

B.ARCHITECTURE
ARCHITECT CONSERVATION AR 6016
LECTURE – 5
UNIT – III
INTRODUCTION TO CONSERVATION

Listing Heritage Building:

The first important thing that is done is listing the building. You need to have a heritage building list or inventory of buildings which are stated by the ASI. ASI takes care of all buildings that are 100 year or plus. But this covers about only 5000 monuments at the national level and 3500 at state level. This is definitely not sufficient, this does not cover all of our heritage buildings and its focus is on monuments only. This is where INTACH steps in they consider all notable buildings of more than 50 years of age. They are notable because of architectural historic, archaeological or aesthetic importance. INTACH's inventory is referred to as national register of historic properties. What usually happens is what is there in ASI I is also there in INTACH because they have to have a comprehensive list and it covers everything. What is this list actually do? It attempts to create a systematic, accessible, retrievable inventory of the built heritage of the country. It also hopes to serve as a resource material for developing heritage conservation policies and regulations. Once a property or building is listed in a particular heritage list either by the INTACH or the ASI, it has to undertake necessary conservation activities which are formulated by particular people in the planning authority which protects these buildings. For a holistic viewing of architectural heritage, register of crafts people

also have to be associated with this so they can actually give their expertise on different buildings that require their expert work. It is important that the buildings listed and the associated activities are constituting part of living heritage that these buildings do not become obsolete and if at all the building is obsolete it has to be listed as obsolete building which gives it purpose as well as a suggestion that it can be rehabilitated into a new purpose. Now what is the selection criteria for a building to be listed. You have historical significance, historic integrity and historic context. Now if we think of historic significance, it's either association with events, activities or patterns. So this gives the importance of a property. What is event. For eg it can be kumbh mela or it can be kumbabishegam of a particular temple. So that is the event or the activity that gives the importance to that particular temple. The next thing is important association with important people or ordinary people who have made significant contribution to India's living heritage. For eg. its Mahatma Gandhi's house at porbandher in Gujarat. Distinctive significant character of design, construction or form or work of a master crafts person. For eg ancient temples of India all you have is the chapel. Because Michael Angela worked on it and its important. So even if it a master craftsperson who worked on it and it could be his last piece of work it gives a criteria to be preserved or listing. So what actually happens, when the listing actually occurs? You get a background of information for your socio economic history like railway stations, town halls, markets and things like that. Technological innovation could also be represented like a dam, bridge and finally town planning features like squares, streets or avenues like the Rajpath in New Delhi.

Historic integrity: This refers to a properties historic identity. This could be surviving physical characteristics, or significant elements that have been existed in the property's history. The original

identity includes the changes or additions that have been made over in historic time. For instance the original instruction of a building could be 1720 and additions could be made in 1748 and then in 1800 but with respect to the original date of construction, yes it is additions but from the perspective of 2016 they are all part of the historic fabric part of the illustrates past building. So we need to make sure that we retain the original materials, design features and the method of construction. Suppose there are major changes that are made in any of these categories then we can make sure that this building is listed but we clearly state that it has lost its integrity. Finally historic context, basically it refers to properties or information with respect to historic trends or important theme in history for a period of time. It could be a particular event that has occurred there or a series of community that has lived in a particular time. It could be the Mada Street around the temple where it no longer exists like that but the houses of the agra haram could still have historic contexts that exists even today. This is where the next stage comes in from individual building to precincts or a district. Precincts or properties with multiple owners. So it is not the individual building that we are talking about but group of buildings that are clumped together or cluster. For eg we have the agra fort complex. But in the Agra fort complex we have the Jahangir Mahal, Diwani-Aaam, Diwani Khas and Moti masjid, all of these are individually very important. But when you put them together they are equally more important in terms of Agra fort complex. So it has to be documented together but also individually.

Documentation of Historic Structure:

Now we come to next stage. Now that our building is listed what is the next step in practice. We have to document these structures. It has to be documented in their existing conditions. Photogrammetry is the science of basically taking photographs

and making reliable drawings of these photographs. If you look at some of these ancient buildings they are vast and huge, it is not possible to take a tape and measure it. So photogrammetry helps us in these situations and these drawings. It can be used to record the design of important historic structure. Digital drawings will also help us make a set of base line so that we can make damage mapping, it will give us good starting point for a conservation project. It is crucial to document a building before any changes are made because if any changes are made later on, we will know what is an addition, what has been removed and what to do in time and what is made and recorded accordingly. Now with respect to documentation, there are 4 standards that an conservation architect should follow. It should adequately explicate and illustrate what is actually important and valuable about the building that is very crucial. What is it that is important.

Standard 2: The document should be prepared accurately from reliable sources, if there are limitations, they should be clearly stated so independent verification from another body is also possible. Reliable sources in the sense, certain buildings might not have a written document about it. And if we go about doing the research for the same it should be only from reliable sources whom we can write as a reliable source at the end of the document. So and so person with so and so history has given us information about the so called building.

Standard 3: Document shall be prepared on the materials that are readily reproducible, durable and standard sizes. If the original history of material is completely deteriorated, if no longer can be made, it has to be addition suggestion has to be made, such that the closest material that is existing today may be used. The final standard is the document shall be clearly and concisely

produced. Now what is the typical construction of a historic structure consist of?

1. Drawings: It comprises of both sketches, detail plans, elevations sections with measurements Photographs. It can include both large format of not only the exterior but interior views high lighten the main characteristics of the building for both documentation and later damage mapping. The process of documentation itself is quite tedious process. It's not going to happen overnight. Sometimes it takes months and if the site is very vast site with number of buildings, it could be years like the Agra fort complex in such a case, the documentation, the photographs of 1 building could be done in 2015 and the other building is in 2016. So there is a were tier of 1 year in between . So this helps in damage mapping- the photographs so if we have photographs that are categorized and distinguishable based on date this will help us. Then written data, history, architectural and archaeological data any releveant information with respect to the site or surrounding the site comes under this category. And inspection of test which have been conducted on the building in the past that also has to be included as part of the documentation.

Assessing Architectural Character:

Now we decide to document the building. We have decided that what the values are. We have to discuss the architectural character of the heritage building, only then can it be documented. So how can we assess the architectural character of a historic structure.

1. We have to identify the visual aspects of the historic building so we can preserve the character of the building.

2. Important goals 1- preservation of the historic material and the preservation of the buildings distinguishing features and characters. So every own building has its own identity, it has its own character and different visual aspects and physical features come into this picture. So we have to study the overall structure of it. Now we have different ways of understanding all buildings. They could be specific building types, like it could be a temple, school or it could be a church use typology way we have distinguishing it. Next they can be studied as examples of specific materials. Yes it is sandstone building, No its limestone or marble building or granite building

3. It could also be considered as an example of historical period. No it's our deco, its gothic revival farm house, its one story bungalow, its colonial architecture, its british style architecture all of that comes as an example of historic period. The final facet of architectural building or architectural marvel is events or people which is intangible, this is where the dandi march started .This is the building where the independence bill was signed. So things like that are associated with the building. So that is the final reason. Now what is the process of identifying the visual character. There is a 3 step approach that is used. And this can be used by anyone to examine and identify those important feature that contribute to the visual character of a building. The first step is looking at the building from afar. LOOKINH at the the building with respect to entire site it is situated in. Next going closer and studying the building at arm reach level. That is you appreciate the materials, the craftsmanship and service finishes and finally the 3rd step Is going into the building and going through the building to perceive the different spaces , perceive the details that are there in the interior and the interior visual character.

Step 1: Identifying the overall visual aspects. This is easy this is done even in lay mans point of term. You just have to identify based on shape of the building, openings in the building, roof and related features, projections, trim, setting, so when we actually look at the building from afar, I see a slope roof, I see a flat roof, I see so many dome's, balcony's I see so many gallery. So it's just the study of the overall visual gallery aspects of the building from the outside.

Step 2: Visual character at the close range. This comes to a little more knowledge about the building you need to have, you come to an arms length where you can touch the building and this is done based on materials, craft details and craftsmanship. So here you study the color and texture of the materials any surface evidence of craftsmanship, showing the age of the building or the deterioration any material that is contrastingly different from the original. All of this is what you study in the 2nd stage. 3rd and final stage is the visual character of the interior spaces, and finishes. Here certain more amount of detail is required because we have to enter the interior space and it is little more difficult because we have to analyse and study individual rooms the interconnecting spaces and interrelated spaces like staircases, lobby spaces and what we have to study here is the surface material and the different finishes that are there. Instance it could be a marble floor with granite column it could be a corners made of POP or later date. So all of these has to be studied in detail and same time you have study the purpose of each room. Now fragility of a building visual character. If we study that how visually we have the architectural character but the process is actually a fragile process in the sense by a wrong cleaning method we can irreversibly damage a thing, for example if we are insensitive to re pointing the joints, you could change the character of the building. If you give a wrong color to the outer exterior, you

entirely change the look of the building and the age of the building. Inappropriate cleaning you should not use acid to clean stones which will actually give discoloration, which will reverse the wrong date when we are analyzing the building. So it is very important that we assess the visual character without damaging it because it is very fragile. Now we look at some examples over here. This is to show you the right fragility of a buildings visual character. This badly done re-pointing work of the bricks. How is the original and how is the rework that is done. It is completely changing the shade of the building. Here you have the study of arm's length visual character, the materials. The pink level is stoned randomly then you have exposed brick work. Down you have the overall visual character, roof and the related features. Yes it is cable roof with grill work, then I have windows, curved corners, I have so many cup holes, chimneys all of these are part of the roof and related features. Here you have interior visual character, surface materials and finishes. Here is the lobby space and interconnected space like stair case, this is the exposed structure of the interior and this shows the core features like stair case which is stone, the railing which is metal and the railing handles which are wood. So these are the things that we talk about on the different kinds of materials.

Now we have covered documentation, listing and assessing the architectural character of the building. Now how do I encompass all these information? That's where the historic structure report comes into being.

Historic Structure Report:

A HSR is a preservation and rehabilitation tool, any building that has been listed as important historic structure, should have a historic structure report mainly. It basically evaluates the existing condition provides the general recommendations that are to be

dealt with the existing issues and if at all there is consideration of a adaptive reuse what could be that use and the current use of that building. So it is very important that we assess the physical character, evolutionary development, issues of challenges in maintaining it and to understand in detail the value of historic property. So a HSR consists of all these information in detail. It is very similar to that of a conditional assessment report and structural assessment report. A HSR consists of both written data, documentations, plans, elevations as well as the conservation plans if at all it is being attached. So it is for both the existing building, the building in the past and what construction do you think will happen in the future to make it structure ably stable if required. This should be a primary reference document that is consulted for any project that is to be planned or scheduled to be planned with respect to that particular building. So what does a comprehensive HSR include, you have introductory information like site information, property identification, ownership details, educative summary as in who is asking for the report, what is the purpose of the report, is there a proposed adaptive reuse things like that. Then we have a historical over view, what is the value of the building, why is it valuable, what is the historic function,

If there is a personal history attached to it what is it?

The summary of the history of building.

What is the reference material for this? And if there is additional information required, which state is that?

Setting environmental or function contacts, what was the use of the building?

What is the current use of the building, the structural set up of the building and how do you see it in the future. What do you think the future of this building holds?

Architectural and landscape overview. A detailed description of the structure's site, structural system or type, exterior or interior architectural detailing, stylistic elements which could be character defining elements like a particular day window, arch way or arcade. All of this comes under identification and documentation. Its just not what is there, what was there and even the documentation of changes that are going to be suggested and alterations that are going to be made to the structure. Then you have condition assessment report. This consists of summary description of the existing condition, the existing conditions by just not drawing but also photographic images, room by room description of the interiors, evaluation of the physical condition of the structure including what is the quality of the masonry, how is the motor, how is the roofing, what kind of walls, ceilings, all of that, so everything is going to be evaluated in this. Then you have an accessibility assessment. This is done for the historic structures that are going to be made open to the public. Because according to the disability act of reason times, it is very important that all kinds of public with different kinds of handicapped are able to enter a particular building and usually old buildings did not give importance to such things. Then summary building port. There are lots of evaluation and documentation when we go through an old building we can see a lot of violation to the current building core. They might not have toilets. They might not have cross ventilations or lighting entering the building. So things like this also has to be made upon.

Then you have recommendations for repair, replacement or restoration what is that you are going to recommend for this

building is it going to be used as current use ?if its obsolete or empty?

What is the thing that is going to happen after it is restored or if you are going to assign a new news to it? What is the changes you are going to suggest for the same?

Then you have the existing conditions recorded. What is the existing condition of the side plan or floor plan, photographic evidence supporting these plans, photographic documentation is very crucial like I mentioned deterioration can happen over time just like few days or few months. All of these has to be recorded through photo or video documentation. A dif at all there is supplementary information available like whole site drawings, even that has to be provided.

Guidelines For Preservation:

Now guidelines for preservation, now we have gone through listing, documentation and we have seen in part of documentation as how do we assess an architectural character, now we have written down a HSR. Now we have a HSR in hand and say we have a building in hand if I am going to preserve it, these are the guidelines that I have to follow to preserve it.

The developer should have an understanding of the heritage status and then pursue the development and make sure the heritage of the building is retained and the value is not lost. Definitely we have to assign a better use for the building and make sure the adaptive reuse project has minimal impact on the values of the building. We need to discourage things like facadism, where only front facad of the building is maintained and the rest of it is gutted out and changed. Then we need to require new work which is marked as contemporary, we shouldn't try to

pass off the current work that is old. And if new use is assigned to the building, it has to be compatible to the original use.

Guidelines For Adaptive Reuse:

Now we think of adaptive reuse. The whole idea is to provide new housing, commercial opportunities as well as economic opportunities of the society that is built in and one of the main environmental benefits of reusing the building is the retention of the original buildings, embodied energy. There is nothing more sustainable than using the old building that is already existing and assigning a new purpose for it, which is the basis of the architecture.