

| Element | Type | Station | Elevation | Length | Entrance Grade | Exit Grade | K | Middle Ordinate | SSD/HSD |
|----------------------|-------|-------------|-----------|--------|----------------|------------|----|-----------------|---------|
| Symmetrical Parabola | PVC | F 121+15.00 | 718.61 | 440 | -3.41% | 7.01% | 42 | 5.73 | |
| | POVC | F 121+50.00 | 717.56 | | | | | | |
| | POVC | F 122+00.00 | 716.56 | | | | | | |
| | POVC | F 122+50.00 | 716.16 | | | | | | |
| | VLOW | F 122+59.00 | 716.15 | | | | | | |
| | POVC | F 123+00.00 | 716.35 | | | | | | |
| | PVI | F 123+35.00 | 711.10 | | | | | | |
| | POVC | F 123+50.00 | 717.13 | | | | | | |
| | POVC | F 124+00.00 | 718.51 | | | | | | |
| | POVC | F 124+50.00 | 720.47 | | | | | | |
| | POVC | F 125+00.00 | 723.03 | | | | | | |
| | POVC | F 125+50.00 | 726.18 | | | | | | |
| | PVT | F 125+55.00 | 726.53 | | | | | | |
| | PVT | F 125+55.00 | 726.53 | | | | | | |
| Linear | POVT | F 126+00.00 | 729.69 | 65 | 7.01% | | | | |
| | PVC | F 126+20.00 | 731.09 | | | | | | |
| | PVC | F 126+20.00 | 731.09 | | | | | | |
| Symmetrical Parabola | POVC | F 126+50.00 | 732.94 | 140 | 7.01% | -0.94% | 18 | -1.39 | 206 |
| | PVI | F 126+90.00 | 736.00 | | | | | | |
| | POVC | F 127+00.00 | 734.88 | | | | | | |
| | VHIGH | F 127+43.49 | 735.42 | | | | | | |
| Linear | POVT | F 127+50.00 | 735.41 | 25 | -0.94% | | | | |
| | PVT | F 127+60.00 | 735.34 | | | | | | |
| | PVC | F 127+85.00 | 735.11 | | | | | | |
| Symmetrical Parabola | PVC | F 127+85.00 | 735.11 | 130 | -0.94% | 2.45% | 38 | 0.55 | |
| | POVC | F 128+00.00 | 735.00 | | | | | | |
| | VLOW | F 128+21.02 | 734.94 | | | | | | |
| | PVI | F 128+50.00 | 734.50 | | | | | | |
| | POVC | F 129+00.00 | 735.75 | | | | | | |
| | PVT | F 129+15.00 | 736.09 | | | | | | |
| Linear | PVT | F 129+15.00 | 736.09 | 245 | 2.45% | | | | |
| | POVT | F 129+50.00 | 736.95 | | | | | | |
| | POVT | F 130+00.00 | 738.17 | | | | | | |
| | POVT | F 130+50.00 | 739.39 | | | | | | |
| | POVT | F 131+00.00 | 740.62 | | | | | | |
| | POVT | F 131+50.00 | 741.84 | | | | | | |
| | PVC | F 131+60.00 | 742.08 | | | | | | |
| | PVC | F 131+60.00 | 742.08 | | | | | | |
| Symmetrical Parabola | POVC | F 132+00.00 | 743.14 | 100 | 2.45% | 3.48% | 97 | 0.13 | |
| | PVI | F 132+10.00 | 743.31 | | | | | | |
| | POVC | F 132+50.00 | 744.70 | | | | | | |
| | PVT | F 132+60.00 | 745.05 | | | | | | |
| Linear | PVT | F 132+60.00 | 745.05 | 200 | 3.48% | | | | |
| | POVT | F 133+00.00 | 746.44 | | | | | | |
| | POVT | F 133+50.00 | 748.18 | | | | | | |
| | POVT | F 134+00.00 | 749.92 | | | | | | |
| | POVT | F 134+50.00 | 751.66 | | | | | | |
| | PVC | F 134+60.00 | 752.01 | | | | | | |
| | PVC | F 134+60.00 | 752.01 | | | | | | |
| | POVC | F 135+00.00 | 753.16 | | | | | | |
| Symmetrical Parabola | PVI | F 135+20.00 | 754.10 | 120 | 3.48% | -0.17% | 33 | -0.55 | 355 |
| | POVC | F 135+50.00 | 753.91 | | | | | | |
| | VHIGH | F 135+74.29 | 754.00 | | | | | | |
| | PVT | F 135+80.00 | 754.00 | | | | | | |
| | PVT | F 135+80.00 | 754.00 | | | | | | |
| | POVT | F 136+00.00 | 753.96 | | | | | | |
| Linear | POVT | F 136+50.00 | 753.87 | 140 | -0.17% | | | | |
| | POVT | F 137+00.00 | 753.79 | | | | | | |
| | PVC | F 137+20.00 | 753.75 | | | | | | |
| | PVC | F 137+20.00 | 753.75 | | | | | | |
| | PVI | F 137+50.00 | 753.70 | | | | | | |
| Symmetrical Parabola | PVT | F 137+80.00 | 753.08 | 60 | -0.17% | -2.05% | 32 | -0.14 | 605 |
| | PVT | F 137+80.00 | 753.08 | | | | | | |
| | POVT | F 138+00.00 | 752.67 | | | | | | |
| | POVT | F 138+50.00 | 751.65 | | | | | | |
| Linear | POVT | F 139+00.00 | 750.62 | 130 | -2.05% | | | | |
| | PVC | F 139+10.00 | 750.42 | | | | | | |
| | PVC | F 139+10.00 | 750.42 | | | | | | |
| | PVI | F 139+45.00 | 749.70 | | | | | | |
| | PVI | F 139+45.00 | 749.70 | | | | | | |
| Symmetrical Parabola | POVC | F 139+50.00 | 749.91 | 70 | -2.05% | 0.67% | 26 | 0.24 | |
| | VLOW | F 139+62.83 | 749.88 | | | | | | |
| | PVT | F 139+80.00 | 749.93 | | | | | | |
| | PVT | F 139+80.00 | 749.93 | | | | | | |
| Linear | PVT | F 139+80.00 | 749.93 | 35 | 0.67% | | | | |
| | POVT | F 140+00.00 | 750.07 | | | | | | |
| | PVC | F 140+15.00 | 750.17 | | | | | | |
| Symmetrical Parabola | PVC | F 140+15.00 | 750.17 | 70 | 0.67% | -8.24% | 8 | -0.78 | 156 |
| | VHIGH | F 140+20.24 | 750.18 | | | | | | |
| | PVI | F 140+50.00 | 750.40 | | | | | | |
| | PVT | F 140+85.00 | 747.52 | | | | | | |
| Linear | PVT | F 140+85.00 | 747.52 | 25 | -8.24% | | | | |
| | POVT | F 141+00.00 | 746.28 | | | | | | |
| | PVC | F 141+10.00 | 745.46 | | | | | | |
| Symmetrical Parabola | PVC | F 141+10.00 | 745.46 | 80 | -8.24% | -6.67% | 51 | 0.16 | |
| | PVI | F 141+50.00 | 742.16 | | | | | | |
| | PVT | F 141+90.00 | 739.50 | | | | | | |
| | PVT | F 141+90.00 | 739.50 | | | | | | |
| Linear | POVT | F 142+00.00 | 738.83 | 40 | -6.67% | | | | |
| | PVC | F 142+30.00 | 736.83 | | | | | | |
| | PVC | F 142+30.00 | 736.83 | | | | | | |

| Element | Type | Station | Elevation | Length | Entrance Grade | Exit Grade | K | Middle Ordinate | SSD/HSD |
|----------------------|-----------|-------------|-----------|--------|----------------|------------|-----|-----------------|---------|
| Symmetrical Parabola | PVC | F 142+30.00 | 736.83 | 220 | -6.67% | -0.48% | 36 | 1.70 | |
| | POVC | F 142+50.00 | 735.55 | | | | | | |
| | POVC | F 143+00.00 | 732.85 | | | | | | |
| | PVI | F 143+40.00 | 729.50 | | | | | | |
| | POVC | F 143+50.00 | 730.86 | | | | | | |
| | POVC | F 144+00.00 | 729.56 | | | | | | |
| | PVT | F 144+50.00 | 728.97 | | | | | | |
| | PVT | F 144+50.00 | 728.97 | | | | | | |
| Linear | POVT | F 145+00.00 | 728.74 | 110 | -0.48% | | | | |
| | POVT | F 145+50.00 | 728.50 | | | | | | |
| | PVC | F 145+60.00 | 728.45 | | | | | | |
| Symmetrical Parabola | PVC | F 145+60.00 | 728.45 | 210 | -0.48% | -5.87% | 39 | -1.42 | 305 |
| | POVC | F 146+00.00 | 728.05 | | | | | | |
| | POVC | F 146+50.00 | 726.98 | | | | | | |
| | PVI | F 146+65.00 | 727.95 | | | | | | |
| | POVC | F 147+00.00 | 725.27 | | | | | | |
| | POVC | F 147+50.00 | 722.91 | | | | | | |
| Linear | PVT | F 147+70.00 | 721.79 | 25 | -5.87% | | | | |
| | PVT | F 147+70.00 | 721.79 | | | | | | |
| | PVC | F 147+95.00 | 720.32 | | | | | | |
| Symmetrical Parabola | PVC | F 147+95.00 | 720.32 | 120 | -5.87% | 0.09% | 20 | 0.89 | |
| | POVC | F 148+00.00 | 720.03 | | | | | | |
| | POVC | F 148+50.00 | 717.84 | | | | | | |
| | PVI | F 148+55.00 | 716.80 | | | | | | |
| | POVC | F 148+94.00 | 716.94 | | | | | | |
| | POVC | T 0+00.00 | 716.94 | | | | | | |
| | VLOW | T 0+19.28 | 716.85 | | | | | | |
| PVT | T 0+21.00 | 716.85 | | | | | | | |
| Linear | PVT | T 0+21.00 | 716.85 | 119 | 0.09% | | | | |
| | POVT | T 0+50.00 | 716.88 | | | | | | |
| | POVT | T 1+00.00 | 716.92 | | | | | | |
| | PVC | T 1+40.00 | 716.95 | | | | | | |
| Symmetrical Parabola | PVC | T 1+40.00 | 716.95 | 110 | 0.09% | -7.67% | 14 | -1.07 | 194 |
| | VHIGH | T 1+41.21 | 716.95 | | | | | | |
| | POVC | T 1+50.00 | 716.93 | | | | | | |
| | PVI | T 1+95.00 | 717.00 | | | | | | |
| | POVC | T 2+00.00 | 715.73 | | | | | | |
| | PVT | T 2+50.00 | 712.78 | | | | | | |
| Linear | PVT | T 2+50.00 | 712.78 | 50 | -7.67% | | | | |
| | PVC | T 3+00.00 | 708.95 | | | | | | |
| | PVC | T 3+00.00 | 708.95 | | | | | | |
| Symmetrical Parabola | PVI | T 3+35.00 | 706.26 | 70 | -7.67% | -5.19% | 28 | 0.22 | |
| | POVC | T 3+50.00 | 705.55 | | | | | | |
| | PVCC | T 3+70.00 | 704.44 | | | | | | |
| | PVCC | T 3+70.00 | 704.44 | | | | | | |
| Symmetrical Parabola | POVC | T 4+00.00 | 703.01 | 110 | -5.19% | -2.04% | 35 | 0.43 | |
| | PVI | T 4+25.00 | 701.59 | | | | | | |
| | POVC | T 4+50.00 | 701.21 | | | | | | |
| | PVT | T 4+80.00 | 700.46 | | | | | | |
| | PVT | T 4+80.00 | 700.46 | | | | | | |
| | POVT | T 5+00.00 | 700.05 | | | | | | |
| Linear | POVT | T 5+50.00 | 699.03 | 100 | -2.04% | | | | |
| | PVC | T 5+80.00 | 698.42 | | | | | | |
| | PVC | T 5+80.00 | 698.42 | | | | | | |
| | POVC | T 6+00.00 | 697.99 | | | | | | |
| | PVI | T 6+20.00 | 697.60 | | | | | | |
| Symmetrical Parabola | POVC | T 6+50.00 | 696.77 | 80 | -2.04% | -2.75% | 113 | -0.07 | 1570 |
| | PVT | T 6+60.00 | 696.50 | | | | | | |
| | PVT | T 6+60.00 | 696.50 | | | | | | |
| | POVT | T 7+00.00 | 695.40 | | | | | | |
| | POVT | T 7+50.00 | 694.03 | | | | | | |
| Linear | PVC | T 7+95.00 | 692.79 | 135 | -2.75% | | | | |
| | PVC | T 7+95.00 | 692.79 | | | | | | |
| | POVC | T 8+00.00 | 692.65 | | | | | | |
| | POVC | T 8+50.00 | 691.46 | | | | | | |
| Symmetrical Parabola | PVI | T 8+60.00 | 691.00 | 130 | -2.75% | -1.13% | 80 | 0.26 | |
| | POVC | T 9+00.00 | 690.59 | | | | | | |
| | PVT | T 9+25.00 | 690.27 | | | | | | |
| | PVT | T 9+25.00 | 690.27 | | | | | | |
| | POVT | T 9+50.00 | 689.99 | | | | | | |
| Linear | PVC | T 9+75.00 | 689.70 | 50 | -1.13% | | | | |
| | PVC | T 9+75.00 | 689.70 | | | | | | |

VERTICAL ALIGNMENT SHEET 8

PROJECT NAME: VERSHIRE-THETFORD

PROJECT NUMBER: STP 2911(I)

FILE NAME: pl0c224.dgn

PLOT DATE: 1/29/2013

DESIGNED BY: NLL

DRAWN BY: JLS

IPARM FILE NAME: IOC224_I07

CHECKED BY: PTS

SHEET 107 OF 232