WOODBROOK ELEMENTARY
Addition, Renovation, & Modernization
COMMUNITY MEETING
NOVEMBER 29, 2016
Scope

• Additions
  • 16 classrooms
  • 2 SPED Rooms
  • Support spaces
  • Expanded Cafeteria
  • A new Gymnasium and support spaces.

• Improvements to existing building
  • Classroom Modernization & Furniture
  • Media Center Modernization
  • Kitchen & Serving Line Improvements/Upgrades
  • Cafeteria Renovation
  • ADA Improvements
  • Renovate bathrooms
  • Expand admin area
  • New signage
  • New electrical switch gear
## Project Schedule

<table>
<thead>
<tr>
<th>Phase</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schematic Design</td>
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<tr>
<td>Design Development</td>
<td></td>
<td>2M</td>
<td></td>
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<tr>
<td>Construction Documents</td>
<td>4M</td>
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<td></td>
</tr>
<tr>
<td>Bidding/Award</td>
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<td>2M</td>
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<tr>
<td>Construction</td>
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<tr>
<td>Redistricting Study</td>
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</table>
Key Changes Since September

- Traffic study complete
- Further refinement of site plan
- Development of interior floor plans
WOODBROOK ELEMENTARY SCHOOL EXPANSION

TRAFFIC STUDY OVERVIEW
Study Process

- Traffic Counts
- Field Observations
- Analyze Existing Conditions
- Grow Background Traffic
- Estimate Additional Traffic
- Analyze Future Conditions
- Examine Queuing and Delay
  Compare the Build and No-Build Conditions
  Identify needed improvements
Study Area
Study Intersections
Existing Traffic Volumes
Estimated New Trips

Site Trip Generation
Three methodologies were considered to develop the trip generation estimates associated with the school expansion. The methodologies include:

- The percent increase compared the existing school related traffic,
- The Institute of Transportation Engineers (ITE) Trip Generation Manual, and
- A manual estimate based on 260 students, 74% bus ridership, and vehicle occupancy of 1.25 provided by Albemarle County School staff.

A discussion of the three methods can be found in Appendix F.

After comparing the trip generation methods, ITE Trip Generation 9th Edition was used to calculate the future site trips. Table 5 provides a summary of the trip generation for the expansion.

Table 5 Site Trip Generation

<table>
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<tr>
<th>description</th>
<th>Lu code</th>
<th>unit</th>
<th>qty</th>
<th>daily</th>
<th>AM</th>
<th>school PM</th>
<th>commuter PM</th>
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<td>260</td>
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</table>
New Traffic
Future Traffic Volumes (2017)
Future Traffic Volumes (2022)
Traffic Conditions Comparison 2022
Brookmere/Woodbrook
Traffic Conditions Comparison 2017
Route 29 / Woodbrook

2017 No Build VS. 2017 Build Queue Comparison
Route 29/Woodbrook Dr - Morning Peak Hour

2017 No Build VS. 2017 Build Queue Comparison
Route 29/Woodbrook Dr - Afternoon School Peak Hour
Traffic Conditions Comparison 2022
Route 29 / Woodbrook
Summary

• Brookmere Rd - minimal increase in queue of one vehicle. Very little impact to delay (1.3s on average)

• Route 29 – Maximum of 2 more cars in queue. Increase in delay of 2.7s. All cars still make it through in once cycle.

• Impacts might be less if Berkmar Extended takes more cars off of Route 29 than included in the analysis.
There are five designated outdoor learning spaces around the perimeter of Woodbrook Elementary School, each adjacent to a different type of classroom or entrance. The school’s desire to create maker spaces for students and the physical enrichment of these spaces (along a long arced corridor) insinuates the formation of a circuit: five activity spaces linked together through both curriculum and the tangible production of student work. Students can CREATE designs in the studio space, perhaps in art class. Students can then BUILD their creations in the workshop space and conduct experiments in the existing lab. Some of these projects might be put to use in the greenhouse or gardens where students GROW plants as a part of their studies in science, social studies, and physical education. Once their projects are complete, students can PERFORM their work on the outdoor stage. This space can also serve as an auxiliary music classroom and outdoor dining area. Finally, students can proudly DISPLAY their work to the school community and visitors at the main entrance to the building, creating a visually exciting arrival experience defined by the talent and creativity of the student body. This project-centered environment and sequence of maker spaces will engender a transdisciplinary approach to education at Woodbrook Elementary and reinforce the iterative process inherent to the design, creation, execution, and presentation of projects.

Complementing these outdoor learning areas are several play spaces that can also be linked via form and function. A long curvilinear path can lead students through a series of alternating play experiences, both structured and unstructured. These spaces should draw the students into engaged interaction with the natural environment and encourage exploration of the natural environment, particularly in the form of adventure and nature-based play, with opportunities to link play to learning. One representation of this theme is to site a woodland glade close to the building where students can engage themselves in imaginative play among the trees or, on another visit, record their observations on plants and wildlife.
Thank You