

**Town of Boone
Planning Commission
Regular Meeting
6:00 PM, Aug. 22, 2016
Council Chambers, 1500 Blowing Rock Road**

I. Adoption of Agenda

II. Approval of Meeting Minutes

June 6, 2016 Special Public Hearing Minutes

June 6, 2016 Special Public Hearing minutes

June 13, 2016 Planning Commission Meeting Minutes

June 13, 2016 Planning Commission Meeting Minutes

III. Election of Vice-Chairperson

IV. Case 20160136 Rivers Walk Planned Development Zoning Map Amendment

1. Rivers Walk Application Information
2. Rivers Walk Neighborhood Meeting Information
3. Rivers Walk Applicant's Development Narrative
4. Rivers Walk Applicant's Summary of Changes
5. Rivers Walk Information Submitted to Community Appearance Commission
6. Rivers Walk Site Plans
7. Rivers Walk Building Elevations
8. Rivers Walk Lighting Plans
9. Rivers Walk Floor Plans
10. Rivers Walk Traffic Impact Analysis
11. Rivers Walk Parking Study
12. Rivers Walk PD Zoning Map Amendment Staff Report

V. Case 20160377 Parking Structures - UDO Text Amendment

1. Parking Structures Application Information
2. Parking Structures Staff Report

VI. Case 20160419 Welsh Conditional District Zoning Map Amendment

1. Welsh Application Information
2. Welsh Site Plan Information
3. Welsh CD Zoning Map Amendment Staff Report

VII. Case 20160423 Appalachian State University General Use Zoning Map Amendment

1. ASU (Howard Street Hall) Application Information
2. ASU (Howard Street Hall) GU Zoning Map Amendment Staff Report

VIII. Case 20160501 Projecting Theater Marquee-Lighting UDO Text Amendment

1. Projecting Theater Marquee Lighting Application Information
2. Projecting Theater Marquee Lighting Staff Report

IX. Other Matters by Board Members or Staff

Discussion of November and December Meeting Dates

X. Adjournment

**DRAFT SPECIAL PUBLIC HEARING
MINUTES
MONDAY, JUNE 6, 2016
5:30 P.M.**

COUNCIL MEMBERS:	Mayor Pro-Tem Lynne Mason, Loretta Clawson, Jeannine Underdown, Jennifer Teague and Charlotte Mizelle
PLANNING COMMISSION MEMBERS:	Chairperson-Eric Woolridge, Vice-Chairperson Greg Simmons, Matthew Long, , Connor Boyle, Charlie Myers, Caroline Catoe, Matthew Vincent, Jon Tate, Michelle Dineen and Cameron Lippard
STAFF PRESENT:	Bill Bailey-Director of Planning and Inspections, Jane Shook-Planning Supervisor, Brian Johnson-Urban Design Specialist and Marlene Crosby-Board Secretary
OTHERS PRESENT:	John Ward-Town Manager arrived at 5:52 p.m. and Allison Meade-Town Attorney

Call to Order

Mayor Pro-tem Mason called the hearing to order at 5:33 p.m. and she explained the order of the public hearing which included not closing the public hearing on the planned development cases but leaving them open to receive further comment at open meetings.

Case 20160226 Landscape Contractor -Amend UDO Subsection 31.12.01 to specify when plant material must be installed by a NC licensed landscape contractor.

Mr. Bill Bailey, Director of the Planning and Inspections Department presented this case and noted there is an update to a state mandated statute for this case. He said that the supplemental information included in this packet and prepared by Ms. Allison Meade, Town Attorney clarifies the exemptions.

There were no questions or speakers on this case.

Mayor Pro-tem Mason closed this public hearing at 5:37 p.m.

Case 20160275 Marketplace Planned Development - Zoning Map Amendment - John Winkler with The Winkler Organization has filed a Zoning Map Amendment Petition for a planned development at properties located at or near 783 West King Street (Watauga Co. PINs: 2900-79-7562-000 & 2900-79-6480-000). The proposed development consists of a mixed-use building containing both residential and commercial uses, including a parking deck. The residential portion will contain 99 dwelling units with 159 bedrooms; with the following uses are proposed to be allowed for the commercial portion of the building: 11.06 Restaurant ≤ 2,500 ft² open to the public during 10pm-6am, 11.07 Other restaurants ≤ 2,500 ft²; 11.08 Restaurant > 2,500 ft² open to the public during 10pm-6am; 11.09 Other restaurants ≤ 2,500 ft², 11.12 Personal Service Establishment open to the public during 10 pm – 6 am, 11.13 Other Personal Service Establishments, 11.14 Retail Store up to 5,000 ft²; 11.15 Retail Store more than 5,000 ft² but less than 25,000 ft², 11.19 Other business or Professional Office, 14.02 Brewpub and 15.02 Parking Structure.

Communication: June 6, 2016 Special Public Hearing minutes (June 6, 2016 Special Public Hearing Minutes)

Mr. Bailey gave a brief background on this case. Mr. Bailey handed out a copy of an email that Mr. Bailey had received regarding this case. He noted that a final draft of this proposed project will be presented tonight by Mr. Jim Deal, Attorney for the applicant.

Mr. Jim Deal the attorney for the applicant gave a brief background of the proposed project. He noted that the idea for this project started a little over one year ago. He said it started out as a possible parking garage and as a result of meetings with the Town Staff and community members it evolved into a mixed-use project with a street-level commercial component and a residential component and a parking garage. He said this proposed project has gone through a number of redesigns. He explained that the proposed project located on three streets in the Downtown area and how the applicant has tried to incorporate the commercial component on all three streets. He further explained that the applicant tried to create as many parking spaces as possible to help Downtown Business Owners. He talked about the applicant trying to make the residential apartments more geared for the young professionals. He said he walked along King Street trying to figure what the character of Boone is with some of the buildings having wood and some of them with stucco. He passed around two photos of Downtown Boone buildings that no longer exist (the old Daniel Boone Hotel and the Old Watauga County Courthouse building). He noted that the courthouse building had red brick on it. He said that Mr. John Cooper the owner of Mast General Stores and a member of the Downtown Boone Development Association suggested adding balconies on the upper levels of the residential units of the proposed building.

Mr. Deal talked about the meetings he had with Town Staff regarding the way the Unified Development Ordinance and the Boone 2030 Master Plan are constructed and what could be called into question in terms of this proposed project. He noted that the applicant would like to arrive at some kind of a consensus as a community on what we would like the proposed project to be which would include the exterior appearance.

The town meetings consisted of the Downtown Boone Development Association and the Community Appearance Commission and other community members and the applicant was able to gather feedback from each of them regarding this proposed project to incorporate into the revised plans.

Mr. Deal talked about the neighborhood meeting that was held and the concerns that were talked about at the meeting. He talked about the building heights on King Street, Howard Street and Water Street. He said in the original building plans and the building height presented at the neighborhood meeting was 46 feet and eight inches. He said as a result of the neighborhood meeting discussion and comments, the developer has reworked the plans. He noted that the project information in the meeting packet shows the building height to be 38 feet and the height probably really closer to 36 feet and four inches and he explained that the building height is measured from the median to the corner and not going up in a straight line but in a diagonal line. It noted to not be misleading, they put 38 feet in the plans and it is less than the 40 feet. He noted there is an eight feet and eight inch reduction in the height of the building on King Street. He said at the mid-point of the building on Water Street, he said as a result of the neighborhood meeting the building height changed from 50 feet and ten inches to 42 feet and four inches. He said based on measuring the building height from Water Street, it is 2 feet and four inches higher from what the UDO could "arguably" require. He noted that the UDO states that you measure from a primary street and in the case the primary street is King Street. He said at the neighborhood meeting the mid-point or median on Howard Street was 61 feet and six inches and the proposed redesigned height was changed to 50 feet and four inches.

Mr. Deal talked about a lengthy email that was sent to the Town regarding the requirements of the Boone 2030 Master Plan. He said the email conveniently left out what the Boone 2030 Master Plan called for at

this exact site. He said the Boone 2030 Master Plan called for a six-story building. He further talked about the other building heights on King Street.

Mr. Deal talked about a concern regarding the building appearance. He talked about the old Watauga County Bank building and the Farmers Hardware building being located beside it. He noted that the proposed redesign included the look of the old Watauga Bank building on King Street. He talked about needing certain features in order to comply with the UDO.

Mr. Deal noted that on June 2, 2016 the proposed plans were reviewed by the Community Appearance Commission meeting. He noted that the developer is not requesting any deviations from the UDO regarding the exterior appearance. He said the CAC members were alright with the proposed plans based on the proposed revisions presented at this meeting.

Mr. Deal talked about some of the features like folding windows for some of the commercial space which may allow patio-type seating for some of the restaurants.

Mr. Deal said when the CAC members were asked about the building being stepped down, they did not like this idea.

Mr. Deal said there is a clock feature on the King Street elevation and it adds a couple of feet of height to the building and the building is still only at 38 feet.

Mr. Deal talked again about an email regarding this proposed project. He said he felt the email was wanting the Town to develop property that was owned by someone else. He noted that the proposed project is in line with the 2030 Boone Master Plan.

Mr. Deal said the proposed project has 159 bedrooms, he said after the neighbor meeting the number of bedrooms were reduced. He said the 159 bedrooms are in separate units. He said it has 367 parking spaces. He said if every single bedroom took a parking space, which he does not believe will happen based on the history in the Town and the cost of the parking spaces. He said this will leave 108 extra spaces which will be dedicated to some of the restaurants.

Mr. Deal talked about the planned development process and how it has worked well on this project because there has been a lot of opportunities to gather feedback and apply the feedback to the revised plans.

Mr. Deal introduced Mr. Brent Davis from Brent Davis Architecture.

Mr. Davis said that he has incorporated the communities concerns into the revised plans.

Mr. Davis pointed out that the clock feature on the King Street elevation changed the building height from 36 to 38 feet, he said otherwise the majority of the building height is 36 feet. He talked about the Water Street elevation and said the building height is 48 feet and four inches. He went over some of the other building heights of the building at various points of the building.

Mr. Davis said the main building feature is brick with applied trim. He noted that the King Street elevation represents the best revisions. He said he incorporated some of the elements of the old Watauga County Bank building into the revisions. He talked about the creating of shadow lines to make the building look like it had grown over time rather than using the typical bronze store front look. They chose to use a divided store front look to create more of a vintage look. He noted that the Downtown Boone Development Association suggested to include balconies in the apartments. He talked about the lobby being a place for people to wait for restaurant seating and it connects with the parking garage.

Mr. Davis talked about the style of windows with sloped awnings and they have a number of vendors they can get various types of windows from for the building.

Mr. Davis noted that Mr. Jason Gaston from Valor Engineering had information on the landscape and hardscape for the proposed project.

Mr. Davis went over the square footage for the whole building, entrances to the apartments and the parking deck. He explained on the elevations the location of the parking deck because the deck is not exposed from the outside of the building.

Mayor Pro-tem Mason asked Mr. Davis to break out the number of units that are one-bedroom and two-bedroom. Mr. Davis said there are 44 one-bedroom units, 50 two-bedroom units, five three-bedroom units for a total of 99 units and 159 bedrooms.

Council Member Teague asked for more information on the underground parking. He said the parking deck is 35 feet deep on King Street and another 20 feet deep for two more parking levels. He said each deck has a sloped parking ramp to reduce the retaining wall height and costs on King Street. He said there are 134 standard parking spaces, 11 accessible spaces 222 compact spaces for a total of 367 parking spaces and there are 88 bicycle spaces. She asked what level the bikes will be located on. Mr. Davis said they are trying to get them on the grade level off of Howard Street.

Council Member Mizelle asked for clarification on the trash compactors. Mr. Davis said there is one compactor not two compactors. Council Member Mizelle asked if there is enough room for the trash truck to get in and out to empty the trash. Mr. Davis said it is enough room according to the trash company.

Mr. Ward added, if this proposed plan is approved the Town will incorporate the Howard Street design plan with the radius turn.

Council Member Mizelle asked if the building will be thoroughly lit on all sides of the building. Mr. Davis said the lighting has not been addressed on one side of the building.

Mr. Ward said if the proposed plan is approved the Town will work with the developer on the Town's Streetscape plan.

Mayor Pro-Tem Mason clarified that there is an adopted street scape plan for the Downtown area. She asked Mr. Deal if this proposed plan would meet those requirements on W. King Street, Water Street and Howard Street as one unified project. Mr. Deal said it was his understanding that the Town is still working on their Howard Street plan and the developer wants to work with the Town on this plan but once they know what that plan is, the developer will agree to work with the Town on the Howard Street plan.

Mr. Deal further explained the closures of the Town streets during the proposed project would need to be coordinated with the Town and the developer. He noted that about 85 percent of the construction of this proposed project will take place inside the building footprint.

Council Member Clawson asked about the height of the proposed building where it joins the Murphy's Restaurant. Mr. Deal said the building is about seven feet taller than Murphy's Restaurant and on W. King Street it is lower than the Watauga County Bank building. He noted the Farmers Hardware building on W. King Street is 47 feet high. He said behind the building facing Howard Street the current building is 53 high. He said the proposed building is lower than both of those elevations.

Council Member Mizelle asked about the width of the compact parking spaces. Mr. Deal said the compact spaces are eight-feet wide instead of nine-feet wide. He talked about the turning ratios for the parking spaces. He said the standard space is 9 feet and you need a greater width, if you have a certain amount of compact spaces. He further explained the change in parking. He said if the spaces become too tight, come of the spaces may need to be reconfigured, if needed. He noted that the compact spaces will be in the very low level of the building for the tenants that are living in the building because of the ability to

control the tenant parking. He talked about the current proposed parking space plan being 367 spaces. He said this number could change to 330 parking spaces in order to accommodate extra space for cars.

Council Member Clawson talked about the narrow parking spaces at the movie theatre and she doesn't want to see that size in these parking spaces. Mr. Deal noted that most parking lots have a mixture of parking spaces in their lots. He said the developer was trying to maximize the available number of parking spaces in the Downtown area. He talked about gas prices determining the type of cars that people drive. Council Member Mizelle asked Mr. Deal if changing the parking spaces is as simple as changing the lines that outline a parking space. He said there are others present at this meeting that could answer parking questions.

Mayor Pro-Tem Mason asked what percentage of parking spaces will be reserved for residents versus commercial and public use. Mr. Deal said the figure used in the plan was 80 percent. He said he felt this was a high percentage and he did not feel that 80 percent of the residents will rent a space. He said it will depend on the tenant. He said if every single bedroom had a parking space, there are 208 extra spaces which is more parking than all of King Street. He confirmed that the 208 extra spaces would be available for commercial or public parking.

Council Member Teague asked about short-term parking.

Council Member Teague asked if the restaurants will be built out. Mr. Deal said this is usually driven by the tenant and it sometimes determines the cost of rent.

Mayor Pro-Tem Mason asked is the developer intending to lease the units by the unit or the bedroom. Mr. Deal said renting by the bedroom has been going on in Boone for 40 years and there is no negative connotation for doing this. He noted that he has had a good experience with renting by the bedroom.

Mayor Pro-Tem Mason said she felt it is important to have versatility in housing in the Downtown area and it not be geared to one sector of our community. She said for some populations renting by the bedroom works great but for a good part of our community, they are looking for units to rent rather than bedrooms to rent. He said he thinks this is why the developer is proposing one-bedroom units. Mr. Deal agreed with Mayor Pro-Tem Mason and he said he thinks this project has a good mix and it is attractive to the young professional. He noted that there may be a lot of young professionals that want a two-bedroom unit.

Council Member Clawson asked if the bedrooms would be per person. Mr. Deal explained how lease contracts are written.

Council Member Collins said she talked with the Community Appearance Commission regarding the King Street façade changes. She said they talked about taking off some of the EFIS and adding more brick to the façade to help with the transition to Howard Street. Mr. Deal asked if the feedback from the CAC members could be given to Mr. Brent Davis to review.

Council Member Mizelle asked since this is a proposed planned development project has anyone shown any interest in adding rooftop solar because it is the wish of the Sustainability, Environment and Economics committee members to have rooftop solar. Mr. Deal said there is one private person that is interested in it but the management of the water needs to be figured out. He said he was not sure, if it will actually happen yet. He said if the rooftop solar would make the building higher, the developer would need to deal with the height issue. Mr. Deal said the developer is happy to look into it.

Planning Commission Member Catoe asked if the rent rate amounts have been established. Mr. Deal explained how the rent amounts are usually calculated.

Planning Commission Member Boyle talked about the solar panels and said that the water would drip off of the roof. He asked about the height of the proposed building on the East elevation. Mr. Deal pointed out on the elevations the answer to this question.

Council Member Teague asked if the units are structured to be sold. Mr. Deal said not at this time it is not the intent. He said he would not say it will never happen due to condominium laws.

Council Member Clawson said the Downtown merchants would like to see public parking. Mr. Deal talked about the hourly parking turn over being needed to make the parking work. Council Member Teague asked Mr. Deal to get more information regarding the hourly parking spaces by the next Council meeting to find out how many spaces would be going to hourly parking. Mr. Deal said he would like for the parking expert to talk about the parking and the developer would need to know the dollar amount of the approved for the project. Council Member Clawson said she thought restaurant spaces are important.

Planning Commission Vice-Chairperson Simmons asked on the East elevation what part of the proposed building is covered in relation to Murphy's Restaurant. Mr. Deal said that Murphy's Restaurant is about a third of the way back. Discussion ensued on the driveway behind Murphy's Restaurant.

Planning Commission Chairperson Woolridge asked for any comments the developer might have regarding the lobby and bringing more life to King Street because these type of changes are not reflected in the proposed plans. Mr. Deal talked about some changes that were made at the June 2, 2016 CAC meeting and said that Mr. Bailey has not had time to present him with those changes. Mr. Deal talked about the roll-up windows and the use of them being weather driven. Mr. Deal noted that the drawings presented at this meeting are not the final drawings.

Mr. Davis talked about the sloping sidewalks and they possibility can install folding windows and still meet accessibility requirements.

Planning Commission Chairperson Woolridge asked if the plans would reflect the changes that Mr. Deal is presenting in this meeting.

Mr. Winkler talked about the question on egress and the door openings of the building.

Planning Commission Member Lippard reiterated what Planning Commission Chairperson Woolridge mentioned regarding bringing more life to King Street. Vice-Chairperson Simmons agrees that he would like to see more life brought to the King Street. Mr. Deal said the developer is open to looking at options that are acceptable.

Ms. Allison Meade, Town Attorney said in the PD process this would be the time to work out the options to the best extent possible.

Planning Commission Tate agreed that it will be difficult to deal with the slope on the corner of the building at King Street and Water Street.

Mr. Winkler noted that where the terrain will allow the developer will do as much as possible to allow entry off the street into the building.

Mr. Deal said the developer is willing to work out conditions on the proposed project.

Council Member Teague asked Mr. Davis a question on the entry of the building. Mr. Davis explained the entrances to the building.

Council Member Teague said she understands what the Planning Commission Chairperson Woolridge is saying in support of the Planning Commission.

Mr. Steve McLaurin from McLaurin Parking said the proposed project will have in access of 135 hourly parking spaces available. Mr. McLaurin said the parking rate will determine who parks in the parking deck. He talked about the parking rate and how it will stimulate people to park there and have an incentive to move their car from the parking deck. He talked about the parking deck having 80 percent occupancy on a normal day. He talked about the extra parking being able to absorb the extra vehicles for days, when it is needed.

Council Member Mizelle asked about the eight-foot parking space width. Mr. McLaurin said the key to the dynamics of turnover is where people can get out of the vehicles easily. He talked about training the parking attendances on how to park the vehicles in regular and compact spaces. He said there is a possibility that they may need to decrease the parking spaces because they want people to be able to get in and out of the parking spaces with ease.

Council Member Teague asked would the parking be paid before or after you park. Mr. McLaurin said that has not been determined yet. He said he thinks the parking deck will have an attendant and you will pay on the way out Monday through Friday. He said they are still working out the dynamics of the parking deck.

Planning Commission Member Vincent asked if they will limit the amount of time for the parking. Mr. McLaurin said the parking rate will determine the parking cost and he thinks that the cost might be \$2.00 for the first hour.

Council Member Teague asked if other spaces can be rented other than the tenants in the building. Mr. McLaurin said the tenants of the building will be the first to rent spaces and then to business owners and there will be a cap on it.

Mayor Pro-Tem Mason asked if Mr. McLaurin to prepare some information on the minimum of public parking spaces that might be available for those who want long-term parking and bring it to the next Council meeting so they do not lose the public parking option for people who want long-term parking.

Mr. Frank Amenya from Davenport Engineering gave an overview of the traffic study and the traffic improvements that are being worked on. He said at the neighborhood meeting there were asked if they were going to increase parking. He said that yes they will increase parking and they will mitigate the traffic that they are bringing in. He said at Water Street and King Street, they are looking at re-timing the signal light and providing a right-hand lane. He said at the intersection of Howard Street and Water Street the Town is improving their pedestrian addition with the Howard Street study. He said at the intersection of Poplar Grove and Water Street the North Carolina Department of Transportation is looking at this section for a possible round-a-bout which was recommended as a result of the traffic study. He said there will be a sidewalk along King Street and there are improvements for the pedestrians and bicycles along Howard Street. He noted that they are proposing 88 bicycle racks for bicycles in the parking deck.

Mr. Amenya said the proposed project is within 400 feet of a transit line. He said there is an express transit line routes on Poplar Grove Road.

Planning Commission Member Boyle asked how they will mitigate the traffic at intersection of Water Street and King Street due to traffic back-ups on Water Street from River Street. Mr. Amenya talked about re-timing the signal lights to help cars exit the parking deck to help keep the traffic flowing. He said that he recommends that the Town work with NCDOT to reconfigure the light cycle at the Poplar Grove Extension and King Street to make sure it is signalized to help traffic flow onto the Poplar Grove Road to King Street rather than the River Street traffic continuing onto the Poplar Grove Road.

It was asked how many cars will exit the Water Street parking deck every minute? Mr. Amenya said in the morning peak hours, there are 26 cars making a left turn and 26 cars making a right turn per hour. He

said in the evening peak hours, there are 47 making left turn and 43 making a right turn per hour. He noted that peak hours are usually 7 am to 9 am and 6 pm to 8 pm.

Mr. Amenya referred to the tables in the traffic study and explained the levels of service for E, D or F and how it relates to peak hours. He said you are good, if you can maintain a level D or better and this goes out to 20 years of growth on this case.

Planning Commission Member Lippard asked about future projections and what it would cost. Mr. Amenya said they base the traffic counts on the growth rate and he said the growth rate is compounded. He said he projected the growth rate by two percent.

Mr. Amenya explained the comparison and the level of service between the Rivers Walk project and the Marketplace project and he said they have accounted for future traffic flow and he added that he had worked with NCDOT on the future traffic count.

Mr. Amenya introduced Mr. Trent Moody from Davenport Engineering, he said he may be at future Town meetings when Mr. Amenya may not be available.

Council Member Mizelle asked about the round-a-bout at Water Street and River Street. Mr. Amenya explained that the NCDOT and the university are looking at this area for a round-a-bout. He said they will need the support of the Town, when they look at River Street. He said the university is looking at reducing the number of lanes due to speeding on Rivers Street.

Mayor Pro-Tem Mason asked if there was other information to be presented by the applicant. Mr. Deal said they have no more to present at this time but they are available for additional questions after the public comment.

Mayor Pro-Tem Mason called for a short break at 7:10 p.m.

Mayor Pro-Tem Mason reconvened the hearing at 7:20 p.m.

Mr. Charles Travis and his wife owns Old World Galleries and he said he is acutely aware of the parking problem in Downtown Boone. He said the Town parking meters helped the parking problem. He said he is in favor of the project as presented. He said the architectural drawings were appropriate for the Town of Boone.

Mr. Morgan Shaw said he is a business partner with Mr. Charles Travis at Old World Galleries. He noted that traffic and parking has always been a problem on King Street. He said the more parking the better to help their clients have better accessibility to benefit their business and the Town of Boone. He is in support of the parking of the proposed project.

Mr. Chuck Luddeke said he owns the Boone Mellow Mushroom. He said since his business has moved to King Street he has twice the parking issues than his former location on Rivers Street. He has had a number of customers that have been ticketed, booted or towed and his customers want him to pay these costs and have stated that they will not return to his restaurant. He also said that he supports the parking in the proposed project.

Mayor Pro-Tem Mason said that Mr. Ward has some written communication that he had received regarding this proposed case. She also noted that there were some emails sent to the Council from Mr. Eric Plagg and Ms. Pam Williamson. Mr. Ward said he also has a typed document from Steve and Eric Lawson with possible questions to be provided to the Council on this proposed project (not in the record).

Mayor Pro-Tem Mason asked if there were others that wanted to speak on this case or if anyone had any further questions on it from the Council or the Planning Commission. She also noted that the public

hearing on this case will remain open for ongoing conversation as a result of the planned development process.

Council Member Teague asked if the proposed building touches the Murphy's Restaurant building. Mr. Deal said the proposed building does not physically touch Murphy's Restaurant.

Mr. Ward noted there is a walkway between the buildings.

Case 20160295 Wellness District Standards - Amend the UDO to create a new Wellness District zoning district which contains standards specific to the district.

Mr. Bailey presented this case and noted that the proposed standards presented at this hearing were geared for the State of North Carolina - College of Health Sciences project. Mr. Bailey noted that the proposed standards would only apply to properties that are rezoned. He said the new language is presented in blue. He also noted that most of the proposed language came from the Wellness District plan itself, the Council and the various workshops and the community.

Mr. Bailey said there are a couple of questions that can be avoided by deferring to the current code. He further explained that the proposed changes can help on the next case at this hearing for the State of North Carolina General Use Zoning Map Amendment and the proposed language is not geared for the complete Wellness District standards.

Mayor Pro-Tem Mason clarified that the specifications being presented at this hearing are for the property located at the corner of State Farm Road and Deerfield Road which will be the North Carolina State - College of Health Sciences. It was also noted that other surrounding properties will operate under current zoning.

Mr. Bailey explained what all is involved with the rezoning and the developing of the WD standards. He said there will be a workshop to help develop the standards for the WD district. He noted that the Staff is about 70 percent complete on the developing of the WD standards and the standards will be subject to some modifications.

Mayor Pro-Tem Mason asked what the basis is for some of these standards. Mr. Bailey said the language came from the plan itself, the Council's input, information received at the workshops and information from the Community Appearance Commission.

Ms. Meade asked Mr. Bailey to outline the timing moving forward regarding the more defined process of the developing of the WD standards and when the re-zoning would happen for the rest of the WD District. Mr. Bailey said the Staff's goal is to complete the standards before the end of this year because Staff wants to start on the Council priorities such as parking, multi-family and mixed-use development. He noted it is difficult for Staff to balance all the large projects, Council priorities, WD standards and the College of Health Sciences re-zoning. He further explained that the Staff's best tactic was to prepare the standards so they would work for one project and then provide the basis for the rest of the discussion on the WD standards. He said at the July 2016 Council meeting the Staff will be requesting to set up a workshop.

Council Member Clawson asked about the parking for the College of Health and Sciences. Mr. Bailey said the students will primarily ride the Appalcart. He noted that the Council wanted a more specific parking study on this project. He said that there are representatives from the State of North Carolina State present at this meeting to answer questions on this case.

Ms. Meade asked about the percentages of the color-palette. Mr. Bailey said there was input from the North Carolina State - College of Health and Sciences and the Community Appearance Commission on the

color palette. Mr. Bailey and Mr. Brian Johnson, Urban Design Specialist talked about the changes to the color palette and the CAC member's review of the building materials.

Ms. Meade talked about page 178 of the hearing packet under building materials and the focus on stone material. She talked about the percentage of brick on the building façade. Mr. Johnson said the intent was to provide enough percentage of stone to tie the whole area together and the whole Wellness District at some point.

Discussion ensued on the percentage of windows.

Discussion ensued on the percentages under Building Materials Section D.

Mr. Brian Johnson, Urban Design Specialist talked about the balancing of building materials.

Mayor Pro-tem Mason asked about the 35 percent for building materials. Mr. Johnson said it is based on the total façade and existing requirements that requires 25 percent stone on the façade. Ms. Meade asked about the percentages and will they get you the look that you want. Mr. Johnson explained the percentages were to include certain building materials. Ms. Meade suggested that Staff review the proposed language for clarity in setting the percentages.

Mayor Pro-Tem Mason talked about the need to make the necessary clarifications in all parts of the UDO so that the applicants are really clear on the building materials requirements for facades.

Mr. Johnson said the CAC members can look again at the percentages for the stone. He said the CAC members wanted to see a mountain look in the building facades and not just glass and brick.

Mr. Bailey asked about Section 17.05.01 on the descriptions of the various facades and asked what was unclear. Mr. Bailey explained why the UDO just defines the face of a building as a façade of a building. Mayor Pro-Tem Mason said in the definitions of the UDO the term is generally defined.

Mayor Pro-Tem Mason suggested that the Staff update the overall definition so there is clarity for facades. Mr. Bailey explained that Staff left the definition vague. She said that it would be helpful to have an example of what 35 percent of a façade looks like.

Mr. Johnson talked about previous discussions on building materials. He talked about the percentages and what allows a stone entry way. Ms. Meade suggested requiring a certain mix of elements rather than percentages.

Mr. Bailey added in terms of current code that the CVS Pharmacy does meet the current code and the CAC is trying to avoid this type of look in the future.

Council Member Clawson noted that the look of the new Modern Toyota and Subaru building does not look like the Town of Boone because you cannot see the stone on the building.

Mr. Ward talked about the Town working on time tables with the university and still trying to meet the Town's requirements. He said we need to come to a good conclusion on the interim basis why we work out the details of the full plan just to keep everything moving and making sure we meet the university's expectations as well as the Town's. Mr. Bailey added that the Staff can work with the university on the proposed project.

Mr. Bailey explained about the rezoning of the properties.

Council Member Clawson talked about two doctors she talked to and what their concerns were regarding the Wellness District Standards.

Mr. Bailey talked about the requirements of the building and rebuilding of buildings in the Wellness District.

Mr. Bailey further explained the blank spaces and highlighted areas in the language presented in the hearing packet. Mr. Bailey noted that if the Staff does not describe a standard, it will refer back to the existing ordinance.

Mr. Ward pointed out that the adoption of the Wellness District plan was in November and the bond issuance was in March. He noted that the Town had already been working on the Wellness District for about one year with the university. And now the design standards and a possible rezoning being addressed in June and a permit in August.

Planning Commission Vice-Chairperson Simmons asked if he requested a rezoning would it be denied because there were no developed parking standards. Mr. Bailey said that Council could deny the request or request the standards be completed because the parking standards have not yet been developed.

Mr. Bailey said the State of North Carolina is working to get started on their building and the Staff is working on the developing of the standards and the rezoning of the property.

Ms. Meade asked if the Staff asked the university designers, if any of the proposed language would work for them. Mr. Bailey yes, he did send a rough draft to the university for their review.

There no speakers on this case.

Mayor Pro-Tem Mason closed this public hearing at 8:06 p.m.

Case 20160299 State of North Carolina - General Use Zoning Map Amendment: Rezone property owned by the State of North Carolina located at the corner of Deerfield Road and State Farm Road (Watauga County PIN: 2910-72-6682-000) from O/I Office Institutional to WD Wellness District.

Mr. Bailey said this is the property that is more commonly known as the College of Health Sciences. He noted that the standards that were just discussed in the prior case would be the standards that would applied to the rezoning of this property. He referred to the Table of Permissible Uses in the hearing packet and reviewed the standard practices.

Council Member Clawson asked about the Multi-Family dwellings column and wanted to know if it was included. He noted that it does not pertain to this case. He explained how to read the table including the standards that are applicable. He noted that the columns that are populated in the table for W/D and the O/I are what is being proposed to be allowed now.

Discussion ensued on multi-family development and student housing in the Wellness District.

Planning Commission Vice-Chairperson Simmons asked about the difference between the red L and black L. Mr. Bailey said it is drawing your attention to the supplemental standards.

Discussion ensued on the number of building stories for buildings in the Wellness District. Mr. Bailey noted that there will be no more than six floors. He reminded the Council that there was a detailed presentation on building heights and stories.

Council Member Teague said she is concerned about the proposed concept to the whole Wellness District as it relates to number of bedrooms and floors.

Mr. Bailey noted that the decision to be made is on one piece of property for one building so it can be rezoned. Mr. Bailey reminded the Council that the language will be altered again very shortly in the proposed workshops in August or September this year.

Discussion ensued on possibility changes to the number of floors in the Wellness District and. It was clarified that this type of change would probably not impact the State of North Carolina.

Mayor Pro-Tem Mason closed this public hearing at 8:16 p.m.

Mayor Pro-Tem Mason called for a short break at 8:17 p.m.

Mayor Pro-Tem Mason reconvened the hearing at 8:29 p.m.

Case 20160136 Rivers Walk Planned Development Zoning Map Amendment - Jeff Githens with McKinley Boone, LLC has filed a Zoning Map Amendment Petition for a planned development consisting of a mixed-use building containing both residential and commercial uses, including a parking deck for properties located at 178 South Water Street, 190 and 208 Poplar Grove Road. The residential portion will contain 119 dwelling units with 380 bedrooms; with the following uses proposed to be allowed for the commercial portion of the building :11.06 Restaurant $\leq 2,500$ ft² open to the public during 10 pm – 6 am, 11.07 Other Restaurants $\leq 2,500$ ft², 11.08 Restaurant $> 2,500$ ft² open to the public during 10 pm – 6 am, 11.09 Other Restaurants $> 2,500$ ft², 11.12 Personal Service Establishment open to the public during 10 pm – 6 am, 11.13 Other Personal Service Establishments, 11.14 Retail Store up to 5,000 ft², 11.15 Retail Store more than 5,000 but less than 25,000 ft², 11.18 Business or Profession Office open to the public during 10 pm – 6 am, 11.19 Other Business or Professional Office, 11.23 Medical Office, Category 4, 12.10 Recreation Facility, Category 1, and 14.02 Brewpub.

Ms. Meade explained at the April 2016 Council meeting the Council directed that the Council would consider this case again at the May Council meeting. The applicant requested instead of being at the May Council meeting to be at the June 6, 2016 Special Public Hearing. She said that Council will take the matter under advisement at the June 2016 regular Council meeting. She noted that the Planning Commission would not attend this Special Public Hearing. She noted that the Planning Commission members were welcome to stay or leave before the case was heard.

Mayor Pro-Tem Mason asked if the Planning Staff had additional comments on this case.

Mr. Bailey said the Staff had not had time to review everything that had been submitted to them since the last meeting. Mr. Bailey said he sent the applicant an email after the April 2016 hearing regarding questions from the Council and the developer has been responding to those questions.

Mr. Bailey asked the Council to refer to the supplemental information in the packet.

Mr. Ward asked Staff to summarize all the Council and Planning Commission questions into one document regarding the email. Mr. Bailey pointed out the changes that had been made.

Mayor Pro-Tem Mason noted that on page 287 of the packet there are responses to some of these questions.

Mr. Deal said there have been some modifications to the plans since the April Council meeting. He said he did not have an opportunity to discuss the concerns or anything the developer thought was important at the April Council meeting.

Mr. Deal told the Council that they are comparing this proposed project to the previously approved project. He said there is an approved plan that can be built now. He said the proposed plan is a sufficient improvement over the approved plan.

Mr. Deal in the previous plan there was an easement for the Greenway but the Town had to build it. He said the proposed plan with the conditions placed on it by the Planning Commission provides for the developer to build the Greenway.

Mr. Deal said the previous plan has commercial space going along the Poplar Grove Road that may not rent. The proposed plan concentrated the commercial space along Water Street where it will rent.

Mr. Deal said the revised plan increases the ceiling height in the commercial space over what was previously approved which makes it easier to rent the spaces. He said the proposed plan has 13 feet for the ceiling height in the commercial space.

Mr. Deal said the previous plan did not allow for an elevator to reach the top floor of the building. He said the revised plan does allow for the elevator to reach the top floor.

Mr. Deal met with the County Commissioners and talked about the access road behind the property for this project. He said the County Commissioners indicated that they would allow access.

Mr. Deal said he also talked to the County Commissioners about the possibility of using a gravel area behind this project for additional leased parking from the County. The County Commissioners did say that they are dealing with a creek pipe issue and they said they would like to see the developer and the County work together on this issue at the same time.

Mr. Deal said in the previous plan the roof top equipment could be seen. He said in the revised plan includes a parapet screening for the equipment which is a sufficient improvement.

Mr. Deal talked about the reduction in parking and he suggested as a way to deal with this is to require the developer to secure 50 or 100 off-site parking as a condition of their parking plans. He said this might be partially dependent on the amount of people who bring cars.

Mr. Deal talked about the April 2016 Planning Commission voted 8 to 1 to recommend approval of the project along with certain conditions for the developer to agree to. Mr. Deal said since that time there have been some other changes to address Council's concerns and he said he would ask Mr. Jeff Githens to address those changes. He names the following concerns: removing the swimming pool, lowering the building and about the Greenway going to Poplar Grove Road.

Mr. Deal talked about the emails that were received that contained erroneous information.

Mr. Deal said he hopes there can be discussion on this proposed project to have a better project.

Mr. Jeff Githens talked about the revised changes and he pointed out the changes of the Greenway on the site plan. He said he would work with the County on the easement for a path and sidewalk along Poplar Grove Road and have it included as a condition of approval as well.

Mr. Githens pointed out on the site map the location of the Greenway.

Mayor Pro-Tem Mason and Mr. Ward talked about the proposed Greenway in relation to the West Downtown Boone Plan.

Discussion ensued on the connector to Water Street to Poplar Grove Extension to increase pedestrian traffic.

Mr. Deal confirmed that the County Commissioners agreed to work with the Town up to the Poplar Grover Road.

Council Member Mizelle asked Mr. Deal about the proposed parking area and how many spaces would be in it. Mr. Ward noted that the current parking ordinance addresses both on-site and off-site parking. Mr. Ward said in other Towns, they have purchased the property for parking and created lease agreements for parking. Mr. Ward talked about the driveway possibility being significantly upgraded because it will end up with two-lane traffic and emergency vehicles.

Mr. Githens said he is following his own narrative as he addresses the Council's questions.

Mr. Githens talked about unit mix and providing housing for students and young professionals.

Mr. Githens went over the changes to the units and their bedrooms. He said they changed the four bedroom units into two bedrooms which resulted into seven four-bedroom units and fourteen two-bedroom units. He noted that he did not see this to be necessary but because he wanted to be responsive to the Council, they made this change. He feels this is a good ratio of unit mix for the university market and the young professionals.

Mr. Githens talked about the amount of future growth in this area and that it has already been absorbed in the data that came from a third-party market data service that his company pay to provide this information to them.

Mr. Githens said that his company reviewed the census data for this area. He gave some statistics regarding different age groups. He said the prominent age group in Boone is from 18 to 24 and this project will serve this age group.

Council Member Teague asked if they looked at older age groups because this is a housing need in the community. Mr. Githens said there is no one project that fits all groups.

Council Member Mizelle asked Mr. Githens, if he was aware that the Town is going to have a lot of beds coming available in the next year. Mr. Githens said yes, he is aware of it.

Mr. Ward noted that with the Standard of Boone there has been some hesitancy to sign leases because of the projected completion date.

Mr. Ward confirmed that he was able to verify these market data number from a totally different source and the numbers with 100 percent occupancy levels are in direct conflict with the update of the housing study that was done and paid for by the Town. Mr. Bailey explained what included in the previous housing study. Mr. Bailey noted that the housing study predicted at 2, 500 bed access based off of information five years or younger.

Discussion ensued on the number of bedrooms. Mr. Deal said there is no increase in the number of beds that have been approved. Mr. Ward said the proposed breakdown of bedrooms is more in line with what the Council asked for than the previous breakdown of bedrooms. Mr. Githens said that it is not true that three and four bedrooms do not rent well. Mr. Githens said he felt very good about the unit mix of bedrooms. He says there is a substantial market and demand for this product here in Boone.

Council Member Collins said she has some information from the university's office of student development. She said the projected main campus headcount not to be confused with distance learning or online learning or anything else, she said in 2016 is supposed to be 16, 919 students, in 2017 is supposed to be 17,027 students. This is an increase of 189 students. She said in 2020 the head count is supposed to be 7,276 students. She said she was told that the university's increase in growth will be slow and steady. She said with the beds in this project and the beds in the other developments under construction, she doesn't know who is going to live in these units. She noted that she is in support of development. She said that the people she has talked to regarding this project did not like the 2015 plan.

Mr. Deal talked about the increase of student-transfers to the university at the junior and senior levels which will be a sufficient increase.

Council Member Collins said that the public that she talked to did not like the height of the building and the building being 700 feet along the two-lane Poplar Grove Road.

Council member Clawson asked about the parking. Mr. Githens said he feels good about his parking ratio but there could be a condition of approval for off-site parking.

Mr. Githens talked about showing proof of parking in the lease as a contracted parking arrangement.

He said there is the ability to require other parking. He talked about going below the flood grade near Boone Creek. He said they could go deeper another 10 feet and build more parking spaces but they didn't think it was a good idea and he chose not to do so.

Council Member Mizelle asked what they did with the space where they removed the swimming pool. Mr. Githens said this allowed them to reduce the height of the deck about one-foot and one-half. She asked if there was any way to make parking spaces in this area. He said no.

Council Member Mizelle asked how tall is the parapet and Mr. Githens said it is roughly 30 inches.

Mr. Githens showed the location of the cross section of the deck and explained there are two parking levels and he pointed out the most efficient way to build the parking deck.

Mr. Githens talked about the building cross-sections changes from 1A to 3B. He said they reduced their floor to floor height and it still allows room for nine foot ceilings in the residential units. They took out roughly two and one-half feet of space.

Council Member Clawson asked about the building heights changes. Mr. Githens said the building height is 47 feet and more than the original approval. It was not noted that the parapet does not count in the building height. Mr. Deal noted the Planning Commission wanted the clock tower put in the proposed plan and it is located on Building 1A. It was noted that the lowest building with the clock tower would be 38 feet. It was noted that the parapet height does not count in the building height.

Mr. Githens talked about façade and elevation changes in Building 1A and 1B at Poplar Grove Rd and Water Street intersection. He showed the original black and white elevation and the color elevations are the revised changes. He said he has tried to replicate the arches where possible.

Mr. Githens talked about the façade and elevation changes in Building 1C. He pointed out the change from the commercial to residential space. He talked about the building materials and what could be used on the building.

Ms. Meade asked about the exterior building material that is colored in gray. Mr. Githens said it is labeled as stutto or hardy board. He described other building materials for the exterior of the building.

Discussion ensued on the changes made to the commercial parking space. Mr. Deal said the surface lot changed what was going to be part of the inside parking. Mr. Bailey said the Planning Commission wanted more residential parking in the garage and to push all of the commercial parking to the surface lot.

Mayor Pro-Tem Mason talked about the charge for parking on Saturdays in Downtown Boone, she said if there was not a charge the Town would be a parking lot.

Mayor Pro-Tem Mason said she supported the first plan because of the project staying in character with the Downtown area with the 40 foot building height. She noted that 700 feet is more than two football fields. She said she struggled with the 700 feet before and now the building is taller than the previous plan. She said that the Downtown needs to be inclusive of all of our community and not just one sector. She said this project will easily dominate. She said she has increasing concerns about the proposed plan.

Mr. Githens talked about the Rivers Walk building height being lower than the proposed Marketplace Mixed Use project and it being a relative comparison. Ms. Meade said the Council is talking about building height on the Rivers Walk project and they are talking about elevation on the Marketplace proposed project. Mr. Githens said it sounds like this is a double standard and it makes no sense to him, when the building height of the Rivers Walk project is lower than the Marketplace proposed project. Ms. Meade

explained that what is happening with each building is the opposite of each other. He said he feels there is no right answer.

Mayor Pro-Tem Mason told Mr. Githens that in a planned development process it is supposed to add something to the community of a much greater value. She talked about the various zoning districts and this project being in the B-1 zoning district. Mr. Deal said once again the Council is ignoring what has already been approved. Mr. Deal said the property has already been purchased and they are going to build it and the question is, are they going to build a better project than what has already been approved.

Council Member Teague said she does not like that the building is 700 feet long. She said she likes the bedroom count to what is being suggested, she said there was 70 two-bedroom apartments and it becomes the potential for young professionals. She said that the difference in the bedroom count is a large issue.

Mr. Deal said not many people will be able to tell the difference between a building height of 40 and 45 feet. He suggested that the discussion be on what has been approved.

Discussion ensued on having housing that appeals to more than university students. Mr. Deal talked about making land costs affordable. He talked about the Council working with the Council.

Mr. Githens talked about Building 3A and 3B he talked about using lap siding and making distinct changes to break up the look of the façade.

Mr. Githens showed some updated renderings from the Water Street and King Street perspectives.

Mr. Githens said he would make more changes, if needed.

Council Member Collins said it is her understanding that there is an offer to purchase the G & B Oil Company or has that purchase closed. Mr. Glenn Weaver said they have purchased the Southern States property and they have a contract for the G & B Oil Company for \$2 million dollars and expenses and they have no other choice than to buy it.

Council Member Mizelle said she is alright with the building height but she continues to be concerned with the parking situation. She said she did not want the Rivers Walks parking to be taken up in the Marketplace building. She wants to make sure that parking is being added to the Downtown area to help businesses.

Council Member Teague talked about at Daniel Boone Park as an option. Mr. Ward explained these spaces are leased individually for nine months and not available on Saturdays.

Mayor Pro-Tem Mason said there is a lot of concern in the community regarding parking.

Mr. Githens asked about the building height of Marketplace versus the proposed Rivers Walk project. He said the Rivers Walk has lower building height than the proposed Marketplace building. Ms. Meade said that Marketplace project is on a grade.

Mr. Deal talked about the Council's struggle with the building height and he said he wanted to find out what could be done that would satisfy the Council.

Mayor Pro-tem Mason said that until we start building housing that is not appealing to students, we are not going to build it.

Mayor Pro-Tem Mason reminded everyone said that this hearing is to be continued at the Council meeting and no decisions will be made at this hearing.

Mr. Githens noted that there could be a condition for parking. Mr. Deal said there could be written in the lease that the tenants cannot park at the Marketplace parking garage. Mr. Githens said for the Council to tell them what to do and they would do it.

Council Member Teague said that her concerns have not been addressed and she does not see how this proposed project is a better one than the previous project.

The first speaker was Ms. Diane Blanks. She said she was opposed to the Marketplace – Mixed Use Project and the Rivers Walk - Mixed Use project because they are out-of-scale projects for the Town of Boone.

The second speaker was Mr. Glenn Weaver said they used four different architects to create the soul of Boone. He said the reason he proposed parking the Horn in the West parking area is because the parking spaces were not being utilized and they already had asphalt which would help create revenue for the Town of Boone. He talked more about providing parking and tenant leases in a free market society. He said he does not object to purchasing property to build their own parking lot and make it available for this project. He talked about the existing building height being 45 feet high and said it would be better if it were taller because of its length. He said it would be more expensive to use parapets than using screens to hide the mechanical equipment. He said it would be better to use a parapet and he talked about the problem of using screens on the building because the snow catches in them. He said additional building height along with the parapet will allow for a better looking building than what was previously approved. He suggested that Mr. Alan Crees from Municipal Engineering talk about the benefits of the parapet.

The third speaker was Mr. Roger Wright talked about the Lawrence Group suggesting to build up rather than out and not to have student parking in the Downtown area. He talked about the students signing an affidavit that they were not going to park at the university. He talked about the approving of the conditional district zoning approvals without a 180 day waiting period. He said the Town in general needs parking.

Mr. Frank Mohler, Chairperson, Cultural Resources Advisory board. He said he was asked to voice the concerns of the board. He said that the Cultural Resources Advisory Board has been trying to locate a purpose for the property. He said the Council has recently approved a request to investigate the use of the property for an interpretative trail system. He said they are awaiting a visit from Mr. Tim Johnson from the North Carolina Trails Parks Department. He talked about the drawing for the trail. The concerns are for increased security for the Rivers House and the park property and increased parking enforcement.

Mr. Alan Crees from Municipal Engineering talked about benefits of the parapet in the proposed building. He said he looked at several views from King Street and the proposed building heights. He said the cross-sections found in the meeting packet. He said the proposed building is slightly higher than King Street in the upper reaches of Building 3. He talked about the additional screening that might be needed to hide the roof top units.

Mr. Crees said a lot of people are concerned with The Standard at Boone building height at 67 feet high and the Rivers Walk building is in the mid-40 feet range. He said the Rivers Walk proposed building is 20 feet shorter than The Standard at Boone. He said another benefit is about 800 feet of Greenway Trail which Mr. Githen's company has agreed to build it. He said with regard to parking, he believes there are certain students that do not want to own a car and this would promote walkability. He said another benefit is restoring the approximate 320 feet of the stream buffer and the underground power lines for the length of the project up Poplar Grove Road. He talked about the surface parking adding to the Town's tax base.

Mr. Ward asked Mr. Githens for the ball park project cost including the land. Mr. Githens said around \$35 million in the total budget. He said this was calculated over the current tax role of around \$180,000.00 annually.

Discussion ensued on the increase in the tax role based on the \$35 million projected project cost. Mr. Ward noted that this would also impact the Municipal Service District.

Discussion ensued on if the Rivers Walk project would be in the Municipal Service District.

Mr. Deal summarized by saying he hopes the dialogue continues address the Council's concerns. He said he cares what Boone looks like and he said he hopes that the Council and the developer can work out a solution that works for the Town.

Mr. Githen's said he is trying to be as accommodating as he can be and is willing to work with the Town on the issues or concerns of the Council. He wants this project to work and he believes that this proposed project is better than the approved project.

It was noted that this case will be continued to the next Council meeting on June 16, 2016.

ADJOURNMENT

Council Member Clawson made a motion to adjourn the hearing at 10:18 p.m., seconded by Council Member Mizelle.

Vote:

Aye – All

Nay – None

The vote was unanimous.

Lynne Mason Mayor Pro-Tem

Marlene Crosby, Board Secretary

Eric Woolridge, Planning Commission Chairperson

**DRAFT PLANNING COMMISSION
MEETING MINUTES
MONDAY, JUNE 13, 2016
6:00 P.M.**

**PLANNING COMMISSION
MEMBERS:**

Chairperson Eric Woolridge, Vice-Chairperson Greg Simmons, Caroline Catoe, Michelle Dineen, Susan McCracken, Matthew Long, Matthew Vincent, Cameron Lippard, Charlie Myers and Jeff Templeton

PLANNING STAFF:

Bill Bailey-Planning Director, Jane Shook-Planning Supervisor, Brian Johnson-Urban Design Specialist and Marlene Crosby-Board Secretary

Chairperson Woolridge called the meeting to order at 6:00 p.m.

ADOPTION OF AGENDA

Member Lippard made a motion to accept the agenda as presented, seconded by Member Long.

Vote:

Aye – All
Nay - None

The motion is unanimous.

APPROVAL OF MINUTES

Member Lippard made a motion to approve the May 2, 2016 Quarterly Public Hearing minutes, seconded by Member Myers.

Vote:

Aye – All
Nay - None

The motion is unanimous.

Member Templeton made a motion to approve the May 9, 2016, Planning Commission minutes as amended with two changes, seconded by Member Dineen.

Vote:

Aye – All
Nay - None

The motion is unanimous.

CASE 20160266 Landscape Contractor: Amend UDO Subsection 31.12.01 regarding landscape contractors.

Mr. Bill Bailey, Director of Planning and Inspections Department explained that the proposed draft changes brings the UDO into compliance with recently amended state statutes.

Mr. Brian Johnson, Urban Design Specialist explained the language was similar to the language for general contractor's work over \$30,000. He said this is specific to landscape work.

Vice-Chairperson Simmons confirmed that labor and material costs are included in the \$30,000.

Discussion ensued on the types' of landscaping projects which would likely trigger the requirement to use a licensed landscape contractor.

Mr. Johnson talked about the bond that is carried with the contractor's license; he said it is good to have if there are ever any complaints made against the contractor's work. He talked about the number of contractor's that have gotten their license. Member Long said he knew of some contractor's that had gotten their license.

First motion and vote:

Member Lippard made a motion, seconded by Member Vincent that the proposed amendment to the Town's zoning ordinance is consistent with the Towns comprehensive plan and other applicable plans of the Town which relate to this application because it brings the UDO language in alignment with current NC statutes requirements concerning the licensure of a landscape contractor.

Vote:

Aye – All

Nay – None

The vote was unanimous.

Second Motion and Vote: Member Lippard made a motion, seconded by Member Vincent that the Planning Commission recommends approval because the text amendment brings the UDO language in alignment with NC statutes.

Vote:

Aye – All

Nay – None

The vote was unanimous.

CASE 20160275 Marketplace Planned Development – Zoning Map Amendment John Winkler with The Winkler Organization has filed a Zoning Map amendment Petition for a planned development consisting of a mixed-use building containing both residential and commercial uses, including a parking deck for

properties located at or near 783 West King Street (Watauga Co. PINs: 2900-79-7562-000 & 2900-79-6480-000).

Mr. Bailey presented this case as outlined in the meeting packet. He noted the applicant has made revisions to the proposed plans as a result concerns stated at the June 6, 2016 special public hearing.

Discussion ensued as to whether the public hearing was still open. The meeting continued with the public hearing considered open.

Chairperson Woolridge explained that the floor would be open to public comment after Mr. Davis gave his presentation on the plan revisions.

Mr. Jim Deal, Attorney for the applicant summarized the revisions that are reflected in the proposed plans and Mr. Brent Davis from Brent Davis Architecture handed out revised plans and elevations (permanently attached) and reviewed each of the revisions.

Mr. Davis said the compact parking spaces have been re-calculated to address the people's concern regarding the ease of getting in and out of their vehicles. In the re-calculation the compact parking widths changed to 8' 8" to 9 feet wide. Mr. Deal said that he estimates around 15 parking spaces were lost in the revision of the plan. Mr. Deal said it dropped their estimated parking to 350 spaces from 367 spaces. Mr. Deal the engineers would have to determine where the support columns would need to be placed which may cause a further reduction in parking spaces.

Mr. Davis presented the following changes:

King Street: The windows closest to Murphy's have been modified to be folding doors which would open the space on the street. Other folding windows were added. Mr. Davis noted that the "arrows" as shown on the plan indicate that the windows and doors could be opened. Mr. Davis noted that the lobby had been narrowed to provide additional room to the restaurant spaces on either side of the lobby. Mr. Davis explained that there were options for steps down into the commercial spaces due to the change of grade along the sidewalk. Mr. Davis further described the potential for outdoor seating at the corner of King Street and Water Street at the 45 degree angle portion of the building.

Water Street: Mr. Davis noted the addition of windows and doors similar to those on King Street.

On the Howard Street elevation, Chairperson Woolridge asked the width of the door going into the restaurant. Mr. Davis said the width is five feet.

On the King Street elevation, Member McCracken asked why the entrance to the commercial tenant on the right was on the side of the building.

Mr. Davis said there was a request to put it on the side. Chairperson Woolridge explained that the original plans showed a main entry into the building a lobby. He said that he requested entry off of another street.

Discussion ensued on the location of the doors on King Street for the restaurants. Mr. Davis said there will be more planning for the restaurant entry depending on what the tenant will want for the restaurant. Mr. Davis said the revision on King Street opened up about 70 percent of the linear footage of this side of building for the restaurant.

Member Catoe asked, if you include parking, what is the square footage of the commercial [area](#). Mr. Davis said it is 30,000 square feet.

On the King Street side, Mr. Davis explained how they made a change to the parking deck entrance that gained square footage to the building.

Chairperson Woolridge asked if the entrance to the building will be off of Water Street. Mr. Davis said yes. Mr. John Winkler, the applicant for this project, explained that they removed the big lobby opening on King Street based off of a request to remove it.

Chairperson Woolridge if there were other comments regarding the redesign of the proposed project.

Member Vincent asked about the parking spaces. Mr. Winkler gave a breakdown of the parking spaces, he said that 210 spaces have been allotted for long term monthly spaces and 140 have been allotted for hourly parking spaces for a total of 350 spaces. Mr. Winkler explained the cost of the parking deck is around \$5 to \$6 million dollars and there will be a ten percent deposit needed prior to construction of the parking deck. Mr. Deal said the tenants will have to pay for their parking. Mr. Deal said another part of it is the restaurant customer and staff parking is taking into consideration.

Discussion ensued on the changes to the original lobby area off of King Street to a hallway which now would lead to the parking deck and the residential units.

Chairperson Woolridge asked Mr. Davis what their thoughts were on signage for the building. Mr. Davis said that they created the sign bands to help with sign options on the building and to break up the look of the building.

Chairperson Woolridge said he felt that good well-planned signage is important and wanted to suggest that all the retail or restaurant signage be projecting signs.

Mr. Deal said that signage could this be placed as a condition on the proposed project. Mr. Bailey said if the applicant deviates from the current ordinance, there would need to be a recommendation made for it. Mr. Bailey pointed out that the Council could make a different recommendation on it.

Mr. Deal noted that they have a deviation on the square footage for wall signs.

Discussion ensued on different types of signage and adding dimension and character to the building. Member Lippard said he does not want to see the signage making it look like a government building.

Member McCracken asked about the previous main hall lobby door and noted that the entry way was more open than what is currently being proposed. She asked if the commission needed to discuss the change in door width at this meeting. Member Lippard said it was the consensus of the commission to not have the main entrance look like an interior mall. Mr. Deal said the revised change to the main hallway entry is a direct result of what the commission said they wanted to see at the June 2016 special public hearing. Member McCracken said she liked the idea of having a lobby because of the winter weather and she noted that she liked the idea of giving the entry a more welcome feel. Mr. Deal said you would have to take into consideration the loss of square footage for restaurant seating.

Discussion ensued on the type of entry way into the main hallway. Mr. Davis said he could make a change to the double doors off of the street.

Mr. Bailey explained the process for recommendations that should be followed so the Council can see what has been done.

Discussion ensued on how the King Street hallway functioned for ADA compliance.

Chairperson Woolridge noted it was the consensus of the commission to recommend projecting signs on the proposed building.

Discussion ensued on awnings. Mr. Johnson said that some people like awnings and some people do not like them. Mr. Johnson said the purpose of awnings is to provide protection from the weather. Mr. Johnson talked about the maintenance issues from the Public Works standpoint concerning the awnings. Mr. Johnson said the Community Appearance Commission supports the use of awnings.

Member Lippard said he feels like the Downtown area needs architectural style in their signage and awnings. He said the tenant would hopefully have some stylistic ideas that will make the building pop.

Vice-Chairperson Simmons talked about the possibility of a tenant using a structural awning.

Mr. Davis talked about identifying entrances into the proposed building, he said he would be glad to look at other possibilities on this topic, if needed.

Mr. Bailey talked about the Deviation Analysis in Accordance with UDO 9.10.05 (B)(1) located on page 58 of the meeting packet and he read number two from this list.

Mr. Deal said maybe there needs to be a recommendation from the commission for the applicant to look into projecting signs rather than sign bands. Mr. Deal noted that he was not sure what the square footage should be. It was noted that 48 square feet is a lot of square footage.

Mr. Bailey said that the applicant might want to think about doing some combination of sign band and projecting signage.

Ms. Shook asked that any recommendations for the signage be very clear so that Staff would be able to issues permits without confusion.

Chairperson Woolridge asked the applicant if the applicant would be agreeable to number two. Mr. Deal said yes they are agreeable to it.

Chairperson Woolridge asked about window logos. Mr. Bailey said the Town does not regulate anything inside the windows.

Discussion ensued on the deviation table and signage.

Mr. Bailey read UDO Article 26.07.01 through 26.07.07 about the signage that is allowed and not allowed in the B-1 zoning district. Mr. Bailey noted that a freestanding sign is not proposed at this project.

Ms. Shook talked about the Staff revising the sign ordinance and this would be a good opportunity to discuss sign-package requirements to include in the sign ordinance.

Mr. Deal talked about identifying the Marketplace building versus the tenants that live there. He talked about using a wall sign that directs the public to the parking deck.

Mr. Bailey said one of the things that the Staff tries to promote directory signs that help the public understand who is in the building.

Discussion ensued on projecting signs and wall signs.

Vice-Chairperson Simmons talked about the street level commercial uses on page 58 of the meeting packet. He talked about the King Street and Water Street sharing square footage and Water Street and Howard Street sharing square footage for commercial uses. He talked about the raw requirements outlined on the Deviation Analysis in Accordance with UDO 9.10.05(B)(1). He reviewed the changes that were made to the table. Vice-Chairperson Simmons and Member Long agreed that the commercial parking spaces are not included in these calculations.

Vice-Chairperson Simmons discussed the complexities of measuring commercial area in a building which has three different street frontages with varying topographical changes which change the street level of the building on all three sides.

Mr. Deal said all three street facing sides of the building having commercial square footage.

Vice-Chairperson Simmons talked about the Howard Street parking deck entrance and accessing the parking deck at this location which is parking deck level three. Mr. Deal noted that the applicant is not positive if they can put any bicycle parking at this location until they get the design from the construction company.

Mr. Winkler talked about the possible addition of 48 to 64 more bicycle parking spaces and the location of the bicycle parking if they do not have to install several water meters.

Vice-Chairperson Simmons said the only time he almost got seriously injured was on a bicycle in a parking deck.

Mr. Deal talked about the challenges of putting bicycle parking on level three of the Howard Street side of the building with the possible challenges of the installation of the water meters. Mr. Deal said they would work with the Public Works department on this.

Discussion ensued on the commuting by bicycle and being able to locate the parking deck on level three. Mr. Davis said he would work on this.

Member Dineen asked if the balcony doors were glass. Mr. Davis said yes they are proposing glass on these doors.

Vice-Chairperson Simmons talked about the configuration of bedrooms. He said originally there were 100 one-bedrooms, 31 two-bedrooms and three three-bedroom units. The current proposal is 44 one-bedroom units (44 bedrooms), 50 two-bedroom units (100 bedrooms), and five three-bedroom units with (15 bedrooms) for a total of 99 units and 159 bedrooms.

Mr. Deal said they tried to balance the mix of the number of bedrooms and the number of parking spaces to make enough profit to pay for the building. Mr. Winkler said the parking deck alone will not support paying for the building.

Member Lippard talked about the student housing, young professionals and family. Mr. Deal said there are five three-bedroom units. Mr. Deal explained the leasing process and who is obligated to pay the rent on the units.

Member Myers asked for clarification on the hallway that goes to the back of the building, if it was created as a result of reducing the main hallway. Mr. Davis said it was not shown in the first concept of the plan.

Member Myers asked how wide is the alley way between Murphy's Restaurant and the southwest corner of the building. Mr. Davis said the distance is seven feet. It was noted that the applicant only owned five feet of the seven foot alley.

Member Myers asked about fire access issues on the Murphy's side of the building. Mr. Deal said they had not had any comments about it from the Fire Department during the plan review.

Mr. Winkler said the building and parking deck will be sprinkled.

Member Vincent asked about other exterior building materials other than brick that they might be looking at to use on the building. Mr. Davis said as far as trim materials, they are looking at a manufactured stone which is a ground limestone mixed into a slurry and poured into a form. It will give them a lot of the design elements they are trying to achieve. He said they are still researching trim materials. He noted that real limestone is very heavy and difficult to work with on the building.

Member Vincent asked about the materials for guard rails. Mr. Davis said some type of metal that is powder coated.

Mr. Davis said they have more research to do for molding and pilasters, etc.

Chairperson Woolridge asked the commission members about their feelings on the exterior building materials. Member Vincent said he is still trying to decide what the look of Boone is because every building is different. Member Long said that he likes the look of the proposed plans as it relates to the exterior of the building.

Member Dineen asked if there will an opportunity to add live plants in the enclosed atrium. Mr. Davis said the atrium will be enclosed and a conditioned space with sky lights. Mr. Winkler said that they have not yet researched this topic.

The first speaker was Mr. Eric Plaag. Mr. Plaag introduced himself as the Chair of the Historic Preservation Commission, but noted that he is conveying his thoughts as a citizen of Boone and not as the Chairperson of the Historic Preservation Commission. He said that he had emailed many of the thoughts that he is sharing at this meeting to the Council and he had asked that those concerns be forwarded to the Planning Commission.

Mr. Plaag commended Mr. Winkler and his development team for listening to concerns voiced at the neighborhood meeting on April 5, 2016 regarding the proposed project.

Mr. Plaag said the reduction in building height along King Street and Howard Street is a modest improvement. He said although flawed and incomplete the applicant has tried proposed to modify the architectural elements that are more appropriate to Downtown Boone.

Mr. Plaag said the biggest flaw is thinking the parking deck will improve parking in the Downtown area. He said the problem is Mr. Winkler's reason for asking for parking in Downtown Boone. He further talked about the parking allowances mentioned in the Staff report for this case, he said they are maximum and not minimum allowances. He talked about the proposed 367 parking spaces and what is permitted by the UDO. He said that Mr. Winkler is hoping to make a profit from the long-term leased parking spaces.

Mr. Plaag talked about the traffic study showing an increase in traffic.

Mr. Plaag talked about the not having the commitment in writing for any hourly parking arrangement. He urged the commission to get it in writing, if they want it to be part of the deal.

Mr. Plaag said partnering with the university and other commercial companies on the proposed parking deck would keep parking from coming onto King Street, Howard Street and Water Street and help mitigate parking issues in the Downtown area.

Mr. Plaag talked about the problems with the increased traffic flow will increase rather than decrease the current traffic issues.

Mr. Plaag strongly urged the Planning commission to deny the PD request because it exceeds the UDO limits on parking, height limitations and because of under-performed street-level commercial use. He noted that parking is not one of the categories of commercial space.

Mr. Plaag talked about the use of inappropriate building materials such as fiber cement, composite trim, cast concrete and parapet walls and exterior balconies that are not found in Boone's architectural.

The PC has the power to use the PD process for the appropriate building materials. He suggested that the Planning Commission members make use of that power.

Mr. Plaag handed out a photo named Downtown redevelopment concept from the Boone 2030 Land Use Plan, and noted that the design was more appropriate for Downtown Boone.

Member Templeton asked Mr. Plaag about one of the building materials. Mr. Plaag asked to complete his presentation before addressing his question. He said the materials used in the photo are appropriate for Downtown Boone.

Mr. Plaag handed out a rough sketch dated June 2, 2016 of the proposed Marketplace re-design levels that he had drawn (permanently attached). The sketch showed three levels of the building from King Street, Water Street and Howard Street. He reviewed the mix of uses on each level. He talked about the garage access on Howard Street. He said this building design fits the property and it does support the PD process. He noted that Howard Street would be the only access point for the parking garage.

Mr. Plaag asked the commission to encourage Mr. Winkler and Mr. Deal to consider his design proposal or to revise their proposal to a design that would make a better fit for Downtown Boone.

Member Templeton talked about the proposed building materials not being harmonious with the Downtown area. Member Templeton asked Mr. Plaag in his opinion what he thought is the appropriate building materials for the Downtown area. Mr. Plaag said the HPC has been engaged in the survey of Downtown Boone to help establish for the appropriate architectural materials for the Downtown area. Mr. Plaag referred to the Downtown guidelines draft that has been reviewed by the Community Appearance Commission. Mr. Plaag said the solution is to figure out what you want your Downtown area to look like. He said raw brick is a historic building material and certain stylistic features.

Mr. Plaag talked about the Planning Commission not attending the Historic Preservation Committee meetings and asking for advice on building materials. Member Lippard said he is not required to go to the HPC meetings and said he is not beholden to the HPC, he is beholden to the Council.

Member Long asked if members of the CAC have communicated with the HPC. Mr. Plaag said yes they have. Member Long noted that he depends upon and respects the opinion of the CAC that relays their information to the Planning Commission.

Discussion ensued on to appropriate building materials in the downtown area and how they compare to existing buildings.

Member Lippard said the commission appreciates Mr. Plaag's comments regarding helping to make the Downtown buildings more ascetically pleasing on a Downtown strip, however, he feels that we have one of the ugliest Downtowns because everyone got to choose what they wanted at one time. He said we are having some guidelines placed on this proposed project which is more than a step forward than any 1920's building built in this Town.

Member Lippard said it is good that the HPC finally has one representative that comes and talks constantly about this subject. He said if you are a public entity you should share that information and the commission should not have to ask for it, he said he wants to make sure that this is clear.

Mr. Johnson talked about the look of the Farmers Hardware building having the look of concrete. Mr. Plaag said it was appropriate to use concrete, when that building was built.

Member Lippard said right now the commission has to figure out what the commission needs to discuss regarding building height, traffic issues, hourly parking. He said he does not see any agreement on materials at this time.

Member Long talked about the Downtown Boone Development Association comments being incorporated into the proposed plans that included the balconies. Mr. Plaag said there are no buildings in Downtown Boone that has balconies.

Vice-Chairperson Simmons noted that the illustrations in the Boone 2030 Land Use Plan were for illustration purposes only and that a person cannot choose just one photo from the plan to indicate importance. He noted that description found on page 223 of the Staff Report regarding the illustrations was important.

Member McCracken made a motion, seconded by Member Lippard to recess the public hearing.

At 8:12 p.m. Chairperson Woolridge called for a short break.

At 8:24 p.m. Chairperson Woolridge reconvened the meeting.

Chairperson Woolridge asked the Planning Commission regarding their thoughts or concerns on the proposed project.

Member Templeton said he is in favor of the proposed project. He said this is a viable and needed project for the Downtown area.

Member McCracken said she is generally in support of this proposed project. She said that she would like to see a condition placed on the project that no less than 40 percent of the total parking spaces be for short-term parking. She talked about the 50 percent requirement for commercial and that she has struggled with it. She said she would like to see more flexibility be given to the petitioner to be able to make the best use for the lobby hallway space. She said she would like to see a right turn on Water Street.

Mr. Deal said they are in agreement with 40 percent or whatever the ultimate percentage is. He also said the more hourly parking the better.

Discussion ensued on the possible traffic issue at 5 p.m.

Member Dineen said she would like to see more housing for young professionals and families but the market does not lend itself to this type of housing. She noted her concern for having this large amount of parking at this location.

Member Lippard said he has taken into consideration that the applicant is willing to work with the Council and Planning Commission on this proposed project and trying to make the plans more suitable to the Downtown area. He said he appreciates the public comment because it reiterates what they have been doing. He noted that the commission can never make everyone happy. He said some of the things that need to continue to be discussed are the projecting signage, awning and the parking being specified as the 40 percent for hourly parking. He thinks the building height issues have been dealt with well, he likes the sliding doors that open up into the sidewalk environment, regarding the lobby, he doesn't care if it

has one or not. He said he hoped that the housing options in the future would include young professionals.

Member Vincent talked about the parking issue in the Downtown area. He commended the applicant and his team for working with everyone and making the revisions to the proposed project. He said he would like to see the façade of the building broken up. He supports the proposed plan.

Member Myers talked about the availability of parking in the parking deck for the Downtown businesses. He said the softening the streetscape with the sliding doors and the projecting signs would be a good addition. He said he is in support of the project.

Member Catoe asked about the number of bedrooms, if Council approves can they be changed again.

Mr. Bailey said they have to go back through the approval process, if they change the layout of the unit mix.

Member Long talked about the difference between affordable housing and housing for young professionals. He said he would recommend this proposed project to the Council.

Vice-Chairperson Simmons said he agrees with Member Long and Member Vincent and he talked about hourly parking, and making it clear as to what the sign package is. He talked about the discussion regarding bringing vitality to the street. He talked about the change of the unit-mix being included in the recommendation. He supports this proposed project. He also reminded the commission to include the information on page 192 in the packet, when making recommendations.

Mr. Bailey said a statement should be made if the unit mix needs to be specific.

Member Vincent talked about the marketing research for the proposed project.

Chairperson Woolridge asked the applicant if they would agree to no more than five three-bedrooms and zero four-bedroom units. Mr. Deal said yes.

Member McCracken said she is struggling with the number of bedrooms. She asked if we should the commission should say they do not want to see more than ten percent of the one or two bedroom units. Chairperson Woolridge said they want to keep the bedrooms at one and two bedroom units.

Discussion ensued on the signage requirements for the proposed building.

Discussion ensued on building identification signs. Mr. Winker showed a rendering of the 45 degree angle of the building that faces the court house with the name Marketplace on it.

Chairperson Woolridge discussed with Staff how to describe the sign requirements.

Member McCracken asked if there was any signage in the Downtown area for parking. Mr. Bailey said yes.

Chairperson Woolridge told the applicant that the commission is working on substitute language for number two on the deviation list.

The commission discussed using a sign band and the possibility of the option of an awning at the entrances.

Ms. Shook talked about the directory signs that are allowed by right. Ms. Shook explained the benefit of a directory sign.

Chairperson Woolridge asked the applicant if would agree to these options. Mr. Deal said yes.

Mr. Bailey reminded the commission members to include the PD findings found on page 191 of the meeting packet into their motion for recommendations for conditions.

Discussion ensued on acceptable building materials. Member Long said the commission members are in agreement that they did not want to see hardy board used as building material. Mr. Bailey read about the acceptable building materials.

Member Long asked about the architectural exterior building materials and should they be addressed now. Mr. Deal said the applicant would not mind appearing before the Community Appearance Commission again for a final approval, if needed.

Discussion ensued on the type of building materials that should be used on the proposed building. Chairperson Woolridge asked what the applicant would agree to use as building material.

Mr. Bailey said the Council modified the requirements for materials in the B-1 zoning district which are red brick or darker, natural stone, use of concrete. He said simulated brick, cultured stacked stone is prohibited.

Member Long suggested noting that architectural concrete would be prohibited under the current ordinance.

Mr. Johnson explained that the building material has to physically attach to the building.

Mr. Bailey said the CAC members showed a concern for the use of EFIS.

Mr. Davis noted that pre-cast concrete is thick and heavy and he further described this material.

Member Catoe asked if the railings are acceptable per the UDO. Mr. Bailey said yes.

Mr. Johnson talked about the variations of building materials that break up the look of the building.

It was noted if the applicant wanted to use slate as a building material that it would be allowed.

Chairperson Woolridge summarized the recommendations discussed by the Planning Commission members and agreed upon by the applicant as follows:

1. At least forty percent (40%) of the project's parking will be dedicated for short-term hourly parking.
2. The development is limited to the proposed five 3 bedroom units and is not allowed to have any 4 bedroom units.
3. The applicant is granted an exception to allow cast concrete or similar material (such as cast moldings) for accent trim as shown on the building.
4. The applicant's removal of the request for the deviation regarding attached wall signage to be allowed the following:
 - a. The applicant is allowed to place a building identification sign [such as "Marketplace"] within the sign band or cornice band at each of the 45 degree angles proposed for the building.
 - b. Each [commercial] tenant will be allowed up to a 16 square foot projecting sign and an awning sign [meeting the requirements set forth for awning signs in the B1].
 - c. Each parking entrance will be allowed up to a 24 square foot projecting sign.
 - d. The applicant is given approval to have an awning at all other ingress/egress points on the building.

First motion and vote:

Member Lippard made a motion, seconded by Member McCracken that the proposed amendment to the Town's zoning map is consistent with the Towns comprehensive plan and other applicable plans of the Town which relate to this application because of the following:

1. It [the Marketplace development] meets the call from the Boone 2030 plan for mixed-use development;
2. It [the Marketplace development] provides the possibility for more much-needed commercial parking in the B1 downtown district;
3. The parcel is located in the Primary Growth Area and the parcel is located in the G-4 Downtown Boone sector, which is appropriate for redevelopment and new infill mixed-use downtown development.
4. The development is further supported by the Comprehensive Plan Update as follows:
 - a. 2.3.2(E) New development, redevelopment and rehabilitation of structures and sites shall occur in a manner which is consistent with the neighborhood and architectural context of

the immediate area and supportive whenever possible of Boone's original community character as a High Country small town, and

- b. 2.1.5(B) The Town in concert with the downtown property owners and merchants shall encourage public and private efforts to develop and publicize adequate and appropriately designed off-street parking lots in the downtown area, and
 - c. 2.1.1(F) Commercial uses may be encouraged to develop by consolidation and expansion of existing commercially zoned property, only when such consolidation and expansion does not encroach upon a viable residential area, and
 - d. 2.1.5(A) A compatible design character for the downtown area, drawing upon the locality's original High Country small town features, shall be identified, reinforced and supported to put forth a quality image and sense of place.
 - e. 2.1.5(B) A variety of mutually compatible and supportive mixed uses shall be encouraged in the downtown area;
 - f. 2.3.3(D) Factors in determining preferred locations for high density residential development shall include: close proximity to the university, employment or shopping centers, access to major thoroughfares and the transit system; the availability of public services and facilities; and compatibility with adjacent land uses.
 - g. 2.3.3(G) Compact, full service neighborhoods offering opportunities for living, working, shopping, and gathering places, shall be encouraged in newly planned developments as well as for redeveloping areas.
5. It [the Marketplace development] presents a unique application of the new planned development procedures because:
- a. The proposed PD will produce a development of equal or higher quality than otherwise required by the strict application of district regulations that would otherwise govern;
 - b. The proposed PD will encourage innovative arrangement of buildings and open spaces to provide efficient, attractive, flexible, and environmentally sensitive design;
 - c. The proposed PD will produce a development functioning as a cohesive, unified project; and
 - d. The proposed PD will not substantially injure or damage the use, value, and enjoyment of surrounding property nor hinder or prevent the development of surrounding property in accordance with the adopted plans and policies of the Town.

Vote:

Aye – All
Nay – None

The vote was unanimous.

Second Motion and Vote:

Chair Woolridge made a motion, seconded by Member Catoe that the Planning Commission recommends approval with the following developer agreed upon conditions:

1. Where there is a conflict between the application information and the plans (site plans and architectural plans bearing a received date of May 27, 2016 and as amended on June 13, 2016), the plans shall control. Insignificant deviations may be permitted to comply with the requirements of the UDO.
2. Any commitments and representations concerning the proposed project made by the applicant or its (his or her) representatives at the public hearing shall also become a condition of the permit, and a basis for a stop work order and/or permit revocation if violated.
3. Final plans shall be submitted that are in compliance with the provisions of the UDO and other provisions of the Town Code.
4. All driveway permits shall be obtained prior to the issuance of a Zoning Permit.
5. The applicant will be required to satisfy all NCDOT requirements prior to the issuance of a Zoning Permit.
6. At least forty percent (40%) of the project's parking will be dedicated for short-term hourly parking.
7. The development is limited to the proposed five 3 bedroom units and is not allowed to have any 4 bedroom units.
8. The applicant is granted an exception to allow cast concrete or similar material (such as cast moldings) for accent trim as shown on the building.
9. The applicant's removal of the request for the deviation regarding attached wall signage to be allowed the following:
 - a. The applicant is allowed to place a building identification sign [such as "Marketplace"] within the sign band or cornice band at each of the 45 degree angles proposed for the building.
 - b. Each [commercial] tenant will be allowed up to a 16 square foot projecting sign and an awning sign [meeting the requirements set forth for awning signs in the B1].
 - c. Each parking entrance will be allowed up to a 24 square foot projecting sign.
 - d. The applicant is given approval to have an awning at all other ingress/egress points on the building because of the reasons listed within the first motion.

Vote:

Aye – All
Nay – None

The vote was unanimous.

CASE 20160295 Wellness District Standards: Amend the UDO to create a new Wellness District zoning district which contains standards specific to the district.

Ms. Shook reviewed the revisions to these standards changes on page 225 highlighted in gray.

Ms. Shook noted that many of the items that were of concern had been removed for further discussion at the workshop that would be scheduled in the fall.

Discussion ensued regarding the connection of the Middle Fork Greenway to the Town of Boone's greenway. Chair Woolridge asked if the proposed College of Health Sciences included the connection as shown in the adopted plan. Mr. Bailey further explained that the multi-use path on the site plan is 10 feet wide and concrete.

Mr. Bailey talked about the rezoning of the State of North Carolina property and that the university repositioned their building to incorporate the Middlefork Greenway.

Chairperson Woolridge asked if the Planning Commission should recommend that the language of the trail to be more explicit in Section 17.08.01. He suggested leaving this language general.

Ms. Shook noted the changes to the definition of "façade" and noted that definitions for "primary façade" and "secondary façade" had been added.

Member Templeton recused himself from the meeting because of a financial conflict. He left the meeting at 9:45 p.m.

First motion and vote:

Member McCracken made a motion, seconded by Member Vincent that the proposed amendment to the Town's zoning ordinance is consistent with the Towns comprehensive plan and other applicable plans of the Town which relate to this application because of the Comprehensive Plan focus on economic development in this area acknowledging the area's natural beauty, university and medical center presence as the town's greatest asset for economic development and jobs creation. Furthermore this is consistent with the Comprehensive Plan 2.1.1(D) economic development efforts shall encourage the revitalization and reuse of currently unused or underutilized structures, sites and infrastructure in appropriately located areas and 2.1.1(E) the Town shall encourage a public service and regulatory environment conducive to business recruitment and expansion, while at the same time enhancing the area's physical and human resources.

Vote:

Aye – All

Nay – None

The vote was unanimous.

Second Motion and Vote: Chair Woolridge made a motion, seconded by Vice-Chair Simmons that the Planning Commission recommends approval provided that language is incorporated that requires incorporation of the B-Well section of the Middle Fork Greenway Master Plan for the reasons stated in the first motion.

Vote:

Aye – All

Nay – None

The vote was unanimous.

CASE 20160299 State of North Carolina – General Use Zoning Map Amendment Rezone property owned by the State of North Carolina located at the corner of Deerfield Road and State Farm Road (Watauga County PIN: 2910-72-682-000).

Mr. Bailey said the rezoning is for one piece of property that would be subject to the [Wellness District](#) standards, if adopted.

Vice-Chairperson Simmons asked what are the consequences, if this property does not get rezoned. Mr. Bailey said it reverts it back to the current standards.

Discussion ensued on how zoning impacts state owned properties. Mr. Bailey said the Town Staff will review the appearance and zoning of the property.

Mr. Bailey said the Staff has committed to work through the zoning issues for this project because the State of North Carolina is ready to break ground.

First motion and vote:

Member McCracken made a motion, seconded by Member Vincent that the proposed amendment to the Town's zoning map is consistent with the Towns comprehensive plan and other applicable adopted plans of the Town which relate to this application because this change recognizes the area's natural beauty and the university and medical center presences as the town's greatest asset for economic development and jobs creation and this project recognizes the cooperative planning among town, county and the university, and this property is located within a focus area selected in the Boone 2030 Land Use Plan.

Vote:

Aye – All
Nay – None

The vote was unanimous.

Second Motion and Vote:

Chair Woolridge made a motion, seconded by Member Catoe that the Planning Commission recommends approval for the reasons stated in the first motion and because the rezoning for the School of Health Sciences will provide a basis, and an anchor, and a tool to spur the redevelopment within the recently created Wellness District.

Vote:

Aye – All
Nay – None

The vote was unanimous.

OTHER MATTERS BY BOARD MEMBERS OR STAFF

Chairperson Woolridge noted that this was the last commission meeting that Vice-Chairperson Simmons would attend as a result of the expiration of his term on the Planning Commission. Chairperson Woolridge thanked Vice-Chairperson Simmons for all of his work on the Planning Commission.

ADJOURNMENT

Member Lippard made a motion to adjourn the meeting at 9:57 p.m., seconded by Member McCracken.

Vote:

Aye – All

Nay - None

The motion is unanimous.

Chairperson, Eric Woolridge

Board Secretary, Marlene Crosby

Zoning/Planning Permit Application

Town of Boone Planning & Inspections Department
680 W. King Street, Suite C ♦ Boone, North Carolina 28607
Phone (828) 268-6960 ♦ Fax (828) 268-6961
www.townofboone.net

PERMIT IS FOR (CHOOSE ONE):

- ☐ Single Family or Duplex (Residential)
☐ Commercial
☐ Board of Adjustment Hearing (other than Appeals)
☒ Planning/Other

A. CONTACT INFORMATION

Applicant: Glenn Weaver Company: Harrod/AP, LLC
Address: 6612 Fleetwood Drive, Raleigh, NC 27612
Phone Number: 919-414-0739 Email Address: glenn.weaver@frontier.com
Property Owner: G&B Oil Company and Harrod/AP, LLC Company: Same
Address: PO Box 811 Elkin NC 28621 (G&B) and PO Box 90713 Raleigh NC 27675 (Harrod)
Phone Number: 336-835-3607 (G&B) and 919-414-0739 ((Harrod) Email Address: glenn.weaver@frontier.com (Harrod//

B. PROPERTY INFORMATION

Watauga County Parcel Identification Number(s): 2900-79-3318-000, 2900-79-0661-000 & 2900-69-8658-000
Address/Location: 178 South Water Street, 190 Poplar Grove Road & 208 Poplar Grove Road
Project Name: Rivers Walk Planned Development Mixed Use Project

C. PERMIT SUBCATEGORIES

Additional Forms Needed

Zoning Permits

- | | |
|---|---|
| ☐ Accessory Building | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Addition/Expansion including decks and patios | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Change of Occupancy | *Commercial Project Data Form |
| ☐ Land Disturbance (not associated with the construction of a bldg.) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Manufactured Home Set-up in Park | *Manufactured Home in Park Form |
| ☐ New Building Construction | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Renovation/Remodel | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Accessory Use (as listed in UDO Subsection 15.07.01) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Temporary Use (as listed in UDO Subsection 15.07.02) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Sign | *Sign Project Data Form (Zoning) |
| ☐ Pavement Sealant | *Pavement Sealant Project Data Form |
| ☐ Major Subdivision Zoning Permit | *Commercial Project Data Form |

Board of Adjustment Hearings

- | | |
|--|---|
| ☐ Special Use Permit/Modification | *Special Use Permit Form |
| ☐ Variance | *Variance Form |
| ☐ Major Subdivision Preliminary Plat Approval | *Major Subdivision Preliminary Plat Approval Form |

Planning/Other

- | | |
|---|--|
| ☐ Exempt Division of Land | *Subdivision Exemption Project Data Form |
| ☐ Minor Subdivision (Preliminary and Final Plat) | *Minor Subdivision Project Data Form |
| ☐ Major Subdivision (Final Plat) | *Major Subdivision Final Plat Project Data Form |
| ☐ UDO Text Amendment | *Text Amendment Project Data Form |
| ☐ General Use Zoning Map Amendment | *General Use Map Zoning Map Amendment Project Data Form |
| ☐ Conditional District Zoning Map Amendment | *Conditional District Zoning Map Amendment Project Data Form |
| ☐ Voluntary Annexation | *Annexation Petition (Satellite or Contiguous) |
| ☐ UDO Text Interpretation | *UDO Interpretation Data Form |

D. DETAILED DESCRIPTION OF PROJECT**4.1**

Mixed Use Project

E. PROJECT MANAGER DESIGNATION

A project manager is responsible for the activities listed in UDO Section 4.19. Single-family and two-family projects involving less than ½ acre of land disturbing activity or commercial site improvements that involve no more than 2,500 square feet of land disturbing activity are exempt from this requirement.

Name: Glenn Weaver Company: Harrod/AP, LLC
 Address: 3361 Fieldwood Drive, Smyrna, GA 30080 License #: n/a
 Phone Number: 919-414-0739 Email Address: glenn.weaver@frontier.com

F. DESIGN PROFESSIONAL INFORMATION

Engineer:

Name: Alan J. Crees Company: Municipal Engineering Services
 Address: PO Box 349 Boone, NC 28607 License #: 27044
 Phone Number: 828-262-1767 Email Address: creesmesco@bellsouth.net

Architect:

Name: Faris Eid, AIA Company: Design Innovations Architects
 Address: 402 S. Gay St, Knoxville, TN 37902 License #:
 Phone Number: 865-243-8441 Email Address: FEid@dia-arch.com

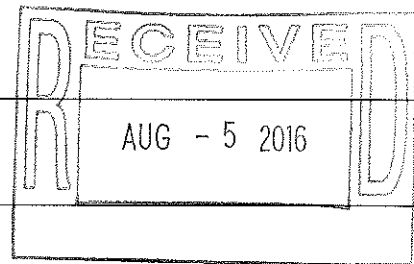
G. APPLICANT SIGNATURE: By signing this form you are certifying that this application and any attached information is accurate. Failure to provide accurate information or failure to provide any requested information may result in delays to permit processing.

Glenn Weaver**8/05/2016****Applicant¹ (Print)****Applicant Signature****Date****(1)Harrod/AP; (2)G&B Oil Company****8/05/2016****Property Owner (Print)****Property Owner Signature****Date****Official Use Only**

Project File Name:

Permit Number:

Project Name/Number:



Date:

Fee:

Receipt Number:

Method of Payment:

Paid By:

S:\FORMS\Forms_2015\ZoningPermitApplication_052015.doc

¹ Documentation confirming that the applicant has a legally sufficient interest in the property proposed for development to use it in the manner requested, or is the duly appointed agent of such a person must be submitted along with this application. Execution by property owner of this application signifies that the applicant is authorized to proceed.

Conditional District Map Amendment Project Data Form

Town of Boone Planning & Inspections Department
680 W. King Street, Suite C ♦ Boone, North Carolina 28607
Phone (828) 268-6960 ♦ Fax (828) 268-6961
www.townofboone.net

Official Use Only

Project Name/Number:

Permit Name/Number:

It is recommended that applicants schedule a meeting with Planning & Inspections Staff prior to application submittal.

A. ADDITIONAL APPLICATION INFORMATION

Application is For: ☐ Conditional District Map Amendment ☒ Planned Development

Hearing Date Requested¹: April 4, 2016

B. DEVELOPMENT INFORMATION

Project Name: Rivers Walk Planned Development Mixed Use Project

Project Description: Mixed Use Project

Existing Zoning District(s): B-1 Proposed Zoning District(s): B1-PD

Existing Land Use(s): Commercial Proposed Land Use(s)²: Mixed Use

Adjacent Land Use(s): N: Multi-family/Commercial E: Commercial/University

W: Commercial S: Park, Residential

Are there are any existing variances granted to the property? ☒ Yes ☐ No ☐ Unknown

UDO Subsection 16.08.05 to allow building to exceed 35' height and UDO Subsection 11.11.02(J)

If yes, describe: to allow reduction to minimum building foot print

Are any variances being requested with this project?³ ☐ Yes ☒ No

If yes, describe:

Total Land Area: 2.747 Acres Total Disturbed Area: 2.59 Acres

Number of Proposed Phases: 1

Describe Phasing (if proposed):

If requesting vesting greater than 2 years (per UDO Section 4.14), list amount requested (up to 3 additional years).

For modifications, list original case # and date granted:

¹ Each applicant must provide the meeting date for which they wish their request to appear. Each completed application must have met published meeting deadlines.

² Please see UDO Article 15 for specific details on permissible uses

³ Each request for a Variance must be submitted on a separate Zoning Permit Application along with the appropriate fee.

C. DOCUMENTS REQUIRED FOR SUBMITTAL

- ☐ Completed Application (see UDO Article 4 & Appendix A)
- ☐ Application Fee
- ☐ 7 complete sets of development site plans
- ☐ One (1) reduced copy of development site plans (11X17)
- ☐ Two (2) sets of copies of building elevations
- ☐ Digital copy of plans (if available)
- ☐ Deed(s) of all property included in the request
- ☐ A written metes & bounds legal description with accompanying survey map is required for a request that would rezone only a portion of a tax parcel or requests for multiple zoning districts

D. PROPERTY OWNER SIGNATURE:

By signing this form you are certifying that this application and any attached information are accurate. Failure to provide accurate information or failure to provide any requested information may result in delays to permit processing.

Property Owner (Print)_____
Property Owner Signature_____
Date_____
Official Use Only

Public Hearing Meeting Date: _____

PC Meeting Date: _____

TC Meeting Date: _____

Date of APO Mailed Notification: _____

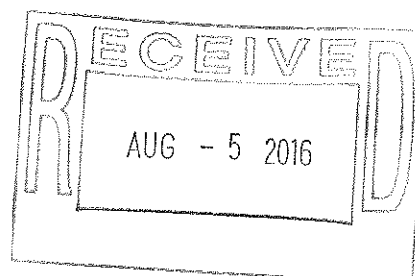
Date of Posted Notification: _____

Project Approved: ☐ Yes ☐ No

Date Order Recorded: _____

Order Recordation Information: Book: _____ Page: _____

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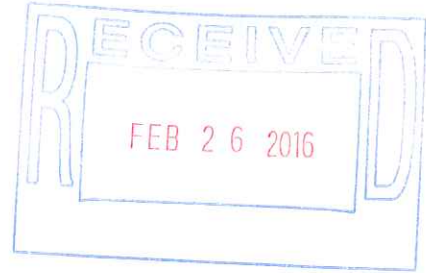


Harrod LLC/Peak Campus Planned Development Property Owners' Meeting

A neighborhood meeting, pursuant to the planned development under Section 9.10.05 of the Unified Development Ordinance was held on December 17, 2015. A notice was given to all of the property owners located within 150 feet of the development site on November 23, 2015, a copy of the Notice is attached. The meeting was held at the Watauga County Agriculture Center at 971 West King Street, Boone, North Carolina. The center had adequate parking and was a convenient location being next to the property in question.

The attendees at the meeting were as follows:

1. Mary Dean Silver on behalf of Resort Area Ministries
P.O. Box 24
Boone, NC 28607
2. Ben Miller
190 Berkeley Street
Boone, NC 28607
3. Deron Geouque, Watauga County Manager
814 West King Street
Boone, NC 28607
4. Monty Dunlap
P.O. Box 215
Boone, NC 28607
5. Sam Furgiuele and Peggy Mendell-Furgiuele
119 Gragg Street
Boone, NC 28607
6. Jeff Githens
2970 Claremont Road
Atlanta, GA
7. Glenn Weaver
3361 Fieldwood Drive
Smyrna, GA 30080
8. Alan Crees, Municipal Engineering
P.O. Box 349
Boone, NC 28607
9. James M. Deal, Jr., Deal, Moseley & Smith, LLP
870 West King Street, Suite B
Boone, NC 28607



At the meeting the petitioner presented contact information for the parties involved in the ownership design and development of the property, being Jeff Githens and Glenn Weaver. The petitioner also provided information for Alan Crees from Municipal Engineering and James M. Deal, Jr. with Deal, Moseley & Smith, LLP as being representatives of the petitioner. The petitioner then provided design maps of the property and proposed development showing general information on the current conditions of the site. The petitioner also presented the proposed uses and site development with preliminary plans or renderings that were available at that time. The

petitioner presented the existing conditions as well as the proposed development conditions for discussion by the parties attending the meeting. A sheet of contact information was provided to all parties who attended the meeting.

Alan Crees from Municipal Engineering described the site plan as well as the footprint of the property. The location of the greenway easement was discussed. The following items were also discussed:

1. The overhead power lines. The petitioner discussed with members of the public who were present the possibility of moving as many of these overhead lines underground as possible.
2. A discussion was held regarding the location of the dumpster and whether there were alternative locations. The petitioner agreed to look at potential alternative locations for the dumpster to move it further away from Proper Restaurant.
3. Discussion was held regarding the possibility of access into the site from the driveway owned by Watauga County as an access to the parking garage and from there thence onto Poplar Grove Road. Deron Geouque on behalf of the county, discussed this matter with the petitioner.
4. The question of the number of parking spaces within the parking deck took place. The petitioner stated that there were approximately 150 spaces in the parking deck plus approximately 18 surface parking spaces. The property owners who were present discussed the parking issues and whether this would be sufficient parking for the project. As part of the general discussion relating to parking and traffic, the petitioner stated that they would support the idea of a traffic circle at the intersection of Rivers and Water Street.
5. The petitioner discussed changing the location of the pool to a courtyard within the building area which would shelter the pool from the view of the other property owners.
6. The petitioner presented materials regarding the potential layout of the floor plan which would orient commercial space more toward Water Street. It would also increase the ceiling height for the commercial space and move the commercial space to a deeper bay with access from Water Street and Poplar Grove Road. The petitioner discussed the number of commercial spaces that would be oriented toward the intersection of Poplar Grove and Water Street. Mr. Furgiuele commented that he liked the idea of the commercial being pushed more toward Water Street rather than all the way up Poplar Grove Road. In general, the revised building elevations were well received.
7. There was a discussion regarding whether the height of the building fronting Water St. would be in context with the Proper Restaurant building with the roof tops of both buildings being of a similar height. Petitioner agreed to look at the issue.
8. The floorplan above the commercial space was discussed including being approximately 380 bedrooms and the general building elevations. The petitioner discussed that there would be four occupied stories but they would like to expand the floor to floor height to provide more reasonable residential ceiling heights and a taller elevator mechanical area in order to allow elevators to reach all floors. The petitioner also discussed providing a parapet for proper storm drainage and screening of HVAC equipment.
9. A discussion regarding the stream took place and the petitioner stated that they would not be covering any areas of the stream that are not currently covered.

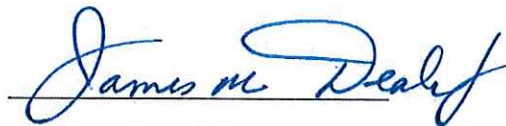
10. There was a discussion regarding potentially extending the proposed Greenway to the parking deck for convenient and safe access to bike storage within the deck. The petitioner represented that they would be amenable to providing such an extension.
11. There was a discussion of possible uses of the commercial space, however there were no defined tenants ready to occupy the commercial space.
12. The last discussion was regarding this project as an improvement to an already approved project in terms of trying to conceal mechanical and HVAC units that might be located on the roof, a relocation of the commercial space to a more commercial friendly area and a general discussion of the allocation of parking spaces within the structure and parking availability for other locations.

The primary concerns voiced by the attendees at the meeting were:

1. The location of the dumpster;
2. A potential concern regarding building height, although screening of mechanical items and rooftop physical items, as well as improving functionality of the building, was seen as a benefit; and
3. A concern over parking and traffic.

The meeting began at approximately 5:30 p.m. and ended at approximately 7:30 p.m. This concludes the report from the meeting of the property owners located with 150 feet of the project.

This Report was prepared by James M. Deal, Jr. pursuant to the Town of Boone UDO Planned Development Ordinance, section 9.10.05.

A handwritten signature in blue ink that reads "James M. Deal, Jr." The signature is written in a cursive, flowing style.

James M. Deal, Jr.

DEAL, MOSELEY & SMITH, LLP
ATTORNEYS AND COUNSELLORS AT LAW

870 WEST KING STREET, SUITE B
BOONE, NORTH CAROLINA 28607
Telephone (828) 264-4734

James M. Deal, Jr.
Allen C. Moseley
Claude D. Smith, Jr. *
C. Philip Ginn
Bryan P. Martin
J. Tucker Deal

Mailing Address:
Post Office Box 311
Boone, North Carolina 28607
Facsimile (828) 264-2712

* Also Licensed in Georgia
Certified Mediator

November 23, 2015

Dear Property Owner,

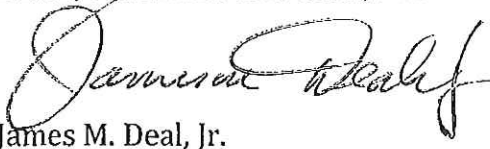
The purpose of this letter is to provide notice of a neighborhood meeting concerning a potential Planned Development for the old Southern States and G & B Oil properties along Water Street and Poplar Grove Road. The meeting is scheduled for Thursday, December 17th at 5:30 p.m. and will be held at the Watauga County Agricultural Center, located at 971 W. King St. Boone, NC. This meeting will be open to the owners of property located within 150 feet of the proposed Planned Development.

At the meeting, the proponent of the potential Planned Development will, at a minimum, present the following information:

1. Contact information of the parties involved in the ownership, design, and development of the property;
2. The location of the property and general information on the current conditions of the site;
3. Proposed use(s) and site development;
4. Any preliminary plans or renderings, if available; and
5. Any other information deemed pertinent by the Director of Planning & Inspections for the Town of Boone.

Very truly yours,

DEAL, MOSELEY & SMITH, LLP



James M. Deal, Jr.



Date Received
July 12, 2016

Harrod/AP, LLC
3361 Fieldwood Drive
Smyrna, GA 30080
Tele: 919-414-0739
Fax: 800-878-2244
Email: glenn.weaver@frontier.com

July 12, 2016

Mr. Bill Bailey, Director
Town of Boone Planning and Inspections
680 W. King Street, Suite C
Boone, NC 28607

Re: Rivers Walk Planned Development Submittal

Dear Mr. Bailey:

We are pleased to submit to you our Planned Development (PD) Submittal for the Rivers Walk Project (Project) in downtown Boone. This proposal is similar to that approved by the Town Council on February 23, 2015, but differs in three ways: (1) retail is requested to be co-located closer to Water Street, (2) parapets are requested in lieu of mechanical screens, and (3) a potential, parking deck entrance is requested from the County alley.

Specific responses to section 9.10.05 of the UDO are provided below:

9.10.05

B. Specific information which must be submitted:

1. **A site specific development plan addressing plan aspects identified in Appendix A, identifying all development specifics which deviate from the standards of this Ordinance.**

With the exception of the items below, everything else in Appendix A is addressed in the drawings.

A2.01.D

A summary of changes to the Project with this PD versus the Conditional Use District Map Amendment approved on February 23, 2015 and the underlying UDO requirements are as follows:

- Residential will not materially change – The residential component of the Project is very similar to that approved on February 23, 2015. The total bed count remains unchanged at 380 beds. The total unit count is 151 versus 145 previously. This change in unit count is due to a change in unit configuration and distribution. A 24 hour, video monitoring, security office/quarters is added.
- Commercial footage provided will not materially change. – The commercial component of the Project has been improved from the February 23, 2015 approval to relocate most of the commercial space nearer to the intersection of Water Street and Poplar Grove Road in lieu of fronting all street frontages with ground level



commercial. In doing so, the Project now has a deeper retail, better proximity to the surface parking lot, and retail accessed off Water Street has higher commercial ceiling height than the previous design.

Per the UDO - where commercial is required on fifty percent (50%) of the square footage of each building on the primary street level (Water Street in this case) and thirty (30%) of each additional street level floor (Poplar Grove Road in this case) for developments located on lots which abut more than one public street in the Central Business District – the Project provides the required commercial space and has not materially changed.

Thus, the commercial component of the Project is generally consistent with sections 15.11.02.A, B, and C of the UDO with the exception of the reorientation of the commercial space towards the Water Street and Poplar Grove Road intersection and the slight deviation from the required commercial space as noted above.

- The Project's parking configuration will not materially change. The design of the parking deck is now efficiently increasing the number of spaces for vehicles, motorbikes and bikes. The lower level deck can alternatively be accessed from the County's property if the County allows this access. Otherwise, the access will be from Poplar Grove Road as shown in the attached plans with sight distances as per NCDOT. In addition to the Tenant Lease requiring that every tenant have a parking contract for their car, a satellite parking lot for 100 plus spaces will be provided by Landlord for the benefit of Tenants. The total on-site parking count provided versus (that approved on February 23, 2015) - and what is required by the UDO, is as follows:
 - Vehicular – 199 versus (184) – Only maximum regulated, no minimum required.
 - Car Share – 2 versus (2) – None required.
 - Motorcycle – 4 versus (6) – 4 are required at ratio of 1 per 40 vehicular spaces.
 - Bicycle – 56 in garage plus 16 in basement versus (72) – 47 are required.
 - Additional, Satellite Parking (off-site) for 100 additional spaces will be secured prior to receiving a Certificate of Occupancy from the Town of Boone.
- Building Height – The current approved height is 40' plus additional screening for rooftop mechanical equipment, (screening is not counted in height measurements per code). To provide for parapets to improve water management, to screen HVAC equipment, and to allow overhead elevator equipment to penetrate the roof line so that elevators can reach all residential levels, the Project needs PD approval. Parapets ranging from 2' to 5' are requested, which exceed the approval granted on February 23, 2015.



These requested building heights for parapets vary from those permitted in sections 16.08.02, 04, 05, and 09 of the UDO, but are necessary to provide the benefits noted above.

- **Building Footprint/Site Plan** – The building footprint/site plan will not materially change and is generally consistent with sections 15.11.02 D, E, F, G, H, I, J, and K of the UDO.

A2.01.G

The total construction cost of the Project is approximately \$25.5 million.

- 2. Written analysis, tailored to specifically address the characteristics of the particular location, addressing how the planned development will effectively and to the greatest degree reasonably possible, mitigate the impacts of the proposed development on the surrounding area, including but not limited to:**

- a. noise impacts;**

Balconies locations will not materially change and are mostly located on certain units facing Boone Creek. Professional on-site management will be available at all hours to manage resident conduct and any complaints. In addition a 24 hour security monitory and security facilities are provided to manage the parking deck and building.

- b. light impacts; and**

Lighting will not materially change. The majority of the parking on-site is within the parking deck which will be at or below the grade of Poplar Grove Road. Additionally, all exterior lighting requirements/codes will be followed.

- c. Elevations and esthetics will not materially change. Possible, predictable negative effect including but not limited to:**

- i. negative visual effects;**

The parapets are considered to be esthetically superior to mechanical screens.. Given the site's location at the bottom of a valley and the steep topography of the surrounding properties, either screens or parapets are neccessary to prevent pedestrians on King Street or in Rivers Park from seeing the roof and mechanical equipment. The proposed street-scaping, utility relocation underground, and historic architectural style will further enhance the site as a true gateway into downtown Boone. The Greenway extension and the restoration of the vegetated buffer along Boone Creek also will greatly improve the visual effects.

- ii. negative traffic effects; and**

Parking and traffic will not materially change. The Project will reduce the current 6 driveway entrances on the site to 2 and move them further away from the intersection of Water Street and Poplar Grove Road.

- iii. negative health effects.**



Health effects will not materially change. The Project stands to redevelop a blighted property and mitigate a site that has been environmentally impacted to the betterment of all surrounding properties, neighbors, and Boone Creek. The urban infill nature of the Project with proximity to downtown Boone and the Appalachian State campus will promote walkability, bike-ability, and connect to mass transit. On site amenities, fitness center, and programs will promote health and well-being for our residents and the citizens of Boone. The Project simply epitomizes best practices in mixed-use design.

3. **Information to demonstrate compliance with all mandatory requirements of this Ordinance, including:**
 - a. **Article 5 Subdivisions (for purposes of this Section the Town Council is the approval authority for major subdivision preliminary plats); N/A**
 - b. **Article 8 Historic Preservation; N/A**
 - c. **Article 19 Grading; Addressed on plans**
 - d. **Article 20 Soil Erosion and Sediment Control; Addressed on plans**
 - e. **Article 21 Stormwater Management; Addressed on plans**
 - f. **Article 22 Utilities; Addressed on plans**
 - g. **Article 29 Watershed Protection; N/A**
 - h. **Article 30 Flood Damage Prevention; Addressed on plans**
4. **Other information which may be required by the Administrator to fully evaluate the proposed development and its potential impacts on the surrounding area. Such information may include but is not limited to: traffic impact analysis, community impact analysis, additional engineering, and legal information.**

We look forward to working with the CAC and Town Council to optimize the architecture and function of the planned project.

Sincerely,

Glenn Weaver
Manager

Date Received
July 12, 2016



Harrod / AP, LLC
Academic Privatization, LLC
3361 Fieldwood Drive
Smyrna, GA 30080
Tele: 919-414-0739
Fax: 800-878-2244
Email: glenn.weaver@frontier.com

July 12, 2016

Mr. Bill Bailey, Director
Town of Boone Planning and Inspections
680 W. King Street, Suite C
Boone, NC 28607

Re: Rivers Walk Planned Development Submittal

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1. **A summary of changes to the Project** with this PD versus the Conditional Use District Map Amendment approved on February 23, 2015 is as follows:

(i) Relocation of Commercial Space:

- Residential will not materially change – The residential component of the Project is very similar to that approved on February 23, 2015. The total bed count remains unchanged at 380 beds. The total unit count is 151 versus 145 previously. This change in unit count is due to a change in unit configuration and distribution.
- Commercial square footage provided will not materially change – The Commercial component of the Project has been improved to relocate most of the Commercial space closer to the intersection of Water Street and Poplar Grove Road. In doing so, the Project now has a deeper retail space for larger tenants, better proximity to the surface parking lot, and the retail accessed off Water Street has a higher Commercial ceiling than the previous design.



- A 24 hour, video monitoring, security office/quarters is added as a part of the Commercial space. This facility will provide security personal to observe the activities in the Commercial and residential parking spaces. Issues such as intruders, break-ins, auto accidents, car alarm activations, reserve space violations and mechanical gates can be observed and resolved.
- The elevations and storefronts related to the Commercial spaces will not materially change from those previously approved. The intent is that the storefronts on Poplar Grove Road will not change even as the use resulting from the relocation may change. (See elevation and floor plans attached.)

(ii) Parapets in lieu of mechanical screens:

- Building Height – The current approved height is 40' plus additional screening for rooftop mechanical equipment. (Screening is not counted in height measurements per code.) Parapets are requested to improve water management and to screen HVAC equipment, and to allow overhead elevator equipment to penetrate the roof line so that elevators can reach all residential levels.
- Parapets are considered to be esthetically superior to mechanical screens and allow for more variety and enhancements to the building elevations along Poplar Grove Road. Given the site's location at the bottom of a valley and the steep topography of the surrounding properties, either parapets or screens will be necessary to prevent pedestrians on King Street or in Rivers Park from seeing the roof and mechanical equipment.
- Attached architectural drawings demonstrate that without parapets or screens, the roof and mechanical equipment will be visible.
- These requested building heights for parapets vary from those permitted in sections of the UDO, but are necessary to provide the benefits noted above.
- A cupola and two chimneys extending five feet above the parapets are requested to enhance variety of the roofline. These are not required but are considered esthetically desirable.



(iii) Approval for an additional and optional entrance to the parking deck is requested:

- The Project's parking configuration will not materially change; however, the design of the parking deck is now more efficiently increasing the number of spaces for vehicles, motorbikes and bikes. Developer requests that the lower level of the parking deck be approved for an additional access from the County's property or alley, if and when the County approves this access. Otherwise, all access will be from Poplar Grove Road as shown in the attached plans with sight distances as per NCDOT.
- The building footprint, site plan and elevations will not materially change as a result of the additional egress from the County alley, although an additional egress portal is required on the west elevation through the basement.

2. The Elevations and Site Plan do not materially change other than as described below:

(i) Elevations:

- The proposed elevations are our efforts to reflect the character of King Street by creating a variety of many small individual building fronts lining Poplar Grove Road. Certain building styles were simulated from existing structures in Lenoir, Blowing Rock and many other towns of the Appalachian Region. Local rock, NC and TN brick, glass, wood, cement plank, and hurricane rated dryvit are incorporated to create the feel of the early 1900's.
- The building elevations will not materially change from those approved; however, minor changes occur in certain materials and colors and fenestration. These are refinements for the building that were not previously defined.
- The elevations are only materially changed as a result of the parapets. See elevation and rendering package attached.

(ii) Site Plan:

- The proposed street-scaping, utility relocation underground, and historic architectural style will further enhance the site. The Greenway



extension and the restoration of the vegetated buffer along Boone Creek also will greatly improve the visual effects.

- Building Footprint/Site Plan – The building footprint/site plan will not materially change other than as defined below. Minor changes occur in certain corners of the foundation, but these are refinements that enable the reduction of the building coverage and do not impact any setback or restricted areas.
- The Building Footprint/Site Plan is only materially change as a result of the additional parking egress. See complete site plan package attached.

3. **The Revised Site Plan** is attached and does not materially change other than as described above.

4. **The Revised Use Calculations:**

- 16,647sf of Commercial space plus 42 interior Commercial parking spaces were originally approved. The PD request is for 17,480sf of Commercial space plus the same number of dedicated Commercial spaces during business hours.
- The total Commercial space was defined as:

Heated Commercial/Retail	16,647 sf
Elevation 3262 P1 Parking	12,324 sf
Total	28,971 sf

- The Commercial uses are substantially the same as planned to include:

Real Estate Leasing Management Office
 Gym
 Coffee Shop
 UPS style printing and copy shop
 Cafe and Bar
 Full service restaurant with alcohol service
 Security Office
 Furniture Repair Shop
 General Merchandise and Clothing stores
 Convenience Store
 Security Office/Quarters:



5. Bedroom Unit Count

- 145 apartments or condominiums with 380 bedrooms were originally approved. Over half of the apartments were expected to be one and two bedroom units. The distribution anticipated was:

Studio			
1 Bedroom	14	10%	14
2 Bedroom	79	54%	158
3 Bedroom			
4 Bedroom	52	36%	208
<u>4 Bedroom 2 Story Apt.</u>			
Total	145		380

- The PD request is for 151 apartments with 380 bedrooms and expected to include a distribution of:

Studio	8	5%	8
1 Bedroom	9	6%	9
2 Bedroom	83	55%	166
3 Bedroom	7	5%	21
4 Bedroom	35	23%	140
<u>4 Bedroom 2 Story Apt.</u>	9	6%	36
Total	151		380

- 6. Parking and traffic** will not materially change, but some enhancements have been incorporated:

The Project redevelops a blighted property and mitigates a site that has been environmentally impacted. The urban infill nature of the Project with proximity to downtown Boone and the Appalachian State campus will promote walk-ability, bike-ability, and connect to mass transit. The site is approximately 600 feet from the Appalachian State Student Center and closer to Academic Facilities than some university owned housing. On-site amenities, fitness center, and programs will promote health and well-being for our Tenants and the citizens of Boone. The Project simply epitomizes best practices in mixed-use design for young professionals and students.

Both Traffic and Parking Studies have been approved. The Project will reduce the current six driveway entrances on the site to two and move them further away from the intersection of Water Street and Poplar Grove Road. Since February



23, 2015, and at Bill Bailey's request, three parking enhancements have been incorporated:

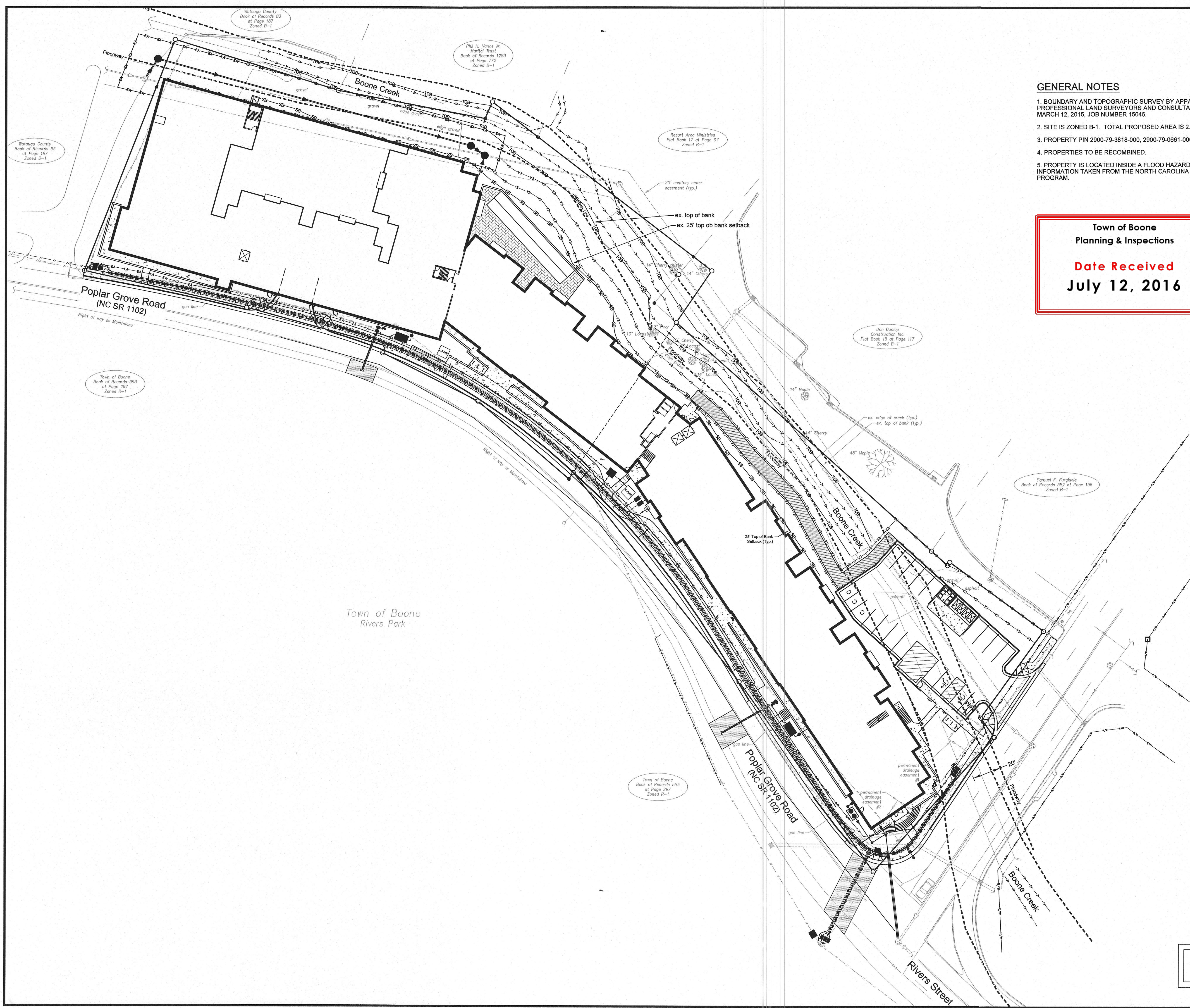
- A mandatory provision to the Tenant Lease requires that any Tenant bringing a car to Boone is required to present evidence to Landlord that a contract for parking has been secured. The Lease amendment is enforceable, and Landlord is required to assure that the Tenant has secured a Parking Contract in order for the Lease to be valid.
- Two car sharing (Zip cars or the equivalent) have been committed by the Landlord for the benefit of Tenants.
- 15 additional parking spaces have been provided in the parking deck and surface parking.
 - a. Vehicular – 199 versus (184) – Only maximum regulated, no minimum required.
 - b. Car Share – 2 versus (2) – None required.
 - c. Motorcycle – 4 versus (6) – 4 are required at ratio of 1 per 40 vehicular spaces.
 - d. Bicycle – 54 versus (72) – 47 are required.

In addition, as part of this PD application, the Developer will secure off-site parking facility for 100 cars for lease to Tenants (Satellite Parking). This facility will be operational prior to issuance of a Certificate of Occupancy by the Town of Boone. Other Commercial and university parking for students is also available.

We look forward to working with the CAC and Town Council to optimize the architecture and function of this planned project.

Sincerely,

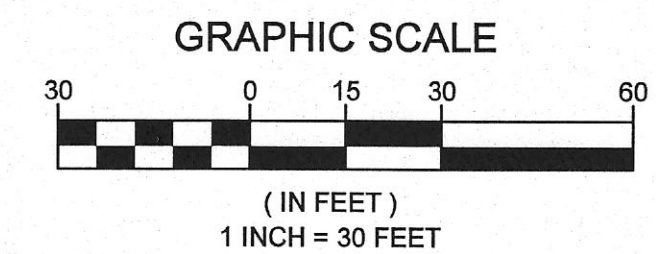
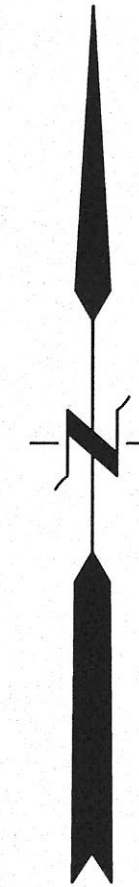
Glenn Weaver
Manager



- GENERAL NOTES**
1. BOUNDARY AND TOPOGRAPHIC SURVEY BY APPALACHIAN PROFESSIONAL LAND SURVEYORS AND CONSULTANTS, PA, DATED MARCH 12, 2015, JOB NUMBER 15046.
 2. SITE IS ZONED B-1. TOTAL PROPOSED AREA IS 2.747 ACRES.
 3. PROPERTY PIN 2900-79-3818-000, 2900-79-0661-000 & 2900-69-8658-000.
 4. PROPERTIES TO BE RECOMBINED.
 5. PROPERTY IS LOCATED INSIDE A FLOOD HAZARD AREA. FLOOD INFORMATION TAKEN FROM THE NORTH CAROLINA FLOOD MAPPING PROGRAM.

**Town of Boone
Planning & Inspections**

**Date Received
July 12, 2016**



PRELIMINARY
FOR REGULATORY REVIEW ONLY

**Engineering
Company, P.A.**

**Municipal
Services**

P.O. BOX 348 BOONE, N.C. 28607
(828) 262-1767
LICENSE NUMBER: C-0281

**RIVERS WALK
HARROD/AP, LLC**

**WATER STREET & POPLAR GROVE ROAD
BOONE, NORTH CAROLINA**

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Town of Boone
Planning & Inspections

Date Received
July 12, 2016

**RIVERS WALK
MIXED-USE PROJECT**

**WATER ST. & POPLAR GROVE RD.
BOONE, NORTH CAROLINA**

PROJECT NO. B13057.3

PRELIMINARY
FOR REGULATORY REVIEW ONLY

by _____
Professional Engineer

LEGEND		LINETYPES		LUI RATIOS		STORMWATER MANAGEMENT	
EX. POWER POLE	PROPOSED POWER POLE	PROPOSED WATERMAIN		SITE IS ZONED B-3 (GENERAL BUSINESS DISTRICT)		EXISTING IMPERVIOUS SURFACE AREA = 81, 836 FT²	
EX. SS MANHOLE	PROPOSED SS MANHOLE	PROPOSED CONTOURS		<u>PROVIDED:</u>		<u>ALLOWED:</u>	PROPOSED IMPERVIOUS SURFACE AREA = 79, 979 FT²
EX. SS CLEANOUT	PROPOSED SS VAULT	EXISTING CONTOURS		LOT AREA = 119,663 FT²	> MIN = 5,000 FT²		THEREFORE, NO STORMWATER DETENTION IS REQUIRED.
EX. GATE VALVE	PROPOSED SS CLEANOUT	STREAM OR CREEK		LOT WIDTH (WATER ST.) = 204 FT	> MIN = 15 FT		
EX. FIRE HYDRANT	PROPOSED GATE VALVE	PROPOSED DRAINAGE PIPE		FLOOR AREA = N/A			
EX. LIGHT POLE	PROPOSED FIRE HYDRANT	EX. STORM DRAINAGE		OPEN SPACE = N/A			
EX. CATCH BASIN	PROPOSED LIGHT POLE	PROPOSED S.S. MAIN		LIVABILITY SPACE = N/A			
EX. DROP INLET	PROPOSED DRAINAGE STRUCTURE	CENTERLINE		RECREATION SPACE = N/A			
EX. WATER METER	PROPOSED YARD DRAINAGE INLET	FENCES		BUILDING HEIGHT = 40 FT	= MAX = 40'		
EX. GUY WIRE	PROPOSED WATER METER	EX. WATERLINE		BUILDING FOOTPRINT = 58,394 FT²	> MIN = 47,865 FT²		
EX. TEST PIT	TEMPORARY DITCH WATTLE	RIGHT-OF-WAY LINE AND EASEMENTS		*MIN BUILDING FOOTPRINT = 40% X 119,663 FT² = 47,865 FT² (VARIANCE HAS BEEN GRANTED)			
EX. DRAINAGE MANHOLE	TEMPORARY ROCK PIPE INLET PROTECTION	EX. SANITARY SEWER					
EX. GAS MARKER	TEMPORARY HARDWARE CLOTH & GRAVEL INLET PROTECTION	PERMANENT DIVERSION					
EX. WELL		TEMPORARY BERM DITCH					
EX. TREE		SILT FENCE					
EX. BUSH		EXISTING WOODS LINE					
EX. SIGN		EXISTING POWERLINE					
EX. TELEPHONE PEDESTAL		EXISTING FIBER OPTIC LINE					

RECEIVED

JAN 26 2015

1-23-15

DATE

AJC

BY

REVISION

BUILDING FOOTPRINT REVISED

DESCRIPTION

COVER SHEET

SCALE: AS SHOWN

DATE: 12-22-14

DRWN. BY: AJC

CHKD. BY: AJC

PROJECT NUMBER

B13057.3

DRAWING NO. C-1

SHEET NO. 1 OF 6

WATER STREET

BOONVILLE

1.1 MIXED-USE MULTI-FAMILY RESIDENTIAL:

14 ONE BEDROOM UNITS
79 TWO BEDROOM UNITS
52 FOUR BEDROOM UNITS

MAXIMUM PARKING SPACE REQUIREMENTS

1 BEDROOM UNITS:	1 PARKING SPACE / UNIT	X	14 UNITS	=	14 SPACES
2 BEDROOM UNITS:	2 PARKING SPACES / UNIT	X	79 UNITS	=	158 SPACES
4 BEDROOM UNITS:	3 PARKING SPACES / UNIT	X	52 UNITS	=	156 SPACES

MAXIMUM RESIDENTIAL AUTOMOBILE PARKING SPACES: = 328 SPACES

2.1 COMMERCIAL RETAIL:

COMMERCIAL RETAIL SPACE: 16,000 FT²
MAXIMUM SPACE REQUIREMENT: 5 SPACES / 1,000 FT² OF RETAIL SPACE

MAXIMUM COMMERCIAL AUTOMOBILE PARKING SPACES: = 80 SPACES
TOTAL MAXIMUM AUTOMOBILE PARKING SPACES: = 408 SPACES

△ AUTOMOBILE PARKING SPACES PROVIDED:

PARKING DECK = 166
SURFACE PARKING LOT = 18
LEASED SPACES = AS NEEDED

TOTAL SPACES PROVIDED = 184 + LEASED SPACES AS NEEDED

MOTORCYCLE PARKING REQUIREMENTS

TOTAL NUMBER OF AUTOMOBILE PARKING SPACES: = 160 SPACES
MOTORCYCLE PARKING SPACE REQUIREMENT: 1 SPACE / 40 AUTOMOBILE PARKING SPACES

MINIMUM NUMBER OF MOTORCYCLE PARKING SPACES REQUIRED: = 4 SPACES
PROVIDED MOTORCYCLE PARKING SPACES: = 6 SPACES

ALL MOTORCYCLE SPACES WILL BE LOCATED IN THE PARKING STRUCTURE ON IN THE SURFACE LOT

BICYCLE PARKING REQUIREMENTS

SHORT TERM BICYCLE SPACES

TOTAL NUMBER OF RESIDENTIAL UNITS: = 145 UNITS
RESIDENTIAL SHORT TERM BICYCLE SPACE REQUIREMENT: 1 SPACE / 20 UNITS
MINIMUM NUMBER OF SHORT TERM BICYCLE SPACES REQUIRED FOR RESIDENTIAL: = 7 SPACES

TOTAL COMMERCIAL GROSS FLOOR AREA: = 16,647 FT²
COMMERCIAL SHORT TERM BICYCLE SPACE REQUIREMENT: 1 SPACE / 5,000 FT² GROSS FLOOR AREA
MINIMUM NUMBER OF SHORT TERM BICYCLE SPACES REQUIRED FOR COMMERCIAL: = 3 SPACES

MINIMUM NUMBER OF SHORT TERM BICYCLE SPACES REQUIRED: = 10 SPACES
PROVIDED SHORT TERM BICYCLE SPACES: = 15 SPACES

LONG TERM BICYCLE SPACES

TOTAL NUMBER OF RESIDENTIAL UNITS: = 145 UNITS
RESIDENTIAL LONG TERM BICYCLE SPACE REQUIREMENT: 1 SPACE / 4 UNITS
MINIMUM NUMBER OF LONG TERM BICYCLE SPACES REQUIRED FOR RESIDENTIAL: = 36 SPACES

TOTAL COMMERCIAL GROSS FLOOR AREA: = 16,647 FT²
COMMERCIAL LONG TERM BICYCLE SPACE REQUIREMENT: 1 SPACE / 12,000 FT² GROSS FLOOR AREA
MINIMUM NUMBER OF LONG TERM BICYCLE SPACES REQUIRED FOR COMMERCIAL: = 1 SPACES

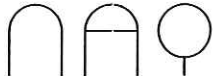
MINIMUM NUMBER OF LONG TERM BICYCLE SPACES REQUIRED: = 37 SPACES
PROVIDED LONG TERM BICYCLE SPACES: = 58 SPACES

SHORT TERM BICYCLE RACKS WILL BE LOCATED OUTSIDE IN FRONT OF THE BUILDINGS
ALL LONG TERM BICYCLE SPACES WILL BE PROVIDED IN COVERED AREAS OF THE PARKING DECK.

BICYCLE PARKING NOTES

ALL BICYCLE PARKING FACILITIES SHALL MEET THE REQUIREMENTS OF THE TOWN OF BOONE'S UNIFIED DEVELOPMENT ORDINANCE. IN PARTICULAR, BICYCLE PARKING FACILITIES SHALL BE CONSTRUCTED OF MATERIALS OF SUFFICIENT STRENGTH TO SIGNIFICANTLY RESIST THEIR DISPLACEMENT OR REMOVAL, AND THEY SHALL BE SECURELY ANCHORED IN CONCRETE OR OTHER EQUIVALENT MATERIAL OR SYSTEM OF SUFFICIENT STRENGTH TO SIGNIFICANTLY RESIST REMOVAL. BICYCLE PARKING FACILITIES SHALL SUPPORT BICYCLES IN A STABLE POSITION WITHOUT DAMAGE TO WHEELS, FRAME OR OTHER COMPONENTS AND ALLOW FOR THE USE OF EITHER A CABLE, U-SHAPED, OR SIMILAR LOCK TO SECURE BOTH WHEELS OF THE BICYCLE. NO LESS THAN 4" SHALL BE PROVIDED BETWEEN PARALLEL RACKS.

EXAMPLES OF ACCEPTABLE FACILITIES:



- CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
- NEW SANITARY SEWER MAINS SHALL BE 12" CLASS 350 DUCTILE IRON PIPE UNLESS SPECIFIED OTHERWISE.
- ALL SANITARY SEWER SERVICES SHALL BE 6" SCH 40 PVC, CONSTRUCTED ACCORDING TO NC BUILDING CODE. PLACE 2-DIRECTIONAL CLEANOUTS ON S.S. SERVICE WITHIN 10' OF BUILDING.
- PLUMBING ENGINEER SHALL CONFIRM SIZE, MATERIAL, AND LOCATION OF ALL SEWER SERVICES.
- SANITARY SEWER MAIN SHALL BE BEDDED IN STONE IN POOR SOIL CONDITIONS AND AT DEPTHS GREATER THAN 10' OR AS DIRECTED BY ENGINEER.
- RIM ELEVATIONS MAY VARY AFTER GRADING IS COMPLETED. MATCH RIM ELEVATIONS TO FINISHED GRADE.
- SANITARY SEWER MANHOLES WITH UPSTREAM PIPE GRADES ABOVE 8% SHALL BE CONSIDERED "HIGH VELOCITY" MANHOLES. INVERTS SHALL BE COATED WITH 4 MILS OF ABRASION RESISTANT EPOXY RESIN. SEE DETAIL ON DETAIL SHEET.
- THE CONTRACTOR/PROPERTY OWNER IS RESPONSIBLE FOR ANY DAMAGE TO THE SEWER MAINS IN THE CONSTRUCTION AREA UNTIL CONSTRUCTION IS COMPLETE.
- ALL NEW SEWER MAINS LOCATED OUTSIDE THE TOWN OF BOONE'S ROAD RIGHT-OF-WAY SHALL HAVE A 25' EASEMENT DEDICATED TO THE TOWN OF BOONE. THE EASEMENT SHALL BE GENERALLY CENTERED ON THE NEW SEWER MAIN, HOWEVER IT MAY BE OFFSET TO AVOID EXISTING STRUCTURES.

FIRE PROTECTION NOTES:

- CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION, SIZE & TYPE OF ALL EXISTING PIPES AT TIE-IN POINTS, PRIOR TO ORDERING NEW PIPE OR FITTINGS.
- SPRINKLER CONTRACTOR SHALL NOT CALCULATE FOR SPRINKLER SUBMITTAL ABOVE 90% AVAILABLE WATER. NO VALVE PITS OR BUILDING ENTRY FOR SHUT OFF. PROVIDE KNOX BOX SECURITY SYSTEM FOR FIRE DEPARTMENT ENTRY. COORDINATE LOCATION OF KNOX BOX, FDCs AND PIVs WITH FIRE MARSHALL.
- SPRINKLER CONTRACTOR SHALL CONFIRM SIZE, MATERIAL, AND LOCATION OF ALL FIRE AND FDC LINES.
- RPZ DETECTORS SHALL BE LOCATED ON THE FIRE LINE IN EACH OF THE SPRINKLER ROOMS OR OUTSIDE IN A HOT BOX. A DRAIN MUST BE INSTALLED TO HANDLE CATASTROPHIC FAILURE OF THE RELIEF VALVES AND OUTLET TO THE ATMOSPHERE IF INSTALLED IN SPRINKLER ROOMS. SPRINKLER CONTRACTOR TO PROVIDE MIKE TRIVETT, TOWN OF BOONE'S BACK FLOW PREVENTION COORDINATOR, WITH SPECIFICATIONS FOR RPZ DETECTOR AND CALCULATIONS FOR DRAIN.
- FIRE DEPARTMENT CONNECTIONS (FDCs) SHALL BE LOCATED A MAXIMUM OF 100' FROM FIRE HYDRANTS. FDCs SHALL BE PROPERLY MARKED.
- STANDPIPES SHALL BE REQUIRED DUE TO BUILDING ELEVATIONS. THEY SHALL BE A DRY TYPE SYSTEMS WITH CONNECTIONS LOCATED ON THE INTERVENING STAIR LANDINGS. THE CONNECTIONS SHALL BE LOCATED AT THE SAME LOCATION AS THE FDCs. WALL MOUNTED OR FREE STANDING PIVs ARE APPROVED TYPES.
- THE MAIN STRUCTURE ADDRESS NUMBER HEIGHT SHALL BE 8" OF CONTRASTING COLOR TO THE BUILDING WITH THE LOCATION TO BE DETERMINED BY THE BOONE FIRE DEPARTMENT. UNIT NUMBERS SHALL BE SUBMITTED TO THE TOWN GIS DEPARTMENT FOR APPROVAL. ADDITIONAL REQUIREMENTS ARE POSSIBLE UPON REVIEW OF BUILDING PLANS.
- DRY STANDPIPE CONNECTION SHALL BE LOCATED NEXT TO FDC.

WATER MAIN & SERVICE NOTES:

- ALL UNDERGROUND UTILITIES SHALL BE FIELD LOCATED BY CONTRACTOR PRIOR TO EXCAVATION.
- CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION, SIZE & TYPE OF ALL EXISTING PIPES AT TIE-IN POINTS, PRIOR TO ORDERING NEW PIPE OR FITTINGS.
- ANY NEW WATER MAINS SHALL BE CLASS 350 DUCTILE IRON OR C-900 PVC PIPE.
- ALL WATER SERVICE LINES SHALL BE SDR 13.5 PVC UNLESS OTHERWISE SPECIFIED.
- ALL WATER MAINS AND SERVICES SHALL HAVE A MINIMUM 3' COVER UNLESS SPECIFIED OTHERWISE.
- ALL VALVES SHALL BE RESILIENT-SEAT DUCTILE IRON GATE VALVES.
- COORDINATE LOCATION OF ALL NEW TAPS & METERS WITH TOWN OF BOONE UTILITY DEPARTMENT (828-268-6250).
- CONCRETE THRUST BLOCKING SHALL BE PROVIDED AT ALL BENDS AND FITTINGS FOR MAINS AND SERVICES OVER 4" IN DIAMETER.
- ALL BENDS AND TEES SHALL BE RESTRAINED JOINT AND HAVE THRUST BLOCKING. SEE DETAIL SHEET FOR SCHEDULE OF THRUST BLOCKING.
- ALL HYDRANTS MUST BE KENNEDY K-81 HYDRANTS OR APPROVED EQUAL. COORDINATE WITH TOWN OF BOONE UTILITY DEPARTMENT.
- HYDRANT LOCATORS SHALL BE ADDED TO ALL FIRE HYDRANTS IN THE PROJECT AREA FOR IDENTIFICATION DURING INCLEMENT WEATHER.
- PLUMBING ENGINEER SHALL CONFIRM SIZE, MATERIAL, AND LOCATION OF ALL WATER SERVICES. SPRINKLER CONTRACTOR SHALL CONFIRM SIZE, MATERIAL, AND LOCATION OF ALL FIRE AND FDC LINES.
- PLUMBING CONTRACTOR & SPRINKLER CONTRACTOR SHALL COORDINATE WITH MIKE TRIVETT AT TOWN OF BOONE UTILITY DEPARTMENT REGARDING BACKFLOW PREVENTION REQUIREMENT PRIOR TO CONSTRUCTION (828-268-6250).
- THE CONTRACTOR/PROPERTY OWNER IS RESPONSIBLE FOR ANY DAMAGE TO THE WATER MAINS IN THE CONSTRUCTION AREA UNTIL CONSTRUCTION IS COMPLETE.

WATER METER NOTES:

- WATER METERS FOR THE BUILDING MAY BE LOCATED INSIDE THE BUILDING IN METER ROOMS. IF INSIDE, THE METERS SHALL BE SENSUS RADIO READ OR APPROVED EQUAL WITH DUEL CHECK SETTERS OR DUEL CHECK VALVES.
- METERS MAY BE LOCATE OUTSIDE THE BUILDING IN INDIVIDUAL METER BOXES. OUTSIDE METERS SHALL BE SENSUS TOUCH READ OR APPROVED EQUAL WITH DUAL CHECK SETTERS.
- COORDINATE TAPS AND METERS WITH TOWN OF BOONE UTILITY DEPARTMENT (828-268-6250).

BACKFLOW PREVENTION NOTES:

- RPZ DETECTORS ARE REQUIRED FOR EACH FIRE LINE INTO THE BUILDING. RPZ DETECTORS MAY BE LOCATED IN A SPRINKLER ROOM INSIDE THE GARAGE OR IN AN ABOVE GROUND HOT BOX OUTSIDE THE BUILDING.
- A REDUCED PRESSURE PRINCIPAL ASSEMBLY (RP) IS REQUIRED ON ALL DOMESTIC WATER SERVICE LINES ENTERING THE BUILDING IF DOMESTIC METERS ARE LOCATED INSIDE THE BUILDING. IN ADDITION, ALL COMMERCIAL USES IN THE US HWY 321 BUILDING SHALL HAVE RP's ON THEIR INDIVIDUAL SERVICE LINES. THESE RP's MAY BE LOCATED IN BACKFLOW ROOMS IN THE PARKING GARAGE.
- ALL RPZ DETECTORS AND RP's LOCATED IN SPRINKLER OR BACKFLOW ROOMS SHALL HAVE A DRAIN INSTALLED TO HANDLE CATASTROPHIC FAILURE OF THE RELIEF VALVES AND OUTLET TO THE ATMOSPHERE.
- SPRINKLER CONTRACTOR AND PLUMBING ENGINEER SHALL PROVIDE MIKE TRIVETT, TOWN OF BOONE'S BACK FLOW PREVENTION COORDINATOR, WITH SPECIFICATIONS FOR RPZ DETECTOR AND RP's ALONG WITH CALCULATIONS FOR DRAIN.

- SITE IS CURRENTLY ZONED B-1. APPLICANT IS REQUESTING THAT THE SUBJECT PROPERTY BE REZONED TO CONDITIONAL ZONING DISTRICT B-1.
- PROPOSED PROPERTY AREA = 2.747 ACRES.
- UPON APPROVAL PROPERTIES WILL BE RECOMBINED INTO ONE TRACT.
- PRIOR TO ANY EXCAVATION, CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES. CALL 1-800-632-4949.
- ALL UTILITIES SHALL BE UNDERGROUND.
- CONTACT NEW RIVER LIGHT & POWER FOR LOCATION OF POWER (828-264-3671).
- CONTACT AT&T FOR PHONE SERVICE (828-262-4908).
- CONTACT CHARTER COMMUNICATIONS FOR CABLE SERVICE (828-733-1510).
- ALL SIDEWALKS WITHIN THE TOWN OF BOONE RIGHT OF WAY SHALL CONFORM TO ALL REQUIREMENTS OF SECTION 23.08 OF THE TOWN OF BOONE'S UNIFIED DEVELOPMENT ORDINANCE.
- 24" CONCRETE CURB & GUTTER (NC DOT STD. 846.01) SHALL BE USED AS SHOWN ON PLAN. 30" CURB & GUTTER SHALL BE USED IN THE RIGHT-OF-WAY.
- PARKING SPACE DIMENSIONS ARE TO FACE OF CURB (TYP). RADII ARE TO BACK OF CURB (TYP).
- THE CONTRACTOR/PROPERTY OWNER IS RESPONSIBLE FOR ANY DAMAGE TO THE WATER & SEWER MAINS IN THE CONSTRUCTION AREA UNTIL CONSTRUCTION IS COMPLETE.
- ALL ROOFTOP EQUIPMENT SHALL BE SCREENED OR OTHERWISE PLACED OUT OF VIEW FROM ADJACENT STREETS.
- ALL UTILITIES INCLUDING BUT NOT LIMITED TO HVAC UNITS AND METERS SHALL BE SCREENED FROM ADJACENT PROPERTIES AND PUBLIC STREETS PER SECTION 25.02 OF THE TOWN OF BOONE'S UNIFIED DEVELOPMENT ORDINANCE.
- HANDICAP SPACES SHALL BE MARKED BOTH ON PAVEMENT & WITH SIGNS IN COMPLIANCE WITH THE LATEST EDITION OF THE NORTH CAROLINA ACCESSIBILITY CODE.
- COMPACT AUTOMOBILE AND MOTORCYCLE SPACES SHALL BE MARKED ON PAVEMENT ONLY.
- MOTORCYCLE AND SCOOTER SPACES SHALL HAVE MINIMUM DIMENSIONS OF 4x8' AND PROVIDED WITH A FIXED FEATURE FOR SECURING THE MOTORCYCLES AND SCOOTERS. IN ADDITION, SPACES SHALL CONFORM TO ALL OTHER REQUIREMENTS OF SECTION 24.10 OF THE TOWN OF BOONE'S UNIFIED DEVELOPMENT ORDINANCE.
- LONG TERM AND SHORT TERM BICYCLE RACKS AND SPACES SHALL CONFORM TO ALL REQUIREMENTS OF SECTION 24.09 OF THE TOWN OF BOONE'S UNIFIED DEVELOPMENT ORDINANCE.
- ALL RECOMMENDATIONS SPECIFIED IN THE TRANSPORTATION IMPACT ANALYSIS PREPARED BY DAVENPORT ENGINEERING SHALL BE FOLLOWED.

SIGNAGE NOTES:

- ALL SIGNAGE SHALL BE PERMITTED SEPARATELY.

VARIANCES GRANTED TO THE PROJECT:

THE FOLLOWING VARIANCES WERE GRANTED BY THE TOWN OF BOONE'S BOARD OF ADJUSTMENT ON NOVEMBER 6, 2014:

- VARIANCE FROM UDO SUBSECTION 15.11.02 (J) TO REDUCE THE MINIMUM BUILDING FOOTPRINT FROM 60% TO 40% OF THE TOTAL GROSS LAND AREA OF THE LOT.
- VARIANCE FROM UDO SUBSECTION 16.08.05 TO ALLOW THE BUILDING TO EXCEED 35' IN HEIGHT WHEN THE BUILDING IS WITHIN 100' OF AN R-1 ZONED PROPERTY.

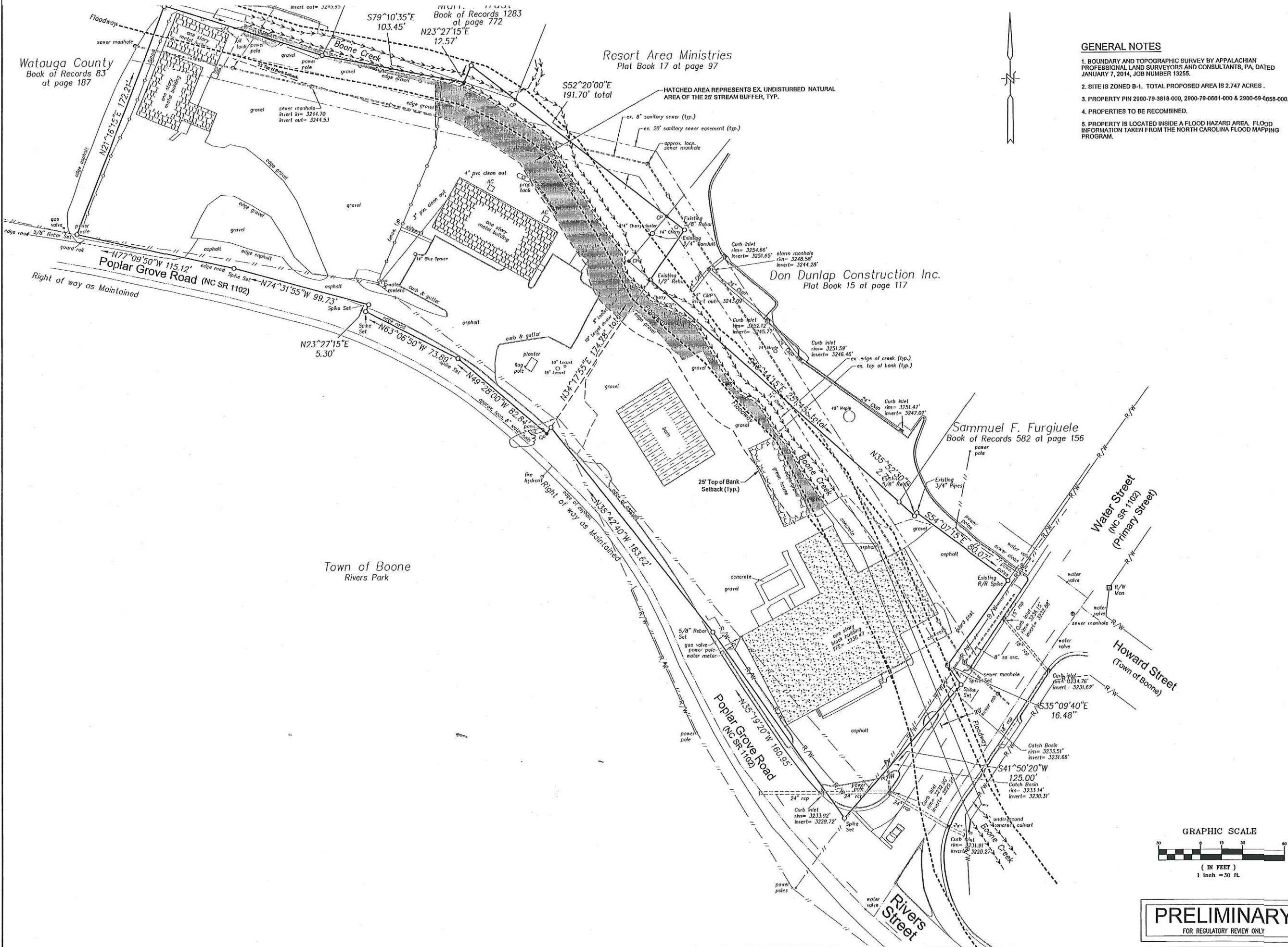
PRELIMINARY
FOR REGULATORY REVIEW ONLY



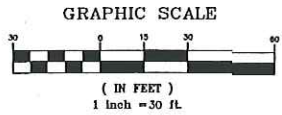
RIVERS WALK
HARRODIAP, LLC
WATER STREET & POPLAR GROVE ROAD
BOONE, NORTH CAROLINA

PROJECT NOTES

SCALE:	NTS
DATE:	12-22-14
DRWN. BY:	AJC
CHKD. BY:	AJC
PROJECT NUMBER	B13057.3
DRAWING NO.	C-2
SHEET NO.	2 OF 6



- GENERAL NOTES**
1. BOUNDARY AND TOPOGRAPHIC SURVEY BY APPALACHIAN PROFESSIONAL LAND SURVEYORS AND CONSULTANTS, P.A. DATED JANUARY 7, 2014, JOB NUMBER 13255.
 2. SITE IS ZONED B-1. TOTAL PROPOSED AREA IS 2.747 ACRES.
 3. PROPERTY PIN 2900-79-3818-000, 2900-79-0561-000 & 2900-09-4058-000.
 4. PROPERTIES TO BE RECOMBINED.
 5. PROPERTY IS LOCATED INSIDE A FLOOD HAZARD AREA. FLOOD INFORMATION TAKEN FROM THE NORTH CAROLINA FLOOD MAPPING PROGRAM.



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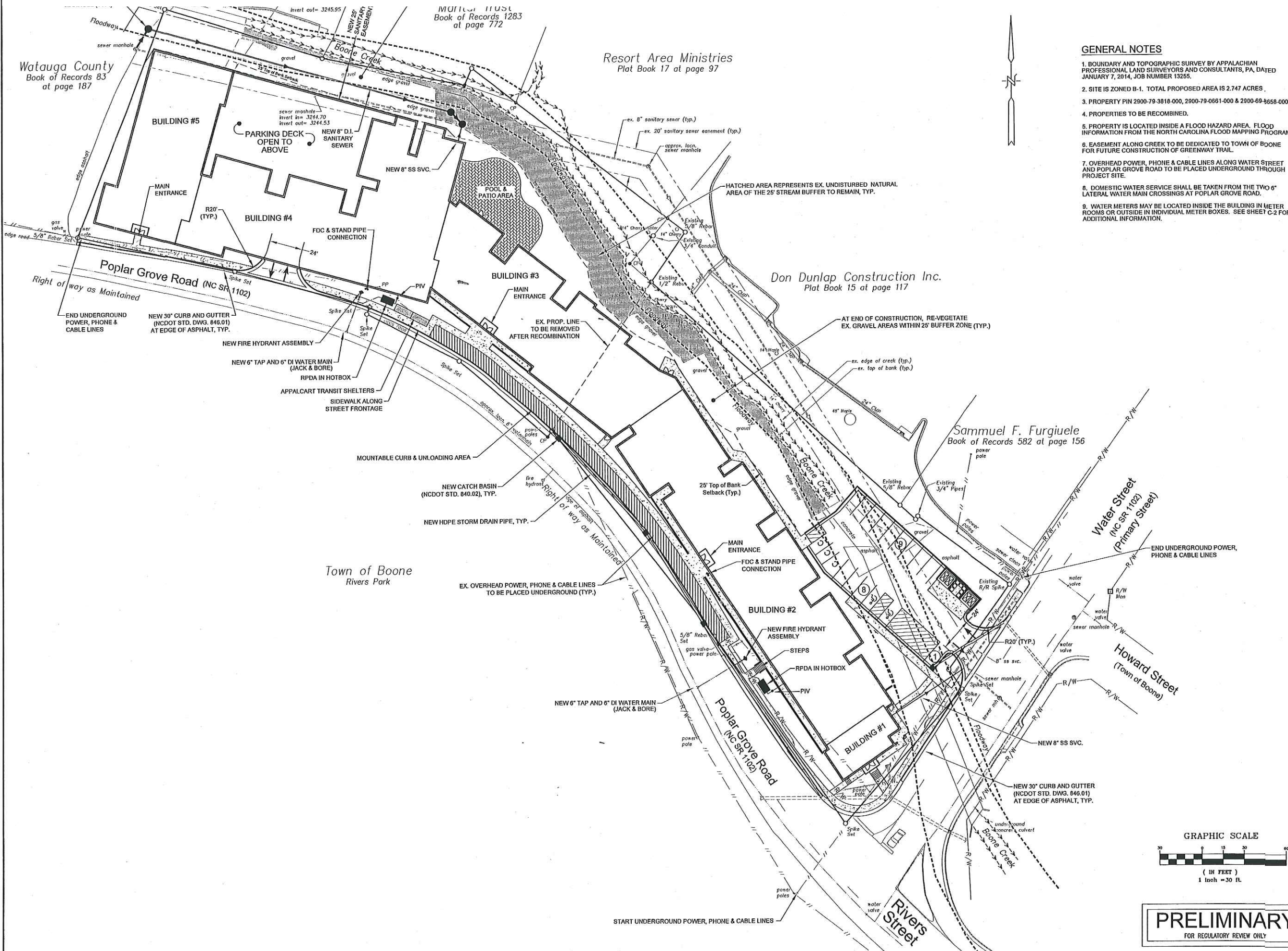
Engineering
Company, P.A.

Municipal
Services

P.O. BOX 249 BOONE, N.C. 28601 (828) 292-1707
P.O. BOX 37 CHANCE, N.C. 27523
(919) 772-5333

RIVERS WALK
HARRODIAP, LLC
WATER STREET & POPLAR GROVE ROAD
BOONE, NORTH CAROLINA

EXISTING CONDITIONS	
DATE	DESCRIPTION
BY	REV.
DATE	DESCRIPTION
SCALE: 1" = 30'	
DATE: 12-22-14	
DRWN. BY: AJC	
CHKD. BY: AJC	
PROJECT NUMBER	
B13057.3	
DRAWING NO.	SHEET NO.
C-3	3 OF 6



- GENERAL NOTES**
1. BOUNDARY AND TOPOGRAPHIC SURVEY BY APPALACHIAN PROFESSIONAL LAND SURVEYORS AND CONSULTANTS, PA, DATED JANUARY 7, 2014, JOB NUMBER 13265.
 2. SITE IS ZONED B-1. TOTAL PROPOSED AREA IS 2.747 ACRES.
 3. PROPERTY PIN 2900-79-3818-000, 2900-79-0661-000 & 2900-69-9568-000.
 4. PROPERTIES TO BE RECOMBINED.
 5. PROPERTY IS LOCATED INSIDE A FLOOD HAZARD AREA. FLOOD INFORMATION FROM THE NORTH CAROLINA FLOOD MAPPING PROGRAM.
 6. EASEMENT ALONG CREEK TO BE DEDICATED TO TOWN OF BOONE FOR FUTURE CONSTRUCTION OF GREENWAY TRAIL.
 7. OVERHEAD POWER, PHONE & CABLE LINES ALONG WATER STREET AND POPLAR GROVE ROAD TO BE PLACED UNDERGROUND THROUGH PROJECT SITE.
 8. DOMESTIC WATER SERVICE SHALL BE TAKEN FROM THE TWO 6" LATERAL WATER MAIN CROSSINGS AT POPLAR GROVE ROAD.
 9. WATER METERS MAY BE LOCATED INSIDE THE BUILDING IN METER ROOMS OR OUTSIDE IN INDIVIDUAL METER BOXES. SEE SHEET C-2 FOR ADDITIONAL INFORMATION.

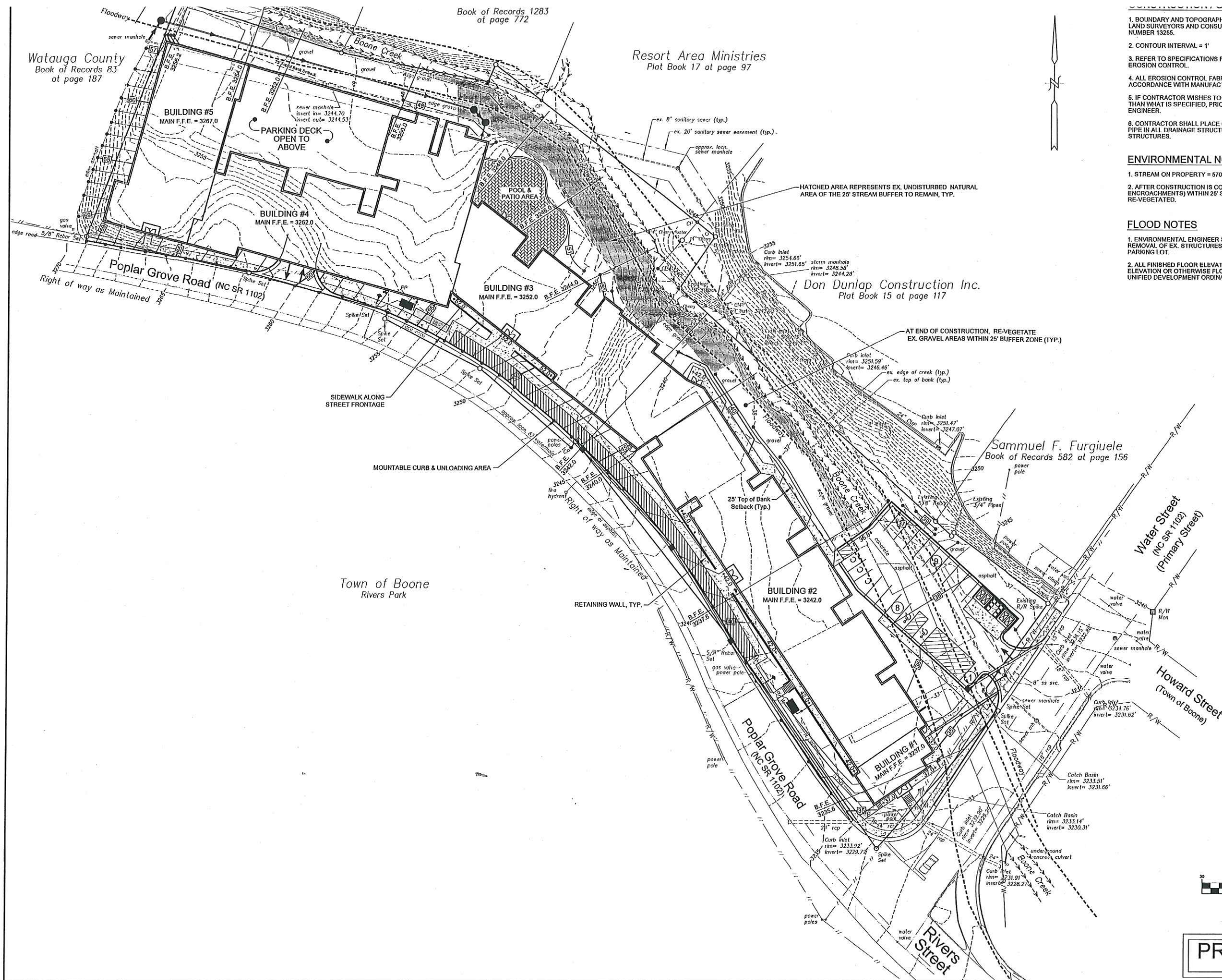
Engineering
Company, P.A.

Municipal
Services

P.O. BOX 348 BOONE, NC 28601
(828) 292-1787
LICENSE NUMBER C0227

RIVERS WALK
HARROD/AP, LLC
WATER STREET & POPLAR GROVE ROAD
BOONE, NORTH CAROLINA

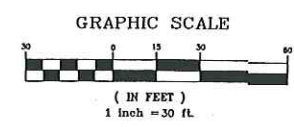
PRELIMINARY SITE PLAN	
DATE	REV.
12-22-14	AJC
DRWN. BY:	AJC
CHRD. BY:	AJC
PROJECT NUMBER	B13057.3
DRAWING NO.	SHEET NO.
C-4	4 OF 6



- CONSTRUCTION NOTES**
1. BOUNDARY AND TOPOGRAPHIC SURVEY BY APPALACHIAN PROFESSIONAL LAND SURVEYORS AND CONSULTANTS, PA, DATED JANUARY 7, 2014, JOB NUMBER 13255.
 2. CONTOUR INTERVAL = 1'
 3. REFER TO SPECIFICATIONS FOR GRADING, COMPACTING, DRAINAGE AND EROSION CONTROL.
 4. ALL EROSION CONTROL FABRIC SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
 5. IF CONTRACTOR WISHES TO USE AN EROSION CONTROL FABRIC OTHER THAN WHAT IS SPECIFIED, PRIOR APPROVAL MUST BE GRANTED BY ENGINEER.
 6. CONTRACTOR SHALL PLACE CONCRETE INVERTS TO THE LEVEL OF OUTLET PIPE IN ALL DRAINAGE STRUCTURES SO THAT THERE IS NO PONDING IN STRUCTURES.

- ENVIRONMENTAL NOTES**
1. STREAM ON PROPERTY = 570 LF.
 2. AFTER CONSTRUCTION IS COMPLETE, EXISTING GRAVEL AREAS (PREVIOUS ENCROACHMENTS) WITHIN 25' STREAM BUFFER ZONE SHALL BE RE-VEGETATED.

- FLOOD NOTES**
1. ENVIRONMENTAL ENGINEER SHALL PROVIDE NO-RISE CERTIFICATION FOR REMOVAL OF EX. STRUCTURES IN FLOODWAY AND GRADING OF SURFACE PARKING LOT.
 2. ALL FINISHED FLOOR ELEVATIONS SHALL BE 2' ABOVE BASE FLOOD ELEVATION OR OTHERWISE FLOOD-PROOFED PER THE TOWN OF BOONE UNIFIED DEVELOPMENT ORDINANCE.



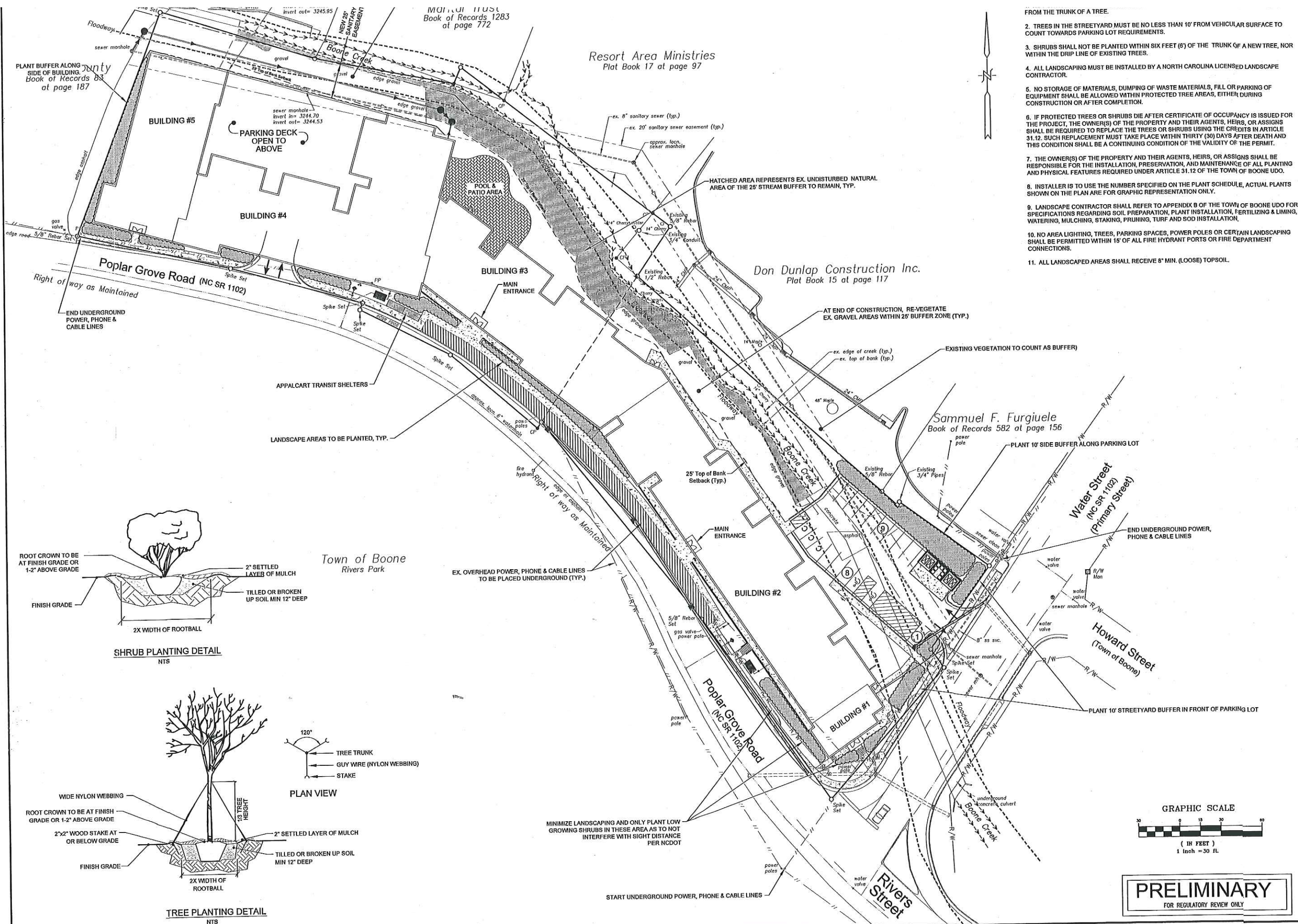
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Municipal Services
P.O. BOX 348 BOONE, N.C. 27325
(828) 263-1767
P.O. BOX 97 GARNER, N.C. 27325
(919) 772-5393
LICENSE NUMBER C-251

RIVERS WALK
HARRODIAP, LLC
WATER STREET & POPLAR GROVE ROAD
BOONE, NORTH CAROLINA

DESCRIPTION	
DATE	REV.
12-22-14	AJC
DRWN. BY:	AJC
CHKD. BY:	AJC
PROJECT NUMBER	B13057.3
DRAWING NO.	C-5
SHEET NO.	5 OF 6

Communication: Rivers Walk Information Submitted to Community Appearance Commission (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

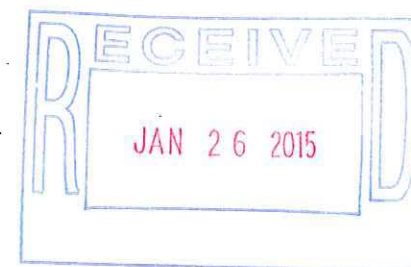
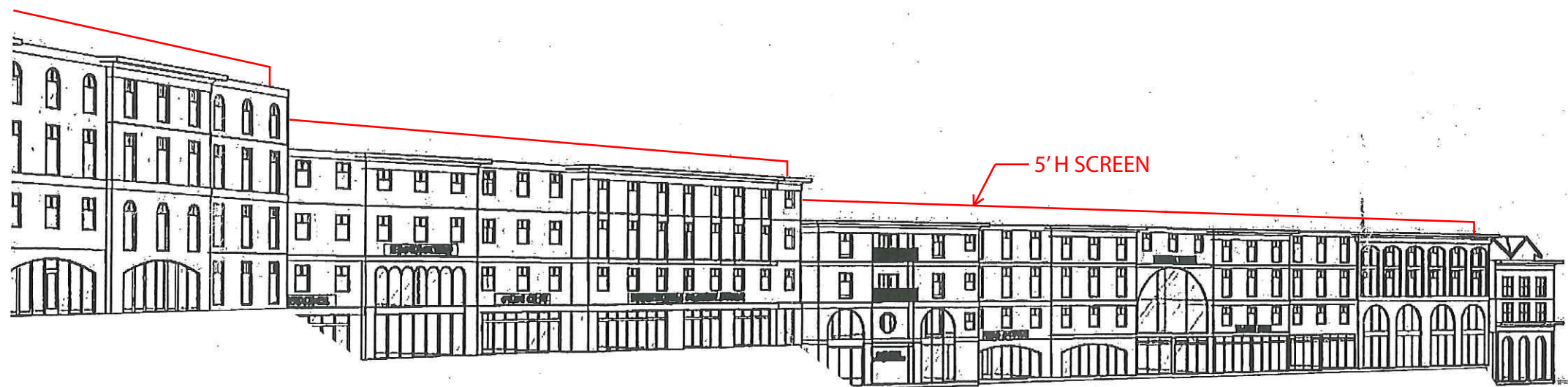


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RIVERS WALK
HARROD/AP, LLC
WATER STREET & POPLAR GROVE ROAD
BOONE, NORTH CAROLINA

[illegible]

97 GARNER, N.C. 27229
919) 772-5393
P.O. BOX 349 BOONE,
(602) 382-1171
LICENSE NUMBER-C-0281



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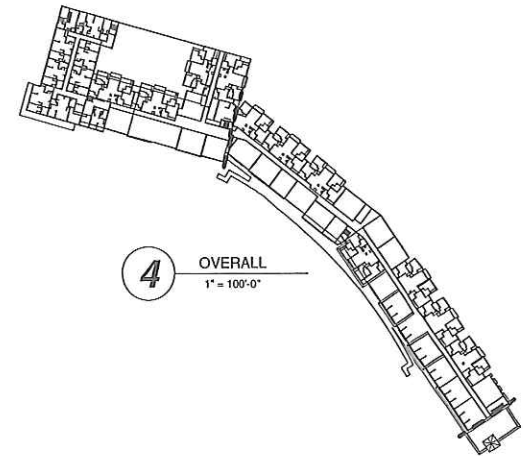
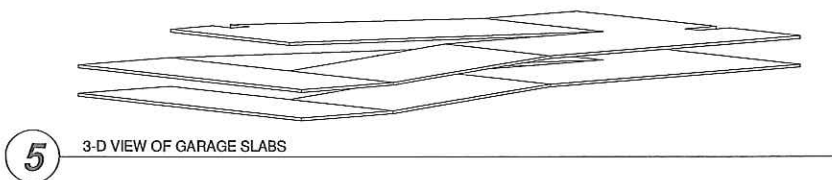
DATE XXXXXX
PROJECT # 14xxx
SHEET NUMBER A-101

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Project Status
RIVERS WALK PLAZA
178 S. WATER STREET, BOONE,
NC 28607

**APPALACHIAN
ARCHITECTURE, PA**
703 West King Street
Boone, NC 28607

DIA
Design Innovation
ARCHITECTS + INTERIORS + PLANNING
402 S. Gay Street, Suite 201, Knoxville, TN 37902



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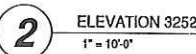
DATE	XXXXXX
PROJECT #	14xxx
SHEET NUMBER	A-101

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ph 865.637.8540 or 865.291.2221 fx 865.544.3840
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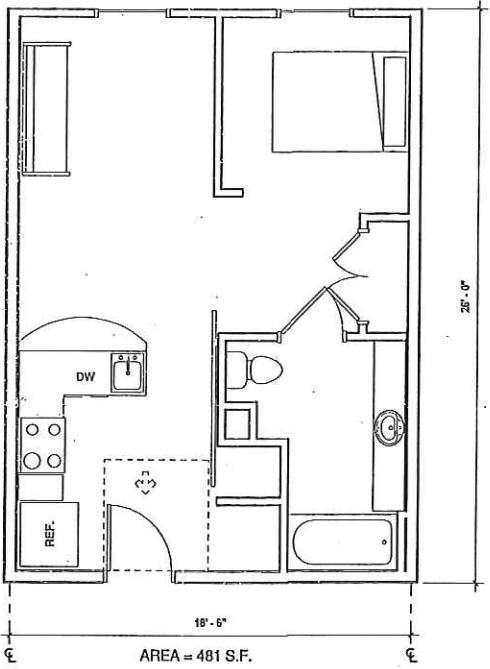
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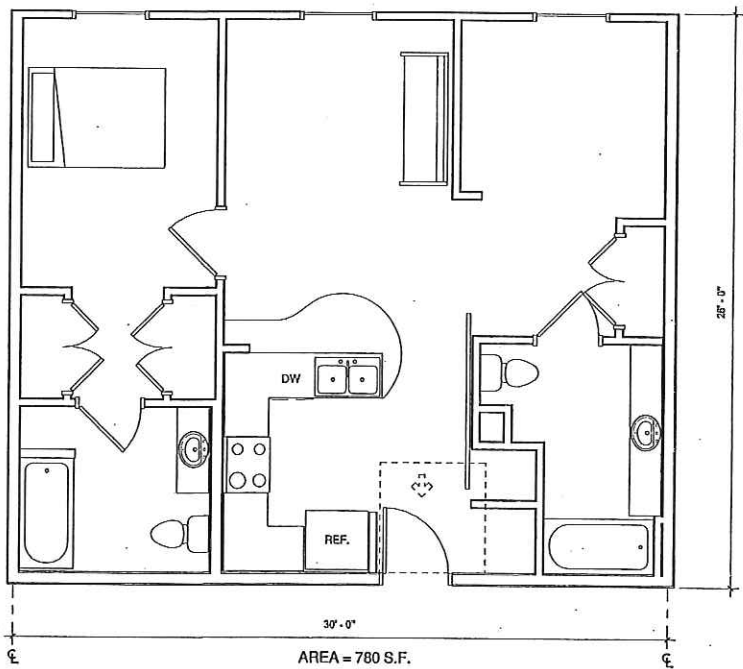
ph 828.265.2405

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 Phone 865.637.8540 or 865.291.1111
www.dia-arch.com

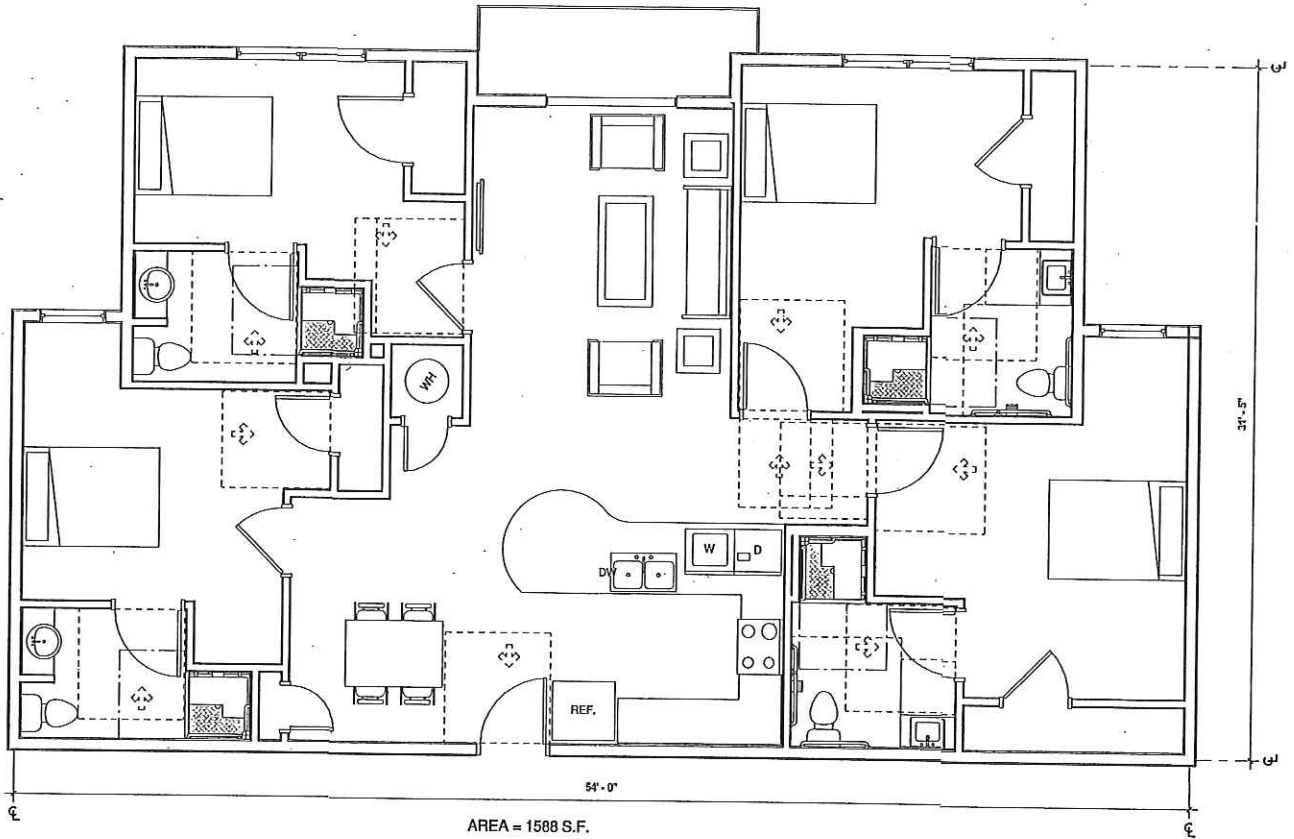
Packet Pg. 67



3 1 BED 1 BATH UNIT
1/4" = 1'-0"



2 2 BED 2 BATH UNIT
1/4" = 1'-0"



1 4 BED 4 BATH IN-LINE UNIT
1/4" = 1'-0"

PRELIMINARY NOT FOR CONSTRUCTION	
DATE	12/19/14
PROJECT #	14xxx
SHEET NUMBER	A-102
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5' H SCREEN BEYOND



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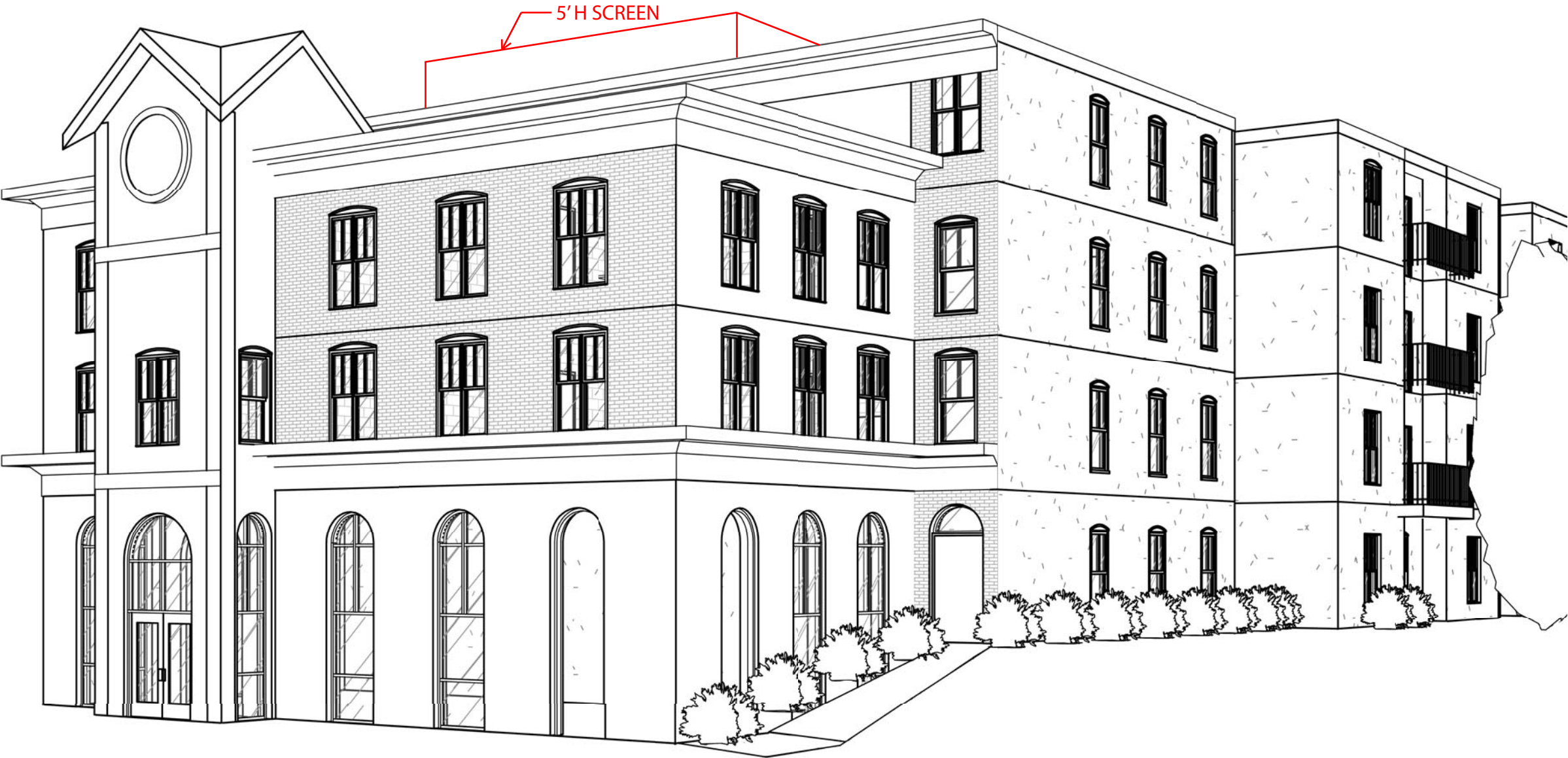
DATE	XX/XX/XX
PROJECT #	14xxx
SHEET NUMBER	A-201

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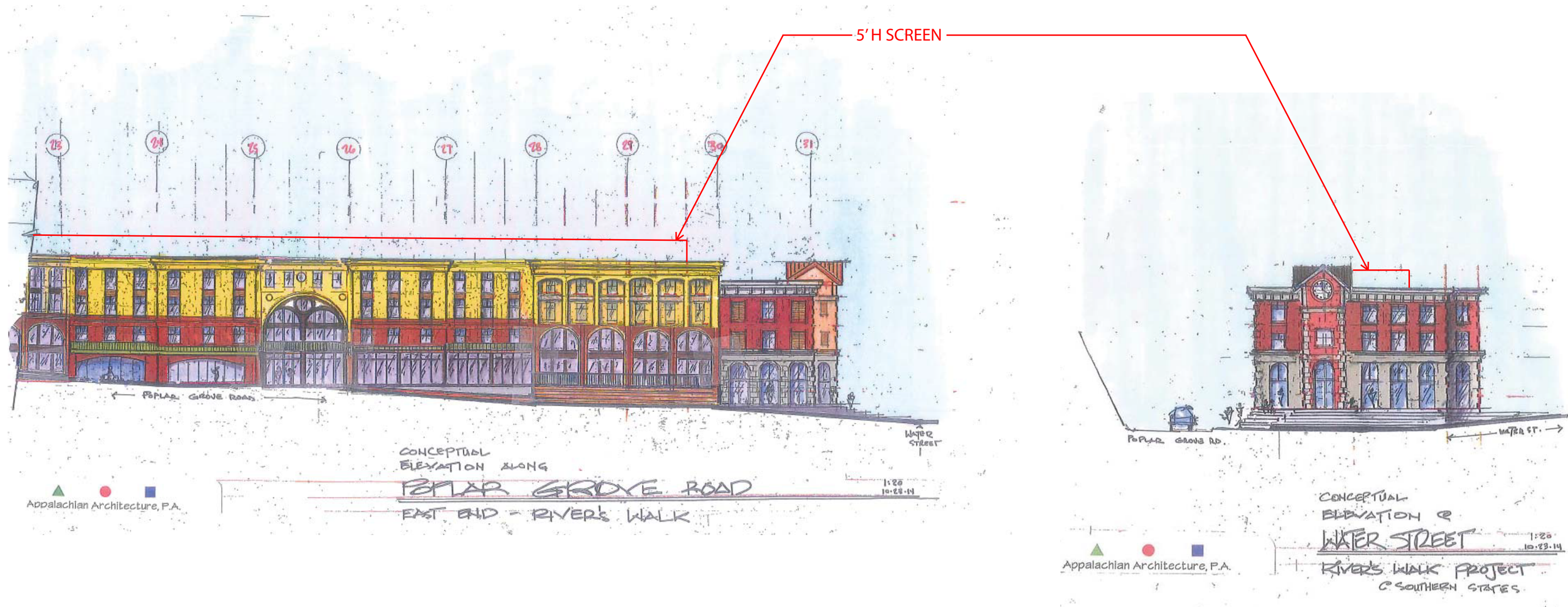


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DATE	XX/XX/XX
PROJECT #	14xxx
SHEET NUMBER	A-201
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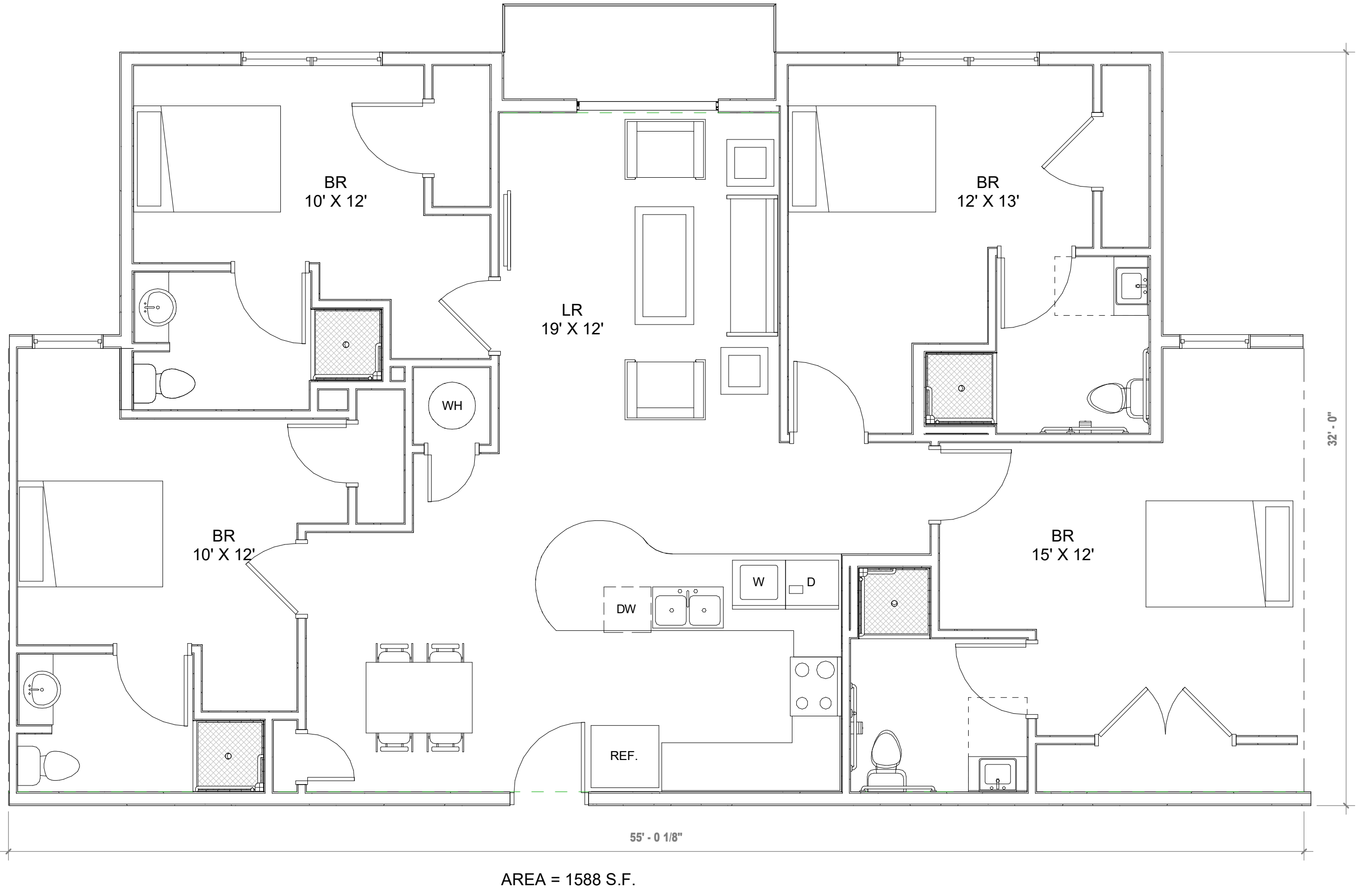


PRELIMINARY NOT FOR CONSTRUCTION	
DATE	XX/XX/XX
PROJECT #	14xxx
SHEET NUMBER	A-20
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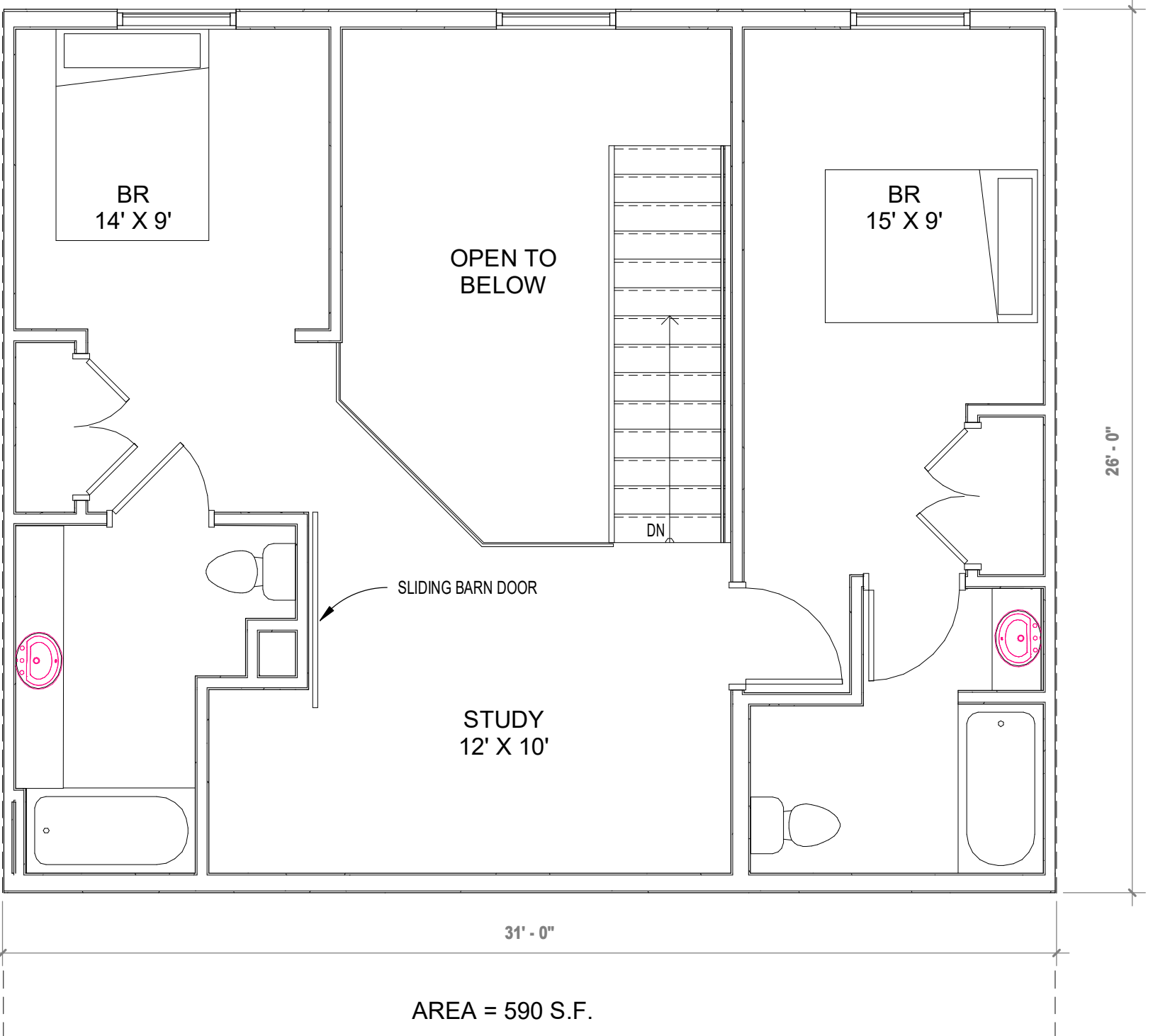
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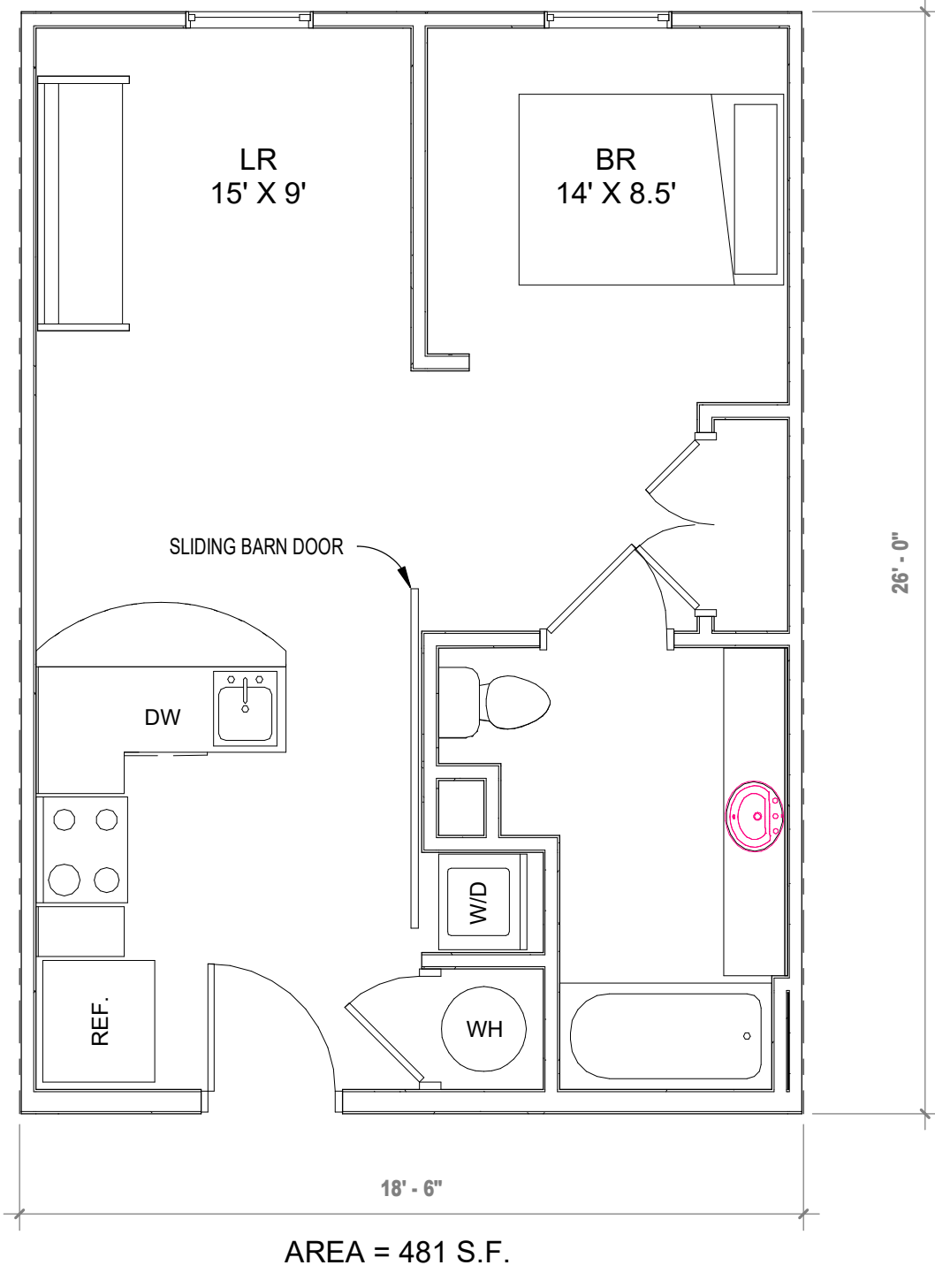


1 4 BED UNIT
1/4" = 1'-0"



Town of Boone
Planning & Inspections

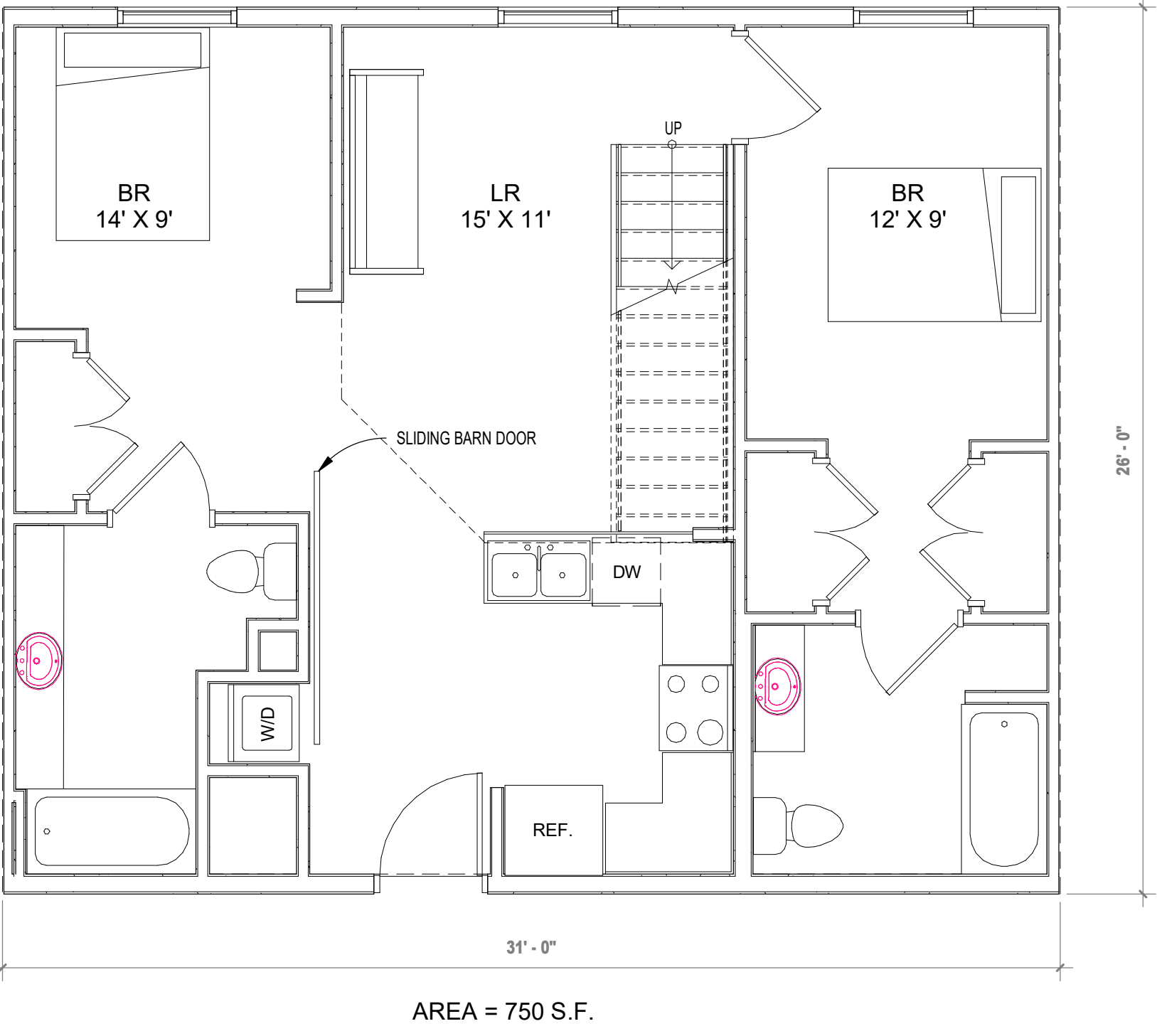
Date Received
July 12, 2016



2 1 BED UNIT
1/4" = 1'-0"



3 2 BED UNIT
1/4" = 1'-0"



4 4 BED TOWNHOUSE, 2 FLOORS
1/4" = 1'-0"

PRELIMINARY NOT FOR CONSTRUCTION

DATE	07/12/16
PROJECT #	14028
SHEET NUMBER	A-101

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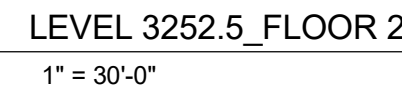
RIVERS WALK
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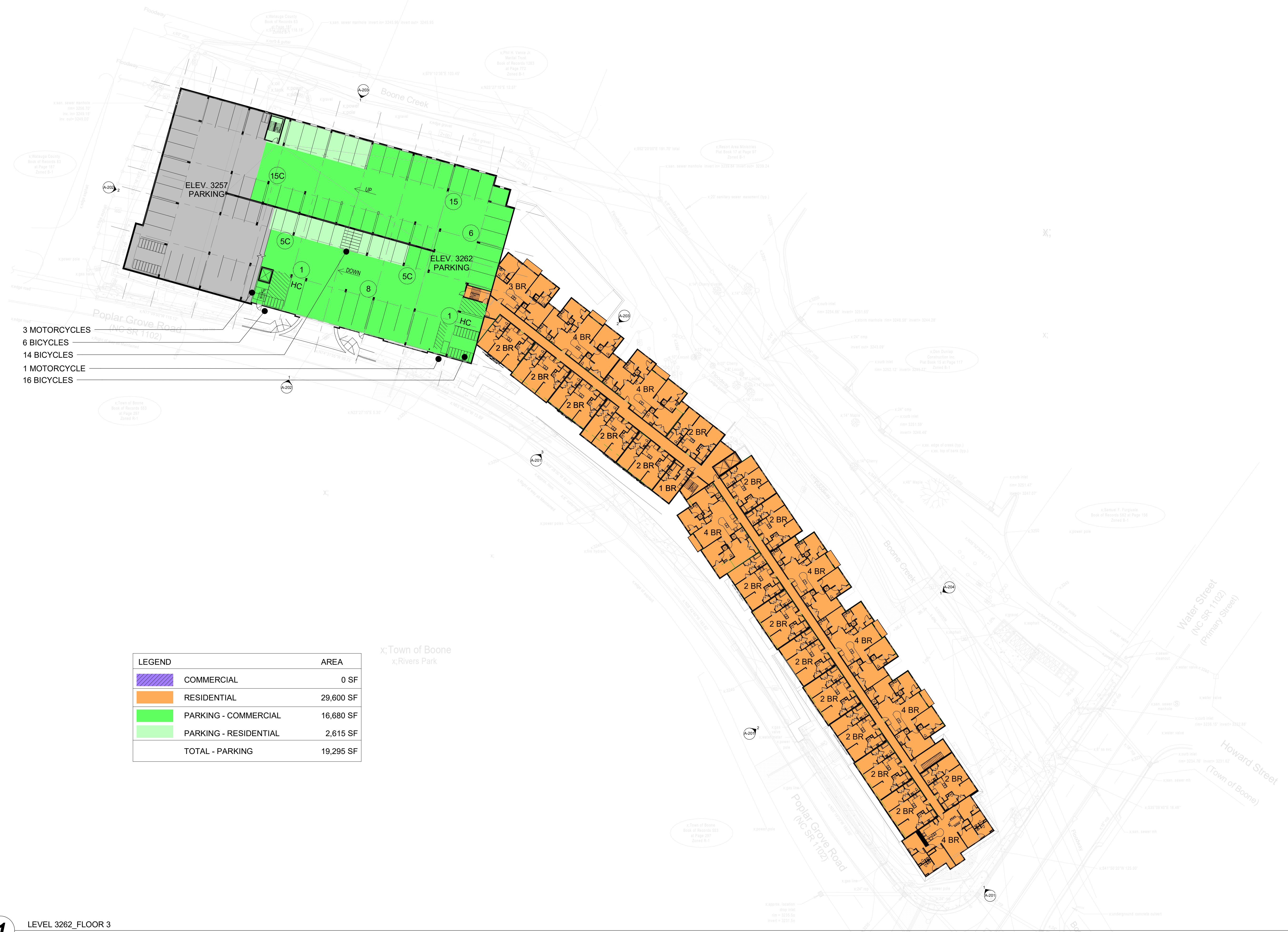
Communication: Rivers Walk Information Submitted to Community Appearance Commission (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)





1" = 30'-0"

Packet Pg. 74



PRELIMINARY NOT FOR CONSTRUCTION

DATE	07/12/16
PROJECT #	14028
SHEET NUMBER	A-104

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Packet Pg. 75



1 LEVEL 3271.5_FLOOR 4
1" = 30'-0"

PRELIMINARY NOT
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DATE	07/12/16
PROJECT #	14028
SHEET NUMBER	A-105

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Packet Pg. 76



1 LEVEL 3281_FLOOR 5
1" = 30'-0"

PRELIMINARY NOT
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DATE	07/12/16
PROJECT #	14028
SHEET NUMBER	A-106

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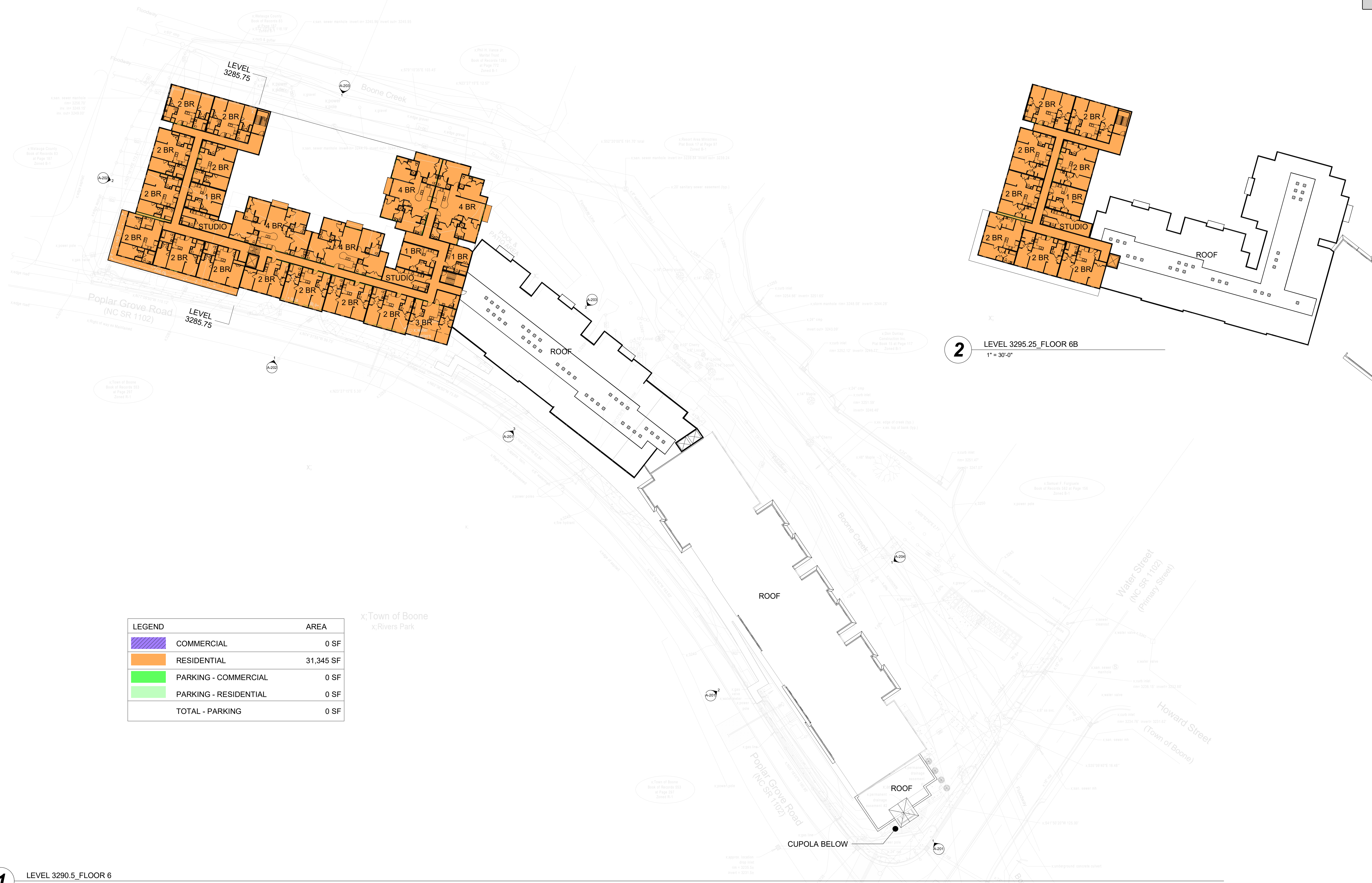
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Packet Pg. 77



CONCEPT OF MATERIAL VARIATIONS & PARAPET PROFILES



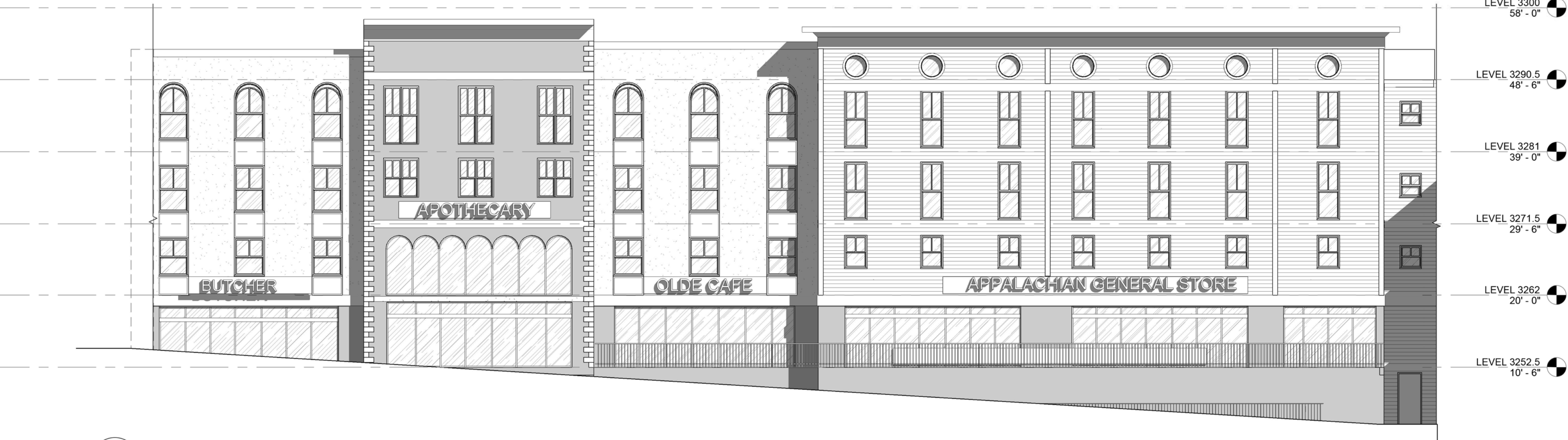
1 WATER ST ELEVATION--EAST
1" = 10'-0"

PROPOSED TOP OF PARAPET

CONCEPT OF MATERIAL VARIATIONS & PARAPET PROFILES



2 POPLAR GROVE RD ELEVATION--SOUTH
1" = 10'-0"



3 POPLAR GROVE RD ELEVATION--CENTER
1" = 10'-0"

PRELIMINARY NOT
FOR CONSTRUCTION

DATE 07/12/16
PROJECT # 14028
SHEET NUMBER A-201

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1 POPLAR GROVE RD ELEVATION--NORTH
1" = 10'-0"



2 WATAUGA CO. ELEVATION--WEST
1" = 10'-0"

PRELIMINARY NOT
FOR CONSTRUCTION

DATE	07/12/16
PROJECT #	14028
SHEET NUMBER	A-202

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Packet Pg. 80



1 BOONE CREEK ELEVATION--NORTH
1" = 10'-0"



2 BOONE CREEK ELEVATION--CENTER
1" = 10'-0"

PRELIMINARY NOT
FOR CONSTRUCTION

DATE	07/12/16
PROJECT #	14028
SHEET NUMBER	A-203

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RIVERS WALK
178 S. WATER ST., BOONE, NC 28607

DIA

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Packet Pg. 81



Communication: Rivers Walk Information Submitted to Community Appearance Commission (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

PRELIMINARY NOT
FOR CONSTRUCTION

DATE	07/12/16
PROJECT #	14028
SHEET NUMBER	A-204

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Packet Pg. 82



Town of Boone
Planning & Inspections

Date Received
July 21, 2016

PRELIMINARY
FOR REGULATORY REVIEW ONLY

by _____
Professional Engineer

Packet Pg. 83

AUTOMOBILE PARKING REQUIREMENTS

MIXED-USE MULTI-FAMILY RESIDENTIAL:

17 ONE BEDROOM / STUDIO UNITS
83 TWO BEDROOM UNITS
7 THREE BEDROOM UNITS
44 FOUR BEDROOM UNITS

MAXIMUM PARKING SPACE REQUIREMENTS

1 BEDROOM / STUDI UNITS:	1 PARKING SPACE / UNIT	X	17 UNITS	=	17 SPACES
2 BEDROOM UNITS:	2 PARKING SPACES / UNIT	X	83 UNITS	=	166 SPACES
3 & 4 BEDROOM UNITS:	3 PARKING SPACES / UNIT	X	51 UNITS	=	153 SPACES

MAXIMUM RESIDENTIAL AUTOMOBILE PARKING SPACES: = 336 SPACES

COMMERCIAL RETAIL:

COMMERCIAL RETAIL SPACE:	17,750 FT²
MAXIMUM SPACE REQUIREMENT:	5 SPACES / 1,000 FT² OF RETAIL SPACE

MAXIMUM COMMERCIAL AUTOMOBILE PARKING SPACES: = 89 SPACES
TOTAL MAXIMUM AUTOMOBILE PARKING SPACES: = 425 SPACES

AUTOMOBILE PARKING SPACES PROVIDED:

PARKING DECK	= 169
SURFACE PARKING LOT	= 19
TOTAL SPACES PROVIDED	= 188

MOTORCYCLE PARKING REQUIREMENTS

TOTAL NUMBER OF AUTOMOBILE PARKING SPACES:	= 188 SPACES
MOTORCYCLE PARKING SPACE REQUIREMENT:	1 SPACE / 40 AUTOMOBILE PARKING SPACES

MINIMUM NUMBER OF MOTORCYCLE PARKING SPACES REQUIRED: = 5 SPACES
PROVIDED MOTORCYCLE PARKING SPACES: = 6 SPACES

MOTORCYCLE SPACES WILL BE LOCATED IN THE PARKING STRUCTURE AND IN THE SURFACE LOT

BICYCLE PARKING REQUIREMENTS

SHORT TERM BICYCLE SPACES

TOTAL NUMBER OF RESIDENTIAL UNITS:	= 151 UNITS
RESIDENTIAL SHORT TERM BICYCLE SPACE REQUIREMENT:	1 SPACE / 20 UNITS
MINIMUM NUMBER OF SHORT TERM BICYCLE SPACES REQUIRED FOR RESIDENTIAL:	= 8 SPACES

TOTAL COMMERCIAL GROSS FLOOR AREA:	= 17,750 FT²
COMMERCIAL SHORT TERM BICYCLE SPACE REQUIREMENT:	1 SPACE / 5,000 FT² GROSS FLOOR AREA
MINIMUM NUMBER OF SHORT TERM BICYCLE SPACES REQUIRED FOR COMMERCIAL:	= 4 SPACES

MINIMUM NUMBER OF SHORT TERM BICYCLE SPACES REQUIRED: = 12 SPACES
PROVIDED SHORT TERM BICYCLE SPACES: = 12 SPACES

LONG TERM BICYCLE SPACES

TOTAL NUMBER OF RESIDENTIAL UNITS:	= 151 UNITS
RESIDENTIAL LONG TERM BICYCLE SPACE REQUIREMENT:	1 SPACE / 4 UNITS
MINIMUM NUMBER OF LONG TERM BICYCLE SPACES REQUIRED FOR RESIDENTIAL:	= 38 SPACES

TOTAL COMMERCIAL GROSS FLOOR AREA:	= 17,750 FT²
COMMERCIAL LONG TERM BICYCLE SPACE REQUIREMENT:	1 SPACE / 12,000 FT² GROSS FLOOR AREA
MINIMUM NUMBER OF LONG TERM BICYCLE SPACES REQUIRED FOR COMMERCIAL:	= 1 SPACES

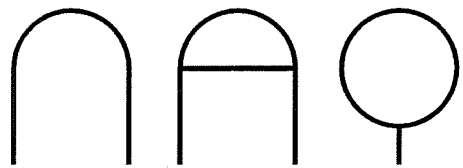
MINIMUM NUMBER OF LONG TERM BICYCLE SPACES REQUIRED: = 39 SPACES
PROVIDED LONG TERM BICYCLE SPACES: = 56 SPACES

SHORT TERM BICYCLE RACKS WILL BE LOCATED OUTSIDE IN FRONT OF THE BUILDING AND AT SURFACE LOT.
ALL LONG TERM BICYCLE SPACES WILL BE PROVIDED IN COVERED AREAS OF THE PARKING DECK.

BICYCLE PARKING NOTES

ALL BICYCLE PARKING FACILITIES SHALL MEET THE REQUIREMENTS OF THE TOWN OF BOONE'S UNIFIED DEVELOPMENT ORDINANCE. IN PARTICULAR, BICYCLE PARKING FACILITIES SHALL BE CONSTRUCTED OF MATERIALS OF SUFFICIENT STRENGTH TO SIGNIFICANTLY RESIST THEIR DISPLACEMENT OR REMOVAL, AND THEY SHALL BE SECURELY ANCHORED IN CONCRETE OR OTHER EQUIVALENT MATERIAL OR SYSTEM OF SUFFICIENT STRENGTH TO SIGNIFICANTLY RESIST REMOVAL. BICYCLE PARKING FACILITIES SHALL SUPPORT BICYCLES IN A STABLE POSITION WITHOUT DAMAGE TO WHEELS, FRAME OR OTHER COMPONENTS AND ALLOW FOR THE USE OF EITHER A CABLE, U-SHAPED, OR SIMILAR LOCK TO SECURE BOTH WHEELS OF THE BICYCLE. NO LESS THAN 4' SHALL BE PROVIDED BETWEEN PARALLEL RACKS.

EXAMPLES OF ACCEPTABLE FACILITIES:



SEWER MAIN & SERVICE NOTES:

- CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
- NEW SANITARY SEWER MAINS SHALL BE 12" CLASS 350 DUCTILE IRON PIPE UNLESS SPECIFIED OTHERWISE.
- ALL SANITARY SEWER SERVICES SHALL BE 6" SCH 40 PVC, CONSTRUCTED ACCORDING TO NC BUILDING CODE. PLACE 2-DIRECTIONAL CLEANOUTS ON S.S. SERVICE WITHIN 10' OF BUILDING.
- PLUMBING ENGINEER SHALL CONFIRM SIZE, MATERIAL, AND LOCATION OF ALL SEWER SERVICES.
- SANITARY SEWER MAIN SHALL BE BEDDED IN STONE IN POOR SOIL CONDITIONS AND AT DEPTHS GREATER THAN 10' OR AS DIRECTED BY ENGINEER.
- RIM ELEVATIONS MAY VARY AFTER GRADING IS COMPLETED. MATCH RIM ELEVATIONS TO FINISHED GRADE.
- SANITARY SEWER MANHOLES WITH UPSTREAM PIPE GRADES ABOVE 8% SHALL BE CONSIDERED "HIGH VELOCITY" MANHOLES. INVERTS SHALL BE COATED WITH 4 MILS OF ABRASION RESISTANT EPOXY RESIN. SEE DETAIL ON DETAIL SHEET.
- THE CONTRACTOR/PROPERTY OWNER IS RESPONSIBLE FOR ANY DAMAGE TO THE SEWER MAINS IN THE CONSTRUCTION AREA UNTIL CONSTRUCTION IS COMPLETE.
- ALL NEW SEWER MAINS LOCATED OUTSIDE THE TOWN OF BOONE'S ROAD RIGHT-OF-WAY SHALL HAVE A 25' EASEMENT DEDICATED TO THE TOWN OF BOONE. THE EASEMENT SHALL BE GENERALLY CENTERED ON THE NEW SEWER MAIN, HOWEVER IT MAY BE OFFSET TO AVOID EXISTING STRUCTURES.

FIRE PROTECTION NOTES:

- CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION, SIZE & TYPE OF ALL EXISTING PIPES AT TIE-IN POINTS, PRIOR TO ORDERING NEW PIPE OR FITTINGS.
- SPRINKLER CONTRACTOR SHALL NOT CALCULATE FOR SPRINKLER SUBMITTAL ABOVE 90% AVAILABLE WATER. NO VALVE PITS OR BUILDING ENTRY FOR SHUT OFF. PROVIDE KNOX BOX SECURITY SYSTEM FOR FIRE DEPARTMENT ENTRY. COORDINATE LOCATION OF KNOX BOX, FDCs AND PIVs WITH FIRE MARSHALL.
- SPRINKLER CONTRACTOR SHALL CONFIRM SIZE, MATERIAL, AND LOCATION OF ALL FIRE AND FDC LINES.
- RPZ DETECTORS SHALL BE LOCATED ON THE FIRE LINE IN EACH OF THE SPRINKLER ROOMS OR OUTSIDE IN A HOT BOX. A DRAIN MUST BE INSTALLED TO HANDLE CATASTROPHIC FAILURE OF THE RELIEF VALVES AND OUTLET TO THE ATMOSPHERE IF INSTALLED IN SPRINKLER ROOMS. SPRINKLER CONTRACTOR TO PROVIDE MIKE TRIVETT, TOWN OF BOONE'S BACK FLOW PREVENTION COORDINATOR, WITH SPECIFICATIONS FOR RPZ DETECTOR AND CALCULATIONS FOR DRAIN.
- FIRE DEPARTMENT CONNECTIONS (FDCs) SHALL BE LOCATED A MAXIMUM OF 100' FROM FIRE HYDRANTS. FDCs SHALL BE PROPERLY MARKED.
- STANDPIPES SHALL BE ARE REQUIRED DUE TO BUILDING ELEVATIONS. THEY SHALL BE A DRY TYPE SYSTEMS WITH CONNECTIONS LOCATED ON THE INTERVENING STAIR LANDINGS. THE CONNECTIONS SHALL BE LOCATED AT THE SAME LOCATION AS THE FDCs. WALL MOUNTED OR FREE STANDING PIVs ARE APPROVED TYPES.
- THE MAIN STRUCTURE ADDRESS NUMBER HEIGHT SHALL BE 8" OF CONTRASTING COLOR TO THE BUILDING WITH THE LOCATION TO BE DETERMINED BY THE BOONE FIRE DEPARTMENT. UNIT NUMBERS SHALL BE SUBMITTED TO THE TOWN GIS DEPARTMENT FOR APPROVAL. ADDITIONAL REQUIREMENTS ARE POSSIBLE UPON REVIEW OF BUILDING PLANS.
- DRY STANDPIPE CONNECTION SHALL BE LOCATED NEXT TO FDC.

WATER MAIN & SERVICE NOTES:

- ALL UNDERGROUND UTILITIES SHALL BE FIELD LOCATED BY CONTRACTOR PRIOR TO EXCAVATION.
- CONTRACTOR IS RESPONSIBLE FOR CONFIRMING LOCATION, SIZE & TYPE OF ALL EXISTING PIPES AT TIE-IN POINTS, PRIOR TO ORDERING NEW PIPE OR FITTINGS.
- ANY NEW WATER MAINS SHALL BE CLASS 350 DUCTILE IRON OR C-900 PVC PIPE.
- ALL WATER SERVICE LINES SHALL BE SDR 13.5 PVC UNLESS OTHERWISE SPECIFIED.
- ALL WATER MAINS AND SERVICES SHALL HAVE A MINIMUM 3' COVER UNLESS SPECIFIED OTHERWISE.
- ALL VALVES SHALL BE RESILIENT-SEAT DUCTILE IRON GATE VALVES.
- COORDINATE LOCATION OF ALL NEW TAPS & METERS WITH TOWN OF BOONE UTILITY DEPARTMENT (828-268-6250).
- CONCRETE THRUST BLOCKING SHALL BE PROVIDED AT ALL BENDS AND FITTINGS FOR MAINS AND SERVICES OVER 4" IN DIAMETER.
- ALL BENDS AND TEES SHALL BE RESTRAINED JOINT AND HAVE THRUST BLOCKING. SEE DETAIL SHEET FOR SCHEDULE OF THRUST BLOCKING.
- ALL HYDRANTS MUST BE KENNEDY K-81 HYDRANTS OR APPROVED EQUAL. COORDINATE WITH TOWN OF BOONE UTILITY DEPARTMENT.
- HYDRANT LOCATORS SHALL BE ADDED TO ALL FIRE HYDRANTS IN THE PROJECT AREA FOR IDENTIFICATION DURING INCLEMENT WEATHER.
- PLUMBING ENGINEER SHALL CONFIRM SIZE, MATERIAL, AND LOCATION OF ALL WATER SERVICES. SPRINKLER CONTRACTOR SHALL CONFIRM SIZE, MATERIAL, AND LOCATION OF ALL FIRE AND FDC LINES.
- PLUMBING CONTRACTOR & SPRINKLER CONTRACTOR SHALL COORDINATE WITH MIKE TRIVETT AT TOWN OF BOONE UTILITY DEPARTMENT REGARDING BACKFLOW PREVENTION REQUIREMENT PRIOR TO CONSTRUCTION (828-268-6250).
- THE CONTRACTOR/PROPERTY OWNER IS RESPONSIBLE FOR ANY DAMAGE TO THE WATER MAINS IN THE CONSTRUCTION AREA UNTIL CONSTRUCTION IS COMPLETE.

WATER METER NOTES:

- WATER METERS FOR THE BUILDING MAY BE LOCATED INSIDE THE BUILDING IN METER ROOMS. IF INSIDE, THE METERS SHALL BE SENSUS RADIO READ OR APPROVED EQUAL WITH DUEL CHECK SETTERS OR DUEL CHECK VALVES.
- METERS MAY BE LOCATE OUTSIDE THE BUILDING IN INDIVIDUAL METER BOXES. OUTSIDE METERS SHALL BE SENSUS TOUCH READ OR APPROVED EQUAL WITH DUAL CHECK SETTERS.
- COORDINATE TAPS AND METERS WITH TOWN OF BOONE UTILITY DEPARTMENT (828-268-6250).

BACKFLOW PREVENTION NOTES:

- RPZ DETECTORS ARE REQUIRED FOR EACH FIRE LINE INTO THE BUILDING. RPZ DETECTORS MAY BE LOCATED IN A SPRINKLER ROOM INSIDE THE GARAGE OR IN AN ABOVE GROUND HOT BOX OUTSIDE THE BUILDING.
- A REDUCED PRESSURE PRINCIPAL ASSEMBLY (RP) IS REQUIRED ON ALL DOMESTIC WATER SERVICE LINES ENTERING THE BUILDING IF DOMESTIC METERS ARE LOCATED INSIDE THE BUILDING. IN ADDITION, ALL COMMERCIAL USES IN THE US HWY 321 BUILDING SHALL HAVE RP's ON THEIR INDIVIDUAL SERVICE LINES. THESE RP's MAY BE LOCATED IN BACKFLOW ROOMS IN THE PARKING GARAGE.
- ALL RPZ DETECTORS AND RP's LOCATED IN SPRINKLER OR BACKFLOW ROOMS SHALL HAVE A DRAIN. INSTALLED TO HANDLE CATASTROPHIC FAILURE OF THE RELIEF VALVES AND OUTLET TO THE ATMOSPHERE.
- SPRINKLER CONTRACTOR AND PLUMBING ENGINEER SHALL PROVIDE MIKE TRIVETT, TOWN OF BOONE'S BACK FLOW PREVENTION COORDINATOR, WITH SPECIFICATIONS FOR RPZ DETECTOR AND RP's ALONG WITH CALCULATIONS FOR DRAIN.

GENERAL NOTES:

- SITE IS CURRENTLY ZONED B-1. APPLICANT IS REQUESTING THAT THE SUBJECT PROPERTY BE REZONED TO CONDITIONAL ZONING DISTRICT B-1.
- PROPOSED PROPERTY AREA = 2.747 ACRES.
- UPON APPROVAL PROPERTIES WILL BE RECOMBINED INTO ONE TRACT.
- PRIOR TO ANY EXCAVATION, CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES. CALL 1-800-632-4949.
- ALL UTILITIES SHALL BE UNDERGROUND.
- CONTACT NEW RIVER LIGHT & POWER FOR LOCATION OF POWER (828-733-1510).
- CONTACT AT&T FOR PHONE SERVICE (828-262-4908).
- CONTACT CHARTER COMMUNICATIONS FOR CABLE SERVICE (828-733-1510).
- ALL SIDEWALKS WITHIN THE TOWN OF BOONE RIGHT OF WAY SHALL CONFORM TO ALL REQUIREMENTS OF SECTION 23.08 OF THE TOWN OF BOONE'S UNIFIED DEVELOPMENT ORDINANCE.
- 24" CONCRETE CURB & GUTTER (NC DOT STD. 846.01) SHALL BE USED AS SHOWN ON PLAN. 30" CURB & GUTTER SHALL BE USED IN THE RIGHT-OF-WAY.
- PARKING SPACE DIMENSIONS ARE TO FACE OF CURB (TYP). RADII ARE TO BACK OF CURB (TYP).
- THE CONTRACTOR/PROPERTY OWNER IS RESPONSIBLE FOR ANY DAMAGE TO THE WATER & SEWER MAINS IN THE CONSTRUCTION AREA UNTIL CONSTRUCTION IS COMPLETE.
- ALL ROOFTOP EQUIPMENT SHALL BE SCREENED OR OTHERWISE PLACED OUT OF VIEW FROM ADJACENT STREETS.
- ALL UTILITIES INCLUDING BUT NOT LIMITED TO HVAC UNITS AND METERS SHALL BE SCREENED FROM ADJACENT PROPERTIES AND PUBLIC STREETS PER SECTION 25.02 OF THE TOWN OF BOONE'S UNIFIED DEVELOPMENT ORDINANCE.
- HANDICAP SPACES SHALL BE MARKED BOTH ON PAVEMENT & WITH SIGNS IN COMPLIANCE WITH THE LATEST EDITION OF THE NORTH CAROLINA ACCESSIBILITY CODE.
- COMPACT AUTOMOBILE AND MOTORCYCLE SPACES SHALL BE MARKED ON PAVEMENT ONLY.
- MOTORCYCLE AND SCOOTER SPACES SHALL HAVE MINIMUM DIMENSIONS OF 4'x8' AND PROVIDED WITH A FIXED FEATURE FOR SECURING THE MOTORCYCLES AND SCOOTERS. IN ADDITION, SPACES SHALL CONFORM TO ALL OTHER REQUIREMENTS OF SECTION 24.10 OF THE TOWN OF BOONE'S UNIFIED DEVELOPMENT ORDINANCE.
- LONG TERM AND SHORT TERM BICYCLE RACKS AND SPACES SHALL CONFORM TO ALL REQUIREMENTS OF SECTION 24.09 OF THE TOWN OF BOONE'S UNIFIED DEVELOPMENT ORDINANCE.
- ALL RECOMMENDATIONS SPECIFIED IN THE TRANSPORTATION IMPACT ANALYSIS PREPARED BY DAVENPORT ENGINEERING SHALL BE FOLLOWED.

SIGNAGE NOTES:

- ALL SIGNAGE SHALL BE PERMITTED SEPARATELY.

LIGHTING NOTES:

- ALL SITE LIGHTING SHALL CONFORM TO THE STANDARDS IN SECTION 25.05 OF THE TOWN'S UDO.
- ALL PARKING DECK LIGHTING SHALL CONFORM TO IESNA STANDARDS.

VARIANCES GRANTED TO THE PROJECT:

THE FOLLOWING VARIANCES WERE GRANTED BY THE TOWN OF BOONE'S BOARD OF ADJUSTMENT ON NOVEMBER 6, 2014:

- VARIANCE FROM UDO SUBSECTION 15.11.02 (J) TO REDUCE THE MINIMUM BUILDING FOOTPRINT FROM 50% TO 40% OF THE TOTAL GROSS LAND AREA OF THE LOT.
- VARIANCE FROM UDO SUBSECTION 16.08.05 TO ALLOW THE BUILDING TO EXCEED 35' IN HEIGHT WHEN THE BUILDING IS WITHIN 100' OF AN R-1 ZONED PROPERTY.

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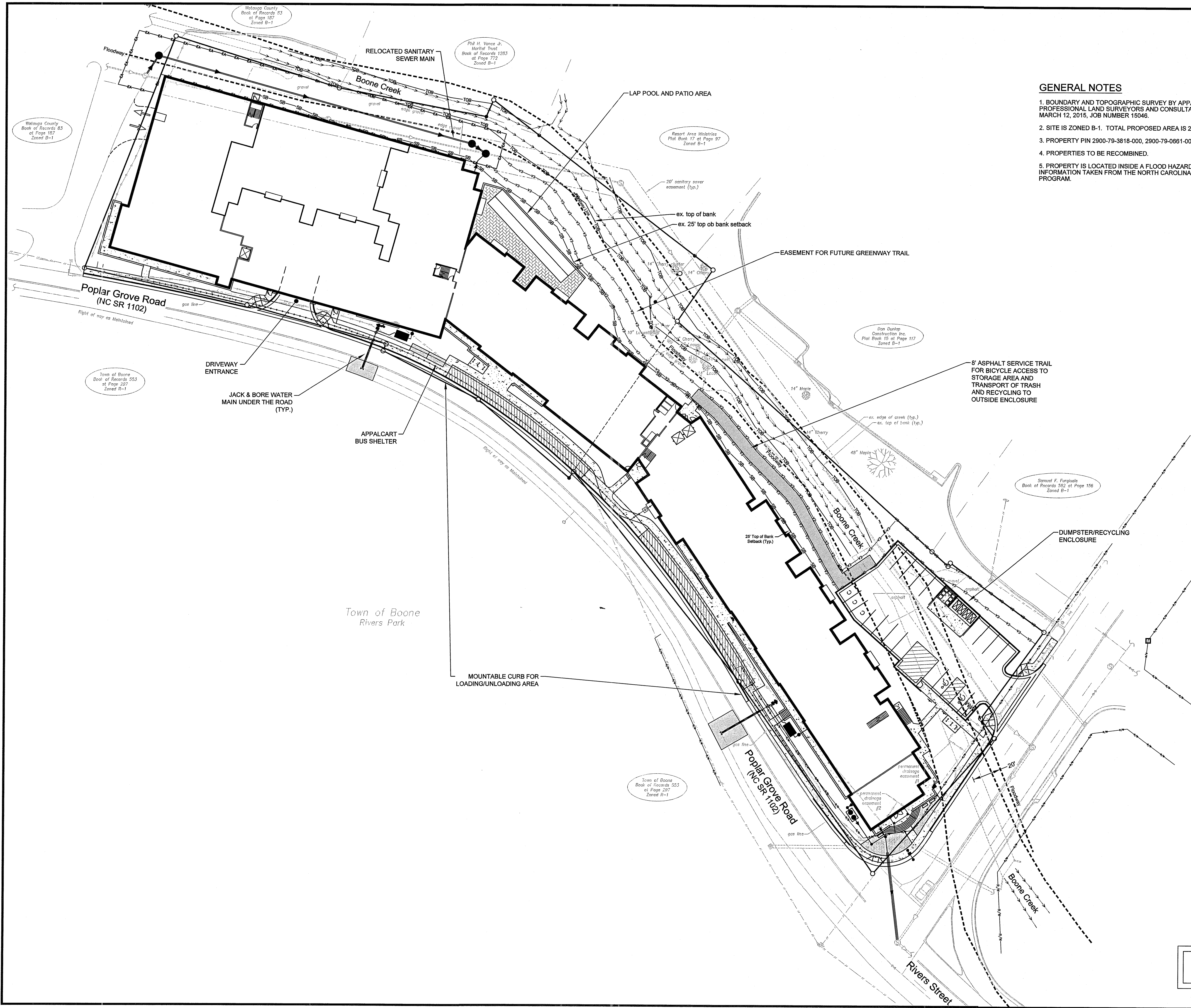
RIVERS WALK
HARROD/AP, LLC
WATER STREET & POPLAR GROVE ROAD
BOONE, NORTH CAROLINA

SCALE:	AS SHOWN
DATE:	7-21-16
DRWN. BY:	EGT
CHKD. BY:	AJC
PROJECT NUMBER	B13057.1
DRAWING NO.	C-2
SHEET NO.	2 OF 14

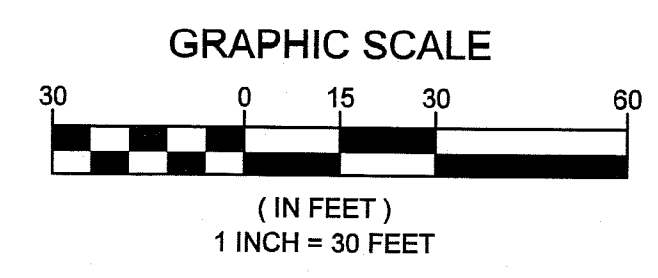
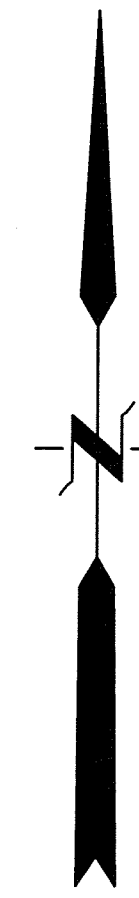


**RIVERS WALK
HARROD/AP, LLC
WATER STREET & POPLAR GROVE ROAD
BOONE, NORTH CAROLINA**

[illegible]



- GENERAL NOTES**
1. BOUNDARY AND TOPOGRAPHIC SURVEY BY APPALACHIAN PROFESSIONAL LAND SURVEYORS AND CONSULTANTS, PA, DATED MARCH 12, 2015, JOB NUMBER 15046.
 2. SITE IS ZONED B-1. TOTAL PROPOSED AREA IS 2.747 ACRES .
 3. PROPERTY PIN 2900-79-3818-000, 2900-79-0861-000 & 2900-69-8658-000.
 4. PROPERTIES TO BE RECOMBINED.
 5. PROPERTY IS LOCATED INSIDE A FLOOD HAZARD AREA. FLOOD INFORMATION TAKEN FROM THE NORTH CAROLINA FLOOD MAPPING PROGRAM.



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**Engineering
Company, P.A.**

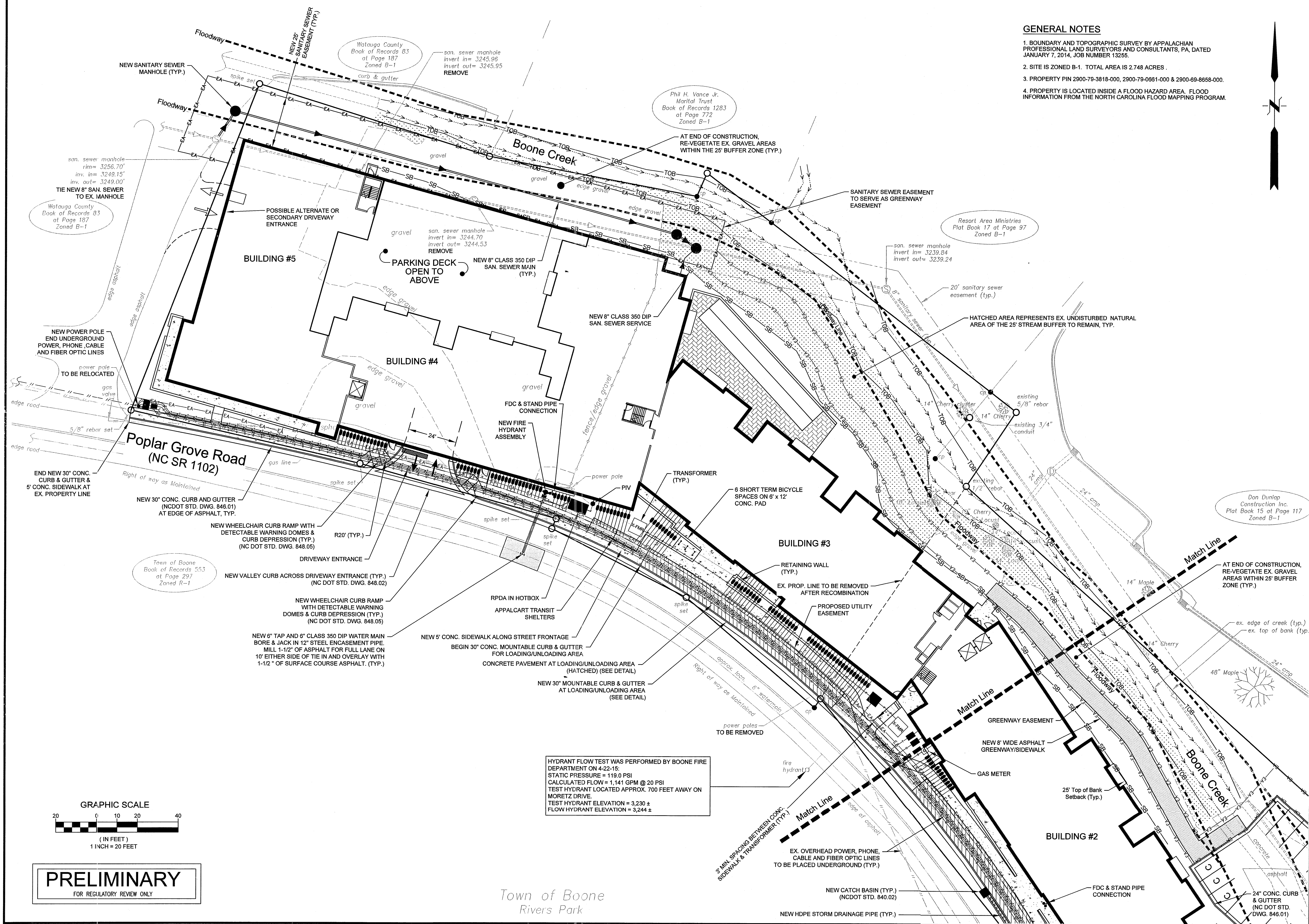
**Municipal
Services**

P.O. BOX 348 BOONE, N.C. 28607
(828) 262-1767
LICENSE NUMBER: C-0281

**RIVERS WALK
HARROD/AP, LLC
WATER STREET & POPLAR GROVE ROAD
BOONE, NORTH CAROLINA**

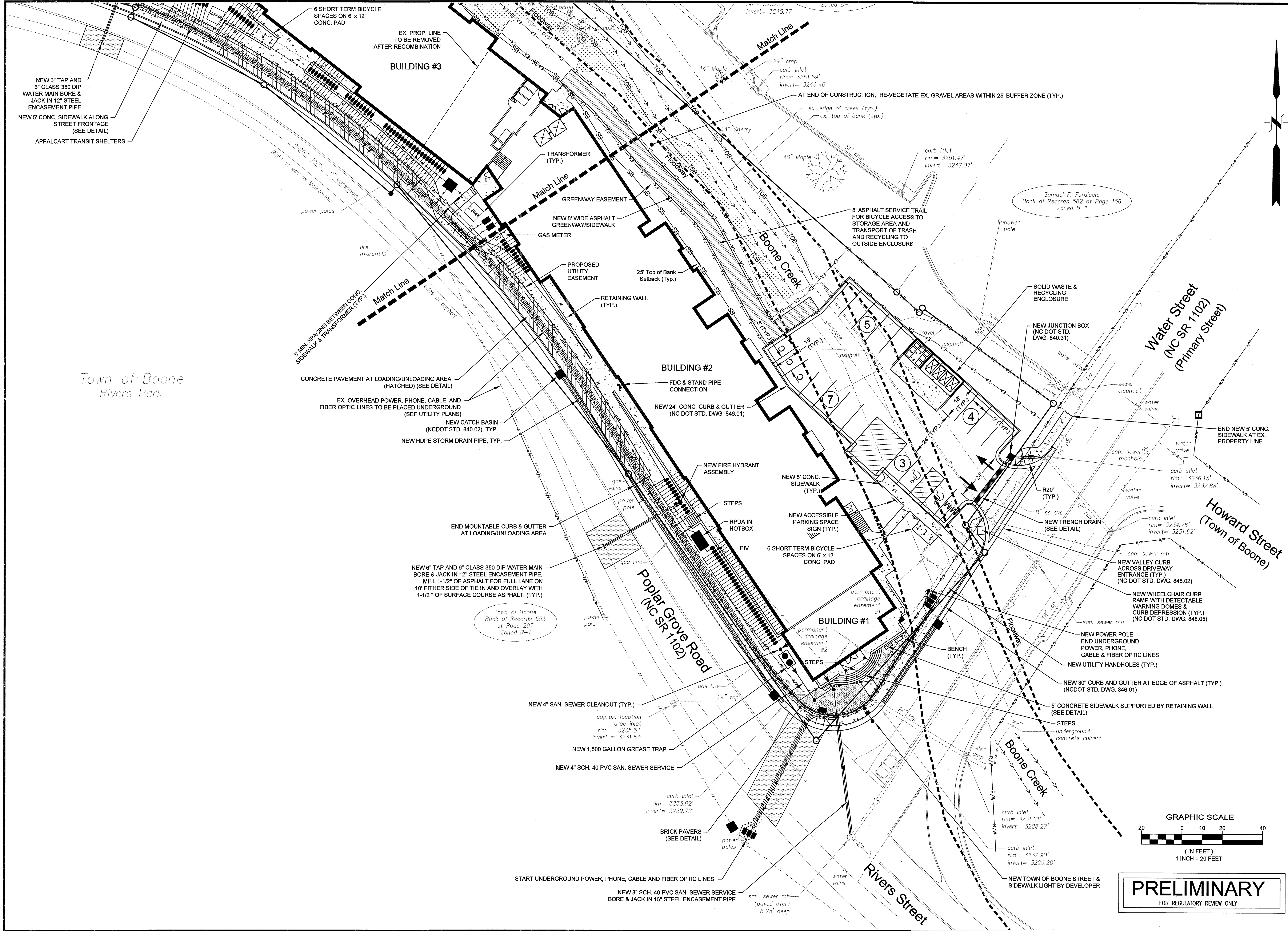
DATE		BY	REV.	DESCRIPTION
				OVERALL SITE PLAN
SCALE: 1" = 30'				
DATE: 7-21-16				
DRWN. BY: EGT				
CHKD. BY: AJC				
PROJECT NUMBER				
B13057.1				
DRAWING NO.		SHEET NO.		
C-4		4 OF 14		

1. BOUNDARY AND TOPOGRAPHIC SURVEY BY APPALACHIAN PROFESSIONAL LAND SURVEYORS AND CONSULTANTS, PA, DATED JANUARY 7, 2014, JOB NUMBER 13255.
2. SITE IS ZONED B-1. TOTAL AREA IS 2.748 ACRES .
3. PROPERTY PIN 2900-79-3818-000, 2900-79-0661-000 & 2900-69-8658-000.
4. PROPERTY IS LOCATED INSIDE A FLOOD HAZARD AREA. FLOOD INFORMATION FROM THE NORTH CAROLINA FLOOD MAPPING PROGRAM.



PRELIMINARY
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Town of Boone
Rivers Park



Engineering
Company, P.A.

Municipal
Services

P.O. BOX 97 GARNER, N.C. 27529
(919) 772-5393
LICENSE NUMBER: C0281

RIVERS WALK
HARROD/AP, LLC
WATER STREET & POPLAR GROVE ROAD
BOONE, NORTH CAROLINA

DATE		DESCRIPTION	
DATE	REV.	BY	DESCRIPTION
PRELIMINARY SITE PLAN SHEET 2 OF 2			
SCALE: 1" = 20'			
DATE: 7-21-16			
DRWN. BY: EGT			
CHKD. BY: A/JC			
PROJECT NUMBER B13057.1			
DRAWING NO. C-6		SHEET NO. 6 OF 14	

CONSTRUCTION NOTES:

- 1. BOUNDARY AND TOPOGRAPHIC SURVEY BY APPALACHIAN PROFESSIONAL LAND SURVEYORS AND CONSULTANTS, PA, DATED JANUARY 7, 2014, JOB NUMBER 13255.
- 2. ROOF DRAINS SHALL TIE TO DRAINAGE SYSTEM. CONTRACTOR TO PROVIDE ALL NECESSARY WATER TIGHT CONNECTIONS AND FITTINGS. REFER TO ARCHITECTURAL PLANS FOR EXACT DOWNSPOUT LOCATIONS.
- 3. UNLESS INDICATED OTHERWISE ALL CMP'S SHALL BE FULLY BITUMINOUS OR ALUMINIZED COATED 16 GA. CORRUGATED STEEL WITH CORRUGATED OR HUGGER TYPE CONNECTING BANDS.
- 4. DOUBLE WALL, SMOOTH INTERIOR HIGH DENSITY POLYETHYLENE CORRUGATED DRAIN PIPE MAY BE USED IN LIEU OF COATED CORRUGATED METAL PIPE. PIPE MUST MEET ASTM F667. PIPE LOCATED IN RIGHT-OF-WAY SHALL BE NC DOT APPROVED.
- 5. ALL STORM DRAINAGE PIPES SHALL HAVE 1' MINIMUM COVER.
- 6. CONTOUR INTERVAL=1'
- 7. REFER TO ORIGINAL SPECIFICATIONS FOR GRADING, COMPACTING, DRAINAGE AND EROSION CONTROL.
- 8. ALL EROSION CONTROL FABRIC SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
- 9. IF CONTRACTOR WISHES TO USE AN EROSION CONTROL FABRIC OTHER THAN WHAT IS SPECIFIED, PRIOR APPROVAL MUST BE GRANTED BY ENGINEER.
- 10. CONTRACTOR SHALL PLACE CONCRETE INVERTS TO THE LEVEL OF OUTLET PIPE IN ALL DRAINAGE STRUCTURES SO THAT THERE IS NO PONDING.

Engineering
Company, P.A.

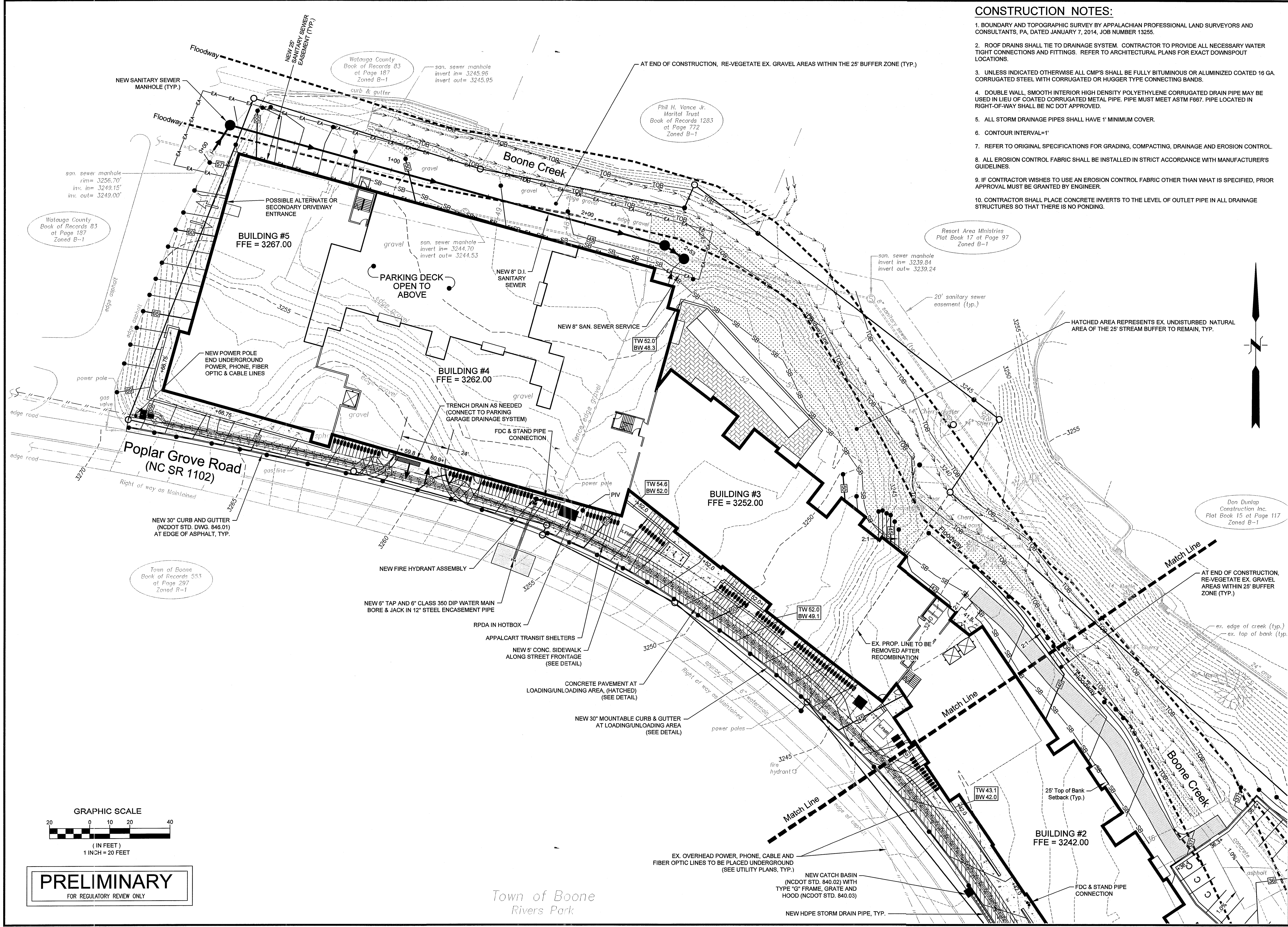


Municipal
Services

P.O. BOX 349 BOONE, N.C. 28607
(626) 262-1767
LICENSE NUMBER: C-0281

RIVERS WALK
HARROD/AP, LLC
WATER STREET & POPLAR GROVE ROAD
BOONE, NORTH CAROLINA

PRELIMINARY GRADING & DRAINAGE PLAN		SHEET 1 OF 2	
DATE	BY	REV.	DESCRIPTION
SCALE: 1" = 20'			
DATE: 7-21-16			
DRWN. BY: EGT			
CHKD. BY: A/JC			
PROJECT NUMBER			
B13057.1			
DRAWING NO.		SHEET NO.	
C-7		7 OF 14	



PRELIMINARY
FOR REGULATORY REVIEW ONLY

Town of Boone
Rivers Park

Engineering
Company, P.A.

Municipal
Services

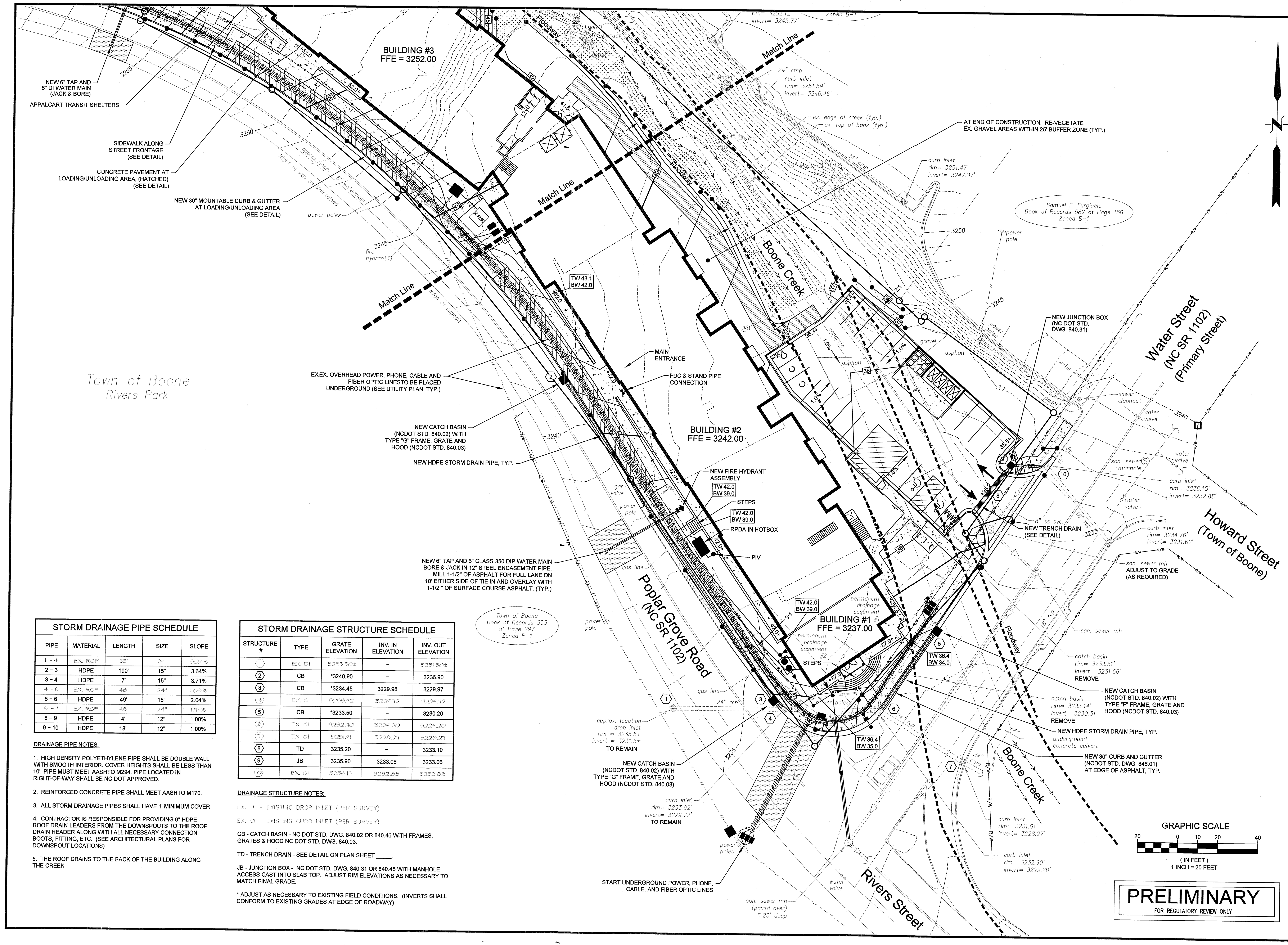
P.O. BOX 57 GARNER, N.C. 27539
(919) 772-5383
LICENSE NUMBER: C-0281

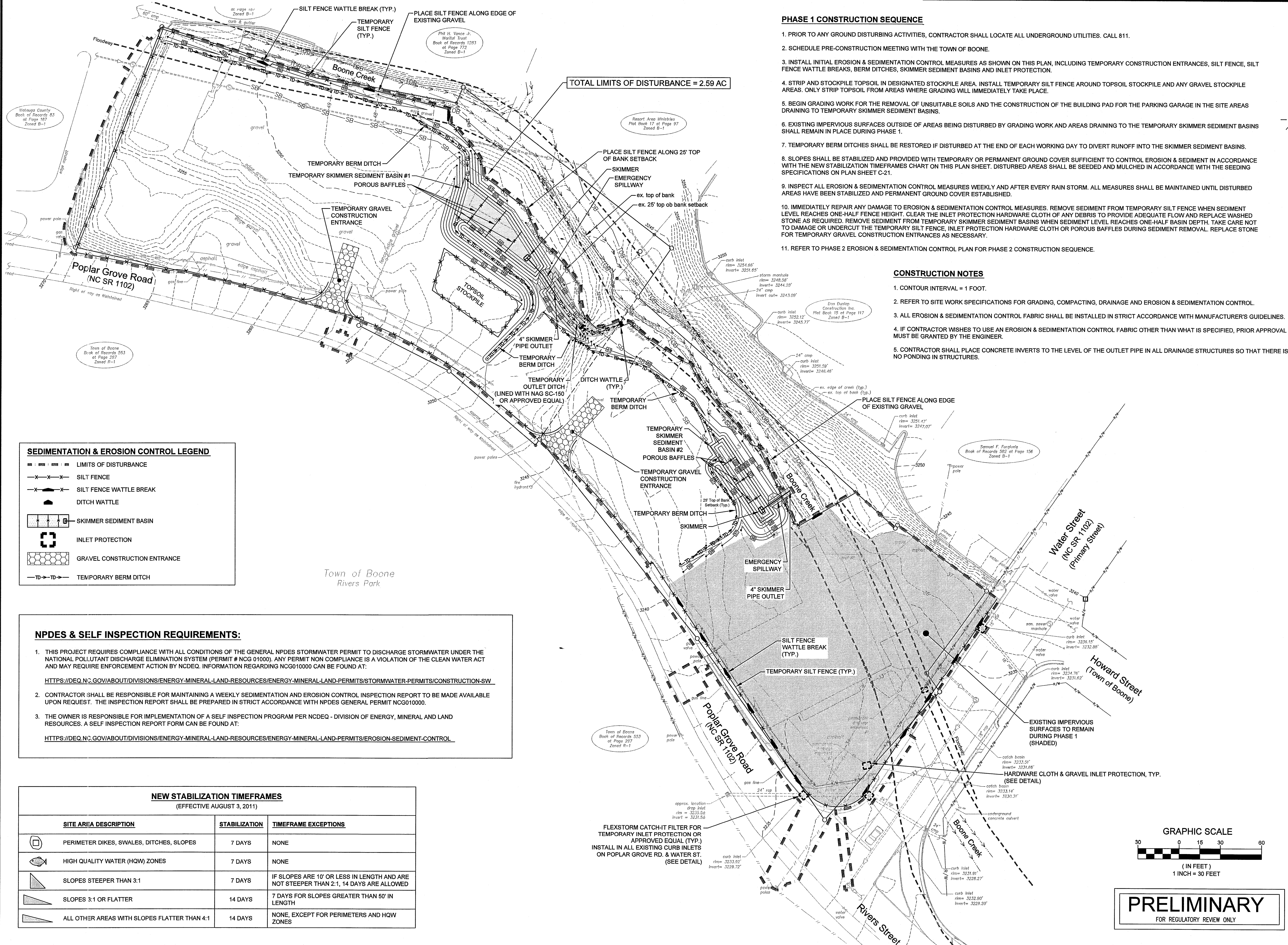
**RIVERS WALK
HARRODIAP, LLC**

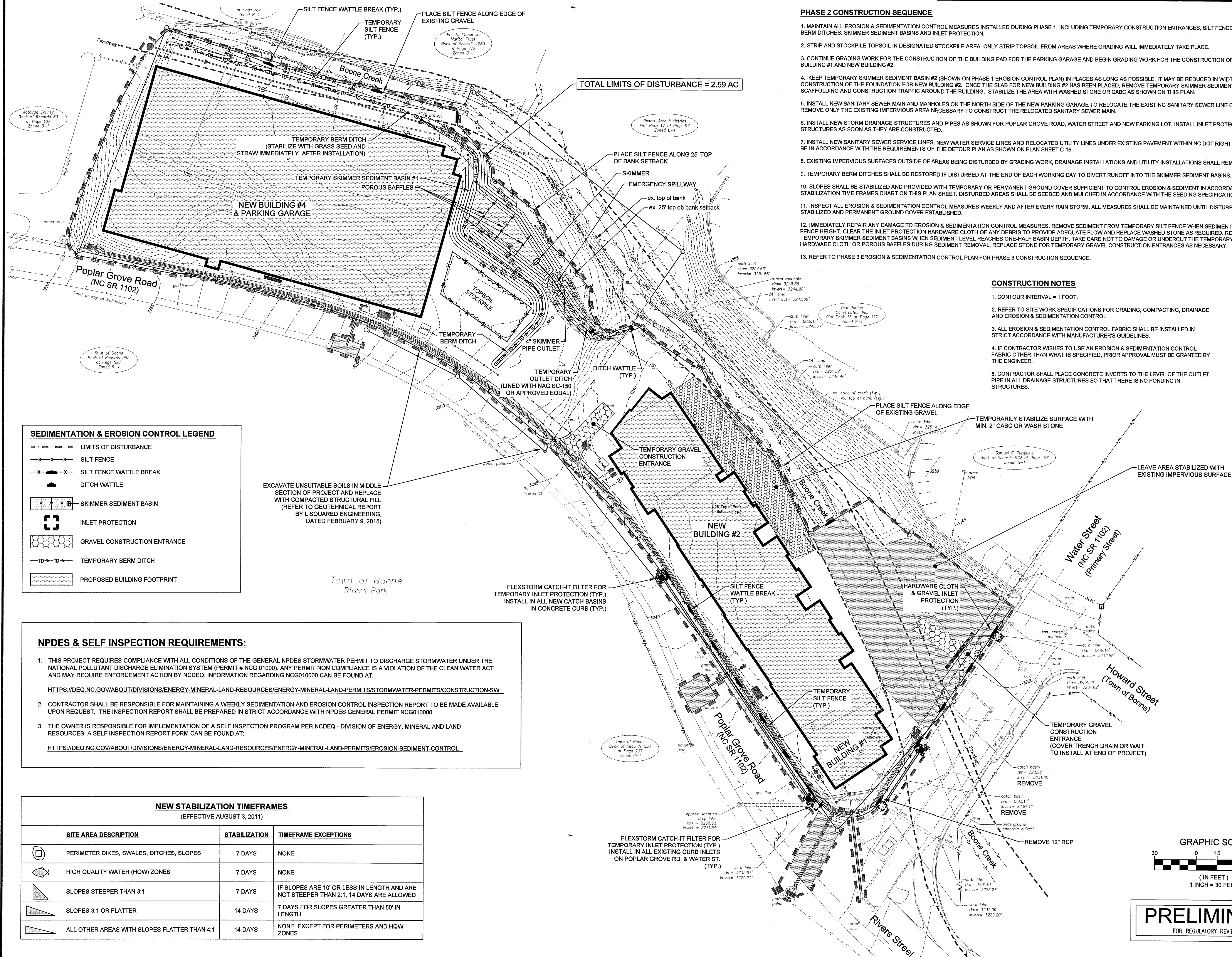
**WATER STREET & POPLAR GROVE ROAD
BOONE, NORTH CAROLINA**

**PRELIMINARY GRADING & DRAINAGE PLAN
SHEET 2 OF 2**

SCALE:	1"=20'
DATE:	7-21-16
DRWN. BY:	EGT
CHKD. BY:	AJC
PROJECT NUMBER	B13057.1
DRAWING NO.	C-8
SHEET NO.	8 OF 14







PHASE 2 CONSTRUCTION SEQUENCE

1. MAINTAIN ALL EROSION & SEDIMENTATION CONTROL MEASURES INSTALLED DURING PHASE 1, INCLUDING TEMPORARY CONSTRUCTION ENTRANCES, SILT FENCE, SILT FENCE WATTLE BREAKS, BERM DITCHES, SKIMMER SEDIMENT BASINS AND INLET PROTECTION.
2. STRIP AND STOCKPILE TOPSOIL IN DESIGNATED STOCKPILE AREA. ONLY STRIP TOPSOIL FROM AREAS WHERE GRADING WILL IMMEDIATELY TAKE PLACE.
3. CONTINUE GRADING WORK FOR THE CONSTRUCTION OF THE BUILDING PAD FOR THE PARKING GARAGE AND BEGIN GRADING WORK FOR THE CONSTRUCTION OF THE BUILDING PAD FOR NEW BUILDING #1 AND NEW BUILDING #2.
4. KEEP TEMPORARY SKIMMER SEDIMENT BASIN #2 (SHOWN ON PHASE 1 EROSION CONTROL PLAN) IN PLACES AS LONG AS POSSIBLE. IT MAY BE REDUCED IN WIDTH TO ACCOMMODATE CONSTRUCTION OF THE FOUNDATION FOR NEW BUILDING #2. ONCE THE SLAB FOR NEW BUILDING #2 HAS BEEN PLACED, REMOVE TEMPORARY SKIMMER SEDIMENT BASIN TO ALLOW FOR SCAFFOLDING AND CONSTRUCTION TRAFFIC AROUND THE BUILDING. STABILIZE THE AREA WITH WASHED STONE OR CABC AS SHOWN ON THIS PLAN.
5. INSTALL NEW SANITARY SEWER MAIN AND MANHOLES ON THE NORTH SIDE OF THE NEW PARKING GARAGE TO RELOCATE THE EXISTING SANITARY SEWER LINE OUTSIDE OF THE BUILDING PAD. REMOVE ONLY THE EXISTING IMPERVIOUS AREA NECESSARY TO CONSTRUCT THE RELOCATED SANITARY SEWER MAIN.
6. INSTALL NEW STORM DRAINAGE STRUCTURES AND PIPES AS SHOWN FOR POPLAR GROVE ROAD, WATER STREET AND NEW PARKING LOT. INSTALL INLET PROTECTION FOR NEW DRAINAGE STRUCTURES AS SOON AS THEY ARE CONSTRUCTED.
7. INSTALL NEW SANITARY SEWER SERVICE LINES, NEW WATER SERVICE LINES AND RELOCATED UTILITY LINES UNDER EXISTING PAVEMENT WITHIN NC DOT RIGHT OF WAY. INSTALLATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE DETOUR PLAN AS SHOWN ON PLAN SHEET C-15.
8. EXISTING IMPERVIOUS SURFACES OUTSIDE OF AREAS BEING DISTURBED BY GRADING WORK, DRAINAGE INSTALLATIONS AND UTILITY INSTALLATIONS SHALL REMAIN IN PLACE DURING PHASE 2.
9. TEMPORARY BERM DITCHES SHALL BE RESTORED IF DISTURBED AT THE END OF EACH WORKING DAY TO DIVERT RUNOFF INTO THE SKIMMER SEDIMENT BASINS.
10. SLOPES SHALL BE STABILIZED AND PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER SUFFICIENT TO CONTROL EROSION & SEDIMENT IN ACCORDANCE WITH THE NEW STABILIZATION TIME FRAMES CHART ON THIS PLAN SHEET. DISTURBED AREAS SHALL BE SEEDED AND MULCHED IN ACCORDANCE WITH THE SEEDING SPECIFICATIONS ON PLAN SHEET C-21.
11. INSPECT ALL EROSION & SEDIMENTATION CONTROL MEASURES WEEKLY AND AFTER EVERY RAIN STORM. ALL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS HAVE BEEN STABILIZED AND PERMANENT GROUND COVER ESTABLISHED.
12. IMMEDIATELY REPAIR ANY DAMAGE TO EROSION & SEDIMENTATION CONTROL MEASURES. REMOVE SEDIMENT FROM TEMPORARY SILT FENCE WHEN SEDIMENT LEVEL REACHES ONE-HALF FENCE HEIGHT. CLEAR THE INLET PROTECTION HARDWARE CLOTH OF ANY DEBRIS TO PROVIDE ADEQUATE FLOW AND REPLACE WASHED STONE AS REQUIRED. REMOVE SEDIMENT FROM TEMPORARY SKIMMER SEDIMENT BASINS WHEN SEDIMENT LEVEL REACHES ONE-HALF BASIN DEPTH. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE TEMPORARY SILT FENCE, INLET PROTECTION HARDWARE CLOTH OR POROUS BAFFLES DURING SEDIMENT REMOVAL. REPLACE STONE FOR TEMPORARY GRAVEL CONSTRUCTION ENTRANCES AS NECESSARY.
13. REFER TO PHASE 3 EROSION & SEDIMENTATION CONTROL PLAN FOR PHASE 3 CONSTRUCTION SEQUENCE.

CONSTRUCTION NOTES

1. CONTOUR INTERVAL = 1 FOOT.
2. REFER TO SITE WORK SPECIFICATIONS FOR GRADING, COMPACTING, DRAINAGE AND EROSION & SEDIMENTATION CONTROL.
3. ALL EROSION & SEDIMENTATION CONTROL FABRIC SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
4. IF CONTRACTOR WISHES TO USE AN EROSION & SEDIMENTATION CONTROL FABRIC OTHER THAN WHAT IS SPECIFIED, PRIOR APPROVAL MUST BE GRANTED BY THE ENGINEER.
5. CONTRACTOR SHALL PLACE CONCRETE INVERTS TO THE LEVEL OF THE OUTLET PIPE IN ALL DRAINAGE STRUCTURES SO THAT THERE IS NO PONDING IN STRUCTURES.

SEDIMENTATION & EROSION CONTROL LEGEND

- — — — — LIMITS OF DISTURBANCE
- x — x — x — SILT FENCE
- x — x — x — SILT FENCE WATTLE BREAK
- — — — — DITCH WATTLE
- — — — — SKIMMER SEDIMENT BASIN
- — — — — INLET PROTECTION
- — — — — GRAVEL CONSTRUCTION ENTRANCE
- — — — — TEMPORARY BERM DITCH
- — — — — PROPOSED BUILDING FOOTPRINT

EXCAVATE UNSUITABLE SOILS IN MIDDLE SECTION OF PROJECT AND REPLACE WITH COMPACTED STRUCTURAL FILL (REFER TO GEOTECHNICAL REPORT BY L SQUARED ENGINEERING, DATED FEBRUARY 9, 2015)

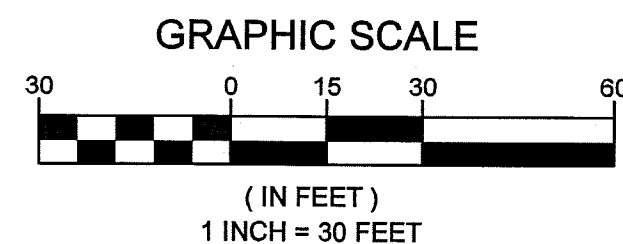
NPDES & SELF INSPECTION REQUIREMENTS:

1. THIS PROJECT REQUIRES COMPLIANCE WITH ALL CONDITIONS OF THE GENERAL NPDES STORMWATER PERMIT TO DISCHARGE STORMWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (PERMIT # NCG 01000). ANY PERMIT NON COMPLIANCE IS A VIOLATION OF THE CLEAN WATER ACT AND MAY REQUIRE ENFORCEMENT ACTION BY NCDEQ. INFORMATION REGARDING NCG010000 CAN BE FOUND AT:
<https://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permits/stormwater-permits/construction-sw>
2. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A WEEKLY SEDIMENTATION AND EROSION CONTROL INSPECTION REPORT TO BE MADE AVAILABLE UPON REQUEST. THE INSPECTION REPORT SHALL BE PREPARED IN STRICT ACCORDANCE WITH NPDES GENERAL PERMIT NCG010000.
3. THE OWNER IS RESPONSIBLE FOR IMPLEMENTATION OF A SELF INSPECTION PROGRAM PER NCDEQ - DIVISION OF ENERGY, MINERAL AND LAND RESOURCES. A SELF INSPECTION REPORT FORM CAN BE FOUND AT:
<https://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permits/erosion-sediment-control>

NEW STABILIZATION TIMEFRAMES

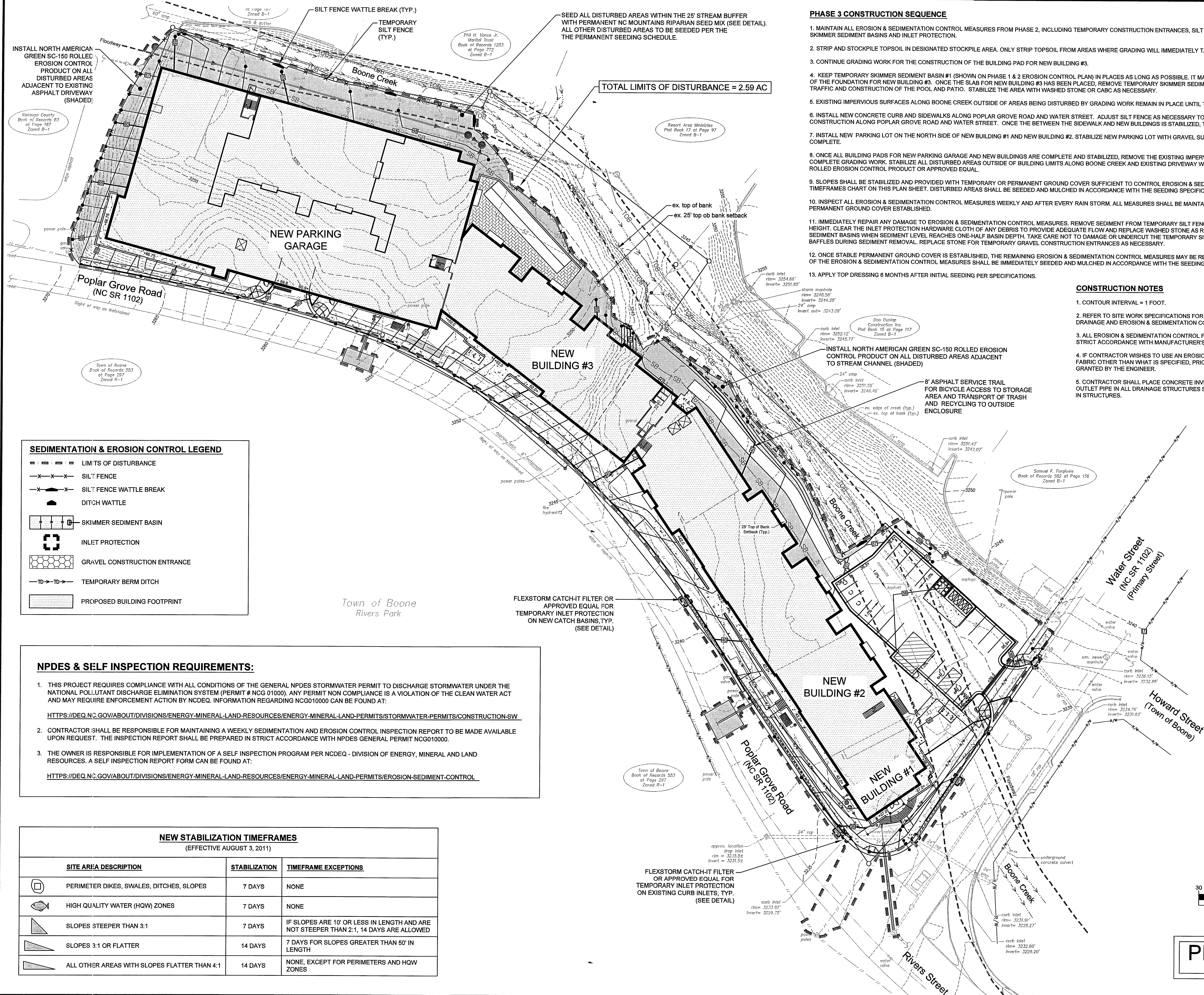
(EFFECTIVE AUGUST 3, 2011)

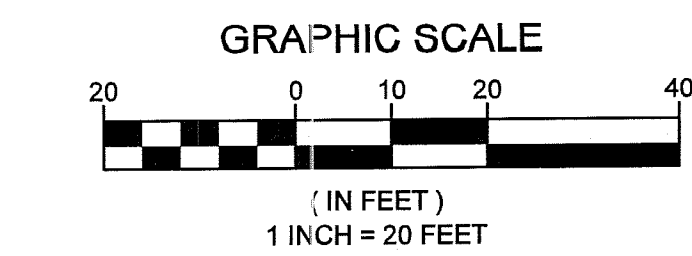
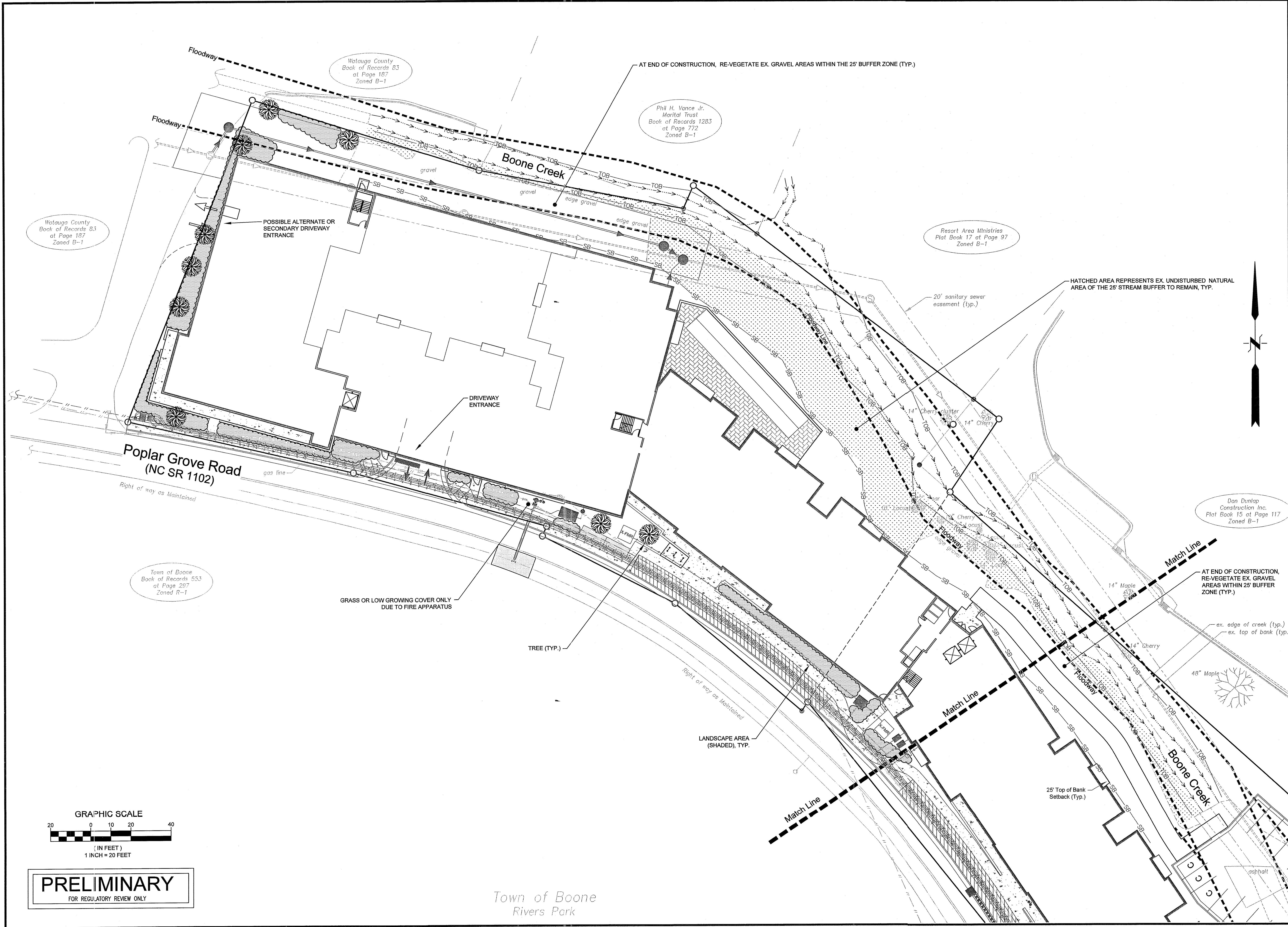
SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES, SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQP) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES



PRELIMINARY

FOR REGULATORY REVIEW ONLY





PRELIMINARY
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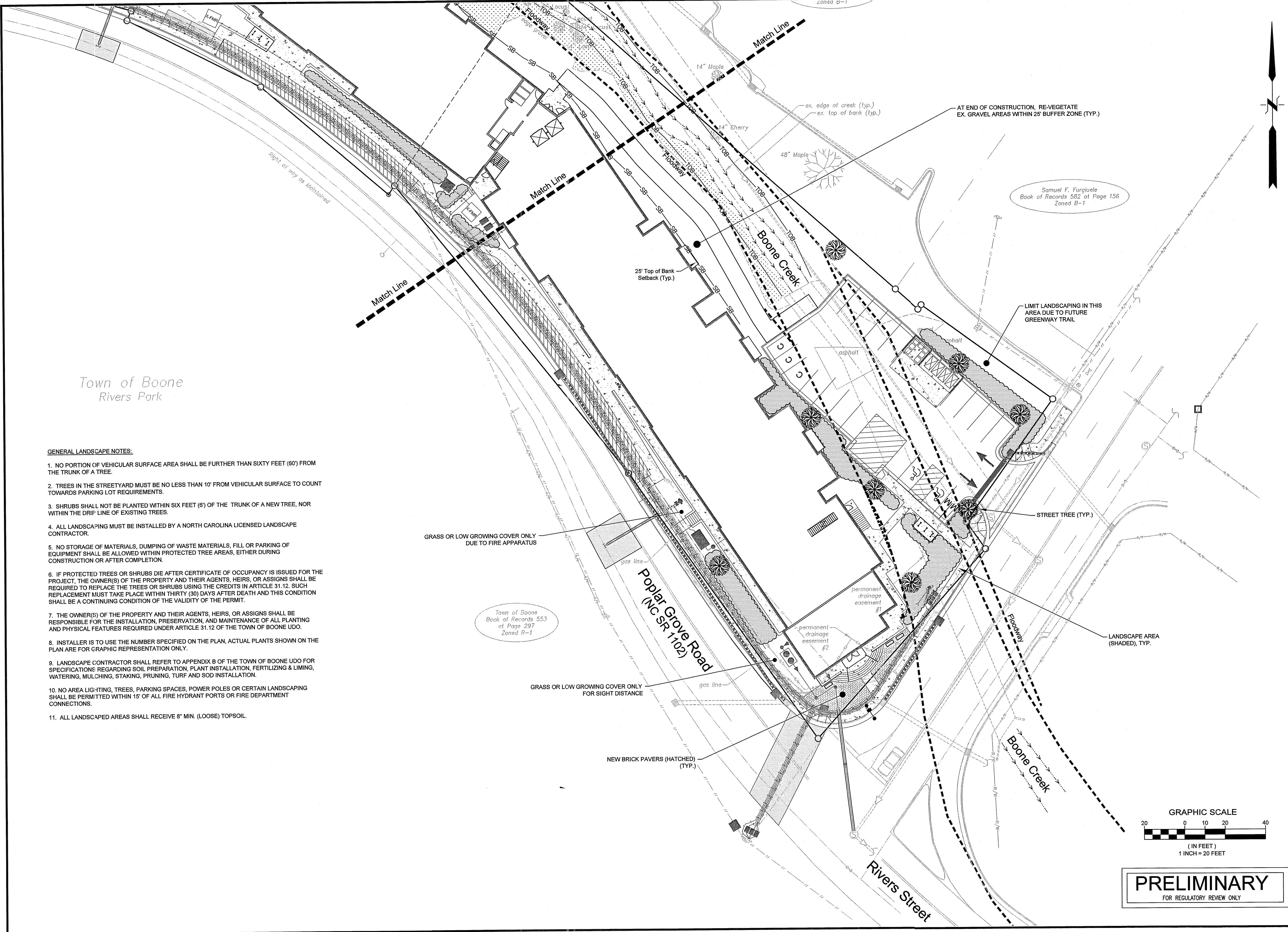
Town of Boone
Rivers Park

Engineering
Company, P.A.
P.O. BOX 349 BOONE, N.C. 28607
(828) 262-1767
LICENSE NUMBER: C-0261

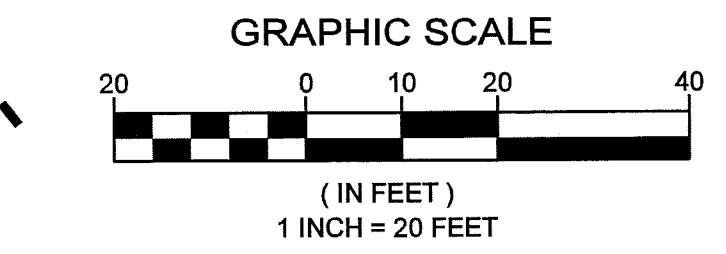
Municipal
Services
P.O. BOX 57 GARNER, N.C. 27529
(919) 772-5583

**RIVERS WALK
HARROD/AP, LLC
WATER STREET & POPLAR GROVE ROAD
BOONE, NORTH CAROLINA**

DESCRIPTION		DATE	BY	REV.
PRELIMINARY LANDSCAPE PLAN				
SHEET 1 OF 2				
SCALE: 1" = 20'				
DATE: 7-21-16				
DRWN. BY: EGT				
CHKD. BY: AJC				
PROJECT NUMBER				
B13057.1				
DRAWING NO.		SHEET NO.		
C-12		12 OF 14		

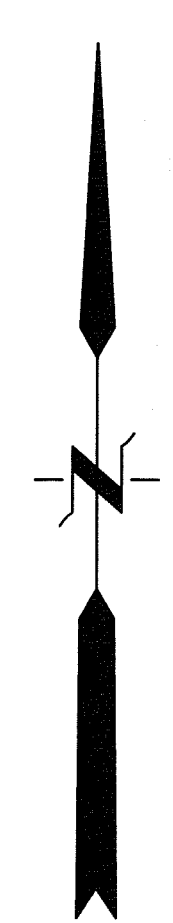


- GENERAL LANDSCAPE NOTES:**
1. NO PORTION OF VEHICULAR SURFACE AREA SHALL BE FURTHER THAN SIXTY FEET (60') FROM THE TRUNK OF A TREE.
 2. TREES IN THE STREETYARD MUST BE NO LESS THAN 10' FROM VEHICULAR SURFACE TO COUNT TOWARDS PARKING LOT REQUIREMENTS.
 3. SHRUBS SHALL NOT BE PLANTED WITHIN SIX FEET (6') OF THE TRUNK OF A NEW TREE, NOR WITHIN THE DRIP LINE OF EXISTING TREES.
 4. ALL LANDSCAPING MUST BE INSTALLED BY A NORTH CAROLINA LICENSED LANDSCAPE CONTRACTOR.
 5. NO STORAGE OF MATERIALS, DUMPING OF WASTE MATERIALS, FILL OR PARKING OF EQUIPMENT SHALL BE ALLOWED WITHIN PROTECTED TREE AREAS, EITHER DURING CONSTRUCTION OR AFTER COMPLETION.
 6. IF PROTECTED TREES OR SHRUBS DIE AFTER CERTIFICATE OF OCCUPANCY IS ISSUED FOR THE PROJECT, THE OWNER(S) OF THE PROPERTY AND THEIR AGENTS, HEIRS, OR ASSIGNS SHALL BE REQUIRED TO REPLACE THE TREES OR SHRUBS USING THE CREDITS IN ARTICLE 31.12. SUCH REPLACEMENT MUST TAKE PLACE WITHIN THIRTY (30) DAYS AFTER DEATH AND THIS CONDITION SHALL BE A CONTINUING CONDITION OF THE VALIDITY OF THE PERMIT.
 7. THE OWNER(S) OF THE PROPERTY AND THEIR AGENTS, HEIRS, OR ASSIGNS SHALL BE RESPONSIBLE FOR THE INSTALLATION, PRESERVATION, AND MAINTENANCE OF ALL PLANTING AND PHYSICAL FEATURES REQUIRED UNDER ARTICLE 31.12 OF THE TOWN OF BOONE UDO.
 8. INSTALLER IS TO USE THE NUMBER SPECIFIED ON THE PLAN, ACTUAL PLANTS SHOWN ON THE PLAN ARE FOR GRAPHIC REPRESENTATION ONLY.
 9. LANDSCAPE CONTRACTOR SHALL REFER TO APPENDIX B OF THE TOWN OF BOONE UDO FOR SPECIFICATIONS REGARDING SOIL PREPARATION, PLANT INSTALLATION, FERTILIZING & LIMING, WATERING, MULCHING, STAKING, PRUNING, TURF AND SOD INSTALLATION.
 10. NO AREA LIGHTING, TREES, PARKING SPACES, POWER POLES OR CERTAIN LANDSCAPING SHALL BE PERMITTED WITHIN 15' OF ALL FIRE HYDRANT PORTS OR FIRE DEPARTMENT CONNECTIONS.
 11. ALL LANDSCAPED AREAS SHALL RECEIVE 8" MIN. (LOOSE) TOPSOIL.



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NOTES:

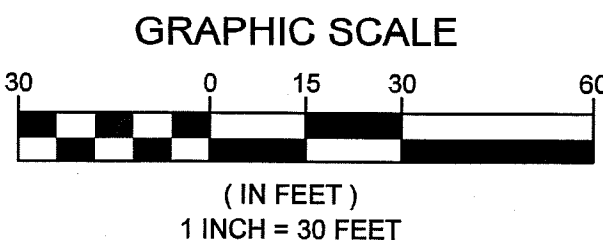
1. ALL UTILITIES SHALL BE LOCATED A MINIMUM OF 2' ABOVE BASE FLOOD ELEVATION.
2. HVAC EQUIPMENT SHALL BE LOCATED ON THE ROOF OF THE PROPOSED BUILDINGS.
3. THE FINISHED FLOOR OF THE PROPOSED BUILDINGS SHALL AT LEAST 2' ABOVE THE BASE FLOOD ELEVATION. INCIDENTAL AREAS NOT 2' ABOVE BASE FLOOD ELEVATIONS SHALL BE FLOOD PROOFED.
4. THE CONTRACTOR IS REQUIRED TO PROVIDE THE THE FINISHED FLOOR ELEVATIONS FOR THE PROPOSED BUILDING. PRE-CONSTRUCTION, AFTER FIRST FLOOR IS ESTABLISHED, AND FINAL CONSTRUCTION

PROJECT DESCRIPTION:

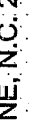
**REDEVELOPMENT OF THE SITE AND CONSTRUCTION OF
A NEW MULTI-BUILDING MIXED USE PROJECT.**

BASE FLOOD ELEVATION:

1. THE BASE FLOOD ELEVATIONS VARY FOR THE BUILDINGS. SEE PLAN. ELEVATION TAKEN FROM THE T NORTH CAROLINA FLOOD MAPPING PROGRAM.
2. ALL FINISHED FLOOR ARE PLANNED TO BE A MINIMUM OF 2 FEET ABOVE BASE FLOOD ELEVATION. ANY INCIDENTAL AREAS NOT 2 FEET ABOVE BASE FLOOD ELEVATION WILL BE FLOOD PROOFED. ALL REQUIREMENTS OF THE TOWN OF BOONE'S FLOOD DAMAGE PREVENTION ORDINANCE WILL BE MET.



PRELIMINARY
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Municipal Services

P.O. BOX 97 GARNER, N.C. 27529
(919) 772-5593



Engineering Company, P.A.

P.O. BOX 349 BOONE, N.C. 28607
(828) 282-1767

**RIVERS WALK
HARROD/AP, LLC
WATER STREET & POPLAR GROVE ROAD
BOONE, NORTH CAROLINA**

[illegible]

Town of Boone
Planning & Inspections

Date Received
July 18, 2016



1 WATER ST ELEVATION--EAST
1" = 10'-0"



2 POPLAR GROVE RD ELEVATION--SOUTH
1" = 10'-0"



3 POPLAR GROVE RD ELEVATION--CENTER
1" = 10'-0"

- MATERIAL LEGEND
- STONE A
 - STONE B
 - BRICK A
 - BRICK B
 - MONOLITHIC SURFACE
 - CLAPBOARD SIDING

PRELIMINARY NOT FOR CONSTRUCTION	
DATE	07/18/16
PROJECT #	14028
SHEET NUMBER	A-201
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RIVERS WALK
178 S. WATER ST., BOONE, NC 28607

APPALACHIAN
ARCHITURECTURE, PA
703 West King Street
Boone, NC 28607
ph 828.265.2405

DIA
Design Innovation
ARCHITECTS + INTERIORS + PLANNING
402 S. Gay Street, Suite 201, Knoxville, TN 37902
ph 865.637.8540 or 865.291.2221 fx 865.544.3840
www.dia-arch.com

Communication: Rivers Walk Building Elevations (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)



1 POPLAR GROVE RD ELEVATION--NORTH
1" = 10'-0"



2 WATAUGA CO. ELEVATION--WEST
1" = 10'-0"

- MATERIAL LEGEND
- STONE A
 - STONE B
 - BRICK A
 - BRICK B
 - MONOLITHIC SURFACE
 - CLAPBOARD SIDING

PRELIMINARY NOT FOR CONSTRUCTION

DATE	07/18/16
PROJECT #	14028
SHEET NUMBER	A-202

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1 BOONE CREEK ELEVATION--NORTH
1" = 10'-0"



2 BOONE CREEK ELEVATION--CENTER
1" = 10'-0"

- MATERIAL LEGEND
- STONE A
 - STONE B
 - BRICK A
 - BRICK B
 - MONOLITHIC SURFACE
 - CLAPBOARD SIDING

PRELIMINARY NOT
FOR CONSTRUCTION

DATE	07/18/16
PROJECT #	14028
SHEET NUMBER	A-203

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1 BOONE CREEK ELEVATION--SOUTH
1" = 10'-0"

Communication: Rivers Walk Building Elevations (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

- MATERIAL LEGEND
- STONE A
 - STONE B
 - BRICK A
 - BRICK B
 - MONOLITHIC SURFACE
 - CLAPBOARD SIDING

PRELIMINARY NOT
FOR CONSTRUCTION

DATE	07/18/16
PROJECT #	14028
SHEET NUMBER	A-204

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178 S. WATER ST., BOONE, NC 28607

DIA

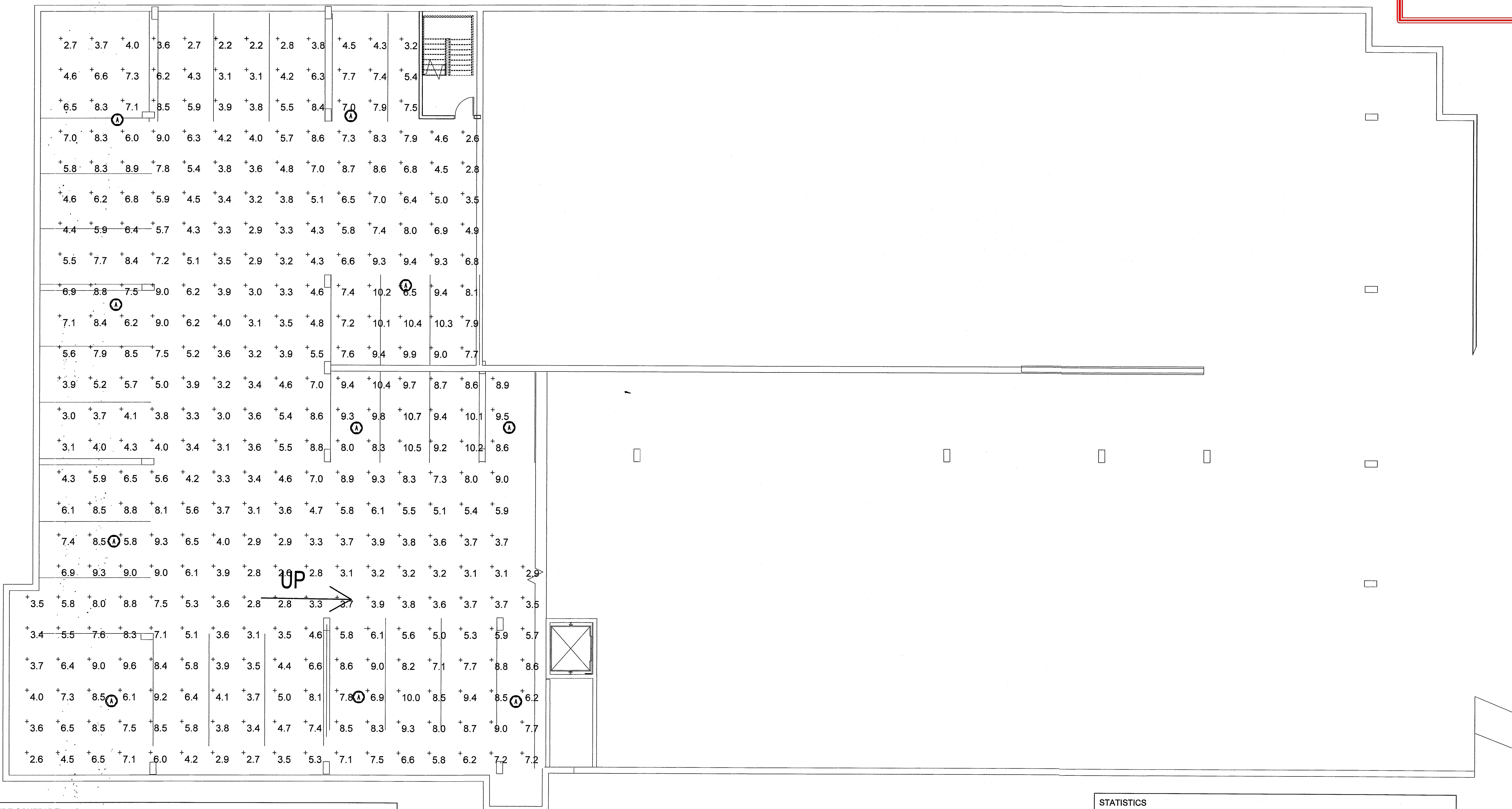
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www.dia-arch.com

Town of Boone
Planning & Inspections

Date Received
July 21, 2016



LUMINAIRE SCHEDULE										
Symbol	Label	Qty	Caatlog Number	Description	Lamp	Mounting Ht.	File	Lumens	LLF	Watts
○	A	74	SVPG-168L-1800-NW-5	PHILIPS SOFTVIEW PARKING GARAGE	LED	9'	SVPG-168L-1800-NW-5.les	Absolute	0.95	84.8

STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
1st flr	+	6.0 fc	10.7 fc	2.2 fc	4.9:1	2.7:1

PARKING GARAGE FIRST FLOOR PHOTOMETRIC PLAN
SCALE: 1/8"=1'-0"



PRELIMINARY NOT FOR CONSTRUCTION

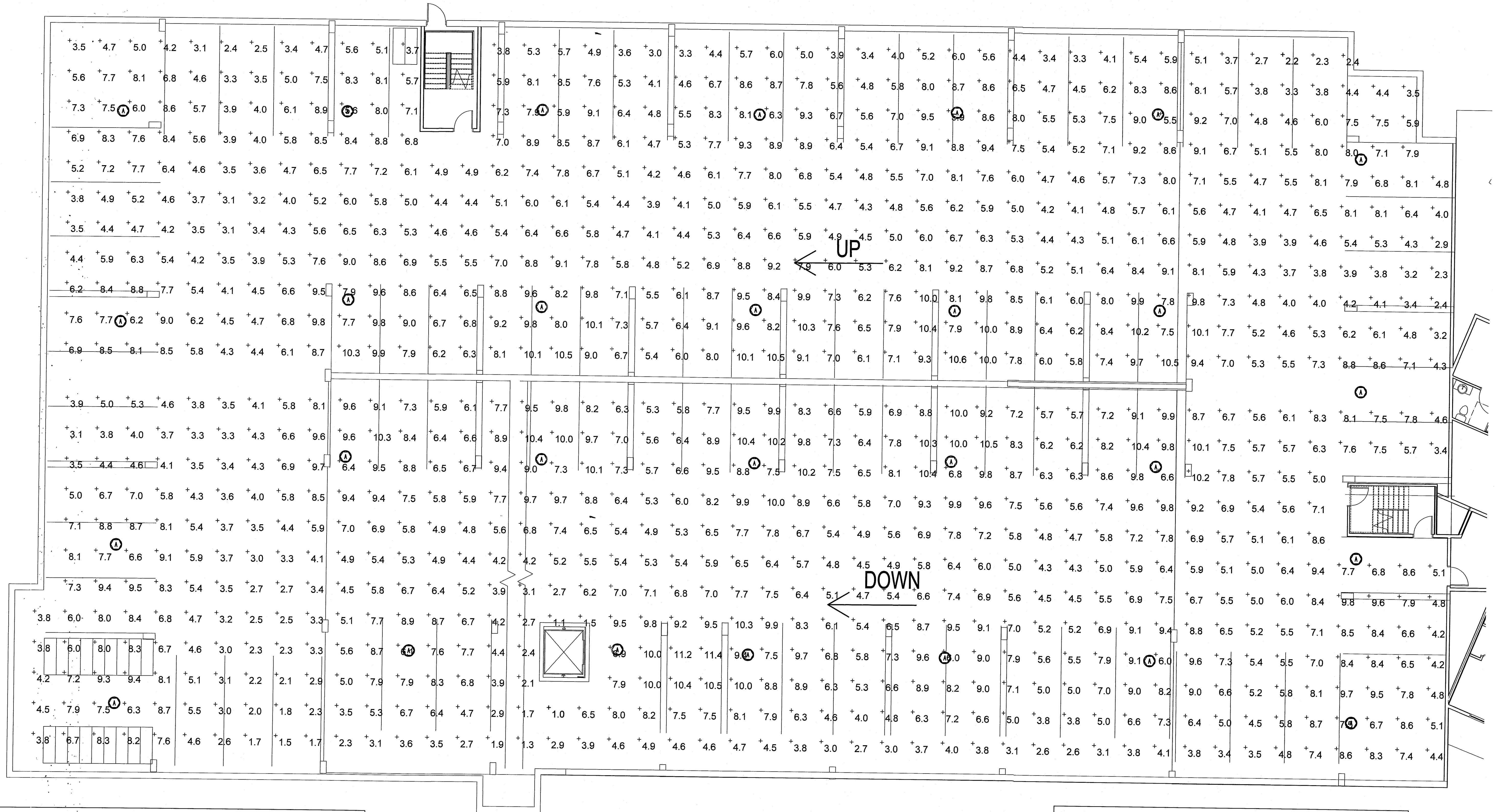
DATE	07/11/16
PROJECT #	14028
SHEET NUMBER	EP101

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ph 865.637.8540 or 865.291.2221 fx 865.544.3840
www.dia-arch.com



LUMINAIRE SCHEDULE										
Symbol	Label	Qty	Catalog Number	Description	Lamp	Mounting Ht.	File	Lumens	LLF	Watts
	A	74	SVPG-168L-1800-NW-S	PHILIPS SOFTVIEW PARKING GARAGE	LED	9'	SVPG-168L-1800-NW-S.ies	Absolute	0.95	84.8

STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
2nd flr DN	+	6.4 fc	11.4 fc	1.0 fc	11.4:1	6.4:1
2nd flr UP	+	6.3 fc	10.6 fc	2.2 fc	4.8:1	2.9:1

PARKING GARAGE SECOND FLOOR PHOTOMETRIC PLAN
SCALE: 1/8"=1'-0"

**FACILITY
SYSTEMS
CONSULTANTS, LLC**
713 South Central Street, Suite 101
Knoxville, Tennessee 37902
Phone: (865) 246-0144
Fax: (865) 246-1084

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FOR CONSTRUCTION**

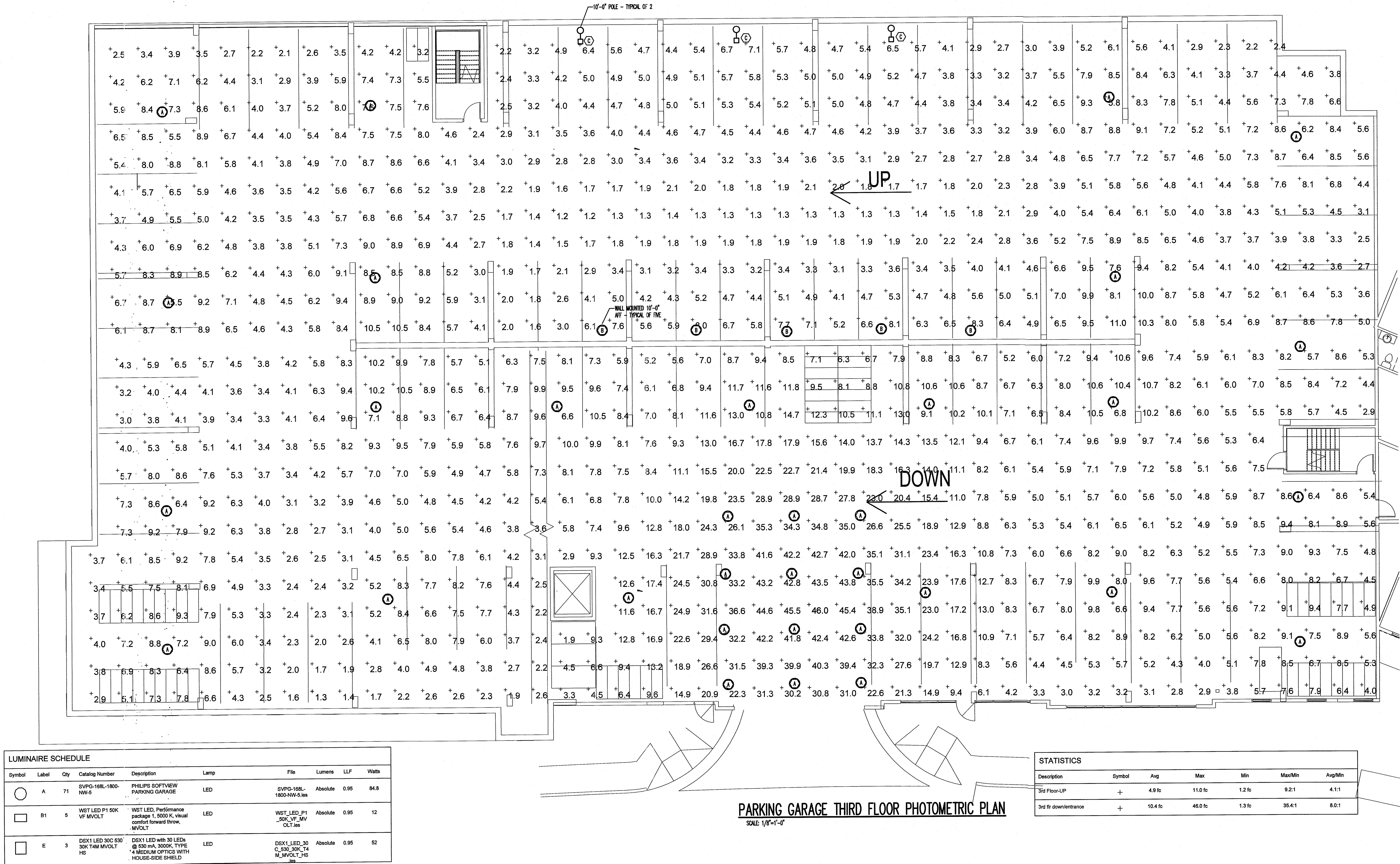
DATE	07/11/16
PROJECT #	14028
SHEET NUMBER	EP102

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ph 865.637.8540 or 865.291.2221 fx 865.544.3840
www.dia-arch.com



LUMINAIRE SCHEDULE							
Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens LLF Watts
	A	71	SVPG-168L-1800-NW-5	PHILIPS SOFTVIEW PARKING GARAGE	LED	SVPG-168L-1800-NW-5.ies	Absolute 0.95 84.8
	B1	5	WST LED P1 50K VF MVOLT	WST LED, Performance package 1, 5000 K, visual comfort forward throw, MVOLT	LED	WST_LED_P1_50K_VF_MV_OLT.ies	Absolute 0.95 12
	E	3	DSX1 LED 300C 530 30K T4M MVOLT HS	DSX1 LED with 30 LEDs @ 530 mA, 3000K, TYPE A MEDIUM OPTICS WITH HOUSE-SIDE SHIELD	LED	DSX1_LED_30C_530_30K_T4_M_MVOLT_HS.ies	Absolute 0.95 52

STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
3rd Floor-UP	+	4.9 fc	11.0 fc	1.2 fc	9.2:1	4.1:1
3rd flr down/entrance	+	10.4 fc	46.0 fc	1.3 fc	35.4:1	8.0:1

PRELIMINARY NOT FOR CONSTRUCTION

DATE

07/11/16

PROJECT #

14028

SHEET NUMBER

EP103

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178 S. WATER ST., BOONE, NC 28607

FACILITY SYSTEMS CONSULTANTS, LLC

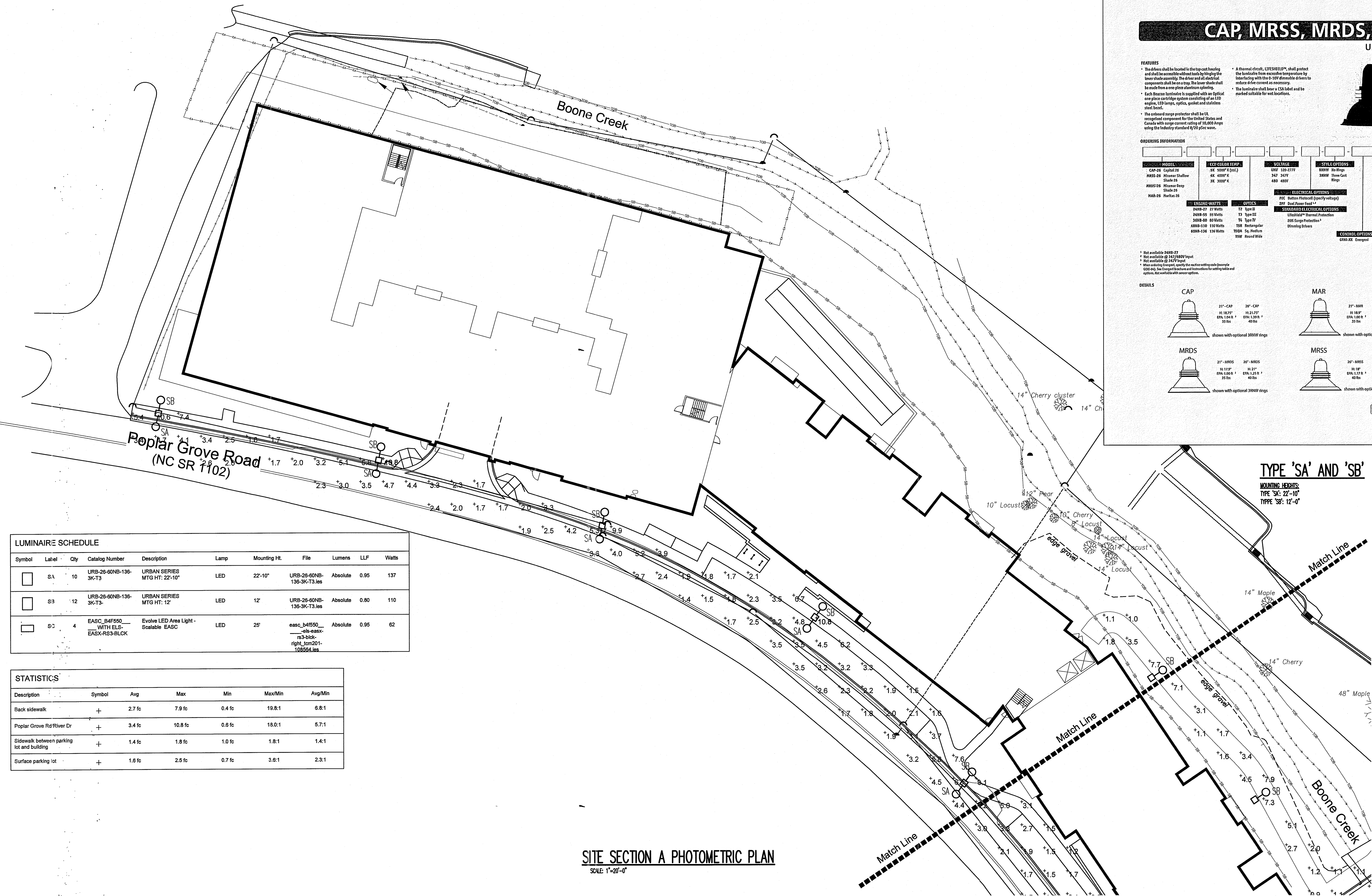
713 South Central Street, Suite 101
Knoxville, Tennessee 37902
Phone: (865) 244-0144
Fax: (865) 244-1054

DIA

Design Innovation

ARCHITECTS + INTERIORS + PLANNING

402 S. Gay Street, Suite 201, Knoxville, TN 37902
ph 865.637.8540 or 865.291.2221 fx 865.544.3840
www.dia-arch.com



CAP, MRSS, MRDS, MAR

Urban (Large)

FEATURES

- The luminaire shall be designed to be mounted to the rear of the building and shall be accessible without tools by hanging the luminaire from the rear of the building.
- The luminaire shall be made from a one-piece aluminum extrusion.
- Each luminaire shall be supplied with an optional one-piece cartridge system consisting of an LED engine, LED lamp, optics, gasket and stainless steel lens.
- The on-board surge protector shall be UL recognized component for the United States and Canada with surge current rating of 10,000 Amperes using the industry standard of 70 psec wave.

ORDERING INFORMATION

MODEL	RECURRING LAMP	VOLTAGE	STYLING	FINISH
CAP-26: Capital 26	4K 4000°K	120V 220-277V	300W 300W	300W 300W
MRSS-26: Mirrored Shallow	4K 4000°K	120V 220-277V	300W 300W	300W 300W
MRDS-26: Mirrored Deep	4K 4000°K	120V 220-277V	300W 300W	300W 300W
MAR-26: Marlin 26	4K 4000°K	120V 220-277V	300W 300W	300W 300W

DETAILS

MODEL	RECURRING LAMP	VOLTAGE	STYLING	FINISH
CAP-26: Capital 26	4K 4000°K	120V 220-277V	300W 300W	300W 300W
MRSS-26: Mirrored Shallow	4K 4000°K	120V 220-277V	300W 300W	300W 300W
MRDS-26: Mirrored Deep	4K 4000°K	120V 220-277V	300W 300W	300W 300W
MAR-26: Marlin 26	4K 4000°K	120V 220-277V	300W 300W	300W 300W

LUMINAIRE SCHEDULE									
Symbol	Label	Qty	Catalog Number	Description	Lamp	Mounting Ht.	File	Lumens	LLF
	SA	10	URB-26-60NB-136-3K-T3	URBAN SERIES MTG HT: 22'-10"	LED	22'-10"	URB-26-60NB-136-3K-T3.les	Absolute	0.95
	SB	12	URB-26-60NB-136-3K-T3	URBAN SERIES MTG HT: 12'	LED	12'	URB-26-60NB-136-3K-T3.les	Absolute	0.80
	SC	4	EASC_B4F550 WITH ELS-EASC-RS-BLCK	Evolve LED Area Light - Scalable EASC	LED	25'	easc_b4f550_els-easc-rs3-blck-right_lum201-108564.les	Absolute	0.95

STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Back sidewalk	+	2.7 fc	7.9 fc	0.4 fc	19.8:1	6.8:1
Poplar Grove Rd/River Dr	+	3.4 fc	10.8 fc	0.6 fc	18.0:1	5.7:1
Sidewalk between parking lot and building	+	1.4 fc	1.8 fc	1.0 fc	1.8:1	1.4:1
Surface parking lot	+	1.6 fc	2.5 fc	0.7 fc	3.6:1	2.3:1

SITE SECTION A PHOTOMETRIC PLAN
SCALE: 1"=20'-0"

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DATE	07/11/16
PROJECT #	14028
SHEET NUMBER	SP100

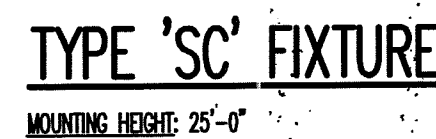
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STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Back sidewalk	+	2.7 fc	7.9 fc	0.4 fc	19.8:1	6.8:1
Poplar Grove Rd/River Dr	+	3.4 fc	10.8 fc	0.6 fc	18.0:1	5.7:1
Sidewalk between parking lot and building	+	1.4 fc	1.8 fc	1.0 fc	1.8:1	1.4:1
Surface parking lot	+	1.6 fc	2.5 fc	0.7 fc	3.6:1	2.3:1

LUMINAIRE SCHEDULE										
Symbol	Label	Qty	Catalog Number	Description	Lamp	Mounting Ht.	File	Lumens	LLF	Watts
	SA	10	URB-26-60NB-136-3K-T3	URBAN SERIES MTG HT: 22'-10"	LED	22'-10"	URB-26-60NB-136-3K-T3.iss	Absolute	0.95	137
	SB	12	URB-26-60NB-136-3K-T3-	URBAN SERIES MTG HT: 12'	LED	12'	URB-26-60NB-136-3K-T3.iss	Absolute	0.80	110
	SC	4	EASC_B4F550_____ WITH ELS-_____ EASX-RS3-BLCK	Evolve LED Area Light - Scalable EASC	LED	25'	easc_b4f550_____ _____ els-easx- rs3-blick- right_tcm201- 100564.iss	Absolute	0.95	62



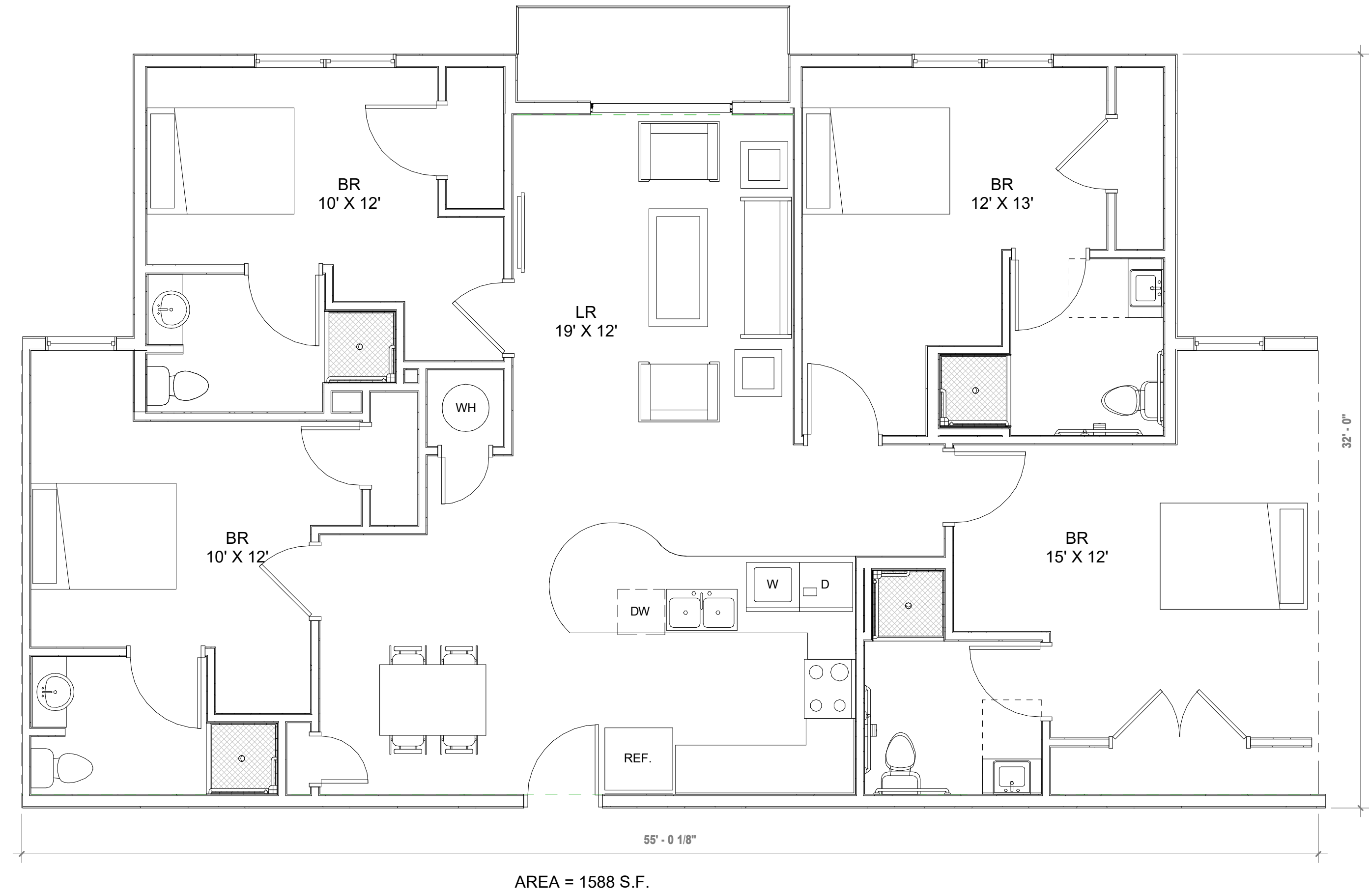
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SHEET NUMBER	SP101

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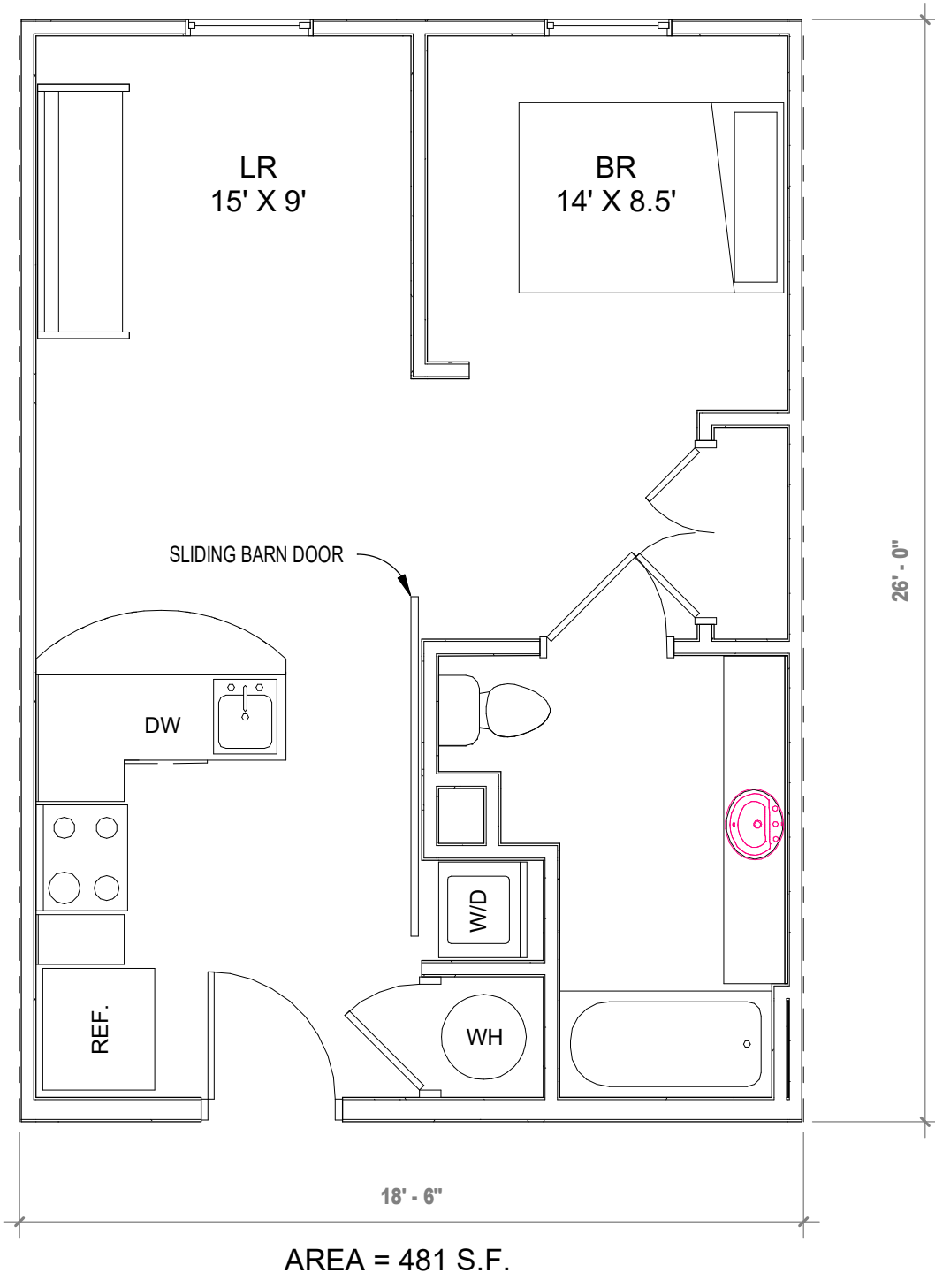
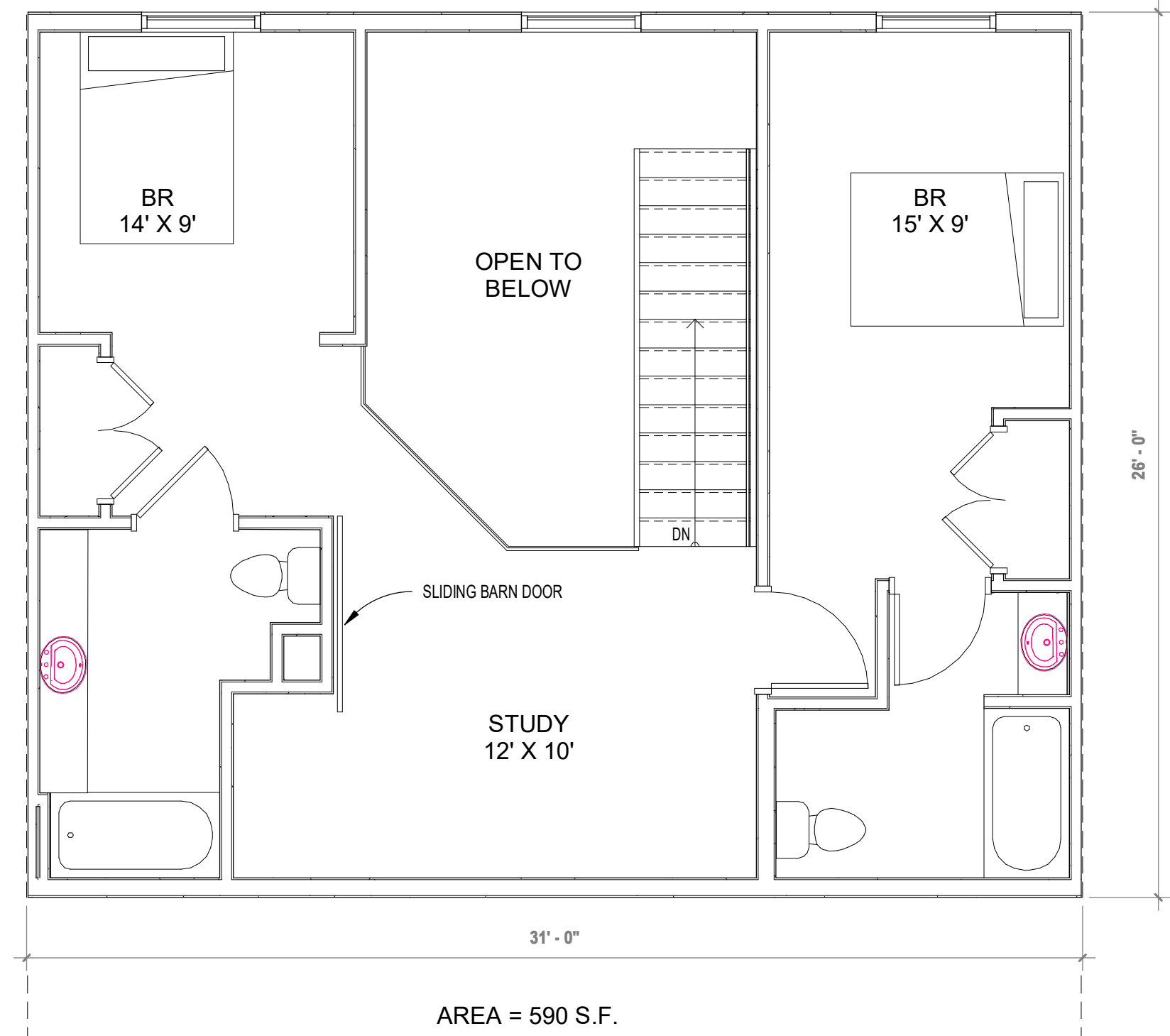
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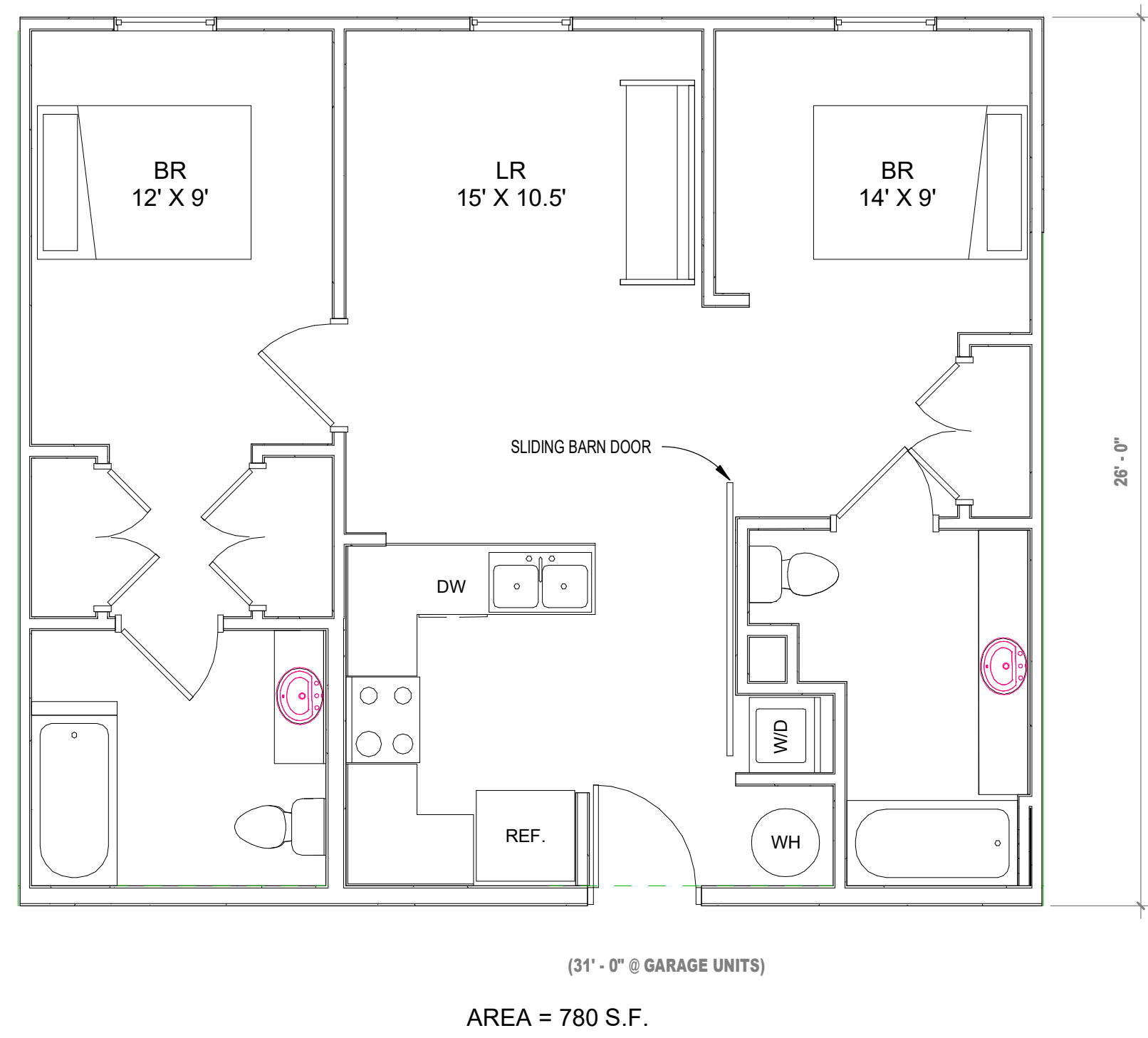
Date Received
July 18, 2016



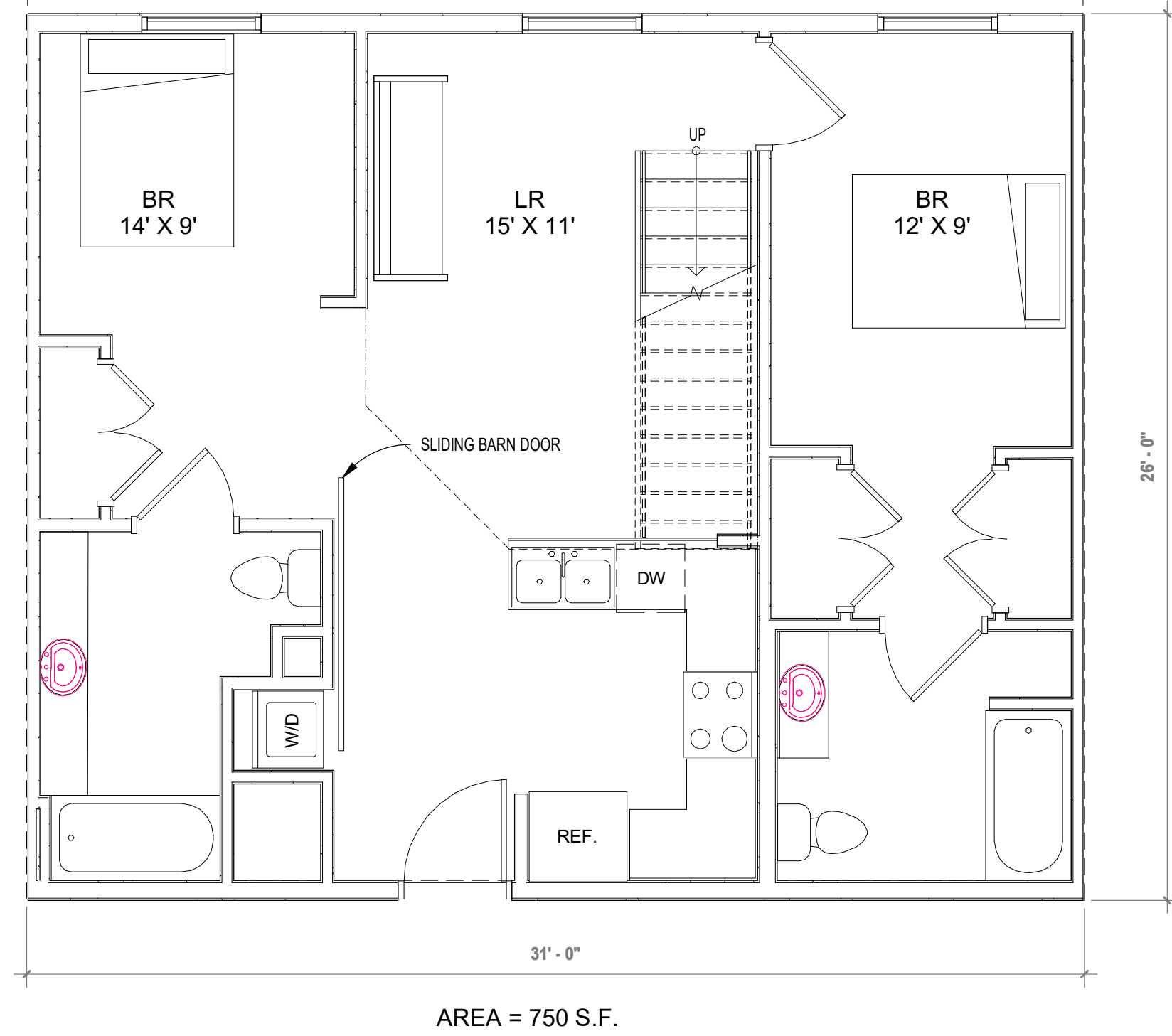
1 4 BED UNIT
1/4" = 1'-0"



2 1 BED UNIT
1/4" = 1'-0"



3 2 BED UNIT
1/4" = 1'-0"



4 4 BED TOWNHOUSE, 2 FLOORS
1/4" = 1'-0"

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1

LEVEL 3242_FLOOR 1
1" = 30'-0"

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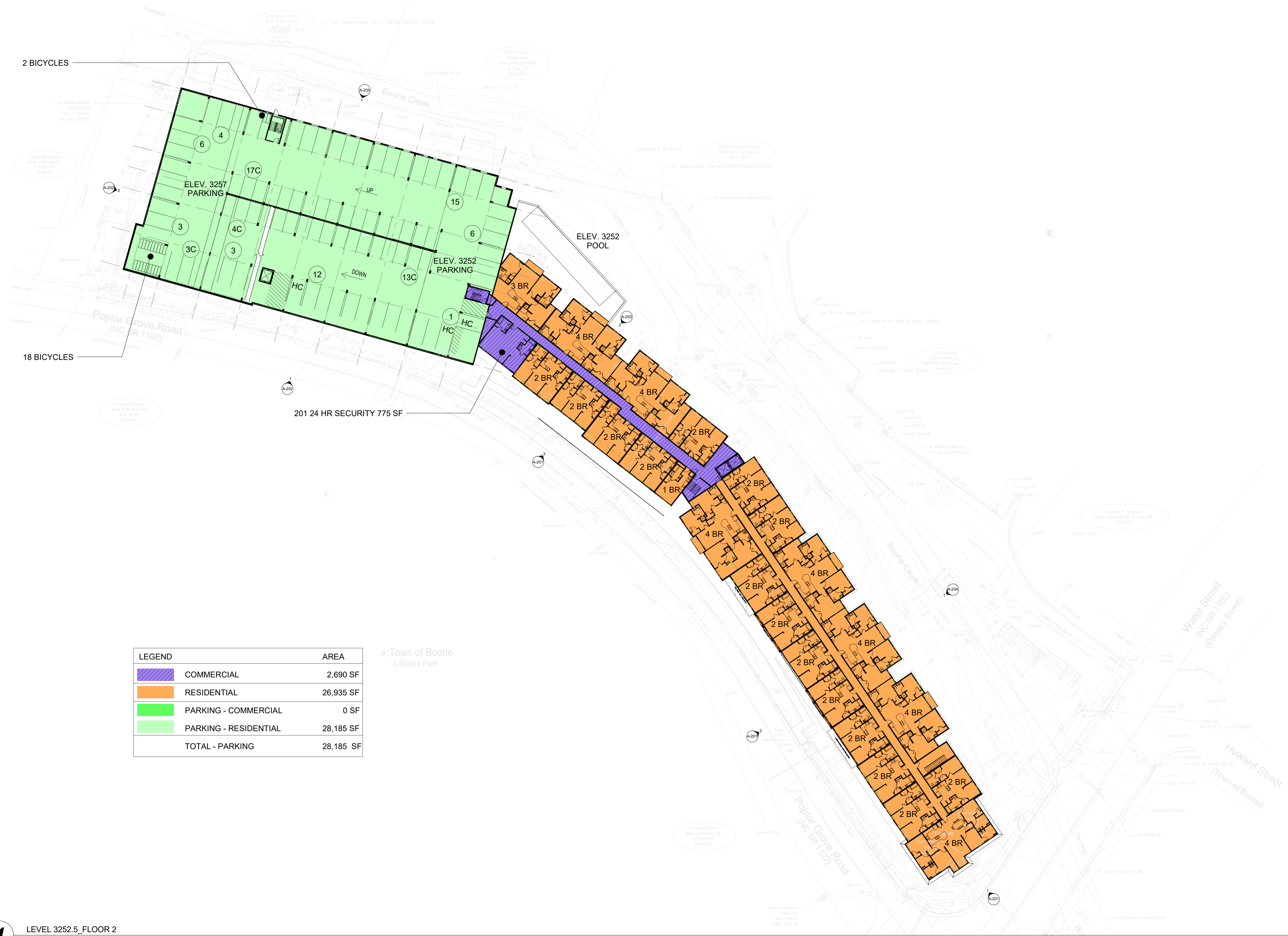
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1 LEVEL 3252.5_FLOOR 2
1" = 30'-0"

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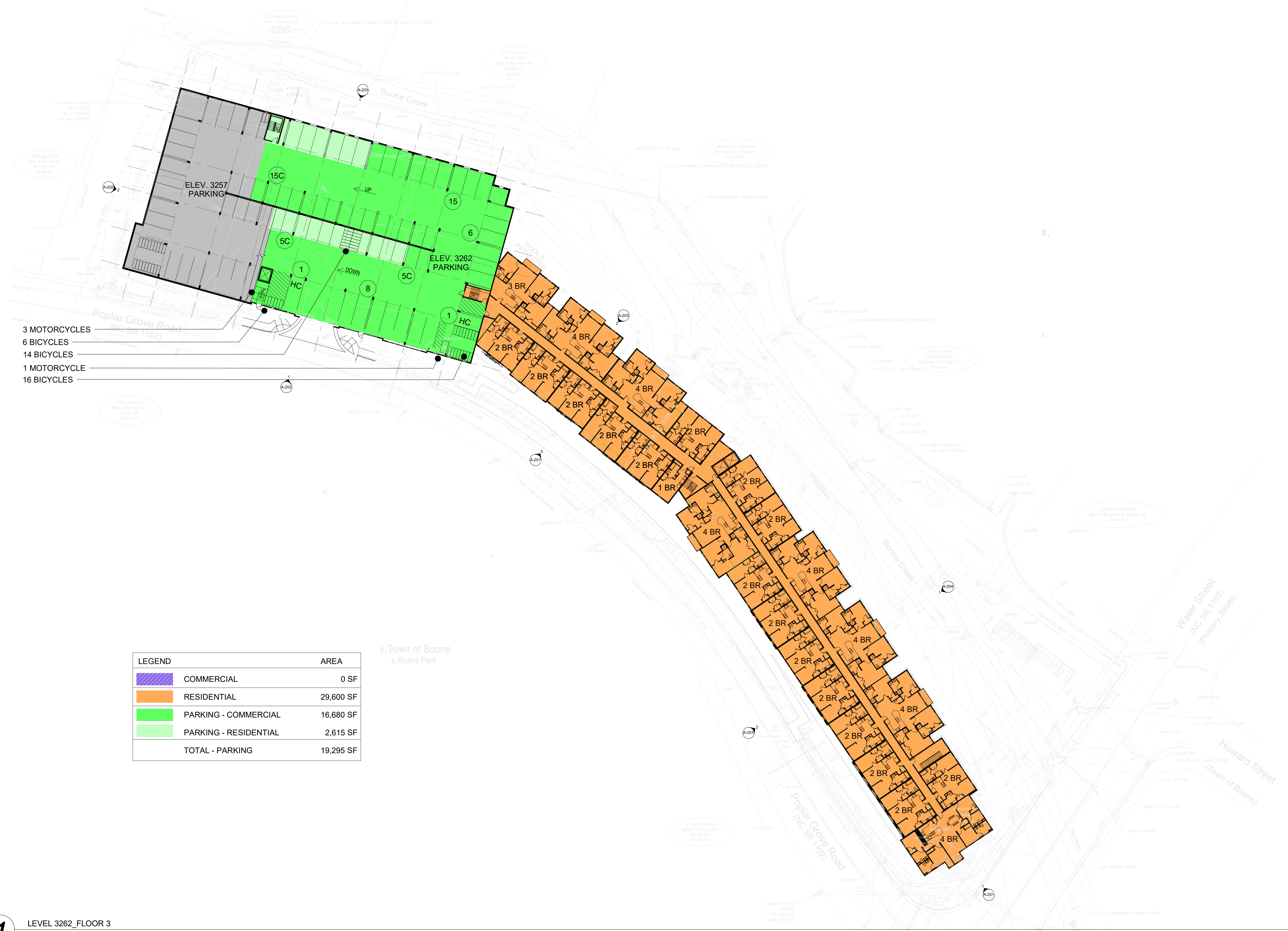
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1

LEVEL 3262_FLOOR 3
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1 LEVEL 3271.5_FLOOR 4
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1

LEVEL 3281_FLOOR 5
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TRANSPORTATION IMPACT ANALYSIS

Prepared for Harrod/ AP, LLC

Project Number: 14-076

Original: 01/16/2015

Revised: 02/26/2016

River Walk Development

Boone, NC

Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)





Transportation Impact Analysis

River Walk Development Boone, NC

Prepared for Harrod/ AP, LLC

Original: January 16, 2015

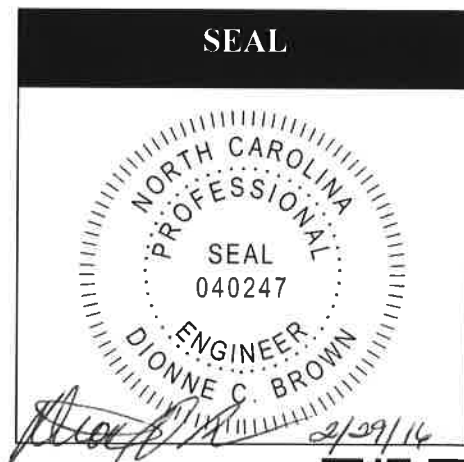
Revised: February 26, 2016

Analysis by: Mary Morgan, P.E.
Dionne C. Brown, P.E.

Drafting/Graphics by: Dionne C. Brown, P.E.

Reviewed by: Mary Morgan, P.E.

Sealed by: Dionne C. Brown, P.E.



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River Walk Development – Revised Transportation Impact Analysis
Prepared for Harrod/ AP, LLC
Original: January 16, 2015
Revised: February 26, 2016

Executive Summary

The proposed River Walk Development is located within the Central Business District (CBD) along the northwest quadrant of Rivers Street/ Poplar Grove Road and Water Street in Boone, North Carolina. As currently planned, the site will consist of 380 bedrooms of a mix of young professional and student apartment housing and 10,266 square feet of retail area..

The site plan shows three (3) driveways to the site: two which will serve as the access to the proposed parking deck on site, and one driveway on Water Street that will serve as the access to a 17- vehicular space parking lot (2 for shared car service), 2 motorcycle spaces and 14 bicycle spaces. The majority of tenants at the residential building will park in the parking deck. Hence, this traffic analysis considers the parking deck access on Poplar Grove Road to be the primary access to the site.

Since the submittal of the River Walk Development TIA in January 2015, there have been changes to the site plan that needed to be reflected in a revised TIA. Therefore, DAVENPORT was retained to determine the potential traffic impacts of this development and to identify transportation improvements that may be required to accommodate the impacts of both background traffic and new development traffic. The following intersections were included in the study:

- West King Street at Water Street
- Water Street at Howard Street
- Water Street at Rivers Street/ Poplar Grove Road
- Water Street at Proposed Site Access 1
- Poplar Grove Road at Proposed Site Access 2
- Poplar Grove Road at Proposed Site Access 3

The above-mentioned intersections were analyzed for the following scenarios:

- 2014 Existing Conditions
- 2016 Future No Build Conditions
- 2016 Future Build-Out Conditions
- 2016 Future Build-Out with Improvements (as necessary)

The build-out analysis year for this project was assumed to be 2016. The AM (7-9 am) and PM (4-6 pm) peaks were studied.

The Town of Boone and the North Carolina Department of Transportation (NCDOT) were contacted to obtain background information and to ascertain the elements to be covered in this Transportation Impact Analysis (TIA). Information regarding the property was provided by Harrod/ AP, LLC.



Level of Service Results

The results of the study are discussed by intersection below:

Water Street at West King Street

This signalized intersection of Water Street at West King Street currently operates at LOS A in the AM peak and LOS C in the PM peak. The simulation show sporadic queuing on the northbound left approach of this intersection during the PM peak, which is mainly due to heavy left turns. In 2016 future no build conditions, the analysis indicates LOS A in the AM peak and LOS C in the PM peak. With the addition of site traffic, this intersection is projected to operate at LOS B in the AM peak and LOS C in the PM peak. It is recommended to optimize signal timing to accommodate future traffic growth.

Water Street at Howard Street

This unsignalized intersection currently operates at LOS A in the AM peak and LOS B in the PM peak. In 2016 future no build conditions, LOS A is expected in the AM peak and LOS B in the PM peak. Additionally, sporadic queues were observed on the westbound approach of Howard Street, particularly during the PM peak. This is mainly due to lack of sufficient gaps from the minor street, which is due to heavy traffic volumes and queues on Water Street. This is a background condition which exists regardless of the proposed development. With the addition of proposed site traffic, LOS A is expected in the AM peak and LOS B in the PM peak. No improvements are recommended.

Water Street at Rivers Street/ Poplar Grove Road

This unsignalized intersection currently operates at LOS B in the AM peak and LOS C in the PM peak. In 2016 future no build conditions, LOS B is expected in the AM peak and LOS C in the PM peak. With the addition of site traffic, LOS B is expected in the AM peak and LOS D in the PM peak. No improvements are recommended.

Water Street at Proposed Site Access 1

This unsignalized intersection is expected to operate at LOS B or better during future build scenarios. Though this intersection is in close proximity to Howard Street and existing driveway to the north, this access is expected to serve a 17-space parking lot with minimal trips. Close driveway spacing such as this is typical for a downtown central business district and dense urban settings. No improvements are recommended.

Poplar Grove Road at Proposed Site Access 2

This unsignalized intersection is expected to operate at LOS B during future build scenarios. No improvements are recommended.

Poplar Grove Road at Proposed Site Access 3

This unsignalized intersection is expected to operate at LOS B during future build scenarios. No improvements are recommended.



The recommended improvements at the study intersections are illustrated in Figure 9 in the report.

Level of Service Summary

Table A presents the summary of the level of service analysis.

Table A - Level of Service Summary				
AM Peak	2014 Existing	2016 Future No Build	2016 Build	2016 Build with Improvements
Water Street at King Street	A (9.4)	A (9.6)	B (10.3)	B (10.3)
Water Street at Howard Street	A (9.4) WB Approach	A (9.5) WB Approach	A (9.7) WB Approach	
Water Street at Rivers Street/ Poplar Grove Road	B (11.3) SB Approach	B (11.5) SB Approach	B (12) SB Approach	
Water Street at Proposed Site Access 1			A (9.3) EB Approach	
Poplar Grove Road at Proposed Site Access 2			B (11.9) SB Approach	
Poplar Grove Road at Proposed Site Access 3			B (12.2) SB Approach	
PM Peak	2014 Existing	2016 Future No Build	2016 Build	2016 Build with Improvements
Water Street at King Street	C (21.6)	C (22.5)	C (23.5)	C (22.2)
Water Street at Howard Street	B (10.8) WB Approach	B (11) WB Approach	B (11.4) WB Approach	
Water Street at Rivers Street/ Poplar Grove Road	C (19.8) SB Approach	C (21.8) SB Approach	D (29.5) SB Approach	
Water Street at Proposed Site Access 1			B (12.7) EB Approach	
Poplar Grove Road at Proposed Site Access 2			B (13.1) SB Approach	
Poplar Grove Road at Proposed Site Access 3			B (13.6) SB Approach	
LOS (delay in seconds)				
Note for unsignalized conditions, LOS and delay indicates only minor street approach with longest delay				



Pedestrian and Bicycle Accommodations

As part of the development of this site, the developer plans to construct the following pedestrian and bicycle accommodations:

- Sidewalks will be constructed along the street frontage of the property: the northeastern side of Poplar Grove Road and along Water Street.
- A sidewalk will be provided adjacent to the commercial/ retail store entrances on site.
- The developer build the greenway trail from the surface lot to the parking deck as depicted on the site plan. This will provide safe and convenient access to the parking deck bike storage areas.
- In order to accommodate bicycling activities to and from the site, there will be 50 covered bicycle spaces inside of the garage and 14 bicycles spaces in the surface lot.

Transit Accommodations

AppalCart provides transit service in the Town of Boone. *AppalCart* currently runs routes (Gold, Pop 105 and Express routes) which provides service in the proximity of the site. There is an existing *AppalCart* stop on King Street and Water Street, which is within 400 feet of the proposed development. Residents in this proposed development will be able to use this transit service to reach their destinations. In addition, a loading lane has been incorporated into the site plan along Poplar Grove Road for buses.

Summary and Conclusion

The proposed River Walk Development is located on the border of Appalachian State University (ASU) and the Central Business District (CBD) along the northwest quadrant of Rivers Street/ Poplar Grove Road and Water Street in Boone, North Carolina. As currently planned, the site will consist of 380 bedrooms of a mix of young professional and student apartment housing and 10,266 square feet of retail area.

The site plan shows three (3) driveways to the site: two which will serve as the access to the proposed parking deck on site, and one driveway on Water Street that will serve as the access to a 17-space parking lot. The majority of tenants at the residential building will park in the parking deck. Hence, this traffic analysis considers the parking deck access on Poplar Grove Road to be the primary access to the site.

The trip generation indicates that based on the current site plan the proposed project is projected to generate a net total of 1,271 trips per day. This is based on 380-bedrooms of a mix of young professional and student apartment housing and 10,266 square feet of retail area.

The analysis indicates that all study intersections will operate at LOS D or better in the future build conditions.



Table B summarizes the recommended improvements for the 2016 future build scenario. Improvements are shown in Figure 9 in the report.

In conclusion, this analysis has been conducted based on NCDOT and Town of Boone guidelines and has determined the potential traffic impacts of this development. With the build-out of the site, the analysis indicates there will be adequate capacity to accommodate future traffic. Note that the site accesses should to be designed according to NCDOT standards as appropriate.

Table B - Recommended Improvement Summary	
Water Street at West King Street	Optimize signal timing
Water Street at Howard Street	No improvements recommended
Water Street at Rivers Street/ Poplar Grove Road	No improvements recommended
Water Street at Proposed Site Access 1	No improvements recommended
Poplar Grove Road at Proposed Site Access 2	No improvements recommended
Poplar Grove Road at Proposed Site Access 3	No improvements recommended
Water Street at Existing Driveway	No improvements recommended
Pedestrian and Bicycle Accommodations	• Sidewalks will be constructed along the street frontage of the property: the northeastern side of Poplar Grove Road and along Water Street. • A sidewalk will be provided adjacent to the commercial/retail store entrances on site. • The developer build the greenway trail from the surface lot to the parking deck as depicted on the site plan. This will provide safe and convenient access to the parking deck bike storage areas. • In order to accommodate bicycling activities to and from the site, there will be 50 covered bicycle spaces inside of the garage and 14 bicycle spaces in the surface lot.
Transit Accommodations	• There is an existing <i>AppalCart</i> stop on Water Street at West King Street which is within 400 feet of the proposed development. Residents in this proposed development will be able to use this transit service to reach their destinations.



River Walk Development – Revised Transportation Impact Analysis
Prepared for Harrod/ AP, LLC
Original: January 16, 2015
Revised: February 26, 2016

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River Walk Development – Revised Transportation Impact Analysis
Prepared for Harrod/ AP, LLC
Original: January 16, 2015
Revised: February 26, 2016

1.0 Introduction

The proposed River Walk Development is located within the Central Business District (CBD) along the northwest quadrant of Rivers Street/ Poplar Grove Road and Water Street in Boone, North Carolina. As currently planned, the site will consist of 380 bedrooms of a mix of young professional and student apartment housing and 10,266 square feet of retail area. Figure 1 presents the site plan.

The site plan shows three (3) driveways to the site: two which will serve as the access to the proposed parking deck on site, and one driveway on Water Street that will serve as the access to a 17- vehicular space parking lot (2 for shared car service), 2 motorcycle spaces and 14 bicycle spaces. The majority of tenants at the residential building will park in the parking deck. Hence, this traffic analysis considers the parking deck access on Poplar Grove Road to be the primary access to the site.

Since the submittal of the River Walk Development TIA in January 2015, there have been changes to the site plan that needed to be reflected in a revised TIA. Therefore, DAVENPORT was retained to determine the potential traffic impacts of this development and to identify transportation improvements that may be required to accommodate the impacts of both background traffic and new development traffic. The following intersections were included in the study:

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- Poplar Grove Road at Proposed Site Access 3

The above-mentioned intersections were analyzed for the following scenarios:

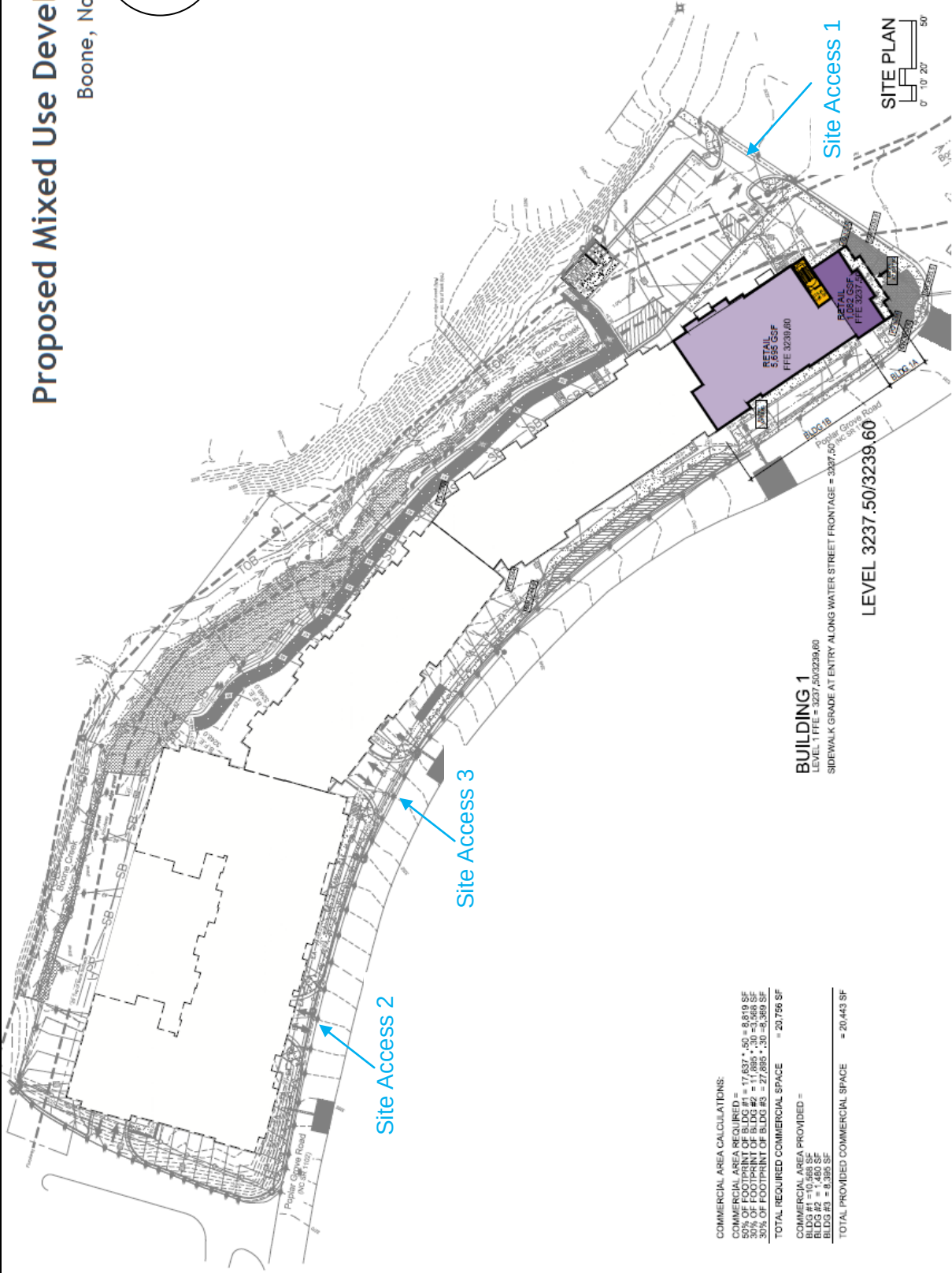
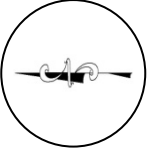
- 2014 Existing Conditions
- 2016 Future No Build Conditions
- 2016 Future Build-Out Conditions
- 2016 Future Build-Out with Improvements (as necessary)

The build-out analysis year for this project was assumed to be 2016. The AM (7-9 am) and PM (4-6 pm) peaks were studied.

The Town of Boone and the North Carolina Department of Transportation (NCDOT) were contacted to obtain background information and to ascertain the elements to be covered in this Transportation Impact Analysis (TIA). Information regarding the property was provided by Harrod/ AP, LLC.

Proposed Mixed Use Development

Boone, North Carolina



COMMERCIAL AREA CALCULATIONS:	
COMMERCIAL AREA REQUIRED =	17,637 * .30 = 5,291 SF
50% OF FOOTPRINT OF BLDG #1 =	11,637 * .50 = 5,819 SF
50% OF FOOTPRINT OF BLDG #2 =	11,637 * .50 = 5,819 SF
30% OF FOOTPRINT OF BLDG #3 =	27,895 * .30 = 8,369 SF
TOTAL REQUIRED COMMERCIAL SPACE	= 20,756 SF
COMMERCIAL AREA PROVIDED =	
BLDG #1 =	10,568 SF
BLDG #2 =	10,568 SF
BLDG #3 =	8,395 SF
TOTAL PROVIDED COMMERCIAL SPACE	= 20,443 SF



FIGURE 1
SITE PLAN





FIGURE 2B
VICINITY MAP

● EXISTING INTERSECTION
● PROPOSED INTERSECTION





2.0 Existing Conditions

2.1 Inventory

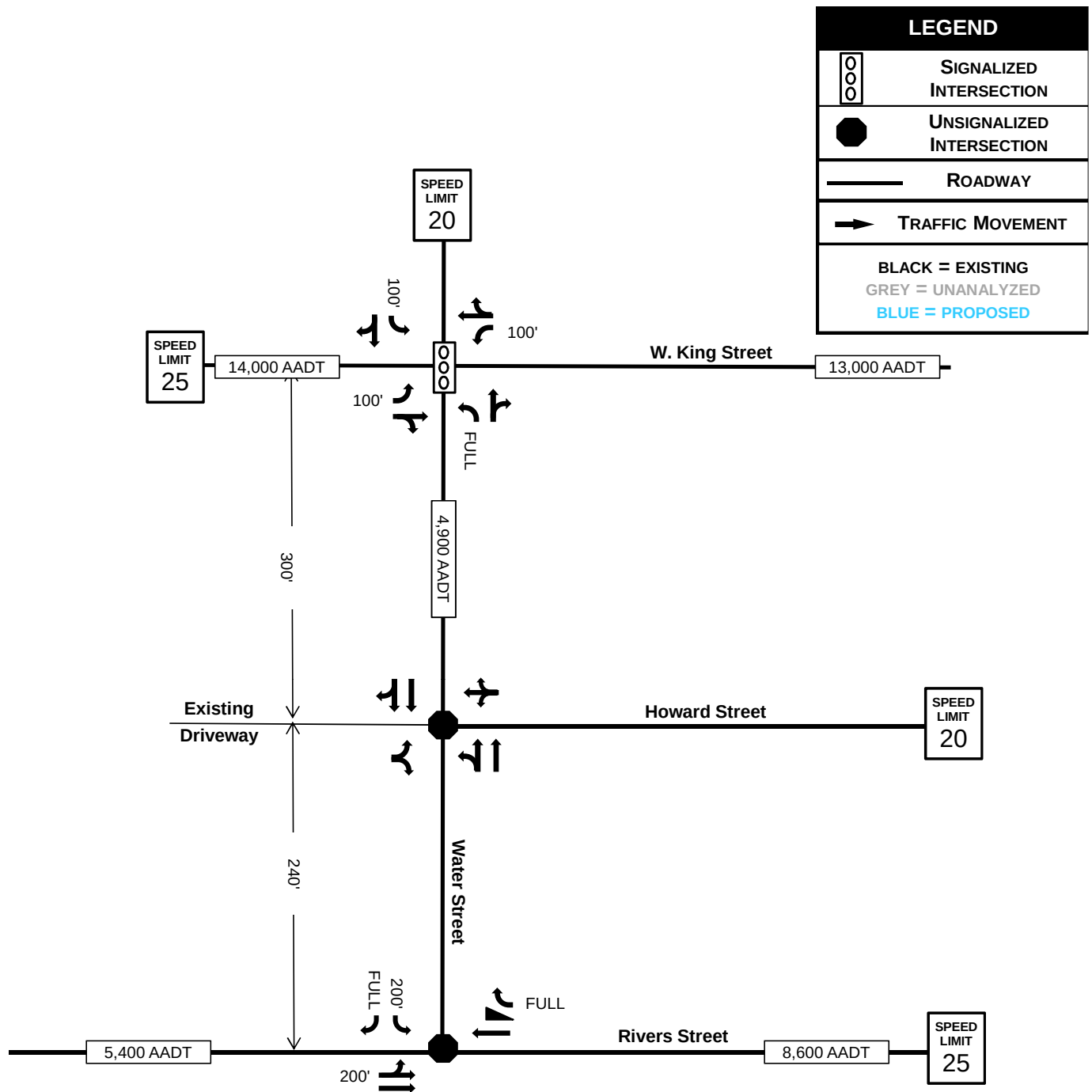
A field investigation was conducted by DAVENPORT staff to determine the existing roadway conditions in the study area. Table 2.1 presents a summary of this review. Figure 3 illustrates the existing lane geometry.

Table 2.1 - Street Inventory					
Facility Name	Route #	Typical Cross Section	Pavement Width	Speed Limit	Maintained By
West King Street	US 421	2-lane undivided	Approx. 48'	25 MPH	NCDOT
Howard Street	N/A	1-2 lane undivided	Approx. 22'	20 MPH	Town of Boone
Rivers Street/Poplar Grove Road	SR 1163	2-4 lane undivided	Approx. 48'	25 MPH	NCDOT
Water Street	SR 1102	4-lane undivided	Approx. 48'	20 MPH	Town of Boone

2.2 Existing Traffic Volumes

Existing traffic volumes for this project were collected by DAVENPORT staff. Table 2.2 below contains the dates these counts were conducted. Appalachian State University (ASU) and Watauga County Schools were in session at the time of traffic counts. Traffic volumes were balanced along study intersections. Figure 4 shows existing AM and PM peak hour volumes. The full reports for these volumes can be found in the appendix.

Table 2.2 - Traffic Volume Data		
<u>Count Location:</u>	<u>Date Taken:</u>	<u>By:</u>
West King Street at Water Street	11/6/14	DAVENPORT
Howard Street at Water Street	11/6/14	DAVENPORT
Rivers Street at Water Street	11/6/14	DAVENPORT



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LEGEND



**SIGNALIZED
INTERSECTION**



**UNSIGNALIZED
INTERSECTION**



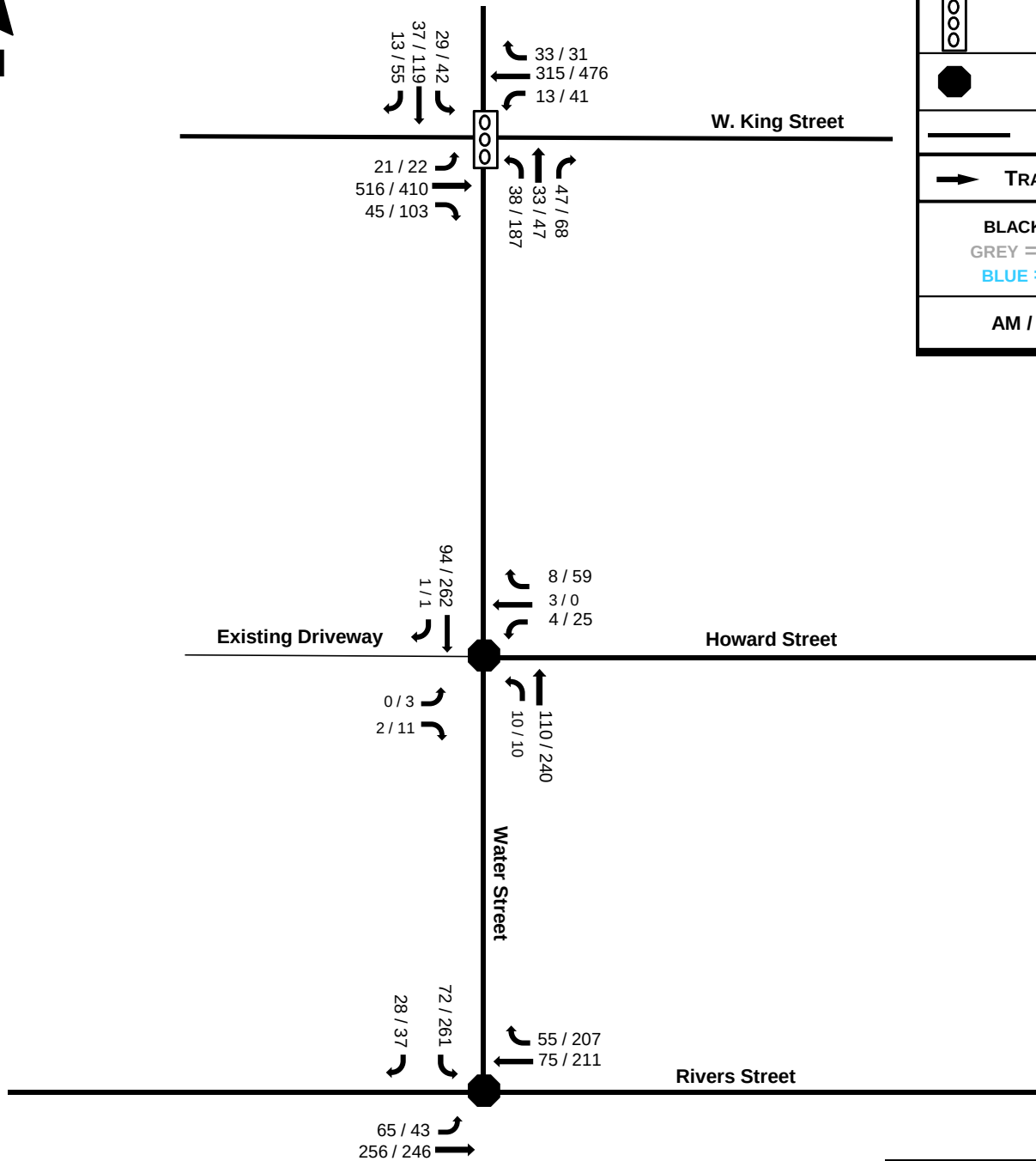
ROADWAY



TRAFFIC MOVEMENT

**BLACK = EXISTING
GREY = UNANALYZED
BLUE = PROPOSED**

AM / PM PEAKS



**FIGURE 4
EXISTING TRAFFIC
VOLUMES**

**RIVER WALK DEVELOPMENT
BOONE, NC**

PROJECT NUMBER 14-076



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3.0 Approved Developments and Committed Improvements

3.1 *Approved Developments*

Approved developments are developments that have been recently approved in the area, but not yet constructed. Per NCDOT staff, there are no approved developments to be considered in this analysis, but the 2% annual growth rate would be sufficient to account for background traffic growth.

3.2 *Committed Improvements*

Committed Improvements are improvements that are planned by NCDOT, a local municipality, or a developer in the area, but not yet constructed. Per NCDOT, there are no committed developments in the study area.





4.0 Methodology

4.1 Base Assumptions and Standards

In general, the analysis for this project was conducted utilizing commonly accepted NCDOT standards. The following table contains a summary of the base assumptions:

Table 4.1 - Assumptions	
Peak Hour Factor	0.90
Background Traffic Annual Growth Rate	2.0% per year for all roadways
Base Signal Timing/Phasing	Provided by NCDOT
Analysis Software	Synchro/SimTraffic Version 8.0
Lane widths	12-feet
Truck percentages	2%

4.2 Trip Generation

As currently planned, this development will include 380-bedrooms of a mix of young professional and student apartment housing and 10,266 square feet of retail space. TripGen 2013 software, based on the 9th Edition of ITE Trip Generation Manual, was used to develop the projected trips created by this development. Table 4.2 contains the results.

Table 4.2 - ITE Trip Generation									
River Walk Development, Boone NC									
Average Weekday Driveway Volumes					24 Hour	AM Peak Hour		PM Peak Hour	
					Two-Way				
<u>Land Use</u>	<u>ITE Land Code</u>	<u>Size</u>		<u>Data Source</u>	<u>Volume</u>	<u>Enter</u>	<u>Exit</u>	<u>Enter</u>	<u>Exit</u>
Apartments	220	380	Persons	Equations	1,254	53	57	89	62
Retail	820	10.27	Th.Sq.Ft GLA	Equations	1,547	24	15	62	68
Total Unadjusted Trips					2,801	77	72	151	130
Internal Capture Reduction		12% Daily / 11% PM			-309	0	0	-14	-14
Subtotal with Internal Capture					2,492	77	72	137	116
Pass-by Reduction		0% AM / 34% PM			-473	0	0	-19	-20
Pedestrian/Transit Reduction		30%			-748	-23	-22	-41	-35
Total Adjusted Trips					1,271	54	50	77	61

Mixed-use developments of this type are designed to combine a number of uses into one site, allowing people to live, work and shop in the same area and without dependence on a vehicle. This proposed development meets the criteria as defined in the ITE Trip Generation Handbook for a "multi-use" development. Therefore, the trips for this development were reduced using the method described in Chapter 7 of the ITE



Handbook. A reduction of 12% was applied to daily and 11% to the PM peak hour trips for residential and retail land uses. The worksheets for the internal capture are shown in the supporting documentation of the Appendix.

Developments of this type also generate what are called “pass-by” trips. The ITE Trip Generation Manual defines “pass-by” trips as trips that are generated by the development, but are already on the adjacent roadway. These trips are not new trips, but are a part of the existing background traffic on Rivers Street/ Poplar Grove Road and Water Street. A “pass-by” reduction of 34% was applied to retail trips in the PM peak hour.

Further consideration was given to the context of the site and surrounding area to account for the potential of non-vehicle trips. This site is located in close proximity to the Appalachian State University (ASU) campus and Downtown Boone. Many residents in the student-oriented apartments are likely to walk or bike to access the university or destinations in Downtown. In addition, an *AppalCart* (transit) stop is located near the site. *AppalCart* provides direct transit service in the Town on Boone. Based on this, we have applied a 30% reduction to daily trips to account for the use of alternative modes of transportation.

4.3 Trip Distribution

Residential site trips for this proposed development were distributed based on the existing traffic patterns and engineering judgment. The directional distributions for the residential site trips are as follows:

- 45% to and from the east on Rivers Street
- 30% to and from the east on West King Street
- 15% to and from the west on Poplar Grove Road
- 10% to and from the west on West King Street

Retail site trips for this proposed development were distributed based on the existing traffic patterns and engineering judgment. The directional distributions for the retail site trips are as follows:

- 40% to and from the east on Rivers Street
- 15% to and from the west on Poplar Grove Road
- 15% to and from the east on West King Street
- 15% to and from the west on West King Street
- 10% to and from the north on Water Street
- 5% to and from the east on Howard Street

The residential and retail trip distributions are shown in Figure 5A and 5B, respectively. 80% of pass-by trips were assumed to originate from the east on Rivers Street and 20% of pass-by trips from the west on Poplar Grove Road. The pass-by trip distribution for this development is illustrated in Figure 5C.



4.4 Future No Build Traffic

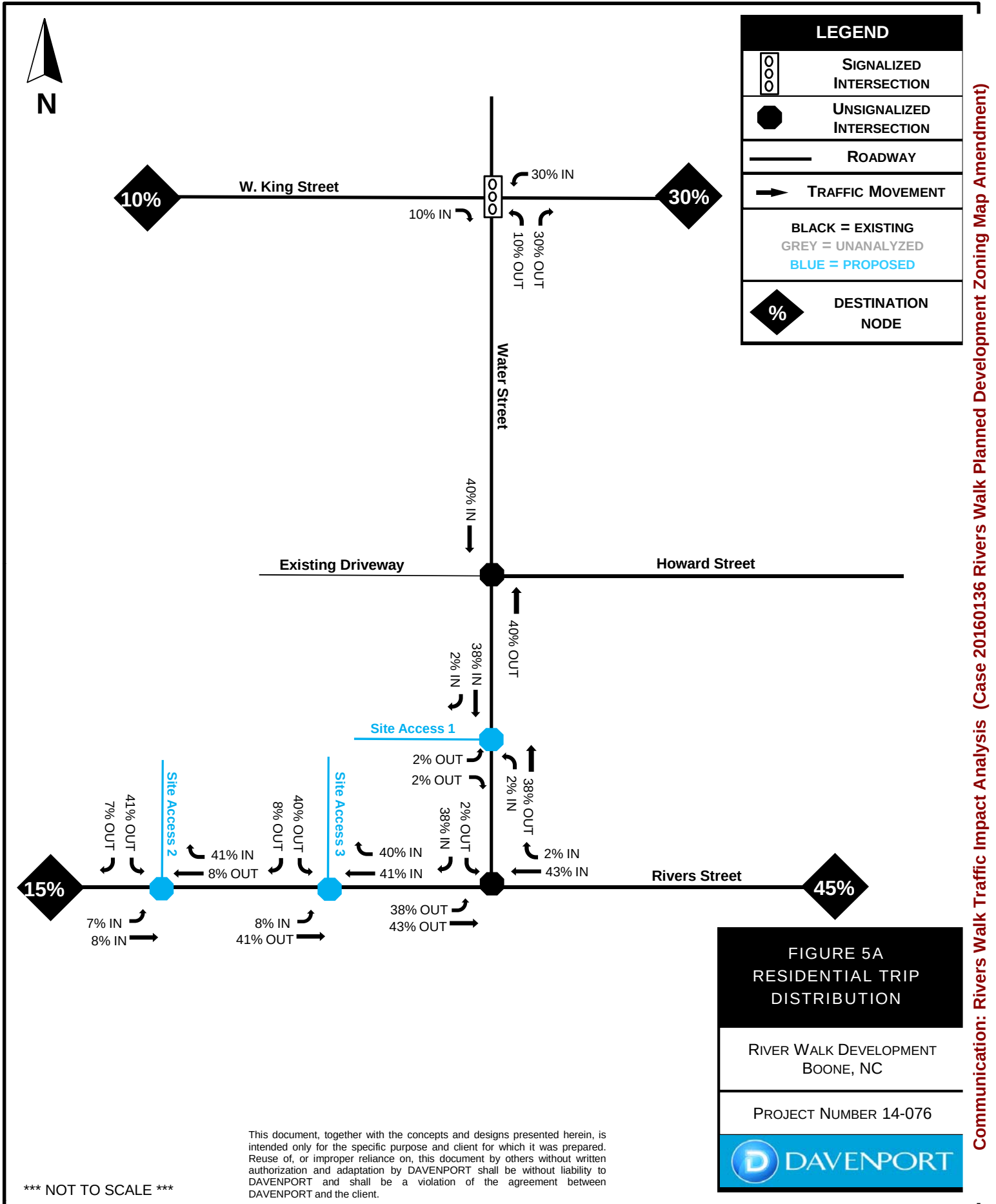
The 2016 future no build traffic volumes were computed by applying a 2.0% compounded annual growth rate to the 2014 existing traffic volumes. Figure 6 shows the 2016 future no build traffic volumes for AM and PM peaks.

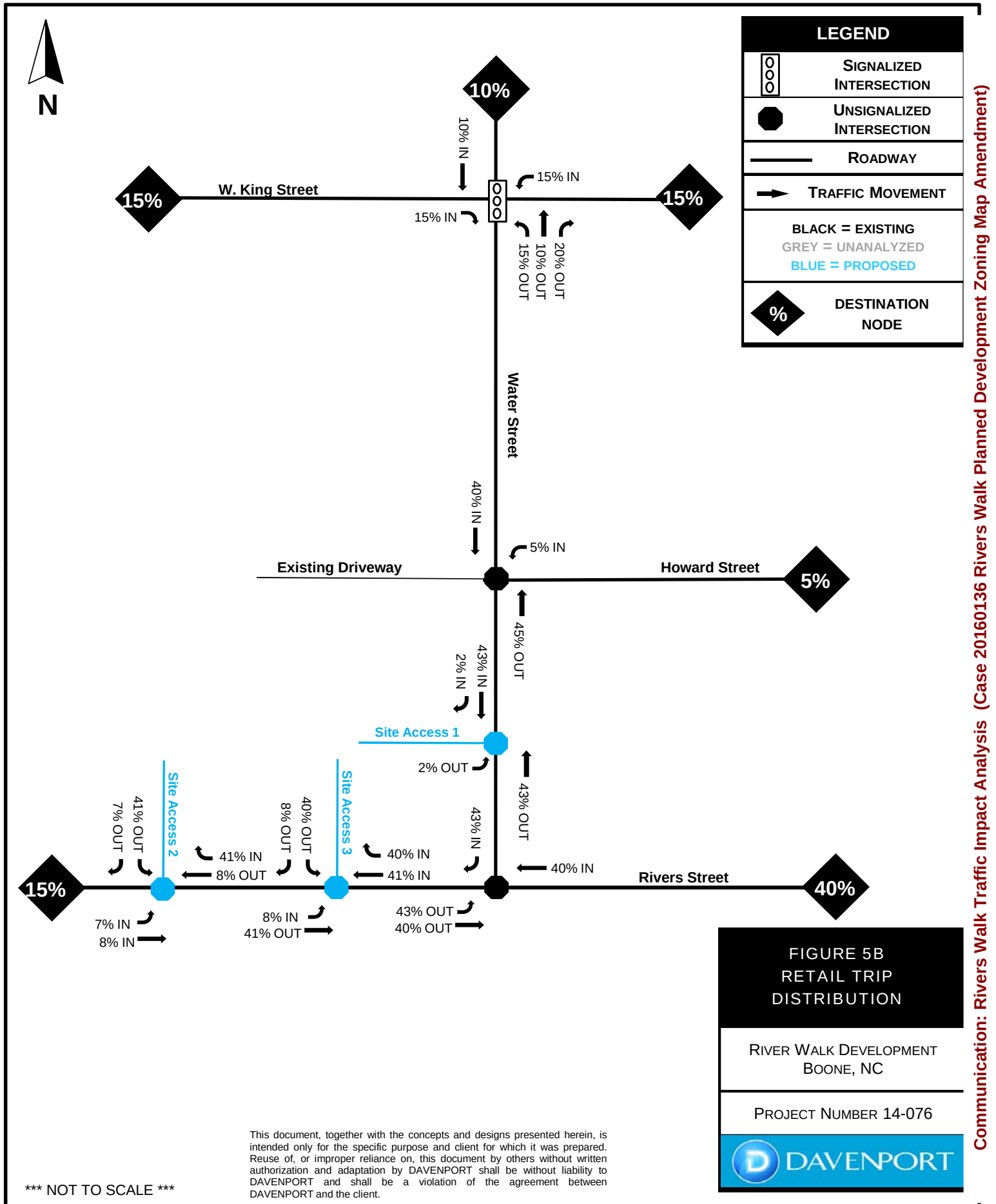
4.5 Total Traffic

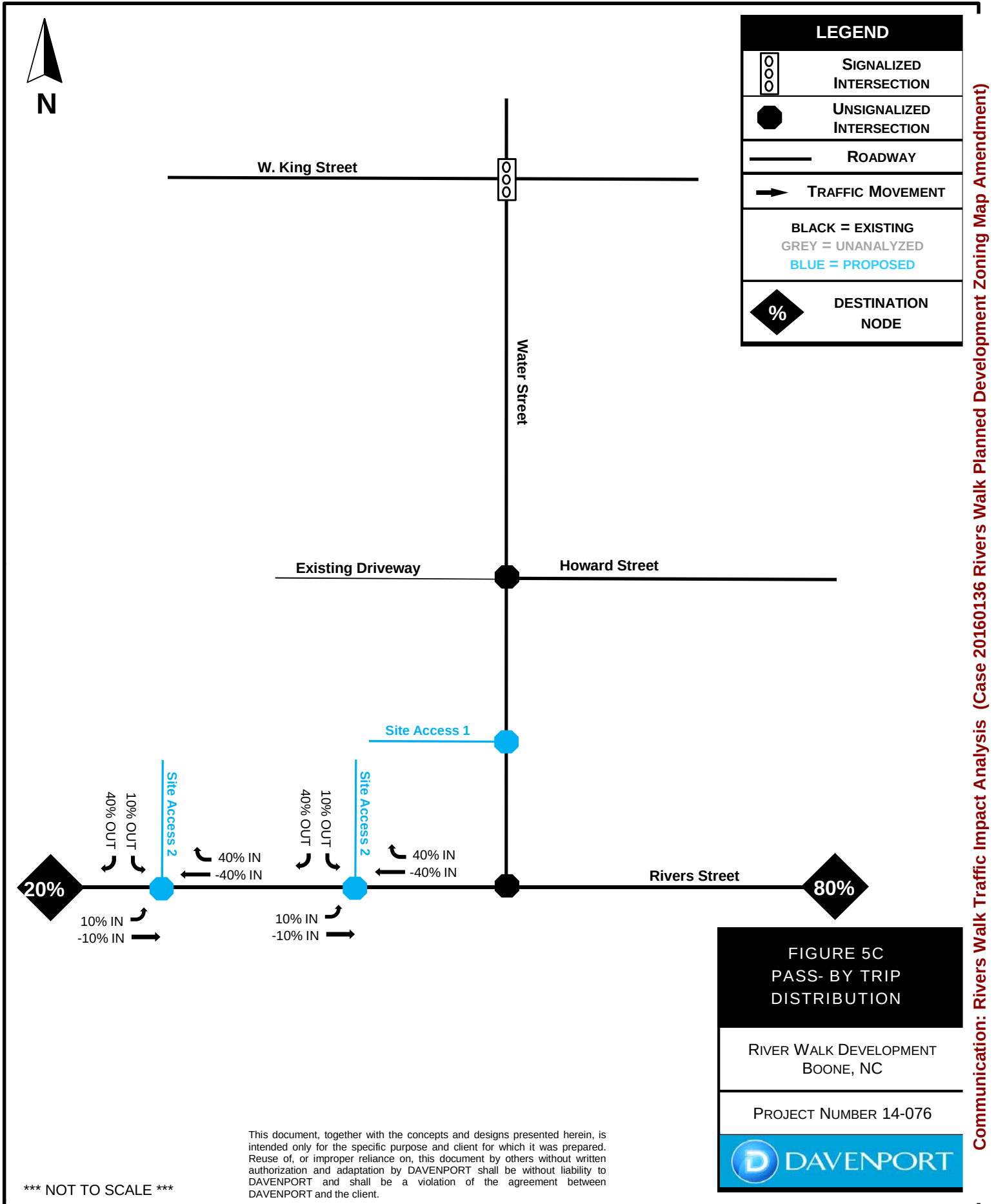
The 2016 build-out traffic volumes were obtained by summing 2016 future no build volumes and residential, retail and pass-by site trips due to the proposed project. Site trips are shown in Figure 7A, 7B and 7C, respectively. The resulting build volume totals for AM and PM peaks are shown in Figure 8. More information can be found in the Traffic Volume Data section of the appendix.



West King Street at Water Street facing north







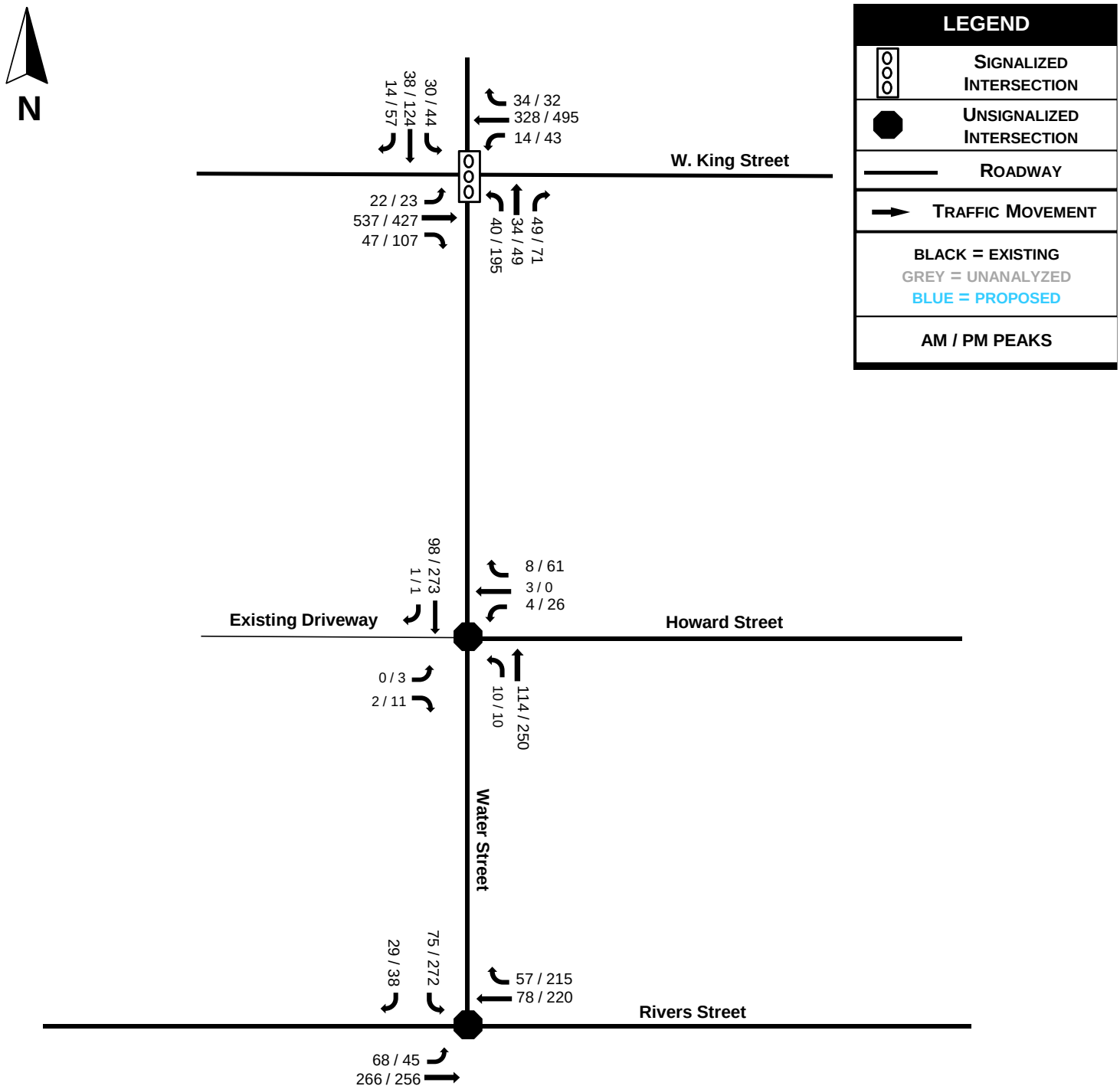


FIGURE 6
2016 FUTURE NO
BUILD VOLUMES

RIVER WALK DEVELOPMENT
BOONE, NC

PROJECT NUMBER 14-076



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LEGEND



SIGNALIZED
INTERSECTION



UNSIGNALIZED
INTERSECTION



ROADWAY



TRAFFIC MOVEMENT

BLACK = EXISTING
GREY = UNANALYZED
BLUE = PROPOSED

AM / PM PEAKS

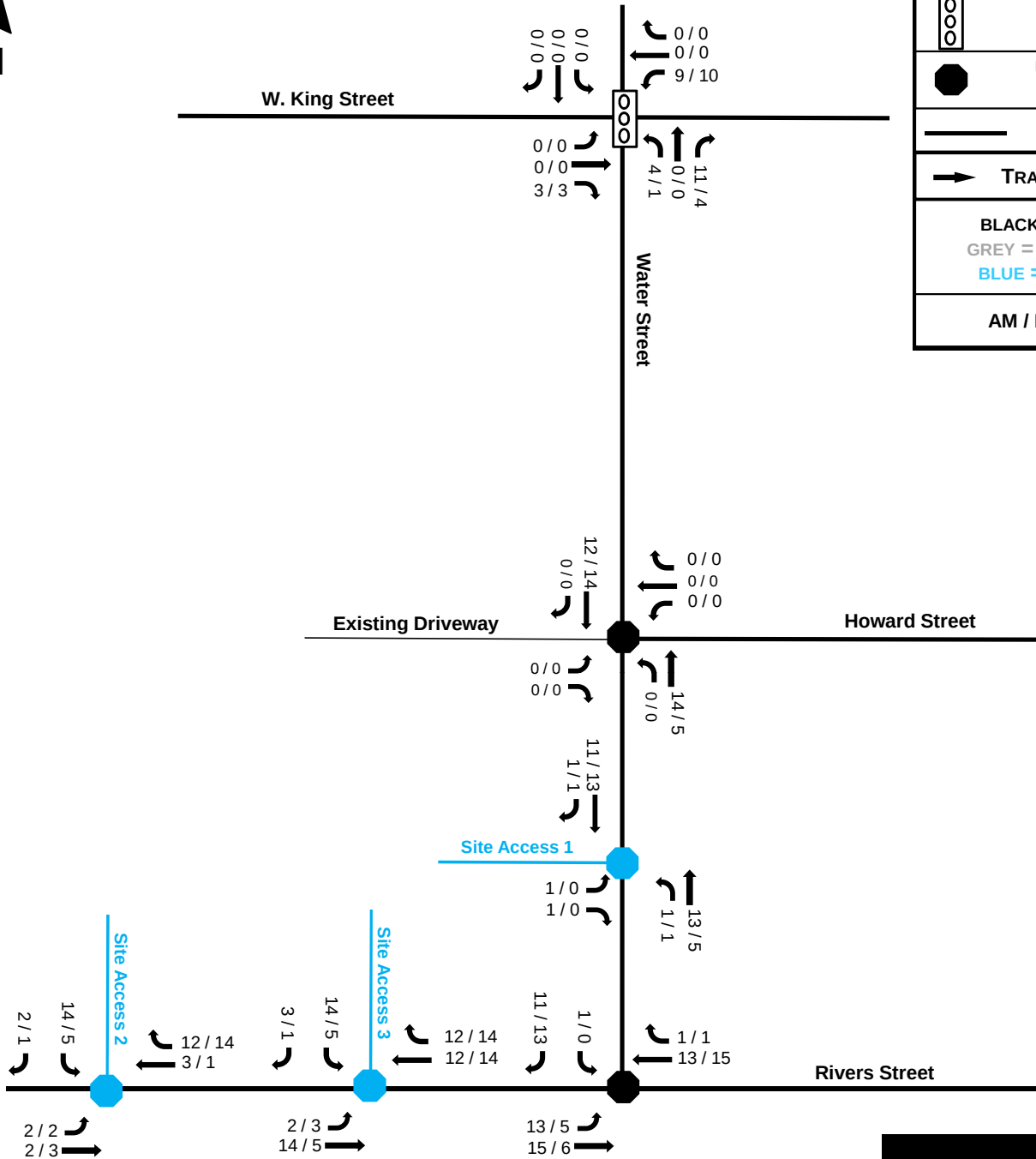


FIGURE 7A
RESIDENTIAL SITE
TRIPS

RIVER WALK DEVELOPMENT
BOONE, NC

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SIGNALIZED
INTERSECTION



UNSIGNALIZED
INTERSECTION



ROADWAY



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AM / PM PEAKS

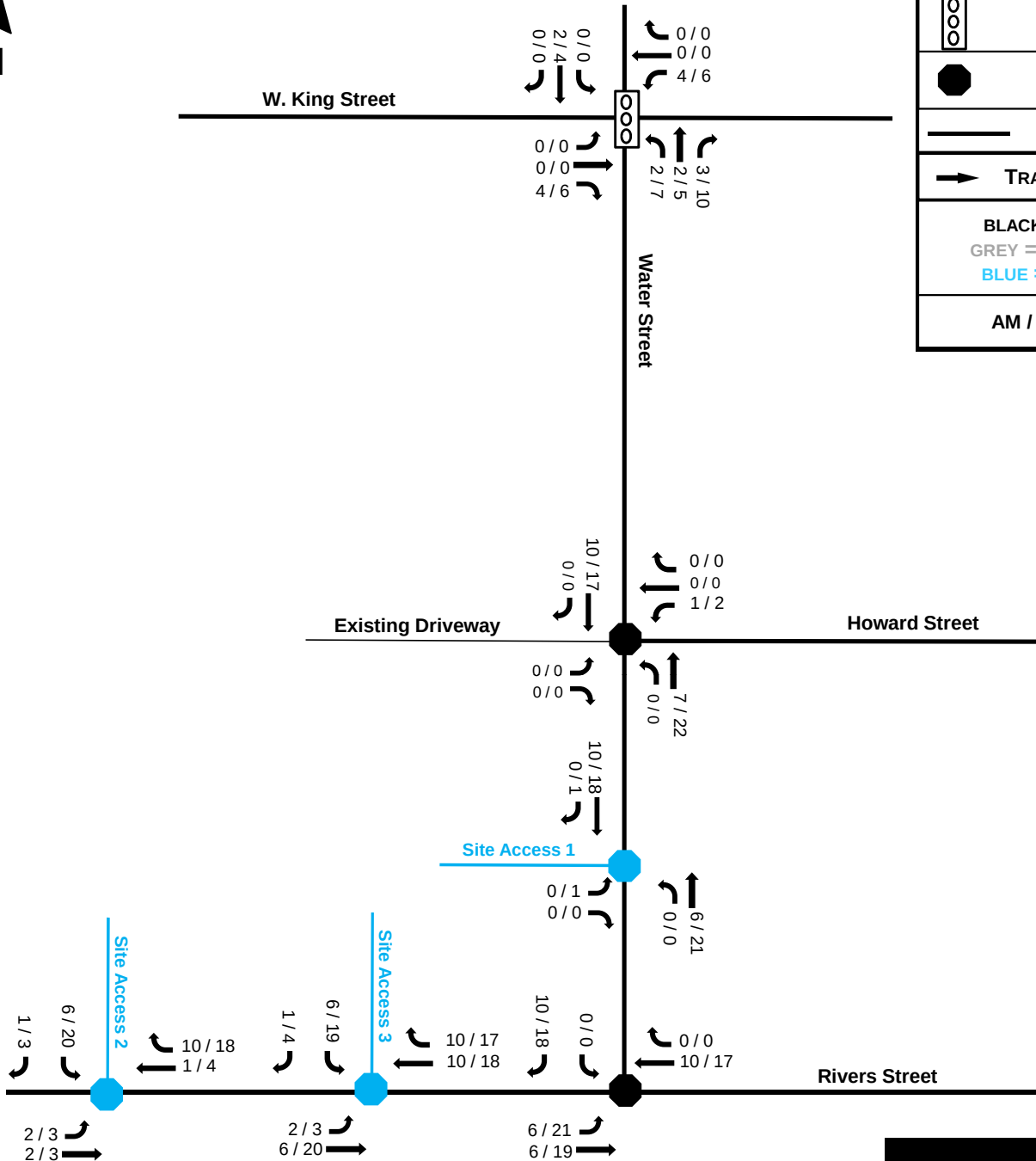


FIGURE 7B
RETAIL SITE TRIPS

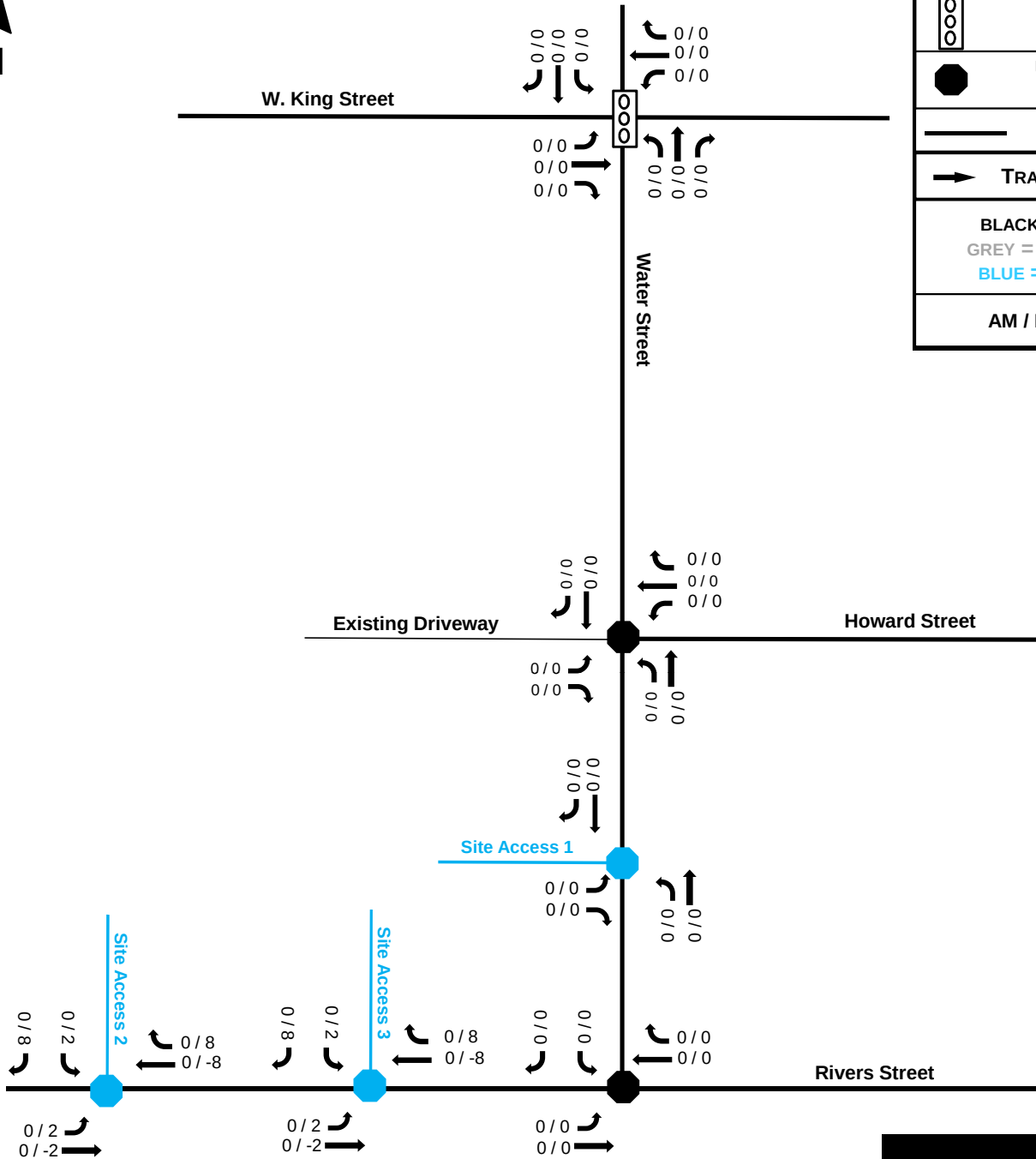
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LEGEND



**SIGNALIZED
INTERSECTION**



**UNSIGNALIZED
INTERSECTION**



ROADWAY



TRAFFIC MOVEMENT

**BLACK = EXISTING
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BLUE = PROPOSED**

AM / PM PEAKS

**FIGURE 7C
PASS-BY SITE TRIPS**

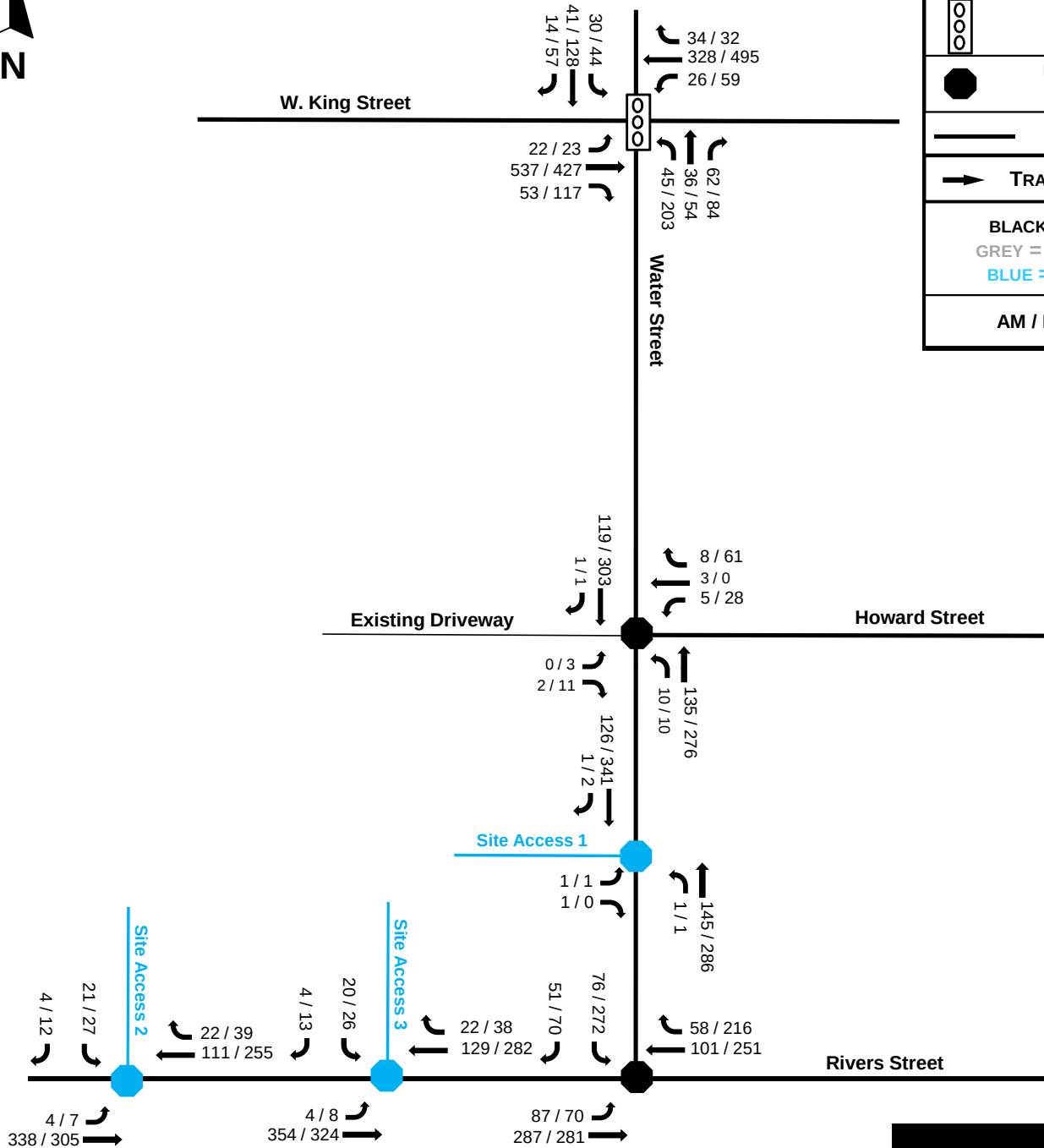
**RIVER WALK DEVELOPMENT
BOONE, NC**

PROJECT NUMBER 14-076



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LEGEND



**SIGNALIZED
INTERSECTION**



**UNSIGNALIZED
INTERSECTION**



ROADWAY



TRAFFIC MOVEMENT

**BLACK = EXISTING
GREY = UNANALYZED
BLUE = PROPOSED**

AM / PM PEAKS

**FIGURE 8
2016 FUTURE BUILD
VOLUMES**

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5.0 Capacity Analysis

5.1 Level of Service Evaluation Criteria

The Transportation Research Board's Highway Capacity Manual (HCM) utilizes a term "level of service" to measure how traffic operates in intersections and on roadway segments. There are currently six levels of service ranging from A to F. Level of service "A" represents the best conditions and Level of Service "F" represents the worst. Synchro Traffic Modeling software was used to determine the level of service for studied intersections. Note for unsignalized intersection analysis, the level of service noted is for the worst approach of the intersection. This is typically the left turn movement for the side street approach, due to the number of opposing movements. All worksheet reports from the analyses can be found in the Appendix.

Table 5.1 – Highway Capacity Manual

Levels of Service and Control Delay Criteria			
Signalized Intersection		Unsignalized Intersection	
Level of Service	Control Delay Per vehicle (sec)	Level of Service	Delay Range (sec)
A	≤ 10	A	≤ 10
B	> 10 and ≤ 20	B	> 10 and ≤ 15
C	> 20 and ≤ 35	C	> 15 and ≤ 25
D	> 35 and ≤ 55	D	> 25 and ≤ 35
E	> 55 and ≤ 80	E	> 35 and ≤ 50
F	> 80	F	> 50



5.2 Level of Service Results

The results of the study are discussed by intersection below:

Water Street at West King Street

This signalized intersection of Water Street at West King Street currently operates at LOS A in the AM peak and LOS C in the PM peak. The simulation show sporadic queuing on the northbound left approach of this intersection during the PM peak, which is mainly due to heavy left turns. In 2016 future no build conditions, the analysis indicates LOS A in the AM peak and LOS C in the PM peak. With the addition of site traffic, this intersection is projected to operate at LOS B in the AM peak and LOS C in the PM peak. It is recommended to optimize signal timing to accommodate future traffic growth.

Water Street at Howard Street

This unsignalized intersection currently operates at LOS A in the AM peak and LOS B in the PM peak. In 2016 future no build conditions, LOS A is expected in the AM peak and LOS B in the PM peak. Additionally, sporadic queues were observed on the westbound approach of Howard Street, particularly during the PM peak. This is mainly due to lack of sufficient gaps from the minor street, which is due to heavy traffic volumes and queues on Water Street. This is a background condition which exists regardless of the proposed development. With the addition of proposed site traffic, LOS A is expected in the AM peak and LOS B in the PM peak. No improvements are recommended.

Water Street at Rivers Street/ Poplar Grove Road

This unsignalized intersection currently operates at LOS B in the AM peak and LOS C in the PM peak. In 2016 future no build conditions, LOS B is expected in the AM peak and LOS C in the PM peak. With the addition of site traffic, LOS B is expected in the AM peak and LOS D in the PM peak. No improvements are recommended.

Water Street at Proposed Site Access 1

This unsignalized intersection is expected to operate at LOS B or better during future build scenarios. Though this intersection is in close proximity to Howard Street and existing driveway to the north, this access is expected to serve a 17-space parking lot with minimal trips. Close driveway spacing such as this is typical for a downtown central business district and dense urban settings. No improvements are recommended.

Poplar Grove Road at Proposed Site Access 2

This unsignalized intersection is expected to operate at LOS B during future build scenarios. No improvements are recommended.

Poplar Grove Road at Proposed Site Access 3

This unsignalized intersection is expected to operate at LOS B during future build scenarios. No improvements are recommended.



The recommended improvements at the study intersections are illustrated in Figure 9.

5.3 Level of Service Summary

Table 5.2 presents the summary of the level of service analysis.

Table 5.2 - Level of Service Summary				
AM Peak	2014 Existing	2016 Future No Build	2016 Build	2016 Build with Improvements
Water Street at King Street	A (9.4)	A (9.6)	B (10.3)	B (10.3)
Water Street at Howard Street	A (9.4) WB Approach	A (9.5) WB Approach	A (9.7) WB Approach	
Water Street at Rivers Street/ Poplar Grove Road	B (11.3) SB Approach	B (11.5) SB Approach	B (12) SB Approach	
Water Street at Proposed Site Access 1			A (9.3) EB Approach	
Poplar Grove Road at Proposed Site Access 2			B (11.9) SB Approach	
Poplar Grove Road at Proposed Site Access 3			B (12.2) SB Approach	
PM Peak	2014 Existing	2016 Future No Build	2016 Build	2016 Build with Improvements
Water Street at King Street	C (21.6)	C (22.5)	C (23.5)	C (22.2)
Water Street at Howard Street	B (10.8) WB Approach	B (11) WB Approach	B (11.4) WB Approach	
Water Street at Rivers Street/ Poplar Grove Road	C (19.8) SB Approach	C (21.8) SB Approach	D (29.5) SB Approach	
Water Street at Proposed Site Access 1			B (12.7) EB Approach	
Poplar Grove Road at Proposed Site Access 2			B (13.1) SB Approach	
Poplar Grove Road at Proposed Site Access 3			B (13.6) SB Approach	
LOS (delay in seconds)				
Note for unsignalized conditions, LOS and delay indicates only minor street approach with longest delay				



LEGEND	
	SIGNALIZED INTERSECTION
	UNSIGNALIZED INTERSECTION
	ROADWAY
	TRAFFIC MOVEMENT
BLACK = EXISTING	
GREY = UNANALYZED	
BLUE = PROPOSED	

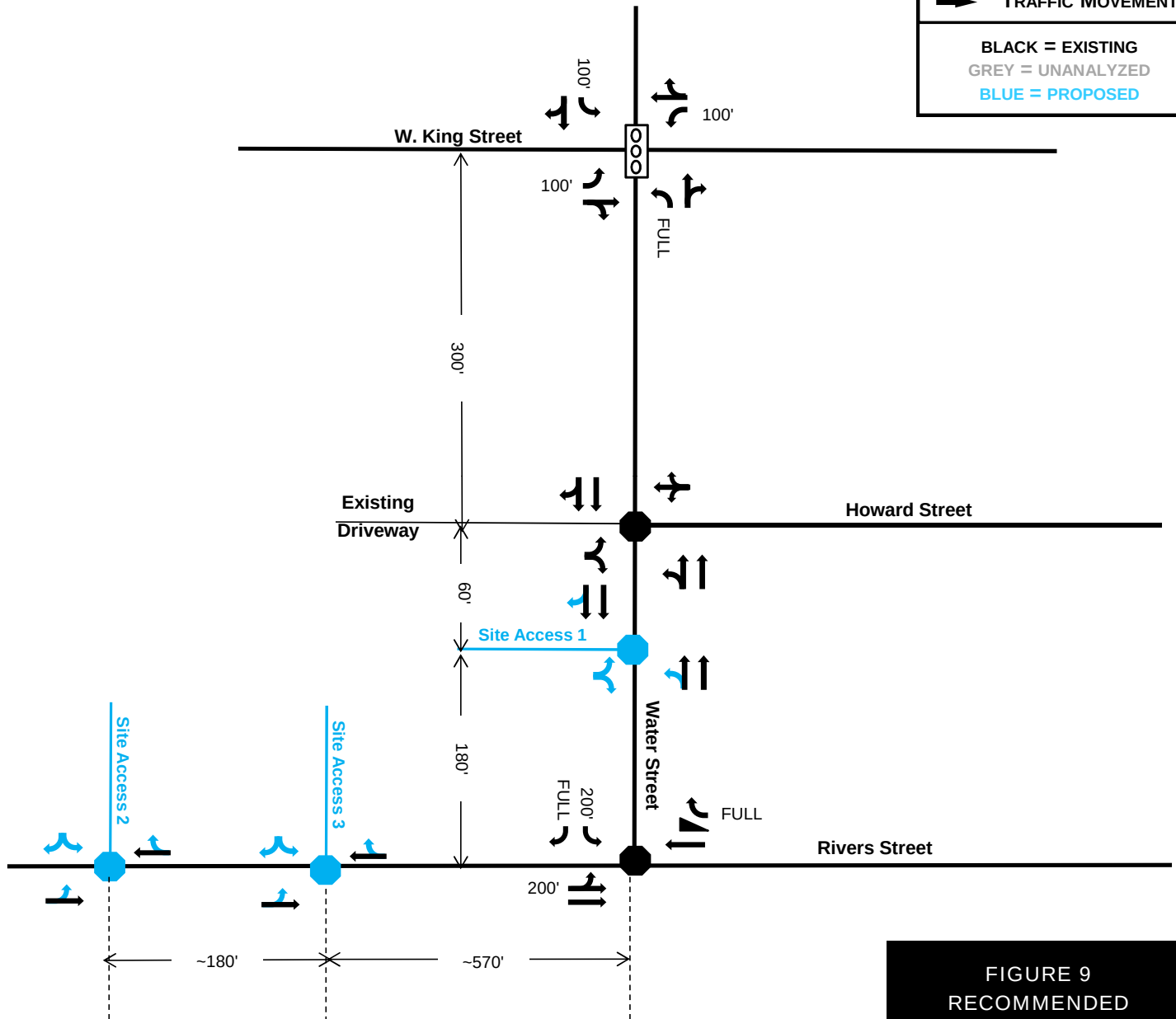


FIGURE 9
RECOMMENDED
IMPROVEMENTS

RIVER WALK DEVELOPMENT
BOONE, NC

PROJECT NUMBER 14-076



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6.0 Pedestrian and Bicycle Accommodations

As part of the development of this site, the developer plans to construct the following pedestrian and bicycle accommodations:

- Sidewalks will be constructed along the street frontage of the property: the northeastern side of Poplar Grove Road and along Water Street.
- A sidewalk will be provided adjacent to the commercial/ retail store entrances on site.
- The developer build the greenway trail from the surface lot to the parking deck as depicted on the site plan. This will provide safe and convenient access to the parking deck bike storage areas.
- In order to accommodate bicycling activities to and from the site, there will be 50 covered bicycle spaces inside of the garage and 14 bicycles spaces in the surface lot.

7.0 Transit Accommodations

AppalCart provides transit service in the Town of Boone. *AppalCart* currently runs routes (Gold, Pop 105 and Express routes) which provides service in the proximity of the site. There is an existing *AppalCart* stop on King Street and Water Street, which is within 400 feet of the proposed development. Residents in this proposed development will be able to use this transit service to reach their destinations. In addition, a loading lane has been incorporated into the site plan along Poplar Grove Road for buses.



Water Street at Howard Street facing south



8.0 Summary and Conclusion

The proposed River Walk Development is located on the border of Appalachian State University (ASU) and the Central Business District (CBD) along the northwest quadrant of Rivers Street/ Poplar Grove Road and Water Street in Boone, North Carolina. As currently planned, the site will consist of 380 bedrooms of a mix of young professional and student apartment housing and 10,266 square feet of retail area.

The site plan shows three (3) driveways to the site: two which will serve as the access to the proposed parking deck on site, and one driveway on Water Street that will serve as the access to a 17-space parking lot. The majority of tenants at the residential building will park in the parking deck. Hence, this traffic analysis considers the parking deck access on Poplar Grove Road to be the primary access to the site.

The trip generation indicates that based on the current site plan the proposed project is projected to generate a net total of 1,271 trips per day. This is based on 380-bedrooms of a mix of young professional and student apartment housing and 10,266 square feet of retail area.

The analysis indicates that all study intersections will operate at LOS D or better in the future build conditions.

Table 8.0 on the following page summarizes the recommended improvements for the 2016 future build scenario. Improvements are shown in Figure 9 in the report.

In conclusion, this analysis has been conducted based on NCDOT and Town of Boone guidelines and has determined the potential traffic impacts of this development. With the build-out of the site, the analysis indicates there will be adequate capacity to accommodate future traffic. Note that the site accesses should to be designed according to NCDOT standards as appropriate.


Table 8.0 - Recommended Improvement Summary

Water Street at West King Street	Optimize signal timing
Water Street at Howard Street	No improvements recommended
Water Street at Rivers Street/ Poplar Grove Road	No improvements recommended
Water Street at Proposed Site Access 1	No improvements recommended
Poplar Grove Road at Proposed Site Access 2	No improvements recommended
Poplar Grove Road at Proposed Site Access 3	No improvements recommended
Water Street at Existing Driveway	No improvements recommended
Pedestrian and Bicycle Accommodations	• Sidewalks will be constructed along the street frontage of the property: the northeastern side of Poplar Grove Road and along Water Street. • A sidewalk will be provided adjacent to the commercial/retail store entrances on site. • The developer build the greenway trail from the surface lot to the parking deck as depicted on the site plan. This will provide safe and convenient access to the parking deck bike storage areas. • In order to accommodate bicycling activities to and from the site, there will be 50 covered bicycle spaces inside of the garage and 14 bicycle spaces in the surface lot.
Transit Accommodations	• There is an existing <i>AppalCart</i> stop on Water Street at West King Street which is within 400 feet of the proposed development. Residents in this proposed development will be able to use this transit service to reach their destinations.



Appendix



Level of Service Analysis



Water Street at West King Street

Lanes, Volumes, Timings

100: W. King Street & Water Street

1/13/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	516	45	13	315	33	38	33	47	29	37	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		25	100		25	25		25	100		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.986			0.912			0.962	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1593	1656	0	1593	1653	0	1593	1529	0	1593	1613	0
Flt Permitted	0.525			0.388			0.721			0.699		
Satd. Flow (perm)	880	1656	0	650	1653	0	1209	1529	0	1172	1613	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			20			20	
Link Distance (ft)		576			371			300			329	
Travel Time (s)		15.7			10.1			10.2			11.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			30			70						
Adj. Flow (vph)	23	573	50	14	350	37	42	37	52	32	41	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	623	0	14	387	0	42	89	0	32	55	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

14-076 River Walk Development
Mary Morgan, PE

AM Existing
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Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

Lanes, Volumes, Timings

100: W. King Street & Water Street

1/13/2015



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	36.0	36.0		36.0	36.0		25.0	25.0		25.0	25.0	
Total Split (s)	50.0	50.0	0.0	50.0	50.0	0.0	25.0	25.0	0.0	25.0	25.0	0.0
Total Split (%)	66.7%	66.7%	0.0%	66.7%	66.7%	0.0%	33.3%	33.3%	0.0%	33.3%	33.3%	0.0%
Maximum Green (s)	44.0	44.0		44.0	44.0		19.0	19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	59.2	59.2		59.2	59.2		11.2	11.2		11.2	11.2	
Actuated g/C Ratio	0.79	0.79		0.79	0.79		0.15	0.15		0.15	0.15	
v/c Ratio	0.03	0.48		0.03	0.30		0.23	0.39		0.18	0.23	
Control Delay	3.3	5.5		3.3	4.0		30.3	33.2		29.3	29.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	3.3	5.5		3.3	4.0		30.3	33.2		29.3	29.5	
LOS	A	A		A	A		C	C		C	C	
Approach Delay		5.4			4.0			32.3			29.4	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)	2	89		1	45		18	38		13	23	
Queue Length 95th (ft)	9	188		7	96		43	75		35	52	
Internal Link Dist (ft)		496			291			220			249	
Turn Bay Length (ft)	100			100						100		
Base Capacity (vph)	695	1307		513	1305		339	428		328	452	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.03	0.48		0.03	0.30		0.12	0.21		0.10	0.12	

Intersection Summary

Area Type: CBD

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 9.4

Intersection LOS: A

Intersection Capacity Utilization 48.9%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings
100: W. King Street & Water Street

1/13/2015

Splits and Phases: 100: W. King Street & Water Street



Lanes, Volumes, Timings

100: W. King Street & Water Street

1/13/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	537	47	14	328	34	40	34	49	30	38	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		25	100		25	25		25	100		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.986			0.912			0.959	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1593	1656	0	1593	1653	0	1593	1529	0	1593	1608	0
Flt Permitted	0.515			0.374			0.719			0.697		
Satd. Flow (perm)	863	1656	0	627	1653	0	1205	1529	0	1169	1608	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			20			20	
Link Distance (ft)		576			371			300			329	
Travel Time (s)		15.7			10.1			10.2			11.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			30			70						
Adj. Flow (vph)	24	597	52	16	364	38	44	38	54	33	42	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	649	0	16	402	0	44	92	0	33	58	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

14-076 River Walk Development
Mary Morgan, PE

AM No Build
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Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

Lanes, Volumes, Timings

100: W. King Street & Water Street

1/13/2015



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	36.0	36.0		36.0	36.0		25.0	25.0		25.0	25.0	
Total Split (s)	50.0	50.0	0.0	50.0	50.0	0.0	25.0	25.0	0.0	25.0	25.0	0.0
Total Split (%)	66.7%	66.7%	0.0%	66.7%	66.7%	0.0%	33.3%	33.3%	0.0%	33.3%	33.3%	0.0%
Maximum Green (s)	44.0	44.0		44.0	44.0		19.0	19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	59.1	59.1		59.1	59.1		11.3	11.3		11.3	11.3	
Actuated g/C Ratio	0.79	0.79		0.79	0.79		0.15	0.15		0.15	0.15	
v/c Ratio	0.04	0.50		0.03	0.31		0.24	0.40		0.19	0.24	
Control Delay	3.4	5.8		3.4	4.1		30.4	33.3		29.2	29.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	3.4	5.8		3.4	4.1		30.4	33.3		29.2	29.5	
LOS	A	A		A	A		C	C		C	C	
Approach Delay		5.7			4.1			32.3			29.4	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)	2	96		2	48		18	40		14	24	
Queue Length 95th (ft)	9	204		7	102		45	77		36	54	
Internal Link Dist (ft)		496			291			220			249	
Turn Bay Length (ft)	100			100						100		
Base Capacity (vph)	680	1304		494	1302		337	428		327	450	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.04	0.50		0.03	0.31		0.13	0.21		0.10	0.13	

Intersection Summary

Area Type: CBD

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 9.6

Intersection LOS: A

Intersection Capacity Utilization 50.4%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings
100: W. King Street & Water Street

1/13/2015

Splits and Phases: 100: W. King Street & Water Street



Lanes, Volumes, Timings

100: Water Street & W. King Street

2/29/2016

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	537	53	26	328	34	45	36	62	30	41	14
Future Volume (vph)	22	537	53	26	328	34	45	36	62	30	41	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100			100			25			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.986			0.905			0.961	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1593	1655	0	1593	1653	0	1593	1517	0	1593	1611	0
Flt Permitted	0.513			0.366			0.717			0.677		
Satd. Flow (perm)	860	1655	0	614	1653	0	1202	1517	0	1135	1611	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			20			20	
Link Distance (ft)		576			371			284			329	
Travel Time (s)		15.7			10.1			9.7			11.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			30			70						
Adj. Flow (vph)	24	597	59	29	364	38	50	40	69	33	46	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	656	0	29	402	0	50	109	0	33	62	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	36.0	36.0		36.0	36.0		25.0	25.0		25.0	25.0	
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0		25.0	25.0	
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	44.0	44.0		44.0	44.0		19.0	19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	58.3	58.3		58.3	58.3		12.1	12.1		12.1	12.1	
Actuated g/C Ratio	0.78	0.78		0.78	0.78		0.16	0.16		0.16	0.16	
v/c Ratio	0.04	0.51		0.06	0.31		0.26	0.44		0.18	0.24	
Control Delay	3.7	6.4		4.0	4.5		29.7	33.5		28.1	28.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

14-076 River Walk Development
Mary Morgan, PE

AM Build
Page 1

Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

Lanes, Volumes, Timings

100: Water Street & W. King Street

2/29/2016

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	3.7	6.4		4.0	4.5		29.7	33.5		28.1	28.5	
LOS	A	A		A	A		C	C		C	C	
Approach Delay		6.3			4.5			32.3			28.4	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)	2	105		3	51		21	47		14	26	
Queue Length 95th (ft)	10	224		12	110		48	87		35	55	
Internal Link Dist (ft)		496			291			204			249	
Turn Bay Length (ft)	100			100						100		
Base Capacity (vph)	668	1286		477	1284		336	424		317	451	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.04	0.51		0.06	0.31		0.15	0.26		0.10	0.14	

Intersection Summary

Area Type: CBD

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 10.3

Intersection LOS: B

Intersection Capacity Utilization 51.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 100: Water Street & W. King Street



Lanes, Volumes, Timings

100: Water Street & W. King Street

2/29/2016

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	537	53	26	328	34	45	36	62	30	41	14
Future Volume (vph)	22	537	53	26	328	34	45	36	62	30	41	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100			100			25			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.986			0.905			0.961	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1593	1655	0	1593	1653	0	1593	1517	0	1593	1611	0
Flt Permitted	0.513			0.366			0.717			0.677		
Satd. Flow (perm)	860	1655	0	614	1653	0	1202	1517	0	1135	1611	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			20			20	
Link Distance (ft)		576			371			284			329	
Travel Time (s)		15.7			10.1			9.7			11.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			30			70						
Adj. Flow (vph)	24	597	59	29	364	38	50	40	69	33	46	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	656	0	29	402	0	50	109	0	33	62	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	36.0	36.0		36.0	36.0		25.0	25.0		25.0	25.0	
Total Split (s)	50.0	50.0		50.0	50.0		25.0	25.0		25.0	25.0	
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	44.0	44.0		44.0	44.0		19.0	19.0		19.0	19.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	58.3	58.3		58.3	58.3		12.1	12.1		12.1	12.1	
Actuated g/C Ratio	0.78	0.78		0.78	0.78		0.16	0.16		0.16	0.16	
v/c Ratio	0.04	0.51		0.06	0.31		0.26	0.44		0.18	0.24	
Control Delay	3.7	6.4		4.0	4.5		29.7	33.5		28.1	28.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

14-076 River Walk Development
Mary Morgan, PE

AM Build + Improvements
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Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

Lanes, Volumes, Timings

100: Water Street & W. King Street

2/29/2016

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	3.7	6.4		4.0	4.5		29.7	33.5		28.1	28.5	
LOS	A	A		A	A		C	C		C	C	
Approach Delay		6.3			4.5			32.3			28.4	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)	2	105		3	51		21	47		14	26	
Queue Length 95th (ft)	10	224		12	110		48	87		35	55	
Internal Link Dist (ft)		496			291			204			249	
Turn Bay Length (ft)	100			100						100		
Base Capacity (vph)	668	1286		477	1284		336	424		317	451	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.04	0.51		0.06	0.31		0.15	0.26		0.10	0.14	

Intersection Summary

Area Type: CBD

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 10.3

Intersection LOS: B

Intersection Capacity Utilization 51.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 100: Water Street & W. King Street



Lanes, Volumes, Timings

100: W. King Street & Water Street

1/13/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	410	103	41	476	31	187	47	68	42	119	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		25	100		25	25		25	100		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.970			0.991			0.911			0.953	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1593	1626	0	1593	1661	0	1593	1527	0	1593	1598	0
Flt Permitted	0.371			0.367			0.531			0.645		
Satd. Flow (perm)	622	1626	0	615	1661	0	890	1527	0	1081	1598	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			20			20	
Link Distance (ft)		576			371			300			329	
Travel Time (s)		15.7			10.1			10.2			11.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			30			70						
Adj. Flow (vph)	24	456	114	46	529	34	208	52	76	47	132	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	570	0	46	563	0	208	128	0	47	193	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

14-076 River Walk Development
Mary Morgan, PE

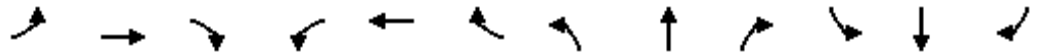
PM Existing
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Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

Lanes, Volumes, Timings

100: W. King Street & Water Street

1/13/2015



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	36.0	36.0		36.0	36.0		25.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	0.0	60.0	60.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	66.7%	66.7%	0.0%	66.7%	66.7%	0.0%	33.3%	33.3%	0.0%	33.3%	33.3%	0.0%
Maximum Green (s)	54.0	54.0		54.0	54.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	58.2	58.2		58.2	58.2		23.8	23.8		23.8	23.8	
Actuated g/C Ratio	0.65	0.65		0.65	0.65		0.26	0.26		0.26	0.26	
v/c Ratio	0.06	0.54		0.12	0.52		0.89	0.32		0.16	0.46	
Control Delay	7.2	11.6		7.8	11.3		68.3	28.1		25.9	30.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	7.2	11.6		7.8	11.3		68.3	28.1		25.9	30.9	
LOS	A	B		A	B		E	C		C	C	
Approach Delay		11.4			11.0			53.0			29.9	
Approach LOS		B			B			D			C	
Queue Length 50th (ft)	5	171		10	166		109	56		20	88	
Queue Length 95th (ft)	15	262		25	253		#231	104		47	151	
Internal Link Dist (ft)		496			291			220			249	
Turn Bay Length (ft)	100			100						100		
Base Capacity (vph)	403	1052		398	1075		257	441		312	462	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.06	0.54		0.12	0.52		0.81	0.29		0.15	0.42	

Intersection Summary

Area Type: CBD

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 21.6

Intersection LOS: C

Intersection Capacity Utilization 70.1%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Lanes, Volumes, Timings

100: W. King Street & Water Street

1/13/2015

Queue shown is maximum after two cycles.

Splits and Phases: 100: W. King Street & Water Street



Lanes, Volumes, Timings

100: W. King Street & Water Street

1/13/2015

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	427	107	43	495	32	195	49	71	44	124	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		25	100		25	25		25	100		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.970			0.991			0.911			0.953	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1593	1626	0	1593	1661	0	1593	1527	0	1593	1598	0
Flt Permitted	0.353			0.348			0.523			0.639		
Satd. Flow (perm)	592	1626	0	583	1661	0	877	1527	0	1071	1598	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			20			20	
Link Distance (ft)		576			371			300			329	
Travel Time (s)		15.7			10.1			10.2			11.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			30			70						
Adj. Flow (vph)	26	474	119	48	550	36	217	54	79	49	138	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	593	0	48	586	0	217	133	0	49	201	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

14-076 River Walk Development
Mary Morgan, PE

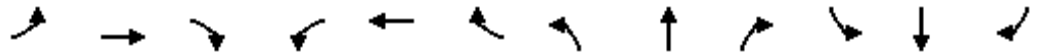
PM No Build
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Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

Lanes, Volumes, Timings

100: W. King Street & Water Street

1/13/2015



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	36.0	36.0		36.0	36.0		25.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0	0.0	60.0	60.0	0.0	30.0	30.0	0.0	30.0	30.0	0.0
Total Split (%)	66.7%	66.7%	0.0%	66.7%	66.7%	0.0%	33.3%	33.3%	0.0%	33.3%	33.3%	0.0%
Maximum Green (s)	54.0	54.0		54.0	54.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0	-2.0	-2.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	57.4	57.4		57.4	57.4		24.6	24.6		24.6	24.6	
Actuated g/C Ratio	0.64	0.64		0.64	0.64		0.27	0.27		0.27	0.27	
v/c Ratio	0.07	0.57		0.13	0.55		0.91	0.32		0.17	0.46	
Control Delay	7.3	12.5		8.1	12.0		71.7	27.8		25.8	30.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	7.3	12.5		8.1	12.0		71.7	27.8		25.8	30.6	
LOS	A	B		A	B		E	C		C	C	
Approach Delay		12.2			11.7			55.0			29.7	
Approach LOS		B			B			E			C	
Queue Length 50th (ft)	5	182		10	176		116	59		21	93	
Queue Length 95th (ft)	16	279		26	269		#247	108		49	158	
Internal Link Dist (ft)		496			291			220			249	
Turn Bay Length (ft)	100			100						100		
Base Capacity (vph)	377	1037		372	1060		253	441		309	462	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.07	0.57		0.13	0.55		0.86	0.30		0.16	0.44	

Intersection Summary

Area Type: CBD

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 22.5

Intersection LOS: C

Intersection Capacity Utilization 72.8%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Lanes, Volumes, Timings
100: W. King Street & Water Street

1/13/2015

Queue shown is maximum after two cycles.

Splits and Phases: 100: W. King Street & Water Street



Lanes, Volumes, Timings

100: Water Street & W. King Street

2/29/2016

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	427	117	59	495	32	203	54	84	44	128	57
Future Volume (vph)	23	427	117	59	495	32	203	54	84	44	128	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100			100			25			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.968			0.991			0.909			0.954	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1593	1623	0	1593	1661	0	1593	1524	0	1593	1599	0
Flt Permitted	0.351			0.339			0.520			0.606		
Satd. Flow (perm)	588	1623	0	568	1661	0	872	1524	0	1016	1599	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			20			20	
Link Distance (ft)		576			371			284			329	
Travel Time (s)		15.7			10.1			9.7			11.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			30			70						
Adj. Flow (vph)	26	474	130	66	550	36	226	60	93	49	142	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	604	0	66	586	0	226	153	0	49	205	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	36.0	36.0		36.0	36.0		25.0	25.0		25.0	25.0	
Total Split (s)	60.0	60.0		60.0	60.0		30.0	30.0		30.0	30.0	
Total Split (%)	66.7%	66.7%		66.7%	66.7%		33.3%	33.3%		33.3%	33.3%	
Maximum Green (s)	54.0	54.0		54.0	54.0		24.0	24.0		24.0	24.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	57.0	57.0		57.0	57.0		25.0	25.0		25.0	25.0	
Actuated g/C Ratio	0.63	0.63		0.63	0.63		0.28	0.28		0.28	0.28	
v/c Ratio	0.07	0.59		0.18	0.56		0.93	0.36		0.17	0.46	
Control Delay	7.3	12.9		8.9	12.2		77.1	28.5		26.0	30.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

14-076 River Walk Development
Mary Morgan, PE

PM Build
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Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

Lanes, Volumes, Timings

100: Water Street & W. King Street

2/29/2016

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	7.3	12.9		8.9	12.2		77.1	28.5		26.0	30.5	
LOS	A	B		A	B		E	C		C	C	
Approach Delay		12.7			11.9			57.5			29.6	
Approach LOS		B			B			E			C	
Queue Length 50th (ft)	5	187		15	176		123	69		21	95	
Queue Length 95th (ft)	16	288		35	269		#261	123		50	161	
Internal Link Dist (ft)		496			291			204			249	
Turn Bay Length (ft)	100			100						100		
Base Capacity (vph)	371	1026		359	1051		251	440		293	461	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.07	0.59		0.18	0.56		0.90	0.35		0.17	0.44	

Intersection Summary

Area Type: CBD

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 23.5

Intersection LOS: C

Intersection Capacity Utilization 80.0%

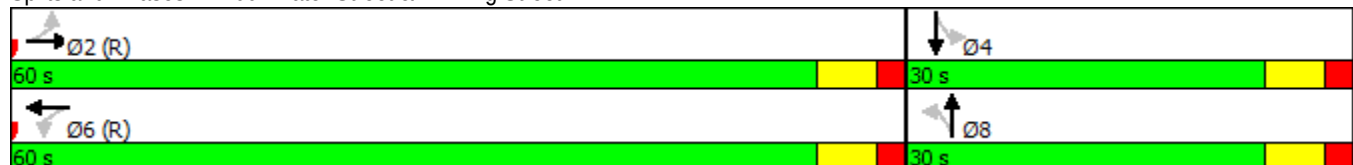
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 100: Water Street & W. King Street



Lanes, Volumes, Timings

100: Water Street & W. King Street

2/29/2016

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	427	117	59	495	32	203	54	84	44	128	57
Future Volume (vph)	23	427	117	59	495	32	203	54	84	44	128	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	100		0	0		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100			100			25			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.968			0.991			0.909			0.954	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1593	1623	0	1593	1661	0	1593	1524	0	1593	1599	0
Flt Permitted	0.341			0.329			0.533			0.614		
Satd. Flow (perm)	572	1623	0	552	1661	0	894	1524	0	1029	1599	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			20			20	
Link Distance (ft)		576			371			284			329	
Travel Time (s)		15.7			10.1			9.7			11.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Parking (#/hr)			30			70						
Adj. Flow (vph)	26	474	130	66	550	36	226	60	93	49	142	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	604	0	66	586	0	226	153	0	49	205	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	36.0	36.0		36.0	36.0		25.0	25.0		25.0	25.0	
Total Split (s)	52.0	52.0		52.0	52.0		38.0	38.0		38.0	38.0	
Total Split (%)	57.8%	57.8%		57.8%	57.8%		42.2%	42.2%		42.2%	42.2%	
Maximum Green (s)	46.0	46.0		46.0	46.0		32.0	32.0		32.0	32.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0		12.0	12.0		12.0	12.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effect Green (s)	55.2	55.2		55.2	55.2		26.8	26.8		26.8	26.8	
Actuated g/C Ratio	0.61	0.61		0.61	0.61		0.30	0.30		0.30	0.30	
v/c Ratio	0.07	0.61		0.20	0.58		0.85	0.34		0.16	0.43	
Control Delay	10.2	15.8		11.9	14.9		56.3	25.0		21.8	26.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

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Mary Morgan, PE

PM Build + Improvements
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Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

Lanes, Volumes, Timings

100: Water Street & W. King Street

2/29/2016

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	10.2	15.8		11.9	14.9		56.3	25.0		21.8	26.9	
LOS	B	B		B	B		E	C		C	C	
Approach Delay		15.6			14.6			43.7			25.9	
Approach LOS		B			B			D			C	
Queue Length 50th (ft)	6	200		16	188		118	66		20	92	
Queue Length 95th (ft)	20	370		45	346		#200	106		43	138	
Internal Link Dist (ft)		496			291			204			249	
Turn Bay Length (ft)	100			100						100		
Base Capacity (vph)	350	994		338	1018		337	575		388	604	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.07	0.61		0.20	0.58		0.67	0.27		0.13	0.34	

Intersection Summary

Area Type: CBD

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 22.2

Intersection LOS: C

Intersection Capacity Utilization 80.0%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 100: Water Street & W. King Street





Water Street at Howard Street

HCM Unsignalized Intersection Capacity Analysis

200: Howard Street & Water Street

1/13/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	2	4	3	8	10	110	0	0	94	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	2	4	3	9	11	122	0	0	104	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)											300	
pX, platoon unblocked												
vC, conflicting volume	199	249	53	199	250	61	106			122		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	199	249	53	199	250	61	106			122		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	99	99	99	99			100		
cM capacity (veh/h)	728	647	1003	736	647	991	1484			1463		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	2	17	52	81	70	36						
Volume Left	0	4	11	0	0	0						
Volume Right	2	9	0	0	0	1						
cSH	1003	827	1484	1700	1700	1700						
Volume to Capacity	0.00	0.02	0.01	0.05	0.04	0.02						
Queue Length 95th (ft)	0	2	1	0	0	0						
Control Delay (s)	8.6	9.4	1.6	0.0	0.0	0.0						
Lane LOS	A	A	A									
Approach Delay (s)	8.6	9.4	0.6		0.0							
Approach LOS	A	A										
Intersection Summary												
Average Delay			1.0									
Intersection Capacity Utilization			18.9%		ICU Level of Service					A		
Analysis Period (min)			15									

Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

HCM Unsignalized Intersection Capacity Analysis

200: Howard Street & Water Street

1/13/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	2	4	3	8	10	114	0	0	98	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	2	4	3	9	11	127	0	0	109	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)											300	
pX, platoon unblocked												
vC, conflicting volume	206	258	55	206	259	63	110			127		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	206	258	55	206	259	63	110			127		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	99	99	99	99			100		
cM capacity (veh/h)	720	640	1000	728	639	988	1478			1457		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	2	17	53	84	73	37						
Volume Left	0	4	11	0	0	0						
Volume Right	2	9	0	0	0	1						
cSH	1000	820	1478	1700	1700	1700						
Volume to Capacity	0.00	0.02	0.01	0.05	0.04	0.02						
Queue Length 95th (ft)	0	2	1	0	0	0						
Control Delay (s)	8.6	9.5	1.6	0.0	0.0	0.0						
Lane LOS	A	A	A									
Approach Delay (s)	8.6	9.5	0.6		0.0							
Approach LOS	A	A										
Intersection Summary												
Average Delay			1.0									
Intersection Capacity Utilization			18.9%		ICU Level of Service				A			
Analysis Period (min)			15									

Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

HCM Unsignalized Intersection Capacity Analysis

200: Water Street & Howard Street

2/29/2016

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	2	5	3	8	10	135	0	0	119	1
Future Volume (Veh/h)	0	0	2	5	3	8	10	135	0	0	119	1
Sign Control	Stop				Stop				Free		Free	
Grade	0%				0%				0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	2	6	3	9	11	150	0	0	132	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage (veh)												
Upstream signal (ft)												284
pX, platoon unblocked												
vC, conflicting volume	240	304	66	240	305	75	133	150				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	240	304	66	240	305	75	133	150				
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1	4.1				
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	100	100	100	99	100	99	99	100				
cM capacity (veh/h)	681	603	983	689	603	971	1449	1429				
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	2	18	61	100	88	45						
Volume Left	0	6	11	0	0	0						
Volume Right	2	9	0	0	0	1						
cSH	983	784	1449	1700	1700	1700						
Volume to Capacity	0.00	0.02	0.01	0.06	0.05	0.03						
Queue Length 95th (ft)	0	2	1	0	0	0						
Control Delay (s)	8.7	9.7	1.4	0.0	0.0	0.0						
Lane LOS	A	A	A									
Approach Delay (s)	8.7	9.7	0.5	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay	0.9											
Intersection Capacity Utilization	20.5%			ICU Level of Service					A			
Analysis Period (min)	15											

Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

HCM Unsignalized Intersection Capacity Analysis

200: Howard Street & Water Street

1/13/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	0	11	25	0	59	10	240	0	0	262	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	0	12	28	0	66	11	267	0	0	291	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)											300	
pX, platoon unblocked												
vC, conflicting volume	513	581	146	447	581	133	292			267		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	513	581	146	447	581	133	292			267		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	99	94	100	93	99			100		
cM capacity (veh/h)	409	420	875	485	420	891	1266			1294		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	16	93	100	178	194	98						
Volume Left	3	28	11	0	0	0						
Volume Right	12	66	0	0	0	1						
cSH	703	713	1266	1700	1700	1700						
Volume to Capacity	0.02	0.13	0.01	0.10	0.11	0.06						
Queue Length 95th (ft)	2	11	1	0	0	0						
Control Delay (s)	10.2	10.8	0.9	0.0	0.0	0.0						
Lane LOS	B	B	A									
Approach Delay (s)	10.2	10.8	0.3		0.0							
Approach LOS	B	B										
Intersection Summary												
Average Delay			1.9									
Intersection Capacity Utilization			30.7%		ICU Level of Service					A		
Analysis Period (min)			15									

Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

HCM Unsignalized Intersection Capacity Analysis

200: Howard Street & Water Street

1/13/2015

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	0	11	26	0	61	10	250	0	0	273	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	0	12	29	0	68	11	278	0	0	303	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)											300	
pX, platoon unblocked												
vC, conflicting volume	533	604	152	464	604	139	304			278		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	533	604	152	464	604	139	304			278		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	99	94	100	92	99			100		
cM capacity (veh/h)	394	407	867	471	407	884	1253			1282		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	16	97	104	185	202	102						
Volume Left	3	29	11	0	0	0						
Volume Right	12	68	0	0	0	1						
cSH	690	701	1253	1700	1700	1700						
Volume to Capacity	0.02	0.14	0.01	0.11	0.12	0.06						
Queue Length 95th (ft)	2	12	1	0	0	0						
Control Delay (s)	10.3	11.0	0.9	0.0	0.0	0.0						
Lane LOS	B	B	A									
Approach Delay (s)	10.3	11.0	0.3		0.0							
Approach LOS	B	B										
Intersection Summary												
Average Delay			1.9									
Intersection Capacity Utilization			31.3%		ICU Level of Service				A			
Analysis Period (min)			15									

Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

HCM Unsignalized Intersection Capacity Analysis

200: Water Street & Howard Street

2/29/2016

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	11	28	0	61	10	276	0	0	303	1
Future Volume (Veh/h)	3	0	11	28	0	61	10	276	0	0	303	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	0	12	31	0	68	11	307	0	0	337	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)												284
pX, platoon unblocked												
vC, conflicting volume	581	666	169	510	667	154	338				307	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	581	666	169	510	667	154	338				307	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	99	100	99	93	100	92	99				100	
cM capacity (veh/h)	363	375	845	437	375	865	1218				1250	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	15	99	113	205	225	113						
Volume Left	3	31	11	0	0	0						
Volume Right	12	68	0	0	0	1						
cSH	668	662	1218	1700	1700	1700						
Volume to Capacity	0.02	0.15	0.01	0.12	0.13	0.07						
Queue Length 95th (ft)	2	13	1	0	0	0						
Control Delay (s)	10.5	11.4	0.8	0.0	0.0	0.0						
Lane LOS	B	B	A									
Approach Delay (s)	10.5	11.4	0.3	0.0								
Approach LOS	B	B										
Intersection Summary												
Average Delay				1.8								
Intersection Capacity Utilization				32.5%	ICU Level of Service				A			
Analysis Period (min)				15								

Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

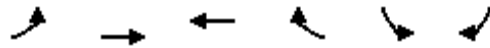


Water Street at Rivers Street/ Poplar Grove Road

HCM Unsignalized Intersection Capacity Analysis

300: Rivers Street & Water Street

1/13/2015

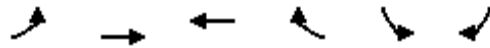


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕	↕	↕	↕
Volume (veh/h)	65	256	75	55	72	28
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	72	284	83	61	80	31
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	83				370	83
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	83				370	83
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				86	97
cM capacity (veh/h)	1512				575	959
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	167	190	83	61	80	31
Volume Left	72	0	0	0	80	0
Volume Right	0	0	0	61	0	31
cSH	1512	1700	1700	1700	575	959
Volume to Capacity	0.05	0.11	0.05	0.04	0.14	0.03
Queue Length 95th (ft)	4	0	0	0	12	3
Control Delay (s)	3.5	0.0	0.0	0.0	12.3	8.9
Lane LOS	A				B	A
Approach Delay (s)	1.6		0.0		11.3	
Approach LOS					B	
Intersection Summary						
Average Delay			3.0			
Intersection Capacity Utilization			24.4%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

300: Rivers Street & Water Street

1/13/2015

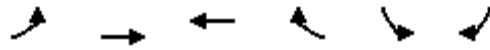


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕	↕	↕	↕
Volume (veh/h)	68	266	78	57	75	29
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	76	296	87	63	83	32
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	87				386	87
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	87				386	87
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				85	97
cM capacity (veh/h)	1507				560	955
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	174	197	87	63	83	32
Volume Left	76	0	0	0	83	0
Volume Right	0	0	0	63	0	32
cSH	1507	1700	1700	1700	560	955
Volume to Capacity	0.05	0.12	0.05	0.04	0.15	0.03
Queue Length 95th (ft)	4	0	0	0	13	3
Control Delay (s)	3.5	0.0	0.0	0.0	12.5	8.9
Lane LOS	A				B	A
Approach Delay (s)	1.6		0.0		11.5	
Approach LOS					B	
Intersection Summary						
Average Delay			3.0			
Intersection Capacity Utilization			24.9%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

300: Rivers Street & Water Street

2/29/2016

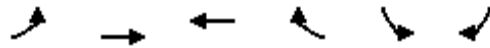


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔↔	↔	↔	↔	↔
Traffic Volume (veh/h)	87	287	101	58	76	51
Future Volume (Veh/h)	87	287	101	58	76	51
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	97	319	112	64	84	57
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	112				466	112
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	112				466	112
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				83	94
cM capacity (veh/h)	1475				491	920
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	203	213	112	64	84	57
Volume Left	97	0	0	0	84	0
Volume Right	0	0	0	64	0	57
cSH	1475	1700	1700	1700	491	920
Volume to Capacity	0.07	0.13	0.07	0.04	0.17	0.06
Queue Length 95th (ft)	5	0	0	0	15	5
Control Delay (s)	3.9	0.0	0.0	0.0	13.8	9.2
Lane LOS	A				B	A
Approach Delay (s)	1.9		0.0		12.0	
Approach LOS					B	
Intersection Summary						
Average Delay			3.4			
Intersection Capacity Utilization			26.3%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

300: Rivers Street & Water Street

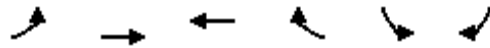
1/13/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕	↕	↕	↕
Volume (veh/h)	43	246	211	207	261	37
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	48	273	234	230	290	41
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	234				467	234
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	234				467	234
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				43	95
cM capacity (veh/h)	1330				506	767
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	139	182	234	230	290	41
Volume Left	48	0	0	0	290	0
Volume Right	0	0	0	230	0	41
cSH	1330	1700	1700	1700	506	767
Volume to Capacity	0.04	0.11	0.14	0.14	0.57	0.05
Queue Length 95th (ft)	3	0	0	0	89	4
Control Delay (s)	2.9	0.0	0.0	0.0	21.2	10.0
Lane LOS	A				C	A
Approach Delay (s)	1.2		0.0		19.8	
Approach LOS					C	
Intersection Summary						
Average Delay			6.2			
Intersection Capacity Utilization			47.3%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis300: Rivers Street & Water Street

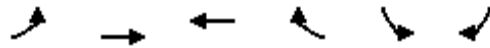
1/13/2015



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕	↕	↕	↕
Volume (veh/h)	45	256	220	215	272	38
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	50	284	244	239	302	42
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	244				487	244
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	244				487	244
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				38	94
cM capacity (veh/h)	1319				490	756
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	145	190	244	239	302	42
Volume Left	50	0	0	0	302	0
Volume Right	0	0	0	239	0	42
cSH	1319	1700	1700	1700	490	756
Volume to Capacity	0.04	0.11	0.14	0.14	0.62	0.06
Queue Length 95th (ft)	3	0	0	0	103	4
Control Delay (s)	2.9	0.0	0.0	0.0	23.4	10.0
Lane LOS	A				C	B
Approach Delay (s)	1.3		0.0		21.8	
Approach LOS					C	
Intersection Summary						
Average Delay			6.8			
Intersection Capacity Utilization			48.9%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis300: Rivers Street & Water Street

2/29/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕	↕	↕	↕
Traffic Volume (veh/h)	70	281	251	216	272	70
Future Volume (Veh/h)	70	281	251	216	272	70
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	78	312	279	240	302	78
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	279				591	279
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	279				591	279
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				27	89
cM capacity (veh/h)	1281				411	718
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	182	208	279	240	302	78
Volume Left	78	0	0	0	302	0
Volume Right	0	0	0	240	0	78
cSH	1281	1700	1700	1700	411	718
Volume to Capacity	0.06	0.12	0.16	0.14	0.73	0.11
Queue Length 95th (ft)	5	0	0	0	145	9
Control Delay (s)	3.7	0.0	0.0	0.0	34.4	10.6
Lane LOS	A				D	B
Approach Delay (s)	1.7		0.0		29.5	
Approach LOS					D	
Intersection Summary						
Average Delay			9.2			
Intersection Capacity Utilization			52.3%		ICU Level of Service	A
Analysis Period (min)			15			



Water Street at Proposed Site Access 1

HCM Unsignalized Intersection Capacity Analysis

400: Water Street & Site Access 1

2/29/2016



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	1	1	145	126	1
Future Volume (Veh/h)	1	1	1	145	126	1
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	1	1	161	140	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					360	
pX, platoon unblocked						
vC, conflicting volume	223	70	141			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	223	70	141			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	745	978	1440			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	2	55	107	93	48	
Volume Left	1	1	0	0	0	
Volume Right	1	0	0	0	1	
cSH	845	1440	1700	1700	1700	
Volume to Capacity	0.00	0.00	0.06	0.05	0.03	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	9.3	0.1	0.0	0.0	0.0	
Lane LOS	A	A				
Approach Delay (s)	9.3	0.0		0.0		
Approach LOS	A					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			14.7%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis400: Water Street & Site Access 1

2/29/2016

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	0	1	286	341	2
Future Volume (Veh/h)	1	0	1	286	341	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	0	1	318	379	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)					360	
pX, platoon unblocked						
vC, conflicting volume	541	190	381			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	541	190	381			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	471	819	1174			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	1	107	212	253	128	
Volume Left	1	1	0	0	0	
Volume Right	0	0	0	0	2	
cSH	471	1174	1700	1700	1700	
Volume to Capacity	0.00	0.00	0.12	0.15	0.08	
Queue Length 95th (ft)	0	0	0	0	0	
Control Delay (s)	12.7	0.1	0.0	0.0	0.0	
Lane LOS	B	A				
Approach Delay (s)	12.7	0.0		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			19.5%	ICU Level of Service		A
Analysis Period (min)			15			

Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

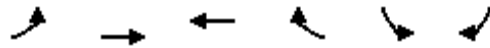


Poplar Grove Road at Proposed Site Access 2

HCM Unsignalized Intersection Capacity Analysis

500: Rivers Street & Site Access 2

2/29/2016

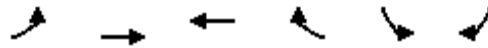


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	4	338	111	22	21	4
Future Volume (Veh/h)	4	338	111	22	21	4
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	376	123	24	23	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	147				519	135
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	147				519	135
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				96	100
cM capacity (veh/h)	1435				516	914
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	380	147	27			
Volume Left	4	0	23			
Volume Right	0	24	4			
cSH	1435	1700	551			
Volume to Capacity	0.00	0.09	0.05			
Queue Length 95th (ft)	0	0	4			
Control Delay (s)	0.1	0.0	11.9			
Lane LOS	A		B			
Approach Delay (s)	0.1	0.0	11.9			
Approach LOS			B			
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			31.0%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

500: Rivers Street & Site Access 2

2/29/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	305	255	39	27	12
Future Volume (Veh/h)	7	305	255	39	27	12
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	8	339	283	43	30	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	326				660	304
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	326				660	304
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				93	98
cM capacity (veh/h)	1234				425	735
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	347	326	43			
Volume Left	8	0	30			
Volume Right	0	43	13			
cSH	1234	1700	488			
Volume to Capacity	0.01	0.19	0.09			
Queue Length 95th (ft)	0	0	7			
Control Delay (s)	0.2	0.0	13.1			
Lane LOS	A		B			
Approach Delay (s)	0.2	0.0	13.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.9			
Intersection Capacity Utilization			31.7%	ICU Level of Service		A
Analysis Period (min)			15			

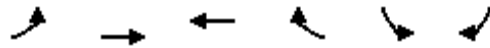


Poplar Grove Road at Proposed Site Access 3

#

HCM Unsignalized Intersection Capacity Analysis600: Rivers Street & Site Access 3

2/29/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	8	324	282	38	26	13
Future Volume (Veh/h)	8	324	282	38	26	13
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	9	360	313	42	29	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	355				712	334
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	355				712	334
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				93	98
cM capacity (veh/h)	1204				396	708
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	369	355	43			
Volume Left	9	0	29			
Volume Right	0	42	14			
cSH	1204	1700	462			
Volume to Capacity	0.01	0.21	0.09			
Queue Length 95th (ft)	1	0	8			
Control Delay (s)	0.3	0.0	13.6			
Lane LOS	A		B			
Approach Delay (s)	0.3	0.0	13.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.9			
Intersection Capacity Utilization			33.5%		ICU Level of Service	
Analysis Period (min)			15		A	



Trip Generation

Trip Generation Summary - Phase 1

Project: 14-076
Alternative: Alternative 1

Open Date: 12/29/2014
Analysis Date: 12/29/2014

ITE	Land Use	Average Daily Trips			AM Peak Hour of Adjacent Street Traffic			PM Peak Hour of Adjacent Street Traffic		
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
220	APT 1 380 Persons	627	627	1254	55	55	110	75	75	150
820	CENTERSHOPPING 1 10.27 Gross Leasable Area 1000 SF	774	773	1547	24	15	39	62	68	130
Unadjusted Volume		1401	1400	2801	79	70	149	137	143	280
Internal Capture Trips		0	0	0	2	2	4	24	24	48
Pass-By Trips		0	0	0	0	0	0	19	17	36
Volume Added to Adjacent Streets		1401	1400	2801	77	68	145	94	102	196

Total AM Peak Hour Internal Capture = 3 Percent

Total PM Peak Hour Internal Capture = 17 Percent



Traffic Volume Data

DAVENPORT

305 West 4th Street Suite 2A

Winston Salem, NC 27101

Ph:(336)744-1636

Counted By: Miovision

Weather: Clear

File Name : King at Water

Site Code : 13-070 King @ Wa

Start Date : 11/6/2014

Page No : 1

Groups Printed- Lights - Mediums - Articulated Trucks

	Water Street Southbound					King Street Westbound					Water Street Northbound					King Street Eastbound					
Start Time	Thru	Right	Peds	App. Total		Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Tot
07:00 AM	0	5	3	0	8	1	44	2	0	47	4	0	2	0	6	0	84	8	0	92	15
07:15 AM	5	6	1	0	12	2	56	1	0	59	5	0	5	0	10	3	116	4	0	123	20
07:30 AM	8	11	6	0	25	3	75	1	0	79	6	8	12	0	26	8	135	12	0	155	28
07:45 AM	7	5	1	0	13	3	78	15	0	96	9	11	15	0	35	6	141	12	0	159	30
Total	20	27	11	0	58	9	253	19	0	281	24	19	34	0	77	17	476	36	0	529	94
08:00 AM	9	5	5	0	19	2	91	9	0	102	12	10	8	0	30	5	138	7	0	150	30
08:15 AM	5	6	1	0	12	5	71	8	0	84	11	4	12	0	27	2	102	14	0	118	24
08:30 AM	9	6	4	0	19	5	77	10	0	92	7	6	3	0	16	4	90	9	0	103	23
08:45 AM	9	7	7	0	23	6	74	7	0	87	4	7	5	0	16	4	98	11	0	113	23
Total	32	24	17	0	73	18	313	34	0	365	34	27	28	0	89	15	428	41	0	484	101
09:00 AM	3	5	2	0	10	4	51	9	0	64	10	7	9	0	26	7	86	16	0	109	20
09:15 AM	8	8	3	0	19	6	60	9	0	75	13	9	4	0	26	3	77	19	0	99	21
09:30 AM	9	16	4	0	29	6	67	8	0	81	15	6	7	0	28	6	58	10	0	74	21
09:45 AM	10	11	6	0	27	5	69	7	0	81	15	4	4	0	23	7	67	15	0	89	22
Total	30	40	15	0	85	21	247	33	0	301	53	26	24	0	103	23	288	60	0	371	86
10:00 AM	9	7	4	0	20	5	63	5	0	73	13	6	6	0	25	6	77	9	0	92	21
10:15 AM	7	3	7	0	17	7	66	4	0	77	10	5	8	0	23	3	67	15	0	85	20
10:30 AM	11	9	9	0	29	6	66	9	0	81	12	9	10	0	31	3	82	14	0	99	24
10:45 AM	14	9	6	0	29	8	64	10	0	82	17	11	15	0	43	9	79	10	0	98	25
Total	41	28	26	0	95	26	259	28	0	313	52	31	39	0	122	21	305	48	0	374	90
11:00 AM	16	6	5	0	27	8	52	6	0	66	14	2	8	0	24	6	84	10	0	100	21
11:15 AM	8	3	7	0	18	6	67	12	0	85	13	3	14	0	30	5	72	7	0	84	21
11:30 AM	9	10	2	0	21	8	93	6	0	107	10	6	16	0	32	3	72	12	0	87	24
11:45 AM	17	10	9	0	36	7	67	14	0	88	11	9	9	0	29	11	90	19	0	120	27
Total	50	29	23	0	102	29	279	38	0	346	48	20	47	0	115	25	318	48	0	391	95
12:00 PM	11	8	10	0	29	8	86	13	0	107	14	20	14	0	48	8	93	14	0	115	29
12:15 PM	20	9	5	0	34	10	102	10	0	122	21	12	14	0	47	4	81	14	0	99	30
12:30 PM	13	14	8	0	35	12	74	13	0	99	21	10	18	0	49	4	66	12	0	82	26
12:45 PM	13	11	7	0	31	12	76	12	0	100	24	9	16	0	49	5	77	7	0	89	26
Total	57	42	30	0	129	42	338	48	0	428	80	51	62	0	193	21	317	47	0	385	113
01:00 PM	11	13	9	0	33	8	65	9	0	82	20	7	9	0	36	3	72	15	0	90	24
01:15 PM	11	13	2	0	26	17	75	10	0	102	24	10	16	0	50	7	77	10	0	94	27
01:30 PM	13	11	10	0	34	7	78	15	0	100	25	9	17	0	51	6	105	14	0	125	31
01:45 PM	13	12	12	0	37	10	92	9	0	111	24	7	17	0	48	8	107	18	0	133	32
Total	48	49	33	0	130	42	310	43	0	395	93	33	59	0	185	24	361	57	0	442	115
02:00 PM	16	9	9	0	34	12	92	18	0	122	18	18	13	0	49	5	97	15	0	117	32
02:15 PM	15	10	8	0	33	11	107	8	0	126	16	13	6	0	35	2	100	17	0	119	31
02:30 PM	9	7	7	0	23	17	55	11	0	83	14	10	10	0	34	4	90	13	0	107	24
02:45 PM	15	3	10	0	28	14	102	12	0	128	30	12	15	0	57	4	92	24	0	120	33
Total	55	29	34	0	118	54	356	49	0	459	78	53	44	0	175	15	379	69	0	463	121
03:00 PM	15	12	11	0	38	8	74	13	0	95	39	9	13	0	61	8	98	15	0	121	31
03:15 PM	17	21	5	0	43	15	82	15	0	112	28	11	17	0	56	4	92	13	0	109	32
03:30 PM	10	12	9	0	31	14	108	15	0	137	34	12	15	0	61	4	69	15	0	88	31
03:45 PM	14	13	11	0	38	12	105	9	0	126	34	15	7	0	56	3	89	16	0	108	32
Total	56	58	36	0	150	49	369	52	0	470	135	47	52	0	234	19	348	59	0	426	128
04:00 PM	9	10	9	0	28	10	126	10	0	146	36	13	10	0	59	10	90	17	0	117	35
04:15 PM	14	12	6	0	32	15	94	4	0	113	38	14	15	0	67	2	88	14	0	104	31
04:30 PM	10	18	7	0	35	15	98	4	0	117	39	6	11	0	56	3	116	16	0	135	34

Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

DAVENPORT

305 West 4th Street Suite 2A

Winston Salem, NC 27101

Ph:(336)744-1636

File Name : King at Water
 Site Code : 13-070 King @ Wa
 Start Date : 11/6/2014
 Page No : 2

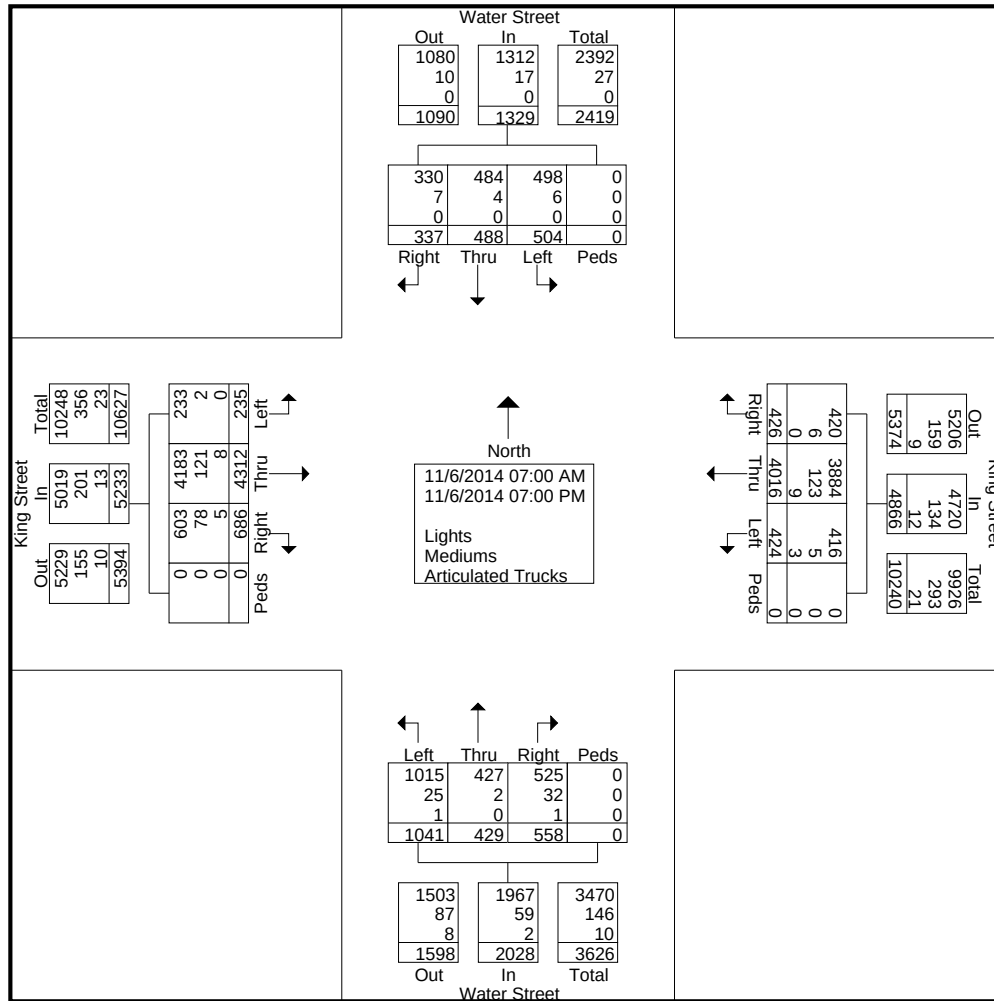
Groups Printed- Lights - Mediums - Articulated Trucks

	Water Street Southbound					King Street Westbound					Water Street Northbound					King Street Eastbound								
Start Time	Thru	Right	Peds	App. Total		Left	Thru	Right	Peds	App. Total		Left	Thru	Right	Peds	App. Total		Left	Thru	Right	Peds	App. Total		Int. Tot
04:45 PM	13	20	15	0	48	15	116	7	0	138	45	10	16	0	71	2	114	22	0	138			39	
Total	46	60	37	0	143	55	434	25	0	514	158	43	52	0	253	17	408	69	0	494			140	
05:00 PM	13	26	21	0	60	5	130	9	0	144	42	16	15	0	73	9	109	27	0	145			42	
05:15 PM	4	18	9	0	31	12	124	9	0	145	64	14	13	0	91	8	88	33	0	129			39	
05:30 PM	12	13	10	0	35	9	106	6	0	121	36	11	24	0	71	3	99	21	0	123			35	
05:45 PM	14	8	9	0	31	11	112	3	0	126	37	7	15	0	59	1	110	13	0	124			34	
Total	43	65	49	0	157	37	472	27	0	536	179	48	67	0	294	21	406	94	0	521			150	
06:00 PM	8	12	11	0	31	15	105	11	0	131	26	6	14	0	46	6	71	11	0	88			29	
06:15 PM	10	10	3	0	23	11	102	5	0	118	30	6	13	0	49	4	76	19	0	99			28	
06:30 PM	6	7	6	0	19	11	87	6	0	104	25	13	15	0	53	3	69	15	0	87			26	
06:45 PM	2	8	6	0	16	5	91	8	0	104	26	6	8	0	40	4	62	13	0	79			23	
Total	26	37	26	0	89	42	385	30	0	457	107	31	50	0	188	17	278	58	0	353			108	
07:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0				
Grand Total	504	488	337	0	1329	424	4016	426	0	4866	1041	429	558	0	2028	235	4312	686	0	5233			1345	
Apprch %	37.9	36.7	25.4	0		8.7	82.5	8.8	0		51.3	21.2	27.5	0		4.5	82.4	13.1	0					
Total %	3.7	3.6	2.5	0	9.9	3.2	29.8	3.2	0	36.2	7.7	3.2	4.1	0	15.1	1.7	32	5.1	0	38.9				
Lights	498	484	330	0	1312	416	3884	420	0	4720	1015	427	525	0	1967	233	4183	603	0	5019			1301	
% Lights	98.8	99.2	97.9	0	98.7	98.1	96.7	98.6	0	97	97.5	99.5	94.1	0	97	99.1	97	87.9	0	95.9			96.	
Mediums	6	4	7	0	17	5	123	6	0	134	25	2	32	0	59	2	121	78	0	201			41	
% Mediums	1.2	0.8	2.1	0	1.3	1.2	3.1	1.4	0	2.8	2.4	0.5	5.7	0	2.9	0.9	2.8	11.4	0	3.8			3.	
Articulated Trucks	0	0	0	0	0	3	9	0	0	12	1	0	1	0	2	0	8	5	0	13			2	
% Articulated Trucks	0	0	0	0	0	0.7	0.2	0	0	0.2	0.1	0	0.2	0	0.1	0	0.2	0.7	0	0.2			0.	

DAVENPORT

305 West 4th Street Suite 2A
Winston Salem, NC 27101
Ph:(336)744-1636

File Name : King at Water
Site Code : 13-070 King @ Wa
Start Date : 11/6/2014
Page No : 3



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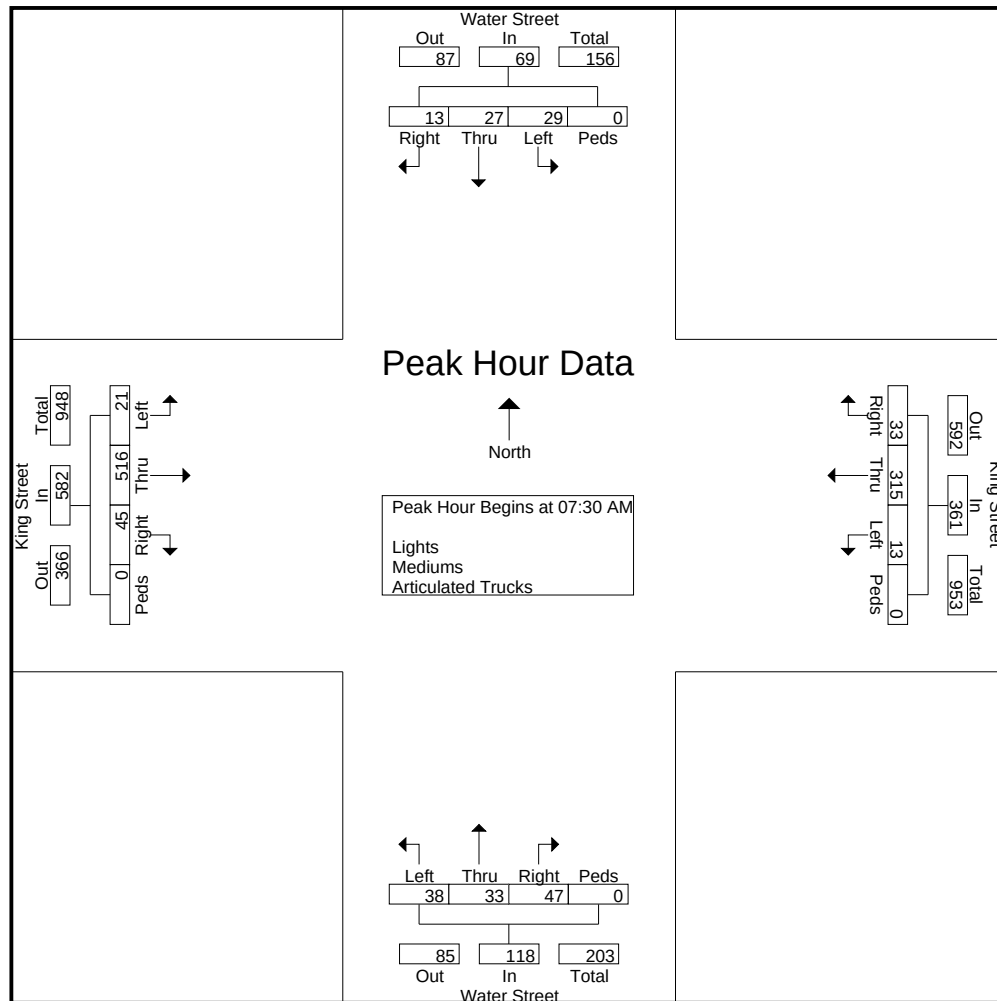
305 West 4th Street Suite 2A

Winston Salen, NC 27101

Ph:(336)744-1636

File Name : King at Water
 Site Code : 13-070 King @ Wa
 Start Date : 11/6/2014
 Page No : 4

	Water Street Southbound					King Street Westbound					Water Street Northbound					King Street Eastbound					
Start Time	Thru	Right	Peds	App. Total		Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Tot
Peak Hour Analysis From 07:00 AM to 09:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	8	11	6	0	25	3	75	1	0	79	6	8	12	0	26	8	135	12	0	155	28
07:45 AM	7	5	1	0	13	3	78	15	0	96	9	11	15	0	35	6	141	12	0	159	30
08:00 AM	9	5	5	0	19	2	91	9	0	102	12	10	8	0	30	5	138	7	0	150	30
08:15 AM	5	6	1	0	12	5	71	8	0	84	11	4	12	0	27	2	102	14	0	118	24
Total Volume	29	27	13	0	69	13	315	33	0	361	38	33	47	0	118	21	516	45	0	582	113
% App. Total	42	39.1	18.8	0		3.6	87.3	9.1	0		32.2	28	39.8	0		3.6	88.7	7.7	0		
PHF	.806	.614	.542	.000	.690	.650	.865	.550	.000	.885	.792	.750	.783	.000	.843	.656	.915	.804	.000	.915	.93

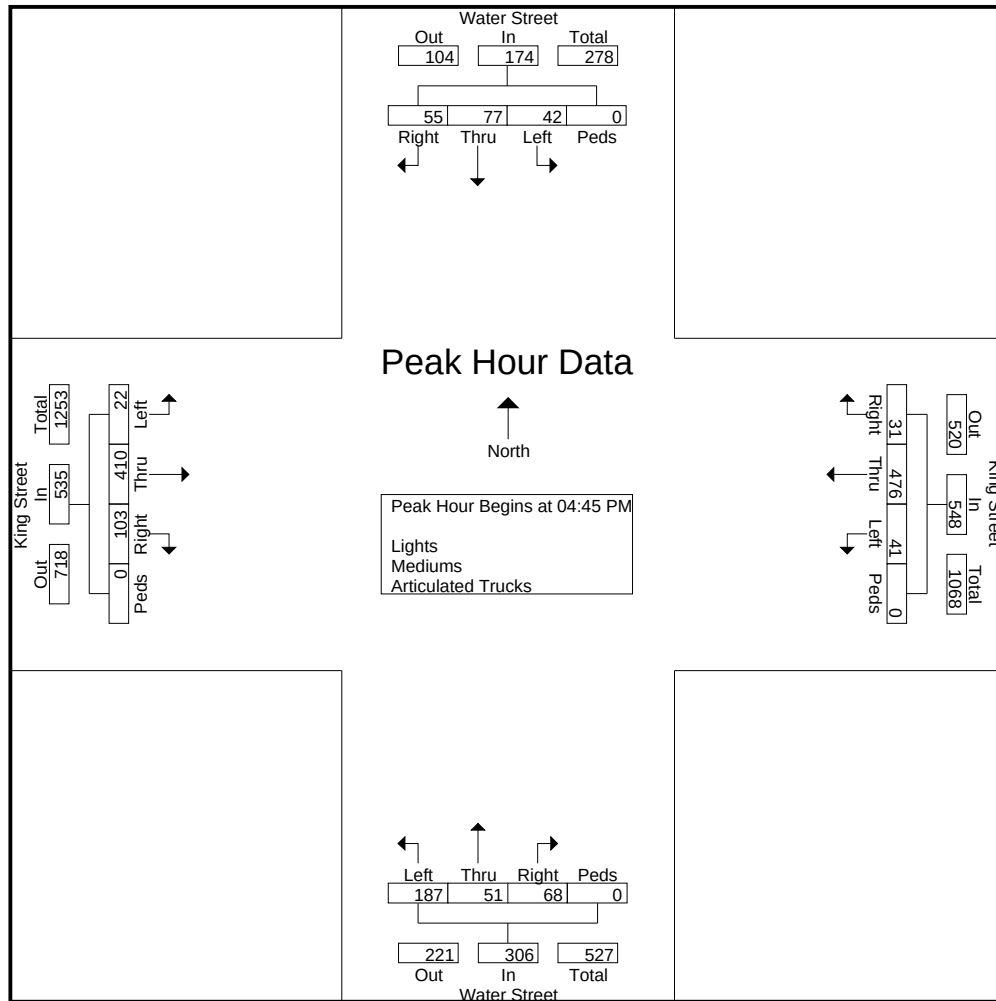


DAVENPORT

305 West 4th Street Suite 2A
Winston Salen, NC 27101
Ph:(336)744-1636

File Name : King at Water
Site Code : 13-070 King @ Wa
Start Date : 11/6/2014
Page No : 5

	Water Street Southbound					King Street Westbound					Water Street Northbound					King Street Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Tot
Peak Hour Analysis From 04:00 PM to 07:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	13	20	15	0	48	15	116	7	0	138	45	10	16	0	71	2	114	22	0	138	39
05:00 PM	13	26	21	0	60	5	130	9	0	144	42	16	15	0	73	9	109	27	0	145	42
05:15 PM	4	18	9	0	31	12	124	9	0	145	64	14	13	0	91	8	88	33	0	129	39
05:30 PM	12	13	10	0	35	9	106	6	0	121	36	11	24	0	71	3	99	21	0	123	35
Total Volume	42	77	55	0	174	41	476	31	0	548	187	51	68	0	306	22	410	103	0	535	156
% App. Total	24.1	44.3	31.6	0		7.5	86.9	5.7	0		61.1	16.7	22.2	0		4.1	76.6	19.3	0		
PHF	.808	.740	.655	.000	.725	.683	.915	.861	.000	.945	.730	.797	.708	.000	.841	.611	.899	.780	.000	.922	.92



DAVENPORT

305 West 4th Street Suite 2A
Winston Salem, NC 27101
Ph:(336)744-1636

Counted by: C. Galderise
Weather: Clear

File Name : Howard at Water
Site Code : 00000001
Start Date : 11/6/2014
Page No : 1

Groups Printed- Cars - Bank 1

Start Time	Southbound					Westbound					Northbound					Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	12	0	2	14	0	0	0	1	1	0	4	0	0	4	1	0	0	1	2	21
07:15 AM	0	15	0	1	16	0	0	1	1	2	0	15	0	0	15	0	0	0	0	0	33
07:30 AM	0	24	1	5	30	0	1	1	1	3	0	21	0	1	22	0	0	2	8	10	65
07:45 AM	0	20	0	4	24	2	0	5	2	9	0	26	0	0	26	1	0	0	9	10	69
Total	0	71	1	12	84	2	1	7	5	15	0	66	0	1	67	2	0	2	18	22	188
08:00 AM	0	14	1	1	16	0	0	1	1	2	1	26	0	0	27	0	0	0	0	0	45
08:15 AM	0	26	0	2	28	3	2	3	1	9	1	26	0	1	28	0	0	2	0	2	67
08:30 AM	0	18	1	3	22	0	1	1	1	3	2	15	0	1	18	0	0	0	4	4	47
08:45 AM	0	29	0	5	34	0	0	2	1	3	3	20	0	0	23	0	0	0	4	4	64
Total	0	87	2	11	100	3	3	7	4	17	7	87	0	2	96	0	0	2	8	10	223
09:00 AM	0	21	0	8	29	1	0	2	4	7	4	25	0	2	31	0	0	0	8	8	75
09:15 AM	0	39	0	6	45	1	1	5	6	13	0	31	0	1	32	0	0	0	5	5	95
09:30 AM	0	26	0	4	30	5	0	6	1	12	0	16	0	1	17	0	0	0	3	3	62
09:45 AM	0	21	1	2	24	1	0	3	1	5	2	12	0	1	15	0	0	0	2	2	46
Total	0	107	1	20	128	8	1	16	12	37	6	84	0	5	95	0	0	0	18	18	278
10:00 AM	0	9	0	2	11	1	1	2	3	7	0	11	0	0	11	0	0	0	5	5	34
10:15 AM	0	25	0	5	30	2	1	4	3	10	2	20	0	2	24	0	0	1	4	5	69
10:30 AM	0	22	0	7	29	2	0	6	4	12	0	14	0	1	15	0	0	0	1	1	57
10:45 AM	0	38	0	4	42	12	0	9	3	24	2	41	0	3	46	2	0	0	2	4	116
Total	0	94	0	18	112	17	2	21	13	53	4	86	0	6	96	2	0	1	12	15	276
11:00 AM	0	18	1	7	26	1	0	5	7	13	1	17	0	2	20	0	0	0	6	6	65
11:15 AM	0	16	0	7	23	0	1	7	12	20	1	17	0	3	21	3	0	1	6	10	74
11:30 AM	0	27	2	3	32	1	1	3	3	8	1	27	0	0	28	1	0	1	3	5	73
11:45 AM	0	38	0	2	40	8	4	12	4	28	0	30	0	0	30	0	0	0	1	1	99
Total	0	99	3	19	121	10	6	27	26	69	3	91	0	5	99	4	0	2	16	22	311
12:00 PM	0	16	0	7	23	2	1	8	2	13	2	22	0	1	25	4	0	4	2	10	71
12:15 PM	0	23	0	4	27	4	0	9	3	16	3	30	0	2	35	0	0	3	1	4	82
12:30 PM	0	27	1	4	32	2	0	13	7	22	1	22	1	0	24	1	0	0	5	6	84
12:45 PM	0	52	0	7	59	3	1	13	9	26	2	51	0	3	56	1	0	2	3	6	147
Total	0	118	1	22	141	11	2	43	21	77	8	125	1	6	140	6	0	9	11	26	384
01:00 PM	0	25	0	7	32	3	0	5	7	15	1	19	0	0	20	1	0	0	8	9	76
01:15 PM	0	25	0	8	33	3	0	5	11	19	1	19	0	0	20	1	0	0	4	5	77
01:30 PM	0	43	0	2	45	7	0	11	8	26	3	38	0	0	41	2	0	1	7	10	122
01:45 PM	0	43	0	1	44	7	0	11	5	23	3	38	0	0	41	2	0	1	3	6	114
Total	0	136	0	18	154	20	0	32	31	83	8	114	0	0	122	6	0	2	22	30	389
02:00 PM	0	21	1	6	28	1	0	3	8	12	1	18	0	2	21	0	0	2	5	7	68
02:15 PM	0	36	0	3	39	2	0	4	7	13	2	25	0	0	27	3	0	2	8	13	92
02:30 PM	0	21	0	4	25	5	0	7	15	27	2	20	0	4	26	0	0	3	5	8	86
02:45 PM	0	27	0	3	30	3	0	11	13	27	2	21	0	2	25	0	0	0	4	4	86
Total	0	105	1	16	122	11	0	25	43	79	7	84	0	8	99	3	0	7	22	32	332
03:00 PM	0	20	3	1	24	3	0	7	9	19	0	28	0	0	28	0	0	1	2	3	74
03:15 PM	0	48	0	0	48	9	0	11	5	25	0	36	0	0	36	2	0	1	2	5	114
03:30 PM	0	34	0	1	35	6	0	6	10	22	1	31	0	0	32	0	0	1	3	4	93
03:45 PM	0	32	0	2	34	6	0	5	6	17	1	52	0	0	53	0	0	6	2	8	112
Total	0	134	3	4	141	24	0	29	30	83	2	147	0	0	149	2	0	9	9	20	393

DAVENPORT

305 West 4th Street Suite 2A
Winston Salen, NC 27101
Ph:(336)744-1636

File Name : Howard at Water
Site Code : 00000001
Start Date : 11/6/2014
Page No : 2

Groups Printed- Cars - Bank 1

	Southbound					Westbound					Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	0	32	0	2	34	4	1	6	9	20	2	42	0	1	45	2	0	0	3	5	104
04:15 PM	0	44	0	6	50	6	0	13	13	32	1	67	0	0	68	1	0	0	1	2	152
04:30 PM	0	43	0	1	44	3	0	13	18	34	1	33	0	1	35	2	0	1	3	6	119
04:45 PM	0	56	1	1	58	11	0	16	10	37	5	47	0	1	53	1	0	4	2	7	155
Total	0	175	1	10	186	24	1	48	50	123	9	189	0	3	201	6	0	5	9	20	530
05:00 PM	0	58	0	3	61	4	0	12	8	24	1	63	0	1	65	0	0	1	5	6	156
05:15 PM	0	52	0	1	53	7	0	18	9	34	3	60	0	0	63	0	0	5	1	6	156
05:30 PM	0	38	0	1	39	6	0	8	5	19	1	49	0	0	50	2	0	5	0	7	115
05:45 PM	0	36	1	1	38	4	0	9	2	15	2	48	0	0	50	0	0	1	1	2	105
Total	0	184	1	6	191	21	0	47	24	92	7	220	0	1	228	2	0	12	7	21	532
06:00 PM	0	16	2	7	25	2	1	3	8	14	1	12	0	2	15	0	0	4	2	6	60
06:15 PM	0	33	0	5	38	11	0	11	10	32	3	43	0	1	47	0	1	3	3	7	124
06:30 PM	0	25	0	1	26	3	0	2	3	8	5	28	0	0	33	1	0	3	0	4	71
06:45 PM	0	33	0	1	34	6	0	12	1	19	2	32	0	0	34	0	0	0	0	0	87
Total	0	107	2	14	123	22	1	28	22	73	11	115	0	3	129	1	1	10	5	17	342
Grand Total	0	1417	16	170	1603	173	17	330	281	801	72	1408	1	40	1521	34	1	61	157	253	4178
Apprch %	0	88.4	1	10.6		21.6	2.1	41.2	35.1		4.7	92.6	0.1	2.6		13.4	0.4	24.1	62.1		
Total %	0	33.9	0.4	4.1	38.4	4.1	0.4	7.9	6.7	19.2	1.7	33.7	0	1	36.4	0.8	0	1.5	3.8	6.1	
Cars	0	1401										1387									
% Cars	0	98.9	100	100	99	98.8	94.1	99.1	100	99.3	100	98.5	100	100	98.6	91.2	100	100	100	98.8	98.9
Bank 1	0	16	0	0	16	2	1	3	0	6	0	21	0	0	21	3	0	0	0	3	46
% Bank 1	0	1.1	0	0	1	1.2	5.9	0.9	0	0.7	0	1.5	0	0	1.4	8.8	0	0	0	1.2	1.1

DAVENPORT

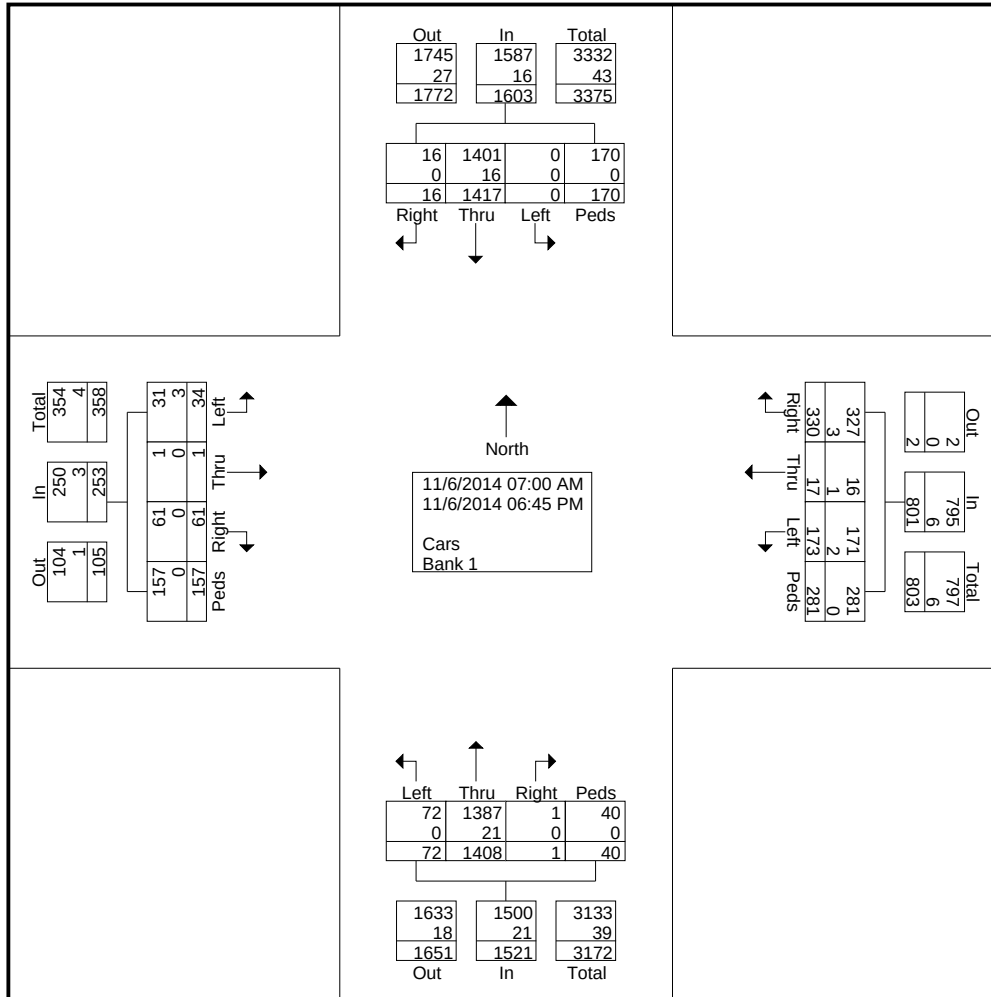
305 West 4th Street Suite 2A
Winston Salen, NC 27101
Ph:(336)744-1636

File Name : Howard at Water

Site Code : 00000001

Start Date : 11/6/2014

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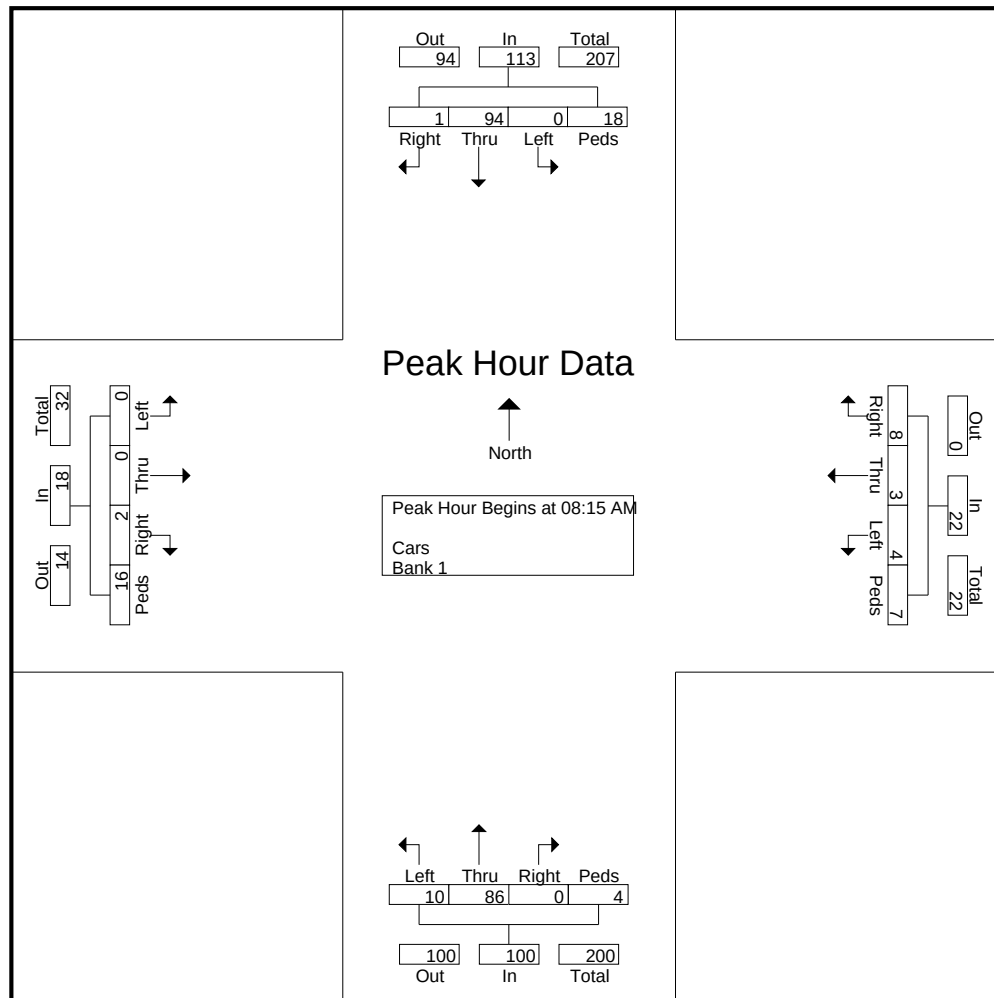
File Name : Howard at Water

Site Code : 00000001

Start Date : 11/6/2014

Page No : 4

	Southbound					Westbound					Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:15 AM																					
08:15 AM	0	26	0	2	28	3	2	3	1	9	1	26	0	1	28	0	0	2	0	2	67
08:30 AM	0	18	1	3	22	0	1	1	1	3	2	15	0	1	18	0	0	0	4	4	47
08:45 AM	0	29	0	5	34	0	0	2	1	3	3	20	0	0	23	0	0	0	4	4	64
09:00 AM	0	21	0	8	29	1	0	2	4	7	4	25	0	2	31	0	0	0	8	8	75
Total Volume	0	94	1	18	113	4	3	8	7	22	10	86	0	4	100	0	0	2	16	18	253
% App. Total	0	83.2	0.9	15.9		18.2	13.6	36.4	31.8		10	86	0	4		0	0	11.1	88.9		
PHF	.000	.810	.250	.563	.831	.333	.375	.667	.438	.611	.625	.827	.000	.500	.806	.000	.000	.250	.500	.563	.843

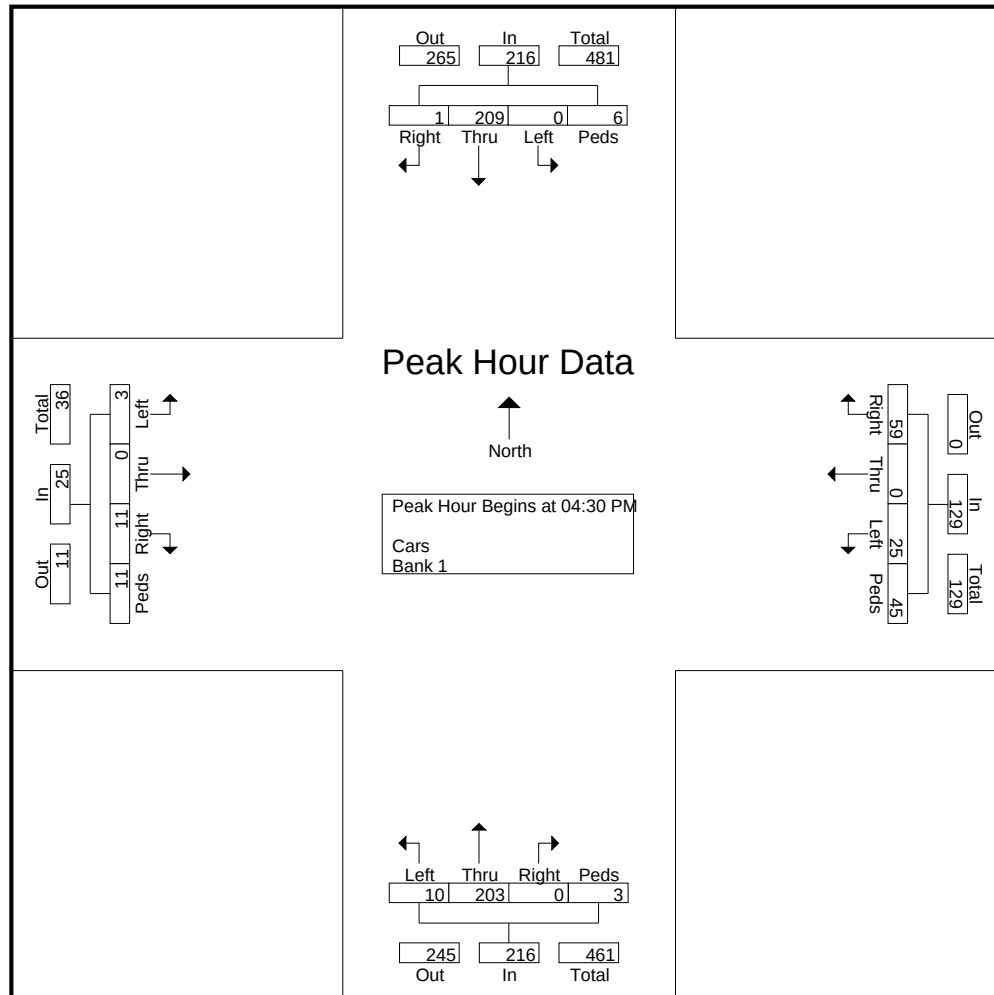


DAVENPORT

305 West 4th Street Suite 2A
Winston Salen, NC 27101
Ph:(336)744-1636

File Name : Howard at Water
Site Code : 00000001
Start Date : 11/6/2014
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	Southbound					Westbound					Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	43	0	1	44	3	0	13	18	34	1	33	0	1	35	2	0	1	3	6	119
04:45 PM	0	56	1	1	58	11	0	16	10	37	5	47	0	1	53	1	0	4	2	7	155
05:00 PM	0	58	0	3	61	4	0	12	8	24	1	63	0	1	65	0	0	1	5	6	156
05:15 PM	0	52	0	1	53	7	0	18	9	34	3	60	0	0	63	0	0	5	1	6	156
Total Volume	0	209	1	6	216	25	0	59	45	129	10	203	0	3	216	3	0	11	11	25	586
% App. Total	0	96.8	0.5	2.8		19.4	0	45.7	34.9		4.6	94	0	1.4		12	0	44	44		
PHF	.000	.901	.250	.500	.885	.568	.000	.819	.625	.872	.500	.806	.000	.750	.831	.375	.000	.550	.550	.893	.939



DAVENPORT

305 West 4th Street Suite 2A
Winston Salen, NC 27101
Ph:(336)744-1636

Counted By:
Weather: Clear

File Name : Water at Riv
Site Code : 00000001
Start Date : 11/6/2014
Page No : 1

Groups Printed- Unshifted - Bank 1

Start Time	Southbound					Westbound					Northbound					Eastbound					Int. T
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	13	0	1	0	14	0	15	8	0	23	0	0	0	0	0	1	32	0	0	33	
07:15 AM	9	0	2	0	11	0	5	7	0	12	0	0	0	0	0	4	40	0	0	44	
07:30 AM	22	0	4	0	26	0	15	6	0	21	0	0	0	0	0	18	60	0	0	78	1
07:45 AM	12	0	4	0	16	0	36	11	3	50	0	0	0	0	0	14	84	0	0	98	1
Total	56	0	11	0	67	0	71	32	3	106	0	0	0	0	0	37	216	0	0	253	4
08:00 AM	16	0	1	0	17	0	12	15	0	27	0	0	0	0	0	9	66	0	0	75	1
08:15 AM	22	0	5	1	28	0	12	9	0	21	0	0	0	1	1	10	46	0	0	56	1
08:30 AM	9	0	4	0	13	0	14	14	0	28	0	0	0	0	0	5	43	0	0	48	
08:45 AM	21	0	3	0	24	0	17	13	2	32	0	0	0	0	0	6	51	0	0	57	1
Total	68	0	13	1	82	0	55	51	2	108	0	0	0	1	1	30	206	0	0	236	4
09:00 AM	14	0	1	0	15	0	15	8	1	24	0	0	0	1	1	0	41	0	0	41	
09:15 AM	20	1	2	3	26	0	23	17	0	40	0	0	0	0	0	7	70	0	0	77	1
09:30 AM	24	0	13	1	38	0	21	16	2	39	0	0	0	0	0	3	46	0	1	50	1
09:45 AM	28	0	2	1	31	0	24	13	0	37	0	0	0	0	0	9	44	0	0	53	1
Total	86	1	18	5	110	0	83	54	3	140	0	0	0	1	1	19	201	0	1	221	4
10:00 AM	23	0	2	0	25	0	17	19	0	36	0	0	0	0	0	7	24	0	0	31	
10:15 AM	16	0	5	1	22	0	13	14	0	27	0	0	0	0	0	5	30	0	0	35	
10:30 AM	27	0	5	3	35	0	23	22	0	45	0	0	0	0	0	5	57	0	0	62	1
10:45 AM	35	0	6	4	45	0	35	26	1	62	0	0	0	0	0	4	43	0	0	47	1
Total	101	0	18	8	127	0	88	81	1	170	0	0	0	0	0	21	154	0	0	175	4
11:00 AM	21	0	4	2	27	0	23	17	0	40	0	0	0	0	0	4	28	0	0	32	
11:15 AM	15	0	2	2	19	0	15	15	0	30	0	0	0	0	0	5	29	0	0	34	
11:30 AM	26	0	5	2	33	0	13	20	0	33	0	0	0	0	0	4	28	0	0	32	
11:45 AM	47	0	4	0	51	0	29	16	4	49	0	0	0	1	1	5	36	0	0	41	1
Total	109	0	15	6	130	0	80	68	4	152	0	0	0	1	1	18	121	0	0	139	4
12:00 PM	34	0	6	2	42	0	25	26	0	51	0	0	0	0	0	8	52	0	1	61	1
12:15 PM	31	0	4	8	43	0	35	31	0	66	0	0	0	0	0	4	50	0	0	54	1
12:30 PM	36	0	5	2	43	0	33	31	1	65	0	0	0	0	0	3	39	0	0	42	1
12:45 PM	29	2	10	2	43	0	22	21	0	43	0	0	0	0	0	10	27	0	0	37	1
Total	130	2	25	14	171	0	115	109	1	225	0	0	0	0	0	25	168	0	1	194	5
01:00 PM	45	0	5	1	51	0	33	17	1	51	0	0	0	1	1	4	25	0	0	29	1
01:15 PM	43	0	8	1	52	0	33	30	0	63	0	0	0	0	0	8	26	0	0	34	1
01:30 PM	38	0	9	1	48	0	32	34	1	67	0	0	0	0	0	6	48	0	0	54	1
01:45 PM	39	0	12	3	54	0	41	30	0	71	0	0	0	0	0	5	47	0	0	52	1
Total	165	0	34	6	205	0	139	111	2	252	0	0	0	1	1	23	146	0	0	169	6
02:00 PM	35	0	6	4	45	0	48	30	0	78	0	0	0	0	0	5	35	0	0	40	1
02:15 PM	34	0	12	5	51	0	40	29	0	69	0	0	0	0	0	5	33	0	0	38	1
02:30 PM	31	0	8	3	42	0	29	23	0	52	0	0	0	0	0	7	35	0	0	42	1
02:45 PM	43	0	6	3	52	0	29	35	0	64	0	0	0	1	1	6	33	0	0	39	1
Total	143	0	32	15	190	0	146	117	0	263	0	0	0	1	1	23	136	0	0	159	6
03:00 PM	33	1	6	1	41	0	30	37	6	73	0	0	0	1	1	7	50	0	0	57	1
03:15 PM	51	0	14	0	65	0	38	42	4	84	0	0	0	0	0	5	44	0	0	49	1
03:30 PM	40	0	13	0	53	0	43	42	2	87	0	0	0	0	0	4	31	0	0	35	1
03:45 PM	43	0	12	1	56	0	43	46	4	93	0	0	0	0	0	8	49	0	1	58	2
Total	167	1	45	2	215	0	154	167	16	337	0	0	0	1	1	24	174	0	1	199	7
04:00 PM	46	0	9	0	55	0	45	45	4	94	0	0	0	0	0	10	25	0	0	35	1
04:15 PM	42	0	11	1	54	0	43	52	2	97	0	0	0	0	0	12	40	0	0	52	2
04:30 PM	39	1	18	2	60	0	42	36	2	80	0	0	0	0	0	0	51	0	0	51	1
04:45 PM	72	0	17	3	92	0	46	40	6	92	0	0	0	0	0	10	49	0	1	60	2
Total	199	1	55	6	261	0	176	173	14	363	0	0	0	0	0	32	165	0	1	198	8

Communication: Rivers Walk Traffic Impact Analysis (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)

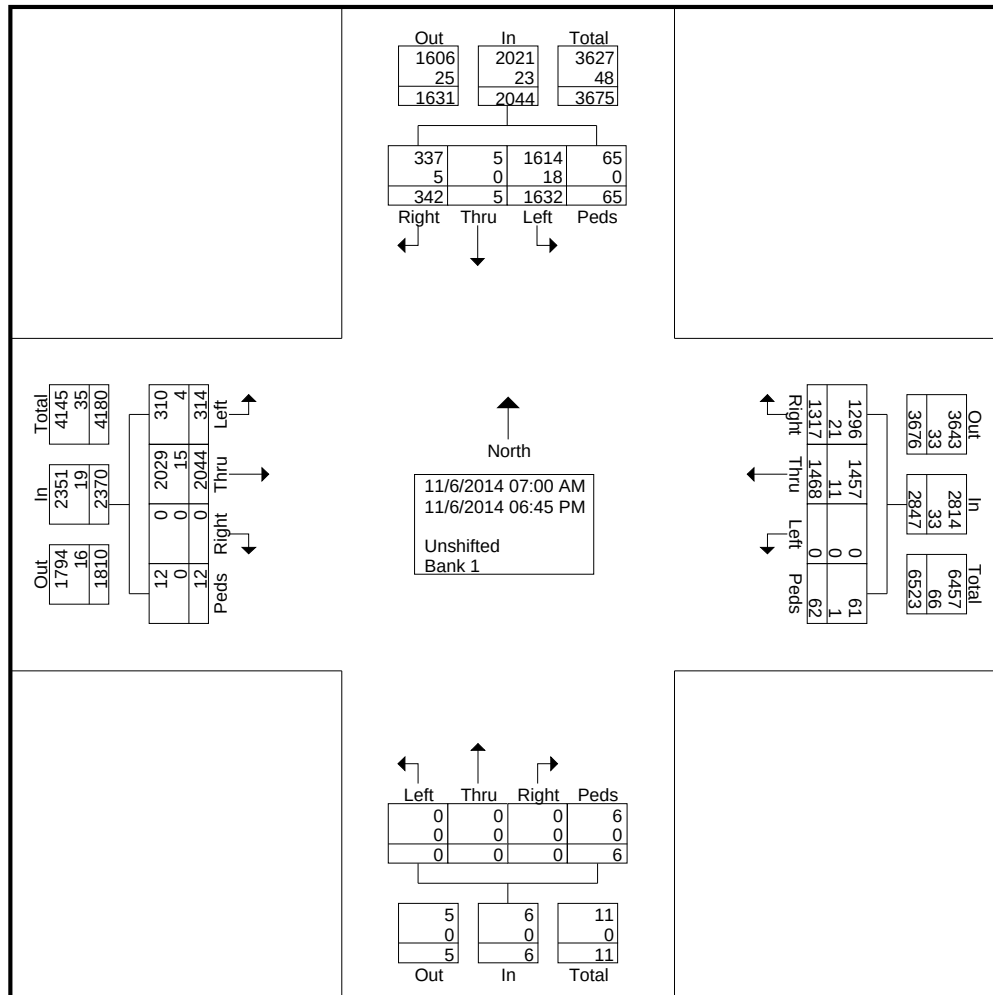
DAVENPORT

305 West 4th Street Suite 2A
Winston Salem, NC 27101
Ph:(336)744-1636

File Name : Water at Riv
Site Code : 00000001
Start Date : 11/6/2014
Page No : 2

Groups Printed- Unshifted - Bank 1

	Southbound					Westbound					Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. T
05:00 PM	65	0	15	0	80	0	63	51	1	115	0	0	0	0	0	17	82	0	1	100	2
05:15 PM	74	0	8	2	84	0	55	63	6	124	0	0	0	0	0	9	60	0	1	70	2
05:30 PM	64	0	11	0	75	0	47	53	2	102	0	0	0	0	0	7	55	0	1	63	2
05:45 PM	40	0	11	0	51	0	47	44	2	93	0	0	0	0	0	8	32	0	2	42	1
Total	243	0	45	2	290	0	212	211	11	434	0	0	0	0	0	41	229	0	5	275	9
06:00 PM	41	0	11	0	52	0	43	35	0	78	0	0	0	0	0	3	25	0	1	29	1
06:15 PM	47	0	10	0	57	0	42	41	4	87	0	0	0	0	0	5	35	0	0	40	1
06:30 PM	40	0	5	0	45	0	33	37	1	71	0	0	0	0	0	5	30	0	0	35	1
06:45 PM	37	0	5	0	42	0	31	30	0	61	0	0	0	0	0	8	38	0	2	48	1
Total	165	0	31	0	196	0	149	143	5	297	0	0	0	0	0	21	128	0	3	152	6
Grand Total	1632	5	342	65	2044	0	1468	1317	62	2847	0	0	0	6	6	314	2044	0	12	2370	72
Apprch %	79.8	0.2	16.7	3.2		0	51.6	46.3	2.2		0	0	0	100		13.2	86.2	0	0.5		
Total %	22.5	0.1	4.7	0.9	28.1	0	20.2	18.1	0.9	39.2	0	0	0	0.1	0.1	4.3	28.1	0	0.2	32.6	
Unshifted	1614	5	337	65	2021	0	1457	1296	61	2814	0	0	0	6	6	310	2029	0	12	2351	71
% Unshifted	98.9	100	98.5	100	98.9	0	99.3	98.4	98.4	98.8	0	0	0	100	100	98.7	99.3	0	100	99.2	
Bank 1	18	0	5	0	23	0	11	21	1	33	0	0	0	0	0	4	15	0	0	19	
% Bank 1	1.1	0	1.5	0	1.1	0	0.7	1.6	1.6	1.2	0	0	0	0	0	1.3	0.7	0	0	0.8	

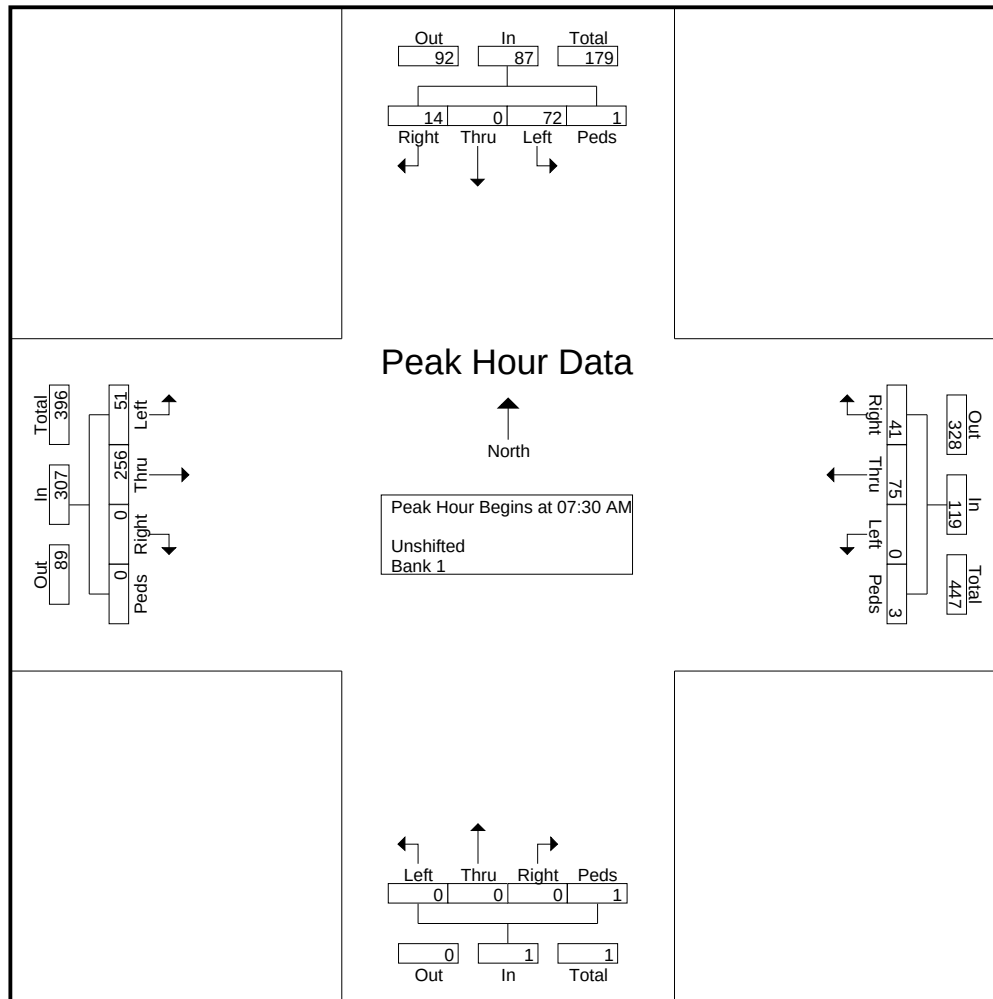


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305 West 4th Street Suite 2A
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Ph:(336)744-1636

File Name : Water at Riv
Site Code : 00000001
Start Date : 11/6/2014
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	Southbound					Westbound					Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. T
Peak Hour Analysis From 07:00 AM to 09:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	22	0	4	0	26	0	15	6	0	21	0	0	0	0	0	18	60	0	0	78	1
07:45 AM	12	0	4	0	16	0	36	11	3	50	0	0	0	0	0	14	84	0	0	98	1
08:00 AM	16	0	1	0	17	0	12	15	0	27	0	0	0	0	0	9	66	0	0	75	1
08:15 AM	22	0	5	1	28	0	12	9	0	21	0	0	0	1	1	10	46	0	0	56	1
Total Volume	72	0	14	1	87	0	75	41	3	119	0	0	0	1	1	51	256	0	0	307	5
% App. Total	82.8	0	16.1	1.1		0	63	34.5	2.5		0	0	0	100		16.6	83.4	0	0		
PHF	.818	.000	.700	.250	.777	.000	.521	.683	.250	.595	.000	.000	.000	.250	.250	.708	.762	.000	.000	.783	.7

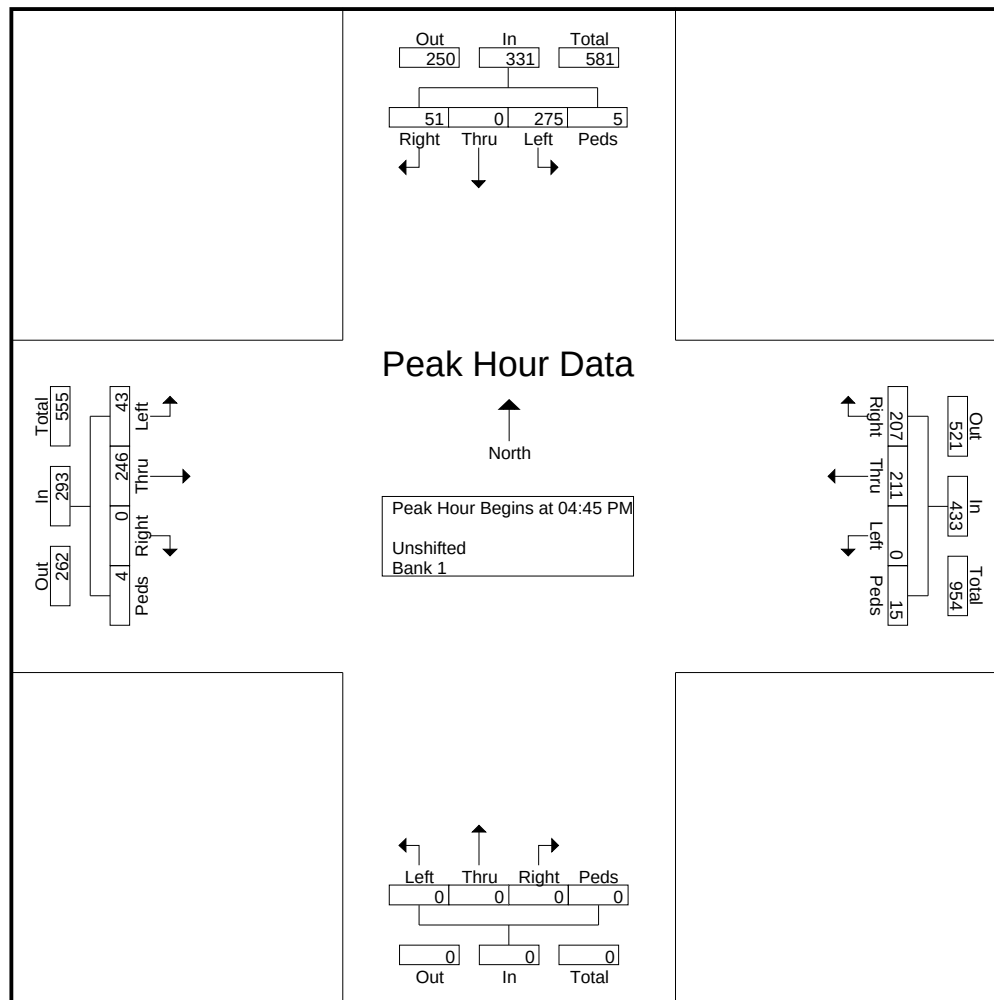


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File Name : Water at Riv
Site Code : 00000001
Start Date : 11/6/2014
Page No : 4

	Southbound					Westbound					Northbound					Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. T
Peak Hour Analysis From 04:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	72	0	17	3	92	0	46	40	6	92	0	0	0	0	0	10	49	0	1	60	2
05:00 PM	65	0	15	0	80	0	63	51	1	115	0	0	0	0	0	17	82	0	1	100	2
05:15 PM	74	0	8	2	84	0	55	63	6	124	0	0	0	0	0	9	60	0	1	70	2
05:30 PM	64	0	11	0	75	0	47	53	2	102	0	0	0	0	0	7	55	0	1	63	2
Total Volume	275	0	51	5	331	0	211	207	15	433	0	0	0	0	0	43	246	0	4	293	10
% App. Total	83.1	0	15.4	1.5		0	48.7	47.8	3.5		0	0	0	0		14.7	84	0	1.4		
PHF	.929	.000	.750	.417	.899	.000	.837	.821	.625	.873	.000	.000	.000	.000	.000	.632	.750	.000	1.00	.733	.8





Supporting Documentation

Internal Capture: PM Peak Hour of Adjacent Street

LAND USE A RETAIL

ITE Code	Trip Gen'tC	Page	1502
Size	Trip Gen'tC	Unit	10'x3 s.f.
Enter	62	6	56
Exit	68	8	60
Total	130	14	116
%	100%	11%	89%

Pass-By Trips	%	34%
Enter	19	
Exit	20	
Total	40	

Internal Trips should be removed from the total number of trips generated by the multi-use site before applying the pass-by reduction
Trip Generation Handbook, 2nd Edition, Chapter 7, pg 85

Enter from External
56
Exit to External
60

Exit Demand
3% 2
BALANCED
0
Enter Demand
31% 0

Exit Demand
12% 8
BALANCED
8
Enter Demand
31% 28

Enter Demand
2% 1
BALANCED
0
Exit Demand
23% 0

Enter Demand
9% 6
BALANCED
6
Exit Demand
53% 33

LAND USE B OFFICE

ITE Code	Size	Page	1205
Unit	10'x3 s.f.	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	100%	#DIV/0!	#DIV/0!

Enter from External
0
Exit to External
0

Enter Demand
0% 0
BALANCED
0
Exit Demand
2% 0

LAND USE C RESIDENTIAL

ITE Code	Size	Page	329
Unit	10'x3 s.f.	Internal	External
Enter	89	8	81
Exit	62	6	56
Total	151	14	137
%	100%	9%	91%

Enter from External
81
Exit to External
56

Exit Demand
0% 0
BALANCED
0
Enter Demand
2% 2

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT

RETAIL	OFFICE	RESIDENTIAL	TOTAL
Enter	56	0	81
Exit	60	0	56
Total	116	0	116
Single-Use Trip Gen. Estm.	130	0	151
TERMINAL CAPTURE			9.8%

Single-Use Trip Gen. Estm.

Total Internal	14
Enter	14
Exit	14

New Roadway System Trips [After Deduction for Pass-By]

Enter	118
Exit	96
Total	214

The diagram illustrates the relationship between three land use categories: Land Use B (Office), Land Use C (Residential), and Land Use D (Pass-By Trips). It shows how trips generated by these land uses are distributed and how they interact with each other.

Land Use B: OFFICE

ITE Code	Size	Page	Unit	Internal	External
1203	10'x3 s.f.				
Enter	0	0	0	0	0
Exit	0	0	0	0	0
Total	0	0	0	0	0
%	100%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Office trip generation is calculated as: $1203 \times 0 = 0$ trips.

Office trips are distributed as follows:

- Enter from External: 0
- Exit to External: 0

Land Use C: RESIDENTIAL

ITE Code	Size	Page	Unit	Internal	External
542	10'x3 s.f.				
Enter	627	85	542		
Exit	627	70	557		
Total	1,254	155	1,099		
%	100%	12%	88%		

Residential trip generation is calculated as: $542 \times 627 = 340,014$ trips.

Residential trips are distributed as follows:

- Enter from External: 0
- Exit to External: 19

Land Use D: PASS-BY TRIPS

ITE Code	Size	Page	Unit	Internal	External
1500	10'x3 s.f.				
Enter	774	70	704		
Exit	774	85	688		
Total	1,547	155	1,392		
%	100%	10%	90%		

Pass-by trip generation is calculated as: $1500 \times 774 = 1,161,000$ trips.

Pass-by trips are distributed as follows:

- Enter from External: 704
- Exit to External: 688

Flow Diagram Summary:

- Office trips (0) flow into the Residential trip generation calculation.
- Residential trips (340,014) flow into the Pass-by trip generation calculation.
- Pass-by trips (1,161,000) flow into the Residential trip generation calculation.
- Residential trips (340,014) flow into the Pass-by trip generation calculation.

NET EXTERNAL TRIPS FOR MULTI-USE DEVELOPMENT			
	RETAIL	OFFICE	RESIDENTIAL
Enter	704	0	542
Exit		688	557
Total	1,392	1,099	
Single Use Trip Cap. Excess	1,647	0	1,264

Enter	1,035
Exit	1,039
Total	2,074

Total Internal	
Enter	155
Exit	155
309	

INTERNAL CAPTURE (%)	11.00%
----------------------	--------

New Roadway System Trips [After Deduction for Pass-By]

February 26, 2016

Jeff Githens
President
Peak Campus
2970 Clairmont Road NE, Suite 310
Atlanta, GA 30329
O: 404-920-5361
C: 404-964-3677
F: 404-920-5461
jgithens@peakcampus.com

RE: Addendum #2 to Parking Demand Study
River Walk, Boone, NC
(DAVENPORT Project Number 14-076)

Dear Mr. Githens:

The following is an updated addendum to the Parking Demand Study prepared for the River Walk Development dated 5/19/2015. An addendum to the original study was prepared on 1/14/16 to provide additional information. This letter provides an update to reflect the latest site plan for the development.

1.0 Introduction

DAVENPORT was retained to prepare an updated Addendum to the original Parking Demand Study dated May 19, 2015 for the proposed River Walk Development located on the northwest quadrant of Poplar Grove Road and Water Street in Boone. As currently planned, the site will consist of 380 bedrooms (119 units) of which approximately 95% are expected to be students, and 10,266 square feet of retail area.

The purpose of this updated Addendum is to provide and update that reflects the latest site plan for the development.

2.0 Parking Demand

2.1 Requirements per UDO

The Boone UDO addresses mixed-use, multifamily and commercial, land uses in terms of a maximum parking allowed rather than a minimum parking required

2.1.1 Mixed-Use Multifamily Maximum Parking Allowed

The UDO allows 1 space per bedroom for apartments with three or fewer bedrooms and a maximum of three spaces for apartments with larger numbers of bedrooms. Additionally, the UDO allows for a 10% reduction to the minimum parking required, based upon adequate pedestrian access to ASU campus and another 10% reduction based upon adequate access to bus/transit services. Interestingly, the ASU Parking Survey addressed in later sections of this letter, found that 74.1% of students surveyed brought cars to Boone which is consistent with the above and other allowances provided in the UDO.



2.1.2 Commercial Maximum Parking Allowed

The UDO estimates five spaces per 1,000 square feet as the maximum parking that may be allowed for commercial retail and office. For restaurants, 12 spaces per 1,000 square feet is the maximum parking that may be allowed.

2.1.3 Motorcycle Parking Requirement

Per the UDO, one motorcycle parking space is required for every 40 vehicle parking space. With 164 vehicle parking spaces planned for onsite, four motorcycle spaces are required. Six motorcycle spaces are being provided.

2.1.4 Bicycle Parking Requirement

Per the UDO, the combined requirement of short and long term bicycle parking for the intended uses is 39 spaces. Per the developer, a total of 64 parking spaces will be provided onsite.

Per the UDO, the required motor vehicle parking can be reduced for every 5 bicycle spaces in excess of the minimum requirement up to a maximum of 10%. Therefore, since 25 more bicycle spaces are being provided than required, the number of motor vehicle parking spaces required can be reduced by 5 spaces.

2.2 Onsite Shared Cars

Based upon information provided by the developer, there will be two (2) shared cars provided onsite (i.e. Zipcar). Per the research published by shared car programs, each shared car is estimated to replace 15 personally-owned vehicles. Thus, the provision of shared cars onsite for the tenants can further alleviate the need for personally-owned vehicles for residents and parking. For the purposes of this study, the estimated parking demand for the residential portion of the development was adjusted based on the provided shared cars using the research information.

2.3 Commercial Parking Requirement

The original Parking Study dated 5/16/2015 addressed the Commercial Parking for the proposed mixed use development. The results of that study and previous parking studies performed in Boone provided for a commercial mixed use, parking demand of 2 spaces per every 1,000 square feet.



3.0 Motor Vehicle Parking Demand per UDO

Utilizing the measured parking rate for the commercial component of this mixed-use site, and the UDO standard rates for the residential portion, Table 1.0 below shows the projected parking needs for the development.

Table 1.0 – Parking Needed for Proposed Mixed-Use Site			
Residential Use			
Type of Use	Parking Rate ¹	Number of Units	Spaces Allowed
1 bedroom unit	1 space per unit	5	5
2 bedroom unit	2 spaces per unit	39	78
3 bedroom unit	3 spaces per unit	3	9
4 bedroom unit	3 spaces per unit	72	216
Residential Maximum Parking Allowed			308
20% Reduction for Pedestrian/Transit Access			-62
Reduction for Excess Bicycle Parking			-5
Reduction for Shared Cars (2 provided onsite) ²			-30
Residential Parking			211
Commercial Use			
Type of Use	Commercial Retail		
Square Footage	10,266 sq. ft.		
Field-observed parking rate ³	2 spaces per 1,000 sq. ft.		
Commercial Parking	21 spaces		
Site Total			
Total Parking	232 spaces		

¹Rates based on Boone UDO Article 24

²Based on published shared car research that each shared car replaces 15 personally-owned vehicles

³Rate based on field-observed rate

4.0 Parking Supply

Per the site plan, a parking deck will be constructed as part of the Rivers Walk Development with 147 automobile parking spaces. A surface lot will also be provided with an additional 17 spaces. Thus, a total of **164 parking spaces will be provided onsite**. As previously discussed, the total maximum parking allowed for the site is 232 spaces. Since the proposed site will consist of both commercial and residential uses, both short term and long term parking will be needed. Potential short term and long term offsite parking locations are further discussed below.

4.1 Offsite Parking – Short Term

The site is located in downtown Boone, where on-street parking, and public, university, private parking are located within walking distance. An investigation was performed to identify offsite parking areas within 500 feet of the site (per the UDO). Table 2.0 below provides a summary of the available short term parking:

Table 2.0 – Short Term Offsite Parking Inventory				
Name	Location	Number of Spaces (approx.)	Owner	Parking Type
W. King Street on-street parking	Within 500-ft radius of site	46	Public	1-hour, 2-hour
Total		46		



4.2 Offsite Parking – Long Term

The residential component of this development will generate the need for long term (daily) parking. Table 3.0 summarizes available long term parking within 500 feet of the site for residents.

Table 3.0 – Long Term Offsite Parking Inventory				
Name	Location	Number of Spaces (approx.)	Owner	Parking Type
Campus West	S. Water Street, Rivers Street and Howard Street	100	Private	Long Term
Total		100		

4.3 Total Parking Available

Table 4.0 below provides a summary of the parking available for residents and patrons of the River Walk Development. As shown, a total of 310 spaces are available through both onsite and inventoried offsite parking. Figure 3 (attached) summarizes the available parking for both short term and long term parking. In addition to the inventoried parking located within 500 feet of the development, the first of many Appalachian State University parking lots is 650' from the proposed development. There are 6,500 parking spaces available on the ASU campus. To utilize parking spaces on the ASU campus students must pay a parking fee.

Table 4.0 – Available Parking	
Type	Number of Spaces (approx.)
Onsite	164
Offsite – Short Term	46
Offsite – Long Term	100
Total	310

5.0 Demand per Student Parking Survey

Given the specific characteristics of this development, the close proximity to campus, and that 95% of tenants are anticipated to be students, it was determined that more information regarding the specific parking needs for the student tenants would be necessary in order to more accurately estimate the parking demand of the proposed development.

Additional information about the parking and vehicle ownership of ASU students had not previously been published. As such, a student survey was conducted (by others) during the Fall 2015, semester.

5.1 Methodology

The survey (attached) was conducted in order to better understand the potential parking needs of the student tenants of the proposed development. Six students were asked to distribute surveys to fellow classmates. The surveys were conducted in classrooms just prior to scheduled classes, so that distance learning students were not included as a part of the survey results, and so that results were not biased as a result of geographic sampling locations. The sampled group represents 2.5% of the University's reported 16,777 students attending classes on the main campus. The majority of the surveyed students (over 98%) indicated they were full time (FTE) students. Twenty-two of the students surveyed indicated that they lived at home and were deleted from the sample.



The sample is sufficient to be statistically significant. The statistical confidence level of the sample representing the student population is slightly greater than 95%. ⁽¹⁾

The distribution of the 416 students completing the survey was:

1.4%	Graduate Students	6
25.5%	Seniors	106
29.6%	Juniors	123
22.1%	Sophomores	92
21.4%	Freshmen	<u>89</u>
	Subtotal	416
	(Less students living with family)	<u>-22</u>
		394

This group included all classes of students who live both on and off campus. Students who live on campus were included in the results given the close proximity of the proposed development and the expected similar parking needs. The proposed development is located a comparable distance to the library and classrooms as many on-campus, university housing facilities including Appalachian Heights and the Living Learning Center.

An equal number of Type "A" and "B" forms, was completed by students in random classrooms. Forms "A" and "B" were identical except that the order of the "true" and "false" style answers was reversed. The forms contained the following fifteen questions:

- 1 What year student are you?
- 2 Are you considered a Full Time Student?
- 3 Do you live on or off campus?
- 4 Are you a commuting student living at home or with family?
- 5 Do you keep a car available for your use at school?
- 6 Do you drive the car daily?
- 7 Do you normally drive only on weekends?
- 8 Do you routinely walk from your room to classes?
- 9 Do you routinely ride the bus from your room to classes?
- 10 If you have no car, do you use a motor cycle or bike for transportation?
- 11 Do you routinely use the State Farm Parking Complex?
- 12 Are you an international student?
- 13 Do you pay a University Parking Fee for on-campus parking?
- 14 Where do you currently live, (Complex name or address)?
- 15 How much do you pay monthly, semester or annually for parking including University Permits?

5.2 Survey Results

The following responses to the survey questions were:

- a. 163 students (41.4%) live on campus;
- b. 292 students (74.1%) keep a car;
- c. 213 students (54.1%) routinely walk to class from their residence;
- d. 127 students (32.2%) routinely ride the bus to class;
- e. 15 students (3.8%) use a motor cycle or motor bike;
- f. 31 students (7.9%) routinely use the ASU State Farm Parking Complex;
- g. 138 students (35.0%) pay a University Parking Fee excluding metered parking.



Additional information can be found attached.

5.3 Survey Conclusion and Application

The survey results demonstrate that 74% of the surveyed students have a car, and 26% do not. Of all students surveyed, 35% have parking privileges on campus and 39% have cars without existing on-campus parking privileges.

Applying these findings to the proposed development, of the 380 residents planned, 95% or 361 are expected to be students. Using the survey results, 74.1%, or 268, student residents would be expected to have cars, and 35%, or 126, student residents would be expected to have parking privileges on the University campus. Of the 268 students expected to have cars at the proposed development, 142 student residents are anticipated to bring automobiles. And 143 students would be expected to require private, parking contracts. Hence, there would be enough onsite parking to accommodate the anticipated students with one (1) additional parking space left over.

Of the 5% or 19 non-student residents planned to reside at the proposed development, all are anticipated to own cars and require parking contracts.

Total residential parking demand is anticipated to be:

Student Residents Parking	268
Student residents with University parking privileges	<u>-126</u>
Total residents requiring private contract parking	142
Less: available on-premises, resident parking spaces	<u>-143</u>
Students without available on- premises parking	-1
Plus: Young Professional Parking	<u>19</u>
Residents requiring off-premises, private, parking contracts	18

The proposed development provides 164 parking spaces. A minimum of 21 spaces are required for short term commercial parking. The remaining 143 are available for residential contract parking. An anticipated 18 residents (including non-student residents) would need to acquire off-premises, private contracts. These off-premises contract spaces are available on the adjacent parking lot at Water and Rivers Street where the Holton Mountain Rentals, has offered to rent spaces on a first come basis.

6.0 Lease Language

As a final all-inclusive remedy to assuring residents utilize off-street, contract parking, Developer and Management of the proposed development have agreed to require all residents intending to bring automobiles to Boone to execute a mandatory Parking Addendum. The Parking Addendum is a legally binding contract in the Lease between Tenant and Landlord⁽²⁾. The Parking Addendum specifically requires that Tenant provide proof of an off-site, parking contract in the event that Tenant has not leased structured parking in the garage of the proposed development. See the attached for a copy of the Parking Addendum.

(1) Raosoft, Inc.

(2) "494 Lofts", Winkler Organization



7.0 Summary and Conclusion

DAVENPORT was retained to perform a parking demand study for the proposed Rivers Walk Development located on the northwest quadrant of Rivers Street/ Poplar Grove Road and Water Street in Boone, North Carolina. As currently planned, the site will consist of 380 bedrooms (119 units), approximately 95% of tenants are expected to be students, and 10,266 square feet of retail area. The purpose of this study was to determine if adequate parking is available for the development through onsite parking and other available offsite parking.

The projected parking demand for the site is 182 spaces. A total of 164 spaces will be provided onsite, with an additional 146 spaces located within 500 feet of the site. The motorcycle and bicycle parking provided onsite meet and exceed the UDO requirements. Table 5.0 provides a summary.

Table 5.0 – Parking Summary			
Motor Vehicle			
Parking Demand (approx.)		Parking Supply (approx.)	
Commercial	21	Onsite Commercial (Short-Term)	46
Residential	161	Onsite Residential (Long-Term)	138
		Offsite	146
Total	182	Total	330
Motorcycle			
UDO Required Motorcycle Parking	4	Provided Motorcycle Parking	6
Bicycle			
UDO Required Bicycle Parking	39	Provided Bicycle Parking	64

In addition to the estimated parking demand and supply, consideration must be given to the location of this development and the provisions provided onsite to accommodate and encourage tenants without vehicles. The site is located within walking distance of ASU and in Downtown Boone where pedestrian traffic has a large role in the overall traffic. Given that the apartments are anticipated to be comprised of mainly students, these tenants will have the opportunity to be less dependent on vehicles given the convenience to walk or bike to campus, as well as locations downtown.

Accommodations will be provided onsite specifically geared towards tenants without vehicles. Two shared cars will be provided onsite (e.g. Zipcar). Per the research published by shared car programs, each shared car is estimated to replace 15 personally-owned vehicles. A tenant-based ridesharing program will also be offered. This is in addition to the ASU ridesharing program (Zimride) and transit (Appalcart) system.

Finally, language will be included in the lease that specifically states the limited parking onsite and the requirement to provide proof of alternative parking arrangements if the tenant has not leased parking through the development.

Student surveys show that many students already choose not to maintain a personally-owned vehicle while at ASU. Given the ability, ease, and promotion for Rivers Walk tenants not to bring a personally-owned vehicle, and the supporting lease language, it is anticipated that this trend would increase for this site.

In conclusion, based on surveyed and field-measured parking rates, and the site-specific considerations, it is anticipated that sufficient parking is provided at this development.



Page 8
Mr. Githens

2/26/2016
DAVENPORT Project No. 14-076

Please contact me if you have any questions.

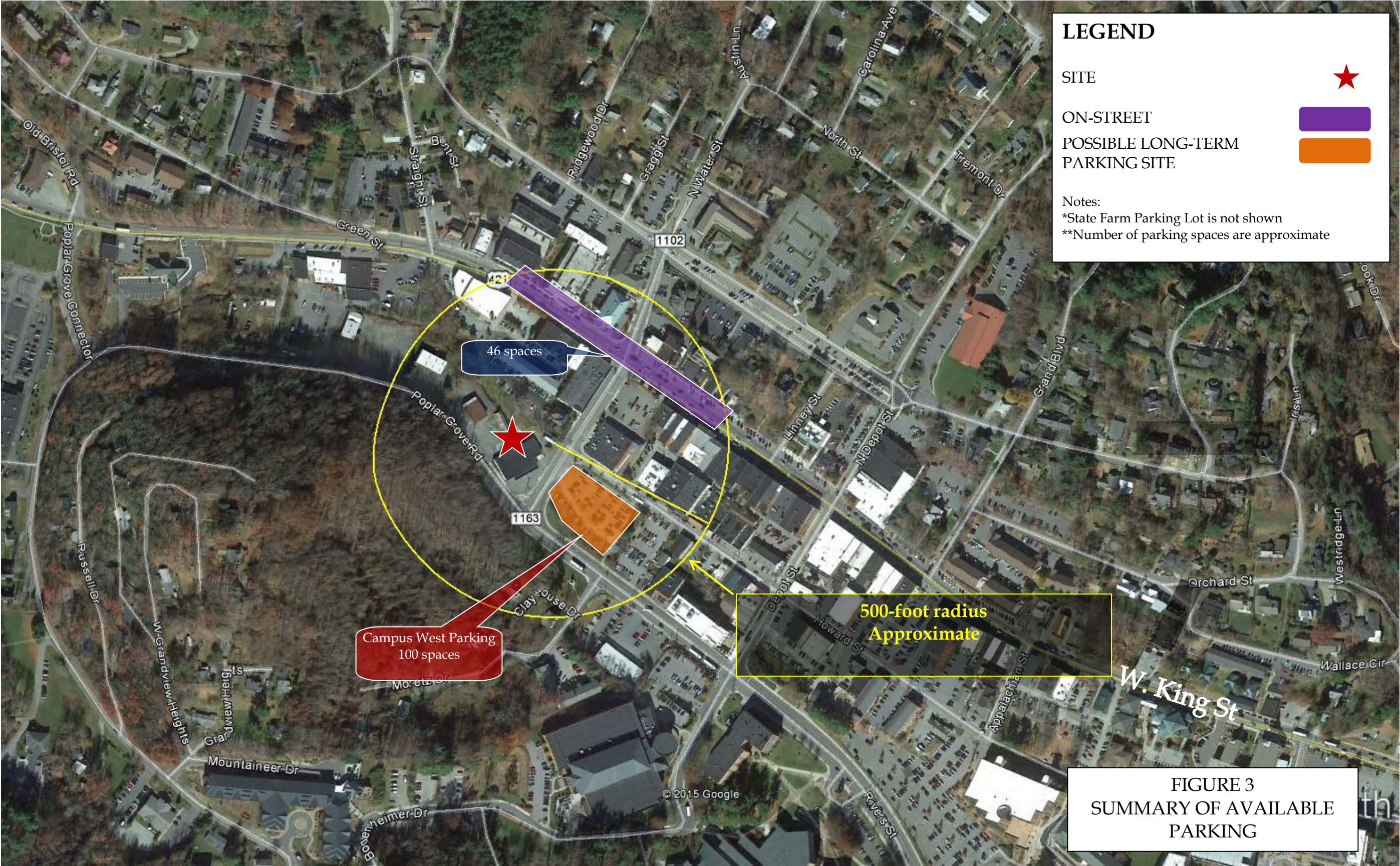
Sincerely,

A handwritten signature in dark ink, appearing to read 'Frank Amenya'.

Frank Amenya, PE, PTOE

Attachments: Figure 3
 Parking Survey
 Parking Calculations
 Rivers Walk Lease - Parking Addendum

Communication: Rivers Walk Parking Study (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)



STUDENT TRANSPORTATION SURVEY

INSTRUCTIONS

Please circle your answers by choosing the appropriate response or entering your comments in the spaces provided.

1 What year student are you?	Freshman Junior Post Grad	Sophomore Senior
2 Are you considered a Full Time Student?	Yes	No
3 Do you live on or off campus?	On	Off
4 Are you a commuting student living at home or with family?	Yes	No
5 Do you keep a car available for your use at school?	Yes	No
6 Do you drive the car daily?	Yes	No
7 Do you normally drive only on weekends?	Yes	No
8 Do you routinely walk from your room to classes?	Yes	No
9 Do you routinely ride the bus from your room to classes?	Yes	No
10 If you have no car, do you use a motor cycle or bike for transportation?	Yes	No
11 Do you routinely use the State Farm Parking Complex?	Yes	No
12 Are you an international student?	Yes	No
13 Do you pay a University Parking Fee for on-campus parking?	Yes	No
14 Where do you currently live, (Complex name or address)?		
15 How much do you pay monthly, semester or annually for parking including University Permits?	Monthly, or Semester, or Annually	\$ \$ \$

If you have any other comments about transportation or parking, please include below.



Total Parking Demand for Residents of Proposed Development					
Student Residents			Non-Student Residents		Total
Total Residents		380		380	
% of Student Residents		95%	% of Non-Student Residents	5.00%	
Expected Students	361	361	Non-Students	19	
% with Cars		74.10%		100.00%	
			Non-Student Residential Parking	19	19
Students Requiring Parking		268			
% Students having Campus Parking Privileges	35%				
Students with Campus Parking Privileges	126	(126)			
Student Residents without Campus Parking Privileges		142			142
					161
Less On-premises Residential Parking		-143			-143
Students Requiring Off-premises, Non-University Parking		-1			
Total Off-Premises, Non-University Required Parking					18

Individual Residential Rental Contract

RIVERS WALK - Parking Addendum

IN CONSIDERATION of the terms described below and the mutual promises made to each other RIVERS WALK, LLC (Landlord), by and through his/her/its agent (Agent), leases and rents to

_____**(TENANT)**, this ____ day of _____, **2017**.

WITNESSETH: That subject to the terms and conditions set forth by this Residential Rental Contract Parking Addendum, Tenant does hereby acknowledge that limited parking is provided for the Property, "RIVERS WALK" and does hereby agree to provide Landlord proof of Contract Parking arrangements, should Tenant possess a vehicle while residing in the property.

Contract Parking is defined as, but not limited to a parking contract or permit to park at:

Rivers Walk in the Residential Structured Parking Deck;
Holton Mountain Rental parking at Water Street and Rivers Street
Appalachian State University

(Metered Parking is specifically not considered Contract Parking.)

Landlord: **Rivers Walk, LLC.**

By: _____ **(Seal). Date** _____

By: _____ **(Seal) Date:** _____
Management

Tenant: _____

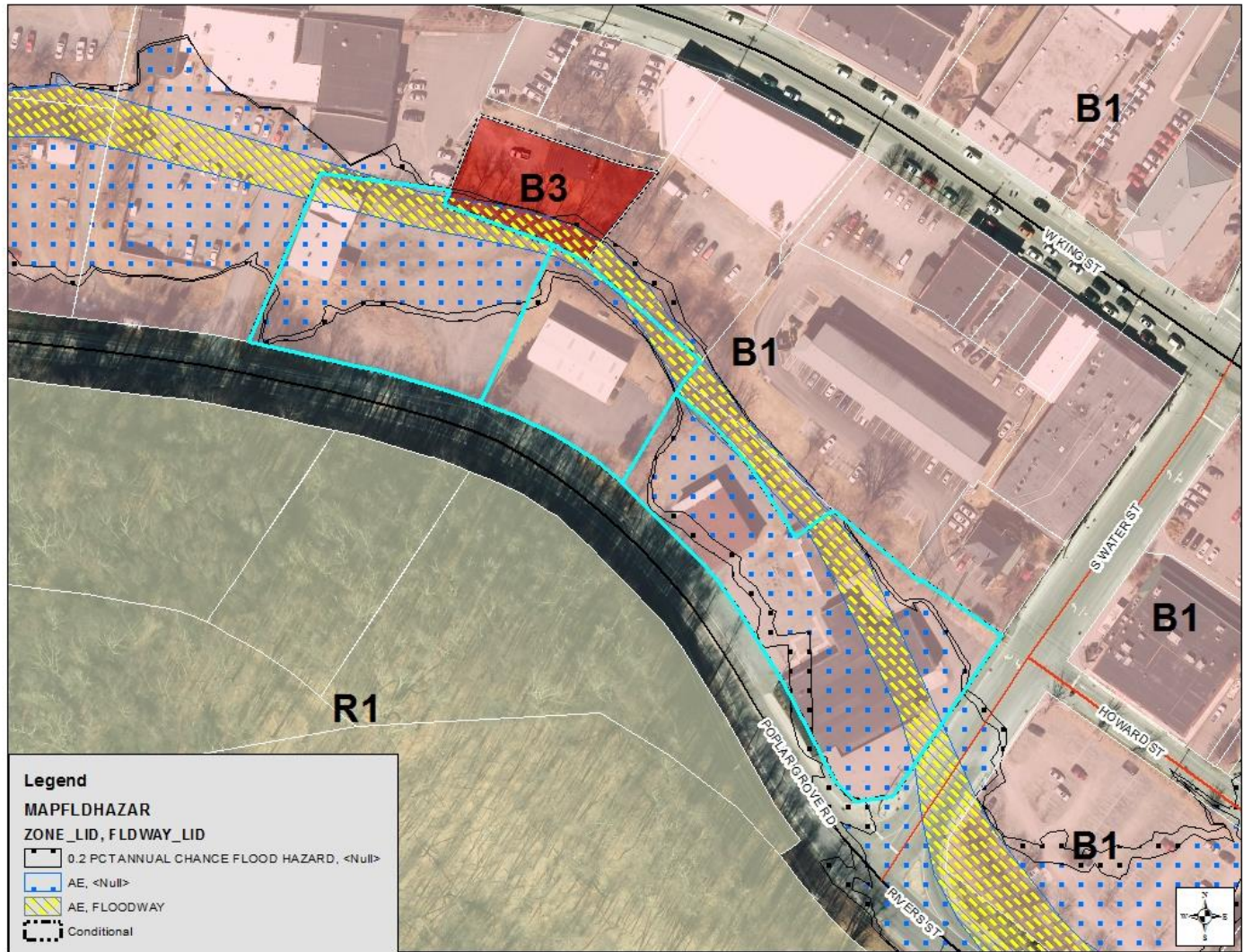
By: _____ **(Seal) Date:** _____
Signature of Tenant

Addendum Printed January 4, 2016

Communication: Rivers Walk Parking Study (Case 20160136 Rivers Walk Planned Development Zoning Map Amendment)



**STAFF REPORT
PUBLIC HEARING
AUGUST 22, 2016
CASE 20160136 RIVERS WALK PLANNED DEVELOPMENT ZONING MAP AMENDMENT**



Request

Glen Weaver has filed a Planning Permit Application for a Planned Development Zoning Map Amendment to rezone 178 South Water Street, 190 and 208 Poplar Grove Road from B1 Central Business to a Planned Development zoning district with a site specific development plan which includes a mixed-use building (residential and commercial uses), including a parking deck. The residential portion contains 151 dwelling units (380 bedrooms); with the following uses proposed for the commercial portion of the building: 11.06 Restaurant ≤ 2,500 ft² open to the public during 10 pm–6 am, 11.07 Other Restaurants ≤ 2,500 ft², 11.08 Restaurant > 2,500 ft² open to the public during 10 pm–6 am, 11.09 Other Restaurants > 2,500 ft², 11.12 Personal Service Establishment open to the public during 10 pm–6 am, 11.13 Other Personal Service Establishments, 11.14 Retail Store up to 5,000 ft², 11.15 Retail Store more than 5,000 but less than 25,000 ft², 11.18 Business or Profession Office open to the public during 10 pm – 6 am, 11.19 Other Business or Professional Office, 11.23 Medical Office, Category 4, 12.10 Recreation Facility, Category 1, and 14.02 Brewpub.

8/15/2016 11:00:55 AM

Applicant Information

Applicant Name/Position: Glen Weaver
Applicant Organization: Harrod/AP, LLC
Applicant Address: 6612 Fleetwood Drive, Raleigh, NC 27612
Applicant Contact Phone: (919) 414-0739
Applicant Email: glenn.weaver@frontier.com

Parcel Information

Addresses: 178 South Water Street, 190 & 208 Poplar Grove Road
Watauga County PINs: 2900793318000, 2900790661000, and 2900698658000
Property Owner: G & B Oil Company and Harrod/AP, LLC
Total Lot size: 2.747 acres
Jurisdiction: Corporate limits
Access: Water Street (Town) and Poplar Grove Road (NCDOT)
Topography: Approximate 24' change in elevation from Water Street to the back of the property; Slope generally from SE to NW
SFHA: Yes
Watershed District: No
Corridor District: No
NCD: No
Viewshed: No
Transit Route: Yes. Closest stop within 400'. Staff does not have verification that the applicant has committed with AppalCart to having a stop at this development though 2 AppalCart bus shelters are shown on the plans.
Utilities: Town water and sewer are available.
Current Zoning: CD-B1
Vesting: 2 years
2030 Plan Designations: G-4 Downtown Boone

Zoning & Use of Adjacent Properties		
	Adjacent Zoning	Adjacent Land Use
North	B1 Central Business	Restaurant, Multi-Family, Retail, Auto Garage
East	B1 Central Business	Parking Lot
South	R1 Single Family	Vacant
West	B1 Central Business	Government Facility

History

11-06-2014: Board of Adjustment granted two variances related to this project as outlined below:

1. UDO Subsection 15.11.02(J): The applicant was granted a variance to UDO Subsection 15.11.02(J) to reduce the minimum building footprint from 50% to 40%.

2. UDO Subsection 16.08.05: The applicant was granted a variance to UDO Subsection 16.08.05 to allow the building to exceed the 35' height requirement when the building is within 100' feet of a R1 zoned property.

02-23-2015: Town Council approved with conditions a conditional district zoning map amendment request, vested for 2 years, to rezone the properties at 178 South Water Street and 190 and 208 Poplar Grove Road from B1 Central Business to Conditional District B1 with a site specific development plan for a mixed use project- Rivers Walk. This development included 16,647 square feet of commercial area, 145 apartments with 380 bedrooms, and a parking deck. Uses approved within the commercial area include: 11.06 Restaurant $\leq$ 2,500 ft² open to the public during 10 pm – 6 am, 11.07 Other Restaurants $\leq$ 2,500 ft², 11.08 Restaurant $>$ 2,500 ft² open to the public during 10 pm – 6 am, 11.09 Other Restaurants $>$ 2,500 ft², 11.12 Personal Service Establishment open to the public during 10 pm – 6 am, 11.13 Other Personal Service Establishments, 11.14 Retail Store up to 5,000 ft², 11.15 Retail Store more than 5,000 but less than 25,000 ft², 11.18 Business or Profession Office open to the public during 10 pm – 6 am, 11.19 Other Business or Professional Office, 11.23 Medical Office, Category 4, 12.10 Recreation Facility, Category 1, and 14.02 Brewpub.

Conditions of Approval:

1. Where there is a conflict between the application information and the plans (bearing a received date of January 26, 2014), the plans shall control. Insignificant deviations may be permitted to comply with the requirements of the UDO.
2. Any commitments and representations concerning the proposed project made by the applicant or its (his or her) representatives at the public hearing shall also become a condition of the permit, and a basis for a stop work order and/or permit revocation if violated.
3. Final plans shall be submitted that are in compliance with the provisions of the UDO and other provisions of the Town Code.
4. The Town of Boone will be given the necessary easements for public sidewalks which leave existing street right-of-way.
5. All driveway permits shall be obtained prior to the issuance of a Zoning Permit.
6. Applicant shall demonstrate adequate parking for the development.
7. Applicant shall build the courtyard as demonstrated on the drawing submitted by Bill Dixon on February 9, 2015 at the Planning Commission meeting.
8. The applicant shall provide an easement for 8' minimum greenway along Boone Creek through the development of the property.

04-04-2016: Case 20160136 Rivers Walk Planned Development Zoning Map Amendment was heard during a Special Public Hearing.

04-11-2016: Planning Commission reopened the public hearing to hear additional testimony and to discuss possible conditions with the applicant. After the public hearing was closed the Planning Commission deliberated and ultimately recommended approval of the case with developer approved conditions. Below are the Planning Commission's recommendations:

First motion and vote: Member Long made a motion, seconded by Member Tate that the proposed amendment to the Town's zoning map is consistent with the Towns comprehensive

plan and other applicable plans of the Town which relate to this application because the said plan development is a higher overall quality development than the previously approved conditional district development because the increase in building height makes it a more viable project and allows elevator service to all residents and has less construction impact on Kraut creek, has better storm water management design and proper rooftop screening for mechanical equipment. The commercial space is more attractive and flexible in size and is in a more concentrated location bordering Water Street. It is more likely to be successful as commercial space than the previous commercial space plan. The applicant's willingness to construct the Greenway along the property and Kraut Creek will be a benefit to all the residents of Boone and those visiting the Downtown area. The redistribution of commercial parking to the surface lot allows for more convenient parking for the commercial retail space. In regards to architecture, the applicant is willing to work with the Community Appearance Commission which will result in an architectural design that is harmonious with the Downtown area and based on more community consensus.

Vote: ***Aye – 8 (Catoe, Dineen, Myers, Long, Tate, Templeton, Vincent, Woolridge)***
 Nay – 1 (Simmons)
 The motion passed.

Second Motion and Vote: Chairperson Woolridge made a motion, seconded by Member Long that the Planning Commission recommend approval based on the previously approved plan and the proposed plan because it will create a higher quality development and assure a cohesive design in the Downtown area and the surrounding properties with the following conditions:

1. Where there is a conflict between the application information and the plans (site plans bearing a received date of March 25th and architectural plans bearing a received date of March 28, 2016), the plans shall control. Insignificant deviations may be permitted to comply with the requirements of the UDO.
2. Any commitments and representations concerning the proposed project made by the applicant or its (his or her) representatives at the public hearing shall also become a condition of the permit, and a basis for a stop work order and/or permit revocation if violated.
3. Final plans shall be submitted that are in compliance with the provisions of the UDO and other provisions of the Town Code.
4. The Town of Boone will be given the necessary easements for public sidewalks which leave existing street right-of-way.
5. All driveway permits shall be obtained prior to the issuance of a Zoning Permit.
6. The surface lot in the plan be used for non-employee commercial parking and a minimum of five parking spaces inside the parking deck be dedicated towards commercial parking.
7. The applicant will work with the Community Appearance Commission to develop the final appearance for the building based on the current B-1 zoning standards.
8. The applicant agreed to re-incorporate the clock tower into the building design.

9. The applicant agreed to construct a paved eight-foot wide Greenway to the counties property line.
10. The applicant commitment to construct the greenway and streetscape according to the "Greenway Connection to Howard Street drawing" submitted to the Planning Commission on April 11, 2016.

Vote: **Aye – 8 (Catoe, Dineen, Myers, Long, Tate, Templeton, Vincent, Woolridge)**
 Nay – 1 (Simmons)
 The motion passed.

- 04-21- 2016:** Town Council forwarded Case 20160136 Rivers Walk Planned Development to the May 19, 2016 Town Council meeting in order to reopen the public hearing to hear additional comments.
- 05-19-2016:** The applicant requested that Council continue the public hearing to the June 6, 2016 Special Public Hearing to give the applicant more time to address comments made at the April Town Council meeting. This request was approved.
- 06-06-2016:** Applicant presented revised information at a special public hearing before Town Council.
- 06-16-2016:** The applicant requested that Council continue the case until the July 25th Public Hearing because one of the partners in the project was no longer involved and the remaining original partner would be changing the plan back to his original plan and planned to incorporate new provisos requested by Council. This request was approved with a request that the applicant bring the revised information to the Community Appearance Commission for a courtesy review.
- 07-21-2016:** The applicant requested that Council continue the case until the August 22nd Public Hearing because the applicant did not have sufficient time to appear before the Community Appearance Commission before the July 25th Public Hearing. This request was approved.
- 07-26-2016:** The applicant presented revised information to the Community Appearance Commission, an excerpt from the draft minutes for this meeting are below:

Mr. Tucker Deal, Attorney for the project gave a brief update on what is happening with the project since the previous conditional district approval. Mr. Deal briefly talked about the three proposed changes that were similar to the previous approval but differ in three significant ways. The proposed changes are the commercial space is requested to be co-located closer to Water Street, the parapets are requested in lieu of mechanical screens and the additional potential parking deck entrance is requested from the County's alley.

Mr. Deal said that he and Mr. Weaver are interested in all feedback regarding the improvements that are proposed for this project.

Mr. Deal introduced Mr. Glenn Weaver from Harrod/AP, LLC to the commission members.

Mr. Weaver began his presentation on the project and noted that Mr. Jeff Githens is no longer involved in this project.

Mr. Weaver said there has been no change to the number of bedrooms in the residential area. He noted that he may have figured out a way to increase the number of two-bedrooms or smaller units to 66 percent. He said the commercial square footage increased slightly in the heated

commercial area. He said this square footage might vary, if there is added patio space on the back of the building but the square footage would not be less than in the previous approval.

Mr. Brian Johnson, Urban Design Specialist asked Mr. Weaver to talk about the original elevations for this project for the conditional district approval. Mr. Johnson pointed out that these elevations was not reviewed for zoning approval.

Mr. Weaver handed out a three-page document entitled, Appendix A, Description of Changes to the CDZ approvals for Rivers Walk granted February 23, 2015 (permanently attached). He presented the changes listed in the attached document.

Mr. Weaver pointed out on the elevations presented at this meeting the proposed changes to the uses.

Mr. Weaver talked about the proposed changes to the building materials. He said he has no problem in changing the proposed materials, if needed.

Mr. Weaver talked about the engineered drawings and the different views of what can be seen of the parapets at different elevations.

Mr. Weaver talked about the selling of the apartments as condos, the possibility of the selling the development to the university and the renting of the apartments with or without furniture.

Discussion ensued on the use of a parapet versus the use of screening on the top of the building. Mr. Weaver talked about the clock tower, fake chimneys and the steeple being above the parapets. It was the consensus of the CAC members to prefer a parapet rather than some type of screening.

Mr. Weaver talked about the mechanical equipment and the crash zone requirement for the elevator shaft which is also behind the parapet.

Mr. Weaver noted that the following requested changes in the parking garage spaces are an increase in the auto-parking spaces to 188 spaces from 184, an increase in the motorcycle parking to six spaces from four spaces, a decrease in bicycle spaces from 72 spaces to 68 spaces which is a total of 384 spaces being requested in the PD process.

Mr. Weaver talked about the commercial and residential traffic entering into the building parking lot through the alley way located on the County's property. He noted that this will help with less direct traffic into the building parking lot.

Council Member Collins asked Mr. Weaver, if the developer would think about not leasing the apartments until they know that the development will be ready by 80 percent to get a Certificate of Occupancy. Mr. Weaver talked about his experiences with other development projects. He noted one experience that he had in Atlanta, Georgia where a tree permit was required and it took one year longer to get the final Certificate of Occupancy for the project.

Discussion ensued on the building materials. Mr. Weaver talked about the building materials being limestone or rock on the bottom of the side of the building with red brick above it. Mr. Weaver stated that he proposed using a granite stone on the building in multiple locations. The CAC members were not in favor of the use of hardy board as a building material. Mr. Weaver talked about using plastic or vinyl material for the parapets. It was noted that the CAC members had no opinion on the use of plastic or vinyl on the parapets. It was the consensus of the CAC members to leave the concern of the parapet building materials for the Council's consideration.

Discussion ensued on the design of the building and breaking up the façade. Council Member Mizelle said she felt this topic had been addressed with the recesses of the building.

Council Member Mizelle talked about wanting to protect the Rivers Park.

Council Member Collins noted that she would like to see more brick and granite rock on the building, if possible.

Discussion ensued on the windows of the building, it was noted the windows are designed with a stop on them to keep them from opening all the way. The CAC members discussed that real wood windows would be preferred over vinyl windows.

Motion and Vote:

Chairperson Williams made a motion to recommend the use of parapets on the proposed building, seconded by Council Member Mizelle.

Vote: Aye – All
Nay – None

The vote was unanimous.

Discussion ensued on the different ranges of building heights as it relates to the clock tower. Mr. Weaver pointed out on the map presented at the meeting the different building heights for the clock tower and steeple.

Motion and Vote:

Chairperson Williams made a motion to recommend not allowing the clock tower to exceed 45 feet in height, seconded by Council Member Mizelle.

Vote: Aye – All
Nay – None

The vote was unanimous.

Discussion ensued on the chimney and steeple height as it was presented in this meeting. The CAC members did not have an opinion on the height of the chimney or the steeple exceeding the previously approved building height. It was the consensus of the CAC members to leave this topic for the Council's consideration.

NOTE: The original Rivers Walk development is vested until February 24, 2017 or until the property is rezoned. The developers are requesting a new plan approval through the planned development process recently adopted by Council, which equates to the properties being rezoned.

Impact Analysis

Projected impacts:

1. **Traffic:** This project will bring additional vehicles to the downtown area. The traffic study indicates that an additional 2,801 trips a day will be made from the site. While the traffic study claims no change in level of service based upon the development being completed, the increase in traffic will be noticeable.
2. **Parking:** Based on maximum parking standards in the UDO, the development would be allowed to provide up to 366 residential parking spaces and up to 87 commercial parking spaces for a total of 453 parking spaces. However the applicant is providing 188 parking spaces per plans received on July 21, 2016 (-265). There is a potential to impact nearby parking lots.
3. **Transit:** This project has the potential for negative impact on local transit. Without guarantees that AppalCart can service the development there is a potential for lower the level of service of the transit system. The applicant has not demonstrated that the development is in contract with AppalCart to ensure appropriate service to the development though the traffic study assumes a reduction based upon transit service.

4. Building materials: Since the original approval, Council has amended the UDO (Subsection 25.02.04(B) to include a provision to require the main building façade in the B1 to be comprised of unpainted red or darker brick or natural stone. As proposed the main building façade does not meet this requirement.
5. Scale: Though the scale of the building as compared to the lot is in keeping with the standards of the B1, the scale of this building could potentially dwarf surrounding structures.



Petitioner's Proposal

Proposed Zoning: Rivers Walk Planned Development (Rivers Walk PD)

Comparison Chart		
Standard for B1	CD B1 (Original CD Approval)	PD Rivers Walk
UDO Section 16.08 Building Height Limitations (UDO Subsections 16.08.02 & 16.08.04) Maximum Building Height = 40'	Max Height of 40'	Deviation requested from original approval. Applicant is requesting a deviation to allow screening/parapets to screen the HVAC equipment and to allow the overhead elevator equipment to penetrate the roof line so that elevators can reach all residential levels. See applicant's

Comparison Chart																				
Standard for B1	CD B1 (Original CD Approval)	PD Rivers Walk																		
		summary of changes for varying proposed heights. (up to 62').																		
UDO ARTICLE 15, SUBSECTION 15.11.04(A) Multi-Family in Mixed Use:																				
1. Each project shall provide primary street level commercial land uses (i.e. retail, office, restaurant) of at least fifty percent (50%) of the square footage of the footprint of each building on the primary street level. For developments located on lots which abut more than one public street in the Central Business District, each additional street level floor shall provide commercial uses of at least 30% of that level's square footage. For purposes of this Subsection, the "primary street" shall be determined according to the following order: King Street, Howard Street, Depot Street, all other streets. For example, if a project is located on a lot that abuts both King Street and Howard Street, King Street shall be considered the "primary street" while for a project which abuts Howard Street and Depot Street, Howard Street shall be considered the "primary street" and so on.	Applicant demonstrated compliance with this requirement.	Deviation requested by applicant to relocate commercial space toward the Water Street/Poplar Grove Road intersection. See applicant's summary of changes. Per the applicant's calculation, they are providing a larger amount of commercial space. The applicant is providing 17,480 square feet (original approval contained 16,647 square feet). <table border="1"> <thead> <tr> <th></th><th>Required</th><th>Provided</th></tr> </thead> <tbody> <tr> <td>Bldg. 1.</td><td>100% 1,485 ft²</td><td>100% 1,485 ft²</td></tr> <tr> <td>Bldg. 2</td><td>30% 5,382 ft²</td><td>76% 13,575 ft²</td></tr> <tr> <td>Bldg. 3</td><td>30% 3,060 ft²</td><td>26% 2,690 ft²</td></tr> <tr> <td>Bldg. 4</td><td>30% 8,455 ft²</td><td>0% 0 ft²</td></tr> <tr> <td>Total:</td><td>18,382 ft²</td><td>17,748 ft² Difference of -634 ft²</td></tr> </tbody> </table> Please note that it appears the applicant is using development amenities as commercial space. Please see applicant's summary of changes.		Required	Provided	Bldg. 1.	100% 1,485 ft ²	100% 1,485 ft ²	Bldg. 2	30% 5,382 ft ²	76% 13,575 ft ²	Bldg. 3	30% 3,060 ft ²	26% 2,690 ft ²	Bldg. 4	30% 8,455 ft ²	0% 0 ft ²	Total:	18,382 ft ²	17,748 ft ² Difference of -634 ft ²
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Total:	18,382 ft ²	17,748 ft ² Difference of -634 ft ²																		
2. The entire frontage of the primary street level of the building abutting the street shall provide commercial uses. Required entrances for ingress and egress to secondary uses are permitted along said frontage so long as they are no larger than necessary to meet building code and safety requirements for ingress and egress. Commercial uses on the non-primary street level(s) shall front on the non-primary street.	Applicant demonstrated compliance with this requirement.	In compliance. Water Street is the primary street and commercial uses are providing along the Water Street frontage. In addition the commercial uses along Poplar Grove Road (non-primary street) front on Poplar Grove Road.																		
3. New projects shall be at least two floors above the primary street level.	Applicant demonstrated compliance with this requirement.	In compliance. Applicant has demonstrated compliance with this requirement.																		

Comparison Chart		
Standard for B1	CD B1 (Original CD Approval)	PD Rivers Walk
4. Buildings facades shall be oriented to each public street and shall have a primary entrance door facing each abutting public sidewalk.	Applicant demonstrated compliance with this requirement.	In compliance. Applicant has demonstrated compliance with this requirement.
5. A minimum of 60% of primary public street level facing building facade shall be comprised of transparent, non-reflective windows and 30% of non-primary street level facing building facades shall be comprised of transparent, non-reflective windows.	Applicant demonstrated compliance with this requirement.	Applicant appears to be compliant based upon observation of submitted elevations, though detailed calculations will need to be provided.
6. Surface parking shall be located away from each public street to the extent possible, and if practical, to the rear of the principal building.	Applicant demonstrated compliance with this requirement.	In compliance. Applicant is providing surfacing parking to the side of the building along Water Street.
7. Structured parking is permitted to the rear of the building or below the street level floor.	Applicant demonstrated compliance with this requirement.	In compliance. Applicant is providing the structured parking at the end of the building on Poplar Grove Road.
8. Building facades may be no further than 0'- from the established street setback line, except where necessary to provide landscaped courtyards, plazas, pocket parks, other pedestrian oriented amenities, or when there would be interference with public utilities.	Applicant demonstrated compliance with this requirement.	In compliance. Poplar Grove Road: The applicant is proposing a setback which varies with the right-of-way from 8' to 32'. Within this the right-of-way and the setback area the applicant is providing landscaping, pedestrian walkways along the building and sidewalks along the street. The applicant also has their loading and unloading area.
9. The minimum building footprint shall be 50% of the total gross square feet of the lot.	Applicant received a variance to this requirement which allowed a reduction to the building footprint to 40%.	In compliance due to variance. Applicant is proposing a building footprint of 49%. Please note that the applicant is noting that the building footprint has deviated from the original approval.
10. Pedestrian weather protection such as awnings or canopies are encouraged along the public street but may be placed only in accordance with an encroachment agreement authorized by the Town Council.	Applicant indicated within the original development summary that the development would be in compliance with this requirement.	Per the Applicant's elevations the building is providing canopies. As they are not shown on the site plan, Staff cannot confirm that they will encroach into either of the right-of-ways.
UDO Section 24.01 Parking Spaces Required Multi-Family Parking Spaces= Commercial Spaces (Retail)=	Total of 184 on-site parking spaces, (166 within the parking structure, and 18 in the surface parking lot)	In compliance with maximum parking requirement. Applicant still has the requirement to provide a sufficient number of parking spaces to accommodate the number of vehicles that ordinarily are likely to

Comparison Chart		
Standard for B1	CD B1 (Original CD Approval)	PD Rivers Walk
	*Note as a condition of approval the applicant submitted a parking study analysis which was approved by Mr. Bailey on February 23, 2016	be attracted to the development in question. Total of 188 on-site parking spaces (169 within the parking structure and 19 in the surface parking lot).
UDO Section 24.09 Bicycle Parking Required Short-Term Spaces = 0 Required Long-Term Spaces = 0	15 Short-term provided 37 Long-term provided	In compliance. 12 Short-term provided 56 Long-term provided
UDO Article 25 Community Appearance Standards	Applicant required to meet Article 25.	Deviation requested from original approval. Applicant's proposed elevations have been modified from the original approval as detailed by the applicant. Note: The applicant's elevations deviate from the current Community Appearance Standards which require buildings in the B1 Central Business District to be comprised of unpainted red or darker color brick or natural stone.

TRAFFIC IMPACT ANALYSIS:

Excerpt from Traffic Impact Analysis provided below. Please see the Rivers Walk Traffic Impact Analysis for the full report.

TRAFFIC IMPACT ANALYSIS: The applicant has submitted a Traffic Impact Analysis March 4, 2016 for this project. Below is an excerpt containing pedestrian, bicycle and transit accommodations and the summary and conclusion:

Pedestrian and Bicycle Accommodations

As part of the development of this site, the developer plans to construct the following pedestrian and bicycle accommodations:

- Sidewalks will be constructed along the street frontage of the property: the northeastern side of Poplar Grove Road and along Water Street.
- A sidewalk will be provided adjacent to the commercial/ retail store entrances on site.
- The developer build the greenway trail from the surface lot to the parking deck as depicted on the site plan. This will provide safe and convenient access to the parking deck bike storage areas.
- In order to accommodate bicycling activities to and from the site, there will be 50 covered bicycle spaces inside of the garage and 14 bicycles spaces in the surface lot.

Transit Accommodations

AppalCart provides transit service in the Town of Boone. *AppalCart* currently runs routes (Gold, Pop 105 and Express routes) which provides service in the proximity of the site. There is an existing *AppalCart* stop on King Street and Water Street, which is within 400 feet of the proposed development. Residents in this proposed development will be able to use this transit service to reach their destinations. In addition, a loading lane has been incorporated into the site plan along Poplar Grove Road for buses.

Summary and Conclusion

The proposed River Walk Development is located on the border of Appalachian State University (ASU) and the Central Business District (CBD) along the northwest quadrant of Rivers Street/ Poplar Grove Road and Water Street in Boone, North Carolina. As currently planned, the site will consist of 380 bedrooms of a mix of young professional and student apartment housing and 10,266 square feet of retail area.

The site plan shows three (3) driveways to the site: two which will serve as the access to the proposed parking deck on site, and one driveway on Water Street that will serve as the access to a 17-space parking lot. The majority of tenants at the residential building will park in the parking deck. Hence, this traffic analysis considers the parking deck access on Poplar Grove Road to be the primary access to the site.

The trip generation indicates that based on the current site plan the proposed project is projected to generate a net total of 1,271 trips per day. This is based on 380-bedrooms of a mix of young professional and student apartment housing and 10,266 square feet of retail area.

The analysis indicates that all study intersections will operate at LOS D or better in the future build conditions.

Table B summarizes the recommended improvements for the 2016 future build scenario. Improvements are shown in Figure 9 in the report.

In conclusion, this analysis has been conducted based on NCDOT and Town of Boone guidelines and has determined the potential traffic impacts of this development. With the build-out of the site, the analysis indicates there will be adequate capacity to accommodate future traffic. Note that the site accesses should to be designed according to NCDOT standards as appropriate.

Table 8.0 - Recommended Improvement Summary

Water Street at West King Street	Optimize signal timing
Water Street at Howard Street	No improvements recommended
Water Street at Rivers Street/Poplar Grove Road	No improvements recommended
Water Street at Proposed Site Access 1	No improvements recommended
Poplar Grove Road at Proposed Site Access 2	No improvements recommended
Poplar Grove Road at Proposed Site Access 3	No improvements recommended
Water Street at Existing Driveway	No improvements recommended
Pedestrian and Bicycle Accommodations	- Sidewalks will be constructed along the street frontage of the property: the northeastern side of Poplar Grove Road and along Water Street. - A sidewalk will be provided adjacent to the commercial/retail store entrances on site. - The developer build the greenway trail from the surface lot to the parking deck as depicted on the site plan. This will provide safe and convenient access to the parking deck bike storage areas. - In order to accommodate bicycling activities to and from the site, there will be 50 covered bicycle spaces inside of the garage and 14 bicycle spaces in the surface lot.
Transit Accommodations	There is an existing AppalCart stop on Water Street at West King Street which is within 400 feet of the proposed development. Residents in this proposed development will be able to use this transit service to reach their destinations.

Comments from P & I staff

1. Although the overall impervious area is being reduced, and buffer encroachments already exist, stormwater detention should be considered to mitigate the temperature and sediment impacts of stormwater collected from roofs of new buildings that drain into Boone Creek. NCDENR should be contacted to see if additional permits or approvals are required.
2. The applicant has not demonstrated full compliance with the requirements of UDO Article 25 Community Appearance Standards (as in the original approval). Demonstration of full compliance (materials, features, colors etc.) will be required during zoning compliance review for a Zoning Permit.
3. Staff requests that if approved, that Council seek a condition regarding public transit. Recent feedback from AppalCart has noted that while developments are considering the transit system in their traffic impact studies, no commitments are being made with the transit agency. Without these commitments, AppalCart cannot guarantee service to the development.
4. Staff requests that if approved, that Council seek a condition regarding the greenway easement to include the preparation of the site to the greatest degree possible since the applicant is not proposing to construct the path.

Comments from Other Departments & Outside Agencies

Public Works:

Services Division (Facilities Maintenance Superintendent)

The Public Services Department has reviewed the above referenced plan and has the following comments.

1. Please provide more detail on the type of solid waste container being proposed and show turning movements on plans to demonstrate the collection vehicle can safely service the containers. Also, storage capacity of one-eight cubic yards per bedroom should be satisfied.
2. Sidewalks along any public street shall require the dedication of a permanent easement for public use and maintenance to the Town of Boone. This applies to any sidewalk along Poplar Grove Road that is not within the right-of-way.
3. An encroachment agreement will be needed for storm water pipe #9.
4. Proposed greenway easement leaves applicant's property. Please clarify if adjoining property owners have agreed to an easement to complete the greenway in this area.
5. There is an existing street light at the corner of South Water Street and Poplar Grove Road within the street right-of-way. The applicant will be required to replace this existing infrastructure in the "courtyard" area.

Utilities Division (Utility Services Technician)

1. We will require more water and sanitary sewer information on future utility plans and project notes.

Fire Department (Assistant Fire Chief/Fire Marshal)

Detailed plans meeting all regulations will be required for Zoning and Building Permit reviews.

Compliance with Planned Development Requirements

Applicant's Compliance with Planned Development Requirements	
UDO Subsection	Compliance
UDO Subsection 9.10.03: a PD may be only be proposed for either a development site containing 3 or more acres or a proposed development which includes both commercial and residential uses.	In compliance. The project as contains both commercial and residential uses.
UDO Subsection 9.10.04: The authorization of a PD shall preclude any requirement for obtaining a variance from the Board of Adjustment unless it is a variance to Article 29 Watershed Protection and Article 30 Flood Damage Prevention. Any such variances must be obtained before a public hearing is held on the proposed PD.	In compliance. The applicant has obtain required variances.
UDO Subsection 9.10.05(A)(1): One or more pre-petition consultations with the Administrator, in which the petitioner identifies the development site, its natural features, and the nature of the proposed development.	In compliance. The applicant has had several consultations with Town staff.
UDO Subsection 9.10.05(A): Before submitting the petition, the petitioner must schedule a meeting with owners of property located within 150' of the development site. - The petitioner must provide notice at least 21 days prior to the meeting in accordance with Subsection 1.13.02 herein. - The meeting must be held at an accessible and convenient location in light of available options. - The petitioner must record the names and addresses of all attendees at the meeting. - At the meeting, the petitioner, at a minimum, shall present all the following information: - Contact information of the parties involved in the ownership, design, and development of the property; - The location of the property and general information on the current conditions of the site; - Proposed use(s) and site development; - Any preliminary plans or renderings, if available; and - Any other information deemed pertinent by the Administrator. - The petitioner shall provide the Administrator with a report which details the meeting including any concerns expressed by attendees and any commitments made by the petitioner. This report shall be included in the staff report.	In compliance. Please see applicant's "Harrod LLC/Peak Campus Planned Development Property Owner Meeting" meeting minutes.
UDO Subsection 9.10.05(B)(1): A site specific development plan addressing plan aspects identified in Appendix A, identifying all development specifics which deviate from the standards of this Ordinance.	In compliance. The applicant has submitted a site specific development plan and a separate narrative identifying all development specifics which

	deviate from the standards of this Ordinance. Please see applicant's narrative.
UDO Subsection 9.10.05(B)(2): Written analysis, tailored to specifically address the characteristics of the particular location, addressing how the planned development will effectively and to the greatest degree reasonably possible, mitigate the impacts of the proposed development on the surrounding area, including but not limited to: a. noise impacts; b. light impacts; and c. any other predictable negative effect, including but not limited to: i. negative visual effects; ii. negative traffic effects; and iii. negative health effects.	Yes. Please see applicant's narrative.
UDO Subsection 9.10.05(B)(3): Information to demonstrate compliance with all mandatory requirements of this Ordinance, including: a. Article 5 Subdivisions (for purposes of this Section the Town Council is the approval authority for major subdivision preliminary plats); b. Article 8 Historic Preservation; b. Article 19 Grading; c. Article 20 Soil Erosion and Sediment Control; d. Article 21 Stormwater Management; e. Article 22 Utilities; f. Article 29 Watershed Protection; g. Article 30 Flood Damage Prevention;	In compliance. If approved, additional technical details will be required to determine full compliance with the requirements of these Articles (as applicable).

CONFORMITY TO ADOPTED PLANS

COMPREHENSIVE PLAN UPDATE

[Click here to view the 2006 Comprehensive Plan Update](#)

1.1 Overall Objectives for the Boone Comprehensive Plan (p. 15):

The following objectives, which have not been listed in any particular order of importance, are deliberately broad in scope and less specific than either a policy statement or an implementation action.

Economic Development: Acknowledge the area's natural beauty, university, and medical center presence as the Town's greatest assets for economic development and jobs creation. Treat them accordingly.

Community Appearance and Community Character: Blend the built environment with the natural, scenic, and historic character of a High Country small town. Especially discourage commercial strip development, cluttered signage, and "cheap" apartment buildings.

Open Space: Integrate open space and greenways into the urban fabric of the Town. Preserve the countryside by discouraging suburban sprawl. Avoid development in floodplains, on ridgetops, and on steep slopes.

Environmental Quality: Address and monitor growth factors and activities that contribute to water, air, light, and noise pollution.

Trees: Conserve existing trees and plant new trees, especially hardwoods.

Automobile Transportation: Maximize the efficiency of existing facilities, but not at the expense town and neighborhood character and livability. Build or expand transportation facilities and parking areas as needed, but with care. Work to reduce auto dependency, use, and congestion.

Bikeways: Implement the planned system of bikeways as a legitimate transportation alternative. Unify with greenways and other pedestrian facilities where possible.

Mass Transit: Enhance and support the mass transit system as an effective alternative to the congestion created by the individual automobile.

Pedestrian Movement: Encourage a system of sidewalks, paths, crosswalks and compact development patterns which make it easy to get around Boone on foot.

Infrastructure: Engage in long range planning for water and sewer systems, stormwater runoff, natural gas, and other utility systems. Place overhead utilities underground whenever feasible.

Public Safety: Maintain a high level of policing and fire protection and plan the expansion of public safety services to coincide with projected population increases and identified needs.

Energy and Waste: Reduce waste generation, and the consumption of energy and water. Develop area recycling programs to the fullest. Encourage an anti-litter consciousness among residents and visitors.

University: Emphasize cooperative planning among the Town, County, and University.

Downtown: Support and enhance the cultural and historic significance of downtown Boone, and affirm its appealing, pedestrian orientation.

Recreation: Strive for additional public recreation facilities, especially sports fields, greenways and indoor recreation centers.

Neighborhoods: Ensure the livability of neighborhoods, especially through land use and traffic planning.

Public Involvement: Encourage active public involvement and volunteerism to expand the effectiveness of community planning and action.

1.2 Growth Strategy Map (p. 17): The property is located within Primary Growth Area. The Primary Growth Area is that portion of the urban growth area where urban level of facilities are already in place or can be provided most cost effectively. This is the area where near term growth and development is to be especially encouraged.

Comprehensive Plan Policies: Staff has reviewed land use and comprehensive plan policies, and listed those policies which in staff's opinion have a bearing on the request. The Board should review these policies carefully. Each member may make his or her own interpretation as to the relevance of each and which carry the most weight thereby shaping their overall recommendation.

2.1 THE ECONOMY

2.1.1 Economic Development

- A. *The Town shall protect and enhance a high quality of life, image, cultural amenities, and natural beauty as the most effective, long term component of an economic development strategy. ******
- D. *Economic development efforts shall encourage the revitalization and reuse of currently unused or underutilized structures, sites and infrastructure in appropriately located areas.*
 - D.1 Evaluate development regulations for amendments providing flexibility in the renovation and redevelopment of existing structures and sites.
 - D.2 Urge the resolution of the clean up process of the 482 State Farm Road site so as to render the building suitable for use as soon as possible.
 - D.3 Pursue annually at least one joint public-private venture that will benefit the community at large.
- F. *New firms and expanding businesses that complement the natural resources and beauty of the region shall be especially recruited and encouraged.*

2.1.2 Commercial Development

- B. Commercial and office development shall be encouraged to locate in planned shopping centers, office parks and mixed use developments to stop the proliferation of strip development.
- C. Community/Commercial Centers shall be located adjacent to a major street and contain or be adjacent to other appropriate community facilities.
- D. Automobile Orientated Neighborhood and Convenience Commercial Centers shall be encouraged to locate on a collector street or secondary street at its intersection with a major street.
- F. Commercial uses may be encouraged to develop by consolidation and expansion of existing commercially zoned property, only when such consolidation and expansion does not encroach upon a viable residential area.
- G. Effective buffering and/or landscaping shall be provided where a large scale or automobile-orientated commercial or office use adjoins an existing or planned residential use.
- J. Highway Oriented Commercial uses shall be clustered along segments of major streets and contain land uses which are mutually compatible and reinforcing in use and design. Businesses shall be encouraged to coordinate their site designs with other nearby businesses. Design factors shall include, at a minimum, shared parking and street access, convenient pedestrian and vehicular movement, and consistent sign standards.

2.1.5 Downtown

- A. A compatible design character for the downtown area, drawing upon the locality's original High Country small town features, shall be identified, reinforced and supported to put forth a quality image and sense of place.
- B. The Town, in concert with the downtown property owners and merchants, shall encourage public and private efforts to develop and publicize adequate and appropriately designed off-street parking lots in the downtown area.
- C. A variety of mutually compatible and supportive mixed uses shall be encouraged in the downtown area.
- E. Public and private development decisions in the downtown area shall exhibit a special concern for maintaining the intensive, pedestrian oriented character of the district.

- F. The maintenance and revitalization of downtown Boone, as well as planning for its future development, will reflect the realities and qualities befitting its geographical setting and function as a center of (1) commercial and service activities, (2) educational and cultural activities, events and (3) public services.

2.2 THE INFRASTRUCTURE

2.2.1 Transportation

- I. Driveway cuts along major streets and roads shall be limited to allow these streets to serve primarily as safe traffic movement corridors or, alternatively, to maximize curb frontage for on-street parking.

2.2.2 Utilities

- B. Water and sewer services shall be concentrated within the limits of a geographically defined Urban Growth Area. The Primary Growth Area shall receive first priority for the provision or enhancement of water and sewer services.
- E. The Town shall employ incentives to encourage a concentration of intense urban type development within the Urban Growth Area.

2.2.4 Public Safety

- D. The Town shall place renewed emphasis on enforcement of the state building code and flood prevention regulations to avert or minimize loss of life and property during natural disasters.

2.2.5 Environmental Quality

- C. Development activities in the 100 year floodplain or near lakes or streams shall be carefully controlled. If development must occur, low intensity uses such as open space, recreation and adequately buffered agricultural or forestry activities shall be preferred.
- E. Development which preserves the natural features of the site, including existing topography, streams and significant trees and vegetation, shall be reflected in the Town's Development Standards.

2.3 THE COMMUNITY

- A. Urban type development within the Urban Growth Area shall meet appropriate Town standards.
- B. Properly planned, mixed use developments that promote efficient provision of public services shall be encouraged within the Urban Growth Area.

2.3.2 Community Character

- E. New development, redevelopment and rehabilitation of structures and sites shall occur in a manner which is consistent with the neighborhood and architectural context of the immediate area, and supportive, whenever possible, of Boone's original community character as a High Country small town.

2.3.3 Housing and Neighborhoods

- A. The protection and rehabilitation of viable neighborhoods shall be encouraged to insure their continued existence as a major housing source and as a reflection of the area's image as an attractive, highly livable community.
- C. Proposed residential development which would expose residents to harmful effects of incompatible development or to environmental hazards shall be prohibited.

- D. Innovative and flexible land planning and development practices shall be encouraged to create livable developments which better safeguard land, water, energy and historic resources.
- E. Factors in determining preferred locations for high density residential development shall include: close proximity to the university, employment or shopping centers; access to major thoroughfares and the transit system; the availability of public services and facilities; and compatibility with adjacent land uses.
- G. Compact, full service neighborhoods, offering opportunities for living, working, shopping, and gathering places, shall be encouraged in newly planned developments, as well as for redeveloping areas.

BOONE 2030 LAND USE PLAN

[Click here to view the Boone 2030 Land Use Plan](#)

The 2030 Land Use Plan works together with the Town's Comprehensive Plan and other plans and programs to provide for the Town's long range growth. The Land Use Plan is a three-dimensional framework for the comprehensive plan and serves as the basis for all the facility and service needs of the Town. The Land Use Plan serves as the guiding vision and policy basis for determining the appropriateness of any development or redevelopment that is proposed for the Town's planning jurisdiction.

These properties are located within the G-4 Downtown Boone sector and are also located in a Regional Center.



The G-4 sector is comprised of areas with existing development, with a relatively dense street grid, and which are appropriate for redevelopment or additional development. These areas are shown in the purple color on the Framework Map. This includes the historic downtown and the King Street corridor as far east as Hardin Street.

This area is, in large respect, appropriate for redevelopment and new infill development and well served with infrastructure (roads, utilities, etc.), and access to services and amenities. Because this area is already well provided for in terms of urban services, it is one of the most efficient and most attractive area for redevelopment of underutilized land or development of vacant parcels. It is also one of the best areas for development in terms of minimizing new environmental impacts to natural areas since the area has been built upon since Boone's founding. In-depth discussion of concepts for downtown development, redevelopment and infill neighborhood development is included in the Downtown Boone section of the Land Use Plan. In general, however, the following development types and uses are appropriate in the G-4 sector, continuing in the historic pattern of mixed-use downtown development in Boone. Appropriate land uses/development types include: single-family and multi-family residential, commercial uses (retail and office), mixed-use development, civic uses, light industrial uses

Regional Centers are mixed-use activity centers with employment and commercial uses that attract people from beyond the immediate neighborhoods and from surrounding communities. These centers are appropriate for commercial and employment development as well as the area's highest density housing. The area of these centers is based on a 1/2 mile radius (a typical 10-minute walk)—the larger black circles on the map. Regional centers are envisioned for downtown Boone and the historic university core; around the hospital and the current high school site; and at the intersection of US 321 and NC 105; and around the intersection of US321 and Shadowline Drive. These centers will provide the highest concentrations of residential and employment in the Plan area.

REASONABLE BASIS FOR APPROVAL

To establish "reasonable basis" the permit issuing authority must balance several factors, including the size of the tract, the compatibility of the rezoning with the comprehensive plan and other applicable adopted plans, the benefits and detriments resulting from the rezoning to the petitioner landowner, neighbors and the surrounding community, and the relationship between the proposed uses and the uses currently allowed in adjacent tracts.

The proposed rezoning encompasses approximately 2.7 acres in the downtown area. Surrounding land uses include apartments, restaurants, retail businesses, offices, town-owned park and single-family dwelling units. This proposed rezoning is consistent with and supported by several plan objectives and policies in the comprehensive plan and Boone 2030 Plan as noted above.

Based on the foregoing analysis, this rezoning petition is/is not a reasonable request.

Certification of Notification by Mail

I, Marlene Crosby, certify that individual notices meeting the requirements of Article 9, Subsection 9.03.03(B)(2) of the Town of Boone UDO were placed in the mail (first class) on August 3, 2016.

Marlene Crosby, Administrative Support Specialist

Certification of Posting

I, Bill Bailey, certify that the subject property was posted as required in Article 9, Subsection 9.03.03(B)(2) of the Town of Boone UDO on August 8, 2016.

Bill Bailey, Planning Director

Staff Analysis and Recommendations

This project is located in the downtown area, near Appalachian State University and adjacent to Boone Creek and the recommended West Downtown Alive multi-use trail.

If Council approves the request, Staff recommends the following conditions:

1. Where there is a conflict between the application information and the plans (site plans and architectural plans bearing a received dates _____), the plans shall control. Insignificant deviations may be permitted to comply with the requirements of the UDO.
2. Any commitments and representations concerning the proposed project made by the applicant or its (his or her) representatives at the public hearing shall also become a condition of the permit, and a basis for a stop work order and/or permit revocation if violated.
3. Final plans shall be submitted that are in compliance with the provisions of the UDO and other provisions of the Town Code.
4. All driveway permits shall be obtained prior to the issuance of a Zoning Permit.
5. The applicant will be required to satisfy all NCDOT requirements prior to the issuance of a Zoning Permit.
6. The applicant shall dedicate a greenway easement to the Town of Boone as shown. During construction of the development, the applicant shall prepare the site for the installation of the greenway.
7. The applicant shall contract with AppalCart to provide service to the development.

Planned Development Procedural Information

Per UDO Subsection 14.05.01(B):

A PD creates a sui generis (unique) zoning district not limited to the authorized uses and the development standards of a specific existing zoning district and may be subjected to conditions that make the development plan more desirable. A PD is intended to permit the establishment of areas in which diverse uses may be combined and integrated through careful planning to provide a unified and compatible development which is consistent with adopted plans, and which may reasonably be expected to result in a quality of living environment which is more closely in keeping with the purposes of zoning than would otherwise likely be obtained. It is not the intent of the Town Council that the PD district become a “loophole” designed to permit otherwise illegal contract, conditional or spot zoning, or clandestine institution of an unlawful use variance. Rather the PD district is intended to permit further refinement and more detailed expression of adopted plans in situations where the owners of the property present a development plan which is found to be in the public interest and consistent with adopted plans.

1. A PD should only be approved upon the following findings:
 - a. That the proposed PD will produce a development of equal or higher quality than otherwise required by the strict application of district regulations that would otherwise govern;
 - b. That the proposed PD will encourage innovative arrangement of buildings and open spaces to provide efficient, attractive, flexible, and environmentally sensitive design;
 - c. That the proposed PD will produce a development functioning as a cohesive, unified project; and
 - d. That the proposed PD will not substantially injure or damage the use, value, and enjoyment of surrounding property nor hinder or prevent the development of surrounding property in accordance with the adopted plans and policies of the Town.

PLANNING BOARD REPORT

Per NCGS 160A-387, all proposed amendments to the zoning ordinance or zoning map shall have a written report provided from the Planning Board to the Town Council within 30 days of referral of the amendment to the Planning Board, or the Town Council may proceed in its consideration of the amendment without the Planning Board report. Furthermore, in no case is the Town Council bound by the recommendations, if any, of the Planning Board.

Per NCGS 160A-383, the Planning Board shall advise and comment on whether the proposed zoning amendment is consistent with all applicable officially adopted plans, and provide a written recommendation to the Town Council that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with the officially adopted plans shall not preclude consideration or approval of the proposed amendment by the Town Council.

First motion and vote: The proposed Amendment to the Town’s zoning map ☐is OR ☐is not consistent with the Town’s comprehensive plan and other applicable adopted plans of the Town which relate to this application because:

Second Motion and Vote: The Planning Commission recommends ☐approval OR ☐denial for the following reasons:

TOWN COUNCIL ACTION

Per NCGS 160A-383, zoning regulations shall be made in accordance with a comprehensive plan. Prior to adopting or rejecting any zoning amendment, the governing board shall adopt a statement describing whether its action is consistent with an adopted comprehensive plan and explaining why the board considers the action taken to be reasonable and in the public interest.

First motion and vote: The proposed amendment to the Town's zoning map ☐is OR ☐is not consistent with the Town's Comprehensive plan and other applicable adopted plans of the Town which relate to this application because:

Second Motion and Vote: I move to ☐approve OR ☐deny the proposed amendment to the Town's zoning map and believe ☐ approval OR ☐denial is reasonable and in the public interest because:

Zoning/Planning Permit Application

Town of Boone Planning & Inspections Department
 680 W. King Street, Suite C ♦ Boone, North Carolina 28607
 Phone (828) 268-6960 ♦ Fax (828) 268-6961
www.townofboone.net

PERMIT IS FOR (CHOOSE ONE):

- ☐ Single Family or Duplex (Residential)
☐ Commercial
☐ Board of Adjustment Hearing (other than Appeals)
☐ Planning/Other

A. CONTACT INFORMATION

Applicant: Alan Crees Company: Municipal Engineering
 Address: PO Box 349, Boone, NC 28607
 Phone Number: 828-262-1767 Email Address: creesmesco@bellsouth.net
 Property Owner: _____ Company: _____
 Address: _____
 Phone Number: _____ Email Address: _____

B. PROPERTY INFORMATION

Watauga County Parcel Identification Number(s): N/A
 Address/Location: N/A
 Project Name: Parking Structures – UDO Text Amendments

C. PERMIT SUBCATEGORIES*Additional Forms Needed***Zoning Permits**

- | | |
|---|---|
| ☐ Accessory Building | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Addition/Expansion including decks and patios | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Change of Occupancy | *Commercial Project Data Form |
| ☐ Land Disturbance (not associated with the construction of a bldg.) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Manufactured Home Set-up in Park | *Manufactured Home in Park Form |
| ☐ New Building Construction | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Renovation/Remodel | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Accessory Use (as listed in UDO Subsection 15.07.01) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Temporary Use (as listed in UDO Subsection 15.07.02) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Sign | *Sign Project Data Form (Zoning) |
| ☐ Pavement Sealant | *Pavement Sealant Project Data Form |
| ☐ Major Subdivision Zoning Permit | *Commercial Project Data Form |

Board of Adjustment Hearings

- | | |
|--|---|
| ☐ Special Use Permit/Modification | *Special Use Permit Form |
| ☐ Variance | *Variance Form |
| ☐ Major Subdivision Preliminary Plat Approval | *Major Subdivision Preliminary Plat Approval Form |

Planning/Other

- | | |
|---|--|
| ☐ Exempt Division of Land | *Subdivision Exemption Project Data Form |
| ☐ Minor Subdivision (Preliminary and Final Plat) | *Minor Subdivision Project Data Form |
| ☐ Major Subdivision (Final Plat) | *Major Subdivision Final Plat Project Data Form |
| ☒ UDO Text Amendment | *Text Amendment Project Data Form |
| ☐ General Use Zoning Map Amendment | *General Use Map Zoning Map Amendment Project Data Form |
| ☐ Conditional District Zoning Map Amendment | *Conditional District Zoning Map Amendment Project Data Form |
| ☐ Voluntary Annexation | *Annexation Petition (Satellite or Contiguous) |
| ☐ UDO Text Interpretation | *UDO Interpretation Data Form |

D. DETAILED DESCRIPTION OF PROJECT

See Project Data Form

E. PROJECT MANAGER DESIGNATION

A project manager is responsible for the activities listed in UDO Section 4.19. Single-family and two-family projects involving less than ½ acre of land disturbing activity or commercial site improvements that involve no more than 2,500 square feet of land disturbing activity are exempt from this requirement.

Name: N/A Company: _____
 Address: _____ License #: _____
 Phone Number: _____ Email Address: _____

F. DESIGN PROFESSIONAL INFORMATION

Engineer:

Name: N/A Company: _____
 Address: _____ License #: _____
 Phone Number: _____ Email Address: _____

Architect:

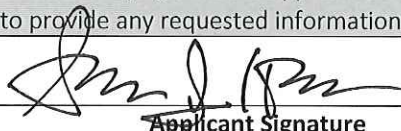
Name: N/A Company: _____
 Address: _____ License #: _____
 Phone Number: _____ Email Address: _____

G. APPLICANT SIGNATURE: By signing this form you are certifying that this application and any attached information is accurate. Failure to provide accurate information or failure to provide any requested information may result in delays to permit processing.

Alan Crees

Applicant¹ (Print)

N/A



Applicant Signature

N/A

6-10-16

Date

Property Owner (Print)

Property Owner Signature

Date

Official Use Only

Project File Name:

Parking Structures - Text Amendment

Permit Number:

20160377

Project Name/Number:

Date:

6-10-16

Fee:

\$ 300.00

Receipt Number:

439883

Method of Payment:

ck # 12805

Paid By:

App South

S:\FORMS\Forms_2015\ZoningPermitApplication_052015.doc

¹ Documentation confirming that the applicant has a legally sufficient interest in the property proposed for development to use it in the manner requested, or is the duly appointed agent of such a person must be submitted along with this application. Execution by property owner of this application signifies that the applicant is authorized to proceed.

UDO Text Amendment Project Data Form

Town of Boone Planning & Inspections Department
680 W. King Street, Suite C ♦ Boone, North Carolina 28607
Phone (828) 268-6960 ♦ Fax (828) 268-6961
www.townofboone.net

Official Use Only

Project Name/Number:

Permit Name/Number:

A. TEXT INFORMATION

Amendment is to:

Article(s): Article 16 District Standards; Article 9 Amendments

Section(s): 16.01 Schedule of Land Use Intensity Regulations; 9.10 Planned Developments

Brief Description of Amendment (Attach Proposed Text):

Increase allowable "Building Footprint" for parking structures in B3 and OI Zoning Districts and allow parking

structures to be considered as a Planned Development.

Reason for Change:

Since parking structures are considered a "building", they are limited by building footprint and floor area

in the B3 and OI Zoning Districts.

Official Use Only

Public Hearing Meeting Date: _____

PC Meeting Date: _____

TC Meeting Date: _____

Text Approved: ☐ Yes ☐ No

Date UDO Updated: _____

CIVIL/SANITARY/ENVIRONMENTAL ENGINEERS

SOLID WASTE MANAGEMENT

**Municipal
Services**

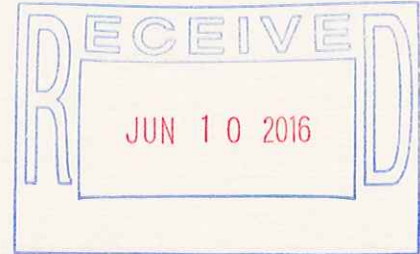
SITE PLANNING/SUBDIVISIONS

**Engineering
Company, P.A.**

SUBSURFACE UTILITY ENGINEERING (SUE)

June 10, 2016

Mr. Bill Bailey, Director
Town of Boone
Planning and Inspections Department
PO Drawer 92
Boone, NC 28607



RE: Proposed UDO Text Amendment for
Parking Structures in B3 & OI Zoning Districts

Dear Mr. Bailey:

We have been investigating the feasibility of developing parking structures in the B3 (General Business) and OI (Office and Institutional) Zoning Districts. We have found that it is not feasible to construct parking structures in these Zoning Districts because they are considered "buildings" and have to meet floor area and open space intensity ratios that are applied to conventionally occupied buildings.

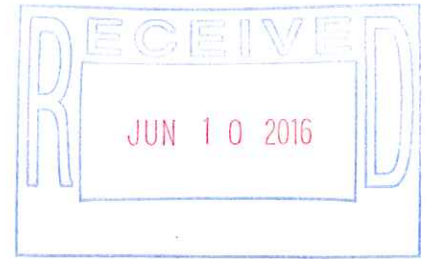
Therefore, we are proposing text amendments that would permit parking structures to be feasibly constructed in the B3 and OI Zoning Districts. The proposed text amendments are based on our written analysis and exhibits that were developed during the feasibility study. Enclosed, please find the following:

- Zoning/Planning Permit Application
- UDO Text Amendment Project Data Form
- \$300 Application Fee
- Analysis Report with Exhibits

We would like to work with the Town's Staff regarding the application for the proposed UDO Text Amendment. Please let us know if you can meet to discuss in more detail. We would also appreciate the inclusion of any supporting information demonstrating conformity to the Town's adopted plans.

Sincerely,
MUNICIPAL ENGINEERING SERVICES CO., P.A.

Alan J. Crees, PE



Article 16 DISTRICT STANDARDS

16.01 Schedule of Land Use Intensity Regulations

16.01.01 Unless otherwise specified, development in the following zones shall comply with the intensity regulations indicated in the following Intensity Table.

- A. Unless otherwise provided in this Ordinance, the land use intensity regulations for architecturally integrated subdivisions shall apply to the development as a whole and not to individual parts thereof.
- B. A site specific development plan consisting of no other use than one (1) "single family dwelling" is not subject to the maximum floor area ratio requirements but all other intensity rules apply.
- C. In the B1 Zoning District, a minimum "Building Footprint" of fifty percent (50%) is required. All other regulations in the Intensity Table apply.
- D. In the B2 Zoning District, a development may utilize the values in the Intensity Table or may substitute a maximum "Building Footprint" of thirty percent (30%) and an open space ratio of seventy percent (70%). All other regulations in the Intensity Table apply.
- E. In the B3 Zoning District, a development may utilize the values in the Intensity Table or may substitute a maximum "Building Footprint" of thirty percent (30%) and an open space ratio of seventy percent (70%). All other regulations in the Intensity Table apply.
- F. In the B3 & OI Zoning Districts, a development which proposes a parking structure as either a principal or accessory use may substitute a maximum "Building Footprint" of sixty percent (60%) and an open space ratio of forty percent (40%). All other regulations in the Intensity Table apply.

(20150028-11192015)

9.10 Planned Development (PD)

9.10.01 The authorization of a PD for any use which is permitted only as a special use in this Ordinance shall preclude any requirement for obtaining a special use permit for such use.

9.10.02 Specific conditions applicable to a PD may be proposed by the petitioner or the Town or its agencies, but only those conditions mutually agreed upon by the Town and the petitioner may be incorporated into the permit requirements.

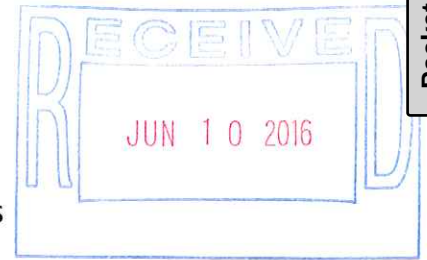
- A. Conditions and site-specific standards imposed in a PD shall be limited to those that address (i) the conformance of the development and use of the site to Town Ordinances and the comprehensive plan or other plan and (ii) the impacts reasonably expected to be generated by the development or use of the site.

9.10.03 A PD may only be proposed for one of the following:

- A. A development site containing 3 or more acres;
- B. A proposed development which includes both commercial and residential uses.
- C. A proposed development which consists of a parking structure as a primary or accessory use.

ANALYSIS REPORT

Proposed UDO Text Amendment for Parking Structures in B3 & OI Zoning Districts



INTRODUCTION

There has been a realization in certain areas of Boone that there is a need for additional automobile parking. Most of the discussion on this matter has been centered on parking structures in Boone's Downtown Business District. However, there are other areas in the Town of Boone that could benefit from parking structures.

Parking structures have become more commonplace as land values in urban areas rise. Their benefits include:

- More densely parked vehicles allow for the preservation of Livability Space including existing natural areas, lawns, landscaped areas, walkways, sitting areas and outdoor recreational areas
- Promotes Walkability – Instead of driving around looking for a parking space close to their destination, drivers will go directly to a parking garage because they know there will be available spaces and are willing to walk further to their destination.
- They allow for longer parking times
- Vehicles are under protection from rain, snow and sun

Recently we were asked to investigate the feasibility of building a parking structure not associated with Appalachian State University and outside the B1 Zoning District. The UDO allows parking structures to be constructed in the B1, B3, OI and U1 Zoning Districts. Therefore, our analysis focused on B3 and OI Zoning Districts.

ANALYSIS

The UDO's Intensity Table is attached for reference. B3 and OI Districts both have a minimum Open Space Ratio of 71% and minimum Livability Space Ratio of 27%. The maximum Floor Ratio for the B3 District is 42.9% and the maximum Floor Area Ratio for the OI District is 34%. UDO Subsection 16.01.01 E allows a substitution in the B3 District of a maximum "Building Footprint" of 30% and an Open Space of 70%. This allows for an increase in the Floor Area Ratio.

Through our analysis, we quickly discovered that building a parking structure in the B3 and OI zoning districts was not feasible because parking structures are considered a "building". This

means that the structured parking area on a site is constrained by floor area and building footprint normally applied to occupied buildings.

A typical development consists of a building and a surface parking lot. However, suppose that a developer would like to provide a parking structure instead of a surface parking lot (either as a principal use or in addition to a building) on a B3 zoned property. Per the current UDO, the entire parking structure would have to fit into the allowed building footprint. This means the entire development would be contained on 30% of the land, leaving nearly 70% undeveloped. We don't believe that it is the intent of the UDO to limit development to 30% of the land in the General Business and Office and Institutional Zoning Districts.

We investigated the feasibility of constructing a parking structure in B3 and OI Zoning Districts using a hypothetical property size of 1.0 acre. See below for an explanation of the attached Exhibits used in the investigation:

EXHIBIT 1 – This exhibit shows the maximum buildout of a B3 zoned property for a typical commercial project consisting of a building and surface parking lot. By using a maximum building footprint of 30% and maximizing the parking area, a minimum Livability Space of 27.5% is left. Livability Spaces general consist of all green space but also includes walkways, patios and sitting areas.

EXHIBIT 2 - This exhibit shows the maximum buildout of an OI zoned property for a typical commercial project consisting of a building and surface parking lot. A Livability Space of 27.0% is left.

EXHIBIT 3 – This exhibit shows a 4-story parking garage using the maximum floor area of 42.9% on a B3 zoned property. Parking is contained in the building; therefore the surface parking lot is eliminated. A Livability Space of 88% is left.

Exhibit 4 – This exhibit shows a 4-story parking garage using the maximum building footprint of 30% on a B3 zoned property. Again, parking is contained in the building; therefore the surface parking lot is eliminated. A Livability Space of 68.9% is left.

Exhibit 5 – This exhibit shows the minimum dimensions of a multi-story parking structure. Based on the conditions listed, a minimum footprint of 127' x 200' has been determined.

Exhibit 6 – This exhibit shows a minimum size parking garage on the 1.0 acre property. A Livability Space of 40.5% is left.

Exhibit 7 – This exhibit shows maximizing the parking structure by utilizing the entire building envelope. A Livability Space of 31.5 % is left, which is still 4.5% above the minimum.

CONCLUSION

Our conclusion from the analysis is that developments using parking structures have the potential to result in higher Livability Space. This means the development can have more lawns, landscaping, pocket parks and sitting areas. Although the building would have a greater mass than the current UDO allows, it is offset by providing more green space.

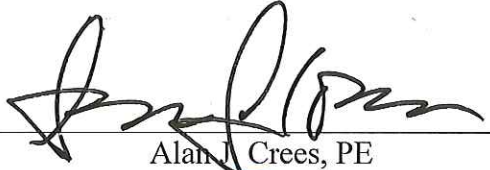
Therefore, we propose a maximum Building Footprint of 60% and a minimum Open Space of 40% for parking structures in the B3 and OI zoning districts. We believe this strikes a good balance between developed area and Livability Space.

The subject property used in the analysis was an ideal shape and size for the minimum parking garage. This leads to the conclusion that the minimum property size that could support a parking garage per the above proposal is about one acre.

Typically properties are irregularly shape. Constructing a parking structure on irregularly shaped property could lead to even greater Livability Space.

Both developing and redeveloping land in Boone can be challenging due to environmental factors such as terrain, flood plains, trout buffers, etc. In addition there is just limited space in Boone. Because of these factors and the uniqueness of parking structures, we are also proposing that developments consisting of them be allow to utilize the Planned Development process.

Respectfully Submitted,


Alan J. Crees, PE

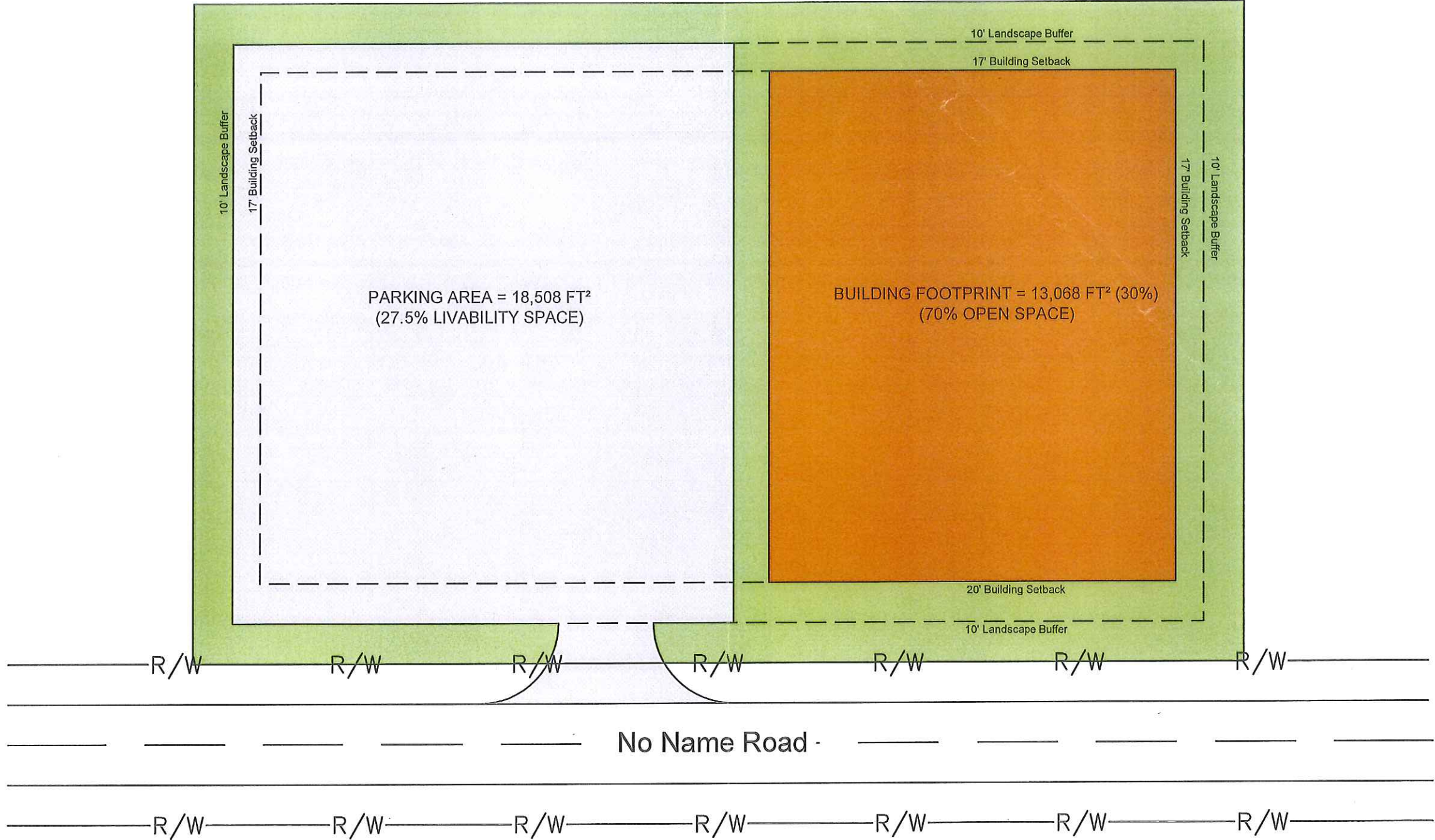
Municipal Services Garner, N.C.	 Boone, N.C.	Engineering Company, P.A. Morehead City, N.C.
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Town of Boone
Unified Development Ordinance
Article 16 District Standards

16.01.02 Intensity Table

Zoning District	Minimum Gross Land Area	Minimum Lot Width	Minimum Street Frontage	Maximum Floor Area Ratio (FAR)	Minimum Open Space Ratio (OSR)	Minimum Livability Space Ratio (LSR)	Minimum Recreation Space Ratio (RSR)	Setbacks	
								Street	Interior
Residential Zoning Districts									
RA No Public Water & Sewer Available	20,000 sq. ft.	100 ft.	80 ft.	.100	.80	.65	.025	20 ft.	18 ft.
RA Public Water Available	15,000 sq. ft.	80 ft.	64 ft.	.100	.80	.65	.025	20 ft.	18 ft.
RA Public Water & Sewer Available	10,000 sq. ft.	65 ft.	52 ft.	.100	.80	.65	.025	20 ft.	14 ft.
R1	8,000 sq. ft.	70 ft.	56 ft.	.162	.77	.53	.032	20 ft.	14 ft.
R1A	8,000 sq. ft.	70 ft.	56 ft.	.162	.77	.53	.032	20 ft.	14 ft.
RR	6,000 sq. ft.	70 ft.	56 ft.	.283	.74	.48	.042	20 ft.	13 ft.
R2	6,000 sq. ft.	70 ft.	56 ft.	.283	.74	.48	.042	20 ft.	13 ft.
R4	6,000 sq. ft.	70 ft.	56 ft.	.283	.74	.48	.042	20 ft.	13 ft.
R3	5,000 sq. ft.	80 ft.	64 ft.	.480	.72	.40	.062	20 ft.	13 ft.
MH	87,120 sq. ft.	None	56 ft.	.214	.76	.51	.039	20 ft.	20 ft.
Commercial/Industrial Zoning Districts									
OI	10,000 sq. ft.	100 ft.	80 ft.	.340	.71	.27	.032	20 ft.	17 ft.
B1	5,000 sq. ft.	15 ft.	12 ft.	None	None	None	None	Refer to Section 16.06.02	Refer to Section 16.06.04
B2	5,000 sq. ft.	50 ft.	40 ft.	.264	.76	.27	.049	20 ft.	17 ft.
B3	5,000 sq. ft.	50 ft.	40 ft.	.429	.71	.27	.062	20 ft.	17 ft.
M1	17,000 sq. ft.	80 ft.	64 ft.	.350	.65	.3	None	20 ft.	22 ft.
Educational Zoning Districts									
U1	None	None	None	.429	.71	.27	.039	Refer to Section 16.06.09	Refer to Section 16.06.08

(20140384-08212014)



PROVIDED PER EXHIBIT			ALLOWABLE PER UDO	
TOTAL LOT AREA	=	1.0 ACRES		N/A
FLOOR AREA	=	N/A		N/A
BUILDING FOOTPRINT	=	30%	30% (MAX)	
OPEN SPACE	=	70%	70% (MIN)	
LIVABILITY SPACE	=	27.5%	27% (MIN)	

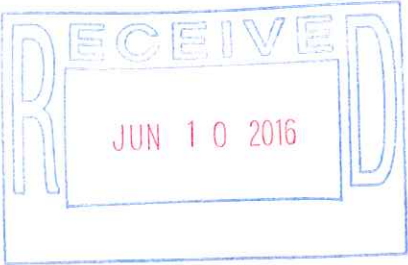
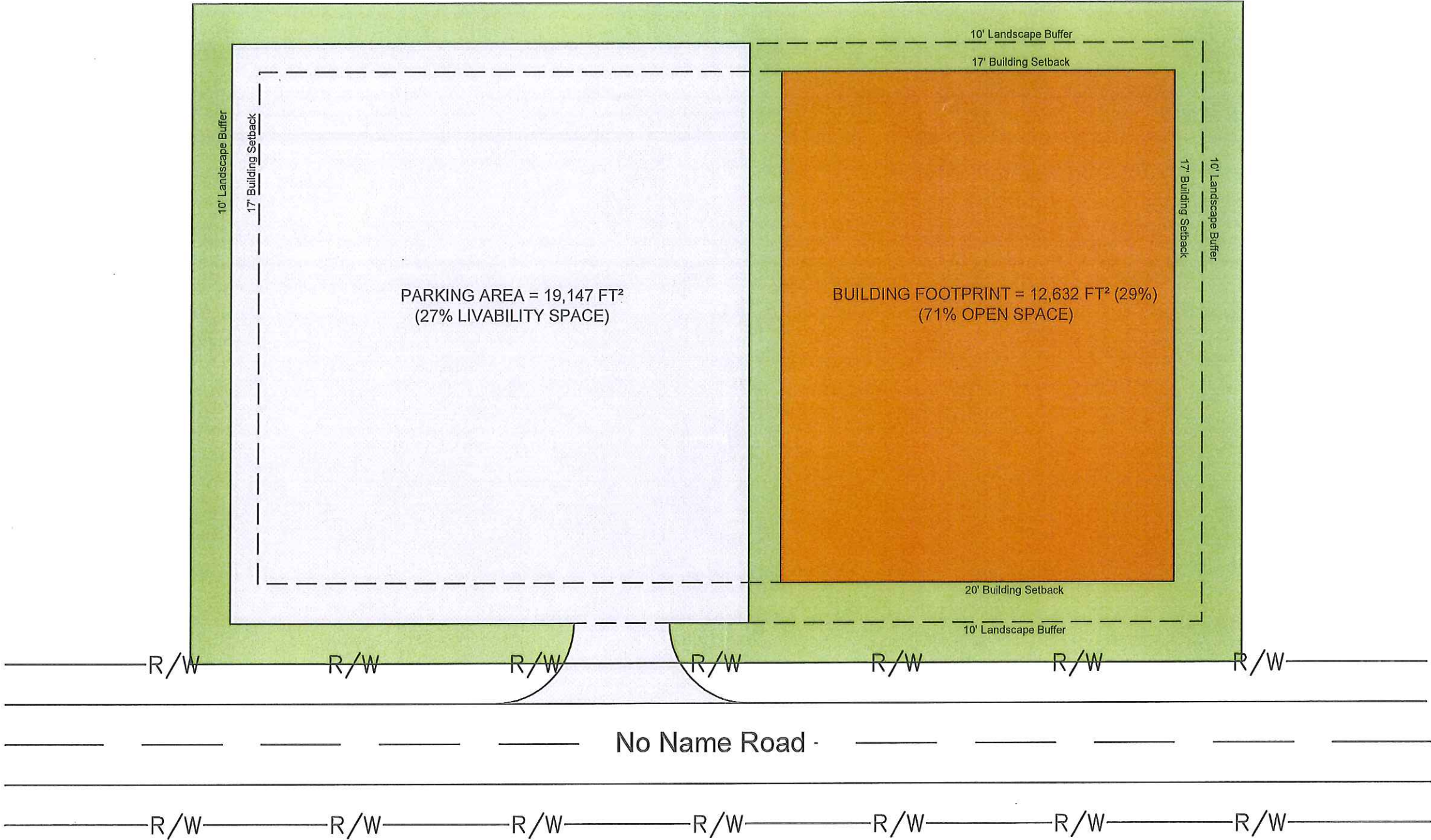


EXHIBIT 1

MULTI-STORY BUILDING USING MAXIMUM BUILDING FOOTPRINT IN B3 ZONING DISTRICT

1" = 30'

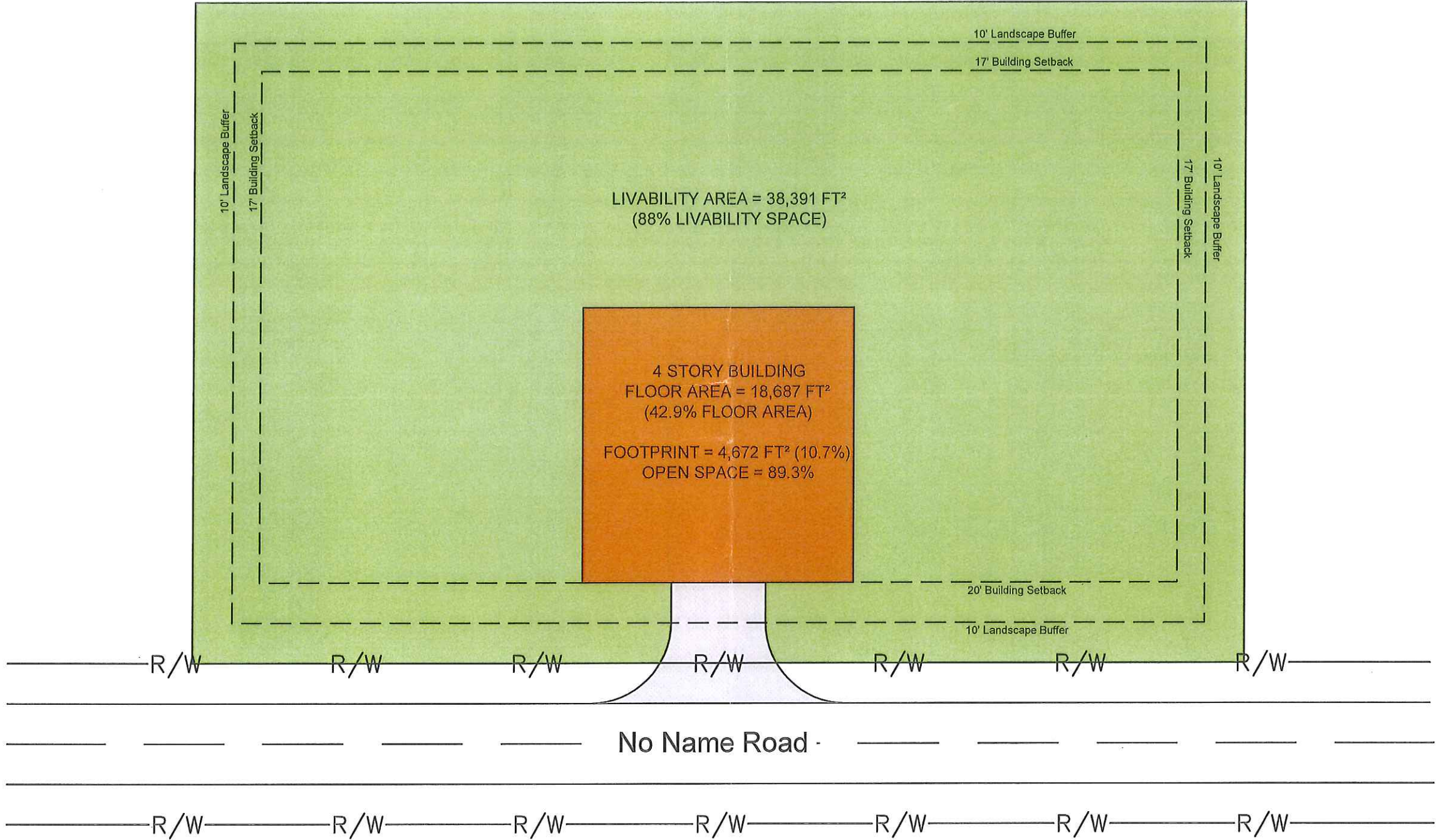


PROVIDED PER EXHIBIT			ALLOWABLE PER UDO	
TOTAL LOT AREA	=	1.0 ACRES		N/A
FLOOR AREA	=	29%		34% (MAX)
BUILDING FOOTPRINT	=	29%		29% (MAX)
OPEN SPACE	=	71%		71% (MIN)
LIVABILITY SPACE	=	27%		27% (MIN)

EXHIBIT 2

1 STORY BUILDING USING MAXIMUM LUI RATIOS IN OI ZONING DISTRICT

1" = 30'

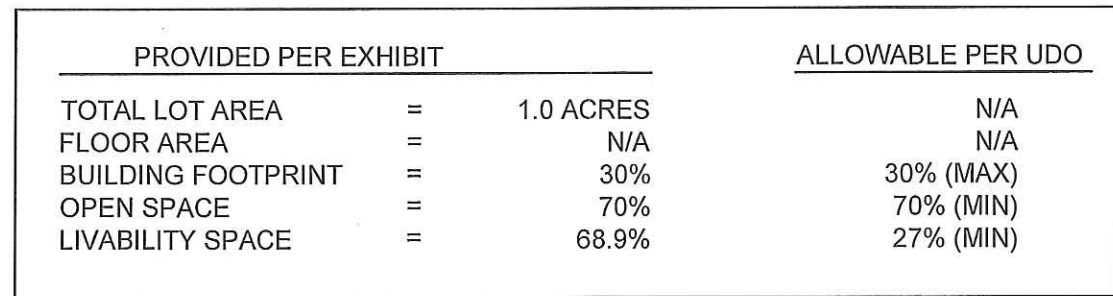


PROVIDED PER EXHIBIT			ALLOWABLE PER UDO	
TOTAL LOT AREA	=	1.0 ACRES		N/A
FLOOR AREA	=	42.9%		42.9% (MAX)
BUILDING FOOTPRINT	=	10.7%		42.9% (MAX)
OPEN SPACE	=	89.3%		71% (MIN)
LIVABILITY SPACE	=	88%		27% (MIN)

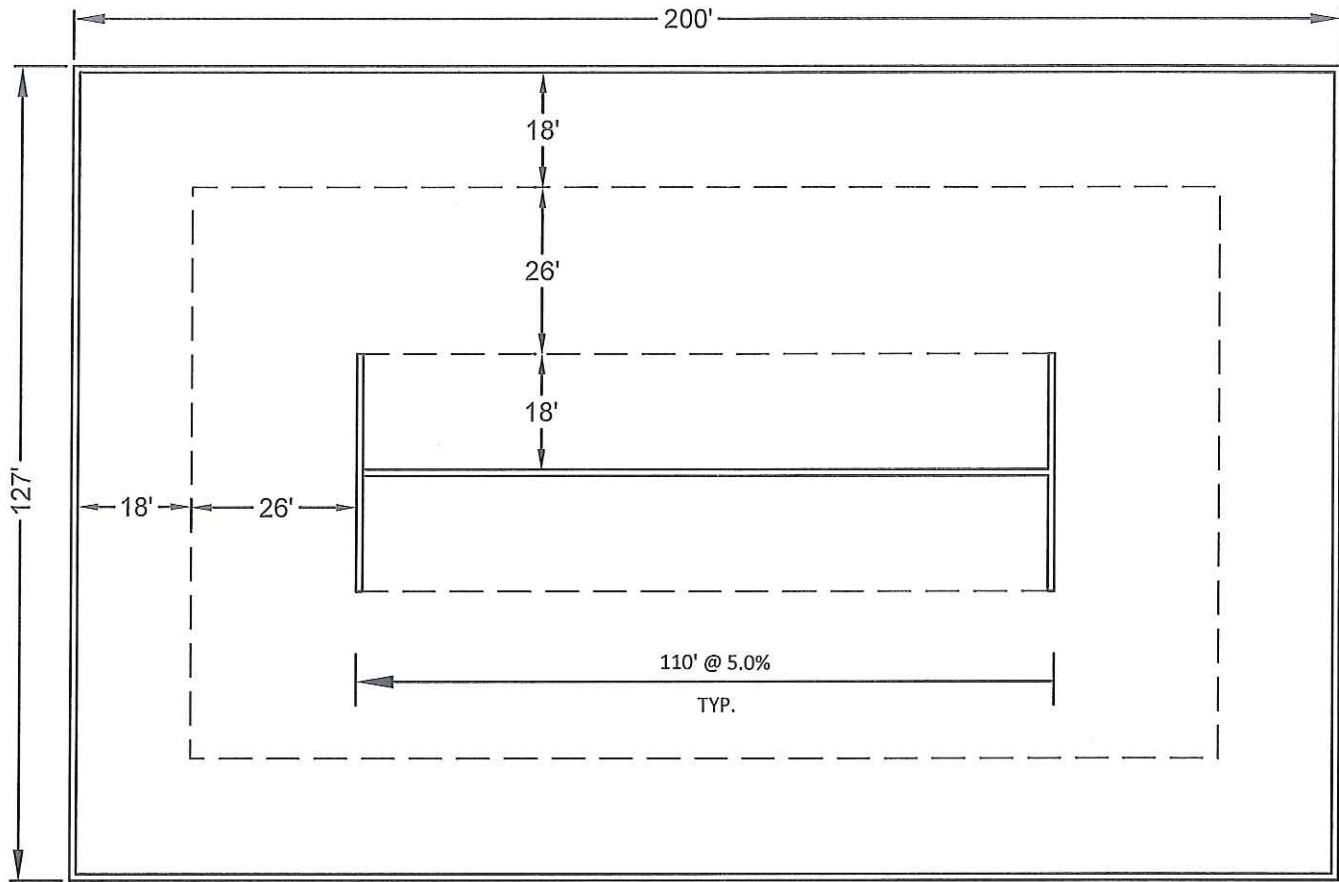
EXHIBIT 3

4 STORY PARKING GARAGE WITH MAXIMUM FLOOR AREA IN B3 ZONING DISTRICT

1" = 30'



MULTI-STORY PARKING GARAGE USING MAXIMUM 30% FOOTPRINT IN B3 ZONING DISTRICT



DESIGN CRITERIA:

- 11' FLOOR TO FLOOR HEIGHT
- MAXIMUM 5% RAMPS AND SIDE SLOPES
- 1' WALL THICKNESS
- STANDARD PARKING SPACES
- 26' AISLES FOR BETTER MANEUVERABILITY

EXHIBIT 5

MINIMUM PARKING GARAGE DIMENSIONS

1" = 30'

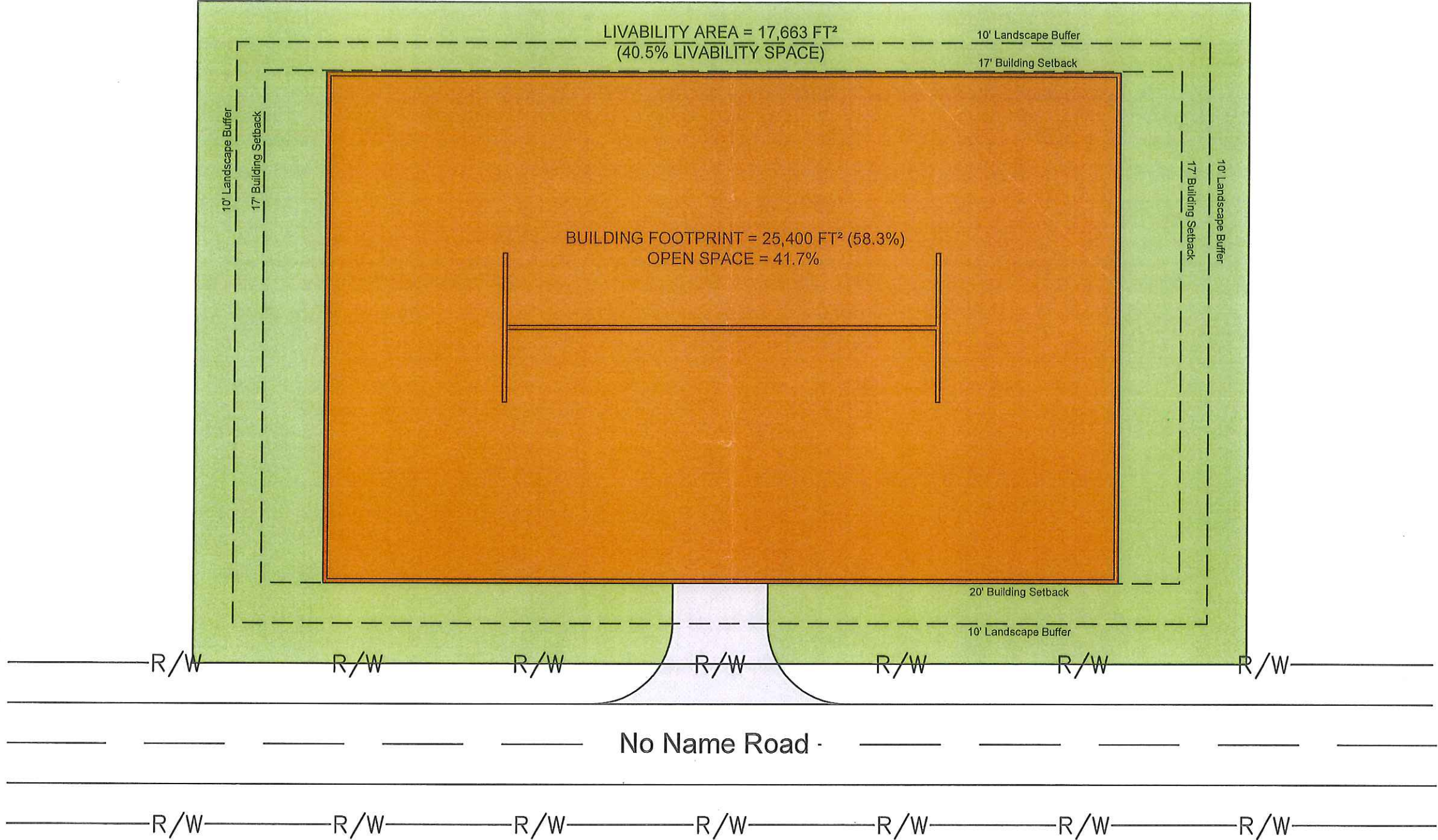
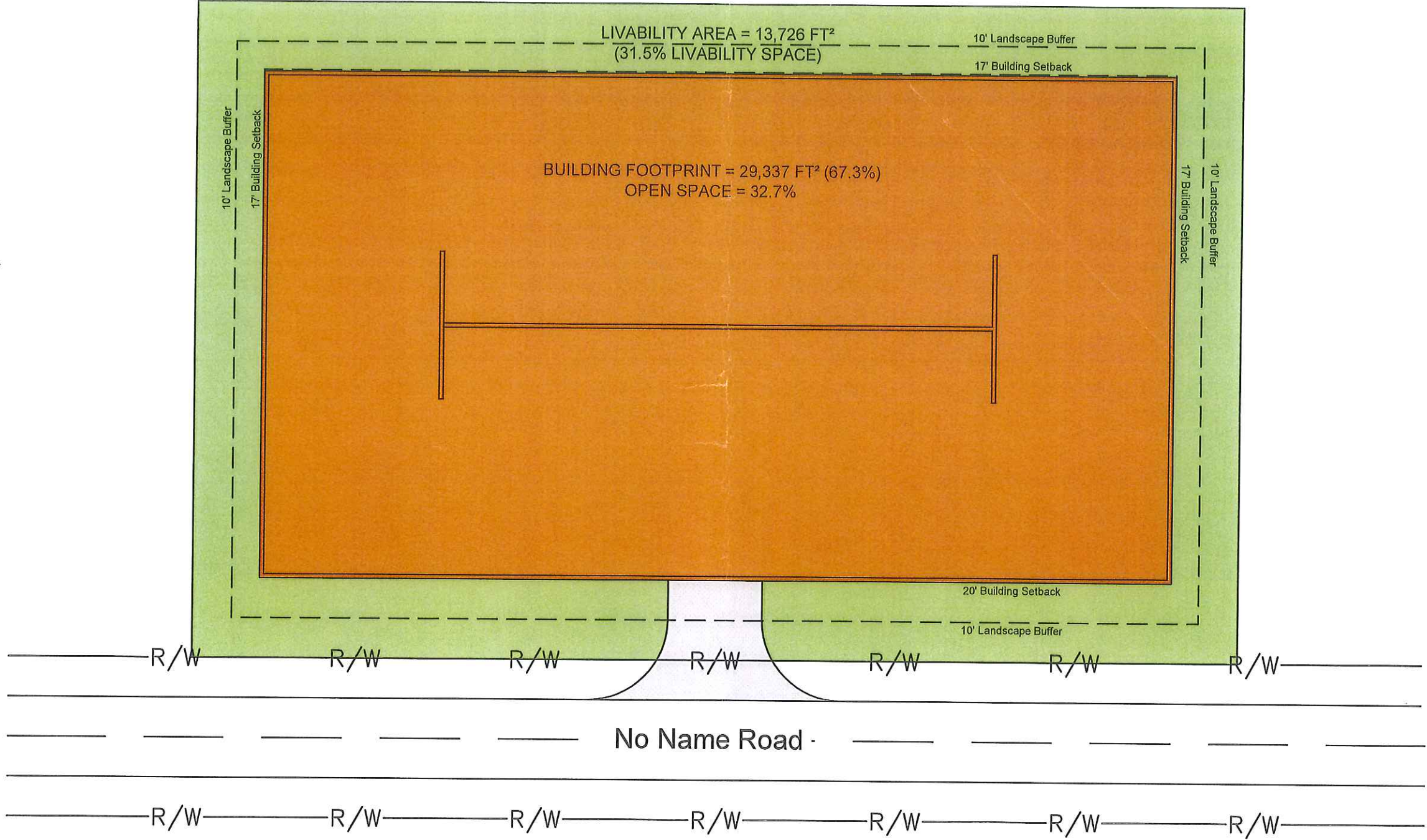


EXHIBIT 6
LUI RATIONS USING MINIMUM PARKING GARAGE DIMENTIONS

1" = 30'



PROVIDED PER EXHIBIT			ALLOWABLE PER UDO	
TOTAL LOT AREA	=	1.0 ACRES		N/A
FLOOR AREA	=	N/A		N/A
BUILDING FOOTPRINT	=	67.3%		30% (MAX)
OPEN SPACE	=	32.7%		70% (MIN)
LIVABILITY SPACE	=	31.5%		27% (MIN)

EXHIBIT 7

LUI RATIOS WITH PARKING GARAGE UTILIZING ENTIRE BUILDING ENVELOPE

1" = 30'



**STAFF REPORT
PUBLIC HEARING
AUGUST 22, 2016
CASE 20160377 PARKING STRUCTURES- UDO TEXT AMENDMENT**

Request

Alan Crees has filed an application for a text amendment regarding “parking structures”. Mr. Crees request and analysis are attached.

Analysis

Staff has reviewed the request and feels that there is merit to some of the analysis. At Council’s direction, Staff is already working on modifications to Article 24 Parking. Staff requests that Council consider merging this request to the ongoing modification to Article 24 Parking.

PLANNING BOARD REPORT/RECOMMENDATIONS

Per NCGS 160A-387, all proposed amendments to the zoning ordinance or zoning map shall have a written report provided from the Planning Board to the Town Council within 30 days of referral of the amendment to the Planning Board, or the Town Council may proceed in its consideration of the amendment without the Planning Board report. Furthermore, in no case is the Town Council bound by the recommendations, if any, of the Planning Board.

Per NCGS 160A-383, the Planning Board shall advise and comment on whether the proposed zoning amendment is consistent with all applicable officially adopted plans, and provide a written recommendation to the Town Council that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with the officially adopted plans shall not preclude consideration or approval of the proposed amendment by the Town Council.

First motion and vote: The proposed amendment to the Town’s zoning ordinance ☐is OR ☐is not consistent with the Town’s comprehensive plan and other applicable adopted plans of the Town which relate to this application because:

Second Motion and Vote: The Planning Commission recommends ☐approval OR ☐denial for the following reasons:

TOWN COUNCIL ACTION

Per NCGS 160A-383, zoning regulations shall be made in accordance with a comprehensive plan. Prior to adopting or rejecting any zoning amendment, the governing board shall adopt a statement describing whether its action is consistent with an adopted comprehensive plan and explaining why the board considers the action taken to be reasonable and in the public interest.

First motion and vote: The proposed amendment to the Town’s zoning ordinance ☐is OR ☐is not consistent with the Town’s Comprehensive plan and other applicable adopted plans of the Town which relate to this application because:

Second Motion and Vote: I move to ☐approve OR ☐deny the proposed amendment to the Town’s zoning ordinance and believe ☐approval OR ☐denial is reasonable and in the public interest because:

Zoning/Planning Permit Application

Town of Boone Planning & Inspections Department
 680 W. King Street, Suite C • Boone, North Carolina 28607
 Phone (828) 268-6960 • Fax (828) 268-6961
www.townofboone.net

PERMIT IS FOR (CHOOSE ONE):

- ☒ Single Family or Duplex (Residential)
☐ Commercial
☐ Board of Adjustment Hearing (other than Appeals)
☐ Planning/Other

A. CONTACT INFORMATION

Applicant: David Welsh Company: _____
 Address: 342 Old Bristol Rd Boone, NC 28607
 Phone Number: 828-963-0376 Email Address: dw@davidjwelsh.com
 Property Owner: David Welsh Company: _____
 Address: 240 Grand Blvd. Boone, NC
 Phone Number: 828-963-0376 Email Address: dw@davidjwelsh.com

B. PROPERTY INFORMATION

Watauga County Parcel Identification Number(s): 2901501722000
 Address/Location: 342 Old Bristol Rd. Boone, NC 28607
 Project Name: The Blue House

C. PERMIT SUBCATEGORIES*Additional Forms Needed***Zoning Permits**

- | | |
|---|---|
| ☐ Accessory Building | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Addition/Expansion including decks and patios | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Change of Use | *Commercial Project Data Form |
| ☐ Land Disturbance (not associated with the construction of a bldg.) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Manufactured Home Set-up in Park | *Manufactured Home in Park Form |
| ☐ New Building Construction | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Renovation/Remodel | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Accessory Use (as listed in UDO Subsection 15.07.01) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Temporary Use (as listed in UDO Subsection 15.07.02) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Sign | *Sign Project Data Form (Zoning) |
| ☐ Pavement Sealant | *Pavement Sealant Project Data Form |
| ☐ Major Subdivision Zoning Permit | *Commercial Project Data Form |

Board of Adjustment Hearings

- | | |
|--|---|
| ☐ Special Use Permit/Modification | *Special Use Permit Form |
| ☐ Variance | *Variance Form |
| ☐ Major Subdivision Preliminary Plat Approval | *Major Subdivision Preliminary Plat Approval Form |

Planning/Other

- | | |
|---|--|
| ☐ Exempt Division of Land | *Subdivision Exemption Project Data Form |
| ☐ Minor Subdivision (Preliminary and Final Plat) | *Minor Subdivision Project Data Form |
| ☐ Major Subdivision (Final Plat) | *Major Subdivision Final Plat Project Data Form |
| ☐ UDO Text Amendment | *Text Amendment Project Data Form |
| ☐ General Use Zoning Map Amendment | *General Use Map Zoning Map Amendment Project Data Form |
| ☒ Conditional District Zoning Map Amendment | *Conditional District Zoning Map Amendment Project Data Form |
| ☐ Voluntary Annexation | *Annexation Petition (Satellite or Contiguous) |
| ☐ UDO Text Interpretation | *UDO Interpretation Data Form |

D. DETAILED DESCRIPTION OF PRC

Conditional use with classes change from R2 to B2.
 Changing a college rental into an art studio.
 Adding 2 parking spaces.

E. PROJECT MANAGER DESIGNATION

A project manager is responsible for the activities listed in UDO Section 4.19. Single-family and two-family projects involving less than ½ acre of land disturbing activity or commercial site improvements that involve no more than 2,500 square feet of land disturbing activity are exempt from this requirement.

Name: _____ Company: _____
 Address: _____ License #: _____
 Phone Number: _____ Email Address: _____

F. DESIGN PROFESSIONAL INFORMATION

Engineer:

Name: _____ Company: _____
 Address: _____ License #: _____
 Phone Number: _____ Email Address: _____

Architect:

Name: _____ Company: _____
 Address: _____ License #: _____
 Phone Number: _____ Email Address: _____

G. APPLICANT SIGNATURE: By signing this form you are certifying that this application and any attached information is accurate. Failure to provide accurate information or failure to provide any requested information may result in delays to permit processing.

David Welsh
 Applicant¹ (Print)


 Applicant Signature

6/28/16
 Date

David Welsh
 Property Owner (Print)


 Property Owner Signature

6/28/16
 Date

Official Use Only

Project File Name:

Welsh, David + Michael - Cond. District Map Amendment

Permit Number:

20160419

Project Name/Number:

Date: 6-28-16	Fee: \$500.00	Receipt Number: 440613	Method of Payment: ck # 3682	Paid By: David Welsh
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S:\FORMS\Forms_2015\Zoning\ZoningPlanningPermitApplication_052016.doc

¹ Documentation confirming that the applicant has a legally sufficient interest in the property proposed for development to use it in the manner requested, or is the duly appointed agent of such a person must be submitted along with this application. Execution by property owner of this application signifies that the applicant is authorized to proceed.

Conditional District Map Amendment Project Data Form

Town of Boone Planning & Inspections Department
680 W. King Street, Suite C • Boone, North Carolina 28607
Phone (828) 268-6960 • Fax (828) 268-6961
www.townofboone.net

Official Use Only

Project Name/Number:

Welsh - CD Map Amend

Permit Name/Number:

20160419

It is recommended that applicants schedule a meeting with Planning & Inspections Staff prior to application submittal.

A. ADDITIONAL APPLICATION INFORMATION

Application is For: ☒ Conditional District Map Amendment ☐ Conditional District Map Amendment Modification

Hearing Date Requested¹: 8/15/16

B. DEVELOPMENT INFORMATION

Project Name: 342 Old Bristol Rd. Boone, NC 28607

Project Description: Changing from R2 to B2

Existing Zoning District(s): R2 Proposed Zoning District(s): B2

Existing Land Use(s): R2 Proposed Land Use(s)²: B2

Adjacent Land Use(s): N: B2 E: R2

W: B3 S: R2

Are there any existing variances granted to the property? ☐ Yes ☒ No ☐ Unknown

If yes, describe: _____

Are any variances being requested with this project?³ ☐ Yes ☒ No

If yes, describe: _____

Total Land Area: .16 acres Total Disturbed Area: _____

Number of Proposed Phases: _____

Describe Phasing (if proposed): _____

If requesting vesting greater than 2 years (per UDO Section 4.14), list amount requested (up to 3 additional years). _____

For modifications, list original case # and date granted: _____

¹ Each applicant must provide the meeting date for which they wish their request to appear. Each completed application must have met published meeting deadlines.

² Please see UDO Article 15 for specific details on permissible uses

³ Each request for a Variance must be submitted on a separate Zoning Permit Application along with the appropriate fee.

C. DOCUMENTS REQUIRED FOR SU **ITAL**

- ☒ Completed Application (see UDO Article 4 & Appendix A)
- ☒ Application Fee
- ☒ 7 complete sets of development site plans
- ☐ One (1) reduced copy of development site plans (11X17)
- ☐ Two (2) sets of copies of building elevations
- ☐ Digital copy of plans (if available)
- ☐ Deed(s) of all property included in the request
- ☐ A written metes & bounds legal description with accompanying survey map is required for a request that would rezone only a portion of a tax parcel or requests for multiple zoning districts

D. PROPERTY OWNER SIGNATURE:

By signing this form you are certifying that this application and any attached information are accurate. Failure to provide accurate information or failure to provide any requested information may result in delays to permit processing.

David J. Welsh

Property Owner (Print)



Property Owner Signature

6/28/16

Date

Official Use Only

Public Hearing Meeting Date: _____

PC Meeting Date: _____

TC Meeting Date: _____

Date of APO Mailed Notification: _____

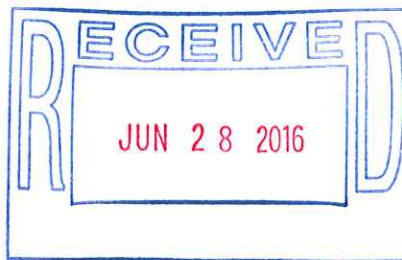
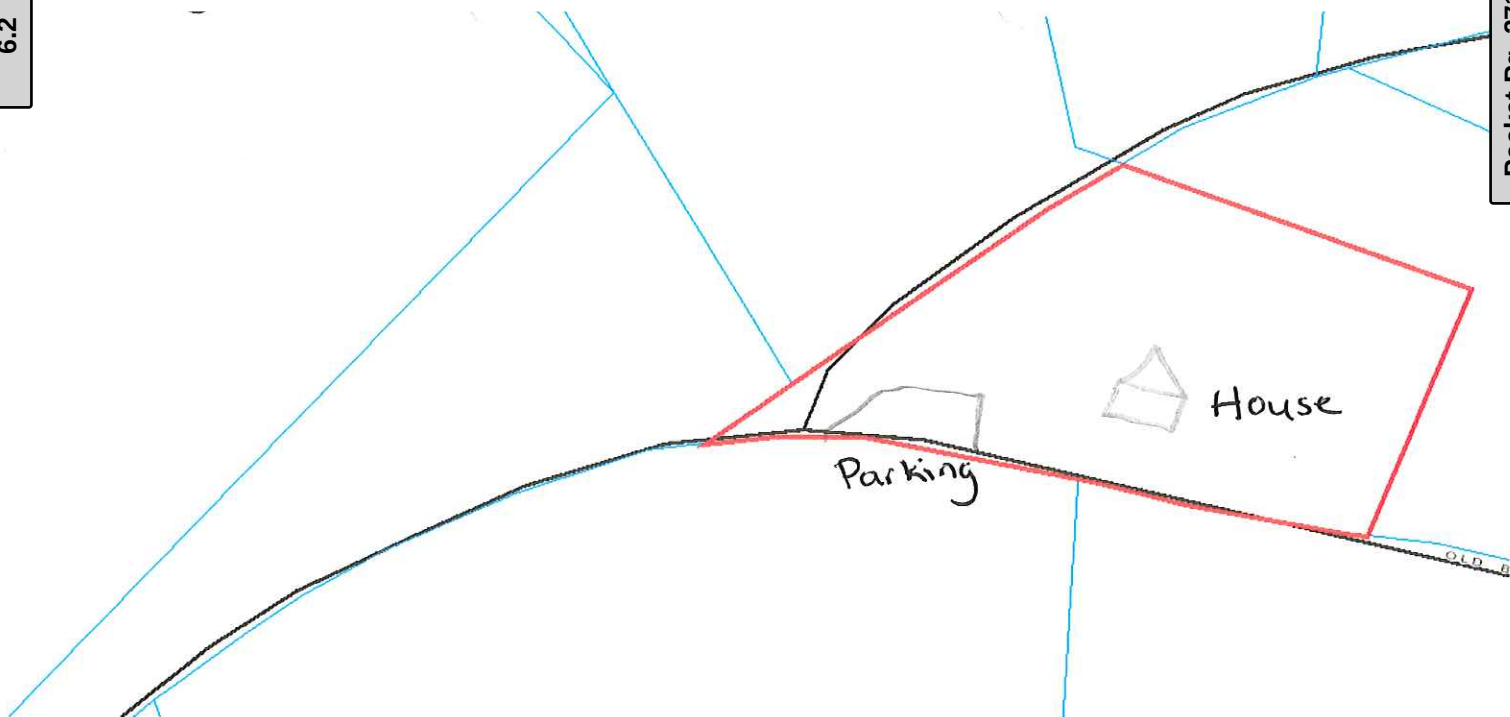
Date of Posted Notification: _____

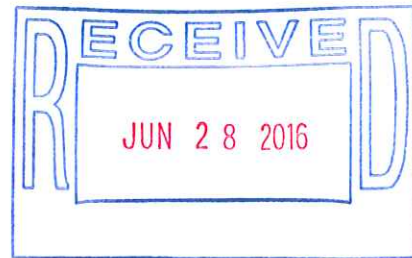
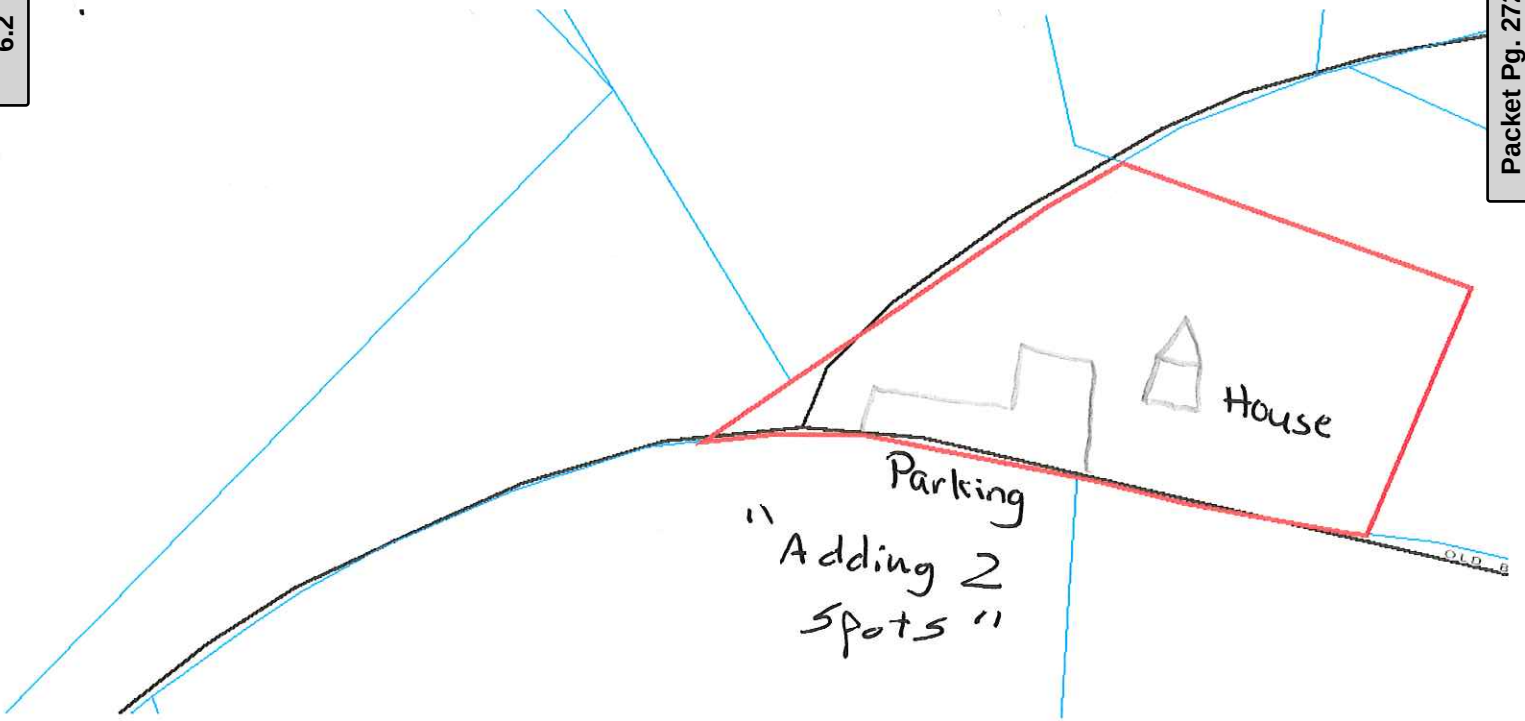
Project Approved: ☐ Yes ☐ No

Date Order Recorded: _____

 Order Recordation Information: Book: _____ Page: _____
 S:\FORMS\Forms_2015\ConditionalDistrictZoningMapAmendmentProjectDataForm_062015.doc

Communication: Welsh Application Information (Case 20160419 Welsh Conditional District Zoning Map Amendment)





342 Old Bristol Road

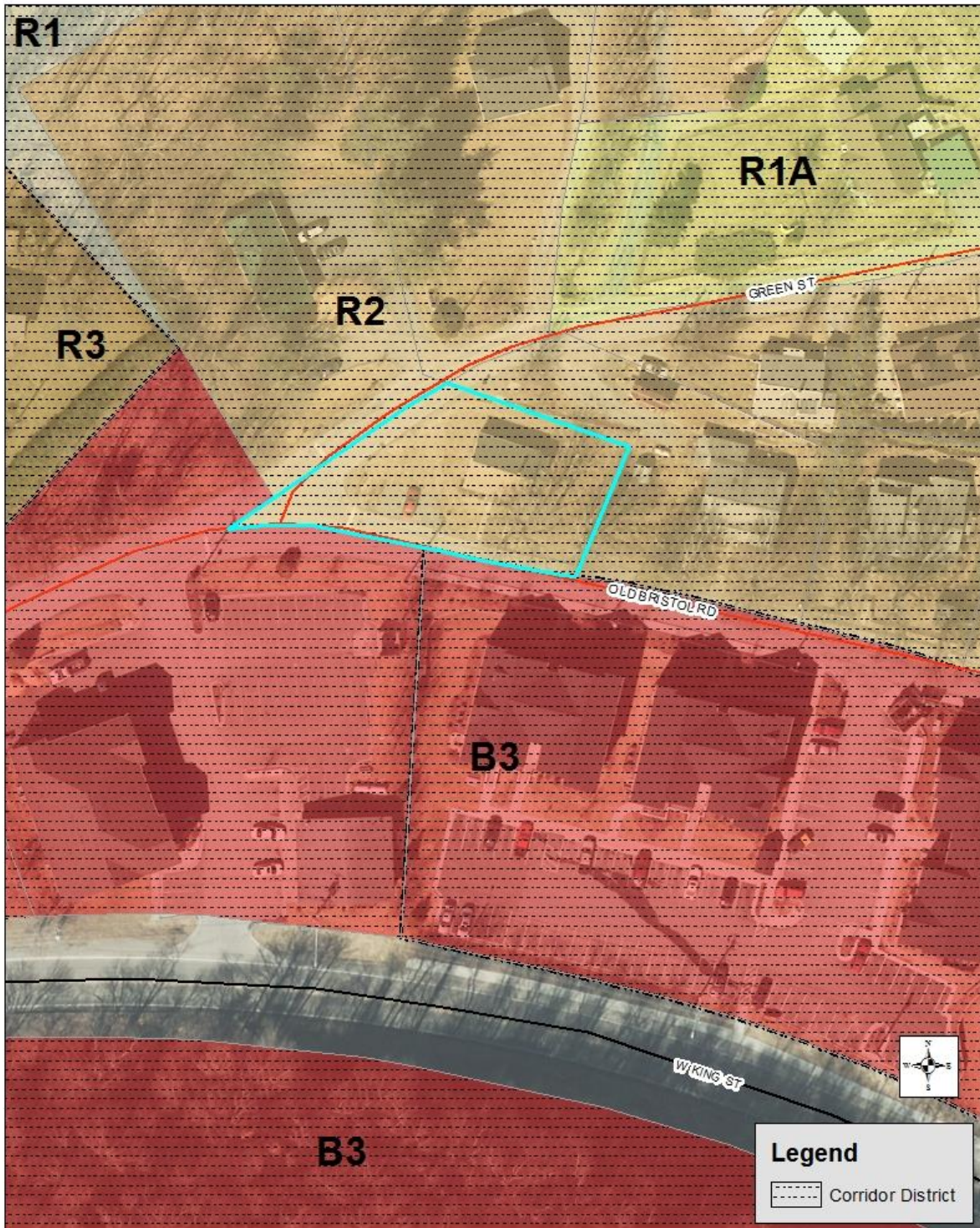
Communication: Welsh Site Plan Information (Case 20160419 Welsh Conditional District Zoning Map





342 Old Bristol Road

Zoning Map Information



Request

David Welsh has filed a Planning Permit Application for a Conditional District Zoning Map Amendment to rezone 342 Old Bristol Road from R2 Two-Family Residential to Conditional District B2 Neighborhood Business with a site specific development plan for Use 11.13 Other Personal Service Establishments. The applicant has indicated on the application that the use is for an “art studio”.

Applicant Information

Petitioner Name/Position: David Welsh
Petitioner Organization: NA
Petitioner Address: 240 Grand Boulevard, Boone, NC 28607
Petitioner Contact Phone: 828-963-0376
Petitioner Email: dw@davidjwelsh.com

Parcel Information

Addresses: 342 Old Bristol Road
Watauga County PINs: 2901501722000
Property Owner: David Welsh and Michael Welsh
Total Lot size: .16 acre
Jurisdiction: Town of Boone Corporate Limits
Access: Old Bristol Road
Topography: Approximately 4’ change in elevation from Green Street to Old Bristol Road;
 Slope from NW to SE
SFHA: No
Watershed District: No
Corridor District: Yes
NCD: No
Viewshed: No
Transit Route: Green Route (West) stop located at Pinnacle Drive & Old Bristol Road
 (approximately 500’ from property)
Town Utilities: Unknown
Current Zoning: R2 Two-Family Residential, Corridor District Overlay
Vesting: 2 Years
2030 Plan Designations: G1
Current Use(s): Single Family Dwelling

Zoning & Use of Adjacent Properties

	Adjacent Zoning	Adjacent Land Use
North	R2 Two-Family	Single-Family Dwellings
East	R2 Two-Family	Single-Family Dwellings
South	B3 General Business; CD B3 General Business	Multi-Family Dwellings, Laundromat,
West	B3 General Business; 42 Two-Family	Vacant , Multi-Family Dwellings

Impact Analysis

1. **Parking:** The existing single-family dwelling has a parking area for 3 vehicles. The applicant proposed to add two parking spaces to the parking area. The intensity of parking will increase over the parking typical at a single-family dwelling.
2. **Landscape Buffer:** As proposed, the applicant is not required to install any landscape buffers for this change-of-use. Use 11.13 is predicted to have a greater impact on the adjacent property owner to the east than the existing single-family dwelling.



Petitioner's Proposal

Proposed Zoning: Conditional District B2 Neighborhood Business

Applicant Submitted Materials:

1. Planning Permit Application/Conditional District Project Data Form
2. Site Plan

Comments from P&I staff

Zoning District Descriptions:

R2: Per UDO Subsection 14.01.01 residential zoning districts are designed and intended to secure for the persons who reside there a comfortable, healthy, safe, and pleasant environment in which to live, sheltered from incompatible and disruptive activities that properly belong in nonresidential districts.

The R2 Two-Family Residential District is established to provide a medium density living area consisting of single-family and two-family dwellings, and other related uses necessary for a sound neighborhood. The regulations for this district are designed and intended to secure for the persons who reside there a comfortable, healthy, safe, aesthetically pleasing and pleasant environment in which to live, sheltered from incompatible and disruptive activities that properly belong in nonresidential districts.

B2: The B2 Neighborhood Business District is intended to provide for the development of low-density commercial and services that are accessible by pedestrians and cyclists from surrounding neighborhoods, which serve the day to day convenience needs of surrounding neighborhoods, and are of such nature as to be in harmony with the neighborhoods they serve. Appropriate residential uses are allowed in this district, normally as part of mixed-use developments. The regulations for this district are designed and intended to create a comfortable, healthy, safe, aesthetically pleasing, and pleasant environment for all appropriate uses.

NOTE: Though, the applicant does not propose to enlarge the existing building (just the parking area). Staff has provided the following information so the intensity of the two zoning district can be compared.

Intensity Regulations

Per UDO Section 16.01 development shall comply with the intensity regulations indicated in the Intensity Table (below) with the following exceptions (as noted in Subsection 16.01.01):

- A. Unless otherwise provided in this Ordinance, the land use intensity regulations for planned residential developments and architecturally integrated subdivisions shall apply to the development as a whole and not to individual parts thereof.
- B. A site specific development plan consisting of no other use than one (1) "single family dwelling" is not subject to the maximum floor area ratio requirements but all other intensity rules apply.
- C. In the B1 Zoning District, a minimum "Building Footprint" of fifty percent (50%) is required. All other regulations in the Intensity Table apply.
- D. In the B2 Zoning District, a development may utilize the values in the Intensity Table or may substitute a maximum "Building Footprint" of thirty percent (30%) and an open space ratio of seventy percent (70%). All other regulations in the Intensity Table apply.

- E. In the B3 Zoning District, a development may utilize the values in the Intensity Table or may substitute a maximum “Building Footprint” of thirty percent (30%) and an open space ratio of seventy percent (70%). All other regulations in the Intensity Table apply.

16.01.02 Intensity Table

Zoning District	Minimum Gross Land Area	Minimum Lot Width	Minimum Street Frontage	Maximum Floor Area Ratio (FAR)	Minimum Open Space Ratio (OSR)	Minimum Livability Space Ratio (LSR)	Minimum Recreation Space Ratio (RSR)	Setbacks	
								Street	Interior
R2	6,000 sq. ft.	70 ft.	56 ft.	.283	.74	.48	.042	20 ft.	13 ft.
B2	5,000 sq. ft.	50 ft.	40 ft.	.264	.76	.27	.049	20 ft.	17 ft.
Proposed	6,970 ft.	140 ft. ±	140 ft. ±	.212	.89	.74	NA	10-17 ft.*	17 ft. ± north/east
Compliance*	Yes	Yes	Yes	Yes	Yes	Yes	NA	No	Yes

(*based upon tax information and site plan information on existing structure which contains nonconformities in regards to the street setback)

Current Use: 1.01 Single-Family Dwelling; permitted in the R2 zoning district by right.

Proposed Use: 11.13 Other Personal Service Establishments; permitted in the B2 zoning district by right. Use 11.13 only includes personal service establishments which are not open to the public between the hours of 10 pm and 6 am.

A personal service establishment is defined in UDO Article 34 as:

“A business that provides individual services related to personal needs directly to customers at the site of the business, or that receives goods from or returns goods to the customer that have been treated or processed at that location or another location. This includes travel agencies, dry-cleaners, laundries, tailors, hair stylists, cosmeticians, toning or tanning salons, photocopy centers, shoe repair shops, appliance repair shops, interior design studios, and dance and martial arts studios and other similar uses. This does not include gas stations.”

Transitional Zone: No

Parking: The applicants have demonstrated general compliance with UDO Article 24 Parking in regards to vehicle parking.

Vehicle: Per UDO Subsection 24.03.03, Use 11.13 is limited to a maximum of 5 spaces per 1000 ft² of gross floor area, which limits the applicant to 8 parking spaces on the property. The applicant is proposing 5 standard spaces.

Change of Use: The applicant will be required to bring the site into compliance in accordance with the tier system set forth in UDO Subsection 7.05.02(A) as follows:

- A. Compliance of existing development with the requirements of the Ordinance shall be triggered by the costs of proposed new development in accordance with the following tiers. The Administrator may require certification of the new development by a competent professional. The following tiers are cumulative in effect:

1. **Tier 1:** Repair, reconstruction, modification and alteration of a structure or development in which the cost is certified to exceed ten percent (10%) of the value of the development shall require compliance with the following, to the extent practicable:
 - a. Bicycle parking in accordance with Section 24.09.
 - b. Lighting in accordance with Section 25.05.
2. **Tier 2:** Repair, reconstruction, modification and alteration of a structure or development in which the cost is certified to exceed twenty-five percent (25%) of the value of the development shall require compliance with the following, to the extent practicable:
 - a. Solid waste and recycling containers pursuant to Section 22.13.
 - b. Signs pursuant to Article 26.
 - c. Color requirements in accordance with Subsection 25.02.05.
 - d. Landscape Standards pursuant to, with a priority given to shade tree installation.
3. **Tier 3:** Repair, reconstruction, modification and alteration of a structure or development in which the cost is certified to exceed fifty percent (50%) of the value of the development, or in the case of a structure located in a Floodway or Special Flood Hazard Area in which the cost exceeds fifty percent (50%) of the value of the structure, shall require compliance with the following, to the extent practicable:
 - a. Drainage and stormwater requirements pursuant to Article 21.
 - b. Pedestrian circulation and sidewalk requirements pursuant to Section 23.08.
 - c. Parking requirements pursuant to Article 24.
 - d. All other Community Appearance requirements of Article 25.
 - e. Corridor District requirements pursuant to Article 14.
 - f. Special Flood Hazard Area compliance pursuant to Article 31.
4. **Tier 4:** Repair, reconstruction, modification and alteration of a structure or development in which the cost is certified to exceed seventy-five (75%) of the value of the development shall require compliance with all requirements of the UDO unless compliance is impossible.

Comments from Other Departments & Outside Agencies

Public Works:

Utilities Division (Utility Services Technician):

Applicant will need to demonstrate compliance with backflow and other commercial utility requirements as necessary during the Zoning Permit process.

Fire Department (Assistant Fire Chief/Fire Marshal):

Site approved. Applicant will have to meet all fire code requirements during the building permit process.

CONFORMITY TO ADOPTED PLANS**COMPREHENSIVE PLAN UPDATE**

[Click here to view the 2006 Comprehensive Plan Update](#)

1.1 Overall Objectives for the Boone Comprehensive Plan (p. 15):

The following objectives, which have not been listed in any particular order of importance, are deliberately broad in scope and less specific than either a policy statement or an implementation action.

Economic Development: Acknowledge the area's natural beauty, university, and medical center presence as the Town's greatest assets for economic development and jobs creation. Treat them accordingly.

Community Appearance and Community Character: Blend the built environment with the natural, scenic, and historic character of a High Country small town. Especially discourage commercial strip development, cluttered signage, and "cheap" apartment buildings.

Open Space: Integrate open space and greenways into the urban fabric of the Town. Preserve the countryside by discouraging suburban sprawl. Avoid development in floodplains, on ridgetops, and on steep slopes.

Environmental Quality: Address and monitor growth factors and activities that contribute to water, air, light, and noise pollution.

Trees: Conserve existing trees and plant new trees, especially hardwoods.

Automobile Transportation: Maximize the efficiency of existing facilities, but not at the expense town and neighborhood character and livability. Build or expand transportation facilities and parking areas as needed, but with care. Work to reduce auto dependency, use, and congestion.

Bikeways: Implement the planned system of bikeways as a legitimate transportation alternative. Unify with greenways and other pedestrian facilities where possible.

Mass Transit: Enhance and support the mass transit system as an effective alternative to the congestion created by the individual automobile.

Pedestrian Movement: Encourage a system of sidewalks, paths, crosswalks and compact development patterns which make it easy to get around Boone on foot.

Infrastructure: Engage in long range planning for water and sewer systems, stormwater runoff, natural gas, and other utility systems. Place overhead utilities underground whenever feasible.

Public Safety: Maintain a high level of policing and fire protection and plan the expansion of public safety services to coincide with projected population increases and identified needs.

Energy and Waste: Reduce waste generation, and the consumption of energy and water. Develop area recycling programs to the fullest. Encourage an anti-litter consciousness among residents and visitors.

University: Emphasize cooperative planning among the Town, County, and University.

Downtown: Support and enhance the cultural and historic significance of downtown Boone, and affirm its appealing, pedestrian orientation.

Recreation: Strive for additional public recreation facilities, especially sports fields, greenways and indoor recreation centers.

Neighborhoods: Ensure the livability of neighborhoods, especially through land use and traffic planning.

Public Involvement: Encourage active public involvement and volunteerism to expand the effectiveness of community planning and action.

1.2 Growth Strategy Map (p. 17):

Primary Growth Area: The Primary Growth Area is that portion of the urban growth area where urban level of facilities are already in place or can be provided most cost effectively. This is the area where near term growth and development is to be especially encouraged.

2.0 Policies for Growth and Development (p. 18-77)

Staff has reviewed land use and comprehensive plan policies, and listed those policies which in staff's opinion have a bearing on the request. The Council and Commission should review these policies carefully. Each member may make his or her own interpretation as to the relevance of each and which carry the most weight thereby shaping their overall recommendation.

2.1 THE ECONOMY (p. 19)

2.1.1 Economic Development

- A. The Town shall protect and enhance a high quality of life, image, cultural amenities, and natural beauty as the most effective, long term component of an economic development strategy.
- D. Economic development efforts shall encourage the revitalization and reuse of currently unused or underutilized structures, sites and infrastructure in appropriately located areas.
- F. New firms and expanding businesses that complement the natural resources and beauty of the region shall be especially recruited and encouraged.
- I. Small business start-ups, expansions and spin-offs shall be encouraged. The presence of ASU and Caldwell Community College and Technical Institute shall be recognized as a necessary and important resource for area businesses.
- K. Boone shall identify and provide services consistent with the needs of the area's growing retiree population.

2.1.2 Commercial Development

- A. Uncontrolled strip development along the area's through streets shall be prohibited. The undesirable effects of existing strip development shall be reduced and/or reconfigured when redevelopment opportunities permit. New strip development on isolated single lots along through streets shall be discouraged.
- B. Commercial and office development shall be encouraged to locate in planned shopping centers, office parks and mixed use developments to stop the proliferation of strip development.
- E. Residentially scaled and designed neighborhood businesses may be a planned element of newly developed or redeveloped neighborhoods. They should be near other compatible facilities such as elementary schools and neighborhood parks.
- F. Commercial uses may be encouraged to develop by consolidation and expansion of existing commercially zoned property, only when such consolidation and expansion does not encroach upon a viable residential area.

- G. Effective buffering and/or landscaping shall be provided where a large scale or automobile-orientated commercial or office use adjoins an existing or planned residential use.
- H. Encroachment of incompatibly scaled and designed commercial or office uses into viable existing or planned residential areas shall be prohibited.
- I. Office and institutional development may be encouraged as a transitional land use between residential areas and higher intensity commercial activities.

2.3 THE COMMUNITY (p. 60)

- A. Urban type development within the Urban Growth Area shall meet appropriate Town standards.

2.3.2 Community Character

- E. New development, redevelopment and rehabilitation of structures and sites shall occur in a manner which is consistent with the neighborhood and architectural context of the immediate area, and supportive, whenever possible, of Boone's original community character as a High Country small town.

2.3.3 Housing and Neighborhoods

- A. The protection and rehabilitation of viable neighborhoods shall be encouraged to insure their continued existence as a major housing source and as a reflection of the area's image as an attractive, highly livable community.
- D. Innovative and flexible land planning and development practices shall be encouraged to create livable developments which better safeguard land, water, energy and historic resources.
- G. Compact, full service neighborhoods, offering opportunities for living, working, shopping, and gathering places, shall be encouraged in newly planned developments, as well as for redeveloping areas.

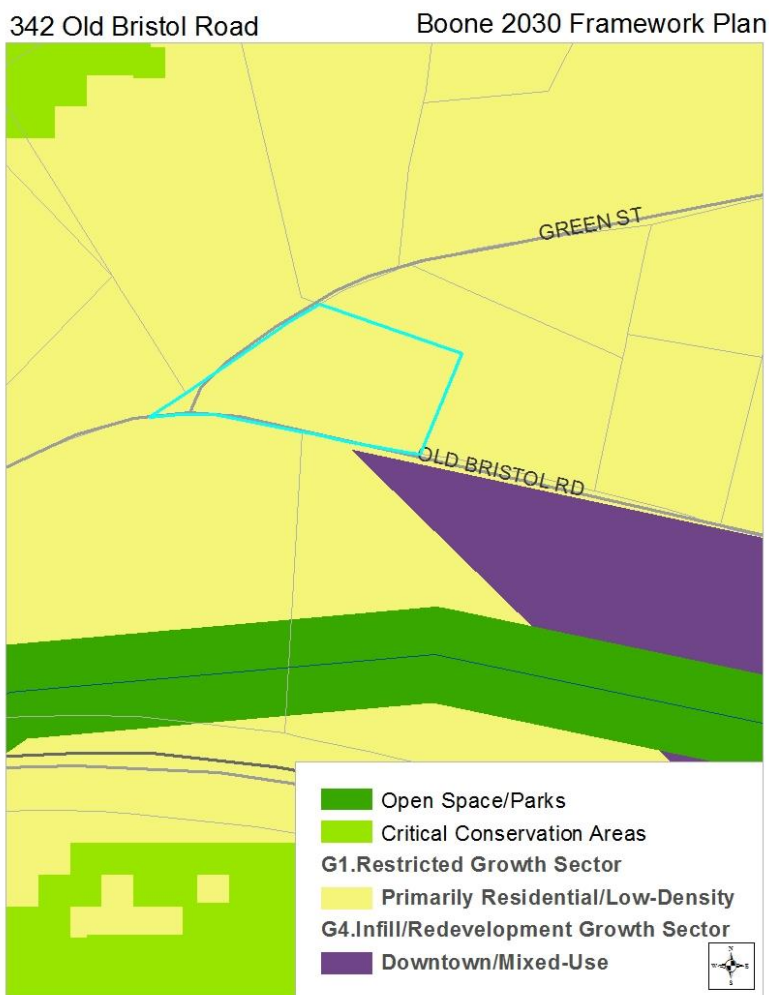
2.3.4 Public Involvement

- A. Public involvement shall be encouraged in decisions concerning land use and development by making the public aware of proposed developments at the earliest opportunity, as well as fostering communication among developers, the Town, the County, the University, and the general public.

BOONE 2030 LAND USE PLAN

[Click here to view the Boone 2030 Land Use Plan](#)

The 2030 Land Use Plan works together with the Town's Comprehensive Plan and other plans and programs to provide for the Town's long range growth. The Land Use Plan is a three-dimensional framework for the comprehensive plan and serves as the basis for all the facility and service needs of the Town. The Land Use Plan serves as the guiding vision and policy basis for determining the appropriateness of any development or redevelopment that is proposed for the Town's planning jurisdiction. This property is located in the G-1 Low Density/Primarily Residential sector.



The G-1 sector is intended for relatively low density residential development. This sector includes existing low-density residential neighborhoods that are not appropriate for redevelopment. It also includes lands that are not proximate to thoroughfares and are not projected to be high growth areas due to limited access to transportation networks and utilities. Appropriate Land Uses/Development Types include:

Low density cluster developments	Low density single family residential development
Limited convenience retail	Civic uses such are parks, government or religious

REASONABLE BASIS FOR APPROVAL

To establish “reasonable basis” the permit issuing authority must balance several factors, including the size of the tract, the compatibility of the rezoning with the comprehensive plan and other applicable adopted plans, the benefits and detriments resulting from the rezoning to the petitioner landowner, neighbors and the surrounding community, and the relationship between the proposed uses and the uses currently allowed in adjacent tracts.

The proposed rezoning encompasses approximately .16 acre close to the downtown area. Surrounding land uses include apartments, laundromats, duplexes and single-family dwelling units.

This proposed rezoning is consistent with and supported by several plan objectives and policies in the comprehensive plan and the Boone 2030 Plan as noted above. This rezoning benefits the petitioner and surrounding property owners because the proposed use (11.13 Other Personal Service Establishment- art studio) provides transition between the higher intensity land uses to the south and the west and the lower intensity uses to the north and east and is an appropriate use for the B2 Neighborhood Business zoning district. In addition, this project is situated at the edge of the neighborhood and the intersection with higher intensity uses. The only

potential detrimental effects to either the petitioner or the surrounding property owners could be parking and a possible potential impact to the property on the eastern boundary due to the increase in activity on the subject property.

The parking concerns could be effectively managed through different parking management techniques and use management including limiting class or event sizes. Impacts to the adjacent property to the east could be mitigated through the installation of an enhanced landscape buffer along the eastern boundary of the subject property.

Based on the foregoing analysis, this rezoning petition appears to be a reasonable request.

Certification of Notification by Mail

I, Marlene Crosby, certify that individual notices meeting the requirements of Article 9, Subsection 9.03.03(B)(2) of the Town of Boone UDO were placed in the mail (first class) on August 3, 2016.

Marlene Crosby, Administrative Support Specialist

Certification of Posting

I, Bill Bailey, certify that the subject property was posted as required in Article 9, Subsection 9.03.03(B)(2) of the Town of Boone UDO on August 8, 2016.

Bill Bailey, Planning Director

Staff Analysis and Recommendations

Based on the information provided by the applicant and the analysis contained herein, Staff finds this project, as proposed by the applicant, is generally compatible with the surrounding land uses.

If Council approves the request, Staff recommends the following conditions:

1. Where there is a conflict between the application information and the plans (site plans bearing a received date of July 19, 2016) the plans shall control. Insignificant deviations may be permitted to comply with the requirements of the UDO.
2. Any commitments and representations concerning the proposed project made by the applicant or its (his or her) representatives at the public hearing shall also become a condition of the permit, and a basis for a stop work order and/or permit revocation if violated.
3. Final plans shall be submitted that are in compliance with the provisions of the UDO and other provisions of the Town Code.
4. The applicant comply with the requirements of UDO Section 7.05.
5. If the landscaping requirements in Subsection 7.05.02, are not triggered by the new use, the applicant shall install an opaque evergreen buffer along the eastern property line.

PLANNING BOARD REPORT

Per NCGS 160A-387, all proposed amendments to the zoning ordinance or zoning map shall have a written report provided from the Planning Board to the Town Council within 30 days of referral of the amendment to the Planning Board, or the Town Council may proceed in its consideration of the amendment without the Planning Board report. Furthermore, in no case is the Town Council bound by the recommendations, if any, of the Planning Board.

Per NCGS 160A-383, the Planning Board shall advise and comment on whether the proposed zoning amendment is consistent with all applicable officially adopted plans, and provide a written recommendation to the Town Council that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with the officially adopted plans shall not preclude consideration or approval of the proposed amendment by the Town Council.

First motion and vote: The proposed Amendment to the Town's zoning map ☐is OR ☐is not consistent with the Town's comprehensive plan and other applicable adopted plans of the Town which relate to this application because:

Second Motion and Vote: The Planning Commission recommends ☐approval ☐denial for the following reasons:

TOWN COUNCIL ACTION

Per NCGS 160A-383, zoning regulations shall be made in accordance with a comprehensive plan. Prior to adopting or rejecting any zoning amendment, the governing board shall adopt a statement describing whether its action is consistent with an adopted comprehensive plan and explaining why the board considers the action taken to be reasonable and in the public interest.

First motion and vote: The proposed amendment to the Town's zoning map ☐is ☐is not consistent with the Town's Comprehensive plan and other applicable adopted plans of the Town which relate to this application because:

Second Motion and Vote: I move to ☐approve ☐deny the proposed amendment to the Town's zoning map and believe ☐ approval ☐denial is reasonable and in the public interest because:

Zoning/Planning Permit Application

Town of Boone Planning & Inspections Department
680 W. King Street, Suite C ♦ Boone, North Carolina 28607
Phone (828) 268-6960 ♦ Fax (828) 268-6961
www.townofboone.net

PERMIT IS FOR (CHOOSE ONE):

- ☐ Single Family or Duplex (Residential)
☐ Commercial
☐ Board of Adjustment Hearing (other than Appeals)
☐ Planning/Other

A. CONTACT INFORMATION

Applicant: Appalachian State University Company: Appalachian State University
Address: 438 Academy St. Boone, NC 28608
Phone Number: 828-262-2070 Email Address: burwellth@appstate.edu
Property Owner: Appalachian State University Company: same
Address: 438 Academy St. BB Dougherty Administration Building, Boone, NC 28608
Phone Number: 828-262-2070 Email Address: burwellth@appstate.edu

B. PROPERTY INFORMATION

Watauga County Parcel Identification Number(s): 2910-08-0049-000
Address/Location: 663 Howard Street
Project Name: Howard Street Hall

C. PERMIT SUBCATEGORIES

Additional Forms Needed

Zoning Permits

- | | |
|---|---|
| ☐ Accessory Building | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Addition/Expansion including decks and patios | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Change of Use | *Commercial Project Data Form |
| ☐ Land Disturbance (not associated with the construction of a bldg.) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Manufactured Home Set-up in Park | *Manufactured Home in Park Form |
| ☐ New Building Construction | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Renovation/Remodel | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Accessory Use (as listed in UDO Subsection 15.07.01) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Temporary Use (as listed in UDO Subsection 15.07.02) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Sign | *Sign Project Data Form (Zoning) |
| ☐ Pavement Sealant | *Pavement Sealant Project Data Form |
| ☐ Major Subdivision Zoning Permit | *Commercial Project Data Form |

Board of Adjustment Hearings

- | | |
|--|---|
| ☐ Special Use Permit/Modification | *Special Use Permit Form |
| ☐ Variance | *Variance Form |
| ☐ Major Subdivision Preliminary Plat Approval | *Major Subdivision Preliminary Plat Approval Form |

Planning/Other

- | | |
|---|--|
| ☐ Exempt Division of Land | *Subdivision Exemption Project Data Form |
| ☐ Minor Subdivision (Preliminary and Final Plat) | *Minor Subdivision Project Data Form |
| ☐ Major Subdivision (Final Plat) | *Major Subdivision Final Plat Project Data Form |
| ☐ UDO Text Amendment | *Text Amendment Project Data Form |
| ☒ General Use Zoning Map Amendment | *General Use Map Zoning Map Amendment Project Data Form |
| ☐ Conditional District Zoning Map Amendment | *Conditional District Zoning Map Amendment Project Data Form |
| ☐ Voluntary Annexation | *Annexation Petition (Satellite or Contiguous) |
| ☐ UDO Text Interpretation | *UDO Interpretation Data Form |

D. DETAILED DESCRIPTION OF PROJECT

Renovation of 1st & 2nd floors, conversion of Sanctuary into two classrooms & renovation of balance of existing offices & classrooms into faculty offices. Addition of elevator will be required.

E. PROJECT MANAGER DESIGNATION

A project manager is responsible for the activities listed in UDO Section 4.19. Single-family and two-family projects involving less than ½ acre of land disturbing activity or commercial site improvements that involve no more than 2,500 square feet of land disturbing activity are exempt from this requirement.

Name: Scott Baker Company: LS3P
Address: 227 West Trade Street, Charlotte, NC 28202 License #: # 8326
Phone Number: 704 - 371-7848 Email Address: scottbaker@ls3p.com

F. DESIGN PROFESSIONAL INFORMATION

Engineer:

Name: Jeff Smith Company: Bulla Smith Design Engineering
Address: 1347 Harding Place, Suite 201, Charlotte, NC 28204 License #: NC PE # 18175
Phone Number: 704-333-3122 Email Address: jsmith@bullasmith.com

Architect:

Name: Scott Baker Company: LS3P
Address: 227 West Trade Street, Charlotte, NC 28202 License #: # 8326
Phone Number: 704-333-6686 Email Address: scottbaker@ls3p.com

G. APPLICANT SIGNATURE: By signing this form you are certifying that this application and any attached information is accurate. Failure to provide accurate information or failure to provide any requested information may result in delays to permit processing.

Timothy H. Burwell
Applicant¹ (Print)

[Signature]
Applicant Signature

6/29/16
Date

Timothy H. Burwell
Property Owner (Print)

[Signature]
Property Owner Signature

6/29/16
Date

Official Use Only

Project File Name:

State of NC (Howard St. Hall) - Map Amendment

Permit Number:

20160423

Project Name/Number:

Date: <u>6-30-16</u>	Fee: <u>\$300.00</u>	Receipt Number: <u>446617</u>	Method of Payment: <u>ck# 50204689</u>	Paid By: <u>Appalachian State University</u>
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¹ Documentation confirming that the applicant has a legally sufficient interest in the property proposed for development to use it in the manner requested, or is the duly appointed agent of such a person must be submitted along with this application. Execution by property owner of this application signifies that the applicant is authorized to proceed.

General Use Zoning Map Amendment

Project Data Form

Town of Boone Planning & Inspections Department
680 W. King Street, Suite C ♦ Boone, North Carolina 28607
Phone (828) 268-6960 ♦ Fax (828) 268-6961
www.townofboone.net

Official Use Only

Project Name/Number:

ASU (State INC) GU Zoning Map Amend

Permit Name/Number:

20160423

It is recommended that applicants schedule a meeting with Planning & Inspections Staff prior to application submittal.

A. ADDITIONAL APPLICATION INFORMATION

Hearing Date Requested¹: Public Hearing Meeting 8/22/16

B. DEVELOPMENT INFORMATION

Existing Zoning District(s): R-3 Proposed Zoning District(s): U1

Existing Land Use(s): U1 1/2 childcare

Adjacent Land Use(s): N: R3 E: R3

W: R3 S: U1

Are there are any existing variances granted to the property? ☐ Yes ☐ No ☒ Unknown

If yes, describe:

Total Land Area: 0.56 acres

C. DOCUMENTS REQUIRED FOR SUBMITTAL

- ☒ Application Fee
- ☒ Deed(s) of all property included in the request
- ☒ A written metes & bounds legal description with accompanying survey map is required for a request that would rezone only a portion of a tax parcel or requests for multiple zoning districts * Metes & Bounds Identified on attached recorded deed w/ asterisks

D. PROPERTY OWNER SIGNATURE:

By signing this form you are certifying that this application and any attached information are accurate. Failure to provide accurate information or failure to provide any requested information may result in delays to permit processing.

Timothy H Burwell
Property Owner (Print)


Property Owner Signature

June 28, 2016
Date

¹ Each applicant must provide the meeting date for which they wish their request to appear. Each completed application must have met published meeting deadlines.

Official Use Only

Public Hearing Meeting Date: August 22 2016

PC Meeting Date: _____

TC Meeting Date: _____

Date of APO Mailed Notification: _____

Date of Posted Notification: _____

Project Approved: ☐ Yes ☐ No

Date Order Recorded: _____

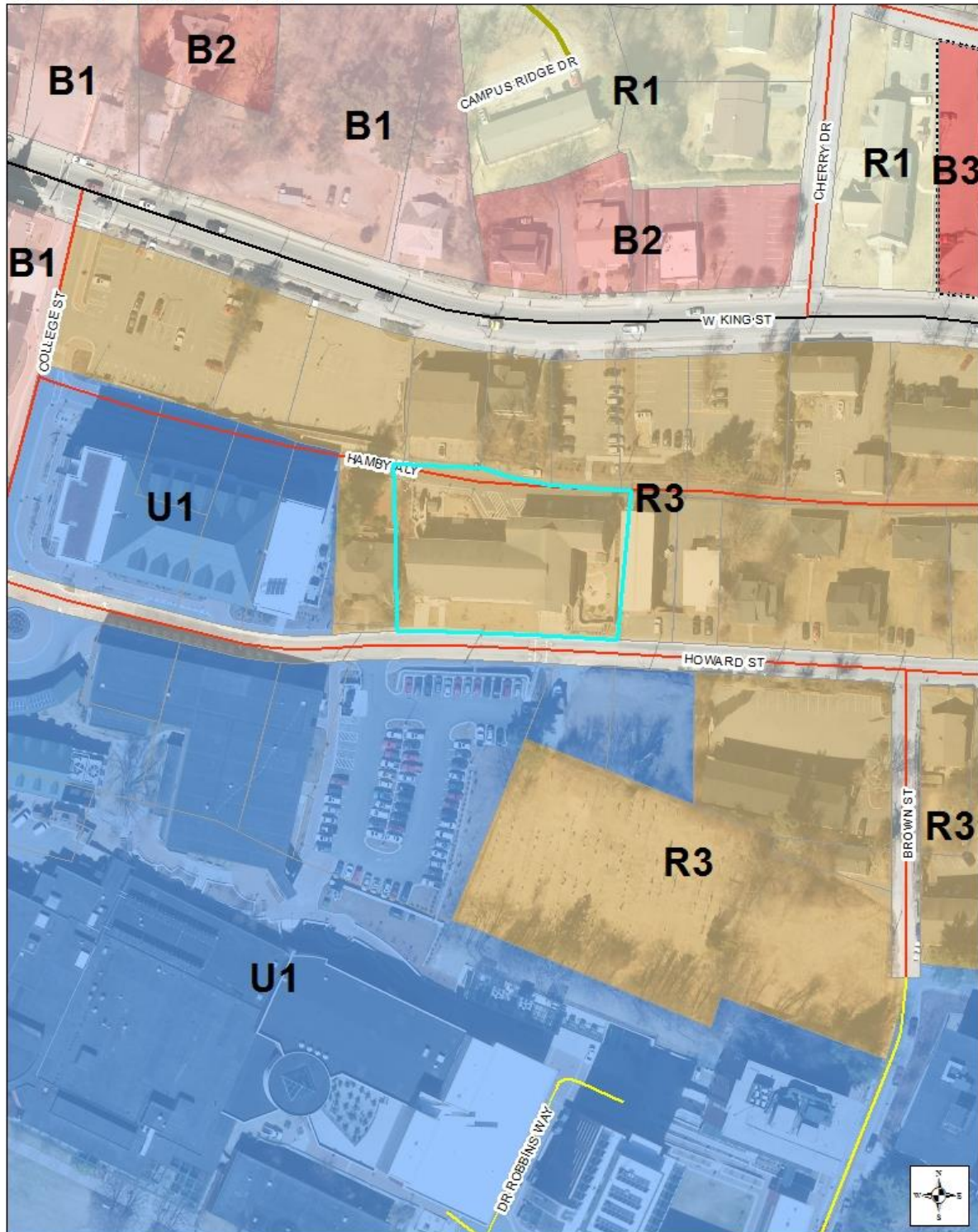
Order Recordation Information: Book: _____ Page: _____
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STAFF REPORT
PUBLIC HEARING
AUGUST 22, 2016

CASE 20160423 ASU (HOWARD STREET HALL) GENERAL USE ZONING MAP AMENDMENT

663 Howard Street



REQUEST

Dr. Timothy Burwell on behalf of Appalachian State University has filed a General Use Zoning Map Amendment Application for 663 Howard Street (Watauga Co. PIN: 2910080049000) to rezone the property from R3 Multiple-Family Residential to U1 University.

APPLICANT INFORMATION

Applicant Name/Position: Dr. Timothy Burwell
Applicant Organization: Appalachian State University
Applicant Address: 438 Academy Street, Boone, NC 28608
Applicant Contact Phone: (828) 262-2070
Applicant Email: burwellth@appstate.edu

PARCEL INFORMATION

Address: 663 Howard Street
Watauga County PINs: 2910080049000
Property Owner: Howard Street Ventures LLC
Total Lot size: .555 acre (24,176 square feet)
Jurisdiction: Corporate limits
Access: Howard Street (local town street) and Hamby Alley (one way local town street)
Topography: Approximate 16' change in elevation from Howard Street to Hamby Alley; Slope from SW to NE
SFHA: No.
Watershed District: No
Corridor District: No
NCD: No
Viewshed: No
Transit Route: Yes. (Green Route West, Express, Gold Route -not after 6 pm, Pop 105)
Utilities: Town water and sewer are available.
Current Zoning: R3 Multiple Family
Vesting: NA
2030 Plan Designations: University Campus
Current Uses: Daycare (basement area), Vacant (upstairs area)

Zoning & Use of Adjacent Properties		
	Adjacent Zoning	Adjacent Land Use
North	R3 Multiple-Family	Across Hamby Alley: Multi-Family Dwelling Units
East	R3 Multiple-Family	Multi-Family Dwelling Units; Single-Family Dwelling Unit; Parking Lot
South	U1 University	Across Howard Street: Parking Lot, Cemetery
West	R3 Multiple-Family	Duplex

IMPACT ANALYSIS

Zoning District Descriptions:

R3: Per UDO Subsection 14.01.01 residential zoning districts are designed and intended to secure for the persons who reside there a comfortable, healthy, safe, and pleasant environment in which to live, sheltered from incompatible and disruptive activities that properly belong in nonresidential districts.

The R3 Multiple-Family Residential District is established to provide a high density area consisting of three or more dwelling units per lot plus limited service use. The regulations for this district are designed and intended to secure for the persons who reside there a comfortable, healthy, safe, aesthetically pleasing, and pleasant environment in which to live and provide for compatible and disruptive activities that properly belong in nonresidential districts.

U1: Per UDO Subsection 14.0301, educational districts are established to provide areas which promote the enhancement of compatible educational institutions and opportunities within the Town's planning area while preserving the overall small-town character of Boone. For their principal and accessory uses, the entities which are subject to the U1, E1 and E2 districts may only function within those districts. Uses allowed in those districts must be integral to the entity or must be specifically identified and authorized for those districts in the Table of Principal Uses, Table of Accessory Uses and Table of Temporary Uses.

The U1 University District is established for Appalachian State University (ASU). This district is intended to provide for the planning and expansion of ASU's main campus that is consistent with the Town's overall planning objectives. Specific uses listed in the U1 column in the Table of Principal Uses, the Table of Accessory Uses, and the Table of Temporary Uses are only allowed if they are associated with and have the approval of the institution authorized under Use Category 9.01 and 9.02.

Permissible Uses:

UDO Article 15, Section 15.07 contains the Table of Principal Uses, which should be read in conjunction with the definition of terms set forth in UDO Article 34. Below is a comparison of the uses allowed in the R3 and U1 zoning districts.

15.07 Table of Principal Uses

Use #	Specific Use	Zoning Districts		Reference
		R3	U1	
1.0 Household Living				
1.01	Single-Family Dwelling		P	
1.02	Manufactured Home “Class A”		P	15.08
1.03	Manufactured Home “Class B”			15.08
1.04	Manufactured Home “Class C”			
1.05	Manufactured Home Park			15.09
1.06	Duplex (one duplex building per lot)	P	P	
1.07	Duplex (more than one duplex building per lot)	L	L	15.10
1.08	Townhouse (up to 30 bedrooms)	L ^{T50}	L ^{T50}	15.10
1.09	Townhouse (31-100 bedrooms)	L ^{T75}	L ^{T75}	15.10
1.10	Townhouse (> 100 bedrooms)	L ^{T125}	L ^{T125}	15.10
1.11	Multi-Family Dwelling (up to 30 bedrooms)	L ^{T125}	L ^{T125}	15.10
1.12	Multi-Family Dwelling (31-100 bedrooms)	L ^{T200}	L ^{T200}	15.10
1.13	Multi-Family Dwelling (> 100 bedrooms)	L ^{T300}	L ^{T300}	15.10

Use #	Specific Use	Zoning Districts		Reference
		R3	U1	
1.14	Multi-Family Dwelling in Mixed Use (up to 30 bedrooms)		L ^{T75}	15.11
1.15	Multi-Family Dwelling in Mixed Use (31-100 bedrooms)		L ^{T75}	15.11
1.16	Multi-Family Dwelling in Mixed Use (> 100 bedrooms)		L ^{T75}	15.11
2.0 Group Living				
2.01	Family Care Home	L	L	15.13
2.02	Family Care Institutions		L ^{T125}	15.14
2.03	Halfway House, Category 1		L	15.14
2.04	Halfway House, Category 2			15.14
2.05	Nursing Care Home	L	L	15.14
2.06	Nursing Care Institution			15.14
2.07	Skilled Nursing Facility			15.14
2.08	Retirement Community, Category 1	L	L	15.15
2.09	Retirement Community, Category 2	L ^{T200}	L ^{T125}	15.15
2.10	Residence Hall, Category 1	L	L	15.15
2.11	Residence Hall, Category 2	L ^{T200}	L ^{T200}	15.15
2.12	Residence Hall, Category 3			15.15
2.13	Fraternity or Sorority Dwelling	S ^{T300}	P ^{T300}	15.16
2.14	Boarding House	L	P	15.17
3.0 Transient Living				
3.01	Home for Survivors of Domestic Violence		L	15.18
3.02	Shelter for Homeless, Category 1	L ^{T50}	L ^{T50}	15.19
3.03	Shelter for Homeless, Category 2	L ^{T300}	L ^{T300}	15.19
3.04	Bed and Breakfast, Category 1		L	15.20
3.05	Bed and Breakfast, Category 2		L ^{T125}	15.20
3.06	Vacation Rental	L ^{T75}	L ^{T75}	15.21
3.07	Motel		P ^{T300}	
3.08	Hotel		P ^{T200}	
4.0 Institutional Uses				
4.01	Airport/Landing Strip			15.22
4.02	Heliport		S ^{T300}	15.22
4.03	Funeral Home Establishment		P	
4.04	Cemetery	P	P	
4.05	Post Office		P	
4.06	Post Office, Distribution			
4.07	Animal Sanctuary		S ^{T300}	
5.0 Government Uses				
5.01	Government Cultural Facility		P	
5.02	Government Neighborhood Cultural Facility, Indoor Activity Only	P	P	
5.03	Government Neighborhood Cultural Facility, Includes Outdoor Activity		P	
5.04	Recreation Facility, Category 1	P	P	
5.05	Recreation Facility, Category 2	P	P	
5.06	Recreation Facility, Category 3	S	P ^{T50}	
5.07	Event Venue, Category 1		P	
5.08	Event Venue, Category 2		P	
5.09	Event Venue, Category 3		P ^{T50}	
5.10	Landfill			
5.11	Solid Waste Processing			
5.12	Police Substation	P	P	
5.13	Utility Facility, Town	L	L	15.23
5.14	Utility Facility, Government, Neighborhood	L	L	15.23
5.15	Utility Facility, Government, Regional		L ^{T300}	15.23
5.16	Government Facility	P	P	

Use #	Specific Use	Zoning Districts		Reference
		R3	U1	
6.0 Non-Government Utility Facility				
6.01	Utility Facility, Neighborhood	L	L	15.23
6.02	Utility Facility, Regional		L ^{T300}	15.23
7.0 Telecommunications				
7.01	Antenna Collocation on Existing Wireless Support Structure not requiring additional accessory equipment	P	P	
7.02	Antenna Collocation on Existing Wireless Support Structure requiring additional accessory equipment	L	L	15.24
7.03	Building Mounted Antenna not requiring additional accessory equipment	L	L	15.24
7.04	Building Mounted Antenna requiring additional accessory equipment		L	15.24
7.05	Antenna Collocation on Electrical Transmission Towers	L		15.24
7.06	Other Antenna		L	15.24
7.07	Wireless Support Structure which meets district height requirements	L	L	15.24
7.08	Stealth Wireless Facility which exceeds district height requirements	S	L	15.24
7.09	Wireless Support Structure which does not meet district height requirements up to and including 120’		L	15.24
7.10	Other Tower that exceeds 120’ in height			15.24
7.11	Emergency Response Communication Antenna	P	P	
8.0 Assembly				
8.01	Religious Assembly, Category 1	P	P	
8.02	Religious Assembly, Category 2	p ^{T125}	P	
8.03	Religious Assembly, Category 3		p ^{T200}	
8.04	Club/Lodge, Category 1		P	
8.05	Club/Lodge Which Does Not Serve Alcohol		P	
9.0 Education				
9.01	Appalachian State University		P	
9.02	Caldwell Community College and Technical Institute		P	
9.03	Other Public Colleges and Universities			
9.04	Private Colleges and Universities			
9.05	Trade School		P	
9.06	High School		P	
9.07	Elementary School			
9.08	Boarding School		P	
9.09	All other Educational Facilities			
10.0 Daycare				
10.01	Child Daycare, Large	L	P	15.25
10.02	Child Daycare Center		P	15.25
10.03	Adult Daycare, Large	L	P	15.25
10.04	Adult Daycare Center		P	15.25
10.05	All Other Daycare			
11.0 General Sales and Service				
11.01	Kennel			15.26
11.02	Veterinary Office/Hospital with Outdoor Kennels		L ^{T125}	15.26
11.03	Veterinary Office/Hospital without Outdoor Kennels		P	
11.04	Financial Institution ≤ 5,000 ft²		P	
11.05	Financial Institution > 5,000 ft²		P	
11.06	Restaurant ≤ 2,500 ft² open to the public during 10 pm – 6 am		P	
11.07	Other Restaurants ≤ 2,500 ft²		P	
11.08	Restaurant > 2,500 ft² open to the public during 10 pm – 6 am		P	
11.09	Other Restaurants > 2,500 ft²		P	
11.10	Bar			
11.11	ABC Store			

Use #	Specific Use	Zoning Districts		Reference
		R3	U1	
11.12	Personal Service Establishment open to the public during 10 pm – 6 am		P	
11.13	Other Personal Service Establishments		P	
11.14	Retail Store up to 5,000 ft ²		P	
11.15	Retail Store more than 5,000 but less than 25,000 ft ²		P	
11.16	Retail Store 25,000 ft ² and greater			15.27
11.17	Shopping Center/Mall		S ^{T125}	15.28
11.18	Business or Professional Office open to the public during 10 pm–6 am		P	
11.19	Other Business or Professional Office		P	
11.20	Medical Office, Category 1		P	
11.21	Medical Office, Category 2		P	
11.22	Medical Office, Category 3		P	
11.23	Medical Office, Category 4		P	
11.24	Hospital		p ^{T300}	
11.25	Medical Emergency Response			
11.26	Open Air Market, Recurring		L ^{T75}	15.29
11.27	Vehicle Sales and Service			15.30
11.28	Equipment Sales and Service			15.31
11.29	Moped Sales and Service			
11.30	Boat or Marine Craft Sales and Service			15.32
11.31	Impound Lot/Towing Service		P	15.33
11.32	Gas Station		P	
11.33	Car Wash		P	
11.34	Seasonal Retail Activities and Amusements		P	
12.0 Recreation				
12.01	Indoor Shooting Range		P	15.34
12.02	Outdoor Shooting Range			
12.03	Indoor Theater		P	
12.04	Outdoor Theater		P	
12.05	Event Venue, Category 1		P	
12.06	Event Venue, Category 2		P	
12.07	Event Venue, Category 3		P	
12.08	Campground and Recreational Vehicle Park		L	15.35
12.09	Coliseum		p ^{T300}	
12.10	Recreation Facility, Category 1		P	
12.11	Recreation Facility, Category 2		P	
12.12	Recreation Facility, Category 3			
12.13	Racetrack			
13.0 Agriculture				
13.01	Garden, Community	L	P	15.36
13.02	Garden, Residential	L	L	15.37
13.03	Agricultural Operation Excluding Livestock			
13.04	Agricultural Operation Including Livestock			
13.05	Swine Farm			
13.06	Confined Animal Feeding Operation (CAFO)			
13.07	Custom Slaughterhouse			
13.08	Other Slaughterhouse			
13.09	Forestry	L	L	15.38
14.0 Manufacturing				
14.01	Microbrewery		L	15.39
14.02	Brewpub		L	15.39
14.03	Brewery/Distillery		L	15.40
14.04	Brewery/Distillery, Other			15.41

Use #	Specific Use	Zoning Districts		Reference
		R3	U1	
14.05	Winery Associated with a Vineyard		L	15.42
14.06	Winery		L	15.42
14.07	Winery, Other			
14.08	Extraction of Earth Materials			
14.09	Machine/Welding Shop		L ^{T200}	15.44
14.10	Manufacturing, Other			15.45
15.0 Parking				
15.01	Parking Lot		P	15.46
15.02	Parking Structure		P	15.47
15.03	Park and Ride Lots		P	15.46
16.0 Storage				
16.01	Mini-Storage		P	15.48
16.02	Outdoor Storage		P	15.49
16.03	Warehouse		P	
16.04	Fuel Storage Facility			
16.05	Chemical Storage Facility			
17.0 Transportation				
17.01	Passenger Terminals		P ^{T200}	
17.02	Trucking or freight terminal $\leq 10,000$ ft ²			
17.03	Trucking or freight terminal $> 10,000$ ft ²			
18.0 Waste Related Uses				
18.01	Recycling Drop-off Station		P	15.49
18.02	Recycling and Salvage			15.49
18.03	Junkyard			
18.04	Private Landfill			
19.0 Particular Activities which pose Particular Concerns about Public Health				
19.01	Electronic and Internet Gaming			15.50
19.02	Adult Establishments			15.51

15.07.01 Table of Accessory Uses

Use #	Accessory Uses	Zoning Districts		Reference
		R3	U1	
A-1	Secondary Suite	L	L	15.52
A-2	Home Occupation	L	L	15.53
A-3	Accessory Dwelling Unit	L	L	15.54
A-4	Drive-Through		L	15.55
A-5	Outdoor Display		L	15.56
A-6	Outdoor Storage		L	15.57
A-7	Outdoor Dining		L	15.58
A-8	Automated Teller Machine (ATM)		P	
A-9	Automated Teller Machine (ATM), Freestanding	L	L	15.59
A-10	Produce Stand		L	15.60
A-11	Poultry	L	P	15.61
A-12	Livestock, Small	L	P	15.62
A-13	Livestock, Large			15.63
A-14	Bees	L	P	15.64
A-15	Garden, Residential	L	P	15.65
A-16	Satellite receiving antennas less than 1 meter in diameter	P	P	
A-17	Satellite receiving antennas less than 2 meters in diameter		P	
A-18	Satellite receiving antennas 2 meters and greater in diameter		P	

Use #	Accessory Uses	Zoning Districts		Reference
		R3	U1	
A-19	Helistop		ST300	
A-20	Swimming pools, spas, and hot tubs	L	L	15.66
A-21	Caretaker's residence		L	15.67
A-22	Vehicular Gate	L	L	15.68
A-23	Vehicle Washing Station	P	P	
A-24	Chemical Storage Facility		P	
A-25	Open Air Market, Accessory	L	L	15.29
A-26	Daycare, Small	P	P	

15.07.03 Table of Temporary Uses

Use #	Temporary Uses	Zoning Districts		Reference
		R3	U1	
T-1	Temporary Care Provider Dwelling	L	L	15.69
T-2	Temporary Construction or Repair Dwelling	L	L	15.69
T-3	Temporary Construction Trailer	L	L	15.69
T-4	Temporary Mobile Medical Unit		L	15.69
T-5	Temporary Classroom		L	15.69
T-6	Temporary Portable Storage Containers			15.69
T-7	Temporary Staging		P	15.69
T-8	Temporary Non-Fixed Site Event Venue		P	15.69
T-9	Carrier on Wheels (COW)	L	L	15.69
T-10	Yard Sales	L		15.69
T-11	Itinerant Merchant/Peddler	L		15.69
T-12	Open Air Market, Temporary		L	15.29

Intensity Regulations

Per UDO Section 16.01 development shall comply with the intensity regulations indicated in the Intensity Table (below) with the following exceptions (as noted in Subsection 16.01.01):

- A. Unless otherwise provided in this Ordinance, the land use intensity regulations for planned residential developments and architecturally integrated subdivisions shall apply to the development as a whole and not to individual parts thereof.
- B. A site specific development plan consisting of no other use than one (1) "single family dwelling" is not subject to the maximum floor area ratio requirements but all other intensity rules apply.
- C. In the B1 Zoning District, a minimum "Building Footprint" of fifty percent (50%) is required. All other regulations in the Intensity Table apply.
- D. In the B2 Zoning District, a development may utilize the values in the Intensity Table or may substitute a maximum "Building Footprint" of thirty percent (30%) and an open space ratio of seventy percent (70%). All other regulations in the Intensity Table apply.
- E. In the B3 Zoning District, a development may utilize the values in the Intensity Table or may substitute a maximum "Building Footprint" of thirty percent (30%) and an open space ratio of seventy percent (70%). All other regulations in the Intensity Table apply.

16.01.02 Intensity Table

Zoning District	Minimum Gross Land Area	Minimum Lot Width	Minimum Street Frontage	Maximum Floor Area Ratio (FAR)	Minimum Open Space Ratio (OSR)	Minimum Livability Space Ratio (LSR)	Minimum Recreation Space Ratio (RSR)	Setbacks	
								Street	Interior
R3	5,000 sq. ft.	80 ft.	64 ft.	.480	.72	.40	.062	20 ft.	13 ft.
U1	None*	None*	None*	.429	.71	.27	.039	16.06.09	16.06.08

16.06.08: In the U1 district, the minimum street setback of ten feet (10') shall apply only when development is proposed adjacent to Town maintained streets.

16.06.09: In the U1 district, the minimum interior setback shall be increased to fourteen feet (14') only when development is proposed adjacent to R1 zoned property. Additional setback provisions in Section 16.06.05 do not apply in the U1 district. The minimum interior setback is zero feet (0') only when development is proposed adjacent to B1 zoned property.

***16.10.01** University campus land will be considered as a whole for purposes of computing land use intensities. This provision does not apply to satellite tracts; however, land separated from the main campus only by a public street or thoroughfare will be deemed part of the main campus, and any land separated from the University's State Farm property only by a public street or thoroughfare will be deemed part of the State Farm property.

Building Height Limitations

Subject to other provisions of UDO Section 16.08, building height limitations in the R-1 and B-1 shall be as follows:

Zone	Height Limitation (Feet)
R3	50 (primary) – 90 (secondary)
U1	Refer to Subsection 16.08.09

UDO Subsection 16.08.09: In the U1 district, building heights for structures internal to the main campus shall be generally limited only by the Town's firefighting capability except for those structures located immediately adjacent to property in a non-University district. In this instance:

- A. All building proposed within 100 feet of an R1, R1A, RR, R2, R4, or RA zoned property shall be limited to a maximum height of thirty-five feet (35').
- B. All building proposed within fifty feet (50') of an R3, OI, B1, B2, or B3 zoned property shall be limited to the maximum height allowed in the adjoining district. Additional height restrictions in Subsection 16.08.04 and 16.08.05 shall not apply in the U1 district.

CONFORMITY TO ADOPTED PLANS**COMPREHENSIVE PLAN UPDATE**

[Click here to view the 2006 Comprehensive Plan Update](#)

1.1 Overall Objectives for the Boone Comprehensive Plan (p. 15):

The following objectives, which have not been listed in any particular order of importance, are deliberately broad in scope and less specific than either a policy statement or an implementation action.

Economic Development: Acknowledge the area's natural beauty, university, and medical center presence as the Town's greatest assets for economic development and jobs creation. Treat them accordingly.

Community Appearance and Community Character: Blend the built environment with the natural, scenic, and historic character of a High Country small town. Especially discourage commercial strip development, cluttered signage, and "cheap" apartment buildings.

Open Space: Integrate open space and greenways into the urban fabric of the Town. Preserve the countryside by discouraging suburban sprawl. Avoid development in floodplains, on ridgetops, and on steep slopes.

Environmental Quality: Address and monitor growth factors and activities that contribute to water, air, light, and noise pollution.

Trees: Conserve existing trees and plant new trees, especially hardwoods.

Automobile Transportation: Maximize the efficiency of existing facilities, but not at the expense town and neighborhood character and livability. Build or expand transportation facilities and parking areas as needed, but with care. Work to reduce auto dependency, use, and congestion.

Bikeways: Implement the planned system of bikeways as a legitimate transportation alternative. Unify with greenways and other pedestrian facilities where possible.

Mass Transit: Enhance and support the mass transit system as an effective alternative to the congestion created by the individual automobile.

Pedestrian Movement: Encourage a system of sidewalks, paths, crosswalks and compact development patterns which make it easy to get around Boone on foot.

Infrastructure: Engage in long range planning for water and sewer systems, stormwater runoff, natural gas, and other utility systems. Place overhead utilities underground whenever feasible.

Public Safety: Maintain a high level of policing and fire protection and plan the expansion of public safety services to coincide with projected population increases and identified needs.

Energy and Waste: Reduce waste generation, and the consumption of energy and water. Develop area recycling programs to the fullest. Encourage an anti-litter consciousness among residents and visitors.

University: Emphasize cooperative planning among the Town, County, and University.

Downtown: Support and enhance the cultural and historic significance of downtown Boone, and affirm its appealing, pedestrian orientation.

Recreation: Strive for additional public recreation facilities, especially sports fields, greenways and indoor recreation centers.

Neighborhoods: Ensure the livability of neighborhoods, especially through land use and traffic planning.

Public Involvement: Encourage active public involvement and volunteerism to expand the effectiveness of community planning and action.

1.2 Growth Strategy Map (p. 17): The property is located within Primary Growth Area. The Primary Growth Area is that portion of the urban growth area where urban level of facilities are already in place or can be provided most cost effectively. This is the area where near term growth and development is to be especially encouraged.

Comprehensive Plan Policies: Staff has reviewed land use and comprehensive plan policies, and listed those policies which in staff's opinion have a bearing on the request. The Board should review these policies carefully.

Each member may make his or her own interpretation as to the relevance of each and which carry the most weight thereby shaping their overall recommendation.

2.1 THE ECONOMY

2.1.1 Economic Development

POLICIES AND ACTIONS

- A. The Town shall protect and enhance a high quality of life, image, cultural amenities, and natural beauty as the most effective, long term component of an economic development strategy.
- D. Economic development efforts shall encourage the revitalization and reuse of currently unused or underutilized structures, sites and infrastructure in appropriately located areas.
- E. The Town shall encourage a public service and regulatory environment conducive to business recruitment and expansion, while at the same time enhancing the area's physical and human resources.
- I. Small business start-ups, expansions and spin-offs shall be encouraged. The presence of ASU and Caldwell Community College and Technical Institute shall be recognized as a necessary and important resource for area businesses.

2.1.5 Downtown

- B. The Town, in concert with the downtown property owners and merchants, shall encourage public and private efforts to develop and publicize adequate and appropriately designed off-street parking lots in the downtown area.
- C. A variety of mutually compatible and supportive mixed uses shall be encouraged in the downtown area.
- D. Public and private developments shall be encouraged to incorporate local artistry into public and semi-public spaces downtown.
- E. Public and private development decisions in the downtown area shall exhibit a special concern for maintaining the intensive, pedestrian oriented character of the district.
- F. The maintenance and revitalization of downtown Boone, as well as planning for its future development, will reflect the realities and qualities befitting its geographical setting and function as a center of (1) commercial and service activities, (2) educational and cultural activities, events and (3) public services.

2.3 THE COMMUNITY

- A. Urban type development within the Urban Growth Area shall meet appropriate Town standards.

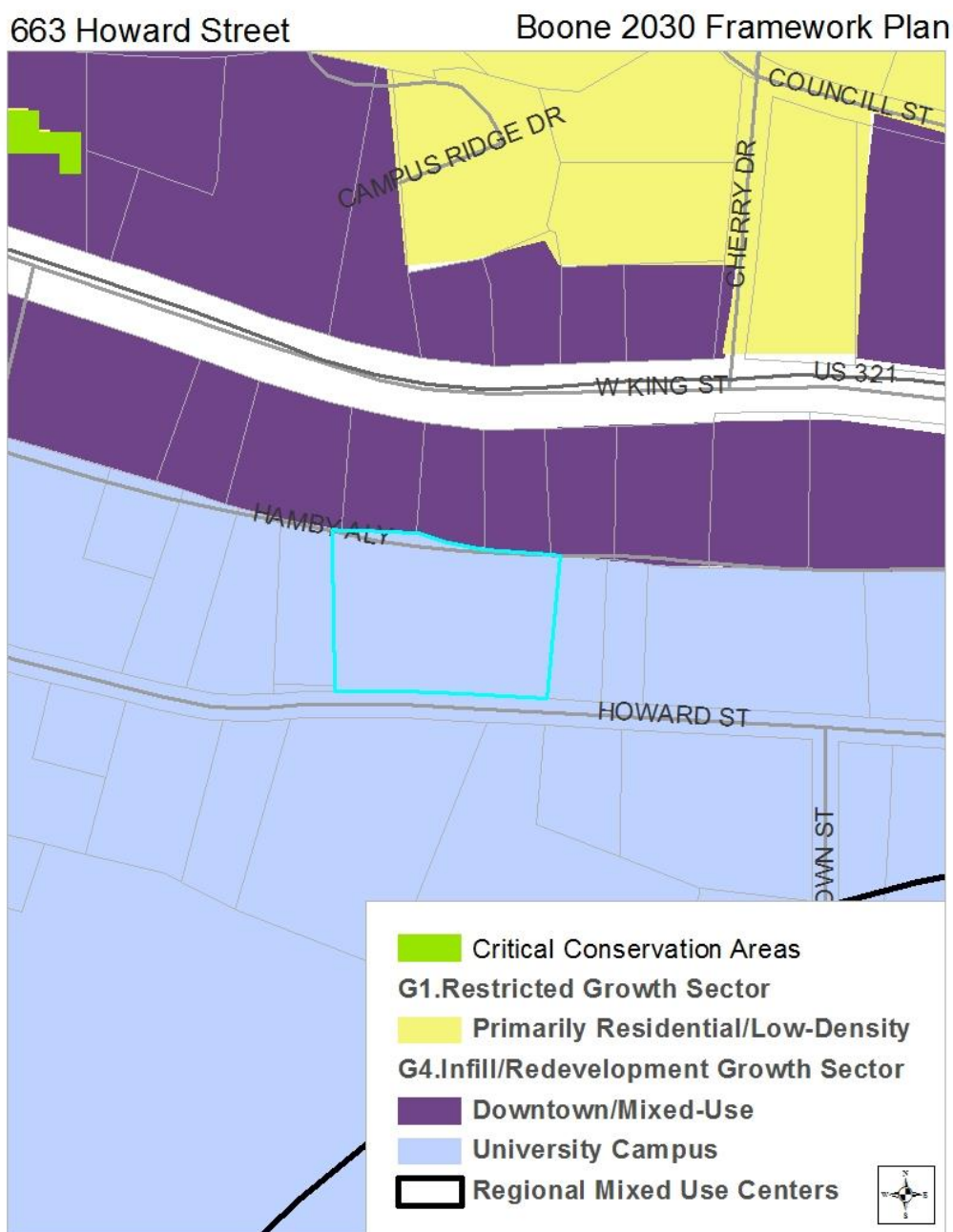
2.3.2 Community Character

- A. The identification, restoration and active use of structures, buildings, monuments, and neighborhoods of historic or architectural significance shall be encouraged as a means of enhancing their economic and cultural value to the planning area.
- C. Wise development of the tourism potential of the area's architectural, historic, scenic and natural resources shall be encouraged.
- D. The destruction of significant architectural, historic, scenic, natural and archaeological resources in the planning area shall be discouraged.

- E. New development, redevelopment and rehabilitation of structures and sites shall occur in a manner which is consistent with the neighborhood and architectural context of the immediate area, and supportive, whenever possible, of Boone's original community character as a High Country small town.

BOONE 2030 LAND USE PLAN

[Click here to view the Boone 2030 Land Use Plan](#)



In addition to the geographic sectors, the Framework Plan indicates two related special land uses: the existing schools and other civic sites such as the hospital, the community college, and the library. The ASU's main campus property is shown in light blue. These civic and institutional uses properties are related to the community's permanent green infrastructure since large pieces of land on many these properties will continue be undeveloped open space. Recommended details of the ASU campus/downtown Boone interface are laid out in Section 7,

Downtown Boone. Additional recommendations for Town/Campus coordination are included in Section 6, Transportation and Section 8, Focus Areas, and in the implementation matrix in the Executive Summary.

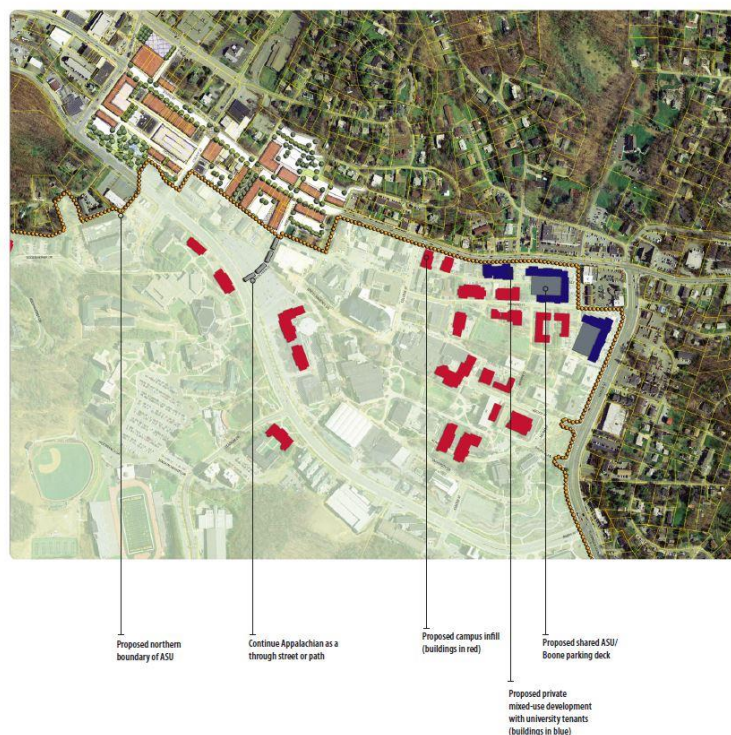
Excerpt from Section 7 Downtown Boone, Page 93: The northern boundary of Appalachian State University abuts Boone's Downtown District and creates the intersection of "Town & Gown." While the Town was going through this planning process, ASU was simultaneously updating their campus master plan. In fact, the design teams for each process were all from the same firms and conducted parallel charrette processes. The efficiencies of this decision by both parties was most evident while looking specifically at how the University interfaces with Downtown Boone.

Promote mixed use infill along King Street. The illustration to the right demarcates the University's proposed northern boundary in orange while red and blue buildings are proposed infill construction for the updated campus master plan. Both plans placed an obvious emphasis on the enhancement of the building articulation along King Street. As the "Main Street" of the Town, buildings along this corridor should be pulled close to the street with wide sidewalks and enhanced streetscapes.

The red buildings on the ASU master plan represent proposed new university-owned buildings. The blue buildings represent privately developed mixed-use buildings that might serve university-related uses (residences, offices, and retail). The campus master plan also reflects another potential shared Town-ASU parking deck location at the eastern end of King Street.

Continue the conversation. The concurrent charrette process began to open up the lines of communication between the Town and the University. This plan suggests continued meetings as both plans are implemented over the coming months and years.

THE COMBINED DOWNTOWN & ASU VISION



ULTIMATE ISSUE BEFORE COUNCIL (UDO SECTION 9.07)

Per UDO Section In deciding whether to adopt a proposed amendment to this Ordinance, the central issue before the Council is whether the proposed amendment advances the public health, safety, or welfare. All other issues are irrelevant, and all information related to other issues at the public hearing may be declared irrelevant by the Mayor and be excluded. In particular, when considering proposed general use map amendments:

- A. The Council shall not consider any representations made by the petitioner that if the change is granted the rezoned property will be used for only one of the possible range of uses permitted in the requested classification. Rather, the Council shall consider whether the entire range of permitted uses in the requested classification is more appropriate than the range of uses in the existing classification.
- B. The Council shall only consider the impact of the proposed change on the public at large.

CERTIFICATION OF NOTIFICATION BY MAIL

I, Marlene Crosby, certify that individual notices meeting the requirements of Article 9, Subsection 9.03.03(B)(2) of the Town of Boone UDO were placed in the mail (first class) on August 3, 2016.

Marlene Crosby, Administrative Support Specialist

CERTIFICATION OF POSTING

I, Bill Bailey, certify that the subject property was posted as required in Article 9, Subsection 9.03.03(C) of the Town of Boone UDO on August 8, 2016.

Bill Bailey, Planning Director

PLANNING BOARD REPORT

Per NCGS 160A-387, all proposed amendments to the zoning ordinance or zoning map shall have a written report provided from the Planning Board to the Town Council within 30 days of referral of the amendment to the Planning Board, or the Town Council may proceed in its consideration of the amendment without the Planning Board report. Furthermore, in no case is the Town Council bound by the recommendations, if any, of the Planning Board.

Per NCGS 160A-383, the Planning Board shall advise and comment on whether the proposed zoning amendment is consistent with all applicable officially adopted plans, and provide a written recommendation to the Town Council that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with the officially adopted plans shall not preclude consideration or approval of the proposed amendment by the Town Council.

First motion and vote: The proposed Amendment to the Town's zoning map ☐is OR ☐is not consistent with the Town's comprehensive plan and other applicable adopted plans of the Town which relate to this application because:

Second Motion and Vote: The Planning Commission recommends ☐approval OR ☐denial for the following reasons:

TOWN COUNCIL ACTION

Per NCGS 160A-383, zoning regulations shall be made in accordance with a comprehensive plan. Prior to adopting or rejecting any zoning amendment, the governing board shall adopt a statement describing whether its action is consistent with an adopted comprehensive plan and explaining why the board considers the action taken to be reasonable and in the public interest.

First motion and vote: The proposed amendment to the Town's zoning map ☐is OR ☐is not consistent with the Town's Comprehensive plan and other applicable adopted plans of the Town which relate to this application because:

Second Motion and Vote: I move to ☐approve OR ☐deny the proposed amendment to the Town's zoning map and believe ☐ approval OR ☐denial is reasonable and in the public interest because:

Zoning/Planning Permit Application

Town of Boone Planning & Inspections Department
680 W. King Street, Suite C ♦ Boone, North Carolina 28607
Phone (828) 268-6960 ♦ Fax (828) 268-6961
www.townofboone.net

PERMIT IS FOR (CHOOSE ONE):

- ☐ Single Family or Duplex (Residential)
☐ Commercial
☐ Board of Adjustment Hearing (other than Appeals)
☒ Planning/Other

A. CONTACT INFORMATION

Applicant: Town of Boone Company: _____
Address: PO Drawer 192, Boone, NC 28607
Phone Number: _____ Email Address: _____
Property Owner: _____ Company: _____
Address: _____
Phone Number: _____ Email Address: _____

B. PROPERTY INFORMATION

Watauga County Parcel Identification Number(s): NA
Address/Location: NA
Project Name: Projecting Theater Marquee- Lighting, UDO Text Amendment

C. PERMIT SUBCATEGORIES

Additional Forms Needed

Zoning Permits

- | | |
|---|---|
| ☐ Accessory Building | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Addition/Expansion including decks and patios | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Change of Occupancy | *Commercial Project Data Form |
| ☐ Land Disturbance (not associated with the construction of a bldg.) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Manufactured Home Set-up in Park | *Manufactured Home in Park Form |
| ☐ New Building Construction | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Renovation/Remodel | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Accessory Use (as listed in UDO Subsection 15.07.01) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Temporary Use (as listed in UDO Subsection 15.07.02) | *Zoning Project Data Form (Residential or Commercial) |
| ☐ Sign | *Sign Project Data Form (Zoning) |
| ☐ Pavement Sealant | *Pavement Sealant Project Data Form |
| ☐ Major Subdivision Zoning Permit | *Commercial Project Data Form |

Board of Adjustment Hearings

- | | |
|--|---|
| ☐ Special Use Permit/Modification | *Special Use Permit Form |
| ☐ Variance | *Variance Form |
| ☐ Major Subdivision Preliminary Plat Approval | *Major Subdivision Preliminary Plat Approval Form |

Planning/Other

- | | |
|---|--|
| ☐ Exempt Division of Land | *Subdivision Exemption Project Data Form |
| ☐ Minor Subdivision (Preliminary and Final Plat) | *Minor Subdivision Project Data Form |
| ☐ Major Subdivision (Final Plat) | *Major Subdivision Final Plat Project Data Form |
| ☒ UDO Text Amendment | *Text Amendment Project Data Form |
| ☐ General Use Zoning Map Amendment | *General Use Map Zoning Map Amendment Project Data Form |
| ☐ Conditional District Zoning Map Amendment | *Conditional District Zoning Map Amendment Project Data Form |
| ☐ Voluntary Annexation | *Annexation Petition (Satellite or Contiguous) |
| ☐ UDO Text Interpretation | *UDO Interpretation Data Form |

D. DETAILED DESCRIPTION OF PROJECT

See Project Data Form

E. PROJECT MANAGER DESIGNATION

A project manager is responsible for the activities listed in UDO Section 4.19. Single-family and two-family projects involving less than ½ acre of land disturbing activity or commercial site improvements that involve no more than 2,500 square feet of land disturbing activity are exempt from this requirement.

Name: NA Company: _____
 Address: _____ License #: _____
 Phone Number: _____ Email Address: _____

F. DESIGN PROFESSIONAL INFORMATION**Engineer: NA**

Name: _____ Company: _____
 Address: _____ License #: _____
 Phone Number: _____ Email Address: _____

Architect: NA

Name: _____ Company: _____
 Address: _____ License #: _____
 Phone Number: _____ Email Address: _____

G. APPLICANT SIGNATURE: By signing this form you are certifying that this application and any attached information is accurate. Failure to provide accurate information or failure to provide any requested information may result in delays to permit processing.

<u>Jane Shook</u>		Approved to send to PH by TC on 07/21/16
Applicant¹ (Print)	Applicant Signature	Date
<u>NA</u>	<u>NA</u>	<u>NA</u>
Property Owner (Print)	Property Owner Signature	Date

Official Use Only

Project File Name:

Projecting Theater Marquee- UDO Text Amendment

Permit Number:

20160501

Project Name/Number:

NA

Date:	Fee:	Receipt Number:	Method of Payment:	Paid By:
August 1, 2016	NA	NA	NA	NA

S:\FORMS\Forms_2015\ZoningPermitApplication_052015.doc

¹ Documentation confirming that the applicant has a legally sufficient interest in the property proposed for development to use it in the manner requested, or is the duly appointed agent of such a person must be submitted along with this application. Execution by property owner of this application signifies that the applicant is authorized to proceed.

UDO Text Amendment Project Data Form

Town of Boone Planning & Inspections Department
 680 W. King Street, Suite C ♦ Boone, North Carolina 28607
 Phone (828) 268-6960 ♦ Fax (828) 268-6961
www.townofboone.net

Official Use Only**Project Name/Number:**

Projecting Theater Marquee Lighting- UDO Text Amendment

Permit Name/Number:

20160501

A. TEXT INFORMATION**Amendment is to:**Article(s): Article 26 SignsSection(s): 26.13 Marquee Sign Regulations**Brief Description of Amendment (Attach Proposed Text):**Modification of the UDO text as it relates to projecting theater marquees.**Reason for Change:**To allow different lighting standards for projecting theater marquees.**Official Use Only**Public Hearing Meeting Date: August 22, 2016

PC Meeting Date: _____

TC Meeting Date: _____

Text Approved: ☐ Yes ☐ No

Date UDO Updated: _____

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Communication: Projecting Theater Marquee Lighting Application Information (Case 20160501 Projecting Theater Marquee-Lighting UDO Text



**STAFF REPORT
PUBLIC HEARING
AUGUST 22, 2016**

CASE 20160501 PROJECTING THEATER MARQUEE LIGHTING - UDO TEXT AMENDMENT

Request

On July 21, 2016 Town Council approved a request from the Appalachian Theatre to amend UDO Article 26 Signs, Section 26.13 Marquee Sign Regulations, Subsection 26.13.02 to allow a projecting theater marquee in the B1 Central Business zoning district to use flashing, blinking, scrolling or intermittent lights.

Proposed text (as proposed by the project architect) for Subsection 26.163.02: A projecting theater marquee may be illuminated but shall BE PERMITTED TO USE flashing, blinking, scrolling or intermittent lights ONLY DURING HOURS OF OPERATION."

History and Analysis

- 06/2009: Town Council was approached in regards to the old Appalachian Theater which at the time was being renovated by Cecil B. DeBoone, LLC. At that the time, the owners wished to install a projecting theater marquee, similar to the marquee the original theater had. Town Council directed the Town Attorney and Staff to draft language [26.13.02] to allow for the restoration of the historical marquee. Draft language was written based upon an old photograph of the marquee.
- 08/2009: Council approved the draft language allowing projecting theater marquees in the B1 Central Business District.
- 07/2016: Staff forwarded a request to Council from the Appalachian Theatre to modify the type of lighting a theater marquee is allowed to use. The theater has requested to use flashing, blinking, scrolling or intermittent lights, to reproduce as accurately as possible, the historic appearance and function of the original marquee, and to meet the requirements of the Memorandum of Understanding with the Town to restore the marquee as historically accurately as possible, including the original lighting and use. Council approved this request.

Staff does not have any records which demonstrate that the lighting on the original marquee flashed, blinked, scrolled, or used intermittent lights. Original language for the projecting theater marquee was drafted based upon photographic evidence.

If approved, Staff recommends making the following changes so that the use of flashing, blinking, scrolling or intermittent lights is limited as much as possible in the B1 Central Business District.

The text below in ~~red-strikethrough~~ is the text proposed to be deleted and the blue underline is the new text for consideration. Please note, text amendments now contain the case number and effective date in italicized font at the end of the section in which the text was modified.

26.13 Marquee Sign Regulations

26.13.01 The following regulations shall apply solely to marquee signs other than [a historical reconstruction of a](#) projecting theater marquee.

- A. Except where a projecting theater marquee is utilized pursuant to this Section, theaters, museums, auditoriums and other entertainment facilities are permitted one (1) changeable copy marquee in addition to their two (2) permitted signs.
- B. Marquee signs shall conform to the applicable sign requirements for the district in which they are located, however the area of the marquee sign shall be permitted an increase in size up to an additional 100% provided that one of the other signs to which the business is entitled is reduced in size. The percentage of increase in area shall be equal to the reduction in area of the other permitted sign.
- C. If the marquee is a freestanding sign, the height of the marquee may not be increased over that permitted in the zone in which it is located.

26.13.02 The following regulations shall apply solely to [a historical reconstruction of a](#) projecting theater marquee ~~signs~~:

- A. A projecting theater marquee shall be allowed only in the B1 Central Business District.
- B. No portion of a projecting theater marquee shall be less than ~~ten~~-[eight](#) feet (~~10~~ [8](#)') above grade nor higher than sixteen feet (16').
- C. A projecting theater marquee and supporting structures shall not extend over the edge of any sidewalk or into any street right-of-way absent an encroachment agreement authorizing such incursion by the Town.
- D. The projecting theater marquee shall only be attached to the building in which the theater is located and must be above an entrance to the theater. No projecting theater marquee sign shall be wider than the building to which it is attached.
- E. Signage may be installed directly upon the vertical face or faces of a projecting theater marquee with the following conditions:
 - 1. Channel letters may extend above such vertical face or faces provided that the letter height is restricted to twelve inches (12") in height.
 - 2. No sign may extend below such vertical face or faces with the exception of lighting elements. All lighting elements shall meet the requirements of Subsection 26.13.02(B) above.
 - 3. The changeable copy portions of a projecting theater marquee shall not exceed fifty percent (50%) of the total area of all faces and comply with Section 27.01.
 - 4. All other signage attached to a projecting theater marquee may not exceed 20 percent (20%) of the total area of all faces.

F. A projecting theater marquee may ~~be illuminated but shall not include flashing, blinking, scrolling or intermittent lights~~ include the use of flashing, scrolling, or intermittent lights subject to the following conditions:

- a. The flashing, scrolling, blinking, or intermittent lights may only be in operation during the time the theater is open to the public and prohibited between the hours of 11 p.m. to 7 a.m.
- a.b. Light fixtures on the projecting theater marquee do not have to meet the requirement for full cut-off fixtures as required in Subsection 25.05.02.

F.G. Encroachment: Where a projecting theater marquee extends over a public sidewalk or other public property, an executed encroachment agreement approved by the Boone Council shall be required prior to issuance of any sign permit for a projecting theater marquee.

G.H. A projecting theater marquee may be constructed either as part of a new structure or as an addition to an existing structure as follows:

1. Site specific plans and specifications must be submitted from a registered North Carolina licensed structural engineer demonstrating that the projecting theater marquee complies in all ways with appropriate code provisions of the Town and the State of North Carolina, including but not limited to, materials, drainage, roof strength, bracing and anchorage.
2. A final certification from the registered North Carolina licensed structural engineer shall be required stating that the projecting theater marquee complies with all appropriate code provisions of the Town and the State of North Carolina and that the projecting theater marquee has been constructed according to their submitted design.

(20160501-xxxxxxx)

CONFORMITY TO ADOPTED PLANS

COMPREHENSIVE PLAN UPDATE

[Click here to view the 2006 Comprehensive Plan Update](#)

1.1 Overall Objectives for the Boone Comprehensive Plan (p. 15): The following objectives, which have not been listed in any particular order of importance, are deliberately broad in scope and less specific than either a policy statement or an implementation action.

Economic Development: Acknowledge the area's natural beauty, university, and medical center presence as the Town's greatest assets for economic development and jobs creation. Treat them accordingly.

Community Appearance and Community Character: Blend the built environment with the natural, scenic, and historic character of a High Country small town. Especially discourage commercial strip development, cluttered signage, and "cheap" apartment buildings.

Open Space: Integrate open space and greenways into the urban fabric of the Town. Preserve the countryside by discouraging suburban sprawl. Avoid development in floodplains, on ridgetops, and on steep slopes.

Environmental Quality: Address and monitor growth factors and activities that contribute to water, air, light, and noise pollution.

Trees: Conserve existing trees and plant new trees, especially hardwoods.

Automobile Transportation: Maximize the efficiency of existing facilities, but not at the expense town and neighborhood character and livability. Build or expand transportation facilities and parking areas as needed, but with care. Work to reduce auto dependency, use, and congestion.

Bikeways: Implement the planned system of bikeways as a legitimate transportation alternative. Unify with greenways and other pedestrian facilities where possible.

Mass Transit: Enhance and support the mass transit system as an effective alternative to the congestion created by the individual automobile.

Pedestrian Movement: Encourage a system of sidewalks, paths, crosswalks and compact development patterns which make it easy to get around Boone on foot.

Infrastructure: Engage in long range planning for water and sewer systems, stormwater runoff, natural gas, and other utility systems. Place overhead utilities underground whenever feasible.

Public Safety: Maintain a high level of policing and fire protection and plan the expansion of public safety services to coincide with projected population increases and identified needs.

Energy and Waste: Reduce waste generation, and the consumption of energy and water. Develop area recycling programs to the fullest. Encourage an anti-litter consciousness among residents and visitors.

University: Emphasize cooperative planning among the Town, County, and University.

Downtown: Support and enhance the cultural and historic significance of downtown Boone, and affirm its appealing, pedestrian orientation.

Recreation: Strive for additional public recreation facilities, especially sports fields, greenways and indoor recreation centers.

Neighborhoods: Ensure the livability of neighborhoods, especially through land use and traffic planning.

Public Involvement: Encourage active public involvement and volunteerism to expand the effectiveness of community planning and action.

Comprehensive Plan Policies: Staff has reviewed land use and comprehensive plan policies, and listed those policies which in staff's opinion have a bearing on the request. The Commission and Council should review these policies carefully. Each member may make his or her own interpretation as to the relevance of each and which carry the most weight thereby shaping their overall recommendation.

COMPREHENSIVE PLAN POLICIES

2.1 THE ECONOMY

2.1.1 Economic Development

- A. The Town shall protect and enhance a high quality of life, image, cultural amenities, and natural beauty as the most effective, long term component of an economic development strategy.

A.1 Continue to evaluate and amend development regulations to help insure aesthetic quality in the area and preserve the natural beauty of the area.

E. The Town shall encourage a public service and regulatory environment conducive to business recruitment and expansion, while at the same time enhancing the area's physical and human resources.

2.1.5 DOWNTOWN

F. The maintenance and revitalization of downtown Boone, as well as planning for its future development, will reflect the realities and qualities befitting its geographical setting and function as a center of (1) commercial and service activities (2) educational and cultural activities, events and (3) public services.

F.3 Encourage private investment and seek public funding opportunities for downtown revitalization projects.

2.3 THE COMMUNITY

2.3.1 COMMUNITY APPEARANCE

D. Sign policies and standards shall periodically be updated to enhance community identity and create a high quality business image.

2.3.2 COMMUNITY CHARACTER

A. The identification, restoration, and active use of structures, buildings, monuments, and neighborhoods of historic or architectural significance shall be encouraged as a means of enhancing the economic and cultural value to the planning area.

B. Multiple and appropriate adaptive reuse of historic resources shall be encouraged.

B.1 Amend development regulations to offer flexibility for restoration and active use of historic structures and other resources.

E. New development, redevelopment, and rehabilitation of structures and sites shall occur in a manner which is consistent with the neighborhood and architectural context of the immediate area, and supportive, whenever possible, of Boone's original community character as a High Country small town.

PLANNING BOARD REPORT/RECOMMENDATIONS

Per NCGS 160A-387, all proposed amendments to the zoning ordinance or zoning map shall have a written report provided from the Planning Board to the Town Council within 30 days of referral of the amendment to the Planning Board, or the Town Council may proceed in its consideration of the amendment without the Planning Board report. Furthermore, in no case is the Town Council bound by the recommendations, if any, of the Planning Board.

Per NCGS 160A-383, the Planning Board shall advise and comment on whether the proposed zoning amendment is consistent with all applicable officially adopted plans, and provide a written recommendation to the Town Council that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with the officially adopted plans shall not preclude consideration or approval of the proposed amendment by the Town Council.

First motion and vote: The proposed amendment to the Town's zoning ordinance ☐is OR ☐is not consistent with the Town's comprehensive plan and other applicable adopted plans of the Town which relate to this application because:

Second Motion and Vote: The Planning Commission recommends ☐approval OR ☐denial for the following reasons:

TOWN COUNCIL ACTION

Per NCGS 160A-383, zoning regulations shall be made in accordance with a comprehensive plan. Prior to adopting or rejecting any zoning amendment, the governing board shall adopt a statement describing whether its action is consistent with an adopted comprehensive plan and explaining why the board considers the action taken to be reasonable and in the public interest.

First motion and vote: The proposed amendment to the Town's zoning ordinance ☐is OR ☐is not consistent with the Town's Comprehensive plan and other applicable adopted plans of the Town which relate to this application because:

Second Motion and Vote: I move to ☐approve OR ☐deny the proposed amendment to the Town's zoning ordinance and believe ☐approval OR ☐denial is reasonable and in the public interest because:
