CHAPTER THREE:
Construction Impacts
CHAPTER THREE: CONSTRUCTION IMPACTS

3.1 Description of Construction Phasing /Staging and Construction Activities Per Phase

Projects associated with the West Campus Residential Initiative are proposed to occur in five phases. Each phase of construction work is expected to take approximately 16-18 months. The principal reason for the sequential approach to construction is that Cornell has a commitment to provide on-campus housing for sophomores and transfer students who choose to live on campus. This commitment requires the university to maintain the bed count on west campus at approximately the present level. Consequently, the construction work must be phased and yield new housing prior to demolition of existing housing.

Each phase of work includes construction of residential facilities. Some phases coincide with construction of parking facilities, demolition of buildings, and construction of the Community and Recreation Center.

The construction phasing plan is illustrated in Figure 3.1.A: Construction Phasing, and summarized in Table 3.1.A: WCRI Construction Phasing Plan. Please note these dates are approximate and depend on a variety of factors including ability to complete construction documents and availability of construction labor, to name a few.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Project Name</th>
<th>Start</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>House #1, House #2 North University Avenue Lot</td>
<td>Mar 03</td>
<td>Jun 03</td>
</tr>
<tr>
<td>2</td>
<td>Demo Class ‘22 and ’28 House #2 South</td>
<td>Jun 04</td>
<td>Dec 05</td>
</tr>
<tr>
<td>3</td>
<td>Demo Sperry House #3 CRC</td>
<td>Jan 06</td>
<td>Feb 06</td>
</tr>
<tr>
<td>4</td>
<td>Demo Class ‘18 and ‘26 Demo Noyes Center House #4</td>
<td>Jun 07</td>
<td>Dec 08</td>
</tr>
<tr>
<td>5</td>
<td>Demo Class ‘17 House #5</td>
<td>Jan 09</td>
<td>Feb 09</td>
</tr>
</tbody>
</table>

Phase 1 includes construction of House #1, and the north residential wing of House #2. Staging and contractor offices for Phase 1 construction will occur primarily on the project site and possibly across the street, in the large lawn panel in front of 660 Stewart Avenue. Contractor access to the site will be from both Stewart Avenue and University Avenue. The University Avenue parking lot will be constructed at the beginning of phase 1 of the WCRI. The parking lot will be paved and finished so as to be available for contractor parking. Construction of a separate university project, the Cornell parking garage, is proposed to occur concurrently with the Phase 1 of the WCRI work.

Phase 2 consists of demolition of Class of ’22 and ’28 Halls and construction of the dining wing and south residential wing of House #2. Staging and contractor offices for Phase 2 construction will occur primarily on the project site and possibly across the street, in the large lawn panel in front of 660 Stewart Avenue. Contractor access to the site will be from Stewart Avenue.

Phase 3 consists of demolition of Sperry Hall and construction of House #3. Staging and contrac-
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Figure 3.1.A: Construction Phasing

WCRI
tor offices for Phase 3 construction will occur on the project site and across West Avenue on the southwest corner of Libe Slope. Contractor access to the site will be from West Avenue. The Community Recreation Center will also be constructed during phase 3.

Phase 4 consists of demolition of Class of ’18 and ’26 Halls and Noyes Center, and construction of House #4. Staging and contractor offices for Phase 4 will occur on the project site. Contractor access will be from Stewart Avenue.

Phase 5 consists of demolition of Class of ’17 Hall and construction of House #5. Staging and contractor offices for Phase 5 will occur on the project site. Contractor access will be from Stewart Avenue.

3.2 Demolition and Recycling of Materials During Construction

a. Environmental Setting
The removal of the six existing residence halls and Noyes Community Center, as well as existing walkways, driveways and parking lots within the site, will generate a substantial amount of debris and recyclable materials. Materials that may have recycling potential include slate roofing, structural steel and other metals such as copper and iron, brick and concrete block, wood, window and door units, lighting and plumbing fixtures and furniture.

Many building and site materials, such as concrete, brick, masonry, steel and asphalt that are not suited to re-use have the potential to be recycled. To be recyclable, materials need to be easily separated from other types of materials and contaminants such as trash, nails and broken glass. Specialized equipment such as hydraulic grappler and crusher arms, tub grinders and metal separators can be used in sorting and processing metal and masonry building components on the site. Where markets for them exist, these building materials can be sold or given away.

The Class Halls were cleaned of asbestos in the early 1990’s. Noyes Center houses asbestos containing materials in the thermal system insulation and is encapsulated in some floor tiles. Asbestos will be remediated prior to demolition as per the Department of Labor Guidelines.

b. Impacts of Demolition Debris
The most significant impacts associated with conventional building removal and site clearing practices are the transportation of demolition debris and its disposal in landfills. Demolition debris consumes substantial amounts of volume in landfills.

c. Mitigation Measures
The applicant has set a goal of reducing the amount of demolition debris from the project that would be landfilled or otherwise disposed of by re-using certain materials on site, or making other materials available to area recyclers. Prior to removal, buildings will be inventoried to identify building components that have potential for re-use or recycling.

In larger cities where markets exist for recycled building materials, substantial amounts have been successfully diverted from the traditional waste stream generated by building demolition. Techniques and equipment have also been developed in recent years that allow building materials to be separated from each other and sorted as a building is taken apart.

Recyclable building components can also be donated to not-for-profit groups engaged in housing development or reconstruction. The university has in the past permitted Ithaca Neighborhood Housing Services, Inc. to salvage at no charge used building materials from its former Cornell
Quarters, Roberts Hall complex and Pleasant Grove Apartments complexes, prior to their demolition. The amount of materials that can be recycled will be determined by the recipient organization’s ability to absorb and utilize the materials, and the local market for the materials. Removal of items such as doors, lighting and plumbing fixtures must be done by hand and is more costly and labor intensive. Where local markets for these items have been found, however, this higher cost can be offset by a combination of the revenues generated from the sale of such materials and the savings accrued by the elimination of landfill tipping fees.

The university will emphasize the recycling of used building materials during the demolition of all structures to be removed from the site. Steps it will take to encourage and facilitate the recycling of building materials include:

- recycling furnishings;
- continue current University policy of recycling scrap metals generated during demolition and construction projects;
- continue current university policy of recycling cardboard packaging materials at construction sites;
- requiring that prospective demolition contractors submit a recycling plan as part of their bid package;
- including commitment to recycling in the criteria for selecting demolition contractors.

Early in the design phase for projects that contain demolition, the university and architects will be soliciting demolition contractors and local organizations.

Asbestos contained in Noyes Center will be remediated prior to demolition as per the Department of Labor Guidelines.

d. **Unavoidable Impacts**

The applicant is committed to the re-use or recycling of building materials from those structures scheduled to be removed during the proposed project. It is not feasible however to re-use or recycle all of the materials within the existing buildings. An unavoidable impact of the project will thus be the need to transport off-site any of the construction and demolition debris and recyclable materials.

### 3.3 Construction Impacts to Hot Truck

a. **Environmental Setting**

The Hot Truck is a mobile canteen-type truck that has sold sandwiches and other food from a number of locations along Stewart Avenue since 1961. Its customer base consists of students living in the existing west campus residence halls and surrounding fraternities, sororities, student cooperatives and apartment complexes. It is a convenient place for students to buy late night meals and snacks. Almost all customers walk to and from the Hot Truck.

The hours of the Hot Truck can vary considerably from day-to-day, depending on market conditions. In general during the academic year the truck operates at its Stewart Avenue location during the evening and late night. Some nights it may be in operation as late as 5:00 a.m., depending on customer traffic. Although it does not currently do so, the Hot Truck can operate on a 24-hour basis, and could operate during the daytime hours on Stewart Avenue, should the market opportunity exist.
Currently the Hot Truck parks at the bottom of the stairway located northwest of Class of 1922 Hall. At that location there is an electrical outlet that services the appliances inside the Hot Truck, and a small area where customers can stand as they wait to place or to pick up orders.

Stewart Avenue is a city street, and the Hot Truck is subject to City of Ithaca regulations and permitting procedures. The Hot Truck operates on Stewart Avenue with the permission of the City of Ithaca. Cornell University has no authority over the permitting of the Hot Truck.

b. Construction Impacts to the Hot Truck
Construction of House 2 could result in eliminating the walkway and stairway at its current location. If this happens the Hot Truck operations will have to be moved to another location on Stewart Avenue.

Possible secondary impacts will be occasional noise, dust and other impacts of construction that may occur in close proximity to the Hot Truck, and the potential closure of walkways and need for detours along some of the pedestrian routes to the Hot Truck. These impacts, however, are expected to be short-term and can be mitigated.

A positive impact to the Hot Truck during the construction phase is the hundreds of construction workers nearby, who have the potential to be customers.

c. Mitigation Measures
Upon completion of the project there will be walkway connections between west campus and Stewart Avenue which will provide at least the same level of access as exists now. The university will coordinate its design for these pedestrian connections to Stewart Avenue.

Anticipated impacts to access to the Hot Truck by construction activities are expected to be short-term and associated with construction. Proposed mitigation measures to address these anticipated impacts will include:

- clearly marked all-weather detours around active construction areas within the project site;
- adequate fencing, walls or other barriers to prevent Hot Truck customers from entering active construction areas;
- controls to minimize dust and water run-off along or over routes Hot Truck customers will take.

d. Unavoidable Impacts
Relocation of the Hot Truck to another location will require some adjustment in terms of travel routes and distance on the part of regular customers. In terms of proximity to and access by its overall customer base, however, no impacts are anticipated. Although some customers may have to walk a longer distance to the Hot Truck, others will have a shorter distance to walk.

Because such a large proportion of the Hot Truck customer base arrives in late summer at the beginning of the academic year, the impact of relocating the Hot Truck may be mitigated somewhat by scheduling the move during the summer months.

Relocation of the Hot Truck will require re-wiring to provide electrical service to the truck.
3.4 Construction Impacts to the 4th Ward 1st District Polling Place

a. Environmental Setting
West campus has traditionally hosted the City of Ithaca Fourth Ward, First District public polling place for local, state and national elections, primaries and referenda. Because the majority of registered voters in the district are Cornell University students, and many live in the existing west campus residence hall complex, the location of the polling place within west campus is considered an important student amenity in addition to a service to the surrounding community.

For the past four years the Class of ‘22 Hall has hosted the public polling place. Prior to that, it was located in Class of ‘28 Hall and for many years previous, in Noyes Community Center. The university provides the appropriate space and limited parking for voters, and polling place workers, as well as access for the off-loading of voting machines. The City of Ithaca is responsible for setting up and removing the voting machines. The Tompkins County Board of Elections arranges for election inspectors and all other staff to oversee voting.

b. Construction Impacts to 4th Ward Polling Place
All three of the buildings that have housed or now house the facility are proposed to be demolished as part of the overall project. The demolition, however, will not be necessary until Phase 2 (Class of ‘22 and ‘28) or Phase 4 (Noyes Center) of the project.

Possible secondary impacts will be potential noise, dust and other impacts of construction that may occur in close proximity to the polling place, and the potential closure of walkways and need for detours accessible to the mobility impaired between voter parking areas and the polling place.

c. Mitigation Measures
The university proposes to mitigate the impact of demolition of the building housing the public polling place by relocating the polling place to one of the new Houses or the new Community Recreation Center. These new facilities are expected to be able to accommodate the size and access requirements of a public polling place, including maintaining existing parking arrangements.

Anticipated impacts to access to the polling place caused by construction activities are expected to be short-term. Proposed mitigation measures to address these anticipated impacts will include:

- Clearly marked all-weather detours around active construction areas within the project site;
- Adequate fencing, walls or other barriers to prevent polling place users from entering active construction areas;
- Controls to minimize dust and water run-off along or over routes polling place users will take.

d. Unavoidable Impacts
The unavoidable impacts of the proposed action on the existing polling place, as discussed above, is the need to relocate it to another building within the west campus complex, and possible minor short term impacts associated with major construction in close proximity to the polling place. Given the proposed mitigation measures outlined above, however, these impacts are not expected to adversely affect the operation of the polling place or the ability of voters to participate in elections.
3.5 Construction Impacts to Stormwater

a. Construction Impacts to Stormwater:
Sediment in runoff from the construction sites can impact downstream water quality if left unmitigated.

Portions of west campus ultimately drain to and could impact Fall Creek. Other portions of west campus drain to and could impact Cascadilla Creek. Temporary controls employed during construction must focus on controlling erosion of exposed soils and minimizing discharge of dewatering practices directly into storm sewer systems.

The University Avenue site drains to and can impact Cascadilla Creek. Temporary stormwater management practices employed during construction must control erosion of exposed soils.

b. Mitigation Measures for Construction Impacts to Stormwater:
For all phases of construction on both sites, the following temporary practices will be employed as needed:

- Install silt fence adjacent to the downhill edge of any grading and parallel with the contours.
- Provide protection around drainage inlets using rock check dams.
- Temporary seeding and mulching of disturbed areas or topsoil stockpiles should be encouraged if soils will remain exposed longer than 14 days.
- Install sediment traps prior to initiating significant earthwork and maintain throughout the construction period until all soils are stabilized.
- Direct all sediment-laden water from trench and pit excavations to a sediment basin.
- Install crushed stone tracking pads at all construction site entrances.
- Clean adjacent streets soiled by construction vehicles on a regular basis.

Construction documents for each phase of the project should include an erosion and sediment control plan prepared in accordance with New York State "Guidelines for Urban Erosion & Sediment Control".

c. Unavoidable Construction Impacts to Stormwater
Construction vehicles will tend to track some soil, either as dust or mud, onto adjacent streets and it will eventually be flushed into the storm sewer. Deposition of airborne dust on surrounding impervious surfaces will also flush into the storm sewers.
3.6 Construction Impacts to Air Quality

a. Construction Impacts to Air Quality:
Construction of the University Avenue surface parking lot will take approximately three months to complete. Clearing, earthwork, and placement of the gravel base will create the potential for increased dirt and dust particles in the air. This portion of the work will last approximately six weeks. Placement of pavements, curbing, walkways, lighting and landscaping will take another six weeks. After this three month period, no additional disturbance to air quality will occur from the University Avenue site. The intention is to fully complete work on the University Avenue site, including landscape screening and establishment of lawns before turning it over to construction workers. This minimizes the length of time the site will be disrupted.

Work on the west campus site will be phased. Ground clearing, excavation, building demolition and surface disturbance resulting from movement of materials and machinery will result in increased amounts of total suspended particulates on and near the site. Each phase will be completed, including landscaping and establishment of lawns, prior to beginning work on subsequent phases so as to minimize the area being impacted at any one time.

b. Mitigation Measures for Construction Impacts to Air Quality:
The first construction activity will be to pave the University Avenue surface parking lot. This will provide a paved surface for contractor vehicle parking so as to minimize dust. The University Avenue surface lot will be for contractor’s personal vehicles, not for construction equipment.

Dust-control measures during construction of the WCRI will include:

- wetting down the site on a regular basis to minimize dust;
- maintaining crushed stone tracking pads at all entrances to the construction site;
- reseeding disturbed areas quickly so as to minimize bare exposed soils on site;
- keeping the roads clear of mud and debris;
- requiring trucks be covered; and
- prohibiting the burning of debris on site.

Asbestos in the existing Noyes Center will be remediated prior to demolition, and is discussed in section 3.2.

c. Unavoidable Construction Impacts to Air Quality:
Some increase in TSP is an unavoidable aspect of construction activity. The amount of construction generated dust created depends on several factors including soil conditions, moisture content, amount of time soils are exposed to the wind and sun, weather-related factors and construction practices.
3.7 Construction Impacts to Noise

a. Construction Impacts to Noise
Noise as a result of normal construction activities is inevitable and will impact the west campus area for the duration of the construction. There will be a limited amount of controlled blasting. Noise levels resulting from construction will vary depending on location and the stage of the project.

Noise levels will be typical for a project of this size, phase and scope. The biggest impact of construction noise will be on students and staff who reside on west campus. Nearby residences on Stewart Avenue and University Avenue and the Greek houses on west campus can be expected to be impacted by construction noise at some phase during the construction.

The project will comply with the City of Ithaca noise ordinance.

b. Mitigation Measures for Construction Impacts to Noise
Construction noise will be muffled to the extent possible and will not exceed levels allowed by law. Although local codes allow construction activity daily from 7:30 am to 10:00 pm, some exterior noise-generating construction activities will be restricted during certain times in order to minimize impact on the community. For example, noise-producing construction activities may be restricted during exams.

The university will establish a plan for communicating with nearby residents to alert them of upcoming construction activities and work with NYSEG and other local utilities as necessary. The university will work closely with the contractor to implement Best Management Practices (BMP) for noise reduction to the extent possible. BMP Mitigation measures listed by New York State Department of Environmental Conservation that will be utilized to the extent possible include:

- source reduction (mufflers, dampeners, electric motors instead of air compressors);
- duration reductions (limiting days, hours, times);
- put equipment inside buildings to dampen noise

c. Unavoidable Construction Impacts to Noise
Construction noise is an unavoidable but temporary negative result of this project. Noise as a result of normal construction activities is inevitable and will impact the west campus area for the duration of the construction.
3.8 Construction Impacts to Traffic & Parking

The following sections address traffic and parking impacts related to the construction sequencing for the West Campus Residential Initiative Project and a concurrent but separate project, to build a proposed garage between South Avenue and Edgemoor Lane. A separate DEIS will be prepared to address impacts of the garage. The construction parking and traffic analysis described in the following sections addresses the construction vehicular traffic from both the proposed garage and the WCRI so that the system can be evaluated as a whole. Section 3.8.1 describes construction impacts to parking. Section 3.8.2 addresses impacts related to contractor and construction vehicles.

3.8.1 Construction Impacts to Parking

a. Construction Impacts to Parking

During construction of the WCRI, the University Avenue parking lot will be used primarily for contractor parking. During construction phases where construction worker parking does not fully utilize the capacity of the lot, the remainder of the spaces will be allocated for west campus students. During certain construction phases, spaces in a proposed parking garage will be allocated to accommodate displaced west campus parkers. Surface parking will also be lost due to the construction of the parking garage. Therefore, the peak construction worker vehicle demand occurs during phase one.

Use of the proposed garage for displaced parkers is the preferred option during construction of the WCRI, and, as such, has been analyzed in the following discussion. The end of the section includes a discussion of the alternate construction parking locations in the event that the garage is not available.

Parking Background:

The west campus population will remain static, and the expectation is that student demand for parking will remain essentially the same as well. Currently, the student resident parking demand for west campus is approximately 270. 133 of those students hold permits to B lot.

Displaced parkers who are not accommodated in lots in the west campus and South Avenue area during construction will be offered permits in B lot. B lot has an approximate capacity of 1041 spaces, and its primary users are students and staff. Currently, it is 80% utilized during the academic year, and 65% utilized during the non-academic year, and therefore, has room for any excess need created by construction of the WCRI.

Prior to phase one, the existing tennis courts on west campus will be converted to 100 temporary parking spaces to be used until construction of the Community Recreation Center.

Phase One Construction:

The University Avenue surface lot will be built and paved at the start of this phase. Once construction of the lot is complete, construction workers will park in the new lot and work will commence on west campus. West campus work during phase one will eliminate approximately 148 parking spaces due to construction of House 1 and House 2 North at the corner of Stewart and University avenues. Concurrently, under a separate project, construction of a proposed garage between South Avenue and Edgemoor Lane will eliminate approximately 105 spaces.

All displaced staff will be accommodated in the remaining existing lots and the temporary lot. All contractors (peak of approximately 222) will be provided parking at the University Avenue Lot.
Although the number of peak construction vehicles is expected to slightly exceed the capacity of the lot, it is expected that construction workers will double park during this phase. This is a typical condition for construction parking provisions. Approximately 8 west campus students will continue to park in the west campus area, and approximately 129 will park remotely at B lot.

**Phase Two Construction:**
West campus work during phase two will eliminate approximately 16 more west campus parking spaces due to construction of House 2 South. This loss will be partially offset by the completion of approximately 10 spaces during phase one. The proposed garage will be operational during phase two, with approximately 400 spaces.

All staff will be accommodated in the remaining existing lots in the area and the proposed garage. All contractors (peak of approx. 73) will be provided parking at the University Avenue Lot.
Approximately 173 west campus students will park in the temporary tennis lot and the University Ave surface lot, while approximately 97 will park remotely at B lot.

**Phase Three Construction:**
West campus work during phase three will eliminate the 100 temporary spaces due to construction of House 3 and the Community Recreation Center.

All staff will be accommodated in the remaining existing lots in the area and the proposed garage. All contractors (peak of approx. 192) will be provided parking at the University Avenue Lot.
Approximately 173 west campus students will park in the proposed garage, while approximately 97 will park remotely at B lot.

**Phase Four Construction:**
West campus work during phase four will eliminate approximately 39 parking spaces due to construction of House 4.

All staff will be accommodated in the remaining existing lots in the area and the proposed garage. All contractors (peak of approx. 167) will be provided parking at the University Avenue Lot.
Approximately 173 west campus students will park in the proposed garage and University Avenue surface lot, while approximately 97 will park remotely at B lot.

**Phase Five Construction:**
West campus work during phase five will eliminate approximately 13 parking spaces due to construction of House 5. This loss will be partially offset by the completion of approximately 5 spaces during phase 4.

All staff will be accommodated in the remaining existing lots in the area and the proposed garage. All contractors (peak of approx. 94) will be provided parking at the University Avenue Lot.
Approximately 173 west campus students will park in the proposed garage and University Avenue surface lot, while approximately 97 will park remotely at B lot.

**b. Mitigation Measures**
There are no impacts to parking during construction that are not mitigated. All displaced staff and west campus resident parkers will continue to receive parking accommodations from Cornell. All construction workers commuting to the site will be provided parking.

**c. Unavoidable Impacts**
An unavoidable impact of the WCRI is that parking will be re-located due to construction of new houses on west campus. However, there is no net parking loss as a result of this project.
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3.8.2 Construction Impacts to Traffic

a. Construction Impacts to Traffic

Construction Worker Traffic:
Phase one of the WCRI construction will result in the greatest impact to the surrounding area due to a combination of construction activities related to the WCRI project as well as a concurrent proposed parking garage project behind the law school. Phase one is projected to commence in early 2003 and continue for a period of 18 months. The daily work force will arrive prior to 8:00 a.m. in the morning and depart in the afternoon prior to 4:30 p.m. These times are outside of the morning and afternoon commuter peaks of 8:00 to 9:00 a.m. and 4:30 to 5:30 p.m. Since ambient traffic is less during off-peak intervals, the actual effect of work force added traffic is minimized.

An approximation of relative impact is shown by estimating the volume of contractors arriving and departing the site during the peak construction interval. It is anticipated that a combined total of approximately 222 construction workers will be working at the WCRI and the concurrent garage project at the peak of construction (phase one). Figure 3.8.A shows the traffic volume increases on select links within the study area as a result of construction worker traffic. Arriving and departing construction workers are distributed to the street network in a manner proportionate to how existing traffic is distributed on the street network. This was established based on traffic counts of existing conditions.

Figure 3.8.A indicates the most significant increase related to construction worker traffic occurs in the link between intersections 4: University Ave / Stewart Ave and 22: University Ave / Surface Lot driveway. All other links will experience increases on the order of one vehicle per minute or less during the hour that construction workers are expected to arrive. It is important to note that these increases occur only during arrival and departure of the construction workers and are not an all day occurrence.

Construction Delivery Vehicle Traffic:
Construction activities will be supported by daily deliveries of materials, supplies and miscellaneous services. It is anticipated that this traffic will fluctuate between 13 to 42 construction deliveries per day, dependent on phase and time of the year. The related trips, most of which are trucks, arrive and depart the site throughout the day. A maximum of approximately four arrivals and departures during the morning and afternoon commuter peaks is expected at the height of the
construction activity. This level of increase is minimal when considering the magnitude of existing traffic volumes already on the network. However, it is recognized that truck traffic typically requires more time and space for maneuvering, and minor increases in delay can be expected. Large deliveries (oversized loads or multiple truck loads) will be scheduled for special delivery times so as not to coincide with periods of peak activity on the delivery routes.

It is expected that contractors will utilize existing designated truck routes where possible. Designated truck routes in the City of Ithaca include Route 79 (State Street) and Route 13. From these routes, it is expected that delivery vehicles will use Stewart Avenue and Lake Street to access the site. These routes are illustrated in Figure 3.8.B. To the extent possible, the university will direct truck traffic to access the site via Route 13 and Lake Street in order to minimize traffic in residential neighborhoods. Trucks using Lake Street will pass-by two City of Ithaca Schools: Ithaca High School and Boynton Middle School. Both schools begin at 8:00 AM; Boynton Middle School dismisses students at 2:21 PM while Ithaca High School dismissal is 2:37 PM. Impacts related to truck traffic at Lake Street driveways accessing these schools are expected to be minor as minimal truck traffic is expected during the arrival and departure periods for students. Given the dispersion of trucks over these routes as well as the low volume of hourly truck traffic, minor impacts to neighborhoods along these routes are anticipated as a result of construction related activities. Lake Street/East Shore Drive, north of Kline Road, carries approximately 3,000 vehicles per day (vpd). Assuming that construction delivery vehicles disperse over the two routes such that 50% of the delivery vehicles use Lake Street, a maximum of 21 trucks per day would be added to the daily traffic volume. This is less than 1% of the daily traffic volume on Lake Street.

b. Mitigation Measures:
The university will require the contractor for the project to submit a delivery plan and proposed delivery routes for the most traffic intensive elements of construction. The university will review this plan with the City and work with the contractor to achieve minimum impacts.

Other mitigation measures include:

- Construction will start before peak traffic hours
- Providing parking for near the site for construction workers minimizes traffic impacts on neighborhood streets since construction workers will not need to search for nearby on-street parking.
- Construction deliveries will be spread out during the day
- Major deliveries will be coordinated and scheduled during off peak hours

c. Unavoidable Impacts:
An increase in contractors who will be working at the site and truck traffic to the site will occur for the duration of construction. This will result in some minor increases in delay.
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SRF DIAGRAM:

3.8.A: Construction worker arrival & departure trips

Figure 3.8.A:
Construction Worker Arrival & Departure Trips
Phase One Condition
Figure 3.8.B:  
Construction Delivery Routes  
WCRI

Note: Routes 79 & 13 are posted truck routes.
3.9 Construction Impacts to Pedestrians and Cyclists

a. Construction Impacts to Pedestrians and Cyclists:
Anticipated construction impacts to pedestrians and cyclists are expected to vary by phase.

b. Mitigation Measures for Impacts to Pedestrians and Cyclists:
Proposed mitigation measures to address anticipated impacts will include:

- clearly marked all-weather detours around active construction areas;
- adequate fencing, walls or other barriers to prevent pedestrians or bicyclists from entering active construction areas;
- location of construction staging areas to minimize conflicts between major pedestrian and bicycle routes and routes to and from active construction areas;
- controls to minimize dust and water run-off along or over pedestrian and bicycle routes.

c. Unavoidable Construction Impacts to Pedestrians and Cyclists:
The unavoidable impacts of the proposed action on pedestrian and bicycle circulation are small in scale. Normal routes in limited locations within the site will be disrupted during construction. These impacts however will be temporary in nature and will not extend beyond completion of the project.