Australian Heritage Database

Places for Decision

Class : Historic

Item: 1

Identification

List:	**National Heritage List**
Name of Place:	Great Ocean Road and Rural Environs
Other Names:	
Place ID:	105875
File No:	2/01/140/0020
Primary Nominator:	2211 Geelong Environment Council Inc.
Nomination Date:	11/09/2005
Principal Group:	Monuments and Memorials

Status

Legal Status:	14/09/2005 - Nominated place
Admin Status:	22/08/2007 - Included in FPAL - under assessment by AHC

Assessment

Recommendation:	Place meets one or more NHL criteria
Assessor's Comments:	
Other Assessments:	:

Location

Nearest Town:	Apollo Bay
Distance from town (km):	
Direction from town:	
Area (ha):	42000
Address:	Great Ocean Rd, Apollo Bay, VIC, 3221
LGA:	Surf Coast Shire VIC Colac - Otway Shire VIC Corangamite Shire VIC

Location/Boundaries:

About 10,040ha, between Torquay and Allansford, comprising the following:

1. The Great Ocean Road extending from its intersection with the Princes Highway in the west to its intersection with Spring Creek at Torquay. The area comprises all that part of Great Ocean Road classified as Road Zone Category 1.

2. Bells Boulevarde from its intersection with Great Ocean Road in the north to its intersection with Bones Road in the south, then easterly via Bones Road to its intersection with Bells Beach Road. The area comprises the whole of the road reserves.
3. Bells Beach Surfing Recreation Reserve, comprising the whole of the area entered in the Victorian Heritage Register (VHR) No H2032.
4. Jarosite Road from its intersection with Great Ocean Road in the west to its intersection with Bells Beach Road in the east. The area comprises the whole of the road reserve.
5. An area at Point Addis, Point Addis Road, comprising an area bounded by a line commencing at MGA point Zone 55 260033mE 5746787mN, then via straight lines joining the following MGA points consecutively: 260117mE 5746814mN, 260178mE 5746750mN, 260045mE 5746730mN, then directly to the commencement point.
6. An area at Eastern View, Golf Links Road, comprising an area bounded by a line commencing at the north east corner of Lot 26 LP11651, then northerly to MGA point 242345mE 5738040mN, then westerly to the intersection of the eastern road reserve boundary of Golf Links Road with MGA northing 5737970mN (approximate MGA point 242170mE 5737970mN), then southerly via the eastern road reserve boundary of Golf Links Road to its intersection with the northern road reserve boundary of Great Ocean Road, then easterly via the road reserve boundary to its intersection with the south west corner of Lot 1 TP539266, then northerly to the north west corner of Lot 1 TP539266, then easterly directly to the point of commencement.
7. An area bounded by a line commencing at MGA point 241895mE 5737530mN, then via straight lines joining the following MGA points consecutively: 242155mE 5737660mN, 242170mE 5737620mN, 242430mE 5737710mN, then northerly to the intersection of the northern road reserve boundary of Great Ocean Road with MGA easting 242410mE (approximate MGA point 242410mE 5737790mN), then south westerly via the northern road reserve boundary of Great Ocean Road to its intersection with the north east corner of Lot 2 TP403676, then westerly via the northern boundary of Lot 2 TP403676 to its intersection with the eastern boundary of Lot 2022 2187, then north westerly to the eastern most point of Lot 3 TP403676, then northerly, westerly and southerly via the eastern, northern and western boundaries of Lot 1 TP558905 to its south west corner, then via straight lines joining the following MGA points consecutively: 240160mE 5736490mN, 240175mE 5736350mN, 240215mE 5736315mN, 240190mE 5736300mN, 240185mE 5736230mN, 240190mE 5736205mN, 240197mE 5736195mN, then directly to the intersection of the northern road reserve boundary of Great Ocean Road with MGA easting 240235mE (approximate MGA point 240235mE 5736190mN), then easterly via the road reserve boundary of Great Ocean Road to its intersection with the western most point of Lot 139 LP10103, then directly to the northern most point of Lot 139 LP10103, then south easterly to the eastern most point of Lot 138 LP10103, then south westerly via the south eastern boundary of Lot 138 LP10103 to its intersection with the road reserve boundary of Great Ocean Road, then westerly via the road reserve boundary to its intersection with the eastern boundary of Lot 1 LP10103, then southerly and westerly via the eastern and southern boundary of Lot 1 LP10103 to its south west corner, then directly to the south west corner of Lot 11 LP10103, then directly to MGA point 239830mE 5735333mN, then directly to the intersection of the northern road reserve boundary of Great Ocean Road with MGA easting 239739mE (approximate MGA point 239739mE 5735417mN), then westerly via the northern road reserve boundary to its intersection with northern boundary of Lot 4A 3/PP3015,

then westerly, southerly and easterly via the northern, western and southern boundaries of Lot 4A 3/PP3015 to its intersection with the northern road reserve boundary of Great Ocean Road, then south easterly via the alignment of the southern boundary of Lot 4A 3/PP3015 to its intersection with the southern road reserve boundary of Great Ocean Road (approximate MGA point 760520mE 5732120mN), then south westerly via the road reserve boundary to its intersection with MGA easting 759630mE (approximate MGA point 759630mE 5730860mN), then directly to geographical coordinate point 38.5341S 143.9809E, then northerly via straight lines joining the following geographical coordinate points consecutively: 38.5315S 143.9831E, 38.5269S 143.9868E, 38.5226S 143.9896E, 38.5131S 144.0001E, 38.5113S 144.0035E, 38.5064S 144.0077E, 38.5023S 144.0075E, 38.5001S 144.0119E, 38.4939S 144.0201E, 38.4922S 144.0253E, 38.4880S 144.0313E, 38.4858S 144.0347E, 38.4821S 144.0361E, 38.4789S 144.0356E, 38.4775S 144.0369E, 38.4751S 144.0422E, then north westerly directly to the point of commencement.

8. An area 2km south west of Cinema Point, comprising a circle of 100 metres radius centred on MGA point 239050mE 5734740mN.
9. An area bounded by a line commencing at geographical coordinate point 38.5419S 143.9783E, then southerly via straight lines joining the following geographical coordinate points consecutively: 38.5421S 143.9802E, 38.5451S 143.9847E, 38.5470S 143.9886E, 38.5475S 143.9915E, 38.5490S 143.9918E, 38.5507S 143.9885E, 38.5525S 143.9882E, 38.5557S 143.9849E, 38.5569S 143.9826E, 38.5570S 143.9796E, 38.5588S 143.9785E, 38.5613S 143.9788E, 38.5679S 143.9737E, 38.5687S 143.9682E, 38.5713S 143.9667E, 38.5759S 143.9622E, 38.5774S 143.9589E, 38.5779S 143.9530E, 38.5784S 143.9495E, 38.5815S 143.9474E, 38.5844S 143.9402E, 38.5886S 143.9363E, 38.5907S 143.9306E, 38.5933S 143.9257E, 38.5983S 143.9216E, 38.6007S 143.9232E, 38.6089S 143.9212E, 38.6119S 143.9182E, 38.6145S 143.9186E, 38.6164S 143.9178E, 38.6180S 143.9152E, 38.6274S 143.9093E, 38.6344S 143.8972E, 38.6358S 143.8938E, 38.6386S 143.8941E, 38.6400S 143.8948E, 38.6409S 143.8960E, 38.6419S 143.8960E, 38.6432S 143.8943E, 38.6441S 143.8904E, 38.6458S 143.8869E, 38.6485S 143.8861E, 38.6532S 143.8765E, 38.6539S 143.8738E, 38.6556S 143.8725E, 38.6572S 143.8722E, 38.6590S 143.8698E, 38.6622S 143.8669E, 38.6688S 143.8655E, 38.6702S 143.8674E, 38.6717S 143.8680E, 38.6730S 143.8673E, 38.6734S 143.8651E, 38.6756S 143.8596E, 38.6769S 143.8529E, 38.6782S 143.8506E, 38.6786S 143.8461E, 38.6799S 143.8438E, 38.6831S 143.8419E, 38.6859S 143.8416E, 38.6871S 143.8427E, 38.6896S 143.8431E, 38.6928S 143.8417E, 38.6940S 143.8363E, 38.6944S 143.8252E, 38.6937S 143.8185E, 38.6946S 143.8155E, 38.6943S 143.8112E, 38.6964S 143.8061E, 38.6980S 143.8063E, 38.6998S 143.8021E, 38.6984S 143.7971E, 38.7000S 143.7929E, 38.7029S 143.7833E, 38.7039S 143.7775E, 38.7053S 143.7777E, 38.7066S 143.7749E, 38.7076S 143.7686E, 38.7060S 143.7641E, 38.7077S 143.7616E, 38.7086S 143.7572E, 38.7131S 143.7538E, 38.7153S 143.7495E, 38.7147S 143.7478E, 38.7166S 143.7435E, 38.7167S 143.7392E, 38.7195S 143.7292E, 38.7215S 143.7295E, 38.7229S 143.7278E, 38.7231S 143.7255E, 38.7272S 143.7163E, 38.7276S 143.7136E, 38.7268S 143.7123E, 38.7269S 143.7116E, 38.7282S 143.7113E, 38.7293S 143.7089E, 38.7293S 143.7069E, 38.7315S 143.7000E, 38.7328S 143.6991E, 38.7357S 143.6915E, 38.7352S 143.6899E, 38.7380S 143.6837E, 38.7409S 143.6798E, 38.7489S 143.6731E, 38.7525S 143.6722E, 38.7550S 143.6723E, 38.7562S 143.6731E,

38.7562S 143.6740E, then southerly to the south east corner of Lot 11B 8/PP2396, then north westerly via the western boundary of Lot 11B 8\PP2396 to the north west corner of Lot 11B 8/PP2396, then north easterly via the eastern road reserve boundary of Great Ocean Road to its intersection with MGA northing 5729730mN (approximate MGA point 759405mE 5729730mN), then north easterly directly to the point of commencement.

At Skenes Creek the following areas are included: Lot 11C 3/2936; all that part of Lot 10B 3/2936 and Skenes Creek Road (comprising the whole of the road reserve) to the south of a line connecting the following MGA points: 735640mE 5710640mN and 735693mE 5710630mN.

Excluded from the above area are Lot 11C 8/PP2936, Lot 11D 8/PP2936 and Lot 30E PP3861.

10. An area 1km south of Lorne, comprising a circle of 250 metres radius centred on MGA point 759200mE 5728625mN.
11. An area 3km south west of Lorne, comprising a circle of 250 metres radius centred on MGA point 757990mE 5727240mN.
12. Teddy's Lookout, Lorne, comprising an area bounded by a line commencing at MGA point 759640mE 5728586mN, then via straight lines joining the following MGA points consecutively: 759655mE 5728575mN, 759650mE 5728535mN, 759590mE 5728475mN, 759536mE 5728467mN, 759530mE 5728480mN, then directly to the point of commencement.
13. At Wye River and Separation Creek the following Lots are included: Lot 2012 3861, Lot 2F 3861 and the adjoining Lot to the east of Lot 2F 3861, Lot 1 TP762047, Lot 2G 3861, Lot 29R 2813, Lot 2007 2813, Lot 2006 2813, Lot 27E 2813, Lot 2068 2813.
14. At Kennett River the following Lots are included: Lot 10B 3861, Lot 10C 3861 and the adjoining Lot to the north of Lot 10C 3861.
15. All that part of Mariners Lookout Road to the north of MGA northing 5709180mN. The area comprises the whole of the road reserve.
16. An area bounded by a line commencing at geographical coordinate point 38.7593S 143.6816E, then via straight lines joining the following geographical coordinate points consecutively: 38.7606S 143.6825E, 38.7617S 143.6812E, 38.7632S 143.6795E, 38.7659S 143.6723E, 38.7680S 143.6691E, 38.7705S 143.6673E, 38.7746S 143.6667E, 38.7764S 143.6724E, 38.7786S 143.6757E, 38.7807S 143.6742E, 38.7794S 143.6697E, 38.7837S 143.6646E, 38.7853S 143.6619E, 38.7917S 143.6504E, 38.7932S 143.6456E, 38.7935S 143.6425E, 38.7922S 143.6405E, 38.7935S 143.6387E, 38.7940S 143.6280E, 38.7948S 143.6259E, 38.7946S 143.6229E, 38.7965S 143.6178E, 38.8106S 143.6011E, 38.8162S 143.5970E, 38.8194S 143.5908E, 38.8213S 143.5901E, 38.8221S 143.5877E, 38.8242S 143.5867E, 38.8258S 143.5889E, 38.8269S 143.5892E, 38.8287S 143.5861E, 38.8306S 143.5861E, 38.8369S 143.5812E, 38.8422S 143.5738E, 38.8471S 143.5638E, 38.8488S 143.5644E, 38.8582S 143.5554E, 38.8587S 143.5514E, 38.8562S 143.5447E, 38.8582S 143.5356E, 38.8575S 143.5191E, 38.8597S 143.5118E, 38.8559S 143.5024E, 38.8498S 143.4973E, 38.8453S 143.4903E, 38.8361S 143.4887E, 38.8108S 143.4605E, 38.7895S 143.4298E, 38.7844S 143.4265E, 38.7853S 143.4104E, 38.7819S 143.3997E, 38.7772S 143.3993E, 38.7709S 143.3900E, 38.7618S 143.3713E, 38.7593S 143.3631E, 38.7566S 143.3577E, 38.7578S 143.3425E, 38.7600S 143.3273E, 38.7541S 143.3111E, 38.7531S 143.3003E, 38.7571S 143.2982E, 38.7607S 143.2853E, 38.7644S 143.2813E, 38.7634S 143.2750E, 38.7712S 143.2664E, 38.7742S

143.2598E, 38.7702S 143.2454E, 38.7703S 143.2392E, 38.7692S 143.2328E, 38.7634S 143.2283E, 38.7634S 143.2209E, 38.7610S 143.2130E, 38.7558S 143.2095E, 38.7510S 143.2028E, 38.7467S 143.1957E, 38.7412S 143.1850E, 38.7353S 143.1843E, 38.7276S 143.1733E, 38.7081S 143.1538E, 38.6921S 143.1362E, 38.6753S 143.1146E, 38.6685S 143.1034E, 38.6514S 143.0692E, 38.6515S 143.0611E, 38.6490S 143.0537E, 38.6436S 143.0488E, 38.6409S 143.0397E, 38.6340S 143.0298E, 38.6319S 143.0213E, 38.6265S 143.0141E, 38.6258S 143.0031E, 38.6242S 142.9907E, 38.6271S 142.9794E, 38.6264S 142.9663E, 38.6220S 142.9494E, 38.6257S 142.9468E, 38.6298S 142.9383E, 38.6197S 142.9064E, 38.6194S 142.8897E, 38.6123S 142.8729E, 38.6086S 142.8622E, 38.6078S 142.8554E, 38.5970S 142.8498E, 38.5955S 142.8407E, 38.5882S 142.8190E, 38.5830S 142.8154E, 38.5761S 142.7979E, 38.5698S 142.7845E, 38.5593S 142.7668E, 38.5473S 142.7508E, 38.5454S 142.7482E, 38.5249S 142.7223E, 38.5249S 142.7223E, 38.5249S 142.7223E, 38.5173S 142.7101E, 38.5137S 142.6989E, 38.5066S 142.6926E, 38.5010S 142.6837E, 38.4923S 142.6681E, 38.4858S 142.6607E, 38.4783S 142.6501E, 38.4716S 142.6416E, 38.4652S 142.6310E, 38.4606S 142.6215E, 38.4570S 142.6148E, 38.4475S 142.5980E, 38.4415S 142.5903E, 38.4385S 142.5841E, 38.4356S 142.5803E, then northerly to the north west corner of the Bay of Islands Coastal Park, then easterly via the northern boundary of the Bay of Islands Coastal Park to its eastern most point, then south easterly to the south west corner of Lot 3 LP135751, then south easterly via the southern boundary of Lot 3 LP135751 and its alignment to its intersection with the western road reserve boundary of Halladale Street, then southerly via the western road reserve boundary of Halladale Street to its intersection with the southern road reserve boundary of Schomberg Road, then easterly via the southern road reserve boundary to its intersection with the eastern road reserve boundary of Irvine Street, then northerly via the eastern road reserve boundary of Irvine Street to its intersection with the southern road reserve boundary of Great Ocean Road, then easterly via the southern road reserve boundary of Great Ocean Road to its intersection with the north west corner of Port Campbell National Park, then easterly via the northern boundary of Port Campbell National Park to its intersection with the High Water Mark at approximate MGA point 673435mE 5723580mN, then south easterly and south westerly via the High Water Mark to its intersection with Port Campbell National Park (approximate MGA point 673370mE 5723350mN), then easterly via the northern boundary of Port Campbell National Park to its intersection with Plantation Road at approximate MGA point 682120mE 5721765mN, then easterly via Plantation Road to its intersection with Booringa Road, then southerly, westerly and easterly via the Port Campbell National Park boundary to its intersection with the High water Mark at approximate MGA point 687490mE 5713530mN, then south easterly via the High Water Mark to its intersection with MGA easting 692790mE (approximate MGA point 692790mE 5707620mN), then north easterly to geographical coordinate 38.7563S 143.2227E, then via straight lines joining the following geographical coordinates consecutively: 38.7565S 143.2248E, 38.7586S 143.2247E, 38.7603S 143.2302E, 38.7619S 143.2331E, 38.7660S 143.2361E, 38.7666S 143.2412E, 38.7668S 143.2498E, 38.7687S 143.2533E, 38.7699S 143.2570E, 38.7681S 143.2647E, 38.7670S 143.2643E, 38.7649S 143.2646E, 38.7631S 143.2657E, 38.7618S 143.2682E, 38.7624S 143.2704E, 38.7606S 143.2724E, 38.7602S 143.2738E, 38.7606S 143.2758E, 38.7603S 143.2773E, 38.7612S 143.2789E, 38.7608S 143.2798E, 38.7599S 143.2795E, 38.7584S 143.2797E, 38.7579S 143.2814E, 38.7578S 143.2835E, 38.7570S

143.2846E, 38.7563S 143.2888E, 38.7546S 143.2932E, 38.7545S 143.2957E, 38.7533S 143.2954E, 38.7518S 143.2976E, 38.7506S 143.2985E, 38.7492S 143.3019E, 38.7490S 143.3039E, 38.7507S 143.3094E, 38.7504S 143.3122E, 38.7507S 143.3144E, 38.7520S 143.3164E, 38.7540S 143.3238E, 38.7555S 143.3251E, 38.7564S 143.3278E, 38.7548S 143.3308E, 38.7550S 143.3332E, 38.7541S 143.3394E, 38.7548S 143.3416E, 38.7545S 143.3457E, 38.7537S 143.3491E, 38.7538S 143.3539E, 38.7545S 143.3548E, 38.7535S 143.3563E, 38.7534S 143.3577E, 38.7546S 143.3614E, 38.7580S 143.3665E, 38.7592S 143.3726E, 38.7590S 143.3739E, 38.7592S 143.3749E, 38.7600S 143.3749E, 38.7620S 143.3782E, 38.7611S 143.3787E, 38.7615S 143.3798E, 38.7625S 143.3796E, 38.7666S 143.3892E, 38.7680S 143.3909E, 38.7695S 143.3937E, 38.7708S 143.3955E, 38.7756S 143.4023E, 38.7770S 143.4024E, 38.7787S 143.4029E, 38.7794S 143.4038E, 38.7785S 143.4045E, 38.7786S 143.4060E, 38.7803S 143.4085E, 38.7815S 143.4091E, 38.7817S 143.4112E, 38.7809S 143.4143E, 38.7794S 143.4157E, 38.7807S 143.4183E, 38.7809S 143.4206E, 38.7818S 143.4212E, 38.7808S 143.4232E, 38.7812S 143.4246E, then easterly to the intersection of the southern boundary of the road reserve boundary of Great Ocean Road with MGA easting 710810mE(approximate MGA point 710810mE 5704700mN), then easterly via the road reserve boundary to its intersection with MGA easting 711020mE (approximate MGA point 711020mE 5704615mN), then southerly to the intersection of the High Water Mark with MGA easting 710990mE (approximate MGA point 710990mE 5704450mN), then easterly via the High Water Mark to its intersection with the boundary of Lot A2 2936 (approximate MGA point 731474mE 5704510mN), then westerly and northerly via the western boundary of Lot A2 2936 to its intersection with the eastern road reserve boundary of Great Ocean Road (731430mE 5704780mN), then northerly via the eastern road reserve boundary to its intersection with south west corner of Lot 1 PS309028, then easterly via the southern boundary of Lot 1 PS309028 to its intersection with the boundary of Lot 13B 2 2936, then easterly via the northern boundary of Lot 13B 2 2936 to its intersection with the High Water Mark, then north easterly via the High Water Mark to its intersection with MGA northing 5706390mN (approximate MGA point 732830mE 5706390mN), then north easterly to the point of commencement.

17. At Hordon Vale, comprising Lot 8 PS326892 and Lot 1 TP83406.
18. An area 3km north west of Hordon Vale, comprising that part of Lot 21H 2005 and Lot 21A 3357 to the south of a line connecting MGA points 715393mE 5706850mN and 715480mE 5706910mN, and to the north of a line connecting MGA pints 714887mE 5706395mN and 714945mE 5706375mN. Also included is Lot 1 PS14969.
19. An area 2km south west of Lavers Hill comprising Lot 27C 2089, Lot 29C 2089, Lot 2007 2089and Lot 2011 2089.
20. An area approximately 4km north east of Hordon Vale, comprising an area bounded by a line commencing at MGA point 721945mE 5707283mN, then via straight lines joining the following MGA points consecutively: 722013mE 5707281mN, 722011mE 5707195mN, 721943mE 5707198mN, then directly to the commencement point.
21. The road reserve of the Old Ocean Road between its intersection with the eastern road reserve boundary of the Great Ocean Road at MGA easting 687546mE (approximate MGA point 687546mE 5715333mN) and the western road reserve boundary of the Great Ocean Road at MGA easting 695403mE (approximate MGA point 695403mE 5711158mN).

22. The road reserve of the Old Ocean Road between its intersection with the eastern road reserve boundary of the Great Ocean Road at MGA easting 710526mE (approximate MGA point 710526mE 5709022mN) and the northern road reserve boundary of the Great Ocean Road at MGA northing 5705236mN (approximate MGA point 711236mE 5705236mN).

Assessor's Summary of Significance:
The Great Ocean Road and Scenic Environs is an outstanding and iconic coastal journey. Stories and scenery along the road and coastline help us understand Australia's history, prehistory and ongoing coastal processes.

Constructed by workers including more than 3000 returned servicemen as a utilitarian memorial to First World War servicemen, the Great Ocean Road is a significant reminder of the participation of Australian servicemen in the First World War, the Australian community's appreciation of their service, and the support provided for the continuing welfare of servicemen upon returning to Australia. Archaeological evidence of the repatriation workers' camps has potential to reveal details of the living and working conditions and experiences of sustenance workers in remote locations during the inter-war period.

The *Ocean Road Planning Scheme* was a pioneering planning mechanism which enabled an integrated approach across four local shires to protect and preserve the exceptional scenery of the region. The *Scheme* initiated processes which led to an evolution in the protection of land in Australia for its scenic environmental value.

The frequently changing diverse landscapes and views from the Great Ocean Road have made it an exemplar route of scenic journey, and Australia's most famous coastal drive. The route was designed to follow the lines of nature and facilitate public access to this spectacular coastline, creating a flowing, serpentine journey that hugs the coast and provide views of diverse scenery. Its viewpoints, scenic lookouts and unobtrusively engineered roadworks allow a natural aesthetic to dominate. The Great Ocean Walk provides further public access to areas of coastline where the road diverts inland.

The powerful, spectacular and distinctive landscapes of the Great Ocean Road and Scenic Environs are highly valued by the Australian community and international tourists for their aesthetic qualities and have inspired visual artists, writers, musicians and theatre troupes. The geological formations from the Twelve Apostles to the Bay of Islands are widely recognised, and are capable of evoking strong emotional responses.

The geomorphological features of the Port Campbell Limestone Coast are rare in their diversity, and it is the definitive place in Australia to observe limestone geomorphology and coastal erosion processes on rocky coasts. The Cretaceous coast of the Otways displays geomorphological processes that are contributing to research into the origins of significant shore platforms that illustrate the environment prior to the breakup of Gondwana.

The Otway Ranges Coastal Cretaceous site contains rare polar dinosaur fossil sites, including Dinosaur Cove, Australia'smost famous polar dinosaur fossil site and a site which helped popularise fossils and dinosaurs in Australia. Fossils from later periods are also being discovered in the dunes around Bells Beach. Fossil finds extracted from these sites continue to yield important information about Australia's prehistory, and processes of erosion may

lead to further discoveries along this coastline in the future.

The cultural and natural tourism experiences, including the iconic Twelve Apostles and the treacherous 'Shipwreck Coast', are greatly valued by the Australian community. The iconic Bells Beach is valued by Australia's surfing community for its place in Australian surfing. It was the world's first Surfing Recreation Reserve, and remains the location of the world's longest running international surfing carnival and home to one the most prestigious trophies in surfing.
The Great Ocean Road and Scenic Environs has a special association with a number of people with importance to Australian history. William Thomas Bartholomew McCormack, founding member of the Victorian Country Roads Board, supervised the construction of the Great Ocean Road and was responsible for the practical and aesthetic design of the famous route. The Great Ocean Road may never have been completed if not for the enthusiasm and determination of Howard Hitchcock, businessman, philanthropist, and Mayor of Geelong from 1917 to 1922. Eminent landscape designer Edna Walling's experiences of the environment on the Great Ocean Road from the 1920s-40s were a powerful influence behind her wide-reaching advocacy for the in-situ conservation of native plants, particularly along roadsides, and their judicious use in garden design. The Great Ocean Road is also associated with the more than 3000 returned servicemen who, through the repatriation works program, were employed to construct the road, and took great pride in their involvement in creating an enduring memorial to their fellow servicemen.

Draft Values:

Criterion	***Values***	***Rating***
A Events, Processes	The Great Ocean Road memorial road from Torquay to Allansford, a journey of 242 kms, is significant for commemoration of the service of First World War servicemen. The project was envisaged by the Victorian state government Country Roads Board and the Great Ocean Road Trust, with the support of the federal government Repatriation Department, to provide work for First World War returned servicemen, as a utilitarian memorial to all Australian First World War servicemen, and as a gift to residents and tourists to enable access to the spectacular coastal landscape. The construction involved years of fundraising activities, including promotional movies, land sales and generous donations from the community. The works program employed more than 3,000 returned servicemen over a period of 13 years from 1919 to 1932. Gullies and other places along the road bear names given to them by returned servicemen after places where they had fought. Memorial plaques commemorating the work of the men and the champions of the project are located at The Arch at Eastern View and at Mount Defiance. The construction of the memorial road combined substantial community fundraising efforts with the manual labour of returned servicemen. The road therefore represents a significant reminder of the participation of Australian servicemen in the First World War, the Australian community's appreciation of their service by its	AT

	desire to commemorate the servicemen in a grand manner, and the support provided for the continuing welfare of servicemen upon their return to Australia. Evidence of its importance as a memorial road includes: the route within the existing road alignment of the Great Ocean Road from Torquay to Allansford, including the newer deviations through the Otway Ranges and the eastern headland at Port Campbell; the Memorial Arch at Eastern View, and the memorial plaques at Eastern View and Mount Defiance; as well as the hand-cut markings on the cliff faces adjacent to the road. To protect the coastal scenery the Victorian Town and Country Planning Board developed the *Ocean Road Planning Scheme* in 1955. The pioneering planning mechanism was established to control development and preserve the scenic landscape values along the Great Ocean Road. The Scheme was implemented in four local shires (South Barwon, Barrabool, Winchelsea and Otway), and the concept of protective coastal planning has been maintained in the region since its inception. The processes instigated by the *Ocean Road Planning Scheme*, and subsequent planning controls in the region, initiated an evolution in the protection of public and private land in Australia for its scenic environmental value. These processes led to principles which are now an integral aspect of environmental planning in Australia. The continuing protection provided by the planning system around the Great Ocean Road is testament to the success of this early model. The Otway Ranges Coastal Cretaceous site (from Lorne to Moonlight Head) contains several fossil sites including Dinosaur Cove, Australia's most famous polar dinosaur fossil site. The significance of the discovery of polar dinosaur fossils made Dinosaur Cove internationally renowned and stimulated wide public interest in fossils and dinosaurs in Australia.	
B Rarity	The diversity of geomorphological features found in the single lithological unit of Port Campbell limestone is rare on a national scale. (See also *criterion (c)* and *criterion (d)*). The Otway Ranges is one of only two places in Australia where polar dinosaur fossils are found. The polar dinosaur fossil record of this area is recognised as rare on both national and international scales. (See also *criterion (a)* and *criterion (c)*).	AT
C Research	The remains of the construction workers' camps in numerous locations along the Great Ocean Road have archaeological potential to provide information about the lives of the workers during the period of construction. The majority of records of the Great Ocean	AT

Road Trust were destroyed during the 1940s, resulting in a sparse documentary record relating to the workers and their camps and increasing the potential importance of material evidence from the camps.

The size of certain of the camps and their existence throughout the 13 years of construction of the road creates the potential for a unusually rich deposits of archaeological material relating to sustenance workers over a span of time. Archaeological investigation is likely to yield evidence of the camps and may provide insight into the working and living conditions of sustenance workers and those who supported them in remote locations during the inter-war period.

The fossil record of the Otway Ranges Coastal Cretaceous site constitutes one of the very few known polar dinosaur assemblages from either hemisphere, and one of the most diverse. Dinosaur Cove is the first-discovered and best-known site within the Otway Ranges Coastal Cretaceous site and is internationally recognised for its contribution to human understanding of a polar environment in the Cretaceous period. The fossil record from this area includes an assemblage of velociraptors, flying ptserosaurs, underwater plesiosaurs, oviraptors, primeval crocodiles, turtles and upright relatives of echidnas and platypus. The earlier finds from these sites continue to be analysed and new discoveries published by some of Australia's most pre-eminent palaeontologists. Palaeontological work continues in the Otway Ranges Coastal Cretaceous site. Further research combined with coastal erosion may lead to further palaeontological revelations in the future.

More recent fossil discoveries near Bells Beach, including some by members of the public, are making a significant contribution to scientific understanding of the evolution of marine species from the late Oligocene period. They are also important in enabling public understanding of Australia's past, due to their accessibility and relative ease of discovery in the quickly eroding coastal environment. As they are analysed by palaentologists, these discoveries are providing important insights into the evolution of baleen and toothed whales, as it is believed the extinct whale species *Janjucetus hunderi* represents a previously unknown offshoot of the evolutionary tree. As coastal erosion continues, it is possible that more finds will be made at Bells Beach, contributing further to the rich and significant fossil record of the Great Ocean Road coastline.

The Cretaceous coast of the Otways displays geomorphological processes which continue to be the subject of innovative monitoring and research into erosion rates of shore platforms. This research has increased knowledge of the role of erosion in the geomorphological debate over the origins of these platforms. The monitoring sites and

	their precincts are of national significance. The Cape Otway coast has national significance for its Mesozoic rock platforms, volcanoclastic Mesozoic rock (which illustrates the environment prior to the breakup of Gondwana), its cliffs, marine terraces and its role in the study of platforms. In particular these include rock platforms and associated geomorphological features between Parker River and Point Lewis, between Moonlight Head and Milanesia Beach, and at Point Lewis, Cape Patton, View Point, Point Sturt, Artillery Rocks, Pebble Point, Point Franklin, and Lion Headland.	
D Principal characteristics of a class of places	Exhibiting a diversity of frequently changing and dramatic landscapes, the Great Ocean Road is an exemplar route of scenic journey within Australia. Journeying from Torquay to Allansford, with a deviation at the eastern end to access Bells Beach, the specifically created scenic tourist route is Australia's most famous coastal drive. Attributes of the road which demonstrate the principal characteristics of this class of cultural place include the intentionally designed route of the road to facilitate public access to this spectacular coastline and provide views of diverse scenery from the road; its key viewpoints and scenic lookouts that are positioned to take advantage of the coastal vistas and hinterland backdrops; and the unobtrusively engineered road works such as cuttings, drainage and retaining walls to allow a natural aesthetic to dominate. The Port Campbell Limestone coast (from Port Campbell National Park west to and including the Bay of Martyrs and Bays of Islands) is the definitive place in Australia to observe and study limestone geomorphology and coastal erosion processes on rocky coasts. This is in large part due to the rapid rate of erosion and spectacular, well-publicised stack collapses, but also due to the contrast between the younger elements at the Bay of Islands and the more eroded elements at the Port Campbell end. The Port Campbell Limestone coast is of outstanding national significance for its remarkable range of features that are characteristic of limestone coastlines.	AT
E Aesthetic characteristics	The Great Ocean Road and Scenic Environs demonstrate outstanding scenic landscape values and a diversity of natural landscapes. The scenic environs include all views from the Great Ocean Road and Great Ocean Walk. Included within the environs and of particular significance are the Twelve Apostles. This distinctive and spectacular group of rock formations is widely recognised by the Australian community, serving as an inspirational landscape capable of evoking strong emotional responses. The Bay of Islands and Bay of Martyrs, while less widely known, are similar, but younger, geomorphological formations and are also important aesthetic elements of the coastline.	AT

The coastline from Lorne to Kennett River offers among the world's most dramatic cliff and ocean scenery able to be viewed from a vehicle. Along the length of the Great Ocean Road, the pullover points and lookouts beside or nearby the road provide travellers with spectacular views of the coastline, hinterland, and Bass Strait seascape, framed only by cliffs, lighthouses and unencumbered by intrusive built structures.

Lookout points for particularly significant aesthetic experiences include: Bells Beach South, Anglesea Scenic Lookout, Point Addis, Urquhart Bluff, Cinema Point, Teddy's Lookout, Cape Patton Lookout, Mount Defiance, Marriner's Lookout, Cape Otway Lighthouse, Castle Cove, Johanna Beach, The Gable, Gibson's Steps, the Twelve Apostles (several viewing areas), Loch Ard Gorge, The Arch, The Grotto, Peterborough Golf Course carpark lookout, Bay of Martyrs Lookout, and Bay of Islands Lookout (Planisphere 2003), and all views from the Great Ocean Walk.

The diverse and changing scenery along the route is intrinsic to the vast appeal of this coastline. The serpentine road weaves around coastal cliffs, past curving beaches into seaside towns closely bordered by dense native vegetation, and in the Otway Ranges, through tall eucalypt forest with giant tree ferns. The coastal views are complemented by the high aesthetic values of the forest and waterfall scenery at the Maits Rest precinct and Melba Gully.

The rolling rural landscape west of the Otway Ranges opens to the spectacular vista of the Twelve Apostles. The sea-carved rocky coast includes sheer cliff walls, island arches, blowholes, canyons and caves. Immediately inland along the rocky Port Campbell coast is coastal heath and scrub, swamp land and wetlands.

The Great Ocean Road and Scenic Environs include some of the most featured Australian landscapes and seascapes in print, film and digital media. The region has inspired a number of works by significant artists, photographers and writers, including Arthur Streeton, Eugene von Guerard, Nicholas Chevalier, Jeffrey Makin, Frank Hurley, Steve Parish, Ken Duncan and Myra Morris. Theatrical groups, musicians and filmmakers have also taken inspiration from the scenic journey and environment of the Great Ocean Road.

G Social value	Bells Beach is an internationally renowned surfing location which is strongly associated with the development of surfing and the surf industry in Australia, and has considerable importance for the large Australian surfing community. The Bells Beach Surfing Recreation Reserve, declared in 1973, was the first of its kind in Australia and the first specifically proclaimed surfing reserve in the world. The unique surfing conditions at Bells	AT

Beach, and the international competitions held there, have been instrumental in the development of surfing technology in Australia. In 1970 Bells Beach was the first Australian venue for the World Surfing Titles; and its Easter surfing tournament remains the world's longest running international surfing carnival featuring one of the two most prestigious surfing trophies in the world.

The landscape is highly valued by many Australians, and has obtained iconic status. For many Australians, the Great Ocean Road is synonymous with tourism and holidays, with over 7 million visits by Australians to the Great Ocean Road region annually. Visitors are attracted to the iconic, spectacular scenery experienced on the scenic journey and the accessibility of the historic shipwrecks along the coast, which help deepen the visitor experience by interpreting themes of immigration, shipping and trade.

H Significant people	The Great Ocean Road has a special association with a number of people whose life or works have national importance, including William T B McCormack, Howard Hitchcock, Edna Walling and the more than three thousand returned servicemen involved in the construction of the road.	AT

William Thomas Bartholomew McCormack was one of the founding members and Chairman of the Country Roads Board of Victoria. He designed and oversaw the difficult engineering and surveying works involved in the construction of the Great Ocean Road. McCormack memorably wrote that roads should 'follow the lines of nature' for aesthetic and practical reasons.

Howard Hitchcock was a businessman and Mayor of Geelong, and the inaugural Chairman of the Great Ocean Road Trust. Hitchcock's foresight, dedication and personal contributions to the Great Ocean Road Scheme were integral to the project. His commitment to the construction of the Great Ocean Road was recognised by the installation of a memorial at Mount Defiance lookout; he was further recognised at the opening ceremony in 1932, and at the re-enactment on its 75th anniversary. Hitchcock's aspiration to create a permanent memorial drive, now one of the world's greatest scenic drives, resulted in a significant legacy to the Australian community.

Edna Walling, one of the most influential early landscape designers in Australia, frequented the Great Ocean Road from the early 1920s for the inspiration and rejuvenation provided by coastal views and proximity to nature. The environment around the Great Ocean Road was one of the key factors in her increasing advocacy for the conservation and judicious use of native plants, especially in country gardens, along Australian roadsides, and in other public spaces.

More than three thousand returned servicemen were involved in the construction of the Great Ocean Road from 1919 – 1932. Repatriation programs employed returned servicemen around the country, and thousands applied for work in the construction teams for the Great Ocean Road. The men viewed their involvement as a lasting memorial to their fellow servicemen, and took great pride in their contribution. The road itself is considered a memorial to all Australian World War I servicemen, and also to the significant works of those returned servicemen involved in its construction.

Historic Themes:

Group: 01 Tracing the evolution of the Australian environment
Themes: 01.03 Assessing scientifically diverse environments
Sub-Themes:

Group: 01 Tracing the evolution of the Australian environment
Themes: 01.04 Appreciating the natural wonders of Australia
Sub-Themes:
Group: 03 Developing local, regional and national economies
Themes: 03.08 Moving goods and people
Sub-Themes: 03.08.05 Moving goods and people on land
Group: 03 Developing local, regional and national economies
Themes: 03.08 Moving goods and people
Sub-Themes: 03.08.07 Building and maintaining roads
Group: 03 Developing local, regional and national economies
Themes: 03.16 Struggling with remoteness, hardship and failure
Sub-Themes: 03.16.01 Dealing with hazards and disasters
Group: 04 Building settlements, towns and cities
Themes: 04.06 Remembering significant phases in the development of settlements, towns and cities
Sub-Themes:
Group: 05 Working
Themes: 05.01 Working in harsh conditions
Sub-Themes:
Group: 08 Developing Australia's cultural life
Themes: 08.01 Organising recreation
Sub-Themes: 08.01.01 Playing and watching organised sports
Group: 08 Developing Australia's cultural life
Themes: 08.01 Organising recreation
Sub-Themes: 08.01.04 Enjoying the natural environment
Group: 08 Developing Australia's cultural life
Themes: 08.03 Going on holiday
Sub-Themes:
Group: 08 Developing Australia's cultural life
Themes: 08.07 Honouring achievement
Sub-Themes:
Group: 08 Developing Australia's cultural life
Themes: 08.08 Remembering the fallen
Sub-Themes:

Group: 08 Developing Australia's cultural life
Themes: 08.09 Commemorating significant events
Sub-Themes:

Nominator's Summary of Significance:
The region which goes under the name of the Great Ocean Road is of national conservation significance for its natural and cultural heritage values including its natural and rural scenery and its historical associations.
The historical, and rural scenic beauty values of this nomination can be isolated and are separately described here but it is worth stressing that the different facets of significance are closely linked through history and geography.
The story began in 1916 with the birth of an idea of building a road along the rugged Otway coastline to link an existing road head near Eastern View with the townships of Lorne and Apollo Bay. The notion was that this would serve as a memorial to those who served in the World War, provide employment for returned servicemen and open up the dramatic coastal scenery for tourists in a manner similar to other roads in areas of great scenic interest in California, South Africa and Italy. The significance of the Road itself, which was later extended beyond Apollo Bay, is that it is Australia's finest example of its type - a commemorative road project, providing employment for a particular group of workers, in an area of great tourist interest. The way in which the Road attracts visitors from Australia and overseas and its iconic status in Australia is part of its heritage significance.
The second aspect of significance relates to the way the Road spawned Australia's first regional plan for a coastal area. The Ocean Road Planning Scheme which was placed on exhibition in 1955 and approved by the Governor in Council in 1958, pioneered this aspect of regional planning in Australia. The building of the Road and the great increase in mobility through increased car ownership had created a threat of ribbon development, adversely impacting on the scenery. The Ocean Road Planning Scheme was the response. It was primarily aimed at restricting development to the existing centres, thus preserving the scenery. The Plan was influential in Victoria and beyond and its basic objectives have continued to be pursued in planning in the Great Ocean Road Region to the present day. Its significance with regard to this aspect then is that this was the pioneering coastal regional plan for Australia. A copy of the original plan of 1955 is enclosed as a part of the nomination. The different sheets have been marked and an overlap has been provided so that they can be joined together to show the full length of the plan. This might be of interest to the members of the Heritage Council.
The third aspect of significance in relation to this nomination developed from the conjunction of the access provided by the Road and the recognition of the scenic beauty of the rural areas on either side of the road and with the development of specific landscape protection measures in regional and municipal planning schemes. The building of the road had created the means for the appreciation of these values and the planning schemes which evolved from the approach of the Ocean Road Planning Scheme put in place the statutory and other means for their protection. The third aspect of significance then is the protected scenic values of the rural areas adjoining the Great Ocean Road.

Description:
Historic
The Great Ocean Road and Scenic Environs is located on the west coast of Victoria. The coastline abuts the dynamic ocean swells of Bass Strait, and the hinterland displays a diverse natural environment including temperate rainforest, heathlands, wetlands, sheer cliffs, ancient rock stacks and stunning beaches, which combined provide a magnificent aesthetic landscape

and seascape. The panoramic vistas from designated lookout points and as viewed whilst travelling along the road are exceptional. The GOR itself is a serpentine route which abuts the rocky coast in many areas, particularly between Lorne and Apollo Bay, and winds though the hills of the Otway Ranges. The GOR commences at Torquay and continues westward to Warrnambool; the boundary of the assessed area ceases at the junction of the GOR with the Princes Highway near Allansford, a journey of 242 kilometres.

The road itself is a two-lane winding bitumen structure with frequent road side pull-overs at strategic view points, and slow vehicle turnouts. For most of its length the road is adjacent to the coast, with the 75 kilometre stretch from The Arch at Eastern View to Apollo Bay a most dramatic segment of curvilinear road hugging the cliffs. It passes through or is adjacent to landscapes with a diversity of land forms and vegetation that include natural cliffs, exposed rocky road cuts, some with evidence of being made by hand, beaches, steeply sloped hills, numerous rivers and river estuarine waters, rain forests, shrubby forests, woodlands, coastal heathlands, interspersed with cultural features of open grasslands predominantly with dairy cattle, plantations, hamlets and several coastal townships.

The memorials exist as key features along the road; The Arch at Eastern View is a major commemorative feature with its collection of plaques, the bronze sculpture of repatriation road workers and modern landscaping. Mount Defiance Lookout is an historic view point with a memorial stone wall and associated historic stone retaining walls and culverts.

Camps that housed the workers who constructed the road were located along the length of the road, typically on flat land near a source of fresh water such as a creek. No above ground evidence of these camps can be seen, although it is possible that subsurface archaeological evidence remains in situ and may provide valuable evidence of the lives of inter-war sustenance workers. Such camp sites are now believed to be predominantly located on private land.

Famous shipwrecks on Victoria's west coast during the nineteenth and early twentieth centuries include the *Schomberg* (1855), *Marie Gabrielle* (1869), *Loch Ard* (1878), *Eric the Red* (1880), *WB Godfrey* (1891), *Fiji* (1891), and *Falls of Halladale* (1908). All shipwrecks off the coast of Victoria wrecked more than 75 years ago are protected historic shipwrecks, and are listed on the Victorian Heritage Register. Some of the victims of these tragic events were buried nearby, and their graves are also protected sites. The graves of the *Loch Ard* shipwreck victims are located within Port Campbell National Park, the grave of a victim of the *Fiji* wreck is on the cliff top at Moonlight Head (in the Great Otway National Park).

A memorial grave stone for two mariners who drowned when trying to salvage cargo from the *WB Godfrey* shipwreck is located in coastal ti-tree adjacent to the GOR just east of Lorne. The graves of the drowned men were discovered by the repatriation workers when constructing the GOR; the path of the road was not diverted. The memorial and grave stone is now located within the Great Otway National Park (formerly the Angahook-Lorne State Park).

The *Loch Ard* shipwreck site is located in the Twelve Apostles Marine National Park, close to Mutton Bird Island. The remains of the *Fiji* and *Marie Gabrielle* are dispersed on the beach and exposed reef at Wreck Beach (within the Great Otway National Park). The rocky platforms around the base of Cape Otway, and some of the nearby creek mouths (all within the Great Otway National Park) are home to the scattered remains of *Eric the Red*.

The shipwrecks *Antares* (1914), *Children* (1838) and *Falls of Halladale* are all located in the Bay of Islands Coastal Park, and the sites of the *Schomberg* (1855) and *Newfield* (1892) are located in the waters adjacent to the Port Campbell National Park near Peterborough. The *Grange* (1858) is located in the Marengo Reefs Marine Sanctuary near Apollo Bay. Two wrecks, the *Inverlochy* (1902) and the *Naiad* (1881) are within the Point Addis Marine National Park.

Natural –
The coastal geomorphology of the place includes the Port Campbell Limestone Coast, Cape Otway and the Cretaceous Coast between Lorne and Moonlight Head.

Short and Woodroffe (2009) describe the geomorphology of the GOR as follows:
The 260-kilometre-long Great Ocean Road, located between Anglesea and Warrnambool in Victoria, is truly one of the great coastal drives in the world. The main reason is that it traverses a predominantly steep rocky coast that provides spectacular views, and culminates in the rapidly eroding limestone and marls of the Port Campbell National Park, which is best exemplified by the Twelve Apostles. The coast consists of two parts, the eastern Anglesea to Cape Otway section, where the road hugs the coast and which is composed of Jurassic-age sedimentary rocks, including horizontally bedded sandstone, siltstones and conglomerates, and the western Cape Otway to Warrnambool section, which is predominantly Tertiary limestone and marls.
On the eastern Anglesea coast, the sedimentary rocks are eroded from prominent rock platforms backed by steep cliffs, and cut by occasionally narrow, V-shaped valleys. The road winds around the cliffs and into and out of the valleys. The softer limestone of the Port Campbell coast, which bears the full force of the Southern Ocean swell, is eroding far more rapidly (1-20 millimetres per year on average) forming steep, at times overhanging, cliffs up to 100 metres high. The rapid retreat also leaves sea stacks such as the Twelve Apostles and arches such as the former London Bridge. Both of these iconic landforms have undergone major collapses in the past 20 years. London Bridge comprised a double arch, but the inner arch collapsed on 15 January 1990. Similarly, the collapse of one of the sea stacks within the Twelve Apostles occurred on 3 July 2005, resulting in fewer 'apostles' left standing.

Mark Dickson's paper for the expert workshop on Rocky Coasts describes the geomorphological processes of the area as follows:
"The 50 km coastline between Childers Cove and Glenample consists of steep cliffs up to 70m high cut into soft Port Campbell limestone…. Such [rocky coast] morphologies are best developed in relatively resistant rocks that support near-vertical cliffs, but where discontinuities (e.g. joints, bedding planes) result in differential erosion along lines of weakness."

"The progressive erosion of a headland can produce a sequence of erosional morphologies. For instance, a line of weakness in a protruding headland can be initially eroded forming an arch, but continued widening of that arch can lead to roof collapse, and the subsequent formation of a stack, which is eventually depleted leaving a patch of reef near sea level."

"The Cape Otway to Port Campbell shoreline is exposed to high wave energy from prevailing south-westerly ocean storm and swell waves that pass across a narrow (~60km) continental shelf… such that there is a reasonably rapid rate of development of the rocky coast features…

huge waves break against the near-vertical cliffs during storms and have cut out ledges 3-6m wide along the bedding planes at various levels up to 60m above the high tide mark. The speed of cliff retreat has preserved only one fragment of Late Pleistocene landscape at Two Mile Bay, where limestone reef attenuates nearshore wave energy."

The GOR runs alongside rocky outcrops exposing the geological diversity of the Artillery Rocks area with strange rock concretions of sandstone, quartz, feldspar and shale (Cousland 2007:59). The Cumberland River and Mount Defiance Lookout expose sandstone cuts.

Within the forests a short distance from the road are steep sided valleys, and fast flowing streams with many waterfalls and cascades. Forested hills extending to a height of 675 metres at Mount Cowley provide much of the backdrop to the north of the GOR while the ocean waters provide the back drop to the south.

The place supports a wide range of plant communities, ranging from tall wet eucalypt forest to coastal heathlands.

Great Otway National Park includes wet sclerophyll forest dominated by mountain ash *(Eucalyptus regnans*) and messmate (*E. obliqua*), sometimes in association with manna gum (*E. viminalis*), mountain grey gum (*E. cypellocarpa*) or blue gum (*E. globulus*). Cool temperate rainforest dominated by myrtle beech (*Nothofagus cunninghamii*) and blackwood (*Acacia melanoxylon*) also occurs, mostly in riparian situations. The dry sclerophyll forests are dominated by messmate, brown stringy bark (*E. baxteri*), and sometimes narrow leaf peppermint (*E. radiata*), usually with a heathy understorey. Coastal cliffs and bluffs are generally covered with shrublands including white correa (*Correa alba*), boobialla (*Myoporum insulare*), coast everlasting (*Ozothamnus turbinatus*) and coast beard-heath (*Leucopogon parviflorus*). The wetter forests of the Otways differ from those of eastern Victoria in that they are more similar to the wet forests of Tasmania, and include some species that are common in Tasmania but restricted in Victoria.

The vegetation of the dryer western coastal parts of the place in Port Campbell National Park, such as near the Twelve Apostles, is mostly tussock grasslands dominated by tussock-grass (*Poa poiformis*), cushion bush (*Calocephalus brownii*) and coast saw-sedge (*Ghania trifida*), and further inland, shrublands dominated by coast beard-heath, coast daisy bush (*Olearia axillaris*) and coast everlasting.

More details are available at the RNE listings on the Australian Heritage Database (AHDB) – see links below:

Otway National Park and Adjacent Areas
http://www.heritage.gov.au/cgi-bin/ahpi/record.pl?RNE15057

Port Campbell National Park
http://www.heritage.gov.au/cgi-bin/ahpi/record.pl?RNE3778

Anglesea Heath/Bald Hills Area
http://www.heritage.gov.au/cgi-bin/ahpi/record.pl?RNE16617
http://www.heritage.gov.au/cgi-bin/ahpi/record.pl?RNE18842

Angahook-Lorne State Park and adjacent areas

http://www.heritage.gov.au/cgi-bin/ahpi/record.pl?RNE18054

Indigenous Sites
Known Aboriginal heritage places within the area include shell middens on the coast and stone artefact scatters and some isolated artefacts on the adjoining plains, forested hinterland and uplands (Freslov 1998; Goulding 2006a & 2006b). These probably represent a small percentage of what actually exists (Parks Victoria & DSE 2008). Aside from archaeological sites, places of importance to Aboriginal people also include massacre sites, song lines, stories and family links to places (Parks Victoria & DSE 2007).

Outside the Otway Ranges little site documentation has been undertaken with the exception of archaeological excavations at Glen Aire Shelter, Seal Point and Moonlight Head (Goulding 2006a & 2006b). However, occupation sites along the coastline are evidenced by middens, artefact scatters, isolated artefacts, scarred trees and rockshelters (Russell & McNiven 1995; Cane 1998) with a fish trap at Loutit Bay and an ochre quarry at Point Addis (Cane 1998). The coastline in the Port Campbell area was almost inaccessible to Aboriginal people, except where they had cut steps into the soft limestone cliffs to access the shoreline for fishing (Cane 1998; Parks Victoria 1998).

Analysis:
Criterion (a)
The place has outstanding heritage value to the nation because of the place's importance in the course, or pattern, of Australia's natural or cultural history;

Nominator's claims
The nominator has claimed that:
1 The Great Ocean Road has significance as a commemorative road project, that initially connected Eastern View to Lorne and then to Apollo Bay, providing employment for a particular group of workers, in an area of great tourist interest. It is a memorial to the efforts of Australians who served in the First World War and to the more than 3,000 returned service men who were employed on the road works.
2 Pioneering coastal regional planning was Australia's first regional plan of a coastal area – the Ocean Road Planning Scheme which was placed on exhibition in 1955 and approved by the Governor in Council in 1958.

Assessor's analysis

Indigenous heritage
The archaeological evidence currently available provides information on the Aboriginal occupation and use of the GOR area over the last 2,000 years. Most of the recorded sites near the coast contain the remains of shellfish and land mammals while inland sites generally comprise scatters of stone tools. The Seal Point, Glen Aire and Moonlight Head rockshelters provide the best evidence of seasonal occupation and changes in resource use patterns in southern Victoria during the late Holocene (Goulding 2006a & 2006b).

The Moonlight Head and Seal Point sites show an early focus on marine resources with a subsequent change to terrestrial-focussed activities. For example, the excavation of the Seal Point site revealed an early reliance on elephant seals, shifting to fur seals and later to land mammals and fish resources. These changes have been argued as evidence of a population

increase and a shift to a more sedentary lifestyle between 500 and 300 years ago (Goulding 2006a; Cane, 1998; Russell & McNiven 1995).

Seal Point has the largest shell midden deposit in Victoria measuring 400 metres long, 100 metres wide and 1.5 metres deep. The site was first occupied about 1,500 years ago and includes ten shallow circular hut depressions of approximately two metres in diameter and 30 centimetres in depth. Seal Point is the only documented example of hut depressions in a shell midden on the south eastern mainland of Australia (Goulding 2006a). Similar hut depressions have been found at a shell midden at West Point, on the north-west coast of Tasmania. The hut depressions in Tasmania and Victoria date to the late Holocene (Ranson 1978; Collett *et al* 1998:Table 5).

The coasts of south western Victoria and north western Tasmania are areas where a specialised economy and more sedentary Aboriginal way of life occurred. The specialisation was based on a strikingly low level of coastal fishing and dependence on seals, shellfish and land mammals (Lourandos 1968; Bowdler & Lourandos 1982). The greatest recorded diversity of places associated with this specialised Aboriginal way of life occurs in north west Tasmania at places like West Point and Bluff Hill Point (Lourandos & Bowdler 1982; Stockton 1982; Stockton & Rodgers 1979; Cosgrove 1983; Jones 1980; Collett *et al* 1998).

The West Point complex in Tasmania, including the shell midden and hut depressions, is unique in terms of its size, density and the diversity of cultural materials (O'Connor 2007). Both Seal Point and West Point provide evidence for the exploitation of the Southern Elephant Seal (Jones 1981; Goulding 2006b). While Seal Point has been described as the largest and richest shell deposit in Victoria (Goulding 2006b), West Point is noted as "one of the largest and richest occupation sites ever excavated in Australia" (Flood 1999:201). In comparison to Seal Point, the West Point complex has all the representative features of a semi-permanent village, including large numbers of stone artefacts, the remains of a wide range of food species and the remains of human cremations and ornaments (O'Connor 2007).

While the Aboriginal heritage places at Seal Point, Glen Aire and Moonlight Head rockshelters are of regional significance in demonstrating occupation, resource use and settlement in Victoria, it is unlikely that this evidence makes an outstanding contribution to Australia's cultural history.

There is insufficient information to conclude that Indigenous values may meet threshold for outstanding value to the nation under *criterion (a).*

Constructing the memorial road

The GOR is claimed as the largest war memorial in the world and was constructed by returned servicemen to honour their fellow diggers from the First World War. The entire road extends 254 kilometres from Torquay to Warrnambool, 242 kilometres of which is proposed for inclusion in the boundary. It has historical significance under this criterion for the over 3,000 repatriation workers (*The Argus*, 5 April 1935), who were returned servicemen from the First World War, involved in the construction under a program that provided repatriation employment. The servicemen were reported to have been very proud to be involved in creating the memorial to all the diggers who lost their lives in the First World War and to the survivors who fought with them.

The Country Roads Board (CRB) proposed the construction of a coastal road in Victoria's west in 1915. After continuing deliberations, the *Great Ocean Road Scheme* was finally developed in 1917 and formally launched at Colac on 22 March 1918 (Cecil & Carr 1988:71). Initial surveys for the route of the road took place in 1918, and construction commenced in 1919. Howard Hitchcock, councillor and Mayor of Geelong, was appointed inaugural Chairman of the Great Ocean Road Trust to manage the scheme and in addressing the meeting he noted:
'What finer memorial could be built to commemorate the magnificent bravery of our Victorian soldiers in the Great War? It will be a memorial to benefit soldiers, and give pleasure to thousands of tourists.'

For its time, the proposal was logistically and financially ambitious – starting at Barwon Heads and following the coast through Torquay, Anglesea, Aireys Inlet, Apollo Bay, Cape Otway, Glenaire, Princetown, Port Campbell, to Peterborough where it would join an existing road to Warrnambool at Nirranda. The task of raising funds for the project, anticipated at £150,000, was very demanding and the building of the road took around 13 years, finally being completed in 1932. The Repatriation Department and CRB contributed financially and in kind to the project. Some sections of the road were built by private companies and individuals, such as the parts constructed by Sunnymead Estates at Anglesea and Aireys Inlet (E Stuckey, pers. comm. 5 February 2010). The Great Ocean Road Trust was charged with raising additional finances through promotional activities, private donations and sales of adjacent land. The Trust's inaugural chairman, Howard Hitchcock, made significant personal donations in order to continue the works when funds were low (Alsop 1982:40). Workers' wages and continuing improvements and maintenance of the road were assisted by collecting tolls for use of the private road before it was handed over to the public in 1936. The main records of the Great Ocean Road Trust were destroyed in the 1940s, although some minute books survive.

The road works undertaken by the returned servicemen involved carving out the cliffs using picks, shovels and dynamite with cartage by horse and dray (Roger Grant 2008:1). The hand cut cliff faces between Lorne and Cape Patton with their multi-facetted surfaces and gently curved profiles are evidence of their handcrafting and construction achievement. The masonry structures of Cape Defiance lookout and retaining wall are also evidence of the original work. The lookout was unveiled in 1935, honouring the work of the Great Ocean Road Trust's founding president, Howard Hitchcock, and his contribution to the success of the project, as well as honouring the servicemen who served in the First World War.

Links to the First World War are evident in the names given to some of the locations along the road, such as Sausage Gully and Shrapnel Gully, named after two battlefields at Anzac Cove, Gallipoli (Doug Sterling on Nexus - http://australianetwork.com/nexus/stories/s2037919.htm).

Several memorial plaques are located along the road commemorating servicemen and government officials involved in the road planning. The most significant war memorial is the timber gateway (The Arch) at Eastern View, just west of Fairhaven, which has been reconstructed three times in this location. The original gateway was located at the toll-point near Cathedral Rock, but was moved to the present location at Eastern View when the tolls were revoked in 1936. The gateway here was rebuilt in 1939, 1970 and 1983, and it replicates the original form. Adjacent to the memorial gateway are historic *Cupressus macrocarpa* plantings which are possibly memorial plantings, *Cupressus* being a species commonly

planted for World War I memorial avenues.

The GOR served both a utilitarian and memorial function, and the supporters, engineers and returned servicemen saw these functions as intrinsically linked, evidenced by publicity at the time. The GOR was an aspirational war memorial project for its time, and the road is a physical reminder of a significant period in Australia following the First World War. The GOR has values of outstanding significance to the nation for its ability to commemorate the event of constructing the GOR as a World War I memorial, and as a significant returned servicemen employment program.

Comparison - memorials
The First World War of 1914-1918 fostered an enormous community need to establish lasting memorials to all those who served their countries, and Australia has more war memorials than any other country (Callaway 2008). The idea of planting avenues as memorials appears to have originated in Britain in 1918 and became popular in Australia and other Commonwealth nations. At least 121 avenues of honour were established in Australia after World War I, with the Ballarat Avenue of Honour probably the first and longest in Australia. The practice of establishing memorial avenues was most apparent in the young Commonwealth countries of Canada, Australia and New Zealand, where monuments of stone and living memorials such as gardens and avenues were patriotically supported by most citizens.

In *Sacred Places: War Memorials in the Australian Landscape*, Inglis only once refers to the GOR as a memorial, and The Arch at Eastern View is not mentioned (1999:138). A private website aimed at documenting the thousands of war memorials in Australia includes more than 6000 listings, but the GOR is missing (http://www.skp.com.au/memorials2/default.htm). The Returned and Services League (RSL) National Headquarters claims to have no information on the GOR (pers. comm. 18 August 2009). The Victorian branch of the RSL include the Memorial Arch and plaques at Mount Defiance in its state-wide listing of war memorials, but the GOR itself does not make the list as a memorial in its own right (http://www.rslvic.com.au/).

While war memorials such as the Shrine of Remembrance in Melbourne and the Australian War Memorial in Canberra are widely known, and avenues of honour are ubiquitous in rural Australia, the GOR's memorial status is often overshadowed by its other values.

Interestingly, numerous websites state that the Coral Sea Battle Memorial Park in Cardwell, Queensland is the largest war memorial in Australia, but there is little information about its actual size, and it is unlikely to be as large as the GOR. Nor does Inglis (1999) mention the Coral Sea Battle Memorial Park. In terms of land area, there seems to be no war memorial that compares to the GOR in the Australian context. There is insufficient information to conclude that it is the largest war memorial in the world, but it may be largest driveable war memorial.

The Ballarat Avenue of Honour is a memorial avenue of exotic trees that extends for 22 kilometres from the Arch of Victory at Ballarat, toward Learmonth. Between 1917 and 1919, 3912 trees were planted, but many of these have been removed or have died. The trees are primarily elms, but another ten species are also included. Originally each tree originally had a bronze dedication plaque at its base.

In its unsuccessful nomination to the National Heritage List, the Ballarat Avenue of Honour was claimed as the only memorial avenue entered through an arch; the longest memorial avenue in Australia; and also the memorial to have involved the largest number of people in its construction and fundraising. The GOR is undoubtedly a longer memorial road, although not an avenue (of trees); it is also entered through an arch (at Eastern View); and with the more than 3,000 repatriation workers and many employees of the CRB and members of the Great Ocean Road Trust, the construction and fundraising for the GOR involved thousands more people than did the Ballarat Avenue of Honour.

Other memorial avenues have been created following World War II and the Vietnam War. The Remembrance Driveway along the Hume and Federal Highways honours the 24 Australians who were awarded the Victoria Cross for acts of valour and extraordinary personal courage during World War II and subsequent conflicts, by establishing roadside rest areas and memorial parks along the route in their honour (RTA 2008). It covers a distance of 300kms, and consists of a collection of roadside plantations, groves and parks covering 100 hectares. Although the length of the Remembrance Driveway is in fact longer than the GOR, rather than being specifically designed and constructed as a memorial road, it took advantage of the existing vehicular route from Sydney to Canberra. Subsequent road realignments have resulted in many of the original plantations being bypassed (Webb 2005).

The only other roadway identified by Inglis is War Memorial Drive in Adelaide, which runs west from King William Road in North Adelaide, to meet Park Terrace at Bowden.

Although there are thousands of memorial features relating to the First World War, including many established alongside highways and memorial gates to tracks and pathways, the GOR appears to be the largest scale memorial road. It is distinctively different to memorial avenues, some of which are included in heritage lists.

Establishing protection under a planning scheme

In Australia, during the 19th and early 20th centuries, parks and reserves were initially set aside for the purpose of protecting landscape values, usually for their scenic qualities. Land has been reserved for national parks and reserves since the 1870s. Australia's first National Park was Royal National Park, created in 1879, while Victoria's first conservation reserve (Ferntree Gully) was set aside in 1867 and proclaimed as a park in 1882 (Parks Victoria 2000).

Prior to Federation, the colonial governors were directed to reserve coastal lands for public purposes and at Federation the former colonies retained many of their original powers, including overall management of the coastal zone. From as early as the 1930s many seaside locations were protected to enable increasing numbers of tourists and residents access for recreational and leisure activities. This has resulted in diverse administrative systems for coastal management (Gorlay 2000).

Town and urban planning has been practiced in Australia since the early nineteenth century (City Futures 2007:19); the urban planning movement underwent reform in the 1920s and 1930s, moving towards a legislative basis and enabling ideals to be translated into practice (Hutchings 1999:78). By the 1940s regional planning began to develop, and there was an emerging interest in landscape assessment by geographers, architects and planners (Hepper 1984:26). However, until the enactment of the *Ocean Road Planning Scheme*, planning controls adjacent to the coast were limited to the coastal reserves and foreshore area (through

reservation as crown land), and planning legislation was generally focussed on urban centres.

The regime to administer an *Ocean Road Planning Scheme* was established by the Town and Country Planning Board (TCPB), was agreed by the shires (South Barwon, Barrabool, Winchelsea and Otway) and brought under the control of an Interim Development Order (IDO) in March 1952. The *Ocean Road Planning Scheme* was placed on exhibition in 1955 and approved by the Governor in Council in 1958. The *Ocean Road Planning Scheme* went beyond the bounds of the coastal lands by including the regional rural environment. It went beyond the parks and reserves system by regulating development on private, as well as public, land. This protective planning regime was set in place with the purpose to ensure the preservation of the scenic beauty of the GOR area.

The Scheme was primarily aimed at confining development to the existing town centres, thus preserving the scenic values of the landscape. This was a new approach to protection of the environment, which was historically achieved by the creation of National Parks, and other parks and reserves. The Scheme was influential in Victoria and beyond and its basic objectives have continued to be pursued in planning in the GOR region to the present day.

Other than the *Ocean Road Planning Scheme*, it was not until the 1970s that planning policies in other parts of Australia began to specifically deal with coastal and other scenic environments. In NSW, the National Trust's report on the Hunter Region in 1972 suggested the protection of Scenic Preserves through land use zoning provisions of the *Local Government Act*, in much the same way that the *Ocean Road Planning Scheme* protected the land in western Victoria since the 1950s (National Trust of NSW 1972).

Hepper's 1984 report for the former Australian Heritage Commission reviewed the development of these landscape assessment and planning measures around Australia. It identified Victoria as the most active of all states in early assessment and planning for protection of landscape value, but failed to mention the *Ocean Road Planning Scheme*. Hepper notes that the Victorian Forests Commission Visual Management System developed in the 1960s was a significant contributor to landscape assessment, and that the former TCPB also produced significant studies (although the TCPB's *Ocean Road Planning Scheme* is not listed). In the early 1980s the former Victorian Department of Planning assisted local and regional planning authorities with statutory controls for landscape protection (Hepper 1984).

The GOR is a cultural construct that was created to enable access to the scenic environment; similarly, the *Ocean Road Planning Scheme* is a cultural product that was created to protect the road and the scenic values in the vicinity. This example of institutionalised coastal planning to protect a scenic coastal landscape is a pioneering case in Post War Australian planning.

Comparison – protective planning

In Tasmania, the earliest landscape protection measures were created through the establishment of the Scenery Preservation Board (SPB) under the *Scenery Preservation Act* (Tas) in 1915. Although Russell Falls (now within Mt Field National Park) was designated as a Nature Reserve in 1885, Mt Field National Park was not declared until 1916. The SPB recommended reserves of land to be preserved for their scenic, scientific or historical interest, and reserves were created because they were wasteland or had tourist potential (Castles 2009, quoted in www.utas.edu.au/library/companion_to_tasmanian_history/S/Scenery.htm).

Much later in Tasmania the *Local Government Act* 1962 specified that town and country planning schemes could deal with 'the preservation of objects of historical interest or natural beauty' (Hepper 1984:39). Later, the *National Parks and Wildlife Service Act* 1970 stated that land may be set aside for 'the preservation or protection of natural beauty…or scenic interest' (Hepper 1984:40). In 1976 a Statement of Planning Policy was developed for the Arthur Highway (leading to the *Tasman Peninsula Statutory Planning Scheme*), and set guidelines for the management of the area visible from the highway based on landscape character; however Hepper notes that the Scheme was not initially successful in protecting the scenic values from development impacts (1984: 40). This is a similar example of planning policy developed by another state in relation to the scenic character surrounding a road, and it came almost 20 years after the *Ocean Road Planning Scheme*.

In New South Wales, the *Coastal Lands Protection Scheme* commenced in 1973 (http://www.planning.nsw.gov.au/PlansforAction/Coastalprotection/tabid/166/language/en-AU/Default.aspx), with the Environmental Planning and Assessment Act 1979 providing the legislative framework. Hepper identifies this Scheme as significant in landscape assessment and planning as it involved 'acquisition and protective zoning of coastal lands to ensure protection of coastal landscape units' (1984:32).

In South Australia, the Coast Protection Board was formed in 1972 with the proclamation of the *Coast Protection Act 1972;* while in Queensland, the *Coastal Protection and Management Act 1995* (Coastal Act) was passed by the Queensland Parliament in November *1995*. Older Acts in Queensland included the *Harbours Act 1955*, *Canals Act 1958* and *Beach Protection Act 1968*. In the 1970s landscape assessments were undertaken in South Australia with the involvement of the National Trust of Australia (South Australia), listing 39 significant landscapes around the state. By 1979 the SA Department of Planning became more actively involved by commissioning an assessment of the Fleurieu Peninsula to identify the physical character and sensitivity to visual change by development (Hepper 1984:31).

In Western Australia, the *State Coastal Planning Policy* was prepared in 2003, under Section 5AA of the *Town Planning and Development Act 1928*.

The GOR has values of outstanding significance to the nation for the coastal protective planning exemplified by the *Ocean Road Planning Scheme* which was established decades ahead of other Australian states.

The tourism industry generated by the road and its iconic status

The spectacular natural scenery of the GOR was the catalyst for development of the road for tourism. In 1919 the Great Ocean Road Trust claimed that the educational value of enabling access to the 'magnificent scenery' would promote the economic possibilities of the region, and the associated tourist traffic would be worth £1,000,000/year to the Victorian economy (*The Argus*, 5 March 1919). Very early in the works program members of the Trust recognised the tourism potential in the 'grandeur of the scenery', and throughout the construction they showed 'panorama' images in Melbourne and Geelong cinemas to generate public interest in the region.

The GOR has iconic status, embodied in the serpentine, cliff-hugging journey and the spectacular coastal vistas, particularly the Twelve Apostles, and there is high domestic and

international tourist visitation to the region (Tourism Victoria 2010). The GOR scenic tourist drive is promoted internationally on the internet, in guidebooks and promotional material as a must-do activity in Victoria. The distinctive landscape is a highlight of Tourism Victoria's 'Jigsaw' brochure series, is the subject of a stand-alone section in the popular Lonely Planet travel guide and website, and is noted as a 'magnificent must not miss' experience in the Australian *Roughguide* travel book.

By 2003 the GOR region was contributing over $3 billion annually to the economy and responsible for 40,000 jobs, 9,000 of which were directly related to the tourism industry (2002–3). In 2007, $1.2 billion was spent by tourists in the GOR region alone (Victorian Government Media Release 13/04/07).

The region attracted 5.2 million domestic day-trip visitors and 2.3 million domestic overnight visitors in the year ending March 2008, and more than 150,000 international overnight visitors for the same period (Tourism Victoria 2010), and has a 48% market share for regional Victoria (Tourism Victoria 2009a, 2009b & 2009c). Between 1999 and 2007, there was an increase of 17.4% in international tourists to the region. Intrastate visitors accounted for 86% of the domestic overnight market in 2008 (Vic Government Media Release 13/04/07).

Tourism Victoria's statistics for the Great Ocean Road region (December 2008) indicate that surfers constitute 5% of domestic day-trip visitors, and 4% of international visitors, to the GOR region. These figures are considerably higher than surfing participation in other parts of regional Victoria (2%). Fifty percent of both domestic and international visitors travel to the GOR region to visit the beach generally (almost double than for other parts of regional Victoria). Around 34% of domestic visitors and 30% of international visitors participate in general sightseeing activities.

In 2008 Tourism Australia, partnered with Parks Australia, added the GOR to its list of National Landscapes, a global tourism marketing campaign. Identification as a National Landscape recognises the symbolic status of the GOR and region and aims to further develop domestic and international tourism interest in natural environments that are iconically Australian (*Surf Coast Times*, 5 August 2008; Tourism Australia 'National Landscapes' website: http://www.tourism.australia.com/en-au/marketing/5651_national-landscapes-program.aspx).

The Twelve Apostles at Port Campbell feature in numerous posters, television advertisements and panoramic calendars (for example, calendars produced by noted photographers Ken Duncan and Steve Parish), as well as pictorial guidebooks for Australia. Renowned landscape photographer Steve Parish describes the Twelve Apostles as 'iconic' in his *Discover Australia* series, with an aerial image of the rock formations displayed on the cover.

The dramatic coastline has also created other niche tourism markets relating to beach and surfing culture, and heritage tourism. By the 1950s surfing breaks at Bells Beach were enticing a different kind of tourist – those focussed on sport and leisure (see discussion on Bells Beach iconic and social significance under *criterion (g)*). With a considerable proportion of the day visitors to the GOR region coming to ride the reliable surf breaks along the stretch of coast from Bells Beach to Gibsons Steps, local businesses provide 'learn to surf' lessons in most of the coastal towns.

For centuries shipwreck events around the world have drawn voyeurs and opportunists. Shipwrecks in isolated communities were seen as beneficial to local economies for the commercial goods that became available and later for the tourists that were attracted by the romance of the stories (Fielding 2003). Alan C. Green's photograph of the wreck of the *Falls of Halladale* near Peterborough in 1908 shows picnickers by the cliff, watching the ship meet its inevitable fate. Now, along with the spectacular scenery, surfing and shipwrecks are intrinsic tourist drawcards to the region, enhancing the visitor experience. Flagstaff Hill Maritime Village at Warrnambool interprets the maritime heritage of the Shipwreck Coast, and draws 50,000 – 80,000 visitors annually (P. Abbott, pers. comm. 4/4/09).

The coast adjacent to the road is the site of more than 100 shipwrecks that occurred in the late nineteenth and early twentieth centuries in Victoria's south west. The tales of 45 of these wrecks are told in the Historic Shipwreck Trail that runs from Moonlight Head to the South Australian border. Plans are underway to develop the third stage of the trail to link Moonlight Head to Point Lonsdale at Port Phillip Heads, which will establish it as the longest continuous shipwreck trail in Australia.

The *Loch Ard* (1878) is a particularly famous and tragic story, and is locally significant for the associated cemetery near Loch Ard Gorge and the hundreds of artefacts that were recovered contemporaneous with the wreck, such as the famous Minton ceramic *Loch Ard* Peacock, and during early SCUBA diving activities.

The treacherous and busy route through Bass Strait was known historically as one of the worst shipping lanes in the world, particularly for large immigrant and cargo sailing ships completing their voyages from Europe to Australia. Hundreds of ships per day passed Cape Otway in the mid-nineteenth century, and many shipping mishaps occurred on this coastline in the early years of the colony. The tragic wrecking of the *Cataraqui* in 1844 at King Island, in which 400 passengers and crew perished, was the catalyst for the colonial government to build the Cape Otway Lighthouse (completed in 1848) as well as several other Bass Strait lighthouses.

Nevertheless, 18 immigrant and international cargo ships are known to have wrecked on this part of the Victorian coast after 1848, with 70 shipwrecks recorded between Torquay and Peterborough from 1835 to 1958. More than 300 people lost their lives in these events.

Numerous stretches of coastline around Australia have similar stories of shipwrecks and comparable or an even greater density of shipwrecks. The significance of shipwrecks to the region is indicated by the well recognised branding. The eastern section of the GOR is known as the 'Shipwreck Coast' and the VicRoads logo for the GOR tourist route is an anchor; furthermore, the GOR Historic Shipwreck Trail (the section from Moonlight Head to Port Fairy is known as 'Shipwreck Coast') has graphic chevrons with a sinking ship in the centre. The branding is a continuous reminder to visitors of the history of the region.

The shipwrecks are an intrinsic element of the iconic GOR touring and scenic experience. The ability of the GOR to interpret the historic themes of immigration, shipping and trade is unique in Australia. The interpretive experience is enhanced by the accessibility of the coastline, the ability to stop at viewpoints that evoke the wild and treacherous nature of the shipping route, the existence of a comprehensive historic shipwreck interpretation trail, several graves of shipwreck victims along the route, and the presence of numerous maritime heritage museums in the local townships.

Comparison - Tourism
Tourism figures for other iconic natural and cultural heritage attractions in regional Australia demonstrate that the number of visitors (especially domestic tourists) to the GOR is considerable.

Visitor numbers for identical periods are not readily accessible, however the figures noted below give a good indication of visitors numbers. In 2006 Uluru/Kata-Tjuta National Park attracted 400,000 visitors, and contributed some $400 million to the region (http://abc.gov.au/news/stories/2006/05/03/1629293.htm). The Great Barrier Reef drew 1.8 million visitors in 2008, 60% of whom were international visitors (http://www.gbrmpa.gov.au/corp_site/key_issues/tourism/management/gbr_visitation/numbers/reef_wide). As at 2005, the ABC reported that Kosciuszko National Park hosts some 3 million visitors annually (http://www.abc.net.au/news/stories/2005/11/08/1499993.htm).

The three-year average to June 2007 for visitors to the Blue Mountains show that 60,000 international, 460,000 domestic and 1.4 million domestic day visitors spent a combined $300 million dollars in the region annually (http://www.tra.australia.com/content/documents/LGA%20Profiles/NSW/BlueMountains%20LGA.pdf).

However, while present day figures are instructive, they do not of themselves provide the depth of information required to make a comparative assessment. This criterion relates to the importance of a place to the course or pattern of Australia's natural or cultural history. It is therefore legitimate to compare the role of the GOR with other places in the context of Australia's tourism history.

Davidson and Spearritt (2000: Preface xv), writing what they considered 'a national history of tourism', make only four direct references to the GOR. It is the first-mentioned place under the chapter on roads for tourists (Davidson and Spearritt: 163-4), although greater emphasis is given to the Pacific Highway for its overall effect on tourism. Similarly, the chapter on coasts and beaches puts greater emphasis on a number of other places including St Kilda, Victoria; Manly, NSW; Bondi, NSW; and the Gold Coast, Queensland (Davidson and Spearritt: 126-53).

Shipwreck tourism
Western Australia has 21 shipwreck/maritime heritage trails along its vast coastline, however the trails are disparate and primarily localised for the individual townships or discrete area eg 'Shipwrecks of the Southern Coast', 'Albany Maritime Heritage Trail' and the 'Historic Shipwrecks of Shark Bay'. South Australia has several land-based wreck trails, including the 'Southern Ocean Shipwreck Trail' which runs from the Victorian border to the Murray River mouth, and the 'Port Elliot Maritime Heritage Trail'. Several other wreck trails in SA are submerged or aquatic-based trails.

New South Wales has many individual shipwreck interpretation signs around the coast, although few shipwreck trails. Examples of land-based trails established for visitors are 'Shipwreck Walk' at Newcastle, and the Jervis Bay wreck trail. New South Wales also has other maritime-based trails, such as the 'Port Macquarie Shipping Trail' bronze plaques embedded into the lawn within Town Beach.

In Tasmania, the 'King Island Maritime Trail' takes visitors on a scenic tour of the island's rugged coastline. The Northern Territory is planning to install a shipwreck trail around Darwin Harbour.

While all these trails tell the stories of local shipwrecks, the GOR Historic Shipwreck Trail is the most visited and most accessible to a large number of domestic and international tourists who visit the region. The branding of the GOR tourist route linking it with the story of shipping and shipwrecks is unique in Australia.

Given the limited evidence of the GOR as important to the history of tourism and shipwrecks in Australia, it is unlikely that the Great Ocean Road and Scenic Environs will meet threshold for National Heritage values under this criterion. The tourism aspects (including shipwrecks tourism) of the Great Ocean Road and Scenic Environs are likely to reach threshold under *criterion (g)* for social values.

Coastal Cretaceous Fossil Sites

The first fossil in Australia to be correctly identified as a dinosaur was found in the Inverloch area in 1903 by the geologist William Hamilton Ferguson. It was not until 1978 that more finds were discovered, by geologist Rob Glenie and two young student volunteers, John Long and his cousin, Tim Flannery. Tim Flannery, then 22, repeatedly searched for more fossils at this site, before searching similar geology in the Otway Ranges for fossils with Thomas H Rich and Mike Archer.

The fossil site at Dinosaur Cove, 12 km northwest of Cape Otway, was discovered in 1980 by Tim Flannery and Mike Archer, and named by Thomas H Rich who, with his wife Patricia Vickers-Rich, led research at the site for over 30 years. This site was very important, if not instrumental, in generating wide public interest in the fossils and dinosaurs and is still renowned internationally for its Cretaceous dinosaur fossils.

More information on the importance of Tim Flannery, Mike Archer, Thomas Rich and Patricia Vickers-Rich to the history of Australian science is found under *criterion (h)*, below).

The 2008 Department of the Environment, Water, Heritage and the Arts report entitled *A comparison of the heritage values of important Australian fossil sites* puts Dinosaur Cove within a larger site called Otway and Strzelecki Ranges Coastal Cretaceous Sites. The Otway Ranges Coastal Cretaceous site extends all the way from Lorne to Moonlight Head on the western Victorian coastline. The Strzelecki Ranges Coastal Cretaceous site extends from Inverloch through to San Remo on the eastern Victorian coastline. The finds at Dinosaur Cove are approximately 5-10 million years older than those at Winton in Queensland (note that the Dinosaur Stampede site there is on the NHL already).

The assemblage of finds from Dinosaur Cove (in Otway National Park), together with finds from Flat Rock at Inverloch (in Bunarong Marine Park), are internationally unusual, as they shed light on a polar environment inhabited by dinosaurs, fish, archaic amphibians, mammals and a bird. There are no other Cretaceous polar dinosaur sites in Australia. Part 5 of the 1999 BBC program *Walking with Dinosaurs* was based on Victoria's polar dinosaurs.

As explained above, the Otway Ranges Coastal Cretaceous site, is one of two related areas in

Australia where polar dinosaur fossils can be found. The fossil assemblage found in the Otway Ranges was internationally recognised as important in shedding light on life in the Cretaceous period, when this part of Australia was within the Antarctic Circle. A wide range of polar dinosaurs were discovered at Dinosaur Cove, which appear to have had night vision and may have been warm-blooded, enabling them to forage for food in the darkness and low temperatures of the long polar winter. The temperatures were not as cold as today's Antarctic temperatures, and the area supported vegetation. At the time, the area was a flood plain within a great river valley that formed as Australia started to separate northward from Antarctica. In the last 30 million years the sediments were uplifted to form the Otway and Strzelecki Ranges, bringing them near the surface again.

This particular fossil site at Dinosaur Cove has been fully exploited for practical purposes to below sea level, with all the finds located *ex situ*, and access to the site is discouraged at present. However, the associative values of Dinosaur Cove are significant and research into the finds from there is ongoing. Palaeontological work also continues in the other parts of the Otway Ranges Coastal Cretaceous site. Continuing research combined with coastal erosion may yield further palaeontological revelations in the future – refer *criterion (c)*.

With the significant role of the Otway Ranges Coastal Cretaceous site in stimulating public interest in fossils and dinosaurs in Australia, including Dinosaur Cove, which has national and international renown as a polar fossil site, the Great Ocean Road and Scenic Environs reaches threshold for National Heritage values under *criterion (a)* for its importance in the course of Australia's cultural history.

Flora

The Great Ocean Road and Scenic Environs supports a wide range of plant communities, ranging from tall wet eucalypt forest to coastal heathlands.

Great Otway National Park includes wet sclerophyll forest dominated by mountain ash *(Eucalyptus. regnans*) and messmate (*E. obliqua*), sometimes in association with manna gum (*E. viminalis*), mountain grey gum (*E. cypellocarpa*) or blue gum (*E. globulus*). Cool temperate rainforest dominated by myrtle beech (*Nothofagus cunninghamii*) and blackwood (*Acacia melanoxylon*) also occurs, mostly in riparian situations. The dry sclerophyll forests are dominated by messmate, brown stringy bark (*E. baxteri*), and sometimes narrow leaf peppermint (*E. radiata*), usually with a heathy understorey. Coastal cliffs and bluffs are generally covered with shrublands including white correa (*Correa alba*), boobialla (*Myoporum insulare*), coast everlasting (*Ozothamnus turbinatus*) and coast beard-heath (*Leucopogon parviflorus*). The wetter forests of the Otway Ranges differ from those of eastern Victoria and are more similar to the wet forests of Tasmania, and include some species that are common in Tasmania but restricted in Victoria.

The vegetation of the dryer western coastal parts of the place in Port Campbell National Park, such as near the Twelve Apostles, is mostly tussock grasslands dominated by tussock-grass (*Poa poiformis*), cushion bush (*Calocephalus brownii*) and coast saw-sedge (*Ghania trifida*), and further inland, shrublands dominated by coast beard-heath (*Leucopogon parviflorus*), coast daisy bush (*Olearia axillaris*) and coast everlasting (*Ozothamnus turbinatus*).

The Anglesea Heathlands-Bald Hills area in the eastern part of the Great Ocean Road and Scenic Environs supports heathlands of various types that have been claimed to contain the richest flora in Victoria and to be amongst the highest diversity plant communities

internationally (eg Meredith et al 1991). Heathland types include Bald Hills heathland, heathy open forest and heathy woodland. The area also has a very high diversity of orchids (seventy-nine species, including eight hybrid species).

More details are available at the RNE listings on the Australian Heritage Database (AHDB) – see Bibliography.

During the early-to-mid 1990s, there were a number of values-identification, planning and land-purchase issues related to the coastal and semi-coastal heathlands between Urquhart Bluff and Anglesea. This included the planning panel assessment of the proposal to subdivide O'Donohue's land and the Mt Ingoldsby area, the RNE assessments of those areas, and the subsequent purchase of most of these lands by the Victorian Government and the Victorian Conservation Trust, supplemented by $250,000 from the Commonwealth National Reserve System. Most of these lands are now included within the Great Otway National Park and the Anglesea Heath (an area of public land subject to a legally-binding co-operative management agreement between Parks Victoria, the Department of Sustainability and Environment, and Alcoa World Alumina Australia).

Examples of opinions of expert botanists at that time are:
'Of the five vegetation types described for the study area (*O'Donohue's land*), Victorian Grey Gum Woodland is considered to be of national significance …' (five attributes supporting this opinion are listed) (Meredith *et al* 1991; Hope 1993).

'Heaths contain the richest flora recorded anywhere [within] Victoria. Small scale plant diversity is very high with 162 species per hectare recorded. Internationally this is very high and is only exceeded outside rainforest by heaths in south western WA and the Cape Botanical Province in South Africa' (Hope 1993, citing Meredith 1986, in an objection assessment report for the Australian Heritage Commission, although this conclusion was disputed by Gullan 1993).

'This report concludes that the Anglesea heathlands are indeed distinct, … support a rich ground orchid flora (by Australian and perhaps world standards), support a floristically rich version of Heathy Woodland vegetation …' (Gullan 1993).

An ANHAT analysis conducted for the 2007 PPAL process indicated that the Otways region is not outstandingly rich at a national scale for animal species, plant species or for some heath-associated plant groups. The Geelong mapsheet used in the ANHAT analysis, which contains the Anglesea Heath, an area that was highly rated by various expert botanists during planning and land-purchase processes in the mid 1990s (see below), was found to be one of the richest areas in Victoria for orchids, similar to localities within the Grampians and the Alpine National Park, and which also compares favourably with other similar areas in southern Australia. This area was also found to be significant for *Environment Protection and Biodiversity Conservation Act 1999* (EPBC) listed mammal species (ranked 43rd in Australia) and orchid species (ranked 15th). However a number of other places around Australia demonstrated the importance for refugia for threatened species across a wider array of taxa, such as south-western Australia and the wallum heath of southern Queensland. An analysis of the numbers of endemics, as a surrogate for rare species other than EPBC listed species, indicated that the Otways region was surpassed by several other places in south-east Australia. These conclusions were confirmed by a subsequent ANHAT analysis in 2009.

ANHAT compares species rather than plant communities and hence provides only a partial assessment of botanical significance, however it does provide an indication of relative national significance of particular plant communities by analysing the results for species typical of those communities.

Various expert botanical surveys and opinions from the mid-1990s indicate that the botanical values of the coastal and semi-coastal heathland part of Great Otway National Park north-east of Urquhart Bluff and the Anglesea Heath might, on further analysis and investigation, exceed thresholds for national significance. However, a firm conclusion on whether a nationally significant threshold for *criterion (a)* would be met for heathlands adjoining or near the GOR cannot be made due to the absence of sufficient information on heathlands elsewhere in Australia to allow an adequate comparison to be conducted. The heathlands are therefore not included as a national heritage value in this assessment. However, it can be reasonably concluded on the basis of what is currently known about heathlands in this area that they are of very high significance and might well meet threshold in future if sufficient comparative information becomes available to enable a comprehensive and soundly-based comparison with heathlands elsewhere in Australia.

Geomorphology
Although a case could be made for the geomorphological processes of the coastline along the GOR meeting threshold for geomorphological values under *criterion (a),* it is considered that these features are more relevant for *criteria (c)* and particularly *(d)*.

The Great Ocean Road and Scenic Environs has outstanding value to the nation against criterion (a) for its importance in the course and pattern of history due to the story of its construction by returned servicemen as a utilitarian memorial to Australian World War I servicemen, serving today to commemorate also the strength of community support for the servicemen who fought and practical concern for the continuing welfare of the returned servicemen who laboured on the road, for the contribution of the* Ocean Road Planning Scheme *to the early development of coastal protective planning in Australia, and for the significance of the fossil finds from the Otway Ranges Coastal Cretaceous site to awareness of fossils and dinosaurs in Australia.

Criterion (b)
The place has outstanding heritage value to the nation because of the place's possession of uncommon, rare or endangered aspects of Australia's natural or cultural history;

The nominator made no claim against *criterion (b)* but natural heritage values have been assessed against this criterion.

The case is made by geomorphological experts that the Port Campbell Limestone coast is unique, that it is rare to find such complexity and diversity of geomorphological features within a single lithological unit. These natural processes are also significant under *criteria (c)* and *(d)*, and the spectacular coastline (meeting *criterion (e)*) allows for the wide appreciation of those processes. See *criteria (c)* and *(d*) for further detail and analysis.

The case is also made for the rarity of the polar dinosaur fossil record of the Otway Ranges Coastal Cretaceous site. Together with the Strzelecki Ranges Coastal Cretaceous site east of Melbourne, these areas are the only polar dinosaur fossil sites in Australia, and are also internationally recognised as rare. For detail and further analysis, refer *criterion (a)* and *criterion (c)*.

Flora – heathlands
Refer to the analysis at *criterion (a)*, above.

The Great Ocean Road and Scenic Environs has outstanding value to the nation against criterion (b) for the rarity of the diversity of geomorphological features in a single lithological unit of the Port Campbell Limestone, and for the rarity of the polar dinosaur fossil record in the Otway Ranges Coastal Cretaceous site.

Criterion (c)
The place has outstanding heritage value to the nation because of the place's potential to yield information that will contribute to an understanding of Australia's natural or cultural history;

The nominator made no claim against *criterion (c)* but historic and natural heritage values have been assessed against this criterion.

Archaeological potential of the repatriation workers' camps
The repatriation workers camped out along the isolated stretch of coast throughout the construction. Camps or 'canvas cities' comprising enough tents to house up to 100 men were erected as residential accommodation.

These workers' camps along the GOR have the potential to provide an insight into the lives of the repatriation workers and those who provided support to them during the course of the works through study of the archaeological remains. As the records of the Great Ocean Road Trust were destroyed during the 1940s, much of the detail about life and conditions in the camps has been lost, and may only be determined through archaeological investigations.

In order to reach threshold under this criterion, the potential research value needs to be related to a contribution of national importance. Information on the lives of repatriation workers on the GOR is unlikely in itself to be a contribution of national importance.

The question becomes whether the repatriation workers' camps could provide information on a broader area of Australia's cultural history with national importance. It may be considered that a study of the lives of sustenance workers in remote places during the interwar period would be such an area. In order to determine whether the place has 'outstanding heritage value to the nation' a comparative assessment with other places and sources that may provide comparable information has been undertaken (below).

Workers' camps – comparison

A number of other places could potentially provide information on the lives of sustenance workers in remote places during the interwar period. In 1916, William Calder of the CRB suggested seven road projects which could be built exclusively by returned servicemen. Other than the GOR, most of these were in Gippsland, Victoria (Alsop 1965: 8-9).

Cannon (1996: 111-16) provides a broader set of examples of remote sustenance labour projects during the inter-war period. These included forestry work at Timboon, Mount Bold and Mount Crawford, tourist roads to Marysville, Warburton and Healesville; piers at Portland, Port Fairy and Gippsland ports; bridges at Cobram and Tocumwal; and sewerage works at Warrnambool, Swan Hill and Horsham. While these related to the Great Depression rather than post-war repatriation, it should be noted however that many of the most disadvantaged unemployed men during the Great Depression were also repatriated servicemen (Cannon: 22-24).

Cannon also specifically notes the existence of camps in relation to: the construction of a road at Birchip (now part of the Sunraysia Highway), with 12 tents; the construction of the road to Mt Buffalo chalet in 1933, with nearly 100 workers; and also in 1933 the regrading of railway tracks between Ararat and Glenorchy, Warracknabeal to Portland and Murtoa to Geelong, with 17,000 men who worked in batches of 5,000 at a time and 'lived in tents along these lines for years while performing their pick and shovel duties' (Cannon 1996: 111-12).

In Western Australia, approximately 3,500 sustenance workers labouring on dam, reservoir and channelling projects lived in camps at Myalup and Stonehouse (both south of Perth). A vivid 1932 report from an 'undercover' *West Australian* reporter disguised as a sustenance worker who spent several weeks living in the camps records some aspects of life in the West Australian camps:

He described how each new inmate was issued with a billy, mug, plate, frying pan, kerosene tin, one blanket and a bed frame covered in a sacking … He was allotted to one of 700 tents, where he was disgusted by the 'nauseating sight' of a dirty table with food bags open to the flies, unwashed dishes, and an earthern floor covered with filth. … He described others returned from their day's labour as 'A silent, spiritless procession…'

(Cannon 1996: 113-14)

Apart from this account, preliminary research suggested that there is limited information available on the West Australian camp sites, and no information on their location could be located. For the purposes of this assessment report, an investigation of workers' camp sites which may have research potential has centred on the Gippsland region, due to the number of recent heritage survey reports which cover this area. Brady (1992:65-66) usefully sets out the background of the Victorian Forests Commission's Unemployed Relief Work programme, which employed 5,295 men across Victoria in 1930-31 alone. The men were engaged in forestry which 'laid down the foundations for future silvicultural [forestry] treatment of indigenous Victorian forests', and were housed in camps which followed the work (Brady 1992: 65-66).

Grinbergs (1992: 30, 35 & 50) details a number of roads in the Gippsland region constructed using sustenance labour. In particular, he notes that the Buchan-Jindabyne road 'has significant heritage importance' due to its construction by sustenance workers (Grinbergs 1992: 30). He suggests that camps housing between 40 and 80 workers were set up in nine locations, and evidence may remain in some form (Grinbergs 1992: 50).

Reports from Brady and Perham (1993), Rhodes and Barnard (1996) and Nigel Lewis Richard Aitken Pty Ltd and McCann (1993) each noted the existence of workers' camps. Brady and Perham (1993) and Rhodes and Barnard (1996:9) generally considered the condition of workers' camps as 'poor', 'destroyed', 'damaged' or 'disturbed'. Rhodes and Barnard noted in relation to a railway camp that '[p]revious recordings of similar sites in the region … indicate that material traces of the camps where labourers were housed in tents are very insubstantial' (Rhodes & Barnard 1996: 82).

However, Siberia Crossing Siding on the Bairnsdale / Orbost railway line, was considered to be a potentially important site in relation to the Depression in Victoria (Brady & Perham 1993: 13; see also Nigel Lewis Richard Aitken Pty Ltd & McCann (1993): unpaged). 'Boola Camp' has been assessed as above threshold for social values for the Register of the National Estate (Context 1999: 109). A camp at Colquhoun railway siding was noted as having 'extensive' remains, and as part of a larger complex of sites, found each to be above threshold for National Estate values (Nigel Lewis Richard Aitken & McCann 1993: unpaged). While some sites assessed by Rhodes and Barnard (1996: 10) were found to have either local or regional significance, none had state significance .

The story of large scale movement of sustenance workers from cities to the country in conditions of considerable hardship is likely to have national resonance. While the full potential of this story has not yet been explored, this criterion can recognise places that may contribute information to stories of national importance that have not yet been told.

The GOR workers' camps are likely to have the potential to yield information that is unavailable from existing historical sources or material evidence of workers' camps elsewhere in Australia, including in Gippsland. The overall number of sustenance workers in Gippsland was comparable or higher than at the GOR, and it is likely that Gippsland had more camps. There is doubt about the integrity and condition of the Gippsland workers' camps sites, but so too with those along the GOR. However, the Gippsland camps are likely to have been smaller and occupied for shorter durations, which would make it likely that less evidence accumulated. The GOR camps also span a longer period of time overall, also adding to its research potential when compared with the Gippsland sites.

Natural – Cinema Point to Cape Otway Coastline

Decades-long monitoring and research in the cretaceous rocky coastline of the eastern portion of the Great Ocean Road and Scenic Environs coast has contributed major findings that help our understanding of rocky coast processes, especially in relation to determining erosion rates of shore platforms through the use of micro-erosion meters, and the role of erosion in the origins of these platforms. The 2009 expert workshop on rocky coasts considered Cape Otway to have at least national, and possibly international, significance for its Mesozoic rock platforms, volcanoclastic Mesozoic rock (as the best exposure in Australia which illustrates the environment prior to the breakup of Gondwana), its cliffs, marine terrace and its role in the study of rock platforms.

Natural – Fossil Record

As noted under *criterion (a*), the Otway and Strzelecki Ranges Coastal Cretaceous sites are the only polar dinosaur sites in Australia. The Otway Ranges Coastal Cretaceous site extends

from Lorne to Moonlight Head on the western Victorian coastline and includes the iconic site of Dinosaur Cove. The fossils from Dinosaur Cove constitute one of the very few known polar dinosaur assemblages from either hemisphere and one of the most diverse (Rich and Vickers-Rich 2000). The finds from these sites between 1984 and 1994 continue to be analysed, such as the 2005 publication of the discovery of a new monotreme, *Kryoryctes cadburyi*. Although the fossiliferous rock at Dinosaur Cove itself has been, for all practical purposes, fully exploited, finds from the site continue to be analysed and palaeontological work continues in other parts of the Otway Ranges Coastal Cretaceous site . Further analysis and research combined with coastal erosion may add further palaeontological discoveries to this coastline's already rich fossil record.

More recent fossil discoveries near Bells Beach, including some by members of the public, are also making a significant contribution to scientific understanding of the evolution of marine species from the late Oligocene period. They are also important in stimulating ongoing public interest in and understanding of Australia's past, due to their accessibility and relative ease of discovery in the quickly eroding coastal environment. As they are analysed by palaentologists, these discoveries are providing important insights into the evolution of baleen and toothed whales, as it is believed the extinct whale species *Janjucetus hunderi* represents a previously unknown offshoot of the evolutionary tree. As coastal erosion continues, it is possible that more finds will be made, contributing further to the rich and significant fossil record of the GOR coastline.

The Great Ocean Road and Scenic Environs has outstanding value to the nation against criterion (c) for the research value of the Cape Otway coast, its rich fossil record and palaelontological potential, and the archaeological potential of the repatriation workers' camp sites.

Criterion (d)
The place has outstanding heritage value to the nation because of the place's importance in demonstrating the principal characteristics of:
(i) a class of Australia's natural or cultural places; or
(ii) a class of Australia's natural or cultural environments

The nominator has made a claim against *criterion (d)* but provided no particular information for the place demonstrating the principal characteristics of a class of Australia's natural or cultural environments.

Routes of human movement – a route of scenic journey
As a class of cultural environment, the GOR is considered within the subcategory of 'scenic journey' within the broad class of 'routes of human movement'.

A route of human movement is a type of cultural landscape influenced primarily by the functional activity of linking people with places. In considering this class of cultural environment from a national perspective, distinctive subcategories and their characteristics can be identified. Apart from routes of scenic journey, other subcategories include:
· *Walking trails* may overlap with scenic journeys but can include historic Indigenous trails as well as long and short distance recreation walking tracks. Many historic walking

trails have been altered to become a developed road and therefore no longer have the principal characteristics of walking trails. Examples of walking trails include the Great Ocean Walk (Victoria), Australian Alps Walking Track (NSW/Victoria/ACT), the Bibbulmun Track (WA), the Overland Track (Tasmania), and the Larapinta Trail (NT). Indigenous trade routes for ochre and obsidian may also be classed in this category;

· *Routes of exploration and rough country transiting* are routes that opened up Australia for settlement and resource exploitation, including sea and river navigational routes, survey routes and scientific exploration routes, as well as stock, forestry and mining routes. Recognised routes in this category include the Black Allen line, Birdsville and Strzelecki Tracks, the Canning River Stock Route, forestry tracks and tramways and the Murray River;

· *Goods and services routes*; and

· *Spiritual routes*

Routes of scenic journey are particularly characterised with a scenic experience. Particular characteristics typical of this subcategory which are demonstrated by the GOR are as follows:

- A curvilinear route with changing topography and roadside vegetation that allow diverse scenery experiences.
- A structured form to enhance scenic viewing by large numbers of travellers (rather than encourage through-traffic) such as a narrow road with numerous scenic view point pullovers.
- Visual access to clearly defined natural and cultural landscapes such as villages, towns, hamlets, rural grazing landscapes, plantations, forests, woodlands, coastal heaths, wetlands, coastal cliffs, rivers and sea.
- Unobtrusive engineered road works such as road cuts, drains and retaining walls permitting a natural aesthetic to dominate.

Other Australian examples of routes of scenic journey include Puffing Billy Railway, the Alpine Way, the Great Alpine Road, the Cairns to Kuranda Railway route and river journey routes.

The GOR is important for the array of features of a route of scenic journey that are unmarred by inappropriate development. In particular:

A curvilinear route with changing topography and roadside vegetation that allow diverse scenery experiences - The diverse and frequently changing landscape of its coastal route has helped to make the GOR one of the most famous tourist drives in the world. Upon its creation, *The Argus* declared the GOR to be the finest coastal roadway in the world, providing access to magnificent coastal scenery (*The Argus* 26 Nov 1932). The serpentine road travels through historic seaside resort towns, lush forest and coastal heath; past wetlands and estuaries; along the edge of towering cliffs, spectacular rock platforms, expansive beaches and giant rock stacks. In fine weather, serene coastal vistas are interspersed with dramatic formations.

A structured form to enhance scenic viewing by large numbers of travellers (rather than encourage through-traffic) such as a narrow road with numerous scenic view point pullovers - The roadside pullovers take in the rugged cliffs and expansive seascape, with 'the ocean stretching, green and purple, to the skyline' offering magnificent views (*The Argus:ibid*). Numerous memorial plaques draw tourists into the history of the region, highlighting the

story of the construction of the memorial road. Other interpretation signs share the tragedies of the many shipwrecks that have occurred in the treacherous waters of Bass Strait, and the graves of some of the victims are scattered along the route (see *criterion (a)*).

The landscape is inspiring in its diversity. The journey from east to west, with minor deviations, takes travellers past world famous surf beaches and through low-lying coastal ti-tree and heath. Adjacent to the road are waterfalls and rainforest, and gaps in the foliage provide glimpses of the ocean swells.

Visual access to clearly defined natural and cultural landscapes such as villages, towns, hamlets, rural grazing landscapes, plantations, forests, woodlands, coastal heaths, wetlands, coastal cliffs, rivers and sea - On entry into the townships, historic structures, including lighthouses, jetties and resort hotels come into view. The road's course moves from high above the waves which crash onto the rocky coast and dips to sea level to cross the mouths of creeks before climbing once again.

En route from Lorne to Apollo Bay, the juxtaposition of coastal cliffs and inland forest is most apparent, and the road becomes the interface between them. The townships of Kennett River and Wye River lie hidden in the eucalypt forest, and relic jetties poke out from the rocks. Westward into Apollo Bay the road flattens and the rolling hills above Apollo Bay encircle the curving beach, providing more diversity to the scenery. The Otway Ranges lie just beyond the line of grassy hills, and Marriner's Lookout, high above Apollo Bay, provides spectacular views of Bass Strait and the coast, framed by cliffs and rolling hills to the north, east and west. Travelling further west, the road pushes inland through the tall wet eucalypt forest north of Cape Otway, with myrtle beech and blackwood creating a canopy over the bitumen, mountain ash high above, and giant tree ferns beside the road.

The dense eucalypt forest slowly gives way to a rolling rural landscape as the road presses south again, until the traveller finally comes upon the breathtaking Twelve Apostles. These ancient rock stacks loom above the ferocious ocean swells, some standing almost 50 metres high. Platforms away from the road allow the best views to these spectacular formations. The sea-carved rocky coast includes sheer cliff walls, island arches, blowholes, canyons and caves.

The remainder of the route west is undulating land bordered by the rocky cliffs on the south. Beyond Port Campbell the GOR passes through the wetlands of Curdies Inlet, and weaves along with several turn-offs to the Bay of Islands and Bay of Martyrs, where rock formations and limestone cliffs similar to the Twelve Apostles await their island fate.

Unobtrusive engineered road works such as road cuts, drains and retaining walls permitting a natural aesthetic to dominate – Due in part to its construction using manual labour, and having been designed with the aesthetic experience in mind, the GOR was engineered, and has been maintained, with minimal visual intrusion from road works. Road cuts generally retain the natural rock surfacing, drainage culverts are recessed below view and retaining walls are the minimum required to provide adequate safety.

Comparison

There are numerous roads noted as scenic tourist drives within Australia that could be considered to fit within the class of 'scenic journeys', but they have not necessarily been

purposely constructed for scenic tourism. The landscapes that other coastal and semi-coastal roads in Australia traverse have less variety in scenery, topography and vegetation than the GOR, even though many of them provide spectacular coastal views in places.

Comparative roads in the category of scenic routes are the Great Alpine Road (Victoria) and more particularly the Alpine Way in NSW that has some similar characteristics, but not the array of natural and cultural landscapes of the GOR. In 1921 the Royal Automobile Club of Victoria organised the first 1000-mile Alpine Reliability Contest on roads running from Omeo to Tallangatta. It became an annual event, and in 1926 Mount Kosciuszko was added to the route. By that time hundreds of motorists were passing over the Alpine Highway in the summer season (Richardson 1999:101). Domestic travel was dominated by the motor car after World War II, and the Snowy Mountains Authority built access roads in the Snowy Mountains as part of the Snowy Mountains Hydroelectric Scheme, which opened up the NSW snowfields to tourism. Construction of roads in the Victorian Alps and the Kiewa Hydro development basin had the same effect in Victoria (Richardson 1999:150). At the beginning of the twentieth century the Snowy Mountains were one of NSW's two major natural tourist attractions (www.visitnsw.com/100years).

Other coastal routes include the Captain Cook Highway north of Cairns, coastal highways in eastern and north-western Tasmania, the Princes Highway behind the Coorong in South Australia, the Lincoln and Flinders Highways on the Eyre Peninsula in South Australia, the Eyre Highway in western South Australia and eastern Western Australia on the Great Australian Bight, and the Princes Highway between Wollongong and Royal National Park, NSW.

With spectacular tropical coastal scenery, the Captain Cook Highway in Queensland was constructed in 1933 as a transport route between Cairns and Mossman, initially bypassing Port Douglas (http://www.tourismportdouglas.com.au/port-douglas-history.1026.0.html accessed 20/08/09 12:30pm). The highway is a winding route overlooking the Coral Sea and 43km of the 60km journey hugs the cliff edge. Whilst stunning, the scenery is not as diverse or renowned as that encountered on the GOR.

Tasmania's Tasman Highway from St Helens to Sorrell is a dramatic coastal drive, and the northern portion is usually included as a segment of the renowned Targa Tasmania Rally. Also in Tasmania is Pinnacle Road up to Mt Wellington. The construction of Pinnacle Road commenced in 1934, and was constructed with the depression era sustenance labour. The road was opened in 1937 (http://www.wellingtonpark.tas.gov.au/common/faq/index.php?section=home#faq17).

In NSW the road from Sydney to Royal National Park (now the Princes Highway) was constructed to take advantage of the scenic values of the area, and to enable transport by buggy and later car to Royal National Park (National Heritage list place ID 105893). The road linked several existing roads in the area, although many people probably travelled to Royal National Park on the railway which was installed in 1886.

It is notable that many so-called coastal roads are not actually located on the coast itself, but for most of their length are located substantially inland. Examples include the Princes Highway in East Gippsland, Victoria and south-eastern NSW, and the Great Northern and North West Coastal highways in WA. The lengths of those roads that closely access or hug the coast are generally very much shorter than those of the GOR, which has a total length

between Torquay and Allansford near Warrnambool of 242 kilometres, of which all but about 50 kilometres is coastal.

Shorter coastal roads that are largely or entirely within the urbanised precincts of the major capital cities are not directly comparable with the GOR due to their urban context and significantly shorter lengths.

Internationally, California's Pacific Coast Highway (Highway 1) between Los Angeles and San Francisco is renowned as a scenic coastal drive, and was developed in the same period as the GOR. The most comparable section to the GOR traverses the region known as Big Sur, just south of San Francisco; originally a wagon track, it was modernised from 1922 until 1937 when it officially opened (www.jrabold.net/bigsur/intro.htm). The Great Ocean Road Trust referred specifically to the great Californian coastal highway in support of building a similar scenic route in Australia, and claimed that that GOR would open up the area for tourists to experience some of the finest scenery in the world (*The Argus* 23 March 1918). Other famous coastal drives around the world include the Amalfi Coast, Chapman's Peak Drive at the Cape of Good Hope in South Africa, and Highway 11 in Hawaii.

The Great Ocean Road and Scenic Environs has outstanding heritage value to the nation as a route of scenic journey, demonstrating characteristics including an intentionally designed route to facilitate public access and provide views of diverse scenery; key viewpoints and scenic lookouts that are positioned to take advantage of the vistas and backdrops; and the unobtrusive engineering to allow a natural aesthetic to dominate. It is renowned, locally, nationally and internationally for its spectacular and diverse scenery.

More detail on the diversity of scenery can be found in the analysis of *criterion (e*), including a reference to the Great Ocean Walk, which is another important scenic journey although not of itself above threshold under this criterion.

Natural values - geormorphology

The natural heritage values assessment covers the geomorphology of the area covering the length of the GOR from Torquay to the Bay of Islands, and including the coastline and adjacent terrestrial and marine reserves.

The analysis for the present assessment draws heavily on the Expert Workshop on Rocky Coasts convened by the Department of the Environment, Water, Heritage and the Arts in July 2009 and chaired by Peter Valentine from the Australian Heritage Council. Experts in coastal geomorphology from around Australia were asked to provide a shortlist of sites that would meet national heritage threshold and to submit papers demonstrating the case for each of these sites. Experts present were Professor Bruce Thom, Colin Woodroffe, Chris Sharples, Mark Dickson, Wayne Stephenson, Susan White, Vic Semenuik and Neville Rosengren. Papers by Mark Dickson, Neville Rosengren and Susan White made convincing cases for the Port Campbell limestone coastline of the GOR including the Bay of Islands.

The experts discussed and assessed a shortlist of various rocky coastlines against the National Heritage criteria and rated each site using a 4 star system, 4 stars representing international significance, 3 stars representing national significance, and 3+stars considered to have significance at least at the national level, and possibly internationally. This process therefore effectively constitutes a peer-reviewed comparative analysis.

The following rocky coastlines were rated highest, all reaching 3+ stars and above. Relevant sites for this assessment are in bold:

**** Sydney Sandstone (incl. Narrabeen, Hawkesbury sandstones) (NSW)
**** **Port Campbell Coast including Bay of Islands (VIC)**
**** Tasman-Forestier Peninsula (TAS)
**** Nullarbor Coast (SA)
**** Zuytdorp Cliffs (WA)
**** Kimberley
***+ **Cape Otway (VIC)**
***+ Pt Peron – Rottnest Island (WA)

In addition, July 2009 also saw the International Association of Geomorphologists meet in Melbourne. A range of international experts in geomorphology attended a field trip (led by Wayne Stephenson) to the GOR as part of this conference, and were impressed with the features on display including the following:

- The famous right hand break at Bells Beach resulting from a combination of clean swell and a limestone reef at the southern end, with shore platforms at the end of the beach limestone;
- The change in geology from Tertiary sediments around Bells Beach to the Cretaceous greywacke of the Otway Ranges, shown by the dramatic change in topography;
- Shore platforms along the Lorne waterfront are used for micro-erosion metering. Erosion rates for the Otway shore platforms were 0.37mm per year;
- Marine terraces between Lorne and Apollo Bay, of an unknown age - from perhaps the last interglacial and indicative of a much higher sea level, or perhaps tectonic influences of a much older age. These platforms were central to the mid 20th Century debate over the marine or subaerial origin of shore platforms. Edwards' 'Storm wave platforms' and Hills' classification of platforms were based on these sites.
- Cretaceous greywacke concretions perched on pedestals of the surrounding sandstone mix, including extremely good examples of honeycomb (tafnoi) weathering.
- Active shore terraces and Pleistocene terraces at Marengo, just west of Apollo Bay;
- Tertiary (Miocene) limestones of the Port Campbell Coast, characterised by steep to vertical cliffs of up to 70m high, and displaying a variety of cliffs, stacks, caves and arches. According to Stephenson (2009), the rich variety of coastal landforms is the result of the interaction between marine processes and the pre-existing karst landscape. The crenulated, or jagged, coastline is the result of cliff recession intersecting tunnels, caves, and joints.
- The Twelve Apostles as a spectacular feature demonstrating rapid coastal erosional processes.
- Loch Ard Gorge as evidence of the dynamism of the coastline, using the 2009 collapse of Island Arch and the 1990 collapse of Long Bridge as examples.

In a report to the Victorian Government in 1984, Rosengren claimed that the following coastal sites within the Shire of Otway (from near Mt Defiance west to just beyond Princetown) have international significance for their geomorphology:

- Artillery Rocks;
- Dinosaur Cove;

- Lion Headland to Slippery Point;
- Moonlight Head to Milanesia Beach (coastal cliffs and landslips);
- Point Sturt (terrace); and
- View Point (emerged platform).

The following coastal sites within the Shire of Otway were similarly listed as having national significance:

- Cape Patton;
- Parker River to Point Lewis;
- Point Flinders;
- Pebble Point (Mesozoic / Tertiary); and
- Point Franklin (dunes and platform).

It should be noted that all experts consulted on the significance of the GOR make frequent reference to the seminal work on the geomorphology of this coastline by E.C.F. Bird, although this assessment did not use this source directly.

The typical features of rocky coasts include headlands, gorges, sea caves, blowholes, arches and stacks. The coastline from Cape Otway to the Bay of Islands on the GOR exemplifies the full range of significant features of this type of coastline and it is the finest example of this in Australia, and one of the best in the world.

This highly erodable coastline is not only spectacular but is ever changing and is the classic Australian example of its type. The stacks and arches off this coast continue to change shape and sometimes disappear, and these events are usually captured by visitors at the time of or soon after the event and are highly publicised in the media.

This coastline is the best site in Australia and one of the best sites in the world to study the entire sequence of limestone coast evolution, including the rapid rate of erosion and other processes, including mechanisms of clifftop dune development. This is particularly the case because of the sheer diversity of cliffed coastline features on the one geological formation of Port Campbell Limestone. The Bay of Islands demonstrates one of the earlier phases in the erosional process of this and other coastlines, with an extensive field of clifftop dolines above less eroded cliffs. This is a nationally outstanding example of a coastal doline field, contributing to the fine illustration of the diversity of karst processes at work along this coastline.

On the occasion of another stack collapsing in September 2009, it was explained by Parks Victoria that the features of stacks in themselves are less important than their being evidence of the significant coastal geomorphological processes along this coastline.

Natural values - comparison
The Port Campbell limestone coast is nationally comparable with the Nullarbor Coast of the Great Australian Bight. However the Bunda Cliffs in the Bight are considered far more uniform and continuous, but less diverse than the Port Campbell coast (Rocky Coasts Expert Workshop July 2009).

As noted above, the Rocky Coasts expert workshop considered the Port Campbell coast (including the Bay of Islands) to have national, and in some cases, international significance. It concluded that the coastline of the GOR from Cape Otway to the Bay of Islands clearly meets threshold for National Heritage listing under this and other criteria. This assessment includes both the Port Campbell Limestone component and the Cape Otway component.

The Great Ocean Road and Scenic Environs has outstanding value to the nation against criterion (d) for demonstrating the principal characteristics of class of cultural environment – a route of human movement, being a route of scenic journey. The place has outstanding value to the nation for its ability to demonstrate a wide range of coastal geomorphological processes in the one place.

Criterion (e)
The place has outstanding heritage value to the nation because of the place's importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;

Nominator's Claims
The way in which the Road attracts visitors from Australia and overseas and its iconic status in Australia is part of its heritage significance.

The protected scenic values of the rural areas created by the road and the planning scheme.

An area of nationally outstanding scenery comprising both national and rural element.

The rural scenery in the area accessed by the Road is significant for its landscape value.

"This is a coast of outstanding and varied coastal scenery."
Neville Rosengren

Aesthetic value for NHL assessment uses the phenomenological/ experiential approach that involves the value being identified from several sources, which may include landscape experts, communities, tourism information, and art and literature.

The GOR is distinctive amongst Australian coastal and semi-coastal roads in that it traverses a wide diversity of natural landscapes within a relatively short distance – hilly vegetated terrain, coastal cliffs, beaches and headlands, heathlands, scrub, tall eucalypt forest, rural farm land, estuaries, and river valleys, to the flatter, straighter coastal tracts near the Twelve Apostles and beyond. The limestone coastal cliffs and rock stacks of the western sector of the coastline, particularly the Twelve Apostles, Loch Ard Gorge and Bay of Islands, are profoundly spectacular and are widely known for their exceptionally high scenic values.

Port Campbell National Park (now part of the Great Otway National Park), adjacent to the Twelve Apostles, Loch Ard Gorge, London Bridge and The Arch, was very highly rated for aesthetic value in the Regional Forestry Assessment (RFA) process, which included

community workshops.

In *Identifying Inspirational Landscapes Stage 2 Volume 2: Preliminary place notes and assessments* (Crocker and Davies 2005:38-40), Port Campbell and the Otway Ranges were deemed to have met the indicators of inspirational landscapes to a high degree, with adequate information to substantiate the claim. Inspirational landscapes were identified as landscapes that invoke 'profound emotional, spiritual and/or intellectual responses or actions because of their physical qualities, meanings, associations, stories and/or history' (Crocker & Davies 2005). Inspirational values indicators were defined as inherent or acquired, and could include physical features, uncommon properties and stories associated with the place (Crocker & Davies 2005).

In relation to the Port Campbell coastline, Crocker and Davies note that:
This landscape is widely documented as a natural feature of exceptional scenic value in official reports and popular publications (books, guidebooks, brochures, posters, calendars etc) and is featured on numerous Internet sites and in TV travel programs. Photographers have made it one of the most photographed natural areas in Australia, along with Uluru, Kakadu and the Great Barrier Reef (all World Heritage Areas). Photographs of the coastline (particularly the Twelve Apostles) are so widely published that this location assumes iconic status amongst Australia's natural landscapes. The Port Campbell coastline features are amongst the most heavily promoted images of Australia internationally and large numbers of visitors are drawn to view the area from throughout Australia and overseas.
(Crocker and Davies 2005:19)

The report noted that the RFA process rated the Otway Ranges highly for aesthetic value, and that the basis of this conclusion was even stronger for the enlarged Great Otway National Park than for the original Otway National Park (Crocker and Davies 2005).

In 1978 the Land Conservation Council (LCC) commented that "the coast from Cape Otway to Warrnambool offers some of the most spectacular coastal scenery in Australia and is therefore of national significance" (from RNE listing for Otway-Port Fairy coast) (LCC 1997:1113). In its exemplar landscape assessment study, authors Planisphere note that the coastline from Lorne to Kennett River offers 'some of the most dramatic cliff and ocean scenery able to be viewed from a car or bus anywhere in the world, and is a landscape of national significance' (Planisphere 2003: precinct 4.1, p2).

The section of the GOR between Marengo and Princetown diverts away from the coastline and winds through the hills and valleys of the Otway Ranges. In this region, the Great Ocean Walk stretches 100 kilometres from Apollo Bay to Glenample Homestead near the Twelve Apostles, thereby providing near-continuous public access to this spectacular and isolated scenic rocky coastline. The route of the walk provides many scenic coastal vistas that are not visible from the GOR substantially adding to both the inherent aesthetic values of the place and the capacity for their appreciation.

The aesthetic value of the GOR is strengthened by features of the landscape having been recorded in art and literature. Its aesthetic qualities have been identified by Australian artists, writers and the local community since early in the colony's settlement. The spectacular coastal landscape in this part of Victoria has been painted, photographed, filmed, written about, and been the setting for plays for more than 100 years. Famous Heidelberg School artists Arthur Streeton and Eugene von Guerard created landscape and seascape images of the

Port Campbell and Cape Otway region, as did artist Nicholas Chevalier.

Arthur Streeton painted about six seascapes around Port Campbell, including *Loch Ard Gorge* (oil 1920). Frederick Horatio Bruford's *The Scene of the Wreck of the Loch Ard* (oil c1878) hangs in the Warrnambool Art Gallery. Jeffrey Makin (b 1943) painted *Port Campbell* (oil) in 1980.

Nicholas Chevalier published the engraving, *Cave, Cape Otway*, in 1862. Eugene von Guerard's tinted lithograph, *Forest Cape, Otway Ranges*, was published in 1867. He also painted the major oil, *Cumberland Creek, near Cape Otway, Victoria*. William Ford's *Black Thursday: a Rush for Life through Cape Otway Forest* (oil 1851) is a well known work.

Photographers Frank Hurley and Nicholas Caire both produced images of the region; contemporary panoramic photographers Steve Parish and Ken Duncan regularly use images of the Twelve Apostles and GOR coastline, Otway Ranges and hinterland in their works.

Frank Hurley (1885-1962) produced a number of photographs of the Port Campbell area, including images of the Twelve Apostles, that are held by the National Library of Australia (NLA). Nicholas Caire's photographs, *Crystal Brook in the Cape Otway Ranges*, *Straw's Falls, Cape Otway Ranges* and *Giant Trees, Cape Otway* were taken c1880.

Harry Nankin, David Tatnell and Peter Walton are contemporary photographers who have all included photos of the Otway Ranges in their books.

The State Library of Victoria (SLV) holds the Phillip Doak Collection with almost 700 slides of the GOR coastline, shipwrecks, relics and marine life taken by the late west coast photographer, Phillip Doak. The collection was donated to the State Library of Victoria by Doak's parents following his tragic death in 1999 and is considered an important record of the changing historical and natural landscape of the region. Many of the photographs have been published in books about the GOR, and can also be found in Doak's book Tales from Australia's Shipwreck Coast (Doak/Manifold 2001). The SLV states that the "quality of Phillip's work is remarkable, given his lack of professional training in photography", and the Heritage Council of Victoria rank Phillip Doak's documentation of Victoria's shipwrecks very highly (http://www.slv.vic.gov.au/about/news/focus_on/doak.html).

The SLV also holds a collection of photographs by landscape designer Edna Walling (see analysis under *criterion (h)*, below). Walling took many photographs of Australian landscapes and native flora for her publications, as well as numerous self-portraits. Images taken at East Point, the rustic holiday retreat she built at Big Hill on the GOR, illustrate how she incorporated her 'chalet' into the natural landscape. Many photographs show glimpses and views from her property to the scenery around the GOR. Most importantly, Walling's personal captions to the images provide great insight into the way the natural landscape here inspired her increasing advocacy for the *in situ* conservation of native plants which she shared with gardeners around Australia.

As noted under *criterion (h)*, Edna Walling wrote in her memoir (cited in Hardy 2005: 199-204):

It is easy to agree with the one who said this is one of the loveliest highways in Australia, running, as it does, alongside beautiful blue gums and ironbarks and past native shrubs that

make the drive of particular interest and joy to botanists.

Novels and stories set in the Otway Ranges and along the GOR coastline have been written by authors including Donald McLean, Lynn Ferris and Myra Morris. Donald McClean was a minor author whose *The Man from Curdie's River* (1907) was included in *The Age's* list of 50 best Australian novels in 1933; it is set partly around Port Campbell. Lynn Ferris's novel, *John Heathlyn of the Otway* (1916), is about early selectors in the district. Myra Morris's ghost story, *Vision in the Forest* (1947), is set in the Otway forest.

Apart from a few wide shots of clearly Tasmanian landscapes, much of the 2009 film *Van Diemen's Land* was filmed on the rivers and in the forests of the Otway Ranges.
The final, famous scene in the legendary surfing film, *Point Break* (1991), starring Keanu Reeves and Patrick Swayze, was 'set' at Bells Beach, where one of the main characters surfed a 'killer wave'. (Although the location was supposedly Bells Beach, the scene was actually shot at Indian Beach in Oregon, USA) (http://www.geelong.ws/Great-Ocean-Road-Attractions-Surf-Coast/Bells-Beach.html).

Victorian touring theatre troupe *OzAct* has regularly performed their environmentalist adaptation of William Shakespeare's *The Tempest* at Loch Ard Gorge since 1995. *OzAct* uses the evocative beach and caves of Loch Ard Gorge, famously used by *Loch Ard* shipwreck survivors Eva Carmichael and Tom Pearce as its stage, with Bass Strait and Mutton Bird Island as the stunning backdrop to the set (http://www.ozact.com/aboutus.html).

GOR public consultation workshops undertaken in 2004 identified the rural environment as an integral part of the scenic attractiveness of the GOR region. The report highlighted areas around lookout points and places of high importance for wildlife and biodiversity such as wetlands. The scenic values of the local rural environment seen from the road are fundamentally related to the spacious rural character of the area.

Other than these consultation results and Lynn Ferris's novel, sources do not make specific reference to the more extensive rural environment beyond the coast. The rugged rocky coastline and mountain scenery is mentioned and depicted time and again (as evidenced above), and less frequently the adjacent hinterland, such as the coastal heath around Anglesea and Aireys Inlet.

Where vistas are framed by rural landscapes from significant lookout points and pullovers along the road, the sense of isolation bounded by rocky hills and vast ocean is an important factor in the aesthetic qualities of the region. However, the overall rural scenery defined by the original *Ocean Road Planning Scheme* is not a primary aspect of the aesthetic experience, contrary to the nominator's suggested boundary which extends several kilometres inland in some areas. The evocative qualities are focussed seaward, to the crashing waves, rugged cliffs and ancient rock stacks of this powerful coastal landscape. Perched high on the cliff tops, the views to and from the lighthouse at Cape Otway adds to the wild and spectacular scenery. Even when snaking through the towering mountain ash forests in the Otway Ranges, the glimpses of ocean through the trees contribute significantly to the aesthetic experience. In light of this, the rural environs are not considered to reach threshold for National Heritage values under this criterion.

Key Viewpoints and Descriptions

The following key coastal viewpoints relevant to the GOR assessment were amongst those identified by Planisphere in its landscape assessment study of the GOR (2003). The descriptions are a combination of the assessor's experience, recent images, Planisphere's commentary and descriptions for the Visit Victoria website:

- **Bells Beach South:** Ocean, surf and beach views from the lookout platforms at the Surfing Reserve.
- **Anglesea Scenic Lookout**: Breathtaking coastal views from elevated memorial lookout.
- **Point Addis:** Impressive ocean, beach, coastal vegetation views, and spectacular sandstone cliffs east past Bells Beach to Point Lonsdale, and west beyond Anglesea to Lorne. The lookout is remote and accessed by a long boardwalk, evoking a strong sense of isolation on this wild stretch of coast.
- **Urquhart Bluff**: This lookout provides medium to long distance views to Anglesea and Point Roadknight, with beach and low coastal heath in the foreground. Views of the indigenous coastal heath can be seen when looking towards Aireys Inlet.
- **Cinema Point**: Spectacular views east towards Eastern View, Fairhaven and Aireys Inlet. This lookout is one of the road's highest vantage points, and takes its name from the early panoramic promotional pictures used by the Great Ocean Road Trust to generate support for the construction of the road.
- **Cape Patton Lookout**: Located on the west side of Cape Patton, and on the coastal side of the GOR. Tourists need to leave their vehicles to see the views over the memorial stone retaining wall. The result is dramatic and spectacular expansive ocean views which take in the steep rocky cliffs to the east and the partially cleared hills, Apollo Bay and Cape Otway to the west.
- **Mount Defiance:** Panoramic ocean views toward Artillery Rocks. Turn out just off the GOR, between Lorne and Wye River. Stone wall is a memorial to Howard Hitchcock.
- **Marriner's Lookout**: Expansive panoramic views of Apollo Bay to the south, east and west, across the cleared hills, over the township, and far out to sea. The views are framed by the hills to the east and west, and further out stretches from Marengo along the scarp towards Cape Patton. The backdrop is of the hilly northern ridge.
- **Castle Cove:** The cliffs near the lookout are rugged and vegetated, and drop to an isolated sandy beach. The wild ocean views contrast with the distant rolling rural hinterland to the north east.
- **Johanna Beach:** An isolated lookout point down a road that deviates from the GOR. It has views to the ocean and beach, with rocky cliffs to the west and rocky escarpments to the east.
- **Gibson's Steps:** Expansive views to the east and west of the dramatic coastal cliffs, ocean and beach.
- **Twelve Apostles (several viewing areas):** Boardwalks, tracks, and platforms ensure the best views of the spectacular rock stacks. Low coastal scrub and rocky clifftops are adjacent to the viewing areas, and the platforms provide expansive views of the spectacular cliffs, rock stacks and ocean to the horizon, some 12 nautical miles distant.
- **Loch Ard Gorge**: Pathway takes visitor past the Loch Ard Cemetery, to the lookout over Loch Ard Gorge & Mutton Bird Islands. The path is lined with taller coastal vegetation. Views from the platform allow closer access to the rock stacks with broader, long-range coastal views to the east and west.

- **The Arch**: Views from the platform allow closer access to the rock stacks with broader, long-range coastal views to the east and west.
- **The Grotto**: Views from the platform allow closer access to the rock stacks with broader, long-range coastal views to the east and west
- **Peterborough car park/golf course:** Long distance views along the coast to the east with sheer cliff faces. To the east, the attractive sandy beach is visible near the entry to Curdies Inlet, with low rocky cliffs. Westward the vista takes in the coastal dunes and township.
- **Bay of Islands Lookout:** Provides excellent views of this remarkable group of islands enclosed by a bay of weathered cliff faces. The views are contrasted with the backdrop of rural pastures and coastal vegetation. The Bay of Islands demonstrates one of the earlier phases in the erosional process of this and other coastlines, compared with the geologically older Twelve Apostles.

The following additional lookouts were identified by the Visit Victoria tourism website (http://www.visitvictoria.com/displayobject.cfm/objectid.5485F126-98BC-4934-A9CFD1C73849A992/):

- **Aireys Inlet/Split Point Lighthouse:** Vast ocean views over Eagle and Table rocks.
- **Teddy's Lookout (Mt St George):** Stunning vistas from the platform high above the coast where the St George River empties into a small cove.
- **Cape Otway Light Station:** The lighthouse stands 91 metres above the ocean and the tower offers spectacular views of the rugged Otway coast to the east and west.
- **The Gable:** Magnificent views to Moonlight Head. The lookout platform seems to hang off the top of the cliff 70 metres above the waves, the highest sea cliffs on this part of the coast.
- **Bay of Martyrs car park:** View the stunning rock stacks of the Bay of Islands, particularly beautiful at sunset when the islands and Massacre Point are backlit by the sun.

These coastal views are complemented by the high aesthetic values of the forest and waterfall scenery at the Maits Rest precinct and the National Trust-listed Melba Gully, diversifying the aesthetic experience of the scenic journey.

As a result of the vast amount of tourism exposure of the region, the GOR and its scenic environment continues to be one Australia's most featured landscapes and seascapes in print, film and digital media.
The Great Ocean Road and Scenic Environs is of outstanding value to the nation for its aesthetic characteristics, in particular its scenic vistas experienced from the road and its many lookouts and pullovers as experienced by its many visitors and recorded in film, art and literature.

Indigenous values
There is a lack of published information regarding Aboriginal oral histories and local knowledge relating to the formation of prominent natural features of the region; broader social values; and the significance of the heritage values. Due to this limitation, there is insufficient information to determine whether the views of Aboriginal people regarding the GOR's aesthetic characteristics meets the threshold requirements for outstanding value to the

nation under *criterion (e).*

The Great Ocean Road and Scenic Environs has outstanding value to the nation against criterion (e) based on the strength in the assessment of aesthetic value of the coastal landscape from numerous sources, in particular its scenic vistas experienced from the road and its many lookouts and pullovers as experienced by its many visitors and recorded in film, art and literature.

Criterion (f)
The place has outstanding heritage value to the nation because of the place's importance in demonstrating a high degree of creative or technical achievement at a particular period;

Nominator's Claim
Pioneering coastal regional planning -- Australia's first regional plan of a coastal area. The Ocean Road Planning Scheme which was placed on exhibition in 1955 and approved by the Governor in Council in 1958.

The nominator's claim that the *Ocean Road Planning Scheme* was a pioneering coastal regional plan is supported under *criterion (a)* for its national importance in the pattern of Australia history. However the claim that it demonstrates a high degree of creative or technical achievement is not supported, and does not meet threshold for outstanding value to the nation. While it is a pioneering coastal regional plan, it does not demonstrate a significant paradigm shift in the discipline. It can be viewed as influencing subsequent coastal planning regimes but was an incremental, not a significant, shift in the planning industry of the period.

Engineering:
One of the unusual aspects of the project was that the Road was to be constructed on a completely new alignment, purpose built as a scenic touring road, and not following any existing track or paths (Fagetter 2000).

At its inception, the GOR was noted to be a difficult engineering feat; early in 1919, following the completion of the initial surveys by the CRB, the Great Ocean Road Trust claimed that the engineering was not as difficult as predicted (*The Argus* 25 Jan 1919). However, later that year *The Argus* reported that the section of road from Lorne to Cape Patton was 'regarded as the worst [ie most difficult] that will ever be encountered' (*The Argus* 20 Sept 1919). Whether this statement intended to make a comparison to other GOR works, or to other road works generally, is not certain.

The difficulty of the works is evidenced by the many years spent surveying and constructing the route, and the large numbers of people involved. Optimistically, *The Argus's* Donald McDonald reported that the worst parts of the construction, in short lengths between Lorne and Kennett River, were not more difficult than some of the longer sections of Dargo Road in East Gippsland (*The Argus* 25 Jan 1919).

The engineering design and construction of the program was supervised by CRB's civil engineer and surveyor Major William Thomas Bartholomew McCormack (see historical details under *criterion (h)* below), and carried out by more than 3,000 returned servicemen. Towards the end of the project, and during road widening works in the 1930s, Depression Sustenance workers, many of whom were also repatriated servicemen, joined the project (*The Argus* 12/1932; Fagetter 2000).

McCormack was responsible for ensuring the road works were sensitive to the scenic environment; his design followed the lines of nature around the escarpments, rising high above the coast at the cliffs and dropping to sea level where creek mouths met the open ocean. The work was slow, with initial 10-mile surveys for the route taking several months; construction of the road using explosives, picks and shovels continued for 13 years. Men were lowered down the cliffs with ropes around their waist, with the other end attached to trees to stop them tumbling over the edge. Others were lowered in bosun's chairs to set the explosives charges, and rock spoil was thrown down the slope toward the ocean. Local historian Iain Grant notes that as the track was widened the spoil was carted away in wheelbarrows, and later by horses pulling wooden and steel scoops (Grant, pers. comm. 26/8/09).

The rugged rocky coastline made the work difficult due to the steep gradient of the hillside toward the sea. The more treacherous sections on steep cliffs and unstable slopes made the work very difficult (Fagetter 2000). Heritage engineer David Beauchamp notes that when water got into the cut terrain 'greasy back' (slicken sides) would form, resulting in land slippage (Beauchamp pers. comm. 7/9/09).

On 26 November 1932, the day of the official opening of the GOR, *The Argus* reported on "The Great Ocean Road: the highway cut from rock":
To-day 150 miles of the finest coastal roadway in the world will be officially opened to traffic. The making of the Great Ocean Road was a labour of Hercules. The difficulties facing the engineers were enormous. The roadway had to be driven along the face of the rugged cliffs which stretch almost unbroken along the western part of the coast of Victoria. For mile after mile the road had to be blasted out of the rock, and the workers were often forced, before they could gain a footing, to hack a narrow track along the cliff face. Crouching against the rock, with the sea breaking 100ft. below, the men pushed on steadily with pick and shovel, drill, and dynamite, and gradually the road grew beneath their feet. Valleys had to be crossed, hills to be passed, and thousands of tons of rock blown and hewn from the high seawall.

The Argus went on to report that at Mount Defiance the engineers faced a serious problem as the roadway hangs almost 200 feet above the sea, and the rock-face is practically sheer.

During 1954, 1971, 1979 and 1985, torrential rains and flooding with subsequent rock slides caused closures of the road. A major rock slide at Windy Point (eight kilometres from Lorne) in 1971 threatened to send thousands of tons of rock onto the GOR. The CRB closed the road for five months while they installed 55 rock anchors to stabilise the cliff face. Long-term local resident Doug Sterling recalls the Windy Point rock-slide on the ABC's 'Nexus' program:
[The] face of the mountain started to peel off. They drilled holes right through this peeled-off bit back into the base mountain and pinned it all with prestressed concrete. And all these caps capped up the ends of the prestressed stuff. Blocked the road here for about six months, we

couldn't get through….[i]t looked like it was all going to push into the sea. But, anyway, they saved the day by pinning it back onto the big mountain again…I don't think it's ever been done before or since. And a lot of people, particularly from Japan, hear about this and they stop and watch this and see where this big marvel took place. (http://australianetwork.com/nexus/stories/s2037919.htm)

Evidence of the hand-cut rock faces, with individual pick-marks, can be seen on the cliffs above the GOR, particularly around Mount Defiance and Big Hill.

Engineers Australia presently recognises only four roads in its Heritage Recognition Program – National Engineering Heritage Landmarks and Engineering Heritage Markers: Old Great North Road, NSW; the Mitchell Freeway, WA; the Stuart Highway, NT; and Victoria Pass, NSW – Blue Mountains. The Victorian chapter of Engineering Heritage Australia maintains a list of works/places of potential national engineering heritage significance. The list includes the GOR for the social impact it had at the time of construction, but it is yet to be assessed for engineering technology used in its construction. Experts from Engineering Heritage Victoria and Engineering Heritage Australia state that the GOR is not regarded as particularly significant from an engineering technology perspective (Miles Pierce, pers. comm. 15/9/09).

Comparisons

The reports of the Great Ocean Road Trust were destroyed during the 1940s, so evidence of the difficulties encountered during the engineering work lies with other sources contemporary with the construction program. Accounts in *The Argus* during and immediately subsequent to the works refer to the enormous engineering difficulties encountered throughout the project, particularly due to the location on steep rocky cliffs. The descriptions of the works, as quoted above, make it clear that the surveying and cutting of the road was slow and treacherous.

Advice from several heritage engineers suggests that the standards and methods used to create the GOR through mountainous and rocky land were no different to those used to create other roads in similar environments. Dr Brian Harper (civil engineering historian) and Miles Pierce (Deputy Chairman of Engineering Heritage Victoria), note that the use of hand tools like picks, drills and shovels, and the setting of explosives, was standard practice at that time. The National Heritage listing for the Old Great North Road describe the same techniques used by convict labour in its construction 100 years earlier.

The four roads listed by Engineering Heritage Australia as National Engineering Landmarks provide some insight into the reasons for recognising places with significant engineering heritage value. Two of the roads (Victoria Pass/Great Western Highway and the Great North Road, also known as the Old Great North Road) have similar engineering histories to the GOR, yet were constructed around a century earlier, and it is understood that this is likely to distinguish their engineering significance from that of the GOR:

Victoria Pass, the western descent of the Great Western Highway off the Blue Mountains ridge line, was constructed in 1832 under the direction of Sir Thomas Mitchell, the then Surveyor General of NSW. The pass consists of a road carved out of the side of the escarpment by convict labour using simple hand tools in similar manner to the Great North Road to Newcastle. Victoria Pass however is still carrying traffic on a daily basis as if it were a recently constructed highway. Both cars and heavy semi-trailers haul up this steep road at a volume far beyond what Mitchell and his supervisors could ever have imagined when they constructed the road. (Newsletter of Engineering Heritage Australia, July 2002:13, p1)

The Great North Road is listed by Engineering Heritage Australia for its engineering significance; it was constructed with convict labour between 1826 and 1836. Its official values on the National Heritage List note the engineering value within *criterion (a)*, but it is not considered to be an engineering achievement of outstanding value to the nation under *criterion (f)*.

There are many environmental similarities in the story of the Great North Road and the GOR, despite the inland terrain of the Great North Road having been tackled almost 100 years prior. A major component of the significance of the Great North Road lies in its labour force of convicts who were assigned the task as harsh punishment for secondary offences. The GOR's labour force of returned servicemen is also a significant aspect of the construction story, and despite having some choice in their assignment, the location and environment were equally isolated and harsh, with little shelter from the elements.

Like the GOR, the work on the Great North Road was laborious, and involved surveying, engineering, blasting and masonry with hand tools. The distance covered is also similar – some 250 kilometres – and it has steep mountain sides to contend with.

Another civil engineering project that is included on the National Heritage List for technical achievement is the Sydney Harbour Bridge. The Snowy Hydro-Electric Scheme has been nominated for its engineering achievement and is currently being assessed.

The GOR is a tribute to the thousands of returned servicemen involved in its construction (as described under *criterion (a)* and *(h)*, and to the designing engineer (see *criterion (h)*)*;* however, it is not considered a technical achievement in civil engineering of outstanding national value.

The Great Ocean Road and Scenic Environs is unlikely to meet the threshold for outstanding value to the nation against criterion (f).

Criterion (g)
The place has outstanding heritage value to the nation because of the place's strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;

The nominator made no claim against *criterion (g)* but historic heritage values have been assessed against this criterion.

As well as providing work for the newly returned veterans of the First World War and developing a link for road transport between the isolated coastal communities, the construction of the GOR aimed to open up this tremendously beautiful part of the Australian coast for tourism in its many forms.

The GOR and scenic environment is important to a number of community groups. The iconic Bells Beach, adjacent to the GOR, is a significant place in the local scenic environment and

highly valued by the Australian surfing community. The renowned tourism status of the GOR is significant to domestic and international tourists and the tourism industry. The local community values the GOR and scenic environment for its tourism, memorial and iconic status, and it is also of great significance to the wider Australian community as a national icon, particularly the Twelve Apostles.

Surfing community

Bells Road deviates from the GOR two kilometres west of Torquay, and it is the primary access route to the internationally renowned surfing location of Bells Beach. Bells Beach Surfing Recreation Reserve, created in 1973, was the first of its kind in Australia, and also the first specific surfing reserve declared in the world (Heritage Victoria 2009); Bells Beach is listed on the Victorian Heritage Register as Bells Beach Surfing Reserve (H2032).

When Hawaiian Duke Kahanamoku first bought surfing to Australia in 1915, he inspired Geelong local Lou Whyte to ride the wild waves of the Victorian coast; by 1919 Whyte and his friends were boardriding at Lorne Point. In 1956 a surf carnival took place at Torquay during the Melbourne Olympics before an audience of 65,000 (www.visitgreatoceanroad.org.au/great-ocean-road/destinations/the-surf-coast/surfing).

In the late 1940s adventurous local surfers rode motorbikes along the clifftop from Jan Juc to Bells Beach using the relict Cobb & Co track and the rough Second World War lookout road from Anglesea to Point Addis; other access to the beach was granted by local property owners (Pollard 1996:136). The Cobb & Co track was widened, lengthened and consolidated in 1960, improving access to the surf beach (*ibid*:138-39). Today, access to Bells Beach is from the GOR onto Bells Road, which links back up with the GOR after several kilometres. While statistics have not been located, anecdotal evidence suggest that many tourists take the deviation to Bells Beach when travelling the GOR in order to visit this world-famous site, particularly when travelling the route for the first time.

Bells Beach has a strong association with Australian surfing, particularly for its role in the development of surfing and the surfing industry in Australia. In 2008 Surfing Australia reported that 10% of the Australian community were recreational surfers, and 20% had an active interest in surfing. Participation in surfing ranks in the top 20 sports in Australia, ahead of core sports including cricket, netball and soccer (Surfing Australia 2008). It is considered one of Australia's iconic sports.

National surfboard riding competitions have been held at Bells Beach since 1961. In 1970 Bells Beach was the first Australian venue for the World Surfing Titles, and since that time Australian and international surfing champions have flocked to Bells Beach every Easter for the world's longest running international surfing carnival. The Bells Beach Easter Classic trophy is one of the two most prestigious professional surfing trophies in the world, the other being the Pipeline Masters Trophy (Hawaii). Prestigious European travel magazine, *Conde Nast Traveller,* notes Bells Beach as one of the two centres of surfing in the world (http://www.cntraveller.com/Special_Features/Beaches/Sporting_beaches/).

Nearby Torquay is home to the multi-billion dollar surf manufacturing industry in Australia, where two of the world's major surfing brands base their headquarters (see Heritage Victoria 2009; Stewart, Skinner and Edwards 2008). The international surf industry is dominated by three Australian companies, Rip Curl, Quiksilver & Billabong (known as 'The Big Three'),

who account for 52% of the global surf-ware market, with 45% held by Rip Curl and Quiksilver alone (Stewart *et al*, *ibid*). Both Rip Curl and Quiksilver were founded in Torquay (1969 and early 1970s respectively) and are still based there. The town continues to be the home of the wholly Australian-owned and operated Rip Curl company; Quiksilver's Asia-Pacific headquarters is located in Torquay although its international office is now based in the United States.

The proximity of Bells Beach to Torquay is significant, as the unique surfing conditions at Bells Beach and consequently the international surfing competitions held there have been instrumental in the development of surfing technology in Australia. In 1981 Australian surfer Simon Anderson won the Bells Beach Classic on his innovative 'thruster', a fast and manoeuvrable three-finned board that 'encouraged sharper and more 'subtle' turning, whilst maintaining stability' (http://www.surfa.com.au/Content.asp?ID=263), leading the thruster to become the standard board for surfers around the world today (http://www.surfinglife.com.au/worldtour/wave-profiles/142-bells-beach).

Rip Curl has used Bells Beach and the local surfing market as a testing ground for innovations in wetsuit manufacturing since its inception, and Quiksilver was the developer and designer of the now ubiquitous boardshort. Sport and tourism academics Stewart, Skinner and Edwards highlight that the Torquay region was a focal point for surfing in Australia, with a strong surfing culture, and consequently the ready market was both well-informed and critical (2008:25).

A study by Stewart, Skinner and Edwards in 2008 investigated the reasons behind Torquay's status as the global home of the surfing industry, and determined that the specific regional conditions were integral to the 'explosive international growth of these businesses' (2008:2). They identified the historical origins, proximity to international surfing events based at Bells Beach and the subsequent international exposure of the brands, as specific factors behind their global dominance (*ibid*:3).

The GOR plays a significant role in encouraging and enabling surfers and tourists access to Bells Beach. It is a conduit to the coastline and the famous Bells Beach Surfing Reserve. The opportunity to surf the booming waves along the GOR's rugged coast is one of the later twentieth century tourist attractions of the region, and an important contributor to the local economy. The scenic lookout at Bells Beach Surfing Recreation Reserve is identified by Crocker and Davies as a key viewpoint along the GOR (1995).

Tourism

Testament to the enthusiasm and determination of Mayor of Geelong Harold Hitchcock, the GOR scenic drive has become an iconic tourist destination in Australia, and is recognised internationally as one of the greatest ocean drives in the world. Tourism figures for 2009-10 demonstrate that the GOR region attracted some 7.5 million domestic tourist visits for the year, nearly one-third of whom are overnight visits, highlighting the importance of the region to Australia's economy (Tourism Victoria 2010). The spectacular Twelve Apostles are easily identified by Australians as an iconic element of the southern Australian coastline. Parks Australia and Tourism Australia recognise the GOR region as one of the 10 National Landscapes, in the company of internationally renowned icons Uluru and the Great Barrier Reef.

A survey of local residents in 1999 identified the GOR as of moderate to high social significance and of high aesthetic value (Robin Crocker & Assoc 1999). While more recent surveys have not been conducted, it is considered that this landscape is highly valued by the Australian community, with most Australians knowing of the GOR, and especially the Twelve Apostles, as evidenced by the over 5 million domestic day-trip visits to the region annually.

Conde Naste Traveller lists the GOR tourist drive as one of its 'Journeys of a Lifetime' (http://www.cntraveller.com/Special_Features/Journeys_of_a_Lifetime/The_Great_Ocean_Road/Default.asp), and US travel magazine *Forbes Traveller* rates it amongst the world's greatest coastal drives (http://www.forbestraveler.com/luxury/greatest-coastal-drives-slide.html?partner=msnbc).

For further detailed analysis in regard to tourism generally and shipwreck tourism, refer to the analysis under *criterion (a)*, above.

Local community

The construction of the GOR by returned servicemen as a memorial to their fellow First World War servicemen was welcomed by the residents of the local townships, primarily as a long-awaited road transport route. It has had profound social and economic benefits for the region. Wider community support for the road began with the repatriation program, evident in the considerable donations received by the Great Ocean Road Trust, which raised some £150,000 (equivalent to approximately $10 million today) for the project, and local community members were significant contributors to the program.

The ongoing significance of the road to the local community and in particular its status as a war memorial is supported by the community's desire to maintain the road as a tourist route and preserve the Arch at Eastern View.

The Department of Sustainability and Environment's land use and transport strategy for the GOR (2004) encourages non-tourist traffic to utilise the north-south links.

Since the installation of the first arch in 1932 at The Springs tollgate, four arches have been located over the road. The first simple arch, painted with "Returned Soldiers and Sailors Memorial Great Ocean Road", was demolished when the toll was abandoned in 1936, but three years later a second Memorial Arch was erected and dedicated to WTB McCormack. The CRB announced intentions to remove the arch in 1979, considering it too low and narrow. Pressure from the local community prevented its demolition, but soon after it was damaged by a truck, and a third larger arch, in a similar form, was erected at the same location once the road was widened.
This arch was destroyed during the 1983 Ash Wednesday bushfires which devastated much of the land around Eastern View. The CRB decide not replace it, but the local community's reverence for the archway, regardless of its many incarnations, was again illustrated by a public outcry, and the fourth (current) arch was built (Fagetter 2000:2).

Surf Coast Shire has installed an explanatory sign on site relating to the five bronze plaques that tell the story of The Arch and road, and a new bronze statue was unveiled in 2007 for the 75th anniversary of the opening of the road. The sculpture is situated on the coastal side of the road adjacent to the Eastern View Memorial Arch.

Although the Great Ocean Road and Scenic Environs undoubtedly has a special association with its local community, there is no evidence to suggest that this is any more so than the special association other groups within the broader Australian community have with the Great Ocean Road and Scenic Environs in relation to its role in Australian surfing and tourism.

Comparisons
Bells Beach is highly significant to the Australian and international surfing community, and it is designated as one of only two 'Surfing Reserves' in the world. Its significance at a state level is demonstrated by its listing on the Victorian Heritage Register. Other famous surfing breaks in Australia include the Gold Coast in Queensland and Margaret River in WA. Bells Beach is recognised nationally and worldwide as Australia's most famous surf break.

Other natural places valued by the Australian community for tourism include Uluru, the Great Barrier Reef and Kakadu National Park. Each of these places has unique and well established attributes that make them special to the Australian community, and contribute to their national and international iconic status (see Australian Heritage Database). Both Uluru and Kakadu have significant natural and cultural heritage values, and the Great Barrier Reef is renowned as the largest coral reef system in the world.

The GOR and its major tourist drawcard the Twelve Apostles are as well recognised, visited and identified by Australians as the places noted above. The GOR as a scenic drive is equally well recognised, and is intrinsically linked to the natural features of the adjacent coastline.

For detailed comparative analysis in regard to tourism and shipwreck tourism, refer to the analysis under *criterion (a)*, above.

The Great Ocean Road and Scenic Environs has outstanding value to the nation against criterion (g) due to the iconic tourism status of the road and region for the Australian community generally, and for the importance of Bells Beach to the surfing community for its role in the development of surfing and the surf industry in Australia.

Criterion (h)
The place has outstanding heritage value to the nation because of the place's special association with the life or works of a person, or group of persons, of importance in Australia's natural or cultural history;

The nominator made no claim against *criterion (h)* but historic heritage values have been assessed against this criterion.

The GOR is significant for its association with the career of engineer and surveyor William Thomas Bartholomew McCormack, the life work of businessman and mayor Howard Hitchcock, the work of garden designer Edna Walling, and the work of the more than 3,000 returned servicemen who laboured on the project.

William Thomas Bartholomew McCormack (1879 – 1947)
The construction of the GOR was proposed by Victorian engineer William Calder, originally as a memorial to the returned servicemen of the western district of Victoria. The difficult project was designed and overseen by civil engineer and surveyor (Major) William Thomas Bartholomew McCormack, who along with Calder was one of the three founding members of the CRB of Victoria.

McCormack is credited with insisting that the road should 'follow the lines of nature' for aesthetic as well as practical reasons. Along with his two colleagues, between 1913 and 1915 McCormack laid the foundations of Victoria's road network, surveying the countryside on horseback. As a member of the Australian Imperial Force, he served as major commanding the 10th Field Company, Engineers in 1916, and in 1917 he was commanding royal engineer, 3rd Division, under Sir John Monash.

McCormack was an honorary lecturer in engineering at the University of Melbourne (1913-15), a foundation member of the Institution of Engineers, Australia, and a member of the Institution of Civil Engineers, London. A memorial plaque is located at The Arch at Eastern View, acknowledging McCormack's role as honorary engineer to the Great Ocean Road Trust and Chairman of the CRB (http://adbonline.anu.edu.au/biogs/A100225b.htm).

Howard Hitchcock (1866 – 1932)
Geelong businessman and Mayor, Howard Hitchcock, was a vocal and active advocate for the merits of Geelong, and a successful fundraiser for the war effort, assisting in acquiring £1.5 million for war loans and £132,000 for various war and peace funds both during and after the First World War. These two passions were successfully combined when Hitchcock publicly supported Calder's proposal for the 'modern coastal highway', and Hitchcock was made the inaugural President of the Great Ocean Road Trust in 1918 (Rowe, 2002). The GOR was the combined vision of Calder, Hitchcock and McCormack, and without the dedication of all three men it may never have been completed.

Hitchcock's foresight and commitment to the scheme was considerable, demonstrated by his personal contribution of some £3,000 to the Great Ocean Road Trust, but he passed away on 22 August 1932, just prior to its completion. At the official opening of the GOR, Sir William Irvine, Lieutenant-Governor, paid tribute to Hitchcock, proclaiming that "no nobler monument could be erected to the memory of the late Howard Hitchcock than that which his own enthusiasm has taken such a large part in creating, and which will always be associated with his name" (*The Argus*, 28 November 1932). Hitchcock's chauffeur drove his car in the ceremonial cavalcade, with Hitchcock's seat empty as a salute to his dedication (http://adbonline.anu.edu.au/biogs/A090317b.htm?hilite=hitchcock).

In 1936, when the deeds to the GOR were handed over to the Victorian Government, the *Geelong Advertiser* reported that it was doubtful that any of the other work that Hitchcock did for the public transcended in material value the work he did for the GOR. The article went on to say that, without distracting from the efforts of his colleagues, had it not been for Hitchcock's enthusiasm and practical assistance, the work may not have continued (*Geelong Advertiser*, 2 October 1936). A memorial to the work of Hitchcock is located at Mount Defiance Lookout. At the 75th anniversary of the official opening of the GOR, the re-enactment of the procession left a vehicle empty expect for a hat on the seat, a modern tribute to Hitchcock's enormous contribution to the GOR's construction (de Kretser 2007).

William Calder
Engineer William Calder, Chairman and one of the three founding members of the CRB, proposed the construction of the GOR, and its dedication as a war memorial in 1917. His suggestion resulted in the creation of the Great Ocean Road Trust to raise funds for and manage the project, with assistance from the CRB.

Calder's work with the CRB included the upgrade and maintenance of Victoria's arterial rural road network which had been seriously neglected following the construction of the extensive railway network. A report that Calder wrote following a research trip to North America and Europe 'is widely regarded as a classic of road-construction practice and road-administration' (http://adbonline.anu.edu.au/biogs/A070529b.htm). Many of his recommendations for the construction, management and maintenance of roads, such as fuel tax and bituminous roads, are still used today. The Australian Dictionary of Biography notes that Calder's main achievement was the network of state highways in Victoria. The Calder Highway, between Melbourne and Bendigo/Mildura, is named after him (*ibid*).

While Calder's role in mobilising the people behind the construction of the GOR was significant, he is better known for his other engineering and policy achievements in road construction in Victoria and Australia.

Edna Walling (1895 – 1973)
One of the most influential early landscape gardeners in Australia, Edna Walling is recognised for her enormous influence in twentieth century gardening in Australia (Australian Dictionary of Biography). She frequented the GOR from the early 1920s for rejuvenation by the sea. In 1947, when nearby settlements were still small, she built a rustic holiday house, or 'Chalet', (which later burnt down, but of which there are still remains) on a steep plot that she named East Point. It is clear from her writings and photography during and soon after this time, that the environment around the GOR was one of the key factors in her increasing advocacy for the conservation and judicious use of, native plants especially in country gardens, along Australian roadsides and in other public spaces.

The schedule to the Heritage Overlay of the Surf Coast Planning Scheme has listed 'East Point (Edna Walling property)' (ref HO39) at Big Hill, including remnant fabric and archaeological evidence of the Walling cottage, the rock walls, steps, chimney stacks /fireplaces and garden remnants. The site is also listed on the Victorian Heritage Inventory (H7721-0247: 'East Point Edna Walling's Holiday Cottage and Garden').

Walling was landscaper to some prominent figures in Australia at the time, including Dame Nellie Melba, the Murdochs and the Manifolds, and created gardens in Victoria, South Australia, Tasmania, New South Wales and Queensland. Her articles in widely read magazines such as *The Australian Home Beautiful* (1926-46), *Woman's World* and others made her a household name, and led her landscaping, cottage and garden planting designs to become extremely popular. Earlier in her career she had established a village (Bickleigh Vale) at Mooroolbark (now a Melbourne suburb), where she lived and designed picturesque 'English' cottages and gardens. Walling's gardens came to be seen as prestigious, and she capitalised on this popularity by writing prolifically and publishing four successful books: *Gardens in Australia* (1943), *Cottage and Garden in Australia* (1947), *A Gardener's Log*

(1948) and *The Australian Roadside* (1952). *On the Trail of Australian Wildflowers* was posthumously published in 1984, but similarly promoted the conservation and beauty of Australian native plants. She used her publications to expound her views, which then became more widely held around Australia. Highly influential in her day, she became somewhat of a cult figure among gardeners in the decades after her death.

As Walling's biographer Sara Hardy writes, "In years to come, the Great Ocean Road would have a lookout for tourists at the hairpin bend that was beneath East Point, for it was the perfect place to have a panoramic view of coastline and ocean" and "Edna wrote about her experiences of building East Point in a memoir entitled *The Happiest Days Of My Life*" (Hardy 2005:199-204), including the following excerpts:

After many years of searching, I came across some land overlooking the sea, far lovelier than anything I had ever dreamed of…

It is easy to agree with the one who said this is one of the loveliest highways in Australia, running, as it does, alongside beautiful blue gums and ironbarks and past native shrubs that make the drive of particular interest and joy to botanists. Going through Anglesea in the spring time was always a delight, for it is really quite a good place for wild flowers, so good that we decided we should take an English botanist down for the day; and she agreed with alacrity.

"Aren't you going to have a garden?" someone asked me. Apart from needing a respite from gardens, I felt we already had all the garden we wanted. In the spring, the rock ferns were lovely and the outcropping boulders, patterned with lichen a perennial delight. The plants here may be described as belonging to an Ironbark-Blue Gum association and the species that form in the undergrowth of these trees are Varnish Wattle (*Acacia vernicflua*), Dogwood or Tree Everlasting (*Helichrysum ferrugineum*), Sticky-leaved Boobialla (*Myoporum viscosum*), *Goodenia ovata*, Groundsel (*Senecio lautus*), *Helichrysum apiculatum*, Rock Fern (*Cheilanthes tenuifolia*), Native Cranberry (*Astroloma humifusum*), Bulbose Lily (*Bulbose bulbosa*), Scented Groundsel (*Senecio odoratus*), Wild Geranium (*Pelargonium australis*) *Stellaria pungens*, Pennywort (*Hydrocotyle hirta*), Sweet Bursaria (*Bursaria spinosa*), and Golden Everlasting. What more could we wish for in the vicinity!

For a landscape gardener of such repute not to want to create a garden where there were native plants, speaks volumes about how she viewed the beauty of these native plants in their natural environment along the GOR. In her memoir, Walling also describes having assistance from the Melbourne Herbarium in identifying native plant specimens collected along the GOR. Although not the first to experiment with Australian native plants in garden design, and Walling herself already used them in domestic gardens from the 1920s, by the mid 1940s she had developed a particular interest in native plants and actively campaigned to protect them in the wild, especially along Australia's roadsides. In 1951 she published an article entitled 'Plants that border the Great Ocean Road' in the early *Australian Geographical Magazine*. One of Edna's most influential publications in terms of the appreciation of conserving and using native plants in landscaping was *Country Roads* (first published in 1952 as *The Australian Roadside*) which features 15 large plates of the GOR, with evocative prose descriptions such as:

This highway on the coast of Bass Strait, in Victoria, is one of the most beautiful and universally enjoyed memorials in Australia. It passes through varied scenery, through forest

and near the sea, sometimes extending right down to the water, sometimes receding inland for a mile or two. But apart from the scenic beauty of this highway, the plants bordering the roadside are of no small interest.

Originally published in 1948 (just one year after the purchase of East Point), *A Gardener's Log* opens with a section entitled 'Australian plants for gardens' and, whilst claiming not to be 'a fanatic where native plants are concerned', and did not consider them universally appropriate in small suburban gardens, she was all for their suitability 'for many a spot in a country garden, where an exotic is eking out a miserable and most lonely existence because the planter has not realised that some native might not only be happier there but would present a much more restful and pleasing effect'. She describes the native shrub *Calytrix sullivanii* (Fringe Myrtle) as 'positively inebriating!' and goes on to write:
It is really bewildering to think how plants of such great beauty are so comparatively little known and so seldom propagated. Great sheets of them should be in our public gardens and on our highways.

English-born and raised, Walling's earlier garden designs were very much in the English style, and such views advocating for native plants demonstrate a significant change in how she viewed Australian native plants. The change was probably rather gradual but culminated in a greater awareness and passion than before around the time of her purchase of East Point and increased frequency of being in the GOR area. It is clear that the environment around the GOR was a source of rejuvenation and inspiration for Walling. She shared this enthusiasm and experience with the wider public through her published writings, photography and open garden events. The State Library of Victoria maintains a number of Walling's photographs in the La Trobe Picture Collection. Elements of her individual landscaping style are still widely emulated and 'Edna Walling gardens' are well-known today as amongst the most refreshing and inspiring in Australia (Dixon & Churchill 1998).

Tim Flannery
Professor Tim Flannery was one of two palaeontologists who first discovered fossils at Dinosaur Cove. Professor Flannery was named Australian of the Year in 2007 for helping millions of Australians better appreciate and understand the environment. Sir David Attenborough described him as being in the league of all-time great explorers such as David Livingstone. Professor Flannery has published several popular books on his field research experiences and other issues. His book, *The Weather Makers*, debuted on the *New York Times* bestseller list and won the 2006 NSW Premier's Book of the Year Award. He is renowned academically for his research into the mammals of Melanesia, publishing several acclaimed books on the subject. In 2007 he joined the Faculty of Science at Macquarie University in Sydney. Among many other affiliations, he is a member of the Australian Academy of Science and of the Wentworth Group of Concerned Scientists, which reports on Australian environmental issues. Although perhaps better known for his recent environmental writings and megafauna research, as well as being Australian of the Year in 2007, Professor Flannery has continued to co-author publications on the polar dinosaur finds.

Although Professor Flannery's involvement in the polar dinosaur discovery at Dinosaur Cove is worthy of recognition, he is now better associated with other areas of research and the association of the Great Ocean Road and Scenic Environs with his work is not sufficient to reach threshold under this criterion.

Michael Archer

Professor Michael (Mike) Archer is a palaeontologist specialising in Australian vertebrates. Together with (now) Professor Tim Flannery, Professor Archer made the first fossil discovery at Dinosaur Cove. He is now perhaps best known for his work at the Riversleigh fossil mammal site in Queensland, part of the World Heritage listed Australian Fossil Mammal Sites, which has yielded the remains of more than 200 previously unknown species of vertebrates from the limestone. Like Flannery, Archer is often cited in Australian media. While Director of the Australian Museum, he initiated attempts to clone the Tasmanian Tiger (*Thylacinus cynocephalus*) which is believed to have been extinct since 1936. Archer was Dean of Science at the University of New South Wales (UNSW) for five years until 2009 and is now Professor of the School of Biological, Earth and Environmental Sciences at UNSW. It is unknown how significant his early discoveries were in stimulating his career as an eminent palaeontologist, but it is probable that they provided stimulus to his career.

As with Professor Flannery, although Professior Archer's involvement in the polar dinosaur discovery at Dinosaur Cove is worthy of recognition, he is now better associated with other areas of research and the association of the Great Ocean Road and Scenic Environs with his work is not sufficient to reach threshold under this criterion.

Patricia Vickers-Rich and Thomas Hewitt Rich

Professor Patricia (Pat) Vickers-Rich and Dr Thomas (Tom) Hewitt Rich led fossil research at Dinosaur Cove for a decade from 1984, with the help of Earthwatch and other volunteers, the National Geographic Society, the Australian Research Council and Atlas Copco. Since excavation ceased at the Dinosaur Cove site, excavations have focussed on the Flat Rocks site near Inverloch. However, analysis of the Dinosaur Cove finds continues, led by the Richs. Dr Rich was there when Flannery and Archer discovered the first fossil at Dinosaur Cove; Dr Rich named the site in a pencil entry in his notebook, and this subsequently became the official name for the site. The two palaeontologists collaborate on the study of fossils and their names are synonymous with the finds from the Dinosaur Cove site. They continue to publish on the subject. Professor Vickers-Rich holds a personal chair in palaeontology at Monash University and is interested in reconstructing ancient environments. Dr Rich is curator of vertebrate palaeontology at Museum Victoria.

One of the current experts in interpreting the Bells Beach whale fossils, Dr Erich Fitzgerald, gave the following affirmation on the nomination for Dr Rich and Professor Vickers-Rich for the 2007 Selwyn Medal:

I first met Tom Rich when I was nine years old, during a National Museum of Victoria (now Museum Victoria) 'open day'. Against the backdrop of a throng of children running amok that day in the palaeontology collection, recounting the number of dinosaur names they knew by heart, Tom Rich took the time to talk with me about fossil mammals and fossil hunting. To a nine-year old fossil and natural history enthusiast, Tom and Pat Rich were legends, the couple who opened the world's eyes to Australia's wonderful palaeontological record and what it could tell us about the evolution of life, our planet and humankind itself. Their contributions to Victorian, Australian, indeed international, geology, palaeontology and evolutionary biology represent a lasting foundation on which all future work in this part of the world must surely start from. All those years ago, Tom and Pat Rich seemed to me equal with the great figures of renown in the annals of palaeontology. Now, that view remains the same.

Although the involvement of Professior Vickers-Rich and Dr Rich in the excavations of the cretaceous sites is worthy of recognition, the association of the Great Ocean Road and Scenic Environs with their work is not sufficient to reach threshold under this criterion.

First World War Returned Servicemen

Following the return of thousands of diggers from the First World War, the Australian government faced the difficulty of re-skilling and employing the servicemen. The GOR was constructed primarily as a make-work program for returned servicemen to enable them to "think over the proposals for their repatriation".

In 1934 when the road required metalling and widening, 400 returned servicemen participated in the work, completing the road surfacing from Geelong to Warrnambool. The road was conceived as a lasting war memorial to the servicemen who fought in the First World War. It is the largest war memorial in Australia, and arguably the largest and most spectacular in the world (Australian Broadcasting Corporation 2009, *Moments in Time: Great Ocean Road*, 14/8/09).

The original section of the GOR from Torquay to Apollo Bay was built by returned servicemen over the 13 year period from 1919 to 1932, and it is a unique war memorial. More than 3,000 returned servicemen were employed in the repatriation program, labouring on surveying the track, blasting and carting rock, chiselling of the steep hillsides, and levelling of the roadway. The Apollo Bay Historical Society is undertaking research to identify the men who were involved in the program. The records of the Great Ocean Road Trust were destroyed during the 1940s, and consequently finding information on the workers involved is proving difficult.

W.T.B. McCormack and Howard Hitchcock were the project champions without whom the works may never have been completed; their roles were well recognised and valued at the time of construction, and have continued to be honoured by lasting memorials and tributes. The returned servicemen involved in the construction were valued by the local, regional and greater Victorian community at the time for their contribution to opening up this part of the coast, demonstrated by the large sum of donations made towards the works. Their role in the construction of the memorial road was recognised by the Victorian community during the 75th anniversary ceremony in 2007.

Due to these outstanding contributions, the GOR is the largest war memorial constructed in Australia, possibly the world, and its scenic setting makes it one of the most spectacular in the world. Accordingly, the the Great Ocean Road and Scenic Environs has a special association with the works of the more than 3,000 returned servicement involved in its construction that is of outstanding heritage value to the nation.

The Great Ocean Road and Scenic Environs has outstanding value to the nation against criterion (h) for its special association with surveyor and engineer W.T.B. McCormack, businessman and civic leader Howard Hitchcock, for its influence on landscape garden designer Edna Walling who in turn influenced others to conserve native plants, and for its special association with the work of the more than 3,000 returned servicemen who constructed the road.

Criterion (i)
The place has outstanding heritage value to the nation because of the importance as part of Indigenous traditions;

The nominator made no claim against *criterion (i)* but Indigenous heritage values have been assessed against this criterion.

Indigenous
There is a lack of published information regarding Aboriginal oral histories and local knowledge relating to the formation of prominent natural features of the region; broader social values; and the significance of the heritage values. Due to this limitation, there is insufficient information to determine whether the views of Aboriginal people meet the threshold requirements for outstanding value to the nation under *criterion (i).*

The Great Ocean Road and Scenic Environs does not meet the threshold as a place important as part of Indigenous tradition that is of outstanding value to the nation under criterion (i).

History:
Indigenous History
The coastal zone of western Victoria in the vicinity of the GOR encompasses the traditional country of a number of Aboriginal people, including: the Wathaurung people of the Geelong area; the Gulidjan whose land extends from the Gellibrand River to Colac and the lakes and wetlands beyond; the Gadubanud (Katubanut) whose land extends east of the Gellibrand River and centres around the Otway Ranges; the Girai Wurrung (Kirrae Wurrung), west of the Gellibrand River to Warrnambool; and the Wada Wurrung (Watha Wurrung), north of Painkalac Creek (Clark 1990; Goulding 2006a; Victorian Environmental Assessment Council 2004; Parks Victoria & DSE 2008). This area continues to be of economic, spiritual and cultural importance to these Aboriginal communities (Freslov 1998).

The earliest evidence of Aboriginal occupation is dated to the mid to late Holocene, approximately 5 000 years ago (Goulding 2006a). Aboriginal groups exploited the resource rich areas on the coastal margins and wetlands, moving seasonally between the coast and the productive basalt plains of the hinterland (Goulding 2006a; Parks Victoria 1999). Coastal resources were central to Aboriginal economies in western Victoria and some sites demonstrate an increasing trend towards intensified exploitation of marine resources, higher population densities and social change during the late Holocene (Cane 1998).

Indigenous Contact History
One of the earliest Europeans to encounter Aboriginal people in the area was William Buckley who escaped from the Sorrento settlement in December 1803 and lived with the Wada Wurrung Balug people for over thirty years (Clark 1990; Goulding 2006a). In the

account of his adventures, Buckley notes that his first permanent resting place was at Nooraki (Mount Defiance) where he constructed a shelter and stayed for several months (Morgan & Flannery 2002: 26). The Wada Wurrung Balug accepted Buckley as one of their own and he was given a wife to whom he had a daughter (Clark 1990; Tipping 1966). In 1835, after spending 32 years living in a hut near the mouth of Bream Creek, William Buckley surrendered himself to a visiting party of European settlers and received a pardon from Lieutenant-Governor George Arthur (Tipping 1966; Morgan 1852).

Aboriginal people played an important role in opening up the region for Europeans. In the Otway Ranges Aboriginal people acted as guides and translators (Parks Victoria and DSE 2008). However, conflict was commonplace between European settlers and Aboriginal people in the Western District. In 1839 the Wesleyan Methodist Missionary Society established Bunting Dale mission on the Barwon River, one of the first mission stations to operate in Victoria. The location of the mission at the intersection of three tribal boundaries was associated with conflict between Aboriginal groups and was the primary reason for its closure just 12 years later (Niewójt 2006).

There was continuing violent interactions between European settlers and Aboriginal people including the Aire River massacre of 1846 (Clark 1995). As a result of a number of massacres the Board for the Protection of Aborigines petitioned to establish further reserves and stations for the protection of Aboriginal people (Goulding 2006b). These included the Framlingham Mission (1865-1916) on Girai Wurrung land near Warrnambool. When the mission was closed many people were moved to the Lake Tyers Mission in Gippsland. While some stayed on at Framlingham Reserve there was no government support and people survived on limited rations and good-will (Goulding 2006b; Clark 1990; ABC n.d.). In 1971 the Aboriginal community were given ownership of the land at Framlingham (Goulding 2006b; Clarke 1990:18; VAEA & ABS nd).

Shipping and shipwrecks

Bass Strait off the southern coast of Victoria was the primary shipping route between Europe and the Australian colonies during the nineteenth century. Sailing ships were said to be 'threading the eye of the needle' when entering the treacherous strait, with its narrow gap and the small islands scattered between Cape Otway and Tasmania.

Nearly 800 ships are believed to have wrecked off the coast of Victoria and only 40% have been located. The treacherous west coast is home to more than 100 shipwrecks, and these events in the region between Peterborough to Moonlight Head, including Port Campbell National Park, have caused it to be labelled the Shipwreck Coast. The tales of 45 of these wrecks are told in the Historic Shipwreck Trail that runs from Moonlight Head to the South Australian border.

There was a great loss of life particularly from the *Loch Ard* with only two survivors of the 54 passengers and crew. The coastal steamer *Casino* sank in 1932 at Apollo Bay and the first US marine casualty of World War II, the merchant navy vessel *City of Rayville* struck a German mine in Bass Strait on 8 November 1940 and sank off Cape Otway.

Shipwrecks in isolated communities were seen as beneficial to the local economy for the commercial goods that became available and later for tourists attracted by the romance of the stories (Fielding 2003). A 1908 photograph by Allan C. Green of the wreck of the *Falls of*

Halladale near Peterborough shows picnickers by the cliff, watching the ship meet its inevitable fate.

The wrecking of the *Loch Ard* is particularly famous and is locally significant for the associated cemetery near Loch Ard Gorge, and for the association with nearby Glenample Homestead. Also famous are the hundreds of artefacts that were recovered during early salvage operations at the wreck site, such as the magnificent Minton ceramic *Loch Ard* Peacock, and during SCUBA diving activities almost 100 years later. Many of these artefacts are on display at the Port Campbell Visitor Information Centre and at Flagstaff Hill Maritime Village.

The tragic wrecking of the *Cataraqui* (Australia's worst peace-time civilian shipwreck) in 1844 was the catalyst behind the construction of the Cape Otway Lighthouse. The lighthouse has operated continuously since 1848 and is the oldest surviving original lighthouse on mainland Australia, and Australia's third oldest lighthouse (after Tasmania's Iron Pot Lighthouse, built in 1832, and Macquarie Lighthouse in NSW, which was rebuilt in 1883). Cape Otway Lighthouse is located within the Great Otway National Park, and is included in the Victorian Heritage Register (H1222) and the Register of the National Estate (Place ID 3690).

The most long-standing maritime story associated with the area is the Mahogany Ship – the remains of a ship built of dark timber that has been suggested to be mahogany, possibly of early Portuguese, Spanish, Dutch or Chinese origin, wrecked near Warrnambool. Sightings of the wreck were recorded in 1836 and during the 1880s, encouraging history buffs and academics to search for the location of the wreck since it was first reported. It is most likely that the wreck was an early nineteenth century American whaling vessel, but its location has not been discovered.

Post-Contact Settlement History

Dr George Bass set out to determine if there was a strait between New South Wales and Van Diemen's Land in 1797. In 1798 he travelled with Captain Matthew Flinders on the *Norfolk* to prove it was a navigable passage. It was subsequently named Bass Straight (Australian Dictionary of Biography).

As commander of the survey vessel *Lady Nelson* in 1800, Captain James Grant was assigned the task of passing through Bass Straight (Australian Dictionary of Biography Online). Grant charted various landmarks during his subsequent assignment to survey the area in 1801, and named Cape Otway after British naval captain Sir Albany Otway. Cape Marengo, near Apollo Bay, was named by French explorer Nicolas Baudin when he passed through Bass Strait aboard *Le Géographe* on his voyage of scientific discovery in 1802 (Anderson & Cahir 2003).

Sealers and whalers are known to have been active on this part of the Australian coastline since the early nineteenth century, but apart from whale carcasses little evidence of their visits was left behind (Anderson & Cahir 2003).

In the 1820s and 1830s the coast was visited by whalers and sealers from Tasmania, with sealer William Dutton establishing a whaling station at Portland in 1829, and the Hentys following in 1834 to establish a pastoral settlement – they also set up a whaling station and a

boat building yard just east of Portland (near the current town of Allestree). Other whalers sought shelter in the area of Apollo Bay around the same period (Anderson & Cahir 2003). A wave of exploration and settlement spread down the south-west coast of Victoria following the founding of Melbourne in 1835 and the subsequent settlement of Geelong.

In the mid-1840s several attempts to travel overland to Cape Otway were made, with little success. In 1846, Assistant Surveyor George Smythe mapped the rugged section between Cape Otway and Urquhart Bluff and William Urquhart surveyed the region back towards Geelong, setting boundaries for the County of Grant.

From the 1840s, pastoralists took up large runs behind the Otway Ranges, and timbercutters settled around Louttit Bay (later to become Lorne) and Apollo Bay (formerly Middleton) in the 1850s. Difficulties with transportation saw settlement decline after 1864, but when tracts of forest were made available for selection in 1869, 1884 and 1890 settlers began returning to the region.

Fishermen began earning their living from the bountiful ocean waters and settlements commenced at Aireys Inlet, Anglesea, Eastern View, Fairhaven, Bellbrae, Lorne and Apollo Bay.

Glenample Homestead, established in 1869 by pioneer Hugh Gibson and located adjacent to the Twelve Apostles was an early pastoral settlement and Gibson and his family were involved in the rescue and recuperation of the survivors of the *Loch Ard* shipwreck (Parks Victoria 2009; Crocker and Davies 2005 Vol 3:20). The homestead is within the bounds of the Port Campbell National Park, and is listed on the Victorian Heritage Register (H0392, Victorian Heritage Database) and the Register of the National Estate (place ID 3696).

Great Ocean Road History

The 1850s timber harvesting around Louttit Bay and Apollo Bay initially relied upon the sea for transport of goods in and out of the settlements. The small coastal settlements were isolated due to the continuing difficulty accessing them by road, so shipping companies including the Belfast and Koroit Steam Navigation Co and the Western Steam Navigation Company were integral to their survival. The companies ran small coastal traders like the SS *Champion* and SS *Julia Percy* as the region's primary form of passenger and cargo transport.

Even after the construction of the GOR with its dangerous and slow course, Victoria's western district townships continued to rely upon coastal vessels such as the SS *Casino*, its short-lived replacement the SS *Coramba,* and later the SS *Wannon* well into the middle of the twentieth century.

By 1859 a telegraph line had been established between Geelong and the Cape Otway Lighthouse, following the coast (Cecil & Carr 1988). A bridle track followed the same route, connecting Lorne (Louttit Bay) and Apollo Bay, and was upgraded to "a track" status in 1872. This was the primary inland access route for the isolated towns on the Otway coast. An account of the state of this track in 1874 by the mining engineer R.A.F. Murray, described the remoteness of the coast, the dangers to vessels and the poor condition of the path (Alsop 1982).

During the 1870s, the resorts at Lorne and Apollo Bay were developed and mostly serviced

by sea transport although a rough track was developed between Apollo Bay and Cape Otway and Johanna.

Anderson and Cahir quote *The Argus* in 1891 when the *WB Godfrey* wrecked east of Lorne to illustrate the inaccessibility of the region:
"The route for horsemen lies over precipitous ranges, where the tracks are few and almost indistinguishable, and where the methods of equine locomotion resolve themselves into a succession of slides and scrambles" (Anderson & Cahir 2003:10).

In 1908 a Lorne resident, E.H. Lascelles, founder of a Geelong wool firm, suggested opening of a coastal road to the seascapes and ocean views but it was eight years before discussions commenced between the State War Council and the CRB in 1916, to find road projects which could provide employment for returned servicemen (Alsop 1982). One of the road projects suggested by William Calder, Chairman of the board, was the South Coast Road which he described as being 'somewhat along the lines of the Coast Road constructed by the Highway Commission of California, which has proved such an enormous asset to the State of California by the attraction of tourists from all parts of America'. Calder further noted that 'along the whole route the scenery is magnificent and extremely varied and that it would be a fine asset to this State by attracting tourists from all parts of Australia' (*ibid*:8-9).

After these deliberations, the *Great Ocean Road Scheme* was proposed in 1917 and formally launched at Colac on 22 March 1918 (Cecil & Carr 1988:71). It was anticipated that the road would cost £150,000, and Calder had previous stated that the CRB had £100,000 per year available for maintenance on roads (Alsop 1982:8).

The road was to start at Barwon Heads following the coast through Torquay to Apollo Bay, then inland through the Otway Ranges to Princetown, then again along the coast to Peterborough. At Nirranda it would join an existing road to Warrnambool. Initial surveys for the route of the road took place in 1918, and construction officially commenced in 1919.

Howard Hitchcock, Geelong Mayor and businessman publicly advocated Calder's proposal for the 'modern coastal highway' on the basis that apart from providing work for returned servicemen, opening up the area for timber getting, and providing a means for getting produce to market, it would be a memorial to the fallen and surviving servicemen who had fought in the war. Hitchcock anticipated that the Australian Government would have difficulty re-skilling and providing employment for the returned servicemen, and vigorously pursued the opportunity to turn the construction of the GOR into a repatriation works program. The GOR was the combined vision of Calder, Hitchcock and McCormack, and Hitchcock was made the inaugural President of the Great Ocean Road Trust in 1918 (Rowe 2002).

Although there were some existing sections of road linking towns on the west coast, the majority of the GOR was constructed between 1919 and 1932. The new sections were Anglesea to Big Hill; Lorne to Apollo Bay; Apollo Bay to Glen Aire; Lower Gellibrand to Princetown; and Port Campbell to Nirranda. More than 3,000 returned servicemen laboured on surveying the track and blasting and carting rock. They used picks and shovels to chisel the steep hillsides and level the roadway, and stayed in numerous camps along the road from Eastern View to Hordern Vale, always nearby a source of fresh water. Camps were established at Grassy Creek, Big Hill and Wye River early in the works, and some were still occupied by 1933. Some camps accommodated around 100 men, while others, such as one by

the St George River, had only 20 men in 1933.

Information regarding the length of occupation of each of the camps along the GOR has not been located, but historical evidence suggests that some may have been occupied from 1920 until at least 1933.

Wooden mess huts, galvanised drying rooms and kitchens were established at the sites (*The Argus* 26/11/1932). The camps were serviced by vegetable plots and cooks and there are records of pianos being supplied for entertainment (Fagetter 2000). Food was provided at cost, and some workers recalled that fish and rabbits supplemented the rations (Grant, pers. comm. 26/8/09).

Research by Apollo Bay and District Historical Society (Stuckey, pers. comm., 29/11/09) indicates that camps were located at Eastern View, Stony Creek (Lorne), Grassy Creek, Big Hill Creek, Sheoak River, St Georges River, Cumberland River, Cape Patton (Ramsden Farm), Wye River, Kennett River, Skenes Creek, Glen Aire, Lavers Hill and Hordern Vale. Images of some of the camps are held by the State Library of Victoria, and some documentation may exist in the records of the CRB and in private collections.

Approximately half of the camps were related directly to works run by the CRB, and the others to works run by the Great Ocean Road Trust, depending on the section of road the workers were constructing. While some of the camps may be located in areas that have been impacted by later developments, such as the camp site at Cumberland River, others are likely to be relatively undisturbed due to their remote locations and dense vegetation.

The Great Ocean Road Trust paid for a significant component of the works, anticipating they would cost £150,000 (equivalent to an astounding $10 million in today's currency). Through the CRB and the Repatriation Department, the state and federal governments provided assistance to the Great Ocean Road Trust; despite these affiliations, the Trust relied heavily on fundraising activities, the generous donations of private individuals and sales of adjacent land to acquire sufficient funds for the works.

The GOR was originally a private road with a tollway, and tolls were collected at Cathedral Rock, Grassy Creek and Point Castries (Mary Sheehan & Associates 2003: 38). The original 1922 toll gate at Grassy Creek was relocated in 1926 to The Springs, 1 km on the Lorne side of Cathedral Rock. A toll was also collected from 1924 near Aireys Inlet for traffic passing through land owned by Mr Lane. From 1922 to 1936 the GOR operated on a toll way basis. The toll system ended when control of the Road was handed from the Trust to the CRB (Victorian government) on 2 October 1936; it was declared a Tourist Road and gazetted as 'Ocean Road' in December of the same year. It was not until 1972 that it was re-gazetted as the 'GOR', although it had been referred to by this name during its construction.

During 1954, 1971, 1979 and 1985, torrential rains, flooding with subsequent rock slides caused closures of the road. A major rock slide at Windy Point (eight kilometres from Lorne) in 1971 threatened to send thousands of tons of rock onto the road. The CRB closed the road for five months while they installed 55 rock anchors to stabilise the cliff face.

Major works of realignment and widening and replacement of timber bridges by concrete bridges have been carried out and finally in 1987 the sealing of the road to Peterborough was completed.

Memorials
Australian war memorials in towns and cities take the form of public sculptures, shrines, memorial walls and gates, honour rolls, avenues of honour, gardens, buildings and even swimming pools. The Australian War Memorial notes they may be in the form of the "ubiquitous 'small town memorial' to the large-scale monuments of national significance" (http://www.awm.gov.au/exhibitions/shapingmemory/memorials.asp).

When the *Great Ocean Road Scheme* was developed, first and foremost the road itself was to be a memorial to 'fallen soldiers and soldiers from Victoria who had fought in the war' (Alsop 1982:10).

There are a number of associated memorials as well as the four memorial arches over the road. The original arch at "The Springs" toll gate said "Returned Soldiers and Sailors Memorial Great Ocean Road". It was demolished when the toll was abandoned. Later The Arch was erected at Eastern View in 1939 as a memorial, and dedicated "To the memory of Major W T B McCormack, M. Inst. C.E., honorary engineer to The Great Ocean Road Trust and Chairman of the CRB". It was accidentally destroyed by a truck in 1970 and a new larger arch built on the same spot. It was destroyed on 16 February 1983 in the Ash Wednesday bush fires when the coastal area between Lorne and Anglesea was devastated. The five bronze plaques on the seaward pillar of the fourth arch tell the story.

Fagetter (2000:2) noted that the public affection for this icon is so strong that when it was suggested that the arch might not be replaced there was a public outcry. Local myth tells of two more major disturbances, one when it was vandalised shortly after the first arch was built, and later when a truck took the top off in 1984.

Most travellers read The Arch itself as marking the beginning of the special scenic stretch of the road. Surf Coast Shire has installed an explanatory sign on the site relating to the bronze plaques, and a new bronze statue was unveiled in 2007 for the 75th anniversary of the opening of the road. The sculpture is situated on the coastal side of the road adjacent to The Arch.

A memorial wall and memorial tablets were unveiled in 1935 at the Mount Defiance section of the road, honouring the contribution to the success of the project of the Great Ocean Road Trust's founding president, Howard Hitchcock, and the servicemen who served in the First World War.

The GOR is the largest war memorial in Australia. The servicemen involved in its construction were themselves reported to have been very proud to be involved in creating the memorial to Australians who fought in the First World War.

Engineering
The GOR was one of several government and community partnerships common in early road building in Victoria; the CRB undertook the work on behalf of the Great Ocean Road Trust, and workers were supplied, supervised and part-funded by the Repatriation Department (Fagetter 2000).

The GOR was a newly-designed tourist route constructed on a winding course hugging the west coast of Victoria. It was conceived by the Chair of the CRB, renowned Australian engineer and surveyor William Calder, and the honorary engineer was Major W.B.T. McCormack. The GOR was arguably McCormack's greatest achievement, and he is honoured for his contribution through a memorial plaque at Eastern View. Although McCormack oversaw the project, the majority of the day to day supervision and design was undertaken by Arthur E. Callaway, Chief Engineer of the CRB, with a team of construction engineers and surveyors (Alsop 1982:13). The project cost some £150,000 and was primarily funded through private donations and fundraising by the Great Ocean Road Trust, with little financial assistance from the government. It took 13 years to survey and complete, using a labour force of more than 3,000 returned servicemen who required a 'chit' (letter/note) from the Repatriation Department to be eligible for the work, and in later years, Depression sustenance workers.

The works were undertaken with hand tools, explosives, wheelbarrows and horses dragging scoops. Men were lowered down the cliff attached to ropes secured at the other end to trees to enable charges to be set. West coast local resident Doug Sterling recalls:
It was very, very dangerous work. Unfortunately, a lot of the people who were working here were shell-shocked, and when they had the blasting going on it really upset them (http://australianetwork.com/nexus/stories/s2037919.htm).

The servicemen were paid 10 shilling and sixpence per day, approximately equivalent to the average Australian wage in 1920 (http://www.ausstats.abs.gov.au/ausstats/free.nsf/0/F2E83690C3E0ADB1CA2573CC0017A8B5/$File/13010_1901_1919%20section%2033.pdf). This was four shillings and sixpence more than their pay whilst in service. This earned them the title in some circles of 'six bob-a-day tourists' (Iain Grant, pers. comm. 26/8/09).

Grant's research has indicated that some men only worked part time, and others were assigned to the GOR for a few months before making way for someone else. The contemporary newspaper accounts gave positive reports of the works, describing the construction environment as beneficial for the recuperation of the returned servicemen.

However research by Alsop indicates that in the early years of the project the workers were not pleased with the conditions of their employment (1982). Some did not find the climate agreeable; others disliked the rough camping conditions and were disgruntled with the low wages, which were sometimes delivered late. In February 1920 the works were suspended, and the men were blamed for poor quality workmanship and claimed to be inexperienced. ,Works recommenced in April 1920 and the slow progress continued.

In 1922, when the first section of the new road from Eastern View to Lorne was officially opened, some accounts of the opening were not glowing. One particular correspondent from *The Age* is quoted by Alsop (1982:31-36), and it is clear that the reporter was unimpressed by the work. 'Clouds of fine grit' were tossed up by the wheels of the vehicles, 'blackening the faces of the motorists'. He goes on to say that the roadway was merely a sandy track that dodged through the stunted trees and scrub and 'through a formidable set of abrupt hills'. He feared the 'war chant' of the Southern Ocean flinging waves onto the rocks 100 feet below the motor car 'which crawled around the side of the cliff like a nervous insect'. Here, he says, lies the weakness of the GOR. The track is too narrow for vehicles to pass, and the road is only formed, not metalled, and the heavy rain could cause the cliffs to slip onto it.

Before the road was metalled in 1934, many others considered it a fair-weather track, with heavy rain making the route impassable. Periods of torrential rains caused a number of other rock slides and road closures in the latter half of the twentieth century.

Planning History

The Great Ocean Road Trust had encouraged development in the forested areas but in the post Second World War period, with increasing car ownership, the central authorities began to fear that the GOR could end up destroying the attractiveness of the very thing it was designed to give access to - the magnificent scenery. This threat particularly attracted the interest of the Town and Country Planning Board (TCPB), which had been established in 1946 under the *Town and Country Planning Act 1944* (Mosley 1997:25-28).

Prior to Federation, the colonial governors were directed to reserve coastal lands for public purposes and at Federation the former colonies retained many of their original powers, including overall management of the coastal zone. From as early as the 1930s many seaside locations were protected to enable increasing numbers of tourists and residents access for recreational and leisure activities. This has resulted in diverse administrative systems for coastal management (Gorlay 2000).

Town and urban planning has been practiced in Australia since the early nineteenth century (City Futures 2007:19); the urban planning movement underwent reform in the 1920s and 1930s, moving towards a legislative basis and enabling ideals to be translated into practice (Hutchings 1999:78).

The 1955 *Ocean Road Planning Scheme* went beyond the bounds of the coastal lands by including the regional rural environment. The purpose of this protective planning regime was to ensure the preservation of the scenic beauty of the Ocean Road area. The TCPB recommended that it produce and administer an *Ocean Road Planning Scheme* that was agreed by the shires (South Barwon, Barrabool, Winchelsea and Otway) and brought under the control of an Interim Development Order (IDO) in March 1952 with the purpose of ensuring the preservation of the scenic beauty of the Ocean Road area. It received the approval of the Governor in Council on 15th April, 1958 (Mosley 1997). The TCPB had overall development control while the municipalities were responsible for enforcing the scheme in their municipalities.

The Board's 8th report for 1952/53 referred to the *unequalled scenery* and stated that *by the planning scheme an endeavour will be made to preserve this natural asset in the interests of the general community for all time.* The aim was to concentrate development at the existing centres and preserve the scenic attractions of the intervening areas by preventing speculative sub-division (Mosley 1997:26), thus preserving the scenery.

This was an innovative approach to protection of the environment which was previously achieved through the creation of parks and reserves. The parks and reserves system would have been seen as prohibitive to development; rather than preventing development in the region entirely, the plan aimed to control development to ensure it was contained and sensitive to the scenic environment. The basic objectives of the scheme have continued to be pursued in planning in the GOR region to the present day.

Between 1975 and 1984 as a result of restructuring of state planning at the central government level and new thinking about the organisation of regional planning, the *Ocean Road Planning Scheme* was replaced by a variety of other plans. This included statutory planning schemes for the several Shires and, in the case of the eastern sector of the GOR region, by the Geelong Regional Plan. The objectives and basic measures of the *Ocean Road Planning Scheme* were translated into the new plans including for the western sector of the region (beyond Marengo), where the *Ocean Road Planning Scheme* had previously not applied. The history of these changes is summarised by Mosley (1997).

The planning schemes of the shires paid special attention to the rural environs of the GOR and endeavours were made to adopt a uniform and coordinated approach. At the same time there was a move to develop policies (at the state and national level) which would provide a higher level of protection for the coast as a whole.

In Victoria a Statement of Planning Policy for Coastal Environments was produced in 1977. This paved the way for the *Victorian Coastal Strategy* (1997 and 2002). The latter provided for the establishment of Regional Coastal Boards and the production of Coastal Action Plans by the Boards. The Western Region Coastal Board has produced two Action Plans for the nominated place: most of the coast of the nominated place is covered by the *Central West Regional Coastal Action Plan* (2002), and the coast west of Moonlight Head is covered by the *South West Regional Coastal Action Plan* (2002). In a parallel move the Country Victoria Tourism Council developed the *Great Ocean Road Tourism Development Plan* (1996 and 2002) which stresses the importance of strategic planning policies and controls to conserve the area's scenic values.

The state government's response to the requests of the shires and the conservation groups for a coordinated approach to planning of the region and for a high standard of amenity protection was the development of a land use and transport strategy for the region (see *Great Ocean Road Region Towards a Vision for the Future* 2004).

The main measures for the protection of privately owned rural areas are zoning and protective overlays and by setting minimum subdivision levels (40 or 60 hectares). The two main zoning categories used for this purpose are 'Environmental Rural' and 'Rural'. These are supplemented by significant landscape overlays, which cover private and public land. The *Surf Coast Planning Scheme* contains a Coastal Development Policy for the GOR and coastal environs which aims to 'protect and enhance the environmental qualities and scenic landscape values of the Great Ocean Road and coastal environs' (2004:1). The *Colac Otway Planning Scheme* includes strategic directions covering the protection of character of the Otway Coast. Similar strategic directions for the protection of the rural environs of the GOR including protection of the landscapes and the prevention of linear development are included in the *Corangamite Planning Scheme*.

Public consultations concerning the development of the 2004 land use and transport strategy noted that the public, including visitors to the region, see the rural environments which developed as farming areas in the nineteenth century as integral to the scenic attractiveness of the GOR region. There are specific parts of the rural environs such as the landscapes around public viewing points and places of high importance for wildlife and biodiversity, such as wetlands, which are of special importance, but the values fundamentally relate to the spacious rural character of the area and are of a 'broad acre' nature.

Recent developments affecting the protection of the GOR include the *Victorian Coastal Strategy* (1997 and 2002), the *Great Ocean Road Region Landscape Assessment Study* (Planisphere 2003) and the land use and transport strategy for the Great Ocean Road Region (2004). These recommended greater reliance on access from the Princes Highway rather than further development of the GOR. Effect was given to the recommendations by amendments to the State Planning Policy section of the *Victoria Planning Provisions* and by government funding for the north-south feeder roads.

Planning and management of the immediate environs of the road is the responsibility of a number of municipal and state government authorities.

The Great Ocean Road Coast Committee Inc was appointed in August 2004 from an amalgamation of five separate Foreshore Committees of Management for Torquay, Anglesea, Aireys Inlet, Fairhaven and Lorne, and works in close partnership with Surf Coast Shire. It is a Crown Lands Committee of Management established under the *Crown Land (Reserves Act) 1978* and has broad powers to manage the coast land reserved for public purposes on behalf of the Crown.

Tourism

The spectacular natural scenery of the GOR was the catalyst for development of the road for tourism. The new road aimed to open the region for tourism and connect the isolated coastal towns of Torquay, Anglesea, Lorne and Apollo Bay. Its secondary but vital purpose was to provide a land transport link, with goods transportation at the time still relying heavily on coastal steamers. In 1919 the Great Ocean Road Trust claimed that the educational value of enabling access to the 'magnificent scenery' would promote the economic possibilities of the region, and the associated tourist traffic would be worth £1,000,000/year to the Victorian economy (*The Argus*, 5 March 1919). Very early in the works program members of the Trust recognised the tourism potential in the 'grandeur of the scenery', and throughout the construction they showed 'panorama' images in Melbourne and Geelong cinemas to generate public interest in the region.

The completion of the road coincided with the age of popular motor touring and photography. The Grand Pacific Hotel and Pier was established in Lorne and opened in 1879. It was known as the "Queen of the Watering Places". It set a high standard and encouraged the established of numerous boarding houses offering hospitality for the tourist (Cecil & Carr 1988: 24). Managing Director, and later Chairman of the Great Ocean Road Trust, Charles Richard Herschell, was a documentary film pioneer, and his 'Rose Series' of promotional postcards featured many images of the GOR.

At the official opening of the GOR in November 1932, Lieutenant Governor Sir William Irvine optimistically declared that upon opening the road, 'it may be the key that will unlock to thousands the majesty of our rock-bound coast' (*The Argus*, 28 November 1932). *The Argus* reporter covering the opening recognised the cultural tourism potential of the road, highlighting 'things old and new', such as the littering of 'wrecks…which foundered among the rocky cliffs and headlands' and the 1848 Otway lighthouse (*The Argus*, 26 November 1932). Almost 80 years since the official opening, the vision of thousands of tourists flocking to the region was a success probably beyond the expectations of Hitchcock, Irvine and the numerous others involved.

Recently, the GOR has established itself as a highlight of tourism brochures and travel publications marketing the Victorian region to tourists, as well as being honoured as a National Landscape by Tourism Australian in 2008. There is extensive tourist interpretation along the length of the GOR, with branding associating the road with the story of shipwrecks along the coast.

The most recent addition to the tourism experience in the region is the Great Ocean Walk, which officially opened in December 2005, shortly after the merging of a number of local parks into the Great Otway National Park (GONP). The walk starts at Apollo Bay and heads west for 104 kilometres, winding through the GONP and along the cliff tops and beaches to Glenample Homestead. It can also be undertaken in segments or as day hikes. An additional $1.3m was allocated in 2009 to extend the trail to the Twelve Apostles and for other infrastructure upgrades (Tourism Victoria Feb 2009). The Great Ocean Walk takes in many remote parts of the rocky coastline that are not accessible by vehicle and also passes many of the key lookout points.

Along with the spectacular scenery, surfing and shipwrecks are intrinsic tourist drawcards to the region, enhancing the visitor experience, with surfing accounting for a large number of the day-trip visitors. Flagstaff Hill Maritime Village at Warrnambool interprets the maritime heritage of the Shipwreck Coast, and draws 50,000 – 80,000 visitors annually (P Abbott, pers. comm. 4/4/09).

National Parks and Conservation Reserves

Port Campbell National Park was proclaimed in 1964, with a minor extension added later. The area had been reserved late in the nineteenth century because of its scenic attractions. The Bay of Islands Coastal Park was created from the original coastal reserve set aside in the early 1870s "for the protection of the coastline", and permanently reserved in 1982 and 1984. It was proclaimed the Bay of Islands Coastal Park in 1997.

Since proclamation, the parks have attracted rapidly increasing numbers of visitors, drawn to the area largely because of the spectacular coastal landscapes. The Twelve Apostles Marine National Park and The Arches Marine Sanctuary were proclaimed in November 2002 as part of a new series (the first in Australia) of marine national parks and sanctuaries along the Victorian coast (Crocker and Davies 2005 Vol 3: 20).

The Great Ocean Road Trust, while espousing the virtues of the scenic landscape, encouraged the release of Crown land at Eastern View, and the Trust built a hotel and golf links in the hope of developing a township. It failed, and the forest has now reclaimed the golf links while the hotel burned down in 1983 on Ash Wednesday. Today a strip of housing backs on to the Lorne-Angahook State Park (now part of the Great Otway National Park), and Fagetter states that this is a reminder of the dangers of uncontrolled development and the need for appropriate planning (Fagetter 2000).

All along the coast, local citizens work hard to conserve the environment. The inspiring views from Anglesea across to the Aireys Inlet lighthouse were protected when local citizens and environment groups organised to buy the heathlands and add them to the public domain (Fagetter 2000). Local shire community profiles all identify the importance of the environment and its ongoing protection to the local community.

Parks Victoria brochures declare that the Twelve Apostles are the third most visited natural site in Australia. The world famous collection of wave-sculpted rock formations is located off shore from the eastern end of Port Campbell National Park, and within the bounds of the Twelve Apostles Marine National Park. Other highlights within the Marine National Park include Loch Ard Gorge and the Island Archway. The park, covering 7500 hectares of ocean adjacent to the coast, is located south east of Port Campbell between Broken Head and Pebble Point, and runs for 17km along the coast and 3 nautical miles out from shore to the limit of Victorian state waters. The famous *Loch Ard* shipwreck lies within this Marine National Park.

Other rock formations off the coast of Port Campbell National Park include the Grotto, the Arch and London Bridge (which became an island when the landward arch collapsed in 1990).

Just west of the boundary of Port Campbell National Park lies the Bay of Islands Coastal Park, stretching 32 kilometres from Peterborough toward Warrnambool. It has outstanding coastal views and extraordinary geological features, with sheer cliffs and rock stacks dominating the bays (Bay of Martyrs and Bay of Islands), and heathlands display colourful spring wildflowers. Five of Victoria's protected historic shipwrecks lie within this park: the international passenger and cargo vessels *Falls of Halladale*, *Schomberg*, *Newfield*, and *Antares*, and the early intercolonial trader *Children*.

Further east is the recently created Great Otway National Park, covering 103,000 hectares of coastal land, with a wide range of vegetation including temperate rainforest, tall wet eucalypt forest and botanically diverse heathlands and woodlands. The park was gazetted in 2005, increasing the Otway National Park by 60,000 hectares by including Angahook-Lorne, Carlisle and Melba Gully State Parks, as well as some State forest and other crown land (http://www.parkweb.vic.gov.au/1park_display.cfm?park=47). It incorporates Cape Otway and its 1848 lighthouse, as well as the remains of the historic shipwrecks *Fiji* and *Marie Gabrielle* at Wreck Beach below Moonlight Head, and the scattered remnants of *Eric the Red*.

Condition:
As noted in the analysis, palaeontological work continues within the Otway Ranges Coastal Cretaceous site, and analysis continues on the fossil finds already yielded. However the fossil deposit at Dinosaur Cove itself has been exhausted for all practical purposes, having been excavated to some metres below sea level and only associative values remain at Dinosaur Cove. Access to the site is discouraged by Parks Victoria and the access track is reported to be overgrown. The fossil record from this site is housed ex-situ and continues to be analysed further.

The finds at Bells Beach appear to be chance finds by members of the general public and resulting from erosion. It is not clear how well protected this more recent fossil record is. However, further natural erosion and excavation in the Otway Ranges Coastal Cretaceous site and at Bells Beach may yet yield more finds of significance.

The natural heritage values of the public lands adjoining the GOR are in generally good condition, and prospects for their protection have improved over recent decades with the consolidation of various parks and reserves into the Great Otway National Park. The

cessation of logging within the park, improved coastal management including improved visitor infrastructure to manage increasing visitor numbers, and the purchase and inclusion of heathland areas in reserves in the eastern sector of the place, all contribute to the protection of the values of the adjacent land. Some improvements are necessary in relation to controlling regrowth scrub on the southern margins of the GOR, which in many places significantly obstructs visual appreciation of the spectacular ocean views, one of the outstanding values of the GOR. Weed infestations (especially blackberry) at numerous locations along the GOR require control and if possible eradication.

Management plans for the Port Campbell and Bay of Islands areas are in place, and although they may now require review, appear to protect and manage the potential National Heritage values identified in this assessment as well as many additional heritage values that are unlikely to meet national threshold.

It is the natural dynamism of this rocky coastal landscape that holds the key to its geomorphological significance, rather than the number of stacks, caves or arches that are standing at any one time. It is a place in which evolutionary landscape development can be viewed over quite short timescales and, as long as these are natural processes unaltered by the influence of modern development, the values of this landscape will remain intact while continuing to evolve. Collapses in recent years of sea stacks and arches along the western coast constitute graphic evidence of the dynamic nature of the naturally-occurring coastal erosion, one of the geomorphological values of the place, rather than a reduction in condition due to human activity.

Information on the condition of many of the Aboriginal cultural heritage places within the Otway Ranges National Park, Otway Coastal Reserve and the Alcoa Lease Area is not available. However, it has been noted that the shell middens in general, including Seal Point, are eroded (Goulding 2006a).

The areas surrounding the road are in a good condition as a result of the planning efforts of the last 50 years. These worked to confine the development to existing centres so conserving the natural environment and rural scenery.

The road itself has been subject to ongoing maintenance and is also considered to be in good condition, with a high degree of integrity. There is little information on the condition of other aspects of the historical fabric, including the hand-cut markings on the cliff faces adjacent to the road, subterranean remains of the workers' camps and the historical markers including the arch at Eastern View.

The *Ocean Road Planning Scheme* and its successors have been very largely successful in preventing inappropriate development in the region. Up until the last decade there has been less attention paid to the threat which would arise from overdevelopment of the GOR itself, leading to increased pressure for development and unpleasant traffic conditions.

In 2005 the Victorian Government, when declaring the Great Otway National Park, identified the GOR as an arterial tourist route, and the GOR Regional Transport Strategy aims to keep heavy traffic to the north-south roads that link the coast to the Princes Highway. The funding of work on these side roads was a major recommendation of the GOR Regional Transport Strategy. In the latest development to prevent over use, speed limits on parts of the GOR have been lowered from 100 to 80 kilometres per hour.

The local Shires that manage the majority of land in the area (Surf Coast, Colac Otway, Corangamite and Moyne) have all implemented the recommendations of the Great Ocean Road Regional Landscape Assessment Study (Planisphere 2003). Consequently each local planning scheme now has Significant Landscape Overlays which aim to protect the landscape values from inappropriate development. Environmental significance and vegetation overlays provide additional protection for the aesthetic values associated with the GOR journey.

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