

THE STATE OF DELAWARE



DEPARTMENT OF TRANSPORTATION
OFFICE OF TRANSPORTATION SOLUTIONS
PLANS AND SPECIFICATIONS FOR

CONTRACT NUMBER- T201208302 CENTRAL MAINTENANCE
FEDERAL AID NUMBER- ESTP-2011(16) PAGE 1 OF 30
CONTRACT TITLE- EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013,
2014

PLANS PREPARED BY: *Art He*
CENTRAL DISTRICT DESIGN ENGINEER

DATE RECOMMENDED: _____

CENTRAL DISTRICT CONTRACTS ENGINEER

DATE RECOMMENDED: 5/23/11

Maria Fantini
CENTRAL DISTRICT MAINTENANCE ENGINEER

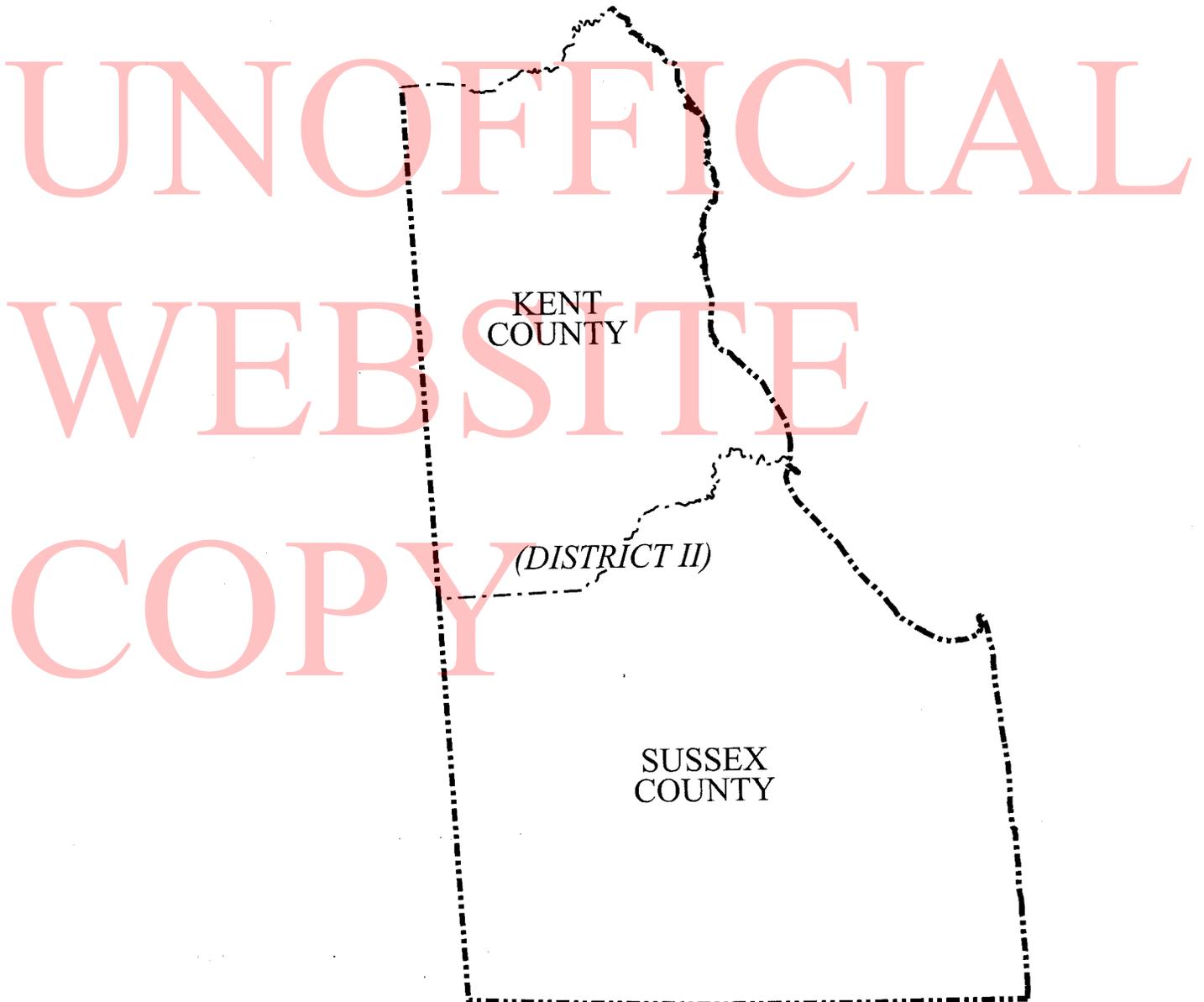
DATE APPROVED: 5/23/11
Thomas E. Greve
CENTRAL DISTRICT ENGINEER



UNOFFICIAL
WEBSITE
COPY

LOCATION MAP

LOCATION 1- Open End Location - Actual Locations to be determined



DEPARTMENT OF TRANSPORTATION

CONTRACT NO. T201208302

CENTRAL MAINTENANCE

PAGE 3 of 30

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013, 2014

EPOXY PAVEMENT MARKING SPECIAL PROVISIONS

GENERAL DESCRIPTION:

This contract provides for the complete removal of the existing painted, thermoplastic, tape, and epoxy lines and replacing them with epoxy pavement markings. The Contractor shall be responsible for the removal of all debris and hazardous waste. This contract also provides the re-stripping of several existing roadways through out the state.

The Contractor shall furnish the epoxy paint; the glass spheres; and all labor, equipment and incidentals necessary to apply pavement markings in a safe and efficient manner.

It is expected that there will not be a break in the program. However it is dependent wholly upon the rate at which the work is completed.

The contractor is hereby notified that, at least, some of the materials used on the contract and the waste generated there from or thereby is hazardous and must be handled in strict accordance with the environmental rules and laws of this State. The contractor is fully and wholly responsible for obtaining any necessary permits and for strictly complying with said rules and laws during the life of this project. When grinding, no grinding debris shall be disposed of within the Del DOT or state right of way.

There may be several roadway construction and/or pavement marking projects whose contractors are performing similar work as part of their overall contract during the life of this contract.

In District II Kent & Sussex Counties, U.S., and Delaware Routes should be painted at night. The night work may also include work on some other major high-volume roads (see Maintenance of Traffic - Night Work).

STANDARD SPECIFICATIONS:

The specifications entitled "State of Delaware, Division of Highway Specifications, August 2001, hereinafter referred to as the Standard Specifications, and the Special Provisions contained herein, shall govern the work to be performed under this contract.

The Special Provisions represent modifications and revisions to the Standard Specifications and whenever the Special Provisions differ from the Standard Specifications, these Special Provisions shall govern.

BIDDING PROCEDURE AND CONTRACT AWARD:

The Delaware Department of Transportation will accept bids on Contract No. T201208302 District II.

The award of the contract or contracts will be based upon a comparison of the total of the lowest acceptable bids received for each of the individual contracts, bid separately.

SUBMISSION OF PROPOSALS:

Bidders must submit proposals upon forms provided by the Department.

A bidder must bid on each and every item of each contract upon which they bid. Each contract will be bid in its entirety as an itemized lump sum contract.

Proposals must be submitted in an envelope clearly marked "Proposal for Division of Highway Operations Contract No. T201208302.

LENGTH OF CONTRACT:

The period of this contract is from the date of "Notice to Proceed" for three (3) calendar years. The Department also reserves the right, if deemed necessary, to a one-time increase in funding 50% above the awarded amount.

DEPARTMENT OF TRANSPORTATION

CONTRACT NO. T201208302

CENTRAL MAINTENANCE

PAGE 4 of 30

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013, 2014

CONTRACT EXTENSION: The successful bidder may extend the contract price to any other State or Local agency during the contract period if it is agreeable with both parties.

PRICE ADJUSTMENT: Extension to future years is dependent on legislative appropriations for these Fiscal Years and agreement on succeeding year's pricing as described herein. The bid prices in the contract must be guaranteed for the first year of the contract. In future year contract extensions, the vendor may request an increase in unit prices. The vendor will be required to request any price increases prior to the extension of the contract. The bid prices in the contract extension shall be guaranteed for the period of the contract extension. If the difference requested exceeds the change in the Nationwide All Urban Consumer Price Index (CPI-U), U.S. city average for the same period, approval of any price adjustment offered the vendor above the CPI-U will be at the discretion of the Director, Maintenance and Operations. The Department retains the right to cancel the future year extension if any acceptable agreement cannot be reached with the vendor on the price adjustment. This contract may be extended for such period, quantities and time as is mutually agreeable between both parties.

RIGHTS TO TERMINATE THE CONTRACT:

The Department reserves the right to terminate the contract for failure to meet the provisions of the contract.

PREVIOUS SUCCESSFUL EXPERIENCE:

Each Bidder on this contract shall, with his bid, submit a notarized certification listing, at least, three major applications he has done using high viscosity, fast drying traffic binder. This certification shall list the names for whom and when the work was done, and total footage of lines applied.

The experience must pertain to at least part of the crew that will be working on this contract. Previous pavement markings done for the State of Delaware will be considered.

ALTERATION OF PLANS OR CHARACTER OF WORK:

The Department reserves the right to increase or decrease any or all of the locations and quantities as shown in the bid schedule.

The locations and quantities given in the proposal are approximate only and will be the basis for comparing bids.

Any increase or decrease in quantities and/or any additions or omissions of placement sites on this contract shall not be cause for any increase or decrease of contract unit prices bid. Subsection 109.05 and 109.06 of the Standard Specifications does not apply.

EPOXY PAVEMENT MARKING MATERIALS:

The contractor shall supply the Epoxy paint and glass spheres as specified in this contract.

Materials to be used shall be approved by the Project Coordinator as being among those as listed on the Approved Materials List. Proper labels and paperwork will be required as proof.

More detailed information concerning these materials is available by contacting the Department's Materials and Research Section, (302) 760-2400.

Upon notification of award, it shall be the responsibility of the vendor to contact the Department's Materials and Research Section to arrange for sampling and testing of approved materials.

All samples required by the Department's Materials and Research Section shall be supplied by the vendor 30 days prior to use in amounts and sizes indicated, at no cost to the Department.

DEPARTMENT OF TRANSPORTATION

CONTRACT NO. T201208302

CENTRAL MAINTENANCE

PAGE 5 of 30

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013, 2014

Equipment Required

The successful bidder must use on this contract equipment meeting the following minimum requirements:

A. Truck mounted striper

1. The applicator shall provide individual material reservoirs, or space, for the storage of Part A and Part B of the epoxy resin composition; for the storage of water; and for the storage of reflective glass spheres.

2. The applicator shall be equipped with heating equipment of sufficient capacity to maintain the individual epoxy resin components at the manufacturers recommended temperature for spray application and for heating water to a temperature of approximately 140EF (60EC).

3. The glass spheres shall be gravity dropped upon 20 mills (500 um) of epoxy pavement markings to produce a wet-night-reflective pavement marking. The large spheres (Federal Spec. Type 4) shall be applied at a rate of 12 pounds per gallon (1.4 kg/L) of epoxy pavement marking material, immediately followed by a second drop of AASHTO M-247 Type 1 glass spheres applied rate of 12 pounds per gallon (1.4 kg/L) of epoxy pavement marking material.

4. The applicator shall be equipped with metering devices or pressure gauges, on the proportioning pumps.
Metering devices or pressure gauges shall be visible to the project coordinator.

5. The applicator shall be equipped with all the necessary spray equipment, mixers, compressors, and other appurtenances to allow for the placement of epoxy reflectorized pavement markings in a simultaneous sequence of operations.

6. The applicator shall be equipped with a citizens band transceiver for communication with the project coordinator

B. Auxiliary trucks properly identified to trail the striping unit for the purpose of controlling traffic, protection of newly painted lines and to warn approaching traffic that slow moving equipment will be encountered.

1. The auxiliary trucks shall be equipped with a citizens band transceiver for communication with the project coordinator

C. A power broom capable of cleaning pavement for the application of both edge lines and center lines. An additional warning vehicle must follow the broom truck if this vehicle is more than (750ft.) ahead or the paint machine.

BASE OF OPERATIONS:

The contractor must provide his own base of operations; he cannot store any equipment, materials, or supplies necessary for this contract on State property.

Any work on any equipment or any transfer of materials among vehicles shall not take place in any highway yard.

SUBMISSION OF INVOICE:

An invoice for each work site shall be submitted in triplicate to State of Delaware, Department of Transportation, Division of Highway Operations, Central District Signs/Markings. Attn: Steve Gustafson 930 Public Safety Blvd Dover De, 19901.

Each of the areas listed under "Placement Sites" will be considered as a unit of work. Payment will be on a monthly basis for each separate unit of work complete in place and accepted.

DEPARTMENT OF TRANSPORTATION

CONTRACT NO. T201208302

CENTRAL MAINTENANCE

PAGE 6 of 30

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013, 2014

LOCATION OF WORK SITES:

Delaware Route 6 will be the boundary between District I to the north and District II to the south. The Project Coordinator will assign other roads that cross the boundary line.

The work sites assigned under Contract # T201208301 will be in District I.

The work sites assigned under Contract # T201208302 will be in District II.

If a single contractor is working in both Districts, a full markings team is required in each District from the first day of work in each District until 85% of the assigned work is completed.

The contractor may not consolidate both crews in one District or change work crews between or within Districts without written permission.

Upon written application by the contractor, the Project Control Officer will review release of one markings team after both Districts have been 85% completed.

CONSTRUCTION SAFETY AND HEALTH STANDARDS:

It is a condition of this contract, and shall be made a condition of each subcontract entered into pursuant to the contract, that the contractor and any other subcontractor shall not require any laborer or mechanic employed in performance of the contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health or safety, as determined under construction safety and health standards (Title 29, Code of Federal Regulations, Part 1926 - published in the Federal Register on December 16, 1972), as amended from time to time.

INSURANCE AND RESPONSIBILITY FOR INJURY OR DAMAGE CLAIMS:

The Contractor shall not commence work under this contract until full evidence of insurance is provided in the form of a certificate or certificates, against all liabilities, damages, and accidents as more fully set forth herein.

Satisfactory evidence of all insurance coverage, including special endorsements and bonds when required, shall be forwarded to the Division of Highway Operations for review when submitting the executed contract. Certified copies of any policies may be required at any time in addition to the certificate(s) furnished.

All certificates of insurance shall contain a provision whereby the Division, or their nominee, will receive ten (10) days' prior written notice of any material change in or cancellation of coverage.

All insurance policies required shall be maintained in full force until all work under this contract is completed, as evidenced by the formal acceptance thereof, in writing, by the Division.

The insurance companies indicated in the certificates shall be authorized to do business in the State of Delaware and shall be acceptable to the Division of Highway Operations.

No separate payment will be made for furnishing the insurance specified herein. The costs of such coverage shall be included in the prices bid for the various items scheduled in the Proposal.

Neither approval by the Division, nor a failure to disapprove insurance certificates furnished by the contractor shall release the contractor from full responsibility for all liability as set forth in the indemnification clauses stated herein below.

The minimum requirements of insurance to be carried by the contractor shall be as follows:

DEPARTMENT OF TRANSPORTATION

CONTRACT NO. T201208302

CENTRAL MAINTENANCE

PAGE 7 of 30

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013, 2014

A. CONTRACTOR'S COMPREHENSIVE GENERAL LIABILITY INSURANCE

Bodily Injury Liability with a limit of Two Hundred Fifty Thousand Dollars (\$250,000) liability for all damages arising out of personal injuries to or death of one person and, subject to that limit for each person, a total (or aggregate) limit of Five Hundred Thousand Dollars (\$500,000) liability for all damages arising out of personal injury to or death of two or more persons in any one occurrence; and Property Damage Liability with a limit of Two Hundred Fifty Thousand Dollars (\$250,000) liability for all damages of property in any one accident and subject to that limit per accident, a total (or aggregate) limit of Five Hundred Thousand Dollars (\$500,000) liability for all damages arising out of injury to, destruction of, or loss of use of property during the policy period.

If any part of the work under this contract is to be performed by a subcontractor, the prime contractor shall carry on his own behalf Contractor's Protective Liability Insurance for both Bodily Injury and Property Damage Liability for the same limits as specified above. Complete Operations coverage shall be indicated on the certificate for the same limits as above for both Bodily Injury and Property Damage Liability.

The certificates shall further indicate the acceptance by the insurance carrier of the indemnification clauses set forth below.

B. COMPREHENSIVE AUTOMOBILE LIABILITY INSURANCE

To provide coverage for all owned, non-owned and leased vehicles. Limits of liability to be Two Hundred Fifty Thousand Dollars (\$250,000) for each person and Five Hundred Thousand (\$500,000) for each occurrence for Bodily Injury Liability and Two Hundred Fifty Thousand Dollars (\$250,000) for each accident for Property Damage Liability.

C. WORKMAN'S COMPENSATION INSURANCE

Statutory - as required by the Workmen's Compensation Laws of the State of Delaware.

MAINTENANCE OF TRAFFIC:

No separate payments will be made for maintenance of traffic costs. For the purpose of this contract, these are considered incidental to the bid work orders.

Traffic shall be maintained at all times in accordance with Subsections 104.09, 107.07, and 104.02 of the Standard Specifications.

All work shall be performed in a manner that will reasonably provide the least practicable obstruction to all road users, including vehicular, pedestrian, and bicycle traffic, and shall conform to the requirements of the Delaware Manual on Uniform Traffic Control Devices, Part 6, including all revisions up to the date of advertisement for bids.

All crewmembers shall wear, at all times, a Class Three safety vest that meets the ANSI 107 – 2004 standard requirements.

The Division of Transportation Solutions' District Safety Officer or an authorized representative of the Department prior to the start of work must approve all vehicles, equipment, and traffic control devices used on this contract.

The contractor shall be responsible for furnishing, placing and relocating portable signs and devices to safely protect workers, equipment and fresh (wet) markings from traffic. The contractor will be held fully liable for paint getting on vehicles when the line has not been protected correctly.

For the purposes of this contract, "dry" is defined as no tracking of a painted line when an automobile crosses the line.

Three working days will be allowed for equipment approval after which time Liquidated Damages for Failure to Pursue the Work will be assessed. (See Liquidated Damages.)

DEPARTMENT OF TRANSPORTATION

CONTRACT NO. T201208302

CENTRAL MAINTENANCE

PAGE 8 of 30

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013, 2014

The required signs and warning devices for this contract shall be on the site prior to the beginning of the work.

All traffic control devices will remain the property of the contractor.

There will be no separate payment for the requirements for Maintenance of Traffic. Flaggers shall be governed by and familiar with the Delaware Manual on Uniform Traffic Control Devices (MUTCD) Part VI, latest edition, and updates in effect at the time of advertisement for bids. Flaggers shall have completed flagger training and testing within the last 3 (three) years as offered by American Traffic Safety Services Association (ATTSA). The Contractor shall provide appropriate documents showing the flagger certification status throughout the duration of the contract.

Flaggers shall be completely covered (clothed) from neck to feet. The minimum clothing requirement for flaggers shall be long pants and a standard T-Shirt with sleeves along with appropriate footwear (no open-toed shoes). The Flagger shall wear a Class Three safety vest that meets the ANSI 107 - 2004 standard requirements.

The contractor must plan the work so that no lanes of traffic are closed or seriously hindered from Friday noon to Monday noon, or from noon on the last working day before a holiday until noon of the first working day after a holiday, unless previously approved by the Project Coordinator.

Some signs and devices may be carried on mobile equipment.

One way traffic will be permitted for limited distances only at the discretion of the Engineer.

All vehicles shall display flashing or rotating yellow lights, which are visible in all directions. All arrow boards must have controls so that the arrow may be switched without stopping the vehicle.

Normal rush hour traffic conditions prohibit the placement of traffic markings from 6 to 9 AM and 3 to 7 PM on certain high volume roads. Work performed during these times will be restricted to those roads not subject to great rush hour peaks as determined by the Project Coordinator.

Night work is defined as any roadwork occurring between one-half (1/2) hour after sunset and one-half (1/2) hour before sunrise.

For night work:

Additional traffic control devices are required.

A minimum of six 3000-watt lights shall be used to illuminate the work area. These lights shall be positioned so they do not interfere with the traveling public. 1,000 watt Halogen or Quartz lights may be used in place of the 3,000 watt bulbs at the Project Coordinator's discretion.

The 'WET EPOXY PAINT' signs shall be constructed of prismatic retroreflective sheeting so as to be readable at night. One of the smaller following trucks may lead the convoy at night at the Project Coordinator's direction.

The Department, at its discretion, may require night work on some major high volume roadways. The Department will consider night work on other roadways at its discretion.

DEPARTMENT OF TRANSPORTATION

CONTRACT NO. T201208302

CENTRAL MAINTENANCE

PAGE 9 of 30

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013, 2014

WORK PERIOD:

The first day of work is to be on or before July 1, 2011.

With the permission of the Project Coordinator, the contractor may start before the above noted date. Permission to start after the above noted dates without Liquidated Damages being assessed will not be granted.

AUTHORIZATION OF WORK:

All work assigned under this contract shall be authorized in writing signed by the Project Coordinator. Any unauthorized work will not be approved for payment.

WORKMANSHIP:

The contractor is required to perform the work called for in this contract to a high standard of workmanship.

The contractor shall be responsible for the complete preparation of the roadway surface as necessary for the product to be applied, including the removal of dust, dirt, and other foreign matter immediately prior to the installation of the pavement marking material.

When removal of existing markings is required the designated markings must be completely (100%) removed, or to the satisfaction of the project coordinator.

When doing any type of removal the contractor shall be fully and wholly responsible for the clean up and disposal of any and all waste or residue generated from this operation to the satisfaction of the project coordinator.

The contractor shall be the responsible for the application of pavement markings for all lanes of a roadway including the turn lanes, dotted lines (E.T's), and the edge lines at intersections.

Professional demeanor is required at all times. Actions toward Inspection staff or motorists including, but not limited to, intimidating or threatening gestures or words or unseemly language will be cause for requiring the permanent removal of the offending employees from this project.

On all highways the contractor shall paint from both sides of the machine whenever two lines are needed, or use two machines simultaneously, as long as traffic can be accommodated. This shall not require a reduction in marking speed.

Any application of marking materials which is defective or which is incorrectly located by the contractor shall be replaced at the sole expense of the contractor.

The contractor at no expense to the Department shall remove the Epoxy Paint and other materials spilled on the pavement.

The contractor shall carry a waste container so that any spilled paint or other material can be held for disposal.

Painting of any line over (5") in width must be accomplished by the use of more than one paint gun.

The contractor must be able to paint (10") gore lines off either side of the paint machine, but not necessarily simultaneously.

When painting interstate highways and limited access highways, special attention is required when painting in the areas of off and on ramps. The contractor will close his vehicles up so as not to allow traffic to cross lines to exit or enter the highway at ramps. The painting operations shall be required to stop to let paint dry at ramps to eliminate tracking of paint.

DEPARTMENT OF TRANSPORTATION

CONTRACT NO. T201208302

CENTRAL MAINTENANCE

PAGE 10 of 30

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013, 2014

CONTROL AND INSPECTION:

The Department's Pavement Marking Section will assign areas of work.

Upon receipt of the "award letter" the contractor must submit a list of required materials that he/she needs to order prior to the receipt of a Purchase Order, such as Epoxy paint and glass beads, to insure that the application of pavement markings begin on the scheduled date. The Department will send written confirmation of those items that the contractor is authorized to purchase.

The contractor will be reimbursed for the approved materials that have been purchased, up to 20% of the total bid price of the contract, with the approval of the Engineer in charge should the contract be terminated by the State of Delaware.

An authorized representative of the Department shall be assigned as Project Coordinator and shall be present during each application of the material. Payment will not be made for any work done when said representative is not present.

The Department will advise the contractor of the order in which the work must be undertaken. The Department may revise the order up to two (2) working days prior to the start of the work on a roadway without penalty.

The provisions of Failure to Pursue the Work shall apply when the contractor does not perform the work in the order required by the Department.

The contractor shall begin work on the assigned units of work on or before the fifth (5th) working day (weather permitting) after notification to begin work, subject to the limitations set forth herein. Failure to begin work with the specified time shall be regarded as Failure to Pursue the Work. (See Liquidated Damages).

The contractor shall pursue the work within each District at a rate of at least \$100,000.00 per month during any period when work is assigned. After \$100,000 of work is completed in a District in any month and assigned work remains to be completed, work must continue at a rate of, at least, \$5,000 per day. Failure to comply with this paragraph is a Failure to Pursue the Work. (See Liquidated Damages).

Work completed in excess of \$100,000 is not cumulative and may not be carried over to the next month.

Should it be necessary to halt the work because of incorrect or unsatisfactorily applied pavement markings under the terms of this contract, a Failure to Pursue the Work shall have occurred. (See Liquidated Damages.)

Should the contractor fail to provide adequate protection to the surroundings of the work site or should the operations be carried out in such a way as to allow or cause damage to any roadway, street, sidewalk, the property of any utility or other private or public property, the Liquidated Damages for Failing to Protect the Work Site may be assessed from the time the contractor is notified of the condition until he completes the repair. (See Liquidated Damages).

Should the repairs not be undertaken or should it be necessary for the Department to protect the area and/or make the repairs, the costs shall be deducted from the monies due the contractor.

The standard workday is 7 1/2 hours for normal daytime operations - 8:00 A.M. to 4:00 P.M., 1/2 hour lunch.

The standard workday when night work is authorized and scheduled is 9:00 P.M. to 5:00 A.M. Sunday night/Monday morning through Thursday night/Friday morning. All markings removed shall be replaced at the end of each work shift each day.

If the contractor wishes to work a longer day, the rate of work will be increased by \$400 per hour for each hour or fraction thereof the Projector Coordinator is at a work site.

Unless prior arrangements in writing or documented in Project Coordinator's Diary have been made between the contractor and the Project Coordinator, the Department's representative will not wait past one (1) hour from the start of the standard work day or the agreed upon time. Should the situation arise where the contractor is not available for work within that one hour, the Projector Coordinator may be given a different assignment for that day and in such event no work under

DEPARTMENT OF TRANSPORTATION

CONTRACT NO. T201208302

CENTRAL MAINTENANCE

PAGE 11 of 30

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013, 2014

this contract shall be pursued for that day. For every such occurrence provisions for Failure to Pursue the Work shall apply. (See Liquidated Damages).

Authorization for longer workdays and work on non-working days shall be at the discretion of the Project Coordinator.

OUT OF SEQUENCE WORK:

From time to time during normal working hours, the contractor may be required to provide a work force at a particular job site on less than ten days notice or while working on a unit of work at a different job site.

As long as the total value of the out of sequence work in any one month is less than \$10,000, compensation will not be increased for that out of sequence work.

The contractor must pursue out of sequence work within one working day of its being assigned or the provisions of Failing to Pursue the Work shall apply.

LIQUIDATED DAMAGES:

The available work must be completed and billed to the Department by the contractor at the minimum rate of \$100,000 per calendar month. In any month when the contractor fails to have completed work at the required rate, Liquidated Damages in the amount of \$1,500 per workday may be assessed until the required amount of work is completed and billed.

If workdays are lost due to weather or legal holidays, the required average rate of work per month will be reduced by \$5,000 per workday lost.

Failure to Pursue the Work or Failure to Protect the Work Site shall cause Liquidated Damages in the amount of \$3,000 per workday to be assessed.

In any month when the work performed is less than 90% of the required amount, a review for default on the bond will be made.

In any month when the work performed is less than 75% of the required amount, the contractor shall show cause as to why the bond shall not be declared in default.

PATTERNS:

This contract shall include all longitudinal lines but it shall not include diagonal lines or transverse lines.

Lines shall be (3"), (5"), (10"), (9"), (14"), dotted, skip or solid, as required herein or as specified by the engineer.

The typical skip pattern is a (40ft.) cycle made up of a (10ft.) painted surface and a (30ft.) space. The typical pattern for dotted lines (ET'S) is a (8ft.) cycle made up of a (2ft.) painted surface and a (6 ft.) space. The Project Coordinator may require other patterns.

METHOD OF MEASUREMENTS OF APPLIED MATERIALS:

The contractor shall have on his equipment a suitable measuring device capable of determining the total number of "Linear Feet" of materials actually applied within a tolerance of +/-2%. This device shall be calibrated, at least, twice weekly during marking operations.

It shall be the contractor's responsibility, when each road is completed to have recorded the length in "Linear Feet", and width in Inches of each line of material applied, and at the end of each day to provide the data to the Project Coordinator.

BASIS OF PAYMENT FOR APPLIED MATERIALS:

DEPARTMENT OF TRANSPORTATION

CONTRACT NO. T201208302

CENTRAL MAINTENANCE

PAGE 12 of 30

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013, 2014

Pavement Markings as required in this contract in place, accepted and measured as required, will be paid for at the contract unit price bid per "Linear feet" by line width, which price and payment shall constitute full compensation for supplying and applying the marking material and for all labor, tests, protection, equipment, tools, manipulation and incidentals necessary to protect the operation from traffic and to complete the item of work to the satisfaction of the Department.

Adjustments to monies due the contractor will be made as provided herein. Specific attention is called to the section concerning application of materials, adjustments for applications outside of tolerance.

Such payment shall not relieve the contractor from obligations incurred in warranting the quality of the workmanship provided at the job site. Final acceptance, as evidenced in writing after the completion of the entire contract or at such time as a practical determination of the quality of the workmanship can be made by the Department, will be necessary before any bonds or parts of bonds will be released.

PREPARATION OF ROAD NOT PREVIOUSLY MARKED:

The project coordinator will lay out all roads that have not been previously marked with pavement markings.

MAINTENANCE OF TRAFFIC

FREEWAY, for the purpose of this contract, freeway roads will consist of I-95, I-295, I-495, DE Route 1 from DE Route 7 to the Dover Air Force Base, and DE Route 141 from Commons Boulevard to DE Route 2.

It shall be the responsibility of the contractor to provide a State Police escort and a Portable Changeable Message Sign (PCMS) for all work performed on freeway roads and ramps. Work will not be allowed if police escort and PCMS are not present.

Moving operations shall be performed in accordance with the following Typical Applications from the Delaware Manual on Uniform Traffic Control Devices:

For two-lane roadways, Modified Typical Application 17B (including cone truck) for application, and Typical Application 17 for cone recovery.

For multilane roadways, Typical Application 35C for application and Typical Application 35 for cone recovery.

For freeways with more than two lanes in one direction, Typical Application 35E for application, and Typical Application 35 for cone recovery (closing one lane).

For freeways with more than two lanes in one direction, Typical Application 35G for application, and Typical Application 35A for cone recovery (closing more than one lane). Additional vehicles are required when closing more than two lanes.

NOTE: Typical Applications are subject to change based on public comment.

PLACEMENT SITES:

The project coordinator will assign the sites on a bi-weekly basis.

Notes for Figure 6H-17—Typical Application 17
Mobile Operations on a Two-Lane Road
(Delaware Revision)

Standard:

1. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.
2. Shadow and work vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.
3. If an arrow board is used, it shall be used in the caution mode.

Guidance:

4. *Where drivers emerging from an intersecting roadway will not encounter the shadow vehicle prior to the work area, a stationary warning sign should be placed on the intersecting road.*
5. *Where practical and when needed, the work and shadow vehicles should pull over periodically to allow vehicular traffic to pass.*
6. *Whenever adequate stopping sight distance exists to the rear, the shadow vehicle should maintain the minimum distance from the work vehicle and proceed at the same speed. The shadow vehicle should slow down in advance of vertical or horizontal curves that restrict sight distance.*

Option:

7. The minimum distance between the work and shadow vehicles may vary according to terrain, paint drying time, and other factors, such as the manufacturer's recommendations for the truck-mounted attenuator.
8. Additional shadow vehicles to warn and reduce the speed of oncoming or opposing vehicular traffic may be used. Law enforcement vehicles may be used for this purpose.
9. If the work and shadow vehicles cannot pull over to allow vehicular traffic to pass frequently, a DO NOT PASS sign may be placed on the rear of the vehicle blocking the lane.
10. Arrow boards may be omitted from work vehicles that cannot support the installation of an arrow board.

Support:

11. Shadow vehicles are used to warn motor vehicle traffic of the operation ahead.

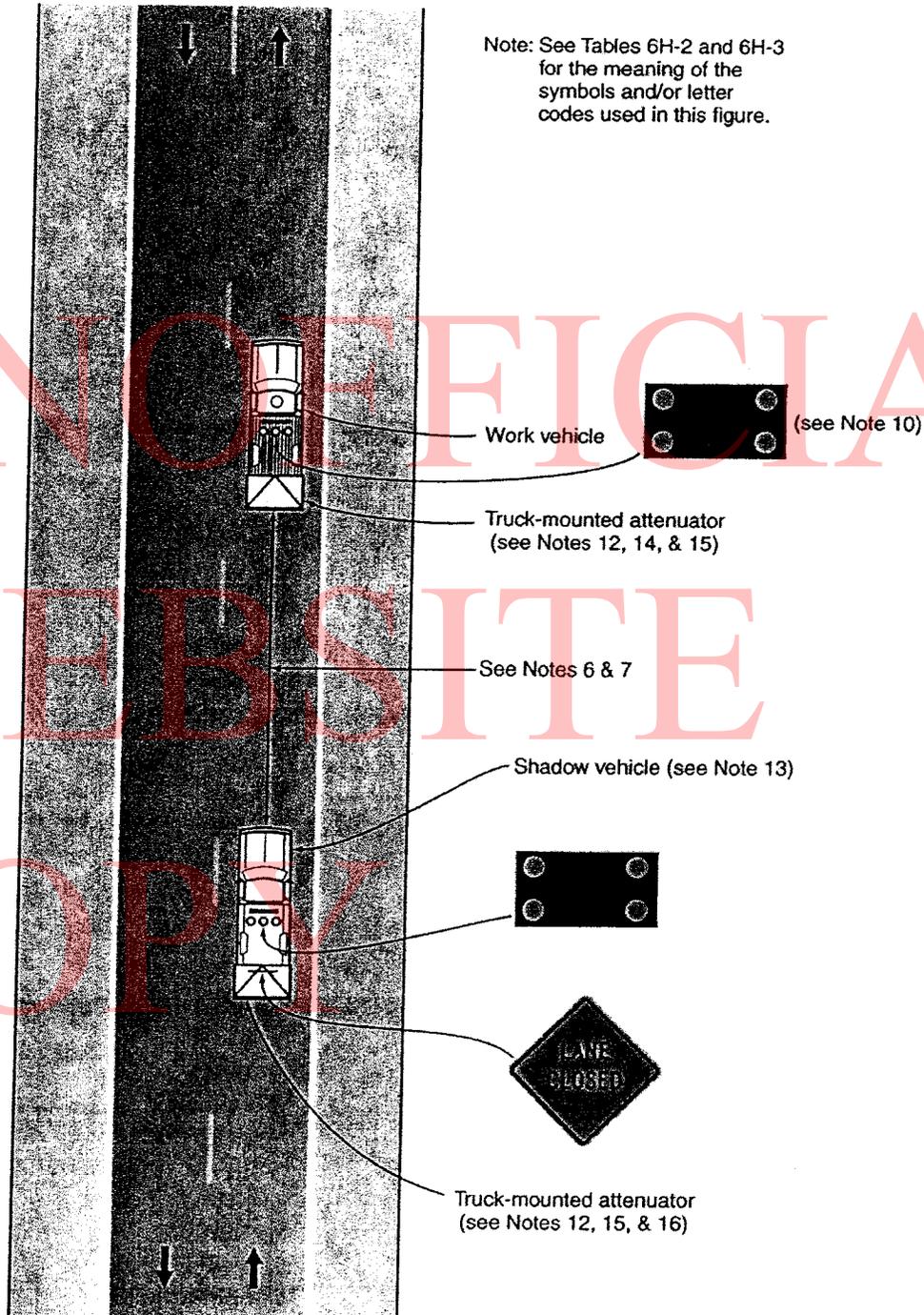
Standard:

12. Except as provided in Notes 14 and 16, the work and shadow vehicles shall be equipped with truck-mounted attenuators for mobile operations on roadways with a posted speed limit or 85th-percentile speed greater than 40 mph.
13. A shadow vehicle shall be used for all mowing operations on two-lane roads where the tire of the mower or mower deck encroaches upon the traveled way.

Option:

14. Truck-mounted attenuators may be omitted from specialized work vehicles, such as sweeper, vacuum, and pothole patching trucks, and other work vehicles that cannot support the installation of a truck-mounted attenuator.
15. Truck-mounted attenuators may be used for mobile operations along roadways with a posted speed limit or 85th-percentile speed less than or equal to 40 mph.
16. For mowing operations along two-lane roads, truck-mounted or trailer-mounted attenuators may be omitted from the shadow vehicle when the mower encroaches upon the traveled way.

Figure 6H-17. Mobile Operations on a Two-Lane Road (TA-17)
(Delaware Revision)



Typical Application 17

Notes for Figure 6H-17B—Typical Application 17B
Mobile Striping Operations on a Two-Lane Road with a Separate Cone Recovery Convoy
(Delaware Revision)

Standard:

1. A minimum of three vehicles shall be used for the initial mobile striping application convoy and a minimum of two vehicles shall be used for the cone recovery convoy.
2. The cone recovery convoy shall operate in accordance with Figure 6H-17.
3. Flags and/or flashing lights shall be mounted on the gun carriages whenever the carriages extend 1 foot or more beyond the width of the application vehicle.
4. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.
5. Shadow and application vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.
6. If an arrow board is used, it shall be used in the caution mode.

Guidance:

7. *The cone recovery should occur within 1 hour of the initial application or within the corresponding drying time based on ambient temperatures.*
8. *Where drivers emerging from an intersecting roadway will not encounter a shadow vehicle prior to the work area, a stationary warning sign should be placed on the intersecting road.*
9. *Whenever adequate stopping sight distance exists to the rear, the shadow vehicles should maintain the minimum distance from the preceding vehicle and proceed at the same speed. The shadow vehicles should slow down in advance of vertical or horizontal curves that restrict sight distance.*

Option:

10. The minimum distance between the shadow vehicles may vary according to terrain, paint drying time, and other factors, such as the manufacturer's recommendations for the truck-mounted attenuator.
11. Additional shadow vehicles to warn and reduce the speed of oncoming or opposing vehicular traffic may be used. Law enforcement vehicles may be used for this purpose.
12. Arrow boards may be omitted from work vehicles that cannot support the installation of an arrow board.

Support:

13. Shadow vehicles are used to warn motor vehicle traffic of the operation ahead.

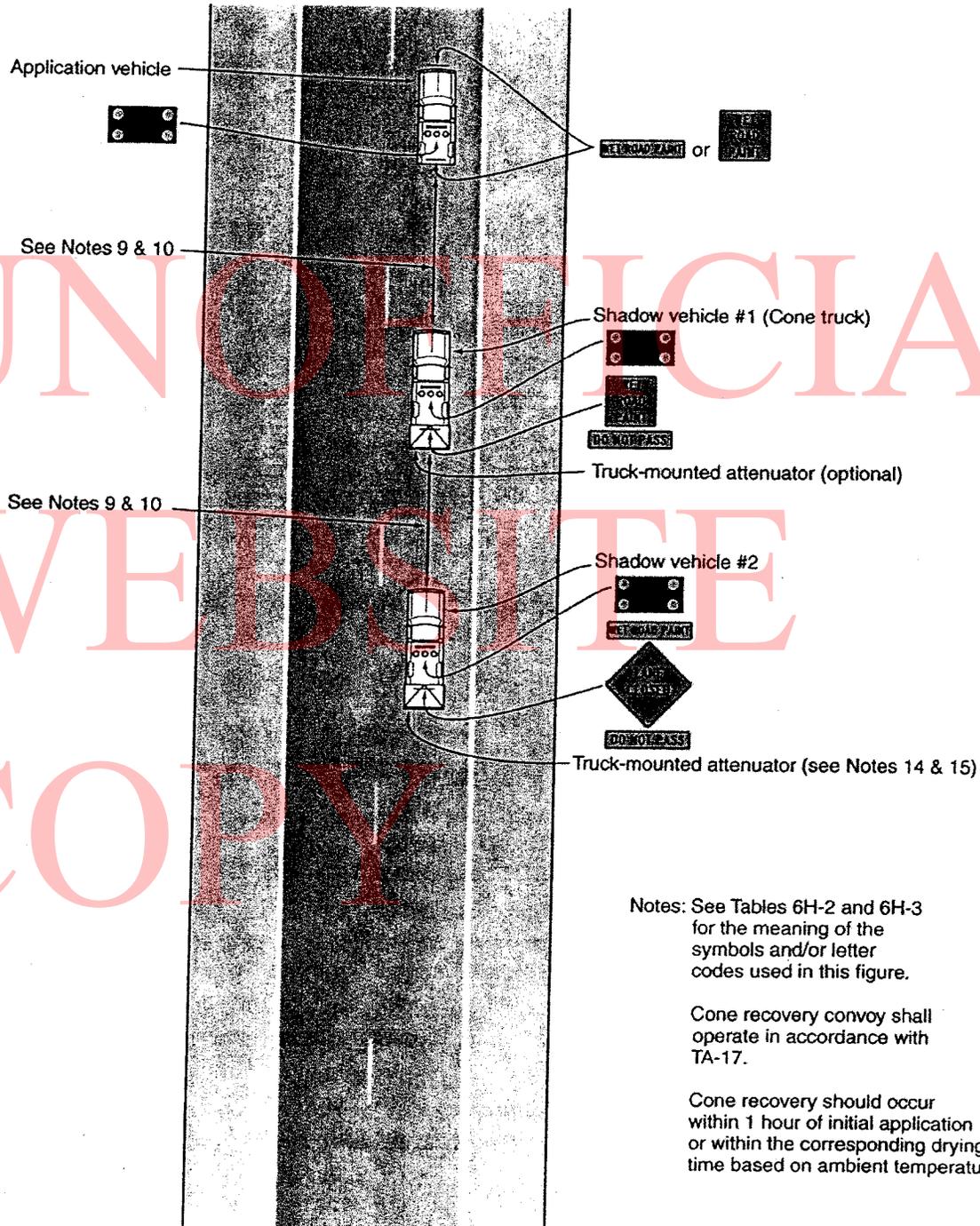
Standard:

14. Shadow Vehicle 2 shall be equipped with a truck-mounted attenuator for mobile operations on roadways with a posted speed limit or 85th-percentile speed greater than 40 mph.

Option:

15. Truck-mounted attenuators may be used for mobile operations along roadways with a posted speed limit or 85th-percentile speed less than or equal to 40 mph.
16. Retroreflective cones may be used to supplement mobile striping operations to protect the painted lines.

Figure 6H-17B. Mobile Striping Operations on a Two-Lane Road with a Separate Cone Recovery Convoy (TA-17B) (Delaware Revision)



Notes: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Cone recovery convoy shall operate in accordance with TA-17.

Cone recovery should occur within 1 hour of initial application or within the corresponding drying time based on ambient temperatures.

Typical Application 17B

Notes for Figure 6H-35—Typical Application 35
Short Duration and Mobile Operations on a Multi-Lane, Divided Highway
with a Single Lane Closure
(Delaware Revision)

Standard:

1. Arrow boards on the shadow vehicles shall, at a minimum, be Type B, with a size of 60 x 30 inches.
2. If used, vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.
3. Shadow and work vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.
4. An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane.
5. When a side road or entrance ramp intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.

Guidance:

6. *Vehicles used for these operations should be made highly visible with appropriate equipment, such as signs or arrow boards.*
7. *Work should normally be accomplished during off-peak hours to the extent practical.*
8. *Whenever adequate stopping sight distance exists to the rear, the shadow vehicles should maintain the minimum distance from the preceding vehicle and proceed at the same speed. The shadow vehicles should slow down in advance of vertical or horizontal curves that restrict sight distance.*

Option:

9. The minimum distance between the shadow vehicles may vary according to terrain and other factors, such as the manufacturer's recommendations for the truck-mounted attenuator.
10. Shadow Vehicle 4 may be used where adequate shoulder width is available to display a portable changeable message sign.

Guidance:

11. *If used, Shadow Vehicle 4 should be located upstream of queued traffic to advise motorists of the potential for stopped vehicles.*

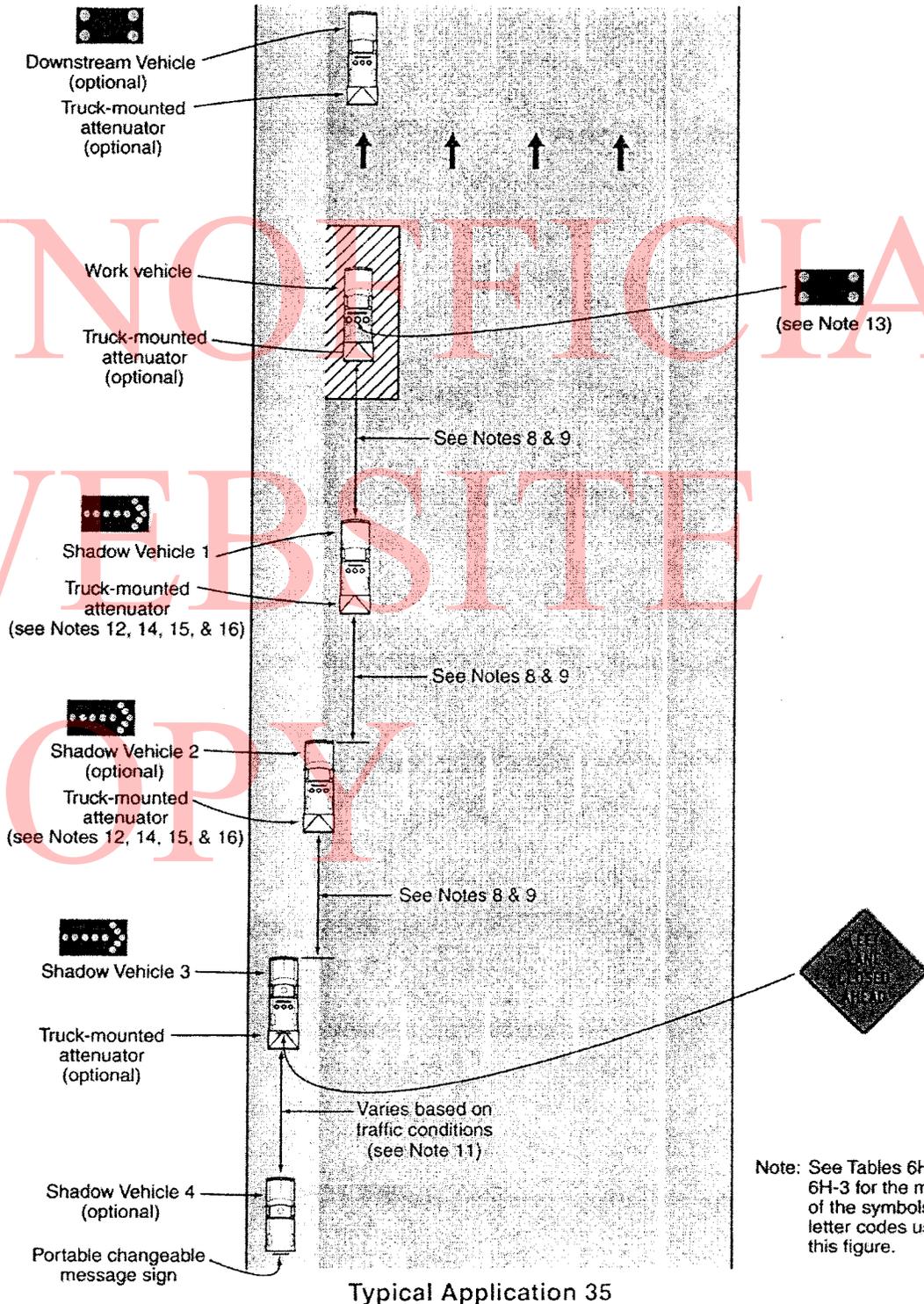
Standard:

12. Except as provided in Notes 14 and 15 or as denoted as optional in Figure 6H-35, the work and shadow vehicles shall be equipped with truck-mounted attenuators for operations on roadways with a posted speed limit or 85th-percentile speed greater than 40 mph.

Option:

13. Arrow boards may be omitted from work vehicles that cannot support the installation of an arrow board.
14. Truck-mounted attenuators may be omitted from specialized work vehicles, such as sweeper, vacuum, and pothole patching trucks, and other work vehicles that cannot support the installation of a truck-mounted attenuator.
15. For short duration operations of 15 minutes or less along roadways with a posted speed limit or 85th-percentile speed greater than 40 mph, truck-mounted attenuators may be omitted if a vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used or if the shoulder width is less than the width of a truck-mounted attenuator.
16. Truck-mounted attenuators may be used for all operations along roadways with a posted speed limit or 85th-percentile speed less than or equal to 40 mph.

Figure 6H-35. Short Duration and Mobile Operations on a Multi-Lane, Divided Highway with a Single Lane Closure (TA-35) (Delaware Revision)



Notes for Figure 6H-35A—Typical Application 35A
Short Duration and Mobile Operations on a Multi-Lane, Divided Highway
with a Double Lane Closure
(Delaware Revision)

Standard:

1. Arrow boards on the shadow vehicles shall, at a minimum, be Type B, with a size of 60 x 30 inches.
2. If used, vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.
3. Shadow and work vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.
4. An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane.
5. When a side road or entrance ramp intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.

Guidance:

6. *Vehicles used for these operations should be made highly visible with appropriate equipment, such as signs or arrow boards.*
7. *Work should normally be accomplished during off-peak hours to the extent practical.*
8. *Shadow Vehicle 1A should be used for stationary short duration operations only.*
9. *Whenever adequate stopping sight distance exists to the rear, the shadow vehicles should maintain the minimum distance from the preceding vehicle and proceed at the same speed. The shadow vehicles should slow down in advance of vertical or horizontal curves that restrict sight distance.*

Option:

10. The minimum distance between the shadow vehicles may vary according to terrain and other factors, such as the manufacturer's recommendations for the truck-mounted attenuator.
11. Shadow Vehicle 6 may be used where adequate shoulder width is available to display a portable changeable message sign.

Guidance:

12. *If used, Shadow Vehicle 6 should be located upstream of queued traffic to advise motorists of the potential for stopped vehicles.*

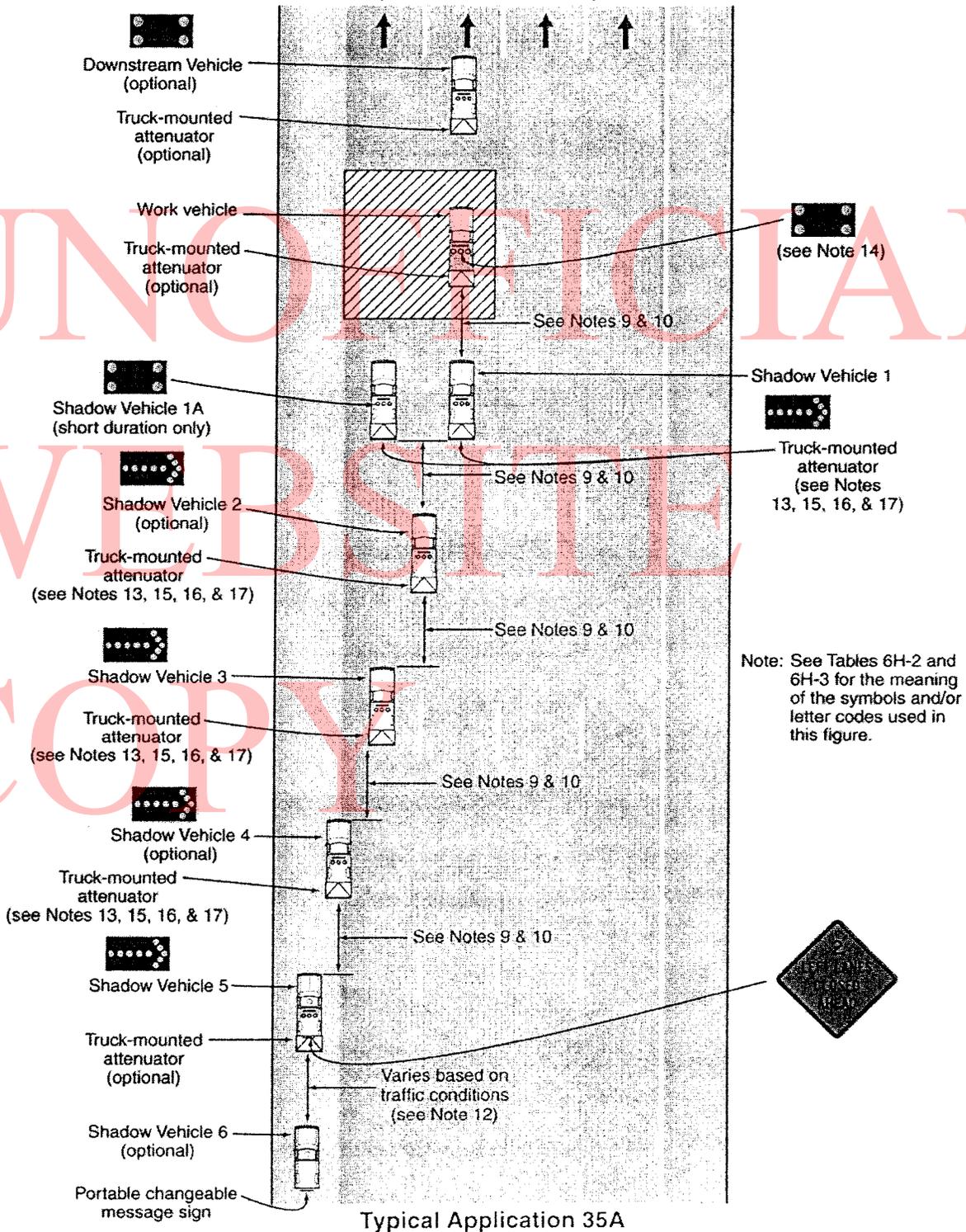
Standard:

13. Except as provided in Notes 15 and 16 or as denoted as optional in Figure 6H-35A, the work and shadow vehicles shall be equipped with truck-mounted attenuators for operations on roadways with a posted speed limit or 85th-percentile speed greater than 40 mph.

Option:

14. Arrow boards may be omitted from work vehicles that cannot support the installation of an arrow board.
15. Truck-mounted attenuators may be omitted from specialized work vehicles, such as sweeper, vacuum, and pothole patching trucks, and other work vehicles that cannot support the installation of a truck-mounted attenuator.
16. For short duration operations of 15 minutes or less along roadways with a posted speed limit or 85th-percentile speed greater than 40 mph, truck-mounted attenuators may be omitted if a vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used or if the shoulder width is less than the width of a truck-mounted attenuator.
17. Truck-mounted attenuators may be used for all operations along roadways with a posted speed limit or 85th-percentile speed less than or equal to 40 mph.

Figure 6H-35A. Short Duration and Mobile Operations on a Multi-Lane, Divided Highway with a Double Lane Closure (TA-35A)
(Delaware Revision)



**Notes for Figure 6H-35C—Typical Application 35C
Mobile Striping Operations on a Multi-Lane, Divided Highway
with a Separate Cone Recovery Convoy
(Delaware Revision)**

Standard:

1. A minimum of three vehicles shall be used for the initial mobile striping application convoy and a minimum of three vehicles shall be used for the cone recovery convoy.
2. The cone recovery convoy shall operate in accordance with Figure 6H-35.
3. Arrow boards on the shadow vehicles shall, at a minimum, be Type B, with a size of 60 x 30 inches.
4. Flags and/or flashing lights shall be mounted on the gun carriages whenever the carriages extend 1 foot or more beyond the width of the application vehicle.
5. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.
6. Shadow and application vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.
7. An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane.
8. When a side road or entrance ramp intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.

Guidance:

9. *The cone recovery should occur within 1 hour of the initial application or within the corresponding drying time based on ambient temperatures.*
10. *Vehicles used for these operations should be made highly visible with appropriate equipment, such as signs or arrow boards.*
11. *Work should normally be accomplished during off-peak hours to the extent practical.*
12. *Whenever adequate stopping sight distance exists to the rear, the shadow vehicles should maintain the minimum distance from the preceding vehicle and proceed at the same speed. The shadow vehicles should slow down in advance of vertical or horizontal curves that restrict sight distance.*

Option:

13. The minimum distance between the shadow vehicles may vary according to terrain, paint drying time, and other factors, such as the manufacturer's recommendations for the truck-mounted attenuator.
14. Additional shadow vehicles to warn and reduce the speed of oncoming or opposing vehicular traffic may be used. Law enforcement vehicles may be used for this purpose.
15. Arrow boards may be omitted from work vehicles that cannot support the installation of an arrow board.

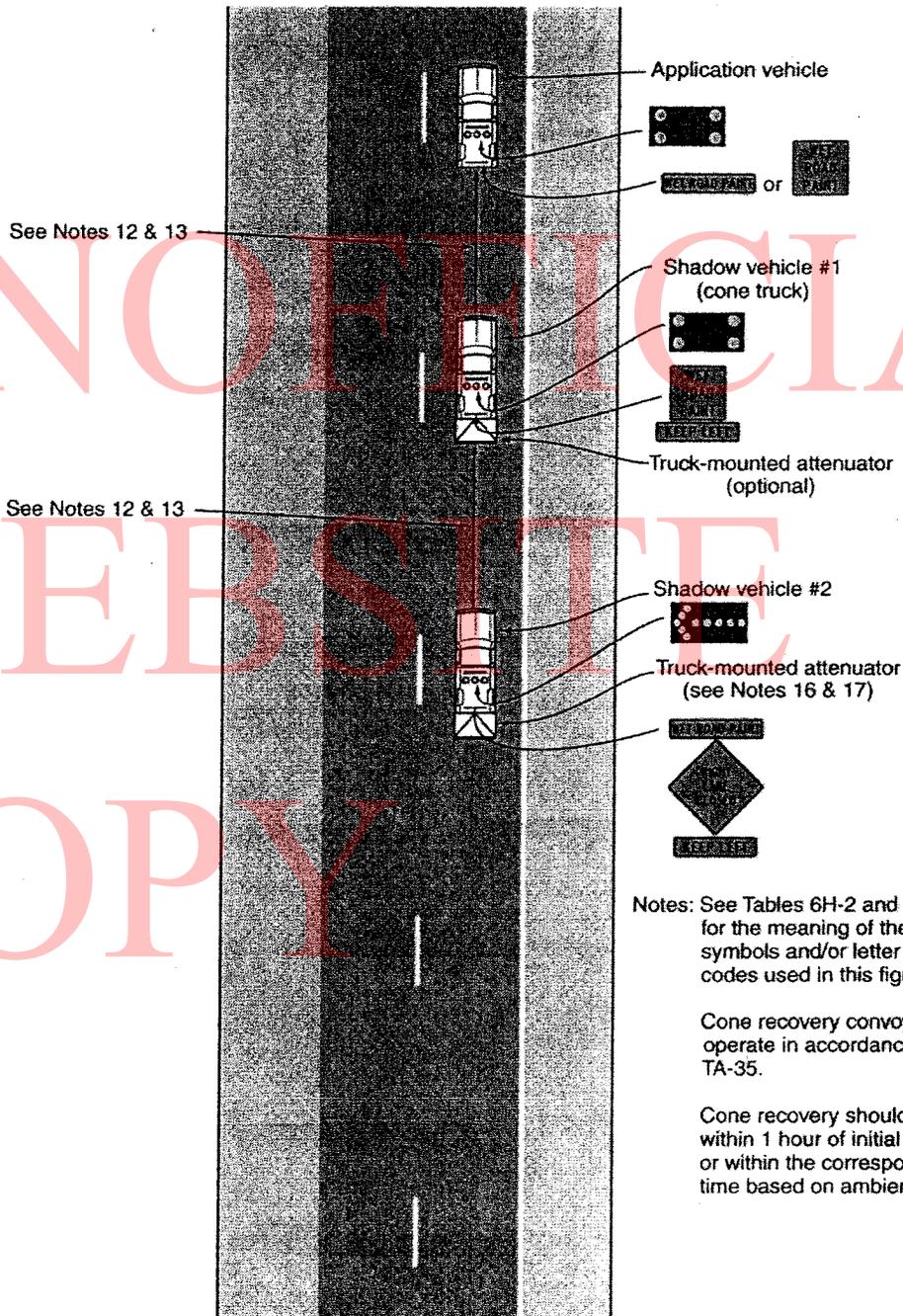
Standard:

16. Shadow Vehicle 2 shall be equipped with a truck-mounted attenuator for mobile operations on roadways with a posted speed limit or 85th-percentile speed greater than 40 mph.

Option:

17. Truck-mounted attenuators may be used for mobile operations along roadways with a posted speed limit or 85th-percentile speed less than or equal to 40 mph.

Figure 6H-35C. Mobile Striping Operations on a Multi-Lane, Divided Highway with a Separate Cone Recovery Convoy (TA-35C) (Delaware Revision)



Typical Application 35C

Notes for Figure 6H-35E—Typical Application 35E
Mobile Striping Operations on an Interstate, Freeway, or Expressway
with a Single Lane Closure and a Separate Cone Recovery Convoy
(Delaware Revision)

Standard:

1. A minimum of three vehicles shall be used for the initial mobile striping application convoy and a minimum of three vehicles shall be used for the cone recovery convoy.
2. The cone recovery convoy shall operate in accordance with Figure 6H-35.
3. Arrow boards on the shadow vehicles shall, at a minimum, be Type B, with a size of 60 x 30 inches.
4. Flags and/or flashing lights shall be mounted on the gun carriages whenever the carriages extend 1 foot or more beyond the width of the application vehicle.
5. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.
6. Shadow and application vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.
7. An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane.
8. When a side road or entrance ramp intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.
9. A law enforcement vehicle shall supplement the convoys on interstates, freeways, and expressways.

Guidance:

10. *The cone recovery should occur within 1 hour of the initial application or within the corresponding drying time based on ambient temperatures.*
11. *Closing an interior lane only on a directional roadway with three or more lanes is strongly discouraged because of worker safety and driver expectancy concerns associated with permitting high-speed traffic on both sides of the work space. When an interior lane is closed, an adjacent lane should also be considered for closure.*
12. *Vehicles used for these operations should be made highly visible with appropriate equipment, such as signs or arrow boards.*
13. *Work should normally be accomplished during off-peak hours to the extent practical.*
14. *Whenever adequate stopping sight distance exists to the rear, the shadow vehicles should maintain the minimum distance from the preceding vehicle and proceed at the same speed. The shadow vehicles should slow down in advance of vertical or horizontal curves that restrict sight distance.*

Option:

15. The minimum distance between the shadow vehicles may vary according to terrain, paint drying time, and other factors, such as the manufacturer's recommendations for the truck-mounted attenuator.
16. Arrow boards may be omitted from work vehicles that cannot support the installation of an arrow board.
17. Shadow Vehicle 3 may be used where adequate shoulder width is available to display a portable changeable message sign.

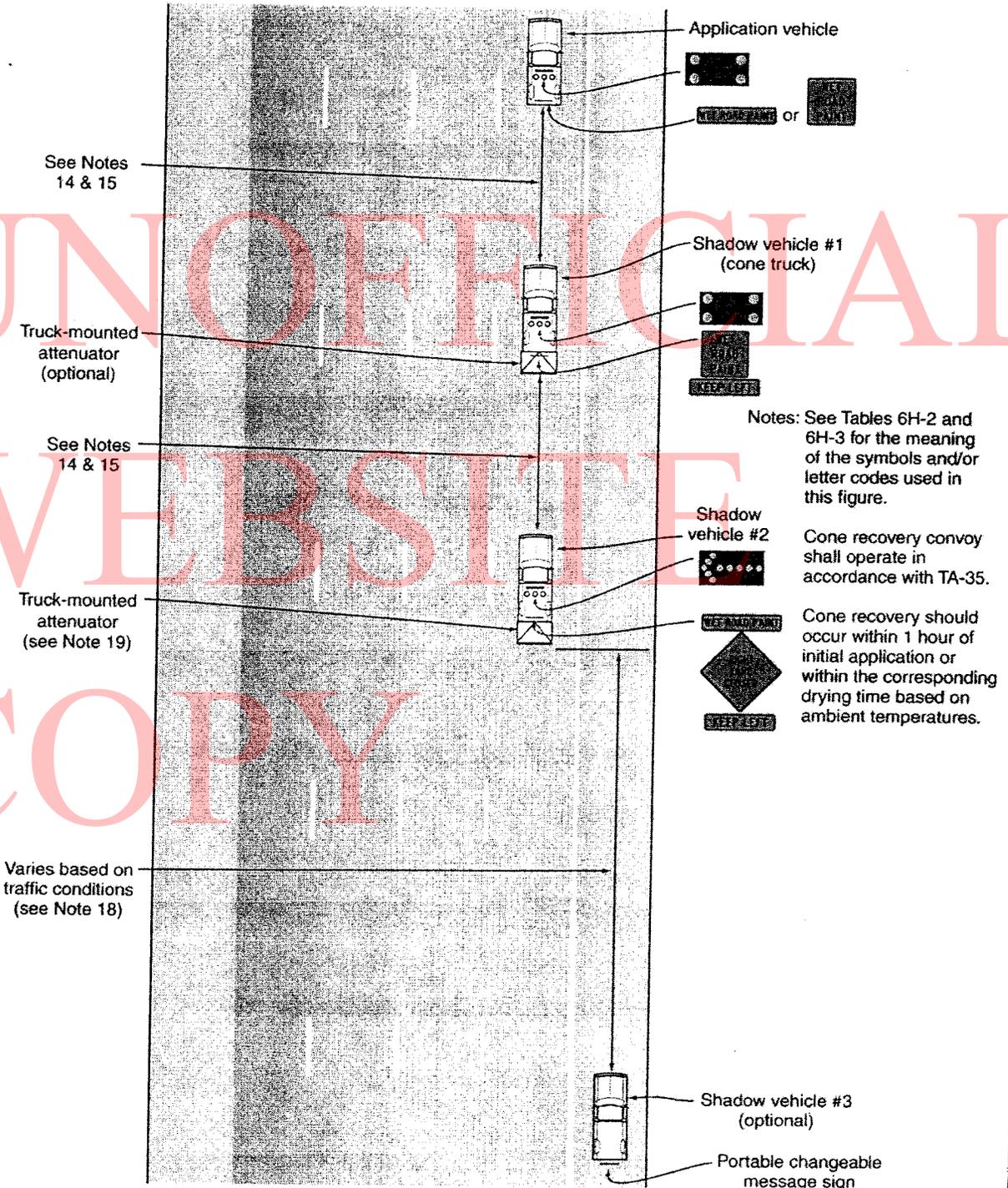
Guidance:

18. *If used, Shadow Vehicle 3 should be located upstream of queued traffic to advise motorists of the potential for stopped vehicles.*

Standard:

19. Shadow Vehicle 2 shall be equipped with a truck-mounted attenuator for mobile operations on roadways with a posted speed limit or 85th-percentile speed greater than 40 mph.

Figure 6H-35E. Mobile Striping Operations on an Interstate, Freeway, or Expressway with a Single Lane Closure and a Separate Cone Recovery Convoy (TA-35E) (Delaware Revision)



Typical Application 35E

Notes for Figure 6H-35G—Typical Application 35G
Mobile Striping Operations on an Interstate, Freeway, or Expressway
with a Double Lane Closure and a Separate Cone Recovery Convoy
(Delaware Revision)

Standard:

1. A minimum of four vehicles shall be used for the initial mobile striping application convoy and a minimum of four vehicles shall be used for the cone recovery convoy.
2. The cone recovery convoy shall operate in accordance with Figure 6H-35A.
3. Arrow boards on the shadow vehicles shall, at a minimum, be Type B, with a size of 60 x 30 inches.
4. Flags and/or flashing lights shall be mounted on the gun carriages whenever the carriages extend 1 foot or more beyond the width of the application vehicle.
5. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.
6. Shadow and application vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.
7. An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane.
8. When a side road or entrance ramp intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.
9. A law enforcement vehicle shall supplement the convoys on interstates, freeways, and expressways.

Guidance:

10. *The cone recovery should occur within 1 hour of the initial application or within the corresponding drying time based on ambient temperatures.*
11. *Closing an interior lane only on a directional roadway with three or more lanes is strongly discouraged because of worker safety and driver expectancy concerns associated with permitting high-speed traffic on both sides of the work space. When an interior lane is closed, an adjacent lane should also be considered for closure.*
12. *Vehicles used for these operations should be made highly visible with appropriate equipment, such as signs or arrow boards.*
13. *Work should normally be accomplished during off-peak hours to the extent practical.*
14. *Whenever adequate stopping sight distance exists to the rear, the shadow vehicles should maintain the minimum distance from the preceding vehicle and proceed at the same speed. The shadow vehicles should slow down in advance of vertical or horizontal curves that restrict sight distance.*

Option:

15. The minimum distance between the shadow vehicles may vary according to terrain, paint drying time, and other factors, such as the manufacturer's recommendations for the truck-mounted attenuator.
16. Arrow boards may be omitted from work vehicles that cannot support the installation of an arrow board.
17. Shadow Vehicle 4 may be used where adequate shoulder width is available to display a portable changeable message sign.

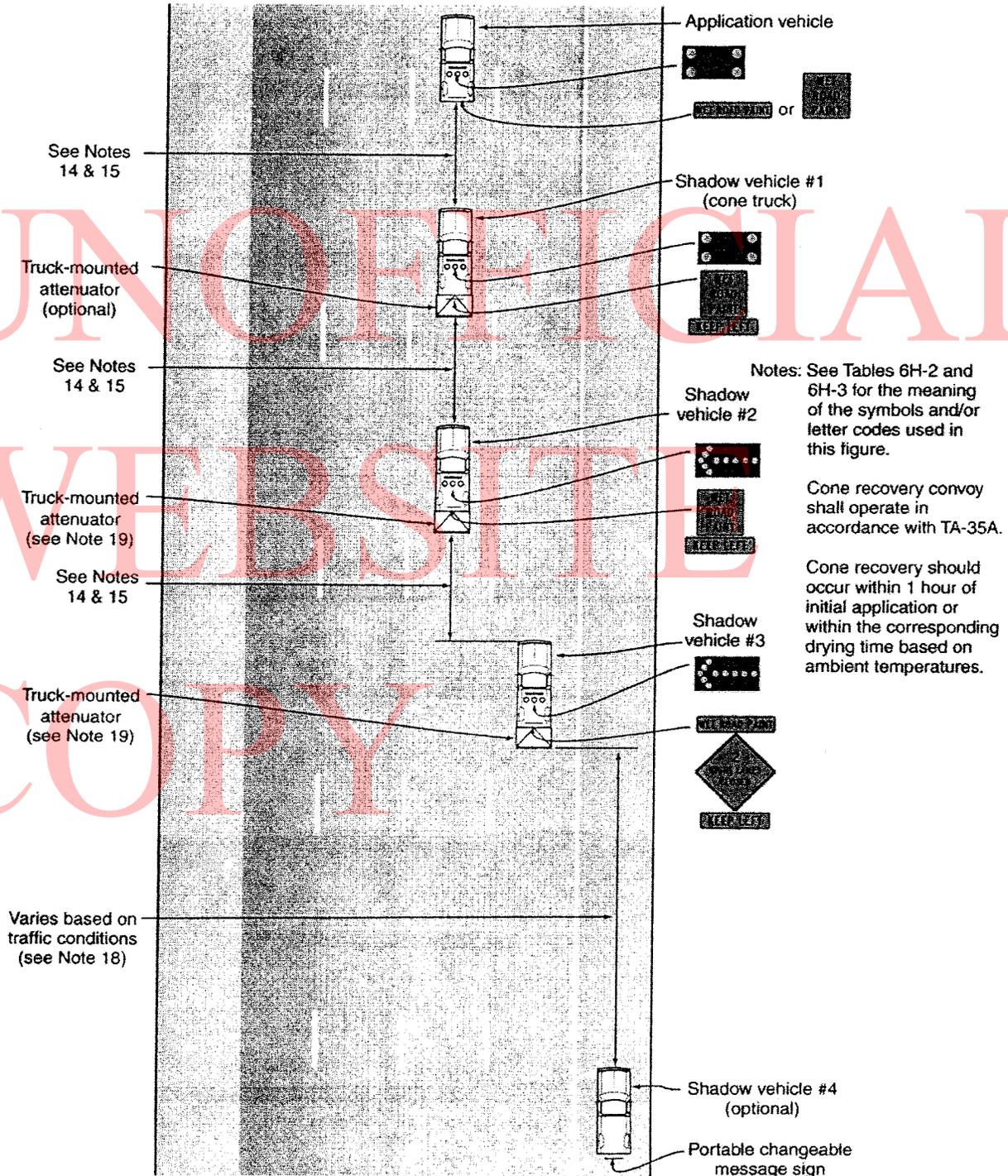
Guidance:

18. *If used, Shadow Vehicle 4 should be located upstream of queued traffic to advise motorists of the potential for stopped vehicles.*

Standard:

19. Shadow Vehicles 2 and 3 shall be equipped with truck-mounted attenuators for mobile operations on roadways with a posted speed limit or 85th-percentile speed greater than 40 mph.

Figure 6H-35G. Mobile Striping Operations on an Interstate, Freeway, or Expressway with a Double Lane Closure and a Separate Cone Recovery Convoy (TA-35G) (Delaware Revision)



Typical Application 35G

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201208302

PAGE 27 OF 30

CENTRAL
MAINTENANCE

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013, 2014

LOCATION 1 (EPOXY PAVEMENT (DISTRICT II) MARKINGS KC & SC 2012, 2013, 2014) FROM
TO

LENGTH

GENERAL IMPROVEMENTS

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC

COMMENTS:

MATERIAL ESTIMATE FOR LOCATION 1

| | | |
|--------|---|-------------------|
| 748643 | RAISED PAVEMENT MARKER, WHITE/RED ON ASPHALT | 100.00 EACH |
| 748644 | RAISED PAVEMENT MARKER, YELLOW/RED | 100.00 EACH |
| 748645 | RAISED PAVEMENT MARKER, YELLOW/YELLOW | 100.00 EACH |
| 748646 | RAISED PAVEMENT MARKER, INTERSTATE/EXPRESSWAYS, WHITE/RED ON ASPHALT | 100.00 EACH |
| 748647 | RAISED PAVEMENT MARKER, INTERSTATE/EXPRESSWAY, YELLOW/RED | 100.00 EACH |
| 748648 | RAISED PAVEMENT MARKER, INTERSTATE/EXPRESSWAY, WHITE/RED ON CONCRETE | 100.00 EACH |
| 748649 | RAISED PAVEMENT MARKER, WHITE/RED ON CONCRETE | 100.00 EACH |
| 748650 | RAISED PAVEMENT MARKER, INTERSTATE/EXPRESSWAY, YELLOW/RED ON CONCRETE | 100.00 EACH |
| 748651 | RAISED PAVEMENT MARKER, YELLOW/YELLOW ON CONCRETE | 100.00 EACH |
| 748652 | REPLACEMENT OF RAISED PAVEMENT MARKER LENSES, WHITE/RED | 200.00 EACH |
| 748653 | REPLACEMENT OF RAISED PAVEMENT MARKER LENSES, YELLOW/RED | 200.00 EACH |
| 748654 | REPLACEMENT OF RAISED PAVEMENT MARKER LENSES, YELLOW/YELLOW | 200.00 EACH |
| 748656 | REPLACEMENT OF RAISED PAVEMENT MARKER LENSES, WHITE/RED, TURNPIKE | 200.00 EACH |
| 748657 | REPLACEMENT OF RAISED PAVEMENT MARKER LENSES, YELLOW/RED, TURNPIKE | 200.00 EACH |
| 748708 | RAISED PAVEMENT MARKER, YELLOW/RED ON CONCRETE | 100.00 EACH |
| 748709 | WHITE EPOXY CENTERLINE, 5" | 1,030,433.00 L.F. |
| 748710 | YELLOW EPOXY CENTERLINE, 5" | 1,046,688.00 L.F. |
| 748711 | WHITE EPOXY EDGE LINE, 5" | 1,106,333.00 L.F. |
| 748712 | YELLOW EPOXY EDGE LINE, 5" | 1,070,893.00 L.F. |
| 748713 | WHITE EPOXY GORE LINE, 10" | 12,865.00 L.F. |
| 748714 | WHITE EPOXY GORE LINE (TURNPIKE), 10" | 100,931.00 L.F. |
| 748715 | WHITE EPOXY CENTERLINE (TURNPIKE), 5" | 129,436.00 L.F. |
| 748716 | WHITE EPOXY EDGE LINE (TURNPIKE), 5" | 638,713.00 L.F. |
| 748717 | YELLOW EPOXY EDGE LINE (TURNPIKE), 5" | 635,572.00 L.F. |
| 748718 | BLACK EPOXY CONTRAST, 3" | 133,000.00 L.F. |
| 748719 | BLACK EPOXY CONTRAST (TURNPIKE), 3" | 390,000.00 L.F. |
| 748720 | BLACK EPOXY CONTRAST, 5" | 75,340.00 L.F. |

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201208302

PAGE 28 OF 30

CENTRAL
MAINTENANCE

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013, 2014

LOCATION 1 (EPOXY PAVEMENT (DISTRICT II) MARKINGS KC & SC 2012, 2013, 2014) FROM
TO

LENGTH

GENERAL IMPROVEMENTS

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC

COMMENTS:

MATERIAL ESTIMATE FOR LOCATION 1

| | | |
|--------|--|-----------------|
| 748721 | BLACK EPOXY CONTRAST (TURNPIKE), 5" | 75,000.00 L.F. |
| 748722 | BLACK EPOXY CONTRAST (TURNPIKE), 9" | 5,323.00 L.F. |
| 748723 | BLACK EPOXY CONTRAST, 9" | 20,000.00 L.F. |
| 748724 | BLACK EPOXY CONTRAST, 14" | 5,428.00 L.F. |
| 748725 | BLACK EPOXY CONTRAST (TURNPIKE), 14" | 50,283.00 L.F. |
| 748726 | REMOVAL OF LINE, 1" - 6" | 538,375.00 L.F. |
| 748727 | REMOVAL OF LINE GREATER THAN 6" - 12" | 50,829.00 L.F. |
| 748728 | REMOVAL OF LINE GREATER THAN 12" - 18" | 2,800.00 L.F. |
| 748729 | REMOVAL OF LINE TURNPIKE, 1" - 6" | 305,757.00 L.F. |
| 748730 | REMOVAL OF LINE TURNPIKE, GREATER THAN 6" - 12" | 307,623.00 L.F. |
| 748731 | REMOVAL OF LINE TURNPIKE, GREATER THAN 12" - 18" | 10,000.00 L.F. |
| 763563 | PERFORMANCE AND PAYMENT BOND | 1.00 L.S. |
| 763632 | REMOVAL OF RAISED PAVEMENT MARKER | 500.00 EACH |

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT: T201208302

PAGE 29 OF 30

CENTRAL
MAINTENANCE

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013, 2014

CONTRACT QUANTITIES SUMMARY SHEET

| | | |
|--------|---|-------------------|
| 748643 | RAISED PAVEMENT MARKER, WHITE/RED ON ASPHALT | 100.00 EACH |
| 748644 | RAISED PAVEMENT MARKER, YELLOW/RED | 100.00 EACH |
| 748645 | RAISED PAVEMENT MARKER, YELLOW/YELLOW | 100.00 EACH |
| 748646 | RAISED PAVEMENT MARKER, INTERSTATE/EXPRESSWAYS, WHITE/RED ON ASPHALT | 100.00 EACH |
| 748647 | RAISED PAVEMENT MARKER, INTERSTATE/EXPRESSWAY, YELLOW/RED | 100.00 EACH |
| 748648 | RAISED PAVEMENT MARKER, INTERSTATE/EXPRESSWAY, WHITE/RED ON CONCRETE | 100.00 EACH |
| 748649 | RAISED PAVEMENT MARKER, WHITE/RED ON CONCRETE | 100.00 EACH |
| 748650 | RAISED PAVEMENT MARKER, INTERSTATE/EXPRESSWAY, YELLOW/RED ON CONCRETE | 100.00 EACH |
| 748651 | RAISED PAVEMENT MARKER, YELLOW/YELLOW ON CONCRETE | 100.00 EACH |
| 748652 | REPLACEMENT OF RAISED PAVEMENT MARKER LENSES, WHITE/RED | 200.00 EACH |
| 748653 | REPLACEMENT OF RAISED PAVEMENT MARKER LENSES, YELLOW/RED | 200.00 EACH |
| 748654 | REPLACEMENT OF RAISED PAVEMENT MARKER LENSES, YELLOW/YELLOW | 200.00 EACH |
| 748656 | REPLACEMENT OF RAISED PAVEMENT MARKER LENSES, WHITE/RED, TURNPIKE | 200.00 EACH |
| 748657 | REPLACEMENT OF RAISED PAVEMENT MARKER LENSES, YELLOW/RED, TURNPIKE | 200.00 EACH |
| 748708 | RAISED PAVEMENT MARKER, YELLOW/RED ON CONCRETE | 100.00 EACH |
| 748709 | WHITE EPOXY CENTERLINE, 5" | 1,030,433.00 L.F. |
| 748710 | YELLOW EPOXY CENTERLINE, 5" | 1,046,688.00 L.F. |
| 748711 | WHITE EPOXY EDGE LINE, 5" | 1,106,333.00 L.F. |
| 748712 | YELLOW EPOXY EDGE LINE, 5" | 1,070,893.00 L.F. |
| 748713 | WHITE EPOXY GORE LINE, 10" | 12,865.00 L.F. |
| 748714 | WHITE EPOXY GORE LINE (TURNPIKE), 10" | 100,931.00 L.F. |
| 748715 | WHITE EPOXY CENTERLINE (TURNPIKE), 5" | 129,436.00 L.F. |
| 748716 | WHITE EPOXY EDGE LINE (TURNPIKE), 5" | 638,713.00 L.F. |
| 748717 | YELLOW EPOXY EDGE LINE (TURNPIKE), 5" | 635,572.00 L.F. |
| 748718 | BLACK EPOXY CONTRAST, 3" | 133,000.00 L.F. |
| 748719 | BLACK EPOXY CONTRAST (TURNPIKE), 3" | 390,000.00 L.F. |
| 748720 | BLACK EPOXY CONTRAST, 5" | 75,340.00 L.F. |
| 748721 | BLACK EPOXY CONTRAST (TURNPIKE), 5" | 75,000.00 L.F. |

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT: T201208302

PAGE 30 OF 30

CENTRAL
MAINTENANCE

EPOXY PAVEMENT MARKINGS (DISTRICT II) KC & SC 2012, 2013, 2014

CONTRACT QUANTITIES SUMMARY SHEET

| | | |
|--------|--|-----------------|
| 748722 | BLACK EPOXY CONTRAST (TURNPIKE), 9" | 5,323.00 L.F. |
| 748723 | BLACK EPOXY CONTRAST, 9" | 20,000.00 L.F. |
| 748724 | BLACK EPOXY CONTRAST, 14" | 5,428.00 L.F. |
| 748725 | BLACK EPOXY CONTRAST (TURNPIKE), 14" | 50,283.00 L.F. |
| 748726 | REMOVAL OF LINE, 1" - 6" | 538,375.00 L.F. |
| 748727 | REMOVAL OF LINE GREATER THAN 6" - 12" | 50,829.00 L.F. |
| 748728 | REMOVAL OF LINE GREATER THAN 12" - 18" | 2,800.00 L.F. |
| 748729 | REMOVAL OF LINE TURNPIKE, 1" - 6" | 305,757.00 L.F. |
| 748730 | REMOVAL OF LINE TURNPIKE, GREATER THAN 6" - 12" | 307,623.00 L.F. |
| 748731 | REMOVAL OF LINE TURNPIKE, GREATER THAN 12" - 18" | 10,000.00 L.F. |
| 763563 | PERFORMANCE AND PAYMENT BOND | 1.00 L.S. |
| 763632 | REMOVAL OF RAISED PAVEMENT MARKER | 500.00 EACH |

COPY