Included under Items 816.01, 816.02, and 816.03 is the maintenance of the existing traffic signal system. The existing traffic signal system is to remain operational during the entire construction period until the proposed system is activated. Such work shall include, if necessary, temporary erection and wiring of relocated signal posts and all other work required to maintain the existing signal systems. The Contractor shall pay for the use of police details necessary to control traffic at this location due to failure of the existing system caused by operations of the Contractor.

It shall be the responsibility of the Contractor to provide all labor, equipment and material required for the maintenance or full repair of all temporary and proposed traffic control equipment within the project limits, including damage by automobile accident, from the date of written notice given to the Engineer that the Contractor will work on or near an existing signal, until the date of acceptance of the completed project. This written notice must be given before the Contractor may proceed with any traffic signal system work.

For the purpose of these paragraphs, the phrase "Traffic Signal Control Equipment" is intended to include, but is not limited to: controllers, detectors, signal housings, supporting structures, cabinets, wires, conduit and all other ancillary electrical equipment used for traffic control.

OPTICAL EMERGENCY PRE-EMPTION

Optical emergency preemption equipment shall be provided at the signalized intersection. The equipment shall employ optical communication to identify the presence of designated priority vehicles and cause the traffic signal controller to advance to or hold the desired traffic signal preemption phase as shown on the Contract Plans. The equipment shall interface with the proposed traffic signal controller without compromising normal operations or any safety provisions. Above all, the equipment shall be fully compatible with optical emergency emitters currently used by the Town of Dartmouth and City of New Bedford.

The optical emergency preemption equipment shall consist of optical detectors, a confirmation strobe (preemption indicator light), optical detector cable, phase selector, interfacing of preemption equipment with the local controller, making electrical connections and all required incidentals. The detectors shall be single channel type, as shown on the plans. The detectors and confirmation strobe shall be mounted as described herein and as shown on the contract plans.

The equipment shall be the latest models on the MassHighway Approved Equipment List. The following are the operational requirements of the optical emergency preemption system:

A. The communication between the optical emitter and the detector shall be effective over a line-of-sight path of up to 1800 feet.
B. A single preemption phase, as specified on the contract plans, shall be activated when its associated detector receives the optically transmitted signal from the emitter.
C. Upon receiving the signal, the detector shall transmit the information to the phase selector for processing and the confirmation strobe shall be activated.
D. Phase selector shall cause the controller to show the selected preemption phase to assist the emergency vehicle through the intersection without cross street conflict.
E. Phase selector shall not alter the predetermined phase sequence; only the duration of the display may be altered.
F. The system shall allow sufficient time to deliver the selected preemption phase in accordance with the minimum time required to terminate the non-desired phase.
G. Transition from green to red without an appropriate yellow and all red change interval shall not occur.
H. Phase selector shall obtain and hold the selection preemption green display for a