

**TOWNSHIP OF UPPER SAUCON
LEHIGH COUNTY, PENNSYLVANIA
ORDINANCE NO. 175**

**AN ORDINANCE OF THE BOARD OF SUPERVISORS OF UPPER SAUCON
TOWNSHIP, LEHIGH COUNTY, PENNSYLVANIA, PROVIDING A
DEFINITION OF CONSTRUCTION TRUCKS AND MOTOR CARRIER
VEHICLES, PROHIBITING THE OPERATION OF CONSTRUCTION TRUCKS
AND MOTOR CARRIER VEHICLES ON EAST VALLEY ROAD, AND
PROVIDING FOR SIGNS AND PENALTIES**

A. LEGISLATIVE FINDINGS.

WHEREAS, East Valley Road (T-458) in Upper Saucon Township (hereinafter, "Township") is a 2-lane north/south local road, approximately 6,684 feet (1.26 miles) in length serving primarily a residential area; and

WHEREAS, Section 320 of the Township Zoning Ordinance classifies East Valley Road (hereinafter, "EVR") by default a local road; and

WHEREAS, EVR runs between Camp Meeting Road (a collector road) and PA Route 309 (an arterial road), and intersects numerous driveways, access roads and public streets serving residential developments; and

WHEREAS, EVR primarily carries motorists from local neighborhoods to state owned and maintained regional roadways; and

WHEREAS, there are no primary truck destinations or originations along EVR; and

WHEREAS, State-owned and maintained roadways provide safer, alternative truck routes; and

WHEREAS, due to ongoing development, concerns have been expressed about the ability of EVR to safely handle truck traffic; and

WHEREAS, because of these concerns, the Township engaged its engineer, Hanover Engineering Associates, Inc. (hereinafter, "Engineer") to perform an engineering and traffic study of EVR to determine whether a truck traffic restriction should be imposed; and

WHEREAS, the Engineer issued a report, dated September 2021, a copy of which is attached hereto as **Exhibit A**; and

WHEREAS, the Engineer determined, among other things, that a) adjacent residential land uses create truck safety concerns on a roadway with limited width and without shoulders, b) the pavement is of inadequate structural capacity and may be seriously damaged by truck use and c) there exists inadequate turning radii and horizontal width to support truck traffic; and

WHEREAS, the Engineer concluded that a truck prohibition is justified for EVR and that appropriate signage be installed; and

WHEREAS, the Pennsylvania Vehicle Code, 75 Pa.C.S.A. Section 101, et. seq. (hereinafter, "Vehicle Code") at Section 4902 authorizes the Township Board of Supervisors (hereinafter, "Supervisors") to place restrictions (with appropriate exemptions) on the weight or size of vehicles operated on certain roadways consistent with the results of an appropriate engineering and traffic study; and

WHEREAS, Pennsylvania Department of Transportation Publication 212, at Section 212.117(b), authorizes prohibitions on the weight, kind, size or class of vehicles operated on certain roadways in accordance with the conclusions of such studies; and

WHEREAS, the Supervisors find that the placement of restrictions on the class, weight and size of trucks on EVR is consistent with the recommendations contained in **Exhibit A**, PennDOT warrants, site conditions, and the public health, safety and general welfare.

IT IS HEREBY ENACTED AND ORDAINED by the Board of Supervisors of Upper Saucon Township, Lehigh County, Pennsylvania, as follows:

B. SUBSTANTIVE PROVISIONS.

Section 1: Definitions

(a) Except where the context clearly indicates to the contrary, the following words and phrases when used in this Ordinance shall have the following definitions.

Construction Truck. A three or four axle truck engaged in construction operations.

Local. With respect to local deliveries, pickups or services, the term "local" shall mean properties to which access is gained from EVR.

Motor Carrier Vehicle

(1) A truck, truck tractor or combination having a gross vehicle weight rating, gross combination weight rating, registered gross weight, registered combination weight or actual gross weight of 17,001 pounds or more.

(2) A truck, truck tractor or combination engaged in interstate commerce and having a gross vehicle weight rating, gross combination weight rating, registered gross weight, registered combination weight or actual gross weight of 10,001 pounds or more.

(b) If any word or phrase used in this Ordinance is not defined herein, but is defined in Section 102 of the Vehicle Code, such word or phrase shall have the same meaning as ascribed therein.

Section 2: Restrictions on Vehicle Size

Pursuant to the authority granted by Section 4902 of the Vehicle Code, it shall be unlawful for any person to operate a Construction Truck or Motor Carrier Vehicle on any part of the 1.26-mile segment of East Valley Road running between northbound State Route 309 and Camp Meeting (SR 2049).

Section 3: Exclusions from Prohibition

The following vehicles shall be exempt from the restrictions imposed under Section 2 of this Ordinance:

- (a) School buses,
- (b) Emergency vehicles, and
- (c) Construction trucks or motor carrier vehicles making local deliveries or pickups or providing local services.

Section 4: Notice of Restrictions

Appropriate signs shall be erected and maintained along EVR to provide notice of the truck restriction. Signage type, size and location shall be in accordance with **Exhibit A**.

Section 5: Violations and Penalties

Any person convicted of a violation of this Ordinance, or any supplement or amendment hereto, shall be liable to pay a penalty and costs of prosecution (including legal fees) as set forth in the Vehicle Code.

Section 6: Effective Date

This Ordinance shall become effective five (5) days after passage.

ENACTED AND ORDAINED this 14th day of February, 2022, by the Board of Supervisors of the Township of Upper Saucon, Lehigh County, Pennsylvania, in lawful session duly assembled.

[Signatures Follow]

UPPER SAUCON TOWNSHIP
BOARD OF SUPERVISORS



Chairman



Vice Chairman



Supervisor

ATTEST:



Secretary



Supervisor

Supervisor

Exhibit A

Engineering and Traffic Study

**For a Truck Restriction on
Valley Road, T-458 (East)**



**In
Upper Saucon Township
Lehigh County**

Prepared by:

**Hanover Engineering Associates, Inc.
252 Brodhead Road, Suite 100
Bethlehem, PA 18017-8944
(610) 691-5644 Fax: (610) 691-6968**

September 2021

TABLE OF CONTENTS

Introduction	1
Existing Roadway Conditions.....	1
Existing Traffic Conditions.....	2
Roadway Geometrics And Land Use	2
Alternative Routes	6
Conclusions/Recommendations.....	7

Roadway Pictures	3-6
Map of Proposed Sign Installation	Following Report
PennDOT Approved Sign Specifications.....	Following Report

INTRODUCTION

This Engineering and Traffic Study has been prepared by Hanover Engineering Associates, Inc., as Township Engineer for Upper Saucon Township, to investigate the need for a truck traffic restriction along Valley Road, T-458 (East) from SR 309 north/east to Camp Meeting Road, SR 2049 in Upper Saucon Township, Lehigh County.

Valley Road (East) connects Route 309 (SR 0309) to Camp Meeting Road (SR 2049). Valley Road (East) is a 35 mph, 2-lane north/south roadway within a rural residential area, approximately 6,684 feet (1.26 mile) in length. This roadway is owned and maintained by Upper Saucon Township. Upper Saucon Township is concerned about truck traffic using this road as a cut-through to the State owned facilities of SR 0309 and SR 2049.

A truck traffic restriction should be considered where either the existing roadway conditions and/or the existing traffic conditions are poorly suited for trucks. **This study was prepared in accordance to Pennsylvania Department of Transportation (PennDOT) Publication 212, *Official Traffic Control Devices*, Subchapter B, Section 212.117 Weight, size and load restrictions.** As part of this report, a review of the existing roadway and traffic conditions includes an evaluation of pavement condition, roadway alignment, roadway geometry, compatibility with surrounding land use and the availability of alternative routes were performed for Valley Road (East) to determine if through trucks should be prohibited for the protection and safety of the public. Applicable references and supporting data are provided at the end of this report

EXISTING ROADWAY CONDITIONS

Regarding highway conditions, the grounds for a truck restriction under state law and regulation must meet the following criteria.

PennDOT Publication 212 Section 212.117(b) *Traffic on a highway may be prohibited or restricted by weight of vehicle, or kinds or classes of vehicles when warranted by an engineering evaluation. Engineering evaluation may be based on structural analysis, testing engineering judgment or a combination thereof. A restriction is warranted when one or more of the following conditions are present:*

- (1) The highway pavement or shoulder have inadequate structural capacity or have been weakened due to deterioration, high traffic volumes or climatic condition, and may be seriously damaged unless a restriction is imposed.*
- (2) An engineering evaluation of previous similar climatic condition on the highway or on similar highways indicates that vehicles over a certain weight should have been prohibited.*

PennDOT Publication 212 Section 212.117(c)(2) *A highway has inadequate turning radii, horizontal width or creates concerns for vehicles with low ground clearance at one or more locations.*

Valley Road (East) Street is a rural local road that currently consists of bituminous surface in fair to good condition; however, base course and sub-grade are of unknown materials, with “alligator” cracking prevalent in some areas of roadway, most likely due to poor roadway base drainage. South of the Saucon Creek Bridge, for approximately 0.9 miles, Valley Road (East) is approximately 19 feet wide with +/- 9½ feet wide travel lanes and 0-2 foot wide unimproved shoulders. Pavement markings include a double yellow center line with white edge lines. As currently constructed, Valley Road (East) predominantly does not meet the minimum criteria for travel lane widths on rural local roads set forth in PennDOT Publication 13M, Design Manual Part 2

(DM-2). Design standards require a minimum travel lane width of 10 feet for local roadways with a speed limit of 30 mph and an ADT between 401 to 1,500 vehicles. Existing shoulder widths also do not meet the minimum recommendation of 5 feet on each side for this classification of roadway.

EXISTING TRAFFIC CONDITIONS

Regarding traffic conditions, the grounds for a truck restriction under state law and regulation must meet the following criteria:

PennDOT Publication 212 Section 212.117(d) *Traffic on a highway or bridge may be prohibited or restricted by weight or size of vehicle, or kinds or classes of vehicles when, an engineering evaluation of the horizontal and vertical alignment, prevailing traffic speeds, compatibility of the various types of traffic, history of vehicle crashes or vehicular characteristics, indicates that the movement of certain vehicles constitutes a safety hazard. Restrictions may include weight; height, width or length of vehicles or their loads; types of cargo; speed or gearing; stopping requirements; specified travel lanes; and hours of operation.*

ROADWAY GEOMETRICS AND LAND USE

The width of the roadway, predominant lack of shoulders, proximity of obstructions within the clear zone and adjacent developments were reviewed as part this study to determine if roadway geometrics and conditions along Valley Road (East) support a truck prohibition.

The horizontal and vertical alignment of the roadway is unremarkable; however, the constrained roadway width and lack of shoulders creates conflicts within the roadway clear zone, consisting of structures, utility poles, trees and vegetation. Adjacent land use is predominantly residential to the east and southwesterly portion of the roadway, promoting concerns for pedestrians and bicyclists required to use the cartway area of the roadway. Three residential roadways intersect Valley Road (East) in this area, including East Hopewell Road, West Saucon Avenue and Courtney Drive. Limited roadway width along Valley Road (East) precludes trucks from making turning maneuvers without encroaching upon opposing lanes of traffic within these residential intersections. The following pictures show current roadway conditions along Valley Road (East).

PICTURE #1

Shows no shoulders with utility poles and vegetation in close proximity to the roadway



PICTURE #2

Shows no shoulders with utility poles, trees and vegetation in close proximity to the roadway.



PICTURE #3

Shows no shoulders with trees and vegetation in close proximity to the roadway.



PICTURE #4

Shows no shoulders with trees, vegetation and structures in close proximity to the roadway.



PICTURE #5

Shows 0'-2' shoulders with trees, vegetation and structures in close proximity to the roadway.



PICTURE #6

Shows no shoulder/drop-off with erosion adjacent to the roadway.



PICTURE #7

Shows no shoulders with “alligator” cracking repair along the roadway near Courtney Street.

**ALTERNATIVE ROUTES**

A review of the highway network was conducted to determine if an alternative route or routes exist if trucks are prohibited on Valley Road (East). Where feasible, truck traffic should be directed towards roadways that have the ability to better accommodate these additional traffic volumes without an excessive increase in the overall length.

Establishment of an alternative route is based on the following criteria.

PennDOT Publication 212 Section 212.117(f) *An alternate route shall be established whenever vehicles are prohibited under subsection (a) or (b) on either a numbered traffic route or a State-designated highway on the National Highway System, as established by the Federal Highway Administration, when the following apply:*

- (1) A reasonable alternate route exists which is not readily perceived by drivers.*
- (2) The alternate route can legally, safely, structurally and physically accommodate the weight and size of vehicles and their loads that are being detoured.*
- (3) Five or more vehicles per day are estimated to be prohibited from using the original route*

Because Valley Road (East) is not a numbered traffic route or a State-designated highway on the National Highway System, an alternate truck route does not need to be established to accommodate truck traffic. Although a truck route does not need to be established, we still reviewed the local roadway network to determine if trucks have adequate access and circulation for this area of Upper Saucon Township. As previously discussed, Valley Road (East) is a locally owned and maintained roadway which intersects State owned and maintained roadways at either end. There are no truck origination or destination locations along Valley Road (East). Currently, trucks may utilize State owned and maintained PA Route 309 (SR 0309), Center Valley Parkway (SR 2044), Saucon Valley Road (SR 2036), or to a lesser extent, Camp Meeting Road (SR 2049). Please refer to the location map following this report.

CONCLUSIONS / RECOMMENDATIONS

In accordance with Pennsylvania Department of Transportation (PennDOT) Publication 212, *Official Traffic Control Devices*, Subchapter B, Section 212.117 a truck prohibition is justified for Valley Road (East) for the following reasons:

1. Adjacent land use is primarily residential creating safety concerns for truck traffic intermixing with pedestrians or bicyclists along a limited width roadway without adequate shoulders.
2. There are no primary truck originations or destinations along the roadway.
3. Bituminous pavement appears to have inadequate structural capacity and may be seriously damaged unless a restriction is imposed.
4. Valley Road (East) predominantly has inadequate turning radii, horizontal width, and no shoulders creating concerns for large or heavy vehicles along the majority of the roadway..
5. Truck traffic can utilize State owned and maintained roadways for safer alternative routes.

Valley Road, T-458 (East)

Truck Prohibition Signage Plan

2044

Walter J. Deal Hwy

Lake Thomas

Center Valley Pkwy

SAUCON VALLEY RD



EXCEPT
LOCAL
DELIVERIES

CAMP MTG RD

18034

VALLEY RD (EAST)

COURTNEY DR

W SAUCON AVE

E HOPEWELL



EXCEPT
LOCAL
DELIVERIES

309

Lanark Rd

3000 ft

Google Earth

© 2021 Google

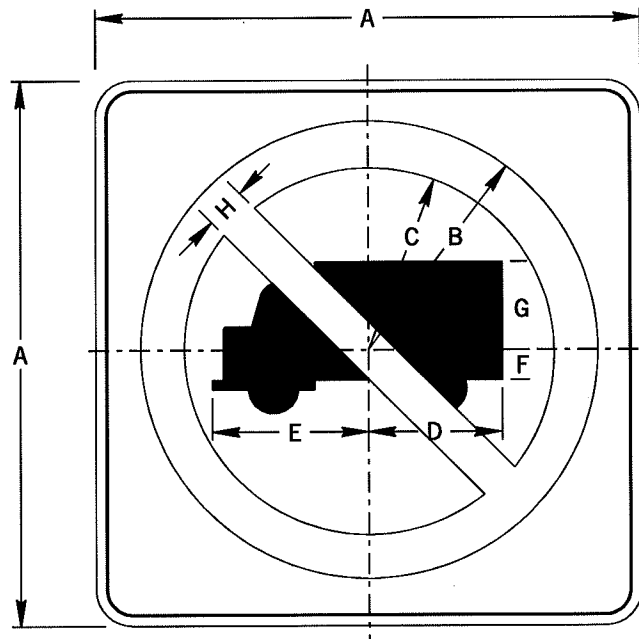


R5-2

NO TRUCK SIGN

(a) Justification. The No Truck Sign (R5-2) shall be authorized for use to prohibit trucks, except that such vehicles may be operated thereon for the purpose of delivering or picking up materials or merchandise. When local truck deliveries are permitted, the Except Local Deliveries Sign (R5-2-3) shall be mounted beneath the R5-2 sign.

(b) Size. The standard size of the R5-2 sign shall be 24" x 24".



DIMENSIONS - IN										
SIGN SIZE A x A	B	C	D	E	F	G	H	MAR- GIN	BOR- DER	BLANK STD.
24" x 24"	10.5	8.5	6.5	7.5	1.8	4.3	2	0.4	0.6	B3-24
30" x 30"	13.2	10.6	8.1	9.4	4.7	5.3	2.6	0.4	0.8	B3-30
36" x 36"	15.8	12.8	9.8	11.3	5.6	6.4	3	0.6	1	B3-36
48" x 48"	21	17	13	15	7.5	8.5	4	0.8	1.2	B3-48

COLOR:

SYMBOL AND BORDER:
BLACK (NON-REFLECTORIZED)

CIRCLE AND SLASH:
RED (REFLECTORIZED)

BACKGROUND:
WHITE (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION

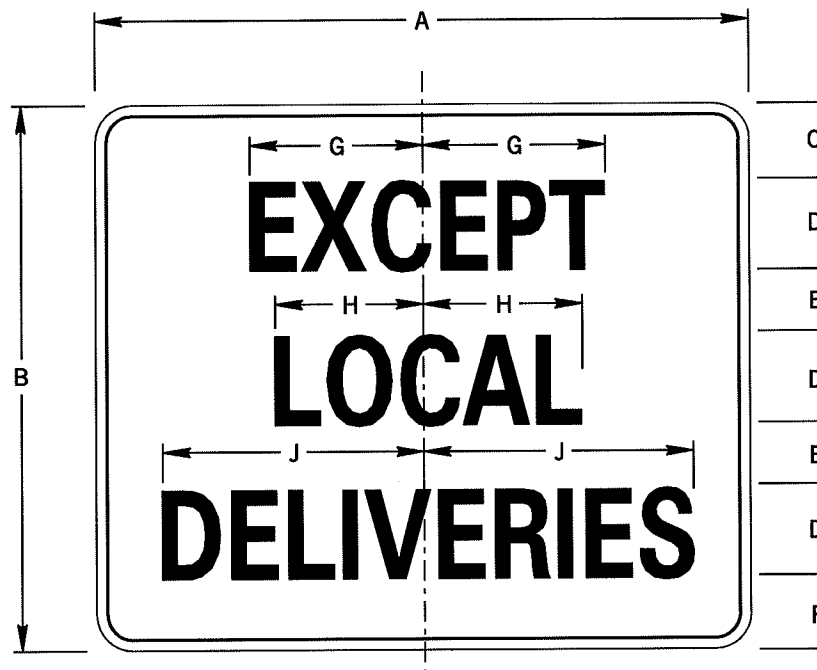
By : *John C. Rowe* Date : 02-29-12
Chief, Traffic Engineering and Permits Section
Bureau of Maintenance and Operations

R5-2-3

EXCEPT LOCAL DELIVERIES SIGN

The Except Local Deliveries Sign (R5-2-3) may be used below the No Trucks Sign (R5-2), Weight Limit () Tons Sign (R12-1), and the Except Combinations () Tons Sign (R12-5A) when kinds or classes of vehicles are prohibited except for local deliveries. Local deliveries are defined as deliveries going to or from a residence, commercial establishment, or farm located on a posted highway or which can be reached only via a posted highway. The R5-2-3 sign shall not, however, be used when a bridge or other structure is not capable of supporting the legal weight limit. The term "RESIDENTIAL" may be substituted for "LOCAL" if there is a commercial development in the area and satisfactory alternate access roadways exist for the commercial development.

When used the R5-2-3 sign shall be mounted below the R5-2, R12-1, or R12-5A sign. The R5-2-3 sign shall be the same width as the sign it supplements.



DIMENSIONS - IN										
SIGN SIZE A x B	C	D	E	F	G	H	J	MAR- GIN	BOR- DER	BLANK STD.
24" x 18"	2.5	3C	2	2.5	6.1	5.1	9.3	0.4	0.4	B5-2418
36" x 30"	4.1	5C	3.4	4.1	10.1	8.4	15.4	0.6	0.6	B5-3630
48" x 36"	5	6C	4	5	12.1	10.2	18.5	0.6	0.8	B5-4836

COLOR:

LEGEND AND BORDER:
BLACK (NON-REFLECTORIZED)

BACKGROUND:
WHITE (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION

By : Alan C. Rowe Date : 02-29-12
Chief, Traffic Engineering and Permits Section
Bureau of Maintenance and Operations