



### **BRYNWOOD DEVELOPMENT PROPOSAL TO JOIN WATER DISTRICT #2: FACT SHEET**

If you are receiving this fact sheet, then you are a member of the WD2 Water District (Windmill Water District). On September 9, 2015 the Town Board received the Brynwood petition for extension of WD2. A Special Town Board Meeting was held on October 28<sup>th</sup> for WD2 residents, so they would better understand the facts and details. That meeting, the power point presentation, and all information can be found on the Town Website under [Town News](#) or under [Quick Links](#). There will be a Public Hearing held in Town Hall on **Wednesday, December 9<sup>th</sup>** and we encourage all WD2 residents to attend and ask any questions you may have. The Town Board serves as Water Commissioners, so we appreciate the input from the Windmill community. We will be leaving the Public Hearing open and will circulate a survey to WD2 residents after the hearing to obtain your input before the hearing is reconvened in 2016. Here are some facts for your review.

#### **Brynwood Proposal:**

- Develop new Bedrock well(s) on WD2 property and upgrade current water supply system, adding to WD2 overall pumping capacity.
- Brynwood's use of WD2 water is limited only to the 73 Residential Units and Clubhouse (i.e.: domestic). All irrigation needs will be provided by their on-site water sources, not from WD2.
- The proposal will add 73 new residential units to the Capital unit count (i.e.: homes). The Clubhouse will be assigned a unit count equivalent, to be discussed at the Public Hearing.
- Brynwood projected domestic peak water demands are 24 GPM (gallons per minute). NYSDOH (NYS Dept of Health) requires Brynwood to provide well(s) of 48 GPM, twice their needs. The Town's Engineer Consultant recommends that Brynwood provide well(s) of 100 GPM. \*\*\*

#### **Financial Impact on WD2 Capital Expense (Without Brynwood Clubhouse unit equivalent calculation):**

- Projected Average Annual Capital Debt Savings per Household: 16.1% (Clubhouse will add additional savings).
- Existing Windmill property owners will each realize approximate savings of \$6,957 during debt term.
- A cumulative reduction of existing member (381) Capital debt over life of current bond: \$2,650,555.
- Approximate cost of Brynwood drilling new well: \$1.2Million. This cost will not be borne by Windmill property owners.

#### **Evaluation of Current WD2 System (Does not include new Brynwood proposal):**

- WD2 Potable water is sourced from a Sand and Gravel Aquifer within the Mianus Watershed.
- There are 4 Sand and Gravel Wells: #2, #3, #4 and #5. Wells 2, 3 and 5 cannot operate simultaneously. Well #1 is no longer operational.
- Existing NYSDEC (NYS Dept. of Environmental Conservation) water-taking permit limits the taking from the district's wells to 290 GPM (Gallons per minute). WD2 has current peak demand which exceed the NYSDEC permit.
- Non-Peak demand: Adequate capacity to supply needs of existing customers.
- Peak Demand: Challenging due to increased residential irrigation demands, pools and larger homes.
- Current Maintenance needs include: Rehab of Well 4 and test balance of wells to determine yield.

#### **Information for Proposed New Bedrock Well(s) Water Source:**

- Bedrock Well(s) will likely not influence surface water bodies (i.e.: lakes/ponds) and not significantly affect groundwater recharge to the Sand and Gravel Well field, as per Town Engineer Consultant.
- New well(s) will allow Water Department more flexibility when pumping the existing Sand and Gravel Wells, which can be cycled, rested, and not operated continuously.

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- Resting of current wells will allow Sand and Gravel Aquifer more time to recharge during drier times.
- \*\*\*Surplus water capacity will exist from new proposed well(s). (100GPM > 48GPM > 24 GPM)

**Term Definitions (See Power Point presentation for illustrations):**

- **Well:** A tubular, man-made conduit installed into the ground to access and collect groundwater.
- **Aquifer:** An underground water-bearing rock or sediment where groundwater can be extracted.
- **Sand and Gravel Aquifer:** An aquifer where groundwater is stored in the pore space of unconsolidated Sand and Gravel.
- **Bedrock Aquifer:** An Aquifer composed of consolidated bedrock.
- **Recharge:** The amount of surface water that makes its way back to the groundwater table.

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**Frequently Asked Questions (FAQ):**

***What is the impact on our current water supply (i.e.: the water sourced from the Sand and Gravel Aquifer within the Mianus Watershed?***

The Mianus Watershed is 37 square miles, so it is significantly larger than the area occupied by the homes in WD2. The Town's Engineer Consultant has determined that the Brynwood project's impact would be 0.3% on the entire Watershed. The Engineer analyzes (1) Peak demand of the project x 2 (48 GPM) as per NYSDEC guidelines, (2) Recharge rate of the Bedrock Aquifer (8.45 inches per year), (3) Inter-Basin transfer, and (4) The effect on the existing sand and gravel wells. The recharge rate to the Bedrock Aquifer at 8.45 inches per year indicates sufficient water to support the demand of the project even in a severe drought. The Inter-Basin transfer of water would be 0.225% of the available recharge, rounded to 0.3%. Therefore the daily demand of the project will have a negligible effect on the Mianus River Watershed. In addition, new bedrock well(s) in WD2 would allow for the existing Sand and Gravel Aquifer to rest and recharge, and potentially prolong the life of wells #2, #3, #4, and #5.

***What is the financial savings to residents?***

The primary projected savings impacts your annual capital cost to fund existing bonds, mainly the \$9.9Million water project. The savings calculations are without the Clubhouse unit count equivalent as detailed earlier. Once determined at the Public Hearing, the Clubhouse unit equivalent will increase the savings per household beyond the 73 new units. The Average of Annual Savings per Household is 16.1%, or approximately \$300 per year. Existing district property owners will realize a savings of \$6,957 (throughout the existing debt period). A Cumulative reduction of existing member debt = \$2,650,555.

***Is Brynwood paying to join WD2 to cover previous capital debt?***

That is not part of the proposal. As per Town Code, all "Out of District" users pay double the inside rate for water. The policy was enacted as the doubling of the rate provides for Capital contribution, as Brynwood and formerly Canyon Club have paid for about 50 years. The golf club has also paid an annual fire line fee. In addition, as the Towns' Engineer Consultant recommends, Brynwood will provide well(s) that produces twice what is required by NYSDEC, so the excess will be available for the district to use. The projected cost of the new well and infrastructure upgrades is approximately \$1.2Million, to be paid by Brynwood thus no cost to WD2.

***What is Brynwood providing to the district?***

Brynwood is providing the development of new Bedrock Well(s) with a recommended yield of twice what is required. Adding the new water source would include all required upgrades to the current water system at an approximate cost of \$1.2M. In addition, the 73 new units will reduce each homeowner's Capital tax bill by approximately 16.1%. The TBD Clubhouse unit count equivalent will increase this percentage further.

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