CHAPTER 11

SIGNS, RIGHT-OF-WAY, PAVEMENT MARKINGS

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11.1 POLICIES AND RESPONSIBILITIES

GENERAL REGULATIONS

The regulations established by the Department of Transportation for official traffic control devices are found in <u>67 Pa. Code, Chapter 212</u>.

REMOVAL OF OTHER THAN OFFICIAL TRAFFIC SIGNS

Existing signs of nonstandard design or application shall be removed and replaced when needed by new standard signs as rapidly as is economically feasible. If you are aware of maintenance problems involving signs installed by others, you should contact the responsible party. In the case of a missing or knocked down Stop sign, if the responsible party cannot be contacted in an expedient manner, it is desirable to temporarily install a Department sign until the appropriate party can install their sign.

REMOVAL OF INTERFERING LIGHTS

The Secretary of Transportation and local officials, in their respective jurisdictions, shall have the authority to cause the removal of all colored or flashing light signs or other lights, signs or markings so located as to interfere with traffic or to be confused with or to obstruct the view or effectiveness of official traffic control devices.

Any such devices that are observed which appear to interfere with traffic or to be confused with or to obstruct the view or effectiveness of official traffic control devices should be reported to the Engineering District for further review and/or action.

SIGNS AND BANNERS ACROSS OR WITHIN THE LEGAL LIMITS OF A HIGHWAY

It shall be unlawful to place any sign, banner or advertising matter of any kind whatsoever on or across any State highway or on or across any structure within the legal limits of any State-designated highway without first having the local municipality pass a resolution designating their intent to erect such a sign or banner and have a confirmation letter from the Department that we have the resolution on file.* See <u>Pub. 212 Section 212.7</u> and <u>Pub. 46, Chapter 2.10.</u>

Any such sign, banner or advertising matter placed without the consent of the Department shall be declared to be a public nuisance and may be removed by the Department with or without notice to the persons responsible for the placing of such sign.

If such a device is observed, it should be reported to the Engineering District for review and/or action.

11.2 STANDARDIZATION OF SIGNS

Each highway sign shall be used only for the specific purpose prescribed for in Department Regulations and Policies. Before a new highway or any detour or temporary route is opened to traffic, all necessary signs should be placed.

Guide signs directing traffic to and on temporary routes or detours or signs erected indicating road conditions or restrictions should be removed when no longer applicable. Uniformity of application is as important as standardization.

EXCESSIVE USE OF SIGNS

Care should be taken when placing regulatory or warning signs to effectively control traffic. Excessive or capricious use of signs will reduce their effectiveness.

11.3 MAINTENANCE OF SIGNS

MAINTENANCE OF SIGNS ADJACENT TO LIMITED ACCESS HIGHWAYS

Owners or occupants of abutting property or the traveling public have no right of ingress or egress to, from, or across a limited access highway. Outdoor advertising devices or other facilities which are off the right-of-way must be serviced from the service roads adjacent to the highway or from the network of public highways in the area.

Any violations noted should be brought to the attention of our Office of Chief Counsel after warning violators that they are subject to prosecution as trespassers.

REPLACEMENT OF SIGNS

A major responsibility of maintenance forces is the replacement and repair of signs and posts. A sign or post must be replaced when the sign or post has been damaged or when the legibility of the sign is impaired by fading of the sign face or by loss of retroflectivity. The history of all sign maintenance that involves the replacement of a sign must be captured in the Plant Maintenance System (PM) thru the use of a sign (SI) notification.

The Federal Highway Administration has mandated that all states have a method to maintain their traffic signs so that they comply with the minimum retroreflectivity levels found in the <u>MUTCD</u>. The Department has elected to use the Expected Sign Life Method to maintain the minimum level of retroreflectivity of our traffic signs. Traffic signs fabricated from Type III retroreflective sheeting material can be expected to give a minimum of 18 years of satisfactory performance.

The Plant Maintenance System provides a database of all the signs in each county and their associated ages. Each county will establish a cycle replacement program so that 1/18 of the Types B, C, E and F signs in their county are replaced each year. Larger Type A ground mounted signs and overhead signs will also be replaced on an 18-year cycle using a combination of construction and county maintenance resources.

Particular emphasis is to be placed on assuring necessary sign repairs are made on limited access highways following the winter maintenance season.

Damage to ground-mounted signs on Type B, C or E supports are to be repaired immediately.

Any damage to the larger Type A signs that impair legibility may require replacement steel in addition to new signs. Type A signs may be obtained from the Sign Shop, while steel and associated hardware will be available either through contract or directly from steel fabricators and sign suppliers. All springtime repairs should be completed by Memorial Day of each year. Because material orders may take up to 6 weeks, necessary Type A sign repairs should be identified by March 31st of each year so material may be ordered. Sign vegetation removal and maintenance should also be performed in accordance with existing policy found elsewhere in this manual.

As always, any subsequent damage to interstate/expressway signs that follows completed springtime repairs should also be repaired in a timely manner throughout the year. This includes completing appropriate repairs or replacements before the winter season begins when our ability to address them is lost until the following year.

The District Traffic Unit will be responsible for performing engineering studies to identify new or revised traffic signs or to relocate or remove existing signs. County maintenance forces are responsible for routine maintenance of existing signs.

FIELD REPAIRS AND STRAIGHTENING

The County Sign Foreman will determine what field repairs will be done. This decision must be based on good judgment and sound economics. Field repairs must not be made unless they will be economical and effective. As noted above, any field repair that involves the replacement of a sign must have a sign notification created and closed in PM after the fact.

In the case of minor damage to a sign, such as a slight deformation, which does not impair legibility, repairs will normally be made without removing the sign from its support.

In many instances the sign support is bent or knocked out of position without damage to the sign itself. Wood posts in good condition must be reset. Metal posts, which are deformed to a minor degree, can be bent to proper shape. All nonstandard posts must be replaced with a breakaway post. On an asphalt or concrete surface, a v-lock must be used with the post. Occasionally, a sign becomes loosened from its support as a result of wind vibration or because the original installation was not properly made. Each sign crew will carry a supply of materials and suitable tools for making such field repairs. All sign supports shall conform to the criteria in the <u>Pub. 108, Sign Foreman's Manual</u>.

OBSTRUCTIONS

Removal of vegetation around traffic signs is set forth in <u>Chapter 13.5</u> under the heading of "Department's Operational Duties" item 11.

Removal of obstructions to visibility around signs is an extremely important maintenance task. Visibility of regulatory and warning signs is of particular importance. Special attention must be given to all STOP and YIELD signs to make sure that they are visible at all times. Where normal right-of-way mowing and trimming operations are not adequate, special mowing and trimming to make signs visible will be necessary.

Where sign visibility is restricted or entirely obscured by snow banks, the removal of snow may require hand shoveling.

If a maintenance crew notices any obstruction to the visibility of a warning sign, that crew will take immediate measures to remove the obstruction.

A maintenance crew will not park a vehicle on the right-of-way at a place where the visibility of a regulatory or warning sign will be obstructed.

SIGN DAMAGE BY MAINTENANCE OPERATIONS

Each maintenance crew is cautioned to use extra care when working near a road sign. If a sign is damaged in the performance of work, the crew must do what they can to repair the damage. The accident must be reported to the County Maintenance office.

REMOVAL OF UNNECESSARY SIGNS

Signs will lose their effectiveness if they are not removed when no longer needed. Guide signs directing traffic to and on temporary routes or detours, or signs erected indicating road conditions or restrictions should be removed when no longer applicable. Removal of any permanent regulatory or warning signs should only be accomplished with a concurrence from the District Traffic Unit. A sign notification in PM must also accompany this work and the sign equipment record flagged for deletion for removal from the database.

Also, if a maintenance operation is not completed, the last thing the Foreman must do before leaving the job location at the end of the day is to be sure that all signs and other traffic devices which are not needed and might tend to confuse drivers are removed or covered.

If it is necessary to erect temporary signs at a hazard such as a pavement heave or settlement, the signs must be removed as soon as the repairs are completed.

STORING, HANDLING AND TRANSPORTING SIGNS AND POSTS

Traffic signs will be stored under cover in a dry place and in such positions that warping or disfigurement will not take place. Signs covered with reflective sheeting are easily damaged by rough handling and must be transported and stored vertically. Shelves and vertical compartments will be constructed in such a manner that the surfacing and symbols on one sign will not come in contact with an adjoining sign. In order to protect the sign faces, slip sheeting (a heavy wax paper), thin foam, or cardboard is provided to separate signs and to protect the sign face. These separators should be kept against the sign face until the sign is installed.

Care must be exercised when the signs are being transported from the storage place to the field locations. The general practice is to have the sign crew use a special truck which contains crating or racks for protecting the signs.

Posts will be stored under cover and in such a manner that they will not warp or spring. Normally, they are stacked horizontally with the bottom of each raised off the ground or floor so that an air space is between the posts and the ground or floor. When posts are being sorted or removed from storage, care must be taken not to damage the finish. The same care is necessary when posts are being transported from the storage place to the field locations.

SIGN SUPPORTS

All signs must be erected on breakaway posts. A V-lock must be used if the post is installed in asphalt or concrete surfaces. For type and number of post required, and method of installation refer to <u>Pub. 108, Sign</u> Foreman's Manual Publication or <u>Pub. 111, Pavement Markings and Signing Standards</u>.

ITS DEVICES

ITS device maintenance shall be completed by a prequalified contractor in accordance with <u>Pub. 697, ITS</u> <u>Maintenance Standards</u>.

Removal of trees, brush and other vegetation will be completed following the procedures found in <u>Chapter 13.5</u>.

WORK AREA PROTECTION

Depending on the type of maintenance operation being performed, it is necessary to place Traffic Control Devices to protect the workers as well as the public. For the type of devices required for a specific operation refer to <u>Pub. 213, Temporary Traffic Control Guidelines</u>.

EQUIPMENT AND PUBLICATIONS FOR SIGN CREW

As a minimum, it is recommended that sign crews have the following equipment and publications available for their use at all times:

- Crew cab with flashing or revolving yellow light
- Power pack or generator
- Electric drill (preferably cordless)
- Electric, hydraulic or gasoline post driver
- Portable electric band saw
- Hydraulic Post Puller
- Level (at least 2 feet long)
- Tape measure and ruler
- Ladder
- Sledge hammers
- Wrecking bar
- Saws (hand and hack)
- Drift pins
- Mechanic's hammer
- Various hand tools

- Cold chisels
- China pencil for marking signs
- Torque wrench
- Flexible delineator post driver
- Bandit tool
- Pop rivet gun
- Distance Measuring Instrument (DMI)
- Drive caps
- Black Permanent Marker
- Measuring wheel
- Line level and string
- Chain saw
- Extension cords
- Air compressor
- Impact wrench

- Pioneer tools (axe, pick and shovels)
- Pruning tools
- Complete first aid kit
- Post driver (hydraulic, pneumatic, or electric)
- Pub. 212, Official Traffic Control Devices
- Pub. 213 Temporary Traffic Control Guidelines

- Pub. 236, Handbook of Approved Signs

- <u>Pub. 111, Pavement Markings and Signing</u> <u>Standards</u>
- Pub. 113, Maintenance Foreman's Manual
- Pub. 108, Sign Foreman's Manual

11.4 BICYCLEPA ROUTE MAINTENANCE

The BicyclePA touring route system was initiated by PennDOT and the Pennsylvania Pedal-cycle and Pedestrian Advisory Committee (PPAC) in 1999 and totals over 2,200 miles of signed (M1-8A) bicycle routes and rail-trails. These routes showcase the cultural and physical highlights of the commonwealth and have recieved high marks from users.

For locations where it has traditionally been PennDOT's responsibility, these BicyclePA touring route shoulders shall be swept by Memorial Day each year. Bicycle PA Route signs shall be inspected annually and any maintenance needs also completed by Memorial Day. Any necessary replacement signs may be ordered directly from the Sign Shop using the commodity codes previously established from the original implementation of the program.

BicyclePA touring route maps are found within PennDOT's website under "Travel in PA."

11.5 RIGHT-OF-WAY AND ENCROACHMENTS

DEFINITIONS

Encroachment - any object within the legal limits of the right-of-way without the consent of PennDOT.

Illegal sign - a sign located off the right-of-way which does not comply with <u>Act No. 160 of 1971</u> and <u>67 Pa.</u> <u>Code, Chapter 445</u> or within right-of-way without permission of PennDOT.

Squatter - a person on right-of-way without title, right, or permission of PennDOT. Refer to <u>67 Pa. Code</u>, <u>Chapter 212</u>.

ENCROACHMENTS AND SIGN CONTROL POLICY

- 1. All areas within the legal limits of the right- of-way shall be devoted exclusively to public highway purposes. The Engineering Districts shall be responsible for preserving the right-of-way free and clear of all public and private installations, facilities or encroachments (including signs) except those specifically allowed by law which are in the public interest and will not impair the highway or interfere with the free and safe flow of traffic thereon.
- 2. Outdoor advertising signs outside the highway right of way adjacent to interstate and Federal-aid primary highways shall be controlled as required by <u>Act No. 160 of 1971</u> and <u>67 Pa. Code, Chapter 445</u>. The Engineering Districts shall be responsible for identifying and removing illegal signs in a timely manner.

TYPES OF ENCROACHMENTS

Type 1: Nuisance Objects

Examples: Small temporary signs, junk cars, piles of building material, displays of automobiles or other products for sale, etc.

Type 2: Permanent Improvements

Examples: Fences, walls, hedges, ponds, planters, buildings, parking lots, etc.

Type 3: Permanent Signs

Examples: Permanent outdoor advertising signs whether advertising a commercial product or business activity.

Type 4: Human Beings

Examples: Squatters, Homeless, People living in cars, on the streets, under bridges, or in short-term shelters.

REMOVAL OF INANIMATE ENCROACHMENTS

Efforts should be made to remove Encroachments. Encroachments not removed may be candidates for discretionary action, such as occupancy permits or lease agreements.

When a possible encroachment is identified, the following steps should be taken:

- 1. Being careful that the right-of-way width and line are firm, determine if the object is on the right-ofway and is without permission from PennDOT.
- 2. If judgment recommends urgent removal is needed, the County should remove the encroachment and charge the property owner for all costs occurred, if appropriate.
- 3. When removal is not urgent, determine if the encroachment is within the Clear Zone.
- 4. If the object is an encroachment within the Clear Zone, pursue removal by the property owner. A letter (Initial Notice) should be sent to the property owner requesting removal of the encroachment within 30 days. The Right-of-Way Encroachments and Outdoor Advertising Sign Control brochure may or may not be appropriate to be included.
- 5. After the expiration of the 30 days removal period provided in the Initial Notice, the County will verify whether or not the owner has removed the encroachment.
- 6. If the Initial Notice does not result in the encroachment being removed, a second letter (Final Notice) is suggested to provide a 15 day requirement to remove the encroachment and a notification that if the encroachment is not removed PennDOT will remove it and charge them for all costs incurred.
- 7. After the expiration of the 15 days removal period provided in the Final Notice, the County will verify whether or not the owner has removed the encroachment
- 8. When the encroachment is removed by the property owner a letter of acknowledgement (Thank You) is suggested.
- 9. Should PennDOT need to remove the encroachment, the County should schedule activities or contractor, as needed.
- 10. Where fences or other obstructions prevent easy access to encroachments, PennDOT employees will cooperate with the landowner by using access roads or lanes to eliminate any possible destruction to property.
- 11. Form RW-781 should be used in connection with the removal of illegal signs within right-of-way.
- 12. When an illegal sign is removed from the right-of-way, the sign and all debris will be cleaned up and disposed of.
- 13. Seek reimbursement for PennDOT costs incurred for the removal of encroachments. Guidance may be sought through the District Fiscal Office.

RELOCATION OF HUMAN BEINGS

Human beings improperly within the right-of-way detract from the safe operation of the highway and pose a liability risk. They should not be permitted to remain. However, proper safety precautions must be taken when attempting to relocate a squatter and adequate consideration must be given to the squatter's immediate well-being.

PennDOT shall seek assistance with relocating the person and belongings. If the circumstances appear to be solely a trespassing issue, the matter should be referred to the PA State Police. When other circumstances exist, assistance should be sought through the County's Department/Office of Human Services. If it is determined that PennDOT will assist with the relocation, the appropriate local or State Police shall be asked to provide a protective escort. The immediate well-being of people being relocated should be addressed by the County's Department/Office of Human Services. PennDOT may assist with disposing of debris on the right-of-way that the County's Department/Office of Human Services does not clear from the site. Helpful information may be found in Portland State University's, Homeless Encampment on Public Right-of-Way: A Planning and Best Practices Guide.

REMOVAL PROCEDURES FOR OUTDOOR ADVERTISING DEVICES OUTSIDE RIGHT-OF-WAY

- 1. If the owner of an illegal sign does not remove it, Federal law requires PennDOT to remove it.
- 2. Section 10 of <u>Act No. 160 of 1971</u> authorizes PennDOT to remove illegal signs outside the right-of-way if not removed by the owner and is fully set forth as follows:

Section 10: Removal of Prohibited Advertising Devices

In addition to the penalties prescribed in this act, the Secretary may institute any appropriate action or proceeding after thirty days' written notice of a violation to the person or persons maintaining or allowing to be maintained such device, to prevent, restrain, correct or abate a violation or to cause the removal of any advertising device erected or maintained in violation of the provisions of this act, or the secretary may have any such device corrected or removed by his employees. In the event of such removal, the person or persons responsible for the erection or maintenance of such device and the person or persons allowing such device to be maintained shall be liable to PennDOT for the cost of removal or correction of such device. Neither the Secretary of Transportation, nor any other employee acting at his direction, shall be liable in any criminal or civil action for damages for any action authorized by this act.

- 3. Neither the Secretary of Transportation, nor any other employee acting in accordance with these instructions, shall be liable for trespass based on the entry onto land and removal of an outdoor advertising sign erected and maintained in violation of <u>Act No. 160 of 1971</u> and <u>67 Pa. Code, Chapter 445</u>.
- 4. When an illegal sign is identified, Form <u>RW-790</u>, Request to Remove Illegal or Abandoned Sign, should be issued to the sign owner and land owner which provide the illegal sign owner and landowner 30 days to remove the illegal sign or explain why it should not be removed.
- 5. If the illegal sign is not removed or no acceptable explanation provided within 30 days, a Form <u>RW-790F</u>, Final Notice to Remove Illegal or Abandoned Sign, should be issued to the sign owner and landowner. The <u>RW-790F</u> provides the sign owner and landowner 30 days to remove the illegal sign.
- 6. After the expiration of the 30 days removal period provided in Form <u>RW-790F</u> the District will verify whether or not the owner has removed the sign.
- 7. If not removed, the District Office will request removal by the appropriate County Maintenance Manager. Include in the request a copy of Form <u>RW-790</u>, Sign Data, photograph(s), sufficient location information, a copy of all removal notices pertaining to the sign, and any other appropriate information.

- 8. Maintenance forces should remove the entire sign to ground level in the safest, fastest and least costly manner available. The owner had 2 notices and at least 60 days to salvage the sign and chose not to. Such a sign is defined in <u>Chapter 445.8(b)</u> of the regulations as an abandoned sign to be removed by PennDOT pursuant to <u>445.8(c)</u>.
- 9. Access to an illegal sign on private property will be directly from the highway if possible. If necessary, a portion of the right-of-way fence will be removed and subsequently restored. If access from the highway is not feasible, use whatever access is reasonable and appropriate. If any person inquires as to the purpose, show the notices and explain. If any person becomes confrontational or threatening, simply leave the area and request advice from the District or Central Office.
- 10. If an illegal sign is on private property adjacent to the Pennsylvania Turnpike (I-76, I-276, I-476, PA Turnpike 43, PA Turnpike 60, or PA Turnpike 66) and the most feasible access to it is from Turnpike right-of-way, the District should coordinate removal activity with the appropriate local Turnpike Maintenance Manager.
- 11. Illegal signs on private property will be cut off as close to the ground as possible. It is preferable to cut the sign to easily handled pieces for removal and disposal, and this is required if the location is close to the roadway where debris could become a traffic hazard. However, if removal from the site would greatly increase time, effort and costs because of terrain, distance or other factors, the cut sign sections may remain at the site.
- 12. Electrified signs require additional measures. If the electric is supplied to the sign directly from a nearby pole through its own meter, try to get the local electric company to disconnect. If they are unwilling, power between the meter and the sign may be shut off if there is a switch or circuit breaker or by pulling the meter. Only a qualified District person should do this. If the electricity cannot be disconnected, alternative removal procedures should be considered.
- 13. The County Maintenance Manager will inform the District Office in writing when an illegal sign has been removed.
- 14. Seek reimbursement for PennDOT costs incurred for the removal of illegal signs off of the right-ofway. Guidance may be sought through the District Fiscal Office.

MAILBOXES

PennDOT does not prohibit property owners from placing mailboxes within the right-of-way, as it is recognized that the postal service has certain placement requirements regarding the location of mailboxes (<u>http://faq.usps.com</u>). However, since mailboxes are not placed on the right-of-way under permit regulations, they can technically be deemed to be encroachments which are placed and remain at the risk of the property owners.

Mailboxes should not be permanent installations and must be removed or moved at the direction of PennDOT at the owners' expense. Concrete, stone, brick, or other substantial edifices are not to be constructed in the right-of-way and they must be of a break-a-way design. The American Association of State Highway and Transportation Officials (AASHTO) Roadside Design Guide, Chapter 11, Erecting Mailboxes on Streets and Highways, addresses the safety and construction of mailboxes, mailbox supports, and mailbox turnout designs.

11.6 PAVEMENT MARKINGS

Prior to the beginning of the paint season, the District Traffic Units in conjunction with the Maintenance Districts, must review all interstate and expressway highways to determine if the existing pavement markings are expected to be adequate through summer months. If the markings are not adequate, or not expected to last through the September Labor Day holiday, then those identified interstates/expressways are to be painted first and completed by Memorial Day. The review and subsequent line painting for interstates and expressways is to be done for each route on a district wide basis and not on a county-by-county basis.