



Bright View Engineering
Moving you forward

2899-25

February 4, 2025

VIA EMAIL

Zayibeth Carballo, PE, PLS, PP, CME, CFM, CFS
Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, New Jersey 07052

Re: Safety Study
Cullen Drive & Carlson Road
West Orange Township, Essex County, New Jersey
BVE Project No.: 241193

Dear Ms. Carballo:

Bright View Engineering was tasked by the Township of West Orange (*the Township here-in*) with performing an evaluation of the existing traffic controls at the intersection of Cullen Drive & Carlson Road. This analysis was performed to assess the safety conditions at the intersection and the installation of a stop control on Cullen Drive.

Bright View Engineering (*BVE here-in*), in coordination with the Township, collected data during various site visits, reviewed crash information provided by the Township and reviewed data provided by NJDOT's Safety Voyager to assess the existing conditions at the study location. The collected data and observations were utilized to determine if the existing traffic conditions in the project area justify the implementation of the new traffic pattern. Our methodology conforms with the provisions set forth in NJSA Title 39:4-8, Institute of Transportation Engineers (*ITE*) literature, and the applicable requirements of the Manual on Uniform Traffic Control Devices (*MUTCD*). The following points were considered within the scope of our study:

- An inventory of the roadway facilities in the project vicinity, including the existing physical and traffic operating characteristics;
- Crash data along roadway segments interconnecting the study intersections;
- Recommendations;
- Summary and Conclusions.

70 South Orange Avenue, Suite 109
Livingston, New Jersey 07039

C: (732) 236-7557 T: (973) 228-0999 F: (201) 753-3904
BrightViewEngineering.com

P.O. Box 99
Roseland, NJ 07068



EXISTING CONDITIONS

Multiple field investigations were conducted to obtain an inventory of existing roadway conditions, posted traffic controls, adjacent land uses, lane configurations of the roadways in the study area, and existing vehicular and pedestrian traffic patterns. The following is a brief description of the roadways:

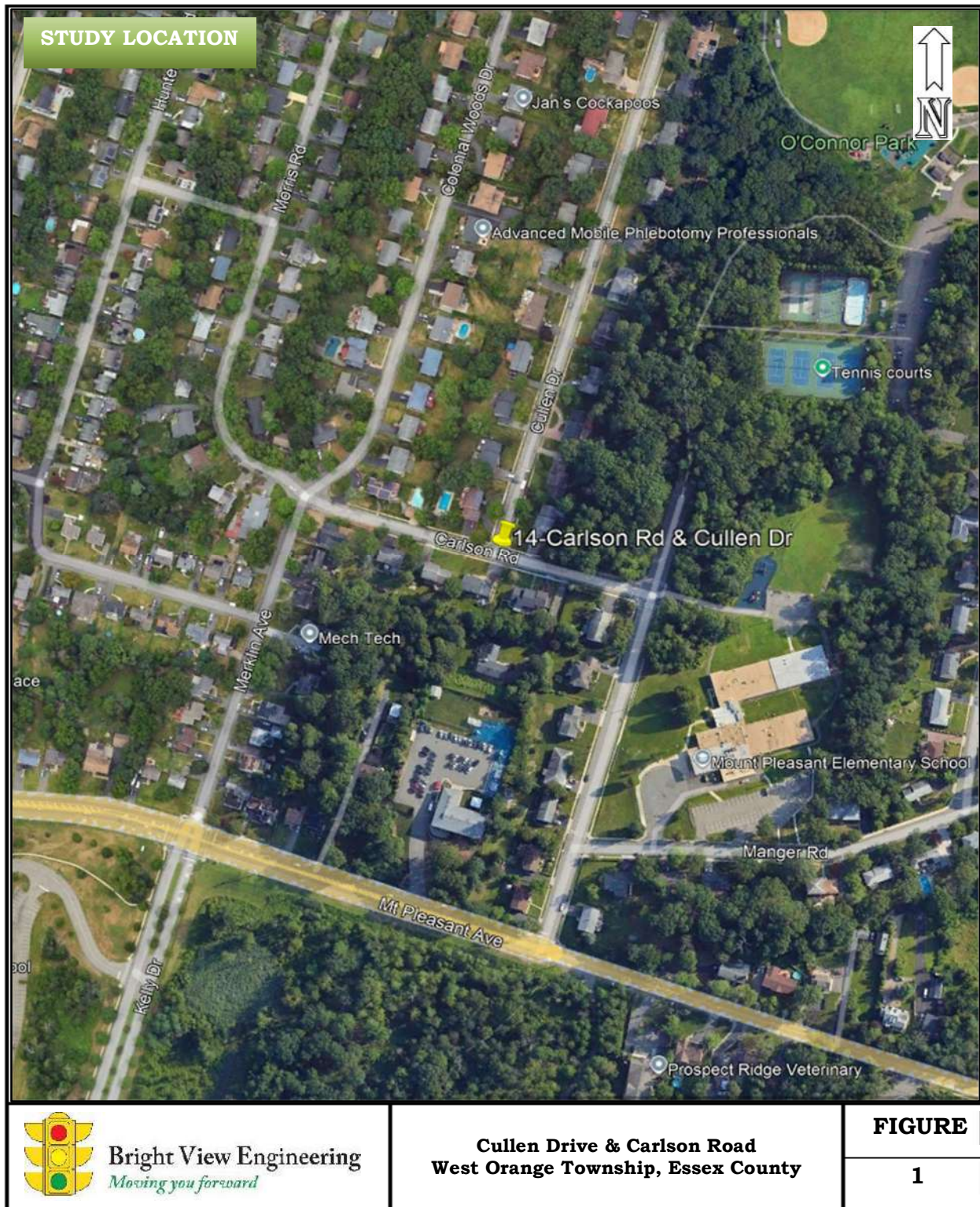
The intersection of Cullen Drive & Carlson Road is a 3-legged unsignalized intersection. There is no traffic control at the intersection. We note that the intersection is approximately 600 feet from Mount Pleasant Elementary School.

Carlson Road is an east to west local street under the jurisdiction of the Township of West Orange which spans 0.14 miles between Ellison Avenue and Colonial Woods Drive. There are no NJDOT Straight-Line Diagrams available for this roadway. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Carlson Road provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Carlson Road is generally residential in nature.

Cullen Drive is a north to south local street under the jurisdiction of the Township of West Orange which spans 0.22 miles between Carlson Road and a dead end. There are no NJDOT Straight-Line Diagrams available for this roadway. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Cullen Drive provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Cullen Drive is generally residential in nature.



FIGURE 1





DATA COLLECTION

CRASH HISTORY DATA

BVE obtained crash data from the Township and through NJDOT's Safety Voyager. There were no crashes reported at the study intersection within a five-year period.

FIELD OBSERVATIONS

BVE conducted field data collection and performed vehicle runs along the study area. We observed that presently, there are no traffic controls at the study intersection. The study area is a residential neighborhood with primarily single-family housing.

We observed that the sight lines at the intersection of Cullen Drive & Carlson Road are obstructed due to overgrown foliage.

FIGURE 2 – Cullen Drive & Carlson Road





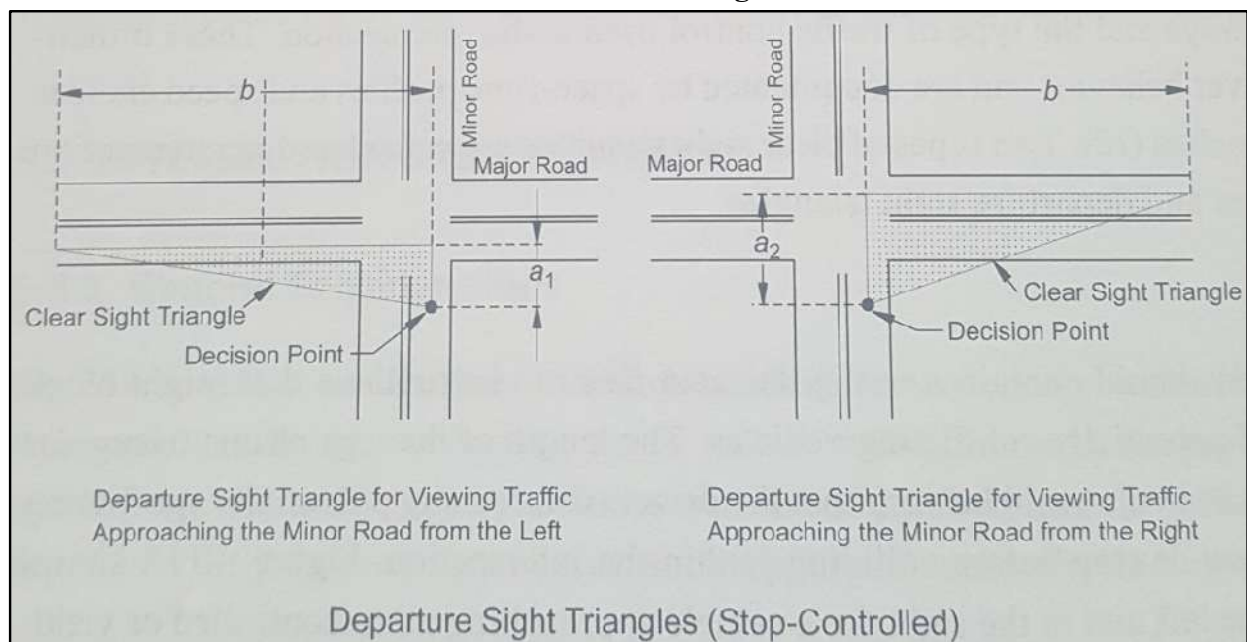
RECOMMENDATIONS

It is our recommendation that a STOP sign be installed on the Cullen Drive approach at the study intersection. Treatments which can be considered include but are not limited to:

Sight Distance Improvements – At the intersection of Cullen Drive & Carlson Road, the line of sight of approaching vehicles was found to be obstructed. We observed that if vehicles stop closer to the mainline on Carlson Road, then they would have clear visibility of the traffic conditions at the intersection and would be able to safely make a turn onto Carlson Road.

It is our opinion that if the tree and other foliage at the corners of the intersection are cleared, then the sight distance can be improved. We recommend that the Township cooperate with its residents to trim overgrown foliage and clear obstruction from sight triangles, as reasonable.

FIGURE 3 – Intersection Sight Distance





STOP Sign Installation – A STOP control on the minor-road approach should be considered as per Section 2B.11-Minor Road Stop Control of the MUTCD (11th Edition). The STOP sign would provide the appropriate traffic control at the study intersection to improve safety and circulation of traffic. We recommend that the Township install a STOP sign on Cullen Drive at the study intersection. The installation of the STOP sign should be implemented per the guidance presented within Chapter 2B-Regulatory Signs, Barricades, and Gates of the MUTCD (11th Edition).

FIGURE 4 – STOP Sign Installation



Striping and Signages –We recommend that the Township provide a stop bar and double yellow line striping on Cullen Drive to support the stop sign.

Sidewalk and Crosswalk Markings – We recommend that the Township maintain their sidewalks, and update their marked crosswalks within the study area to improve pedestrian safety and circulation. The implementation of the roadway striping, and signs should follow the guidance presented within the latest edition of the MUTCD.



SUMMARY & CONCLUSIONS

It is our recommendation, based upon our field observations, the guidance from MUTCD and Title 39, and the existing conditions, that the Township of West Orange should consider the installation of a STOP sign and additional striping at the intersection of Cullen Drive & Carlson Road.

Should you have any questions or require additional information please do not hesitate to contact me at (732) 236-7557.

Very truly yours,
Bright View Engineering


John Jahr, P.T.P., T.S.O.S.
Principal


Joseph A. Fishinger, Jr., PE, PP, PTOE
Director of Traffic Engineering

JJJ/am

<https://bvengr.sharepoint.com/sites/bvengr/proj/241193-WOT-StopControl/7-Reports-Analysis/Stop-Control/14-Cullen-Dr-Carlson-Rd.docxs>



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Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, New Jersey 07052

Re: Safety Study
Devonshire Terrace & Nottingham Road
West Orange Township, Essex County, New Jersey
BVE Project No.: 241193

Dear Ms. Carballo:

Bright View Engineering was tasked by the Township of West Orange (*the Township here-in*) with performing an evaluation of the existing traffic controls at the intersection of Devonshire Terrace & Nottingham Road. This analysis was performed to assess the safety conditions at the intersection and the installation of a stop control on Nottingham Road.

Bright View Engineering (*BVE here-in*), in coordination with the Township, collected data during various site visits, reviewed crash information provided by the Township and reviewed data provided by NJDOT's Safety Voyager to assess the existing conditions at the study location. The collected data and observations were utilized to determine if the existing traffic conditions in the project area justify the implementation of the new traffic pattern. Our methodology conforms with the provisions set forth in NJSA Title 39:4-8, Institute of Transportation Engineers (*ITE*) literature, and the applicable requirements of the Manual on Uniform Traffic Control Devices (*MUTCD*). The following points were considered within the scope of our study:

- An inventory of the roadway facilities in the project vicinity, including the existing physical and traffic operating characteristics;
- Crash data along roadway segments interconnecting the study intersections;
- Recommendations;
- Summary and Conclusions.

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EXISTING CONDITIONS

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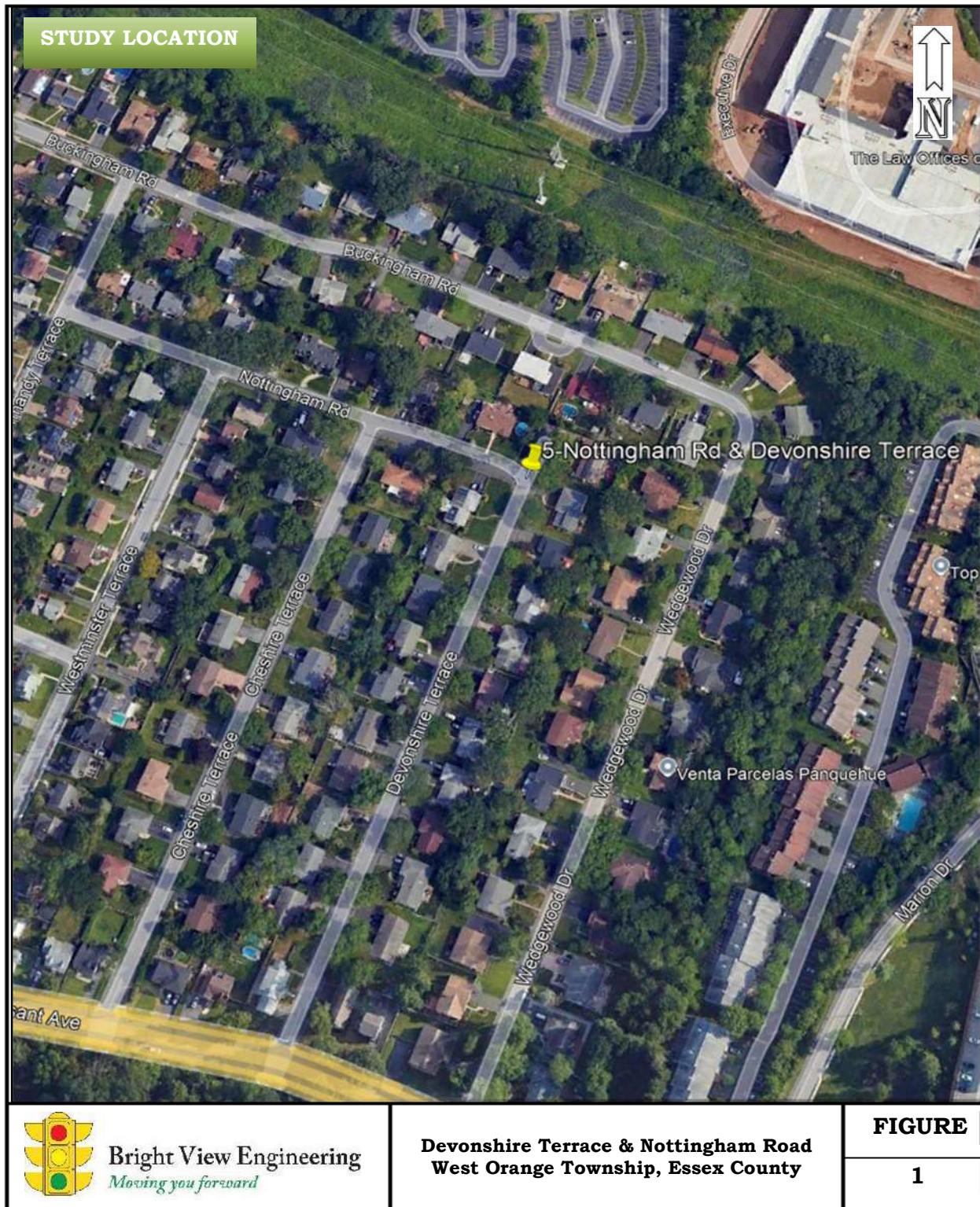
The intersection of Devonshire Terrace & Nottingham Road is a 3-legged unsignalized intersection. There is no traffic control at the intersection.

Devonshire Terrace is a north to south local street under the jurisdiction of the Township of West Orange which spans 0.18 miles between Nottingham Road and Mount Pleasant Avenue. There are no NJDOT Straight-Line Diagrams available for this roadway. Devonshire Terrace is STOP-controlled at its intersection with Mount Pleasant Avenue. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Devonshire Terrace provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Devonshire Terrace is generally residential in nature.

Nottingham Road is an east to west local street under the jurisdiction of the Township of West Orange which spans 0.14 miles between Normandy Terrace and Devonshire Terrace. There are no NJDOT Straight-Line Diagrams available for this roadway. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Nottingham Road provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Nottingham Road is generally residential in nature.



FIGURE 1





DATA COLLECTION

CRASH HISTORY DATA

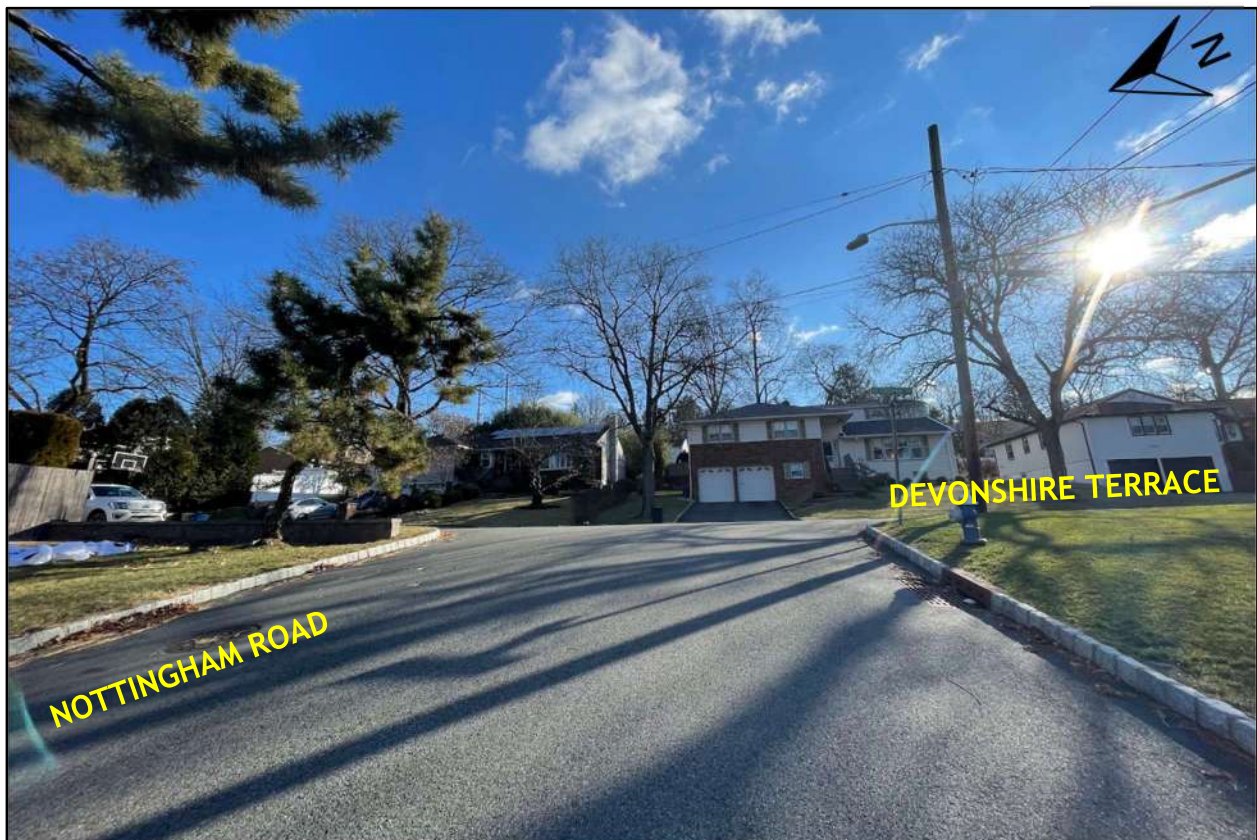
BVE obtained crash data from the Township and through NJDOT's Safety Voyager. There were no crashes reported at the study intersection within a five-year period.

FIELD OBSERVATIONS

BVE conducted field data collection and performed vehicle runs along the study area. We observed that presently, there are no traffic controls at the study intersection. The study area is a residential neighborhood with primarily single-family housing.

We observed that the horizontal and vertical sight lines at the intersection of Devonshire Terrace & Nottingham Road are obstructed due to overgrown foliage and roadway's grade. Nottingham Road has an uphill grade as approaching the intersection.

FIGURE 2 – Devonshire Terrace & Nottingham Road





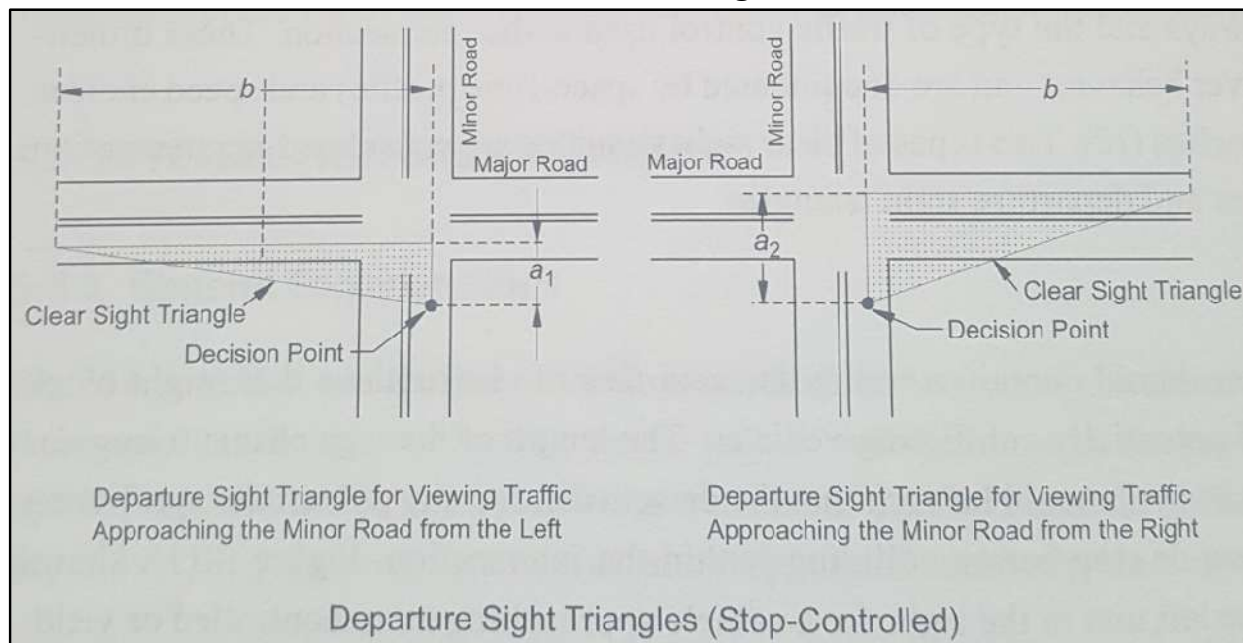
RECOMMENDATIONS

It is our recommendation that a STOP sign be installed on the Nottingham Road approach at the study intersection. Treatments which can be considered include but are not limited to:

Sight Distance Improvements – At the intersection of Devonshire Terrace & Nottingham Road, the line of sight of approaching vehicles was found to be obstructed due to foliage and the intersection's geometry. We observed that if vehicles stop closer to the mainline on Devonshire Terrace, then they would have clear visibility of the traffic conditions at the intersection and would be able to safely make a turn onto Devonshire Terrace.

It is our opinion that if the tree and other foliage at the corners of the intersection are cleared, then the sight distance can be improved. We recommend that the Township cooperate with its residents to trim overgrown foliage and clear obstruction from sight triangles, as reasonable.

FIGURE 3 – Intersection Sight Distance





STOP Sign Installation – A STOP control on the minor-road approach should be considered as per Section 2B.11-Minor Road Stop Control of the MUTCD (11th Edition). The STOP sign would provide the appropriate traffic control at the study intersection to improve safety and circulation of traffic. We recommend that the Township install a STOP sign on Nottingham Road at the study intersection. The installation of the STOP sign should be implemented per the guidance presented within Chapter 2B-Regulatory Signs, Barricades, and Gates of the MUTCD (11th Edition).

FIGURE 4 – STOP Sign Installation



Striping and Signages – Given the wide curb radius at the study intersection and roadway geometry, we recommend the implementation of additional striping to support the installation of the stop sign. We recommend that the Township provide a stop bar and double yellow line striping on Nottingham Road to support the stop sign.

Sidewalk and Crosswalk Markings – We recommend that the Township consider installing sidewalks and marked crosswalks within the study area to improve pedestrian safety and circulation. The implementation of the roadway striping, and signs should follow the guidance presented within the latest edition of the MUTCD.

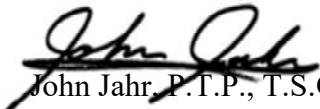


SUMMARY & CONCLUSIONS

It is our recommendation, based upon our field observations, the guidance from MUTCD and Title 39, and the existing conditions, that the Township of West Orange should consider the installation of a STOP sign and additional striping at the intersection of Devonshire Terrace & Nottingham Road.

Should you have any questions or require additional information please do not hesitate to contact me at (732) 236-7557.

Very truly yours,
Bright View Engineering


John Jahr, P.T.P., T.S.O.S.
Principal


Joseph A. Fishinger, Jr., PE, PP, PTOE
Director of Traffic Engineering

JJJ/am

<https://bvengr.sharepoint.com/sites/bvengr/proj/241193-WOT-StopControl/7-Reports-Analysis/Stop-Control/5-Devonshire-Terr-Nottingham-Rd.docxs>



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Zayibeth Carballo, PE, PLS, PP, CME, CFM, CFS
Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, New Jersey 07052

Re: Safety Study
Cheshire Terrace & Nottingham Road
West Orange Township, Essex County, New Jersey
BVE Project No.: 241193

Dear Ms. Carballo:

Bright View Engineering was tasked by the Township of West Orange (*the Township here-in*) with performing an evaluation of the existing traffic controls at the intersection of Cheshire Terrace & Nottingham Road. This analysis was performed to assess the safety conditions at the intersection and the installation of a stop control on Cheshire Terrace.

Bright View Engineering (*BVE here-in*), in coordination with the Township, collected data during various site visits, reviewed crash information provided by the Township and reviewed data provided by NJDOT's Safety Voyager to assess the existing conditions at the study location. The collected data and observations were utilized to determine if the existing traffic conditions in the project area justify the implementation of the new traffic pattern. Our methodology conforms with the provisions set forth in NJSA Title 39:4-8, Institute of Transportation Engineers (*ITE*) literature, and the applicable requirements of the Manual on Uniform Traffic Control Devices (*MUTCD*). The following points were considered within the scope of our study:

- An inventory of the roadway facilities in the project vicinity, including the existing physical and traffic operating characteristics;
- Crash data along roadway segments interconnecting the study intersections;
- Recommendations;
- Summary and Conclusions.

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EXISTING CONDITIONS

Multiple field investigations were conducted to obtain an inventory of existing roadway conditions, posted traffic controls, adjacent land uses, lane configurations of the roadways in the study area, and existing vehicular and pedestrian traffic patterns. The following is a brief description of the roadways:

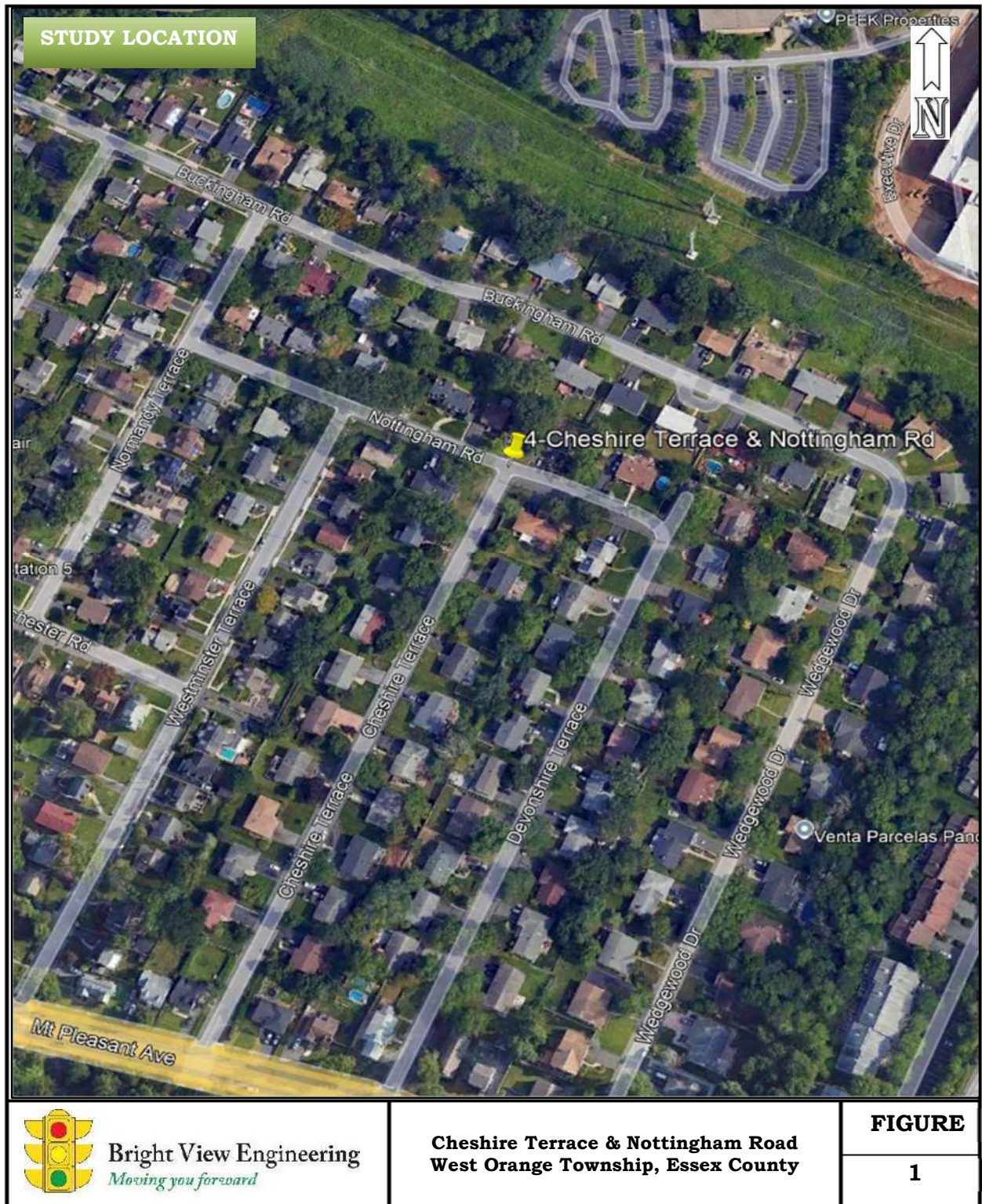
The intersection of Cheshire Terrace & Nottingham Road is a 3-legged unsignalized intersection. There is no traffic control at the intersection.

Cheshire Terrace is a north to south local street under the jurisdiction of the Township of West Orange which spans 0.18 miles between Nottingham Road and Mount Pleasant Avenue. There are no NJDOT Straight-Line Diagrams available for this roadway. Cheshire Terrace is STOP-controlled at its intersection with Mount Pleasant Avenue. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Cheshire Terrace provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Cheshire Terrace is generally residential in nature.

Nottingham Road is an east to west local street under the jurisdiction of the Township of West Orange which spans 0.14 miles between Normandy Terrace and Devonshire Terrace. There are no NJDOT Straight-Line Diagrams available for this roadway. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Nottingham Road provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Nottingham Road is generally residential in nature.



FIGURE 1





DATA COLLECTION

CRASH HISTORY DATA

BVE obtained crash data from the Township and through NJDOT's Safety Voyager. There were no crashes reported at the study intersection within a five-year period.

FIELD OBSERVATIONS

BVE conducted field data collection and performed vehicle runs along the study area. We observed that presently, there are no traffic controls at the study intersection. The study area is a residential neighborhood with primarily single-family housing.

We observed that the sight lines at the intersection of Cheshire Terrace & Nottingham Road are obstructed due to overgrown foliage.

FIGURE 2 – Cheshire Terrace & Nottingham Road





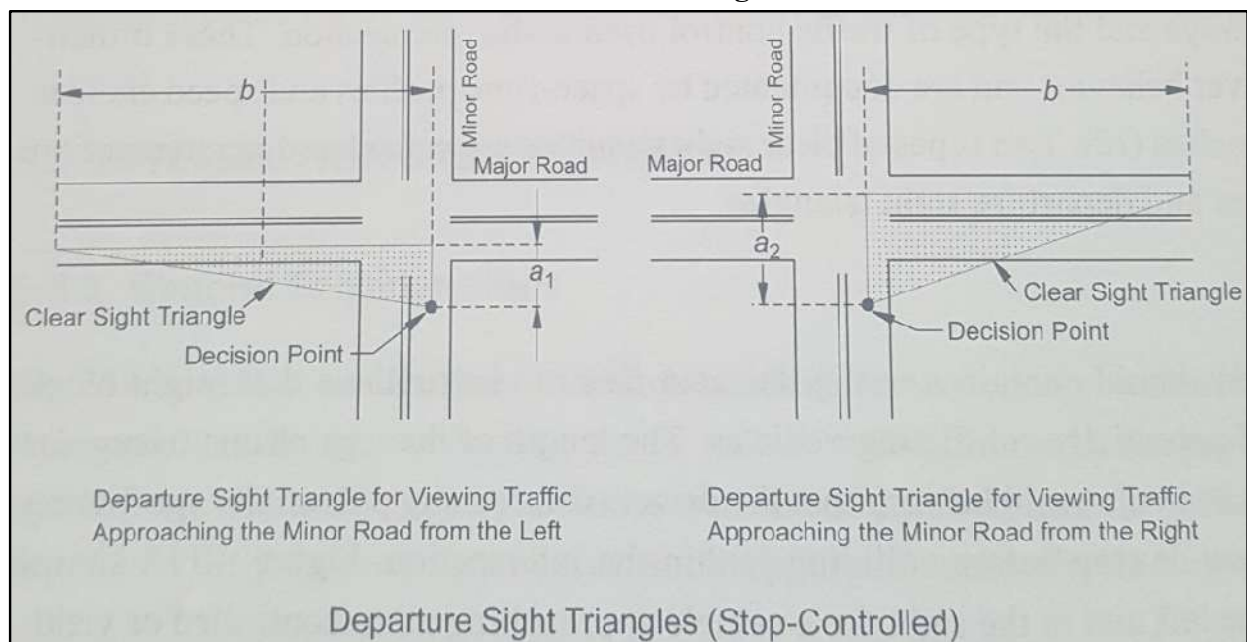
RECOMMENDATIONS

It is our recommendation that a STOP sign be installed on the Cheshire Terrace approach at the study intersection. Treatments which can be considered include but are not limited to:

Sight Distance Improvements – At the intersection of Cheshire Terrace & Nottingham Road, the line of sight of approaching vehicles was found to be obstructed. We observed that if vehicles stop closer to the mainline on Nottingham Road, then they would have clear visibility of the traffic conditions at the intersection and would be able to safely make a turn onto Nottingham Road.

It is our opinion that if the tree and other foliage at the corners of the intersection are cleared, then the sight distance can be improved. We recommend that the Township cooperate with its residents to trim overgrown foliage and clear obstruction from sight triangles, as reasonable.

FIGURE 3 – Intersection Sight Distance





STOP Sign Installation – A STOP control on the minor-road approach should be considered as per Section 2B.11-Minor Road Stop Control of the MUTCD (11th Edition). The STOP sign would provide the appropriate traffic control at the study intersection to improve safety and circulation of traffic. We recommend that the Township install a STOP sign on Cheshire Terrace at the study intersection. The installation of the STOP sign should be implemented per the guidance presented within Chapter 2B-Regulatory Signs, Barricades, and Gates of the MUTCD (11th Edition).

FIGURE 4 – STOP Sign Installation



Striping and Signages – We recommend that the Township provide a stop bar and double yellow line striping on Cheshire Terrace to support the stop sign.

Sidewalk and Crosswalk Markings – We recommend that the Township consider installing sidewalks and marked crosswalks within the study area to improve pedestrian safety and circulation. The implementation of the roadway striping, and signs should follow the guidance presented within the latest edition of the MUTCD.

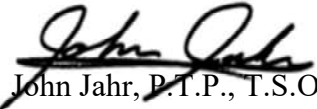


SUMMARY & CONCLUSIONS

It is our recommendation, based upon our field observations, the guidance from MUTCD and Title 39, and the existing conditions, that the Township of West Orange should consider the installation of a STOP sign and the appropriate striping at the intersection of Cheshire Terrace & Nottingham Road.

Should you have any questions or require additional information please do not hesitate to contact me at (732) 236-7557.

Very truly yours,
Bright View Engineering


John Jahr, P.T.P., T.S.O.S.
Principal


Joseph A. Fishinger, Jr., PE, PP, PTOE
Director of Traffic Engineering

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<https://bvengr.sharepoint.com/sites/bvengr/proj/241193-WOT-StopControl/7-Reports-Analysis/Stop-Control/4-Cheshire-Terr-Nottingham-Terr.docxs>



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Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, New Jersey 07052

Re: Safety Study
Westminster Terrace & Nottingham Road
West Orange Township, Essex County, New Jersey
BVE Project No.: 241193

Dear Ms. Carballo:

Bright View Engineering was tasked by the Township of West Orange (*the Township here-in*) with performing an evaluation of the existing traffic controls at the intersection of Westminster Terrace & Nottingham Road. This analysis was performed to assess the safety conditions at the intersection and the installation of a stop control on Westminster Terrace.

Bright View Engineering (*BVE here-in*), in coordination with the Township, collected data during various site visits, reviewed crash information provided by the Township and reviewed data provided by NJDOT's Safety Voyager to assess the existing conditions at the study location. The collected data and observations were utilized to determine if the existing traffic conditions in the project area justify the implementation of the new traffic pattern. Our methodology conforms with the provisions set forth in NJSA Title 39:4-8, Institute of Transportation Engineers (*ITE*) literature, and the applicable requirements of the Manual on Uniform Traffic Control Devices (*MUTCD*). The following points were considered within the scope of our study:

- An inventory of the roadway facilities in the project vicinity, including the existing physical and traffic operating characteristics;
- Crash data along roadway segments interconnecting the study intersections;
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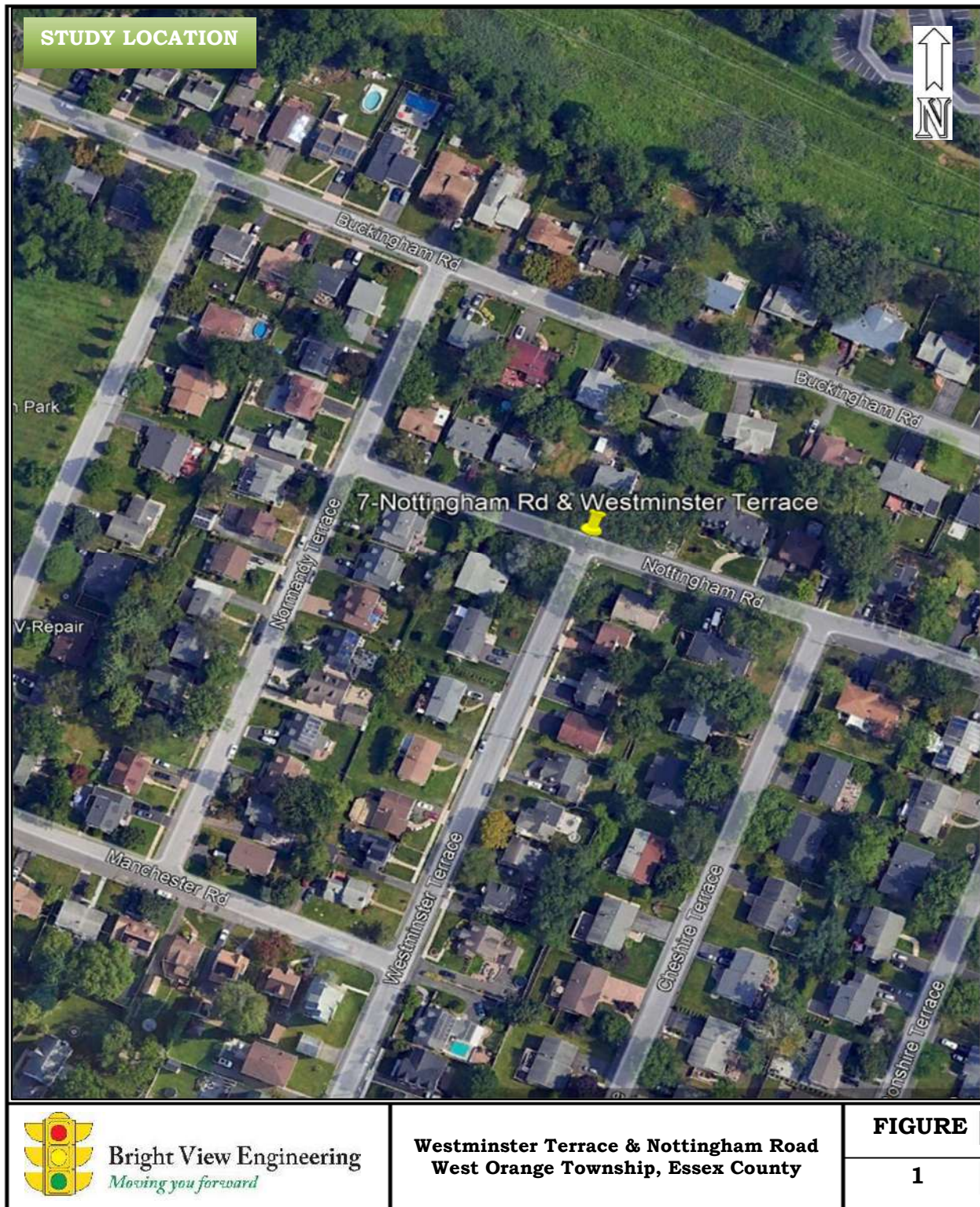
The intersection of Westminster Terrace & Nottingham Road is a 3-legged unsignalized intersection. There is no traffic control at the intersection.

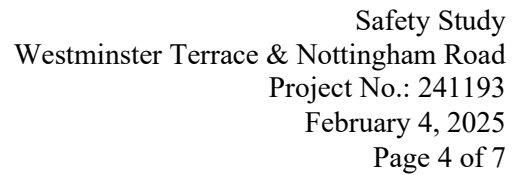
Westminster Terrace is a north to south local street under the jurisdiction of the Township of West Orange which spans 0.20 miles between Nottingham Road and Mount Pleasant Avenue. There are no NJDOT Straight-Line Diagrams available for this roadway. Westminster Terrace is STOP-controlled at its intersection with Mount Pleasant Avenue. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Westminster Terrace provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Westminster Terrace is generally residential in nature.

Nottingham Road is an east to west local street under the jurisdiction of the Township of West Orange which spans 0.14 miles between Normandy Terrace and Devonshire Terrace. There are no NJDOT Straight-Line Diagrams available for this roadway. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Nottingham Road provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Nottingham Road is generally residential in nature.



FIGURE 1





BVE obtained crash data from the Township and through NJDOT's Safety Voyager. There were no crashes reported at the study intersection within a five-year period.

BVE conducted field data collection and performed vehicle runs along the study area. We observed that presently, there are no traffic controls at the study intersection. The study area is a residential neighborhood with primarily single-family housing.

We observed that the sight lines at the intersection of Westminster Terrace & Nottingham Road are obstructed due to overgrown foliage.

FIGURE 2 – Westminster Terrace & Nottingham Road





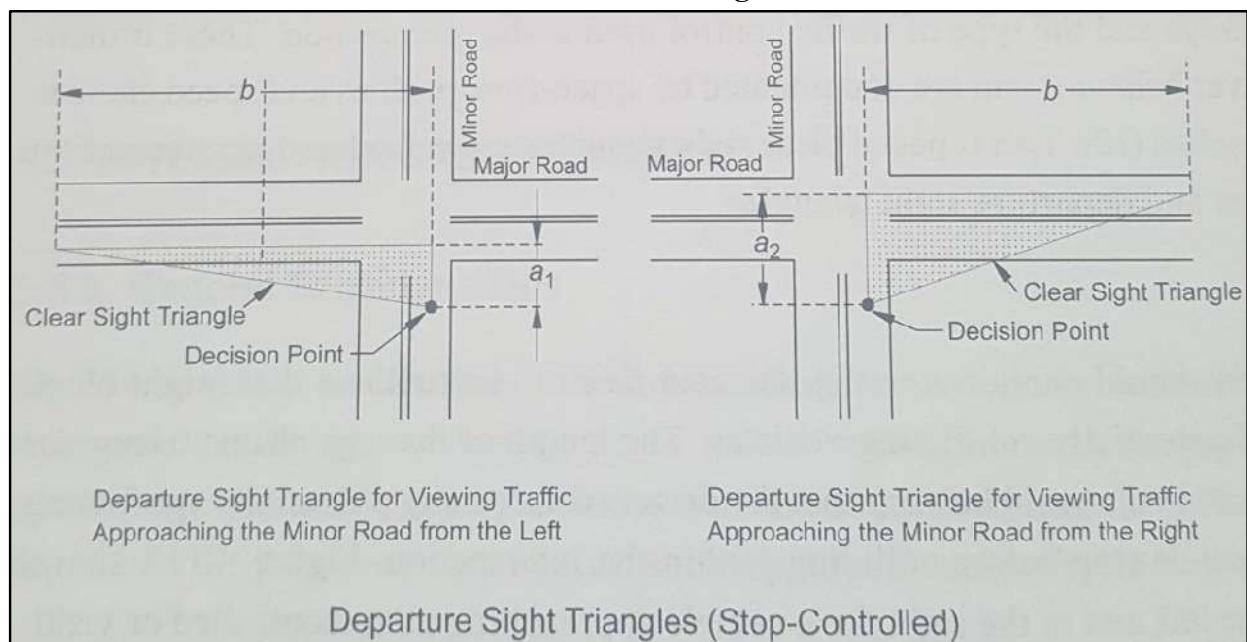
RECOMMENDATIONS

It is our recommendation that a STOP sign be installed on the Westminster Terrace approach at the study intersection. Treatments which can be considered include but are not limited to:

Sight Distance Improvements – At the intersection of Westminster Terrace & Nottingham Road, the line of sight of approaching vehicles was found to be obstructed. We observed that if vehicles stop closer to the mainline on Nottingham Road, then they would have clear visibility of the traffic conditions at the intersection and would be able to safely make a turn onto Nottingham Road.

It is our opinion that if the tree and other foliage at the corners of the intersection are cleared, then the sight distance can be improved. We recommend that the Township cooperate with its residents to trim overgrown foliage and clear obstruction from sight triangles, as reasonable.

FIGURE 3 – Intersection Sight Distance





STOP Sign Installation – A STOP control on the minor-road approach should be considered as per Section 2B.11-Minor Road Stop Control of the MUTCD (11th Edition). The STOP sign would provide the appropriate traffic control at the study intersection to improve safety and circulation of traffic. We recommend that the Township install a STOP sign on Westminster Terrace at the study intersection. The installation of the STOP sign should be implemented per the guidance presented within Chapter 2B-Regulatory Signs, Barricades, and Gates of the MUTCD (11th Edition).

FIGURE 4 – STOP Sign Installation



Striping and Signages –We recommend that the Township provide a stop bar and double yellow line striping on Westminster Terrace to support the stop sign.

Sidewalk and Crosswalk Markings – We recommend that the Township maintain their sidewalks, install additional sidewalks along Westminster Terrace & Nottingham Road, and update their marked crosswalks within the study area to improve pedestrian safety and circulation. The implementation of the roadway striping, and signs should follow the guidance presented within the latest edition of the MUTCD.



SUMMARY & CONCLUSIONS

It is our recommendation, based upon our field observations, the guidance from MUTCD and Title 39, and the existing conditions, that the Township of West Orange should consider the installation of a STOP sign and additional striping at the intersection of Westminster Terrace & Nottingham Road.

Should you have any questions or require additional information please do not hesitate to contact me at (732) 236-7557.

Very truly yours,
Bright View Engineering


John Jahr, P.T.P., T.S.O.S.
Principal


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Director, Municipal Engineer
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Re: Safety Study
Nottingham Road & Normandy Terrace
West Orange Township, Essex County, New Jersey
BVE Project No.: 241193

Dear Ms. Carballo:

Bright View Engineering was tasked by the Township of West Orange (*the Township here-in*) with performing an evaluation of the existing traffic controls at the intersection of Nottingham Road & Normandy Terrace. This analysis was performed to assess the safety conditions at the intersection and the installation of a stop control on Nottingham Road.

Bright View Engineering (*BVE here-in*), in coordination with the Township, collected data during various site visits, reviewed crash information provided by the Township and reviewed data provided by NJDOT's Safety Voyager to assess the existing conditions at the study location. The collected data and observations were utilized to determine if the existing traffic conditions in the project area justify the implementation of the new traffic pattern. Our methodology conforms with the provisions set forth in NJSA Title 39:4-8, Institute of Transportation Engineers (*ITE*) literature, and the applicable requirements of the Manual on Uniform Traffic Control Devices (*MUTCD*). The following points were considered within the scope of our study:

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EXISTING CONDITIONS

Multiple field investigations were conducted to obtain an inventory of existing roadway conditions, posted traffic controls, adjacent land uses, lane configurations of the roadways in the study area, and existing vehicular and pedestrian traffic patterns. The following is a brief description of the roadways:

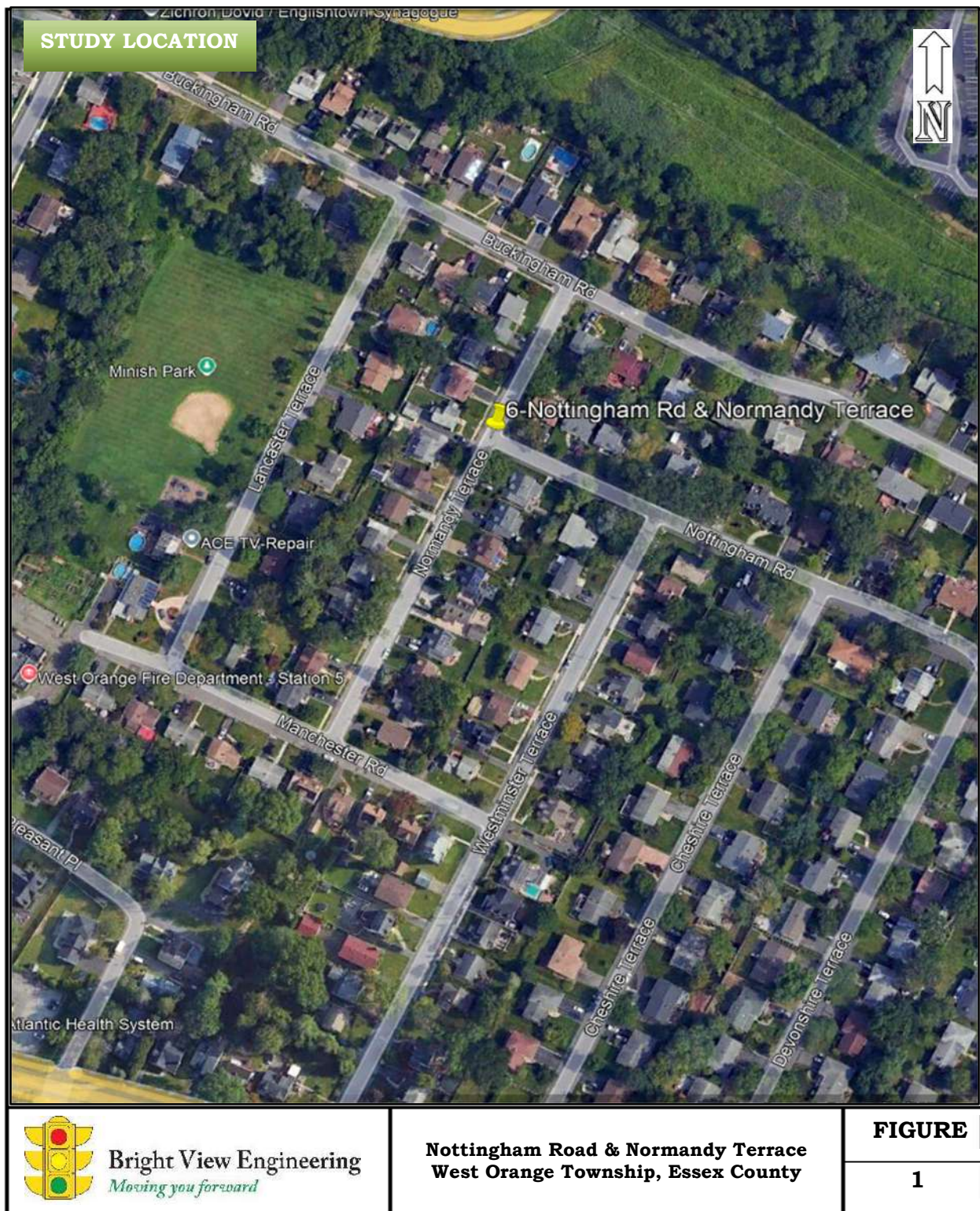
The intersection of Nottingham Road & Normandy Terrace is a 3-legged unsignalized intersection. There is no traffic control at the intersection. We note that striping for a Stop control has been installed at the intersection along Nottingham Road.

Normandy Terrace is a north to south local street under the jurisdiction of the Township of West Orange which spans 0.15 miles between Buckingham Road and Manchester Road. There are no NJDOT Straight-Line Diagrams available for this roadway. Normandy Terrace is STOP-controlled at its intersection with Buckingham Road. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Normandy Terrace provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Normandy Terrace is generally residential in nature.

Nottingham Road is an east to west local street under the jurisdiction of the Township of West Orange which spans 0.14 miles between Normandy Terrace and Devonshire Terrace. There are no NJDOT Straight-Line Diagrams available for this roadway. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Nottingham Road provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Nottingham Road is generally residential in nature.



FIGURE 1





DATA COLLECTION

CRASH HISTORY DATA

BVE obtained crash data from the Township and through NJDOT's Safety Voyager. There were no crashes reported at the study intersection within a five-year period.

FIELD OBSERVATIONS

BVE conducted field data collection and performed vehicle runs along the study area. We observed that presently, there are no traffic controls at the study intersection. The study area is a residential neighborhood with primarily single-family housing.

We observed that the sight lines at the intersection of Nottingham Road & Normandy Terrace are obstructed due to overgrown foliage. We note that striping for a Stop control has been installed at the intersection along Normandy Terrace.

FIGURE 2 – Nottingham Road & Normandy Terrace





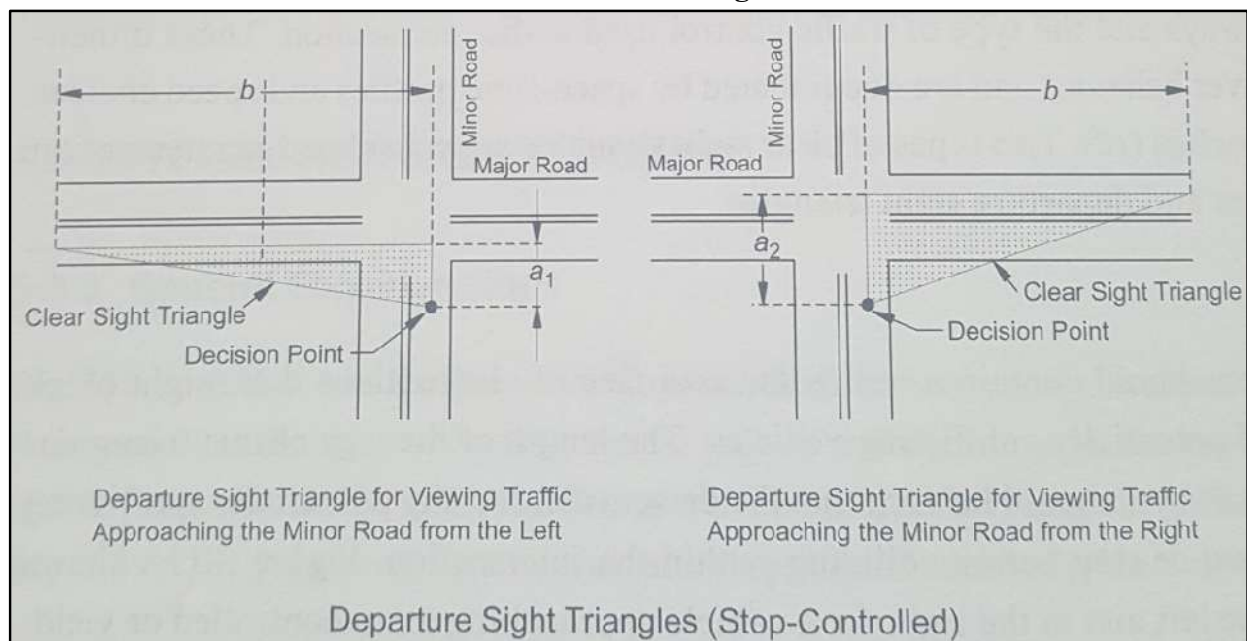
RECOMMENDATIONS

It is our recommendation that a STOP sign be installed on the Nottingham Road approach at the study intersection. Treatments which can be considered include but are not limited to:

Sight Distance Improvements – At the intersection of Nottingham Road & Normandy Terrace, the line of sight of approaching vehicles was found to be obstructed. We observed that if vehicles stop closer to the mainline on Normandy Terrace, then they would have clear visibility of the traffic conditions at the intersection and would be able to safely make a turn onto Normandy Terrace.

It is our opinion that if the tree and other foliage at the corners of the intersection are cleared, then the sight distance can be improved. We recommend that the Township cooperate with its residents to trim overgrown foliage and clear obstruction from sight triangles, as reasonable.

FIGURE 3 – Intersection Sight Distance





STOP Sign Installation – A STOP control on the minor-road approach should be considered as per Section 2B.11-Minor Road Stop Control of the MUTCD (11th Edition). The STOP sign would provide the appropriate traffic control at the study intersection to improve safety and circulation of traffic. We recommend that the Township install a STOP sign on Nottingham Road at the study intersection. The installation of the STOP sign should be implemented per the guidance presented within Chapter 2B-Regulatory Signs, Barricades, and Gates of the MUTCD (11th Edition).

FIGURE 4 – STOP Sign Installation



Sidewalk and Crosswalk Markings – We recommend that the Township maintain their sidewalks, install additional sidewalks along Nottingham Road, and update their marked crosswalks within the study area to improve pedestrian safety and circulation. The implementation of the roadway striping, and signs should follow the guidance presented within the latest edition of the MUTCD.

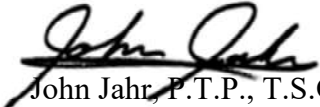


SUMMARY & CONCLUSIONS

It is our recommendation, based upon our field observations, the guidance from MUTCD and Title 39, and the existing conditions, that the Township of West Orange should consider the installation of a STOP sign at the intersection of Nottingham Road & Normandy Terrace.

Should you have any questions or require additional information please do not hesitate to contact me at (732) 236-7557.

Very truly yours,
Bright View Engineering


John Jahr, P.T.P., T.S.O.S.
Principal


Joseph A. Fishinger, Jr., PE, PP, PTOE
Director of Traffic Engineering

JJJ/am

<https://bvengr.sharepoint.com/sites/bvengr/proj/241193-WOT-StopControl/7-Reports-Analysis/Stop-Control/6-Nottingham-Rd-Normandy-Terr.docxs>



Bright View Engineering
Moving you forward

February 4, 2025

VIA EMAIL

Zayibeth Carballo, PE, PLS, PP, CME, CFM, CFS
Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, New Jersey 07052

Re: Safety Study
Manchester Road & Westminster Terrace
West Orange Township, Essex County, New Jersey
BVE Project No.: 241193

Dear Ms. Carballo:

Bright View Engineering was tasked by the Township of West Orange (*the Township here-in*) with performing an evaluation of the existing traffic controls at the intersection of Manchester Road & Westminster Terrace. This analysis was performed to assess the safety conditions at the intersection and the installation of a stop control on Manchester Road.

Bright View Engineering (*BVE here-in*), in coordination with the Township, collected data during various site visits, reviewed crash information provided by the Township and reviewed data provided by NJDOT's Safety Voyager to assess the existing conditions at the study location. The collected data and observations were utilized to determine if the existing traffic conditions in the project area justify the implementation of the new traffic pattern. Our methodology conforms with the provisions set forth in NJSA Title 39:4-8, Institute of Transportation Engineers (*ITE*) literature, and the applicable requirements of the Manual on Uniform Traffic Control Devices (*MUTCD*). The following points were considered within the scope of our study:

- An inventory of the roadway facilities in the project vicinity, including the existing physical and traffic operating characteristics;
- Crash data along roadway segments interconnecting the study intersections;
- Recommendations;
- Summary and Conclusions.

70 South Orange Avenue, Suite 109
Livingston, New Jersey 07039

C: (732) 236-7557 T: (973) 228-0999 F: (201) 753-3904
BrightViewEngineering.com

P.O. Box 99
Roseland, NJ 07068



EXISTING CONDITIONS

Multiple field investigations were conducted to obtain an inventory of existing roadway conditions, posted traffic controls, adjacent land uses, lane configurations of the roadways in the study area, and existing vehicular and pedestrian traffic patterns. The following is a brief description of the roadways:

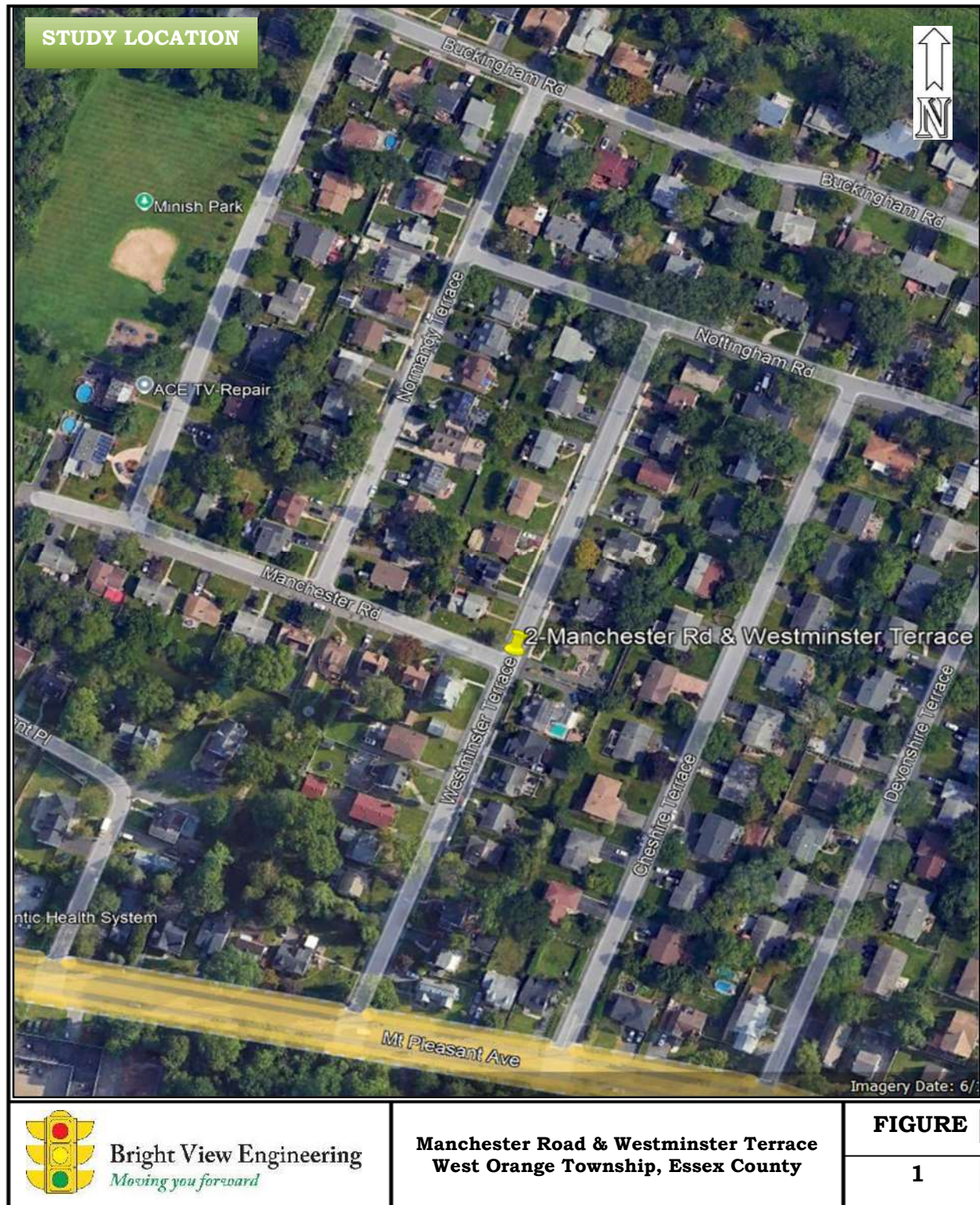
The intersection of Manchester Road & Westminster Terrace is a 3-legged unsignalized intersection. There is no traffic control at the intersection. We note that striping for a Stop control has been installed at the intersection along Manchester Road.

Manchester Road is an east to west local street under the jurisdiction of the Township of West Orange which spans 0.10 miles between Westminster Terrace and Lancaster Terrace. There are no NJDOT Straight-Line Diagrams available for this roadway. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Manchester Road provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Manchester Road is generally residential in nature.

Westminster Terrace is a north to south local street under the jurisdiction of the Township of West Orange which spans 0.20 miles between Nottingham Road and Mount Pleasant Avenue. There are no NJDOT Straight-Line Diagrams available for this roadway. Westminster Terrace is STOP-controlled at its intersection with Mount Pleasant Avenue. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Westminster Terrace provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Westminster Terrace is generally residential in nature.



FIGURE 1





DATA COLLECTION

CRASH HISTORY DATA

BVE obtained crash data from the Township and through NJDOT's Safety Voyager. These are shown in **Table 1** below:

Table 1 – Crash Data 10/20

DATE	STREET	CROSS STREET	TYPE	Circumstance
10/08/20	Manchester Road	Westminster Terrace	Backing	Driver Inattention

Based upon the crash data provided, we observe that one (1) incident was reported at the study intersection on 10/08/20. The incident was not contributed to speeding but driver inattention.

FIELD OBSERVATIONS

BVE conducted field data collection and performed vehicle runs along the study area. We observed that presently, there are no traffic controls at the study intersection. The study area is a residential neighborhood with primarily single-family housing.

We observed that the sight lines at the intersection of Manchester Road & Westminster Terrace are obstructed due to overgrown foliage. We note that striping for a Stop control has been installed at the intersection along Manchester Road.

FIGURE 2 – Manchester Road & Westminster Terrace





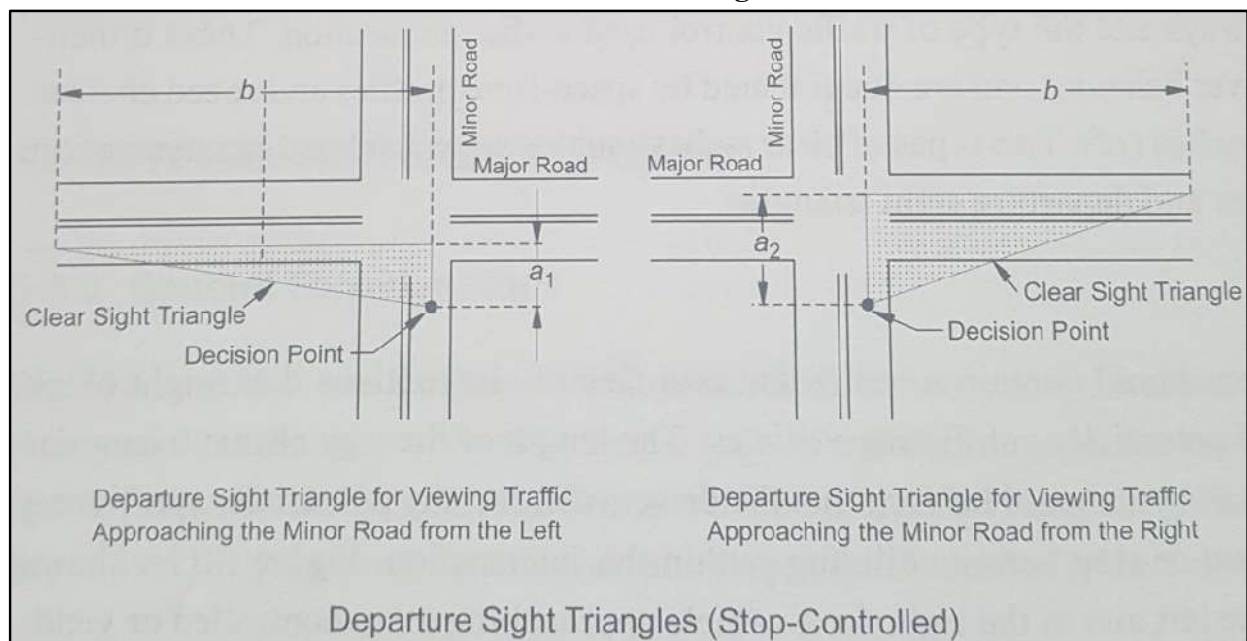
RECOMMENDATIONS

It is our recommendation that a STOP sign be installed on the Manchester Road approach at the study intersection. Treatments which can be considered include but are not limited to:

Sight Distance Improvements – At the intersection of Manchester Road & Westminster Terrace, the line of sight of approaching vehicles was found to be obstructed. We observed that if vehicles stop closer to the mainline on Westminster Terrace, then they would have clear visibility of the traffic conditions at the intersection and would be able to safely make a turn onto Westminster Terrace.

It is our opinion that if the tree and other foliage at the corners of the intersection are cleared, then the sight distance can be improved. We recommend that the Township cooperate with its residents to trim overgrown foliage and clear obstruction from sight triangles, as reasonable.

FIGURE 3 – Intersection Sight Distance





STOP Sign Installation – A STOP control on the minor-road approach should be considered as per Section 2B.11-Minor Road Stop Control of the MUTCD (11th Edition). The STOP sign would provide the appropriate traffic control at the study intersection to improve safety and circulation of traffic. We recommend that the Township install a STOP sign on Manchester Road at the study intersection. The installation of the STOP sign should be implemented per the guidance presented within Chapter 2B-Regulatory Signs, Barricades, and Gates of the MUTCD (11th Edition).

FIGURE 4 – STOP Sign Installation



Sidewalk and Crosswalk Markings – We recommend that the Township maintain their sidewalks, install additional sidewalks along Manchester Road & Westminster Terrace, and update their marked crosswalks within the study area to improve pedestrian safety and circulation. The implementation of the roadway striping, and signs should follow the guidance presented within the latest edition of the MUTCD.

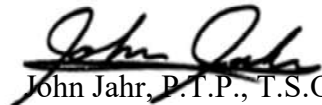


SUMMARY & CONCLUSIONS

It is our recommendation, based upon our field observations, the guidance from MUTCD and Title 39, and the existing conditions, that the Township of West Orange should consider the installation of a STOP sign at the intersection of Manchester Road & Westminster Terrace.

Should you have any questions or require additional information please do not hesitate to contact me at (732) 236-7557.

Very truly yours,
Bright View Engineering


John Jahr, P.T.P., T.S.O.S.
Principal


Joseph A. Fishinger, Jr., PE, PP, PTOE
Director of Traffic Engineering

JJJ/am

<https://bvengr.sharepoint.com/sites/bvengr/proj/241193-WOT-StopControl/7-Reports-Analysis/Stop-Control/2-Manchester-Rd-Westminster-Terr.docxs>



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February 4, 2025

VIA EMAIL

Zayibeth Carballo, PE, PLS, PP, CME, CFM, CFS
Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, New Jersey 07052

Re: Safety Study
Normandy Terrace & Manchester Road
West Orange Township, Essex County, New Jersey
BVE Project No.: 241193

Dear Ms. Carballo:

Bright View Engineering was tasked by the Township of West Orange (*the Township here-in*) with performing an evaluation of the existing traffic controls at the intersection of Normandy Terrace & Manchester Road. This analysis was performed to assess the safety conditions at the intersection and the installation of a stop control on Normandy Terrace.

Bright View Engineering (*BVE here-in*), in coordination with the Township, collected data during various site visits, reviewed crash information provided by the Township and reviewed data provided by NJDOT's Safety Voyager to assess the existing conditions at the study location. The collected data and observations were utilized to determine if the existing traffic conditions in the project area justify the implementation of the new traffic pattern. Our methodology conforms with the provisions set forth in NJSA Title 39:4-8, Institute of Transportation Engineers (*ITE*) literature, and the applicable requirements of the Manual on Uniform Traffic Control Devices (*MUTCD*). The following points were considered within the scope of our study:

- An inventory of the roadway facilities in the project vicinity, including the existing physical and traffic operating characteristics;
- Crash data along roadway segments interconnecting the study intersections;
- Recommendations;
- Summary and Conclusions.

70 South Orange Avenue, Suite 109
Livingston, New Jersey 07039

C: (732) 236-7557 T: (973) 228-0999 F: (201) 753-3904
BrightViewEngineering.com

P.O. Box 99
Roseland, NJ 07068



EXISTING CONDITIONS

Multiple field investigations were conducted to obtain an inventory of existing roadway conditions, posted traffic controls, adjacent land uses, lane configurations of the roadways in the study area, and existing vehicular and pedestrian traffic patterns. The following is a brief description of the roadways:

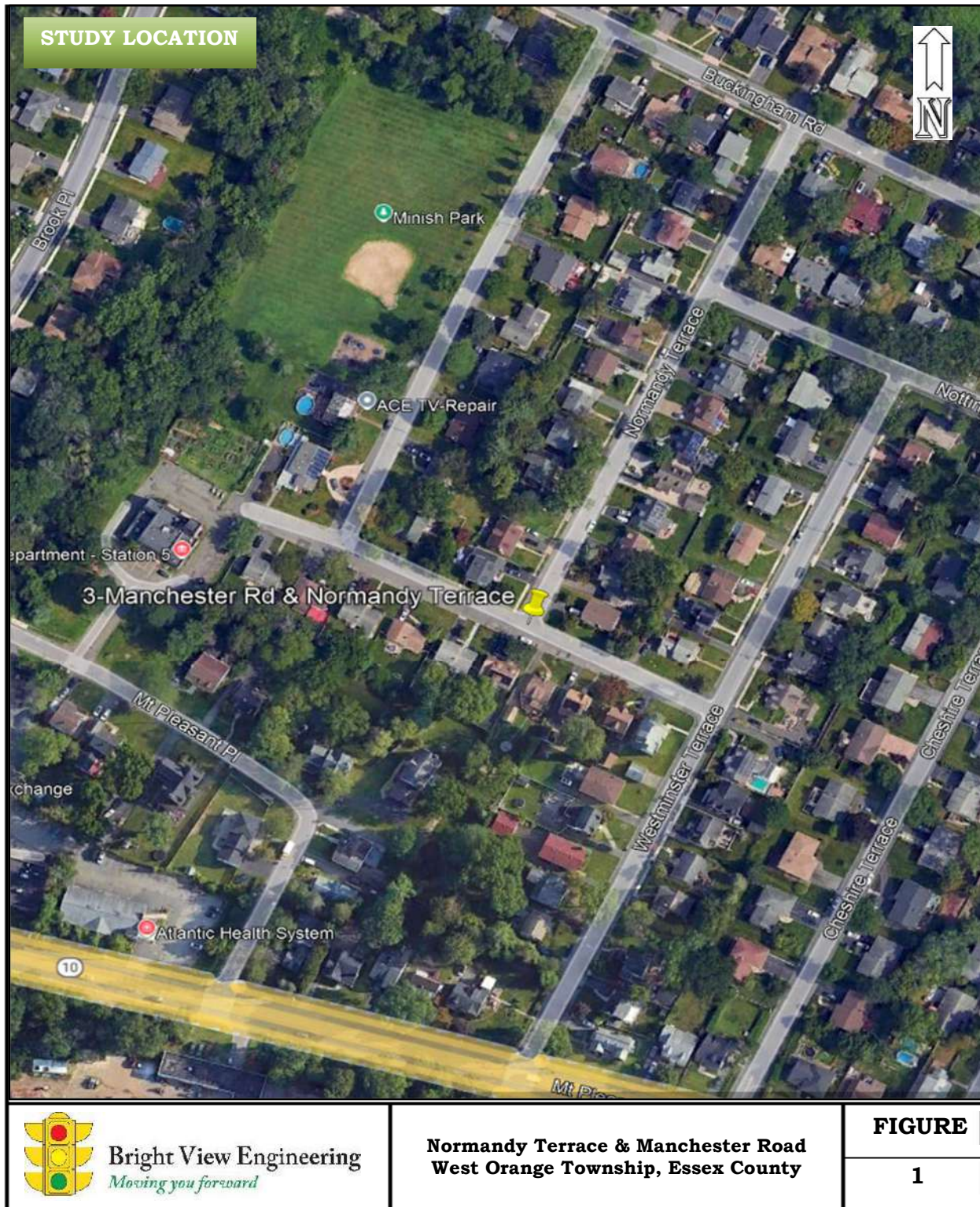
The intersection of Normandy Terrace & Manchester Road is a 3-legged unsignalized intersection. There is no traffic control at the intersection. We note that striping for a Stop control has been installed at the intersection along Normandy Terrace.

Normandy Terrace is a north to south local street under the jurisdiction of the Township of West Orange which spans 0.15 miles between Buckingham Road and Manchester Road. There are no NJDOT Straight-Line Diagrams available for this roadway. Normandy Terrace is STOP-controlled at its intersection with Buckingham Road. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Normandy Terrace provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Normandy Terrace is generally residential in nature.

Manchester Road is an east to west local street under the jurisdiction of the Township of West Orange which spans 0.10 miles between Westminster Terrace and Lancaster Terrace. There are no NJDOT Straight-Line Diagrams available for this roadway. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Manchester Road provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Manchester Road is generally residential in nature.



FIGURE 1





DATA COLLECTION

CRASH HISTORY DATA

BVE obtained crash data from the Township and through NJDOT's Safety Voyager. There were no crashes reported at the study intersection within a five-year period.

FIELD OBSERVATIONS

BVE conducted field data collection and performed vehicle runs along the study area. We observed that presently, there are no traffic controls at the study intersection. The study area is a residential neighborhood with primarily single-family housing.

We observed that the sight lines at the intersection of Normandy Terrace & Manchester Road are clear of obstructions. We note that striping for a Stop control has been installed at the intersection along Normandy Terrace.

FIGURE 2 – Normandy Terrace & Manchester Road





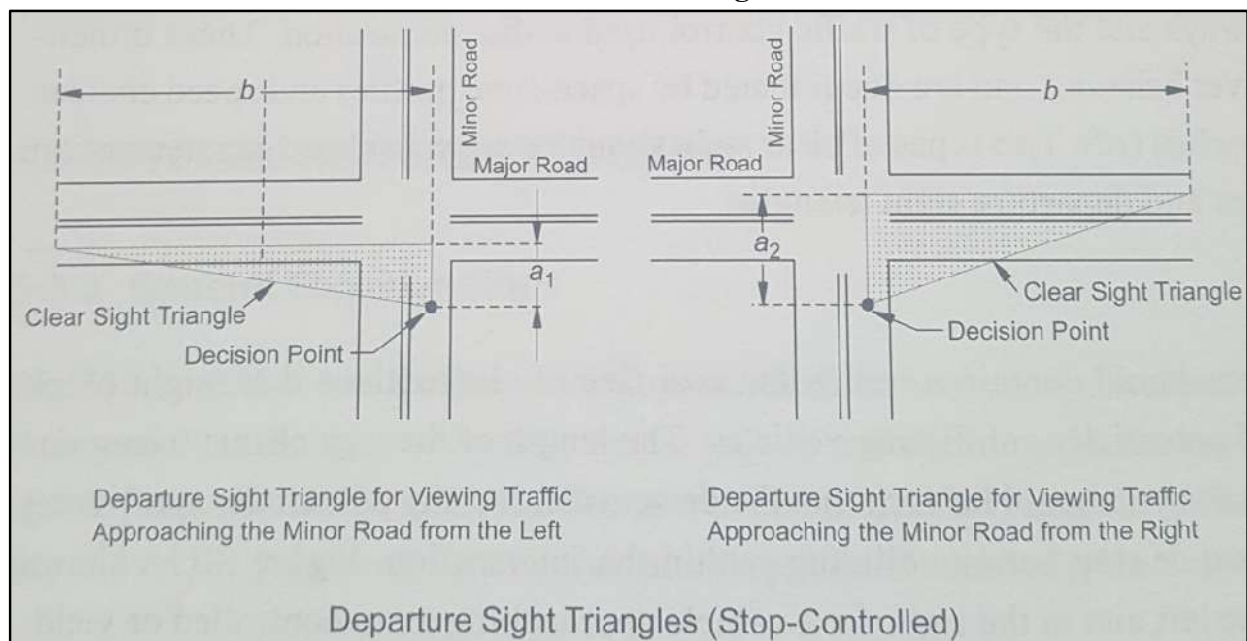
RECOMMENDATIONS

It is our recommendation that a STOP sign be installed on the Normandy Terrace approach at the study intersection. Treatments which can be considered include but are not limited to:

Sight Distance Improvements – At the intersection of Normandy Terrace & Manchester Road, the line of sight for approaching vehicles was found to be clear. We observed that stopped vehicles would have clear visibility of the traffic conditions at the intersection and would be able to safely make a turn onto Manchester Road.

It is our opinion that clear sight lines should be maintained by properly maintaining trees and foliage and prohibiting parking at the corners of the study intersection. We recommend that the Township continue to cooperate with its residents to trim overgrown foliage and clear obstruction from sight triangles, as reasonable.

FIGURE 3 – Intersection Sight Distance





STOP Sign Installation – A STOP control on the minor-road approach should be considered as per Section 2B.11-Minor Road Stop Control of the MUTCD (11th Edition). The STOP sign would provide the appropriate traffic control at the study intersection to improve safety and circulation of traffic. We recommend that the Township install a STOP sign on Normandy Terrace at the study intersection. The installation of the STOP sign should be implemented per the guidance presented within Chapter 2B-Regulatory Signs, Barricades, and Gates of the MUTCD (11th Edition).

FIGURE 4 – STOP Sign Installation



Sidewalk and Crosswalk Markings – We recommend that the Township maintain their sidewalks, install additional sidewalks along Manchester Road, and update their marked crosswalks within the study area to improve pedestrian safety and circulation. The implementation of the roadway striping, and signs should follow the guidance presented within the latest edition of the MUTCD.

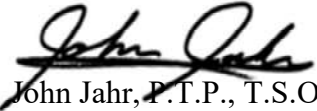


SUMMARY & CONCLUSIONS

It is our recommendation, based upon our field observations, the guidance from MUTCD and Title 39, and the existing conditions, that the Township of West Orange should consider the installation of a STOP sign at the intersection of Normandy Terrace & Manchester Road.

Should you have any questions or require additional information please do not hesitate to contact me at (732) 236-7557.

Very truly yours,
Bright View Engineering


John Jahr, P.T.P., T.S.O.S.
Principal


Joseph A. Fishinger, Jr., PE, PP, PTOE
Director of Traffic Engineering

JJJ/am

<https://bvengr.sharepoint.com/sites/bvengr/proj/241193-WOT-StopControl/7-Reports-Analysis/Stop-Control/3-Normandy-Terr-Manchester-Rd.docxs>



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February 4, 2025

VIA EMAIL

Zayibeth Carballo, PE, PLS, PP, CME, CFM, CFS
Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, New Jersey 07052

Re: Safety Study
Lancaster Terrace & Manchester Road
West Orange Township, Essex County, New Jersey
BVE Project No.: 241193

Dear Ms. Carballo:

Bright View Engineering was tasked by the Township of West Orange (*the Township here-in*) with performing an evaluation of the existing traffic controls at the intersection of Lancaster Terrace & Manchester Road. This analysis was performed to assess the safety conditions at the intersection and the installation of a stop control on Lancaster Terrace.

Bright View Engineering (*BVE here-in*), in coordination with the Township, collected data during various site visits, reviewed crash information provided by the Township and reviewed data provided by NJDOT's Safety Voyager to assess the existing conditions at the study location. The collected data and observations were utilized to determine if the existing traffic conditions in the project area justify the implementation of the new traffic pattern. Our methodology conforms with the provisions set forth in NJSA Title 39:4-8, Institute of Transportation Engineers (*ITE*) literature, and the applicable requirements of the Manual on Uniform Traffic Control Devices (*MUTCD*). The following points were considered within the scope of our study:

- An inventory of the roadway facilities in the project vicinity, including the existing physical and traffic operating characteristics;
- Crash data along roadway segments interconnecting the study intersections;
- Recommendations;
- Summary and Conclusions.

70 South Orange Avenue, Suite 109
Livingston, New Jersey 07039

C: (732) 236-7557 T: (973) 228-0999 F: (201) 753-3904
BrightViewEngineering.com

P.O. Box 99
Roseland, NJ 07068



EXISTING CONDITIONS

Multiple field investigations were conducted to obtain an inventory of existing roadway conditions, posted traffic controls, adjacent land uses, lane configurations of the roadways in the study area, and existing vehicular and pedestrian traffic patterns. The following is a brief description of the roadways:

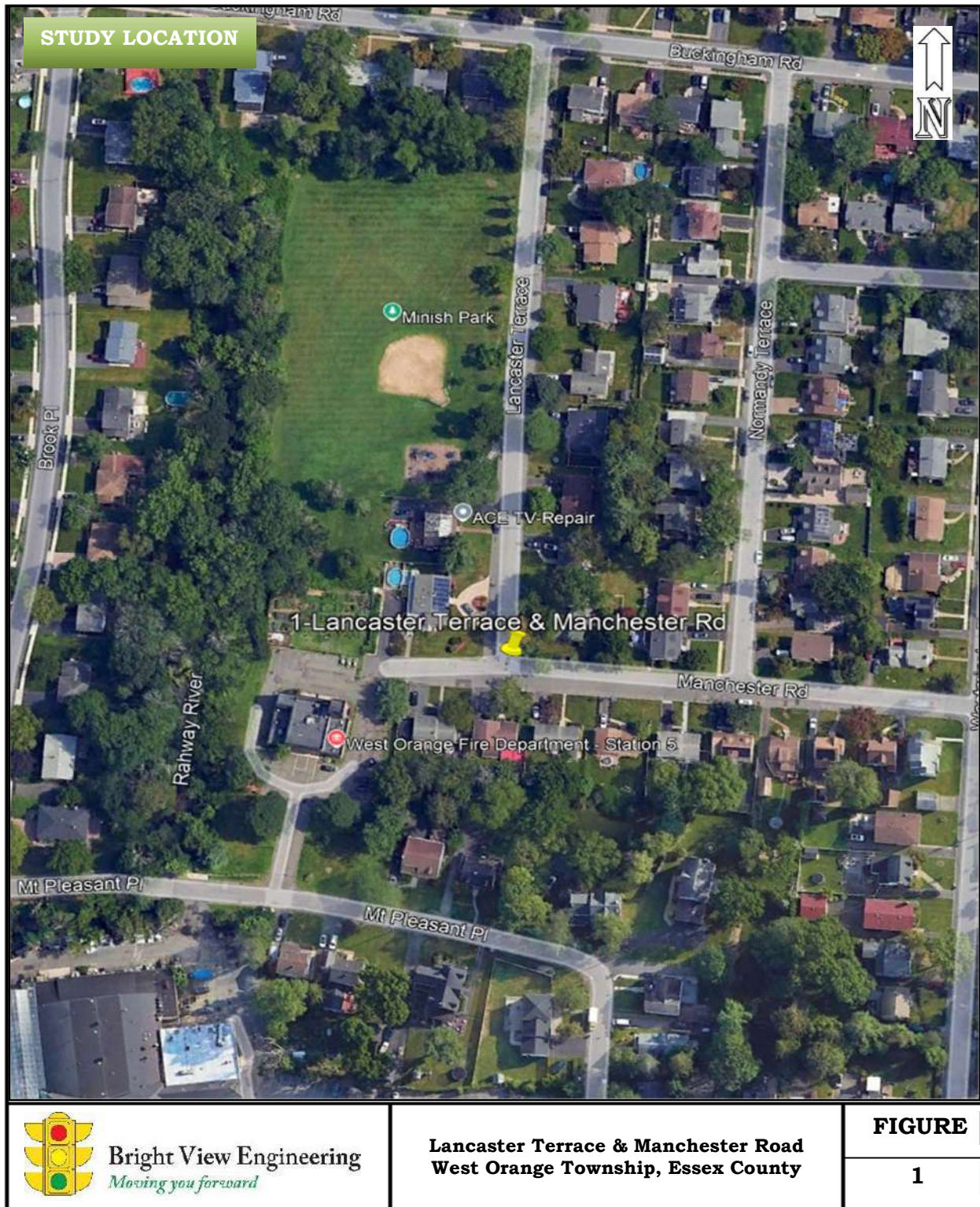
The intersection of Lancaster Terrace & Manchester Road is a 3-legged unsignalized intersection. There is no traffic control at the intersection. We note that striping for a Stop control has been installed at the intersection along the Lancaster Terrace.

Lancaster Terrace is a north to south local street under the jurisdiction of the Township of West Orange which spans 0.15 miles between Buckingham Road and Manchester Road. There are no NJDOT Straight-Line Diagrams available for this roadway. Lancaster Terrace is STOP-controlled at its intersection with Buckingham Road. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Lancaster Terrace provides an approximate pavement width of 32-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Lancaster Terrace is generally residential in nature.

Manchester Road is an east to west local street under the jurisdiction of the Township of West Orange which spans 0.10 miles between Westminster Terrace and Lancaster Terrace. There are no NJDOT Straight-Line Diagrams available for this roadway. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Manchester Road provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Manchester Road is generally residential in nature.



FIGURE 1





DATA COLLECTION

CRASH HISTORY DATA

BVE obtained crash data from the Township and through NJDOT's Safety Voyager. There were no crashes reported at the study intersection within a five-year period.

FIELD OBSERVATIONS

BVE conducted field data collection and performed vehicle runs along the study area. We observed that presently, there are no traffic controls at the study intersection. The study area is a residential neighborhood with primarily single-family housing.

We observed that the sight lines at the intersection of Lancaster Terrace & Manchester Road are obstructed due to foliage. We note that striping for a Stop control has been installed at the intersection along the Lancaster Terrace.

FIGURE 2 – Lancaster Terrace & Manchester Road





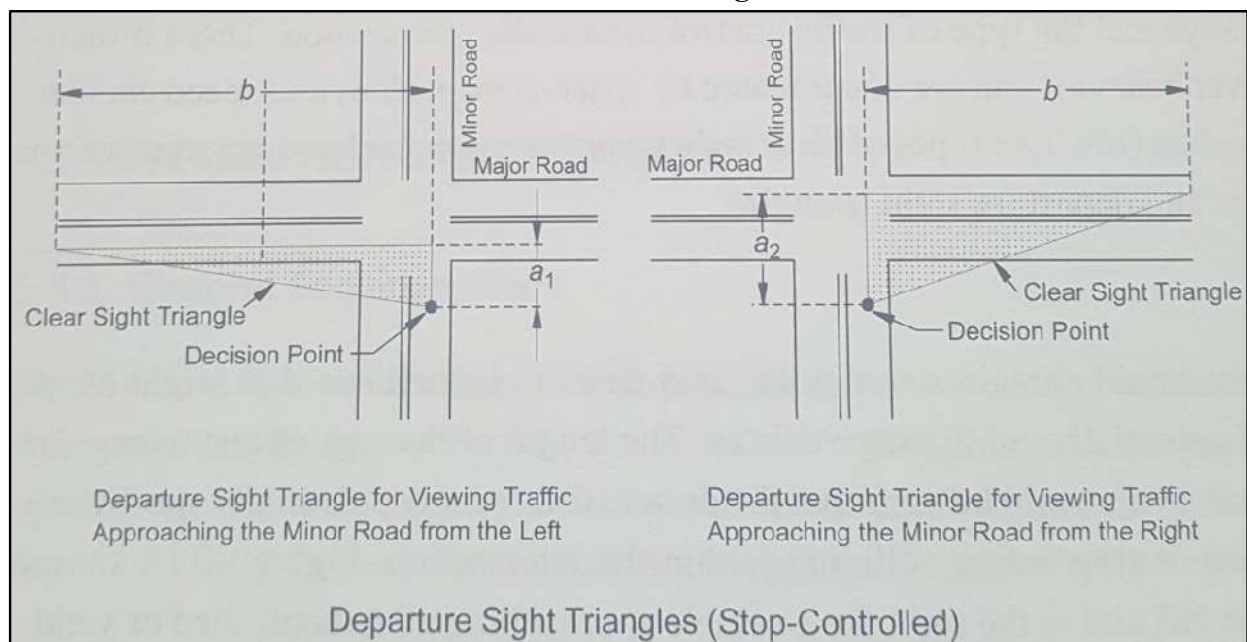
RECOMMENDATIONS

It is our recommendation that a STOP sign be installed on the Lancaster Terrace approach at the study intersection. Treatments which can be considered include but are not limited to:

Sight Distance Improvements – At the intersection of Lancaster Terrace & Manchester Road, the line of sight of approaching vehicles was found to be obstructed. We observed that if vehicles stop closer to the mainline on Manchester Road, then they would have clear visibility of the traffic conditions at the intersection and would be able to safely make a turn onto Manchester Road.

It is our opinion that if the tree and other foliage at the corners of the intersection are cleared, then the sight distance can be improved. We recommend that the Township cooperate with its residents to trim overgrown foliage and clear obstruction from sight triangles, as reasonable.

FIGURE 3 – Intersection Sight Distance





STOP Sign Installation – A STOP control on the minor-road approach should be considered as per Section 2B.11-Minor Road Stop Control of the MUTCD (11th Edition). The STOP sign would provide the appropriate traffic control at the study intersection to improve safety and circulation of traffic. We recommend that the Township install a STOP sign on Lancaster Terrace at the study intersection. The installation of the STOP sign should be implemented per the guidance presented within Chapter 2B-Regulatory Signs, Barricades, and Gates of the MUTCD (11th Edition).

FIGURE 4 – STOP Sign Installation



Sidewalk and Crosswalk Markings – We recommend that the Township consider installing sidewalks and marked crosswalks within the study area to improve pedestrian safety and circulation. The implementation of the roadway striping, and signs should follow the guidance presented within the latest edition of the MUTCD.

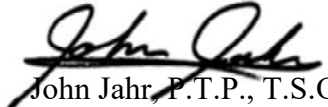


SUMMARY & CONCLUSIONS

It is our recommendation, based upon our field observations, the guidance from MUTCD and Title 39, and the existing conditions, that the Township of West Orange should consider the installation of a STOP sign at the intersection of Lancaster Terrace & Manchester Road.

Should you have any questions or require additional information please do not hesitate to contact me at (732) 236-7557.

Very truly yours,
Bright View Engineering


John Jahr, P.T.P., T.S.O.S.
Principal


Joseph A. Fishinger, Jr., PE, PP, PTOE
Director of Traffic Engineering

JJJ/am

<https://bvengr.sharepoint.com/sites/bvengr/proj/241193-WOT-StopControl/7-Reports-Analysis/Stop-Control/1-Lancaster-Terr-Manchester-Rd.docxs>



Bright View Engineering
Moving you forward

February 4, 2025

VIA EMAIL

Zayibeth Carballo, PE, PLS, PP, CME, CFM, CFS
Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, New Jersey 07052

Re: Safety Study
Brook Place & Mount Pleasant Place
West Orange Township, Essex County, New Jersey
BVE Project No.: 241193

Dear Ms. Carballo:

Bright View Engineering was tasked by the Township of West Orange (*the Township here-in*) with performing an evaluation of the existing traffic controls at the intersection of Brook Place & Mount Pleasant Place. This analysis was performed to assess the safety conditions at the intersection and the installation of a stop control on Brook Place.

Bright View Engineering (*BVE here-in*), in coordination with the Township, collected data during various site visits, reviewed crash information provided by the Township and reviewed data provided by NJDOT's Safety Voyager to assess the existing conditions at the study location. The collected data and observations were utilized to determine if the existing traffic conditions in the project area justify the implementation of the new traffic pattern. Our methodology conforms with the provisions set forth in NJSA Title 39:4-8, Institute of Transportation Engineers (*ITE*) literature, and the applicable requirements of the Manual on Uniform Traffic Control Devices (*MUTCD*). The following points were considered within the scope of our study:

- An inventory of the roadway facilities in the project vicinity, including the existing physical and traffic operating characteristics;
- Crash data along roadway segments interconnecting the study intersections;
- Recommendations;
- Summary and Conclusions.

70 South Orange Avenue, Suite 109
Livingston, New Jersey 07039

C: (732) 236-7557 T: (973) 228-0999 F: (201) 753-3904
BrightViewEngineering.com

P.O. Box 99
Roseland, NJ 07068



EXISTING CONDITIONS

Multiple field investigations were conducted to obtain an inventory of existing roadway conditions, posted traffic controls, adjacent land uses, lane configurations of the roadways in the study area, and existing vehicular and pedestrian traffic patterns. The following is a brief description of the roadways:

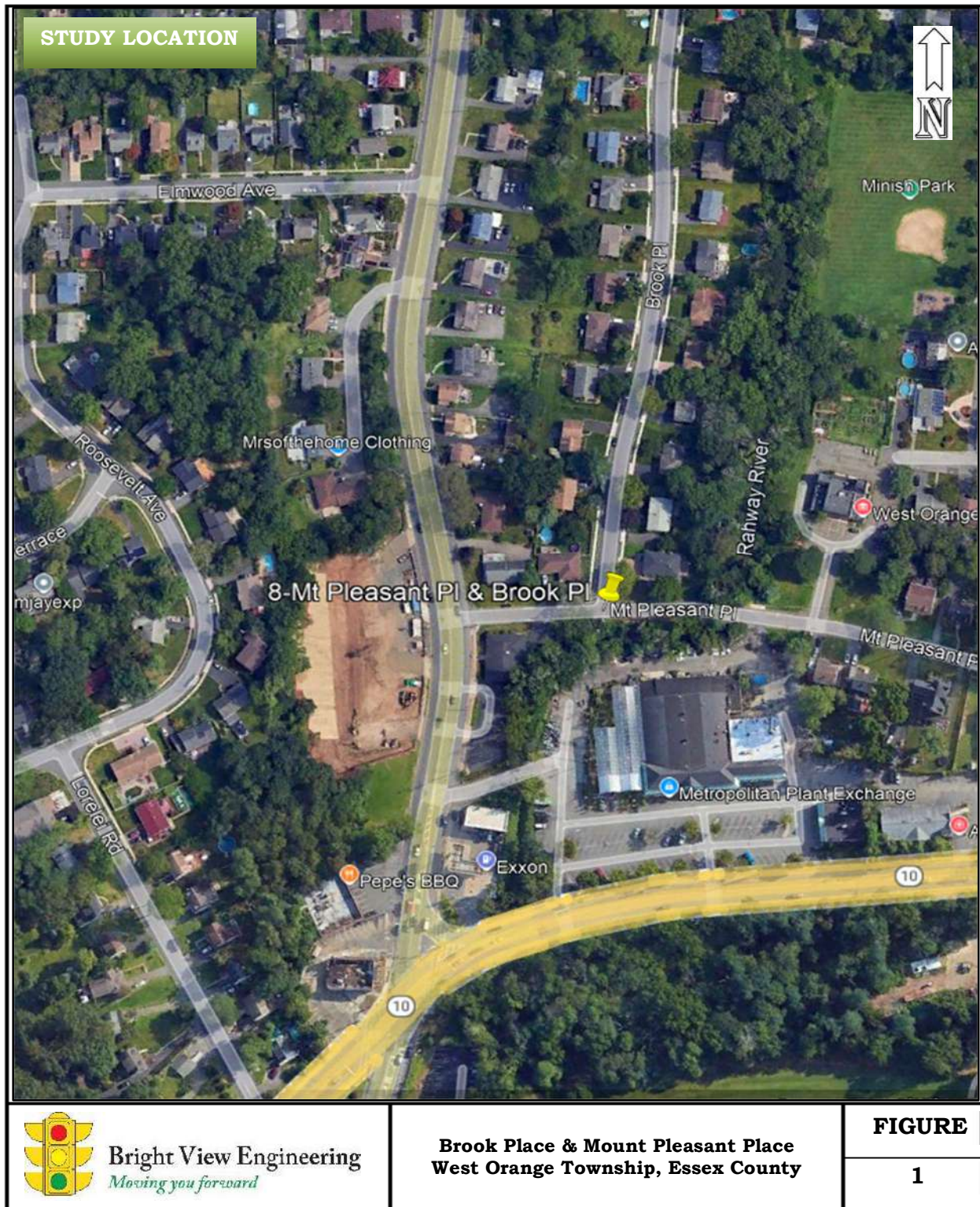
The intersection of Brook Place & Mount Pleasant Place is a 3-legged unsignalized intersection. There is no traffic control at the intersection. We note that the intersection is approximately 400 feet away from West Orange Fire Station #5 on Mount Pleasant Place.

Brook Place is a north to south local street under the jurisdiction of the Township of West Orange which spans 0.20 miles between Buckingham Road and Mount Pleasant Place. There are no NJDOT Straight-Line Diagrams available for this roadway. Brook Place is STOP-controlled at its intersection with Buckingham Road. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Brook Place provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Brook Place is generally residential in nature.

Mount Pleasant Place is an east to west local street under the jurisdiction of the Township of West Orange which spans 0.20 miles between Pleasant Valley Way and Mount Pleasant Avenue. There are no NJDOT Straight-Line Diagrams available for this roadway. Mount Pleasant Place is STOP-controlled at its intersection with Pleasant Valley Way and Mount Pleasant Avenue. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Mount Pleasant Place provides an approximate pavement width of 27-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Mount Pleasant Place is generally residential in nature with businesses near Mount Pleasant Avenue.



FIGURE 1





DATA COLLECTION

CRASH HISTORY DATA

BVE obtained crash data from the Township and through NJDOT's Safety Voyager. These are shown in **Table 1** below:

Table 1 – Crash Data 02/22

DATE	STREET	CROSS STREET	TYPE	Circumstance
02/03/22	Brook Place	Mount Pleasant Place	Struck Parked Vehicle	Improper Passing

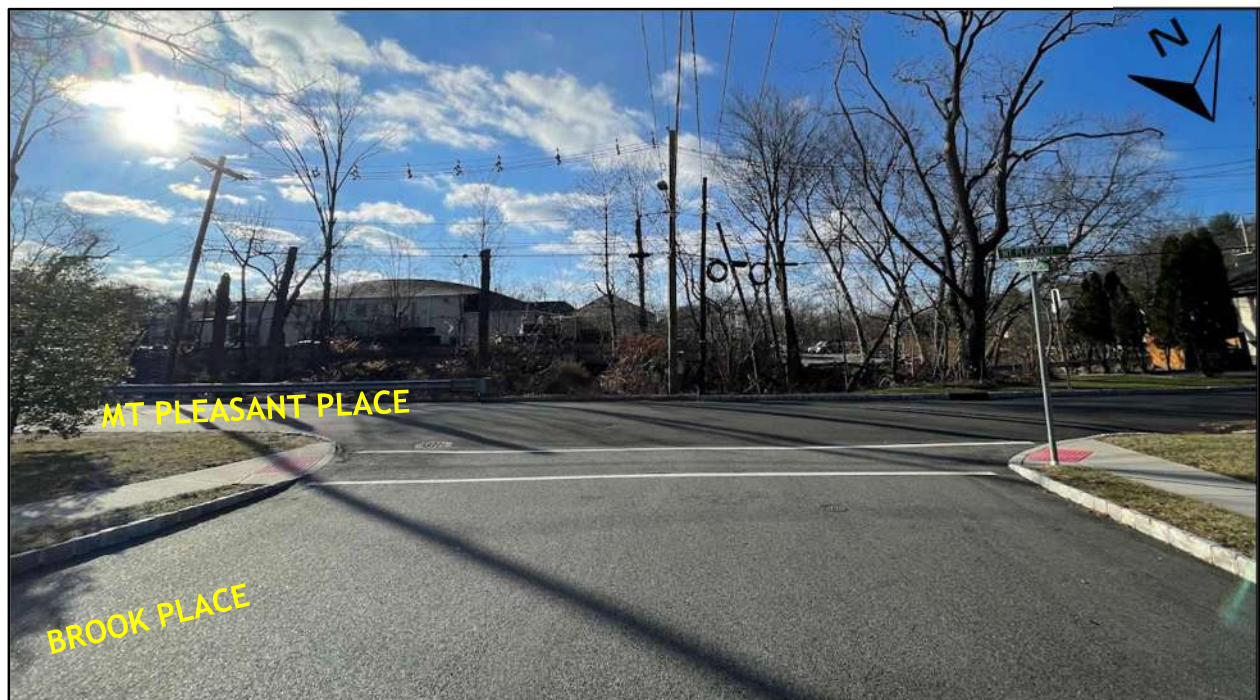
Based upon the crash data provided, we observe that one (1) incident was reported at the study intersection on 02/03/22. The incident was not contributed to speeding but improper passing.

FIELD OBSERVATIONS

BVE conducted field data collection and performed vehicle runs along the study area. We observed that presently, there are no traffic controls at the study intersection. The study area is a residential neighborhood with primarily single-family housing.

We observed that the sight lines at the intersection of Brook Place & Mount Pleasant Place are obstructed due to foliage.

FIGURE 2 – Brook Place & Mount Pleasant Place





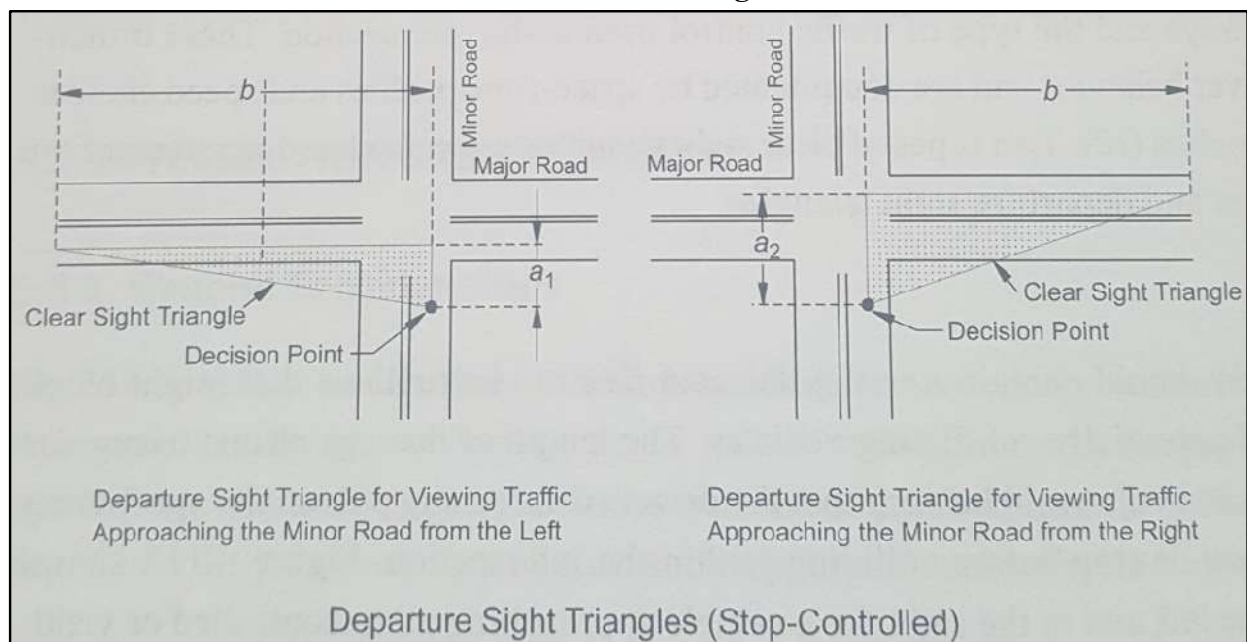
RECOMMENDATIONS

It is our recommendation that a STOP sign be installed on the Brook Place approach at the study intersection. Treatments which can be considered include but are not limited to:

Sight Distance Improvements – At the intersection of Brook Place & Mount Pleasant Place, the line of sight of approaching vehicles was found to be obstructed. We observed that if vehicles stop closer to the mainline on Mount Pleasant Place, then they would have clear visibility of the traffic conditions at the intersection and would be able to safely make a turn onto Mount Pleasant Place.

It is our opinion that if the tree and other foliage at the corners of the intersection are cleared, then the sight distance can be improved. We recommend that the Township cooperate with its residents to trim overgrown foliage and clear obstruction from sight triangles, as reasonable.

FIGURE 3 – Intersection Sight Distance





STOP Sign Installation – A STOP control on the minor-road approach should be considered as per Section 2B.11-Minor Road Stop Control of the MUTCD (11th Edition). The STOP sign would provide the appropriate traffic control at the study intersection to improve safety and circulation of traffic. We recommend that the Township install a STOP sign on Brook Place at the study intersection. The installation of the STOP sign should be implemented per the guidance presented within Chapter 2B-Regulatory Signs, Barricades, and Gates of the MUTCD (11th Edition).

FIGURE 4 – STOP Sign Installation



Striping and Signages –We recommend that the Township provide a stop bar and double yellow line striping on Brook Place to support the stop sign.

Sidewalk and Crosswalk Markings – We recommend that the Township maintain their sidewalks, installing additional sidewalks along Mount Pleasant Place, and update their marked crosswalks within the study area to improve pedestrian safety and circulation. The implementation of the roadway striping, and signs should follow the guidance presented within the latest edition of the MUTCD.

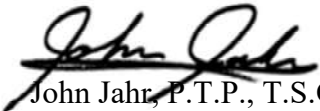


SUMMARY & CONCLUSIONS

It is our recommendation, based upon our field observations, the guidance from MUTCD and Title 39, and the existing conditions, that the Township of West Orange should consider the installation of a STOP sign and additional striping at the intersection of Brook Place & Mount Pleasant Place.

Should you have any questions or require additional information please do not hesitate to contact me at (732) 236-7557.

Very truly yours,
Bright View Engineering


John Jahr, P.T.P., T.S.O.S.
Principal


Joseph A. Fishinger, Jr., PE, PP, PTOE
Director of Traffic Engineering

JJJ/am

<https://bvengr.sharepoint.com/sites/bvengr/proj/241193-WOT-StopControl/7-Reports-Analysis/Stop-Control/8-Brook-Pl-Mount-Pleasant-Pl.docxs>



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February 4, 2025

VIA EMAIL

Zayibeth Carballo, PE, PLS, PP, CME, CFM, CFS
Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, New Jersey 07052

Re: Safety Study
Gilbert Place & Bradford Avenue
West Orange Township, Essex County, New Jersey
BVE Project No.: 241193

Dear Ms. Carballo:

Bright View Engineering was tasked by the Township of West Orange (*the Township here-in*) with performing an evaluation of the existing traffic controls at the intersection of Gilbert Place & Bradford Avenue. This analysis was performed to assess the safety conditions at the intersection and the installation of a stop control on Gilbert Place.

Bright View Engineering (*BVE here-in*), in coordination with the Township, collected data during various site visits, reviewed crash information provided by the Township and reviewed data provided by NJDOT's Safety Voyager to assess the existing conditions at the study location. The collected data and observations were utilized to determine if the existing traffic conditions in the project area justify the implementation of the new traffic pattern. Our methodology conforms with the provisions set forth in NJSA Title 39:4-8, Institute of Transportation Engineers (*ITE*) literature, and the applicable requirements of the Manual on Uniform Traffic Control Devices (*MUTCD*). The following points were considered within the scope of our study:

- An inventory of the roadway facilities in the project vicinity, including the existing physical and traffic operating characteristics;
- Crash data along roadway segments interconnecting the study intersections;
- Recommendations;
- Summary and Conclusions.

70 South Orange Avenue, Suite 109
Livingston, New Jersey 07039

C: (732) 236-7557 T: (973) 228-0999 F: (201) 753-3904
BrightViewEngineering.com

P.O. Box 99
Roseland, NJ 07068



EXISTING CONDITIONS

Multiple field investigations were conducted to obtain an inventory of existing roadway conditions, posted traffic controls, adjacent land uses, lane configurations of the roadways in the study area, and existing vehicular and pedestrian traffic patterns. The following is a brief description of the roadways:

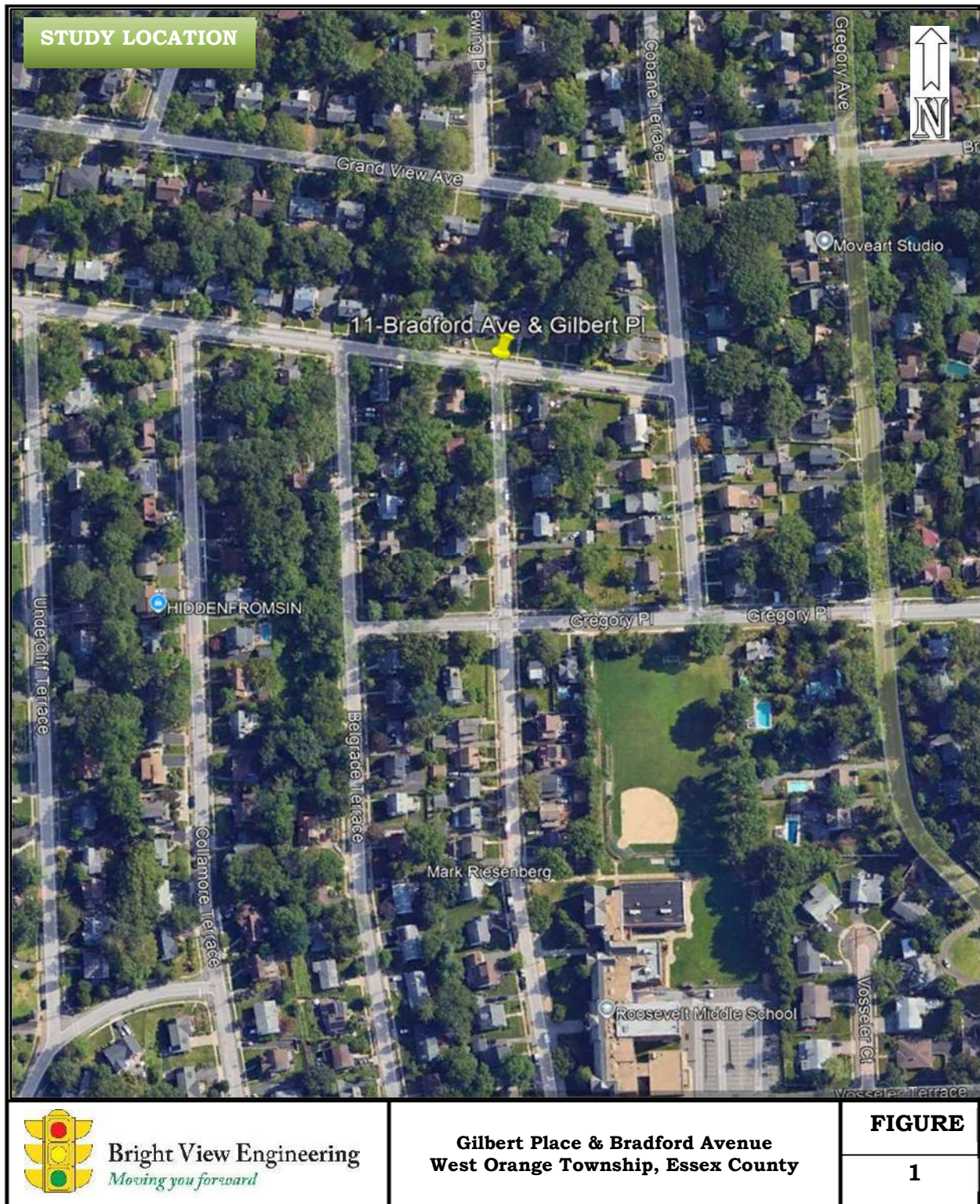
The intersection of Gilbert Place & Bradford Avenue is a 3-legged unsignalized intersection. There is no traffic control at the intersection. We note that the intersection is approximately 900 feet from Roosevelt Middle School.

Gilbert Place is a north to south local street under the jurisdiction of the Township of West Orange which spans 0.34 miles between Forrest Hill Road and Bradford Avenue. There are no NJDOT Straight-Line Diagrams available for this roadway. Gilbert Place is STOP-controlled at its intersections with Gregory Place, Club Boulevard, and Forrest Hill Road. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Gilbert Place provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Gilbert Place is generally residential in nature.

Bradford Avenue is an east to west local street under the jurisdiction of the Township of West Orange which spans 0.23 miles between Cobane Terrace and Northfield Avenue. There are no NJDOT Straight-Line Diagrams available for this roadway. Bradford Avenue is STOP-controlled on its intersection with Northfield Avenue and Cobane Terrace. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Bradford Avenue provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Bradford Avenue is generally residential in nature.



FIGURE 1





DATA COLLECTION

CRASH HISTORY DATA

BVE obtained crash data from the Township and through NJDOT's Safety Voyager. There were no crashes reported at the study intersection within a five-year period.

FIELD OBSERVATIONS

BVE conducted field data collection and performed vehicle runs along the study area. We observed that presently, there are no traffic controls at the study intersection. The study area is a residential neighborhood with primarily single-family housing.

We observed that the sight lines at the intersection of Gilbert Place & Bradford Avenue are clear of obstructions.

FIGURE 2 – Gilbert Place & Bradford Avenue





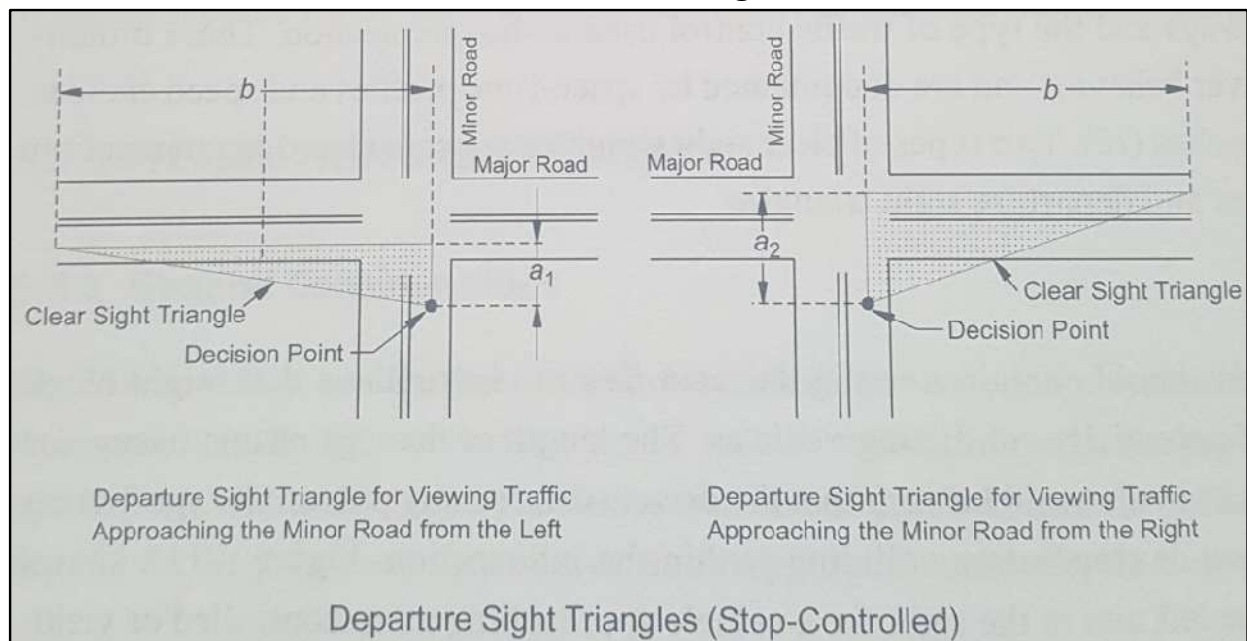
RECOMMENDATIONS

It is our recommendation that a STOP sign be installed on the Gilbert Place approach at the study intersection. Treatments which can be considered include but are not limited to:

Sight Distance Improvements – At the intersection of Gilbert Place & Bradford Avenue, the line of sight for approaching vehicles was found to be clear. We observed that stopped vehicles would have clear visibility of the traffic conditions at the intersection and would be able to safely make a turn onto Bradford Avenue.

It is our opinion that clear sight lines should be maintained by properly maintaining trees and foliage and prohibiting parking at the corners of the study intersection. We recommend that the Township continue to cooperate with its residents to trim overgrown foliage and clear obstruction from sight triangles, as reasonable.

FIGURE 3 – Intersection Sight Distance





STOP Sign Installation – A STOP control on the minor-road approach should be considered as per Section 2B.11-Minor Road Stop Control of the MUTCD (11th Edition). The STOP sign would provide the appropriate traffic control at the study intersection to improve safety and circulation of traffic. We recommend that the Township install a STOP sign on Gilbert Place at the study intersection. The installation of the STOP sign should be implemented per the guidance presented within Chapter 2B-Regulatory Signs, Barricades, and Gates of the MUTCD (11th Edition).

FIGURE 4 – STOP Sign Installation



Striping and Signages –We recommend that the Township provide a stop bar and double yellow line striping on Gilbert Place to support the stop sign.

Sidewalk and Crosswalk Markings – We recommend that the Township maintain their sidewalks and update their marked crosswalks within the study area to improve pedestrian safety and circulation. The implementation of the roadway striping, and signs should follow the guidance presented within the latest edition of the MUTCD.

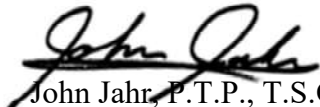


SUMMARY & CONCLUSIONS

It is our recommendation, based upon our field observations, the guidance from MUTCD and Title 39, and the existing conditions, that the Township of West Orange should consider the installation of a STOP sign and additional striping at the intersection of Gilbert Place & Bradford Avenue.

Should you have any questions or require additional information please do not hesitate to contact me at (732) 236-7557.

Very truly yours,
Bright View Engineering


John Jahr, P.T.P., T.S.O.S.
Principal


Joseph A. Fishinger, Jr., PE, PP, PTOE
Director of Traffic Engineering

JJJ/am

<https://bvengr.sharepoint.com/sites/bvengr/proj/241193-WOT-StopControl/7-Reports-Analysis/Stop-Control/11-Gilbert-Pl-Bradford-Ave.docxs>



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February 4, 2025

VIA EMAIL

Zayibeth Carballo, PE, PLS, PP, CME, CFM, CFS
Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, New Jersey 07052

Re: Safety Study
Vosseler Court & Vosseler Terrace
West Orange Township, Essex County, New Jersey
BVE Project No.: 241193

Dear Ms. Carballo:

Bright View Engineering was tasked by the Township of West Orange (*the Township here-in*) with performing an evaluation of the existing traffic controls at the intersection of Vosseler Court & Vosseler Terrace. This analysis was performed to assess the safety conditions at the intersection and the installation of a stop control on Vosseler Court.

Bright View Engineering (*BVE here-in*), in coordination with the Township, collected data during various site visits, reviewed crash information provided by the Township and reviewed data provided by NJDOT's Safety Voyager to assess the existing conditions at the study location. The collected data and observations were utilized to determine if the existing traffic conditions in the project area justify the implementation of the new traffic pattern. Our methodology conforms with the provisions set forth in NJSA Title 39:4-8, Institute of Transportation Engineers (*ITE*) literature, and the applicable requirements of the Manual on Uniform Traffic Control Devices (*MUTCD*). The following points were considered within the scope of our study:

- An inventory of the roadway facilities in the project vicinity, including the existing physical and traffic operating characteristics;
- Crash data along roadway segments interconnecting the study intersections;
- Recommendations;
- Summary and Conclusions.

70 South Orange Avenue, Suite 109
Livingston, New Jersey 07039

C: (732) 236-7557 T: (973) 228-0999 F: (201) 753-3904
BrightViewEngineering.com

P.O. Box 99
Roseland, NJ 07068



EXISTING CONDITIONS

Multiple field investigations were conducted to obtain an inventory of existing roadway conditions, posted traffic controls, adjacent land uses, lane configurations of the roadways in the study area, and existing vehicular and pedestrian traffic patterns. The following is a brief description of the roadways:

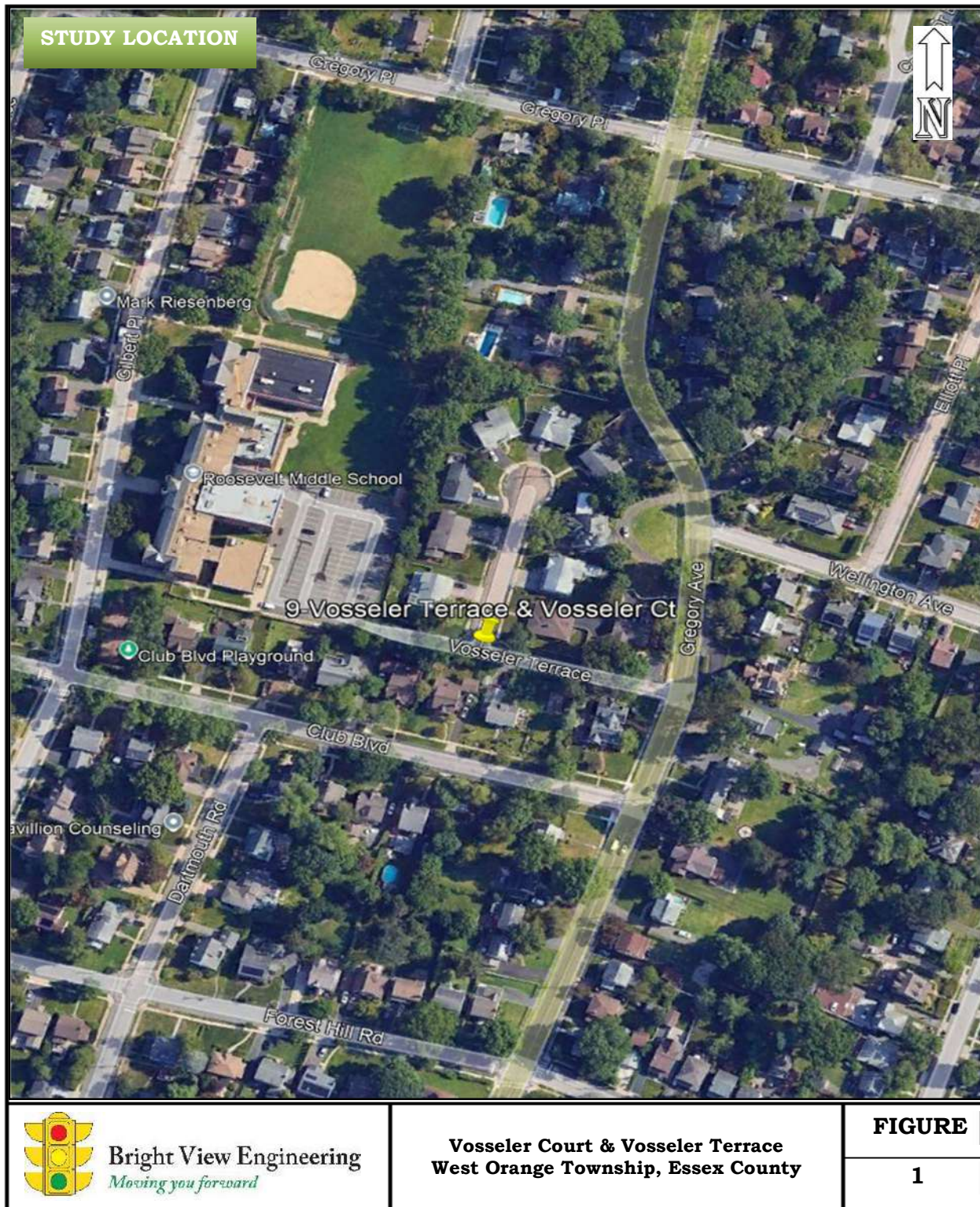
The intersection of Vosseler Court & Vosseler Terrace is a 3-legged unsignalized intersection. There is no traffic control at the intersection. We note that the intersection is approximately 300 feet from Roosevelt Middle School.

Vosseler Court is a Cul-de-sac under the jurisdiction of the Township of West Orange which spans 0.05 miles to Vosseler Terrace. There are no NJDOT Straight-Line Diagrams available for this roadway. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Vosseler Court provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Vosseler Court is generally residential in nature.

Vosseler Terrace is an east to west local street under the jurisdiction of the Township of West Orange which spans 0.07 miles between the Roosevelt Middle School parking lot and Gregory Avenue. There are no NJDOT Straight-Line Diagrams available for this roadway. Vosseler Terrace is STOP-controlled at its intersection with Gregory Avenue. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Vosseler Terrace provides an approximate pavement width of 21-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is not permitted along both sides of the roadway. The land use along Vosseler Terrace is generally residential in nature.



FIGURE 1





DATA COLLECTION

CRASH HISTORY DATA

BVE obtained crash data from the Township and through NJDOT's Safety Voyager. There were no crashes reported at the study intersection within a five-year period.

FIELD OBSERVATIONS

BVE conducted field data collection and performed vehicle runs along the study area. We observed that presently, there are no traffic controls at the study intersection. The study area is a residential neighborhood with primarily single-family housing.

We observed that the sight lines at the intersection of Vosseler Court & Vosseler Terrace are obstructed due to overgrown foliage.

FIGURE 2 – Vosseler Court & Vosseler Terrace





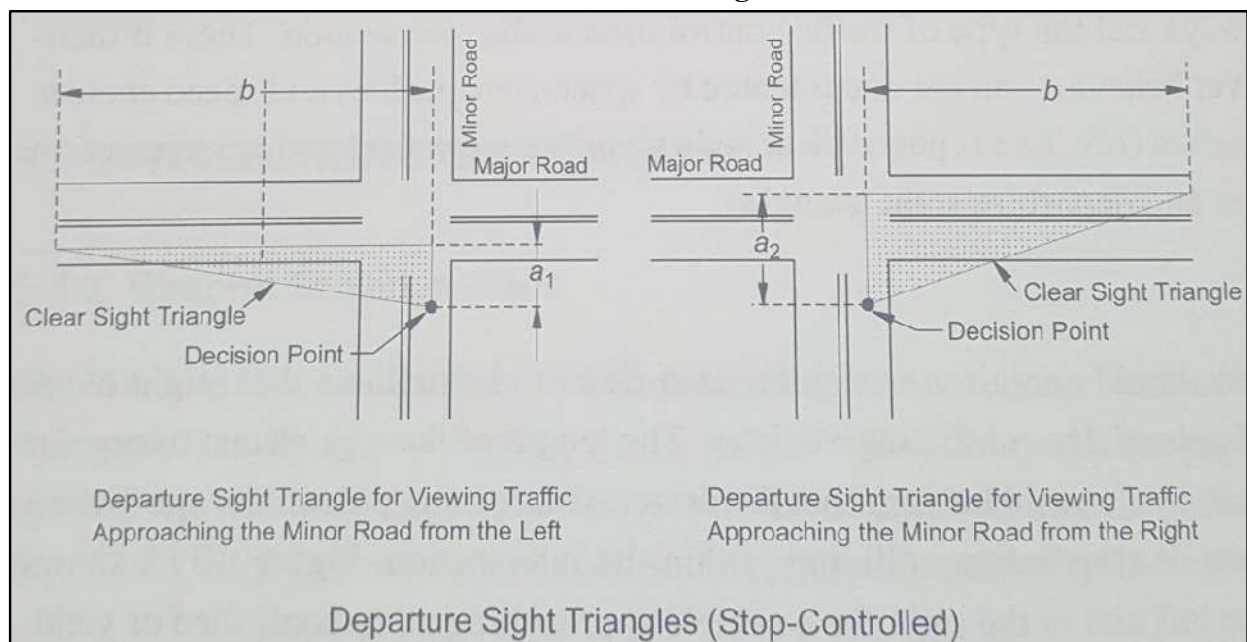
RECOMMENDATIONS

It is our recommendation that a STOP sign be installed on the Vosseler Court approach at the study intersection. Treatments which can be considered include but are not limited to:

Sight Distance Improvements – At the intersection of Vosseler Court & Vosseler Terrace, the line of sight of approaching vehicles was found to be obstructed. We observed that if vehicles stop closer to the mainline on Vosseler Terrace, then they would have clear visibility of the traffic conditions at the intersection and would be able to safely make a turn onto Vosseler Terrace.

It is our opinion that if the tree and other foliage at the corners of the intersection are cleared, then the sight distance can be improved. We recommend that the Township cooperate with its residents to trim overgrown foliage and clear obstruction from sight triangles, as reasonable.

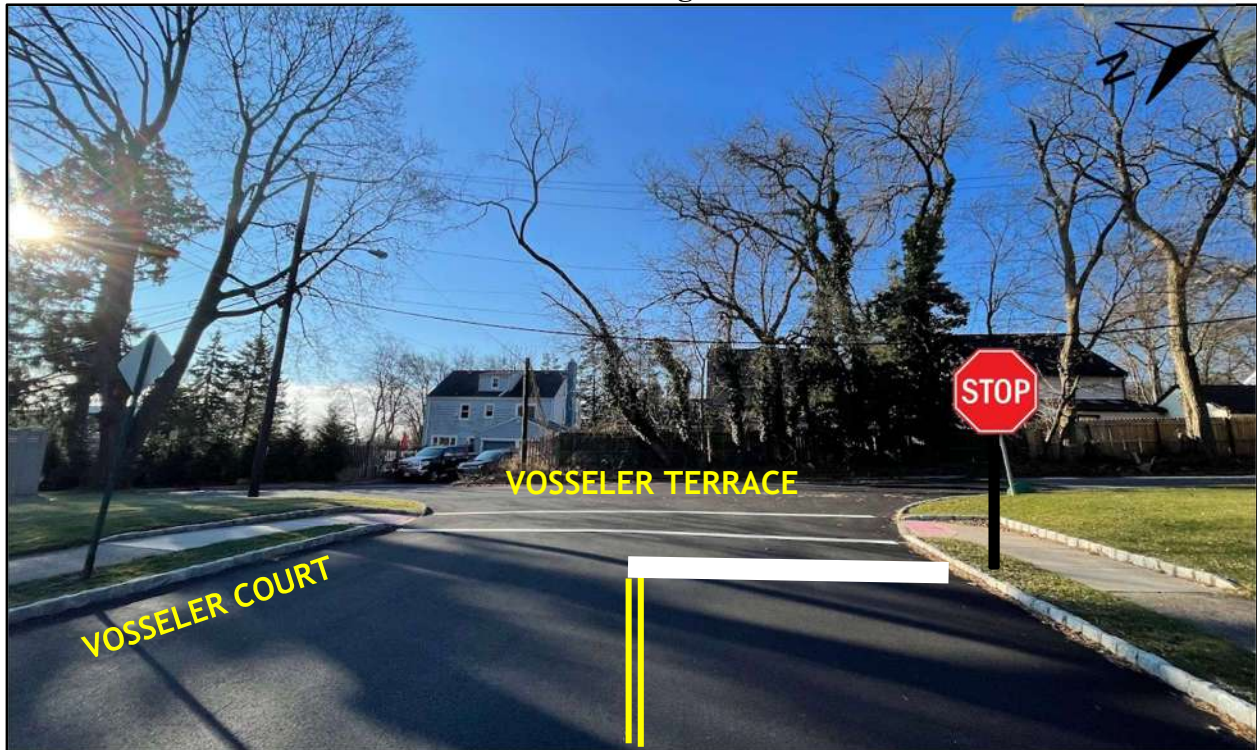
FIGURE 3 – Intersection Sight Distance





STOP Sign Installation – A STOP control on the minor-road approach should be considered as per Section 2B.11-Minor Road Stop Control of the MUTCD (11th Edition). The STOP sign would provide the appropriate traffic control at the study intersection to improve safety and circulation of traffic. We recommend that the Township install a STOP sign on Vosseler Court at the study intersection. The installation of the STOP sign should be implemented per the guidance presented within Chapter 2B-Regulatory Signs, Barricades, and Gates of the MUTCD (11th Edition).

FIGURE 4 – STOP Sign Installation



Striping and Signages – Given the wide curb radius at the study intersection, we recommend the implementation of additional striping to support the installation of the stop sign. We recommend that the Township provide a stop bar and double yellow line striping on Vosseler Court to support the stop sign.

Sidewalk and Crosswalk Markings – We recommend that the Township maintain their sidewalks, installing additional sidewalks along Vosseler Terrace, and update their marked crosswalks within the study area to improve pedestrian safety and circulation. The implementation of the roadway striping, and signs should follow the guidance presented within the latest edition of the MUTCD.

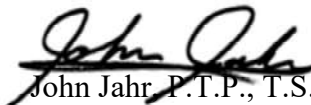


SUMMARY & CONCLUSIONS

It is our recommendation, based upon our field observations, the guidance from MUTCD and Title 39, and the existing conditions, that the Township of West Orange should consider the installation of a STOP sign and additional striping at the intersection of Vosseler Court & Vosseler Terrace.

Should you have any questions or require additional information please do not hesitate to contact me at (732) 236-7557.

Very truly yours,
Bright View Engineering


John Jahr, P.T.P., T.S.O.S.
Principal


Joseph A. Fishinger, Jr., PE, PP, PTOE
Director of Traffic Engineering

JJJ/am

<https://bvengr.sharepoint.com/sites/bvengr/proj/241193-WOT-StopControl/7-Reports-Analysis/Stop-Control/9-Vosseler-Ct-Vosseler-Terr.docxs>



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February 4, 2025

VIA EMAIL

Zayibeth Carballo, PE, PLS, PP, CME, CFM, CFS
Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, New Jersey 07052

Re: Safety Study
Devon Drive & Mountain Way
West Orange Township, Essex County, New Jersey
BVE Project No.: 241193

Dear Ms. Carballo:

Bright View Engineering was tasked by the Township of West Orange (*the Township here-in*) with performing an evaluation of the existing traffic controls at the intersection of Devon Drive & Mountain Way. This analysis was performed to assess the safety conditions at the intersection and the installation of a stop control on Devon Drive.

Bright View Engineering (*BVE here-in*), in coordination with the Township, collected data during various site visits, reviewed crash information provided by the Township and reviewed data provided by NJDOT's Safety Voyager to assess the existing conditions at the study location. The collected data and observations were utilized to determine if the existing traffic conditions in the project area justify the implementation of the new traffic pattern. Our methodology conforms with the provisions set forth in NJSA Title 39:4-8, Institute of Transportation Engineers (*ITE*) literature, and the applicable requirements of the Manual on Uniform Traffic Control Devices (*MUTCD*). The following points were considered within the scope of our study:

- An inventory of the roadway facilities in the project vicinity, including the existing physical and traffic operating characteristics;
- Crash data along roadway segments interconnecting the study intersections;
- Recommendations;
- Summary and Conclusions.

70 South Orange Avenue, Suite 109
Livingston, New Jersey 07039

C: (732) 236-7557 T: (973) 228-0999 F: (201) 753-3904
BrightViewEngineering.com

P.O. Box 99
Roseland, NJ 07068



EXISTING CONDITIONS

Multiple field investigations were conducted to obtain an inventory of existing roadway conditions, posted traffic controls, adjacent land uses, lane configurations of the roadways in the study area, and existing vehicular and pedestrian traffic patterns. The following is a brief description of the roadways:

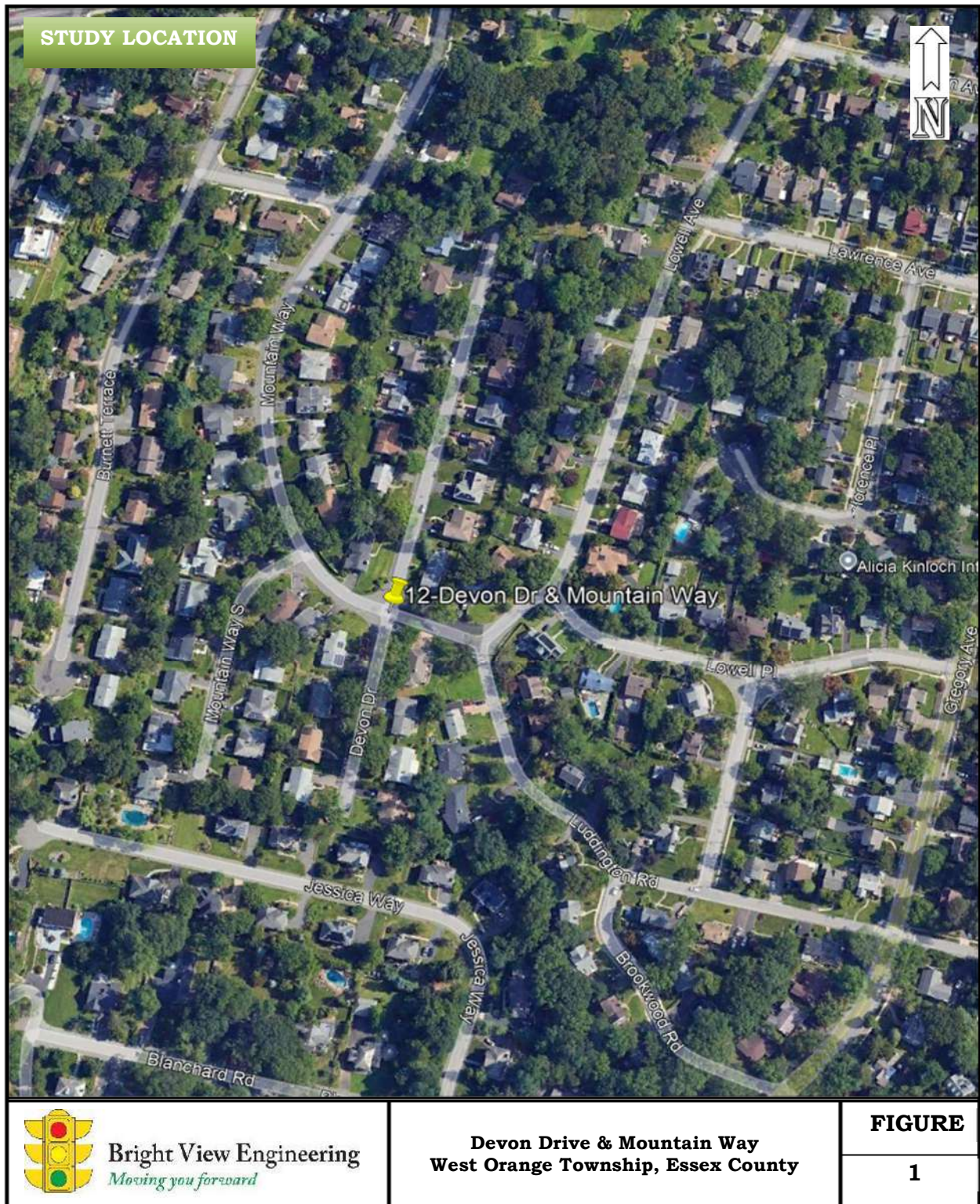
The intersection of Devon Drive & Mountain Way is a four-way unsignalized intersection. There is no traffic control at the intersection.

Devon Drive is a north to south local street under the jurisdiction of the Township of West Orange which spans 0.20 miles. There are no NJDOT Straight-Line Diagrams available for this roadway. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Devon Drive provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Devon Drive is generally residential in nature.

Mountain Way is a north to south local street under the jurisdiction of the Township of West Orange which spans 0.28 miles between Walker Road and Lowell Avenue. There are no NJDOT Straight-Line Diagrams available for this roadway. Mountain Way is STOP-controlled at its intersection with Walker Road. The speed limit on the roadway is posted at 25 MPH. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Mountain Way provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Mountain Way is generally residential in nature.



FIGURE 1





DATA COLLECTION

CRASH HISTORY DATA

BVE obtained crash data from the Township and through NJDOT's Safety Voyager. These are shown in **Table 1** below:

Table 1 – Crash Data 07/19

DATE	STREET	CROSS STREET	TYPE	Circumstance
07/12/19	Devon Drive	Mountain Way	Non-Fixed Object	Driver Inattention

Based upon the crash data provided, we observe that one (1) incident was reported at the study intersection on 07/12/19. The incident was not contributed to speeding but driver inattention.



FIELD OBSERVATIONS

BVE conducted field data collection and performed vehicle runs along the study area. We observed that presently, there are no traffic controls at the study intersection. The study area is a residential neighborhood with primarily single-family housing.

We observed that the sight lines at the intersection of Devon Drive & Mountain Way are obstructed due to overgrown foliage.

FIGURE 2 & 3 – Devon Drive & Mountain Way





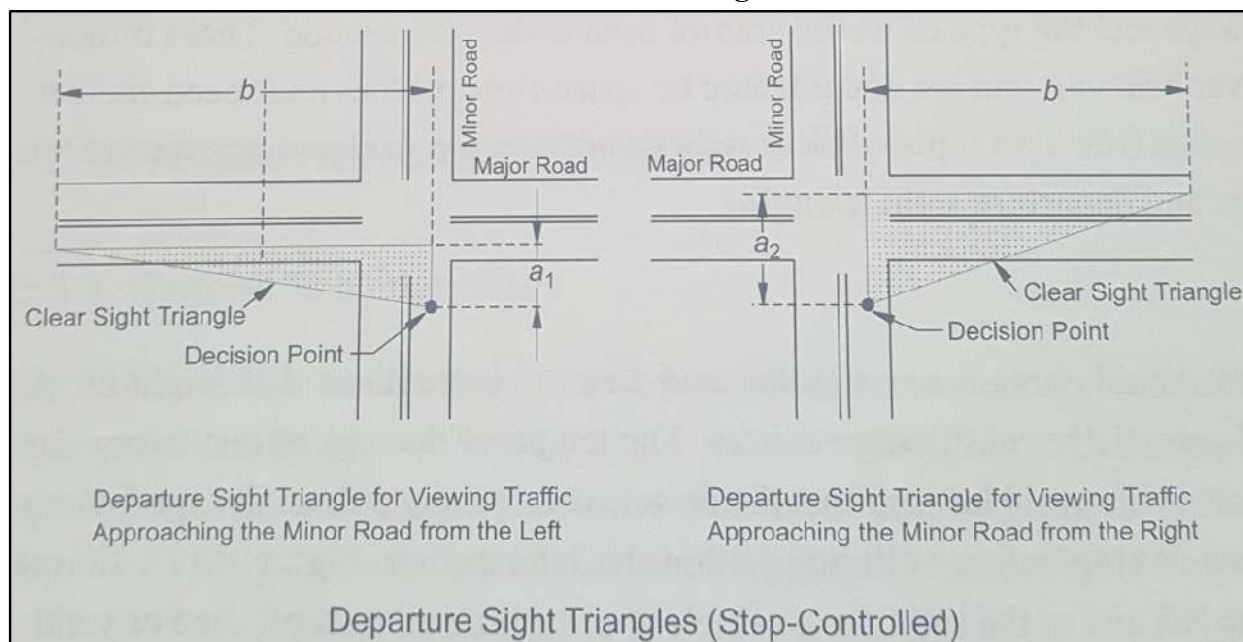
RECOMMENDATIONS

It is our recommendation that a STOP sign be installed on the Devon Drive approach at the study intersection. Treatments which can be considered include but are not limited to:

Sight Distance Improvements – At the intersection of Devon Drive & Mountain Way, the line of sight of approaching vehicles was found to be obstructed. We observed that if vehicles stop closer to the mainline on Mountain Way, then they would have clear visibility of the traffic conditions at the intersection and would be able to safely make a turn onto Mountain Way.

It is our opinion that if the tree and other foliage at the corners of the intersection are cleared, then the sight distance can be improved. We recommend that the Township cooperate with its residents to trim overgrown foliage and clear obstruction from sight triangles, as reasonable.

FIGURE 4 – Intersection Sight Distance





STOP Sign Installation – A STOP control on the minor-road approach should be considered as per Section 2B.11-Minor Road Stop Control of the MUTCD (11th Edition). The STOP sign would provide the appropriate traffic control at the study intersection to improve safety and circulation of traffic. We recommend that the Township install a STOP sign on Devon Drive at the study intersection. The installation of the STOP sign should be implemented per the guidance presented within Chapter 2B-Regulatory Signs, Barricades, and Gates of the MUTCD (11th Edition).

FIGURE 5 & 6 – STOP Sign Installation





Striping and Signages – Given the wide curb radius at the study intersection, we recommend the implementation of additional striping to support the installation of the stop sign. We recommend that the Township provide a stop bar and double yellow line striping on Devon Drive to support the stop sign.

Sidewalk and Crosswalk Markings – We recommend that the Township consider installing sidewalks and marked crosswalks within the study area to improve pedestrian safety and circulation. The implementation of the roadway striping, and signs should follow the guidance presented within the latest edition of the MUTCD.

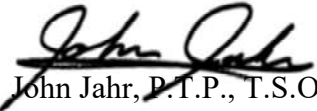


SUMMARY & CONCLUSIONS

It is our recommendation, based upon our field observations, the guidance from MUTCD and Title 39, and the existing conditions, that the Township of West Orange should consider the installation of STOP signs on both approach of Devon Drive and additional striping at the intersection of Devon Drive & Mountain Way.

Should you have any questions or require additional information please do not hesitate to contact me at (732) 236-7557.

Very truly yours,
Bright View Engineering


John Jahr, P.T.P., T.S.O.S.
Principal


Joseph A. Fishinger, Jr., PE, PP, PTOE
Director of Traffic Engineering

JJJ/am

<https://bvengr.sharepoint.com/sites/bvengr/proj/241193-WOT-StopControl/7-Reports-Analysis/Stop-Control/12-Devon-Dr-Mountain-Way.docxs>



Bright View Engineering
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February 4, 2025

VIA EMAIL

Zayibeth Carballo, PE, PLS, PP, CME, CFM, CFS
Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, New Jersey 07052

Re: Safety Study
Mountain Way South & Mountain Way
West Orange Township, Essex County, New Jersey
BVE Project No.: 241193

Dear Ms. Carballo:

Bright View Engineering was tasked by the Township of West Orange (*the Township here-in*) with performing an evaluation of the existing traffic controls at the intersection of Mountain Way South & Mountain Way. This analysis was performed to assess the safety conditions at the intersection and the installation of a stop control on Mountain Way South.

Bright View Engineering (*BVE here-in*), in coordination with the Township, collected data during various site visits, reviewed crash information provided by the Township and reviewed data provided by NJDOT's Safety Voyager to assess the existing conditions at the study location. The collected data and observations were utilized to determine if the existing traffic conditions in the project area justify the implementation of the new traffic pattern. Our methodology conforms with the provisions set forth in NJSA Title 39:4-8, Institute of Transportation Engineers (*ITE*) literature, and the applicable requirements of the Manual on Uniform Traffic Control Devices (*MUTCD*). The following points were considered within the scope of our study:

- An inventory of the roadway facilities in the project vicinity, including the existing physical and traffic operating characteristics;
- Crash data along roadway segments interconnecting the study intersections;
- Recommendations;
- Summary and Conclusions.

70 South Orange Avenue, Suite 109
Livingston, New Jersey 07039

C: (732) 236-7557 T: (973) 228-0999 F: (201) 753-3904
BrightViewEngineering.com

P.O. Box 99
Roseland, NJ 07068



EXISTING CONDITIONS

Multiple field investigations were conducted to obtain an inventory of existing roadway conditions, posted traffic controls, adjacent land uses, lane configurations of the roadways in the study area, and existing vehicular and pedestrian traffic patterns. The following is a brief description of the roadways:

The intersection of Mountain Way South & Mountain Way is a 3-legged unsignalized intersection. There is no traffic control at the intersection.

Mountain Way South is a north to south local street under the jurisdiction of the Township of West Orange which spans 430 feet between a dead-end and Mountain Way. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Mountain Way provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Mountain Way South is generally residential in nature.

Mountain Way is a north to south local street under the jurisdiction of the Township of West Orange which spans 0.28 miles between Walker Road and Lowell Avenue. There are no NJDOT Straight-Line Diagrams available for this roadway. Mountain Way is STOP-controlled at its intersection with Walker Road. The speed limit on the roadway is posted at 25 MPH. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Mountain Way provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Mountain Way is generally residential in nature.



FIGURE 1





DATA COLLECTION

CRASH HISTORY DATA

BVE obtained crash data from the Township and through NJDOT's Safety Voyager. There were no crashes reported at the study intersection within a five-year period.

FIELD OBSERVATIONS

BVE conducted field data collection and performed vehicle runs along the study area. We observed that presently, there are no traffic controls at the study intersection. The study area is a residential neighborhood with primarily single-family housing.

We observed that the sight lines at the intersection of Mountain Way South & Mountain Way are obstructed due to overgrown foliage.

FIGURE 2 – Mountain Way South & Mountain Way





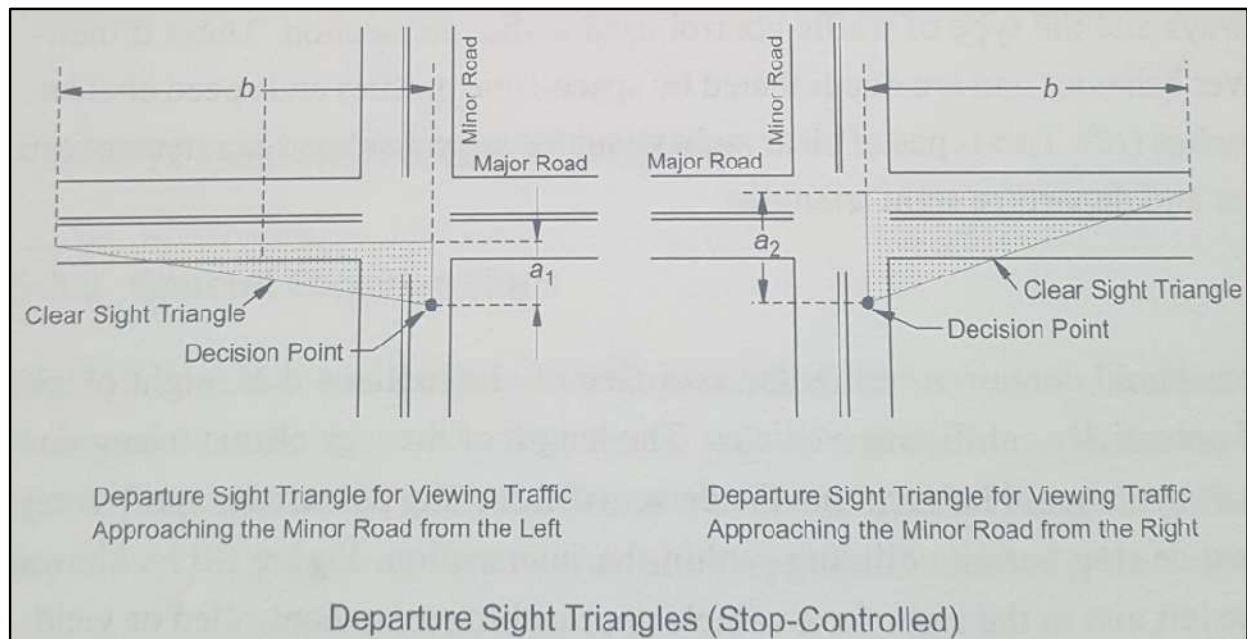
RECOMMENDATIONS

It is our recommendation that a STOP sign be installed on the Mountain Way South approach at the study intersection. Treatments which can be considered include but are not limited to:

Sight Distance Improvements – At the intersection of Mountain Way South & Mountain Way, the line of sight of approaching vehicles was found to be obstructed due to foliage and the intersection's geometry. We observed that if vehicles stop closer to the mainline on Mountain Way, then they would have clear visibility of the traffic conditions at the intersection and would be able to safely make a turn onto Mountain Way.

It is our opinion that if the tree and other foliage at the corners of the intersection are cleared, then the sight distance can be improved. We recommend that the Township cooperate with its residents to trim overgrown foliage and clear obstruction from sight triangles, as reasonable.

FIGURE 3 – Intersection Sight Distance





STOP Sign Installation – A STOP control on the minor-road approach should be considered as per Section 2B.11-Minor Road Stop Control of the MUTCD (11th Edition). The STOP sign would provide the appropriate traffic control at the study intersection to improve safety and circulation of traffic. We recommend that the Township install a STOP sign on Mountain Way South at the study intersection. The installation of the STOP sign should be implemented per the guidance presented within Chapter 2B-Regulatory Signs, Barricades, and Gates of the MUTCD (11th Edition).

FIGURE 4 – STOP Sign Installation



Striping and Signages – Given the wide curb radius at the study intersection and roadway geometry, we recommend the implementation of additional striping to support the installation of the stop sign. We recommend that the Township provide a stop bar and double yellow line striping on Mountain Way South to support the stop sign.

Sidewalk and Crosswalk Markings – We recommend that the Township consider installing sidewalks and marked crosswalks within the study area to improve pedestrian safety and circulation. The implementation of the roadway striping, and signs should follow the guidance presented within the latest edition of the MUTCD.

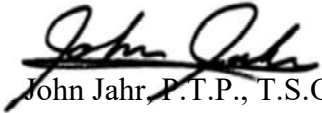


SUMMARY & CONCLUSIONS

It is our recommendation, based upon our field observations, the guidance from MUTCD and Title 39, and the existing conditions, that the Township of West Orange should consider the installation of a STOP sign and additional striping at the intersection of Mountain Way South & Mountain Way.

Should you have any questions or require additional information please do not hesitate to contact me at (732) 236-7557.

Very truly yours,
Bright View Engineering


John Jahr, P.T.P., T.S.O.S.
Principal


Joseph A. Fishinger, Jr., PE, PP, PTOE
Director of Traffic Engineering

JJJ/am

<https://bvengr.sharepoint.com/sites/bvengr/proj/241193-WOT-StopControl/7-Reports-Analysis/Stop-Control/13-Mountain-Way-S-Mountain-Way.docxs>



Bright View Engineering
Moving you forward

February 4, 2025

VIA EMAIL

Zayibeth Carballo, PE, PLS, PP, CME, CFM, CFS
Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, New Jersey 07052

Re: Safety Study
Sylvan Place & Burnett Terrace
West Orange Township, Essex County, New Jersey
BVE Project No.: 241193

Dear Ms. Carballo:

Bright View Engineering was tasked by the Township of West Orange (*the Township here-in*) with performing an evaluation of the existing traffic controls at the intersection of Sylvan Place & Burnett Terrace. This analysis was performed to assess the safety conditions at the intersection and the installation of a stop control on Sylvan Place.

Bright View Engineering (*BVE here-in*), in coordination with the Township, collected data during various site visits, reviewed crash information provided by the Township and reviewed data provided by NJDOT's Safety Voyager to assess the existing conditions at the study location. The collected data and observations were utilized to determine if the existing traffic conditions in the project area justify the implementation of the new traffic pattern. Our methodology conforms with the provisions set forth in NJSA Title 39:4-8, Institute of Transportation Engineers (*ITE*) literature, and the applicable requirements of the Manual on Uniform Traffic Control Devices (*MUTCD*). The following points were considered within the scope of our study:

- An inventory of the roadway facilities in the project vicinity, including the existing physical and traffic operating characteristics;
- Crash data along roadway segments interconnecting the study intersections;
- Recommendations;
- Summary and Conclusions.

70 South Orange Avenue, Suite 109
Livingston, New Jersey 07039

C: (732) 236-7557 T: (973) 228-0999 F: (201) 753-3904
BrightViewEngineering.com

P.O. Box 99
Roseland, NJ 07068



EXISTING CONDITIONS

Multiple field investigations were conducted to obtain an inventory of existing roadway conditions, posted traffic controls, adjacent land uses, lane configurations of the roadways in the study area, and existing vehicular and pedestrian traffic patterns. The following is a brief description of the roadways:

The intersection of Sylvan Place & Burnett Terrace is a 3-legged unsignalized intersection. There is no traffic control at the intersection.

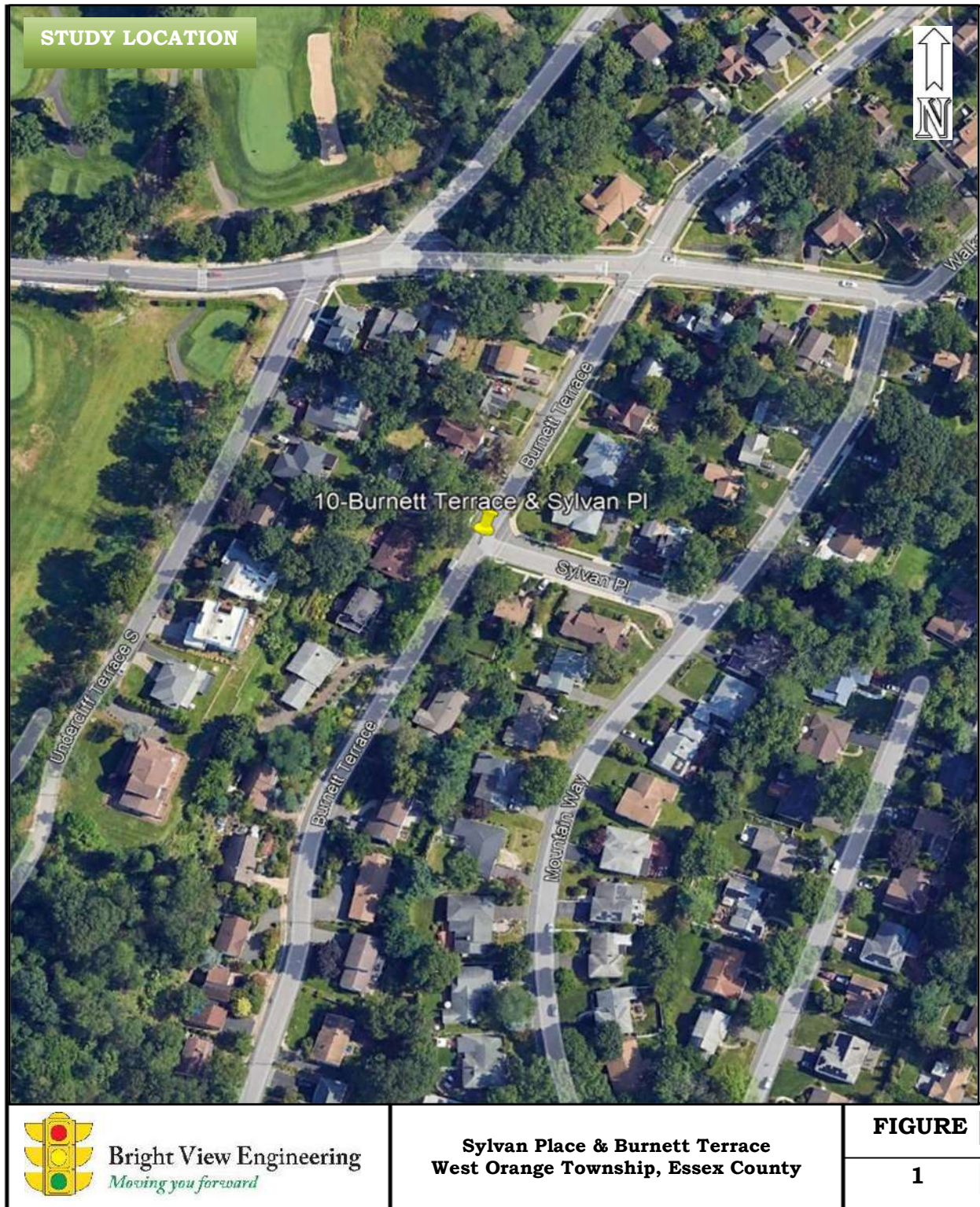
Sylvan Place is an east to west local street under the jurisdiction of the Township of West Orange which spans 0.04 miles between Mountain Way and Burnett Terrace. There are not NJDOT Straight-Line Diagrams available for this roadway. There is no speed limit posted along the roadway. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Sylvan Place provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Sylvan Place is generally residential in nature.

Burnett Terrace is a north to south local street under the jurisdiction of the Township of West Orange which spans 0.47 miles between Walker Road and the Cul-de-sac located at the bottom of Burnett Terrace. There are no NJDOT Straight-Line Diagrams available for this roadway. Burnett Terrace is STOP-controlled on its intersection with Walker Road. The speed limit on the roadway is posted at 25 MPH. It is our opinion that a 25 MPH speed limit is appropriate and conforms with the guidance set forth within the New Jersey Statutes Title 39. Burnett Terrace provides an approximate pavement width of 30-ft and allows for bi-directional travel with one travel lane for each approach. On-street parking is permitted along both sides of the roadway. The land use along Burnett Terrace is generally residential in nature.

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FIGURE 1





DATA COLLECTION

CRASH HISTORY DATA

BVE obtained crash data from the Township and through the NJDOT's Safety Voyager. We were provided with a data range from April 2022 through May 2022. These are shown in **Table 1** below:

Table 1 – Crash Data 04/22 to 05/22

DATE	STREET	CROSS STREET	TYPE	Circumstance
04/16/22	Burnett Terrace	Sylvan Place	Backing	Failed to Yield ROW
05/16/22	Sylvan Place	Burnett Terrace	Encroachment	Improper Turning

Based upon the provided crash data, we observe that two (2) incidents was reported at the study intersection. The incident was not contributed to speeding but improper passing and failure to yield to right-of-way.

FIELD OBSERVATIONS

BVE conducted field data collection and performed vehicle runs along the study area. We observed that presently, there are no traffic controls at the study intersection. The study area is a residential neighborhood with primarily single-family housing.

We observed that the horizontal and vertical sight lines at the intersection of Sylvan Place & Burnett Terrace are obstructed due to overgrown foliage and roadway's grade. Sylvan Place has an uphill grade as approaching the intersection.

FIGURE 2 – Sylvan Place & Burnett Terrace





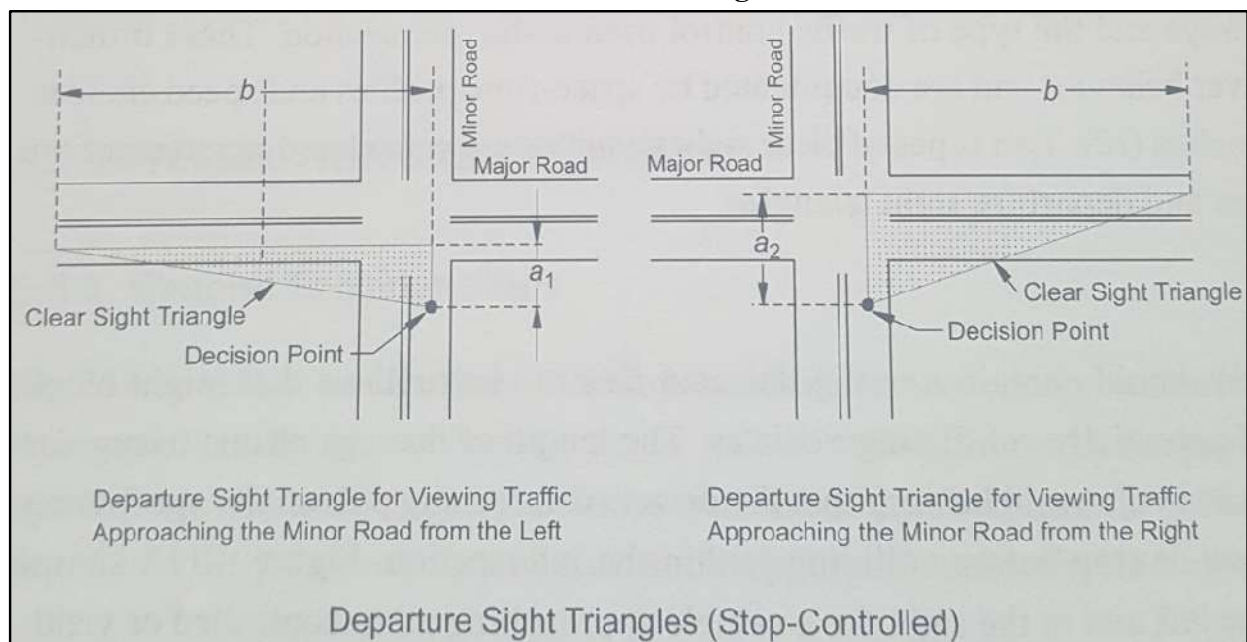
RECOMMENDATIONS

It is our recommendation that a STOP sign be installed on the Sylvan Place approach at the study intersection. Treatments which can be considered include but are not limited to:

Sight Distance Improvements – At the intersection of Sylvan Place & Burnett Terrace, the line of sight of approaching vehicles was found to be obstructed. We observed that if vehicles stop closer to the mainline on Burnett Terrace, then they would have clear visibility of the traffic conditions at the intersection and would be able to safely make a turn onto Burnett Terrace.

It is our opinion that if the tree and other foliage at the corners of the intersection are cleared, then the sight distance can be improved. We recommend that the Township cooperate with its residents to trim overgrown foliage and clear obstruction from sight triangles, as reasonable.

FIGURE 3 – Intersection Sight Distance





STOP Sign Installation – A STOP control on the minor-road approach should be considered as per Section 2B.11-Minor Road Stop Control of the MUTCD (11th Edition). The STOP sign would provide the appropriate traffic control at the study intersection to improve safety and circulation of traffic. We recommend that the Township install a STOP sign on Sylvan Place at the study intersection. The installation of the STOP sign should be implemented per the guidance presented within Chapter 2B-Regulatory Signs, Barricades, and Gates of the MUTCD (11th Edition).

FIGURE 4 – STOP Sign Installation



Striping and Signages – Given the wide curb radius at the study intersection, we recommend the implementation of additional striping to support the installation of the stop sign. We recommend that the Township provide a stop bar and double yellow line striping on Sylvan Place to support the stop sign.

Sidewalk and Crosswalk Markings – We recommend that the Township maintain their sidewalks and update their marked crosswalks within the study area to improve pedestrian safety and circulation. The implementation of the roadway striping, and signs should follow the guidance presented within the latest edition of the MUTCD.



SUMMARY & CONCLUSIONS

It is our recommendation, based upon our field observations, the guidance from MUTCD and Title 39, and the existing conditions, that the Township of West Orange should consider the installation of a STOP sign and additional striping at the intersection of Sylvan Place & Burnett Terrace.

Should you have any questions or require additional information please do not hesitate to contact me at (732) 236-7557.

Very truly yours,
Bright View Engineering


John Jahr, P.T.P., T.S.O.S.
Principal


Joseph A. Fishinger, Jr., PE, PP, PTOE
Director of Traffic Engineering

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<https://bvengr.sharepoint.com/sites/bvengr/proj/241193-WOT-StopControl/7-Reports-Analysis/Stop-Control/10-Sylvan-Pl-Burnett-Terr.docxs>