Bringing It All Together
The previous chapter reviewed and compared two projects which included environmental and historic preservation issues. Neither project, however, included every issue. But, by using some ideas from each project, and examining ideas in the regulating information, an ideal project can be formulated. The following information describes how the ideal project would address the same issues presented previously, gives suggestions of ways for preservationists to incorporate environmental issues and for environmentalists to incorporate the ideas of historic preservation, and mentions any similarities or important conflicts which exist. Together this information would create a rehabilitation project that would not harm our environment, built or natural. Instead, the project would help to maintain and improve our environment.

**Overall Goal**

**Ideal Goal:**

The initial intention of the project should be to enhance and never harm our surroundings.

**What to do:**

Historic preservationists and environmentalists have to consider and become educated about each others issues along with their own concerns.

**Similarities/Conflicts:**

Preservationists and environmentalists already share ideas about creating a good project. They both believe the project needs to be well planned, consider other issues besides finances, and quality should prevail over quantity. Both also want to enhance a part of our environment. The main difference in the goals are rooted in the specifics: environmentalists consider the natural environment first and preservationists consider the building first.
Energy Conservation

Ideal Goal:

The most energy efficient systems which do not harm the character of the building should be installed.

What to do:

Because of the widespread information about energy conservation, preservationists lean more toward the environmental side of this issue than environmentalists do toward the preservation side. Preservationists, however, need to continue their education on different methods for creating an energy efficient building. Environmentalists on the other side need to remember that systems can damage a building and more than likely will be replaced in the future by a better system. Using the second best system in order to save the character of the building is a sacrifice energy conservationists need to make.

Similarities/Conflicts:

The biggest conflict is the windows. The original windows should be examined, and then the most efficient window which gives the same appearance to the building should be selected. In the case of the two studies explained previously, a wood framed, triple pane window with a low emissivity (Low E) coating on two panes and argon gas between the panes would be the best selection. These windows typically have an R-value of 4.3 to 5.9. If the cost of these windows is too much, a double pane window also with a Low E coating and argon will give an R-value of approximately 2.5. This particular window was selected because it can be custom designed and have an all wood frame, which would maintain the original character of the buildings.
Indoor Air Quality

Ideal Goal:

In this ideal situation all the products installed in the building, including those used for repairing existing elements, should be nontoxic and not pollute the air. The ventilation of the building should be sufficient to ensure a comfortable environment, but not waste energy. In the two studies examined, the ideal ventilation rate according to ASHRAE research should be 20 cfm/person.

What to do:

Preservationists need to become educated on the materials which cause indoor air pollution. When needing to repair important elements, the materials used should be examined for air polluting chemicals as well as similarity to the existing material.

Similarities/Conflicts:

The biggest issue here is a similarity between what an environmentalist would suggest and what a preservationists would suggest for a material. The Preservation Briefs are a good example of what preservationists suggest. In general it is stated in the Briefs that certain materials should not be used because they may cause harm to the building. Many times the materials which will harm the building are materials which would pollute the air.

Indirect Environmental Impacts

Ideal Goal:

When selecting materials a cradle-to-cradle consideration should be made. This means the product's impact on the environment will be
considered from the methods of obtaining materials to produce it, the
production of it, and what happens to it after it is used will all be consid-
ered when making a selection.

What to do:

This is also an area where preservationists could improve. They simply
need to consider the ideal goal when selecting materials. This is not
currently a common practice.

Similarities/Conflicts:

The similarities here are basically the same as they are for air quality
control. Both groups generally suggest using the same types of products
for different reasons. Unfortunately, as materials which are harmful to
the environment have become used more commonly in general construc-
tion, they have become more commonly accepted in preservation prac-
tice.

Overall Aspects

Ideal Goal:

The important overall characteristics should be considered when reha-
bilitating a building.

What to do:

Environmentalists need to remember that the character of the building is
also an important part of our environment. Buildings can be easily
damaged by someone who believes modernizing them is the best prac-
tice. Often modernizing has led to unnecessary deterioration and loss of
color character, making the building less useful to the next generation.
Similarities/Conflicts:

The conflict here compares to the conflict of the overall goals. Environmentalists and preservationists are initially concerned with different aspects of our environment. Preservationists are saving what we produce while environmentalists are protecting what is here naturally. Environmentalists should realize that the way our environment has been shaped by those who have come before us is also important.

Close Range Aspects

Ideal Goal:

The important characteristic details of the exterior should be respected when rehabilitating a building.

What to do:

Environmentalists need to respect the important details of the exterior and not ruin them in an attempt to update the building. For preservationists, when repairing these elements they need to remember the environmental issues.

Similarities/Conflicts:

The conflict here is probably the thought of how important these details are to the character of the building. The details of the building are often thought to be trivial, and less important than the shape or openings. The details, types of material and craftsmanship are essential to the character of the building, as was discussed previously. These things make the building what it is.
Interior Spaces, Features, and Finishes

Ideal Goal:

Interior features which are important to the character should be respected when rehabilitating a building.

What to do:

Environmentalists should not simply remove everything on the interior of the building. There are usually some interior elements remaining which are important to the character and can be useful in the rehabilitation. At the very least an examination of what is in the building and what affect it has on the character should be done.

Similarities/Conflicts:

Environmentalists are using an existing building partially because it is better for the environment to use what we already have rather than to unnecessarily create something new. This philosophy seems to stop with the exterior of the building. The standards established for rehabilitation projects are practical about what should be maintained. They only expect the important or special features which make the building what it is to be maintained. Once these elements are removed, they are gone.
An Example Of Incorporation

In order to further demonstrate the incorporation of environmental and historic preservation ideas, the following example will be explained.

The two cases studied used different types of windows for different reasons. Neither window selection though incorporated the ideas the other used to select their window. For a window to respect both the character of the building and the environment in general, it must recognize the issues presented previously. A particular window manufacturer was found to meet much of the criteria given in this research. The following describes the issues discovered about the window:

- can be custom designed with an all wood frame using high quality craftsmanship
- a triple-pane window with a low-emissivity coating is available
- the company generally recognizes the need to be environmentally conscious of its practices, and is being used as an example of an environmentally conscious company in the state of Minnesota
- the waste from producing the windows is recycled

The one thing found when investigating this product was that the wood does not come from a sustainable source. In other words, it comes from someone who cuts down whole forests at once ruin the chances for the ecosystem of the forest to continue or for it to produce quality tress. However, this is probably a compromise that would have to be made. But, the individual specifying the windows could tell the company the environmentally sensitive, high quality approach is greatly appreciated and would be even better if certified sustainable wood was used. This may seem like a lot of work, but it did not take more than thirty minutes to discover this information. Most companies will want to promote a product and will want sales people to be informed about any sensitive issues they address in a conscious way.
Summary

If architects and builders simply used the information presented in the Preservation Briefs and learned the proper questions to ask about product manufacturing, the rehabilitation of buildings could become extremely successful in the fight to maintain our environment. The first and foremost decision that must be made is to use our urban fabric and to do so in a way which improves our whole environment.

Overall the most important thing that both environmentalists and preservationists need to remember is to consider the impacts of the decisions they make. Environmentalists need to remember the building makes an important contribution to the built environment, while the preservationists need to remember there are many other parts of the whole environment which can be affected by the built environment. Both interest groups already agree that good maintenance, high quality, and good planning are important parts of a successful project. If they bring these ideas into every level of the rehabilitation process, they could produce even better projects.