

SUSTAINABLE DESIGN



WOODLAWN FIRE STATION #24 Woodlawn, VA



NORFOLK FIRE STATION #11 Norfolk, VA



HENRICO COUNTY FIREHOUSE #19 Henrico, VA
Gold Commonwealth of Virginia Community Champion 2020

SUSTAINABLE DESIGN

STRENGTHENING COMMUNITY

Taking the long view not only makes good financial sense, it aligns with the imperatives of a resilient fire service delivery model. A sustainable Firehouse should live through generations of firefighters and more than 50 years of heavy use. It should be durable, adaptable, and expandable. It should align with the social context of it's community as naturally as it does with the environmental conditions of it's site. A sustainable Firehouse becomes a cornerstone of it's community and a symbol of strength, safety, and joy to all who rely on it.

60+
SUSTAINABLE PROJECTS
COMPLETED NATIONWIDE

198
TOTAL DESIGN AWARDS

300+
GOVERNMENT PROJECTS
NATIONWIDE

SITE PLANNING

Sustainable site planning reaches beyond the boundaries of the project to exemplify the values of the neighborhood, integrate with the local microclimate, orient to advantageous solar and wind angles, and cooperate with existing stormwater flows. It includes the design of apparatus aprons that will last the lifespan of the building, low-maintenance and native landscaping, protecting views to nature from the interior of the station, functional outdoor living space, and gardening opportunities for fresh produce.

ENERGY CONSERVATION

Energy use is a key factor in the design of our stations, and their 24/7/365 occupancy makes them a smart target for energy conservation dollars. This starts with not oversizing the building. Passive solar principles, self-shading, natural ventilation, and daylighting can all reduce energy demands while increasing firefighter health and well-being. The efficiency of mechanical systems, water heating, lighting, and the building envelope is maximized through the use of advanced modeling software and lifecycle cost analysis.

BUILDING MATERIALS

Building material choices must consider the extensive impacts that resource extraction, processing/ manufacturing, and transportation to the job site have on our environment. Environmentally preferable building materials are non-toxic, highly-durable, and easy to maintain. This aligns with the fire service industry's focus on resilience as well as the critical need for cleanability. Within the parameters of cost, performance, and aesthetics, careful selection can be long-lasting, promote health, and enliven the space to build camaraderie and morale.



ROCHESTER FS #2 Rochester, MN



SPRINGFIELD FIRE STATION #4 Springfield, MO



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We are the fire department, we don't build buildings. We have some ideas, but we don't even know what is available. The nice thing about the process that we had with BKV Group was our ability to describe outcomes that we were looking for and then the expertise from BKV Group that provided us this wonderful building.

ERIC KERSKA

*Fire Chief of Rochester
City of Rochester, MN
Rochester Fire Station #2*

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BKV Group finished up Fire Station #2 in Rochester, MN. It was a very challenging project with site issues and property acquisition issues. We had a tight budget and they were able to bring it in on time and on budget. [BKV Group] was just fantastic on how they collaborated with the department and my fire group. I was so impressed with the project that when I retired from the Rochester Fire Department, I went to go work for BKV Group.

GREG "G.K." MARTIN

*Fire Service Operations Expert
Retired Fire Chief of Rochester
City of Rochester, MN
Rochester Fire Station #2*

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Through all of the projects, I must say that BKV Group stands out by having demonstrated their professional approach and showing flexibility to adjust the project schedule and program changes in support of our goals.

ED BASS

*Senior Project Manager
Henrico County: Short Pump firehouse 19*

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Short Pump Firehouse 19 uses half the annual energy of the average of our other stations.

CHUCK PHAN

*Project Manager
Henrico County's*

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