An architectural rendering of the Durham Technical Community College Main Campus. The image shows a modern building with a mix of brick and metal siding, featuring a series of vertical windows. In the foreground, there is a large, landscaped area with terraced seating, greenery, and a paved walkway. People are depicted walking, sitting on the terraces, and riding bicycles, suggesting a vibrant campus environment. A white text box with an orange border is overlaid on the left side of the image.

DURHAM TECHNICAL COMMUNITY COLLEGE

# 2022 CAMPUS PLAN UPDATE

## MAIN CAMPUS

JUNE 28, 2022



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### SKANSKA

SANDY GRAY

|    |                          |    |
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# 01

## EXECUTIVE SUMMARY

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# 2022 CAMPUS PLAN UPDATE

## EXECUTIVE SUMMARY

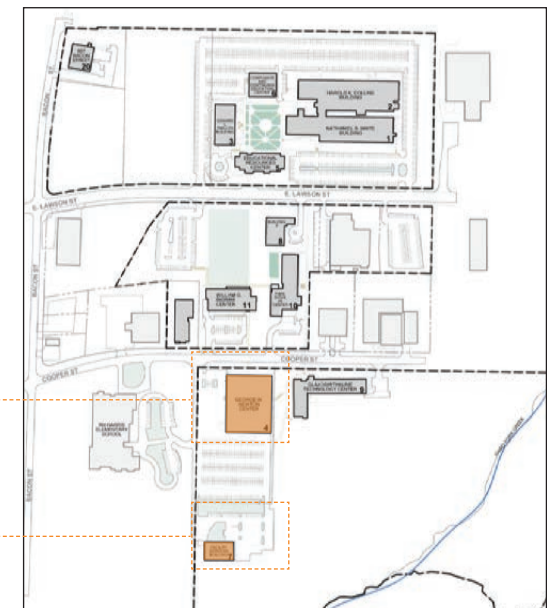
### FRAMEWORK

This 2022 Campus Plan is an **update** to the **2015 Master Plan** for the **Main Durham Campus** only. This report does not update the planning for the Orange County Campus or the Northern Durham Center. The Orange County Campus was updated in 2021.

The team analyzed the 2015 plan to understand the issues the College is trying to address and if the proposed 2015 solutions are still relevant in 2022.

The **2015 Master Plan** identified the following **primary action items**:

- 1) **A new Health Sciences Education Building** to address the high demand for healthcare professionals.
- 2) **Renovation of the Newton Building** due to the poor laboratory spaces for the applied technology programs.
- 3) **A new Facilities Building** due to the existing facility being at end-of-life with some safety concerns.





Since the 2015 Master Plan, **2 of the 3 primary action items have been addressed**. The new William G. Ingram Center for Applied Learning and Technology and the Renovated Newton Center have addressed the need for modern laboratories and student spaces for the Applied Technology programs. The new Facility building was also constructed which allowed for demolition of the potentially unsafe existing facility. The **remaining primary action item** of a new **Health Sciences Education Building** is still a need for the region. With the recent pandemic, the need for healthcare training remains paramount for the region.

The 2015 Master Plan noted that accomplishing all three of the primary projects would enable a list of **secondary projects** that includes renovations of several buildings. However, since the Health Sciences Education Building has not been completed, these renovations have not yet been enabled.

Since 2015, the college has made two **property acquisitions**: west of building 11, which is a property with a building that served as a metal fabrication shop, and east of Building 8, which is a property with a building that currently is a warehouse for two companies. Both of these buildings would need extensive renovations to be properly fit-up to serve as academic buildings. In a 2021 **facilities evaluation report**, it was noted that renovations of these buildings would be extensive enough that the delta in cost for new construction would be low enough to consider new construction due to the constraints renovations force on a building program.

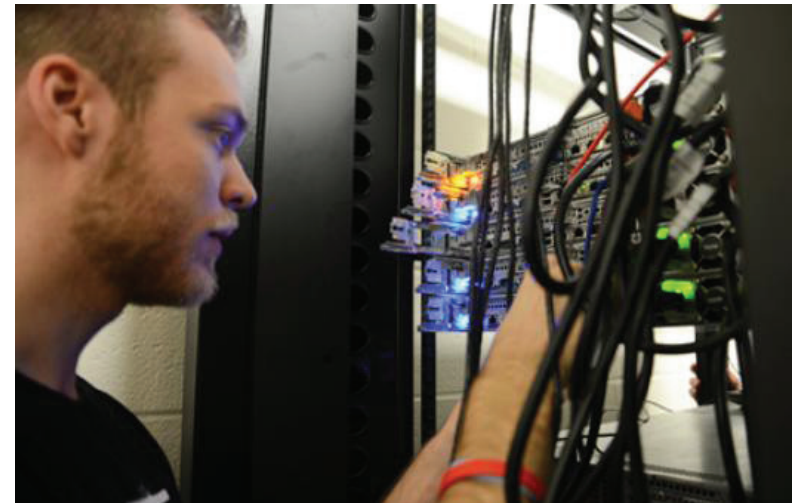


- |                                       |                                     |
|---------------------------------------|-------------------------------------|
| <b>Buildings addressed in 2015 MP</b> | <b>Buildings pending renovation</b> |
| 3 Renovation Newton Building          | 1 Nathaniel B. White Building       |
| 7 Facilities Building                 | 2 Harold K. Collins Building        |
| 11 William G. Ingram Center           | 3 Edward L. Phillips Building       |
|                                       | 5 Educational Resources Center      |
|                                       | 6 Corporate and Cont. Ed. Center    |
|                                       | 9 Glaxosmithkline Center            |
| <b>Recent property acquisitions</b>   |                                     |
| A Metal Fabrication Building          |                                     |
| B Warehouse Building                  |                                     |

The **COVID-19 pandemic** has caused everyone to rethink and strategize the implication on our community's future. While **Health Sciences** training has maintained or even increased in demand directly due to the pandemic, there have been other programmatic shifts related to industry expansion in the region that may be indirectly influenced by the consequences of the pandemic among other factors.

The **Triangle Region** experienced a large migration of businesses during the pandemic because many companies decided to set up major hubs or headquarters in the area. Several national publications have the Triangle region as a **top 3** metropolitan area for growth. Durham Tech is part of the pipeline to provide new talent and continued training to support these new and existing growing businesses. **The Life Sciences industry** is growing very fast and is looking to find local talent; in addition, the **IT industry** is also expanding very fast in the region.

The College recognizes these challenges and is looking to expand their training bandwidth. The pandemic also transformed education during the years of lock-down to rely on a **hybrid approach to providing education**. Like all educational institutions, Durham Tech has embraced remote learning as a viable method of educating their students. However, in analyzing their students' needs, the College acknowledges a purely remote educational program is deficient to many students' needs and learning styles. Durham Tech believes **hands-on training** remains the best method for students to learn many of the critical skills they will need in their future workplaces. The need for laboratories and classrooms remain with the **hybrid learning model**.







Collaborative workshop 06/09/2022



## PROCESS

The **2022 Campus Plan Update** was developed through a series of collaborative workshops between Durham Tech Staff, the Design Consultant, and Strategic Advisors. In these workshops we developed the campus goals, evaluated data, and ultimately developed updated concepts for the campus. We worked together and developed a **survey for students and staff** that helped the team understand **trends** that affect the **planning of the campus**. The team also had several walkthroughs of the campus to analyze the success and deficiencies of the exterior spaces in regard to the strategic goals. The Design Consultant was also tasked with evaluating the campus for ADA deficiencies and these are noted in this plan. This information collection culminated in **updating the planning concepts for the Campus**. The Design Consultant provided the College with cost models that are based around the **planning concepts** so that Durham Tech can take next steps to acquire funding to execute these concepts.





## CAMPUS GOALS

Recently, **Durham Tech** updated their **Strategic Plan** that factored the pandemic's influence on our community. In this Strategic Plan, the College pledged to create a **Welcoming Campus** that would be an environment of belonging and inclusiveness reflected by their **One College model**. They also pledge to teach in modern learning spaces using **Today's Technology** so that students are prepared for the modern workforce.

Their **Pathways to Institutional Excellence** notes that they need to develop teaching and learning spaces by building or renovating them with **state-of-the-art technology and infrastructure**. The strategic plan also notes that Durham Tech will strive to create **green and sustainable campuses**, minimizing the College's Carbon footprint, and engaging in campus beautification efforts that culturally reflect Durham and Orange Counties' communities.

Using the **Strategic Plan as a foundation** the **2022 Campus Plan Update** establishes these goals:



CAPACITY

PROVIDE MORE CAPACITY FOR HEALTH SCIENCES, LIFE SCIENCES, INFORMATION TECHNOLOGY, AND APPLIED TECHNOLOGY



IDENTITY

ENHANCE CAMPUS IDENTITY



OUTDOOR

IMPROVE THE QUALITY OF CAMPUS OUTDOOR SPACES



INDOOR

IMPROVE CAMPUS INTERIOR SPACES



CONNECTION

CREATE A MORE CONNECTED CAMPUS THAT FEELS WELCOMING FOR ALL STUDENTS WITHOUT BARRIERS



AMENITIES

PROVIDE AMENITIES AND SUPPORT SPACES FOR STUDENTS AND STAFF



SUSTAINABLE

PROVIDE OPPORTUNITIES FOR SUSTAINABILITY, REDUCED CARBON FOOTPRINT, AND ENHANCING STUDENTS' WELLBEING



## PROPOSED PROJECTS

The proposed projects have been subdivided into three different categories depending on the scope of work they will cover.

### ACADEMIC BUILDING PROJECTS

These projects focus primarily on the addition or renovation of buildings to provide more capacity for their respective educational field. In addition, these projects nest renovations/enhancements to the surrounding building area and include indoor+outdoor amenities for students+staff.

For detailed information about these projects, refer to page 37.

Health Sciences Education building (Future building 12)

Life Sciences Education building (Future building 13)

Applied Technologies building (Future building 14)

Building 9 Interior refresh

### MAJOR CAMPUS IMPROVEMENTS

These projects focus on enhancing the campus identity and experience. They aim to improve the existing outdoor spaces and the appearance of Lawson Street.

For detailed information about these projects, refer to page 47.

Lawson Street improvements\*

Enhance North Quad

Enhance Building 1&2 courtyard

### GENERAL IMPROVEMENTS

These projects focus on improving campus functionality, safety, and circulation for the students+staff. Additionally, the Landscape Enhancements will improve the overall appearance of the outdoor spaces.

For detailed information about these projects, refer to page 53.

ADA improvements

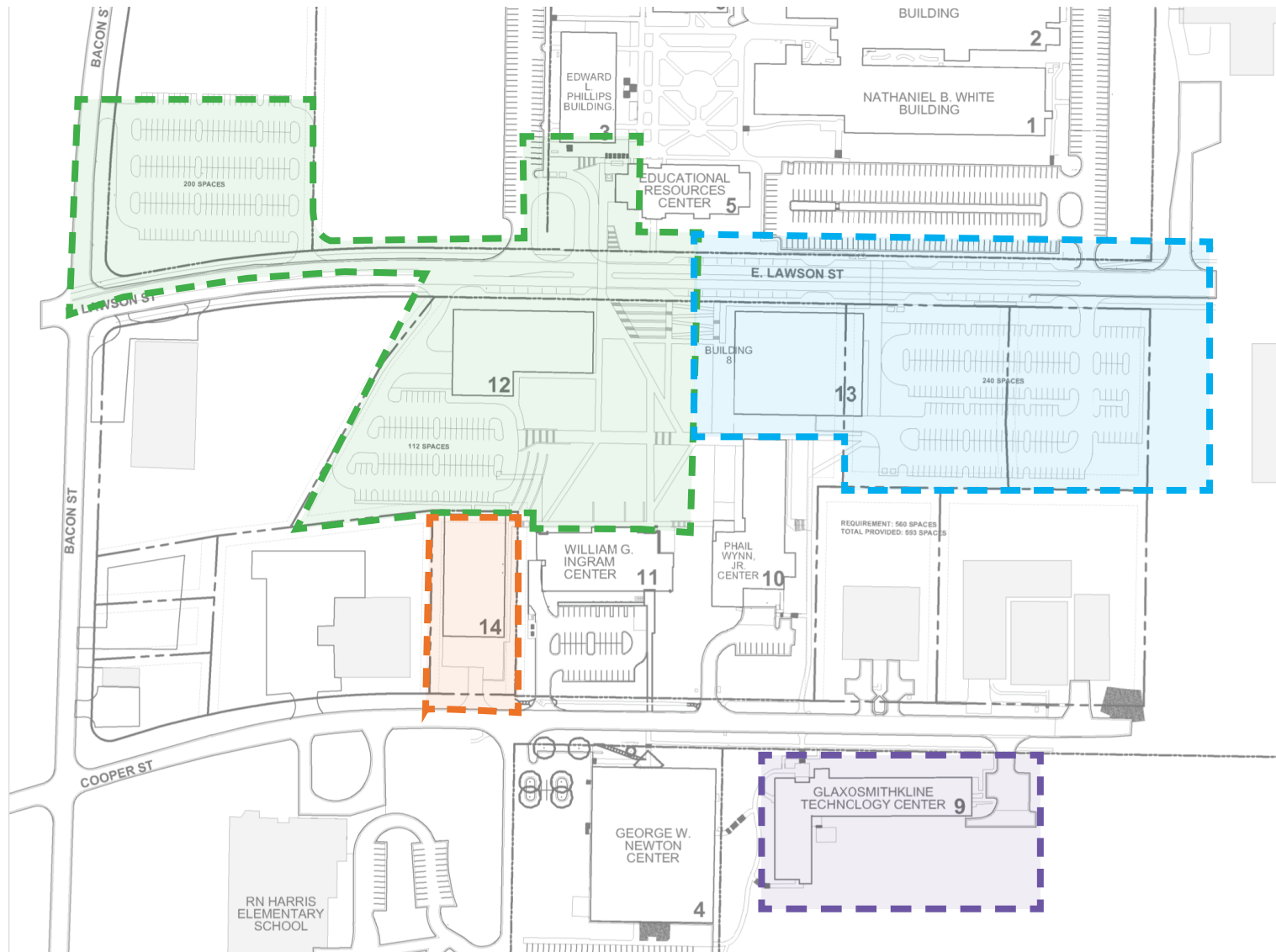
Landscape enhancements

Wayfinding refresh

\* For budgeting purposes, Lawson Street improvements have been nested into Building 12 and Building 13 projects



## ACADEMIC BUILDING PROJECTS



### ACADEMIC BUILDING PROJECTS

 Health Sciences Education Building (Future Building 12)

 Life Sciences Education Building (Future Building 13)

 Applied Technologies Building (Future Building 14)

 Building 9 Interior Refresh





## ACADEMIC BUILDING PROJECTS

### CONSTRUCTION OF A NEW HEALTH SCIENCES EDUCATION BUILDING (FUTURE BUILDING 12)

**Opportunities** to achieve these strategic goals\*



CAPACITY

Provide for **Health Sciences** education



IDENTITY

Improve campus **identity**



OUTDOOR

Improve the quality of campus **outdoor spaces**



INDOOR

Improve the quality of **indoor spaces**



CONNECTION

Create a more **connected campus** that feels welcoming for all students



AMENITIES

Provide **amenities** and support spaces for students and staff



SUSTAINABLE

Provide for **sustainability** and enhancing students' well-being

### Components

New **80,000 GSF** classroom/lab building

**Pedestrian bridge** that links to the Northern campus

**Lawson streetscape** improvements

Campus **green space** and landscape improvements

2 surface **parking lots**

**Building 5 renovation** for pedestrian bridge and **vehicular plaza**

\*See page 37 for more information on **how** to achieve the strategic goals.



Rendered view



Project boundary



## ACADEMIC BUILDING PROJECTS

### CONSTRUCTION OF A NEW LIFE SCIENCES EDUCATION BUILDING (FUTURE BUILDING 13)

**Opportunities** to achieve these strategic goals\*



CAPACITY

Provide for **Life Sciences** education



IDENTITY

Improve campus **identity**



OUTDOOR

Improve the quality of campus **outdoor spaces**



INDOOR

Improve the quality of **indoor spaces**



CONNECTION

Create a more **connected campus** that feels welcoming for all students



AMENITIES

Provide **amenities** and support spaces for students and staff



SUSTAINABLE

Provide for **sustainability** and enhancing students' well-being

### Components

New **35,280 GSF** lab and classroom building

**Demolition** of 2 buildings

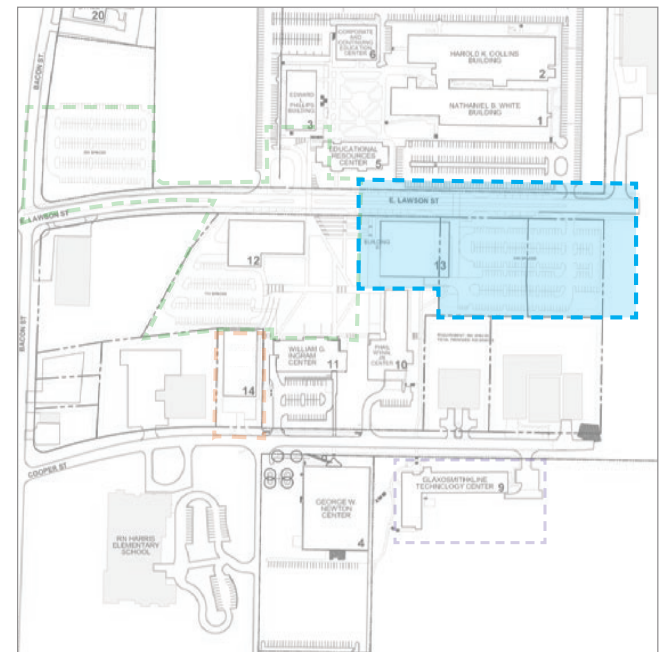
Surface **parking lot**

**Lawson streetscape** improvements

Campus **green space** and landscape improvements



Rendered view



Project boundary

\*See page 41 for more information on **how** to achieve the strategic goals.



## ACADEMIC BUILDING PROJECTS

### CONSTRUCTION OF A NEW APPLIED TECHNOLOGIES BUILDING (FUTURE BUILDING 14)

**Opportunities** to achieve these strategic goals\*



CAPACITY

Provide for **Applied Technologies** education



INDOOR

Improve the quality of **indoor spaces**



CONNECTION

Create a more **connected campus** that feels welcoming for all students



AMENITIES

Provide **amenities** and support spaces for students and staff



SUSTAINABLE

Provide for **sustainability** and enhancing students' well-being

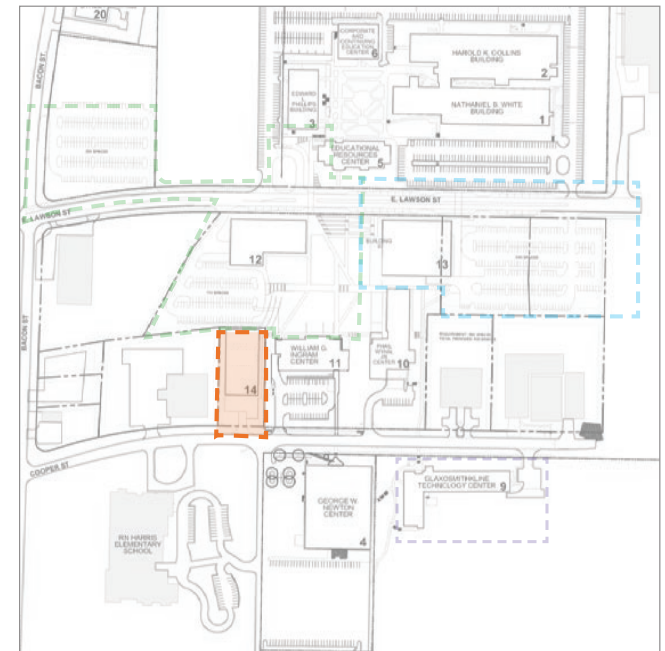
### Components

New **20,000 GSF** lab and classroom building

**Demolition** of Existing Building



Aerial rendered view



 Project boundary

\*See page 44 for more information on **how** to achieve the strategic goals.





## ACADEMIC BUILDING PROJECTS

### BUILDING 9 INTERIOR REFRESH

**Opportunities** to achieve these strategic goals\*



CAPACITY

Provide for modern **Information Technology** education



OUTDOOR

Improve the quality of campus **outdoor spaces**



INDOOR

Improve the quality of **indoor spaces**



AMENITIES

Provide **amenities** and support spaces for students and staff



SUSTAINABLE

Provide for **sustainability** and enhancing students' well-being

### Components

**IT labs** to replace vacated health Sciences spaces.

Student **study spaces**

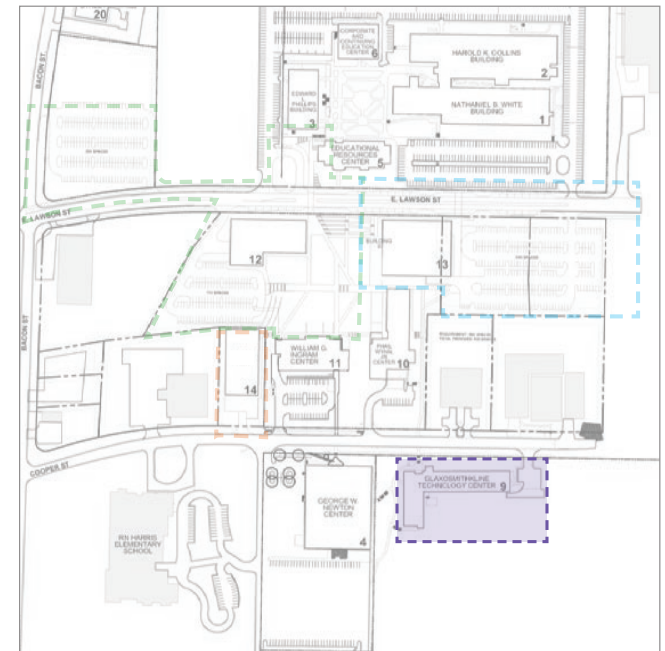
**Coffee shop** or kiosk

**ADA improvements**

**Landscape improvements**



Existing conditions

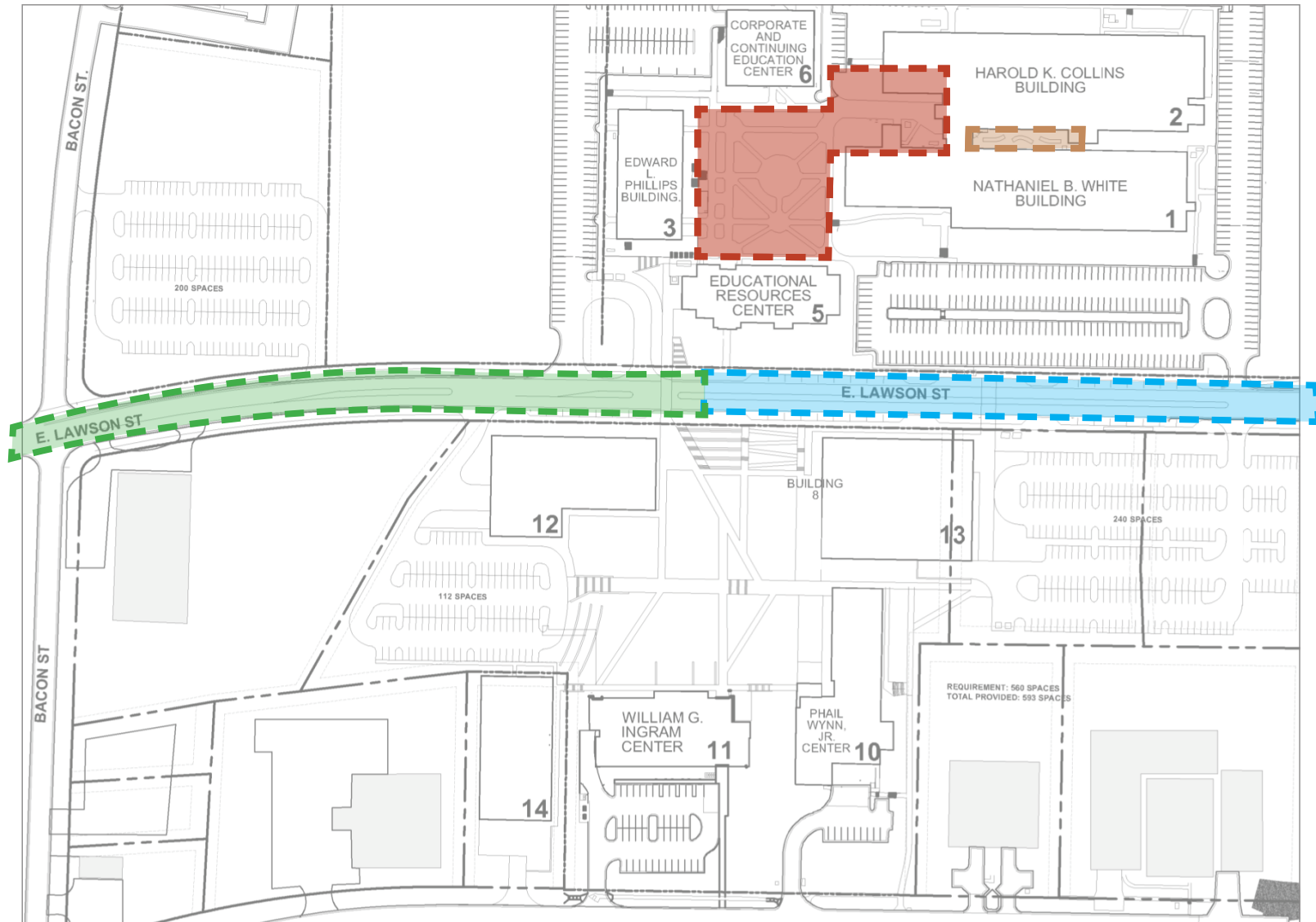


 Project boundary

\*See page 45 for more information on **how** to achieve the strategic goals.



## MAJOR CAMPUS IMPROVEMENTS



### MAJOR CAMPUS IMPROVEMENTS



Lawson St. improvements\*\*\*

\*\*\* For budgeting, Lawson Street improvements have been nested into Building 12 and Building 13 projects



Enhance North Quad



Enhance Building 1&2 Courtyard



## MAJOR CAMPUS IMPROVEMENTS

### LAWSON STREET IMPROVEMENTS

**Opportunities** to achieve these strategic goals\*



OUTDOOR

Improve the quality of campus **outdoor spaces**



CONNECTION

Create a more **connected campus** that feels welcoming for all students



SUSTAINABLE

Provide for **sustainability** and enhancing students' well-being

### Components

**Bury** utility lines

**Landscaped median and edges**

Improved **sidewalks**

Traffic calming: **Street parking**

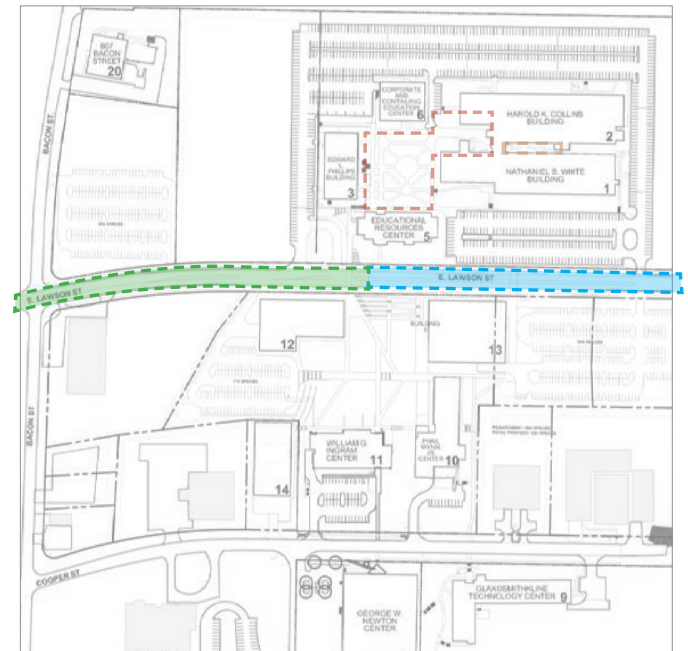
**Bike lanes**

**Connections** to campus outdoor space

\*\*\* For budgeting, Lawson Street improvements have been nested into Building 12 and Building 13 projects



Rendered view



Project boundary

\*See page 47 for more information about this project.





## MAJOR CAMPUS IMPROVEMENTS

### ENHANCE NORTH QUAD

**Opportunities** to achieve these strategic goals\*



OUTDOOR

Improve the quality of campus **outdoor spaces**



CONNECTION

Create a more **connected campus** that feels welcoming for all students



AMENITIES

Provide **amenities** and support spaces for students and staff



SUSTAINABLE

Provide for **sustainability** and enhancing students' well-being

### Components

Enhanced **landscaping**

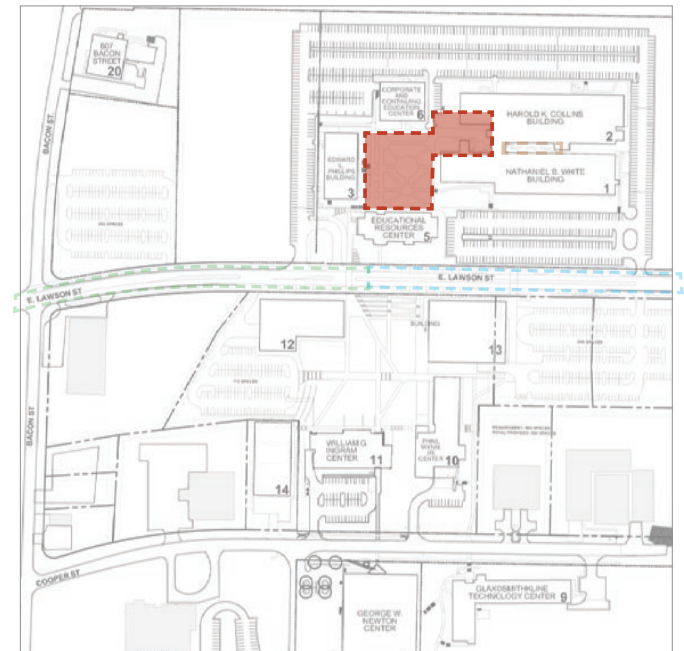
Added **furniture** with more opportunities for seating

**Connect** the **building 3 pit** with the Quad

**Connect building 1&2** by removing barriers both physical and visual



Existing Conditions



Project boundary

\*See page 51 for more information about this project.



## MAJOR CAMPUS IMPROVEMENTS

### ENHANCE BUILDING 1&2 COURTYARD

**Opportunity** to achieve these strategic goals\*



OUTDOOR

Improve the quality of campus **outdoor spaces**



AMENITIES

Provide **amenities** and support spaces for students and staff



SUSTAINABLE

Provide for **sustainability** and enhancing students' well-being

### Components

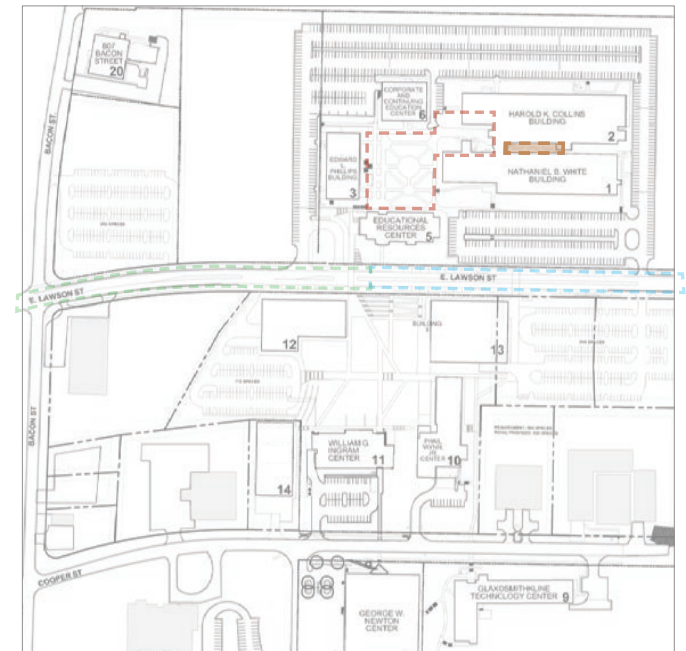
Building enhancements

Enhanced landscaping

Equipment **screening**



Existing Conditions

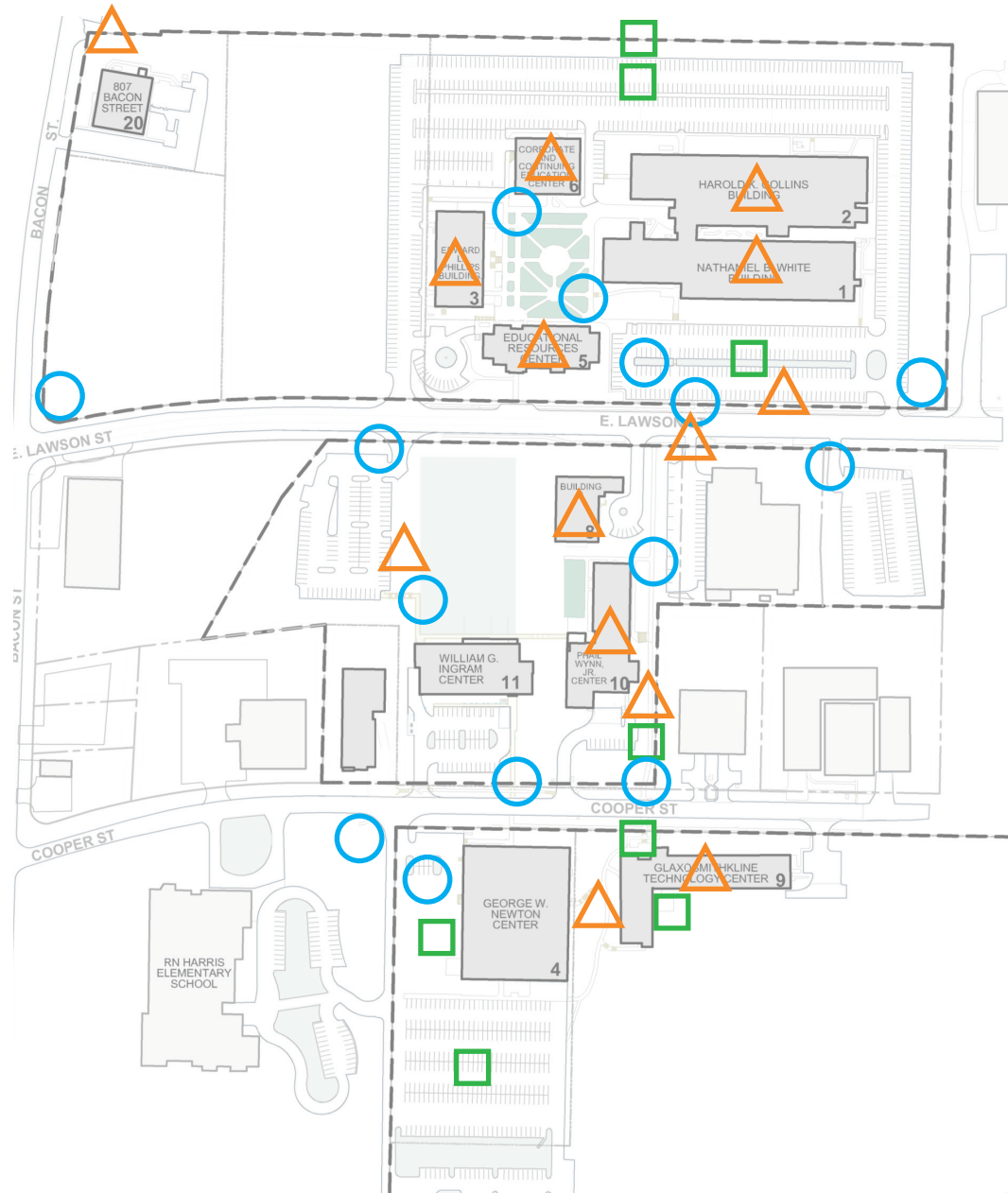


Project boundary




\*See page 52 for more information about this project.



## GENERAL IMPROVEMENTS



### GENERAL IMPROVEMENTS

-  ADA Improvements\*
-  Landscape Enhancements\*\*
-  Wayfinding Refresh\*\*\*

\* See Appendix A for ADA improvements

\*\* See Appendix C for landscape enhancements

\*\*\* See Page 55 for wayfinding improvements





## GENERAL IMPROVEMENTS

### ADDRESS ADA CAMPUS ISSUES

**Opportunity** to achieve these strategic goals:



OUTDOOR

Improve the quality of campus **outdoor spaces**



CONNECTION

Create a more **connected** campus

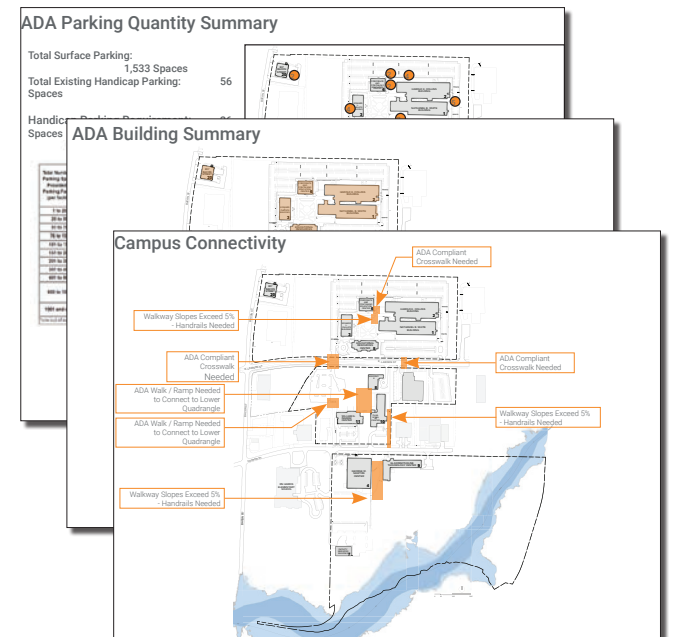
### Components

**Building enhancements**

Campus exterior **pathway enhancements**



Rendered view



ADA studies\*\*

\*See page 53 for more information about this project.

\*\*See **Appendix A** for full ADA report



## GENERAL IMPROVEMENTS

### CAMPUS LANDSCAPE ENHANCEMENTS

**Opportunity** to achieve these strategic goals\*



OUTDOOR

Improve the quality of campus **outdoor spaces**



CONNECTION

Create a more **connected campus** that feels welcoming for all students



SUSTAINABLE

Provide for **sustainability** and enhancing students' well-being

### Components

Planted **landscape screen**

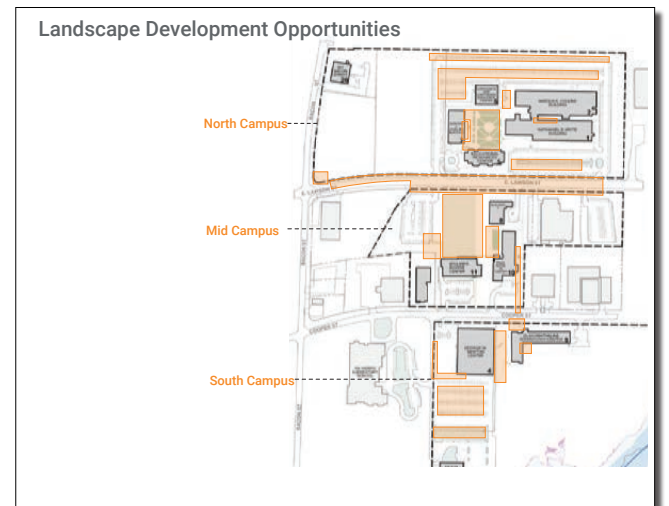
**Planting palette**

Improved **drainage**

Seating walls

\*See page 54 for more information about this project.

\*\*See **Appendix C** for more information about Landscape Improvements



Landscape development studies\*\*



## GENERAL IMPROVEMENTS

### WAYFINDING REFRESH

**Opportunities** to achieve these strategic goals:



CONNECTION

Create a more connected campus that feels welcoming for all students

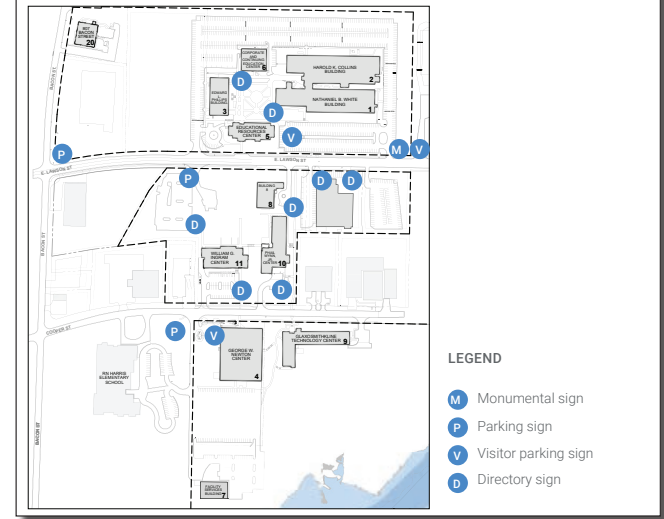
#### Components

Updated **campus signage and exhibits**

Integrate **QR codes** on exhibits



#### Wayfinding Refresh



\*See page 55 for more information about this project.

Wayfinding refresh study





## COST ESTIMATE

### SKANSKA

DTCC - Campus Master-Plan  
Durham Technical Community College  
Durham, NC  
Rough Order of Magnitude (R3)

Skanska USA Building Inc.  
4309 Emperor Blvd, Suite 200  
Durham, NC 27703  
7/26/2022

| PROJECT COST SUMMARY                     |                      |               |          |           |       |                     |       |                     |                      |
|------------------------------------------|----------------------|---------------|----------|-----------|-------|---------------------|-------|---------------------|----------------------|
| Description                              | Constr. \$           | Escalation \$ |          |           |       | Soft \$             |       | Project \$          |                      |
|                                          | Total                | Start         | Duration | MoC       | %     | Total               | %     | Total               | Total                |
| A. Building 12 (Health Science)          | \$58,605,400         | Q3 / 2024     | 22 mos   | Q3 / 2025 | 23.1% | \$13,520,000        | 33.0% | \$23,801,000        | <b>\$95,926,400</b>  |
| B. Building 13 (Life Science Ed)         | \$28,006,500         | Q3 / 2024     | 20 mos   | Q2 / 2025 | 21.6% | \$6,044,000         | 33.0% | \$11,237,000        | <b>\$45,287,500</b>  |
| C. Building 14 (Applied Technology)      | \$12,162,800         | Q2 / 2026     | 18 mos   | Q1 / 2027 | 31.6% | \$3,838,000         | 33.0% | \$5,280,000         | <b>\$21,280,800</b>  |
| D. ADA Enhancements                      | \$1,449,900          | Q2 / 2024     | 3 mos    | Q3 / 2024 | 17.5% | \$254,000           | 20.3% | \$345,000           | <b>\$2,048,900</b>   |
| E. Building 1 & 2 Courtyard Enhancements | \$1,260,700          | Q2 / 2025     | 3 mos    | Q3 / 2025 | 23.6% | \$297,000           | 22.3% | \$347,000           | <b>\$1,904,700</b>   |
| F. North Quad Enhancements               | \$1,696,400          | Q2 / 2025     | 6 mos    | Q3 / 2025 | 23.6% | \$400,000           | 22.3% | \$466,000           | <b>\$2,562,400</b>   |
| G. Campus Landscape Enhancements         | \$366,800            | Q2 / 2024     | 6 mos    | Q3 / 2024 | 17.5% | \$64,000            | 22.3% | \$96,000            | <b>\$526,800</b>     |
| H. Wayfinding Refresh                    | \$315,300            | Q2 / 2024     | 3 mos    | Q3 / 2024 | 17.5% | \$55,000            | 13.0% | \$48,000            | <b>\$418,300</b>     |
| I. Building 9 Refresh                    | \$7,720,100          | Q2 / 2028     | 12 mos   | Q4 / 2028 | 38.6% | \$2,982,000         | 35.0% | \$3,746,000         | <b>\$14,448,100</b>  |
| <b>Total Project Cost</b>                | <b>\$111,583,900</b> |               |          |           |       | <b>\$27,454,000</b> |       | <b>\$45,366,000</b> | <b>\$184,403,900</b> |

\*See **Appendix D** for full Cost Estimate report

# 02

## SURVEY STUDENT + STAFF INPUT

|               |    |
|---------------|----|
| STUDENT INPUT | 25 |
| STAFF INPUT   | 28 |



Survey response summary

\*See **Appendix B** for full survey data for both student and staff surveys.

\*\*The survey data shown in the following pages is not the product of a scientific process and is not representative the entire Durham Tech Community College population. The survey was targeted to a specific group of students and the data obtained from the survey is intended for trending purposes only

## ? SURVEY DATA | STUDENTS

The data was obtained from **107 students** from DTCC who filled out an **on-line survey**. While a large percentage of the student population participates in classes and labs virtually, this data reflects not only how much these areas are being used, but how much they are and will be needed in the future. The survey helped the OBA team obtain **trends** about the usage of the campus spaces and their condition, which were an essential component while pointing out the **goals for the 2022 Campus Plan Update**.

The data trends obtained can be classified into 5 different categories: Services/ amenities, dining facilities, collaboration spaces, outdoor spaces, and wayfinding

### SERVICES/AMENITIES:

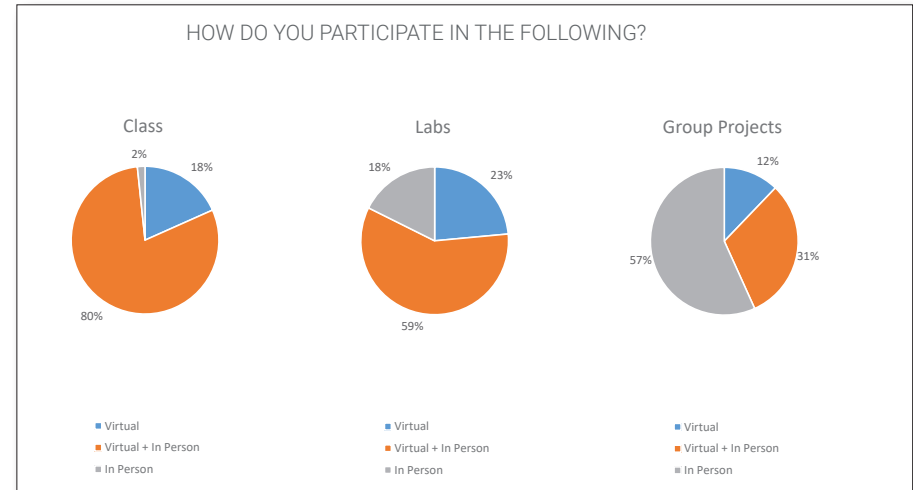
-Overall it seems that their usage is low, but this could be influenced by the percentage of students that currently participate in classes virtually.

-There is a lack of awareness of these spaces, or maybe there are some limitations such as lack of staffing, scheduling, area (sqft), and/or lack of options.

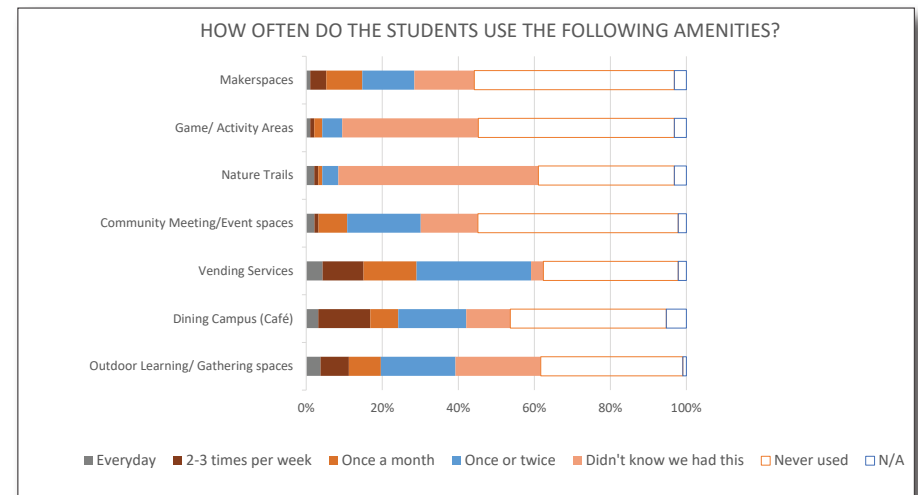
-Students expressed the need for comfortable spaces in between classes.

-The 2022 Campus Plan Update aims to incorporate more of these spaces into the new buildings and renovations to satisfy these needs

\*See **Appendix B** for full survey data for both student and staff surveys.



To see full size chart, refer to **Appendix B**



To see full size chart, refer to **Appendix B**





## SURVEY DATA | STUDENTS

### DINING FACILITIES:

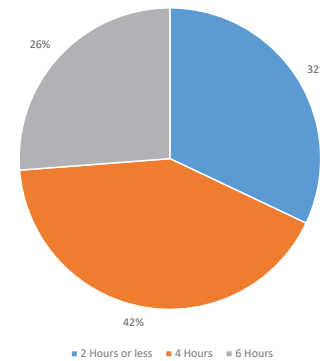
- About 3/4 of the students spend at least 4 hours or more on campus in a day, which means that they most likely will need a snack/meal break to feel comfortable during classes.
- The data and student responses indicates that the current facilities do not fully meet the students need.
- More capacity and options are needed around campus.
- The 2022 Campus Plan Update focuses on providing distributed locations for dining, coffee, and vending

### COLLABORATION SPACES:

- The data reflects that the students do use some spaces, such as the library, as a collaboration space.
- The students expressed the need for more options of these spaces throughout campus.
- The 2022 Campus Plan Update focuses on integrating more collaboration spaces in the new buildings to improve the students experience

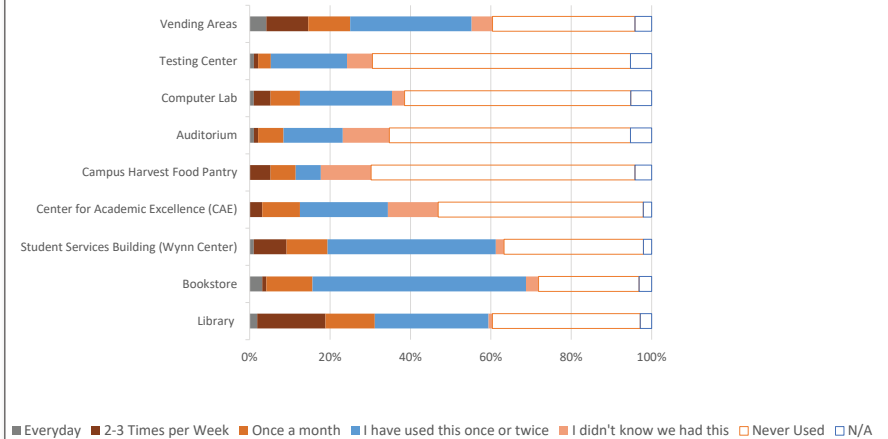
\*See **Appendix B** for full survey data for both student and staff surveys.

HOW MANY HOURS DO YOU SPEND ON CAMPUS IN A DAY?



To see full size chart, refer to **Appendix B**

HOW OFTEN DO THE STUDENTS USE THE FOLLOWING SERVICES?



To see full size chart, refer to **Appendix B**



## SURVEY DATA | STUDENTS

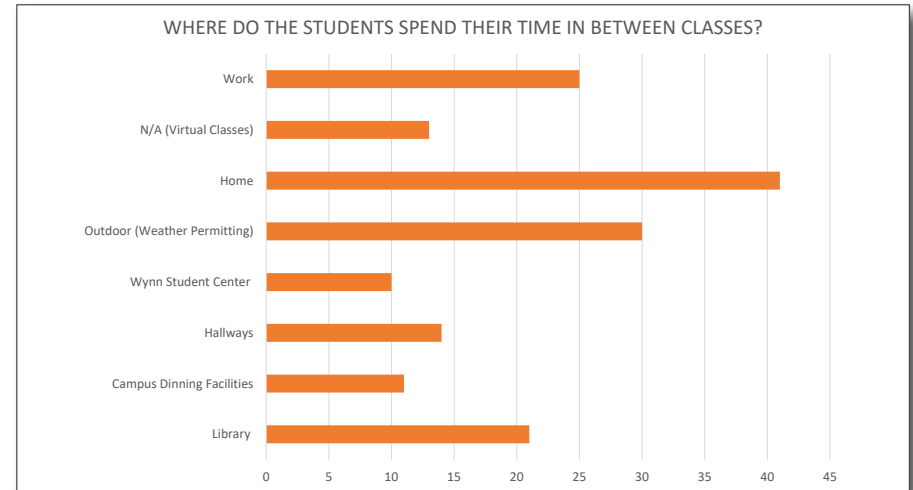
### OUTDOOR SPACES:

- There is a moderate use of the outdoor spaces among the students.
- The students expressed that there is a need for more and a need to improve for the existing ones
- While many students spend their time in between classes at home, improved outdoors spaces may encourage them to interact and collaborate with their peers while reducing their time in transit.
- The 2022 Campus Plan Update aims to enhance the overall campus identity and quality of outdoor spaces to increase the enjoyment and student performance in classes.

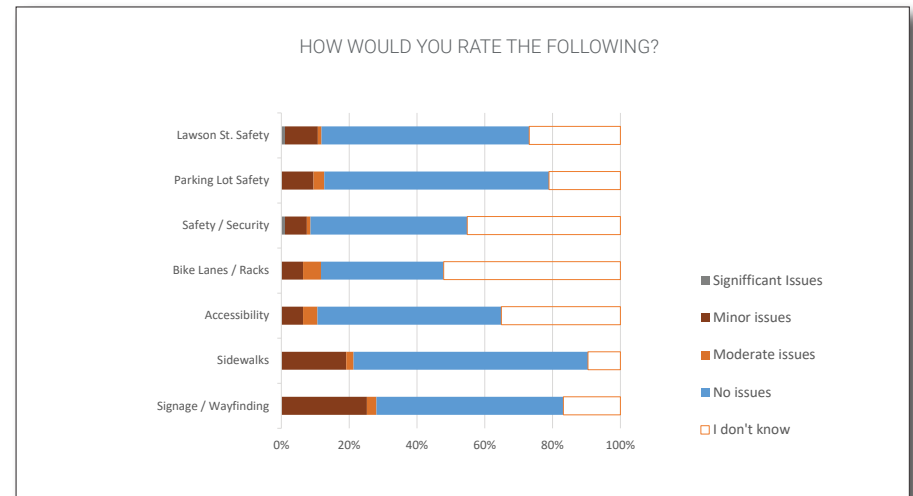
### WAYFINDING:

- The data and student responses highlights the need to update campus wayfinding.
- The 2022 Campus Plan Update will incorporate a renovation of the campus signage and wayfinding, as well as improving overall circulation and access.

\*See **Appendix B** for full survey data for both student and staff surveys.



To see full size chart, refer to **Appendix B**



To see full size chart, refer to **Appendix B**

## ? SURVEY DATA | STAFF

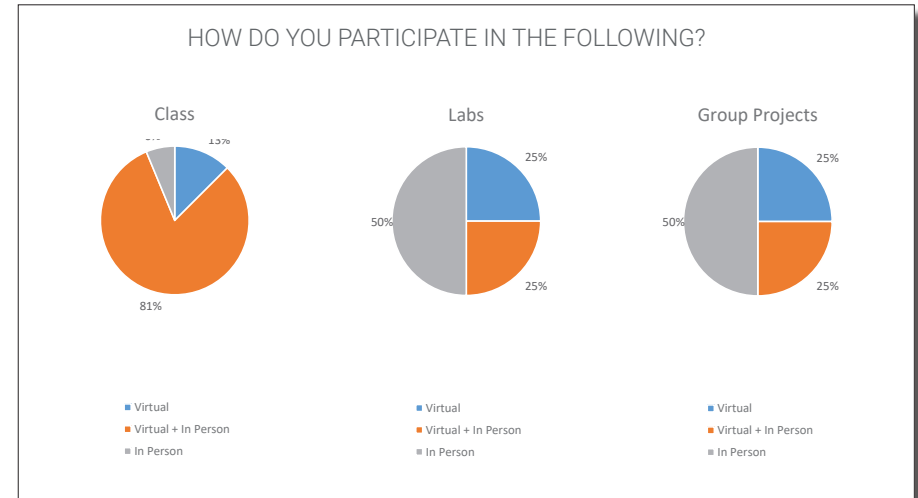
The data was obtained from **14 staff members** from DTCC who filled out an **on-line survey**. While many of the staff members participate in classes and labs virtually, this data reflects not only how much these areas are being used, but how much they are and will be needed in the future. The survey helped the OBA team obtain **trends** about the usage of the campus spaces and their condition, which were an essential component while pointing out the **goals for the 2022 Campus Plan Update**.

The data trends obtained can be classified into 5 different categories: Services/ amenities, dining facilities, collaboration spaces, outdoor spaces, and wayfinding.

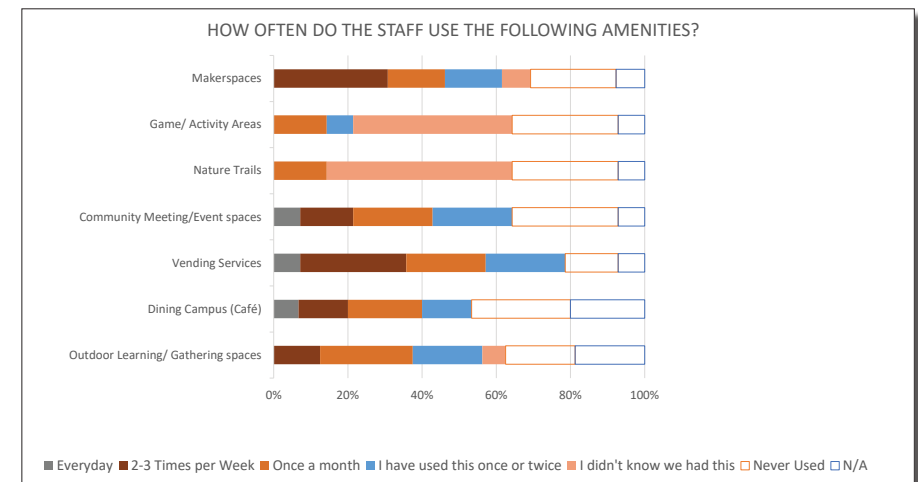
### SERVICES/AMENITIES:

- Overall it seems that their usage is higher than the student population.
- Staff members expressed the need for more amenities around campus since they spend the most time on campus compared to the students.
- The 2022 Campus Plan Update aims to incorporate more of these spaces into the new buildings and renovations to satisfy these needs.

\*See **Appendix B** for full survey data for both student and staff surveys.



To see full size chart, refer to **Appendix B**



To see full size chart, refer to **Appendix B**



## ? SURVEY CONCLUSIONS | STAFF

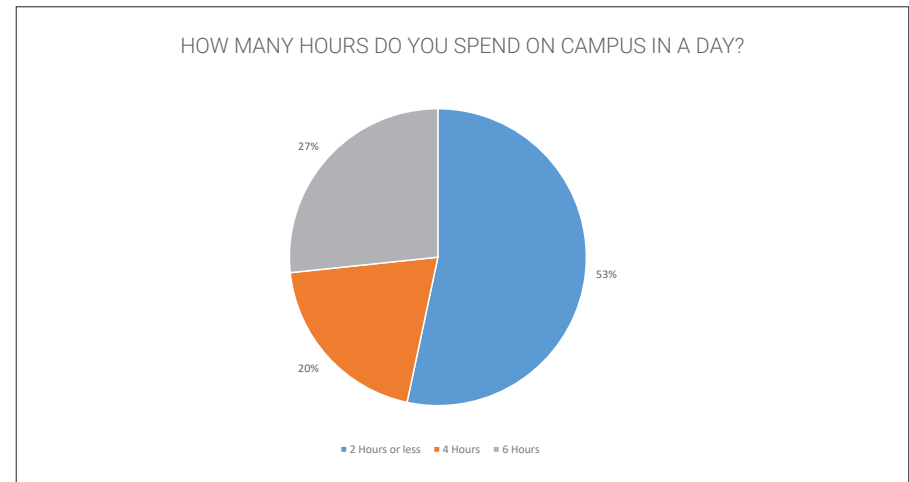
### DINING FACILITIES:

- About 1/2 of the staff members spend at least 4 hours or more on campus in a day, which means that they most likely will need a snack/meal break to feel comfortable during classes.
- The data reflects that the current facilities do not fully satisfy the staff needs for dining options.
- Staff members expressed their need for more dining facility options, such as coffee kiosks and more vending facilities.
- The 2022 Campus Plan Update focuses on providing flexibility to add more dining facilities and improve the existing ones.

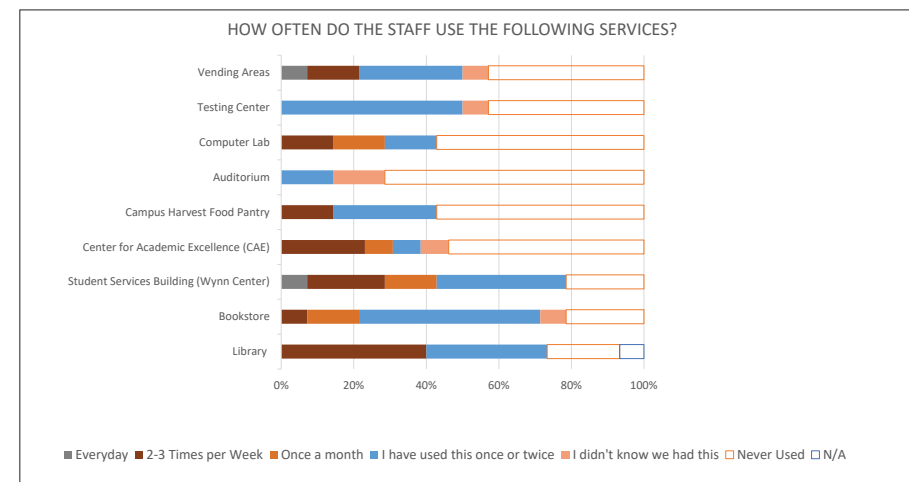
### COLLABORATION SPACES:

- The data reflects that the staff members do use collaboration spaces, but there could be more options offered.
- The 2022 Campus Plan Update will focus on integrating more collaboration spaces on the new buildings to improve the students experience.

\*See **Appendix B** for full survey data for both student and staff surveys.



To see full size chart, refer to **Appendix B**

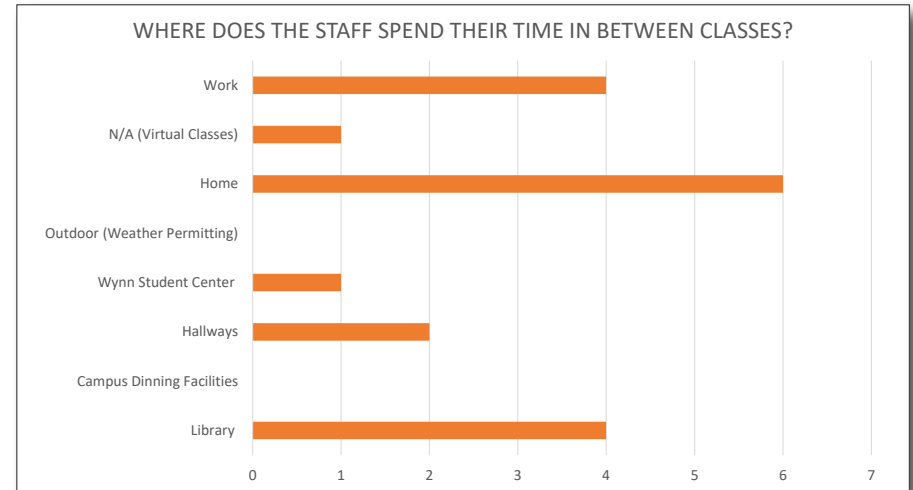


To see full size chart, refer to **Appendix B**

## ? SURVEY CONCLUSIONS | STAFF

### OUTDOOR SPACES:

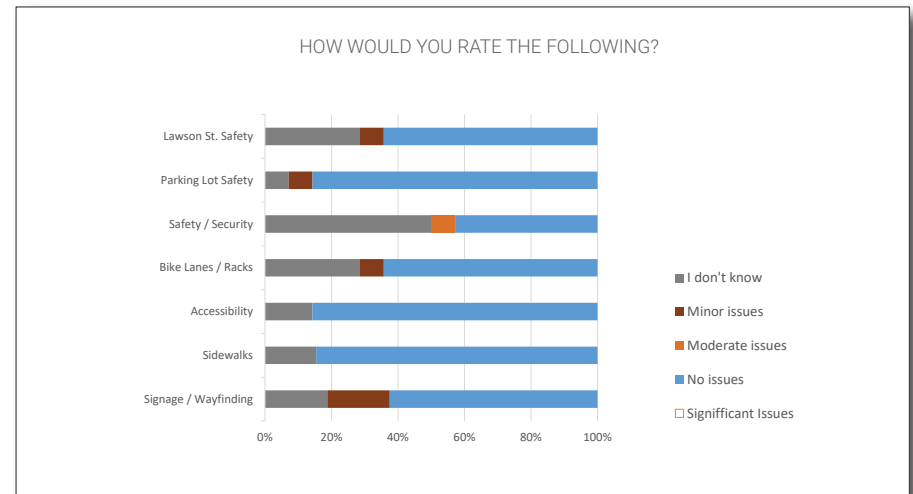
- The staff members expressed that there is a need for more options for outdoor spaces and also a need of improvement for the existing ones.
- The staff members expressed that outdoor learning spaces would be a great resource to provide to the students.
- The 2022 Campus Plan Update aims to enhance the overall campus identity and quality of outdoor spaces to increase the enjoyment and student performance in classes.



To see full size chart, refer to **Appendix B**

### WAYFINDING:

- The data and staff member responses highlights the need to update campus wayfinding.
- The 2022 Campus Plan Update will incorporate a renovation of the campus signage and wayfinding, as well as improving overall circulation and access.



To see full size chart, refer to **Appendix B**

\*See **Appendix B** for full survey data for both student and staff surveys.

# 03

## CONCEPTS

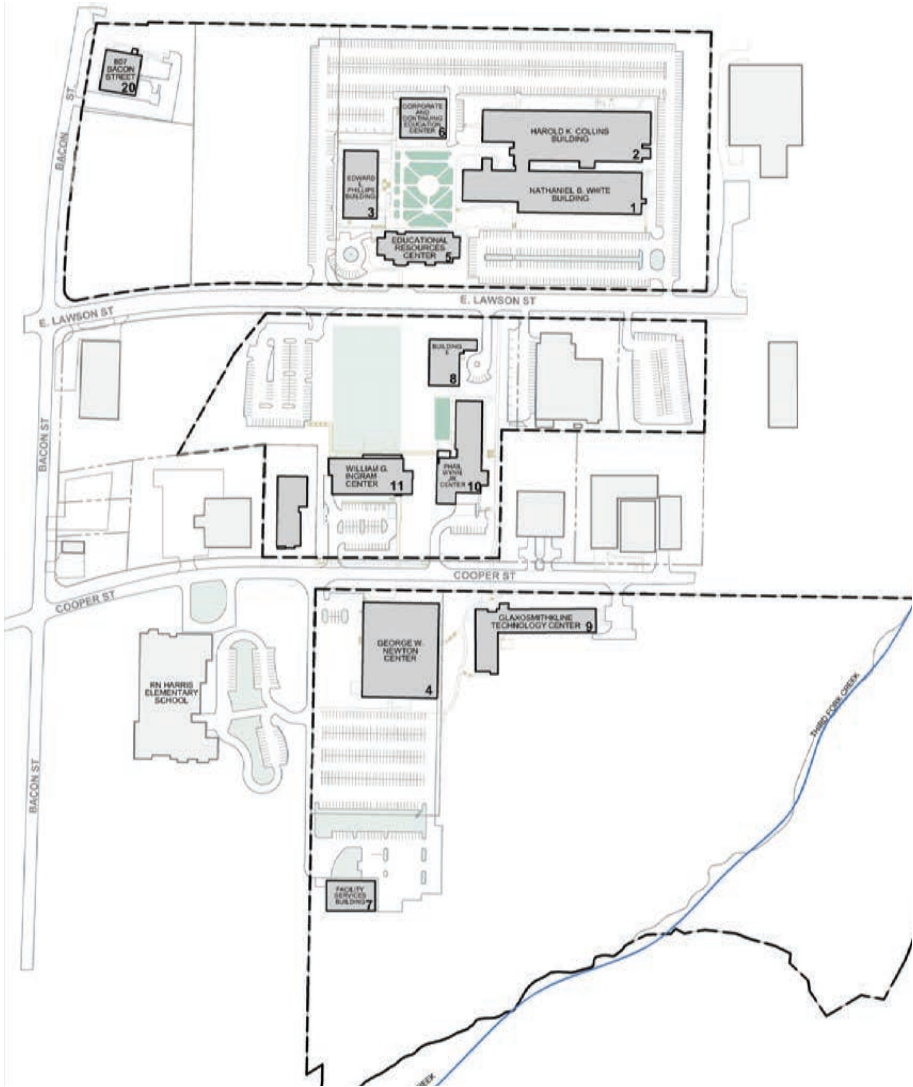
ANALYSIS 32

SITE PLAN 34

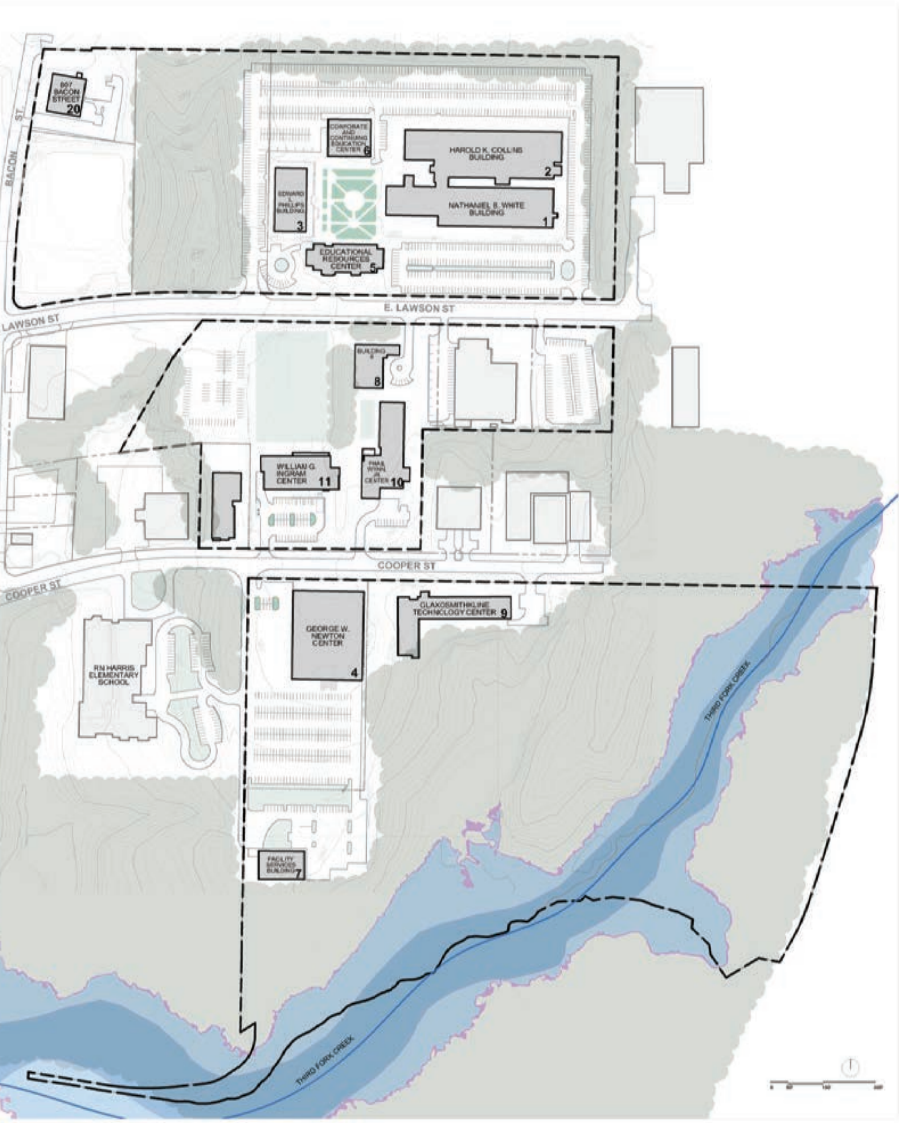
RENDERINGS 35

2022 CAMPUS PLAN UPDATE PROJECTS 37

# EXISTING CONDITIONS

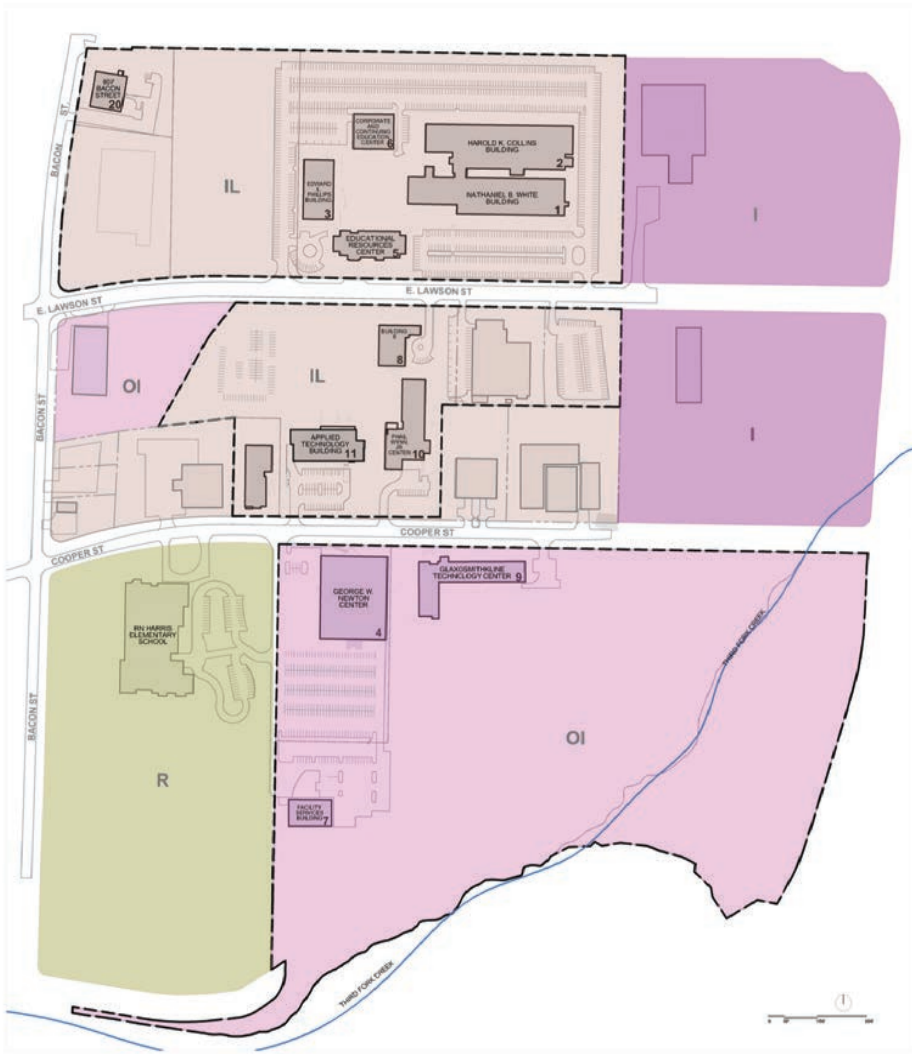


# NATURAL SYSTEMS





ZONING



LEGEND

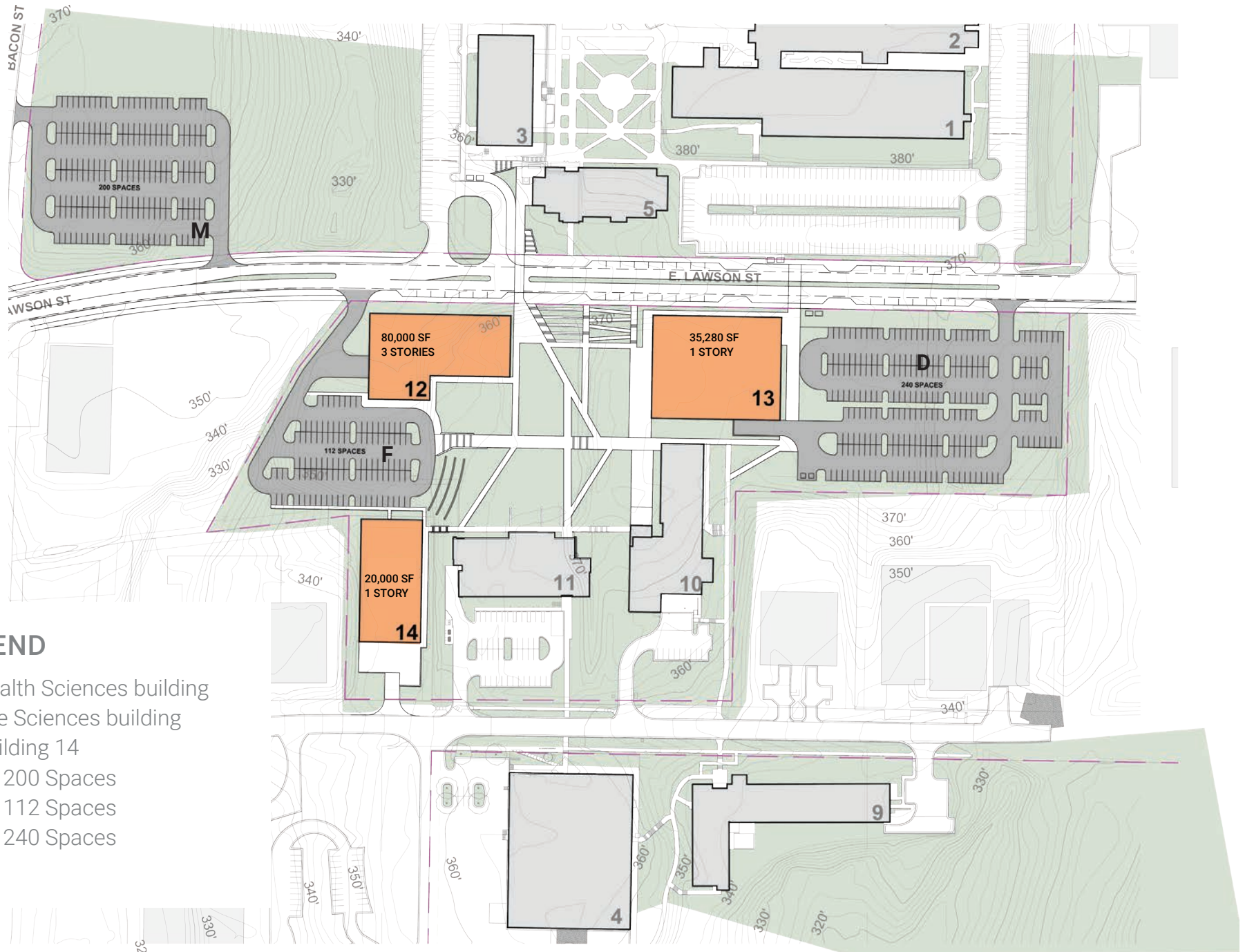
- Campus Boundary
- Stream/River
- Industrial (I)
- Office Industrial (OI)
- Industrial Light (IL)
- Residential (R)

| Dimensional Standard   | IL   |      | OI    |      |
|------------------------|------|------|-------|------|
|                        | Min. | Max. | Min.  | Max. |
| Lot Area (Square feet) | 5000 | -    | 20000 | -    |
| Lot Width (feet)       | 50   | -    |       | -    |
| Street Yard (feet)     | -    | 20   |       | 15   |
| Side Yard (feet)       | 15   | -    |       | -    |
| Rear Yard (feet)       | 25   | -    |       | -    |
| Building Coverage (%)  | -    | 60   |       | 60   |
| Height (feet)          | -    | 50   |       | 90   |

## LEGEND

- 12 Health Sciences building
- 13 Life Sciences building
- 14 Building 14
- Lot M 200 Spaces
- Lot F 112 Spaces
- Lot D 240 Spaces

## CAMPUS SITE PLAN





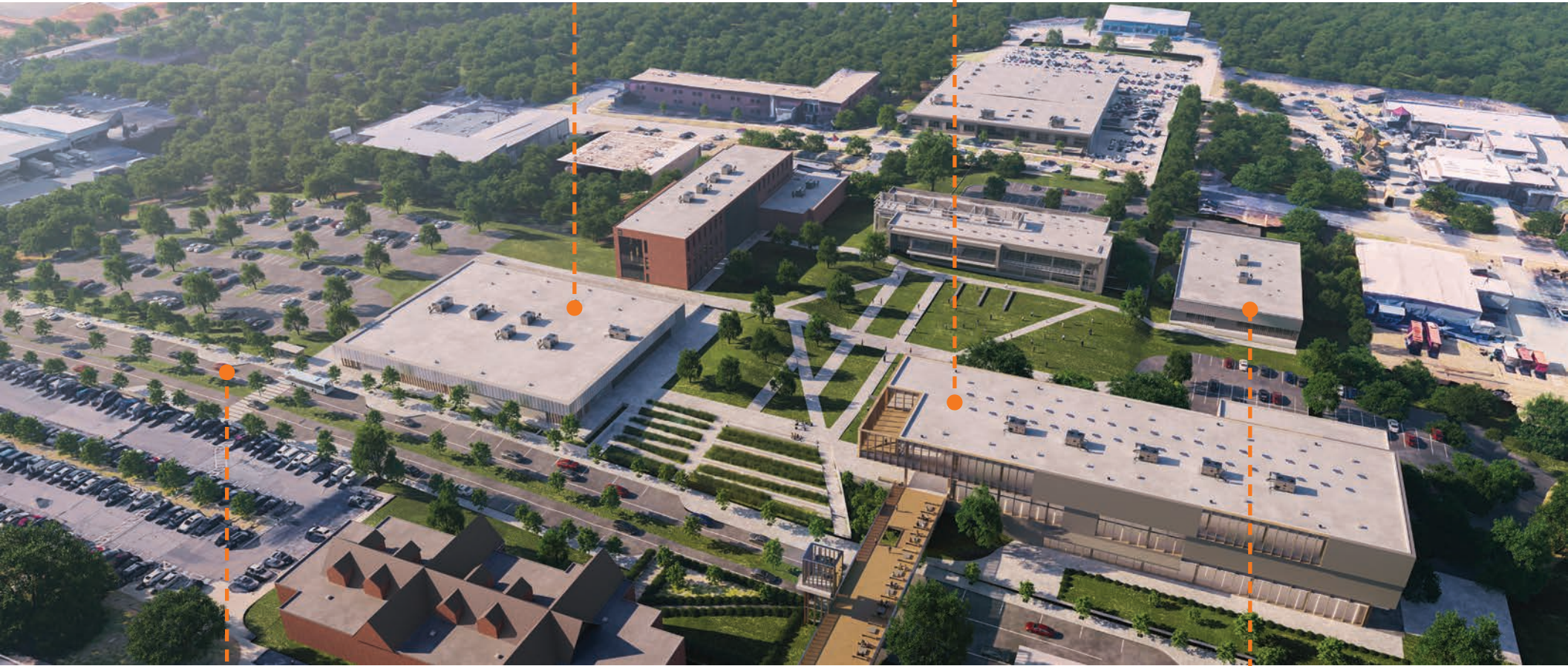


CAMPUS SITE PLAN- RENDERED



Building 13 (Life Sciences)

Building 12 (Health Sciences)



Lawson Street Improvements

Building 14 (Applied Technologies)

## AERIAL VIEW OF CAMPUS





## BUILDING 12 (HEALTH SCIENCES) GOALS

- Provide a modern **Health Sciences** education building
- Create a **building** and **pedestrian bridge** that have strong architectural presence along Lawson St. Also improve **Lawson St. streetscape** to make it feel like a campus corridor.
- Improve the quality of campus **outdoor spaces** by enhancing the **landscape** and providing a new **green space** for students and staff
- Improve the quality of **indoor spaces** by providing abundant natural light, comfortable spaces, and good circulation, modern technology, and infrastructure
- Create a more **connected campus** by creating a pedestrian bridge that connects the northern and middle sections of the campus
- Provide **amenities** and support spaces for students and staff such as vending, student breakout space, coffee kiosks, and collaboration areas.
- Provide building certification through **LEED or equivalent certification** to ensure a **sustainable** project that reduces carbon footprint and enhances students' and staffs' well-being.



Rendering Concept



Rendering Concept



## BUILDING 12 (HEALTH SCIENCES) COMPONENTS



Rendering Concept

### LEGEND

1. New 80,000 GSF classroom/lab building
2. Pedestrian bridge that links to the northern campus
3. Lawson Streetscape improvements
4. Campus green space and landscape improvements
5. 2 surface parking lots
6. Building 5 addition/ renovation for pedestrian bridge connection
7. Building 5 vehicular plaza





BUILDING 12 RENDERING





PEDESTRIAN BRIDGE RENDERING





# BUILDING 13 (LIFE SCIENCES) GOALS

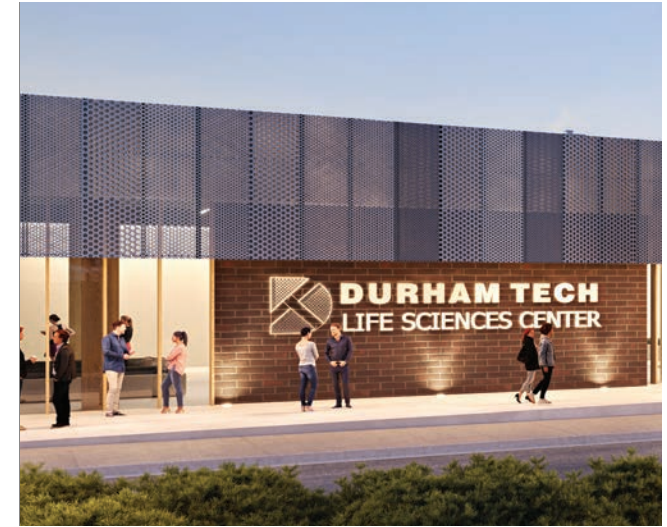
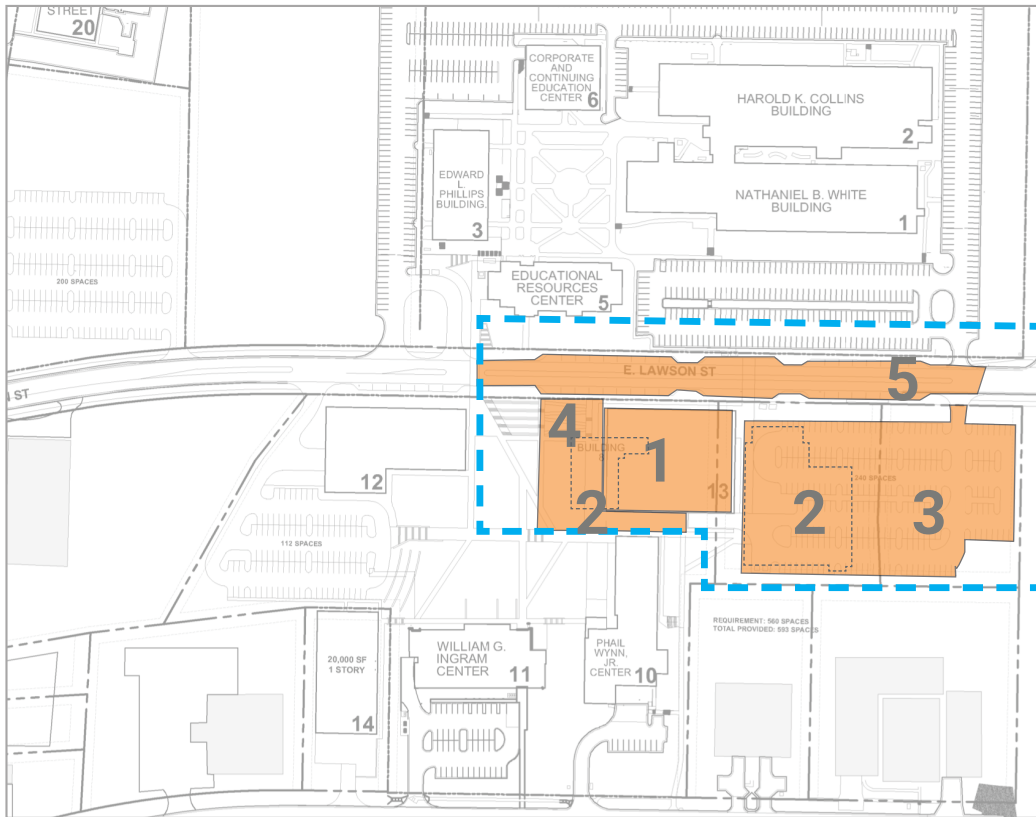
- Provide a modern **Life Sciences** Education building
- Create a **building** that has strong architectural presence along Lawson St. Also improve **Lawson St. streetscape** to make it feel like a campus corridor.
- Improve the quality of campus **outdoor spaces** by enhancing the landscape and providing a new green space for students and staff
- Improve the quality of **indoor spaces** by providing abundant natural light, comfortable spaces, and good circulation, modern technology, and infrastructure
- Create a more **connected campus** by linking several key campus corridors together
- Provide **amenities** and support spaces for students and staff such as vending, student break out space, coffee kiosks, and collaboration areas.
- Provide building certification through **LEED or equivalent certification** to ensure a **sustainable** project that reduces carbon footprint and enhances students' and staffs' well-being.



Rendering Concept



## BUILDING 13 (LIFE SCIENCES) COMPONENTS



### LEGEND

1. New 35,280 GSF lab and classroom bldg
2. Demolition of 2 buildings
3. Surface parking lot
4. Campus green space
5. Lawson streetscape improvement



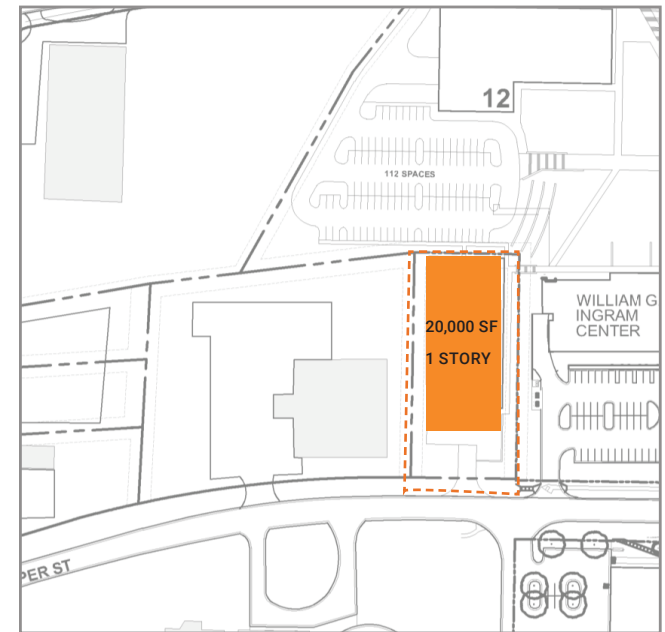
BUILDING 13 RENDERING





## BUILDING 14 (APPLIED TECHNOLOGIES) GOALS

- Provide a modern **Applied Technologies Building** that relocates welding and HVAC from Bacon Street closer to the rest of the campus.
- Provide area for **campus storage** near the heart of the campus for to aid in facility management efficiency
- Improve the quality of **indoor spaces** by providing abundant natural light, comfortable spaces, and good circulation, modern technology, and infrastructure
- Provide **amenities** and support spaces for students and staff such as vending, student breakout space, coffee kiosks, and collaboration areas.
- Provide building certification through **LEED or equivalent certification** to ensure a **sustainable** project that reduces carbon footprint and enhances students' and staffs' well-being.



### COMPONENTS

1. New 20,000 GSF lab, classroom, and campus storage bldg
2. Demolition of existing building





# BUILDING 9 REFRESH | GOALS

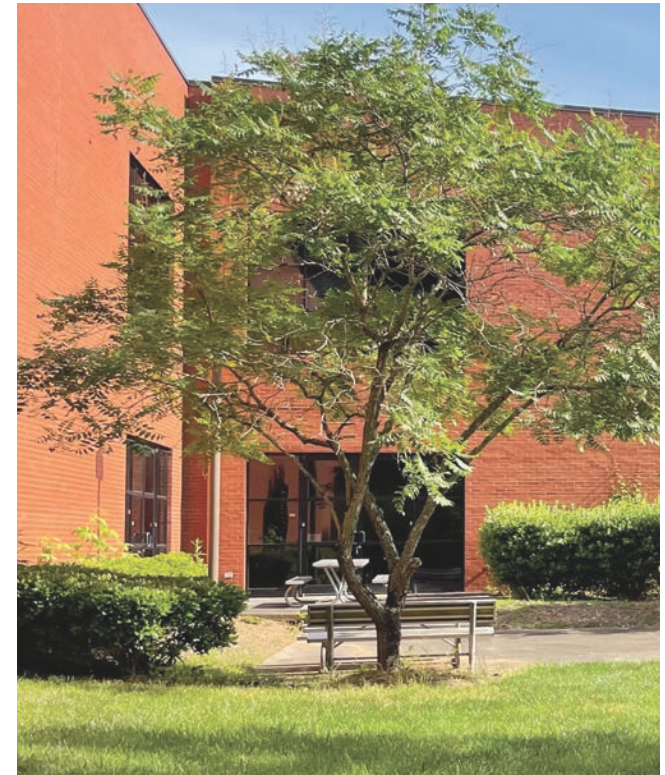
- Provide more capacity for modern **Information Technology** education by adding additional classrooms and laboratories where health sciences have vacated
- Improve the quality of campus **outdoor spaces** by allowing access and further developing the inner courtyard and make some modifications to the landscape along the building perimeter
- Improve the quality of **indoor spaces** by modernizing the technology and infrastructure of the building
- Renovate amenities to better serve the students and staff such as coffee kiosks and studying spaces
- Provide building certification through **LEED or equivalent certification** to ensure a **sustainable** project that reduces carbon footprint and enhances students' and staffs' well-being.



Existing Conditions



## BUILDING 9 REFRESH | COMPONENTS



Existing Conditions

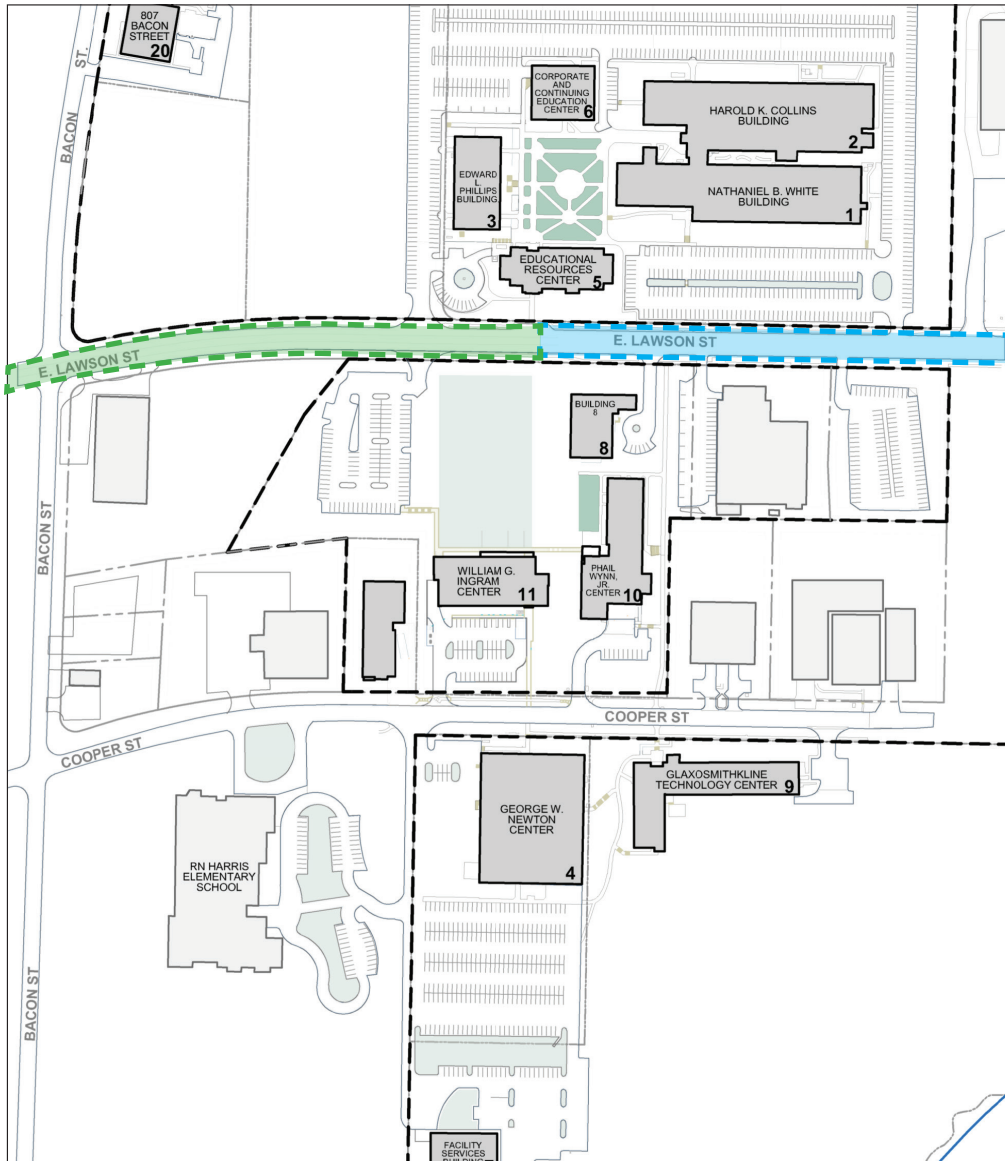
### LEGEND

1. IT labs to replace Health Sciences spaces.
2. Add student study spaces
3. Add a coffee shop or kiosk
4. ADA improvements
5. Landscape Improvements



## PROJECTS | MAJOR CAMPUS IMPROVEMENTS

# LAWSON ST. | IMPROVEMENTS



Existing Conditions

### LEGEND

Building 12

Building 13

### COMPONENTS

- Utility line removal
- Landscaped median
- Improved sidewalks
- Traffic calming: street parking
- Bike lanes
- Landscape edges
- Connections to campus outdoor space

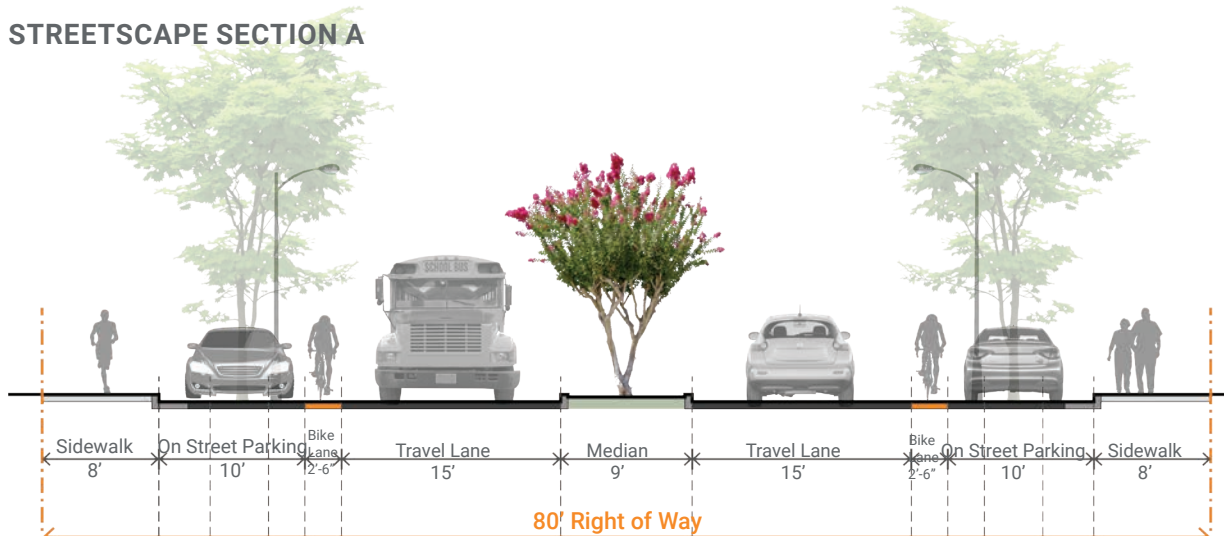
\*\*\* For budgeting, Lawson Street improvements have been nested into Building 12 and Building 13 projects



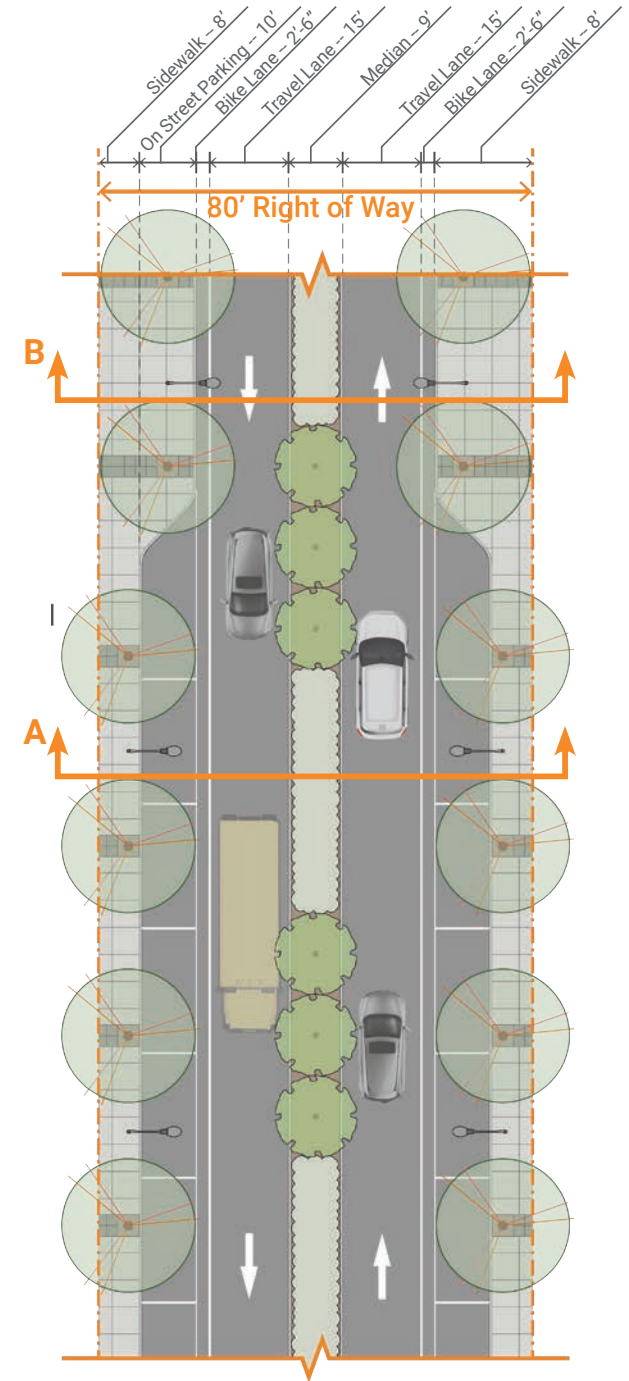
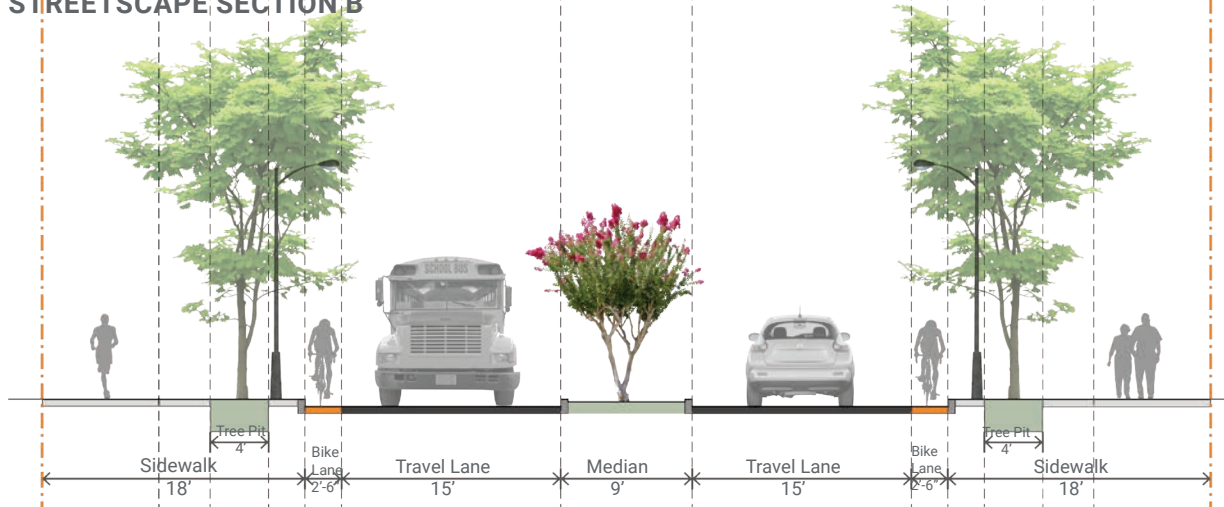


# LAWSON ST. | IMPROVEMENTS

STREETSCAPE SECTION A



STREETSCAPE SECTION B



STREETSCAPE ENLARGED PLAN





LAWSON STREET RENDERING

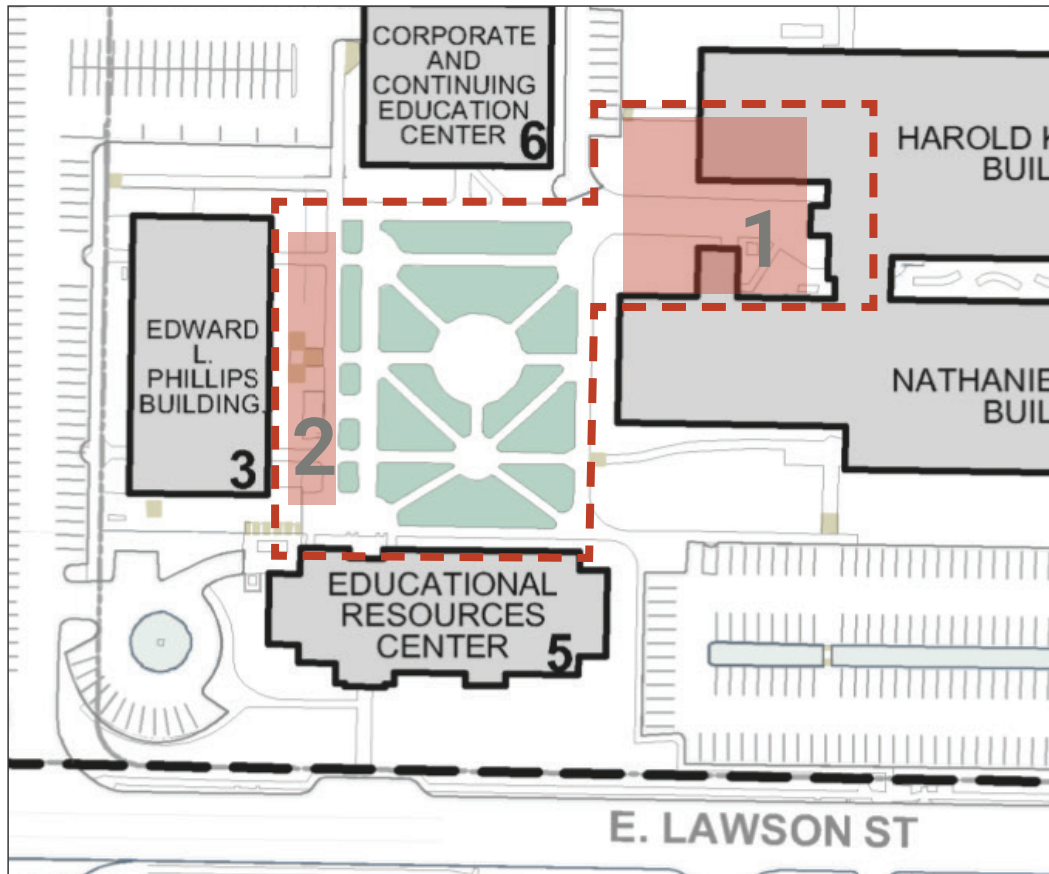




LAWSON STREET RENDERING



## NORTH QUAD | ENHANCEMENT



Existing Conditions

### LEGEND

1. Better connection to Bldg 1+2
2. Connect Building 3 pit to upper courtyard

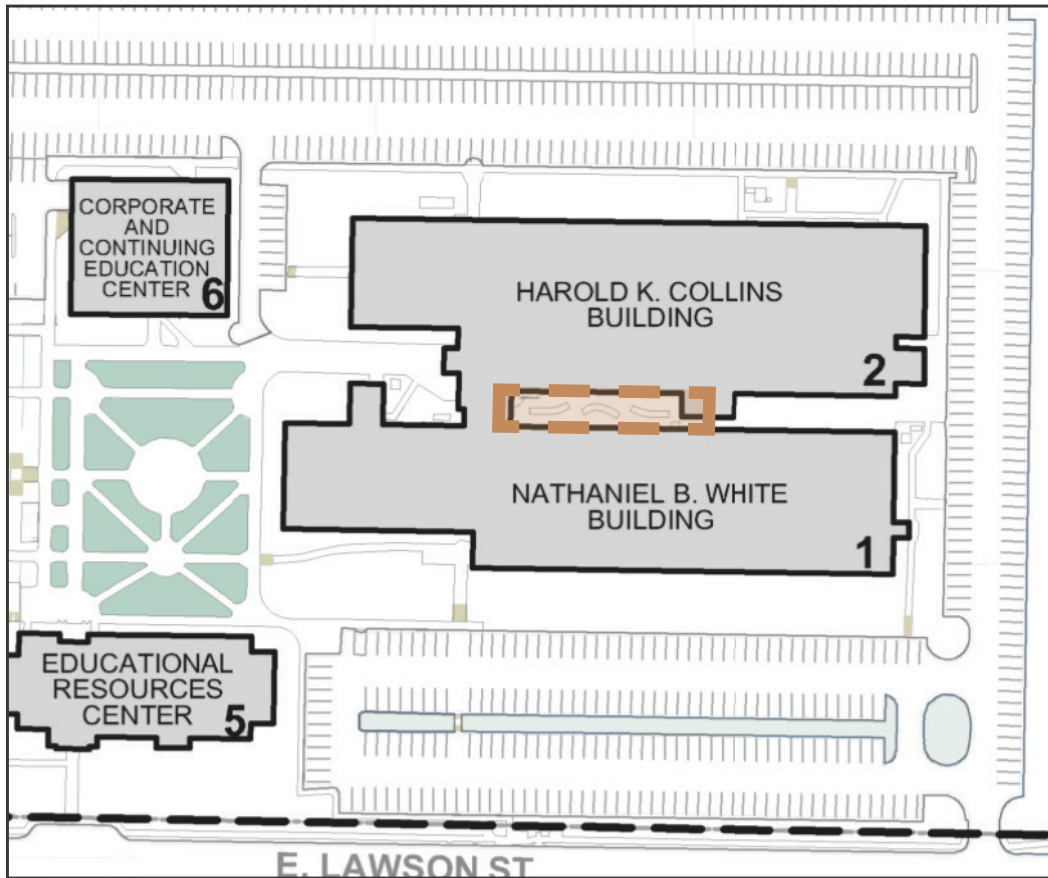
### COMPONENTS

More seating capacity  
Improved drainage  
More shaded areas  
More vegetation





## BUILDING 1 & 2 COURTYARD | ENHANCEMENT



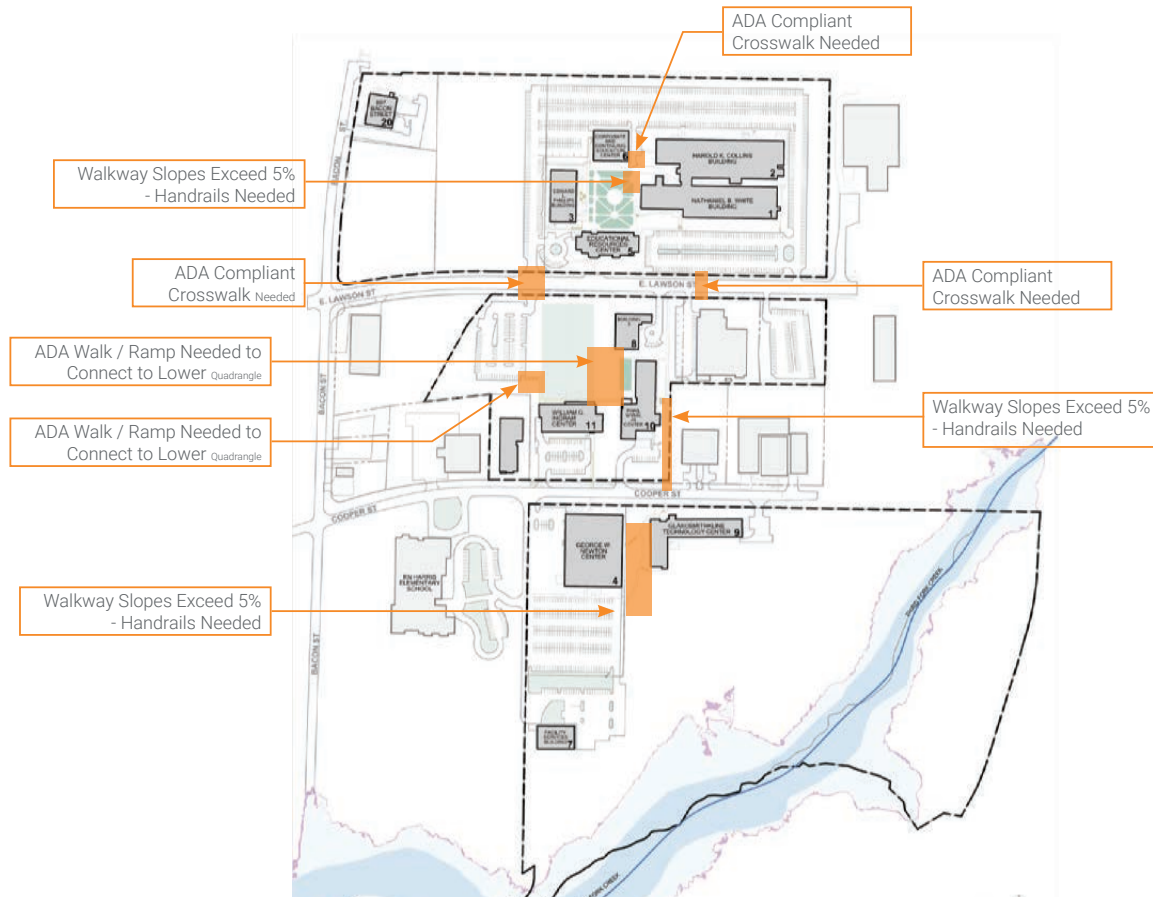
Existing Conditions

### COMPONENTS

- Improved landscaping
- Screen for transformer
- Opportunity for mural on Building 2
- Overhead string lighting
- Overhead door to open classroom to courtyard
- Furniture improvements
- Shade structures



# ADA IMPROVEMENTS



## ADA CAMPUS CONNECTIVITY STUDY



Rendered view

## COMPONENTS

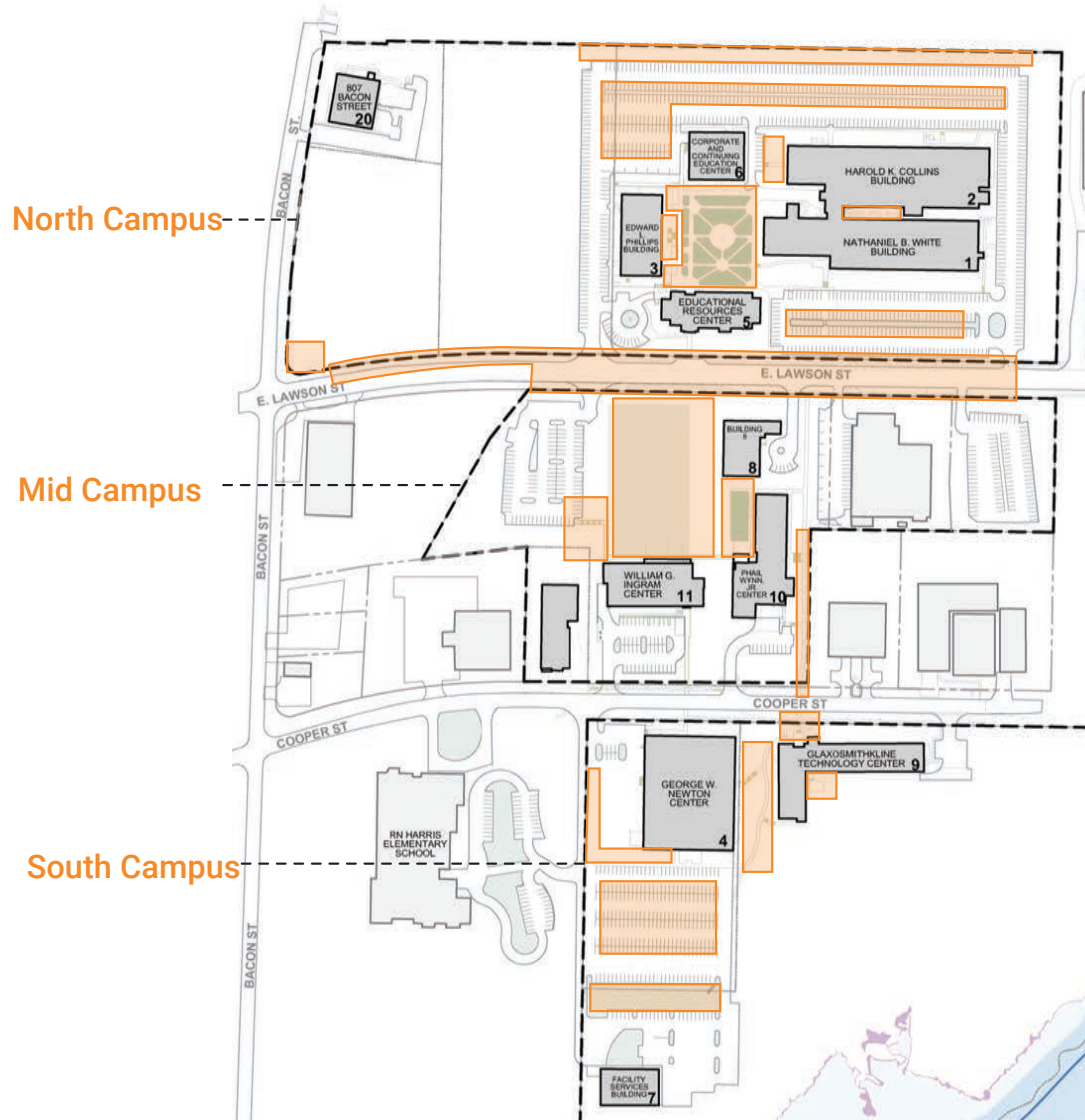
- Building enhancements
- Campus exterior pathway enhancements

For more details see **Appendix A**





## LANDSCAPE ENHANCEMENTS



Existing Conditions

### COMPONENTS

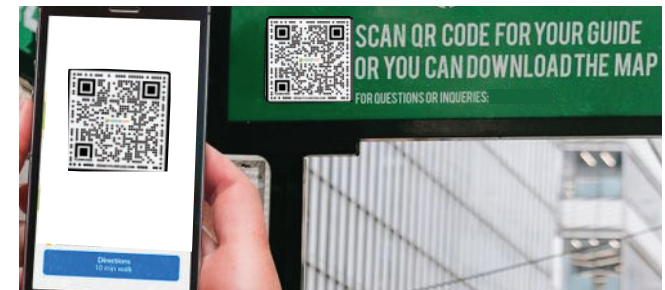
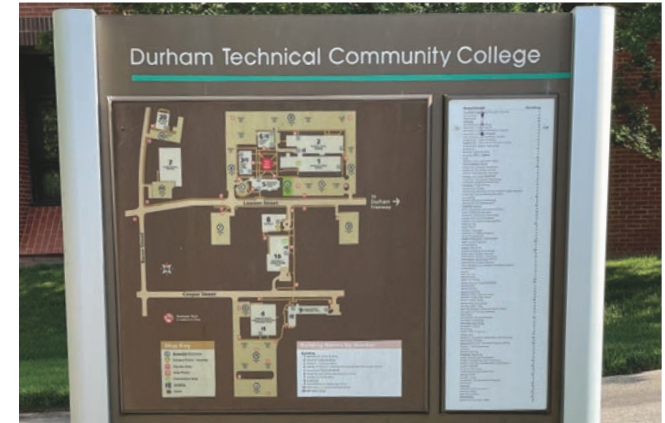
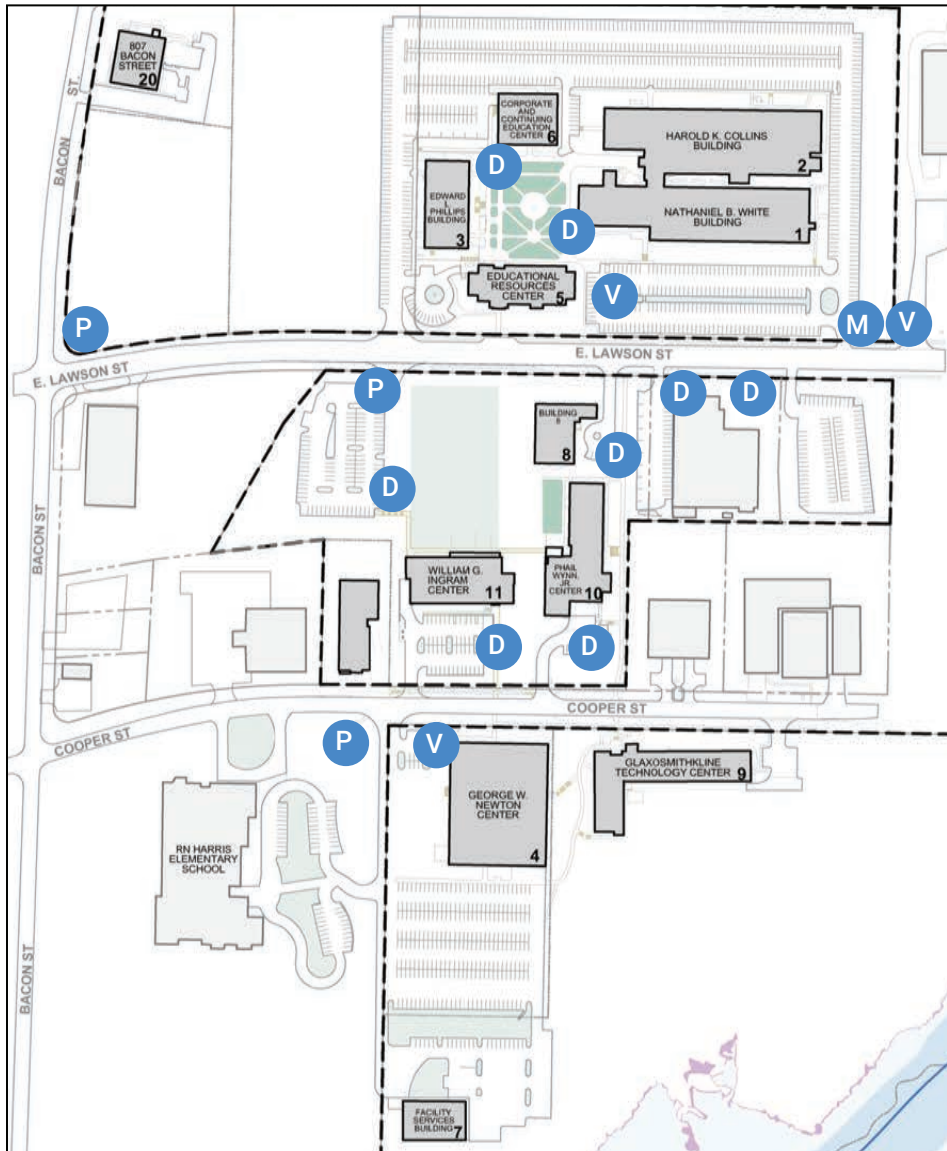
- Planted landscape screen
- Planting palette
- Improved drainage
- Seating walls

For more details see **Appendix C**





## WAYFINDING REFRESH



Below are our recommendations for items to be replaced or added to address campus wayfinding needs.

### LEGEND

- M** Monumental signage opportunity
- P** Parking signage opportunity
- V** Visitor parking signage opportunity
- D** Directory signage opportunity

The wayfinding refresh will incorporate the addition of updated exhibits with QR codes, which will facilitate updates as campus grows.

# 04

## APPENDIX

### APPENDIX A

|                             |    |
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| A.1 ADA EVALUATION          | 57 |
| A.2 BUILDING ADA EVALUATION | 65 |

### APPENDIX B

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| STUDENT+ STAFF SURVEY | 74 |
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### APPENDIX C

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| LANDSCAPE IMPROVEMENTS | 97 |
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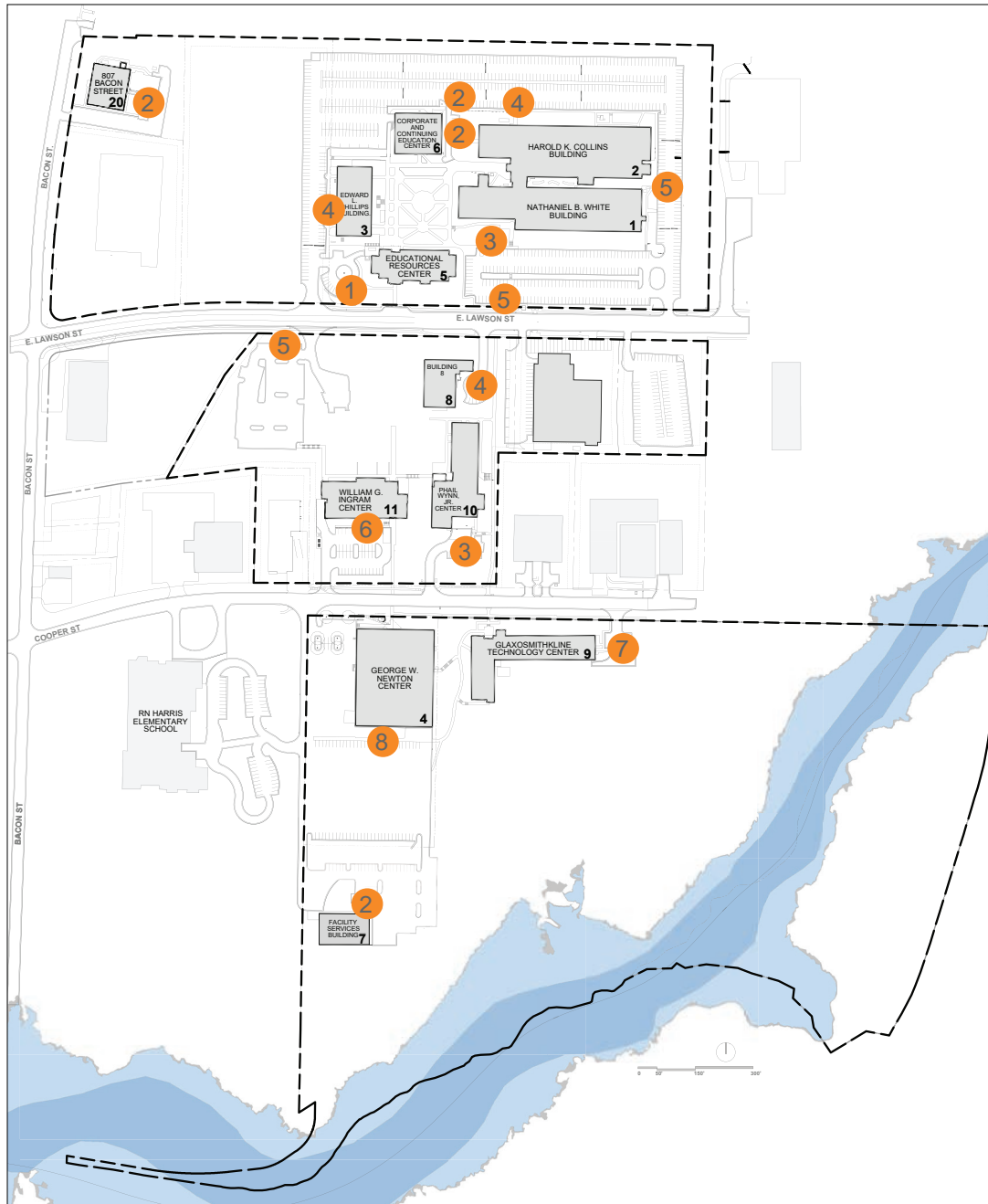
### APPENDIX D

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| COST ESTIMATE | 105 |
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### APPENDIX E

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| MEETING MINUTES | 146 |
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# ADA PARKING CONDITIONS | QUANTITY SUMMARY



Total Surface Parking: 1,533 Spaces  
Total Existing Handicap Parking: 56 Spaces

Handicap Parking Requirement: 26 Spaces

## Minimum Number of Accessible Parking Spaces

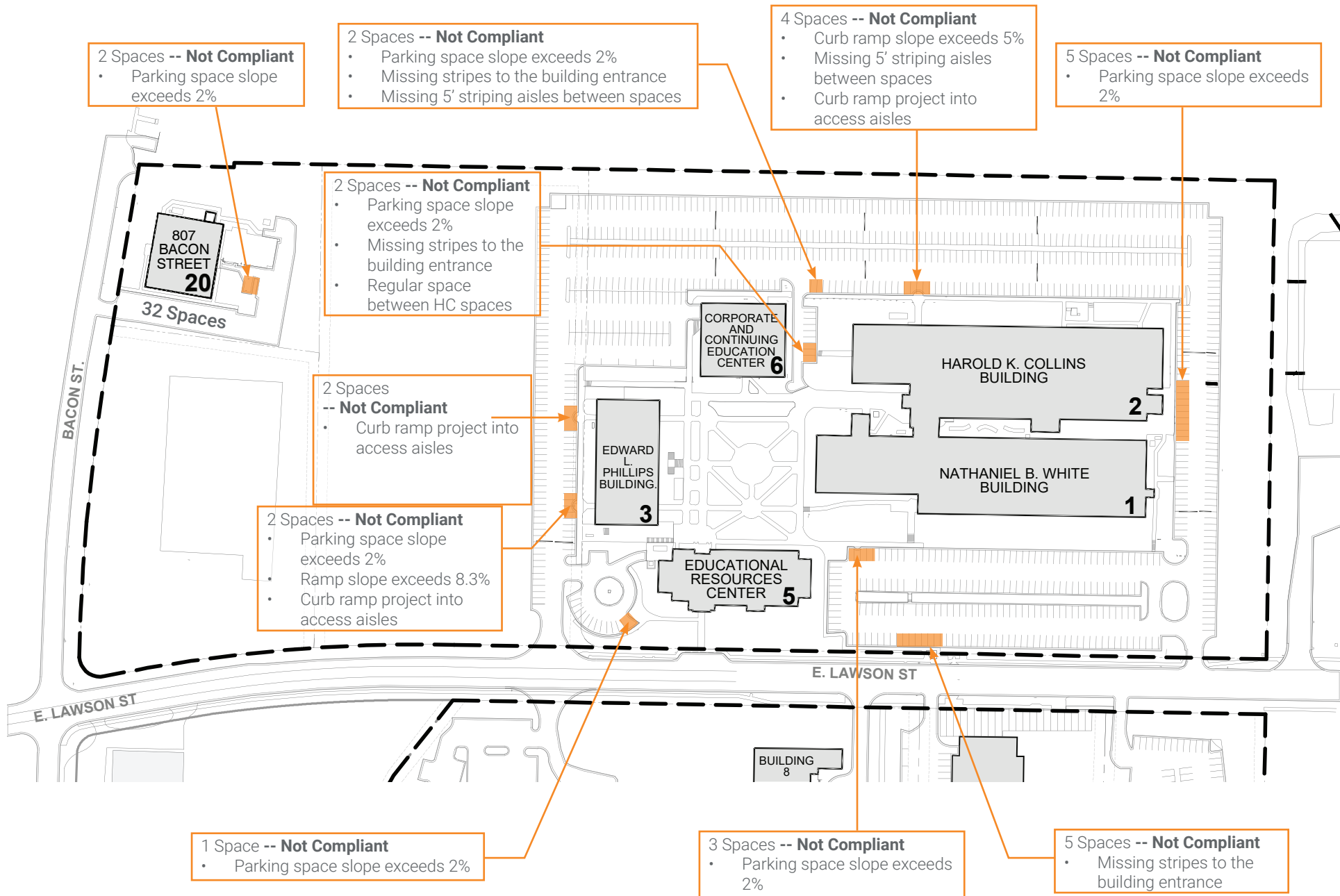
2010 Standards (208.2)

| Total Number of Parking Spaces Provided in Parking Facility (per facility) | (Column A)<br>Minimum Number of Accessible Parking Spaces (car and van) | Minimum Number of Van-Accessible Parking Spaces (1 of six accessible spaces) |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------------------------|
| 1 to 25                                                                    | 1                                                                       | 1                                                                            |
| 26 to 50                                                                   | 2                                                                       | 1                                                                            |
| 51 to 75                                                                   | 3                                                                       | 1                                                                            |
| 76 to 100                                                                  | 4                                                                       | 1                                                                            |
| 101 to 150                                                                 | 5                                                                       | 1                                                                            |
| 151 to 200                                                                 | 6                                                                       | 1                                                                            |
| 201 to 300                                                                 | 7                                                                       | 2                                                                            |
| 301 to 400                                                                 | 8                                                                       | 2                                                                            |
| 401 to 500                                                                 | 9                                                                       | 2                                                                            |
| 500 to 1000                                                                | 2% of total parking provided in each lot or structure                   | 1/6 of Column A*                                                             |
| 1001 and over                                                              | 20 plus 1 for each 100 over 1000                                        | 1/6 of Column A*                                                             |

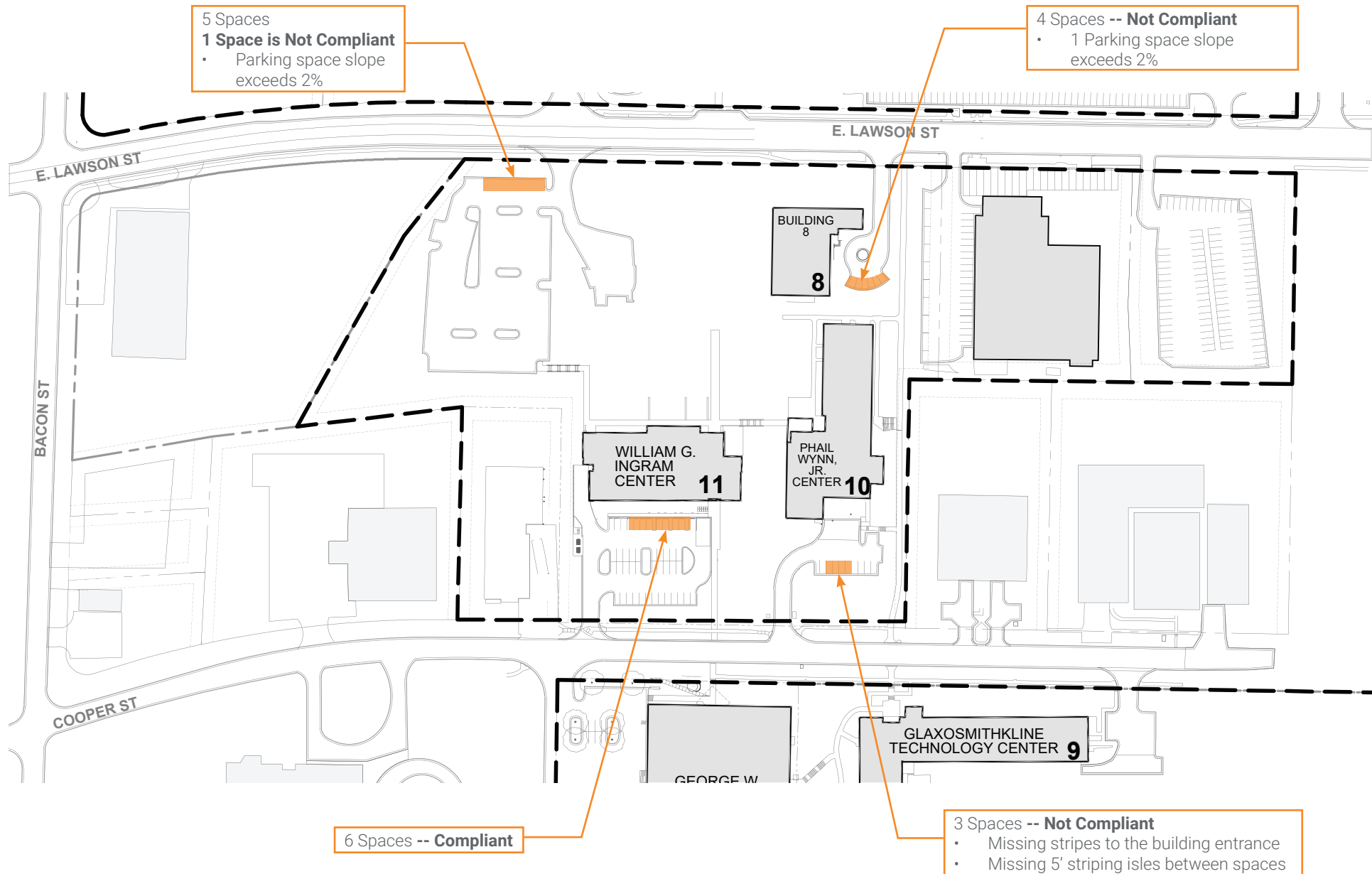
\*one out of every 6 accessible spaces



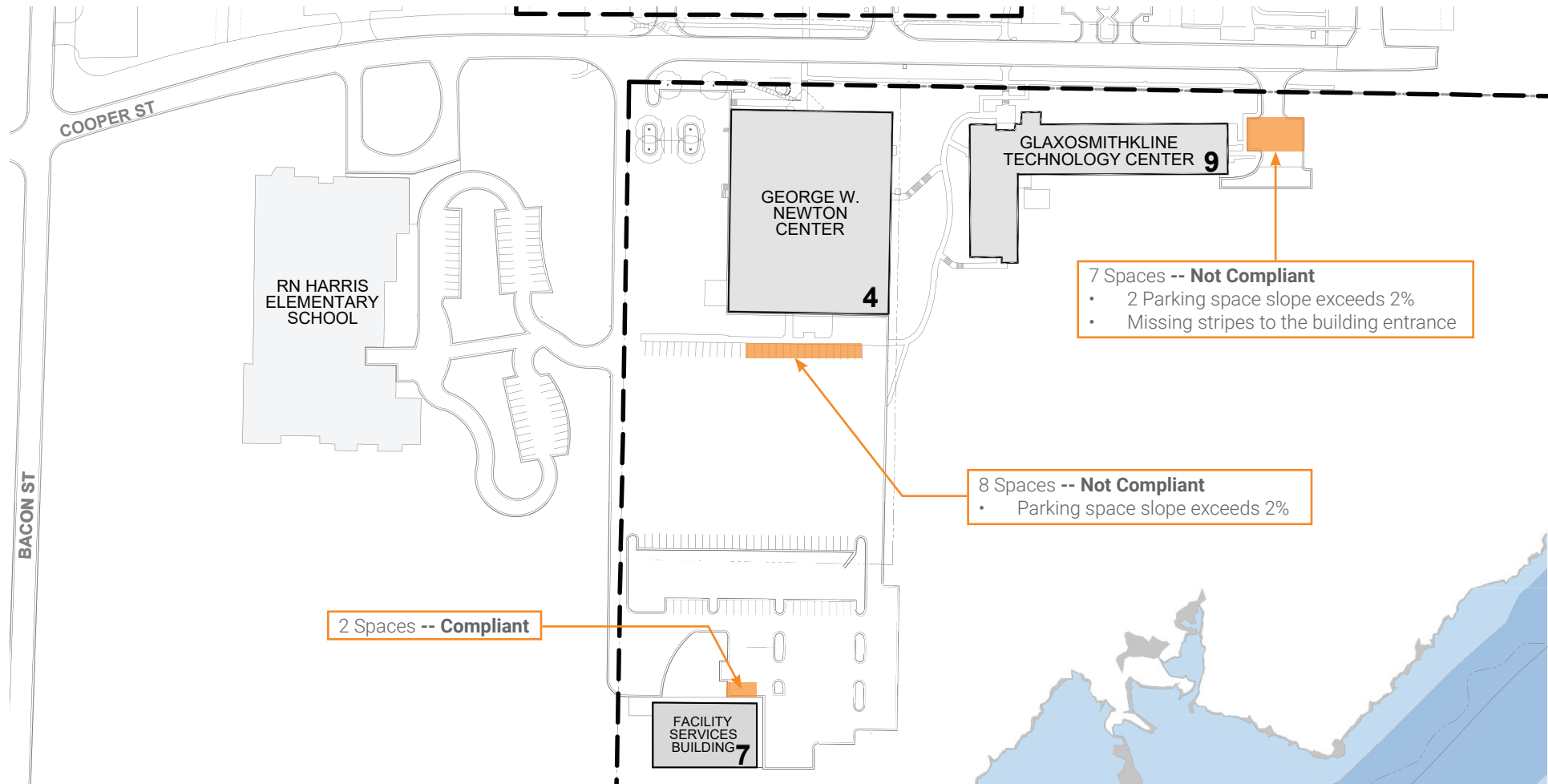
# ADA PARKING CONDITIONS | NORTH CAMPUS



# ADA PARKING CONDITIONS | CENTRAL CAMPUS

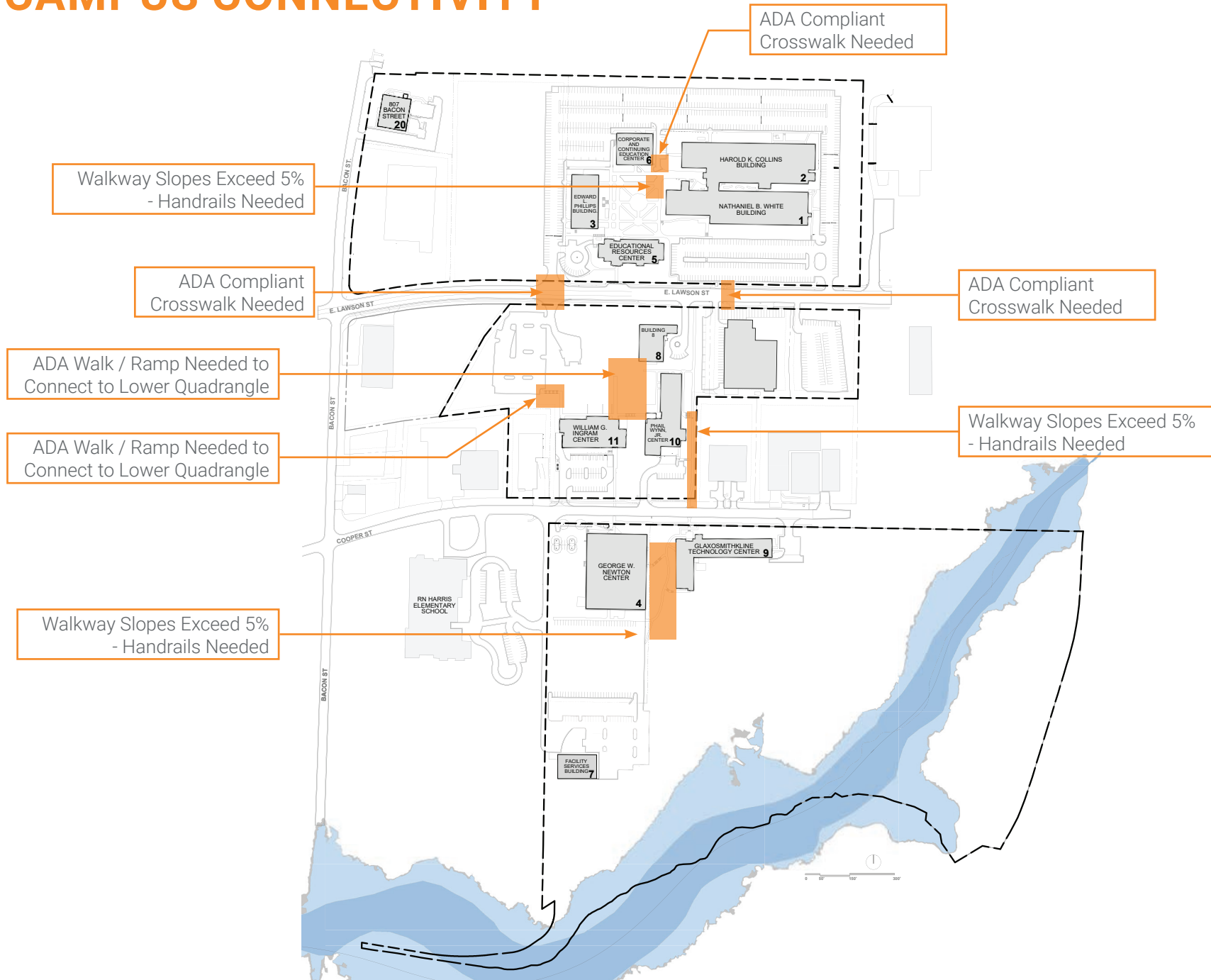


# ADA PARKING CONDITIONS | SOUTH CAMPUS

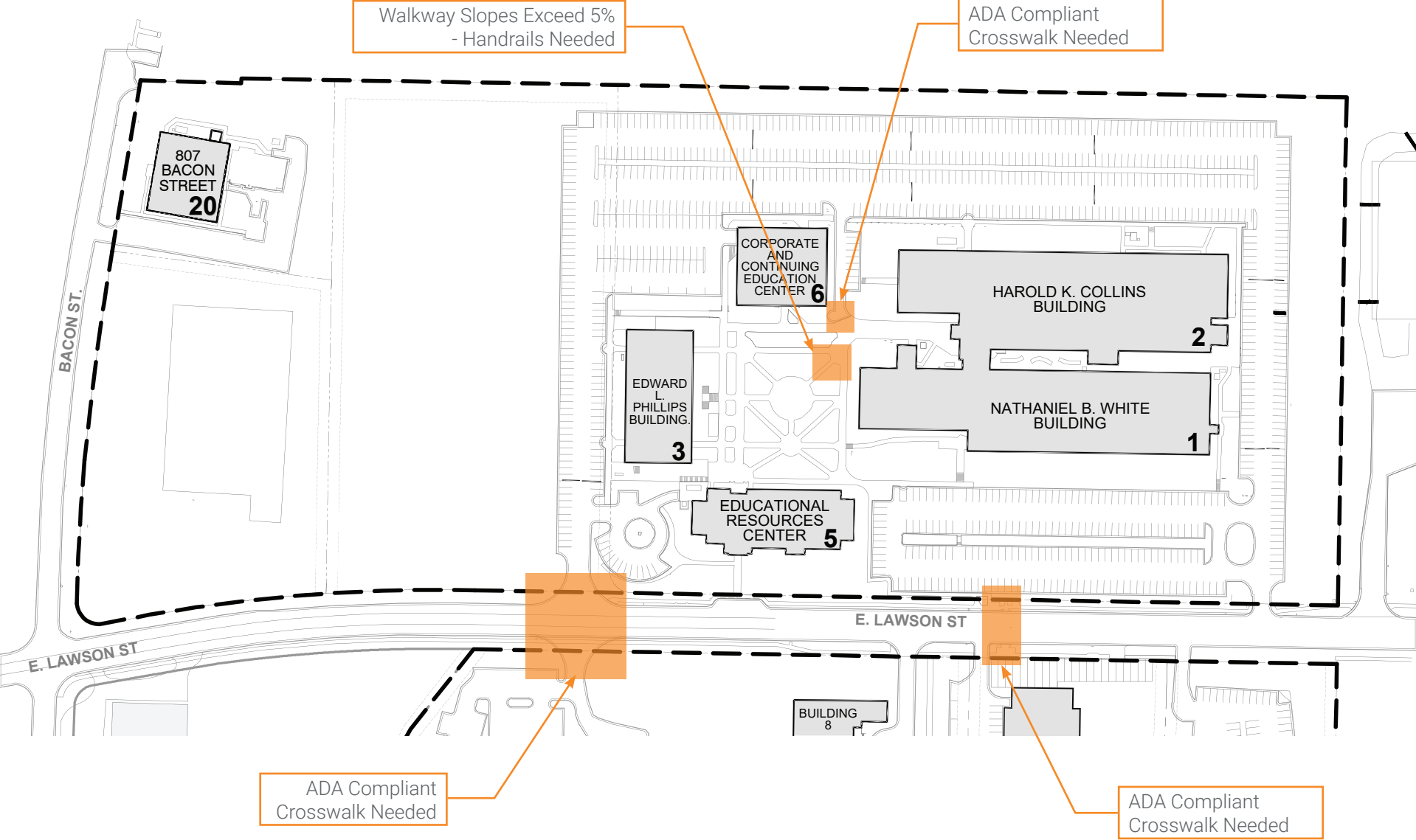




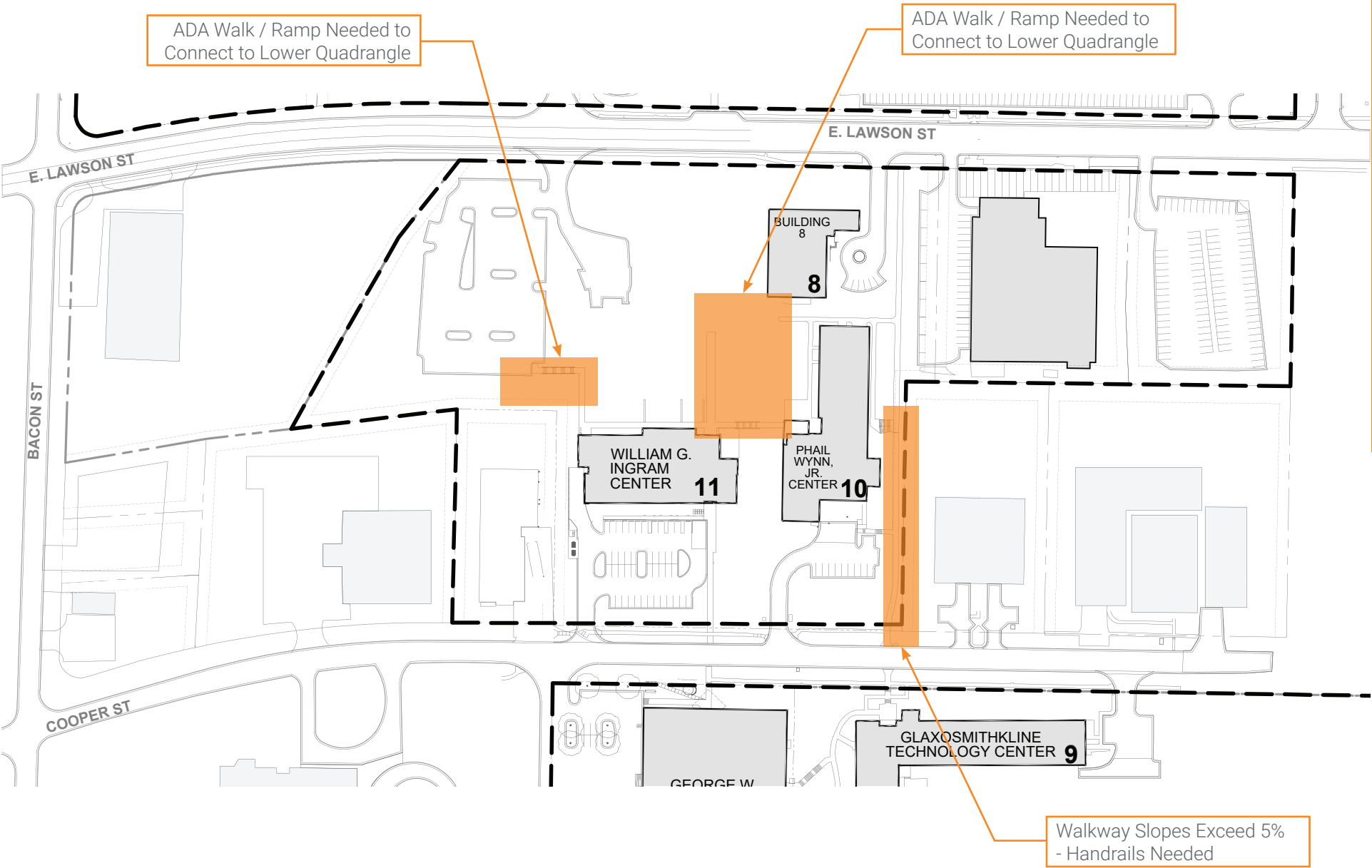
# CAMPUS CONNECTIVITY



# CAMPUS CONNECTIVITY | NORTH CAMPUS

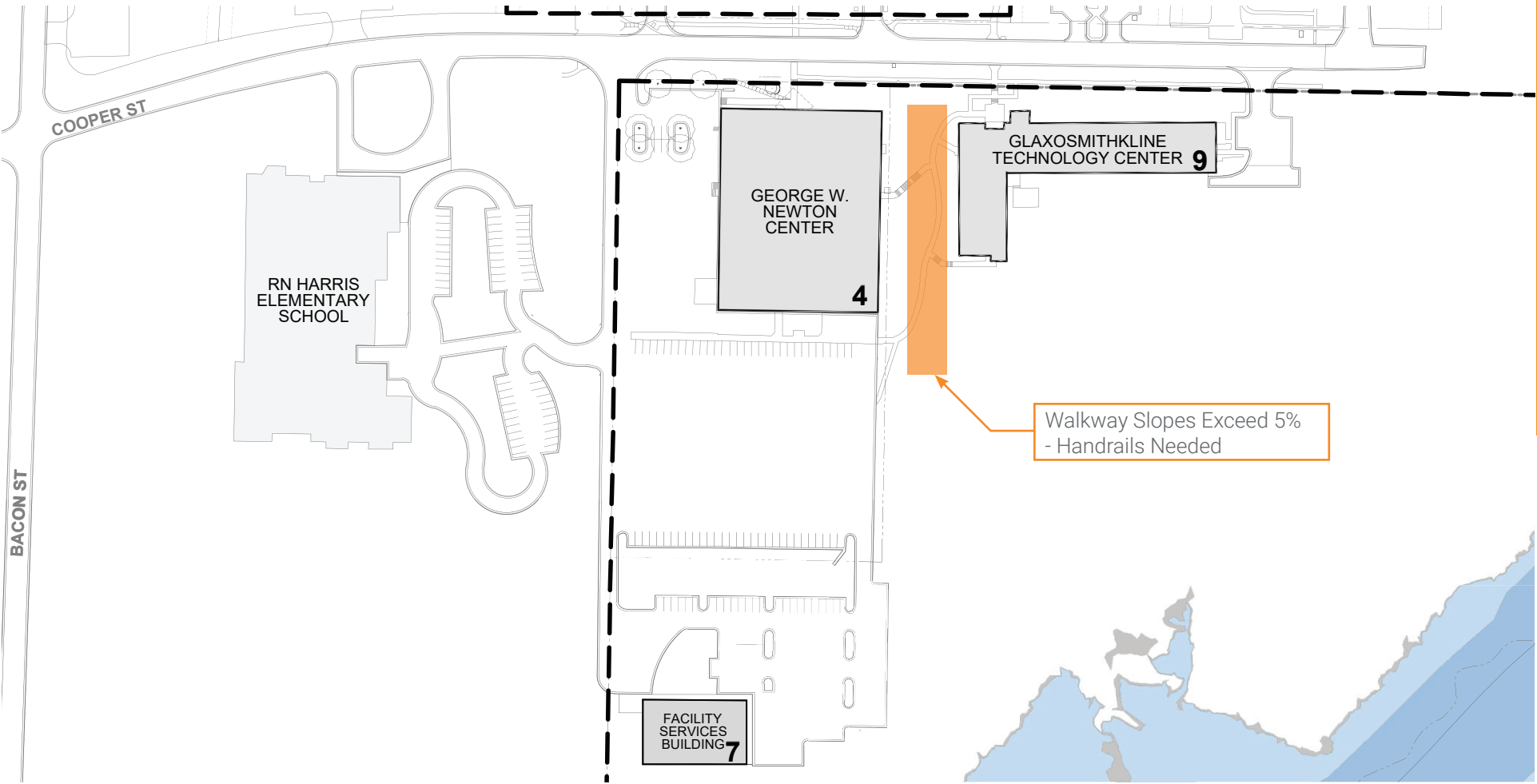


# CAMPUS CONNECTIVITY | CENTRAL CAMPUS





# CAMPUS CONNECTIVITY | SOUTH CAMPUS



# ADA EVALUATION | BUILDINGS

# ADA BUILDING EVALUATION | BUILDING 1

## BUILDING 1 – ADA NONCOMPLIANCE ITEMS

### ENTRANCES:

- Loose laid floor mats at building entrances slide around. Provide means to prevent the mats from sliding.

### ACCESSIBLE ROUTES:

- Automated External Defibrillator (AEDs) protrudes 9" from face of wall and is mounted with the bottom higher than 27-inches above the floor. Relocate 1 AED.
- Handrails each side of the ramp to Building 2 do not extend 12-inches beyond the bottom of the ramp. Extend 2 handrails.

### SIGNAGE:

1. No issues.

### INTERIOR DOORS:

- Door closers at Toilets, Human Resources, and Career Readiness exceed 5 lbs. of pressure to open doors. Adjust or replace 6 door closers.

### ASSEMBLY SEATING AND BENCHES:

- Not Applicable.

### SERVICE COUNTERS:

- At Cashier transaction windows, the sills are higher than 36-inches above the floor and the bottom of the counter is less than 27-inches above the floor. Lower 3 windowsills and raise 1 counter.

### TOILETS:

- The operable parts of the paper towel dispensers in toilets exceed the 48-inch mounting height. Lower 4 towel dispensers.
- There are no vertical grab bars in the HC stalls. Provide 4 – 18-inch grab bars.
- In Women's Toilet T03, the 42-inch side grab bar is not mounted with the end 54-inches from the back wall. Reposition 1 grab bar.
- HC stalls do not have self-closing doors and do not have door pulls. Add 4 self-closing hinges and 8 door pulls.



# ADA BUILDING EVALUATION | BUILDING 2

## BUILDING 2 – ADA NONCOMPLIANCE ITEMS

### ENTRANCES:

- Loose laid floor mats at building entrances slide around. Provide means to prevent the mats from sliding.

### ACCESSIBLE ROUTES:

- Automated External Defibrillator (AEDs) protrudes 9" from face of wall and is mounted with the bottom higher than 27-inches above the floor. Relocate 1 AED.
- Fire extinguishers protrude more than 4-inches from face of wall and are higher than 27-inches above the floor. Relocate 2 fire extinguishers.

### SIGNAGE:

- No issues.

### INTERIOR DOORS:

- Door closers exceed 5 lbs. of pressure to open doors. Adjust or replace 12 door closers.
- Several doors have doorknobs. Replace 38 doorknobs with lever handles

### ASSEMBLY SEATING AND BENCHES:

- In the Auditorium, 4 wheelchair spaces are required and 2 are provided. Remove 2 fixed tables to allow for the additional spaces.
- In the Student Lounge, tables are not provided with a height of 28-34 inches and knee space of 17-25 inches. Provide a table that will accommodate the required height and knee space.

### SERVICE COUNTERS:

- Not applicable.

### TOILETS:

- The operable parts of the paper towel dispenser in west end Women's Toilet exceed the 48-inch mounting height. Lower 1 towel dispenser.
- The operable parts of the paper towel dispensers mounted above the countertops in 4 toilets exceed the 44-inch mounting height. Lower 4 towel dispensers.
- There are no vertical grab bars in the HC stalls. Provide 6 – 18-inch grab bars.
- Toilet tissue dispensers are located with the bottoms lower than 12-inches above the grab bar. Raise 6 tissue dispensers.
- HC stalls do not have self-closing doors and do not have door pulls. Add 6 self-closing hinges and 12 door pulls.

# ADA BUILDING EVALUATION | BUILDING 3

## BUILDING 3 – ADA NONCOMPLIANCE ITEMS

### ENTRANCES:

- Loose laid floor mats at building entrances slide around. Provide means to prevent the mats from sliding.

### ACCESSIBLE ROUTES:

- Automated External Defibrillators (AEDs) protrude 9" from face of wall and are mounted with the bottoms higher than 27-inches above the floor. Relocate 2 AEDs.
- Fire extinguishers protrude more than 4-inches from face of wall and are higher than 27-inches above the floor. Relocate 7 fire extinguishers.
- The elevator cab is 50-inches deep and is required to be 54-inches deep minimum. Replace 1 elevator cab.
- The elevator cab alarm button is higher than 54-inches. Lower 1 alarm button.
- Toilet room doors have 5-inches clear on the pull side. Relocate 4 doors to achieve 18-inches clear on the latch pull side.

### SIGNAGE:

- A few signs are not located on the latch side of the door. Relocate 6 signs.

### INTERIOR DOORS:

- Toilet room door closers exceed 5 lbs. of pressure to open doors. Adjust or replace 4 door closers.
- Several doors have doorknobs. Replace 49 doorknobs with lever handles.

### ASSEMBLY SEATING AND BENCHES:

- Not applicable.

### SERVICE COUNTERS:

- Not applicable.

### TOILETS:

- The operable parts of the paper towel dispensers in the Women's Toilets exceed the 48-inch mounting height. Lower 2 towel dispensers.
- Seats on the HC water closets are 16-inches above the floor. Raise 4 toilet seats to 17-19-inches above the floor.
- There are no vertical grab bars in the HC stalls. Provide 4 – 18-inch grab bars.
- Toilet tissue dispensers are located with the bottoms lower than 12 inches above the grab bar. Raise 4 tissue dispensers.
- HC stalls do not have self-closing doors and have twist type locks. Add 4 self-closing hinges and 4 slide type locks.
- HC stall doors are not 32-inches wide. Provide toilet partitions with wider HC stall doors.
- The 42-inch side grab bars are not mounted with the end 54-inches from the back wall. Reposition 4 grab bars.
- The rear grab bars are 24-inches long. Replace 4 grab bars with 36-inch bars.
- The flush valve handles are center mounted. Relocate 4 handles to the open side of the stall.
- Coat hooks in the HC stalls are higher than 48-inches above the floor. Lower 4 coat hooks.

# ADA BUILDING EVALUATION | BUILDING 5

## BUILDING 5 – ADA NONCOMPLIANCE ITEMS

### ENTRANCES:

- Loose laid floor mats at building entrances slide around. Provide means to prevent the mats from sliding.

### ACCESSIBLE ROUTES:

- Fire extinguishers protrude more than 4-inches from face of wall and are higher than 27-inches above the floor. Relocate 4 fire extinguishers.
- The elevator cab is 51-inches deep and is required to be 54-inches deep minimum. Replace 1 elevator cab.
- The platform lift in the Auditorium does not have a 30-inch-wide approach on the latch side at the upper landing. Reconfigure approach to lift. The lift did not appear to be operational (service panel was open).
- Several doors have less than 12-inches clear on the push side. Relocate 6 doors to achieve 12-inches clear on the latch push side.

### SIGNAGE:

- No issues.

### INTERIOR DOORS:

- Toilet room door closers exceed 5 lbs. of pressure to open doors. Adjust or replace 8 door closers.
- Several doors have doorknobs. Replace 14 doorknobs with lever handles.

### ASSEMBLY SEATING AND BENCHES:

- In the Auditorium, 6 wheelchair spaces have been provided and the required number of spaces is 5. However, the clear floor area at the spaces does not meet minimum requirements and they overlap the required clearance for the accessible routes. Remove 8 fixed seats to allow for clearances.
- HC seating locations overlap accessible routes. Relocate or increase width of spaces

### SERVICE COUNTERS:

- No issues.

### TOILETS:

- The operable parts of the paper towel dispensers in the toilets exceed the 48-inch mounting height. Lower 6 towel dispensers.
- HC stalls do not have self-closing doors. Add 6 self-closing hinges.
- Seats on the water closets in the single toilets are 16-inches above the floor. Raise 2 toilet seats to 17-19-inches above the floor.
- The flush valve handles are center mounted. Relocate 8 handles to the open side of the stall.
- The 42-inch side grab bars are not mounted with the end 54-inches from the back wall. Reposition 8 grab bars.
- Except for lower-level lobby toilets, all toilets have the grab bars mounted higher than 36-inches above the floor. Lower 12 grab bars.
- The 36-inch-long grab bars on the back walls do not extend 12-inches from the water closet centerline to the end of the bar. Relocate 8 grab bars.



# ADA BUILDING EVALUATION | BUILDING 6

## BUILDING 6 – ADA NONCOMPLIANCE ITEMS

### ENTRANCES:

- Loose laid floor mats at building entrances slide around. Provide means to prevent the mats from sliding.

### ACCESSIBLE ROUTES:

- Fire extinguishers protrude more than 4-inches from face of wall and are higher than 27-inches above the floor. Relocate 5 fire extinguishers.
- At Men's Toilets, the front approach space to doors is 52-inches deep due to location of water coolers. Relocate 2 water coolers to achieve 60-inches clear.

### SIGNAGE:

- No issues.

### INTERIOR DOORS:

- Door closers exceed 5 lbs. of pressure to open doors and take less than 5 seconds to close to latching speed. Adjust or replace 12 door closers.
- Several doors have doorknobs. Replace 19 doorknobs with lever handles.

### ASSEMBLY SEATING AND BENCHES:

- Not applicable

### SERVICE COUNTERS:

- At Reception transaction windows, the sills and countertop exceed 36-inches above the floor. Lower 2 windowsills.

### TOILETS:

- The operable parts of the paper towel dispenser in the Women's Toilets exceed the 48-inch mounting height. Lower 2 towel dispensers.
- Seats on the HC water closets are 16-inches above the floor. Raise 2 toilet seats to 17-19-inches above the floor.
- There are no vertical grab bars in the HC stalls. Provide 2 – 18-inch grab bars.
- Toilet tissue dispensers are located with the bottoms lower than 12 inches above the grab bar. Raise 4 tissue dispensers.
- HC stalls do not have self-closing doors and have twist type locks. Add 2 self-closing hinges and 2 slide type locks.
- The 42-inch side grab bars are not mounted with the end 54-inches from the back wall. Reposition 2 grab bars.
- The 36-inch-long grab bars on the back walls do not extend 12-inches from the water closet centerline to the end of the bar. Relocate 2 grab bars.
- The 36-inch-long grab bars on the back walls are lower than 33-36-inches above the floor. Relocate 2 grab bars.
- The flush valve handles are center mounted. Relocate 2 handles to the open side of the stall.
- Coat hooks in the HC stalls are higher than 48-inches above the floor. Lower 2 coat hooks.
- The depth of the HC stalls is less than 56-inches deep. Replace 2 toilet partitions.

# ADA BUILDING EVALUATION | BUILDING 8

## BUILDING 8 – ADA NONCOMPLIANCE ITEMS

### ENTRANCES:

- Loose laid floor mats at building entrances slide around. Provide means to prevent the mats from sliding.

### ACCESSIBLE ROUTES:

- Front approach to water cooler has 14-inches of clearance below cooler. Modify installation to achieve 17-25-inches below cooler.

### SIGNAGE:

- No issues.

### INTERIOR DOORS:

- Door closers exceed 5 lbs. of pressure to open doors and take less than 5 seconds to close to latching speed. Adjust or replace 6 door closers.

### ASSEMBLY SEATING AND BENCHES:

- Not applicable

### SERVICE COUNTERS:

- No issues.

### TOILETS:

- In each toilet room, the end of the privacy wall is less than 48-inches from the side wall of the toilet room. Increase opening width in 2 locations.
- There are no vertical grab bars in the HC stalls. Provide 2 – 18-inch grab bars.
- Toilet tissue dispensers are located with the bottoms lower than 12 inches above the grab bar. Raise 2 tissue dispensers.
- HC stalls do not have self-closing doors. Add 2 self-closing hinges.
- The 42-inch side grab bars are not mounted with the end 54-inches from the back wall. Reposition 2 grab bars.
- The 36-inch-long grab bars on the back walls do not extend 12-inches from the water closet centerline to the end of the bar. Relocate 2 grab bars.
- The 36-inch-long grab bars on the back walls are lower than 33-36-inches above the floor. Relocate 2 grab bars.
- The flush valve handles are center mounted. Relocate 2 handles to the open side of the stall.
- The HC stall water closets are 23-inches from the centerline of the fixture to the wall. Relocate 2 fixtures so they are 16-18-inches from the centerline to the wall.
- Bottom of mirrors are more than 35-inches above the floor. Lower 2 mirrors.

# ADA BUILDING EVALUATION | BUILDING 9

## BUILDING 9 – ADA NONCOMPLIANCE ITEMS

### ENTRANCES:

- Loose laid floor mats at building entrances slide around. Provide means to prevent the mats from sliding.

### Accessible Routes:

- Automated External Defibrillators (AEDs) protrude 9" from face of wall and are mounted with the bottom higher than 27-inches above the floor. Relocate 2 AEDs.
- In Vestibule 150, the distance between the edge of the interior door in the open position to the wall is 42-inches. Increase size of Vestibule to achieve 48-inches.
- At toilets 181, 182, 282, and 283, the doors have 13-inches clear on the pull side. Relocate 4 doors to achieve 18-inches clear on the latch pull side.

### SIGNAGE:

- No issues.

### INTERIOR DOORS:

- Door closers exceed 5 lbs. of pressure to open doors and take less than 5 seconds to close to latching speed. Adjust or replace 6 door closers.

### ASSEMBLY SEATING AND BENCHES:

- In the Teaching Center, 4 wheelchair spaces are required and 3 are provided. Remove 2 fixed seats to allow for the additional space.
- In each Men's and Women's Toilet/Shower/Locker room, a 36-inch L x 17-inch D wall supported bench is provided. This does not meet the minimum size of 42-inches L x 20-24-inches D and the approach space is less than 30-inches W x 48-inches L.

### SERVICE COUNTERS:

- Not applicable

### TOILETS:

- The HC stall water closets are 21-inches from the centerline of the fixture to the wall. Relocate 4 fixtures so they are 16-18-inches from the centerline to the wall.
- The HC stall water closets have the flush valve handles mounted on the short side of the fixture. Move 4 handles to the open side of the stall.
- The operable parts of the paper towel dispensers mounted above the countertops in 4 toilets exceed the 44-inch mounting height. Lower 4 towel dispensers.
- There are no vertical grab bars in the HC stalls. Provide 4 – 18-inch grab bars.
- Toilet tissue dispensers are located with the bottoms lower than 12-inches above the grab bar. Raise 4 tissue dispensers.
- HC stalls do not have self-closing doors and do not have door pulls. Add 4 self-closing hinges and 8 door pulls.
- Coat hooks in HC stalls are higher than 48-inches above the floor. Lower 4 coat hooks.



# ADA BUILDING EVALUATION | BUILDING 10

## BUILDING 10 – ADA NONCOMPLIANCE ITEMS

### ENTRANCES:

- Loose laid floor mats at building entrances slide around. Provide means to prevent the mats from sliding.

### ACCESSIBLE ROUTES:

- Automated External Defibrillators (AEDs) protrude 9" from face of wall and are mounted with the bottoms higher than 27-inches above the floor. Relocate 3 AEDs.

### SIGNAGE:

- No issues.

### INTERIOR DOORS:

- At each toilet, door closers exceed 5 lbs. of pressure to open doors. Adjust or replace 6 door closers.

### ASSEMBLY SEATING AND BENCHES:

- Not applicable

### SERVICE COUNTERS:

- The transaction counter in the Advising Office is higher than 36-inches above the floor. Lower 1 counter and opening.

### TOILETS:

- In each of the Men's Toilets, the end of the privacy wall is less than 48-inches from the side wall of the toilet room. Increase opening width in 3 locations.
- There are no vertical grab bars in the HC stalls. Provide 6 – 18-inch grab bars.
- The tops of all grab bars are higher than 36-inches above the floor. Reposition 12 grab bars.
- The operable parts of the paper towel dispensers mounted above the counter-tops in each toilet room exceed the 44-inch mounting height. Lower 3 towel dispensers.

# ADA BUILDING EVALUATION | BUILDING 20

## BUILDING 20 – ADA NONCOMPLIANCE ITEMS

### ENTRANCES:

- Loose laid floor mats at building entrances slide around. Provide means to prevent the mats from sliding.
- The automatic actuator button for the interior door going out is inoperable.

### ACCESSIBLE ROUTES:

- No issues

### SIGNAGE:

- No issues.

### INTERIOR DOORS:

- At each toilet, door closers exceed 5 lbs. of pressure to open doors. Adjust or replace 2 door closers.

### ASSEMBLY SEATING AND BENCHES:

- Not applicable.

### SERVICE COUNTERS:

- Not applicable.

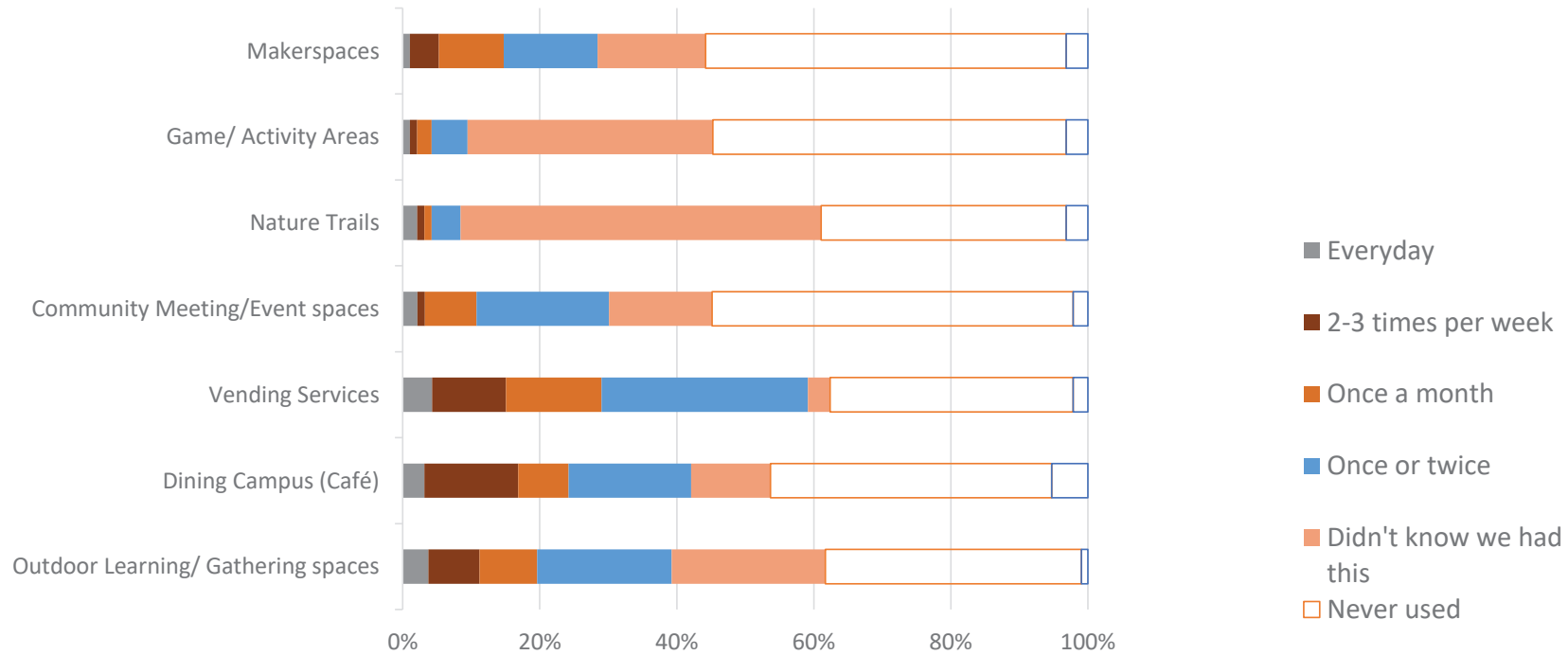
### TOILETS:

- In the Men's Toilet, the clear path to the urinals is less than 36-inches wide. Increase opening width in 1 location.
- There are no vertical grab bars in the HC stalls. Provide 2 – 18-inch grab bars.
- In the Women's Toilet, the tops of the grab bars are higher than 36-inches above the floor. Reposition 2 grab bars.
- HC stalls do not have self-closing doors and do not have door pulls on the interior. Add 2 self-closing hinges and 2 door pulls.
- Coat hooks in the HC stalls are higher than 48-inches above the floor. Lower 2 coat hooks.
- The operable parts of the paper towel dispensers exceed the 48-inch mounting height. Lower 2 towel dispensers.
- The approach space to the towel dispensers is less than 30-inches. Increase approach width in 2 locations.



## STUDENT SURVEY

## HOW OFTEN DO STUDENTS USE THE FOLLOWING AMENITIES?

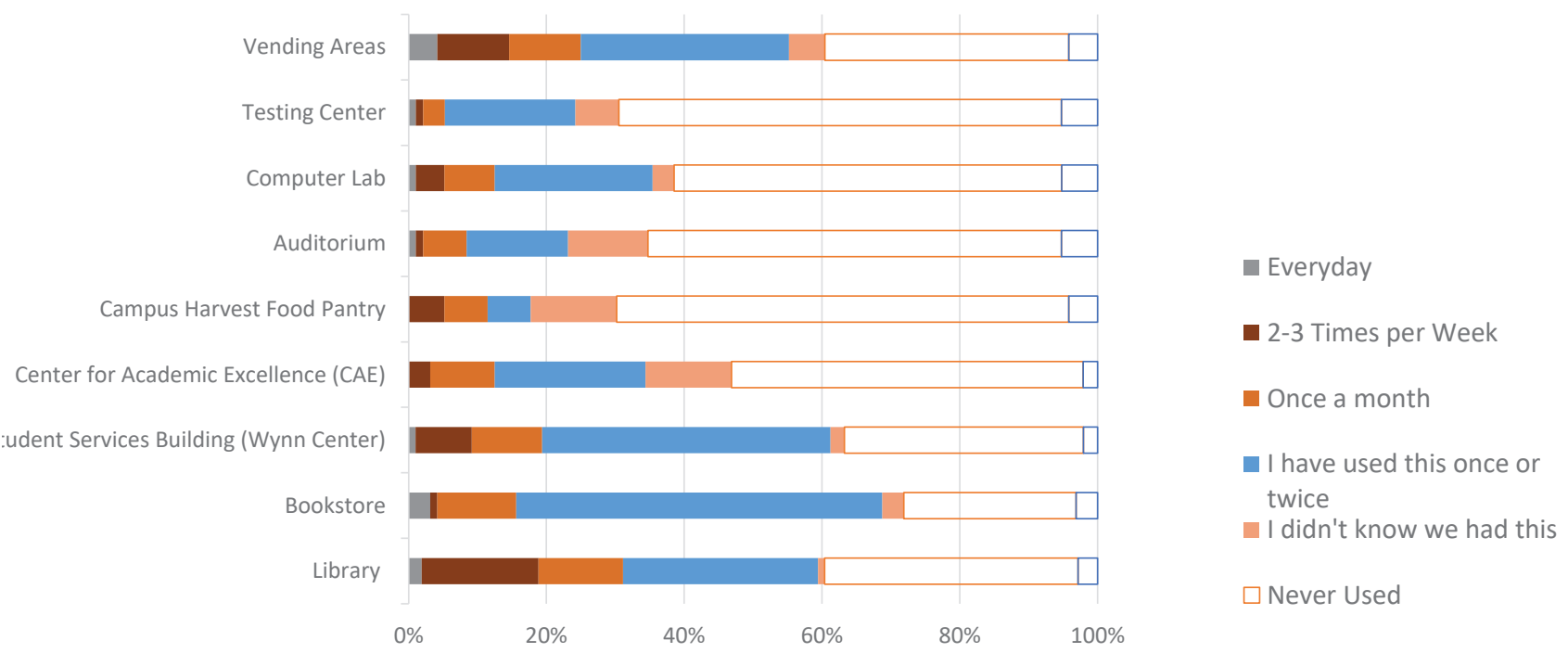


**STUDENT SURVEY**

107 Entries



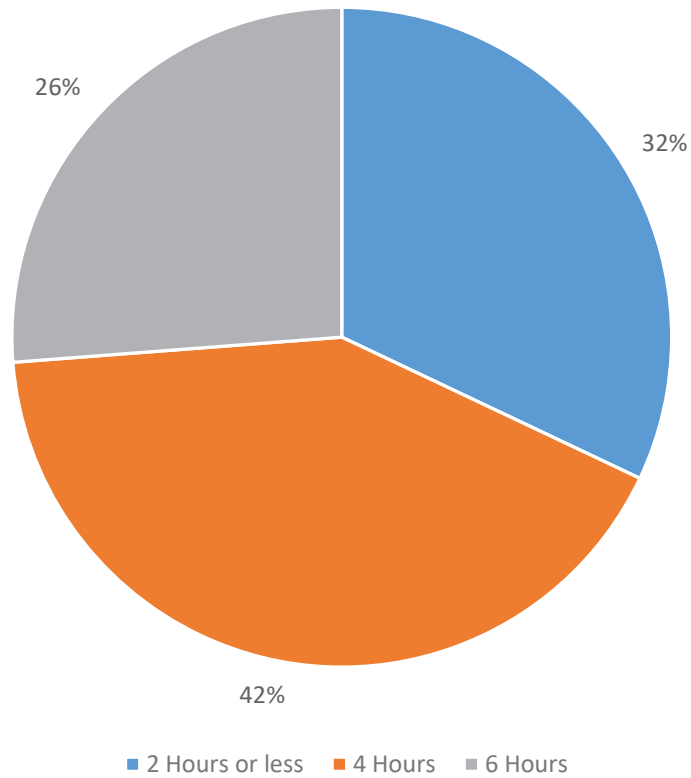
# HOW OFTEN DO STUDENTS USE THE FOLLOWING SERVICES?



**STUDENT SURVEY**

107 Entries

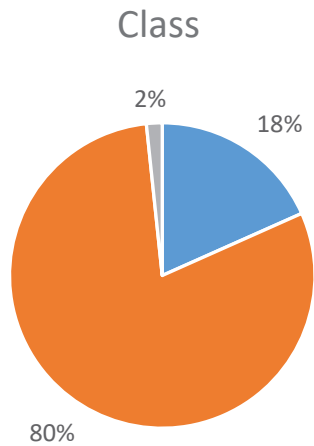
HOW MANY HOURS DO YOU SPEND ON CAMPUS IN A DAY?



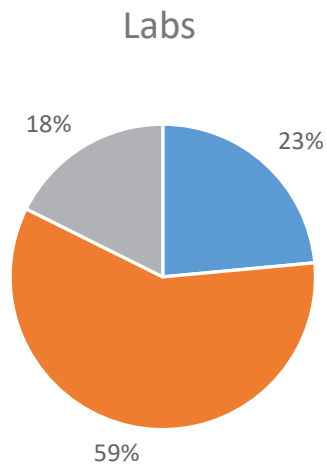
**STUDENT SURVEY**

107 Entries

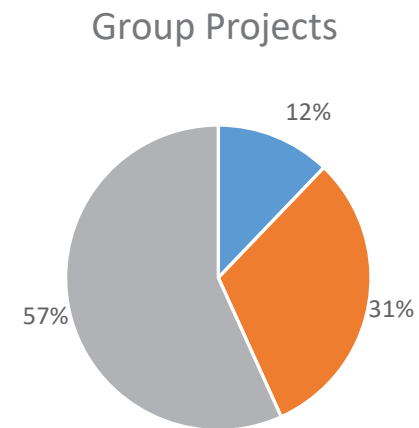
## HOW DO YOU PARTICIPATE IN THE FOLLOWING?



■ Virtual  
■ Virtual + In Person  
■ In Person



■ Virtual  
■ Virtual + In Person  
■ In Person



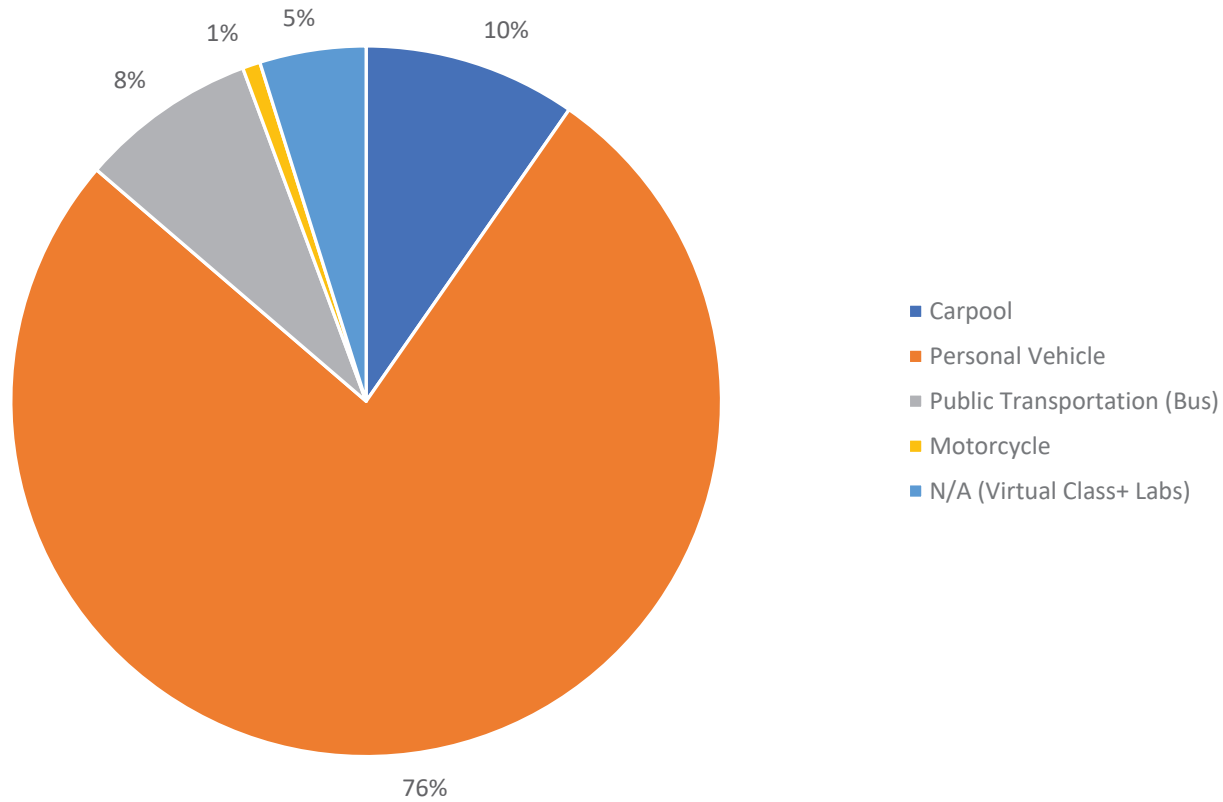
■ Virtual  
■ Virtual + In Person  
■ In Person



**STUDENT SURVEY**

107 Entries

## HOW DO THE STUDENTS GET TO CAMPUS?

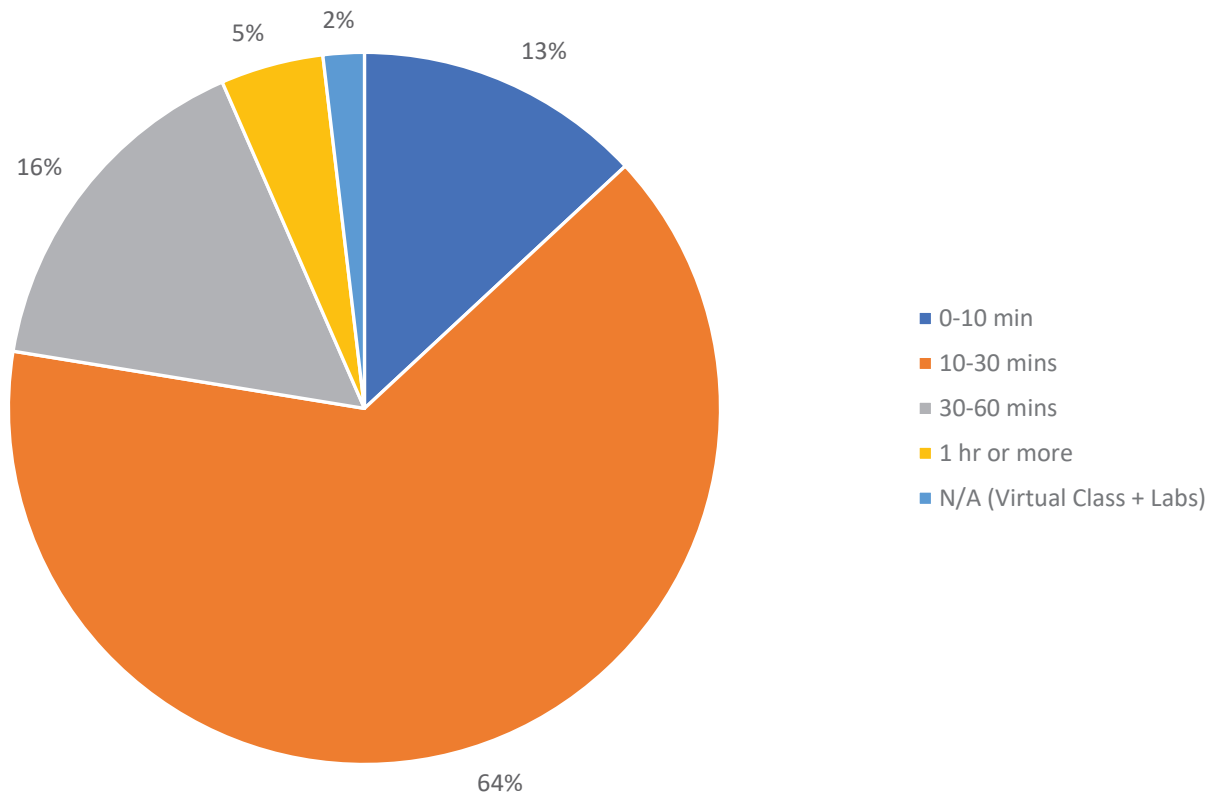


**STUDENT SURVEY**

107 Entries



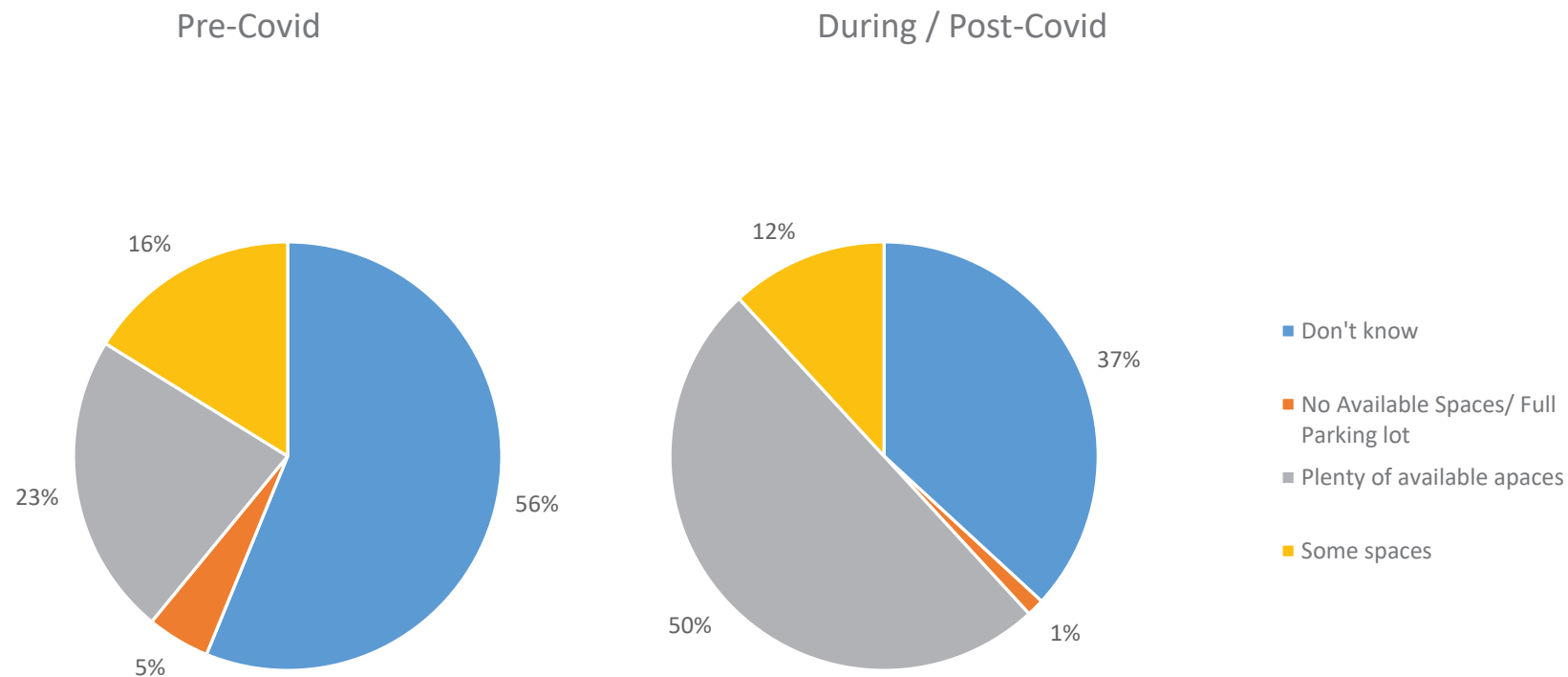
HOW LONG IS YOUR COMMUTE TO CAMPUS?



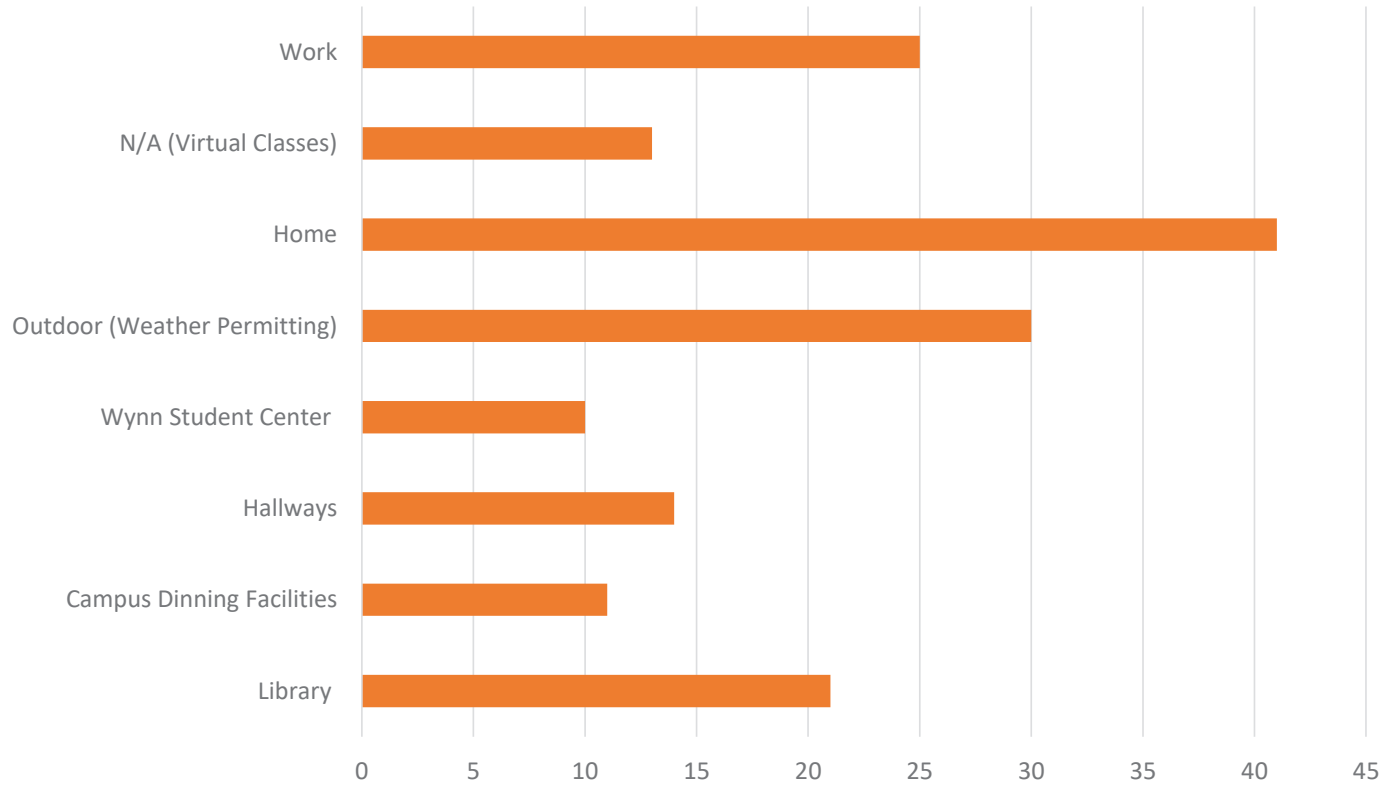
**STUDENT SURVEY**

107 Entries

## HOW DID THE COVID PANDEMIC IMPACT PARKING OCCUPANCY ON CAMPUS?



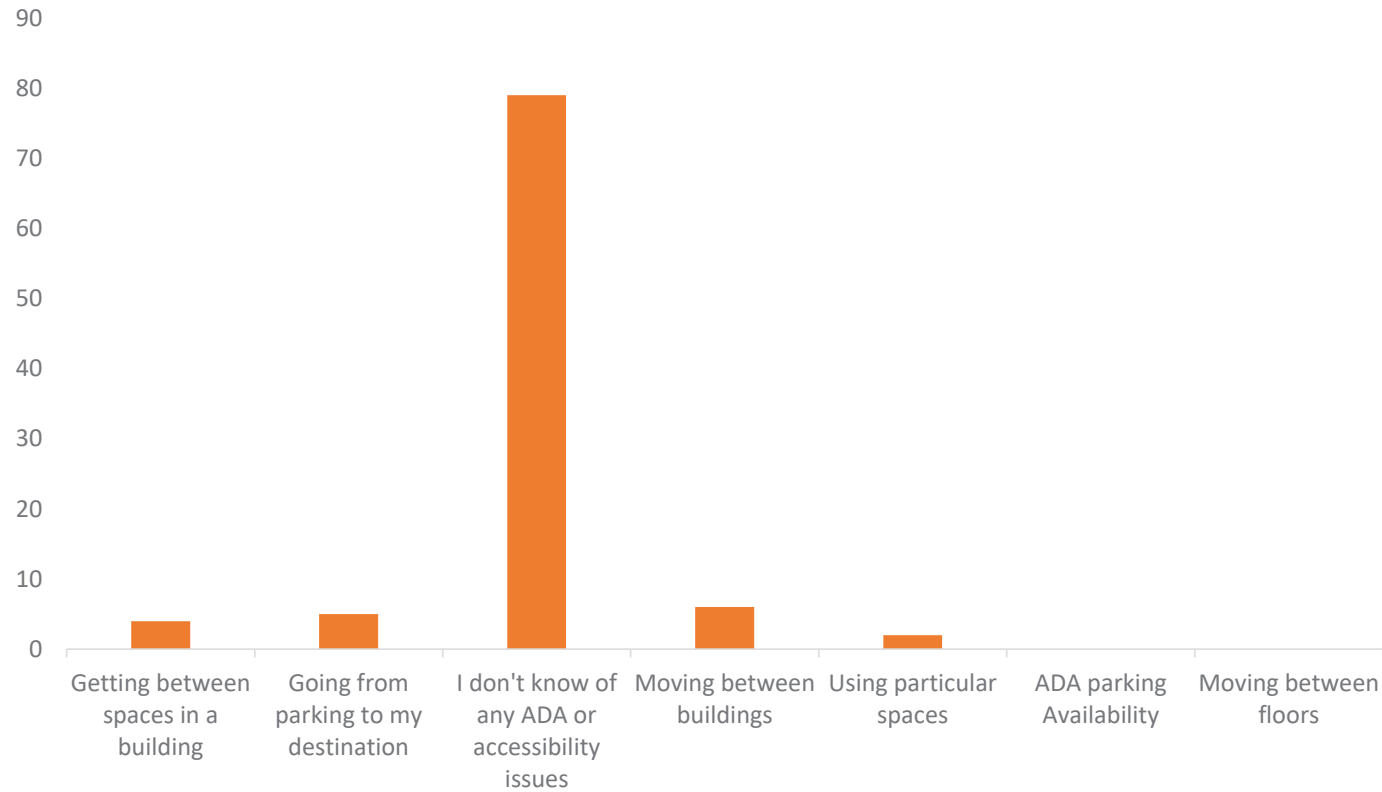
## WHERE DO THE STUDENTS SPEND THEIR TIME IN BETWEEN CLASSES?



### STUDENT SURVEY

107 Entries

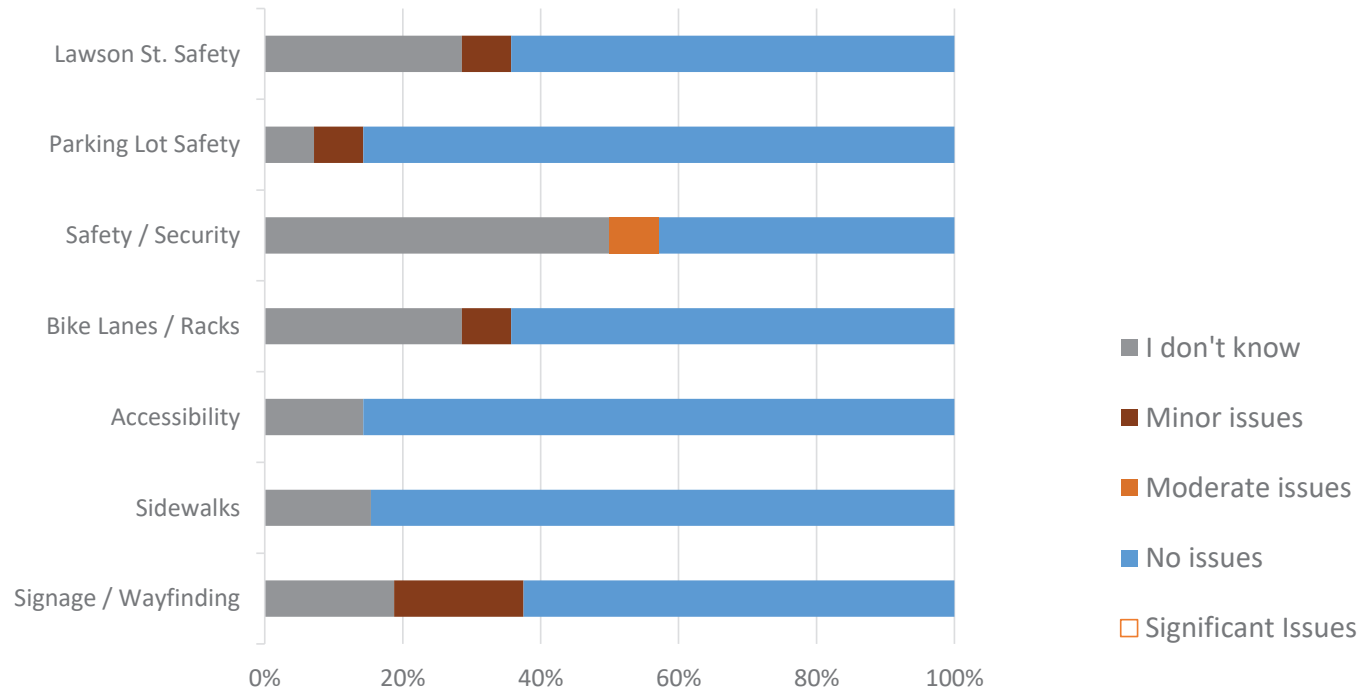
## WHAT ARE SOME OF THE COMMON ADA OR ACCESSIBILITY ISSUES?

**STUDENT SURVEY**

107 Entries



## HOW WOULD YOU RATE THE FOLLOWING?



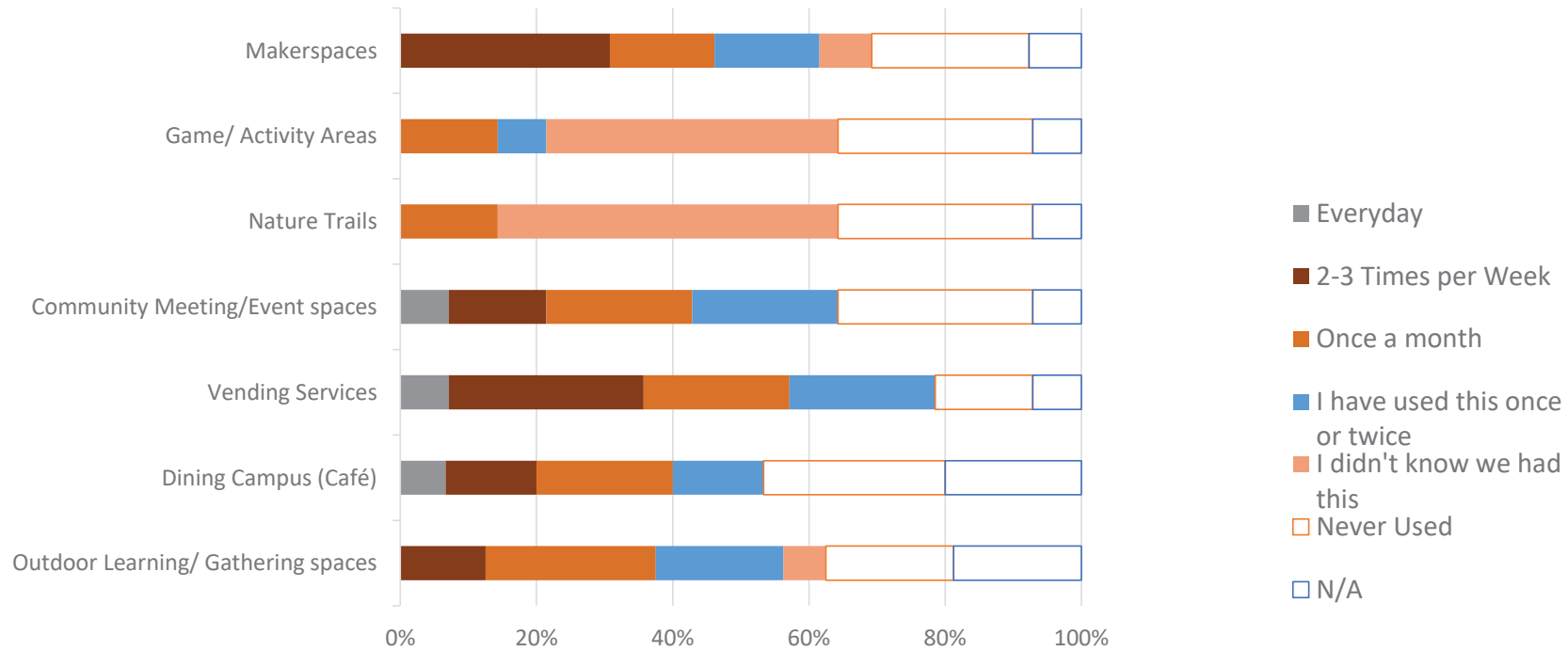
### STUDENT SURVEY

107 Entries

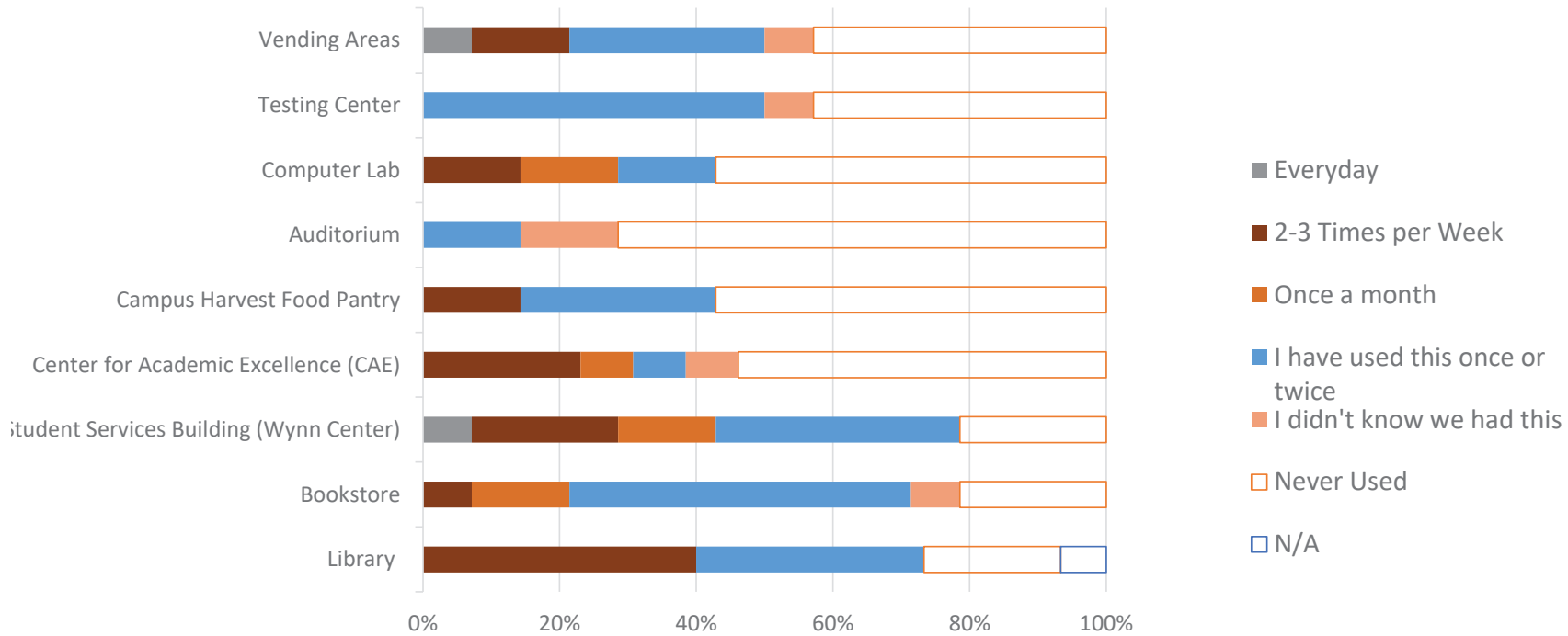


## STAFF SURVEY

## HOW OFTEN DO STAFF USE THE FOLLOWING AMENITIES?

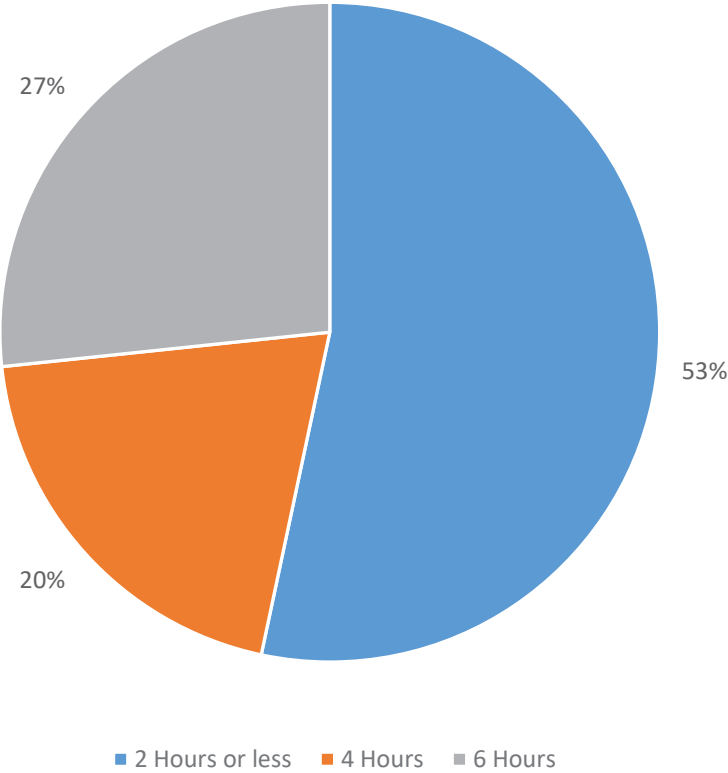


## HOW OFTEN DO THE STAFF USE THE FOLLOWING SERVICES?





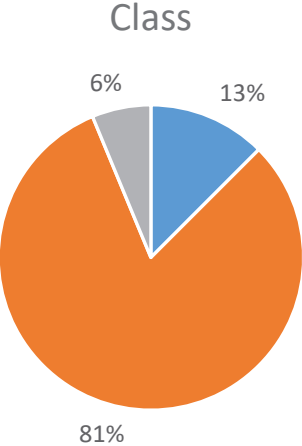
HOW MANY HOURS DO YOU SPEND ON CAMPUS IN A DAY?



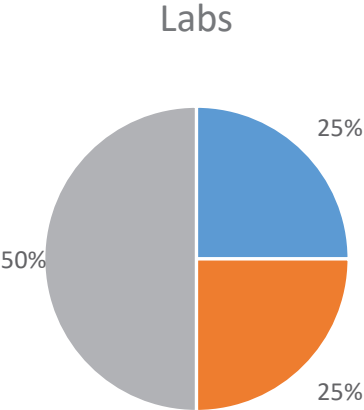
**STAFF SURVEY**

14 Entries

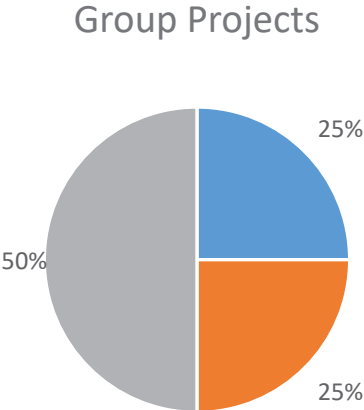
HOW DO YOU PARTICIPATE IN THE FOLLOWING?



- Virtual
- Virtual + In Person
- In Person



- Virtual
- Virtual + In Person
- In Person



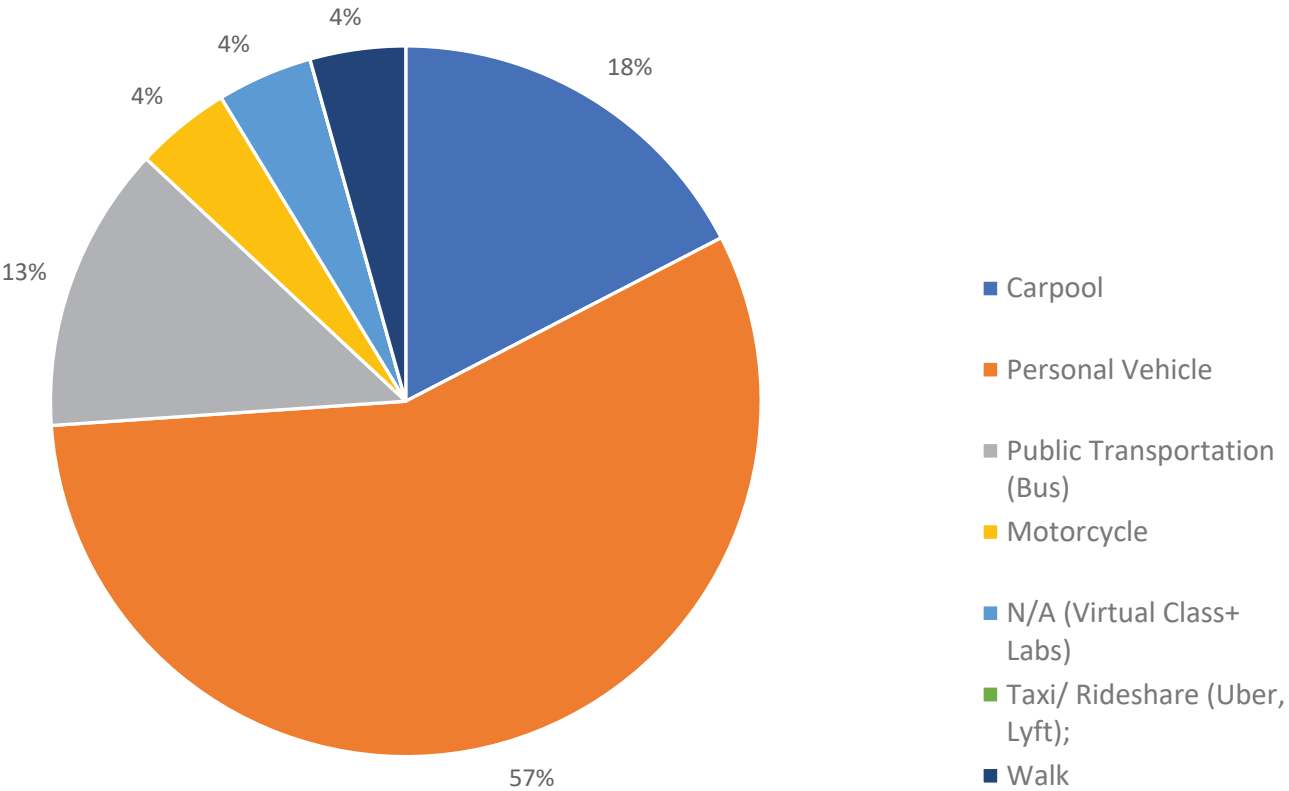
- Virtual
- Virtual + In Person
- In Person



**STAFF SURVEY**

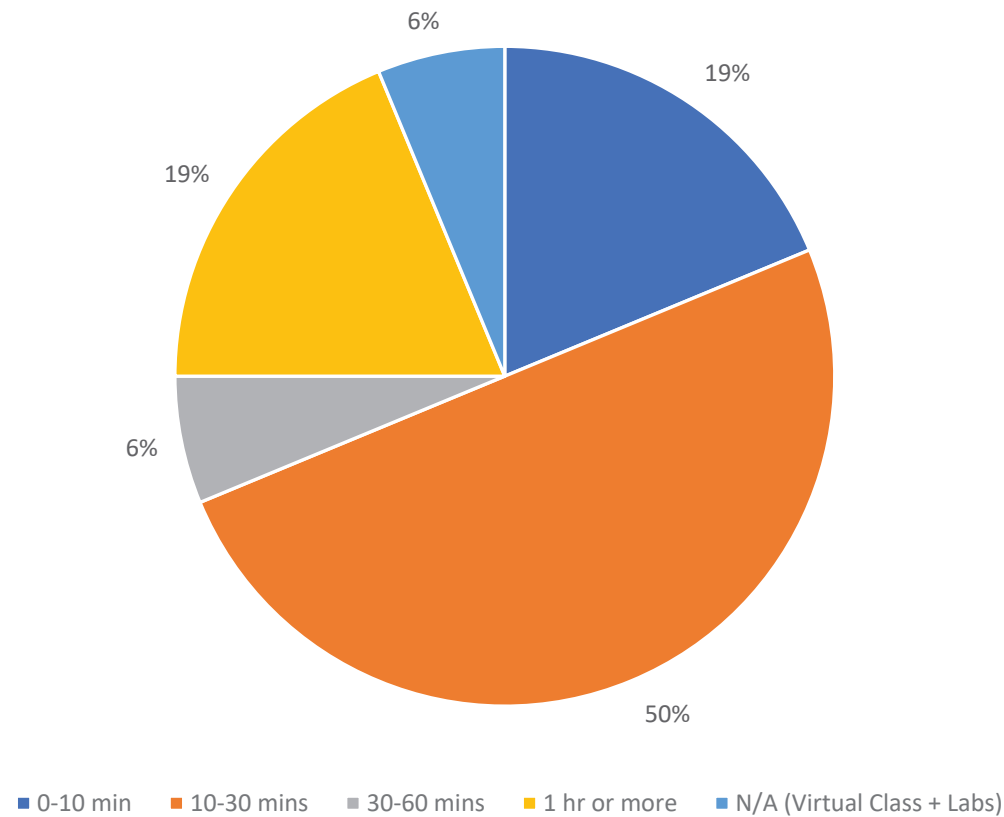
14 Entries

HOW DO THE STAFF GET TO CAMPUS?



**STAFF SURVEY**  
14 Entries

HOW LONG IS YOUR COMMUTE TO CAMPUS?

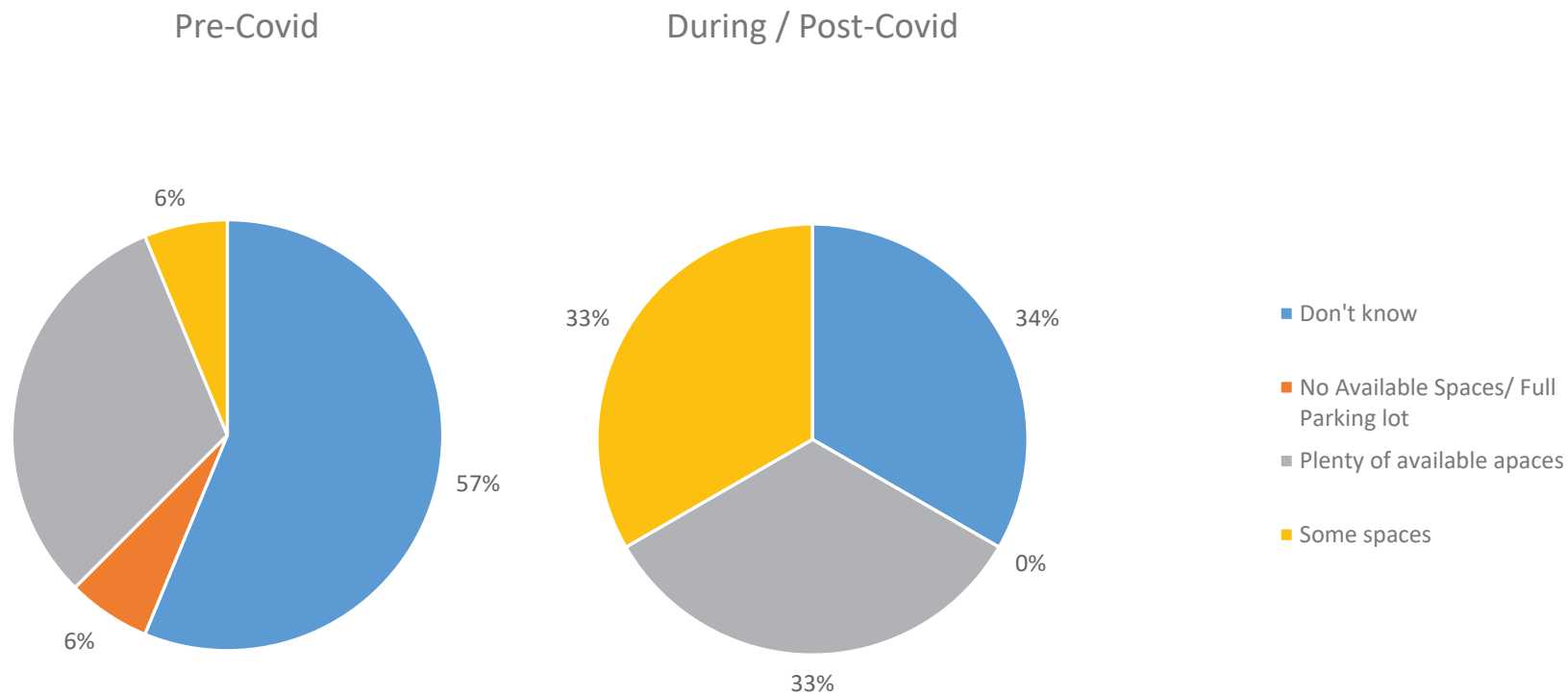


STAFF SURVEY

14 Entries

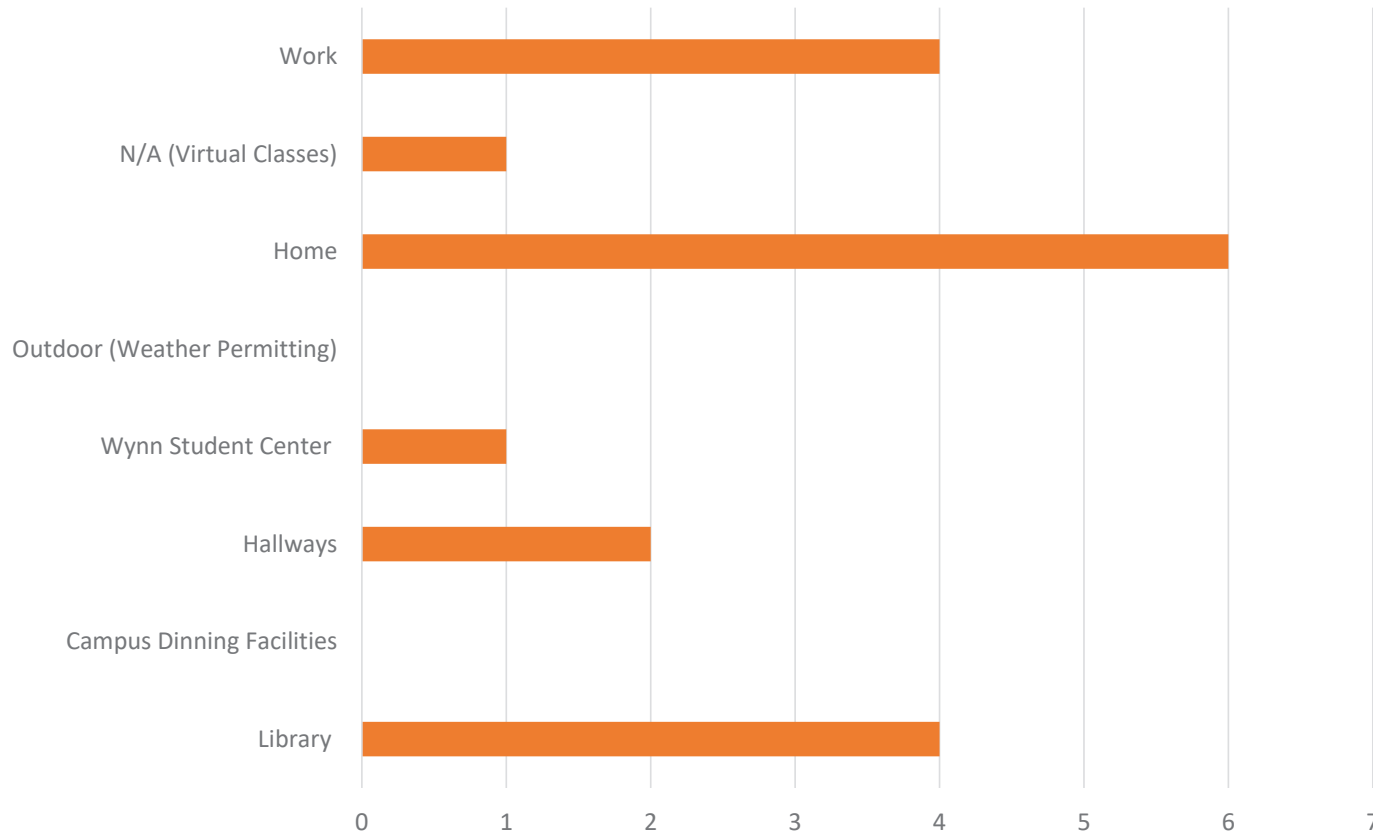


## HOW DID THE COVID PANDEMIC IMPACT PARKING OCCUPANCY ON CAMPUS?

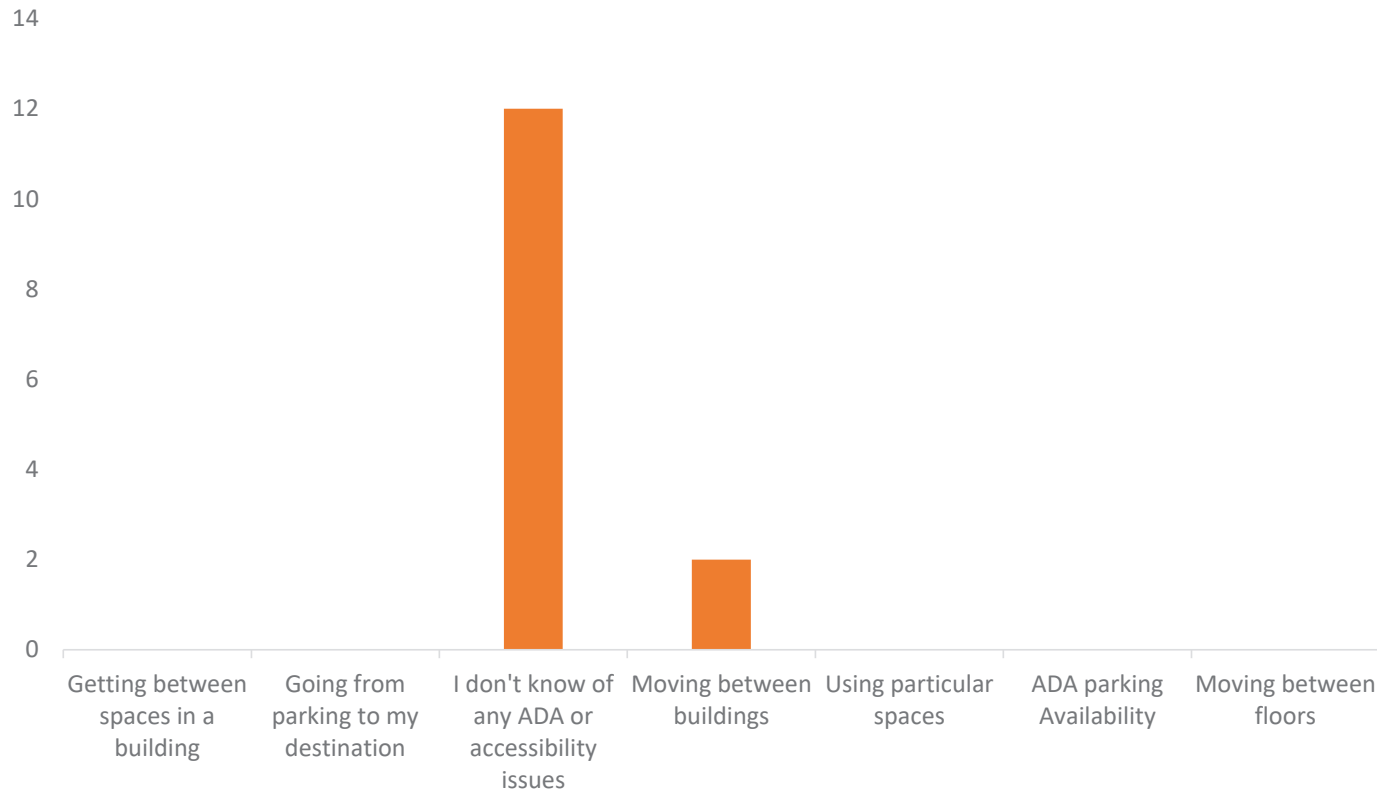


**STAFF SURVEY**  
14 Entries

## WHERE DO THE STAFF SPEND THEIR TIME IN BETWEEN CLASSES?



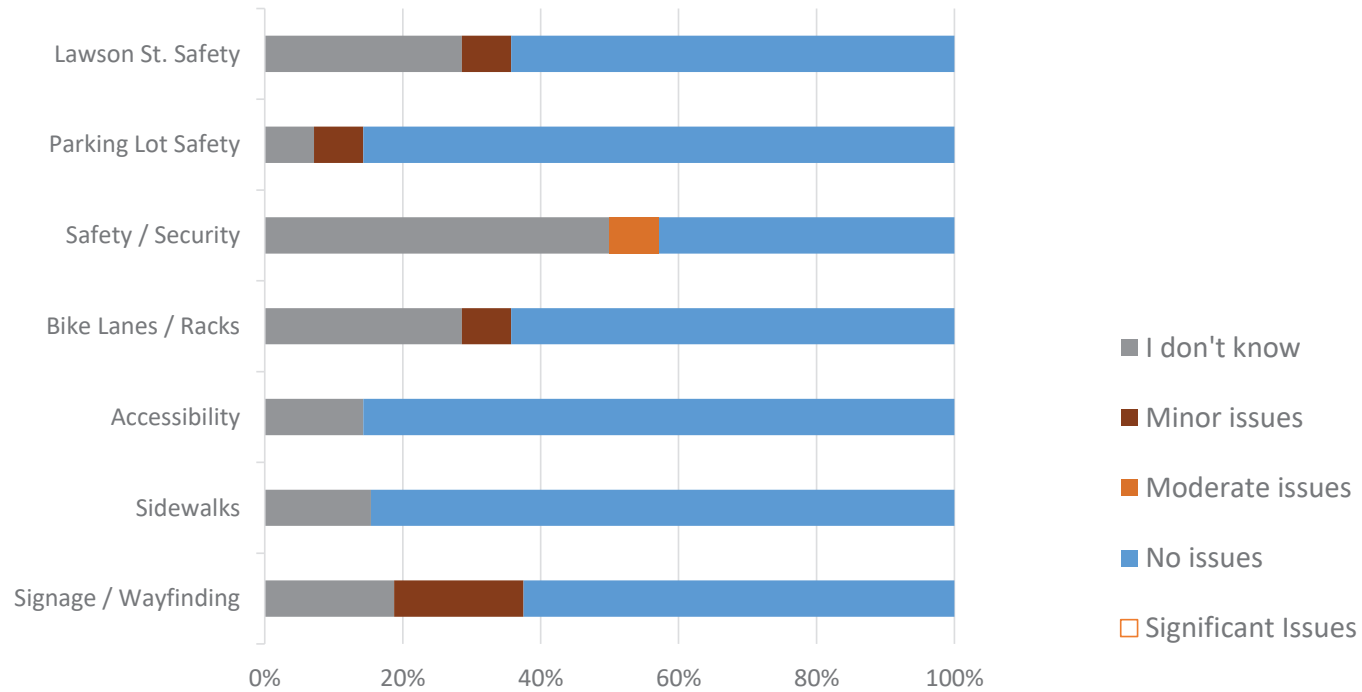
## WHAT ARE SOME OF THE COMMON ADA OR ACCESSIBILITY ISSUES?



**STAFF SURVEY**

14 Entries

## HOW WOULD YOU RATE THE FOLLOWING?



### STAFF SURVEY

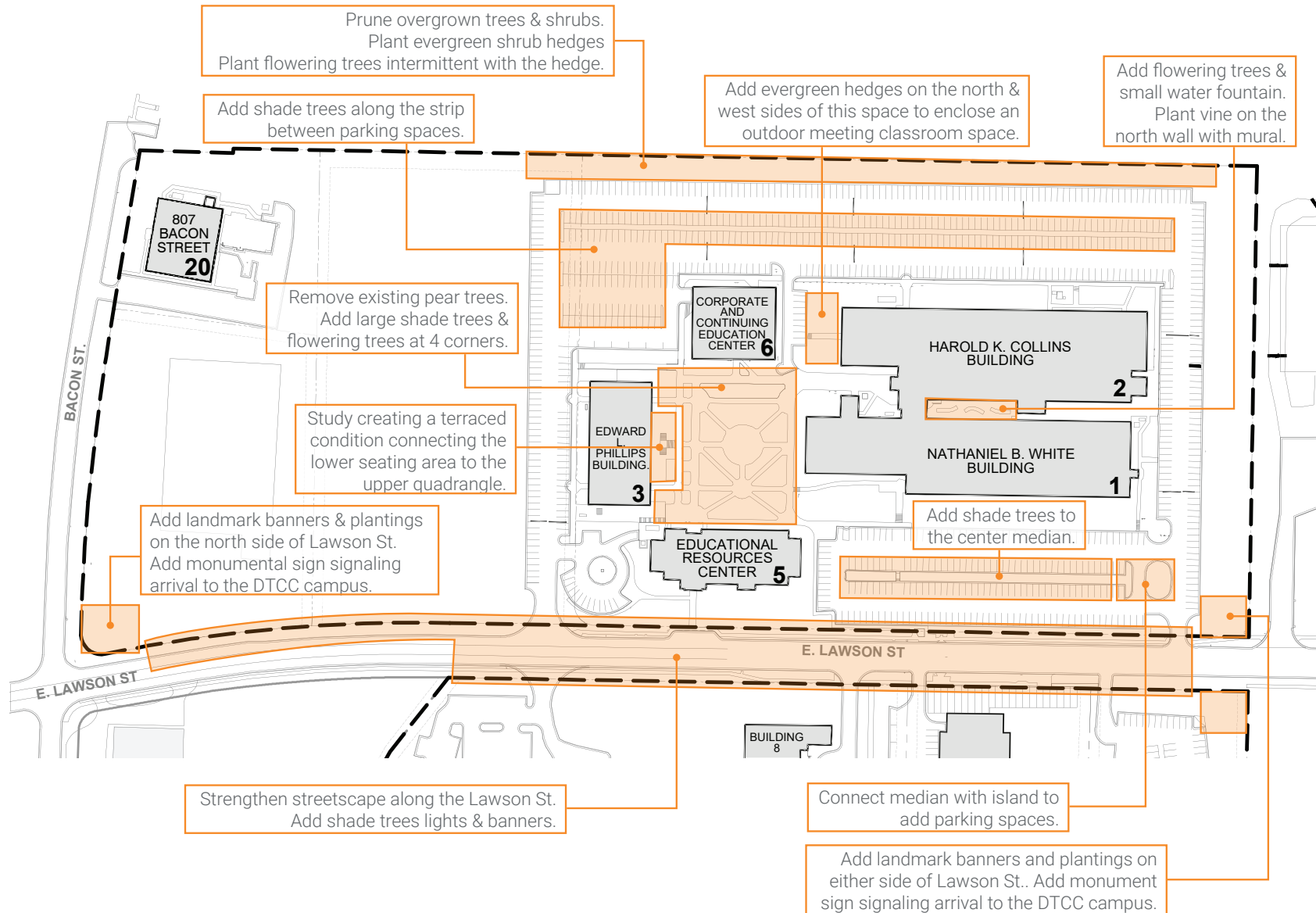
14 Entries



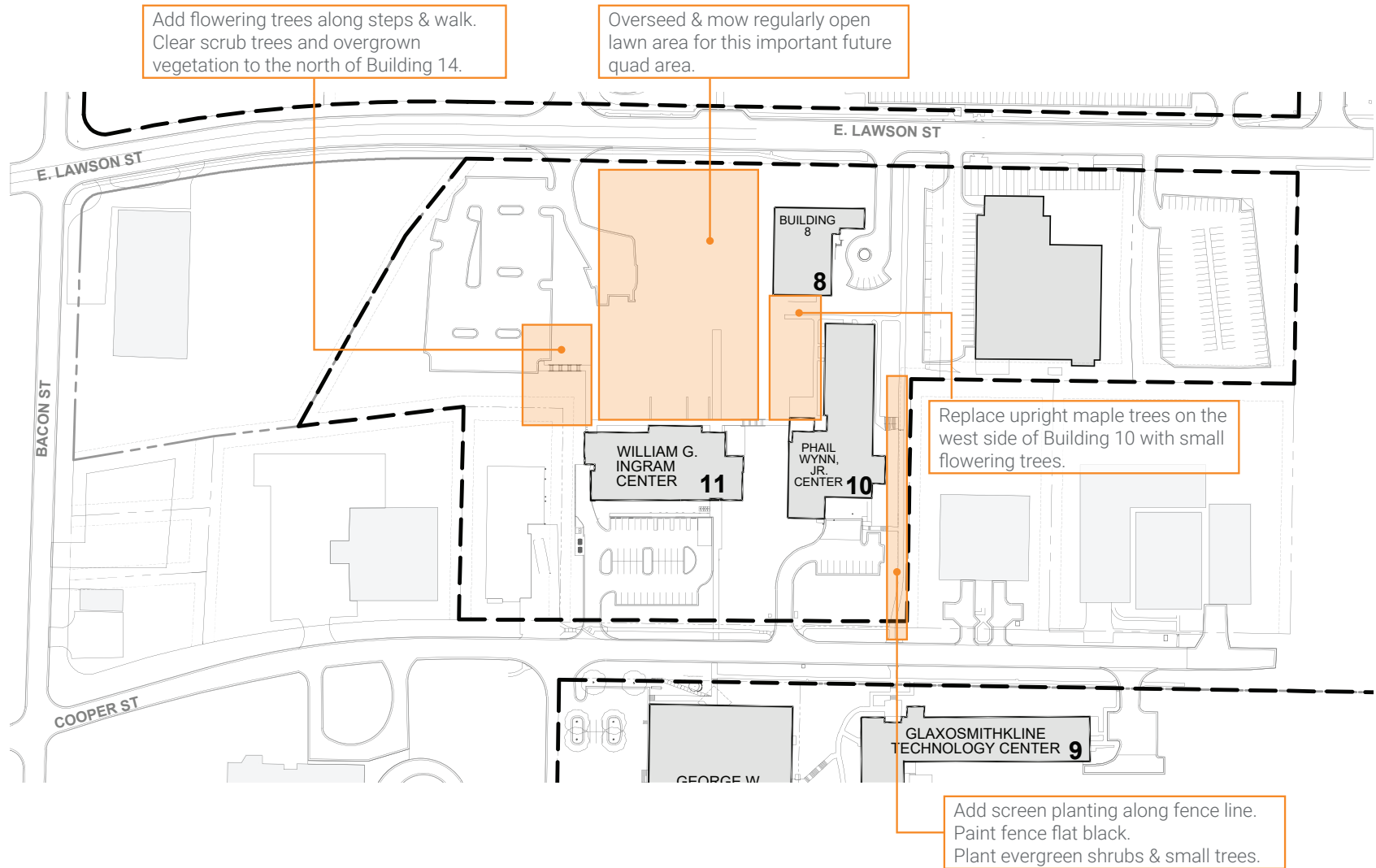


## LANDSCAPE IMPROVEMENTS

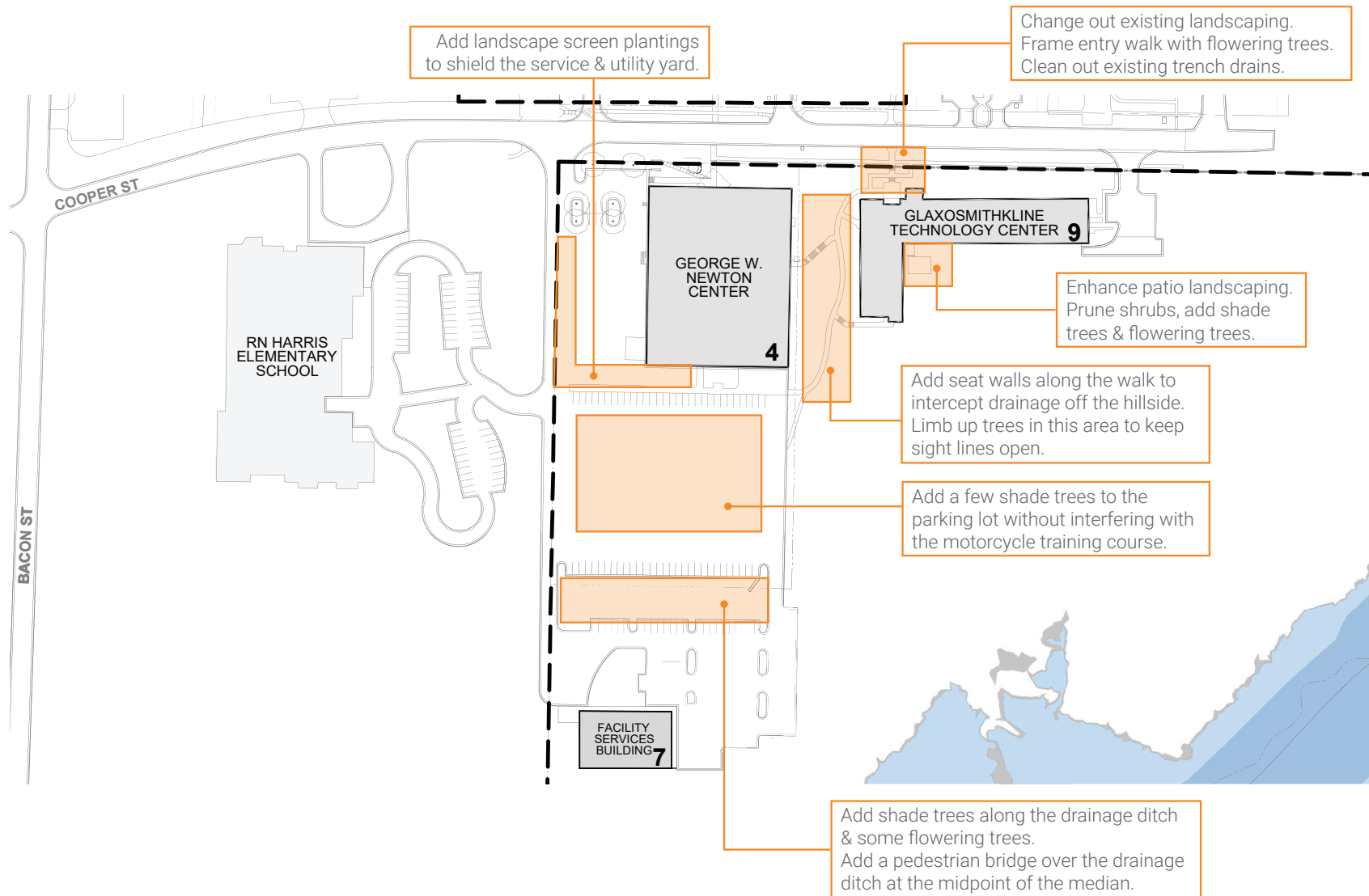
# LANDSCAPE DEVELOPMENT OPPORTUNITIES | NORTH CAMPUS



# LANDSCAPE DEVELOPMENT OPPORTUNITIES | MID CAMPUS



# LANDSCAPE DEVELOPMENT OPPORTUNITIES | SOUTH CAMPUS





# PLANTING PALETTE

## QUADRANGLE SHADE TREES

Shade trees are selected for their commercial availability, longevity, and heat and drought tolerance once established. As they age trees should be limbed up to allow people walk beneath them and create a broad overhead canopy.



Highbeam Overcup Oak



High Tower Willow Oak



Golden Rain Tree



Chinese Pistache Tree



Liberty Elm

## FLOWERING TREES

Flowering trees are selected for their vibrant spring blossoms and reliable performance in central North Carolina. Once established, these trees can be allowed to grow without pruning to alter their natural form and shape.



Eastern Redbud



Kousa Dogwood



Saucer Magnolia



Chinese Fringe Tree



Star Magnolia



# PLANTING PALETTE

## EVERGREEN TREES

Evergreen trees are intended to screen areas from public view and frame important views.



Virginia Pine



American Holly  
& Cultivars



Green Giant Arborvitae



Grandiflora Magnolia

## STREET TREES

Street trees are selected for their ability to grow in confined spaces and achieve a medium shade tree stature. These trees will need to comply with the City of Durham's recommended street trees list.



Trident Maple



Red Maple



Red Oak



# PLANTING PALETTE

## SCREENING TREES AND SHRUBS

Trees and shrubs used for screening are generally more narrow and upright in form and are selected for their reliable performance in central North Carolina.



Chindo Viburnum



Green Giant Arborvitae



Foster's Holly

## PERENNIAL GRASSES

Perennial grasses are selected for their commercial availability and reliable growth and performance. These grasses may be used as stabilizing ground cover where no mowing is needed or required.



Pennisetum – Blonde Ambition



Pennisetum – Little Bunny



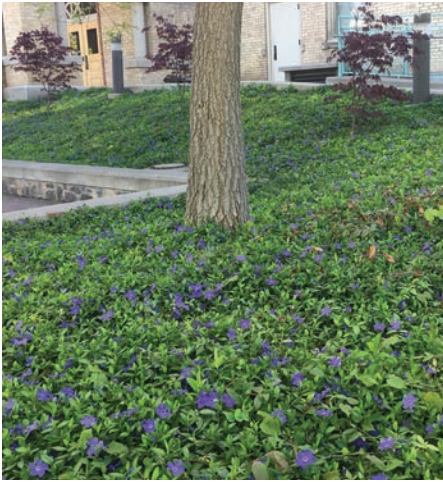
Love Grass



# PLANTING PALETTE

## GROUND COVERS

Ground covers can be employed around buildings where lawn is not suitable and on slopes where mowing will be challenging. Ground covers are selected for part sun and shade conditions and are drought and heat tolerant.



Vinca Minor / Periwinkle



Vinca Major / Periwinkle



Liriope Muscari / Liriope



Carex pensylvanica / Carex



## COST ESTIMATE

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Project: DTCC - Campus Master-Plan  
Client: Durham Technical Community College  
Stage: Rough Order of Magnitude (R3)  
Date: 7/26/2022

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## Conceptual Cost Estimate

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| - Project Cost Summary                               | 4       |
| - Construction Cost Summary                          | 5 - 6   |
| - Cost Estimate Back-Up (Building 12)                | 7 - 9   |
| - Cost Estimate Back-Up (Building 13)                | 10 - 12 |
| - Cost Estimate Back-Up (Building 14)                | 13 - 14 |
| - Cost Estimate Back-Up (ADA Enhancements)           | 15 - 20 |
| - Cost Estimate Back-Up (Building 1 & 2 Courtyard)   | 21 - 22 |
| - Cost Estimate Back-Up (North Quad Enhancements)    | 23 - 24 |
| - Cost Estimate Back-Up (Campus Landscape Screening) | 25 - 26 |
| - Cost Estimate Back-Up (Wayfinding Refresh)         | 27 - 28 |
| - Cost Estimate Back-Up (Building 9 Renovations)     | 29 - 31 |
| - Scope Assumptions                                  | 33 - 35 |
| - Indirect Cost Overview                             | 36      |
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## Cost Master-Plan: Executive Cost Summary

### Overview

The following report relates to the proposed long-term campus improvements at the Durham Technical Community College (Main Campus) in Durham, NC. The scope of work is based on the master-plan outline prepared by O'Brien Atkins (in May / June 2022) which focuses on the following improvements:

| Description                      | Type                         | Timeline (Construction Start) |
|----------------------------------|------------------------------|-------------------------------|
| A. Building 12                   | New construction / 80,000 sf | Q3 / 2024                     |
| B. Building 13                   | New construction / 35,820 sf | Q3 / 2024                     |
| C. Building 14                   | New construction / 20,000 sf | Q2 / 2026                     |
| D. ADA Barrier Enhancements      | Building upgrades            | Q2 / 2024                     |
| E. Building 1 & 2 Courtyard      | Site Upgrades                | Q2 / 2025                     |
| F. North Quad Enhancements       | Site Upgrades                | Q2 / 2025                     |
| G. Campus Landscape Enhancements | Campus upgrades              | Q2 / 2024                     |
| H. Wayfinding Refresh            | Campus upgrades              | Q2 / 2024                     |
| I. Building 9 Refresh            | Renovation / 25,250 sf       | Q2 / 2028                     |

### Approach

Conceptual / programmatic cost estimates have been prepared for each of the above sections A thru I. Overall costs are outlined on pages 4 thru 6 and include total construction costs plus adjustments for anticipated escalation and project soft costs. Back-up construction costs are included for each section and are outlined on pages 7 thru 31.

The pricing approach included within this estimate is intended to prepare "stand-alone" project costs for each of the main scope sections. This allows the prioritization / resorting of each of the scope sections as required.

Supporting appendices describing scope assumptions and indirect cost %'s have been included in pages 33 to 40.

## SKANSKA

DTCC - Campus Master-Plan  
Durham Technical Community College  
Durham, NC  
Rough Order of Magnitude (R3)

Skanska USA Building Inc.  
4309 Emperor Blvd, Suite 200  
Durham, NC 27703  
7/26/2022

| PROJECT COST SUMMARY                     |                      |               |          |           |       |                     |         |                     |                      |
|------------------------------------------|----------------------|---------------|----------|-----------|-------|---------------------|---------|---------------------|----------------------|
| Description                              | Constr. \$           | Escalation \$ |          |           |       |                     | Soft \$ |                     | Project \$           |
|                                          | Total                | Start         | Duration | MoC       | %     | Total               | %       | Total               | Total                |
| A. Building 12 (Health Science)          | \$58,605,400         | Q3 / 2024     | 22 mos   | Q3 / 2025 | 23.1% | \$13,520,000        | 33.0%   | \$23,801,000        | <b>\$95,926,400</b>  |
| B. Building 13 (Life Science Ed)         | \$28,006,500         | Q3 / 2024     | 20 mos   | Q2 / 2025 | 21.6% | \$6,044,000         | 33.0%   | \$11,237,000        | <b>\$45,287,500</b>  |
| C. Building 14 (Applied Technology)      | \$12,162,800         | Q2 / 2026     | 18 mos   | Q1 / 2027 | 31.6% | \$3,838,000         | 33.0%   | \$5,280,000         | <b>\$21,280,800</b>  |
| D. ADA Enhancements                      | \$1,449,900          | Q2 / 2024     | 3 mos    | Q3 / 2024 | 17.5% | \$254,000           | 20.3%   | \$345,000           | <b>\$2,048,900</b>   |
| E. Building 1 & 2 Courtyard Enhancements | \$1,260,700          | Q2 / 2025     | 3 mos    | Q3 / 2025 | 23.6% | \$297,000           | 22.3%   | \$347,000           | <b>\$1,904,700</b>   |
| F. North Quad Enhancements               | \$1,696,400          | Q2 / 2025     | 6 mos    | Q3 / 2025 | 23.6% | \$400,000           | 22.3%   | \$466,000           | <b>\$2,562,400</b>   |
| G. Campus Landscape Enhancements         | \$366,800            | Q2 / 2024     | 6 mos    | Q3 / 2024 | 17.5% | \$64,000            | 22.3%   | \$96,000            | <b>\$526,800</b>     |
| H. Wayfinding Refresh                    | \$315,300            | Q2 / 2024     | 3 mos    | Q3 / 2024 | 17.5% | \$55,000            | 13.0%   | \$48,000            | <b>\$418,300</b>     |
| I. Building 9 Refresh                    | \$7,720,100          | Q2 / 2028     | 12 mos   | Q4 / 2028 | 38.6% | \$2,982,000         | 35.0%   | \$3,746,000         | <b>\$14,448,100</b>  |
| <b>Total Project Cost</b>                | <b>\$111,583,900</b> |               |          |           |       | <b>\$27,454,000</b> |         | <b>\$45,366,000</b> | <b>\$184,403,900</b> |

DTCC - Campus Master-Plan  
Durham Technical Community College  
Durham, NC  
Rough Order of Magnitude (R3)

Skanska USA Building Inc.  
4309 Emperor Blvd, Suite 200  
Durham, NC 27703  
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| CONSTRUCTION COST SUMMARY                                   |            |          |                     |
|-------------------------------------------------------------|------------|----------|---------------------|
| Description                                                 | sf         | \$ / sf  | Total \$            |
| <b>A. Building 12 (Health Science)</b>                      |            |          |                     |
| A1 Make Ready / Prep Work                                   | 323,000 SF | \$5.39   | \$1,739,800         |
| A2 New Construction                                         | 80,000 SF  | \$549.51 | \$43,960,600        |
| A3 Utility Infrastructure                                   | 323,000 SF | \$4.32   | \$1,394,100         |
| A4 Sitework (Base)                                          | 241,000 SF | \$18.04  | \$4,348,100         |
| A5 Sitework (Lot 150)                                       | 82,000 SF  | \$14.43  | \$1,183,600         |
| A6 Streetscape Improvements                                 | 36,450 SF  | \$29.19  | \$1,063,800         |
| A7 Bridge Connector                                         | 4,000 SF   | \$889.68 | \$3,558,700         |
| A8 Building 5 Renovations                                   | 5,800 SF   | \$233.91 | \$1,356,700         |
| <b>Total - A. Building 12 (Health Science)</b>              |            |          | <b>\$58,605,400</b> |
| <b>B. Building 13 (Life Science Ed)</b>                     |            |          |                     |
| B1 Make Ready / Prep Work                                   | n/a        | n/a      | \$2,086,200         |
| B2 New Construction                                         | 35,820 SF  | \$573.73 | \$20,551,100        |
| B3 Utility Infrastructure                                   | 206,410 SF | \$4.96   | \$1,023,800         |
| B4 Sitework                                                 | 206,410 SF | \$15.31  | \$3,160,700         |
| B5 Streetscape Improvements                                 | 39,428 SF  | \$30.05  | \$1,184,700         |
| <b>Total - B. Building 13 (Life Science Ed)</b>             |            |          | <b>\$28,006,500</b> |
| <b>C. Building 14 (Applied Technology)</b>                  |            |          |                     |
| C1 Make Ready / Prep Work                                   | 42,000 SF  | \$22.20  | \$932,600           |
| C2 New Construction                                         | 20,000 SF  | \$515.02 | \$10,300,300        |
| C3 Utility Infrastructure                                   | 42,000 SF  | \$6.32   | \$265,500           |
| C4 Sitework                                                 | 42,000 SF  | \$15.82  | \$664,400           |
| <b>Total - C. Building 14 (Applied Technology)</b>          |            |          | <b>\$12,162,800</b> |
| <b>D. ADA Enhancements</b>                                  |            |          |                     |
| D1 Building Enhancements                                    | -          | -        | \$1,449,900         |
| D2 Campus Pathways                                          | -          | -        | In A, B, C, and F   |
| <b>Total - D. ADA Enhancements</b>                          |            |          | <b>\$1,449,900</b>  |
| <b>E. Building 1 &amp; 2 Courtyard Enhancements</b>         |            |          |                     |
| E1. Courtyard Enhancements                                  | -          | -        | \$1,260,700         |
| <b>Total - E. Building 1 &amp; 2 Courtyard Enhancements</b> |            |          | <b>\$1,260,700</b>  |
| <b>F. North Quad Enhancements</b>                           |            |          |                     |
| F1 North Quad Enhancements                                  | -          | -        | \$1,696,400         |
| <b>Total - F. North Quad Enhancements</b>                   |            |          | <b>\$1,696,400</b>  |
| <b>G. Campus Landscape Enhancements</b>                     |            |          |                     |
| G1. Campus Landscape Enhancements                           | -          | -        | \$366,800           |
| <b>Total - G. Campus Landscape Enhancements</b>             |            |          | <b>\$366,800</b>    |



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| CONSTRUCTION COST SUMMARY            |           |          |                    |
|--------------------------------------|-----------|----------|--------------------|
| Description                          | sf        | \$ / sf  | Total \$           |
| <b>H. Wayfinding Refresh</b>         |           |          |                    |
| H1 Campus Signage Upgrades           | -         | -        | \$315,300          |
| <b>Total - H. Wayfinding Refresh</b> |           |          | <b>\$315,300</b>   |
| <b>I. Building 9 Refresh</b>         |           |          |                    |
| I1 Building 9 Interior Upgrade       | 25,250 SF | \$238.23 | \$6,015,300        |
| I2 Add Student Study Program         | 2,500 SF  | \$275.32 | \$688,300          |
| I3 Add Coffee Shop Program           | 800 SF    | \$387.13 | \$309,700          |
| I4 Courtyard & Screening Upgrades    | 6,500 SF  | \$37.29  | \$242,400          |
| I5 Roofing Replacement               | 24,782 SF | \$18.74  | \$464,400          |
| <b>Total - I. Building 9 Refresh</b> |           |          | <b>\$7,720,100</b> |

**A. Building 12 (New Health Science)**  
Construction Cost Back-Up

PROJECT - DTCC - Campus Master-Plan  
 CLIENT - Durham Technical Community College  
 LOCATION - Durham, NC  
 STAGE - Rough Order of Magnitude (R3)

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**A. Building 12 (New Health Science)**

| Description                               | Quantity |      | Unit Price (Raw) | Unit Price (M/Up)     | Grand Total         |
|-------------------------------------------|----------|------|------------------|-----------------------|---------------------|
| <b>A1 Make Ready / Prep Work</b>          |          |      |                  |                       |                     |
| Preparation                               |          |      |                  |                       |                     |
| Mobilization / set up                     | 1        | ls   | \$25,000.00      | \$32,087.98 /ls       | \$32,100            |
| Surface demolition over gross site        | 323,000  | sf   | \$1.00           | \$1.28 /sf            | \$414,600           |
| Clear and grub site                       | 323,000  | sf   | \$0.45           | \$0.58 /sf            | \$186,600           |
| Earthwork, cut and fill (balanced)        | 23,926   | cy   | \$10.00          | \$12.84 /cy           | \$307,100           |
| Cut, net export                           | 5,981    | cy   | \$30.00          | \$38.51 /cy           | \$230,300           |
| Finish grading                            | 293,000  | sf   | \$0.60           | \$0.77 /sf            | \$225,600           |
| Erosion control measures                  | 323,000  | sf   | \$0.55           | \$0.71 /sf            | \$228,000           |
| Temporary work / protection               | 18       | mos  | \$5,000.00       | \$6,417.60 /mos       | \$115,500           |
| <b>TOTAL: A1 Make Ready / Prep Work</b>   |          |      | <b>323,000</b>   | <b>\$5.39 \$/sf</b>   | <b>\$1,739,800</b>  |
| <b>A2 New Construction</b>                |          |      |                  |                       |                     |
| Building 12                               |          |      |                  |                       |                     |
| New health science building               | 80,000   | sf   | \$375.00         | \$481.32 /sf          | \$38,505,600        |
| Premium for marquee building element      | 80,000   | sf   | \$45.00          | \$57.76 /sf           | \$4,620,700         |
| Premium for food service equipment        | 1        | ls   | \$600,000.00     | \$770,111.49 /ls      | \$770,100           |
| Premium for utility hook ups              | 1        | ls   | \$50,000.00      | \$64,175.96 /ls       | \$64,200            |
| <b>TOTAL: A2 New Construction</b>         |          |      | <b>80,000</b>    | <b>\$549.51 \$/sf</b> | <b>\$43,960,600</b> |
| <b>A3 Utility Infrastructure</b>          |          |      |                  |                       |                     |
| Site Utilities                            |          |      |                  |                       |                     |
| Domestic / fire water infrastructure      | 7.4      | acre | \$30,000.00      | \$38,505.57 /acre     | \$285,500           |
| Sanitary sewer infrastructure             | 7.4      | acre | \$30,000.00      | \$38,505.57 /acre     | \$285,500           |
| Site gas infrastructure                   | 7.4      | acre | \$14,000.00      | \$17,969.27 /acre     | \$133,200           |
| Primary / secondary power infrastructure  | 7.4      | acre | \$20,000.00      | \$25,670.38 /acre     | \$190,300           |
| Low voltage infrastructure                | 7.4      | acre | \$15,000.00      | \$19,252.79 /acre     | \$142,800           |
| Storm drainage infrastructure             | 7.4      | acre | \$24,000.00      | \$30,804.46 /acre     | \$228,400           |
| Connections, re-routes, shutdowns, etc.   | 1        | ls   | \$100,000.00     | \$128,351.92 /ls      | \$128,400           |
| <b>TOTAL: A3 Utility Infrastructure</b>   |          |      | <b>323,000</b>   | <b>\$4.32 \$/sf</b>   | <b>\$1,394,100</b>  |
| <b>A4 Sitework (Base)</b>                 |          |      |                  |                       |                     |
| Site Improvements (Excluding new Lot 150) |          |      |                  |                       |                     |
| New surface lot and connecting roadways   | 55,000   | sf   | \$9.00           | \$11.55 /sf           | \$635,300           |
| Pedestrian circulation                    | 20,000   | sf   | \$20.00          | \$25.67 /sf           | \$513,400           |
| Premium for enhanced paving / plaza       | 10,000   | sf   | \$25.00          | \$32.09 /sf           | \$320,900           |
| Outdoor learning areas                    | 25,000   | sf   | \$30.00          | \$38.51 /sf           | \$962,600           |
| Loading dock, MEP yard                    | 5,000    | sf   | \$24.00          | \$30.80 /sf           | \$154,000           |
| Landscaping, enhanced                     | 20,000   | sf   | \$10.00          | \$12.84 /sf           | \$256,700           |
| Landscaping, outlying areas               | 86,000   | sf   | \$2.50           | \$3.21 /sf            | \$276,000           |
| Site terracing                            | 1,200    | lf   | \$275.00         | \$352.97 /lf          | \$423,600           |
| Site retaining                            | 300      | lf   | \$485.00         | \$622.51 /lf          | \$186,800           |
| Site stairs, ramps, railings at Quad area | 1        | ls   | \$125,000.00     | \$160,439.89 /ls      | \$160,400           |
| Signage, specialties                      | 1        | ls   | \$100,000.00     | \$128,351.92 /ls      | \$128,400           |
| Tie-ins with existing surfaces            | 1        | ls   | \$25,000.00      | \$32,087.98 /ls       | \$32,100            |
| Site lighting                             | 211,000  | sf   | \$0.50           | \$0.64 /sf            | \$135,400           |
| Additional surface drainage               | 211,000  | sf   | \$0.60           | \$0.77 /sf            | \$162,500           |
| <b>TOTAL: A4 Sitework (Base)</b>          |          |      | <b>241,000</b>   | <b>\$18.04 \$/sf</b>  | <b>\$4,348,100</b>  |

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**A. Building 12 (New Health Science)**

| Description                                                 | Quantity |     | Unit Price (Raw) | Unit Price (M/Up)     | Grand Total        |
|-------------------------------------------------------------|----------|-----|------------------|-----------------------|--------------------|
| <b>A5 Sitework (Lot 150)</b>                                |          |     |                  |                       |                    |
| New Surface Lot                                             |          |     |                  |                       |                    |
| Demo, grading, utilities                                    |          |     |                  | /                     | incl in A1 / A3    |
| Final grading                                               | 82,000   | sf  | \$0.60           | \$0.77 /sf            | \$63,100           |
| AC paving                                                   | 61,500   | sf  | \$9.00           | \$11.55 /sf           | \$710,400          |
| Curbs / curb and gutter                                     | 1,200    | lf  | \$24.00          | \$30.80 /lf           | \$37,000           |
| Tie-in with existing roadway                                | 1        | ls  | \$5,000.00       | \$6,417.60 /ls        | \$6,400            |
| Striping / signage                                          | 1        | ls  | \$15,000.00      | \$19,252.79 /ls       | \$19,300           |
| Pedestrian walkways                                         | 3,000    | sf  | \$15.00          | \$19.25 /sf           | \$57,800           |
| Curb cut ramps                                              | 2        | ea  | \$3,000.00       | \$3,850.56 /ea        | \$7,700            |
| Landscaping islands                                         | 3,500    | sf  | \$7.50           | \$9.63 /sf            | \$33,700           |
| Landscaping, outlying areas                                 | 14,000   | sf  | \$2.50           | \$3.21 /sf            | \$44,900           |
| Site retaining                                              | 150      | lf  | \$400.00         | \$513.41 /lf          | \$77,000           |
| Site lighting                                               | 82,000   | sf  | \$0.70           | \$0.90 /sf            | \$73,700           |
| Additional surface drainage                                 | 82,000   | sf  | \$0.50           | \$0.64 /sf            | \$52,600           |
| <b>TOTAL: A5 Sitework (Lot 150)</b>                         |          |     | <b>82,000</b>    | <b>\$14.43 \$/sf</b>  | <b>\$1,183,600</b> |
| <b>A6 Streetscape Improvements</b>                          |          |     |                  |                       |                    |
| Offsite Improvements                                        |          |     |                  |                       |                    |
| Resurface of Lawson Street, new top coat                    | 19,200   | sf  | \$7.50           | \$9.63 /sf            | \$184,800          |
| Modify drainage structure heights                           | 19,200   | sf  | \$2.00           | \$2.57 /sf            | \$49,300           |
| Striping / signage                                          | 19,200   | sf  | \$1.50           | \$1.93 /sf            | \$37,000           |
| Create new central median, including demo, planting, curbs  | 7,500    | sf  | \$20.00          | \$25.67 /sf           | \$192,500          |
| Expand Lawson Street for additional street parking          | 3,000    | sf  | \$45.00          | \$57.76 /sf           | \$173,300          |
| Sidewalk modifications                                      | 6,750    | sf  | \$18.00          | \$23.10 /sf           | \$155,900          |
| New crosswalks                                              | 560      | sf  | \$75.00          | \$96.26 /sf           | \$53,900           |
| Tie in with existing paving                                 | 1        | ls  | \$25,000.00      | \$32,087.98 /ls       | \$32,100           |
| Traffic management                                          | 3        | mos | \$12,000.00      | \$15,402.23 /mos      | \$46,200           |
| Phasing / sequencing premium                                | 15.0%    |     |                  | /                     | \$138,800          |
| <b>TOTAL: A6 Streetscape Improvements</b>                   |          |     | <b>36,450</b>    | <b>\$29.19 \$/sf</b>  | <b>\$1,063,800</b> |
| <b>A7 Bridge Connector</b>                                  |          |     |                  |                       |                    |
| Pedestrian Bridge                                           |          |     |                  |                       |                    |
| Demolition                                                  | 1        | ls  | \$25,000.00      | \$32,087.98 /ls       | \$32,100           |
| Bridge foundations                                          | 3        | loc | \$15,000.00      | \$19,252.79 /loc      | \$57,800           |
| Tower element foundations                                   | 1        | loc | \$5,000.00       | \$6,417.60 /loc       | \$6,400            |
| Bridge - unenclosed, complete                               | 2,500    | sf  | \$500.00         | \$641.76 /sf          | \$1,604,400        |
| Tower / branding element, allowance                         | 1        | ls  | \$750,000.00     | \$962,639.37 /ls      | \$962,600          |
| Premium for structural oversizing (for future enclosure)    | 2,500    | sf  | \$75.00          | \$96.26 /sf           | \$240,700          |
| Modifications at Building 5 / plaza / tie-in                | 1,500    | sf  | \$150.00         | \$192.53 /sf          | \$288,800          |
| Site improvements around bridge base, allowance             | 3        | loc | \$3,000.00       | \$3,850.56 /loc       | \$11,600           |
| Traffic management                                          | 2        | mos | \$12,000.00      | \$15,402.23 /mos      | \$30,800           |
| Phasing / sequencing premium                                | 10.0%    |     |                  | /                     | \$323,500          |
| <b>TOTAL: A7 Bridge Connector</b>                           |          |     | <b>4,000</b>     | <b>\$889.68 \$/sf</b> | <b>\$3,558,700</b> |
| <b>A8 Building 5 Renovations</b>                            |          |     |                  |                       |                    |
| Existing Building 5                                         |          |     |                  |                       |                    |
| Form new building entry                                     | 1        | ls  | \$100,000.00     | \$128,351.92 /ls      | \$128,400          |
| Interior renovations at upper floor for circulation (light) | 5,800    | sf  | \$165.00         | \$211.78 /sf          | \$1,228,300        |
| <b>TOTAL: A8 Building 5 Renovations</b>                     |          |     | <b>5,800</b>     | <b>\$233.91 \$/sf</b> | <b>\$1,356,700</b> |

**B. Building 13 (Life Science Training Center)**  
Construction Cost Back-Up



PROJECT - DTCC - Campus Master-Plan  
 CLIENT - Durham Technical Community College  
 LOCATION - Durham, NC  
 STAGE - Rough Order of Magnitude (R3)

Skanska USA Building Inc.  
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**B. Building 13 (Life Science Training Center)**

| Description                                        | Quantity |      | Unit Price<br>(Raw) | Unit Price<br>(M/Up) | Grand Total  |
|----------------------------------------------------|----------|------|---------------------|----------------------|--------------|
| B1 Make Ready / Prep Work                          |          |      |                     |                      |              |
| Building Demolition                                |          |      |                     |                      |              |
| Existing building demolition                       | 37,000   | sf   | \$15.00             | \$19.25 /sf          | \$712,400    |
| Premium for hazmat                                 | 37,000   | sf   | \$6.50              | \$8.34 /sf           | \$308,700    |
| Temporary utility caps                             | 1        | ls   | \$30,000.00         | \$38,505.57 /ls      | \$38,500     |
| Protection and off haul                            | 1        | ls   | \$75,000.00         | \$96,263.94 /ls      | \$96,300     |
| Site Grading / Prep                                |          |      |                     |                      |              |
| Site preparation / grading                         | 206,410  | sf   | \$2.50              | \$3.21 /sf           | \$662,300    |
| Erosion control                                    | 206,410  | sf   | \$0.75              | \$0.96 /sf           | \$198,700    |
| Site temporary works                               | 18       | mos  | \$3,000.00          | \$3,850.56 /mos      | \$69,300     |
| TOTAL: B1 Make Ready / Prep Work                   |          |      | n/a                 | n/a -                | \$2,086,200  |
| B2 New Construction                                |          |      |                     |                      |              |
| Building 13                                        |          |      |                     |                      |              |
| Allowance per 01/28/22 ROM (w/ market adjustment)  | 35,820   | sf   | \$447.00            | \$573.73 /sf         | \$20,551,100 |
| TOTAL: B2 New Construction                         |          |      | 35,820              | \$573.73 \$/sf       | \$20,551,100 |
| B3 Utility Infrastructure                          |          |      |                     |                      |              |
| Site Utilities                                     |          |      |                     |                      |              |
| Domestic / fire water infrastructure               | 4.7      | acre | \$35,000.00         | \$44,923.17 /acre    | \$212,900    |
| Sanitary sewer infrastructure                      | 4.7      | acre | \$35,000.00         | \$44,923.17 /acre    | \$212,900    |
| Site gas infrastructure                            | 4.7      | acre | \$18,000.00         | \$23,103.34 /acre    | \$109,500    |
| Primary / secondary power infrastructure           | 4.7      | acre | \$22,000.00         | \$28,237.42 /acre    | \$133,800    |
| Low voltage infrastructure                         | 4.7      | acre | \$17,500.00         | \$22,461.59 /acre    | \$106,400    |
| Storm drainage infrastructure                      | 4.7      | acre | \$25,000.00         | \$32,087.98 /acre    | \$152,000    |
| Connections, re-routes, shutdowns, etc.            | 1        | ls   | \$75,000.00         | \$96,263.94 /ls      | \$96,300     |
| TOTAL: B3 Utility Infrastructure                   |          |      | 206,410             | \$4.96 \$/sf         | \$1,023,800  |
| B4 Sitework                                        |          |      |                     |                      |              |
| Site Improvements                                  |          |      |                     |                      |              |
| New surface lot and connecting roadways            | 91,481   | sf   | \$9.00              | \$11.55 /sf          | \$1,056,800  |
| Pedestrian circulation                             | 15,000   | sf   | \$20.00             | \$25.67 /sf          | \$385,100    |
| Premium for enhanced paving / plaza                | 5,000    | sf   | \$25.00             | \$32.09 /sf          | \$160,400    |
| Outdoor learning areas                             | 10,000   | sf   | \$30.00             | \$38.51 /sf          | \$385,100    |
| Loading dock, MEP yard                             | 3,500    | sf   | \$24.00             | \$30.80 /sf          | \$107,800    |
| Landscaping, enhanced                              | 15,000   | sf   | \$10.00             | \$12.84 /sf          | \$192,500    |
| Landscaping, islands                               | 5,000    | sf   | \$7.50              | \$9.63 /sf           | \$48,100     |
| Landscaping, outlying areas                        | 26,429   | sf   | \$2.50              | \$3.21 /sf           | \$84,800     |
| Site terracing                                     | 250      | lf   | \$275.00            | \$352.97 /lf         | \$88,200     |
| Site retaining                                     | 150      | lf   | \$485.00            | \$622.51 /lf         | \$93,400     |
| Site stairs, ramps, railings at Quad area          | 1        | ls   | \$125,000.00        | \$160,439.89 /ls     | \$160,400    |
| Add compliant railings to existing ramp at Bldg 9  | 160      | lf   | \$240.00            | \$308.04 /lf         | \$49,300     |
| Add compliant railings to existing ramp at Bldg 10 | 180      | lf   | \$240.00            | \$308.04 /lf         | \$55,400     |
| Signage, specialties                               | 1        | ls   | \$25,000.00         | \$32,087.98 /ls      | \$32,100     |
| Tie-ins with existing surfaces                     | 1        | ls   | \$15,000.00         | \$19,252.79 /ls      | \$19,300     |
| Site lighting                                      | 171,410  | sf   | \$0.50              | \$0.64 /sf           | \$110,000    |
| Additional surface drainage                        | 171,410  | sf   | \$0.60              | \$0.77 /sf           | \$132,000    |
| TOTAL: B4 Sitework                                 |          |      | 206,410             | \$15.31 \$/sf        | \$3,160,700  |

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**B. Building 13 (Life Science Training Center)**

| Description                                                | Quantity |     | Unit Price<br>(Raw) | Unit Price<br>(M/Up) | Grand Total        |
|------------------------------------------------------------|----------|-----|---------------------|----------------------|--------------------|
| <b>B5 Streetscape Improvements</b>                         |          |     |                     |                      |                    |
| Offsite Improvements                                       |          |     |                     |                      |                    |
| Resurface of Lawson Street, new top coat                   | 19,428   | sf  | \$7.50              | \$9.63 /sf           | \$187,000          |
| Modify drainage structure heights                          | 19,428   | sf  | \$2.00              | \$2.57 /sf           | \$49,900           |
| Striping / signage                                         | 19,428   | sf  | \$1.50              | \$1.93 /sf           | \$37,400           |
| Create new central median, including demo, planting, curbs | 9,000    | sf  | \$20.00             | \$25.67 /sf          | \$231,000          |
| Expand Lawson Street for additional street parking         | 4,000    | sf  | \$45.00             | \$57.76 /sf          | \$231,000          |
| Sidewalk modifications                                     | 7,000    | sf  | \$18.00             | \$23.10 /sf          | \$161,700          |
| New crosswalks                                             | 560      | sf  | \$75.00             | \$96.26 /sf          | \$53,900           |
| Tie in with existing paving                                | 1        | ls  | \$25,000.00         | \$32,087.98 /ls      | \$32,100           |
| Traffic management                                         | 3        | mos | \$12,000.00         | \$15,402.23 /mos     | \$46,200           |
| Phasing / sequencing premium                               | 15.0%    |     |                     | /                    | \$154,500          |
| <b>TOTAL: B5 Streetscape Improvements</b>                  |          |     | <b>39,428</b>       | <b>\$30.05 \$/sf</b> | <b>\$1,184,700</b> |

**C. Building 14 (Applied Technology)**  
Construction Cost Back-Up

PROJECT - DTCC - Campus Master-Plan  
 CLIENT - Durham Technical Community College  
 LOCATION - Durham, NC  
 STAGE - Rough Order of Magnitude (R3)

Skanska USA Building Inc.  
 4309 Emperor Blvd, Suite 200  
 Durham, NC 27703  
 7/26/2022

**C. Building 14 (Applied Technology)**

| Description                              | Quantity |      | Unit Price<br>(Raw) | Unit Price<br>(M/Up) | Grand Total  |
|------------------------------------------|----------|------|---------------------|----------------------|--------------|
| C1 Make Ready / Prep Work                |          |      |                     |                      |              |
| Building Demolition                      |          |      |                     |                      |              |
| Existing building demolition             | 20,000   | sf   | \$16.00             | \$20.54 /sf          | \$410,700    |
| Premium for hazmat                       | 20,000   | sf   | \$6.50              | \$8.34 /sf           | \$166,900    |
| Temporary utility caps                   | 1        | ls   | \$10,000.00         | \$12,835.19 /ls      | \$12,800     |
| Protection and off haul                  | 1        | ls   | \$25,000.00         | \$32,087.98 /ls      | \$32,100     |
| Preparation                              |          |      |                     |                      |              |
| Mobilization / set up                    | 1        | ls   | \$15,000.00         | \$19,252.79 /ls      | \$19,300     |
| Surface demolition over gross site       | 42,000   | sf   | \$1.00              | \$1.28 /sf           | \$53,900     |
| Clear and grub site                      | 42,000   | sf   | \$0.45              | \$0.58 /sf           | \$24,300     |
| Earthwork, cut and fill (balanced)       | 3,111    | cy   | \$10.00             | \$12.84 /cy          | \$39,900     |
| Cut, net export                          | 778      | cy   | \$30.00             | \$38.51 /cy          | \$29,900     |
| Finish grading                           | 22,000   | sf   | \$0.60              | \$0.77 /sf           | \$16,900     |
| Erosion control measures                 | 42,000   | sf   | \$0.55              | \$0.71 /sf           | \$29,600     |
| Temporary work / protection              | 15       | mos  | \$5,000.00          | \$6,417.60 /mos      | \$96,300     |
| TOTAL: C1 Make Ready / Prep Work         |          |      | 42,000              | \$22.20 \$/sf        | \$932,600    |
| C2 New Construction                      |          |      |                     |                      |              |
| Building 14                              |          |      |                     |                      |              |
| New applied technology building          | 20,000   | sf   | \$360.00            | \$462.07 /sf         | \$9,241,300  |
| Premium for high bay components          | 20,000   | sf   | \$25.00             | \$32.09 /sf          | \$641,800    |
| Premium for single story inefficiencies  | 20,000   | sf   | \$15.00             | \$19.25 /sf          | \$385,100    |
| Premium for utility hook ups             | 1        | ls   | \$25,000.00         | \$32,087.98 /ls      | \$32,100     |
| TOTAL: C2 New Construction               |          |      | 20,000              | \$515.02 \$/sf       | \$10,300,300 |
| C3 Utility Infrastructure                |          |      |                     |                      |              |
| Site Utilities                           |          |      |                     |                      |              |
| Domestic / fire water infrastructure     | 1.0      | acre | \$37,500.00         | \$48,131.97 /acre    | \$46,400     |
| Sanitary sewer infrastructure            | 1.0      | acre | \$37,500.00         | \$48,131.97 /acre    | \$46,400     |
| Site gas infrastructure                  | 1.0      | acre | \$17,500.00         | \$22,461.59 /acre    | \$21,700     |
| Primary / secondary power infrastructure | 1.0      | acre | \$25,000.00         | \$32,087.98 /acre    | \$30,900     |
| Low voltage infrastructure               | 1.0      | acre | \$18,750.00         | \$24,065.98 /acre    | \$23,200     |
| Storm drainage infrastructure            | 1.0      | acre | \$26,400.00         | \$33,884.91 /acre    | \$32,700     |
| Connections, re-routes, shutdowns, etc.  | 1        | ls   | \$50,000.00         | \$64,175.96 /ls      | \$64,200     |
| TOTAL: C3 Utility Infrastructure         |          |      | 42,000              | \$6.32 \$/sf         | \$265,500    |
| C4 Sitework                              |          |      |                     |                      |              |
| Site Improvements                        |          |      |                     |                      |              |
| Connecting roadways                      | 3,500    | sf   | \$12.00             | \$15.40 /sf          | \$53,900     |
| Pedestrian circulation                   | 4,500    | sf   | \$20.00             | \$25.67 /sf          | \$115,500    |
| Premium for enhanced paving / plaza      | 2,250    | sf   | \$15.00             | \$19.25 /sf          | \$43,300     |
| Loading dock, MEP yard                   | 7,500    | sf   | \$25.00             | \$32.09 /sf          | \$240,700    |
| Landscaping, enhanced                    | 3,000    | sf   | \$10.00             | \$12.84 /sf          | \$38,500     |
| Landscaping, outlying areas              | 3,500    | sf   | \$2.50              | \$3.21 /sf           | \$11,200     |
| Site retaining                           | 150      | lf   | \$485.00            | \$622.51 /lf         | \$93,400     |
| Site stairs, railings, walls             | 1        | ls   | \$10,000.00         | \$12,835.19 /ls      | \$12,800     |
| Signage, specialties                     | 1        | ls   | \$5,000.00          | \$6,417.60 /ls       | \$6,400      |
| Tie-ins with existing surfaces           | 1        | ls   | \$5,000.00          | \$6,417.60 /ls       | \$6,400      |
| Site lighting                            | 22,000   | sf   | \$1.00              | \$1.28 /sf           | \$28,200     |
| Additional surface drainage              | 22,000   | sf   | \$0.50              | \$0.64 /sf           | \$14,100     |
| TOTAL: C4 Sitework                       |          |      | 42,000              | \$15.82 \$/sf        | \$664,400    |

## D. ADA Enhancements

### Construction Cost Back-Up



PROJECT - DTCC - Campus Master-Plan  
 CLIENT - Durham Technical Community College  
 LOCATION - Durham, NC  
 STAGE - Rough Order of Magnitude (R3)

Skanska USA Building Inc.  
 4309 Emperor Blvd, Suite 200  
 Durham, NC 27703  
 7/26/2022

**D. ADA Enhancements**

| Description                                             | Quantity |     | Unit Price<br>(Raw) | Unit Price<br>(M/Up) | Grand Total |
|---------------------------------------------------------|----------|-----|---------------------|----------------------|-------------|
| <b>D1 Building Enhancements</b>                         |          |     |                     |                      |             |
| Building 1                                              |          |     |                     |                      |             |
| Prep Work                                               |          |     |                     |                      |             |
| Form access to work                                     | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| Temporary protection                                    | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| ADA Barrier Removal                                     |          |     |                     |                      |             |
| Recess slab for entry mats                              | 4        | loc | \$5,000.00          | \$6,417.60 /loc      | \$25,700    |
| Relocate AED to accessible location                     | 1        | ea  | \$250.00            | \$320.88 /ea         | \$300       |
| Extend ramp rails at Building 2 (Allow 36" total)       | 4        | loc | \$750.00            | \$962.64 /loc        | \$3,900     |
| Remove / replace door closers                           | 6        | ea  | \$450.00            | \$577.58 /ea         | \$3,500     |
| Modify transaction windows, lower window units          | 3        | loc | \$1,200.00          | \$1,540.22 /loc      | \$4,600     |
| Modify transaction windows, raise shelf unit            | 1        | loc | \$500.00            | \$641.76 /loc        | \$600       |
| Lower PT dispensers in restrooms                        | 4        | ea  | \$150.00            | \$192.53 /ea         | \$800       |
| Add grab bars at ADA stalls                             | 4        | ea  | \$275.00            | \$352.97 /ea         | \$1,400     |
| Reposition grab bars at ADA stalls                      | 1        | ea  | \$250.00            | \$320.88 /ea         | \$300       |
| Add self closing hinges at existing ADA stalls          | 4        | ea  | \$450.00            | \$577.58 /ea         | \$2,300     |
| Add pull door hardware at existing ADA stalls           | 8        | ea  | \$500.00            | \$641.76 /ea         | \$5,100     |
| Patch Repairs                                           |          |     |                     |                      |             |
| Patch repairs                                           | 15%      |     |                     | /                    | \$9,200     |
| Small project premium, supervision, mobilizations, etc. | 20%      |     |                     | /                    | \$14,100    |
| Building 2                                              |          |     |                     |                      |             |
| Prep Work                                               |          |     |                     |                      |             |
| Form access to work                                     | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| Temporary protection                                    | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| ADA Barrier Removal                                     |          |     |                     |                      |             |
| Recess slab for entry mats                              | 4        | loc | \$5,000.00          | \$6,417.60 /loc      | \$25,700    |
| Relocate AED to accessible location                     | 1        | ea  | \$250.00            | \$320.88 /ea         | \$300       |
| Relocate fire extinguishers to accessible location      | 2        | ea  | \$250.00            | \$320.88 /ea         | \$600       |
| Remove / replace door closers                           | 12       | ea  | \$450.00            | \$577.58 /ea         | \$6,900     |
| Replace door knobs with lever handles                   | 38       | ea  | \$300.00            | \$385.06 /ea         | \$14,600    |
| Add accessible table at student lounge                  | 1        | ea  | \$1,500.00          | \$1,925.28 /ea       | \$1,900     |
| Lower PT dispensers in restrooms                        | 5        | ea  | \$150.00            | \$192.53 /ea         | \$1,000     |
| Add grab bars at ADA stalls                             | 6        | ea  | \$275.00            | \$352.97 /ea         | \$2,100     |
| Raise TP dispensers                                     | 6        | ea  | \$200.00            | \$256.70 /ea         | \$1,500     |
| Add self closing hinges at existing ADA stalls          | 6        | ea  | \$450.00            | \$577.58 /ea         | \$3,500     |
| Add pull door hardware at existing ADA stalls           | 12       | ea  | \$500.00            | \$641.76 /ea         | \$7,700     |
| Patch Repairs                                           |          |     |                     |                      |             |
| Patch repairs                                           | 15%      |     |                     | /                    | \$11,800    |
| Small project premium, supervision, mobilizations, etc. | 20%      |     |                     | /                    | \$18,100    |
| Building 3                                              |          |     |                     |                      |             |
| Prep Work                                               |          |     |                     |                      |             |
| Form access to work                                     | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| Temporary protection                                    | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| ADA Barrier Removal                                     |          |     |                     |                      |             |
| Recess slab for entry mats                              | 1        | loc | \$5,000.00          | \$6,417.60 /loc      | \$6,400     |
| Relocate AED to accessible location                     | 2        | ea  | \$250.00            | \$320.88 /ea         | \$600       |
| Relocate fire extinguishers to accessible location      | 7        | ea  | \$250.00            | \$320.88 /ea         | \$2,200     |
| Replace elevator cab                                    | 1        | ea  | \$75,000.00         | \$96,263.94 /ea      | \$96,300    |
| Lower elevator cab controls                             | 1        | ls  | \$2,000.00          | \$2,567.04 /ls       | \$2,600     |
| Modify / relocate toilet room doors                     | 4        | ea  | \$3,500.00          | \$4,492.32 /ea       | \$18,000    |
| Relocate wall mounted signage                           | 6        | ea  | \$250.00            | \$320.88 /ea         | \$1,900     |
| Remove / replace door closers                           | 4        | ea  | \$600.00            | \$770.11 /ea         | \$3,100     |
| Replace door knobs with lever handles                   | 49       | ea  | \$400.00            | \$513.41 /ea         | \$25,200    |
| Lower PT dispensers in restrooms                        | 2        | ea  | \$150.00            | \$192.53 /ea         | \$400       |
| Raise WC / seats                                        | 4        | ea  | \$1,500.00          | \$1,925.28 /ea       | \$7,700     |

PROJECT - DTCC - Campus Master-Plan  
 CLIENT - Durham Technical Community College  
 LOCATION - Durham, NC  
 STAGE - Rough Order of Magnitude (R3)

Skanska USA Building Inc.  
 4309 Emperor Blvd, Suite 200  
 Durham, NC 27703  
 7/26/2022

**D. ADA Enhancements**

| Description                                             | Quantity |     | Unit Price<br>(Raw) | Unit Price<br>(M/Up) | Grand Total |
|---------------------------------------------------------|----------|-----|---------------------|----------------------|-------------|
| Add grab bars at ADA stalls                             | 4        | ea  | \$275.00            | \$352.97 /ea         | \$1,400     |
| Add self closing hinges / locks at existing ADA stalls  | 4        | ea  | \$695.00            | \$892.05 /ea         | \$3,600     |
| Modify / replace ADA cubicles as required               | 6        | ea  | \$5,000.00          | \$6,417.60 /ea       | \$38,500    |
| Reposition grab bars at ADA stalls                      | 4        | ea  | \$250.00            | \$320.88 /ea         | \$1,300     |
| Remove and replace grab bars                            | 4        | ea  | \$435.00            | \$558.33 /ea         | \$2,200     |
| Relocate flush valve handles                            | 4        | ea  | \$750.00            | \$962.64 /ea         | \$3,900     |
| Lower coat hooks                                        | 4        | ea  | \$50.00             | \$64.18 /ea          | \$300       |
| Patch Repairs                                           |          |     |                     |                      |             |
| Patch repairs                                           | 15%      |     |                     | /                    | \$34,300    |
| Small project premium, supervision, mobilizations, etc. | 20%      |     |                     | /                    | \$52,500    |
| Building 5                                              |          |     |                     |                      |             |
| Prep Work                                               |          |     |                     |                      |             |
| Form access to work                                     | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| Temporary protection                                    | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| ADA Barrier Removal                                     |          |     |                     |                      |             |
| Recess slab for entry mats                              | 4        | loc | \$5,000.00          | \$6,417.60 /loc      | \$25,700    |
| Relocate AED to accessible location                     |          | ea  | \$250.00            | \$320.88 /ea         |             |
| Relocate fire extinguishers to accessible location      | 4        | ea  | \$250.00            | \$320.88 /ea         | \$1,300     |
| Replace elevator cab                                    | 1        | ea  | \$75,000.00         | \$96,263.94 /ea      | \$96,300    |
| Reconfigure approach to stage lift, allowance           | 1        | ls  | \$25,000.00         | \$32,087.98 /ls      | \$32,100    |
| Modify / relocate doors                                 | 6        | ea  | \$3,500.00          | \$4,492.32 /ea       | \$27,000    |
| Remove / replace door closers                           | 8        | ea  | \$600.00            | \$770.11 /ea         | \$6,200     |
| Replace door knobs with lever handles                   | 14       | ea  | \$400.00            | \$513.41 /ea         | \$7,200     |
| Reconfigure assembly seating, allowance                 | 1        | ls  | \$20,000.00         | \$25,670.38 /ls      | \$25,700    |
| Lower PT dispensers in restrooms                        | 6        | ea  | \$150.00            | \$192.53 /ea         | \$1,200     |
| Raise WC / seats                                        | 2        | ea  | \$1,500.00          | \$1,925.28 /ea       | \$3,900     |
| Reposition grab bars at ADA stalls                      | 28       | ea  | \$200.00            | \$256.70 /ea         | \$7,200     |
| Add self closing hinges at existing ADA stalls          | 6        | ea  | \$350.00            | \$449.23 /ea         | \$2,700     |
| Relocate flush valve handles                            | 8        | ea  | \$750.00            | \$962.64 /ea         | \$7,700     |
| Patch Repairs                                           |          |     |                     |                      |             |
| Patch repairs                                           | 15%      |     |                     | /                    | \$38,600    |
| Small project premium, supervision, mobilizations, etc. | 20%      |     |                     | /                    | \$59,100    |

PROJECT - DTCC - Campus Master-Plan  
 CLIENT - Durham Technical Community College  
 LOCATION - Durham, NC  
 STAGE - Rough Order of Magnitude (R3)

Skanska USA Building Inc.  
 4309 Emperor Blvd, Suite 200  
 Durham, NC 27703  
 7/26/2022

**D. ADA Enhancements**

| Description                                             | Quantity |     | Unit Price<br>(Raw) | Unit Price<br>(M/Up) | Grand Total |
|---------------------------------------------------------|----------|-----|---------------------|----------------------|-------------|
| <b>Building 6</b>                                       |          |     |                     |                      |             |
| Prep Work                                               |          |     |                     |                      |             |
| Form access to work                                     | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| Temporary protection                                    | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| ADA Barrier Removal                                     |          |     |                     |                      |             |
| Recess slab for entry mats                              | 1        | loc | \$5,000.00          | \$6,417.60 /loc      | \$6,400     |
| Relocate water coolers                                  | 2        | ea  | \$1,500.00          | \$1,925.28 /ea       | \$3,900     |
| Relocate fire extinguishers to accessible location      | 5        | ea  | \$250.00            | \$320.88 /ea         | \$1,600     |
| Remove / replace door closers                           | 12       | ea  | \$600.00            | \$770.11 /ea         | \$9,200     |
| Replace door knobs with lever handles                   | 19       | ea  | \$400.00            | \$513.41 /ea         | \$9,800     |
| Modify transaction windows, lower window units          | 2        | loc | \$800.00            | \$1,026.82 /loc      | \$2,100     |
| Lower PT dispensers in restrooms                        | 2        | ea  | \$150.00            | \$192.53 /ea         | \$400       |
| Raise WC / seats                                        | 2        | ea  | \$1,500.00          | \$1,925.28 /ea       | \$3,900     |
| Add grab bars                                           | 2        | ea  | \$275.00            | \$352.97 /ea         | \$700       |
| Raise TP dispensers                                     | 4        | ea  | \$200.00            | \$256.70 /ea         | \$1,000     |
| Add self closing hinges / locks at existing ADA stalls  | 2        | ea  | \$695.00            | \$892.05 /ea         | \$1,800     |
| Reposition grab bars at ADA stalls                      | 6        | ea  | \$200.00            | \$256.70 /ea         | \$1,500     |
| Modify / replace ADA cubicles as required               | 6        | ea  | \$5,000.00          | \$6,417.60 /ea       | \$38,500    |
| Relocate flush valve handles                            | 2        | ea  | \$750.00            | \$962.64 /ea         | \$1,900     |
| Lower coat hooks                                        | 2        | ea  | \$50.00             | \$64.18 /ea          | \$100       |
| Patch Repairs                                           |          |     |                     |                      |             |
| Patch repairs                                           | 15%      |     |                     | /                    | \$14,300    |
| Small project premium, supervision, mobilizations, etc. | 20%      |     |                     | /                    | \$22,000    |
| <b>Building 8</b>                                       |          |     |                     |                      |             |
| Prep Work                                               |          |     |                     |                      |             |
| Form access to work                                     | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| Temporary protection                                    | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| ADA Barrier Removal                                     |          |     |                     |                      |             |
| Recess slab for entry mats                              | 4        | loc | \$5,000.00          | \$6,417.60 /loc      | \$25,700    |
| Relocate water coolers                                  | 1        | ea  | \$1,500.00          | \$1,925.28 /ea       | \$1,900     |
| Modify / relocate doors                                 | 6        | ea  | \$3,500.00          | \$4,492.32 /ea       | \$27,000    |
| Increase privacy wall openings                          | 2        | loc | \$3,600.00          | \$4,620.67 /loc      | \$9,200     |
| Relocate WC fixtures                                    | 2        | ea  | \$3,500.00          | \$4,492.32 /ea       | \$9,000     |
| Add grab bars                                           | 2        | ea  | \$275.00            | \$352.97 /ea         | \$700       |
| Raise TP dispensers                                     | 2        | ea  | \$200.00            | \$256.70 /ea         | \$500       |
| Lower existing mirrors                                  | 2        | ea  | \$695.00            | \$892.05 /ea         | \$1,800     |
| Reposition grab bars at ADA stalls                      | 6        | ea  | \$450.00            | \$577.58 /ea         | \$3,500     |
| Add self closing hinges at existing ADA stalls          | 2        | ea  | \$450.00            | \$577.58 /ea         | \$1,200     |
| Relocate flush valve handles                            | 2        | ea  | \$750.00            | \$962.64 /ea         | \$1,900     |
| Patch Repairs                                           |          |     |                     |                      |             |
| Patch repairs                                           | 15%      |     |                     | /                    | \$14,300    |
| Small project premium, supervision, mobilizations, etc. | 20%      |     |                     | /                    | \$21,900    |

PROJECT - DTCC - Campus Master-Plan  
 CLIENT - Durham Technical Community College  
 LOCATION - Durham, NC  
 STAGE - Rough Order of Magnitude (R3)

Skanska USA Building Inc.  
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 Durham, NC 27703  
 7/26/2022

**D. ADA Enhancements**

| Description                                             | Quantity |     | Unit Price<br>(Raw) | Unit Price<br>(M/Up) | Grand Total |
|---------------------------------------------------------|----------|-----|---------------------|----------------------|-------------|
| Building 9                                              |          |     |                     |                      |             |
| Prep Work                                               |          |     |                     |                      |             |
| Form access to work                                     | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| Temporary protection                                    | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| ADA Barrier Removal                                     |          |     |                     |                      |             |
| Recess slab for entry mats                              | 4        | loc | \$5,000.00          | \$6,417.60 /loc      | \$25,700    |
| Relocate AED to accessible location                     | 2        | ea  | \$250.00            | \$320.88 /ea         | \$600       |
| Increase entry vestibule openings                       | 1        | loc | \$10,000.00         | \$12,835.19 /loc     | \$12,800    |
| Relocate doors / infill openings                        | 4        | ea  | \$2,800.00          | \$3,593.85 /ea       | \$14,400    |
| Remove / replace door closers                           | 6        | ea  | \$600.00            | \$770.11 /ea         | \$4,600     |
| Remove / replace locker benches, 36" long               | 2        | ea  | \$900.00            | \$1,155.17 /ea       | \$2,300     |
| Relocate WC fixtures                                    | 4        | ea  | \$3,500.00          | \$4,492.32 /ea       | \$18,000    |
| Raise / lower TP dispensers                             | 8        | ea  | \$200.00            | \$256.70 /ea         | \$2,100     |
| Add grab bars at ADA stalls                             | 4        | ea  | \$275.00            | \$352.97 /ea         | \$1,400     |
| Relocate flush valve handles                            | 4        | ea  | \$750.00            | \$962.64 /ea         | \$3,900     |
| Add self closing hinges at existing ADA stalls          | 4        | ea  | \$450.00            | \$577.58 /ea         | \$2,300     |
| Add pull door hardware at existing ADA stalls           | 8        | ea  | \$500.00            | \$641.76 /ea         | \$5,100     |
| Lower coat hooks                                        | 4        | ea  | \$50.00             | \$64.18 /ea          | \$300       |
| Patch Repairs                                           |          |     |                     |                      |             |
| Patch repairs                                           | 15%      |     |                     | /                    | \$15,900    |
| Small project premium, supervision, mobilizations, etc. | 20%      |     |                     | /                    | \$24,400    |
| Building 10                                             |          |     |                     |                      |             |
| Prep Work                                               |          |     |                     |                      |             |
| Form access to work                                     | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| Temporary protection                                    | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| ADA Barrier Removal                                     |          |     |                     |                      |             |
| Recess slab for entry mats                              | 4        | loc | \$5,000.00          | \$6,417.60 /loc      | \$25,700    |
| Relocate AED to accessible location                     | 3        | ea  | \$250.00            | \$320.88 /ea         | \$1,000     |
| Remove / replace door closers                           | 6        | ea  | \$600.00            | \$770.11 /ea         | \$4,600     |
| Modify transaction windows, lower window units          | 1        | loc | \$1,200.00          | \$1,540.22 /loc      | \$1,500     |
| Increase privacy wall openings                          | 3        | loc | \$3,600.00          | \$4,620.67 /loc      | \$13,900    |
| Add grab bars at ADA stalls                             | 6        | ea  | \$275.00            | \$352.97 /ea         | \$2,100     |
| Reposition grab bars at ADA stalls                      | 12       | ea  | \$250.00            | \$320.88 /ea         | \$3,900     |
| Lower PT dispensers in restrooms                        | 3        | ea  | \$200.00            | \$256.70 /ea         | \$800       |
| Patch Repairs                                           |          |     |                     |                      |             |
| Patch repairs                                           | 15%      |     |                     | /                    | \$9,900     |
| Small project premium, supervision, mobilizations, etc. | 20%      |     |                     | /                    | \$15,200    |

PROJECT - DTCC - Campus Master-Plan  
 CLIENT - Durham Technical Community College  
 LOCATION - Durham, NC  
 STAGE - Rough Order of Magnitude (R3)

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 Durham, NC 27703  
 7/26/2022

**D. ADA Enhancements**

| Description                                             | Quantity |     | Unit Price<br>(Raw) | Unit Price<br>(M/Up) | Grand Total             |
|---------------------------------------------------------|----------|-----|---------------------|----------------------|-------------------------|
| Building 20                                             |          |     |                     |                      |                         |
| Prep Work                                               |          |     |                     |                      |                         |
| Form access to work                                     | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400                 |
| Temporary protection                                    | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400                 |
| ADA Barrier Removal                                     |          |     |                     |                      |                         |
| Recess slab for entry mats                              | 4        | loc | \$5,000.00          | \$6,417.60 /loc      | \$25,700                |
| Replace automatic actuator button                       | 1        | ea  | \$1,250.00          | \$1,604.40 /ea       | \$1,600                 |
| Increase accessible width to urinals / TPs at RRs       | 3        | loc | \$4,000.00          | \$5,134.08 /loc      | \$15,400                |
| Remove / replace door closers                           | 2        | ea  | \$600.00            | \$770.11 /ea         | \$1,500                 |
| Reposition grab bars at ADA stalls                      | 2        | ea  | \$375.00            | \$481.32 /ea         | \$1,000                 |
| Add grab bars at ADA stalls                             | 2        | ea  | \$350.00            | \$449.23 /ea         | \$900                   |
| Add self closing hinges at existing ADA stalls          | 2        | ea  | \$450.00            | \$577.58 /ea         | \$1,200                 |
| Add pull door hardware at existing ADA stalls           | 2        | ea  | \$500.00            | \$641.76 /ea         | \$1,300                 |
| Lower coat hooks                                        | 2        | ea  | \$50.00             | \$64.18 /ea          | \$100                   |
| Lower PT dispensers in restrooms                        | 2        | ea  | \$200.00            | \$256.70 /ea         | \$500                   |
| Patch Repairs                                           |          |     |                     |                      |                         |
| Patch repairs                                           | 15%      |     |                     | /                    | \$9,300                 |
| Small project premium, supervision, mobilizations, etc. | 20%      |     |                     | /                    | \$14,300                |
| TOTAL: D1 Building Enhancements                         |          |     |                     | \$/sf                | \$1,449,900             |
| D2 Campus Pathways                                      |          |     |                     |                      |                         |
| North Quad Railings / Crosswalk                         |          |     |                     |                      | see Building North Quad |
| Building 9 Railings                                     |          |     |                     |                      | see Building 13         |
| Building 10 Railings                                    |          |     |                     |                      | see Building 13         |
| Lower Quadrangle - Ramp 1                               |          |     |                     |                      | see Building 12         |
| Lower Quadrangle - Ramp 2                               |          |     |                     |                      | see Building 13         |
| East Lawson Cross Walks                                 |          |     |                     |                      | see Building 12 / 13    |
| TOTAL: D2 Campus Pathways                               |          |     | n/a                 | -                    |                         |



**E. Building 1 & 2 Courtyard Enhancements**  
Construction Cost Back-Up

PROJECT - DTCC - Campus Master-Plan  
 CLIENT - Durham Technical Community College  
 LOCATION - Durham, NC  
 STAGE - Rough Order of Magnitude (R3)

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**E. Building 1 & 2 Courtyard Enhancements**

| Description                                         | Quantity |     | Unit Price<br>(Raw) | Unit Price<br>(M/Up) | Grand Total |
|-----------------------------------------------------|----------|-----|---------------------|----------------------|-------------|
| E1. Courtyard Enhancements                          |          |     |                     |                      |             |
| Building 1 Modifications                            |          |     |                     |                      |             |
| Cut openings in existing ext walls for roller doors | 3        | ea  | \$6,500.00          | \$8,342.87 /ea       | \$25,000    |
| Prep slab / structural around openings              | 3        | ea  | \$3,500.00          | \$4,492.32 /ea       | \$13,500    |
| New roller doors, assume 15' x 12'                  | 3        | ea  | \$20,000.00         | \$25,670.38 /ea      | \$77,000    |
| Flashings / trim around openings                    | 90       | lf  | \$50.00             | \$64.18 /lf          | \$5,800     |
| Patch repair exterior surfaces                      | 225      | sf  | \$25.00             | \$32.09 /sf          | \$7,200     |
| Patch repair interior surfaces                      | 225      | sf  | \$10.00             | \$12.84 /sf          | \$2,900     |
| Temporary protection                                | 3        | loc | \$750.00            | \$962.64 /loc        | \$2,900     |
| Building 2 Modifications                            |          |     |                     |                      |             |
| Prep existing exterior wall for new mural finish    | 2,000    | sf  | \$7.50              | \$9.63 /sf           | \$19,300    |
| Overhead Shade Structure (Between Bldg 1 & 2)       |          |     |                     |                      |             |
| Overhead trellis structure, allow 1,500 sf          | 1,500    | sf  | \$250.00            | \$320.88 /sf         | \$481,300   |
| Structural connections with existing buildings      | 2        | loc | \$10,000.00         | \$12,835.19 /loc     | \$25,700    |
| Roofing patching / flashings                        | 2        | loc | \$15,000.00         | \$19,252.79 /loc     | \$38,500    |
| Lighting                                            | 1,500    | sf  | \$20.00             | \$25.67 /sf          | \$38,500    |
| Courtyard Improvements                              |          |     |                     |                      |             |
| Form access, demolition, preparation                | 1        | ls  | \$1,000.00          | \$1,283.52 /ls       | \$1,300     |
| Regrading                                           | 7,000    | sf  | \$3.00              | \$3.85 /sf           | \$27,000    |
| Site improvements - pedestrian                      | 2,800    | sf  | \$25.00             | \$32.09 /sf          | \$89,800    |
| Site improvements - landscaping                     | 4,200    | sf  | \$10.00             | \$12.84 /sf          | \$53,900    |
| Water feature, allowance                            | 1        | ls  | \$50,000.00         | \$64,175.96 /ls      | \$64,200    |
| Slab for new transformer                            | 250      | sf  | \$15.00             | \$19.25 /sf          | \$4,800     |
| Screen wall footings                                | 50       | lf  | \$125.00            | \$160.44 /lf         | \$8,000     |
| Screen wall around transformer                      | 300      | sf  | \$40.00             | \$51.34 /sf          | \$15,400    |
| Screen wall cap                                     | 50       | lf  | \$80.00             | \$102.68 /lf         | \$5,100     |
| Metal gate access to transformer                    | 1        | set | \$5,000.00          | \$6,417.60 /set      | \$6,400     |
| Caulking / sealants                                 | 7,000    | sf  | \$1.00              | \$1.28 /sf           | \$9,000     |
| Site signage                                        | 1        | ls  | \$1,500.00          | \$1,925.28 /ls       | \$1,900     |
| Site specialties                                    | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| Site utility modifications                          | 7,000    | sf  | \$2.00              | \$2.57 /sf           | \$18,000    |
| Site drainage                                       | 7,000    | sf  | \$2.50              | \$3.21 /sf           | \$22,500    |
| Site lighting                                       | 7,000    | sf  | \$2.50              | \$3.21 /sf           | \$22,500    |
| Relocate transformer                                | 1        | ls  | \$127,000.00        | \$163,006.93 /ls     | \$163,000   |
| Tie-ins with existing surfaces                      | 1        | ls  | \$3,000.00          | \$3,850.56 /ls       | \$3,900     |
| TOTAL: E1. Courtyard Enhancements                   |          |     |                     | \$180.10 \$/sf       | \$1,260,700 |

## F. North Quad Enhancements

### Construction Cost Back-Up

PROJECT - DTCC - Campus Master-Plan  
 CLIENT - Durham Technical Community College  
 LOCATION - Durham, NC  
 STAGE - Rough Order of Magnitude (R3)

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 7/26/2022

**F. North Quad Enhancements**

| Description                                         | Quantity |     | Unit Price<br>(Raw) | Unit Price<br>(M/Up) | Grand Total                |
|-----------------------------------------------------|----------|-----|---------------------|----------------------|----------------------------|
| <b>F1 North Quad Enhancements</b>                   |          |     |                     |                      |                            |
| Ramp / Cross Walk at Building 1 / 6                 |          |     |                     |                      |                            |
| Form access to work / temporary protection          | 2        | loc | \$1,500.00          | \$1,925.28 /loc      | \$3,900                    |
| Add compliant railings to existing ramp ways        | 100      | lf  | \$240.00            | \$308.04 /lf         | \$30,800                   |
| Demo existing walkway / regrade                     | 240      | sf  | \$10.00             | \$12.84 /sf          | \$3,100                    |
| Add new ADA compliant crosswalk, including striping | 240      | sf  | \$30.00             | \$38.51 /sf          | \$9,200                    |
| Associated striping / signage                       | 1        | ls  | \$1,000.00          | \$1,283.52 /ls       | \$1,300                    |
| Patch repairs                                       | 2        | loc | \$1,500.00          | \$1,925.28 /loc      | \$3,900                    |
| <b>Areaway Renovations at Building 3</b>            |          |     |                     |                      |                            |
| Form access                                         | 1        | ls  | \$1,500.00          | \$1,925.28 /ls       | \$1,900                    |
| Demolition of existing retaining wall               | 1,500    | sf  | \$30.00             | \$38.51 /sf          | \$57,800                   |
| Temporary supports                                  | 1        | ls  | \$30,000.00         | \$38,505.57 /ls      | \$38,500                   |
| Excavation / off haul to form new basement          | 433      | cy  | \$45.00             | \$57.76 /cy          | \$25,000                   |
| Waterproofing upgrades as required                  | 500      | sf  | \$20.00             | \$25.67 /sf          | \$12,800                   |
| Patch existing basement wall, now exposed           | 360      | sf  | \$24.00             | \$30.80 /sf          | \$11,100                   |
| Footings for new retaining walls                    | 824      | lf  | \$50.00             | \$64.18 /lf          | \$52,900                   |
| New concrete retaining walls                        | 580      | sf  | \$60.00             | \$77.01 /sf          | \$44,700                   |
| Retaining wall tops                                 | 124      | lf  | \$50.00             | \$64.18 /lf          | \$8,000                    |
| Terraced concrete benches, 21" x 21"                | 600      | lf  | \$385.00            | \$494.15 /lf         | \$296,500                  |
| Concrete steps                                      | 75       | lfr | \$75.00             | \$96.26 /lfr         | \$7,200                    |
| Concrete seatwall, 30" x 30"                        | 120      | lf  | \$450.00            | \$577.58 /lf         | \$69,300                   |
| Railings                                            | 300      | lf  | \$255.00            | \$327.30 /lf         | \$98,200                   |
| Site improvements - pedestrian                      | 500      | sf  | \$25.00             | \$32.09 /sf          | \$16,000                   |
| Site improvements - landscaping                     | 2,000    | sf  | \$15.00             | \$19.25 /sf          | \$38,500                   |
| Site signage                                        | 1        | ls  | \$3,000.00          | \$3,850.56 /ls       | \$3,900                    |
| Site specialties                                    | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400                    |
| Modifications to existing bridges, 20'-0" x 7'-0"   | 2        | ea  | \$35,000.00         | \$44,923.17 /ea      | \$89,800                   |
| Site utility modifications                          | 1,200    | sf  | \$3.00              | \$3.85 /sf           | \$4,600                    |
| Site drainage                                       | 1,200    | sf  | \$2.00              | \$2.57 /sf           | \$3,100                    |
| Site lighting - bollards / uplights                 | 42       | ea  | \$500.00            | \$641.76 /ea         | \$27,000                   |
| Tie-ins with existing surfaces                      | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400                    |
| <b>Shade Structure / Landscaping at Building 1</b>  |          |     |                     |                      |                            |
| Form access                                         | 1        | ls  | \$500.00            | \$641.76 /ls         | \$600                      |
| Demolition and regrading                            | 4,200    | sf  | \$3.50              | \$4.49 /sf           | \$18,900                   |
| Demolish existing addition, complete, off haul      | 775      | sf  | \$25.00             | \$32.09 /sf          | \$24,900                   |
| Site improvements - pedestrian                      | 1,050    | sf  | \$25.00             | \$32.09 /sf          | \$33,700                   |
| Site improvements - landscaping                     | 3,150    | sf  | \$8.00              | \$10.27 /sf          | \$32,300                   |
| New shade structure / outdoor classroom             | 2,000    | sf  | \$200.00            | \$256.70 /sf         | \$513,400                  |
| Lighting and power at classroom                     | 2,000    | sf  | \$15.00             | \$19.25 /sf          | \$38,500                   |
| New landscaping at existing Building demo area      | 775      | sf  | \$8.00              | \$10.27 /sf          | \$8,000                    |
| New seat walls                                      | 25       | lf  | \$400.00            | \$513.41 /lf         | \$12,800                   |
| Site signage                                        | 1        | ls  | \$1,000.00          | \$1,283.52 /ls       | \$1,300                    |
| Site specialties                                    | 1        | ls  | \$2,500.00          | \$3,208.80 /ls       | \$3,200                    |
| Site utility modifications                          | 4,200    | sf  | \$2.50              | \$3.21 /sf           | \$13,500                   |
| Site drainage                                       | 4,200    | sf  | \$2.00              | \$2.57 /sf           | \$10,800                   |
| Site lighting                                       | 4,200    | sf  | \$2.00              | \$2.57 /sf           | \$10,800                   |
| Tie-ins with existing surfaces                      | 1        | ls  | \$1,500.00          | \$1,925.28 /ls       | \$1,900                    |
| <b>TOTAL: F1 North Quad Enhancements</b>            |          |     |                     |                      | <b>- \$/sf \$1,696,400</b> |

## G. Campus Landscape Enhancements

### Construction Cost Back-Up



PROJECT - DTCC - Campus Master-Plan  
 CLIENT - Durham Technical Community College  
 LOCATION - Durham, NC  
 STAGE - Rough Order of Magnitude (R3)

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**G. Campus Landscape Enhancements**

| Description                                      | Quantity |    | Unit Price<br>(Raw) | Unit Price<br>(M/Up) | Grand Total      |
|--------------------------------------------------|----------|----|---------------------|----------------------|------------------|
| <b>G1. Campus Landscape Enhancements</b>         |          |    |                     |                      |                  |
| Landscape Improvements                           |          |    |                     |                      |                  |
| North Lot                                        |          |    |                     |                      |                  |
| Remove overgrown trees / shrubs                  | 10       | ea | \$450.00            | \$577.58 /ea         | \$5,800          |
| Demo portion of parking lot for new tree install | 12       | ea | \$200.00            | \$256.70 /ea         | \$3,100          |
| New evergreen shrub hedge at lot                 | 700      | lf | \$45.00             | \$57.76 /lf          | \$40,400         |
| New evergreen shrub hedge at outdoor mtg space   | 215      | lf | \$45.00             | \$57.76 /lf          | \$12,400         |
| New flowering trees                              | 20       | ea | \$750.00            | \$962.64 /ea         | \$19,300         |
| Associated topsoil, ground cover                 | 15,000   | sf | \$2.00              | \$2.57 /sf           | \$38,500         |
| Patch repairs                                    | 1        | ls | \$1,500.00          | \$1,925.28 /ls       | \$1,900          |
| Building 1 & 5 Lot                               |          |    |                     |                      |                  |
| Demo portion of parking lot for new tree install | 12       | ea | \$200.00            | \$256.70 /ea         | \$3,100          |
| New shade trees to center median                 | 12       | ea | \$900.00            | \$1,155.17 /ea       | \$13,900         |
| Extend existing median including demo / grading  | 3,750    | sf | \$15.00             | \$19.25 /sf          | \$72,200         |
| Patch repairs                                    | 1        | ls | \$1,500.00          | \$1,925.28 /ls       | \$1,900          |
| Buildings 8 & 10                                 |          |    |                     |                      |                  |
| Add evergreen shrubbery                          | 75       | ea | \$75.00             | \$96.26 /ea          | \$7,200          |
| Remove overgrown trees / shrubs                  | 10       | ea | \$450.00            | \$577.58 /ea         | \$5,800          |
| New flowering trees                              | 10       | ea | \$750.00            | \$962.64 /ea         | \$9,600          |
| New small trees                                  | 10       | ea | \$600.00            | \$770.11 /ea         | \$7,700          |
| Associated topsoil, ground cover                 | 10,000   | sf | \$2.00              | \$2.57 /sf           | \$25,700         |
| Paint existing fencing                           | 3,500    | sf | \$1.95              | \$2.50 /sf           | \$8,800          |
| Patch repairs                                    | 1        | ls | \$1,500.00          | \$1,925.28 /ls       | \$1,900          |
| Buildings 4 & 7                                  |          |    |                     |                      |                  |
| Add hedge screening                              | 375      | lf | \$45.00             | \$57.76 /lf          | \$21,700         |
| Add shrub planting                               | 50       | ea | \$75.00             | \$96.26 /ea          | \$4,800          |
| Add shade trees                                  | 8        | ea | \$950.00            | \$1,219.34 /ea       | \$9,800          |
| Add flowering trees                              | 8        | ea | \$750.00            | \$962.64 /ea         | \$7,700          |
| Associated topsoil, ground cover                 | 2,500    | sf | \$2.00              | \$2.57 /sf           | \$6,400          |
| New pedestrian bridge over drainage ditch        | 100      | sf | \$275.00            | \$352.97 /sf         | \$35,300         |
| Patch repairs                                    | 1        | ls | \$1,500.00          | \$1,925.28 /ls       | \$1,900          |
| <b>TOTAL: G1. Campus Landscape Enhancements</b>  |          |    |                     | <b>\$11.74 \$/sf</b> | <b>\$366,800</b> |

## H. Wayfinding Refresh Construction Cost Back-Up

PROJECT - DTCC - Campus Master-Plan  
 CLIENT - Durham Technical Community College  
 LOCATION - Durham, NC  
 STAGE - Rough Order of Magnitude (R3)

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## H. Wayfinding Refresh

| Description                                      | Quantity |     | Unit Price<br>(Raw) | Unit Price<br>(M/Up) | Grand Total |
|--------------------------------------------------|----------|-----|---------------------|----------------------|-------------|
| H1 Campus Signage Upgrades                       |          |     |                     |                      |             |
| Campus Signage (including demo, footings, etc.)  |          |     |                     |                      |             |
| Visitor parking signage                          | 4        | ea  | \$750.00            | \$962.64 /ea         | \$3,900     |
| Directory signage                                | 7        | ea  | \$900.00            | \$1,155.17 /ea       | \$8,100     |
| Vehicular signage                                | 2        | ea  | \$650.00            | \$834.29 /ea         | \$1,700     |
| Miscellaneous signage allowance                  | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| Offsite Signage                                  |          |     |                     |                      |             |
| New landscape planting enhancements on E. Lawson | 3        | loc | \$25,000.00         | \$32,087.98 /loc     | \$96,300    |
| Add new monumental signage                       | 3        | loc | \$50,000.00         | \$64,175.96 /loc     | \$192,500   |
| Patch repairs                                    | 1        | ls  | \$5,000.00          | \$6,417.60 /ls       | \$6,400     |
| TOTAL: H1 Campus Signage Upgrades                |          |     |                     | - \$/sf              | \$315,300   |

## I. Building 9 Refresh

### Construction Cost Back-Up

PROJECT - DTCC - Campus Master-Plan  
 CLIENT - Durham Technical Community College  
 LOCATION - Durham, NC  
 STAGE - Rough Order of Magnitude (R3)

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**I. Building 9 Refresh**

| Description                                            | Quantity |    | Unit Price<br>(Raw) | Unit Price<br>(M/Up)  | Grand Total        |
|--------------------------------------------------------|----------|----|---------------------|-----------------------|--------------------|
| <b>I1 Building 9 Interior Upgrade</b>                  |          |    |                     |                       |                    |
| Interior Renovation (50% of Floor Area)                |          |    |                     |                       |                    |
| Demolition and prep                                    | 25,250   | sf | \$8.00              | \$10.27 /sf           | \$259,300          |
| Interior reconfiguration                               | 25,250   | sf | \$30.00             | \$38.51 /sf           | \$972,300          |
| Interior improvements                                  | 25,250   | sf | \$40.00             | \$51.34 /sf           | \$1,296,400        |
| MEP upgrades                                           | 25,250   | sf | \$100.00            | \$128.35 /sf          | \$3,240,900        |
| Exterior Upgrades                                      |          |    |                     |                       |                    |
| Patch / repair envelope resulting from interior renov. | 30,000   | sf | \$5.00              | \$6.42 /sf            | \$192,500          |
| Patch / repair roofing resulting from interior renov.  | 28,000   | sf | \$1.50              | \$1.93 /sf            | \$53,900           |
| Window replacement                                     |          |    |                     | /                     | N/A                |
| Roofing replacement                                    |          |    |                     | /                     | N/A                |
| Structural Upgrade                                     |          |    |                     |                       |                    |
| Structural upgrades                                    |          |    |                     | /                     | N/A                |
| Other                                                  |          |    |                     |                       |                    |
| Hazardous material abatement                           |          |    |                     | /                     | N/A                |
| <b>TOTAL: I1 Building 9 Interior Upgrade</b>           |          |    | <b>50,500</b>       | <b>\$119.11 \$/sf</b> | <b>\$6,015,300</b> |
| <b>I2 Add Student Study Program</b>                    |          |    |                     |                       |                    |
| Add Study Program (2,000 sf)                           |          |    |                     |                       |                    |
| Demolition and prep                                    | 2,500    | sf | \$15.00             | \$19.25 /sf           | \$48,100           |
| Interior reconfiguration, complete                     | 2,500    | sf | \$180.00            | \$231.03 /sf          | \$577,600          |
| Temporary protection / phasing                         | 10.0%    |    |                     | /                     | \$62,600           |
| <b>TOTAL: I2 Add Student Study Program</b>             |          |    | <b>2,500</b>        | <b>\$275.32 \$/sf</b> | <b>\$688,300</b>   |
| <b>I3 Add Coffee Shop Program</b>                      |          |    |                     |                       |                    |
| Add Coffee Shop (600 sf)                               |          |    |                     |                       |                    |
| Demolition and prep                                    | 800      | sf | \$15.00             | \$19.25 /sf           | \$15,400           |
| Interior reconfiguration, complete                     | 400      | sf | \$200.00            | \$256.70 /sf          | \$102,700          |
| Food service equipment / storage                       | 400      | sf | \$250.00            | \$320.88 /sf          | \$128,400          |
| Seating area                                           | 400      | sf | \$75.00             | \$96.26 /sf           | \$38,500           |
| Temporary protection / phasing                         | 10.0%    |    |                     | /                     | \$24,700           |
| <b>TOTAL: I3 Add Coffee Shop Program</b>               |          |    | <b>800</b>          | <b>\$387.13 \$/sf</b> | <b>\$309,700</b>   |
| <b>I4 Courtyard &amp; Screening Upgrades</b>           |          |    |                     |                       |                    |
| Courtyard Enhancements (50' x 50')                     |          |    |                     |                       |                    |
| Form access, demolition, preparation                   | 2,500    | sf | \$2.50              | \$3.21 /sf            | \$8,000            |
| Regrading                                              | 2,500    | sf | \$6.00              | \$7.70 /sf            | \$19,300           |
| Site improvements - hardscape                          | 1,100    | sf | \$35.00             | \$44.92 /sf           | \$49,400           |
| Site improvements - landscape                          | 1,000    | sf | \$12.50             | \$16.04 /sf           | \$16,000           |
| Accessible pathway / ramp                              | 400      | sf | \$30.00             | \$38.51 /sf           | \$15,400           |
| Steps / railings                                       | 1        | ls | \$3,000.00          | \$3,850.56 /ls        | \$3,900            |
| Courtyard access / envelope modifications              | 1        | ls | \$5,000.00          | \$6,417.60 /ls        | \$6,400            |
| Site signage                                           | 1        | ls | \$1,000.00          | \$1,283.52 /ls        | \$1,300            |
| Site specialties                                       | 1        | ls | \$3,000.00          | \$3,850.56 /ls        | \$3,900            |
| Site utility modifications                             | 1        | ls | \$5,000.00          | \$6,417.60 /ls        | \$6,400            |
| Site drainage                                          | 2,500    | sf | \$2.00              | \$2.57 /sf            | \$6,400            |
| Site lighting                                          | 2,500    | sf | \$2.00              | \$2.57 /sf            | \$6,400            |
| Tie-ins with existing surfaces                         | 1        | ls | \$1,500.00          | \$1,925.28 /ls        | \$1,900            |



PROJECT - DTCC - Campus Master-Plan  
 CLIENT - Durham Technical Community College  
 LOCATION - Durham, NC  
 STAGE - Rough Order of Magnitude (R3)

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**I. Building 9 Refresh**

| Description                                           | Quantity |    | Unit Price<br>(Raw) | Unit Price<br>(M/Up) | Grand Total      |
|-------------------------------------------------------|----------|----|---------------------|----------------------|------------------|
| Screening                                             |          |    |                     |                      |                  |
| Treat / prune existing trees / shrubs                 | 1        | ls | \$2,500.00          | \$3,208.80 /ls       | \$3,200          |
| Add new flowering trees                               | 10       | ea | \$750.00            | \$962.64 /ea         | \$9,600          |
| Add shade trees                                       | 6        | ea | \$950.00            | \$1,219.34 /ea       | \$7,300          |
| Enhance existing patio area planting                  | 4,000    | sf | \$3.00              | \$3.85 /sf           | \$15,400         |
| Clean existing trench drains                          | 1        | sf | \$500.00            | \$641.76 /sf         | \$600            |
| Add new seatwall                                      | 120      | lf | \$400.00            | \$513.41 /lf         | \$61,600         |
| <b>TOTAL: I4 Courtyard &amp; Screening Upgrades</b>   |          |    | <b>2,500</b>        | <b>\$96.96 \$/sf</b> | <b>\$242,400</b> |
| <b>I5 Roofing Replacement</b>                         |          |    |                     |                      |                  |
| Existing Roof Replacement                             |          |    |                     |                      |                  |
| Demolish existing roof covering                       | 24,782   | sf | \$1.00              | \$1.28 /sf           | \$31,800         |
| New single ply roofing finish, on existing insulation | 24,782   | sf | \$12.00             | \$15.40 /sf          | \$381,700        |
| Flashings / copings                                   | 24,782   | sf | \$1.00              | \$1.28 /sf           | \$31,800         |
| Roof drainage modifications                           | 24,782   | sf | \$0.50              | \$0.64 /sf           | \$15,900         |
| Roof specialties                                      | 1        | ls | \$2,500.00          | \$3,208.80 /ls       | \$3,200          |
| Temporary roofing                                     | 24,782   | sf |                     | /sf                  | included         |
| <b>TOTAL: I5 Roofing Replacement</b>                  |          |    | <b>24,782</b>       | <b>\$18.74 \$/sf</b> | <b>\$464,400</b> |

## Appendices

*Scope Assumptions*  
*Indirect Cost Breakdown*  
*Soft Cost Breakdown*  
*Escalation Overview*  
*Building \$ / GSF Overview*

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## Conceptual Cost Estimate: Scope Assumptions

| Phase                            | Key Data Points                                                                                                                                                                                                                                                  | Scope Assumptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Major Allowances *                                                                                                                                                                                                          | Exclusions                                                                                                                                                 |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A. Building 12 (Health Science)  | 80,000 sf Building<br>7.4 acre site<br>New 150 stall parking lot<br>New 121 stall parking lot<br>19,200 sf offsite improvements<br>Bridge walk, 200 lf x 12.5 lf wide<br>1,500 sf Building 5 plaza renov.<br>5,800 sf Building 5 renovation<br>24 month duration | - 3 story building, above grade<br>- Marquee building status<br>- Connector bridge over E. Lawson.<br>- Bridge assumed unenclosed<br>- Light renovation at Bldg 5 level 2<br>- Cut / fill - export condition (25%)<br>- New AC surface lots<br>- Pedestrian circulation and plazas<br>- Outdoor learning (25,000 sf)<br>- Site retaining (60") x 300 lf<br>- Site terracing, 1,200 lf<br>- Lower quad ramps / connectivity<br>- Resurface of existing E. Lawson<br>- Add parking off E. Lawson (3,000 sf)<br>- New median at E. Lawson<br>- New crosswalk at E. Lawson                                  | - Food service equip = \$600,000<br>- Sitework specialties = \$100,000<br>- Bridge tower = \$750,000<br>- Oversize bridge structure = \$240,000<br>- Building 5 new entry = \$290,000<br>- Offsite phasing premium = 15.00% | - Contaminated soils removal<br>- Underpinning<br>- Low voltage devices / cable<br>- Traffic signalization<br>- Rock excavation<br>- Department relocation |
| B. Building 13 (Life Science Ed) | 35,820 sf Building<br>37,000 sf existing bldg demo<br>4.7 acre site<br>91,000 sf lot<br>19,500 sf offsite improvements<br>18 month duration                                                                                                                      | - 1 story building, above grade<br>- Classroom / training facility<br>- Engagement w/ local industry<br>- Student visit opportunities<br>- Demolition of existing building<br>- Cut / fill - export condition (25%)<br>- New AC surface lots<br>- Pedestrian circulation and plazas<br>- Outdoor learning (10,000 sf)<br>- Site retaining (60") x 150 lf<br>- Site terracing, 250 lf<br>- Lower quad ramps / connectivity<br>- New railings at Bldg 10 ramp<br>- Resurface of existing E. Lawson<br>- Add parking off E. Lawson (4,000 sf)<br>- New median at E. Lawson<br>- New crosswalk at E. Lawson | - Offsite phasing premium = 15.00%                                                                                                                                                                                          | - Contaminated soils removal<br>- Underpinning<br>- Low voltage devices / cable<br>- Traffic signalization<br>- Rock excavation<br>- Department relocation |

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### Conceptual Cost Estimate: Scope Assumptions

| Phase                                    | Key Data Points                                                                                                    | Scope Assumptions                                                                                                                                                                                                                                                                      | Major Allowances *                                                                                                                                                       | Exclusions                                                                                                                                                                    |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| C. Building 14 (Applied Technology)      | 20,000 sf Building<br>1.0 acre site<br>20,000 sf existing bldg demo<br>15 month duration                           | - 1 story building, above grade<br>- High bay structure required<br>- Pedestrian circulation and plazas<br>- Site retaining (60") x 150 lf                                                                                                                                             |                                                                                                                                                                          | - Contaminated soils removal<br>- Underpinning<br>- Low voltage devices / cable<br>- Traffic signalization<br>- Rock excavation<br>- Department relocation<br>- Off site work |
| D. ADA Enhancements                      | Select upgrades Buildings 1 - 3,<br>5, 6, 8 - 10, and 20                                                           | Site ADA upgrades - moved to Bldgs<br>9, 12, and 13                                                                                                                                                                                                                                    | - 20% premium for small projects<br>- 15% premium for interior patching                                                                                                  | - Bldg 2 Assembly seating upgrades<br>- Bldg 5 Assembly seating upgrades<br>- Bldg 9 Assembly seating upgrades                                                                |
| E. Building 1 & 2 Courtyard Enhancements | 7,000 sf of site improvements<br>2,000 sf shade structure<br>3 month duration                                      | - New pedestrian paving / plaza<br>- New landscaping in courtyard<br>- Coiling doors (3) added to Bldg 1<br>- New enclosure around (e ) t/former<br>- New wall mural prep only<br>- New water feature<br>- New shade structure between bldgs<br>- Surface drainage & lighting upgrades | - Water feature = \$50,000<br>- Transformer relo = \$127,000<br>- Roof / structure mods at new<br>shade structure = \$50,000<br>- Shade trellis (b/w Bldgs) = \$270 / sf | - Contaminated soils removal<br>- Rock excavation<br>- Wall mural finishes                                                                                                    |
| F. North Quad Enhancements               | 8,000 sf of site improvements<br>Bldg 1 shade str. = 2,000 sf<br>Bldg 1 demo addition = 775 sf<br>6 month duration | - New cross walk / rails at Bldg 1 & 6<br>- Change areaway to terrace design<br>- 6 rows + of PIP concrete terracing<br>- New terrace 100' long<br>- New metal railings at terrace<br>- Upgrade existing walkway bridges<br>- New bollards and uplighting                              | - Bridge upgrades = \$35k / each<br>- Shade structure = \$200 / sf                                                                                                       | - Contaminated soils removal<br>- Rock excavation<br>- Bridge replacement                                                                                                     |
| G. Campus Landscape Enhancements         | Multiple upgrade locations<br>32,000 sf landscape upgrade<br>6 month duration                                      | - Tree / planting replacement<br>- Tree / planting augmentation<br>- New shrubbery<br>- North lot<br>- Building 1 & 5 lot<br>- Building 8 & 10<br>- Building 4 & 7<br>- Bridge upgrades                                                                                                | - Bridge upgrades = \$35,000 / each                                                                                                                                      | - Contaminated soils removal<br>- Rock excavation                                                                                                                             |

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### Conceptual Cost Estimate: Scope Assumptions

| Phase                 | Key Data Points                                                                                                                                                               | Scope Assumptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Major Allowances *                   | Exclusions                                                                                                                                                                                                                                                                                            |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| H. Wayfinding Refresh | 13+ site signage locations<br>3 month duration                                                                                                                                | <ul style="list-style-type: none"> <li>- New code and way finding signage</li> <li>- 13 + identified sign replacements</li> <li>- New monument signage</li> <li>- New off site landscape planting</li> </ul>                                                                                                                                                                                                                                                                                                                                                                    | - Monumental signage = \$50k x 3 loc | <ul style="list-style-type: none"> <li>- Branding signage</li> <li>- Graphic signage</li> <li>- Exterior building signage</li> <li>- Interior building signage</li> </ul>                                                                                                                             |
| I. Building 9 Refresh | 50,5000 sf existing building<br>50% of existing to be renovated<br>2,500 sf student program<br>800 sf coffee shop added<br>2,500 sf courtyard renovation<br>12 month duration | <ul style="list-style-type: none"> <li>- Moderate interior renovation</li> <li>- Existing layout to remain in place</li> <li>- Create new IT labs</li> <li>- Minor envelope patching only</li> <li>- Moderate MEP upgrades</li> <li>- Incorporate new 2,500 sf study area</li> <li>- Incorporate new 400 sf coffee shop</li> <li>- Incorporate new 400 sf café seating</li> <li>- Added seatwalls 120'</li> <li>- Enhance existing patio</li> <li>- Replace railings at (e ) ramp</li> <li>- Exterior courtyard renovations</li> <li>- Reroofing - single ply finish</li> </ul> | Coffee shop food equipment = \$125k  | <ul style="list-style-type: none"> <li>- Contaminated soils removal</li> <li>- Underpinning</li> <li>- Low voltage devices / cable</li> <li>- Department relocation</li> <li>- Hazmat abatement at Bldg 9</li> <li>- Structural upgrades at Bldg 9</li> <li>- Window replacement at Bldg 9</li> </ul> |



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| INDIRECT CONSTRUCTION COST BREAKDOWN |              |
|--------------------------------------|--------------|
| Description                          | Total        |
| <b>Indirects</b>                     |              |
| General conditions                   | 6.00%        |
| General requirements                 | 4.00%        |
| CM fee                               | 3.00%        |
| Bonding, insurances, BR              | 4.00%        |
| CM contingency                       | 3.00%        |
| Design contingency                   | 5.00%        |
| LEED certification premium           | 0.50%        |
| <b>Total Soft Cost %</b>             | <b>28.4%</b> |

The above compound mark-up is used in the construction cost back-up for each scope section and is applied to the direct unit costs to derive overall construction costs (in current \$).

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| SOFT COST BREAKDOWN                 |               |               |               |               |              |
|-------------------------------------|---------------|---------------|---------------|---------------|--------------|
| Description                         | New           | Renovation    | ADA Upgrade   | Wayfinding    | Sitework     |
| <b>Professional Fees</b>            |               |               |               |               |              |
| AE Fees                             | 10.00%        | 12.00%        | 8.00%         | incl below    | 10.00%       |
| Specialty Consulting Fees           | 1.50%         | 2.00%         | 2.00%         | incl below    | 2.00%        |
| Owner PM / Mgt Fees                 | 2.00%         | 2.00%         | 1.00%         | incl below    | 2.00%        |
| Inspection / Testing                | 0.50%         | 0.50%         | 0.50%         | n/a           | 0.50%        |
| Commissioning                       | 0.75%         | 0.75%         | n/a           | n/a           | n/a          |
| <b>Furnishings / IT / Equipment</b> |               |               |               |               |              |
| FFE                                 | 6.00%         | 6.00%         | 1.00%         | n/a           | 1.50%        |
| IT Equipment / Low Voltage          | 4.00%         | 3.00%         | n/a           | n/a           | n/a          |
| Audio - Visual                      | 0.50%         | 0.50%         | n/a           | n/a           | n/a          |
| Security                            | 1.00%         | 1.00%         | n/a           | n/a           | 0.50%        |
| Owner Furnished Equipment           | 1.00%         | 1.00%         | 1.00%         | n/a           | 1.00%        |
| Artwork                             | 0.50%         | 0.25%         | n/a           | n/a           | n/a          |
| Graphics / Branding                 | 0.50%         | 0.25%         | n/a           | n/a           | n/a          |
| <b>Other</b>                        |               |               |               |               |              |
| Permitting                          | 1.50%         | 1.50%         | 1.50%         | incl below    | 1.50%        |
| Department Relocation               | -             | -             | -             | -             | -            |
| Bidding / Legal                     | 0.25%         | 0.25%         | 0.25%         | incl below    | 0.25%        |
| Owner Contingency                   | 3.00%         | 4.00%         | 5.00%         | incl below    | 3.00%        |
| <b>Total Soft Cost %</b>            | <b>33.00%</b> | <b>35.00%</b> | <b>20.25%</b> | <b>13.00%</b> | <b>22.3%</b> |

The above additive soft cost mark-up is used at the project cost summary level and is applied to the escalated total construction cost amounts for each scope section.

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## Escalation Overview

| Phase                                                   | MoC       | 2022 * | 2023  | 2024  | 2025  | 2026  | 2027  | 2028  | 2029  | 2030  | 2031  | 2032  |
|---------------------------------------------------------|-----------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| A. Building 12 (Health Science)                         | Q3 / 2025 |        |       |       |       | 23.1% |       |       |       |       |       |       |
| B. Building 13 (Life Science Ed)                        | Q2 / 2025 |        |       |       | 21.6% |       |       |       |       |       |       |       |
| C. Building 14 (Applied Technology)                     | Q1 / 2027 |        |       |       |       |       | 31.6% |       |       |       |       |       |
| D. ADA Enhancements                                     | Q3 / 2024 |        |       | 17.5% |       |       |       |       |       |       |       |       |
| E. Building 1 & 2 Courtyard Enhancements                | Q3 / 2025 |        |       |       | 23.6% |       |       |       |       |       |       |       |
| F. North Quad Enhancements                              | Q3 / 2025 |        |       |       | 23.6% |       |       |       |       |       |       |       |
| G. Campus Landscape Enhancements                        | Q3 / 2024 |        |       | 17.5% |       |       |       |       |       |       |       |       |
| H. Wayfinding Refresh                                   | Q3 / 2024 |        |       | 17.5% |       |       |       |       |       |       |       |       |
| I. Building 9 Refresh                                   | Q2 / 2028 |        |       |       |       |       |       | 38.6% |       |       |       |       |
| Annual Escalation (to be pro-rated / compounded to MoC) |           | 6.00%  | 6.50% | 5.50% | 5.00% | 4.50% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% | 4.00% |

\* 2022 escalation noted from current (June) through end of calendar year

The above compounded escalation mark-up is used at the project cost summary level and is applied to the total construction cost amounts for each scope section.

## Document Log & Definitions

### Document Log

The cost model was prepared using the following documents

| Description                             | From           | Date                          |
|-----------------------------------------|----------------|-------------------------------|
| Scope Exhibits (site plan / renderings) | O'Brien Atkins | not dated / received 05/09/22 |
| Executive Summary Narrative             | O'Brien Atkins | not dated / received 05/09/22 |
| ADA Upgrade Site Plan                   | O'Brien Atkins | 2021                          |
| Landscape Improvement Concepts          | O'Brien Atkins | 06/06/22                      |
| Estimate RFI Responses (Round 1)        | O'Brien Atkins | 05/25/22                      |
| Estimate RFI Responses (Round 2)        | O'Brien Atkins | 06/06/22                      |
| ADA Building Reports                    | O'Brien Atkins | not dated / received 06/09/22 |

### Definitions

#### Direct Construction Costs

Direct construction costs within this report are intended to reflect base subcontractor level pricing / "Cost of Work". Direct unit prices assume a minimum of 3 responsive bids per bid package. Direct / subcontract unit costs include all subcontractor overhead, profit, sales tax, materials, equipment, and labor.

#### Indirect Construction Costs

Indirect costs are included as an overall % burden within the estimate back-up which is intended to include project general conditions, project staffing, mobilization, temporary works, bonding and insurances, subguard insurances, general contractor's fee, design contingencies, and phasing impacts. A breakdown to the overall % burden is illustrated in this report's appendices.

#### Escalation

While all direct construction costs are reflective of "current pricing" levels in Durham, NC, additional allowances have been included at the summary level to escalate each phase to it's corresponding midpoint of construction. Escalation has been included as a compound annual % adjustment to account for anticipated labor, material, and other external market fluctuations between the date of this estimate and each phase's mid-point. A breakdown of phase escalation is illustrated in this report's appendices.

#### Soft Costs

To evaluate a total project cost budget, project soft costs have been included as a % burden to overall escalated construction costs to account for non tangible costs such as design fees, FFE, IT equipment, permits, and other associated owner needs / contingencies. A breakdown of project soft costs is illustrated in this report's appendices.

#### Total Project Costs

Total project costs represent the sum total of direct and indirect construction costs, escalation, and soft costs.

## Conceptual Cost Estimate: New Building Scope Overview

Within the master-plan scope of work there are numerous individual projects ranging from new construction to renovation to selective upgrades, and to campus wide enhancements. At a summary level not all of the individual master-plan projects lend themselves to a \$ / GSF type metric as each project includes multiple unique scope and cost considerations that can greatly influence the bottom line when expressed over a functional SF-age. Furthermore, some of the master-plan projects do not relate to a GSF metric at all (EG - campus wayfinding or landscape screening upgrades).

The most recognizable \$ / GSF metrics within the master-plan are for the new construction projects (Buildings 12, 13, and 14). The table below outlines the current \$ / GSF being carried for each along with an outline of what some of the key cost drivers are as well as a comparison to the corresponding \$ / GSF used in prior DTCC cost studies (the Orange Campus Master-Plan from June 2021 and the Life Science Education Study from January 2022).

| Description                                         | Notes                                                                                         |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>A. Building 12 (Health Science)</b>              |                                                                                               |
| Current Construction \$ / GSF (Bldg only)           | \$550 GSF                                                                                     |
| Current Construction \$ / GSF (Bldg + Site)         | \$643 GSF (excluding Lot 150 & E. Lawson Improvements)                                        |
| Orange Campus Health Sci \$ / GSF (Bldg + Site)     | \$556 GSF (June 2021)                                                                         |
| Variance (Current vs Orange Campus)                 | <b>\$87 GSF</b>                                                                               |
| <u>Cost Drivers / Consideration</u>                 |                                                                                               |
| - Escalation since June 2021 (10%)                  | \$56 GSF                                                                                      |
| - Marquee building premium                          | \$58 GSF (welcoming element, increased glazing, enhanced elevations, prefunction space, etc.) |
| <b>B. Building 13 (Life Science Ed)</b>             |                                                                                               |
| Current Construction \$ / GSF (Bldg only)           | \$574 GSF                                                                                     |
| Current Construction \$ / GSF (Bldg + Site)         | \$691 GSF (excluding E. Lawson Improvements & Demo)                                           |
| DTCC Life Science ROM \$ / GSF (Bldg + Site)        | \$629 GSF (Jan 2022)                                                                          |
| Variance (Current vs January ROM)                   | <b>\$61 GSF</b>                                                                               |
| <u>Cost Drivers / Consideration</u>                 |                                                                                               |
| - Escalation since Jan 2022 (3%)                    | \$19 GSF                                                                                      |
| - New parking lot in lieu of resurfacing existing   | \$32 GSF (previous ROM assumed re-use of existing lot)                                        |
| - GSF adjustment                                    | \$9 GSF (minor correction 35,820 GSF vs 35,280 SF)                                            |
| <b>C. Building 14 (Applied Technology)</b>          |                                                                                               |
| Current Construction \$ / GSF (Bldg only)           | \$515 GSF                                                                                     |
| Current Construction \$ / GSF (Bldg + Site)         | \$608 GSF                                                                                     |
| Orange Campus Skilled Trades \$ / GSF (Bldg + Site) | \$579 GSF (June 2021)                                                                         |
| Variance (Current vs Orange Campus)                 | <b>\$29 GSF</b>                                                                               |
| <u>Cost Drivers / Consideration</u>                 |                                                                                               |
| - Escalation since June 2021 (10%)                  | \$58 GSF                                                                                      |
| - Added premium for high bay structure              | \$32 GSF                                                                                      |
| - Added premium for single story impacts            | \$19 GSF                                                                                      |
| - Added site retaining element                      | \$5 GSF                                                                                       |
| - Adjustment (1 acre site vs 7 acre)                | -\$85 GSF                                                                                     |





## MEETING MINUTES

## Agenda/Meeting Minutes

Project: DTCC Masterplan

Project Number: 2021067

Purpose: Design Workshop

Meeting Location: Lyons Boardroom

Meeting Date: 4/26/2022 – 9:30am-11:00am (EST)

Prepared By: Steven Harris

| Attendees in Bold: |         |          |                       |         |          |
|--------------------|---------|----------|-----------------------|---------|----------|
| Name               | Company | Initials | Name                  | Company | Initials |
| Steven Harris      | OBA     | SH       | Susan Bowens          | DTCC    | SB       |
| Jay Smith          | OBA     | JS       | Kara Battle           | DTCC    | KB       |
| Kevin Montgomery   | OBA     | KM       | Melissa Oakley Ockert | DTCC    | MO       |
| John Atkins        | OBA     | JA       | Tina Ruff             | DTCC    | TR       |
| Nix Salcedo        | OBA     | NS       | Abraham Dones         | DTCC    | AD       |
| Kelly Wang         | OBA     | KW       | Erica Taylor          | DTCC    | ET       |
| Josh Brady         | OBA     | JB       | Andy Kleitsch         | DTCC    | AK       |
| JB Buxton          | DTCC    | JBB      | Jonathan Cook         | DTCC    | JC       |
| Marshall Fuller    | DTCC    | MF       |                       |         |          |

| ITEMS | NOTES/ ISSUES/ ACTION                                                                                                                                                                                                                                                                                        | RESP | DUE DATE |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|
| 1.0   | Project Updates and Introductions                                                                                                                                                                                                                                                                            |      |          |
| 2.0   | Survey Analysis                                                                                                                                                                                                                                                                                              |      |          |
| 2.1   | JB led discussion and went over the survey results and data obtained.                                                                                                                                                                                                                                        |      |          |
| 2.2   | Team members questioned about the data sample and the survey participants. AD mentioned he worked along with TR on a campus climate survey, which has more information about student enrollment. AD noted they targeted certain groups which may make some of this data not represent the full student body. |      |          |
| 2.3   | SB asked the OBA team how does the survey data influence design? JB explained that the survey provides trending data. SH noted we need to separate the survey data obtained from staff and students into two separate surveys.                                                                               |      |          |
| 2.4   | JC Noted that some students get snacks at the Food Pantry. Also, that we may need to increase its capacity                                                                                                                                                                                                   |      |          |

|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 2.5 | JBB mentioned that there is a lack of collaborative spaces, as well as a lack of clear wayfinding and circulation patterns. In addition the campus needs more outdoor environment for collaborative spaces.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |
| 2.6 | TR noted that there are not a lot of spaces to spend time on campus, so students just go outside.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |
| 2.7 | JBB noted that the college performed their own survey. OBA to request a copy of the results of this survey.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |
| 3.0 | Campus Evaluation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |
| 3.1 | SH led discussion on this workshop session                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| 3.2 | MO loved the traffic calming strategies, but was concerned that traffic calming on Lawson St. would displace traffic onto Cooper St. OBA members noted that because of the campus layout and topography this was unlikely to happen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |
| 3.3 | JBB stated the top three priorities in regards to traffic calming and overall streetscape on Lawson St. 1) Bury the utility lines. 2) Planted Median. 3) Street Parking                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |
| 3.4 | JS mentioned that the campus needs to improve the overall landscape and planting. Also noted that some of the trees are decaying/ in bad condition.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |
| 3.5 | MF described the space in between buildings 1 and 2 as a place that could provide the "best bang for the buck." He noted that if the OBA team could use strategies to reduce heat, more people will use it more and it would become a great place to spend time. It was noted that a lot of people do not know where this space is, including some of the meeting members. JBB indicated that the space would be a great "test" space for collaboration areas but should be designed in a way that does not distract the classrooms adjacent to it. Additionally, the space could use movable chairs and take advantage of having one access point for safety and security purposes. JA noted that the space could use a water feature. It was noted that there is some stormwater drainage underneath the space, but options like a raingarden could work. |  |  |
| 3.6 | MF indicated that the utility lines on the pathways along building 8 and 10 could be removed, since they do not serve a purpose anymore.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |
| 3.7 | The team discussed the potential of the open space behind building 9. MO mentioned it used to be occupied by staff on a frequent basis before COVID, but not anymore. TR asked if a renovation could be made to the building to facilitate student access and increase space occupation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |
| 3.8 | JBB noted that one of the priorities for the campus should be to activate the spaces that are already there and to improve connectivity. Summarized the following deficiencies and opportunities:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |

|     |                                                                                                                                                                                                                                 |  |  |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|     | <ul style="list-style-type: none"> <li>▪ Not enough collaboration space</li> <li>▪ Lack of clear routes and wayfinding</li> <li>▪ Increased opportunity for outdoor academic spaces coming out of the pandemic</li> </ul>       |  |  |
| 4.0 | Concept Review                                                                                                                                                                                                                  |  |  |
| 4.1 | AK+J noted that there is a lack of a turnaround point on campus and that a lot of students get dropped off at the street, either by carpooling or by the school buses. They both think the drop-off area is a good idea.        |  |  |
| 4.2 | There was very positive feedback on the design option that brings the buildings together and pushes the parking to the perimeter zone of the campus.                                                                            |  |  |
| 4.3 | The DTCC members had a few questions about ADA parking, parking entry, emergency building access, and service areas. The OBA team indicated that those items need to be studied further as we continue to develop the concepts. |  |  |
| 4.4 | JBB mentioned that there has been active communication with the owner of the land West of the campus. If this land acquisition moves forward, it will enhance planning opportunities for OBA team                               |  |  |
| 4.5 | AK asked the OBA team if the travel lane width could be reduced from 15' to 14' and expand the planted median on Lawson St. streetscape. JS responded that those adjustments may be possible, but more study may be needed.     |  |  |
| 4.6 | OBA asked the team members if they consider the 20 yr plan is "too far". JBB responded that planning out beyond 10 years in advance still makes sense                                                                           |  |  |
| 4.7 | Overall, the team members agreed to move forward with the design option that brings the buildings together and has a defined campus core.                                                                                       |  |  |
| 4.8 | MO indicated that by demolishing building 8, childcare and healthcare needed to be relocated.                                                                                                                                   |  |  |
| 4.9 | JBB indicated that even though we need to meet a parking count by code, the campus should not have unnecessary impervious area taken by parking.                                                                                |  |  |
| 5.0 | Next Steps                                                                                                                                                                                                                      |  |  |
| 5.1 | SH send a quote to AK to evaluate if there is a stream on the Northwest portion of campus.                                                                                                                                      |  |  |
| 5.2 | Review Full campus evaluation and ADA                                                                                                                                                                                           |  |  |
| 5.3 | Develop concepts and landscape master plan                                                                                                                                                                                      |  |  |
| 5.4 | Review Draft Comprehensive Plan Report                                                                                                                                                                                          |  |  |

*This represents the architect's understanding of the principal matters discussed as related to action items for the architect and their consultants. If there are any additions or corrections, please notify the architect immediately. If not, these minutes will stand as a record of the items discussed.*



## Agenda/Meeting Minutes

Project: DTCC Masterplan

Project Number: 2021067

Purpose: Design Workshop

Meeting Location: ERC Boardroom

Meeting Date: 3/29/2022 – 9:00am (EST)

Prepared By: Steven Harris

| Attendees in Bold: |         |          |                       |         |          |
|--------------------|---------|----------|-----------------------|---------|----------|
| Name               | Company | Initials | Name                  | Company | Initials |
| Steven Harris      | OBA     | SH       | Susan Bowens          | DTCC    | SB       |
| Jay Smith          | OBA     | JS       | Kara Battle           | DTCC    | KB       |
| Kevin Montgomery   | OBA     | KM       | Melissa Oakley Ockert | DTCC    | MO       |
| John Atkins        | OBA     | JA       | Tina Ruff             | DTCC    | TR       |
| Nix Salcedo        | OBA     | NS       | Abraham Dones         | DTCC    | AD       |
| Toni Brown         | DTCC    | TB       | Erica Taylor          | DTCC    | ET       |
| Andy Kleitsch      | DTCC    | AK       | Jim DePalma           | DTCC    | JD       |
| JB Buxton          | DTCC    | JB       |                       |         |          |
| Marshall Fuller    | DTCC    | MF       |                       |         |          |

| ITEMS | NOTES/ ISSUES/ ACTION                                                                                                                                                                                                                                                                                                                                                                           | RESP | DUE DATE |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|
| 1.0   | Project Updates and Introductions                                                                                                                                                                                                                                                                                                                                                               |      |          |
| 2.0   | 2015 Masterplan Review                                                                                                                                                                                                                                                                                                                                                                          |      |          |
| 2.1   | Enrollment is lower than ever. Pandemic has decreased enrollment and shifted more learning to a virtual platform. It is not clear to anyone if the shift will ever go back to pre-pandemic levels. Right now, it is about 50% in-person and 50% virtual. It is expected that enrollment will increase, but not at the rate seen in 2008-2015. Beyond building use demand, this affects parking. |      |          |
| 2.2   | The large meeting space noted in the 2015 Masterplan, is lower in the list of priorities for the masterplan update.                                                                                                                                                                                                                                                                             |      |          |
| 2.3   | A new health technology building is still the top priority and is targeted for the next county bond referendum.                                                                                                                                                                                                                                                                                 |      |          |
| 2.4   | It was noted that the renovating of existing buildings is still a top priority. Buildings noted for renovating in 2015 are in worse shape now. It was                                                                                                                                                                                                                                           |      |          |

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|      | noted that renovations to Collins and Tech Building are targets to include in the next CIP (Capital Improvements Plan).                                                                                                                                                                                                                 |  |  |
| 2.5  | It was noted that some skilled trades programs need expansion/new space. The target is to relocate the programs from the Bacon Bldg (Bldg 20) closer to the Newton/Ingram/Tech Center cluster of campus. This may be able to occur in the recently acquired property/bldg that was at the old metalworks facility.                      |  |  |
| 2.6  | Discussion about the new Hub for the campus. The question posed was should it be more centralized as new buildings are being built between Lawson and Cooper St. There is                                                                                                                                                               |  |  |
| 2.7  | Discussion about Parking Decks. The cost per parking space is approximately 10x to surface parking space. Tabletop decks are around 5x the cost. The general consensus was to try to avoid building parking structures and concentrate on funding program buildings.                                                                    |  |  |
| 2.8  | It was noted that the organization of the college has changed since 2015. Before it was organized by buildings, now there are 7 meta-majors that organize the college.                                                                                                                                                                  |  |  |
| 2.9  | It was noted that more transitional spaces are needed to increase flexibility for the campus.                                                                                                                                                                                                                                           |  |  |
| 2.10 | There was noted concerns about Accessibility around the campus.                                                                                                                                                                                                                                                                         |  |  |
| 2.11 | It was noted that with the planning of the campus we need to remember that there are two different types of students that the college has to accommodate. There is a younger student that is comfortable with a hybrid learning approach and there are some adult students that learn better in a traditional in-person setting.        |  |  |
| 2.12 | Discussion about Café/Coffee shops needed distributed around the campus.                                                                                                                                                                                                                                                                |  |  |
| 3.0  | Site Analysis                                                                                                                                                                                                                                                                                                                           |  |  |
| 3.1  | JB – For the Masterplan, lets target 2 spaces per 1000 sqft of new building for the planning due to the pandemic shift to less cars on campus.                                                                                                                                                                                          |  |  |
| 3.2  | Health Building – should be mostly in-person enrolment, will need to make sure parking is convenient and safe to travel at night. Need to consider scheduling and the impact to traffic on Lawson St. It was suggested that we may want to direct parking lot traffic to Cooper St to alleviate the possible jam when classes exchange. |  |  |
| 3.3  | Discussion about Traffic Calming on Lawson Street. Passive street design measures could be employed including planted medians, bike lanes, street parking, street crossings, etc.                                                                                                                                                       |  |  |
| 3.4  | Discussion about a better signature feature to the campus that makes it clear that you have arrived on the campus along Lawson Street. The current sign alone is not satisfactory.                                                                                                                                                      |  |  |

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| 3.5 | It was noted that the Bridge that ties North and Middle sides of campus from the bisecting Lawson Street is still a priority for the 2022 Masterplan update.                                                                     |  |  |
| 4.0 | Program Analysis                                                                                                                                                                                                                 |  |  |
| 4.1 | JB – The program needs are well defined right now. In lieu of the survey/questionnaire to the staff about program needs, lets focus on the amenities and support spaces. Determine how to send survey out to students and staff. |  |  |
| 4.2 | JB – There is still a desire to do community work sessions with regional employers. DTCC is working on coordinating this with Durham Chamber of Commerce.                                                                        |  |  |
| 5.0 | Next Steps                                                                                                                                                                                                                       |  |  |
| 5.1 | Next Workshop schedule for 4/26. 90 mins meeting. SH to send out calendar reservations for 9am and 11am and see what has better attendance.                                                                                      |  |  |
| 5.2 | JS and SH will perform a campus assessment report as part of the Landscape Masterplan. MF requested to be part of the assessment walkthrough. Need to review campus at night to determine the experience and improvements.       |  |  |
| 5.3 | As part of the campus assessment, wayfinding analysis will be included.                                                                                                                                                          |  |  |
| 5.4 | ADA study will be performed. This will be inside the buildings and the exterior campus spaces.                                                                                                                                   |  |  |

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## Agenda/Meeting Minutes

Project: DTCC Masterplan

Project Number: 2021067

Purpose: Design Workshop

Meeting Location: Lyons Boardroom

Meeting Date: 6/09/2022 – 9:30am-11:00am (EST)

Prepared By: Steven Harris

| Attendees in Bold: |         |          |                       |         |          |
|--------------------|---------|----------|-----------------------|---------|----------|
| Name               | Company | Initials | Name                  | Company | Initials |
| Steven Harris      | OBA     | SBH      | Susan Bowens          | DTCC    | SB       |
| Jay Smith          | OBA     | JS       | Marshall Fuller       | DTCC    | MF       |
| Kevin Montgomery   | OBA     | KM       | Melissa Oakley Ockert | DTCC    | MO       |
| John Atkins        | OBA     | JA       | Andy Kleitsch         | DTCC    | AK       |
| Nixzali Salcedo    | OBA     | NS       | James DePalma         | DTCC    | JD       |
| Carolina Sarmiento | OBA     | CS       | JB Buxton             | DTCC    | JB       |
| Abraham Dones      | DTCC    | AD       | Kara Battle           | DTCC    | KB       |
| Tina Ruff          | DTCC    | TR       |                       |         |          |

| ITEMS | NOTES/ ISSUES/ ACTION                                                                                                                                                                                                                                      | RESP | DUE DATE |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|
| 1.0   | SBH Project Updates and Introductions                                                                                                                                                                                                                      |      |          |
| 2.0   | Concepts and Opportunities                                                                                                                                                                                                                                 |      |          |
| 2.1   | Clarification that Building 8 will be required for demolition in the proposed concept to create Building 13.                                                                                                                                               |      |          |
| 2.2   | AD questioned if the architecture of building 14 would be on a slope or if it would be lowered. OBA team explained the building entry can match the grade so it will be accessible from building 11 and the future parking lot south of future building 12 |      |          |
| 2.3   | DTCC members wanted more details about West parking – if the land would be acquired how would it be used?                                                                                                                                                  |      |          |
| 2.4   | AD asked the OBA team: How will wayfinding be updated as campus is updating? OBA Team suggested the use of QR codes, as these are easy to use and update as campus develops.                                                                               |      |          |
| 2.5   | TR asked the OBA team asked about the possibility of making the connecting bridge an indoor /outdoor student space so it could be                                                                                                                          |      |          |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |
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|      | used year-round and incorporate charging/connection spaces using amenity programming.                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |
| 2.6  | JB noted that sustainability is a “non-negotiable” feature for the development of the campus.                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |
| 2.7  | SB questioned about the timing of construction between building 12 and 14 and combining the renovation of Lawson St all at once. SBH suggested that the OBA team could work along with DTCC to plan ahead and make a strategy that works best for the college.                                                                                                                                                                                                                                                       |  |  |
| 2.8  | AD asked the OBA team if the vehicular plaza included navigation possibilities for public transportation. OBA Team: Yes.                                                                                                                                                                                                                                                                                                                                                                                             |  |  |
| 2.9  | Building 13 – Life Science building – “building 10 not seen in render?”. SBH explained that the view of the perspective is the reason for this but another rendering shows it well.                                                                                                                                                                                                                                                                                                                                  |  |  |
| 2.10 | JS explained the street parking option on Lawson St. and DTCC members questioned if street parking would look like Cooper St. JS explained that with some design that includes some framing of the spots the look can be much improved over Copper St.                                                                                                                                                                                                                                                               |  |  |
| 2.11 | DTCC members questioned if Lawson St would have the capability to let trucks and emergency vehicles go through? OBA team noted that the streetscape lane and sidewalk dimensions should have no issues                                                                                                                                                                                                                                                                                                               |  |  |
| 2.12 | MF questioned how the renovation of Lawson St get approved? They have had unsuccessful attempts trying get approval for smaller projects. OBA team explained that because of the magnitude of the project, there should be less obstacles trying to obtain approval from the city/jurisdiction. However, it will still be a process that will need to start early and may need some politicking.                                                                                                                     |  |  |
| 2.13 | Building 9 – Information Technology building – OBA team discussed a potential renovation on the façade of the building by the conference room. MO: mentioned a couple of issues regarding the outdoor space: <ul style="list-style-type: none"> <li>▪ Conference room is next to staff lounge</li> <li>▪ Students can see into the conference room, and it is distracting</li> <li>▪ Removing existing door on windows that also causes distraction</li> </ul> OBA team will note these issues in the campus report. |  |  |
| 2.14 | North Courtyard – creating private spaces that contrast the bigger open spaces.                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |
| 2.15 | Team Discussed if Building 13 had enough SF after relocation of HVAC and welding building to include other programs. The conclusion is that it would have more because the 20K GSF is more than Building 20 where these programs are currently located.                                                                                                                                                                                                                                                              |  |  |



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| 2.16 | AD suggested providing indoor/ outdoor childcare and safety for children – currently in building 8, which means they need to relocate once building is demolished.<br><br>JBB noted that Building 20 may be the appropriate place after its vacated by welding and HVAC.                                                                                                                                                       |  |  |
| 2.17 | AK explained that the campus needs more storage capacity, and even more after demolishing the facility on Cooper St.<br><br>SBH asked if this requirement needs to be directly addressed in the campus plan with physical space. The answer was YES.<br><br>MF added that they need to more efficient with storage – not keeping furniture and stuff that is not reusable.<br><br>ACTION – MF to define GSF needed for storage |  |  |
| 2.18 | MF asked the OBA team to talk more about the landscape with the DTCC team. OBA team noted that there is more information in regard to the landscape noted in the report and was omitted for the presentation due to time restrictions.                                                                                                                                                                                         |  |  |
| 3.0  | Cost Summary                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |
| 3.1  | Explained project cost summary and the estimate and escalation of budget per year based on construction cost.                                                                                                                                                                                                                                                                                                                  |  |  |
| 3.2  | AK noted that the college obtained a \$35mi bond for the Life Science building and a \$75mi bond for the Health Science building.                                                                                                                                                                                                                                                                                              |  |  |
| 3.3  | AK asked the OBA team how long will it take from the time they assign an Architect to the time they can bid the project? SBH noted that that process should take about 12 months                                                                                                                                                                                                                                               |  |  |
| 4.0  | Next Steps                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |
| 4.1  | Explained the completion of drafted report and the completion of long-range plan.                                                                                                                                                                                                                                                                                                                                              |  |  |
| 4.2  | JB asked for additional meeting on June 21 <sup>st</sup> , 2022 to engage board members                                                                                                                                                                                                                                                                                                                                        |  |  |

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