Research Triangle High School

RTHS Board Meeing

Date and Time

Wednesday December 16, 2020 at 5:30 PM EST

Location

Due to the statewide COVID-19 restrictions, this meeting will only be held as a Zoom video teleconference.

Join Zoom Meeting: https://rthighschool.zoom.us/j/98283216480

Meeting ID: 982 8321 6480

Find your local number: https://rthighschool.zoom.us/u/aefdPJWonu

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[The RTHS Board of Directors meets monthly on the Third Wednesday of each month, except for December and July. Meetings are normally held onsite at 5:30pm until 7pm, upstairs in the FBC Conference Room.]

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Agenda

I. Opening Items

A. Record Attendance

B. Call the Meeting to Order

C. Approve Minutes

Approve minutes for RTHS Board Meeing on November 18, 2020

II. CEO Actions

A. CSO Report

B. COVID 19 Update

Considerations:

1. Student/Teacher Safety
2. Academic Quality – comparative student performance, labs, etc
3. Facility Constraints
4. Staff Recommendations
5. Surrounding County/Charter School Plans
6. Survey Results (Parent & Student)

Timeline to Revisit

III. Finance

A. Monthly Finance Report

B. Finance Committee Updates

IV. Academic Excellence

A. Committee Updates / Goals Status

V. Development

A. Development Committee Issues / Goals Status

VI. Governance

A. Vote on adding 2 directors

- Sherry Carty
- Rejeev Thalla

VII. Other Business (As Needed)

VIII. Executive (Closed) Session

A. Personnel Matter Discussion

IX. Closing Items

A. Adjourn Meeting

Coversheet

Approve Minutes

Section: I. Opening Items
Item: C. Approve Minutes
Purpose: Approve Minutes
Submitted by:
Related Material: Minutes for RTHS Board Meeing on November 18, 2020

APPROVED

Research Triangle High School

Minutes

RTHS Board Meeing

Date and Time
Wednesday November 18, 2020 at 5:30 PM

Location
Due to the statewide COVID-19 restrictions, this meeting will only be held as a Zoom video teleconference.

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Directors Present
A. Quigley (remote), C. Mugge (remote), C. Rao (remote), G. Rodgers (remote), M. Johnson (remote), S. Hunter (remote), T. Medhin

Directors Absent
E. Cunningham, M. Bliss, S. Rivers-Kobler

Guests Present
E. Grunden (remote), J. Guilford (remote)

I. Opening Items

A.

Record Attendance and Guests

B. Call the Meeting to Order

G. Rodgers called a meeting of the board of directors of Research Triangle High School to order on Wednesday Nov 18, 2020 at 5:57 PM.

C. Approve Minutes from last Board Meeting

C. Mugge made a motion to approve the minutes from RTHS Board Meeing on 10-21-20.
C. Rao seconded the motion.
The board **VOTED** to approve the motion.

Roll Call

E. Cunningham	Absent
G. Rodgers	Aye
A. Quigley	Aye
C. Rao	Aye
M. Bliss	Absent
S. Rivers-Kobler	Absent
C. Mugge	Aye
M. Johnson	Aye
T. Medhin	Aye
S. Hunter	Aye

D. Monthly Finance Report

- Significant surplus; expect to make some major expenditures (come from facilities fund set aside)
- ADM is driving the surplus up
- Need to review this year's cut against surplus and probably making adjustments based on any potential reductions in state funding next year

E. Vote to accept Consent Agenda above

C. Mugge made a motion to accept Consent Agenda.
C. Rao seconded the motion.
The board **VOTED** to approve the motion.

Roll Call

S. Rivers-Kobler	Absent
G. Rodgers	Aye
A. Quigley	Aye
M. Bliss	Absent
E. Cunningham	Absent
M. Johnson	Aye
T. Medhin	Aye
C. Mugge	Aye
S. Hunter	Aye

Roll Call

C. Rao	Aye

II. CEO ACTIONS

A. CSO REPORT

- Increasing transportation; finance committee review followed by presentation to the Board
- Plan B: Hybrid school reopening - still under review; Doing focus groups and survey; Still not a lot of enthusiasm to return to the Building
- HVAC repair: Quote received 20% lower than expected; to be approved by the Board
- Consider using reserves meant for "Capital" expenditure rather than treat it as "Repair" and using surplus; to be reviewed again
- Collaborative efforts with ABC Science; Signed a MOU (creates opportunities for students and connections with health community
- Greenlight Education App: provide community connection related to Covid
- School’s Black Student Union and Allies: set up meetings with several Duke medical professionals; Objective: provide a safe place for students to ask physical and mental health questions.
- Charter renewal: Up to date

M. Johnson made a motion to provisionally approve the self-study to the Charter.
A. Quigley seconded the motion.
The board **VOTED** to approve the motion.

Roll Call

M. Bliss	Absent
C. Rao	Aye
M. Johnson	Aye
A. Quigley	Aye
S. Hunter	Aye
G. Rodgers	Aye
S. Rivers-Kobler	Absent
C. Mugge	Aye
E. Cunningham	Absent
T. Medhin	Aye

III. Academic Excellence

A. Academic Committee Issues / Goals Status

- Reviewing what effectiveness can we demonstrate regarding remote learning
- Messaging matters; Compiling students' work to demonstrate good performance in spite of the odds; Maintaining some success
- Part time Math teacher helping underperforming students;

IV. Development

A. Development Committee Issues / Goals Status

- Focused on action items from the Retreat
- Updated work items on Board on Track; Goals set up for the School year

V. Governance

A. Committee Issues / Goals Status

- Looked at the items from the Retreat; updating the Goals
- New Board member recruiting
- Provide dates/time for meeting with potential Board Members (Chaya Rao and Gary Rodgers)

VI. Executive Session

A. Personnel Matters

C. Mugge made a motion to enter into Executive Session to discuss a Personnel Matter.
C. Rao seconded the motion.
The board **VOTED** to approve the motion.

Roll Call

S. Rivers-Kobler	Absent
M. Bliss	Absent
C. Rao	Aye
S. Hunter	Aye
A. Quigley	Aye
M. Johnson	Aye
T. Medhin	Aye
G. Rodgers	Aye
C. Mugge	Aye
E. Cunningham	Absent

- CSO Evaluation for School year 2019-2020 based on Board and Staff feedback

C. Rao made a motion to leave the Executive Session.
S. Hunter seconded the motion.
The board **VOTED** to approve the motion.

Roll Call

C. Rao	Aye
E. Cunningham	Absent
G. Rodgers	Aye
C. Mugge	Aye
S. Hunter	Aye
A. Quigley	Aye
M. Johnson	Aye

Roll Call

T. Medhin	Aye
S. Rivers-Kobler	Absent
M. Bliss	Absent

VII. Closing Items

A. Adjourn Meeting

There being no further business to be transacted, and upon motion duly made, seconded and approved, the meeting was adjourned at 6:00 PM.

Respectfully Submitted,
G. Rodgers
S. Hunter made a motion to adjourn the meeting.
A. Quigley seconded the motion.
The board **VOTED** to approve the motion.

Roll Call

T. Medhin	Aye
S. Hunter	Aye
E. Cunningham	Absent
S. Rivers-Kobler	Absent
G. Rodgers	Aye
C. Mugge	Aye
C. Rao	Aye
A. Quigley	Aye
M. Johnson	Aye
M. Bliss	Absent

Coversheet

CSO Report

Section: II. CEO Actions
Item: A. CSO Report
Purpose: FYI
Submitted by:
Related Material: CSO Report Dec 16.pdf

CSO Report December 16, 2020

I. State of School
   a. Open status: recommendation to remain under remote until high schools can return under DHHS Plan A (full attendance, masks and distancing optional).
      i. We are working on plans to bring in students who need more attention and supervision to do remote work on campus.
      ii. We will be expanding opportunities for small groups of students from other courses to come in for activities, meetings, and things that can't be done remotely, or are better in person.
      iii. Both of these will be limited opportunities
   b. Report will be released to stakeholders explaining the decision.
   c. Recruitment
      i. Virtual open houses held in November and December.
      ii. Due to demand additional sessions will be added during January after the lottery application window has been opened.
      iii. Lottery application will open Jan. 6, 2021 and close February 28, 2021, with the lottery drawing to be held Thursday, March 18.
   d. Refresh/Repair/Refurbish efforts to be made in while the school is closed.
      i. Upgrade controls in building to increase security
      ii. Landscaping/parking lot/signage outside
      iii. Safety evaluations and repair of unsafe areas.
      iv. Paint, furniture, and livability upgrades
II. Hiring approval
   a. Joshua Edwards (UNC, BS Psychology, 2013). Has worked and coached with Teach For America and taught for 7 years in KIPP schools in Rocky Mount and Washington, D.C. He will take duties working with students who need additional support in math. His strength is in Math 1 and Math 2 and has had success in improving skills in students below grade level. He is also African-American.

Coversheet

COVID 19 Update

Section: II. CEO Actions
Item: B. COVID 19 Update
Purpose: FYI
Submitted by:
Related Material: recommendation for spring semester.pdf
Detailed January 2021 Reopening Plan Report.pdf

RESEARCH TRIANGLE HIGH SCHOOL

RTHS Board of Directors:

Since we began the school year in remote, we have been concerned with two issues that we believe drive our choice to remain in remote or in person. Those two are the safety risk presented by COVID-19 and the quality of the educational product we are able to deliver. The two compete: if the COVID risk is high, then we will sacrifice educational quality to preserve health. If the risk is low, then we have more freedom to address educational quality without worrying as much about risk of infection. On the other hand, should educational quality be poor, we would need to take greater health risks; consequently if the quality of our remote product is good, then we need not worry about what risks we might have to take with respect to COVID.

To that end, we surveyed teachers, students, and parents to see how these two issues were perceived. In general, the bulk of respondents felt that the health risk was substantial (about 4 on a scale of 1-10, with 1 being the most alarming) and the quality of the educational product was acceptable (about 6-7 on a scale of 1-10, with 10 being as effective as regular in person instruction). I have not included the actual values because there were differences, but they are not substantial and do not undermine the point, which seemed to be that perception that risk of infection was a bigger concern than improving the educational product.

With that information in mind, and an improving disease situation back in October, the school's administrative team began discussing protocols for reopening in January. We began with the creation of the physical aspects of the environment, knowing that if these protocols were in place, we could enact them at any time. Knowing this would also help us to focus teacher training on preparing for reopening. The biggest single factor in addressing reopening is the DHHS plan schedule. Currently, high schools can only operate under Plan C (full remote) or Plan B (a hybrid system with no more than 50% of students on campus at any time. We then undertook imagining what conditions would be like under Plan B on campus.

Given the size of our classrooms and hallways, which are substantially smaller than those of a traditional public high school in our area, we concluded that 50% occupancy would not be achievable with the additional constraint of six foot spacing between students, another requirement of Plan B. Our models thus accommodated a third of students physically present at any time. When we began to consider the logistics of placing students in this model, a host of other problems began to emerge from our modeling. It was at this time that I began to bring these concerns to teachers to discuss, and

Research Triangle High School
3106 E. NC Highway 54
P.O. Box 13453
Research Triangle Park, NC 27709
www.researchtrianglehighschool.org
Office: 919.998.6757 Fax: 919.998.3402

eventually led to us operating focus groups of parents, students, and teachers to see what opinions might exist of the consequences of opening under Plan B.

Consequences of Opening in a Hybrid Remote Environment (Plan B)

Several concerns have been raised by parents, students, and teachers during the fall semester:

1. Equity of service: how do we ensure that the neediest students receive the most support?
2. Quality of interaction with students, both in class and in mentoring
3. Validity of assessment in a remote environment
4. Effectiveness of instruction
5. Ability to provide an educationally supportive environment
6. Social interaction between students, and between students and teachers

There are others, but these were the principal issues discussed. The mission of reopening should at least be to improve the quality of at least some of these, if not all, while not impeding others to the point where the overall experience is less than what is being provided to students now in full remote. How does Plan B affect these quality of school life variables?

1. Equity of service
    a. Opening the building again would bring all students to a place where the educational environment is more conducive to learning. Currently we cannot guarantee that students have the same opportunities to complete work at home.
    b. Having all students in the building would allow us to deliver technology (including reliable internet service) and food support to students easier than we can now.
2. Quality of interaction with students

. Mentoring is currently a low priority, and with no incentive to attend few students do. We believe mentoring is an important part of the educational model and can facilitate it better on site.

a. Being present with students in a classroom allows for far superior feedback and monitoring of student learning than a zoom classroom.

b. Allows for greater SEL (social/emotional learning) support of students and families, including counselor contact.

3. Validity of assessments

. While not widespread, it is certain that students are cheating on assessments while at home, leading some teachers to abandon their use, undermining the PL model. Security would be higher at school.

4. Effectiveness of instruction

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. Teachers can connect in a local space with students in ways they cannot remotely (social interactions, feedback). Diagnostics and feedback would improve in face-to-face instruction.

a. It is difficult to provide students with adequate support during remote work. Face to face learning would provide higher quality instruction in skill work.

b. Lab work is nearly impossible in remote learning and even when possible not comparable to the use of equipment and techniques that exist in the school space.

5. Ability to provide a supportive educational environment

. Distractions in the home can impede student performance on assessments. Performance would likely be higher at school under supervision.

a. IEP and section 504 accommodations can be better made in a school setting.

b. The school is better able to pull students out for additional support and practice.

6. Social interaction between students, and between students and teachers

. Remaining at home without seeing friends is stressful and leading to psychological issues and poor academic performance

a. Students cannot do group work remotely

b. Teachers can communicate better with students in school as they get to know each other better in a more social space

Obviously, there are reasons why a face-to-face reopening could be beneficial. The question to be answered is can these benefits be realized? And if so, what is the cost of realizing them? In our modeling, we discovered several costs that cannot be overlooked, and will absolutely affect the school's ability to deliver the benefits of face to face learning as outlined above.

The most important single obstacle is scheduling. In order to have all students return to the building, we would need some kind of population rotation. The Wake County schools initially planned a one week in school/two weeks out of school model; we could adopt that or a one day on/two day off model. There are challenges with this. First, students would not be able to see all of their friends. They would only likely see one-third of them, and then only the same third for the entire year. This undermines the benefit of having students back in the school. Second, these students would only receive one day of face to face instruction each week (at most four days every three weeks. Currently, students receive two days of virtual face to face instruction under the remote plan. In addition, in their three day rotation, each group of students would be expected to complete two days of independent work with very little assistance from their teacher. Also, that work would have to be sufficiently independent from the face to face instruction that students could do it whether they had experienced the face to face lesson. The first group would get the face to face instruction on site, followed by two days of independent work. The second group would have two independent days with the presence day in the middle, and the last group would not get their face to face instruction until they had already worked on the assignment for two days. This would require exceptional planning by teachers, and would likely result in poorer outcomes for the second and third groups of students.

A second problem with scheduling is the demand on teacher time. Each teacher would have to teach their face to face classes but also provide support to their remote students

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every day. Regardless of how you choose to accommodate this daily, it would further reduce the amount of class time each student would meet with their teacher each week. Each teacher would have to teach their five classes face to face each day, then somehow work with five classes of remote learners. It is difficult to see how this is possible in a day that does not require teachers to work even more hours than they would were we in a traditional seven period day. This does not even take into account the additional time teachers would need to grade and plan for their classes. Currently, each teacher has one planning period. They would need at least two in order to support all of these students each day, and most teachers continue to work at home at night. I cannot in good conscience create a daily schedule that would require teachers to work 12 or more hours. This compromises their ability to provide students with quality instruction and appropriate attention. Reducing the length of classes compromises the ability of science courses to do lab work, which is a chief reason for wanting face to face instruction in the first place.

A third problem with scheduling is what that schedule would look like. While it may be possible to develop a rotating schedule with the appropriate timing the cost of implementing a new schedule at the school would require retraining of students and practice by teachers. We imagined a period of at least two weeks where teachers would practice working in the building so that we could maintain safety protocols and get used to the additional details around being open in hybrid. Students would require additional training and pracitce, which would further compromise the quality of learning. Teacher reactions to the schedules were uniform: while they would bring students back into the building, the sacrifices made in time, preparation, and quality of learning were not commensurate with the educational result. (include schedules?)

Scheduling and teacher workload are likely the two biggest problems, but not the only ones affecting the quality of education. Teachers raised concerns about the logistics of the safety protocols. In particular, how would the school enforce mask wearing, the required temperature and symptom checks, and students and families who refused to honor the protocols? How would the school manage contact tracing? How would a COVID infection in the school, which we must assume will happen, disrupt learning when the school needed to be closed again? All of these are defined in our operational program for Plan B, but the working memory occupied by these worries in a teacher’s mind reduces the space for effective teaching.

One of the chief safety concerns arising in schools that have been open under Plan A and Plan B is mask wearing. The ABC Science Collaborative, a group based at Duke that has been advising NC school districts about reopening, including RTHS, has recently changed their recommendations about “mask breaks” during the school day because of evidence of transmission in schools that did this. This usually happened at lunch, and so in our modeling we ended the school day before a lunch period. The complexities of safely managing a lunch period are difficult to overcome. This creates an equity problem: parents who work during the day may not be able to pick up students in the middle of the day. This has been our experience on half days and Fridays during a regular school year.

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Another equity concern is that COVID disproportionately affects lower income families and people of color. Students from affected families would likely stay home more, deriving no benefit from attendance. The same result would happen if these families chose to keep students at home because of fears of their students mixing with a larger population and possibly risking exposure to their own families. If we are not providing support to all of our students as they need, we are creating an equity problem, not just not solving one.

The above points all fall under the umbrella of educational quality. The other variable is disease safety. On the one hand, we have early, but not conclusive, evidence that schools do not support lots of secondary transmission. Of course, very few schools have been open long enough to develop substantial data. Middle schools that we know of that have been operating in hybrid situations have done so without any problems. Even the incidence in local traditional schools is low, and almost none of the cases arose from school contact. We expect that we will have cases, and we have contingencies to deal with them. We have been addressing the air quality in the school, as this is the principal means of transmission, and feel that we have created an environment where the risk of transmission is as low as we can make it. However, disease conditions have grown dramatically worse in the last few months. The positivity rate, number of cases, hospitalizations, and deaths are far higher than they were when we were ordered to close in March. While science tells us that local positivity rates are not linked to school-based cases, it is difficult to reconcile the urgency of opening school with the state of the disease in the community.

Returning to our thinking about the balance between disease risk and quality of education, it seems that returning to school both increases the risk of students, faculty, and families becoming exposed to the disease, while also reducing the amount of instructional time each week that students will receive, and will reduce the quality of that time and stretch teachers further than they are now. A situation where disease risk increases but educational quality decreases is the exact opposite of the goals we have had since we switched to remote learning on March 13.

Recommendation

It is my recommendation that RTHS not resume on campus instruction under Plan B (hybrid learning). In addition to taking on increased COVID risk on campus, educational quality will be compromised and equity in service to students will be reduced. A substantial number of students and faculty have indicated that they would not return, or would be likely not to return, should we open under hybrid conditions for health or childcare reasons, and these absences would further compromise educational quality.

Instead, we will commit to improving the quality of our remote instruction program. We are seeking outside advice on how to evaluate and amend the program. We will also be bringing mentoring back and increasing our SEL activities with students. We will increase the amount of time we spend teaching our students management and coping strategies, all of which will pay off for them in the long run. We also will be developing plans to bring small groups of students to campus more regularly for activities and learning opportunities.

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It is important to note that nearly all of the educational quality concerns are artifacts of Plan B. Should high schools be allowed to open under Plan A, where there are no restrictions on attendance and only screening needs to be done, we would very much consider opening and restoring as closely to standard conditions as possible (traditional schedule, full attendance, etc.). Of course, any decision to open would be dependent on disease conditions in the state. We are very optimistic about the impact of a vaccine on these plans.

I appreciate the board's consideration of this information. I have not included the raw data for brevity but can develop a more detailed proposal if you feel it would be necessary to build the case.

Sincerely,

Eric A. Grunden
Chief School Officer

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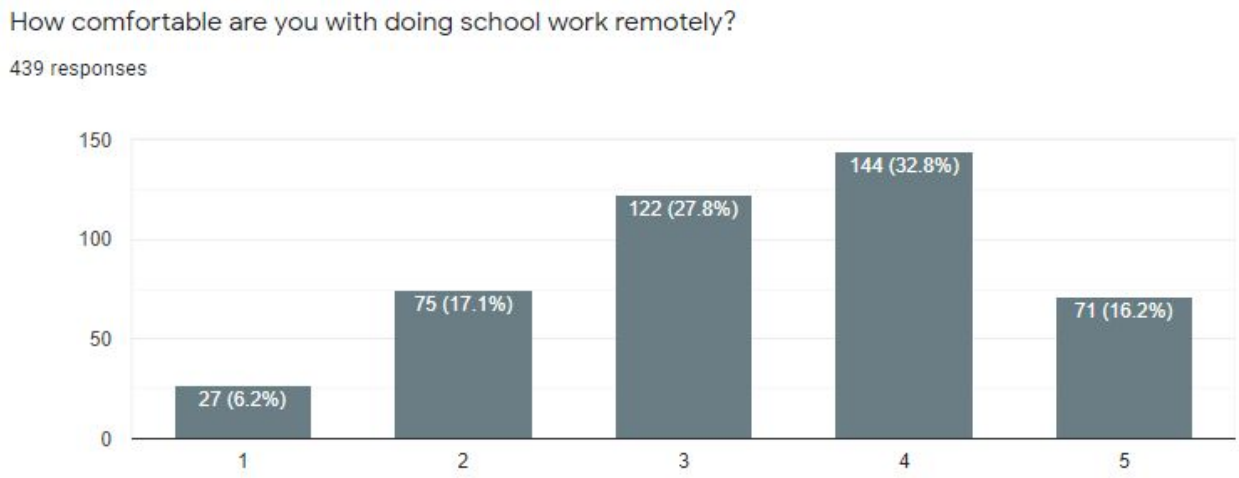
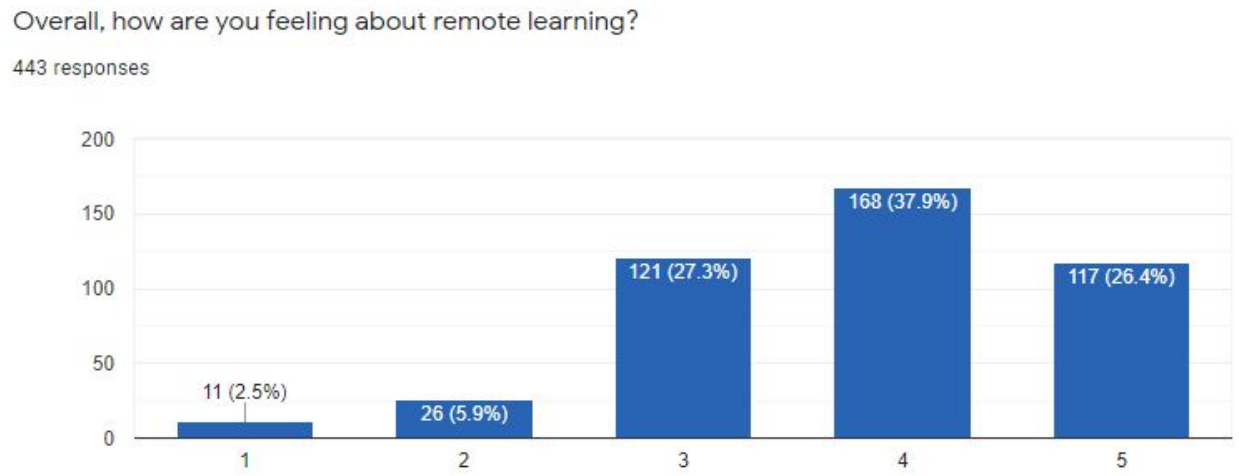
To that end, we surveyed teachers, students, and parents to see how these two issues were perceived:

Students (1 = not comfortable, 5 = very comfortable)



(students were also asked to rate each of their teachers on the clarity of policies and plans for remote learning. While individual results varied, the profile of responses was similar to that above, a general satisfaction with the remote learning environment).

Parents (1 = not comfortable, 5 = very comfortable)



With respect to the priorities of concerns about reopening, teachers (62.5%), students (53.5%), and families (72.6%) all ranked concerns about COVID prevention as the most important factor relating to reopening:

(numbers in parentheses are the number of responses received. Numbers led by the # indicate where a group ranked the item differently than the rank column indicates. For example, 19.8% of student respondents ranked “improving educational quality” at #1)

Rank	Item	Teachers (48)	Students (439)	Families (443)
1	COVID prevention	62.5%	53.5%	72.6
2	Improving Educational Quality	27.1 (22.9 at #3)	19.8 (#1)	24.6
3	Interaction with teachers	29.1 (#4)	17.5	26.4
	Mental Health		20.2 (#1)	
	Interaction with Peers		19.1 (#2)	

Students had different priorities than teachers and families in other cases, but in general “improving educational quality” was significantly less important than disease prevention. Students showed additional sensitivity to alienation from peers and mental health concerns, which are consistent with comments received in the survey and at the school in general. Across the three groups, the question “Which will improve MOST for you if we return to school in the building?” received “quality of instruction” as a response 20-21% of the time, showing that this is not a principle concern of any RTHS stakeholders.

It is reasonable to conclude from this data that disease prevention is a priority, while improving educational quality is not. Obviously we would like to deliver the best educational produc possible, but our ability to do so is limited by disease constraints. Peer-peer and teacher-peer interactions were listed as concerns, and I will address those later in this report.

Physical Plant Concerns

With the hope that we would reopen in January, and an improving disease situation back in October, the school’s administrative team began discussing protocols for reopening. We began with the creation of the physical aspects of the environment, knowing that if these protocols were in place, we could enact them at any time. Knowing this would also help us to focus teacher training on preparing for reopening. The biggest single factor in addressing reopening is the DHHS plan schedule. Currently, high schools can only operate under Plan C (full remote) or

Plan B (a hybrid system with no more than 50% of students on campus at any time. We then undertook imagining what conditions would be like under Plan B on campus.

Given the size of our classrooms and hallways, which are substantially smaller than those of a traditional public high school in our area, we concluded that 50% occupancy would not be achievable with the additional constraint of six foot spacing between students, another requirement of Plan B. Our models thus accommodated a third of students physically present at any time. When we began to consider the logistics of placing students in this model, a host of other problems began to emerge from our modeling. It was at this time that I began to bring these concerns to teachers to discuss, and eventually led to us operating focus groups of parents, students, and teachers to see what opinions might exist of the consequences of opening under Plan B.

Consequences of Opening in a Hybrid Remote Environment (Plan B)

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There are others, but these were the principal issues discussed. The mission of reopening should at least be to improve the quality of at least some of these, if not all, while not impeding others to the point where the overall experience is less than what is being provided to students now in full remote. How does Plan B affect these quality of school life variables?

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2. Quality of interaction with students
    a. Mentoring is currently a low priority, and with no incentive to attend few students do. We believe mentoring is an important part of the educational model and can facilitate it better on site.
    b. Being present with students in a classroom allows for far superior feedback and monitoring of student learning than a zoom classroom.
    c. Allows for greater SEL (social/emotional learning) support of students and families, including counselor contact.

3. Validity of assessments
    a. While not widespread, it is certain that some students are using outside resources for assessments while at home, leading some teachers to abandon their use, undermining the Personalized Learning model. Security would be higher at school.
4. Effectiveness of instruction
    a. Teachers can connect in a local space with students in ways they cannot remotely (social interactions, feedback). Diagnostics and feedback would improve in face-to-face instruction.
    b. It is difficult to provide students with adequate support during remote work. Face to face learning would provide higher quality instruction in skill work.
    c. Lab work is nearly impossible in remote learning and even when possible not comparable to the use of equipment and techniques that exist in the school space.
5. Ability to provide a supportive educational environment
    a. Distractions in the home can impede student performance on assessments. Performance would likely be higher at school under supervision.
    b. IEP and section 504 accommodations can be better made in a school setting.
    c. The school is better able to pull students out for additional support and practice.
6. Social interaction between students, and between students and teachers
    a. Remaining at home without seeing friends is stressful and leading to psychological issues and poor academic performance
    b. Students cannot do group work remotely
    c. Teachers can communicate better with students in school as they get to know each other better in a more social space

Obviously, there are reasons why a face-to-face reopening could be beneficial. The question to be answered is can these benefits be realized? And if so, what is the cost of realizing them? In our modeling, we discovered several costs that cannot be overlooked, and will absolutely affect the school's ability to deliver the benefits of face to face learning as outlined above.

The most important single obstacle is scheduling. In order to have all students return to the building, we would need some kind of population rotation. The Wake County schools initially planned a one week in school/two weeks out of school model; we could adopt that or a one day on/two day off model. There are challenges with this. First, students would not be able to see all of their friends. They would only likely see one-third of them on average, and then only the same third for the entire remainder of the year. This undermines the benefit of having students back in the school. Second, these students would only receive one day of face to face instruction each week (at most four days every three weeks). Currently, students receive two days of virtual face to face instruction under the remote plan. In addition, in their three day rotation, each group of students would be expected to complete two days of independent work with very little assistance from their teacher. Also, that work would have to be sufficiently independent from the face to face instruction that students could do it whether they had experienced the face to face lesson. The first group would get the face to face instruction on

site, followed by two days of independent work. The second group would have two independent days with the presence day in the middle, and the last group would not get their face to face instruction until they had already worked on the assignment for two days. This would require exceptional planning by teachers, and would likely result in poorer outcomes for the second and third groups of students. The focus groups all recognized these concerns, as captured in the comments made by the participants.

A second problem with scheduling is the demand on teacher time. Each teacher would have to teach their face to face classes but also provide support to their remote students every day. Regardless of how you choose to accommodate this daily, it would further reduce the amount of class time each student would meet with their teacher each week. Each teacher would have to teach their five classes face to face each day, then somehow work with five classes of remote learners. It is difficult to see how this is possible in a day that does not require teachers to work even more hours than they would were we in a traditional seven period day. This does not even take into account the additional time teachers would need to grade and plan for their classes. Currently, each teacher has one planning period. They would need at least two in order to support all of these students each day, and most teachers continue to work at home at night. I cannot in good conscience create a daily schedule that would require teachers to work 12 or more hours. This compromises their ability to provide students with quality instruction and appropriate attention. Reducing the length of classes compromises the ability of science courses to do lab work, which is a chief reason for wanting face to face instruction in the first place.

A third problem with scheduling is what that schedule would look like. While it may be possible to develop a rotating schedule with the appropriate timing the cost of implementing a new schedule at the school would require retraining of students and practice by teachers. We imagined a period of at least two weeks where teachers would practice working in the building so that we could maintain safety protocols and get used to the additional details around being open in hybrid. Students would require additional training and pracitce, which would further compromise the quality of learning. Teacher reactions to the schedules were uniform: while they would bring students back into the building, the sacrifices made in time, preparation, and quality of learning were not commensurate with the educational result. Two additional schedules were drafted to reflect different accommodations of class time and they were presented to the focus groups:

Model Schedule	Minutes of class per week with teacher	Minutes of independent work during the school day	Minutes of office hours possible
Current remote	120 per period	(not scheduled)	510
7 day rotation	60 per period	(not scheduled)	108
Full day	40 per period	40 (seminar)	380

While these two schedules have their flaws, and it is possible that with work an idealized schedule could be devised that would reduce the impact of having fewer students in the building, it is unlikely that any on campus reduced-capacity schedule would result in a comparable amount of instructional minutes. Not only are teacher-student minutes reduced in a hybrid model, but independent time would increase, given the 1-on, 2-off rotation model.

Scheduling and teacher workload are likely the two biggest problems, but not the only ones affecting the quality of education. Teachers raised concerns about the logistics of the safety protocols. In particular, how would the school enforce mask wearing, the required temperature and symptom checks, and students and families who refused to honor the protocols? How would the school manage contact tracing? How would a COVID infection in the school, which we must assume will happen, disrupt learning when the school needed to be closed again? All of these are defined in our operational program for Plan B, but the working memory occupied by these worries in a teacher's mind reduces the space for effective teaching.

One of the chief safety concerns arising in schools that have been open under Plan A and Plan B is mask wearing. The ABC Science Collaborative, a group based at Duke that has been advising NC school districts about reopening, including RTHS, has recently changed their recommendations about "mask breaks" during the school day because of evidence of transmission in schools that did this. This usually happened at lunch, and so in our modeling we ended the school day before a lunch period. The complexities of safely managing a lunch period are difficult to overcome. This creates an equity problem: parents who work during the day may not be able to pick up students in the middle of the day. This has been our experience on half days and Fridays during a regular school year.

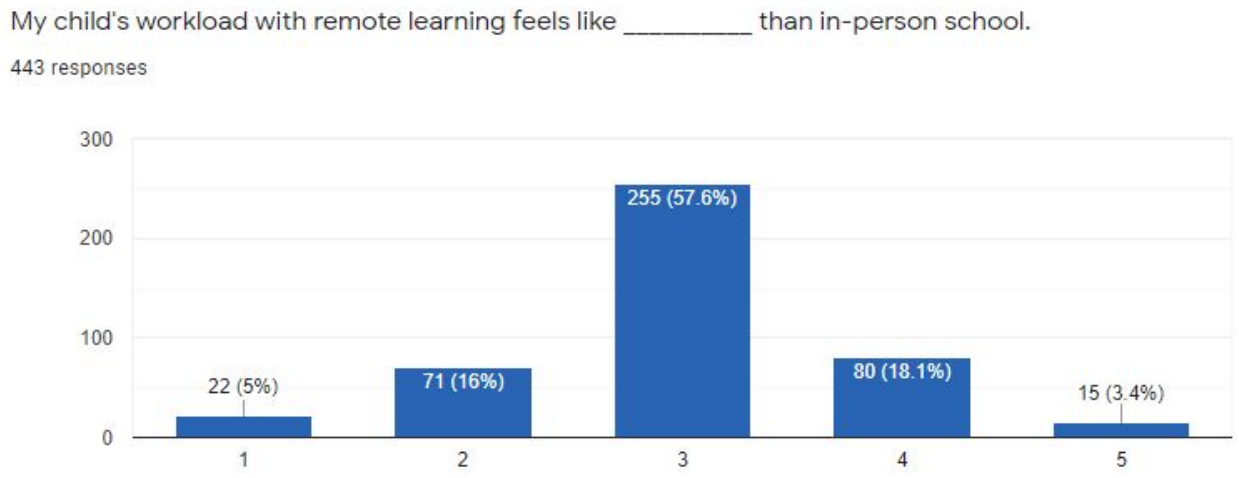
Another equity concern is that COVID disproportionately affects lower income families and people of color. Students from affected families would likely stay home more, deriving no benefit from attendance. The same result would happen if these families chose to keep students at home because of fears of their students mixing with a larger population and possibly risking exposure to their own families. If we are not providing support to all of our students as they need, we are creating an equity problem, not just not solving one.

We cannot ignore the social effects of school closure. Complaints about isolation, depression, and lack of motivation are certainly present. Data from the surveys and focus groups show that these are concerns:

“What will improve MOST about students' experience if we return to school in the building?”

	Teachers	Students	Families
Quality of instruction	28%	19%	21%
Ease of getting feedback	25%	20%	25%
Greater focus and discipline	33%	42%	28%
Grades	0%	10%	2%
None	21%	8%	23%

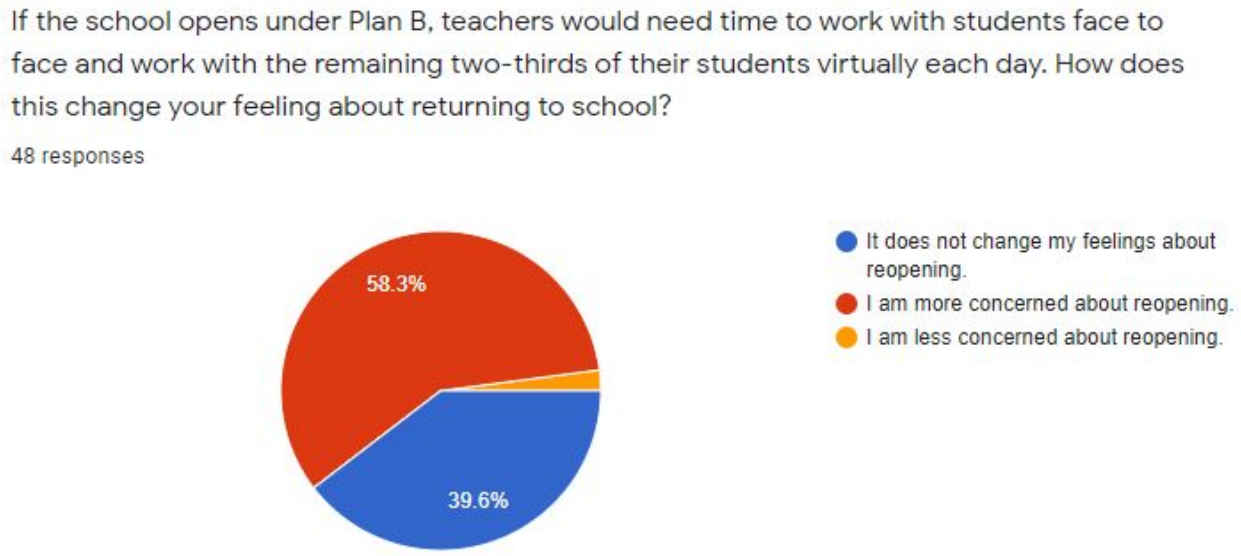
All groups reported the highest percentage of responses on “greater focus and discipline” echoing a theme heard in comments: it is easier to get work done at school than at home. But how much time will be available for that? Will we be able to realize that greater focus when we add travel, class change, reduced capacity, and a new schedule in the new year? It is also interesting to note that grade improvement was seen by all as the far unlikliest change to occur should students be back in the building, further supporting the idea that the quality of the RTHS remote education is at least good enough for now. Students and parents alike reported that workloads seem similar to the regular classroom



(1 = much less, 5 = much more)

Again, student results were collected across all teachers, but the general pattern was the same. The home environment is much harder to control than a well-managed classroom, for certain. But would we realize that classroom benefit with all of the other concerns about being on site?

Another clarifying set of questions concerned increased/decreased concerns about certain factors: not having lunch on campus, the ⅓ rotation, or the possibility of having a remote teacher while in the classroom. None of these twists seemed to affect the level of concern about returning, which supports the idea that only those two majoy factors, disease and educational quality, are influential. The exception is a heightened concern by teachers that managing the remote and in-person classrooms every day would be challenging:



COVID Concerns

The above points all fall under the umbrella of educational quality. The other variable is disease safety. On the one hand, we have early, but not conclusive, evidence that schools do not support lots of secondary transmission. Of course, very few schools have been open long enough to develop substantial data. Middle schools that we know of that have been operating in hybrid situations have done so without any problems. Even the incidence in local traditional schools is low, and almost none of the cases arose from school contact. We expect that we will have cases, and we have contingencies to deal with them. We have been addressing the air quality in the school, as this is the principal means of transmission, and feel that we have created an environment where the risk of transmission is as low as we can make it. However, disease conditions have grown dramatically worse in the last few months. The positivity rate, number of cases, hospitalizations, and deaths are far higher than they were when we were ordered to close in March. While science tells us that local positivity rates are not linked to school-based cases, it is difficult to reconcile the urgency of opening school with the state of the disease in the community.

Returning to our thinking about the balance between disease risk and quality of education, it seems that returning to school both increases the risk of students, faculty, and families becoming exposed to the disease, while also reducing the amount of instructional time each week that students will receive, and will reduce the quality of that time and stretch teachers

further than they are now. A situation where disease risk increases but educational quality decreases is the exact opposite of the goals we have had since we switched to remote learning on March 13. Preventing disease is our first concern, according to all survey data. In March of 2020 it was decided that the school should be closed for safety, and that was when infection rates, death and hospitalization rates were all far lower than they are today. If we follow the recommendations of the Centers for Disease Control, we are faced with further evidence that schools should not be open:

Comparison of NC County Alert Metrics to CDC Risk of School Transmission

***COVID-19 County Alert System Notification**

County	Final Tier	14-day Case Rate Per 100,000	14-day Percent Positive^	Hospital Impact
Wake County	Significant/Yellow	309.9	5.7%	Low Impact

Metrics are based on data from November 6, 2020 to November 19, 2020.

CDC indicators and thresholds for risk of introduction and transmission of COVID-19 in schools

INDICATORS	Lowest risk of transmission in schools	Lower risk of transmission in schools	Moderate risk of transmission in schools	Higher risk of transmission in schools	Highest risk of transmission in schools
CORE INDICATORS					
Number of new cases per 100,000 persons within the last 14 days*	<5	5 to <20	20 to <50	50 to ≤ 200	>200

(Johneka Williams, Longleaf School of the Arts)

Final Factors

All of this would be immaterial if the decision to remain closed caused families or staff to leave the school. Data indicate support for remaining closed:

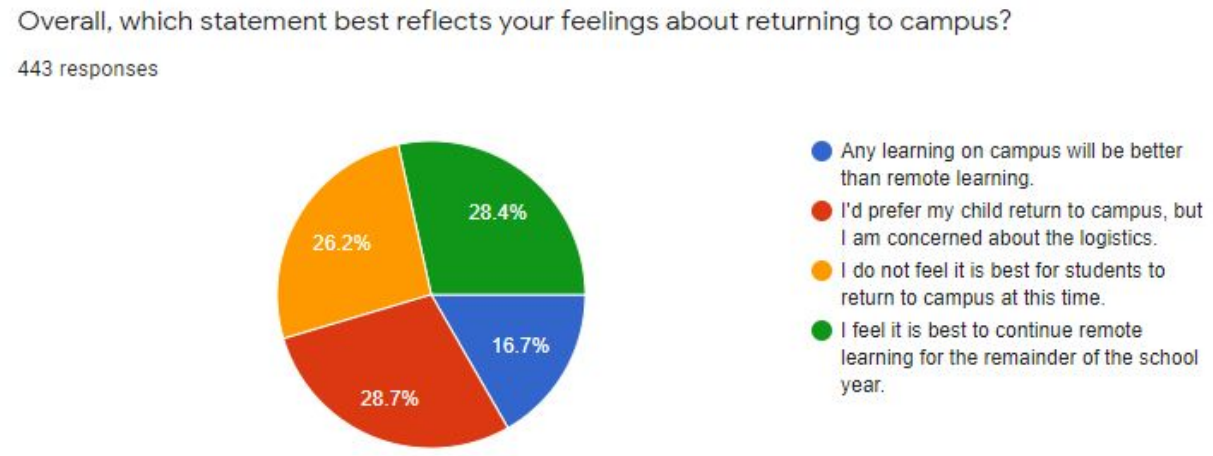
If RTHS were to open with a reduced capacity, what is the likelihood that you would send your child/return to school in the building?

	Teachers	Students	Families
No	19	14	22
Probably Not	29	16	19
Neutral	25	25	20
Probably Will	17	19	14
Definitely Will	10	23	25

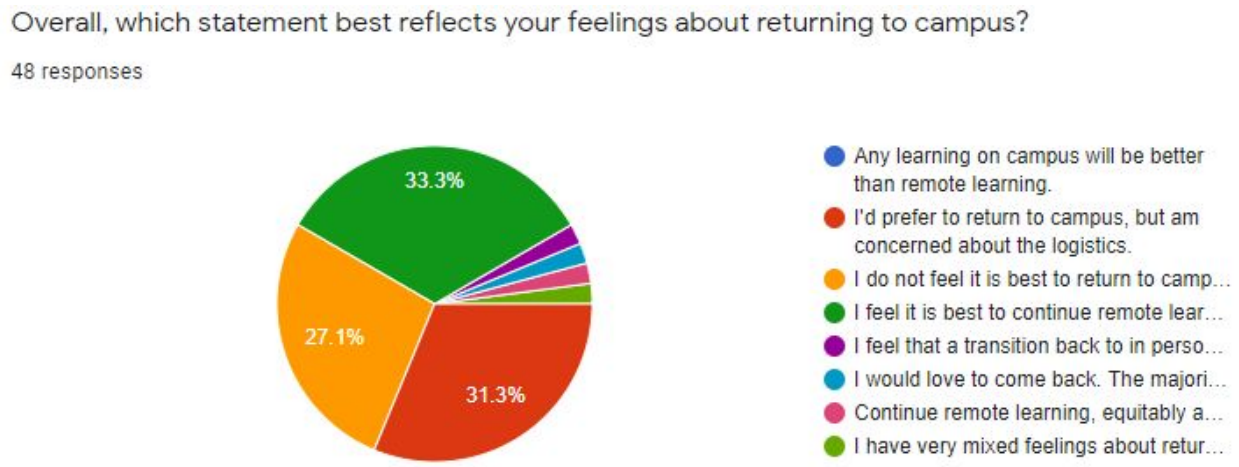
What is troubling about this data is the significantly higher percentage of teachers that have indicated they would not be likely to return if we opened the building under Plan B. We would not be able to support on-campus instruction if more than 20% of our teaching staff did not return. We are now seeing local school districts facing the same challenge in substitute staffing, and they are considering returning to remote learning out of necessity.

Parents, students, and teachers feel that there is no urgency to return to campus:

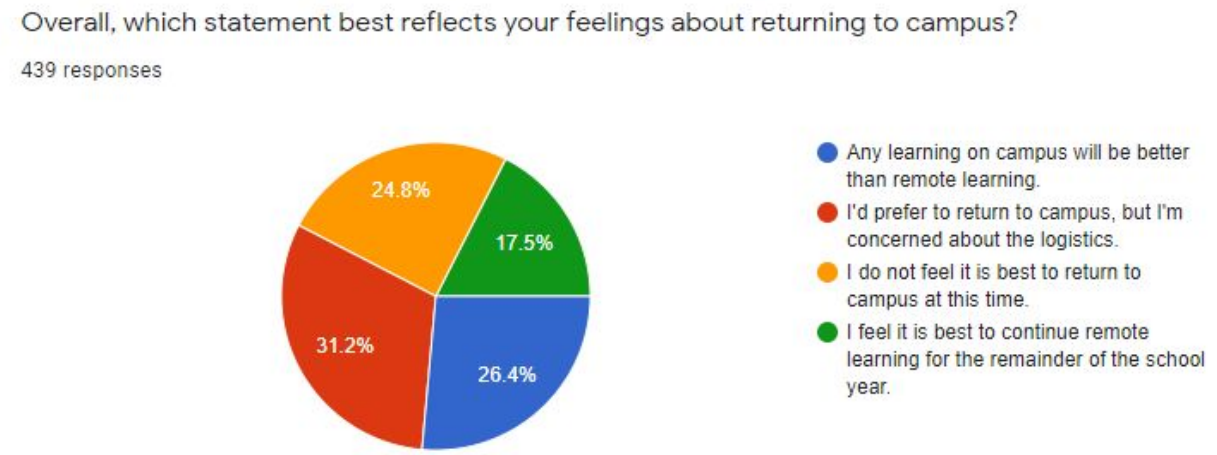
Parents:



Teachers:



Students:



Recommendation

It is my recommendation that RTHS not resume on campus instruction under Plan B (hybrid learning). In addition to taking on increased COVID risk on campus, educational quality will be compromised and equity in service to students will be reduced. A substantial number of students and faculty have indicated that they would not return, or would be likely not to return, should we open under hybrid conditions for health or childcare reasons, and these absences would further compromise educational quality.

Instead, we will commit to improving the quality of our remote instruction program. We are seeking outside advice on how to evaluate and amend the program. We will also be bringing mentoring back and increasing our SEL activities with students. We will increase the amount of time we spend teaching our students management and coping strategies, all of which will pay off for them in the long run. We also will be developing plans to bring small groups of students to campus more regularly for activities and learning opportunities.

It is important to note that nearly all of the educational quality concerns are artifacts of Plan B. Should high schools be allowed to open under Plan A, where there are no restrictions on attendance and only screening needs to be done, we would very much consider opening and restoring as closely to standard conditions as possible (traditional schedule, full attendance, etc.). Of course, any decision to open would be dependent on disease conditions in the state. We are very optimistic about the impact of a vaccine on these plans.

I appreciate the board's consideration of this information. The complete data sets can be viewed but contain student names and should not be released publicly.

Additional Information:

Sample Schedules
Focus Group Notes (contains anonymized participant comments)

Coversheet

Monthly Finance Report

Section: III. Finance
Item: A. Monthly Finance Report
Purpose: FYI
Submitted by:
Related Material: FY 2020-21 Budget Update 11.30.20.xlsx

Notice

The following file is attached to this PDF. You will need to open this packet in an application that supports attachments to pdf files, e.g. Adobe Reader:

FY 2020-21 Budget Update 11.30.20.xlsx

Coversheet

Development Committee Issues / Goals Status

Section: V. Development
Item: A. Development Committee Issues / Goals Status
Purpose: FYI
Submitted by:
Related Material: 2020_12_09_development_committee_meeting_minutes.pdf
THS-DD-Sheets.pdf
RTHS Landscape Proposal.pptx

Research Triangle High School

Minutes

Development Committee Meeting

Monthly Development Meeting

Date and Time
Wednesday December 9, 2020 at 2:30 PM

Location
Zoom Call during pandemic

https://rthighschool.zoom.us/j/94317644302

The Development Committee meets monthly - one week prior to the Board Meeting. If possible, please attend the meeting the meeting in person in Ashley's office. Alternately, you can connect in through zoom at:

https://rthighschool.zoom.us/j/94317644302

Committee Members Present
A. Fenoglio (remote), C. Mugge (remote), S. Rivers-Kobler (remote)

Committee Members Absent
M. Johnson, N. Danehower, T. Medhin

I. Opening Items

A. Record Attendance and Guests

B. Call the Meeting to Order
C. Mugge called a meeting of the Development Committee of Research Triangle High School to order on Wednesday Dec 9, 2020 @ 2:30 PM.

II. Development

A. Development Update

Ashley reported that Giving Tuesday was very successful a raising approx. $12K.
Ashley then shared the more detailed architectural plans for the landscaping of the front of the school. Much discussion ensued on the details of the plan and materials. Overall, all felt that the design was very well done. We discussed the opportunities for corporate sponsoring various areas of the plan. Ashley will provide a powerpoint to be used at the next Board Meeting to engage with Board.

B. Discuss 2020 Strategic Development Action Items

Much of the discussion was on the fundraising form to send out to the various organizations. We edited the original form during the meeting removing sections that requested information from the organizations that was not needed at this time and that would potentially cause concerns with some of the organizations. Ashley will send out the form before the holidays and have a meeting with the organizations in January. Carmen and Sondra will be included in the meeting.

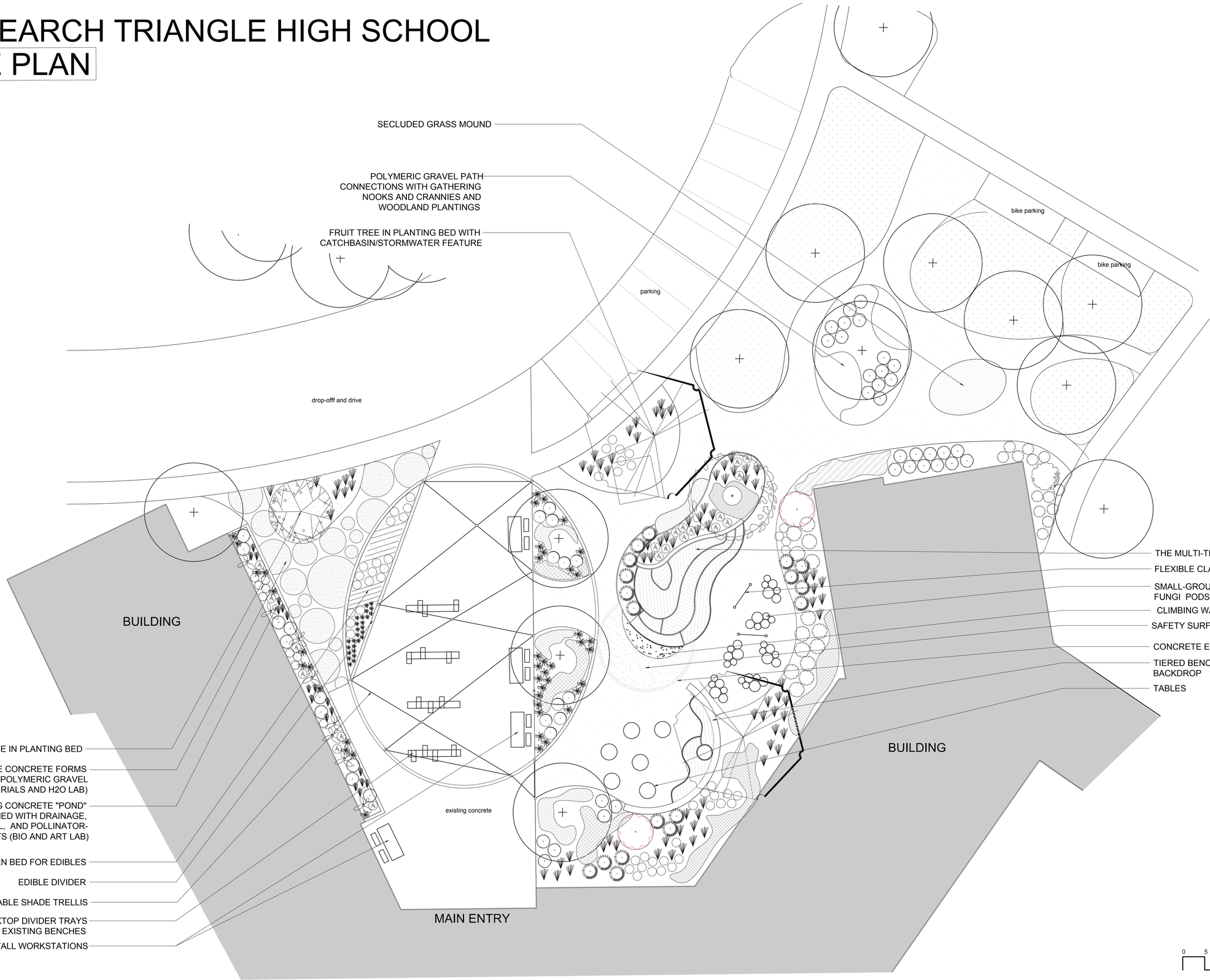
III. Closing Items

A. Adjourn Meeting

There being no further business to be transacted, and upon motion duly made, seconded and approved, the meeting was adjourned at 3:30 PM.

Respectfully Submitted,
C. Mugge

RESEARCH TRIANGLE HIGH SCHOOL
SITE PLAN



TRIBUTARY LAND DESIGN + BUILD
1812 Chapel Hill Rd
Durham NC 27707
919.402.1311

RESEARCH TRIAGLE HIGH SCHOOL
COURTYARD RE-DESIGN

Project Address:
3100 East, NC-54, Durham, NC 27709
Client:
RESEARCH TRIANGLE HIGH SCHOOL
Client Contact:
Ashley Fenoglio |
Director of Operations and Development
Email: afenoglio@rthighschool.org
Phone: (919) 998-4757 ext. 223

No.	Date	Revision Notes	Zone	Appr

Designed By	KG	Date	12.9.20	Project No.	RTHS-COURTYARD
Drawn By	KG	Revision	0	Drawing Code	
Checked By				CAD File Name	RTHS-BASE-DESIGN
Reviewed By	Katherine Gill			Plot Date	12.9.20
Submitted By	Katherine Gill,PLA,Tributary				
Project Manager	Katherine Gill				

Sheet Title
SITE PLAN

Scale
1"=10'

Sheet No.
1 of 1

Triangle High School :
The Court, The Yard, The Lab

TRANSFORM A BARREN, CORPORATE ENTRY TO A DIVERSE, HEALTHY, ACTIVATED OUTDOOR ENGAGEMENT CENTER

KEY DESIRES:

HIGH IMPACT PLANTINGS, MODELING ECOLOGICAL SYSTEMS, PLANT COMMUNITIES, EDIBLE GARDENS

WATER LAB: MONITOR STORMWATER, SITE USE, QUALITY AND QUANTITY AND CONNECTIVITY TO THE WATERSHED AND PLANT COMMUNITY OUTCOMES

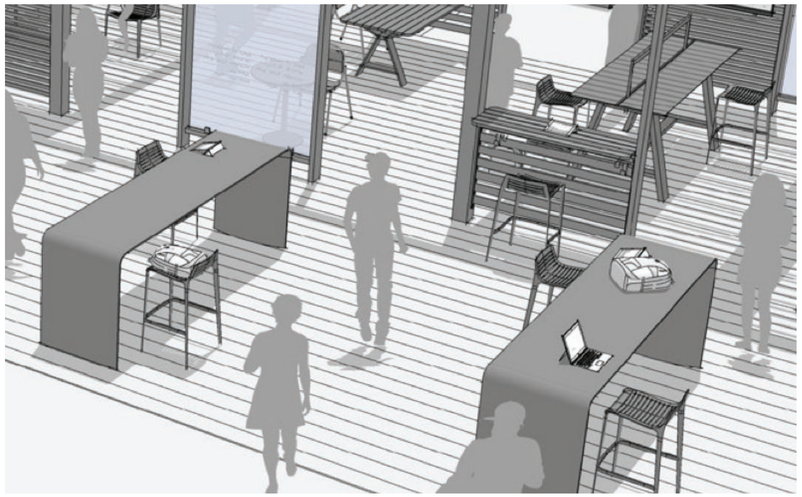
SPACE FOR PHYSICAL ACTIVITY

SPACE FOR SOCIAL GATHERING AND EATING

SPACE FOR OUTDOOR LEARNING WITH BUILT-IN PROJECT BASED LEARNING OPPORTUNITIES

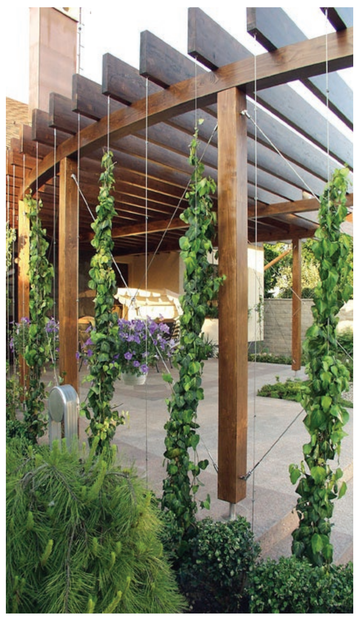
CREATE LOTS OF OPPORTUNITY OUT OF A SMALL, LIMITED OUT-DOOR AREA

PRECEDENT IMAGES FOR INSPIRATION AND EXAMPLES OF DESIGN INTENT



Multi-sided seating and tables for socializing nd solitude; work or eating

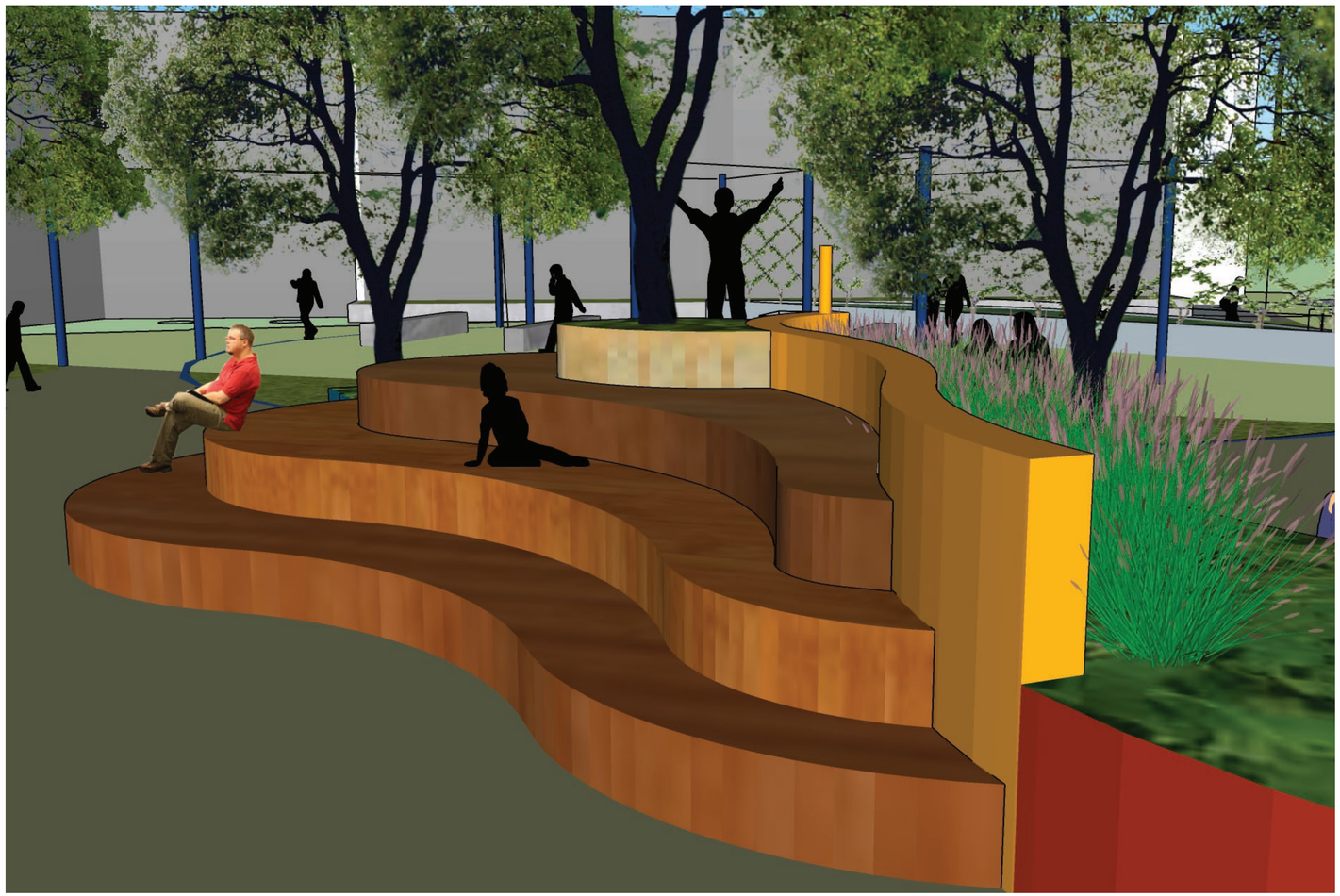
3 dimensional forms that morph into active climbing spaces and inviting seating areas and pockets and elevated mounds for green.



Trellising for biodiversity, shade, division of space, spacemaking.

Tiered platforms for multi-purpose seating and interruptions for green

TRIBUTARY
LAND DESIGN + BUILD






RESEARCH TRIANGLE HIGH SCHOOL




Our Mission

To increase access to globally competitive Science, Technology, Engineering and Math (STEM) education for students and teachers across North Carolina, by incubating, proving and scaling innovative models of teaching and learning.

Our Core Vision & Values

Our Vision

RTHS will provide the tools and develop the capacity for students to intentionally determine their futures.

Our Values

- We hold high standards and encourage growth through failure.
- We provide students with the tools to access power.
- We find joy in learning and exploring.
- We respect each other.
- We are responsive.

Quick Facts

- Opened in 2012 in the heart of RTP
- 550 Students
- Grades 9-12
- We enroll students from 9 different counties and over 60 middles schools
- We are one of the top 5 schools in NC for creating student growth on the ACT between 9th and 11th grades
- Demographic Data:
    - African-American: 14.9%
    - Asian: 17.2%
    - Caucasian: 49.3%
    - Latino: 10.1%
    - Multiracial: 8.2%

RTHS is a School that...

- Accelerates learning for every student on the achievement curve
- Moves students from passive recipients to collaborative creators
- Collaborates with RTP scientists, engineers and experts to build relevant STEM opportunities for our students.
- Builds relationships between students, local companies and universities.

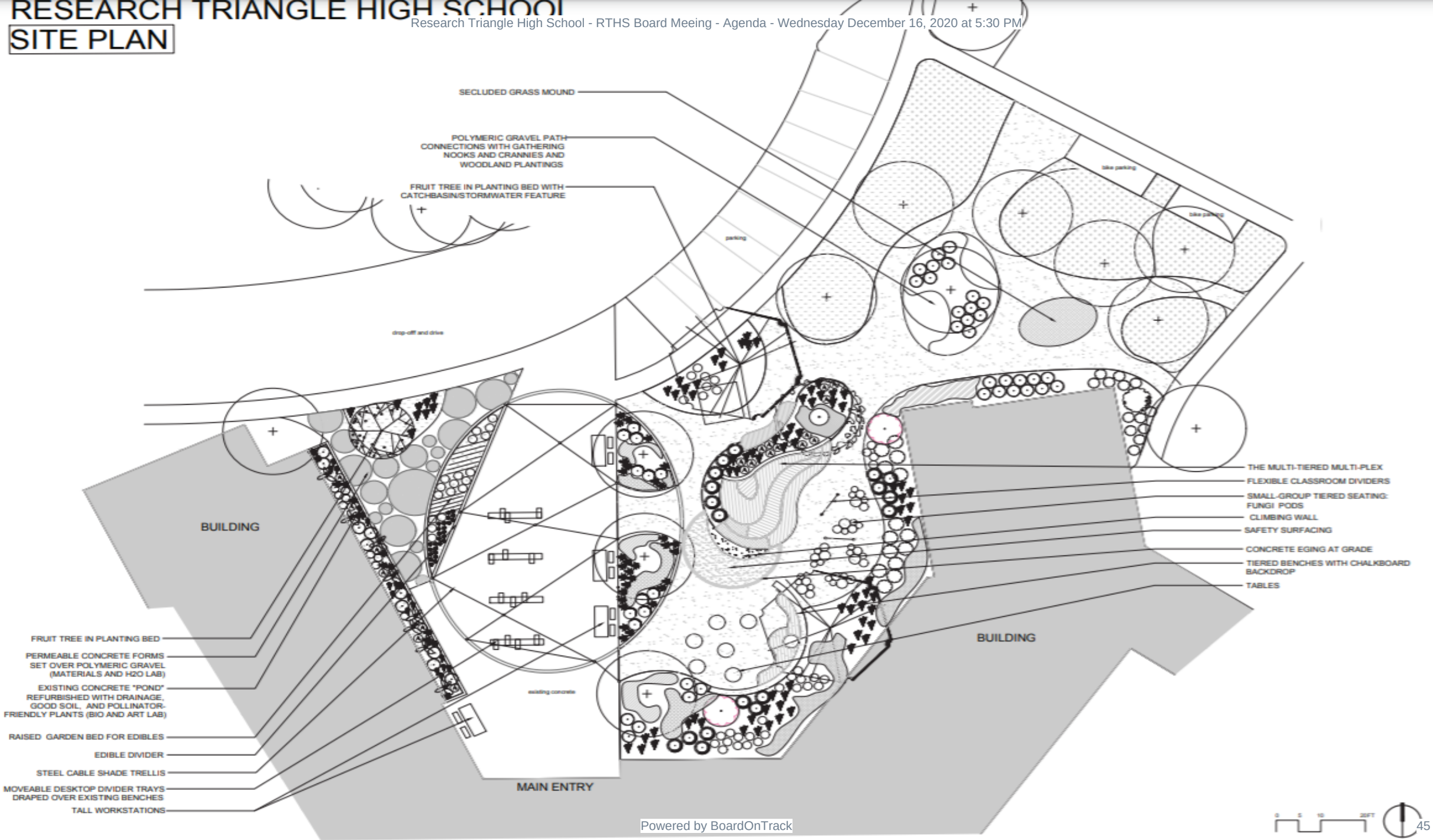
What is next?

Our school is embarking on a major improvement project —

- A complete landscaping overhaul
- Outdoor classroom space and amphitheater
- Outdoor lab and edible garden space
- All native landscaping and sustainable building materials

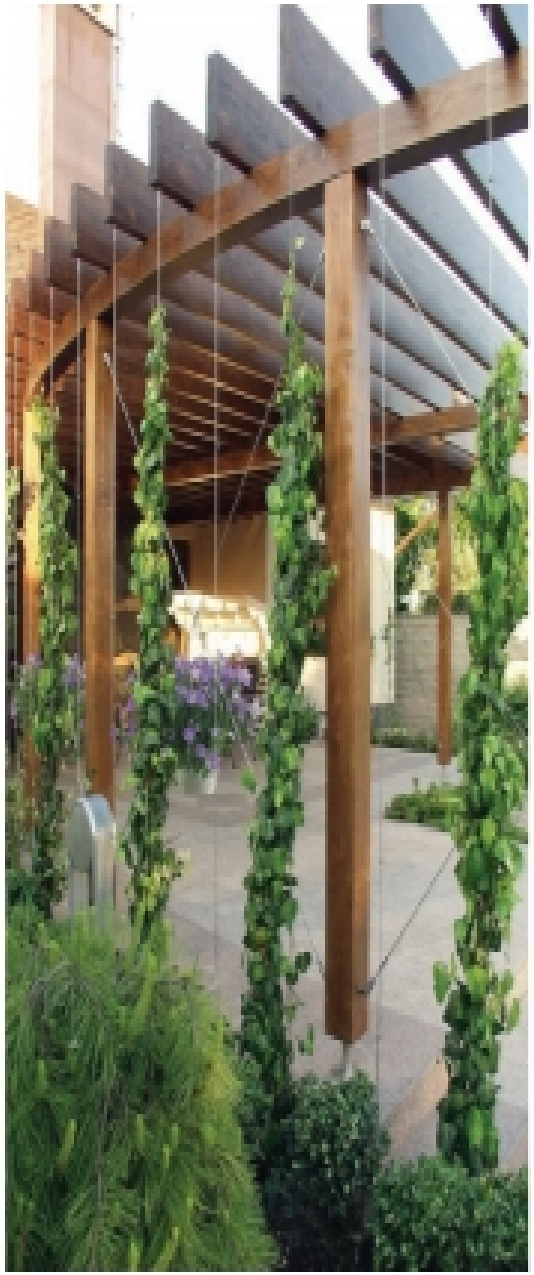
RESEARCH TRIANGLE HIGH SCHOOL

SITE PLAN



Active learning spaces and outdoor classroom space will allow for a more dynamic and engaging school environment

The outdoor garden will not only be a beautiful space for students to relax, it will also be a space where students get hands on experience working in the garden. This will be an outdoor lab where students can get their hands dirty and learn about their environment.



How can you help? Become a sponsor!

Triassic

Donate $10,000.00

Have your name on our “Wall of Partners”

Jurassic

Donate $15,000

Have your name on our “Wall of Partners”

*Need help with second incentive

Cretaceous

Donate $20,000+

Naming rights for our outdoor classroom, amphitheater, edible garden/outdoor lab

How can you help? Become a partner!

- Help us develop the curriculum for our outdoor lab.
- Provide materials for construction and maintenance.
- Volunteer to teach lessons and “Master Classes”
- Any other ideas that you may have!

Our Partners in Learning

- BASF
- Lenovo
- Credit Suisse
- IBM
- Cisco
- Ubisoft
- United Therapeutics
- Biogen
- NC State
- Duke
- Chapel Hill
- Wake Tech
- Durham Tech

at Research Triangle High School, *we*

Reach out to under-represented communities because we believe every student deserves a great education.

Implement a personalized learning model which has proven successful in helping kids achieve growth.

Value students as individuals and respect each student’s social and emotional needs.

Thank you!