

# **VILLAGE OF MARTIN'S ADDITIONS**

**MONTGOMERY COUNTY  
MARYLAND**



# **REPORT OF THE STORM WATER TASK FORCE**

**December 2010**

*Michael, Zielinski, Chair*  
**Boucie Addison**  
**Barbara Bares**  
**Lynne Iadarola**  
**Michael Krackov**  
**Anne Lieberman**

**VILLAGE OF MARTINS ADDITIONS**

**REPORT OF THE STORM WATER TASK FORCE**

**December 2010**

Michael Zielinski, Chair  
Boucie Addison  
Barbara Bares  
Lynne Iadarola  
Michael Krackov  
Anne Lieberman

## **MISSION AND METHODOLOGY**

When the Village of Martin's Additions (VMA) first began to address the issues surrounding infill development and redevelopment in the spring of 2007, residents expressed concerns about the effects that increased impervious surface areas and increased size of structures had on storm water runoff. The Village decided to defer consideration of the storm water issues, and proceeded with a comprehensive review of its building ordinance, appointing a Land Use Task Force. VMA eventually enacted amendments to the building ordinance, which became effective in June of 2009.

In February of 2010, the Council reviewed a proposal by Jakubiak & Associates to provide consulting services to assist a Storm Water Task Force, and retained the services of that firm. In March of 2010, the VMA Storm Water Task Force was created to address the storm water issues that had been raised, but deferred, in the building ordinance review process. The Task Force was instructed to:

- (1) evaluate options that may be available to the Village to address storm water issues associated with new construction and other lot improvements, specifically water runoff resulting from new construction that could adversely affect adjacent private or public property;
- (2) evaluate the sustainability of the Village's current storm water management system (storm water drains) to handle current and increased flows.

The Task Force first met on March 25, 2010, and generally agreed to meet every fourth Thursday of the month in the Village Offices.

With the assistance of Jakubiak & Associates and Alan Beal, the Village's Buildings Administrator, the Task Force reviewed provisions of the laws of Montgomery County and neighboring jurisdictions addressing storm water runoff, considered storm water issues prevalent in the Village, initiated a survey of Village residents to gather information on specific storm water issues, consulted Montgomery County officials regarding the storm water drainage system in the Village, and independently observed and reviewed various aspects of potential storm water drainage problems related to construction and the Village's drainage system.

## **MAJOR INTERVENING DEVELOPMENTS**

Two developments with respect to storm water issues occurred following the initial concerns expressed by Village residents in 2007. By far the most significant was the County's enactment of an ordinance requiring that construction projects adding significant lot coverage provide safe conveyance of, or retain on the property, storm water runoff generated by the new construction.

The second development was the Village's enactment of amendments to its building ordinance, which became effective in June of 2009, imposing limitations on new construction, one of the purposes of which was to minimize the flow of storm water from lots by encouraging the maintenance of open spaces and the reduction of impervious surfaces.

### **Montgomery County Ordinance**

Montgomery County Council Bill No. 26-05, enacted October 17, 2006, amended the Montgomery County Code, *inter alia*, by adding Section 8-29B, "Control of Water Runoff on Small Lots." The law became effective on March 1, 2007. All building permit applications submitted on or after that date for new construction or for projects adding more than 400 square feet of building lot coverage are required to include plans for the "safe conveyance or control of any increased water runoff, resulting from additional impervious area or any other topographic alteration, that would drain onto any adjacent or nearby private property."

An approved drainage system must be designed to handle at least 1.5 inches of rainfall during a 24-hour period. The subject water runoff must be retained in an "on-site absorption or drainage device, such as rain barrel, cistern with a slow release or controlled pump discharge, underground percolation and storage system, rain garden, rooftop garden or detention device, bioretention filter, or vegetation buffer." The runoff also can be conveyed off the property by a drainage line, inlet or pipe or other engineered feature such as a swale or ditch, or natural topography or buffer area that successfully absorbs water drainage.

Guidelines for the control of runoff in conformance with the law require the submission of drainage plans that describe the proposed drainage system for collecting, transporting, and disposing of the water runoff. Collected water runoff must be discharged into County approved drainage systems or natural drainage systems. Existing drainage patterns must not be altered in a manner that adversely affects adjoining or nearby properties. General design criteria for runoff control devices, e.g. dry wells, rain barrels and cisterns, are included in the guidelines.

The intent of the County ordinance is to ensure that water runoff from new construction or significant additions to lot coverage be conveyed or controlled to avoid adverse impacts on adjoining or nearby properties.

### **VMA's Building Ordinance Amendments**

The Village enacted amendments to its building ordinances effective in June 2009. Several provisions placed limits on impervious surfaces, including more restrictive set-back requirements (§ 7-402(e)), reductions in allowable building coverage based upon lot size (§ 7-402(g)), a requirement that non-vegetative surfaces not exceed 30% of the area of front yards (§ 7-402(h)), and a limitation of 10 feet on driveway widths in front yards (§ 7-402(j)). These restrictions could be expected to reduce the amount of impervious surface areas generated by new construction projects.

## **OTHER JURISDICTIONS' REGULATIONS**

The Storm Water Task Force reviewed the ordinances of five neighboring jurisdictions—Somerset, Chevy Chase Section 3, Chevy Chase Section 5, Chevy Chase Village, and the Town of Chevy Chase (TCC)—to see if any of them address storm water runoff issues resulting from new residential construction. In particular, the Task Force looked to see if neighboring jurisdictions require compliance with standards stricter than those set forth in Montgomery County Code Section 8-29B, “Control of Water Runoff on Small Lots” (see discussion of the County ordinance earlier in this report). Only one jurisdiction, TCC, adds significant requirements to the Montgomery County storm water regulations for small lot construction.

Somerset’s ordinances (§ 6-303(9)) require only compliance with the Montgomery County Code.

The Chevy Chase Village Code (§ 8-25) basically requires only compliance with the Montgomery County Code for the construction of single-family residences and secondary structures. For permits to perform grading or construction of impermeable surfaces such as patios, driveways, walkways, terraces, or other paving, or installation of downspouts or drains that would alter the existing or natural flow of water, however, the Village may impose conditions on the issuance of the permit to avoid adverse effects on abutting public or private property.

Chevy Chase Section 3 (§ 6-302) and Chevy Chase Section 5 (§ 9-200) both require that applications for building permits for structures (includes patios and driveways) over 144 square feet must include a drainage plan. In addition, building permits will not be granted for any residential building, addition, renovation, sump pump, or driveway unless the property owner can show the resulting runoff will not adversely affect adjacent public or private property. Applications for driveway permits must demonstrate maximum permeability (80%–100%), or provide a means for retaining water on site so that drainage won’t affect adjacent property.

TCC’s Water Drainage Ordinance (Chapter 28) is the most rigorous of neighboring jurisdictions’ ordinances. It requires, in brief, that applications for a permit for any planned development that covers a footprint of 700 square feet or more must include a professionally developed water drainage plan that will prevent rainwater flowing onto adjacent property or into the Town’s drainage system. The plan must also include a “Water Drainage Plan Inspection and Maintenance Agreement,” which must be recorded in the County’s land records. The agreement allows the Town to inspect the system, and to effectuate needed maintenance and repairs if the owner fails to do so after proper notice. The Town’s costs and applicable penalties can be assessed against the property and collected as property taxes or by a suit for damages. TCC estimates that the typical cost to the owner for such a drainage plan is \$15,000 (adding about 5% to the estimated total cost of a 700-square-foot project). The ordinance provides for a refundable performance bond from the homeowner to be held in escrow for approximately 12 months after final inspection for use in fixing any water drainage problem not effectively controlled by the homeowner’s drainage plan. Violation of the ordinance or of an approved drainage plan is

punishable by a fine of up to \$1,000 a day. Repeated violations may constitute a misdemeanor.

The passage of TCC's Water Drainage Ordinance was the result of a study done in 2005-06 by the Water Subcommittee of the Town's Environment Committee regarding water drainage problems that had resulted, or could result, from a spate of new construction and renovations. The objective of the rule is to require homeowners to retain storm water on their properties. TCC estimates the cost to administer the ordinance (basically the cost of the Town Engineer) to be \$64,000 per year (offset by permit fees), and \$35,000 in start-up costs (education/outreach, setting up formal procedures and forms, etc.)

## **VMA'S STORM DRAIN SYSTEM**

Information regarding the storm water drainage system in VMA was primarily obtained by the consultant Chris Jakubiak, who contacted Michael Mitchell, an engineer with the County's Department of Transportation responsible for storm drains. The County design standard is that systems should be able to handle a 10-year storm. Mitchell believes that the drainage system in the Village is capable of doing that, although there are no as-built plans for the system and there has been no study to determine the system's capacity to handle increases in runoff due to development activities. There is no established inspection or maintenance program, and no plans for modernization or increases in capacity. The County responds to issues as they arise, and is prepared to restore the functionality of the system. This is precisely the same information obtained by the Town of Chevy Chase's Environment Committee, Water Subcommittee, as reflected in its March 2006 report on Town Water Problems and Solutions.

The Task Force did not undertake an evaluation of the Village's storm drain system either to ascertain its current capacity or its ability to handle increased flows. As noted above, the system is the sole responsibility of the County. Studies to ascertain the system's capacity relative to current and future demands would be costly. In light of the County's position on the status quo, and the anticipated mitigation of the impact of new construction due to the County's 2007 runoff control ordinance, it was determined to refer consideration of any such undertaking to the Council.

## **SURVEY OF VMA RESIDENTS**

In May, the Task Force initiated a survey soliciting the views of Village residents on problems relating to storm water runoff and ground water disturbances that may have affected their properties. The survey form, attached to this report as Appendix A, was mailed to every residence in the Village, and returns were requested by May 17, 2010. The purpose of the survey was to assess the functioning of the storm drainage system located on Village streets, the locations of other drains or sewers (i.e., in residents' yards), and whether residents have experienced storm water runoff and related water problems and whether the problems they experienced are problems the Village may be able to address.

## **Summary of Survey Responses**

Eighty-seven of 333 households returned a completed survey. At least one resident from each Village street responded. A graphic presentation summarizing the survey responses is attached to this report at Appendix B.

Sixty-six of the 87 respondents have experienced water problems. Of those 66, about 50% attribute the water problems to grading, 39% to storm water runoff, and 25% to construction on adjacent property.

Of the 53 respondents who have paid to fix their water problems, 11% have paid more than \$25,000, 24% have paid more than \$10,000, and 41% have paid more than \$5,000. Residents have used a wide variety of approaches to address water problems, including French drains, rain barrels, swales, and sump pumps.

## **Village Storm Sewers and Drains**

About 25% of respondents indicated that their storm drains get overwhelmed in a large rain. Of those, nearly half report that this occurs during a 10-year storm. A small handful of residents referred to specific storm sewers that experienced problems.

## **Water Runoff Resulting from Construction on Adjacent Property**

Fourteen residents reported that they experienced water runoff resulting from construction on adjacent properties. Approximately half of those residents live on Quincy Street and Bradley Lane. More than half indicated that the problem did not exist before the construction began; some indicated that the construction exacerbated an existing problem.

Comments on a few other survey responses also expressed concerns about the storm water impact of construction on adjacent properties. Some reported general increases in water flow most likely attributable to changes in one or more properties further up a slope. The Task Force could not find any instance where construction adjacent to those properties was subject to the Montgomery County "Control of Water Runoff on Small Lots" ordinance.

A review of Village and County records identified eight properties on which significant construction projects were recently completed that were subject to the Montgomery County ordinance, i.e., permit applications submitted after March 1, 2007. Drainage plans specifying how water runoff would be controlled were submitted with the building plans. With one exception, no survey responses identified runoff problems from those projects, and the Task Force is unaware of such complaints from other sources, e.g. concerns raised with the Village Office. One survey response reported increased runoff in a side yard attributable to a downspout on one of the projects. However, the County-required drainage plan specified that the downspout was supposed to be connected to an underground pipe routing the water to the sewer line, and should not be discharging onto the side yard. At present, it is unknown whether the sewer connection was built as shown on the plan or some malfunction in the line occurred.

## CONCLUSIONS

### *VMA's Storm Drain System*

The Village's storm drain system belongs to and is the sole responsibility of Montgomery County. The County believes that the system meets the design standard of having the capacity to handle a 10-year storm event. Observations by Task Force members during two very heavy rain storms on August 18 and September 30 revealed that—with the exception of pooling on Brookville Road, primarily at the Bradley intersection, and a back-up at the private drain at dead-end Delfield on September 30 due to leaves clogging the inlet grates—all Village storm drains were running clear and there were no apparent problems. While the August storm was more modest, the Chevy Chase area received roughly 5.0 inches of rain on September 30, more than three times the amount that storm water management systems are required to handle under the Montgomery County ordinance.<sup>1</sup> Those observations appeared to confirm the fact that the system's capacity is adequate, at least for the present. Obstructions of storm drain openings can lead to back-ups. However, they are typically quickly remedied.

The repaving/reconstruction of Brookville Road currently underway will, hopefully, solve the problems on that roadway.

For dead-end Delfield, where the private drain may have limited capacity and the grating over the opening can easily get clogged with leaves and other debris, Michael Mitchell with the County's Department of Transportation has advised that, upon request by the Village the County would investigate the drainage issue and design a solution for any problem. If the drain is on private property (which it apparently is), the County would need an easement to do any work, and the County would not pay for any easement. However, affected property owners typically give the County an easement to solve the problem. It is possible that a solution might entail reconstruction of a sewer inlet that would not clog and could route the water through/under property in the Village.

There is also a private drain in a back yard on Oxford Street. Mitchell believed that it is entirely private and did not know what, if anything, it is connected to. He advised that affected property owners could pool resources and connect it to a storm drain in the street. A right-of-way permit would be needed.

### *Runoff Due to Infill Construction*

Infill development over the years, including the construction of large homes and new additions, has increased impervious areas throughout the Village. When the Village building

---

<sup>1</sup> Weather information was supplied by Keith Allen, VMA's resident meteorologist. Official data from the National Airport station showed 0.52 inches of rain on August 22, but Keith advised that this area received about 2.0 inches. On September 30 the airport measured 4.66 inches of rain, and several places in Montgomery and Prince Georges Counties reported more than 5 inches, with a high of 7 inches in Greenbelt.

ordinance amendments were considered, numerous residents complained of increased storm water runoff caused by construction. Some survey responses also reported problems attributable, at least in part, to storm water runoff from construction on adjacent properties. However, all of the construction projects to which water runoff problems could be attributed were initiated prior to the applicability of the 2007 Montgomery County “Control of Water Runoff on Small Lots” ordinance. Construction projects in VMA that were subject to that ordinance and that comply with the drainage plans required by that permitting process do not appear to have generated any complaints of adverse water runoff on adjacent properties.

While relatively few completed VMA construction projects have been subject to the County ordinance or the 2009 changes to the VMA building regulations, the Task Force believes that, at this point, there is insufficient data to justify the amendment of the Village ordinances to add complex or costly drainage plan requirements, like those in the Town of Chevy. However, the topography of the Village renders many properties susceptible to storm water runoff from adjacent “upstream” properties. The Task Force believes that the trigger for general applicability of the Montgomery County ordinance—an increase of 400 square feet in building lot coverage—is too large to afford adequate protection in VMA from runoff from new roofed structures or other impervious surfaces, such as patios, walkways, or driveways. Accordingly, the Task Force recommends that a provision be added to the building regulations requiring that applicants for permits for buildings, new driveways or other impervious surfaces, demonstrate that the resulting runoff will not adversely affect adjacent public or private property. Such a requirement will force applicants to consider and address runoff issues for projects that would not require drainage plans under the County ordinance, and would not require costly surveys, or drawings by professional engineers. Similar provisions are included in the ordinances of Chevy Chase Sections 3 and 5. A copy of the pertinent Section 3 Ordinance, with the subject provision highlighted, is attached as Appendix C. In addition, the Village should continue to monitor storm water runoff associated with new construction and should consider revisiting this issue when it has had more experience under the recently enacted ordinances, and there have been further improvements in the development of pervious materials for driveways and similar surfaces.

## **OTHER OPTIONS TO BE CONSIDERED**

### *(1) Educate residents about storm water management practices and programs.*

Responsible storm water management involves more than addressing the adverse effects of runoff on properties adjacent to construction projects. The Village is located in the Chesapeake Bay watershed, and storm water entering the Village’s drainage system ultimately finds its way to the Bay. The Environmental Protection Agency has recently indicated that restrictions on runoff will be required to meet pollution reduction goals for the Bay. Voluntary efforts to reduce the amount of storm water runoff that flows directly into the Village sewer system should be strongly encouraged. One mechanism to further this goal would be to include a questionnaire in the building permit process, inquiring whether environmentally friendly measures, such as those described below, have been considered. Development of such a program might be attractive as a project for a local college student interested in environmental issues.

Residents can help to improve storm water management through the use of private, on-lot capture and treatment practices. The Montgomery County RainScapes program is designed to encourage installation of private storm water management practices on residential lots. These practices by individual homeowners can include, for example, the installation of rain gardens, rain barrels and cisterns, permeable pavement, green roofs, tree planting, dry wells, and conservation landscaping, all of which hold storm water on the site, reducing the volume of water and pollutants draining into local streams. The County considers its RainScapes program a vital component of its watershed restoration efforts.

The County offers technical and educational assistance to encourage property owners to implement RainScapes techniques on their property. The County's RainScapes program also may provide financial rebates—up to \$1,200 per residential lot—to homeowners who wish to retrofit their property to improve storm water management by installing an eligible RainScapes technique. (Projects are not eligible if they are associated with permit approval requirements for new building construction.)

For homeowners not yet ready to install a RainScape, the County also recommends everyday steps they can take, such as environmentally friendly landscaping and composting of yard waste, to reduce storm water runoff from their yards. Visit [www.montgomerycountymd.gov/rainscapes](http://www.montgomerycountymd.gov/rainscapes) for more information.

*(2) Amend the Village ordinances to ensure that storm water control devices built or installed as part of a building project to satisfy Village and County laws are fabricated to be cleanable and are maintained in good working order. While the County ordinance requires that permittees and their successors in interest must preserve and maintain each approved drainage system, there is no apparent enforcement mechanism to ensure that control devices, such as dry wells and cisterns, be maintained in working order. Structures such as dry wells, for example, can fill with silt over time and cease to be effective. The Village may wish to consider amending Village ordinances to require an agreement, such as TCC's "Water Drainage Plan Inspection and Maintenance Agreement," for storm water drainage systems required under the County ordinance. There would be no administrative expense associated with such a change, because the Village would not be obligated to conduct inspections. Such agreements would provide an enforcement mechanism to address drainage systems that ceased to function properly and were not repaired by the property owner.*

*(3) Request that the County investigate the back-up problems at the "private drain" at the end of dead-end Delfield, and design and implement a solution, with the assistance of private property owners, if necessary.*



## VILLAGE OF MARTIN'S ADDITIONS STORM & GROUND WATER SURVEY

The Village of Martin's Additions' Storm Water Task Force, appointed by the Village Council in April of 2010, would like the views of Village residents on problems relating to storm water runoff and ground water disturbances that may have affected your property. Your experiences and comments will help the Task Force identify problems and possible solutions related to storm water management within the boundaries of the Village.

Please take a few minutes to answer the questions on this survey. Send your completed survey to the Village office (7013 B Brookville Road) in the enclosed envelope either by hand or by mail. You may also fax your responses to 301-656-0030 or email your scanned response to: [martinsadditions@verizon.net](mailto:martinsadditions@verizon.net). Copies of this survey can also be downloaded from the Village website at [www.martinsadditions.org](http://www.martinsadditions.org) under "Hot Topics".

**To ensure that your reply is included in the final analysis, please return your completed survey to the Village Office by May 17<sup>th</sup>, 2010.**

**1) My property has faced the following water problems:**

- |   |   |
|---|---|
| Flooded basement <input type="checkbox"/>         | Overflowing storm drains <input type="checkbox"/> |
| Icy sidewalks <input type="checkbox"/>            | Flooded yard <input type="checkbox"/>             |
| Erosion from storm water <input type="checkbox"/> | Sediment build up <input type="checkbox"/>        |
| Clogged storm drains <input type="checkbox"/>     | Standing water <input type="checkbox"/>           |
| Storm water runoff <input type="checkbox"/>       | Other <input type="checkbox"/>                    |

**2) What do you believe were/are the causes of your problems? Please circle/or describe.**

eg: erosion, grading, aging house, gutters, storm water runoff, construction on our property, construction on adjacent property, etc.

**3) If related to construction, did the problem exist before construction began?**

- Strongly agree   
Agree   
Neutral   
Disagree   
Strongly disagree   
No opinion

**4) Have you tried to fix your water problems?**

Yes  No  Considering options now

If so, how?(Check as many as applicable and circle those that worked)

Dry Wells  Sump pumps  Retaining walls  Plantings  Re-grading   
French drains  Rain Barrels  Swales  Other \_\_\_\_\_

5) **Approximately, how much have you paid to fix your water problems or repair damages to your house or property by a flood or stormwater problem?**

Less than \$500  \$501-\$1000  \$1001-\$5000  \$5001-\$10,000  \$10,001-\$25,000  over \$25,000

Have any of those solutions worked?

Yes  (which ones) No  Please Describe:

6) **Does storm water run off or discharge from your property onto Village sidewalks, streets, or adjoining properties?**

Yes  No  Don't know  Please Describe:

7) **Do storm drains on your block get overwhelmed in a large rain? How often does this occur? Please identify the location (nearest house address or intersection).**

Yes  No  Don't know  If yes, how often? \_\_\_\_\_

8) **Do you have a storm drain or culvert on or adjacent to your property? Identify the location. eg. Rear house, side yard, etc.**

Yes  No  Don't know

9) **What do you consider to be problems and/or issues with storm water in the Village?**

---

**For your survey to be included in the Village-wide analysis, please fill out the information below and return by May 17<sup>th</sup>, 2010.**

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

If there are questions, may we contact you for clarification? Yes  No

**Email Address:** \_\_\_\_\_

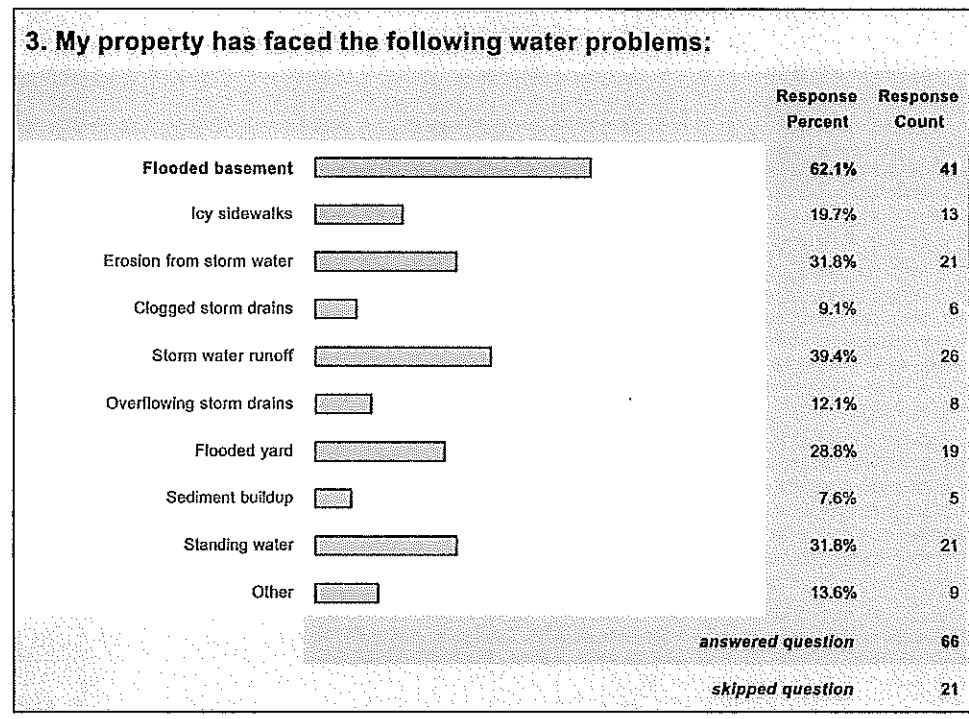
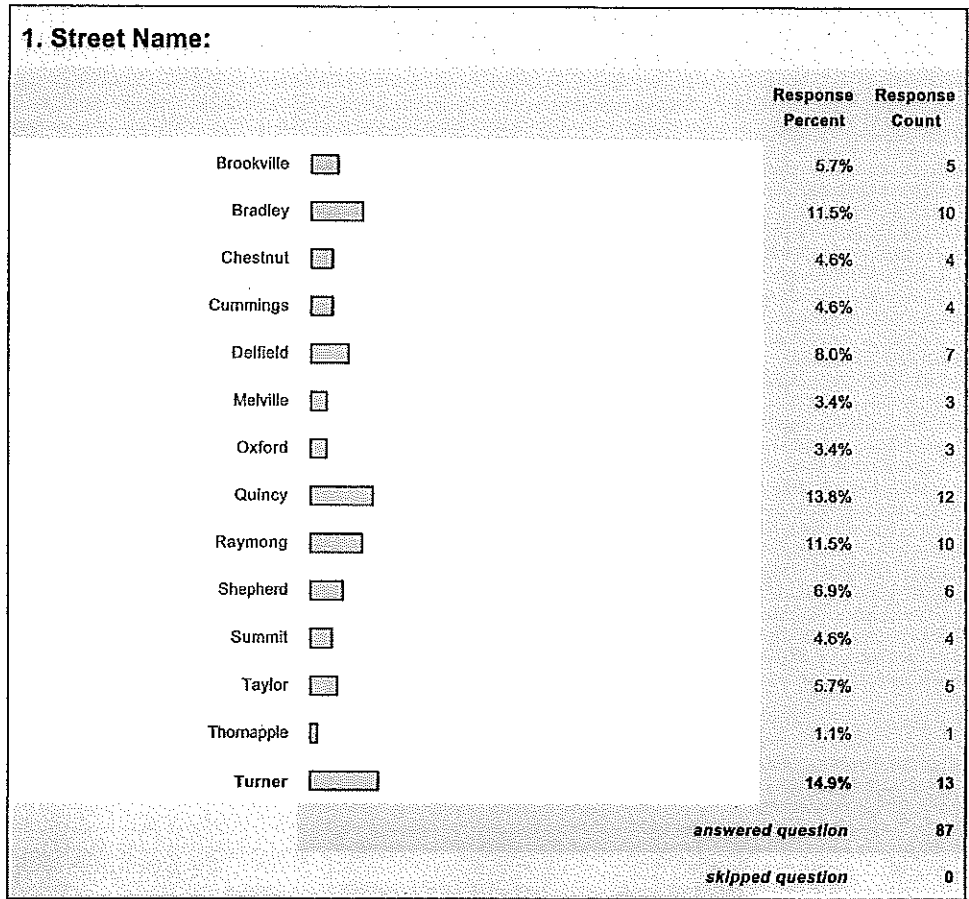
**Daytime Phone:** \_\_\_\_\_

**Evening Phone:** \_\_\_\_\_

**Additional comments are welcome.**

Village of Martin's Additions  
7013 B Brookville Road, Chevy Chase, MD 20815  
Phone: 301-656-4112 ♦ Fax: 301-656-0030  
email: martinsadditions@verizon.net ♦ website:www.martinsadditions.org

VMA Storm Water



**4. What do you believe were/are the causes of your problems? Please circle/or describe.**

	Response Percent	Response Count
Erosion	19.3%	11
Grading	50.9%	29
Aging house	14.0%	8
Gutters	8.8%	5
Storm water runoff	38.6%	22
Construction on our property	1.8%	1
Construction on adjacent property	24.6%	14
Other (please specify)		37
<i>answered question</i>		<b>57</b>
<i>skipped question</i>		<b>30</b>

**5. If related to construction, did the problem exist before construction began?**

	Response Percent	Response Count
Strongly agree	7.0%	3
Agree	14.0%	6
Neutral	7.0%	3
Disagree	11.6%	5
Strongly disagree	16.3%	7
No opinion	44.2%	19
<i>answered question</i>		<b>43</b>
<i>skipped question</i>		<b>44</b>

### 6. Have you tried to fix your water problems?

	Response Percent	Response Count
Yes	81.8%	54
No	15.2%	10
Considering options now	3.0%	2
<b>answered question</b>		<b>66</b>
<b>skipped question</b>		<b>21</b>

### 7. If you are trying or have tried to fix water problems, what approaches have you tried?

	Response Percent	Response Count
Dry wells	23.4%	11
Sump pumps	44.7%	21
Retaining walls	21.3%	10
Plantings	48.9%	23
Re-grading	57.4%	27
French drains	36.2%	17
Rain barrels	12.8%	6
Swales	8.5%	4
Other (please specify)		29
<b>answered question</b>		<b>47</b>
<b>skipped question</b>		<b>40</b>

**8. If you are trying or have tried to fix water problems, what approaches have worked for you?**

	Response Percent	Response Count
Dry wells	10.0%	2
Sump pumps	25.0%	5
Retaining walls	5.0%	1
Plantings	25.0%	5
Re-grading	55.0%	11
French drains	40.0%	8
Rain barrels	10.0%	2
Swales	10.0%	2
Other (please specify)		23
<i>answered question</i>		67
<i>skipped question</i>		20
		67

**9. Approximately, how much have you paid to fix your water problems or repair damages to your house or property by a flood or stormwater problem?**

	Response Percent	Response Count
Less than \$500	20.8%	11
\$501-\$1000	17.0%	9
\$1001 - \$5000	20.8%	11
\$5001-\$10,000	17.0%	9
\$10,001-\$25,000	13.2%	7
Over \$25,000	11.3%	6
<i>answered question</i>		53
<i>skipped question</i>		34

**10. If you have paid to fix your water problems, have any of these solutions worked?**

	Response Percent	Response Count
Yes, Dry wells	5.6%	2
Yes, Sump pumps	25.0%	9
Yes, Retaining walls	2.8%	1
Yes, Plantings	16.7%	6
Yes, Re-grading	27.8%	10
Yes, French drains	30.6%	11
Yes, Rain barrels	5.6%	2
Yes, Swales	8.3%	3
Yes, Other	27.8%	10
No, None	16.7%	6
If yes, other - please describe		33
<i>answered question</i>		36
<i>skipped question</i>		51




**11. Does storm water run off or discharge from your property onto Village sidewalks, streets, or adjoining properties?**

	Response Percent	Response Count
Yes, onto sidewalks	9.9%	8
Yes, onto streets	28.4%	23
Yes, onto adjoining properties	11.1%	9
No	48.1%	39
Don't know	16.0%	13
<i>answered question</i>		81
<i>skipped question</i>		6






**12. Water that runs off or discharges from my property goes onto:**

	Response Percent	Response Count
Village sidewalks	26.1%	6
Village streets	73.9%	17
Adjoining properties	34.8%	8
Other (please specify)		20
<i>answered question</i>		23
<i>skipped question</i>		64

**13. Do storm drains on your block get overwhelmed in a large rain? How often does this occur?**

	Response Percent	Response Count
Yes 	26.9%	21
No 	50.0%	39
Don't know 	23.1%	18
<i>answered question</i>		78
<i>skipped question</i>		9







**14. If storm drains on your block get overwhelmed in a large rain, how often does this occur?**

	Response Percent	Response Count
Every time it rains 	13.0%	3
Monthly 	17.4%	4
Annually 	17.4%	4
Every few years 	4.3%	1
Every 10 years 	47.8%	11
Comments		21
<i>answered question</i>		23
<i>skipped question</i>		64




**15. If storm drains on your block get overwhelmed in a large rain, please indicate the location.**

	Response Count
	20
<i>answered question</i>	20
<i>skipped question</i>	67

**16. Do you have a storm drain or culvert on or adjacent to your property?  
Identify the location. Eg. Rear house, side,**

		Response Percent	Response Count	
No		71.3%	57	
Don't know		11.3%	9	
Yes, in front of the house		5.0%	4	
Yes, in the rear of the house		2.5%	2	
Yes, on the side of the house		5.0%	4	
Yes, other		5.0%	4	
			<i>answered question</i>	80
			<i>skipped question</i>	7

**17. What do you consider to be problems and/or issues with storm water in the Village? (Check all that apply.)**

		Response Percent	Response Count	
Issues unrelated to storm water runoff (e.g., broken water pipes)		2.7%	1	
Issues VMA can address (e.g., sump pumps, runoff from construction or neighbor)		67.6%	25	
Issues County can address (e.g., insufficient drainage on streets, improper slope on street, etc.)		54.1%	20	
Comments (noted in response to this question or not captured elsewhere)			40	
			<i>answered question</i>	37
			<i>skipped question</i>	50

## Chevy Chase Section 3 Ordinance

### Section 6-302. Permits Required; Application

(a) Building permits issued by the Building Inspector are required before the following work can be started:

1. Constructing, altering, erecting or demolishing any structure
2. Constructing, rebuilding or reconstructing any off-street parking area
3. Excavating, grading yards or installing a sump pump and/or a new sump pump discharge.
4. Constructing or renovating (but NOT re-surfacing or replacing an existing driveway) a driveway, driveway apron or curb cut.
5. Blocking or closing a street or sidewalk in connection with any construction activities.
6. Constructing or altering a fence or wall.

.....

(e) Applicants for building permits must submit the following:

1. A copy of the Montgomery County Building Permit if one is required.
2. A copy of the house location survey with the addition or accessory structure clearly indicated.
3. A copy of a full set of County-approved plans. If any structure or improvement (including a fence) is to be placed within two feet (2') of any Section 3 building restriction line or property line, the applicant must submit a boundary survey executed by a licensed Maryland surveyor within the past five years showing the existing structures on the lot, the building restriction lines (setbacks) and the proposed improvements and their relationship to the restriction lines.
4. For structures over 144 square feet, a drawing prepared by a licensed engineer showing the following:
  - a. Front and rear yard widths; and
  - b. North point and scale of plan, and
  - c. The location of any existing and proposed drainage structure, including any swale, and the general flow of water, indicated by arrows, to and from each structure. The applicant must file a drainage plan with current and proposed topographic contours for any construction (including a driveway) that would impact an existing condition or increase any impervious surface.
5. A copy of the Section 3 Building Permit Application form along with the appropriate fee.

(f) Building permits will not be granted for any residential building, addition, or renovation or accessory structure, sump pump, new sump pump discharge or driveway unless the property owner can show that the resulting runoff will not adversely affect any adjacent property, public sidewalk and/or streets.

(g) The building permit application for any proposed construction or renovation of any driveway shall demonstrate maximum permeability (80-100%) or provide for adequate means of retaining stormwater on site so that drainage would not adversely affect any adjacent property or public sidewalk or street.



**REPORT OF THE STORM WATER TASK FORCE  
December 2010**

**VILLAGE OF MARTIN'S ADDITIONS  
7013 B Brookville Road Chevy Chase, Montgomery County, Maryland 20815  
301-656-4112 ♦ FAX 301-656-0030 ♦ [martinsadditions@verizon.net](mailto:martinsadditions@verizon.net)**