CITY OF CHARLOTTESVILLE

Department of Neighborhood Development Services

City Hall Post Office Box 911 Charlottesville, Virginia 22902 Telephone 434-970-3182 Fax 434-970-3359 www.charlottesville.org



September 13, 2019

TO: Charlottesville Planning Commission, Neighborhood Associations & News Media

Please Take Notice

A Work Session of the Charlottesville Planning Commission will be held on Tuesday, September 24, 2019 at 5pm in the NDS Conference Room (610 East Market Street)

AGENDA

- 1. 218 West Market Street Special Use Permit Proposal
- 2. Public Comment

cc: City Council
Dr Tarron Richardson
Paul Oberdorfer
Alexander Ikefuna
Planners
Jeff Werner
Lisa Robertson

CITY OF CHARLOTTESVILLE

DEPARTMENT OF NEIGHBORHOOD DEVELOPMENT SERVICES PLANNING COMMISSION

PRELIMINARY DISCUSSION: SPECIAL USE PERMIT

Author of Memo: Brian Haluska, Principal Planner

Date of Meeting: September 24, 2019

RE: 218 West Market Street

Background

Jeff Levien of Heirloom Real Estate Holdings, LLC, acting as agent for owner Market Street Promenade, LLC, has submitted a special use permit for a mixed-use development at 218 West Market Street. The request is for additional height and density.

The conceptual plan proposes a new building with up to 134 residential units. The property is further identified on City Real Property Tax Map 33 Parcel 276. The site is zoned Downtown Corridor with an Architectural Design Control District Overlay Zone and Urban Corridor Parking Overlay Zone. The property is approximately 0.56 acres.

Vicinity Map



Preliminary Analysis

Reason for Special Use Permit

The applicant is requesting a special use permit for additional height and density.

The maximum height permitted by right in the Downtown zoning district is 70 feet, with an additional 31 feet permitted by special use permit. The applicant shows a maximum building height of 101 feet.

The maximum by-right residential density in the Downtown corridor is 43 dwelling units per acre, with 240 units per acre permitted by special use permit. The applicant is requesting density of 240 dwelling units an acre.

Questions for Discussion

- Engagement with the adjacent streets The proposed building will frontage on both West Market Street and Old Preston Avenue. The frontage on Old Preston faces the HVAC facility for the Omni hotel, but is also along a pedestrian connection to the Downtown Mall. How does the proposed building massing impact Old Preston Avenue?
- Massing and Scale The proposed building would be 101 feet tall, and would be
 a focal point of persons travelling east down West Market Street. The building is
 in proximity with several other tall structures including the Omni Hotel and the
 CODE building that is currently under construction. The adjacent buildings along
 West Market, however, are only single story buildings.

Attachments

Application
Conceptual plan with Drawings



Application for Special Use Permit

Project Name: 218 West Morket Redevelopment
Address of Property: 218 West Market Street RECEIVED
Tax Map and Parcel Number(s): 33-776
Current Zoning District Classification: Downstown
Comprehensive Plan Land Use Designation: Hixed-Use NEIGHBORHOOD DEVELOPMENT SERVICES
Is this an amendment to an existing SUP? N
If "yes", provide the SUP #:
Applicant: Heirloom Real Estate Holdings, LLC - Jeff Levien
Address: % Milestone Partners 300 2nd ST NE Charlottesuille, VA 22902
Phone: 434-245-5803 Email: Tell e Levich 3. com
Applicant's Role in the Development (check one):
Owner Owner's Agent Designer Contract Purchaser
Owner of Record: Market Street Promovade, LCC
Address: 1500 Amberst St. Suite 3, Charlottswille, VA 22903
Phone: Email:
Phone: Email: Reason for Special Use Permit:
Reason for Special Use Permit:
Reason for Special Use Permit: Additional height: 101 feet
Reason for Special Use Permit: Additional height: 101 feet Additional residential density: units, or units per acre
Reason for Special Use Permit: Additional height: 101 feet Additional residential density: units, or240 units per acre Authorize specific land use (identify) Other purpose(s) (specify City Code section): (1) Applicant's and (2) Owner's Signatures
Reason for Special Use Permit: Additional height:IO\ feet Additional residential density: units, or240 units per acre Authorize specific land use (identify) Other purpose(s) (specify City Code section):
Reason for Special Use Permit: Additional height: 101 feet Additional residential density: units, or240 units per acre Authorize specific land use (identify) Other purpose(s) (specify City Code section): (1) Applicant's and (2) Owner's Signatures
Reason for Special Use Permit: X



Application for Special Use Permit

GINIA-19 Project Name: 218 West Horket Redevelopment
Address of Property: 218 West Harket Street
Tax Map and Parcel Number(s): 33-276
Current Zoning District Classification: <u>Donate Pour</u> t
Comprehensive Plan Land Use Designation: Hwd-Usc
Is this an amendment to an existing SUP? <u>N</u> If "yes", provide the SUP #:
Applicant: Heirlann Real Estate Holdings, CLC
Address: 90 Milesbac Partners 300 2nd ST NE Charlottesuille, 1/A 72902 Phone: 481-245-5803 Email: Telle Levich 3.com
Applicant's Role in the Development (check one):
Owner Owner's Agent Designer Contract Purchaser
Owner of Record: Market Street Proncoade: 1.1.C
Address: 1500 Amberst St Scribe 3 Charlottswille, VA 22903
Phone: Email:
Reason for Special Use Permit:
X Additional height: 101 feet
Additional analysis describes and 200 series and 200
Additional residential density: units, or <u>240</u> units per acre
Authorize specific land use (identify)
Authorize specific land use (identify)
Authorize specific land use (identify) Other purpose(s) (specify City Code section):
Authorize specific land use (identify) Other purpose(s) (specify City Code section): (1) Applicant's and (2) Owner's Signatures
Authorize specific land use (identify) Other purpose(s) (specify City Code section): (1) Applicant's and (2) Owner's Signatures (1) Signature Print Jeff Leylen Date 3/13/19 Applicant's (Circle One): LLC Member LLC Manager Corporate Officer (specify) Other (specify): Print John M. Mulhenhy Date 8-13-19
Authorize specific land use (identify) Other purpose(s) (specify City Code section): (1) Applicant's and (2) Owner's Signatures (1) Signature Print Jeffen Date 3/13/19 Applicant's (Circle One): LLC Member LLC Manager Corporate Officer (specify) Other (specify):



Pre-Application Meeting Verification

Project Name: 218 West Market Street
GINIA-1
Pre-Application Meeting Date: 04/09/2019
Applicant's Representative: Craig Kotarski / Jeff Dreyfus
Planner: Brian Haluska
Other City Officials in Attendance:
The following items will be required supplemental information for this application and
must be submitted with the completed application package:
must be submitted with the completed application package: 1. Preliminary Elevations
1. Preliminary Elevations
1 Preliminary Flevations
1. Preliminary Elevations2
1. Preliminary Elevations
 1. Preliminary Elevations 2
1. Preliminary Elevations2
 1. Preliminary Elevations 2
 1. Preliminary Elevations 2. 3. 4.
 1. Preliminary Elevations 2. 3. 4.



Application Checklist

Project Name: 218 West Market Redevelopment

l cert	ify that the following documentation is ATTACHED to this application:
	34-158(a)(1): a site plan (ref. City Code 34-802(generally); 34-1083(communications facilities)
	34-158(a)(3): Low-impact development (LID) methods worksheet (required for developments that include non-residential uses, and developments proposing 3 or more SFDs or TFDs)
	34-158(a)(4): a building massing diagram, and building elevations (required for applications proposing alteration of a building height or footprint, or construction of any new building(s))
	34-158(a)(5) and 34-12: affordable housing data. (i) how many (if any) existing dwelling units on the property are an "affordable dwelling unit" by the city's definitions? (ii) Will existing affordable units, or equivalent affordable units, remain following the development? (iii) What is the GFA of the project? GFA of residential uses? GFA of non-residential uses?
	34-157(a)(1) Graphic materials that illustrate the context of the project, and a narrative statement as to compatibility with existing patterns of use and development
	34-157(a)(2) Narrative statement: applicant's analysis of conformity with the Comprehensive Plan
	34-157(a)(3) Narrative statement: compliance with applicable USBC provisions
	34-157(a)(4) Narrative statement identifying and discussing any potential adverse impacts, as well as any measures included within the development plan, to mitigate those impacts
	34-158(a)(6): other pertinent information (narrative, illustrative, etc.)
	All items noted on the Pre-Application Meeting Verification.
Applic Signat By Its	Print Jeffrey Levien Date 8/13/19
	(For entities, specify: Officer, Member, Manager, Trustee, etc.)



Community Meeting

Project Name: 218 West Harket Street Redevelopment

Section 34-41(c)(2) of the Code of the City of Charlottesville (adopted October 19, 2015) requires applicants seeking rezonings and special use permits to hold a community meeting. The purpose of a community meeting is to provide citizens an opportunity to receive information about a proposed development, about applicable zoning procedures, about applicable provisions of the comprehensive plan, and to give citizens an opportunity to ask questions. No application for a rezoning shall be placed on any agenda for a public hearing, until the required community meeting has been held and the director of neighborhood development services determines that the application is ready for final review through the formal public hearing process.

By signing this document, the applicant acknowledges that it is responsible for the following, in connection to the community meeting required for this project:

- 1. Following consultation with the city, the applicant will establish a date, time and location for the community meeting. The applicant is responsible for reserving the location, and for all related costs.
- 2. The applicant will mail, by U.S. mail, first-class, postage pre-paid, a notice of the community meeting to a list of addresses provided by the City. The notice will be mailed at least 14 calendar days prior to the date of the community meeting. The applicant is responsible for the cost of the mailing. At least 7 calendar days prior to the meeting, the applicant will provide the city with an affidavit confirming that the mailing was timely completed.
- 3. The applicant will attend the community meeting and present the details of the proposed application. If the applicant is a business or other legal entity (as opposed to an individual) then the meeting shall be attended by a corporate officer, an LLC member or manager, or another individual who can speak for the entity that is the applicant. Additionally, the meeting shall be attended by any design professional or consultant who has prepared plans or drawings submitted with the application. The applicant shall be prepared to explain all of the details of the proposed development, and to answer questions from citizens.
- 4. Depending on the nature and complexity of the application, the City may designate a planner to attend the community meeting. Regardless of whether a planner attends, the City will provide the applicant with guidelines, procedures, materials and recommended topics for the applicant's use in conducting the community meeting.
- 5. On the date of the meeting, the applicant shall make records of attendance and shall also document that the meeting occurred through photographs, video, or other evidence satisfactory to the City. Records of attendance may include using the mailing list referred to in #1 as a sign-in sheet (requesting attendees to check off their name(s)) and may include a supplemental attendance sheet. The City will provide a format acceptable for use as the supplemental attendance sheet.

Applicant: Heirham Ked Estate Ho	belings, LCC	
By:		1 1 0
Signature	Print Jeffrey Levien Dat	te
Its: <u>Manager</u>	(Officer, Member, Trustee, etc.)	



Owner's Authorizations

(Not Required)

Right of Entry- Property Owner Permission

the property that is the subject of this application, for the purpose of this Special Use Permit application.	e of gathering information for the review
Owner: Market Street ProHeroade, ILC	Date
By (sign name): Print Name:	
Owner's: LLC Member LLC Manager Corporate Offi	icer (specify):
Other (specific):	
Owner's Agent	
I, the undersigned, hereby certify that I have authorized the followas my lawful agent, for the purpose of making application for this purposes, including, without limitation: to make decisions and regmy property and upon me, my successors and assigns.	special use permit, and for all related
Name of Individual Agent: Tell Leuren	
Name of Corporate or other legal entity authorized to serve as a	gent: Hirlson Real Estate Holdings, a
Owner: By (sign name): Jeffiey Levien Print Name Circle one:	Date: <u>8//3//9</u> e:
Owner's: LLC Member LLC Manager Corporate Off	ficer (specify):

I, the undersigned, hereby grant the City of Charlottesville, its employees and officials, the right to enter



Owner's Authorizations

(Not Required)



Disclosure of Equitable Ownership

Section 34-8 of the Code of the City of Charlottesville requires that an applicant for a special use permit make complete disclosure of the equitable ownership "real parties in interest") of the real estate to be affected. Following below I have provided the names and addresses of each of the real parties in interest, including, without limitation: each stockholder or a corporation; each of the individual officers and directors of a corporation; each of the individual members of an LLC (limited liability companies, professional limited liability companies): the trustees and beneficiaries of a trust, etc. Where multiple corporations, companies or trusts are involved, identify real parties in interest for each entity listed.

Name Teffrey Levico Address 2093 Gooding Road North Granders, VA 22459

Name	Address
Name	Address
Name	Address
Attach additional sheets as needed.	
	es of stockholders does not apply to a corporation whose stock is change and which corporation has more than five hundred (500)
Signature Its: Managel	Print Tefficy Levien Date 8/13/19 (Officer, Member, Trustee, etc.)



Fee Schedule

Project Name: 218 West Morket St Reducopment

Application Type	Quantity	Fee	Subtotal
Special Use Permit	\	\$1800	#1800
Special Use Permit (Family Day Home for 6-12 Children)		\$500	
Mailing Costs per letter		\$1 per letter	
Newspaper Notice		Payment Due Upon Invoice	
TOTAL			# 1,800

Office Use Only							
Amount Received: \$1,800	Date Paid 8 13 19	Received By: Since 1. Bar	more)				
Amount Received:	Date Paid	Received By:					
Amount Received:	Date Paid	Received By:					
Amount Received:	Date Paid	Received By:					



LID Checklist

Project Name:	218	12sty	Market	Redevelor	Heat
•					Obstor

LID Measure	LID Checklist Points	Ро	ints
Compensatory Plantings (see City buffer mitigation manual). 90% of restorable stream buffers restored.	5 points or 1 point for each 18% of the total acreage		
Pervious pavers for parking and driveways with stone reservoir for storage of 0.5 inches of rainfall per impervious drainage area. Surface area must be $>1,000$ ft. ² or $\geq 50\%$ of the total parking and driveway surface area.	7 points or 1 point for each 7% of parking and driveway surface area.		
Shared parking (must have legally binding agreement) that eliminates >30% of on-site parking required.	5 points or 1 point for each 6% of parking surface eliminated.	5	5
Impervious Disconnection. Follow design manual specifications to ensure adequate capture of roof runoff (e.g. cisterns, dry wells, rain gardens)	8 points		
Bioretention . Percent of site treated must exceed 80%. Biofilter surface area must be ≥ 5% of impervious drainage area.	8 points or 1 point for each 10% of site treated.		
Rain gardens. All lots, rain garden surface area for each lot ≥ 200 ft. ² .	8 points or 1 point for each 10% of lots treated.		
Designed/constructed swales. Percent of site treated must exceed 80%, achieve non-erosive velocities, and able to convey peak discharge from 10 year storm.	8 points or 1 point for each 10% of site treated.		
Manufactured sand filters, filter vaults (must provide filtering rather than just hydrodynamic). Percent of site treated must exceed 80%. Sizing and volume for water quality treatment based on manufacturer's criteria.	8 points or 1 point for each 10% of site treated.		8
Green rooftop to treat ≥ 50% of roof area	8 points	8	
Other LID practices as approved by NDS Engineer.	TBD, not to exceed 8 points		
Off-site contribution to project in City's water quality management plan. This measure to be considered when on site constraints (space, environmentally sensitive areas, hazards) limit application of LID measures. Requires pre-approval by NDS Director.	5 points	OFTON 1	opton 2
	Total Points	13	13

Applicant's Signature		,
Signature	Print Jakieg Levien	Date

218 West Market Redevelopment

SUP Application
Request for Additional Density and Height
Narrative Statement
August 13, 2019

Heirloom Real Estate Holdings, LLC (the "Applicant"), contract purchaser of the site located at 218 West Market Street (and in City records as Tax Map 33 Parcel 276), requests approval of a special use permit ("SUP") to allow residential density on the properties up to 240 units per acre and height up to 101'. This request is in accordance with Section 34-560 and 34-557, respectively, of the City's zoning ordinance.

The owners of the Applicant are the same owners of Heirloom West Main Development, LLC, (Owner/Developer of 600 West Main, currently under construction) and Heirloom West Main Development Second Phase, LLC (Owner/Developer of 612 West Main, currently under and SUP Application review).

Applicant, in preparation for this SUP, submitted a Request for Demolition to the Board of Architectural Review ("BAR") and it was heard at the March 13, 2019 public hearing. The BAR discussed the merits of the existing structure, along with the historical and architectural significance. Those factors, coupled with the prospect of a mixed-use redevelopment, the BAR Approved the Request for Demolition, with conditions. The most significant condition is: The demolition of the building is contingent upon the granting of a Certificate of Appropriateness ("COA") and building permit for this building's replacement.

Request for Additional Density

The Applicant anticipates constructing a variety of housing units ranging from studio units, 1-bedroom, 2-bedroom (and potentially, 3-bedroom) units. Approval of additional density up to 240 units per acre will enable the Applicant to provide this broad range of unit types and offer them at a variety of price points to potential residents. Keeping with the current restrictions on density would result in large, expensive, units geared to one segment of the residential market, or worse, derail the redevelopment of the property and continue the property to be used for low density retail. Approval of the additional density will enable the project to positively impact the housing stock and options available in the Downtown area and be consistent with the overall vision of the City.

Request for Additional Height

The Applicant anticipates constructing a building that meets all the standards and guidelines, as outlined in the Downtown ADC District, up to a height of 101'. Approval of additional height will enable the Applicant to provide a mixed-use project with retail/commercial uses on the ground floor(s) and residential above. This request is consistent with the current and future scale at the West end of the Downtown Mall. With the longstanding Omni Hotel anchoring the west end and the currently under construction C.O.D.E building, height of up to 101' for 218 West Market will compliment these buildings well.

Conformity with Comprehensive Plan

Additional density will be in keeping with the goal of the City as expressed in the Comprehensive Plan. The Comprehensive Plan's land use map designates the properties for mixed-use. This proposal includes both housing and retail/commercial. The additional residential units will help to increase the number of full-time residents living on the downtown mall. This will continue to enhance the vibrancy of the downtown mall and balance the residential, retail, restaurant, entertainment, office, and hospitality that exists today. With projects like C.O.D.E and 3Twenty3 both currently under construction and creating new Class A office space in downtown, the proposed application compliments them well in providing housing options in downtown to support a walkable lifestyle.

This project will also serve towards meeting the City's Comprehensive Plan goals to "grow the housing stock" and "promote housing options." The Applicant expects to include in the project a number of market-rate (non-student) studio units which will provide a housing option not presently available in the West Main or Downtown areas (except as will be provided on a limited basis at the Applicant's 600 West Main project and currently proposed 612 West Main Project).

Additional height will be in keeping with the scale and mass of the West end of the Downtown Mall. The Omni Hotel and the C.O.D.E building provide the contextual scale to support a project of up to 101' in height. Additionally, the subject site's size and dual street frontage make it an ideal candidate for additional height, as opposed to other parcels in the Downtown corridor. The prescribed street wall and step backs, outlined in the Zoning Code, allow the building to scale appropriately to the pedestrian at both West Market and Old Preston, yet still achieve the height necessary to support mixed-use and the residential density request above.

Potential Impacts

Approval of additional density for the project will have minimal impact on the Downtown area. The residential density requested is provided for in the zoning ordinance as a permitted use and thus the City has already decided the density is appropriate for the zoning district. Any impacts associated with increased density are mitigated by the proximity of the project to employment and retail centers, public transit and the provision of bicycle facilities.

It is anticipated that many residents will choose to live in the project precisely because they will be able to walk to work, shopping, and transit. Because Downtown is well served by bus and train transit as well as cab service, residents will have transportation options and reliance on their personal vehicle is reduced. Newer transit options like Bird and Lime are also available in Downtown. Bicycle facilities will be provided and much of the City is within "bike-able" distance from the project.

Existing Affordable Housing

There are no existing "affordable dwelling units" on the property. There will thus be no loss of affordable housing. The project is planned to include a mix of units, including studio units, at a variety of price points. This is a better option than what would be built under the existing zoning density (24 large, expensive, units) or if the project was not undertaken at all and the property remained in its current use.

Compliance with USBC Provisions

The project will be constructed in complete compliance with all building code requirements.

Conclusion

The proposed redevelopment of the properties will be in keeping with the City's goals as expressed in the Comprehensive Plan for creating a mixed-use, urban neighborhood in Downtown. The project will greatly enhance the vibrancy of the Western portion of Downtown Mall by bringing an increase in the number of residents with front door access to the Mall. By offering a variety of housing types oriented to those who seek to live, work and shop within a walk-able setting, the project will be filling a niche for housing that is currently underserved. Approval of the special use permit allowing residential density up to 240 units per acre and a height up to 101'will enable all this to be achieved.



218 WEST. MARKET ST.

ZONE: MIXED-USE DOWNTOWN CORRIDOR - "D"

ARCHITECTURAL DESIGN CONTROL
DISTRICT URBAN CORRIDOR PARKING ZONE

PRIMARY STREETS: WEST MARKET ST., OLD PRESTON AVE.

LAND AREA: 0.56 ACRES/24,393 SF

DENSITY: MIN. REQ'D BY RIGHT WITH SUP 21 DUA 43 DUA 240 DUA

DWELLING UNITS: 12 UNITS 24 UNITS 134 UNITS

STREET WALL HT: 40' MIN., 45 ' MAX

STEPBACK: 25' AFTER 45' MAXIMUM HEIGHT

OVERALL HEIGHT: 70' BY RIGHT

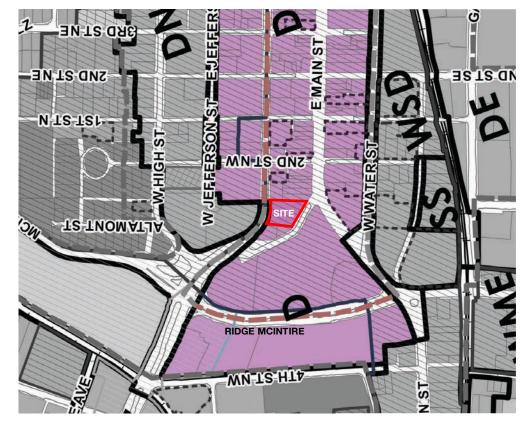
101' WITH SPECIAL USE PERMIT

CALCULATED AVERAGE GRADE PLANE: 448'-3"

PARKING: REQUIRED FOR ALL ADDITIONAL UNITS

ALLOWED AS A RESULT OF THE INCREASED DENSITY WITH AN SUP

ZONING MAP:







218 WEST. MARKET ST.

ZONE: MIXED-USE DOWNTOWN CORRIDOR - "D"

> ARCHITECTURAL DESIGN CONTROL DISTRICT URBAN CORRIDOR PARKING ZONE

PRIMARY STREETS: WEST MARKET ST., OLD PRESTON AVE.

LAND AREA: 0.56 ACRES/24,393 SF

MIN. REQ'D **DENSITY:** BY RIGHT WITH SUP

21 DUA 43 DUA 240 DUA

DWELLING UNITS: 12 UNITS 24 UNITS 134 UNITS

STREET WALL HT: 40' MIN., 45 ' MAX

STEPBACK: 25' AFTER 45' MAXIMUM HEIGHT

OVERALL HEIGHT: 70' BY RIGHT

101' WITH SPECIAL USE PERMIT

CALCULATED AVERAGE GRADE PLANE: 448'-3"

PARKING: REQUIRED FOR ALL ADDITIONAL UNITS

> ALLOWED AS A RESULT OF THE INCREASED DENSITY WITH AN SUP



PARKING LEVEL DIAGRAM; BY RIGHT





LEVEL 2-3 DIAGRAM; BY RIGHT



LEVEL 1 PLAN DIAGRAM; BY RIGHT



LEVELS 4 AND HIGHER 25' STEPBACK ON PRIMARY STREETS







VIEW WEST FROM WEST MARKET STREET - BY RIGHT



VIEW WEST FROM WEST MARKET STREET - WITH SUP



VIEW EAST FROM WEST MARKET STREET - BY RIGHT



VIEW EAST FROM WEST MARKET STREET - WITH SUP





VIEW WEST FROM EAST MAIN STREET (PEDESTRIAN MALL) - BY RIGHT



VIEW WEST FROM EAST MAIN STREET (PEDESTRIAN MALL) - WITH SUP



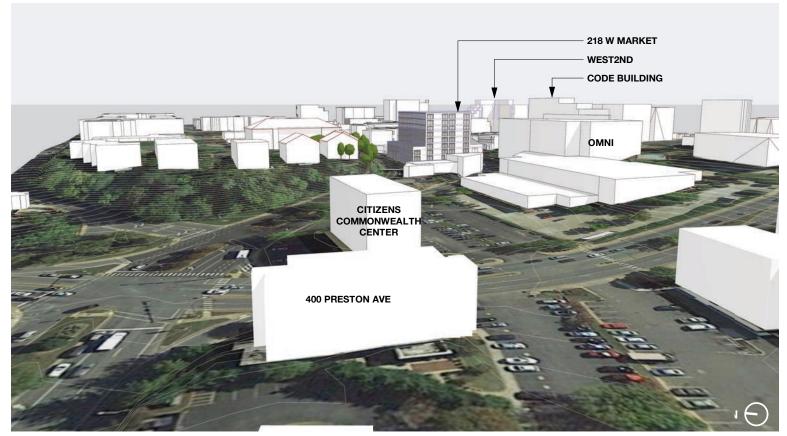
VIEW WEST ACROSS RIDGE MCINTIRE - BY RIGHT



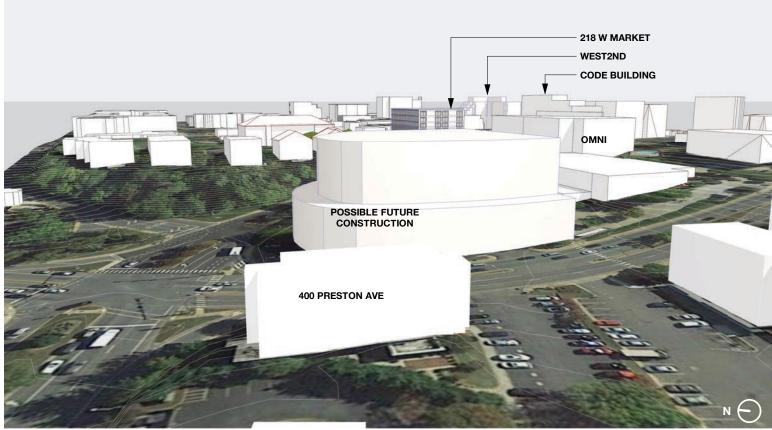
VIEW ACROSS RIDGE MCINTIRE - WITH SUP*

*Parking lot in foreground is zoned the same as 218 W. Market. New construction in foreground would completely obscure view of 218 W. Market St.





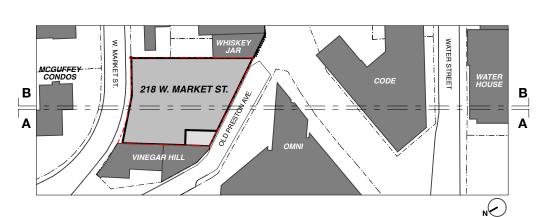
AERIAL VIEW WEST FROM EAST - EXISTING BUILDING IN FOREGROUND

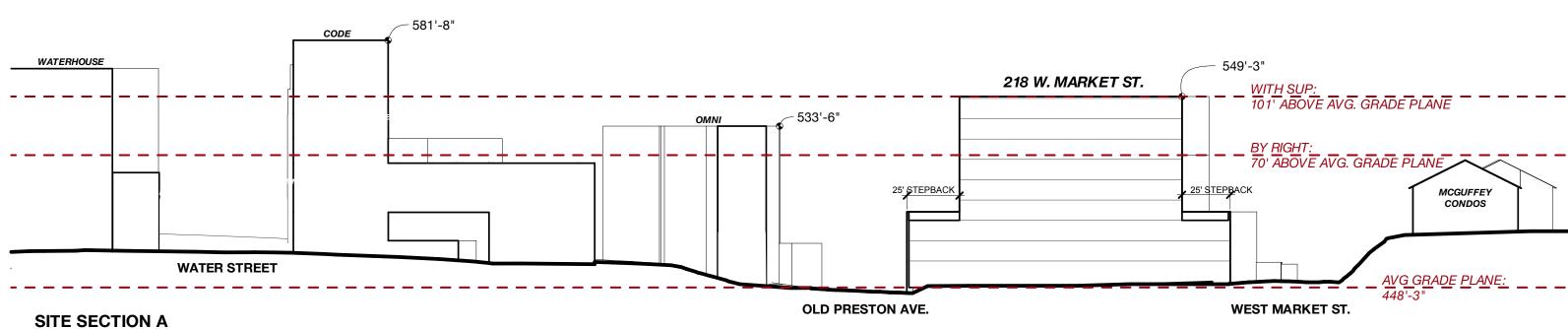


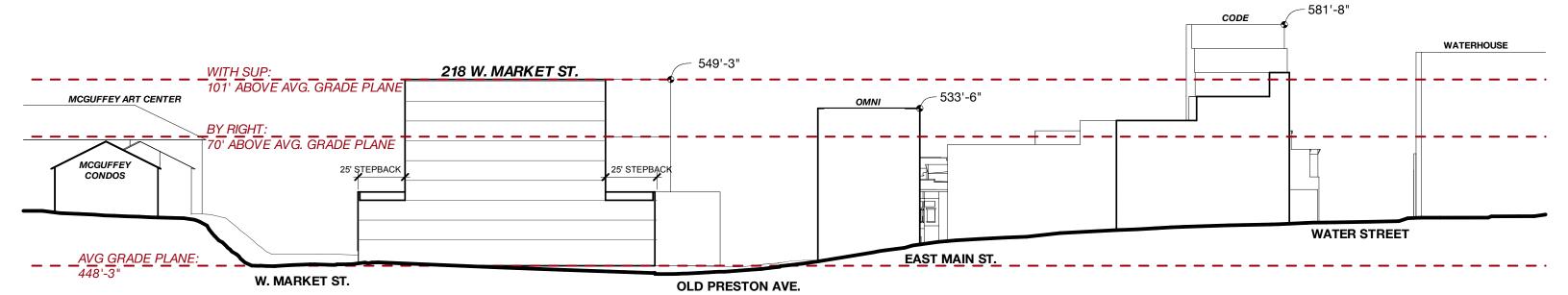
AERIAL VIEW WEST FROM EAST - POSSIBLE FUTURE CONSTRUCTION IN FOREGROUND



AERIAL VIEW WEST FROM STAPLES PARKING LOT

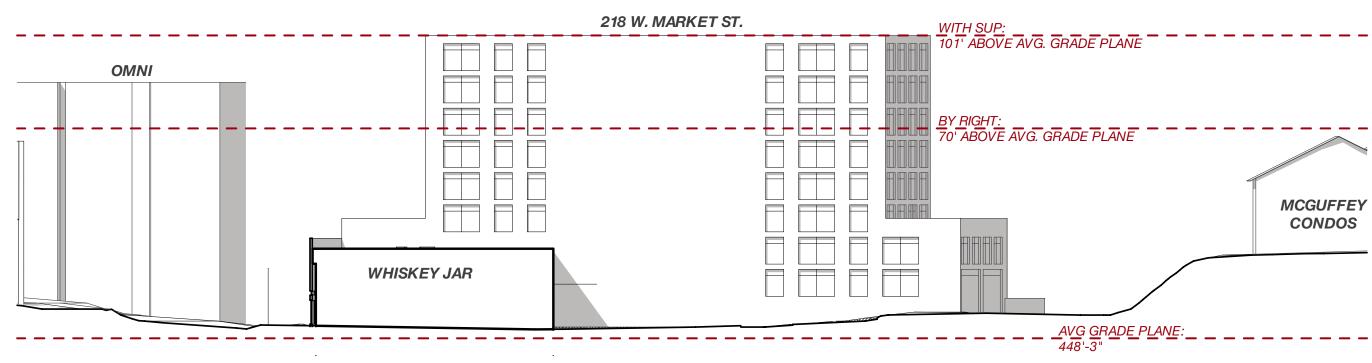






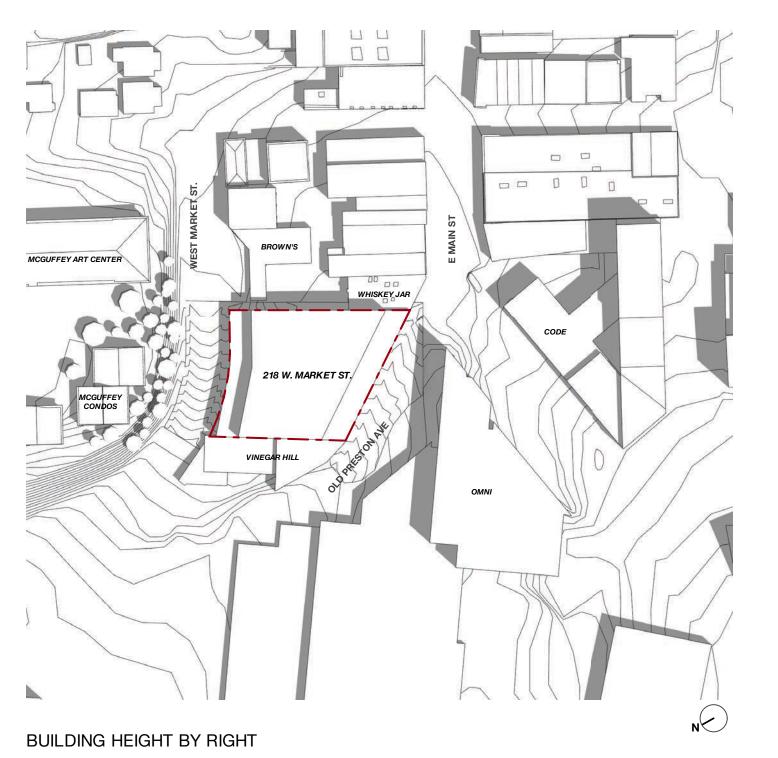


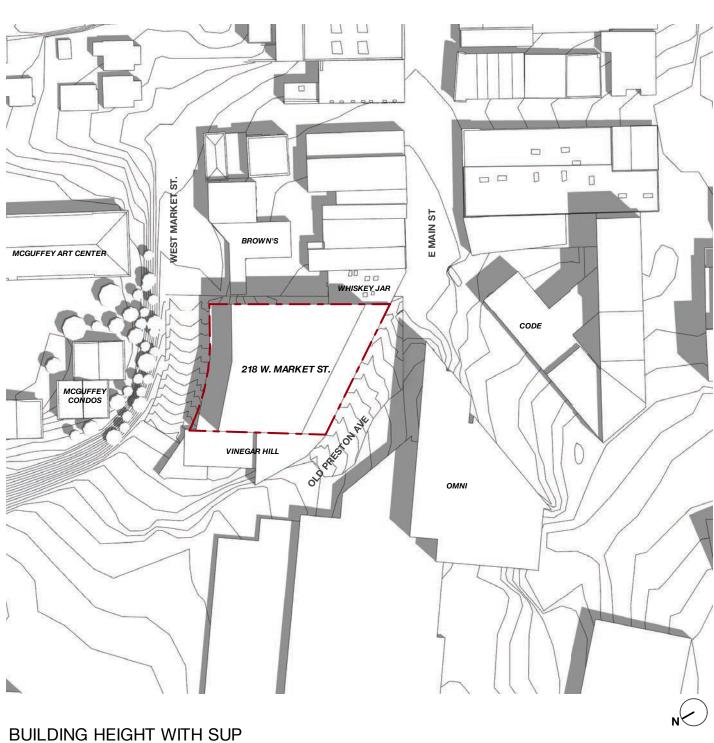




EAST ELEVATION

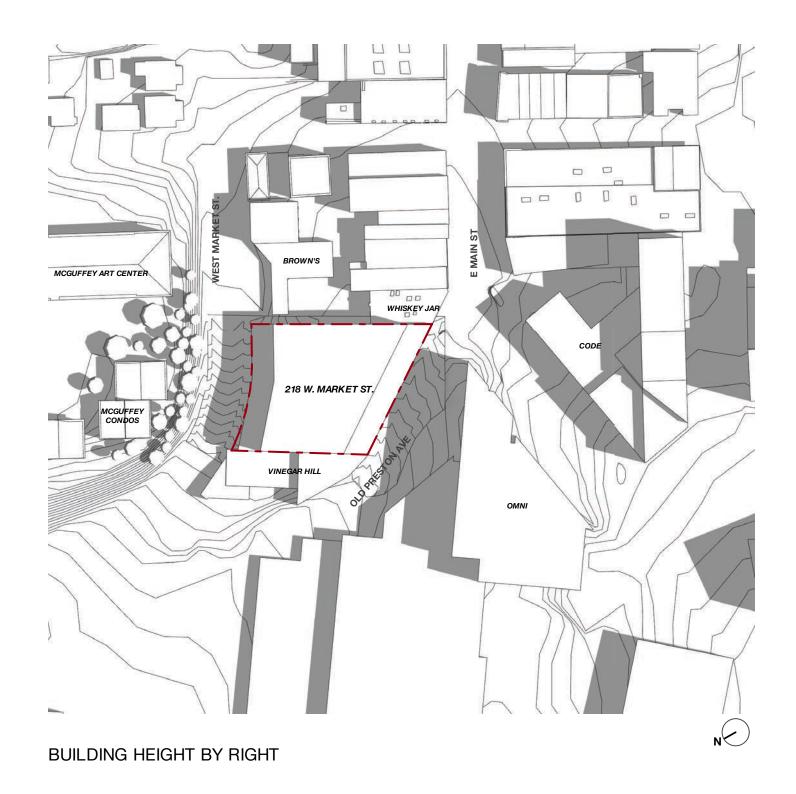


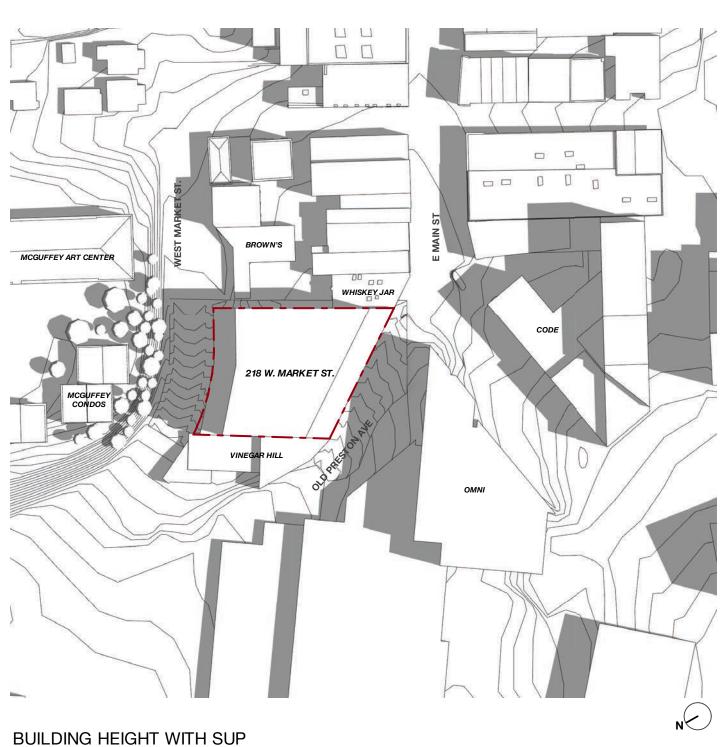




SHADOW STUDIES LONGEST DAY OF THE YEAR: 2PM JUNE 21ST

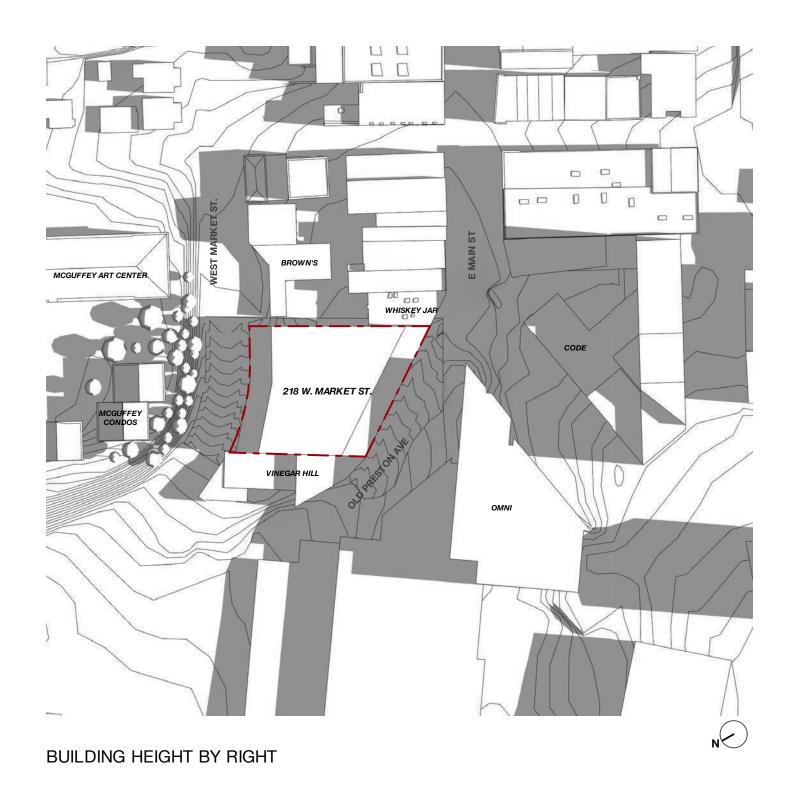
10



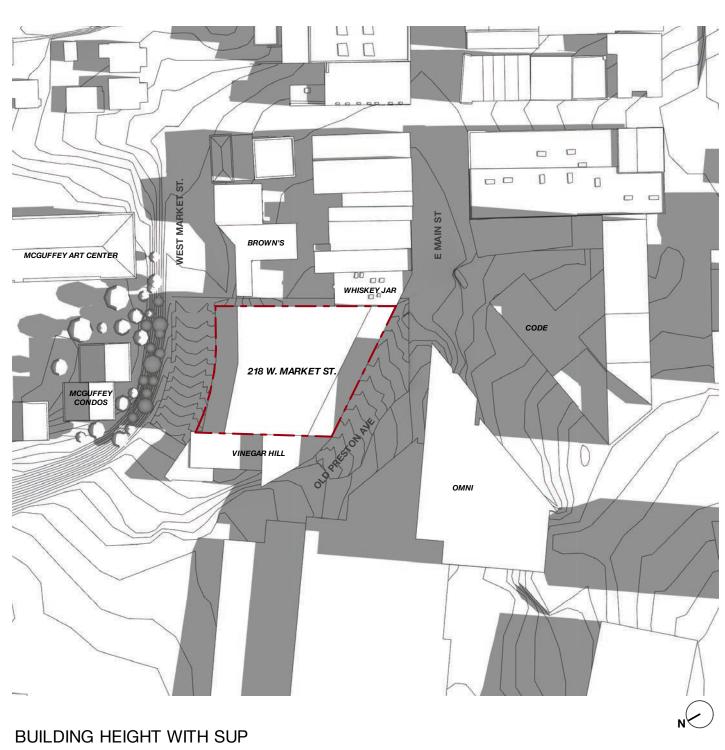


SHADOW STUDIES FALL AND SPRING EQUINOX: 2PM MARCH/SEPTEMBER 21ST

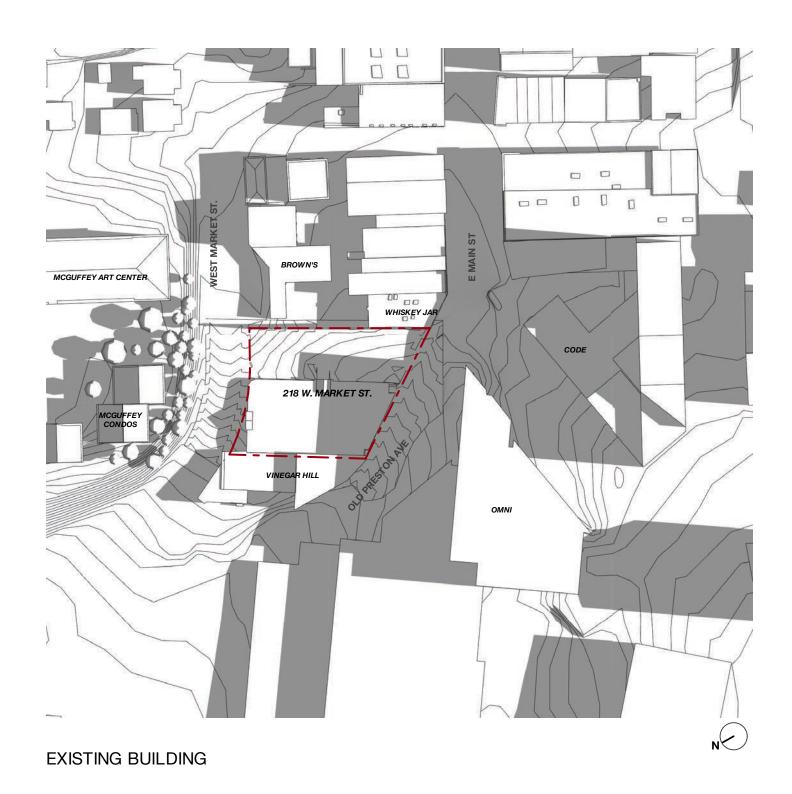
11



DECEMBER 21 SHADOW STUDY COMPARISON - BY RIGHT & SUP



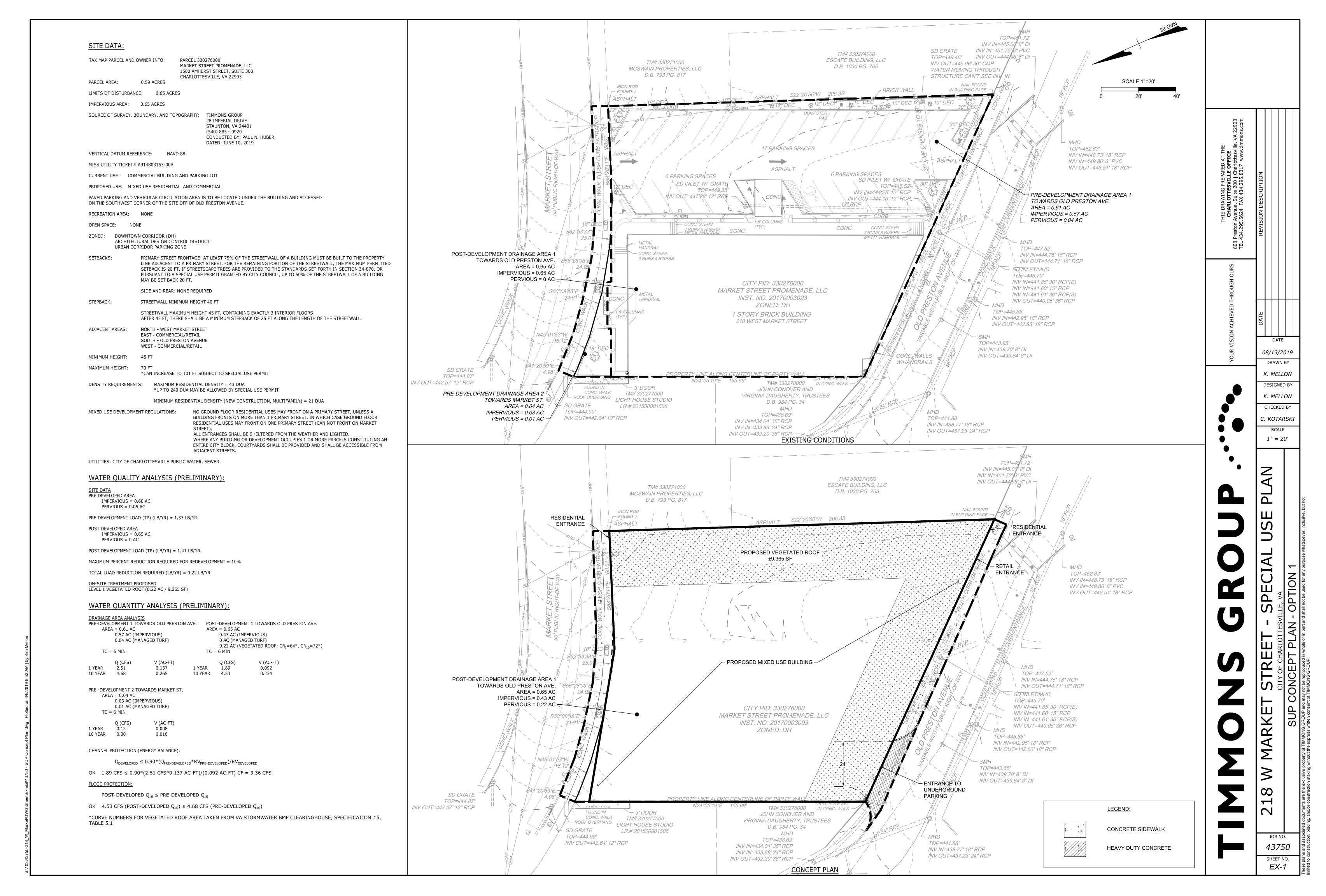
SHADOW STUDIES SHORTEST DAY OF THE YEAR: 2PM DECEMBER 21ST



DECEMBER 21 SHADOW STUDY COMPARISON - EXISTING & SUP



SHADOW STUDIES SHORTEST DAY OF THE YEAR: 2PM DECEMBER 21ST



L

