To All Strathmere and Whale Beach Homeowners and Visitors,

In this newsletter, we are going to attempt to explain a very confusing series of issues relating to flood insurance, flood zones, elevations, etc.

DISCLAIMER: The SIA is not an engineering, surveying, architectural, contracting or insurance firm, so do NOT make any decisions based on what you read here. We are hoping to 'splain things well enough so that you can ask intelligent questions of those kinds of firms when you do need to make a decision.

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Morning of October 29, 2012
Photo by Greg Bennett

PREAMBLE - This subject is complicated and therefore confusing. We think that every homeowner in Strathmere and Whale Beach should have an understanding of it, and hope you will labor through what follows. This newsletter is long, but we've tried to present it in a logical format. Much of the language comes right out of FEMA bulletins (and probably right from legislation), so it can be a little convoluted, but stay with it. We recommend you not struggle with trying to understand it all the first time through, but read all the way to the end to get the overall sense of the subject. Then you can return to specific sections to get a better understanding.

Before you begin, it is important that you understand four key terms / acronyms:

BFE - Base Flood Elevation. The elevation of surface water resulting from a flood that has a 1 percent chance of equaling or exceeding that level in any given year.

ABFE - Advisory Base Flood Elevation. The BFE shown on the "advisory" maps published by FEMA last December.

FIRM - Flood Insurance Rate Map. Once new BFE’s are finalized, FEMA publishes a FIRM that is used to determine flood insurance premium rates.

Pre-FIRM - This relates not to the time before any Flood Insurance Rate Map, but specifically to the time before the first FIRM for a given community (for Upper Township, 12/10/76).
We are going to take you through the legislation enabling (and changing) the National Flood Insurance Program in Section 1, then discuss mapping in Section 2, flood insurance rates in Section 3, some discussion in Section 4 and finally What Should You Do in Section 5.

So here we go!

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Most Strathmere homeowners are going to be hit with substantial increases in flood insurance premium rates over the next few years. Multiple things are causing this, including the new law enacted in 2012 and an updating of the maps used to determine risk for the purpose of setting rates. Add to that the damage caused by Sandy, and the desire to ensure that rebuilding takes place with the first two in mind, and things get complicated.

First, the new law and its impact on NFIP.

**Section 1 - The National Flood Insurance Program (NFIP)** - Prior to the 1960's, flood insurance was part of homeowner's insurance. When it became clear that flooding usually involved many insured homes at one time, thus increasing the risk to insurance companies to unprofitable levels, they began to exclude flooding from their policies, first offering separate flood policies and then, when that became unprofitable, no flood insurance policies at all.

Congress then passed the National Flood Insurance Act of 1968, creating the National Flood Insurance Program. This program enables property owners in participating communities to purchase insurance protection from the government against losses from flooding. This insurance is designed to provide an insurance alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by floods.

The program was supposed to be self-supporting, but several provisions kept that from happening. Congress had agreed to provide affordable (subsidized) flood insurance for properties that were already in harm's way, and to insure only newly constructed buildings at risk-based rates. Also, buildings rated on risk would be allowed to keep their risk-class rate basis even if the true risk went up. Following the 2005 hurricanes (Katrina, Rita and Wilma), the NFIP found itself under water (bad pun intended) and unable to repay $18 billion to the US Treasury.

Over the years, Congress had amended the original act several times, including the addition of a provision that made it mandatory for any lending institution making a loan backed with Federal money (virtually all these days) for a building in a flood zone to carry flood insurance (note that the mandate is for the lender - not the borrower, but the effect is the same).

Recently, Congress became determined to end taxpayer subsidizing of properties in flood-prone areas, whether they be in river valleys, the hurricane-prone southern coastlines or our own barrier islands.

If you're interested, here is a paper prepared in 2011 discussing the problems with NFIP that led to legislation the following year.
In 2012, Congress passed the bipartisan Biggert-Waters Act, known officially as Title II of the Transportation Bill, which was signed into law on July 6, 2012. It extended the NFIP for five years and made a number of changes related to improving the solvency of the NFIP, flood risk mapping, and flood mitigation programs. It raised the limit on (normal) annual premium increases to 20% (from 10%) and requires FEMA to submit a ten-year repayment plan for the program’s debt to the US Treasury, most of which (before Sandy) was incurred during the 2005 hurricane season. The solvency and debt-reduction requirements - together with the raising of the limit on annual premium increases to 20% - virtually ensure that premiums will be going up across the board. But they will go up faster on those properties that are too low in the flood zone and are losing their subsidies.

Here is where many Strathmere homeowners, who were receiving discounted rates, will be affected:

Since the beginning of the NFIP program, owners of buildings who found themselves too low in the flood zone (below BFE) through no fault of their own have been given a break on their flood insurance premiums. These properties have been insured by the NFIP at rates that do not reflect the true risk of flood damage. These policies are subsidized by the NFIP, which can borrow from the US Treasury when premium collections are not sufficient to pay claims, but those loans must be repaid.

The no fault part of this condition means one of two things:

1. The building was built before 1975 or before the community received its first Flood Insurance Rate Map (in our case, Upper Township’s Initial FIRM-Identified date was 12/10/76, as indicated on this website). These properties are insured at Pre-FIRM rates, unless the owner shows by an official elevation survey that the building is not too low and elects to be rated based on elevation.

2. The building was built Post-FIRM (after 1976), in compliance with a FIRM, with a permit from the community, but a more recent FIRM shows the building to be at greater risk of flooding (this is what is happening now with the new maps). These buildings were previously grandfathered, and allowed to keep the rate-class (flood zone and building elevation relative to Base Flood Elevation - BFE) that applied at the time of construction.

The 2012 NFIP reforms will result in premium increases across the nation. Discounted insurance rates are being discontinued for all properties except Pre-FIRM primary residences that have not lost their qualification for the rate (see below).

Pre-FIRM rates are being discontinued for all secondary residences and business properties. Beginning January 1, 2013, pre-FIRM rates for currently insured properties expire with termination of an existing policy and are not available for a new policy on the property. Currently insured properties that no longer qualify for Pre-FIRM rates will see their premiums increase 25% per year until actuarial rates (commensurate with risk) are achieved.
Grandfathered rates are being discontinued, with premium increases toward actuarial rates being phased in over a five-year period; 20% of the increase being added each year. The five-year period begins on the effective date of the FIRM that identifies the increased risk. For example, if the actuarial rate is $4000 per year more than the subsidized rate, the premium would increase $800 per year for five years.

How Residential Property Loses its Pre-FIRM Rating

A Pre-FIRM primary residence will lose its qualification for Pre-FIRM rates under the following conditions and situations:

- When the policy-holder intentionally lets the policy lapse.
- When the property is sold. A new policy cannot be written at Pre-FIRM rates.
- If, after July 6, 2012, the building is improved and the cost of improvement is more than 30% of the fair market value of the building before improvements were begun.
- If, after July 6, 2012, the building is substantially damaged and the cost to restore it to its pre-damaged condition is 50% of the fair market value of the building before damage occurred. For substantial damage, the “cost” is the cost to restore the building to its pre-damage condition - even if you don’t plan to spend that much or to restore it fully. It also includes the cost of discretionary improvements you plan to make as part of the restoration project.
- If the flood insurance claims history on the building meets one of the following criteria:
  - Total NFIP claims paid for flood-related building damage exceed the fair market value of the building (not including the lot)
  - The property is a severe repetitive loss (SRL) property – A single family property with 1-4 residences is an SRL property if it has incurred flood-related damage resulting in four or more claims payments for building damage that exceed $5,000 each, OR, two claims payments for building damage that together exceed the value of the insured building.
- If the owner of a repetitive loss property refuses an offer of mitigation assistance (to raise or relocate the building), including an offer under the Hazard Mitigation Grant Program (HMGP).

So for most Strathmere homeowners (unless your home is a primary residence that was built before 12/10/76 and none of those conditions apply), flood insurance premiums were going to increase substantially because of the new law - before the impacts of the new flood maps and regardless of Sandy.

Here is an excellent summary of the 2012 Act, and here is an excellent article on the issue.

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Section 2 - Mapping - in order to determine in which locations flood insurance for mortgaged homes is required, and the level of risk to determine appropriate premiums, the National Flood Insurance Program has had maps of potential flood areas (called Special Flood Hazard Areas - or SFHA's) of the US prepared. The main criteria for these maps is to determine
which properties would be affected by a flood that has a "one in a hundred" chance of occurring in any given year (often referred to inaccurately as a "hundred-year flood - or storm"), and further, how high those properties would have to be to avoid damage. Lines are then drawn on the maps and "zones" created showing the **Base Flood Elevation (BFE)** for each zone above which the property should be "safe" in that one in a hundred flood.

You can find [current Flood Insurance Rate Maps](#) here. Type in your Strathmere address in the upper left, "seach" and then use the tool on the left to "zoom in".

Here, from that website, is a map showing the [current elevations required for Strathmere](#) (we believe it became effective on July 15, 1992).

As you can see (if you have very good eyesight), almost all of Strathmere is currently in the "A10 (EL 10)" Zone, although there are properties south of Prescott in the "V11 (EL13)" zone.

Both "A" and "V" zones are part of Special Hazard Flood Areas (SHFA). The "A" (for Advisory) zones are for areas where flooding (and thus flood damage) is anticipated during a 0.01 flood, but only from the level of the water. In the "V" zones (V in this case stands for Velocity), not only is flooding anticipated but also **wave action on top of the flooding**. This makes the risk higher for the same flood elevation and leads to higher premium rates and more strict construction standards. For instance, in a "V" zone the house must be built on pilings or columns (not block) so that wave action can pass through under the house, and not smack into
the foundation. Also, no "enclosures" are permitted below the base flood elevation. Here is a FEMA Technical Bulletin on construction in a V-Zone (you may have to click "open" to see it).

Current (non-subsidized) rates are based on the 1992 map above. Work has been going on to draw new Flood Insurance Rate Maps (FIRMs) for the coastal regions of New Jersey and New York for the last several years. These updated maps were to be delivered to state and local officials in mid-2013. Because of all the damage and projected rebuilding as a result of Sandy, and because the existing FIRMs were developed more than 20 years ago, FEMA decided to release an early version of these maps, showing "Advisory Base Flood Elevation" (ABFE) information. The only time they've done this before was just after Hurricane Katrina. Here is a map showing part of Strathmere:

![Map showing part of Strathmere](image)

You can find this map of New Jersey, and zoom in to your street here. Then go to "Basemap"; select "Imagery" and you'll actually see your house in relation to the ABFE zones. If a line goes through a house, the house is considered to be in the "more strict" (worse) zone.
You can quickly see that the new map reflects a higher risk of flooding and thus higher (advisory) base flood elevations and has also moved many of our houses, especially toward the bay, from the "A" zone to the "V" zone. The "V" Zone even extends from the bay across Commonwealth around Webster, taking in the church. Not only are the base flood elevations higher (mostly 11 and 12 feet instead of 10), but they are measured from a different level (datum), which makes these numbers even worse than they look!

**Datum**  A vertical datum is used to measure the elevations of points of the earth's surface. The "old" BFE maps, which are still in effect today, measure BFE from what was thought to be "sea level" back in 1929 (NGVD29). In 1988 authorities discovered that gravity affected the measurements of heights (which had been based on 1929 principles). The results mean that big mountains such as the Rockies are as much as 6-7 feet (or more) higher and lower lying areas could actually be a foot or so lower. Explanation [here](#).

The bottom line is that the new maps use the **North American Vertical Datum of 1988** (NAVD88) and the conversion from the old to the new means that a point in Strathmere on the old map (say elevation 10 feet) is 1.280 feet lower than elevation 10 feet on the new map.

Here is an example for an actual house on Bayview Drive (hopefully the actual house isn't leaning as much as the one in the sketch):

![Diagram](image)

On the left are the measurements used in the current maps with the NGVD29 datum. The first floor was built to a level of 11.87 feet and the bottom of the lowest horizontal member is at 10.0 feet. The house is on pilings. Now look at what happens with the datum NAVD88 used on the new maps. The house is now 1.28 feet lower in reference to the new datum, so the first floor is
at elevation 10.59 feet and the bottom of the lowest horizontal member is at elevation 8.72 feet.

This house is currently (upper gray map) in the A10 (EL10) Zone. For flood insurance purposes, in the A Zones, the key measurement is to the first floor, which is at 11.87 or 1.87 feet above the BFE. FEMA "rounds" up or down from the BFE, so in this case the house is considered to be at a "+2" elevation.

If, when the new maps become official, this house is in the A (EL 11) Zone, the house will now be (11.00-10.59) = 0.41 feet below the BFE, but rounding down in this case, at BFE (a loss of two feet).

But suppose the ABFE's on the new (scarlet) map above are not changed and this house is in the V (EL 13) Zone (the EL13 / EL12 line currently runs through the house, putting it in the higher category zone). In the V Zones, the key measurement is to the bottom of the lowest horizontal member, which is at 8.72 feet elevation above the new datum. This means the house is now (13.00 - 8.72) = 4.28 feet rounded down to four feet below the new BFE. So the house went from a "+2" to a "-4" (and this house had no damage from Sandy).

You can make similar calculations for your house. Basically you will lose one foot for the datum change and one foot (in the A Zone) for the BFE elevation change from Elevation 10 to Elevation 11, a total of two feet. If you are in the A Zone presently and wind up in the V Zone, you will lose an additional two feet when the measurement changes from the first floor to the lowest horizontal member and still another foot if you are in the V12 Zone.

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Section 3 - Flood Insurance Rates. As described above, the 2012 NFIP law meant that, unless you are a year-round resident with a home built prior to 12/10/76 that did not lose its qualification, flood insurance rates for most homes were going to rise without the new maps. For many, the new maps, when they finally become official and become a FIRM (Flood Insurance Rate Map), will cause rates to rise even more.

We could not find a simplified "table" showing previous flood rates, perhaps because there are so many variables that insurance agents all use a government computer program to enter the specifics for a given property to determine the rate (note that the rates are the same regardless of the agent you get insurance from). There are a series of tables in this publication, but presumably you already know your current rate and can start from there. Pre-FIRM rates, which do not vary with elevation, may be found here.

We received this table of 2013 rates from a "friend of a friend", and have been unable to locate it on a website, so we can't verify its accuracy. Nevertheless, numbers used in FEMA briefings and press conferences have been very close to those in this table, so we'll use them in our example. The table does not specify the deductible amount.
As you can see, having your house in a V-Zone substantially increases flood insurance premiums. You can also see how much premiums increase when you are below the Base Flood Elevation compared to being at or above the BFE.

Let’s use as an example, the house in the sketch above on Bayview Drive. Here is information from the declaration page (below) of the flood insurance policy for that home. As you can see, the house is presently in the A10 Zone with an elevation of 2 (2 feet above 10 feet elevation). The cost of that coverage is $338 for the house, $96 for the contents and $4 for the ICC premium, for a total of $438. Then there is the (Upper Township) Community Rating System discount of 15% ($66), plus the federal policy fee (to cover such things as mapping) and the policy nets to $412 per year. The policy has only $25,600 coverage for contents - about 1/4 of the $100,000 column in the rate chart above, so we’ll prorate. If we go to two feet above in the left column and take $448 + a prorated $46 (for contents) = $494 + ICC Premium of $4 = $498 - CRS 15% discount = $423 + Policy fee $40 = $463, compared to $412 today (note that our chart above gives no deductible amounts, so again these can only be guestimates).
Now let's see what happens to insurance rates for this house in the situations described with the sketch, above.

If the house ends up in the A (EL 11) Zone (unlikely), the elevation difference will go from +2 to "at BFE". Using the logic above, the premium would be $1359 + $91 = $1450 + $4 = $1454 less the CRS discount = $1236 + $40 = $1276. So, $1276 is certainly an increase from today's $412 premium, but not a crushing amount.

Now suppose the house stays where the scarlet ABFE map above placed it - in the V (EL 13) Zone. In that case, you must go over to the right-hand "V" tables to the "4 feet below" line. Now the premium would be $17,734 + $1393 or $19,127 + $4 + $40 = $19,171 (note that there is no CRS discount if you are rated as "below BFE" - regardless of zone). This annual premium of over $19,000 is for a house on pilings that is presently two feet above BFE. If the house were on a block foundation, and/or had an enclosure (garage, etc.) below BFE, the premium would be even higher. If the V 12/V13 line moves so that all of the bayfront homes go in the V (EL 12) Zone (somewhat likely), the $19,171 annual premium would drop to $16,806.

We've used one house as an example on how to estimate your rates. Note that even in the "A" Zone, the loss of subsidies will mean a substantial increase in premiums, and cause most people to at least consider elevating their homes. There could be large amounts of funds (grants) available to help with this, but this newsletter is long enough without covering that subject much here.

Timing - FEMA has said that the Preliminary BFE Maps will be released later this year (expected for Cape May County in October). Because of the effect on rates described above, they are very aware that they will have to justify the new maps. Once the preliminary maps are released, formal appeals can be made, but the 2012 law specified that appeals can only be made for "technical or scientific" reasons (not because many people may have to sell
and/or property values will decrease). Sometime in 2014, the BFE maps will be adopted and become the new FIRM - Flood Insurance Rate Map. The next time your policy expires after that "FIRM" date, your premiums will begin to increase (from the new map - on top of the legislative increases beginning this year). As explained in Section 1 above, the rates for a new FIRM will be phased in over five years. For the V12 example above, the premiums would increase by 0.20 ($16806-$412) = about $3280 each year beginning in either 2014 or 2015 and reaching the new annual rate of $16,806 in 2018 or 2019.

Here is [an article](#) that's a companion to the article linked above. It also discusses the new rates and their timing.

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**Section 4 - Discussion.** Many New Jersey homeowners feel that there is some kind of a conspiracy to drive up the cost of flood insurance and force them to either raise their homes at great cost or sell them for a loss - thus the almost daily headlines in local papers on the subject of ABFE's, and even [letters to the editor](#) asking that the grandfathering that Congress eliminated last year be reinstated. But remember, the object of the 2012 law and the mapping is basically twofold: (1) to properly identify the risk in flood zones of a flood with a chance of one in a hundred (1%) in any given year, and (2) to have the homeowner, rather than the taxpayer, carry the burden of that risk. We don't pretend to understand the science behind the calculations for the new BFE's, but we do know that we have had to evacuate Strathmere twice in the last two years - for Irene in 2011 and Sandy in 2012. In each case, we've talked about how "lucky" Strathmere was that the storms mostly went north of us. With Sandy, the center went over Brigantine, and even though Cape May County had damage (and water higher than the 1962 storm), flood levels did not approach what inundated northern coastal New Jersey and New York. Here, Sandy was several feet below the projected "one in a hundred" storm. Even though Sandy did not reach that level, more than 25 homes in Strathmere received extensive flood damage.

**Are these new ABFE maps "flawed?"** Again, FEMA had not planned to release these maps until mid-2013. Then there would be a review and appeal process before they are finally adopted as FIRM's - Flood Insurance Rate Maps - probably in 2014. After Sandy did so much damage to the New York and New Jersey coastal communities, triggering the need for a tremendous amount of rebuilding, there was great concern that the rebuilding would take place without the information that was so close to coming out. Then thousands (perhaps hundreds of thousands) of homeowners might rebuild their homes and find out they had built too low or to insufficient standards. Thus the early release of "advisory" maps, and NJ Governor Christie's decision to say that for rebuilding purposes, these maps are "official" (his decision has no effect on federal flood insurance rates - just construction rules). FEMA has said that as a result of their decision to release them early, these are very "conservative" maps; that is, they are deliberately worse (more strict) than the BFE maps are expected to be. Also, the location of the "V" zones was done primarily on the basis of current land elevation, and a key "wave analysis study" has yet to be conducted. For that reason, most observers believe the "V" zones will shrink somewhat. There is, of course, no guarantee of this.
Construction - Note that if you are planning to build this year, Upper Township passed an ordinance in 2012 requiring the height of the lowest horizontal member of a new or reconstructed building to be at BFE plus one foot, regardless of "FIRM" zone. With Governor Christie’s mandate to adopt the ABFE’s for NJ construction, this means the ordinance requires the lowest horizontal member to be at ABFE plus one. Upper did not, however, eliminate the use of block foundation or prohibit enclosures below BFE in the A Zone.

The Upper Township Planning Board has discussed an ordinance that would absolve people from getting a variance for exceeding the height limitation if they were rebuilding to meet the new flood elevations. Both the Planning Board and the Township Committee seem inclined to do that, and may do so, but a recent NJ Supreme Court decision said that a municipality cannot have an ordinance that allows a non-conforming structure to avoid getting a variance for construction. Since a large percentage of homes in Strathmere are on small lots and are non-conforming, a variance may be required anyway.

Township Engineer Paul Dietrich engineer@uppertownship.com says that he will meet with anyone who wants to go over the calculations for their home. He will, however, need an elevation certificate for the home first.

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Section 5 - What should you do? Obviously, we can't answer that for everyone (or perhaps anyone), but we will offer some guidance.

First - don't panic! Flood rates are going to go up a lot, but the worst increases are at least a year away.

Second - unless your home was substantially damaged and (or) you are in the process of rebuilding and raising it, if you are in a "V" zone it's pretty clear that you should wait for the final maps before doing any construction. If you are in an "A" zone, you will probably stay in an "A" zone, though those wave analysis studies could throw some curveballs. An article in the February 8 edition of Patch reinforces this advice to wait.

Third - once the maps (and thus future rate increases) are finalized, probably in 2014, you can do some analysis and decision-making (and of course you can start considering options now). We believe folks in Strathmere will fall into one of two categories: either you are at or above the new BFE's, or you are below them.

If you are at or above the new BFE's (probably a small percentage of people with homes here), you will likely decide to grit your teeth and either pay the new premiums, or, if you have no mortgage, choose to self-insure. If you ever rebuild or reconstruct your home, you may want to raise it even more.
If you are below the new BFE's, it appears you have three choices:

1) Looking at the rates in the chart above for both A and V zones, it looks like it will almost certainly be an economic "winner" to **raise (or rebuild) your house**.

2) If you have no mortgage, it may make sense to **self-insure** (not buy flood insurance), although you really need to think about the risk you are assuming.

3) **Sell your house** and let the new owners choose between the first two choices...

Okay, now you can panic! Seriously, we don't enjoy writing this, but the decision by Congress to cease the subsidies by taxpayers for most houses in flood-prone areas around the country will result in a huge change in the character of all of those communities - including Strathmere.

**Possible assistance to pay for elevating your house –**

In previous newsletters we've written about the **Increased Cost of Compliance (ICC)** feature that is a part of your flood insurance premium and benefit. There are [more details here](#), but basically, if you suffered substantial flooding, you can receive up to $30,000 to elevate or rebuild your house to reduce the risk of future flooding.

FEMA has Hazard Mitigation Assistance (HMA) grant programs that provide funding for eligible mitigation activities that reduce disaster losses and protect life and property from future disaster damages. One of those is the Hazard Mitigation Grant Program (HMGP). Upper Township has applied for such a grant, and hopefully you signed up as we recommended you do in our [January 28 Newsletter](#). If not, you can still apply in the future.

The [SBA](#) has loans available for rental properties and year-round residents who had damage from Sandy. The interest rates are comparable to the rates for current **home-equity loans**, which you may prefer (remember that most of the value in Strathmere property is in the land, not the structure, so you may have lots of equity to use).

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**Summary** - We said at the top that this stuff is very complicated. Hopefully we've made it somewhat clearer. Again, we've used imperfect data and unverified charts to try to explain things. Don't make any decisions based on this newsletter, but use the information here to question your architects, movers, contractors, etc., to find how all this applies to your particular situation - and remember: **on a barrier island, higher is better!**
The Strathmere Improvement Association includes all owners in Strathmere and Whale Beach and many visitors. It was founded in 1951 as a community organization with the simple objective of making Strathmere a better place. We are proud of the organization's many accomplishments over the years.

Please let us know if you have comments or suggestions for the newsletter or for SIA in general, or if you'd like us to change your e-mail address in our records.

You can contact us by responding to this e-mail at sia6@comcast.net or by mailing SIA at PO Box 57, Strathmere, NJ 08248.

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Thanks very much for your continuing support of the Strathmere Improvement Association!

Linda Bateman       Elaine Holsomback       Donna Diefenderfer
President           Vice-President         Treasurer

Rosemarie Whelan    Ken Weaver
Recording Secretary  Corresponding Secretary