STATEN ISLAND

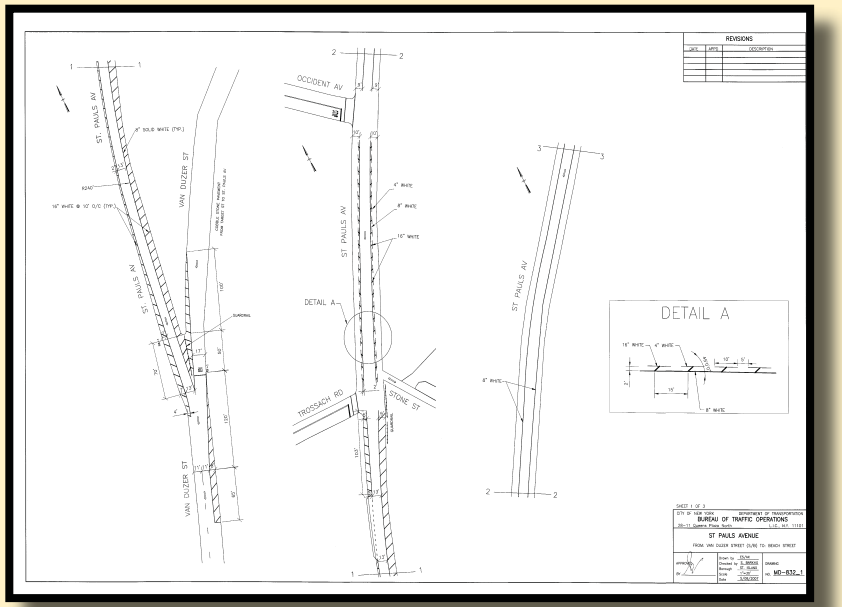
TRANSPORTATION TASK FORCE

High Priority Intersection Improvements

Ongoing 2007

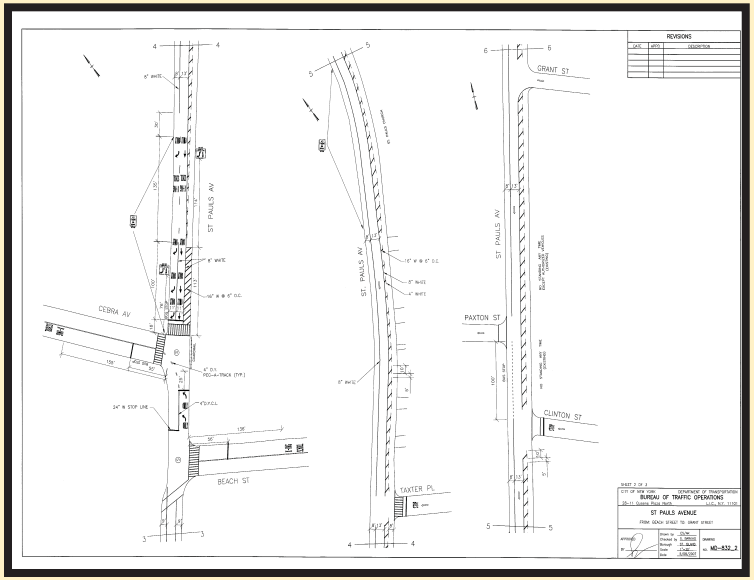
One of the primary objectives of the Staten Island Task Force was to look at opportunities to address Staten Island's growing congestion. An important short-term action of this initiative included identifying key intersections whose operational and design issues were causing congestion. In the first year of the Task Force, the Department was highly successful in the development and accelerated implementation of priority intersection investigations. These exercises, where the Department took a proactive approach to developing engineering and safety initiatives to improve the operation and safety of intersections, were done so without committing to major capital work. Last year, projects included adjustments to signal timing, the addition of turning phases, changes to curbside regulations and improved geometry through striping or low impact treatments. Through additional requests, as well as continued analysis of the arterial network, the Department has identified additional locations for improvements for 2007. As the year progresses, we will be refining and introducing additional locations for improvement. Two of the initial intersections identified for 2007 include:

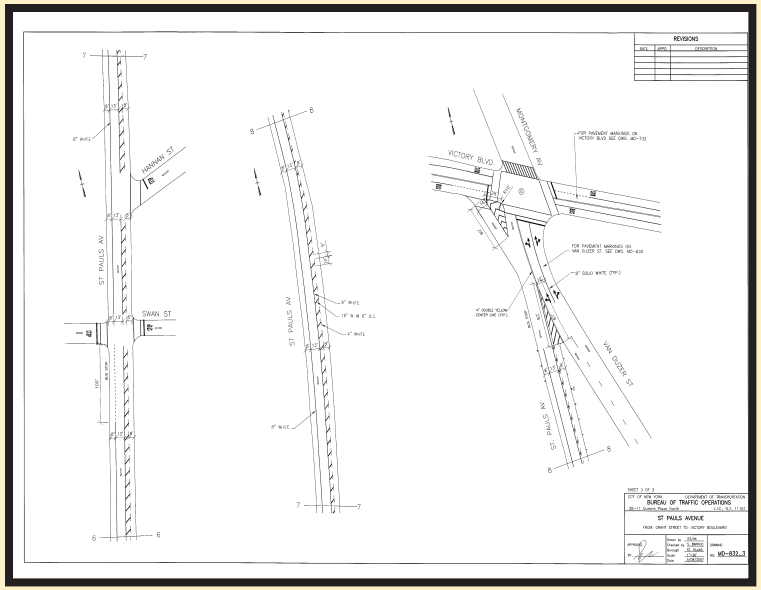
- St. Paul's Avenue
- Intersection of Rockland Avenue and Brielle Avenue



St. Paul's Avenue - Installed June 2007

St. Paul's Avenue has similar characteristics to the Van Duzer Street Corridor that was part of the improvements last year. This one-way roadway is fairly wide for a one-way corridor. Accordingly, vehicles





tended to speed excessively along St. Paul's Avenue due to the relative straight profile and lane markings. Accordingly, the Department developed a traffic calming program based upon the success of the Van Duzer Street Model.

In early June, the Department installed roadway markings and channelized the roadway with buffers to narrow the street to one travel lane. The limits of this improvement are Victory Boulevard to Van Duzer Street.

Rockland Avenue and Brielle Avenue - Summer 2007

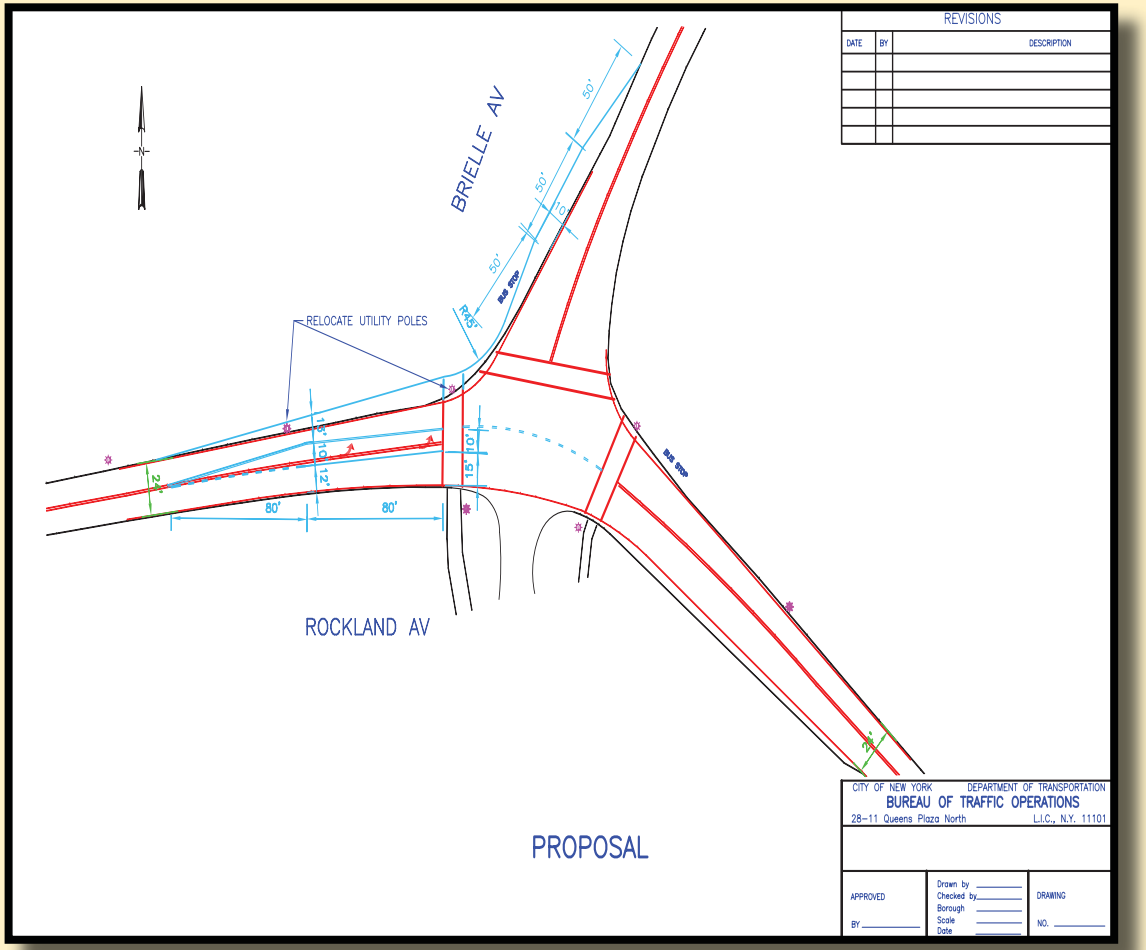
The 3-way T-shaped intersection of Rockland and Vrielle Avenue, although surrounded entirely by parkland, is one of the most critical intersections in Staten Island. Because of the large swaths of parkland in this part of the island and La Tourette Park, there are limited opportunities to travel east-west across the island. Rockland Avenue connects the neighborhoods of New Springville and Willowbrook to the west with Richmondtown and New Dorp Heights to the East. Brielle Avenue, which begins at Rockland Avenue provides access along the north-south axis, with connections to the Staten Island Expressway and the Manor Heights neighborhood.

Accordingly, there is a fairly high amount of traffic traversing through this intersection. Similar to the previous High Priority intersection improvements, the Department developed a comprehensive set of recommendations for this intersection to improve safety, operation as well as provide pedestrian and transit amenities. These improvements are scheduled to be installed in the summer of 2007. The primary components of this program are as follows:

- Widening the intersection to improve traffic flow. This is accomplished through the widening of both the southbound western approach on Brielle Avenue, as well as the north curb along Rockland Avenue. Under the previous configuration, the narrow roadway did not provide for a dedicated left turn lane, frequently causing congestion and

backups. By widening Rockland Avenue, the intersection will provide for a turning land for northbound traffic. In addition, the wider intersection allows for a safer more direct westbound movement, and peg-a-tracs will be installed to guide traffic through the intersection. These improvement necessitate the relocation of two utility poles.

- Installation of crosswalks and pedestrian signals on the west leg of the intersection
- Creation of new bus stop and improved access to bus stop through widening to prevent traffic backups.
- Improved pedestrian path to the adjacent park facility.



Rockland Avenue and Brielle Avenue Schamtic Drawing

Boroughwide Daylighting Initiative

Summer 2007

The process of "Daylighting" an intersection has both safety and operational benefits. "Daylighting" refers to the process of installing restrictive parking regulations at intersections to improve visibility and safety for motorists. These parking restrictions are designed to help motorists gain an unobstructed view of traffic approaching the intersection, as well as provide additional roadway space for through or turning vehicles at intersections. In the past, the Department has worked closely with community stakeholders to identify intersections that would benefit from daylighting to enhance safety in the borough.

As part of the Staten Island Task Force initiative, we accelerated these efforts and began to identify additional locations throughout the borough which would benefit from these treatments. This included identifying and daylighting twelve intersections a month.

In CY 2006, the Department met its goals of implementing these treatments at twelve locations per month and applied this treatment to 108 locations.

For 2007, the Department continues to identify locations based upon community input and field investigations, and is looking at standardized procedures for the application of this treatment for certain types of intersections.

Charleston Area Improvements

Ongoing 2007

The New York City Department of Transportation, in conjunction with the New York State Department of Transportation (NYSDOT) has been actively engaged in the identification and implementation of traffic improvements in the Charleston area of Staten Island. These improvement stem from the NYSDOT Southern Staten Island Traffic Study that is identifying and evaluating the impacts of recently constructed projects, developments under construction, and proposed developments in this community. The study area includes the West Shore Expressway, the Korean War Veterans Parkway, the service roads associated with these highways and the major local street arterials. The objective of the study is to recommend short-term and long term strategies to address the increasing traffic demand traveling to/from the Charleston area and develop alternatives that address safety and mobility.

Accordingly, NYSDOT prepared a technical memorandum with Transportation Systems Management (TSM) recommendations for immediate improvements at local street intersections in the Charleston area. TSM measures involving traffic signal timing, signing and pavement markings increase the efficiency and safety of the streets and intersections and can be implemented in the near term and have immediate benefits.

Overall, there are eight intersections that were identified by NYSDOT as having the potential to benefit from the application of TSM measures and the Department has been reviewing these plans accordingly. To date, several of the recommendation, most notably improved signage has already been implemented.

Intersection	TSM Measure	Results
Veterans Road West @ WSE Entrance/ Exit Ramps and Bricktown Way	Revise Traffic signal timing	Improves capacity and level of service
Veterans Road West @ Tyrellan Avenue and Centre Road	-Provide exclusive left-turn lane on northbound approach Add pavement markings	Improves efficiency
Boscombe Avenue @ KWVP Entrance/ Exit Ramps	Restrict northbound approach to left or right turns Revise signal timing and phasing	Improves capacity and level of service
Boscombe Avenue @ Tyrellan Avenue	Revise signal timing and phasing	Improve capacity and level of service
Veterans Road West @ Bricktown Way	Clear trees and brush at northwest corner	Improves intersection sight distance
Veterans Road West @ Englewood Avenue	Revise green signal indication Add signing and pavement markings Clear trees and brush and brush at north-east corner	Improves safety
Bloomingdale Road @ Drumgoole Road West and Veterans Road East	Add signing and pavement markings	Improves safety
Bloomingdale Road @ Woodrow Road	Add exclusive right-turn lane to north-bound approach Add exclusive lane to southbound approach	Improves capacity and level of service

One-Way Conversions
Summer 2007

Street	Improvement from two-way to:	Anticipated Implementation Date
North Mada Avenue	One-way S/B from Castleton Avenue to Forest Avenue	June-07
Walbrooke Avenue	One-way S/B from Castleton Avenue to Forest Avenue	June-07
Randall Avenue	One-way N/B from Forest Avenue to Castleton Avenue	June-07
Ridgewood Place	One-way S/B from Castleton Avenue to Forest Avenue	June-07
Midland Beach Phase 4	Limits: Mason Avenue on the north, Freeborn Street on the south, Midland Avenue on the west, Hunter Avenue on the east.	August-07
Midland Beach Phase 5	Limits: Olympia Boulevard on the north, Patterson Avenue on the south, Midland Avenue on the west, Hunter Avenue on the east.	September-07
Prall Avenue / Androvette Avenue	Direction to be determined- very narrow streets -vary from 30 feet to 18 feet	September-07

The Department frequently investigates one-way investigations citywide. These investigations are conducted for safety reasons such as speeding, improved neighborhood circulation or in response to community concerns about roadway operation. In Staten Island, one of the primary concerns in some residential neighborhoods is the narrow width of many of the two-way streets. On these streets, with parking on both sides of the street, the width of the travel lanes is minimized and traffic in many cases, cannot safely maneuver nor can two cars pass each other. In other cases, the existing two-way patterns may contribute to excessive traffic on certain streets. Last year, the Department completed 24 of these conversions, with the Midland Beach conversions the largest of those initiatives.

In response to community concerns, the Department has been investigating numerous locations for possible one way conversions. This has become one of the major activities of the Staten Island Task Force, and the Department continues to identify locations for these conversions.

For Calendar Year 2007, the Department has identified several locations (as listed to the right) and will continue to investigate other locations throughout the borough.

Hylan Boulevard Contra-Flow Lane

Summer 2007

In past years, the Department has made great strides in improving the operation and safety of Hylan Boulevard. This 14-mile corridor connects the island along the eastern shore, linking Rosebank and Tottenville. Throughout the corridor, there are many residential communities and active commercial districts that attract numerous vehicle trips. In addition, it serves as a primary commuter route. As a result of the nature and function of this corridor, Hylan Boulevard is frequently congested on both weekdays and weekends, especially during peak travel hours.

To date, measures implemented along this corridor include the introduction of peak period "No Standing" regulations to create an additional travel lane in the peak hours between Guyon Avenue and Steuben Street, new and extended left turn lanes at several critical intersections, additional traffic signals at critical locations, a two-way left turn lane between Lincoln and Midland Avenues, and the use of oversized large street name signs suspended over the roadway.

In its continuing efforts to further improve traffic safety and operations, the Department is studying the feasibility of contra-flow lanes to facilitate traffic flow during weekday peak periods. The use of contra-flow lanes on this corridor would offer the opportunity to add additional capacity to Hylan Boulevard without having to build new lanes Specifically a contra-flow lane would be implemented northbound (between Richmond Avenue and Steuben Street) in the morning peak and southbound (between Steuben Street and Richmond Avenue) in the evening peak. This project has the potential to improve mass transit and reduce vehicular traffic.

A consultant-led study, which began in April 2006 at a cost of $362,512, will evaluate whether the contra-flow lane would be designated for use by High Occupancy Vehicles (HOV's) and/or buses only or for use by all passenger vehicles, which should improve both vehicular and transit trips providing additional capacity on this congested roadway while seeking to maximize the use of the additional lane capacity. There are two phases of

this study. Phase A involves the feasibility and need of a contra-flow lane. In Phase B, the consultant will develop operational and mitigation measures to implement a contra-flow lane if it is found to be necessary and feasible from the conception level to final design. The Hylan Boulevard contra-flow study is a medium-term initiative of the Staten Island Transportation Task Force study.

The consultant has finalized the existing baseline and is starting to work on the contra-flow alternative analysis. This includes analysis of two distinct networks, a network with a BRT system in place and a second alternative with the BRT in place and with the contra-flow lane for the eastbound direction. Preliminary designs are expected by mid-2007 and a final report/design by the fall.

Right Turn on Red Study

Winter 2007

The practice of permitting turns on red at intersections is as old as the first traffic signals. When traffic signals were first installed in New York City between 1918 and 1925, traffic regulations permitted right turns on red (RTOR) after drivers came to a full stop. However, by 1927, with increased traffic volumes and pedestrian traffic, turns on red were generally prohibited in the City, except where permitted by signs. While RTOR is a national standard in most localities, it is restricted in New York City.

Unlike the rest of the City, there are a significant number of intersections in Staten Island where RTOR is permitted, typically on one approach, and many believe that this can be expanded to other signalized intersection to improve traffic flow. Of the 501 intersections that are signalized, 134 currently allow a RTOR. The purpose of this consultant study is to conduct an engineering analysis to identify all the signalized intersections and individual approaches where RTOR may be permitted on Staten Island.

Locations of Traffic Signals on Staten Island

Some of the concerns regarding RTOR include:

- Potential impacts on pedestrian safety, especially at locations where pedestrian volumes are substantial. These include areas with community facilities including schools, senior centers and commercial shopping areas.
- There is a concern about non-compliance with the "Stop" portion of the regulation. Several studies indicate that over 50% of all motorists fail to make a full "Stop" before executing their turning movement.
- Under certain geometric conditions, ample "corner sight distances" may not be available and could lead to increased right angle crashes.
- Geometric constraints involving turning radius for trucks and other large vehicles, where the turning vehicle may encroach on several lanes when performing a turning movement.

- The magnitude of conflicting traffic volumes may not allow for the safe execution of the RTOR due to insufficient gaps in the intersection traffic flow.

It is expected that traffic delays will subside with the installation of RTOR. The Right Turn on Red Study, which began in mid-June 2006 was expected to last 12 to 15 months, at a cost of $2.2 million. The initial step in evaluation of intersections for RTOR consideration will include collection of existing data and research of relevant studies developed for RTOR opportunities. This will allow for the establishment of screening and design criteria that will be utilized in the evaluation of each of the intersections. Following a complete engineering analysis of all potential intersections, the consultant will submit a recommended list of candidate intersection and their approaches that are suitable for allowing RTOR. The consultant will be tasked to evaluate the opportunity for permitting RTOR and make recommendations for all 501 signalized intersections throughout the borough. The use of RTOR can provide for the efficient movement of traffic by reducing intersection stop delay and vehicular fuel consumption.

It is anticipated that study will be completed in the winter of 2007.