Historic Preservation Commission

Members:
Dr. Stephen Gibson – Chairperson
Ms. Suzanne Wright – Vice Chairperson
Mr. Tim Hoffman – Secretary
Mr. Larry Jackson
Mr. Chris Myers
Dr. Michael Garrett
Lincoln Wilkins. Jr. PhD
Councilwoman Laurie Marchini
Staff Liaison: Kathy McKenney, Historic Planner/Preservation Coordinator

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AGENDA

Historic Preservation Commission
Cumberland City Hall, Council Chambers

DATE: March 10, 2021
TIME: 4:00 PM

Public Notice:

The Cumberland Historic Preservation Commission will meet virtually on February 10th at 4pm. The meeting will now be held on the WebEx platform instead of Zoom. A copy of the meeting agenda has been attached. In addition to accessing the meeting virtually through WebEx, it can also be viewed on the City of Cumberland's website at the following link: http://www.ci.cumberland.md.us/633/Historic-Preservation-Commission-Live-Me

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http://www.ci.cumberland.md.us/633/Historic-Preservation-Commission-Live-Me

APPROVAL OF MINUTES

1. Review of the meeting minutes from the February 10, 2021 Historic Preservation Commission meeting

PUBLIC COMMENT

CERTIFICATES OF APPROPRIATENESS – CONSENT AGENDA

2. 157 Baltimore Street – Four Axes - COA21-000003 – Request to install three new signs for the new business Robert Boyle, applicant

CERTIFICATES OF APPROPRIATENESS

3. 3 Pershing Street – Allegany Museum – COA21-000004 – After the fact review of entrance door replacements, soda blasting removal of patina of transoms, and replacement of door hardware; future soda blasting of the exterior light posts, window replacement, and door opener installation – Michael Fetchero, applicant.

OTHER BUSINESS

4. Updates from HPC Staff and from the Chairperson will be provided
5. Updated Procedure for Project Development and Funding Requests
6. Reports and Additional Planning for the May 2021 Preservation Summit Workshops
7. Administrative Approvals Report: Staff did not process any Certificates of Appropriateness between February 10, 2021 and March 3, 2021

ADJOURNMENT

If you are unable to attend this meeting, please contact the Department of Community Development at (301) 759-6431 or (301) 759-6442.
Applicants or their appointed representatives must be present at the meeting for a review to take place. Please remember to turn off or silence all electronic devices prior to entering the meeting.

File Attachments for Item:

1. Review of the meeting minutes from the February 10, 2021 Historic Preservation Commission meeting

MINUTES

HISTORIC PRESERVATION COMMISSION

February 10, 2021

Virtual Zoom Meeting

The Cumberland Historic Preservation Commission held its regular meeting on Wednesday, February 10, 2021 at 4:00 p.m., via a virtual Webex meeting. Members present were Chairperson Dr. Stephen Gibson, Ms. Suzanne Wright, , Mr. Chris Myers, Mr. Tim Hoffman, Dr. Lincoln Wilkins, and Mr. Larry Jackson. Dr. Michael Garrett experienced technical difficulties and joined the meeting at approximately 4:35pm. Councilwoman Laurie Marchini was absent.

Others in attendance were Kathy McKenney, Historic Planner/Preservation Coordinator, Debbie Helmstetter, Code Technician, Mr. Gino Giatras; Curtis Famous Weiners, Ms. Melinda Kelleher, DDC Executive Director and Rhiannon Brown, Queen City Creamery.

Chairperson, Dr. Stephen Gibson, called the meeting to order. He read the following statement into the record: "The Cumberland Historic Preservation Commission exists pursuant to Section 11 of the City of Cumberland Municipal Zoning Ordinance. Members are appointed by the Mayor and City Council and shall possess a demonstrated special knowledge or professional or academic training in such fields as history, architecture, architectural history, planning, archeology, anthropology, curation, conservation, landscape architecture, historic preservation, urban design or related disciplines. The Commission strives to enhance quality of life by safeguarding the historical and cultural heritage of Cumberland. Preservation is shown to strengthen the local economy, stabilize and improve property values, and foster civic beauty. The Cumberland Historic Preservation Commission operates pursuant to State of Maryland 1977 Open Meetings Act and therefore no pending applications shall be discussed between or amongst Commissioners outside the public hearing to determine the disposition of the application. Please note that the meeting is recorded and that digital signatures are on file from the Chairperson, Vice Chairperson, and Secretary for utilization in project determinations. "

Chairperson Dr. Stephen Gibson introduced the Commission members present

and staff.

APPROVAL OF MINUTES

1. Minutes for January 20, 2021 were approved as written. Mr. Tim Hoffman made the motion to approve the minutes as written and Mr. Chris Myers seconded the motion; all members were in favor, motion was approved.

PUBLIC COMMENT

There were no public comments.

CONSENT AGENDA

There were no items on the consent agenda.

CERTIFICATES OF APPROPRIATENESS

1. ***COA21-000002 35 N. Liberty Street*** – applicant Mr. Gino Giatras, Curtis Famous Wieners, requested to install a metal accessory structure (carport), which is detached from the building, for outdoor dining during the COVID-19 pandemic. This is an After the Fact" application. The structure measures 12'x 41'x8'. The applicant requests to install a sliding service window within the right hand side plate glass storefront window (part 2). The service window will be framed in aluminum and measure 11" x 30". The color is computer gray to match his building.

   Issues discussed were the appearance of the structure and whether it was temporary or filed as a permanent structure. Mr. Giatras spoke with Kevin Thacker, Code Compliance Manager and it was decided to apply as a permanent structure since a building permit was issued. Mr. Giatris wishes to leave the building in place even after dining is returned to normalcy. Mr. Giatris would like to keep it up for raining days, etc. since his other outside dining tables are located on the sidewalk. Mr. Giatras stated the Cumberland Fire Marshall, Mr. Shannon Adams, inspected and approved the structure for C02 levels for outdoor designation. The Fire Marshall will constantly be in touche with the owner to monitor the CO2 levels to make sure it is safe at all times.

   Suzanne Wright made the motion to approve COA 21-000002, 35 N. Liberty Street, pursuant to guidelines 37, 38, 40, & 40 @ 44 on one condition that the accessory structure is temporary and to be revisited

in one year or until in-door dining returns to normal. Review from this body should be no later than February 10, 2022 to see if the applicant wants to make this a permanent structure at that time. The motion was seconded by Mr. Chris Myers. Mr Myers, Mr. Jackson, Dr. Wilkins, Ms. Wright, and Mr. Hoffman all voted in favor; Dr. Garrett voted against. The motion carried.

COA21-000001 108 Harrison Street – Queen City Creamery – Ms. Rhiannon Brown, applicant, requested to add a service sliding door on the side of her building that leads to the alley as a pick up window. Ms. Brown stated they will be receiving a grant from the State. A walk-up window for pedestrian traffic is currently in place along the front of the business. The work will require an alteration to this elevation. Bricks and one window will require removal in order to accommodate the needed 84 ½" x 92 ¼" opening for the Tormax Door System. A 2' concrete ramp will be installed to assist in egress from the new doorway to the asphalt pavement in the alley. Two steel bollards will be installed to protect this area from vehicular impacts.

A lengthy discussion about the project took place. It was noted that the project will require review by the City of Cumberland's Board of Zoning Appeals since drive through restaurants are considered a conditional use in the Central Business District. This resulted in the denial of the original building permit.

Since the Commercial Building Permit was denied by Zoning, Ms. Wright made the motion to table the application until the applicant receives all appropriate permits. Dr. Lincoln Wilkins seconded the motion; Dr. Wilkins, Ms. Wright and Mr. Hoffman voted in favor and Mr. Chris Myers, Mr. Larry Jackson and Dr. Michael Garrett voted against the motion The chairperson was required to vote in order to break the tie. Dr. Gibson voted in favor of the motion, therefore the motion to table the application was approved.

STAFF UPDATES/OTHER BUSINESS

1. Ms. McKenney completed the Certified Local Government Annual Report this week and submitted it to the Maryland Historical Trust.
2. Ms. McKenney is working on a small Façade Improvement Program (a Seed Grant Program) for the Central Business District; more details about the Façade Improvement Program will be coming within the next few weeks.

FUTURE PROJECTS FOR FISCAL YEAR 2022

Ms. McKenney and the members of the Historic Preservation Commission discussed available funding programs for historic preservation projects, required matches, and potential projects that the members of the HPC might want to prioritize in the coming year. Among the points of discussion were:

1. Certified Local Government Grant does not require a match; the grant will have a maximum award of $25,000.00
2. Maryland Historical Trust Capital Non-Capital Grant does require dollar for dollar match.
3. Dr. Lincoln Wilkins expressed his concern about the Survey of Cumberland; a comment referencing the limited foot print under the HPC purview with their agenda and organization. He was wondering if the HPC should consider expanding that foot print in the City from the current foot print.
4. Ms. Wright would like to see Ms. McKenney explore all avenues to support, financially and technically to develop a Preservation Plan for the current district with some strategic initiatives for the future.
5. May (Preservation Month) is approaching. Ms. Wright suggested for Allegany County, the Mayor and City Council and the City's Historic Preservation Committee to have a mini summit meeting during Preservation Month, particularly to guide property and business owners through the review process especially when COVID19 relief funding is provided.
6. For the possible workshops in the month of May, Ms. Wright suggested to present two (2) - five minute virtual summit videos to introduce the Commissioners, and maybe an instructional and informative video to allow the public to ask questions and get feedback in real time. Two committees were formed:

Meet the Commissioners	**Economic Development of Historic Preservation**
1. Dr. Stephen Gibson	**1. Mr. Chris Myers**
2. Dr. Lincoln Wilkins	**2. Ms. Suzanne Wright**
3. Mr. Tim Hoffman	**3. Mr. Larry Jackson**

An audio of tonight's meeting is available upon request.

ADJOURMENT

Ms. Suzanne Wright made the motion to adjourn and Mr. Larry Jackson

seconded to motion. All members were in favor; motion approved.

Respectfully,

Mr. Tim Hoffman, Secretary

March 10, 2021

File Attachments for Item:

2. 157 Baltimore Street – Four Axes - COA21-000003 – Request to install three new signs for the new business Robert Boyle, applicant

CITY OF
CUMBERLAND
MARYLAND
DEPARTMENT OF COMMUNITY DEVELOPMENT
57 N. LIBERTY STREET, CUMBERLAND, MD 21502 • PHONE 301-759-6442 • FAX 301-759-6433 • TDD 800-735-2258
www.cumberlandmd.gov

PERMIT NO. COA21-000003

CERTIFICATE OF APPROPRIATENESS

See attached for information which may be requested by the Historic Preservation Commission, as deemed necessary.

LOCATION: 157 BALTIMORE ST
OWNER: CSB LLC
APPLICANT_____

Robert Boyle
157 Baltimore St., Suite 300
CUMBERLAND, MD 21502

File Date: 02/09/2021

Work Description: Signage - Directional Sign flush mount 26" x 78"; Glass Above Door decal application 29.5" x 58", Building Sign illuminated flush with goose neck lights 81 5/8" x 172 7/8"

Description	Total Cost
Certificate of Appropriateness Review Fee	30.00

TOTAL AMOUNT: 30.00

Proposed Work: Signage - Directional Sign flush mount 26" x 78"; Glass Above Door decal application 29.5" x 58", Building Sign illuminated flush with goose neck lights 81 5/8" x 172 7/8"
Sign specifications:
Building Sign

7ft high X 15ft long X 3in deep single faced aluminum plate sign welded to 2" aluminum angle frame work, the sign would be shoe box construction and fastened thru the sides to matching aluminum angles anchored to the building. There would be no exposed fasteners on the face of the sign. We would anchor to building with lag bolts and lead shields and (4) through bolts with 6"X6" plates on the inside wall

Directional Sign

54" high x 8' single face aluminum pan face 1 1/2" deep with no exposed fasteners on the face. Copy vinyl print with gloss laminate.

Windows

Printed vinyl graphics.

Subject: However to revocation by the HPC in the case the afore named construction is not in compliance with the requirements of the City Ordinance related to Historic Preservation, especially Ordinance No. 3208. H.P.C Chairman _____ H.P.C Secretary _____ statement: I hereby agree to comply with all regulations which are applicable hereto, and further agree that the proposed work shall be faithfully carried out as described on this request and as shown on the plans accompanying same, and not otherwise. This application hereby expires six months following the file date if no action is taken to start specific work. Also, this application will expire six months following the file date if the applicant fails to provide additional information as requested by the HPC or its staff in order for the Commission to render a decision.

Signed: _____

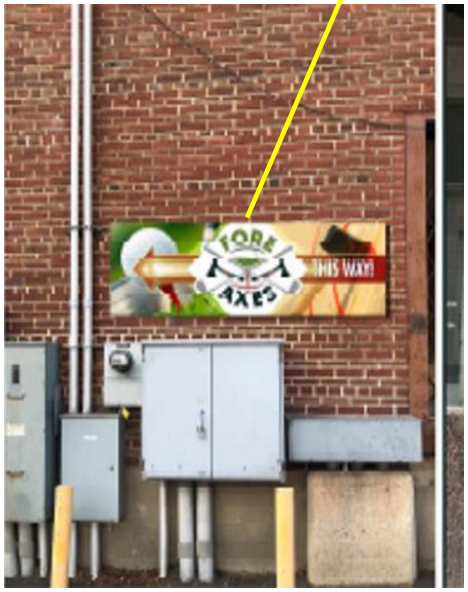

MAY USE
FULL LANE

DIRECTIONAL SIGN
flush mount;
26" high x 78" wide

GLASS ABOVE DOOR
decal application;
29.5" high x 58" wide

BUILDING SIGN
illuminated;
visible area
81 5/8" h x 172 7/8" w


FORE
AXES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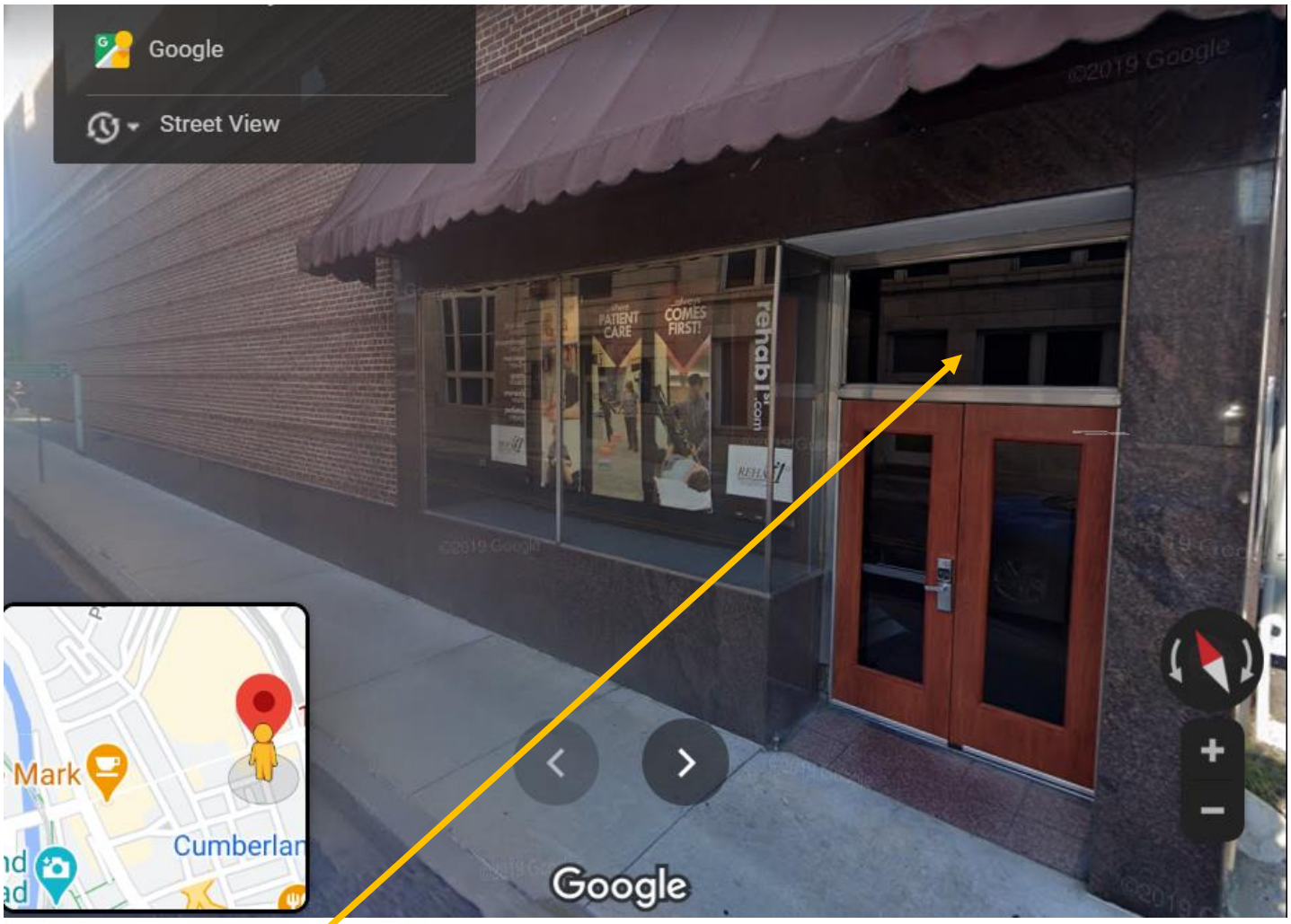
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AXES

Certificate of Appropriateness Application
Presentation of Information
By Kathy McKenney

COA#21-000003
Business Name Fore Axes
Address 157 Baltimore Street
Project Contact Robert Boyle

Project Summary: This application is for the installation of new signage related to a new business that is opening at this location. There are several new signs that have been proposed. The first will be located on the rear façade of the structure. It will be flush mounted and will replace the older internally illuminated box sign at that location. The new sign will measure 7'x15'x3" and will be constructed of aluminum. It will be illuminated externally by three gooseneck lights. As with similar projects, it is preferable that the sign and light fixtures be attached through either existing holes or in the mortar joints in order to minimize damage to the brick.

The second sign is more directional in nature. It will be placed on the rear façade above the existing utility equipment, as shown on the submitted renderings. This sign is also constructed of aluminum 54"x8' and will be flush mounted. Again, this should be into the mortar joints and not into the brick surface. There has not been a light fixture proposed for this sign.

The third sign will be placed on the glass of the entrance area from the South George Street side of the building. The decal will be placed in the transom area and will measure 29.5"x58".

The sections of the Preservation Guidelines that pertain to this application are Guideline 46: Sign Placement; Guideline 47: Sign Size (Chapter 5, Pages 102-103); Guideline 49: New Sign Materials (Chapter 5 Page 104)

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3. 3 Pershing Street – Allegany Museum – COA21-000004 – After the fact review of entrance door replacements, soda blasting removal of patina of transoms, and replacement of door hardware; future soda blasting of the exterior light posts, window replacement, and door opener installation – Michael Fetchero, applicant.

Some of the web versions of the Preservation Briefs differ somewhat from the printed versions. Many illustrations are new and in color; Captions are simplified and some complex charts are omitted. To order hard copies of the Briefs, see Printed Publications.

PRESERVATION BRIEFS

6

Dangers of Abrasive Cleaning to Historic Buildings

Anne E. Grimmer

Undamaged historic brick (above). Sandblasted brick (below). Photo: Courtesy, Illinois Historic Preservation Agency.

"Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible." **—The Secretary of the Interior's Standards for Rehabilitation.**

Abrasive cleaning methods are responsible for causing a great deal of damage to historic building materials. To prevent indiscriminate use of these potentially harmful techniques, this brief has been prepared to explain abrasive cleaning methods, how they can be physically and aesthetically destructive to historic building materials, and why they generally are not acceptable preservation treatments for historic structures. There are alternative, less harsh means of cleaning and removing paint and stains from historic buildings. However, careful testing should precede general cleaning to assure that the method selected will not have an adverse effect on the building materials. A historic building is irreplaceable, and should be cleaned using only the "gentlest means possible" to best preserve it.

What is Abrasive Cleaning?

Abrasive cleaning methods include all techniques that physically abrade the building surface to remove soils, discolorations or coatings. Such techniques involve the use of certain *materials* which impact or abrade the surface under pressure, or abrasive *tools and equipment*. Sand, because it is readily available, is probably the most commonly used type of grit material. However, any of the following materials may be substituted for sand, and all can be classified as abrasive substances: ground slag or volcanic ash, crushed (pulverized) walnut or almond shells, rice husks, ground corncobs, ground coconut shells, crushed eggshells, silica flour, synthetic particles, glass beads and micro-balloons. Even *water* under pressure can be an abrasive substance. Tools and equipment that are abrasive to historic building materials include wire

brushes, rotary wheels, power sanding disks and belt sanders.

The use of water in combination with grit may also be classified as an abrasive cleaning method. Depending on the manner in which it is applied, water may soften the impact of the grit, but water that is too highly pressurized can be very abrasive. There are basically two different methods which can be referred to as "wet grit," and it is important to differentiate between the two. One technique involves the addition of a stream of water to a regular sandblasting nozzle. This is done primarily to cut down dust, and has very little, if any, effect on reducing the aggressiveness, or cutting action of the grit particles. With the second technique, a very small amount of grit is added to a pressurized water stream. This method may be controlled by regulating the amount of grit fed into the water stream, as well as the pressure of the water.

Abrasive cleaning can cause permanent damage to historic fabric, such as this brick wall. Photo: NPS files.

Why Are Abrasive Cleaning Methods Used?

Usually, an abrasive cleaning method is selected as an expeditious means of quickly removing years of dirt accumulation, unsightly stains, or deteriorating building fabric or finishes, such as stucco or paint.

Brick molding next to the window has been severely abraded by sandblasting to remove paint. Photo: NPS files.

The fact that sandblasting is one of the best known and most readily available building cleaning treatments is probably the major reason for its frequent use.

Many mid-19th century brick buildings were painted immediately or soon after completion to protect poor quality brick or to imitate another material, such as stone. Sometimes brick buildings were painted in an effort to produce what was considered a more harmonious relationship between a building and its natural surroundings. By the 1870s, brick buildings were often left unpainted as mechanization in the brick industry brought a cheaper pressed brick and fashion decreed a sudden preference for dark colors. However, it was still customary to paint brick of poorer quality for the additional protection the paint afforded.

It is a common 20th century misconception that all historic masonry buildings were initially unpainted. If the intent of a modern restoration is to return a building to its original appearance, removal of the paint not only may be historically inaccurate, but also harmful. Many older buildings were painted or stuccoed at some point to correct recurring maintenance problems caused by faulty construction techniques, to hide alterations, or in an attempt to solve moisture problems. If this is the case, removal of paint or stucco may cause these problems to reoccur.

Another reason for paint removal, particularly in rehabilitation projects, is to give the building a "new image" in response to contemporary design trends and to attract investors or tenants. Thus, it is necessary to consider the purpose of the intended cleaning. While it is clearly important to remove unsightly stains, heavy encrustations of dirt, peeling paint or other surface coatings, it may not be equally desirable to remove paint from a building which originally was painted. Many historic buildings which show only a slight amount of soil or discoloration are much better left as they are.

A thin layer of soil is more often protective of the building fabric than it is harmful, and seldom detracts from the building's architectural and/or historic character. Too thorough cleaning of a historic building may not only sacrifice some of the building's character, but also, misguided cleaning efforts can cause a great deal of damage to historic building fabric. Unless there are stains, graffiti or dirt and pollution deposits which are destroying the building fabric, it is generally preferable to do as little cleaning as possible, or to repaint where necessary. It is important to remember that a historic building does not have to look as if it were newly constructed to be an attractive or successful restoration or rehabilitation project.

Problems of Abrasive Cleaning

The crux of the problem is that abrasive cleaning is just that--abrasive. An abrasively cleaned historic structure may be physically as well as aesthetically damaged. Abrasive methods "clean" by eroding dirt or paint, but at the same time they also tend to erode the surface of the building material. In this way, abrasive cleaning is destructive and causes irreversible harm to the historic building fabric. If the fabric is brick, abrasive methods remove the hard, outer protective surface, and therefore make the brick more susceptible to rapid weathering and deterioration.

Grit blasting may also increase the water permeability of a brick wall. The impact of the grit particles tends to erode the bond between the mortar and the brick, leaving cracks or enlarging existing cracks where water can enter. Some types of stone develop a protective patina or "quarry crust" parallel to the worked surface (created by the movement of moisture towards the outer edge), which also may be damaged by abrasive cleaning. The rate at which the material subsequently weathers depends on the quality of the inner surface that is exposed.

Abrasive cleaning can destroy, or substantially diminish, decorative detailing on buildings such as a molded brickwork or architectural terra-cotta, ornamental carving on wood or stone, and evidence of historic craft techniques, such as tool marks and other surface textures.

In addition, perfectly sound and/or "tooled" mortar joints can be worn away by abrasive techniques. This not only results in the loss of historic craft detailing but also requires repointing, a step involving considerable time, skill and expense, and which might not have been necessary had a gentler method been chosen. Erosion and pitting of the building material by abrasive cleaning creates a greater surface area on which dirt and pollutants collect. In this sense, the building fabric "attracts" more dirt, and will require more frequent cleaning in the future.

On the left, grit blasting has obliterated the vertical tooling marks from granite, a very dense stone. Photo: NPS files.

In addition to causing physical and aesthetic harm to the historic fabric, there are several adverse environmental effects of dry abrasive cleaning methods. Because of the friction caused by the abrasive medium hitting the building fabric, these techniques usually create a considerable amount of dust, which is unhealthy, particularly to the operators of the abrasive equipment. It further pollutes the environment around the job site, and deposits dust on neighboring buildings, parked vehicles and nearby trees and shrubbery. Some adjacent materials not intended for abrasive treatment such as wood or glass, may also be damaged because the equipment may be difficult to regulate.

Wet grit methods, while eliminating dust, deposit a messy slurry on the ground or other objects surrounding the base of the building. In colder climates where there is the threat of frost, any wet cleaning process applied to historic masonry structures must be done in warm weather, allowing ample time for the wall to dry out thoroughly before cold weather sets in. Water which remains and freezes in cracks and openings of the masonry surface eventually may lead to spalling. High-pressure wet cleaning may force an inordinate amount of water into the walls, affecting interior materials such as plaster or joist ends, as well as metal building components within the walls.

Variable Factors

The greatest problem in developing practical guidelines for cleaning any historic building is the large number of variable and unpredictable factors involved. Because these variables make each cleaning project unique, it is difficult to establish specific standards at this time. This is particularly true of abrasive cleaning methods because their inherent potential for causing damage is multiplied by the following factors:

- the type and condition of the material being cleaned
- the size and sharpness of the grit particles or the mechanical equipment
- the pressure with which the abrasive grit or equipment is applied to the building surface
- the skill and care of the operator, and
- the constancy of the pressure on all surfaces during the cleaning process.

Pressure: The damaging effects of most of the variable factors involved in abrasive cleaning are self evident. However, the matter of pressure requires further explanation. In cleaning specifications, pressure is generally abbreviated as "psi" (pounds per square inch), which technically refers to the "tip" pressure, or the amount of pressure at the nozzle of the blasting apparatus. Sometimes "psig," or pressure at the gauge (which may be many feet away, at the other end of the hose), is used in place of "psi." These terms are often incorrectly used interchangeably.

Despite the apparent care taken by most architects and building cleaning contractors to prepare specifications for pressure cleaning which will not cause harm to the delicate fabric of a historic building, it is very difficult to ensure that the same amount of pressure is applied to all parts of the building. For example, if the operator of the pressure equipment stands on the ground while cleaning a two-story structure, the amount of force reaching the first story will be greater than that hitting the second story, even if the operator stands on scaffolding or in a cherry picker, because of the "line drop" in the distance from the pressure source to the nozzle. Although technically it may be possible to prepare cleaning specifications with tight controls that would eliminate all but a small margin of error, it may not be easy to find professional cleaning firms willing to work under such restrictive conditions. The fact is that many professional building cleaning firms do not really understand the extreme delicacy of historic building fabric, and how it differs from modern construction materials. Consequently, they may accept building cleaning projects for which they have no experience.

The amount of pressure used in any kind of cleaning treatment which involves pressure, whether it is dry or wet grit, chemicals or just plain water, is crucial to the outcome of the cleaning project. Unfortunately, no standards have been established for determining the correct pressure for cleaning each of the many historic building materials which would not

Bronze statuary may be cleaned gently using crushed walnut shells. Photo: NPS files.

cause harm. The considerable discrepancy between the way the building cleaning industry and architectural conservators define "high" and "low" pressure cleaning plays a significant role in the difficulty of creating standards.

Non-historic/Industrial: A representative of the building cleaning industry might consider "high" pressure water cleaning to be anything over 5,000 psi, or even as high as 10,000 to 15,000 psi! Water under this much pressure may be necessary to clean industrial structures or machinery, but would destroy most historic building materials. Industrial chemical cleaning commonly utilizes pressures between 1,000 and 2,500 psi.

Historic: By contrast, conscientious dry or wet abrasive cleaning of a historic structure would be conducted within the range of 20 to 100 psi at a range of 3 to 12 inches. Cleaning at this low pressure requires the use of a very fine 00 or 0 mesh grit forced through a nozzle with a 1/4-inch opening. A similar, even more delicate method being adopted by architectural conservators uses a micro-abrasive grit on small, hard-to-clean areas of carved, cut or molded ornament on a building facade. Originally developed by museum conservators for cleaning sculpture, this technique may employ glass beads, micro-balloons, or another type of micro-abrasive gently powered at approximately 40 psi by a very small, almost pencil-like pressure instrument. Although a slightly larger pressure instrument may be used on historic buildings, this technique still has limited practical applicability on a large scale building cleaning project because of the cost and the relatively few technicians competent to handle the task. In general, architectural conservators have determined that only through very controlled conditions can most historic building material be abrasively cleaned of soil or paint without measurable damage to the surface or profile of the substrate.

Yet some professional cleaning companies which specialize in cleaning historic masonry buildings use chemicals and water at a pressure of approximately 1,500 psi, while other cleaning firms recommend lower pressures ranging from 200 to 800 psi for a similar project. An architectural conservator might decide, after testing, that some historic structures could be cleaned properly using a moderate pressure (200-600 psi), or even a high pressure (600-1800 psi) water rinse. However, cleaning historic buildings under such high pressure should be considered an exception rather than the rule, and would require *very careful* testing and supervision to assure that the historic surface materials could withstand the pressure without gouging, pitting or loosening.

These differences in the amount of pressure used by commercial or industrial building cleaners and architectural conservators point to one of the main problems in using abrasive means to clean historic buildings: misunderstanding of the potentially fragile nature of historic building materials. There is no one cleaning formula or pressure suitable for all situations. Decisions regarding the proper cleaning process for historic structures can be made only after careful analysis of the building fabric, and testing.

How Building Materials React to Abrasive Cleaning

Brick and Architectural Terra-cotta: Abrasive blasting does not affect all building materials to the same degree. Such techniques quite logically cause greater damage to softer and more porous materials, such as brick or architectural terra-cotta. When these materials are cleaned abrasively, the hard, outer layer (closest to the heat of the kiln) is eroded, leaving the soft, inner core exposed and susceptible to accelerated weathering. Glazed architectural terra-cotta and ceramic veneer have a baked on glaze which is also easily damaged by abrasive cleaning. Glazed architectural terra-cotta was designed for easy maintenance, and generally can be cleaned using detergent and water; but chemicals or steam may be needed to remove more persistent stains. Large areas of brick or architectural terra-cotta which have been painted are best left painted, or repainted if necessary.

Plaster and Stucco: Plaster and stucco are types of masonry finish materials that are softer than brick or terra-cotta; if treated abrasively these materials will simply disintegrate. Indeed, when plaster or stucco is treated abrasively it is usually with the intention of removing the plaster or stucco from whatever base material or substrate it is covering. Obviously, such abrasive techniques should not be applied to clean sound plaster or stuccoed walls, or decorative plaster wall surfaces.

Building Stones: Building stones are cut from the three main categories of natural rock: dense, igneous rock such as granite; sandy, sedimentary rock such as limestone or sandstone; and crystalline, metamorphic rock such as marble. As opposed to kiln-dried masonry materials such as brick and architectural terra-cotta, building stones are generally homogeneous in character at the time of a building's construction. However, as the stone is exposed to weathering and environmental pollutants, the surface may become friable, or may develop a protective skin or patina. These outer surfaces are very susceptible to damage by abrasive or improper chemical cleaning.

Building stones are frequently cut into ashlar blocks or "dressed" with tool marks that give the building surface a specific texture and contribute to its historic character as much as ornately carved decorative stonework. Such detailing is easily

damaged by abrasive cleaning techniques; the pattern of tooling or cutting is erased, and the crisp lines of moldings or carving are worn or pitted.

Very high-pressure water has scarred this granite. Photo: NPS files.

Occasionally, it may be possible to clean small areas of rough-cut granite, limestone or sandstone having a heavy dirt encrustation by using the "wet grit" method, whereby a small amount of abrasive material is injected into a controlled, pressurized water stream. However, this technique requires very careful supervision in order to prevent damage to the stone. Polished or honed marble or granite should never be treated abrasively, as the abrasion would remove the finish in much the way glass would be etched or "frosted" by such a process. It is generally preferable to underclean, as too strong a cleaning procedure will erode the stone, exposing a new and increased surface area to collect atmospheric moisture and dirt. Removing paint, stains or graffiti from most types of stone may be accomplished by a chemical treatment carefully selected to best handle the removal of the particular type of paint or stain without damaging the stone. (See section on the "Gentlest Means Possible.")

Wood: Most types of wood used for buildings are soft, fibrous and porous, and are particularly susceptible to damage by abrasive cleaning. Because the summer wood between the lines of the grain is softer than the grain itself, it will be worn away by abrasive blasting or power tools, leaving an uneven surface with the grain raised and often frayed or "fuzzy." Once this has occurred, it is almost impossible to achieve a smooth surface again except by extensive hand sanding, which is expensive and will quickly negate any costs saved earlier by sandblasting. Such harsh cleaning treatment also obliterates historic tool marks, fine carving and detailing, which precludes its use on any interior or exterior woodwork which has been hand planed, milled or carved.

Metals: Like stone, metals are another group of building materials which vary considerably in hardness and durability. Softer metals which are used architecturally, such as tin, zinc, lead, copper or aluminum, generally should not be cleaned abrasively as the process deforms and destroys the original surface texture and appearance, as well as the acquired patina.

Decorative pressed metal interior or exterior features should not be cleaned abrasively. Photo: NPS files.

Much applied architectural metal work used on historic buildings--tin, zinc, lead and copper--is often quite thin and soft, and therefore susceptible to denting and pitting. Galvanized sheet metal is especially vulnerable, as abrasive treatment would wear away the protective galvanized layer.

In the late 19th and early 20th centuries, these metals were often cut, pressed or otherwise shaped from sheets of metal into a wide variety of practical uses such as roofs, gutters and flashing, and facade ornamentation such as cornices, friezes, dormers, panels, cupolas, oriel windows, etc. The architecture of the 1920s and 1930s made use of metals such as chrome, nickel alloys, aluminum and stainless steel in decorative exterior panels, window frames, and doorways. Harsh abrasive blasting would destroy the original surface finish of most of these metals, and would increase the possibility of corrosion.

However, conservation specialists are now employing a sensitive technique of glass bead peening to clean some of the harder metals, in particular large bronze outdoor sculpture. Very fine (75125 micron) glass beads are used at a low pressure of 60 to 80 psi. Because these glass beads are completely spherical, there are no sharp edges to cut the surface of the metal. After cleaning, these statues undergo a lengthy process of polishing. Coatings are applied which protect the surface from corrosion, but they must be renewed every 3 to 5 years. A similarly delicate cleaning technique employing glass beads has been used in Europe to clean historic masonry structures without causing damage. But at this time the process has not been tested sufficiently in the United States to recommend it as a building conservation measure.

Sometimes a very fine smooth sand is used at a low pressure to clean or remove paint and corrosion from copper flashing and other metal building components. Restoration architects recently found that a mixture of crushed walnut shells and copper slag at a pressure of approximately 200 psi was the only way to remove corrosion successfully from a mid-19th century terne-coated iron roof. Metal cleaned in this manner must be painted immediately to prevent rapid recurrence of corrosion. It is thought that these methods "work harden" the surface by compressing the outer layer, and actually may be good for the surface of the metal. But the extremely complex nature and the time required by such processes make it very expensive and impractical for large-scale use at this time.

Cast and wrought iron architectural elements may be gently sandblasted or abrasively cleaned using a wire brush to remove layers of paint, rust and corrosion. Sandblasting was, in fact, developed originally as an efficient maintenance procedure for engineering and industrial structures and heavy machinery--iron and steel bridges, machine tool frames, engine frames, and railroad rolling stock--in order to clean and prepare them for repainting. Because iron is hard, its surface, which is naturally somewhat uneven, will not be noticeably damaged by controlled abrasion. Such treatment will,

however, result in a small amount of pitting. But this slight abrasion creates a good surface for paint, since the iron must he repainted immediately to prevent corrosion. Any abrasive cleaning of metal building components will also remove the caulking from joints and around other openings. Such areas must be recaulked quickly to prevent moisture from entering and rusting the metal, or causing deterioration of other building fabric inside the structure.

Cast iron may be abrasively cleaned, but must be painted immediately to prevent rust. Photo: NPS files.

When is Abrasive Cleaning Permissible?

For the most part, abrasive cleaning is destructive to historic building materials. A limited number of special cases have been explained when it may be appropriate, if supervised by a skilled conservator, to use a delicate abrasive technique on some historic building materials. The type of "wet grit" cleaning which involves a small amount of grit injected into a stream of low pressure water may be used on small areas of stone masonry (i.e., rough cut limestone, sandstone or unpolished granite), where milder cleaning methods have not been totally successful in removing harmful deposits of dirt and pollutants. Such areas may include stone window sills, the tops of cornices or column capitals, or other detailed areas of the facade.

Industrial interiors that are not finely milled may be abrasively cleaned, in some instances. Photo: NPS files.

This is still an abrasive technique, and without proper caution in handling, it can be *just as harmful to the building surface as any other abrasive cleaning method*. Thus, the decision to use this type of "wet grit" process should be made only after consultation with an experienced building conservator. *Remember that it is very time consuming and expensive to use any abrasive technique on a historic building in such a manner that it does not cause harm to the often fragile and friable building materials*.

At this time, and only under certain circumstances, abrasive cleaning methods may he used in the rehabilitation of interior spaces of warehouse or industrial buildings for contemporary uses.

Interior spaces of factories or warehouse structures in which the masonry or plaster surfaces do not have significant design, detailing, tooling or finish, and in which wooden architectural features are not finished, molded, beaded or worked by hand, may be cleaned abrasively in order to remove layers of paint and industrial discolorations such as smoke, soot, etc. It is expected after such treatment that brick surfaces will be rough and pitted, and wood will be somewhat frayed or "fuzzy" with raised wood grain. These nonsignificant surfaces will be damaged and have a roughened texture, but because they are interior elements, they will not be subject to further deterioration caused by weathering.

Historic Interiors That Should Not Be Cleaned Abrasively

Those instances (generally industrial and some commercial properties), when it may be acceptable to use an abrasive treatment on the interior of historic structures have been described. But for the majority of historic buildings, the Secretary of the Interior's *Guidelines for Rehabilitation* do not recommend "changing the texture of exposed wooden architectural features (including structural members) and masonry surfaces through sandblasting or use of other abrasive techniques to remove paint, discolorations and plaster.

Decorative wood exterior or interior features should not be cleaned abrasively. Photo: NPS files.

Thus, it is not acceptable to clean abrasively interiors of historic residential and commercial properties which have *finished* interior spaces featuring milled woodwork such as doors, window and door moldings, wainscoting, stair balustrades and mantelpieces. Even the most modest historic house interior, although it may not feature elaborate detailing, contains plaster and woodwork that is architecturally significant to the original design and function of the house. Abrasive cleaning of such an interior would be destructive to the historic integrity of the building.

Abrasive cleaning is also impractical. Rough surfaces of abrasively cleaned wooden elements are hard to keep clean. It is also difficult to seal, paint or maintain these surfaces which can be splintery and a problem to the building's occupants. The force of abrasive blasting may cause grit particles to lodge in cracks of wooden elements, which will be a nuisance as the grit is loosened by vibrations and gradually sifts out. Removal of plaster will reduce the thermal and insulating value of the

walls. Interior brick is usually softer than exterior brick, and generally of a poorer quality. Removing surface plaster from such brick by abrasive means often exposes gaping mortar joints and mismatched or repaired brickwork which was never intended to show. The resulting bare brick wall may require repointing, often difficult to match. It also may be necessary to apply a transparent surface coating (or sealer) in order to prevent the mortar and brick from "dusting." However. a sealer may not only change the color of the brick, but may also compound any existing moisture problems by restricting the normal evaporation of water vapor from the masonry surface.

"Gentlest Means Possible"

There are alternative means of removing dirt, stains and paint from historic building surfaces that can be recommended as more efficient and less destructive than abrasive techniques. The "gentlest means possible" of removing dirt from a building surface can be achieved by using a low-pressure water wash, scrubbing areas of more persistent grime with a natural bristle (never metal) brush. Steam cleaning can also be used effectively to clean some historic building fabric. Low-pressure water or steam will soften the dirt and cause the deposits to rise to the surface, where they can be washed away.

A third cleaning technique which may be recommended to remove dirt, as well as stains, graffiti or paint, involves the use of commercially available chemical cleaners or paint removers, which, when applied to masonry, loosen or dissolve the dirt or stains. These cleaning agents may be used in combination with water or steam, followed by a clear water wash to remove the residue of dirt and the chemical cleaners from the masonry. A natural bristle brush may also facilitate this type of chemically assisted cleaning, particularly in areas of heavy dirt deposits or stains, and a wooden scraper can be useful in removing thick encrustations of soot. A limewash or absorbent talc, whiting or clay poultice with a solvent can be used effectively to draw out salts or stains from the surface of the selected areas of a building facade. It is almost impossible to remove paint from masonry surfaces without causing some damage to the masonry, and it is best to leave the surfaces as they are or repaint them if necessary.

Some physicists are experimenting with the use of pulsed laser beams and xenon flash lamps for cleaning historic masonry surfaces. At this time it is a slow, expensive cleaning method, but its initial success indicates that it may have an increasingly important role in the future.

There are many chemical paint removers which, when applied to painted wood, soften and dissolve the paint so that it can be scraped off by hand. Peeling paint can be removed from wood by hand scraping and sanding. Particularly thick layers of paint may be softened with a heat gun or heat plate, providing appropriate precautions are taken, and the paint film scraped off by hand. Too much heat applied to the same spot can burn the wood, and the fumes caused by burning paint are dangerous to inhale, and can he explosive. Furthermore, the hot air from heat guns can start fires in the building cavity. Thus, adequate ventilation is important when using a heat gun or heat plate, as well as when using a chemical stripper. A torch or open flame should never he used.

Preparations for Cleaning: It cannot be overemphasized that all of these cleaning methods must be approached with caution. When using any of these procedures which involve water or other liquid cleaning agents on masonry, it is imperative that all openings be tightly covered, and all cracks or joints be well pointed in order to avoid the danger of water penetrating the building's facade, a circumstance which might result in serious moisture related problems such as efflorescence and/or subflorescence. Any time water is used on masonry as a cleaning agent, either in its pure state or in combination with chemical cleaners, it is very important that the work be done in warm weather when there is no danger of frost for several months. Otherwise water which has penetrated the masonry may freeze, eventually causing the surface of the building to crack and spall, which may create another conservation problem more serious to the health of the building than dirt.

Each kind of masonry has a unique composition and reacts differently with various chemical cleaning substances. Water and/or chemicals may interact with minerals in stone and cause new types of stains to leach out to the surface immediately, or more gradually in a delayed reaction. What may be a safe and effective cleaner for certain stain on one type of stone, may leave unattractive discolorations on another stone, or totally dissolve a third type.

Testing: Cleaning historic building materials, particularly masonry, is a technically complex subject, and thus, should never be done without expert consultation and testing. No cleaning project should be undertaken without first applying the intended cleaning agent to a representative test patch area in an inconspicuous location on the building surface. The test patch or patches should be allowed to weather for a period of time, preferably through a complete seasonal cycle, in order to determine that the cleaned area will not he adversely affected by wet or freezing weather or any by-products of the cleaning process.

Mitigating the Effects of Abrasive Cleaning

There are certain restoration measures which can be adopted to help preserve a historic building exterior which has been damaged by abrasive methods. Wood that has been sandblasted will exhibit a frayed or "fuzzed" surface, or a harder wood

will have an exaggerated raised grain. The only way to remove this rough surface or to smooth the grain is by laborious sanding. Sandblasted wood, unless it has been extensively sanded, serves as a dustcatcher, will weather faster, and will present a continuing and ever worsening maintenance problem. Such wood, after sanding, should be painted or given a clear surface coating to protect the wood, and allow for somewhat easier maintenance.

There are few successful preservative treatments that may be applied to grit-blasted exterior masonry. Harder, denser stone may have suffered only a loss of crisp edges or tool marks, or other indications of craft technique. If the stone has a compact and uniform composition, it should continue to weather with little additional deterioration. But some types of sandstone, marble and limestone will weather at an accelerated rate once their protective "quarry crust" or patina has been removed.

Softer types of masonry, particularly brick and architectural terra-cotta, are the most likely to require some remedial treatment if they have been abrasively cleaned. Old brick, being essentially a soft, baked clay product, is greatly susceptible to increased deterioration when its hard, outer skin is removed through abrasive techniques. This problem can be minimized by painting the brick. An alternative is to treat it with a clear sealer or surface coating but this will give the masonry a glossy, or shiny look. It is usually preferable to paint the brick rather than to apply a transparent sealer since sealers reduce the transpiration of moisture, allowing salts to crystallize as subflorescence that eventually spalls the brick. If a brick surface has been so extensively damaged by abrasive cleaning and weathering that spalling has already begun, it may be necessary to cover the walls with stucco, if it will adhere.

Of course, the application of paint, a clear surface coating (sealer), or stucco to deteriorating masonry means that the historical appearance will be sacrificed in an attempt to conserve the historic building materials. However, the original color and texture will have been changed already by the abrasive treatment. At this point it is more important to try to preserve the brick, and there is little choice but to protect it from "dusting" or spalling too rapidly. As a last resort, in the case of severely spalling brick, there may be no option but to replace the brick--a difficult, expensive (particularly if custom-made reproduction brick is used), and lengthy process. As described earlier, sandblasted interior brick work, while not subject to change of weather, may require the application of a transparent surface coating or painting as a maintenance procedure to contain loose mortar and brick dust. (See **Preservation Briefs No. 1** for a more thorough discussion of coatings.)

Metals, other than cast or wrought iron, that have been pitted and dented by harsh abrasive blasting usually cannot be smoothed out. Although fillers may be satisfactory for smoothing a painted surface, exposed metal that has been damaged usually will have to be replaced.

Summary and References

Sandblasting or other abrasive methods of cleaning or paint removal are by their nature destructive to historic building materials and should not be used on historic buildings except in a few well-monitored instances. There are exceptions when certain types of abrasive cleaning may be permissible, but only if conducted by a trained conservator, and if cleaning is necessary for the preservation of the historic structure.

There is no one formula that will be suitable for cleaning all historic building surfaces. Although there are many commercial cleaning products and methods available, it is impossible to state definitively which of these will be the most effective without causing harm to the building fabric. It is often difficult to identify ingredients or their proportions contained in cleaning products; consequently it is hard to predict how a product will react to the building materials to be cleaned. Similar uncertainties affect the outcome of other cleaning methods as they are applied to historic building materials. Further advances in understanding the complex nature of the many variables of the cleaning techniques may someday provide a better and simpler solution to the problems. But until that time, the process of cleaning historic buildings must be approached with caution through trial and error.

It is important to remember that historic building materials are neither indestructible, nor are they renewable. They must be treated in a responsible manner, which may mean little or no cleaning at all if they are to be preserved for future generations to enjoy. If it is in the best interest of the building to clean it, then it should be done "using the gentlest means possible."

Acknowledgements

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The illustrations for this brief not specifically credited are from the files of the Technical Preservation Services Division.

This publication has been prepared pursuant to the National Historic Preservation Act of 1966, as amended, which directs the Secretary of the Interior to develop and make available information concerning historic properties. Technical Preservation Services (TPS), National Park Service prepares standards, guidelines, and other educational materials on responsible historic preservation treatments for a broad public.

June 1979

Reading List

Ashurst, John. *Cleaning Stone and Brick*. Technical Pamphlet 4. London: Society for the Protection of Ancient Buildings. 1977.

Asmus, John F. "Light Cleaning: Laser Technology for Surface Preparation in the Arts." *Technology and Conservation*. 3:3 (Fall 1978), pp. 14-18.

"The Bare-Brick Mistake." *The Old House Journal*. I:2 (November 1973). p 2.

Brick Institute of America. Colorless Coatings for Brick Masonry. *Technical Notes on Brick Construction*. Number 7E (September/October 1976).

Gilder, Cornelia Brooke. *Property Owner's Guide to the Maintenance and Repair of Stone Buildings.* Technical Series/ No. 5. Albany, New York: The Preservation League of New York State, 1977.

Prudon, Theodore H.M. "The Case Against Removing Paint from Brick Masonry." *The Old House Journal*, III:2 (February 1975). pp. 6-7.

_____. "Removing Stains from Masonry." *The Old House Journal.* V:5 (May 1977), pp. 58-59.

Stambolov. T . and J.R.J. Van Asperen de Boer. *The Deterioration and Conservation of Porous Building Material in Monuments: A Review of the Literature.* Second enlarged edition. Rome: International Centre for Conservation, 1976.

Weiss, Norman R. "Cleaning of Building Exteriors: Problems and Procedures of Dirt Removal." *Technology and Conservation*, 2/76 (Fall 1976), pp. 8-13.

_____. *Exterior Cleaning of Historic Masonry Buildings.* Draft. Washington, D.C.: Office of Archeology and Historic Preservation, Heritage Conservation and Recreation Service, U.S. Department of the Interior, 1976.

CITY OF CUMBERLAND MARYLAND

DEPARTMENT OF COMMUNITY DEVELOPMENT

www.cumberlandmd.gov

PERMIT NO. COA21-000004

CERTIFICATE OF APPROPRIATENESS

See attached for information which may be requested by the Historic Preservation Commission, as deemed necessary.

LOCATION: 3 PERSHING ST
OWNER: WESTERN MD STATION CENTER INC
APPLICANT_____

Michael Fetchero
10104 Golf Creek Drive NE
Cumberland, MD 21502

File Date: 03/01/2021

Work Description: Allegany Museum door cleaning project

Description	Total Cost
Certificate of Appropriateness Review Fee	30.00

TOTAL AMOUNT: 30.00

Proposed Work: Allegany Museum door cleaning project
Edited by staff to include the replacement of the two front entrance doors and door hardware as well as a future project to use the same soda blast treatment to the light posts.

Subject: However to revocation by the HPC in the case the afore named construction is not in compliance with the requirements of the City Ordinance related to Historic Preservation, especially Ordinance No. 3208. H.P.C Chairman _____ H.P.C Secretary _____ statement: I hereby agree to comply with all regulations which are applicable hereto, and further agree that the proposed work shall be faithfully carried out as described on this request and as shown on the plans accompanying same, and not otherwise. This application hereby expires six months following the file date if no action is taken to start specific work. Also, this

application will expire six months following the file date if the applicant fails to provide additional information as requested by the HPC or its staff in order for the Commission to render a decision.

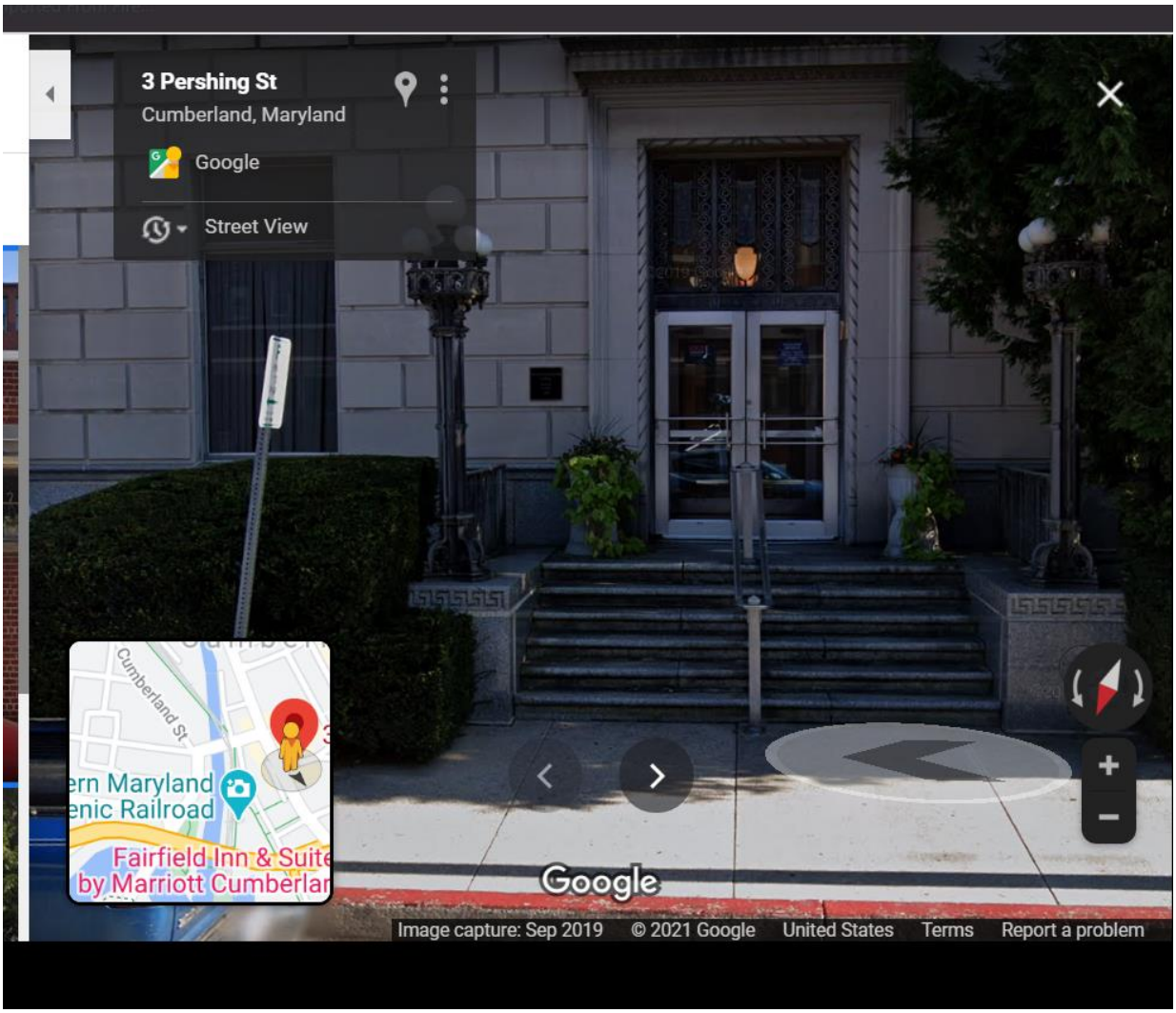
Signed: _____

February 26, 2021

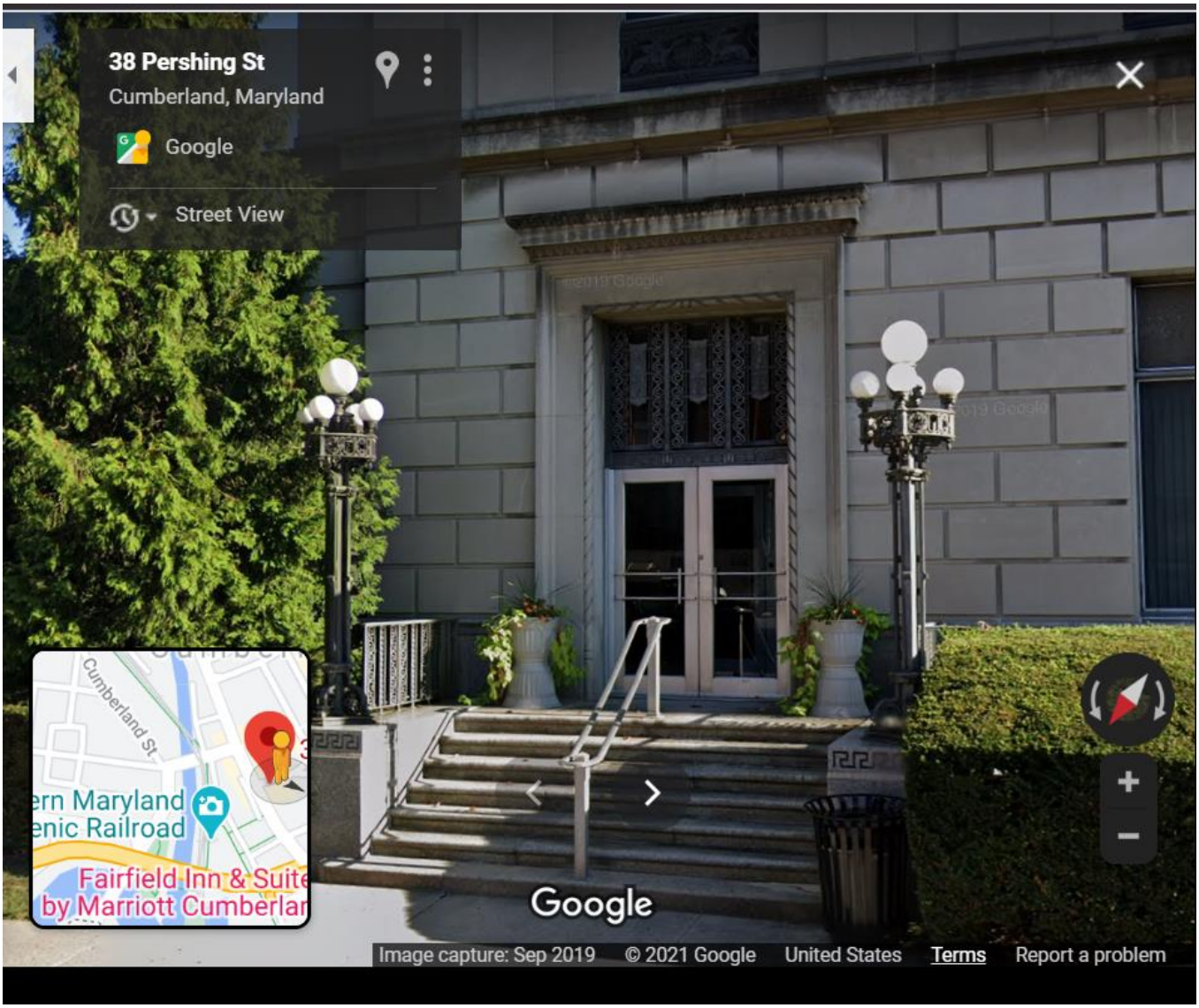
February 26, 2021

March 3, 2021

March 3, 2021



Google Map Image (September 2019)



Google Map Image (September 2019)

Removed Doors

Product Specification Sheets for Doors

TUBELITE®
DEPENDABLE

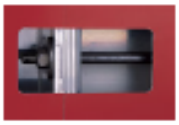
HOME ABOUT US NEWS PRODUCTS GALLERY CAREERS CONTACT ARCHITECTS

CLIENT LOGIN

PRODUCTS

- STOREFRONT
- ENTRANCES
  - Standard Narrow
  - Standard Medium
  - Standard Wide
  - Custom
  - Monumental Entrances
  - Therml=Block Thermal Doors
  - TerraPorte 7600 – Terrace Door
  - FFS Entrances
  - FFB Wide Stile
  - Door Hardware
  - Misc. Extrusions

Standard Wide Stile Entrances



Tubelite Standard Wide Stile Entrances are designed for moderate-to-heavy use in commercial applications. Standard Wide Stile has 5" vertical stiles and top rail, and 6-1/2" bottom rail – optional up to 10" for ADA compliance. The smooth design of Tubelite's door hardware features a convenient pull handle and push bar with lock location 36" above the finished floor.

Durable Tie-Rod Construction

WINDOW WALL

OPERABLE WINDOWS

SUN CONTROLS

THERML=BLOCK
High Performance Thermal Systems

FORCEFRONT STORM
Hurricane Impact Systems

FORCEFRONT BLAST
Blast Hazard Mitigation Systems

ARCHITECTURAL ALUMINUM FINISHES

DESIGN MANUAL

PRODUCT UPDATES

LITERATURE

INDUSTRY RESOURCES

FAQs

makes Tubelite entrances endure. Tie-rod assembly is as durable as welded corner construction and superior in many ways. Tubelite entrances can be modified, disassembled or resized right in the field. No other entrance offers you this much strength and flexibility.

Standard Wide Stile Entrances

Tubelite Standard Wide Stile Entrances are designed for moderate-to-heavy use in commercial applications. Standard Wide Stile has 5" vertical stiles and top rail, and 6-1/2" bottom rail – optional up to 10" for ADA compliance. The smooth design of Tubelite's door hardware features a convenient pull handle and push bar with lock location 36" above the finished floor.

Durable Tie-Rod Construction

The strength and flexibility of steel tie-rod construction is what holds it all together and makes Tubelite entrances endure. Tie-rod assembly is as durable as welded corner construction and superior in many ways. Tubelite entrances can be modified, disassembled or

EXAMPLES >

Azle Elementary School
Azle, TX

Virtual Learning Academy
Berrien Springs, MI

Jordan Elementary School
Brentwood, TN

SEE MORE EXAMPLES IN THE GALLERY >

Standard Wide Entrance Series Product Specifications

Application: Public Buildings
Description: 5" vertical stiles and top rail, and 6-1/2" bottom rail – optional up to 10" for ADA compliance

Glass	Air Infiltration	Structural	U-Factor**
1" std (1/8" – 1")	1.0 CFM/Ft.2 @ 1.57 PSF	30 PSF Design 45 PSF Overload	U-Factor Table

** U-Factor per NFRC 100: COG = 0.24 with warm edge spacer, 1-3/4" x 4-1/2" non-thermal frame.

Standard Entrance Series	Narrow	Medium	Wide
Application	Offices, Strip Centers	Retail Stores	Public Buildings
Traffic	Light to moderate	Moderate to Heavy	Heavy
Vertical Stile 1-3/4" x	2-1/8"	4"	5"
Top Rail 1-3/4" x	2-1/8"	4"	5"
Bottom Rail	4" (opt.	6-1/2" (opt.	6-1/2" (opt.

	Pair: 8'0" x 9' 0"	Pair: 8'0" x 9' 0"	Pair: 8'0" x 9' 0"

Standard Wide Entrance Series Product Specifications	
Application:	Public Buildings
Description:	5" vertical stiles and top rail, and 6-1/2" bottom rail – optional up to 10" for ADA compliance for ADA compliance
Glass:	1" std (1/8" – 1")
Air Infiltration:	1.0 CFM/Ft.2 @ 1.57 PSF
Structural:	30 PSF Design, 45 PSF Overload
U-Factor**:	U-Factor Table

Refer to Tubelite guide specification and test report summaries for complete test specimen description and data.

** U-Factor per NFRC 100: COG = 0.24 with warm edge spacer, 1-3/4" x 4-1/2" non-thermal frame.

Standard Entrance Series	
Narrow	
Application	Offices, Shopping Plazas
Traffic	Light to moderate
Vertical Stile 1-3/4" x	2-1/8"
Top Rail: 1-3/4" x	2-1/8"
Bottom Rail: 1-3/4" x	4" (opt. up to 10")
Maximum Sizes	Single: 4'0" x 9' 0" Pair: 8'0" x 9' 0"
Medium	

Vertical Stile 1-3/4" x	4"
Top Rail: 1-3/4" x	4"
Bottom Rail: 1-3/4" x	6-1/2" (opt. up to 10")
Maximum Sizes	Single: 4'0" x 9' 0" Pair: 8'0" x 9' 0"
Wide	
Application	Public buildings
Traffic	Heavy
Vertical Stile 1-3/4" x	5"
Top Rail: 1-3/4" x	5"
Bottom Rail: 1-3/4" x	6-1/2" (opt. up to 10")
Maximum Sizes	Single: 4'0" x 9' 0" Pair: 8'0" x 9' 0"

+ Standard Wide Series Product Data

+ Standard Wide Series State Approvals

+ Standard Wide Series Performance Data

+ Standard Wide Series Promotional Data

Sodablasting

Soda blasting is a mild form of abrasive blasting in which sodium bicarbonate particles are blasted against a surface using compressed air. It has a much milder abrasive effect than sandblasting. An early use was in the conservation-restoration of the Statue of Liberty in the 1980s.[1]

Soda blasting is a non-destructive method for many applications in cleaning, paint and varnish stripping, automotive restoration, industrial equipment maintenance, rust removal, graffiti removal, molecular steel passivation against rust, oil removal by saponification and translocation, masonry cleaning and restoration, soot remediation, boat hull cleaning and for food processing facilities and equipment and tooth cleaning at the dental laboratory.

Soda blasting a radio dish at Hat Creek Radio Observatory

Applications

Soda blasting can be used for cleaning timber, wood, oak beams, oak floors, doors, stairs & banisters, cars, boat hulls, masonry, and food processing equipment. Soda blasting can also be used to remove graffiti[2] and to clean structural steel. Soda blasting is very effective for mold and fire/smoke damage cleanup as it cleans and deodorizes.

Equipment

Soda blasting

A **soda blaster** is a self-contained system that includes a blast generator, high pressure compressed air, moisture decontamination system, blast hose, and a blast nozzle. The blasting material consists of formulated sodium bicarbonate (also known as baking soda). Blasting soda is an extremely friable material that undergoes micro fragmentation on impact, literally exploding away surface materials without damage to the substrate. Since sodium bicarbonate is much softer than the silicon carbide or aluminium oxide used in sandblasting, the blast nozzle used for soda blasting applications can be made of soft metals such as brass or steel. The pressures used are very low compared to those used in sandblasting, e.g. 20psi as opposed to 120psi.

References

1. Brian Waple (June 19, 2017). "Sodium Bicarbonate: The User-Friendly Blasting Abrasive" (https://www.randrmagonline.com/articles/87459-sodium-bicarbonate-the-user-friendly-blasting-abrasive). *Restoration & Remediation*.

Article Provided by the Applicant

Soda Blasting – Pros & Cons & What it is

by Patrick Harmon May 10, 2017

There are a variety of ways to sandblast products from vapor blasting to standard abrasive blasting. Each method has a variety of benefits and drawbacks depending on the application. This article will address soda blasting and cover the common uses of soda blasting, its benefits, its limitations, and other questions related to soda blasting. For similar questions related to vapor blasting you can review this article.

WHAT IS SODA BLASTING

Soda Blasting is a form of sandblasting that uses baking soda as the sandblast media this is as opposed to other common forms of blast media like corn cob, walnut shell, coal slag, or steel medias. Compared to other forms of blast media baking soda is not as abrasive. From a practical standpoint this means that soda will not profile the surface you are blasting.

THE BENEFITS OF SODA BLASTING

Since soda is not as abrasive or as hard of a blast media it will not alter the substrate of the product you are sandblasting but it will strip any existing paints or even rust from the surface of the product. Not altering the surface of the product you are sandblasting is useful when you may be trying to only clean a surface but not leave impact marks. Common applications where this is beneficial include b[illegible] cleaning cars, car frames, plastics, and other delicate materials.

An additional benefit to soda blasting is that you can use it in cleaning food grade products. Since baking soda is not a harmful chemical and is often used as a part of a cooking process, soda blasting offers an option for blasting a product without concern of food contamination.

Finally, since baking soda media absorbs well it can also be a very effective blast media to clean off greasy parts like engines and similar applications where you are primarily trying to remove oil or grease without altering the underlying products surface.

THE LIMITATIONS OF SODA BLASTING

While not profiling the underlying surface can be helpful when you are trying to remove contaminant without changing the underlying area there are situations where this is not ideal. First is if you need a surface profile. Certain paints require a surface profile so that the coating system specified by the paint company you are working with will adhere to the surface effectively for a long time. To achieve a surface profile you typically need a blast media like coal slag, acls courses, steel, or even glass blast media. If you do not properly profile a surface prior to applying the proper coating to the surface you can experience coating failure where the paint fails to bond to the surface and provide the protection it is supposed to.

A second situation where soda blasting may not be ideal is when you need to remove contaminants that are hard to remove. Many times with older painted products or coating systems that are highly durable the paint that remains on the surface of the product can be difficult to remove as it has formed a strong bond. Soda blasting will not typically remove coating that is strongly adhered to a surface or if it will take a long time.

Additionally, soda blasting is unique because it requires special sandblast pot considerations compared to most abrasive types. Typically to effectively use soda blasting you need to have a blast pot with a specific angle on the outlet of the pressure pot and a specific drive to properly stir the blast media. This equipment is a little more limited in use than a traditional sandblast pot which you can use with a variety of sandblast medias.

MOST COMMON SODA BLASTING APPLICATIONS

- engine parts
- oil pumps
- fiberglass components

- aircraft parts
- delicate substrates

Ultimately soda blasting can be a great solution for stripping surfaces or cleaning dirty surfaces from grease or oil. Using a soda blaster provides a variety of solutions for stripping but not profiling a surface and can be used with food safe items. The limited additional use of soda blasting equipment can sometimes be a limiting consideration. We offer soda blasting equipment solutions that you can check out here.

← BACK TO PITTSBURGH SPRAY EQUIPMENT COMPANY

About Us

Since 1947 we have served as the experts on surface preparation and coating application equipment. From a single spray gun to fully automated systems.

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Pittsburgh Spray Equipment Company

We offer on site service in Ohio, West Virginia, and Pennsylvania
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Glass Service of Cumberland, Inc.

813 LaFayette Ave.
Cumberland, MD 21502
Phone 301-724-3434 Fax 301-724-5912

TO: Allegany Museum
3 Pershing Street
Cumberland, MD
Attention: Gary Bartik

DATE: 4/21/20

PROJECT: Storefront Door Replacement-
Pershing Street Side

DESCRIPTION OF WORK TO BE PERFORMED:
At both vestibules, total of 4 pairs of doors, remove and dispose of existing doors and frames. Transoms to be carefully removed for reinstallation. Furnish and install new wide stile aluminum storefront doors and frames. Door glass to be 1" clear tempered insulated. Door hardware to include manufacturer's standard continuous hinges, rim exit devices with removable mullions, locking hardware, thresholds and weatherstripping. We have allowed for reusing existing door pulls if they can be modified to fit and function properly. Soda blast transoms to clean, coat with clear spray paint. Reinstall transoms, install brake metal trim as required to complete each opening.

Lump Sum Price $36,324

Exit Devices at Rear Doors- at the interior and exterior 42" storefront doors at the parking lot side of the building furnish and install Falcon model 1790 rim panic exit devices. Existing deadbolts to be blanked. New exit devices keyed to existing.

Lump Sum Price $1,656

Insulated Glass Replacement 2nd floor parking lot side- Move modem display as required to access the inside of the window. Remove and dispose of existing glass. Furnish and install new clear tempered insulated glass with gray window tinting film. Note: we will make every effort to match the existing film, however the finish tint of the new film will probably vary from the existing windo

Lump Sum Price $1,314

Thank you for allowing us the opportunity to work with you. If you have any questions or I may be of further assistance please advise.

ACCEPTED:

Firm/Owner: _____

By: _____

Title: _____
Date: _____

GLASS SERVICE OF CUMBERLAND, INC.

By: Dale Hankinson

Dale Hankinson
Estimator

Title:
Date:

MHIC 12957

This Proposal is subject to revision or withdrawal by GSC until communication of acceptance, and may be revised after communication of acceptance where an inadvertent error by GSC has occurred. This Proposal expires thirty (30) days after the date stated above, unless Glass Service of Cumberland expressly agrees to an extension. Posted prices reflect "cash prices". Credit or debit card purchases will be assessed a 4% convenience fee which will be reflected on debit or credit card receipt.

Rear Façade (Facing Harrison Street)

Existing Second Floor Windows

Existing Second Floor Windows

Certificate of Appropriateness Application
Presentation of Information
By Kathy McKenney

COA# 21-000004
Business Name (If Applicable) Allegany Museum
Address 3 Pershing Street
Project Contact Mike Fetchero

Project Summary

This most current application is for the "after the fact" review of additional work that has taken place on the front façade of the structure. The work includes the replacement of the two front entrance doors, soda blasting the ornate metal within the transom at each front entrance, sealing the metal transom surfaces with a clear spray paint and replacing the door hardware if the existing hardware is unusable.

Additionally, as shown on the attached contractor estimate, the property owners are considering the installation of exit devices at the exterior of the building on the parking lot side (adjacent to Harrison Street) as well as the replacement the existing glass on the second-floor window units which face Harrison Street. These windows units are to have clear tempered glass with a tinted window film installed at each location.

In speaking with the contractor and the applicant, the property owner is also considering using the soda blasting treatment on the exterior light posts, followed by the application of a clear spray paint.

As shown in the attached Preservation Brief from the National Park Service, the existence of a patina on an historic surface is not necessarily a negative and removing it, particularly using an abrasive material or process can sometimes be harmful to the original historic fabric.

As with previous projects, since there is a perpetual preservation easement on this structure, the Maryland Historical Trust will also be reviewing the current scope of work. This review is not complete at this time.

The sections of the Preservation Guidelines that pertain to this application are Guideline 1:Preserve Significant Historic Features (Chapter 5: Page 65); Guideline 6: Safety Codes and Handicap Access (Chapter 5, Page 69); Guideline 23: Replacement Windows (Chapter 5 Page 82); Guideline 29: Replacement Doors (Chapter 5 Page 86); Guideline 37: Commercial Building Ornamentation (Chapter 5, page 93); Appendix A: General Maintenance Guidelines Metals (pages 8-10)