# Closed Circuit Television (CCTV) Camera – Site Test

This test will confirm that the CCTV equipment at the site is fully operational, per manufacturer’s specifications, prior to network connectivity.

## CCTV: General Information

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **CCTV: General Information** | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | |
| Project Number: | | | | |  | Project Name: | | | | | |  | |
| Project Stationing: | | | | |  | Date of Test: | | | |  | | | |
| Device Name: | | |  | | | Manufacturer: | | | | |  | | |
| Serial #: |  | | | | | Model #: |  | | | | | | |
| Username (If Required): | |  | | | | Password (If Required): | | | | | | |  |
| Communication Method: | | | |  | | IP Address: | |  | | | | | |
| Subnet Mask: | |  | | | | Inspector: | | |  | | | | |

| **CCTV: General Requirements** | | |
| --- | --- | --- |
| **Requirement** | **Pass Fail** | **Notes** |
| Verify location of device installation is as per the plans.  Structure offset from edge of travel lane: \_\_\_\_\_\_\_\_\_\_\_  Latitude:\_\_\_\_\_\_\_\_\_\_\_\_\_ Longitude:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |
| Verify all installed devices and equipment (including components inside of cabinets) match the approved shop drawings and catalog cuts. |  |  |

## CCTV: Lowering System

| **CCTV: Lowering System** | | |
| --- | --- | --- |
| **Requirement** | **Pass Fail** | **Notes** |
| Verify the camera lowering system functions by completely lowering and raising the CCTV, using both powered lowering device and manual winch 3 times each. |  |  |
| Verify that CCTV is stable and locked at the top of the CCTV Lowering System by visual inspection. |  |  |
| Verify that network cable has proper strain relief within pole and is not being damaged by movement of pulleys and support cable. |  |  |

| **CCTV: AC Power – Device Specific** | | |
| --- | --- | --- |
| **Requirement** | **Pass Fail** | **Notes** |
| Verify voltage in CCTV load center is within +/- 5% of 120 VAC or 240 VAC. |  |  |
| Verify that lightning surge protection is installed at both ends of CCTV power over Ethernet cables. |  |  |
| Verify that the device manufacturer’s recommended power/communication cable is being used and is of adequate length. |  |  |
| For documentation purposes, record the Ethernet Injector (POEI) power consumption from the AC Mains. | *Not a pass / fail test* | Record wattage: |

## V: Operations

| **CCTV: Operations** | | |
| --- | --- | --- |
| **Requirement** | **Pass Fail** | **Notes** |
| Visually verify quality of video in day mode. The video will be full motion at the required resolution, without any noise interference or distortion. |  |  |
| Verify the camera pans 360+ degrees to left and right. |  |  |
| Verify the camera tilt range is from 20 degrees above horizon to 90 degrees below horizon. |  |  |
| Verify the camera has 30x optical zoom and 12x digital zoom. |  |  |
| Verify manual and auto focus capability. |  |  |
| Verify auto iris capability. |  |  |
| Verify manual iris operation by opening and closing to display the adjustment to light levels. |  |  |

Overall CCTV Site Test: 🞏 Pass 🞏 Fail

Inspector Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Organization: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_

Witness Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Organization: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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# CCTV Camera – Communications & Systems Test

This test will confirm that the installed equipment is fully operational utilizing New Hampshire’s Advanced Transportation Management System (ATMS) at the NHDOT TMC.

## CCTV: General Information

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| **CCTV: General Information** | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | |
| Project Number: | | | | |  | Project Name: | | | | | |  | |
| Project Stationing: | | | | |  | Date of Test: | | | |  | | | |
| Device Name: | | |  | | | Manufacturer: | | | | |  | | |
| Serial #: |  | | | | | Model #: |  | | | | | | |
| Username (If Required): | |  | | | | Password (If Required): | | | | | | |  |
| Communication Method: | | | |  | | IP Address: | |  | | | | | |
| Subnet Mask: | |  | | | | Inspector: | | |  | | | | |

## CCTV: Prerequisites

| **CCTV: Prerequisites\*** | | |
| --- | --- | --- |
| **Requirement** | **Pass Fail** | **Notes** |
| Contractor has coordinated with the TMC, and has established connectivity to the camera from the TMC. |  |  |
| Contractor has verified all device components are configured with supplied IP's, VLANs, configurations, and interface login credentials, and has properly labeled all ports in device web interfaces. (ITS Spec 3.5) |  |  |
| Contractor must be ready, with all necessary parties and preparation, to start the testing at the designated start time. |  |  |

\*-Failure to meet any of the prerequisite requirements shall be grounds for immediate testing termination

## CCTV: Communications

| **CCTV: Communications** | | |
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| **Requirement** | **Pass Fail** | **Notes** |
| If wireless communications is utilized, document the signal strength. \_\_\_\_\_\_\_\_\_\_\_\_dB |  |  |
| Verify communications to the CCTV (Ping). |  |  |
| Verify device status appears on New Hampshire’s ATMS. |  |  |
| Generate a manual communications failure at the CCTV camera cabinet, and verify both ATMS and manufacturer software display the error. Verify the CCTV responds after communications have been restored. |  |  |
| Verify ATMS regains communication to the CCTV after power has been disconnected in the field for 2 minutes then restored. |  |  |

## CCTV: Central Control

| **CCTV: Central Control** | | |
| --- | --- | --- |
| **Requirement** | **Pass Fail** | **Notes** |
| Perform a full diagnostic scan in ATMS and manufacturer software, and confirm no errors shown. |  |  |
| Disconnect power to the device, and verify a power supply error is displayed in ATMS and/or manufacturer software. Verify the error no longer exists after power is restored. |  |  |
| Open the cabinet door and verify an intrusion alarm is displayed in ATMS and/or manufacturer software. |  |  |
| Visually verify quality of video in day mode. The video will be full motion at the required resolution, without any noise interference or distortion. |  |  |
| Pan Camera 360+ degrees to left and right. |  |  |
| Tilt camera down through full range of motion and then back to original position. |  |  |
| Zoom camera in fully to selected location within the field of view then zoom completely out. |  |  |
| Verify manual and auto focus capability. |  |  |
| Verify auto iris capability. |  |  |
| Verify manual iris operation by opening and closing the iris. |  |  |
| Nighttime - Pan Camera 360+ degrees to left and right. |  |  |
| Nighttime - Tilt camera down through full range of motion and then back to original position. |  |  |
| Nighttime - Zoom camera in fully to selected location within the field of view then zoom completely out. |  |  |
| Nighttime - Open and close the iris to display the adjustment to light levels and transition from color to black and white mode. |  |  |
| Nighttime - Visually verify quality of video during the above nighttime tests. |  |  |
| Log into all site device component web interfaces. Verify no errors are reported, and web interfaces display all information needed for remote monitoring of device status. Verify all ports are properly addressed and labeled in interfaces. |  |  |

Overall CCTV Systems Test: 🞏 Pass 🞏 Fail

Inspector Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Organization: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_

Witness Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Organization: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_