

35/13-99B 6100 Connecticut Ave.
(Chevy Chase Village HD)

35/13-~~99~~B REV. 6100 Connecticut
Avenue (Chevy Chase Village HD)

1-sided orig.

**SHULMAN
ROGERS
GANDAL
PORDY &
ECKER, P.A.**

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Donald R. Rogers
Karl L. Ecker†
David A. Pordy+
David D. Freishtat
Martin P. Schaffer
Christopher C. Roberts
Jeffrey A. Shane
Edward M. Hanson, Jr.
David M. Kochanski
James M. Kefauver
Robert B. Canter
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Karl J. Protel, Jr.+
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Rebecca Oshway
Ashley Joel Gardner
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William C. Davis, III
Patrick M. Martyn
Elizabeth A. White
Sandy David Baron
Christine M. Sorge
Michael L. Kabik
Gregory D. Grant+
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Stephen G. Janoski
Simon M. Nadler
Karl W. Means
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Cara A. Frye*
Sarit Keinan
Heather L. Howard
Stephen A. Metz
Hong Suk "Paul" Chung
Lisa C. DeLessio*
Alexander Nemiroff
Patrick J. Howley
Glenn W.D. Golding+

Of Counsel
Larry N. Gandal
Leonard R. Goldstein
Richard P. Meyer*
William Robert King
Larry A. Gordon*
David E. Weisman
Lawrence Eisenberg
Deborah L. Moran
Michelle L. Lazerow*
Karen M. Doherty+
Mimi L. Magyar
Maryland and D.C.
except as noted:
+ Virginia also
* Maryland only
* D.C. only
† Retired
■ Federal practice only

Writer's Direct Dial Number:

(301) 230-5228
tdugan@srgpe.com

March 1, 2004

By Messenger

Ms. Gwen Wright

Historic Preservation

The Maryland-National Capital Park and Planning Commission

8787 Georgia Avenue

Silver Spring, Maryland 20910

Re: Chevy Chase Club
Dance Terrace

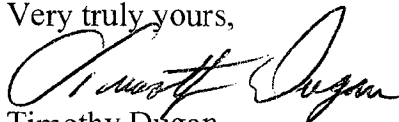
Dear Gwen:

I am sending the following:

- 1) A plan showing where the dance terrace is located within the Club's historic boundary.
- 2) Materials and Layout Plan, Plan L-1.
- 3) Grading Plan and Drainage, Plan L-2.

The Club would like to replace its existing surface with the one described on the plans. If appropriate, please indicate by signing below that no historic work permit is required, and return it to me by facsimile. Please call with your comments, questions and instructions. Thank you.

Very truly yours,


Timothy Dugan

No historic work permit is necessary.
Countywide Historic Preservation



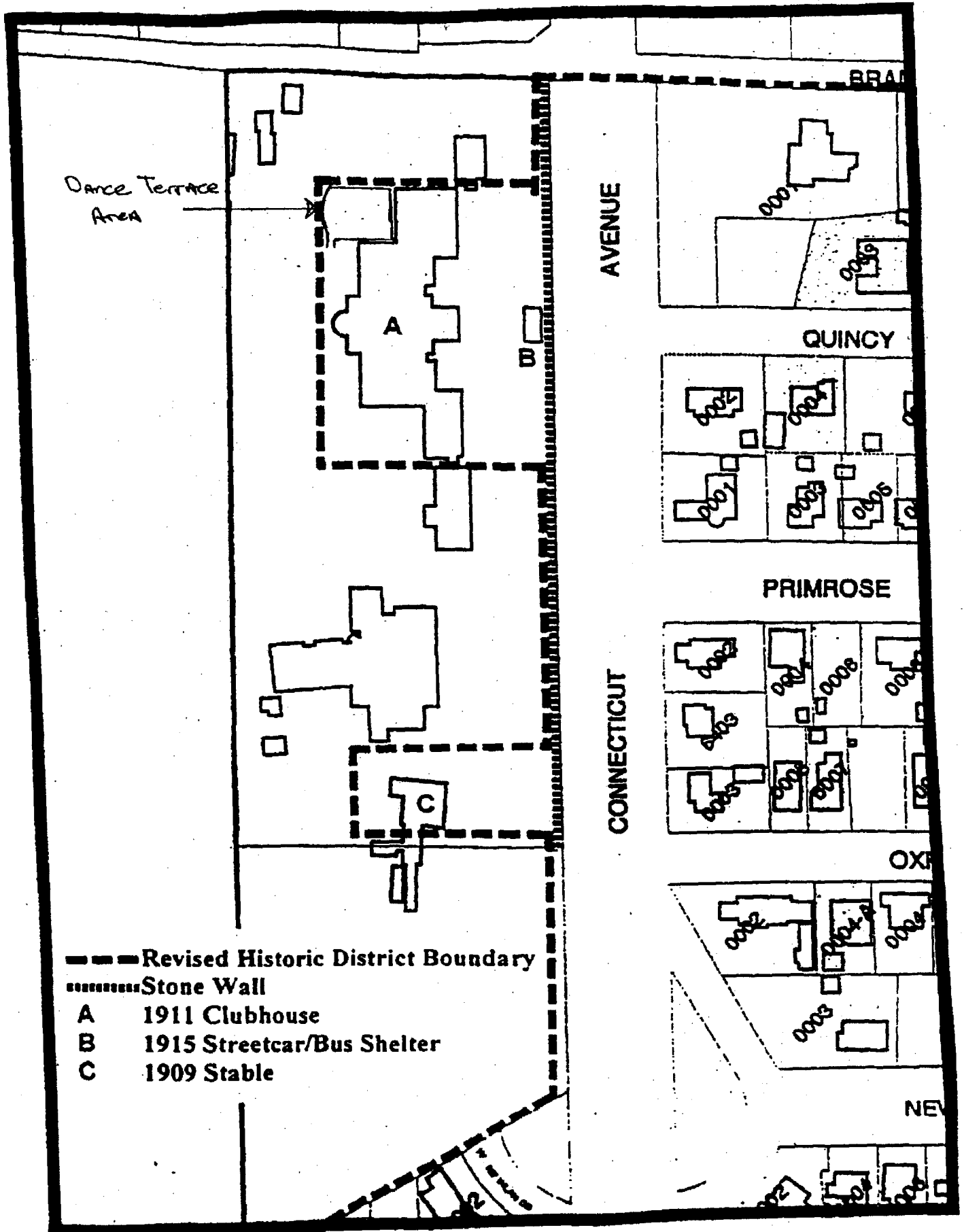
Gwen Marcus, Date: 3/4/04

Enclosures

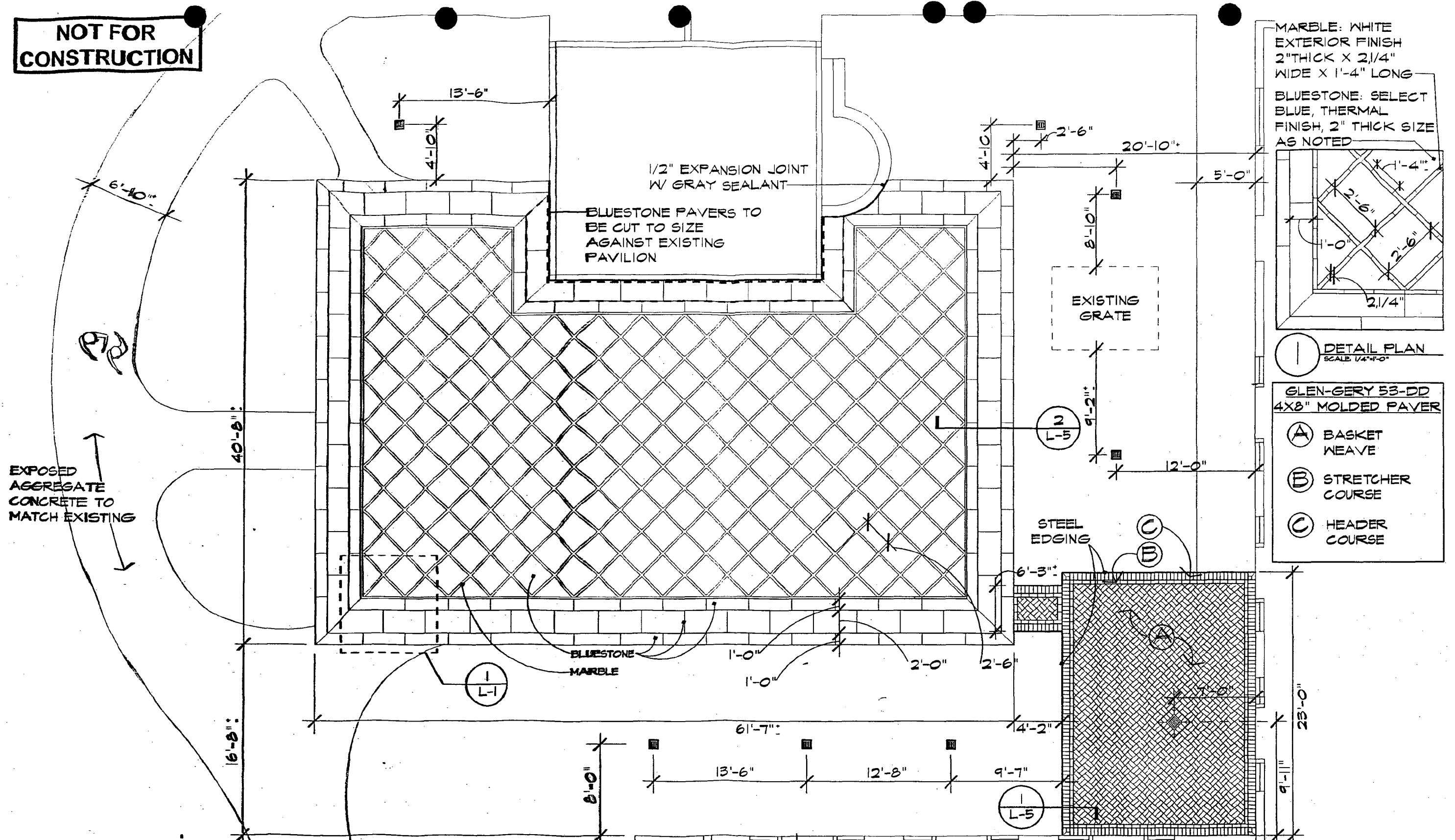
G:\51\CHEVY CHASE CLUB 104443\DANCE TERRACE\HISTORIC PRESERVATION\Gwen Wright 02 28 04.doc

**CHEVY CHASE VILLAGE HISTORIC DISTRICT:
CHEVY CHASE CLUB BOUNDARY**

FIGURE 3

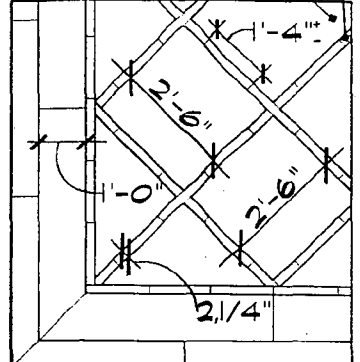


NOT FOR CONSTRUCTION



MARBLE: WHITE
EXTERIOR FINISH
2" THICK X 2 1/4"
WIDE X 1'-4" LONG

BLUESTONE: SELECT
BLUE, THERMAL
FINISH, 2" THICK SIZE
AS NOTED



1 DETAIL PLAN
SCALE: 1/4" = 1'-0"


GLEN-GERY 53-DD
4X8" MOLDED PAVER

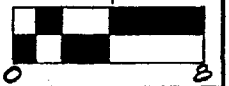
- (A)** BASKET WEAVE
- (B)** STRETCHER COURSE
- (C)** HEADER COURSE

Chevy Chase Club
6100 Connecticut Avenue
Chevy Chase, Maryland 20815

Materials and Layout Plan

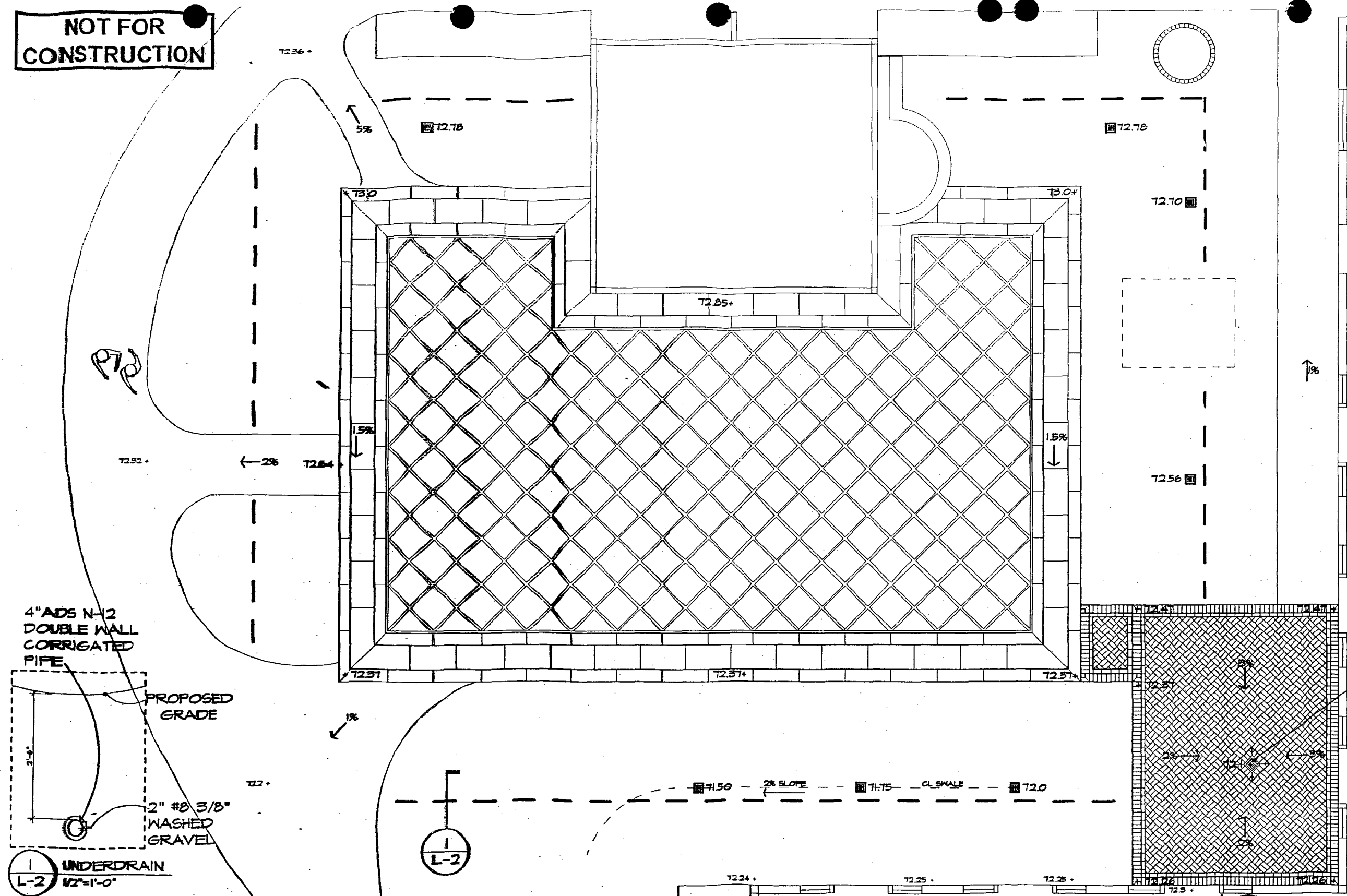
Michael Vergason Landscape Architects Ltd.
1102 King Street, 2nd Fl
Alexandria, VA 22314
(703) 836-5557
(703) 836-5505 Fax

 NORTH
SCALE: 1/8" = 1'-0"
DATE: 1/27/04



L-1

**NOT FOR
CONSTRUCTION**



LEGEND

- 72.3 + EXISTING SPOT GRADE
- 72.3 + PROPOSED SPOT GRADE
- CARSON IND. 9" CATCH BASIN CAST IRON ATRIUM GRATE #TT-915 TO BE TIED INTO SD SYSTEM
- 4" ADS N-12 DOUBLE WALL CORRUGATED PIPE TO BE TIED INTO EXISTING SD SYSTEM

NDS
12" MANGANESE BRONZE GRATE #1214 TO BE TIED INTO EXISTING SD SYSTEM

4" ADS N-12 DOUBLE WALL CORRUGATED PIPE
PROPOSED GRADE
2" #8 3/8" WASHED GRAVEL
1 UNDERDRAIN L-2 1/2"=1'-0"

Chevy Chase Club
6100 Connecticut Avenue
Chevy Chase, Maryland 20815

Grading Plan and Drainage

Michael Vergason Landscape Architects Ltd.
1102 King Street, 2nd Fl.
Alexandria, VA 22314
(703) 836-5557
(703) 836-5505 Fax

NORTH
SCALE: 1/8"=1'-0"
DATE: 1/27/04

L-2

File

M-NCPPC



MONTGOMERY COUNTY DEPARTMENT OF PARK & PLANNING

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

8787 Georgia Avenue
Silver Spring, Maryland 20910-3760

Date: 6/14/00

MEMORANDUM

TO: Robert Hubbard, Director
Department of Permitting Services

FROM: *GW* Gwen Wright, Coordinator
Historic Preservation

SUBJECT: Historic Area Work Permit

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

Approved

Approved with Conditions: _____

and HPC Staff will review and stamp the construction drawings prior to the applicant's applying for a building permit with DPS; and

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

Applicant: Cherry Chase Country Club

Address: 6600 Connecticut Ave, Cherry Chase, MD

and subject to the general condition that, after issuance of the Montgomery County Department of Permitting Services (DPS) permit, the applicant arrange for a field inspection by calling the Montgomery County DPS Field Services Office at 240-777-6210 prior to commencement of work and not more than two weeks following completion of work.



RETURN TO: Department of Environmental Protection
 Division of Development Services and Regulation
 250 Hungerford Drive, Rockville, Maryland 20850
 (301) 217-6370

Historic Preservation Commission
 (301) 495-4570

APPLICATION FOR HISTORIC AREA WORK PERMIT

CONTACT PERSON HOLT JORDAN
 DAYTIME TELEPHONE NO. 702 737 0451

TAX ACCOUNT # _____
 NAME OF PROPERTY OWNER Cherry Chase Country Club DAYTIME TELEPHONE NO. _____
 ADDRESS 6100 Connecticut Ave Cherry Chase MD 20815
CITY STATE ZIP CODE
 CONTRACTOR _____ TELEPHONE NO. _____
 CONTRACTOR REGISTRATION NUMBER _____
 AGENT FOR OWNER _____ DAYTIME TELEPHONE NO. _____

LOCATION OF BUILDING/PREMISE
 HOUSE NUMBER _____ STREET _____
 TOWN/CITY _____ NEAREST CROSS STREET _____
 LOT _____ BLOCK _____ SUBDIVISION _____
 LIBER _____ FOLIO _____ PARCEL _____

PART ONE: TYPE OF PERMIT ACTION AND USE

1A. CIRCLE ALL APPLICABLE: A/C Slab Room Addition
 Construct Extend Alter/Renovate Repair Move Porch Deck Fireplace Shed Solar Woodburning Stove
 Wreck/Raze Install Revocable Revision Fence/Wall (complete Section 4) Single Family Other planting
 1B. CONSTRUCTION COST ESTIMATE \$ 5000.00
 1C. IF THIS IS A REVISION OF A PREVIOUSLY APPROVED ACTIVE PERMIT SEE PERMIT # _____

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

3A. HEIGHT 5 feet 0 inches
 3B. INDICATE WHETHER THE FENCE OR RETAINING WALL IS TO BE CONSTRUCTED ON ONE OF THE FOLLOWING LOCATIONS:
 On party line/property line _____ Entirely on land of owner _____ On public right of way/easement _____

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 [Signature] Date 5/29/00

APPROVED For Chairperson, Historic Preservation Commission
 Signature [Signature] Date 6/14/00
 DISAPPROVED Signature _____ Date _____

APPLICATION/PERMIT NO. 19814 DATE FILED: 5/25/00 DATE ISSUED: _____

SEE REVERSE SIDE FOR INSTRUCTIONS

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

1. WRITTEN DESCRIPTION OF PROJECT

- a. Description of existing structure(s) and environmental setting, including their historical features and significance:

Remove asphalt & install plantings

- b. General description of project and its effect on the historic resource(s), the environmental setting, and, where applicable, the historic district:

Creates landscape along facade of building

2. SITE PLAN

Site and environmental setting, drawn to scale. You may use your plat. Your site plan must include:

- the scale, north arrow, and date;
- dimensions of all existing and proposed structures; and
- site features such as walkways, driveways, fences, ponds, streams, trash dumpsters, mechanical equipment, and landscaping.

3. PLANS AND ELEVATIONS

You must submit 2 copies of plans and elevations in a format no larger than 11" X 17". Plans on 8 1/2" X 11" paper are preferred.

- Schematic construction plans, with marked dimensions, indicating location, size and general type of walls, window and door openings, and other fixed features of both the existing resource(s) and the proposed work.
- Elevations (facades), with marked dimensions, clearly indicating proposed work in relation to existing construction and, when appropriate, context. All materials and fixtures proposed for the exterior must be noted on the elevations drawings. **An existing and a proposed elevation drawing of each facade affected by the proposed work is required.**

4. MATERIALS SPECIFICATIONS

General description of materials and manufactured items proposed for incorporation in the work of the project. This information may be included on your design drawings.

5. PHOTOGRAPHS

- Clearly labeled photographic prints of each facade of existing resource, including details of the affected portions. All labels should be placed on the front of photographs.
- Clearly label photographic prints of the resource as viewed from the public right-of-way and of the adjoining properties. All labels should be placed on the front of photographs.

6. TREE SURVEY

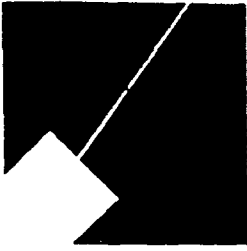
If you are proposing construction adjacent to or within the dripline of any tree 6" or larger in diameter (at approximately 4 feet above the ground), you must file an accurate tree survey identifying the size, location, and species of each tree of at least that dimension.

7. ADDRESSES OF ADJACENT AND CONFRONTING PROPERTY OWNERS

For all projects, provide an accurate list of adjacent and confronting property owners (not tenants), including names, addresses, and zip codes. This list should include the owners of all lots or parcels which adjoin the parcel in question, as well as the owner(s) of lot(s) or parcel(s) which lie directly across the street/highway from the parcel in question. You can obtain this information from the Department of Assessments and Taxation, 51 Monroe Street, Rockville, (279-1355).

Please print (in blue or black ink) or type this information on the following page. Please stay within the guides of the template, as this will be photocopied directly onto mailing labels.

M-NCPPC



MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

8787 Georgia Avenue
Silver Spring, Maryland 20910-3760

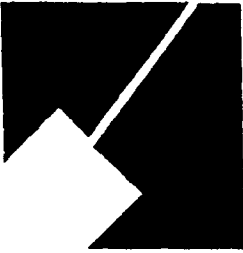
MEMORANDUM

DATE: 6/14/00
TO: Local Advisory Panel/Town Government *Village of Chevy Chase*
FROM: Historic Preservation Section, M-NCPPC
RZ Robin D. Ziek, Historic Preservation Planner
Perry Kephart, Historic Preservation Planner
Michele Naru, Historic Preservation Planner
SUBJECT: Historic Area Work Permit Application - HPC Decision

The Historic Preservation Commission reviewed this project on 6/14/00.
A copy of the HPC decision is enclosed for your information.

Thank you for providing your comments to the HPC. Community involvement is a key component of historic preservation in Montgomery County. If you have any questions, please do not hesitate to call this office at (301) 563-3400.

M-NCPPC



MONTGOMERY COUNTY DEPARTMENT OF PARK & PLANNING

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

8787 Georgia Avenue
Silver Spring, Maryland 20910-3760

Date: 6/14/00

MEMORANDUM

TO: Historic Area Work Permit Applicants

FROM: *WJW* Gwen Wright, Coordinator
Historic Preservation Section

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 Permitting Services (DPS) at 255 Rockville Pike, second floor, in Rockville. Please note that although your work has been approved by the Historic Preservation Commission, it must also be approved by DPS before work can begin.

When you file for your building permit at DPS, you must take with you the enclosed forms, as well as the Historic Area Work Permit that will be mailed to you directly from DPS. 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 DPS at 240-777-6370.

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 301-563-3400.

Please also note that you must arrange for a field inspection for conformance with your approved HAWP plans. Please inform DPS/Field Services at 240-777-6210 of your anticipated work schedule.

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

c:\hawpapr.wpd

EXPEDITED HISTORIC PRESERVATION COMMISSION STAFF REPORT

Address: 6100 Connecticut Avenue Meeting Date: 5/24/00
 Applicant: Chevy Chase Country Club Report Date: 5/17/00
 (Holt Jordan, Agent)
 Resource: Chevy Chase Village Historic District Public Notice: 5/10/00
 Review: HAWP Tax Credit: No
 Case Number: 35/13-99B REVISION Staff: Robin Ziek

PROPOSAL: Remove paving for new planting bed adjacent to the carriage house; revise plantings in existing planting bed.

RECOMMEND: Approval

DATE OF CONSTRUCTION: ca. 1909

SIGNIFICANCE: Individual Master Plan Site
 Within a Master Plan Historic District
 Primary Resource
 Contributing Resource
 Non-Contributing/Out-of-Period Resource

ARCHITECTURAL DESCRIPTION: Neo-Classical stone and stucco structure

PROPOSAL: Remove 8-11' of paving along the east side of the Carriage House for a new planting bed. The plantings will be kept low and adjacent to the stone foundation, with no large evergreen shrubs or vines. In addition, an existing planting bed at the NE corner of the Carriage House will be relandscaped.

RECOMMENDATION: Approval Approval with conditions

Approval is based on the following criteria from Chapter 24A of the Montgomery County Code, Section 8(b): The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to insure conformity with the purposes and requirements of this chapter, if it finds that:

- 1. The proposal will not substantially alter the exterior features of an historic site, or historic resource within an historic district; or
- 2. The proposal is compatible in character and nature with the historical, archaeological, 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; or

III-O

and subject to the general condition that, **the applicant shall contact staff for an appointment to stamp three permit sets (one for HPC files; call 301-563-3400 for appointment) prior to applying to DPS for the building permit;** and, after issuance of the Montgomery County Department of Permitting Services (DPS) permit, the applicant arrange for a field inspection by calling the DPS Field Services Office at (240) 777-6240 prior to commencement of work and not more than two weeks following completion of work.



RETURN TO: Department of Environmental Protection
 Division of Development Services and Regulation
 250 Hungerford Drive, Rockville, Maryland 20850
 (301) 217-6370

Historic Preservation Commission
 (301) 495-4570

**APPLICATION FOR
 HISTORIC AREA WORK PERMIT**

CONTACT PERSON HOLT JORDAN
 DAYTIME TELEPHONE NO. 702 737 0451

TAX ACCOUNT # _____
 NAME OF PROPERTY OWNER Cherry Chase Country Club DAYTIME TELEPHONE NO. () _____
 ADDRESS 6100 Connecticut Ave Cherry Chase MD 20815
CITY STATE ZIP CODE
 CONTRACTOR _____ TELEPHONE NO. () _____
 CONTRACTOR REGISTRATION NUMBER _____
 AGENT FOR OWNER _____ DAYTIME TELEPHONE NO. () _____

LOCATION OF BUILDING/PREMISE

HOUSE NUMBER _____ STREET _____
 TDWN/CITY _____ NEAREST CROSS STREET _____
 LOT _____ BLOCK _____ SUBDIVISION _____
 LIBER _____ FOLIO _____ PARCEL _____

PART ONE: TYPE OF PERMIT ACTION AND USE

1A. CIRCLE ALL APPLICABLE: CIRCLE ALL APPLICABLE: A/C Slab Room Addition
 Construct Extend Alter/Renovate Repair Move Porch Deck Fireplace Shed Solar Woodburning Stove
 Wreck/Raze Install Revocable Revision Fence/Wall (complete Section 4) Single Family Other Planting #
 1B. CONSTRUCTION COST ESTIMATE \$ 5000.00
 1C. IF THIS IS A REVISION OF A PREVIOUSLY APPROVED ACTIVE PERMIT SEE PERMIT # _____

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

3A. HEIGHT _____ feet _____ inches
 3B. INDICATE WHETHER THE FENCE OR RETAINING WALL IS TO BE CONSTRUCTED ON ONE OF THE FOLLOWING LOCATIONS:
 On party line/property line _____ Entirely on land of owner _____ On public right of way/easement _____

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] _____ 5/29/00 _____
 Signature of owner or authorized agent Date

APPROVED _____ For Chairperson, Historic Preservation Commission
 DISAPPROVED _____ Signature _____ Date _____

APPLICATION/PERMIT NO. 519874 DATE FILED: 5/25/00 DATE ISSUED: _____

SEE REVERSE SIDE FOR INSTRUCTIONS

3

THE FOLLOWING ITEMS MUST BE COMPLETED AND THE RESULTS
MUST ACCOMPANY THIS APPLICATION.

1. WRITTEN DESCRIPTION OF PROJECT

- a. Description of existing structure(s) and environmental setting, including their historical features and significance:

remove asphalt & install plantings

- b. General description of project and its effect on the historic resource(s), the environmental setting, and, where applicable, the historic district:

creates landscape along facade of building

2. SITE PLAN

Site and environmental setting, drawn to scale. You may use your plat. Your site plan must include:

- a. the scale, north arrow, and date;
b. dimensions of all existing and proposed structures; and
c. site features such as walkways, driveways, fences, ponds, streams, trash dumpsters, mechanical equipment, and landscaping.

3. PLANS AND ELEVATIONS

You must submit 2 copies of plans and elevations in a format no larger than 11" X 17". Plans on 8 1/2" X 11" paper are preferred.

- a. Schematic construction plans, with marked dimensions, indicating location, size and general type of walls, window and door openings, and other fixed features of both the existing resource(s) and the proposed work.
b. Elevations (facades), with marked dimensions, clearly indicating proposed work in relation to existing construction and, when appropriate, context. All materials and fixtures proposed for the exterior must be noted on the elevations drawings. **An existing and a proposed elevation drawing of each facade affected by the proposed work is required.**

4. MATERIALS SPECIFICATIONS

General description of materials and manufactured items proposed for incorporation in the work of the project. This information may be included on your design drawings.

5. PHOTOGRAPHS

- a. Clearly labeled photographic prints of each facade of existing resource, including details of the affected portions. All labels should be placed on the front of photographs.
b. Clearly label photographic prints of the resource as viewed from the public right-of-way and of the adjoining properties. All labels should be placed on the front of photographs.

6. TREE SURVEY

If you are proposing construction adjacent to or within the dripline of any tree 6" or larger in diameter (at approximately 4 feet above the ground), you must file an accurate tree survey identifying the size, location, and species of each tree of at least that dimension.

7. ADDRESSES OF ADJACENT AND CONFRONTING PROPERTY OWNERS

For all projects, provide an accurate list of adjacent and confronting property owners (not tenants), including names, addresses, and zip codes. This list should include the owners of all lots or parcels which adjoin the parcel in question, as well as the owner(s) of lot(s) or parcel(s) which lie directly across the street/highway from the parcel in question. You can obtain this information from the Department of Assessments and Taxation, 51 Monroe Street, Rockville, (279-1355).

Please print (in blue or black ink) or type this information on the following page. Please stay within the guides of the template, as this will be photocopied directly onto mailing labels.

May 24, 2000

Historic Preservation Commission
Montgomery County, MD
250 Hungerford Drive
Rockville MD 20850

**JORDAN
HONEYMAN**
Landscape Architecture

1003 K Street NW
Suite 840
Washington DC 20001
202.737.0451
202.737.0452 FAX

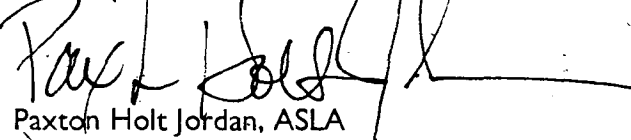
Re: Carriage House Plantings
Chevy Chase Country Club
6100 Connecticut Avenue
Chevy Chase, MD 20815

Dear Commissioners & Staff:

We are proposing to remove 8'-11' band of asphalt adjacent to the lower level carriage house and replace with plantings. A stone or cobble curb will form the edge of the new plantings along the existing asphalt parking area. A two foot planting strip is proposed on the south side of the carriage house and the east side of the greenhouse. No vines will be planted to climb on the walls.

Thank you for your consideration.

Sincerely,
Jordan Honeyman
Landscape Architecture



Paxton Holt Jordan, ASLA
Partner

LIST OF PHOTOGRAPHS

1. Area in front of greenhouse
2. Area adjacent to carriage house
3. Detail photo of area adjacent to carriage house

EXISTING GREENHOUSE

REMOVE ASPHALT -
INSTALL CURB -
CREATE PLANTING BEDS
NO LARGE EVERGREEN
SHRUBS OR VINES

EXISTING
CARRIAGE HOUSE

REMOVE ASPHALT -
INSTALL CURB -
CREATE PLANTING BEDS
NO LARGE EVERGREEN
SHRUBS OR VINES

Handwritten notes: "Handwritten notes" and "1/18 - 1/19"

REVISED PLANTINGS

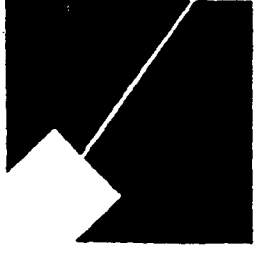
EXISTING DRAIN

EXISTING SIDEWALK

LAWN

6

M-NCPPC



MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING
THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

8787 Georgia Avenue
Silver Spring, Maryland 20910-3760

Date: Dec. 1, 1999

MEMORANDUM

TO: Robert Hubbard, Director
Department of Permitting Services

FROM: pd2 Gwen Wright, Coordinator
Historic Preservation

SUBJECT: Historic Area Work Permit

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

Approved Denied
 Approved with Conditions: _____

and HPC Staff will review and stamp the construction drawings prior to the applicant's applying for a building permit with DPS; and

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

Applicant: Chevy Chase Club (Kirk Reese, General Manager)
Address: 6100 Connecticut Ave., Chevy Chase, MD. 20815

and subject to the general condition that, after issuance of the Montgomery County Department of Permitting Services (DPS) permit, the applicant arrange for a field inspection by calling the DPS Field Services Office at (301)217-6240 prior to commencement of work and not more than two weeks following completion of work.

Re: Chevy Chase Village Astoria District

(7)



RETURN TO: DEPARTMENT OF PERMITTING SERVICES
250 HUNGERFORD DRIVE, 2nd FLOOR, ROCKVILLE, MD.
301/217-8370

DPS - #8

HISTORIC PRESERVATION COMMISSION
301/563-3400

APPLICATION FOR HISTORIC AREA WORK PERMIT

Contact Person: Kirk O. Reese, General Mgr.

Daytime Phone No.: 301-652-4100

FEDERAL MARYLAND
Tax Account No.: 52-0799949 1660825

Name of Property Owner: Chevy Chase Club, Inc. Daytime Phone No.: 301-652-4100

Address: 6100 Connecticut Avenue Chevy Chase Maryland 20815
Street Number City State Zip Code

Contractor: P.E. Queen Roofing Stucco Phone No.: P.E. Queen 410-634-2331
D.L. Boyd, Co. D.L. Boyd 301-773-6767

Contractor Registration No.: # 41804 /L# 1636816

Agent for Owner: _____ Daytime Phone No.: _____

LOCATION OF BUILDING/PREMISE

House Number: 6100 Street: Connecticut Avenue

Town/City: Chevy Chase Nearest Cross Street: Primrose Street

Lot: _____ Block: _____ Subdivision: _____

Liber: _____ Folio: _____ Parcel: P-277

PART ONE: TYPE OF PERMIT ACTION AND USE

1A. CHECK ALL APPLICABLE:

CHECK ALL APPLICABLE:

- Construct Extend Alter/Renovate A/C Slab Room Addition Porch Deck Shed
- Move Install Wreck/Blaze Solar Fireplace Woodburning Stove Single Family
- Revision Repair Revocable Fence/Wall (complete Section 4) Other: Roof & Exterior

1B. Construction cost estimate: \$ 70,000.00

1C. If this is a revision of a previously approved active permit, see Permit # N/A

PART TWO: COMPLETE FOR NEW CONSTRUCTION AND EXTENS/OADDITIONS

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

3A. Height _____ feet _____ inches

3B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:

- On party line/property line
- Entirely on land of owner
- On public right of way/easement

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]
Signature of owner or authorized agent

10/19/99
Date

Approved: [Signature] For Chairperson, Historic Preservation Commission

Disapproved: _____ Signature: _____ Date: Dec 1, 1999

Application/Permit No.: 205090 Date filed: 11/10/99 Date issued: _____

35/13-99BB

8

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

1. WRITTEN DESCRIPTION OF PROJECT

- a. Description of existing structure(s) and environmental setting, including their historical features and significance:

The Chevy Chase Club Carriage House, constructed ca. 1909 as a "permanent stables and shed for automobiles," is a sophisticated example of a relatively rare building type that flourished just after the turn of the century. In the brief period of time before the new motor car supplanted the horse and carriage, when wealthy people owned both horses and motor cars, a unique architectural form developed which combined the stables, carriage house, and garage. Modernity, light and every convenience were considered essential for the new garages, while at the same time the traditional stabling and care of the horses was incorporated. The Chevy Chase Club's combined stables and garage is a skillful example of this rare building type, and it is surprisingly intact to its original design character.

- b. General description of project and its effect on the historic resource(s), the environmental setting, and, where applicable, the historic district:

Restoration pebble dash stucco. Replacement of the roof asphalt shingles with synthetic slate shingles. Installation of a Fire Suppression System and revision of the current electrical wiring. Restoration of Window Treatments. Restoration of hayloft doors. Replacement of the Upper and Lower Carriage House Doors to style of the turn of the century. Will return the Carriage House to the turn of the century building.

2. SITE PLAN

Site and environmental setting, drawn to scale. You may use your plat. Your site plan must include:

- the scale, north arrow, and date;
- dimensions of all existing and proposed structures; and
- site features such as walkways, driveways, fences, ponds, streams, trash dumpsters, mechanical equipment, and landscaping.

3. PLANS AND ELEVATIONS

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5. PHOTOGRAPHS

- Clearly labeled photographic prints of each facade of existing resource, including details of the affected portions. All labels should be placed on the front of photographs.
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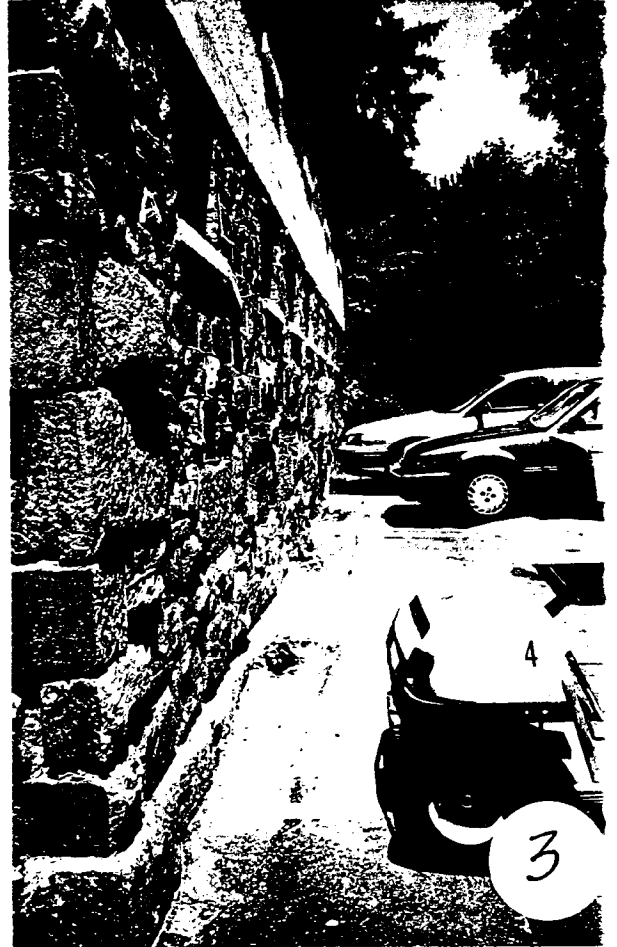
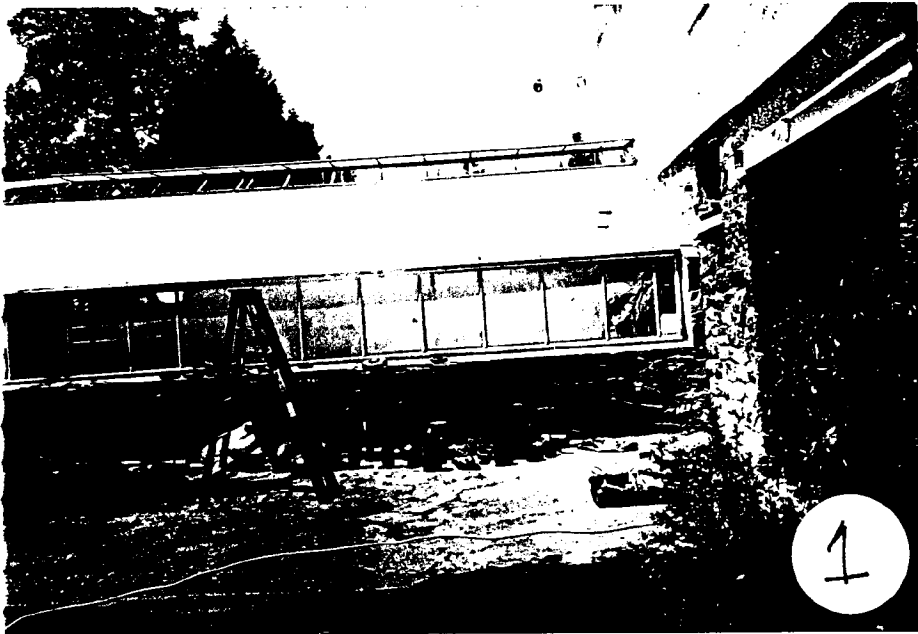
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Facsimile Cover

To: 1-301-563-3412 From: Bourke, Tom
Fax Number: 1-301-563-3412 Subject: CCV LAP: 3 Magnolia, 5 Grafton, 1
Date: Tuesday, June 13, 2000 Pages: 2
Time: 2:34:19 PM

Message:

The following are the comments by the Chevy Chase Village LAP for HPC Agenda Items for 6/14/00:

- P* A 3 Magnolia Pkwy,
Robbins-Evans Residence
Non-contributing resource
Front alterations - revision for wood-framed windows
Staff recommendation: approval
the CCV LAP concurs with the staff recommendation to approve without conditions. The change to prior plan is not significant.
- P* D. 5 Grafton, Poole-Barr Residence
Contributing resource
a change to a previously (1998) approved front facade
Staff recommendation: approval
The LAP concurs with staff recommendation for approval without conditions. The changes from the prior approval are minor and generally help the facade.
- P* J. 1 East Melrose, Asher Residence
Contributing Resource
replace existing chain-link and panel fence with 6' 1x6 board on board fence
Staff recommendation: expedited approval
The LAP concurs that this is a good candidate for an expedited approval. Applicant is reminded that they must also secure approval from Chevy Chase Village Board of Managers for fences.
- R* O. 6100 Connecticut, CC Country Club
Primary resource
remove 8' x 11' paving area and replace with planting bed
Staff recommendation: Expedited approval
The LAP concurs with Staff recommendation

May 24, 2000

Historic Preservation Commission
Montgomery County, MD
250 Hungerford Drive
Rockville MD 20850

**JORDAN
HONEYMAN**
Landscape Architecture

1003 K Street NW
Suite 840
Washington DC 20001
202.737.0451
202.737.0452 FAX

Re: Carriage House Plantings
Chevy Chase Country Club
6100 Connecticut Avenue
Chevy Chase, MD 20815

Dear Commissioners & Staff:

We are proposing to remove 8'-11' band of asphalt adjacent to the lower level carriage house and replace with plantings. A stone or cobble curb will form the edge of the new plantings along the existing asphalt parking area. A two foot planting strip is proposed on the south side of the carriage house and the east side of the greenhouse. No vines will be planted to climb on the walls.

Thank you for your consideration.

Sincerely,
Jordan Honeyman
Landscape Architecture


Paxton Holt Jordan, ASLA
Partner

LIST OF PHOTOGRAPHS

1. Area in front of greenhouse
2. Area adjacent to carriage house
3. Detail photo of area adjacent to carriage house







M-NCPPC



MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

8787 Georgia Avenue
Silver Spring, Maryland 20910-3760

Date: Dec. 1, 1999

MEMORANDUM

TO: Robert Hubbard, Director
Department of Permitting Services

FROM: *GW* Gwen Wright, Coordinator
Historic Preservation

SUBJECT: Historic Area Work Permit

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

Approved Denied
Approved with Conditions: _____

and HPC Staff will review and stamp the construction drawings prior to the applicant's applying for a building permit with DPS; and

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

Applicant: Chevy Chase Club (Kirk Reese, General Manager)
Address: 6100 Connecticut Ave., Chevy Chase, MD. 20815

and subject to the general condition that, after issuance of the Montgomery County Department of Permitting Services (DPS) permit, the applicant arrange for a field inspection by calling the DPS Field Services Office at (301)217-6240 prior to commencement of work and not more than two weeks following completion of work.

Re: Chevy Chase Village Historic District



RETURN TO: DEPARTMENT OF PERMITTING SERVICES
250 HUNGERFORD DRIVE, 2nd FLOOR, ROCKVILLE, MD 20850
301/217-6370

DPS - #8

HISTORIC PRESERVATION COMMISSION
301/563-3400

APPLICATION FOR HISTORIC AREA WORK PERMIT

Contact Person: Kirk O. Reese, General Mgr.

Daytime Phone No.: 301-652-4100

FEDERAL MARYLAND
Tax Account No.: 52-0799949 1660825

Name of Property Owner: Chevy Chase Club, Inc. Daytime Phone No.: 301-652-4100

Address: 6100 Connecticut Avenue Chevy Chase Maryland 20815
Street Number City State Zip Code

Contractor: P.E. Queen Roofing Stucco P.E. Queen 410-634-2331
D.L. Boyd, Co. Phone No.: D.L. Boyd 301-773-6767

Contractor Registration No.: # 41804 /L# 1636816

Agent for Owner: Daytime Phone No.:

LOCATION OF BUILDING/PREMISE

House Number: 6100 Street: Connecticut Avenue

Town/City: Chevy Chase Nearest Cross Street: Primrose Street

Lot: Block: Subdivision:

Liber: Folio: Parcel: P-277

PART ONE: TYPE OF PERMIT ACTION AND USE

1A. CHECK ALL APPLICABLE:

- Construct Extend Alter/Renovate
Move Install Wreck/Flaze
Revision Repair Revocable

CHECK ALL APPLICABLE:

- AC Slab Room Addition Porch Deck Shed
Solar Fireplace Woodburning Stove Single Family
Fence/Wall (complete Section 4) Other: Roof & Exterior

1B. Construction cost estimate: \$ 70,000.00

1C. If this is a revision of a previously approved active permit, see Permit # N/A

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3A. Height feet inches

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Signature of owner or authorized agent

Date 10/19/99

Approved: For Chairperson, Historic Preservation Commission

Disapproved: Signature: Date: Dec 1, 1999

Application/Permit No.: 205090 Date Filed: 11/10/99 Date Issued:

SEE REVERSE SIDE FOR INSTRUCTIONS

35/13-99BB

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M-NCPPC



MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

8787 Georgia Avenue
Silver Spring, Maryland 20910-3760

MEMORANDUM

DATE:

Dec 1, 1999

TO:

Local Advisory Panel/Town Government

Village of Chevy Chase

FROM:

Historic Preservation Section, M-NCPPC
Robin D. Ziek, Historic Preservation Planner
PDR Perry Kephart, Historic Preservation Planner
Michele Naru, Historic Preservation Planner

SUBJECT:

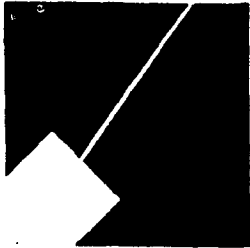
Historic Area Work Permit Application - HPC Decision

The Historic Preservation Commission reviewed this project on
A copy of the HPC decision is enclosed for your information.

Dec 1, 1999

Thank you for providing your comments to the HPC. Community involvement is a key component of historic preservation in Montgomery County. If you have any questions, please do not hesitate to call this office at (301) 563-3400.

M-NCPPC



MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

8787 Georgia Avenue
Silver Spring, Maryland 20910-3760

Date: Dec 1, 1999

MEMORANDUM

TO: Historic Area Work Permit Applicants

FROM: *GW* Gwen Wright, Coordinator
Historic Preservation Section

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

II - C

205090

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 Permitting Services (DPS) 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 DPS before work can begin.

(If)

When you file for your building permit at DPS, you must take with you the enclosed forms, as well as the Historic Area Work Permit that will be mailed to you directly from DPS. 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 DPS at 301-217-6370.

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 301-563-3400.

Please also note that you must arrange for a field inspection for conformance with your approved HAWP plans. Please inform DPS/Field Services at 301-217-6240 of your anticipated work schedule.

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

HISTORIC PRESERVATION COMMISSION STAFF REPORT

Address:	6100 Connecticut Avenue	Meeting Date:	12/1/99
Applicant:	Chevy Chase Club, Inc. (Kirk O. Reese, General Manager)	Report Date:	11/24/99
Resource:	Chevy Chase Village Historic District	Public Notice:	11/17/99
Review:	HAWP	Tax Credit:	Yes
Case Number:	35/13-99BB	Staff:	Robin Ziek

PROPOSAL: New roof and doors**RECOMMEND:** Approval**PROJECT BACKGROUND**

RESOURCE: Outstanding Resource in the Kensington Historic District
 STYLE: Neo-Classical
 DATE: ca. 1909

The Carriage House at the Chevy Chase Club is considered an important element on the property (see the *Historic Documentation and Recommendations* report prepared by Robinson & Associates, October 1999, attached). The report provides a context for understanding the significance of this structure, as it represents a transition for private transportation from horse-drawn carriages to the automobile. This building provided stable space for horses and carriages on the lower level, and garage space at the upper level for automobiles.

The building has a stone foundation. It is brick, with a pebble-dashed stucco finish. The building has a pyramidal roof, with dormers (of varying sizes) at each roof plane. Many of the original doors remain, although the main garage and stable doors have been replaced with modern roll-up doors. The roof is presently covered with red asphalt shingles.

PROJECT PROPOSAL

The applicant proposes several alterations which will reflect more closely the original character of the carriage house. The existing asphalt shingle roof would be removed, and replaced with a plastic composite slate substitute material (see Circle). The existing garage doors at the upper level, and the existing stable doors at the lower level, would be removed and replaced with custom doors designed to match the remaining original doors (see

Circle and Report) which have diagonal wood bracing in panels below multi-light windows. The door at the lower level would be installed on the interior and be designed as a roll-up door. The door on the upper level, however, would roll open on a track on the front elevation. New lighting, similar to carriage lamps, would be installed on the exterior above the doors.

The remaining work to the building consists of repair and maintenance to the stucco finish and the existing windows. Vines will be removed, and the woodwork painted.

STAFF DISCUSSION

The applicant has done a thorough job of researching the proposal before bringing it before the HPC. They have considered two roofing alternatives which would be consistent with a building of this type and date (metal or slate), although there is no evidence as to which material was originally used here. The other buildings on the property have slate or cement slate substitute shingles. Therefore, the applicant would like to use a slate-like material for consistency.

The proposed plastic composite slate substitute material is based on castings of slate shingles, and it is applied in a similar manner, being nailed in place. Staff notes that the applicant could have applied a new asphalt roof without HPC approval, but that they feel the proposed shingle will more closely replicate a slate roof. Staff also notes that the building is not readily visible from the public right-of-way. Furthermore, the *Guidelines* for the District recommend that the HPC should be open to consideration of new substitute materials as they become available. Staff agrees with this, and feels that this is a good location for an application of this particular substitute material.

With regard to the new doors, staff feels that the proposed design would be considered the restoration of an original feature, even though the method of operation will differ. The door at the lower level will be installed as a roll-up door, rolling up on the interior. The proposed installation on the upper elevation, however, will be for sliding doors on the exterior of the facade. The challenge here will be to design the installation such that moisture is not introduced into the pebble-dashed stucco. Slider doors were, however, a typical method of operation in the early part of this century which was borrowed from barns.

STAFF RECOMMENDATION

Staff recommends that the Commission find this proposal consistent with the purposes of Chapter 24A-8(b)2:

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 *Secretary of the Interior's Standards for Rehabilitation #2*:

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 subject to the general condition that, after issuance of the Montgomery County Department of Permitting Services (DPS) permit, the applicant arrange for a field inspection by calling the DPS Field Services Office at (301) 217-6240 prior to commencement of work and not more than two weeks following completion of work.



RETURN TO: DEPARTMENT OF PERMITTING SERVICES
250 HUNGERFORD DRIVE, 2nd FLOOR, ROCKVILLE, MD
301/217-6370

DPS - #8

HISTORIC PRESERVATION COMMISSION
301/563-3400

APPLICATION FOR
HISTORIC AREA WORK PERMIT

Contact Person: Kirk O. Reese, General Mgr.

Daytime Phone No.: 301-652-4100

FEDERAL MARYLAND
Tax Account No.: 52-0799949 1660825

Name of Property Owner: Chevy Chase Club, Inc. Daytime Phone No.: 301-652-4100

Address: 6100 Connecticut Avenue Chevy Chase Maryland 20815
Street Number City State Zip Code

Contractor: Roofing Stucco P.E. Queen 410-634-2331
D.L. Boyd, Co. Phone No.: D.L. Boyd 301-773-6767

Contractor Registration No.: # 41804 /L# 1636816

Agent for Owner: Daytime Phone No.:

LOCATION OF BUILDING/PREMISE

House Number: 6100 Street: Connecticut Avenue

Town/City: Chevy Chase Nearest Cross Street: Primrose Street

Lot: Block: Subdivision:

Liber: Folio: Parcel: P-277

PART ONE: TYPE OF PERMIT ACTION AND USE

1A. CHECK ALL APPLICABLE:

CHECK ALL APPLICABLE:

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Move Install Wreck/Raze Solar Fireplace Woodburning Stove Single Family
Revision Repair Revoicable Fence/Wall (complete Section 4) Other: Roof & Exterior

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2A. Type of sewage disposal: 01 WSSC 02 Septic 03 Other:

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3A. Height feet inches

3B. Indicate whether the fence or retaining wall is to be constructed on one of the following locations:

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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

Date: 10/19/99

Approved: For Chairperson, Historic Preservation Commission

Disapproved: Signature: Date:

Application/Permit No.: 205090 Date Filed: 11/10/99 Date Issued:

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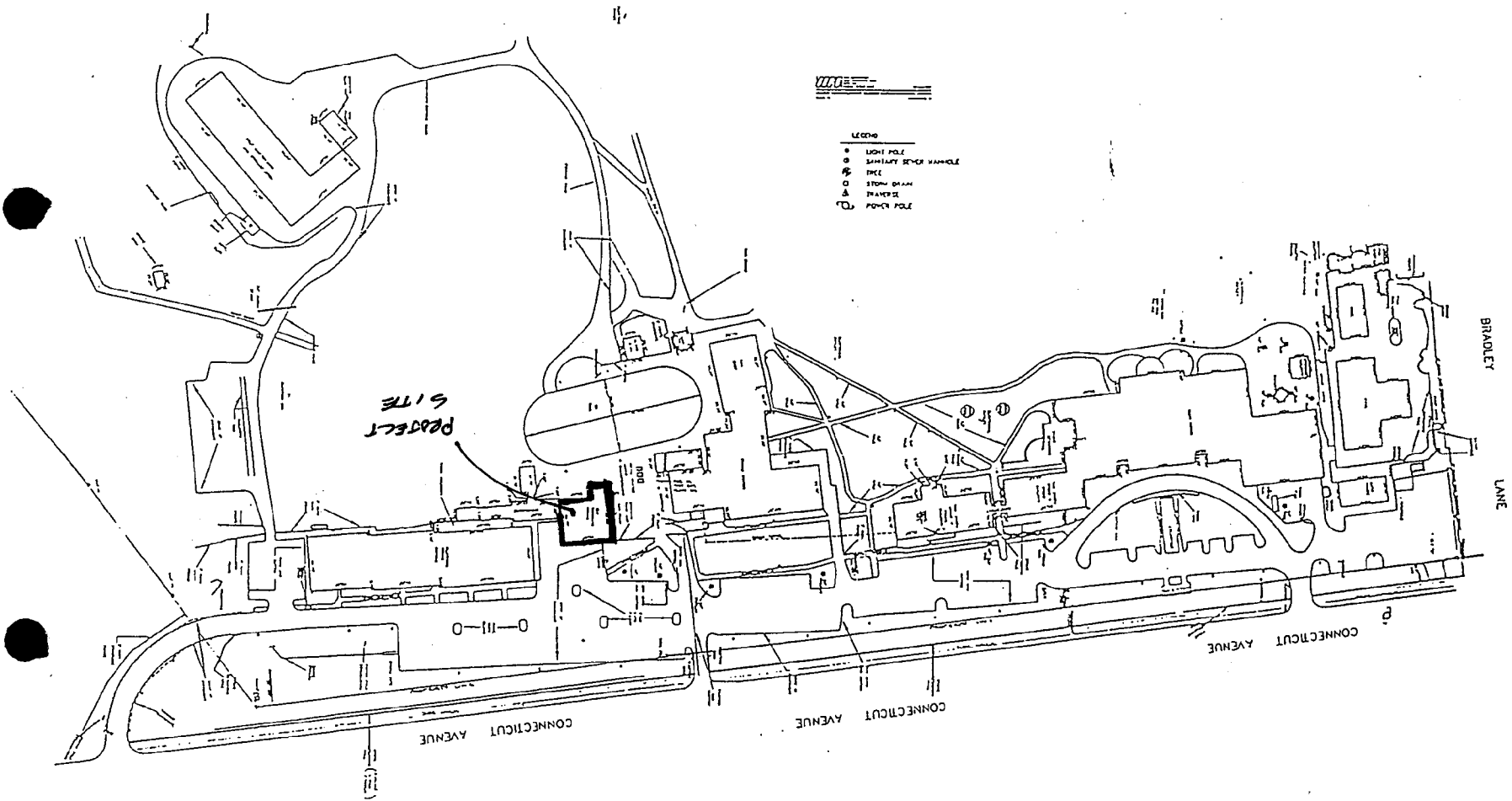
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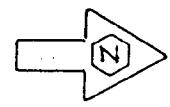
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0 10 20 30 40 50

- Legend
- LIGHT POLE
 - ⊙ SANITARY SEWER MANHOLE
 - ⊕ FIRE
 - ⊖ STOP SIGN
 - △ TRAVEL
 - POWER POLE



NO.	REVISION
	
CHEVY C CLU:	
ARCHITECTURAL AS-	

Mr. Richard & Barbara McMillan
2 Newlands Street
Chevy Chase, MD 20815

Mr. Albert M. & Betryce G.
Prosterman
3 Newlands Street
Chevy Chase, MD 20815

Mr. Karl W. & Nina C. Corby
2 West Newlands Street
Chevy Chase, MD 20815

Mr. Marcus W. & Diane M.
Montgomery
2 Oxford Street
Chevy Chase, MD 20815

Mr. Randy D. & Susan J. Denchfield
3 Oxford Street
Chevy Chase, MD 20815

Mr. Otto J. & Jeanne Weaver Ruesch
1 Primrose Street
Chevy Chase, MD 20815

Mr. Steve Dussek
2 Primrose Street
Chevy Chase, MD 20815

Resident
6403 Connecticut Avenue
Chevy Chase, MD 20815

Mr. Robert H. Shorb, Jr. & Liz
Lavette
135 Hesketh Street
Chevy Chase, MD 20815

Mr. Mathew P. Kantor & Mecki M.
Kuppers
139 Hesketh Street
Chevy Chase, MD 20815

Mr. Daniel V. & Brigitte A. Kaeser
141 Hesketh Street
Chevy Chase, MD 20815

Mr. Gautam & Sonya Philip
143 Hesketh Street
Chevy Chase, MD 20815

Mr. Jonathan B. & Leslie W. Hill
145 Hesketh Street
Chevy Chase, MD 20815

Mr. Arthur Chase & Emma Jane Cox
10 Laurel Parkway
Chevy Chase, MD 20815

Ms. Joan P. Karasik
9 West Lenox Street
Chevy Chase, MD 20815

Mr. Michael C. & Susie Gelman
11 West Lenox Street
Chevy Chase, MD 20815

Mr. Robert H. Myers
15 West Lenox Street
Chevy Chase, MD 20815

Ms. Mary W. Gutheim
33 West Lenox Street
Chevy Chase, MD 20815

Mr. Brian W. Smith & Donna J.
Holverson
35 West Lenox Street
Chevy Chase, MD 20815

Mr. Lee M. Petty
37 West Lenox Street
Chevy Chase, MD 20815

Mr. Cary & Roselin Euwer
43 West Lenox Street
Chevy Chase, MD 20815

Mr. John & Susan Gorman
45 West Lenox Street
Chevy Chase, MD 20815

Mr. Arthur D. & Eileen B. Mason
47 West Lenox Street
Chevy Chase, MD 20815

Mr. John & Carole Detweiler
49 West Lenox Street
Chevy Chase, MD 20815

Mr. Edward W. Virgin
51 West Lenox Street
Chevy Chase, MD 20815

Mr. John J. & Kathleen K. McMacken
5 West Melrose Street
Chevy Chase, Maryland 20815

Mr. Joseph Weber & Virginia L.
Trimble
9 West Melrose Street
Chevy Chase, MD 20815

Mr. Nicholas & Lydia Calio
11 West Melrose Street
Chevy Chase, MD 20815

Mr. Richard & Barbara McMillan
2 Newlands Street
Chevy Chase, MD 20815

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Prosterman
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Chevy Chase, MD 20815

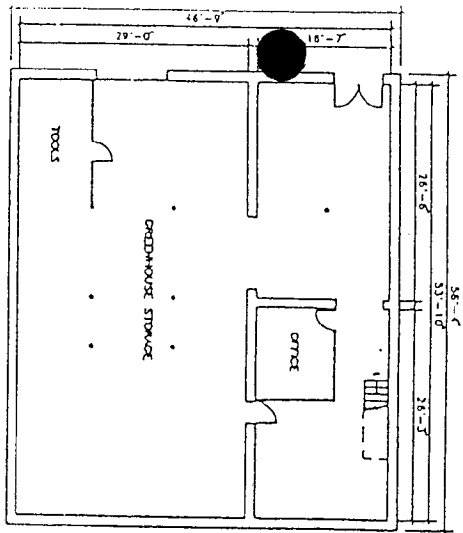
Mr. Otto J. & Jeanne Weaver Ruesch
1 Primrose Street
Chevy Chase, MD 20815

Mr. Steve Dussek
2 Primrose Street
Chevy Chase, MD 20815

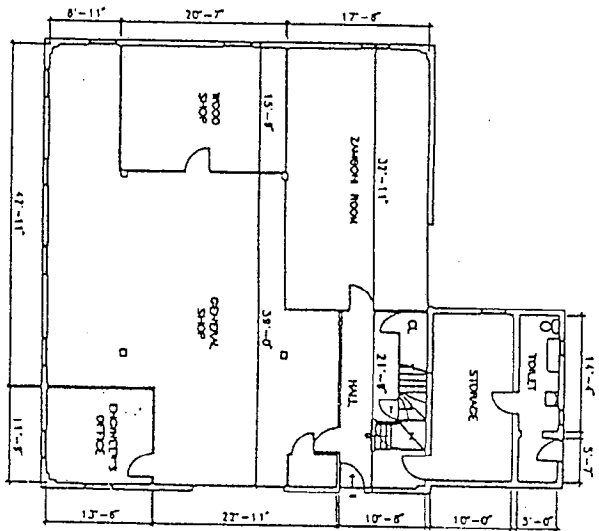
Mr. Chris Gladstone & Elise Rabekoff
2 Quincy Street
Chevy Chase, MD 20815

Mr. Luis F. & Judith S. Salgado
3 Quincy Street
Chevy Chase, MD 20815

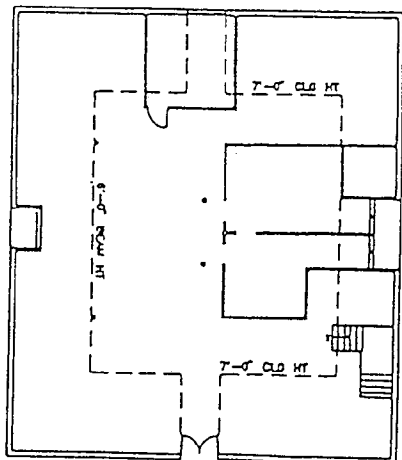
Resident
6403 Conn.
Ch. Ch. 20815



OLD CARRIAGE HOUSE - GROUND FLOOR PLAN



OLD CARRIAGE HOUSE - MAIN FLOOR PLAN



OLD CARRIAGE HOUSE - ATTIC FLOOR PLAN



Carriage House Endowment Committee Project

#4 General Description of project materials and manufacturer

1. Roofing Replacement P.E. Queen Roofing
Contractor's Registration # 41804

Replace existing asphalt roofing with Royal Slate
Manufacturer: Royal Ecoproducts Limited- See attached Product Specification Sheet.

50 years lifetime warranty. Dimensions: 18"x12"=wt per tile=1.5 lbs.
Gray Slate

All Copper flashing/30 lb Felt material

2. Pebble Dash Stucco Repair D.L. Boyd, Inc.
Contractors License # 16368162

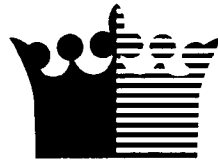
Remove all loose and damaged stucco, apply metal roth and pebble dash to match Existing stucco wall finish.

3. Replace existing north and south end metal overhead hoods with all wood carriage House doors.
The Fine Woodworking Company, Inc.
Contractors License # 223732

Doors to be milled to match existing dormer doors with frame and panel detailing. Panel to be v-groove planking with 1/4" safety glass lights window above. Doors to be hung with classic Stanley sliding barn door hardware.

4. Remove overhead telephone cables Telesystem Inc.
Contractors License # 2705-031323A

Remove overhead telephone cable from Boiler Room and Carriage House. Run new underground telephone cable.



Royal Ecoproducts Limited

"Innovation Makes the Difference"™

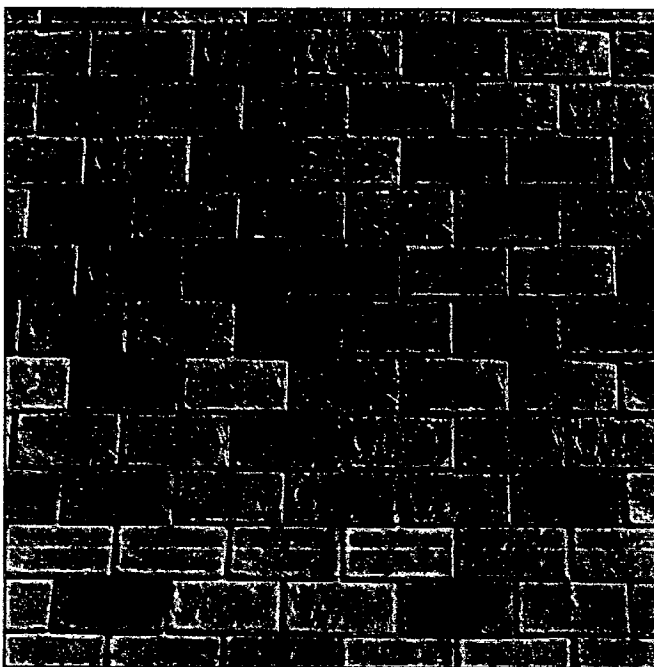
Royal Slate Roofing

Royal Ecoproducts Limited introduces an innovative and revolutionary new roofing system.

Royal Ecoproducts Limited introduces an innovative and revolutionary new roofing system for applications that add not only value but also prestige and individuality to your home.

Royal Slate Roofing that replicates the classic look of slate is inviting, natural and elegant, and expands the possibilities of urban and residential architecture without the added weight or cost.

This new product line is made from a durable plastic composite extending your roof's lifecycle substantially. For the homeowner, it all adds up to a lifetime of outstanding performance, durability, protection, and beauty for your home.

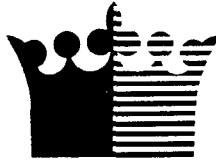


Through a combination of extensive R&D, innovative engineering and state-of-the-art manufacturing technologies we can offer such a high quality product. Our roofing systems have undergone extensive testing, far exceeding industry standards.

The roofing system is as easy to install as conventional asphalt shingles and requires no added substructure, unlike other systems in the marketplace.

With a product lifespan designed to exceed our **50 year warranty**, you now have the opportunity to create originality in your neighborhood, while increasing the equity in your home.

Royal Ecoproducts Roofing Systems, economical and ecological roofing solutions for today and the future.



Royal Ecoproducts Limited

"Innovation Makes the Difference"™

119 Snow Blvd., Concord, Ontario, Canada L4K 4N9 Tel: (905) 761-6406 1-800-465-7670 Fax: (905) 761-6419

Product Testing

Fire Rating Listing

UL & ULC (Underwriters Laboratories) listed. For prepared roofing material shingles Class "C" in accordance with UL790 & CAN/ULC-S107-M87.

Ultra Violet (UV) Exposure Testing

Tiles were exposed to an accelerated U.V. test (Zenon arc chamber) for 2000 hrs. After 1000 hrs. the tiles exhibited a light even fade of the surface finish with no trace of cracking, spalling, deformation. At 2000 hrs. no further changes were recorded.

Wind Driven Rain Testing

In accordance with the requirements of ASTM E331 Standard (minimum -1000 Pascal's to pass). The test results indicated water did not penetrate the system up to a negative pressure of -2700 Pascal's (Testing System Limitations). These results are equivalent to 156 mph or 251 km/hr.

Freeze Thaw Cycles

In accordance with ASTM C666 Method A. The tiles are subjected to 303 freeze/thaw cycles. The results showed no signs of damage, e.g. spalling, cracking or splitting. "Ortech", an independent accredited lab concluded, "The Royal Ecoproducts Royal Slate roof tile displayed a very good resistance to freeze-thaw damage."

Heat Cycle Testing

The tiles were subjected to twenty periods of 24 hours cycles consisting of 16 hrs. in a controlled chamber at high temperature and then 8 hrs. at cool temperature. The results were no sign of cracking, spalling, deformation or visible expansion.

Nail Tear Strength Testing

The tensile force required to pull a single nail through a roofing tile. Results concluded 250 lbs. or 113 kg. (Installed tiles have 4 nails far exceeding any force which would act on it).

Nail Pull Through Testing

"Ortech", an independent accredited lab concluded "The Royal Ecoproducts roofing tile resistance to nail pull through (27.75 Mpa) far exceeds peak wind pressures of 5 kPa." (204 mph or 329 km/hr). Installed tiles have four nails.

Water Absorption Testing

The water absorption was conducted in accordance with ASTM C272 (Water absorption of core materials for structural sandwich construction). The tiles were immersed in water for 500 hours with no appreciable weight gain.

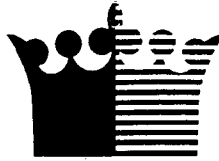
Water Presence Testing

In accordance with ASTM E96-95 (Water vapour transmission of materials) the test results have shown the tile to be impermeable.

Product Specifications / Accessories

- Weight per tile = 1.5 lbs.
- Width = 12 inches.
- Length = 18 inches.
- Fastened with standard 1 1/2 inch copper, stainless steel or galvanized roofing nails.
- Ridge Cap tiles available.
- For 4/12 to 6/12 pitches use 6" exposure (or 200 pcs/ roofing square)
- For 7/12 pitches and up use 7" exposure (or 172 pcs/ roofing square)
- No special tools required. Installation guide available.

Distributor:



Royal Ecoproducts Limited

"Innovation Makes the Difference"™

119 Snow Blvd., Concord, Ontario, Canada L4K 4N9 Tel: (905) 761-6406 1-800-465-7670 Fax: (905) 761-6419

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Freeze Thaw Cycles

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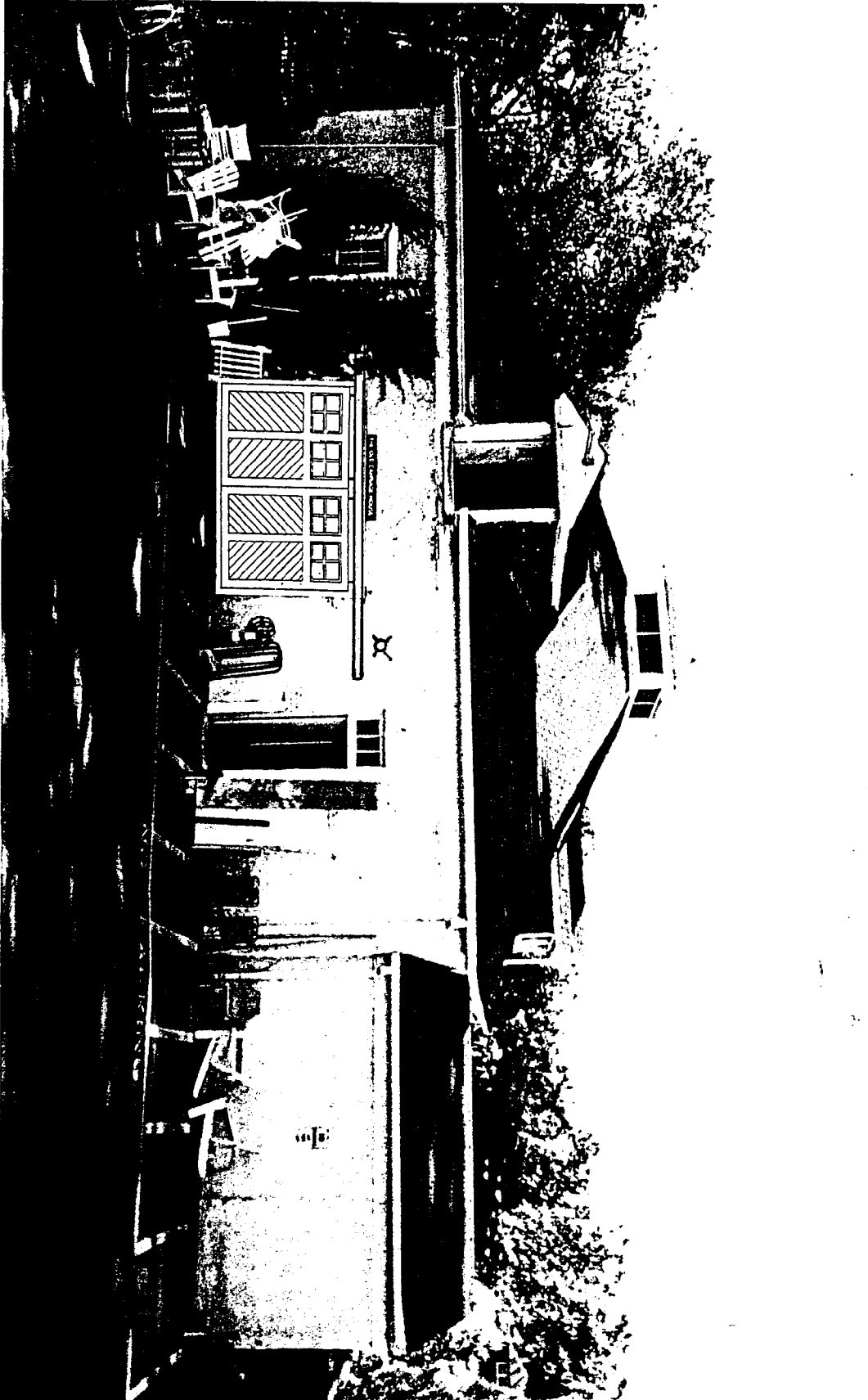
Distributor:

$\frac{1}{8}'' - 1'$



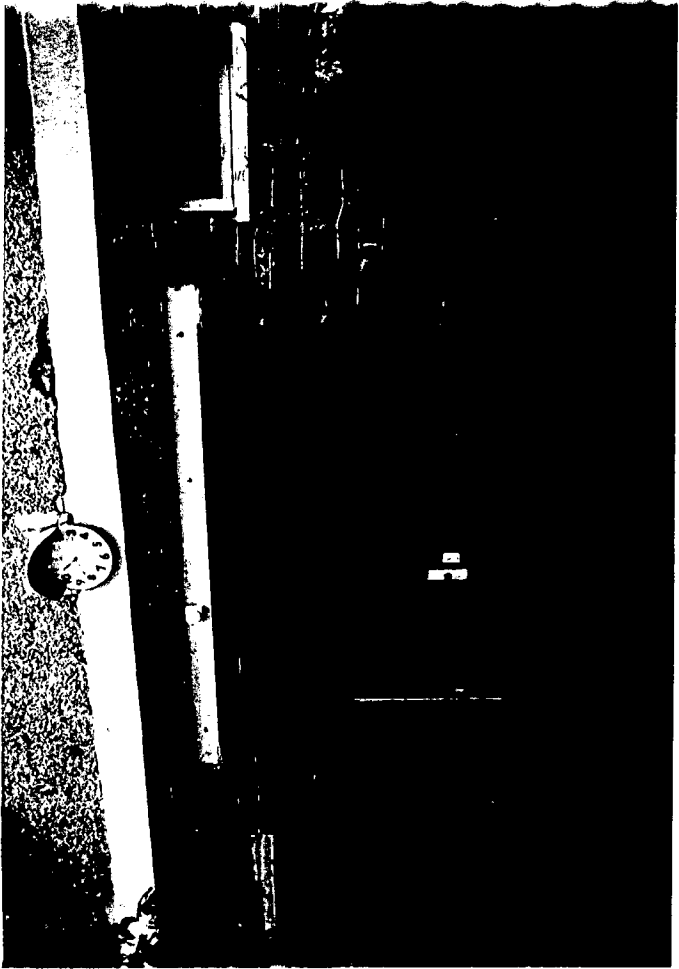
$\frac{1}{8}'' - 1'$





FRONT ELEVATION





**HISTORIC DOCUMENTATION AND RECOMMENDATIONS
FOR THE RENOVATION OF THE CARRIAGE HOUSE
AT THE CHEVY CHASE CLUB**



Prepared for:
THE CHEVY CHASE CLUB

Prepared by:
ROBINSON & ASSOCIATES, INC.

OCTOBER 1999

I. INTRODUCTION/STATEMENT OF PURPOSE

The Chevy Chase Club Carriage House, constructed ca. 1909 as a “permanent stables and shed for automobiles,” is a sophisticated example of a relatively rare building type that flourished just after the turn of the century. In the brief period of time before the new motor car supplanted the horse and carriage, when wealthy people owned both horses and motor cars, a unique architectural form developed which combined the stables, carriage house, and garage. Modernity, light, and every convenience were considered essential for the new garages, while at the same time the traditional stabling and care of horses was incorporated. The Chevy Chase Club’s combined stables and garage is a skillful example of this rare building type, and it is surprisingly intact to its original design character.

This historical study, commissioned by the Chevy Chase Club and prepared by Robinson & Associates, Inc., focuses strongly on documenting the original materials and design of the “stables and shed for automobiles.” Its purpose is to provide the Chevy Chase Club with information for decision-making on the maintenance and enhancement of the building.

II. HISTORIC CONTEXT AND DESIGN CHARACTERISTICS OF STABLE/GARAGE BUILDINGS

The Evolution of the Combined Stables and Garages

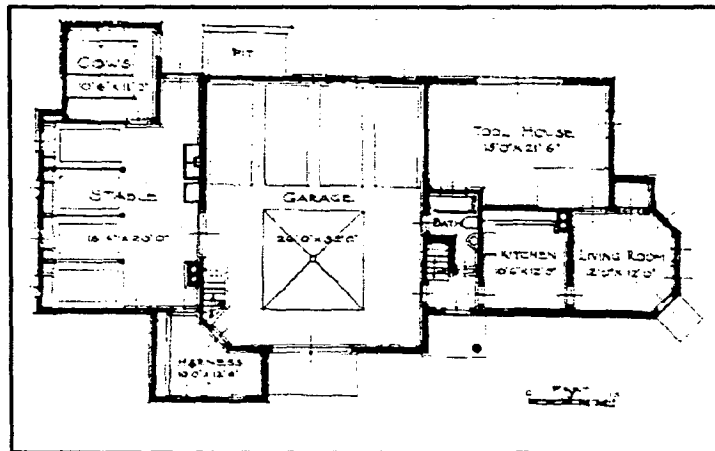
The automobile garage, though in many ways a unique structure, is actually a descendant of the carriage house and stable. The link between the carriage house and garage is especially apparent in the early days of the automobile. This period of ownership was responsible for the initial conception of the garage and the realization of its possibilities. Though introduced in America in the 1890s, automobiles remained a possession of the wealthy elite until after 1910. The popular view of the automobile during this period was one of leisure and status, a view which greatly influenced garage design during this early period.

The adaptive use of carriage houses and stables as automobile garages was the earliest way of housing early motor cars. Faced with the imminent need to shelter their expensive automobiles, owners often looked to the carriage house as a solution. For some owners, carriage houses and stables were simply converted to garages by removing stalls and modifying individual rooms. Other sophisticated owners hired architects to design combined stable-garage complexes. Combined horse and automobile shelters required special design elements. To guard against harmful car and stable fumes, which were damaging to both the health of horses and the finish of automobiles, separate areas were usually designed. In addition, fireproof construction was often used, due to the presence of gasoline, and the combustibility of the early automobile. Often designed by well-known architects, these combined stables and garages were early symbols of the growing importance of the automobile. Many of the new designs mirrored characteristics of the traditional stable and carriage house, especially in the use of barn-like hinge doors.



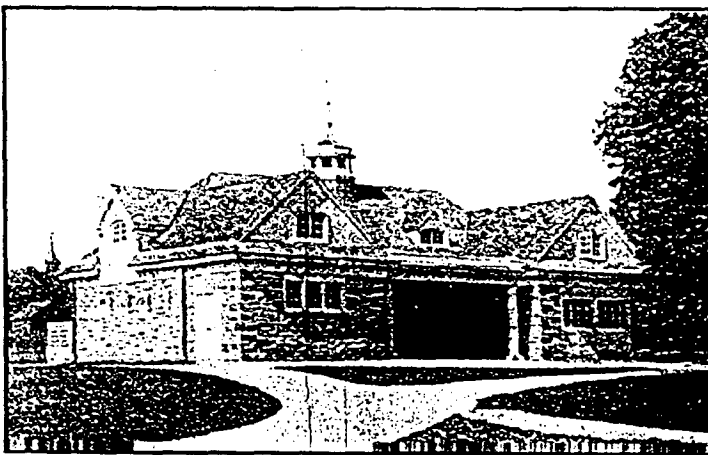
Early example of combined stable-garage complex from Willoughby, Ohio.

Source: *The Domestication of the Garage*



Floor plan of stable-garage complex. Willoughby, Ohio.

Source: *Housing the Horseless Carriage*



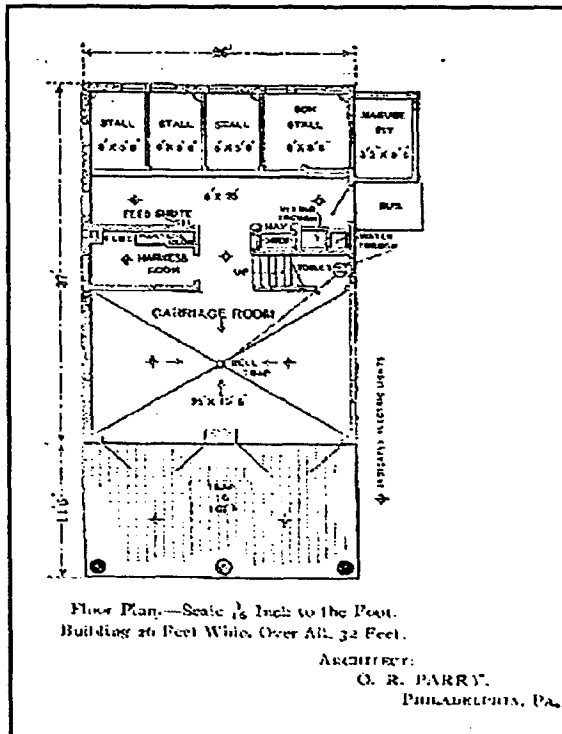
Stable-garage complex at Haverford, Pennsylvania, circa 1911.

Source: *Private Country and Suburban Garages*

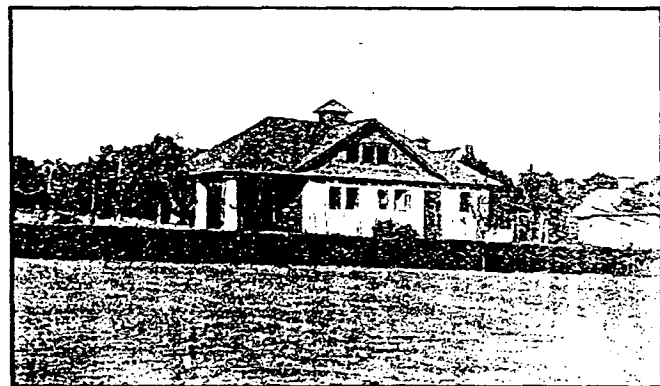
The use of combined stables and garages did not remain a viable option for many years. The increased chance of fire coupled with the damaging effects of fumes convinced many to build a separate garage that housed only automobiles. The shift to automobile garages was also a result of the growing reliability of the automobile and its replacement of the horse and carriage as the primary mode of transportation. Thus, the early combined stable and garage marked a short but influential beginning of garage design.

Design Characteristics of Stables and Carriage Houses

Stables and carriage houses constructed in the early twentieth century had a typical set of characteristic features. Important elements of stable designs were the arrangement and division of stalls, tack rooms, harness rooms, and the coach house. Stalls generally were placed side by side, with larger box stalls occupying the corners of the stable. A passageway was often placed in the middle to allow easier movement in and out of the stable. Stable floors were usually constructed of brick and quadrilled cement, which allowed for efficient and thorough cleaning with a hose. Stable windows were often placed high above each stall to let natural light into the stable. Hay lofts, usually conveniently located on the floor above the horses, helped to lessen the effects of heat and cold as well as noise.



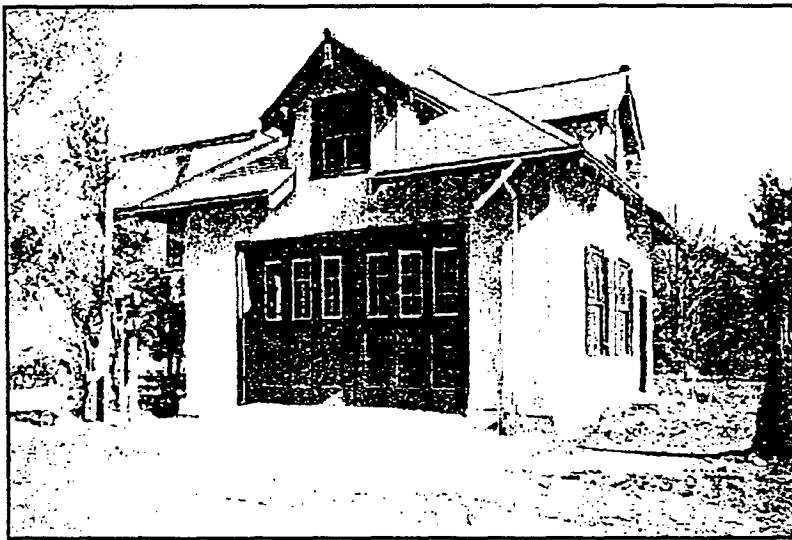
Floor plan of cement stable at Haverford, Pennsylvania.
Source: *Cement Houses and Private Garages*



Example of cement stable at Haverford, Pennsylvania
circa 1912.
Source: *Cement Houses and Private Garages*

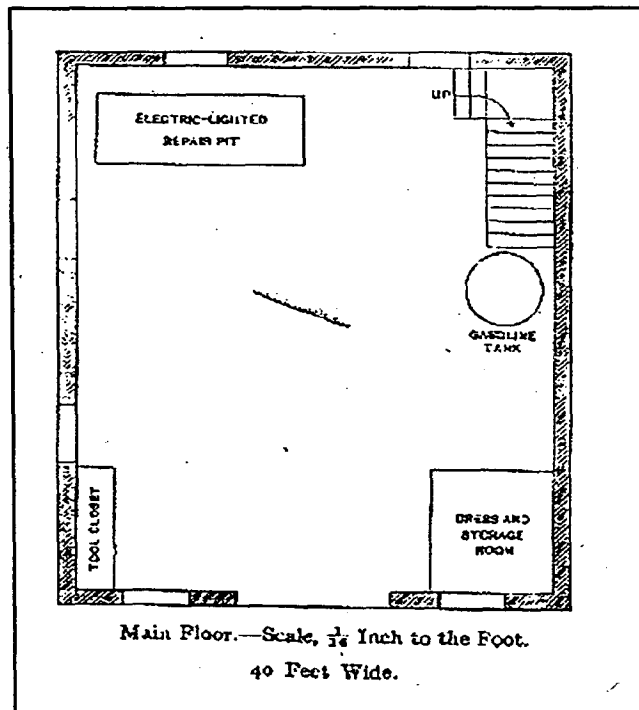
Design Characteristics of the Early Auto Garage

Design materials of the combined auto garage and stable are similar to those found in early auto garages. Garages typically displayed a wide variety of architectural styles, as owners often decided to mirror the style of the main house. The choice of individual materials played a great part in providing a garage with a distinctive character. In addition to aesthetic concerns, garage owners also weighed issues such as cost and protection against fire.



Early garage at Newton Center, Massachusetts, circa 1912.

Source: *Cement Houses and Private Garages*



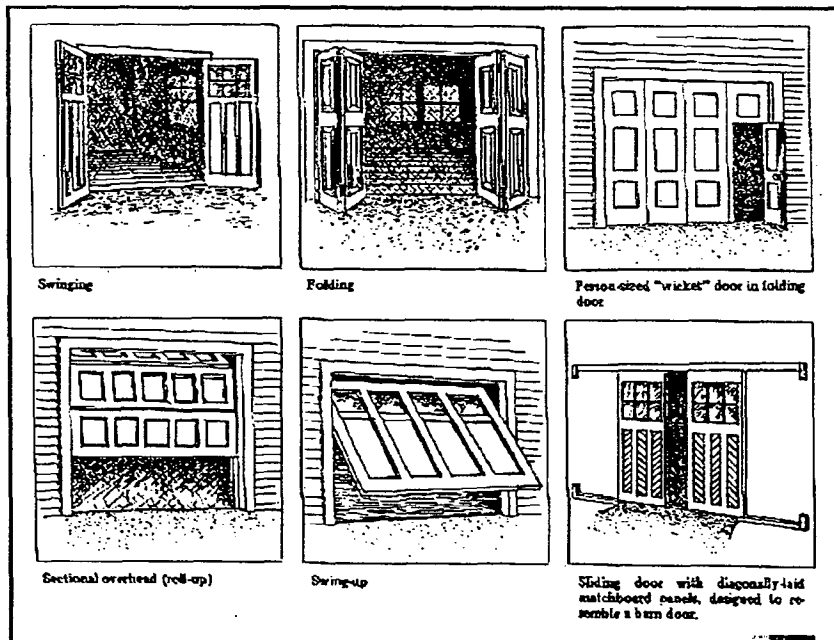
Typical floor plan of an early garage, circa 1912.

Source: *Cement Houses and Private Garages*

Doors

Early garage doors were a key element in the overall design of garages. In addition to functionality, garage doors usually provided the most visible aesthetic element. As a result, doors were available in several different designs. All early garage doors were made of wood and usually held glass panes. Garage doors at this time had to have a minimum width and height of eight feet to provide effective access. This minimum width and height later changed, as cars increased in size. Early garages usually had only one door opening. Later, as garages held more cars, individual door openings for each car were used to avoid possible damage and allow easier access.

The earliest of garages used simple double-leaf hinged doors, which swung out when opened. This early carriage house and barn influence was logical, as garages were in many ways descendants of the carriage house. Hinged doors, however, were not always the most effective solution for owners, as they were cumbersome and required large amounts of space when swung outward. As a result, designers developed innovative doors to create easy-to-use, and aesthetically pleasing, alternatives. One option kept the barn-like doors, but placed them on tracks, which enabled the owner to simply slide the doors open. Another solution involved folding doors, which were hinged doors folded back inside the garage. Spring-loaded roll-up and swing-up doors were popular alternatives as they were easy to use. Also occasionally used was a "wicket" door, which was placed into the main garage door so that individuals could enter without opening the entire door. These various garage doors varied in appearance, often depending on the overall architectural style of the garage.



Early examples of garage door types.
Source: *The Great American Garage*

Roofs

Early garages employed a variety of roof designs and materials. While the gable and hipped roof were common, mansard, gambrel, shed, and other roofs were also used. Expensive garages often mirrored the roof design of the main house. Early garages also tended to have a steeper roof pitch than modern garages. The use of roof materials was often influenced by a desire to fireproof the garage. Early automobiles could be highly combustible and were viewed by many owners as unpredictable and dangerous. Therefore, fireproofing a garage was an important aspect of early garage design. Fire retardant roofs included asbestos, cement, slate, tin, and asphalt shingles, standing-seam metal, and clay tiles. Despite the desire to fireproof garages, wood shingles were often used as a roof material. Another popular element of roof design, especially with more expensive garages, was the use of roof details, such as dormers, cupolas, vents, cresting, and copings. In addition to their aesthetic value, roof details such as cupolas provided practical purposes as well. Cupolas often contained vents, which allowed dangerous fumes to escape the garage. This was especially important in garages combined with stables, as automobile fumes were unhealthy for horses.



Early example of small garage at Brighton, Massachusetts, circa 1912.
Source: *Cement Houses and Private Garages*

Construction Materials

As with roof design, construction materials were chosen by some builders with the intention of preventing fires. A popular choice in the early period of garage construction was concrete. This new construction material was inexpensive, durable, and adaptable to various structural conditions. Also used as a fireproof material were hollow tile, vitrified brick and stone construction. While expensive, brick and stone had the advantages of being stable and aesthetically pleasing. Some owners were unable to afford the high costs of elaborate garages, and as a result, wooden frame garages were also relatively common. To combat fire, owners would apply plaster, tin, or glazed tile. Stucco applied over wire lath was a common practice, as it

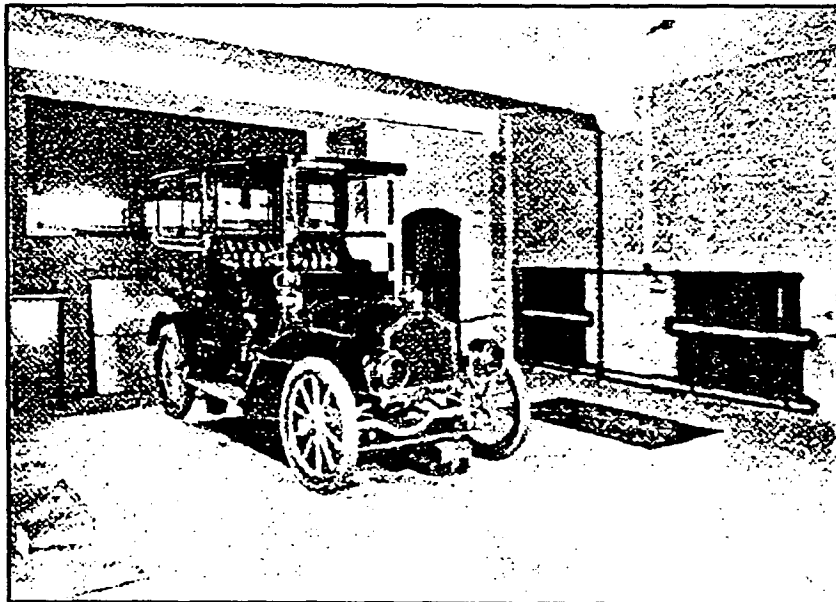
helped to retard fire and had a distinctive look. One popular form of stucco called "pebble-dash" consisted of aggregate applied to stucco, giving the exterior a distinctive texture.

Windows

The use of windows in garages usually involved glazed panes set in the garage door. For the other facades of the garage, standard sash windows were used, often one window along each side of the building. Providing much-needed light and ventilation, windows were one of the design elements used to complement the architectural style.

Interior Characteristics

Before gas stations and repair shops were widely accessible, automobile garages were often equipped with workbenches, gas pumps, cabinets, hoists, repair pits, and washbasins. Often, these were loosely arranged around the periphery of one large undivided interior space. At times, a turntable was built into the floor to avoid awkward maneuvering to enter and exit the garage. The earliest garages featured inclined ramps to facilitate (by a rolling start) the engine ignition process.



Interior view of early garage (circa 1907) illustrating various equipment, such as plumbing, heating, lighting, and repair pits.

Source: *Great American Garages*

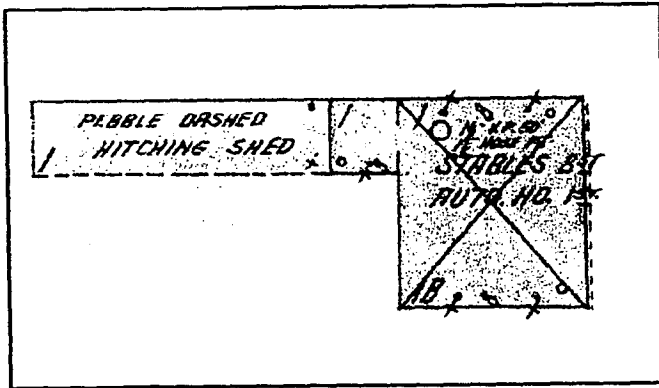
III. THE CHEVY CHASE CLUB CARRIAGE HOUSE

The first definitive reference to the building now referred to as the "Carriage House" – a reference which specifically dates the building and gives its original use – is contained in the December 7, 1909 *Annual Report* of the Chevy Chase Club. It reports: "A permanent stables and shed for automobiles have been erected and the grounds around them have been graded." According to a more specific reference in John Lynham's early edition of *The Chevy Chase Club -- A History*, the cost was \$10,962; storage rates (for automobiles, by implication) were fixed at \$7.50 per month; and a tank was installed to supply gasoline to the members at 16 cents per gallon. This was clearly a substantial building, since only a few years earlier, in 1905, the Bungalow had been constructed for \$9,789. The reference to grading is particularly interesting, as the clever device of manipulating the grade allowed access on two primary levels – at the lower level for the stables and at the upper level for the garage.

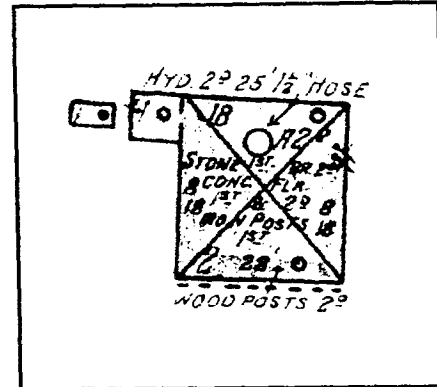
Slim additional evidence on the construction, early uses, or design character of the building has been located in any other identified archival sources. Archival collections -- including historic photographs, maps, architectural drawings and plans, annual reports, insurance records, and other archival sources -- of the Chevy Chase Club, Chevy Chase Historical Society, and Montgomery County Historical Society have been reviewed in depth. Careful on-site evaluations to visually assess physical characteristics of the building, as well as the interpretation of relevant historic context data on characteristic features of other early stable-automobile shed buildings, therefore become increasingly important in determining early design character. Finally, since a skillful design hand is evident in the building's design, project lists and/or drawings collections for several most likely architects for the building (including Arthur B. Heaton, Leon Dessez, and J. Henri de Sibour) were investigated; no evidence of their involvement or building plans were located.

The single most definitive pieces of evidence are found in early fire insurance maps covering the property. Sanborn fire insurance maps delineate certain architectural materials, characteristics, and uses for the building. On the 1916 Sanborn map of the Chevy Chase Club (the first representation of Montgomery County in the Sanborn series), the carriage house appears as a two-story, brick construction with a frame cornice. The roof of the building is keyed as being metal or slate. The use of brick construction and a metal or slate roof is evidence that the building was designed with fireproofing in mind. It appears most likely that the original materials were slate and pebble dash on brick construction. On the map, the lower level, or basement, is keyed as a stable, and the upper floor as a garage. The footprint of the building includes an extension on the west facade. The first portion of this extension, which is present today, is a one-story room of the same brick construction as the main building. On the map, however, an additional extension of frame construction is present. This one-story extension is labeled as a "hitching shed," with a exterior finish of pebble-dash stucco. The hitching shed was most likely used to house and repair carriages. The roofing material of the hitching shed was keyed as a shingle roof.

The 1927 Sanborn map is the only other early one covering the Chevy Chase Club grounds. It is similar to the 1916 map with a few exceptions. The frame construction hitching shed does not appear on the 1927 map, as it was most likely unnecessary by that time. The 1927 map also lists the stone foundation, which more than likely is original, but was not mentioned in the 1916 map. The first and second floors are listed as having concrete floors, which was common for garages and stables. Also listed are iron posts on the stable floor and wooden posts on the garage floor.



Chevy Chase Club Carriage House as it appears in the 1916 Sanborn Fire Insurance Map.



Chevy Chase Club Carriage House as it appears in the 1927 Sanborn Fire Insurance Map.

KEY TO SYMBOLS	DESCRIPTION	NOTES
[Symbol]	Frame building with stone concrete base	
[Symbol]	Stone building	
[Symbol]	Stone building with iron posts	
[Symbol]	Stone building with wood posts	
[Symbol]	Stone building with concrete floor	
[Symbol]	Stone building with concrete floor and iron posts	
[Symbol]	Stone building with concrete floor and wood posts	
[Symbol]	Stone building with concrete floor and stone concrete base	
[Symbol]	Stone building with concrete floor and stone concrete base and iron posts	
[Symbol]	Stone building with concrete floor and stone concrete base and wood posts	
[Symbol]	Stone building with concrete floor and stone concrete base and iron posts and wood posts	

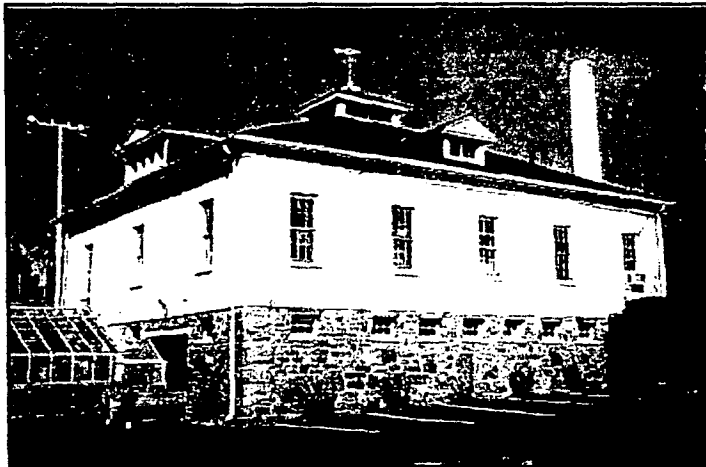
Key to 1916 Sanborn Fire Insurance Map.

KEY TO SYMBOLS	DESCRIPTION	NOTES
[Symbol]	Stone building with concrete floor and stone concrete base	
[Symbol]	Stone building with concrete floor and stone concrete base and iron posts	
[Symbol]	Stone building with concrete floor and stone concrete base and wood posts	
[Symbol]	Stone building with concrete floor and stone concrete base and iron posts and wood posts	
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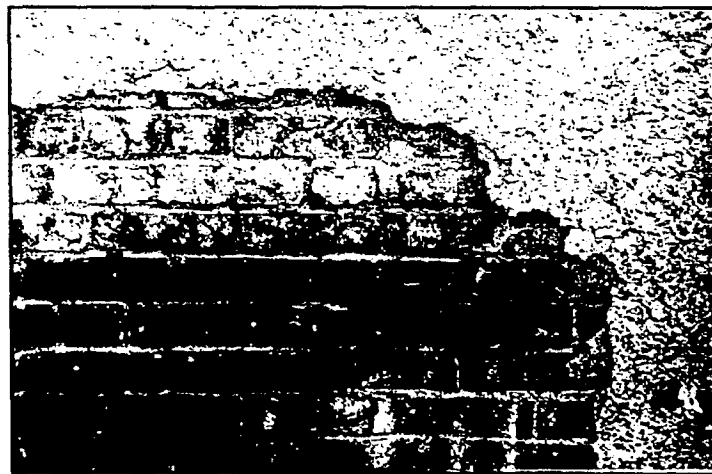
Key to 1927 Sanborn Fire Insurance Map.

Current Exterior Architectural Details

Current exterior architectural details of the Chevy Chase Club Carriage House include original elements, as well as more recent changes. The building itself measures 56'-4" by 49'-1". The stone foundation, which is exposed on the south and east facades, appears to be original and in good condition. The warm tones of the varied granite blocks and the grapevine joints are distinctive.



Chevy Chase Club Carriage House, Southeast facade, 1999.
Source: Robinson & Associates

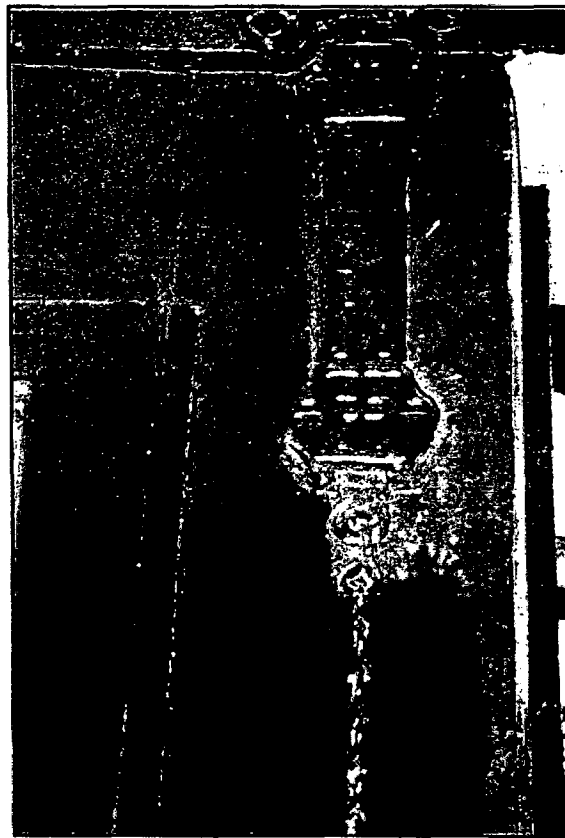


**Detail of Chevy Chase Club Carriage House wall with
pebble-dash stucco and American bond brick.**
Source: Robinson & Associates

Windows are present on both the stable level and the garage level. The windows on the stable level include eight on the east facade and two on the south facade; all are set high in the stone foundation and are rectangular in shape with top-mounted hinges. The eight windows on the east facade roughly correspond with each individual stall, thus providing light and a certain degree of visual stimulation for each horse.

The windows on the garage level of the carriage house are all six-over-six, double-hung windows and include two windows on the south facade, five on the east facade, and one on the north facade.

The door openings on the south facade open into the stable portion of the building. That the current roll-up door on this facade is a replacement is clear not only by its materials and character, but also by the evident patch and inserted I-beam above. The original opening, probably roughly the same size (its original width can be confirmed by removing the recent concrete patches on either side), was most likely occupied by a set of double-leaf hinged doors that swung outward. Also on the south facade is the attached greenhouse, which is a recent addition. The double-leaf hinged doors that connect the greenhouse and carriage house appear to be original. This distinctive set of doors, a massive 6' x 9' in dimension, feature twelve-pane lights in their upper half and diagonal wooden bracing set into the panel below. Notable original hardware includes the decorative metal locking device (or bolt) set high at the edge of the leftmost door.



Detail of decorative metal locking device on greenhouse/stable door.

Source: Robinson & Associates

This original door design and configuration is repeated, in miniature, on the set of doors in the hayloft opening on the north facade of the building. Considerably smaller than their counterparts on the south elevation, these doors measure approximately 3' x 5', consist of panels of diagonally placed wood beneath four-pane lights, and are set below the pediment and block-and-tackle of this gable-roofed dormer. The garage door on the north facade is of modern construction. The original garage door was likely a double-

leaf hinge door, of wood construction. The new door on the west facade fills a recently created entrance for storage of the zamboni equipment.

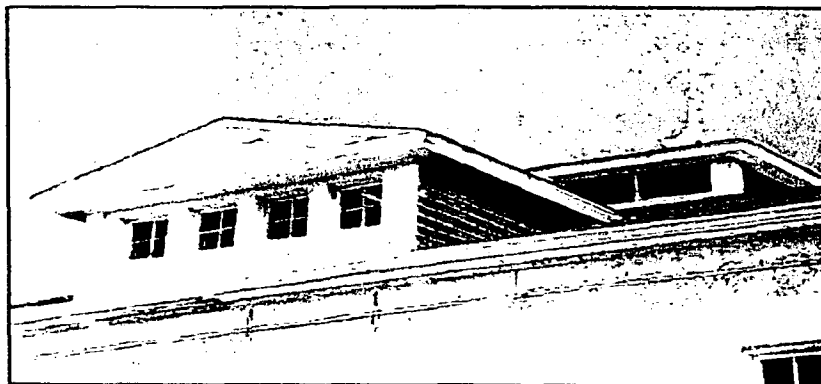


Detail of original stable door at greenhouse entrance (South facade) of the Chevy Chase Club Carriage House.
Source: Robinson & Associates



Detail of original hay loft doors at north elevation of the Chevy Chase Club Carriage House.
Source: Robinson & Associates

The roof is currently covered with dark red asphalt shingles and no remnants of original material are evident beneath the shingles. Original roofing material is best determined by the Sanborn fire insurance maps. According to these maps, the carriage house had a slate or metal roof, which were the materials of choice for owners who were interested in fireproofing a garage. The four gable-roofed dormers on each side of the hipped roof are original; slightly different in dimensions, they have front-facing pediments, below which are set square four-paned windows. The distinctive dormer on the north facade led to a hayloft which was probably used for storage. The ventilator at the peak of the roof was a decorative element that also included vents on the sides, and a weathervane finial (of undetermined age).



Detail of south dormer and cupola.
Source: Robinson & Associates

Current Interior Architectural Details

The Carriage House interior retains certain elements of the original design. The stable level includes a quadrilled concrete floor, which enabled water to flow efficiently from the stall into centrally located metal drains. The patterns grooved into the cement floor also denote the locations of each stall and the box stalls in the corners. In the center of the large stable area is a central passageway leading to the entrance. This arrangement of stalls and passageways was standard for stables of this period. On one side of the stable wall, a large sliding door is present. It appears to be of early construction, but the fact that it may not be original to the building is supported by the fact that the open space is cut off by the clear imprint of a former iron post hole. The northwest corner of the stable level is partitioned off (and differentiated by floor pattern) to contain the stairs (which are original and intact to the attic) and, presumably, harness rooms, cleaning rooms, etc. Often in stables a hay chute was constructed that connected an attic above with the stable below, but upon inspection, the evidence of a hay chute was not found. However, since the Carriage House includes a garage on the floor above it, the construction of a hay chute may have been too difficult to include.



Interior view of stable of the Chevy Chase Club Carriage House.

Source: Robinson & Associates

The garage level includes scored square concrete flooring, with each square measuring approximately 3' x 3'. This type of smooth concrete floor was the standard for garages of this period. The garage floor has undergone several changes, especially involving the construction of new partitions and walls. The garage was designed to be a large open space to provide ample room for the maneuvering of numerous

automobiles in and out it. Little or none of the other original features such as workbenches, repair pits, etc., that may have existed have been identified.



Interior view of garage of the Chevy Chase Carriage House.

Source: Robinson & Associates

The attic space could have been originally used in several ways. Early garages and stable combinations often reserved upper levels as living quarters for stable hands or chauffeurs. The presence of windows in the dormers of each facade, as well as the organization of the attic space into several defined rooms points to this as a possibility. The presence of the hayloft on the dormer of the north facade suggests that the attic may have been used for the storage of hay for horses in the stable. The attic also may have been used as a general storage area.

IV. RECOMMENDATIONS

In summary, the Chevy Chase Club's "permanent stables and shed for automobiles" is a skillful example of a rather rare building type, the combined stables and garage that is highly relevant to the transition from the horse-drawn era to early automobile age. Fortunately, the building is largely intact to its original design. This section of the report focuses on recommendations that allow for the effective maintenance and the return of important missing elements to this architecturally distinctive building.

Roofing Material

Fireproof construction was critical to the safe housing and care both horses and motor cars in early combined stables and garages, and a variety of roofing materials were employed at the time that the Carriage House was constructed. The roof of the Carriage House is a principal character-defining feature, and careful investigation has gone into a recommendation for replacement material. Since physical investigation has not located remnants of the early roof surface, the most reliable information comes from the 1916 Sanborn fire insurance map, on which the building is keyed to indicate that its roof surface at that date was metal or slate.

Either of these materials--the use of a painted metal standing-seam material or the use of slate--would be an appropriate choice as a roofing material for the building. However, slate is recommended, as it most likely was original. Slate is a costly material, but its durability and life-cycle cost analysis are important factors to consider (slate can last 50-100 years). Alternative materials can be used with similar effect, and a number of manufacturers have developed "simulated slate" that is accepted rather widely. Several suppliers of historically appropriate slate, substitute slate, and metal roofing are listed in the section of this report entitled "Suppliers and Sources of Historic Materials," and in numerous other technical bulletins. One factor that may influence the selection of roof material is the aesthetic effect that it will have in combination with the exterior material selected (see below).

Exterior Material

The 1916 Sanborn map key indicates exterior materials including brick walls, a stone foundation, and pebble-dash stucco on the wooden hitching shed. The character of the brick wall surface indicates that it is highly likely that the brick was covered with stucco originally or at a very early date. Pebble-dash stucco is also an important part of the character of the larger Chevy Chase Historic District.

As stated above, repairing/replacing the early pebble-dash stucco is believed to be the most conceptually appropriate treatment. It is our understanding that the Club has a reliable recommendation for a craftsman who is familiar with historically correct pebble-dash application, and that certainly makes the repair and/or re-application of stucco a viable alternative.

Doors

The design of garage doors was a practical problem for early car owners, and the evolution of the earliest garage doors can be traced from hinged swinging doors (ca. 1910-40), folding hinged doors (ca. 1915-29), rolling doors on overhead tracks (ca. 1920-45), and a solid tilting overhead door (ca. 1935-49). Both the construction date of the Carriage House (ca. 1909) and remaining historic door types on the building indicate that the original doors were probably of the hinged swinging type. It seems clear that the two historic doors (at the greenhouse entrance and at the hayloft) form the model for a historically accurate door type. Although fabricated in different scales, they are strikingly similar in design.

Again, practical considerations are important in selecting replacement doors where original doors are missing -- and it is not good judgement to return simply to double hinged doors. A number of current manufacturers, however, now produce historically compatible replacement doors. (See "Suppliers and Sources of Historic Materials.") It seems possible and practical to select a sectional overhead (roll-up) door, swing-up door, or sliding door that has characteristics similar to the existing historic doors (i.e., multipane sash in the upper section and a paneled lower section, as well as the appearance of a double-leaf hinged door). Even more desirable would be to take advantage of the custom design services of some of these manufacturers to more fully replicate the original doors, especially the diagonal woodwork in their lower panel.

One important note: Attention should be paid to historic hardware on both doors and windows wherever it exists. The foliated locking device on the large original door on the south side is an important example.

Windows

Natural light and air were considered requirements for the safe housing of both horses and automobiles. Original windows with several different configurations are in place throughout the Carriage House. Much emphasis has been placed recently in technical architectural bulletins on the viability and long-term cost benefit of retaining original wooden sash – even when damaged or deteriorated. (Numerous technical bulletins are available that support this premise.) Since the windows are an important aspect of the design of this building, the recommendation would be to repair – as opposed to replacing – them.

SUPPLIERS AND SOURCES OF HISTORIC GARAGE MATERIALS

Doors

Designer Doors, Inc.
283 Troy Street
River Falls, Wisconsin 54022
(800) 241-0525

Hahn's Woodworking Co. Inc.
109 Aldine Road
Roselle, New Jersey 07203
(908) 241-8825

Holmes Garage Door Co.
P.O. Box 1976
Auburn, Washington 98071-1976
(206) 931-8900

Summit Door, Inc.
603 West Palm Avenue
Orange, California 92868
(714) 536-6633

Garage Hardware

Richards-Wilcox Co.
(312) 897-6951

Stanley Hardware
Dept. OHJ
New Britain, Connecticut 06050
(203) 225-5111

Roofing Materials

Slate

Buckingham-Virginia Slate Corp.
P.O. Box 8
Arvon, Virginia 23004
(804) 581-1131

Slate International Inc.
15106 Marlboro Pike
Upper Marlboro, MD 20772
(301) 952-0120

Slate Substitute

Atlas International Building Products
5600 Hochelaga St.
Dept. OHJ
Montreal, Quebec, Canada
H1N 1W1
(800) 361-4962

Metal Roofing

Metal Sales Mfg. Corp.
999 Park Place, Dept. OHJ
New Albany, IN 47150
(812) 944-1879

Classic Products, Inc.
299 Staunton St.
P.O. Box 701, Dept. OHJ
Piqua, OH 45356
(800) 543-8938

Roofmaster Products Company
(800) 421-6174

Follansbee Steel
P.O. Box 610, Dept. OHJ
Follansbee, West Virginia 26037
(304) 527-1260

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Van Court, Robert H. "The Home Garage." *The Independent*, May 4, 1914, 202-03.

Wahlberg, Holly. "A House for the Automobile - The Changing Garage." *Old House Journal*, July/August, 1998, 60-65.

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CCC - Carriage House

SITE
meeting - RDZ

1909

Willy, Chief Engineer - His Headquarters

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"ant's" 1880's / 1920 ← more popular

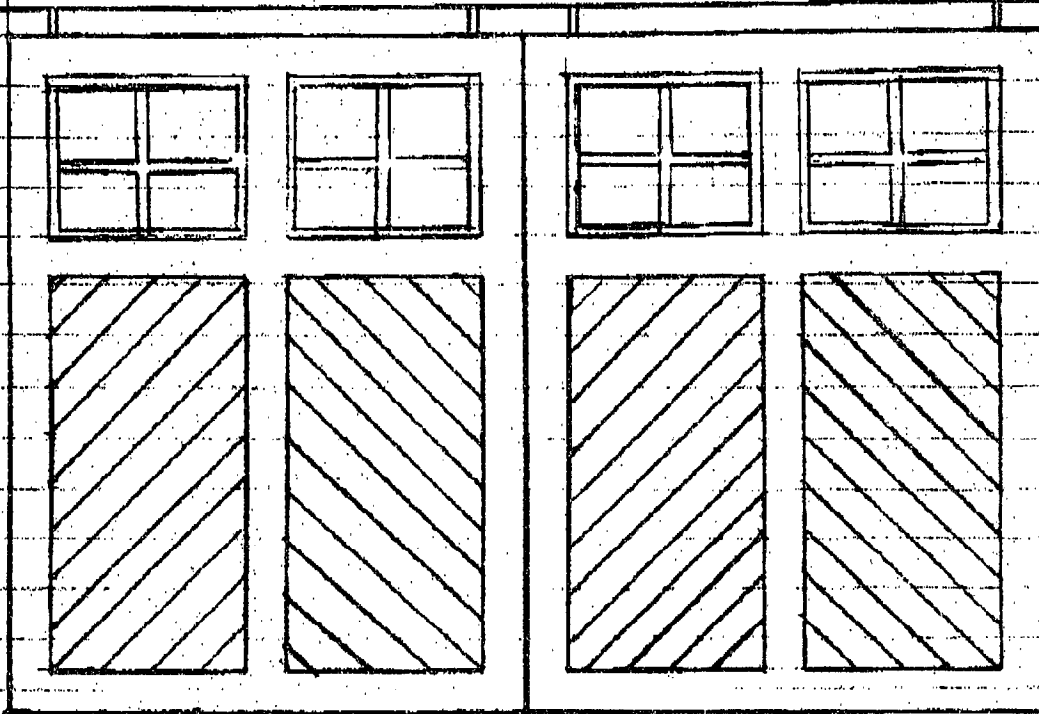
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Carriage House Rehab.

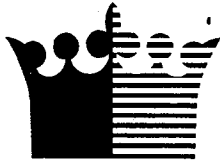
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#1



CARRIAGE HOUSE DOORS

SCALE: 1/2" = 1'



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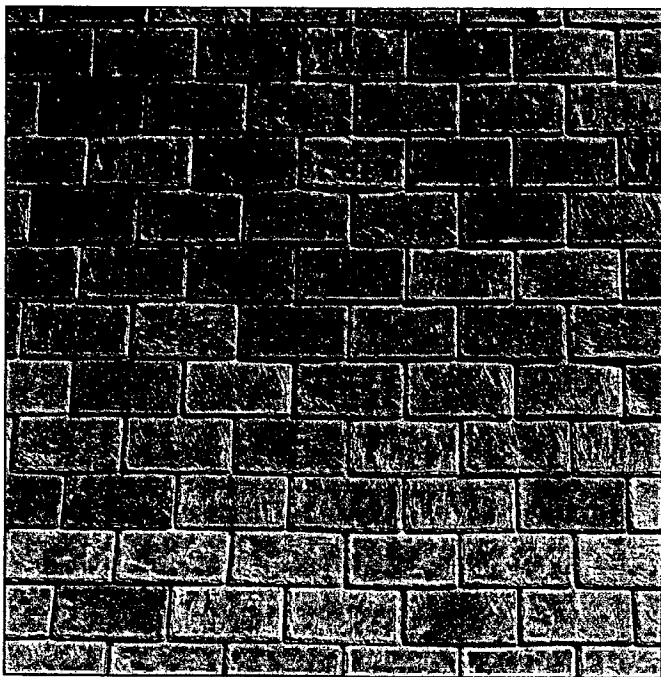
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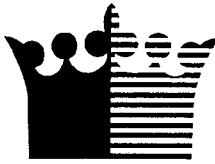


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Product Testing

Fire Rating Listing

UL & ULC (Underwriters Laboratories) listed. For prepared roofing material shingles Class "C" in accordance with UL790 & CAN/ULC-S107-M87.

Ultra Violet (UV) Exposure Testing

Tiles were exposed to an accelerated U.V. test (Zenon arc chamber) for 2000 hrs. After 1000 hrs. the tiles exhibited a light even fade of the surface finish with no trace of cracking, spalling, deformation. At 2000 hrs. no further changes were recorded.

Wind Driven Rain Testing

In accordance with the requirements of ASTM E331 Standard (minimum -1000 Pascal's to pass). The test results indicated water did not penetrate the system up to a negative pressure of -2700 Pascal's (Testing System Limitations). These results are equivalent to 156 mph or 251 km/hr.

Freeze Thaw Cycles

In accordance with ASTM C666 Method A. The tiles are subjected to 303 freeze/thaw cycles. The results showed no signs of damage, e.g. spalling, cracking or splitting. "Ortech", an independent accredited lab concluded, "The Royal Ecoproducts Royal Slate roof tile displayed a very good resistance to freeze-thaw damage."

Heat Cycle Testing

The tiles were subjected to twenty periods of 24 hours cycles consisting of 16 hrs. in a controlled chamber at high temperature and then 8 hrs. at cool temperature. The results were no sign of cracking, spalling, deformation or visible expansion.

Nail Tear Strength Testing

The tensile force required to pull a single nail through a roofing tile. Results concluded 250 lbs. or 113 kg. (Installed tiles have 4 nails far exceeding any force which would act on it).

Nail Pull Through Testing

"Ortech", an independent accredited lab concluded "The Royal Ecoproducts roofing tile resistance to nail pull through (27.75 Mpa) far exceeds peak wind pressures of 5 kPa." (204 mph or 329 km/hr). Installed tiles have four nails.

Water Absorption Testing

The water absorption was conducted in accordance with ASTM C272 (Water absorption of core materials for structural sandwich construction). The tiles were immersed in water for 500 hours with no appreciable weight gain.

Water Presence Testing

In accordance with ASTM E96-95 (Water vapour transmission of materials) the test results have shown the tile to be impermeable.

Product Specifications / Accessories

- Weight per tile = 1.5 lbs.
- Width = 12 inches.
- Length = 18 inches.
- Fastened with standard 1 1/2 inch copper, stainless steel or galvanized roofing nails.
- Ridge Cap tiles available.
- For 4/12 to 6/12 pitches use 6" exposure (or 200 pcs/ roofing square)
- For 7/12 pitches and up use 7" exposure (or 172 pcs/ roofing square)
- No special tools required. Installation guide available.

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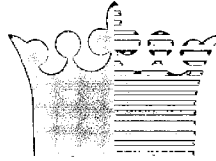
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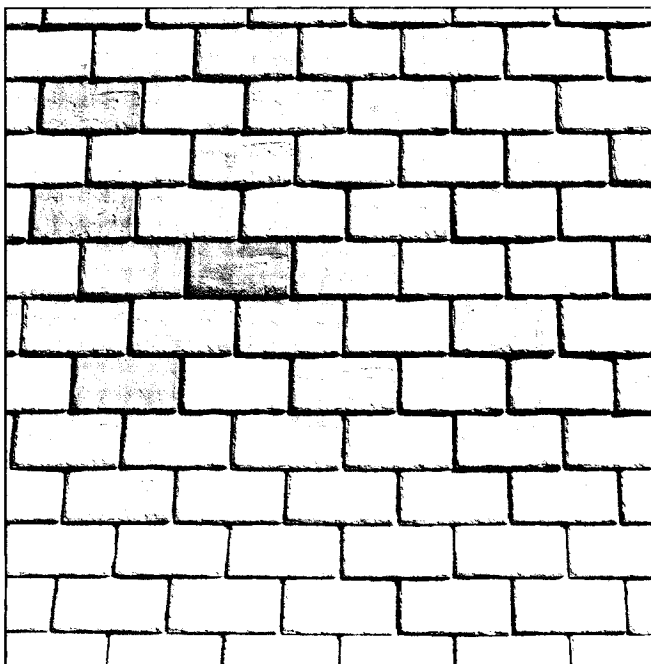
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**HISTORIC DOCUMENTATION AND RECOMMENDATIONS
FOR THE RENOVATION OF THE CARRIAGE HOUSE
AT THE CHEVY CHASE CLUB**



Prepared for:
THE CHEVY CHASE CLUB

Prepared by:
ROBINSON & ASSOCIATES, INC.

OCTOBER 1999

I. INTRODUCTION/STATEMENT OF PURPOSE

The Chevy Chase Club Carriage House, constructed ca. 1909 as a “permanent stables and shed for automobiles,” is a sophisticated example of a relatively rare building type that flourished just after the turn of the century. In the brief period of time before the new motor car supplanted the horse and carriage, when wealthy people owned both horses and motor cars, a unique architectural form developed which combined the stables, carriage house, and garage. Modernity, light, and every convenience were considered essential for the new garages, while at the same time the traditional stabling and care of horses was incorporated. The Chevy Chase Club’s combined stables and garage is a skillful example of this rare building type, and it is surprisingly intact to its original design character.

This historical study, commissioned by the Chevy Chase Club and prepared by Robinson & Associates, Inc., focuses strongly on documenting the original materials and design of the “stables and shed for automobiles.” Its purpose is to provide the Chevy Chase Club with information for decision-making on the maintenance and enhancement of the building.

II. HISTORIC CONTEXT AND DESIGN CHARACTERISTICS OF STABLE/GARAGE BUILDINGS

The Evolution of the Combined Stables and Garages

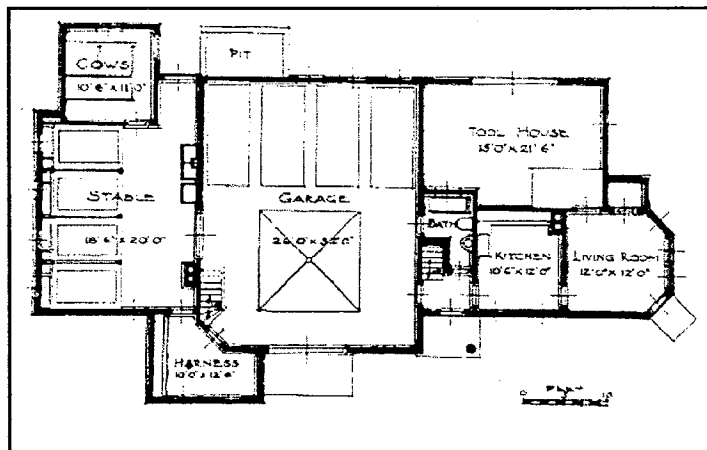
The automobile garage, though in many ways a unique structure, is actually a descendant of the carriage house and stable. The link between the carriage house and garage is especially apparent in the early days of the automobile. This period of ownership was responsible for the initial conception of the garage and the realization of its possibilities. Though introduced in America in the 1890s, automobiles remained a possession of the wealthy elite until after 1910. The popular view of the automobile during this period was one of leisure and status, a view which greatly influenced garage design during this early period.

The adaptive use of carriage houses and stables as automobile garages was the earliest way of housing early motor cars. Faced with the imminent need to shelter their expensive automobiles, owners often looked to the carriage house as a solution. For some owners, carriage houses and stables were simply converted to garages by removing stalls and modifying individual rooms. Other sophisticated owners hired architects to design combined stable-garage complexes. Combined horse and automobile shelters required special design elements. To guard against harmful car and stable fumes, which were damaging to both the health of horses and the finish of automobiles, separate areas were usually designed. In addition, fireproof construction was often used, due to the presence of gasoline, and the combustibility of the early automobile. Often designed by well-known architects, these combined stables and garages were early symbols of the growing importance of the automobile. Many of the new designs mirrored characteristics of the traditional stable and carriage house, especially in the use of barn-like hinge doors.



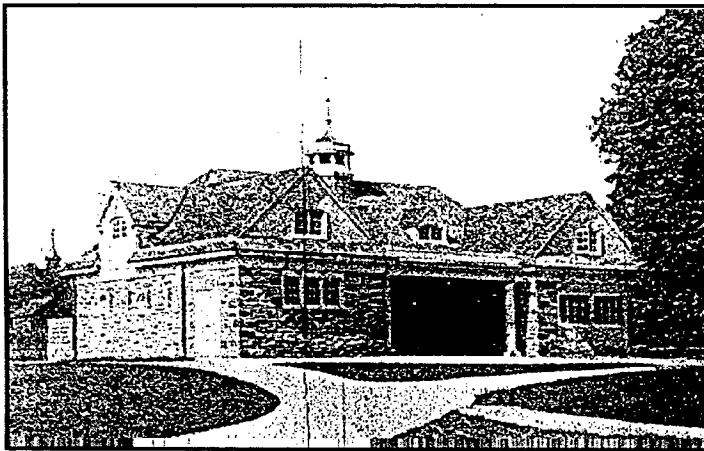
Early example of combined stable-garage complex from Willoughby, Ohio.

Source: *The Domestication of the Garage*



Floor plan of stable-garage complex. Willoughby, Ohio.

Source: *Housing the Horseless Carriage*



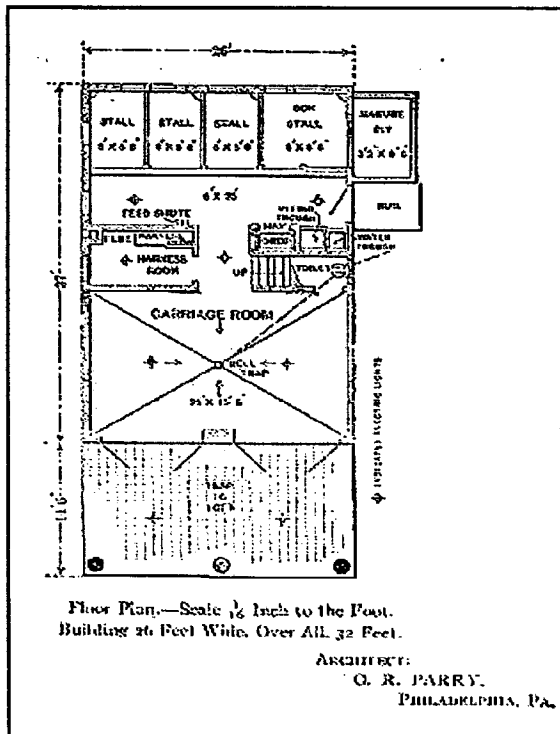
Stable-garage complex at Haverford, Pennsylvania, circa 1911.

Source: *Private Country and Suburban Garages*

The use of combined stables and garages did not remain a viable option for many years. The increased chance of fire coupled with the damaging effects of fumes convinced many to build a separate garage that housed only automobiles. The shift to automobile garages was also a result of the growing reliability of the automobile and its replacement of the horse and carriage as the primary mode of transportation. Thus, the early combined stable and garage marked a short but influential beginning of garage design.

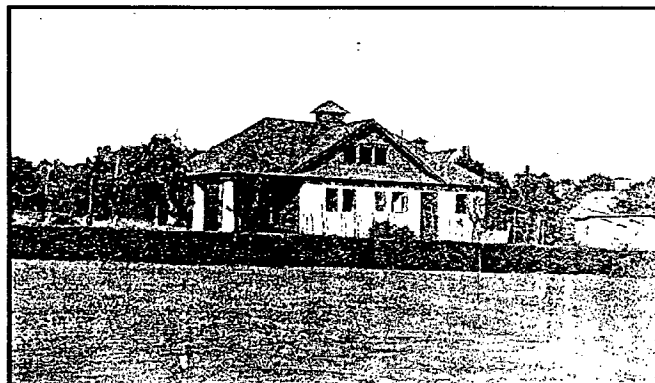
Design Characteristics of Stables and Carriage Houses

Stables and carriage houses constructed in the early twentieth century had a typical set of characteristic features. Important elements of stable designs were the arrangement and division of stalls, tack rooms, harness rooms, and the coach house. Stalls generally were placed side by side, with larger box stalls occupying the corners of the stable. A typical stall measured nine or ten feet in length and five feet in width. A passageway was often placed in the middle to allow easier movement in and out of the stable. Stable floors were usually constructed of brick and quadrilled cement, which allowed for efficient and thorough cleaning with a hose. Stable windows were often placed high above each stall to let natural light into the stable. Hay lofts, usually conveniently located on the floor above the horses, helped to lessen the effects of heat and cold as well as noise.



Floor plan of cement stable at Haverford, Pennsylvania.

Source: *Cement Houses and Private Garages*

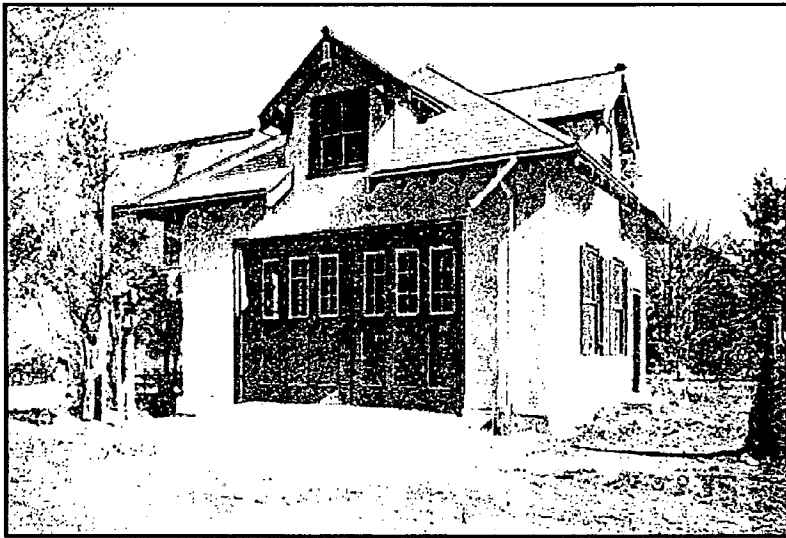


Example of cement stable at Haverford, Pennsylvania circa 1912.

Source: *Cement Houses and Private Garages*

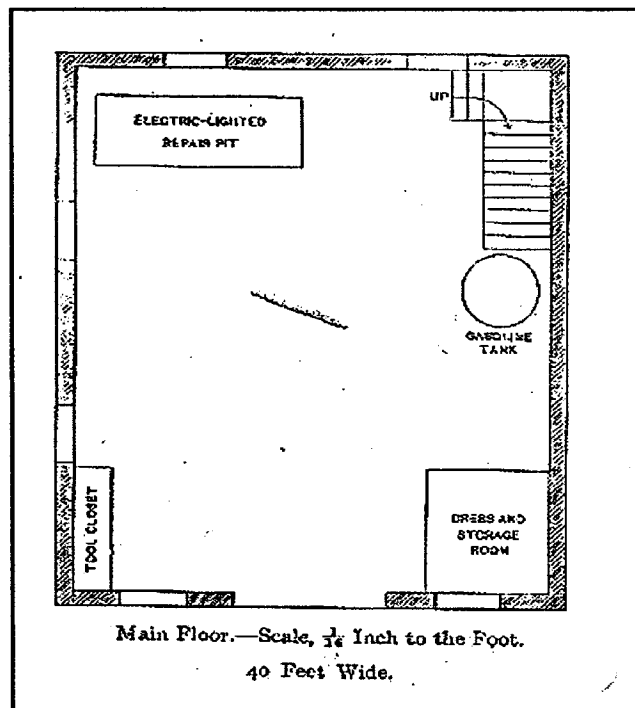
Design Characteristics of the Early Auto Garage

Design materials of the combined auto garage and stable are similar to those found in early auto garages. Garages typically displayed a wide variety of architectural styles, as owners often decided to mirror the style of the main house. The choice of individual materials played a great part in providing a garage with a distinctive character. In addition to aesthetic concerns, garage owners also weighed issues such as cost and protection against fire.



Early garage at Newton Center, Massachusetts, circa 1912.

Source: *Cement Houses and Private Garages*



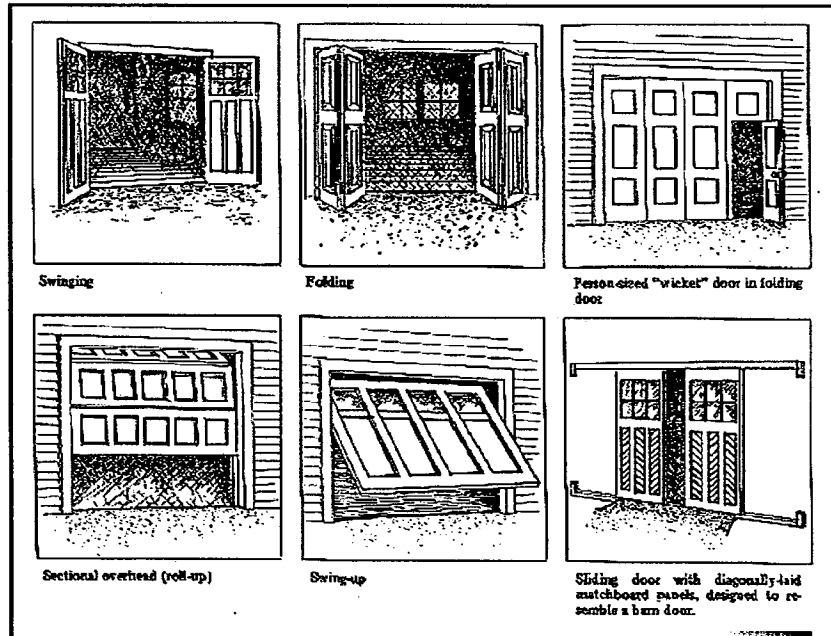
Typical floor plan of an early garage, circa 1912.

Source: *Cement Houses and Private Garages*

Doors

Early garage doors were a key element in the overall design of garages. In addition to functionality, garage doors usually provided the most visible aesthetic element. As a result, doors were available in several different designs. All early garage doors were made of wood and usually held glass panes. Garage doors at this time had to have a minimum width and height of eight feet to provide effective access. This minimum width and height later changed, as cars increased in size. Early garages usually had only one door opening. Later, as garages held more cars, individual door openings for each car were used to avoid possible damage and allow easier access.

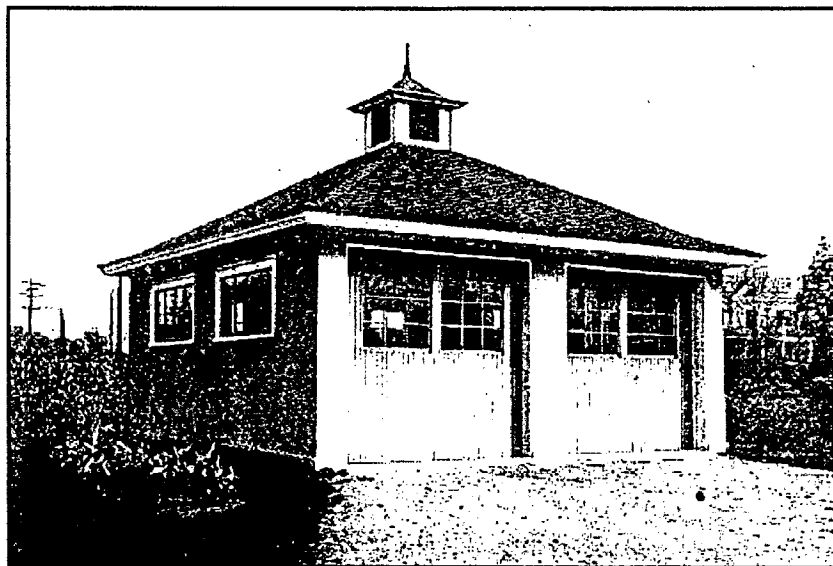
The earliest of garages used simple double-leaf hinged doors, which swung out when opened. This early carriage house and barn influence was logical, as garages were in many ways descendants of the carriage house. Hinged doors, however, were not always the most effective solution for owners, as they were cumbersome and required large amounts of space when swung outward. As a result, designers developed innovative doors to create easy-to-use, and aesthetically pleasing, alternatives. One option kept the barn-like doors, but placed them on tracks, which enabled the owner to simply slide the doors open. Another solution involved folding doors, which were hinged doors folded back inside the garage. Spring-loaded roll-up and swing-up doors were popular alternatives as they were easy to use. Also occasionally used was a "wicket" door, which was placed into the main garage door so that individuals could enter without opening the entire door. These various garage doors varied in appearance, often depending on the overall architectural style of the garage.



Early examples of garage door types.
Source: *The Great American Garage*

Roofs

Early garages employed a variety of roof designs and materials. While the gable and hipped roof were common, mansard, gambrel, shed, and other roofs were also used. Expensive garages often mirrored the roof design of the main house. Early garages also tended to have a steeper roof pitch than modern garages. The use of roof materials was often influenced by a desire to fireproof the garage. Early automobiles could be highly combustible and were viewed by many owners as unpredictable and dangerous. Therefore, fireproofing a garage was an important aspect of early garage design. Fire retardant roofs included asbestos, cement, slate, tin, and asphalt shingles, standing-seam metal, and clay tiles. Despite the desire to fireproof garages, wood shingles were often used as a roof material. Another popular element of roof design, especially with more expensive garages, was the use of roof details, such as dormers, cupolas, vents, cresting, and copings. In addition to their aesthetic value, roof details such as cupolas provided practical purposes as well. Cupolas often contained vents, which allowed dangerous fumes to escape the garage. This was especially important in garages combined with stables, as automobile fumes were unhealthy for horses.



Early example of small garage at Brighton, Massachusetts, circa 1912.

Source: *Cement Houses and Private Garages*

Construction Materials

As with roof design, construction materials were chosen by some builders with the intention of preventing fires. A popular choice in the early period of garage construction was concrete. This new construction material was inexpensive, durable, and adaptable to various structural conditions. Also used as a fireproof material were hollow tile, vitrified brick and stone construction. While expensive, brick and stone had the advantages of being stable and aesthetically pleasing. Some owners were unable to afford the high costs of elaborate garages, and as a result, wooden frame garages were also relatively common. To combat fire, owners would apply plaster, tin, or glazed tile. Stucco applied over wire lath was a common practice, as it

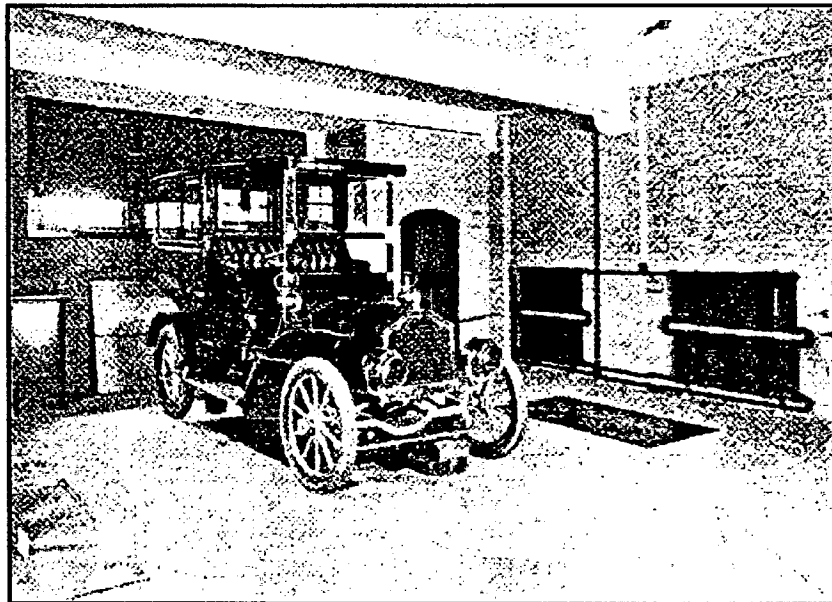
helped to retard fire and had a distinctive look. One popular form of stucco called “pebble-dash” consisted of aggregate applied to stucco, giving the exterior a distinctive texture.

Windows

The use of windows in garages usually involved glazed panes set in the garage door. For the other facades of the garage, standard sash windows were used, often one window along each side of the building. Providing much-needed light and ventilation, windows were one of the design elements used to complement the architectural style.

Interior Characteristics

Before gas stations and repair shops were widely accessible, automobile garages were often equipped with workbenches, gas pumps, cabinets, hoists, repair pits, and washbasins. Often, these were loosely arranged around the periphery of one large undivided interior space. At times, a turntable was built into the floor to avoid awkward maneuvering to enter and exit the garage. The earliest garages featured inclined ramps to facilitate (by a rolling start) the engine ignition process.



Interior view of early garage (circa 1907) illustrating various equipment, such as plumbing, heating, lighting, and repair pits.
Source: *Great American Garages*

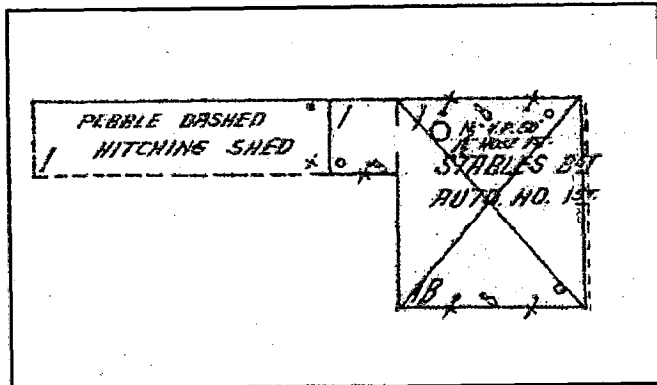
III. THE CHEVY CHASE CLUB CARRIAGE HOUSE

The first definitive reference to the building now referred to as the "Carriage House" – a reference which specifically dates the building and gives its original use – is contained in the December 7, 1909 *Annual Report* of the Chevy Chase Club. It reports: "A permanent stables and shed for automobiles have been erected and the grounds around them have been graded." According to a more specific reference in John Lynham's early edition of *The Chevy Chase Club -- A History*, the cost was \$10,962; storage rates (for automobiles, by implication) were fixed at \$7.50 per month; and a tank was installed to supply gasoline to the members at 16 cents per gallon. This was clearly a substantial building, since only a few years earlier, in 1905, the Bungalow had been constructed for \$9,789. The reference to grading is particularly interesting, as the clever device of manipulating the grade allowed access on two primary levels – at the lower level for the stables and at the upper level for the garage.

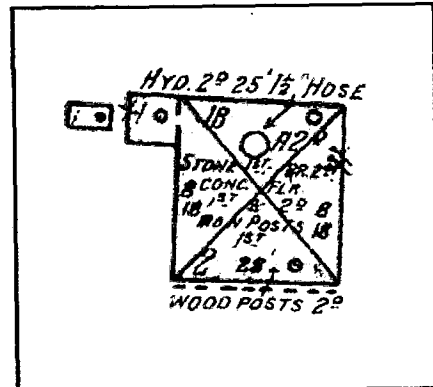
Slim additional evidence on the construction, early uses, or design character of the building has been located in any other identified archival sources. Archival collections -- including historic photographs, maps, architectural drawings and plans, annual reports, insurance records, and other archival sources -- of the Chevy Chase Club, Chevy Chase Historical Society, and Montgomery County Historical Society have been reviewed in depth. Careful on-site evaluations to visually assess physical characteristics of the building, as well as the interpretation of relevant historic context data on characteristic features of other early stable-automobile shed buildings, therefore become increasingly important in determining early design character. Finally, since a skillful design hand is evident in the building's design, project lists and/or drawings collections for several most likely architects for the building (including Arthur B. Heaton, Leon Dessez, and J. Henri de Sibour) were investigated; no evidence of their involvement or building plans were located.

The single most definitive pieces of evidence are found in early fire insurance maps covering the property. Sanborn fire insurance maps delineate certain architectural materials, characteristics, and uses for the building. On the 1916 Sanborn map of the Chevy Chase Club (the first representation of Montgomery County in the Sanborn series), the carriage house appears as a two-story, brick construction with a frame cornice. The roof of the building is keyed as being metal or slate. The use of brick construction and a metal or slate roof is evidence that the building was designed with fireproofing in mind. It appears most likely that the original materials were slate and pebble dash on brick construction. On the map, the lower level, or basement, is keyed as a stable, and the upper floor as a garage. The footprint of the building includes an extension on the west facade. The first portion of this extension, which is present today, is a one-story room of the same brick construction as the main building. On the map, however, an additional extension of frame construction is present. This one-story extension is labeled as a "hitching shed," with a exterior finish of pebble-dash stucco. The hitching shed was most likely used to house and repair carriages. The roofing material of the hitching shed was keyed as a shingle roof.

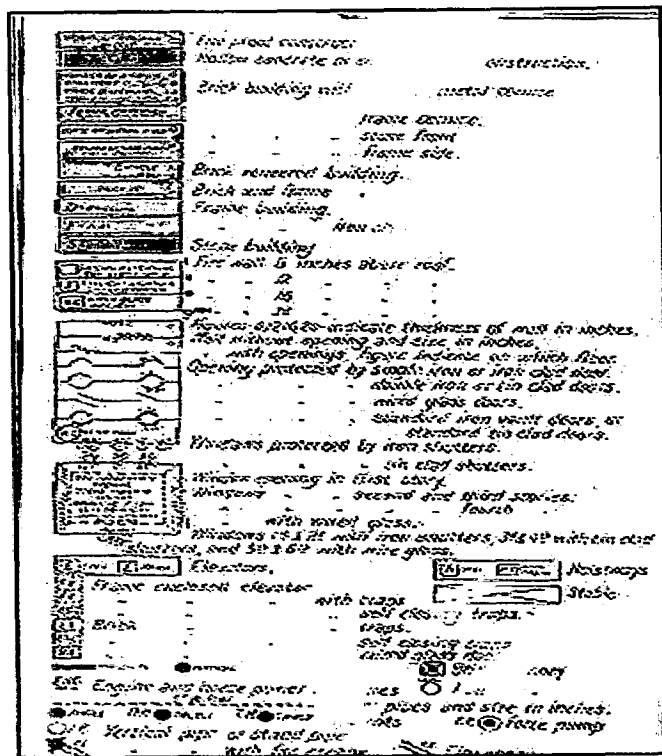
The 1927 Sanborn map is the only other early one covering the Chevy Chase Club grounds. It is similar to the 1916 map with a few exceptions. The frame construction hitching shed does not appear on the 1927 map, as it was most likely unnecessary by that time. The 1927 map also lists the stone foundation, which more than likely is original, but was not mentioned in the 1916 map. The first and second floors are listed as having concrete floors, which was common for garages and stables. Also listed are iron posts on the stable floor and wooden posts on the garage floor.



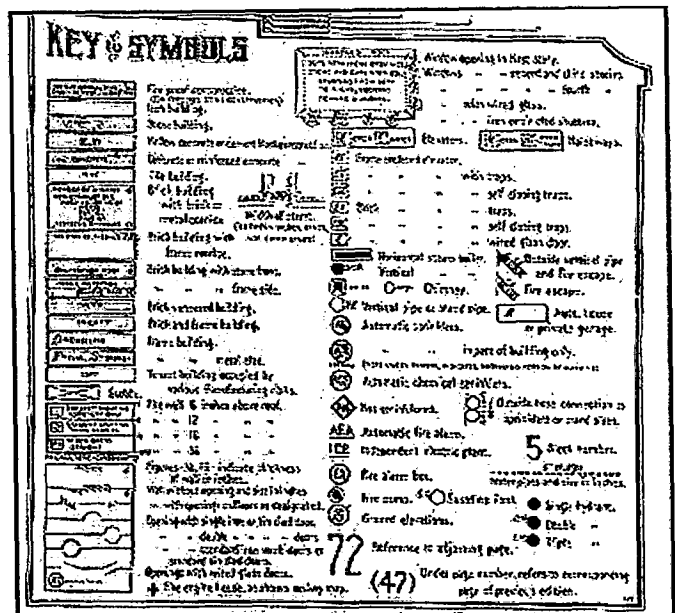
Chevy Chase Club Carriage House as it appears in the 1916 Sanborn Fire Insurance Map.



Chevy Chase Club Carriage House as it appears in the 1927 Sanborn Fire Insurance Map.



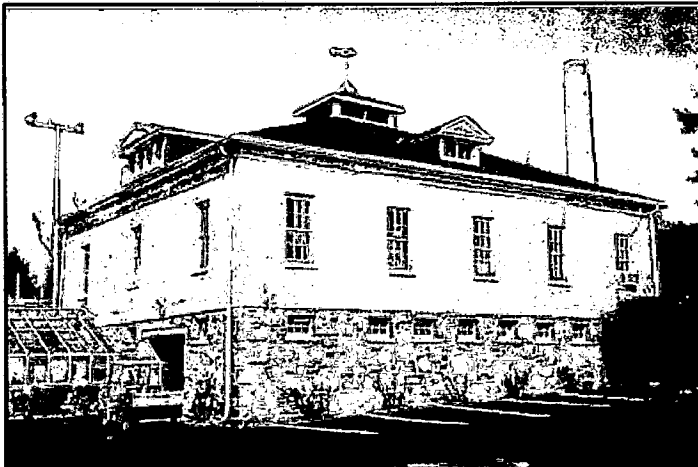
Key to 1916 Sanborn Fire Insurance Map.



Key to 1927 Sanborn Fire Insurance Map.

Current Exterior Architectural Details

Current exterior architectural details of the Chevy Chase Club Carriage House include original elements, as well as more recent changes. The building itself measures 56'-4" by 49'-1". The stone foundation, which is exposed on the south and east facades, appears to be original and in good condition. The warm tones of the varied granite blocks and the grapevine joints are distinctive.



Chevy Chase Club Carriage House, Southeast facade, 1999.
Source: Robinson & Associates



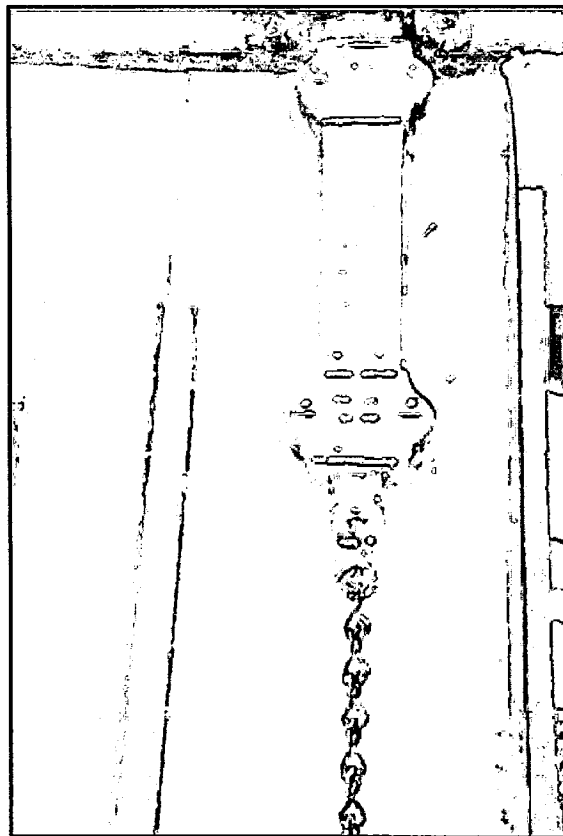
Detail of Chevy Chase Club Carriage House wall with
pebble-dash stucco and American bond brick.

Source: Robinson & Associates

Windows are present on both the stable level and the garage level. The windows on the stable level include eight on the east facade and two on the south facade; all are set high in the stone foundation and are rectangular in shape with top-mounted hinges. The eight windows on the east facade roughly correspond with each individual stall, thus providing light and a certain degree of visual stimulation for each horse.

The windows on the garage level of the carriage house are all six-over-six, double-hung windows and include two windows on the south facade, five on the east facade, and one on the north facade.

The door openings on the south facade open into the stable portion of the building. That the current roll-up door on this facade is a replacement is clear not only by its materials and character, but also by the evident patch and inserted I-beam above. The original opening, probably roughly the same size (its original width can be confirmed by removing the recent concrete patches on either side), was most likely occupied by a set of double-leaf hinged doors that swung outward. Also on the south facade is the attached greenhouse, which is a recent addition. The double-leaf hinged doors that connect the greenhouse and carriage house appear to be original. This distinctive set of doors, a massive 6' x 9' in dimension, feature twelve-pane lights in their upper half and diagonal wooden bracing set into the panel below. Notable original hardware includes the decorative metal locking device (or bolt) set high at the edge of the leftmost door.



Detail of decorative metal locking device on greenhouse/stable door.

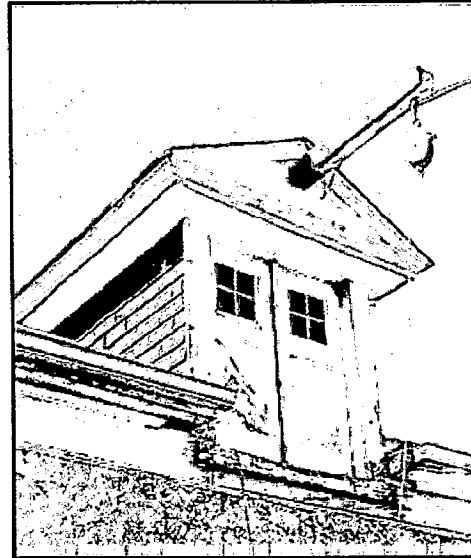
Source: Robinson & Associates

This original door design and configuration is repeated, in miniature, on the set of doors in the hayloft opening on the north facade of the building. Considerably smaller than their counterparts on the south elevation, these doors measure approximately 3' x 5', consist of panels of diagonally placed wood beneath four-pane lights, and are set below the pediment and block-and-tackle of this gable-roofed dormer. The garage door on the north facade is of modern construction. The original garage door was likely a double-

leaf hinge door, of wood construction. The new door on the west facade fills a recently created entrance for storage of the zamboni equipment.

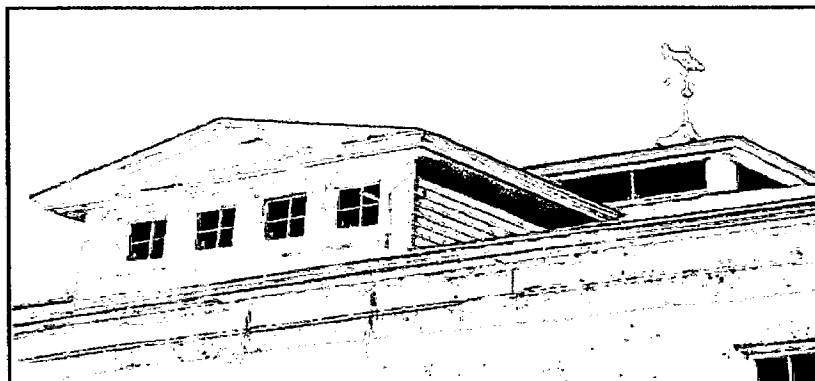


Detail of original stable door at greenhouse entrance (South facade) of the Chevy Chase Club Carriage House.
Source: Robinson & Associates



Detail of original hay loft doors at north elevation of the Chevy Chase Club Carriage House.
Source: Robinson & Associates

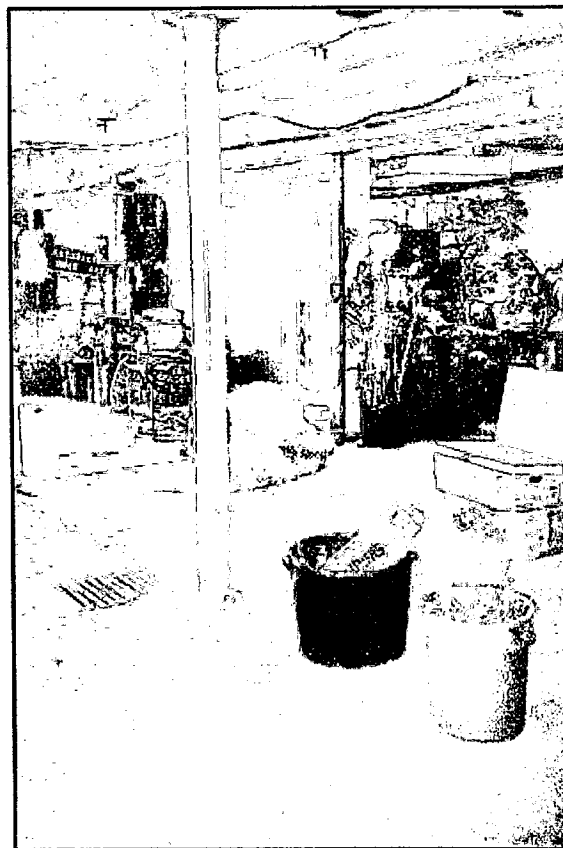
The roof is currently covered with dark red asphalt shingles and no remnants of original material are evident beneath the shingles. Original roofing material is best determined by the Sanborn fire insurance maps. According to these maps, the carriage house had a slate or metal roof, which were the materials of choice for owners who were interested in fireproofing a garage. The four gable-roofed dormers on each side of the hipped roof are original; slightly different in dimensions, they have front-facing pediments, below which are set square four-paned windows. The distinctive dormer on the north facade led to a hayloft which was probably used for storage. The ventilator at the peak of the roof was a decorative element that also included vents on the sides, and a weathervane finial (of undetermined age).



Detail of south dormer and cupola.
Source: Robinson & Associates

Current Interior Architectural Details

The Carriage House interior retains certain elements of the original design. The stable level includes a quadrilled concrete floor, which enabled water to flow efficiently from the stall into centrally located metal drains. The patterns grooved into the cement floor also denote the locations of each stall and the box stalls in the corners. In the center of the large stable area is a central passageway leading to the entrance. This arrangement of stalls and passageways was standard for stables of this period. On one side of the stable wall, a large sliding door is present. It appears to be of early construction, but the fact that it may not be original to the building is supported by the fact that the open space is cut off by the clear imprint of a former iron post hole. The northwest corner of the stable level is partitioned off (and differentiated by floor pattern) to contain the stairs (which are original and intact to the attic) and, presumably, harness rooms, cleaning rooms, etc. Often in stables a hay chute was constructed that connected an attic above with the stable below, but upon inspection, the evidence of a hay chute was not found. However, since the Carriage House includes a garage on the floor above it, the construction of a hay chute may have been too difficult to include.



Interior view of stable of the Chevy Chase Club
Carriage House.

Source: Robinson & Associates

The garage level includes scored square concrete flooring, with each square measuring approximately 3' x 3'. This type of smooth concrete floor was the standard for garages of this period. The garage floor has undergone several changes, especially involving the construction of new partitions and walls. The garage was designed to be a large open space to provide ample room for the maneuvering of numerous

automobiles in and out it. Little or none of the other original features such as workbenches, repair pits, etc., that may have existed have been identified.



Interior view of garage of the Chevy Chase Carriage House.
Source: Robinson & Associates

The attic space could have been originally used in several ways. Early garages and stable combinations often reserved upper levels as living quarters for stable hands or chauffeurs. The presence of windows in the dormers of each facade, as well as the organization of the attic space into several defined rooms points to this as a possibility. The presence of the hayloft on the dormer of the north facade suggests that the attic may have been used for the storage of hay for horses in the stable. The attic also may have been used as a general storage area.

IV. RECOMMENDATIONS

In summary, the Chevy Chase Club's "permanent stables and shed for automobiles" is a skillful example of a rather rare building type, the combined stables and garage that is highly relevant to the transition from the horse-drawn era to early automobile age. Fortunately, the building is largely intact to its original design. This section of the report focuses on recommendations that allow for the effective maintenance and the return of important missing elements to this architecturally distinctive building.

Roofing Material

Fireproof construction was critical to the safe housing and care both horses and motor cars in early combined stables and garages, and a variety of roofing materials were employed at the time that the Carriage House was constructed. The roof of the Carriage House is a principal character-defining feature, and careful investigation has gone into a recommendation for replacement material. Since physical investigation has not located remnants of the early roof surface, the most reliable information comes from the 1916 Sanborn fire insurance map, on which the building is keyed to indicate that its roof surface at that date was metal or slate.

Either of these materials--the use of a painted metal standing-seam material or the use of slate--would be an appropriate choice as a roofing material for the building. However, slate is recommended, as it most likely was original. Slate is a costly material, but its durability and life-cycle cost analysis are important factors to consider (slate can last 50-100 years). Alternative materials can be used with similar effect, and a number of manufacturers have developed "simulated slate" that is accepted rather widely. Several suppliers of historically appropriate slate, substitute slate, and metal roofing are listed in the section of this report entitled "Suppliers and Sources of Historic Materials," and in numerous other technical bulletins. One factor that may influence the selection of roof material is the aesthetic effect that it will have in combination with the exterior material selected (see below).

Exterior Material

The 1916 Sanborn map key indicates exterior materials including brick walls, a stone foundation, and pebble-dash stucco on the wooden hitching shed. The character of the brick wall surface indicates that it is highly likely that the brick was covered with stucco originally or at a very early date. Pebble-dash stucco is also an important part of the character of the larger Chevy Chase Historic District.

As stated above, repairing/replacing the early pebble-dash stucco is believed to be the most conceptually appropriate treatment. It is our understanding that the Club has a reliable recommendation for a craftsman who is familiar with historically correct pebble-dash application, and that certainly makes the repair and/or re-application of stucco a viable alternative.

Doors

The design of garage doors was a practical problem for early car owners, and the evolution of the earliest garage doors can be traced from hinged swinging doors (ca. 1910-40), folding hinged doors (ca. 1915-29), rolling doors on overhead tracks (ca. 1920-45), and a solid tilting overhead door (ca. 1935-49). Both the construction date of the Carriage House (ca. 1909) and remaining historic door types on the building indicate that the original doors were probably of the hinged swinging type. It seems clear that the two historic doors (at the greenhouse entrance and at the hayloft) form the model for a historically accurate door type. Although fabricated in different scales, they are strikingly similar in design.

Again, practical considerations are important in selecting replacement doors where original doors are missing – and it is not good judgement to return simply to double hinged doors. A number of current manufacturers, however, now produce historically compatible replacement doors. (See "Suppliers and Sources of Historic Materials.") It seems possible and practical to select a sectional overhead (roll-up) door, swing-up door, or sliding door that has characteristics similar to the existing historic doors (i.e., multipane sash in the upper section and a paneled lower section, as well as the appearance of a double-leaf hinged door). Even more desirable would be to take advantage of the custom design services of some of these manufacturers to more fully replicate the original doors, especially the diagonal woodwork in their lower panel.

One important note: Attention should be paid to historic hardware on both doors and windows wherever it exists. The foliated locking device on the large original door on the south side is an important example.

Windows

Natural light and air were considered requirements for the safe housing of both horses and automobiles. Original windows with several different configurations are in place throughout the Carriage House. Much emphasis has been placed recently in technical architectural bulletins on the viability and long-term cost benefit of retaining original wooden sash – even when damaged or deteriorated. (Numerous technical bulletins are available that support this premise.) Since the windows are an important aspect of the design of this building, the recommendation would be to repair – as opposed to replacing – them.

SUPPLIERS AND SOURCES OF HISTORIC GARAGE MATERIALS

Doors

Designer Doors, Inc.
283 Troy Street
River Falls, Wisconsin 54022
(800) 241-0525

Hahn's Woodworking Co. Inc.
109 Aldine Road
Roselle, New Jersey 07203
(908) 241-8825

Holmes Garage Door Co.
P.O. Box 1976
Auburn, Washington 98071-1976
(206) 931-8900

Summit Door, Inc.
603 West Palm Avenue
Orange, California 92868
(714) 536-6633

Garage Hardware

Richards-Wilcox Co.
(312) 897-6951

Stanley Hardware
Dept. OHJ
New Britain, Connecticut 06050
(203) 225-5111

Roofing Materials

Slate

Buckingham-Virginia Slate Corp.
P.O. Box 8
Arvon, Virginia 23004
(804) 581-1131

Slate International Inc.
15106 Marlboro Pike
Upper Marlboro, MD 20772
(301) 952-0120

Slate Substitute

Atlas International Building Products
5600 Hochelaga St.
Dept. OHJ
Montreal, Quebec, Canada
H1N 1W1
(800) 361-4962

Metal Roofing

Metal Sales Mfg. Corp.
999 Park Place, Dept. OHJ
New Albany, IN 47150
(812) 944-1879

Classic Products, Inc.
299 Staunton St.
P.O. Box 701, Dept. OHJ
Piqua, OH 45356
(800) 543-8938

Roofmaster Products Company
(800) 421-6174

Follansbee Steel
P.O. Box 610, Dept. OHJ
Follansbee, West Virginia 26037
(304) 527-1260

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**HISTORIC DOCUMENTATION AND RECOMMENDATIONS
FOR THE RENOVATION OF THE CARRIAGE HOUSE
AT THE CHEVY CHASE CLUB**



Prepared for:
THE CHEVY CHASE CLUB

Prepared by:
ROBINSON & ASSOCIATES, INC.

OCTOBER 1999

I. INTRODUCTION/STATEMENT OF PURPOSE

The Chevy Chase Club Carriage House, constructed ca. 1909 as a “permanent stables and shed for automobiles,” is a sophisticated example of a relatively rare building type that flourished just after the turn of the century. In the brief period of time before the new motor car supplanted the horse and carriage, when wealthy people owned both horses and motor cars, a unique architectural form developed which combined the stables, carriage house, and garage. Modernity, light, and every convenience were considered essential for the new garages, while at the same time the traditional stabling and care of horses was incorporated. The Chevy Chase Club’s combined stables and garage is a skillful example of this rare building type, and it is surprisingly intact to its original design character.

This historical study, commissioned by the Chevy Chase Club and prepared by Robinson & Associates, Inc., focuses strongly on documenting the original materials and design of the “stables and shed for automobiles.” Its purpose is to provide the Chevy Chase Club with information for decision-making on the maintenance and enhancement of the building.

II. HISTORIC CONTEXT AND DESIGN CHARACTERISTICS OF STABLE/GARAGE BUILDINGS

The Evolution of the Combined Stables and Garages

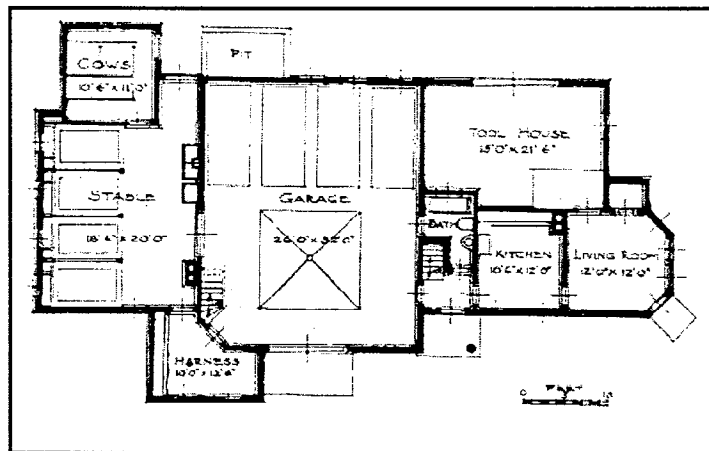
The automobile garage, though in many ways a unique structure, is actually a descendant of the carriage house and stable. The link between the carriage house and garage is especially apparent in the early days of the automobile. This period of ownership was responsible for the initial conception of the garage and the realization of its possibilities. Though introduced in America in the 1890s, automobiles remained a possession of the wealthy elite until after 1910. The popular view of the automobile during this period was one of leisure and status, a view which greatly influenced garage design during this early period.

The adaptive use of carriage houses and stables as automobile garages was the earliest way of housing early motor cars. Faced with the imminent need to shelter their expensive automobiles, owners often looked to the carriage house as a solution. For some owners, carriage houses and stables were simply converted to garages by removing stalls and modifying individual rooms. Other sophisticated owners hired architects to design combined stable-garage complexes. Combined horse and automobile shelters required special design elements. To guard against harmful car and stable fumes, which were damaging to both the health of horses and the finish of automobiles, separate areas were usually designed. In addition, fireproof construction was often used, due to the presence of gasoline, and the combustibility of the early automobile. Often designed by well-known architects, these combined stables and garages were early symbols of the growing importance of the automobile. Many of the new designs mirrored characteristics of the traditional stable and carriage house, especially in the use of barn-like hinge doors.



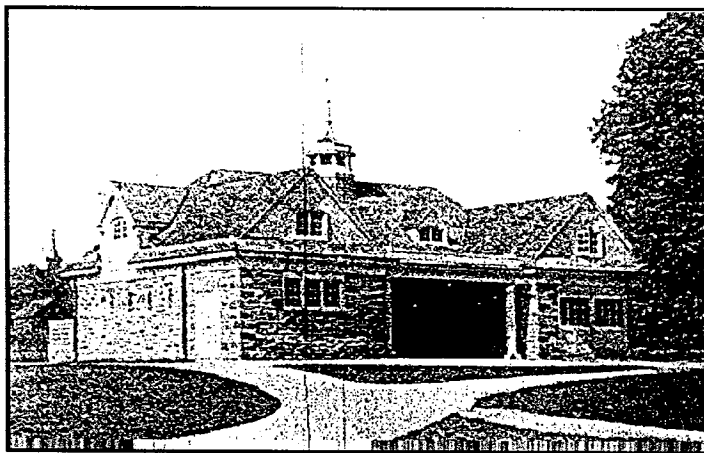
Early example of combined stable-garage complex from Willoughby, Ohio.

Source: *The Domestication of the Garage*



Floor plan of stable-garage complex. Willoughby, Ohio.

Source: *Housing the Horseless Carriage*



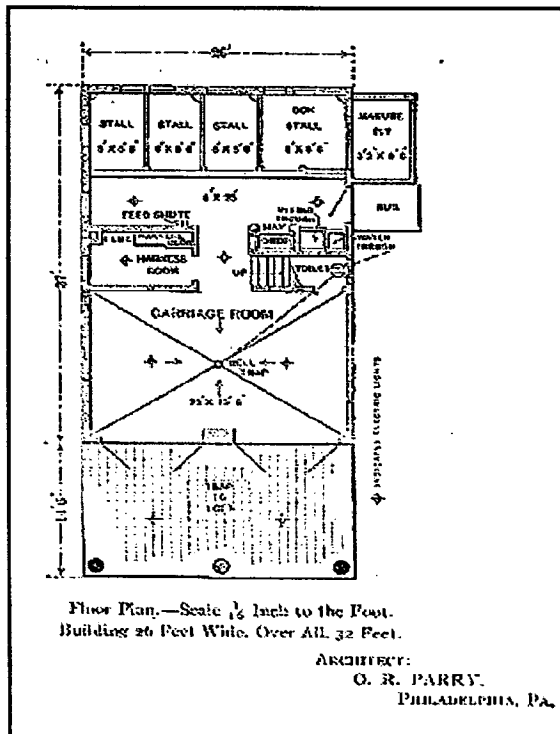
Stable-garage complex at Haverford, Pennsylvania, circa 1911.

Source: *Private Country and Suburban Garages*

The use of combined stables and garages did not remain a viable option for many years. The increased chance of fire coupled with the damaging effects of fumes convinced many to build a separate garage that housed only automobiles. The shift to automobile garages was also a result of the growing reliability of the automobile and its replacement of the horse and carriage as the primary mode of transportation. Thus, the early combined stable and garage marked a short but influential beginning of garage design.

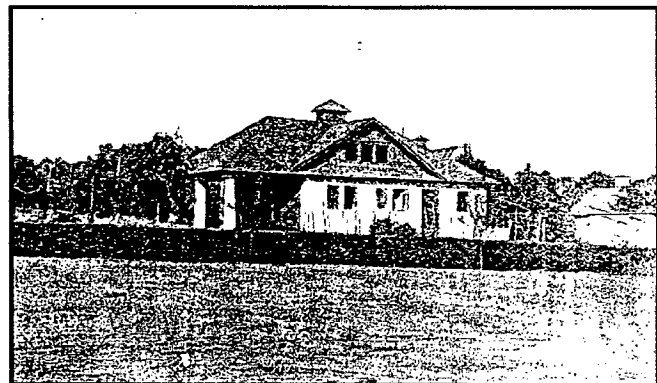
Design Characteristics of Stables and Carriage Houses

Stables and carriage houses constructed in the early twentieth century had a typical set of characteristic features. Important elements of stable designs were the arrangement and division of stalls, tack rooms, harness rooms, and the coach house. Stalls generally were placed side by side, with larger box stalls occupying the corners of the stable. A typical stall measured nine or ten feet in length and five feet in width. A passageway was often placed in the middle to allow easier movement in and out of the stable. Stable floors were usually constructed of brick and quadrilled cement, which allowed for efficient and thorough cleaning with a hose. Stable windows were often placed high above each stall to let natural light into the stable. Hay lofts, usually conveniently located on the floor above the horses, helped to lessen the effects of heat and cold as well as noise.



Floor plan of cement stable at Haverford, Pennsylvania.

Source: *Cement Houses and Private Garages*

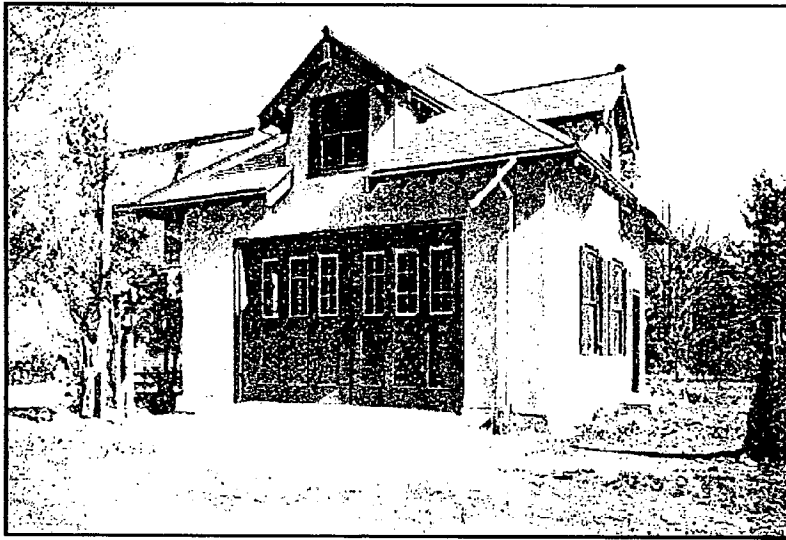


Example of cement stable at Haverford, Pennsylvania circa 1912.

Source: *Cement Houses and Private Garages*

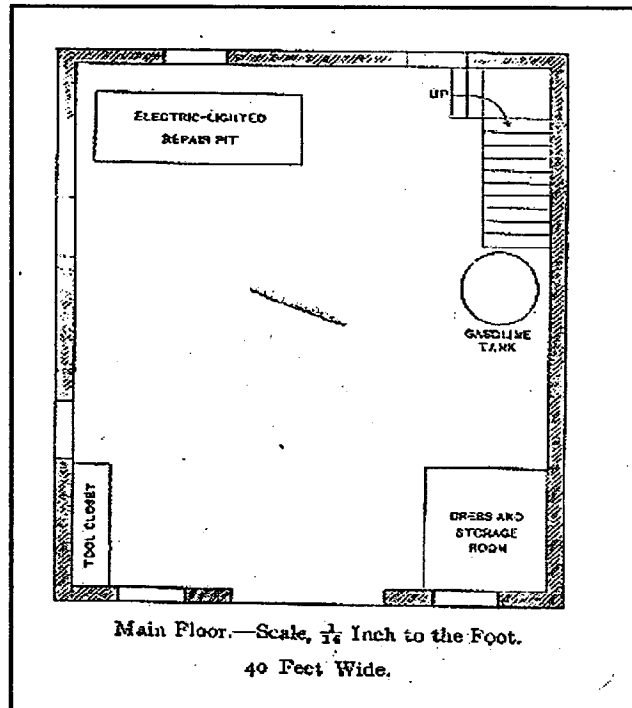
Design Characteristics of the Early Auto Garage

Design materials of the combined auto garage and stable are similar to those found in early auto garages. Garages typically displayed a wide variety of architectural styles, as owners often decided to mirror the style of the main house. The choice of individual materials played a great part in providing a garage with a distinctive character. In addition to aesthetic concerns, garage owners also weighed issues such as cost and protection against fire.



Early garage at Newton Center, Massachusetts, circa 1912.

Source: *Cement Houses and Private Garages*



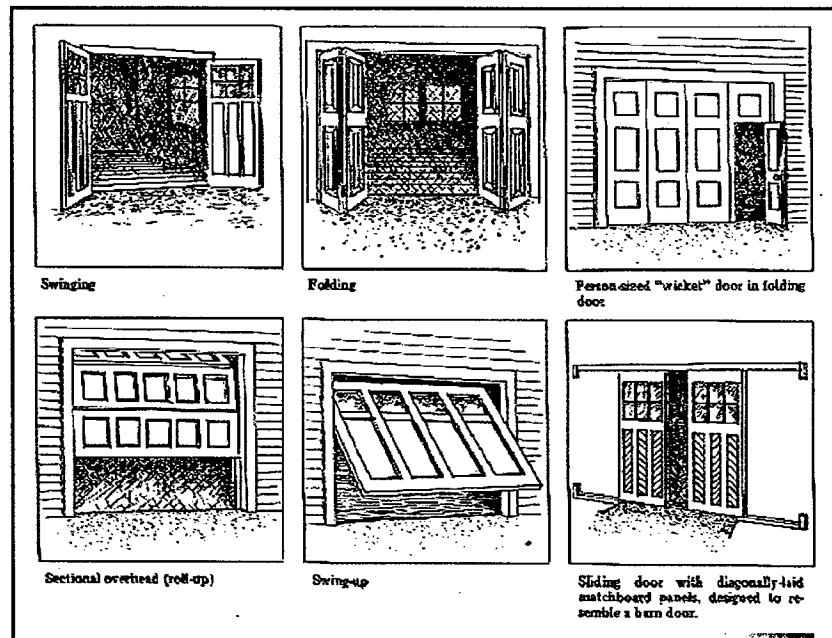
Typical floor plan of an early garage, circa 1912.

Source: *Cement Houses and Private Garages*

Doors

Early garage doors were a key element in the overall design of garages. In addition to functionality, garage doors usually provided the most visible aesthetic element. As a result, doors were available in several different designs. All early garage doors were made of wood and usually held glass panes. Garage doors at this time had to have a minimum width and height of eight feet to provide effective access. This minimum width and height later changed, as cars increased in size. Early garages usually had only one door opening. Later, as garages held more cars, individual door openings for each car were used to avoid possible damage and allow easier access.

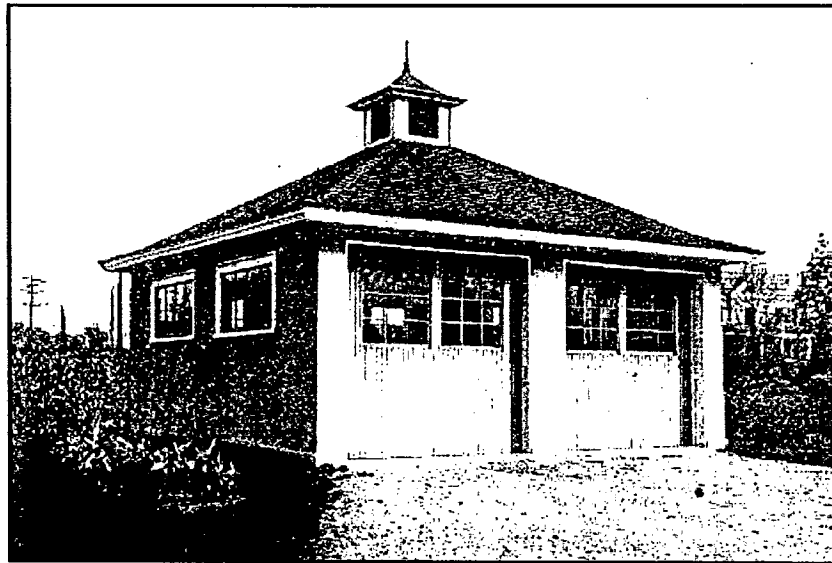
The earliest of garages used simple double-leaf hinged doors, which swung out when opened. This early carriage house and barn influence was logical, as garages were in many ways descendants of the carriage house. Hinged doors, however, were not always the most effective solution for owners, as they were cumbersome and required large amounts of space when swung outward. As a result, designers developed innovative doors to create easy-to-use, and aesthetically pleasing, alternatives. One option kept the barn-like doors, but placed them on tracks, which enabled the owner to simply slide the doors open. Another solution involved folding doors, which were hinged doors folded back inside the garage. Spring-loaded roll-up and swing-up doors were popular alternatives as they were easy to use. Also occasionally used was a "wicket" door, which was placed into the main garage door so that individuals could enter without opening the entire door. These various garage doors varied in appearance, often depending on the overall architectural style of the garage.



Early examples of garage door types.
Source: *The Great American Garage*

Roofs

Early garages employed a variety of roof designs and materials. While the gable and hipped roof were common, mansard, gambrel, shed, and other roofs were also used. Expensive garages often mirrored the roof design of the main house. Early garages also tended to have a steeper roof pitch than modern garages. The use of roof materials was often influenced by a desire to fireproof the garage. Early automobiles could be highly combustible and were viewed by many owners as unpredictable and dangerous. Therefore, fireproofing a garage was an important aspect of early garage design. Fire retardant roofs included asbestos, cement, slate, tin, and asphalt shingles, standing-seam metal, and clay tiles. Despite the desire to fireproof garages, wood shingles were often used as a roof material. Another popular element of roof design, especially with more expensive garages, was the use of roof details, such as dormers, cupolas, vents, cresting, and copings. In addition to their aesthetic value, roof details such as cupolas provided practical purposes as well. Cupolas often contained vents, which allowed dangerous fumes to escape the garage. This was especially important in garages combined with stables, as automobile fumes were unhealthy for horses.



Early example of small garage at Brighton, Massachusetts, circa 1912.
Source: *Cement Houses and Private Garages*

Construction Materials

As with roof design, construction materials were chosen by some builders with the intention of preventing fires. A popular choice in the early period of garage construction was concrete. This new construction material was inexpensive, durable, and adaptable to various structural conditions. Also used as a fireproof material were hollow tile, vitrified brick and stone construction. While expensive, brick and stone had the advantages of being stable and aesthetically pleasing. Some owners were unable to afford the high costs of elaborate garages, and as a result, wooden frame garages were also relatively common. To combat fire, owners would apply plaster, tin, or glazed tile. Stucco applied over wire lath was a common practice, as it

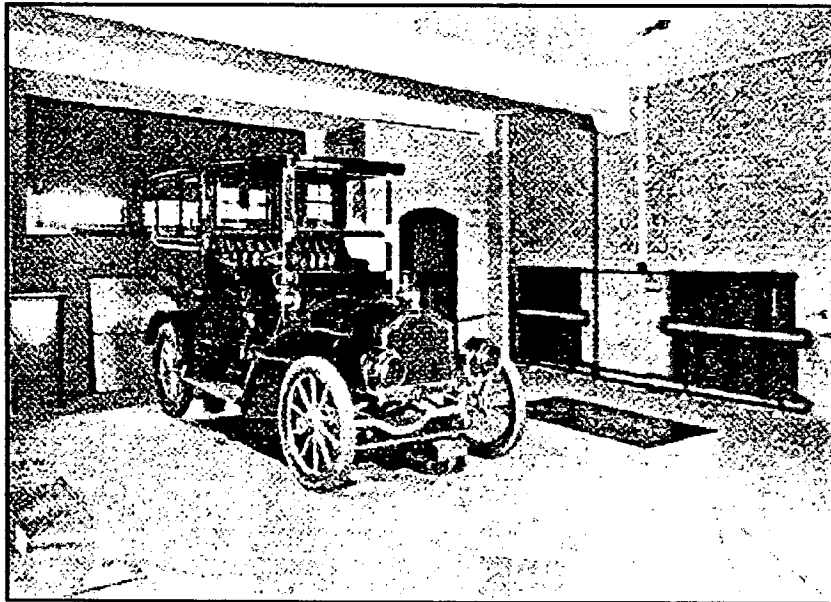
helped to retard fire and had a distinctive look. One popular form of stucco called “pebble-dash” consisted of aggregate applied to stucco, giving the exterior a distinctive texture.

Windows

The use of windows in garages usually involved glazed panes set in the garage door. For the other facades of the garage, standard sash windows were used, often one window along each side of the building. Providing much-needed light and ventilation, windows were one of the design elements used to complement the architectural style.

Interior Characteristics

Before gas stations and repair shops were widely accessible, automobile garages were often equipped with workbenches, gas pumps, cabinets, hoists, repair pits, and washbasins. Often, these were loosely arranged around the periphery of one large undivided interior space. At times, a turntable was built into the floor to avoid awkward maneuvering to enter and exit the garage. The earliest garages featured inclined ramps to facilitate (by a rolling start) the engine ignition process.



Interior view of early garage (circa 1907) illustrating various equipment, such as plumbing, heating, lighting, and repair pits.
Source: *Great American Garages*

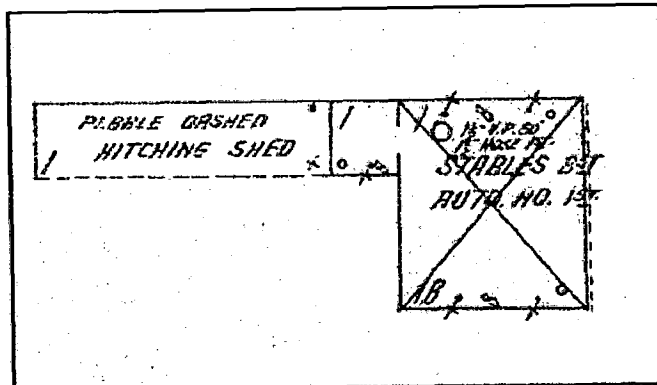
III. THE CHEVY CHASE CLUB CARRIAGE HOUSE

The first definitive reference to the building now referred to as the "Carriage House" – a reference which specifically dates the building and gives its original use – is contained in the December 7, 1909 *Annual Report* of the Chevy Chase Club. It reports: "A permanent stables and shed for automobiles have been erected and the grounds around them have been graded." According to a more specific reference in John Lynham's early edition of *The Chevy Chase Club -- A History*, the cost was \$10,962; storage rates (for automobiles, by implication) were fixed at \$7.50 per month; and a tank was installed to supply gasoline to the members at 16 cents per gallon. This was clearly a substantial building, since only a few years earlier, in 1905, the Bungalow had been constructed for \$9,789. The reference to grading is particularly interesting, as the clever device of manipulating the grade allowed access on two primary levels – at the lower level for the stables and at the upper level for the garage.

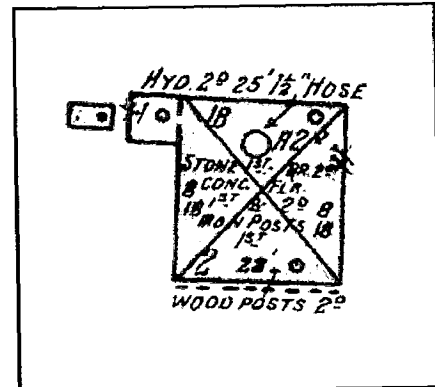
Slim additional evidence on the construction, early uses, or design character of the building has been located in any other identified archival sources. Archival collections -- including historic photographs, maps, architectural drawings and plans, annual reports, insurance records, and other archival sources -- of the Chevy Chase Club, Chevy Chase Historical Society, and Montgomery County Historical Society have been reviewed in depth. Careful on-site evaluations to visually assess physical characteristics of the building, as well as the interpretation of relevant historic context data on characteristic features of other early stable-automobile shed buildings, therefore become increasingly important in determining early design character. Finally, since a skillful design hand is evident in the building's design, project lists and/or drawings collections for several most likely architects for the building (including Arthur B. Heaton, Leon Dessez, and J. Henri de Sibour) were investigated; no evidence of their involvement or building plans were located.

The single most definitive pieces of evidence are found in early fire insurance maps covering the property. Sanborn fire insurance maps delineate certain architectural materials, characteristics, and uses for the building. On the 1916 Sanborn map of the Chevy Chase Club (the first representation of Montgomery County in the Sanborn series), the carriage house appears as a two-story, brick construction with a frame cornice. The roof of the building is keyed as being metal or slate. The use of brick construction and a metal or slate roof is evidence that the building was designed with fireproofing in mind. It appears most likely that the original materials were slate and pebble dash on brick construction. On the map, the lower level, or basement, is keyed as a stable, and the upper floor as a garage. The footprint of the building includes an extension on the west facade. The first portion of this extension, which is present today, is a one-story room of the same brick construction as the main building. On the map, however, an additional extension of frame construction is present. This one-story extension is labeled as a "hitching shed," with an exterior finish of pebble-dash stucco. The hitching shed was most likely used to house and repair carriages. The roofing material of the hitching shed was keyed as a shingle roof.

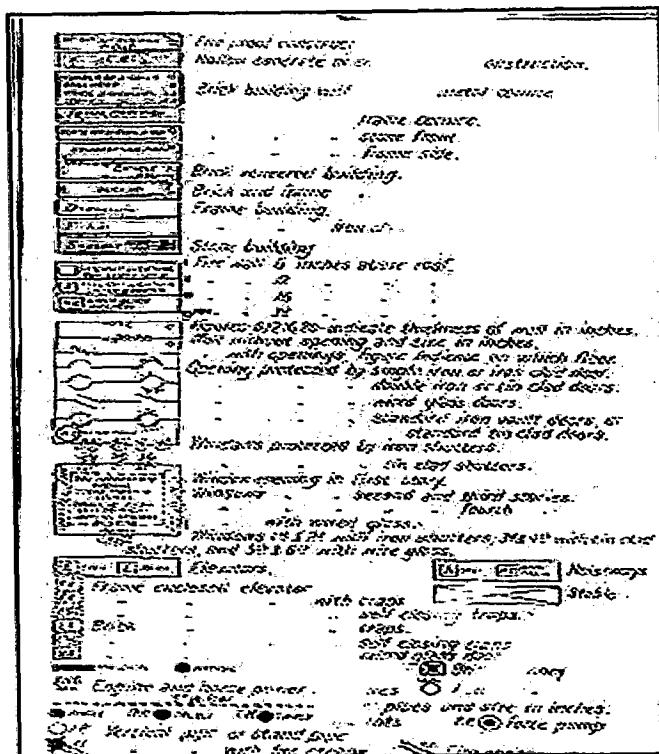
The 1927 Sanborn map is the only other early one covering the Chevy Chase Club grounds. It is similar to the 1916 map with a few exceptions. The frame construction hitching shed does not appear on the 1927 map, as it was most likely unnecessary by that time. The 1927 map also lists the stone foundation, which more than likely is original, but was not mentioned in the 1916 map. The first and second floors are listed as having concrete floors, which was common for garages and stables. Also listed are iron posts on the stable floor and wooden posts on the garage floor.



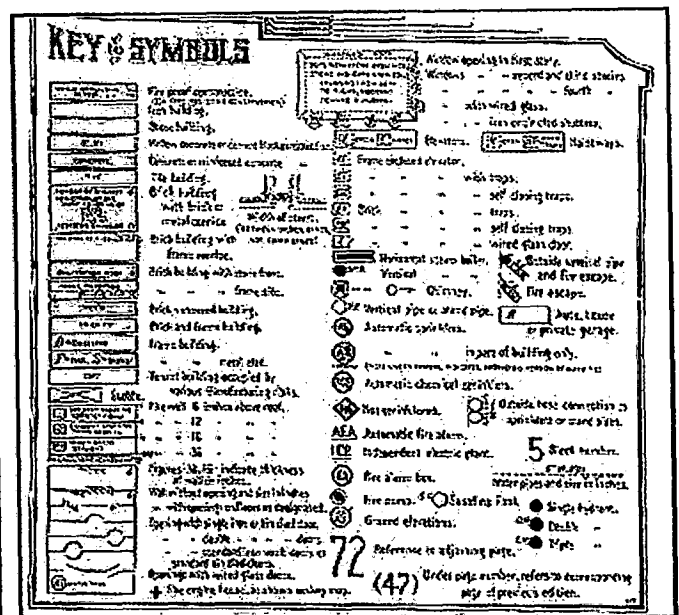
Chevy Chase Club Carriage House as it appears in the 1916 Sanborn Fire Insurance Map.



Chevy Chase Club Carriage House as it appears in the 1927 Sanborn Fire Insurance Map.



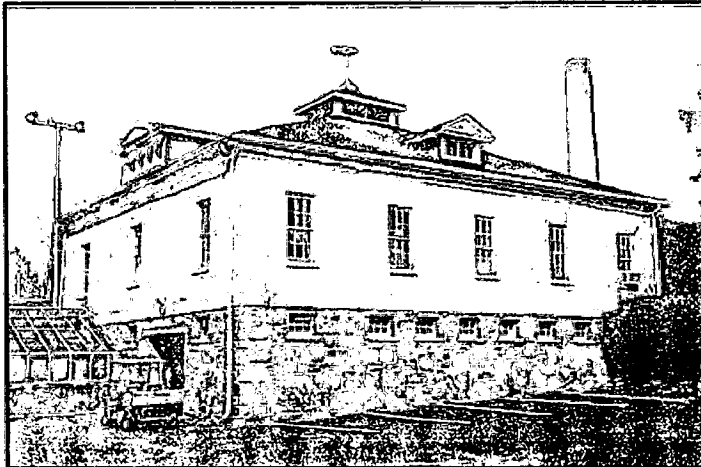
Key to 1916 Sanborn Fire Insurance Map.



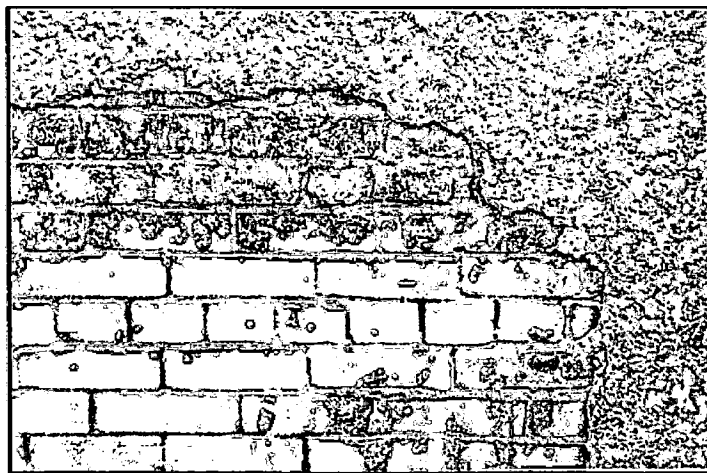
Key to 1927 Sanborn Fire Insurance Map.

Current Exterior Architectural Details

Current exterior architectural details of the Chevy Chase Club Carriage House include original elements, as well as more recent changes. The building itself measures 56'-4" by 49'-1". The stone foundation, which is exposed on the south and east facades, appears to be original and in good condition. The warm tones of the varied granite blocks and the grapevine joints are distinctive.



Chevy Chase Club Carriage House, Southeast facade, 1999.
Source: Robinson & Associates



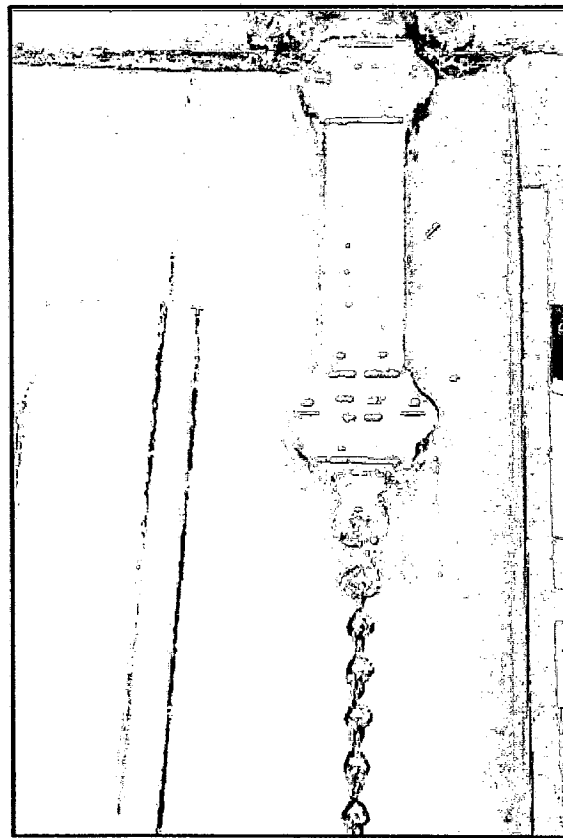
**Detail of Chevy Chase Club Carriage House wall with
pebble-dash stucco and American bond brick.**

Source: Robinson & Associates

Windows are present on both the stable level and the garage level. The windows on the stable level include eight on the east facade and two on the south facade; all are set high in the stone foundation and are rectangular in shape with top-mounted hinges. The eight windows on the east facade roughly correspond with each individual stall, thus providing light and a certain degree of visual stimulation for each horse.

The windows on the garage level of the carriage house are all six-over-six, double-hung windows and include two windows on the south facade, five on the east facade, and one on the north facade.

The door openings on the south facade open into the stable portion of the building. That the current roll-up door on this facade is a replacement is clear not only by its materials and character, but also by the evident patch and inserted I-beam above. The original opening, probably roughly the same size (its original width can be confirmed by removing the recent concrete patches on either side), was most likely occupied by a set of double-leaf hinged doors that swung outward. Also on the south facade is the attached greenhouse, which is a recent addition. The double-leaf hinged doors that connect the greenhouse and carriage house appear to be original. This distinctive set of doors, a massive 6' x 9' in dimension, feature twelve-pane lights in their upper half and diagonal wooden bracing set into the panel below. Notable original hardware includes the decorative metal locking device (or bolt) set high at the edge of the leftmost door.



Detail of decorative metal locking device on greenhouse/stable door.

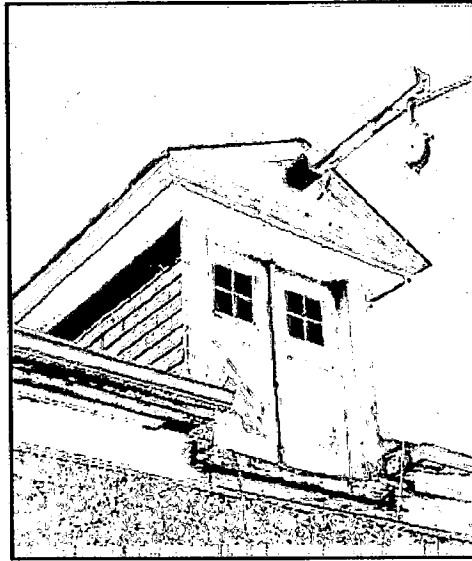
Source: Robinson & Associates

This original door design and configuration is repeated, in miniature, on the set of doors in the hayloft opening on the north facade of the building. Considerably smaller than their counterparts on the south elevation, these doors measure approximately 3' x 5', consist of panels of diagonally placed wood beneath four-pane lights, and are set below the pediment and block-and-tackle of this gable-roofed dormer. The garage door on the north facade is of modern construction. The original garage door was likely a double-

leaf hinge door, of wood construction. The new door on the west facade fills a recently created entrance for storage of the zamboni equipment.

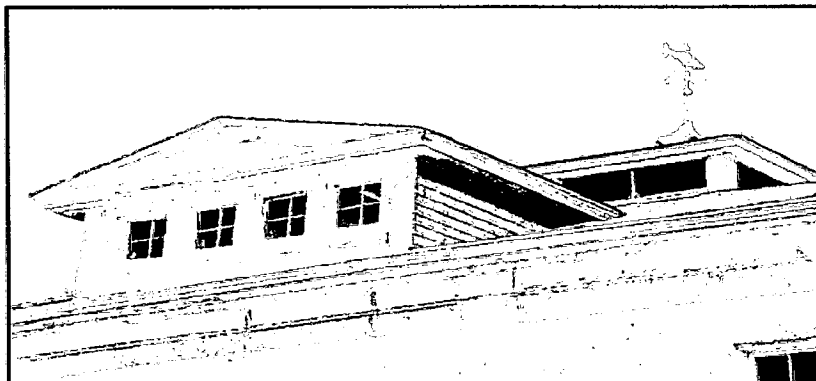


Detail of original stable door at greenhouse entrance (South facade) of the Chevy Chase Club Carriage House.
Source: Robinson & Associates



Detail of original hay loft doors at north elevation of the Chevy Chase Club Carriage House.
Source: Robinson & Associates

The roof is currently covered with dark red asphalt shingles and no remnants of original material are evident beneath the shingles. Original roofing material is best determined by the Sanborn fire insurance maps. According to these maps, the carriage house had a slate or metal roof, which were the materials of choice for owners who were interested in fireproofing a garage. The four gable-roofed dormers on each side of the hipped roof are original; slightly different in dimensions, they have front-facing pediments, below which are set square four-paned windows. The distinctive dormer on the north facade led to a hayloft which was probably used for storage. The ventilator at the peak of the roof was a decorative element that also included vents on the sides, and a weathervane finial (of undetermined age).



Detail of south dormer and cupola.
Source: Robinson & Associates

Current Interior Architectural Details

The Carriage House interior retains certain elements of the original design. The stable level includes a quadrilled concrete floor, which enabled water to flow efficiently from the stall into centrally located metal drains. The patterns grooved into the cement floor also denote the locations of each stall and the box stalls in the corners. In the center of the large stable area is a central passageway leading to the entrance. This arrangement of stalls and passageways was standard for stables of this period. On one side of the stable wall, a large sliding door is present. It appears to be of early construction, but the fact that it may not be original to the building is supported by the fact that the open space is cut off by the clear imprint of a former iron post hole. The northwest corner of the stable level is partitioned off (and differentiated by floor pattern) to contain the stairs (which are original and intact to the attic) and, presumably, harness rooms, cleaning rooms, etc. Often in stables a hay chute was constructed that connected an attic above with the stable below, but upon inspection, the evidence of a hay chute was not found. However, since the Carriage House includes a garage on the floor above it, the construction of a hay chute may have been too difficult to include.



**Interior view of stable of the Chevy Chase Club
Carriage House.**

Source: Robinson & Associates

The garage level includes scored square concrete flooring, with each square measuring approximately 3' x 3'. This type of smooth concrete floor was the standard for garages of this period. The garage floor has undergone several changes, especially involving the construction of new partitions and walls. The garage was designed to be a large open space to provide ample room for the maneuvering of numerous

automobiles in and out it. Little or none of the other original features such as workbenches, repair pits, etc., that may have existed have been identified.



Interior view of garage of the Chevy Chase Carriage House.

Source: Robinson & Associates

The attic space could have been originally used in several ways. Early garages and stable combinations often reserved upper levels as living quarters for stable hands or chauffeurs. The presence of windows in the dormers of each facade, as well as the organization of the attic space into several defined rooms points to this as a possibility. The presence of the hayloft on the dormer of the north facade suggests that the attic may have been used for the storage of hay for horses in the stable. The attic also may have been used as a general storage area.

IV. RECOMMENDATIONS

In summary, the Chevy Chase Club's "permanent stables and shed for automobiles" is a skillful example of a rather rare building type, the combined stables and garage that is highly relevant to the transition from the horse-drawn era to early automobile age. Fortunately, the building is largely intact to its original design. This section of the report focuses on recommendations that allow for the effective maintenance and the return of important missing elements to this architecturally distinctive building.

Roofing Material

Fireproof construction was critical to the safe housing and care both horses and motor cars in early combined stables and garages, and a variety of roofing materials were employed at the time that the Carriage House was constructed. The roof of the Carriage House is a principal character-defining feature, and careful investigation has gone into a recommendation for replacement material. Since physical investigation has not located remnants of the early roof surface, the most reliable information comes from the 1916 Sanborn fire insurance map, on which the building is keyed to indicate that its roof surface at that date was metal or slate.

Either of these materials--the use of a painted metal standing-seam material or the use of slate--would be an appropriate choice as a roofing material for the building. However, slate is recommended, as it most likely was original. Slate is a costly material, but its durability and life-cycle cost analysis are important factors to consider (slate can last 50-100 years). Alternative materials can be used with similar effect, and a number of manufacturers have developed "simulated slate" that is accepted rather widely. Several suppliers of historically appropriate slate, substitute slate, and metal roofing are listed in the section of this report entitled "Suppliers and Sources of Historic Materials," and in numerous other technical bulletins. One factor that may influence the selection of roof material is the aesthetic effect that it will have in combination with the exterior material selected (see below).

Exterior Material

The 1916 Sanborn map key indicates exterior materials including brick walls, a stone foundation, and pebble-dash stucco on the wooden hitching shed. The character of the brick wall surface indicates that it is highly likely that the brick was covered with stucco originally or at a very early date. Pebble-dash stucco is also an important part of the character of the larger Chevy Chase Historic District.

As stated above, repairing/replacing the early pebble-dash stucco is believed to be the most conceptually appropriate treatment. It is our understanding that the Club has a reliable recommendation for a craftsman who is familiar with historically correct pebble-dash application, and that certainly makes the repair and/or re-application of stucco a viable alternative.

Doors

The design of garage doors was a practical problem for early car owners, and the evolution of the earliest garage doors can be traced from hinged swinging doors (ca. 1910-40), folding hinged doors (ca. 1915-29), rolling doors on overhead tracks (ca. 1920-45), and a solid tilting overhead door (ca. 1935-49). Both the construction date of the Carriage House (ca. 1909) and remaining historic door types on the building indicate that the original doors were probably of the hinged swinging type. It seems clear that the two historic doors (at the greenhouse entrance and at the hayloft) form the model for a historically accurate door type. Although fabricated in different scales, they are strikingly similar in design.

Again, practical considerations are important in selecting replacement doors where original doors are missing – and it is not good judgement to return simply to double hinged doors. A number of current manufacturers, however, now produce historically compatible replacement doors. (See "Suppliers and Sources of Historic Materials.") It seems possible and practical to select a sectional overhead (roll-up) door, swing-up door, or sliding door that has characteristics similar to the existing historic doors (i.e., multipane sash in the upper section and a paneled lower section, as well as the appearance of a double-leaf hinged door). Even more desirable would be to take advantage of the custom design services of some of these manufacturers to more fully replicate the original doors, especially the diagonal woodwork in their lower panel.

One important note: Attention should be paid to historic hardware on both doors and windows wherever it exists. The foliated locking device on the large original door on the south side is an important example.

Windows

Natural light and air were considered requirements for the safe housing of both horses and automobiles. Original windows with several different configurations are in place throughout the Carriage House. Much emphasis has been placed recently in technical architectural bulletins on the viability and long-term cost benefit of retaining original wooden sash – even when damaged or deteriorated. (Numerous technical bulletins are available that support this premise.) Since the windows are an important aspect of the design of this building, the recommendation would be to repair – as opposed to replacing – them.

SUPPLIERS AND SOURCES OF HISTORIC GARAGE MATERIALS

Doors

Designer Doors, Inc.
283 Troy Street
River Falls, Wisconsin 54022
(800) 241-0525

Hahn's Woodworking Co. Inc.
109 Aldine Road
Roselle, New Jersey 07203
(908) 241-8825

Holmes Garage Door Co.
P.O. Box 1976
Auburn, Washington 98071-1976
(206) 931-8900

Summit Door, Inc.
603 West Palm Avenue
Orange, California 92868
(714) 536-6633

Garage Hardware

Richards-Wilcox Co.
(312) 897-6951

Stanley Hardware
Dept. OHJ
New Britain, Connecticut 06050
(203) 225-5111

Roofing Materials

Slate

Buckingham-Virginia Slate Corp.
P.O. Box 8
Arvon, Virginia 23004
(804) 581-1131

Slate International Inc.
15106 Marlboro Pike
Upper Marlboro, MD 20772
(301) 952-0120

Slate Substitute

Atlas International Building Products
5600 Hochelaga St.
Dept. OHJ
Montreal, Quebec, Canada
H1N 1W1
(800) 361-4962

Metal Roofing

Metal Sales Mfg. Corp.
999 Park Place, Dept. OHJ
New Albany, IN 47150
(812) 944-1879

Classic Products, Inc.
299 Staunton St.
P.O. Box 701, Dept. OHJ
Piqua, OH 45356
(800) 543-8938

Roofmaster Products Company
(800) 421-6174

Follansbee Steel
P.O. Box 610, Dept. OHJ
Follansbee, West Virginia 26037
(304) 527-1260

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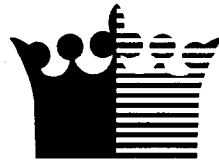
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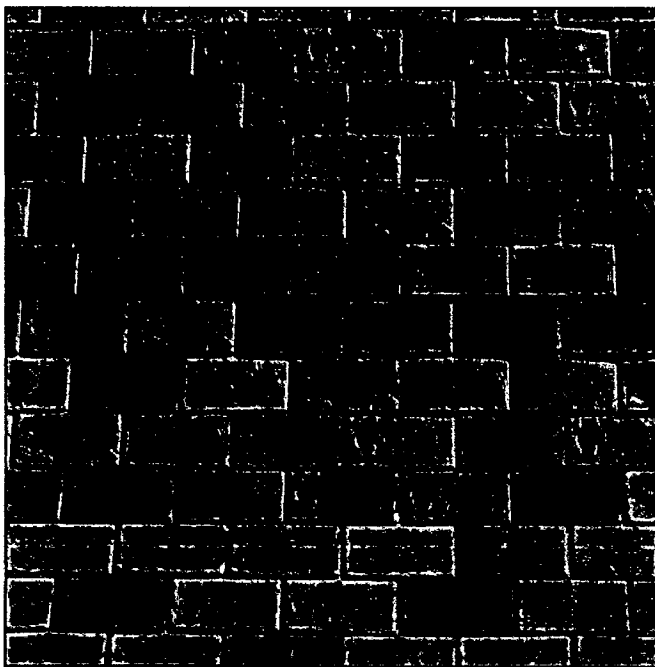
Royal Slate Roofing

Royal Ecoproducts Limited introduces an innovative and revolutionary new roofing system.

Royal Ecoproducts Limited introduces an innovative and revolutionary new roofing system for applications that add not only value but also prestige and individuality to your home.

Royal Slate Roofing that replicates the classic look of slate is inviting, natural and elegant, and expands the possibilities of urban and residential architecture without the added weight or cost.

This new product line is made from a durable plastic composite extending your roof's lifecycle substantially. For the homeowner, it all adds up to a lifetime of outstanding performance, durability, protection, and beauty for your home.

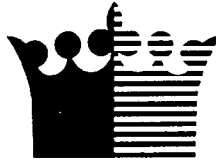


Through a combination of extensive R&D, innovative engineering and state-of-the-art manufacturing technologies we can offer such a high quality product. Our roofing systems have undergone extensive testing, far exceeding industry standards.

The roofing system is as easy to install as conventional asphalt shingles and requires no added substructure, unlike other systems in the marketplace.

With a product lifespan designed to exceed our **50 year warranty**, you now have the opportunity to create originality in your neighborhood, while increasing the equity in your home.

Royal Ecoproducts Roofing Systems, economical and ecological roofing solutions for today and the future.



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Product Testing

Fire Rating Listing

UL & ULC (Underwriters Laboratories) listed. For prepared roofing material shingles Class "C" in accordance with UL790 & CAN/ULC-S107-M87.

Ultra Violet (UV) Exposure Testing

Tiles were exposed to an accelerated U.V. test (Zenon arc chamber) for 2000 hrs. After 1000 hrs. the tiles exhibited a light even fade of the surface finish with no trace of cracking, spalling, deformation. At 2000 hrs. no further changes were recorded.

Wind Driven Rain Testing

In accordance with the requirements of ASTM E331 Standard (minimum -1000 Pascal's to pass). The test results indicated water did not penetrate the system up to a negative pressure of -2700 Pascal's (Testing System Limitations). These results are equivalent to 156 mph or 251 km/hr.

Freeze Thaw Cycles

In accordance with ASTM C666 Method A. The tiles are subjected to 303 freeze/thaw cycles. The results showed no signs of damage, e.g. spalling, cracking or splitting. "Ortech", an independent accredited lab concluded, "The Royal Ecoproducts Royal Slate roof tile displayed a very good resistance to freeze-thaw damage."

Heat Cycle Testing

The tiles were subjected to twenty periods of 24 hours cycles consisting of 16 hrs. in a controlled chamber at high temperature and then 8 hrs. at cool temperature. The results were no sign of cracking, spalling, deformation or visible expansion.

Nail Tear Strength Testing

The tensile force required to pull a single nail through a roofing tile. Results concluded 250 lbs. or 113 kg. (Installed tiles have 4 nails far exceeding any force which would act on it).

Nail Pull Through Testing

"Ortech", an independent accredited lab concluded "The Royal Ecoproducts roofing tile resistance to nail pull through (27.75 Mpa) far exceeds peak wind pressures of 5 kPa." (204 mph or 329 km/hr). Installed tiles have four nails.

Water Absorption Testing

The water absorption was conducted in accordance with ASTM C272 (Water absorption of core materials for structural sandwich construction). The tiles were immersed in water for 500 hours with no appreciable weight gain.

Water Presence Testing

In accordance with ASTM E96-95 (Water vapour transmission of materials) the test results have shown the tile to be impermeable.

Product Specifications / Accessories

- Weight per tile = 1.5 lbs.
- Width = 12 inches.
- Length = 18 inches.
- Fastened with standard 1 1/2 inch copper, stainless steel or galvanized roofing nails.
- Ridge Cap tiles available.
- For 4/12 to 6/12 pitches use 6" exposure (or 200 pcs/ roofing square)
- For 7/12 pitches and up use 7" exposure (or 172 pcs/ roofing square)
- No special tools required. Installation guide available.

Distributor:

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