Sweet Air Park, home of Jacksonville Recreation Center and Jacksonville Senior Center, serves all ages, with a playground, school-age recreation programs, and offerings for senior citizens. Plus, this is a LEED® Certified facility, bringing green building to all ages as well. How is it green? From every angle!

**outside**

Part of green design involves limiting a building’s impact on the surrounding ecosystems. This includes managing stormwater runoff so that developments, such as buildings and parking lots, don’t adversely affect adjacent properties and water systems. Here, there is a stormwater management pond that stores rainwater and releases it slowly to prevent erosion and damage downstream.

At Sweet Air Park, over one million square feet, or 83% of the project, remains as open space. This provides habitat for a variety of vegetation and refuge for local wildlife. Open space also connects the outdoors with the people using the Recreation and Senior Centers, pavilions, playground, fields, and walking trail.

Just as we try to avoid polluting the land, water, and air, we want to avoid polluting the night sky. Reducing light pollution minimizes the impact of light on nocturnal wildlife and migrating birds as well as neighbors. Lighting outside and inside the building has been designed to limit the light trespassing onto adjacent roads and communities; so, the stars can shine through.

**under ground**

At Sweet Air Park, less water is being used, both outside and inside. Outdoors, there is no irrigation of the landscaping and fields. Trees, shrubs, and plants are native or adapted species that flourish in local conditions, needing minimal care.

Indoors, ultra-low flow lavatory faucets with automatic sensors, low flow urinals, and dual flush water closets have been installed, reducing water use by an estimated 42%.

**up above**

From up above, you can see that the roofs of the Recreation and Senior Centers and the storage building are white and the roofs of the pavilions are a light green. Lighter colored roofs are more reflective and stay cooler in the summer, so the Recreation and Senior Centers require less air conditioning. A reflective roof also reduces the “heat island effect;” the building doesn’t hold as much heat, so the air temperature around the building is lower, slowing air pollution caused by higher temperatures.

**in the air**

Reducing pollutants inside buildings leads to healthier and more comfortable occupants and users. The easiest way to reduce indoor pollutants is to not bring them in. Paints, adhesives, carpet, and wood products used in this building have zero or low levels of volatile organic chemicals (VOCs) that could off-gas and irritate occupants. To help maintain a healthy indoor environment, permanent mats have been installed at entrances to capture dirt and particles.

During construction, mechanical equipment was protected from dust and chemicals, with ducts sealed and filters being replaced, so there would not be contaminants in the air when the systems started. Also, the
building's air conditioning systems use refrigerants that do not contain CFCs (chlorofluorocarbons), which damage the ozone layer and increase ultraviolet (UV) radiation.

Both the Recreation and Senior Centers are being cleaned with non-toxic, biodegradable, non-petroleum-based products approved by Green Seal®, and even these products are stored in separately ventilated rooms. Paper products, such as toilet tissue and hand towels, are made of 100% recycled paper. This “green housekeeping” reduces exposure of building users and maintenance personnel to chemical contaminants that could adversely impact air quality and the environment; as well, it limits the environmental impact of cleaners and disposable products.

No smoking is allowed inside the building or within twenty-five feet of entrances, avoiding the health risks of secondhand smoke and contamination of indoor air and surfaces.

in the wires and pipes

Within the electric wires and gas pipes here, there should be fewer electrons and less propane flowing. This facility has been designed to exceed the ASHRAE (American Society of Heating, Refrigeration, and Air-Conditioning Engineers) national design standard for building energy performance. The energy cost saving at this building is estimated to be 18.4%. Not only will less energy be used, but the environmental impact of producing and utilizing electricity and propane will be reduced.

behind the walls, above the ceiling, and under the floor

All building materials, whether seen or hidden behind walls and above ceilings, come from raw materials that had to be extracted, processed, and transported to this site to be used, and there are energy and pollution costs associated with creating and moving these materials.

To reduce the environmental costs of construction, 15 percent of the materials used in this project were recycled, such as paving, concrete, the steel building, metal roofing, and window frames. Even items like the ceiling tiles and drywall have recycled content. Asphalt, concrete, steel framing, and drywall were extracted and manufactured within 500 miles of Sweet Air Park, yielding 40 percent of regionally-produced materials.

Various energy saving measures are used in this building. Commercial kitchen appliances that meet or exceed Energy Star standards have been installed. Occupancy sensors have been provided throughout the building; when the sensors register no activity in these spaces, showing that they are unused, lights will switch off automatically to save energy. Controls have been installed on the mechanical equipment to manage the amount of outside air entering the building, reducing the heating and cooling needed.

Another responsible way to conserve resources is to recycle construction waste. Many construction materials, including concrete, asphalt, metals, drywall, wood, and paper, can be recycled, reducing the demand for new materials and the energy to produce them. Recycling also reduces the amount of debris sent to landfills. During construction of the Jacksonville Recreation and Senior Centers, over 96 percent of the waste was recycled, diverting 287 tons from area landfills.

And the conservation doesn't stop with construction. There are bins in both centers where building users can deposit materials that are recyclable in Baltimore County, including paper, metal, glass, and plastics, so our green building can stay green.

So, whatever your age, come to Jacksonville Recreation Center and Jacksonville Senior Center at Sweet Air Park, where you can enjoy being green from every angle!

Building Design-Build Team
General Contractor: North Point Builders
Architect: Sanders Designs
Mechanical/Electrical Engineer: Kibart, Inc.
LEED Consultant: Right Way Environmental

Siteream Team
Civil Engineer: Site Resources, Inc.
Site Electrical Engineer: Spears/Votta Assoc.
General Contractor: Dixie Construction

Agencies
Baltimore County Executive and the Baltimore County Council
Baltimore County Departments of Public Works, Recreation and Parks, and Aging Maryland DNR Program Open Space