As most Bannockburn residents are aware, unless we experience unforeseen further delays there will soon be a sanitary sewer and stream restoration project underway in the creek valley from the pool down to MacArthur Blvd. The work is being done by WSSC and its contractor, Lane Construction. The stream restoration portion is necessitated by continued erosion and degradation of the Bannockburn Creek stream bed, which has exposed and undermined some of the sanitary sewer piping that serves houses bordering the stream valley. This has been an ongoing and worsening problem for many years, and in general it is good that major corrective measures are now going to be taken.

About half of the stream restoration work will occur on various parts of the County “Right of Way” that runs all the way down the valley. A majority of the access road and one of the staging areas will be on BCI land; the other staging area will be in the swimming pool parking lot. In the lower half of the valley, with the exception of the roughly 18% of the stream that flows over BCI and Corps of Engineers land next to MacArthur Boulevard, most of the restoration work will occur on or abutting land privately held by homeowners. This project has been in design for about 2 years by Black & Veatch, the engineering firm contracted by WSSC to design the restoration. Several community-wide informational meetings were held last year, and the designers have met with and accommodated the site specific needs and concerns of the property holders upon whose land construction will take place. The design has now also been approved by the appropriate Montgomery County, State, and Federal reviewing agencies.

The work itself includes placing an inner lining in the sewer main to stabilize it, repairing exposed sewer lateral connections to individual houses where needed, and restoring the stream bed by raising it to cover the exposed laterals. The restored stream bed will be stabilized against future erosion during high run-off periods (i.e., during big storms) by v-shaped cross weirs in the stream bed and low stone footings or walls at many places along the creek banks. The weirs will redirect the erosive energy of high volume run-off into 21 small waterfalls, taking it away from stream banks. The stones used for this work will be large, up to 2000 pounds each, to ensure stability.

The estimated duration of the work is expected to be 5-6 months. The contractor is required to install sediment and erosion control measures all along the boundaries, or “Limits of Disturbance” of the work site. The contractor will be supervised by WSSC, with additional oversight by the Montgomery County DEP. But even with proper control measures, the work site will be quite messy, especially after periods of rain. There will be large construction equipment in use, some trees will have to be removed, and material for the weirs, walls, and raised stream bed will have to be brought in. About 1,400 tons of the large stones will be used. The work is supposed to be finished, including all the specified bank restoration and re-planting, by late spring 2015. We should expect that it will take a few growing seasons for the new vegetation to establish itself, and the valley to begin to look something like its old self.

Last week WSSC advised us that they had found a source of stone that was not ‘bluestone’ and delivered samples, as Allan informed everyone last week. The stone (from Churchville Quarry, near Bel Pre north of Baltimore) is dark grey granite. Many of you have come by to take a look, and the reaction has been, almost
unanimously, that it is darker than you would prefer, but if that is the best WSSC can do, then you could reluctantly live with it.

At John’s suggestion we decided to revisit the local Tri State quarry, since they appeared to have some stone that was the right color. We met with the yard manager and he confirmed information that we had picked up investigating stone for this project: 1) the brownish tints typical in the stream bed are found in near-surface rock, and 2), that kind of rock is by now mined out of local quarries. There is some acceptable rock available, but at about four times the price ($400/ton vs $100/ton). The large sizes required for our project only show up by good luck during blasting, and not nearly enough could be produced over the timespan involved for this project. We left convinced that Tri State could not supply our needs.

We also visited the Booze Creek restoration to take a second look at how the stone used fits into the surroundings. We were only able to view the creek close to River Road, since access is not now easy. There was some very dark stone, and although it does not match the native stone it was not particularly objectionable. The really objectionable use of ‘bluestone’ in high walls (much higher than any of those planned for our stream) that was seen by Allan last year was located much further downstream, and is no longer easily accessible.

We concluded from all of the above that the stone proposed for use by WSSC is the best we can reasonably expect to get. If anyone wants to still take a look at it, it is available on the back patio at Allan’s house, 7115 Braeburn Place, or across the bridge from the lower valley. This stone is much preferable to the ‘bluestone’ types originally proposed.

There are some informational photos at the end of this article, depicting elements of the proposed work.

Look for periodic updates on this major project in our neighborhood in the newsletter!

Sanitary Sewer Main piping exposed by erosion in the creek bed, located behind upper Braeburn Place. There are several other such places along the creek bed as it flows toward MacArthur Blvd.
An "Imbricated" retaining wall, from a similar erosion control project on Booze Creek, completed about 2 - 3 years ago. Note the stone used for our project will be a much darker gray color.

A "cross weir" from Booze creek, a stabilization structure that will be used on our job as well. This is looking up stream at the weir. Also note, Booze Creek is quite a bit larger than our stream.
Stream stabilization stones from another project off Massachusetts Ave., which approximate the dark gray color we will be using. This project was completed over ten years ago.