ACKNOWLEDGMENTS

Steering Committee

David Faus  Head of School
Chris Fallon  Chief Financial Officer
Kevin Sottak  Head of External Affairs
Susan Kearney  Assistant Head for Academics and Innovation
Dennis Kurgansky  Board of Trustees- President
Sarah Schweizer  Board of Trustees- Chair of Property Committee
Joel Coleman  Upper School Head
Randy Woods  Middle School Head
Bryan Powell  Lower School Head
John Hendricks  Dean of the Arts at the St. Paul’s Schools
Lee Mueller  Director of Ward Center Operations
Paul Bernstorf  Director of Athletics
Dan Taylor  Director of Facilities for the St. Paul’s Schools
<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Executive Summary</td>
</tr>
<tr>
<td>2. Planning Context</td>
</tr>
<tr>
<td>3. Process</td>
</tr>
<tr>
<td>4. Principles</td>
</tr>
<tr>
<td>5. Facilities Analysis</td>
</tr>
<tr>
<td>6. Campus Analysis</td>
</tr>
<tr>
<td>7. Campus Master Plan</td>
</tr>
<tr>
<td>8. Sustainable Campus</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

St. Paul's School (SPS) is a premier independent kindergarten through twelfth grade college-preparatory day school in Brooklandville, Maryland. The 125-acre campus is shared with its sister school, St. Paul's School for Girls (SPSG) and with St. Paul's Plus. St. Paul's School enrollment is approximately 750 students. The School uniquely provides a co-educational lower school experience for kindergarten through fourth grade and an all-boys Middle School (grades 5th-8th) and Upper School (grades 9th-12th). Proximity and coordination between St. Paul's School and St. Paul's School for Girls provides co-educational curriculum offerings and facilities for the Middle and Upper School communities. The International Baccalaureate Program at the Upper School uniquely prepares students for the rigors of college academics.

This campus master plan provides a campus vision for the SPS campus to support many of the strategic plan initiatives. The goals of the strategic plan provide an objective lens to evaluate the analysis, strategies and physical design during the master planning process.

The planning process started in earnest in September 2014 and ended in April 2015. The iterative process included a period of analysis and discussion, which in turn influenced the development of capital project and planning themes. The final campus master plan received approval by the Steering Committee and was approved by the entire Board of Trustees on June 9, 2015.
Planning principles were articulated to guide the development of the master plan. These principles express the values to be embodied in the quality, character and performance of St. Paul’s School development. The master plan should guide the physical development of St. Paul’s School in a way that:

1. Preserves the sense of place.
2. Enables buildings and site improves to foster a visionary learning community.
3. Connects the various places, precincts and academic communities together.
4. Allows for flexible, manageable growth.

These principles were derived from information gathered during the analysis phase of the planning process and illustrate the priorities expressed by many stakeholders.

St. Paul’s School consists of more than 12 academic and support buildings totaling approximately 256,500 gross square feet of floor area, approximately 14 residential homes and approximately 32 acres of athletic fields. The academic core is focused around the Brooklandwood Mansion. The following is a summary of SPS non-residential program:

<table>
<thead>
<tr>
<th>BUILDING</th>
<th>BUILDING AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ward Center</td>
<td>30,462 GSF</td>
</tr>
<tr>
<td>2. Chapel</td>
<td>12,000 GSF</td>
</tr>
<tr>
<td>3. Fisher Hall</td>
<td>13,040 GSF</td>
</tr>
<tr>
<td>4. Ratcliffe Hall</td>
<td>38,150 GSF</td>
</tr>
<tr>
<td>5. Brooklandwood</td>
<td>12,800 GSF</td>
</tr>
<tr>
<td>6. Katherine Smith Hall</td>
<td>40,901 GSF</td>
</tr>
<tr>
<td>7. Middleton Athletic Center (Kinsolving)</td>
<td>75,900 GSF</td>
</tr>
<tr>
<td>8. Laporte Hall</td>
<td>6,874 GSF</td>
</tr>
<tr>
<td>9. Ordeman Hall</td>
<td>3,800 GSF</td>
</tr>
<tr>
<td>10. Chapin Hall</td>
<td>30,028 GSF</td>
</tr>
<tr>
<td>11. Kelly Gymnasium</td>
<td>4,667 GSF</td>
</tr>
<tr>
<td>12. Price House Maintenance Building</td>
<td>6,652 GSF</td>
</tr>
<tr>
<td>13. Stadium</td>
<td>---</td>
</tr>
<tr>
<td>14. Emerson Farm Facilities Building and Yard</td>
<td>1,800 GSF</td>
</tr>
</tbody>
</table>

**TOTAL 256,522 GSF**
### Vision and Master Plan

The vision for the campus builds on the character of the historic Brooklandwood estate. Proposed buildings and open spaces reinforce the north-south axis and respect the expansive views south over Greenspring Valley. New building program maintains the precincts surrounding Brooklandwood mansion. Where possible, St. Paul’s Lane is shifted to the outside of the campus core creating an edge around a compact pedestrian-oriented campus. Buildings and site design will harness the topography to create outdoor rooms, places for learning and socializing. Views and walkways are extended beyond St. Paul’s Lane to strengthen links to SPSG, athletics and learning spaces outside of the academic core.

This master plan focuses on facilities and grounds within the St. Paul’s School property lines. However, the planning process necessarily touched on areas of common interest to both St. Paul’s and St. Paul’s School for Girls, most notably improvements to the Arts facilities, student dining services, and the pathways connecting the two schools. These joint priorities will be addressed through a separate, coordinated study of the Ward Center for the Arts in the summer and fall of 2015 with the understanding that the results of that study may further inform and modify this plan. The following outline describes the priorities and programs proposed for the facilities and grounds at St. Paul’s School:

**IMMEDIATE PRIORITY**

- Upper School (56,000 SF)
  - STEM (25,000 SF) / Humanities (31,000 SF)
  - Loop Road

- Stadium (14,400 SF)
  - Stadium / Fields
  - Seminary Entrance

**FUTURE PRIORITY**

- Nature Center (4,200 SF)

- Future Athletics:
  - Hockey Rink (28,600 SF)
  - Natatorium (14,000 SF)
  - Squash (6 courts, 6,000 SF)

- Lower School Addition (6,000-9,000 SF)

- Multipurpose (6,000-12,000 SF w/ basement)

- Brooklandwood Renovation
A Upper School and Loop Road
The inadequate space and configuration of Ratcliffe Hall and the desire to provide a state-of-the-art STEM facility places the Upper School as the highest priority. The old, piece-meal structure of Ratcliffe Hall limits the opportunity to enlarge or renovate the building to meet current educational needs and building standards. The proposed Upper School (56,000 SF) provides access to Fisher Hall and will continue to anchor the eastern edge of the south lawn. The relocation of St. Paul's Lane to the east of the future Upper School is an opportunity to create a more pedestrian-oriented campus center.

B Stadium and West Seminary Entrance
The second priority includes expanding the stadium complex, transforming Thompson Field into a second turf field and enhancing the sense of arrival from West Seminary Road. Providing shelter for athletes and permanent toilets is necessary for the convenience and safety of athletes and spectators. The expansion of the stadium (14,400 SF) offers the opportunity to provide restrooms, concessions, additional seating, plaza and concourse, team meeting rooms and media rooms. Site improvements may include developing Thompson Field into a turf field. The West Seminary Road entrance improvements may include removing parking from St. Paul's Lane, reorganizing parking lot P-12 to create a landscape buffer along St. Paul's Lane and developing an overflow parking lot.

C Nature Center
The Darrell House site has limited programmatic possibilities; however a nature center (4,200 SF) at this location provides an opportunity to engage students with the forested stream valley. The nature center and related site improvements provides a catalyst opportunity to reinvigorate the ropes course.

D Future Athletic Facilities
The master plan identifies the existing baseball field as an opportunity to expand indoor athletic programs. Potential athletic programs include an ice hockey rink (28,600 SF) or an indoor swimming facility (14,000 SF) with additional squash courts (6,000 SF). This location offers convenient pedestrian access to Middleton Athletic Center and central campus. There is sufficient space to provide additional parking and practice fields and outdoor basketball courts adjacent to this new building. The practice field south of the tennis complex is a buildable area that could accommodate new athletic facilities or a replacement baseball field.

E Lower School Addition
The Lower School addition (6,000-9,000 SF) offers permanent space for displaced language arts classes, relocation for an enlarged music classroom, and a classroom wing for 5th graders. The addition of an elevator would ensure internal accessibility between floors.

F Ordeman Plaza and Multipurpose Building
The Multipurpose Building (6,000 SF-12,000 SF) provides flexible space to support large gatherings, assemblies, indoor recess and events. When Kelly Gym was converted to squash courts the campus lost flexible assembly and recess space. The Multipurpose Building offers an opportunity to create usable open space on a sloping site. The master plan envisions an amphitheater oriented towards the multipurpose building on the east side. Ordeman Hall offers the opportunity to provide swing space for learning or administration functions, however this building could be removed to provide more land area for the Multipurpose Building or other future needs. The location of Price Hall (Maintenance Building) provides an opportunity to locate a hard-court playing area (basketball) or parking.

G Brooklandwood Renovation
Brooklandwood is the symbolic heart of the school as well as the physical center of the school. Renovation and on-going maintenance will ensure the legacy of the Carroll family continues. The renovation should include upgrades to building systems to support staff and visitors. In addition an analysis of space utilization should be performed to better optimize administrative services.

H Student Center, Dining and Consolidated Arts
A coordinated study between SPSG and SPS will address the future of the Ward Center and refine this master plan. At a basic level this master plan tentatively considers a shared student center and expanded dining hall (12,500 SF), space to expand and consolidate the arts (16,000 SF) and walking path between SPS and SPSG.
Proposed Buildings
Existing Buildings

EXECUTIVE SUMMARY
PLANNING CONTEXT
St. Paul’s School is a premier independent kindergarten through twelfth grade college-preparatory day school in Brooklandville, Maryland. The School, rooted in the Episcopal faith and educational traditions, was founded in 1849 at the Old St. Paul’s Episcopal Church in downtown Baltimore. Since its inception, the School has moved multiple times, before locating in 1952 to the current Brooklandwood Campus. The 125-acre campus is shared with its sister school, St. Paul’s School for Girls and with St. Paul’s Plus.

Today St. Paul’s School has approximately 750 students enrolled with the support of 110 faculty members. The School is committed to providing a strong bond between students and faculty, with a 7:1 student to faculty ratio.

The School uniquely provides a co-educational lower school experience for kindergarten through fourth grade and an all-boys Middle School (grades 5th-8th) and Upper School (grades 9th-12th). Proximity and coordination between St. Paul’s School and St. Paul’s School for Girls provides co-educational curriculum offerings and facilities for the Middle and Upper School communities. The International Baccalaureate Program at the Upper School uniquely prepares students for the rigors of college academics.
STRATEGIC PLAN

The St. Paul's Strategic Plan 2014 is the current strategic plan to guide the School forward. The strategic plan is an extension of the school's mission and philosophy and works to guide all school efforts, including its physical development and the master plan. The strategic priorities include academic excellence, coordination, diversity, episcopal tradition, faculty excellence, financial sustainability, governance initiatives.

http://strategicplan.stpaulsschool.org/pillars/academic-excellence

The goals of the strategic plan provide an objective lens to evaluate the analysis, strategies and physical form generated by the master planning process. The master plan provides a campus vision to support many of the strategic plan initiatives. The master plan will need to provide new and renovated facilities to accommodate programs and spaces that foster balanced, lifelong learning to prepare students for the complex changing world. The master plan will identify opportunities to enhance shared facilities, expand and integrate student life experience between the two schools and their divisions. The master plan will seek to create a welcoming and thriving learning community for all people regardless of gender, ethnicity and socio-economic and cultural orientation. In the quest to strengthen the episcopal tradition, physical improvements will seek to elevate the visibility of the Episcopal spirit found in physical forms of the existing chapel, sacred landscapes and communal places as well as facilities that shelter the service learning opportunities. The planning of innovative spaces and facilities will promote faculty members’ ability to excel at their academic mission and encourage their own professional growth and learning. The master plan will assist in identifying strategic investments for infrastructure and facilities across all divisions. The master plan will provide a shared vision to support the implementation of a capital campaign.

PLANNING CONTEXT

The rural Brooklandwood campus is located approximately 10 miles north of Baltimore City. The combined St. Paul's School campuses are bound by Falls Road to the east and north and Greenspring Valley Road to the south. Large-lot residential parcels define the western and southern edge of the campus.

The campus has access from Falls Road, West Seminary Road and Greenspring Valley Road. Falls Road provides direct access to I-83 and I-695 located approximately one mile south of the campus. The ease of access to these routes makes Brooklandwood regionally accessible by car.

Brooklandwood is located at the eastern edge of the Valley Planning Council. The Valley Plan is a planning tool to preserve the rural legacy and character of the Greenspring Valley. The inherit beauty of Brooklandwood campus and landscape is a product of this plan and Baltimore County zoning regulations. However, the same planning tools limit campus growth by prohibiting access to public sewer and restricting campus development within an established development envelope.
The planning process occurred over an eight-month period, starting in earnest September 2014 and ending in April 2015. The iterative process included a period of analysis and discussion, which in turn influenced the development of capital project and planning themes.

The planning consultant team, Hord Coplan Macht, worked closely with the Master Planning Steering Committee, composed of leaders from the School’s administration and some members of the Board of Trustees. Meetings were held on a regular basis, at least once a month, to discuss and resolve design and planning questions.

Hord Coplan Macht reviewed the School’s Strategic Master Plan and other guiding documents to understand the context and policies that influence St. Paul’s growth and form. Throughout the process, the planning team toured the facilities and expansive campus. Existing conditions were documented, analyzed and presented to the Master Planning Steering Committee, Board of Trustees and the St. Paul’s Property Committee.

A series of concept studies were developed prior to the refinement of a final plan. The final master plan received approval by the Steering Committee and was approved by the entire Board of Trustees on June 9, 2015.

Stakeholder interviews were conducted throughout the month of September and October. The interviews included the following stakeholders:

- Planning Steering Committee
- Board of Trustees
- Senior Administration
- Teachers
- Lower School Administration
- Middle School Administration
- Upper School Administration
- Athletics Administration
- Ward Center Administration
- Facilities Management
- Students
- St. Paul’s School for Girls (Administrators and Board members)

During the interview process a survey was conducted to assess stakeholder
INTERVIEW SURVEY

perspectives of the campus’s strengths and weaknesses. The interviewers were asked the following five questions, with a visual summary of their results shown on the next page:

• What is your favorite places on campus? (Best)
  1. The Ward Center (blending of greater St. Paul’s Communities)
  2. The Hill (vistas)
  3. The Chapel (physical reminder of root connection to Old St. Paul’s Church)

• What is your least favorite places on campus? (Worst)
  1. Ratcliffe Hall (overcrowded and outdated)
  2. Distances (vertical and horizontal distance between SPS, SPSG and athletic fields)
  3. Traffic and Parking (pedestrian-vehicular conflicts; lack of parking for events; confusion regarding one-way and two-way traffic flows)

• What places would you preserve (Keep)?
  1. Campus & Open Space Setting
  2. Chapel
  3. Brooklandwood
  4. Lower School
  5. Middle School
  6. Middleton Athletic Center
  7. Ward Center

• What places would you remove (Toss)?
  1. Upper School (Ratcliffe Hall)
  2. Price Hall
  3. Ordeman Hall

• Without concern for cost and constraints what type of places would you add to the campus (Pie-in-the-Sky)?
  1. New Upper School
  2. Stadium with 2nd Turf Field
  3. Improve SPS-SPSG Path
  4. Student Center
  5. Consolidated Arts
  6. Ice Rink
  7. Natatorium

Students completed a similar on-line survey. They used cameras or cellphones to visually
PLANNING PROCESS

BEST

KEEP

WORST

TOSS

PIE-IN-THE-SKY
document their favorite and least favorite places on campus. Their visual responses were emailed to the consultant team.

- What is your favorite places on campus?
  1. Upper School Library
  2. Middle School
  3. The Chapel
  4. Open Space and Vistas

- What is your least favorite places on campus?
  1. Ratcliffe Hall
  2. Ordeman Hall
  3. Parking by the stadium (long walk to school)
LEAST FAVORITE
Planning principles were articulated to guide the development of the master plan. These principles express the values to be embodied in the quality, character and performance of St. Paul’s School development. The master plan should guide the physical development of St. Paul’s School in a way that:

1. Preserves the sense of place.
2. Enables buildings and site improvements to foster a visionary learning community.
3. Connects the various places, precincts and academic communities together.
4. Allows for flexible, manageable growth.

These principles were derived from information gathered during the analysis phase of the planning process and illustrate the priorities expressed by many stakeholders. These principles have influenced the master plan and should provide guidance for future building, site and infrastructure projects.
1. PRESERVATION OF PLACE PRESERVATION
   a. Preserve the historic Brooklandwood estate and Emerson Farm
   b. Reinforce the north-south sequence of open spaces and buildings that define the Brooklandwood campus.
   c. Protect the natural forested stream valleys that frame the greater St. Paul’s campuses.

2. VISIONARY LEARNING COMMUNITY
   a. Create places and spaces to engage and inspire students.
   b. Enrich the mental and physical well-being of campus occupants and foster stewardship for the environment.
   c. Encourage places that support social interaction and collaborative learning outside of the traditional classroom.

3. CONNECTED CAMPUS
   a. Improve the visitation experience and sense of arrival.
   b. Continue to strengthen the visual and physical connections between the two St. Paul’s Schools.
   c. Enhance the visual and physical pedestrian connections between the buildings.

3. FLEXIBLE MANAGEABLE GROWTH
   a. Create a framework plan to allow for changes in priorities.
   b. Develop realistic capital projects that are financially feasible.
   c. Provide incremental implementation strategies, where each phase of growth does not diminish the sense of a complete campus.
GREATER ST. PAUL’S CAMPUS

The greater St. Paul’s campuses include both St. Paul’s School (SPS), St. Paul’s School for Girls (SPSG) and St. Paul’s Plus facilities for a combined total of 125-acres. The greater St. Paul’s campus extends on a north-south axis. The St. Paul’s School for Girls property is located at the center of the campus and separates the St. Paul’s School (boys) academic core from the southern athletic fields. Additionally the Ward Center, a visual and performing arts and dining facility, is located between the SPSG and SPS. This facility is jointly operated by the two schools.

This master plan focused on the St. Paul’s School property and facilities.
1 Ward Center
2 Chapel
3 Fisher Hall
4 Ratcliffe Hall
5 Brooklandwood
6 Katherine Smith Hall
7 Middleton Athletic Facility (Kinsolving)
8 Laporte Hall
9 Ordeman Hall
10 Chapin Hall
11 Kelly Gymnasium
12 Price House (Maintenance Building)
13 Stadium
14 Emerson Farm (Facilities Building & Yard)
15 Darrell House (abandoned)
16 SPSG
17 St. Paul’s Plus
ST. PAUL'S PROGRAM

St. Paul’s School consists of more than 12 academic and support buildings totaling approximately 256,500 gross square feet of floor area, approximately 14 residential homes and approximately 32 acres of athletic fields. The academic core is focused around the Brooklandwood Mansion.

<table>
<thead>
<tr>
<th>BUILDING</th>
<th>BUILDING AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ward Center</td>
<td>30,462 GSF</td>
</tr>
<tr>
<td>2. Chapel</td>
<td>12,000 GSF</td>
</tr>
<tr>
<td>3. Fisher Hall</td>
<td>13,040 GSF</td>
</tr>
<tr>
<td>4. Ratcliffe Hall</td>
<td>38,150 GSF</td>
</tr>
<tr>
<td>5. Brooklandwood</td>
<td>12,800 GSF</td>
</tr>
<tr>
<td>6. Katherine Smith Hall</td>
<td>40,901 GSF</td>
</tr>
<tr>
<td>7. Middleton Athletic Center (Kinsolving)</td>
<td>75,900 GSF</td>
</tr>
<tr>
<td>8. Laporte Hall</td>
<td>6,874 GSF</td>
</tr>
<tr>
<td>9. Ordeman Hall</td>
<td>3,800 GSF</td>
</tr>
<tr>
<td>10. Chapin Hall</td>
<td>30,028 GSF</td>
</tr>
<tr>
<td>11. Kelly Gymnasium</td>
<td>4,667 GSF</td>
</tr>
<tr>
<td>12. Price House Maintenance Building</td>
<td>6,652 GSF</td>
</tr>
<tr>
<td>13. Stadium</td>
<td>---</td>
</tr>
<tr>
<td>14. Emerson Farm Facilities Building and Yard</td>
<td>1,800 GSF</td>
</tr>
<tr>
<td>15. Darrell House (abandoned)</td>
<td>---</td>
</tr>
<tr>
<td>TOTAL</td>
<td>256,522 GSF</td>
</tr>
</tbody>
</table>

GREATER ST. PAUL’S CAMPUS
16. St Paul’s School for Girls (SPSG)
17. St. Paul's Plus
LOWER SCHOOL

The co-ed Lower School enrollment is approximately 195 students between grades pre-K through 4th. The Lower School program is self-contained within the two-story Katherine Smith Hall (40,901 GSF). The building includes a small multipurpose room, dining area without a full kitchen, library / learning center, art and music classrooms as well as science and discovery (problem-based learning lab) rooms.

The building was original the stables for the Brooklandwood estate. The building expanded to the south and east around a central courtyard. Two portable classrooms are located to the east of the Smith Hall and currently house language arts courses.

Smith Hall is well lit, with lots of natural light. The scale of the building is very comfortable for younger students. The historic nature of the building provides a strong aesthetic character, however general maintenance of mechanical systems and structure, such as replacing the multipurpose floor, will require attention.

Smith Hall is not internally accessible between floors. Some of the major program needs include space for a working kitchen, admissions office space, enlarged music space and language arts space (eliminating the mobile classrooms) under a single roof.

Major Needs:
- Accessible building (elevator)
- Full admissions office
- Full working kitchen
- Enlarged music space
1 Ward Center
2 Chapel
3 Fisher Hall
4 Ratcliffe Hall
5 Brooklandwood
6 Katherine Smith Hall
7 Middleton Athletic Facility (Kinsolving)
8 Laporte Hall
9 Ordemian Hall
10 Chapin Hall
11 Kelly Gymnasium
12 Maintenance Building
13 Stadium
14 Emerson Farm (Facilities Building & Yard)
15 Darrell House (abandoned)
16 SPSG
17 St. Paul’s Plus
MIDDLE SCHOOL

The Middle School enrollment is approximately 195 students between the grades of 5th through 8th. The Middle School program is concentrated within Chapin Hall (28,028 GSF), with two classrooms located on the lower level of Ordeman Hall (1,900 GSF). In the past Ordeman Hall was dedicated exclusively for the fifth grade. Woodshop, predominantly a Middle School elective, is located under Kinsolving Gym. Middle School students also use Middleton Athletic Center, Ward Center (dining and arts) and the Chapel.

Chapin Hall was built within the past 10 years. In general this building is well liked. Most classrooms have good proportions and floor area. There are a few classrooms, particularly at the end of the corridor that are small with irregular wall configuration. The flexible walls between lab space and classrooms have evolved to a preferred permanent wall configuration, however acoustics through the flexible wall is problematic.

The library on the upper level is beautiful, with a great visual orientation south overlooking the valley. Similar to many libraries, the space needs related to housing a collection of books has diminished, making the library over-sized for its current function. Digital media has greatly reduced the space need for printed material.

The old Kelly Gymnasium is linked to Chapin hall by an enclosed breezeway. Recently this gymnasium was converted into squash courts. The squash courts are well used and have become a popular campus amenity. However the Middle School lost direct access to indoor recreation and meeting space. Throughout the interview process, many constituents advocated for providing a multipurpose space for the Middle School.

Ordeman Hall is an old and small facility. For such a small structure, the interior circulation is winding and confusing. The building is inaccessible between levels. There is water damage on the interior walls, particularly in the IT closet. The upstairs houses the Bridges program offices.

Major Needs:
- Large multipurpose room (Kelly Replacement)
1 Ward Center
2 Chapel
3 Fisher Hall
4 Ratcliffe Hall
5 Brooklandwood
6 Katherine Smith Hall
7 Middleton Athletic Facility (Kinsolving)
8 Laporte Hall
9 Ordeman Hall
10 Chapin Hall
11 Kelly Gymnasium
12 Maintenance Building
13 Stadium
14 Emerson Farm (Facilities Building & Yard)
15 Darrell House (abandoned)
16 SPSG
17 St. Paul’s Plus
The Upper School enrollment is approximately 360 students between grades 9th through 12th. Upper School classrooms are located predominantly in Ratcliffe Hall (38,150 GSF) and Fischer Hall (13,040 GSF). The existing STEM lab is located in the basement of Kinsolving (832 GSF). Upper School students also use Middleton Athletic Center, Ward Center (dining and arts), the Chapel as well as SPSG facilities.

Fisher Hall, built recently, provides a new library / learning center, advising offices, classroom space and lounge space on two levels. Fisher Hall was well-regarded during the interviews and survey process. Fisher Hall is linked to Ratcliffe Hall by an enclosed corridor. The floor levels between Fisher Hall and Ratcliffe do not align and require internal ramping. The internal ramping consumes valuable floor area within Ratcliffe Hall.

Ratcliffe Hall is a conglomeration of old building additions and renovations. Ratcliffe is narrow building with low floor-to-floor heights. Many classrooms are inadequately sized and proportioned. The corridors are narrow with limited natural light. The lower level science room has water damage. The mechanical systems are old and require regular maintenance attention. The classrooms have high room utilization, indicating that the facility is undersized for the existing Upper School population.

Additional classrooms and lab space were identified as major programmatic needs.
1. Ward Center
2. Chapel
3. Fisher Hall
4. Ratcliffe Hall
5. Brooklandwood
6. Katherine Smith Hall
7. Middleton Athletic Facility (Kinsolving)
8. Laporte Hall
9. Ordeman Hall
10. Chapin Hall
11. Kelly Gymnasium
12. Maintenance Building
13. Stadium
14. Emerson Farm (Facilities Building & Yard)
15. Darrell House (abandoned)
16. SPSG
17. St. Paul’s Plus
ATHLETICS

Indoor athletics and recreation are concentrated within the Middleton Athletic Center (77,403 GSF), which includes the old Kinsolving gym and new addition of Laporte (golf center). The squash courts in Kelly Gymnasium (4,667 GSF) expand the overall athletic program to 82,070 gross square feet. The old Kinsolving gym does not have air conditioning which makes this space uncomfortable on hot days. The center has limited space for lockers for both middle and upper school students, outside coach office and coach locker rooms and storage. Currently there is a design study for expand Kelly Gym for two more squash courts.

Saint Paul School has an abundance of fields for sports. However the fields, with the exception of the baseball diamond, are located a 1/3-3/4 of a mile downhill from the Middleton Athletic Center. The field sports include a turf field, 6 grass fields, 1 softball field, 1 baseball field, and 14 tennis courts (leased by Homeland Racquet Club).

The major needs for athletics include expanding and enhancing the stadium to provide more seating, restroom facilities, team meeting space and concession space. The other major project includes converting the Thompson Field into a turf field to support year-round continuous athletic events both for St. Paul's School and other sporting tournaments. Although not an immediate priority, the master plan identified land for an ice hockey facility or an indoor swimming facility with additional squash courts. Swimming and ice hockey teams lease off-site facilities for practice and matches. This arrangement limits their ability to control their schedule.

Major Needs:
- Stadium with toilets and enclosed space
- Second Turf Field
ARTS & DINING

The Ward Center is a jointly operated facility between SPSG and SPS. The building houses a dining hall and a fully operating kitchen (8,433 GSF) and performing and fine arts program (21,661 GSF). The building located between the girls school and boys campus is a symbol of their collaborative spirit. The building is dynamic as it cascades down the hillside. The dining hall and rotunda have views over the valley, with the theater, music and arts spaces tucked into the hillside.

Since its construction more than 25 years ago, the two schools have outgrown the spaces and functions of the Ward Center. The theater is an intimate space and works well for theater projections, however there is limited back-of-stage spaces. HVAC system improvements have reduced art room space and storage. There is not a designated ceramic space. The choral rooms are not large enough and have poor acoustics.

The arts program is spread throughout both campuses.

- Acting Lab - Laporte Hall
- Graphics Lab - Upper School & SPSG
- Choir - Chapel
- Woodshop - Kinsolving
- Dance - SPSG

The tables and chairs have expanded beyond the walls of the dining hall and into the rotunda space. Additional dining and kitchen space have also been identified as needs for the Ward Center.

Major art needs:
1. Visual Arts
   a. Additional arts room
   b. Ceramic space
   c. Digital arts room
2. Theater
   a. Dressing room
   b. Scene shop
3. Music
   a. 3 appropriately sized choral rooms
   b. 2 instrumental rooms
   c. Additional practice space

Major dining needs:
1. Expanded dining
2. Expanded kitchen / service
1 Ward Center
2 Chapel
3 Fisher Hall
4 Ratcliffe Hall
5 Brooklandwood
6 Katherine Smith Hall
7 Middleton Athletic Facility (Kinsolving)
8 Laporte Hall
9 Ordeman Hall
10 Chapin Hall
11 Kelly Gymnasium
12 Maintenance Building
13 Stadium
14 Emerson Farm (Facilities Building & Yard)
15 Darrell House (abandoned)
16 SPSG
17 St. Paul’s Plus
STUDENT SUPPORT AND SERVICES

Administration & Facilities Management

The central administrative function is located in the historic Brooklandwood Mansion (12,800 GSF) and facility management is located in the Price House Maintenance Building (6,652 GSF).

Brooklandwood provides office space for the Headmaster, Alumni, Admissions, Business and Philanthropy. Brooklandwood has a small conference room. Board of Trustee meetings occur in the Lower School dining room or in the large classroom in Fischer Hall. Brooklandwood does not have a large room for the entire Board. The third floor and many spaces in the basement are not usable other than for storage.

The historic Brooklandwood mansion is an iconic building and well-revered by the campus community. Its historic nature and central location make it difficult to alter and expand the building. Although the building is well maintained and beautiful, the building lacks air conditioning and relies on unsightly and noisy window air conditioning units. The second floor is inaccessible for people with mobility issues.

The Price House (6,652 GSF) is scheduled to be vacated and its functions relocated near the Emerson Farm site. This relocation will free up the Price House and site for other uses.

The Chapel

The Chapel (12,000 GSF), reminiscent of the traditional Episcopal parish church, espouses the spiritual foundation and roots of the St. Paul’s community. The lower level of the church provides offices, classroom and a small choral room. The Chapel location, similar to the Ward Center, sits with high visibility at the edge of the hillside. The main sanctuary has limited capacity and cannot house the entire school, let alone a division.
1 Ward Center
2 Chapel
3 Fisher Hall
4 Ratcliffe Hall
5 Brooklandwood
6 Katherine Smith Hall
7 Middleton Athletic Facility (Kinsolving)
8 Laporte Hall
9 Ordeman Hall
10 Chapin Hall
11 Kelly Gymnasium
12 Maintenance Building
13 Stadium
14 Emerson Farm (Facilities Building & Yard)
15 Darrell House (abandoned)
16 SPSG
17 St. Paul’s Plus
CAMPUS ANALYSIS
BROOKLANDWOOD AXIS

The academic campus surrounding the historic Brooklandwood estate is organized along a north-south axis that runs along a ridge line extending from Falls Road to flag court and memorial bell. This sequence of spaces originates at the Falls Road gatehouses flanking the entrance into the campus. The loosely planted tree-lined and median entry drive approaches Brooklandwood then expands into a drop-off circle. The drop-off loop frames Hamilton Lawn, the forecourt of Brooklandwood Mansion.

Katherine Smith Hall and Middleton Athletic Facility provide architectural edges to either side of this entry sequence. Their main entrances and forecourts are oriented towards this north-south axis.

The north-south axis continues through Brooklandwood Mansion. The sequence passes under the porte-cochere before entering the parlor, hall and onto the rear porch overlooking the southern lawn. The southern lawn is framed on the either side by shade trees and further defined by Chapin Hall on the west and Fisher Hall, Ratcliffe Hall and the Chapel on the east. The memorial bell south of the southern lawn and at the crest of the hilltop terminates this north-south axis. At this point the framed sequence of campus spaces, becomes expansive with views over the Greenspring Valley.

The Ward Center architecturally defines the western edge of the panoramic view from the edge of the hilltop campus.
Contributing Buildings
Open Space
Campus Axis
Vista
BROOKLANDWOOD AXIS

1. FALLS ROAD GATEWAY

2. ENTRANCE MEDIAN

3. HAMILTON LAWN / BROOKLANDWOOD ENTRANCE
4. BROOKLANDWOOD PORCH

5. LOWER BROOKLANDWOOD LAWN / MEMORIAL / HILLSIDE

6. VIEW FROM MEMORIAL / HILLSIDE
In general the academic core of the campus is divided into quarters, surrounding the Brooklandwood Mansion, the administrative and symbolic center of the campus. The Lower School occupies the northeast corner, Athletics occupies the northwest, Middle School occupies the southwest and Upper School occupies the southeast.

The Ward Center, directly south of the Middle School, provides a center for performing and visual arts as well as dining for SPS and SPSG.
The campus is defined by the historic character of the Brooklandwood Mansion (Site Inventory #BA-87), a mansion built in 1793 by Charles Carroll, one of the signers of the Declaration of Independence. The building was placed on the National Register of Historic Places in 1972. The stable (Smith Hall) and Falls Road gatehouses are contributing structures to the historic Brooklandwood estate.

The Brooklandwood Tenant Houses numbers 1, 2 & 3 (Site Inventory # BA 1594, 1595, 1596) have been placed on the National Register of Historic Places and Baltimore County Final Landmarks List (1991). These small but important farmhouses exemplify the early tenant houses in the Greenspring Valley. They are located at the southern end of the Saint Paul School’s campus adjacent Greenspring Valley Road.
FORECOURT SPACE AT MIDDLETON

LOWER SCHOOL PLAY SPACE

ORDEMAN HALL
The academic core, perched on a hilltop, is framed by two forested stream valleys, Dipping Pond Run to the west and Deep Run to the east. These streams ultimately flow to the larger Jones Fall watershed. Large areas of the riparian forests are delineated into protected forest conservation areas. Stream, wetlands and associated buffers are generally located within the forest stands. The southern edge of the academic core is defined by the steeply sloping lawn descending down to SPSG facilities and the athletic fields located in the valley. Within the western forests is the remnants of the Darrell House and an underutilized high-adventure ropes course.

The academic core, a remnant of the historic Brooklandwood estate, is composed of a network of open spaces. The formal spaces align with the dominant north-south axis, including Hamilton Lawn, the upper terrace of the southern lawn, the forecourt plazas or courtyards of the flanking academic buildings and chapel. The reflective garden south of the chapel, the labyrinth and landscape around the old pool house are formal landscape areas located away from the north-south axis.

Each of the divisions are directly connected to a play space or lawn. Play fields, playground, hard courts and an amphitheater are conveniently located to the rear of the Smith Hall (Lower School). The Middle School recreational spaces consist of the lower terrace of the southern lawn, the residual hardscape between Ordeman, Brooklandwood and Chapin Halls and the terraced basketball court west of Ordeman Hall. The residual hardscape is popular for playing wall ball off of windowless masonry west wall of Brooklandwood. The Upper School recreation space is located to the east of the Ratcliffe Hall including the upper terrace with the foundation of the old fountain. The fountain base is used to play four square ball games. The old pool house on the lower terrace is a shady gathering space adjacent the labyrinth. The enclosed, but unconditioned, room at the back of the old pool house is used as the senior’s room.

In between the formal landscapes and recreational spaces are sloping lawns and landscape spaces. Northwest of St. Paul’s Drive and Middleton Athletic Center is the Blenckstone baseball field and an outdoor swimming pool facility. The baseball field has good proximity to Middleton Athletic Center. The lower playing fields are well removed from the active center of campus. The outdoor swimming pool is predominantly inactive throughout the academic calendar.
LANDSCAPE TYPES

OLD POOL HOUSE & PLAZA

SOUTH LAWN
Topography is a defining feature of the greater St. Paul's Campus. The academic core is located on a ridge gently descending along the north-south axis from Falls Road to the flag-court and memorial bell before descending rapidly to the Greenspring Valley. Beyond the developed area of the academic core to the east and west the topography descends quickly into forested stream valleys. There is approximately 122 feet of elevation change from the Tullai Field to the flag-court memorial and 42 feet between Ward Center to SPSG.

This hilltop campus has memorable views over and beyond the Greenspring Valley with glimpses of Towson and Baltimore skylines on the horizon. The distinctive green roofs of the campus buildings perched on the hill are visible from the valley below and as far away as the Baltimore Beltway (I-695).

The topography does present challenges for easy or accessible pedestrian mobility, vehicular circulation and development requiring level ground, such as playing fields.
ENVIRONMENTAL & REGULATORY CONSTRAINTS

Wetland, stream, forest conservation areas and related buffers restrict development activity. These systems are typically located at the periphery of the campus.

Campus development, particularly for buildings, is limited within a maximum building envelope perimeter, as recorded with Baltimore County. In general, this boundary permits flexibility for new buildings within the academic core. However, the boundary excludes land northeast of Ratcliffe Hall and south of the Smith Hall. The Darell House is located outside of the maximum building envelope. Redevelopment of the Darell House Site is limited to an environmental / outdoor center.
CIRCULATION

Vehicular Circulation
The greater St. Paul's campus has two major access points or gateways from Falls Road (Maryland Route 25). The northern Falls Road entrance is well-defined by the historic gatehouses and arcing gateway sign over the entrance road. Structures and trees are located close to the roadway. This creates limited visibility and makes placement of entrance signs difficult. The signal is activated to allow exiting cars priority onto Falls Road. The access drive from this intersection leads directly into the academic core with access to St. Paul's Drive.

The second gateway is at the western terminus of West Seminary Road and Falls Road. This intersection has a regularly sequenced traffic signal intervals. The intersection has adequate roadway width for good site lines. This intersection is anchored on the northwest corner with a low but visible gateway sign wall, welcoming people to the campus. This access point leads directly to the athletic fields, St. Paul's Plus, tennis complex and St. Paul's School for Girls before ascending up the hill to Boy's School academic core.

South Exit Road extends from St. Paul's Drive at St. Paul's Plus to the third and secondary access point at Greenspring Valley Road. It passes through a narrow stone gateway. It is unsignalized and only permits exiting from the campus. A parallel drive east of the historic tenant houses provides ingress only to the campus from Greenspring Valley Road. This combination of intersections provides a secondary, back entrance to campus.

St. Paul's Drive is a one-way loop road around SPS academic core. The loop road separates the Lower School, Upper School and the Chapel from the western portion of the campus. The Lower School and Upper School have a slip-lane for drop off in front of their respective building. The Middle School drop-off is at the rear of Chapin Hall through the parking lot. The one-way loop system provides a rational counterclockwise flow for pick-up and drop-off and provides sufficient stacking space prior to exiting the campus. The loop system limits direct access to facilities, particularly for the Ward Center. Their most convenient parking is behind the Middle School and requires a vehicle to navigate around the entire campus from their drop-off loop.

There are approximately 249 parking spaces near the academic core. In this area parking
lots are generally located to the rear of building. The exceptions to this rule include the Lower School and the Ward Center loading. The Lower School parking lot (Lot P-1) sits to the north and in front of their main building entrance. Parking lot P-7 and the Ward Center loading bays are located directly on the Loop Road. This is a visual distraction from views of the Chapel. Bus parking is located at parking lot P4.

Adjacent to Tullai Field is parking lot P-12 with 96 spaces and two bus bays conveniently in front of the sidewalk entrance to the stadium. This lot provides senior and over-flow parking for the School. This parking area does not have a buffer from St. Paul’s Lane. A proposed parking lot (P-14) is located south of St. Paul’s Plus. It will provide overflow parking for the athletic fields.

In general the parking supply is adequate, although not necessarily convenient for all campus constituents, such as senior parking. Large events, particularly athletic events require additional parking. Currently temporary parking on fields and lawns satisfies event parking demands. This comes at the cost of losing and damaging fields and landscape areas.

Service areas are typically buffered or located to the rear of buildings. However the loading and service area for the Maintenance Building abuts the loop road. Unloading and parked service vehicles are visually unattractive and obstruct typical school circulation. The relocation of maintenance facilities to the Emerson Farm site will eliminate this condition.

**Pedestrian Circulation**

In general the pedestrian sidewalk network in the academic core provides good connection between buildings. The portion of St. Paul’s Lane internal to the academic core creates pedestrian-vehicular conflict points. The Lower School community is self-sufficient. This reduces the frequency of Lower School students crossing the St. Paul’s Lane. The Upper School, the Chapel and Ward Center require students to cross the road. Current crosswalks are stripped and speed humps and tables help slow vehicles. Steep topography and environmental constraints limit the ability to create a full outer loop road around a car-free, pedestrian campus.

The campus has numerous stairs and ramps that traverses the sloping site. In addition curbs limit the amount of fully accessible pathways. The steep hillside leading down to SPSG and athletic fields is not an accessible route.
Pedestrian Circulation
Accessibility Challenges
Vehicular Conflicts
The school is connected to the regional electric, gas, telecommunication and water infrastructure networks. The school does not have public sewer access and relies on septic systems to manage waste water. Large land areas are devoted to existing septic fields, reserve septic fields and associated buffers for septic fields.

The stadium and lower fields do not have restrooms. They rely on free-standing portable toilets. These unattractive portable toilets are located near the West Seminary Road entrance. Available septic fields for stadium plumbing would require pumping sewage up hill to the academic core.
DEVELOPMENT OPPORTUNITIES

Building Opportunities
Base on site and facilities analysis the following locations offer opportunities for building development:

A. Site A includes Ratcliffe Hall and the sloping grounds east and north of Ratcliffe Hall. This opportunity site is narrow in width between Brooklandwood and the building restriction line to the east. Additional constraints include the existing geothermal field located north of Fisher Hall and steep slopes down towards the old pool house. Replacing the Upper School in this area enables the Upper School to maintain connection to Fisher Hall and keeps the Upper School within proximity to SPSG and the Ward Center.

B. The development opportunities in front of Smith Hall, along the entrance drive are limited to protect the historic character of Smith Hall and SPS campus setting. In considering building additions to the school, Site B provides an opportunity to expand Lower School program on both floor levels, enabling an opportunity to add an elevator within the building. Expansion in this area is limited to eastward expansion. This requires displacement of the pavilion, some walkways and places the building closer to existing play space.

C. Site C covers the Smith Hall surface parking lot. While this land area is level, the land is elevated above the first floor of Smith Hall, requiring expansion of the Lower School to step up to a higher floor level or requires excavation of the parking lot. Development on this site would displace parking and a stormwater facility.

D. Site D includes the baseball field west of the St Paul's Lane. This land area is relatively flat and at the same elevation of the lower lobby between Middleton Athletic Center and Kingsolving Gym. The limits of building restriction line coincides with the surrounding steep slopes.

E. Site E is the land area between Middleton Athletic Center and Chapin Hall. This land area includes two facilities (Price House and Ordeman Hall) that are considered as low-priority to maintain and preserve. The site descends from the Hamilton Lawn on the east down to St Paul's Lane to the west. Landscape and building opportunities in this area should strive to work with the grade changes to create more usable spaces, such as but not limited to terrace outdoor classrooms or walk-out basement condition. The existing path linking the lower lobby between Middleton Athletic Center and Kingsolving Gym south to Ordeman Hall is an important flat pedestrian path that links athletics to the Middle School and Upper School. This pathway should be preserved and enhanced with redevelopment in this location.
F. Site F identifies locations around the perimeter of the Ward Center to permit building expansion. Steep slopes and open space preservation east of the building will have significant impact on building location and form. At the time of this master planning document, a separate planning study commenced to study the Ward Center. This study will discuss more specifically the opportunities around the Ward Center.

G. Site G includes the existing stadium and field sport complex as well as the building development opportunity areas along the north, west and south side of the Tullai Field. A major constraint is the lack of septic capacity at this low elevation. Sanitary would need to be pumped up to the academic core to existing septic and reserve fields.

H. Site H is approximately 2 acres of buildable land where the tennis court fields are located. This site lacks existing septic capacity.

I. Site I is the area of the proposed maintenance facilities which will replace Price House maintenance activities.

**Site Opportunities**

Based on site and facilities analysis the following locations offer opportunities for site and landscape enhancements:

1. Site 1 includes the Darell House, ropes and high-adventure area and surrounding wooded landscape. This area has limited building program opportunity, except for reusing the Darell House footprint for a nature center or outdoor pavilion. Improving visual and physical access from the academic campus to this area enhance outdoor education and recreation opportunities. A stormwater facility between the Darell House and academic core is an obstruction to providing a more direct pedestrian link, directing west of Price House.

2. Site 2 includes the land area framed by Brooklandwood, Ratcliffe Hall, the Chapel, Chapin Hall and St. Paul's Lane. The land is terraced as it descends from Brooklandwood to St. Paul's Lane. The lower terrace is actively used by the Middle School for recreation. This outdoor space is important to the Middle School and should remain flexible. The upper terrace is more quiet and landscaped at the foot of Brooklandwood mansion. This terrace is an opportunity to create a ceremonial space connected to the mansion, similar to the Hamilton Lawn.
3. Site 3 includes the open, wide steep slopes of the hill south of St. Paul’s Lane and the Chapel are iconic. The upper slopes offer an opportunity to lounge, hang-out and reflect and enjoy the vista over the Greenspring Valley. Adirondack chairs are scattered along the upper portion of the slopes and reconfigured depending on activities. The memorial bell and flags are located on a small terraced plaza immediately south of St. Paul’s Lane on axis with Brooklandwood mansion. Landscape improvements in this area should respect the openness of this slope. Pedestrian comforts such as seating at various elevations along the north-south pedestrian path should be provided. Pedestrian connections between the academic core to SPSG and stadium below should be explored with the Ward Center study in progress.

4. Site 4 includes the forested landscape along St. Paul’s Lane near the West Seminary Avenue entrance. The narrow forest and boulders along West Seminary provides a scenic setting, with glimpses of the stadium and campus on the hill. These bucolic qualities are lessened by the large stretch of head-in parking along St. Paul’s Lane and the portable toilets.

5. Site 5 consists of a small triangular piece of land between South Exit Road, tennis courts and adjacent residential properties. This area is level and scheduled to be developed as a small parking lot to serve the lower playing fields.

6. Site 6 includes the stretch of playing fields between the St. Paul’s Tennis Courts (Homeland Racquet Club) and Greenspring Valley Road. Informal, surplus parking is provided between the Tennis Court Fields and Emerson Field.
CAMPUS MASTER PLAN
Integrate STEM
The first question addressed the relationship of Science, Technology, Engineering and Mathematics (STEM) curriculum within the each division. It was concluded that STEM should be integrated within each of the three divisions, rather than a single facility for the entire SPS community. Keeping STEM housed within the each of the three divisions fosters better collaboration between disciplines, teachers and students. Currently STEM is integrated and located within the Lower School and Middle School buildings. Upper School STEM is located predominantly in Ratcliffe Hall but has an innovation lab in the basement of the Middleton Athletic Center. Consolidating Upper School STEM to a single location within proximity to the other Upper School disciplines is a programmatic priority.
Consolidate Arts

The second question pertained to the dispersion of arts throughout SPS and SPSG campuses. It was recognized that arts should be consolidated within a common center, such as the Ward Center. The process to thoroughly analyze the consolidation of the arts and expansion of the Ward Center requires coordination with SPSG. It was concluded to address this through a jointly sponsored study, independent of this master plan process.

5th Grade with Lower School

The final question accessed the placement of the 5th grade. There was general agreement that 5th graders were not fully ready to be integrated into Middle School culture. They are currently located in a wing in Chapin Hall. The master plan accommodates 5th grade boys in an addition at Smith Hall should the School ever decide to pursue this option.
PROGRAM PRIORITIES

This master plan focuses on facilities and grounds within the St. Paul’s School property lines. However, the plan process necessarily touched on areas of common interest to both St. Paul’s and St. Paul’s School for Girls, most notably improvements to the Arts facilities, student dining services, and the pathways connecting the two schools. These joint priorities will be addressed through a separate, coordinated study of the Ward Center for the Arts in the summer and fall of 2015 with the understanding that the results of that study may further inform and modify this plan. The following describe the priorities and programs proposed for the facilities and grounds at St. Paul’s School:

**IMMEDIATE PRIORITY**

- Upper School (56,000 SF)
  - a. STEM (25,000 SF) / Humanities (31,000 SF)
  - b. Loop Road
- Stadium (14,400 SF)
  - a. Stadium / Fields
  - b. Seminary Entrance

**FUTURE PRIORITY**

- Nature Center (4,200 SF)
- Future Athletics:
  - a. Hockey Rink (28,600 SF)
  - b. Natatorium (14,000 SF)
  - c. Squash (6 courts, 6,000 SF)
- Lower School Addition (6,000- 9,000 SF)
- Multipurpose (6,000- 12,000 SF w/ basement)
- Brooklandwood Renovation
CAMPUS MASTER PLAN

Campus Core

Stadium, Seminary Gateway, Emerson Farm, & Athletics

CAMPUS PLAN
Academic Campus Vision

The vision for the academic campus core builds on the character of the historic Brooklandwood estate. Proposed buildings and open spaces reinforce the north-south axis and respect the expansive views south over the Greenspring Valley. New programs maintain the character of precincts surrounding Brooklandwood mansion. Where possible St. Paul’s Lane shifts to the outside of the campus core creating an edge around a pedestrian campus. Buildings and site design sensitively work with existing topography to create outdoor rooms, places for learning and socializing. Views and walkways extend beyond St. Paul’s Lane to strengthen links to SPSG, athletics and learning spaces within the valley below.
St. Paul’s School has a defining architectural appearance rooted in the site’s history. Future projects need to be sensitive to these attributes and qualities. The School should develop design guidelines for building, sign and site aesthetics to promote a common St. Paul’s architectural language.

The guidelines should support key architectural patterns that have evolved over the centuries, such as but not limited to the following:

1. Simple building form and mass (i.e. typically 2 story buildings),
2. Placement of buildings to define open spaces and views,
3. Inclusion of forecourts at building entries (e.g. Middleton Athletic Complex),
4. Use of common materials and details (e.g. brick and metal-seam roofs),
5. Identify common site elements (e.g. benches, lights and signs)
The Upper School

The master plan proposes a new Upper School (56,000 SF) to replace the aging and undersized Ratcliffe Hall (38,150 SF). This will provide a net increase of 17,850 SF for the Upper School. The new building will right-size and provide additional classroom space for each of the following departments: language, English, history and math. Each department will consist of six (6) classrooms, a seminar room and an office suite. Similar to the other departments, science is planned to receive office space and a seminar room. The enlarged building area provides space additional and modernized science labs with sufficient learning and work space. The proposed program provides four additional lab spaces, expanding learning opportunities in a STEM lab, innovation lab and fabrication lab. The proposed program allows potential space for the Head of School and staff. This enables the Head of School to work more closely with students and opens up administration space in Brooklandwood mansion. The new Upper School is envisioned to be enriched with a variety of common spaces to help foster social interaction and informal learning. The program also includes important assembly space such as an enlarged board room and lecture hall.

The master plan proposes a three-story, ‘L’ shaped building configuration for the Upper School. This compact form should architecturally address the formal nature of building frontage along the South Lawn. The building is envisioned to be contextual to the traditional building language of the adjacent buildings around the South Lawn. The east-west wing of the building which would not be located within the historic context of the campus provides an opportunity to create a building language expressive of the science, technology, engineering and mathematics curriculum. This wing of the building offers opportunities for views towards the forested landscape.

A two story atrium located at the inside bend of the building offers an opportunity to create a lofty student commons space. The two-story atrium volume enables the new three-story Upper School classroom wings to transition down to the existing two-story Fisher Hall. The atrium space offers views into a new courtyard between Fisher Hall, the new Upper School building and the Chapel.

From the atrium and courtyard, people will have a view south focused on the steeple of the Chapel. This creates a strong visual connection to School’s Episcopal foundation. The courtyard space is open to the south, enabling sunlight to illuminate into the courtyard and atrium. The courtyard is an opportunity to provide an outdoor gathering space for the Upper School community.
**South Lawn**
Site improvements to the South Lawn include creating a more formal semi-circular landscaped space on the upper terrace closest to Brooklandwood. This upper terrace space offers an opportunity to enhance social activities at Brooklandwood, such as fundraisers. A low site wall, similar to the site wall around Hamilton Lawn, will enhance the separation of the upper terrace from the expansive South Lawn. A wide flight of stairs offers an opportunity to link the two outdoor spaces and provides a place to casually sit and observe student recreation or learning events on the South Lawn.

**Lamotte Plaza**
An east-west oriented plaza (new Lamotte Plaza) along the north side of Fisher Hall connects the Upper School atrium with the existing parking lot and pool house. The plaza is an opportunity to provide seating for socializing with views towards the eastern forest. Additionally this plaza is envisioned to be a popular point of entry to the Upper School from St. Paul’s Lane.

**St. Paul’s Lane**
The realignment of St. Paul’s Lane around the Upper School, Chapel and Fisher Hall enables safe recreation and pedestrian activity on the South Lawn without the interference of cars. The proposed realignment of St. Paul’s Lane shifts south and drops in elevation as it crosses along the edge of the South Lawn to connect with the existing lane alignment south of the Chapel. This alignment allows the South Lawn to remain higher in elevation than St. Paul’s Lane. Views from Brooklandwood Terrace and South Lawn would gaze over the Lane, reducing the visual impact of cars. The master plan proposes relocating the memorial bell and flags on axis with Brooklandwood at the new southern edge of South Lawn. This brings the memorial internal to the South Lawn and pedestrian campus.

The proposed compact form of the new Upper School allows St. Paul’s Lane alignment to stay closer to Upper School complex to minimize impacts to slopes and existing vegetation. This road alignment allows site improvements to the existing terra-cotta balustrade and retaining wall, in addition to providing stairs to connect to the proposed higher elevation of St. Paul’s Lane.

The proposed St. Paul’s Lane extension may impact the existing geothermal wells north of Fisher Hall. Replacement and/or expansion geothermal wells should be considered beneath the South Lawn, where future development should not be contemplated.

The design of St. Paul’s Lane envisions sidewalks along the street, particularly on the eastern edge to provide space for student drop-off. Highly visible crosswalks, such as constructed with pavers or elevated above the road surface, reinforce safe pedestrian access and help deter speeding vehicles. Street trees and street lighting along St. Paul’s Lane around the entire campus core will help create a strong edge and identity to the School. Street trees should be used sparingly between the Ward Center and the Chapel to preserve views south over the valley.
A spacious (+/-12-feet wide) north-south walkway along the west face of the new Upper School is envisioned to connect the Upper School to SPSG and Hamilton Lawn. This wide walkway also enables vehicles to have temporary access to the proposed plaza in front of the Chapel for key events, such as weddings and funerals. In this design vehicular access to this walkway occurs from St. Paul's Lane east of Brooklandwood mansion. The proposed plaza in front of the Chapel is approximately the same size and location of the existing bulbed-out intersection. The plaza provides a hardscape space for Chapel related events with commanding views over the valley.

The master plan proposes a wide flight of stairs to traverse the slope between the proposed Chapel plaza and the lower St. Paul's Lane. The flight of stairs creates an opportunity to formally link the meandering asphalt walkway between SPS and SPSG with the South Lawn. The stairs will create a place for seating, socializing and enjoying the view over the valley. The hillside between the South Lawn and new St. Paul's Lane alignment is an opportunity to create a focal and ornamental landscape to welcome people to the campus and define the lower edge of the Southern Lawn and campus core.

**Brooklandwood Renovation**

Brooklandwood is the symbolic heart of the school as well as the physical center of the school. Brooklandwood's stately character is a welcoming place for visitors. Renovation and on-going maintenance should be done to ensure the legacy of the Carroll family estate continues for future generations. Renovations should include but not limited to modernization of mechanical, electrical, fire protection and plumbing systems, while maintaining historic detail and character.

A space utilization study should be performed to identify optimal layout and spaces to house administrative services and offices as well as preserve reception, meeting and support spaces on the ground floor. The space utilization study should consider other administrative space opportunities outside of Brooklandwood. These spaces include but are not limited to Ordeman Hall that may be available after the implementation of other capital projects such as Student Center and Upper School. In addition to mechanical system upgrades, exploring secondary egress to the third floor may allow the third floor to be considered for office functions, rather than storage.

**Lower School Addition**
The proposed St. Paul’s Lane alignment creates an opportunity to resurface the road near the existing Lower School entrance and eastern edge of Brooklandwood. A paver-covered roadway at this location would help foster a sense of arrival for the Lower School and would provide a highly visible cross-walk for the smallest constituents of the campus community. The pavers would also help calm traffic.

The southeast corner of Smith Hall provides a building opportunity to add approximately 6,000 SF of additional classroom space on two levels. Expansion along the southern edge of the multi-purpose room would minimize disruption to existing classrooms and their views. Additionally the proposed 2-story addition could link to both existing levels of Smith Hall. Providing an elevator with the addition would enable accessibility between floors. The proposed classroom wing allows the languages currently located in trailers to be brought back into Smith Hall. The building addition provides an opportunity for a larger music room and three classrooms to accommodate the potential future relocation of the 5th Grade.

An additional lower level walk-out basement condition could be provided depending on the results of geotechnical analysis and necessary excavation. This additional floor space could provide extra space for science and discovery classrooms without losing more open space.

The proposed addition would require the relocation of the existing outdoor pavilion. The master plan relocates the pavilion and tiered seating on the embankment along the kindergarten wing adjacent the proposed building addition.

**Multipurpose Building**

The addition of a Multipurpose Building between the Middleton Athletic Center and Ordeman Hall provides a larger gathering space for the greater academic community and flexible space for physical education and athletic programs. The new Multipurpose Building is envisioned to take advantage of the steeply sloping site to create an upper floor level (6,000 SF) and lower floor level (6,000 SF) each with direct access to outdoor spaces.

A small terrace along the western and lower side of the Multipurpose Building offers an opportunity for spill-out space for activities associated with the lower level building program. A hard-court play space (basketball) is proposed on the lowest portion of this site, approximately where Price Hall is currently located. Other hard-courts may be located adjacent to the future Athletics Building.

**Amphitheater**

The assembly space on the upper floor of the Multipurpose Building is designed to have direct access to terrace adjacent the north-south pedestrian path linking Middleton Athletic Complex to Chapin Hall. An outdoor amphitheater may be carved into the existing curving slopes to support outdoor lessons and activities. New trees and landscape along Brooklandwood Entry Drive would help create a more defined edge to
Hamilton Lawn and encloses the amphitheater.

**Ordeman Hall and Plaza**
Ordeman Hall is a small building with inefficient internal circulation. When surveyed respondents had little attachment to the building. However, the building does provide space suitable for temporary seminar and office use, particularly during times of campus expansion. Ordeman’s close proximity to Brooklandwood makes this building a reasonable administrative office annex. A structural assessment of interior walls may make it possible to remove walls to create an open and flexible floor plan. Renovation efforts may want to explore regrading the up-hill slope to redirect rain water away from the building.

Currently the Middle School uses the two ground floor seminar rooms. Ideally, these rooms would be better housed at Chapin Hall. In the event that the school store is relocated to a future student center or the Middle School library is repositioned, these seminar rooms could be brought into Chapin Hall thereby allowing these Ordeman seminar rooms to be used for office or other functions.

The master plan calls the open space between Chapin Hall and Ordeman Hall as Ordeman Plaza. The master plan proposes this space to continue to have active and flexible recreation space for middle school boys and provide pedestrian connection between the buildings. This plaza’s surface should be treated with level and durable hardscape material to withstand regular wall-ball games.

Site stairs with seating provides an opportunity to create a distinctive edge between Ordeman Plaza and the Middle School drop-off loop. Terraced seating would provide a place for boys to socialize while they wait for pick-up. The orientation of the seats provide a view west towards the forested area around the ropes course and proposed Nature Center.

**Nature Center and Site**
Steep slopes and an existing storm water facility preclude direct pedestrian access from Ordeman Plaza to the new Nature Center. Selective clearing and pruning of forest trees would allow a visual connection to the Nature Center from Ordeman Plaza. Pedestrian access to the new Nature Center is recommended to follow down the existing service drive from St. Paul’s Lane. A small trail-head pavilion located at the edge of St. Paul’s Lane offers an inviting gateway and informational sign for visitors to the Nature Center. The trail to the proposed Nature Center should be designed to permit service vehicles and handicap-accessible parking but maintain a pedestrian-scaled walking path into the woods.
Future Athletics Building and Site
The current baseball field location provides an opportunity for future athletic facilities, such as a hockey rink (28,000 SF) or a natatorium with squash courts (20,000 SF) within close proximity to the existing Middleton Athletic Complex. The master plan envisions the future Athletics Building to be sited orthogonally to the existing hillside and proposed playing fields. This creates a building entrance forecourt oriented towards St. Paul’s Lane with the opportunity to create a strong visual and direct pedestrian path connection to Middleton Athletic Complex and campus core. Convenient and additional surface parking can be accommodated adjacent to the Athletic Building along with space for outdoor basketball courts and a practice field.

Stadium and Field Improvements
The stadium redevelopment is envisioned to expand seating along the west side of Tullai Field. Team rooms and storage as well as restroom facilities at the field level may be located like bookends to the expanded stands. A standing-room terrace and concession pavilions located above these facilities would activate a north-south pedestrian promenade with views of both Tullai Field and the SPSG fields. This pedestrian promenade provides access points to the stands, to the path leading up the hill to the campus core and to the stadium entrance plaza at St. Paul’s Lane. The entrance plaza provides space for signage and memorials to teams and players to be celebrated by visitors entering the stadium. Thompson Field may be replaced with an artificial turf surface to extend the field usage throughout the seasons.

West Seminary Gateway
The head-in parking along the north side of St. Paul’s Lane is recommended to be removed allowing street trees and landscape planting to better define the edge of the St. Paul’s Lane. This design strategy creates a narrower paving section and enhances the sense of arrival by framing either side of St. Paul’s Lane with landscape, street trees and site walls or fences. This landscape material palette should coordinate with the existing landscape materials found throughout the campus. The master plan proposes creating a paver panel across St. Paul’s Lane near the intersection of Falls Road and Seminary Avenue distinctively defining the entrance to the campus.

The master plan proposes narrowing existing parking lot P-12 adjacent the stadium by flattening the parking stall angle. This provides an opportunity to create a landscape edge along St. Paul’s Lane with low planting, site walls or fencing and street trees to both screen the parking and create a stronger sense of arrival from the Seminary Avenue entrance. This parking strategy does reduce the quantity of parking in the lot.

A small parking lot may be located behind the existing forest stand just east of Thompson Field. This small parking lot can absorb displaced parking from St. Paul’s Lane and Lot P-12.
**Emerson Farm and Athletic Fields**

The existing sports fields south of the tennis courts are proposed to remain athletic in nature. The master plan proposes building a new Baseball Stadium within the build-able area south of the tennis complex. However due to the limitations of permitted buildable area outside of the campus core, this site provides an alternative site for future athletic facilities, such as but not limited to ice hockey and swimming facilities.

An allee of street trees planted along South Exit Road helps frame this narrow road and preserve its rural character. The street trees buffer views between the road and playing fields or proposed parking areas. As projected with previous studies a new maintenance building will be located in the maintenance yard north of the Emerson Farm houses and a new parking lot P-14 is proposed adjacent to the proposed baseball stadium. Consideration should be given for alternatives to conventional asphalt parking lots to minimize the visual impact on the surrounding pastoral scenery. Alternatives such as satellite parking with shuttle service to the fields should be explored.
Saint Paul’s School is committed to sustainability. This commitment is evident by the many built projects and community actions. Fisher Hall achieved LEED Gold certification by implementing numerous strategies including a geothermal heat pump system, daylighting in 90% of spaces, low-flow plumbing and a vegetative roof cover to name a few. Less visible the recently upgraded heating and cooling system at the Ward Center has made a significant reduction in energy costs. Campus events such as “Hour without Power” and “Zero Waste” not only reduce energy and waste, but provide great learning experiences, foster community and raise environmental awareness. Building on this momentum, the following section of the Master Plan outlines strategies to help move the School towards a more sustainable future. The strategies target major elements and resources of the campus- site, transportation, water, energy, indoor air quality and materials and the community. While some strategies have direct implementation on the campus plan organization, other strategies require a focused consideration for individual buildings and further coordination and community input. The strategies together form a comprehensive and starting point to improve St. Paul’s ecological footprint and improve the health and happiness of its community. St. Paul’s School is committed to following goals and other best practices for sustainability.

Site
The master plan concentrates new development within the existing campus area, avoiding sensitive environmental features- forests, streams, wetlands and major steep slopes. This compact development plan arranges buildings to reinforce existing open spaces and creates new opportunity for outdoor learning spaces. The human habitat of the campus and more natural habitat of the surrounding valleys are connected by defined view corridors and pathways that allow exploration in the nature. In addition, the School should consider developing a habitat management and environment restoration plan to enhance on-site environmental functions. The stewardship required for creating and monitoring habitat and ecosystems provide an opportunity to expand hands-on environmental learning and service.
Buildings and site improvements should sensitively respond to the existing conditions to minimize erosion and damage to the landscape. Buildings should be placed to minimize disturbances to slopes and limit unnecessary disturbances to site infrastructure. Native and adaptable plant palette minimizes water consumption and enhances local flora and fauna habitat. Native shade trees should be placed to reduce the urban heat island produced by streets, sidewalks and buildings. A landscape and site management plan should be developed to provide sustainable best practice guidance for campus facilities managers. Best practices might include integrated pest management (IPM) and plant management guidelines. IPM’s seek to eliminate the use of unhealthy or toxic levels of chemicals to control weeds and rodents. Plant management guidelines seek to properly care for plants and minimize the overuse of fertilizer and chemicals.

**Transportation**

The location of St. Paul’s School, outside of the urban core of Baltimore County, offers few transportation choices, other than the automobile, for students, faculty and employees. Existing transit is not within a convenient walking distance to the academic core of the campus. Building strategies to improve transit ridership may be costly and not in keeping with existing mobility patterns of the campus community. Encouraging car-pooling and use of low-emitting, fuel efficient and/or electric cars may prove to be a more practical method to reduce carbon emissions. Priority parking for these alternative vehicles and for carpools rewards people and technologies that reduce carbon emissions. Consideration should be given to incentivize the use of shuttle service for students as well as employees. Replacement shuttle buses should consider hybrid and electric models. Anti-idling measures could be implemented at peak pick-up times to reduce the formation of exhaust in concentration around students and building entries. Internal to the campus, the master plan provides a network of pedestrian walkways to encourage convenient, safe and accessible walking between buildings and between Schools. The pedestrian walks should feel safe and provide amenities like benches to promote walking rather than driving around campus.
SUSTAINABLE CAMPUS STRATEGIES

Water
Water, particularly waste water, is a major infrastructure issue for the school. New buildings and landscapes should strive to minimize the use of water in order to reduce the impact on the septic systems. Buildings should be equipped with low-flow fixtures to reduce the consumption of water. It is important for the School to determine its current baseline water usage to help establish realistic water reduction goals. Although not possible today, St. Paul’s School should continue to work to gain access to public sewer connection rather than expand their septic systems. Aging and failing septic systems are key contributors of nutrient loading into the watershed and Chesapeake Bay. Under the Maryland and Baltimore County rainwater regulations, rainwater needs to be treated locally, rather than conveyed to large detention facilities, disrupting the natural hydrology of a site. An integrated stormwater management plan offers a system of best management practices such as rain gardens, bioretention facilities and rainwater harvesting to allow local groundwater recharge and improved hydrology. These systems are incorporated into the landscape design and enhance the beauty of the site. Native and adapted plant species use water efficiently and help reduce irrigation needs.

Energy
The photo-voltaic panels on the roof of Smith Hall and Fisher Hall are visible signs of St. Paul’s School commitment to reducing energy dependency and reducing carbon emissions. New buildings and major renovation projects should strive to surpass current building code standards for energy performance. Facilities should follow commissioning or retro-commissioning process to assess energy efficiency, identify energy-saving opportunities, and optimize existing building systems. The School should continue to expand their use of monitoring energy use to help establish goals and strategies, such as improving building insulation, using energy efficient equipment, appliances and lights to reduce energy consumption and increase efficiency. Having the energy data available, such as through a dashboard system provides tangible sources for curriculum integration and public awareness. The School might also consider purchasing green power to support utility companies to expand renewal energy.
**Indoor Air Quality (IAQ) and Materials**

The comfort and well-being of students and all occupants are impacted by indoor air quality. New construction and any renovation project should strive to exceed minimum indoor air quality standards and should establish an Indoor Air Quality management plan. Proper use of healthy building materials should be used to limit off-gassing of volatile organic compounds, unwanted chemicals, and discourage mold and similar allergens. The management plan would also identify safe products to use for cleaning and methods to enable building systems last beyond their expended life time. Recycled, regionally sourced, durable, rapidly renewable materials should be prioritized to reduce depletion of resources and the energy required to transport or extract or produce these materials. Programmatically, the design of facilities should address convenient access to recycling.

Food service can be an important role in creating a more sustainable campus. Healthy and locally produced food not only support local agriculture and reduce transportation costs, but offer wholesome food for growing minds. Food waste can then be diverted to composting and ultimately used to improve soil conditions for the campus landscape. These actions provide a tangible and visible learning opportunity.

**People and Process**

An integrated design approach should be started early in the process of design to ensure building systems and spaces are coordinated and function optimally together to enhance building efficiency and user experiences. The historic nature of the campus establishes a strong campus identity. Preserving structures, such as Brooklandwood, maintain campus heritage and reduce waste and materials. Where possible, efforts should be made to maintain the existing facilities and upgrade these structures improve water and energy conservation. New buildings should be designed for flexibility, so future generations can adapt the structure for new uses.

Education can empower people to understand and tackle environmental issues and champion sustainability goals. Many of the strategies above offer opportunities to be integrated into curriculum. Building design and tools such as displays, signs and dashboards should be encouraged to enhance teaching, participation and foster stewardship on the campus and in the larger community.