Synthetic Materials Discussion

Background

Some heritage alteration permit (HAP) and other decisions have come through CACP and Council, where there has been disagreement on use of alternative materials to wood etc.

Most existing HCD plans and guidelines encourage wood, and discourage aluminum/vinyl, but are silent on some other materials (ie. composites). They also seem to frequently use language like "avoid" and "encourage" rather than "must" or "must not."

- So, it is unsurprising that reasonable people can disagree about what should be allowed.

Excerpts from a selection of HCD plans and guidelines (Bishop Hellmuth, Blackfriars, and Wortley/Old South) are attached as Schedule "A."

It seems to be in everyone's interest to have consistency in decisions on the use of synthetic materials, and fairer to set that direction comprehensively rather than as one-off exceptions to those who complain louder or apply for retroactive approval.

Focus has been on HCDs rather than individually designated buildings:

- Individually designated buildings have more uniquely identified features, probably harder to create anything close to "one size fits all" guidance.
- HCDs also have building rankings that could make more concrete guidance easier to develop

Technological advancements in materials, climate resiliency considerations, and increasing concerns around affordability to property owners, may merit a fresh rethink of the use of synthetic materials in HCDs (within the bounds of our heritage policies/legislation).

Language of Motion for Consideration:

> *CACP recommends that Council task civic administration with creating and delivering a more permissive set of guidelines for the use of synthetic materials (including composites) in buildings designated under HCDs. These guidelines would aim to offer greater flexibility in material choices, while also aligning with London's existing HCD policies. Such guidelines would be made available to the public and implemented in staff's delegated heritage decisions, with the intention of enhancing the current framework.*

Schedule “A”

Bishop Hellmuth

Building Alteration Policies

Original building materials, features and finishes should be repaired and conserved rather than replaced, when possible. The original has greater historical value. (p. 5)

When replacing building features, they should be duplicated or be in keeping with the character of the original. (p.5)

Walls: Original exterior wall finishes should be conserved wherever possible, together with their patina of age and weathering. 92% of the buildings in the heritage district are brick. Brick is the preferred wall finish for alterations. Alternative wall finishes should be traditional, such as stucco and wood. (p. 5)

Windows: The conservation of original windows in general and stained glass windows in particular is a high priority. If altered, they should complement the finish, style, proportions and placement of the original. Removal of original stained glass windows is strongly discouraged. Vinyl and aluminum-clad windows are discouraged as they lack historic character. (p. 6)

Trim: Alterations should ensure the conservation of the original trim wherever possible. If replaced, it should duplicate the original. Custom-made trim is usually required when replacing (p. 6)

Verandahs: Alterations should ensure their conservation, particularly the original posts, handrails and ’brackets. If parts are to be replaced, they should duplicate the original (p. 6)

Gables: If parts are replaced or repaired, they should duplicate the original in terms of finish, size, proportions and appearance. Custom made replacement parts are usually required (p. 6)

Roofs: New roof finishes should duplicate the original, such as slate, cedar shingle or asphalt, or be a complementary alternative such as asphalt appearing as cedar shingle. (p. 8)

Building Addition Policies

Original building materials, features and finishes should be repaired and conserved, rather than replaced, when possible. The original has greater historical value. (p. 9)

Materials: Materials Over 90% of the buildings in the heritage district are brick. The continued use of brick for additions is encouraged. Compatible alternatives should be traditional, such as wood or stucco. Vinyl or metal sidings are discouraged as they lack historic character and longevity. (p. 10)

Windows: Painted wood windows are encouraged. Vinyl and aluminum-clad windows are discouraged as they lack historic character. (p. 11)

Trim: Decorative wood trim extended through to the new addition is encouraged. As a secondary facade, a more modest trim is also appropriate. Vinyl or aluminum trim, particularly for soffits, is strongly discouraged as not being compatible. (p. 11)

New Building Policies

Original building materials, features and finishes should be repaired and conserved, rather than replaced, when possible. The original has greater historical value. (p. 13)

Materials: Compatible alternatives should be traditional, such as wood or stucco. Vinyl or metal sidings are discouraged as they lack historic character and longevity (p. 17)

Windows: The sash and window style in new buildings is encouraged to have a similar look and colour to comply with the heritage design objectives. (p. 17)

Trim: Where appropriate to the style of the new building, painted decorative wood trim is encouraged. This is a character defining architectural feature of the heritage district. (p. 18)

Blackfriars

Architectural Design Guidelines

Many forms of growth and change are not only inevitable, but desirable to keep the area viable and vibrant. Change can incorporate new lifestyle patterns and materials, assemblies and technology that are the expectation today, for most residents and property owners (p.44)

Gables, Dormers:

> Deteriorated wood components should be replaced with new components fabricated to replicate the original design. Where components are completely missing, or too deteriorated to provide a pattern for replication, undertake adequate research by observing similar examples and copying as precisely as possible;

Siding:

Natural wood siding can be acquired and milled to profiles identical to the original profile and nailed in place and painted or stained to replicate the original appearance. This is the optimum solution where feasible;

Prefinished wood siding in several standard profiles and colours, along with required trim components is also available. While the raw wood that is the starting material has knots and blemishes that were not present in wood siding a century ago, this material is the preferred second choice if natural wood siding is unavailable or too costly;

Vinyl and aluminum siding are popular now for new construction and renovation because they are very inexpensive alternatives. They are inexpensive because they are very thin sheet materials formed into plank-shaped profiles and finished in a range of standard colours. They perform well at keeping rain and weather out of the building, but because of the thin nature of the sheet material, they are very fragile in use and prone to damage from impact of vehicles, toys, and ladders used for maintenance. These materials are not recommended to cover or replace original wood siding; and,

Fiber-cement board (which is a safe development from the abandoned asbestos-cement industry) is a relatively new product that offers many of the benefits of traditional wood siding without the cost or some of the defects that are standard with new wood products. The boards are available in a variety of standard profiles and pre-finished with a primer for finish painting on site. They are available in a smooth, flat finish that will stay smooth and flat compared to most vinyl and aluminum sidings. Like wood, they must be protected with a paint finish that can be selected from any paint colour and must be maintained with occasional repainting. This material, while less preferable than wood siding, is more suitable than aluminum and vinyl materials;

Porches and Verandahs:

For decorative elements such as gingerbread fretwork and other trim, wood is still the best choice to recreate the original appearance, but using improved technology such as waterproof glues and biscuit joiners and liquid preservatives and best quality paints to protect the finished product;

Fiberglass and plastic versions of decorative trims should be avoided. Poor interpretation of the scale or design of applied decoration detracts from the visual appearance and architectural coherence of porches and verandahs;

Soffits & Fascias

Avoid maintenance and repairs that require the covering of original materials with a new layer that conceals the original;

Replace deteriorated original wood details in soffits and fascias with new wood cut to replicate the profile of the original, and finished to match;

Windows & Doors

The replacement of original wood framed windows by vinyl or aluminum clad windows is discouraged. If this is the only reasonable option, the replacement windows should mimic the original windows with respect to style, size and proportion, with a frame that is similar in colour, or can be painted, to match other windows;

Decorative Trim and Details

Avoid covering or otherwise obscuring decorative trim and details with other materials, particularly vinyl and aluminum siding;

Wortley/Old South

Avoid "new" materials and methods of construction if the original is still available. In some cases, after careful research, substitute materials may perform better than original materials, but beware of using materials that have not been tested for years in a similar application.

C o n s e r v e ; Retain and restore heritage attributes wherever possible rather than replacing them, particularly for features such as windows, doors, porches and decorative trim.

Where replacement of features (e.g. doors, windows, trim) is unavoidable, the replacement components should be of the same style, size, proportions and material whenever possible.

Gables, Dormers and Turrets

Deteriorated wood components should be replaced with new components fabricated to replicate the original design. Where components are completely missing, or too deteriorated to provide a pattern for replication, undertake adequate research by observing similar examples and copying as precisely as possible.

Soffits & Fascias

Avoid maintenance and repairs that require the covering of original materials with a new layer that conceals the original.

Replace deteriorated original wood details in soffits and fascias with new wood cut to replicate the profile of the original, and finished to match.

Siding

The replacement materials available for wood siding includes: natural wood, specially prepared and pre-finished wood, vinyl, aluminum, and fiber-cement board siding.

Natural wood siding can be acquired and milled to profiles identical to the original profile and nailed in place and painted or stained to replicate the original appearance. This is the optimum solution where feasible.

Prefinished wood siding in several standard profiles and colours, along with required trim components is also available. While the raw wood that is the starting material has knots and blemishes that were not present in wood siding a century ago, this material is the preferred second choice if natural wood siding is unavailable or too costly.

Vinyl and aluminum siding are popular now for new construction and renovation because they are very inexpensive alternatives. They are inexpensive because they are very thin sheet materials formed into plank-shaped profiles and finished in a range of standard colours. They perform well at keeping rain and weather out of the building, but because of the thin nature of the sheet material, they are very fragile in use and prone to damage from impact of vehicles, toys, and ladders used for maintenance. These materials are not recommended to cover or replace original wood siding.

Fiber-cement board (which is a safe development from the abandoned asbestos-cement industry) is a relatively new product that offers many of the benefits of traditional wood siding without the cost or some of the defects that are standard with new wood products. The boards are available in a variety of standard profiles and pre-finished with a primer for finish painting on site. They are available in a smooth, flat finish that will stay smooth and flat compared to most vinyl and aluminum sidings. Like wood, they must be protected with a paint finish that can be selected from any paint colour and must be maintained with occasional repainting.

This material, while less preferable than wood siding, is more suitable than aluminum and vinyl materials.

Porches and Verandahs

For decorative elements such as gingerbread fretwork and other trim, wood is still the best choice to recreate the original appearance, but using improved technology such as waterproof glues and biscuit joiners and liquid preservatives and best quality paints to protect the finished product.

Fibreglass and plastic versions of decorative trims should be avoided. Poor interpretation of the scale or design of applied decoration detracts from the visual appearance and architectural coherence of porches and verandahs.

Windows

The replacement of original wood framed windows by vinyl or aluminum clad windows is discouraged. If this is the only reasonable option, the replacement windows should mimic the original windows with respect to style, size and proportion, with a frame that is similar in colour, or can be painted, to match other windows.

Decorative Trim and Details

Avoid covering or otherwise obscuring decorative trim and details with other materials, particularly vinyl and aluminum siding.

Preserve and restore as much of the original trim and detailing as possible and use the original as templates for new replacements.