Appendix E:
Tunnel Construction Methods
Tunnel Boring Machine (with Precast Segmented Lining)

TBM Schematic

Example Double-Deck Structure

1. Cutting Wheel
2. Excavation Chamber
3. Pressure Bulkhead
4. Thrust Cylinder
5. Auger Conveyor
6. Erector
7. Segment
Roadheader Tunnel
Compact section excavated with RH
Section with TBM