

**Submission on behalf of Engineering Heritage Victoria to the
Parliament of Victoria –
Legislative Council Environment and Planning Committee
Inquiry into Protections within the Victorian Planning Framework.**

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Submission by

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1. Summary:

This submission to the Parliament of Victoria –Legislative Council Environment and Planning Committee Inquiry into Protections within the Victorian Planning Framework, on behalf of Engineering Heritage Victoria, is specifically related to the **Terms of Reference Section 4**. viz.:

(4) *Protecting heritage in Victoria ...—*

- (a) the adequacy of current criteria and processes for heritage protection;
- (b) possible federal involvement in heritage protection;
- (c) separating heritage protection from the planning administration;
- (d) establishing a heritage tribunal to hear heritage appeals
- (e) the appointment of independent local and state heritage advisers;
- (f) the role of Councils in heritage protection;
- (g) penalties for illegal demolitions and tree removals.

Our major concerns are outlined below under point 3.

We would be pleased to provide supplementary information, and/or elaborate on these points at a public hearing.

2. Background – Who are we:

Founded in 1974, Engineering Heritage Victoria (EHV) is a ‘Special Interest Group’ of the Institution of Engineers Australia (Engineers Australia), Victoria Division. The original Terms of Reference of EHV were:

- o To inform and educate engineers about our engineering heritage, and to promote a wider awareness and understanding of the key role that engineers and engineering has played in the development of our nation.

- o To encourage and organise participation by engineers in:
 - o identifying the steps in the progressive development of engineering within Australia,
 - o recording details about notable engineers and engineering works.
- o To record, maintain and conserve historic documentation about engineers, with the aim of assisting research and better understanding our engineering heritage.
- o To present engineering heritage to engineers and the public through papers, conferences, exhibitions, museums, tours and landmarking / plaquing programmes.
- o To protect and conserve engineering heritage items and records so that, where possible, these items are conserved, restored or documented, to maintain an effective record of the works of engineers.
- o To maintain liaison with allied organisations interested in engineering heritage.

More information about the activities of Engineering Heritage Victoria are current goals are available from <https://www.engineersaustralia.org.au/Communities-And-Groups/Special-Interest-Groups/Engineering-Heritage-Australia/Branches>

Individual members of the EHV committee have interests and expertise covering a wide range of fields related to engineering and/or industrial heritage. Some members have been or are currently directly involved in projects to preserve specific sites or objects of engineering heritage significance. Some members have been, or are currently, members of the Heritage Council of Victoria, or its advisory committees.

EHV is part of a national over-arching coordinating body - Engineering Heritage Australia (EHA) – Engineers Australia’s peak heritage body. Its National board is comprised of representatives from each of the State and Territory Division heritage groups.

The National Committee develops policy and represents Engineers Australia nationally on engineering and industrial heritage matters. The National board also manages a number of Australia-wide programs and provides guidance and a degree of co-ordination to the engineering heritage groups located in each Division. For more information see

<https://www.engineersaustralia.org.au/Communities-And-Groups/Special-Interest-Groups/Engineering-Heritage-Australia>

In particular, across Australia, EHA and the State and Territory Engineering Heritage groups are involved in:

- o **National Engineering Oral History Program** (*established in 2001*)
See: <https://www.engineersaustralia.org.au/Communities-And-Groups/Special-Interest-Groups/Engineering-Heritage-Australia/History>
- o **Engineering Heritage and Conservation Guidelines** (*established in 1992*)
These guidelines have been prepared by Engineering Heritage Australia to assist professional engineers and others to discharge their responsibilities towards our engineering heritage. The guidelines complement the Environmental Principles of Engineers Australia.
The Guidelines are intended to help the engineer and heritage practitioner to understand the concept of significance of an engineered work or its elements, and also the methods available for retaining that significance during any alterations, development or demolition. See: <https://www.engineersaustralia.org.au/Communities-And-Groups/Special-Interest-Groups/Engineering-Heritage-Australia/About-EHA>

And also the eight **Practice Notes** covering:

1. *Evaluation of Engineering Heritage*
2. *Assessment of Engineering Heritage Items*

3. *Conservation of Engineering Heritage Items*
 4. *Assessment of an Industrial Site*
 5. *Assessment and Conservation of an Industrial Heritage Item*
 6. *Assessment and Conservation of a Timber Building*
 7. *Assessment and Conservation of Movable Heritage*
 8. *Conserving a Wheeled Steam Engine*
- o **Engineering Heritage Recognition Program** (*established in 1984*)

The purpose of the Program is to encourage conservation of Australian engineering heritage and to raise community awareness of engineering and the benefits it provides.

See <https://www.engineersaustralia.org.au/Communities-And-Groups/Special-Interest-Groups/Engineering-Heritage-Australia/Recognition>

It is through these programs that Engineering Heritage Victoria over many decades has established a close working relationship with Heritage Victoria, The National Trust of Victoria, Australia ICOMOS, Museums, Libraries, Archives, Galleries, Historical Societies and groups, Universities, and many similarly minded organisations across Victoria and Australia. As well as many international engineering heritage and history groups such as the Newcomen Society, International Committee for the Conservation of the Industrial Heritage (TICCIH), ICE, IMechE, ASCE, IEEE.

3. **Our Major Concerns related to Protecting heritage in Victoria**

(a) ***the adequacy of current criteria and processes for heritage protection;***

1. ***The Nizhny Tagil Charter For The Industrial Heritage***, 2003, developed by International Committee for the Conservation of the Industrial Heritage (TICCIH)
<https://ticcih.org/about/charter/> ***should be adopted as a guiding document for heritage protection in Victoria.***

Explanation:

Like the Australia ICOMOS ***Burra Charter***, the ***Nizhny Tagil Charter*** sets out guidelines to aid the identification of place and sites where major innovations in the use of energy in trade and commerce occurred.

“The material evidence of these profound changes is of universal human value, and the importance of the study and conservation of this evidence must be recognised” .

2. ***Identify the Major Innovations in Victoria’s History and protect and conserve the objects, documents and sites related to them.***

Explanation:

Related to point ‘1’ above, there are many significant innovations in Victoria’s history, but in most cases the people and places have not been identified, or if they have been identified, they often lack adequate protection, conservation and interpretation. In some cases, objects related to the innovations – drawings, prototypes, products are stored in Museums, Archives, Libraries, Galleries, but the industrial sites and buildings that provide context are not recognised, protected or interpreted. For example: Geelong, Melbourne and Sydney developed the world’s first viable refrigeration plants, then exported the technology – the sites and remains are poorly protected. Melbourne and Victoria was the World leader in the development of Electric arc welding - we had the world’s first all-welded gasometers, the world’s largest all-welded gasometers, the first welding machinery plants, and built factories across the world – the sites are not recognised or protected or interpreted. Other innovative

and significant all welded-structures from the 1920s and 1930s are not recognised or protected. There are also sites of major innovation that have been protected for social or architectural reasons but they are not recognised for their industrial process innovations – processes often reflected in the way the structures are built, and the products that they produced that created social change and wealth. There are many inventions and innovations and their related places that are not well recognised or given heritage protection.

3. ***It is recommended that a research project(s) be supported to ensure that sites of major innovations are identified and protected.***

Explanation:

Related to point '2' above, research is needed, and it should be funded by Government, perhaps through a University Centre for Innovation research.

4. ***The recommendations contained in many Thematic Heritage Studies have not yet been considered by the relevant National, State or Local heritage authorities. In many cases the studies and their findings have not been released to the public. These Heritage Studies should be released so that the community can fully understand these histories, their recommendations, and so sites can be identified. And they should be considered and adopted by the relevant National, State or Local heritage authorities, so sites can be given legal protection.***

Explanation:

EHV (and EHA) have over many decades have been involved with major ***Thematic Heritage Studies*** and ***National, State, Regional, Municipal and Local Heritage Studies***. Many of these studies have made recommendations for better protection and conservation of ***Industrial Heritage*** and ***Engineering Heritage*** places, but the relevant authorities have either failed to adopt these recommendations, or have failed to implement them, leading to many very significant objects and sites remaining unprotected or not conserved. And in many cases, being demolished before being recognised and protected.

For example, the recommendations in the thematic study of Electricity Generating Power Stations in Australia, ("*Industrial Heritage of Power Generation - A Framework for Heritage Management*") prepared for the Electricity Supply Association of Australia, [Australian Electricity Supply Industry Research Board], Godden Mackay, 1995) have been forgotten and ignored, leading to many sites of State and National significance being destroyed.

Some of the recommendations were:

7. *Heritage agencies should use the data, typology and methodology established in this report in the assessment and decision making process for both public and private section power stations.*
8. *Individual power generation authorities should prepare their own heritage asset strategies which are consistent with national plans and strategies.*
9. *Asset management for power stations, particularly regular maintenance, should have regard to established heritage significance and long term options for conservation.*
10. *Maintenance procedures should include allocation of resources for the maintenance of buildings, plant and equipment that are established as having heritage significance.*
11. *Power generation authorities should establish and continue archival collections which cover the design, construction, operation and decommissioning .of all power stations under their control.*
12. *Historic records should be collated, archived and stored with a view to satisfying relevant recording requirements at the time of decommissioning of individual stations.*
13. *Records of both fabric and operation (including oral history and traditions) should be made prior to rather than after decommissioning of individual stations.*
14. *A detailed disposal procedure, including preparation of a conservation plan (where relevant) should be*

prepared and implemented.

15. Individual elements of equipment as well as assemblages or systems should be included in the assessment and management of heritage assets. Where individual power stations are to be demolished as part of their disposal, provision should be made for the recovery and lodgement of significant plant and equipment with an appropriate institution.

By ignoring these recommendations, we have not only lost many of these very significant heritage places, we have lost the history, and an understanding of the technical innovations and techniques related to the operation of these power stations.

5. **Many Thematic Heritage Studies have only been partially completed – for example, only a first stage of a thematic study has been completed, with the further stages not being started. These studies should be completed so the community can fully understand these histories and identify significant sites for protection.**

Explanation:

One of the major themes in Victoria's history is Water Supply, domestic, and stock, including irrigation. Only the first stage thematic study of Water Supply for Victoria, has been completed, leaving many places with little or no heritage protection. Merging of rural water supply systems, and changes to irrigation systems have had little regard to the rich heritage of these places.

(b) possible federal involvement in heritage protection;

1. **It is strongly recommended that there should be an stronger involvement and leadership in Heritage identification and protection at a National level**

Explanation:

Many years ago, the Commonwealth was a leading agent in the processes of identification, the practices and processes of conservation, interpretation of heritage across the whole of Australia, across all fields and across all level of management. Helping to identify and protect all our heritage - all the "Things we want to Keep". Now it is only associated with establishing a short list of iconic "National sites".

Many of the thematic studies of engineering works across Australia, were funded by the National Heritage Council – such as the national study of Bridges, the national study on Large Dams, the study on Power Stations, and so on.

2. **Stronger support by the Commonwealth, and by all levels of government, of the Australian Heritage Strategy is needed.**

The 2015 Australian Heritage Strategy

<https://www.awe.gov.au/parks-heritage/heritage/publications/australian-heritage-strategy> has barely been implemented and it is now being reviewed! Due to the lack of leadership at the Commonwealth level its contribution to heritage management across Australia has so far been minimal.

- Many of the ideas contained within it are most worthy of strong support, such as the integrated management of heritage - on site, in Museums, in Archives, in Libraries, in Galleries, and so on – and particularly the linking of information, good conservation and good interpretation across these 'traditional silos' is strongly supported.

- We need to take a more holistic approach to our heritage across the whole spectrum: Movable / Immovable / Tangible / Intangible heritage.

- We need to take a more holistic management approach to heritage: across built heritage, indigenous heritage, natural heritage; across geo-heritage, science and engineering heritage; across all social heritage; identify significant landscapes.

4. Further Information

Further information elaborating the volunteer work of the Engineering Heritage Victoria, and Engineering Heritage Australia is available if needed.

Further details about the concerns we have raised and more specific examples to support these concerns are available from the authors.

We look forward to elaborating our concerns either in writing or at a public hearing.