Harold E. Langley

Bridge Engineer, New Hampshire Highway Department

Designer – 1922 to 1934
Assistant Bridge Engineer – 1935 to 1941
Bridge Engineer - 1942 to 1961

Annotated Bibliography of Published Works

List of Attributed Bridge Plans

Prepared for

New Hampshire Department of Transportation,
Bureau of Environment
Concord, NH

By

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Summary

This project was undertaken to fulfill, in part, the project mitigation requirements stipulated in the Memorandum of Agreement pertaining to the removal and replacement of the Redington Street or Apthorp Bridge over the Ammonoosuc River in Littleton, New Hampshire, a National Register eligible historic resource.

Harold Edward Langley was born in January 8, 1896 in Durham, New Hampshire and died August 6, 1991, in Concord.[1] He attended the Massachusetts Institute of Technology, graduating in 1917. His WWI draft registration card, dated June 2, 1917, states his present trade as a farmer, in the employ of his father Edward Langley. He apparently did not serve in WWI. In 1919 he began his career with the New Hampshire Highway Department as a resident engineer. He was promoted and served the Department as a Designer from 1922 to 1934, as Assistant Bridge Engineer from 1935 to 1941, and as Bridge Engineer from 1942 to 1961. Langley designed at least 368 bridges and structures for the Department during his tenure, as listed in the following table, not counting design drawings that do not bear his initials or no longer exist.

As would be expected of his early designs during the 1920s, the majority are for relatively simple short-span bridges including concrete slab bridges, I-beam stringer bridges with flat concrete decks as well as so-called jack arch bridges with multi-arched concrete decks, and concrete T-beam bridges. The rapid expansion of the road network called for hundreds of these types of spans.

Langley corresponded with Arthur G. Hayden, originator of the concrete rigid frame bridge, and based on the data, may have introduced that bridge type in New Hampshire in 1928 with a 22' span carrying Crystal Lake Road over the Suncook River in Gilmanton (Gilmanton 149/061). The Crystal Lake Road bridge remains in service and "not deficient" according to the 2012 NHDOT bridge inspection report.

Langley was comfortable with complex structural analysis that is reflected in the relatively long span concrete rigid frame, reinforced concrete arch, steel truss and steel arch spans he designed. He was a talented architectural draftsman with an eye for aesthetic proportioning. The Beecher Falls Road Bridge over the Connecticut River, a 136'-span deck plate-girder-rib arch bridge, received the Most Beautiful Steel Bridge of 1931 award from the American Institute of Steel Construction (AISC).[2] In 1937 Langley again earned first-place for Most Beautiful Bridge from the AISC for the design of the Chesterfield-Brattleboro box-girder-rib arch over the Connecticut River, also built after the 1936 flood. The award was given jointly to John W. Childs, Bridge Engineer, and Harold E. Langley, Designing Engineer.

At the same time Langley designed the repairs to the landmark 1904 Walpole-Bellows Falls arch bridge over the Connecticut River that was damaged by the 1936 flood and wrote an important paper about the work (see following section). His design, in which the three-hinged arch was

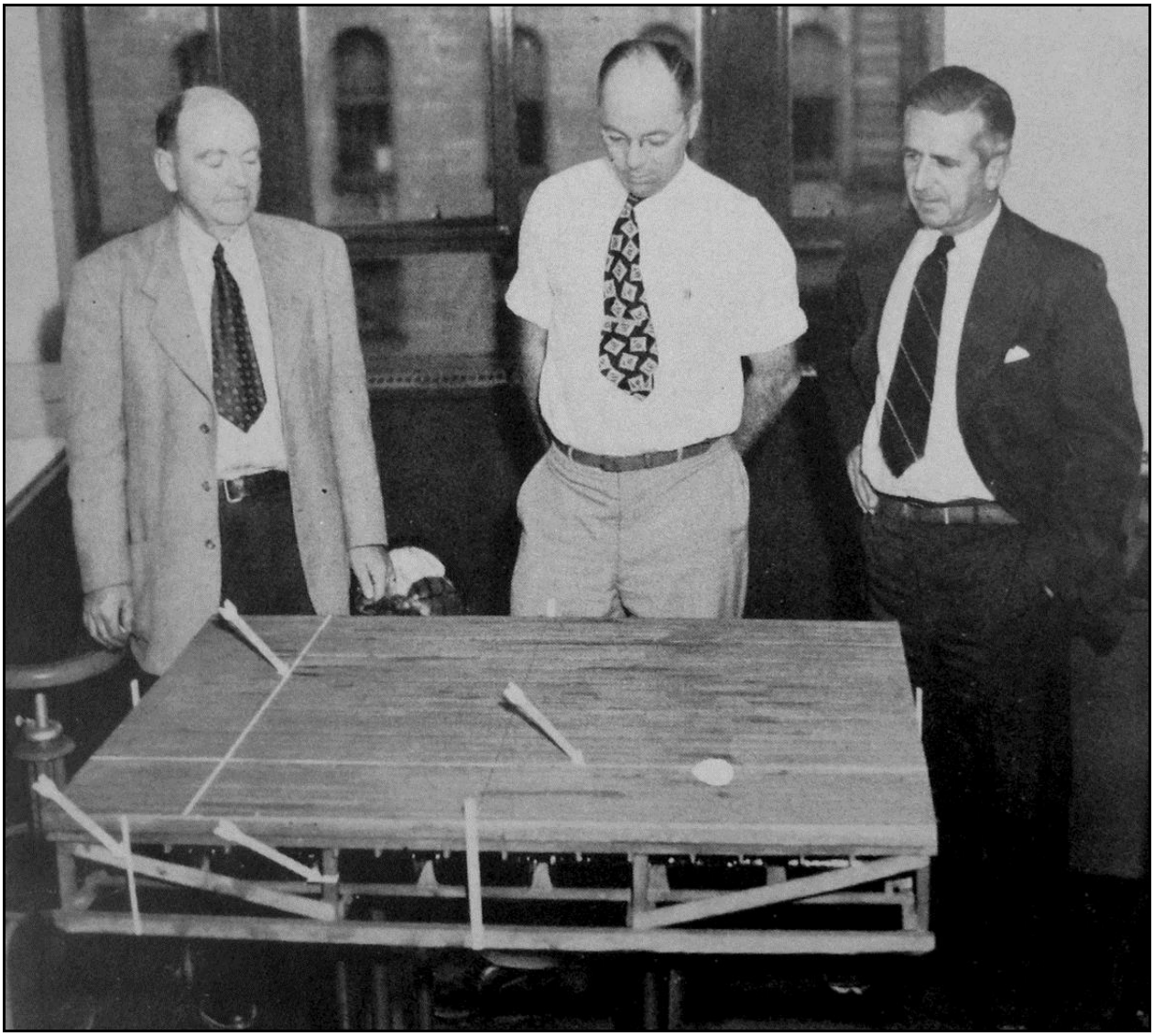
[1] Biographical information is based on U.S. Census and Department of Veteran Affairs Records obtained from Ancestry.com.

2. "National Award Announced for the Most Artistic Bridge," *Engineering News-Record* (July 4, 1932): 870.

temporarily converted to a tied arch and then shortened and raised, was highly praised by his peers for its complexity, ingenuity and boldness.

During WWII Langley was responsible for the creative design of several bridges that utilized non war-critical materials including wood and stone, as described in two articles written by him and discussed below.

A detailed study and critique of his body of work was beyond the scope of this study but an initial assessment suggests that he may have made the largest and perhaps the most significant contribution to bridge building in New Hampshire during the first half of the twentieth century.



Harold E. Langley, Bridge Engineer (left), Robert J. Prowse, Designer, and John O. Morton, Chief Engineer, of the New Hampshire Department of Public Works and Highways, examine a scale model of a floating wharf to be constructed at Hilton Park, Dover Point. (Source: New Hampshire Highways, November, 1950).

Harold E. Langley, State Bridge Engineer, seated to the right of Governor Hugh A. Gregg, at the 1953 Department of Public Works and Highways budget hearing in the State House Council Chambers. Standing left to right: Richard Jewell, Assistant Accountant; Merton C. Buckminster, Chief Accountant; Leroy Johnson, Maintenance Engineer; Fred Auer, Planning and Economics Director. Seated, left to right: J. Harold Johnson, Assistant Commissioner; Frank D. Merrill, Commissioner; Harold E. Langley, Bridge Engineer; Hugh A. Gregg, Governor. (Source: New Hampshire Highways, January, 1953).

Annotated Bibliography of Publications

[1] Langley, H.E. and Edward J. Ducey. "Reconstruction of the Walpole-Bellows Falls Arch Bridge." ***Proceedings of the American Society of Civil Engineers*****, vol. 65, April 1939, pp. 1643-1668. Discussion. J.B. French, L.D. Rights, Conde B. McCullough, H.M. Nelson, H.E. Langley.** ***American Society of Civil Engineers Transactions*****, October 1940, pp. 1701-1712.**

This comprehensive and technically detailed article describes the reconstruction of the Bellows Falls steel arch bridge designed by J.R. Worcester and built in 1904.[3] The bridge was a noted engineering achievement at the time of its construction. It suffered critical structural damage during the famous 1936 flood that was especially severe along the Connecticut River. Langley provided a concise synopsis of the paper, reproduced in part below:

> The three-hinged, open-web, steel, arched highway bridge between the Towns of Walpole, N.H., and Bellows Falls, Vt., was one of the several crossings over the Connecticut River that were seriously damaged during the spring flood of 1936. At the New Hampshire end of the span, the lower chord sections and the adjacent web members of the upstream truss below high-water level were so badly crippled that it was necessary to close the bridge to all vehicular traffic; and the responsible authorities were compelled to decide between major repairs to the structure and its replacement with a new one.
>
> This bridge had been in service only since 1908, and the steelwork in general had been carefully maintained so that a considerable expenditure for repairing the damage was warranted. The consulting engineers who designed the structure were called upon to submit a design for repairs. They formulated a general plan involving supports near each end, with four along the interior of the arch, all supported on timber pile groups. Detailed plans were prepared, and bids were taken for the work on this basis. The successful bid ($120,000) included all operating hazards and was somewhat in excess of the anticipated costs. The danger element involved in this undertaking was relatively high because a further accident to the main span might not only result in the loss of the structure but would probably involve difficulties at the Bellows Falls power plant, situated immediately below the bridge, which is a main link in the electric power system that serves this region. In studying the situation the Bridge Division of the New Hampshire State Highway Department decided that it was more feasible for the State to assume the risks incident to this extra-hazardous procedure than the contractor. To do this it was necessary to let the fabrication and erection contract on a "cost-plus" basis to a competent structural steel contractor who would cooperate with the State forces in driving the piles and placing the concrete.
>
> In consultation with the contractor's engineers a study was made to eliminate some of the more hazardous features of the undertaking by keeping the river as clear of falsework as the condition of the structure would admit. Accordingly, a plan was devised incorporating the use of temporary cable ties to take the horizontal thrust of the arch, thus converting the span

[3] Lewis D. Rights. "Erection of the Bellows Falls Arch Bridge." *Transactions of the American Society of Civil Engineers*, March 1908, pp. 253-280.

> temporarily into a tied three-hinged arch to be carried on falsework towers near the original supports. With the falsework at the ends of the span it could not only be protected, if necessary, from floating ice by means of ice breakers or fenders extending out from the river banks, but it could be constructed from the shores as well.
>
> The use of temporary cable ties and other features introduced in this work seem somewhat unusual, and it is believed that a description of the procedure followed will be of interest to engineers and contractors generally.

This paper is particularly valuable in that it is illustrated with nine photographs and eight figures that show in detail the structural damage caused by the flood and the reconstruction techniques. The methods of rigging the ties and bracing, falsework, and hydraulic jacking system are described and illustrated in clear and adequate detail to enable others to duplicate the procedure.

The co-author, E.J. Ducey, Designing Engineer with American Bridge Company (Pittsburgh, Pa.) was a professional engineer with B.S and M.S. degrees in civil and structural engineering. He was the erection expert at American Bridge, in charge of design and checking of erection schemes for many of the company's largest bridge projects. He is credited with the development of several modern methods of bridge erection. His additional expertise in the control of erection stresses by means of continuous truss action over adjustable erection towers and his methods for the rational analysis of flexible arch ribs, made him the obvious choice for this most complicated and dangerous repair undertaking.[4]

The significance of the repair project in both practical and engineering terms is noted in the discussion of Langley's paper by other engineers:

J.B. French: "The work described in this paper shows boldness and resourcefulness in planning and much skill and constant alertness in the supervision of its execution." "Work of this kind, like foundations and structural frames hidden from view by subsequent construction, and all falsework and temporary structures for purely erection purposes constitute and important part of engineering construction; detailed descriptions of such work, such as are given in this paper, are always valuable contributions to the publications of this Society."

L.D. Rights: Rights was one of the original designing engineers of the bridge and author of the paper describing the design and construction of this seminal steel arch structure.[5] His comments were somewhat critical of what he considered the overly cautious methods used in the bracing and falsework systems. He assumed them to be costly and wanted more cost data on the project. "All this does not in the least detract from the high praise due the engineers for the skill whereby the span was shortened from 540 ft to 486 ft and the spring-line pins raised 17 ft. The success of their scheme is the result of bold design, careful planning and constant care.

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[4] "Edward Joseph Ducey". In Downs, Winfield Scott, Editor. *Who's' Who in Engineering.* New York: Lewis Historical Publishing Co., *1941*, p. 490.

[5] See note 2.

Conde B. McCullough: "Congratulations are due the authors, not only on a most coherent presentation, but also on an exacting piece of reconstruction, efficiently and safely performed." … "It is gratifying indeed to see a 'repair job' of this character accorded the distinction of a detailed technical write-up." McCollough goes on with several examples of his own experience on the subject of repairing and jacking bridges and control of the stresses in the structure when doing so.

H. M. Nelson: Nelson was Hydraulic Engineer for New England Power Service Company of Boston, owners and operators of the Bellows Falls hydroelectric plant immediately downstream of the bridge. He gives an eyewitness account of the flood and damage to the bridge caused by a huge ice jam upstream that broke free and collided with the bridge. He estimated that the "ice cake' that hit the bridge was on average 21 inches thick, over a quarter acre in area, weighing over 500 tons and traveling at about 4 miles per hour. "The impact caused the entire structure to vibrate so violently that the writer, who was leaning over the sidewalk railing to observe, was thrown to the floor." Nelson commends the authors for rejecting the first plan of repair that called for placing a large number of pile bent supports in the river channel, and for "an ingeniously designed bridge-repair project completed under difficult river and weather conditions."

H.E. Langley: Langley's response to the various questions and comments made in the discussion adds substantially to the overall content, and considers "the costs of the various parts of the work, together with some of the more important reasons for adopting the scheme used in making the repairs." Langley noted that "the authors gained considerable satisfaction from the discussions," particularly those by McCullough who evidently gave it a very careful read, and by Nelson who provided invaluable information on the character of the flood and ice floes and their effect on the structure. He notes that the original scheme for the repairs called for the erection of six temporary wooden towers to support the arch trusses during removal of the damaged ends and reconstruction of the abutments. He provides a detailed cost analysis of that option along with the liabilities that made it impractical. A table listing each work item and their individual cost is provided.

[2] Garrelts, J.M. "Design of St. Georges Tied Arch Span." ***Transactions of the American Society of Civil Engineers,*** **vol. 108, 1943, pp. 543- 554; Discussion, R.W. Abbett, Jacob Karol, Alexander Dodge, C.B. Bejarano, A.A. Eremin, A.M. Freudenthal, C.H. Gronquist, H.E. Langley, J.M. Garrelts, pp. 555-576.**

Harold Langley contributed to the discussion of Garrelts' paper which presented a procedure of mathematical analysis used in the design of the 540'-span tied arch bridge carrying the DuPont Highway over the Chesapeake and Delaware Canal at St. Georges, Delaware. Professor Garrelts, an Associate Professor of Civil Engineering at Columbia University and Designing Engineer for Waddell & Hardesty, states, "Although the bridge type is not new, having been used in Europe, it is believed that the design introduces a new type to American practice."

Langley's discussion, as with that of most others, begins with complimentary statements regarded the valuable contribution Garrelts paper makes to the engineering profession. He then questions, like almost all the other discussers, some of the finer details or lack of details, in Garrelts' presentation of his analysis. Langley flatly states that based on his experience with the design of two large arches of 425-foot span in New Hampshire – one a tied arch – "if he were called upon to design a similar structure [of such unusual proportions] he would apply the deflection theory" [instead of the elastic theory that was used]. Several of the other discussions were much more severe in their criticism of Garrelts methods and in his response he addresses them one by one, in some cases simply saying he may have omitted some details of the analysis because they could be considered obvious. In addressing Langley's comments, he says "Mr. Langley's statement regarding formulas based on the deflection theory already seems to have been answered by Mr. Freudenthal and Mr. Gronquist. In this self-tied structure the deflection theory agrees with the analysis given because the arch rib and tie girder deflect the same amount."

[3] Hool, George A., W.S. Kinne, R.R. Zipprodt, and H.E. Langley. *Movable and Long-Span Steel Bridges, 2nd edition*. New York: McGraw-Hill Book Company, 1943.

In 1943 Langley co-authored the revisions for the second edition of the well-known engineering textbook *Movable and Long-Span Steel Bridges*, (1923) one of six volumes of McGraw-Hill's *Structural Engineers' Handbook Library*, written by Hool and Kinne, engineering professors at the University of Wisconsin.

Roy Richard Zipprodt undertook the revision of the Hool and Kinne text for the publisher while serving in the War Department as the Principal Civil Engineer of the Office of the Quartermaster General. Prior to his wartime service, Zipprodt was Associate Structural Engineer at the US Bureau of Standards, and Associate Professor of Civil Engineering at Columbia University prior to that. In the preface, he "acknowledges the continued and very helpful collaboration of his associate, Mr. H. E. Langley, and thanks all others who have in any way contributed to the preparation of this, the Second Edition." How Zipprodt and Langley knew each other or were "associated" at the time could not be determined.

The preface states, "Steel Arch Bridges, Section 7, contains new material pertaining to good examples of recent steel arches." Comparing the two editions, three additional pages were added to the chapter to provide photos and descriptions of the Rainbow Arch Bridge at Niagara Falls and the Chesterfield NH -Brattleboro VT Bridge and the Orford NH–Fairlee VT Bridge, both spanning the Connecticut River.

The two New Hampshire bridges were included as examples of two-hinged (Chesterfield-Brattleboro) and tied-arch (Orford-Fairlee) construction. Each was designed under the same specifications, for the same loading, the same span, the same type of deck, and construction

was started on both in the same year, 1936. Both bridges have box girder type ribs, a span of 425 ft. pin to pin, a rise of 85 feet and a clear roadway width of 24 feet.

Further details of the bridge designs and the erection methods are given. Finally the cost are compared, showing the tied arch to be considerably more expensive than the two-hinged type: The Orford tied arch required 970 tons of steel; the total cost of the bridge was $231,200 of which $153,000 represented the superstructure. The Chesterfield two-hinged arch required 750 tons of steel; the total cost of the bridge was $202,000 of which $135,000 represented the superstructure.

In 1937 Langley shared the first-place award for the "Most Beautiful Steel Bridge of the Year" from the American Institute of Steel Construction (AISC) for the design of the Chesterfield-Brattleboro box-girder-rib arch over the Connecticut River, built in the wake of the 1936 flood. The award was given jointly to John W. Childs, NHHD Bridge Engineer, and Harold E. Langley, Designing Engineer. The Orford span, later named the Samuel Morey Memorial Bridge, designed by Harold E. Langley and John H. Wells, received “Honorable Mention.”

[4] Langley, H. E. "Pre-Framed Timber Bridges in New Hampshire." ***Roads and Streets,*** **April 1943, pp. 44-46.**

During 1941-42, to conserve war-critical materials, the NHHD designed (and built) two stone arch bridges and several wooden superstructure bridges with spans lengths between 20 to 65 feet. Simple stringer spans were used for spans under 30 feet; over 30 feet deck or pony trusses were used, all with 24' clear roadways width and H-15 loading. Langley submitted this article to *Roads and Streets Magazine* to share information on the fabrication and erection methods and costs.

During the fall of 1941, bridge engineers at the New Hampshire State Highway Department determined that the structural steel shapes and reinforcing steel needed for bridges to be built in 1942 would be unavailable. In 1941 there were approximately 900 bridges on the state highway system, of which 150 were rated as substandard for civilian traffic and "a somewhat larger number for military traffic." The majority of the bridges fell in the span length of 20 to 70 feet. Non-critical materials available were mass concrete, stone and timber. Of the steel hardware required for the timber bridges, "timber connector rings, bolts nuts, washers and spikes, only the rings were purchased, all other items were fabricated from existing stock by the Highway maintenance shops or salvaged. A program of salvaging and straightening used spikes was inaugurated."

The timber truss bridge designs were based on use of a good grade of native hemlock with built-up members required for floor beams. For the stringer bridges, southern yellow pine timbers were salvaged from a dismantled mill building and resawn to the required dimensions.

Langley discusses the erection methods that utilized a small truck crane and the existing bridges that were being replaced. Costs are also discussed in detail. For example, the 65-foot span timber pony truss bridges were built at a total cost of $35 per linear foot including timber, hardware, equipment rental and labor.

[5] Langley, H. E. "New Hampshire Timber Bridges Rebuilt." ***Engineering News-Record,*** **January 27, 1944, pp. 138-139.**

In this short article accompanied with three photos, Langley describes the repairs made to wood covered bridges in the state done entirely by state highway department forces under his direction. Due to wartime demands for the state's forest products, logging trucks subjected many of the bridges to loads of 15 tons or more. Dating from the 19th century, the structures were capable for loads of only 4 to 6 tons. Coupled with the deterioration, the overloading damaged members and distorted the structures out of alignment.

The article focuses on the repairs to the covered bridge over the Pemigewasset River in the town of Woodstock, a 182-foot span lattice truss combined with laminated arches. The bridge was raised off its abutments by jacking and supported on three sets of timber falsework consisting of framed pile bents. Deteriorated members were cut out and replaced or spliced as required, the entire structure realigned, rebraced, lowered onto the abutments and back in service in 15 weeks. The repairs were done by a maintenance department crew that varied from four to eight men, at a total cost of $9,000 including materials and labor. Langley notes that due to depletion of the department's younger men for war service, all of the workers with one exception were over 50 years of age.

[6] "Talk by H.E. Langley, March 27, 1951." ***Society for the Preservation of Covered Bridges, Bulletin No. 7.*** **Xerox copy of article with no date or publisher, on file at New Hampshire Division of Historical Resources, Concord.**

In 1951, Harold E. Langley, Bridge Engineer for the New Hampshire Highway Department, discussed several covered bridges in which he was involved, including the Stark Covered Bridge, in a talk before the Society for the Preservation of Covered Bridges. In his presentation, Langley "discussed the causes for bridge deterioration, the means to remedy it, and the numerous problems involved when old bridges are subjected to modem heavy traffic."

Langley made general several points relevant to all covered bridges which are reproduced in full below for the insight they provide on the engineer's perspective of covered bridge problems at that time.

- Covered bridges are [often] neglected by the towns until they get into such a state of disrepair that communities are no longer able to afford to put them in shape… they call for help from the state, and the state engineer inspects them and very often he finds it necessary to condemn bridges that could easily be saved if given earlier attention…

- The weak point in most of the old covered bridges is the floor system. This often deteriorates because the side covering of the bridge is neglected, allowing rain to pelt through on to the floor. In almost any old bridge, there is an inch or more of accumulated dust and dirt. When this is dampened by rain, decay sets in.

- The engineer sometimes finds floors weakened because the towns, in repairing, have turned the floor beams over instead of replacing them. In looking for trouble, he examines the floor and bottom chord first, and especially the condition of the sills, which may carry decay to the chord.

- Occasionally trouble is found in the "trunnels", or wooden pegs, that hold the parts of a bridge together. Dry rot may appear in the center of the pin. In replacing these, a new type of steel ring, known as a Teco Connector, is sometimes used. This is so constructed that the holes do not grow longer and larger, as with a simple steel pin once tried out for the purpose, and the stresses and strains of moving traffic are less liable to do injury to the members.

Two additional publications that were not authored by Langley but discuss notable bridges that he designed:

[7] Childs, John W. "New Hampshire Bypass Road Requires Unusual Structure." *Engineering News-Record,* August 27, 1931, pp. 331-332.

John W. Childs was Bridge Engineer for the NHHD and Langley's boss. Langley assumed the position when Childs retired in 1942. Childs article was about the design features of the U.S. Route 3 Bridge over the Suncook River between the towns of Allenstown and Pembroke, New Hampshire, a seven-span multi-type highway bridge with an overall length of 394 feet. Plans indicate that H.E. Langley was the principal designer. The bridge was replaced in 2005 and documented to HAER standards (NH-578). The main span of the bridge over the river was a two-level riveted steel triangular truss of the modified Warren truss type. The truss span was 148' in length, with roadway decks carried on the upper and lower chords. The other six spans served as approaches to the upper level of the main span and consisted of two 40' steel girder deck spans, one at each end of the bridge; three 50' steel girder deck spans over roadways; and one 12' reinforced concrete slab deck span.

The bridge was significant for its unique design that combined a high-speed bypass bridge on the upper deck and a low-speed local-access bridge on the lower deck with an unusual arrangement of access ramps and approaches. It was an early example of bypass or “thru-way” planning and design and regarded as a creative design solution for a difficult site. Childs called the project "exceptional in the complexity of the hazards done away with and in the expense of the structures required, one of which is a two level bridge separating the roadways of intersecting highways." The article includes a detailed description of the design and costs accompanied by plan, elevation and section drawings.

[8] Gallagher, E. F. "Brick Facing Applied to New Hampshire Highway Bridge." Engineering News-Record, December 12, 1935, p. 813.

Ernest Francis Gallagher was Manager-Engineer of the New England District of the Brick Manufacturers Association of America, based in Worcester, Massachusetts. The purpose of the article was evidently to promote the use of brick in bridge building. Gallagher describes the architectural treatment given to a 38'-span concrete rigid frame bridge carrying NH 27 over the Lamprey River in the town of Epping. Two photos of the bridge, an elevation and a detail of the parapet railing are provided in the one-page article. The bridge (Epping 051/053) was built in 1935 by the NHHD and was designed by H.E. Langley with brick facing for aesthetic reasons. All surfaces of exposed concrete except the underside were faced with locally manufactured waterstruck brick. The solid parapet railings are brick faced and capped with granite; the narrow sidewalks are paved with brick in a basket-weave bond and edged with granite curbing. The flat arch of the span – typical of rigid frame bridges of the period – was faced with soldier and header courses to give the appearance of a natural brick arch. The brick was bonded to the concrete "using heavy copper ties placed 18 in. on centers horizontally and every fourth course vertically." Epping was the center of brick manufacturing in New Hampshire at the time. The contractor was Lane Construction Co. of New Haven, Connecticut; Clayton Chase was resident engineer for the state.

HAROLD E. LANGLEY

BRIDGE & STRUCTURAL DESIGNS

List of Bridge Plans on file at NHDOT noted as "Designed By" Harold E. Langley

Key to Symbols and Abbreviations:

* = bridge replaced
-- = no information
l.o.a. = length overall
Brg Sum = NHDOT Bridge Summary List

Project types:

DA-WR	Defense Access Wartime Request
FA	Federal Aid
FAGH	Federal Aid Grade Highway
FAP	Federal Aid Primary
FRP	Flood Relief Project
H.J.R.	House Joint Resolution
LS	Legislative Special
P	Primary
S	Secondary
SA	State Aid
SAC	State Aid Culvert
SAF	State Aid Flood
T	Turnpikes (old carriage road turnpikes)
TLB	Trunk Line Bridge
TLC	Trunk Line Culvert
TLM	Trunk Line Maintenance
TLR	Trunk Line Reconstruction
TRF	Transportation Road Fund (assumed)
WPA	Works Progress Administration
WPFR	Works Program Flood Relief
WPMH	War Project for Municipal Highways

Bridge Types:

BAS	Bascule
CA	Concrete Arch
CACUL	Concrete Arch Culvert
CB	Concrete Box
CRF	Concrete Rigid Frame
CS	Concrete Slab
CTB	Concrete T-Beam
DPG	Deck Plate Girder
DT	Deck Truss
HT	High Truss
IB-BP	I-Beam stringer with Bridge Plate deck
IB-C	I-Beam stringer with Concrete deck
IB-W	I-Beam stringer with Wood deck
JA	Jack Arch
LT	Low Truss
MA	Masonry Arch
MP	Metal Pipe
MP-A	Metal Plate Arch
PSB	Prestressed Spread Boxes
PSC	Prestressed Concrete
PVS	Prestressed Voided Slabs
SA	Steel Arch
TPG	Thru Plate Girder

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
C-25	Auburn	8/22/22	SAB 1922	not built	--	JA	--	
C-26	Brookfield	7/31/22	SAB 1922	--	--	JA	--	
C-27	Brookline	7/14/22	SAB 1922	087/149*	--	CS	--	
C-28	Chatham	8/8/22	SAB 1922	not built	--	JA	16'	
C-29	Colebrook	8/25/22	SAB 1922	056/102*	--	JA	--	
C-31	Dorchester	6/27/22	SAB 1922	145/087*	--	CS	--	
C-33	Fitzwilliam	7/21/22	SAB 1922	155/094*	NH 12 over Scott Brook	JA	--	
C-35	Hampton Falls	6/6/22	SAB 1922	094/142	NH 88 over Taylor River	JA	20'	
C-36	Hancock	8/8/22	SAB 1922	143/067*	--	JA	--	
C-38	Lyman	8/29/22	SAB 1922	100/123	Tinkerville Road over Patten Brook	CS	17'	On old abutments
C-39	Madison	8/29/22	SAB 1922	068/090	NH 113 over Deep River	CS	14'	
C-41	Mason	8/7/22	SAB 1922	071/062*	--	CS	--	
C-42	Middleton	6/1/22	SAB 1922	--	--	CS	--	
C-43	Newport	6/5/22	SAB 1922	136/100	Elm Street over Dry Bridge	CS	20'	
C-45	Rumney	6/20/22	SAB 1922	--	--	JA	--	
C-46	Sandwich	7/17/22	SAB 1922	147/058*	NH 109 over Red Hill River	JA	13'	
C-47	Warren	7/10/22	SAB 1922	109/173*	--	JA	28'-9"	
C-48	Waterville	7/7/22	SAB 1922	--	--	JA	21'	
C-49	Wolfeboro	7/19/22	SAB 1922	167/095	NH 109 over Willey Brook	JA	27'	
C-50	Alton	3/16/23	SAB 1923	096/287	-- over West Alton Brook	JA	20'	
C-54	Conway	5/22/23	SAB 1923	not built	--	IB-C	--	
C-55	Deerfield	7/12/23	SAB 1923	148/052*	NH 43 over Lamprey River	JA	--	
C-56	Easton	9/11/23	SAB 1923	143/150	NH 116 over Kendall Brook	CS	16'	
C-58	Farmington	6/2/23	SAB 1923	-- *	--	CS	--	
C-60	Goffstown	10/22/23	SAB 1923	053/119	Parker Station Road / Gorham Brook	JA	20'	Listed as IB-C in Brg Sum
C-61	Hampton Falls	8/11/23	SAB 1923	094/142*	--	JA	--	

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
C-63	Lee	8/31/23	SAB 1923	103/078	Lee Hool Road over Lamprey River	IB-C	2 @ 30'	
C-64	Middleton	6/3/23	SAB 1923	082/109*	--	JA	--	
C-66	Pittsburg	7/9/23	SAB 1923	071/033*	--	JA	-	
C-67	Shelburne	9/21/23	SAB 1923	084/124	North Road over Peabody Brook	IB-C	17'	
C-71	Tamworth	9/29/23	SAB 1923	--	--	IB-C	--	
C-72	Thornton	8/28/23	SAB 1923	240/151*	--	--	--	Substructure design
C-75	Winchester	7/8/23	SAB 1923	--	--	JA	--	
C-76	Barnstead	8/28/24	FA-184	126/113	Oxbow Road over Suncook River.	CTB	58' l.o.a.	
C-77	Boscawen	9/22/24	FA-219A	124/102*	--	CACUL	--	
C-78	Bridgewater	7/3/24	SAB 1924	--	--	CS	--	
C-78A	Bristol	4/2/24	FA-205A	100/082	NH 3A over Newfound River.	CTB	60' l.o.a.	
C-79	Campton	5/23/24	SAB 1924	154/144*	NH 175 over Winter Brook	CTB	--	Replaced 1974 with CS
C-80	Colebrook	8/30/24	SAB 1924	191/102*	--	CS	18'	Skewed; curious rebar pattern
C-81	Columbia	9/18/24	FA-221-A	043/036*	US 3 over Lyman Brook	CTB	40'	Replaced 1952 with IB-C
C-82	Derry	7/9/24	SAB 1924	164/127	Hampstead Road over Brook	CS	12' l.o.a.	
C-84	Effingham	8/8/24	SAB 1924	167/095	NH 153 over South River.	CS	16' l.o.a.	Listed as CFR in Brg Sum
C-85	Enfield	2/18/24	SAB 1924	088/086*	--	CTB	--	
C-86	Epsom	7/31/24	SAB 1924	097/122	Black Hall Road over Little Suncook River.	JA	41'	Listed as IB-C in Brg Sum
C-87	Farmington	6/21/24	SAB 1924	096/140	NH 153 over Cocheco River.	CS	2: 48' l.o.a.	
C-88	Fitzwilliam	7/11/24	FA-203-C	191/037*	NH 12 over Tarbell Brook	CTB	--	Replaced 1958 with CRF
C-89	Greenville	6/26/24	SAB 1924	075/114*	Wilton Road over Souhegan River.	IB-C	--	Concrete encased I-Beams Replaced 1938 with HT
C-90	Hanover	7/28/24	SAB 1924	213/150*	Wolfeboro River. over Marshall Brook	IB-C	--	Concrete encased I-Beams Replaced 1973 with IB-BP
C-92	Hooksett	8/4/24	SAB 1925	165/085	--	CS	10'	
C-94	Newbury	5/29/23	FA-189	124/078*	Warner River. (Andrews Brook) over --	JA	--	
C-95	New Ipswich	--	SAB 1924	--	--	CB	--	

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
C-96	Northfield	9/24/24	SAB 1924	152/150*	NH 140 over Tioga River.	IB-C	--	Concrete encased I-Beams Replaced 1968 with CB
C-97	Ossipee	5/1/24	FA-214-A	-- *	--	LT	--	Warren Pony Truss
C-98	Rochester	6/2/24	TLM 1924	--	--	CB	--	
C-99	Rumney	7/7/24	SAB 1924	-- *	--	CTB	--	
C-100	Shelburne	8/10/24	SAB 1924	077/105	US 2 over Rattle Brook	IB-C	17'	Concrete encased I-Beams Listed as CTB in Brg Sum
C-101	Stewartstown	8/19/24	SAB 1924	079/151	US 3 over Bishop Brook	JA	27'	Listed as CS in Brg Sum
C-102	Stratford	7/29/24	SAB 1924	105/070	Hollow Road over Stratford Bog Brook	CTB	27'	
C-103	Thornton	3/11/24	FA-209-A	154/075*	US 3 over Hubbard Brook	-	--	
C-104	Walpole	8/14/24	SAB 1924	-- *	--	CS	--	
C-106	Washington	7/8/24	SAB 1924	128/073*	NH 31 over Halfmoon Pond Outlet	CTB	--	Replaced 1993 w/ CS
D-3	Chatham	7/28/25	SAB 1925	264/132	South Chatham Road over Province Brook	CS	12'	
D-5	Clarksville	7/7/25	SAB 1925	077/042	NH 145 over Pond Brook	CS	16'	
D-6	Columbia	8/3/25	SAB 1925	233/128	Bungy Road over E. Branch Simms Brook	CS	14'	
D-9	Epsom	1/19/25	FA-210-C	086/127*	US 4, 202, NH 9 / Suncook River.	TPG	--	Replaced 1971 w/ IB-C
D-10	Gilmanton	8/7/25	SAB 1925	145/045*	Gilmanton Road over Suncook River.	CS	16'	Solid paneled parapet railing.
D-12	Hanover	6/12/24	SAB 1925	110/073	Hanover Center Road over Monahan Brook	CS	12'	
D-15	Hudson	7/6/25	SAB 1925	110/086	Central Street over Hadley Brook	CS	12'	
D-16	Jefferson	8/22/25	SAB 1925	092/073*	NH 115A over Cherry Mill Brook	IB-C	24'	Replaced in 1950 w/ CRF
D-17	Lebanon	4/8/24	FA-201-C	101/110*	-- over Mascoma River.	CB	2 @ 38'	
D-18	Middleton	7/8/25	SAB 1925	083/076	NH 153 Moose Brook	CB	10'	
D-19	Moultonboro	9/9/25	H.J.R. # 4	192/101*	Long Island Road/Lake Winnipesaukee	IB-W	5 @ ~ 30'	Replaced 1988 w/ IB-C
D-21	New Boston	6/20/25	SAB 1925	122/100*	NH 13 over Cochrane Brook	CS	10'	
D-22	New London	9/28/25	SAB 1925	--	--	CS	7'	
D-23	Northumberland	7/31/25	SAB 1925	223/118	Lost Nation Road over Fox Brook	CS	14'	Rehabbed 1954

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
D-24	Northwood	7.2.25	FA-210-D	102/081	US 4, 202, NH 9 over Tucker Brook	CS	12'	Rehabbed 1985
D-25	Nottingham	8/4/25	SAB 1925	141/127	NH 152 over N. Branch Lamprey River.	JA	17'	Listed as IB-C in Brg Sum Rehabbed 1970
D-27	Peterborough	8/21/25	FA-223-C	070/056*	NH 123 over Contoocook River?	TPG	53'	
D-29	Plainfield	7/26/25	SAB 1925	075/139	NH 12A over Beaver Brook	CS	15'	
D-30	Plymouth	4/13/25	SAB 1925	076/145*	--	CB	17'	
D-32	Shelburne	6/23/25	SAB 1925	079/106*	US 2 over Rattle River	CB	32'	Replaced 1973 with CRF
D-33	Stoddard	7/25/25	SAB 1925	--	--	CS	18'	
D-34	Surry	7/6/25	SAB 1925	--	-- over Cannon Brook	CS	12'	
D-35	Tamworth	7/17/25	SAB 1925	095/162	NH 113 over Chocorua River.	JA	22'	Solid paneled parapet railing
D-38	Waterville	8/13/25	SAB 1925	-- *	--	CS	12'	
E-1	Albany	1/29/26	SAB 1926	260/099	NH 113 Madison Road / Pequawket Brook	CS	12'	
E-2	Alstead	7/20/26	SAB 1926	135/119	NH 123 Forest Road over Hale Brook	CS	12'	
E-4	Benton	6/9/26	SAB 1926	058/052*	NH 25 Moosilauke Road / Oliverian Brook	CS	30'	-
E-5	Boscawen	10/28/26	SAB 1927	138/038*	-- at Stratton Mills	CS	16'	-
E-6	Boscawen	8/26/26	SAB 1926	137/037*	-- at Stratton Mills	CS	16'	-
E-7	Carroll	9/20/26	SAB 1926	--	-- over Ammonoosuc	IB-C	2 @ 33'	
E-8	Columbia	5/27/26	SAB 1926	059/089*	US 3 Daniel Webster Highway./ Cones Brook	CS	2 @ 16'	Replaced 1952 with IB-C
E-9	Dalton	6/9/26	SAB 1926	134/153	NH 135 over John's River.	IB-C	28'	
E-10	Millsfield	7/8/26	SAB 1926	138/153	NH 26 over Clear Stream	IB-C	28'	Skewed
E13	Easton	7/9/26	SAB 1926	090/072*	Wildwood Road over Mudpond Brook	CS	12'	
E-14	East Kingston	--	FA-207-C	067/057	NH 108 over Powwow River	CTB	23'	Rehabbed 2006
E-15	Errol	6/23/26	SAB 1926	093/131*	-- over Pond Brook	CB	15'	
E-16	Farmington	5/17/26	SAB 1926	076/135	Spring Street over Cocheco River.	CTB	36'	Skewed and banked
E-18	Francestown	6/9/26	SAB 1926	125/077*	2nd NH Tnpk. / So. Brook Piscataquog River.	IB-C	44'	Replaced 1983 with MP

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
E-19	Franklin	--	FA-219-C	173/071*	Daniel Webster Highway / Punch Brook	CTB	21'	Replaced 1938 with CTB
E-20	Franklin	--	FA-219-C	149/078*	Daniel Webster Hyw / Punch Brook	CACUL	--	
E-21	Fremont	6/21/26	SAB 1926	119/064*	NH 111A Danville Road over Exeter River.	IB-C	34'	Dated 1978 in Brg Sum
E-23	Hampton	4/23/26	FA-17-C	146/087*	US 1 over Hampton River (Taylor River.)	CTB	32'	Replaced 1965 with PSC
E-24	Harrisville	6/29/26	SAB 1926	056/058*	Chesham Road over Minnewawa Brook	CS	15'	"Russellville Brg." Number reassigned in Brg Sum
E-25	Hart's Location	5/5/26	SAB 1926	235/060*	Crawfords Notch Road over Sawyers River.	TPG	94'	
E-26	Hill	5/11/26	SAB 1926	139/162*	Old NH 3A Pemigewasset Valley Road over Smith River.	CB	44'	Replaced 1999 with PVS
E-31	Lisbon	7/16/26	SAB 1926	081/136	Lyman Road over Mill Brook	CB	2 @ 15'	Rehabbed 1983
E-32	Loudon	4/29/26	SAB 1926	069/084	South Village Road (Rocky Pond Road) over Soucook River.	CTB	40'	
E-33	Lyme	3/27/26	FA-212-C	056/058*	NH 10 Dartmouth Coll. Road / Hewes Brook	CTB	23'	Replaced 1966 with PVS
E-34	Marlboro	4/5/26	FA-203-D	066/080	NH 12 over South. Branch Ashuelot River.	CTB	50'	Replaced 1952 with IB-C
E-37	Milan	7/6/26	SAB 1926	207/087*	Berlin-Milan Road over Leavitt Stream	CB	15'	
E-38	Milton	7/17/26	SAB 1926	078/156	Branch Road over Miller Brook	CS	13'	
E-39	New Durham	6/30/26	SAB 1926	199/054	Old NH 11 over Merrymeeting River.	JA	20'	Solid paneled parapet railing Listed as CTB in Brg Sum
E-43	Greens Grant	12/2/25	FA-1-B	096/136*	NH 16 Pinkham Notch Road over 19 Mile Brook.	IB-C	35'	"Forest Road Project" Replaced 1954 with CACUL
E-44	Sandwich	6/11/26	SAB 1926	147/058	NH 109 over Red Hill River.	CS	11'	Stone faced to resemble arch
E-45	Shelburne	7/1/26	SAB 1926	168/078*	Gorham Hill Ext. Road / State Line Brook.	CS	18'	
E-47	Stratford	--	-	--	Bog Road over Bog Brook	-	--	Abutment replacement due to change in course of Bog Brook

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
E-48	Wolfeboro	7/23/26	SAB 1926	174/077	NH 109 Pond Road over Clay Pit Brook	CB	10'	
E-49	Woodstock	6/4/26	SAB 1928	--	Eastside Road over --	CS	15'	"Peter Topp Bridge"
F-4	Benton	8/7/28	SAF 1928	119/177*	Tunnel Stream Road over Davis Brook	CS	11'6"	Replaced 2005 with CRF
F-5	Benton	8/9/28	SAF 1928	089/180*	NH 116 over Whitcher Brook	CS	23'	Replaced 2003 with CRF
F-6	Benton	8/14/28	SAB 1928	063/179*	NH 116 over Waterman Brook	CS	11'-6"	Replaced 1976 with MP
F-7	Benton	8/17/28	SAB 1928	145/156*	Tunnel Stream Road over Tunnel Brook	IB-C	2 @ 34'	Rehabbed 1992
F-8	Bethlehem	1/11/28	FRP-4	127/178	Dartmouth Coll. Road / Ammonoosuc River	HT	140'	Pratt Truss; "Pierce Bridge"
F-9	Bethlehem	12/16/27	FA-238-A	167/174*	US 3 Daniel Webster Highway. over Gale River.	TPG	70'	Replaced 1990 with IB-C
F-13	Bridgewater	7/18/24	--	161/171*	Jenness Road over Clay Brook	CACUL	8'	Replaced 1972 with MP
F-16	Campton	12/27	FRP-1-C	117/135	US 3 Daniel Webster Highway. over West Branch Brook	TPG	85'	
F-17	Campton	1/9/28	FRP-9-A	124/129	NH 49 over Pemigewasset River	TPG	2 @ 105'	
F-18	Carroll	12/1/27	FRP-3-A	173/142*	Crawford Notch Road / Ammonoosuc River.	TPG	96'	
F-19	Carroll	1/28	FRP-238-B	--	Daniel Webster Highway over Little River.	CS	34'	
F-22	Claremont	1/28	FRP-5-D	--*	Central Road over Connecticut River.	HT	--	Parker Truss
F-23	Dorchester	7/27/28	--	--	Wood Road over --	CB	18'	
F-24	Easton	8/1/28	SAF 1928	062/065*	NH 116 over Wild Ammonoosuc River.	IB-W	39'	Rehabbed 1949 to IB-C
F-25	Easton	7/5/28	SAB 1928	076/064	NH 112, 116 over Morse Brook	CS	15'	Rehabbed 2006
F-26	Gorham	1/10/28	FRP-7-A	075/109*	NH 16 over Moose Brook	TPG	53'-4"	Replaced 2006 with CRF
F-27	Gorham	12/27	FRP-2-B	106/189*	Gorham Hill Road over Peabody River.	HT	136'	High Pratt Truss replaced 1982 with 3-span IB-C
F-29	Harts Location	1/29/26	FRP-3-B	143/094*	Crawford Notch Road over Saco River.	TPG	84'	Replaced
F-30	Haverhill	7/23/28	FRP-4-C	058/115	NH 25 Moosilauke Road / Morris Brook	CS	20'	
F-31	Haverhill	7/10/28	FRP-4-C	072/061*	NH 25 Moosilauke Road / Oliverian Brook	IB-C	50'	Replaced 1999 with IB-C

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
F-32	Haverhill	7/20/28	FRP-4-C	074/051	NH 25 Moosilauke Road / N. Branch River.	IB-C	30'	Concrete encased I Beams
F-33	Haverhill	7/10/28	FRP-4-C	056/102*	NH 25 Moosilauke Road / Oliverian Brook	IB-C	50'	Replaced 1999 with IB-C
G-2	Jefferson	11/21/27	TLM 1928	146/087*	US 2 Gorham Hill Road / Stag Hollow Brook	IB-C	40'	Replaced 1969 with CRF
G-16	Littleton	12/7/27	SAF 1928	232/050*	Redington Street over Ammonoosuc River.	HT	120'	High Pratt "Apthorp Bridge"
G-18	Pinkham's Grant	6/5/28	FA-2-A	065/073*	NH 16 over Ellis River.	-	--	Plan of wood truss formwork. Replaced 1963 with IB-C
G-19	Pinkham's Grant	6/25/28	SAB 1928	065/073	NH 16 over Ellis River.	IB-C	2 @ 40'	Replaced 1963 with IB-C
G-20	Rumney	7/19/28	SAB 1928	--	--	IB-C	30'	Proposed Bridge
G-21	Rumney	7/14/28	SAB 1928	--	--	IB-C	15'	Proposed Bridge
G-22	Rumney	1/14/28	SAB 1928	--	Sand Hill Road over Baker River.	TPG	100'	Proposed Bridge
G-23	Rumney	7/21/28	SAB 1928	--	Stinson Lake Road over --	-	--	Proposed Abutment
G-25	Shelburne	2/9/29	SAF 1928	075/110	North Road over Androscoggin River.	-	--	"Lead Mine Bridge" Replaced 1973 with IB-C
G-27	Warren	7/14/28	SAB 1928	154/122	Breezy Point Road over Baker River.	IB-W	~50'	"Jewell Bridge"
G-28	Warren	11/23/27	FRP-4-B	-- *	Moosilaukee Road over Baker River.	PG	97'	number not in Brg Sum
G-29	Washington	9/7/28	SAF 1928	177/046	NH 31 over Shedd Brook	CS	15'	Rehabbed 1980-
G-32	Wentworth	5/1/28	SAF 1928	-- *	-- over Hurricane Brook	LT	61'	Pony Warren Truss "Dufour Bridge"
G-33	Wentworth	3/22/28	SAF 1928	167/058	Moosilaukee Road over Hurricane Brook	IB-C	57'	
G-34	Wentworth	6/28/28	SAB 1928	--	--	n/a	n/a	Piers for Thayer Bridge
G-35	Wentworth	5/4/28	SAF 1928	--	Road to Dorchester over Witcher Brook	n/a	n/a	Proposed abutments
H-1	Alexandria	4/27/27	SAB 1927	174/146	Bristol Road over Potter Brook	CS	14'	
H-2	Barnstead	3/22/27	SAB 1927	126/089	Depot Road over Perry Brook	IB-C.	31'	
H-3	Barrington	10/4/27	FA-210-H	128/121	--	CS	8'	
H-4	Bedford	4/27/27	SAB 1927	133/113	Baboosil Road over Riddle Brook	CS	10'	

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
H-5	Campton	3/1/27	SAB 1927	153/147	-- over Mad River	CA	86'	Railing detail with light posts Falsework design
H-6	Cornish	9/14/27	SAB 1927	071/139	River Road over Blow Me Down Brook	CA	25'	Stone facing detail
H-7	Croydon	10/8/27	SAB 1927	140/120	Dartmouth Coll. Road / Ash Swamp Brook	CS	20'	
H-8	Dalton	4/30/28	SAB 1927	090/130	Bypassed over Connecticut River, Dalton, NH to Lunenburg, VT	DT	7: 547' l.o.a.	Bypassed
H-10	Durham	6/10/27	SAB 1927	--	Bridge Road over Bunker Creek	CS	16'	
H-13	Gilford	7/15/27	SAB 1927	106/099	Winnipesaukee Road over Gunstock Brook	IB-C.	15'	
H-16	Goshen	5/16/27	TLM 1927	--	-	CS	30'	
H-17	Groton	4/7/27	SAB 1927	153/084	--	CS	15'	
H-18	Hebron	8/30/27	-	--	Foot Tunnel @ Camp Pasquaney	-	3'	Proposed pedestrian subway
H-19	Kingston	8/1/27	SAB 1927	082/074	Road from Kingston to Plaistow	CS	10'	
H-21	Lee	5/16/27	SAB 1927	144/142	Lee Five Corners -to-Madbury/Oyster River.	CS	16'	
H-23	Loudon	5/18/27	SAB 1927	102/119*	Rocky Pond Road / --	CTB	30'	
H-24	Madbury	5/5/27	SAB 1927	118/097*	Douer Road over Bellamy River	IB-C.	--	
H-25	Madison	7/18/27	SAB 1927	073/089	Ossipee Road over Deer River	CS	15'	
H-26	Milan	8/12/27	SAB 1927	201/097	Bridge Street over Androscoggin River.	-	--	Abutment reconstruction
H-28	Orford	7/27/27	SAB 1927	207/109	Baker Pond Road over Baker River.	CS	18'	
H-29	Ossipee	5/25/27	SAB 1927	128/135	NH171 over Beech River.	CS	20'	
H-30	Sandwich	7/7/27	SAB 1927	187/085	NH113 over Bearcamp River	CS	2 @ 18'	
H-31	Shelburne	6/21/29	FA-229B	114/104	Village Road over Clement Brook	CS	2 @ 20'	
H-33	Sunapee	7/18/27	SAB 1927	121/166	Sunapee Lake Road at Georges Mills over Otter Pd Outlet	CS	17'	
H-34	Tamworth	6/2/27	SAB 1927	163/132	NH25 Whittier Road over Stony Brook	CS	18'	
H-35	Thornton	5/27/27	SAB 1927	111/121	East Side Road over Johnson Brook	CS	17'	
H-38	Tuftonboro	5/31/27	SAB 1927	114/082	NH171 Mountain Road / Fields Brook	CS	16'	

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
H-39	Walpole	4/4/27	FA-222-C	--	Monadnock Road over Lanes Brook	CS	30'	Proposed Bridge "A"
H-41	Walpole	4/6/27	FA-222-C	--	Monadnock Road over Wire Brook	CTB	--	Proposed Bridge "C"
H-42	Waterville	8/22/27	SAB 1927	137/113	Waterville Valley Road / Snow Brook	IB-C	28'	Skewed & banked
I-1	Boscawen	7/24/28	SAB 1928	107/122	Salisbury Road over Tannery Brook	CS	13'	
I-2	Boscawen	7/27/28	SAB 1928	111/117	Salisbury Road over Tannery Brook	CS	10'	
I-3	Boscawen	9/6/28	SAB 1928	066-064*	--	CS	15'	
I-4	Canterbury	7/5/28	SAB 1928	236/156	NH106 over Suncook River	CS	18'	
I-8	Freedom	6/4/28	SAB 1928	115/074	Ossipee Lake Road / Danforth Bay outlet	CS	19'	
I-10	Gilmanton	11/19/28	SAB 1928	149/061	Crystal Lake Road over Suncook River	CRF	22'	
I-14	Greenland	7/16/28	FA-226-B	110/100*	NH33 over Winnicut River	IB-C	~ 50'	
I-15	Holderness	5/7/28	SAB 1928	140/088	NH25 over Squam River	IB-C	25'	Paneled parapet railing
I-17	Lisbon	7/10/28	SAB 1928	116/108	Sugar Hill Road over Salmon Hole Creek	CRF	26'	Skewed & banked
I-19	Moultonboro	6/12/28	SAB 1928	171/227	NH 109 Ossipee Mountain Road / Halfway Brook	CB	14'	
I-20	Ossipee	5/29/28	SAB 1928	154/195	Mountain View Road / Beech River	CS	22'	"Minnie White Bridge" Rebuilt as PSC 1997
I-21	Pinkham Notch	10/22/28	FRP-3-D	058/048*	NH16 over New River	CB	2 @ 15'	"Forest Highway Project" Double barrel box culvert
I-24	Strafford	7/5/28	TLC 1928	CP	Central Road	CS	6'	"Cattle Pass"
I-26	Strafford	6/20/28	SAB 1928	140/055	Province Road over Isinglass River	CS	16'	
I-27	Strafford	6/20/28	SAB 1928	139/096	NH202A over Isinglass River	CS	15'	
I-28	Sutton	8/28/28	SAB 1928	112/126*	Penacook Road over Kazar Lake Outlet	CS	22'	Replaced 1940 with CRF
I-29	Swanzey	8/2/28	SAB 1928	150/056	NH 32 over Martin Brook	CS	14'	
I-30	Wakefield	6/22/28	SAB 1928	092/032	Old Wakefield Road over Pine Brook	CS	15'	
I-31	Westmoreland	6/20/28	TLC 1928	145/131	NH 12 Monadnock Road over Mill Brook	CTB	2 @ 15'	

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
J-1	Acworth	9/3/29	SAB 1929	159/086	E. Acworth Road over Cold River	IB-C	35'	Designed with Ralph R. Kenney
J-3	Alton	9/30/29	TLC 1929	193/289	Suncook Valley Road over Beaver Brook	CS	16'	Unusual, CS on CRF spanning existing stone abutments
J-4	Andover	4/12/29	TLC 1929	208/137	NH 11 over Sucker Brook	CACUL	28'	Designed with Leon C. Marshall
J-5	Andover	4/12/29	TLC 1929	212/138	NH 11 over Sucker Brook	CACUL	28'	
J-6	Antrim	9/13/29	TLB 1929	137/146*	Route 9 over Contoocook River	CRF	24'	
J-7	Auburn	10/7/29	FA-240-B	088/159	Old Candia Road over Maple Falls Brook	CB	12'	
J-9	Bennington	5/3/29	TLB 1929	088/095	Contoocook Valley Road / Contoocook River	CA	108'	
J-11	Bridgewater	8/9/29	SAB 1929	145/161	Bridgewater Hill Road over Clay Brook	CRF	16'	Barber Bridge
J-12	Campton	10/26/28	TLB 1929	108/058	Daniel Webster Highway over Bog Brook	IB-C	34'	
J-16	Colebrook	6/24/29	TLM 1929	051/098	NH 26 (East Side Road) / Mohawk River	CA	70'	"so-called Parsons Street Bridge"
J-17	Colebrook	7/5/29	TLB 1929	147/068	NH 26 (East Side Road) / Mohawk River-	CA	50'	Battle Bridge
J-22	Freedom	9/19/29	SAB 1929	127/120	NH153(East Madison Road) / Stony Brook	CRF	24'	
J-24	Gilmanton	10/4/29	SAB 1929	174/094	Crystal Lake Road / Nelson Brook	CRF	10'	
J-25	Gilford	9/3/29	SAB 1929	099/099*	NH 11B Gilford-Weirs Road / Gunstock River	CB	2 @ 17'	
J-27	Hanover	7/12/29	SAB 1929	116/097	Hanover Center Road over Monahan Brook	CRF	12'	
J-28	Hanover	7/8/29	SAB 1929	112/041*	Etna to Hanover Center Road / Mink Brook	CS	18'	Designed with T.R. Smith
J-29	Hart's Location	3/5/29	TLB 1929	201/075*	--	CTB	30'	Designed with Ralph R. Kenney
J-31	Henniker	7/5/29	TLB 1929	096/105	Western Ave over Canal	CTB	40'	

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
J-32	Hollis	9/18/29	SAB 1929	085/144	NH122 over Witch Brook	CRF	16'	No. 2 Bridge on Silver Lake Road
J-33	Hudson	7/23/29	SAC 1929	--	Hudson - Litchfield Road over --	CB	3'-6"	"State Aid Culvert"
J-35	Lancaster	3/26/29	TLB 1929	130/110	US 2, US 3 over Israel River	IB-C	100'	Designed with Leon C. Marshall
J-36	Lee	9/10/29	TLB 1929	106/126*	U.S. 4 A over Oyster River	CRF	22'	
J-37	Lincoln	3/16/29	TLB 1929	131/107*	Daniel Webster Highway / Pemigawasset River	CTB	40'	Designed with Ralph R. Kenney "Whitehouse Bridge"
J-39	Manchester	8/20/29	TLB 1929	191/100*	Rockingham Road over Cohas Brook	CA	61'	
J-40	Milton	7/16/29	SAB 1929	--	Milton Mills Road over --	CRF	20'	State line, Maine
J-42	Newbury	9/19/29	SAB 1929	138/072	South Sutton Road over Ring Brook	IB-C	38'	Designed with Ralph R. Kenney
J-45	Orford	10/4/29	TLB 1929	102/085	Brook Road over Jacob's Brook	CA	50'	Designed with Leon C. Marshall
J-46	Orford	9/10/29	TLB 1929	204/107	NH25A over Brackett Brook	CA	18'	Designed with Ralph R. Kenney
J-47	Orford	9/10/29	TLB 1929	219/112	NH25A over Baker Pond Brook	CS	22'	
J-48	Orford	9/9/29	TLB 1929	217/112	NH25A over Brackett Brook	CS	2 @ 18'	
J-51	Portsmouth	8/10/29	FAR-37-B	161/062	US1 over Sagamore Creek	PSB	17'	
J-52	Swanzey	7/22/29	SAB 1929	149/072	Nh32 over Martin Brook	CS	25'	"South Bridge"
J-53	Swanzey	7/22/29	SAB 1929	143/087	NH32 over Martin Brook	IB-C	30'	IB's cast into abutments "North Bridge, Richmond Road"
J-54	Tamworth	--	SAB 1929	130/112*	Chocorua Road over Swift River	TPG	--	
J-55	Walpole	8/1/29	TLB 1929	079/067*	Monadnock Road over Cold River	CA	2 @ 48'	
J-56	Warner	9/5/29	TLB 1929	187/122	NH103 over Willow Brook	CS	12'	
J-57	Warner	9/17/29	TLB 1929	164/106*	Central Road over --	IB-C	32'	Designed with Ralph R. Kenney
J-58	Weare	6/14/29	SAB 1929	--	River Road over --	CS	11'	

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
J-59	Wilton	6/21/29	SAB 1929	--	Lyndeborough Road over Stony Brook	CRF	20'	
K-5	Alton	1/23/30	TLB 1930	190/121	NH28 over Coffin Brook	CS	20'	
K-7	Antrim	1/18/30	SA 1930	--	Cheshire Road	CB	8'	
K-9	Bartlett	8/22/30	TLB 1930	203/172*	East Side Road over Ellis River	DPG	2 @ 95'	Concrete balustrade railings
K-11	Bath	4/16/30	FA-232-E	141/085	US302, NH10 over Simonds Brook	CACUL	10'	
K-13	Bridgewater	1/20/30	SAB 1930	170/089*	River Road over Fogg Brook	CB	12'	"Woodman Bridge"
K-14	Bristol-New Hampton	8/1/30	SAB 1930	182/087*	-- over Pemigewassett River	HT	305'	Parker truss Boston Bridge Works
K-15	Canaan	No Dates	TLB 1930	165/070	US 4 over Indian River	CRF	40'	Arched opening
K-16	Crawford Notch	5/20/30	TLB 1930	--	-- over Saco River	IB-C	50'	
K-19	Exeter	6/2/30	FA-240-C	--	South Side Road over --	CACUL	5'	
K-21	Franklin	7/15/30	TLB 1930	152/110	Daniel Webster Highway over Pemigewasset River	DPG/ IB-C	3 DPG @ 91' 1 IB-C @ 61' 1 IB-C @ 48'	"Republican Bridge"
K-24	Gilford	9/8/30	SAB 1930	097/094	NH 11B over Meadow Brook	CB	14'	
K-25	Grantham	1/15/30	TLB 1930	116/093	Old NH 10 over Skinner Brook	CTB	44'	
K-26	Groton	7/18/30	SAB 1930	164/066	North Groton Road over Cockermouth River	CTB	2 @ 31'	
K-27	Hampton Falls	6/12/30	FA-244-A	194/059	US 1 Lafayette Road / Hampton Falls River	CB	11'-6"	
K-28	Hanover	5/27/30	SAB 1930	121/134*	--	CS	20'	Designed with Farwell A. Brown
K-29	Hebron	5/1/30	LS 1929	107/101	North Shore Road over Cockermouth River	IB-C	52'	Designed with Leon C. Marshall
K-30	Hollis	8/19/30	SAB 1930	084/136	NH 122 over Witch Brook	CS	14'-7"	Skewed
K-31	Hollis	10/1/30	SAB 1930	087/150	NH 122 over Witch Brook	CRF	14'-7"	
K-32	Hooksett	7/22/30	TLB 1930	148/106	NH 27 over Dubes Pond Outlet	CB	12'	
K-33	Jackson	8/3/30	SAB 1930	171/084	Dundee Road over Great Brook	CS	25'	Skewed

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
K-34	Jaffery	8/26/31	SAB 1930	171/087*	US 202 over Contoocook River	n/a	60'	Sidewalk for Stone Arch Bridge
K-39	Lebanon	1/20/30	FA-201-G	188/126	US 4 over NHRR & Mascoma River	DPG	2 IB-C @ 40' 4 DPG @ 93'	Skewed
K-41	Litchfield	8/11/30	SAB 1930	--	River Road over --	CB	7'	
K-42	Lincoln	6/6/30	TLB 1930	210/093	US 3 over Harvard Brook	CA	44'	Arch
K-43	Marlboro	8/1/30	SAB 1930	072/128	Water Street over Minnewawa Brook	CTB	45'	
K-45	Newport	3/13/30	TLB 1930	139/104	Dartmouth College Road over Sugar River	CA	48'	
K-46	New Hampton	11/15/30	-	111/063*	--	CB	14'	Dark Hollow Bridge
K-48	Nottingham	5/14/30	TLB 1930	185/139*	US4 over Little River	CRF	14'-8"	
K-51	Ossipee	3/28/30	FA-224-D	238/112	NH 16 (East Side Road) over 'Pine River	CA	22'	
K-52	Pittsfield	6/23/30	SAB 1930	--	Gilmanton Road over --	CS	10'	
K-53	Plymouth	8/2/30	TLB 1930	141/143	US 3 (Daniel Webster Highway) / Baker River	HT	169-9"	Pratt Truss
K-54	Plaistow	7/22/30	SAB 1930	--	--	CS	10'	
K-55	Richmond	7/7/30	SAC 1930	--	Winchester Road over --	CACUL	6'	
K-56	Rumney	7/10/30	SAB 1930	--	Stinson Lake Road over --	CB	11'	
L-1	Stewartstown	2/19/30	TLB 1930	054/163	Bridge Street over Connecticut River	SA	136'	
L-2	Stoddard	2/12/30	TLC 1930	182/106	NH 126 over Mohawk River	CRF	48'	Designed with Ralph R. Kenney & "K.L." (unknown)
L-5	Thornton	9/8/30	SAB 1930	--	Mad River Road over --	CB	7'	
L-6	Thornton	10/9/30	SAB 1930	--	Mad River Road over --	CA	12'	
L-7	Troy	6/17/30	SAB 1930	142/103	Monadnock Street over Quarry Brook	CS	10'	
L-8	Troy	6/28/30	SAB 1930	104/088	Monadnock Street over Quarry Brook	CS	19'	
L-10	Warner	3/26/30	FA-243-A	--*	Central Road over Warner River	CRF	2: 37' 57'	
L-11	Wentworth	1/8/30	TLB 1930	--*	Mossilauke Road over Baker River	CA	90'	-
L-12	Westmoreland	6/24/30	SAB 1930	109/124	NH 63 over Mill Brook	CA	30'	3 center arch

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
L-13	Wilmot	6/30/30	SAB 1930	--	4th NH Turnpike over --	CS	15'	Skewed
L-14	Winchester	1/21/30	TLB 1930	--	Dartmouth College Road over --	CRF	18'	
L-16	Allenstown	2/18/31	-	071/047	Suncook Valley Railroad Bridge over Daniel Webster Highway	IB-W	--	
L-18	Bartlett	8/3/31	SAB 1931	189/129*	--	IB-W	20'	2 x 4 wood laminated deck
L-19	Boscawen	4/11/31	SAB 1931	068/145	Long Street over Beaver Dam Brook	CRF	16'	-
L-20	Bridgewater	8/10/31	SAB 1931	170/089*	River Road over Fogg Brook	CRF	20'	-
L-21	Bristol	3/29/31	SAB 1931	067/120	West Shore Road over Fowler River	CRF	43'	Fowler River Bridge
L-22	Brookline	6/26/31	SAB 1931	095/061	South Main Street over Nissitissit River	CRF	25'	-
L-23	Canaan	3/5/31	TLB 1931	169/071	--	CA	2: 40' 78'	Open spandrel
L-24	Chatham	8/3/31	SAB 1931	101/125	NH 113 over Chandler Brook	CRF	22'	Skewed
L-25	Farmington	5/23/31	SAB 1931	087/135*	NH 75, Central Street over Cocheco River	CB	21'	Skewed
L-27	Hillsboro	10/21/31	TLB 1931	112/042*	Saw Mill Road over Beards Brook	CRF	32'	-
L-28	Hooksett	5/15/31	TLB 1931	100/166*	US 3 over Heads Pond	CRF	3: 44' 60' 44'	Realignment of D.W. Highway
L-29	Hooksett	5/18/31	TLB 1931	--	D.W. Highway / Spillway @ Heads Pond	CB	4'-6"	
L-32	Jackson	5/16/31	TLB 1931	152/058	NH 16A East Side Road / Wildcat River	CRF	70'	
L-33	Kingston	7/6/31	SAB 1931	099/109	Main Street over Powwow River	CRF	10'	-
L-34	Lisbon	3/18/31	TLB 1931	094/114*	Dartmouth Coll. Highway / Ammonoosuc River	HT	136'	Pratt Truss-
L-37	Madbury	9/24/31	SAB 1931	--	--	IB-C	16'-6"	-
L-38	Milford	1/20/31	TLB 1931	123/133	NH 13 Babousic Road over Souhegan River	MA	2 @ 50'	Colonel John Shepard Bridge Stone faced concrete
L-39	Monroe	6/19/31	SAB 1931	187/090*	NH 135 over Mill Brook	CRF	12'	-
L-40	Monroe	6/19/31	SAB 1931	175/092	NH 135 over Smutty Hollow Brook	CRF	21'	Skewed
L-44	New London	6/20/31	-	n/a	--	Pedestrian CS	4'	Subway under highway at Little Sunapee

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
L-47	Pembrook-Allenstown	5/12/31	FA-199-G	069/056*	US 3 over Suncook River	DT	148'	Double-deck Warren truss
L-48	Pittsburg	4/6/31	TLB 1931	030/066	US 3 over Connecticut River	TPG.	2 @ 107'	Skewed
L-51	Rochester	8/20/31	SAB 1931	155/110*	NH 125 over Axehandle Brook	CTB	24'	-
L-52	Rochester	10/28/31	SAB 1931	149/113	NH 125 over Cocheco River	IB-C	48'	-
L-54	Strafford	8/14/31	SAB 1931	--	Crown Point to Rochester Road over --	CRF	10'	-
L-55	Stratham	4/6/31	SAB 1931	122/096	Winnicutt Road over Winnicutt River	CRF	3 @ 21'	-
L-58	Tilton	7/1/31	SAB 1931	134/094	Jamestown Road over Winnipesaukee River	IB-C	30'	-
L-59	Wakefield	7/9/31	SAB 1931	211/050	NH109 over Sawmill Brook	CRF	10/	-
L-60	Warren	2/6/31	TLB 1931	120/070*	NH25, NH118 over Baker River	TPG	84'	American Bridge Co.
L-62	Woodstock	2/16/31	TLB 1931	171/153	US 3 Daniel Webster Highway over Lost River	CA	68'	-
M-2	Bethlehem	7/22/32	TLB 1932	129/178*	US 3 over Ammonoosuc River	Sidewalk	--	Added to Bethlehem Truss
M-3	Brookline	5/16/32	SAB 1932	080/078	Mason Road over Nissitissit River	CRF	50'	
M-4	Columbia	8/11/32	SAB 1932	228/109	Bungy Road over E Branch Simms Stream	CS	15'	-
M-6	Easton	6/1/32	SAB 1932	124/131	NH 116 Lost River Road / Ham Branch River	CRF	32'	-
M-8	Exeter	5/3/32	TLB 1932	095/063	NH 108 over Little River	IB-C	33'	with diaphragms called struts
M-12	Goffstown	6/30/32	SAB 1932	084/104	NH 13 (Pleasant Street) over Whittle Brook	CRF	20'	-
M-16	Henniker	8/11/32	SAB 1932	120/112	NH 114 over Contoocook River	MA-CA	2: 118' l.o.a.	Edna Dean Proctor Bridge Concrete encasement of MA
M-19	Landaff	7/20/32	SAB 1932	118/042	NH 112 over Wild Ammonoosuc River	CRF	70'	
M-21	Milton	11/18/31	TLB 1932	101/110	NH 125 over Jones Brook	CRF	24'	Designed with Ralph R. Kenney & Merle R. Patenaude. Stone faced.
M-23	Nashua/ Merrimack	10/16/31	FA- 1931	136/024*	Daniel Webster Highway / Pennichuck Brook	CRF	4: 50' 50' 60' 60'	-

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
M-27	New Hampton	8/6/32	SAB 1932	222/121	Ashland to Winona Road over Ames Brook	CRF	12'	-
M-29	Pittsfield	5/26/32	TLM 1932	--	Route 28 over --	CB	3'	-
M-30	Raymond	7/28/32	TLB 1932	083/151	NH 27 over Lamprey River	CTB	3: 18' 27' 18'	Multi-rib
M-33	Salem	11/16/31	Overpass	--*	Overpass over Rockingham Road	CRF	55'	-
M-39	Sullivan	7/10/322	TLR 1932	093/061	NH 9 Franklin Pierce Highway /Otter Brook	CTB	2 @ 44'	-
M-40	Sutton	7/25/32	SAB 1932	117/065	NH 114 over Lane River	CRF	20'	-
N-8	Claremont	10/23/32	SAB 1933	065/137*	RT 103 over Connecticut River	IB-C	40'	-
N-24	Exeter	5/18/33	SAB 1933	057/052	NH 111 over Exeter River	IB-C	33'	-
N-29	Hillsborough	12/31/32	FA-E-206-F	171/064	Contoocook Falls Road / Contoocook River	TPG	2 @ 108'	-
O-1	Landaff	7/19/33	FA-NRH-232-G	075/177	Dartmouth College Road over Ammonoosuc River & BMRR	TPG	2 @ 108'	Railroad overpass
O-20	Warner	6/30/33	FA-NRH-243-C	203/137	NH 103 Central Road over BMRR	CRF	3: 22' 28' 22'	BMRR Bridge #17.42
P-1	Alton	--	FA-NRH-230-C	163/184	NH 11 over Merrymeeting River	CRF	30'	Stone faced
P-7	Belmont	6/7/33	TLB-1934	113/080*	NH 106 Rocky Pond Road over Tioga River	CTB	40'	Skewed
P-11	Crawfords Purchase	3/21/34	-	090/179	Mt Clinton Road over Sokokis Brook	MP-A	20'	ARMCO multi plate Stone faced facewalls designed with NS, CB
T-12	Dover	10/19/35	WPMH*-54	109/106	NH 9 Central Road over B&MRR	IB-C	2: 44' 26'	IB-W to IB-C *Acronym meaning undetermined
U-9	Lebanon	10/3/35	TLB 1935	149/086	NH 120 over Great Brook	CRF	35'	-
1-11-2-1	Effingham/ Freedom	3/13/28	"Town Flood Bridge"	176/1848	-- over Ossipee River	HT	136'	Pratt Truss
1-12-3-3	Webster	5/10/37	WPFR #18 WPA 7-1	140/070	Deer Meadow Road / Deer Meadow Brook	CS	27'	-
1-14-3-7	Lee	--	TLB-1937	142/128	NH 155A over Oyster River	CB	14'	

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
1-16-1-1	Concord	11/23/36	WPFR #24	070/117	Sewall Falls Road over Merrimack River	HT/IB-C	--	Sewalls Falls Bridge; HEL designed IB-C approach spans
1-16-1-4	Danbury	9/2/37	FAGH-107	178/091	US 4 Mascoma Road over NHRR	TPG	100'	
1-16-2-1	Chesterfield (Brattleboro)	12/7/36	WPA 12-1129 WPFR 7	040/095	Franklin Pierce Highway / Connecticut River	SA	440'	(Bypassed) Arch by John H. Wells; Abutments by HEL
2-1-3-8	Monroe to Barnet, VT	7/1/37	SAB 1937	110/125	Barnet Road over Connecticut River	HT	389'	Parker Truss
2-3-3-4	Meredith	4/27/39	-	185/145*	-- over Waukewan Lake Outlet	CS	26'	Designed with Henry C. Newell
2-4-2-11	Jaffrey	4/1939	-	093/107	NH 124 over Mead Brook	CB	14'-8"	-
2-5-3-3	Chatham	7/16/40	FA-10-A	074/121	NH 113 over Mill Brook	MP-A	15'	Stone faced walls; replaced in kind 1961
2-5-3-4	Cornish	7/10/40	SAB 1940	100/099	Town House Road over Mill Brook	CRF	20'	
2-5-3-7	Lyme	5/15/40	TRF 1940	096/100	Grafton Turnpike over Grant Brook	IB-C	40'	Skewed; with diaphragms
2-6-1-10	Concord	2/25/41	-	040/090	US 3 Main Street over Contoocook River	IB-C	2: 194' l.o.a.	HEL designed concrete pier
2-6-3-1	Portsmouth	11/1940	TLB 1940	198/034	NH 1A E Side Road over Sagamore Creek	DPG	3: 398' l.o.a.	HEL designed abutments & piers for John H Wells superstructure
2-8-2-11	Hampton Beach	10/1941; 11/1944	State Project # 527-	n/a	Hampton Beach Seawall	-	-	Steel sheet pile seawall & boardwalk; "Put on hold"
2-9-1-4	Rye	9/23/42	DA-WR-3	235/153	Brackett Road over Berry Brook	IB-W	2 @ 18'	Wood stringer deck rebuilt as IB-C in 1986
2-9-1-12	Piermont	5/15/43	-	032/103	NH 25 over Connecticut River	HT	355' l.o.a.	Detail of concrete floor form work hung from IB stringers
2-9-1-18	Pittsburg	8/29/43	DA-RM-7A	-- *	-- over Indian Stream	TB	4 @ 28'	Log spans on log cribs, log stringers w/ cross logs 2' o.c. with 3" deck; 8' x 16' log culverts by Wendell H. Piper
2-10-2-10	Enfield	6/1947	TLB-1947	172/112	Boy's Camp Road over Bicknell Brook	DPG	22'	
2-10-3-6	New Boston	8/1947	SAB-1947	103/103	NH 13 over South Brook Piscataquog River	CRF	54'	Steel balustrade railing

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
2-11-1-8	Winchester	9/1946	LS-1309	n/a	NH 10 at Ashuelot Paper Co.	-	-	Concrete retaining wall.
2-11-3-12	Harts Location	12/1948	TLB	127/096	US 302 over Saco River	CTB	35'	
3-1-1-2	Hampton Harbor	5/1957	-	-	-	-	-	Pier cofferdam design
3-2-3-10	Swanzey	6/1951	S-2238	192/123	Flat Roof Mill Rd over Small Brook	CS	13'	
3-2-4-13	Milford	12/1951	P-2376	048/133	? Hillsboro Mill Canal	CS	20'	
3-3-1-3	Manchester	11/1948	S-1636	120/045	NH 114 over Piscataquog R & B&M RR	IB-C	-	Major rebuild of bridge; Alteration to Kelly Bridge
3-3-1-11	Franklin	2/1952	P-1984	162/099	US 3 over B&M RR	IB-C	30'	Reinforced concrete box tunnel; 1 span?
3-3-1-13	Sandwich	6/1952	-	203/139	Town Rd over Whiteface River	IB-C	41'-6"	
3-4-1-11	Alexandria	10/1953	S-2681	153/140	Fowler River	IB-C	63'	HEL on abutment detail on sheets 3&4. RJP principal designer
3-4-1-14	Stark	11/1953	-	115/091	Stark Covered Bridge Repairs	TB-C	-	I-beam deck added under covered wood truss bridge
3-4-1-16	Enfield	3/1954	S-2686	079/153	Main St over Mascoma River	IB-C	2 @ 88'	Continuous spans
3-4-1-17	Weare	1/1954	S-2656	134/129	NH 77 over Piscataquog River	IB-C	57'	1 span
3-4-1-19	Moultonborough	3/1954	S-2640	221/177	NH 171 over Shannon Brook	CS	18'	Flat slab widening
3-4-1-20	Newport	3/1954	T-2790	Wall	NH 11& NH 103	Ret. Wall	-	Retaining wall
3-4-2-2	Pembroke-Concord	4/1954	P-2395	134/050	NH 3 over ?	IB-C	153'	3spans; continuous; with RJP
3-4-3-2	Ossipee-Tamworth	7/1954	P-2738	137/297	NH 16 over Bearcamp River	IB-C	396'	5 spans; Continuous span; Sht. 4 abutments; Sht. 6 bents; Shts. 9,10,12 framing; with RJP
3-4-3-3	Ossipee-Tamworth	7/1954	P-2738	114/328	NH 25 over Bearcamp River	IB-C	397'	3 spans; Continuous span
3-4-3-4	Rumney	7/1954	-	-	Special garage & storage bldg.	-	-	

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
3-4-3-6	Pembroke-Allenstown	8/1954	-	203/088	Pembroke over Suncook River	IB-C	125'	Add sidewalk structure; with WRJP; old number Allentown 059/053
3-4-3-7	Ossipee-Tamworth	9/1954	P-2738	123/324	NH 16 & NH 25 over Chocorua River	CB	27'	2 spans; double barrel concrete box
3-4-4-2	Barrington	9/1954	T-2787	109/162	Green Hill Road over Isinglass River	IB-C	62'	1 span
3-4-4-7	Effingham-Freedom	12/1954	S-2912	110/190	NH 153 over Ossipee River	IB-C	238'	3 spans; continuous; with WRJP
3-4-4-9	Pelham	2/1955	T-2930	105/069	Willow Street over Beaver Brook	IB-C	42'	6 spans
3-4-4-11	Winchester	3/1955	T-2785	151/062	Scotland Road over Roaring Brook	CRF	30'	1 span
3-5-1-4	Amherst	7/1955	S-2913	186/107	NH 122 over Souhegan River	IB-C	138'	3 spans; continuous; possibly combined simple span/continuous span under live loading
3-5-1-7	Westmoreland-Walpole	8/1955	P-2415	217/061	NH 12 over Houghton Brook	CB	13'	
3-5-2-7	Claremont-Cornish	1/1956	P-3168	126/043	NH 120 over Redwater Brook	CRF	20'	
3-5-2-10	Sunapee-Newport	5/1956	P-2427	067/078	NH 103 over Sugar River	CS	99'	3 spans; 1957/1979
3-5-3-5	Newport-Sunapee	5/1956	P-2427	069/079	NH 103 over Sugar River	CS	28'	Bridge widening; slab
3-5-3-6	Newport-Sunapee	5/1956	P-2427	068/080	NH 103 over Sugar River	CB	-	Headwall ext.
3-5-3-8	Franklin	4/1956	T-3227	152/110	US 3 over Pemigewasset River	DPG	-	3 spans; plate girder; new railing/deck; "Republican Bridge". Replaced
3-5-3-10	Columbia	7/1956	P-2982	108/167	US 3 over Simms Stream	IB-C	68'	Composite span with steel grid floor shoulders & conc slab approaches
3-5-3-12	Jaffrey-Peterborough	7/1956	P-2823	049/039	US 202 over Pratt Pond Outlet	CRF	27'	1 span

Plan No.	Town	Plan Date	Project No.	Brg No.	Carrying/Over	Brg Type	Span(s)	Notes
3-5-4-7	Lebanon	2/1957	P-3195	188/126	US 4 over Mascoma River & B&M RR	(2) I-BC (2) DPG	463'	6 spans; 1930/1957 new deck & railings
3-5-4-8	Charlestown	7/1957	P-3359	181/058	NH 12 over B&M RR	RCF	40'	1 span
3-6-1-4	Ossipee	10/1957	P-3303	194/146	NH 28 over B&M RR	CS	106'	3 spans; HEL & RJP. Dated 1959 in Brg. Summary
3-6-1-6	Wentworth	2/1958	P-3271	146/090	NH 25 over Baker River	IB-C	200' 64'-72'-64'	3 spans; continuous; HEL & RJP
3-6-2-11	Jaffrey	4/1958	T-3725	155/084	US 202 over Contoocook River	IB-C	-	Bridge widening
3-6-2-13	Claremont	4/1958	T-3477	113/113	Citizen Street over Sugar River	IB-C	144'	2 spans; continuous
3-6-3-3	Lisbon	7/1958	T-3689	063/078	School Street over Ammonoosuc River	IB-C	222'	3 spans; 1960/1986
3-7-1-13	Concord	8/1959	S-4011	180/063	NH 13 (Clinton St) over Turkey River	CB	20'	1960
3-7-2-4	Weare	11/1959	S-3929A	159/178	NH 77 Relocate over Canal 2	IB-C	453'-	3 spans; Framing sheets with RJP
3-7-2-5	Hopkinton	1/1960	P-3928A	086/084	US 202 over 9 Relocate over Elm Brook	IB-C	317'	3 spans; Hopkinton-Everett Reservoir; various details with RJP
3-7-3-8	Hopkinton	3/1960	S-3931B	089/114	NH 127 Relocate over Spillway Channel	IB-C	280'-	3 spans; Hopkinton-Everett Reservoir; various details with RJP
3-7-3-12	Northfield-Tilton	3/1960	S-4221	097/147	NH 33 over Winnipesaukee River	IB-C	95'	2 spans
3-8-2-5	Harts Location	1/1961	P-4295	055/091	US 302 over Saco River	MP	12'	Outlet chamber
3-8-2-13	Walpole	5/1961	P-3876B	187/058	NH 12 over Great Brook	CRF	18'	
3-8-3-10	Plainfield	6/1961	S-4637	083/098	Stage Rd over Blow-Me-Down Brook	CRF	34'	
3-8-4-7	Rye-Newcastle	1/1962	P-4801	066/071	NH 1B over Little Harbor	BAS	-	Lift bridge; repairs to operator house
3-9-3-3	Auburn	3/1963	P-3885C	087/161	NH 101 over Maple Falls Brook	CB	12'	
3-9-3-4	Auburn	3/1963	P-3885C	088/162	NH 101 over Tower Hill Road	CFR	27'	
3-9-3-5	Candia	3/1963	P-3885C	084/069	Chester Turnpike over Rt101	IB-C	171'	