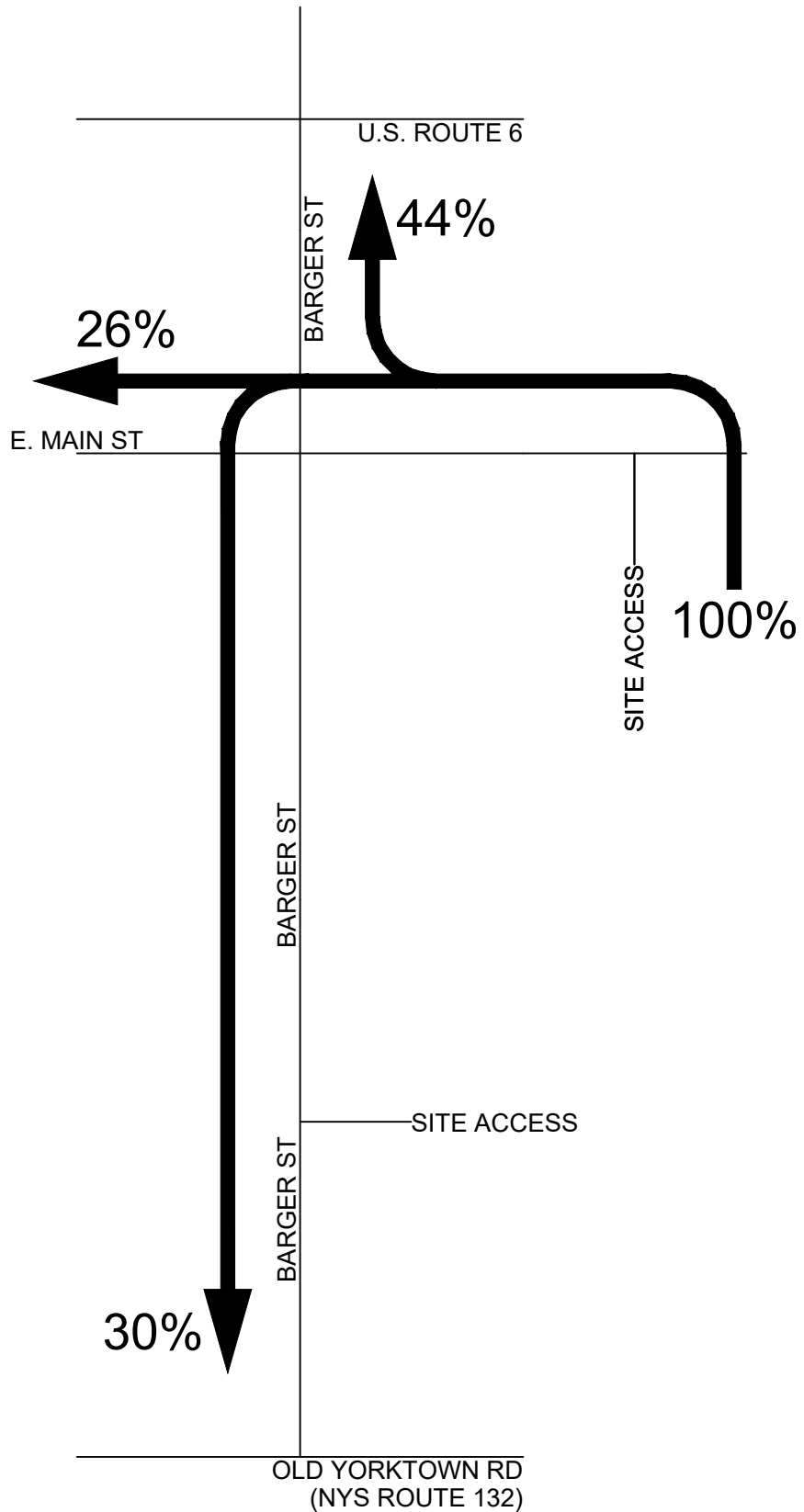
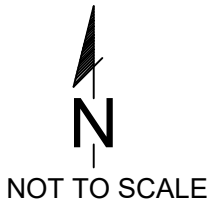
© PROVIDENT DESIGN ENGINEERING, PLLC

Arrival Distribution
3700 Barger Street
Yorktown, Westchester County, New York

Project No. 20-008
Not To Scale
August 2020

Figure No. 07

Q:\PROJECTS-20\20-008 3700 Barger Street\AutoCAD\Traffic\Figures 8.5x11 Portrait REV-3 Revised Site Plan 2020-08-19 (one-way operation).dwg



7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
TEL: (914) 592-4040 WWW.PDERESULTS.COM

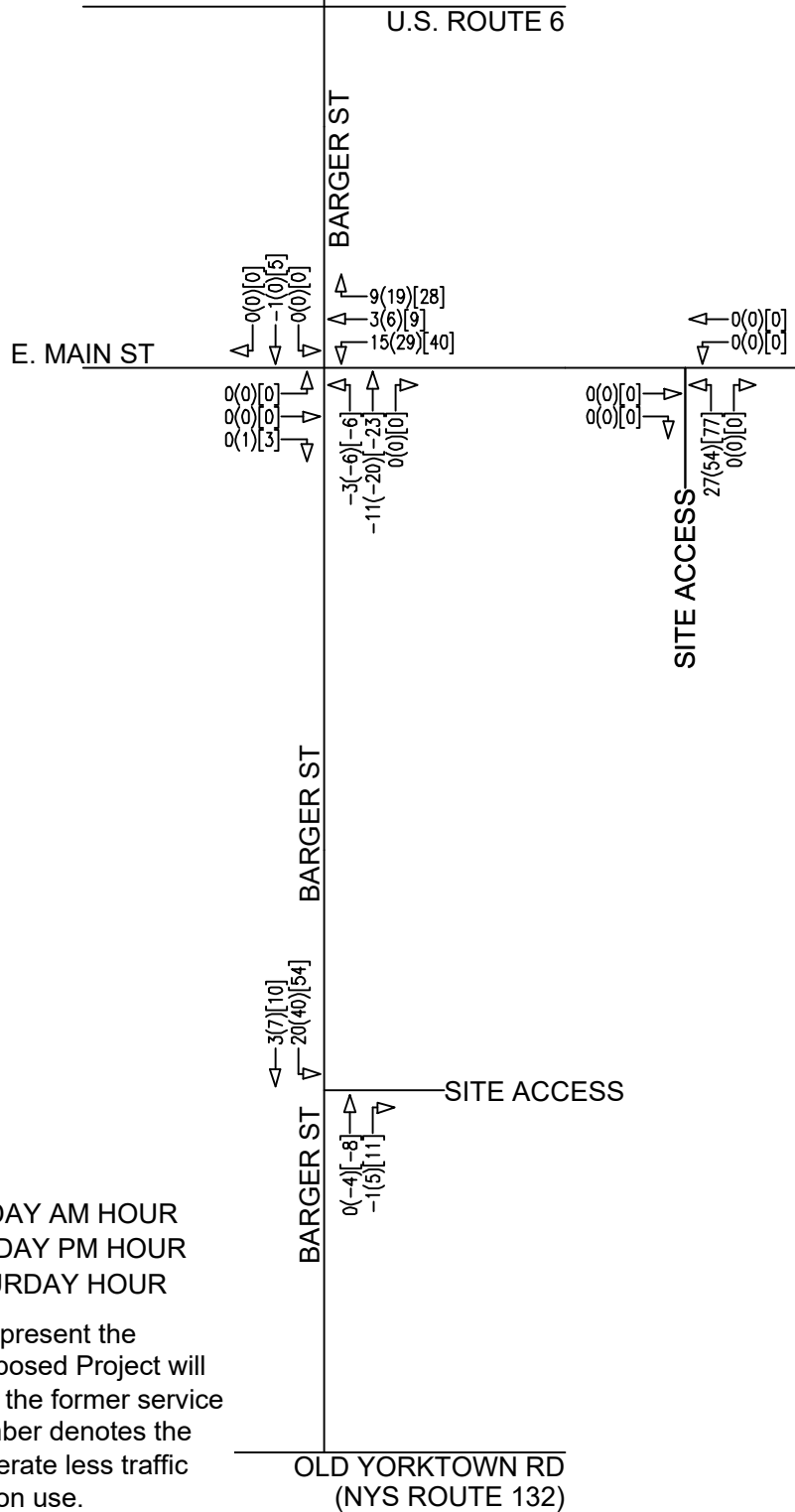
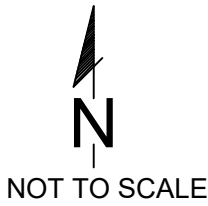
© PROVIDENT DESIGN ENGINEERING, PLLC

Departure Distribution
3700 Barger Street
Yorktown, Westchester County, New York

Project No. 20-008
Not To Scale
August 2020

Figure No. 08

Q:\PROJECTS-20\20-008 3700 Barger Street\AutoCAD\Traffic\TrafficFigures 8.5x11 Portrait REV-3 Revised Site Plan 2020-08-19 (one-way operation).dwg



LEGEND

- 00 - VPH-PEAK WEEKDAY AM HOUR
- (00) - VPH-PEAK WEEKDAY PM HOUR
- [00] - VPH-PEAK SATURDAY HOUR

NOTE: The values shown represent the increase in trips that the proposed Project will generate when compared to the former service station use. A negative number denotes the proposed Project would generate less traffic than the former service station use.



7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
 TEL: (914) 592-4040 WWW.PDERESULTS.COM

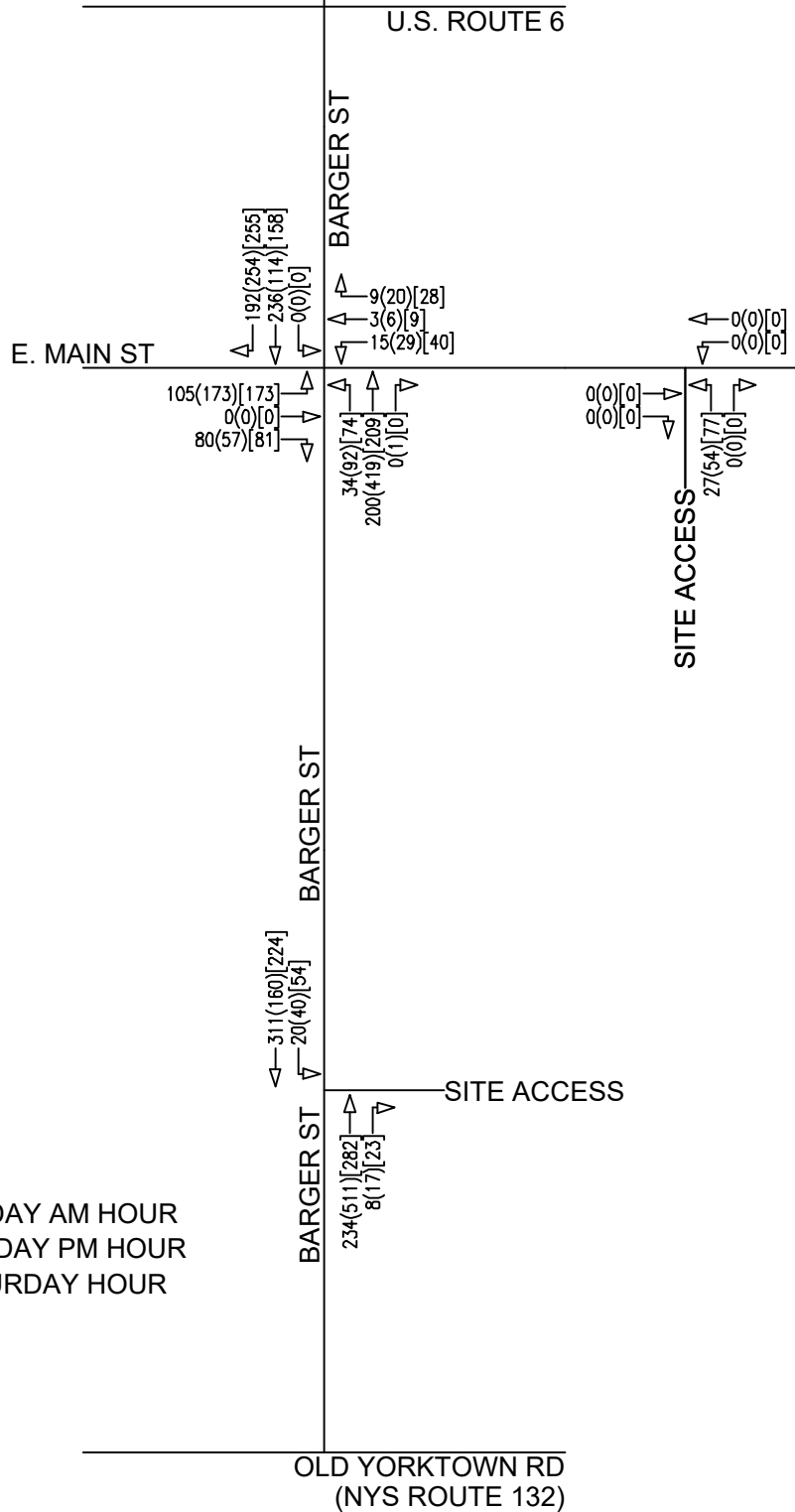
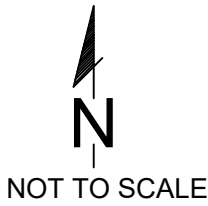
© PROVIDENT DESIGN ENGINEERING, PLLC

Project Generated Traffic Volumes
 3700 Barger Street
 Yorktown, Westchester County, New York

Project No. 20-008
 Not To Scale
 August 2020

Figure No. 09

Q:\PROJECTS-20\20-008 3700 Barger Street\AutoCAD\Traffic\TrafficFigures 8.5x11 Portrait REV-3 Revised Site Plan 2020-08-19 (one-way operation).dwg



LEGEND

- 00 - VPH-PEAK WEEKDAY AM HOUR
- (00) - VPH-PEAK WEEKDAY PM HOUR
- [00] - VPH-PEAK SATURDAY HOUR



7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
TEL: (914) 592-4040 WWW.PDERESULTS.COM

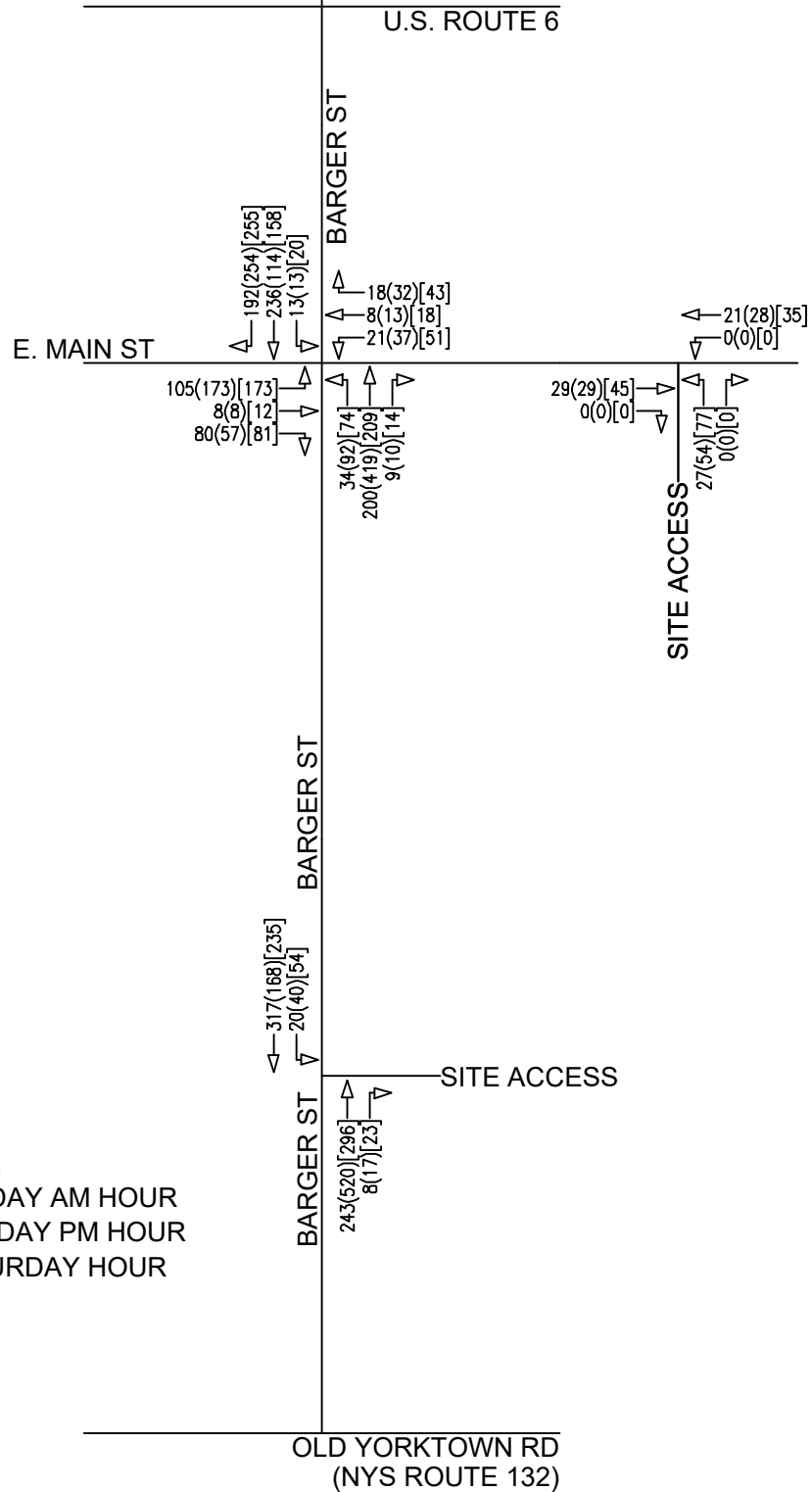
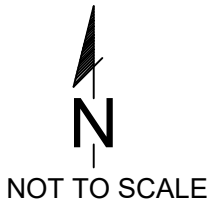
© PROVIDENT DESIGN ENGINEERING, PLLC

2021 Build Traffic Volumes
3700 Barger Street
Yorktown, Westchester County, New York

Project No. 20-008
Not To Scale
August 2020

Figure No. 10

Q:\PROJECTS-20\20-008 3700 Barger Street\AutoCAD\Traffic\TrafficFigures 8.5x11 Portrait REV-3 Revised Site Plan 2020-08-19 (one-way operation).dwg



LEGEND

- 00 - VPH-PEAK WEEKDAY AM HOUR
- (00) - VPH-PEAK WEEKDAY PM HOUR
- [00] - VPH-PEAK SATURDAY HOUR



7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
 TEL: (914) 592-4040 WWW.PDERESULTS.COM

© PROVIDENT DESIGN ENGINEERING, PLLC

2021 Build Traffic Volumes (with Hotel)
 3700 Barger Street
 Yorktown, Westchester County, New York

Project No. 20-008
 Not To Scale
 August 2020

Figure No. 11

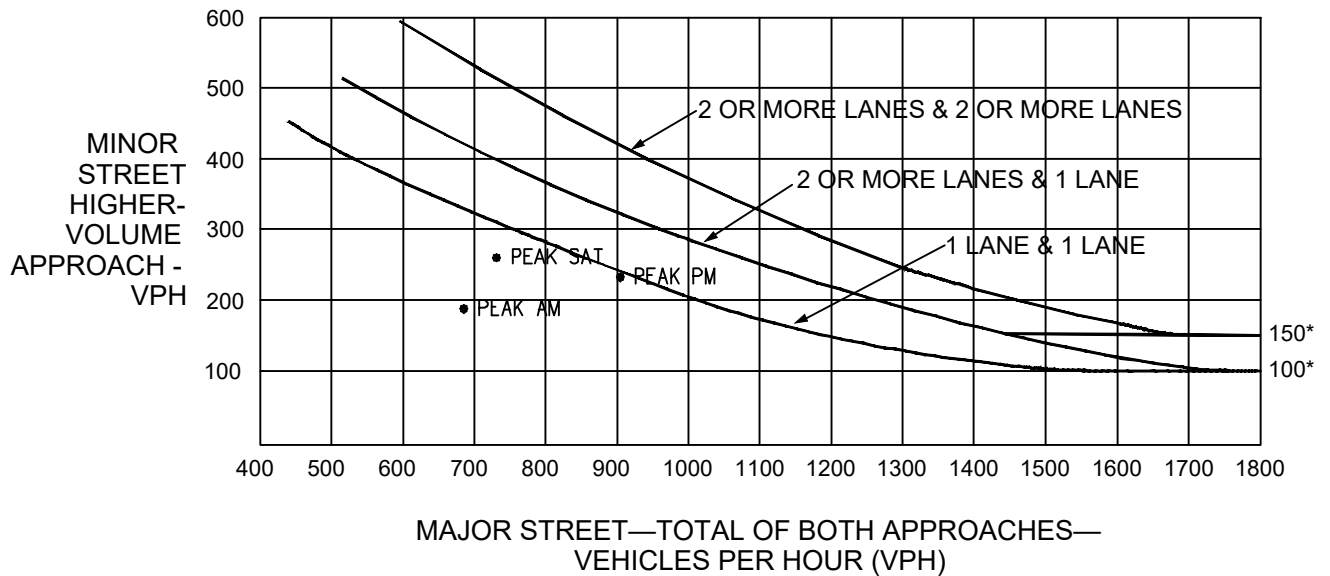
Q:\PROJECTS-20\20-008 3700 Barger Street\AutoCAD\Traffic\Traffic Signal Warrants 2, 3 & 4 2009 MUTCD Revised Site Plan_2020-08-19 (one-way operation).dwg

BARGER STREET AND EAST MAIN STREET

MAJOR STREET APPROACH - 1 LANE

MINOR STREET APPROACH - 1 LANE

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Sect. 4C.04

December 2009



7 SKYLINE DRIVE, HAWTHORNE, NEW YORK 10532
TEL: (914) 592-4040 WWW.PDERESULTS.COM

© PROVIDENT DESIGN ENGINEERING, PLLC

MUTCD Traffic Signal Warrant No. 3
Peak Hour Vehicular Volume
3700 Barger Street
Yorktown, Westchester County, New York

Project No. 20-008
Not To Scale
August 2020

Figure No. 12

ATTACHMENT B

TABLES

Table No. 1
Trip Generation Comparison
Former Gas Station with Service Center Use vs. Proposed Gas Station with Convenience Market

Condition	Land Use	Use Code	Amount	Unit	AM Peak Hour			PM Peak Hour			SAT Peak Hour		
					IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Former Service Station Use	Gasoline/Service Station	944	6	Vehicle Fueling Positions	31	31	62	42	42	84	39	38	77
Pass-By Trips					-18	-18	-36	-18	-17	-35	-16	-16	-32
Total New Site Generated Trips					13	13	26	24	25	49	23	22	45
Proposed Development	Gasoline/Service Station with Convenience Market	945	8	Vehicle Fueling Positions	28	27	55	57	55	112	77	77	154
Pass-By Trips					-17	-17	-34	-31	-32	-63	-43	-43	-86
Total New Site Generated Trips					11	10	21	26	23	49	34	34	68
DIFFERENCE					-2	-3	-5	+2	-2	0	+11	+12	+23

FORMER SERVICE STATION USE NOTES

- Trip Generation based upon information contained in the Institute of Transportation Engineers' (ITE) publication entitled "Trip Generation", 10th Edition.
- Number of fueling positions obtained from Existing Conditions drawing provided by Insite Engineering (dated 12/16/2019).
- Weekday AM and PM Peak Hour trip generation calculated for the 'Peak Hour of Adjacent Street Traffic' using the 'Fitted Curve Equation', when provided; otherwise, the 'Average Rate' was utilized.
- Pass-By Trips calculated per the procedures described in ITE's Trip Generation Handbook, 3rd Edition. ITE does not contain pass-by trip data for the Saturday Peak Hour time period. Therefore, the minimum Pass-By percentage between the Weekday AM and PM Peak Hours was utilized.

PROPOSED DEVELOPMENT NOTES

- Trip Generation based upon information contained in the Institute of Transportation Engineers' (ITE) publication entitled "Trip Generation", 10th Edition.
- Number of fueling positions obtained from Layout and Landscape Plan drawing provided by Insite Engineering (dated 12/16/2019).
- Weekday AM and PM Peak Hour trip generation calculated for the 'Peak Hour of Adjacent Street Traffic' using the 'Fitted Curve Equation', when provided; otherwise, the 'Average Rate' was utilized.
- Pass-By Trips calculated per the procedures described in ITE's Trip Generation Handbook, 3rd Edition. ITE does not contain pass-by trip data for the Saturday Peak Hour time period. Therefore, the minimum Pass-By percentage between the Weekday AM and PM Peak Hours was utilized.

TABLE NO. 2										
PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE										
BARGER STREET & EAST MAIN STREET										
APPROACH	PEAK AM HOUR			PEAK PM HOUR			PEAK SAT HOUR			
	EXISTING	NO-BUILD	BUILD	EXISTING	NO-BUILD	BUILD	EXISTING	NO-BUILD	BUILD	
	2019 Existing Conditions	2021 Future Conditions w/ Former Service Station Use	2021 Future Conditions w/ Proposed Project	2019 Existing Conditions	2021 Future Conditions w/ Former Service Station Use	2021 Future Conditions w/ Proposed Project	2019 Existing Conditions	2021 Future Conditions w/ Former Service Station Use	2021 Future Conditions w/ Proposed Project	
	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	
BARGER STREET										
NB	LTR	a 8.3	a 8.4	a 8.4	a 8.3	a 8.4	a 8.4	a 8.4	a 8.5	a 8.5
SB	LTR	a 7.7	a 7.7	a 7.7	a 8.2	a 8.3	a 8.3	a 7.7	a 7.7	a 7.7
EAST MAIN STREET										
EB	LTR	c 17.5	c 19.3	c 19.2	f 53.0	f 85.3	f 90.2	d 26.5	d 34.8	e 38.1
WB	LTR	- 0.0	- 0.0	c 15.1	b 10.9	b 11.1	c 22.4	- 0.0	- 0.0	c 18.0

TABLE NO. 3										
PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE - SENSITIVITY ANALYSIS										
BARGER STREET & EAST MAIN STREET										
APPROACH	PEAK AM HOUR			PEAK PM HOUR			PEAK SAT HOUR			
	BUILD	BUILD W/ HOTEL	BUILD W/ IMPV	BUILD	BUILD W/ HOTEL	BUILD W/ IMPV	BUILD	BUILD W/ HOTEL	BUILD W/ IMPV	
	2021 Future Conditions w/ Proposed Project	2021 Future Conditions w/ Project & Hotel	2021 Future Conditions w/ Project, Hotel & Intersection Improvement	2021 Future Conditions w/ Proposed Project	2021 Future Conditions w/ Project & Hotel	2021 Future Conditions w/ Project, Hotel & Intersection Improvement	2021 Future Conditions w/ Proposed Project	2021 Future Conditions w/ Project & Hotel	2021 Future Conditions w/ Project, Hotel & Intersection Improvement	
	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	
BARGER STREET										
NB	LTR	a 8.4	a 8.4	a 8.4	a 8.4	a 8.4	a 8.4	a 8.5	a 8.5	a 8.5
SB	LTR	a 7.7	a 7.7	a 7.7	a 8.3	a 8.3	a 8.3	a 7.7	a 7.8	a 7.8
EAST MAIN STREET										
EB	LTR	c 19.2	c 22.1	c 21.9	f 90.2	f 147.7	f 135.5	e 38.1	f 65.7	f 62.8
WB	LTR	c 15.1	c 16.0	c 15.9	c 22.4	d 27.0	d 26.1	c 18.0	c 22.2	c 21.8

TABLE NO. 4 PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE BARGER STREET & PROPOSED DRIVEWAY NORTH													
APPROACH	PEAK AM HOUR				PEAK PM HOUR				PEAK SAT HOUR				
	EXISTING	NO-BUILD	BUILD	BUILD W/ HOTEL	EXISTING	NO-BUILD	BUILD	BUILD W/ HOTEL	EXISTING	NO-BUILD	BUILD	BUILD W/ HOTEL	
	2019 Existing Conditions	2021 Future Conditions w/ Former Service Station Use	2021 Future Conditions w/ Proposed Project	2021 Future Conditions w/ Project & Hotel	2019 Existing Conditions	2021 Future Conditions w/ Former Service Station Use	2021 Future Conditions w/ Proposed Project	2021 Future Conditions w/ Project & Hotel	2019 Existing Conditions	2021 Future Conditions w/ Former Service Station Use	2021 Future Conditions w/ Proposed Project	2021 Future Conditions w/ Project & Hotel	
	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	
BARGER STREET													
SB	LT	a 7.7	a 7.8	N/A	N/A	a 8.5	a 8.7	N/A	N/A	a 7.9	a 8.0	N/A	N/A
PROPOSED DRIVEWAY NORTH													
WB	LR	- 0.0	b 11.3	N/A	N/A	- 0.0	b 14.0	N/A	N/A	- 0.0	b 11.8	N/A	N/A

TABLE NO. 5 PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE BARGER STREET & PROPOSED DRIVEWAY SOUTH													
APPROACH	PEAK AM HOUR				PEAK PM HOUR				PEAK SAT HOUR				
	EXISTING	NO-BUILD	BUILD	BUILD W/ HOTEL	EXISTING	NO-BUILD	BUILD	BUILD W/ HOTEL	EXISTING	NO-BUILD	BUILD	BUILD W/ HOTEL	
	2019 Existing Conditions	2021 Future Conditions w/ Former Service Station Use	2021 Future Conditions w/ Proposed Project	2021 Future Conditions w/ Project & Hotel	2019 Existing Conditions	2021 Future Conditions w/ Former Service Station Use	2021 Future Conditions w/ Proposed Project	2021 Future Conditions w/ Project & Hotel	2019 Existing Conditions	2021 Future Conditions w/ Former Service Station Use	2021 Future Conditions w/ Proposed Project	2021 Future Conditions w/ Project & Hotel	
	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	
BARGER STREET													
SB	LT	a 7.7	a 7.8	a 7.8	a 7.8	a 8.5	a 8.6	a 8.8	a 8.8	a 7.9	a 7.9	a 8.1	a 8.1
PROPOSED DRIVEWAY SOUTH													
WB	LR	- 0.0	b 11.7	N/A	N/A	- 0.0	b 13.5	N/A	N/A	- 0.0	b 11.3	N/A	N/A

TABLE NO. 6 PEAK HOUR LEVEL OF SERVICE SUMMARY TABLE EAST MAIN STREET & PROPOSED DRIVEWAY													
APPROACH	PEAK AM HOUR				PEAK PM HOUR				PEAK SAT HOUR				
	EXISTING	NO-BUILD	BUILD	BUILD W/ HOTEL	EXISTING	NO-BUILD	BUILD	BUILD W/ HOTEL	EXISTING	NO-BUILD	BUILD	BUILD W/ HOTEL	
	2019 Existing Conditions	2021 Future Conditions w/ Former Service Station Use	2021 Future Conditions w/ Proposed Project	2021 Future Conditions w/ Project & Hotel	2019 Existing Conditions	2021 Future Conditions w/ Former Service Station Use	2021 Future Conditions w/ Proposed Project	2021 Future Conditions w/ Project & Hotel	2019 Existing Conditions	2021 Future Conditions w/ Former Service Station Use	2021 Future Conditions w/ Proposed Project	2021 Future Conditions w/ Project & Hotel	
	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	LOS DELAY (sec)	
EAST MAIN STREET													
WB	LT	- 0.0	- 0.0	- 0.0	a 7.3	- 0.0	- 0.0	- 0.0	a 7.3	- 0.0	- 0.0	- 0.0	a 7.3
PROPOSED DRIVEWAY													
NB	LR	- 0.0	- 0.0	- 0.0	a 8.9	- 0.0	- 0.0	- 0.0	a 9.0	- 0.0	- 0.0	- 0.0	a 9.3

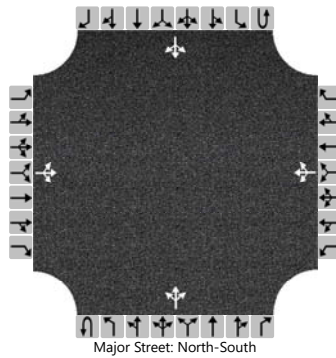
ATTACHMENT C

ANALYSIS REPORTS

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	East Main Street		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	Existing - Peak AM Hour			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		101	0	74		0	0	0		33	197	0		0	222	185
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

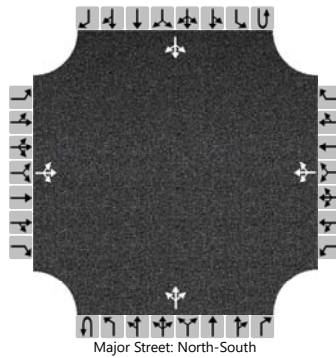
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			190				0			36				0		
Capacity, c (veh/h)			475							1118				1356		
v/c Ratio			0.40							0.03				0.00		
95% Queue Length, Q ₉₅ (veh)			1.9							0.1				0.0		
Control Delay (s/veh)			17.5							8.3				7.7		
Level of Service (LOS)			C							A				A		
Approach Delay (s/veh)	17.5								1.5				0.0			
Approach LOS	C															

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	East Main Street		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	NoBuild-AM-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		105	0	80		0	0	0		37	211	0		0	237	192
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

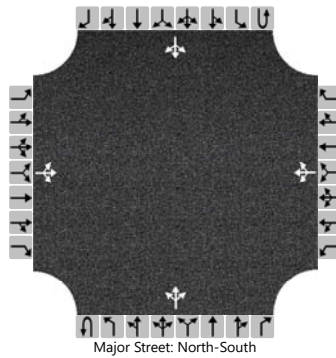
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			201				0			40				0		
Capacity, c (veh/h)			450							1095				1339		
v/c Ratio			0.45							0.04				0.00		
95% Queue Length, Q ₉₅ (veh)			2.3							0.1				0.0		
Control Delay (s/veh)			19.3							8.4				7.7		
Level of Service (LOS)			C							A				A		
Approach Delay (s/veh)	19.3								1.6				0.0			
Approach LOS	C															

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	East Main Street		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-AM-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		105	0	80		15	3	9		34	200	0		0	236	192
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

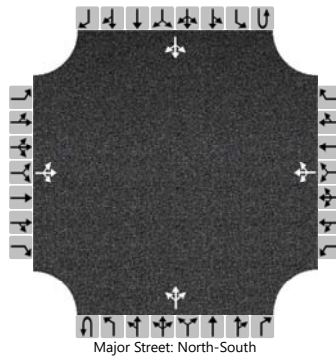
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			201				29				37				0	
Capacity, c (veh/h)			452				386				1096				1352	
v/c Ratio			0.45				0.08				0.03				0.00	
95% Queue Length, Q ₉₅ (veh)			2.2				0.2				0.1				0.0	
Control Delay (s/veh)			19.2				15.1				8.4				7.7	
Level of Service (LOS)			C				C				A				A	
Approach Delay (s/veh)	19.2				15.1				1.5				0.0			
Approach LOS	C				C											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	East Main Street		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-AM-w/ Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		105	8	80		21	8	18		34	200	9		13	236	192
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

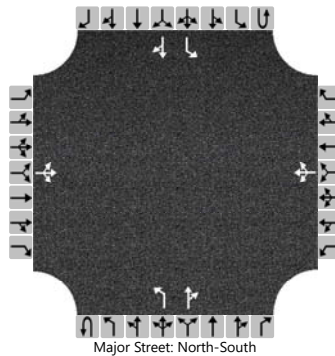
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			210				51							14		
Capacity, c (veh/h)			416				378							1341		
v/c Ratio			0.50				0.14							0.01		
95% Queue Length, Q ₉₅ (veh)			2.8				0.5							0.0		
Control Delay (s/veh)			22.1				16.0							7.7		
Level of Service (LOS)			C				C							A		
Approach Delay (s/veh)	22.1				16.0				1.5				0.3			
Approach LOS	C				C											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	East Main Street		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-AM-w/ Hotel & Impv			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		105	8	80		21	8	18		34	200	9		13	236	192
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

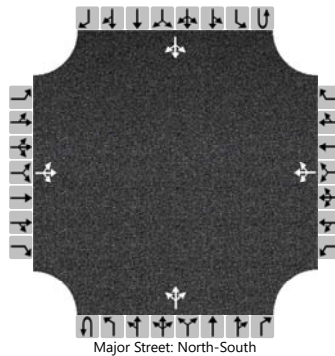
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			210				51							14			
Capacity, c (veh/h)			419				381							1341			
v/c Ratio			0.50				0.13							0.01			
95% Queue Length, Q ₉₅ (veh)			2.7				0.5							0.0			
Control Delay (s/veh)			21.9				15.9							7.7			
Level of Service (LOS)			C				C							A			
Approach Delay (s/veh)		21.9				15.9				1.2				0.2			
Approach LOS		C				C											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	East Main Street		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	Existing - Peak PM Hour			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		166	0	48		0	0	1		88	411	1		0	99	244
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

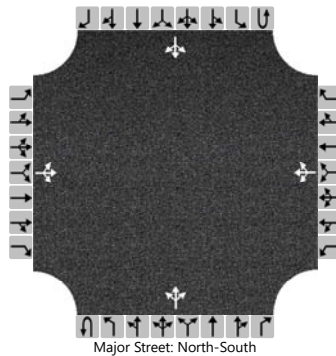
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			233				1			96				0		
Capacity, c (veh/h)			291				611			1186				1112		
v/c Ratio			0.80				0.00			0.08				0.00		
95% Queue Length, Q ₉₅ (veh)			6.4				0.0			0.3				0.0		
Control Delay (s/veh)			53.0				10.9			8.3				8.2		
Level of Service (LOS)			F				B			A				A		
Approach Delay (s/veh)	53.0				10.9				2.2				0.0			
Approach LOS	F				B											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	East Main Street		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	NoBuild-PM-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		173	0	56		0	0	1		98	439	1		0	114	254
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

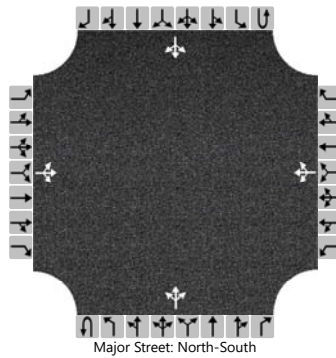
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			249				1			107				0		
Capacity, c (veh/h)			262				588			1159				1084		
v/c Ratio			0.95				0.00			0.09				0.00		
95% Queue Length, Q ₉₅ (veh)			8.9				0.0			0.3				0.0		
Control Delay (s/veh)			85.3				11.1			8.4				8.3		
Level of Service (LOS)			F				B			A				A		
Approach Delay (s/veh)	85.3				11.1				2.4				0.0			
Approach LOS	F				B											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	East Main Street		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-PM-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		173	0	57		29	6	20		92	419	1		0	114	254
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

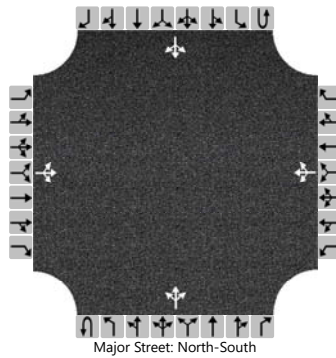
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			250				60			100				0		
Capacity, c (veh/h)			258				266			1159				1104		
v/c Ratio			0.97				0.23			0.09				0.00		
95% Queue Length, Q ₉₅ (veh)			9.2				0.8			0.3				0.0		
Control Delay (s/veh)			90.2				22.4			8.4				8.3		
Level of Service (LOS)			F				C			A				A		
Approach Delay (s/veh)	90.2				22.4				2.3				0.0			
Approach LOS	F				C											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	East Main Street		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-PM-w/ Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		173	8	57		37	13	32		92	419	10		13	114	254
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

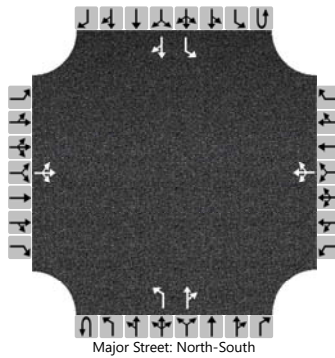
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			259				89			100				14		
Capacity, c (veh/h)			227				251			1159				1095		
v/c Ratio			1.14				0.35			0.09				0.01		
95% Queue Length, Q ₉₅ (veh)			12.0				1.5			0.3				0.0		
Control Delay (s/veh)			147.7				27.0			8.4				8.3		
Level of Service (LOS)			F				D			A				A		
Approach Delay (s/veh)	147.7				27.0				2.3				0.4			
Approach LOS	F				D											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	East Main Street		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-PM-w/ Hotel & Impv			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		173	8	57		37	13	32		92	419	10		13	114	254
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

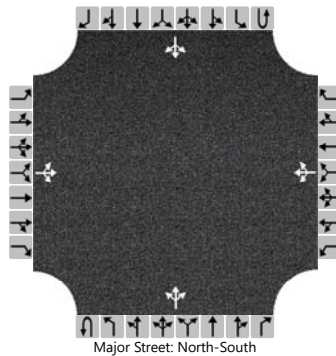
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			259				89				100				14	
Capacity, c (veh/h)			234				258				1159				1095	
v/c Ratio			1.11				0.35				0.09				0.01	
95% Queue Length, Q ₉₅ (veh)			11.5				1.5				0.3				0.0	
Control Delay (s/veh)			135.5				26.1				8.4				8.3	
Level of Service (LOS)			F				D				A				A	
Approach Delay (s/veh)	135.5				26.1				1.5				0.3			
Approach LOS	F				D											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	East Main Street		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	Existing - Peak SAT Hour			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		166	0	69		0	0	0		71	213	0		0	137	245
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

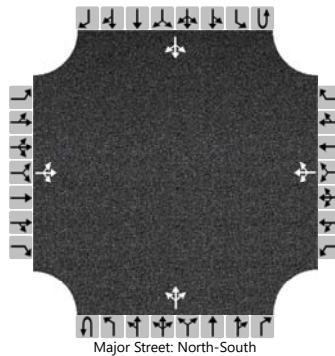
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			255				0			77				0		
Capacity, c (veh/h)			415							1144				1336		
v/c Ratio			0.61							0.07				0.00		
95% Queue Length, Q ₉₅ (veh)			4.0							0.2				0.0		
Control Delay (s/veh)			26.5							8.4				7.7		
Level of Service (LOS)			D							A				A		
Approach Delay (s/veh)	26.5								2.6				0.0			
Approach LOS	D															

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	East Main Street		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	NoBuild-SAT-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		173	0	78		0	0	0		80	232	0		0	153	255
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

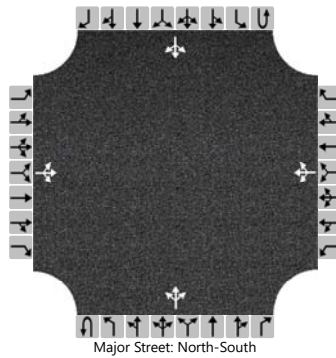
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			273				0			87				0		
Capacity, c (veh/h)			382							1117				1313		
v/c Ratio			0.71							0.08				0.00		
95% Queue Length, Q ₉₅ (veh)			5.4							0.3				0.0		
Control Delay (s/veh)			34.8							8.5				7.7		
Level of Service (LOS)			D							A				A		
Approach Delay (s/veh)	34.8								2.8				0.0			
Approach LOS	D															

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	East Main Street		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-SAT-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		173	0	81		40	9	28		74	209	0		0	158	255
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

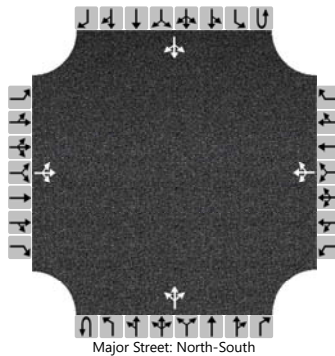
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			276				84							0		
Capacity, c (veh/h)			371				361							1111		1341
v/c Ratio			0.74				0.23							0.07		0.00
95% Queue Length, Q ₉₅ (veh)			5.8				0.9							0.2		0.0
Control Delay (s/veh)			38.1				18.0							8.5		7.7
Level of Service (LOS)			E				C							A		A
Approach Delay (s/veh)	38.1				18.0				2.7				0.0			
Approach LOS	E				C											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	East Main Street		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-SAT-w/ Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		173	12	81		51	18	43		74	209	14		20	158	255
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

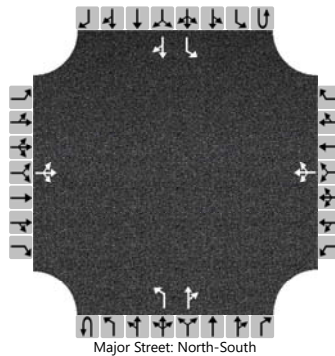
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			289				122			80				22			
Capacity, c (veh/h)			320				330			1111				1324			
v/c Ratio			0.90				0.37			0.07				0.02			
95% Queue Length, Q ₉₅ (veh)			8.7				1.7			0.2				0.1			
Control Delay (s/veh)			65.7				22.2			8.5				7.8			
Level of Service (LOS)			F				C			A				A			
Approach Delay (s/veh)		65.7				22.2				2.6				0.5			
Approach LOS		F				C											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/E Main St		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	East Main Street		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-SAT-w/ Hotel & Impv			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	1	0	0	1	1	0
Configuration			LTR				LTR			L		TR		L		TR
Volume (veh/h)		173	12	81		51	18	43		74	209	14		20	158	255
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

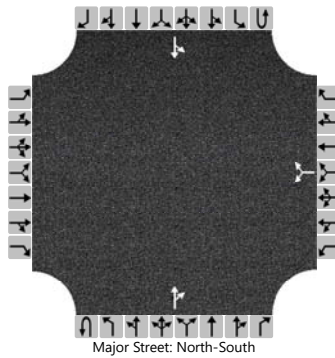
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			289				122				80				22	
Capacity, c (veh/h)			324				334				1111				1324	
v/c Ratio			0.89				0.36				0.07				0.02	
95% Queue Length, Q ₉₅ (veh)			8.5				1.6				0.2				0.1	
Control Delay (s/veh)			62.8				21.8				8.5				7.8	
Level of Service (LOS)			F				C				A				A	
Approach Delay (s/veh)	62.8				21.8				2.1				0.4			
Approach LOS	F				C											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway North		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	Driveway North		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	Existing - Peak AM Hour			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						0		0			230	0		0	296	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.42		6.22							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.52		3.32							2.22		

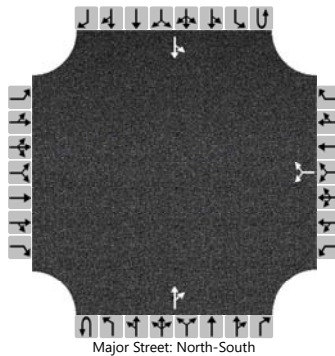
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0									0		
Capacity, c (veh/h)															1316		
v/c Ratio															0.00		
95% Queue Length, Q ₉₅ (veh)															0.0		
Control Delay (s/veh)															7.7		
Level of Service (LOS)															A		
Approach Delay (s/veh)													0.0				
Approach LOS																	

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway North		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	Driveway North		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	NoBuild-AM-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						4		5			239	0		22	295	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.42		6.22							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.52		3.32							2.22		

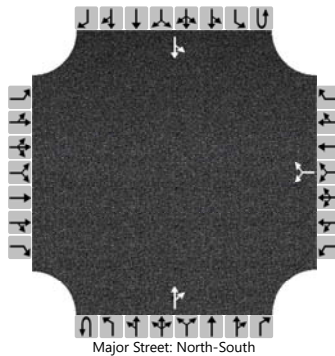
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						10									24		
Capacity, c (veh/h)						578									1305		
v/c Ratio						0.02									0.02		
95% Queue Length, Q ₉₅ (veh)						0.1									0.1		
Control Delay (s/veh)						11.3									7.8		
Level of Service (LOS)						B									A		
Approach Delay (s/veh)					11.3								0.7				
Approach LOS					B												

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway North		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	Driveway North		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	Existing - Peak PM Hour			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						0		0			500	1		0	147	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.42		6.22							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.52		3.32							2.22		

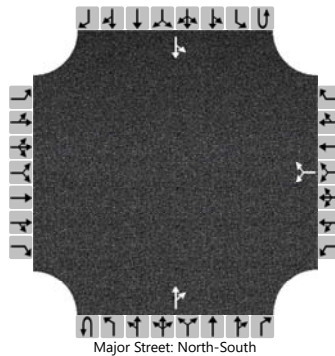
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0									0		
Capacity, c (veh/h)															1024		
v/c Ratio															0.00		
95% Queue Length, Q ₉₅ (veh)															0.0		
Control Delay (s/veh)															8.5		
Level of Service (LOS)															A		
Approach Delay (s/veh)													0.0				
Approach LOS																	

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway North		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	Driveway North		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	NoBuild-PM-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						7		6			520	1		30	140	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.22						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

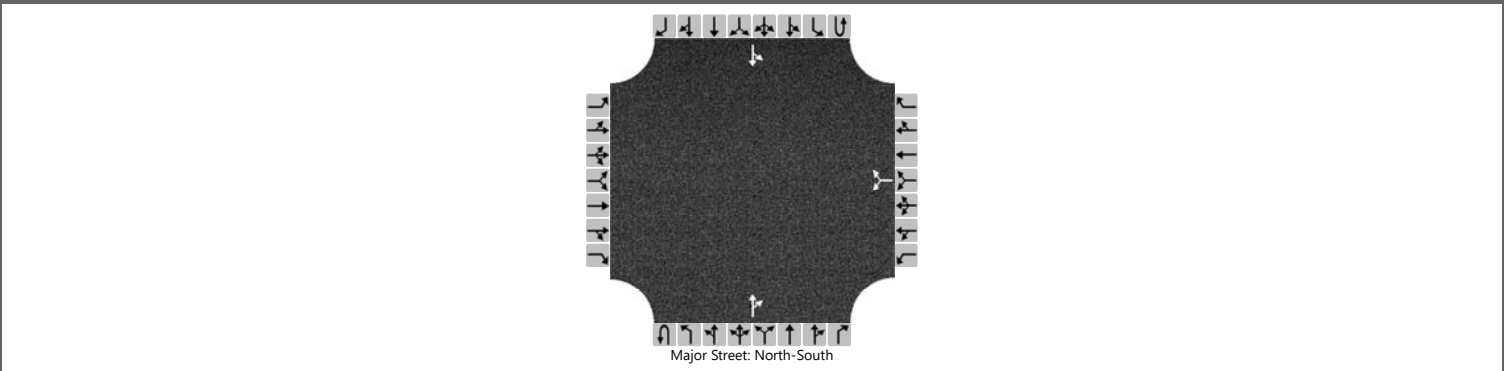
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						14								33		
Capacity, c (veh/h)						413								1006		
v/c Ratio						0.03								0.03		
95% Queue Length, Q ₉₅ (veh)						0.1								0.1		
Control Delay (s/veh)						14.0								8.7		
Level of Service (LOS)						B								A		
Approach Delay (s/veh)						14.0								1.8		
Approach LOS						B										

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway North		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	Driveway North		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	Existing - Peak SAT Hour			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						0		0			284	0		0		206
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2								4.1	
Critical Headway (sec)						6.42		6.22								4.12	
Base Follow-Up Headway (sec)						3.5		3.3								2.2	
Follow-Up Headway (sec)						3.52		3.32								2.22	

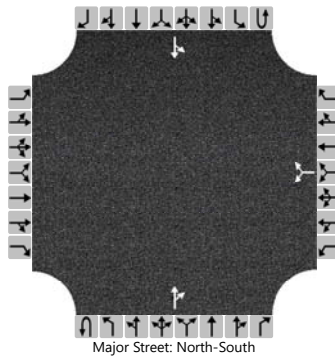
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0										0	
Capacity, c (veh/h)																1252	
v/c Ratio																0.00	
95% Queue Length, Q ₉₅ (veh)																0.0	
Control Delay (s/veh)																7.9	
Level of Service (LOS)																A	
Approach Delay (s/veh)													0.0				
Approach LOS																	

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway North		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	Driveway North		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	NoBuild-SAT-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						6		5			295	0		27	203	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1	
Critical Headway (sec)						6.42		6.22							4.12	
Base Follow-Up Headway (sec)						3.5		3.3							2.2	
Follow-Up Headway (sec)						3.52		3.32							2.22	

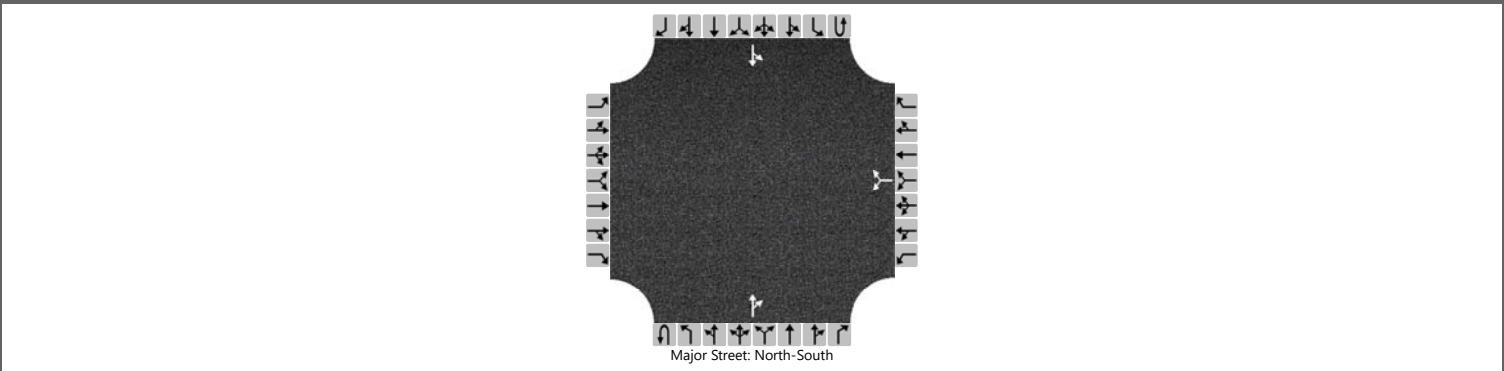
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						12									29	
Capacity, c (veh/h)						544									1239	
v/c Ratio						0.02									0.02	
95% Queue Length, Q ₉₅ (veh)						0.1									0.1	
Control Delay (s/veh)						11.8									8.0	
Level of Service (LOS)						B									A	
Approach Delay (s/veh)						11.8								1.1		
Approach LOS						B										

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway South		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	Driveway South		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	Existing - Peak AM Hour			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						0		0			230	0		0	296	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.42		6.22							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.52		3.32							2.22		

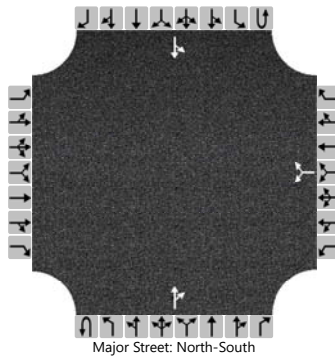
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0									0		
Capacity, c (veh/h)															1316		
v/c Ratio															0.00		
95% Queue Length, Q ₉₅ (veh)															0.0		
Control Delay (s/veh)															7.7		
Level of Service (LOS)															A		
Approach Delay (s/veh)													0.0				
Approach LOS																	

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway South		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	Driveway South		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	NoBuild-AM-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						13		9			234	9		0	308	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.42		6.22						4.12		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.52		3.32						2.22		

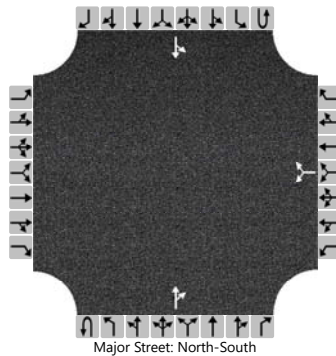
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						24								0		
Capacity, c (veh/h)						559								1300		
v/c Ratio						0.04								0.00		
95% Queue Length, Q ₉₅ (veh)						0.1								0.0		
Control Delay (s/veh)						11.7								7.8		
Level of Service (LOS)						B								A		
Approach Delay (s/veh)					11.7								0.0			
Approach LOS					B											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway South		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	Driveway South		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-AM-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						0		0			234	8		20	311	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.42		6.22							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.52		3.32							2.22		

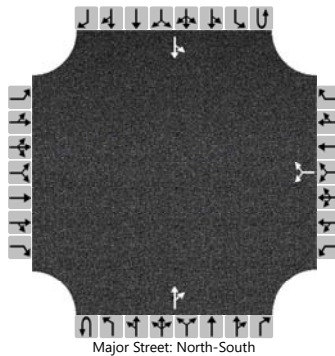
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0									22		
Capacity, c (veh/h)															1301		
v/c Ratio															0.02		
95% Queue Length, Q ₉₅ (veh)															0.1		
Control Delay (s/veh)															7.8		
Level of Service (LOS)															A		
Approach Delay (s/veh)													0.6				
Approach LOS																	

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway South		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	Driveway South		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-AM-w/ Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						0		0			243	8		20	317	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.42		6.22							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.52		3.32							2.22		

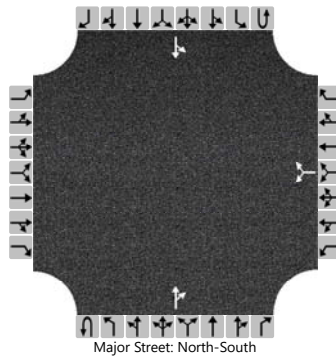
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0									22		
Capacity, c (veh/h)															1290		
v/c Ratio															0.02		
95% Queue Length, Q ₉₅ (veh)															0.1		
Control Delay (s/veh)															7.8		
Level of Service (LOS)															A		
Approach Delay (s/veh)													0.6				
Approach LOS																	

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway South		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	Driveway South		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	Existing - Peak PM Hour			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						0		0			500	0		0	147	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.42		6.22							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.52		3.32							2.22		

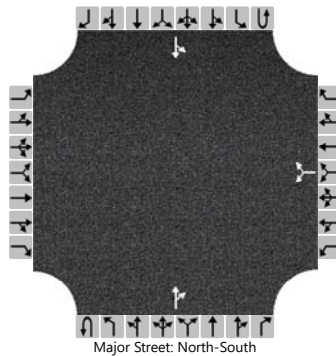
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0									0		
Capacity, c (veh/h)															1025		
v/c Ratio															0.00		
95% Queue Length, Q ₉₅ (veh)															0.0		
Control Delay (s/veh)															8.5		
Level of Service (LOS)															A		
Approach Delay (s/veh)													0.0				
Approach LOS																	

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway South		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	Driveway South		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	NoBuild-PM-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes	0	0	0		0	1	0		0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						13		18			515	13		0	153	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.42		6.22							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.52		3.32							2.22		

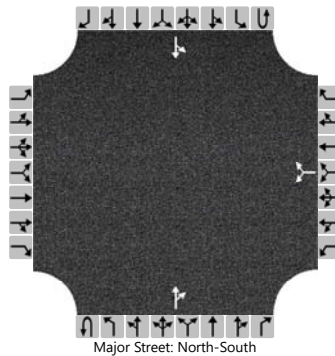
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						34									0		
Capacity, c (veh/h)						456									999		
v/c Ratio						0.07									0.00		
95% Queue Length, Q ₉₅ (veh)						0.2									0.0		
Control Delay (s/veh)						13.5									8.6		
Level of Service (LOS)						B									A		
Approach Delay (s/veh)					13.5								0.0				
Approach LOS					B												

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway South		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	Driveway South		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-PM-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						0		0			511	17		40	160	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1	
Critical Headway (sec)						6.42		6.22							4.12	
Base Follow-Up Headway (sec)						3.5		3.3							2.2	
Follow-Up Headway (sec)						3.52		3.32							2.22	

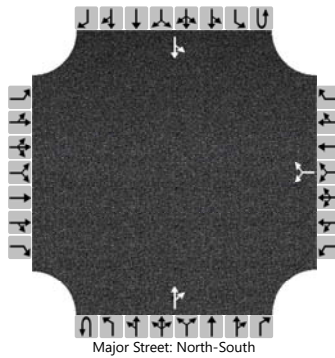
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0									43	
Capacity, c (veh/h)															999	
v/c Ratio															0.04	
95% Queue Length, Q ₉₅ (veh)															0.1	
Control Delay (s/veh)															8.8	
Level of Service (LOS)															A	
Approach Delay (s/veh)													2.1			
Approach LOS																

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway South		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	Driveway South		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-PM-w/ Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						0		0			520	17		40	168	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.42		6.22							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.52		3.32							2.22		

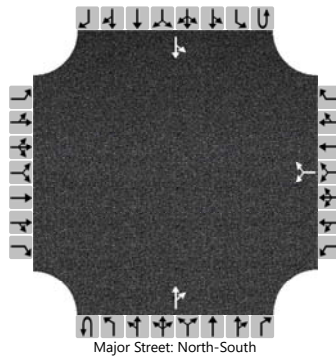
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0									43		
Capacity, c (veh/h)															991		
v/c Ratio															0.04		
95% Queue Length, Q ₉₅ (veh)															0.1		
Control Delay (s/veh)															8.8		
Level of Service (LOS)															A		
Approach Delay (s/veh)													2.0				
Approach LOS																	

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway South		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	Driveway South		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	Existing - Peak SAT Hour			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						0		0			284	0		0	206	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.42		6.22							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.52		3.32							2.22		

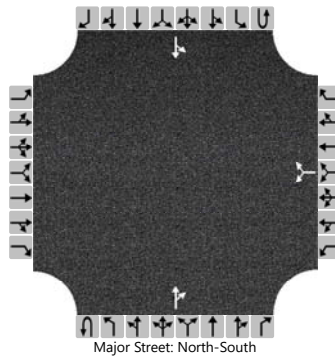
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0									0		
Capacity, c (veh/h)															1252		
v/c Ratio															0.00		
95% Queue Length, Q ₉₅ (veh)															0.0		
Control Delay (s/veh)															7.9		
Level of Service (LOS)															A		
Approach Delay (s/veh)													0.0				
Approach LOS																	

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway South		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	5/21/2020			East/West Street	Driveway South		
Analysis Year	2019			North/South Street	Barger Street		
Time Analyzed	NoBuild-SAT-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						11		15			290	12		0	214	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.42		6.22							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.52		3.32							2.22		

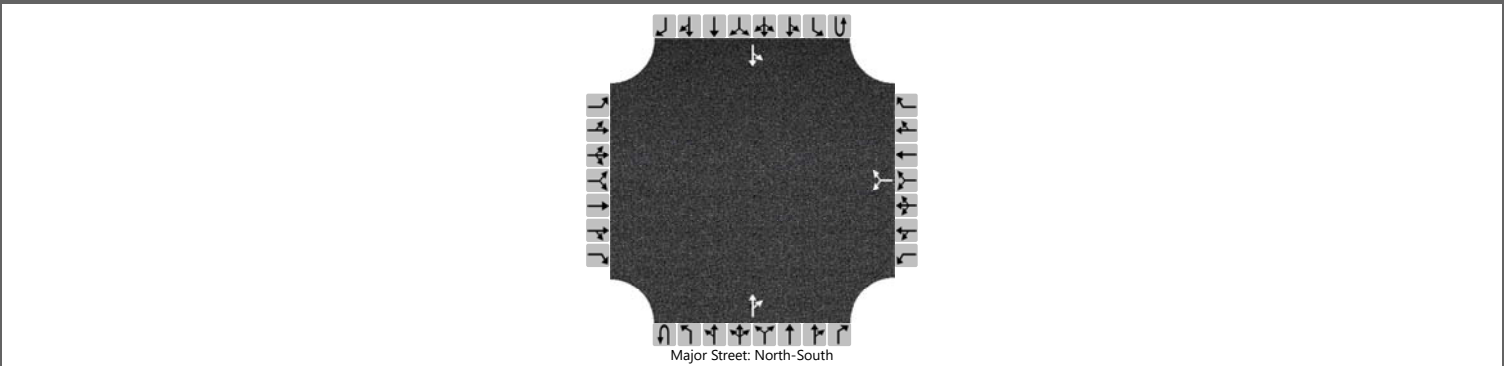
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						28									0		
Capacity, c (veh/h)						602									1231		
v/c Ratio						0.05									0.00		
95% Queue Length, Q ₉₅ (veh)						0.1									0.0		
Control Delay (s/veh)						11.3									7.9		
Level of Service (LOS)						B									A		
Approach Delay (s/veh)					11.3								0.0				
Approach LOS					B												

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway South		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	Driveway South		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-SAT-w/o Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						0		0			282	23		54	224	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.42		6.22							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.52		3.32							2.22		

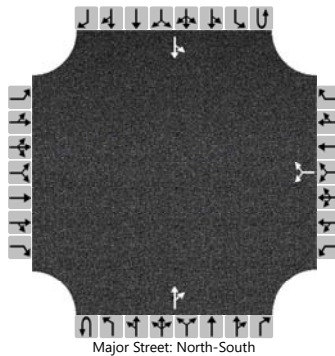
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0									59		
Capacity, c (veh/h)															1228		
v/c Ratio															0.05		
95% Queue Length, Q ₉₅ (veh)															0.2		
Control Delay (s/veh)															8.1		
Level of Service (LOS)															A		
Approach Delay (s/veh)													1.9				
Approach LOS																	

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	Barger St/Driveway South		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	Driveway South		
Analysis Year	2021			North/South Street	Barger Street		
Time Analyzed	Build-SAT-w/ Hotel			Peak Hour Factor	0.92		
Intersection Orientation	North-South			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						0		0			296	23		54	235	
Percent Heavy Vehicles (%)						2		2						2		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2							4.1		
Critical Headway (sec)						6.42		6.22							4.12		
Base Follow-Up Headway (sec)						3.5		3.3							2.2		
Follow-Up Headway (sec)						3.52		3.32							2.22		

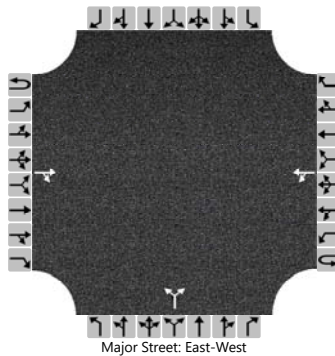
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0									59		
Capacity, c (veh/h)															1212		
v/c Ratio															0.05		
95% Queue Length, Q ₉₅ (veh)															0.2		
Control Delay (s/veh)															8.1		
Level of Service (LOS)															A		
Approach Delay (s/veh)													1.9				
Approach LOS																	

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	E Main St/Driveway		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	Driveway		
Analysis Year	2021			North/South Street	East Main Street		
Time Analyzed	Build-AM-w/ Hotel			Peak Hour Factor	0.92		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			29	0		0	21			27		0				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.10					6.40		6.20			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.20					3.50		3.30			

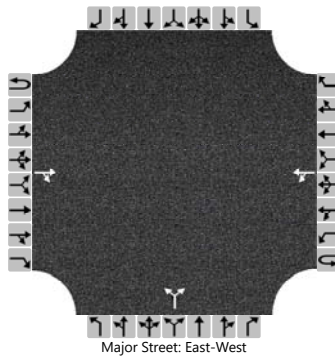
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0						29				
Capacity, c (veh/h)						1594						959				
v/c Ratio						0.00						0.03				
95% Queue Length, Q ₉₅ (veh)						0.0						0.1				
Control Delay (s/veh)						7.3						8.9				
Level of Service (LOS)						A						A				
Approach Delay (s/veh)					0.0				8.9							
Approach LOS									A							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	E Main St/Driveway		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	Driveway		
Analysis Year	2021			North/South Street	East Main Street		
Time Analyzed	Build-PM-w/ Hotel			Peak Hour Factor	0.92		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			29	0		0	28			54		0				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.10					6.40		6.20			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.20					3.50		3.30			

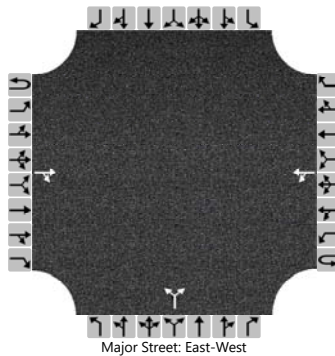
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0						59				
Capacity, c (veh/h)						1594						949				
v/c Ratio						0.00						0.06				
95% Queue Length, Q ₉₅ (veh)						0.0						0.2				
Control Delay (s/veh)						7.3						9.0				
Level of Service (LOS)						A						A				
Approach Delay (s/veh)					0.0				9.0							
Approach LOS									A							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	ST			Intersection	E Main St/Driveway		
Agency/Co.	PDE			Jurisdiction	Yorktown, NY		
Date Performed	8/19/2020			East/West Street	Driveway		
Analysis Year	2021			North/South Street	East Main Street		
Time Analyzed	Build-SAT-w/ Hotel			Peak Hour Factor	0.92		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	3700 Barger Street						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			45	0		0	35			77		0				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.10					6.40		6.20			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.20					3.50		3.30			

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						0					84					
Capacity, c (veh/h)						1571					919					
v/c Ratio						0.00					0.09					
95% Queue Length, Q ₉₅ (veh)						0.0					0.3					
Control Delay (s/veh)						7.3					9.3					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)					0.0				9.3							
Approach LOS									A							

ATTACHMENT D

PROPOSED HOTEL INFORMATION

TABLE 1
HOURLY TRIP GENERATION RATES (HTGR) AND ANTICIPATED
SITE GENERATED TRAFFIC VOLUMES

PROPOSED HOTEL YORKTOWN, NEW YORK	ENTRY		EXIT	
	HTGR*	VOLUME	HTGR*	VOLUME
HOTEL (110 ROOMS)				
PEAK AM HOUR (7:30AM - 8:30AM)	0.27	29	0.19	21
PEAK PM HOUR (4:30PM - 5:30PM)	0.26	29	0.25	28
PEAK PM HOUR OF GENERATOR (6:00PM - 7:00PM)	0.36	40	0.27	29

NOTES:

1) * HTGR-HOURLY TRIP GENERATION RATES EXPRESSED IN TERMS OF TRIPS PER ROOM FOR LAND USES - 310 HOTEL ; BASED ON THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) PUBLICATION ENTITLED "TRIP GENERATION", 10TH EDITION, 2017.



- Office Locations:
- NEW JERSEY ■ MARYLAND
 - NEW YORK ■ GEORGIA
 - PENNSYLVANIA ■ TEXAS
 - FLORIDA ■ TENNESSEE
 - NORTH CAROLINA ■ COLORADO
 - NEW MEXICO ■ VIRGINIA

State of N.Y. C.O.A.: 0008671/0008821

Copyright © 2002 Maser Consulting P.A. All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, re-used, disclosed, distributed or relied upon for any other purpose without the express written consent of Maser Consulting P.A.

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION
OF EXCAVATORS, DESIGNERS, OR
ANY PERSON PREPARING TO
DISTURB THE EARTH'S SURFACE
ANYWHERE IN ANY STATE

Know what's below.
Call before you dig.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS
VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

PRELIMINARY

E. MAIN STREET & BARGER STREET CONCEPT PLAN FOR SHRUB OAK MULTI-FAMILY

U.S. ROUTE 6
TOWN OF YORKTOWN
WESTCHESTER COUNTY
NEW YORK

WESTCHESTER OFFICE
400 Columbus Avenue
Suite 180E
Valhalla, NY 10595
Phone: 914.347.7500
Fax: 914.347.7266

SCALE AS SHOWN	DATE 12/17/19	DRAWN BY J.F.M.	CHECKED BY P.J.G.
PROJECT NUMBER: 18000983A	DRAWING NAME: R-CNPT 4		

SHEET TITLE:
CONCEPT PLAN

SHEET NUMBER:
1 of 3

