

Environment
Effects Statement

Table of contents



Summary Report

EES main report

- | | | |
|----------------------------------|----------------------------------|--|
| 1. Introduction | 11. Surface noise and vibration | 21. Ground movement |
| 2. Project rationale | 12. Tunnel vibration | 22. Groundwater |
| 3. Legislative framework | 13. Land use planning | 23. Contamination and soil |
| 4. EES assessment framework | 14. Business | 24. Surface water |
| 5. Communications and engagement | 15. Arboriculture | 25. Ecology |
| 6. Project development | 16. Landscape and visual | 26. Greenhouse gas |
| 7. Urban design | 17. Social | 27. Environmental management framework |
| 8. Project description | 18. Human health | 28. Conclusion |
| 9. Traffic and transport | 19. Historical heritage | |
| 10. Air quality | 20. Aboriginal cultural heritage | |

Technical reports

- | | | |
|--------------------------------|---------------------------------|---------------------------|
| A. Traffic and transport | G. Arboriculture | M. Ground movement |
| B. Air quality | H. Landscape and visual | N. Groundwater |
| C. Surface noise and vibration | I. Social | O. Contamination and soil |
| D. Tunnel vibration | J. Human health | P. Surface water |
| E. Land use planning | K. Historical heritage | Q. Ecology |
| F. Business | L. Aboriginal cultural heritage | R. Greenhouse gas |

Attachments

- | | | |
|----------------------------|-------------------------------------|--------------------------------|
| I. Sustainability approach | IV. Stakeholder consultation report | VI. Works Approval Application |
| II. Urban design strategy | V. Draft Planning Scheme Amendment | |
| III. Risk report | | |

EES Map Book

EES Chapters

Executive summary	1
North East Link.....	1
Benefits of North East Link	3
Traffic and transport improvements	3
More productive businesses.....	4
More competitive and efficient supply chains.....	4
Greater accessibility for households.....	5
Liveable communities and neighbourhoods.....	5
New 'green' land bridges.....	5
New and upgraded walking and cycling links.....	6
New dedicated busway	6
Planning for North East Link.....	7
Requirement for an EES.....	7
The EES process	7
Approach to EES assessment.....	9
Project approvals.....	9
North East Link elements, features and activities.....	10
M80 Ring Road to northern portal	10
Northern portal to southern portal	12
Eastern Freeway.....	14
Assessing North East Link's impacts.....	16
Transport	16
Amenity and wellbeing	18
Business	23
Social and community.....	25
Land use planning.....	26
Landscape and visual.....	27
Heritage	28
Ground movement.....	30
Groundwater	31
Contamination and soil.....	32
Surface water	33
Ecology	34
Planted trees	36
Managing the project's impacts.....	38
Consulting with the community	39
Concluding the EES process.....	40

Chapter 1	Introduction	1-1
1.1	Purpose of this document	1-1
1.2	Project overview	1-2
1.2.1	Location and design overview.....	1-2
1.2.2	Project objectives and guiding principles	1-3
1.2.3	Project benefits	1-4
1.2.4	Project timeline.....	1-5
1.2.5	Project proponent.....	1-5
1.3	Environment Effects Statement.....	1-5
1.3.1	Requirement for an EES	1-6
1.3.2	Scoping requirements.....	1-6
1.3.3	EES process.....	1-7
1.4	Project approvals.....	1-9
1.4.1	Australian Government approvals	1-9
1.4.2	Victorian Government approvals.....	1-9
1.5	Approach to EES assessment	1-10
1.6	Structure of the EES.....	1-10
Chapter 2	Project Rationale	2-1
2.1	Introduction.....	2-1
2.2	Critical drivers of change	2-2
2.2.1	Population size and distribution	2-2
2.2.2	Economic structure	2-3
2.2.3	Spatial organisation	2-3
2.3	Strategic context	2-5
2.3.1	Poor cross-city movements	2-5
2.3.2	Inefficient freight movement between Melbourne’s north and south-east.....	2-7
2.3.3	Congestion and heavy vehicles on local and arterial roads.....	2-8
2.4	Policy context.....	2-9
2.4.1	National context.....	2-9
2.4.2	Victorian context.....	2-11
2.5	Satisfying the project objectives	2-20
2.6	Project benefits	2-21
2.6.1	Productive businesses	2-22
2.6.2	Competitive supply chains.....	2-22
2.6.3	Prosperous households	2-23
2.6.4	Liveable neighbourhoods.....	2-25

Chapter 3	Legislative Framework.....	3-1
3.1	Introduction	3-1
3.2	Environment Effects Act 1978 (Vic)	3-4
3.2.1	EES purpose	3-4
3.2.2	EES process.....	3-4
3.3	Principal approvals.....	3-6
3.3.1	Planning and Environment Act 1987 (Vic)	3-7
3.3.2	Environment Protection Act 1970 (Vic).....	3-8
3.3.3	Aboriginal Heritage Act 2006 (Vic).....	3-9
3.4	Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)	3-9
3.5	Major Transport Projects Facilitation Act 2009 (Vic).....	3-11
3.6	Other approvals.....	3-12
3.6.1	Heritage Act 2017 (Vic)	3-12
3.6.2	Crown Land (Reserves) Act 1978 (Vic)	3-12
3.6.3	Land Act 1958 (Vic).....	3-12
3.6.4	Road Management Act 2004 (Vic)	3-13
3.6.5	Flora and Fauna Guarantee Act 1988 (Vic).....	3-13
3.6.6	Wildlife Act 1975 (Vic).....	3-13
3.6.7	Water Act 1989 (Vic).....	3-14
Chapter 4	EES assessment framework.....	4-1
4.1	Introduction	4-1
4.2	Overview of the EES assessment framework	4-1
4.3	Scoping requirements	4-3
4.4	Assessment approach.....	4-6
4.4.1	Existing conditions	4-6
4.4.2	Risk assessment	4-7
4.4.3	Impact assessment	4-11
4.4.4	Environmental performance requirements	4-12
4.4.5	Assessing cumulative impacts.....	4-12
4.5	Consultation	4-13
4.6	Project development.....	4-13
4.7	Key approvals	4-14
4.8	Scope of technical studies	4-14

Chapter 5	Communications and engagement.....	5-1
5.1	Introduction.....	5-1
5.2	EES scoping requirements	5-1
5.3	Communication and engagement framework	5-2
5.4	Stakeholders	5-4
5.4.1	Overview of stakeholder groups	5-4
5.4.2	Government stakeholders.....	5-5
5.5	Key engagement activities and tools.....	5-8
5.5.1	Print and digital communication.....	5-10
5.5.2	Community information sessions.....	5-11
5.5.3	Community pop-up sessions.....	5-12
5.5.4	Community Liaison Groups.....	5-12
5.5.5	Community Technical Discussion Groups.....	5-13
5.5.6	Community workshops.....	5-14
5.5.7	Technical Reference Group	5-15
5.5.8	Urban Design Advisory Panel	5-16
5.5.9	Traditional Owners collaboration	5-17
5.6	Overview of engagement.....	5-17
5.6.1	Stage 1 – Corridor selection and business case.....	5-17
5.6.2	Stage 2 – EES preparation and exhibition.....	5-18
5.6.3	Stage 3 – Early works, procurement, construction.....	5-23
5.7	Response to feedback	5-24

Chapter 6	Project development.....	6-1
6.1	Introduction	6-1
6.1.1	Key transport challenges	6-1
6.1.2	Overview of the project development process.....	6-2
6.2	Strategic assessment	6-4
6.2.1	Strategic interventions.....	6-5
6.2.2	Strategic options.....	6-7
6.3	Corridor assessment.....	6-8
6.3.1	Corridor options	6-8
6.3.2	Assessment criteria	6-9
6.3.3	Assessment process.....	6-10
6.3.4	Stakeholder and community input.....	6-12
6.3.5	Assessment of corridor options.....	6-13
6.4	Reference project development.....	6-16
6.4.1	Tunnel.....	6-17
6.4.2	Interchanges.....	6-28
6.4.3	Upgrading the Eastern Freeway	6-46
6.4.4	Doncaster Busway.....	6-52
6.5	The reference project	6-59
Chapter 7	Urban design approach	7-1
7.1	Introduction	7-1
7.2	Stakeholder consultation.....	7-2
7.2.1	Consultation undertaken for the development of the Urban Design Strategy	7-2
7.2.2	Urban Design Advisory Panel	7-2
7.3	Policy context.....	7-3
7.4	Structure of the Urban Design Strategy.....	7-4
7.4.1	Corridor-wide requirements	7-5
7.4.2	Place-specific requirements.....	7-10
7.4.3	Detailed requirements and benchmarks.....	7-11
7.5	Conclusion	7-12

Chapter 8	Project description	8-1
8.1	Introduction.....	8-1
8.2	Project elements.....	8-2
8.2.1	Overview	8-2
8.3	M80 Ring Road to northern portal	8-4
8.3.1	Road design.....	8-6
8.3.2	Noise walls.....	8-12
8.3.3	Walking and cycling	8-12
8.3.4	Waterway modifications.....	8-16
8.3.5	Drainage and stormwater management.....	8-16
8.3.6	Utilities	8-16
8.4	Northern portal to southern portal	8-18
8.4.1	Road design.....	8-20
8.4.2	Noise walls.....	8-30
8.4.3	Walking and cycling	8-30
8.4.4	Drainage and stormwater management.....	8-33
8.4.5	Utilities	8-33
8.4.6	Other ancillary infrastructure	8-33
8.5	Eastern Freeway.....	8-36
8.5.1	Road design.....	8-37
8.5.2	Noise walls.....	8-42
8.5.3	Walking and cycling	8-42
8.5.4	Changes to Koonung Creek	8-45
8.5.5	Drainage and stormwater management.....	8-45
8.6	Water management	8-46
8.6.1	Groundwater management.....	8-46
8.6.2	Flood mitigation	8-47
8.7	Construction.....	8-47
8.7.1	Overview of construction works.....	8-47
8.7.2	Construction assumptions.....	8-49
8.7.3	Indicative construction schedule	8-50
8.7.4	Construction methods.....	8-51
8.7.5	Potential construction compounds.....	8-58
8.7.6	Construction timing, hours and workforce.....	8-62
8.7.7	Construction materials.....	8-63
8.7.8	Traffic and transport management during construction	8-64
8.8	Spoil and waste management	8-65
8.8.1	Spoil generated	8-65
8.8.2	Spoil management	8-65
8.8.3	Spoil haulage routes	8-66
8.8.4	Waste management.....	8-67

8.9	Operation	8-68
8.9.1	Key operational and maintenance activities	8-68
8.9.2	Road closures and changed traffic arrangements.....	8-69
8.9.3	The freeway motorway management system	8-70
8.9.4	The tolling system	8-72
8.9.5	Existing truck bans.....	8-72
8.9.6	Public transport.....	8-74
8.10	Property acquisition.....	8-75
8.10.1	M80 Ring Road to northern portal.....	8-75
8.10.2	Northern portal to southern portal.....	8-75
8.10.3	Eastern Freeway.....	8-76
8.11	Public open space.....	8-78
Chapter 9 Traffic and transport.....		9-1
9.1	Method.....	9-2
9.2	Key transport outcomes	9-5
9.3	Existing conditions	9-9
9.3.1	Travel demand in Melbourne's north-east.....	9-11
9.3.2	Road network	9-12
9.3.3	Freight network.....	9-23
9.3.4	Public transport network	9-34
9.3.5	Walking and cycling network.....	9-38
9.4	Construction impact assessment	9-42
9.4.1	Overview of construction-related traffic.....	9-43
9.4.2	Road and freight network.....	9-46
9.4.3	Public transport network	9-60
9.4.4	Walking and cycling network.....	9-63
9.5	Operation impact assessment.....	9-65
9.5.1	Road network	9-66
9.5.2	Freight network.....	9-89
9.5.3	Public transport network	9-97
9.5.4	Walking and cycling network.....	9-101
9.6	Cumulative impact assessment	9-106
9.7	Conclusion	9-108

Chapter 10	Air quality.....	10-1
10.1	Method.....	10-2
10.2	Air quality regulatory framework and criteria	10-3
10.3	Existing conditions.....	10-5
10.3.1	Sources of air pollution	10-6
10.3.2	Existing air quality	10-6
10.3.3	Sensitive receptors.....	10-9
10.4	Construction impact assessment.....	10-10
10.4.1	Airborne particulate matter (dust)	10-10
10.4.2	Odours.....	10-13
10.4.3	Other emissions	10-15
10.5	Operation impact assessment	10-17
10.5.1	Air quality modelling and assessment approach	10-17
10.5.2	Surface road vehicle emissions.....	10-21
10.5.3	Tunnel ventilation and emissions.....	10-31
10.5.4	Combined air quality impacts from tunnel and vehicle emissions	10-41
10.6	Conclusion.....	10-46
Chapter 11	Surface noise and vibration.....	11-1
11.1	Method.....	11-2
11.2	Existing conditions.....	11-4
11.2.1	Noise Precinct 1	11-10
11.2.2	Noise Precinct 2	11-12
11.2.3	Noise Precinct 3	11-13
11.2.4	Noise Precinct 4	11-15
11.2.5	Noise Precinct 5	11-17
11.3	Construction impact assessment.....	11-20
11.3.1	Construction noise	11-20
11.3.2	Construction vibration.....	11-36
11.4	Operation impact assessment	11-41
11.4.1	Traffic noise	11-41
11.4.2	Fixed infrastructure noise	11-54
11.4.3	Operation surface vibration.....	11-56
11.5	Conclusion.....	11-57

Chapter 12	Tunnel vibration and regenerated noise.....	12-1
12.1	Method.....	12-2
12.2	Existing conditions	12-4
12.2.1	Geological conditions.....	12-4
12.2.2	Existing vibration environment.....	12-5
12.2.3	Sensitive receptors.....	12-6
12.3	Vibration and regenerated noise guideline target levels	12-8
12.4	Vibration and regenerated noise modelling.....	12-9
12.5	Construction impact assessment	12-13
12.5.1	Changes in amenity.....	12-14
12.5.2	Damage to buildings and structures.....	12-36
12.5.3	Damage to infrastructure and utility assets.....	12-38
12.5.4	Effects on the operation of sensitive equipment.....	12-39
12.6	Conclusion	12-40
Chapter 13	Land use planning	13-1
13.1	Method.....	13-2
13.2	Existing conditions	13-4
13.2.1	M80 Ring Road to northern portal.....	13-4
13.2.2	Northern portal to southern portal.....	13-6
13.2.3	Eastern Freeway.....	13-8
13.3	Construction impact assessment	13-11
13.3.1	Acquisition.....	13-11
13.3.2	Temporary occupation.....	13-16
13.3.3	Impacts on the ongoing use of land.....	13-18
13.3.4	Impacts on land use character	13-22
13.3.5	Land use planning policy	13-25
13.4	Operation impact assessment.....	13-34
13.4.1	Impacts on the ongoing use of land.....	13-35
13.4.2	Impacts on future redevelopment.....	13-37
13.5	Conclusion	13-39

Chapter 14	Business	14-1
14.1	Method	14-2
14.2	Existing conditions	14-4
14.2.1	Regional business context	14-4
14.2.2	M80 Ring Road to northern portal	14-6
14.2.3	Northern portal to southern portal	14-7
14.2.4	Eastern Freeway	14-9
14.2.5	Home based businesses	14-12
14.3	Construction impact assessment	14-13
14.3.1	Impacts to business operations and viability	14-13
14.3.2	Reduced local availability of employment and services	14-18
14.3.3	Impacts to business amenity	14-20
14.3.4	Increased travel time	14-23
14.4	Operation impact assessment	14-25
14.4.1	Impacts to business amenity	14-25
14.4.2	Increased operational costs	14-27
14.4.3	Increased travel times	14-27
14.4.4	Poor reinstatement of occupied business properties	14-31
14.5	Conclusion	14-32
Chapter 15	Arboriculture	15-1
15.1	Method	15-2
15.2	Existing conditions	15-4
15.2.1	Tree and urban forest character	15-5
15.2.2	Number of trees within the project boundary	15-9
15.3	Construction impact assessment	15-10
15.3.1	Reduction of trees and urban forest canopy	15-11
15.3.2	Impacts to trees and the urban forest from construction activities	15-13
15.4	Operation impact assessment	15-14
15.5	Cumulative impact assessment	15-16
15.6	Conclusion	15-17

Chapter 16	Landscape and visual	16-1
16.1	Method	16-2
16.1.1	Desktop analysis	16-2
16.1.2	Site investigations and consultation	16-5
16.1.3	Impact assessment and management	16-6
16.2	Existing conditions	16-8
16.2.1	Ridgeline	16-9
16.2.2	Yarra River Valley	16-9
16.2.3	Koonung Creek Valley	16-9
16.2.4	Landscape sensitivity	16-10
16.3	Construction impact assessment	16-11
16.4	Operation impact assessment	16-13
16.4.1	Landscape and visual impacts: public viewpoints	16-14
16.4.2	Landscape and visual impacts: private viewpoints	16-57
16.4.3	Overshadowing	16-72
16.4.4	Light spill	16-74
16.5	Conclusion	16-75
Chapter 17	Social	17-1
17.1	Method	17-2
17.1.1	Desktop analysis	17-2
17.1.2	Stakeholder consultation and community engagement	17-3
17.1.3	Impact assessment and management	17-5
17.2	Existing conditions	17-6
17.2.1	Region overview	17-6
17.2.2	Northern region	17-7
17.2.3	Eastern region	17-12
17.2.4	Inner region	17-16
17.3	Construction impact assessment	17-20
17.3.1	Property acquisition	17-20
17.3.2	Amenity and character	17-24
17.3.3	Access and connectivity	17-28
17.3.4	Function and viability of community infrastructure facilities	17-31
17.4	Operation impact assessment	17-38
17.4.1	Amenity and character	17-39
17.4.2	Access and connectivity	17-43
17.4.3	Function and viability of community infrastructure facilities	17-46
17.5	Conclusion	17-50

Chapter 18	Human health	18-1
18.1	Method	18-2
18.2	Approach to assessing health impacts	18-3
18.2.1	Assessing health impacts from changes in noise and vibration	18-3
18.2.2	Assessing health impacts from changes in air quality	18-4
18.2.3	Assessing health impacts of social changes	18-6
18.2.4	Dealing with uncertainty	18-6
18.3	Existing conditions	18-7
18.3.1	Population profile	18-7
18.3.2	Existing health of the population	18-8
18.4	Construction impact assessment	18-9
18.4.1	Noise and vibration	18-10
18.4.2	Air quality	18-12
18.4.3	Contaminated land	18-13
18.4.4	Social	18-14
18.5	Operation impact assessment	18-18
18.5.1	Noise and vibration	18-18
18.5.2	Air quality in surrounding communities	18-19
18.5.3	In-tunnel air quality	18-24
18.5.4	Social	18-24
18.6	Conclusion	18-27
Chapter 19	Historical heritage	19-1
19.1	Method	19-2
19.2	Existing conditions	19-3
19.2.1	Victorian Heritage Register places	19-4
19.2.2	Victorian Heritage Inventory and unidentified historical archaeological places	19-9
19.2.3	Heritage overlay places	19-11
19.2.4	Other relevant overlays	19-18
19.2.5	Potential heritage places	19-20
19.2.6	Yarra River and environs	19-25
19.3	Construction impact assessment	19-26
19.3.1	Victorian Heritage Register places	19-27
19.3.2	Victorian Heritage Inventory places and other unidentified historical archaeological sites	19-30
19.3.3	Heritage overlay places	19-32
19.3.4	Potential heritage places	19-37
19.4	Operation impact assessment	19-43
19.5	Conclusion	19-45

Chapter 20	Aboriginal cultural heritage	20-1
20.1	Method	20-2
20.2	Existing conditions	20-4
20.2.1	Landforms and geomorphology	20-4
20.2.2	Historical and ethno-historical accounts of Aboriginal occupation in the region	20-5
20.2.3	Land use history.....	20-7
20.2.4	Registered Aboriginal cultural heritage places and objects.....	20-9
20.2.5	Unregistered places and objects of Aboriginal cultural heritage.....	20-12
20.2.6	Areas of cultural heritage sensitivity.....	20-13
20.3	Construction impact assessment	20-14
20.4	Operation impact assessment.....	20-19
20.5	Environmental Performance Requirements	20-20
20.6	Conclusion	20-21
Chapter 21	Ground movement	21-1
21.1	Method	21-1
21.2	Existing conditions	21-3
21.2.1	Regional setting	21-3
21.2.2	M80 Ring Road to the northern portal	21-6
21.2.3	Northern portal to southern portal.....	21-6
21.2.4	Eastern Freeway.....	21-9
21.3	Construction impact assessment	21-10
21.3.1	Community facilities	21-11
21.3.2	Utilities	21-12
21.3.3	Environmental features and landscapes.....	21-16
21.3.4	Residential	21-17
21.3.5	Heritage places	21-20
21.3.6	Other built structures	21-22
21.4	Operation impact assessment.....	21-24
21.5	Environmental performance requirements.....	21-25
21.6	Conclusion	21-26

Chapter 22	Groundwater.....	22-1
22.1	Method.....	22-2
22.2	Existing conditions.....	22-3
22.2.1	Geological setting.....	22-3
22.2.2	Groundwater quality.....	22-6
22.2.3	Groundwater levels.....	22-9
22.2.4	Groundwater availability.....	22-13
22.3	Construction impact assessment.....	22-17
22.3.1	Predicted changes to groundwater during construction.....	22-17
22.3.2	Groundwater availability.....	22-20
22.3.3	Changes to groundwater quality.....	22-21
22.3.4	Disposal of groundwater.....	22-25
22.4	Operation impact assessment.....	22-27
22.4.1	Predicted changes to groundwater during operation.....	22-27
22.4.2	Groundwater availability.....	22-30
22.4.3	Changes to groundwater quality.....	22-33
22.4.4	Disposal of groundwater.....	22-35
22.5	Conclusion.....	22-37
Chapter 23	Contamination and soil.....	23-1
23.1	Method.....	23-2
23.2	Existing conditions.....	23-4
23.2.1	Acid sulfate soil and rock.....	23-4
23.2.2	Existing and historical land use.....	23-6
23.3	Construction impact assessment.....	23-10
23.3.1	Soil and rock.....	23-11
23.3.2	Asbestos, chemicals and waste.....	23-15
23.3.3	Odour, gas and vapours.....	23-17
23.3.4	Groundwater.....	23-19
23.4	Operation impact assessment.....	23-21
23.4.1	Soil and rock.....	23-21
23.4.2	Odour, gas and vapours.....	23-22
23.4.3	Groundwater.....	23-23
23.5	Cumulative impact assessment.....	23-24
23.6	Spoil Management Strategy.....	23-25
23.7	Conclusion.....	23-27

Chapter 24	Surface water	24-1
24.1	Method	24-2
24.2	Existing conditions	24-4
24.2.1	Flooding	24-5
24.2.2	Water quality	24-18
24.2.3	Geomorphology	24-19
24.2.4	Water supply	24-20
24.3	Construction impact assessment	24-21
24.3.1	Flooding	24-21
24.3.2	Water quality	24-24
24.3.3	Geomorphology	24-25
24.3.4	Water supply	24-27
24.4	Operation impact assessment	24-28
24.4.1	Flooding	24-28
24.4.2	Water quality	24-45
24.4.3	Geomorphology	24-48
24.4.4	Water supply	24-50
24.5	Cumulative impact assessment	24-51
24.6	Conclusion	24-52
Chapter 25	Ecology	25-1
25.1	Method	25-2
25.2	Existing conditions	25-4
25.2.1	Flora and ecological communities	25-4
25.2.2	Terrestrial fauna	25-11
25.2.3	Aquatic species and ecosystems	25-19
25.3	Construction impact assessment	25-24
25.3.1	Threatened flora and ecological communities	25-24
25.3.2	Non-threatened native flora and ecological communities	25-28
25.3.3	Threatened and migratory terrestrial fauna	25-32
25.3.4	Non-threatened native terrestrial fauna	25-36
25.3.5	Aquatic species and ecosystems	25-40
25.4	Operation impact assessment	25-44
25.4.1	Threatened flora and ecological communities	25-44
25.4.2	Non-threatened native flora and ecological communities	25-45
25.4.3	Threatened terrestrial fauna	25-47
25.4.4	Non-threatened native terrestrial fauna	25-48
25.4.5	Aquatic species and ecosystems	25-49
25.5	Conclusion	25-53

Chapter 26	Greenhouse gas	26-1
26.1	Method	26-3
26.2	Existing conditions	26-4
26.3	Construction impact assessment	26-5
26.4	Operation impact assessment	26-7
26.4.1	Operation emissions from electricity consumption and maintenance	26-7
26.4.2	Operation emissions from vehicle traffic	26-9
26.4.3	Contribution to Victorian target	26-11
26.5	Environmental performance requirements	26-11
26.6	Conclusion	26-12
Chapter 27	Environmental management framework	27-1
27.1	Introduction	27-1
27.2	Roles and responsibilities	27-2
27.3	Statutory approvals and consents	27-8
27.4	Risk assessment	27-8
27.5	Environmental management documentation	27-9
27.5.1	Environmental management systems	27-11
27.5.2	Environmental management documents	27-12
27.6	Evaluating compliance	27-19
27.6.1	Monitoring	27-19
27.6.2	Auditing	27-20
27.6.3	Reporting	27-21
27.7	Environmental performance requirements	27-23
27.7.1	Consultation required by EPRs	27-23
27.7.2	Recommended EPRs	27-24

Chapter 28	Conclusion	28-1
28.1	Overview	28-1
28.2	Reference design and Environmental Performance Requirements.....	28-2
28.3	Project evaluation against the scoping requirements.....	28-2
28.3.1	Transport capacity, connectivity and traffic management.....	28-2
28.3.2	Health, amenity and environmental quality	28-4
28.3.3	Social, business, land use and infrastructure	28-5
28.3.4	Landscape, visual and recreational values	28-6
28.3.5	Habitat and biodiversity	28-7
28.3.6	Cultural heritage	28-8
28.3.7	Land stability.....	28-9
28.3.8	Waste management.....	28-10
28.3.9	Catchment values.....	28-10
28.3.10	Greenhouse gases.....	28-11
28.4	Environmental Management Framework.....	28-13
28.5	Next steps.....	28-14

Attachments

- I Urban design strategy
- II Sustainability
- III Risk report
- IV Stakeholder consultation report
- V Planning scheme amendment
- VI Works approval

Technical reports

A	Transport
B	Air quality
C	Surface noise and vibration
D	Tunnel vibration
E	Land use planning
F	Business
G	Arboriculture
H	Landscape and visual
I	Social
J	Human health
K	Historical heritage
L	Aboriginal cultural heritage
M	Ground movement
N	Ground water
O	Contaminated soil
P	Surface water
Q	Ecology
R	Greenhouse gas