



FAST FACT SHEET

WHY DID DPS DEVELOPMENT DECIDE TO CREATE A GREEN NEIGHBORHOOD?

DPS Sporting Club Development has a distinguished and consistent history of environmental stewardship for its sporting club projects. Over the past eleven years, and lead by a commitment to its members and a love of the land, Peter Pollak and Steve Schram pioneered the residential sporting club concept. With a commitment to sound and prudent land planning, DPS has left a very “light footprint” wherever its projects exist. With an impressive history of over 5,000 acres of land placed into permanent open space, thirteen miles of pristine riverfront preserved and fifteen miles of ocean frontage enhanced and protected, few other developers internationally can claim such a legacy of stewardship. Not only has the land been protected, but the architectural heritage of the area is recognized, preserved and protected through a comprehensive architectural review process.

At The Greenbrier Sporting Club, this architectural review process took the unprecedented step of limiting the total square footage of houses. At the Snake River Sporting Club, flora and fauna have been protected including five bald eagle nests, migratory paths for the trumpeter swan and elk migration corridors. At the Turks & Caicos Sporting Club, a nursery has been constructed for propagating indigenous plant species and rock iguana habitat protected—this involved some relocation with the San Diego Zoo. Each sporting club has a dedicated naturalist whose education and example-setting assure that the principles of land stewardship will be passed onto the members. DPS also hired an Environmental Advocate to oversee the planning and development of projects long before popular attention was turned to green development issues.

WHY THE GREENBRIER PROJECT?

DPS Sporting Club Development is in a joint venture with The Greenbrier resort and CSX Railroad. The Greenbrier had spent many years interviewing and investigating development companies prior to committing to the development of their precious land resource. DPS was selected and has been a vital and inspirational partner in this effort. The Greenbrier hotel’s roots go back to a love of nature and it was known as a retreat for people seeking health and wellness. From the early days when the sulphur springs were used as part of a therapeutic program to its current stature as a nationally recognized destination for tranquility and rest – it was the idyllic setting for a sporting club. The last of the neighborhoods, located at the Summit Village, enabled the creation of a green neighborhood, representing the culmination of DPS’ history of environmentally responsible land planning and environmental advocacy. The fifty-six lots that make up the neighborhood, and the significant open space and hiking trails that surround it could not be a better choice or location.

HOW WILL THIS NEIGHBORHOOD BECOME GREEN?

The DPS Planning and Development team, in partnership with an internationally acclaimed architect and interior designer, Campion Platt, have crafted a set of home designs that will be used for the project. This effort is accomplished by respecting the significant architectural heritage that has been established and maintained at The Greenbrier, while incorporating environmental considerations and resource efficiency into every step of the planning, design and building process in order to minimize environmental impact. The three legs of this sturdy stool, and the basis for all design decisions are: form – function – sustainability. Campion Platt will not only be creating stunning architecture and inspiring interiors, but designing in a way to reduce consumption and environmental impact while improving health and wellness.

WHAT STANDARDS WILL BE UTILIZED TO ESTABLISH THE GREEN NEIGHBORHOOD?

The National Association of Homebuilders (NAHB) has established and adopted a comprehensive set of Model Green Home Building Guidelines as part of its National Green Building Program. These guidelines are the basis for developing NAHB's National Green Building Standard. This standard will be published by the International Code Council (ICC) and endorsed by the American National Standards Institute (ANSI). These guidelines and the subsequent Standard provide a rating system with a ranking from Bronze to Emerald, Emerald being the highest. The designs for the prototype green homes being designed by Campion Platt will be rated at no less than the Silver level. All houses designed for the Green Homes at The Greenbrier will meet this NAHB Verification that the homes have been built to standard according to these guidelines will be done by independent, third-party verifiers approved by the Department of Energy through its Energy Star Program. It has been determined by the DPS development team that the U.S. Green Building Council LEED (Leadership in Energy and Environmental Design) for Homes rating system will be used as a parallel measurement tool to the scoring system of the NAHB Model Green Home Building Guidelines.

WHAT SPECIFICALLY DO THE NAHB STANDARDS REQUIRE?

The detailed standards review each project using the following criteria: we'll expand this

- Environmentally Responsible Lot and Site Development
- Energy Efficiency
- Water Efficiency
- Resource Efficiency
- Indoor Environmental Quality
- Global Impact of Building
- Homeowner Education and Support

HOW WILL MY HOME BE BUILT IN THE GREEN NEIGHBORHOOD?

The Developer will be utilizing the services of Earthwise Homes, LLC, an affiliate company of Sterling Construction Management, to construct the prototype homes in the Green neighborhood. This construction management firm has built more than ninety-five homes at The Greenbrier and is an experienced, dedicated and capable construction management firm. The senior management of Earthwise Homes has a long history of designing and building energy

efficient structures. During the 1970's and 1980's, they learned the techniques and construction details required to build environmentally responsible architecture utilizing state-of-the-art technology. One of the senior managers has recently received the Certified Green Professional designation from the National Association of Home Builders and will be actively involved in the implementation of the guidelines and material selections. The DPS Planning Department has a USGBC LEED Accredited Professional designer involved in the siting and landscape architecture for all of the green homes. Earthwise is an Energy Star Builder and will utilize the NAHB Model Green Homebuilding Guidelines and arrange for third-party verification process for each home.

WHAT ARE SOME OF THE SPECIFICS OF THE HOUSE CONSTRUCTION THAT WILL MAKE IT GREEN?

The Design and Development team has literally taken the traditional house apart and has analyzed every system, building material and mechanical operation within and around the prototype buildings. Each green building material and system is valued by its quality, durability, sustainability, environmental impact and financial impact.

Examples of this new look at green architecture and building are:

- Careful delineation of the construction limits to minimize disturbance of existing flora and fauna.
- Deliberate reuse of materials that are found on site. This may include indigenous stones for retaining walls, timber being milled from fallen trees and mulch from the clearing process to stabilize the site.
- The foundations will be pre-fabricated, insulated, minimally invasive systems provided by Superior Wall Company. These foundation walls provide for a minimal amount of concrete which maximizes the insulation value of the lower level wall systems. Superior drainage is provided by the proprietary construction methods used for the installation of the panels. See www.superiorwall.com
- A dedicated, passive radon mitigation system will be installed.
- The use of pre-engineered, first and second floor deck systems will be utilized. These systems provide for a minimum amount of waste and utilize fabricated products manufactured from sustainable wood resources with nontoxic resins.
- The superstructure of the building will be provided by Timberpeg. This precision cut, historically correct, post and beam frame is made of planed fir that is harvested from sustainable forests receiving the FSC (Forest Stewardship Council) designation. Timberpeg has been a leader in energy efficient design and pre-cut construction for the past twenty-five years. Since all of the materials are pre-cut and assembled at the factory, there is virtually no on-site waste. The small amount of waste materials is utilized for fuel and animal bedding. For more details go to www.timberpeg.com
- The post and beam frame is then wrapped in one of the most efficient thermal insulation envelopes available. Structural Insulated Panels (SIPS) will be applied to the outside of the post and beam frame and serve as actual structure where there is no wooden frame. These panels provide for maximum R-value with absolutely minimum air infiltration. The entire house is literally "wrapped" in this thermal blanket of insulation with no framing voids typical of conventionally framed homes. The use of these panels allows for accurate and predictable thermal and infiltration data which

enables precise sizing of heating and cooling equipment. For more information on structural insulated panel construction, go to www.sips.org

- Exterior siding and trim materials will be Western Red Cedar. This material is not only beautiful, but very durable. All of the forests supplying the cedar are managed by the Canadian Standards Association; materials will be carefully utilized to minimize waste. Wood products generally have a positive life cycle while creating the architectural significance only natural materials can provide. Roof shingles will also be made of Western Red Cedar and are harvested from blow downs in forests or cut from shorter length stock.
- The windows and French Doors will be provided by the Eagle Window Company. These windows will have very low U-values (insulation values) and low infiltration rates. They are graded by the National Fenestration Rating Council and meet all NAHB guideline requirements. They are constructed of fir grown from forests managed and certified according to standards set by the Sustainable Forestry Initiative and match the fir post and beam frame. The windows are clad on the exterior with aluminum that is made from a significant percentage of recycled material. These windows can be seen at www.eaglewindows.com.
- The mechanical systems will include high efficiency boilers and high SEER rated cooling equipment. Selected equipment will have the Energy Star label. All duct runs will be carefully planned and thoroughly sealed and insulated to minimize leakage. The sizing of the heating and cooling equipment will be calibrated to the exact load requirements for the homes. An optional geothermal ground source heat pump system will be offered. This system draws the latent energy in the earth for efficient heating and cooling – with all equipment inside of the thermal envelope.
- The domestic plumbing system will provide for a potable water distribution and manifold system utilizing cross-linked polyethylene pipe. This piping system allows for uninterrupted runs which add to efficiency and durability. All of the plumbing fixtures will be by Kohler. Toilets will be from the US EPA WaterSense line; faucets and shower heads will be designed for water conservation. The hot water heaters will be either high-efficiency gas hot water heaters or “demand” water heaters which provide limitless water with no constant storage loss. To see fixtures go to www.Kohler.com
- The electrical system distribution will be designed to minimize runs to save materials. All lighting fixtures will be inside of the thermal envelope. Fixtures will be Energy Star labeled where possible. Heat Recovery Ventilators will be utilized to provide a continuous source of exterior fresh air while not losing the energy imbedded in the exchange air. Lights in secondary bathrooms will be controlled by motion sensors.
- Appliances (washer, dryer, refrigerator and dishwasher) will all have Energy Star rating. Professional gas ranges are currently not rated by Energy Star.
- The interior walls will be covered with “paperless” gypsum wallboard to minimize possibility of mold.
- Interior trim will be clear fir from sustainable sources.
- Interior doors will be made of either recycled materials (molded doors) or sustainable fir veneers over resource efficient structural cores.
- Wood floors will be reclaimed flooring from local sources or indigenous, locally harvested and sustainable oak. Floor sealing will utilize low VOC (volatile organic compounds), water-borne finishes.

- Tile will be from natural materials or recycled glass. The adhesives and grouts will have low VOC content.
- Kitchen, bathroom and built-in cabinetry will be certified under the Kitchen Cabinet Manufacturers Association Environmental Stewardship Program.
- Countertops will be granite or marble supplied from regional sources.
- Interior paints, caulking and adhesives will have low VOC or Zero VOC ratings.
- All construction waste will be managed; cardboard, metal, plastic and aluminum will be recycled.
- A detailed owner's manual will be provided outlining the building's goals and strategies and owner impact on energy consumption and costs of operation. A detailed walk through will be conducted and instruction on all mechanical systems including thermostats, lighting controls and fan controls. A comprehensive land protection and use plan will be provided by the Club Naturalist who will personally instruct owners on t wildlife habitat and management.

WHAT ARE THE BENEFITS OF LIVING IN THE GREEN NEIGHBORHOOD?

A respect for the land, pride of place, and the feeling of being part of the global climate change solution is a significant benefit that can't be underestimated. Living in a home that is constructed of materials that are not only beautiful, but durable, and environmentally responsible just makes good sense. Being enveloped in an interior environment that features a host of natural building materials carefully selected for their health and wellness benefits by one of America's premier interior designers is a unique aspect of these green homes. Additionally, the reduction of energy, water and resource consumption, coupled with peek performing mechanical systems will result in lower operating and maintenance costs. All of these factors, combined with the established eloquence that is The Greenbrier Sporting Club, add up to make this an informed, responsible ownership decision.