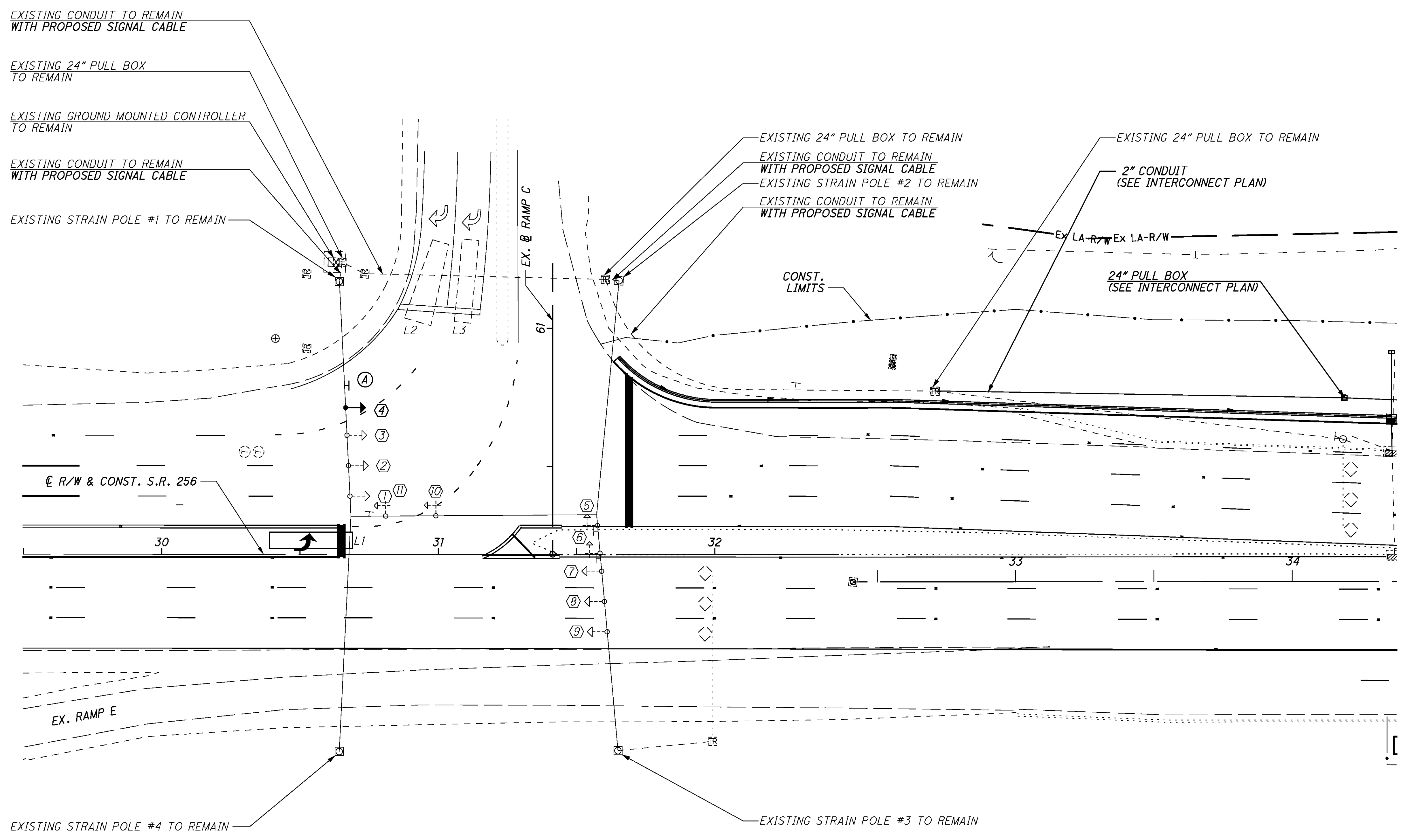


CALCULATED  
SGM  
CHECKED  
SDS

TRAFFIC SIGNAL PLAN  
S.R. 256 AND RAMP C / RAMP E

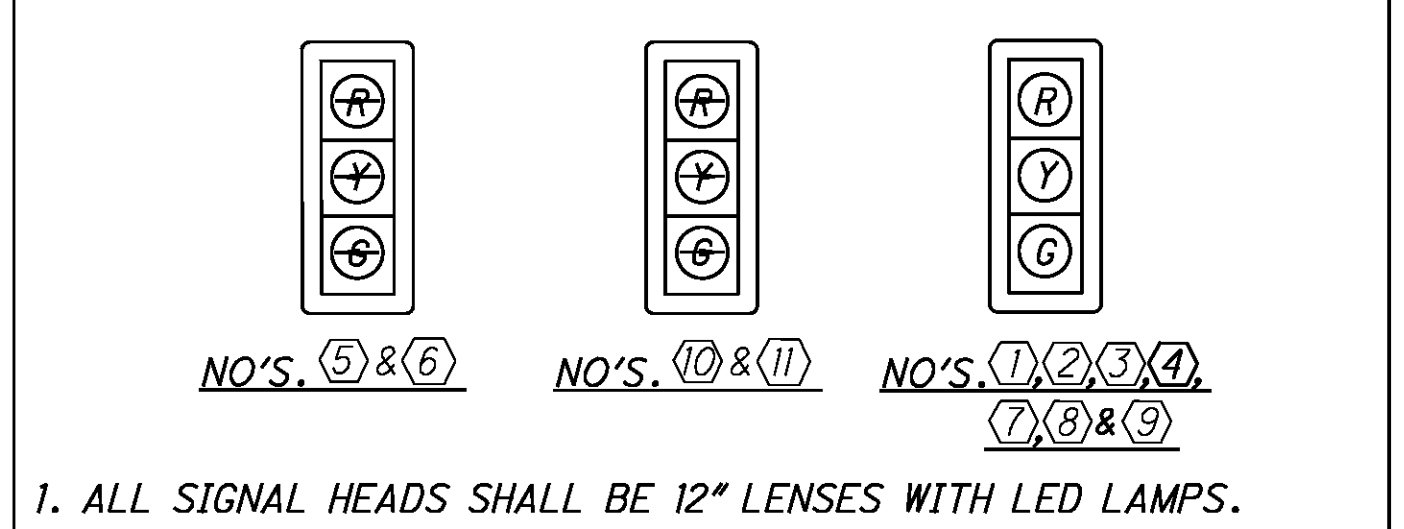
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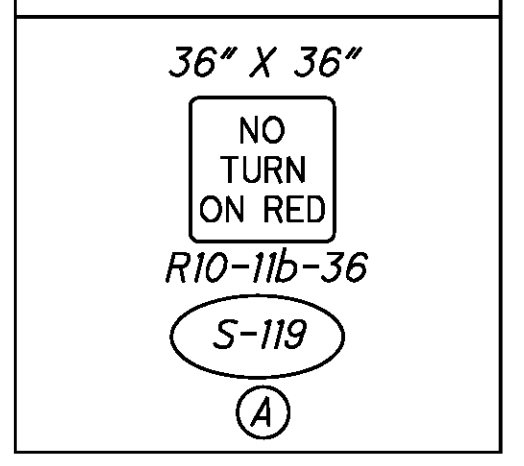
LEGEND

- PROPOSED MAST ARM SUPPORT POLE AND FOUNDATION
- PROPOSED VEHICULAR SIGNAL HEAD
- PROPOSED TRAFFIC SIGNAL CONTROLLER
- PROPOSED PULL BOX (725.06)
- PROPOSED PEDESTAL WITH PEDESTRIAN SIGNAL AND PUSHBUTTON
- PROPOSED VIDEO CAMERA
- PROPOSED DETECTION LOOP
- PROPOSED CONDUIT (725.04)

SIGNAL TYPES



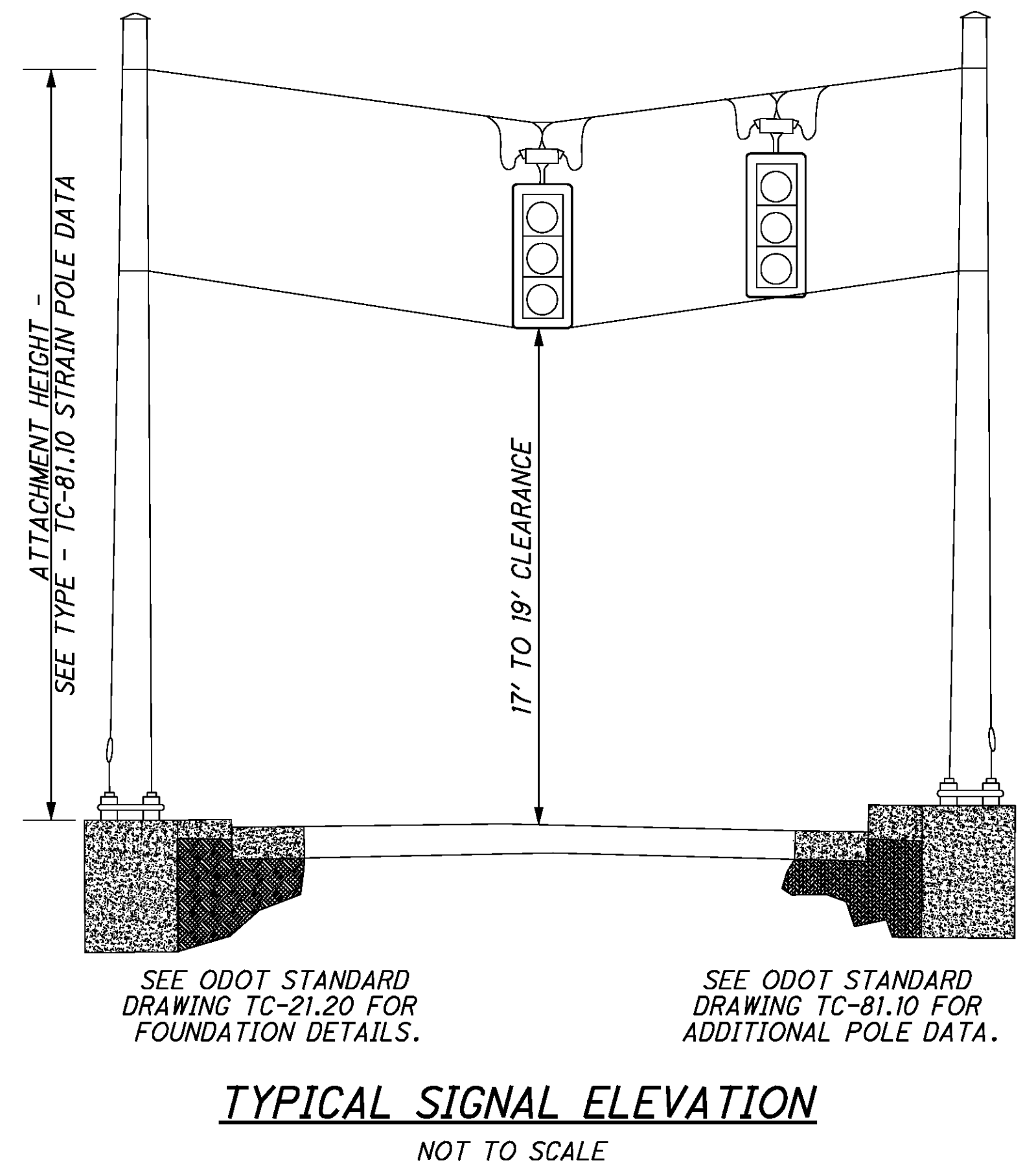
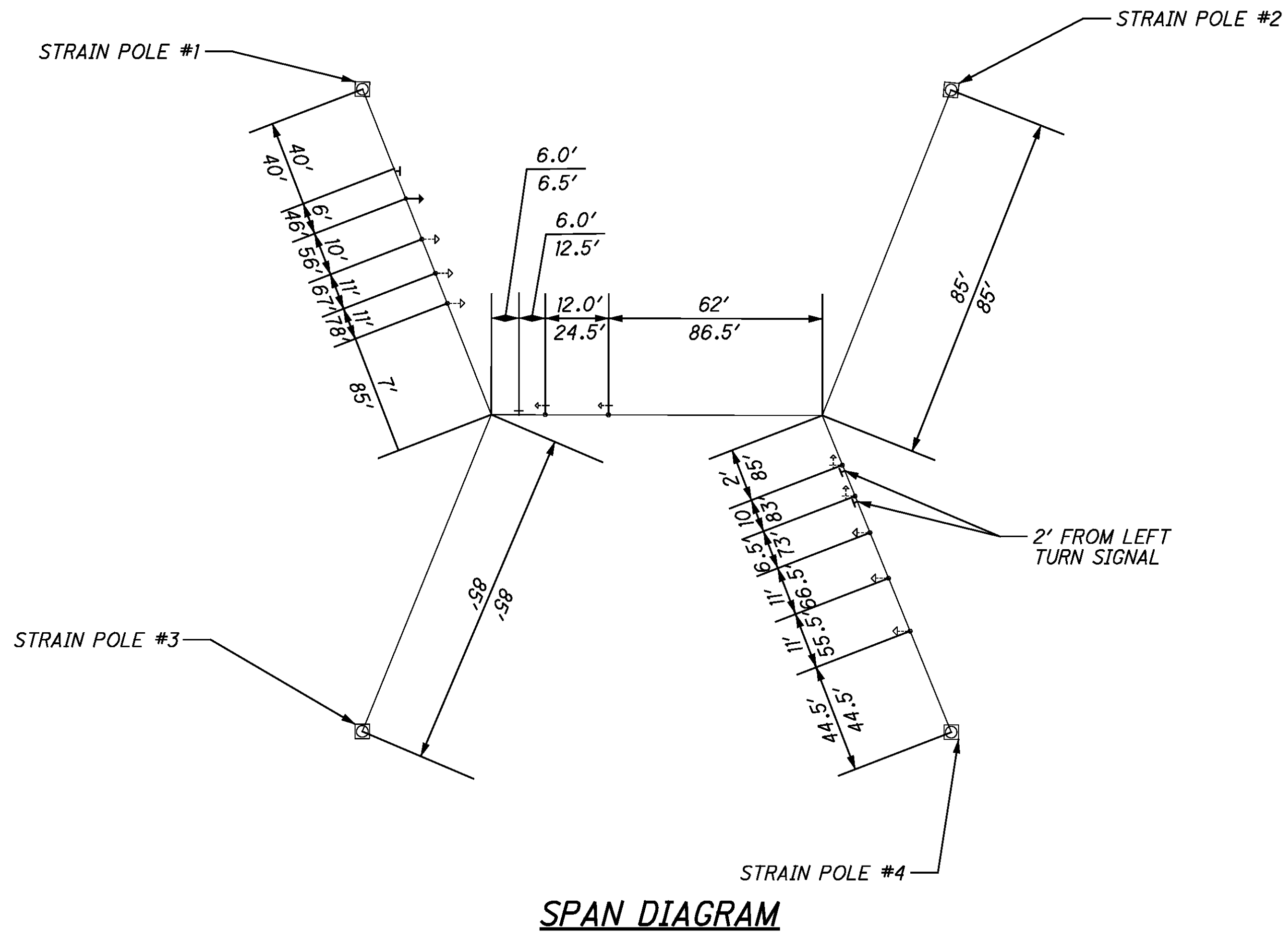
SPAN WIRE SIGNAGE

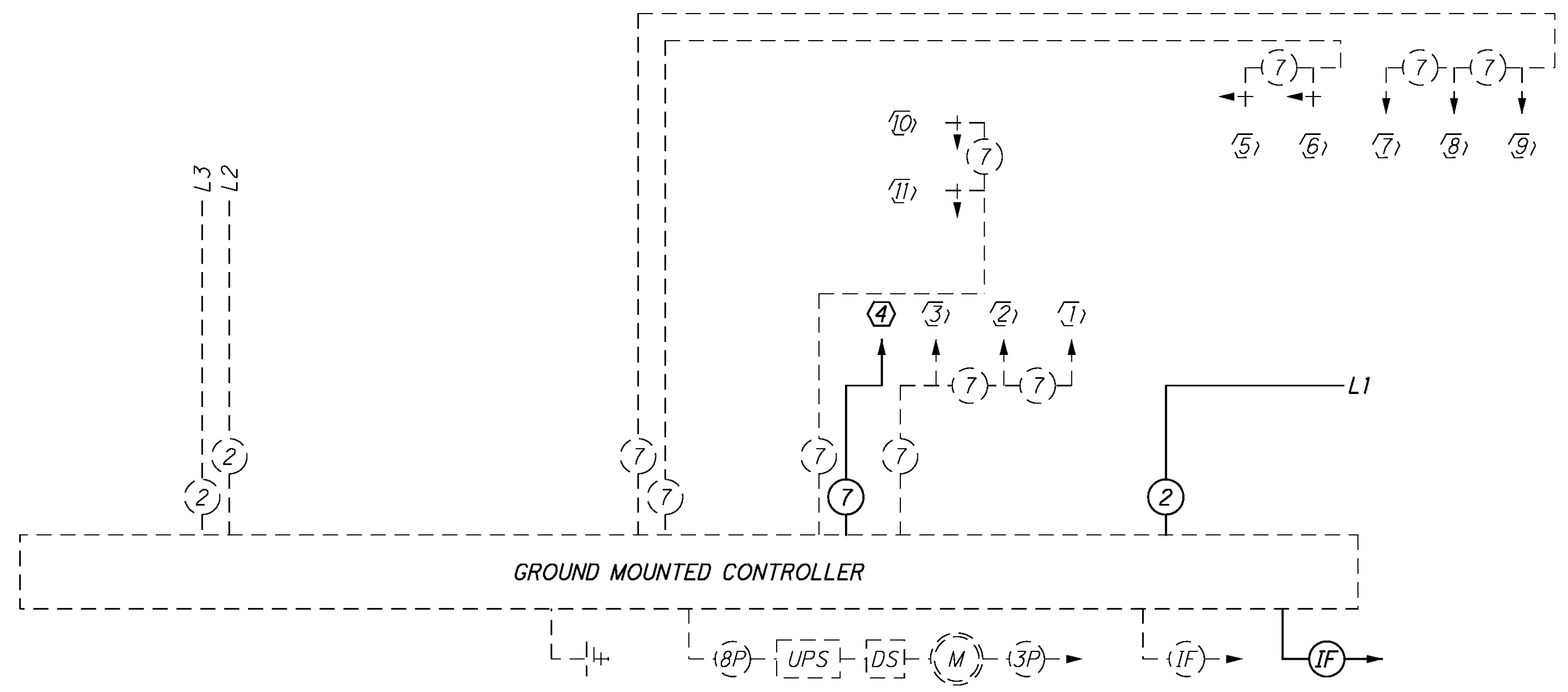


NOTES:

1. THE CONTRACTOR SHALL ENSURE THAT ALL SIGNAL FACES ARE CLEARLY VISIBLE TO ALL ONCOMING VEHICLES; CLEAR OF ANY OBSTRUCTION ONCE MOUNTED TO THE SPAN WIRE.
2. ALL PROPOSED SIGNAL HEADS SHALL HAVE BACKPLATES AND BE PROPERLY TETHERED.
3. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL UTILITIES AND EXISTING SIGNAL HARDWARE AND APPARATUSES PRIOR TO EXCAVATION.
4. SIGNAL HEAD (4) AND SIGN (A) PROPOSED WITH ALL EXISTING SIGNAL HEADS AND SIGNS TO REMAIN.

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**WIRING DIAGRAM**  
NOT TO SCALE



LEGEND

|    |  |      |   |
|----|--|------|---|
| DS | DISCONNECT SWITCH                      |      | GROUND ROD                                  |
| M  | ELECTRIC METER                         | (2)  | 2/C #14 AWG. (LEAD-IN CABLE)                |
|    | VEHICULAR SIGNAL HEAD                  | (5)  | 5/C #14 AWG.                                |
|    | VEHICULAR SIGNAL HEAD<br>W/ TURN ARROW | (7)  | 7/C #14 AWG.                                |
|    | PEDESTRIAN SIGNAL<br>AND PUSHBUTTON    | (2P) | 2/C #4 AWG. (POWER)                         |
|    | VIDEO DETECTION<br>CAMERA              | (3P) | 3/C #4 AWG. (POWER)                         |
|    | UNINTERRUPTIBLE<br>POWER SUPPLY        | (8P) | 2/C #8 AWG. (POWER)                         |
|    | LUMINAIRES                             | (V)  | VIDEO POWER/COAXIAL CABLE                   |
|    |  | (PC) | PHOTO CELL                                  |
|    |  | (LC) | 3 - NO. 6 AWG. 600 VOLT DISTRIBUTION CABLES |
|    |  | (PB) | 3 - 1/2 NO. 10 AWG POLE & BRACKET CABLES    |
|    |  | (IF) | FIBER OPTIC CABLE, 24 FIBER (INTERCONNECT)  |

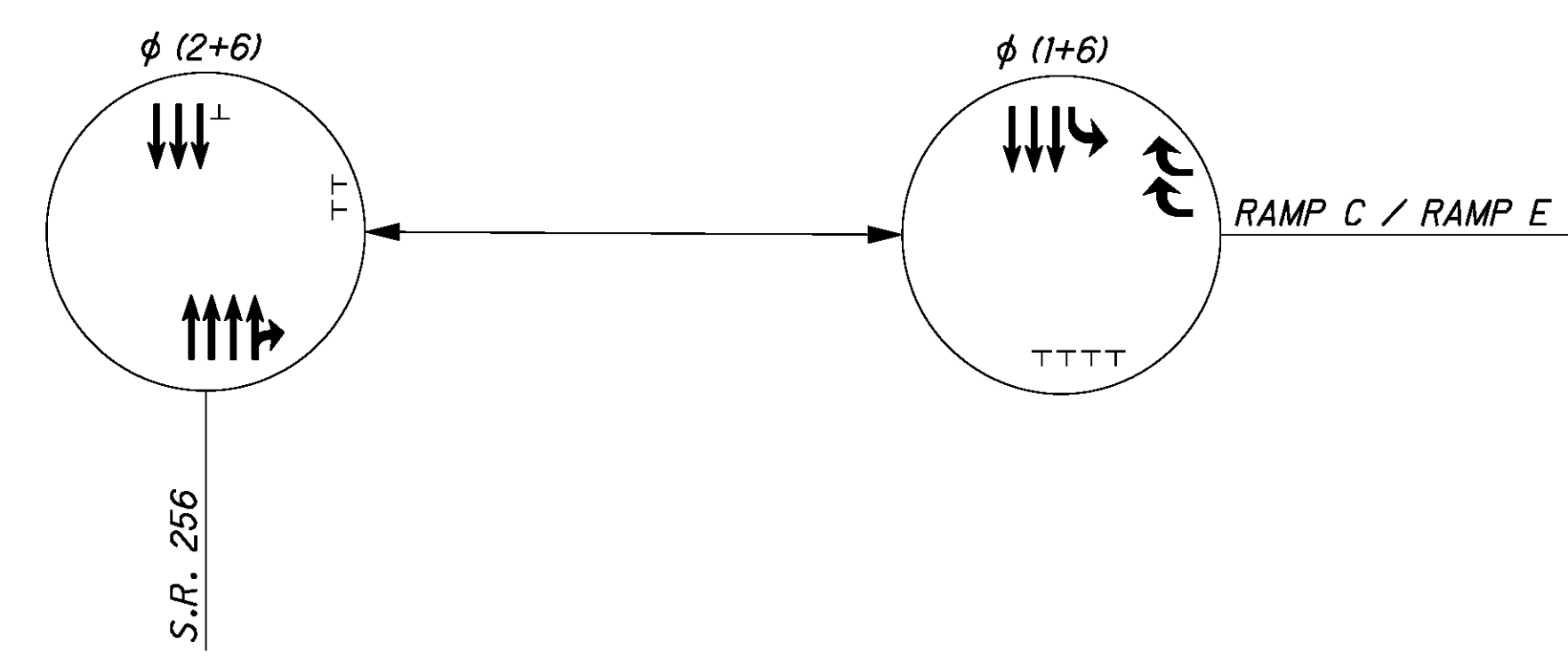
NOTE: WIRING FOR SIGNAL HEAD NO. 4 AND ALL LOOPS WITH THE EXCEPTION OF L2 AND L3 IS PROPOSED AND ALL OTHER WIRING IS EXISTING TO REMAIN.

| SYSTEM TIMING AND COORDINATION CHART |                    |                        |    |      |    |      |     |      |    |
|--------------------------------------|--------------------|------------------------|----|------|----|------|-----|------|----|
|                                      | CYCLE LENGTH (SEC) | PERCENT SPLIT BY PHASE |    |      |    |      |     |      |    |
|                                      |                    | SBLT                   | NB | WBLT | EB | NBLT | SB  | EBLT | WB |
|                                      |                    | 1                      | 2  | 3    | 4  | 5    | 6   | 7    | 8  |
| PROGRAM #1                           | 130                | 31                     | 69 |      |    |      | 100 |      |    |
| PROGRAM #2                           | 120                | 46                     | 54 |      |    |      | 100 |      |    |
| PROGRAM #3                           | 120                | 50                     | 50 |      |    |      | 100 |      |    |
| PROGRAM #4                           | 110                | 45                     | 55 |      |    |      | 100 |      |    |

| TRAFFIC SIGNAL OFFSET CHART |                         |                |                |
|-----------------------------|-------------------------|----------------|----------------|
| INTERSECTION DESCRIPTION:   | NON-MASTER INTERSECTION |                |                |
| TIME PERIOD                 | TIME INTERVAL           | PROGRAM NUMBER | *OFFSET (SEC.) |
| AM PEAK HOUR                | 7:00 AM TO 10:00 AM     | #1             | 46             |
| MID-DAY PEAK HOUR           | 10:00 AM TO 3:00 PM     | #2             | 38             |
| PM PEAK HOUR                | 3:00 PM TO 7:00 PM      | #3             | 2              |
| SATURDAY                    | 7:00 AM TO 7:00 PM      | #4             | 30             |
| OFF PEAK                    | 7:00 PM TO 7:00 AM      | FREE           | FREE           |

\*NOTE: OFFSET IS MEASURED FROM THE START OF YELLOW PHASE OF  $\phi$  (2+6)

| TRAFFIC SIGNAL CONTROL TIMING CHART   |                     |  |    |   |   |      |   |   |
|---|---------------------|--|----|---|---|------|---|---|
| INTERSECTION: S.R. 256 AND RAMP C / RAMP E  |                     |  |    |   |   |      |   |   |
| MAINTAINING AGENCY: ODOT DISTRICT 5   |                     |  |    |   |   |      |   |   |
| START UP  |                     | Dual Entry <input checked="" type="radio"/> Rest in Red: Ring 1: <input type="radio"/> Ring 2: <input type="radio"/> |    |   |   |      |   |   |
| START IN: Y/R FLASH; <input checked="" type="radio"/> ALL RED <input type="radio"/> |                     | Overlap  |    |   |   |      |   |   |
| TIME FOR FLASH OR ALL RED: 5.   |                     | A B C D  |    |   |   |      |   |   |
| FIRST PHASE(S): (2+6)   |                     | Phases   |    |   |   |      |   |   |
| COLOR DISPLAYED: GREEN  |                     | Controller Movement No.  |    |   |   |      |   |   |
| INTERVAL OF FEATURE   | 1                   | 2  | 3  | 4 | 5 | 6    | 7 | 8 |
| INTERSECTION MOVEMENT   |                     |  |    |   |   |      |   |   |
| MINIMUM GREEN TIME (SEC.)   | 7.0                 | 20.0   |    |   |   | 20.0 |   |   |
| PASSAGE TIME (SEC.)   | 3.0                 | 3.0  |    |   |   | 3.0  |   |   |
| MAXIMUM GREEN TIME (SEC.)   | 30.0                | 60.0   |    |   |   | 60.0 |   |   |
| YELLOW CHANGE (SEC.)  | 4.0                 | 4.0  |    |   |   | 4.0  |   |   |
| ALL RED CLEARANCE (SEC.)  | 2.0                 | 2.0  |    |   |   | 2.0  |   |   |
| WALK (MIN.) (SEC.)  |                     |  |    |   |   |      |   |   |
| PEDESTRIAN CLEARANCE (SEC.)   |                     |  |    |   |   |      |   |   |
| RECALL  | MAXIMUM (ON/OFF)    |  |    |   |   |      |   |   |
|   | MINIMUM (ON/OFF)    |  | ON |   |   | ON   |   |   |
|   | PEDESTRIAN (ON/OFF) |  |    |   |   |      |   |   |



PHASING DIAGRAM  
NOT TO SCALE

| FIELD WIRING HOOK-UP CHART |            |                |       |
|----------------------------|------------|----------------|-------|
| SIGNAL HEAD                | INDICATION | FIELD TERMINAL | FLASH |
| 1, 2, 3, 4 (NB)            | R          | $\phi$ 2 R     | Y     |
|                            | Y          | $\phi$ 2 Y     |       |
|                            | G          | $\phi$ 2 G     |       |
| 5, 6 (SB LT)               | R          | $\phi$ 1 R     | R     |
|                            | Y          | $\phi$ 1 Y     |       |
|                            | G          | $\phi$ 1 G     |       |
| 7, 8, 9 (SB)               | R          | $\phi$ 6 R     | Y     |
|                            | Y          | $\phi$ 6 Y     |       |
|                            | G          | $\phi$ 6 G     |       |
| 10, 11 (WB RT)             | R          | $\phi$ 1 R     | R     |
|                            | Y          | $\phi$ 1 Y     |       |
|                            | G          | $\phi$ 1 G     |       |

| LOOP DETECTOR DATA |                          |          |                    |                |       |          |             |
|--------------------|--------------------------|----------|--------------------|----------------|-------|----------|-------------|
| LOOP #             | LOCATION (FROM STOP BAR) | SIZE     | TYPE               | DIRECTIONALITY | DELAY | PHASE    | DESCRIPTION |
| L1                 | 3' IN FRONT              | 6' X 30' | PRESENCE           | SOUTHBOUND     |       | $\phi$ 1 | SB LEFT     |
| L2                 |                          |          | EXISTING TO REMAIN |                |       | $\phi$ 1 | WB RIGHT    |
| L3                 |                          |          | EXISTING TO REMAIN |                |       | $\phi$ 1 | WB RIGHT    |
| L4                 | 250' BEHIND              | 6' X 6'  | PRESENCE           | NORTHBOUND     |       | $\phi$ 2 | NB THRU     |
| L5                 | 250' BEHIND              | 6' X 6'  | PRESENCE           | NORTHBOUND     |       | $\phi$ 2 | NB THRU     |
| L6                 | 250' BEHIND              | 6' X 6'  | PRESENCE           | NORTHBOUND     |       | $\phi$ 2 | NB THRU     |
| L7                 | 125' IN FRONT            | 6' X 6'  | PULSE              | SOUTHBOUND     |       | $\phi$ 6 | SB THRU     |
| L8                 | 125' IN FRONT            | 6' X 6'  | PULSE              | SOUTHBOUND     |       | $\phi$ 6 | SB THRU     |
| L9                 | 125' IN FRONT            | 6' X 6'  | PULSE              | SOUTHBOUND     |       | $\phi$ 6 | SB THRU     |
| L10                | 3' BEHIND                | 6' X 6'  | PRESENCE           | NORTHBOUND     |       | $\phi$ 2 | NB THRU     |
| L11                | 3' BEHIND                | 6' X 6'  | PRESENCE           | NORTHBOUND     |       | $\phi$ 2 | NB THRU     |
| L12                | 3' BEHIND                | 6' X 6'  | PRESENCE           | NORTHBOUND     |       | $\phi$ 2 | NB THRU     |
| L13                | 3' BEHIND                | 6' X 6'  | PRESENCE           | NORTHBOUND     |       | $\phi$ 2 | NB RIGHT    |

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