

| CABLE TERMINATION CHART |           |            |           |            |           |            |           |            |            |
|-------------------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|------------|
| CABLE CONDUCTOR         | T-1       |            | T-2       |            | T-3       |            | T-4       |            | INDICATION |
|                         | S.H. NO.  | INDICATION | S.H. NO.  | INDICATION | S.H. NO.  | INDICATION | S.H. NO.  | INDICATION |            |
| BLACK/RED               | SPARE     |            | SPARE     |            | SPARE     |            | SPARE     |            |            |
| WHITE                   | COMMON    |            | COMMON    |            | COMMON    |            | COMMON    |            |            |
| WHITE/BLACK             | COMMON    |            | COMMON    |            | COMMON    |            | COMMON    |            |            |
| RED                     | 1-4       | R          | 5-7       | R          | 8-11      | R          | 12-14     | R          |            |
| ORANGE                  | 1-4       | Y          | 5-7       | Y          | 8-11      | Y          | 12-14     | Y          |            |
| GREEN                   | 1-4       | G          | 5-7       | G          | 8-11      | G          | 12-14     | G          |            |
| BLACK                   | 4         | <Y         | SPARE     |            | 11        | <Y         | 14        | <Y         |            |
| BLUE                    | 4         | <G         | SPARE     |            | 11        | <G         | 14        | <G         |            |
| GREEN/BLACK             | 15        | W          | 16        | W          | 17        | W          | 19        | W          |            |
| BLUE/WHITE              | SPARE     |            | SPARE     |            | 18        | W          | 20        | W          |            |
| RED/BLACK               | 15        | DW         | 16        | DW         | 17        | DW         | 19        | DW         |            |
| ORANGE/BLACK            | SPARE     |            | SPARE     |            | 18        | DW         | 20        | DW         |            |
| BLACK/WHITE             | PB15      | Ø4         | PB16      | Ø8         | PB17      | Ø8         | PB19      | Ø6         |            |
| RED/WHITE               | SPARE     |            | SPARE     |            | PB18      | Ø6         | PB20      | Ø4         |            |
| GREEN/WHITE             | P.B. COM. |            | P.B. COM. |            | P.B. COM. |            | P.B. COM. |            |            |
| BLUE/BLACK              | SPARE     |            | SPARE     |            | SPARE     |            | SPARE     |            |            |

| SIGNAL HEADS |       |         |           |       |             |          |
|--------------|-------|---------|-----------|-------|-------------|----------|
| NO           | TYPE  | PHASE   | BACKPLATE |       | 12" VEH SEC | PED SIG. |
|              |       |         | 3 SEC     | 4 SEC |             |          |
| 1            | V3    | Ø4      | 1         |       | 3           |          |
| 2            | V3    | Ø4      | 1         |       | 3           |          |
| 3            | V3    | Ø4      | 1         |       | 3           |          |
| 4            | V4LT* | Ø7 & Ø4 |           | 1     | 4           |          |
| 5            | V3    | Ø2      | 1         |       | 3           |          |
| 6            | V3    | Ø2      | 1         |       | 3           |          |
| 7            | V3    | Ø2      | 1         |       | 3           |          |
| 8            | V3    | Ø8      | 1         |       | 3           |          |
| 9            | V3    | Ø8      | 1         |       | 3           |          |
| 10           | V3    | Ø8      | 1         |       | 3           |          |
| 11           | V4LT* | Ø3 & Ø8 |           | 1     | 4           |          |
| 12           | V3    | Ø6      | 1         |       | 3           |          |
| 13           | V3    | Ø6      | 1         |       | 3           |          |
| 14           | V4LT* | Ø1 & Ø6 |           | 1     | 4           |          |
| 15,20        | PED   | PØ4     |           |       |             | 2        |
| 16,17        | PED   | PØ8     |           |       |             | 2        |
| 18,19        | PED   | PØ6     |           |       |             | 2        |
| TOTALS       |       |         | 11        | 3     | 45          | 6        |

\* - Use green/yellow fiber optic turn arrow.

**LEGEND**

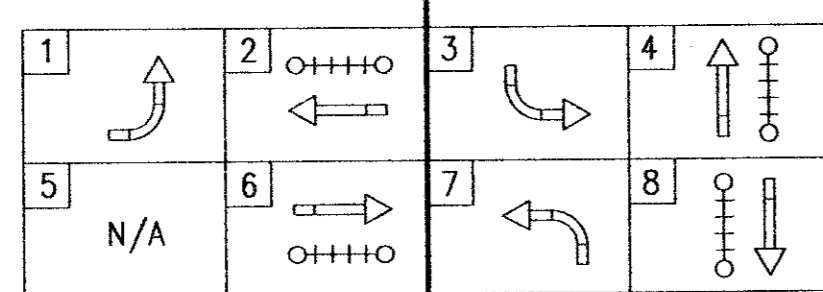
|                               |      |                                     |     |
|-------------------------------|------|-------------------------------------|-----|
| FIRE HYDRANT                  | ⊙    | LOOP DETECTOR (SAW-CUT)             | ⊖   |
| POWER POLE                    | ○    | TRAFFIC SIGNAL ON ARM W/POLE        | ⊙   |
| TELEPHONE LINE U.G.           | —T—  | COMB. ST. LIGHT/SIGNAL POLE         | ⊙   |
| SEWER LINE                    | —S—  | CONDUIT IDENTIFIER                  | ⊙   |
| STORM DRAIN LINE              | —SD— | SIGNAL CONDUIT                      | --- |
| GAS LINE                      | —G—  | DETECTOR PULLBOX TYPE A             | ⊙   |
| WATER LINE                    | —W—  | DETECTOR PULLBOX TYPE C             | ⊙   |
| MANHOLE                       | ○    | PEDESTRIAN SIGNAL AND PUSH BUTTON   | ⊙   |
| LIGHT STANDARD WITH PHOTOCELL | ⊙    | PEDESTAL POLE W/SIGNALS             | ⊙   |
| EXISTING RIGHT-OF-WAY         | ---  | CONTROLLER CABINET                  | ⊙   |
| OPTICOM DETECTOR              | ⊙    | SIGN PLATE TO BE INSTALLED          | ⊙   |
|                               |      | SIGN PLATE AND POLE TO BE INSTALLED | ⊙   |

**PAVEMENT MARKINGS**

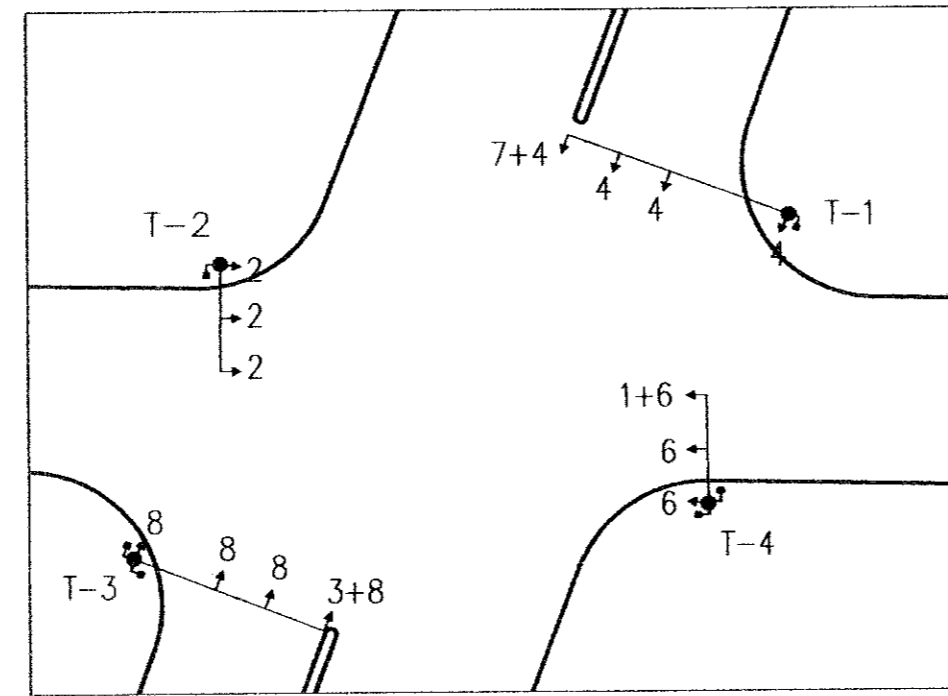
| TYPE   | QUANTITY | UNIT |
|--|----------|------|
| 6" X 6" WHITE REFLECTIVE JIGGLE BARS                   | 30       | EA.  |
| 4" YELLOW BIDIRECTIONAL RETROREFLECTIVE RAISED BUTTONS | 200      | EA.  |
| 24" SOLID WHITE ALKYD THERMOPLASTIC FOR STOP BARS      | 140      | FT.  |
| 6" SOLID WHITE ALKYD THERMOPLASTIC FOR CROSSWALKS      | 430      | FT.  |
| SOLID WHITE ALKYD THERMOPLASTIC LEFT ARROW             | 3        | EA.  |
| SOLID WHITE ALKYD THERMOPLASTIC RIGHT ARROW            | 1        | EA.  |
| SOLID WHITE ALKYD THERMOPLASTIC "ONLY"                 | 4        | EA.  |
| SOLID WHITE ALKYD THERMOPLASTIC THROUGH/LEFT ARROW     | 1        | EA.  |
| SOLID WHITE ALKYD THERMOPLASTIC THROUGH/RIGHT ARROW    | 1        | EA.  |

| DETECTOR DETAILS |              |       |           |         |
|------------------|--------------|-------|-----------|---------|
| LOOP             | DIMENSION    | TURNS | DET. CTR. | SAW CUT |
| Ø1               | 5'X60' QUAD. | 2     | Presence  | 205     |
| Ø2-1             | 5'X60' QUAD. | 2     | Presence  | 190     |
| Ø2-2             | 5'X60' QUAD. | 2     | Presence  | 210     |
| Ø3               | 5'X60' QUAD. | 2     | Presence  | 190     |
| Ø4-1             | 5'X60' QUAD. | 2     | Presence  | 215     |
| Ø4-2             | 5'X60' QUAD. | 2     | Presence  | 200     |
| Ø4-3             | 5'X60' QUAD. | 2     | Presence  | 190     |
| Ø6               | 5'X60' QUAD. | 2     | Presence  | 200     |
| Ø7               | 5'X60' QUAD. | 2     | Presence  | 190     |
| Ø8-1             | 5'X60' QUAD. | 2     | Presence  | 215     |
| Ø8-2             | 5'X60' QUAD. | 2     | Presence  | 200     |
| Ø8-3             | 5'X60' QUAD. | 2     | Presence  | 190     |
| TOTALS           |              |       |           | 2395    |

**NEMA PHASE DIAGRAM**



**SIGNAL HEAD PHASING**



**CONDUIT SUMMARY**

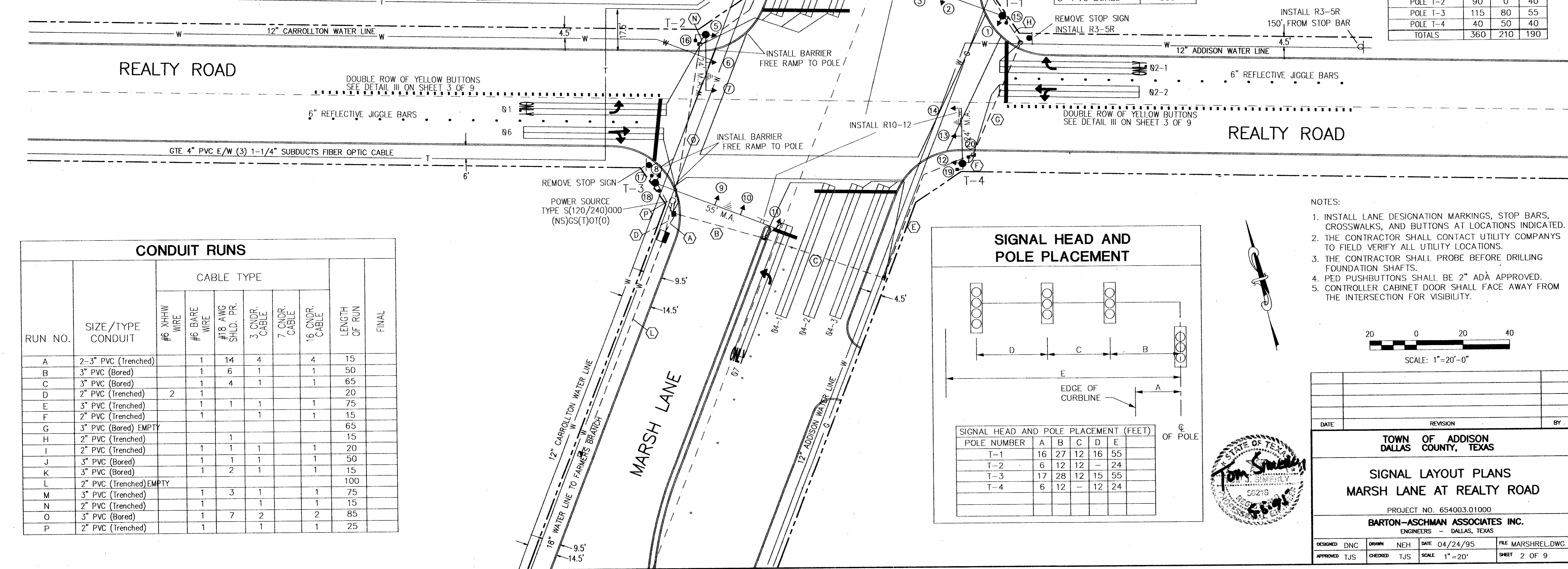
| TYPE            | LENGTH |
|-----------------|--------|
| 2" PVC TRENCHED | 210    |
| 3" PVC TRENCHED | 180    |
| 3" PVC BORED    | 330    |

**GROUND BOX SUMMARY**

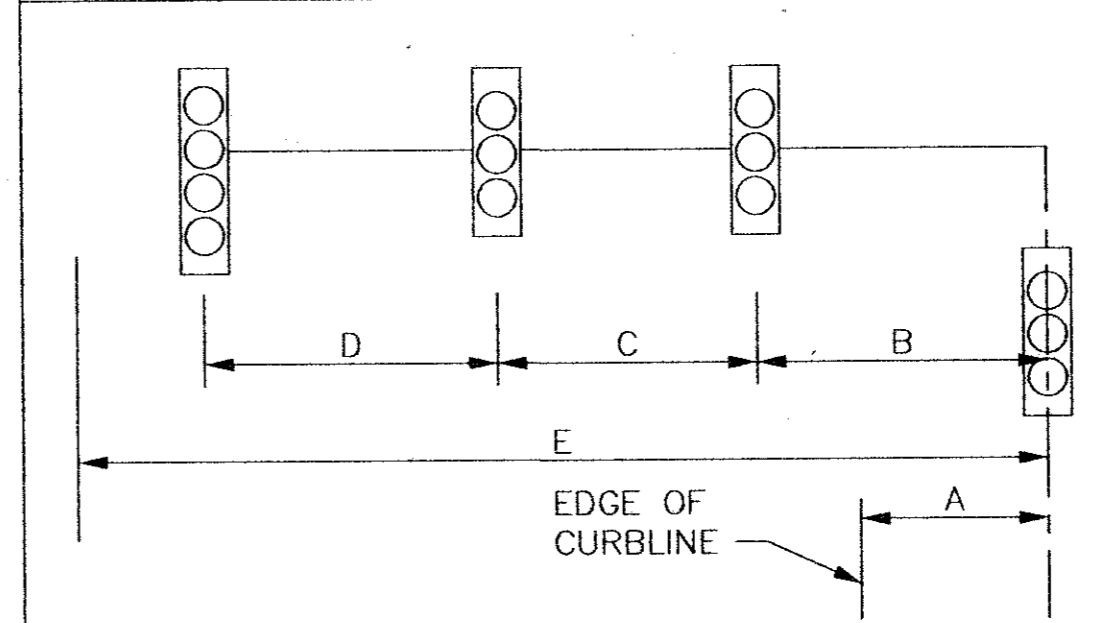
| TYPE | EA |
|------|----|
| A    | 8  |
| C    | 1  |

**CABLE SUMMARY**

| SIGNAL POLE/MA | 5 CNDR. CABLE | 7 CNDR. CABLE | 3 CNDR. CABLE |
|----------------|---------------|---------------|---------------|
| POLE T-1       | 115           | 80            | 55            |
| POLE T-2       | 90            | 0             | 40            |
| POLE T-3       | 115           | 80            | 55            |
| POLE T-4       | 40            | 50            | 40            |
| TOTALS         | 360           | 210           | 190           |

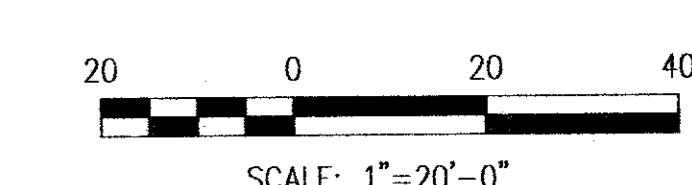


**SIGNAL HEAD AND POLE PLACEMENT**



| SIGNAL HEAD AND POLE PLACEMENT (FEET) |    |    |    |    |    |
|---------------------------------------|----|----|----|----|----|
| POLE NUMBER                           | A  | B  | C  | D  | E  |
| T-1                                   | 16 | 27 | 12 | 16 | 55 |
| T-2                                   | 6  | 12 | 12 | -  | 24 |
| T-3                                   | 17 | 28 | 12 | 15 | 55 |
| T-4                                   | 6  | 12 | -  | 12 | 24 |

- NOTES:**
1. INSTALL LANE DESIGNATION MARKINGS, STOP BARS, CROSSWALKS, AND BUTTONS AT LOCATIONS INDICATED.
  2. THE CONTRACTOR SHALL CONTACT UTILITY COMPANYS TO FIELD VERIFY ALL UTILITY LOCATIONS.
  3. THE CONTRACTOR SHALL PROBE BEFORE DRILLING FOUNDATION SHAFTS.
  4. PED PUSHBUTTONS SHALL BE 2" ADA APPROVED.
  5. CONTROLLER CABINET DOOR SHALL FACE AWAY FROM THE INTERSECTION FOR VISIBILITY.



|      |          |    |
|------|----------|----|
| DATE | REVISION | BY |
|      |          |    |

TOWN OF ADDISON  
DALLAS COUNTY, TEXAS

**SIGNAL LAYOUT PLANS**  
**MARSH LANE AT REALTY ROAD**

PROJECT NO. 654003.01000  
BARTON-ASCHMAN ASSOCIATES INC.  
ENGINEERS - DALLAS, TEXAS

DESIGNED DNC DRAWN NEH DATE 04/24/95 FILE MARSHREL.DWG  
APPROVED TJS CHECKED TJS SCALE 1"=20' SHEET 2 OF 9

