# TRAFFIC CONTROL AND PROTECTION, STANDARD 701316 AND 701321

Eff. 05-01-2002 Rev. 03-01-2009

This work shall be in accordance with Article 701 and the Highway Standard with the following additional information:

Induction Loop Placement

The induction loops shall be placed in accordance with Highway Standards 701316 or 701321; 886006 and as specified. The near edge of the far loop shall be placed 115 feet (35 m) behind the stop bar. The near loops shall be placed 10 feet (3 m) behind the stop bar as shown on the standard. Signal timing will be as follows:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Phase Timing for Each Phase Connection (In Seconds) | | | | | | | |
|  | Φ1 | Φ2 | Φ3 | Φ4 | Φ5 | Φ6 | Φ7 | Φ8 |
| Minimum Green | 12 | 12 |  |  |  |  |  |  |
| Additional Init. | 2.0 | 2.0 |  |  |  |  |  |  |
| Maximum Init. | 20 | 20 |  |  |  |  |  |  |
| Maximum I | 25 | 25 |  |  |  |  |  |  |
| Passage | 2.5 | 2.5 |  |  |  |  |  |  |
| Minimum Gap | 2.5 | 2.5 |  |  |  |  |  |  |
| Amber Clear | 3.5 | 3.5 |  |  |  |  |  |  |
| Red Clearance | \* | \* |  |  |  |  |  |  |
| All Red | A | B |  |  |  |  |  |  |

\* This timing shall be obtained from the District Traffic Control Supervisor and accomplished by utilizing overlaps. Timings for these overlaps are calculated as follows:

Green \*\* sec. \*\* G = L. (Round timing up)

Amber 3.5 sec. 44 ft/sec

Red 0 sec.

L = Stop bar to Stop bar distance in feet.

Loops 1, 2, & 3 are on separate amplifiers (3 total / approach).

Loop 1 set on pulse.

Loops 2 & 3 set on normal.

Loop 3 – delay 2 seconds in amplifier/delay inhibit wired to corresponding phase green.

The advisory speed signs or plates shall show a speed of 30 mph.

3

1

2

Loop layout