

BARD HIGH SCHOOL EARLY COLLEGE

A "Place to Think"

BARD DC
HIGH SCHOOL EARLY COLLEGE

1351



A PLACE TO THINK

ADDING A STORY CREATING A DESTINATION ON THE ROOF, THE MEDICENTER CAPTURES VIEWS ACROSS THE CITY

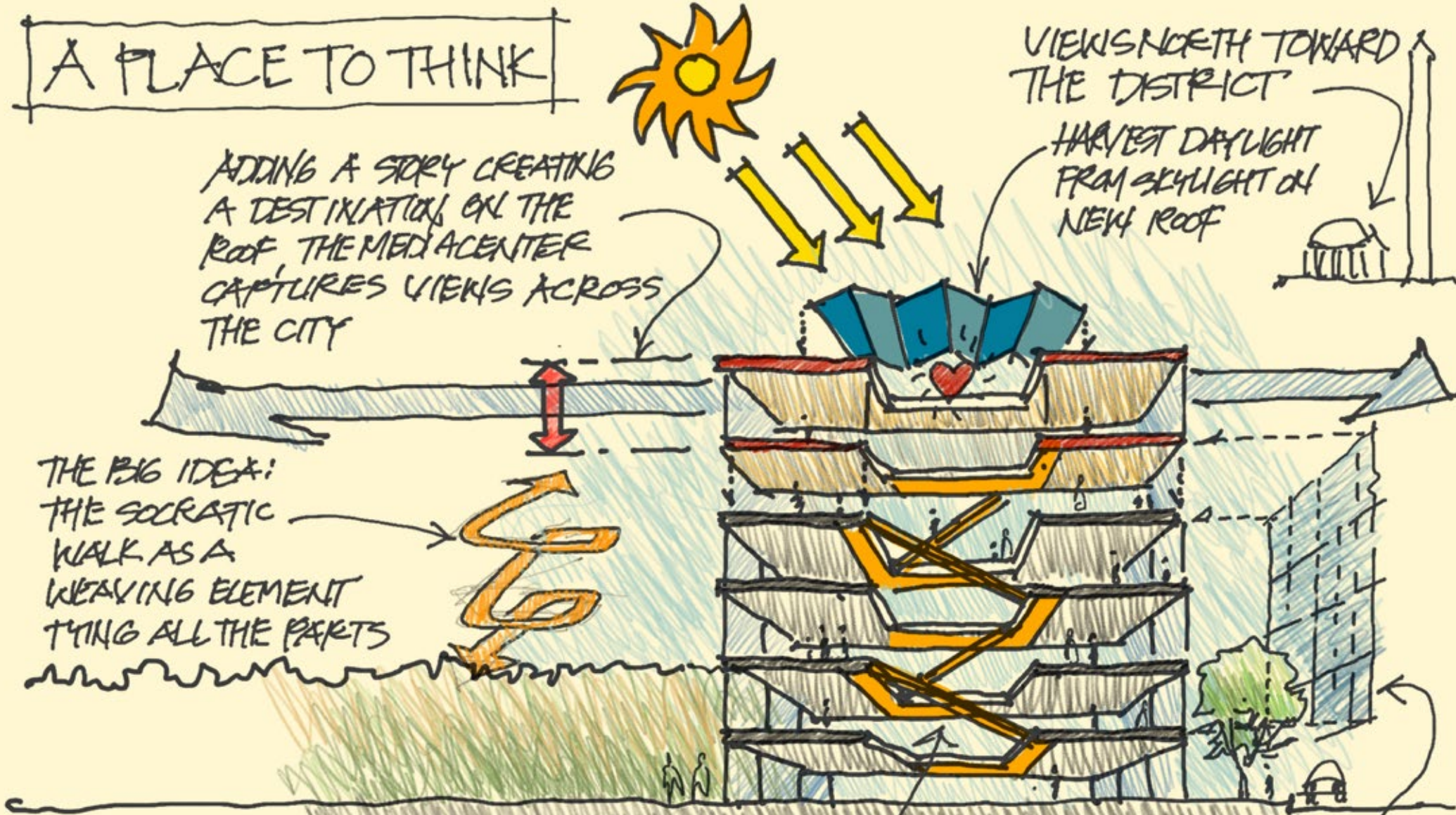
VIEWS NORTH TOWARD THE DISTRICT

HARVEST DAYLIGHT FROM SKYLIGHT ON NEW ROOF

THE BIG IDEA: THE SOCRATIC WALK AS A WEAVING ELEMENT TYING ALL THE PARTS

THE SOCRATIC WALK CLIMBS THROUGH ATRIUM SPACE

POSSIBILITY OF ENVELOPE REPLACEMENT, A CIVIC PRESENCE ON ALABAMA ST



Concept Sketch: A multi-level atrium is designed to bring in daylight from above and create an intuitive circulation system - dubbed the "Socratic Walk."

Executive Summary

Inspired by the philosophy of a diverse “learning landscape,” the Bard High School Early College comprises an array of innovative indoor and outdoor spaces that support a range of activities and connect literally and metaphorically to Bard’s mission and vision.

The modernization of the 108,200 square foot Bard High School Early College (BHSEC), situated at the historic Malcolm X Elementary School site, is an emblem of educational and high-performance learning environment design achievement. This project aimed to create an innovative facility that would not only uphold Bard DC’s impressive record of a 98.4 percent graduation rate and an 82.4 percent Associate degree attainment rate, but also enhance it.

Working with the District of Columbia Public Schools (DCPS), the District of Columbia Department of General Services (DGS), and the Bard High School Early College DC community of students, parents, teachers, and administrators on this project, our goal for the Bard High School Early College modernization project was to provide a cutting-edge facility that promotes the intellectual challenges of a college education and facilitates academic excellence. The design strived to provide spaces that complement the school’s educational and cultural goals, and to create a 21st-Century school that fosters the next generation of environmental stewards.

Our competition-winning design created innovative academies to support ideas in teaching and learning, invited community use, and established new standards for sustainable urban school design. Bard exemplifies how Net Zero Energy can be achieved with existing facilities, proving that small, impactful strategies can result in high-performing buildings.

As stated by Principal Vanessa T. Anderson, PhD, “Bard’s motto is ‘A place to think.’ It is a place where students’ ideas are taken seriously and where they are expected to be serious about their ideas... The experience is rigorous and difficult... our expectations are high, but so is the level of support that we are prepared to provide.”

Scope of Work and Budget

Scope of Work

Bard High School Early College DC established its permanent home in the former Malcolm X Elementary School in Washington, DC, a 1960s building originally designed with very “defensive,” brutalist-style architecture. The 108,200 square foot facility underwent a full modernization in two phases. The existing structure featured a 4-story classroom wing and a one-story multipurpose wing, with limited windows and deep floor plates, posing a challenge for natural lighting.

The Design/Build delivery method fostered collaboration, allowing early investigations to inform cost-effective decisions. For example, replacing the poor-quality exterior with a high-performing skin increased glazing, enhancing natural light—a proven factor in improved learning outcomes. The design incorporated a Socratic walk, symbolized by monumental stairs around a new skylit floor opening, with interior colors lightening from the ground up, mirroring the sky.

Phase 1 involved demolishing part of the one-story wing to build a new high school gym and performance space, cutting large openings for skylights, and re-skinning the building with more windows. The basic layout of the 4-story wing remained, with a central core housing the elevator and essential support spaces. The renovated 4-story wing, gym, and MDF rooms allowed the school to move in and use the building while Phase 2 completed additional classrooms and site improvements, including an athletic field, parking, and a basketball court.

Budget

The project was delivered on-time and on-budget. The final approved GMP was \$81,890,593 (including FF&E, public art installations, permits, design and preconstruction fees, and Owner contingency). Total hard cost of construction was \$61,585,274.



School & Community Research and Engagement

Derived from our Visioning and Community Engagement process with a focus on civic presence, community connectivity, and student experience, we used Design Principles to guide the educational vision and goals of the school.

The programming requirements were developed with extensive input from school faculty, students, and community members who actively participated in various design and research stages. This collaborative approach ensured that the final design was a true reflection of the needs and aspirations of its users.

Community

BHSEC is located in southwest DC, in an area included in the original Barry Farm development. Following the Civil War, the Freedman's Bureau bought the Barry Farm estate, located on the western bank of the Anacostia, to provide opportunities for new black residents and recently freed slaves. This community worked to clear the land for new homes and fields. They also worked over several generations to bring equitable schooling to the community for their children. In 1972, the Alabama Avenue Elementary School, later renamed Malcom X Elementary, was built. This building would become the home for BHSEC. The area was growing and becoming a new hub of Arts and cultural development. In 2000, WMATA's Congress Height Metrorail station opened. The community has traditionally revolved around the school building. Today, lower density apartment buildings and single-family residences border the site. When the elementary school closed, the site became the Malcolm X Opportunity Center, containing non-profit and parks and recreation offices.

The site continued to serve the neighborhood. Basketball courts, playing fields, and other site amenities such as playground equipment, horseshoe pits, picnic benches, and barbeque pits were located to the south of the building. The community had become accustomed to being able to freely access the site and to traverse it for convenient access to the metro. As a new public high school, controlled access was required for student safety but there was also a community desire to include some north-south access for ease of getting to the Metro. The team provided options for DCPS to be able to also provide community access to the playing fields during after school hours and/or on weekends.

Stakeholders

Through an integrated design-build approach, the project team was guided by principles co-created with faculty, administrators, and stakeholders. At every stage of the process, the team presented to and gathered feedback from a School Improvement Team (SIT) comprised of school leadership, staff, teachers, community members, parents, and students. The community has also been involved in the public art process, choosing local and international artists to create art representing the school, its history, and its academic and cultural values. Post-completion, regular meetings and collaboration have nurtured lasting relationships with the client and occupants, driving continuous improvement and learning.

Various stakeholders included:

- DC Public Schools
- Bard College
- Office of the Deputy Mayor for Planning & Economic Development (DMPED)
- Parents and students
- The Congress Park Neighborhood residents
- Washington Metropolitan Area Transit Authority (WMATA)



Challenges

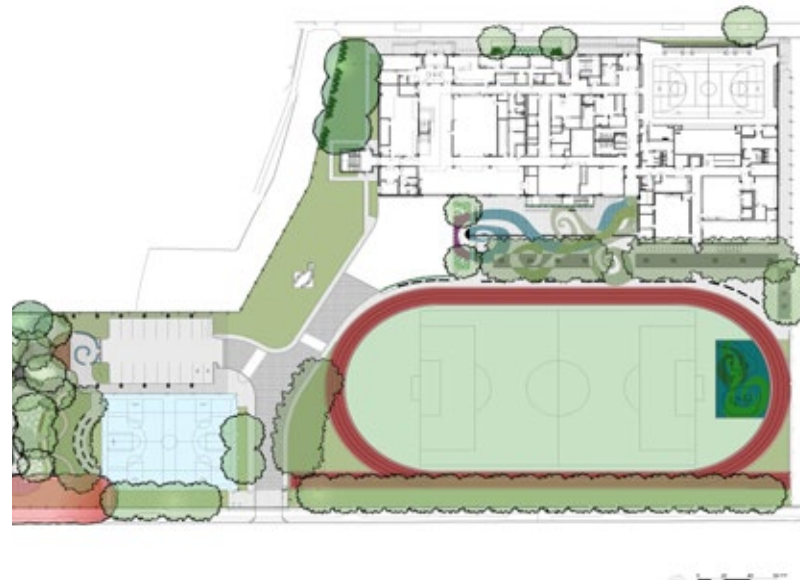
The team was challenged by the constraints of the existing site due to the location of the Metro tunnel running under the southwest corner of the site. WMATA requirements dictated how close and deep the school could be built above the tunnel. Crucial to the process was the need for extensive coordination with WMATA and their engineer team throughout the design process.

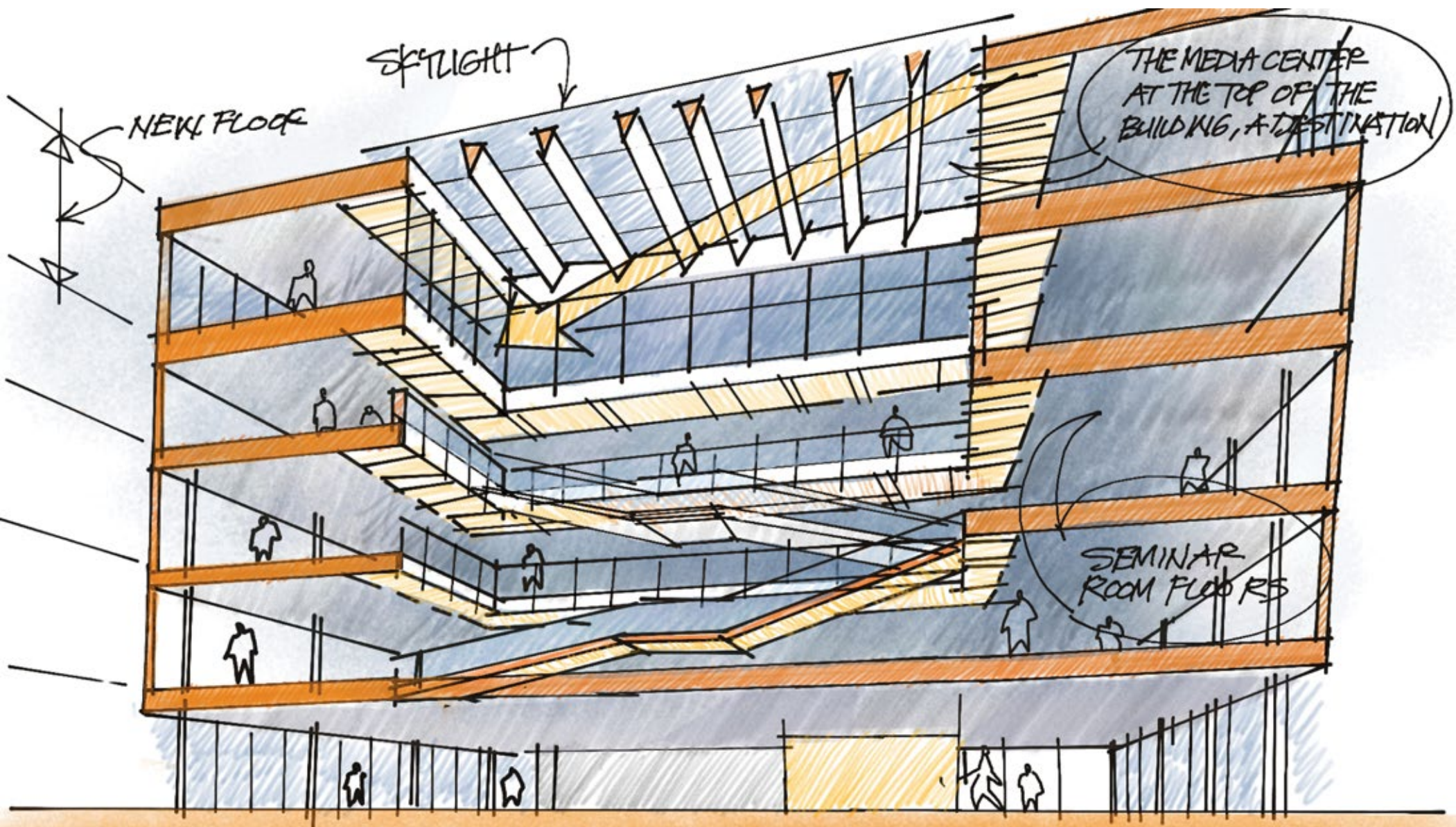
Additionally, the Office of the Deputy Mayor for Planning & Economic Development (DMPED) planned to subdivide the site in order to develop the northeast corner as an affordable multi-housing complex. The concept plans for the apartment building required easements to be implemented, affecting some of the fire ratings and, subsequently, the exterior wall design along that side of the site.

Adding to the issue of site constraints, our team was challenged by an existing four-story building with a subpar envelope and limited access to daylight.

Available Assets

Given its urban nature, the proximity of the site provides convenient access to many community amenities. For example, the Metro station is only a block away, allowing a means for close and safe transportation to and from Bard's campus. In addition, the redevelopment of the nearby Saint Elizabeth's campus creates new retail services (grocery store, restaurants, local businesses), housing, and job training opportunities.





SKYLIGHT

NEW FLOOR

THE MEDIA CENTER AT THE TOP OF THE BUILDING, A DESTINATION

SEMINAR ROOM FLOORS

Visioning Process

Our deep understanding of Bard DC was derived from conversations with faculty and administrators from Bard DC, as well as Bard students from campuses in New York and Baltimore. These conversations inspired us to create the new Bard DC as a diverse “learning landscape,” comprised of an array of innovative indoor and outdoor places that afford a wide range of educational activities that connect literally and metaphorically to Bard’s mission and vision.

To achieve this, we used organizational and design principles to inspire our work. Ten principles were drawn from extensive interaction and conversation with faculty, students, the community, and everyone else with a stake in the success of the project. These design principles became the agreed upon guideposts to help our team realize the school’s vision for a campus that would inspire its students to succeed in the 21st Century. With a focus on civic presence, community connectivity, and student experience, these included:

1. Provide Classrooms that Encourage Student-Led Discussion
2. Create a Healthy, High-Performance Place to Learn
3. Personalize the Environment
4. Embrace Holistic Wellness
5. Support Collaboration throughout the Building
6. Distribute Offices to Encourage Engagement
7. Extend Learning Outdoors
8. Create a “Socratic Walk”
9. Honor the Library as the Heart of the School
10. Inspire and Elevate from the First Impression

These principles are further expanded upon in the Educational Environment section of this dossier.



Value of Process and Project to Community at Large

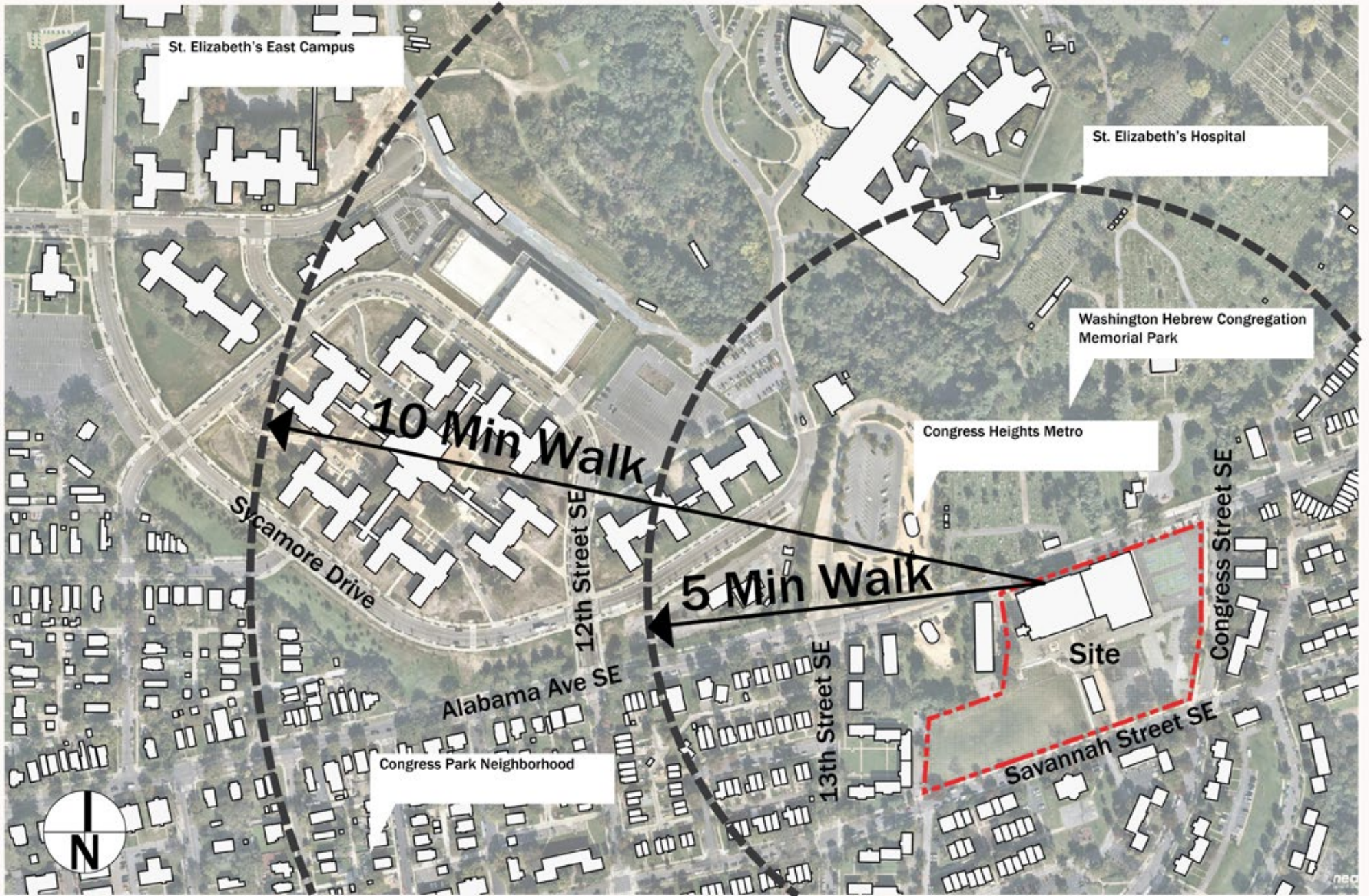
Bard High School Early College DC is not just an educational institution but a beacon of sustainable urban design that fosters community engagement and unity. The school's facilities have been designed with shared use in mind, incorporating after-hour programs which encourage public access and usage. Spaces like the gymnasium, stage, outdoor playground, running tracks and basketball courts are shared with the school and its neighborhood.

Engagement Fostering Diversity, Equity, and Inclusion

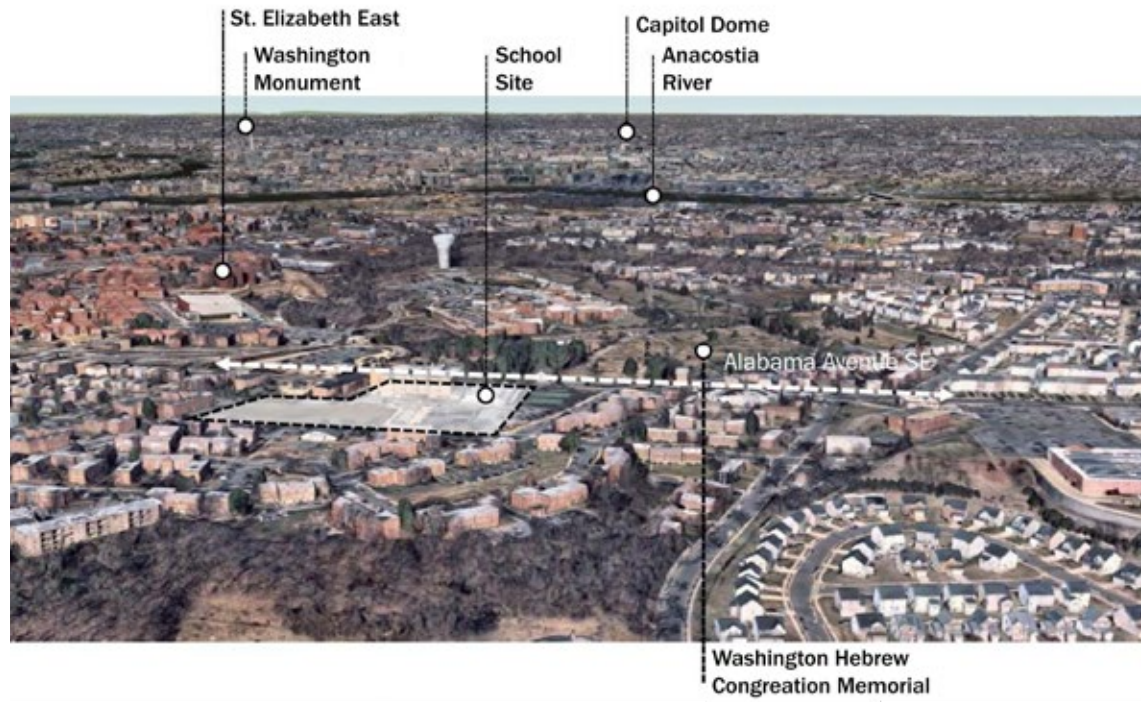
The opening of Bard High School provides a 21st-century high school and early college opportunity to DC's Ward 8, which has traditionally been underserved. The project was designed to adapt to changing environmental, social, and health concerns in the short and long term. The school empowers users to understand and participate in improving the school's performance. Most importantly, the team considered the design at all scales and prioritized positively impacting people, communities, and the planet.







Physical Environment



Bard DC showcases a unique blend of sustainable design, academic excellence, and community engagement. It is a testament to our commitment to creating educational spaces that are not just buildings but catalysts for learning and growth.

Site Context

Bard High School Early College is located at 1351 Alabama Avenue SE, on the site of the former Malcolm X Elementary School property. The property, owned by the District of Columbia, is located in the Congress Height neighborhood in Ward 8 and is zoned as RA-1. It is bounded by Savannah Street SE to the south, 13th Street SE to the west, Alabama Avenue SE to the north, and Congress Street SE to the east.

Fitting within the Larger Context of the Community

The design of the building was instrumental in creating an environment conducive to this unique academic model. The former Malcolm X Elementary School site, one of the tallest structures in its neighborhood, had to harmonize with the predominantly small-scale residential buildings along Savannah Street. Thus, the athletic field and outdoor spaces were strategically designed to serve as a transition zone between

the towering structures along Alabama Avenue and the quaint Savannah Street buildings.

Views to the building from Alabama Avenue offered great opportunities to create a notable and noble “civic presence” for Bard DC. The expansive southern frontage positively engages and enhances the community. The building offers beautiful and sweeping views to the north across the city to DC’s Monumental Core. Congress Heights offers visual connectivity to downtown DC. According to the Washington Post, “The neighborhood’s panoramic views, wide-open green spaces, and affordable housing have long attracted residents to the area.” While the addition of new amenities is a benefit for Ward 8, gentrification is an ongoing concern. Organizations such as the Congress Heights Arts and Cultural Center strive to maintain the vibrant culture of Wards 7 and 8 for generations to come.

How the School Inspires and Motivates

Bard High School Early College DC’s innovative learning environment is designed to promote lifelong learning. The flexible classroom layouts adapt to varied teaching styles and group sizes, promoting collaborative, equitable education. Sustainable features serve as live educational tools, inspiring students to learn about environmental responsibility. Diverse, accessible outdoor spaces shared with the local community encourage engagement beyond school walls.

This combination of flexibility, sustainability, and community integration meets the immediate educational needs and cultivates curiosity, collaboration, and commitment to sustainability, equipping students with skills and values for lifelong learning.

Innovative Aspects of the Physical Environment

By keeping the structure of the existing building and creating a new envelope, a significant amount of money and resources were saved while enhancing the thermal performance of the building. The new façade includes:

- Enhanced daylighting in instructional spaces as well as the “heart” of the school
- Reduced glare in the instructional spaces
- Enhanced views of the campus and community
- Enhanced thermal comfort
- Resulting in healthier, higher-quality spaces where students and teachers can flourish.

The central core of the building, previously a dark, open-plan space, has been transformed into the heart of the school, featuring “The Socratic Walk,” the school’s primary vertical circulation that embraces the heart and inspires the students about the possibilities present in the program. The daylight-filled heart of the school now offers access to a flexible black box space that opens up to become a forum for the entire school, the library, and a series of discovery commons fostering student collaboration.

Access to daylight was a crucial consideration in the design. Perimeter windows provide views and ample daylight. However, there was also the need for alternate means of daylight harvesting to supplement the existing windows, ensuring every program element placed even at the geometric center of the plan has neutralized access to daylight.





Environment Fostering Diversity, Equity, and Inclusion

Our team believes that the physical environment can significantly influence student success. We considered Bard's inclusive learning outcomes and teaching methods and used these principles to shape the building program and exterior spaces. Classroom layouts were designed to promote collaborative learning, with flexible arrangements that can be adapted to different teaching styles.

The creation of diverse accessible outdoor spaces was also an important focus. These include athletic fields and quiet areas for study or relaxation.

The school's design also incorporates features that reduce its environmental impact and serve as teaching tools, inspiring students to learn about sustainability and take action in their lives.

Environment Fostering Sustainability and Wellness

Sustainability was a core principle that guided the design process. Our team designed energy-efficient building systems, a high-performance building envelope, and materials sourced for their low environmental impact to reduce the school's carbon footprint. Natural light was maximized through strategic window placement, reducing the need for artificial lighting and contributing to energy conservation.

Water efficiency was another key consideration. Landscaping was designed with native plants requiring minimal irrigation, and rainwater harvesting systems were integrated to meet non-potable water needs.

The building's performance is monitored continuously to ensure optimal operation of systems and identify improvement areas. This commitment to ongoing performance evaluation underscores the school's dedication to sustainability.

The building offers beautiful views to the north across the city to DC's Monumental Core, enhancing the community's aesthetic appeal. It respects existing use patterns, like neighbors accessing the Metro station by walking across the site.

Bard High School Early College DC sets a new precedent for sustainable design in existing educational facilities. It demonstrates how existing school buildings can be designed to minimize environmental impact while maximizing community benefit. It reinforces our team's belief that our built environment should be sustainable, inclusive, and beneficial to all.



Educational Environment

As Bard College President Leon Botstien wrote to the Bard High School Early College community about the on-going social justice crisis, “The experience of violence, of social trauma and injustice, deepens our commitment to our work as students and educators. The Bard classroom embodies the ideal that we are all better for each other’s voices and ideas.”

Vision and Goals of the School

Bard High School Early College DC was envisioned as a beacon of advanced education, born from a collaboration between Bard High School Early College and DCPS. This initiative, rooted in the belief that young minds can engage in college-level work at an earlier age, provides a unique educational model. The goal: to establish a tuition-free satellite campus of Bard College, located in New York; offers an innovative approach where students undertake traditional high school courses during their first two years and transition into college-level coursework in their junior and senior years. With an admissions process that eliminates entrance exams, this model aims to provide a more inclusive and seamless path to higher education.

Bard DC’s new campus is a testament to its educational vision and goals, providing a supportive, adaptable, and flexible environment that enhances the learning experience. The design promotes a collegiate ambiance that reflects the students’ motivation and the faculty’s commitment to the Bard mission. From the welcoming front door to the commanding views from the library, every aspect of the campus is tailored to inspire and support the educational journey of Bard students.

Supporting the Curriculum

The environment at Bard DC is meticulously designed to support its unique curriculum. By integrating high school and early college programs, the school provides a comprehensive educational journey that informs, inspires, and lays the foundation for student success over four years. The campus architecture itself becomes part of the educational experience, encouraging movement through spaces that facilitate individual study, small group collaboration, and community engagement. This alignment with the Bard motto, “A place to think,” is evident in the design that fosters dynamic learning environments across the campus.







Supporting Various Learning & Teaching Styles

The design of Bard DC's campus caters to a diversity of learning and teaching styles. The Socratic method, which emphasizes critical thinking through questioning, is physically represented in the "Socratic Walk." This space encourages reflection and deeper understanding, fostering connections between different areas of study and between students of various levels. Additionally, the campus offers both short-term and long-lasting opportunities for personalization, allowing the Bard culture to flourish. Students can make the environment their own, thereby enhancing their engagement and sense of ownership in their educational journey.

Adaptability and Flexibility

Adaptability and flexibility are key features of Bard DC's new campus. The 21st-century learning environment includes dynamic indoor and outdoor spaces that support collaboration, stress reduction, and community-building. The building is designed to leverage every square foot for educational purposes, ensuring that all areas, including the library, promote intellectual freedom and collaborative learning. The library, positioned as the heart of the school, offers a flexible, student-centered space where students from all grades can come together, fostering a cohesive learning community. The design also incorporates elements that improve the indoor environment, such as natural light, thermal comfort, acoustics, and indoor air quality, further supporting student potential.

SPACE	DESCRIPTION	QUANTITY	REQUIRED AREA (SF)	TOTAL (SF)
-BS-1	COPYING STORAGE	1	500	500
-BS-2	CUSTODIAL / OGC OFFICE	2	150	300
-BS-3	TOILET / SHOWUP / LOCKER ROOM	1	150	150
-BS-5	CUSTODIAL CLOSET	13	25	325
-BS-10	OUTDOOR CUSTODIAL EQUIP STORAGE	1	300	300
-BS-11	OFFICE STORAGE AREA	1	500	500
-BS-12	CUSTODIAN'S CUP	1	200	200
-BS-13	CUSTODIAL STORAGE	1	300	300
-BS-14	ENG MEETING SHED	1	200	200
-BS-15	ENG MEETING OFFICE	1	150	150
-BS-16	ENG MEETING STORAGE	1	200	200
-BS-17	RECEIVING AREA	1	150	150
-BS-18	STAFF RESTROOM	1	65	65
-BS-19	PANTRY RESTROOM	1	65	65
-BS-20	TECHNOLOGY STORAGE	3	200	600
TOTAL				3,725

SPACE	DESCRIPTION	QUANTITY	REQUIRED AREA (SF)	TOTAL (SF)
TOTAL	CIRCULATION			82,300

SPACE	DESCRIPTION	QUANTITY	REQUIRED AREA (SF)	TOTAL (SF)
H-1B-1	READING / LEARNING / CIRCULATION	1	2,800	2,800
H-1B-2	MAKERSPACE	1	500	500
H-1B-3	SMALL GROUP / CONFERENCE ROOM	3	380	1,080
H-1B-4	LIBRARY OFFICE / WORKROOM	1	400	400
H-1B-5	STORAGE	1	300	300
H-1B-6	DIVIDED CHAIRING ROOM	0	150	0
TOTAL				5,180

SPACE	DESCRIPTION	QUANTITY	REQUIRED AREA (SF)	TOTAL (SF)
H-VA-1	2D ART LAB	1	1,575	1,575
H-VA-2	3D ART LAB	1	1,875	1,875
H-VA-3	KILN ROOM	1	54	54
H-VA-4	ART STORAGE	2	150	300
TOTAL				3,804

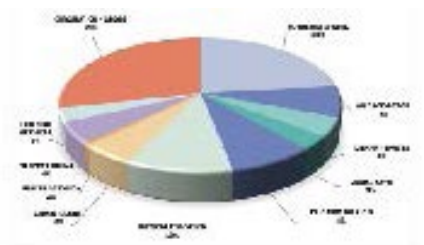
SPACE	DESCRIPTION	QUANTITY	REQUIRED AREA (SF)	TOTAL (SF)
H-A-22	CUTDOOR CLASSROOM	1	0	0
H-A-22	GARDEN	1	0	0
TOTAL				0

SPACE	DESCRIPTION	QUANTITY	REQUIRED AREA (SF)	TOTAL (SF)
H-PE-1	GYMNASIUM	1	4,400	4,400
H-PE-2	OUTDOOR SPORTS FIELD	0	4,400	0
H-PE-3	ATHLETIC CENTER	1	1,400	1,400
H-PE-4	ATHLETIC CENTER - STORAGE	0	4,000	0
H-PE-5	ATHLETIC CENTER - OFFICE	0	200	0
H-PE-6	ATHLETIC CENTER - LOCKER	0	200	0
H-PE-7	TRAINING ROOM	0	200	0
H-PE-8	ATHLETIC CENTER - OFFICE	1	400	400
H-PE-9	ATHLETIC CENTER - OFFICE	1	400	400
H-PE-10	ATHLETIC CENTER - OFFICE	0	100	0
H-PE-11	ATHLETIC CENTER - OFFICE	1	100	100
H-PE-12	ATHLETIC CENTER - OFFICE	1	100	100
H-PE-13	ATHLETIC CENTER - OFFICE	1	100	100
TOTAL				11,800

SPACE	DESCRIPTION	QUANTITY	REQUIRED AREA (SF)	TOTAL (SF)
HAC-2	WELCOME CENTER	1	550	550
HAC-3	SECURITY CENTER	1	75	75
HAC-4	PRINCIPAL'S OFFICE	1	200	200
HAC-5	ADMIN WORKROOM	1	250	250
HAC-6	STORAGE	1	801	801
HAC-7	CONFERENCE RM	1	200	200
HAC-8	TEACHERS ROOM	1	150	150
HAC-9	ADMIN OFFICE	2	150	300
HAC-10	RECEPTION / WAITING AREA	1	880	880
HAC-11	ATTENDANCE / CLERICAL OFFICE	1	150	150
HAC-12	STAFF LOUNGE	1	480	480
HAC-13	WELLNESS / LACTATION ROOM	1	150	150
HAC-14	COUNSELOR RECEPTION	1	60	60
HAC-15	CAREER CENTER	1	850	850
HAC-16	SCHOOL TO CAREER COORDINATOR	1	100	100
HAC-17	COUNSELOR OFFICE	2	100	200
HAC-18	CAREER CENTER STORAGE	1	200	200
HAC-19	CAREER CENTER STORAGE	1	200	200
HAC-20	DAY CARE CENTER	0	2000	0
HAC-21	HABITAT CENTER	1	800	800
HAC-22	OFFICE / CONF RM (5 DOORS)	1	150	150
HAC-23	BLOOD STORAGE	1	50	50
TOTAL				6,080

SPACE	DESCRIPTION	QUANTITY	REQUIRED AREA (SF)	TOTAL (SF)
HHS-1	NURSE OFFICE	1	125	125
HHS-2	WAITING AREA	1	100	100
HHS-3	TREATMENT AREA	1	150	150
HHS-4	OUTS	1	125	125
HHS-5	HS STORAGE	1	25	25
HHS-6	TOILET	1	50	50
TOTAL				625

SPACE	DESCRIPTION	QUANTITY	REQUIRED AREA (SF)	TOTAL (SF)
HFA-1	ART ROOM	1	2,750	2,750
HFA-2	OFFICE	1	2,750	2,750
HFA-3	REHEARSAL / STORAGE	0	20	0
HFA-4	CONTROL ROOM	0	150	0
HFA-5	PRODUCTION	1	200	200
HFA-6	SCENE SHOP	1	400	400
HFA-7	SCENE SHOP STORAGE	1	200	200
HFA-8	MAKEUP/RESSING ROOM	0	300	0
HFA-9	SCENIC PRODUCTION	0	200	0
HFA-10	MS RUNNET / L. REFORM STORAGE	1	1,400	1,400
HFA-11	CONTROL ROOM	1	1,000	1,000
HFA-12	PRODUCTION	1	100	100
HFA-13	MUSIC LIBRARY	1	100	100
HFA-14	MS RUNNET / L. REFORM STORAGE	1	1,000	1,000
HFA-15	REHEARSAL	0	100	0
HFA-16	CONTROL ROOM	1	200	200
HFA-17	PRODUCTION	1	340	340
HFA-18	BLUETOOTH HEATER (OPTIONAL)	1	1,000	1,000
TOTAL				6,860



Educational Specifications

The design team met with DC Public School representatives to discuss the Bard High School Early College educational specifications. DCPS provided feedback on how they envisioned many of the spaces listed in the Education Specifications being used by the Bard community.

The DCPS Educational Specification (Ed Spec) for Bard DC called for a 115,100 SF building to serve a target enrollment of 500 students drawn from all over the city. As an Early College program, Bard's Ed Spec included more of some space types, such as Resource/Small Group rooms, than a comparable comprehensive high school. Using the full space inventory from the Ed Spec, we were able to create a report that explored various building design options and compared the spaces provided to these Ed Spec requirements.

Results of the Project

“With Bard DC... we’re finding new ways to provide our young people with engaging academic experiences that set them up for long-term success.” – Mayor Muriel Bowser

Achieving Educational Goals and Objectives

Everyone and every place on the campus fosters opportunities for Bard’s students, faculty and administrators to engage, discuss and collaborate. The Bard campus provides a diversity of settings to cultivate the passion of administrators, faculties, students and graduates to network and drive to learn and think.

Achieving School District & Community Goals

Since its completion, Bard High School Early College DC has had a transformative impact on both the client and the community. The client, DCPS, now operates a state-of-the-art facility that aligns perfectly with their vision of providing early college education. They have an opportunity to build upon the impressive record of achievement seen across the Bard network, which boasts a graduation rate of 98.4 percent and an Associate’s attainment rate of 82.4 percent.

The school has transcended its role as merely an educational institution for the community. Its facilities, including the athletic field and outdoor spaces, are now shared with the neighborhood, fostering community engagement and unity. Moreover, the school stands as an embodiment of sustainable urban design, setting a new benchmark for other institutions in the district.

Unintended Results and Achievements

Due to the appropriation of a corner of the site by DMPED for their new multi-family housing building, the restrictions/easements created by the metro tunnel under the SW corner of the site, and the request by the school & community to have play fields

that could serve both, a large expansion of the school was not feasible. As such, resources were instead invested in envelope improvements (better thermal performance, better daylight, better civic presence) and in raising the roof of the existing multipurpose room to create a regulation recreation space better suited to the high school. This shift in focus: staying within the existing footprint and on resources that would make the biggest impact on the comfort, wellbeing, and cognitive benefits of its occupants; led to the unexpected outcome of a highly efficient building that requires much less energy for heating, cooling, and lighting. The result is a building that is now producing net zero levels of energy savings.

Value and Good Stewardship of Financial Resources

Bard High School Early College DC exemplifies how educational institutions can revolutionize learning, promote inclusivity, and foster community engagement. It stands as a testament to the belief that young people can excel in college-level work at an early age and provides an environment that nurtures this potential. This project has not only transformed the education landscape but also left an indelible impact on the community it serves.



Sustainability and Wellness Outcomes

Bard High School Early College DC sets a new benchmark for educational facilities by combining sustainable design and building performance strategies to achieve significant energy savings. Committed to Net Zero Energy (NZE) and LEED Platinum goals, the project integrates sustainability at its core through various strategies.

Key design aspects included enhancing natural light and thermal performance to prioritize occupant well-being. Due to the building's large volume and limited windows, spaces needing less daylight, like the Blackbox theater, storage rooms, and restrooms, were centrally located. In contrast, daylight-intensive spaces such as classrooms, the library, and the dining area were placed along the perimeter. A skylight and slab openings for the "Socratic Walk" helped spread daylight to lower levels, achieving 64.7% daylight autonomy with only 3% exceeding glare thresholds.

Indoor air quality was enhanced with high-quality HVAC systems ensuring a constant supply of fresh air. Outdoor learning spaces provided views and a connection to nature. The building envelope was optimized for thermal performance, reducing heating and cooling demands. An all-electric approach, supported by a geothermal well-field system, minimized fossil fuel use and greenhouse gas emissions. A centralized Dedicated Outdoor Air System (DOAS) unit ensured efficient ventilation.

Photovoltaics on the roof and canopy structures generated renewable energy, contributing to the NZE goal. Whole building blower-door testing confirmed the effectiveness of envelope improvements, achieving an airtightness level of 0.139 cfm/sf, surpassing the target of 0.15 cfm/sf.

After one year of operation, Bard High School Early College is performing at an Energy Use Intensity (EUI) of 21.3 kbtu/sf/yr, exceeding initial targets. The design team, along with school leadership, developed educational programs to ensure that teachers, students, and staff operate the building as intended, promoting sustainable practices and high-performance operations.

