$$A^{(2)} = \begin{array}{c} v_1 & v_2 & (v_1, v_3) & (v_2, v_3) & (v_3, v_4) & \dagger \\ v_1 & 0 & 0 & 0 & 0 & 0 \\ v_2 & 0 & 0 & 10 & 0 & 0 \\ (v_1, v_3) & 0 & 0 & 10 & 10 \\ (v_2, v_3) & 0 & 0 & 0 & 10 & 0 \\ (v_3, v_4) & 0 & 0 & 0 & 0 & 10 \\ \end{array}$$

$$T^{(2)} = \begin{array}{c} v_1 & v_2 & (v_1, v_3) & (v_2, v_3) & (v_3, v_4) & \dagger \\ v_1 & v_2 & (v_1, v_3) & (v_2, v_3) & (v_3, v_4) & \dagger \\ 0.5 & 0.5 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0.5 \\ (v_2, v_3) & (v_3, v_4) & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 1 \end{array}$$