

RAINBOW BRIDGE TOLL PLAZA
Rainbow Plaza
Niagara Falls
Niagara County
New York

HABS No. NY-6348

HABS
NY
32-NIAF,
5-

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
National Park Service
Northeast Region
Philadelphia Support Office
U.S. Custom House
200 Chestnut Street
Philadelphia, P.A. 19106

HISTORIC AMERICAN BUILDING SURVEY

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Location: Rainbow Plaza, Niagara Falls, Niagara County, New York

The site is east of the Rainbow Bridge, bounded by the former Robert Moses Parkway on the northwest and west, the operating Robert Moses Parkway on the northeast, Rainbow Boulevard South to the east, and the Niagara Reservation's parking lot on the south.

USGS Map Quadrant: USGS SE/4 Niagara Falls 7.5' Quadrangle,
Universal Transverse Mercator Coordinates:

Point A, 17.657430.4772280; Point B, 17.657490.4772230;

Point C, 17.657400.4772120; Point D, 17.657350.4772190;

Present Owner: Niagara Falls Bridge Commission, Post Office Box 1031 Niagara Falls, New York 14302

Present Occupant: United States General Services Administration and the Niagara Falls Bridge Commission

Present Use: United States Border Crossing; Customs and Immigration Facility and Toll Plaza.

Significance: The original 1941 buildings of the plaza are eligible for inclusion on the National Register of Historic Places. The Inspection Building, Toll Building and Primary Inspection Canopy embody distinctive characteristics of a neo-classical, art deco style. The Rainbow Bridge Toll Plaza facilitated international access, thereby contributing to the growth of the cities of Niagara Falls, United States and Canada.

At the time of this survey, the Rainbow Bridge Toll Plaza border crossing is the second largest international northern entrance to the United States and seventy-five percent of the traffic is non-Canadian and non-American. The site of the Toll Plaza is within the current boundaries of the Niagara Reservation, a National Historic Landmark. The plaza is not within the original boundaries of the Reservation. The concept for the adjacent park land was developed by Frederick Law Olmsted, Sr.

PART I. Historical Information

The initial 1940 design of the Rainbow Bridge Toll Plaza was by Russell Goodwin Larke Architects of Niagara Falls, New York. (The firm no longer exists.) Aymar Embury II of New York, Robert Moses' favorite architect, was consulting architect on the plaza and adjacent Rainbow Bridge. Waddell and Hardesty of New York, engineers of many award winning bridges, and Edward Lupfer Corporation of Buffalo, New York were the engineers of the plaza and bridge.

Aymar Embury, originally trained as an engineer, was the designer of some of the Works Progress Administration's most ambitious projects in New York City, and one of the most prolific architects of the WPA era. He became one of the men who helped shape the face of the city. His buildings were simplified, reduced versions of the more robust classical revival architecture built in earlier eras. Simple and straight-forward, their style was similar to many WPA buildings constructed during the 1930's and 1940's. Embury's neo-classical, art deco style was typical of buildings he designed including those in New York City's Central Park Zoo, Orchard Beach Bathhouse and the New York City Museum of the 1964 World's Fair. His influence over Larke's design was evident in the classical, art deco structures at the Rainbow Bridge Toll Plaza.

Embury became a leading proponent of Modern Classicism, with work characterized by a sleek austerity, combined with a sense of classically inspired motifs, regardless of the structure's setting. In addition to buildings, Embury was involved in bridge design and collaborated with engineer Othmar Hermann Ammann on the design of the Triborough Bridge and the Bronx-Whitestone Bridge that Robert Moses hailed as "architecturally the finest suspension bridge of them all, without comparison, in cleanliness and simplicity of design, in lightness and absence of pretentious ornamentation. Here...we have pure functionalist [*sic*] architecture."

At the time of this survey, the Rainbow Bridge Toll Plaza border crossing was the second largest international northern entrance to the United States and seventy-five percent of the traffic was non-Canadian and non-American. In addition to the importance of the border crossing as a gateway to the United States, the site of the Rainbow Bridge Toll Plaza is significant for several other reasons. Most importantly, the site is near Niagara Falls, one of the Seven Natural Wonders of the world and, at the time of this survey, was the second most visited natural tourist attraction in the United States. The falls have been the focal point of the history of the development of the Rainbow Bridge Toll Plaza Site and the cities of Niagara Falls, United States and Canada.

As early as 1857, with the construction of a canal, Niagara Falls and the Niagara River were the center of industrial development in both Ontario and New York. In 1877 the Niagara Falls Hydraulic Power and Manufacturing Company took over the canal, built a small power plant to serve local mills and the beginning of the industrial era of Niagara Falls began. According to "The Schoellkopf Story" in the 1956 July/August issue of the *Niagara Mohawk News*, the first large scale hydroelectric power plant in the world, the Edward Dean Adams Station, was built in 1895 just north of the Toll Plaza Site. The plant gradually expanded and was renamed the Schoellkopf Station. Over time, water from a thirty-two foot diameter tunnel that had been bored through the rock in 1921 seeped into the rock above the power plant and on June 7, 1957 a rock and water fall began, crushing portions of the power plant below. This rock slide helped prepare the way for the reclamation of the land where industrial areas had existed north of the Toll Plaza area for years.

In addition to the falls' importance in the development of the local area, the site and its public history have precedent-setting significance in our current state and national park systems. The site of the Rainbow Bridge Toll Plaza is within the current boundary of the Niagara Reservation, a National Historic Landmark (It is not within the original Reservation boundaries.) The Reservation is particularly important since its establishment as a State park was the first time a state acquired property through eminent domain for aesthetic purposes. As early as 1834, there were ideas to clear the site and surrounding areas of buildings and signage. However this was not well supported until the 1870's when Henry James, novelist, Frederick Law Olmsted, landscape architect, Charles Eliot Norton, editor of the *Nation*, Frederic Edwin Church, painter, and other well-known individuals became involved in the preservation of this area.

It was not until 1883, as a response to the negligence in the development of the area surrounding the falls, that the State of New York established the Niagara Reservation for public use through a precedent setting use of eminent domain. A bill was passed which stated that the land of the Reservation "shall forever be reserved by the State for the purpose of restoring the scenery of the Falls of Niagara to and preserving it in its natural condition."

In 1885 a bond issue of one-million dollars was authorized by the State of New York to pay for the forty necessary properties held by twenty-five individual land owners and the original 418 acres of the Niagara Reservation land was put into a public trust. This was the first occasion that eminent domain was used to acquire land for aesthetic purposes. The Niagara Reservation, originally a narrow strip of land along the edge of the Niagara River that extends above and below the falls and includes the islands in the river, now encompasses 439 acres (only 139 acres of this are land.) This strip of land was created to implement a green buffer around the falls that

would screen the city of Niagara Falls from view and return the Reservation land to its natural state.

As stated in the 1976 National Historic Landmark Nomination Form, "The formation of the Niagara Reservation stands as a tremendous victory in the struggle to save grand aspects of our natural scenery." The Niagara Reservation land, the first established state park in the United States, provides visitors with views of the beauty and power of the Niagara Falls.

In 1887, Frederick Law Olmsted Sr. a principal landscape architect and park designer in America, submitted his *General Plan for the Improvement of the State Reservation at Niagara* which detailed a plan to preserve the falls, a strip of land around the falls and the nearby islands in their natural state. This plan does not include the site upon which the Rainbow Bridge Toll Plaza was eventually built but is the area south and west of the site. Olmsted's proposal was meant to provide a scenic buffer for the falls by restoring and preserving Goat Island and the area directly adjacent to the falls. The plan was established to "re-establish a permanently agreeable natural character with that of the undisturbed parts."

This plan was implemented by Olmsted and his associate Calvert Vaux through clearing structures from the site, restoration of the land through old photographs of the site and planting the eastern side of the falls as to block out the view of the city of Niagara Falls. In 1926 Olmsted's sons, continuing with the theme of his work, submitted plans to the Commissioners of the State Reservation to extend the park area to the north. The Olmsted landscape vision in this plan connected the State Reservation with Lewiston by extending a greenway north along the Niagara River. This vision went as far as to describe a park that would connect Lake Erie and Lake Ontario.

It was in 1941 that the State of New York gave the Niagara Falls Bridge Commission a perpetual easement of 5.058 acres within the 439 acres of the Niagara Reservation for development of a toll plaza and bridge abutment. Furthermore, the Niagara Reservation was also designated as a National Historic Landmark in 1976 in recognition of its contribution to the conservation of natural resources. The plaza, while within the confines of the current Reservation and National Historic Landmark boundaries, was not within the original Reservation area of 1885.

The Reservation was blemished in 1960 with the construction of the Robert Moses Parkway, a four lane divided highway that ran parallel to the eastern shore of the Niagara River through the middle of the Reservation. (Ironically, the Parkway was built on the site that Moses had required be maintained by both the park and bridge commissions as pedestrian access to the northern portion of the Reservation north of the toll plaza.) As early as 1976, portions of the Parkway were planned to be

closed. As of 1994, a piece of this highway within the Reservation had been abandoned and there were plans to remove more portions, as the highway is such an intrusion upon the Reservation and the river.

The reason for the exact location of the Rainbow Bridge Toll Plaza is obviously directly related to the siting of the Rainbow Bridge. Originally, the Bridge was to be erected at the site of the Falls View Bridge that had collapsed in 1938. The newly formed Niagara Falls Bridge Commission purchased the Falls View Bridge site from the International Railway Company in order to build the first structure over the Niagara River for which the United States and Canada had equal representation.

In 1939 a plan was developed to allow transfer of the Falls View Bridge site for a site further north owned by the Niagara Falls Power Company and various merchants that could be appropriated by the State Park Commission (The Canadian Parks Commission had already appropriated land further downstream to be used for the Canadian plaza.) The United States Council of Parks also desired that the bridge be located further away from the falls. As stated by Major Cole, secretary of the Niagara Frontier State Park, moving the location of the bridge further downstream was of "considerable importance" to the Park Commission. It was Robert Moses, president of the State Council of Parks, that had to approve the land transfer. Moses was concerned that ample space be devoted to the approach to the bridge span and that there be as little interference as possible with the pedestrian travel in the park. He requested two lanes of traffic in each direction over the bridge, eight lanes of traffic to disperse cars coming into the United States and an elevated approach to the bridge to allow pedestrian access to the fragment of park to the north of the proposed plaza.

There were many problems in getting all the necessary legislation and approvals in order to begin construction on the Rainbow Bridge and United States Toll Plaza. At one point, the Bridge Commission was considering a diagonal span across the river (keeping the United States Plaza at the Falls View Bridge site) because it could not obtain land for the United States Terminal further downstream. It was not until 1940 that Robert Moses appropriated the property for the United States bridgehead for the Rainbow Bridge and Toll Plaza by filing a map of the appropriation area and serving notice to the owners of the land.

On May 16, 1940 an elaborate ground breaking ceremony involving representatives of the Niagara Falls Bridge Commission, the Niagara Frontier State Park Commission and other civic officials took place on the site of the United States Plaza. Canadian and American representatives spoke about the "symbolic connection between two countries represented by the projected span." A photo caption in the *Niagara Falls Gazette* the next day illustrated the importance of such a symbol during World War II with the words: "While defenders of democracy were

blowing up famous bridges to halt a ruthless invader in Europe yesterday afternoon, American-Canadian friendship was being symbolized here in ceremonies marking the turning of the first sod for the new Rainbow Bridge across the undefended border." The partnership between the various parties involved was stressed when Samuel Johnson, vice-chairman of the Bridge Commission stated, "The Ontario Parks Department and the New York State Parks department are cooperating, thereby assuring us of suitable terminals, and attractive landscaping which will be well maintained."

The 1940 design of the plaza consisted of a curved-shaped inspection office building, inspection booths and a round toll house with a light pylon. The terminal buildings were not built as per the original plans for cost reasons. The project was not put out to bid until January of 1941 and all of the bids exceeded the planned budget. However, while the Bridge Commission asked the architectural team to go back and reduce the cost of the terminal, the award-winning Rainbow Bridge construction was moving along rapidly. Much of the basements and all of the sub-basements were eliminated from the plans as was most of the aluminum because of its expense and scarcity during wartime. The job was bid again in April and Charles H. Wing Company of Buffalo was awarded the contract for \$99,997 and construction commenced. In May of 1942, the Bridge and all of its affiliated structures were officially dedicated.

Over time, the WPA era complex was developed further to facilitate the processing of the ever increasing volume of traffic at the American border crossing. Parking facilities, roadways and signage were added and improved upon as a joint venture between the Bridge and Park Commissions in 1950. A Customs Service Building and a Secondary Inspection Canopy were added in 1951; both buildings were designed by Cannon, Thiele, Betz and Cannon of Niagara Falls, New York. Unfortunately, at the time of this survey, the toll plaza facilities had ceased to keep up with the growth of visitors at this border crossing. The buildings were not able to be altered to create a welcoming or understandable entry to the United States or Niagara Falls.

This Historic American Building Survey is being prepared because the original plaza buildings are National Register-eligible, the tenant group at the plaza is a federal agency, and a new plan to improve conditions at the border crossing would affect the Toll Plaza site. The HABS report is part of the 106 federal process that must be followed when a National Register property will be affected by federal actions.

PART II. Descriptive Information

The Rainbow Bridge Toll Plaza sits at the United States end of the Rainbow Bridge. The site itself is primarily flat but drops off sharply on the west towards the Niagara River. The southwest corner of the plaza drops off more dramatically. Here a retaining wall drops down to the sheer rock face below.

The Plaza building's massing is primarily horizontal, accentuated only by the vertical light pylon. Although the original drawings of the Toll House show a flag pole on the roof of the building, the light pylon was probably built at the same time as the other 1941 buildings. Letters between Hardesty, Embury and Larke, indicate that they were already specifying the fabrication of the tower in 1940. In addition, the circa 1942 photographs of the plaza prove the light pylon existed at that time.

At the time of this survey, the canopy contains three primary inspection booths for United States bound traffic and two toll booths for Canada-bound traffic. Originally there were only two booths for toll collection (none for inspection) at the most eastern side of the canopy. The booths are aligned under a thin, flat canopy that is a concave arc towards the bridge. To the left, upon the approach from the bridge is the circular Toll house with its light pylon. To the right is the double curving Inspection Building. Unfortunately, the secondary canopy overhang, added on the northeast side of the building in 1951, obscures the subtle articulation of the Inspection Building's form.

The materials of the building complex consist of limestone facades, carved stone panels, metal window frames, greenstone accent coursing, terra cotta tiles and metal and stone fascia and copings. The light fixtures that were designed for the plaza and center of the bridge were the same as those already fabricated for the Canadian Plaza. According to a letter and sketch from Embury to Hardesty, the fixtures on the southern side of the Inspection building as well as those in the plaza, would be adopted by Major Cole, Secretary of the Niagara Frontier State Park to be used within the park.

The freestanding Customs Service Building sits at the east side of the plaza. A simple rectangular-shaped building it, as well as the Secondary Canopy in front of the inspection office building, was built in 1951, based on the design by the local firm of Cannon, Thiele, Betz & Cannon. The existing toll and inspection booths were added in 1958 to improve communication between officials and increase the speed of processing visitors. They were originally stainless steel but at the time of this survey they had been painted.

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Original Architectural Drawings:

The location of the original drawings for the Customs Service Building and the Secondary Canopy by Cannon, Thiele, Betz and Cannon of Niagara Falls are unknown. Copies of the original drawings dated 2-9-51 are located in the archives of Hardesty and Hanover Consulting Engineers (1501 Broadway New York, NY 10036).

The location of the original plans for the Inspection Building, Toll Building and Primary Inspection Canopy are unknown. Copies of the original drawings dated March 1, 1941 are located in the archives of Hardesty and Hanover, Consulting Engineers (1501 Broadway New York, NY 10036).

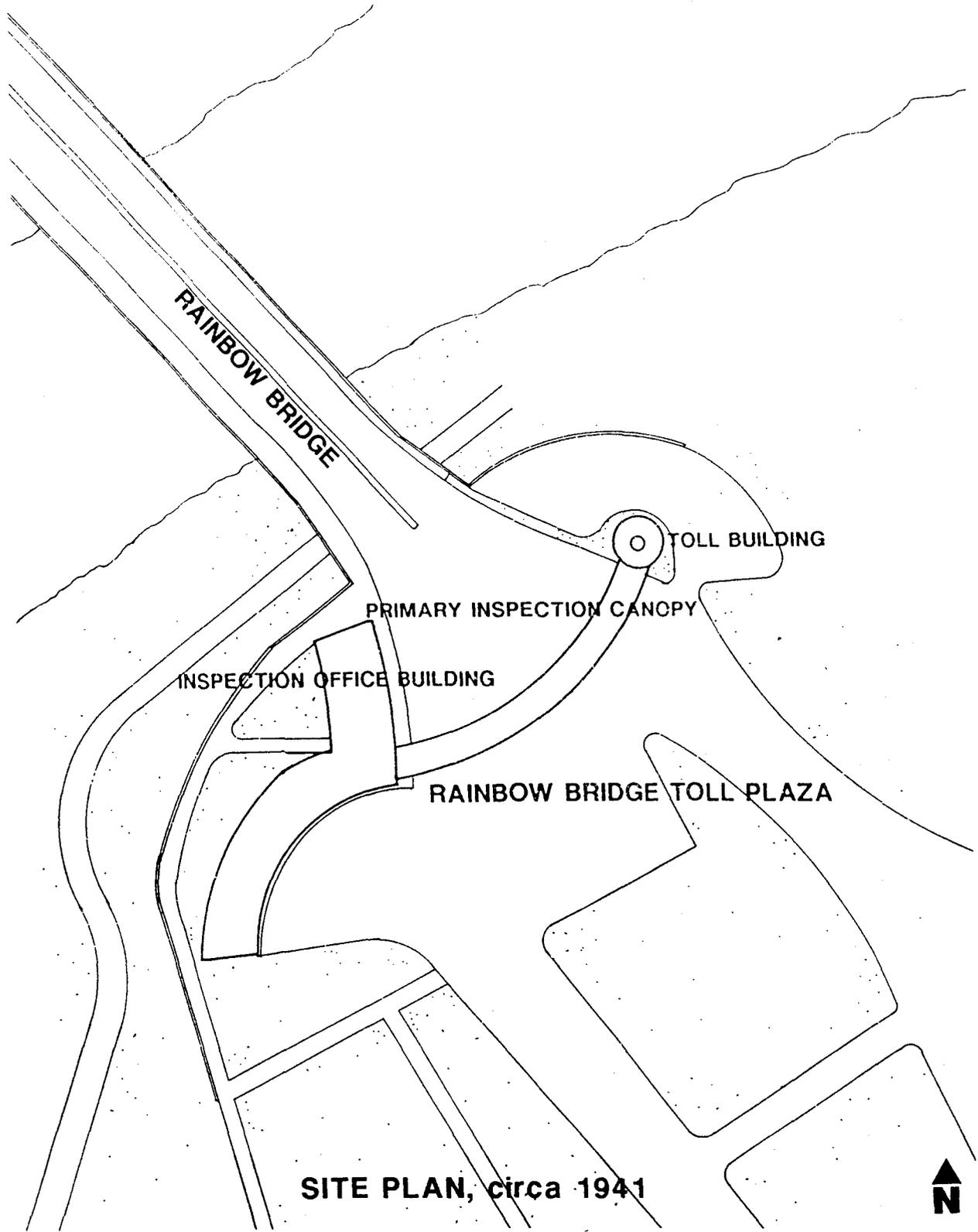
Original Photographs:

The original photographs of the Rainbow Bridge Toll Plaza circa 1942 and 1947 are in the Niagara Falls Bridge Commission archives (Post Office. Box 1031 Niagara Falls, New York 14302).

Supplemental Material:

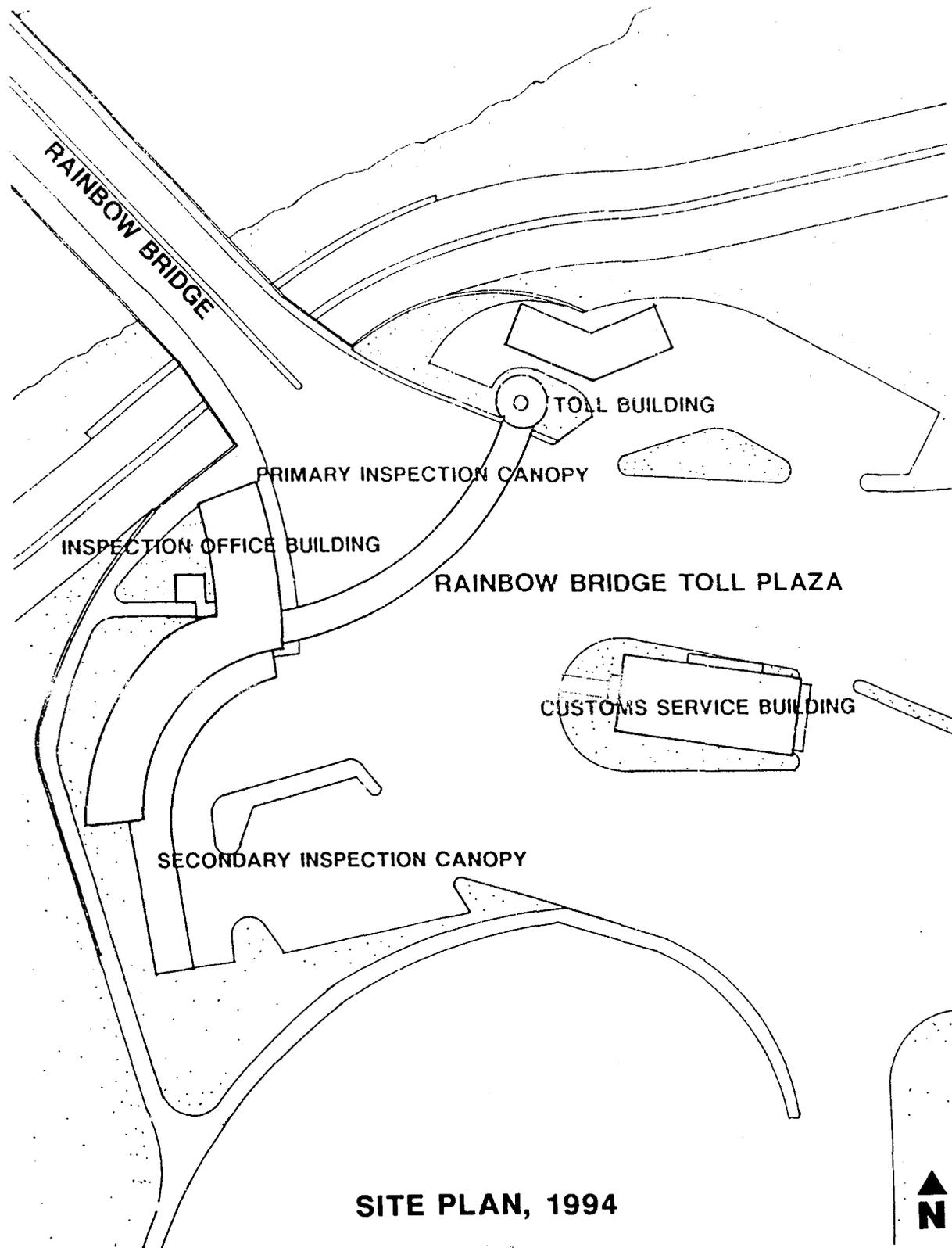
The original copies of Selected Letters of Shortridge Hardesty, Aymar Embury and Russell G. Larke, Niagara Falls and New York City, 1938-1942 which are referenced in this report, are located in the archives of Hardesty and Hanover, consulting engineers (1501 Broadway New York, NY 10036).

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Date: November 8, 1994



SITE PLAN, circa 1941





SITE PLAN, 1994