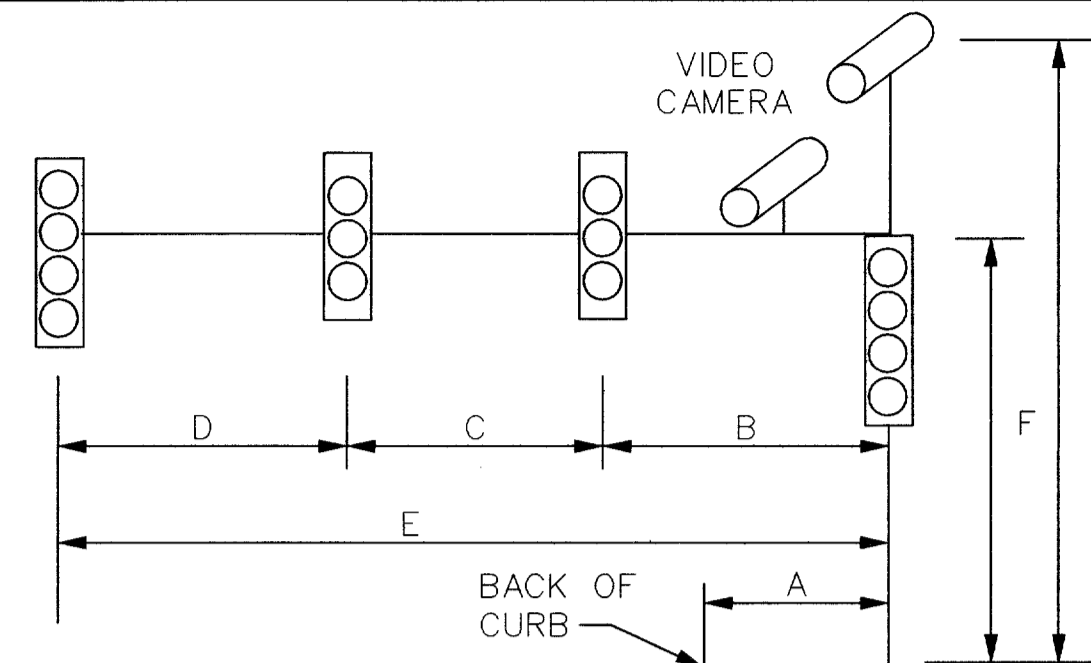


SIGNAL HEAD AND POLE PLACEMENT



SIGNAL HEAD AND POLE PLACEMENT (FEET)

| POLE NO. | A | B | C | D | E | F | FND |
|----------|---|----|----|-----|----|----|--------|
| T-1 | 3 | 23 | 12 | --- | 40 | 28 | 36-A |
| T-2 | 2 | 8 | 11 | 11 | 30 | 19 | 30-A |
| T-3 | 5 | 13 | 11 | 11 | 35 | 19 | 30-A |
| T-4 | 5 | 18 | 11 | 11 | 40 | 28 | 36-A |
| T-5 | 5 | 23 | 11 | 11 | 45 | 19 | EXIST. |
| T-6 | 7 | 30 | 12 | 12 | 55 | 28 | EXIST. |
| T-7 | 5 | 18 | 11 | 11 | 40 | 28 | EXIST. |
| T-8 | 5 | 18 | 11 | 11 | 40 | 28 | EXIST. |

SIGNAL POLE CONDUCTORS

| POLE NUMBER | OPTICOM | 5-CNDR | 7-CNDR | COAX | 3-CNDR |
|-------------|---------|--------|--------|------|--------|
| T-1 | 55 | 115 | --- | 35 | 35 |
| T-2 | 50 | 75 | 55 | 30 | 30 |
| T-3 | --- | 165 | --- | 30 | 30 |
| T-4 | 60 | 110 | 65 | 35 | 35 |
| T-5 | --- | --- | --- | --- | --- |
| T-6 | --- | --- | 80 | --- | --- |
| T-7 | --- | 95 | 65 | --- | --- |
| T-8 | --- | --- | --- | --- | --- |
| TOTAL (LF) | 165 | 560 | 265 | 130 | 130 |

CONDUIT SUMMARY

| SIZE | TYPE | LENGTH (LF) |
|--------|--------|-------------|
| 1" PVC | TRENCH | - |
| 2" PVC | TRENCH | - |
| 3" PVC | TRENCH | 40 |
| 4" PVC | BORE | 250 |
| 4" PVC | TRENCH | - |
| 4" RM | BORE | 90 |

GROUND BOX SUMMARY

| TYPE | EA |
|------|----|
| A | 4 |
| C | - |

CABLE TERMINATION CHART

| CABLE CONDUCTOR | T-1 (16 CNDR) | | T-2 (16 CNDR) | | T-3 (16 CNDR) | | T-4 (16 CNDR) | | T-5 (16 CNDR) | | T-6 (16 CNDR) | | T-7 (16 CNDR) | | T-8 (10 CNDR) | |
|-----------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|
| | S.H. NO. | INDICATION | S.H. NO. | INDICATION | S.H. NO. | INDICATION | S.H. NO. | INDICATION | S.H. NO. | INDICATION | S.H. NO. | INDICATION | S.H. NO. | INDICATION | S.H. NO. | INDICATION |
| BLACK | SPARE | | 4 | <- Y | SPARE | | 31 | <- Y | SPARE | | SPARE | | 21 | <- Y | SPARE | |
| WHITE | | COMMON | | COMMON | | COMMON | | COMMON | | COMMON | | COMMON | | COMMON | | COMMON |
| RED | 1-2 | R | 5-6 | R | 8-10 | R | 11-12 | R | 13-15 | R | 17-19 | R | 21-23 | R | 27-29 | R |
| GREEN | 1-2 | G | 5-6 | G | 8-10 | G/ <- G | 11-12 | G | 13-15 | G | 17-19 | G/ <- G | 21-23 | G | 27-29 | G/ <- G |
| ORANGE | 1-2 | Y | 5-6 | Y | 8-10 | Y | 11-12 | Y | 13-15 | Y | 17-19 | Y | 21-23 | Y | 27-29 | Y |
| BLUE | SPARE | | 4 | <- G | SPARE | | 31 | <- G | SPARE | | SPARE | | 21 | <- G | SPARE | |
| WHT/BLK | SPARE | | SPARE | | | PB COM | | PB COM | | PB COM | | PB COM | | PB COM | | SPARE |
| RED/BLK | SPARE | | SPARE | | 7 | DW | 3 | DW | 30 | DW | 20 | DW | 24 | DW | SIGN SR3-1 | |
| GRN/BLK | SPARE | | SPARE | | 7 | W | 3 | W | 30 | W | 20 | W | 24 | W | SPARE | |
| ORN/BLK | SPARE | | 4 | Y | SPARE | | SPARE | | 16 | Y | SPARE | | 26 | Y | SPARE | |
| BLU/BLK | SPARE | | SPARE | | SPARE | | SPARE | | SPARE | | PB 25 | Ø4 | PB 24 | Ø8 | | |
| BLK/WHT | SPARE | | SPARE | | PB 7 | Ø4 | PB 3 | Ø4 | PB 30 | Ø4 | PB 20 | Ø8 | SPARE | | | |
| RED/WHT | SPARE | | 4 | R | SPARE | | SIGN SR3-1 | | 16 | R | 25 | DW | SPARE | | | |
| GRN/WHT | SPARE | | 4 | G | SPARE | | SPARE | | 16 | G | 25 | W | SPARE | | | |
| BLU/WHT | SPARE | | SPARE | | SPARE | | SPARE | | SPARE | | SPARE | | 26 | G | | |
| BLK/RED | SPARE | | SPARE | | SPARE | | SPARE | | SPARE | | SPARE | | 26 | R | | |
| WHT/RED | | | | | | | | | | | | | | | | |
| ORN/RED | | | | | | | | | | | | | | | | |
| BLU/RED | | | | | | | | | | | | | | | | |

SIGNAL HEADS

| NO | TYPE | PHASE | BACKPLATE | | SIGNAL HEAD | | PED SIG SEC |
|--------|-------|-----------|-----------|-------|-------------|-------|-------------|
| | | | 3 SEC | 4 SEC | 3 SEC | 4 SEC | |
| 1-2 | V3 | Ø3 | 2 | | 2 | | |
| 4 | V4LT* | Ø5+O.L. B | | 1 | | 1 | |
| 5-6 | V3 | O.L. 2 | 2 | | 2 | | |
| 8 | V4LT | O.L. C | | 1 | | 1 | |
| 9-10 | V3 | O.L. C | 2 | | 2 | | |
| 11-12 | V3 | O.L. 6 | 2 | | 2 | | |
| 13-15 | V3 | O.L. 4 | EXIST. | | EXIST. | | |
| 16 | V3 | O.L. 7 | EXIST. | | EXIST. | | |
| 17 | V4LT | Ø8 | | 1 | | 1 | |
| 18-19 | V3 | Ø8 | EXIST. | | EXIST. | | |
| 21 | V4LT* | O.L. A+D | | 1 | | 1 | |
| 22-23 | V3 | O.L. A | 2 | | 2 | | |
| 26 | V3 | O.L. 4 | EXIST. | | EXIST. | | |
| 27 | V4LT | Ø7 | | 1 | | 1 | |
| 28-29 | V3 | Ø7 | EXIST. | | EXIST. | | |
| 31 | V4LT* | Ø1+O.L. 6 | | 1 | | 1 | |
| 3,7 | PED | Ø4 | | | | | 2 |
| 20,24 | PED | Ø8 | | | | | EXIST. |
| 25,30 | PED | Ø4 | | | | | EXIST. |
| TOTALS | --- | --- | 10 | 6 | 10 | 6 | 2 |

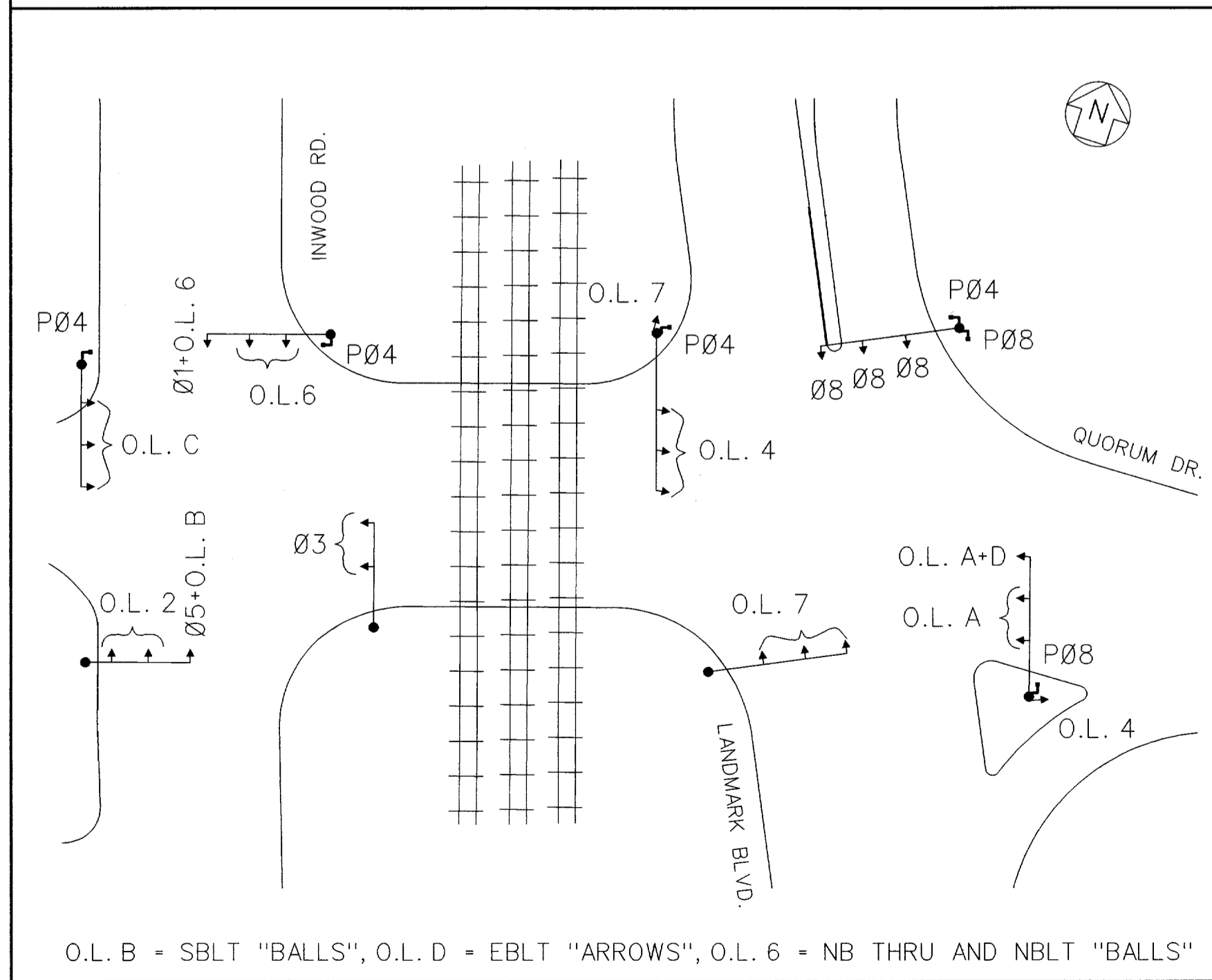
* -USE GREEN/YELLOW BI-MODAL TURN ARROW.

CONDUIT RUNS

| RUN NO. | QUANTITY | SIZE | TYPE | METHOD | *4 XHHW | *6 BARE | COAX CABLE | 4 CNDR OPTICOM | 3 CNDR (VIDEO) | *12 XHHW | 10 CNDR | 16 CNDR | CONDUIT LENGTH | CABLE LENGTH | RUN NO. |
|-----------|----------|------|------|--------|---------|---------|------------|----------------|----------------|----------|---------|---------|----------------|--------------|---------|
| A | 2 | 4" | PVC | Exist. | | | 5 | 3 | 5 | | | 4 | 10 | 15 | A |
| B | 2 | 4" | PVC | Exist. | | | 5 | 3 | 5 | | | 4 | 15 | 20 | B |
| C | 1 | 4" | PVC | Exist. | | | | | | | | | 100 | 110 | C |
| D | 1 | 3" | PVC | Exist. | | | | | | | | | 10 | 15 | D |
| E | 1 | 4" | PVC | Exist. | | | | | | | | | 115 | 125 | E |
| F | 1 | 3" | PVC | Exist. | | | | | | | | | 20 | 25 | F |
| G | 1 | 4" | PVC | Exist. | | | | | | | | | 105 | 115 | G |
| H | 1 | 3" | PVC | Exist. | | | 1 | | 1 | | | | 20 | 25 | H |
| I | 1 | 4" | PVC | Exist. | | | 1 | | 1 | | | | 100 | 110 | I |
| J | 1 | 3" | PVC | Exist. | | | | | | | | | 15 | 20 | J |
| K | 1 | 4" | RMC | Bored | | | 1 | 4 | 3 | 4 | | 4 | 90 | 100 | K |
| L | 1 | 3" | PVC | Trench | | | 1 | 1 | 1 | 1 | | 1 | 5 | 10 | L |
| M | 1 | 4" | PVC | Bored | | | 1 | 1 | 1 | 1 | | 1 | 85 | 95 | M |
| N | 1 | 3" | PVC | Trench | | | 1 | 1 | 1 | 1 | | 1 | 10 | 15 | N |
| O | 1 | 3" | PVC | Trench | | | 1 | 1 | 1 | 1 | | 1 | 10 | 15 | O |
| P | 1 | 4" | PVC | Bored | | | 1 | 1 | 1 | 1 | | 1 | 85 | 95 | P |
| Q | 1 | 3" | PVC | Trench | | | 1 | 1 | 1 | 1 | | 1 | 15 | 20 | Q |
| R | 1 | 4" | PVC | Bored | | | 1 | 2 | 1 | 2 | | 2 | 80 | 90 | R |
| S | 1 | 2" | PVC | Exist. | | | | | | | | | 50 | 60 | S |
| *T | | | | | | | | | | | | | | | T |
| TOTAL(LF) | --- | --- | --- | --- | --- | --- | 440 | 1140 | 635 | 1140 | --- | --- | 970 | --- | --- |

* TO SITE OF NEW R.R. INTERFACE EQUIPMENT.

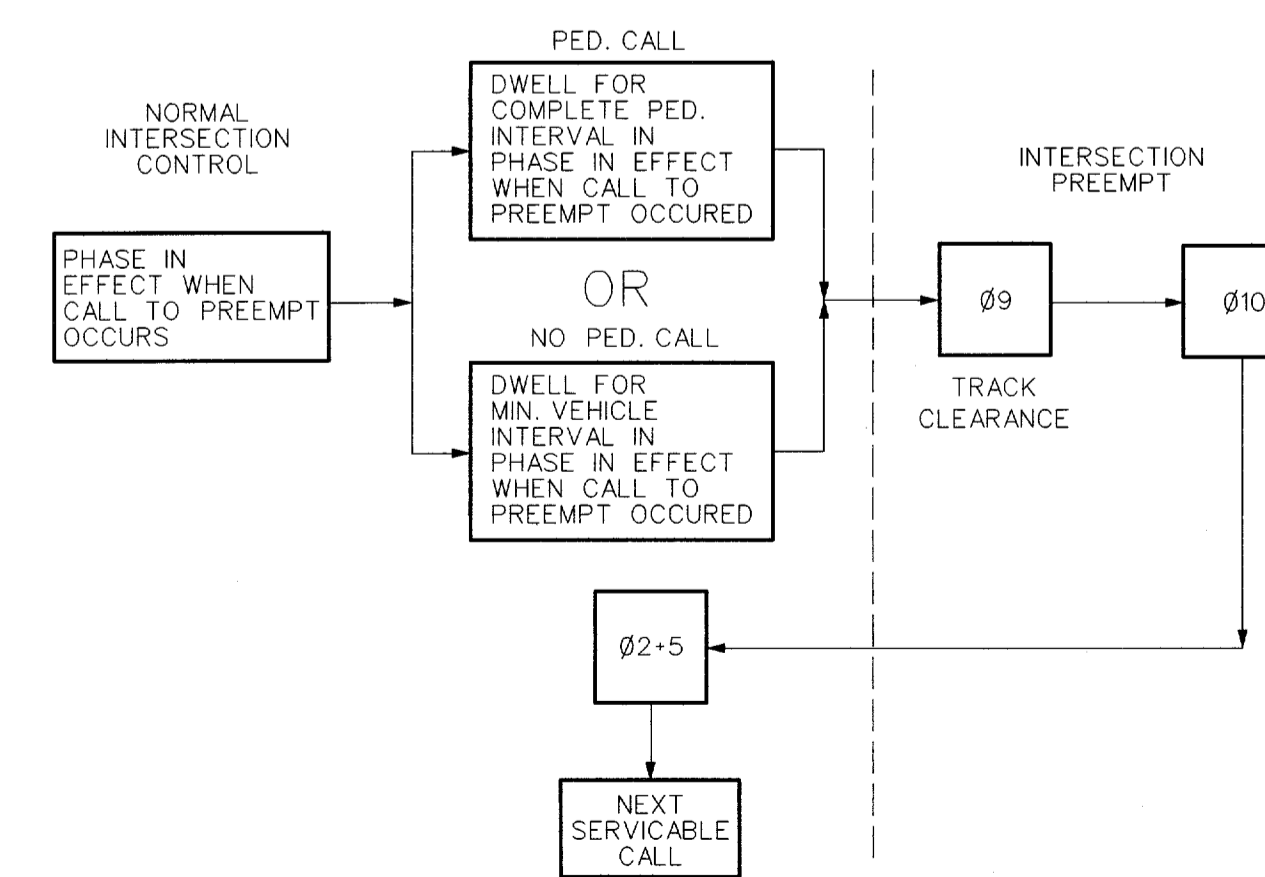
SIGNAL HEAD PHASING



O.L. B = SBLT "BALLS", O.L. D = EBLT "ARROWS", O.L. 6 = NB THRU AND NBLT "BALLS"

ECONOLITE ASC-2 PROGRAMMING

- Ø1 = N.B.L.T. (INWOOD)
- O.L. 2 = Ø2+10
- Ø3 = E.B. THRU
- O.L. 4 = Ø3+4
- Ø5 = S.B.L.T. (INWOOD)
- O.L. 6 = Ø6+10
- O.L. 7 = Ø7+10
- Ø8 = N.B.L.T. & THRU (LANDMARK)
- O.L. A = Ø3+4+5+6+9
- O.L. B = Ø2 BUT NOT Ø10
- O.L. C = Ø4+7+8+9
- O.L. D = Ø5+6+9



RAILROAD PREEMPT SEQUENCE DIAGRAM

Ø9 = O.L. A+C+D (TRACK CLEARANCE)
 Ø10 = Ø2, Ø6, Ø7 (PREEMPTION PHASES)



Alan P. McNeil
5/12/03



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SIGNAL LAYOUT TABLES

INWOOD CONNECTION

**DEPARTMENT OF PUBLIC WORKS
TOWN OF ADDISON, TEXAS**

| DESIGN | DRAWN | DATE | SCALE | NOTES | FILE | NUMBER |
|--------|--------|----------|-------|-------|------|--------|
| A.P.M. | C.W.W. | 05/12/03 | | | | 27 |