

### VEHICLE DETECTOR LOOPS

| LAYOUT SHEET     | LOOP NO. | LANE                   | CALL Ø | SIZE (M)  | TYPE & NO. TURNS | DELAY OR PRESENCE | INDUCTANCE (µH) |      | RESISTANCE (OHMS) |      | LEAKAGE TO GROUND (MEGOHMS) | LOCKING MEMORY |
|------------------|----------|------------------------|--------|-----------|------------------|-------------------|-----------------|------|-------------------|------|-----------------------------|----------------|
|                  |          |                        |        |           |                  |                   | CALC.           | ACT. | CALC.             | ACT. |                             |                |
| VT ROUTE 62 - 14 | 1        | LEFT ONLY (VT 62 EAST) |        | 1.8 X 12  | QUAD - 2         | PRESENCE          | 367             |      | 0.91              |      |                             | NO             |
| VT ROUTE 62 - 14 | 5        | LEFT ONLY (VT 62 WEST) |        | 1.8 X 12  | QUAD - 2         | PRESENCE          | 367             |      | 0.91              |      |                             | NO             |
| BERLIN STREET    | 3A       | THRU AND LEFT (SOUTH)  |        | 1.8 X 12  | QUAD - 2         | PRESENCE          | 396             |      | 0.85              |      |                             | NO             |
| BERLIN STREET    | 3B       | RIGHT (SOUTH)          |        | 1.8 X 1.8 | RECT. - 2        | PRESENCE          | N/A             |      | N/A               |      |                             | NO             |
| BERLIN STREET    | 3C       | THRU AND LEFT (NORTH)  |        | 1.8 X 12  | QUAD - 2         | PRESENCE          | 448             |      | 1.53              |      |                             | NO             |
| BERLIN STREET    | 3D       | RIGHT (NORTH)          |        | 1.8 X 1.8 | RECT. - 2        | PRESENCE          | N/A             |      | N/A               |      |                             | NO             |
|                  |          |                        |        |           |                  |                   |                 |      |                   |      |                             |                |
|                  |          |                        |        |           |                  |                   |                 |      |                   |      |                             |                |

**NOTES:**

THIS PLAN SHEET SHALL ONLY BE USED AS A GUIDE FOR LOOP AND JUNCTION BOX PLACEMENT. THE CONTRACTOR SHALL CONFIRM ALL LOCATIONS IN THE FIELD WITH THE RESIDENT ENGINEER PRIOR TO INSTALLATION.

LOOPS ARE TO BE TERMINATED AT THE JUNCTION BOX WITH A 1M SLACK PER LOOP WIRE, COILED NEATLY WITHIN THE BOX. LOOPS WILL NOT BE CONNECTED TO THE CONTROLLER AT THIS TIME.

ALL BITUMINOUS AREAS TO RECEIVE NEW VEHICLE DETECTOR LOOPS SHALL BE LEVELED WITH TYPE IVS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT AS DIRECTED BY THE RESIDENT ENGINEER PRIOR TO THE INSTALLATION OF THE NEW DETECTOR LOOPS. LOOPS SHALL BE INSTALLED PRIOR TO THE PLACEMENT OF THE WEARING COURSE.

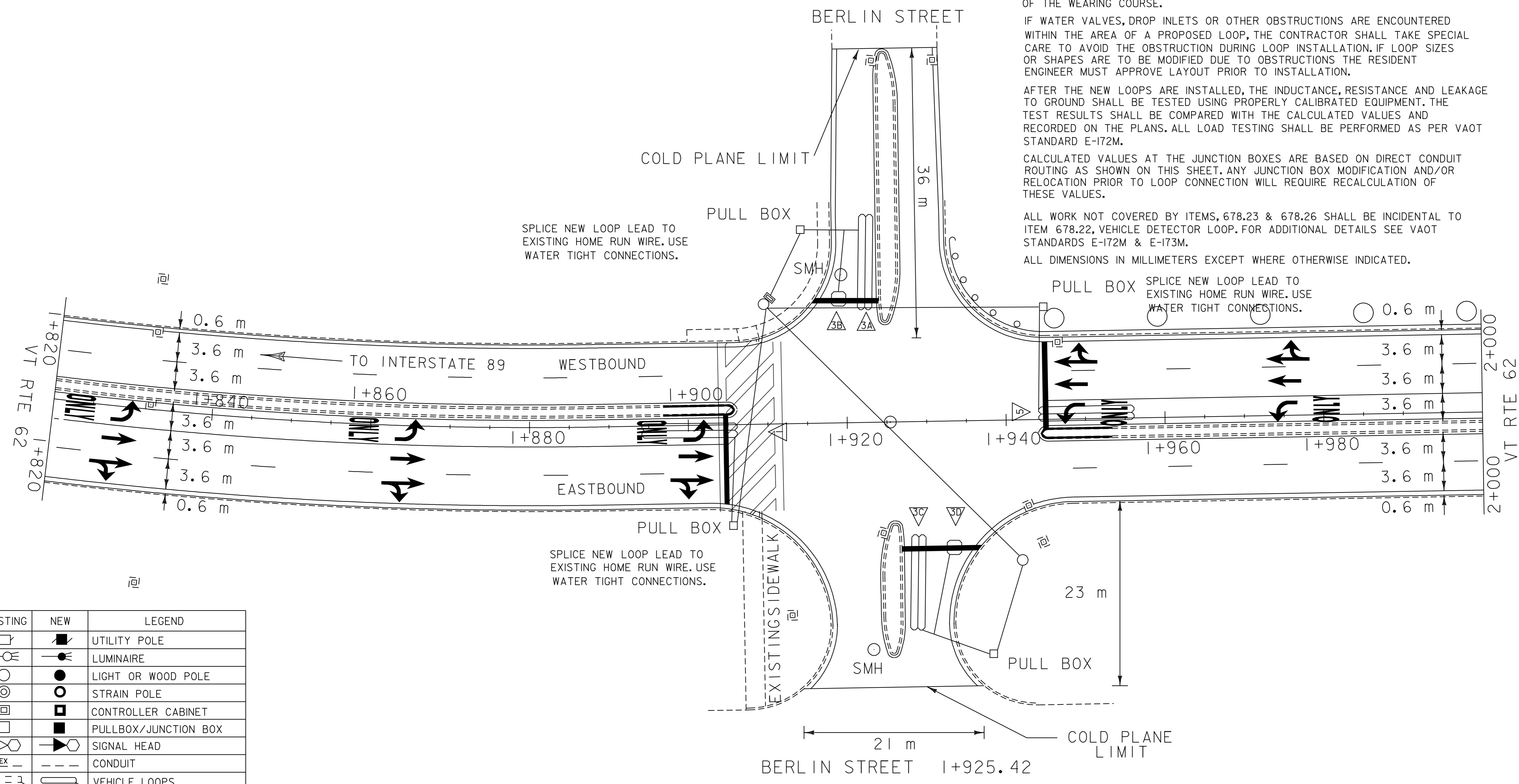
IF WATER VALVES, DROP INLETS OR OTHER OBSTRUCTIONS ARE ENCOUNTERED WITHIN THE AREA OF A PROPOSED LOOP, THE CONTRACTOR SHALL TAKE SPECIAL CARE TO AVOID THE OBSTRUCTION DURING LOOP INSTALLATION. IF LOOP SIZES OR SHAPES ARE TO BE MODIFIED DUE TO OBSTRUCTIONS THE RESIDENT ENGINEER MUST APPROVE LAYOUT PRIOR TO INSTALLATION.

AFTER THE NEW LOOPS ARE INSTALLED, THE INDUCTANCE, RESISTANCE AND LEAKAGE TO GROUND SHALL BE TESTED USING PROPERLY CALIBRATED EQUIPMENT. THE TEST RESULTS SHALL BE COMPARED WITH THE CALCULATED VALUES AND RECORDED ON THE PLANS. ALL LOAD TESTING SHALL BE PERFORMED AS PER VAOT STANDARD E-I72M.

CALCULATED VALUES AT THE JUNCTION BOXES ARE BASED ON DIRECT CONDUIT ROUTING AS SHOWN ON THIS SHEET. ANY JUNCTION BOX MODIFICATION AND/OR RELOCATION PRIOR TO LOOP CONNECTION WILL REQUIRE RECALCULATION OF THESE VALUES.

ALL WORK NOT COVERED BY ITEMS, 678.23 & 678.26 SHALL BE INCIDENTAL TO ITEM 678.22, VEHICLE DETECTOR LOOP. FOR ADDITIONAL DETAILS SEE VAOT STANDARDS E-I72M & E-I73M.

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.



| EXISTING | NEW | LEGEND               |
|----------|-----|----------------------|
|          |     | UTILITY POLE         |
|          |     | LUMINAIRE            |
|          |     | LIGHT OR WOOD POLE   |
|          |     | STRAIN POLE          |
|          |     | CONTROLLER CABINET   |
|          |     | PULLBOX/JUNCTION BOX |
|          |     | SIGNAL HEAD          |
|          |     | CONDUIT              |
|          |     | VEHICLE LOOPS        |
|          |     | PEDESTAL POST        |
|          |     | STANCHION            |
|          |     | SWEEP                |
|          |     | LOOP NUMBER          |

|  |                                   |                             |                |
|--|-----------------------------------|-----------------------------|----------------|
| <b>VEHICLE<br/>DETECTOR LOOP<br/>LAYOUT<br/>#2</b> | PROJECT NAME: BERLIN-BARRE CITY   | PLOT DATE: 12-MAR-2007 11:0 |                |
|  | PROJECT NUMBER: STP 232(1)S       | DRAWN BY: LOCKE             |                |
|  | FILE NAME: /pave/01b022/pb022.dgn | DESIGNED BY: GRAY           | CHECKED BY:    |
|  | DESIGNED BY: GRAY                 | pb022vdl2.1                 | SHEET 34 OF 39 |