# REMOTE CONTROLLED TRAFFIC SIGNAL AND VIDEO SYSTEM

D3 Revised 08-09-2023

Description. This work shall consist of furnishing and installing a Remote Controlled Traffic Signal and Video System at the traffic signal locations shown on the plans.

Materials. Materials shall be according to the following.

Item Article/Section

1. Network Connection………………………………………………………..……………..Note 1
2. Pan-Tilt-Zoom Video Camera……………………………………….……………………Note 2

Note 1. The Network Connection shall be provided by a cellular or cellular cable modem to provide internet connectivity through a virtual private network for the video cameras, controller, conflict monitor / malfunction management unit, uninterruptable power supply, and all other devices in the controller cabinet.

The Network Connection shall be provided for a period of 10 years from date of the Signal Acceptance Notice as described in Article 801.15.

Note 2. Pan-Tilt-Zoom (PTZ) camera shall be an all-weather design resistant to moisture, dust, and corrosion and be mounted on separate mast arms with an extension bracket, if needed, using the manufacturer’s guidelines. The PTZ cameras shall provide visibility for all directions including all signal heads and the traffic signal controller cabinet.

CONSTRUCTION REQUIREMENTS

Software. Computer software shall be provided for the Department’s existing computers and tablet computers to access the Remote Controlled Video System. The software shall allow each device access to all traffic signal equipment and video cameras through the Network Connection. It shall be possible to view all intersecting legs and a separate PTZ camera in real time, with real-life video of the roadway, vehicles, and signal controller cabinet. The Remote Controlled Video System shall provide a list of all PTZ cameras within the District in one window. This software shall also allow traffic signal timings to be reviewed and changed remotely and shall provide detector status to a remote user.

Monitoring. The Remote Controlled Traffic Signal and Video System shall monitor conditions such as cabinet temperature, red flash, power failure, battery backup usage, signal timing changes, door opening / closing, and other conditions. The software shall allow these conditions to be communicated to up to three Department users. For each condition, the user shall be able to receive a text message alert, an email alert, or no alert. Users shall be able to change their individual settings at any time and the Department shall be able to change the users at any time.

Training. Two days of training by a factory representative on the software and equipment for up to ten personnel shall be provided.

Warranty. A ten-year warranty and ten years of software maintenance and updates shall be provided for all Remote Controlled Traffic Signal and Video System licenses and for the Timing Software licenses. All warranty documentation/procedures and contact information for warranty repairs shall be presented on training day.

Basis of Payment. This work shall be paid at the contract unit price per each for REMOTE CONTROLLED TRAFFIC SIGNAL AND VIDEO SYSTEM.

DESIGNER NOTES –

INCLUDE ON THE PLANS

* Number of PTZ cameras. Identify these special cameras in the plans.
* List of District devices that would need software. Contact Operations for a list / number of devices that the software is needed.
* Location (intersection) this special provision applies to – identify the appropriate intersections in the plans with a note.