Toronto	Maintenance Recommendation	TTR 817.310
Transportation	for RESCU CCTV Cameras	January 2012
Recommendation		

Maintenance Recommendation

TTR 817.310

TABLE OF CONTENTS

MAINTENANCE OF CCTV CAMERAS 1.0

- 1.1 Scope
- Schedule 1.2
- 1.3 Method
- Traditional CCTV Cameras 1.4
- 1.5 Dome Cameras

Checklist Forms

CCTV Camera Checklist – Traditional

CCTV Camera Checklist - Dome

Maintenance of CCTV Cameras 1.0

1.1 Scope

This work consists of the scheduled preventative maintenance and inspection of CCTV cameras and their housings and pan/tilt units, including the performance of minor repairs/adjustments on as-needed basis. Both traditional and dome type CCTV cameras are covered in this section.

1.2 **Schedule**

All work described herein shall be performed on all CCTV cameras annually, between March 15 and May 30.. All of the work shall be completed on all of the cameras within the specified time limits.

1.3 Method

The Contractor shall complete each of the steps listed in the following subsections, if applicable for the specific time and location at which the maintenance is being carried out. The Contractor shall also complete and submit to the General Manager the appropriate checklist form attached to this section. All deficiencies noted during inspection and any recommendations for repairs or component replacements shall be reported to the General Manager. All repairs shall use materials previously approved by the General Manager. Component replacements may require the Contractor to schedule a return to the site. Scheduling of the work shall be done by the Contractor in consultation with the General Manager as soon as the authorization to proceed has been given.

1.4

Traditional CCTV Cameras

1.4.1. Camera Pan/Tilt Unit and Pole

- Inspect cables and connectors and cable protection between pole and pan/tilt 1. unit or camera enclosure for abrasions, cracks or deterioration.
- 2. Inspect concrete poles for hairline cracks wider than 1mm and metal poles for any cracks, mechanical damage or corrosion.
- Verify operation of pan/tilt, zoom and focus using appropriate tool or via RESCU control room operators. Ensure cables do not interfere with camera movement.

1.4.2. Camera Lens and Enclosure

Recommendation-----

- 1. Clean lens and enclosure glass plate.
- 2. Remove dirt, moisture or other foreign substances.
- 3. Clean camera enclosure filter.
- 4. Clean enclosure fan assembly.
- 5. Confirm operation of enclosure fan and heater.
- 6. Check for damage inside the enclosure, including insect damage, lightning damage, or other mechanical failure.
- 7. Check enclosure grounds are securely connected.
- 8. Report any visible damage.

1.5 Dome Cameras

1.5.1 Camera and Pole

- 1. Inspect cables and connectors between pole and mounting base for abrasions, cracks or deterioration.
- 2. Inspect concrete poles for any cracks wider than 1 mm and metal poles for any cracks, mechanical damage or corrosion.
- 3. Verify and confirm with RESCU operators the proper operation of dome.

1.5.2 Camera Lens and Housing

- 1. Clean camera eyeball.
- 2. Clean inside and outside of dome cover.
- 3. Remove dirt, moisture or other foreign substances.
- 4. Clean fan assembly.
- 5. Confirm operation of fans and heater.
- 6. Check for damage inside the dome, including insect damage, lightning damage or other mechanical failure.

Toronto	
Transportation	

Maintenance Recommendation for RESCU CCTV Cameras

TTR 817.310 January 2012

Recommendation-----

- 7. Check housing grounds are securely connected.
- 8. Report any visible damage.

1.5.3 Cameras with Lowering Device

- 1. Inspect the raising/lowering equipment to ensure that components are not damaged, corroded, and are working properly.
- 2. Inspect the steel cable inside the conduit and check for any twisting or kinks.
- 3. Inspect and lubricate winch, steel cable, door hinges and locks
- 4. Verify that the video signal from the camera is being received at TMC and camera control functions properly.
- 5. Report any visible damage

Toronto Transportation Recommendation------

Maintenance Recommendation for RESCU CCTV Cameras

TTR 817.310 January 2012

recommendation

CCTV CAMERA CHECKLIST - TRADITIONAL CAMERA # CHECK THE FOLLOWING ITEMS

<u>Initial</u>		
	1.	Clean lens and enclosure glass plate.
	2.	Remove dirt, moisture or other foreign substances.
	3.	Clean camera enclosure filter.
	4.	Clean enclosure fan assembly.
	5.	Confirm operation of enclosure fan.
	6.	Confirm operation of heater strips.
	7.	Check for damage inside the enclosure, including insect damage, lightning damage, or other mechanical failure.
	8.	Inspect cables and connectors and cable protection between pole and pan/tilt unit or camera enclosure for abrasions, cracks, or deterioration.
	9.	Inspect concrete poles for hairline cracks wider than 1mm, and metal poles for any cracks, mechanical damage or corrosion.
	10.	. Verify operation of pan/tilt, zoom and focus using appropriate tool or via RESCU Control Room Operators.
	11.	. Check enclosure grounds are securely connected.
	12.	. Report any visible damage.
		Service Date:
		Completed by:

Note: Report all further repairs that may be required. Record NA for items that or not applicable to this unit, or this time period.

Toronto Toronto Transportation Recommendation------

Maintenance Recommendation for RESCU CCTV Cameras

TTR 817.310 January 2012

CCTV CAMERA CHECKLIST - DOME CAMERA # CHECK THE FOLLOWING ITEMS

<u>Initial</u>		
	1.	Clean camera eyeball.
	2.	Clean inside and outside of dome cover.
	3.	Remove dirt, moisture or other foreign substances.
	4.	Clean enclosure fan assembly.
	5.	Confirm operation of fan.
	6.	Confirm operation of heater.
	7.	Check for damage inside the enclosure, including insect damage, lightning damage or other mechanical failure.
	8.	Inspect cables and connectors and cable protection between pole and mounting base for abrasions, cracks, or deterioration.
	9.	Inspect concrete poles for hairline cracks wider than 1mm, and metal poles for any cracks, mechanical damage or corrosion.
	10	Check housing grounds are securely connected.
	11	. Inspect camera lowering device for damaged and functionality. (if applicable)
	12	Report any visible damages
		Service Date:
		Completed by:

Report all further repairs that may be required.

Record NA for items that or not applicable to this unit, or this time period.