THE FOLLOWING DEFINITIONS HAVE THE MEANINGS ASCRIBED TO THEM PERTAINING TO TRAFFIC SIGNALS AND LIGHTING:

Actuation - The operation of any type of traffic signal control initiated by a detector. There are varying degrees of actuation control (e.g. semi full, priority, pedestrian, or pre-emptive actuation).

Approved - Approved means that the method, device, or material indicated has been accepted by the Department or some other approving authority that is recognized by the Department to be acceptable for use per the prescribed application. The Department withholds the right to accept any method, device, or material approval by another authority which has not been specifically listed on an official approval document by the Department (e.g. APL, standard specifications, specials or plans).

<u>Back Plate</u> - A thin metal louvered black colored frame which is attached to the back of a traffic signal section to increase its contrast to the background. It enhances the ability of the signal to be noticed and seen.

Break-Away "Transformer" Bases - Is a FHWA approved safety feature used on poles which are within the clear zone on high speed roadways where run-off-road (ROR) crashes are possible. It allows the bottom of the pole to break away as it is struck by an errant vehicle. Break-away bases should not normally be used in slower speed areas where pedestrians are allowed.

Continuous Lighting - Is roadway lighting that is provided to a certain illuminance level over a length of roadway or street that is more than safety or intersection lighting for a warranted reason. These reasons include crash prevention, crash mitigation, high nighttime commercial brightness and mitigating opposing vehicle headlight glare.

<u>Controller</u> - The part of the traffic signal control cabinet assembly which performs the basic timing and logic functions of the electrical control of the traffic signal through various supplemental input and output devices. It is a specific design and function digital computer.

<u>Controller Assembly</u> - The traffic signal control assembly consists of all the parts to provide electrical control and operation of a traffic signal. This includes a foundation, cabinet, electrical panels, load switches, flasher, conflict monitor, controller and all other auxiliary equipment.

Combination Pole - A pole structure which includes both traffic signal and roadway lighting features. Another variation is a electrical utility "joint-use" pole which includes traffic signal and/or roadway lighting features. Utility combination poles are often used to mitigate or avoid overhead electric line conflicts.

<u>Cycle</u> - A complete sequence of traffic signal indications within the prescribed time interval.

<u>Detectors</u> - A device for the indicating the passage or presence of a vehicle, bicycle or pedestrian for traffic signal and ramp metering applications. Detectors are also used for transportation data collection. There are a variety of detector technologies which are used, these include:

<u>Inductive Loop Detector</u> - A in pavement detector capable of sensing the passage or presence of a vehicle, bicycle, or pedestrian by a change in inductance characteristics of wired or cabled loop.

Magnetometer Detector - An in pavement detector capable of being actuated by the magnetic disturbance caused by a passing or presence of a vehicle. There are a variety of detector technologies that are very similar to the magnetometer (e.g. micro loops, piezoelectric weight sensors).

<u>Pedestrian Detector</u> - An detector specifically for pedestrian or bicyclist that is usually activated by pushing a button.

<u>Video Detector</u> - A pole mounted camera device that can create virtual detector fields that use interruptions in that visual field to detect the presence or passage of vehicles, pedestrian and/or bicyclist.

Radar or Radio Detectors - A pole mounted radar or radio wave emitting device that can create a virtual detector field that uses interruption in those fields to detect the presence or passage of vehicles, pedestrian and/or bicyclist

Emergency Vehicle Pre-Emption Detector (EVP) - A specific use detector which uses a variety of technologies (e.g. sound, strobe light) to preempt the normal control of a traffic signal to allow for the passage of an emergency vehicle. EVP is typically only done if the local jurisdiction provides the equipment and agrees to maintain and operate it.

Railroad Pre-Emption Connection / Detector - This is an electrical or electronic connection between the rail road company grade crossing signal controller and the traffic signal control assembly which enables the interruption of the normal traffic signal cycle in manner that allows a train to pass through the intersection or immediately adjacent to a intersection.

<u>Flasher</u> - A device used in a control cabinet to open and close a signal indication circuit at a repetitive rate.

<u>Flashing Feature</u> - This feature when operated discontinues the normal traffic signal operation and causes a predetermined combination of flashing signal lights (normal is all red flash for traffic signal malfunctions).

SIGNATURE

ARIZONA DEPARTMENT OF TRANSPORTATION DIVISION TRAFFIC SIGNALS AND LIGHTING STANDARD DRAWINGS

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ARIZONA DEPARTMENT OF TRANSPORTATION DIVISION TRAFFIC SIGNALS AND LIGHTING STANDARD DRAWINGS

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NOT TO SCALE