

#### PLANNING COMMISSION

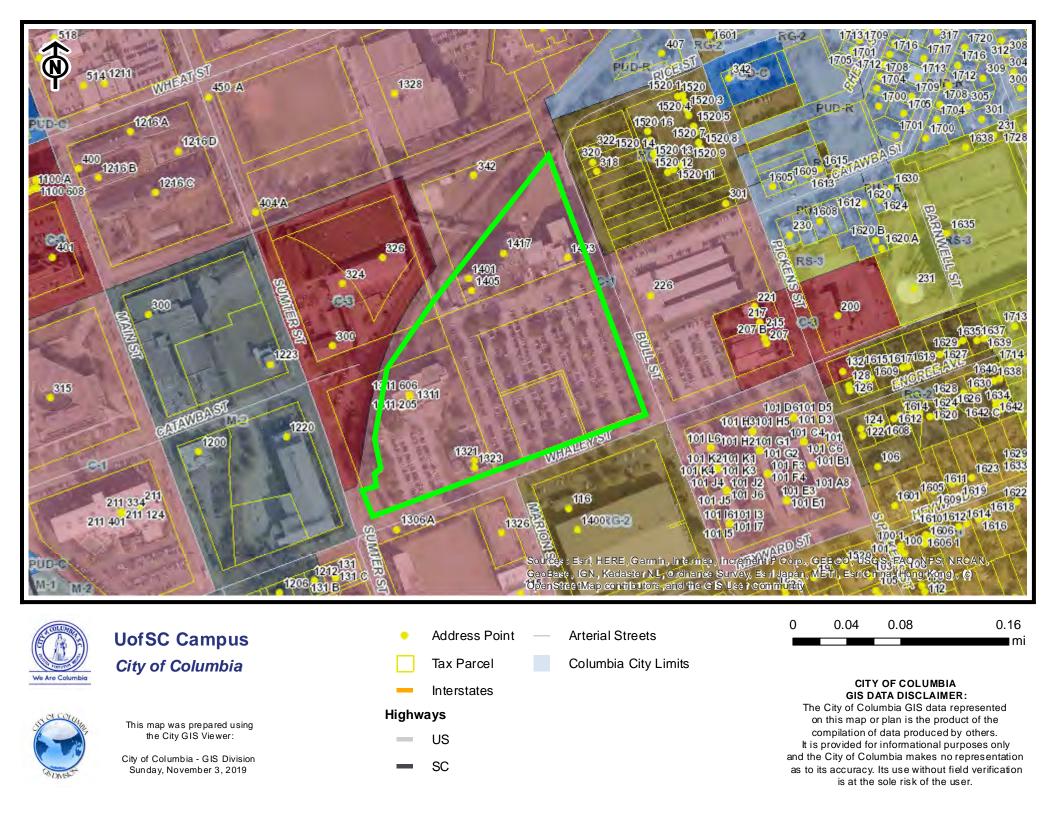
December 2, 2019 at 5:15pm City Council Chambers, 3<sup>rd</sup> Floor, 1737 Main Street, Columbia, SC 29201

#### Site Plan Review Case Summary 200 and 300 Blocks of Bull Street, 1300 and 1400 Blocks of Whaley Street TMS#11302-07-02, 11302-08-02, 11302-09-02, 11306-12-01, 11306-12-02, 11306-13-01, and 11306-12-03 UofSC CAMPUS VILLAGE

Council District:	2
Proposal:	Request Planning Commission site plan approval to construct a 4-building, 1808-bed public dormitory development (U of SC Campus Village)
Applicant:	Derek S. Gruner, University of South Carolina
Proposed Use:	Public Dormitories
Staff Recommendation:	Approval with staff comments.
Detail:	This project is comprised of seven parcels containing ±12.47 acres which and are bounded north by Norfolk Southern Railroad, east by the 200 and 300 blocks of Bull Street, south by the 1300 and 1400 blocks of Whaley Street, and west by Norfolk Southern Railroad. All of the properties are zoned C-1 (Office and Institutional). On the southern portion of the property, the applicant is proposing to construct a four- building public dormitory that will contain 560 units with a total of 1808 beds. Unit sizes will vary between two, three, four, five, and six beds. The southwest portion of the property will contain a transportation hub / parking garage for short term use that will contain 237 spaces for vehicles and 24 spaces for scooters. There is also space allocated for bicycles. The majority of the long term parking associated with this development will be provided in remote off-site locations such as existing garages, existing surface lots, and an improved remote surface lot which is accessed from Key Road near Williams Brice Stadium. The applicant will be providing sidewalks, landscaping and street lighting adjacent to the development. In addition, a railroad crossing gate will be provided at the intersection of Bull and Marion Streets. Though there are many staff comments within this case summary, the proposed site plan largely meets requirements. Should the Planning Commission be inclined to approve this request, we would ask that the Commission condition approval subject to staff comments.

CI	TY REVIEWING AGENCY COMMENTS
CI John Fellows, Planning	<ul> <li>TY REVIEWING AGENCY COMMENTS</li> <li>Recommend approval with conditions: <ol> <li>All work/improvements within the right of way shall require a permit encroachment being submitted and approved by Council.</li> <li>All crosswalks at Marion and Whaley and Bull and Whaley shall be ladder style or continental to provide the greatest visibility at night.</li> <li>There are currently only two street lights within the area. Given addition of transit stops, pedestrian walkways, mixed use building etc. the safety and visibility of pedestrians is important. A street lighting plan will need to be provided. Overhead lighting of the roadway shall be provided at Whaley and Sumter, Whaley and Marion, and Whaley and Bull. Pedestrian lighting shall be provided along both sides of the sidewalk along Whaley and Bull. Lighting shall be turned over to Traffic Engineering for ownership. Overhead lights shall be a autobahn LED fixture on black metal pole. Pedestrian lighting style shall be determined by Traffic Engineering and the Urban Design Planner.</li> </ol> </li> <li>If any portion of the public right of way that will require any restriping or repaving shall require a striping plan to be submitted and reviewed by the Traffic Engineering, Urban Design Planner, and Bike and Pedestrian Planner. Such new markings or restriping shall include bike lanes along Whaley and or Bull per the Walk Bike Columbia Plan. Bike Lanes shall</li> </ul>
	<ul><li>be installed at a minimum for one block.</li><li>5. A traffic study shall be provided that includes a study of vehicles, pedestrians, and cyclist.</li></ul>
Rachel Bailey, Zoning Administrator	<ol> <li>Recommend approval with condition:         <ol> <li>Ensure portions of buildings over 50' and up to 75' are properly set back in accordance to 17-275</li> <li>Parking may be located on any land owned by the University regardless of distance. Such parking shall be improved to meet all applicable parking lot standards. Parking located more than 600 feet from the principal use shall be served by transit system. Transit shelters with security lighting, cameras and emergency call boxes will be on-site. A real time locator feature to inform riders of bus location shall be provided. Hours of transit operation shall factor in ultimate ridership and include weekend and after hours service if there is a demand.</li> </ol> </li> </ol>
Johnathan Chambers, Land	Recommend approval with conditions:
Development Administrator	<ol> <li>Lots must be combined prior to the issuance of any permits.</li> <li>Work within the ROW requires City of Columbia and SCDOT encroachments permits.</li> </ol>
Todd Beiers, Commercial Plans	Recommend approval with condition:
Examiner Scott Rogers, Utilities	1. All Buildings must comply with the 2015 IBC and ALL related Codes. <b>Recommend approval with conditions:</b>
	<ol> <li>Any needed upgrade, extension or relocation of City utilities must be provided by the developer and must meet the City's minimum design standards.</li> <li>Any privately owned/maintained utilities or permanent structures cannot be located inside City of Columbia utility easements.</li> <li>Water mains, water meters that are 4" or larger or any privately maintained utilities will not be allowed inside public right-of-ways or under sidewalks without an approved encroachment permit and written approval from the City Engineer. Coordination between the Civil Engineer, Architect and Mechanical Engineer to allow room for these utilities on the developed property is strongly suggested.</li> <li>If sewer flows for this project result in flows of 4,000 gallons per day or above calculations must be submitted to the City's Engineering department to determine how the proposed project will affect the City's</li> </ol>

	sewer system. Depending upon the effects of the projected flows this project may or may not be approved. If required, these calculations should be submitted to the Engineering department as soon as possible.
David Brewer, Traffic Engineering	Recommend approval with conditions:
	<ol> <li>Applicant to provide a traffic impact study for review and approval prior to the issuance of any permits.</li> <li>All improvements recommended in the traffic impact study must be implemented.</li> </ol>
Kris Scott, Fire Department	Recommend approval.
Caleb King, Forestry	Recommend approval with condition:
	1. New landscaping or irrigation installed in the right of way must be
	maintained by the adjacent property owner in a manner to not interfere
	with vehicular and pedestrian traffic. SCDOT must approve any new
	landscaping installed along SCDOT roadways.
AJ Jessee, Stormwater	Recommend approval with condition:
	1. Development must comply with all applicable land disturbance
	requirements.
Sandra Myers, Parking	Recommend approval.
Robert Sweatt, Street Division	
	Recommend approval.
John Hooks, Solid Waste	Recommend approval.
Scott Holder, Landscaping	Recommend approval.









This map was prepared using the City GIS Viewer:

**UofSC Campus** 

**City of Columbia** 

City of Columbia - GIS Division Sunday, November 3, 2019





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# City of Columbia APPLICATION for SITE PLAN/SUBDIVISION PLAT REVIEW

**OFFICE USE ONLY: Date Received** 

By

1) APPL	ICANT (Please Print)		
Name:	Derek Gruner, RA, LEED AP	Company:	University of South Carolina
Tel. #:	(803) 777-1184	Fax#:	
Mobile #:	(803) 315-3663	E-mail:	DGRUNER@fmc.sc.edu
Do you own	any of the property affected by this applicat	ion? X YES	NO: If NO. provide Letter of Agency

#### 2) THIS APPLICATION IS FOR (Check all that apply)

Group/Individual Commercial Development

Group Residential Development

**Residential Subdivision** 

**Planned Unit Development Site Review** 

#### 3) **PROPERTY**

Address:	1321 Whaley Street	and portions of 1399 Whaley	Piraci	
Auuress.			Street.	
TMS#:		11306-12-02, 11306-12-03, AND 2, 11302-08-02, 11306-13-01	Total Acreage:	12.43 Acres
Current Use:	University Housing		<b>Proposed Use:</b>	University Housing
<b>Current Zoning:</b>	All parcels are C-1			
Number of Lots an	nd/or Units:		Total Sq. Ft.	511,383 SF

### 3) DETAILED PROJECT DESCRIPTION: (Attach additional paper if you need more space)

See attached Project Description

#### 4) **NEIGHBORHOOD CONSULTATION**

Prior to the Planning Commission meeting, meet with the adjacent neighbors or neighborhood association to communicate details of the proposed project. Please note that this informational meeting is not required by ordinance, but is *strongly* encouraged. Contact information may be obtained from Zoning staff.

#### 5) PLAN SUBMITTAL

Please refer to the Checklist for Site Plan Review for materials required for submittal with this application

6) SIGNATURE	
Applicant Signature:	Deel Juman
Print Name:	DEREK S. GRUNER
Date:	10/29/19

PC Date:\_\_\_

Action: \_\_\_\_\_

# **University of South Carolina - Campus Village**

#### Project Description, Parking Summary, and Traffic Impact Study October 30, 2019









#### University of South Carolina Campus Village – Project Description

**Site Information:** This first stage of Campus Village will redevelop approximately 9 acres or property owned by the university. The property is north of Whaley Street on the existing large surface parking lot that serves Bates House and Bates West residence halls and also on land currently occupied by Cliff Apartments and a surface parking lot in front of Cliff Apartments. The site is ideal for redevelopment and will enjoy connectivity with the campus core via the existing elevated pedestrian promenade in the original South Marion Street right-of-way. Bates House and Bates West residential halls will remain occupied during the construction of this first stage of Campus Village construction. The project will demolish Cliff Apartments, construct and furnish four residential buildings as described in more detail below, construct a transportation hub/parking facility, and provide all associated on-site and off-site work to include utilities, paving, landscaping and site amenities.

**General Project Description:** Campus Village is envisioned as a comprehensive and transformational student residence project achieving numerous campus objectives consistent with the vision of the 2018 Master Plan. These objectives include:

- 1. Respond to enrollment growth with no less than 1800 new beds in four new residential buildings that are consistent with recently constructed or renovated campus residence halls for security and a holistic living-learning environment.
- 2. Eliminate the abatement and maintenance needs of Cliff Apartments, constructed in 1974, through demolition and removal of this facility.
- 3. Reimagine a predominantly barren surface parking lot and create a village with humanely scaled brick buildings surrounded by landscaped green space inspired by the historic areas of the campus.
- 4. Provide on-site amenities including a large dining facilities, robust shuttle service, a transportation hub facility, multi-purpose rooms in the residence halls, and a small canteen grocery store to offer an environment that is a complete student-life experience.
- 5. A site plan which strengthens the South Marion Street pedestrian promenade connecting Campus Village and the Athletics Village to the campus core to the north. A pedestrian bridge will be restored where the South Marion Street promenade crosses Wheat Street to enhance access to the core campus. Other offsite improvements are needed for safe connectivity and to respond to the increase in student population in this district of the campus.

One new residential building will be constructed on the site of Cliff Apartments and the other three residential buildings will be constructed on the large parking lot immediately south of the Bates House and the Bates West residence halls. The residential buildings will be non-combustible and constructed of steel and concrete using a combination of International Building Code Construction Types IIA, IA, and IIB. The buildings will comply with accessibility standards of IC A117.1-2009 and the Fair Housing Act of 1998. The project will meet a 2-Globe sustainability rating using the Green Globes rating system. A low-rise transportation hub with approximately 175 parking spaces will be built on the site of the existing surface lot south of Cliff Apartments.

**Residential Building One:** A six-story building with an additional partial basement level comprising approximately 156,700 gross square feet. The building provides approximately 412 beds configured in a "traditional pod" style in which bathrooms are located in a community core as opposed to being within a suite.





Opportunities to increase the bed count will be explored During Phase II design. Bedrooms are typically 253 square feet and each will accommodate two beds. A large dining facility, of approximately 26,200 square feet, will occur on the ground level with direct access from a main plaza along the South Marion Street promenade. The dining facility will be operated as part of the food service contract with Aramark. A small campus police substation also occurs on the ground level.

**Residential Building Two:** A six-story building comprising approximately 113,500 gross square feet. The building provides approximately 436 beds configured in a "suite" style in which two bedrooms share a private bathroom core with a toilet, a shower and two sinks. Suites are typically 600 square feet and each bedroom will accommodate two beds. The ground level will provide approximately 3560 square feet for a coffee shop and 2960 square feet for a canteen store for purchasing groceries and other staples.

**Residential Building Three:** A six-story building comprising approximately 123,800 gross square feet. The building provides approximately 460 beds configured in a "suite" style in which two bedrooms share a private bathroom core with a toilet, a shower and two sinks. Suites are typically 600 square feet and each bedroom will accommodate two beds. The ground level will provide multi-purpose rooms and a faculty office suite.

**Residential Building Four:** A six-story building comprising approximately 131,900 gross square feet. The building provides approximately 500 beds configured in a "suite" style in which two bedrooms share a private bathroom core with a toilet, a shower and two sinks. Suites are typically 600 square feet and each bedroom will accommodate two beds. The ground level will provide a multi-purpose room.

#### Typical residential amenities occurring in each building include:

- Community functions concentrated on the ground floors with student residences beginning on the second floors and extending to the sixth floors;
- Secure building lobbies, furnished, with a staffed reception desk and elevators accessible through a secure elevator lobby requiring card access for entry to access upper residential floors;
- Apartments for resident life coordinators;
- Public restrooms on the ground floor of each building;
- Administrative offices on the ground floor of each building;
- Multi-purpose rooms, kitchen lounges and study lounges occur on residential floors;
- 2-3 public elevators per building
- A central laundry;
- A central interior bike storage room;
- A central trash room connected to smaller trash rooms on every residential floor via trash chutes;
- Institutional quality interior finishes at the floors, walls and ceilings;
- Every bedroom will be furnished with institutional quality furniture to include beds, desks, chairs and wardrobes;
- Electronic access control will require access cards for entry to all exterior doors and all suite and bedroom doors as dictated by university housing standards;
- Vandal-resistant windows at the ground level;
- Cameras will be installed throughout the exterior and interior public spaces as dictated by campus police;

South Carolina GREYSTAR\*

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- Wireless internet, wired data ports, and campus cable television ports are provided throughout;
- Support spaces including custodial rooms, mechanical rooms, fire sprinkler valve/pump rooms and electrical rooms.

**Transportation Hub:** A low-rise parking facility, (two staggered elevated levels), adjacent to Residential Building One will provide approximately 200 spaces for short-term student parking, taxi service, cars for lease, faculty and staff parking, scooter parking and bike sharing stations. The vast majority of parking for Campus Village will be remote and off-site. Locations will include existing off-site garages, existing surface lots and an improved remote surface lot, accessed from Key Road near Williams-Brice Stadium, that will be funded by the Campus Village project. Project funding will also create and improve parking for commuters adjacent to Colonial Life Arena so that commuters can be relocated from the Blossom Street and Bull Street Garages thereby creating parking capacity for Campus Village residents in these garages.

**Other Off-site Supporting Site Improvements:** The Campus Village development will greatly increase the number of students in the southern district of the campus which will require that the university implement other campus improvements to support the students at Campus Village. These improvements will include:

- Improve remote surface parking for students to comply with City of Columbia ordinances which mandate 1 parking space for every 2 student beds. Improvements will include improving a university-owned gravel lot accessed from Key Road near Williams-Brice Stadium and improving a deteriorated university-owned lot near Colonial Life Arena where commuters will park thereby shifting commuters from parking garages and creating capacity for Campus Village resident parking to comply with the City ordinance.
- Enhancing the safety of Sumter Street from Whaley Street to just north of the railroad bridge (slightly more than two blocks). Sumter Street will receive more pedestrian, bike and vehicular traffic as a result of Campus Village. Portions of Sumter Street do not provide sidewalks or bike lanes. Work should include a pedestrian bridge over Rocky Branch Creek so students are not forced to walk in the roadway.
- Railroad crossing gates at the intersection of Whaley Street and Sumter Street. Currently the crossing is un-gated and is near the entrance to the on-site transportation facility.
- Possible utility upgrades to supply additional electrical power and the replacement/upgrade of aged sewer and water lines that will support Campus Village.
- New sidewalks at Bull Street and Marion Street to create safe pedestrian connectivity with other campus areas.
- Intramural recreation improvements on adjacent university property to address the increase in students in the district.
- Improvements and possible reconstruction of portions of the elevated walkway in the South Marion Street corridor that will be used by students to walk and bike from Campus Village to the academic core of campus.

**Project Justification:** The project will meet a portion of the demand for on-campus housing which has been confirmed by numerous surveys and housing master plans. This demand has only increased by recent enrollment growth. The project will eliminate deferred maintenance by demolishing Cliff Apartments which is beyond its serviceable life and does not comply with contemporary building codes.



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#### University of South Carolina Campus Village – Parking Strategy

#### **EXECUTIVE SUMMARY | CAMPUS VILLAGE PARKING STRATEGY**

#### Α. Introduction

The first stage of the Campus Village Residential Development Project will demolish one existing public dormitory building owned by USC and construct four new public dormitory buildings, also to be owned by USC, which will provide approximately 1808 new beds. Two existing university public dormitories, which are adjacent to the site of the new buildings, will remain providing 950 beds. This ultimate onsite total of 2758 beds will require 1379 parking spaces. This calculation reflects the City of Columbia Zoning Ordinance:

Section 17-258 Table 1; Table of Permitted Uses, Section 8811.4 (Dormitories, Public) which requires .5 spaces per bedroom.

Parking to serve the development has adopted a strategy of providing an extremely limited number of parking spaces on-site. Parking on-site will be limited to approximately 200 spaces in a "parking/transit hub" facility for short term student access, Campus Village resident staff, rideshare vehicles, Uber/Lyft access, bikes and scooters. Generally, parking to serve new beds will be provided at existing oncampus parking garages and remote surface lots owned by the university and in excess of 600 feet from Campus Village. Commuters and some residents who currently occupy parking spaces near Campus Village and who occupy campus garages will be shifted to two large remote lots, one near Williams-Brice Stadium and the other near Colonial Life Arena. Other smaller lots will round out an aggregate approach to provide parking spaces in excess of what is required by City of Columbia Zoning for stage one of Campus Village. All remote lots will be served by a transit system as allowed by:

#### Sec. 17-345. - Reduction of parking requirements for certain uses.

(h) College or university public dormitories. Parking for public dormitories may be located on land owned by the college or university regardless of the distance from the principal use. Such parking shall be improved to meet all applicable parking lot standards, and not be located in a residential zoning district. Parking located more than 600 feet from the lot where the principal use is located shall be served by a transit system. Transit shelters shall be provided to protect riders from the elements, and include security lighting, emergency call boxes, and security cameras. A real time locator feature to inform riders of the bus location shall be provided. Hours of transit operation shall factor in ultimate ridership and include weekend and after hours service if there is a demand.

Β. Aggregate parking for Campus Village is provided through the following four means:







- 1. <u>Creation of new on-site parking for Campus Village residents:</u>
  - a. 200 new parking spaces created in the parking/transit hub facility on-site
- 2. <u>Allowing commuters and residents to occupy remote parking on a daily basis that currently is only</u> <u>used for football events (7 days annually):</u>
  - a. Key Road D Lot at WBS, 575 spaces.
  - b. Remote Lot near WBS, <u>145 spaces</u>.
  - Total720 spaces

#### 3. Existing capacity in garages and surface lots

258 existing spaces identified as available within existing USC daily use inventory:

- a. Athletic Village Garage, 150 spaces (the garage serving the Athletics Village has capacity for buildings that have not been constructed and are not in the foreseeable plans for the university)
- b. AD11 AV Roost Lot, 75 spaces (the lot served the Roost Dormitory which has been vacated and is to be demolished in the future)
- c. S23 off Bull Street, 33 (existing spaces remain in use throughout the project)
- d. AD9 Benson Lot 121 spaces (currently serving on-site dormitories)
- e. AD6Bates Lot56 spaces (remaining on lot adjacent to Bates dormitories)Total435 spaces
- 4. <u>Parking relocated to new spaces and reassignment of existing spaces</u>
  - a. Create 733 new spaces west of Colonial Life Arena for commuters after the university Facilities Department moves to Flora Street. Relocate commuters from the Blossom Street and Bull Street garages and reassign garage spaces for Campus Village residents.
  - b. Bull Street Garage, 433 spaces (approximately)
  - c. Blossom Street Garage,300 spaces (approximately)Total733 spaces

**Grand total of spaces 2088** spaces (Excess spaces will be available for assignment to the parking demand from future stages of development at Campus Village)

#### C. CAMPUS VILLAGE PHASE I PARKING PLAN ANNUALIZED

REQUIREMENTS:2,758 bed count, 1,379 parking spaces.STAGE ONE IMPLEMENTATION: 2758 bed count, 2,088 parking spaces (+709 sp.)







#### TIMELINE

#### 2019 1213 BEDS OCCUPIED AT CLIFF APARTMENTS, BATES HOUSE AND BATES WEST

# 2020 STAGE ONE | CONSTRUCTION BEGINS ON AD6 BATES LOT | 950 BEDS OCCUPIED IN BATES HOUSE AND BATES WEST DORMITORIES. 950 BEDS

#### Notes:

- Cliff Apartments demolished
- S7 Cliff Lot, 141 spaces removed
- S23 Bull Street, 33 existing spaces remain.
- AD9 Benson Lot, 121 existing spaces remain.
- AD6 Bates Lot, 56 existing spaces remain, 600 spaces removed.
- AV Garage, 150 existing spaces are available from existing capacity.
- AD11, AV Roost Lot, 75 existing spaces available from existing capacity.
- Remote D Lot, 145 special event spaces become available for daily use.
- Key Road Lot, 575 special event spaces become available for daily use.

#### 1,155 existing parking spaces supporting 950 beds (475 spaces required)

**2022** STAGE ONE CAMPUS VILLAGE COMPLETED | 2758 BEDS OCCUPIED IN CAMPUS VILLAGE **Notes:** 

- Campus Village Parking/Transit Hub, 200 new spaces created
- Create 733-space (minimum) commuter lot west of Colonial Life Arena and move commuters from existing garages to this remote lot.
- Bull Street Garage, 433 existing spaces become available
- Blossom St. Garage, 300 existing spaces become available

933 parking spaces created

**TOTAL 2,088 parking spaces supporting 2,758 beds.** (Excess spaces will be available for assignment to the parking demand from future stages of development at Campus Village)

#### D. AGGREGATE PLAN PARKING SUMMARY:

S23 Bull Street,	33
AD9 Benson Lot,	121
AD6 Bates Lot,	56
AV Garage,	150
AD 11, AV Roost Lot,	75
Remote 'D' Lot,	145
Key Road Lot,	575
CV Garage,	200
Bull Street Garage,	433
Blossom St. Garage,	300
Total Spaces Available	2,088





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#### TRAFFIC & TRANSPORTATION OVERVIEW CAMPUS VILLAGE PROJECT

#### **PROJECT DESCRIPTION**

As of October 2019, the following describes the development characteristics for the proposed Campus Village project:

	DEVELOPMENT STAGE			
	10/19 - 1/20	Stage 1 2020-2022 (Construction Period)	Stage 1 2022 (Construction Completed)	Stage 2& 3 Future (Construction completed)
Beds (Number of Residents)				,
Existing On-Site	1,213	950	950	2,758
Removed From Site	263	0	0	0
Added On-Site	0	0	1,808	992
Total at Stage Completion	950		2,758	3,750
Net Change	-263	0	1,808	992
Parking (Number of Spaces)				
Existing On-Site	951	951	1,155	2,088
Removed From Site	0	741	0	177
Added On-Site (Garage)	0	0	200	0
Added Off-Site	0	945	733	0
Total at Stage Completion	951	1,155	2,088	1,911
Net Change	0	204	933	-177

Note that the above-cited development characteristics differ from those evaluated in the previously submitted Traffic Impact & Access Study (TIAS). At full buildout, the currently (as of October 2019) proposed project reflects 50 more beds (residents) and 745 less parking spaces in the on-site parking structure.

Note that all information cited in this Traffic & Transportation Overview is associated with/based on the site conditions at full buildout.

#### **EXISTING (2016) CONDITIONS**

Per direction from City staff, the following intersections were included in the formal project study area for the TIAS:

- Pickens Street at Wheat Street
- Pickens Street at Whaley Street
- Pickens Street at Heyward Street
- Assembly Street at Whaley Street
- Future Parking Structure Access Point

Existing turning movement counts were conducted for the above-cited (4) existing intersections in November 2015. Capacity analyses were completed for all study area intersections to determine project impacts.

Existing (2016) AADT data within the project study area is as follows:

- Whaley Street (between Assembly Street and Main Street) carries a typical weekday traffic volume of approximately 9,000 vehicles-per-day (vpd). This is taken from data provided by SCDOT.
- Whaley Street (between Pickens Street and Sumter Street) carries a typical weekday traffic volume of approximately 7,800 vehicles-per-day (vpd). This is estimated via data collected in January 2016.

#### TRAFFIC VOLUME DIVERSIONS DUE TO PARKING LOT REMOVAL

Per the current plan, existing surface parking areas will be removed to allow for new buildings/grounds. In total, these areas provide for a combined 951 parking spaces. In order to approximate the traffic volume diversion that would be experienced throughout the study area, entering/exiting volume data (by turning movement type) was collected for each parking area during the weekday morning (7:00-9:00 AM) and evening (4:00-6:00 PM) peak periods. The following reflects a summary of the entering/exiting movements related to the cited parking areas that are to be diverted:

- AM Peak-Hour = 337 trips (230 entering / 107 exiting)
- PM Peak-Hour = 466 trips (204 entering / 262 exiting)

#### **PROJECT TRIP GENERATION**

The Institute of Transportation Engineers (ITE) *Trip Generation* manual was reviewed to determine if any provided Land-Use Code (LUC) is applicable to the Campus Village project. Based on this review, no typical LUC was deemed to be applicable for the project. As such, the University coordinated with City of Columbia Traffic Engineering staff to develop applicable trip generation rates for the proposed Campus Village development.

In order to develop these rates, a similar residential housing/parking area proximity combination was sought out on-campus. The long-term parking area within the Bull Street Garage was chosen as having similar operating characteristics to the planned onsite garage for the Campus Village project. A total of 372 resident students were found to park (via issued permit) in the Bull Street Garage long-term parking area and also live in University owned/maintained housing in close proximity to the Bull Street Garage. The vehicular movements (entering and exiting) for those 372 students who park in the long-term area of the Bull Street Garage were tracked (via card reader) for the month of October. Upon review of the entire data set, the following six (6) dates were defined as "typical" and would be used for further study/analysis:

- 10-1-15 (Thursday)
- 10-13-15 (Tuesday)
- 10-15-15 (Thursday)
- 10-20-15 (Tuesday)
- 10-27-15 (Tuesday)
- 10-29-15 (Thursday)

Upon review of the AM (7-9) and PM (4-6) peak periods for each of the six (6) typical dates, the following represents the "Maximum Enter" and "Maximum Exit" for the AM peak-hour, the PM peak-hour and Weekday Daily time periods for any date studied:

- AM Peak-Hour = (7 enter / 3 exit) = 10 trips
- PM Peak-Hour = (29 enter / 34 exit) = 63 trips
- Weekday Daily = (307 enter / 226 exit) = 533 trips

Noting that these vehicular movements were applicable to the cited 372 nearby residents, the following trip rates (per resident) can be calculated:

- AM Peak-Hour = 0.0269 trips/resident (70% enter / 30% exit)
- PM Peak-Hour = 0.1694 trips/resident (46% enter / 54% exit)
- Weekday Daily = 1.4328 trips/resident (58% enter / 42% exit)

As currently (October 2019) proposed, a 200-space parking garage will be the only parking area provided on-site and thereby is assumed to be the only generator of site traffic at this location. Assuming all 200 spaces within the garage will be assigned to residents living in the Campus Village, the above-cited rates were used to calculate the projected trip generation for the site. The projected trip generated traffic volumes are as follows:

- AM Peak-Hour = 6 trips (4 entering / 2 exiting)
- PM Peak-Hour = 34 trips (16 entering / 18 exiting)
- Weekday Daily = 287 trips (166 entering / 121 exiting)

#### EXISTING (2016) PLUS PROPOSED (10/2019) CONDITIONS

To estimate Existing PLUS Proposed conditions, the following additions/subtractions will be made to/from the Existing condition scenario:

• Subtract traffic associated with the existing surface parking lots from the study area.

Add traffic to be generated by the proposed parking structure with 200-space parking supply.

After above procedures, the following can be stated:

- During the AM Peak-Hour, the Campus Village project is anticipated to cause a net decrease of 331 trips (226 entering / 105 exiting) within the project study area.
- During the PM Peak-Hour, the Campus Village project is anticipated to cause a net decrease of 432 trips (188 entering / 244 exiting) within the project study area.

#### **TRAFFIC IMPACT & ACCESS STUDY**

The University conducted a formal Traffic Impact & Access Study (TIAS) per existing City of Columbia guidelines and regulations. The TIAS was prepared/finalized in April 2016 and reflected the project's development characteristics at that time.

Per the TIAS (April 2016), under the post development condition, acceptable overall service levels were projected at all study area intersections. Multiple movements and/or lane groups were projected to experience a decrease in delay value and an increase in corresponding service level due to the fact that traffic volume (specifically along Whaley Street) is projected to be decreased with the buildout of the Campus Village project. The study area network was projected to experience a net decrease in traffic volume. This is primarily due to the fact that the higher generating (due to commuter student influence) surface parking areas are being removed and replaced with a parking garage that will be utilized by Campus Village residents only, thereby reducing the trip generation rate associated with each parking space.

Per the TIAS (April 2016), each segment of Whaley Street is projected to experience a decrease in Daily Traffic Volume due to the modification in user type for associated parking areas along the roadway.

The currently (October 2019) proposed development characteristics are anticipated to yield a lessened impact to the study area as compared to the previous (April 2016) development characteristics as evaluated in the prior TIAS.

University staff is currently coordinating with City staff to determine if an update to the prior TIAS will be required.

#### **OTHER CONSIDERATIONS**

#### **City of Columbia Parking Requirement Guidelines**

It should be noted that the applicable City of Columbia parking requirement/guideline will be 0.50 parking spaces per bed. The required number of parking spaces to support the Campus Village project is as follows:

Net Bed Increase (3,750 – 1,213) \* 0.50 = 1,269 Parking Spaces

#### **Off-Site / Satellite Parking Locations**

As cited, a 200-space garage will be the only parking area provided on-site. As such, the remainder of required parking spaces (1,269 - 200 = 1,069 parking spaces), as well as the displaced commuters, etc., will have to be provided for at off-site/satellite parking areas.

At the present time, the University is evaluating several sites to provide the remaining spaces. When locations are formally decided upon, this information will be provided to appropriate City staff.

#### **Shuttle / Transit Operations**

Shuttle/transit operations will be accommodated on-site for the Campus Village project as well as for the chosen off-site/satellite parking areas. University staff will work to develop logical accommodations. This will most likely be related to arrival/departure routes, shuttle stop locations, load/unload operations, etc. Where necessary, it is assumed that the accommodations for heavy vehicles will be made to allow for the safe circulation of shuttle/transit vehicles.

Of specific note for the project study area will be the fact that the University is in the process of modifying all existing shuttle/transit routes to discontinue the use of Pickens Street in this area for route service.



Α

В

PARKING

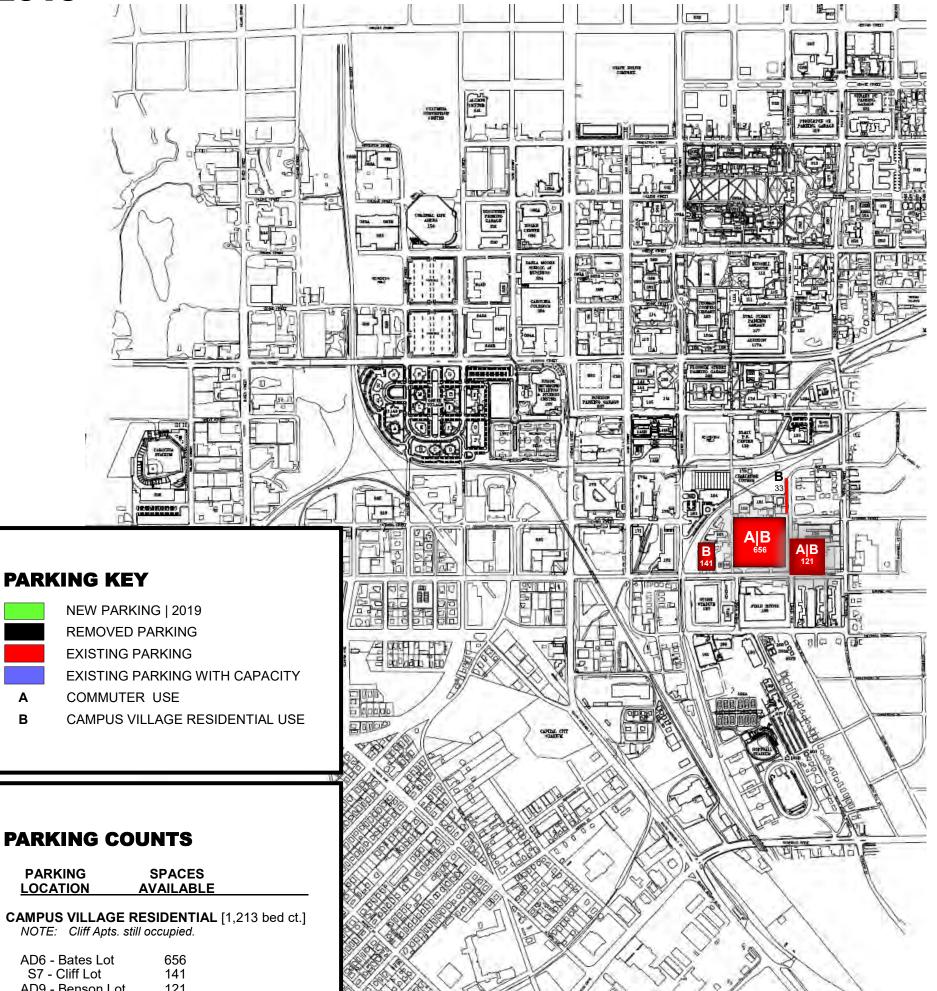
LOCATION

S7 - Cliff Lot

#### **CAMPUS VILLAGE** PARKING MASTER PLAN 2019-2026 10.21.2019

prepared by USC | Campus Planning





AD9 - Benson Lot 121	
S23 - Bull Street 33	
Subtotal 951	
TOTAL COUNT 951	
NOTE: AV denotes Athletic Village	The second second second
NOTE: AV denotes Athletic Village CV denotes Campus Village EXT denotes a portion of spaces w/in facilities available	
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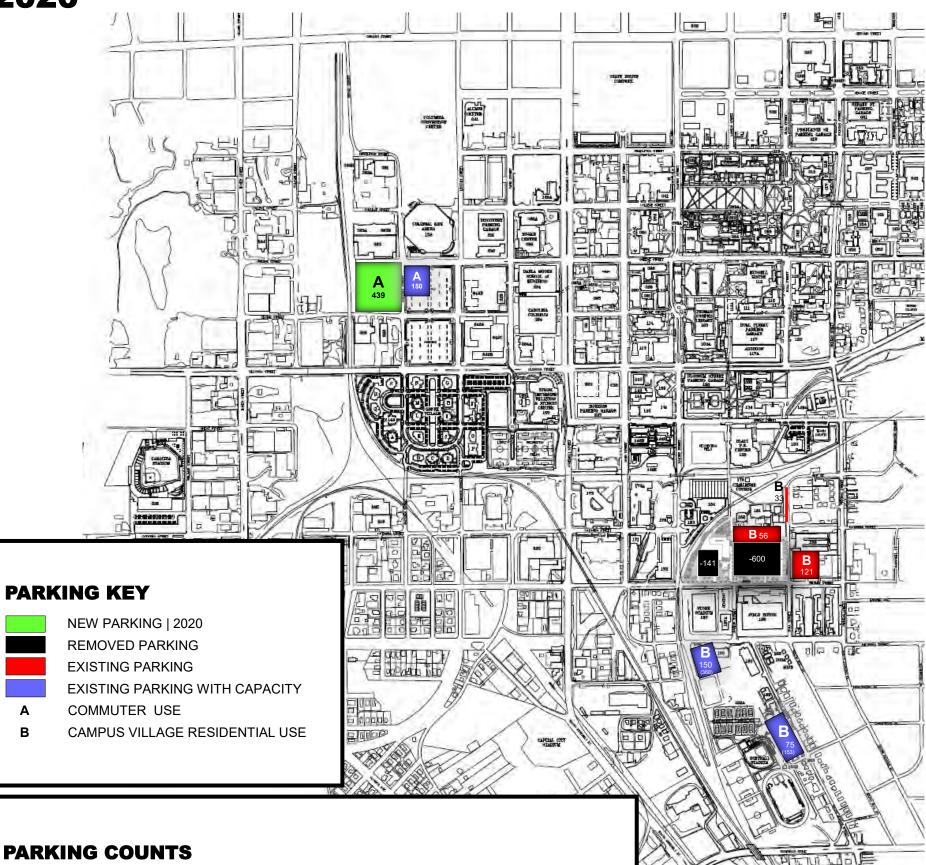
# **CAMPUS VILLAGE** PARKING MASTER PLAN 2019-2026

prepared by USC | Campus Planning

2020

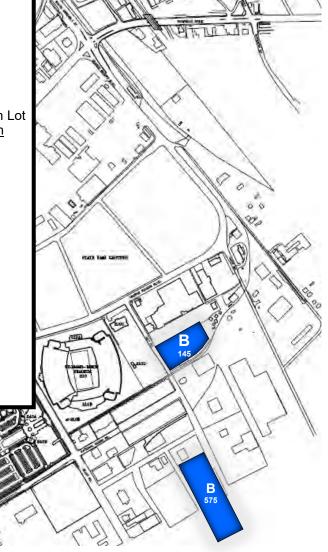
Α В

Subtotal



10.21.2019

PARKING LOCATION	SPACES AVAILABLE	+/- CHANGE 2019-2020	IMPACT TO TOTAL USC PARKING SYSTEM
NEW COMMUTER	2		
Gadsden Playfie	ld Lot 439	+439	users relocated from W Gadsden/Blossom L
FS4 - CLA SŴ	150	+150	spaces reclaimed from Facilities relocation



CAMPUS VILLAGE RESIDENTIAL [CV PH 1   950 bed ct 475 parking space required]					
AD6 - Bates Lot	56	-600			
S7—Cliff Lot	0	-141	Cliff Apartments close		
AD9 - Benson Lot	121	NC			
S23 - Bull Street	33	NC			
AD11 - AV Roost Lot	75 (EXT)	+75			
AV Garage	150 (EXT)	+150			
Key Road Lot	575	+575	new to USC parking system		
Remote 'D' Lot-EXT	145	+145	new to USC parking system		
Subtotal	1,155	+204			
TOTAL COUNT	1,744	+793			

+589

NOTE: AV denotes Athletic Village CV denotes Campus Village EXT denotes s portion of spaces w/in facilities available

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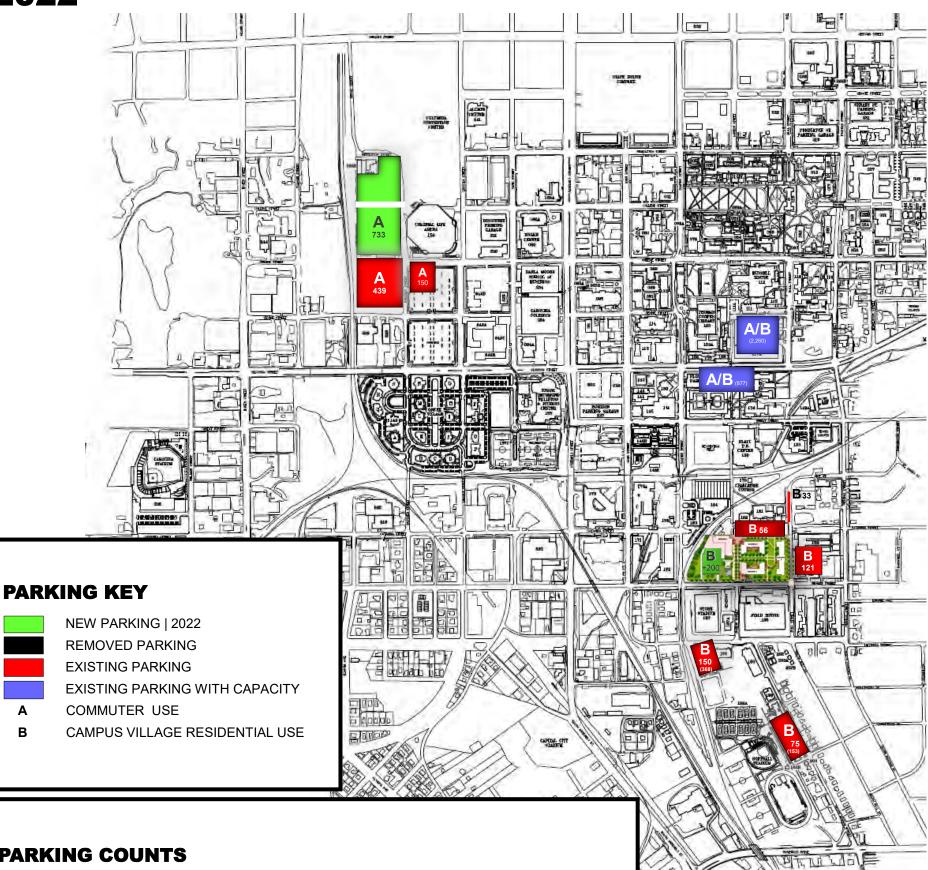
589



# **CAMPUS VILLAGE** PARKING MASTER PLAN 2019-2026

prepared by USC | Campus Planning





10.21.2019

#### **PARKING COUNTS**

Α

В

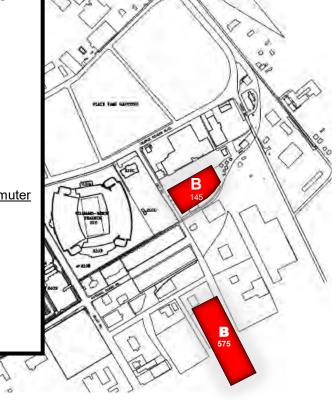
PARKING LOCATION	SPACES AVAILABLE	+/- CHANGE 2021-2022	IMPACT TO TOTAL USC PARKING SYSTEM
NEW COMMUTER			
Gadsden Playfie	eld Lot 439	NC	
FS4 - CLA SŴ	150 EXT	NC	
West CLA Lot	733	+733	users relocating from Bull/Blossom Garages
Subtota	1 1.322	+733	

#### 1,

**CAMPUS VILLAGE RESIDENTIAL** [2,758 bed ct.| 1,379 spaces required] NOTE: CV PH I | 1,808 new beds — 904 additional parking spaces required

AD6 - Bates Lot	56	NC	spaces removed from USC system space new to USC system
CV Garage	200	+200	
AD9 - Benson Lot	121	NC	
S23 - Bull Street AD11 - AV Roost Lot	33 75 (EXT)	NC NC NC	
AV Garage	150 (EXT)	NC	
Key Road Lot	575	NC	
Remote 'D' Lot	145	NC	
<u>Bull / Blossom Garage</u>	733 (EXT)	+733	new spaces for CV users   existing Comm
Subtotal	2,088	+933	users relocated to West CLA Lot
TOTAL COUNT	3,410	+1,666	

NOTE: AV denotes Athletic Village CV denoted Campus Village EXT denotes a portion of spaces w/in facilities available



# UofSC CAMPUS VILLAGE H27-6133-MJ



# OWNER

UNIVERSITY OF SOUTH CAROLINA 1600 HAMPTON ST.

SUITE 606 COLUMBIA, SC 29208 TEL -

# DEVELOPER GREYSTAR

18 broad street SUITE 300 CHARLESTON, SC 29401 TEL 901.259.2500

ARCHITECTS WDG ARCHITECTURE, PLLC 1025 CONNECTICUT AVE. NW SUITE 300 WASHINGTON, DC 20036 TEL 202.857.8300

# COLUMBIA, SC

BOUDREAUX 1519 SUMTER ST. COLUMBIA, SC 29201 TEL 803.799.0247

# CIVIL ENGINEER COX AND DINKINS

724 BELTLINE BLVD. COLUMBIA, SC 29205 TEL 803.764.62.49

# LANDSCAPE ARCHITECT WOOD + PARTNERS, INC.

7 LAFAYETTE PLACE HILTON HEAD ISLAND, SC 29925 TEL 843.681.6618

STRUCTURAL

ENGINEER TADJER-COHEN-EDELSON ASSOCIATES, INC. 1501 FARM CREDIT DRIVE SUTIE 2300 MCLEAN, VA 22102 TEL 301.587.1820

# STRUCTURAL ENGINEER (SUPERSTRUCTURE) PRESCIENT

115 N. DUKE ST. SUITE 2A DURHAM, NC 27701 TEL 303.397.1914

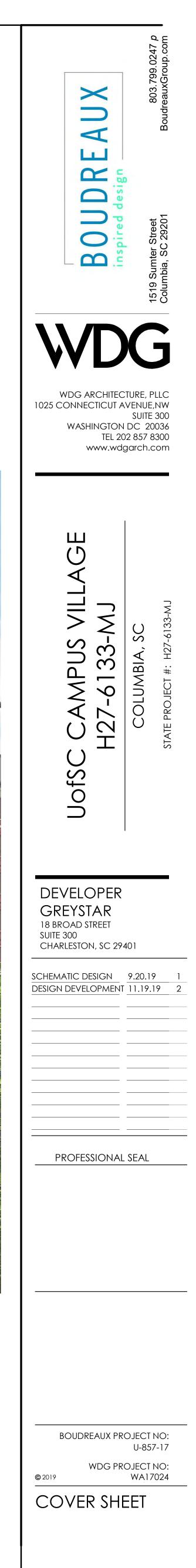
MEP / FP ENGINEERING AHA CONSULTING ENGINEERS

3700 MANSELL RD. SUITE 200 Alpharetta, ga 30222 TEL 770.992.8585

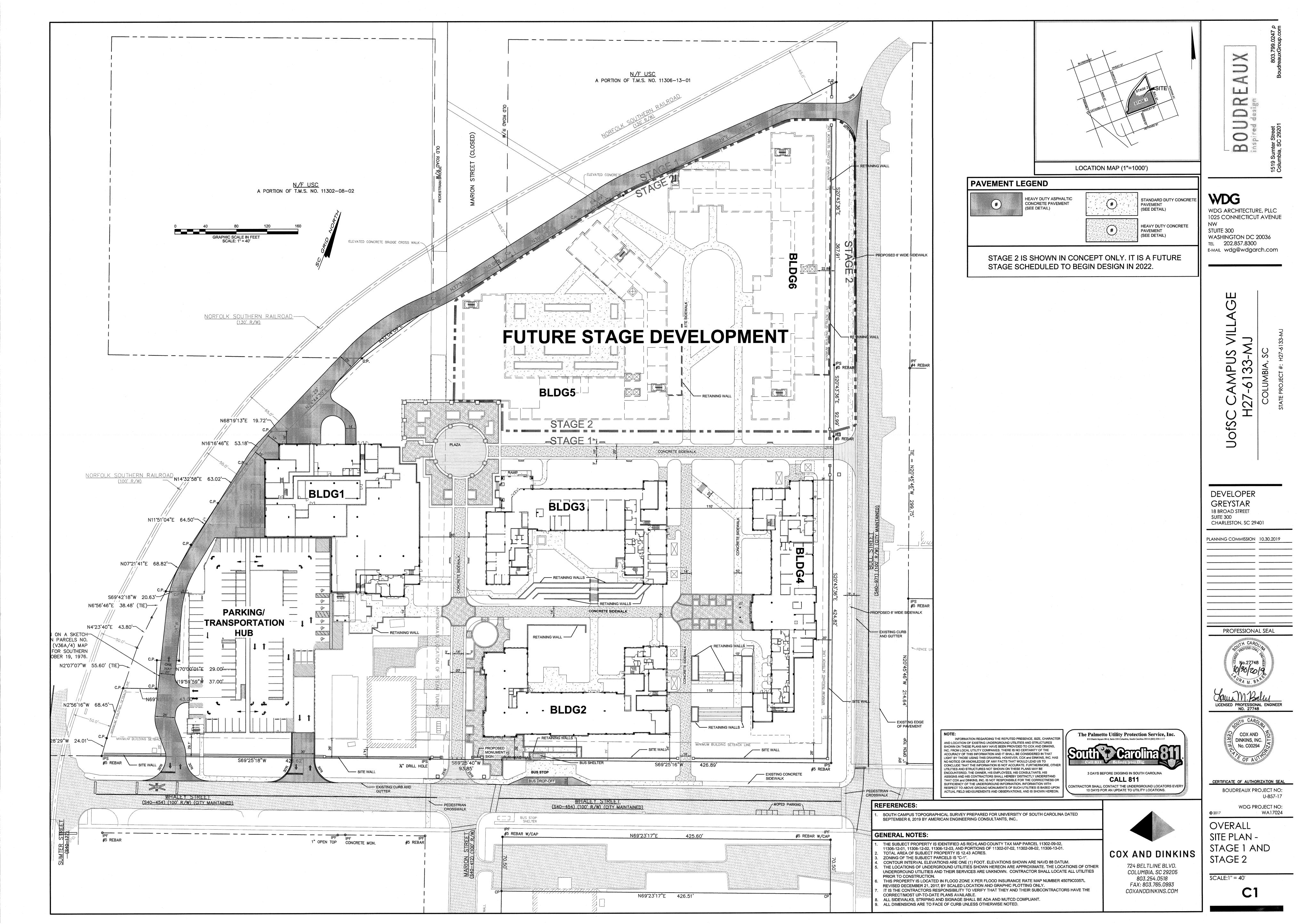


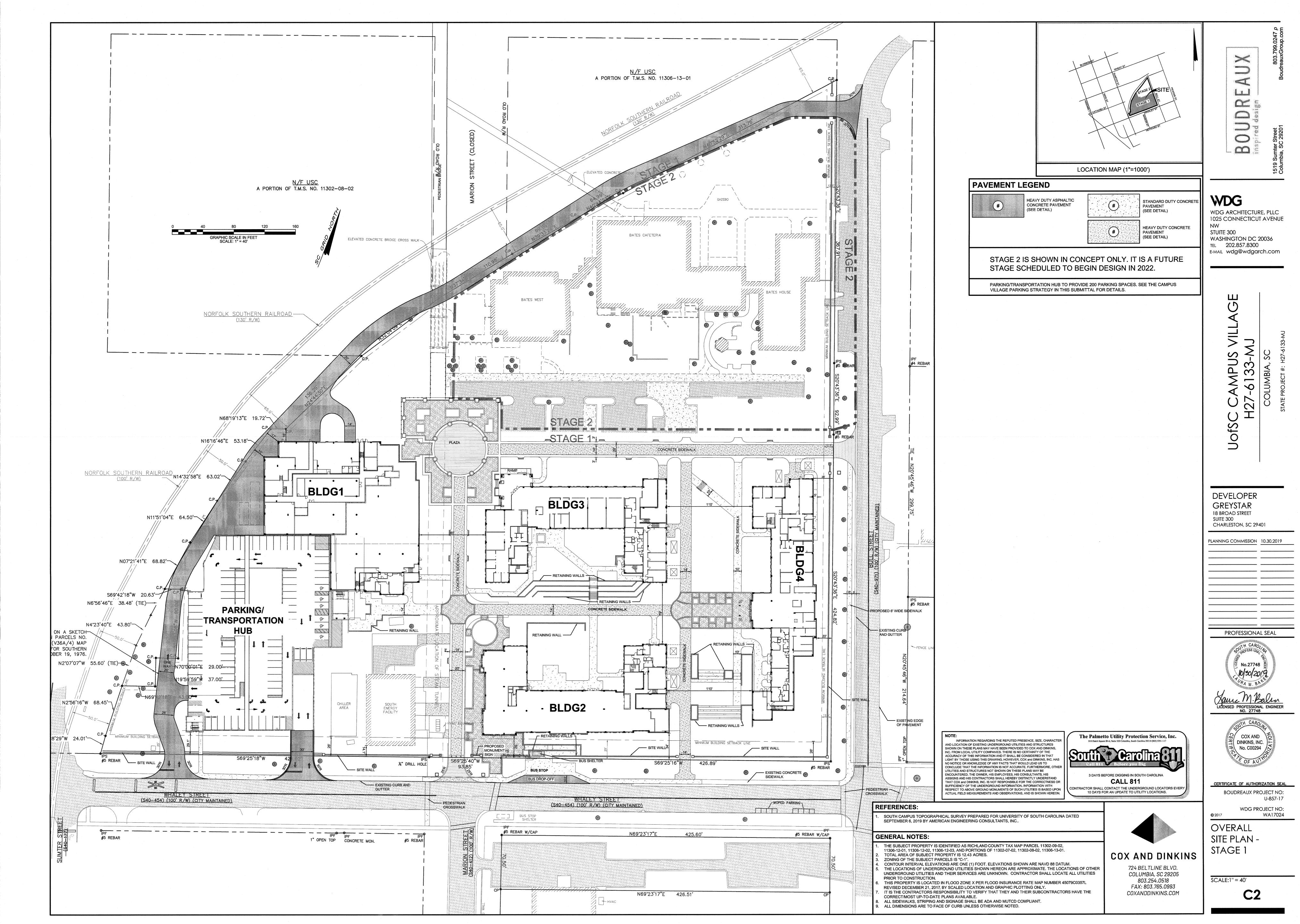


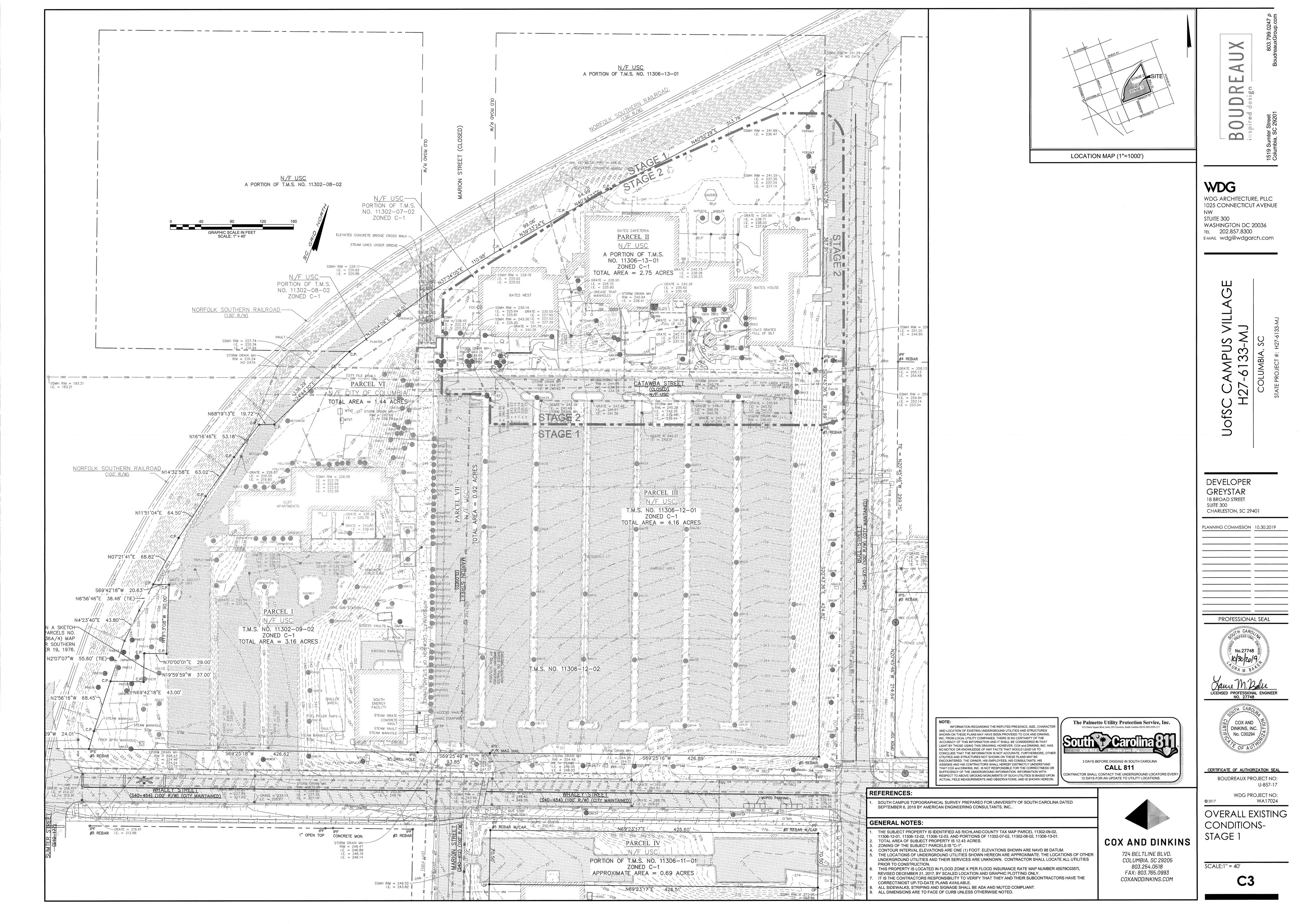
VIEW FROM WHALEY STREET

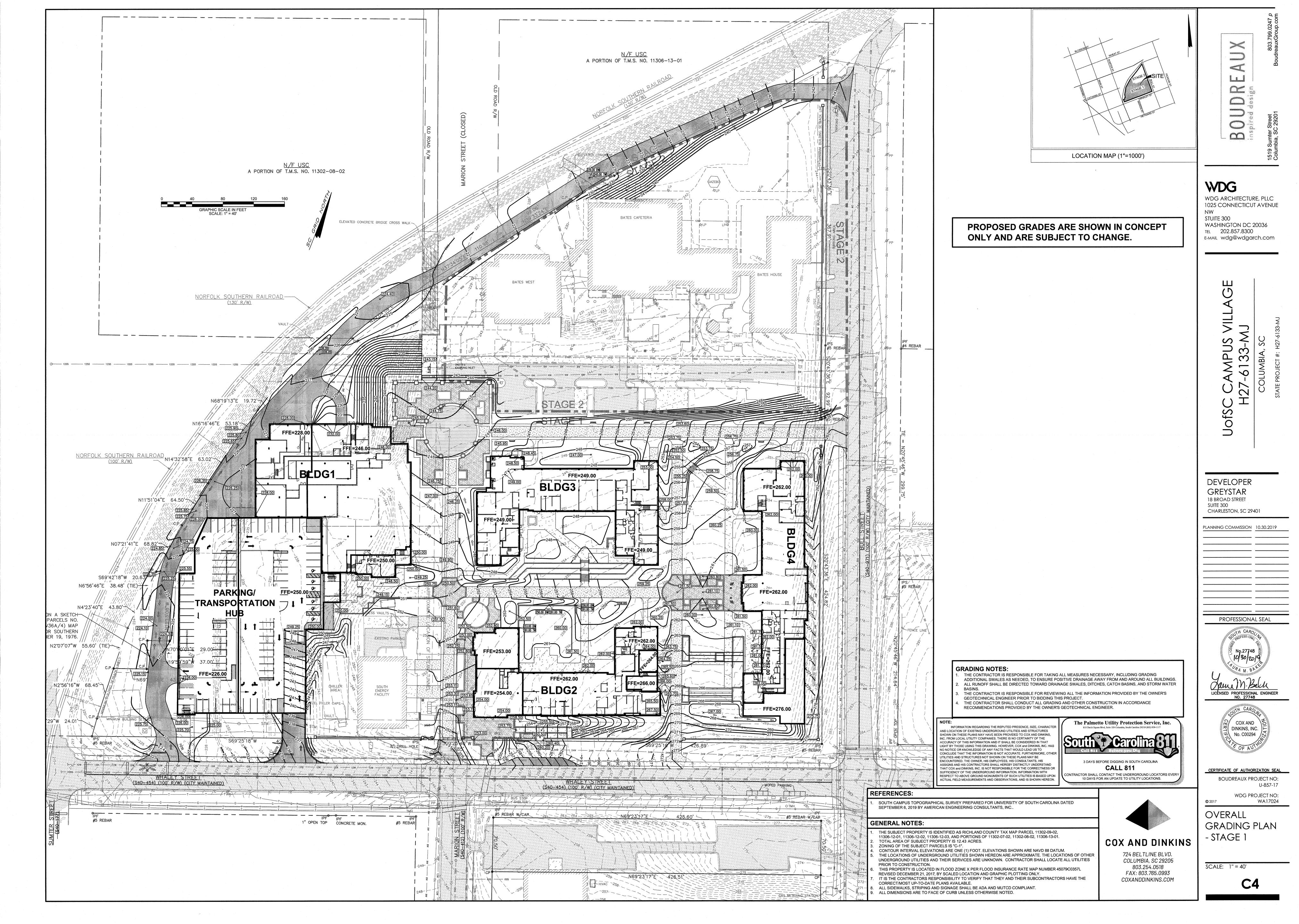


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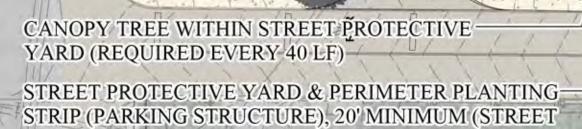
DENSITY FACTOR CALCULATION:	
TOTAL SITE ACREAGE:	13 AC.
DFS / ACRE REQUIRED:	30 / AC.
TOTAL REQUIRED DFS:	390 UNITS
TOTAL TREE UNITS PROPOSED TO BE REMOVED (GRAND TREES - SEE STAGE 1 AND 2 SUMMARY BELOW):	834.2 UNITS
REQUIRED DFS TO BE PROVIDED (ENTIRE SITE - STAGE 1 & 2):	1224.2 UNITS
EXISTING TREES TO REMAIN (CREDITS):	360.4 UNITS
PROPOSED CANOPY AND UNDERSTORY TREE PLANTINGS (CREDIT):	632 UNITS
DFS UNIT SURPLUS/SHORTAGE:	-232 UNITS

STAGE ONE TREE REMOVALS	QTY.	ALL TREES BELOW ARE GRAND	INCHES	DFS UNITS
NUMBER OF OAK REMOVED:	11	INCHES REMOVED:	303	278.4
NUMBER OF CRAPE MYRTLE REMOVED:	43	INCHES REMOVED:	678	363.2
NUMBER OF WETOAK REMOVED:	3	INCHES REMOVED:	76	63
NUMBER OF HOLLY REMOVED:	4	INCHES REMOVED:	51	24.4
NUMBER OF BIRCH REMOVED:	1	INCHES REMOVED:	10	4.8
TOTAL GRAND TREE INCHES & UNIT	S REMO	OVED (STAGE ONE):	1118	733.8

STAGE TWO TREE REMOVALS	QTY.	ALL TREES BELOW ARE GRAND	INCHES	DFS UNITS
NUMBER OF OAK REMOVED:	2	INCHES REMOVED:	48	37.2
NUMBER OF CRAPE MYRTLE REMOVED:	10	INCHES REMOVED:	102	49.2
NUMBER OF HOLLY REMOVED:	2	INCHES REMOVED:	29	14
NUMBER OF MAPLE REMOVED:	0	INCHES REMOVED:	0	0
NUMBER OF BIRCH REMOVED:	0	INCHES REMOVED:	0	0
TOTAL GRAND TREE INCHES & UNIT	OVED (STAGE TWO):	179	100.4	

EXISTING TREES TO REMAIN	QTY.	ALL TREES BELOW ARE GRAND	DFS UNITS
NUMBER OF OAKS TO REMAIN:	20	TOTAL DFS UNITS:	255.2
NUMBER OF PINES TO REMAIN:	7	TOTAL DFS UNITS:	58.6
NUMBER OF HARDWOODS TO REMAIN:	0	TOTAL DFS UNITS:	0
NUMBER OF MAPLES TO REMAIN:	1	TOTAL DFS UNITS:	29.4
NUMBER OF CRAPE MYRTLES TO REMAIN:	2	TOTAL DFS UNITS:	17.2
TOTAL TREES TO REMAIN:	30	TOTAL REMAINING UNITS:	360.4

REQUIRED DFS UNITS (STAGE 1 & 2):	1224.2	
EXISTING TREE CREDITS (STAGE 1 & 2):	360.4	232 SHORT OF THE REQUIRED DFS UNITS
PROPOSED REPLACEMENT TREE UNITS:	632	
PROPOSED STAGE 1 TREE UNITS:	411	
PROPOSED STAGE 2 TREE UNITS:	221	



PROTECTIVE YARD AREA =  $\pm 11,250$  SF MINIMUM)

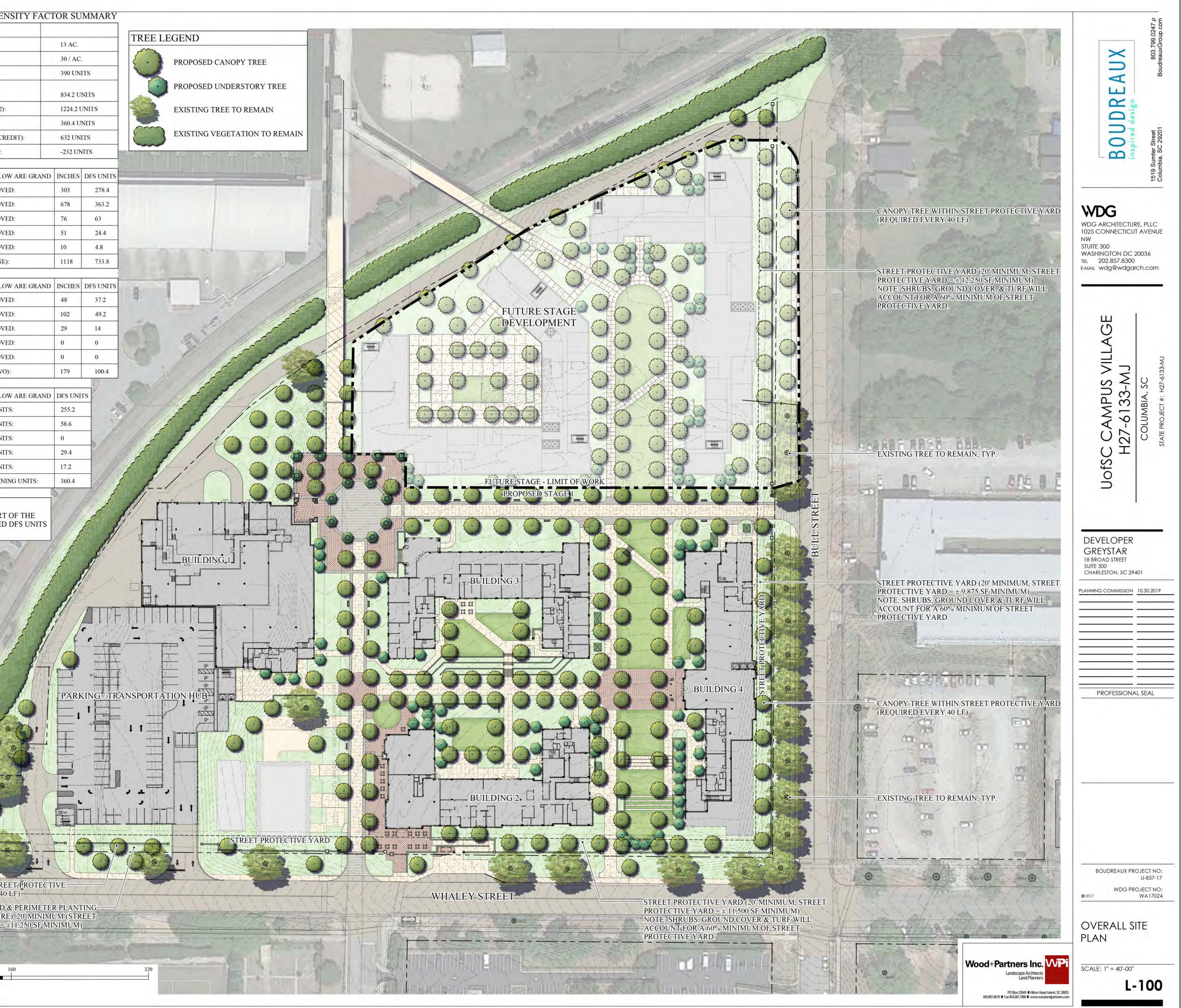
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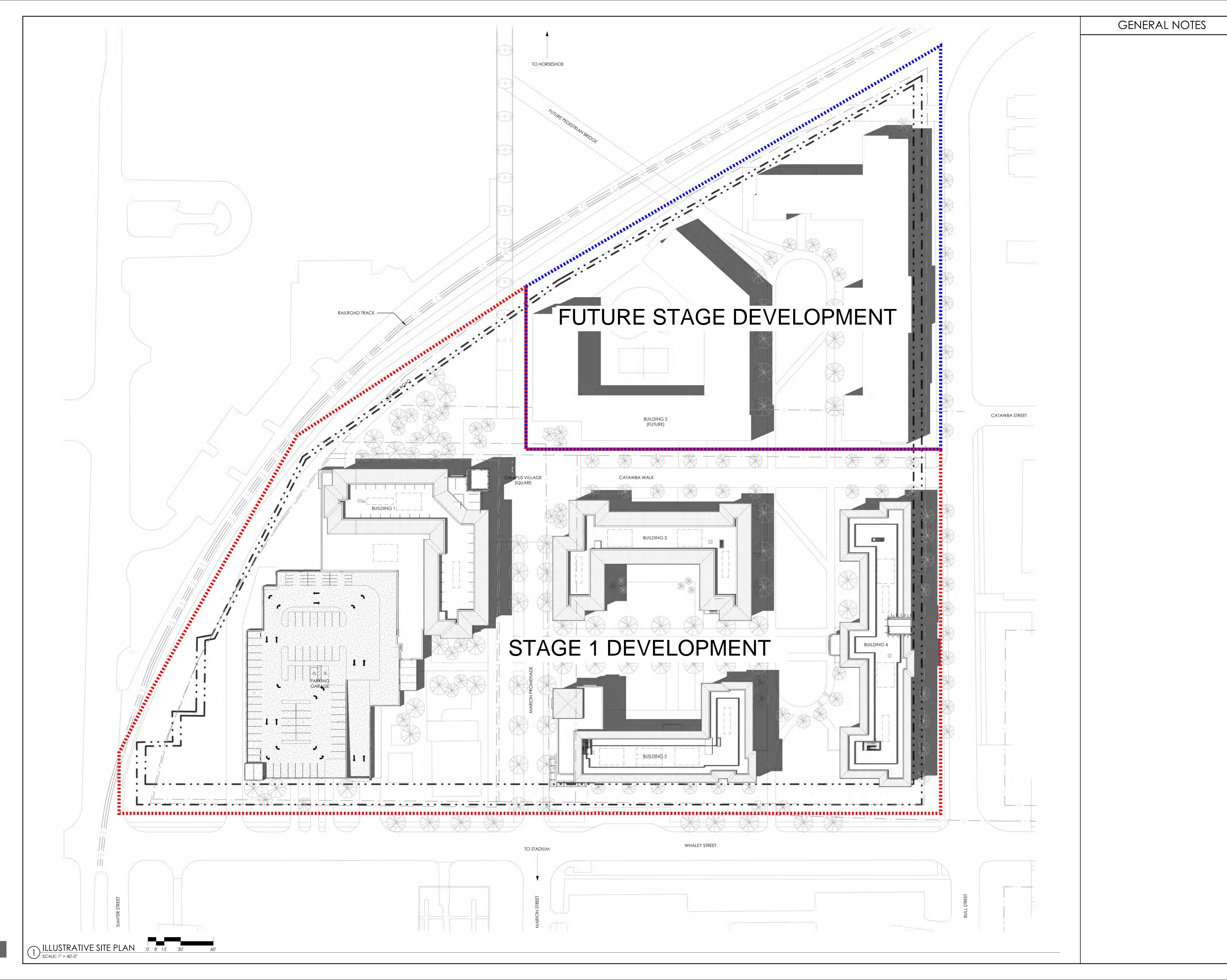


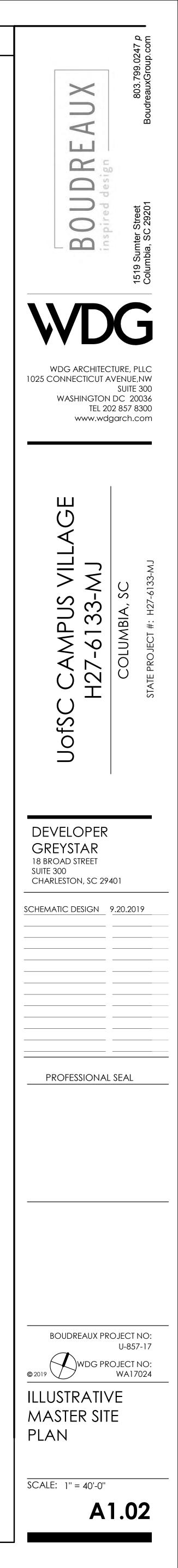
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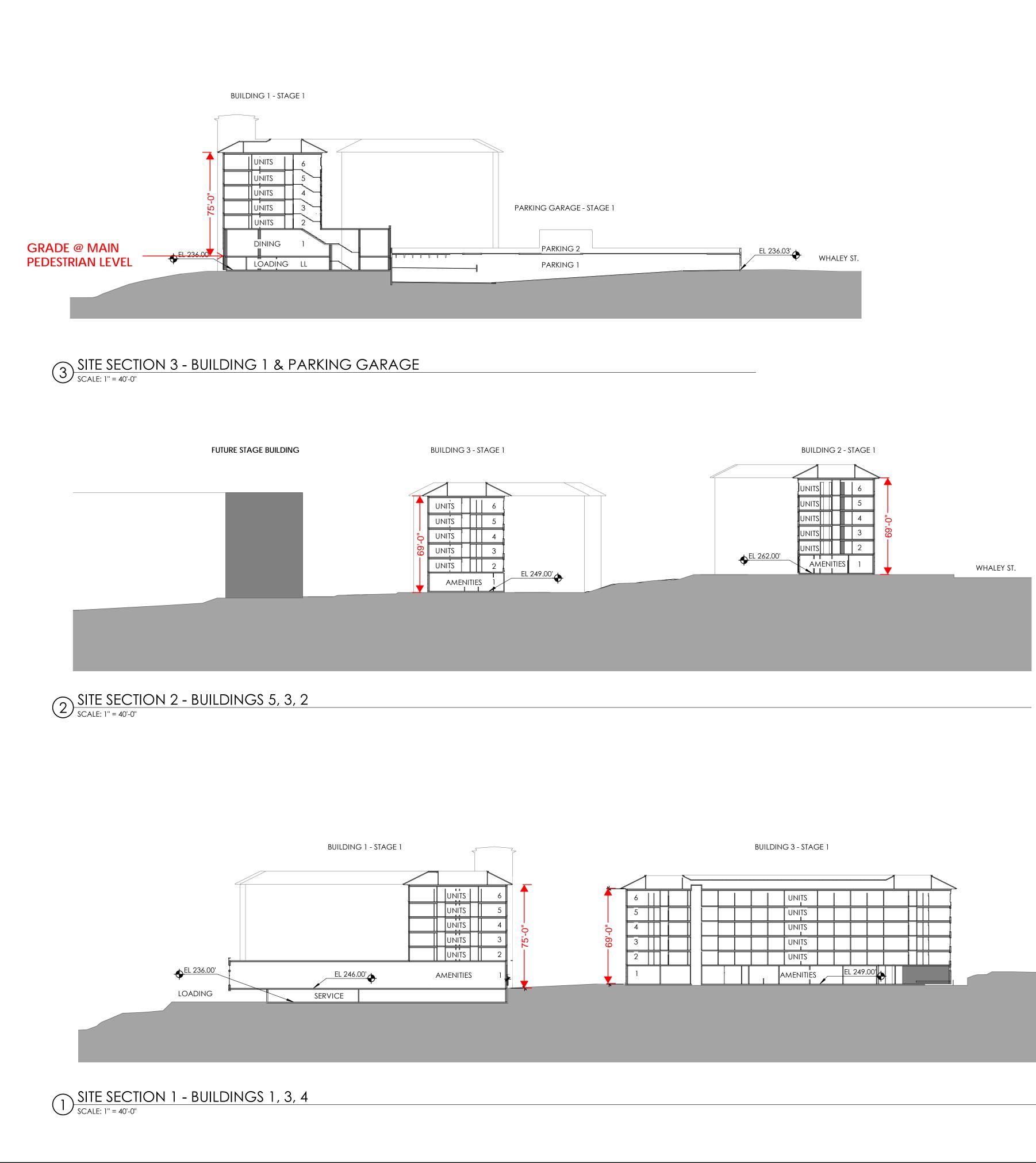
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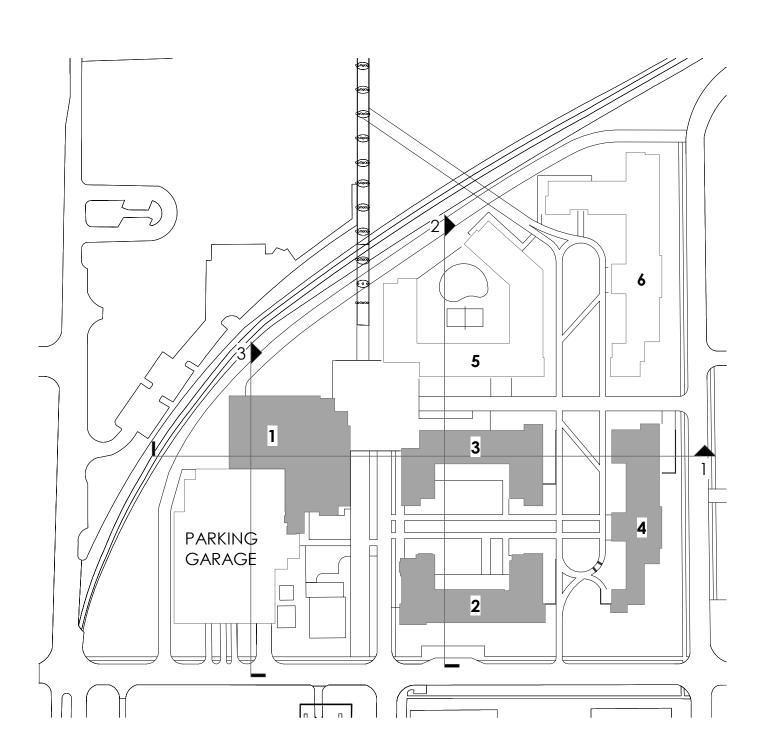




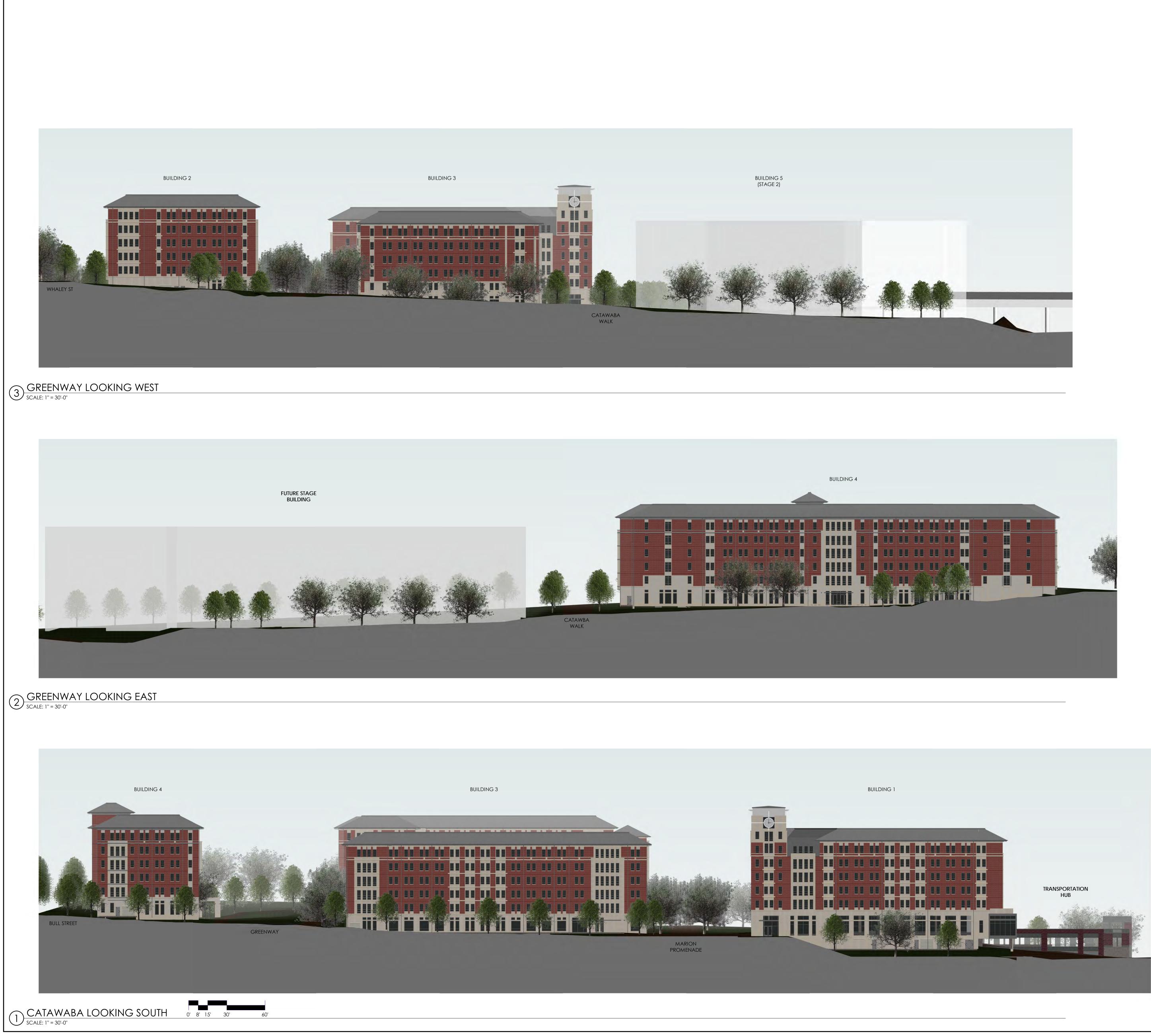
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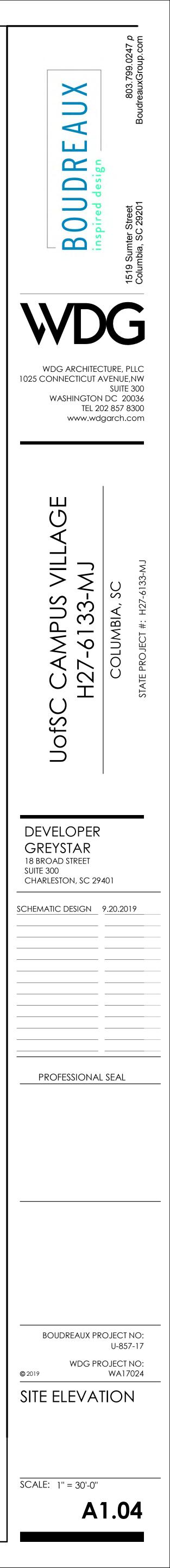
BUILDING 4 - STAGE 1 5 4 3 AMENITIES

BULL ST

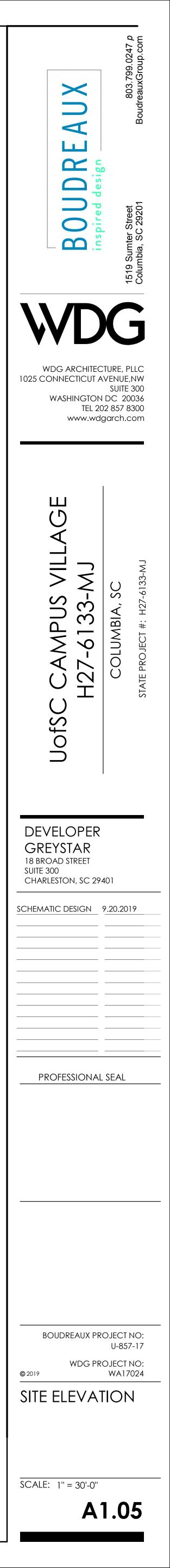




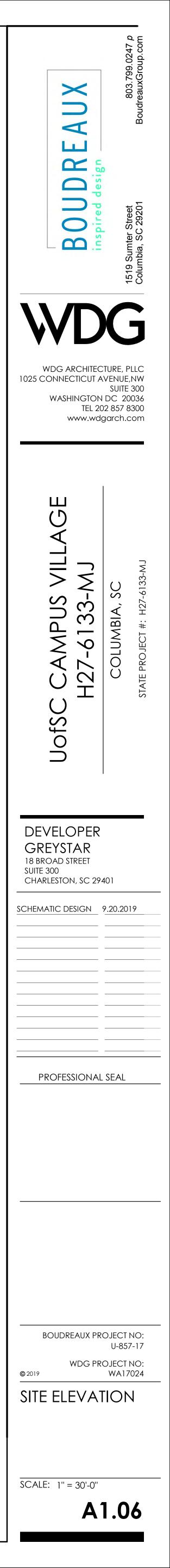


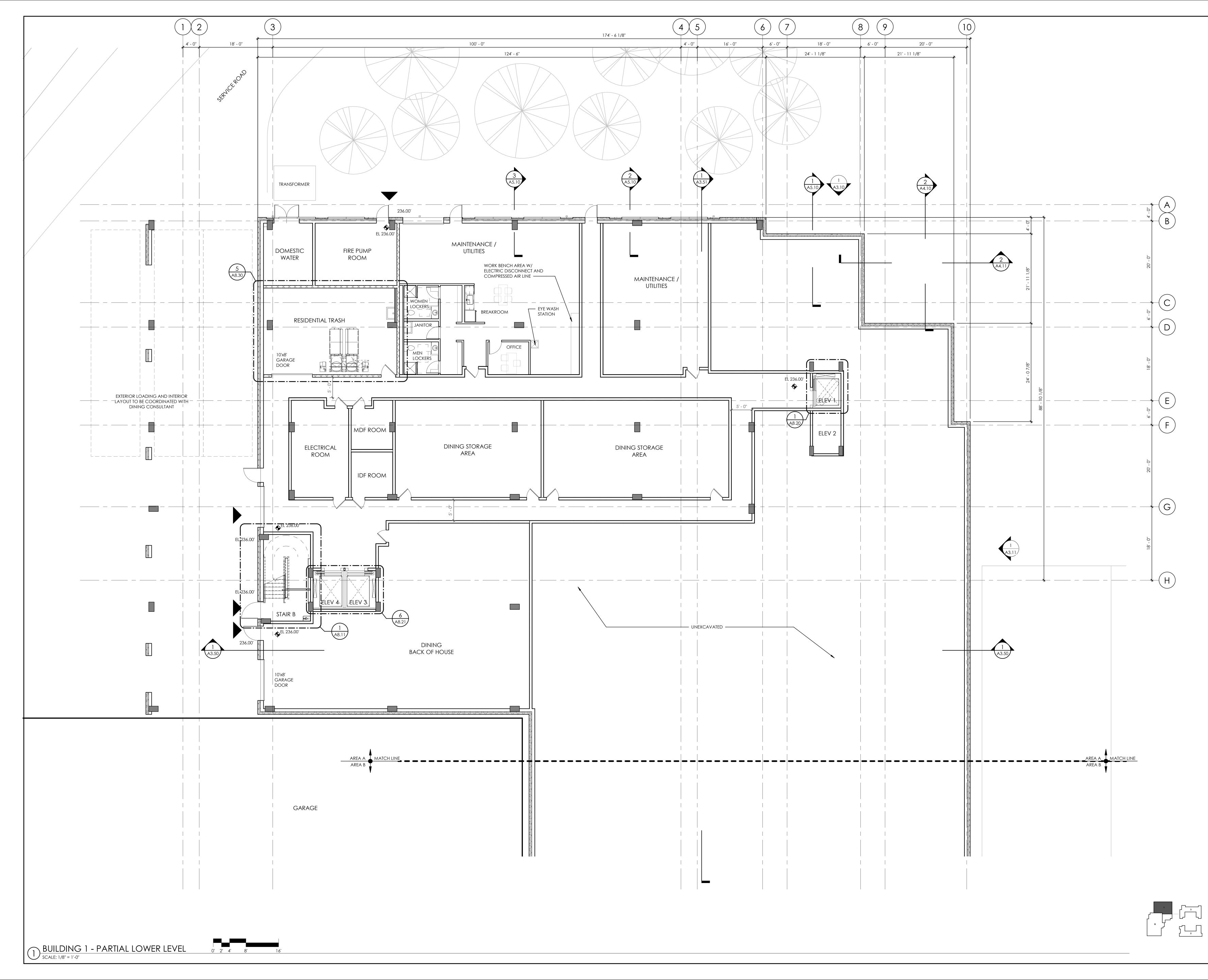




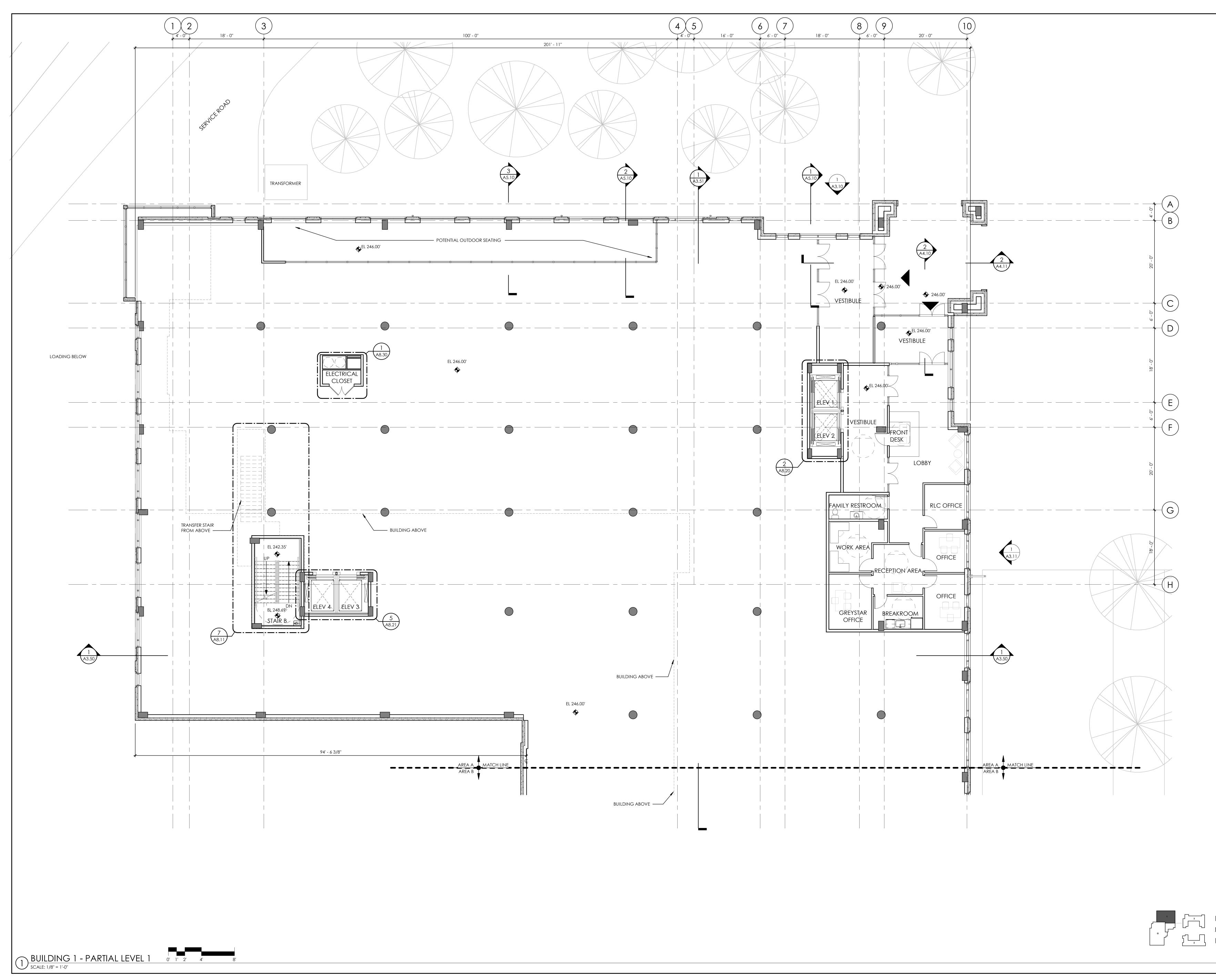




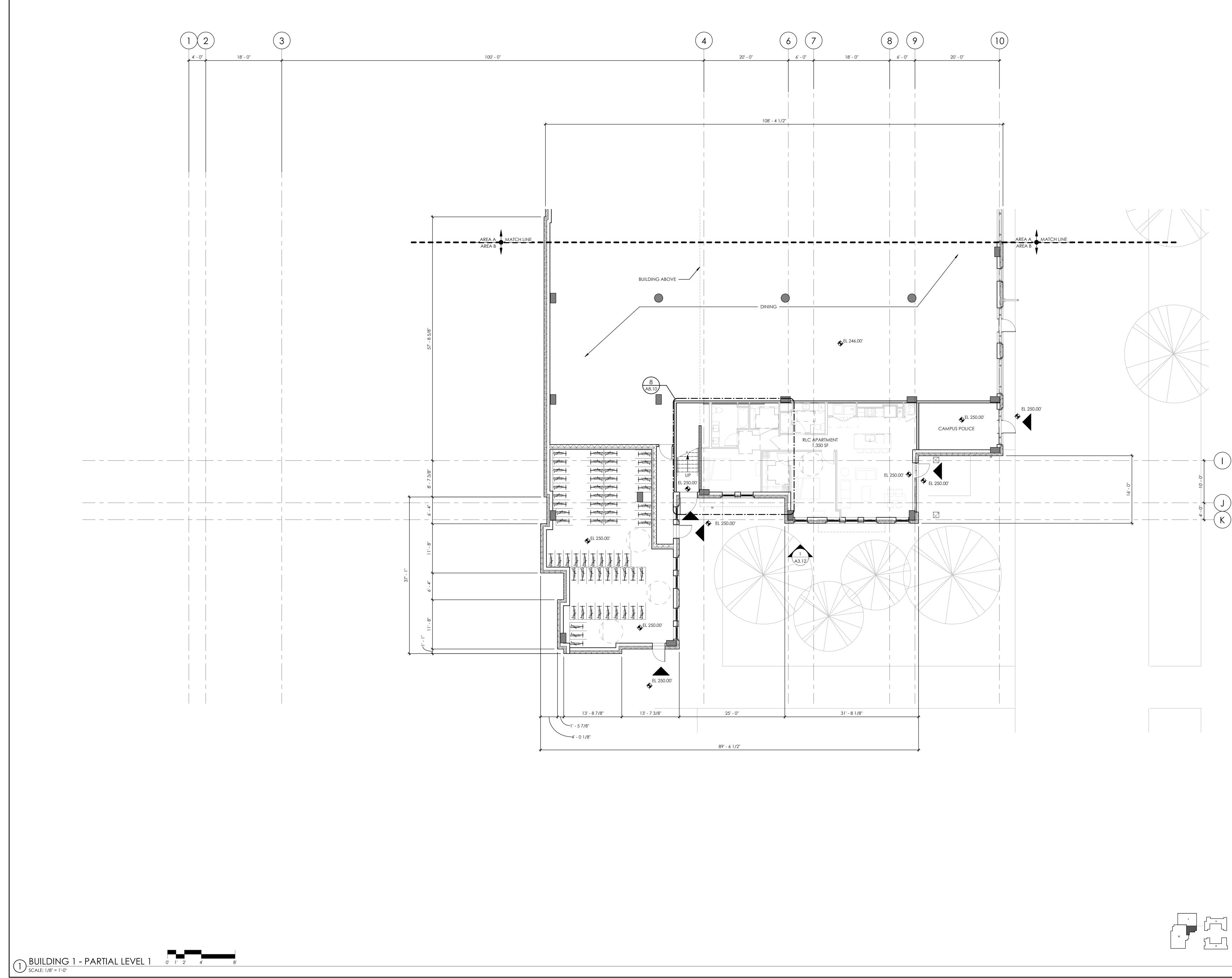




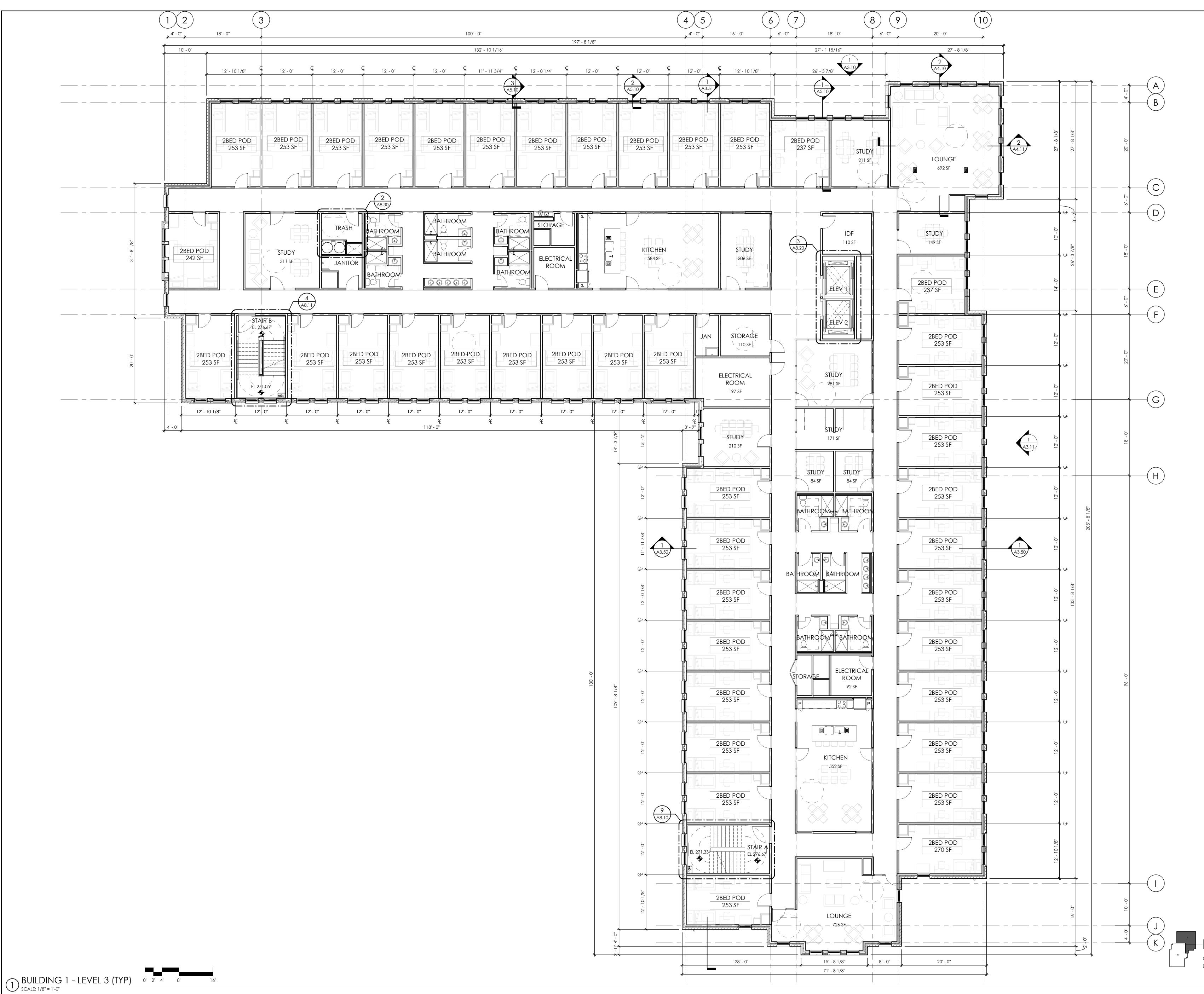






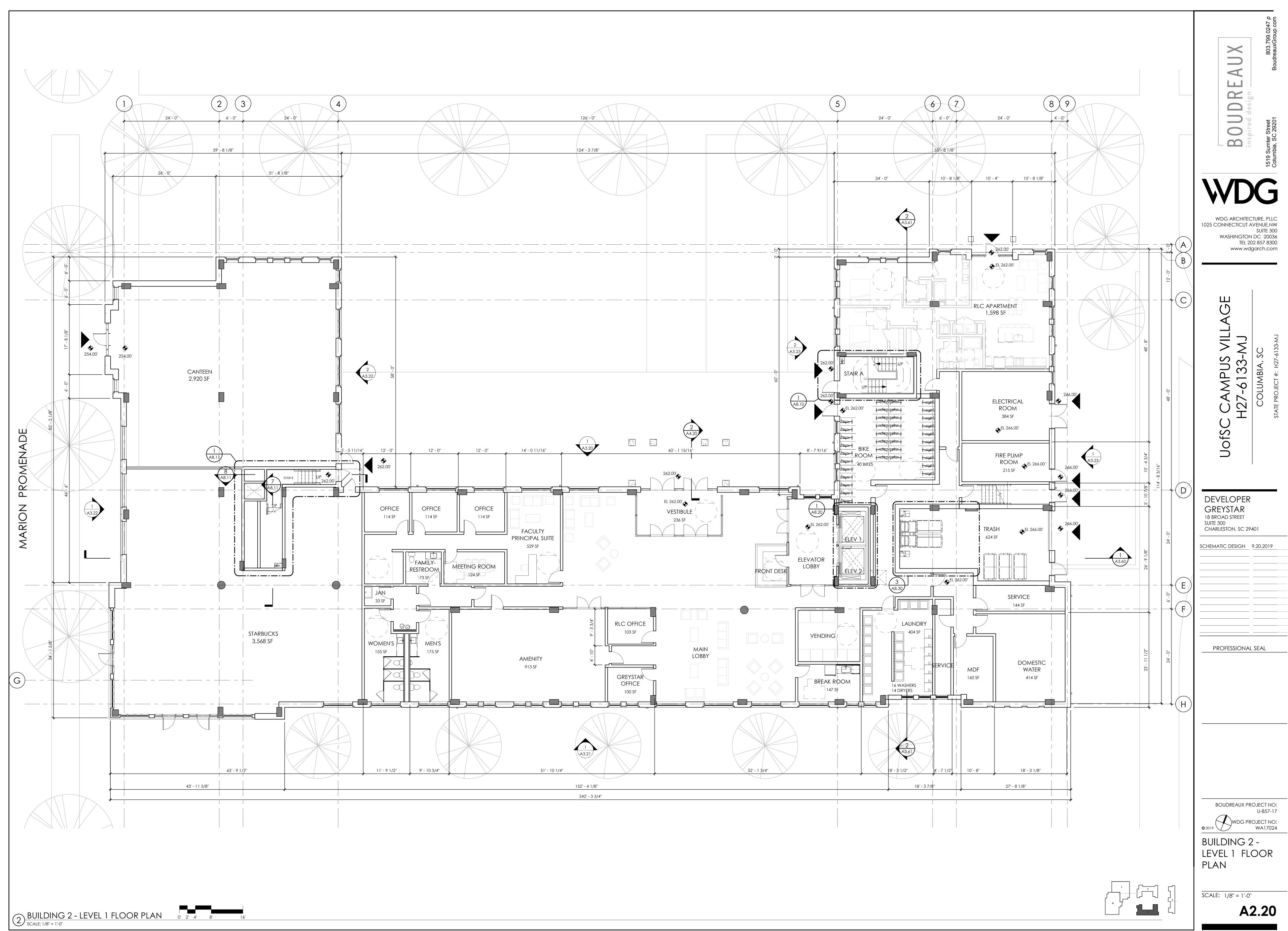


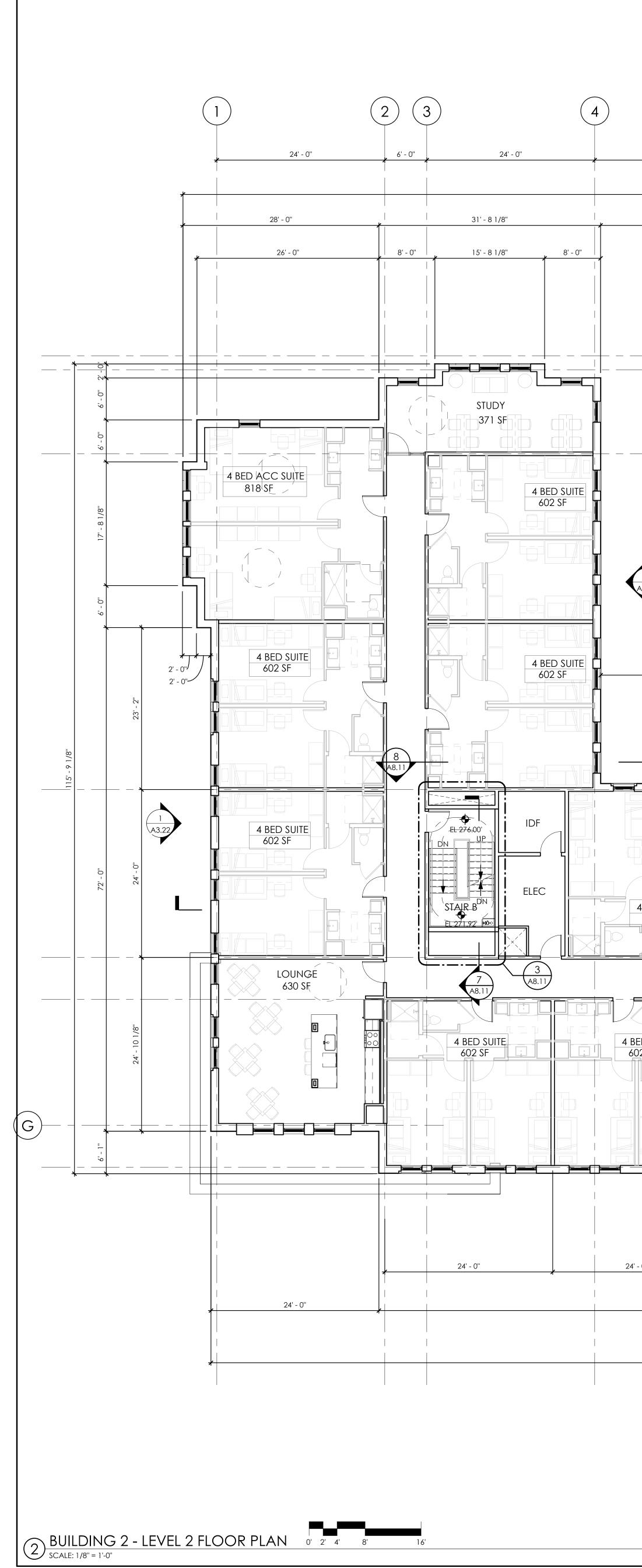






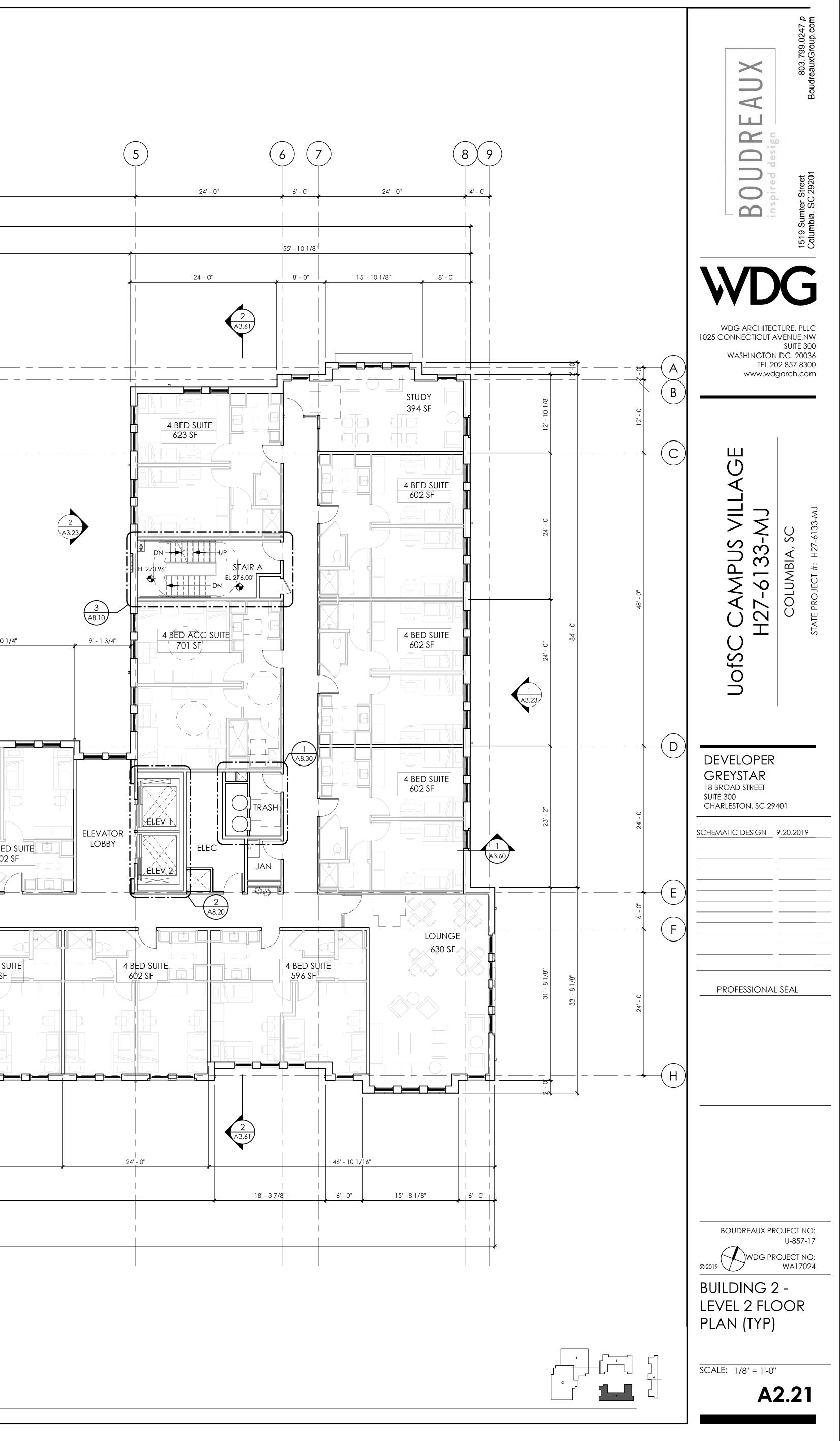


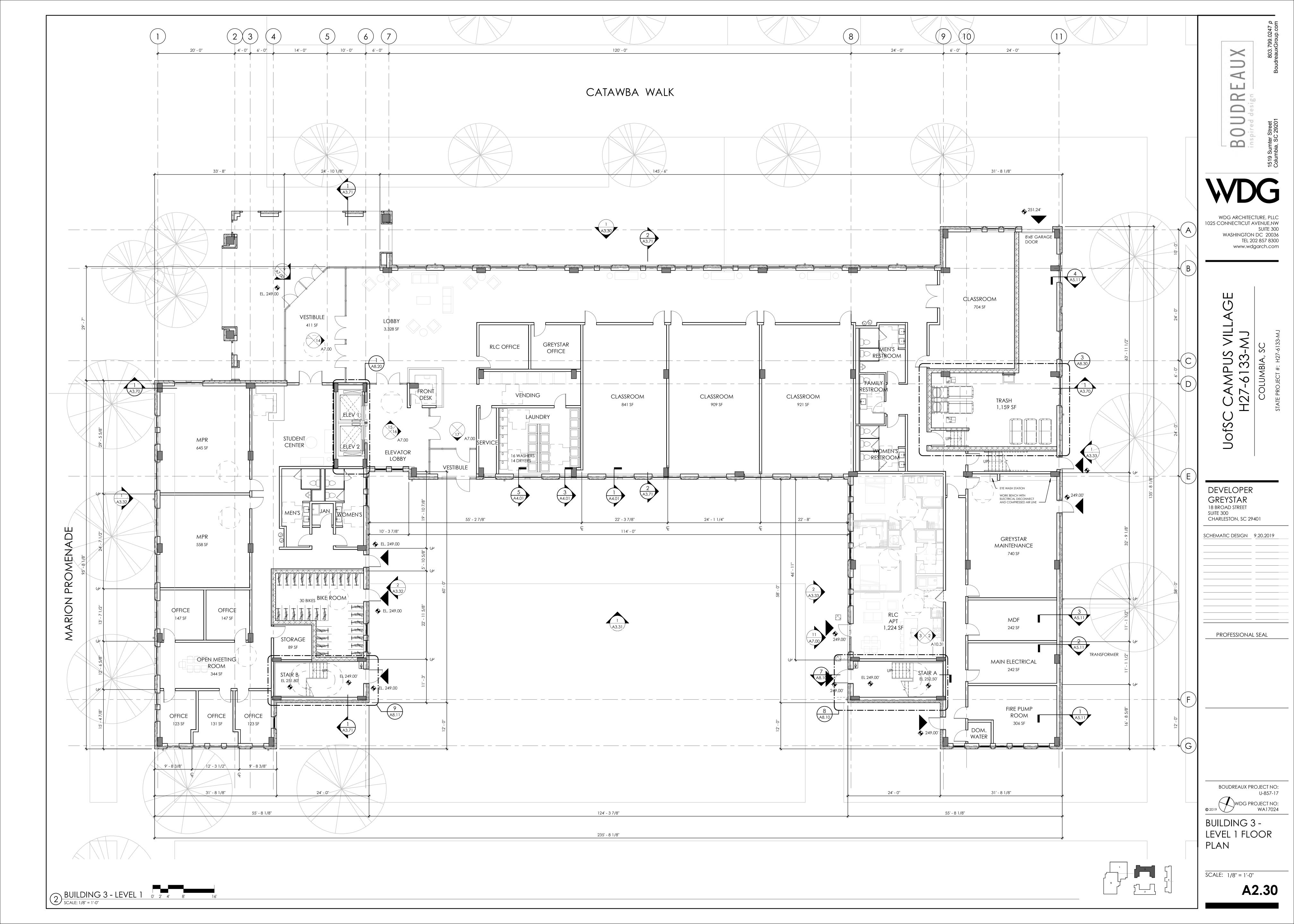


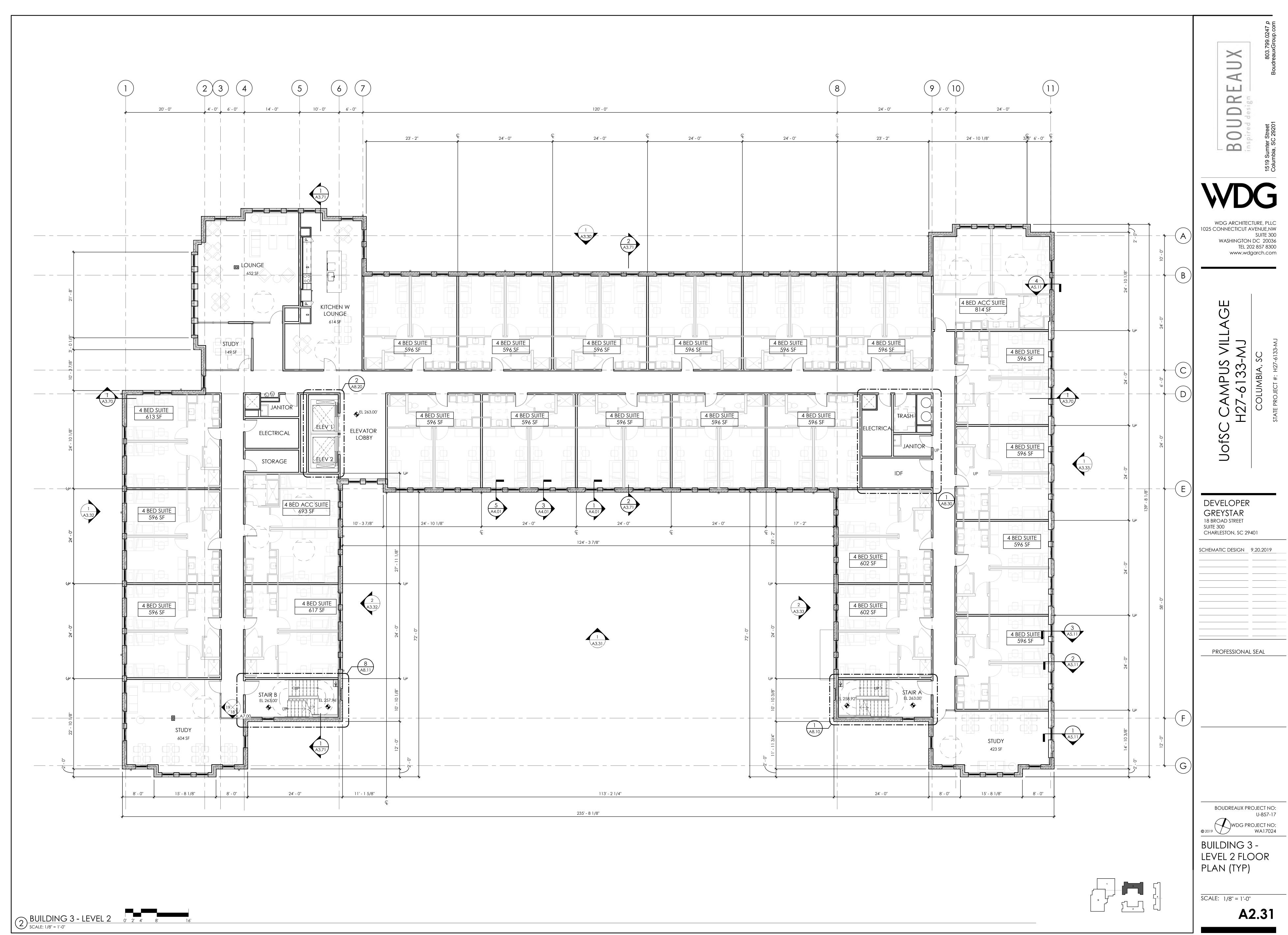


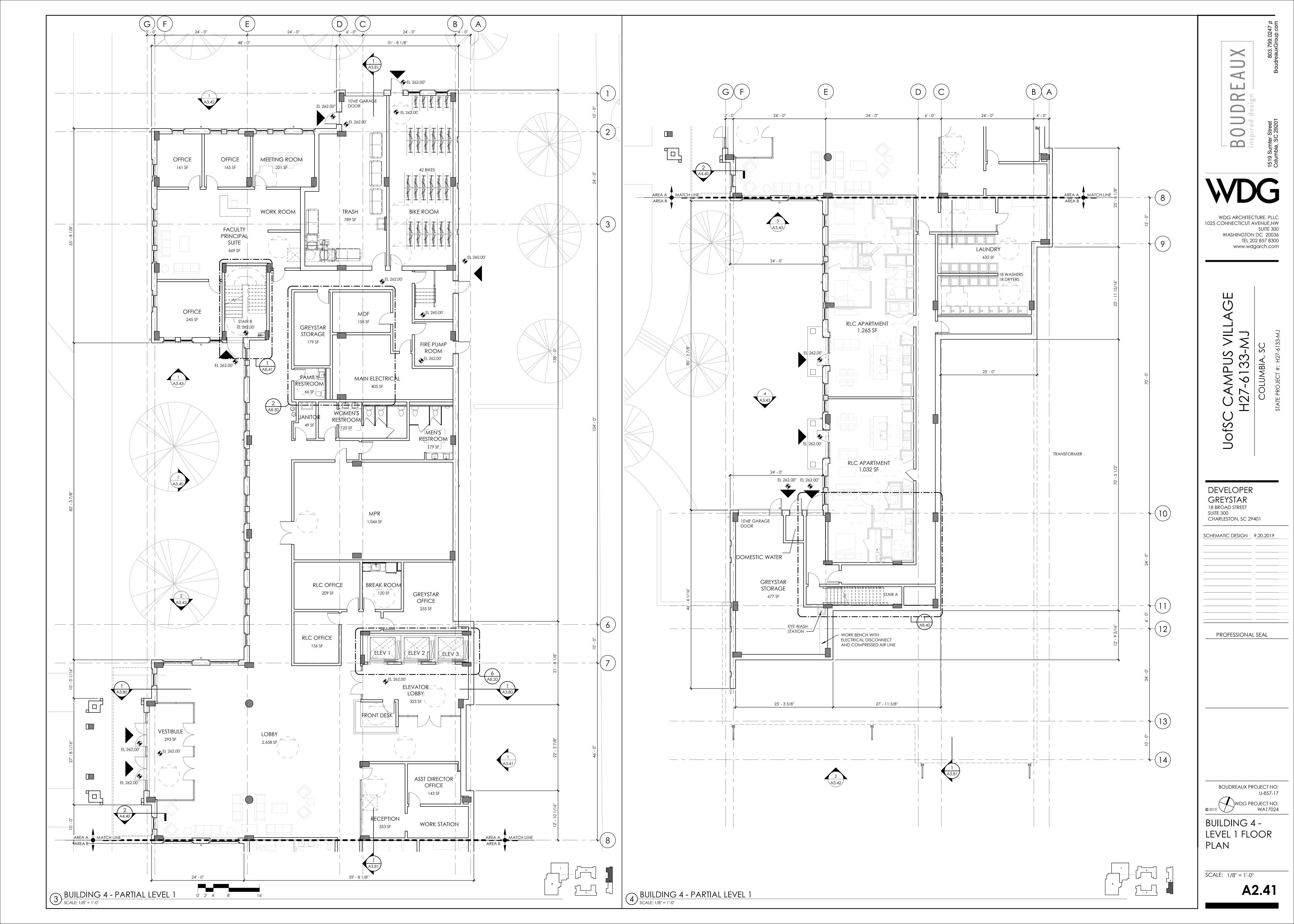
			126' - 0''			
			' - 9 1/8''			
			124' - 2 7/8"			
2 A3.22						
19' - 1 3/4"	<u>k</u> 24' - 0''	24' - 0''		24' - 0"		24' - 0 1/2
			A3.20			
1					2 A4.20	
4 BED SUITE 602 SF	4 BED SUITE 602 SF	4 BED SUI 602 SF		4 BED SUITE 602 SF		4 BED 602 S
ED SUITE 2 SF	4 BED SUITE	4 BED SUITE 602 SF		4 BED SUITE		4 BED SUI 602 SF
2 SF	602 SF	602 SF		602 SF		602 SF
- 0"	24' - 0''	24' - 0''		24' - 0''		24' - 0''
		169' - 8 1/8''				

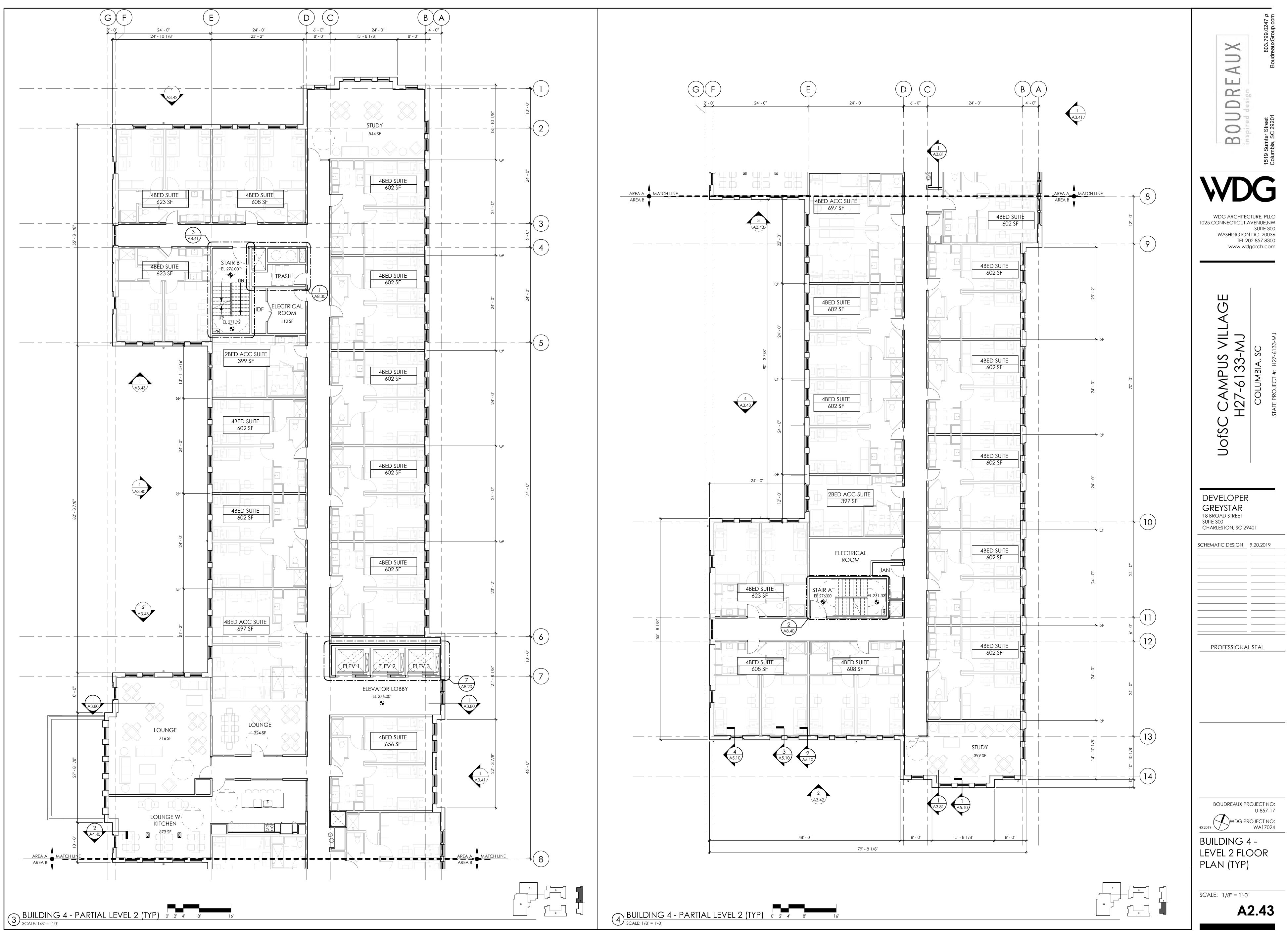
239' - 8 1/8"

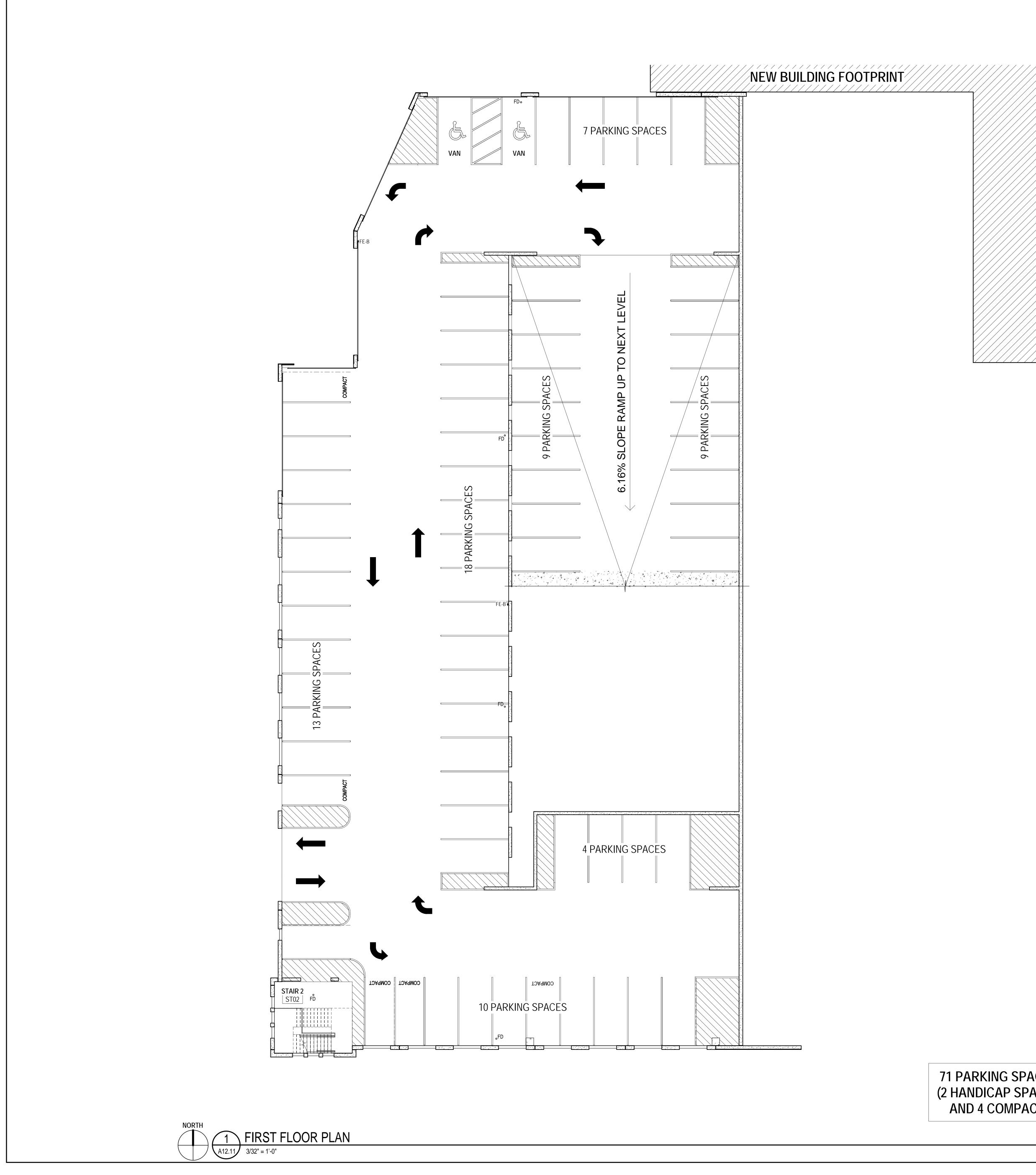


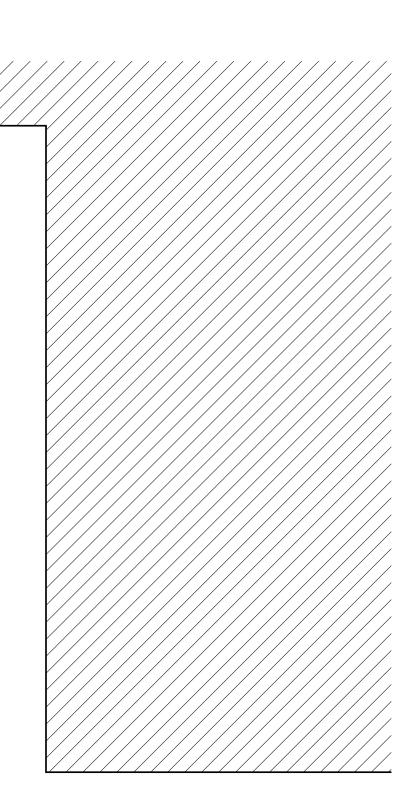












# GENERAL NOTES - FLOOR PLAN A. DIMENSIONS ARE FROM FACE OF WALL TO FINISH FACE OF WALL UNLESS NOTED OTHERWISE.DIMENSIONS ARE FROM FACE OF WALL TO FINISH FACE OF WALL UNLESS NOTED OTHERWISE. 8. REFER TO SHEET A3.1 FOR INTERIOR PARTITION TYPES INDICATED ON FLOOR PLANS C. REFER TO SHEET A3.\_ FOR ENLARGED PLANS. D. SEE REFLECTED CEILING PLANS (A2.X SERIES) FOR 1/8" = 1'-0" REFLECTED CEILING PLANS. SEE LEVEL 1 FLOOR PLANS FOR DOWNSPOUTS (DS) WITH DOWNSPOUT BOOTS.SEE LEVEL 1 FLOOR PLANS FOR DOWNSPOUTS (DS) WITH DOWNSPOUT BOOTS. SEE LIFE SAFETY PLANS (AX.X SERIES) FOR CODE REQUIRED TACTILE SIGNS. FLOOR PLAN LEGEND NEW DOOR, NEW WALL, SEE A3.1 FOR WALL PARTITION TYPES NEW SMOKE PARTITION, SEE WALL PARTITION TYPES NEW 1 HOUR RATED WALL, SEE A3.1 FOR WALL PARTITION TYPES NEW 2 HOUR RATED WALL, SEE A3.1 WALL PARTITION TYPES NEW 3 HOUR RATED WALL, SEE A3.1 FOR WALL PARTITION TYPES \_\_\_\_\_ LINE OF OBJECT ABOVE FEC FIRE EXTINGUISHER IN SEMI-RECESSED CABINET FE FIRE EXTINGUISHER,

CONTROL JOINT AT FIRE RATED

BRACKET MOUNTED

CONTROL JOINT AT NON-RATED CONTRC

DOWNSPOUT w/ CAST-IRON BOOT

PLAN KEYNOTE LEGEND

СВ

71 PARKING SPACES (2 HANDICAP SPACES AND 4 COMPACT)

WDG ARCHITECTURE, PLLC 1025 CONNECTICUT AVENUE NW SUITE 300 WASHINGTON DC 20036 TEL 202 857 8300

E-MAIL wdg@wdgarch.com ARCHITECT BOUDREAUX

1519 SUMTER ST COLUMBIA, SC 29201

TEL 803.799.0247 E-MAIL info@boudreauxgroup.com

STRUCTURAL ENGINEER TADJER-COHEN-EDELSON ASSOCIATES, INC. 1109 SPRING ST. SUITE 510 SILVER SPRING, MD 20910 TEL 240.354.1560

E-MAIL info@tadjerco.com STRUCTURAL ENGINEER PRESCIENT

115 N. DUKE ST. SUITE 2A DURHAM, NC 27701 TEL 303.397.1914 E-MAIL

MEP ENGINEER AHA CONSULTING ENGINEERS

3700 MANSELL RD. SUITE 200 Alpharetta, GA 30022 TEL 770.992.8585 E-MAIL info\_atl@aha-engineers.con



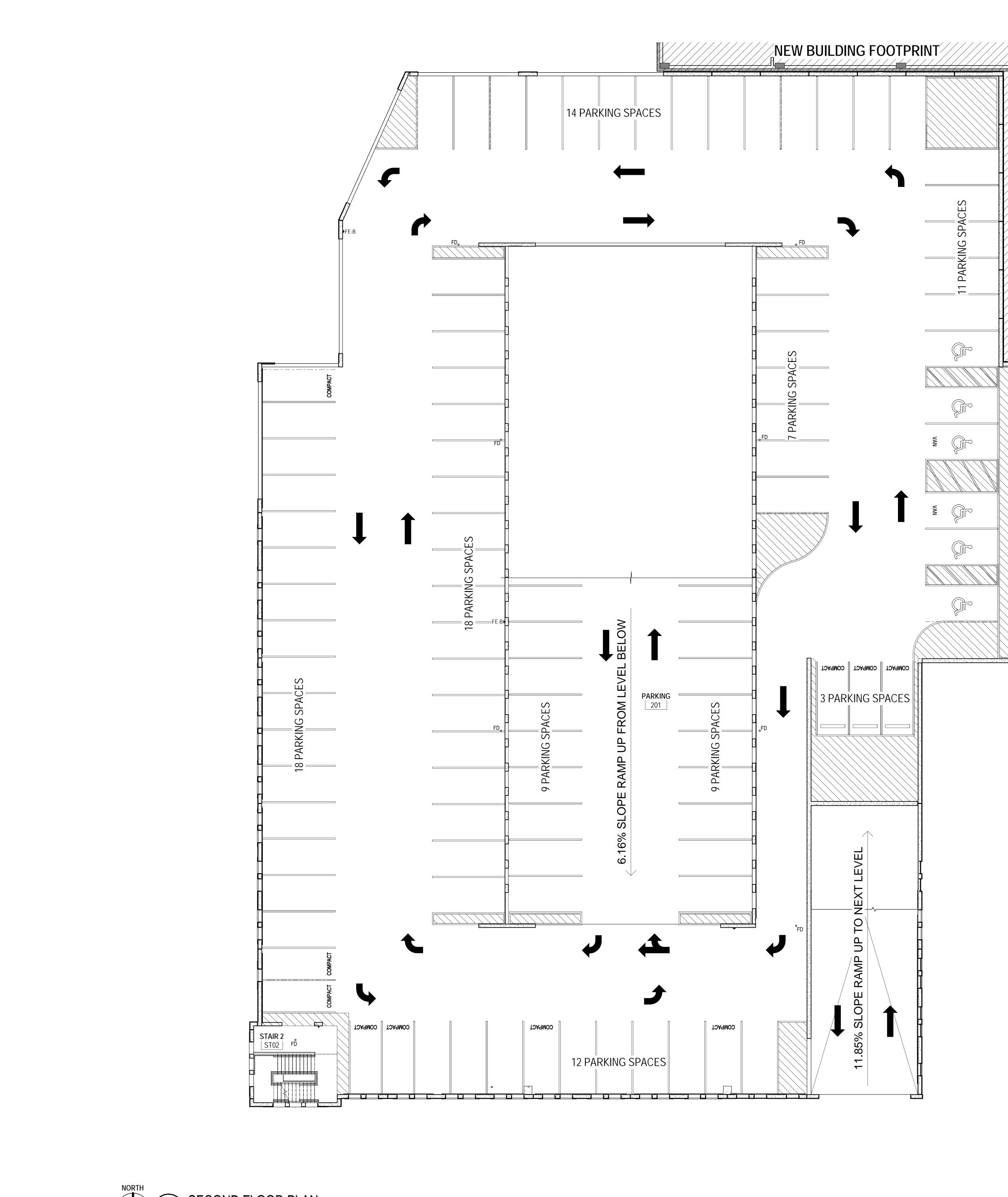
EdR 999 SO. SHADY GROVE RD. SUITE 600 MEMPHIS, TN 38120

PROFESSIONAL SEAL



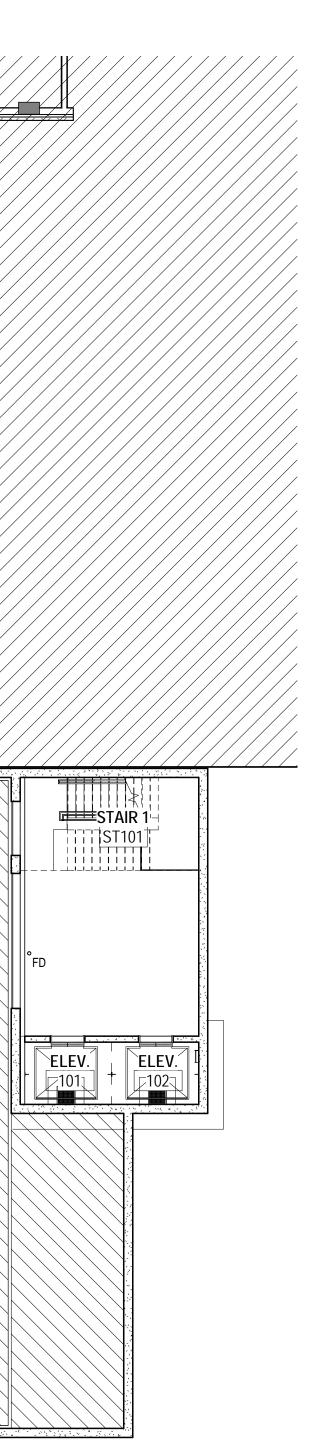
SCALE: As indicated A12.11

BOUDREAUX PROJECT NO: U-857-17 PARKING GARAGE



 1
 SECOND FLOOR PLAN

 A12.12
 3/32" = 1'-0"



101 PARKING SPACES (6 HC SPACES & 7 COMPACT)

GENERAL NOTES	S - FLOOR PLAN
OTHERWISE. DIMENSIC UNLESS NOTED OTHER' B. REFER TO SHEET A3.1 F C. REFER TO SHEET A3 F	OR INTERIOR PARTITION TYPES INDICATED ON FL
E. SEE LEVEL 1 FLOOR PLA LEVEL 1 FLOOR PLANS I	ANS FOR DOWNSPOUTS (DS) WITH DOWNSPOUT B FOR DOWNSPOUTS (DS) WITH DOWNSPOUT BOOT: S (AX.X SERIES) FOR CODE REQUIRED TACTILE SIC
FLOOR PLAN LE	GEND
	NEW DOOR, SEE DOOR SCHEDULE
	NEW WALL, SEE A3.1 FOR WALL PARTITION TYPES
	NEW SMOKE PARTITION, SEE WALL PARTITION TYPES
	NEW 1 HOUR RATED WALL, SEE A3.1 FOR WALL PARTITION TYPES
	NEW 2 HOUR RATED WALL, SEE A3.1 WALL PARTITION TYPES
	NEW 3 HOUR RATED WALL, SEE A3.1 FOR WALL PARTITION TYPES
	LINE OF OBJECT ABOVE
<u>FE</u> C	FIRE EXTINGUISHER IN SEMI-RECESSED CABINET
FE	FIRE EXTINGUISHER, BRACKET MOUNTED
Y	CONTROL JOINT AT FIRE RATED FRAMED WALL
▼	CONTROL JOINT AT NON-RATED
1	WALL

СВ

DOWNSPOUT w/ CAST-IRON BOOT

PLAN KEYNOTE LEGEND

WALL UNLESS NOTED IISH FACE OF WALL CATED ON FLOOR PLANS " REFLECTED CEILING WNSPOUT BOOTS.SEE ISPOUT BOOTS. ED TACTILE SIGNS.

WDG ARCHITECTURE, PLLC 1025 CONNECTICUT AVENUE NW SUITE 300 WASHINGTON DC 20036 TEL 202 857 8300 E-MAIL wdg@wdgarch.com

ARCHITECT BOUDREAUX

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TEL 803.799.0247 E-MAIL info@boudreauxgroup.com

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E-MAIL info@tadjerco.com STRUCTURAL ENGINEER PRESCIENT

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MEP ENGINEER AHA CONSULTING ENGINEERS

3700 MANSELL RD. SUITE 200 Alpharetta, GA 30022 TEL 770.992.8585 E-MAIL info\_atl@aha-engineers.con



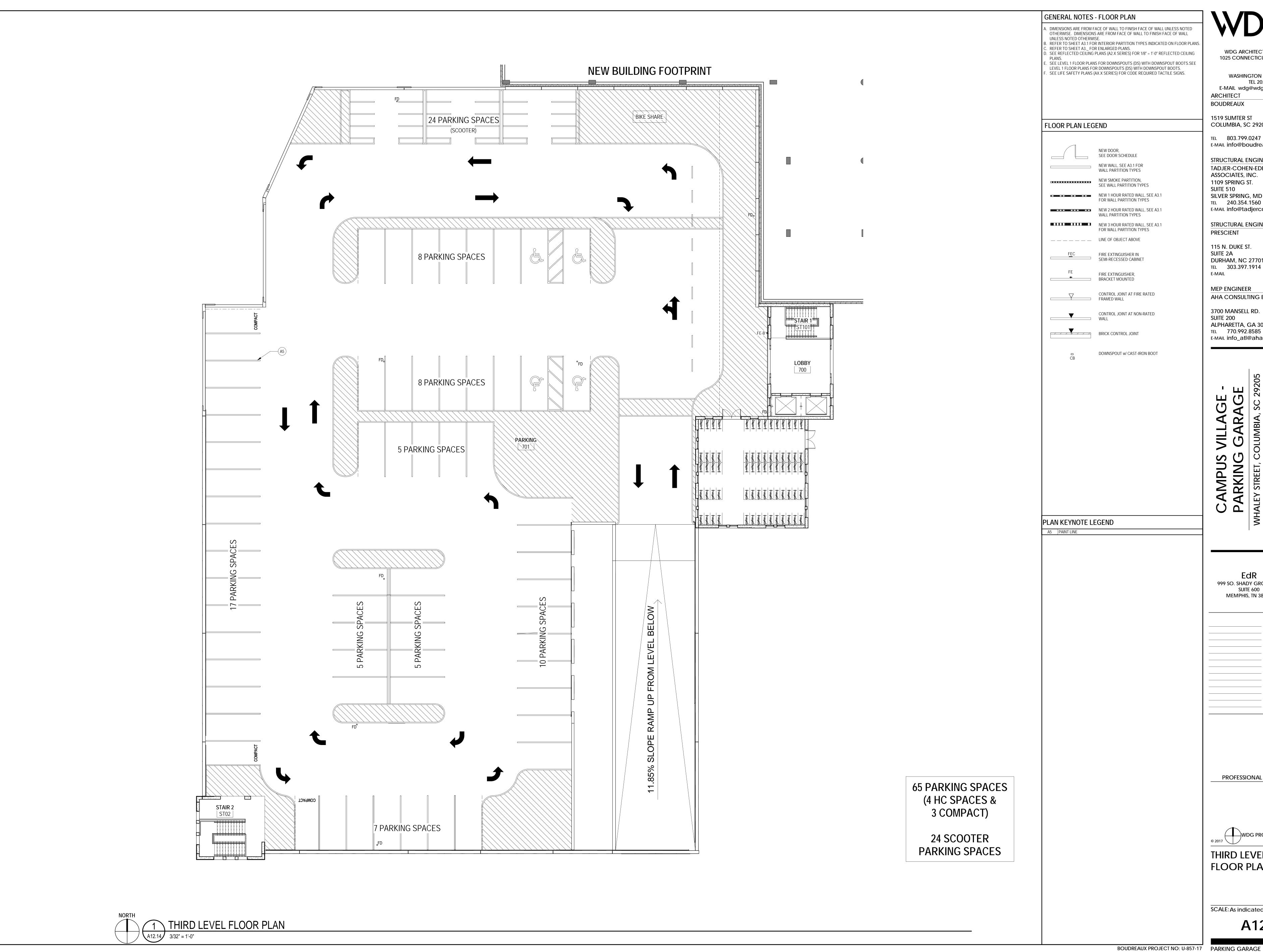
EdR 999 SO. SHADY GROVE RD. SUITE 600 MEMPHIS, TN 38120

PROFESSIONAL SEAL



SCALE: As indicated A12.12

BOUDREAUX PROJECT NO: U-857-17 PARKING GARAGE



WDG ARCHITECTURE, PLLC 1025 CONNECTICUT AVENUE NW SUITE 300 WASHINGTON DC 20036 TEL 202 857 8300

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E-MAIL info@tadjerco.com STRUCTURAL ENGINEER

115 N. DUKE ST. SUITE 2A DURHAM, NC 27701 TEL 303.397.1914 E-MAIL

PRESCIENT

MEP ENGINEER AHA CONSULTING ENGINEERS

3700 MANSELL RD. SUITE 200 Alpharetta, GA 30022 TEL 770.992.8585 E-MAIL info\_atl@aha-engineers.con



EdR 999 SO. SHADY GROVE RD. SUITE 600 MEMPHIS, TN 38120

PROFESSIONAL SEAL



SCALE: As indicated

A12.14