'96A REVISION
30/12-~~96~~ 10701 Rockville Pike.
Rockville

This case will be filed as a WAWP for the July 10th meeting

IMPORTANT MESSAGE

FOR Dwen

DATE 5/28 TIME 11:45 A.M. P.M.

M Richard Brandt

OF

PHONE
AREA CODE NUMBER EXTENSION

☐ FAX
☐ MOBILE 410 / 514-7634
AREA CODE NUMBER TIME TO CALL

TELEPHONED	✓	PLEASE CALL	✓
CAME TO SEE YOU		WILL CALL AGAIN	
WANTS TO SEE YOU		RUSH	
RETURNED YOUR CALL		SPECIAL ATTENTION	

MESSAGE What is likelihood of allowing total replacement w/ new thermal windows at Strathmore Hall?

(202) 293-1700

Sue

SIGNED

TOPS FORM 3002S MADE IN U.S.A.

Corby Estate / Strathmore Hall

#30/012-96A

Window Rehab. HPC 7/10/96

MARYLAND HISTORICAL TRUST

Office of Preservation Services

Parris N. Glendening, Governor
Patricia J. Payne, Secretary

June 26, 1996

Jeffrey C. Luker
Quinn/Evans Architects
1214 Twenty-Eighth Street, N.W.
Washington, D.C. 20007

Re: Easement Committee Review
Strathmore Hall
Montgomery County

Dear Mr. Luker:

As you know, the Easement Committee of the Maryland Historical Trust met on June 5, 1996, and reviewed your request to replace most of the existing sash at Strathmore Hall with new thermally and environmentally efficient sash.

Based on the recommendation of the Easement Committee I did not approve of your proposal to replace most of the existing sash with new thermally efficient sash. However, I proposed a compromise which you indicated might be looked upon favorably. Those suggestions are:

1. The existing replacement sash on the second floor, south, west and east sides may be replaced with new thermally efficient (double glazed) sash, so long as the sash have true divided lites with integral muntins and the muntin profiles will match the muntins found on the historic sash. The existing smaller windows and double doors on this elevation may also be replaced with thermal windows and doors. The Trust must review and approve the appearance of these sash, especially the appearance and the reflectance quality of the glazing. The color and reflectance quality of the glass must be similar to the existing.

2. The Trust is agreeable to the installation of interior storm windows on the north side of the building.

3. The use of a piggy back glass panel for the windows and doors of the Florida Room and the two windows that flank the central entrance on the south elevation is acceptable.

4. We agree that it is acceptable to reswing the center pair of doors at both the north and side elevations at the center hall. Due to the installation of new hardware and glass you may

replace these doors with new units. The existing flanking doors will not be reswung and will be kept. These doors will be reglazed and may have a glass panel installed for thermal efficiency. The Trust will need to approve the appearance of the glazing before final approval is given. The color and the appearance of the glass must be similar to the existing.

The Easement Committee met again on June 26, 1996, to review your new proposal dated June 19, 1996, for a new treatment of the historic sash on the north facade as well as the French doors on the north and south facades. Under this proposal the window sash on the north side of the building would be retained but remilled to accept a thermal pane window. The existing sash including muntins would be milled to accept the thicker glazing and a wood strip would be applied to the exterior. I do not approve of this proposal.

The latest proposal calls for the removal of the glass panes on the French doors at the north and south elevations. The panes would be replaced with thermal panes. This work will be done with no remilling of the doors. I approve of this proposal. The Trust must review and approve the appearance and the reflectance quality of these new doors.

You suggested that the Trust might be in a better position to make a determination of the suitability of the modification to the sash if we saw a mock up. I do not believe that I will change my opinion, but if you wish to incur the extra expense to accomplish this, the Trust would be willing to evaluate it.

With the above parameters you may pursue the above or other options. One option that you had mentioned but was not part of your package was the use of an exterior historic appearing storm sash. You should investigate this further and see if there is any historic justification for their use.

As you are aware the use of this building as an art gallery and office space makes it difficult to use the existing windows. Due to the mixed use of the building, the state of the existing sash and doors and the need to increase environmental efficiency it would seem on the face of it that replacement windows would best suit your needs. However, the majority of the window sash that you would like to replace are in good shape and can easily and efficiently be repaired. We feel that it is important to retain the actual historic materials as well as the historic appearance.

Thank you for consulting with the Trust on this matter. If you need further information please contact Richard J. Brand at (410) 514-7634.

Sincerely,

J. Rodney Little
Director

cc: Mr. Eliot Pfanstiehl
Hon. Gilbert Gude
Ms. Mary Gardner
Ms. Gwen Marcus

HISTORIC PRESERVATION COMMISSION STAFF REPORT

Address: 10701 Rockville Pike

Meeting Date: 7/10/96

Resource: Master Plan Site #30/12,
Corby Estate/Strathmore Hall

HAWP: Alterations

Case Number: 30/12-96A REVISION

Tax Credit: Not Applicable

Public Notice: 6/26/96

Report Date: 6/03/96

Applicant: Mary K. Donohoe

Staff: Patricia Parker

PROPOSAL: Remove and replace 10 windows and 3 doors;
Window/door rehabilitation in remaining openings

RECOMMEND: Approve w/condition

BACKGROUND

On February 28, 1996, the HPC reviewed a proposal by this applicant for various additions and alterations to the Corby Estate/Strathmore Hall, Master Plan Site #30/12. Prior to this submission for preliminary review, HPC staff, Quinn Evans Architects, and staff from the Maryland Historical Trust had worked closely together in the development of plans for the project. The Mansion is protected by a preservation easement held by the Maryland Historical Trust and therefore a Section 106 Review, with approval, is required for any alterations proposed for the structure.

At that time, and on March 13, 1996 as part of the formal HAWP process which followed, the proposal included several alterations and additions to develop Strathmore Hall Arts Center into a first-rate gallery and arts space. As proposed, space would be added for offices, increased and improved gallery space and upgrading of the HVAC and other building elements to meet fire code requirements of applicable building codes. Also, because the building is devoted to public use, it must also meet minimum handicapped accessibility requirements.

This HAWP proposal presented for HPC approval focuses only on proposed changes to the existing windows and doors. Staff again met with the architects and MHT staff on site prior to the applicant's submission of this HAWP application.

In most instances, the applicant does not propose removal of windows and doors. The proposal includes restoration of existing sash - maintaining sash, muntins, rail and stile profiles and restoring the existing window heads, jambs and sills. Glazing would be replaced and insulated glazing is proposed for use to be incorporated into the existing wood windows with true divided lites. Interior profiles would be retained and new wood stops added.

The applicant does propose to remove ten windows at the second floor level on the rear facade. These windows would be replaced with sash to mostly match the existing. Double glazing would be utilized within these openings.

The proposal also includes removal of the central active french doors within three openings (opening 109B and 108B on the first floor; and opening 259A within the gallery space

which provides egress to the balcony at the second level). In these locations, the applicant would install new wood doors with double galzing and true divided lites. The door swings would be changed to meet code requirements. The new doors would have panic hardware and the door profiles would replicate those of the existing doors at either side.

STAFF DISCUSSION

Staff applauds the applicant for expending substantial resources to retain and restore historic fabric in most instances. Staff recommends approval of the applicant's proposal of sash restoration with insulated glazing. The applicant has sought to maintain existing muntin and sash profiles for most openings.

However, the proposal also includes a proposal to remove ten windows on the rear facade which do not meet the test of a feature which is deteriorated beyond repair and therefore in need of replacement. As a result of the site visit, staff feels that the extreme measure of replacement would only be required at seven window openings on the rear facade (south elevation) of the building. These openings are indicated on the drawings as #208, #209, #210, #211, #212 and #213 and #214. In these openings, the original sash has already been changed and is inconsistent with other window openings. Staff recommends replacement with wood windows having true divided lites and sash to match the existing sash in overall configuration, operation and profile.

In window openings #205, #206 and #207, staff recommends that these windows be repaired and **not** replaced. These windows, even though located toward the rear of the building have not been previously altered.

Staff agrees with the applicant that only the french doors which require a change in swing and new panic hardware for egress should be replaced. All other doors should be restored.

STAFF RECOMMENDATION

With the following condition, staff recommends that the Commission find the proposal **consistent** with the purposes of Chapter 24A-8(b)1:

> The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site, or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter;

and with the Secretary of the Interior's Standards for Rehabilitation #1, #2, and #6:

> A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environ ment; and
>
> The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided; and
>
> Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

Condition:

1. Only windows within openings 208, 209, 210, 211, 212, 213 and 214 should be replaced. Replacement sash shall match existing lite configuration, operation, muntin and head profiles. Glazing may be double pane.

and with the general condition applicable to all Historic Area Work Permits that the applicant shall arrange for a field inspection by calling the Montgomery County Department of Environmental Protection (DEP), Field Services Office, five days prior to commencement of work and within two weeks following completion of work.

APPLICATION FOR HISTORIC AREA WORK PERMIT

TAX ACCOUNT # 1823533

NAME OF PROPERTY OWNER Montgomery County TELEPHONE NO. (301) 217-6124
(Contract/Purchaser) Mary K. Donahoe (Include Area Code)
ADDRESS 110 N. Washington Street, 3rd Floor Rockville MD 20850
CITY STATE ZIP
CONTRACTOR To be determined TELEPHONE NO.
CONTRACTOR REGISTRATION NUMBER
PLANS PREPARED BY QUINN EVANS / ARCHITECTS TELEPHONE NO. (202) 298-6700
(Include Area Code)
REGISTRATION NUMBER

LOCATION OF BUILDING/PREMISE

House Number 10701 Street Rockville Pike
Town/City N. Bethesda Election District Strathmore ~~[illegible]~~ Avenue
Nearest Cross Street
Lot ____ Block ____ Subdivision
Liber 5173 Folio 63 Parcel P56 on Tax Map 123

1A. TYPE OF PERMIT ACTION: (circle one)
Construct Extend/Add Alter/Renovate (Repair)
Wreck/Raze Move Install Revocable Revision
Circle One: A/C Slab Room Addition
Porch Deck Fireplace Shed Solar Woodburning Stove
Fence/Wall (complete Section 4) Other

1B. CONSTRUCTION COSTS ESTIMATE $ $150,000
1C. IF THIS IS A REVISION OF A PREVIOUSLY APPROVED ACTIVE PERMIT SEE PERMIT # 9603050062
1D. INDICATE NAME OF ELECTRIC UTILITY COMPANY Pepco
1E. IS THIS PROPERTY A HISTORICAL SITE? Yes

PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTEND/ADDITIONS

2A. TYPE OF SEWAGE DISPOSAL
01 ( ) WSSC 02 ( ) Septic
03 ( ) Other

2B. TYPE OF WATER SUPPLY
01 ( ) WSSC 02 ( ) Well
03 ( ) Other

PART THREE: COMPLETE ONLY FOR FENCE/RETAINING WALL

4A. HEIGHT ____ feet ____ inches
4B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:
1. On party line/Property line
2. Entirely on land of owner
3. On public right of way/easement (Revocable Letter Required).

I hereby certify that I have the authority to make the foregoing application, that the application is correct, and that the construction will comply with plans approved by all agencies listed and I hereby acknowledge and accept this to be a condition for the issuance of this permit.

Signature of owner or authorized agent (agent must have signature notarized on back) — Date: 19 June 1996

APPROVED ____ For Chairperson, Historic Preservation Commission

DISAPPROVED ____ Signature ____ Date ____

APPLICATION/PERMIT NO: 960621006 2 FILING FEE: $ County Project Fee Waived
DATE FILED: PERMIT FEE: $
DATE ISSUED: BALANCE $
OWNERSHIP CODE: RECEIPT NO: FEE WAIVED:

(4)

THE FOLLOWING ITEMS MUST BE COMPLETED AND THE REQUIRED DOCUMENTS MUST ACCOMPANY THIS APPLICATION

DESCRIPTION OF PROPOSED WORK: (including composition, color and texture of materials to be used:)

SEE ATTACHED REPORT DATED JUNE 19, 1996

"STRATHMORE HALL ADDITION AND RENOVATION

WINDOW REHABILITATION

REQUEST FOR HISTORIC AGENCY APPROVAL"

(If more space is needed, attach additional sheets on plain or lined paper to this application)

ATTACH TO THIS APPLICATION (2) COPIES OF: SUCH SITE PLANS (lot dimensions, building location with dimensions, drives, walks, fences, patios, etc. proposed or existing) and/or ARCHITECTURAL DRAWINGS (floor plans, elevations, etc.), PHOTOGRAPHS OF THE AREA AFFECTED, as are necessary to fully describe the proposed work.

MAIL OR DELIVER THE APPLICATION AND ALL REQUIRED DOCUMENTS TO THE:

HISTORIC PRESERVATION COMMISSION
100 MARYLAND AVENUE
ROCKVILLE, MARYLAND 20850

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

BACKGROUND

The existing windows at Strathmore Hall include a mix of double hung, casement and fixed sash in at least twenty-five unique sizes and configurations. The existing condition of the sash varies widely, from fully operable sash at the main level of the music room, to deteriorated and ill-fitting sash at the second floor gallery spaces.

Strathmore Hall Arts Center requests Historic Agency Approval for performance upgrades to the existing window units to support the evolving museum function and County mandated energy requirements. These upgrades include:

- Increased thermal performance
- Reduced air and water infiltration
- Control of ultraviolet light to protect artwork in the Galleries and documents in the Library
- Operable sash at the secand floor office spaces
- Increased security at the first floor and basement levels
- Reduced yearly maintenance costs

At present, the approved construction documents indicate installation of one-piece interior storm panels at most of the existing sash. However, the Arts Center recognizes that the required window upgrades can be more fully addressed with more comprehensive approaches, including sash restoration with insulated glazing and replacement of improperly-sized units. The Arts Center is also aware of the increased costs of restoration and replacement and has raised the funds required to achieve a higher quality solution.

Note: This is a revision to an earlier proposed treatment submitted in May, 1996. This revised proposal responds to the Montgomery County and Maryland Historical Trust dictate that historic sash be retained.

PROPOSED TREATMENT

With this submittal, Quinn Evans/Architects requests that Moryland Historic Trust, and Montgomery County approve the proposed treatment. A more specific description of the treatment is included in the attached Detail Analysis.

1) Retain and restore in place the existing fan light windows and Palladian window groups. These units will be repaired, painted inside and out and fixed in place.
   - Windows No.s: 223; 224; 225; 227; 301; 302

2) Retain and restore in place the existing exterior French doors at the music room. The existing glass lights will be replaced with new safety glass, and the doors will be repaired and remain fully operable.
   - Door No.s: 101A; 101B

3) Replace the central, north and south entrance doors with new wood double glazed true divided light doors. These doors must be re-swung in order to comply with life safety codes. Profiles of the new doors will replicate existing door profiles. The new doors are to be set within the existing frames, and daors at the first floor level will incorporate new panic (egress) hardware.
   - Door No.s: 108-B; 109B; 259A

4) Retain and restore in place the outer pairs of north and south entrance doors with new double glazing incorporating the existing wood muntins (true divided lights). Existing interior profiles of the doors will be retained. Exterior wood glazing stops will be modified to accommodate the additional thickness of insulated glazing.
   - Door No.s: 108-A, C; 109-A, C

5) Rehabilitate the existing frame and restore the existing interior second story casement window in the Music room. This window will serve as an archive of the existing window configuration.
   - Window No.: 204

6) Rehabilitate the existing frames and replace the existing undersized dauble-hung sash at the second floor office and gallery spaces along the south elevation. New sash will match existing sash in overall configuration, but will incorporate different profiles to differentiate them from the restored sash elsewhere in Strathmore Hall. The new sash will incorporate true divided lights and insulated glazing.
   - Window No.s: 205 through 209; 212; 213; 214

7) Rehabilitate existing frames and restore existing sash with new double glazing incorporating the existing wood muntins (true divided lights). Existing interior profiles of the windows will be retained. New wood stops at the exterior face of muntins, rails and stiles will be beveled, creating a "putty line" similar to the existing window construction.
   - Window No.s: All sash not described in items 1 through 4.

EVALUATION

Relative to item seven (above), Quinn Evans/Architects has reviewed the pros and cons of several alternate approaches in a previous proposal dated May, 1996. These approaches included substantial sash replacement, exterior storm panels and interior storm panels. In conjunction with the Maryland Historical Trust and Montgomery County Historic Preservation Commission, Quinn Evans/Architects recommends sash restoration with insulated glazing to best meet the owner's long-term maintenance and functional requirements.

Sash Restoration with Insulated Glazing (Proposed Treatment)

Insulated glazing units would be incorporated into the existing true-divided-light windows. Existing muntins, rails and stiles will be modified to accept the thickness of the insulated glazing units. All interior profiles will be retained. New exterior wood stops will consist of Philippine Mahogany, and

will be beveled, creating a "putty line" similar to the existing window construction. Glazing units will incorporate Low-E coatings, and the glass will be tempered whenever windows are within 2'-0" of exterior doors. Upper sash of double-hung windows would be fixed in place, and all casement sash would be fixed in place.

Historic Fabric:

- Existing wood muntin, rail, and stile profiles will be retained. Existing window heads, jambs and sills will be restored.
- Note that an existing double-hung sash at the Music Room will be "archived" in place at the new fire stair enclosure. (Window # 104)
- Note that an existing casement sash is currently "archived" and will be restored in place at the second floor hallway. (Window # 204)

Pros:

- Increased thermal performance from creation of dead-air space and incorporation of Low-E coatings at double insulated lites
- Reduction of air and water infiltration with new weather-stripping at operable units.
- Reduction of UV light levels (84% reduction) with the use of Low-E coatings.
- Existing muntin, rails and stile profiles will be retained.
- First floor and basement level sash security improved with tamper-proof internal sash locking hardware.
- Operable sash can be provided to accommodate office and kitchen areas.
- Overall interior and exterior appearance of windows will remain unchanged.

Cons:

- Loss of original glass bedding surface to accommodate insulated glazing.

Cost:

- Total estimated project cost: $150,000

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

DOUBLE-HUNG SASH AT MUSIC ROOM - FIRST FLOOR

Photos:

- #1: Interior view of music room.
- #2: Exterior view of sash (lower level).
- #3: Example of interior faux-finish at sash (from French door)

Window No's:

101; 102; 103

Existing Conditions:

Description: Single glazed, 8/12 wood double hung sash with 2" wide rails and stiles, and 1-3/16" wide muntins. Glazing consists of modern, distortion free glass. Sash thickness is 1-3/8". Meeting rail and sill have metal weather-stripping. Jambs are not weather-stripped. Interior finish of the frames is dark stained oak. Sash are faux-finish oak on interior surfaces. All exterior surfaces are painted.

Condition: Lower rails of sash exhibit open joints and water staining. Interior faux-finish is flaking, exposing a white undercoating. Sash are loose in their frames.

Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weather-stripping.

Recommended Treatment - Sash Restoration with Insulated Glazing:

Work: Incorporate insulated glazing units into the existing true-divided-light windows. Existing muntins, rails and stiles will be modified to accept the thickness of the insulated glazing units. All interior profiles will be retained, and existing faux finish will receive a clear wax coating. New exterior wood stops will consist of painted, Philippine Mahogany which will be beveled, creating a "putty line" similar to the existing window construction. Upper sash would be fixed in place.

Impact: Existing historic fabric will remain largely intact. Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved.

Drawing: Similar to Detail G5/A704, incorporating existing window components.

DOUBLE-HUNG SASH (NARROW MUNTINS) AT GALLERY AND MEETING ROOM - SECOND FLOOR

Phatas:

- #7: Exteriar view of sash at Gallery (Rm. 103).
- #8: Detail view af laase sash at jamb (abject easily fits in gap).

Window No's:

208; 209; 212; 213

Existing Conditions:

Descriptian: Single glazed, 6/6 waad dauble hung sash with 1-3/4" wide rails and stiles, and 7/8" wide muntins. Glazing consists af modern, distortion free glass. Sash thickness is 1-3/8". Meeting rail and sill have metal weather-stripping. Jambs are not weather-stripped. Interior and exteriar surfaces are painted.

Condition: Lawer rails af sash exhibit open joints and water staining. Upper sash are generally painted shut. Sash are significantly undersized for the existing frames, allowing for removal without detachment of inside stops.

Comment: Thermal performance of these sash is poor due ta the lack of storm sash or insulated glass. Air infiltration rates are extremely high due to the lack of complete perimeter weather-stripping and poor fit of lawer sash. The presence af modern glazing suggests that these sash may not be original, since historic (distorted) glazing is present at windows elsewhere in Strathmore Hall. The poor fit af the sash also suggests that they may be replacement sash.

Recommended Treatment - Replacement Sash:

Work: Provide single-hung, double insulated, waod sash replacements with pulley-and-chain counterweights and full weather-stripping. Stile, rail and muntin widths to match existing sash. Muntin, rail and stile profiles will differ from the typical existing sash to allow differentiation of new and restored sash. Sash thickness to be 1-3/4". Retain existing window frames, jambs and stops. Rout sash perimeter to accommodate existing 1-1/2" width of jambs. Paint exterior and interior of new sash ta match existing.

Impact: Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved. Operation of window will remain unaffected.

Drawing: Similar to Detail G5/A704

CASEMENT SASH AT MUSIC ROOM (SECOND FLOOR) and SUNROOM (FIRST FLOOR)

Photos:

- #2: Exterior view of sash at Music Room (upper level).
- #9: Detail view of exterior sash from second floor hallway.
- #12: Exterior view of sun room windows.
- #13: Detail view of window and door jambs.

Window No's:

121; 122; 201; 202; 203; 204; 226 thru 228

Existing Conditions:

Description: Single glazed, 8-lite and 12-lite casement sash with 2-1/2" wide rails and stiles, and 1-3/16".wide muntins. Sash thickness is 1-3/8". Meeting stiles (where present) are not weather-stripped. Top and bottom rails of operable sash have metal weather-stripping. Interior and exterior surfaces are painted.

Condition: Lower rails of sash exhibit minimal deterioration. Most sash are painted shut.

Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weather-stripping.

Recommended Treatment - Sash Restoration with Insulated Glazing:

Work: Incorporate insulated glazing units into the existing true-divided-light casement sash. Existing muntins, rails and stiles will be modified to accept the thickness of the insulated glazing units. All interior profiles will be retained. New exterior wood stops will consist of Philippine Mahogany which will be beveled, creating a "putty line" similar to the existing window construction. Tempered glass will be installed as sunroom sash adjacent to doors. Casement sash would be fixed in place. Repaint exterior and interior of sash to match existing.

Impact: Existing historic fabric will remain largely intact. Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved. Window will no longer be operable.

FRENCH DOORS AT FIRST AND SECOND LEVEL

Photos:

- #14: Exterior view of south entrance doors.
- #15: Exterior view of second floor French doors.
- #3: Detail of base of Music Room French doors.

Door No's:

101A & B; 109A, B & C; 108A, B & C; 259A

Existing Conditions:

Description: Single glazed, 10-by-10 wood paired French doors with 4" wide rails and stiles, and 1-3/16" wide muntins. French doors at portico (south elevation) are single-lite, without muntins. Door thickness is 1-3/8". Interior and exterior surfaces are painted. Music Room doors have 1-1/16" wide muntins, and have a faux-finish matching the oak door frames.

Condition: Lower rail of doors exhibits open joints and water staining. Several doors exhibit damaged lower rails at the concealed latches. Egress hardware at main entrances does not meet code.

Comment: Thermal performance of these doors is poor due to the lack of storm doors or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weather-stripping.

Recommended Treatments - Replacement Doors at First Floor Entrances and Second Floor Balcony; Restored Doors with Tempered Glass at Music Room.

Work: Provide new, double insulated, tempered glass wood French door replacements at entrances. Stile, rail and muntin widths and profiles to replicate appearance of existing doors. Door thickness to be 1-3/4". Provide panic hardware at exit doorways. Retain existing door frames. Paint exterior and interior of new doors to match existing. Provide true divided-lite French doors at second floor portico. Restore existing French doors at Music Room and replace glazing with tempered glass (muntin bars are too narrow to accept insulated glazing units).

Impact: Exterior and interior appearance and sightlines of first floor doors will be unchanged. Second floor doors will be converted to divided-lite doors matching first floor doors. Thermal performance will be improved.

TYPICAL DOUBLE-HUNG SASH AT FIRST AND SECOND FLOOR

Photos:

- #4: Exterior view of sash at Library.
- #5: Exterior view of sash at Gallery (Rm. 110).
- #6: Detail view of jamb width.
- #10: Exterior view of sash (upper level).
- #11: Interior detail view of meeting rail with tailpieces.

Window No's:

105 thru 108; 110; 111; 112 thru 118; 215 thru 222

Existing Conditions:

Description: Single glazed, 4/6, 6/9, 8/8 and 8/12 wood double hung sash with 2" wide rails and stiles, and 1-3/16" wide muntins. Sash thickness is 1-3/8". Meeting rail and sill have metal weather-stripping. Jambs are not weather-stripped. Interior and exterior surfaces are painted.

Condition: Lower rails of sash exhibit open joints and water staining. Upper sash are generally painted shut. Sash are loose in their frames.

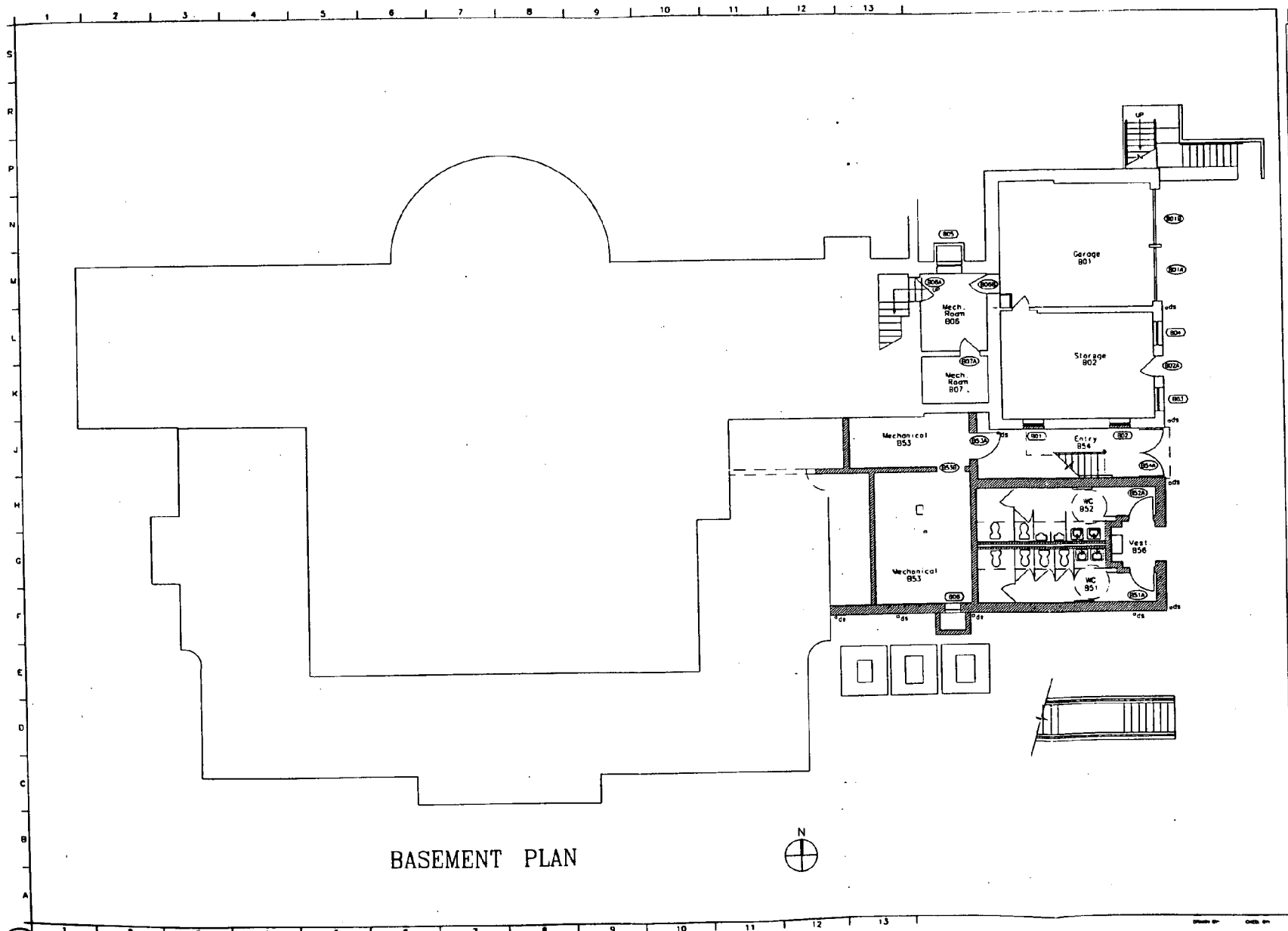
Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weather-stripping.

Recommended Treatment - Sash Restoration with Insulated Glazing:

Work: Incorporate insulated glazing units into the existing true-divided-light windows. Existing muntins, rails and stiles will be modified to accept the thickness of the insulated glazing units. All interior profiles will be retained. New exterior wood stops will consist of Philippine Mahogany which will be beveled, creating a "putty line" similar to the existing window construction. Upper sash will be fixed in place. Repaint exterior and interior of sash to match existing.

Impact: Existing historic fabric will remain largely intact. Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved.

Drawing: Similar to Detail G5/A704, incorporating existing window components.



BASEMENT PLAN

QUINN EVANS ARCHITECTS

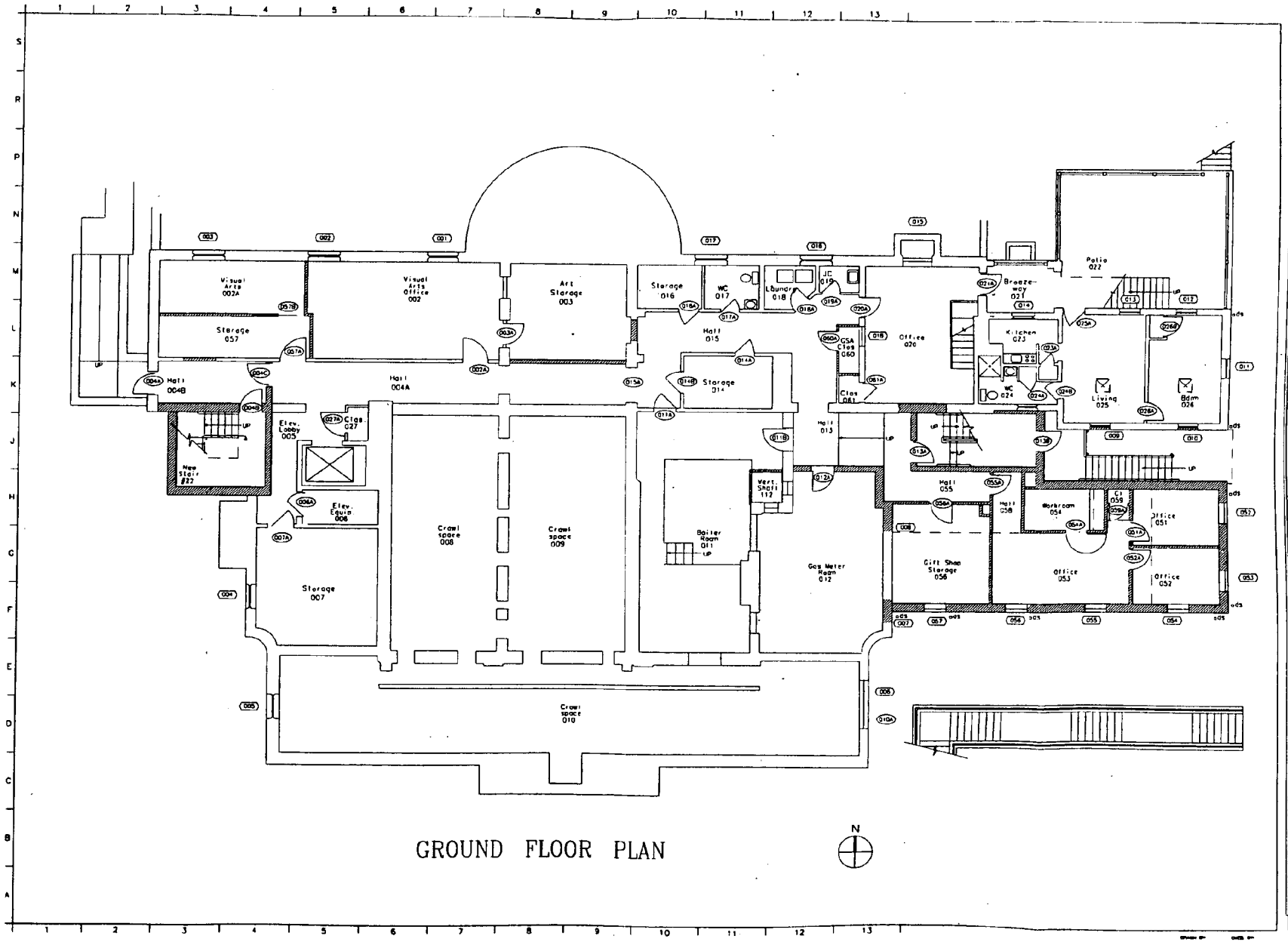
STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52590008

Quinn Evans/ Architects Project No. 95218



GROUND FLOOR PLAN

QUINN EVANS ARCHITECTS

STRATHMORE HALL

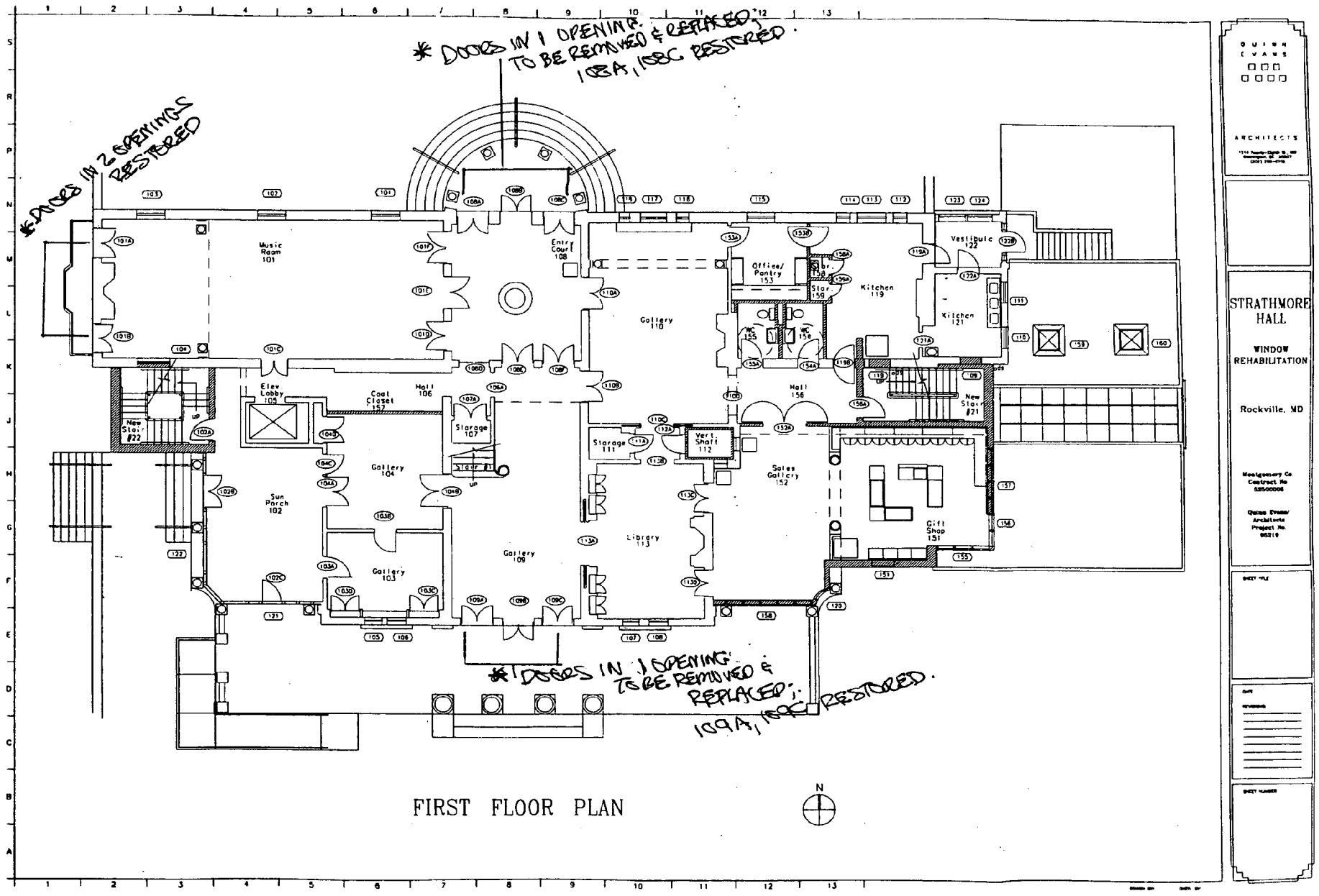
WINDOW REHABILITATION

Rockville, MD

Montgomery Co Contract No 52500008

Quinn Evans/ Architects Project No 06219

(51)



FIRST FLOOR PLAN

QUINN EVANS ARCHITECTS

STRATHMORE HALL

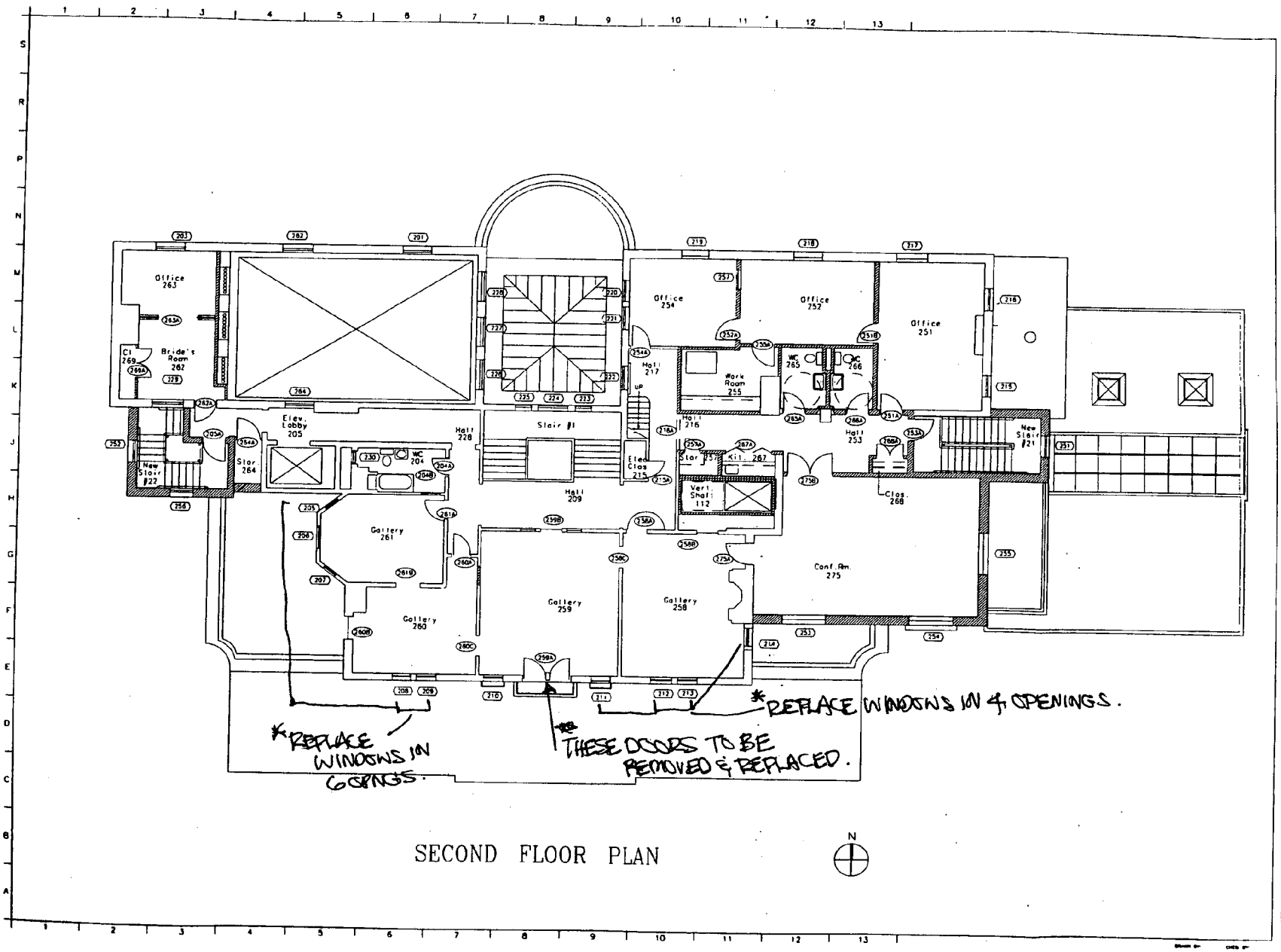
WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 8850000

Quinn Evans/ Architects Project No. 05219

(5)



SECOND FLOOR PLAN

QUINN EVANS ARCHITECTS

STRATHMORE HALL

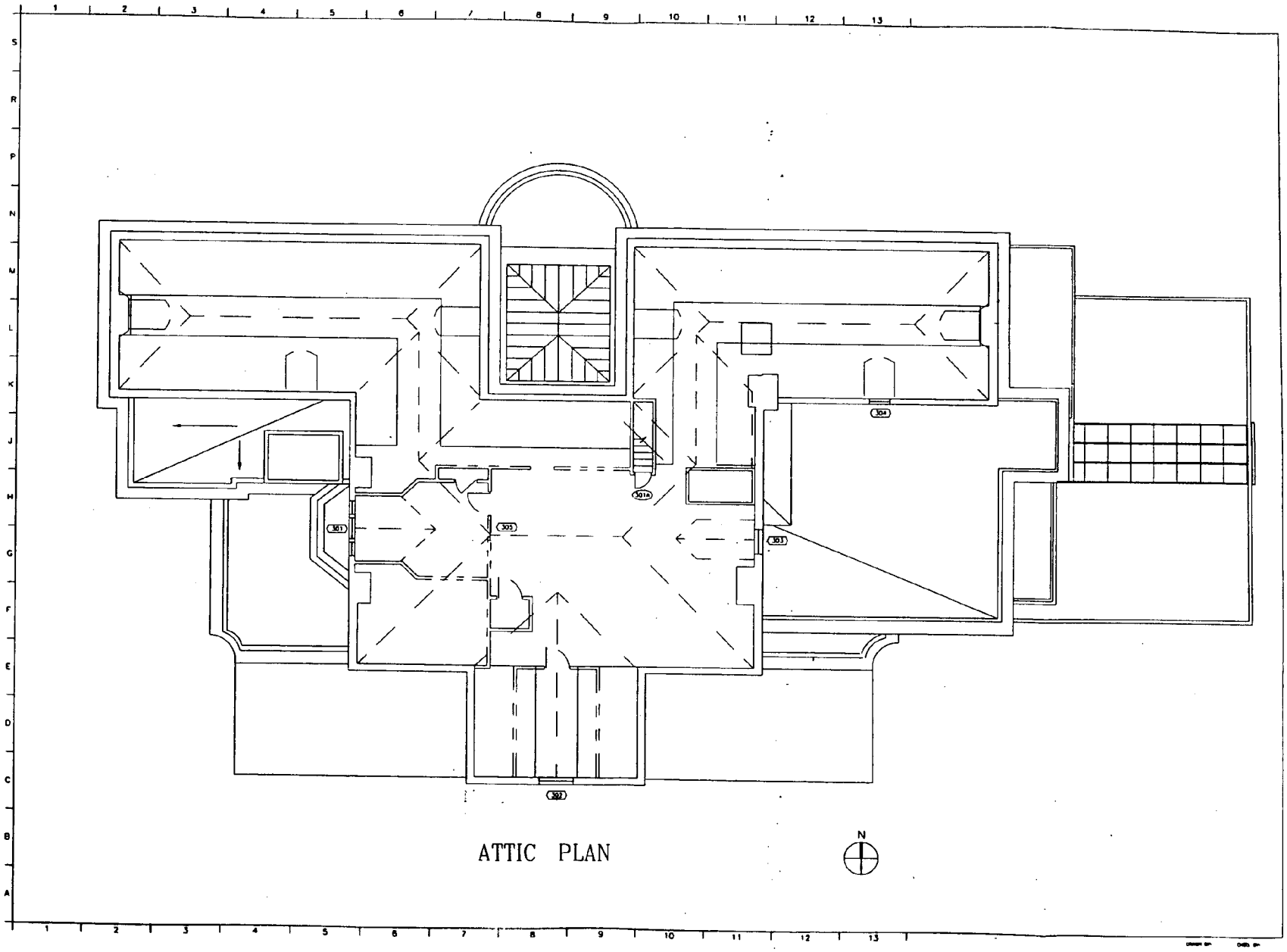
WINDOW REHABILITATION

Rockville, MD

Montgomery Co Contract No 52500008

Quinn Evans/ Architects Project No 05219

(1)



ATTIC PLAN

QUINN EVANS ARCHITECTS

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

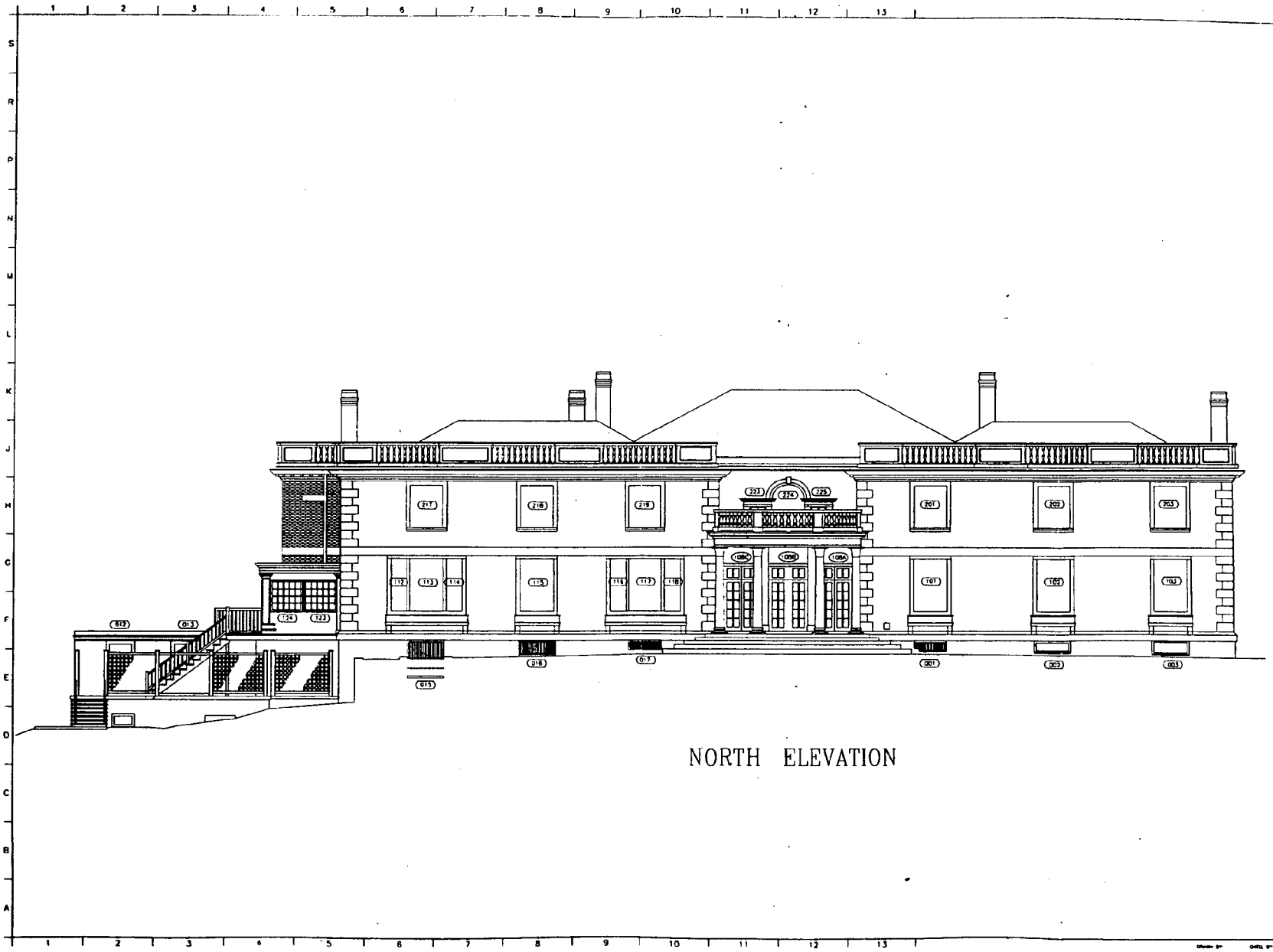
Montgomery Co. Contract No 58500008

Quinn Evans/ Architects Project No 90219

DATE

REVISIONS

SHEET NUMBER



NORTH ELEVATION

QUINN EVANS ARCHITECTS

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500008

Quinn Evans/ Architects Project No. 85218

(19)

WEST ELEVATION

QUINN EVANS ARCHITECTS

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co Contract No. 52500008

Quinn Evans/ Architects Project No. 95219

20

SOUTH ELEVATION

QUINN EVANS ARCHITECTS

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co Contract No 52500006

Quinn Evans/ Architects Project No 852.18

(21)

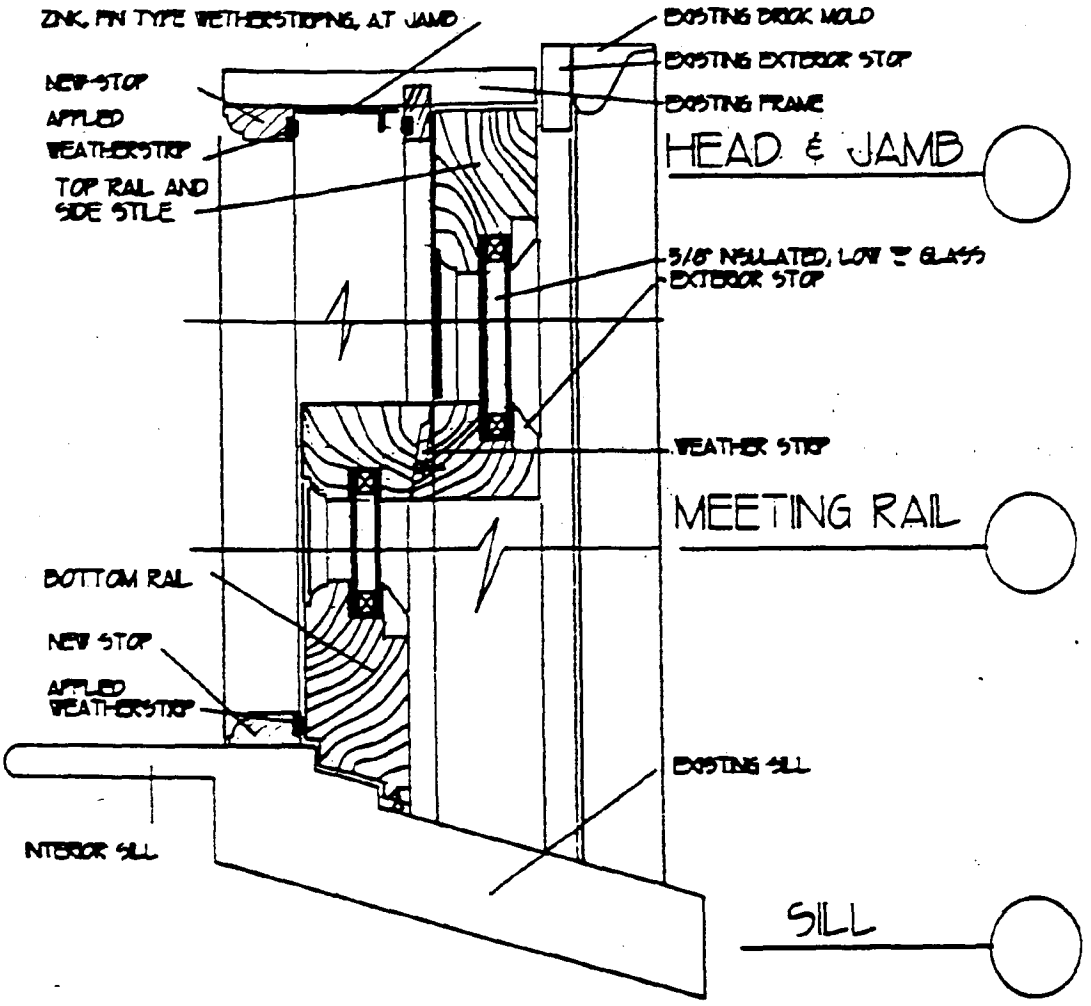
EAST ELEVATION

STRATHMORE HALL

WINDOW REHABILITATION

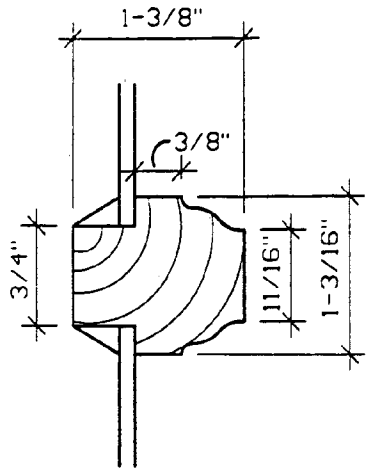
Rockville, MD

(22)

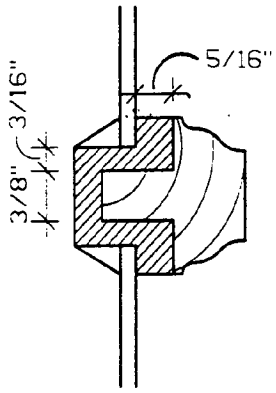


Concept Details for Re-Glazing 1-3/8" Existing Sash
with 7/16" Insulating Glass

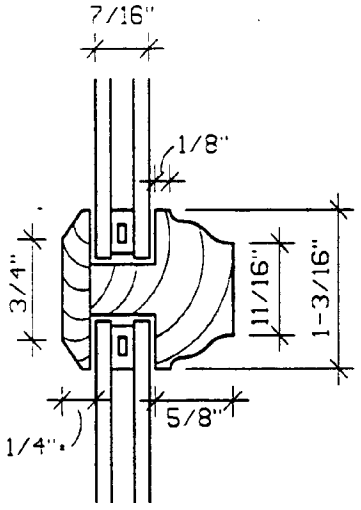
REPLACEMENT SASH DETAILS NO SCALE	STRATHMORE HALL	QUINN EVANS ARCHITECTS



Existing Muntin Bar
(Typical)



Modifications to Muntin
(hatched area will
be removed)



Re-Configured Muntin Bar
with Insulated Glazing

WINDOW MUNTIN PROFILES NO SCALE	STRATHMORE HALL	QUINN EVANS ARCHITECTS

Photo #1: Interior view of music room. 8/12 Faux-finish double-hung sash are at lower level. 8x8 casement sash are at upper level.

Photo #2: Exterior view of sash at Music Room.

Photo #3: Example of interior faux-finish at French doors in Music Room. Double hung sash at lower level have a similar Faux-finish.

Photo #4: Exterior view of sash at Library. Window No.s 212 and 213.

Photo #5: Exterior view of sash at Gallery (Rm. 110).

Photo #6: Detail view of jamb width for double-hung sash at first floor Gallery and Library. Window No.s 105 through 108.

Photo #7: Exterior view of sash at second floor Gallery (Sash No.s 212, 213). Note narrow muntins (Type 3) at this sash.

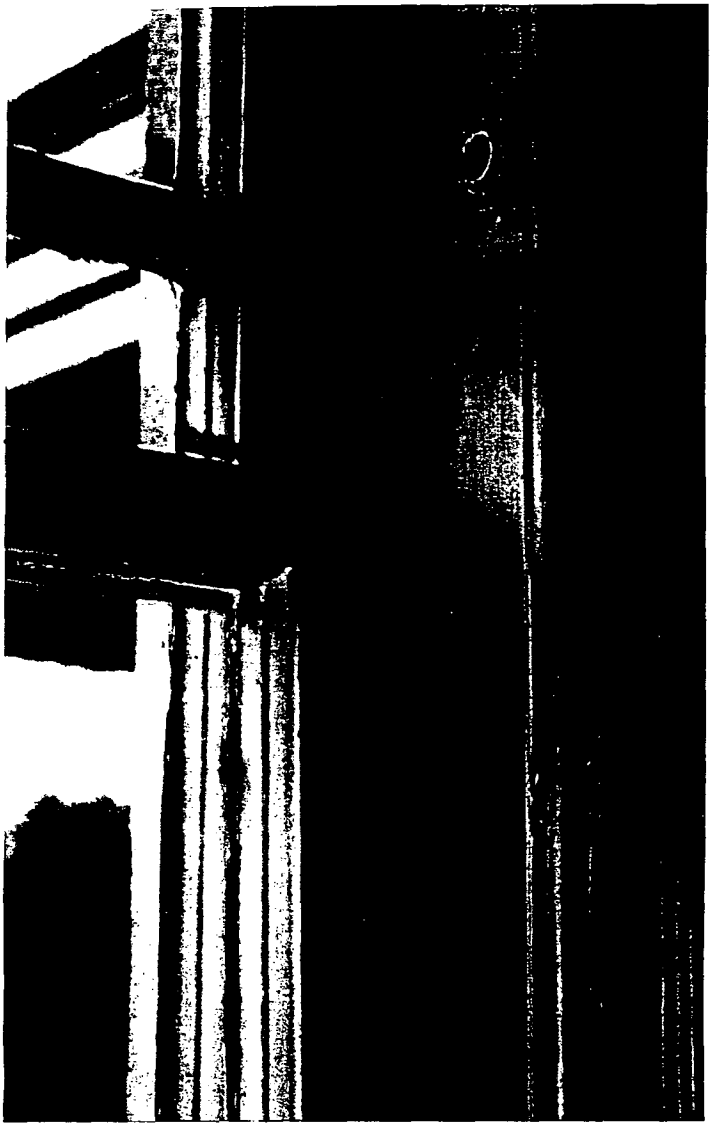


Photo #8: Detail view of loose sash at jamb (object easily fits in gap). This is a typical condition for all narrow-muntin sash at Strathmore Hall. See Photo #7 for exterior view of sash.

Photo #9: Detail view of exterior casement sash at Music Room.
This sash opens onto the second floor hallway.
This historic sash will be restored (archived) in place.

Photo #10: Exterior view of sash at first floor Gallery and kitchen, and second floor offices. The sash at the kitchen and offices must remain operable.

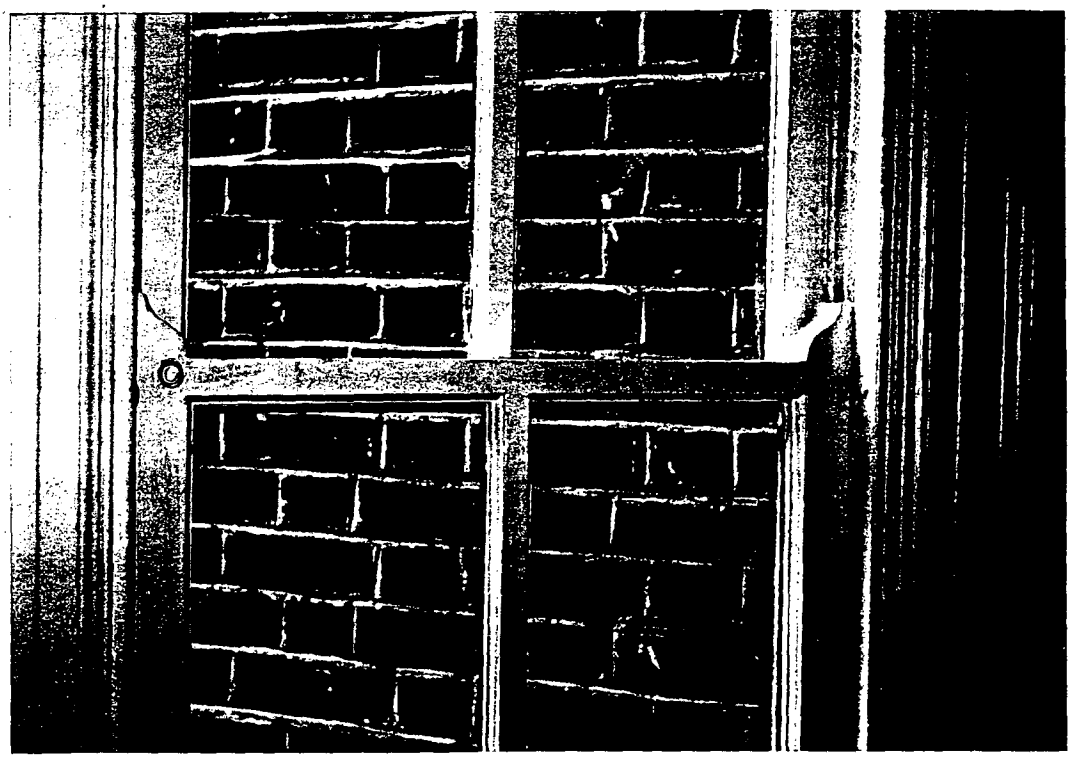


Photo #11: Interior detail view of meeting rail with tailpieces. Window No. 205.

Photo #12: Exterior view of sun room window No.s 121 and 122. These sash will be restored and will receive exterior wood-framed storm glazing.

Photo #13: Detail view of window and door jambs at sun room. Exterior window mullions are already detailed (rabbeted) to receive exterior storm sash.

Photo #14: Exterior view of south entrance door No.s 109B. These doors will be replaced with new, double insulated French doors with egress hardware.

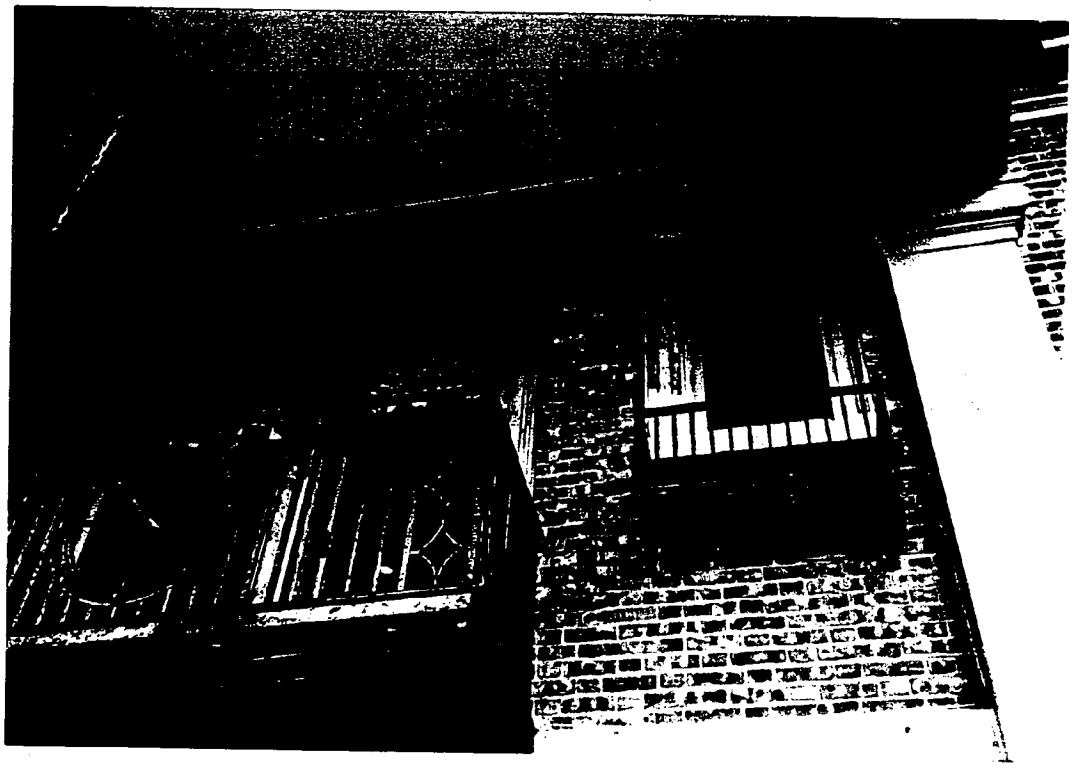


Photo #15: Exterior view of second floor French door No.s 259A. These doors will be replaced with true divided lite French doors.

HAWP APPLICATION: ADDRESSES OF ADJACENT & CONFRONTING PROPERTY OWNERS

Georgetown Preparatory School, Inc.
10900 Rockville Pike
North Bethesda, Maryland 20852

Grosvenor Park II Condominium
10500 Rockville Pike
North Bethesda, Maryland 20852

Washington Metro Area Transit Authority
Grosvenor Metro Station
600 5th Street, N.W.
Washington, D.C. 20001

Academy of the Holy Cross, Inc.
4920 Strathmore Avenue
Kensington, Maryland 20895

American Speech, Language, and Hearing Association
10801 Rockville Pike
North Bethesda, Maryland 20852

June 19, 1996

STRATHMORE HALL ADDITION AND RENOVATION
WINDOW REHABILITATION

REQUEST FOR HISTORIC AGENCY APPROVAL

Montgomery County
Contract No: 52500006

Project Contacts:

Mary K. Donahoe
Project Manager: Montgomery County
(301) 217-6124

Jeffrey C. Luker, Project Manager
David Coe, Preservation Architect
QUINN EVANS/ARCHITECTS
(202) 298-6700

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

TABLE OF CONTENTS

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

BACKGROUND, PROPOSED TREATMENT AND EVALUATION

PREPARED BY QUINN EVANS / ARCHITECTS

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

BACKGROUND

The existing windows at Strathmore Hall include a mix of double hung, casement and fixed sash in at least twenty-five unique sizes and configurations. The existing condition of the sash varies widely, from fully operable sash at the main level of the music room, to deteriorated and ill-fitting sash at the second floor gallery spaces.

Strathmore Hall Arts Center requests Historic Agency Approval for performance upgrades to the existing window units to support the evolving museum function and County mandated energy requirements. These upgrades include:

- Increased thermal performance
- Reduced air and water infiltration
- Control of ultraviolet light to protect artwork in the Galleries and documents in the Library
- Operable sash at the second floor office spaces
- Increased security at the first floor and basement levels
- Reduced yearly maintenance costs

At present, the approved construction documents indicate installation of one-piece interior storm panels at most of the existing sash. However, the Arts Center recognizes that the required window upgrades can be more fully addressed with more comprehensive approaches, including sash restoration with insulated glazing and replacement of improperly-sized units. The Arts Center is also aware of the increased costs of restoration and replacement and has raised the funds required to achieve a higher quality solution.

Note: This is a revision to an earlier proposed treatment submitted in May, 1996. This revised proposal responds to the Montgomery County and Maryland Historical Trust dictate that historic sash be retained.

PROPOSED TREATMENT

With this submittal, Quinn Evans/Architects requests that Maryland Historic Trust, and Montgomery County approve the proposed treatment. A more specific description of the treatment is included in the attached Detail Analysis.

1) Retain and restore in place the existing fan light windows and Palladian window groups. These units will be repaired, painted inside and out and fixed in place.
   - Windows No.s: 223; 224; 225; 227; 301; 302

2) Retain and restore in place the existing exterior French doors at the music room. The existing glass lights will be replaced with new safety glass, and the doors will be repaired and remain fully operable.
   - Door No.s: 101A; 101B

3) Replace the central, north and south entrance doors with new wood double glazed true divided light doors. These doors must be re-swung in order to comply with life safety codes. Profiles of the new doors will replicate existing door profiles. The new doors are to be set within the existing frames, and doors at the first floor level will incorporate new panic (egress) hardware.
   - Door No.s: 108-B; 109B; 259A

4) Retain and restore in place the outer pairs of north and south entrance doors with new double glazing incorporating the existing wood muntins (true divided lights). Existing interior profiles of the doors will be retained. Exterior wood glazing stops will be modified to accommodate the additional thickness of insulated glazing.
   - Door No.s: 108-A, C; 109-A, C

5) Rehabilitate the existing frame and restore the existing interior second story casement window in the Music room. This window will serve as an archive of the existing window configuration.
   - Window No.: 204

6) Rehabilitate the existing frames and replace the existing undersized double-hung sash at the second floor office and gallery spaces along the south elevation. New sash will match existing sash in overall configuration, but will incorporate different profiles to differentiate them from the restored sash elsewhere in Strathmore Hall. The new sash will incorporate true divided lights and insulated glazing.
   - Window No.s: 205 through 209; 212; 213; 214

7) Rehabilitate existing frames and restore existing sash with new double glazing incorporating the existing wood muntins (true divided lights). Existing interior profiles of the windows will be retained. New wood stops at the exterior face of muntins, rails and stiles will be beveled, creating a "putty line" similar to the existing window construction.
   - Window No.s: All sash not described in items 1 through 4.

EVALUATION

Relative to item seven (above), Quinn Evans/Architects has reviewed the pros and cons of several alternate approaches in a previous proposal dated May, 1996. These approaches included substantial sash replacement, exterior storm panels and interior storm panels. In conjunction with the Maryland Historical Trust and Montgomery County Historic Preservation Commission, Quinn Evans/Architects recommends sash restoration with insulated glazing to best meet the owner's long-term maintenance and functional requirements.

Sash Restoration with Insulated Glazing (Proposed Treatment)

Insulated glazing units would be incorparated into the existing true-divided-light windows. Existing muntins, rails and stiles will be modified to accept the thickness of the insulated glazing units. All interior profiles will be retained. New exterior wood stops will consist of Philippine Mahogany, and

will be beveled, creating a "putty line" similar to the existing window construction. Glazing units will incorporate Low-E coatings, and the glass will be tempered whenever windows are within 2'-0" of exterior doors. Upper sash of double-hung windows would be fixed in place, and all casement sash would be fixed in place.

Historic Fabric:

- Existing wood muntin, rail, and stile profiles will be retained. Existing window heads, jambs and sills will be restored.
- Note that an existing double-hung sash at the Music Room will be "archived" in place at the new fire stair enclosure. (Window # 104)
- Note that an existing casement sash is currently "archived" and will be restored in place at the second floor hallway. (Window # 204)

Pros:

- Increased thermal performance from creation of dead-air space and incorporation of Low-E coatings at double insulated lites
- Reduction of air and water infiltration with new weather-stripping at operable units.
- Reduction of UV light levels (84% reduction) with the use of Low-E coatings.
- Existing muntin, rails and stile profiles will be retained.
- First floor and basement level sash security improved with tamper-proof internal sash locking hardware.
- Operable sash can be provided to accommodate office and kitchen areas.
- Overall interior and exterior appearance of windows will remain unchanged.

Cons:

- Loss of original glass bedding surface to accommodate insulated glazing.

Cost:

- Total estimated project cost: $150,000

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

DETAILED ANALYSIS

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

DOUBLE-HUNG SASH AT MUSIC ROOM - FIRST FLOOR

Photos:

- #1: Interior view of music room.
- #2: Exterior view of sosh (lower level).
- #3: Example of interior faux-finish at sash (from French door)

Window No's:

101; 102; 103

Existing Conditions:

Description: Single glazed, 8/12 wood double hung sash with 2" wide rails and stiles, and 1-3/16" wide muntins. Glozing consists of modern, distortion free glass. Sash thickness is 1-3/8". Meeting roil and sill have metal weother-stripping. Jombs ore not weother-stripped. Interior finish of the frames is dork stained ook. Sash are faux-finish oak on interior surfaces. All exterior surfoces are pointed.

Condition: Lower rails of sosh exhibit open joints and water stoining. Interior faux-finish is flaking, exposing o white undercooting. Sosh are loose in their frames.

Comment: Thermal performance of these sash is poor due to the lack of storm sosh or insuloted gloss. Air infiltration rotes are high due to the lock of complete perimeter weother-stripping.

Recommended Treotment - Sosh Restoration with Insuloted Glazing:

Work: Incorporate insuloted glozing units into the existing true-divided-light windows. Existing muntins, roils and stiles will be modified to accept the thickness of the insuloted glozing units. All interior profiles will be retained, ond existing foux finish will receive a clear wax cooting. New exterior wood stops will consist of painted, Philippine Mahogany which will be beveled, creoting a "putty line" similor to the existing window construction. Upper sash would be fixed in place.

Impoct: Existing historic fabric will remain largely intact. Exterior and interior appeorance and sightlines of window will be unchanged. Thermal performance will be improved.

Drawing: Similar to Detail G5/A704, incorporating existing window components.

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

TYPICAL DOUBLE-HUNG SASH AT FIRST AND SECOND FLOOR

Photos:

- #4: Exterior view of sash at Library.
- #5: Exterior view of sash at Gallery (Rm. 110).
- #6: Detail view of jamb width.
- #10: Exterior view of sash (upper level).
- #11: Interior detail view of meeting rail with tailpieces.

Window No's:

105 thru 108; 110; 111; 112 thru 118; 215 thru 222

Existing Conditions:

Description: Single glazed, 4/6, 6/9, 8/8 and 8/12 wood double hung sash with 2" wide rails and stiles, and 1-3/16" wide muntins. Sash thickness is 1-3/8". Meeting rail and sill have metal weather-stripping. Jambs are not weather-stripped. Interior and exterior surfaces are painted.

Condition: Lower rails of sash exhibit open joints and water staining. Upper sash are generally painted shut. Sash are loose in their frames.

Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weather-stripping.

Recommended Treatment - Sash Restoration with Insulated Glazing:

Work: Incorporate insulated glazing units into the existing true-divided-light windows. Existing muntins, rails and stiles will be modified to accept the thickness of the insulated glazing units. All interior profiles will be retained. New exterior wood stops will consist of Philippine Mahogany which will be beveled, creating a "putty line" similar to the existing window construction. Upper sash will be fixed in place. Repaint exterior and interior of sash to match existing.

Impact: Existing historic fabric will remain largely intact. Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved.

Drawing: Similar to Detail G5/A704, incorporating existing window components.

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

DOUBLE-HUNG SASH (NARROW MUNTINS) AT GALLERY AND MEETING ROOM - SECOND FLOOR

Photos:

- #7: Exterior view of sash at Gallery (Rm. 103).
- #8: Detail view of loose sash at jamb (object easily fits in gap).

Window No's:

208; 209; 212; 213

Existing Conditions:

Description: Single glazed, 6/6 wood dauble hung sash with 1-3/4" wide rails and stiles, and 7/8" wide muntins. Glazing consists of modern, distortion free glass. Sash thickness is 1-3/8". Meeting rail and sill have metal weather-stripping. Jambs are not weather-stripped. Interior and exterior surfaces are painted.

Condition: Lower rails of sash exhibit open joints and water staining. Upper sash are generally painted shut. Sash are significantly undersized for the existing frames, allowing for removal without detachment of inside stops.

Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are extremely high due to the lack of complete perimeter weather-stripping and poor fit of lower sash. The presence of modern glazing suggests that these sash may not be original, since historic (distorted) glazing is present at windows elsewhere in Strathmore Hall. The poor fit of the sash also suggests that they may be replacement sash.

Recommended Treatment - Replacement Sash:

Work: Provide single-hung, double insulated, wood sash replacements with pulley-and-chain counterweights and full weather-stripping. Stile, rail and muntin widths to match existing sash. Muntin, rail and stile profiles will differ from the typical existing sash to allow differentiation of new and restored sash. Sash thickness to be 1-3/4". Retain existing window frames, jambs and stops. Rout sash perimeter to accommodate existing 1-1/2" width of jambs. Paint exterior and interior of new sash to match existing.

Impact: Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved. Operation of window will remain unaffected.

Drawing: Similar to Detail G5/A704

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

CASEMENT SASH AT MUSIC ROOM (SECOND FLOOR) and SUNROOM (FIRST FLOOR)

Photos:

- #2: Exterior view of sash at Music Room (upper level).
- #9: Detail view of exteriar sash from secand floor hallway.
- #12: Exterior view of sun room windows.
- #13: Detail view af windaw and daor jambs.

Window No's:

121; 122; 201; 202; 203; 204; 226 thru 228

Existing Conditions:

Descriptian: Single glazed, 8-lite and 12-lite casement sash with 2-1/2" wide rails and stiles, and 1-3/16" wide muntins. Sash thickness is 1-3/8". Meeting stiles (where present) are not weather-stripped. Tap and battom rails of aperable sash have metal weather-stripping. Interior and exteriar surfaces are painted.

Canditian: Lawer rails of sash exhibit minimal deterioratian. Most sash are painted shut.

Comment: Thermal performance of these sash is poar due ta the lack af starm sash ar insulated glass. Air infiltratian rates are high due to the lack af complete perimeter weather-stripping.

Recommended Treatment - Sash Restoration with Insulated Glazing:

Wark: Incorparate insulated glazing units into the existing true-divided-light casement sash. Existing muntins, rails and stiles will be madified to accept the thickness af the insulated glazing units. All interiar profiles will be retained. New exterior wood stops will consist of Philippine Mahogany which will be beveled, creating a "putty line" similar ta the existing windaw canstructian. Tempered glass will be installed as sunraom sash adjacent ta doors. Casement sash would be fixed in ploce. Repaint exterior and interiar of sash to match existing.

Impact: Existing historic fabric will remain largely intact. Exterior and interior appearance and sightlines af windaw will be unchanged. Thermal performance will be improved. Window will no longer be operable.

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

FRENCH DOORS AT FIRST AND SECOND LEVEL

Photos:

- #14: Exterior view of south entrance doors.
- #15: Exterior view of second floor French doors.
- #3: Detail of base of Music Room French doors.

Door No's:

101A & B; 109A, B & C; 108A, B & C; 259A

Existing Conditions:

Description: Single glazed, 10-by-10 wood paired French doors with 4" wide rails and stiles, and 1-3/16" wide muntins. French doors at portico (south elevation) are single-lite, without muntins. Door thickness is 1-3/8". Interior and exterior surfaces are painted. Music Room doors have 1-1/16" wide muntins, and have a faux-finish matching the oak door frames.

Condition: Lower rail of doors exhibits open joints and water staining. Several doors exhibit damaged lower rails at the concealed latches. Egress hardware at main entrances does not meet code.

Comment: Thermal performance of these doors is poor due to the lack of storm doors or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weather-stripping.

Recommended Treatments - Replacement Doors at First Floor Entrances and Second Floor Balcony; Restored Doors with Tempered Glass at Music Room.

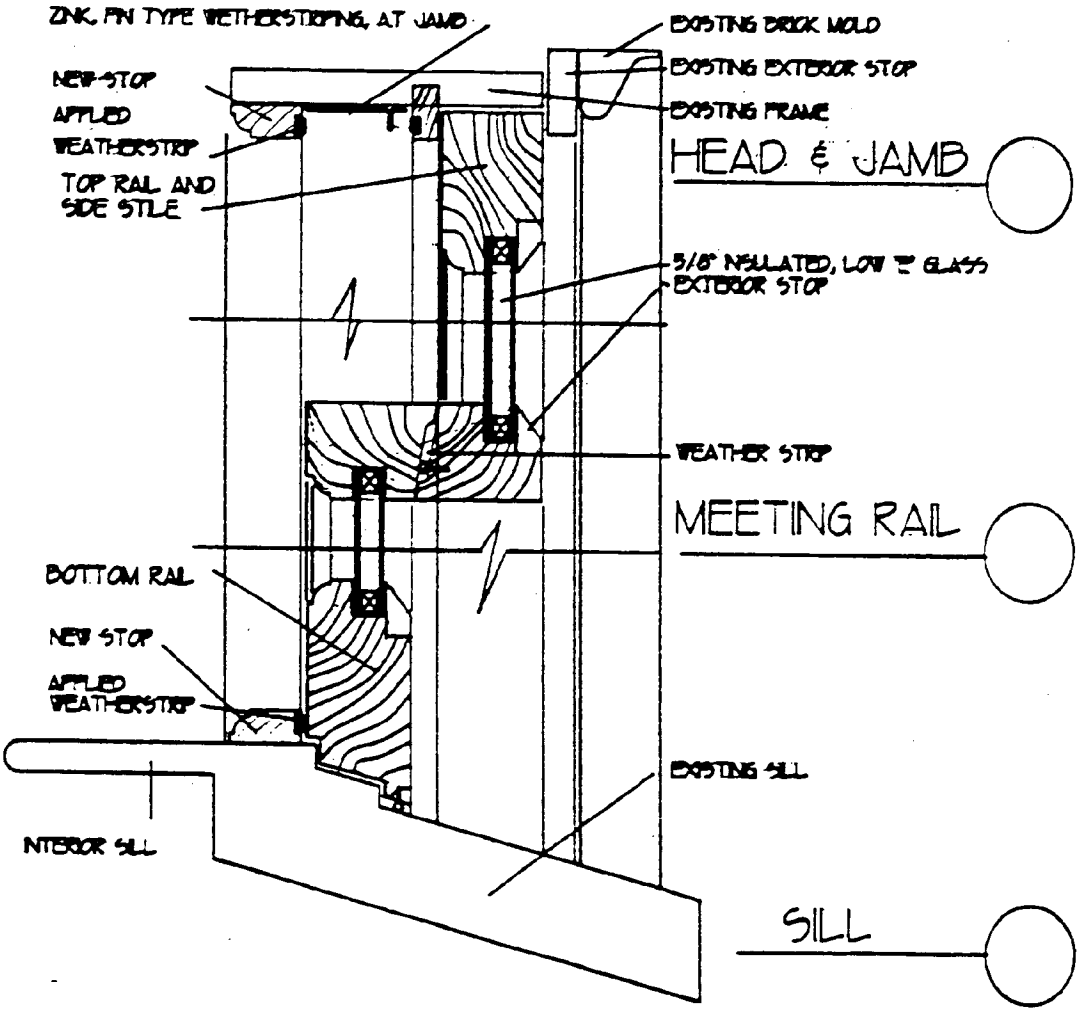
Work: Provide new, double insulated, tempered glass wood French door replacements at entrances. Stile, rail and muntin widths and profiles to replicate appearance of existing doors. Door thickness to be 1-3/4". Provide panic hardware at exit doorways. Retain existing door frames. Paint exterior and interior of new doors to match existing. Provide true divided-lite French doors at second floor portico. Restore existing French doors at Music Room and replace glazing with tempered glass (muntin bars are too narrow to accept insulated glazing units).

Impact: Exterior and interior appearance and sightlines of first floor doors will be unchanged. Second floor doors will be converted to divided-lite doors matching first floor doors. Thermal performance will be improved.

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

PLANS, ELEVATIONS and DETAILS

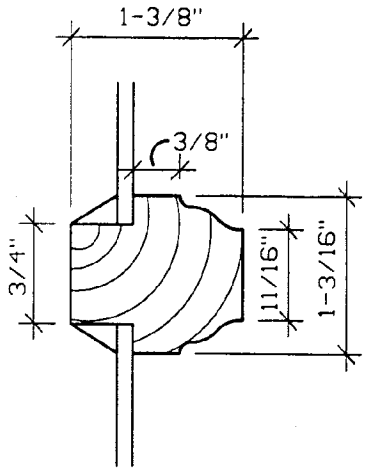
PREPARED BY QUINN EVANS / ARCHITECTS



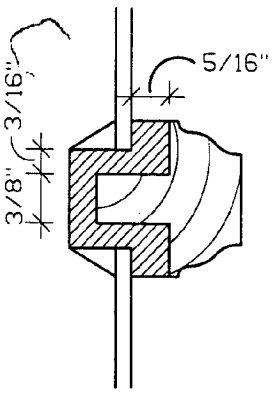
Concept Details for Re-Glazing 1-3/8" Existing Sash
with 7/16" Insulating Glass

APPROVED
Montgomery County
Historic Preservation Commission

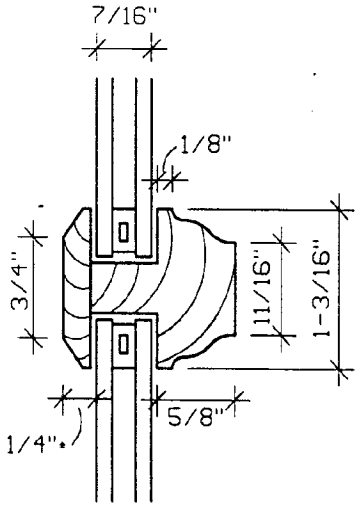
REPLACEMENT SASH DETAILS NO SCALE	STRATHMORE HALL	QUINN EVANS ARCHITECTS



Existing Muntin Bar
(Typical)



Modifications to Muntin
(hatched area will
be removed)



Re-Configured Muntin Bar
with Insulated Glazing

APPROVED
Montgomery County
Historic Preservation Commission

WINDOW MUNTIN PROFILES NO SCALE	STRATHMORE HALL	QUINN EVANS ARCHITECTS

STRATHMORE HALL

ADDITION AND RENOVATION

10701 ROCKVILLE PIKE
ROCKVILLE, MARYLAND 20852

OWNER

MONTGOMERY COUNTY
DEPARTMENT OF FACILITIES AND SERVICES
110 North Washington Street
Rockville, Marland 20850
(301)217-6110

ARCHITECT

QUINN EVANS/ARCHITECTS
1214 Twenty-Eighth Street, NW
Washington, DC 20007
(202)298-6700

OCCUPANT

STRATHMORE HALL ARTS CENTER
10701 Rockville Pike
Rockville, Maryland 20852
(301)530-0540

CIVIL/LANDSCAPE
A. MORTON THOMAS & ASSOC.
12750 Twinbrook Parkway
Rockville, MD 20852
(301)881-2545

STRUCTURAL
SHEMRO ENGINEERING ASSOC.
4823 Fairmont Ave., Suite A
Bethesda, MD 20814
(301)718-8113

MEP
BHARGAVA INTERNATIONAL, INC.
8289 Main Street, Suite 204
Ellicott City, MD 21043
(410)416-6320

LIGHTING
COVENTRY LIGHTING ASSOCIATES
1623 Wisconsin Avenue, NW
Washington, DC 20007
(202)298-8062

1. Briefly stated the Project includes but is not limited to the following:
   a) addition of a one hour rated fire stair tower at the South-West Elevation;
   b) addition of a three story wing with basement including: a second one hour rated fire stair tower, public restrooms, administrative offices, a retail shop, and a conference room at the South-East Elevation;
   c) comprehensive exterior renovation including reconfiguration of interior spaces, restored, cleaned and new finishes, HVAC systems upgrade, improved power services, new lighting, and new fire/security systems.
   d) site work to support the new additions and renovation.
2. The project is designed to conform with the following codes and standards:
   - BOCA National Building Code/1993
   - NEC 1993
   - 1994 NFPA 101
   - 1993 NFPA 13
   - MONTGOMERY COUNTY ENERGY DESIGN GUIDELINES
   - COMAR 05.02.02
   - ADA Accessibility Guidelines 1990 (effective 1995)
   - WSSC 1998
3. The predominate use group classification for Strathmore Hall is Use Group A-3: Assembly without a theatrical stage nor permanent seating (BOCA Section 301, pages 15-16). Incidental uses include Use Group B - Business including administrative offices, and museum shop retail. No separation between mixed use groups is provided nor anticipated, therefore, the most restrictive Use Group, A-3, governs (BOCA Section 313.0 page 25).
4. The existing Strathmore Hall is constructed of masonry bearing walls, wood joist floor/roofing structures, and a wood trussed roof structure. This qualifies as Construction Type 3B: non combustible exterior walls with combustible floor/roofing structures as defined in table 602 (BOCA Section 604 pages 60-61).
5. A Full Dry Pipe Automatic Fire Suppression System is provided throughout the Building, and the Proposed Additions. A new fire alarm system is provided throughout the Building and the Proposed Additions. Comprehensive smoke detection is included with the system.
6. Allowable Square Footage Analysis:

   Approximately 30 % of the building's frontage qualifies as "street frontage" resulting in an allowed Street Frontage Increase of 10% (2% x a/30-25); BOCA 506.0 pages 55-56).
   Given that Type 3B construction, an automatic sprinkler system and the allowed street frontage increase, BOCA allows the following height and area (BOCA 504, 504.2,504, 506.2,506.3 pages 53-57):

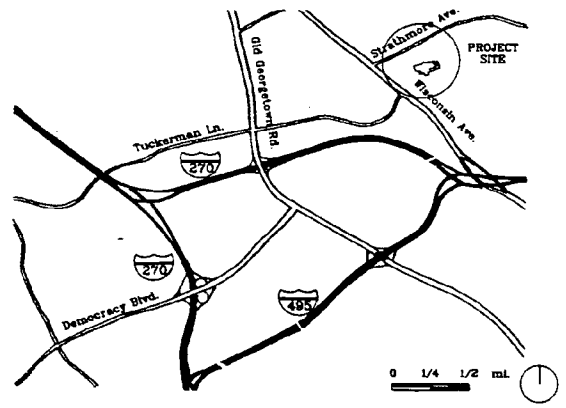
   - 2 story, 37' + 1 story 20' = 3 story, 57'
   - If building is considered a three story building then allowed area is reduced by 20% as follows (9,400 ' /3) = 5720 sf per floor
   - The street frontage increase adds 10% per floor to resulting in a total of 7342 sf allowed per floor.

   The First Floor of Strathmore Hall is the largest floor of the building. It has a gross area - including the Proposed Additions - of 6703 sf. This is well within the allowed square footage.
7. The adjacent spreadsheet titled AREA TABULATIONS/OCCUPANCY CALCULATIONS provides a summary of existing and proposed net sf areas and includes a calculation for the Occupant Load on a floor by floor basis.
8. Given the calculated Occupant loads, at least 3 exits are required at the First Floor, and 2 exits are required at the Second Floor (BOCA Table 1010.2, page 104).
9. Given the calculated Occupant Loads, egress for 620 persons is required at the first floor level. The proposed Project provides two new fire stairs located at the East and West ends of the building. Each stair is 44 inches wide providing additional egress capacity from the First Floor of 2*(44/.3) or 293 Occupants. This new capacity is in addition to exits from the Front Foyer Room (Door #1088, 53"wide/.15 = 353 occupants) and the Main Hall (Door #1089, 53"wide/.15 = 353 occupants) which have the capacity to provide egress 706 Occupants. Further there are additional doors exiting the first floor from the Kitchen and the Sun Porch (BOCA Table 1009.2, page 104). Ample egress from the first floor is provided in the proposed design.

   The project has been granted an exception to door leaf width requirements for doors #s 101E, 101C, 1088 and 1089. See Exception # E-98-59, and letter from the Montgomery County Fire Marshal dated 22 Feb. 1998.
10. Given the calculated Occupant Loads, egress for 287 persons is required from the second floor level. The proposed Project provides two new fire stairs located at the East and West ends of the building. Each stair is 44 inches wide providing a egress capacity from the Second Floor totalling 2*(44/.3) or 293 Occupants (BOCA Table 1009.2, page 104).
11. Since and automatic sprinkler system is provided throughout the building, the proposed 44 inch wide stairs may serve as part of the accessible means of egress from the Second Floor (BOCA 1007.5, Page 102).
12. The existing Grand Stair - Stair #1 - is a communicating space between the 1st and second floors. Smoke partitions or comprehensive smoke detection is required. This project includes provision of a new alarm system which includes comprehensive smoke detection.

AREA TABULATIONS/OCCUPANCY CALCULATIONS

Description	Program Areas (net sf)			Occupant Load	
	Area SF	Renovated SF	Exist'g SF	Factor	# Persons
BASEMENT					
Public Restrooms	368			walk-rated	16
Mechanical Rooms	458		100	300	0
Storage/Garage Areas			200	200	1
Storage/Garage Areas			928	200	3
Entry/Vestibule Area	368			200	3
Subtotal	1,194	0	1,228		
GROUND FLOOR					
Gift Shop Ware/Storage	348			200	1
Office Areas	1,147			100	5
Rec Rooms	264			0	
Hall	99		495	0	
Visual Arts Corridor/s					
Office/Work			768	100	8
Storage			57	300	0
Mech (Gas Meter Room)			452	300	1
Mech (Boiler Room)			550	300	2
Existing Office			708	100	8
Existing Apartment			455	200	2
Main Hall Space			530	100	5
Subtotal	1,858	0	3,515		
FIRST FLOOR					
Gallery		2284		7	326
Strathmore Artists Gallery		375		7	54
Meet/Gift Shop	449			40	7
Administrator's Office		89		100	1
A/C Access Pad Room		51		restroms	1
Rest Room/Recption		49		restroms	1
Fire Risers	264				
Music Room		195		7	192
Sun Porch		352		7	50
Food Preparation Area		428		100	4
Misc Storage		100		200	1
Hall	131	143		0	
Subtotal	844	4,066	0		
SECOND FLOOR					
Gallery		1398		7	0
Administrative Office		769		100	0
Performing Arts					
Coordinator's Office		147		100	0
Green Room		118		100	0
Fire Risers	264			0	
Project Room	369			7	61
Hall/Gallery	136	488		7	204
Restrooms		100		restrms	2
Subtotal	769	3,020	0		
Net SF	14781				



INDEX OF DRAWINGS

FILENAME: G001 DRAWN BY: CHKD. BY:

QUINN EVANS
ARCHITECTS
1214 Twenty-Eighth St., NW
Washington, DC 20007
(202) 298-6700

STRATHMORE HALL
ADDITION AND RENOVATION
Rockville, MD

Montgomery Co. Contract No. 52500006

Quinn Evans/ Architects Project No. 95219

SHEET TITLE
PERMIT SET

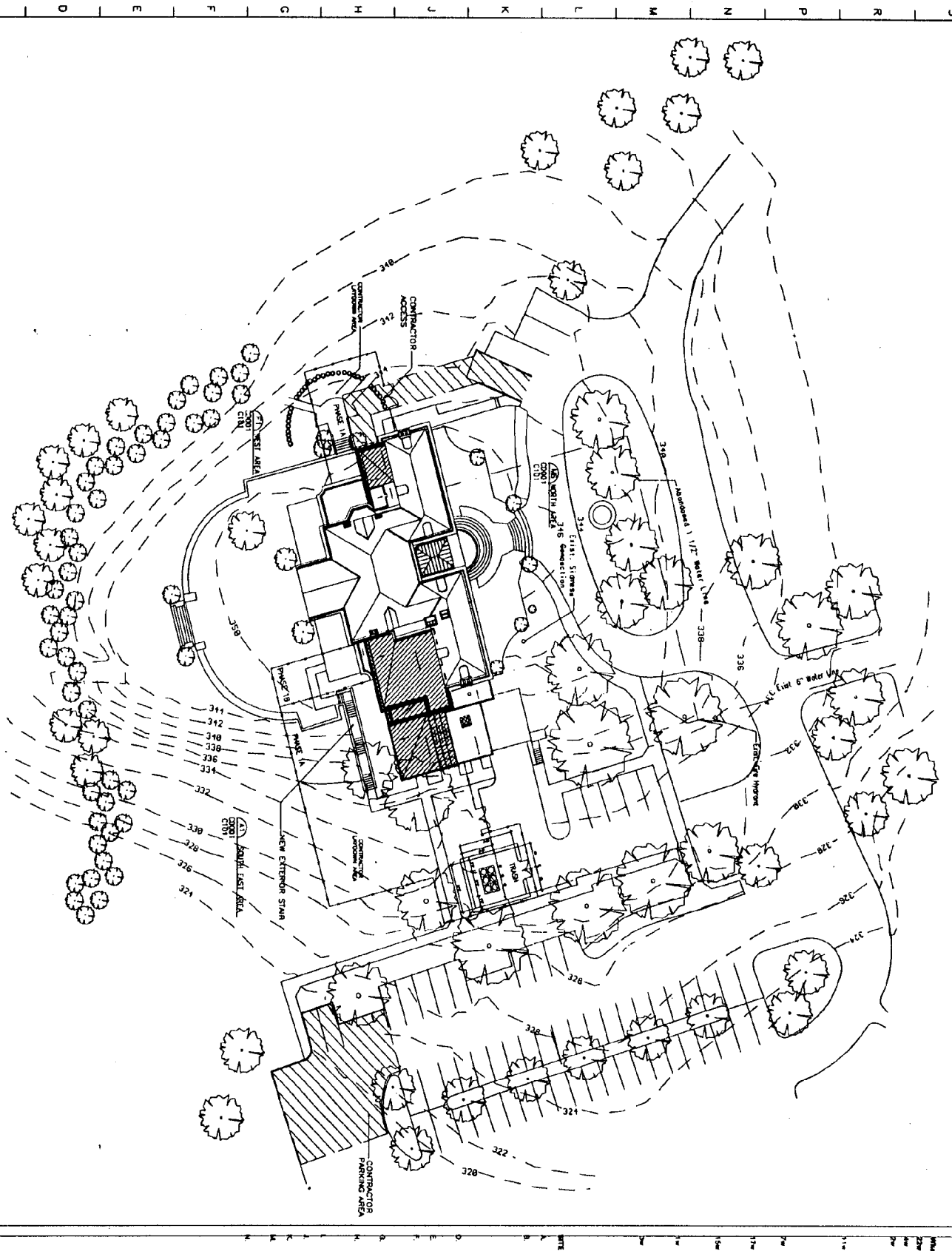
COVER SHEET

DATE
4 March 1998
REVISIONS:

SHEET NUMBER
G001

A1	CODE ANALYSIS	A12	VICINITY MAP
NO SCALE	REF	NO SCALE	

TO BE INCLUDED WITH WINDOW RENOVATION ADDENDUM



PHASING & SCHEDULE REQUIREMENTS

Who	Description	Initiated	Complete
2a	Phases I & I A: Additions	6-July-96	6-June-96
4a	Modification & Submissions	5-Aug-96	2-Sept-96
2a	Modification - Temp. Protection (inflation contingent on approved schedule and submissions)	19-Aug-96	2-Sept-96
1-a	Phase 1A: Additions except Gift Shop	2-Sep-96	15-Nov-96
	Additions except Gift Shop (inflation contingent on approved temporary protection and submissions)		
2a	Phase 1B: Additions including Gift Shop Area	18-Nov-96	31-Dec-96
17a	Phase 2: Renovation Occupants move off premises (except bldg manager)	6-Jan-97	30-Apr-97
15a	Contractor has full use premises	6-Jan-97	21-Apr-97
	Renovation & Substantially Complete	21-Apr-97	20-Apr-97
1a	Occupants return	21-Apr-97	20-Apr-97
	Project Complete	6-May-97	
2a	Hall partially booked (1/4/Sat/Sun)	12-May-96	2-Jun-97
	Hall fully booked	2-Jun-97	-

SITE PLAN CHECKLIST RESPONSE

A. See Vicinity Map on G001.

B. Property Address is:
STRATHMORE HALL
10701 Rockville Pike
Rockville Maryland 20852

Folio 63; Liber 6178; Parcel 58

D. See Vicinity Map on G001 for streets/highways serving the site.

E. See document 5a4.

F. Design has been developed in compliance with State of Maryland Historic Easement Requirements.

G. Lot coverage is existing. New construction adds 2165 SF of new building lot coverage.

H. Work is limited to new additions and new heating system enclosure. See G002, Site Plan.

I. N/A, sitework is limited.

J. N/A, sitework is limited.

K. N/A, sitework is limited.

M. Locations of water mains are existing, see G002, Site Plan.

N. Locations of the Siamese connection, and fire hydrants are existing, see G002, Site Plan.

GENERAL NOTES

The following general notes are provided to assist in working with this drawing. Some applicable notes may not be included below. See drawing G003 for the master key note list.

G - 1 The building is a significant historic structure. Only work which is specifically indicated herein shall be undertaken. No historic materials or building elements may be removed from the site without written permission of the Contracting Officer.

G - 2 During Phase 1, the Hall will be fully occupied during construction. Contractor operations shall be limited to the area indicated. The Contractor shall coordinate all operations so as to avoid interference with the Strathmore Hall bookings, and ongoing activities. The building occupants shall have unlimited access to the structure at all times. Portions of contractor vehicles and materials delivered are limited strictly to the staging areas indicated.

G - 3 The following WORDS & PHRASES are defined as follows:

G - 4 REMOVE: Dismantle and dispose of identified item unless otherwise noted.

REMOVE AND REINSTALL: Dismantle and store item, reinstall same item in the course of the work.

REPLACE: Dismantle and dispose of identified item. Provide new item identical to the removed item.

PROVIDE: Supply and install new item.

COMPLETE: 100% of the identified surface

PAINT: Prepare surface as specified (i.e. remove miscellaneous hardware, patch minor nicks and cracks, wash stains, etc.) and paint.

REPAIR: Cut and remove damaged portion of item identified and patch with new material which matches the removed item in material and profile.

SIMILAR: The referenced detail must be modified to meet the requirements of this specific location. Contractor is to submit revised detail sketch for review by Contracting Officer.

G - 5 Dimensions are taken from face of existing or finished surface unless otherwise indicated.

G - 6 All dimensions are approximate. Contractor is to verify all dimensions in the field concerning existing and new work before proceeding with either fabrication or installation of new work. Drawings may not be accurately scaled.

G - 7 The Contractor is to clear debris from all drains including but not limited to gutters, roof drains, downspouts and trench drains. Upon completion of work, contractor shall test all drains; confirm clear drain flow both before beginning and after completing work.

G - 8 The information contained herein may require adjustments and / or modifications to conform with existing conditions.

G - 9 The contractor shall notify the Contracting Officer if any discrepancy in existing conditions should prohibit execution of the illustrated design.

G - 10 The Contractor shall coordinate various items of all trades to assure proper installation and location. Contractor shall coordinate shop drawings. The contractor is responsible for verifying the suitability of all recommendations for installation.

G - 11 The Contractor shall be responsible for restoring and containing dust and debris generated from the demolition and construction and the disposal of such.

G - 12 Hazardous materials such as lead paint containing materials shall be disposed of properly and in accordance with all applicable laws and regulations.

G - 13 Contractor's staging shall not block building exits nor limit access to Fire Department connections.

G - 14 A site visit prior to bidding is mandatory. Coordinate visit with Montgomery County and Strathmore Hall.

G - 15 Where trench repair is indicated on an interior surface, the repaired wall or ceiling is to be painted complete.

G - 16 Typical brick coursing assumes 1/2" mortar joint.

G - 17 Brick coursing shown is for information purposes. Coursing for new work is to align with coursing of existing building. Verify all coursing and dimensions in the field.

G - 18 All existing doors to be removed may be retained or reused by Contractor and reinstalled by Architect.

G - 19 Demolition and new work to comply with Montgomery County Code and all applicable requires. Limit demolition to the areas associated with the project phases.

QUINN EVANS ARCHITECTS
1714 Franklin St., NW
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STRATHMORE HALL
ADDITION AND RENOVATION
Rockville, MD
Montgomery Co. Contract No. 52580008
Quinn Evans/ Architects Project No. 96219

SHEET MILE
PERMIT SET

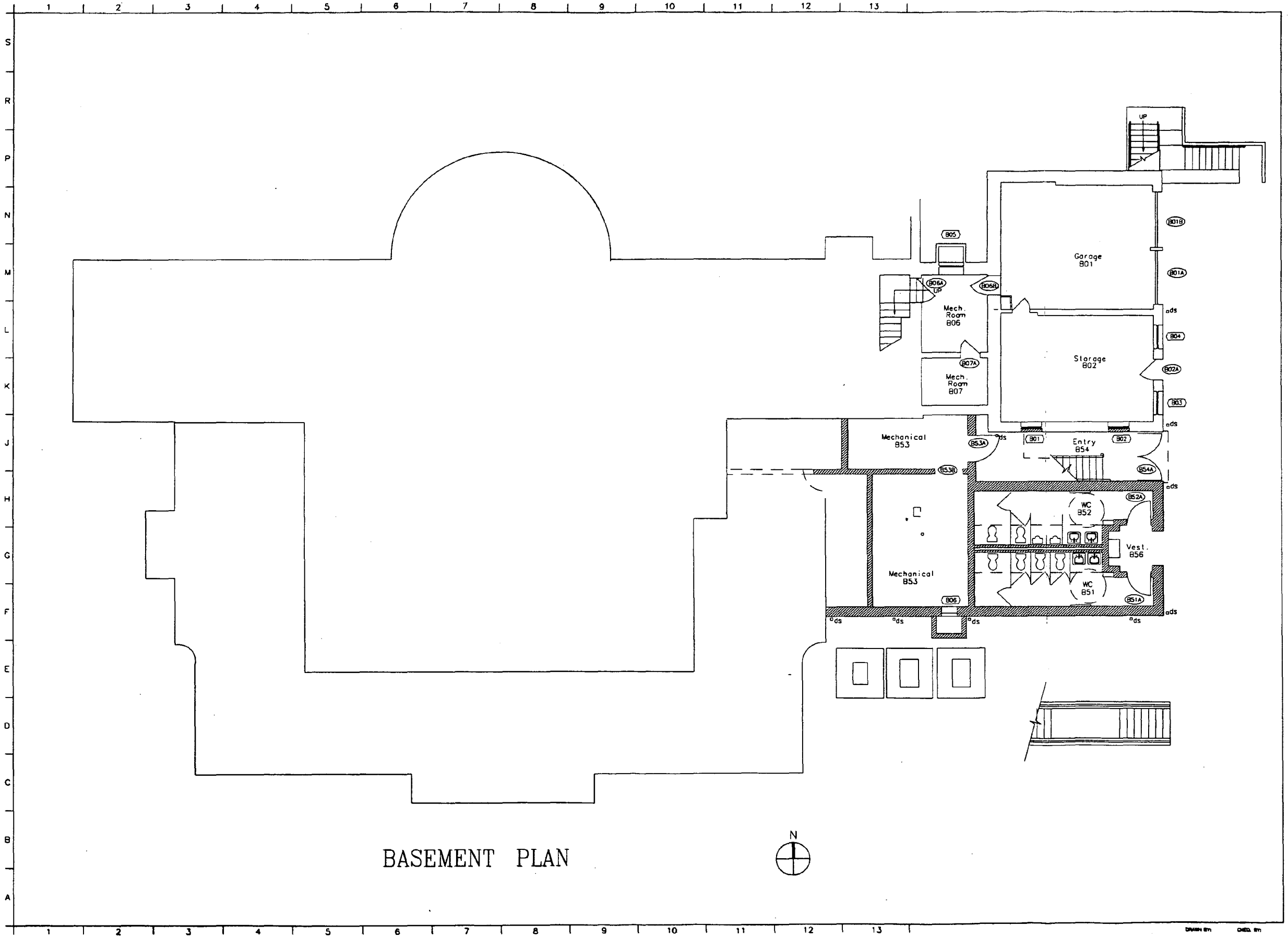
DATE
4 March 1998
REVISIONS:

SITE PLAN

SHEET NUMBER
G002

FILENAME: G002 DRAWN BY: CHKD. BY:

TO BE INCLUDED WITH WINDOW RENOVATION ADDENDUM



BASEMENT PLAN

N

QUINN EVANS ARCHITECTS

1214 Twenty-Eighth St., NW
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(202) 298-6700

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co.
Contract No.
52500008

Quinn Evans/
Architects
Project No.
95219

SHEET TITLE

DATE

REVISIONS:

SHEET NUMBER

DRAWN BY:

CHKD. BY:

GROUND FLOOR PLAN

N

QUINN EVANS ARCHITECTS

1314 Twenty-Eighth St., NW
Washington, DC 20007
(202) 298-6700

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co.
Contract No.
52500006

Quinn Evans/
Architects
Project No.
96219

SHEET TITLE

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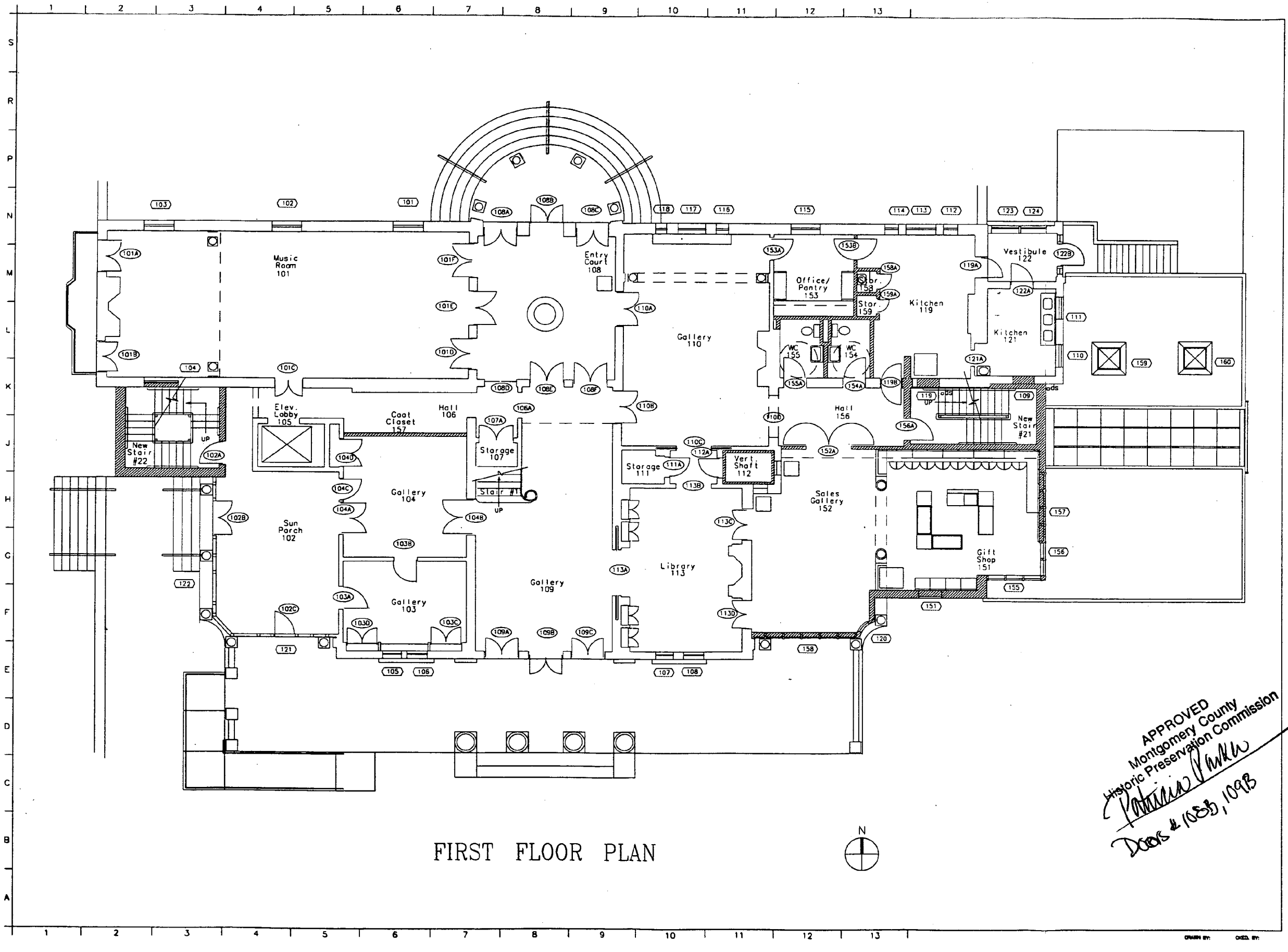


FIRST FLOOR PLAN

APPROVED
Montgomery County
Historic Preservation Commission
Doors # 108B, 109B

QUINN EVANS ARCHITECTS

1314 Twenty-Eight St., NW
Washington, DC 20007
(202) 298-6700

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500006

Quinn Evans/ Architects Project No. 95219

SHEET TITLE

DATE

REVISIONS:

SHEET NUMBER

DRAWN BY: CKED. BY:

SECOND FLOOR PLAN

N

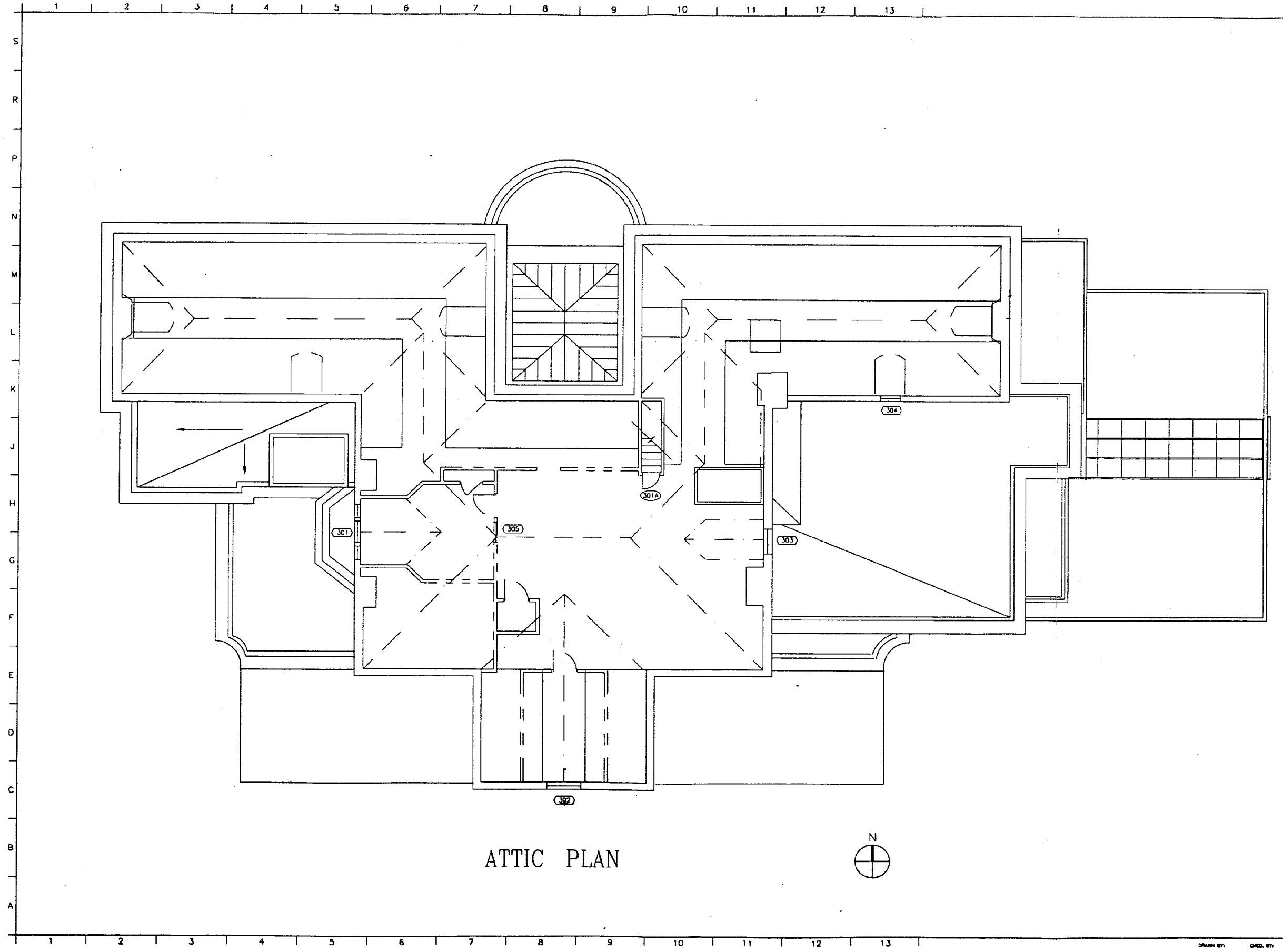
APPROVED
Montgomery County
Historic Preservation Commission
Historic Area Work Permit
Date 2/13/24

STRATHMORE HALL
WINDOW REHABILITATION
Rockville, MD

Montgomery Co.
Contract No.
525000006

Quinn Evans Architects
Project No.
96219

ARCHITECTS
QUINN EVANS



ATTIC PLAN

QUINN EVANS ARCHITECTS

1214 Fourth-Eighth St., NW
Washington, DC 20007
(202) 298-6700

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500006

Quinn Evans/ Architects Project No. 95219

SHEET TITLE

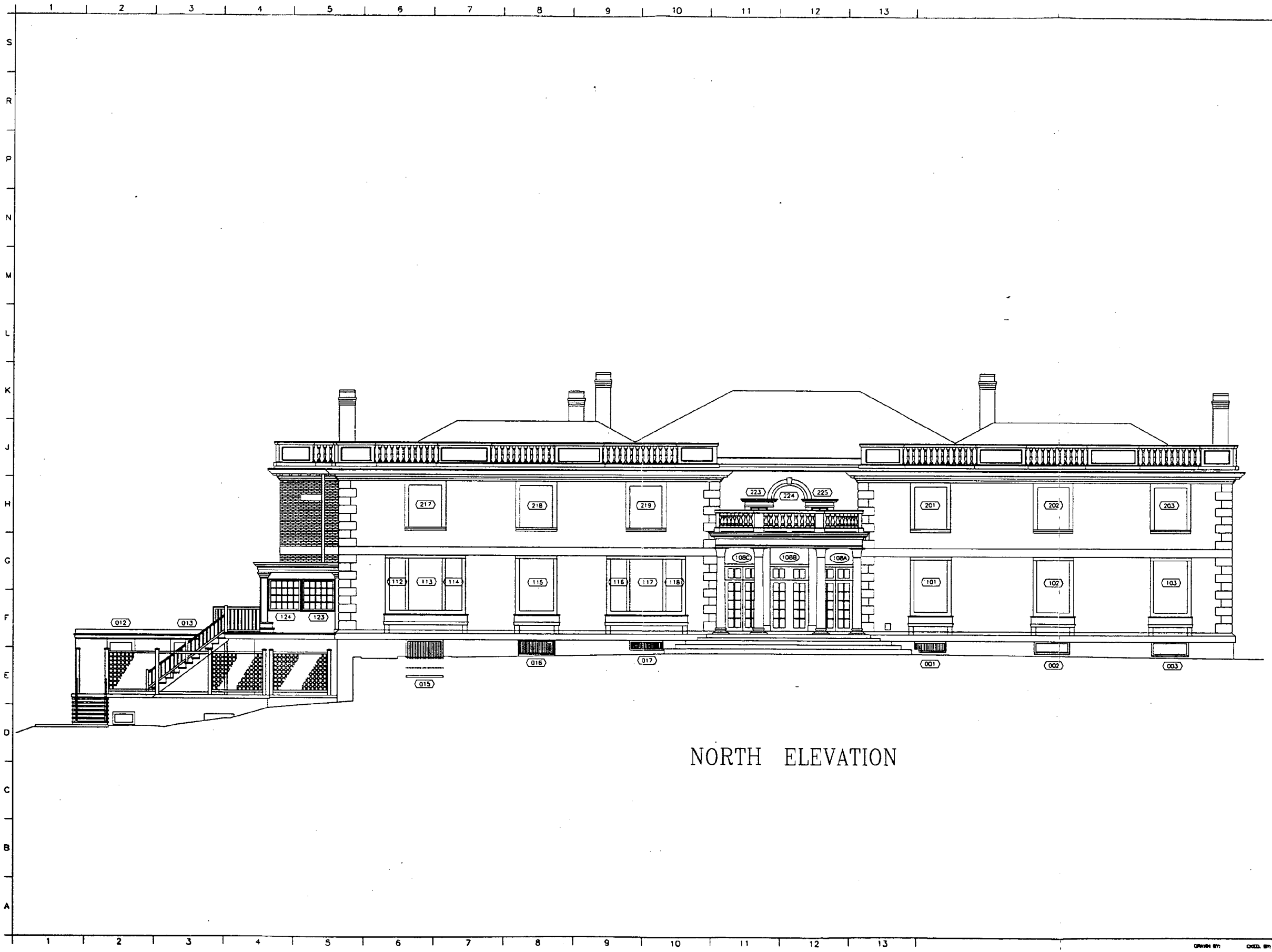
DATE

REVISIONS:

SHEET NUMBER

DRAWN BY

CHKD. BY



NORTH ELEVATION

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Washington, DC 20007
(202) 298-6700

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500006

Quinn Evans/ Architects Project No. 95219

SHEET TITLE

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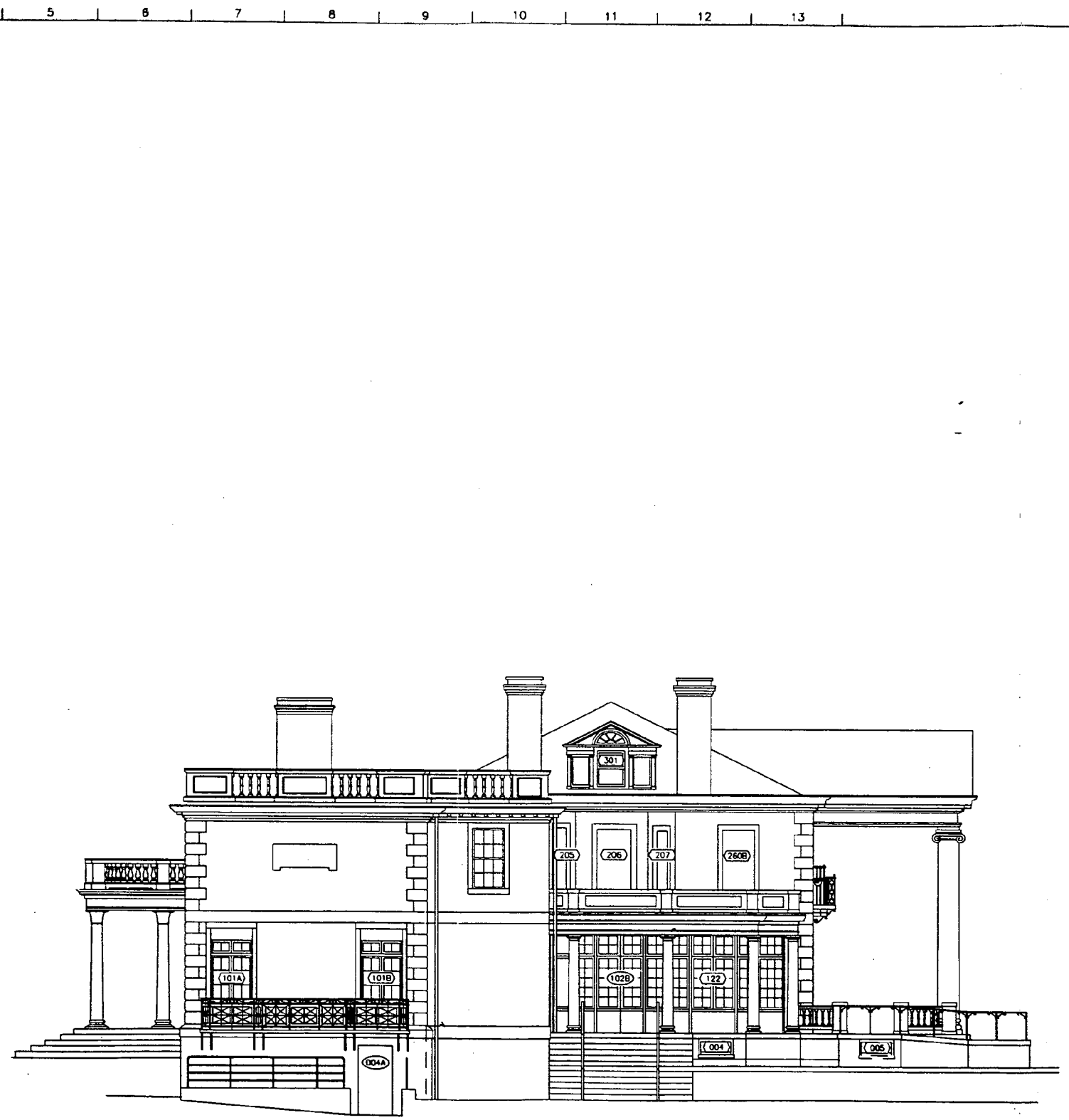

WEST ELEVATION

QUINN EVANS

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1214 Twenty-Eighth St., NW
Washington, DC 20007
(202) 298-5700

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500006

Quinn Evans/ Architects Project No. 95219

SHEET TITLE

DATE

REVISIONS:

SHEET NUMBER

DRAWN BY:

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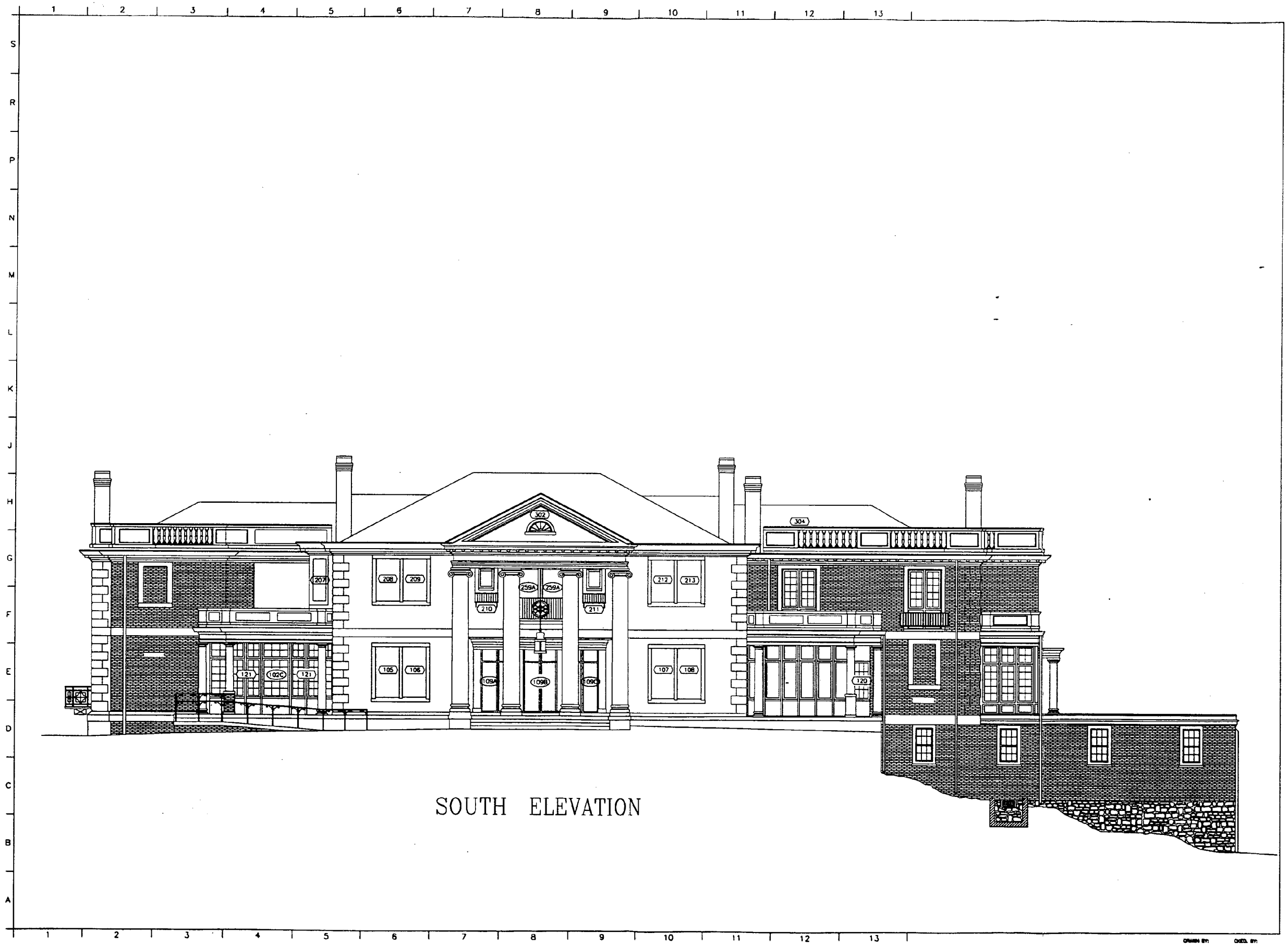

SOUTH ELEVATION

QUINN EVANS
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1216 Twenty-Eighth St., NW
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STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500006

Quinn Evans/ Architects Project No. 95219

SHEET TITLE

DATE

REVISIONS:

SHEET NUMBER

DRAWN BY:

CHKD. BY:

EAST ELEVATION

QUINN EVANS

ARCHITECTS

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STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co.
Contract No.
52500006

Quinn Evans/
Architects
Project No.
95219

SHEET TITLE

DATE

REVISIONS:

SHEET NUMBER

DRAWN BY:

CHKD. BY:

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

PHOTOGRAPHS

Photo #1: Interior view of music room. 8/12 Faux-finish double-hung sash are at lower level. 8x8 casement sash are at upper level.

Photo #2: Exterior view of sash at Music Room.

Photo #3: Example of interior faux-finish at French doors in Music Room. Double hung sash at lower level have a similar Faux-finish.

Photo #4: Exterior view of sash at Library. Window No.s 212 and 213.

Photo #5: Exterior view of sash at Gallery (Rm. 110).

Photo #6: Detail view of jamb width for double-hung sash at first floor Gallery and Library. Window No.s 105 through 108.

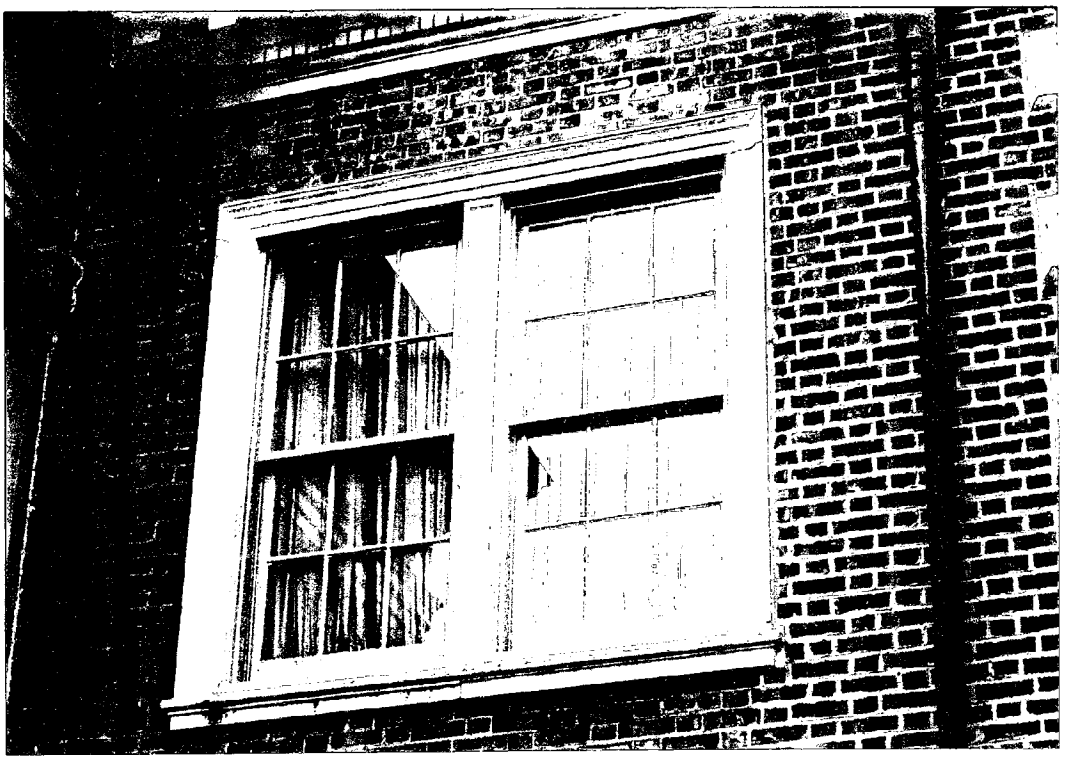

Photo #7: Exterior view of sash at second floor Gallery (Sash No.s 212, 213). Note narrow muntins (Type 3) at this sash.

Photo #8: Detail view of loose sash at jamb (object easily fits in gap). This is a typical condition for all narrow-muntin sash at Strathmore Hall. See Photo #7 for exterior view of sash.

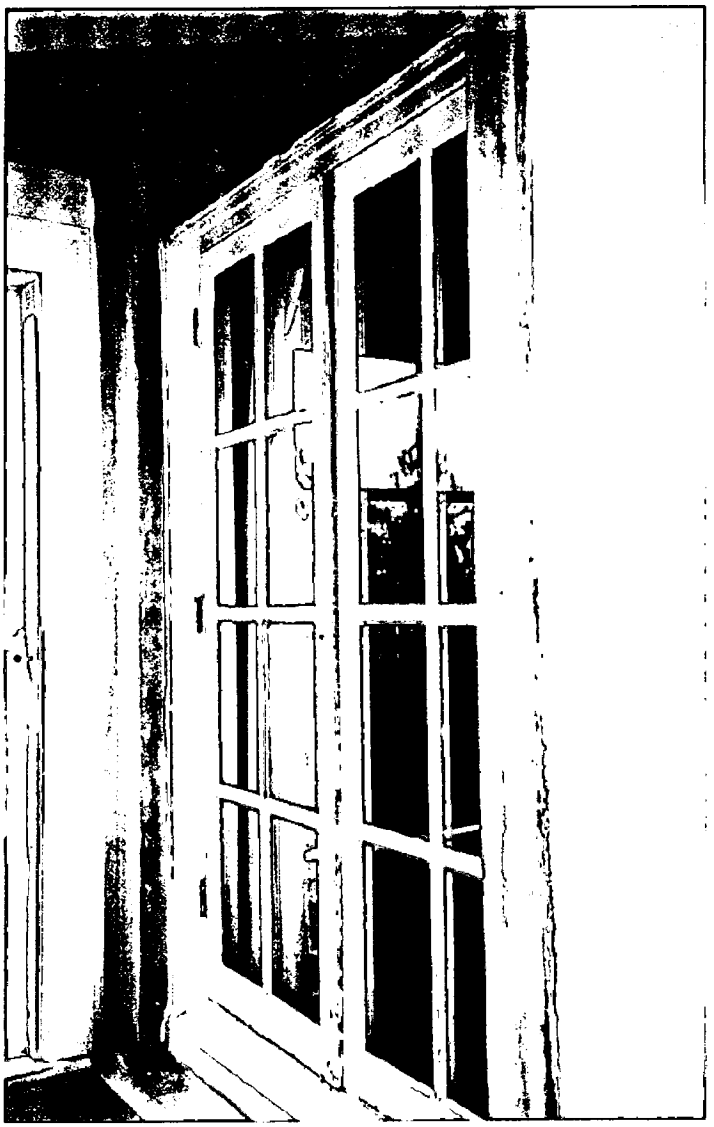

Photo #9: Detail view of exterior casement sash at Music Room.
This sash opens onto the second floor hallway.
This historic sash will be restored (archived) in place.

Photo #10: Exterior view of sash at first floor Gallery and kitchen, and second floor offices. The sash at the kitchen and offices must remain operable.

Photo #11: Interior detail view of meeting rail with tailpieces. Window No. 205.

Photo #12: Exterior view of sun room window No.s 121 and 122. These sash will be restored and will receive exterior wood-framed storm glazing.

Photo #13: Detail view of window and door jambs at sun room. Exterior window mullions are already detailed (rabbeted) to receive exterior storm sash.

Photo #14: Exterior view of south entrance door No.s 109B. These doors will be replaced with new, double insulated French doors with egress hardware.

Photo #15: Exterior view of second floor French door No.s 259A. These doors will be replaced with true divided lite French doors.

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

ADDRESSES OF ADJACENT AND CONFRONTING PROPERTY OWNERS

HAWP APPLICATION: ADDRESSES OF ADJACENT & CONFRONTING PROPERTY OWNERS

Georgetown Preparatory School, Inc.
10900 Rockville Pike
North Bethesda, Maryland 20852

Grosvenor Park II Condominium
10500 Rockville Pike
North Bethesda, Maryland 20852

Washington Metro Area Transit Authority
Grosvenor Metro Station
600 5th Street, N.W.
Washington, D.C. 20001

Academy of the Holy Cross, Inc.
4920 Strathmore Avenue
Kensington, Maryland 20895

American Speech, Language, and Hearing Association
10801 Rockville Pike
North Bethesda, Maryland 20852

May 1996

STRATHMORE HALL ADDITION AND RENOVATION
WINDOW REHABILITATION

REQUEST FOR HISTORIC AGENCY APPROVAL

Montgomery County
Contract No: 52500006

Project Contacts: Mary K Donahoe
Project Manager: Montgomery County
(301) 217-6124

→ Jeffrey C. Luker, Project Manager
David Coe, Preservation Architect
QUINN EVANS/ARCHITECTS
(202) 298-6700

QUINN EVANS/ARCHITECTS

1214 Twenty-Eighth Street, N.W.
Washington, DC 20007
(202) 298-6700
FAX: (202) 298-6666

RECORD OF TRANSMITTAL

DATE: 5/22/96	JOB NO. 95219
Time:	
ATTENTION: Gwen Marcus	
FROM: Jeffrey C, Luker, AIA	
RE: STRATHMORE HALL WINDOW REHABILITATION	

TO Maryland NCPPC
Historic Preservation Department
8787 Georgia Avenue
Silver Spring, MD 20910

WE ARE SENDING THIS VIA:

☐ FAX ☐ COURIER ☒ OVERNIGHT ☐ PRIORITY MAIL

Hard Copy to Follow: Total pages ____

ENCLOSED:

Copies	Date	No.	Description
1	5/22/96	1	Window Rehabilitation Proposal

THESE ARE TRANSMITTED as checked below:

☒ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval
☒ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints
☒ For review and comment ☐ _____
☐ For bids due ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS:

Gwen: Here is the Strathmore Hall Window Reabilitation Proposal for your review.

Gwen, Will call on Thursday
Cordially,

SIGNED: Jeff

If enclosures are not as noted, kindly notify us at once.

STRATHMORE HALL
WINDOW REHABILITATION
May, 1996

TABLE OF CONTENTS

STRATHMORE HALL
WINDOW REHABILITATION
May, 1996

BACKGROUND, PROPOSED TREATMENT AND EVALUATION

PREPARED BY QUINN EVANS / ARCHITECTS

STRATHMORE HALL
WINDOW REHABILITATION
May, 1996

BACKGROUND

The existing windows at Strathmore Hall include a mix of double hung, casement and fixed sash in at least twenty-five unique sizes and configurations. In addition, the sash are built of three major types of muntin profiles. The existing condition of the sash varies widely, from relatively new units in the northeast kitchen wing, to deteriorated and ill-fitting sash at the second floor gallery spaces.

Strathmore Hall Arts Center requests Historic Agency Approval for performance upgrades to the existing window units to support the evolving museum function and County mandated energy requirements. These upgrades include:

- Increased thermal performance
- Reduced air and water infiltration
- Control of ultraviolet light to protect artwork in the Galleries and documents in the Library
- Operable sash at the second floor office spaces
- Increased security at the first floor and basement levels
- Reduced yearly maintenance costs

At present, the construction documents indicate installation of one-piece interior storm panel at most of the existing sash. However, the Arts Center recognizes that the required window upgrades can be more fully addressed with more comprehensive approaches, including renovation and replacement of the windows. The Arts Center is also aware of the increased costs of renovation and replacement and has raised the funds required to achieve a higher quality solution.

PROPOSED TREATMENT

With this submittal, Quinn Evans/Architects requests that Maryland Historic Trust, and Montgomery County approve the proposed treatment. A more specific description of the treatment is included in the attached Detail Analysis.

1) Retain and rehabilitate in place the existing fan light windows. These units will be repaired, painted inside and out and fixed in place.
   - Windows No.s: 224; 227; 301; 302

2) Retain existing sunporch windows complete. Repair, paint and provide new exterior wood storm windows. Where required by code, existing glass lights will be replaced with new safety glass.
   - Window No.s: 121; 122

3) Replace all sets of existing wood and glass divided light doors with new wood double glazed true divided light doors. Profile of the new doors is to exactly replicate that of the existing doors. The new doors are to be set within the existing frames.
   - Door No.s: 101-A, B; 108-A, B, C; 109-A, B, C; 259-A

4) Rehabilitate the existing frames and replace the existing sash with new fixed double glazed sash at the second story casement windows in the Music room. The new sash are to be set within the existing frames and are to include true divided lights. Profiles will accurately replicate the profiles of the existing sash.
   - Window No.s: 201; 202; 203; 226; 227; 228.

5) Rehabilitate the existing frames and replace the existing sash with new double glazed sash at all double hung windows. The new sash are to be set within the existing frames and are to include true divided lights. Profiles will accurately replicate the profiles of the existing sash.
   - Window No.s: All sash not described in items 1 through 4.

EVALUATION

Relative to items three through five (above), Quinn Evans/Architects has reviewed the pros and cons of three alternate approaches. Each approach achieves, to varying degrees, the functions necessary to the evolving museum program at Strathmore Hall. These approaches include substantial sash replacement, exterior storm panels and interior storm panels. Quinn Evans/Architects recommends substantial sash replacement to best meet the owner's long-term maintenance and functional requirements. These three approaches are presented in order of decreasing performance.

1. Substantial Sash Replacement (Proposed Treatment)

Replacement sash would consist of Philippine Mahogany rails and stiles with true divided lites. Lites would be double insulated with internal UV filter. Sash thickness would be 1-3/4" . The existing 1-1/2" guides in the frame for the lower sash would be modified by reducing the width of the interior stop. Upper sash would be routed to accommodate the existing frame configuration. New sash would be painted to match existing. Upper sash of double-hung windows would be fixed in place, and all casement sash would be fixed in place.

Historic Fabric:
- Note that an existing double-hung sash at the Music Room will be "archived" in place at the new fire stair enclosure. (Window # 104)
- Note that an existing casement sash is currently "archived" and will be restored in place at the second floor hallway. (Window # 204)

Pros:
- Increased thermal performance from creation of dead-air space at double insulated lites
- Reduction of air and water infiltration with new weatherstripping at operable units.
- Reduction of UV light levels with the use of internal UV absorbing film
- Maximum life span and lowest maintenance achieved through use of decay resistant wood (Philippine mahogany)
- 1-1/4" muntin profiles will be replicated

- First floor and basement level sash security improved with tamper-proof internal sash locking hardware.
- Operable sash can be provided to accommodate office and kitchen areas
- Overall interior and exterior appearance of windows will remain unchanged
- Maintenance (cleaning) of window units can be accomplished from the interior

Cons:

- Loss of original sash material at replaced units

Cost:

- Approximately $1,650 per sash, installed. Total estimated project cost: $135,000

2. Exterior Storm Panel

Exterior storm panel would consist of tempered glass panels with narrow metal frames. Frames would be installed at face of exterior wood stops and painted to match wood frame. All existing wood sash would be repaired, and weatherstripping would be installed at sash scheduled to remain operable. All remaining sash would be fixed in place. UV absorbing film would be adhered to interior face of sash lites.

Pros:

- Increased thermal performance from creation of dead-air space between sash and storm panel.
- Reduction of air and water infiltration with additional perimeter seals of storm panel
- Increased life expectancy of existing wood sash
- Reduction of UV light levels with the use of applied UV film
- Life span of storm panels is maximized through the use of tempered glass
- Increased security at first floor and basement level windows

Cons:

- Maintenance (cleaning) of window units requires exterior access for removal and reinstallation of storm panels
- Majority of repaired wood sash will become non-functional (fixed in place), making repair costs difficult to justify
- Operable windows at second floor offices require projecting hardware for base of storm panels
- Inconsistent exterior appearance of building wherever storm sash is projected or removed to accommodate operable sash
- Replacement of interior UV film is difficult, and risks damage to wood sash (UV film requires replacement approximately every five years due to scratches or failure of adhesive)
- Application of surface mounted storm panel security hardware (at first floor and basement spaces) to existing wood frames will alter exterior appearance of windows.

Cost:

- Approximately $1,250 per sash, installed. Total estimated project cost: $105,000

3. Interior Storm Panel

The Construction Documents indicate installation of an interior mounted, metal framed Plexiglas sheet with magnetic and neoprene seals. The existing single-glazed wood sash would be repainted. Upper sash of double-hung windows would be fixed in place, and all casement sash would be fixed in place.

Pros:

- Increased thermal performance from creation of dead-air space between sash and storm panel.
- Reduction of air and water infiltration with additional perimeter seals of storm panel
- Reduction of UV light levels with the use of Plexiglas panel
- Lowest first cost, at approximately $70K.

Cons:

- Potential for increased condensation and deterioration at wood sash
- Reduced access to wood sash for routine maintenance
- Reduced operability of windows at second floor offices
- Plastic sheet material is easily scratched, reducing life of storm panels
- Application of aluminum angle with magnetic strip to face of interior wood stops will alter interior appearance of windows.
- Application of surface mounted storm panel security hardware (at first floor and basement spaces) to existing wood frames will alter interior appearance of windows.

Cost:

- Approximately $850 per sash, installed. Total estimated project cost: $70,000

STRATHMORE HALL
WINDOW REHABILITATION
May, 1996

DETAILED ANALYSIS

PREPARED BY QUINN EVANS / ARCHITECTS

STRATHMORE HALL
WINDOW REHABILITATION
May, 1996

DOUBLE-HUNG SASH (WIDE MUNTINS) AT MUSIC ROOM - FIRST FLOOR

Photos:

- #1: Interior view of music room.
- #2: Exterior view of sash (lower level).
- #3: Example of interior faux-finish at sash (from French door)

Window No's:

101; 102; 103

Window Muntin Profile:

Type 2

Existing Conditions:

Description: Single glazed, 8/12 wood double hung sash with 2" wide rails and stiles, and 1-1/4" wide muntins. Glazing consists of modern, distortion free glass. Sash thickness is 1-1/2". Meeting rail and sill have metal weatherstripping. Jambs are not weatherstripped. Interior finish of the frames is dark stained oak. Sash are faux-finish oak on interior surfaces. All exterior surfaces are painted.

Condition: Lower rails of sash exhibit open joints and water staining. Interior faux-finish is flaking, exposing a white undercoating. Sash are loose in their frames.

Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weatherstripping. The presence of modern glazing is an indication of possible replacement sash since historic (distorted) glazing is present at windows elsewhere in Strathmore Hall.

Recommended Treatment - Replacement Sash:

Work: Provide single-hung, double insulated, 8/12 wood sash replacements with integral counterweights and full weatherstripping. Stile, rail and muntin widths and profiles to match existing sash. Sash thickness to be 1-3/4". Retain existing window frames, jambs and stops. Rout sash perimeter to accommodate existing 1-1/2" width of jambs. Paint exterior of new sash to match existing. Paint sash interior to match general color of adjacent woodwork (do not provide faux-finish).

Impact: Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved. Operation of window will remain unaffected.

Drawing: Similar to Detail G5/A704

Alternate 1 - Sash Repair with Exterior Storm Sash

Work: Provide single unit, top-hung, single-glazed, metal frame exterior storm panel with weatherstripping. Substantially repair interior window sash and provide perimeter weatherstripping at sash scheduled to remain operable . Re-paint sash interior to match general color of adjacent woodwork (do not provide faux-finish).

Impact: Exterior appearance and sightlines of window will be modified by the reflective surface of the storm sash during the daytime. Nighttime exterior appearance will remain relatively unchanged. Interior appearance will remain relatively unchanged, except for loss of faux-finish treatment at sash. Thermal performance will be improved. Window will no longer be operable.

Alternate 2 - Interior Storm Sash (currently spec'd in 3/25/96 C.D.'s)

Work: Provide single unit, single-glazed, narrow aluminum frame interior storm panel with magnetic seals. Paint aluminum frame to match overall color of stained oak window frame. Modify existing sash for single-hung function by fixing and sealing upper sash. Repaint window exterior.

Impact: Existing exterior appearance and sightlines of window remain unchanged. Interior appearance modified with aluminum frame of storm sash. Improved thermal performance. Large size of single-piece storm sash restricts operation of window to maintenance personnel. Cleaning and maintenance of window will require exterior access to window unit, and removal of interior storm sash. Increased possibility of surface condensation on wood sash, accelerating deterioration.

Drawing: See Detail A1/A712 in 3/25/96 C.D.'s

DOUBLE-HUNG SASH (WIDE MUNTINS) AT GALLERIES AND LIBRARY - FIRST FLOOR

Photos:

- #4: Exterior view of sash at Library.
- #5: Exterior view of sash at Gallery (Rm. 110).
- #6: Detail view of jamb width.

Window No's:

105 thru 108; 112 thru 118

Window Muntin Profile:

Type 2

STRATHMORE HALL
WINDOW REHABILITATION
May, 1996

Existing Conditions:

Description: Single glazed, 4/6, 6/9 and 8/12 wood double hung sash with 2" wide rails and stiles, and 1-1/4" wide muntins. Glazing consists of modern, distortion free glass. Sash thickness is 1-1/2". Meeting rail and sill have metal weatherstripping. Jambs are not weatherstripped. Interior and exterior surfaces are painted.

Condition: Lower rails of sash exhibit open joints and water staining. Upper sash are generally painted shut. Sash are loose in their frames.

Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weatherstripping. The presence of modern glazing suggests that these sash may not be original, since historic (distorted) glazing is present at windows elsewhere in Strathmore Hall.

Recommended Treatment - Replacement Sash:

Work: Provide single-hung, double insulated, wood sash replacements with integral counterweights and full weatherstripping. Stile, rail and muntin widths and profiles to match existing sash. Sash thickness to be 1-3/4". Retain existing window frames, jambs and stops. Rout sash perimeter to accommodate existing 1-1/2" width of jambs. Paint exterior and interior of new sash to match existing.

Impact: Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved. Operation of window will remain unaffected.

Drawing: Similar to Detail G5/A704

Alternate 1 - Sash Repair with Exterior Storm Sash

Work: Provide single unit, top-hung, single-glazed, metal frame exterior storm panel with weatherstripping. Substantially repair interior window sash and provide complete perimeter weatherstripping. Re-paint sash interior to match color of adjacent woodwork.

Impact: Exterior appearance and sightlines of window will be modified by the reflective surface of the storm sash during the daytime. Nighttime exterior appearance will remain relatively unchanged. Interior appearance will remain unchanged. Improved thermal performance. Operation of window will remain unaffected.

Alternate 2 - Interior Storm Sash (currently spec'd in 3/25/96 C.D.'s)

Work: Provide single unit, single-glazed, narrow aluminum frame interior storm panel with magnetic seals. Paint aluminum frame to match overall color of window frame. Modify existing sash for single-hung function by fixing and sealing upper sash. Repaint window exterior.

Impact: Existing exterior appearance and sightlines of window remain unchanged. Interior appearance modified with aluminum frame of storm sash. Improved thermal performance. Large size of single-piece storm sash restricts operation of window to maintenance personnel. Cleaning and maintenance of window will require exterior access to window unit, and removal of interior storm sash. Increased possibility of surface condensation on wood sash, accelerating deterioration.

Drawing: See Detail A1/A712 in 3/25/96 C.D.'s

DOUBLE-HUNG SASH (NARROW MUNTINS) AT GALLERY AND MEETING ROOM - SECOND FLOOR

Photos:

- #7: Exterior view of sash at Gallery (Rm. 103).
- #8: Detail view of loose sash at jamb (object easily fits in gap).

Window No's:
208; 209; 212; 213

Window Muntin Profile:
Type 3

Existing Conditions:

Description: Single glazed, 6/6 wood double hung sash with 1-3/4" wide rails and stiles, and 7/8" wide muntins. Glazing consists of modern, distortion free glass. Sash thickness is 1-1/2". Meeting rail and sill have metal weatherstripping. Jambs are not weatherstripped. Interior and exterior surfaces are painted.

Condition: Lower rails of sash exhibit open joints and water staining. Upper sash are generally painted shut. Sash are significantly undersized for the existing frames, allowing for removal without detachment of inside stops.

Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are extremely high due to the lack of complete perimeter weatherstripping and poor fit of lower sash. The presence of modern glazing suggests that these sash may not be original, since historic (distorted) glazing is present at windows elsewhere in Strathmore Hall. The poor fit of the sash also suggests that they may be replacement sash.

STRATHMORE HALL
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May, 1996

Recommended Treatment - Replacement Sash:

Work: Provide single-hung, double insulated, wood sash replacements with integral counterweights and full weatherstripping. Stile, rail and muntin widths and profiles to match existing sash. Sash thickness to be 1-3/4". Retain existing window frames, jambs and stops. Rout sash perimeter to accommodate existing 1-1/2" width of jambs. Paint exterior and interior of new sash to match existing.

Impact: Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved. Operation of window will remain unaffected.

Drawing: Similar to Detail G5/A704

Alternate 1 - Sash Repair with Exterior Storm Sash

Work: Provide single unit, top-hung, single-glazed, metal frame exterior storm sash with weatherstripping. Substantially repair interior window sash and provide complete perimeter weatherstripping. Re-paint sash interior to match color of adjacent woodwork.

Impact: Exterior appearance and sightlines of window will be modified by the reflective surface of the storm sash during the daytime. Nighttime exterior appearance will remain relatively unchanged. Interior appearance will remain relatively unchanged. Improved thermal performance. Operation of window will be improved with better fit of sash in existing frames.

Alternate 2 - Interior Storm Sash (currently spec'd in 3/25/96 C.D.'s)

Work: Provide single unit, single-glazed, narrow aluminum frame interior storm sash with magnetic seals. Paint aluminum frame to match overall color of window frame. Modify existing sash for single-hung function by fixing and sealing upper sash. Repaint window exterior.

Impact: Existing exterior appearance and sightlines of window remain unchanged. Interior appearance modified with aluminum frame of storm sash. Improved thermal performance. Large size of single-piece storm sash restricts operation of window to maintenance personnel. Cleaning and maintenance of window will require exterior access to window unit, and removal of interior storm sash. Increased possibility of surface condensation on wood sash, accelerating deterioration. High air infiltration rate of loose sash may require the installation of a locking mechanism for interior storm sash to prevent failure of magnetic seals and "blow-out" during high winds.

Drawing: See Detail A1/A712 in 3/25/96 C.D.'s

STRATHMORE HALL
WINDOW REHABILITATION
May, 1996

CASEMENT SASH AT MUSIC ROOM - SECOND FLOOR

Photos:

- #2: Exterior view of sash at Music Room (upper level).
- #9: Detail view of exterior sash from second floor hallway.

Window No's:

201; 202; 203; 204; 226 thru 228

Window Muntin Profile:

Type 2

Existing Conditions:

Description: Single glazed, 8-by-8 wood outswing paired casement sash with 2-1/2" wide rails and stiles, and 1-1/4" wide muntins. Glazing consists of historic (distorted) glass. Sash thickness is 1-3/8". Meeting stile is not weatherstripped. Top and bottom rails have metal weatherstripping. Interior and exterior surfaces are painted.

Condition: Lower rails of sash exhibit open joints and water staining. Each sash pair is generally painted shut.

Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weatherstripping. The presence of historic glazing suggests that these windows are original.

Recommended Treatment - Replacement Sash:

Work: Provide single-unit, non-operable, double insulated, wood sash replacement. Stile, rail and muntin widths and profiles to replicate appearance of closed casement sash, including "double stile" at meeting stile. Sash thickness to be 1-3/4". Retain existing window frames, jambs and stops. Paint exterior and interior of new sash to match existing.

Impact: Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved. Window will no longer be operable.

Alternate 1 - Sash Repair with Exterior Storm Sash

Work: Provide single unit, top-hung, single-glazed, wood frame exterior storm sash with weatherstripping. Substantially repair casement sash and lock in closed position.

Impact: Exterior appearance and sightlines of window will be modified by the reflective surface of the storm sash during the daytime. Nighttime exterior appearance will remain relatively unchanged. Interior appearance will remain relatively unchanged. Improved thermal

performance. Exterior access to second story sash will be required to clean and maintain storm sash and casement sash.

Alternate 2 - Interior Storm Sash (currently spec'd in 3/25/96 C.D.'s)

Work: Provide single unit, single-glazed, narrow aluminum frame interior storm sash with magnetic seals. Paint aluminum frame to match overall color of window frame. Fix and seal both sash. Repaint window exterior.

Impact: Existing exterior appearance and sightlines of window remain unchanged. Interior appearance modified with aluminum frame of storm sash. Improved thermal performance. Cleaning and maintenance of window will require exterior access to window unit, and removal of interior storm sash. Increased possibility of surface condensation on wood sash, accelerating deterioration.

Drawing: Similar to Detail G5/A704

DOUBLE-HUNG SASH (WIDE MUNTINS) AT SECOND FLOOR OFFICES

Photos:

- #10: Exterior view of sash (upper level).
- #11: Interior detail view of meeting rail with tailpieces.

Window No's:

217; 218; 219

Window Muntin Profile:

Type 1

Existing Conditions:

Description: Single glazed, 8/8 wood double hung sash with 2-1/4" wide rails and stiles, and 1-1/4" wide muntins. Glazing consists of historic (distorted) glass. Sash thickness is 1-1/2". Meeting rail and sill have metal weatherstripping. Jambs are not weatherstripped. Interior and exterior surfaces are painted. Lower sash has upward-facing tailpieces at the top of each stile.

Condition: Lower rails of sash exhibit open joints and water staining. Upper sash are generally painted shut.

Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weatherstripping. The presence of historic glazing and tailpieces suggests that these windows may be original.

STRATHMORE HALL
WINDOW REHABILITATION
May, 1996

Recommended Treatment - Replacement Sash:

Work: Provide single-hung, double insulated, wood sash replacements with integral counterweights and full weatherstripping. Stile, rail and muntin widths and profiles to match existing sash. Sash thickness to be 1-3/4". Retain existing window frames, jambs and stops. Rout sash perimeter to accommodate existing 1-1/2" width of jambs. Paint exterior and interior of new sash to match existing.

Impact: Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved. Operation of window will remain unaffected.

Drawing: Similar to Detail G5/A704

Alternate 1 - Sash Repair with Exterior Storm Sash

Work: Provide single unit, top-hung, single-glazed, metal frame exterior storm sash with weatherstripping. Substantially restore interior window sash and provide complete perimeter weatherstripping. Re-paint sash interior to match color of adjacent woodwork.

Impact: Exterior appearance and sightlines of window will be modified by the reflective surface of the storm sash during the daytime. Nighttime exterior appearance will remain relatively unchanged. Interior appearance will remain relatively unchanged. Improved thermal performance.

Alternate 2 - Interior Storm Sash (currently spec'd in 3/25/96 C.D.'s)

Work: Provide single unit, single-glazed, narrow aluminum frame interior storm sash with magnetic seals. Paint aluminum frame to match overall color of window frame. Modify existing sash for single-hung function by fixing and sealing upper sash. Repaint window exterior.

Impact: Existing exterior appearance and sightlines of window remain unchanged. Interior appearance modified with aluminum frame of storm sash. Improved thermal performance. Large size of single-piece storm sash restricts operation of window to maintenance personnel. Cleaning and maintenance of window will require exterior access to window unit, and removal of interior storm sash. Increased possibility of surface condensation on wood sash, accelerating deterioration.

Drawing: See Detail A1/A712 in 3/25/96 C.D.'s

CASEMENT AND FIXED SASH AT SUN ROOM - FIRST FLOOR

Photos:

- #12: Exterior view of sun room windows.
- #13: Detail view of window and door jambs.

Window No's:

121; 122

Existing Conditions:

Description: Single glazed, 10-lite fixed and casement windows with 4-lite transoms. Rails and stiles are 2-1/2", muntins are 2-3/4". Sash thickness is 1-3/4".

Condition: Lower rails of sash exhibit open joints and water staining.

Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weatherstripping.

Recommended Treatment - Exterior Wood Framed Storm Sash

Work: Provide single unit, single-glazed, 1/1 wood frame exterior storm sash with weatherstripping. Central muntin of storm sash to align with base of transom sash. Substantially repair interior window sash, replace glazing with tempered glass within 2'0" of doors, and fix casement sash in closed position.

Impact: Exterior appearance and sightlines of window will be modified by the reflective surface of the storm sash during the daytime. Nighttime exterior appearance will remain relatively unchanged. Interior appearance will remain relatively unchanged. To accommodate storm sash, casement sash will no longer function. Improved thermal performance.

FRENCH DOORS AT FIRST AND SECOND LEVEL

Photos:

- #14: Exterior view of south entrance doors.
- #15: Exterior view of second floor French doors.
- #3: Detail of base of Music Room French doors.

Door No's:

101A & B; 109A, B & C; 108A, B & C; 259A

STRATHMORE HALL
WINDOW REHABILITATION
May, 1996

Existing Conditions:

Description: Single glazed, 10-by-10 wood paired French doors with 4" wide rails and stiles, and 1-1/4" wide muntins. French doors at portico (south elevation) are single-lite, without muntins. Door thickness is 1-3/8". Interior and exterior surfaces are painted.

Condition: Lower rail of doors exhibits open joints and water staining. Several doors exhibit damaged lower rails at the concealed latches. Egress hardware at main entrances does not meet code.

Comment: Thermal performance of these doors is poor due to the lack of storm doors or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weatherstripping.

Recommended Treatment - Replacement Doors:

Work: Provide new, double insulated, tempered glass wood French door replacements. Stile, rail and muntin widths and profiles to replicate appearance of existing doors. Door thickness to be 1-3/4". Provide panic hardware at exit doorways. Retain existing door frames. Paint exterior and interior of new doors to match existing. Provide true divided-lite French doors at second floor portico.

Impact: Exterior and interior appearance and sightlines of first floor doors will be unchanged. Second floor doors will be converted to divided-lite doors matching first floor doors. Thermal performance will be improved.

Alternate 1 - Door Repair with Interior Storm Panels (currently spec'd in 3/25/96 C.D.'s)

Work: Provide single unit, acrylic-glazed, narrow aluminum frame interior storm panel with magnetic seals. Paint aluminum frame to match overall color of door frame. Replace door glazing with tempered glass.

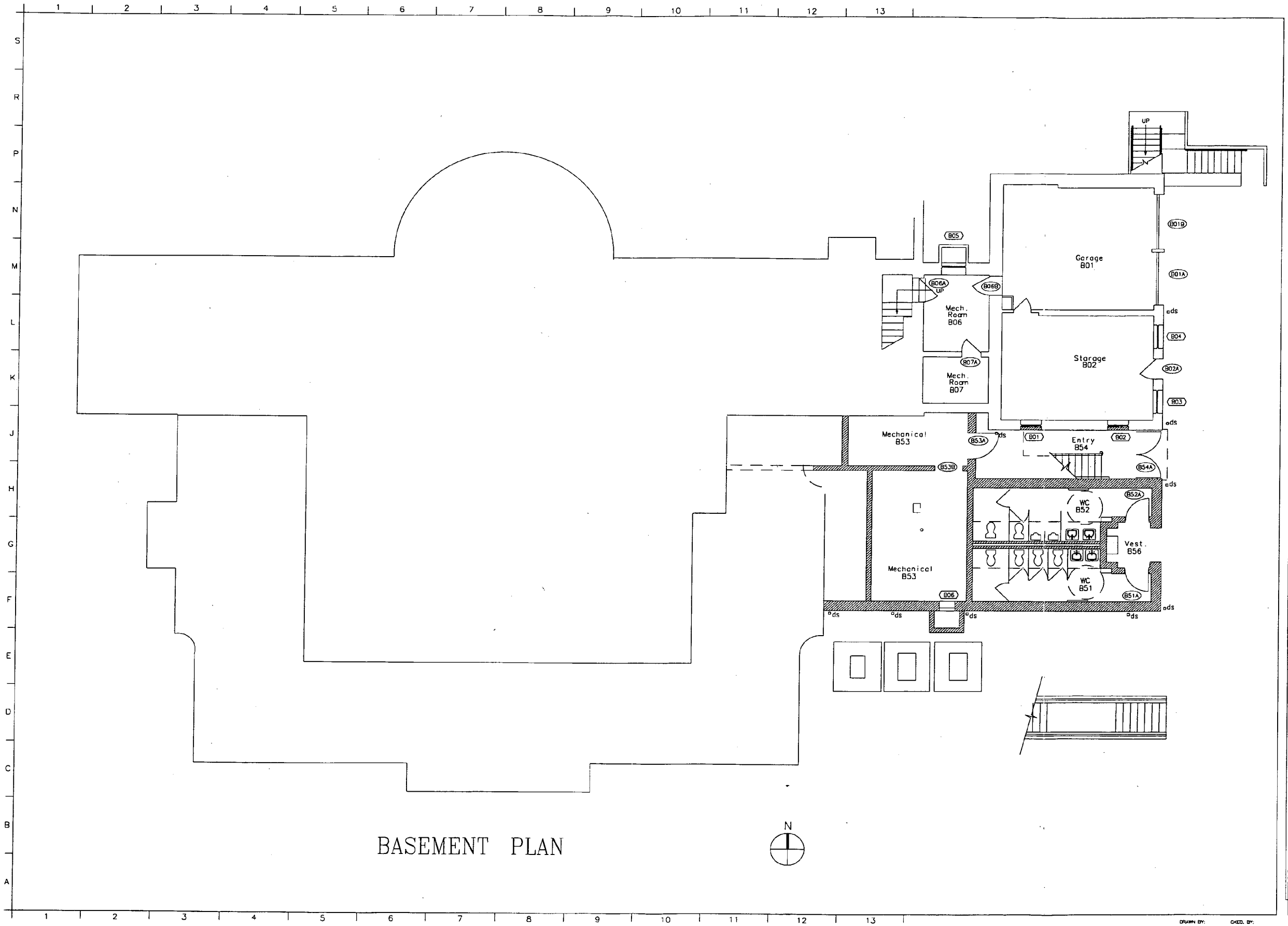
Impact: Existing exterior appearance and sightlines of door remain unchanged. Interior appearance modified with aluminum frame of storm panel. Improved thermal performance. Cleaning and maintenance of door glazing will require removal and reinstallation of storm panel.

Drawing: Similar to Detail A5.1/A712

STRATHMORE HALL
WINDOW REHABILITATION
May, 1996

PLANS, ELEVATIONS and DETAILS

PREPARED BY QUINN EVANS / ARCHITECTS



BASEMENT PLAN

QUINN EVANS

ARCHITECTS

1214 Twenty-Eighth St., NW
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(202) 298-6700

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co.
Contract No.
52800006

Quinn Evans/
Architects
Project No.
95219

SHEET TITLE

DATE

REVISIONS:

SHEET NUMBER

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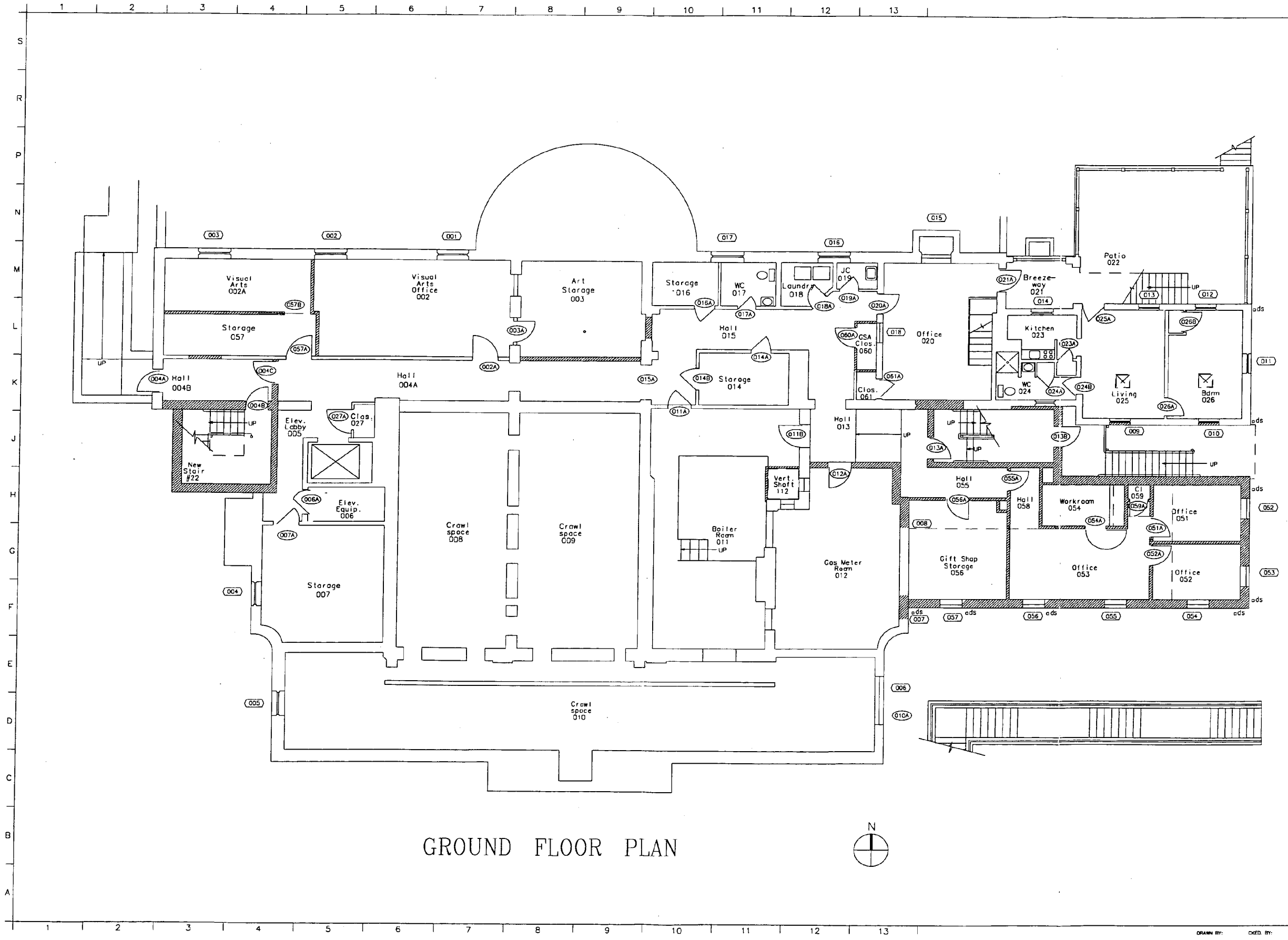

GROUND FLOOR PLAN

QUINN EVANS ARCHITECTS

1214 Twenty-Eighth St., NW
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STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500006

Quinn Evans/ Architects Project No. 95219

SHEET TITLE

DATE

REVISIONS:

SHEET NUMBER

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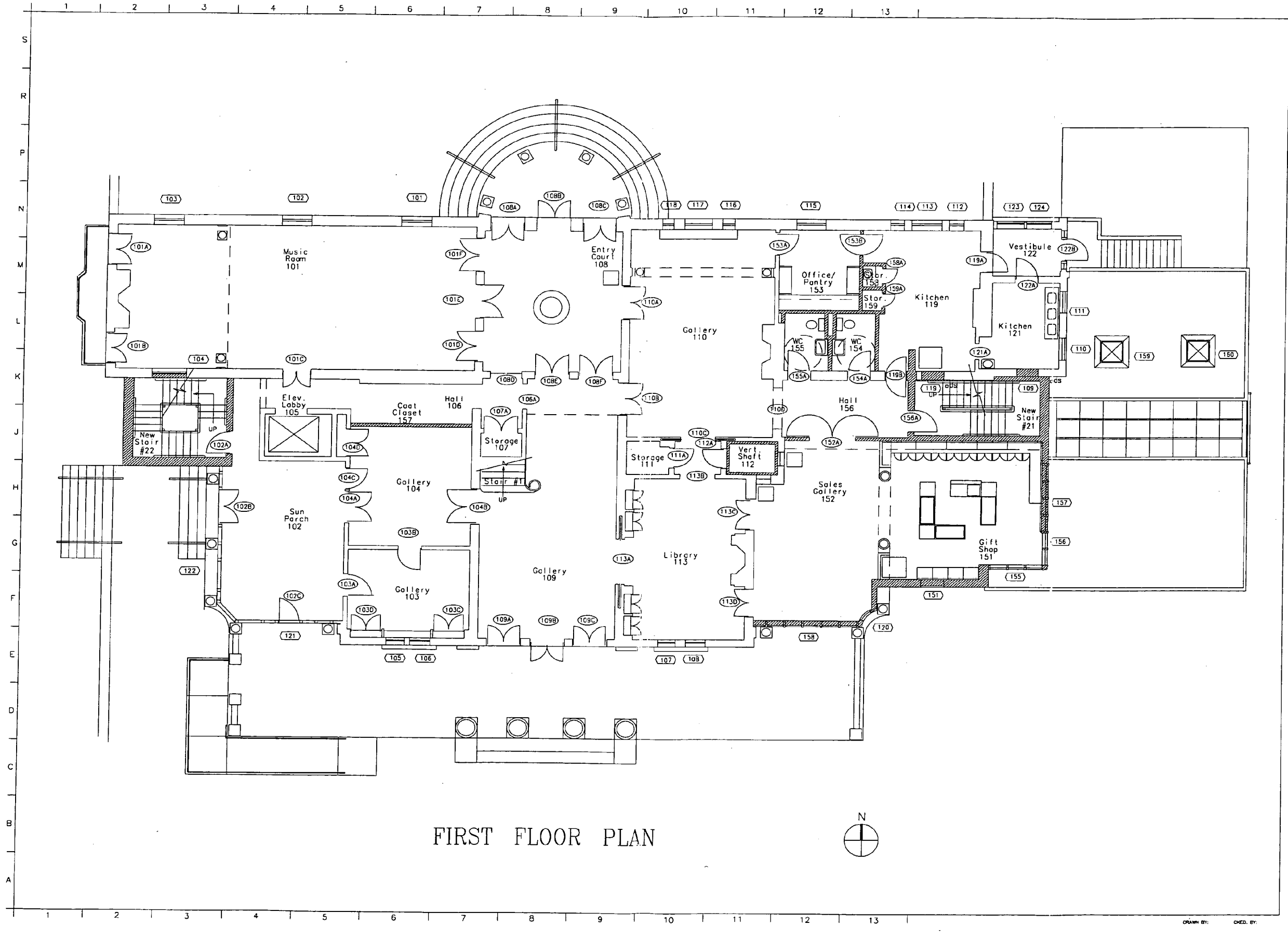

FIRST FLOOR PLAN

QUINN EVANS ARCHITECTS

1314 Twenty-Eighth St., NW
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STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co.
Contract No.
52500006

Quinn Evans/
Architects
Project No.
95219

SHEET TITLE

DATE

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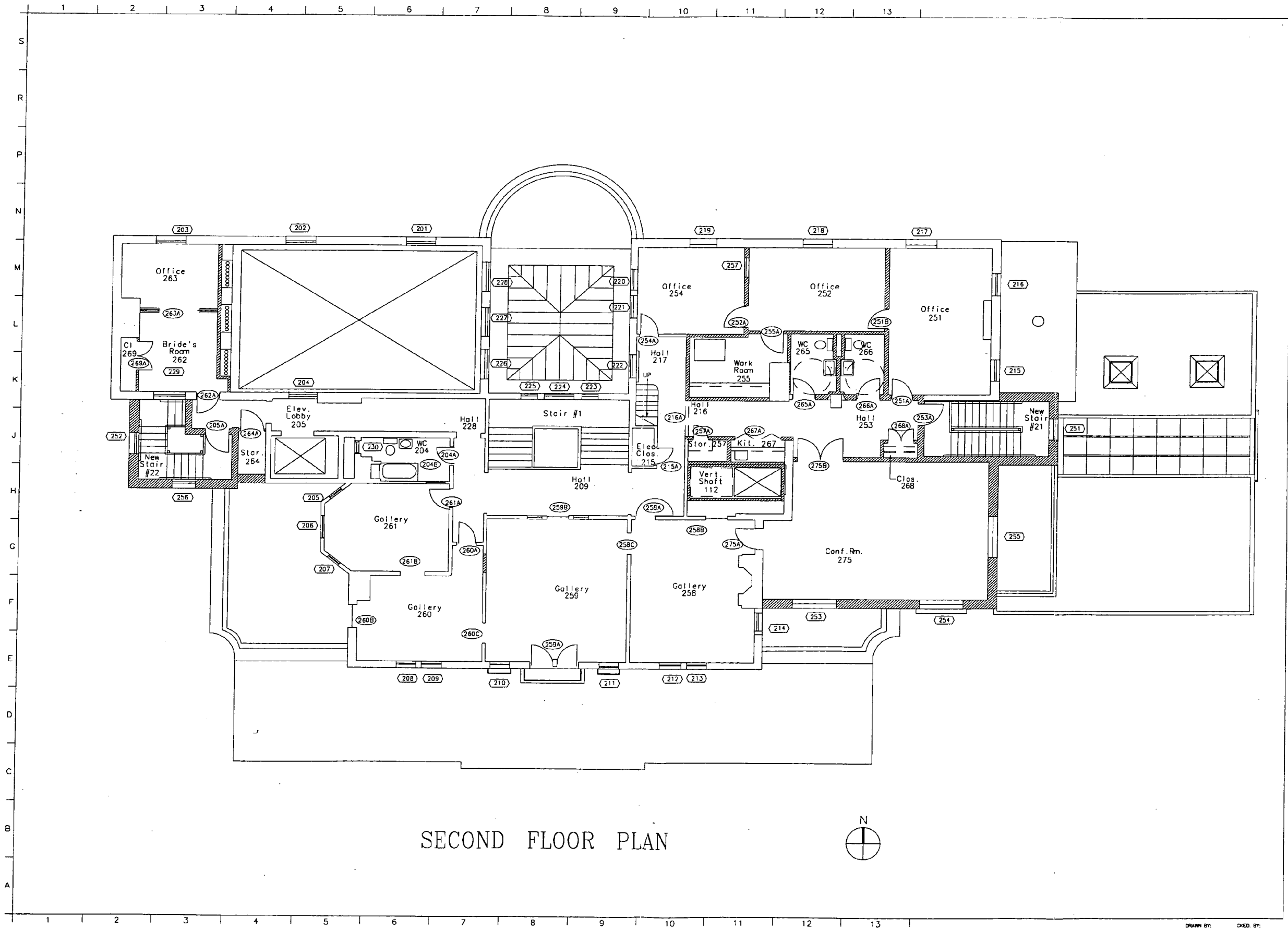

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STRATHMORE HALL

WINDOW REHABILITATION

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Architects
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95219

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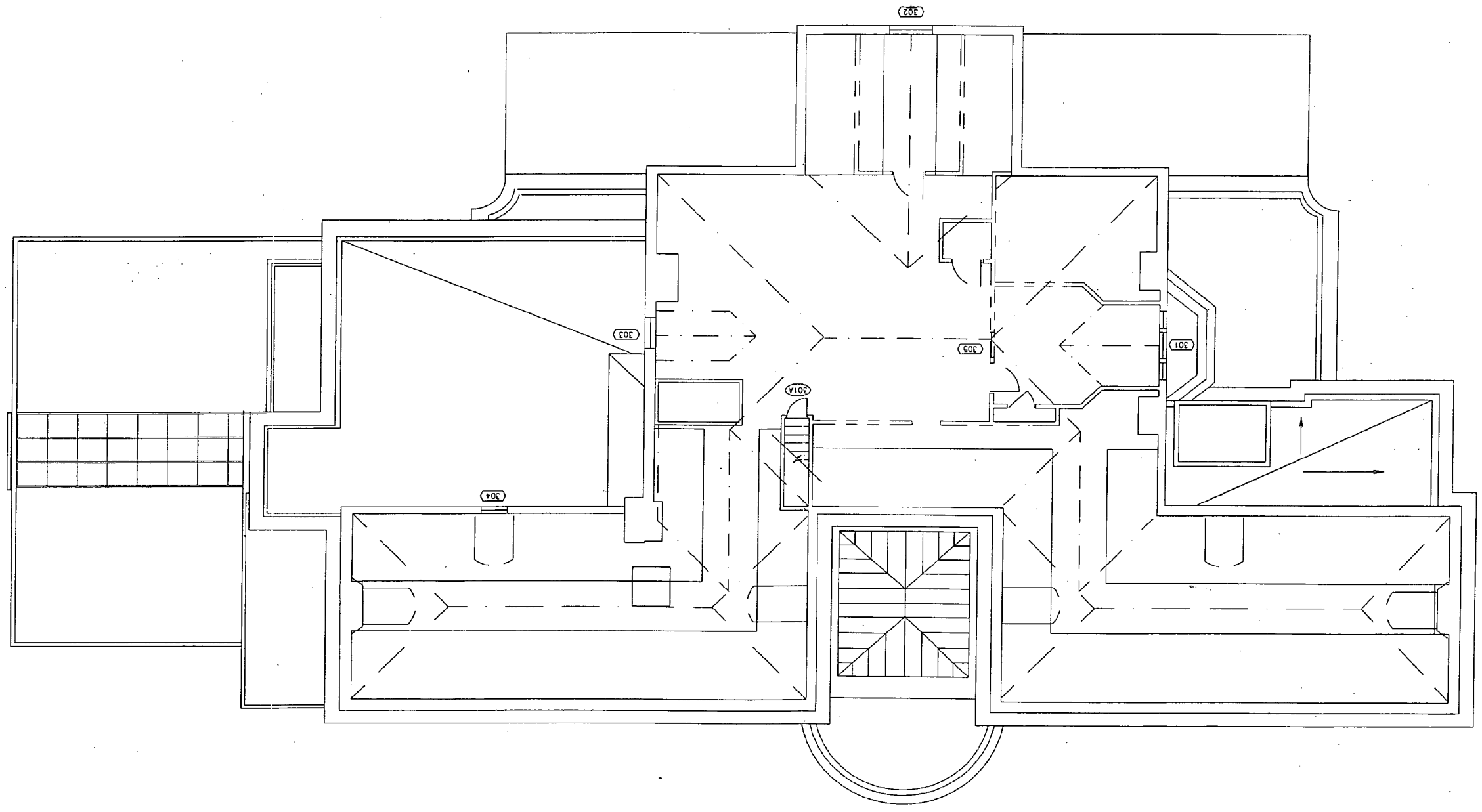

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DATE
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SHEET TITLE

Montgomery Co.
Contract No.
625000008

Quinn Evans/
Architects
Project No.
95219

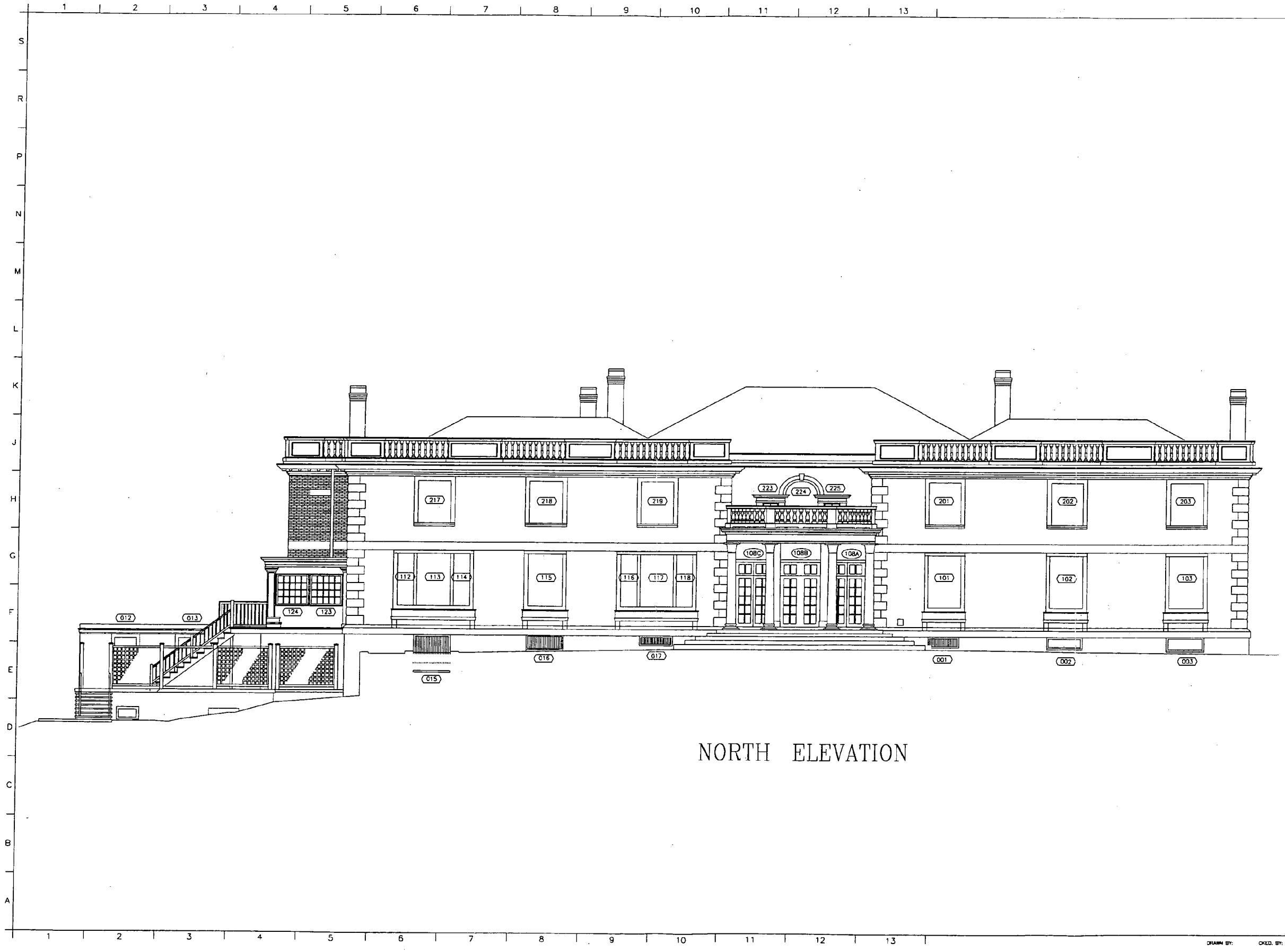
Rockville, MD

WINDOW
REHABILITATION

STRATHMORE
HALL

ARCHITECTS

QUINN
EVANS



NORTH ELEVATION

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STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co.
Contract No.
32500006

Quinn Evans/
Architects
Project No.
95219

SHEET TITLE

DATE

REVISIONS:

SHEET NUMBER

DRAWN BY:

CKED. BY:

WEST ELEVATION

QUINN EVANS ARCHITECTS
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STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500008

Quinn Evans/ Architects Project No. 95219

SHEET TITLE

DATE

REVISIONS:

SHEET NUMBER

DRAWN BY:

CKED. BY:

SOUTH ELEVATION

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STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co.
Contract No.
52500006

Quinn Evans/
Architects
Project No.
95219

SHEET TITLE

DATE

REVISIONS:

SHEET NUMBER

DRAWN BY:

CKED. BY:

EAST ELEVATION

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Washington, DC 20007
(202) 298-8700

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500006

Quinn Evans/ Architects Project No. 95219

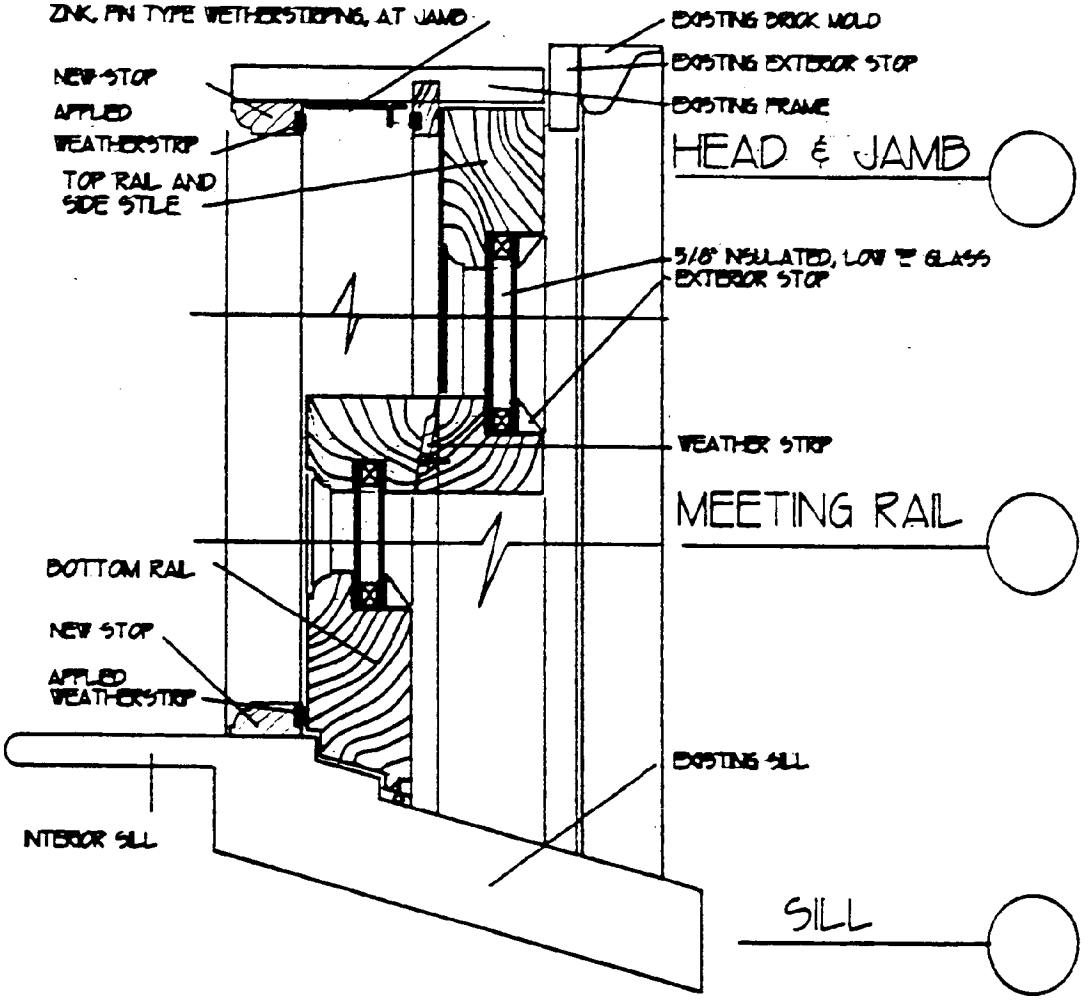
SHEET TITLE

DATE

REVISIONS:

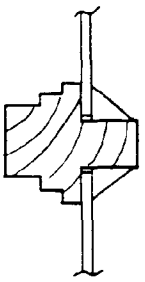
SHEET NUMBER

DRAWN BY: CKED. BY:

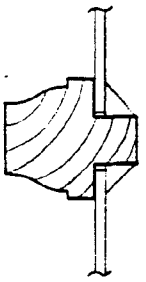


Details for 1-3/4" Sash with 1/2" Insulated Glass

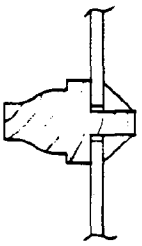
REPLACEMENT SASH DETAILS NO SCALE	STRATHMORE HALL	QUINN EVANS ARCHITECTS



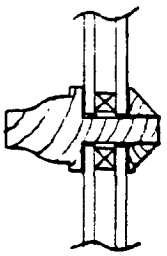
Type 1 – Wide Muntin
w/ Square Shoulders



Type 2 – Wide Muntin



Type 3 – Narrow Muntin



Proposed Muntin
w/ Insulated Glazing
(sample profile)

WINDOW MUNTIN PROFILES NO SCALE	STRATHMORE HALL	QUINN EVANS ARCHITECTS

STRATHMORE HALL
WINDOW REHABILITATION
May, 1996

PHOTOGRAPHS

Photo #1: Interior view of music room. 8/12 Faux-finish double-hung sash are at lower level. 8x8 casement sash are at upper level.

Photo #2: Exterior view of sash at Music Room.

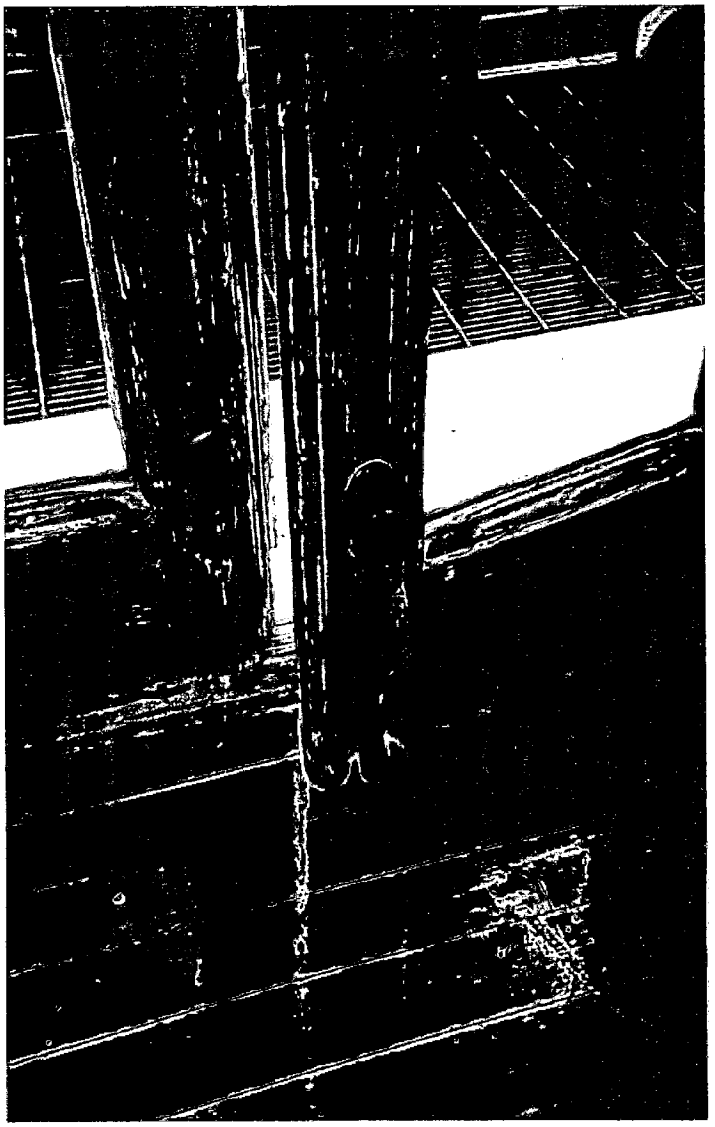


Photo #3: Example of interior faux-finish at French doors in Music Room. Double hung sash at lower level have a similar Faux-finish.

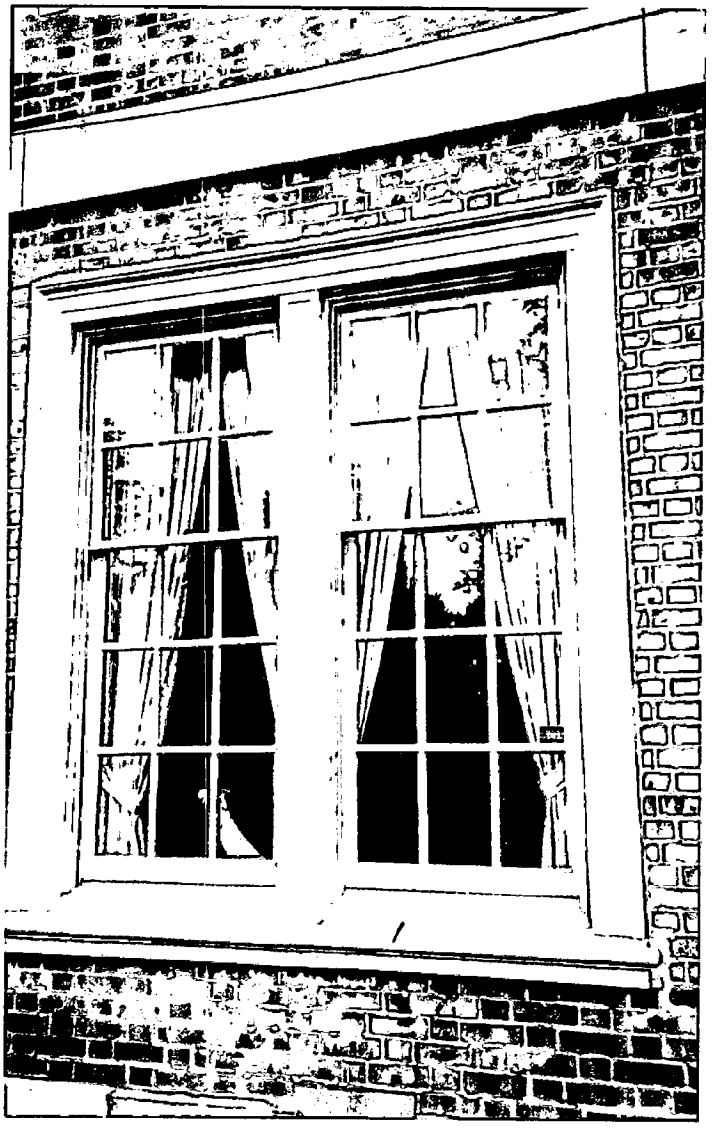


Photo #4: Exterior view of sash at Library. Window No.s 212 and 213.

Photo #5: Exterior view of sash at Gallery (Rm. 110).

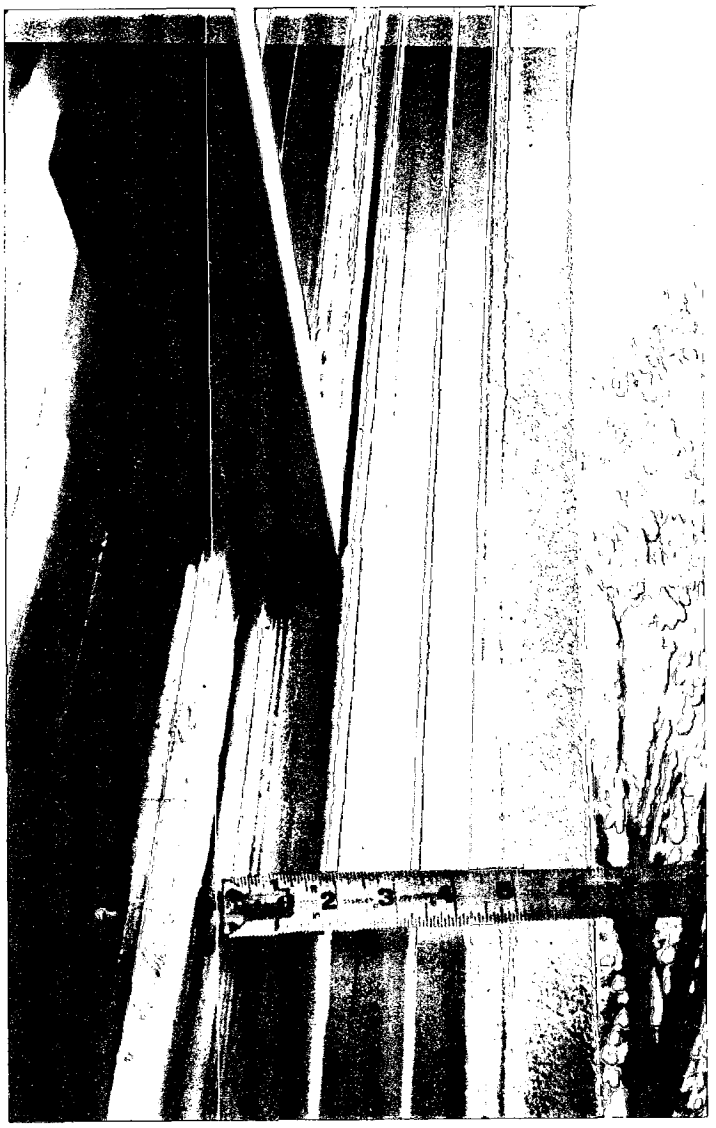


Photo #6: Detail view of jamb width for double-hung sash at first floor Gallery and Library. Window No.s 105 through 108.

Photo #7: Exterior view of sash at second floor Gallery (Sash No.s 212, 213). Note narrow muntins (Type 3) at this sash.

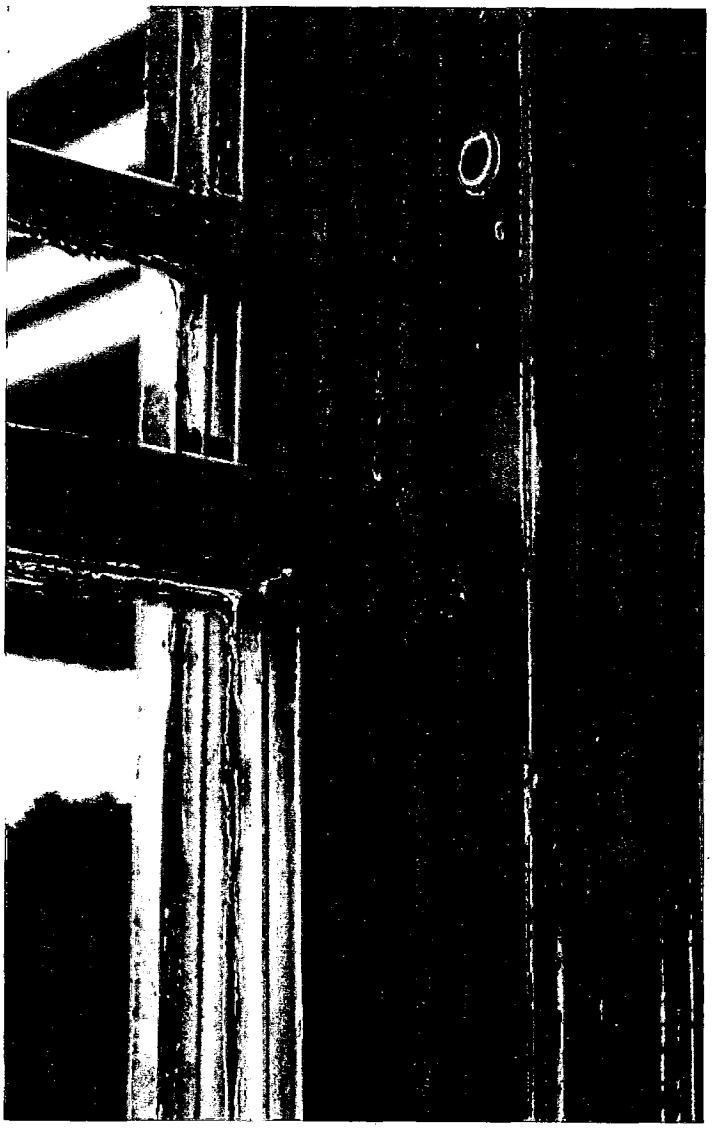


Photo #8: Detail view of loose sash at jamb (object easily fits in gap). This is a typical condition for all narrow-muntin sash at Strathmore Hall. See Photo #7 for exterior view of sash.

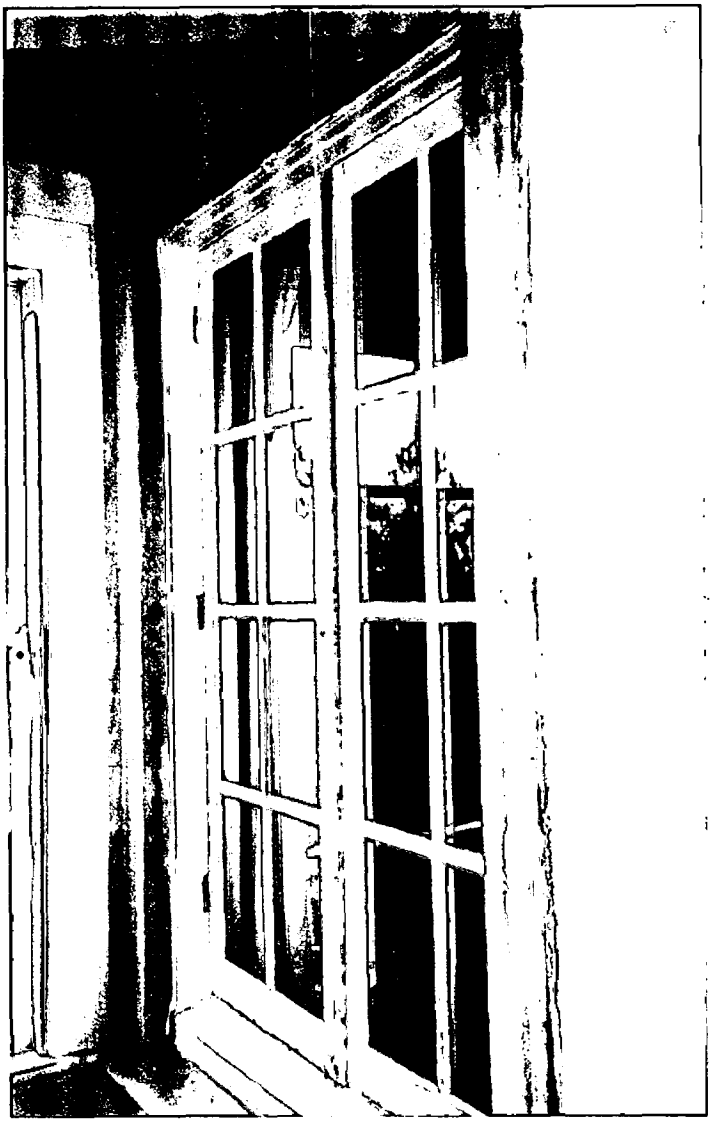


Photo #9: Detail view of exterior casement sash at Music Room.
This sash opens onto the second floor hallway.
This historic sash will be restored (archived) in place.

Photo #10: Exterior view of sash at first floor Gallery and kitchen, and second floor offices. The sash at the kitchen and offices must remain operable.

Photo #11: Interior detail view of meeting rail with tailpieces. Window No. 205.

Photo #12: Exterior view of sun room window No.s 121 and 122. These sash will be restored and will receive exterior wood-framed storm glazing.

Photo #13: Detail view of window and door jambs at sun room. Exterior window mullions are already detailed (rabbeted) to receive exterior storm sash.

Photo #14: Exterior view of south entrance door No.s 109B. These doors will be replaced with new, double insulated French doors with egress hardware.

Photo #15: Exterior view of second floor French door No.s 259A. These doors will be replaced with true divided lite French doors.

Post-it™ Fax Note 7671	Date 11/14/96	# of pages ▶ 3
To Marjorie Reed	From Perry Kephart	
Co./Dept.	Co.	
Phone #	Phone # 495 4570	
Fax # 907-5444	Fax #	

HISTORIC PRESERVATION COMMISSION STAFF REPORT

Address: 10701 Rockville Pike

Meeting Date: 7/10/96

Resource: Master Plan Site #30/12,
Corby Estate/Strathmore Hall

HAWP: Alterations

Case Number: 30/12-96A

Tax Credit: Not Applicable

Public Notice: 6/26/96

Report Date: 6/03/96

Applicant: Mary K. Donohoe

Staff: Patricia Parker

PROPOSAL: Remove and replace 10 windows and 3 doors;
Window/door rehabilitation in remaining openings

RECOMMEND: Approve w/condition

BACKGROUND

On February 28, 1996, the HPC reviewed a proposal by this applicant for various additions and alterations to the Corby Estate/Strathmore Hall, Master Plan Site #30/12. Prior to this submission for preliminary review, HPC staff, Quinn Evans Architects, and staff from the Maryland Historical Trust had worked closely together in the development of plans for the project. The Mansion is protected by a preservation easement held by the Maryland Historical Trust and therefore a Section 106 Review, with approval, is required for any alterations proposed for the structure.

At that time, and on March 13, 1996 as part of the formal HAWP process which followed, the proposal included several alterations and additions to develop Strathmore Hall Arts Center into a first-rate gallery and arts space. As proposed, space would be added for offices, increased and improved gallery space and upgrading of the HVAC and other building elements to meet fire code requirements of applicable building codes. Also, because the building is devoted to public use, it must also meet minimum handicapped accessibility requirements.

This HAWP proposal presented for HPC approval focuses only on proposed changes to the existing windows and doors. Staff again met with the architects and MHT staff on site prior to the applicant's submission of this HAWP application.

In most instances, the applicant does not propose removal of windows and doors. The proposal includes restoration of existing sash - maintaining sash, muntins, rail and stile profiles and restoring the existing window heads, jambs and sills. Glazing would be replaced and insulated glazing is proposed for use to be incorporated into the existing wood windows with true divided lites. Interior profiles would be retained and new wood stops added.

The applicant does propose to remove ten windows at the second floor level on the rear facade. These windows would be replaced with sash to mostly match the existing. Double glazing would be utilized within these openings.

The proposal also includes removal of the central active french doors within three openings (opening 109B and 108B on the first floor; and opening 259A within the gallery space

which provides egress to the balcony at the second level). In these locations, the applicant would install new wood doors with double galzing and true divided lites. The door swings would be changed to meet code requirements. The new doors would have panic hardware and the door profiles would replicate those of the existing doors at either side.

STAFF DISCUSSION

Staff applauds the applicant for expending substantial resources to retain and restore historic fabric in most instances. Staff recommends approval of the applicant's proposal of sash restoration with insulated glazing. The applicant has sought to maintain existing muntin and sash profiles for most openings.

However, the proposal also includes a proposal to remove ten windows on the rear facade which do not meet the test of a feature which is deteriorated beyond repair and therefore in need of replacement. As a result of the site visit, staff feels that the extreme measure of replacement would only be required at seven window openings on the rear facade (south elevation) of the building. These openings are indicated on the drawings as #208, #209, #210, #211, #212 and #213 and #214. In these openings, the original sash has already been changed and is inconsistent with other window openings. Staff recommends replacement with wood windows having true divided lites and sash to match the existing sash in overall configuration, operation and profile.

In window openings #205, #206 and #207, staff recommends that these windows be repaired and **not** replaced. These windows, even though located toward the rear of the building have not been previously altered.

Staff agrees with the applicant that only the french doors which require a change in swing and new panic hardware for egress should be replaced. All other doors should be restored.

STAFF RECOMMENDATION

With the following condition, staff recommends that the Commission find the proposal **consistent** with the purposes of Chapter 24A-8(b)1:

> The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site, or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter;

and with the Secretary of the Interior's Standards for Rehabilitation #1, #2, and #6:

> A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environ ment; and
>
> The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided; and
>
> Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

Condition:

1. Only windows within openings 208, 209, 210, 211, 212, 213 and 214 should be replaced. Replacement sash shall match existing lite configuration, operation, muntin and head profiles. Glazing may be double pane.

and with the general condition applicable to all Historic Area Work Permits that the applicant shall arrange for a field inspection by calling the Montgomery County Department of Environmental Protection (DEP), Field Services Office, five days prior to commencement of work and within two weeks following completion of work.

APPLICATION FOR HISTORIC AREA WORK PERMIT

TAX ACCOUNT # 1823533

NAME OF PROPERTY OWNER Montgomery County TELEPHONE NO. (301) 217-6124
(Contract/Purchaser) Mary K. Donahoe (Include Area Code)
ADDRESS 110 N. Washington Street, 3rd Floor Rockville MD 20850
CITY STATE ZIP

CONTRACTOR To be determined TELEPHONE NO.

CONTRACTOR REGISTRATION NUMBER

PLANS PREPARED BY QUINN EVANS / ARCHITECTS TELEPHONE NO. (202) 298-6700
(Include Area Code)

REGISTRATION NUMBER

LOCATION OF BUILDING/PREMISE

House Number 10701 Street Rockville Pike

Town/City N. Bethesda Election District Strathmore ~~Hall~~ Avenue

Nearest Cross Street

Lot Block Subdivision

Liber 5173 Folio 63 Parcel P56 on Tax Map 123

1A. TYPE OF PERMIT ACTION: (circle one)
Construct Extend/Add Alter/Renovate (Repair) Circle One: A/C Slab Room Addition
Wreck/Raze Move Install Revocable Revision Porch Deck Fireplace Shed Solar Woodburning Stove
Fence/Wall (complete Section 4) Other

1B. CONSTRUCTION COSTS ESTIMATE $ $150,000

1C. IF THIS IS A REVISION OF A PREVIOUSLY APPROVED ACTIVE PERMIT SEE PERMIT # 9603050062

1D. INDICATE NAME OF ELECTRIC UTILITY COMPANY Pepco

1E. IS THIS PROPERTY A HISTORICAL SITE? Yes

PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTEND/ADDITIONS

2A. TYPE OF SEWAGE DISPOSAL
01 ( ) WSSC 02 ( ) Septic
03 ( ) Other

2B. TYPE OF WATER SUPPLY
01 ( ) WSSC 02 ( ) Well
03 ( ) Other

PART THREE: COMPLETE ONLY FOR FENCE/RETAINING WALL

4A. HEIGHT feet inches

4B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:
1. On party line/Property line
2. Entirely on land of owner
3. On public right of way/easement (Revocable Letter Required).

I hereby certify that I have the authority to make the foregoing application, that the application is correct, and that the construction will comply with plans approved by all agencies listed and I hereby acknowledge and accept this to be a condition for the issuance of this permit.

Signature of owner or authorized agent (agent must have signature notarized on back) 19 June 1996 Date

APPROVED For Chairperson, Historic Preservation Commission

DISAPPROVED Signature Date

APPLICATION/PERMIT NO: 9606210062 FILING FEE: $ County Project Fee Waived
DATE FILED: PERMIT FEE: $
DATE ISSUED: BALANCE $
OWNERSHIP CODE: RECEIPT NO: FEE WAIVED:

4

THE FOLLOWING ITEMS MUST BE COMPLETED AND THE REQUIRED DOCUMENTS MUST ACCOMPANY THIS APPLICATION

DESCRIPTION OF PROPOSED WORK: (including composition, color and texture of materials to be used:)

SEE ATTACHED REPORT DATED JUNE 19, 1996

"STRATHMORE HALL ADDITION AND RENOVATION

WINDOW REHABILITATION

REQUEST FOR HISTORIC AGENCY APPROVAL"

(If more space is needed, attach additional sheets on plain or lined paper to this application)

ATTACH TO THIS APPLICATION (2) COPIES OF: SUCH SITE PLANS (lot dimensions, building location with dimensions, drives, walks, fences, patios, etc. proposed or existing) and/or ARCHITECTURAL DRAWINGS (floor plans, elevations, etc.), PHOTOGRAPHS OF THE AREA AFFECTED, as are necessary to fully describe the proposed work.

MAIL OR DELIVER THE APPLICATION AND ALL REQUIRED DOCUMENTS TO THE:

HISTORIC PRESERVATION COMMISSION
100 MARYLAND AVENUE
ROCKVILLE, MARYLAND 20850

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

BACKGROUND

The existing windows at Strathmore Hall include a mix of double hung, casement and fixed sash in at least twenty-five unique sizes and configurations. The existing condition of the sash varies widely, from fully operable sash at the main level of the music room, to deteriorated and ill-fitting sash at the second floor gallery spaces.

Strathmore Hall Arts Center requests Historic Agency Approval for performance upgrades to the existing window units to support the evolving museum function and County mandated energy requirements. These upgrades include:

- Increased thermal performance
- Reduced air and water infiltration
- Control of ultraviolet light to protect artwork in the Galleries and documents in the Library
- Operable sash at the second floor office spaces
- Increased security at the first floor and basement levels
- Reduced yearly maintenance costs

At present, the approved construction documents indicate installation of one-piece interior storm panels at most of the existing sash. However, the Arts Center recognizes that the required window upgrades can be more fully addressed with more comprehensive approaches, including sash restoration with insulated glazing and replacement of improperly-sized units. The Arts Center is also aware of the increased costs of restoration and replacement and has raised the funds required to achieve a higher quality solution.

Note: This is a revision to an earlier proposed treatment submitted in May, 1996. This revised proposal responds to the Montgomery County and Maryland Historical Trust dictate that historic sash be retained.

PROPOSED TREATMENT

With this submittal, Quinn Evans/Architects requests that Maryland Historic Trust, and Montgomery County approve the proposed treatment. A more specific description of the treatment is included in the attached Detail Analysis.

1) Retain and restore in place the existing fan light windows and Palladian window groups. These units will be repaired, painted inside and out and fixed in place.
   - Windows No.s: 223; 224; 225; 227; 301; 302

2) Retain and restore in place the existing exterior French doors at the music room. The existing glass lights will be replaced with new safety glass, and the doors will be repaired and remain fully operable.
   - Door No.s: 101A; 101B

3) Replace the central, north and south entrance doors with new wood double glazed true divided light doors. These doors must be re-swung in order to comply with life safety codes. Profiles of the new doors will replicate existing door profiles. The new doors are to be set within the existing frames, and doors at the first floor level will incorporate new panic (egress) hardware.
   - Door No.s: 108-B; 109B; 259A

4) Retain and restore in place the outer pairs of north and south entrance doors with new double glazing incorporating the existing wood muntins (true divided lights). Existing interior profiles of the doors will be retained. Exterior wood glazing stops will be modified to accommodate the additional thickness of insulated glazing.
   - Door No.s: 108-A, C; 109-A, C

5) Rehabilitate the existing frame and restore the existing interior second story casement window in the Music room. This window will serve as an archive of the existing window configuration.
   - Window No.: 204

6) Rehabilitate the existing frames and replace the existing undersized double-hung sash at the second floor office and gallery spaces along the south elevation. New sash will match existing sash in overall configuration, but will incorporate different profiles to differentiate them from the restored sash elsewhere in Strathmore Hall. The new sash will incorporate true divided lights and insulated glazing.
   - Window No.s: 205 through 209; 212; 213; 214

7) Rehabilitate existing frames and restore existing sash with new double glazing incorporating the existing wood muntins (true divided lights). Existing interior profiles of the windows will be retained. New wood stops at the exterior face of muntins, rails and stiles will be beveled, creating a "putty line" similar to the existing window construction.
   - Window No.s: All sash not described in items 1 through 4.

EVALUATION

Relative to item seven (above), Quinn Evans/Architects has reviewed the pros and cons of several alternate approaches in a previous proposal dated May, 1996. These approaches included substantial sash replacement, exterior storm panels and interior storm panels. In conjunction with the Maryland Historical Trust and Montgomery County Historic Preservation Commission, Quinn Evans/Architects recommends sash restoration with insulated glazing to best meet the owner's long-term maintenance and functional requirements.

Sash Restoration with Insulated Glazing (Proposed Treatment)

Insulated glazing units would be incorporated into the existing true-divided-light windows. Existing muntins, rails and stiles will be modified to accept the thickness of the insulated glazing units. All interior profiles will be retained. New exterior wood stops will consist of Philippine Mahogany, and

will be beveled, creating a "putty line" similar to the existing window construction. Glazing units will incorporate Low-E coatings, and the glass will be tempered whenever windows are within 2'-0" of exterior doors. Upper sash of double-hung windows would be fixed in place, and all casement sash would be fixed in place.

Historic Fabric:

- Existing wood muntin, rail, and stile profiles will be retained. Existing window heads, jambs and sills will be restored.
- Note that an existing double-hung sash at the Music Room will be "archived" in place at the new fire stair enclosure. (Window # 104)
- Note that an existing casement sash is currently "archived" and will be restored in place at the second floor hallway. (Window # 204)

Pros:

- Increased thermal performance from creation of dead-air space and incorporatian of Low-E coatings at double insulated lites
- Reduction of air and water infiltration with new weather-stripping at operoble units.
- Reduction of UV light levels (84% reduction) with the use of Low-E coatings.
- Existing muntin, rails and stile profiles will be retained.
- First floor and basement level sash security improved with tamper-proof intemal sash locking hardware.
- Operable sash can be provided ta accommodate office and kitchen areas.
- Overall interior and exterior appearance of windows will remain unchanged.

Cons:

- Loss of original glass bedding surface to accommodate insulated glazing.

Cost:

- Total estimated project cost: $150,000

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

DOUBLE-HUNG SASH AT MUSIC ROOM - FIRST FLOOR

Photos:

- #1: Interior view of music room.
- #2: Exterior view of sash (lower level).
- #3: Example of interior faux-finish at sash (from French door)

Window No's:

101; 102; 103

Existing Conditions:

Description: Single glazed, 8/12 wood double hung sash with 2" wide rails and stiles, and 1-3/16" wide muntins. Glazing consists of modern, distortion free glass. Sash thickness is 1-3/8". Meeting rail and sill have metal weather-stripping. Jambs are not weather-stripped. Interior finish of the frames is dark stained oak. Sash are faux-finish oak on interior surfaces. All exterior surfaces are painted.

Condition: Lower rails of sash exhibit open joints and water staining. Interiar faux-finish is flaking, exposing a white undercoating. Sash are loose in their frames.

Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weather-stripping.

Recommended Treatment - Sash Restoration with Insulated Glazing:

Work: Incorporate insulated glazing units into the existing true-divided-light windows. Existing muntins, roils and stiles will be modified to accept the thickness of the insulated glazing units. All interior profiles will be retained, and existing faux finish will receive a clear wax coating. New exterior wood stops will consist of painted, Philippine Mahogany which will be beveled, creating a "putty line" similar to the existing window construction. Upper sash would be fixed in place.

Impact: Existing historic fabric will remain largely intact. Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved.

Drawing: Similar to Detail G5/A704, incorporating existing window components.

DOUBLE-HUNG SASH (NARROW MUNTINS) AT GALLERY AND MEETING ROOM - SECOND FLOOR

Photos:

- #7: Exterior view of sash at Gallery (Rm. 103).
- #8: Detail view of loose sash at jamb (object easily fits in gap).

Window No's:

208; 209; 212; 213

Existing Conditions:

Description: Single glazed, 6/6 wood double hung sash with 1-3/4" wide rails and stiles, and 7/8" wide muntins. Glazing consists of modern, distortion free glass. Sash thickness is 1-3/8". Meeting rail and sill have metal weather-stripping. Jambs are not weather-stripped. Interior and exterior surfaces are painted.

Condition: Lower rails of sash exhibit open joints and water staining. Upper sash are generally painted shut. Sash are significantly undersized for the existing frames, allowing for removal without detachment of inside stops.

Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are extremely high due to the lack of complete perimeter weather-stripping and poor fit of lawer sash. The presence of madern glazing suggests that these sash may not be original, since historic (distorted) glazing is present at windows elsewhere in Strathmore Hall. The poor fit of the sash also suggests that they may be replacement sash.

Recommended Treatment - Replacement Sash:

Work: Provide single-hung, double insulated, wood sash replacements with pulley-and-chain counterweights and full weather-stripping. Stile, rail and muntin widths to match existing sash. Muntin, rail and stile profiles will differ from the typical existing sash to allow differentiation of new and restored sash. Sash thickness to be 1-3/4". Retain existing window frames, jambs and stops. Rout sash perimeter to accommodate existing 1-1/2" width of jambs. Paint exterior and interior of new sash to match existing.

Impact: Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved. Operation of window will remain unaffected.

Drawing: Similar to Detail G5/A704

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

CASEMENT SASH AT MUSIC ROOM (SECOND FLOOR) and SUNROOM (FIRST FLOOR)

Photos:

- #2: Exterior view of sash at Music Room (upper level).
- #9: Detail view of exterior sash from second floor hallway.
- #12: Exterior view of sun room windows.
- #13: Detail view of window and door jambs.

Window No's:

121; 122; 201; 202; 203; 204; 226 thru 228

Existing Conditions:

Description: Single glazed, 8-lite and 12-lite casement sash with 2-1/2" wide rails and stiles, and 1-3/16" wide muntins. Sash thickness is 1-3/8". Meeting stiles (where present) are not weather-stripped. Top and bottom rails of operable sash have metal weather-stripping. Interior and exterior surfaces are painted.

Condition: Lower rails of sash exhibit minimal deterioration. Most sash are painted shut.

Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weather-stripping.

Recommended Treatment - Sash Restoration with Insulated Glazing:

Work: Incorporate insulated glazing units into the existing true-divided-light casement sash. Existing muntins, rails and stiles will be modified to accept the thickness of the insulated glazing units. All interior profiles will be retained. New exterior wood stops will consist of Philippine Mahogany which will be beveled, creating a "putty line" similar to the existing window construction. Tempered glass will be installed as sunroom sash adjacent to doors. Casement sash would be fixed in place. Repaint exterior and interior of sash to match existing.

Impact: Existing historic fabric will remain largely intact. Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved. Window will no longer be operable.

FRENCH DOORS AT FIRST AND SECOND LEVEL

Photos:

- #14: Exterior view of south entrance doors.
- #15: Exterior view of second floor French doors.
- #3: Detail of bose of Music Room French doors.

Door No's:

101A & B; 109A, B & C; 108A, B & C; 259A

Existing Conditions:

Description: Single glazed, 10-by-10 wood poired French doors with 4" wide rails and stiles, ond 1-3/16" wide muntins. French doors ot portico (south elevotion) are single-lite, without muntins. Door thickness is 1-3/8". Interior and exterior surfoces ore pointed. Music Room doors have 1-1/16" wide muntins, and have o faux-finish motching the ook door frames.

Condition: Lower roil of doors exhibits open joints and water staining. Severol doors exhibit domoged lower roils ot the conceoled lotches. Egress hordwore ot moin entronces does not meet code.

Comment: Thermol performance of these doors is poor due to the lock of storm doors or insuloted gloss. Air infiltration rotes ore high due to the lock of complete perimeter weother-stripping.

Recommended Treatments - Replocement Doors at First Floor Entrances ond Second Floor Balcony; Restored Doors with Tempered Glass ot Music Room.

Work: Provide new, double insuloted, tempered gloss wood French door replocements ot entronces. Stile, roil and muntin widths and profiles to replicate appearance of existing doors. Door thickness to be 1-3/4". Provide panic hardware ot exit doorways. Retain existing door frames. Paint exterior and interior of new doors to match existing. Provide true divided-lite French doors ot second floor portico. Restore existing French doors at Music Room and replace glozing with tempered glass (muntin bars ore too narrow to accept insulated glazing units).

Impact: Exterior ond interior appeorance and sightlines of first floor doors will be unchonged. Second floor doors will be converted to divided-lite doors matching first floor doors. Thermal performonce will be improved.

STRATHMORE HALL
WINDOW REHABILITATION
June 19, 1996

TYPICAL DOUBLE-HUNG SASH AT FIRST AND SECOND FLOOR

Photos:

- #4: Exterior view of sash at Library.
- #5: Exterior view of sash at Gallery (Rm. 110).
- #6: Detail view of jamb width.
- #10: Exterior view of sash (upper level).
- #11: Interior detail view of meeting rail with tailpieces.

Window No's:

105 thru 108; 110; 111; 112 thru 118; 215 thru 222

Existing Conditions:

Description: Single glazed, 4/6, 6/9, 8/8 and 8/12 wood double hung sash with 2" wide rails and stiles, and 1-3/16" wide muntins. Sash thickness is 1-3/8". Meeting rail and sill have metal weather-stripping. Jambs are not weather-stripped. Interior and exterior surfaces are painted.

Condition: Lower rails of sash exhibit open joints and water staining. Upper sash are generally painted shut. Sash are loose in their frames.

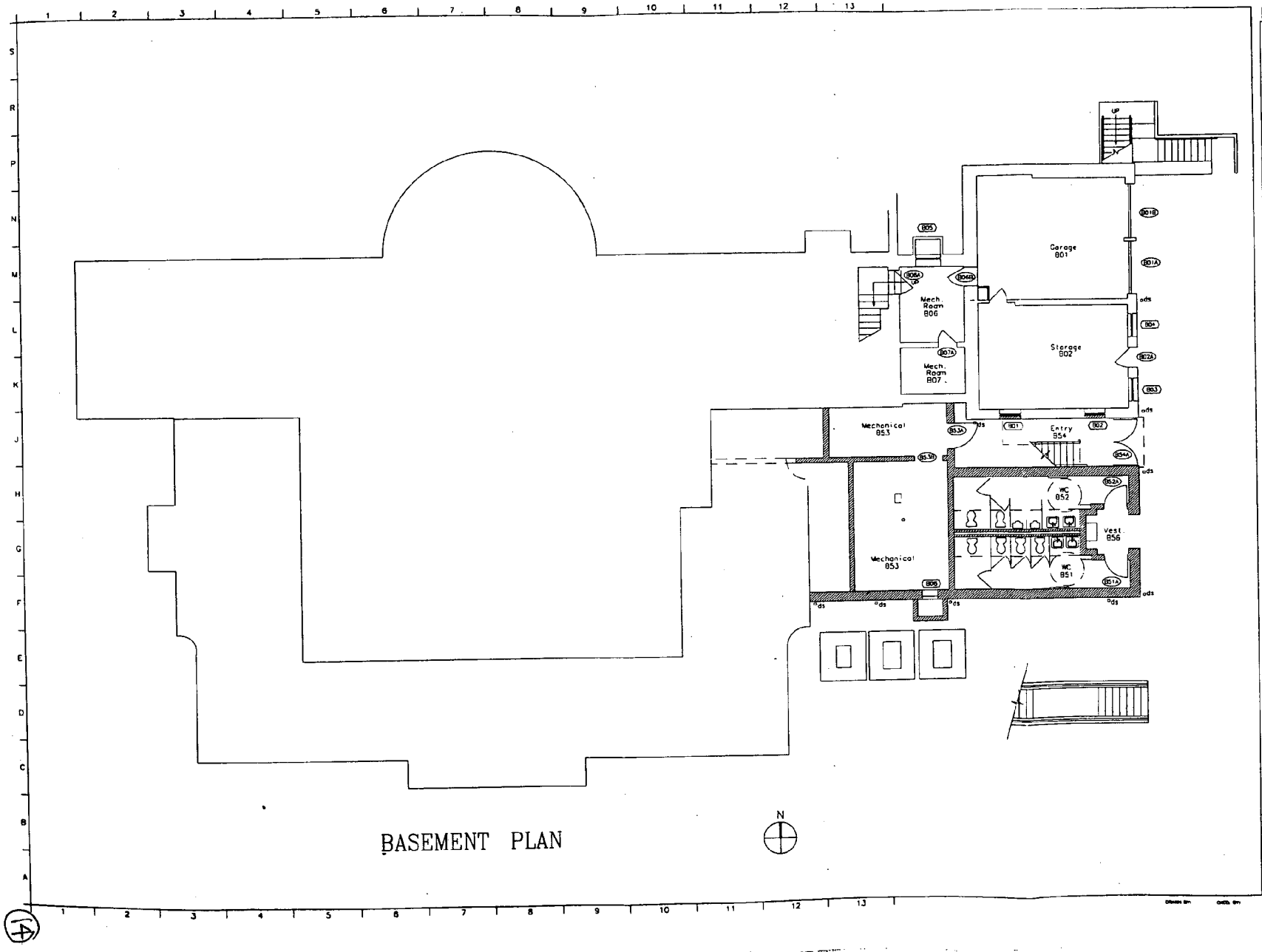
Comment: Thermal performance of these sash is poor due to the lack of storm sash or insulated glass. Air infiltration rates are high due to the lack of complete perimeter weather-stripping.

Recommended Treatment - Sash Restoration with Insulated Glazing:

Work: Incorporate insulated glazing units into the existing true-divided-light windows. Existing muntins, rails and stiles will be modified to accept the thickness of the insulated glazing units. All interior profiles will be retained. New exterior wood stops will consist of Philippine Mahogany which will be beveled, creating a "putty line" similar to the existing window construction. Upper sash will be fixed in place. Repaint exterior and interior of sash to match existing.

Impact: Existing historic fabric will remain largely intact. Exterior and interior appearance and sightlines of window will be unchanged. Thermal performance will be improved.

Drawing: Similar to Detail G5/A704, incorporating existing window components.



BASEMENT PLAN

QUINN EVANS ARCHITECTS

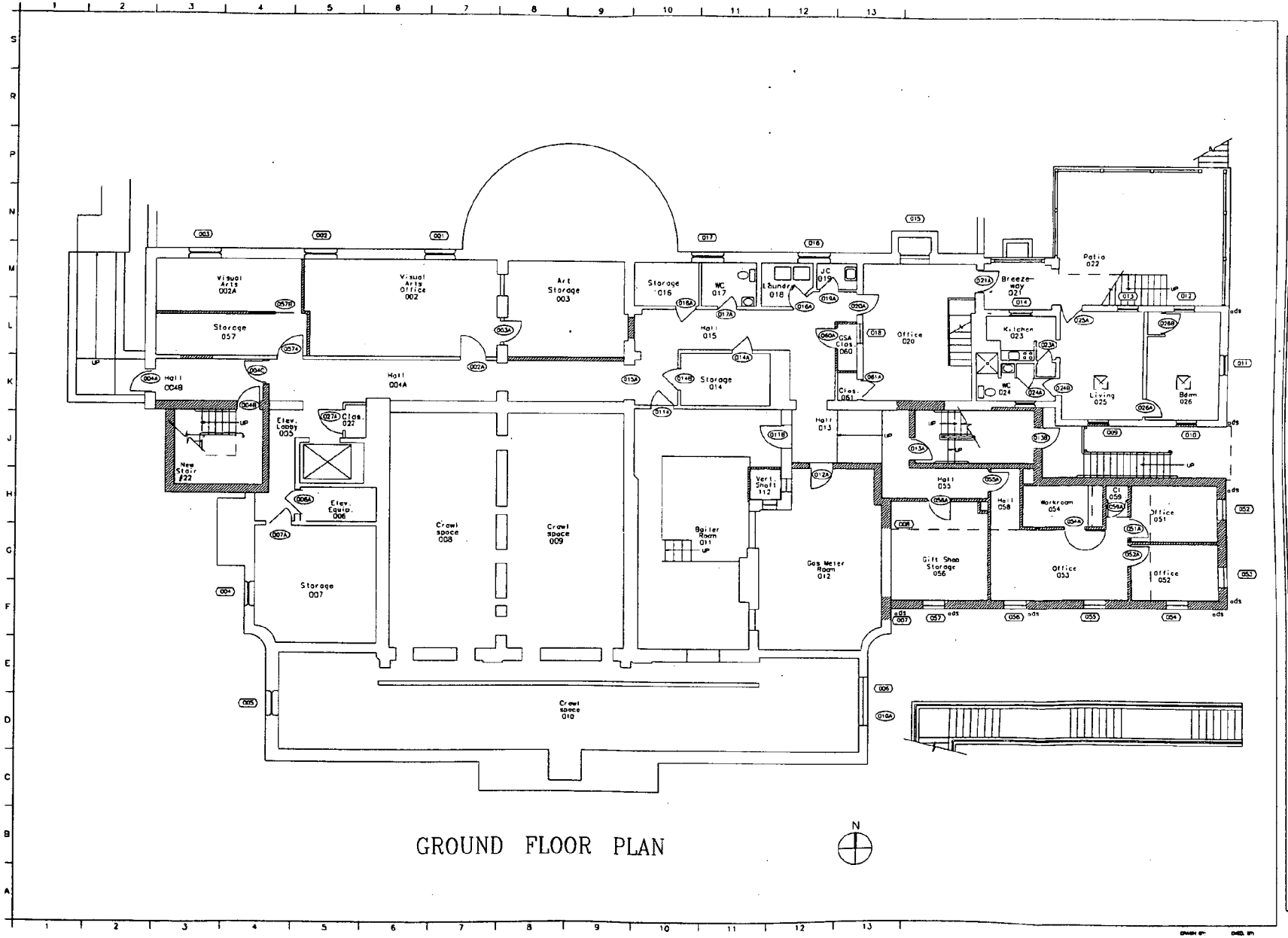
STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500006

Quinn Evans/ Architects Project No. 95219



GROUND FLOOR PLAN

QUINN EVANS ARCHITECTS

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52560006

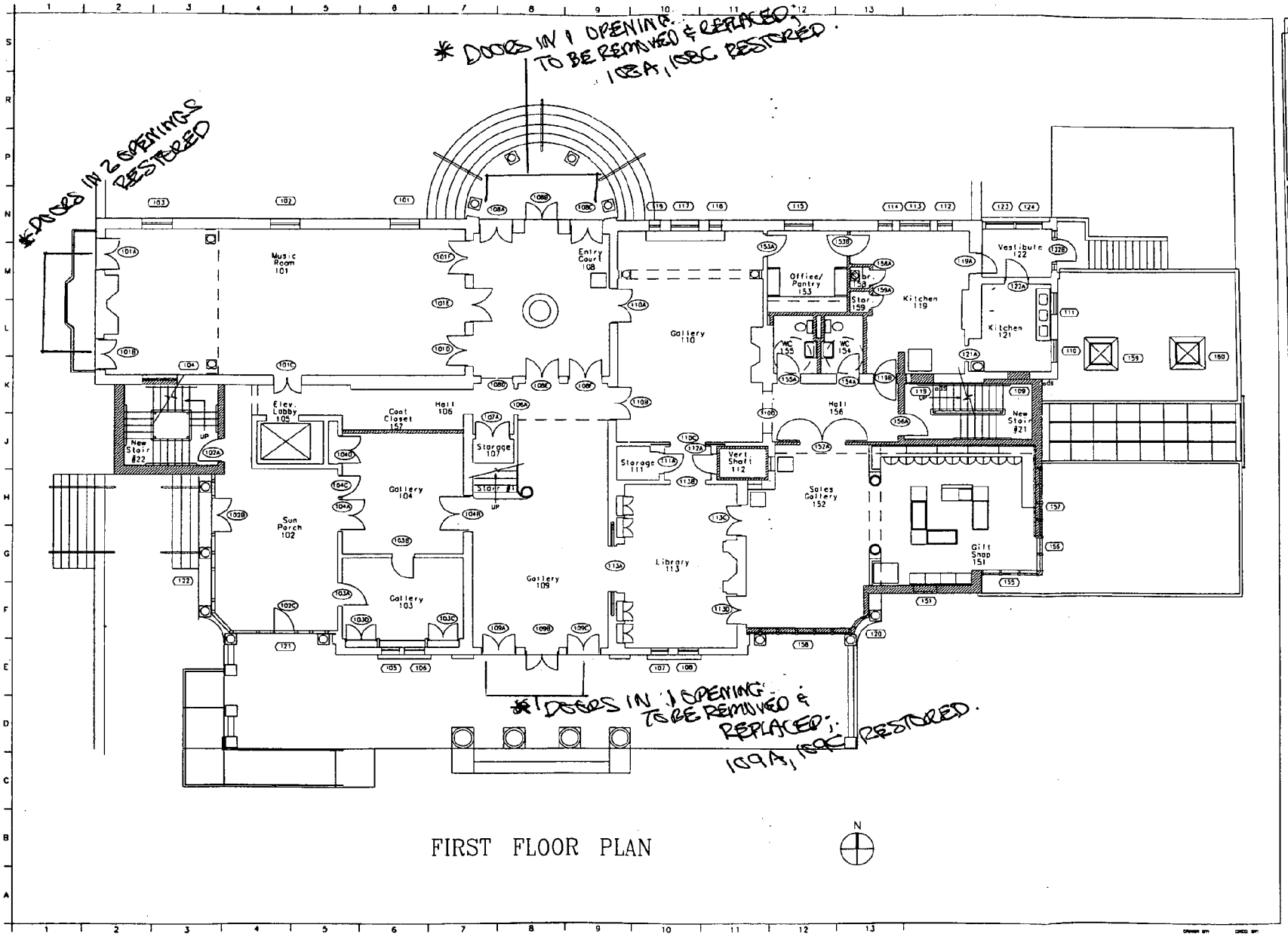
Quinn Evans/ Architects Project No. 05219

SHEET TITLE

DATE

REVISIONS

SHEET NUMBER



QUINN EVANS ARCHITECTS

STRATHMORE HALL

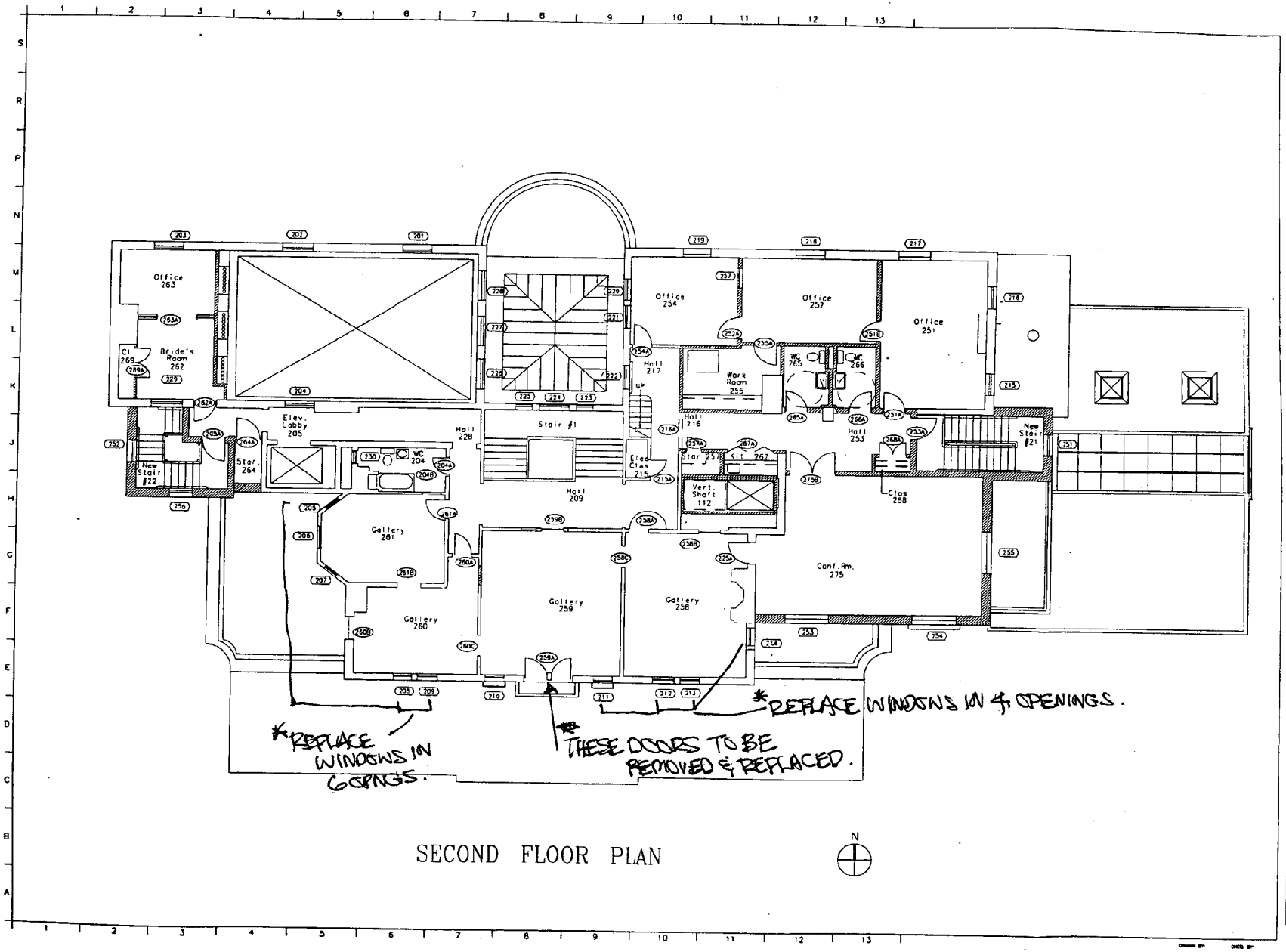
WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500006

Quinn Evans/ Architects Project No. 96219

(6)



SECOND FLOOR PLAN

QUINN EVANS ARCHITECTS

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500008

Quinn Evans/ Architects Project No. 05210

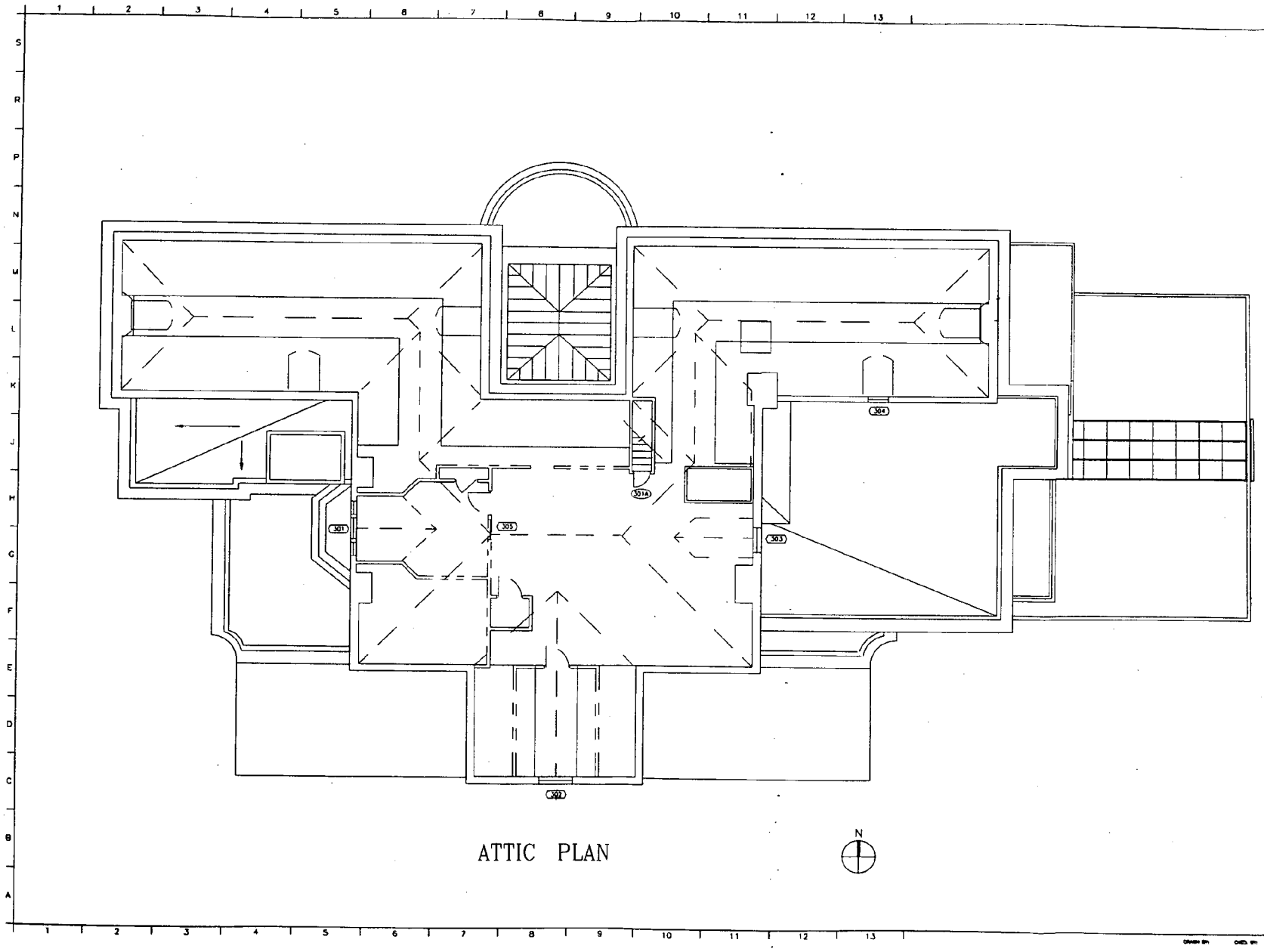
SHEET TITLE

DATE

REVISIONS

SHEET NUMBER

(1)



ATTIC PLAN

QUINN EVANS ARCHITECTS

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No 52500006

Quinn Evans/ Architects Project No. 95218

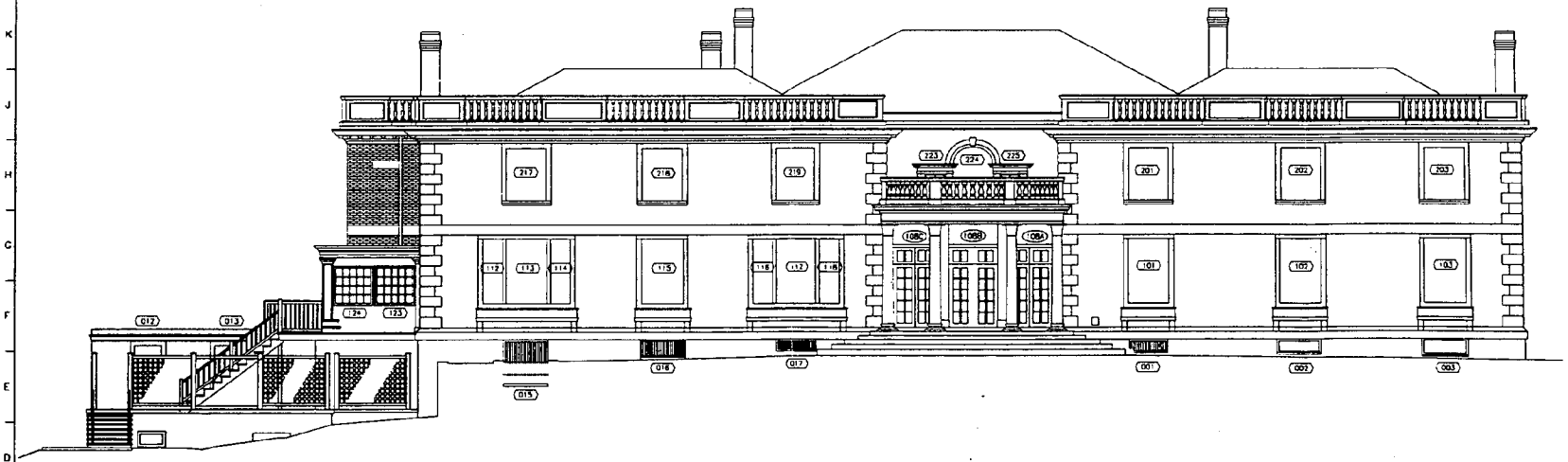
SHEET TITLE

DATE

REVISIONS

SHEET NUMBER

(8)



NORTH ELEVATION

QUINN EVANS

ARCHITECTS

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500008

Quinn Evans/ Architects Project No. 95219

SHEET TITLE

DATE

REVISIONS

SHEET NUMBER

(9)

WEST ELEVATION

QUINN EVANS
ARCHITECTS

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500006

Quinn Evans/ Architects Project No. 98219

SHEET TITLE

DATE

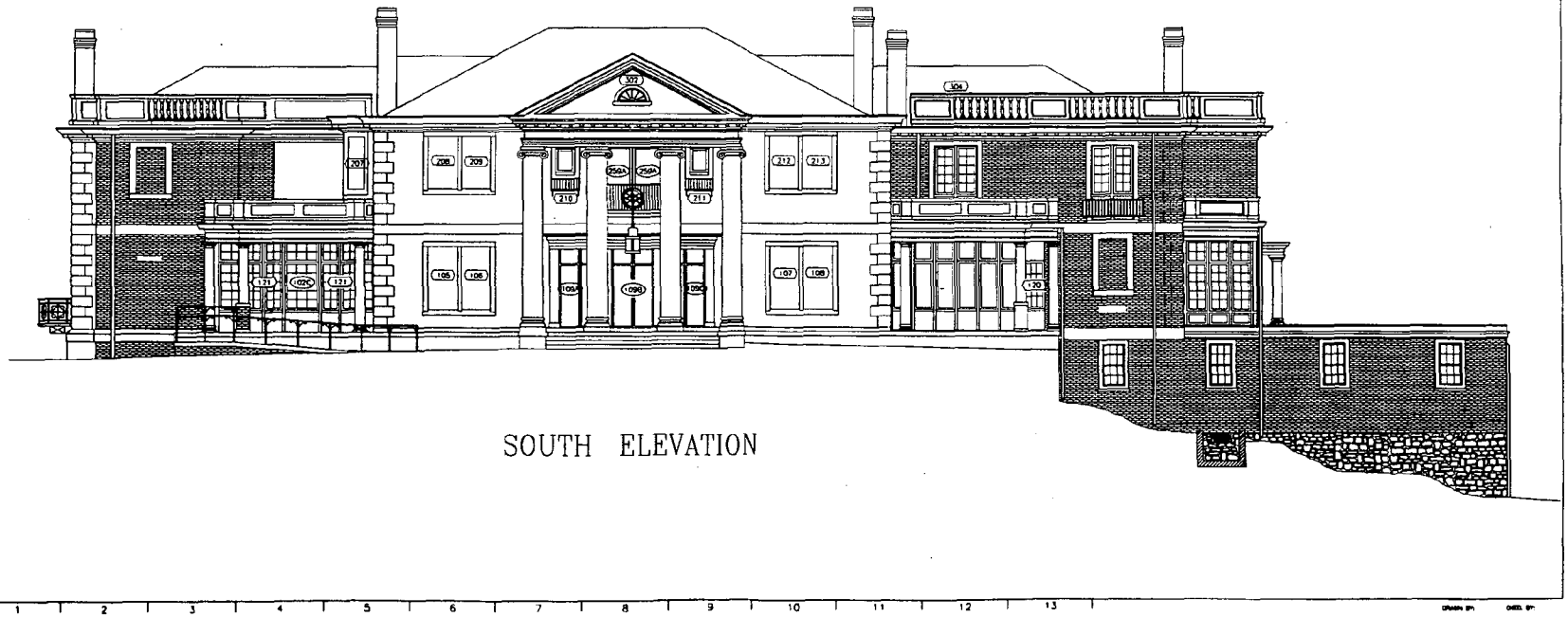
REVISIONS

SHEET NUMBER

DRAWN BY

CHKD BY

20



SOUTH ELEVATION

QUINN EVANS

ARCHITECTS

STRATHMORE HALL

WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No 52500008

Quinn Evans/ Architects Project No. 95219

SHEET TITLE

DATE

REVISIONS

SHEET NUMBER

21

EAST ELEVATION

QUINN EVANS ARCHITECTS

STRATHMORE HALL

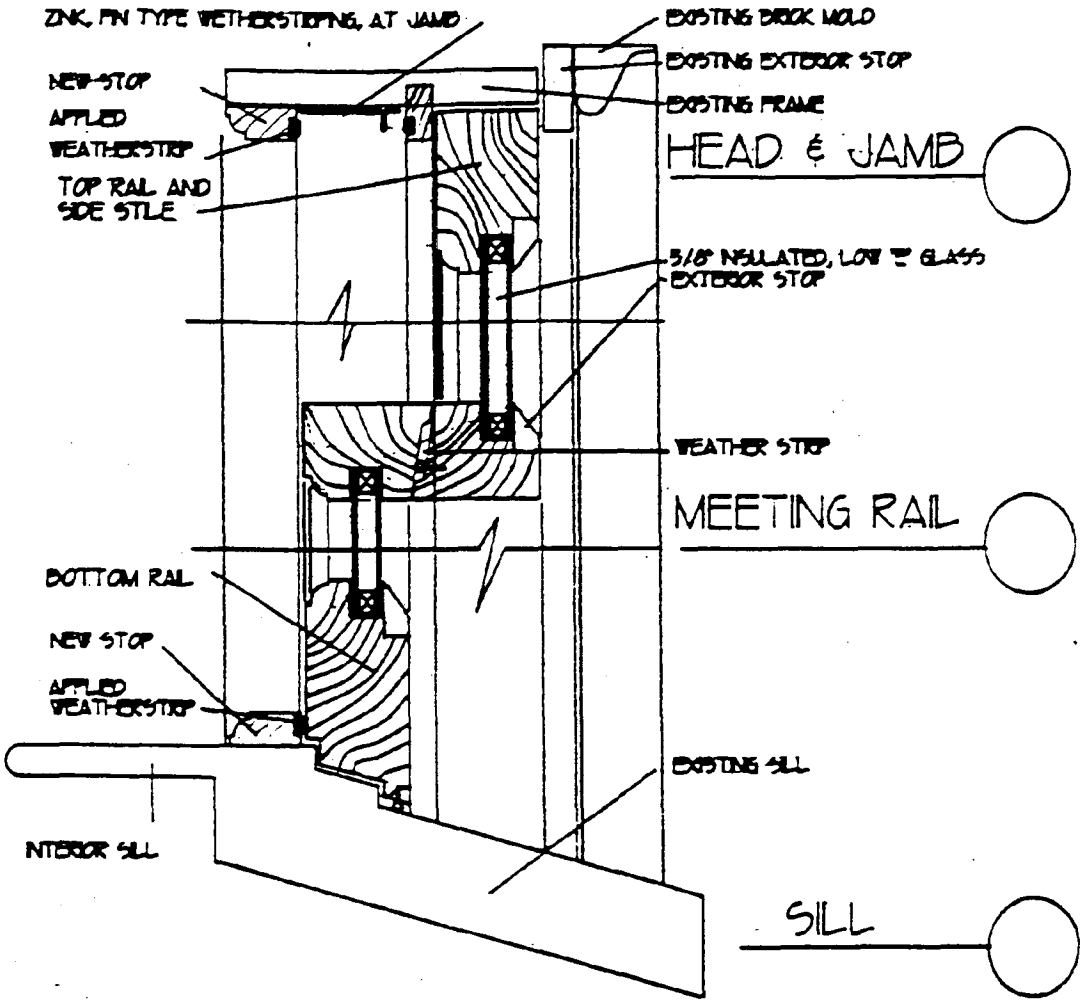
WINDOW REHABILITATION

Rockville, MD

Montgomery Co. Contract No. 52500006

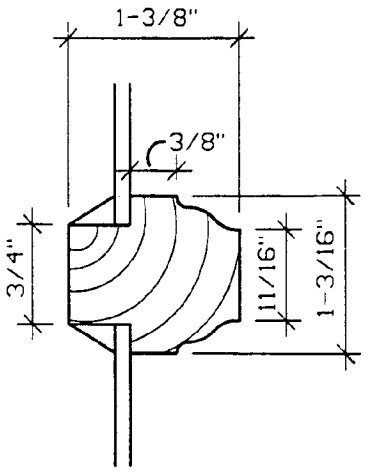
Quinn Evans/ Architects Project No. 95219

(22)

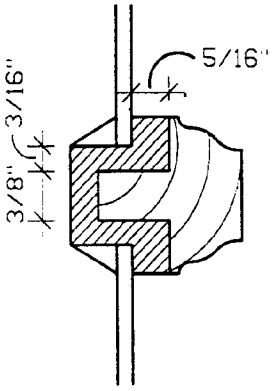


Concept Details for Re-Glazing 1-3/8" Existing Sash
with 7/16" Insulating Glass

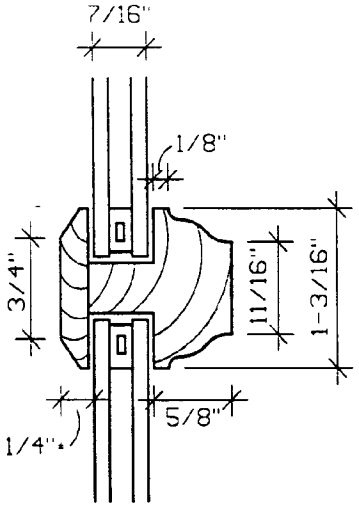
REPLACEMENT SASH DETAILS NO SCALE	STRATHMORE HALL	QUINN EVANS ARCHITECTS



Existing Muntin Bar
(Typical)



Modifications to Muntin
(hatched area will
be removed)



Re-Configured Muntin Bar
with Insulated Glazing

WINDOW MUNTIN PROFILES NO SCALE	STRATHMORE HALL	QUINN EVANS ARCHITECTS

Photo #1: Interior view of music room. 8/12 Faux-finish double-hung sash are at lower level. 8x8 casement sash are at upper level.

Photo #2: Exterior view of sash at Music Room.

Photo #3: Example of interior faux-finish at French doors in Music Room. Double hung sash at lower level have a similar Faux-finish.

Photo #4: Exterior view of sash at Library. Window No.s 212 and 213.

Photo #5: Exterior view of sash at Gallery (Rm. 110).

Photo #6: Detail view of jamb width for double-hung sash at first floor Gallery and Library. Window No.s 105 through 108.

Photo #7: Exterior view of sash at second floor Gallery (Sash No.s 212, 213). Note narrow muntins (Type 3) at this sash.

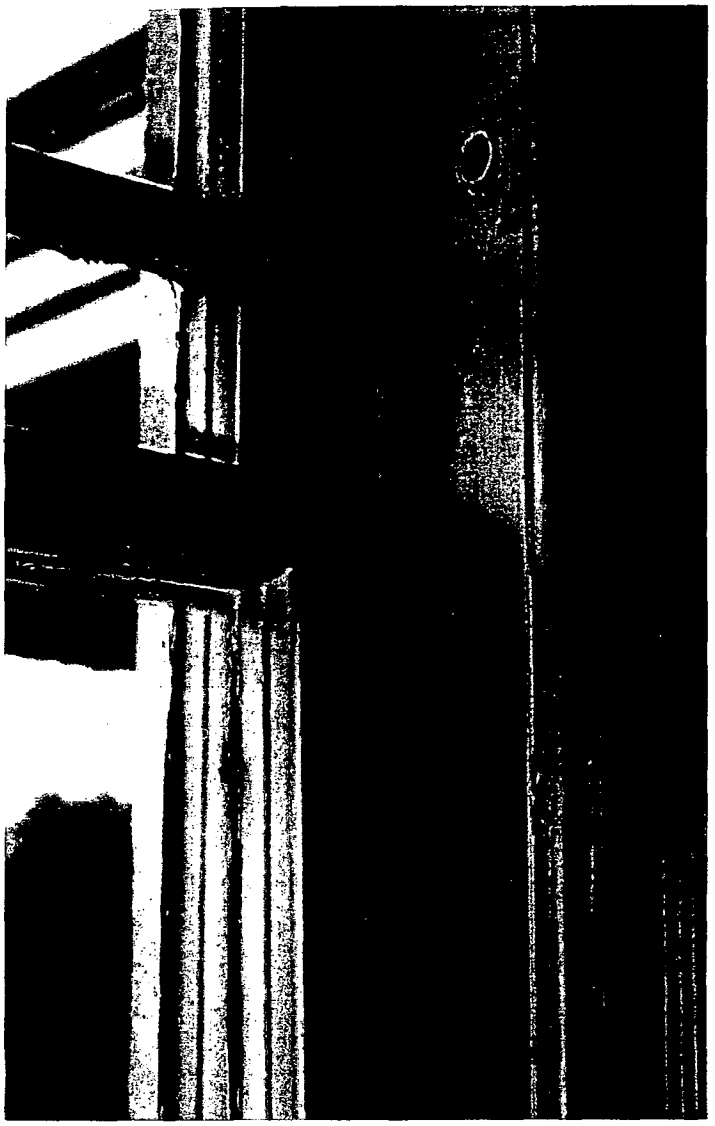


Photo #8: Detail view of loose sash at jamb (object easily fits in gap). This is a typical condition for all narrow-muntin sash at Strathmore Hall. See Photo #7 for exterior view of sash.

Photo #9: Detail view of exterior casement sash at Music Room.
This sash opens onto the second floor hallway.
This historic sash will be restored (archived) in place.

Photo #10: Exterior view of sash at first floor Gallery and kitchen, and second floor offices. The sash at the kitchen and offices must remain operable.

Photo #11: Interior detail view of meeting rail with tailpieces. Window No. 205.

Photo #12: Exterior view of sun room window No.s 121 and 122. These sash will be restored and will receive exterior wood-framed storm glazing.

Photo #13: Detail view of window and door jambs at sun room. Exterior window mullions are already detailed (rabbeted) to receive exterior storm sash.

Photo #14: Exterior view of south entrance door No.s 109B. These doors will be replaced with new, double insulated French doors with egress hardware.

Photo #15: Exterior view of second floor French door No.s 259A. These doors will be replaced with true divided lite French doors.

HAWP APPLICATION: ADDRESSES OF ADJACENT & CONFRONTING PROPERTY OWNERS

Georgetown Preparatory School, Inc.
10900 Rockville Pike
North Bethesda, Maryland 20852

Grosvenor Park II Condominium
10500 Rockville Pike
North Bethesda, Maryland 20852

Washington Metro Area Transit Authority
Grosvenor Metro Station
600 5th Street, N.W.
Washington, D.C. 20001

Academy of the Holy Cross, Inc.
4920 Strathmore Avenue
Kensington, Maryland 20895

American Speech, Language, and Hearing Association
10801 Rockville Pike
North Bethesda, Maryland 20852

Plans for Strathmore Hall renovation to be unveiled

$3.5 million project includes gallery and three-story administrative wing

by Colin Harper Plank
Staff Writer

Downtown art museums may soon face some competition from Montgomery County.

The Strathmore Hall Arts Foundation Inc., will unveil plans for a $3.5 million renovation and expansion of the Strathmore Hall Arts Center at its Sixth Annual Honors Dinner at 6:30 p.m. Thursday, May 23, at the center on Rockville Pike in North Bethesda.

The arts center will get a high tech exhibition gallery and a three-story wing on the east side of the 100-year-old mansion. The renovation work and the new wing should be completed by summer 1997.

"There will be no other comparable quality gallery in the county when we are done," said Eliot Pfanstiehl, the executive director of Strathmore Hall.

The capital campaign Steering Committee for the foundation has already raised $2.6 million to pay for the renovation and expansion. The center is hoping to raise the remaining funds this year. State funds already have given the foundation $1.25 million and Montgomery County has donated $730,000. The remaining $600,000 came from private and corporate sponsors.

The new arts center will continue to be home to the staff of the arts center and the Montgomery County Arts Council. Pfanstiehl said that the center piece of the expansion will be the new Gudelsky Gallery Suite, named in honor of a $300,000 gift from Martha Gudelsky of Silver Spring, a long time Montgomery County patron of the arts.

He hopes to make it the premier exhibition space in the county.

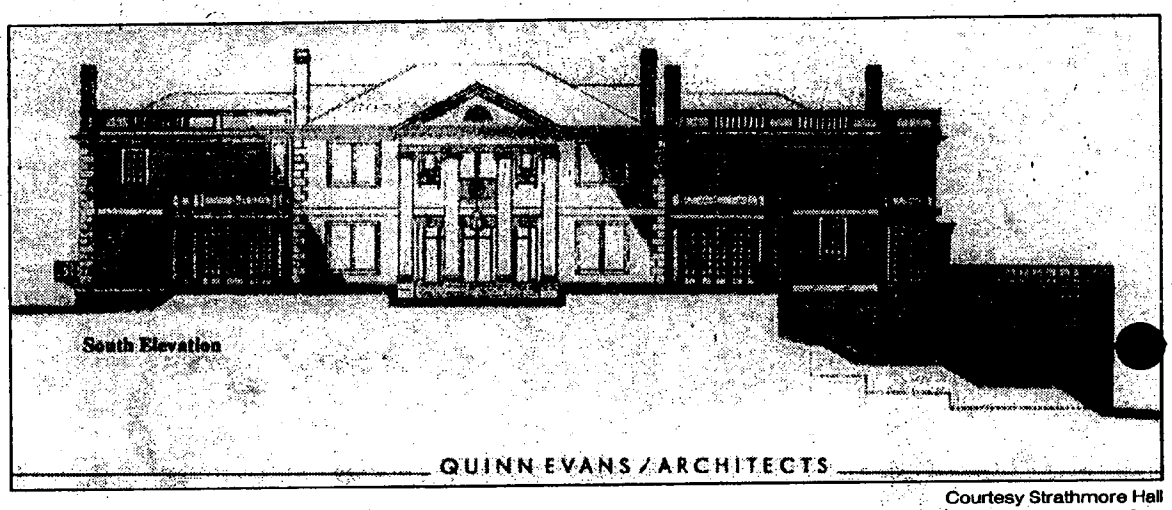
The arts center opened its doors in 1983, after Montgomery County gave the mansion and 11 acres to the nonprofit Strathmore Hall Foundation Inc. to run as a cultural center. Built in 1902, the neo-classical Georgian mansion was originally owned by Capt. and Mrs. James Oyster.

Strathmore Hall Arts Center serves as the visual, performing and literary arts center. The land and mansion are owned and maintained by the county. The Strathmore Hall Arts Foundation pays for the programming and salaries through donations, private grants, performance income and gift shop revenue. The annual operating budget is $600,000.

The expansion, expected to be completed in December, will increase the existing 11,000 square feet of the mansion by 25 percent to almost 16,000 square feet. The work also will include interior renovation of the building.

The work, to begin later this summer, will be conducted in two phases:

Phase one construction of the outside wing will be from August 1996-December 1996. The new wing will include a new office space for the Arts Council and public restrooms on the ground floor for outdoor events; an expanded gift shop, art sales gallery and handicapped accessible bathrooms on the main floor; a conference room on the top floor.



Courtesy Strathmore Hall

Pictured here is a rendering by Quinn Evans/Architects of Washington for the renovation and expansion plans for Strathmore Hall Arts Center. The arts center is unveiling its $3.5 million renovation and expansion plans at the Sixth Annual Honors Dinner on May 23.

Phase two lasts from January-June 1997. The main building top floor will be converted into a four-room gallery suite with a high tech security system, sophisticated lighting and air temperature control to protect the artworks. The rest of the top floor will reconfigure existing office space and add the conference room from the new wing. The main floor will be repainted and have new lighting.

During that time, the foundation staff and arts council will be temporarily housed for free at the Comprint building in Gaithersburg. The printing company is a division of Gazette Newspapers.

Due to an easement placed by the Maryland State Historical Trust on the mansion, Strathmore Hall can not put on any more additions. But Pfanstiehl said he hopes the expansion of the arts center will continue in other directions. He wants the foundation to purchase the 10 acres in front of Strathmore Hall and develop a "20-acre cultural campus." Pfanstiehl said that plans are not set but if they acquire the land it could be the site of a performing space to hold a full orchestra, a theatre, a museum, or an arts education facility. The land is owned by the American Speech-Language-Hearing Association. Strathmore Hall is currently involved in negotiations to acquire the property.

Charles A. Lyons, president of Gazette Newspapers, co-chair of the capital campaign Steering Committee, which is in charge of raising the money for the renovations, and the newly-elected president of the Board of Directors for Strathmore Hall Foundation, Inc., said the foundation will concentrate on raising money for renovations before buying more land.

"We're well on our way towards our goal [of raising renovation money] but now it is time to go to the public and get their support," Lyons said.

Lyons said the capital campaign will encourage people in the co[illegible] to recognize the arts center as a "hidden treasure" and that donations will help to make it an "extraordinary" one.

Lyons said that the arts center will relocate some performances to Georgetown Preparatory School in Rockville and other locations during the construction to keep the interruption of income to a minimum while the arts center staff is displaced for six months.

Continued on next page

12

OLNEY Gazette Wednesday, May 15, 1996 o

Residents fear area church's changed plans for expansion

by Katherine Richards
Staff Writer

Members of the Rockville Korean Baptist Church on Sycamore Lane off Muncaster Mill Road want to alter plans for the church's expansion project, but some neighbors are expressing doubts about the changes.

In 1993, the county approved the church's plan to add a 3,200-square-foot classroom wing to its existing building.

Now, the growing congregation wants to change the plan. Instead of building an education wing, the congregation hopes to build a new 4,000-square-foot sanctuary. The old sanctuary would be used for classrooms, said Pastor Young Kim.

The Montgomery County Planning Commission staff decided the changes to the site plan are important enough to warrant a new public hearing, which is scheduled for tomorrow afternoon.

The church is also seeking permission to double the size of its paved parking lot.

"We're very worried," said Barbara Weintraub, president of the Sycamore Acres Civic Association. She said residents have questions about traffic, runoff, noise, night-time activities and lighting at the site.

"We're just very upset that it went from what appeared to be a reasonable thing to something this huge," said Gemma Corsini, whose yard abuts the church property.

Corsini said she received notice of the changes last week. She said she is concerned about increased traffic and worried that runoff from the enlarged parking lot could flood her basement or harm nearby wetlands.

However, Stan Benning, whose firm Benning & Associates Inc. of Gaithersburg designed the project, said the new plan will bring no more traffic to the neighborhood than the old one.

County planner Malcolm Shaneman said according to the new plan, no wetlands would be disturbed.

The church will have to submit a new lighting, landscaping and parking plan, he said. It will also have to comply with approved plans for stormwater management and forest conservation.

County regulations require parking areas to be screened so headlights don't disturb neighbors, Benning said.

Kim said the expanded facility will be used almost exclusively on Sundays. About 110 to 120 people attend the church's Sunday worship services, he said. Smaller services are held Wednesday evenings, and youth group meetings on Saturdays attract up to 30 people, he said.

"I think it's no trouble at all," Kim said.

He said he had not heard from any of the neighbors, and added, "so far, we have a good relationship with them."

Weintraub and Dave Eskenazi, president of the Greater Olney Civic Association, said last week they would ask for the hearing to be delayed so members could have more time to review the new plan.

Weintraub said she would like the site plan changed to allow worshipers to access the church parking lot from Muncaster Mill Road, in order to reduce the number of cars using Sycamore Lane.

However, Shaneman said the Maryland State Highway Administration "strongly said no" to Muncaster Mill Road access because the church is too close to other intersections.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

DATE: July 10, 1996

MEMORANDUM

TO: Robert Hubbard, Chief
Division of Development Services and Regulation
Department of Environmental Protection (DEP)

FROM: Gwen Marcus, Historic Preservation Coordinator
Design, Zoning, and Preservation Division
M-NCPPC

SUBJECT: Historic Area Work Permit

The Montgomery Historic Preservation Commission has reviewed the attached application for a Historic Area Work Permit. The application was:

_____ Approved _____ Denied

X Approved with Conditions: _____

1. Only windows within openings 208, 209, 210, 211, 212, 213 and 214 should be replaced. Replacement sash shall match existing lite configuration, operation, muntin and head profiles. Glazing may be double pane.
2. All work must meet the approval of the Maryland Historical Trust (MHT.)

THE BUILDING PERMIT FOR THIS PROJECT SHALL BE ISSUED CONDITIONAL UPON ADHERANCE TO THE APPROVED HISTORIC AREA WORK PERMIT(HAWP).

Applicant: Mary K. Donohoe / Montgomery County

Address: 110 North Washington Street, Third Floor, Rockville, Md. 20850

***THE APPLICANT MUST ARRANGE FOR A FIELD INSPECTION BY CALLING DEP/FIELD SERVICES (217-6240) FIVE DAYS PRIOR TO COMMENCEMENT OF WORK AND WITHIN TWO WEEKS FOLLOWING COMPLETION OF WORK.

Property Address: 10701 Rockville Pike

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
8787 Georgia Avenue • Silver Spring, Maryland 20910-3760

DATE: July 10, 1996

MEMORANDUM

TO: Historic Area Work Permit Applicants

FROM: Gwen Marcus, Historic Preservation Coordinator
Design, Zoning, and Preservation Division
M-NCPPC

SUBJECT: Historic Area Work Permit Application - Approval of Application/ Release of Other Required Permits

---

Enclosed is a copy of your Historic Area Work Permit application, approved by the Historic Preservation Commission at its recent meeting, and a transmittal memorandum stating conditions (if any) of approval.

You may now apply for a county building permit from the Department of Environmental Protection (DEP), at 250 Hungerford Drive, Second Floor, in Rockville. Please note that although your work has been approved by the Historic Preservation Commission, it must also be approved by DEP before work can begin.

When you file for your building permit at DEP, you must take with you the enclosed forms, as well as the Historic Area Work Permit that will be mailed to you directly from DEP. These forms are proof that the Historic Preservation Commission has reviewed your project. For further information about filing procedures or materials for your county building permit review, please call DEP at 217-6370.

If your project changes in any way from the approved plans, either before you apply for your building permit or even after the work has begun, please contact the Historic Preservation Commission staff at 495-4570.

Please also note that you must arrange for a field inspection for conformance with your approved HAWP plans. Please inform DEP/Field Services at 217-6240 of your anticipated work schedule.

Thank you very much for your patience and good luck with your project!

Montgomery County Government

Historic Preservation Commission

51 Monroe Street, Suite 1001, Rockville, Maryland 20850
217-3625

APPLICATION FOR HISTORIC AREA WORK PERMIT

TAX ACCOUNT # 1823533

NAME OF PROPERTY OWNER Montgomery County TELEPHONE NO. (301) 217-6124
(Contract/Purchaser) Mary K. Donahoe (Include Area Code)
ADDRESS 110 N. Washington Street, 3rd Floor Rockville MD 20850
CITY STATE ZIP

CONTRACTOR To be determined TELEPHONE NO.
CONTRACTOR REGISTRATION NUMBER

PLANS PREPARED BY QUINN EVANS / ARCHITECTS TELEPHONE NO. (202) 298-6700
(Include Area Code)
REGISTRATION NUMBER

LOCATION OF BUILDING/PREMISE

House Number 10701 Street Rockville Pike

Town/City N. Bethesda Election District Strathmore ~~Hall~~ Avenue

Nearest Cross Street

Lot ____ Block ____ Subdivision

Liber 5173 Folio 63 Parcel P56 on Tax Map 123

1A. TYPE OF PERMIT ACTION: (circle one)
Construct Extend/Add Alter/Renovate (Repair)
Wreck/Raze Move Install Revocable Revision

Circle One: A/C Slab Room Addition
Porch Deck Fireplace Shed Solar Woodburning Stove
Fence/Wall (complete Section 4) Other

1B. CONSTRUCTION COSTS ESTIMATE $ $150,000
1C. IF THIS IS A REVISION OF A PREVIOUSLY APPROVED ACTIVE PERMIT SEE PERMIT # 9603050062
1D. INDICATE NAME OF ELECTRIC UTILITY COMPANY Pepco
1E. IS THIS PROPERTY A HISTORICAL SITE? Yes

PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTEND/ADDITIONS

2A. TYPE OF SEWAGE DISPOSAL
01 ( ) WSSC 02 ( ) Septic
03 ( ) Other

2B. TYPE OF WATER SUPPLY
01 ( ) WSSC 02 ( ) Well
03 ( ) Other

PART THREE: COMPLETE ONLY FOR FENCE/RETAINING WALL

4A. HEIGHT ____ feet ____ inches
4B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:
1. On party line/Property line
2. Entirely on land of owner
3. On public right of way/easement (Revocable Letter Required).

I hereby certify that I have the authority to make the foregoing application, that the application is correct, and that the construction will comply with plans approved by all agencies listed and I hereby acknowledge and accept this to be a condition for the issuance of this permit.

Signature of owner or authorized agent (agent must have signature notarized on back) — Date: 19 June 1996

****

APPROVED X-w/conditions For Chairperson, Historic Preservation Commission

DISAPPROVED Signature Date July 10, 1996

APPLICATION/PERMIT NO: 960621006Z FILING FEE: $ County Project Fee Waived
DATE FILED: PERMIT FEE: $
DATE ISSUED: BALANCE $
OWNERSHIP CODE: RECEIPT NO: FEE WAIVED:

SEE REVERSE SIDE FOR INSTRUCTIONS

MARYLAND HISTORICAL TRUST

Office of Preservation Services

Parris N. Glendening, Governor
Patricia J. Payne, Secretary

June 26, 1996

Jeffrey C. Luker
Quinn/Evans Architects
1214 Twenty-Eighth Street, N.W.
Washington, D.C. 20007

Re: Easement Committee Review
Strathmore Hall
Montgomery County

Dear Mr. Luker:

As you know, the Easement Committee of the Maryland Historical Trust met on June 5, 1996, and reviewed your request to replace most of the existing sash at Strathmore Hall with new thermally and environmentally efficient sash.

Based on the recommendation of the Easement Committee I did not approve of your proposal to replace most of the existing sash with new thermally efficient sash. However, I proposed a compromise which you indicated might be looked upon favorably. Those suggestions are:

1. The existing replacement sash on the second floor, south, west and east sides may be replaced with new thermally efficient (double glazed) sash, so long as the sash have true divided lites with integral muntins and the muntin profiles will match the muntins found on the historic sash. The existing smaller windows and double doors on this elevation may also be replaced with thermal windows and doors. The Trust must review and approve the appearance of these sash, especially the appearance and the reflectance quality of the glazing. The color and reflectance quality of the glass must be similar to the existing.

2. The Trust is agreeable to the installation of interior storm windows on the north side of the building.

3. The use of a piggy back glass panel for the windows and doors of the Florida Room and the two windows that flank the central entrance on the south elevation is acceptable.

4. We agree that it is acceptable to reswing the center pair of doors at both the north and side elevations at the center hall. Due to the installation of new hardware and glass you may

replace these doors with new units. The existing flanking doors will not be reswung and will be kept. These doors will be reglazed and may have a glass panel installed for thermal efficiency. The Trust will need to approve the appearance of the glazing before final approval is given. The color and the appearance of the glass must be similar to the existing.

The Easement Committee met again on June 26, 1996, to review your new proposal dated June 19, 1996, for a new treatment of the historic sash on the north facade as well as the French doors on the north and south facades. Under this proposal the window sash on the north side of the building would be retained but remilled to accept a thermal pane window. The existing sash including muntins would be milled to accept the thicker glazing and a wood strip would be applied to the exterior. I do not approve of this proposal.

The latest proposal calls for the removal of the glass panes on the French doors at the north and south elevations. The panes would be replaced with thermal panes. This work will be done with no remilling of the doors. I approve of this proposal. The Trust must review and approve the appearance and the reflectance quality of these new doors.

You suggested that the Trust might be in a better position to make a determination of the suitability of the modification to the sash if we saw a mock up. I do not believe that I will change my opinion, but if you wish to incur the extra expense to accomplish this, the Trust would be willing to evaluate it.

With the above parameters you may pursue the above or other options. One option that you had mentioned but was not part of your package was the use of an exterior historic appearing storm sash. You should investigate this further and see if there is any historic justification for their use.

As you are aware the use of this building as an art gallery and office space makes it difficult to use the existing windows. Due to the mixed use of the building, the state of the existing sash and doors and the need to increase environmental efficiency it would seem on the face of it that replacement windows would best suit your needs. However, the majority of the window sash that you would like to replace are in good shape and can easily and efficiently be repaired. We feel that it is important to retain the actual historic materials as well as the historic appearance.

Thank you for consulting with the Trust on this matter. If you need further information please contact Richard J. Brand at (410) 514-7634.

Sincerely,

J. Rodney Little
Director

cc: Mr. Eliot Pfanstiehl
Hon. Gilbert Gude
Ms. Mary Gardner
Ms. Gwen Marcus