

A System to Explore Alternative Plans for Demolition of Historic Buildings

- The Case of the Demolition Delay Ordinance of Cambridge, MA, U.S. -

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Abstract:

Japan, as a society, is becoming more interested in utilizing stocks. However, the demolition of historic buildings is still a major issue. In the U.S.—one of the advanced nations in the field of historic preservation—there is a Demolition Delay Ordinance system. It is a system to review demolition projects to try to achieve a good balance between conservation and new development. In Massachusetts, the number of local governments that have adopted this ordinance has increased dramatically; however, there is no system of this type in Japan. This paper aims to explain in detail one local government's experience with this ordinance in the U.S. to use it as a basis for a new system in Japan. We used Cambridge as a case study, which was the first local government in Massachusetts to establish this type of ordinance.

All building owners in Cambridge must apply for a demolition permit when they wish to demolish a building. When the completed application is submitted to the Cambridge Historical Commission (CHC), the CHC staff reviews the application to determine if that the building is over 50 years old and is of significance. If the building has significance, the CHC will hold a public hearing. At the public hearing, the building owner discusses the reasons for the demolition and the replacement proposal. The CHC votes on whether the building is significant and should be preferably preserved. If the building is found to be significant and preferably preserved, it cannot be demolished for six months from the date of the hearing. During that delay period, the building owner explores alternative plans. Finally, the building owner can decide whether an alternative plan will be adopted.

There were 154 applications from July 2009 to September 2013. Plans for thirty-six buildings had a public hearing, and demolition of twelve of those buildings was delayed. Of the 12 buildings, six were preserved by adoption of alternative plans. Of those six buildings, four were partially preserved. One building was wholly preserved. The other remaining building was put on track for landmark designation study, considering a building for historical landmark designation, as an alternative to demolition. It prevents historically significant buildings from demolition and is the strength of this ordinance in Cambridge.

In determining whether the buildings were significant, there were 12 buildings that had an association with the history of the city. As for whether the buildings should be preferably preserved, there were nine instances where the proposed new building would not fit in with the neighborhood, eight instances where the existing building was significant in the neighborhood, seven instances where the replacement proposal was not good, and seven instances where the replacement proposal was incomplete.

Keywords:

Historic buildings, Cultural properties, Historic preservation, United States

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1. Introduction

Japan, as a society, is becoming more interested in utilizing stocks, and maintenance of existing buildings is important issue. However, demolition of historic buildings is still a major issue. In the U.S., one of the advanced nations in the field of historic preservation, there is a Demolition Delay Ordinance system. It is a system to review demolition projects. Furthermore it tries to achieve a good balance between conservation and new development. In recent years, the number of municipalities in the Commonwealth of Massachusetts that have established this ordinance has increased dramatically¹⁾. However, there is no system of this type in Japan.

This paper aims to explain in detail one local government's experience with this type of ordinance to use it as a basis for a new system in Japan. We examined Cambridge, which was the first local government in Massachusetts to establish this ordinance, for our case study.

We focused our attention on the U.S., because although some European countries have advanced systems for historic preservation, these systems are very strict. There is a significant difference between conditions in Japan and Europe. Moreover, the back stories of historic preservation in Japan and the U.S. are similar, because the U.S. also attaches importance to utilizing stocks. The pressure in Japan to develop new systems is similar to the situation in the U.S. Therefore, focusing on the Demolition Delay Ordinance system of Massachusetts as an advanced case must be useful for establishing a new system in Japan to resolve the issue of demolition of historic buildings.

There have been previous studies that described brief outlines of cases in Boston²⁾, Northampton and Pittsfield³⁾, Rutland⁴⁾, and Weston⁵⁾; however, no papers have described details of Cambridge's experience.

In this investigation, we collected information concerning the Demolition Delay Ordinance from related websites in Japan and interviewed two administrative officers and three specialists⁽¹⁾ from August 7 to September 15, 2013. Furthermore, we attended two public hearings in Cambridge.

2. Outline of review process

2-1. Review systems in the U.S.

There are federal, state, and local government organizations in the U.S. working on historic preservation. An overall framework for these organizations was established by the National Historic Preservation Act. Furthermore, each state's functions and authority are established by state law, and local governments establish detailed regulation through ordinances.

Each administrative organization has a system for reviewing construction and development projects. If a development project may have a negative effect on a historic property, the organization puts a hold on the project, giving time for exploring alternative plans that could reduce negative effects. The Section 106 Review process, the State Register of Historic Places for the Commonwealth of Massachusetts, and the Demolition Delay provide these functions at the federal, state, and local levels in Massachusetts.

2-2. Systems for historic preservation in Cambridge

The Cambridge Historical Commission (CHC), a department of the City of Cambridge, administers the ordinance. The CHC is composed of the CHC members who are Cambridge

residents and professionals in the areas of architecture, landscape architecture, law, real estate, and history, in addition to the CHC staff, who are city officials. The CHC members have other day jobs, and they work for the CHC on a voluntary basis.

The CHC administers the city's historic districts, neighborhood conservation districts, landmarks, and easement properties citywide, along with the Demolition Delay Ordinance. Historic districts are areas in which historic buildings and their settings are protected by public review. Neighborhood conservation districts (NCD) are groups of buildings that are architecturally and historically distinctive. Historic districts' regulation is stricter than NCD's one. A different commission administers each NCD and is empowered to approve new construction, demolition, and alterations⁶⁾.

Apart from the abovementioned administration, the CHC protects historic properties, marks historic sites, advises property owners on preservation issues, and researches and publishes information about the history and architecture of Cambridge.

3. Process of the Demolition Delay Ordinances

3-1. Process of a review (Figure 1)

In Cambridge, all of building owners must apply to the Inspectional Services Department (ISD) for a demolition permit if they wish to demolish a building. Demolition is defined in the ordinance as "the act of pulling down, destroying, removing or razing a building or commencing the work of total or substantial destruction with the intent of completing the same." Substantial destruction includes removal of a roof, removal of one side of a building, gutting of a building's interior to the point where exterior features are impacted, and removal of more than 25% of a structure⁷⁾.

When the building owner applies to the ISD for a demolition permit, the completed application is submitted to the CHC. The CHC staff will review the application within five days of receipt to determine if the building is over 50 years old⁽¹⁾ and is significant. If the building is not found to be significant, the applicant can proceed in obtaining other departmental sign-offs, including the police, water, and fire departments. When all necessary approvals have been obtained, the ISD issues a demolition permit.

If the building is found to be significant, the CHC will hold a public hearing within 45 days of receipt of the application. During those 45 days, the CHC staff prepares an approximately five-page report about the building site, architecture, history, reasons for significance, and a recommendation for the public hearing. That report is circulated to the CHC. Abutters to the building, the planning board, the city clerk, and any others deemed to be affected are notified of the public hearing at least 14 days in advance. Additionally, the CHC is required to advertise the public hearing in a newspaper of general circulation for at least 14 days. Moreover, the CHC may place a placard on the building. The building owner often discusses the replacement proposal with the CHC staff before the public hearing, and the CHC is encouraged to do so.

The public hearing is held during the monthly meeting of the CHC. At the public hearing, a report of the building made by the CHC staff is circulated. The Executive Director of the CHC explains conditions and the significance of the building. The building owner discusses the reasons for the demolition and the replacement proposal. Three or four members, on average, of the public speak about the ayes and noes and the significance of the building in the

neighborhood. Seven members of the CHC vote on whether the building is significant and whether the building should be preferably preserved. A preferably preserved building is any building that the CHC determines should be preserved in the public's interest rather than to be demolished.

If the building is not found to be significant or preferably preserved, the application is released for further review by other departments. If the building is found to be significant and preferably preserved, it cannot be demolished for six months from the date of hearing.

If the building owner demolishes an over-50-year-old building without a demolition permit, no building permit can be issued for that site for two years. This penalty also applies to a cases in which preferably preserved significant buildings were lost to fire or other causes due to some failure of the building owner. However, if the loss was not deliberate but accidental, a public hearing is held, and if it is demonstrated at the public hearing that the demolition was accidental and the demolished building was not historically significant, the penalty does not apply.

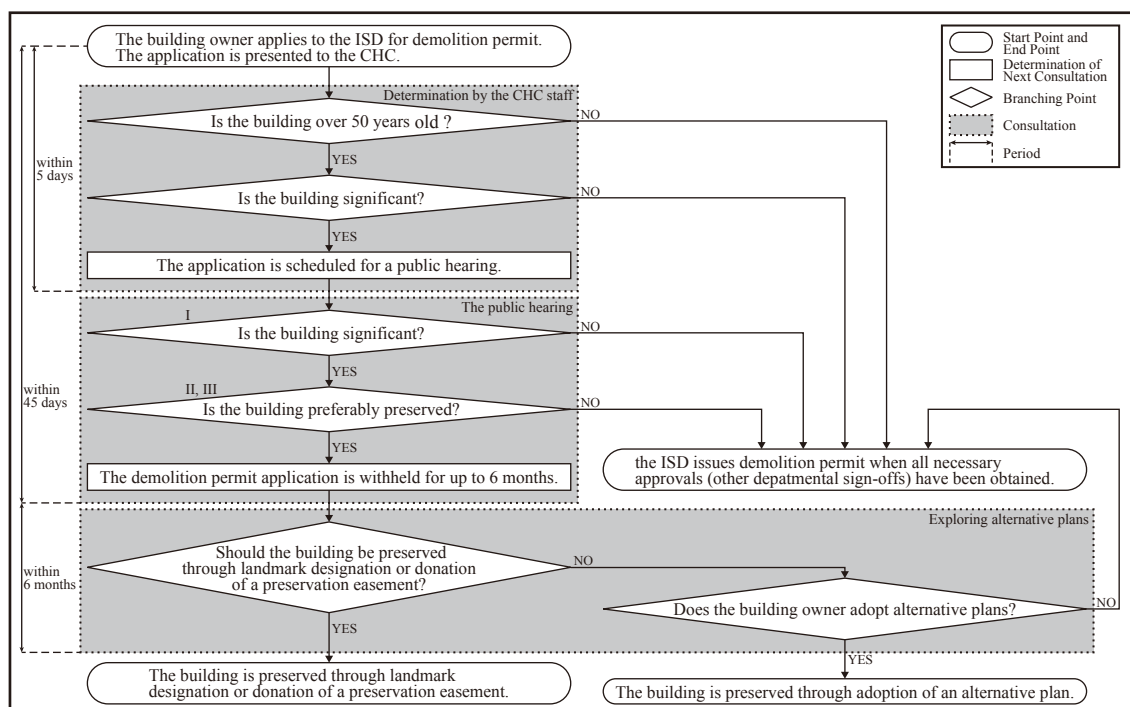


Figure 1 Review process of the Demolition Delay Ordinance

3-2. Process of exploring alternative plan

During the six-month delay period, the building owner usually meets once or twice with the CHC staff for about 30 minutes to explore alternative plans. Finally, the building owner can decide whether to adopt the alternative plan. In some cases, further action may be taken to preserve the building through landmark designation or donation of a preservation easement. This prevents very significant historic buildings from demolition. This is the strength of this ordinance in Cambridge.

The building owner can elect to bring the same or another replacement proposal again for another public hearing to hear comments from public and the CHC during the delay period. If it is determined this time that the proposal maintains the existing building's significance or is more favorable than preserving the existing building, the existing building is determined not preferably preserved. The delay period is canceled at that time, and the building owner can

proceed with the replacement proposal.

If the building owner is reluctant to explore alternative plans, the CHC cannot force the building owner to make changes. However, the CHC staff is considering a landmark designation study might be a motivator for the building owner to explore alternative plans. Because, starting a landmark study would mean further delay for the building owner.

The building owner can use the delay period to modify the development plan. In this light, the delay period does not impede new development; it simply provides an opportunity for exploring methods to preserve historic buildings. However, the CHC staff is considering that more meetings are required in some cases.

3-3. Process of a designation of landmark as alternative to demolition

A landmark is a building, object, site, or structure whose design or history is determined by the city council to be historically or architecturally significant or associated with events, persons, or trends significant in the history of Cambridge.

During the delay period, if the building owner does not make alternative plans to preserve the building and the CHC determines that the building should be preserved through landmark designation, the CHC staff starts a landmark study. During that study period, the CHC staff prepares an approximately 20-page report on the building with details of history and significance, developing boundaries, and standards for the building (Table 1). The report is submitted to the CHC for review. Between 45 and 60 days later, a public hearing is held to consider the proposal. If the CHC decides to designate the building as a landmark, the report is forwarded to the city council. A designation is made by a majority vote of the city council. This process takes one year. If the building is designated, the exterior changes come under the jurisdiction of the CHC. The CHC is empowered to regulate any new construction, demolition, or alteration that will affect the publicly visible features of the designated landmark before work begins.

Table 1 Comparison of Demolition Delay and landmark study

Items of comparison	The Demolition Delay	The landmark study
First review	Review by the CHC staff	The public hearing
Second review	The public hearing	Review by the city council
Pages of the staff report	Approximately 5 pages	Approximately 20 pages
Period of review process	45 days	One year
Who has the right of demolish	The building owner	The CHC

4. Actual conditions of review

4-1. Result of review

There were 154 applications from July 2009 to September 2013. There were two applications for which there were two different results for the same application. We have counted each result a different case; therefore, the total number of cases was 156 (Table 2).

Of those 156 cases, 38 cases were held public hearings. In those 38 cases, 32 buildings were found to be significant. Of those 32 buildings, 16 were found to be preferably preserved

and the demolitions were delayed; the other 16 buildings were not found to be preferably preserved and were not delayed. In the 38 cases held public hearings, three buildings were found to be insignificant although they were determined to be significant in the CHC staff's review. Three other cases had a public hearing without the CHC staff's review, because the buildings in question were demolished without a demolition permit. Those cases were reviewed to determine whether the demolition had been an accident and whether the demolished building had been significant. Overall, of the 64 reviewed cases, 55 decisions of the CHC members were unanimous (Table 3).

Of the 156 cases, 117 cases had no public hearing. In 13 of those cases, the buildings were under 50 years old, in 97 cases the buildings were not significant, and in 7 cases the buildings were not subject to the Demolition Delay. Those seven cases did not have a public hearing, although they were reviewed for other types of historic designation.

Of the total 156 cases, one case was void, because it was a duplicate application in the case log.

Table 2 Results of review

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Classification of cases	Results			Number of cases		
Cases held the public hearing	Preferably preserved	Delayed	12	16	32	38
		Canceled a delay on the way	4			
	Not preferably preserved		16			
	Not significant		3			
	Demolished without a permit		3			
Cases not held the public hearing	Under 50 years old		13		117	
	Not significant		97			
	Not a subject to the Demolition Delay		7			
Void	Duplicate application			1		
Total				156		

4-2. Determination factors in review

Regarding the determination of buildings as significant and preferably preserved at the public hearings, we grouped each determination factor and tallied them. Furthermore, we clarified the factors and features of the buildings that delayed their demolition. We used minutes of the public hearings (from July 2009 to September 2013) and reports by the CHC staff (from August 2011 to September 2013) to find the data.

In determining that buildings were significant, there were 12 cases in which the buildings were associated with the history of the city (Table 4). This was the main reason for determining significance. In determining that the buildings were insignificant, the main reasons were that the buildings were invisible from the public street, ill-preserved, or not architecturally significant.

In determining whether buildings should be preferably preserved, there were nine instances in which the proposed new building would not fit in with the neighborhood, eight instances in which the existing building was significant to the neighborhood, seven instances in which the replacement proposal was not good, and seven instances in which the replacement proposal was incomplete. Therefore, the main factors for preferably preserved were the existing buildings' significance to neighborhood and problems with the replacement proposal. In determining that the buildings should not be preferably preserved, there were nine instances in which the replacement project was good and eight instances in which the existing building was

Table 3 Actual condition of review

Classification of cases	Application number	I Determination factor for significance								Number of votes	II Determination factor for Preferably Preserved					Number of votes	Number of public hearings	The number of people who speak at the public hearing						
		1.	2.	3.	4.	5.	6.	7.	8.		A.	B.	C.	D.	E.			The building owner side	Disapprove demolition	Approve demolition	Other	Disapprove demolition	Approve demolition	Other
Preferably preserved significant buildings which delayed the demolition	D-1176					Unexplained				7-0	O	O	O	O		7-0	1	2	3	1	1	2	2	1
	D-1177					Unexplained				7-0	O	O	O	O		7-0	1	2	3	0	1	7	0	0
	D-1204					Unexplained				5-0				O		5-0	1	2	2	0	2	2	1	1
	D-1230					Unexplained				6-0		O	O			6-0	1	1	0	0	2	2	0	3
	D-1235-a		O	O						5-0			O	O		5-0	1	1	0	0	5	0	0	0
	D-1236		O							6-0	O			O		5-0	1	3	2	0	1	4	1	2
	D-1250		O	O	O					7-0	O	O		O	O	7-0	2	2	3	0	3	3	0	0
	D-1271		O		O	O	O			6-0	O			O		5-1	1	3	0	0	1	5	0	0
	D-1280			O	O			O	O	7-0			O	O		7-0	1	1	3	2	1	0	1	0
	D-1285		O	O		O				7-0			O	O	O	7-0	1	1	2	0	0	4	1	2
	D-1308	O	O				O			7-0	O	O				7-0	1	2	1	0	3	7	2	7
	D-1309	O	O							5-0	O					4-1	1	3	2	1	2	2	0	0
	Total	2	7	4	2	2	3	3	1	5-0	7	6	5	8	2	3	3	2	2	0	2	2	0	0
Preferably preserved significant buildings which canceled the delay	D-1182					Unexplained				5-0	O					5-0	3	1	2	0	2	1	2	2
	D-1209					Unexplained				6-1			O			7-0	2	2	2	0	1	0	0	3
	D-1227-a					Unexplained				5-0			O			5-0	2	3	0	0	2	0	0	4
	D-1291	O	O	O	O			O		6-0	O	O				6-0	2	1	3	0	0	2	1	0
	Total	1	1	0	1	0	0	1	0	6-0	2	1	2	0	0	2	2	1	3	0	0	2	1	0
Not preferably preserved but significant buildings	Application number	I Determination factor of significant								Number of votes	III Determination factor of not Preferably Preserved				Number of public hearings	The number of people who speak at the public hearing								
	1.	2.	3.	4.	5.	6.	7.	8.	a.		b.	c.	d.	The building owner side		Disapprove demolition	Approve demolition	Other	Disapprove demolition	Approve demolition	Other			
	D-1167					Unexplained				6-0			O	O	O	0-6	2	1	0	4	2	0	0	1
	D-1180					Unexplained				5-0		O	O	O		0-5	1	2	1	1	2	0	0	0
	D-1187					Unexplained				7-0		O				0-7	1	2	0	0	0	1	1	1
	D-1190					Unexplained				6-1		O	O			0-7	1	1	0	2	1	2	2	5
	D-1194					Unexplained				4-2	O					0-5	1	3	1	0	2	0	0	0
	D-1214					Unexplained				7-0				O		0-7	1	3	0	1	0	0	0	0
	D-1226					Unexplained				3-2			O			0-5	1	1	0	1	1	0	5	0
	D-1227-b					Identical with D-1227-a				5-0		O				0-5	1	1	0	1	1	0	0	0
	D-1235-b					Identical with D-1227-a				5-0		O				0-5	1	1	0	1	1	0	5	0
	D-1243					Unexplained				6-1			O			0-5	1	2	1	2	0	1	0	2
	D-1244					O				6-1			O			0-7	2	2	0	0	0	0	0	0
	D-1254					O	O			6-0		O	O			0-6	1	3	0	1	3	0	2	3
	D-1286					O				6-0		O		O		0-7	1	1	0	1	2	0	0	0
	D-1287					O				7-0		O				0-6	1	3	2	0	2	0	1	2
	D-1297					O				7-0		O				1-6	1	1	1	0	3	2	0	1
	D-1298					O				7-0		O	O			0-7	1	1	0	2	0	0	1	1
	Total	0	4	1	3	2	0	0	0	6-0	4	9	8	3	2	2	2	1	0	2	0	0	1	1

* I, II, and III are linked to Figure 1 and Table 4. ** We delisted three buildings that had been demolished before the public hearing. *** We delisted three buildings that were found to be insignificant at public hearings. **** D-1227 and D-1235 had two different results for the same application.

ill-preserved. These factors were the main reasons. Moreover, the CHC members determined whether the buildings should be preferably preserved based on information about existing buildings and the replacement proposals.

Table 4 Determination factors in review











I Determination factor for significance	N	II Determination factor for Preferably Preserved	N
1. Have architectural significance in terms of an era, style, and method of construction	3	A. The proposed new building will not fit in with the neighborhood	9
2. Have an association with a history of the city	12	B. The replacement proposal is not good	7
3. Have an association with a history of the neighborhood	5	C. The replacement proposal is incomplete	7
4. A typical example in the categorized buildings	6	D. The existing building is significant to the neighborhood	8
5. An atypical example in the categorized buildings	4	E. A renovation of the building is recommended	2
6. Contribute to the streetscape	3	III Determination factor for not Preferably Preserved	N
7. Keep a well-preserved condition	4	a. The proposed new building will fit in with the neighborhood	4
8. The oldest building in the neighborhood	1	b. The replacement proposal is good	9
		c. The existing building is ill-preserved	8
		d. A significant part of the existing building will be preserved	3

* N means number of cases. ** I, II, and III are linked to Figure 1 and Table 3. *** Determination factors are linked to Table 3.

5. Result after delay period

The demolition of 12 buildings was delayed after review of the public hearing, and 6 of those buildings were preserved by adopting an alternative plan (Table 5). Of those six buildings, four buildings were partially preserved with new construction behind. One building was wholly preserved with renovations. Moreover, one building was preserved as the landmark study. Thus, the landmark study is not a mere formality but actually performs a function.

Table 5 Results after the delay period and each building's picture before action

D-1176: Demolished	D-1177: Demolished	D-1204: Demolished	D-1230: Partially preserved
		No Photo	No Photo
D-1235-a: Demolished	D-1236: Partially preserved	D-1250: Wholly preserved	D-1271: Demolished
			
D-1280: Demolished	D-1285: Partially preserved	D-1308: Landmark study	D-1309: Partially preserved
			

* Photo credit: Cambridge Historical Commission

6. Conclusion

1) *Process of the Demolition Delay Ordinance*

In Cambridge, all demolition applications are reviewed in two steps. First, it is determined whether the building is significant, and second, it is determined whether the building should be preserved. However, it may be necessary to increase of the number of meetings concerning a building depending on the case.

2) *Main factor for delaying demolition*

The main reason why existing building were determined to be significant were that buildings had an association with the city's history. The main reasons why existing buildings were determined to be preferably preserved were their significance to the neighborhood or problems with the replacement proposal.

3) *Result of process*

Out of the 154 buildings in question, only 6 were preserved. However, it should be noted that many historic buildings are preserved by other systems, such as landmark designations. The Demolition Delay Ordinance must be evaluated as a system to make historic preservation more perfect.

4) *Introduction to Japan*

When introducing this ordinance to Japan, the design of an effective realizable system while thinking of compliance with the administrative procedures of the Cultural Assets Preservation Act and the Landscape Act is necessary. Detailed consideration is a future issue.

Notes:

(1) As of Jan. 29, 2014, there were 27,516 buildings in Cambridge, and 20,833 were over 50 years old.

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