2 Vehicle Scanning System Overview

This chapter provides an exterior, operator-level overview of all the components that make up the Vehicle Scanning System.

Note: In the original Product Manuals, this overview covers many different components, and covers each component in much more depth than is shown in this brief excerpt.

2.4 Basic Configuration

The basic configuration of the Vehicle Scanning System, as illustrated in **Figure 1** below, is generally the same for most inspection sites.

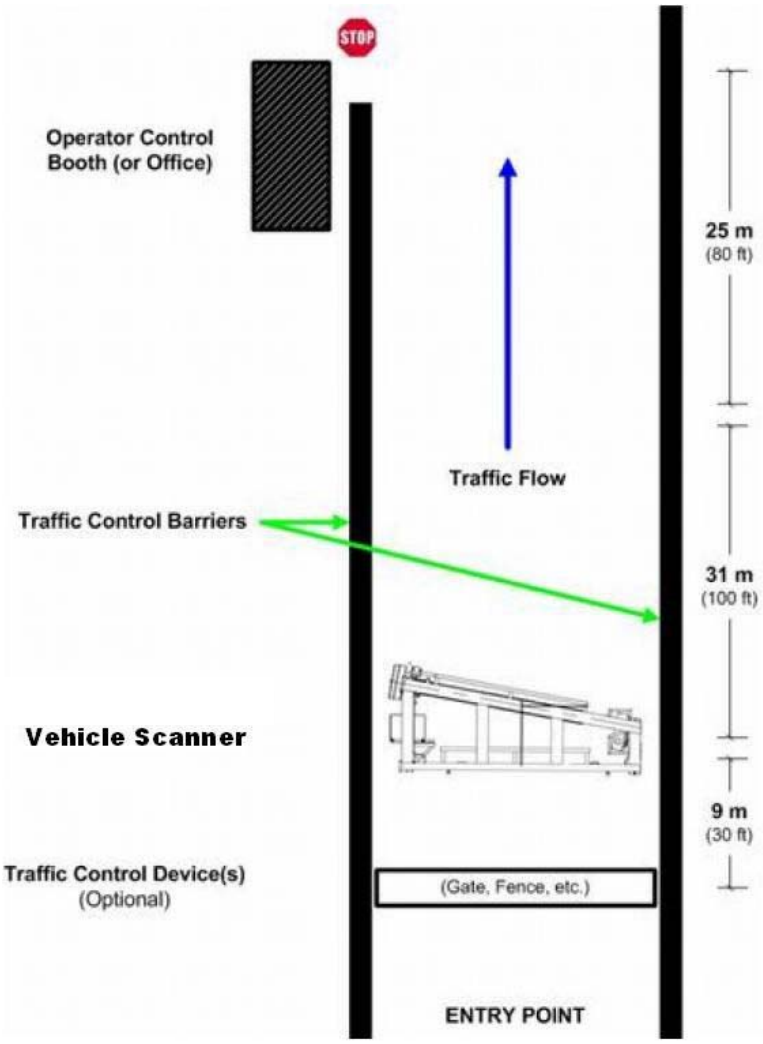

Figure 1: Basic Layout for a Vehicle Scanning Site

2.5 Vehicle Scanner

The Vehicle Scanner is a stationary structure that includes the gamma radiation source, the L-shaped detector array, and various safety and electrical systems.

Figure 2: Vehicle Scanner with approaching Vehicle Under Inspection

2.6 Operator Workstation

The Operator Workstation may be located:

(a) within a separate security Control Booth (see the example in **Figure 3**), or

(b) inside a room that is on the outside of or attached to a building already onsite.

⚠ WARNING

The Vehicle Scanning System Operator Workstation must always be located outside the boundary of the Radiation Conrolled Area, as defined in the chapter on **Radiation Safety**.

Figure 3: Example of a Locally Constructed Control Booth

(The Vehicle Scanner is shown in the Distance)

The Workstation “workspace” on the desktop or countertop (**Figure 4**) consists of two 20 inch flat-screen display monitors, plus a keyboard and mouse.

One monitor displays the scanned image while the other displays the four CCTV images.

Near the desktop/countertop area is a rack-mount cabinet that holds the Workstation Computer (PC) and an Uninterruptable Power Source (UPS).

The Operator Workstation’s laser printer can be placed anywhere nearby.

NOTICE

The specific arrangement of Operator Workstation components will vary from customer site to customer site.

Figure 4: Operator Workstation Desktop Components

(The above image shows the Operator Control Panel, which is covered elsewhere.)

Figure 5, below shows sample images from the CCTV cameras mounted on the Vehicle Scanner, as they would be displayed on one of the monitor screens at the Operator Workstation.

CCTV camera viewing options are described in the chapter on Scanner Operation.

Figure 5: CCTV Monitor Images at the Operator Workstation

2.7 Optional Traffic Light

An optional red-green Traffic Light (**Figure 6**) may be incorporated into the Vehicle Scanning System in order to control the incoming vehicle traffic into the scanning area.

Figure 6: Traffic Light

When this option is employed, a Traffic Light Control at the **Operator Workstation** (**Figure 7**) provides a button, which when pressed by the Operator changes the red light on the external Traffic Light to a green light for 10 seconds.

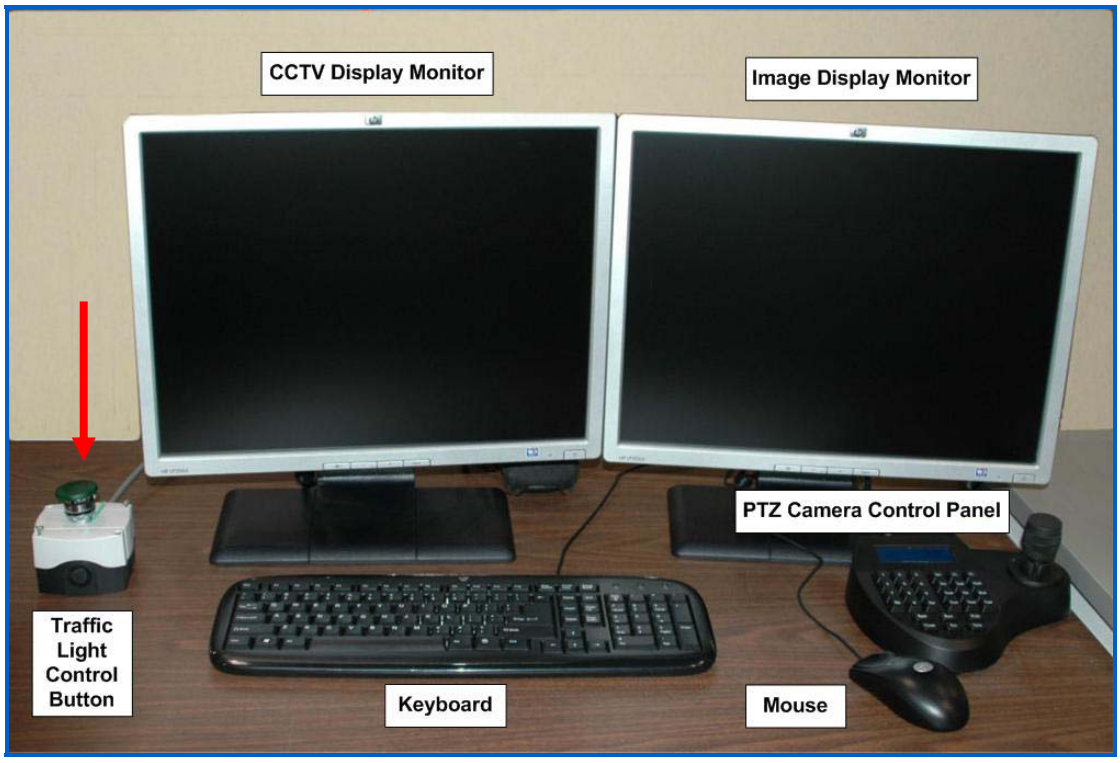

Figure 7: Optional Traffic Light Control at the Operator Workstation

Note: The original Product Manuals described an optional Pan-Tilt-Zoom (**PTZ**) Camera, whose Control Panel is shown above. But no further content is covered in this excerpt.