PLANNING & DEVELOPMENT BOARD AGENDA Revised

The regular meeting of the PLANNING & DEVELOPMENT BOARD will be held at 6:00 p.m. on OCTOBER 23RD, 2018 in COMMON COUNCIL CHAMBERS, City Hall, 108 E. Green Street, Ithaca, NY.

Start Times: Start times are approximate only — APPLICANTS are responsible for being available at whatever time(s) their agenda item(s) is actually discussed.

<table>
<thead>
<tr>
<th>AGENDA ITEM</th>
<th>Approx. Start Time</th>
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<tbody>
<tr>
<td>1 Agenda Review</td>
<td>6:00</td>
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<tr>
<td>2 Privilege of the Floor (3-minute maximum per person — if you will be speaking about a project with a scheduled PUBLIC HEARING below, you are highly encouraged to speak at that time)</td>
<td>6:05</td>
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<tr>
<td>3 Subdivision Review</td>
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<td>A Project: Minor Subdivision</td>
<td>6:15</td>
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<tr>
<td>Location: 111 W Clinton St Tax Parcel # 80.-11-1</td>
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<tr>
<td>Applicant: Lynn Truame for Ithaca Neighborhood Housing Services</td>
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<td>Actions: ☐ Consideration of Preliminary &amp; Final Subdivision Approval</td>
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<td>Project Description: The applicant is proposing to subdivide the 1.71 acre property onto two parcels: Parcel A measuring 1.6 acres (69,848 SF) with 299 feet of frontage on S Geneva St and 173 feet on W Clinton St and containing two existing buildings, parking and other site features; and Parcel B measuring .1 acres (4,480 SF) with and 75 feet of frontage on W Clinton St and containing one multi-family building. The property is in the P-1 Zoning District which has the following minimum requirements: 3,000 SF lot size, 30 feet of street frontage, 25-foot front yard, and 10-foot side yards. The project requires an area variance of the existing deficient front yard on the proposed Parcel B. The project is in the Henry St John Historic District. This is an Unlisted Action under the City of Ithaca Environmental Quality Review Ordinance (“CEQRO”) and the State Environmental Quality Review Act (“SEQRA”), and is subject to environmental review.</td>
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<td>B Project: Major Subdivision (4 Lots)</td>
<td>6:25</td>
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<td>Location: Cherry Street, Tax Parcel # 100.-2.1.21</td>
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<td>Applicant: Nels Bohn for the Ithaca Urban Renewal Agency (IURA)</td>
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<td>Actions: ☐ Consideration of Preliminary Subdivision Approval</td>
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<tr>
<td>Project Description: The IURA is proposing to subdivide the 6-acre parcel into four lots. Lot 1 will measure 1.012 acres, Lot 2 will measure 1.023 acres, Lot 3 will measure 2.601 acres, and Lot 4 will measure .619 acres. Lot 3 will be sold to Emmy’s Organics (see below), Lot 4 will be left undeveloped for future trail use, and Lots 1 &amp; 2 will be marketed and sold for future development. This subdivision is part of a larger development project that is a Type I Action under the City of Ithaca Environmental Quality Review Ordinance (“CEQRO”) §176-4 B(1) (c) and (j) and B(4) the State Environmental Quality Review Act (“SEQRA”) §617-4 (b) (11), for which the Planning Board made a Negative Declaration of Environmental Significance on September 25, 2018.</td>
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4 Site Plan Review

A Project: Construction of a Public Road
Location: Cherry Street, Tax Parcel # 100.-2-1.21
Applicant: Nels Bohn for the Ithaca Urban Renewal Agency (IURA)
Actions: ☑ Consideration of Preliminary & Final Approval

Project Description: The IURA is proposing to extend Cherry Street by 400 feet. The road will be built to City standards with a 65-foot ROW, 5-foot sidewalks and tree lawn, and will be turned over to the City upon completion. The road extension is part of a larger development project that is a Type I Action under the City of Ithaca Environmental Quality Review Ordinance ("CEQRO") §176-4 B(1) (c) and (j) and B(4) the State Environmental Quality Review Act ("SEQRA") §617-4 (b) (11), for which the Planning Board made a Negative Declaration of Environmental Significance on September 25, 2018.

B Project: Construction of a 14-24,000 SF Production Facility (Emmy's Organics)
Location: Cherry Street, Tax Parcel # 100.-2-1.21
Applicant: Ian Gaffney for Emmy’s Organics
Actions: ☑ Consideration of Preliminary & Final Approval

Project Description: Emmy’s Organics is proposing to construct a production facility of up to 24,000 SF, with a loading dock, parking for 22 cars, landscaping, lighting, and signage. The project will be in two phases: Phase one, which will include a 14,000 SF building and all site improvements; and Phase two, (expected in the next 5 years) which will include an addition of between 14,000 and 20,000 SF. As the project site is undeveloped, site development will include the removal of 2 acres of vegetation including 55 trees of various sizes. The facility is part of a larger project that includes subdivision of land a 40-foot road extension by the Ithaca IURA extension that is a Type I Action under the City of Ithaca Environmental Quality Review Ordinance ("CEQRO") §176-4 B(1) (c) and (j) and B(4) the State Environmental Quality Review Act ("SEQRA") §617-4 (b) (11), for which the Planning Board made a Negative Declaration of Environmental Significance on September 25, 2018.

C Project: Retail Expansion (3,200 SF)
Location: 744 S Meadow St
Applicant: James Boglioli for Benderson Development Corp
Actions: ☑ Consideration of Final Approval

Project Description: The applicant is proposing to build a 3,200 SF addition to the western end of the existing 17,546 SF retail space. The project will require the removal of an existing dumpster enclosure – which will be relocated to an expanded dumpster area behind the building to the south. The project includes the additions of two parking spaces to the existing lot. The project is consistent with the findings of the 2000 Generic Environmental Impact Statement.

D Project: North Campus Residential Expansion (NCRE)
Location: Cornell University Campus
Applicant: Trowbridge Wolf Michaels for Cornell University
Actions: ☑ Public Hearing (continued)

Project Description: The applicant proposes to construct two residential complexes (one for sophomores and the other for freshmen) on two sites on North Campus. The sophomore site will have four residential buildings with 800 new beds and associated program space totaling 299,900 SF and a 59,700 SF, 1,200-seat, dining facility. The

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sophomore site is mainly in the City of Ithaca with a small portion in the Village of Cayuga Heights; however, all buildings are in the City. The freshman site will have three new residential buildings (each spanning the City and Town line) with a total of 401,200 SF and 1,200 new beds and associated program space – 223,400 of which is in the City, and 177,800 of which is in the Town. The buildings will be between two and six stories using a modern aesthetic. The project is in three zoning districts: the U-I zoning district in the City in which the proposed five stories and 55 feet are allowed; the Low Density Residential District (LDR) in the Town which allows for the proposed two-story residence halls (with a special permit); and the Multiple Housing District within Cayuga Heights in which no buildings are proposed. This has been determined to be a Type I Action under the City of Ithaca Environmental Quality Review Ordinance (“CEQRO”) §176-4 B(1)(b), (h) 4, (i) and (n) and the State Environmental Quality Review Act (“SEQRA”) § 617.4 (b)(5)(iii).

All NCRE materials are available for download at: [http://www.cityofithaca.org/DocumentCenter/Index/811](http://www.cityofithaca.org/DocumentCenter/Index/811)

**E Project:**
- **Project:** Falls Park Apartments (74 Units)
- **Location:** 121-125 Lake Street
- **Applicant:** IFR Development LLC
- **Actions:** □ Project Overview Presentation □ Declaration of Lead Agency

**Project Description:** The applicant proposes to build a 133,000 GSF, four-story apartment building and associated site improvements on the former Gun Hill Factory site. The 74-unit, age-restricted apartment building will be a mix of one- and two-bedroom units and will include 7,440 SF of amenity space and 85 parking spaces (20 surface spaces and 65 covered spaces under the building). Site improvements include an eight-foot wide public walkway located within the dedicated open space on adjacent City Property (as required per agreements established between the City and the property owner in 2007) and is to be constructed by the project sponsor. The project site is currently in the New York State Brownfield Cleanup Program (BCP). Before site development can occur, the applicant is required to remediate the site based on soil cleanup objectives for restricted residential use. A remedial investigation (RI) was recently completed at the site and was submitted to NYSDEC in August 2018. The project is in the R-3a Zoning District and requires multiple variances. This is a Type I Action under the City of Ithaca Environmental Quality Review Ordinance (“CEQRO”) §176-4 B(1) (h)[2], (k) and (n) and the State Environmental Quality Review Act (“SEQRA”) §617-4 (b)(11).

**F Sketch Plan – Mixed-Use Proposal – Carpenter Business Park**

**Zoning Appeals**
- # 3108, Area Variance, 327 W Seneca Street
- # 3109, Area Variance, 210 Park Place
- # 3110, Area Variance, 208-212 W Buffalo Street
- # 3111, Use Variance, 2 Fountain Place
- # 3112, Use Variance, 2 Willets Place
- # 3107 Area Variance, 113 Fourth Street (revised from last month)

**Old/New Business**
- Special Meeting October 30, 2018
- City Sexual Harassment Policy
- Special Permits
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7 Reports
   A. Planning Board Chair
   B. BPW Liaison
   C. Director of Planning & Development

8 Adjournment

9:15

If you have a disability & would like specific accommodation to participate, please contact the City Clerk at 274-6570 by 12:00 p.m., 2-3 business days (not including weekends/holidays) before the meeting.
WHEREAS: an application has been submitted for review and approval by the City of Ithaca Planning and Development Board for a Minor Subdivision of City of Ithaca Tax Parcel #80.-11-11, by owner Ithaca Neighborhood Housing Services (INHS), and

WHEREAS: the applicant is proposing to subdivide the 1.71 acre property into two parcels: Parcel A measuring 1.6 acres (69,848 SF) with 299 feet of frontage on S Geneva St and 173 feet on W Clinton St and containing two existing buildings, parking, and other site features; and Parcel B measuring .1 acres (4,480 SF) with 75 feet of frontage on W Clinton St and containing one multifamily building. The property is in the P-1 Zoning District which has the following minimum requirements: 3,000 SF lot size, 30 feet of street frontage, 25-foot front yard, and 10-foot side yards. The project requires an area variance for the existing deficient front yard on the proposed Parcel B. The project is in the Henry St John Historic District, and

WHEREAS: this is an Unlisted Action under the City of Ithaca Environmental Quality Review Ordinance and the State Environmental Quality Review Act, both of which require environmental review, and

WHEREAS: this is considered a Minor Subdivision in accordance with the City of Ithaca Code, Chapter 290, Article 1, §290-1, Minor Subdivision – Any subdivision of land resulting in creation of a maximum of one additional buildable lot, and

WHEREAS: the Planning Board being the local agency which has primary responsibility for approving and funding or carrying out the action did, on September 23, 2018 declare itself Lead Agency for the environmental review of the project, and

WHEREAS: legal notice was published and property posted, and adjacent property owners notified in accordance with Chapters 290-9 C. (1), (2), & (3) of the City of Ithaca Code, and

WHEREAS: the Planning and Development Board held the required Public Hearing on September 23, 2018, and

WHEREAS: the City of Ithaca Parks, Recreation, and Natural Resources Commission has been given the opportunity to comment on the proposed project and any comments received to date on the aforementioned have been considered, and

WHEREAS: this Board, acting as Lead Agency in environmental review, did on September 23, 2018 review and accept as adequate: a Short Environmental Assessment Form (SEAF), Part 1, submitted by the applicant, and Part 2, prepared by Planning staff; a plat entitled “Survey Map, 301 South Geneva Street, City of Ithaca, Tompkins County, State of New York,” with a revision date of 7/13/2018 and prepared by T.G. Miller, P.C.; and other application materials, and

WHEREAS: the Planning and Development Board did on September 23, 2018 make a Negative Declaration of Environmental Significance for the proposed Subdivision, and
WHEREAS: the Planning and Development Board recognizes that information received and reviewed for this Subdivision indicates the resultant parcels require area variance from district regulation in the requirements in the P-1 Zoning District, and

WHEREAS: the Board of Zoning Appeals (BZA) did, on October 2, 2018, grant the requested area variances, now, therefore, be it

RESOLVED: that the City of Ithaca Planning and Development Board does hereby grant Preliminary and Final Subdivision Approval to the proposed Minor Subdivision of City of Ithaca Tax Parcel Parcel #80.-11-11 located at 111 W Clinton Street, by owner, INHS, subject to the submission of three (3) paper copies of the final approved plat, all having a raised seal and signature of a registered licensed surveyor.

Moved by:
Seconded by:
In favor:
Against:
Abstain:
Absent:
Vacancies:
WHEREAS: the City of Ithaca Planning and Development Board has a pending subdivision application from the Ithaca Urban Renewal Agency (IURA), for the major subdivision of City of Ithaca Tax Parcel #100.-2-21, and

WHEREAS: the applicant is proposing to subdivide a 6-acre parcel into four lots: Lot 1 will measure 1.012 acres; Lot 2 will measure 1.023 acres; Lot 3 will measure 2.6 acres; and Lot 4 will measure .619 acres. Lot 3 will be sold to Emmy’s Organics and developed as a manufacturing facility, Lot 4 will be left undeveloped for potential future trail use, and Lots 1 & 2 will be marketed and sold for future development. The applicant is also proposing the construction of a 400-foot extension of a public road (Cherry St). The project site is in the Cherry Street District (CSD) which has no minimum lot size or street frontage requirements and the following yard dimension requirements: no front yard setback except as necessary to provide a 5’ sidewalk and 8’ treelawn and minimum 10’ side and rear yard setbacks, and

WHEREAS: the entire development project, including this subdivision, the road construction and the production facility constitute a Type I Action under the City of Ithaca Environmental Quality Review Ordinance (“CEQRO”) §176-4 B(1)(c) and (j) and B(4), and the State Environmental Quality Review Act (“SEQRA”) §617-4 (b) (11), and is subject to environmental review.

WHEREAS: the Ithaca Common Council, the Ithaca Board of Public Works, the NYS Department of Environmental Conservation, and the Tompkins County Industrial Development Authority all potentially involved agencies in this action all consented to the Planning Board acting as Lead Agency for this project, and

WHEREAS: that on August 28, 2018, the Ithaca Planning and Development Board did declare itself Lead Agency in Environmental Review for the proposed project, and

WHEREAS: the City of Ithaca Parks Recreation and Natural Resources Commission has been given the opportunity to comment on the proposed project and any comments received to date on the aforementioned have been considered, and

WHEREAS: legal notice was published and property posted, and adjacent property owners notified in accordance with Chapters 290-9 C. (1), (2), & (3) of the City of Ithaca Code, and

WHEREAS: the Planning and Development Board held the required Public Hearing on September 25, 2018, and

WHEREAS: this Board, acting as Lead Agency in environmental review, did on September 25, 2018 review and accept as adequate: a Full Environmental Assessment Form (FEAF), Part 1, submitted by the applicant, and Parts 2 and 3, prepared by Planning staff and amended by the Planning Board, the following drawings: “Preliminary Subdivision Plat, Showing lands owned by the Ithaca Urban Renewal Agency, Located at Southerly End of Cherry Street, City of Ithaca, Tompkins County New York” dated 7/23/18, and prepared by T.G. Miller, P.C. and other application materials, and

WHEREAS: the Planning and Development Board did on September 25, 2018 make a Negative Declaration of Environmental Significance for the proposed subdivision, and
WHEREAS: the Planning and Development Board recognizes that information received and reviewed for this Subdivision indicates the resultant parcels conform to district regulations for the Cherry Street Zoning District, now, therefore, be it

RESOLVED: that the City of Ithaca Planning and Development Board does hereby grant Preliminary Subdivision Approval to the proposed Major Subdivision of City of Ithaca Tax Parcel #100.2-21, by owner the IURA.

Moved by:
Seconded by:
In Favor:
Against:
Abstain:
Absent:
Vacancies:
WHEREAS: the City of Ithaca Planning and Development Board has a pending Site Plan Review application from the Ithaca Urban Renewal Agency (IURA), for the a 400-foot extension of Cherry Street on City of Ithaca Tax Parcel #100.-2-21, and

WHEREAS: the IURA is proposing to construct a 400-foot extension of Cherry Street. The extension will include a sidewalk, tree lawn and underground utilities. It will be built to City standards and transferred to the City upon completion. The project site is in the Cherry Street District (CSD), and

WHEREAS: the road extension is part of a larger project that includes a major (4 lot) subdivision of the 6-acre parcel, of which one lot will be will be sold to Emmy’s Organics and developed as a manufacturing facility, two lots will be will be marketed and sold for future development, and one lot will be retained undeveloped for potential future trail use, and

WHEREAS: taken as a whole, these actions constitute a Type I Action under the City of Ithaca Environmental Quality Review Ordinance ("CEQRO") §176-4 B(I)(c) and (j) and B(4), and the State Environmental Quality Review Act ("SEQRA") §617-4 (b) (11), and is subject to environmental review.

WHEREAS: the Ithaca Common Council, the Ithaca Board of Public Works, the NYS Department of Environmental Conservation, and the Tompkins County Industrial Development Authority all potentially involved agencies in this action all consented to the Planning Board acting as Lead Agency for this project, and

WHEREAS: that on August 28, 2018, the Ithaca Planning and Development Board did declare itself Lead Agency in Environmental Review for the proposed project, and

WHEREAS: the City of Ithaca Parks Recreation and Natural Resources Commission has been given the opportunity to comment on the proposed project and any comments received to date on the aforementioned have been considered, and

WHEREAS: legal notice was published and property posted, and adjacent property owners notified in accordance with Chapters 290-9 C. (1), (2), & (3) of the City of Ithaca Code, and

WHEREAS: the Planning and Development Board held the required Public Hearing on September 25, 2018, and

WHEREAS: this Board, acting as Lead Agency in environmental review, did on September 25, 2018 review and accept as adequate: a Full Environmental Assessment Form (FEAP), Part 1, submitted by the applicant, and Parts 2 and 3, prepared by Planning staff and amended by the Planning Board, the following drawings: "Preliminary Subdivision Plat, Showing lands owned by the Ithaca Urban Renewal Agency, Located at Southerly End of Cherry Street, City of Ithaca, Tompkins County New York" dated 7/23/18, and prepared by T.G. Miller, P.C.; drawing for the road extension: "Existing Conditions Plan -C100", "Demolition Plan C101", "Erosion and Sediment Control Plan -C102", "Layout Plan-C103", "Utility Plan -C104", "Grading Plan-C105", and "Details-C201" dated 7/31/18 and prepared by T.G. Miller, P.C., and other application materials, and
WHEREAS: the Planning and Development Board did on September 25, 2018 make a Negative Declaration of Environmental Significance for the proposed project, now, therefore, be it

RESOLVED: that the City of Ithaca Planning and Development Board does hereby grant Preliminary and Final Approval to the proposed Cherry St road extension on City of Ithaca Tax Parcel #100.-2-21, by owner the IURA.

Moved by: 
Seconded by: 
In Favor: 
Against: 
Abstain: 
Absent: 
Vacancies: None
WHEREAS: the City of Ithaca Planning and Development Board has a pending site plan review application from Ian Gaffney of Emmy's Organics, for construction of a production facility on City of Ithaca TaxParcel #100.-2-21, and

WHEREAS: the parcel is currently being subdivided into four lots, of which one lot will be sold to Emmy’s Organics and developed as a manufacturing facility, two lots will be marketed and sold for future development, and one lot will be retained undeveloped for potential future trail use. The facility will be approximately 28,000 SF, with a loading dock, parking for 22 cars, landscaping, lighting, and signage. The project will be in two phases; phase one will include a 14,000 SF building and all site improvements; phase two is expected to commence within the next 5 years and will include an addition of up to 14,000 SF. This project is part of a larger development project that also includes a 400-foot extension of Cherry Street to access the subdivided parcels. The project site is in the Cherry Street District (CSD), and

WHEREAS: taken as a whole, these actions constitute a Type I Action under the City of Ithaca Environmental Quality Review Ordinance (“CEQRO”) §176-4 B(1)(c) and (j) and B(4), and the State Environmental Quality Review Act (“SEQRA”) §617-4 (b) (11), and is subject to environmental review.

WHEREAS: the Ithaca Common Council, the Ithaca Board of Public Works, the NYS Department of Environmental Conservation, and the Tompkins County Industrial Development Authority all potentially involved agencies in this action all consented to the Planning Board acting as Lead Agency for this project, and

WHEREAS: that on August 28, 2018, the Ithaca Planning and Development Board did declare itself Lead Agency in Environmental Review for the proposed project, and

WHEREAS: the City of Ithaca Parks Recreation and Natural Resources Commission has been given the opportunity to comment on the proposed project and any comments received to date on the aforementioned have been considered, and

WHEREAS: legal notice was published and property posted, and adjacent property owners notified in accordance with Chapters 290-9 C. (1), (2), & (3) of the City of Ithaca Code, and

WHEREAS: the Planning and Development Board held the required Public Hearing on September 25, 2018, and

WHEREAS: this Board, acting as Lead Agency in environmental review, did on September 25, 2018 review and accept as adequate: a Full Environmental Assessment Form (FEAF), Part 1, submitted by the applicant, and Parts 2 and 3, prepared by Planning staff and amended by the Planning Board, the following drawings: “Preliminary Subdivision Plat, Showing lands owned by the Ithaca Urban Renewal Agency, Located at Southerly End of Cherry Street, City of Ithaca, Tompkins County New York” dated 7/23/18, and prepared by T.G. Miller, P.C., and “Erosion and Sediment Control Plan –C102”, “Demolition Plan C103”, “Site Plan –L-1.0”, “Emmy’s Organics Landscape Plan – L2.0”, “Cherry Street Landscape Plan – L3.0” all with a latest revision date of 9/18/2018; and “Elevations Phase 2 – A201” and “Elevations Phase 1- A202” dated 7/27/18 and “Exiting Conditions –C-101” and “Utility Plan- C105” all.
dated 7-27-18 and “Grading and Drainage Plan – C104” dated 7/27/18 but showing revisions from the
drawing with the same date, to reduce the size of the future addition and remove all grading/ disturbance
for the 25’ wetland buffer, and “Details –C201” dated 7/27/18 but showing revisions from the drawing
with the same date, to include more detailed tree protection details, and all prepared by Stream
Collaborative et.al. and other application materials, and

WHEREAS: the Planning and Development Board did on September 25, 2018 make a Negative
Declaration of Environmental Significance for the proposed project, now, therefore, be it

RESOLVED: that the City of Ithaca Planning and Development Board does hereby grant Preliminary and
Final Approval to the proposed project on City of Ithaca Tax Parcel #100.-2-21, subject to the following
conditions:

i. Submission of a receipt of filing from the Tompkins County Clerk for the approved subdivision,
   and

ii. Submission of a revised layout plan to showing materials for all curbing, and

iii. Submission of project details, including but not limited to lighting, signage, dumpster enclosure,
     exterior furnishings, bike racks, etc, and

iv. Bike racks must be installed before a certificate of occupancy is granted, and

v. This site plan approval does not preclude any other permit that is required by City Code, such as
   sign permits, tree permits, street permits, etc

Moved by:
Seconded by:
In Favor:
Against:
Abstain:
Absent:
Vacancies: None
WHEREAS: an application has been submitted for review and approval by the City of Ithaca Planning and Development Board for a 3,200 SF retail expansion to be located at 744 S Meadow Street, and

WHEREAS: The applicant is proposing to build a 3,200 SF addition to the western end of the existing 17,546 SF retail space. The project will require the removal of an existing dumpster enclosure – which will be relocated to an expanded dumpster area behind the building to the south. The project includes the addition of two parking spaces to the existing lot, and

WHEREAS: this is an Unlisted Action under the City of Ithaca Environmental Quality Review Ordinance and the State Environmental Quality Review Act and requires environmental review, and

WHEREAS: the Planning Board, being the local agency which has primary responsibility for approving and funding or carrying out the action, did, on April 24, 2018 declare itself Lead Agency for the project, and

WHEREAS: legal notice was published and property posted in accordance with Chapters 276-6 B. (4) and 176-12 A. (2) (c) of the City of Ithaca Code, and

WHEREAS: the Planning and Development Board held the required public hearing on April 24, 2018, and

WHEREAS: subsequent to the Board’s declaration of Lead Agency, the applicant submitted a trip generation report prepared by TYLIN International and dated April 24, 2018, that demonstrates that the traffic counts for the proposed new retail is consistent with the findings of the 2000 Generic Environmental Impact Statement (GEIS) for the Southwest Area Land Use Plan and therefore no additional environmental review is required, and

WHEREAS: this Board has, on August 28, 2018, reviewed and accepted as adequate drawings titled “Overall Site Plan (C4.0)” and “Construction Details (C4.2)” with a latest revision date of 5-17-18; “Detailed Site Plan (C4.1a)” and “Detailed Dumpster Plan (C4.1b)” with a latest revision date of 4-06-18; “Grading Plan (C5.0)”, “Drainage Plan (C5.1)”, “Drainage Details (C5.2)”, “Utility Plan (C6.0)” and “Utility Details (C6.0)” dated 2-19-18 and “Demolition and Erosion Plan (C3.0)” and “Landscape Plan (C7.0)” with a latest revision date of dated 5-23-18 and prepared by James Allen Rumsey Architect, a color drawing showing building elevations with labeled materials dated 4-10-18 (with a received date of 7-16-18) and unattributed, and other application materials, and

WHEREAS: the City of Ithaca Parks, Recreation, and Natural Resources Commission; Tompkins County department of Planning and Sustainability; and other interested parties have been given the opportunity to comment on the proposed project and any received comments have been considered, and

WHEREAS: the City of Ithaca Planning and Development Board did, on August 28, 2018 grant Preliminary Site Plan Approval for the proposed project, subject to submission of revised elevations showing materials and design features from the south and west elevations carried over to the north elevation, and
WHEREAS: this Board has, on October 23, 2018, reviewed and accepted a revised color drawing showing building elevations with labeled materials dated 4-10-18 (with a received date of 10-22-18) and unattributed, and other application materials, now, therefore, be it

RESOLVED: that the City of Ithaca Planning and Development Board does hereby grant Final Site Plan Approval for the proposed project subject to the following conditions:

i. Bike racks must be installed before a certificate of occupancy is granted, and

ii. This site plan approval does not preclude any other permit that is required by City Code, such as sign permits, tree permits, street permits, etc

Moved by: 
Seconded by: 
In favor: 
Against: 
Abstain: 
Absent: 
Vacancies: None
NCRE Additional Materials

To: Lisa Nicholas, Senior Planner
City of Ithaca

October 12, 2018

Lisa,

As requested, enclosed please find additional materials in relation to the NCRE SEQR review. Included in this package you will find:

1. Questions regarding energy from the Planning Board and responses to public comment
2. Information about public outreach
3. Response to questions about water capacity of Fall Creek
4. Additional information about Deep Dynamic Compaction (DDC) ground improvement technique
5. Additional transportation information – responses to a board member question and comments received on September 12, 2018 from Eric Hathaway, Transportation Engineer for the City of Ithaca.
6. Upstream methane calculations

If you need anything else, please do not hesitate to ask. As always, thank you for your advice and assistance.

Kimberly Michaels
Principal

Cc: Brent Cross, Village of Cayuga Heights
Susan Ritter, Town of Ithaca
Impacts to Energy & SEQR (pages 169-212)

Comments from the public regarding energy impacts & SEQR

At the September 25th Planning Board public hearing, we listened to all the comments. We also reviewed all the written public comments that were shared since our last Planning Board session.

Many of the comments address greater issues such as climate change, providing a future for our children, concerns about pestilence and war and concerns about communities in Pennsylvania affected by fracking. Attempting to address all of the far-ranging statements which are not within the control of this project, would be unproductive towards the goal of clarifying project energy use and impacts.

In this letter we will address three interrelated general themes of the letters. Specifically, this letter will address the following claims by various letter writers:

- Claim #1: The Board is required by SEQRA rules to consider this project to have a potential significant impact in terms of energy use.
- Claim #2: Cornell’s application is incomplete for the purpose of assessing the level of impact of heating, cooling, and electric services for the new dorms for the purpose of SEQR.
- Claim #3: Information is not clearly presented, does not adequately provide the information necessary to make an appropriate SEQR determination, or is of such complexity as to require an outside expert.

Claim #1: The Board is required by SEQRA rules to decide that this project has a potentially significant impact in terms of energy use.

This claim could stem from an inexperienced commenter’s idea that since the project is a Type 1 action, a significant impact in terms of energy must be assumed. As the Board knows, it is not required by SEQRA rules to decide that this project has a potentially significant impact in terms of energy use. On the contrary, the available regulatory guidance suggests that the project may be classified as having a small energy impact.

NYSDEC publishes an on-line Environmental Assessment Form (EAF) Workbook. The purpose of the NYSDEC Workbook is not to prevent lead agencies from making SEQR determinations appropriate to the locale of the project, but to guide them to an appropriate context for each area of impact. Here is a direct excerpt from NYSDEC explaining the purpose of the Workbook:

“They should be considered as helpful guidance documents that contain background information, links to data and maps, and answers to questions that a reviewing agency may have. They should be considered source books to assist and guide applicants and reviewers involved in a SEQR review.”

1 https://www.dec.ny.gov/permits/90125.html
NYSDEC’s Workbook provides specific guidance for DEC staff to evaluate levels of impact in each specific area of review. Relative to the area of energy, the handbook provides the following guidance (all information in italics is from the referenced NYSDEC site):

**Small Impact:**
- Proposed projects that include land uses similar to those in the surrounding area, and that follow the NYS Energy Code, are likely to have only a small impact. Examples would be:
  - Residential development in an already suburbanized area.
  - Small commercial uses in a professional office or industrial park.
  - Uses that are fully compliant with a community’s adopted Local Climate Action Plan.

**Moderate to Large Impact:**
- Proposed projects that are much larger in scale than the surrounding land uses, or that are in a remote area with limited energy infrastructure, could have a moderate to large impact. Some examples that might fall into this category are:
  - An industrial use on a rural road with electric transmission lines designed for only scattered residential land uses.
  - A single commercial use in an industrial park with much higher energy demands than the other uses in the park.
  - Industrial projects that require large amounts of energy during operation.
  - Large number of residential units in a rural area.

The NCRE application is an example of the items listed as a “small impact”. The project’s impacts could arguably be even smaller than the examples for the following reasons:

- NCRE is designed significantly better than Energy Code
- NCRE’s energy for buildings heat, electric, and cooling will be directly served by existing Cornell utilities, which are of unusually high efficiency
- No utility capacity upgrades are needed to serve this project

Comparing the NCRE project with the “moderate to large impact” examples above, it is clear that NCRE is in scale with surrounding campus uses and may have a lower, not higher, energy demand than uses already on the campus due to the average age of existing buildings despite Cornell’s recent energy-conserving upgrades, and due to NCRE’s design well above current energy code. NCRE is not an industrial project requiring industrial-sized quantities of energy. As discussed below, the occupants of the NCRE residence halls are expected to require less, not more energy, on average than occupants of residences elsewhere in Tompkins County. In addition, the site of NCRE is not a rural area and the infrastructure provided by Cornell is completely adequate for it without any upgrade.

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2 [https://www.dec.ny.gov/permits/91781.html](https://www.dec.ny.gov/permits/91781.html)
Claim #2: Cornell’s Application is Incomplete or insufficient to make a determination.

A comprehensive analysis of energy, including documenting GHG emissions in accordance with SEQRA policy has been provided along with extensive context to help understand how energy would be generated and used by the project.

Cornell’s application included Part I of the Full Environmental Assessment Form (FEAF), the basic standard for Type 1 SEQR Actions (two SEQRA FEAFs were actually submitted, since different versions were in use by different municipalities). The NCRE application also included a readable narrative to help clarify the impact and context of the project, namely, a high-performance building, located within a highly efficient energy infrastructure that provides a high level of energy performance (supported by full-time staff to maintain energy performance over the life of the building). Finally, a detailed third-party analysis of the work was provided by Taitem Engineers, a respected, independent, local firm. The information provided was comprehensive—well beyond the typical standard for energy in a residential Site Plan application.

Additional information and presentations have been provided, in response to requests for clarifications by members of two different municipal planning boards. All information has been shared, in writing, with each of the municipalities involved in this review. The written and oral presentations did not vary the project itself or application and materials presented with Part 1 of the FEAF, but, we trust, have clarified and answered questions.

Institution-wide, Cornell has consistently provided a high level of transparency regarding energy and impacts that go well beyond the NCRE project. Publicly accessible web-based information that explains Cornell’s uniquely efficient energy resources (Combined Heat and Power, Lake Source Cooling, and the Hydroelectric Plant) is available along with Cornell’s Climate Action Plan and goals for future improvement through transition to carbon neutral energy supply and campus-wide energy conservation. Cornell annually publishes not only a greenhouse gas inventory for the Ithaca campus but also specific campus-wide energy use information, building-by-building energy data, and similar information. Cornell routinely offers public tours of its energy facilities, typically hosted by the men and women who operate them, and engage students and faculty in meaningful research projects involving the actual facilities and energy database. Cornell also acknowledges its campus GHG impacts and works to reduce those impacts.

References with website addresses to all of this public information were included in the original site plan application and highlighted in the first City Planning Board presentation. The submitted energy information also goes beyond what is required by a Long Environmental Assessment form, especially for a residential project that will be entirely served by Cornell Utilities for heating, electricity, and cooling, thus having no negative impact on surrounding community utility system for those services.

In response to an earlier Board member request for additional information on energy options (specifically to assess the impacts of using heat pumps powered by energy from the local electrical grid) Cornell also provided calculations that estimate greenhouse gas emissions associated with a total of eight potential energy supply options, representing every reasonable combination for a residential building application. Some of these options could have significant detrimental impacts on Cornell’s ability to maintain operations and provide a community refuge during regional power outages or similar emergencies, and each have specific economic impacts as well. All of them, save the one proposed (connection to Cornell’s district energy systems), would negatively impact Cornell’s ability to strive for carbon neutrality in the future.
Even so, a set of members of the public have asked for more information, specifically challenging the use of the published marginal energy emissions factors referenced in the documents and/or challenging whether possible future changes in the grid might change those numbers over time, while ignoring established protocols and potential changes to Cornell’s own system efficiencies, despite clear evidence of Cornell’s improvements. These challenges provided no specific endpoint or projection other than a desire to push municipalities to ban any use of gas by a project, despite the fact that at this point in time, reasonable alternatives are not available.

Cornell’s approach to future sustainability is in step with community goals for lower carbon emissions. A total electrification of all heat and transportation in the County would boost regional electrical demands significantly – up to triple, according to the analysis in the Tompkins County Energy Roadmap, creating a significant challenge for renewable electricity growth. Thus, even though electrification actions could appreciably lower overall carbon emissions through other means (i.e., removing gasoline emissions and direct propane, oil, or natural gas heating uses), they would create significant new challenges to “greening the grid”. Cornell’s approach, using non-electric renewable resources for campus heat, would remove fossil energy needs without significantly increasing grid electrical needs and thereby fully support efforts to “green the grid”. Cornell’s scale and infrastructure thus allows the institution to undertake “greening” approaches that are not available to smaller organizations or groups.

Lastly, members of the public have also requested that Cornell include “upstream methane emissions” in GHG calculations, even though such use is not consistent with SEQR guidance. A prior response letter (September 17, 2018), pointed out the lack of protocol and standards for making such an assessment and the fact that this assessment would be consistent across all potential actions considered, without changing the proportional impact of any in terms of GHG emissions. However, since the question remains, a brief summary of upstream methane emissions with appropriate context and explanation is included in these materials.

In summary, the claim that Cornell has not provided sufficient information in relation to energy for an appropriate review of SEQR significance, in light of all the information provided and available, is unreasonable and unfounded.

Claim #3: Information is not clearly presented, does not adequately provide the information necessary to make an appropriate SEQR determination, or is of such complexity as to require an outside expert.

In the SEQR Handbook’s (https://www.dec.ny.gov/permits/47636.html) introduction, Subchapter F explains that a lead agency applies the concept of “reasonableness” to its decision-making. Italicized language is quoted from the Handbook:

> The principle of reasonableness, as put into practice in SEQR decision making, has been upheld by the decisions of the courts … In addressing the review of impacts the courts have limited the consideration of impacts to reasonably related potential impacts. The court decisions have also stated that not every conceivable impact needs to be considered; speculative impacts may be ignored.
The EAF and the Concept of Reasonableness:

The Full Environmental Assessment Form assists the agency with applying the reasonableness principle. In the Purpose statement at the beginning of the Full EAF, the instructions recognize that "Frequently there are aspects of a project that are subjective and unmeasurable" and that "those who determine significance may have little or no formal knowledge of the environment or may not be technically expert in environmental analysis." …

The initial instruction to the lead agency in Part 2 (Analysis) of the Full EAF states that: "In completing the form the reviewer should be guided by the question: Have my responses and determinations been reasonable? The reviewer is not expected to be an expert environmental analyst." In the instructions for Part 3 (Evaluation) of the Full EAF, the preparer decides "if it is reasonable to conclude that this impact is important." Following that instruction, a series of questions tests the reasonableness of the decision.

Continuing with the determination of significance, the regulations ask that the lead agency identify and address relevant areas of environmental concern. If a potential impact is too speculative, it should not be addressed. The agency's responsibility is to deal with impacts that are reasonably foreseeable.

In the criteria for determining significance, when addressing potentially relevant long-term, short-term and cumulative impacts, the lead agency is directed to consider those that are "reasonably related." The criteria also include the following reasonable qualifiers to the indicators of significance:

- a substantial adverse change
- substantial increase or decrease
- removal or destruction of large quantities
- large number of people
- material conflict
- impairment of character or quality
- a major change
- creation of a hazard
- creation of a material demand

When the above criteria for "reasonably related" are considered together with the guides discussed in the previous section for putting energy use and GHG emissions into context and with the assurance from the Handbook that members of the Planning Board do not need to have particular expertise, the Planning Board can safely apply the principle of reasonableness to its task. To name just a few characteristics, here we have a residential and dining facility that:

- Already has lower energy use than required by the Energy Code and is expected to be LEED Gold,
• Assuredly has lower energy demand than an industrial use (industrial uses exemplify “moderate to large” energy demand),
• Is geographically in a semi-urban campus, not a rural area, with a highly efficient, adequate combined heat and power infrastructure that will require no new utility development,
• Is designed for easy transition to a more efficient, greener energy supply when that becomes available through Cornell’s infrastructure or on the New York State Electric grid,
• Will house a population, the majority of whose numbers are already present in the present campus population,
• Is in scale, quality, and character consistent with the surrounding institutional usage,
• Is consistent with the City’s comprehensive plan (zoning is evidence of comprehensive plan in the absence of one),
• Is consistent with the Town of Ithaca’s comprehensive plan and its zoning,
• Creates no reasonably related hazard,

Many in the public seek to expand the site plan discussion global context. The discussion is not unimportant, however, it does not belong in this environmental review. It is an example of what the SEQR Handbook says is not “reasonably related.” This global context moves the discussions to matters like climate change, energy policy, and into ever more complex discussions including future projections of marginal efficiency factors for the electric grid. Such future projections are based on competing pressures of added electrification and the pending loss of nuclear resources (both of which will increase the use of natural gas to make electricity versus the growing efforts to increase available renewable resources like wind and solar). This discussion then branches into multiple future scenarios and visions, going well beyond items within the project’s control and the context of local site plan review.

**Summary of Energy Information**

As described in the original submittal, clarified in past letters to the Town and City Planning Boards, and further reiterated in this supplementary letter, the energy impacts of the NCRE project can be characterized as follows:

• NCRE is residential in nature and are the buildings are designed to use 30% less energy than current Energy Code
• NCRE is on target to earn LEED Gold and achieve 20 Energy points
• NCRE will connect to highly efficient electric, heating, and cooling systems (Cornell’s Central Energy Systems, anchored by Combined Heat and Power and Lake Source Cooling).
• Cornell’s central energy systems will not require any capacity enlargement or enhancement to accommodate the project.
• NCRE’s energy use will be about 1.4% of the current campus electric, cooling, and heating loads despite representing about 4% of current campus footprint.
• Ongoing energy conservation work throughout campus is forecast to reduce campus energy use by more than 1.4% by the time the NCRE is operational.
• The greenhouse gas emissions associated with the NCRE project (even if upstream methane emissions are added) will be lower than any of the other options studied, based on USEPA published emissions factors and transmission losses documented in our prior letter assessment.
• By connecting to the district energy infrastructure and by virtue of its low-temperature design, the NCRE project will also accommodate future renewable energy with the campus-wide goals of climate neutrality by 2035.

Per NYSDEC SEQR Workbook guidance, a project of residential nature that meets energy code and is located within an area of sufficient energy infrastructure can already be characterized as having a “small” energy impact within the context of SEQR. The NCRE project not only meets these criteria but also includes many additional positive qualities.

Upstream Methane Leakage (Impacts to Energy, pages 169-212)
Comments from the public requesting upstream methane calculations

Upstream methane leakage is unburned methane that escapes “upstream” or outside of a project’s boundaries. This can occur anywhere along the distributions system and, (unless the applicant is a utility company or energy provider), is typically outside of the applicant’s control. Upstream emissions are leaks found along pipelines, at the drilling or well sites, at compressor stations, etc. Losses can also occur during maintenance of the distribution system.

Cornell previously provided information about the assessment of “upstream leakage” in a letter to the Town of Ithaca Planning Board (September 17, 2018) which explained that upstream emissions are proportionately amplified for each alternative and as such, do not change the relationships between the alternatives.

Taitem Engineers, did not err in assessing the total emissions impact by excluding upstream impacts. Specifically, Taitem followed both the intent and the specific instructions of the NY State Department of Environmental Conservation (NYSDEC) “SEOR Handbook”3 as well as the more detailed NYSDEC policy document “Assessing Energy Use and Greenhouse Gas Emissions in Environmental Impact Statements”4 in documenting their assessment. Those documents were written for NYSDEC staff use in “preparing or reviewing” SEQR information on energy. The documents are also referenced in the SEQR Handbook as guidance for SEQR review by others.

The referenced NYSDEC documents specifically state the following:

• The scope of information to be reported should include GHG emissions directly produced on-site and direct emissions of indirect sources (purchased electricity) using very specific standardized tools and data sources.

• The policy statement is accompanied by its own SEQR Short Environmental Assessment Form (SEAF). The SEAF notes that the policy is intended to be used “state wide” and is intended to identify “the boundaries and methods of the assessment” of GHG emissions5.

• In defining those “boundaries”, the policy states that “Project proponents should present total projected GHG emissions as the sum of emissions from direct stationary sources, direct mobile sources, indirect stationary sources, indirect mobile sources, and waste generation.” “Direct” emissions specifically means combustion emissions at the applicant’s site (or power producer’s

4 https://www.dec.ny.gov/docs/administration_pdf/eisghgpolicy.pdf
5 https://www.dec.ny.gov/docs/administration_pdf/ghgeissshrteaf.pdf
site, in the case of “indirect emissions”). Emissions upstream, i.e., at locations outside of the control of the applicant or electric production facility, such as “upstream methane leakage” are not part of “direct emissions”.

- In their published response to public comment on the issuance of these guidelines, the NYSDEC notes that a specific goal of DEC’s guidance was to provide “methodologies for assessing GHG and energy use, which reduces (rather than enhances) the opportunities for arbitrariness in reviews.”

In summary, upstream methane leakage is not included in these measurement protocols, which seek to provide a reasonable and equitable process for calculating and reviewing GHG impacts. In following established rules and protocols, Taitem allows a fair and standardized assessment of this project against any others that may be before the Board(s).

Nonetheless, due to continued questions from members of the Planning Boards and from the public, in an appendix to this letter, you can find a description of competing methodologies for calculating upstream emissions as well as the calculations as they relate to the NCRE and the alternatives studied.

**Impacts to Energy (pages 169-212)**

*Renovating/Updating Balch – will Balch become more energy efficient?*

The renovation at Balch Hall will target LEED Gold with a site Energy target EUI of 50 kbtu per square foot per year and strive for a stretch target of 36 kbtu per square foot per year. All HVAC systems will be replaced. Additionally, the replaced systems will be designed with low temperature hot water heating (instead of steam) to provide flexibility for future renewable energy solutions. Ventilation loads will be separated from heating and cooling and supplied through a dedicated outside air system with a high efficiency energy recovery system. Existing windows will be thoroughly evaluated and high performance replacement window options will be investigated. Interior wall insulation will likely be added to improve thermal performance of the envelope (WUFI analysis to be completed). High efficiency domestic hot water systems such as drain water heat recovery will also be evaluated.

**Impacts to Energy (pages 169-212)**

*What can you share about window to wall ratio decisions for this project?*

Window to wall ratio for the project varies by building and by location within that building. Larger window areas are strategically placed along ground floors and in other critical areas of resident assembly to encourage interaction and allow transparency and to encourage vibrancy of activity between the indoor and outdoor areas of the project.

Focus has been placed on comparisons of the NCRE buildings with other residential projects’ window-to-wall ratios. At the point that the energy study was conducted and the SEQR documents were submitted, the project design was in the schematic design phase with window-to-wall ratios for the residential portions of

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6 https://www.dec.ny.gov/regulations/56626.html
the buildings at 22%. Since submission, the drawings have continued to be refined and developed. The architectural design, currently at design development level, has a window-to-wall ratio of 17% for the residential portions of the buildings.

As stated above, the buildings, however, are not entirely residential. First floor spaces include a dining hall, assembly spaces and a host of community meeting, social and activity spaces. These spaces benefit from greater transparency and do have more glazing. The overall window-to-wall ratio for the entire project is 31.6%. It is important to note that no single aspect of building design such as this metric determines overall performance. The comprehensive set of design components including high performance window glazing, reduced use of artificial light, high performance roof and wall insulation, highly efficient mechanical systems and electrical components as presented to the planning board yield high performing buildings without compromising the need for daylight and the inherent social and health benefits to residents.

Impacts to Energy (Pages 169-212)

How did you reach LEED Gold?

In order to achieve a LEED Gold Certification, the project is targeting the following points to fit safely within the 60 to 79 point range. Points anticipated to be achieved are listed by LEED category, below.

- Location and Transportation: 14 Points
- Sustainable Sites: 4 Points
- Water Efficiency: 6 Points
- Energy and Atmosphere: 20 Points
- Materials and Resources: 3 Points
- Indoor Environmental Air Quality: 8 Points
- Innovation: 6 Points
- Regional Priority: 2 Points

Impacts to Energy (pages 169-212)

Why not Platinum?

Throughout the iterative design process for the NCRE, the project designers and stakeholders have taken advantage of sound design opportunities to increase the projected LEED certification from LEED silver to a LEED gold level. While additional opportunities to increase the final LEED rating may remain, it is unlikely that LEED platinum will be obtained.
Impacts to Energy (pages 169-212)

What is Cornell’s actual plan for achieving Carbon Neutrality? What plan is in effect for now and renewables in the future?

Cornell’s Climate Action Plan (CAP) and supplemental reports can be found online at
www.climateaction.cornell.edu. The CAP embraces four hierarchical strategies to advance the campus' progress toward carbon neutrality by 2035, 1) Avoid – carbon intensive activities, 2) Reduce – energy use by doing what we do more efficiently, 3) Replace – high carbon energy sources with low carbon energy sources, and finally 4) Offset – with mission-linked actions those emissions which cannot be eliminated.

Key Neutrality Strategies

• Utilize the campus as a living laboratory to demonstrate solutions and accelerate the pace of innovation. Building on the core mission of Cornell in education and research, the CAP acknowledges that Cornell’s ability to mitigate climate change involves engaging students, staff, and faculty in new ways, both on and off campus and prioritizing initiatives that offer the greatest promise of emissions-reducing breakthroughs.

• Integrate a sustainability framework into decision-making:
  • People - Does it meet the needs of people on campus, in the community and in the world?
  • Prosperity - Will it enhance overall prosperity for the campus and our region?
  • Planet - Does it support a sustainable planet?
  • People - Does it help Cornell fulfill its academic mission and purpose?

• Campus engagement programs and campus-wide climate literacy to empower all members of the campus to live and work sustainably. Programs include
  • Green Office, Lab and Event programs and resource
  • Waste and energy reduction competitions
  • Green teams
  • New student and employee orientation programming and resources
  • 20% of course offerings are about sustainability or include sustainability in the syllabus (431 undergraduate, 300 graduate)
  • 50% of students grad from program with sustainability learning outcomes
  • 30% faculty and 85% of research producing departments are involved in sustainability research

• Build and operate high-performance buildings to achieve a 15% reduction in building energy demand. Design and construction standards dictate at least 30% below energy code for new buildings and major renovations, a continuous commissioning program ensures buildings operate efficiently, and the Energy Conservation Initiative invests $10’s of millions to increase the efficiency of our existing building stock.

• Supply 100% of campus energy needs with renewables utilizing Lake Source Cooking, Earth Source Heat, and wind, water, and solar electricity.

• Increase electric vehicle capacity and convert the campus fleet to alternative fuels.

• Develop mission-linked offsetting actions such as supporting development of community solar.
Impacts to Energy (pages 169-212)

Why doesn’t Cornell use more solar?

Information on Cornell’s renewable energy sources and solar farms can be found on page 169 of the SEQR submission. It is elaborated on here.

As a part of campus, NCRE is included in the campus carbon neutrality and 100% renewable energy goals. Cornell is pursuing these goals systematically, prioritizing the most efficient and effective projects. Given the current economic and policy environment, larger scale projects are more efficient and effective in reducing Cornell’s carbon footprint. Cornell will remain vigilant and advocate for opportunities for efficient deployment of rooftop solar for NCRE (and/or other campus buildings) relative to other opportunities.

About 10% of the campus’ net annual electricity is generated by off-site solar farms, rooftop solar, and the campus hydroelectric plant. Cornell is a founding member of the NY Campus Aggregate Renewable Energy Solutions (NYCARES) consortium to pursue hundreds of MW of large-scale renewables. Cornell has also been supportive of a solar developer whose 18MW community solar farm on Cornell land will break ground this fall.
Information on Public Outreach

Response to student comments that indicated there has been no outreach

This project started with Cornell’s 2016 Housing Master Plan, which was a 10-month long process engaging students, staff, faculty, and community members on the status of housing at Cornell and the future needs for campus and the local community. A Working Group consistently met throughout this process, and was made up of representatives across campus, including four students who were elected by their peers into leadership roles (Student Assembly and Graduate and Professional Student Assembly Presidents and the Undergraduate and Graduate and Professional Student Trustees). The independent consultants who led this effort held multiple stakeholder interviews, student focus groups of a variety of cohorts, engaged with the Community Advisory Committee, and analyzed student living off-campus.

Additionally, two student surveys were conducted – 3,900 undergraduates with a 36% response rate and 2,100 graduate and professional students with a 28% response rate. Two open forums for the campus community were held by the consultants in September 2016, and members of the Community Advisory Committee were invited as well. Vice President Ryan Lombardi spoke about the Housing Master Plan at the Tompkins County Housing Summit in December 2016, and in November 2016 Marty Rauker, former senior director of strategic initiatives for Student and Campus Life, presented about the Housing Master Plan at a Town Hall event organized by Cornell’s Student Assembly City and Local Affairs Committee as well as Common Council.

Beyond the extensive research and outreach of the Housing Master Plan, which has informed how the university moves forward, engagement specific to the North Campus Residential Expansion has been conducted as well. Vice President Lombardi and Joe Burke, former director of Campus & Community Engagement, attended a meeting of the Residential Student Congress (a student group at Cornell focused on improving the campus residential community) in October 2017 to tell the group about the project, answer questions and receive feedback. In February 2018 the Residential Student Congress helped organize two open forums for students, at which Vice President Lombardi spoke about the NCRE and sought input from the students on the types of spaces that were being considered in the new buildings. The Residential Student Congress continued this conversation by reaching out and meeting with various residence hall councils at Cornell; the feedback they received was shared with Vice President Lombardi. In August 2018 Vice Presidents Ryan Lombardi and Rick Burgess held an open forum for faculty and staff, during which they discussed the NCRE. Later in August, Vice President Lombardi discussed the project with Cornell’s Faculty in Residence and faculty leaders of Cornell’s West Campus House System.

During 2016 and 2017, Vice President Lombardi (sometimes accompanied by Provost Kotlikoff) made several presentations to the Student Assembly and Faculty Senate on student housing.

Throughout both the Housing Master Plan and North Campus Residential Expansion processes, regular presentations have been given to Cornell’s Board of Trustees, on which serve two elected members of the faculty, two elected students, and one elected staff member. The Student Assembly president and the Graduate and Professional Student Assembly president also attend the Board of Trustees Committee on Student Life meetings, during which many of these presentations were given.

The project team looks forward to continued campus engagement as the project moves forward.
In addition, the NCRE project team has organized and conducted outreach beyond the Cornell community. Below please find a table which lists the public outreach efforts made for the NCRE project. This list is exclusive of public Planning Board Meetings.

<table>
<thead>
<tr>
<th>Date</th>
<th>Meeting</th>
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<tbody>
<tr>
<td>April 10, 2018</td>
<td>Municipal Leaders, Village of Cayuga Heights</td>
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<td>April 19, 2018</td>
<td>Cornell Heights Neighborhood Association</td>
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<tr>
<td>April 24, 2018</td>
<td>Forest Home Neighborhood Association</td>
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<td>May 17, 2018</td>
<td>Municipal Leaders, Village of Cayuga Heights</td>
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<td>June 21, 2018</td>
<td>Tompkins County Planning</td>
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<td>July 5, 2018</td>
<td>Tompkins County Planning</td>
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<td>August 16, 2018</td>
<td>Cornell Heights Neighborhood Association</td>
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<tr>
<td>September 12, 2018</td>
<td>Common Council, City of Ithaca</td>
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<tr>
<td>September 17, 2018</td>
<td>County Legislators</td>
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<tr>
<td>September 20, 2018</td>
<td>Collegetown Neighborhood Council</td>
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<tr>
<td>September 24, 2018</td>
<td>Tompkins County Legislature Planning Development and Environmental Quality Committee</td>
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**Impacts to Public Water Supply (pages 77-82)**

*Is there enough water in Fall Creek?*

Yes. The projected increase in demand is estimated to be 104,000 gallons per day, which equates to one-sixth (1/6) of a cubic foot per second (cfs). During August, the lowest flow month, Fall Creek’s average flow is at 35 cfs. Even during the drought of 2016 flows were 16-25 cfs. The NCRE’s need of 0.167 cfs is not significant.

In addition, Cornell has many tools at its disposal while monitoring the flow of Fall Creek. Cornell continuously monitors the USGS gauging station on Fall Creek, which is available here: [https://waterdata.usgs.gov/nwis/uv?04234000](https://waterdata.usgs.gov/nwis/uv?04234000).

The capacity of Cornell’s Water Filtration Plant is 3.6 MGD while the average daily demand on campus is currently 1.5 MGD (NCRE will add 104,000 gpd).
Impacts to Land (Geotechnical Report, appendix)

Information on DDC Ground Improvement Technique

Deep Dynamic Compaction (DDC) is a ground improvement technique that densifies soils and fill materials by using a drop weight. The drop weight, typically a heavy steel weight, is lifted and dropped onto the footing ground surface to reach a level of required compaction. The ground below is improved by vibrations from the weight. The depth of improvement is determined by the magnitude of the drop weight, the drop height, and the number of drops per point. Drop locations are typically on a grid pattern, the spacing being determined by subsurface conditions, drop weight configuration, and foundation requirements. This method results in depressions at each drop point that need to be backfilled. Typically, the depressions are filled and compacted as work progresses, then the improved area is regraded to design levels and proof rolled. Depending on the end ground use, backfill might consist of on-site spoil or imported structural fill.

This method is not particularly noisy (unlike driving piles with a hammer) and is relatively clean, but the vibrations that improve the subgrade can possibly have adverse effects on nearby structures. Therefore, buildings adjacent to the improvement zone must be monitored to verify that vibrations at the buildings remain below a safe level. Typically a 30 to 50 foot buffer zone is sufficient from adjacent buildings. Based on our current assessment of the soils, construction would anticipate utilizing a 10-ton hammer and a small crane so the vibrations/noise would not be extensive. The vibration issue also applies to certain buried pipes. This will be evaluated and monitored on a case by case basis during construction.

Our current understanding is that the sub-contractor can compact six to eight thousand square feet of building footprint per day, therefore the total number of working days is approximately two months on an interval basis. This two-month period includes all potential DDC work at the sophomore and first-year sites.

Impacts to Transportation (Traffic Study, appendix, page 9)

Response to question regarding possible interventions due to the number of accidents listed at the Pleasant Grove and Jessup intersection.

The following response is from SRF, Traffic Engineers: There were no accident clusters (patterns) identified that would be expected to be altered by intersection treatments. Generally, the threshold is five accidents per year of the same type before improvements to the intersection are considered for implementation. In addition, one accident was a collision with an animal, and intersection improvements cannot prevent this type of accident.

Transportation (Pages 155-156 and Traffic Study appendix)

Response to September 12, 2018 comments from Eric Hathaway, City of Ithaca Transportation Engineer

The applicant must provide analysis showing the capacity of other nearby parking lots to absorb the displaced parking demand from the CC lot.
The average daily parking in the CC Parking Lot is 110 cars, with peaks at around 125. This has been evaluated and verified during the past year by Cornell’s Transportation Services department using license plate recognition (LPR) technology, reviewing real-time parking on site in the morning and afternoon hours. The CC Lot presently hosts staff, faculty and students on a daily basis. Future relocation of parking away from CC Lot is planned as follows: Staff and faculty are eligible to acquire parking permits in the A lot, which peaks at 80% daily occupancy, leaving approximately 140 spaces available on any given day. Student parking will be relocated to Hasbrouck Apartments that has daily availability (at a minimum) of 200 spaces. In addition, some maintenance service operations are being relocated off North Campus in the coming year, which will yield additional availability.

The applicant must quantify the number of parking spots to remain in the vicinity of the proposed housing sites and provide calculations for the reasoning for the number of spaces provided.

Please refer to pages 159-161 in the Review Application Report binder and page 11 of the Traffic Study report.

The applicant must meet with TCAT and Ithaca Carshare and bike share representatives to discuss strategies to encourage usage of these services to reduce vehicular trips associated with the proposed development. Documentation of these conversations must be provided for City review.

Representatives from Cornell’s Transportation Services department are active members of both the Ithaca Carshare board of directors and TCAT board of directors. They attend regular and special meetings of these boards and are actively engaged in strategic and operational transit and alternative transportation planning. Presently, Cornell is monitoring and evaluating the feasibility of the dockless bikeshare program as a viable alternative transportation solution for campus. All alternative transportation conversations are on-going.

The applicant must supply the manual turning traffic counts data (including existing pedestrian counts) and Synchro worksheets for review. It is likely that a sampling of pedestrian traffic volume counts will be required in the Fall to verify the numbers collected in February.

The worksheet data requested has been supplied to Mr. Hathaway.

Midday traffic analysis and light meter analysis must be provided for the following intersections:
- Triphammer/Wait
- Wait/Thurston (east)
- Thurston/Credit Farm
- Thurston/University/Forrest Home/East Ave

It is our understanding that this data will help in determining what the best future updates to this intersection would be. This data may be retrievable from the video taken during the traffic counts and we will investigate getting it. We suggest that this is a site plan review issue, as the project moves forward into detailed design.
The applicant must provide analysis for the number of assumed service vehicles to access the proposed sites.


The applicant must investigate designing improvements to enhance pedestrian safety along the corridor between the intersection of Triphammer Road/Wait Avenue and University/Forrest Home/Thurston.

Please refer to page 166 in the Review Application Report binder. Cornell has committed to working on a solution here in coordination with the City.

The applicant must provide further details regarding the data used to assume the percentage of freshman and sophomore students that bring a vehicle to campus.

The data are based on the number of permits purchased. Below is a chart which lists the actual number of parking permits purchased by students broken out by year and totaled for undergraduates. This chart has already been provided (see September 17, 2018 additional information letter)

<table>
<thead>
<tr>
<th>Student Year</th>
<th>2018-2019 Academic Year</th>
<th>2017-2018 Academic Year</th>
<th>Percentage of 2017 Student Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year</td>
<td>112</td>
<td>105</td>
<td>3%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>270</td>
<td>271</td>
<td>7%</td>
</tr>
<tr>
<td>Junior</td>
<td>187</td>
<td>186</td>
<td>5%</td>
</tr>
<tr>
<td>Senior</td>
<td>194</td>
<td>166</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total Undergrad</strong></td>
<td><strong>763</strong></td>
<td><strong>728</strong></td>
<td><strong>5%</strong></td>
</tr>
</tbody>
</table>

The applicant must clarify how parking occupancy varies throughout the day in the CC lot.

Parking in the CC lot is nearly static. Most staff, faculty, and students park for the day in this parking lot. Some Cornell service vehicles leave from this lot to respond to a campus need and return to this parking lot during the same day.

The applicant must verify their methodology for increasing pedestrian volumes levels in future analysis based on anticipated growth from the development.

Pedestrian volumes are envisioned to follow current mode split patterns of North Campus residents, whereby on a given day 57-80% of North Campus residents (and staff/faculty who utilize North Campus pedestrian facilities) travel by foot to the rest of campus. Projecting for 2000 new beds in this residential community means expecting approximately 1,110-1,600 additional pedestrians daily.

The applicant must provide strategies on how to prevent relocated parking demand from impacting local residential neighborhood parking demand in the vicinity of the proposed site.

The relocated parking demand will primarily be located in the A lot, which is free of charge and closer to the primary campus destinations than any local neighborhood. This is especially true as A lot is also directly serviced by TCAT with routes that circulate through campus.
Local residential neighborhoods may also choose to implement an enforceable residential permit program.

The study states that some of the roadways in the study area would be more appropriately signed for 25 miles per hour instead of 30. Specific analysis should be provided to verify this assumption.

The assumptions are based on the recommendations from the Vision Zero Initiative, a multi-national road traffic safety project that aims to achieve a highway system with no fatalities or serious injuries involving road traffic and pedestrian conflicts. A reduction from 30mph to 20mph reduces risk from 40% to 10%. 25mph is the least amount of a decrease possible without legislative action. A five mph reduction reduces the severity and fatality of traffic crashes and saves lives. [https://visionzeronetwork.org/pioneering-study-affirms-vision-zero-focus-on-speed-management/](https://visionzeronetwork.org/pioneering-study-affirms-vision-zero-focus-on-speed-management/)

Example of campaign to the right:

The applicant must upgrade the following sections of sidewalk and curb ramps per ADA standards to accommodate the increased pedestrian demand:

- An ADA Ramp is needed at Wait Ave and Triphammer Rd Intersection on the east side.
- The sidewalk along Wait Ave 300 block on the east side has surface defects on approximately 10% of the sidewalk.
- The 100 block of Triphammer Rd between Wait Ave and Sisson Pl. has a 4 foot wide broken sidewalk-this should be replaced with a 5 wide sidewalk.
- Curb ramps on Triphammer Road crossing Sisson Pl intersection lacks detectable warnings on the curb ramps.
- The sidewalk network on the east side of the 100 block of Triphammer Rd between Sisson Pl. and Jessup Rd must be completed.
- At the Jessup Rd. and Triphammer Rd. intersection, 4 new ADA ramps are needed.

Per the transportation analysis, the NCRE should not be driving pedestrian traffic toward the periphery of North Campus and beyond. Therefore, the new development not expected to increase pedestrian trips in some of these areas, nor are they utilized by residents of North Campus. Some of the sidewalk routes listed here are used primarily by pedestrian trips generated from Cornell Heights community and Village of Cayuga Heights.
Sidewalks and ADA upgrades at the Thurston Avenue Bridge/Cradit Farm Drive/Wait Avenue, while not designed yet, are already included in the project. Please refer to page 166 in the Review Application Report binder. Cornell has committed to working on a solution here in coordination with the City.

*Sight distance analysis must be provided at the proposed driveway onto Triphammer Road.*

On the pages following, please find site distance analysis from SRF.

*The applicant must provide a discussion of the proposed bike parking strategy for the proposed site.*

Bicycle racks and repair station locations are shown in the drawing set on Layout Sheets L2.01 through L2.06.
September 17, 2018

Ms. Kimberly Michaels, RLA, LEED AP  
Principal  
Trowbridge Wolf Michaels Landscape Architects LLP  
1001 West Seneca Street, Suite 201  
Ithaca, NY 14850

RE: Proposed North Campus Residential Expansion  
City of Ithaca, Town of Ithaca, Village of Cayuga Heights, NY  
Sight Distance Evaluation Technical Letter

Dear Ms. Michaels:

The purpose of this technical letter is to provide a sight distance assessment related to the referenced project. This letter describes the results of the sight distance evaluation performed at the proposed access driveway location along Triphammer Road. The following outlines the results of the assessment.

**SIGHT DISTANCE EVALUATION**

Sight distance was investigated at the proposed access driveway location along Triphammer Road. Sight distance is provided at intersections to allow drivers to perceive the presence of potentially conflicting vehicles. This should occur in sufficient time for a motorist to stop or adjust their speed, as appropriate, to avoid a collision at the intersection.

Sight distance is also provided at intersections to allow the drivers of stopped vehicles a sufficient view of the intersecting highway to anticipate and avoid potential incidents. If the available sight distance for an entering or crossing vehicle is at least equal to the appropriate Stopping Sight Distance (SSD) for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions. To enhance traffic operations, Intersection Sight Distances (ISD) that exceed stopping sight distances are desirable along the major road.

A Policy on Geometric Design of Highways and Streets 6th Edition (2011), published by the American Association of State Highway and Transportation Officials (AASHTO), was used as a reference to establish the required SSD and desirable ISD for the proposed access driveway location.

Required SSD and desirable ISD are based on the design speed for a given section of roadway; generally, the design speed is the posted speed limit plus 5 MPH. In this case, the posted speed limit at the proposed access driveway location is 30 MPH. Hence a design speed of 35 MPH was used. It is noted, however, that actual speeds are likely lower than the posted speed limit as a result of roadway geometrics and constraints (i.e. grades and curves). The required SSD and desirable ISD based on the design speeds are shown in **Table I**.
### TABLE I: SIGHT DISTANCE EVALUATION

<table>
<thead>
<tr>
<th>DIRECTION OF STUDY</th>
<th>POSTED SPEED LIMIT(^1)</th>
<th>DESIGN SPEED(^1)</th>
<th>REQUIRED SSD(^2)</th>
<th>DESIRABLE ISD(^2)</th>
<th>AVAILABLE SIGHT DISTANCE(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Looking Left</td>
<td>30</td>
<td>35</td>
<td>250</td>
<td>390</td>
<td>288± SSD 302/353± ISD</td>
</tr>
<tr>
<td>Looking Right</td>
<td>30</td>
<td>35</td>
<td>250</td>
<td>390</td>
<td>260± SSD Obstructed ISD</td>
</tr>
</tbody>
</table>

Notes:
1. Speeds in MPH.
2. Distances in feet.

Looking left from the proposed access driveway location, the required SSD is satisfied. However, the desirable ISD is limited beginning at 302 feet. Views are intermittently obstructed until 353 feet because of the stand of trees along the west side of Triphammer Road between the properties of 110 and 118 Triphammer Road (all photographs are included as an Attachment to this letter).

Looking right from the proposed access driveway location, the required SSD is satisfied. However, the desirable ISD is completely obstructed by vegetation and a roadside slope.

**CONCLUSIONS & RECOMMENDATIONS**

Based upon current conditions, recommended mitigation includes removing and maintaining any brush and foliage along the sight lines to ensure maximum visibility within the project site's property boundaries. Depending on the right-of-way and geotechnical feasibility, consideration should be given to re-grading the roadway slope looking right of the proposed access driveway location. Intersection warning signage (Manual on Uniform Traffic Control Devices, W2-2) should be installed in advance of the proposed access driveway location approaching from both directions.

If you have any questions or require additional information, please do not hesitate to contact our office.

Very truly yours,

SRF Associates, D.P.C.

Amy C. Dake, P.E., PTOE
Senior Managing Traffic Engineer

Attachments: Exhibit Photographs

ACD/dk

S:\Projects\2018\38008 Cornell North Campus Student Housing\Sight Distance Photos\Proposed Driveway at Triphammer Road - Sight Distance - 09-17-18.docx
Letter to
Ms. Kimberly Michaels, RLA, LEED AP
Trowbridge Wolf Michaels Landscape Architects LLP

Proposed North Campus Residential Expansion
Sight Distance Evaluation Technical Letter

City of Ithaca, Town of Ithaca, Village of Cayuga Heights
Tompkins County, New York
Exhibit Photographs
Proposed North Campus Residential Expansion

Note: Yellow circle denotes proposed access driveway location

Looking right from proposed access driveway location

Roadway slope and vegetation to the right of the proposed access driveway location

Looking at the proposed access driveway location from the left, Stopping Sight Distance location

Looking at the proposed access driveway location from the left, treeline between 110 and 118 Triphammer Road
APPENDIX: CALCULATING UPSTREAM METHANE LEAKAGE IMPACTS

General Assumptions

These calculation methods rely on the following basic assumptions:

Assumption 1: Methane leakage is proportional to methane usage. Measured leakage rates vary widely from site to site and leakage rates depend on numerous local factors, including the design, construction, and operation of infrastructure from well site to point of final use. Since such details are never available in full, the assumption is made that methane leakage or emissions are a fixed proportion of total methane used.

Assumption 2: Methane leakage impacts are compared to CO₂ impacts from combustion using a 20-year timeframe using a “global warming potential” multiplier of 86. The value of 86 represents Dr. Howarth’s estimated relative impact per unit weight of methane compared to an equivalent weight of carbon dioxide. The 20-year timeframe is chosen based on the assertion that reduction of methane in the short term is a critical component to fighting climate change. Using this shorter timeframe contrasts with the 100-year timeframe typically used for CO₂ emissions by the International Panel of Climate Change (IPCC) and others.

Assumption 3: Leakage rates are constant. As a result of the research and outreach of Dr. Howarth, Dr. Ingraffea, and others, the impact of methane leakage is better recognized today than it was prior to those efforts. In response to this recognized concern, there have been a number of initiatives to reduce leakage at its sources: drill pads, transmission mains, compressor stations, distribution lines, and end-use facilities (not to mention landfills, farms, etc.). Both at the State and Federal levels, programs are now in place to better communicate, track, and resolve methane leakage and methane emission at the source (although it has been reported that the USEPA is looking to “roll back” proposed regulations). Recently, a consortium of some of the largest energy companies on earth have pledged to reduce methane emissions to 0.25% of total gas production within the next decade. However, our estimates do not account for any assumed improvement in leakage rates will occur.

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7 Some argue that the 100-year timeframe, for which methane’s relative climate impact is smaller (about 25), is more appropriate to consider, since direct CO₂ impacts will extend across generations. Using a 20-year timeframe results in higher estimates of leakage impacts.


Specific Assumption: Leakage Rates

Upstream methane leakage (as a percentage of natural gas use) is difficult to measure and varies with location. Wide ranges of estimates are found in the literature. For our analysis, results are shown using a value selected by Dr. Howarth, a Cornell employee.

To provide appropriate context, we also note two different estimates, from other sources.

Alternative Leakage Estimate 1: NYSERDA’s approach

New York State’s Energy Research and Development Authority (NYSERDA) periodically provides an estimate of statewide GHG emissions based on its comprehensive energy data. NYSERDA’s estimate acknowledges and includes methane emissions, but only those that are released within New York State (i.e., emissions that NYS can reasonably regulate and help control). NYSERDA is not explicit about their calculation methods. However, they provide the following estimates of total GHG impact from CO$_2$ and from “upstream gas leakage” as follows:

- Total impact from Natural Gas (Methane) Combustion: 74 MMT CO$_{2e}$
- Total impact from Methane Leakage: 2.2 MMT CO$_{2e}$

Thus, NYSERDA reports the overall GHG impact of upstream methane emissions as $\frac{2.2}{74} = 3.0$ percent of CO$_2$ combustion emissions. As noted above, NYSERDA implicitly represents this as the in-State emissions, which are those that NY can reasonably monitor and control, and does not include emissions outside the State and thus outside NYS’s control.

Alternative Leakage Estimate 2: Consensus Research Estimate

A recent (2018) paper co-authored by 25 researchers$^{10}$ representing 16 U.S. research and policy centers estimated that total methane leakage rates are approximately 2.3% of total methane production. Unlike NYSERDA’s figure, this 2.3% includes leakage from borehole to final use. This figure significantly exceeded a former USEPA estimate of 1.4%.

Assessment Based on Howarth Estimate

Dr. Robert Howarth continues to study and refine his estimates of methane leakage based on available data, and recently (September 2018) provided Cornell staff with his latest estimate: 5.1%. Like Alternative Leakage Estimate 2, this estimate includes a broad “boundary” (from well to final combustion) rather than just emissions within NYS (as is the case with the NYSERDA estimate). To compute the impact of leakage based on Howarth’s estimate, Cornell staff used the same calculation methods previously recommended by Howarth of Cornell University. As noted previously, we use this method in the absence of established protocols, because consensus protocols do not exist either in SEQR guidance documents or in NYSDEC’s referenced assessment tools.

$^{10}$ http://science.sciencemag.org/content/early/2018/06/20/science.aar7204
Calculating these “upstream leakage emissions” essentially adds a multiplier to all prior GHG estimates that included only site emissions (mostly CO₂). Using Howarth’s methodology and the above assumptions, the factors are calculated as follows:

\[ \text{ADD\%} = \frac{1}{1-L} \times L \times 86 \times \left(\frac{16}{44}\right) \]

Where:
- \( \text{ADD\%} = \) Percent of Additional GHG Impact from Upstream Methane Leakage (compared to prior figures based on site combustion only)
- \( L = \) Upstream Leakage (percentage expressed as a fraction)
- \( 86 = \) Global Warming Potential factor (relative to CO₂)
- \( \left(\frac{16}{44}\right) = \) Molecular Weight Correction Factor to convert CO₂ to CH₄

Applying this factor (“ADD\%”) to the prior calculations of GHG emissions provides an estimate of the total GHG impact from “upstream methane leakage”. Note that the first element of this equation \( \frac{1}{1-L} \) means that this estimate is a percentage of an approximate estimated amount of gas extracted, rather than a percentage of final measured gas used at the receiving facility. Stated otherwise, this means that the assumed 5.1% leakage figure equates to 5.4% of the final volume of methane received at the combustion site.

**Results**

Table 1 demonstrates how the Howarth leakage estimate impact each of the emissions estimates. Table 2 and Figure 1 show in tabular form and as a visual graphic, respectively, how those estimates compare to the figures originally provided in the project submittal by Taitem. Table 3 and Figure 2, respectively, show in tabular form and as a visual graphic how these estimates compare to the figures provided in the September 17, 2018 response and clarification letter provided to the Town of Ithaca Planning Board. Assumptions used set of calculations were listed in those prior documents.

**Table 1: Upstream Methane Impacts as Percentage of CO₂ GHG Impacts from Natural Gas Combustion**

<table>
<thead>
<tr>
<th>Leakage Estimate Basis</th>
<th>ADD%</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1% methane leakage, per Howarth personal communication, 2018</td>
<td>168%</td>
</tr>
</tbody>
</table>

*ADD\% = Upstream Methane Emissions as a % of Base Emissions*
Table 2: Upstream Methane Emissions GHG Impacts Applied to Taitem Estimates

<table>
<thead>
<tr>
<th></th>
<th>Site GHG Emissions (MT CO₂e/yr)</th>
<th>Additional Upstream GHG Emissions (MT CO₂e/yr) using Howarth Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project as Proposed</td>
<td>2,296</td>
<td>3,857</td>
</tr>
<tr>
<td>Project with Air Source Heat Pumps</td>
<td>3,230</td>
<td>5,426</td>
</tr>
<tr>
<td>Project with Ground Source Heat Pumps</td>
<td>3,034</td>
<td>5,097</td>
</tr>
</tbody>
</table>

Figure 1: Upstream Methane Emissions GHG Impacts Applied to Taitem Estimates
Table 3: Upstream Emissions applied to CU Estimates (from prior supplementary letter)

<table>
<thead>
<tr>
<th>Project Proposal</th>
<th>Site GHG Emissions (MT CO₂\textsubscript{eq}/yr)</th>
<th>Additional Upstream GHG Emissions (MT CO₂\textsubscript{eq}/yr) using Howarth Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Proposal: Cornell CHP &amp; LSC</td>
<td>2,100</td>
<td>3,528</td>
</tr>
<tr>
<td>Boiler and Chiller with Grid Gas and Electric</td>
<td>2,600</td>
<td>4,368</td>
</tr>
<tr>
<td>GSHP with grid electric</td>
<td>2,500</td>
<td>4,200</td>
</tr>
<tr>
<td>ASHP with grid electric</td>
<td>2,600</td>
<td>4,368</td>
</tr>
<tr>
<td>GSHP w/CHP elect (no heat use)</td>
<td>3,000</td>
<td>5,040</td>
</tr>
<tr>
<td>ASHP w/CHP elect (no heat use)</td>
<td>3,200</td>
<td>5,376</td>
</tr>
<tr>
<td>GSHP for heat, LSC for cooling, Grid Elect</td>
<td>2,300</td>
<td>3,864</td>
</tr>
<tr>
<td>GSHP for heat, LSC for cooling, CHP elect (no heat use)</td>
<td>2,700</td>
<td>4,536</td>
</tr>
</tbody>
</table>

Figure 2: Upstream Emissions applied to CU Estimates (from prior supplementary letter)
NCRE
Additional Materials

To: Chris Balestra, Planner
Town of Ithaca

October 12, 2018

Chris,

Enclosed please find responses to questions from the Planning Board from their October 2nd meeting. Included in this package you will find:

1. Responses to questions about the stormwater management plan
2. Responses to questions about energy

If you need anything else, please do not hesitate to ask. As always, thank you for your advice and assistance.

[Signature]

Kimberly Michaels
Principal

Cc: Brent Cross, Village of Cayuga Heights
Lisa Nicholas, Town of Ithaca
Stormwater (pages 75-77)

A board member asked for more information about the management of stormwater, particularly as it relates to the portion of the run-off which will be discharged to Beebe Lake, a fifth order stream.

The stormwater management strategy is described in detail on pages 75-77.

The stormwater management systems are designed to and will be required to comply with NYSDEC regulations.

As described in the SEQR materials, a portion of the site run-off (first-year student site) will discharge to Beebe Lake, a 5th order stream. The NYSDEC stormwater design standards and general permit allow quantity increases to run-off on sites that discharge to a fifth order stream or larger. The primary reason for this is that the peak flows in these larger streams occur much later in time than the peak discharge from the site. Due to the large offset in time-to-peak between the site and the creek, increases in discharge from the site will not increase the peak flow rates in the larger stream. Detention of runoff on the site would tend to bring the two peaks closer together. A good illustration of the concept is the recent flooding in the Carolinas. Localized flooding happened during the storm event, however, the large generalized flood events (associated with stream bank overtopping), occurred as much as two to three days later than the storm. Peak discharges from individual sites typically occur during very short-duration high-intensity storms that are local to the site, whereas peak flows in the larger creek typically occur during more general widespread storm events. In other words, a 100-year storm event on the site will likely not coincide with a 100-year storm event for the stream.

Compared to the 128-square mile Fall Creek watershed, the project will disturb about 25 acres or 0.04 square miles which equates to about 0.03%, three one-hundredths of a percent of the watershed.

Furthermore, The 10-, 50-, 100- and 500-year peaks for the Fall Creek watershed at Cayuga Lake have been estimated by FEMA to be 5,920 cubic feet per second (cfs), 8,950 cfs, 10,430 cfs and 14,400 cfs, respectively. Based on the current hydrologic calculations our civil engineer estimates the peak rates of runoff discharging to Fall Creek directly from subareas four and five will increase by approximately seven cfs, from 65 cfs to 72 cfs, during the 10-year storm, and approximately eight cfs, from 143 cfs to 151 cfs, during the 100-year storm. It is not expected that the quantity or timing of the volumes of run-off from this project will damage downstream structures.

Relative to water quality, the project will employ bioretention filter practices throughout the site to provide treatment for runoff from over 7.5 acres of the impervious areas on the site. The practices target higher polluting parking areas, loading docks and vehicular drives but will also treat runoff from lower polluting pedestrian paths and roofs. In addition to quality treatment, the bioretention filters will also provide runoff reduction volume through infiltration, evaporation and transpiration. The infiltration provided by the practices will increase the recharge of groundwater on the site and help to reduce the volumes of runoff especially during smaller storm events. To increase the amounts of runoff reduction volume provided, most of the filter practices are oversized relative to the minimum required for quality treatment.
Energy Impacts

A request to contextualize 42 Billion BTU of Energy a year. How many homes in Tompkins County is that equivalent to?

The energy study by Taitem Engineers (Table 11, page 205 of the SEQR document) lists the NCRE energy use for heating, hot water, cooling and electricity to be 42,445 MMBtus per year.

The Tompkins County Energy Roadmap, (March 2016 Tompkins County Planning Department), estimates the annual residential energy use in Tompkins County at 34 MMBtu per person and 91 MMBtu per household.

Thus, the energy use as estimated for the NCRE residential facilities (which included residences, social spaces, dining facilities, and other residential amenities for 2000 students) is equivalent to the following:

- The average residential use of 1248 persons in Tompkins County
- The average residential use of 466 households in Tompkins County

A request to explain the physical realities of and imbedded energy involved in the additional infrastructure necessary to use heat pumps for the project. Cornell was asked to estimate the “embedded carbon emissions” for an “optional design” that would utilize heat pumps for heating NCRE buildings.

The calculation of embedded carbon emissions is not included in the standard NYSDEC guidance on GHG emissions calculations for proposed projects under SEQR, which is generally focused on site-specific impacts. Thus, there is no NYS SEQR guidance or standard for such calculations in those guidance documents. To provide a reasonable calculation, Cornell utilized the following assumptions:

- The general arrangement and equipment space allocation for heat pumps is estimated based on a scaled-up version of the systems used in Cornell’s recent construction at the Bloomberg Center building in NYC. This facility was an all-electric building that used ground source heat pumps. However, the central plant can be connected to a cooling tower such that the choice of air or ground source are both possible for this arrangement.
- The GHG emissions calculations were based on the on-line embedded GHG emissions calculator found at this URL: [http://buildcarbonneutral.org/](http://buildcarbonneutral.org/). This is the calculator referenced in the original Taitem report and used by Taitem as a check for embedded carbon impacts described in the original proposed project submittal.

Calculations

The Bloomberg Center at Cornell NYC Tech is used as a proxy for this estimate. Heat pump system sizing is based on peak heating load.
For the Bloomberg Center, the modeled peak heating load was approximately 4,320 MBH. The total mechanical and associated electrical room space required for the heat pump equipment was about 1800 square feet (~24 x 50 room plus ~600 SF cooling tower). This was a rather “tight” mechanical room (in terms of physical space).

For the NCRE, the modeled peak heating load is about 19,000 MBH, or about 4.4 times the heat load (NYC is more temperate and the building was smaller). While the NYC mechanical space was very tight, some modest economy of scale is assumed. Thus, the total building and cooling tower space is estimated to be as follows:

- For a ground source (geothermal exchange) heat pump solution, the required additional building space would approximately scale up – to about 1,800 x 4 = 7,200 square feet.
- An air source heat pump solution also must account for the lower coefficient of performance (COP) of the equipment. From the manufacturer’s data, the COP for creating our 130°F design temperature using exchange with a design low temperature of 0°F would be less than half (~1.7 versus ~3.4 for 55°F ground temperature). Therefore, either a resistance heating override (COP = 1.0), or significantly oversized units or more modular units would be needed to meet peak demand, which occurs on the coldest day. For the purpose of this calculation only, it is assumed the design is to oversize modular units by a factor of 2 (and use resistance heating supplement) to represent this loss in performance, such that the system will require twice the space of a ground source heat pump solution. Thus, for the purpose of the calculations we assume space needs in this case would be approximately 14,400 square feet.

Using this basic data, the on-line calculator is used to estimate the embedded emissions, as shown in table below. A cut and paste of the on-line calculator is included at the end of the section.

**Table 1: Embedded Emissions Estimates for Facilities with Heat Pumps**

<table>
<thead>
<tr>
<th>Type of Heat Pump</th>
<th>Building Square Feet</th>
<th>(Additional) Estimated Embedded Energy for Heat Pump Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Source</td>
<td>7,200</td>
<td>375 metric tons CO&lt;sub&gt;2&lt;/sub&gt;</td>
</tr>
<tr>
<td>Air Source</td>
<td>14,400</td>
<td>185 metric tons CO&lt;sub&gt;2&lt;/sub&gt;</td>
</tr>
</tbody>
</table>

Impacts acknowledged but not calculated

The calculation above only considered embedded energy for building facilities to house the heat pump systems. Other potential impacts for this alternate include the following:

- Ground source heat pumps (GSHPs) require a well field. Bloomberg Center required 80 vertical well bores to provide for peak and seasonal heating load. The Cornell site may provide more or less thermal capacity based on soil types, subsurface temperatures, and similar factors. Scaling up proportionally based on peak load, it is assumed that approximately 352 boreholes would be required for this project. Since a hole spacing of 20’ x 20’ is required to mitigate thermal impacts between wells, this would extend construction impacts over an additional land use of about 140,000 square feet (3.2 acres).
The installation of the GSHP boreholes (typically about 500 feet deep) would typically require about one drill rig day per hole (i.e., 352 days with 1 drill rig or 176 days with 2 rigs, etc.). Drill rigs are typically diesel-driven (direct source of emissions), noisy, and result in significant short-term impacts to local groundwater (in NYC, the subsurface water was not fresh water but saline intrusion from the East River, an estuary of the Atlantic Ocean). Based on Cornell’s experience in NYC the borehole field alone would add over $7,000,000 to the project cost. These environmental, social, and fiscal impacts have not been assessed.

Heat pump systems require the use of refrigerants, many of which are potent GHG chemicals. Some have GHG potentials that are thousands of times more potent than CO₂. Although efforts are underway to develop and require refrigerants with less potent GHG emissions, refrigerant leakage remains a significant GHG concern. GHG totals here do not include estimates of fugitive refrigerant emissions.

Heat pumps of this scale require significant electrical power at peak. For air source heat pumps at peak load, assuming a COP near 1 on the coldest day of the year (i.e., resistance heating override), the delivery of 19,000 MBH of heat (peak load as calculated by the project engineer) could require a peak electrical load of 5.6 MW. Whether connected to Cornell electric or the grid, this peak would likely require local capacity upgrades. A well-designed ground source heat pump system will have a lower peak electrical load (approximately 2 MW), but this will still more than double the existing NCRE modeled peak electrical load and may also impact existing infrastructure.

---

Source Documentation (cut & paste of calculator results from referenced calculator website)

Result 1: Ground Source Heat Pump Building (not including well field)

Approximate net embodied CO₂ for this project is **184 metric tons**.

<table>
<thead>
<tr>
<th>Your Entries</th>
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<tbody>
<tr>
<td>Total Square Feet</td>
</tr>
<tr>
<td>Stories Above Grade</td>
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<tr>
<td>Stories Below Grade</td>
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<tr>
<td>System Type</td>
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<tr>
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<tr>
<td>Existing Vegetation Type</td>
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<tr>
<td>Installed Vegetation Type</td>
</tr>
<tr>
<td>Landscape Disturbed (SF)</td>
</tr>
<tr>
<td>Landscape Installed (SF)</td>
</tr>
</tbody>
</table>

Construction Carbon Calculator formula version 0.03.5, last updated 2007.10.11. These results are an approximation. Your actual carbon footprint may vary. See assumptions for more information.

Result 2: Air Source Heat Pump Building

Approximate net embodied CO₂ for this project is **375 metric tons**.

<table>
<thead>
<tr>
<th>Your Entries</th>
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<tbody>
<tr>
<td>Total Square Feet</td>
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<tr>
<td>Stories Above Grade</td>
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</tr>
</tbody>
</table>

Construction Carbon Calculator formula version 0.03.5, last updated 2007.10.11. These results are an approximation. Your actual carbon footprint may vary. See assumptions for more information.
Dear Ms. JoAnn Cornish,
Director of Planning & Development, City of Ithaca

Dear Ms. Susan Ritter,
Director of Planning, Town of Ithaca

Dear Mr. Brent Cross,
Village of Cayuga Heights Engineer

My name is Kianna Early and I am currently a first-year law student at Cornell. I completed my undergraduate degree at Cornell as well. During my undergraduate career, I was a member of Residential Student Congress (RSC), performing various positions on the executive board, including President. Residential Student Congress represents all residents on Cornell’s Ithaca Campus. Each residence hall sends up to two representatives to sit on the Congress and have the opportunity to represent their hall’s interests. Our mission is to advocate for the interests of the residential student body and provide a safe and comfortable living environment for students.

In that capacity, I worked extensively with the Vice President of Student and Campus Life, Ryan Lombardi, and Project & Communications Coordinator, Tiffany Robertson. We met several times, in the past two years, to discuss the North Campus Residential Expansion in the past two years. I met with every residence hall council to get their opinions on various aspects of the plan and then shared this information with Ryan and Tiffany. Further, Ryan and Tiffany attended a Residential Student Congress meeting to get feedback from our elected representatives in October of 2017. The entire meeting was devoted to getting feedback from our representatives. RSC and the Vice President’s office also jointly hosted campus-wide forums to elicit additional student feedback on the design of the buildings. Finally, I know several other
groups that Ryan and Tiffany met with, including the Student Assembly and the University Assembly.

I would also like to address to how sorely needed this housing is. Cornell has had a deficiency in their housing stock for almost a decade. Cornell’s guarantee for housing to be provided to all first-years and sophomores is not possible, as there are more students enrolled in those classes than beds available. One of the most important aspects of having a successful career at Cornell is having a good living situation. As there is not enough housing for all students, some students are placed in rooms that are overcrowded or in residence halls that are in dire need of renovation. This plan is two-fold: to increase the number of beds available by building new residence halls and renovating already existing buildings. The housing plan has been in the works for almost three years and students have been asked to give input since the very beginning. The administration has been very particular about the design and ensuring that students will enjoy their experience in the new residence halls. Every student I have talked to about the new buildings in my time at Cornell is extremely excited about the prospect and reiterates how much the housing is needed. I urge the board to allow the plan to move forward as any delay, would most likely delay the opening of the buildings for a full academic year. Thank you for your consideration.

Sincerely,

Kianna Early
City of Ithaca Planning & Development Board

From: Brian Eden

Re: Comment on the North Campus Residential Expansion Project

October 22, 2018

Dear Planning & Development Board Members,

At the outset of my comment, I wish to acknowledge Cornell’s major achievements to date in adopting sustainability practices and establishing a goal of carbon neutrality by 2035. My comments here are directed specifically to the application that is now under consideration by the Board.

The North Campus Residential Expansion will be the largest development project in Tompkins County in the past decade. The decision before you has serious implications for achieving the Town’s and County’s greenhouse gas emission reduction goals. Cornell is apparently committed to heating exclusively with methane for the next 10-15 years until the experimental Earth Source Heat project may (or may not) be online. Therefore, the energy performance of the building becomes a critical consideration in mitigating the projected greenhouse gas emission impacts.

I will address here only my concerns with building energy performance. Cornell states that the proposed buildings modeled energy use is ~30% better than the latest state energy code standard”. Given the rapidly accelerating pace of climate change, existing energy codes are not the best measure to evaluate a building’s energy performance to achieve the needed reduction in greenhouse gas emissions. Cornell’s design standard for the proposed buildings is LEED. To maximize a building’s energy performance, it is far better to model a Passive House design. Passive House building comprises a set of design principles used to attain a quantifiable and rigorous level of energy efficiency. Such a building is designed and built in accordance with these building-science principles: employs continuous insulation throughout its entire envelope without any thermal bridging; the building envelope is extremely airtight, preventing infiltration of outside air and loss of conditioned air, employs high-performance windows
(double or triple-paned windows depending on climate and building type) and
doors, uses some form of balanced heat- and moisture-recovery ventilation, and
uses a minimal space conditioning system. Each of these principles has an
associated performance metric. Passive House building principles can be applied
to all building typologies – from single-family homes to multifamily apartment
buildings, offices, and skyscrapers. Cornell did not model a Passive House design
for the North Campus buildings. Case studies indicate that such higher performing
buildings may be constructed at a relatively similar cost to that of a LEED designed
building. I previously provided the 2 dorm comparison from Emory and Henry
College where the Passive House dorm substantially out-performed the LEED
dorm while having been constructed with a lower per square foot cost.

Recently Andreas Benzing, President of New York Passive House, visited
Ithaca to meet with interested persons. He distributed a booklet “From Small to
Extra Large: Passive House Rising to New Heights”. It lists 51 new construction of
and renovation to Passive House building standards in NYS. You may be familiar
with the House at Cornell Tech. There are several other such multi story buildings
Passive House buildings in NYC. This past summer I attended the Low Income
Forum on Energy in Albany. I sat in on a presentation on the Passive House
designed Corona Senior Residence and later talked with the architect. The
building was built by a nonprofit organization whose clients had been displaced
by Superstorm Sandy. The organization decided to construct a building whose
resilience and engineering design would maximize the potential for residents to
shelter in place during power outages or extreme weather events, reducing the
adverse impacts on comfort and health that vulnerable populations can
experience during relocation. Constructing for the needs of seniors added some
complexity to the project. It became even more challenging when they added a
daycare facility on the first floor.

I’ll not be too sanguine about the challenges that constructing to a Passive
House standard presents to a developer. It requires an integrated design process.
This entails close coordination and cooperation among all the parties; developer,
architect, engineer, and general contractor, a condition rarely found during a
traditional construction process. I have previously submitted a comparison of
dorms constructed at Emory and Henry College in approximately the same time
period; one to LEED design standards and the other to Passive House. The Passive
House dorm was constructed at a lower per square foot cost while achieving much better energy performance metrics. Here is another example of a Passive House designed dorm.

Greenhouse Dorm (Vienna, 2015)

For economic reasons, the building had to be implemented in concrete construction with a full thermal protection facade. By an alternative development proposal, deviating from the original requirements of the master plan, a more compact structure could be implemented, which reduces the built-up area, at the same time ensures better tanning of the occupant rooms on the courtyard side and offers more living space and less development areas for the same area.

The compactness of the structures and the clear structural design grid across all floors, the use of semi-finished parts, prefabricated elements and floor slabs in the shell construction as well as the space-optimized development system allow for moderate construction costs despite high equipment quality and excellent energy values. Professional quality assurance and process support in the execution planning as well as in the construction work by the project management contributed significantly to the sustainability.

The rainwater is seeped through infiltration baskets in a core of the earth at the site. The water consumption is reduced by flow restrictors and by fittings with extended cold water range, as the requirement for hot water in dormitories is above average, significantly reduced.

ENERGY CONCEPT

For more than 10 years, all student residences of the OeAD-WV have been built only in the minimum passive house standard according to the guidelines of the Passive House Institute Darmstadt.

A highly insulated, preferably thermal bridge-free and airtight building shell as well as a comfort ventilation system with heat recovery are the basic requirements for reaching the passive house standard.

To achieve the zero energy standard, a centralized ventilation unit with 2 parallel rotary heat exchangers with heat and moisture recovery and special filters has been developed to reduce energy consumption. In the course of the research
project, the ventilation could be carried out on demand and the energy consumption could be reduced. The residual heat requirement is covered by Fernwärme Wien. The water heating is also provided by Fernwärme Wien. Mittels Wasserpararmaturen with an extended cold water range (cold water in the middle position), the hot water consumption, which is in the houses of the OeAD-WV from experience above average, be reduced.

On the flat roofs, the largest possible PV system was installed. In order to reduce the surpluses that would have to be fed into the grid, a battery storage system was installed in the 2.UG as part of a research project. By an electrical power measurement at the root of the house, the excess can be measured and buffered in the battery system. At times of an energy deficit at the root, the battery can be discharged into the home network.

SPECIAL INNOVATIONS

Three home users, the Austrian Exchange Service Housing Administration (OeAD-WV), the Austrian Young Worker Movement (ÖJAB) and the Housing Association for Private Employees (WBV-GPA) have come together for the first time to jointly realize a forward-looking project in a new district - a highly efficient passive house for 313 Austrian and international students. Due to the three different home operators, an interesting mix of the residents and thus also an important impulse for the new district can be expected. The WBV-GPA has also taken on the role of developer and installer.

At the time of its opening, GreenHouse was the world's first certified Passive House Plus (PHI) student dorm, accompanied by a research project on electricity storage and monitoring energy consumption.

In 15 reference rooms, 5 in each component, an extended monitoring with various measurements takes place. For precise control of the energy balance of the building, calibrated heat meters, energy meters, electricity meters and water meters, temperature sensors, window contacts, humidity sensors, etc. are used distributed throughout the building. The meters are equipped with bus modules and communicate directly with the building management system (BMS). The
research project is being carried out by ASCR (Aspern Smart City Research) and Siemens.

FLEXIBILITY

All forms of temporary living are possible. Due to the variety of space (single apartments, double rooms, shared apartments for 2 - 4 people in different equipment categories) usable for almost all user groups. The arrangement of the 3 buildings and the distribution of common areas on all buildings a mix of user groups is possible. The entire development in the building and the majority of all room units are barrier-free usable therefore a conversion as a senior apartment or assisted living is conceivable.

Certification Scheme

[Passive House Plus is more efficient than Passive House Classic as it may not consume more than 45 kWh/(m²a) of renewable primary energy. It must also generate at least 60 kWh/(m²a) of energy in relation to the area covered by the building.]

261 Units; 8488 sq. m.

Thermal envelope

Exterior wall

U-value = 0.1 W/(m²K)

Basement floor / floor slab

U-value = 0.09 W/(m²K)

Roof

U-value = 0.06 W/(m²K)

Frame

U w-value = 0.74 W/(m²K)

Glazing

U g-value = 0.53 W/(m²K)
\( g \text{-value} = 50\% \)

PHPP values

Air tightness

\( n_{50} = 0.24/\text{h} \)

Annual heating demand

12.9 kWh/(m²a) calculated according to PHPP

Heating load

9 W/m²

Primary energy requirement

81 kWh/(m²a) on heating installation, domestic hot water, household electricity and auxiliary electricity calculated according to PHPP

Hopefully an Environmental Impact Statement will be required to assist Cornell and the community in achieving the best potential outcome. Passive House design combined with associated solar pv and energy storage could result in near net zero buildings. Thank you for your consideration of the comments provided to the Board to date.
City of Ithaca Planning Board  
108 East Green Street  
Ithaca, NY 14850

Dear Planning Board Members,

I’m writing as a member of the Ithaca Common Council and chair of the Council’s Planning and Economic Development Committee in response to your review of Cornell University’s North Campus Residential Expansion. This is an exciting project, with the chance to add much-needed student housing to the Cornell campus.

However, the project has provoked significant community concern over its energy usage. The City of Ithaca’s comprehensive plan identifies greenhouse gas reduction as a major goal for the community, striving to reduce community-wide emissions by 80 percent below 2010 levels by 2050. As the comprehensive plan states, the City will promote a “renewable energy infrastructure and the efficient and strategic use of resources, through leadership, education and outreach, revisions to the City Code, and energy security and reliability policies.” The Common Council has taken steps to achieve these goals, most recently with the adoption of a Green Building Policy for the City of Ithaca. Consequently, energy use is a major topic of concern for the city, especially in a project of this magnitude, and should factor into your review.

The DEC publishes guidelines to assist agencies that are reviewing projects in their interpretation of the State Environmental Quality Review Act. Among these is the Full Environment Assessment Form Workbook, which is available on the DEC’s website. According to the Workbook, when considering whether a project applicant should be required to prepare an Environmental Impact Statement (EIS), Planning Boards should determine whether a project will have at least one significant adverse impact on the environment. The Workbook provides thresholds to help Planning Boards determine the level of significance for energy impacts, and the NCRE project exceeds these thresholds in more than one category:

1) DEC recommended threshold: The proposed action will require the creation of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.
According to Cornell its cogeneration supply system will have to serve the equivalent of an additional 466 homes or 9.3 times greater than the recommended threshold for a moderate to large environmental impact.

2) DEC recommended threshold: The proposed action may utilize more than 2,500 MWhrs per year of electricity.

According to Cornell, it will be adding 12,241 million British Thermal units of electricity to serve the NCRE. This is the equivalent of 3,587 MWhrs or 1.4 times the recommended threshold for a moderate to large impact.

3) DEC recommended threshold: The proposed action may involve heating and/or cooling of more than 100,000 square feet of building.

According to Cornell, the square footage of NCRE is 767,400 feet. This is 7.47 times the recommended threshold for a moderate to large impact.

Given these facts, I strongly encourage you to issue a positive declaration and require the project applicant to complete an Environmental Impact Study. A project of this scope and magnitude must be subject to the most rigorous environmental review.

Sincerely,

Seph Murtagh
Chair, PEDC
Alderperson, 2nd Ward
Ithaca Common Council

"An Equal Opportunity Employer with a commitment to workforce diversification."
NCRE energy impact

Elmer Ellis Ewing [eee1@cornell.edu]

To:
Lisa Nicholas; Anya Harris

Cc:
Common Council

Sunday, October 21, 2018 10:33 PM

Statement for Public Hearing—City of Ithaca Planning and Development Board, Oct. 23, 2018

The DEC suggests thresholds for potential impacts to help decide whether an EIS may be needed. One main category of adverse impact is: The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use. Cornell admits that the NCRE plan would exceed this threshold almost ten-fold (466 homes). But does this matter if much of the energy is green? Indeed it does! Even wasting green energy is bad—every BTU of it lost through the designs Cornell has offered will be a BTU of green energy unavailable to replace fossil fuels elsewhere on campus. Good building design is crucial. The nearer we approach net zero energy, the less important the source of the energy becomes. And LEED silver or gold is not the way to get there—the share of points devoted to energy on the LEED scale is too small. Please require an EIS so that a far better building design can be developed. Elmer Ewing
The Benefits of an EIS for the NCRE Proposal

I'm Buzz Lavine. I'm in favor of Cornell building the NCRE. It's definitely a worthwhile undertaking. However, like so many people who have commented to you, I also have deep concerns about the energy impacts from the natural gas heating technology Cornell has chosen. Hopefully those impacts can be mitigated before the project is approved. Under NYS SEQR law, the City's opportunity to thoroughly investigate such mitigation strategies comes primarily through an environmental impact statement.

I've been around the block a time or two with EIS's under SEQR, so I know the benefits. As a Tompkins County Planner for 10 years, a planning board member for 20 years, and having taught environmental assessment at Cornell, I've been involved in EIS's many times. I know that the EIS process usually promotes the fuller understanding of technical issues, mitigation strategies, and alternatives comparisons that commonly elude planning board members who are tasked with reviewing these large complicated projects.

If you require an EIS here, the product would benefit your review of this project in three important ways.

1. **You could hire expert advice** that would more fully assess the project and provide you with a fuller understanding of the technical and legal issues involved. Under SEQR law, you hire the experts and Cornell must pay for them.

2. **Cornell, the public, and you would agree on alternatives that should be studied.** Because many of the concerns voiced so far focus on the heating technology, several alternatives to that technology would be studied in considerable depth; and they would be compared, providing a wealth of new useful decision-making information.

3. **Other strategies to mitigate impacts could also be studied.** Many recently completed buildings elsewhere can illustrate ways of further improving these buildings’ energy efficiency.

When you call for an EIS, you take advantage of all these benefits; and the whole thing could be accomplished in just two or three months. By choosing the EIS
route, you make your decision-making for the community both far better informed and far more easily supported. I encourage you to do just that.
summary outline version of previously sent NCRE comments

Buzz Lavine [mlavine@twcny.rr.com]

To:
Lisa Nicholas; Anya Harris
Cc:
Common Council
Attachments:
Do We Require an EIS - wi~1.docx (104 KB)[Open as Web Page]

Sunday, October 21, 2018 11:48 AM

On 10/19/18, Joe Wilson emailed you "NCRE Comments for October 23, 2018.” That important memo was prepared with input from Members of the Campaign for Renewable Energy, Fossil Free Tompkins and Mothers Out Front.

Below (and also attached as an MSWord document and a PNG image) is a short summary of the same info. For more detail and citations, please refer to that earlier but longer piece. Sometimes it’s handy to have the “Cliff’s Notes version" for quick reference. That’s what this submission is for.

Please distribute this to Planning and Development Board members and staff. As you can see in the Cc line above, I’m also sending copies to Council members.

Thank you all for your very significant time and efforts at reviewing the very large and complex NCRE proposal.

Mitchell Lavine

Do We Require an EIS?
DEC’s Cookbook for Deciding

Mitchell Lavine buzz@baka.com
Do We Require an EIS?  
DEC’s Cookbook for Deciding

Cornell’s NCRE project has evoked many concerns about its energy impacts. DEC has provided us with a cookbook for deciding whether those impacts require the preparation of an EIS. Here’s the generic recipe.

1. Find at least one adverse impact of concern.
2. Determine whether it’s significant by considering the following parameters.
   a) Magnitude of the impact
   b) Probability of its occurrence
   c) Duration of its occurrence

The cookbook has various categories of adverse impacts, each with thresholds of magnitude that qualify as significant. If an impact surpasses that threshold, the decision maker need only consider the probability and duration of its occurrence. If there’s sufficient magnitude, probability and duration, then it’s considered a significant adverse impact, thereby requiring the preparation of an EIS.

The table below shows DEC’s given thresholds for four of NCRE’s main categories of adverse impacts, along with the three parameters of significance for each. As you can see, all four of those adverse impacts qualify as significant, and therefore any one or all of them requires the preparation of an EIS.
<table>
<thead>
<tr>
<th>Adverse Impact Category</th>
<th>DEC's Given Threshold</th>
<th>Magnitude Of Impact</th>
<th>Probability Of Occurrence</th>
<th>Duration Of Occurrence</th>
<th>Requires An EIS?</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use”</td>
<td>Serves more than 50 homes</td>
<td>Cornell says the energy for the NCRE, coming from its gas-fired combined heat and power plant (CHP), will serve the equivalent of 466 homes. That’s 9.3 times the threshold.</td>
<td>Cornell insists the CHP will supply the NCRE. That’s 100% probability.</td>
<td>The commonly assumed lifetime for the facilities is 50 years. That’s 50 years.</td>
<td>Yes</td>
</tr>
<tr>
<td>“The proposed action may utilize more than 2500 MWhrs per year of electricity.”</td>
<td>Uses more than 2500 MWhrs/yr</td>
<td>Cornell says the CHP will produce 12,241 million BTU's of electricity annually for the NCRE. Measured in MWhrs, that’s 3587 MWhrs/yr. That’s 1.4 times the threshold.</td>
<td>Once they’re built, it's assumed by all that they'll remain in use. That’s 100% probability.</td>
<td>The commonly assumed lifetime for the facilities is 50 years. That’s 50 years.</td>
<td>Yes</td>
</tr>
<tr>
<td>“The proposed action may involve heating and/or cooling of more than 100,000 square feet of building.”</td>
<td>100,000 square feet of building</td>
<td>Cornell reports the total building area of the NCRE will be 767,400 square feet. That’s 7.67 times the threshold.</td>
<td>If they build it, that’s the building area. That’s 100% probability.</td>
<td>The planned lifetime for the buildings is 50 years. That’s 50 years.</td>
<td>Yes</td>
</tr>
<tr>
<td>The proposed action must be consistent with community plans</td>
<td>Must be consistent with community plans</td>
<td>The City, the Town and the County each have adopted sustainability requirements calling for decreasing the community's fossil fuel use and/or greenhouse gas emissions. By increasing natural gas use as much as would be used to heat 600 homes, the NCRE does exactly the opposite. Opposite of the threshold.</td>
<td>If heated as proposed, the NCRE will oppose the community's sustainability-related plans. That’s 100% probability.</td>
<td>Cornell’s proposal claims it will use the gas-fired CHP until the CHP’s planned closing in 2035. (At this point they don’t know what will replace it.) That’s at least 15 years, possibly the full 50-yr lifetime of the buildings.</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Dorm expansion

Maryl Mendillo [shunktaketcha@yahoo.com]

To:
   Anya Harris
Sunday, October 21, 2018 1:29 PM

Cornell must lead in energy conservation and eliminating development using fossil fuels.

Cornell would show true leadership by following the SEQR law and process including experts and consultants that are independent of the decision making.

This project needs to slow down and go through the process of making informed and good decisions for the future of Ithaca, Cornell and the earth.

thank you.

Maryl Mendillo
Aurora, NY
Dear Ms. Grunder:

Please distribute this to the members of the Planning Board. These questions and answers were written by the 17 member concerned citizens group which includes representatives of Mothers Out Front, Fossil Free Tompkins, and the Campaign for Renewable Energy. Thank you.

Questions and Answers for the City of Ithaca and the Town of Ithaca regarding Cornell's NCRE application

1. What must a lead agency (City of Ithaca Planning Board) assess? An involved agency (Town of Ithaca Planning Board)?
   The lead agency “must assess the environmental impacts of all actions they have discretion to approve.” An involved agency will “Provide the lead agency with observations and concerns about the proposed action and its potential environmental impact so the lead agency may consider them in making a determination of significance.” (DEC website)

2. Are there precedents for preparation of an EIS for Cornell related housing projects?
   Yes, an EIS was prepared for the Maplewood and Collegetown Terrace projects. These were much smaller projects than NCRE.

3). When is an EIS required by SEQRA?
   An EIS is required by SEQRA “if an action is determined to have potentially significant adverse environmental impacts.” (DEC website)

4) Does the amount of energy proposed for NCRE require an EIS under SEQRA?
   The DEC’s Full Environmental Assessment Form (FEAF) Workbook includes this rule of thumb regarding what constitutes a major quantity of energy requiring an EIS: heating and/or cooling of more than 100,000 square feet of a building. The NCRE’s total square footage is 750% more than this EIS threshold.

5) What does Cornell’s application present as the total energy use for NCRE per year?
   For natural gas: 42,445mmBTU for heating and cooling (Table 11, p. 205 of the Cornell application) ; for electricity 12,141 mm BTU (table 9, p. 202). This is 2.7% (not the 1.4% that Cornell claims) of the 2,000,000 mmBTU used currently on campus. (p. 169)

6) Does it matter how much total energy the new dorms use if Cornell does not use fracked gas and a large part of purchased energy is “green”?
   Yes, we cannot afford to waste energy, whatever the source, because the fossil-free energy used in the new dorms will not be available elsewhere to replace fossil fuel or nuclear energy. The goal must be first to reduce to near zero the requirement for total energy, and then to supply what energy is needed as fossil free. This begins with building design.

7) Does NCRE’s design meet the City Council approved but not yet codified Green Building Policy for green house gas emissions?
   No. In their July review application report Cornell claims that, as designed, NCRE boasts a 25% greenhouse gas emission reduction over the current NYS Building Code. (7/12/18 p. 174) The Green Building Policy requires a 40-50% greenhouse gas emission reduction. In 2025 the required reduction increases to 80%.
8) Do the LEED Silver and Gold designs employed by Cornell ensure that it will require low energy use? NO. Only a small part of the LEED points deal with energy efficiency. In addition to LEED, the building design should be subjected to the performance standards of Net Zero and the Passive House. Best results will be obtained by a combination of all three approaches, using modeling that is readily available.

9) Can Cornell build near net zero buildings? Are there other near net zero fossil free buildings in Tompkins County? Cornell has built near net zero buildings at Maplewood and on Roosevelt Island where they built a 26-story LEED platinum certified passive house building. There are many near net zero or net zero buildings in Tompkins County. Ecovillage’s third neighborhood boasts more than two dozen buildings, all of which which are at least near net zero and seven of which are certified as passive house.

10) In their application, does Cornell include all greenhouse gas emissions from their use of natural gas? No, they do not. They conveniently omit upstream methane emissions, which are the emissions resulting from the drilling for gas and its transportation to Cornell’s co-generation plant.

11) Are the upstream emissions environmentally significant? Yes, the IPCC established that methane is more than 100 times as powerful a heat trapping gas as CO2 over a ten year period. A 2017 Cornell study (Cornell Greenhouse Gas Emissions: measuring our progress toward carbon neutrality) of greenhouse gas emissions featured on Cornell’s Sustainability Office website portrayed total emissions on campus. An accompanying graph showed that upstream methane emissions for the natural gas used at Cornell had 200% more negative global warming effects than the greenhouse gas emitted by the combustion of gas used to produce heat and electricity.

12) When upstream emissions are included, what are the annual energy costs? When upstream emissions are added to the energy data that Cornell has supplied, the energy would be equivalent to that supplied by natural gas for heating 600 houses per year in our area, or driving 4,070 Hummers from Ithaca to Los Angeles.

13) Will an EIS require an analysis of all reasonable alternatives to natural gas? YES

14) Did Cornell present all reasonable, environmentally friendly alternatives? No. With regard to NCRE, Cornell did not present any alternative to the production of electricity outside of their cogeneration plant. There are more environmentally friendly ways of energy production outside of exclusively using fracked gas to generate electricity and heat.

15) Can you name one? Sure. Cornell could purchase “green” wind energy through an ESCO for their electricity and then use some of that energy to run heat pumps to heat NCRE’s dorms. This would be environmentally friendly and would support Cornell’s professed path to carbon neutrality by 2035. It would green the grid by driving the creation of new wind farms. Ithaca College now sources all of its electricity through renewable sources. They have a solar farm that produces 10% of their electricity and source their remaining needs through ESCOs supplying wind energy (https://www.ithaca.edu/ic-news/releases/ithaca-college-dramatically-cuts-carbon-emissions-with-move-to-renewable-electricity-49978/).

16) Another? Cornell can stop selling their dirty excess fracked gas-produced electricity and use the electricity generated by their hydro plant to supply a portion of NCRE.

17) Another? Cornell’s lake source cooling infrastructure points to a second climate-boosting option: lake source heating. Large rivers and lakes can power heat pumps. Hydrothermal systems
are highly efficient and have low maintenance requirements. This system could piggyback on Cornell's pre-existing system deep within Cayuga Lake (op-ed Ithaca Journal 10/6)

18) How does Cornell’s NCRE application fit into the Town’s Comprehensive Plan, the City’s Climate Smart Community Pledge, the County Energy Roadmap and the Cornell plan to be carbon neutral by 2035?

These municipal plans and Cornell’s plan call for reducing the use of fossil fuels and increasing the use of renewables to reach ambitious green house gas emission goals. Cornell’s plan for NCRE does just the opposite. The 2017 article (cited in #11) and featured on the Cornell Sustainability Office website refers to a graph charting upstream emissions and emission from combustion in the cogeneration plant. It concludes by saying “when we fully account for these new, additional sources [i.e. upstream methane emissions] we further underscore what we have known for years — that we must transition as quickly as possible from fossil fuels, as the additional shadow footprint [i.e. methane emissions] this illustrates adds well over 600,000 MT of CO2e.

18) Would it be advantageous for the City Planning Board to hire an independent expert?

Yes. The information that Cornell has provided is technical and slanted towards having the Planning Board approve their application. Taitem is not a truly independent consultant as it is paid by Cornell. Taitem is analyzing and reviewing the application within the parameters set by Cornell. Statistics can be deceiving and can be interpreted in different ways. Cornell has omitted facts that are critical to a sound analysis of this application. An independent professional consultant could aid the Planning Board in preparation for or review of an EIS. S/he would aid in formulating the right questions for Cornell to answer as well as analyzing the answers given by both Cornell and opposition environmental groups.

19) Can the lead agency recover the costs of an independent expert? The involved agency?

“The SEQR statute and regulations allow a lead agency to recover its costs for either the preparation or the review of an environmental impact statement, but not both. Only the lead agency may charge SEQR fees. However, because the lead agency’s review must include the concerns of all other involved agencies, it may use SEQR fees to cover the costs of hiring expertise to address environmental issues raised by other agencies.” (DEC website —Fees for EIS Preparation or Review)

Tom Blecher -- for the 17 member concerned citizen group which includes representatives of Mothers Out Front, Fossil Free Tompkins, and the Campaign for Renewable Energy which produced this document
Hi, Anya and Lisa, Please circulate this memo to Planning Board Members and Involved Staff. It contains comments for the October 23, 2018 City Planning Board Public Hearing concerning NCRE. It was prepared with input from Members of the Campaign for Renewable Energy, Fossil Free Tompkins and Mothers Out Front. Copies are being emailed to City Council Members as well.

I. NCRE Energy Use Causes Several Potentially Significant Adverse Negative Environmental Impacts:

SEQR Regulations 617.7 (c) (1) (vi) says that a “major change in the quantity of energy” may have a significant adverse impact on the environment.

The DEC’s Full Environmental Assessment Form Workbook says that exceeding any of the following “thresholds” creates a presumption of a moderate to large adverse environmental impact requiring an EIS:

- Creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences; According to Cornell the NCRE energy use would serve 466 homes or 9.3 times higher than DEC’s threshold.

- Use of more than 2,500 MWhrs per year of electricity; According to Cornell, NCRE will add 12,241 million British Thermal Units. This is the equivalent of 3,587 MWhrs or 1.4 times higher than DEC’s threshold.

- Heating and/or cooling of more than 100,000 square feet of building; According to Cornell the square footage of NCRE is 767,400 square feet. This is 7.47 times higher than DEC’s threshold.

II. Each of these Adverse Impacts are “Significant” Under SEQR.

The Workbooks lists "magnitude", "duration", and likelihood (probability) as "the key characteristics of possible impacts that should be considered in determining significance." The Workbook also says, "The short or long term or cumulative nature of the impacts also needs to be considered. Each impact of an action must be judged by these characteristics within the context of the site and community."
• As noted above, the magnitude of the energy use is 9.3 times service threshold, 1.4 times the MWhrs/year threshold, and 7.47 times the square footage threshold.

• The duration of these impacts is 50 years because Cornell has not specified a time or a concrete alternative to continued gas use for the useful life of the NCRE buildings.

• The likelihood or probability of these impacts is also 100% because Cornell is adamant that it will use its 100% gas-powered co-generation plant for heat and electricity for NCRE.

• The cumulative impact of emissions will be between 114,800 and 307,650 metric tons over 50 years because Cornell says that NCRE energy use will cause emissions ranging between 2296 and 6153 metric tons of CO2 equivalent each year.

III. Because these Impacts Are “Significant”, an EIS is required.

SEQR Regulation, 6 NYCRR 617.1 includes this language: “… if it is determined that the action may have a significant adverse impact, [the Lead Agency must] prepare or request an environmental impact statement.”

IV. The Conflicts between the NCRE Proposal and the City’s Climate Smart Pledge, the City and Town’s Green Building Policy, and the County’s Energy Road Map Create Potentially Significant Adverse Environmental Impacts.

SEQR Regulation 617.7 (c) (1) (iv) says that “the creation of a material conflict with a community’s current plans or goals as officially approved or adopted” may have a significant adverse impact on the environment.

The City’s “Climate Smart Community Pledge” says the City will “Combat climate change by encouraging low-emissions development that is resilient to climatic changes.” The NCRE’s adding between 2296 and 6153 metric tons of CO2 equivalent each year and 114,800 to 307,650 metric tons of Green House Gas emissions over 50 years creates a material conflict with this Pledge.

The City adopted its Green Building Policy in May of this year. “The recommended policy requires all new buildings and major renovations to be constructed in a way that will result in an estimated 40-50 percent reduction in Green House Gas (GHG) emissions compared to what New York State energy code currently requires.” Because Cornell’s proposal does not reduce greenhouse gas emissions by 40-50%, it is in material conflict with the City’s adopted policy.

Our County has adopted goals for reducing the use of fossil fuels, greenhouse gases, and the fostering of renewable energy. Among the strategies recommended are: improve energy efficiency in buildings and to move from natural gas to heat pumps and biomass heating. This proposal adopts low LEED standards which are unlikely to perform to Code, rejects consideration of more efficient building standards, and rejects heat pumps. These are material conflicts.
V. The Magnitude, Duration, Likelihood, Long-term and Cumulative Effects of these Impacts Make them "Significant" under SEQR.

The Workbooks lists "magnitude", "duration", and likelihood (probability) as "the key characteristics of possible impacts that should be considered in determining significance." The Workbook also says, "The short or long term or cumulative nature of the impacts also needs to be considered. Each impact of an action must be judged by these characteristics within the context of the site and community."

As noted, the magnitude of the energy use exceeds three of the DEC's thresholds for adverse environmental impacts. The duration of these impacts is 50 years. The likelihood or probability of these impacts is 100%. Their cumulative impact will be between 114,800 and 307,650 metric tons of additional Green House Gas emissions over 50 years.

VI. Because these Impacts Are "Significant", an EIS is required.

SEQR Regulation, 6 NYCRR 617.1 includes this language: "... if it is determined that the action may have a significant adverse impact, [the Lead Agency must] prepare or request an environmental impact statement."

16 NYCRR 617.7 (c) (1) (vi)
2FEAF Workbook for Part 2, "Question 14-Impact on Energy", p. 238
3FEAF Workbook for Part 2, "Identifying Potential Impacts", "b." p. 239
4Cornell’s “Additional Materials” “Energy Impacts” dated October 12, 2018, p. 3/6
5FEAF Workbook for Part 2, "Identifying Potential Impacts", "c." p. 239
6FEAF Workbook for Part 2, "Identifying Potential Impacts", "d." p. 239
7FEAF Workbook for Part 3, "Understanding Significance", p. 275
8The pertinent text from p. 275 reads: "The key characteristics of possible impacts that should be considered in determining significance are "magnitude", "duration", and likelihood (probability). Magnitude assesses factors such as severity, size, or extent of an impact. Duration looks at how long an impact may last. Importance relates to how many people are going to be impacted or affected by the project or what role a resource, including natural resources, may have in the community. Likelihood measures how probable it is that the impact may occur. Generally, bigger impact (larger "magnitude") projects are more likely to need more detailed analysis. Taken together, magnitude, duration, and likelihood; along with the context and scale of the proposal: define an impact’s importance."Importance" requires us to look at an impact in relation to the whole action.

"The short or long term or cumulative nature of the impacts also needs to be considered. Each impact of an action must be judged by these characteristics within the context of the site and community.

13FEAF Workbook for Part 3, "Understanding Significance", p. 275
14The pertinent text from p. 275 reads: "The key characteristics of possible impacts that should be considered in determining significance are "magnitude", "duration", and likelihood (probability). Magnitude assesses factors such as severity, size, or extent of an impact. Duration looks at how long an impact may last. Importance relates to how many people are going to be impacted or affected by the project or what role a resource, including natural resources, may..."
have in the community. Likelihood measures how probable it is that the impact may occur. Generally, bigger impact (larger "magnitude") projects are more likely to need more detailed analysis. Taken together, magnitude, duration, and likelihood; along with the context and scale of the proposal; define an impact's importance. "Importance" requires us to look at an impact in relation to the whole action.

"The short or long term or cumulative nature of the impacts also needs to be considered. Each impact of an action must be judged by these characteristics within the context of the site and community."

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Joseph M. Wilson
75 Hunt Hill Road
Ithaca NY 14850 (in the Town of Dryden)
Landline: 607-539-1159; Cell: 607-262-1777
The arc of history bends in the direction we push it.
October 12, 2018

JoAnn Cornish, Director of Planning & Development  
City of Ithaca, 3rd Floor 
108 E. Green Street  
Ithaca, NY 14850

Re: Support for Cornell University’s North Campus Residential Expansion Project

Dear JoAnn:

I am pleased to express my support for Cornell University’s North Campus Residential Expansion project (NCRE). Tompkins County Area Development is the County’s economic development agency. We are dedicated to building a thriving and sustainable economy that improves the quality of life in Tompkins County and Ithaca. I support this project for three reasons:

1. Cornell University is the largest employer in Tompkins County and provides the economic engine for our local economy. The NCRE is a critical element in Cornell’s vision to house all first-year and sophomore students on campus or in Cornell-Affiliated housing. Fulfilling this vision will keep Cornell’s undergraduate experience vibrant. As such this project contributes to Cornell’s status as a top global university – and as the force that leads our economic strength.

2. There is a housing shortage in Tompkins County. This results in a lack of housing for our workforce. The shortage also distorts housing prices, pushing up rents and purchase prices. Generating more housing on campus will free-up off-campus units for permanent residents, and relieve the housing shortage.

3. The County’s Economic Development Strategy seeks to reduce green house gas emissions while supporting economic development. NCRE promises to be built to significantly exceed Energy Code standards. The project also benefits from the campus’ district heating system and renewable energy sources. Therefore, NCRE will be adding housing units that exemplify best practices for achieving our energy goals.

I believe this project is a win for our community on many fronts. I whole-heartedly support the development of the NCRE project.

With warm regards,

Heather D. McDaniel  
President

cc: Sue Ritter, Director of Planning, Town of Ithaca 
Brent Cross, Zoning Officer, Village of Cayuga Heights
WHEREAS: 6 NYCRR Part 617 of the State Environmental Quality Review Law and Chapter 176.6 of the City Code, Environmental Quality Review, require that a lead agency be established for conducting environmental review of projects in accordance with local and state environmental law, and

WHEREAS: State Law specifies that for actions governed by local environmental review, the lead agency shall be that local agency which has primary responsibility for approving and funding or carrying out the action, and

WHEREAS: the City of Ithaca Planning and Development Board has one pending application for site plan approval a 74 unit apartment building, located at 121-125 Lake Street by IFR Development LLC, and

WHEREAS: the applicant proposes to build a 133,000 GSF, four story apartment building and associated site improvements on the former Gun Hill Factory site. The 74-unit, age-restricted apartment building will be a mix of one and two bedroom units and will include 7,440 SF of amenity space and 85 parking spaces (20 surface spaces and 65 covered spaces under the building). Site improvements include an eight foot wide public walkway located within the dedicated open space on adjacent City Property (as required per agreements established between the City and the property owner in 2007) and is to be constructed by the project sponsor. The project site is currently in the New York State Brownfield Cleanup Program (BCP). Before site development can occur the applicant is required to remediate the site based on soil cleanup objectives for restricted residential use. A remedial investigation (RI) was recently completed at the site and was submitted to NYSDEC in August 2018. The project is in the R-3a Zoning District and requires multiple variances, and

WHEREAS: this is a Type I Action under the City of Ithaca Environmental Quality Review Ordinance (“CEQRO”) §176-4 B(1) (h)[2], (k) and (n) and the State Environmental Quality Review Act (“SEQRA”) §617-4 (b) (11), and

WHEREAS: NYS Department of Environmental Conservation, and the Tompkins County Department of Health, Common Council, the Ithaca Industrial Development Authority and the Board of Zoning Appeals, all potentially involved agencies in this action have all consented to the Planning Board acting as Lead Agency for this project, now, therefore be it

RESOLVED: that the City of Ithaca Planning and Development Board does, by way of this resolution, declare itself Lead Agency in Environmental Review for the proposed project.

Moved by:
Seconded by:
In favor:
Against:
Abstain:
Absent:
Vacancies:
Members of the Planning and Development Board discussed the above-listed Zoning Appeals and agreed to forward the following recommendation:

**APPEAL # 3108**

**327 W. SENECA STREET**

**Area Variance**

Appeal of STREAM Collaborative on behalf of the owner, Estate of Orson Ledger, for an Area Variance from Section 325-8, Column 11, Front Yard, Column 12, Side Yard, Column 13, Other Side Yard, and Column 14/15, Rear Yard requirements of the Zoning Ordinance. The applicant proposes to demolish the existing 2 story building and construct a new 3 story building at the property located at 327 W. Seneca Street. The new building will contain 12 units and the applicant would like to optimize construction costs to meet the rental market of 70%-80% of the area median income rate. To achieve the affordable rental rates, the building needs to contain 18 bedrooms to make the project financially viable. The applicant proposes to utilize the interior of the building for the essential elements needed for the 12 apartments. Entry canopies, bike storage, and trash enclosures will be used along the perimeter of the building to provide the tenants with these amenities. The applicant proposes to have a front yard building setback of approximately 7 feet and the front canopy will encroach into the front yard an additional 4 feet, leaving approximately 3 feet of the 10 required by the ordinance. The west side of the building will be 10 feet from the property line although, the installation of the canopy will reduce the setback to 6 feet of the 10 feet required by the ordinance. The canopy on the east side of the building will also encroach in the required side yard leaving 1 foot of the 5 feet required. The zoning ordinance requires the rear yard to be 15% of the lot depth and the applicant proposes to place the building 10 feet from the averaged rear lot line. The ordinance requires a 13 –3” rear yard.

The property is located in a B-2d business use district in which the proposed use is permitted. However, Section 325-38 requires that an area variance be granted before a building permit is issued.

*The Planning Board does not identify any long term planning impacts and supports this appeal. All the requested variance will improve the design of the building, make the units more livable and improve the day-to-day quality of life of the residents. The side variances allow for generous canopies over the entrances, while the front and rear yard variances increase the square footage of the apartments over minimum standards.*
APPEAL # 3109
210 PARK PLACE

Area Variance

Appeal of Susan Gutierrez for area variance from Section 325-8, Column 7, Lot Width, Column 10, Percentage of Lot Coverage, Column 11, Front Yard, Column 12, Side Yard, and Column 13, Other Side Yard requirements of the Zoning Ordinance. The applicant proposes to construct a carport on the south side of the home located at 210 Park Place. The applicant would like to construct the carport to keep her camper and vehicle out of the weather and protect them from falling branches from nearby trees. The proposed carport will be positioned in line with the front of the home and extend to the south property line. The installation of the carport will increase the lot coverage by buildings from 35.5% to 44.3% of the 35% permitted by the ordinance. The carport will also exacerbate the south side yard deficiency. The existing side yard is 7' and the installation of the carport will reduce the side yard to 0' of the 10' required by the ordinance. The property has existing deficiencies in lot width, front yard, and other side yard that will not be exacerbated by the proposal.

The property is located in an R-2b residential use district in which the proposed use is permitted. However, Section 325-38 requires that an area variance be granted before a building permit is issued.

The Planning Board does not identify any long term planning impacts subject to the following: 1) there are no unresolvable neighborhood concerns and 2) that the design and materials of the carport are compatible with the existing building.

APPEAL # 3110
208-12 W. BUFFALO STREET

Area Variance

Appeal of Anthony Salerno of Artcraft Home Improvement, on behalf of the owner Martha Catalfamo for area variance from Section 325-8, Column 11, Front Yard, Column 12, Other Front Yard, and Column 14/15, Rear Yard requirements of the Zoning Ordinance. The property at 208-12 W. Buffalo Street is a mixed use building containing one apartment and a dental office. The property received an area variance in 1978 for the dental office. At that time, the zone district was R-3a, which allowed medical and dental offices as a permitted primary use.

The applicant proposes to remove an old set of cement stairs and install a new deck and wheelchair lift on the rear of the building located at 208-12 W. Buffalo Street. The new deck and lift will be constructed within the required rear yard. The property has an existing rear yard deficiency having 11 feet of the 20 feet required by the ordinance. Although, the new deck is set back approximately 16" from the outermost rear portion of the building, it is exacerbating the rear yard deficiency in length along the rear property line. The property has existing deficiencies in front yard and other front yard that will not be exacerbated by the proposal.

The property is located in an R-2b residential use district in which the proposed use is permitted by variance. However, Section 325-38 requires that an area variance be granted before a building permit is issued.

The Planning Board does not identify any long term planning impacts and supports this appeal. The layout seems to reduce lot coverage from existing conditions and the addition will be minimally visible from the public right of way.
APPEAL # 3111
2 FOUNTAIN PLACE
Use Variance

Appeal of Ryan and Ashleigh Zimmerman on behalf of the owner Ithaca College for a Use variance from Section 325-8, Column 2, Permitted Primary Uses and an Area variance for Column 9, Building Height in Feet requirements of the Zoning Ordinance. The applicant proposes to convert the single family dwelling into a Bed and Breakfast Inn at the property located at 2 Fountain Place. The Bed and Breakfast Inn will contain 10 guest rooms and a living quarters for the owner. The property is located in an R-2a zone district which allows, by special permit, Bed and Breakfast homes that are limited to a maximum of four guest rooms and must be owner occupied and owner managed. Although the applicant will occupy and manage the B & B Inn, the number of guest rooms exceeds the limit to be classified as a B & B home. Therefore, the applicant is requesting a use variance be granted to allow the proposed Bed and Breakfast Inn.

The property has been used as the Ithaca College President’s house since 1938. The 4,492 S.F. mansion was built in 1892 and was designated part of the Fountain Place Historic District in 1974. At that time, the property was located in an R-3a zone which allowed Bed and Breakfast Inns. In 1977, 2 Fountain Place and six of the other surrounding homes were re-zoning from an R-3a zone to R-2a.

The R-2a zone district is limited to one and two-family dwellings, and to permit a Bed and Breakfast Inn would require the Board of Zoning Appeals to grant a use variance. In order to obtain a use variance, the applicant must provide facts to support the set of conclusions. The applicant must show the zoning regulations caused unnecessary hardship in that: the applicant cannot realize a reasonable return, the hardship is unique, the variance will not alter the character of the neighborhood, and that the hardship is not self-created. The applicant contends that to continue the use as a single-family would be financial burden for a family in today’s market. To convert the dwelling to a two-family would require an additional investment into a property that is already priced at a high end market rate. The property is unique in that it is much larger and at a higher market value than the surrounding homes. The surrounding neighborhood, although within the East Hill Historic District, is located in an R-3a zone which allows B & B Inns by special permit. The applicant contends that the hardship is not self-created because, the 1977 zone change to the R-2 zone, caused the large home to be out of character with the permitted uses allowed in the surrounding R-3 zone district.

The property is located in an R-2a zone district which allows a Bed and Breakfast Home by special permit. Although the proposed use as a Bed and Breakfast Inn is not a permitted use in this zone, the applicant would like to maintain the property as is and realize a reasonable return for their investment. The property has an existing deficiency in building height in feet that will not be exacerbated by the proposal.

The property is located in an R-2a residential use district in which the proposed use is not permitted. However, Section 325-38 requires that a use variance be granted before a building permit is issued.

In concept, the Planning Board does not identify any long term planning impacts and supports this appeal. However, the appellant should demonstrate that the use will not include elements, such as an outdoor event space, that will produce evening and nighttime noise and that there is sufficient parking to meet the operational needs.

APPEAL # 3112
2 WILLETTS PLACE
Use Variance
Appeal of Ryan and Ashleigh Zimmerman on behalf of the owner Ithaca College for a Use variance from Section 325-8, Column 2, Permitted Primary Uses of the Zoning Ordinance. The applicant proposes to convert the two-family dwelling into a Bed and Breakfast Inn at the property located at 2 Willetts Place. The applicant intends to use the property to provide 3 additional guest rooms for the proposed Bed and Breakfast Inn at 2 Fountain Place. The applicant will reside at 2 Fountain Place and manage the property at 2 Willetts Place.

The property is located in an R-2a zone district which allows owner occupied and managed Bed and Breakfast Homes, by special permit. The proposed use will meet the number of guest rooms to be classified as a Bed and Breakfast Home. However, the applicant cannot meet the owner occupancy requirement because their residence will be at 2 Fountain Place. Therefore, the applicant is requesting a use variance be granted to allow the proposed Bed and Breakfast Inn.

In order to obtain a use variance, the applicant must provide facts to support the set of conclusions. The applicant must show the zoning regulations caused unnecessary hardship in that: the applicant cannot realize a reasonable return, the hardship is unique, the variance will not alter the character of the neighborhood, and that the hardship is not self-created. The applicant contends that to continue the use as a two-family would require a substantial investment because the building is currently set up like hotel rooms for lodging. Additionally, due to the high sales price and the small size of the building, the applicant cannot realize a reasonable return. The property is unique in that it was built as a carriage house for the property at 2 Fountain Place and converted to a guest house for the residing Ithaca College president. The applicant proposes no exterior alterations to the building and contends that having this property maintained under one owner would be a benefit to the surrounding historic neighborhood. The applicant contends that the hardship is not self-created because the building was built prior to the 1977 zone change from an R-3a to the R-2a zone that prohibited the use for Bed and Breakfast Inns.

The property is located in an R-2a residential use district in which the proposed use is not permitted. However, Section 325-38 requires that a use variance be granted before a building permit is issued.

In concept, the Planning Board does not identify any long term planning impacts and supports this appeal. However, the appellant should demonstrate that the use will not include elements, such as an outdoor event space, that will produce evening and nighttime noise and that there is sufficient parking to meet the operational needs.
REGARDING THE # 2 FOUNTAIN PLACE AND # 2 WILLETTS PLACE APPEALS FOR USE VARIANCES

It is not entirely clear to me what the Planning Board considers in its review of variance requests like this. I would have to assume that you are looking at the planning consequences should the two appeals be granted such as uses not typically associated with B&Bs like events such as weddings, liquor on the premises, meals beyond breakfast, opening the facility to non-guests. And in your review do you scrutinize the grounds for the appeals? I don’t know answers to these questions but seems all are intertwined.

There are two appeals before you because these are separate properties. And not only are they technically unrelated, they are very different in scale, use, and character. 2 Fountain Place is a massive 3 story ornate mansion with extensive gardens and related landscapes including all of the Fountain Place street and sidewalk. It seems that a reasonable case can be made that this property would be hard pressed to continue to function within the R2a zoning format. Whether the current proposal for it is the answer remains to be seen.

On the other hand, 2 Willetts Place is very different. It is a petite rectangular brick box with virtually no associated landscaping, and in its simplicity and scale very easy to maintain. It is a perfect fit for the R2a zoning and its two residential units are already in place so that no modifications are required. So what are the grounds for a use variance at 2 Willetts? According to the submitted appeal “continuing to use the property as a two family home is not feasible because of the high sales price { $450,000 }” Hmmm. Are we to assume that if a property is overpriced by the seller { which I am not convinced it is} that that constitutes grounds for a use variance? Huh. And then there is this claim. “The property has been on the market for six months,”.

Not true. When I went through both properties with I C officials as a courtesy since I own a neighboring property I was told that the College would not review any offers for Willets until it was established that a buyer for 2 Fountain was not interested in it. The buyer of 2 Fountain was to have the right of first refusal. I was therefore surprised when 2 Willets came on the market on 5/2/18 probably by mistake and not surprised when it was removed from the market on 5/4/18. The claim that it has been on the market for 6 months is blatantly misleading and the charge that 2 Willets could not be sold consistent with its R2a zoning is as well. The College certainly had the right to offer the buyer of the president’s house the right of first refusal but such a sale constraint cannot reasonably be interpreted as a hardship inherent in the property. If there might be an assertion of hardship at all it would have to do with who was and who was not allowed to compete to purchase. In other words, a constraint which was self inflicted.

Again 2 Willets Place is a model R2a citizen, small, manageable, simple and tidy and the two dwelling units are already in place. No modifications and no repurposing are necessary. The R2a designation has been extremely important to the lower east hill district over the years maintaining a texture and character of one and two family dwellings and fending off the conversion of charming historic properties into multiple dwellings with transient populations. To repurpose little #2 Willets into a bed and breakfast inn allowing as a result that it contain up to 10 guest rooms makes no sense if the property is evaluated in isolation from its white
elephant neighbor as it should be. In fact, it is absurd. These are separate properties. The hardship of one does not convey to the other.

Finally, the summary assertion made in the Willets appeal states that “The property has been on the market for 6 months {false} and vacant for 18 months{ really what does that have to do with anything? So the College took a year to get organized}. It goes onto assert that “The ability of Ithaca College to sell this property and the viability of a new owner being able to repurpose this historic structure { it does not need repurposing} is directly hindered by the zoning regulations and restrictions” There is no evidence supporting this assertion, in fact it is founded on misrepresentations and false statements of fact. Hence the change of use appeal is groundless and should be denied.

Oh, and might as well address one more thing. 2 Willets is not “ a one story, two family home”. It is a two story structure and the 2nd story is currently undeveloped. The 3 units on the first story currently exist with separate entries, separate living rooms, bedrooms and baths { apparently I C did not get the R2a memo}. If this use variance goes ahead the 2nd story is fair game for development. The first floor units are really efficiency apartments and one could elect to occupy more densely the 2nd floor. This is exactly what R2a zoning was designed to protect us from, a 7 unit transient apartment/rooming house – no resident owner, no common spaces, no breakfast, stretched along the eastern border { literally 2 ft off the property line} of 3 Fountain Place. The only breakfast these folks get in this, keep in mind, stand alone B&B is a clear view of ours.

Respectively

Vincent Mulcahy
Cynthia Livermore
3 Fountain Place
Ithaca
Area Variance

Appeal of Alena Fast representing Ithaca City Apartments, LLC for an Area Variance from Section 325-8, Column 4, Off-Street Parking and Column 12, Other Front Yard requirements of the zoning ordinance. The applicant is in the process of renovating the first floor apartment at the property located at 113 Fourth Street. As part of the renovation, the applicant would like to comply the ADA requirements for accessibility and install an accessible ramp. The property is located on a corner lot and due to site constraints, the applicant proposed to construct the switchback ramp in the front yard facing Madison Street. The ramp will be a total of 300 SF and travel along the front yard, approximately 33 feet, to meet the landing and slope requirements for accessibility. Positioning the ramp in the front yard will increase the existing deficiency of 4’ to 0’ of the 10’ required by the ordinance. The property has an existing deficiency in parking that will not be exacerbated by the proposal.

The property is located in an R-2b residential use district in which the proposed use is permitted. However, Section 325-38 requires that an area variance be granted before a building permit is issued.

*The Planning Board does not identify any long term planning impacts and supports this appeal*
Appeal of Alena Fast representing Ithaca City Apartments, LLC for an Area Variance from Section 325-8, Column 4, Off-Street Parking, Column 12, Other Front Yard and Column 14/15, Rear Yard requirements of the zoning ordinance. The applicant is in the process of renovating the first floor apartment at the property located at 113 Fourth Street. As part of the renovation, the applicant would like to comply the ADA requirements for accessibility and install an accessible ramp. At the Board of Zoning Appeals meeting on October 2nd, the Board requested that the applicant provide an alternate design that would reduce the extent of the front yard variance. The property is located on a corner lot and the applicant now proposes to construct the switchback ramp in the rear yard. The proposed alternate design will provide direct access to the front door of the Accessible apartment. The new design will encroach into the other front yard and will terminate 2 feet from the front property line. The ordinance requires other front yards to have a 10’ setback. The relocation of the ramp to the rear yard will result in a rear yard deficiency leaving 16’-10” of the 22’-8” required by the ordinance. The property has an existing deficiency in parking that will not be exacerbated by the proposal.

The property is located in an R-2b residential use district in which the proposed use is permitted. However, Section 325-38 requires that an area variance be granted before a building permit is issued.
## City of Ithaca Board of Zoning Appeals Worksheet

<table>
<thead>
<tr>
<th>Appeal Number</th>
<th>BZA-3107</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use District</td>
<td>R-2b</td>
</tr>
<tr>
<td>Applicant</td>
<td>Alena Fast of INHS</td>
</tr>
<tr>
<td>Owner</td>
<td>Ithaca City Apartments, LLC</td>
</tr>
<tr>
<td>Application Type</td>
<td>Area Variance</td>
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</table>

<table>
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<tr>
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<th>7</th>
<th>8</th>
<th>9</th>
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<th>13</th>
<th>14/15</th>
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</thead>
<tbody>
<tr>
<td>Column Title</td>
<td>Use</td>
<td>Accessory Use</td>
<td>Off-Street Parking</td>
<td>Off-Street Loading</td>
<td>Lot Area (Sq. Feet)</td>
<td>Lot Width (Feet)</td>
<td>Number of Stories</td>
<td>Height in Feet</td>
<td>% of Lot Coverage</td>
<td>Front Yard</td>
<td>Other Front Yard</td>
<td>Side Yard</td>
<td>Rear yard: % of depth or number of feet, whichever is less</td>
<td>Minimum Building Height</td>
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<tr>
<td>Existing Condition and Use</td>
<td>Two Family Dwelling</td>
<td>0</td>
<td>4515</td>
<td>50'</td>
<td>2</td>
<td>26±</td>
<td>22.5%</td>
<td>17'</td>
<td>4'</td>
<td>13.4'</td>
<td>27' or 29.8%</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>District Regulations for Existing</td>
<td>Two Family Zone</td>
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<td>None Required</td>
<td>3,000</td>
<td>35</td>
<td>3</td>
<td>35</td>
<td>35%</td>
<td>10</td>
<td>10</td>
<td>5</td>
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<tr>
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<td>Def.</td>
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<td>OK</td>
<td>OK</td>
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<td>Proposed Condition and/or Use</td>
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<td>2</td>
<td>26±</td>
<td>29.2%</td>
<td>17'</td>
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<td>13.4'</td>
<td>16'-10&quot; or 18.6%</td>
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<td>District Regulation for Proposed</td>
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<td>None Required</td>
<td>3,000</td>
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<td>3</td>
<td>35</td>
<td>35%</td>
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<td>10</td>
<td>5</td>
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<td>Def.</td>
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<td>Def.</td>
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<td>Def.</td>
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### Notes:
CITY OF ITHACA
108 E. Green St. — Third Floor  Ithaca, NY 14850-5690
DEPARTMENT OF PLANNING, BUILDING, ZONING & ECONOMIC DEVELOPMENT
Gino Leonard, Board of Zoning Appeals Secretary
Telephone: 607-274-6550 Fax: 607-274-6558 E-Mail: gleonardi@cityofithaca.org

BOARD OF ZONING APPEALS (BZA) APPLICATION

1. TYPE OF APPEAL:
   [X] AREA VARIANCE
   [ ] SPECIAL PERMIT
   [ ] USE VARIANCE
   [ ] SIGN VARIANCE
   [ ] ACTION, DECISION, OR INTERPRETATION OF ZONING OFFICER

   RECEIVED
   AUG 17 2018
   DEPARTMENT OF PLANNING AND DEVELOPMENT

   APPEAL #: 3107 (FILLED IN BY STAFF)
   HEARING DATE: 10/2/2018
   BUILDING PERMIT #: 35840 (REQUIRED)
   RECEIPT #: 57712 (FILLED IN BY STAFF)

2. Property Address: 113 Fourth Street Use District: R2b

   Owner’s Name: Ithaca City Apartments, LLC Owner’s Address: 115 West Clinton Street

   City: Ithaca State: NY Zip: 14850

3. Appellant’s Name: Alena Fast, INHS Appellant’s Address: 115 West Clinton Street

   City: Ithaca State: NY Zip: 14850

   Telephone: 607-277-4500 E-Mail: afast@ithacanhs.org

4. Attach Reason for Appeal (see “Zoning Appeal Procedure Form”)

5. Appellant Certification: I certify the information submitted with the appeal is true to the best of my knowledge/belief, and I have read and am familiar with City of Ithaca Zoning Ordinance sections that apply to this appeal (incl. Section 325-40, describing the powers and duties of the Board of Zoning Appeals). I also acknowledge the Board of Zoning Appeals may visit the property and I specifically permit such visits.

   I have met/discussed this application with Zoning Division staff prior to submission.

   ________________________________
   Appellant Signature

STATE OF NEW YORK
COUNTY OF TOMPKINS

Sworn to this 17th day of
August, 2018

______________________________
Notary Public

LESLIE M. DEBO
Notary Public, State of New York
Qualified in Tompkins County
No. 01DE8392543
My Commission Expires May 5, 20

NOTARY PUBLIC AVAILABLE AT CITY HALL.

IMPORTANT: INCOMPLETE applications will be returned to the applicant and the applicant will have to reapply.

If another city approval is required (e.g., Site Plan Review, Subdivision Review, Ithaca Landmarks Preservation Commission Review), this application will likely not be considered at the next scheduled BZA meeting date.

If an application is submitted and subsequent changes are made to the proposal/project, a revised application will be required. The original application will not be considered a placeholder for the original BZA hearing date. Zoning Division staff will also not remove contents from earlier applications to complete a revised application. Applicants are responsible for ensuring all information necessary for processing a Zoning Appeal is submitted by the application deadline for a given BZA hearing date.
1. Ordinance Section(s) for the Appeal:

<table>
<thead>
<tr>
<th>Zoning Ordinance Section being Appealed</th>
<th>Sign Ordinance Section being Appealed</th>
</tr>
</thead>
<tbody>
<tr>
<td>• §325- 8 Column 4, 12, and 14/15</td>
<td>• §272-</td>
</tr>
<tr>
<td>• §325-</td>
<td>• §272-</td>
</tr>
<tr>
<td>• §325-</td>
<td>• §272-</td>
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<tr>
<td>• §325-</td>
<td>• §272-</td>
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<td>• §325-</td>
<td>• §272-</td>
</tr>
<tr>
<td>• §325-</td>
<td>• §272-</td>
</tr>
</tbody>
</table>

2. Application of SEQR determination:  _ Type 1  _X_ Type 2  _ Unlisted

3. Environmental Assessment form used:

   _X_ Short Environmental Assessment Form
   _ _ Long Environmental Form
   ____ Lead Agency
   ____ Determination of Significance
   ____ Completed by the Planning Division at preliminary hearing for SPR

4. A previous appeal _ has,  _X_ has not, been made for this proposal:

   Appeal No. ________, dated ____________
   Appeal No. ________, dated ____________
   Appeal No. ________, dated ____________
   Appeal No. ________, dated ____________
   Appeal No. ________, dated ____________

5. Notes or Special Conditions:

   ___________________________________
   ___________________________________
   ___________________________________
   ___________________________________
   ___________________________________
PROJECT NAME: 113 Fourth Street

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Will project result in a large physical change to the project site or physically alter more than one acre of land?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2. Will there be a change to any unique or unusual land form found on the site or to any site designated a unique natural area or critical environmental area by a local or state agency?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3. Will the project alter or have any effect on an existing waterway?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4. Will the project have an impact on groundwater quality?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>5. Will the project affect drainage flow on adjacent sites?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>6. Will the project affect any threatened or endangered plant or animal species?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>7. Will the project result in an adverse effect on air quality?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>8. Will the project have an effect on visual character of the community or scenic views or vistas known to be important to the community?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>9. Will the project adversely impact any site or structure of historic, pre-historic, or paleontological importance or any site designated a local landmark or in a landmark district?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>10. Will the project have an effect on existing or future recreational opportunities?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>11. Will the project result in traffic problems or cause a major effect to existing transportation systems?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>12. Will the project cause objectionable odors, noise, glare, vibration, or electrical disturbance as a result of the project’s operation during construction or after completion?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>13. Will the project have any impact on public health or safety?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>14. Will the project affect the existing community by directly causing a growth in permanent populations of more than 5 percent over a one-year period OR have a negative effect on the character of the community or neighborhood?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>15. Is there public controversy concerning the project?</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

If any question has been answered YES, a completed Full Environmental Assessment Form (FEAF) is necessary.

PREPARER’S SIGNATURE: [Signature]  DATE: 9/11/2018
PREPARER’S TITLE: Secretary, Board of Zoning Appeals
REPRESENTING: City of Ithaca
# CITY OF ITHACA SHORT ENVIRONMENTAL ASSESSMENT FORM (SEAF)

## Project Information
(to be completed by applicant or project sponsor)

<table>
<thead>
<tr>
<th>1. Applicant/Sponsor:</th>
<th>2. Project Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alena Fast, INHS</td>
<td>Ithaca Scattered Site Rental Preservation Project</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Project Location:</th>
</tr>
</thead>
<tbody>
<tr>
<td>113 Fourth Street Ithaca, NY 14850</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Is Proposed Action:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ New ☑ Expansion ☑ Modification/Alteration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Describe project briefly:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addition of exterior ADA accessible ramp and stair at existing apartment unit entry porch.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Precise Location (road intersections, prominent landmarks, etc., or provide map):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fourth Street and Madison Street</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Amount of Land Affected:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initially: 110 SF Acres or Sq. Ft.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. Will proposed action comply with existing zoning or other existing land use restrictions?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Yes ☑ No  If no, describe briefly: Existing building and porch, as well as proposed ramp, do not comply with Front Yard requirement of the Zoning Ordinance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. What is present land use in vicinity of project:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Residential ☑ Industrial ☑ Agricultural ☑ Parkland/Open Space ☑ Commercial ☑ Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. Describe:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10. Does action involve a permit/approval or funding, now or ultimately, from governmental agency (federal/state/local):</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Yes ☑ No  If yes, list agency name and permit/approval type: NYS Homes and Community Renewal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. Does any aspect of the action have a currently valid permit or approval?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Yes ☑ No  If yes, list agency name and permit/approval type: Building Permit, City of Ithaca Building Division</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12. As a result of proposed action, will existing permit/approval require modification?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Yes ☑ No</td>
</tr>
</tbody>
</table>

---

*I certify the information provided above is true to the best of my knowledge.*

**PREPARER'S SIGNATURE:** Alena Fast  
**DATE:** 8/17/18  
**PREPARER'S TITLE:** Real Estate Developer  
**REPRESENTING:** Ithaca Neighborhood Housing Service
NOTICE OF APPEAL
REGARDING ZONING OR SIGN ORDINANCE
CITY OF ITHACA, NEW YORK

TO: Owners of Property within 200 feet of 113 Fourth Street and others interested.

FROM: Aleena Fast, INHS applicable to property named above, in a(n) R2b zone.

REGARDING: (check appropriate box)

☒ Area Variance
☐ Special Permit
☐ Use Variance
☐ Sign Variance
☐ Action, Decision, or Interpretation of Zoning Officer

City regulations require you be notified of this appeal to the Board of Zoning Appeals (BZA), as described in the attached letter and provide the opportunity for you to comment on it and/or attend the meetings listed below. Anyone considered an interested party may speak for or against the appeal at the meetings listed below, or submit a written statement to the BZA before its designated meeting. There is a time limit of three (3) minutes for each interested party to address the BZA during the Public Hearing portion of the meeting.

The Board of Zoning Appeals bases its decision primarily on the written evidence submitted and presented to it, the testimony of interested parties, and zoning and legal considerations. The written case record will be available for review at the Zoning Division, City Hall, 108 E. Green St., Third Floor, beginning one week before the scheduled BZA meeting. This case has also been referred to the City’s Planning and Development Board that will advise the BZA, if granting the relief sought by the appellant will affect long-term planning objectives. The date of the Planning Board’s meeting regarding this appeal is also listed below.

The Planning Board will consider this case on 10/23/18 at 6:00 P.M. in Common Council Chambers, City Hall, 108 E. Green St. Ithaca.

The Board of Zoning Appeals will consider this case on November 6, 2018 at 6:00 P.M. in Common Council Chambers, City Hall, 108 E. Green St. Ithaca.

Aleena Fast
Signature of Appellant
115 W Clinton St
Address
10/15/18
Date
October 15, 2018

Alena Fast  
Real Estate Developer  
Ithaca Neighborhood Housing Services, Inc.  
115 West Clinton Street  
Ithaca, NY 14850

Re: 113 Fourth Street – Zoning Appeal Letter

Dear Neighbors:

INHS is dedicated to helping people of modest incomes find—and stay in—high-quality housing throughout central New York, a goal that benefits the entire community. Among our many programs and initiatives, we manage well-maintained rental units and rehab old homes.

We are currently underway with a scattered site rental preservation project renovating properties and providing improvements to 98 apartment units throughout Ithaca. 113 Fourth Street is among the properties undergoing interior renovations and is home to two apartments with separate exterior entrances. The first floor unit of this building (Apt 1) is being renovated to comply with ADA accessibility standards in order to provide housing options to a wider range of tenants with varying needs. There are currently no accessible ramps to either entrance at 113 Fourth St.

This letter is a continuation of a previous zoning appeal as the Board of Zoning Appeals asked to see a different layout option for the ramp. The proposed entrance will improve accessibility by providing both a stair and ramp to the porch landing on Madison St and eliminating an existing step up at the entry door. A switchback ramp configuration allows both the stair and ramp to be accessed from a single sidewalk in order to promote an equitable and dignified entrance for tenants and visitors who may require the ramp. As such, the ramp will run along the rear of the building.

The existing porch and stair are located within the required front yard setback of the R2b Zoning Ordinance. Whereas the zoning requirement is 10'; the existing porch landing is within 4 feet from the property line and the existing house is 9'3" at its closest point to Madison St. The proposed ramp and stair will require a rear yard and front yard variance as they too will encroach on the zoning setbacks. We require approval of these variances in order to provide an accessible means of egress from Apt 1 per applicable building codes and ADA standards.

Sincerely,

Alena Fast  
Real Estate Developer

AF/dmks
<table>
<thead>
<tr>
<th>Address</th>
<th>Address</th>
<th>Address</th>
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<td>Orzino, Frank J</td>
<td>Bong, Whitney L</td>
<td>Fox, Michael S</td>
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<tr>
<td>Orzino, Joyce N</td>
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<td>Fox, Victoria G</td>
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<td>209 Fourth St</td>
<td>Ithaca NY 14850</td>
<td>412 Madison St</td>
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<td>500700 44.5-12</td>
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<td>500700 44.5-3</td>
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<td>Smith, Donna K</td>
<td>Tsokyi, Tenzin</td>
<td>Ithaca Housing Authority</td>
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<tr>
<td>414 Madison St</td>
<td>Dhondup, Nyima</td>
<td>800 S Plain St</td>
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<td>Ithaca NY 14850</td>
<td>416 Madison St</td>
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<td>Warner, Sara L</td>
<td>Terry, Robert D</td>
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<td>Watts, Mary Jo</td>
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<td>Apartments Housing Dev Fund, Ithaca City</td>
<td>Ciaschi, Carmen G</td>
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<td>Thompson, Jerry</td>
<td>115 West Clinton St</td>
<td>Ciaschi, Lisa J</td>
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<tr>
<td>1301 Mier St</td>
<td>Ithaca NY 14850</td>
<td>318 Warren Pl</td>
</tr>
<tr>
<td>Laredo TX 78040</td>
<td>Ithaca NY 14850</td>
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<td>Lam, Trung</td>
<td>Ecker, John H</td>
<td>Herneisey, Joanne E</td>
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<td>Ecker, Jeanette</td>
<td>Naylor, Garry</td>
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<td>1401 1/2 Slaterville Road</td>
<td>414 Cascadilla St</td>
<td>416 Cascadilla St</td>
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<td>Ithaca Mo. Mtg of Rel Soc</td>
<td>Ithaca Mo. Mtg of Rel Soc</td>
<td>Mazza and Amici, LLC</td>
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<tr>
<td>3137 Jacksonville Rd</td>
<td>3137 Jacksonville Rd</td>
<td>307 N Tioga St</td>
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<tr>
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<td>Ithaca NY 14850</td>
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<td>500700 44.6-5</td>
<td>500700 44.6-6</td>
<td>500700 44.7-1</td>
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<td>Stewart, Evelyn D</td>
<td>Hall, Hugh W</td>
<td>City of Ithaca</td>
</tr>
<tr>
<td>114 Third St</td>
<td>Hall, Martha H</td>
<td>108 E Green St</td>
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<tr>
<td>Ithaca NY 14850</td>
<td>112 Third St</td>
<td>Ithaca NY 14850</td>
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<td>500700 51.3-3</td>
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<td>Ithaca Housing Authority</td>
<td>Bernstein, Barbara J</td>
<td>Chaudhry, Atif I</td>
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<tr>
<td>800 S Plain St</td>
<td>415 Cascadilla St</td>
<td>411 Cascadilla St Apt 1</td>
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<td>Ithaca NY 14850</td>
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</tr>
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</table>
ZONING APPEAL CERTIFICATION OF MAILING

RE: City of Ithaca Board of Zoning Appeals

Zoning Appeal # 3107

I, Alena Fast, affirm all property owners within two hundred (200) feet of the boundaries of the lot(s) under consideration have been mailed a copy of the enclosed notice on or before 9/18/18. I affirm the notice was mailed to the property owners at the addresses shown on the attached list of owners, by depositing the copy in a post-paid properly addressed envelope, in a post office or an official depository under the exclusive care and custody of the United States Post Office. I further affirm the names and addresses of the property owners are the same as the most recent assessment roll.

[Signature]
(Appellant’s Signature)

PLEASE SUBMIT THIS FORM TO:
City of Ithaca Zoning Division
108 E. Green St., 3rd Fl.
Ithaca, NY 14850

Phone: (607) 274-6550
Fax: (607) 274-6558
BUILDING PERMIT

City of Ithaca, New York

Lecesse Construction

To erect, alter, move or repair a building as follows, in accordance with all Laws, Rules and Regulations applicable thereto:

Operation: Alteration 2
INHS Scattered Site Rental Preservation Project

Address: 113 Fourth Street

Permit Number: 35840

Date of Permit: 7/6/2017
Expiration Date: 7/6/2019

Signed: [Signature]
For The Building Division

THIS PERMIT MUST BE POSTED AT THE PLACE WHERE THE WORK IS IN PROGRESS
"SURVEY MAP OF KITTE BERRY PROPERTY AT 414 CASCADILLA ST." BY CARL CRANDALL AND DATED DECEMBER 1, 1959.

"SURVEY MAP OF NO.105 FOURTH STREET" DATED 12/16/2003 BY T.G. MILLER, P.C.

TITLE INFORMATION
ITHACA NEIGHBORHOOD HOUSING SERVICES, INC.
BK.585 PG.885
TAX MAP NO.44-6-1
AREA=0.104 ACRES

TITLE: SURVEY MAP
NO.113 FOURTH STREET
CITY OF ITHACA, TOMPKINS COUNTY, NEW YORK

DATE: 1/28/2004
SCALE: 1"=20'

T. G. MILLER P.C.
ENGINEERS AND SURVEYSORS
383 NORTH AURORA STREET
ITHACA, NEW YORK 14850
TEL. (607) 272-6477

CERTIFICATION
I hereby certify:

ITHACA NEIGHBORHOOD HOUSING SERVICES, INC.

that I am a licensed land surveyor, New York State License No. 56048, and that this map correctly delineates an parcel of real property and the information herein is true and correct. I have carefully supervised the field work of the survey and have reviewed and examined this survey map. I attest to the truth and accuracy of this map and hereby certify that I was prepared in accordance with the current rules of practice for land surveys adopted by the New York Association of Professional Land Surveyors, and that I found no visible encroachments or other map errors.

SIGNED: [Signature] DATED: 1/3/2016

*AMENDED: 10/2/2018 - SURVEY UPDATED ALL CORNERS FOUND