Building the World
A Finding Aid for the Research Collection of Kathleen Lusk Brooke, PhD.
University of Massachusetts Boston Healey Library
February 2013

For library hours and contact information please visit: http://www.umb.edu/library
Building the World is a website born of the 2006 two-volume work of the same title by Frank P. Davidson and Kathleen Lusk Brooke. The books detail 41 of the world’s most incredible macro-engineering projects, including important documents in the creation of these projects. The books serve not only as histories of these great feats, but also as a collection of documents to be studied for future use.

In 2012, Lusk Brooke gave her research collection to the University of Massachusetts Healey Library. At the same time, the website, Building the World, was begun in order that this information could be shared in an interactive and global manner. The site serves as a forum to invite discussion on the projects presented specifically, as well as the overarching theme of macro-engineering. Additionally, the site acts as an introduction to the projects discussed in Building the World and provides supplemental materials and related links.

Below is the finding aid for the research collection. This collection is not archival, but does include a large number of resources no longer available to the public. In many cases these are websites that no longer exist save for in their printed versions found at Healey Library. Additionally, as a result of the books for which this collection was used, this is one of the few collections dedicated to macro-engineering.

Researcher’s notes: (1) Many of the dates for information found on website listings are simply the last date at which the author(s) accessed the site. Where possible, like with journals and articles, date of publication is listed instead. Additionally, whole site domains are not listed, as many have likely changed. Only the main host site is provided. (2) The projects are listed in the order in which they are found on the website, not as they are found as chapters in the books. For this reason the volume in which each project is found has been listed next to each project; i.e. BTW 1 means the project is found in Building the World volume 1.

BOX 1

BRIDGES

London Bridge, England (BTW 1)

Bbc.co.uk, “London Bridge, 1500,” 2004. [website printout]
Home, Gordon and John Lane, Old London Bridge, 1931. [book printout excerpts]
Lusk Brooke, Kathleen, list of bridge songs, 2004(?). [Word document printout]
Rhymes.org.uk, “‘London Bridge is broken down’ nursery rhyme lyrics, history, and origin,” 2004. [website printout]

**The Brooklyn Bridge, United States (BTW 1)**
Beal, Stephen, “Getting Hitched.” [poem printout]
Crane, Hart, “To Brooklyn Bridge.” [poem printout]
Lusk Brooke, Kathleen, chapter draft and document. [Word document printout]

**Popular Science**, “Rion-Antirion Bridge” 2004. [magazine clipping]

**ENERGY**

**High Dam at Aswan, Egypt (BTW 2)**

“Agreement with the USSR concerning the project for the Implementation of the High dam, Approved by Decree No. 8 of January 9, 1959” [copy]
Egyptian State Tourist Administration, Image of the Nile at Aswan. [photo]
“Episcopal Power and Light: a response to climate change.” [pamphlet]
Fi Qalbi Taaj, “Aswan, the Southern Gate of Egypt,” at ideamarketers.com, 2004. [website printout]
“Gateway to National Information on land and plant nutrition,” author/site unknown. [website printout]
Mesafreen.com, Aswan Dam info, 2004. [website printout]
University of Colorado, Denver, “Organization” and “Culture” at cudenver.edu, 2004. [website printout]

The Hoover Dam and Colorado River Compact, United States (BTW 1)
Harvard University, Hollis Catalogue information for “Colorado River” 2004. [Screen result printout]
Stevens, John E., Hoover Dam, 1988. [book printout excerpts]

Itaipu, Brazil and Paraguay (BTW 2)
“Exchanges of Notes,” on Itaipu contract, 1973 [copy]
International Research Institute for Climate Prediction, “Timeline” at iri.columbia.edu, 2005. [website printout]
“Itreaty Between the Federative Republic of Brazil and the republic of Paraguay Concerning the Hydroelectric...” 1973. [copy]

The Manhattan Project and Atomic Energy Act, United States (BTW 2)
Czuczka, Tony, “Nazis said to have tested crude nuclear device,” The Boston Globe. [newspaper clipping]
Dyson, Freeman, Weapons and Hope (excerpts), 1984. [book printout excerpts]
Lusk Brooke, Kathleen, chapter draft, 2005. [Word document printout]
Nitze, Paul H., From Hiroshima to Glasnost, 1989. [book printout excerpts]
The Snowy Mountain Project, Australia (BTW 2)

“An act relating to the construction and operation of the works, for the generation of hydroelectric power in the Snowy Mountains area,” 1949. [copy]
Australian Consulate General, NY, alpha list of acts from 1901-87 (S). [screen result printout]
Bryant University, “Problems/Pollution,” at Bryant.edu, 2005. [website printout]
Harvard University, Hollis Catalogue information for, “snowy mountains scheme,” 2004. [Screen result printout]
House of Representatives Standing Committee on Science and Innovation, “Submission to the Inquiry into coordination of the sciences to combat the nation’s salinity problem” [copy of report]
Price, Doug, letters, 2005. [originals]

The Tennessee Valley Authority, United States (BTW 2)
National Archives, “Upton Sinclair,” at Spartacus.schoolnet.co.uk, 2004. [website printout]
The Tennessee Valley Authority Act 1933. [copy]

BOX 2

ICONIC MONUMENTS

The Eiffel Tower, France (BTW 1)
“Convention a la Tour Eiffel,” 1889. [3 copies]
Lusk Brooke, Kathleen, chapter intro. [Word document printout]

Solomon’s Temple, Israel (BTW 1)
bbcc.co.uk, “Google Helps Put Dead Sea Scrolls Online,” 2011. [website printout]
Bible, The, 1Kings 4:29-8:45. [book printout excerpts]
Encyclopædia Britannica, “Temple,” (1911) and “Zoroaster,” (1948) [book printout excerpts]
Note: in same file as a postcard from China, 2004.

The Taj Mahal, India (BTW 1)
Consulate General of India, New York, NY, photograph of Taj Mahal [photo]
NEW CITIES

The Founding of Abuja, Nigeria (BTW 2)
“Agreement for the Production of the Master Plan for the federal Capital City and its Regional Grid,” 1977.
Eyinla, Bolade M., “Abuja and Berlin: The Tale of Two Capital Cities.” [PDF printout]
Murtala’s broadcast proclaiming Abuja as federal capital, February 3, 1976. [transcription]

The Founding of Baghdad, Iraq (BTW 1)
“Bagyidaw” (French language pages), author unknown[book printout excerpts]
Cheswell, K.A.C., Early Muslim Architecture, 1940. [book printout excerpts]
Lusk Brooke, Kathleen, bibliographic notes. [Word document printout]
Lusk Brooke, Kathleen, Chapter draft. [Word document printout]
Potts, Cherie, Quotation verification, 2004. [Word document printout]
Weit, Gaston, Baghdad: Metropolis of the Abbasid Caliphate, (excerpts from Fordham.edu), 1971. [website printout]

**The Founding of Brasilia, Brazil (BTW 2)**
Harvard University, Hollis Catalogue information for “brasilia,” 2005. [screen result printout]

**The Founding of Cyrene, Libya (BTW 1)**
“Colony and Mother City,” in E. Badian and Robert Sheik, Translated Documents of Greece and Rome. [book printout excerpts]
Harvard University, Hollis Catalogue, search results for “Cyrene” with some specific bibliographic content, 2004. [screen result printout]
Lendering, Jana, “Cyrene and the Cyrenaica,” at livius.org. [website printout]
Lusk Brooke, Kathleen, chapter draft. [Word document printout]
Lusk Brooke, Kathleen, partial bibliography. [Word document printout]
[website printout]

**BOX 3**
The Founding of Singapore, Singapore (BTW 1)

Library of Congress, Map of Malay Peninsula, at lcweb2.loc.gov. [website printout]
“Treaty with the English Company 1819, and accompanying letter to Major Farquhar, 1819. [translated copy]

The Founding of St. Petersburg, Russia (BTW 1)

Author/site unknown, “Peter the Great’s New Russia (1696-1725)” 2004. [website printout]
Lusk Brooke, Kathleen, annotations, 2012. [Word document printout]
Rempel, Dr. Gerhard, “The Personality of Peter the Great,” at Wnec.edu, 2004. [website printout]
Saint-petersburg.com, “Peter the Great (Peter I)” 2004. [website printout]
The Founding of Washington D.C., United States (BTW 1)

Lusk Brooke, Kathleen, “Contents of Folder.” [Word document printout]
Washington, George, letter to Arthur Young 1791 and Letter to Jefferson 1788, from Washington the President. [copy]
Williams, Dr. Scott W., “Benjamin Banneker 1731-1806,” at buffalo.edu, (2005) 2006. [website printout]

RAILWAYS

The Canadian Pacific Railway, Canada (BTW 1)

Lusk Brooke, Kathleen, chapter draft. [Word document printout]
McDonnell, Greg, Canadian Pacific. [book printout excerpts]
“The Railway Contract of 1881.” [copy]

Shinkansen, Japan (BTW 2)

New England,” 1971. [copy]

The Trans-Siberian Railway, Russia (BTW 1)

The Transcontinental Railroad, United States (BTW 1)
Ambrose, Stephen E., Nothing Like it in the World (excerpts), 2000. [book printout excerpts]
Lusk Brooke, Kathleen, chapter draft. [Word document printout]

U.S. Congress, “Memorial of Asa Whitney, praying for a grant of land to enable him to construct a railroad from Lake Michigan to the Pacific Ocean,” 1848. [copy]

U.S. Congress, “Railroad from Lake Michigan to the Pacific, Memorial of Asa Whitney…” 1845. [copy]


BOX 4

ROADWAYS

The Alaska Highway, United States and Canada (BTW 2)


“Exchange of Notes” for Military Highway to Alaska, 1942-3. [copy]


List of Relevant Books from anchorage.ak.us. [screen result printout]


The Central Artery Project, United States (BTW 2)


Harvard Magazine, “A Planner for GSD.” [magazine clipping]


Massachusetts Turnpike Authority, “Project Background,” and “Project Schedule and Timeline.”
Charlemagne’s Works, Western Europe (BTW 1)

L’Europe au Moyen Age: Documents Expliques, “Dossier sur les ‘Fosse Carolines’ entre Rhin et Danube (793),” documents 113-121 with commentary. [copy]
Fordham University, “Internet Ancient History Sourcebook,” at Fordham.edu [website printout]
King, P.D., Charlemagne’s Translated Sources (Lorsch Annals excerpts), 1987. [book printout excerpts]
Lake, Justin, CD with RFA capitularies. [CD]
Lusk Brooke, Kathleen, chapter draft. [Word document printout]
Monumenta Germaniae Historica, “Capitula cum Primis Conferenda” with translation.[book printout excerpts]
Monumenta Germaniae Historica, “A charter of Charlemagne granting to the Lorsch monastery the rights to fish as Gudenawa and to cut wood from the forest, and the authority to construct a roadway and bridge,” 777, with translation. [book printout excerpts]
RWTH Aachen, Charlemagne Scholarship information, 2004. [website printout]
Scholz, Bernhard Walter and Barbara Rogers (trans.), Carolingian Chronicles, (excerpts), 1970. [book printout excerpts]
Unknown source, “The European Engineers.”

The Federal Highway System, United States (BTW 1)

Federal Highway Administration, “President Dwight D. Eisenhower and the Federal Role in
Highway Safety,” “Federal Highway promotes Simpler and Smarter Ways to Protect Wildlife,” (2003), and list of FHWA websites, 2004. [website and search results printout]
Lusk Brooke, Kathleen, notes on “Bicycle First,” and “AAA.” [Word document printout]
Wilson, David Gordon, “Palleted Automated Transportation: A View of Developments at the Massachusetts Institute of Technology,” 1989. [article printout]

National trails System, United States (BTW 2)
Mackay, Benton, “An Appalachian Trail: A Project in Regional Planning,” in Journal of the American Institute of Architects, 1921. [journal clipping]
U.S. Congress, National Trails System Act,” 1968. [copy]

SPACE

COMSAT, United States (BTW 2)
U.S. Congress, “An Act to provide for the establishment , ownership, and regulation of a commercial communications satellite system, and for other purposes,” 1962. [copy]
Viasat, about the company, at viasat.com, 2005. [website printout]
**NASA and the Apollo Program, United States (BTW 2)**

Arnett, Alison, “When in Space, don’t let the Sauce float off the Plate,” in *Boston Globe*, 2004. [newspaper clipping]


Kennedy, John F., *Speech of May 25, 1961*. [typed transcription]

Logsdon, John M., *The Decision to Go to the Moon: Project Apollo and the National Interest*. [book printout excerpts]


**BOX 5**

**TUNNELS**

**The Channel Tunnel, France and England (BTW 2)**

“Anglo-French Treaty of 1878 for a channel tunnel and submarine railway.” [copy]


Benard, Andre, Brunel Lecture at MIT, 1993.[transcribed copy]


“Channel Tunnel Bill, 1973.” [copy]

Copies of pages of relevant books. [book printout excerpts]

Davidson, Frank P., chapter drafts. [Word document printouts]

“Documents Establishing the Submarine Tunnel Study Group and Minutes of the Meeting of the Board of Control on July 26, 1957.”[copy]


Photo of Davidson. [photo]

Reiter, Joan, “The Channel Tunnel,” and correspondence, 1956-7. [article printout and original letters]


The Treaty of Canterbury, 1986. [copy]
Mont Blanc Tunnel, Italy, Switzerland, and France (BTW 2)


Mont Blanc Convention of 1953. [copy]

NY and NJ Port Authority, “Tunnel fires, vehicle accidents, and chemical spills to be simulated at Port Authority Crossings,” at panynj.gov,(1999) 2004. [website printout]


Wilson, David Gordon, “Palleted Automated Transportation: A View of Developments at the Massachusetts Institute of Technology,” 1989. [article printout]

Trans-Alaska Pipeline, United States (BTW 2)


Exxon Valdez Oil Spill Trustee Council, “Questions and Answers,” at evostc.ak.us, 2005. [website printout]


WATERWORKS

The Aqueducts of Rome, Italy (BTW 1)


Askdrdig.com, “How did the Romans make Concrete?” 2004. [website printout]


Davidson, F.P. (recipient), fax regarding research on Roman edicts, decrees, etc., with the research materials, 1992. [original fax]


Lusk Brooke, Kathleen, annotations for chapter. [Word document printout]

Lusk Brook, Kathleen, chapter draft. [Word document printout]

Romanconcrete.com, “Roman Pantheon: The Triumph of Concrete”. [website printout]

Romano-empire.net, “Illustrated History of the Roman Empire”. [website printout]
San Francisco, California, “The Raker Bill,” 1913. [copy]

The Canal des Deux Mers, France (BTW 1)
AddaLL rare used books search results from used.addall.com, 2004. [website printout]
Davidson, Frank P., correspondence with the Department de la Haute Garonne and National Archives 1990-2. [originals]
“Edict of October 1666 for the Canal de Languedoc” (French). [copy]
Lusk Brooke, Kathleen, annotations, 2012. [Word document printout]
Photo of Canal du Midi, undated. [photo]

The Erie Canal, United States (BTW 1)
“An Act for the improvement of the navigation of the Mohawk and Hudson Rivers,” 1816. [copy]
“An act for to provide for the improvement of the internal navigation of this state,” 1816. [copy]
“An act respecting navigable communications between the great western and northern lakes and Atlantic Ocean,” 1817. [copy]
Author unknown, notes. [original]
Lusk Brook, Kathleen, intro draft [Word document printout]
Pickering, Danby, *The Statutes at Large from the Magna Carta to the end to the eleventh*
**Parliament of Great Britain.** [book printout excerpts]

Shaw, Ronald E., *Erie Water West.* [book printout excerpts]

Stein, Charles, “Be it ditch or dot.com, a world of growth,” in the *Boston Globe*, 2005. [newspaper clipping]


---

**BOX 6**

**The Grand Canal of China, China (BTW 1)**

Unknown resource


Davidson, Frank P., Letter to Mr. Hu regarding translations and notations with reply, 1993. [original]

Davidson, F. P., (recipient), letter with translation of document included. [original]

Drafts for BTW and copies of documents discussed, 2001.[Word document printout]

English.people.com, “Beijing Invites Design to Revive Grand Canal.” [website printout]


Harvard University, Hollis Catalogue, information on *The Grand Canal of China* (1984), 2004. [search result printout]


Harvard University, Hollis Catalogue, information on Leonard, Jane Kate, *Controlling from Afar* (1996), 2004. [search result printout]


Hockney, David and Philip Haas, “A Day on the Grand Canal with the Emperor of China,” 1991. [video]


Lusk Brooke, Kathleen, partial bibliographies. [Word document printout]


Genghis Khan:

Mayell, Hillary, “Genghis Khan a Prolific Lover, DNA Data Implies,” 2004. [article printout]

*Washington Post*, “They Want Genghis Khan to Have His Due, Statue, Too,” 2006. [newspaper clipping]

Genghis Khan Portrait Source:


The Mongolian Empire: Yuan Dynasty:
The New River, England (BTW 1)

Unknown Source, resolution from “a meeting of the inhabitants of Islington and Stoke Newington, held at Canonbury Tavern the 12th of May, 1810, for the purpose of taking into consideration the most effectual means to prevent the practice of indecent bathing in the New River.” [copy]

Protective Dikes and Land Reclamation, The Netherlands (BTW 1)

en.wikipedia.org, “Hans Brinker, or the Silver Skates,” 2011. [website printout]

Holland Dikes:

Author unknown, *West-Friesland’s ‘Oud en Nieuw’, regarding annex 1*, 1936. [copy]
van den Brink, Paul, *De Hollandse Riverkartografie en Waterstaalszorg in Opkomst 1725-54*. [translated copy]
Geography.about.com, “Polders and Dykes of the Netherlands,” 2005. [website printout]
Huisman, Pieter, Letter to F. P. Davidson regarding Polders in Southern Holland, 2005. [original]
Huisman, Pieter, Letter to Kevin J. Downing regarding images to be used in BTW, with 3.5” floppy disk and printouts, as well as copy of original agreement and patent for Vennewaterspolder, 2005. [original]
Knog.nl, “Geography of the Netherlands,” 2005. [website printout]
Lusk Brooke, Kathleen, chapter draft, 2005. [Word document printout]


Roman Villages: Laurium/Woerden:

Water Management:

The Netherlands:
de Boer, Matthijs, letter to F.P. Davidson regarding request for aid and information; includes sections from *Dikes and Windmills* and *Macro*, 2005. [original and book printout excerpts]

Huisman, Pieter, Letter to Kevin J. Downing regarding images to be used in BTW, with printouts, as well as copy of original agreement and patent for Vennewaterspolder, 2005. [original and copy]


**The Suez Canal, Egypt (BTW 1)**

Amazon.com, “Aida,” search results, 2004. [search result printout]

Author unknown, “The Suez Canal – A Global Infrastructure Solution of the Nineteenth Century and Beyond”. [article printout]

Berlin Agreement 1888 website information. [search result printout]


Davidson, Frank P., Correspondence with the French Ministry and Suez Company, 1991. [original]


“Firman de Concession,” from 1854 and letter from the Ministry of Culture regarding obtaining a copy of the original, 1991 (French). [copy and original]

“Text of the Firman of Concession” (trans.), 1854, from Schonfield 1969. [copy, from book printout excerpts]

Harvard University, Hollis Catalogue information for “Suez Canal” search (2 of 567), 2005. [search result printout]
Images, source unknown. [photos]
Lesseps, Ferdinand de, *Souvenirs de Quarante Ans Dedies a Mes Enfants*, 1887. [book printout excerpts]
Lusk-Brooke, Kathleen, draft of chapter, 2001. [Word document printout]

**The Panama Canal, Panama (BTW 1)**
Clayton-Bulwer Treaty, April 19,1850. [copy]
“The Law of the United States Relating to the Panama Canal.” [copy]
Sandstorm, from National Geographic, “Builders.” [website printout]
Wyse Concession, March 20, 1878. [copy]
Zamarano, Juan and Kathia Martinez, “With Panama in Control, Canal Runs Swimmingly,” *Associate Press*, 2005. [article printout]

**BOX 7**

**The Great Wall, China**
Frost, Robert, “Mending the Wall.” [article printout]
“The Great Wall China,” Powerpoint, source unknown ([ftp.ccccd.edu](http://ftp.ccccd.edu)). [Powerpoint printout]
Harvard University, Hollis Catalogue, various search results, 2005. [search result printout]
International Council on Monuments and Sites, World Heritage List (Great Wall). [search result printout]
Lusk Brooke, Kathleen, Chapter draft. [Word document printout]
Lusk Brooke, Kathleen, correspondence, 2005. [Word document printout]
Map, source unknown. [printout]

Other
Davidson, Frank P. and Kathleen Lusk Brook, Building the Future, unpublished. [book]
Davidson, Frank P. and Kathleen Lusk Brook, Building the World, Printed book pages and resources in 6 binders:
(1) Introduction-Taj Mahal
(2) Canal des Deux Mers – Canadian Pacific Railroad
(3) Eiffel Tower – Hoover Dam
(4) TVA – The Founding of Brasilia
(5) NASA – Trans Alaska Pipeline
(6) Itaipu – The Big Dig

Salkeld, Robert, Frank Paul Davidson, C Lawrence Meador, Macroengineering: The Rich Potential.