

IMPACT ANALYSIS – PROPOSED CREBILLY II DEVELOPMENT

OVERALL CALLS FOR POLICE SERVICE:

As indicated in the police department's original impact analysis (dated 01/23/17), the proposed development would in all likelihood have a minimal impact on the overall staffing of the police department and the services offered to the three townships served by it. However, it is important to note that the police department's budget is based upon a system in which each township's share of the overall budget is based upon the amount of time that the officers spend in each township addressing calls for service. Due to the financial impact on Westtown Township that a change in its share of the police department budget could have, examination of this issue should be considered. As noted in the original analysis, the expected calls for service within the new development would add a minimum of 1% to the Township's calls for police services. However, the police department anticipates numerous traffic concerns associated with the development – particularly as specified below. In the event that these concerns are not addressed, the police department anticipates a considerable increase in traffic complaints from residents of both Westtown and Thornbury Townships and a potential increase in crashes.

TRAFFIC CONCERNs:

1. **TRAFFIC CALMING DEVICES:** A significant amount of traffic travels on Route 202 in Westtown Township. Traffic backlogs frequently occur, particularly between Skiles Boulevard and Route 926, and many motorists subsequently utilize side streets to circumvent the traffic. The connector road in the proposed development creates the potential for vehicles to exit at the Skiles Boulevard jug handle and travel in a relatively unimpeded manner through multiple residential neighborhoods to the intersection of Bridlewood Boulevard and Rt. 202. The police department is confident that this traffic pattern will result in a substantial increase in traffic complaints in both Westtown and Thornbury Townships and a potential increase in crashes.

Although the engineering study considered the current pattern of crashes, it is important to note several items:

- The crashes included in the calculation were only reportable crashes (i.e., involving injury or vehicle damage which necessitated towing); this calculation was conducted because only reportable crashes are reported to PennDOT while non-reportable crashes are not. The distinction is important because only approximately 31.4% of the crashes that the department responded to between 2016 and 2018

were reportable. Based upon these statistics, any increase in reportable crashes will likely result in a proportional increase in all types of crashes – impacting Westtown Township's costs for police services.

- The examination of crashes is based upon current traffic patterns. By substantially increasing the traffic on roadways that currently experience limited traffic, it is difficult to predict the crash trends with any reliability.

RECOMMENDATIONS:

- Consideration should be given to the installation of traffic calming devices such as islands, chicanes, etc. (excluding speed humps or bumps) at the entries to the development. Specifically, traffic calming devices should be installed at the following entrances to the development: Road K (at W. Pleasant Grove Road), the Collector Road (at W. Pleasant Grove Road), and the Route 926 entrance.
 - Additionally, consideration should be given to installing at least one additional traffic calming device along the length of the Collector Road. These device(s) would slow speeds and help to prevent the occurrences of crashes involving residents of the development attempting to exit/enter the Collector Road.
 - Although this development will be contained in Westtown Township, it is extremely likely that the traffic patterns for the residential neighborhoods in Thornbury Township (along Bridlewood Boulevard) will be impacted and therefore, attempts to include traffic calming devices for that roadway should be strongly considered.
2. ACCESS TO DEVELOPMENT FROM W. PLEASANT GROVE ROAD: At the current time, southbound traffic from Route 202 turning on to W. Pleasant Grove Road utilizes the paved portion of the roadway to the right of the fog line as a "shoulder" to execute the turn. The shoulder at its widest point is nine feet and the nine foot width is only present for a short distance before W. Pleasant Grove Road.

Although it appears that the development proposal includes a right turn lane for the development, this improvement cannot be overemphasized. Currently, there are 46 residences along W. Pleasant Grove Road (13 on Pleasant Grove Road and 33 on Hidden Pond). By adding an additional 317 residences, the volume of traffic will certainly increase. However, it should also be noted that the additional residences will also specifically result in

additional commercial vehicle traffic: trash removal, school buses, landscaping services, delivery of goods, etc. Since the development will increase the amount of traffic turning on to W. Pleasant Grove Road, including commercial vehicles, there is a potential for it to create more crashes due to its current design.

RECOMMENDATIONS:

- Consideration should be given to widening and lengthening the shoulder on southbound Route 202 approaching W. Pleasant Grove Road. The widening will reduce the likelihood that vehicles turning on to W. Pleasant Grove Road will encroach into the straight-through lanes of vehicles traveling at 45 mph or higher.
- Since PennDOT does not currently recommend the use of deceleration lanes, the police department's prior recommendation to create one at this location is unlikely to be approved by PennDOT. However, it is important that vehicles (particularly large commercial vehicles) need to have an adequate distance and space to move their vehicles completely out of the traffic lane – particularly based upon the fact of the slight grade that occurs prior to W. Pleasant Grove Road.
- Based upon these concerns, it is recommended that the right turn lane commence at the jug handle at Skiles Boulevard and continue to W. Pleasant Grove Road to permit vehicles to properly decelerate and move completely out of the travel lane.

3. INTERSECTION OF S. NEW STREET AND W. PLEASANT GROVE ROAD:

The proposed development will result in an increased overall volume at the intersection. In particular, it is highly likely that there will be an increase in vehicles attempting to turn left from Pleasant Grove onto S. New Street. These changes will create a potential for an increase in crashes due to the current speed limit on S. New Street (35 mph) and the crest of the hill on S. New Street that is south of the development.

RECOMMENDATION:

Consideration should be given to controlling the intersection of S. New St. and W. Pleasant Grove Rd. through either a traffic light or a 3-way stop sign.

4. PLEASANT GROVE ROAD:

It is anticipated that the proposed development will result in a significant increase in heavy vehicles (school buses, delivery vehicles, garbage trucks, and other commercial vehicles accessing the development) and these vehicles will in all likelihood travel on W. Pleasant Grove Road.

RECOMMENDATIONS:

An engineering study should be conducted to:

- determine if the roadway can handle the increased frequency of commercial vehicles and their associated weights.
- determine if the width of the roadway is adequate for large vehicles to safely travel, particularly if moving in opposite directions.
- determine if the length of vehicles may need to be restricted due to the intersection of S. New St. and the ability of vehicles of length to be able to turn without encroaching into other lanes.

5. INTERSECTION OF PLEASANT GROVE, DUNVEGAN DRIVE, AND ROAD K:

The proposed development plan indicates that Road K, an access road, will be constructed at the current intersection of W. Pleasant Grove Road and Dunvegan Drive. Due to the increased volume and anticipated increase in speeds on Pleasant Grove Road, there is the potential for an increase in crashes due to sight-line issues.

RECOMMENDATION:

The intersection should be examined to determine the need for a 4-way stop.

6. RT. 926, COLLECTOR ROAD, S. NEW STREET:

Although the proposed plan appear to indicate that a traffic signal will be placed at the intersection of the Collector Road and Rt. 926, it is the police department's opinion that the signal is critical. Currently, the traffic backs up on Rt. 926 in the area of Bridlewood Boulevard; the increase in traffic volume will exacerbate the issue and effectively gridlock the area.

Additionally, the proposed plan will likely result in increased volume on S. New Street which will also exacerbate the traffic conditions during rush hour.

Consideration should be given to conducting traffic light studies that would examine how traffic flow can be maximized in this area. For example, the studies

could examine whether a staggered green light for southbound S. New Street improve or worsen congestion.