Bo = SparseArray [ $\{\{i_{-}, i_{-}\} /; i \le 5 \Rightarrow a[i], \{1, 4\} \rightarrow b[1]\}, \{5, 5\}$ ]; Bo // MatrixForm

$$\begin{pmatrix} a[1] & 0 & 0 & b[1] & 0 \\ 0 & a[2] & 0 & 0 & 0 \\ 0 & 0 & a[3] & 0 & 0 \\ 0 & 0 & 0 & a[4] & 0 \\ 0 & 0 & 0 & 0 & a[5] \end{pmatrix} ,$$

Bo1 = Inverse [Bo]; Bo1 // MatrixForm

Bi = SparseArray [{{2, 5}  $\rightarrow$  b[2], {3, 6}  $\rightarrow$  b[3], {4, 5}  $\rightarrow$  b[4], {5, 8}  $\rightarrow$  b[5]}, {5, 9}]; Bi // MatrixForm

Bol.Bi // MatrixForm

P = IdentityMatrix[9][[{1, 2, 3, 4, 6, 7, 5, 8, 9}]];
T = P.Join[Bol.Bi, IdentityMatrix[9][[{5, 6, 8, 9}]]]; T // MatrixForm

0	0	0	0	$-\frac{b[1]b[4]}{a[1]a[4]}$	0	0	0	0
0	0	0	0	<u>b[2]</u> a[2]	0	0	0	0
0	0	0	0	0	$\frac{b[3]}{a[3]}$	0	0	0
0	0	0	0	b[4] a[4]	0	0	0	0
0	0	0	0	1	0	0	0	0
0	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	<u>b[5]</u> a[5]	0
0	0	0	0	0	0	0	1	0
0 /	0	0	0	0	0	0	0	1 /

## DiagonalMatrix[Table[w[i], {i, 9}]].T // MatrixForm

0	0	0	0	$-\frac{b[1]b[4]w[1]}{a[1]a[4]}$	0	0	0	0
0	0	0	0	$\frac{b[2] w[2]}{a[2]}$	0	0	0	0
0	0	0	0	0	$\frac{b[3]w[3]}{a[3]}$	0	0	0
0	0	0	0	$\frac{b[4] w[4]}{a[4]}$	0	0	0	0
0	0	0	0	w [5]	0	0	0	0
0	0	0	0	0	w[6]	0	0	0
0	0	0	0	0	0	0	$\frac{b[5] w[7]}{a[5]}$	0
0	0	0	0	0	0	0	w [8]	0
0 )	0	0	0	0	0	0	0	w[9]