

INTERNATIONAL ENGINEERING HISTORY AND HERITAGE

Improving Bridges to ASCE's 150th Anniversary

PROCEEDINGS OF THE THIRD NATIONAL CONGRESS ON CIVIL
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ASCE American Society
of Civil Engineers

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Abstract: These Proceedings of the International Engineering History and Heritage Congress contain papers prepared for delivery as part of the American Society of Civil Engineers National Convention in Houston, Texas, from October 10 to 13, 2001. The papers included provide information on civil engineering history and heritage programs in the United States, Canada, Mexico, and Great Britain and on preservation, restoration, and education activities carried out on individual historic civil engineering projects in these nations.

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Foreword

These Proceedings are dedicated to our mothers (who passed away in the last few years), Barbara Strobel Fredrich and Stella Hovezak Rogers, who supported our civil engineering education and careers.

The third National Congress on Civil Engineering History and Heritage has been expanded to include international engineering speakers and topics. With an emphasis on civil engineering history teaching/learning, restoration of historic bridges, and the American Society of Civil Engineers' 150th Anniversary, we have adopted a sub-theme: "Improving Bridges to ASCE's 150th Anniversary." Our co-sponsors include the ASCE Committee on History and Heritage, the Institution of Civil Engineers Panel for Historical Engineering Works, the ASCE International Activities Committee, the National Park Service, the Texas Section, ASCE and Branch History Committees/Directors, and the hosts: Houston Branch, ASCE and the University of Houston. Session organizers include Frank Griggs, Jr., Eric DeLony (who provided several international contacts), Robie Lange, Augustine J. Fredrich, and Jerry R. Rogers with young members, students, and Section/Branch Officers invited to co-sponsor sessions and attend. We especially thank the 2001 Congress speakers and authors of scholarly papers that will make these ASCE Proceedings so valuable.

The first ASCE Engineering History Conference was held in Washington, D.C. in 1996 with an ASCE Proceedings: *Civil Engineering History: Engineers Make History* (ISBN 0-7844-0209-4). The second Congress was held in Boston in 1998 at the 150th Anniversary of the Boston Society of Civil Engineers with an ASCE Proceedings: *Engineering History and Heritage* (ISBN 0-7844-0394-5). With ASCE's *Sons of Martha: Readings in Civil Engineering Literature* by Augustine J. Fredrich and this third ASCE Engineering History and Heritage Proceedings, there are ample civil engineering papers to utilize in courses in teaching/learning civil engineering history in university classrooms and for students grades 4 through 12.

REVISITING RECOGNITION: NEW PLAQUES FOR EXISTING LANDMARKS: LOS ANGELES SECTION

Irving Sherman, MASCE¹

Abstract

The Los Angeles Section of ASCE has undertaken to provide ASCE bronze plaques at numerous existing Historic Civil Engineering Landmarks (HCEs) which never received such publicly visible recognition. This paper describes the origins of this situation, the actions now being taken, some of the problems encountered, and the present status of the undertaking. The five HCEs which are now closest to receiving new plaques are Bear Valley Dams, Los Angeles City Hall, the Ridge Route, Santa Barbara Mission Early Water Supply, and the Tioga Road.

INTRODUCTION

The 150th Anniversary of ASCE in 2002 is the inspiration for the program described herein. The credit for the start goes to Dr. Daniel S. Turner, who as ASCE President came to the meeting of ASCE's then Committee on History and Heritage of Civil Engineering (CHHACE) in January 1999. Dr. Turner urged Committee members to motivate Local Sections to audit their existing plaques at Historic Civil Engineering Landmarks (HCEs) to ensure that plaque locations were known and that plaques were in good condition, in preparation for the Anniversary celebration. The author brought Dr. Turner's message back to the Los Angeles Section and its History and Heritage Committee, to begin the audit.

RESEARCHING THE RECORDS

There are over 60 HCEs within the 10-county area of the Los Angeles Section. We found that most had been designated during the 1970s when the practice was to provide the project owner only a "Certificate of Recognition" –

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a single sheet of paper which could be framed and hung on an office wall but which never would be seen by the general public.

PLANNING A NEW PROGRAM

The History and Heritage Committee agreed that plaques should be provided to the extent possible for the HCELS which lacked them. It quickly became obvious that it was beyond practicality to provide plaques for all such HCELS in time for the 150th Anniversary. For one thing, the estimated total cost would be in excess of \$25,000. There would also be more work for the Committee than it could handle in the time available. A reasonable target was the placement of plaques at as many as ten HCELS in a one-year period. The History and Heritage Committee proposed such a target, which was accepted by the Section Board of Directors.

With a period of several years required for placement of all needed plaques, we had to prioritize which HCELS should be the first to receive the delayed recognition. The History and Heritage Committee considered the entire list of projects and selected fourteen or fifteen as the most promising, because they were believed to be most visible to the general public. We expected that closer review would remove some of the projects from the initial list, and hoped to be able to select ten HCELS for recognition with new plaques within the first year. One or two of the projects were assigned to each Committee member who was to re-visit the site and look for suitable locations for a new plaque, and, if the physical situation seemed promising, to make initial contact with the project owner.

THE SEARCH FOR FUNDS

Complicating the financial aspect was the trend towards larger, and thus more expensive plaques than had been the case in the past. The History and Heritage Committee of the Los Angeles Section decided that the public was best informed if the plaques included (1) the names of the engineers responsible for the project, and (2) at least a brief explanation of the reason for the selection of the project as an HCEL. Recent plaques incorporating the added information had cost as much as \$900 each. A budget of \$1000 per HCEL, including plaque installation and publicity efforts was proposed; for ten plaques during the first year, this would mean budgeting \$10,000. This was much more than could be provided by the Los Angeles Section.

A possible source of funds appeared in the ASCE State Public Affairs Grants program, and the Los Angeles Section requested Grant funds in 1999 for buying, installing and publicizing plaques, in the amount of \$10,000. The response was disappointing; we were notified early in 2000 that no funds would be available for new plaques for existing HCELS. What was awarded

was a grant of \$1800 to fund publicity expenses relating to placing National HCEL plaques on existing landmarks. All of the projects within the Los Angeles Section which lack plaques are Local HCELS, so they were excluded from the funding. And without funds for plaque purchase, there was nothing to publicize, so the Grant funds for publicity had to be returned unspent.

ROBERT W. BEIN TO THE RESCUE!

Robert W. Bein, ASCE President in 2000-2001 and a member of the Los Angeles Section, has always been a strong supporter of History and Heritage activities. When he learned that the request for Grant funds had been rejected, he came to the Section Board of Directors in May 2000 with an offer; if the Board would budget \$5000 for ten of the needed plaques, he would raise the additional needed \$5000 in contributions from engineering firms, at \$500 per plaque. This was an offer the Board could not refuse, and it agreed to budget \$5000 for the program for fiscal 2000-2001. With a major Section reorganization in process, of course this took approval by the new Board in the Fall of 2000, but approval was given and the process of selecting HCEL projects to receive new plaques got under way in earnest.

PROGRESS AND PROBLEMS

At the time of this writing (April 2001) at least five existing HCELS are expected to receive new ASCE plaques in the coming months, with two or three more likely to follow soon after. The process has been slower than we had hoped; reasons for the slow pace include:

1. Finding a place where a plaque would be visible to the general public means also finding a place where the public is likely to come on foot. In an area where people travel primarily by automobile this requires that parking space be available. There is little point to having a plaque visible only from a freeway where drivers are hoping to go past at 65 miles per hour. Even a site next to a public sidewalk is unsuitable if there are few pedestrians likely to walk by and no public parking spaces exist. Planning is in progress for placement of some plaques in public parks which are scheduled to be developed in the near future.
2. Getting approval from project owners is not automatic. Even though the project owners may have welcomed ASCE recognition over 25 years ago, there is a new generation of managers now in charge. Particularly if the owner is a large governmental organization, there are bureaucratic hurdles. Some managers fear that ASCE recognition will somehow place legal restrictions on their future freedom of action if they should wish to modify or demolish the HCEL. Of course ASCE recognition does not have any such impact, but it is first necessary to get the ear of some decision maker before the lack of impact can even be explained.