

**Simple Analysis Method of Considering Construction Process
at the Time of the Design of Cut and Cover Tunnels with Diaphragm Walls**

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Analysis methods used when cut and cover tunnels with diaphragm walls are designed have been so far either those in consideration of construction process or those leaving construction process out of consideration (hereinafter referred to as analysis method separating construction process). Practically, analysis methods separating construction process have been used unless particular conditions are required at the time of design, because they often leads to the result of the safe side and they are easy to apply. On the other hand, analysis methods in consideration of construction process at the time of design has been said to be desirable in a case where the influence at the time of construction is large. But it is rarely used because the analysis method is very complicated. For that reason, simple analysis methods of considering the residual stress at the time of construction when the main body is designed have been studied. But they have not as far been applied generally. So in this paper, we proposed a simple analysis method of considering the stress state at the time of the temporary installation of diaphragm walls to be later used as the side walls of a cut and cover tunnel in order to make cut and cover tunnels with diaphragm walls more rational and economical structures, and we also showed the characteristics.