# Malin Road Extension Feasibility Study

Prepared for The Borough of Malvern and East Whiteland Township

















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with

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# 1. Introduction

This engineering feasibility study was completed to evaluate the extension of Malin Road between its current southern terminus (just south of Lancaster Avenue) to Warren Avenue in the vicinity of the existing industrial park and SEPTA train station. The consultant team selected for this project and responsible for the preparation of this study included:

McMahon Associates, Inc.
Prime Consultant | Highway Design/Traffic Studies

Stell Environmental Enterprises, Inc.
Sub-Consultant | Environmental Screening

Glackin Thomas Panzak, Inc. Sub-Consultant | Land Use Planning

This study was funded by PennDOT through the Efficient Growth for Growing Suburbs Program (EGGS Program), which was administered by the Delaware Valley Regional Planning Commission (DVRPC). The EGGS program seeks to improve growth management and community design and to optimize the efficiency of their existing and planned transportation network, through better linking land use and transportation planning.

# Goals and Objectives

Both Malvern Borough and East Whiteland Township seek to improve access to the industrial areas along Warren Avenue and to SEPTA's Malvern Train Station from Lancaster Avenue (U.S. Route 30) and points to the north in East Whiteland Township with a new roadway connection. Today, there is not an appropriate route to accommodate trucks travelling between this industrial area and major routes to the north such as U.S. Route 30, U.S. Route 222, and PA Route 29. As a result of the poor access to this area, truck traffic, as well as commuter traffic destined to/from the Malvern Train Station, must travel through neighborhoods and along narrow, residential roads that are not designed or intended to accommodate heavy vehicles or the level of traffic these streets carry today.

The purpose of this new roadway would be to provide a route for trucks and commercial traffic to access the industrial area and redirect this traffic away from surrounding residential neighborhoods, as well as to enhance and protect the transit-oriented village/town development patterns that characterize parts of the study area and improve access to transit for commuters. Improvements to existing roadways (such as Warren Avenue, Old Lancaster Road, Broad Street and Bridge Street) to accommodate truck, commercial, commuter, and additional development potential have not been analyzed in detail by this study due to lack of community support since these improvements would encourage additional non-local to utilize residential and village roadways and require improvements along these streets that would have significant impacts to multiple residence and the neighborhood.

This feasibility study evaluates the engineering, environmental and land use implications of a proposed one-mile roadway connection between Malin Road in East Whiteland Township and to Pennsylvania Avenue. This study also considered alternative roadway alignments, evaluated traffic impacts, and provided cost estimates for design and construction of the new roadway.

Lastly, this study also evaluated benefits and challenges related to the extension of Three Tun Road to Malin Road in order to maximize efficiency of the current road network. This extension would provide additional access to the existing commercial/industrial properties along Three Tun Road as well as provide a relief route for traffic destined between Lancaster Avenue (to the east) and PA Route 352 (to the south), which today travels through the congested intersection of these two roadways. Completion of the Three Tun Road extension was evaluated by this study as a potential supplement to the Malin Road extension, although it was determined through the course of the study that it could be completed independently of the Malin Road extension.

# Study Area

The new roadway segments contemplated with the extension of Malin Road will traverse portions of East Whiteland Township and the Borough of Malvern in Chester County, Pennsylvania. The easterly extension of Three Tun Road from its current terminus to Malin Road will be located completely in East Whiteland Township. Generally, this study evaluates those immediate areas impacted by the new roadway connections; however, the traffic operational implications of the new roadways connections extends beyond the immediate study area and will affect traffic characteristics and operations, as well as travel routes, along the surrounding roadway network.

**Figure 1** illustrates the immediate study area, which was the primary focus of this study and is most broadly defined as the area bound by Lancaster Avenue (U.S. Route 30) to the north, Warren Avenue to the east, King Street to the south, and Sproul Road (PA Route 352) to the west.



Figure 1 | Study Area Map

As noted, the impacts of the new roadway extensions were evaluated beyond the immediate study area and the study intersections are as follows:

- 1) Lancaster Avenue and PA Route 352
- 2) PA Route 352 and Three Tun Road
- 3) Lancaster Avenue and Malin Road
- 4) Lancaster Avenue and PA Route 401
- 5) Lancaster Avenue and PA Route 29
- 6) Lancaster Avenue and Old Lincoln Highway
- Old Lincoln Highway and Old Lancaster Road
- 8) Swedesford Road/Malin Road and PA Route 401
- 9) Warren Road and Quaker Lane
- 10) Warren Road and Pennsylvania Avenue
- 11) Warren Road and King Road

### Study Process

The completion of this feasibility study was a collaborative effort between the consultant team and the Study Advisory Committee (SAC) to evaluate the feasibility of a new roadway extension of Malin Road. The SAC was comprised of representatives of Malvern Borough, East Whiteland Township, DVRPC, the Chester County Planning Commission (CCPC), PennDOT, and SEPTA. The consultant team and SAC held several project status meetings during the course of the study. In addition, a walking tour of the study area, including portions of the potential roadway alignments, was conducted and included the SAC.

The consultant team also presented preliminary study findings to the Malvern Borough's Comprehensive Plan Update Committee and the East Whiteland Township Planning Commission. At these meetings, the consultant team discussed the project goals, purpose, initial findings, and potential impacts and benefits.

This feasibility study represents the first of many planning and engineering steps needed if the Malvern Borough and East Whiteland Township continue to mutually pursue the extension of Malin Road. Further detailed studies, engineering, and public involvement will be involved in any potential future aspects of this project.