

EXPECTED IMPLEMENTATION JANUARY 2013

D PRESERVATION OF PROPERTY - INTELLIGENT TRANSPORTATION SYSTEMS. (REV 6-6-12) (FA 6-29-12) (1-13)

ARTICLE 7-11 (pages 66- 70) is expanded by the following new Subarticle:

7-11.7 Intelligent Transportation Systems (ITS): Protect all Department ITS and related components from damage causing failure or disruption of normal operation. The Department will not require the Contractor to provide routine repairs or maintenance.

711-7.1 Damage Recovery/User Cost: By execution of the Contract, both parties acknowledge and agree that failure to timely restore any Department ITS and related component that has failed or has a disruption in operation with regard to their previous condition and normal operation will result in damages being suffered by the Department and/or the traveling public which are difficult to ascertain with certainty. Parties further acknowledge and agree that the amount of damage recovery/user cost is a best estimate of the actual damages that would be suffered and is a reasonable amount based on the best available information.

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A Whenever actions of the Contractor or vandalism cause the Department's ITS or related components to fail or disrupt normal operations, as determined by the Engineer, restore the Department's ITS and related components to their previous condition and normal operation within the allowable time in Table 1 at no expense to the Department. Temporary repairs may be allowed to restore operation and stop assessment of damage recovery/user cost. Permanent repairs must be made within 90 days of any temporary repairs allowed by the Engineer and prior to final acceptance of the project. If the Department's ITS and related components are not restored within the allowable time, a damage recovery/user cost will be assessed and continue for each additional time period. The allowable time begins with the actual knowledge of the Contractor of the Department's ITS or related component failure or notification to the Contractor by the Engineer of the Department's ITS or related component failure, whichever occurs first. The damage recovery/user cost will not exceed \$25,000.00 over a 24-hour period.

F Whenever actions of a third party cause the Department's ITS or related components to fail or cause a disruption of normal operation, as determined by the Engineer, either restore the Department's ITS and related components to their previous condition and normal operation or provide access and coordinate with the Department's designated contractor in accordance with 8-4.4 as directed by the Engineer. The Department will, with the exception of any damage caused by the Contractor or resulting from vandalism, compensate the Contractor for restoring the Department's existing ITS and related components in accordance with 4-3.4. At the discretion of the Engineer, the damage recovery/user cost will not be assessed or time can be extended if the failure to have the Department's ITS and related components restored and operating properly is beyond the Contractor's control and is applicable to damage caused by third parties only. If the Department performs the work, through in-house forces or contract maintenance, no damage recovery/user costs will be assessed.

T If multiple systems are affected at the same time, the higher damage recovery/user cost will apply and will not end until the system and all components are properly operating.

The Department will have the right to apply as payment on such damages any money, which is due to the Contractor by the Department.

Intelligent Transportation System Component Failures and disruption of normal operation include, but are not limited to the following:

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Telecommunications - This includes the failure, partial failure, or cutting of any telecommunications including but not limited to fiber optic cable, composite cable, or data lines that brings down the system in whole or any part of the system or its functions that include communication between the Master Hubs. Telecommunications failure also includes causing a system to fail over to a redundant path or the removal of a redundant path without written permission from the Engineer.

Camera System - This includes the loss of Video or Pan, Tilt or Zoom from a specific camera site. This also includes any change in the height, angle, or location of the support structure of the camera caused by the contractor.

Vehicle Detection System - This includes the loss of correct data flow from the field device to the Department's Software system located in the Regional Traffic Management Center (RTMC). This includes data for all lanes of travel. If a temporary detection system is used it shall maintain all standards that the existing system is currently using.

Road Weather Information System (RWIS) - This includes complete or partial failure of hardware, software, surge suppression, grounding system, or communications.

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Highway Advisory Radio (HAR) System/Subsystem – This includes complete or partial failure of hardware, software, antennas, beacons, surge suppression, grounding system or communications. This also includes the inability to send data to a HAR and/or the inability of the RTMC operator to verify a HAR message is broadcasting and/or the beacons are correctly flashing.

Dynamic Message System (DMS) - This entails the failure or partial failure for a Dynamic Message Sign. This is to include the inability to send or receive data to a DMS and or the inability for the Operator at the RTMC to display, blank, change, or verify a message sent to the sign.

Power Systems – This includes the complete or partial failure of power to all systems including but not limited to cameras, vehicle detection systems, and dynamic message signs.

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Table 1
Allowable Time and Damage Recovery/User Cost

<u>Item</u>	<u>Allowable Time</u>	<u>Damage Recovery/User Cost for Repairs Not Completed During Allowable Time</u>	<u>Additional Time Period</u>	<u>Damage Recovery/User Cost for Each Additional Time Period</u>
Telecommunications	12 hours		6 hours	
Camera System	12 hours		6 hours	
Vehicle Detection System	48 hours		12 hours	
Road Weather Information System	48 hours		12 hours	
Highway Advisory Radio System	24 hours		6 hours	
Dynamic Message System	12 hours		6 hours	
Power Systems	12 hours		6 hours	

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Unless otherwise noted, provide all removed devices to the Department within five calendar days of removal from functional service, and properly dispose of all poles, fiber, conduit, pull boxes, DMS, loops, and loop detectors.

711-7.2 ITS Repair Plan: Submit an ITS repair plan to the Engineer at the pre-construction conference. Outline the procedures, resources and points of contact for a step-by-step guideline in the event the Contractor damages the ITS infrastructure.

Ensure that the plan addresses temporary and permanent repairs and provides assurances that permanent repairs will be made within 90 days of any temporary repairs allowed by the Engineer and prior to final acceptance of the project.

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Provide detailed plans to the Engineer showing how damage to any ITS facility will be remedied, when required. The detailed plans will become part of the as-built plans package. Remediation plans must follow the same guidelines for development and presentation of the as-built plans and must be approved by the Engineer before any remediation work proceeds.

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