City of Alexandria, Virginia

MEMORANDUM

DATE: MAY 11, 2018

TO: CHAIR AND MEMBERS OF THE OLD AND HISTORIC ALEXANDRIA DISTRICT BOARD OF ARCHITECTURAL REVIEW

FROM: HISTORIC PRESERVATION STAFF

SUBJECT: REVISIONS TO (1) THE ADMINISTRATIVE SIGN POLICY, (2) THE SHED/ACCESSORY BUIDLING POLICY; AND, (3) INTRODUCTION OF THE DRAFT MASONRY GUIDELINE/BEST PRACTICE

Please find attached three documents which will be discussed under other business at the May 16th public hearing:

- Shed policy
- Sign policy
- Draft masonry design guideline/best practice

Staff will make a brief presentation addressing each of the three items and is seeking the Board's feedback and ultimate adoption of the shed and sign policy amendments. Staff also requests the Board's comments on the draft masonry guideline/best practice, and endorsement of the draft document so that it can be circulated publicly for comment.

SHED POLICY

Since the Board adopted the *BAR Polices for Administrative Approval,* the zoning ordinance has been amended throughout the City to allow for slightly larger sheds and greater flexibility regarding where they may be located. As a result, staff proposes to change the shed policy to be consistent with the zoning ordinance.

SIGN POLICY

As the Board is aware, substantial changes were made to the zoning ordinance and the Board's administrative approval sign policy in 2015 because of a U.S. Supreme Court decision, which eliminated the ability of local jurisdictions to consider content when approving signage. Shortly after the Supreme Court decision, the City established a sign work group to study the necessary zoning ordinance changes city-wide, with a special emphasis on the historic districts. The group was charged with addressing the proliferation of A-frame signs which some retailers were putting on the sidewalk in front of their businesses, which were not legal and caused dangerous pedestrian conditions as well as visual clutter.

When the BAR amended the administrative sign policy to remove all references to sign content, a new sign type was added - changeable copy sign - which was intended to accommodate the same

language (sales, events, etc.) seen on the A-frames. Previously this sign type was only allowed for restaurants to display their menus.

Although the business community was involved in the drafting of the amended sign policy and zoning ordinance and generally supported the changes, several retailers continue to put unapproved signs or merchandise in the right-of-way to attract customers. Since the adoption of the revised policy in 2015, staff has seen few, if any, requests for a changeable copy sign, likely because if a retailer has two signs they would need to remove one of those signs in order to install a changeable copy sign. After further review, staff now believes that the sign policy should be changed to allow for administrative approval of one *additional* sign on the building, provided that the additional sign is a changeable copy sign meeting the requirements in the policy (adjacent to the entrance, maximum four-square feet, etc.). This additional modest sign will give retailers the opportunity to advertise specials and/or events without having to remove an existing sign or go to the BAR for approval.

As with all signs, including window signs not regulated by the BAR, the square footage of the changeable copy sign counts toward the maximum allowable signage, which is determed by the length of the building frontage. Currently, the administrative sign policy has one calculation for a single sign (50% of a building frontage), versus a different calculation if two signs were installed (75% of a building frontage). To make the policy more straightforward and recognizing that most businesses desire to install the maximum number of signs, staff recommends that the upper limit of square footage be calculated at 75% of the linear building frontage, regardless of the number of signs installed. For example, for a building with 20 feet of frontage, staff could administratively approve 15 square feet of signage. Staff notes that the existing administrative policy permits staff to refer an application to the BAR for review at a public hearing if staff believes that the design or size of the sign(s) is more than staff believes is appropriate for that location.

DRAFT MASONRY GUIDELINE/BEST PRACTICE

The 1993 Design Guidelines do not include a chapter on repointing, although this is a common repair for masonry features. While appropriate repointing is considered a repair that can be approved by staff, inappropriate repointing results in irreversible damage and is considered a demolition by the BAR. Staff believes that the proposed masonry guideline/best practice will be useful to homeowners, contractors and masons so that they can understand what is considered appropriate masonry repair. The format of the document is taken from the Parker-Gray Design Guidelines and ultimately each chapter of the OHAD BAR's 1993 Design Guidelines will be updated in this format. This is a draft document and staff will be making some layout changes/updates to the document during the comment period. It will be circulated to local masons and presented at the Preservation Month masonry cleaning and paint removal workshop on May 19, 2018.

Board members should mark up the document and provide detailed comments and/or questions. Staff seeks the Board's endorsement of the draft document so that it can be circulated for comment from the preservation community, homeowners and masons and contractors. Once all comments have been received staff will make the necessary edits and return for final adoption of the guideline/best practice.

Revised sheds and accessory structures BAR administrative approval language:

Sheds and Aaccessory structures ~~(sheds and playhouses)~~*	~~New and replacement~~ A sheds ~~and~~ or small accessory buildings ~~used as tool/storage sheds or playhouses not requiring a building permit and~~ limited to ~~50~~ 65 square feet and ~~7~~ 8 feet maximum height, provided ~~they meet the following conditions: They are~~ it is not located on a permanent foundation and may be easily removed. • ~~They are located within a fenced side or rear yard of an interior lot or behind a six-foot tall solid fence on a corner lot~~ ~~A plat is needed to confirm compliance with zoning requirements.~~

Criteria & Standards for Administrative Approval of Signs within the Historic Districts

If permitted under the Zoning Ordinance or City Code, the following signs may be approved administratively pursuant to sections 10-113 and 10-203 of the Zoning Ordinance. Please note that terms not defined here are set out in the Zoning Ordinance or City Code.

SECTION I: CRITERIA FOR GENERAL SIGN TYPES

1. Sign Types

A total of any ~~two~~ three signs from the following sign types may be approved for a non-corner building and up to ~~three~~ four signs may be approved for a corner building (having frontage on two streets or a street and an alley). To receive approval of the maximum number of signs, one must be a changeable copy sign. Existing wall and projecting signs will be included in the total *number* of signs. However, all signs on the building, except temporary signs, count toward the total sign *area* allowed for administrative approval. Only the following sign types qualify for administrative approval.

Wall sign

A wall sign is a sign attached to a wall or painted on or against a flat vertical surface of a structure. The following signs are considered wall signs:

- A **flat** sign on a backing affixed to a wall;
- An **individual letter, pin-mounted** sign installed on a wood frieze board or sign band but not directly installed into a masonry wall;
- A **painted** wall sign, provided that it is painted on a frieze board or on an already painted building wall; and,
- **Changeable copy** sign
    - Only **one** sign, not to exceed 4 square feet in area, may be installed ~~for~~ on a building;
    - It should be located where it does not encroach into the public right-of-way, damage the building or hide building features;
    - It must be constructed of a durable material (such as wood or metal), in a single color, and may be no more than 4 inches deep;
    - No part of the sign may be back-lit or internally illuminated. The sign case may have subtle external illumination, such as a concealed LED rope or targeted mini spotlight; and,
    - The sign copy must be changed manually.

Projecting sign

A projecting sign, also known as a blade sign or a hanging sign, has two sides and projects from a wall or from the corner of a corner building. The maximum area of a projecting sign is 7 square feet and only one side of the sign is counted toward total sign area. The bottom of the

sign must be a minimum of 8 feet above a public sidewalk and 14.5 feet above an alley used by vehicles. The sign and its bracket cannot extend more than 4 feet from the building wall, more than 4 feet into the public right-of-way, or within 1 foot of the curb line (City Code Sec. 5-2-29). Where feasible, new hanging signs should be hung from existing sign brackets previously approved by the BAR or administratively under this process.

2. Permitted Total Sign Area

~~For one sign, the square footage cannot exceed ½ (.5) of the length of the building frontage (linear feet) where it is located. For two signs, the total combined square footage cannot exceed ¾ (.75) of the length of the building frontage where they are located. For buildings with multiple frontages, each elevation is calculated separately.~~

All signs on the building, except temporary signs, count toward the total sign area allowed for administrative approval for each frontage. Total signage square footage may not exceed ¾ (75%) of the length of the building frontage (linear feet) where the signs are located.

3. Sign Lighting

Targeted external illumination (e.g. mini spotlights) which is small in size, illuminates only the proposed sign, and does not damage the building in installation may be approved administratively. Gooseneck lighting or halo illumination must be reviewed and approved by the BAR.

SECTION II: GENERAL REQUIREMENTS AND INFORMATION

- If required, applicants must obtain a separate sign permit (and/or a building permit) through Code Administration.

- A sign which meets the requirements of a coordinated sign master plan which has already been approved by the BAR for a multi-tenant commercial building can be administratively approved by staff, regardless of whether the sign otherwise meets these requirement for administrative approval.

- Prior to receiving an administrative approval for signage, BAR staff will conduct research and/or visit the site to evaluate the subject property and its context to determine if the proposed signage is appropriate.

- Anchors for all signs and sign brackets must be installed into the mortar joints on masonry buildings to avoid damage to the brick or stone. Upon removal of signage and hardware, the tenant and/or business owner shall appropriately repair damage caused by the sign (see *Masonry Guidelines*).

- Previously approved signs and awnings, or awnings with signage, may be replaced in the same size and material, and with new signs, provided that they have the same or less sign area. These awnings and signs may be administratively approved by staff.

All other sign types not specifically addressed in this policy must be reviewed and approved by the BAR. Regardless of whether the sign appears to meet the above criteria, staff may determine that the sign(s) must be approved by the BAR at a public hearing.

Amended by:

Old and Historic BAR: May 16, 2018

Old and Historic BAR: December 7, 2016
Parker-Gray BAR: December 14, 2016

Amended by:
Parker-Gray BAR October 24, 2012
Old and Historic BAR October 3, 2012

Amended by:
Old and Historic BAR June 16, 2010
Parker-Gray BAR June 23, 2010

Approved by:
Parker-Gray BAR September 23, 2009
Old and Historic BAR October 7, 2009

DRAFT

MASONRY

CITY OF ALEXANDRIA
Old & Historic Alexandria District

APPROVAL MATRIX

ALL YEARS	Repointing over 25 Square feet, paint removal and cleaning	Staff Review
	Painting previously unpainted masonry	Board Review
	Painting masonry that is already substantially painted	No Review
	Application of sealants	Board Review
	Demolition of masonry (over 25 sq ft), including inappropriate repointing	Board Review
	Application of stucco to existing masonry	Board Review

Since the 18th century Alexandria has been known as a red brick town. Masonry walls are one of the character defining features of a building and help to determine a building's style and age. Masonry* - including stone and brick - is a strong, durable material that requires relatively little maintenance and should only require repointing every 75-100 years. Mortar is intended to be softer and more porus than masonry. If a masonry wall needs to be replaced or repaired, the new material must match the original design and materials as closely as possible. Unapproved removal of mortar or repointing with an unapproved Portland cement mix is permanent and irreversible, and can result in the full or partial loss of the masonry unit; therefore it is considered a demolition and all applicable parties listed in the zoning ordinance are subject to a class one civil violation that can result in a minimum $1,500 fine. Generally, only buildings constructed afer 1920 can use a high precentage of Portland cement in the mortar mix without damaging the masonry units.

* All masonry features, including retaining walls and garden walls, are subject to the same requirements.

REPOINTING 101

FOUR STEPS TO REPOINTING

1. Properly remove damaged or inappropriate mortar
2. Use the correct mortar mix for your masonry
3. Match the original mortar color and texture
4. Replicate the historic joint profiles

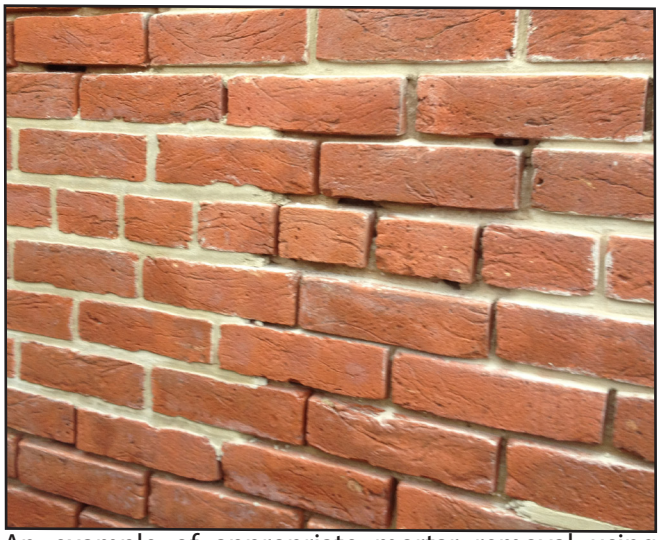
When repairing or replacing historic masonry surfaces, limit the repairs to the damaged areas only.

If a masonry wall needs to be repointed, a mock-up is required prior to starting work. Staff will evaluate the mock-up to confirm that the appropriate tools were used and that the masonry units were not damaged. The mock-up must match the historic mortar in color, texture and tooling. Additional mock-ups may be required if staff finds the mortar characteristic are not correctly replicated. It is important to allow extra time in the scope of work to accomodate this review. Appropriate repointing is approved through the BAR administrtiave approval process and there is no associated fee.

Mortar Removal

Power tools should only be used to remove mortar from horizontal joints by scoring the middle of the joint and using hand tools to remove the remaining mortar. Only hand tools should be used on horizontal joints less than 3/8"tall and on all vertical joints. Mortar should be removed to a depth of 2 1/2 times the height of the joint.

The result of using power tools on mortar joints - the grinders literally sliced off 1/4" sections of brick. The facade is irreversibly damaged, resulting in the loss of the original, handmade bricks. The aesthetic and historic character of the building is lost, as the joints are now twice the original width. The BAR considers this demolition.



An example of appropriate mortar removal using hand chisels. The width of the original joint and the integrity of the brick are maintained.

Masonry damaged by improper mortar removal is considered a demolition, as it is irrepairable and both the homeowner, contractor and other parties identified in the zoning ordinance are subject to a class one violation that can result in a minimum of a $1,500 fine.

Mortar Ingredients & Types

Historically, mortar is composed of a few simple ingredients:

Sand

Water

Lime

Sand - Defines the color and texture of the mortar.
Water - Should be clean and free of salts or chemicals.
Lime - Act as binder or "glue". It can also affect the hardness and moisture permeability of the cured mortar.
Additives - Historic additives include oyster shells, clay particles, colorants, fly ash or pozzolans, and animal hair.
Cements - Generally became commercially available in Alexandria the 1920s and are hard, brittle and non-porous. They should only be used with modern hard-fired brick.

Why lime mortar?

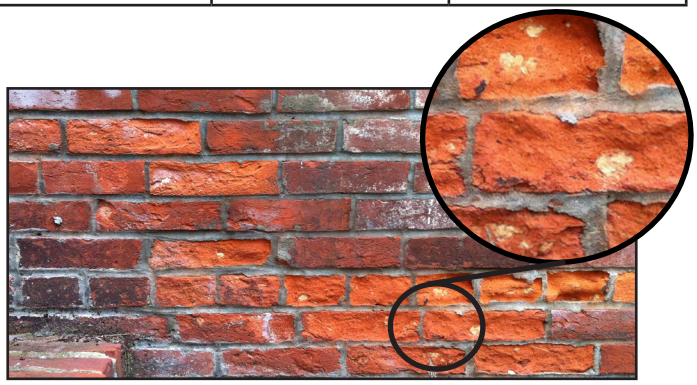
When used on walls of older buildings, high precentage Portland-based mortar does not have the same coefficient of expansion as soft historic brick and is not porous, preventing moisture within a wall from escaping or allowing for natural settlement and seasonal shifting. As a result, permanent damage such as cracking and/or spalling of individual masonry units can occur.

Mortars have different ratios of sand, hydrated lime and water, and sometimes cements and other additives. The mortar types that are appropriate on soft historic brick in the historic district are: L, K, O, N and sometimes S, depending on the location and exposure. Mortar L contains no portland cement. Repointing should not take place the temparature is less than 40 degrees farheheit.

Masonry Material	Sheltered Location	Moderate Exposure	Severe Exposure
Very durable: granite, modern brick (1920s and later)	O	N	S
Moderately Durable: limestone, molded brick	K	O	N
Minimally durable: soft, handmade brick (18th and 19th century)	L	K	O

Source: National Park Service Preservation Brief #2

Buildings constructed before the 1920s generally have a soft and porous brick, which is easily damaged by hard and brittle Portland cement.



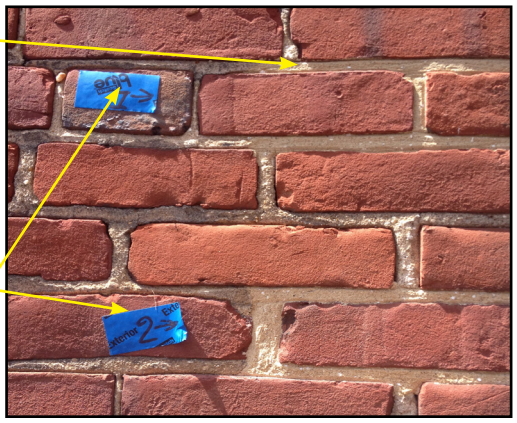
Repointing with a Portland cement mortar has irreversibly damaged the historic brick, causing spalling. Spalling is when the hard-fired face of the brick breaks off due to an impermeable mortar joint.

Color Matching

New mortar must match the color and texture of the original historic mortar. It may be necessary to look in a protected area where the original mortar has not been repointed, such as behind a shutter or under a cornice. If the wall was previously repointed, it may be necessary to scrape off the outer later of mortar to reveal the historic mortar color and texture.

The exposed and soiled layer of mortar has been scraped away to reveal clean mortar for an accurate color match.

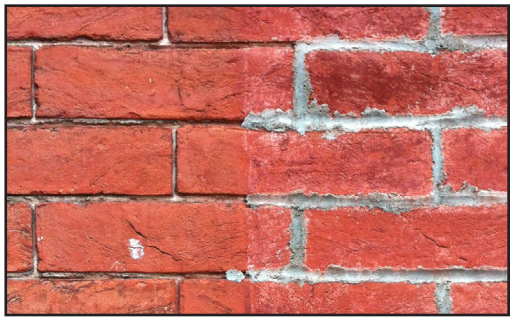
The samples have been clearly labeled with painter's tape so that they are easily identifiable for BAR staff.



IS COLOR MATCHING NECESSARY FOR PAINTED BUIDLINGS?

Subsequent property owners often choose to remove paint and the therefore it is important to color match mortar on painted buildings as well.

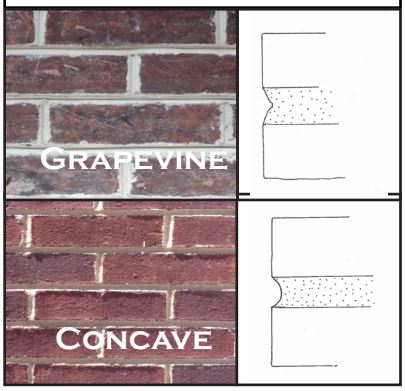
The mortar on the right is the wrong color, incorrectly applied, and includes a high ratio of Portland cement, which is not appropriate for historic masonry. Both the historic and aesthetic characteristics are permanently lost.

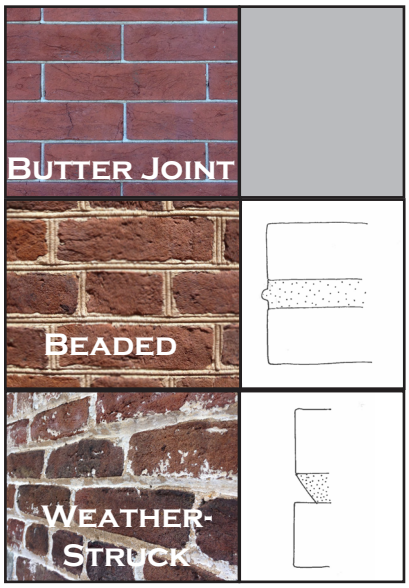


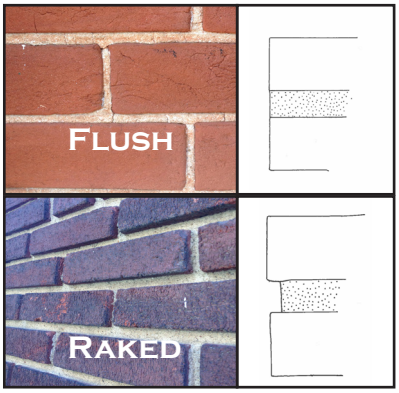
Joint profiles

Which profile?

Look for original mortar in sheltered locations on the building, such as under cornices or behind applied trim.







Repairs, paint removal & cleaning, and sealants

Where is this moisture coming from?

- Are there visible cracks or holes in the wall or mortar? does the wall need to be repointed?
- Are there leaking air conditioning units, pipes or drains near the wall?
- Is the ground sloped away from the building?
- Are your gutters and downspouts in working condition and unclogged?
- Are openings, such as doors and windows, property flashed and caulked?
- Is the moisture caused by rising damp from below grade?
- Is the mosture due to interior conditions or construction errors?
- Is your chimney capped and is the coping on the parapet intact?

Rising damp (water wicking from below) has caused the face of this early brick to crumble from the freeze-thaw cycle.

Another common reason to repair masonry is from damage caused by frequent changes to signs and awnings installed directly into the masonry surface of commercial buildings by drilling holes or using silicone glue. Similar damage may occur on residential properties due to the installation of mailboxes, light fixtures, house numbers and window boxes. Anchors should generally be installed into mortar joints rather than the masonry.

Like mortar repairs, masonry repairs must use matching material in color and texture. NEVER use caulk to fill masonry holes.

Paint Removal & Masonry Cleaning

Cleaning masonry should always be done by the gentlest means possible. Improper paint removal or cleaning can irreversably damage brick. Abrasive removal of paint through methods such as sandblasting or power washing often removes the hard-fired brick surface, leaving the soft interior exposed to weather. Abrasive cleaning methods may only be approved by staff when a skilled architectural conservator has demonstrated it to be the best and safest method. There are several environmentally friendly paint strippers available that can remove multiple layers of paint relatively easily and may be less expensive than frequent repainting. The use of a paint stripper usually requires the use of low pressure water to remove and neutralize the chemicals and paint residue. It is important that you consult with BAR staff on the proper water pressure (psi) to prevent mechanical damage to the masonry surface and avoid penetrating the masonry with the water and chemical residue, which can lead to interior damage or damage to the masonry.

Grafitti should be removed using the same gentle cleaning methods.

The brick on the right has been sandblasted, causing the outer hard fired layer to be removed and making it more susceptible to further damage.

Water-Repellent Sealants

Commonly referred to as sealants, these products are often marketed as water-repellent solutions for historic masonry. While many are advertised as "breathable", they are often not necessary or can even cause additional damage because they block the porosity of the brick and mortar, potentially trapping mosture. Waterproof coatings should not be used except in very rare cases. Application of water-repellent or waterproof coatings on buildings constructed before 1920s require Board approval. Laboratory test results and the recommendation of a reputable architectural conservator must be included as part of the application.

ADDITIONAL RESOURCES

National Park Service Preservation Brief #2: Repointing Mortar Joints in Historic Buildings

Association for Preservation Technology International Bulletins on Mortar

National Park Service Preservation Brief #6: Dangers of Abrasive Cleaning

National Park Service Preservation Brief #1: Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings

U. S. Heritage Group & ASTM