GEORGETOWN COUNTY PLANNING COMMISSION

DATE: October 15, 2020

AGENDA ITEM: A request from Graycliff Capital Partners, LLC acting as agent for Alliance for Economic Development for Georgetown County to amend the Pawleys Island Business Commons Planned Development to allow for a mixed use of commercial and 182 multifamily units. The property is located on the west side of Petigru Drive approximately 35 feet northwest of Tiller Drive in Pawleys Island. TMS # 04-0203-189-02-00. Case # AMPD 8-20-25965.

CURRENT STATUS: The Pawleys Business Commons Planned Development was approved by County Council on June 8, 2008. The PD was approved with various Resort Services uses. The property currently owned by Waccamaw Landscaping came back as a major change and received approval with conditions. Preliminary plans for their phase were reviewed and approved but never constructed. A technology company then purchased two of the parcels and amended the PD to allow for a technology park and other associated uses. The amendment was approved by Council in October of 2015. The Alliance for Economic Development for Georgetown County then purchased Parcel 3 of the tract. The agent for the applicant is proposing to further amend the PD to allow for multi-family uses on Parcel 3.

The site currently contains operations for a landscape business (Parcel 1) and an office and associated parking for a technology firm (Parcel 2). Parcel 3 is currently vacant and partially cleared.

POINTS TO CONSIDER:

1. The property is located on the west side of Petigru Drive across from Tiller Drive and Commerce Drive and contains a total of 28.21 acres. The Waccamaw Farms office, a drywall company and a retail store are located across from the tract. Single family residences are located west of the property. Large tracts to the north and south are vacant. Single family residences are also located to the south at the corner of Safari Lane and Petigru Drive.

2. The PD was last approved (Ordinance 2015-41) with the following conditions:
    - Renaming of the PD to the "Mercom Technology Park PD"
    - Proposed cell tower to comply with Georgetown Communication Tower Ordinance.
    - An updated tree plan to be submitted, reviewed and approved by Planning staff prior to land disturbance.
    - A detailed parking and landscaping plan to be submitted and approved by staff showing loading, dumpster areas and detailed planting and lighting plans.

- Signage limited to two free-standing monument signs which comply with WNCCO Zone standards. Monument sign size and all other signage to comply with GC sign standards.
- Parcels 1 and 2 (property owned by Waccamaw Landscaping) to comply with the previous approval with the exception of the new permitted uses. This portion is exempt from sections of the WNCCO Zone regarding building size, maximum roof pitch and window pane size. Other restrictions apply to this portion of the property as well (See Ordinance 2008-47).
- An easement will be provided for the bike path which will be constructed by the developer. The path may be placed in the street right of way, subject to SCDOT granting an encroachment permit.

3. The original PD was created based on the Resort Services Zoning District. The 2015 amendment resulted in the following uses for the entire PD:

- Office
- Research Center
- Repair service excluding automotive
- Call Center
- Business Service
- Educational Facility
- Printing Business
- Restaurant
- Retail store
- Book store
- Gift shop
- Day Care Center
- Spa
- Medical clinic
- Communication towers subject to the Georgetown County Communications Tower Ordinance
- Eleemosynary, religious or philanthropic institution
- Light manufacturing provided all activities are inside an enclosed building and no discernible noise or fumes are generated
- Warehouse
- Public use
- Accessory uses
- Lodging
- Conference Center/Special Events

4. The current request includes two of the three tax map parcels in this tract. The remaining 6.37 acres (referred to as Parcel 1 on this plan) are addressed in the sixth bullet in Number 2 above.

The majority of the proposed changes involve the 14.45 acres for Parcel 3. The only change for Parcel 2 (the Mercom property) involves the removal of Building C (previously approved for 6,200 SF of office/lodging) and a slight shift for the location of Building B (approved for 6,200 SF of office/lodging). Mercom has agreed to these changes and is supportive of the request. See attached letter.

The new proposal for Parcel 3 includes the retention of Building N now showing 10,000 square feet and 51 parking spaces. The 2015 plan indicated the proposed use as general office. The new plan adds the potential for retail, restaurant and medical uses as well.

5. Buildings J and O are referred to as "Building Type A" and together contain 102 units including 6 studio apartments, 42 one-bedroom units, 42 two-bedroom units and 12 three-bedroom units. All type A buildings are three stories. The height limit for the PD is 35 feet.

   Buildings H and A are referred to as "Building type B" and together contain 72 units including 30 one-bedroom units and 42 two-bedroom units. All type B buildings are three stories.

   Buildings C, D, I and P are referred to as "Carriage/Garage" and together contain 8 two-bedroom units. All carriage buildings are two stories.

   Using the table from the GR (General Residential) section of the Ordinance as a guide, 537,000 SF or 12.33 net acres (minus wetlands and streets) would be required for the proposed 182 units. The site contains 11.5 net acres when wetlands, roads and the commercial tract are removed.

   Total gross density for Parcel 3 is 13.6 units per acre.

   Net density for Parcel 3 (after removing the wetlands, access roads and commercial portion) for the proposed 182 units is 15.8 units per acre.

   The Land Use Element of the Comprehensive Plan defines high density residential development as 5.1 to 16 units per acre.

6. The plan also shows a maintenance/car wash building, a leasing office/club house and a pool area.

7. The applicant proposed the following residential parking requirements: 1.25 spaces for each studio apartment, 1.5 spaces for each one-bedroom unit and 2 spaces for the two and three bedroom units for a total of 324 spaces. The plan shows a total of 466 spaces required for Parcels 2 and 3 with a total of 572 spaces provided.

8. The plan retains the current setbacks as they were approved for the Technology Park:

North side	30'
East side/Petigru	50'
South side	50'
West side	Not required (due to wetlands)

The plan indicates a 20' building separation and a 15' building setback from wetlands. Parcel 3 contains 0.7 acres of wetlands, as well as an isolated freshwater wetland of less than one acre in size. OCRM allows for freshwater wetlands of this size to be incorporated into the overall project pending adequate mitigation.

9. The proposed plan also maintains the previously approved landscape buffers in addition to the building setbacks:

North side	20'
East side	10'
South side	50' (Level 2)
West side	Not required (due to wetlands)

10. A traffic impact analysis was prepared for the PD and approved by the Commission in 2008. The study estimated a total of 2,835 new daily trips for the Resort Services PD based on a 194,200 square foot business park.

The study noted that all intersections would continue to operate at an overall acceptable level of service during AM and PM peak hours, however the east and west Petigru approaches to Waverly Road would operate at LOS "F" during the AM peak. This would occur even without the development as proposed in 2008 according to the study. Also, the analysis indicated that overall traffic numbers over the course of a day were not high enough to warrant signalization at this intersection. The study concluded that the site would have minimal impact on area roadways and would be accommodated by the existing area roadway system.

A new traffic study was required for the proposed project. The new study (attached) estimates a total of 1,062 new trips per day for the 182 multi-family units and the 10,000 square feet of commercial space. The previously approved 2015 plan for this PD indicates a total of 167,700 SF of business park space which would generate approximately 2,448 daily trips (based on business park land use code). The proposed plan generates approximately 1,386 fewer daily trips than the existing plan.

The new study addressed traffic distribution for Highway 17 via Commerce Drive as the preferred route, based on the access management improvements constructed along Highway 17 since the last study. The consultant also addressed

the Petigru and Waverly Road intersection based on the findings of the previous study. The results of the study indicated that both Petigru Drive/Commerce Drive and Petigru Drive/Waverly Road currently operate at an acceptable level of service and will continue to do so with the development of the proposed project. Further, a turn lane analysis performed by the consultant indicated that no turn lanes are recommended at the project driveway along Petigru Drive.

11. The applicant provided a project narrative (attached) to address stormwater for the site. The tract currently drains to the northeast into existing streams and wetlands. Some site runoff currently drains to an existing ditch. This ditch will convey the offsite drainage through the site. Wetlands on the site have additional storage capacity and will be used to minimize the effects of a design storm effect on current downstream conditions. The project will be designed to meet requirements from both Georgetown County Stormwater and OCRM. Development will be routed through a combination of swales, inlets, infiltration systems and wet ponds controlled by an outfall structure to regulate discharge.

    County Stormwater indicated that infiltration could be difficult on this site due to the large amount of wetlands.

12. The Utility Coordinating Committee met on September 4th to review this project. A pump station will likely be needed to bring sewer to the site. The developer will be responsible for the construction of the pump station. This could involve the Mercom property as well. The water system will be looped and tied back into Petigru Drive. The site will likely need to be master metered for both water and sewer to meet GCWSD separation requirements. Santee Cooper indicated that power is available to the site with an existing underground line although some shifting will be needed. No other major issues were discussed.

13. A tree survey was provided for the original proposed development. The applicant had an arborist review the grand trees (over 30" DBH) on the site. Five trees over 30" DBH are located on Parcel 3. Four of the grand trees are able to be saved based on the provided plan. The arborist recommended removal of 3 of the 5 trees based on some decay. A tree removal and replacement plan will be required prior to land disturbance. The previous 2015 plan would require removal of these five trees.

14. The plan maintains the previous signage requirements of two freestanding, monument style signs for the project to be located at the main entrances. Otherwise, signage will follow the General Commercial requirements of the Zoning Ordinance as well as the Waccamaw Neck Commercial Corridor Overlay Zone requirements as stated on the plan.

15. The Comprehensive Plan, Waccamaw Neck, South shows this tract as commercial. The definition of commercial in the Comprehensive Plan does not

allow for residential uses. A designation of transitional or high density residential for Parcel 3 would support the proposed uses.

- Transitional: "The development of a tract of land, building or structure with a variety of complementary and integrated uses, such as, but not limited to, residential, office, medical office, limited retail, public or entertainment in a compact urban form. The commercial component is intended to be less intense than General Commercial."
- High Density Residential: "includes multi-family structures. Density is 5.1 to 16 density units per acre."

16. A walking trail is shown around the perimeter of the development along the edge of the wetlands. A 10' bike path easement is also shown along Petigru Drive as was indicated in the previous PD approvals.

17. Although this tract is located .4 miles from Highway 17 and is not within the boundaries of the WNCCO Zone, the previous PD approval contained a condition which requires that all buildings meet the overlay's architectural standards with exception of the following sections: *(check section reference numbers)*
    - Section 2100.409 which does not allow buildings over 60,000 square feet in size.
    - Section 2100.6012 which requires a 6/12 pitch for 50% of the roof.
    - Section 2100.6021 which prohibits expanses of glass larger than 9 square feet.

    Sections dealing with materials, windows types, colors and building details will all still apply.

    All three of these sections could be reasonably applied to the new, proposed residential buildings.

18. The Land Use Element states that high density residential developments should:
    - Have ample water, sewer and stormwater systems available
    - Be located in proximity to a road system
    - Have all public improvements in existence or be in the capital improvements budget before development occurs
    - Developed in the vicinity of commercial and/or service facilities
    - Designed to blend with landscaping and maximum natural features and coverages
    - Provide adequate off-street parking
    - Density levels for multifamily should fall within the range of 6-16 units per acre
    - Provide sidewalks, bike paths or multi-purpose paths to encourage walkable communities
    - Provide open areas and parks for recreational activities.

    The document further states:

- Density increases in new development should only be allowed if open space is provided by use of planning tools (such as a PD). Open space should be "useable" open space.
- Protect low and medium density residential neighborhoods from commercial/high density encroachment.

FINANCIAL IMPACT: Not applicable

OPTIONS:

1. Recommend approval as requested by applicant.
2. Recommend approval as amended by Planning Commission
3. Defer for 30 days pending further requested information.
4. Recommend denial of request.

STAFF RECOMMENDATION:

If the Commission feels that the criteria from number 18 above are met with the proposed PD amendment, then the Commission should recommend approval with the following conditions:

1. The multifamily buildings for Parcel 3 shall comply with all WNCCO requirements and the earlier exemptions should be removed.
2. In order to further the goal of affordable housing, 5% of the proposed units will be affordable based on the HUD definition for our area.
3. An amendment to the FLU map to transitional or high density residential for Parcel 3.
4. Previous conditions from Ordinance 2015-41 will remain in place.
5. Final approvals from GCWSD, Stormwater, OCRM/Corps, SCDOT and Midway Fire.
6. A tree removal and replacement plan to be approved by staff prior to land disturbance. The four trees as shown should be retained unless further study indicates their deteriorating health.

ATTACHMENTS:

1. Application and Attachments
2. GIS Location Map
3. GIS Zoning Map
4. Existing Plan
5. Proposed Conceptual Plan
6. Adjacent Property Owner Notice

Holly H. Richardson, AICP
Interim Director
Planning and Code Enforcement

Public Notification Information:
Date Advertised: 9/30/2020 (Georgetown Times) **10-1-2020 (Coastal Observer)**
Date Property Posted/By: 9/29/20 (Terri Davis)
Date of Notification: 9-24-2020 **Number Notified: 56**

Case Number/Staff Contact: AMPD 8-20-25965/Holly H. Richardson
Report Completion Date: 9-28-2020 Revision Date:

AMPD-8-20-25965

129 Screven St. Suite 222
Post Office Drawer 421270
Georgetown, S. C. 29440
Phone: 843-545-3158
Fax: 843-545-3299

APPLICATION TO AMEND A PLANNED DEVELOPMENT (PD)

COMPLETED APPLICATIONS MUST BE SUBMITTED ALONG WITH THE REQUIRED FEE, AT LEAST FORTY-FIVE (45) DAYS PRIOR TO A PLANNING COMMISSION MEETING.

Please note this approval applies to this particular property only.

Name of Planned Development: Pawleys Island Business Commons Planned Development

Regulation to which you are requesting an amendment *(check applicable):*

- ( ) **Setback – Complete SECTION B: SETBACK AMENDMENT**
- ( ) **Signage – Complete SECTION C: SIGNAGE AMENDMENT**
- (X) **Site Plan – Complete SECTION D: SITE PLAN AMENDMENT**
- ( ) **Other:**_____

All Applicants must complete SECTION A: APPLICANT INFORMATION

SECTION A: APPLICANT INFORMATION

Property Information:

TMS Number: 04-0203-189-02-00
(Include all affected parcels)

Street Address: Petigru Drive

City / State / Zip Code: Georgetown County, SC

Lot / Block / Number: Parcel 3

Existing Use: Vacant land

Proposed Use: Mixed use

Commercial Acreage: 1.6AC Residential Acreage: 13AC

Property Owner of Record:

Name: Alliance for Economic Dev for Georgetown County

Address: Po Box 1515

City/ State/ Zip Code: Georgetown, SC 29440

Telephone/Fax: 843-545-3161

E-Mail: btucker@gtcounty.org

Signature of Owner / Date: 8/17/2020

Contact Information:

Name: Brian Tucker

Address: 716 Prince Street, Georgetown, SC 29440

Phone / E-Mail: (843) 545-3161/btucker@gtcounty.org

I have appointed the individual or firm listed below as my representative in conjunction with this matter related to the Planning Commission of proposed new construction or improvements to the structures on my property.

Agent of Owner:

Name: Graycliff Capital Partners, LLC

Address: 200 E. Broad Street | Suite 220,

City / State / Zip Code: Greenville, SC 29601

Telephone/Fax: Office: 864.679.4799 | Cell: 843.813.2542

E-Mail: Seth Peterson speterson@GraycliffCapital.com

Signature of Agent/ Date: Seth Peterson

Signature of Owner /Date: Brian Tucker

Proposed Use: Mixed use

Commercial Acreage: 1.6AC Residential Acreage: 13AC

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E-Mail: Seth Peterson speterson@GraycliffCapital.com

Signature of Agent/ Date: Seth Peterson 8/17/20
Seth Peterson

Signature of Owner /Date:
Brian Tucker

Fee Schedule: $250.00 plus $10.00 per Residential acre or $25.00 per Commercial acre.
Adjacent Property Owners Information required:

1. The person requesting the amendment to the Zoning Map or Zoning Text must submit to the Planning office, at the time of application submittal, stamped envelopes addressed with name of each resident within **Four Hundred Feet (400)** of the subject property. The following return address must appear on the envelope: **"Georgetown County Planning Commission, 129 Screven St. Suite 222, Georgetown, SC 29440."**

2. A list of all persons (and related Tax Map Numbers) to whom envelopes were addressed to must also accompany the application.

It is understood by the undersigned that while this application will be carefully reviewed and considered, the burden of proving the need for the proposed amendment rests with the applicant.

Please submit this **completed application** and appropriate **fee** to Georgetown County Planning Division at 129 Screven St. Suite 222, Georgetown, S. C. 29440. If you need any additional assistance, please call our office at 843-545-3158.

Site visits to the property, by County employees, are essential to process this application. The owner\applicant as listed above, hereby authorize County employees to visit and photograph this site as part of the application process.

A sign will to be placed on your property informing residents of an upcoming meeting concerning this particular property. This sign belongs to Georgetown County and will be picked up from your property within five (5) days of the hearing.

All information contained in this application is public record and is available to the general public.

SECTION B: SETBACK AMENDMENT

Please supply the following information regarding your request:

- List any extraordinary and exceptional conditions pertaining to your particular piece of property. none known

- Do these conditions exists on other properties else where in the PD?

  N/A

- Amending this portion of the text will not cause undue hardship on adjacent property owners. No

Submittal requirements: 12 copies of 11 x 17 plans

- A scaled site plan indicating the existing conditions and proposed additions.
- Elevations of the proposal (if applicable).
- Letter of approval from homeowners association (if applicable).

SECTION C: SIGNAGE AMENDMENT

Reason for amendment request: N/A

Number of signs existing currently on site _____

Square footage of existing sign(s) _____

Number of Proposed signs: _____

Square footage of the proposed sign(s) _____

Submittal requirements:

- Proposed text for signage requirements.
- 12 copies (11 x 17) of proposed sign image.
- Site plan indicating placement of the proposed sign(s).
- Elevations.
- Letter from POA or HOA (if applicable)

SECTION D: SITE PLAN AMENDMENT

Proposed amendment request: Revise land use from commercial only to a mixed use of commercial and residential

Reason for amendment request: Allow mix of uses

Submittal requirements:

- 12 copies of existing site plan.
- 12 copies of proposed site plan.
- Revised calculations (*calculations may include density, parking requirements, open space, pervious/impervious ratio, etc.*).

PROJECT NARRATIVE PAWLEYS ISLAND BUSINESS COMMONS PARCEL 3

Parcel is 14.4-acres and consists of multi family buildings with associated roads/drives and utilities. The project is located in Georgetown County, South Carolina. The main entrance to the site is across from the intersection Commerce Drive on Petigru Road.

Existing soil series within the tract consist of:

Lakeland - Hydrologic Soil Group A
Leon - Hydrologic Soil Group B/D
Grifton - Hydrologic Soil Group D

This tract drains to the northeast into existing streams and wetlands that drain into Waverly Creek and ultimately the Atlantic Intracoastal Waterway or Waccamaw River. Based upon field observation, soil conditions within these wetlands appear seasonally wet with several areas containing standing water. Some runoff from offsite areas is currently channeled through the existing ditch. This ditch will convey the offsite drainage through the site. The additional wetlands located onsite have considerable storage capacity, therefore minimizing the effects of a design storm event on the current downstream conditions. The project is contained within flood zone X.

All boundary nodes stages were established with the aid of observervations during a seasonably wet condition and are in conjunction with on-site survey information, USGS topography maps and FEMA maps. Therefore, it is believed that the stage elevation assumptions are accurate and complete.

PURPOSE

- To define the limits of the drainage basin or basins that contains this project.

- To document that major drainage infrastructure such as road crossings, drainage connectors, ponds, and outfalls are adequate for all existing, proposed, and future development within the drainage basin, or that infrastructure construction can be phased to accommodate future development.

- To document compliance with regulatory requirements of the State of South Carolina and County of Georgetown:

  - ***OCRM Requirements***
    - Post Development peak runoff rates shall be detained for the design storm.
    - Water Quality shall be maintained by retaining specified amounts of runoff in a 24 hour period. In South Carolina, see "Stormwater Quality and Design Methodology".
    - Sediment shall be prevented from leaving the site during construction.
    -

- *Georgetown County Requirements*
  - Post Development peak runoff rates shall be detained for the county design storm.
  - Peak stages for the 100 year event in lakes shall be at least one foot below the minimum Finished Floor Elevations.
  - Study entire drainage basin at a buildout condition, including areas upstream and downstream of the current project.
  - Drainage culverts shall be sized to accommodate runoff from the design storm.

PROPOSED DRAINAGE SYSTEM

Development will be routed through a combination of swales, inlets, infiltration systems and wet ponds controlled by an outfall structure to regulate discharge.

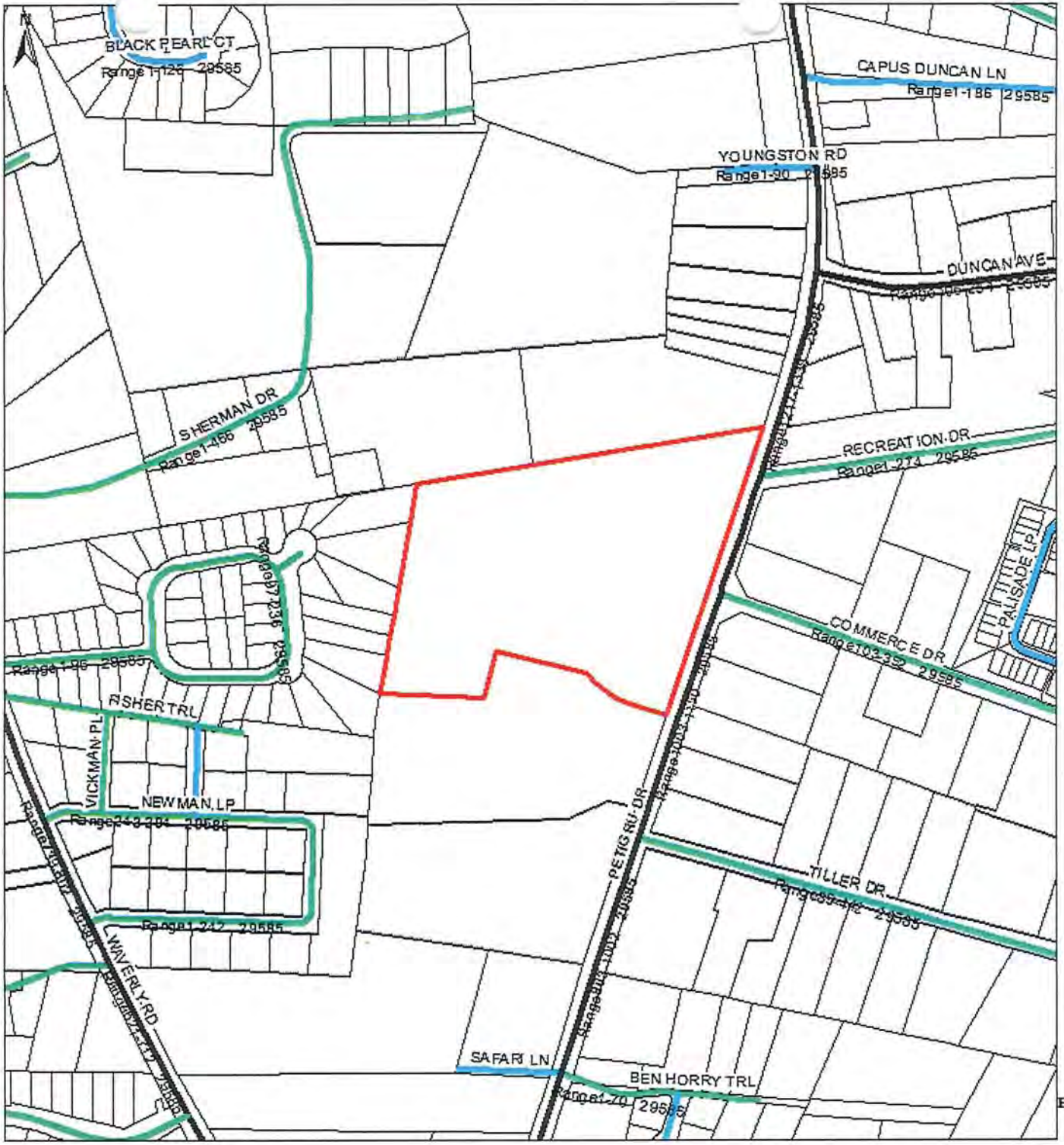
STORMWATER QUANTITY METHODOLOGY

The existing and proposed conditions will be analyzed using the Advanced Interconnected Channel and Pond Routing (ICPR) computer program developed by Streamline Technologies. The program is used to model rainfall and stormwater runoff and to perform hydraulic routing through the storm drainage system. The ICPR program is a FEMA approved model that has the ability to analyze complex interconnected drainage systems dynamically over extended time periods.

The hydrologic input data consists of information for each drainage basin, or subwatershed, within the project. Input variables include runoff curve number, rainfall distribution pattern, hydrograph peaking factor, area of each drainage basin, and time of concentration (see below section "Hydrology" for specifics on the values of these variables that were used in this model). The ICPR program generates runoff hydrographs for each subwatershed based on the user-specified variables. Hydrographs are generated by ICPR using the SCS Unit Hydrograph Method.

The model hydraulic input data consists of a system of nodes and links. Nodes represent locations where flows enter or exit the system, pipe or channel characteristics change, or where stage/storage/time relationships are provided. Links represent traditional types of hydraulic conveyance such as pipes, channels, drop structures, weirs, etc. The sizes, inverts, lengths, and Manning n values for all pipes connecting the lagoons are input into the model. In addition to pipe information, all lagoon and detention area stage-storage information and the respective outfall structure information is input into the model. The node and link conditions are analyzed within the model for a given storm, and flow conditions are determined.

PI Business Commons (Petigru)
Property Location
REZ 8-20-25965



Legend

Streets

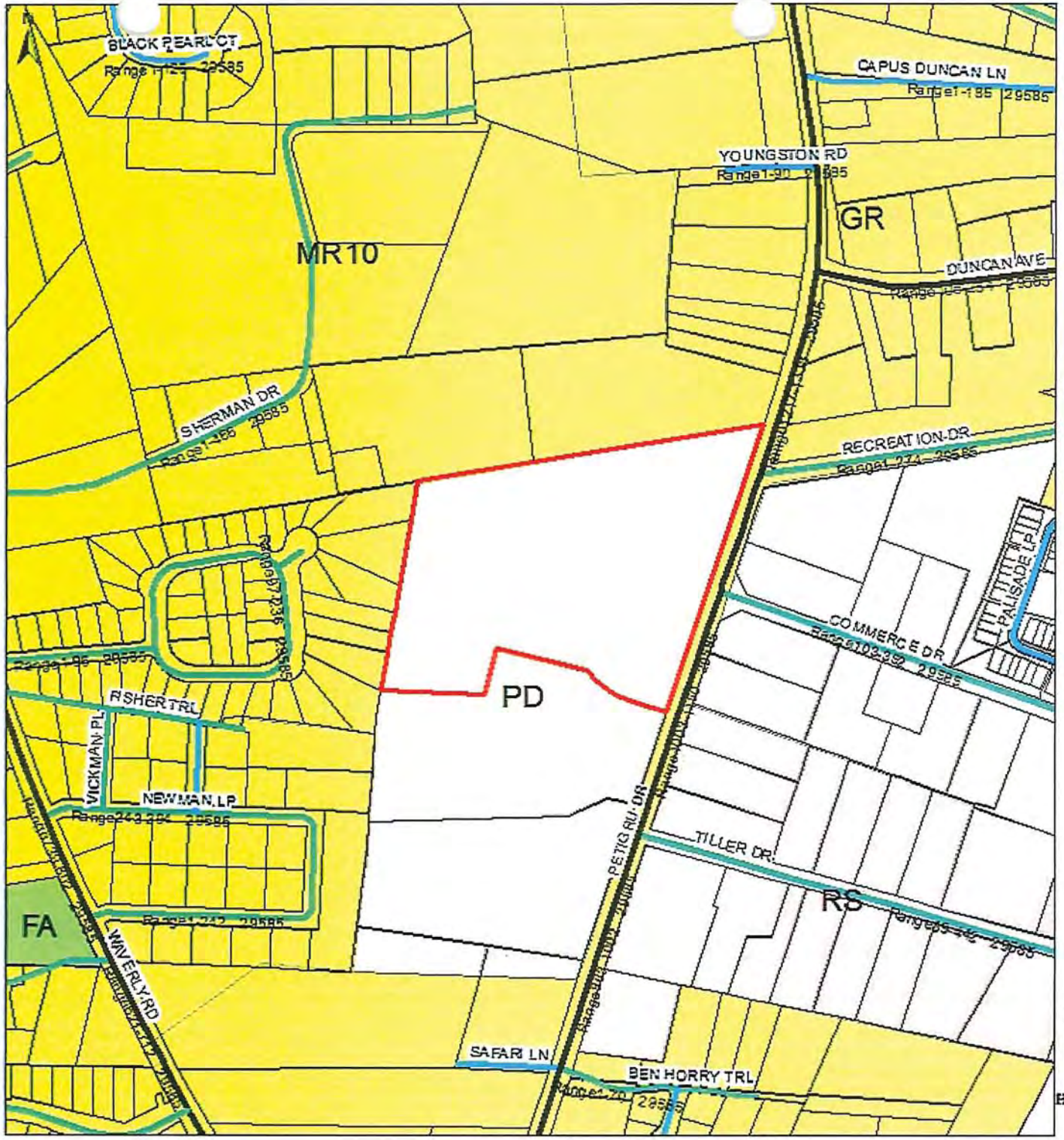
<all other values>

MaintainedBy

- County
- Private
- State
- PI Business Commons
- Lot Lines
- Railroads
- Landmarks
- Municipalities

0 140 280 560 840 1,120 Feet

DISCLAIMER: This map is a graphic representation of data obtained from various sources. All efforts have been made to warrant the accuracy of this map. However, Georgetown County disclaims all responsibility and liability for the use of this map.



PI Business Commor Petigru)
Property Zoning
REZ 8-20-25965

Legend

Streets

MaintainedBy

Zoning

DISTRICT

0 140 280 560 840 1,120 Feet

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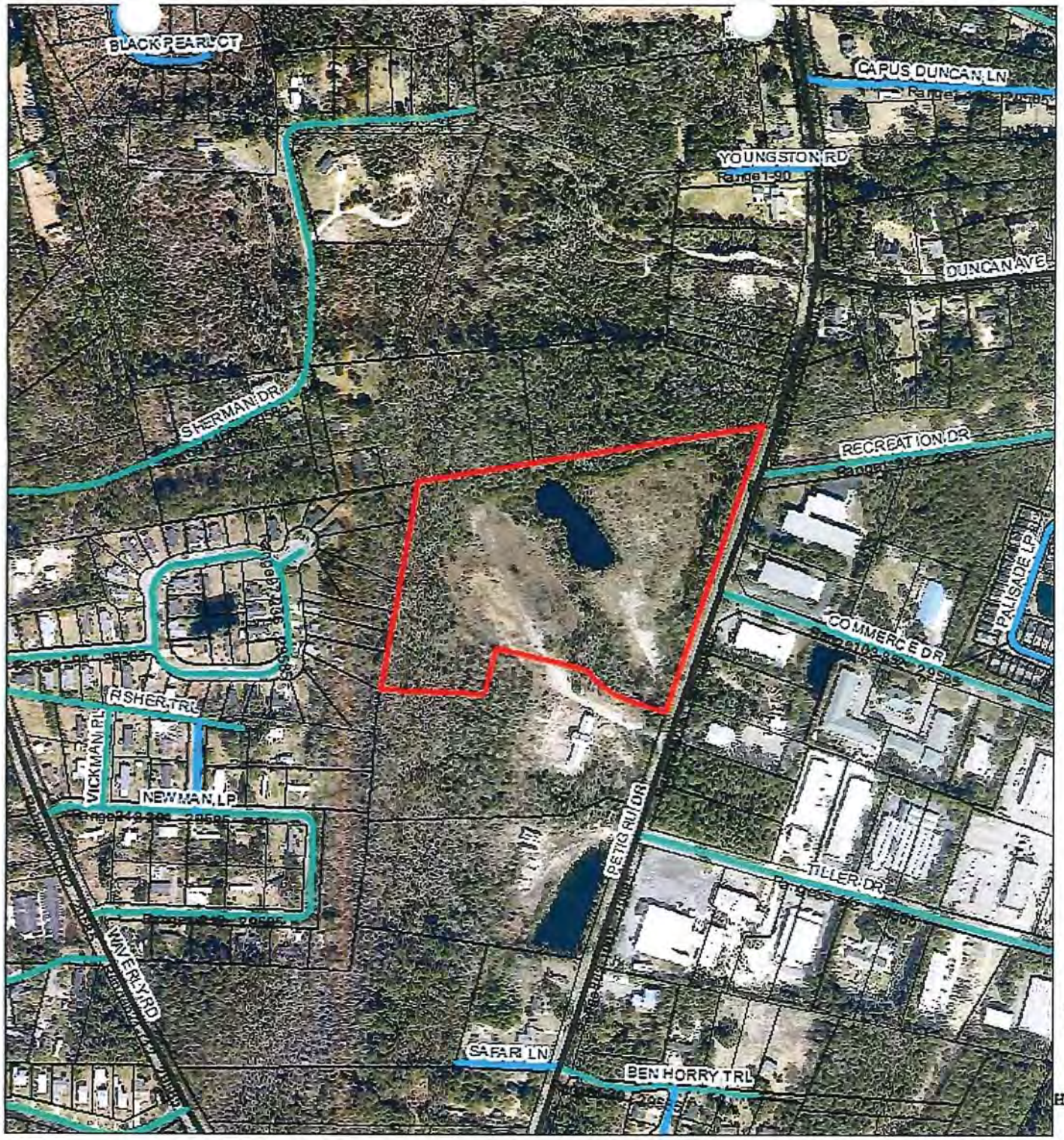

PI Business Commor Petigru)
Property Aerial
REZ 8-20-25965

Legend

Streets

<all other values>

MaintainedBy

- County
- Private
- State
- PI Business Commons
- Lot Lines
- Railroads
- Landmarks

Imagery2017Med

RGB

- Red: Band_1
- Green: Band_2
- Blue: Band_3

Municipalities

0 140 280 560 840 1,120 Feet

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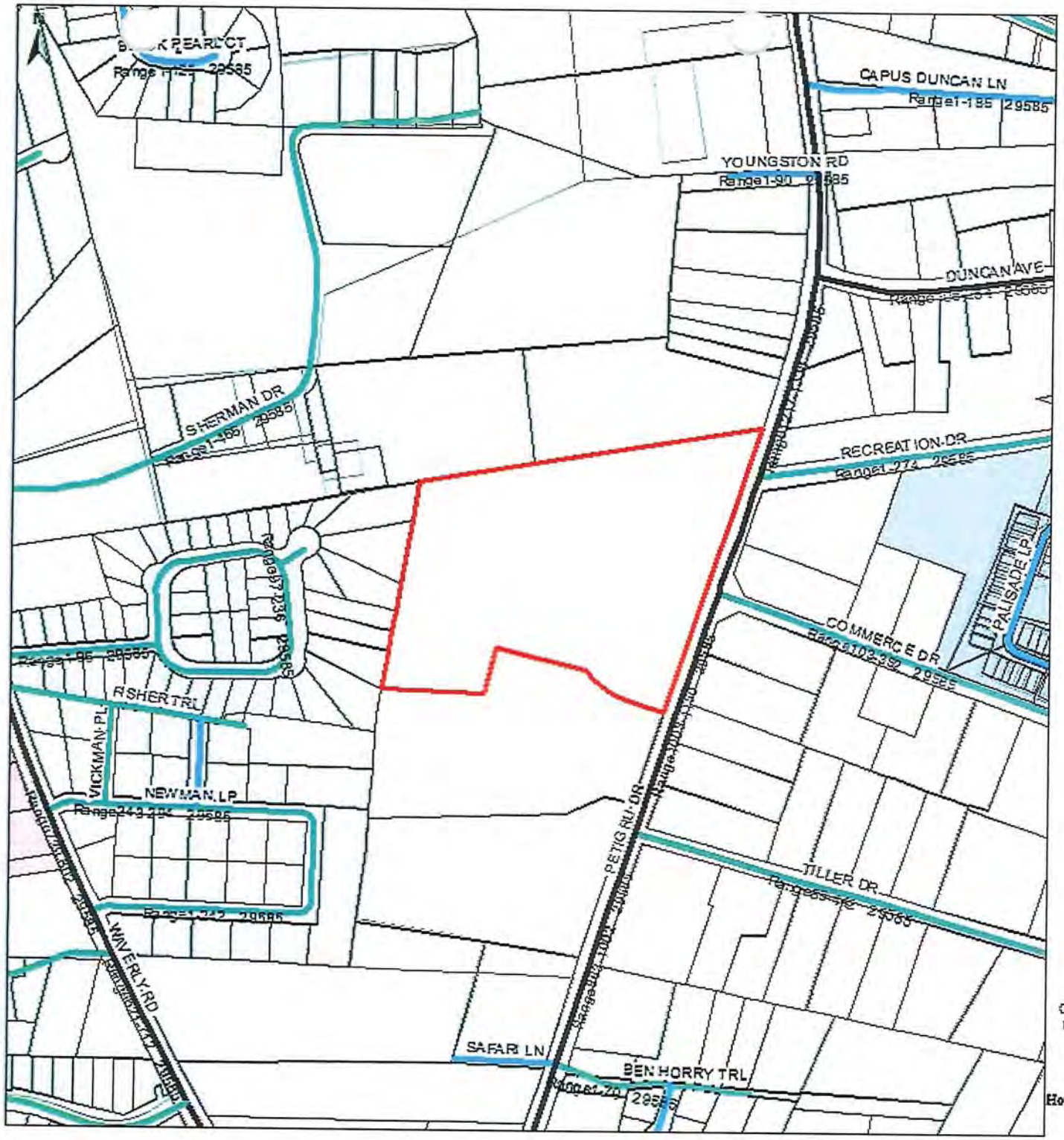

PI Business Commo' Petigru)
Property FLU
REZ 8-20-25965

Legend

Streets

- <all other values>

MaintainedBy

- County
- Private
- State
- PI Business Commons
- Lot Lines
- Railroads
- Landmarks

Future Landuse

FUTURE_LAN

- CITY OF GEORGETOWN
- COMMERCIAL
- CONSERVATION PRESERVATION
- EASEMENT
- HIGH DENSITY RESIDENTIAL
- INDUSTRIAL
- LOW DENSITY RESIDENTIAL
- MEDIUM DENSITY RESIDENTIAL
- POND
- PRIVATE RECREATIONAL
- PUBLIC RECREATIONAL
- PUBLIC/SEMI-PUBLIC
- TOWN OF ANDREWS
- TOWN OF PI
- TRANSITIONAL

Municipalities

0 140 280 560 840 1,120 Feet

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DEVELOPMENT SUMMARY

T.M.S. #: 04-0303-169-00-00
DEED #: 1518-287
CURRENT ZONING: PD (BASED ON RESORT SERVICES)

HIGHLAND ACREAGE: 18.68 ACRES
WETLAND ACREAGE: 3.70 ACRES
POND ACREAGE: 1.45 ACRES
TOTAL ACREAGE: 21.83 ACRES

TOTAL PERVIOUS: 11.69 ACRES (54%)
TOTAL IMPERVIOUS: 10.14 ACRES (46%)

TOTAL OPEN SPACE: 8.34 ACRES (39%)

FLOOD ZONE: 'X' AS SHOWN ON MAP #50087-0001-D, DATED MARCH 16, 1992

REQUIRED BUILDING SETBACKS FROM PD PROPERTY LINE:
NORTH SIDE: 30'
EAST SIDE: 50' PETIGRU DRIVE: 50'
SOUTH SIDE: 50'
WEST SIDE: NOT REQUIRED (DUE TO EXISTING WETLANDS)

REQUIRED LANDSCAPE BUFFER SETBACKS FROM PD PROPERTY LINE:
NORTH SIDE: 20'
EAST SIDE: 10'
SOUTH SIDE: 50' (LEVEL 2 BUFFER)
WEST SIDE: NOT REQUIRED (DUE TO EXISTING WETLANDS)

TECHNOLOGY PARK:
BLDG A: 67,000 SF (1-2 STORY)
BLDG B: 8,200 SF (1-2 STORY)
BLDG C: 8,200 SF (1-2 STORY)
BLDG D: 8,200 SF (1-2 STORY)
BLDG E: 8,200 SF (1-2 STORY)
BLDG F: 8,200 SF (1-2 STORY)
BLDG G: 8,200 SF (1-2 STORY)
BLDG H: 8,200 SF (1-2 STORY)
BLDG I: 8,200 SF (1-2 STORY)
BLDG J: 8,200 SF (1-2 STORY)
BLDG K: 1,200 SF (1 STORY)
BLDG L: 7,500 SF (1 STORY)
BLDG M: 3,400 SF (1-2 STORY)

AREA, YARD, & BLDG. REQUIREMENTS:

BUILDING SETBACKS: SEE DEVELOPMENT SUMMARY
- 15' SETBACK FROM WETLANDS
- 20' MINIMUM BUILDING SEPARATION

LANDSCAPE BUFFER: SEE DEVELOPMENT SUMMARY

MAX. BUILDING HEIGHT: 35'
(SEE GEORGETOWN COUNTY ZONING ORDINANCE)

PARKING REQUIREMENT:
- PARKING REQUIREMENTS SHALL BE BASED ON PROPERTY USE AS PERMITTED BY MERCOM TECHNOLOGY PARK. SEE GEORGETOWN COUNTY ARTICLE X, OFF-STREET PARKING REGULATIONS TO CALCULATE OFF-STREET PARKING REQUIREMENTS.

OUTPARCELS:
PARCEL 1: BLDG N: 15,000 SF (1-2 STORY)
PARCEL 2: BLDG O: 7,000 SF (1-2 STORY)
PARCEL 3: BLDG P: 7,000 SF (1-2 STORY)

AREA, YARD, & HEIGHT REQUIREMENTS:
- MINIMUM OUTPARCEL LOT ACREAGE: 21,780 SF (.5 AC) (EACH LOT SHALL MAINTAIN 30% PERVIOUS SURFACE AREA.)
- MINIMUM OUTPARCEL LOT WIDTH: 100'
- MINIMUM BUILDING SETBACKS:
  FRONT: 50' FROM PETIGRU DRIVE
  SIDE: 20'
  REAR: 20'
  15' SETBACK FROM WETLAND/POND EDGE

MAX. BUILDING HEIGHT: 35'
(SEE GEORGETOWN COUNTY ZONING ORDINANCE)

PARKING REQUIREMENT:
- PARKING REQUIREMENTS SHALL BE BASED ON PROPERTY USE AS PERMITTED BY MERCOM TECHNOLOGY PARK. SEE GEORGETOWN COUNTY ARTICLE X, OFF-STREET PARKING REGULATIONS TO CALCULATE OFF-STREET PARKING REQUIREMENTS.

PROPOSED USES:

GENERAL OFFICE:	138,469 SF
WAREHOUSE:	15,000 SF
RESTAURANT, STANDARD:	7,500 SF
SUITE LODGING: (8 UNITS @ 1,200 SF)	10,800 SF

PARKING REQUIREMENTS:

GENERAL OFFICE:	1 SPACE/300 SF
WAREHOUSE:	1 SPACE/1,500 SF
RESTAURANT, STANDARD:	1 SPACE/100 SF
LODGING:	1.5 SPACES/DWELLING UNIT
PARKING REQUIRED*:	581 SPACES
PROPOSED PARKING*:	583 SPACES

*ANY CHANGES IN USE SHALL REQUIRE COMPLIANCE WITH THE MINIMUM PARKING REQUIREMENTS APPLICABLE TO THE NEW USE.

SIGNAGE:
THERE SHALL BE (2)TWO FREESTANDING, MONUMENT STYLE SIGNS FOR THE PROPOSED DEVELOPMENT (SEE PLAN FOR PROPOSED LOCATIONS)

*ALL SIGNAGE SHALL COMPLY WITH THE WACCAMAW NECK COMMERCIAL CORRIDOR OVERLAY ZONE, ARTICLE XXI, SECTION 2100.A05. GENERAL COMMERCIAL SIGNAGE REGULATIONS SHALL ALSO APPLY FOR BUILDING MOUNTED SIGNAGE.

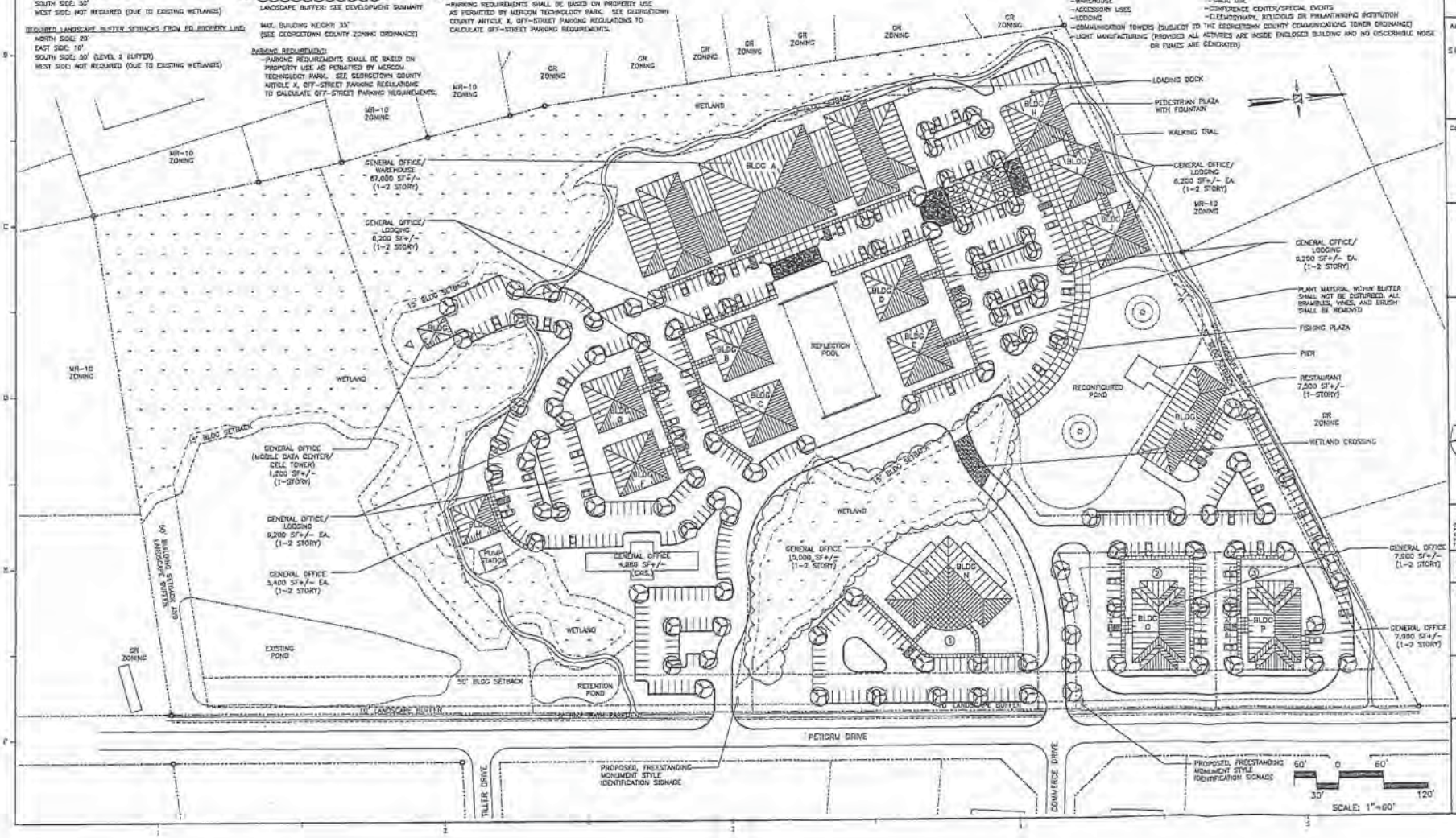
GENERAL NOTES:
1. ALL CONSTRUCTION WILL MEET ARTICLE XXI, WACCAMAW NECK COMMERCIAL CORRIDOR OVERLAY ZONE DESIGN STANDARDS, WITH THE EXCEPTION OF SECTIONS 2100.A06, 2100.A012 & 2100.A021.
2. SITE LIGHTING SHALL BE DESIGNED IN SUCH A WAY TO SHIELD ADJACENT NEIGHBORS FROM AMBIENT LIGHT.

INTENT FOR DEVELOPMENT:

PLANNED DEVELOPMENT BASED ON RESORT SERVICES DISTRICT.

THE INTENT OF THE RESORT SERVICE DISTRICT IS TO PROVIDE AREAS FOR RESORT RELATED SERVICES AND INDUSTRIES WHICH ARE NOT SIGNIFICANTLY OBJECTIONABLE IN TERMS OF NOISE, ODOR, FUMES, ETC., AND EACH OPERATION IS COMPLETELY CONFINED WITHIN AN ENCLOSED BUILDING. THE RESORT-RELATED SERVICES SHOULD NOT HAVE A NEGATIVE EFFECT ON THE EXISTING LIFESTYLE OF THE AREA. THE REGULATIONS WHICH APPLY WITHIN THIS DISTRICT ARE DESIGNED TO ENCOURAGE THE FORMATION AND CONTINUANCE OF A COMPATIBLE ENVIRONMENT FOR USES GENERALLY CLASSIFIED TO BE SUPPORTIVE OF RESORT AREAS; PROTECT AND RESERVE UNDEVELOPED AREAS IN GEORGETOWN COUNTY WHICH ARE SUITABLE FOR SUCH PURPOSES, AND DISCOURAGE ENCROACHMENT ON THOSE INDUSTRIAL USES OR OTHER CAPABLE OF ADVERSELY AFFECTING THE BASIC RESORT CHARACTER OF THIS DISTRICT.

THE FOLLOWING USES SHALL BE PERMITTED WITHIN MERCOM TECHNOLOGY PARK PD:
- OFFICE
- REPAIR SERVICE(EXCLUDING AUTOMOTIVE)
- BUSINESS SERVICES
- PRINTING BUSINESS
- ELECTRONIC RETAIL STORE
- GIFT SHOP
- SPA
- WAREHOUSE
- ACCESSORY USES
- LODGING
- COMMUNICATION TOWERS (SUBJECT TO THE GEORGETOWN COUNTY COMMUNICATIONS TOWER ORDINANCE)
- LIGHT MANUFACTURING (PROVIDED ALL ACTIVITIES ARE INSIDE ENCLOSED BUILDING AND NO DISCERNIBLE NOISE OR FUMES ARE GENERATED)
- RESEARCH CENTER
- CALL CENTER
- EDUCATIONAL FACILITY
- RESTAURANT
- BOOK STORE
- DAY CARE CENTER
- MEDICAL CLINIC
- PUBLIC USE
- CONFERENCE CENTER/SPECIAL EVENTS
- ELEMOSYNARY, RELIGIOUS OR PHILANTHROPIC INSTITUTION



MERCOM TECHNOLOGY PARK

Pawleys Business Commons
Pawleys Island, SC

Owner:
Mercom Corporation
313 Commerce Drive
Pawleys Island, SC 29585

Architect:
SGA ARCHITECTURE
Pawleys Island / Charleston
343 Business Center Lane
PO Box 1659
Pawleys Island, SC 29585
Phone: (843) 235-0402
Fax: (843) 237-1992
www.SGAarchitecture.com

Consultants:

STATE OF SOUTH CAROLINA
SGA ARCHITECTURE LLC
Brocco
REGISTERED ARCHITECT

Corporate Seal

STATE OF SOUTH CAROLINA
STEVENSON GORDON JR.
REGISTERED ARCHITECT

Individual Seal

MEMBER OF
THE AMERICAN INSTITUTE OF ARCHITECTS

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Job Number: 11027
Date: 03/07/12
Drawn by: JW
Checked by: SG.JR

Name:
ZONING DOCUMENTS
Not For Construction

Revisions:
1 - Revisions 10/31/12

Site Plan

L101

X of X

Zoning Submittal

NOTICE OF PUBLIC HEARING

The Planning Commission will consider a request from Graycliff Capital Partners, LLC acting as agent for Alliance for Economic Development for Georgetown County to amend the Pawleys Island Business Commons Planned Development to allow for a mixed use of commercial and multifamily. The property is located on the west side of Petigru Drive approximately 35 feet northwest of Tiller Drive in Pawleys Island. TMS # 04-0203-189-02-00. Case # AMPD 8-20-25965.

The Planning Commission will be reviewing this request on **Thursday, October 15, 2020 at 5:30 p.m. in the Howard Auditorium at 1610 Hawkins Street in Georgetown, South Carolina.**

If you wish to make public comments on this request, you are invited to attend this meeting. If you cannot attend and wish to comment please submit written comment to:

Georgetown County Planning Commission

PO Box 421270

Georgetown, South Carolina 29440

Telephone (843) 545-3158

Fax (843) 545-3299

E-mail: tcoleman@gtcounty.org

Tiffany Coleman

rom: Joey Turner <joeyaturner@hotmail.com>
Sent: Saturday, September 26, 2020 4:11 PM
To: Tiffany Coleman
Subject: Case#AMPD 8-20-25965

Follow Up Flag: Follow up
Flag Status: Flagged

Stay with the overlay as written into law. The number of units that are being suggested is ridiculous. The roads in that area can hardly handle the traffic as it is. By the way you should have made mention of the density in your notice. How can people make an informed decision without these facts? Could it be that the county really wants to make this sale for some reason? DO WHAT'S RIGHT!!!

Joseph A. Turner

Georgetown County Planning Commission

PO Box 421270

Georgetown, SC 29440

9/17/20

To Whom it May Concern:

The request to rezone the property located at TMS # 04-0203-189-02-00 off Petigru Road in Pawleys Island should be denied on the following points, my points of my view.

The county is trying to remedy their mistake of purchasing this property in the first place on the back of the property's neighbors in all directions.

As documented by R. Funnye with GCPW, the property is part of a natural drainage basin for the surrounding area. This basin forms a hefty stream which turns into Chapel Creek, eventually emptying into the Waccamaw River. It is vitally important to maintain that ecosystem. Current developments and road improvements in the area have already impacted water drainage. Properties are experiencing higher than normal ditch drainage overflow.

Traffic impact is at the top of my concerns. With the approval of 2 residential projects only 1 or 2 miles from this proposed project, the influx of cars and lack of infrastructure and traffic signals will make Waverly Road and Martin Luther King both dangerous thoroughfares. I also predict that this would warrant widening Waverly Road to 4 lanes – is the SCDHPT prepared to do that?

Lastly, my daughter and spotted a Red Tailed Hawk yesterday in the surrounding forest and we often hear owls at night. Last week, my son found a Gopher Tortoise on the forest edge. Consideration should be given to the possible destruction of the natural habitat for such species as well.

It is for these reasons, and one other – my future grandchildren – I ask this honorable planning commission to deny the request to build 200 apartments for which we don't have the jobs and industry to fill.

Perhaps, the county should keep this property which could be tied into the elementary school as a nature trail and beautiful preserve teeming with hawks, deer, bunnies, etc.

Respectfully,

Patricia Hendriks

156 Fisher Trail

Pawleys Island, SC

29585

Stantec

PETIGRU APARTMENTS DEVELOPMENT
TRAFFIC IMPACT ANALYSIS

Pawleys Island, South Carolina

September 2020

Prepared for:

Graycliff Capital Partners, LLC

Prepared by:

Stantec Consulting Services Inc.

Stantec

PETIGRU APARTMENTS DEVELOPMENT
TRAFFIC IMPACT ANALYSIS

Pawleys Island, South Carolina

September 2020

Prepared for:

Graycliff Capital Partners, LLC
PO Box 17437
Greenville, SC 29606

Prepared by:

Stantec Consulting Services Inc.
4969 Centre Pointe Drive, Suite 200
North Charleston, South Carolina
Phone: (843) 740-7700
Fax: 843 740-7707

Project No. 171002351

Signature Date

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Appendix H: SCDOT Volume Adjustment Guidelines for COVID-19 Impact
Appendix I: Traffic Impact Analysis for Waccamaw Business Park

Executive Summary

The purpose of this report is to document a traffic impact analysis for the proposed Petigru Apartments Development site in accordance with SCDOT and Georgetown County guidelines. The proposed Petigru Apartments Development site is located west of US 17 along Petigru Drive between Tiller Road and Godfrey Road in the vicinity of Pawleys Island, South Carolina and will consist of 182 apartment units and 10,000 square feet of office space.

Access to the development will be provided through one proposed full access point aligning with Commerce Drive and one existing full access point along Petigru Drive. The proposed project driveway fulfills the SCDOT driveway spacing criteria.

The results of the intersection capacity analysis indicate that the study intersections currently operate, and are expected to continue operating at an acceptable LOS with development of the Petigru Apartments Development in 2023.

Based on the *Roadway Design Manual* guidelines, exclusive right-turn or left-turn lanes are not recommended at the proposed project driveway along Petigru Drive.

1.0 INTRODUCTION

The purpose of this report is to document a traffic impact analysis for the proposed Petigru Apartments Development site in accordance with SCDOT and Georgetown County guidelines. This report summarizes the procedures and findings of the traffic impact analysis.

1.1 PROJECT BACKGROUND

The proposed Petigru Apartments Development site is located west of US 17 along Petigru Drive between Tiller Road and Godfrey Road in the vicinity of Pawleys Island, South Carolina and will consist of 182 apartment units and 10,000 square feet of office space. Per a 2008 traffic study for the Waccamaw Business Park, the site was previously approved for 194,200 square feet of business park. The modified land uses currently proposed to be developed are projected to generate less traffic than the previously approved land use.

Access to the development will be provided through one proposed full access point and one existing full access point along Petigru Drive. The proposed Petigru Apartments Development Project Driveway is aligned with Commerce Drive and is proposed to be full access driveway.

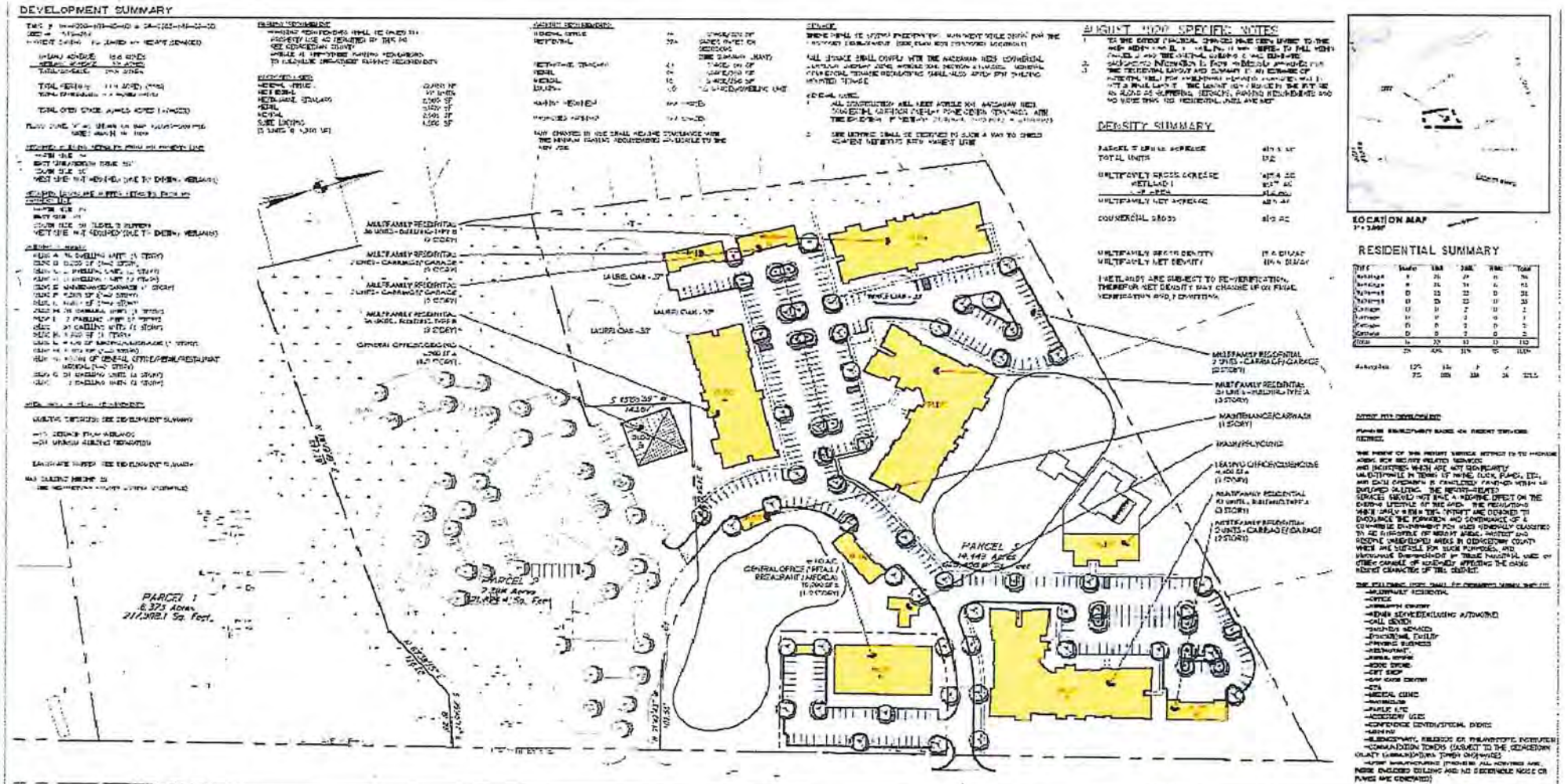
The traffic impact analysis considers the weekday AM peak hour (between 7:00 AM and 9:00 AM) and the weekday PM peak hour (between 4:00 PM and 6:00 PM) as the study time frames. The extent of the existing roadway network to be studied consists of the following intersections:

1) Petigru Drive & Commerce Drive; and
2) Petigru Drive & Waverly Road.

The buildout date for the proposed development is anticipated prior to 2023; therefore, future-year 2023 conditions were analyzed as the Build scenario. Exhibit 1.1 illustrates the location of the project sites, including the adjacent public roadway network, and Exhibit 1.2 illustrates the site plan for the proposed development.

Stantec

Petigru Apartments - Traffic Impact Analysis
Exhibit 1.1 - Project Location Map - PAGE 5



GRAYCLIFF CAPITAL

Not to Scale

ZONING EXHIBIT

Pawleys Island Business Commons Planned Development

GEORGETOWN COUNTY, SC

SEPTEMBER 16, 2020

THOMAS & HUTTON

Stantec

1.2 EXISTING ROADWAY CONDITIONS

Petigru Drive is a two-lane major collector that primarily serves commercial and residential land uses. The posted speed limit is 45 mph. Based upon existing turning movement counts, the percentage of heavy vehicles along Petigru Drive is approximately 3%.

Commerce Drive is a two-lane local street that primarily serves commercial and residential land uses. The posted speed limit is 25 mph. Based upon existing turning movement counts, the percentage of heavy vehicles along Commerce Drive is approximately 2%.

Waverly Road is a two-lane arterial that primarily serves commercial and residential land uses. The posted speed limit is 35 mph. Based upon existing turning movement counts, the percentage of heavy vehicles along Waverly Road is approximately 2%.

2.0 DRIVEWAY SPACING REVIEW

Access to the development will be provided through one proposed full access point and one existing full access point. The Petigru Apartments Development Project Driveway is proposed to be a full access driveway along Petigru Drive aligning with Commerce Drive. The secondary access point will be connected internal to the site via the existing Mercom Driveway. A review of the driveway spacing of the proposed access points was undertaken based upon information contained in SCDOT's *Access & Roadside Management Standards (ARMS)* manual.

The proposed Petigru Apartments Development Project Driveway aligns with the existing Commerce Drive; therefore, it meets the driveway spacing criteria.

3.0 PROJECT TRAFFIC

Project traffic in this analysis is defined as the vehicle trips expected to be generated by the proposed Petigru Apartment Development. These trips were distributed and assigned throughout the study roadway network.

3.1 PROPOSED LAND USES

The Petigru Apartments Development project is proposed to consist of 182 apartment units and 10,000 square feet of office space. The project site is currently vacant.

3.2 TRIP GENERATION ESTIMATES

The trip generation potential for the development was estimated using information contained in ITE's *Trip Generation Manual*, 10th Edition (2017) reference. The estimates utilized land use codes (LUC) 221 – Multifamily (Mid-Rise) Housing, LUC 710 – General Office Building and were developed for the weekday daily, the weekday AM peak hour of the adjacent street, and the weekday PM peak hour of the adjacent street time periods.

Due to the nature of the proposed Petigru Apartments Development project, internal capture trips were considered, whereas pass-by trips were not considered in the trip generation estimates. The trip generation estimates for the development are shown in **Table 3.1** and documented in Appendix A.

Table 3.1 – Trip Generation Estimates

TRIP GENERATION ESTIMATES Petigru Apartments Development							
Land Use	ITE LUC	Scale	Daily	Weekday AM Peak Period		Weekday PM Peak Period	
				Enter	Exit	Enter	Exit
Multifamily Housing (Mid-Rise)	221	182 DU	990	16	46	48	31
General Office Building	710	10 KSF	114	31	5	2	11
		Gross Trips:	1,104	47	51	50	42
		Internal Capture:	-42	-1	-1	-1	-1
		New External Trips:	1,062	46	50	49	41

As noted earlier in this report, this parcel was previously approved for 194,200 square feet of business park. For comparison purposes, the trip generation for the previously approved development is shown in **Table 3.2.** The *Traffic Impact Analysis for Waccamaw Business Park (2008)* report is included in Appendix I.

Table 3.2 – Previously Approved Development Trip Generation Estimates

TRIP GENERATION ESTIMATES Waccamaw Business Park							
Land Use	ITE LUC	Scale	Daily	Weekday AM Peak Period		Weekday PM Peak Period	
				Enter	Exit	Enter	Exit
Business Park	770	194.2 KSF	2,835	230	45	65	215
New External Trips:			2,835	230	45	65	215

Note: The trip generation estimates shown in Table 3.2 above were developed independent of this report for the Traffic Impact Analysis for Waccamaw Business Park (2008) and were developed utilizing ITE's Trip Generation, 7th Edition.

For comparison purposes, the currently proposed development is projected to generate 1,773 fewer daily trips, 184 fewer trips in the weekday AM peak hour and 174 fewer trips in the weekday PM peak hour than the previously approved zoning.

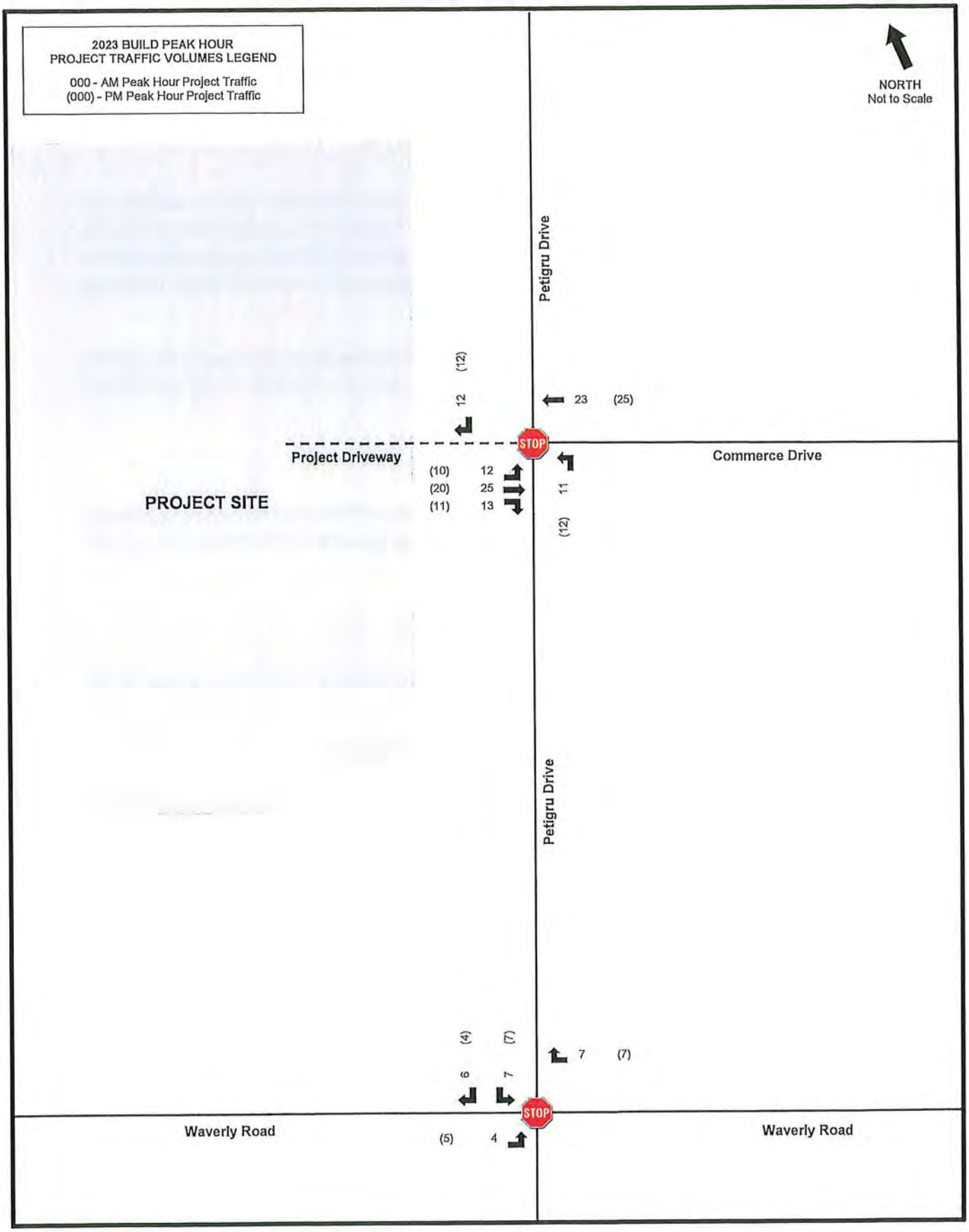
3.3 TRIP DISTRIBUTION & ASSIGNMENT

New external traffic expected to be generated by the Petigru Apartments Development was distributed and assigned to the roadway network based upon existing travel patterns and the anticipated route choice of the users of the development to access the nearby major road, US 17. Since the 2008 study, improved access management along US 17 has been implemented which has restricted turning movements at some intersections and created new signalized intersections elsewhere. Therefore, the assumed distribution of site-generated traffic throughout the road network has been modified from the 2008 study. Due to the existing road network, travel distances and access to signals along US 17, Commerce Drive was assumed to be the preferred route, considering most of the project traffic heading north and south would prefer taking a shorter route of Commerce Drive to access US 17 instead of going through the intersections of Petigru Drive & Martin Luther King Road and Petigru Drive & Waverly Road respectively.

The general distribution of new project trips was assumed to be:

- 50% to/from the east via Commerce Drive;
- 25% to/from the north via Petigru Drive; and
- 25% to/from the south via Petigru Drive.

The assignment of project traffic for the weekday AM and PM peak hours is illustrated in Exhibit 3.1.


2023 BUILD PEAK HOUR
PROJECT TRAFFIC VOLUMES LEGEND
000 - AM Peak Hour Project Traffic
(000) - PM Peak Hour Project Traffic
NORTH
Not to Scale
Petigru Drive
Petigru Drive
Project Driveway
Commerce Drive
PROJECT SITE
Waverly Road
Waverly Road
STOP
STOP
(12)
12
23
(25)
(10)
12
(20)
25
(11)
13
11
(12)
(4)
(7)
6
7
7
(7)
(5)
4

4.0 TRAFFIC VOLUME DEVELOPMENT

Existing 2020 traffic volumes were collected for future volume development at the Petigru Drive & Commerce Drive intersection. To account for the reduced traffic volumes due to the COVID-19 pandemic, seasonal factors assigned by SCDOT were applied to the collected traffic volume numbers. The future-year 2023 traffic volumes consisted of the factored 2020 traffic volumes adjusted by an annual growth rate and projected traffic volumes of the Petigru Apartments Development.

Traffic volumes collected at the Petigru Drive & Waverly Road intersection for another project in 2016 were used. The 2016 traffic volumes were grown to 2020 existing conditions and future-year conditions utilizing the historical background growth rate.

4.1 EXISTING TRAFFIC VOLUMES

The traffic impact analysis considers the weekday AM peak hour (between 7:00 AM and 9:00 AM) and the weekday PM peak hour (between 4:00 PM and 6:00 PM) as the study time frames. The extent of the existing roadway network to be studied consists of the following intersections:

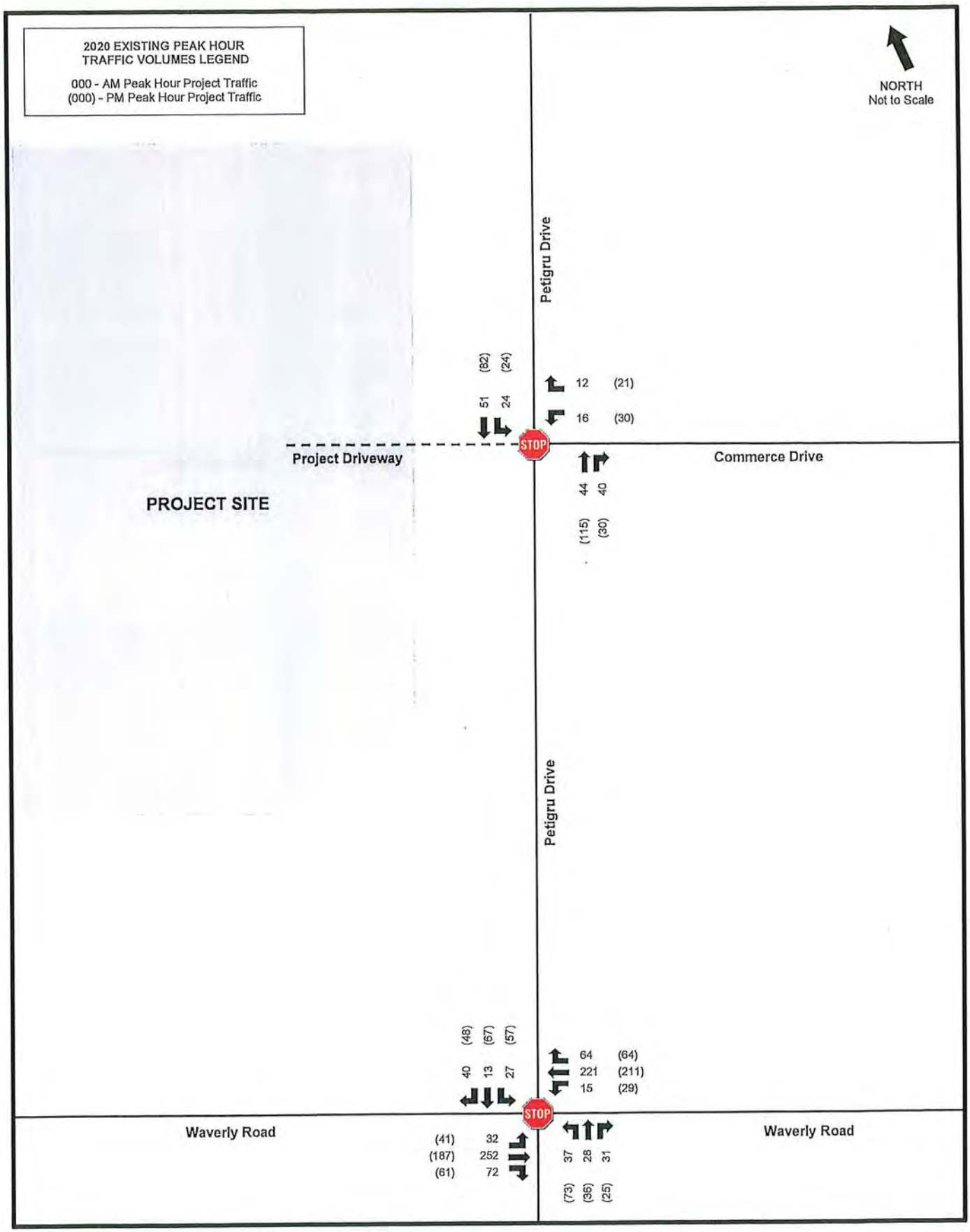
1) Petigru Drive & Commerce Drive; and
2) Petigru Drive & Waverly Road.

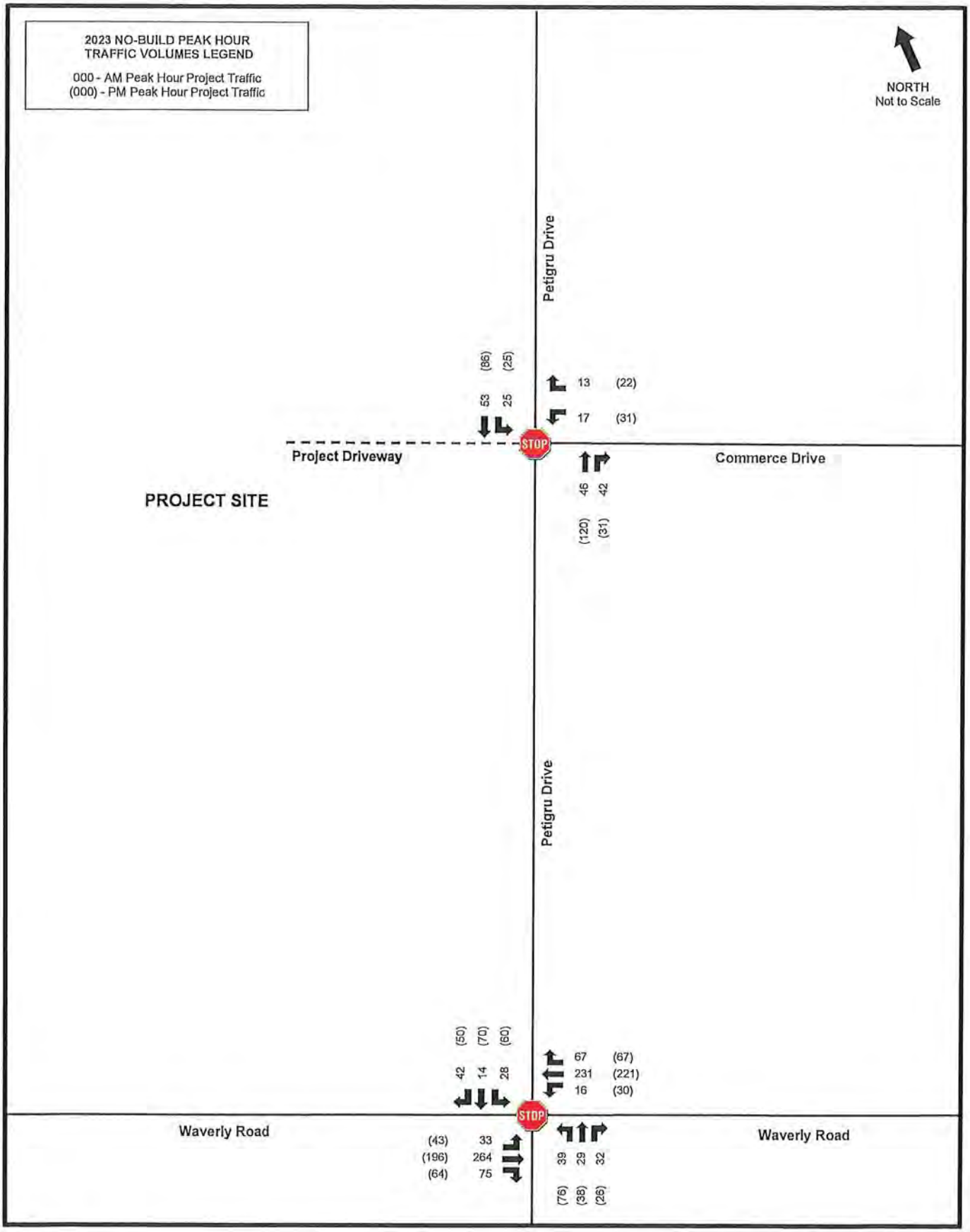
The raw traffic volume counts are provided in Appendix B. The factored existing traffic volumes are illustrated in Exhibit 4.1 and documented in Appendix C.

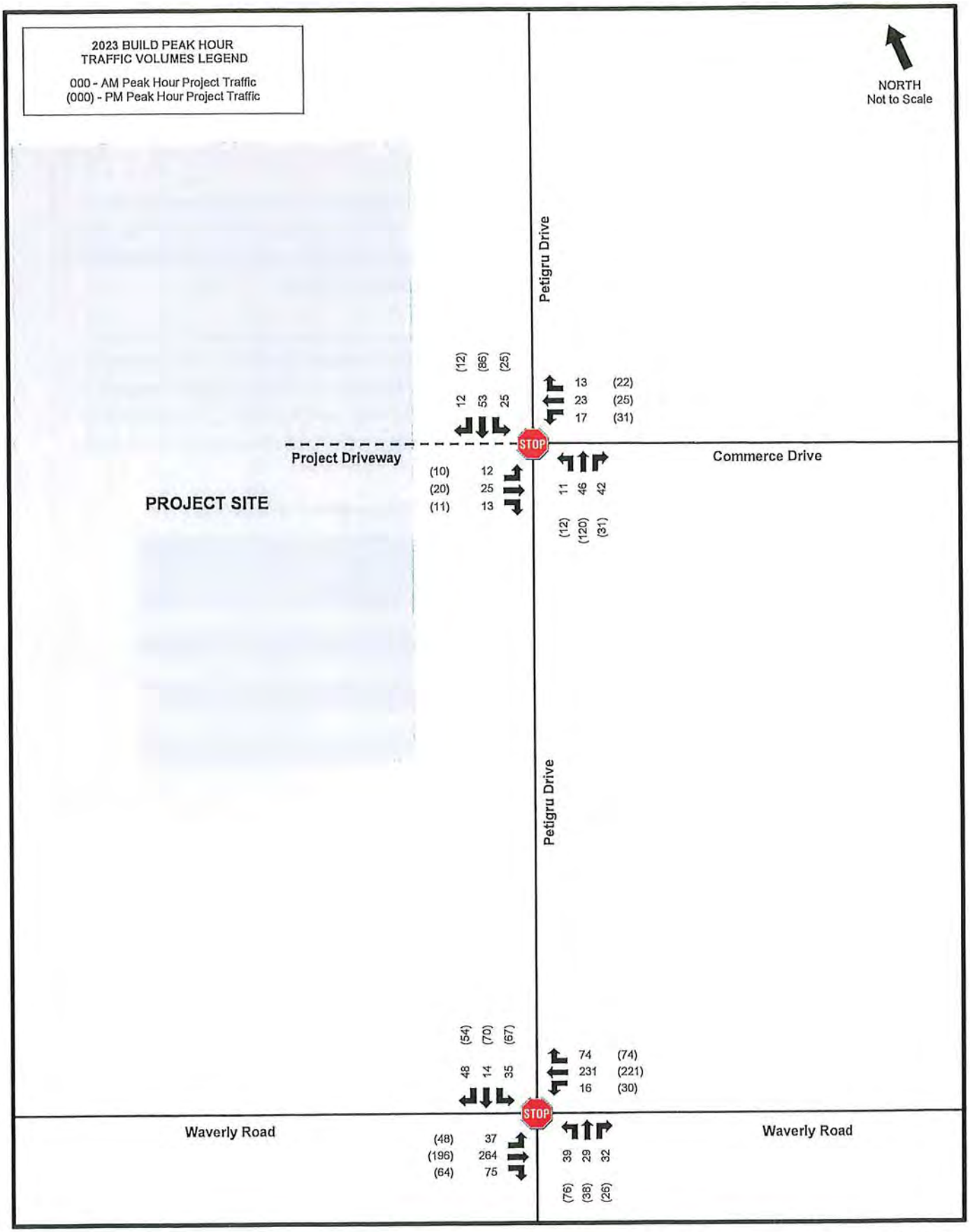
4.2 FUTURE TRAFFIC VOLUME PROJECTIONS

To develop an annual background growth rate for use in the analysis, historical count data along Waverly Road (SCDOT count stations #205 and #207) and US 17 (SCDOT count station #115) was reviewed over the past ten years. It was determined that the roadways have experienced a collective annual growth of 1.5%. Therefore, 1.5% was utilized to develop 2023 No Build traffic volumes, which are illustrated in Exhibit 4.2 and documented in Appendix C.

The Petigru Apartments Development project traffic volumes were then added to the 2023 No Build traffic volumes to develop 2023 Build traffic volumes, which are illustrated in Exhibit 4.3 and documented in Appendix C.


2020 EXISTING PEAK HOUR
TRAFFIC VOLUMES LEGEND
000 - AM Peak Hour Project Traffic
(000) - PM Peak Hour Project Traffic
NORTH
Not to Scale
Petigru Drive
12 (21)
16 (30)
51 (82)
24 (24)
STOP
Project Driveway
Commerce Drive
44 (115)
40 (30)
PROJECT SITE
Petigru Drive
64 (64)
221 (211)
15 (29)
40 (48)
13 (57)
27 (57)
STOP
Waverly Road
(41) 32
(187) 252
(61) 72
37 (73)
28 (36)
31 (25)
Waverly Road


2023 NO-BUILD PEAK HOUR
TRAFFIC VOLUMES LEGEND
000 - AM Peak Hour Project Traffic
(000) - PM Peak Hour Project Traffic
NORTH
Not to Scale
Petigru Drive
Petigru Drive
Project Driveway
Commerce Drive
PROJECT SITE
Waverly Road
Waverly Road
STOP
STOP
53 25
(86) (25)
13 (22)
17 (31)
46 42
(120) (31)
42 14 28
(50) (70) (60)
67 (67)
231 (221)
16 (30)
(43) 33
(196) 264
(64) 75
39 29 32
(76) (38) (26)


2023 BUILD PEAK HOUR
TRAFFIC VOLUMES LEGEND
000 - AM Peak Hour Project Traffic
(000) - PM Peak Hour Project Traffic
NORTH
Not to Scale
Petigru Drive
Project Driveway
Commerce Drive
PROJECT SITE
Petigru Drive
Waverly Road
Waverly Road
STOP
STOP
12 (12)
53 (86)
25 (25)
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23 (25)
17 (31)
(10) 12
(20) 25
(11) 13
11 (12)
46 (120)
42 (31)
48 (54)
14 (70)
35 (67)
74 (74)
231 (221)
16 (30)
(48) 37
(196) 264
(64) 75
39 (76)
29 (38)
32 (26)

5.0 TRAFFIC IMPACT ANALYSIS

Using the existing and projected traffic volumes previously discussed, intersection analysis was conducted for the project driveway intersection considering 2020 Existing conditions, 2023 No Build conditions, and 2023 Build conditions. This analysis was conducted using the Transportation Research Board's *Highway Capacity Manual 2010 (HCM 2010)* methodologies of the *Synchro*, Version 10 software for intersection analysis.

Intersection level of service (LOS) grades range from LOS A to LOS F, which are directly related to the level of control delay at the intersection and characterize the operational conditions of the intersection traffic flow. LOS A operations typically represent ideal, free-flow conditions where vehicles experience little to no delays, and LOS F operations typically represent poor, forced-flow (bumper-to-bumper) conditions with high vehicular delays, and are generally considered undesirable. Table 5.1 summarizes the *HCM 2010* control delay thresholds associated with each LOS grade for unsignalized intersections.

Table 5.1 – *HCM 2010* LOS Criteria for Unsignalized & Signalized Intersections

Unsignalized Intersections	
LOS	Control Delay Per Vehicle (seconds)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Signalized Intersections	
LOS	Control Delay Per Vehicle (seconds)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

5.1 EXISTING TRAFFIC VOLUMES

As part of the intersection analysis, SCDOT's default *Synchro* parameters were utilized. The 2020 traffic counts peak hour factors (PHF) were utilized in the analysis of existing and future-year conditions with a minimum PHF of 0.90 and maximum PHF of 0.95 being considered for the future-year conditions. The 2020 heavy vehicle percentages, as previously discussed, were utilized in the analysis, with a minimum percentage of 2% considered. The existing lane geometry was utilized for the analysis of existing and future-year scenarios.

Using the *Synchro* software, intersection analysis was conducted for 2020 Existing conditions, 2023 No Build conditions, and 2023 Build conditions for the weekday AM peak hour and the weekday PM peak hour time periods. The results of the intersection analysis for existing peak and future-year conditions for the weekday AM and PM peak hour time periods are summarized in **Table 5.2**. For signalized intersections, the overall intersection LOS and delay results are evaluated for acceptable operation, while for the unsignalized intersections, the LOS and delay results are evaluated for the worst-case minor-street approaches only, as based upon HCM 2010 methodologies for two-way stop-controlled intersections.

Table 5.2 – Intersection Analysis Results

Intersection	Control	LOS/Delay (seconds)					
		2020 Existing Conditions		2023 No Build Conditions		2023 Build Conditions	
		AM	PM	AM	PM	AM	PM
Petigru Drive & Commerce Drive/Project Driveway	*Two-Way Stop*	A/9.4 (WB)	B/10.3 (WB)	A/9.4 (WB)	B/10.2 (WB)	B/10.5 (WB)	B/11.6 (WB)
Petigru Drive & Waverly Road	*Two-Way Stop*	D/28.6 (NB)	D/29.2 (NB)	C/19.7 (NB)	D/31.5 (NB)	C/20.3 (NB)	D/33.2 (NB)

Note: LOS/Delay is shown for the worst-case minor-street approach of the two-way stop-controlled intersections.

The results of the intersection analysis indicate that the study intersections currently operate, and are expected to operate at an acceptable LOS with development of the Petigru Apartments Development in 2023.

As previously mentioned, per SCDOT's default Synchro parameters, the existing PHFs were used for analyzing the 2020 Existing Conditions and a PHF of 0.90 was used for the future-year 2023 conditions at the intersection of Petigru Drive & Waverly Road. As a result, the LOS at the Petigru Drive & Waverly Road intersection is projected to improve in the 2023 future-year conditions. A cursory review was performed utilizing the existing PHFs in the future-year conditions, and both the No-Build and Build Conditions are projected to experience undesirable delays.

It should be noted that while there is some project-related traffic heading south on Petigru Drive to the intersection of Waverly Road & Petigru Drive, the additional volume is not projected to significantly affect the operation of that intersection. However, the existing geometric characteristics, including the offset side street approaches, are not ideal and should be considered for improvements with or without the Petigru Apartments Development. Based on discussions with Georgetown County, it is understood that the intersection was previously planned to be reconstructed as a roundabout and funding for the project exists. It is recommended that the county and SCDOT pursue the reconstruction of the intersection as a roundabout or a realigned intersection.

Worksheets documenting the intersection analysis are provided in Appendix D for 2020 Existing conditions, Appendix E for 2023 No Build conditions and Appendix F for 2023 Build conditions.

5.2 TURN LANE ANALYSIS

An analysis was conducted to determine the potential need for exclusive turn lanes for the proposed ingress/egress movements at the proposed project driveway along Petigru Drive. This analysis was conducted utilizing the criteria documented in SCDOT's *ARMS* manual (2008) and *Roadway Design Manual* (2017).

The need for exclusive right-turn lanes is based upon the criteria documented in Section 9.5.1.1 of the *Roadway Design Manual*, which consists of nine considerations. These considerations and applications for the proposed project driveway along Petigru Drive are listed below.

1) *at a free-flowing leg of any unsignalized intersection on a two-lane urban or rural highway which satisfies the criteria in Figure 9.5-A;*

   The Petigru Apartments Development Project Driveway along Petigru Drive was analyzed for an exclusive right-turn lane according to the Roadway Design Manual. The analysis shows that the project driveway does not satisfy the criteria for an exclusive right-turn lane. Worksheets including the turn-lane analysis are provided in Appendix G.

2) *at the free-flowing leg of any unsignalized intersection on a high-speed (50 miles per hour or greater), four-lane urban or rural highway which satisfies the criteria in Figure 9.5-B;*

   This criterion is not applicable as Petigru Drive is not a four-lane highway.

3) *at the free-flowing leg of any unsignalized intersection on a six-lane urban or rural highway;*

   This criterion is not applicable as Petigru Drive is not a six-lane urban highway.

4) *at any intersection where a capacity analysis determines a right-turn lane is necessary to meet the overall level-of-service criteria;*

   The intersection analysis results shown in **Table 5.2** suggest that the project driveway intersection along Petigru Drive would operate at an acceptable LOS. Therefore, this criterion is not applicable.

5) *as a general rule, at any signalized intersection where the projected right-turning volume is greater than 300 vehicles per hour and where there are greater than 300 vehicles per hour per lane on the mainline (A traffic analysis will be required if the turning volumes are greater than 300 vehicles per hour.);*

   The project driveway intersection is not proposed to be signalized. Therefore, this criterion is not applicable.

6) *for uniformity of intersection design along the highway if other intersections have right-turn lanes;*

   No right turn lanes are provided at other similar intersections along Petigru Drive. Therefore, this criterion is not applicable.

7) *At any intersection where the mainline is curved to the left and where the mainline curve requires superelevation;*

   The mainline is not curved at the project driveway intersection; therefore, this criterion is not applicable.

8) *at railroad crossings where the railroad is paralleled to the facility and is located close to the intersection and where a right-turn lane would be desirable to store queued vehicles avoiding interference with the movement of through traffic; or*

   The project driveway intersection is not near railroad facilities; therefore, this criterion is not applicable.

9) *at any intersection where the crash experience, existing traffic operations, sight distance restrictions (e.g., intersection beyond a crest vertical curve), or engineering judgment indicates a significant conflict related to right turning vehicles.*

   No issues with crashes, traffic operations, or sight distance are known; therefore, this criterion is not applicable.

Based on the *Roadway Design Manual* guidelines, an exclusive right-turn lane is not recommended at the proposed project driveway along Petigru Drive.

The need for exclusive left-turn lanes is based upon the criteria documented in Section 9.5.1.2 of the *Roadway Design Manual*, which consists of nine considerations. These considerations and applications for the proposed project driveway along Petigru Drive are listed below:

1) *at any unsignalized intersection on principal, high-speed rural highways with other arterials or collectors;*

   This criterion is not applicable as Petigru Drive is not a principal arterial or high-speed rural highway.

2) *at any unsignalized intersection on a two-lane urban or rural highway that satisfies the criteria in Figures 9.5-C, 9.5-D, 9.5-E, 9.5-F, or 9.5-G;*

   The Petigru Apartments Development Project Driveway along Petigru Drive was analyzed for an exclusive left-turn lane according to the Roadway Design Manual. The analysis shows that the project driveway does not satisfy the criteria for an exclusive left-turn lane. Worksheets including the turn-lane analysis are provided in Appendix G.

3) *at any intersection where a capacity analysis determines a left-turn lane is necessary to meet the level-of-service criteria;*

   The intersection analysis results shown in **Table 5.2** suggest that the project driveway intersection along Petigru Drive would operate at an acceptable LOS. Therefore, this criterion is not applicable.

4) *at any signalized intersection where the left-turn volume is 300 vehicles per hour or more, conduct a traffic review to determine if dual left-turn lanes are required;*

   The project driveway intersection along Petigru Drive is not proposed to be signalized. Therefore, this criterion is not applicable.

5) *as a general rule, at any intersection where the left-turning volume is 100 vehicles per hour (for a single turn lane) or 300 vehicles per hour (for a dual turn lane);*

   As shown in Exhibit 4.3, the left-turning volumes at the Petigru Drive & proposed Petigru Apartments Development Project Driveway/Commerce Drive intersection are lesser than the threshold(s) listed. Therefore, this criterion is not applicable.

6) *at all entrances to major residential, commercial and industrial developments;*

   Although the Petigru Apartments Development can be classified as a significant residential development, as shown in Exhibit 4.3, the projected left-turning volumes at the project driveway intersection are considerably low. Therefore, this criterion is not applicable.

7) *at all median crossovers;*

   There are no median crossovers at the project driveway intersection along Petigru Drive. Therefore, this criterion is not applicable.

8) *for uniformity of intersection design along the highway if other intersections have left-turn lanes (i.e., to satisfy driver expectancy); or*

   No exclusive left-turn lanes are provided at other similar intersections along Petigru Drive. Therefore, this criterion is not applicable.

9) *at any intersection where crash experience, traffic operations, sight distance restrictions (e.g., intersection beyond a crest vertical curve), or engineering judgment indicates a significant conflict related to left-turning vehicles.*

   No issues with crashes, traffic operations, or sight distance are known; therefore, this criterion is not applicable.

Based on the *Roadway Design Manual* guidelines, an exclusive left-turn lane is not recommended at the proposed project driveway along Petigru Drive.

6.0 SUMMARY OF FINDINGS AND RECOMMENDATIONS

The purpose of this report is to document a traffic impact analysis for the proposed Petigru Apartments Development site in accordance with SCDOT and Georgetown County guidelines. The proposed Petigru Apartments Development site is located west of US 17 along Petigru Drive between Tiller Road and Godfrey Road in the vicinity of Pawleys Island, South Carolina and will consist of 182 apartment units and 10,000 square feet of office space.

Access to the development will be provided through one proposed full access point aligning with Commerce Drive and one existing full access point along Petigru Drive. The proposed project driveway fulfills the SCDOT driveway spacing criteria.

The results of the intersection capacity analysis indicate that the study intersections currently operate, and are expected to continue operating at an acceptable LOS with development of the Petigru Apartments Development in 2023.

Based on the *Roadway Design Manual* guidelines, exclusive right-turn or left-turn lanes are not recommended at the proposed project driveway along Petigru Drive.

Appendix A: Trip Generation Estimates Worksheet

TRIP GENERATION ESTIMATES

Petigru Apartments TIA

Weekday Daily

TRIP GENERATION CHARACTERISTICS						DIRECT. DISTRIB.		GROSS TRIPS			INTERNAL CAPTURE TRIPS				PASS-BY CAPTURE TRIPS				NEW EXTERNAL TRIPS		
Land Use	Ed.	LUC	Scale	Unit	Equation/Rate	In	Out	In	Out	Total	%	In	Out	Trips	%	In	Out	Trips	In	Out	Total
Multifamily Housing (Mid-Rise)	10th	221	182	DU	T = 5.45 (X) - 1.75	50%	50%	495	495	990	2%	1	20	21	0%	0	0	0	494	475	969
General Office Building	10th	710	10	KSF	Ln(T) = 0.97 Ln(X) + 2.5	50%	50%	57	57	114	18%	20	1	21	0%	0	0	0	37	56	93
							Total	552	552	1,104	4%	21	21	42	0%	0	0	0	531	531	1,062

Weekday AM Peak Hour

TRIP GENERATION CHARACTERISTICS						DIRECT. DISTRIB.		GROSS TRIPS			INTERNAL CAPTURE TRIPS				PASS-BY CAPTURE TRIPS				NEW EXTERNAL TRIPS		
Land Use	Ed.	LUC	Scale	Unit	Equation/Rate	In	Out	In	Out	Total	%	In	Out	Trips	%	In	Out	Trips	In	Out	Total
Multifamily Housing (Mid-Rise)	10th	221	182	DU	Ln(T) = 0.98 Ln(X) - 0.98	26%	74%	16	46	62	2%	0	1	1	0%	0	0	0	16	45	61
General Office Building	10th	710	10	KSF	T = 0.94 (X) + 26.49	86%	14%	31	5	36	3%	1	0	1	0%	0	0	0	30	5	35
							Total	47	51	98	2%	1	1	2	0%	0	0	0	46	50	96

Weekday PM Peak Hour

TRIP GENERATION CHARACTERISTICS						DIRECT. DISTRIB.		GROSS TRIPS			INTERNAL CAPTURE TRIPS				PASS-BY CAPTURE TRIPS				NEW EXTERNAL TRIPS		
Land Use	Ed.	LUC	Scale	Unit	Equation/Rate	In	Out	In	Out	Total	%	In	Out	Trips	%	In	Out	Trips	In	Out	Total
Multifamily Housing (Mid-Rise)	10th	221	182	DU	Ln(T) = 0.96 Ln(X) - 0.63	61%	39%	48	31	79	1%	0	1	1	0%	0	0	0	48	30	78
General Office Building	10th	710	10	KSF	Ln(T) = 0.95 Ln(X) + 0.36	16%	84%	2	11	13	8%	1	0	1	0%	0	0	0	1	11	12
							Total	50	42	92	2%	1	1	2	0%	0	0	0	49	41	90

Appendix B: Traffic Count Data

South Carolina
Department of Transportation

TO: Traffic Engineering

FROM: Rob Perry, P.E., Director of Traffic Engineering Rob Perry

DATE: July 29, 2020

RE: **Revised Guidance for conducting Traffic Impact Studies during COVID19**

Due to COVID 19, many South Carolina schools statewide have elected to begin the 2020-2021 school year virtually. In addition, traffic volumes remain over 10% below average for volumes statewide. Traffic Engineering is providing this updated guidance memorandum to assist with the drafting, review and approval of Traffic Impact Studies (TIS) for developments and schools seeking encroachment permits. To date, some Districts have provided similar guidance to developers and their Consulting Firms approving inclusion of older count data, with additional instructions such as applying inflationary factors to older counts based on more recent counts taken in the vicinity of a proposed development, school or tourist destination such as beaches. This memorandum supersedes the guidance memorandum issued by Traffic Engineering May 5, 2020.

Consulting Firms developing a TIS should coordinate an appropriate manner for approval of traffic counts with District Traffic Engineers (DTE) on a case by case basis as a one size fits all approach is impractical. However, this memorandum provides multiple options to acquire and include counts for an individual TIS. Any of these three options are permissible for count collections.

1. If count data is available over the past five years and collected when schools were in session those counts may be included in a TIS. A calculated historical growth rate should be recommended by the Consulting Firm performing the TIS to include the basis for it, and approved by the DTE prior to submission of the TIS.

2. Consulting Firms may request to perform new counts with the addition of a 12% growth factor until schools are back in session, and average volumes normalize. DTE's may approve this request on a case by case basis, and approval shall depend on the location of the counts.

3. Historical count data provided by Real Time Data companies may be purchased by Consulting Firms and included in a TIS, but the data must be within the last five years, when schools were in session, and with an accuracy validation included in the TIS. Should the historical count data be over 12-months old an inflationary factor shall be recommended by the Consulting Firm, and approved by the DTE prior to submission of the TIS.

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Traffic counts through various products may be readily obtained from SCDOT's website: https://www.scdot.org/travel/travel-trafficdata.aspx

REP:rep
ec: Andrew T. Leaphart, P.E., Chief Engineer for Operations
File: TE/REP

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March 31, 2008

Mr. James Rice, AIA
SGA Architecture, LLC
245 Business Center Lane - Suite 4B
Pawleys Island, South Carolina 29585

RE: Traffic Impact Analysis for Waccamaw Business Park
Pawleys Island, SC

Dear Mr. Rice:

Iteris, Inc. has completed a traffic impact analysis for the proposed Waccamaw Business Park in Pawleys Island, South Carolina. The site is located on the west side of Petigru Drive, north of Waverly Road, across from Tiller and Commerce Drives. The development will consist of 194,200 square feet of "flex space" – about 1/3rd office and 2/3rd warehouse/shop to be developed over two phases. The entire site is projected to be built-out within four years, by 2012. Access to the site is proposed via three drives on Petigru Drive. Figure 1 illustrates the site location.

The purpose of this study was to determine the traffic impact of the proposed development on the area roadways and to determine if any road improvements are needed to accommodate the traffic generated by the site. The following represents the data collection, analysis and findings for this review:

AREA ROAD SYSTEM

The major roadways providing access to the site are US-17, Waverly Road, Martin Luther King (MLK) Road and Petigru Drive. These roadways are described below:

US-17 is a north-south five-lane arterial with a posted speed limit of 45 mph in the site vicinity. US-17 is under the jurisdiction of the South Carolina Department of Transportation (SCDOT).

Waverly Road is a two-lane northwest-southeast roadway with a posted speed limit of 35 mph. The roadway is under the jurisdiction of the SCDOT and its intersection with US-17 is controlled by a traffic signal. North Causeway Road creates the fourth leg to the intersection.

MLK Road is a two-lane northwest-southeast roadway with a posted speed limit of 45 mph. The roadway is under the jurisdiction of the SCDOT and its intersection with US-17 is controlled by a traffic signal. Access for The Enclave creates the fourth leg to the intersection.

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SITE LOCATION

Waccamaw Business Park: Pawleys Island, SC

Figure 1

Petigru Drive is a two-lane north-south roadway providing direct access to the site. The roadway is under the jurisdiction of the SCDOT and has a posted speed limit of 35 mph southbound and 45 mph northbound in the site vicinity. The Petigru/Waverly Road and Petigru/MLK Road intersections are unsignalized and controlled by stop signs on Petigru.

There are other two-lane local streets such as Tiller Drive and Commerce Drive that can provide access to the site as well. Currently these roadways serve small businesses, the library, and other commercial uses in the site vicinity.

PROPOSED ROAD IMPROVEMENTS

There are road improvements proposed for two of the study intersections on US-17. At the US-17/MLK Road intersection, a southbound left turn lane will be striped and the traffic signal will be modified to serve The Enclave development. At the US-17/Waverly Road intersection, an eastbound right turn lane from Waverly onto US-17 will be constructed. The improvement has funding but no construction schedule as of yet. For the purposes of this study, the improvements for each intersection were assumed to be implemented by 2012.

EXISTING TRAFFIC VOLUMES

To determine the traffic impact of the site on the area roadways, it was necessary to obtain current traffic information for critical intersections in the site vicinity. Therefore, traffic data was collected at the following intersections:

- Waverly Road/Petigru Drive
- MLK Road/Petigru Drive
- US-17/Waverly Road
- US-17/MLK Road

Peak hour traffic counts were performed at the two Petigru intersections on Tuesday, March 11, 2008 from 7:00-9:00 A.M. and 4:00-6:00 P.M. These hours represent the peak periods for traffic during an average weekday. Peak hour counts conducted in October 2007 were obtained for the two US-17 intersections. The peak hours for the intersections were found to be 7:30 A.M.-8:30 A.M. and 4:30 P.M.-5:30 P.M. A copy of the counts is attached.

The 2008 peak hour traffic volumes are illustrated on Figure 2.

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EXISTING TRAFFIC VOLUMES

Waccamaw Business Park: Pawleys Island, SC

Figure 2

BACKGROUND TRAFFIC VOLUMES

Background traffic takes into account the following items:

A. The additional traffic on the roadway system that will be generated by approved developments in the area that may be completed by the time the build-out of the site occurs;

B. Traffic generated by other developments not known at this time;

C. The inherent growth in traffic.

The Waccamaw Business Park is projected to be built-out within four years (by 2012). Item A above was addressed by conferring with the Georgetown County Department of Planning and Code Enforcement. Based on these discussions, it was determined that the following approved developments will be generating traffic by 2012 and should be considered as part of the background traffic analysis:

- *The Enclave* - located on the east side of US-17, near MLK Road
- *Golden Oaks*, located just south of MLK Road, north of the Waccamaw Business Park

The trip generation and distribution for The Enclave development was obtained from a traffic study completed by Day Wilburn Associates for the site titled, *"The Enclave at Pawley's Island Traffic Impact Study"* dated September 2005. At build-out, the site is expected to contain 35 single-family homes and 13,068 square feet of general office. It is assumed the site would be built out by 2012.

The trip generation and distribution for the Golden Oaks development was obtained from a traffic study completed by Thomas & Hutton Engineering Co. titled, "*Golden Oaks Estates – Traffic Impact Study*" dated February 2008. The site is expected to contain 86 single-family homes. It is assumed the site would be built out by 2012.

The trip generation for each of the two background developments can be found in Table 1.

Table 1
2010 BACKGROUND DEVELOPMENT PEAK HOUR TRAFFIC VOLUMES

	Size	A.M. Peak-Hour			P.M. Peak-Hour		
		Entering	Exiting	Total	Entering	Exiting	Total
The Enclave	35 Homes 13,068 sf - Office	41	30	71	43	92	135
Golden Oaks	86 Homes	16	48	64	54	31	85
Total 2012 Trips		**57**	**78**	**135**	**97**	**123**	**220**

To account for the background traffic conditions in Items B and C over the next three years, a growth factor was applied to the 2008 existing traffic volumes shown on Figure 2. Based on historical growth in the County and accepted County growth rates, a three-percent per year growth factor was assumed and applied to the existing traffic volumes at the study intersections for four years.

The background development volumes shown in Table 1 were added to the increased 2008 existing traffic volumes to create the 2012 Background traffic scenario. The 2012 Background peak hour traffic volumes are illustrated on Figure 3.

TRIP GENERATION FOR SITE TRAFFIC

The number of trips that will be generated by the Waccamaw Business Park was estimated based on data contained in *Trip Generation, 7th Edition,* a reference manual published by the Institute of Transportation Engineers (ITE). The Business Park land-use (ITE #770) was found to best represent the trips generated by the site. However, this ITE land use will likely yield a higher trip generation rate than could realistically be expected by the site due to the "Resort Services District Zoning" limitations. Therefore, using the ITE trip generation rates provides a conservative analysis.

The projected peak-hour site-generated traffic volumes are shown in Table 2.

Table 2
PEAK HOUR SITE-GENERATED TRAFFIC VOLUMES

Land Use	Size	A.M. Peak-Hour			P.M. Peak-Hour		
		In	Out	Total	In	Out	Total
Business Park	194,200 sf	230	45	275	65	215	280

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2012 BACKGROUND TRAFFIC VOLUMES

Waccamaw Business Park: Pawleys Island, SC

Figure 3

At build-out, the site is projected to generate a total of 2,835 daily trips; however this is likely higher than what will actually occur.

It is also anticipated that due to zoning restrictions, the number of trucks that will be traveling to and from the site will be minimal.

DIRECTION OF APPROACH

The direction from which traffic will approach and depart the site was determined by an analysis of the existing travel patterns of vehicles and an evaluation of the area roadway system. This analysis resulted in the directions of approach shown in Table 3.

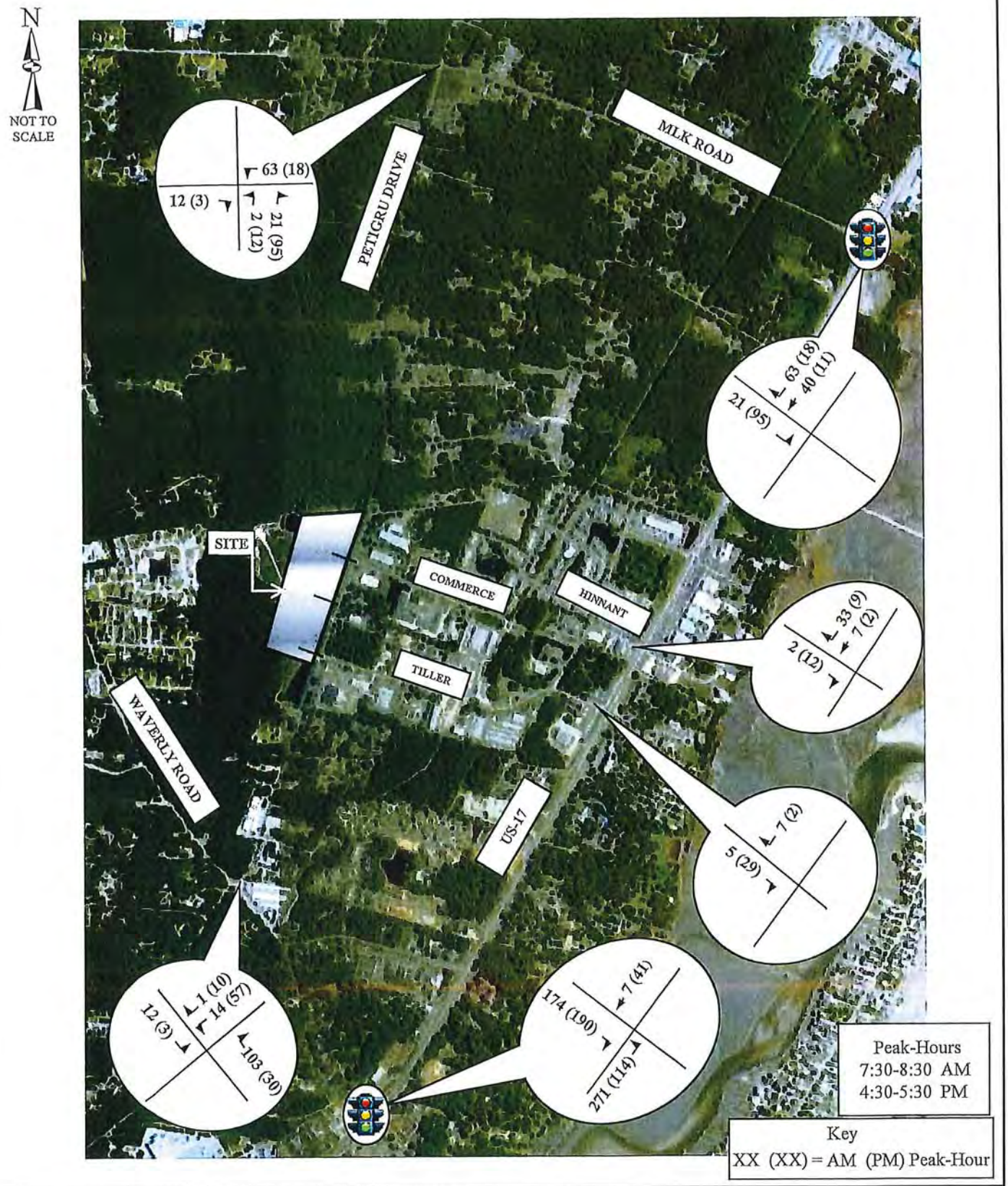
Table 3
DIRECTIONS OF APPROACH

	Percent Distribution
To/From the north on US-17	45
To/From the south on US-17	45
To/From the north on Waverly Road	5
To/From the north on MLK Road	5
TOTAL	**100%**

There are three site drives serving the site on Petigru Drive. The site trips shown in Table 2 were assigned to the surrounding roadway system according to the distribution described above in Table 3; the results of this assignment are illustrated on Figure 4. Figure 5 shows the trips assigned to the three site drives.

It should be noted that it was assumed that about 15-20 percent of the southbound US-17 traffic would use Tiller Drive or Commerce Drive (instead of MLK Road or Waverly Road) to access the site. In turn it was assumed that 15-20 percent of the exiting site traffic destined for southbound US-17 would also use these roadways.

The site traffic volumes shown on Figure 4 were then added to the 2012 Background Traffic volumes (Figure 3) to determine the 2012 Future Traffic volumes. The 2012 Future Traffic volumes are illustrated on Figure 6.



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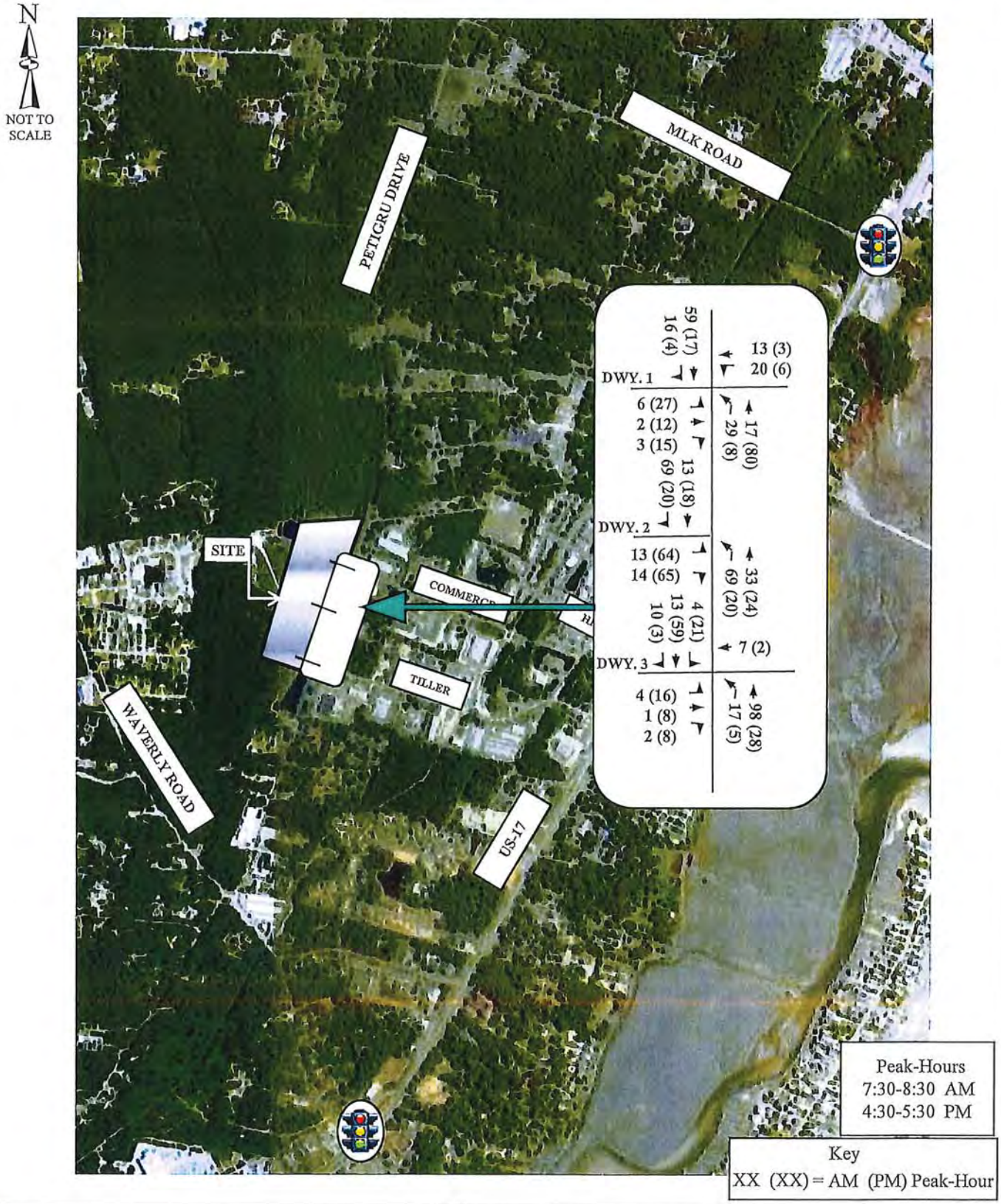
SITE-GENERATED TRAFFIC VOLUMES

Waccamaw Business Park: Pawleys Island, SC

Figure 4



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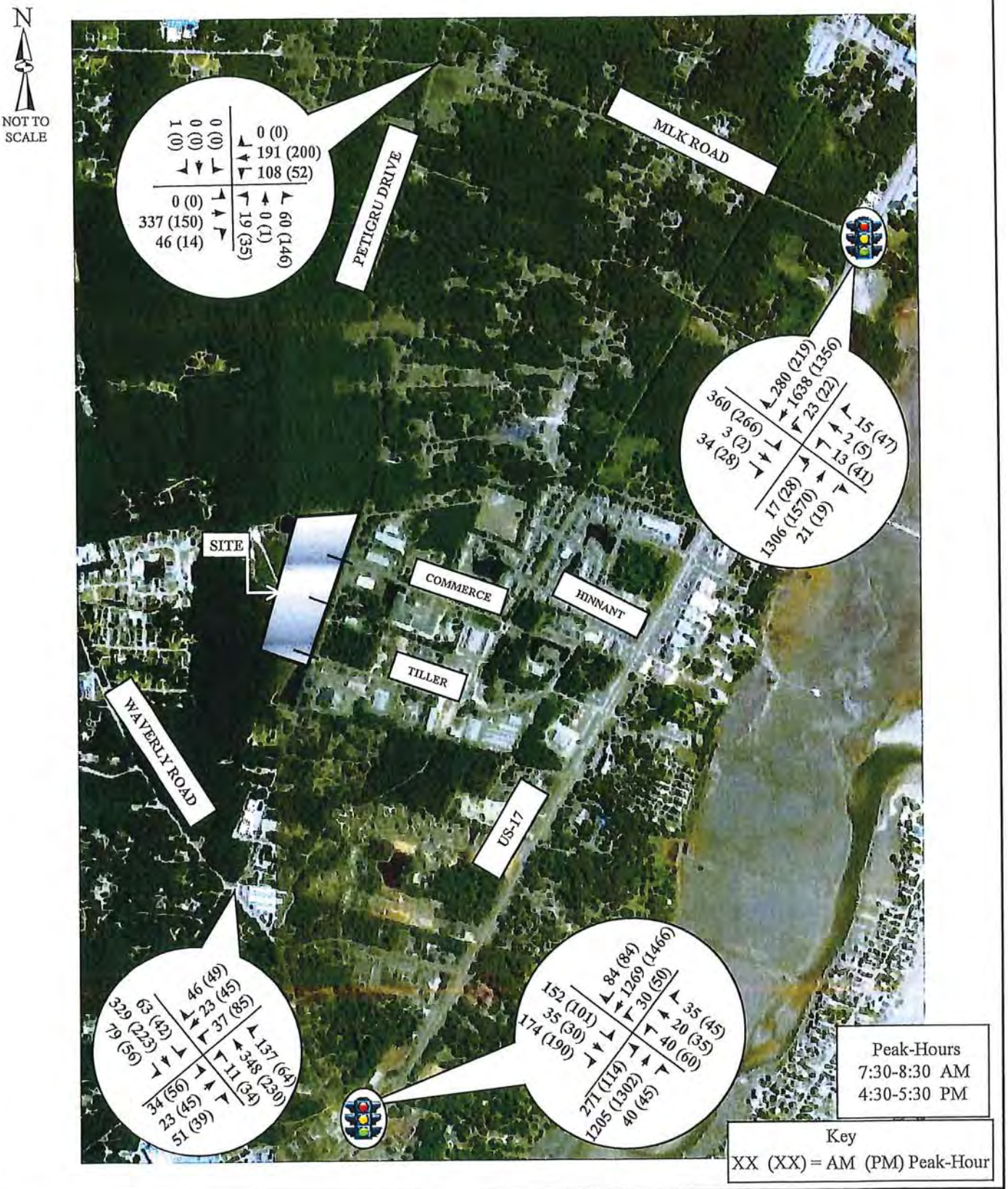
SITE DRIVEWAY TRAFFIC VOLUMES

Waccamaw Business Park: Pawleys Island, SC

Figure 5



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2012 FUTURE TRAFFIC VOLUMES

Waccamaw Business Park: Pawleys Island, SC

Figure 6

CAPACITY ANALYSES

The critical intersections identified for this study were analyzed according to the methodologies published in the *2000 Highway Capacity Manual*. The analysis determines the "Level of Service (LOS)" of the intersections and is based on factors such as the number and types of lanes, signal timing, traffic volumes, pedestrian activity, etc. Levels of service are expressed in a range from "A" through "F," with "A" being the highest level of service, and "F" representing the lowest level of service. Tables 4 and 5 show the thresholds for Levels of Service "A" through "F" for unsignalized and signalized intersections, respectively.

Table 4
LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Level of Service	Delay/Vehicle (seconds)	Description
A	< 10.0	Little or no delay, very low main street traffic.
B	10.1 to 15.0	Short traffic delays, many acceptable gaps.
C	15.1 to 25.0	Average traffic delays, frequent gaps still occur.
D	25.1 to 35.0	Long traffic delays, limited number of acceptable gaps.
E	35.1 to 50.0	Very long traffic delays, very small number of acceptable gaps.
F	> 50.0	Extreme traffic delays, virtually no acceptable gaps in traffic.

Table 5
LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Level of Service	Delay/Vehicle (seconds)	Description
A	< 10.0	Most vehicles do not stop at all.
B	10.1 to 20.0	Some vehicles stop.
C	20.1 to 35.0	The number of vehicles stopping is significant, although many pass through without stopping.
D	35.1 to 55.0	Many vehicles stop. Individual cycle failures are noticeable.
E	55.1 to 80.0	Considered to be the limit of acceptable delay. Individual cycle failures are frequent.
F	> 80.0	Unacceptable delay.

Capacity analyses were conducted at each intersection for the following conditions:

- Existing 2008 conditions;
- Background 2012 conditions without development of the site;
- Future 2012 conditions with site built-out.

The traffic engineering software, Synchro/SimTraffic Version 7 was used to perform the capacity analyses. The capacity analyses worksheets are attached, summarized in Table 6 and discussed in the following paragraphs.

Existing 2008 Capacity Analyses

As shown in Table 6 below, under 2008 ***Existing Conditions***, all intersections are operating at overall acceptable levels of service. All approaches to each intersection operate acceptably during each peak hour.

Background 2012 Capacity Analyses

Under 2012 ***Background Conditions***, without the site traffic added, all intersections continue to operate at overall acceptable levels of service during both peak hours. All approaches to each intersection will operate acceptably with the exception of the east and west approaches to the Petigru/Waverly Road intersection. The east and west Petigru approaches will operate at LOS "E" and LOS "F" respectively, during the A.M. peak hour.

It should be noted that the road improvements discussed earlier in this study that are proposed for the intersections of US-17/MLK Road and US-17/Waverly Road were considered to be in place for the Background and Future 2012 capacity analyses. A southbound left turn lane will be striped and the traffic signal will be modified at the US-17/MLK Road intersection and an eastbound right turn lane from Waverly onto US-17 will be constructed at the US-17/Waverly Road intersection.

Future 2012 Capacity Analyses

Under 2012 ***Future Conditions***, with the addition of site traffic, all intersections continue to operate at overall acceptable levels of service during both peak hours. All approaches to each intersection will operate acceptably with the exception of the east and west approaches to the Petigru/Waverly Road intersection. The east and west Petigru approaches will operate at LOS "F" during the A.M. peak hour.

As can be seen, by 2012 the east and west approaches to the Petigru/Waverly Road intersection will be operating at poor levels of service, even without the Waccamaw Business Park site traffic added to it. However, these poor levels of service only occur during the A.M. peak hour; during the P.M. peak hour all approaches operate acceptably. Furthermore, there is not enough traffic over the course of the day at the intersection to even warrant signalization.

Table 6
EXISTING, BACKGROUND, AND FUTURE CAPACITY ANALYSES

	EXISTING CONDITIONS		BACKGROUND CONDITIONS (2012)		FUTURE CONDITIONS (2012)	
	A.M. Peak	P.M. Peak	A.M. Peak	P.M. Peak	A.M. Peak	P.M. Peak
Approach	Delay/LOS	Delay/LOS	Delay/LOS	Delay/LOS	Delay/LOS	Delay/LOS
MLK/Petigru (Unsignalized)						
Overall	**1.9/A**	**2.6/A**	**2.0/A**	**2.4/A**	**3.5/A**	**4.4/A**
West	0.0/A	0.0/A	0.0/A	0.0/A	0.0/A	0.0/A
East	2.0/A	1.5/A	2.1/A	1.3/A	4.2/A	1.9/A
South	13.0/B	10.2/B	15.0/B	10.9/B	17.5/C	11.9/B
North	0.0/A	9.1/A	0.0/A	9.4/A	0.0/A	9.4/A
MLK/US-17 (Signalized)						
Overall	**15.8/B**	**8.4/A**	**23.5/C**	**11.6/B**	**27.4/C**	**14.9/B**
West	41.3/D	25.4/C	44.4/D	28.8/C	47.7/D	42.6/D
East	0.0/A	0.0/A	12.5/B	16.2/B	11.9/B	12.2/B
South	11.0/B	8.2/A	16.8/B	11.1/B	17.1/B	10.5/B
North	14.4/B	6.5/A	24.4/C	9.7/A	30.6/C	13.2/B
Waverly/US-17 (Signalized)						
Overall	**24.4/C**	**19.3/B**	**27.4/C**	**21.1/C**	**27.1/C**	**21.9/C**
West	31.6/C	17.3/B	20.9/C	15.6/B	30.8/C	16.6/B
East	13.9/B	15.3/B	15.7/B	17.8/B	22.8/C	17.9/B
South	18.6/B	18.3/B	20.1/C	17.7/B	20.9/C	17.7/B
North	29.3/C	20.9/C	37.3/D	25.5/C	33.1/C	27.2/C
Petigru/Waverly (Unsignalized)						
Overall	**6.1/A**	**6.0/A**	**9.8/B**	**7.2/A**	**42.2/D**	**10.8/A**
West	29.3/D	18.4/C	52.7/F	24.0/C	>200.0/F	26.2/D
East	25.4/D	16.0/C	40.3/E	19.4/C	135.7/F	33.2/D
South	1.5/A	1.2/A	1.7/A	1.3/A	2.3/A	1.4/A
North	0.4/A	1.1/A	0.4/A	1.2/A	0.4/A	1.1/A

SITE ACCESS AND AUXILIARY LANE REQUIREMENTS

Access for the site is proposed via three drives on Petigru. The south site access drive is to be located directly across from Tiller Drive and the north access drive is to be located across from Commerce Drive. The third drive will be between the two north and south drives.

To determine whether right or left turn auxiliary lanes would be warranted at the site drives, the South Carolina Highway Design Manual (SCDHM) was consulted. Based on the traffic volumes projected at each site drive (the highest peak hour right-turn volume was 69) and the guidelines in the SCDHM, it was determined that right turn deceleration lanes would not be needed at any of the site drives on Petigru Drive.

Similarly, the SCDHM was consulted to determine whether left turn lanes would be warranted at the site access drives. Based on the traffic volumes projected at each of these site drives (the highest peak hour left-turn volume was 69) and the guidelines in the SCDHM, it was determined that left turn auxiliary lanes would not be needed at any of the site drives on Petigru Drive.

CONCLUSIONS AND RECOMMENDATIONS

The conclusions of the study are as follows:

- The site at build-out is projected to generate 275 A.M. peak hour trips and 280 P.M. peak hour trips; however it is noted that due to the "Resort Services District" zoning that these trips are likely higher than would be expected.

- All study intersections are currently operating at acceptable levels of service. All the approaches to each of the intersections are operating at acceptable levels of service.

- Under 2012 background conditions, all study intersections will continue to operate at overall acceptable levels of service. At the Petigru/Waverly intersection, the east and west approaches to the intersection will operate at poor levels of service during the A.M. peak hour.

- Under 2012 future conditions, with the site traffic added, all study intersections will continue to operate at overall acceptable levels of service. At the Petigru/Waverly intersection, the east and west approaches to the intersection will continue to operate at poor levels of service during the A.M. peak hour. Traffic volumes over the course of the day at this intersection do not warrant a traffic signal.

- No right or left turn auxiliary lanes are needed at any of the site drives on Petigru to serve the site.

Based on this traffic analysis, it can be concluded that the site will have minimal impact on the area roadways and can be adequately accommodated by the area roadway system.

Please do not hesitate to contact us if you have any questions regarding this study.

Sincerely yours,

ITERIS, INC.

Eric J. Tripi, P.E., PTOE
Director of Operations

DEVELOPMENT SUMMARY

T.M.S. #: 04-0203-189-00-00 & 04-0203-189-02-00
DEED #: 1519-287
CURRENT ZONING: PD (BASED ON RESORT SERVICES)

UPLAND ACREAGE: 18.8 ACRES
WETLAND ACREAGE: 3.3 ACRES
TOTAL ACREAGE: 21.8 ACRES

TOTAL PERVIOUS: 11.8 ACRES (55%)
TOTAL IMPERVIOUS: 9.8 ACRES (45%)

TOTAL OPEN SPACE: >/=6.5 ACRES (>/=30%)

FLOOD ZONE: "X" AS SHOWN ON MAP 450097-0001-0, DATED MARCH 18, 1989

REQUIRED BUILDING SETBACKS FROM PD PROPERTY LINE:
NORTH SIDE: 30'
EAST SIDE/PETIGRU DRIVE: 50'
SOUTH SIDE: 50'
WEST SIDE: NOT REQUIRED (DUE TO EXISTING WETLANDS)

REQUIRED LANDSCAPE BUFFER SETBACKS FROM PD PROPERTY LINE:
NORTH SIDE: 20'
EAST SIDE: 10'
SOUTH SIDE: 50' (LEVEL 2 BUFFER)
WEST SIDE: NOT REQUIRED (DUE TO EXISTING WETLANDS)

BUILDING SUMMARY:
BLDG A: 36 DWELLING UNITS (3 STORY)
BLDG B: 6,200 SF (1-2 STORY)
BLDG C: 2 DWELLING UNITS (2 STORY)
BLDG D: 2 DWELLING UNITS (2 STORY)
BLDG E: MAINTENANCE/CARWASH (1 STORY)
BLDG F: 6,200 SF (1-2 STORY)
BLDG G: 6,200 SF (1-2 STORY)
BLDG H: 36 DWELLING UNITS (3 STORY)
BLDG I: 2 DWELLING UNITS (2 STORY)
BLDG J: 51 DWELLING UNITS (3 STORY)
BLDG K: 1,200 SF (1 STORY)
BLDG L: 4,400 SF LEASING/CLUBHOUSE (1 STORY)
BLDG M: 2,400 SF (1-2 STORY)
BLDG N: 10,000 SF GENERAL OFFICE/RETAIL/RESTAURANT MEDICAL (1-2 STORY)
BLDG O: 51 DWELLING UNITS (3 STORY)
BLDG P: 2 DWELLING UNITS (2 STORY)

AREA, YARD, & BLDG REQUIREMENTS:

BUILDING SETBACKS: SEE DEVELOPMENT SUMMARY

-15' SETBACK FROM WETLANDS
-20' MINIMUM BUILDING SEPARATION

LANDSCAPE BUFFER: SEE DEVELOPMENT SUMMARY

MAX BUILDING HEIGHT: 35'
(SEE GEORGETOWN COUNTY ZONING ORDINANCE)

PARKING REQUIREMENT:
-PARKING REQUIREMENTS SHALL BE BASED ON PROPERTY USE AS PERMITTED BY THIS PD. SEE GEORGETOWN COUNTY ARTICLE XI, OFF-STREET PARKING REGULATIONS TO CALCULATE OFF-STREET PARKING REQUIREMENTS.

PROPOSED USES:

GENERAL OFFICE:	22,080 SF
RESIDENTIAL:	197 UNITS
RESTAURANT, STANDARD:	2,500 SF
RETAIL:	5,000 SF
MEDICAL:	2,500 SF
SUITE LODGING: (5 UNITS @ 1,200 SF)	6,000 SF

PARKING REQUIREMENTS:

GENERAL OFFICE:	74	1 SPACE/300 SF
RESIDENTIAL:	324	VARIES BASED ON BEDROOMS (SEE SUMMARY CHART)
RESTAURANT, STANDARD:	25	1 SPACE/100 SF
RETAIL:	25	1 SPACE/200 SF
MEDICAL:	10	1 SPACE/250 SF
LODGING:	7.5	1.5 SPACES/DWELLING UNIT
PARKING REQUIRED*:	466 SPACES	
PROPOSED PARKING*:	572 SPACES	

*ANY CHANGES IN USE SHALL REQUIRE COMPLIANCE WITH THE MINIMUM PARKING REQUIREMENTS APPLICABLE TO THE NEW USE.

SIGNAGE:
THERE SHALL BE (2)TWO FREESTANDING, MONUMENT STYLE SIGNS FOR THE PROPOSED DEVELOPMENT: (SEE PLAN FOR PROPOSED LOCATIONS)

*ALL SIGNAGE SHALL COMPLY WITH THE WACCAMAW NECK COMMERCIAL CORRIDOR OVERLAY ZONE, ARTICLE XXI, SECTION 2100.605. GENERAL COMMERCIAL SIGNAGE REGULATIONS SHALL ALSO APPLY FOR BUILDING MOUNTED SIGNAGE.

GENERAL NOTES:
1. ALL CONSTRUCTION WILL MEET ARTICLE XXI, WACCAMAW NECK COMMERCIAL CORRIDOR OVERLAY ZONE DESIGN STANDARDS, WITH THE EXCEPTION OF SECTIONS 2100.405, 2100.6012 & 2100.6021.
2. SITE LIGHTING SHALL BE DESIGNED IN SUCH A WAY TO SHIELD ADJACENT NEIGHBORS FROM AMBIENT LIGHT.

AUGUST 2020 SPECIFIC NOTES

1. TO THE EXTENT PRACTICAL CHANGES HAVE BEEN LIMITED TO THE AREA WITHIN PARCEL 3. BUILDING B WAS SHIFTED TO FALL WITHIN PARCEL 2 AND THE ORIGINAL BUILDING C WAS ELIMINATED.
2. BACKGROUND INFORMATION IS FROM PREVIOUSLY APPROVED PUD.
3. THE RESIDENTIAL LAYOUT AND SUMMARY IS AN ESTIMATE OF POTENTIAL YIELD FOR PRELIMINARY PLANNING PURPOSES AND IS NOT A FINAL LAYOUT. THE LAYOUT MAY CHANGE IN THE FUTURE AS ALONG AS BUFFERING, SETBACKS, PARKING REQUIREMENTS AND NO MORE THAN 182 RESIDENTIAL UNITS ARE MET.

DENSITY SUMMARY

PARCEL 3 GROSS ACREAGE	±14.4 AC
TOTAL UNITS	182
MULTIFAMILY GROSS ACREAGE	±13.4 AC
WETLAND 1	±0.7 AC
CAR AREA	±1.2 AC
MULTIFAMILY NET ACREAGE	±11.5 AC.
COMMERCIAL GROSS	±1.0 AC
MULTIFAMILY GROSS DENSITY	13.6 DU/AC
MULTIFAMILY NET DENSITY	±15.8 DU/AC

*WETLANDS ARE SUBJECT TO RE-VERIFICATION, THEREFOR NET DENSITY MAY CHANGE UPON FINAL VERIFICATION AND PERMITTING.

LOCATION MAP
1" = 2,000'

RESIDENTIAL SUMMARY

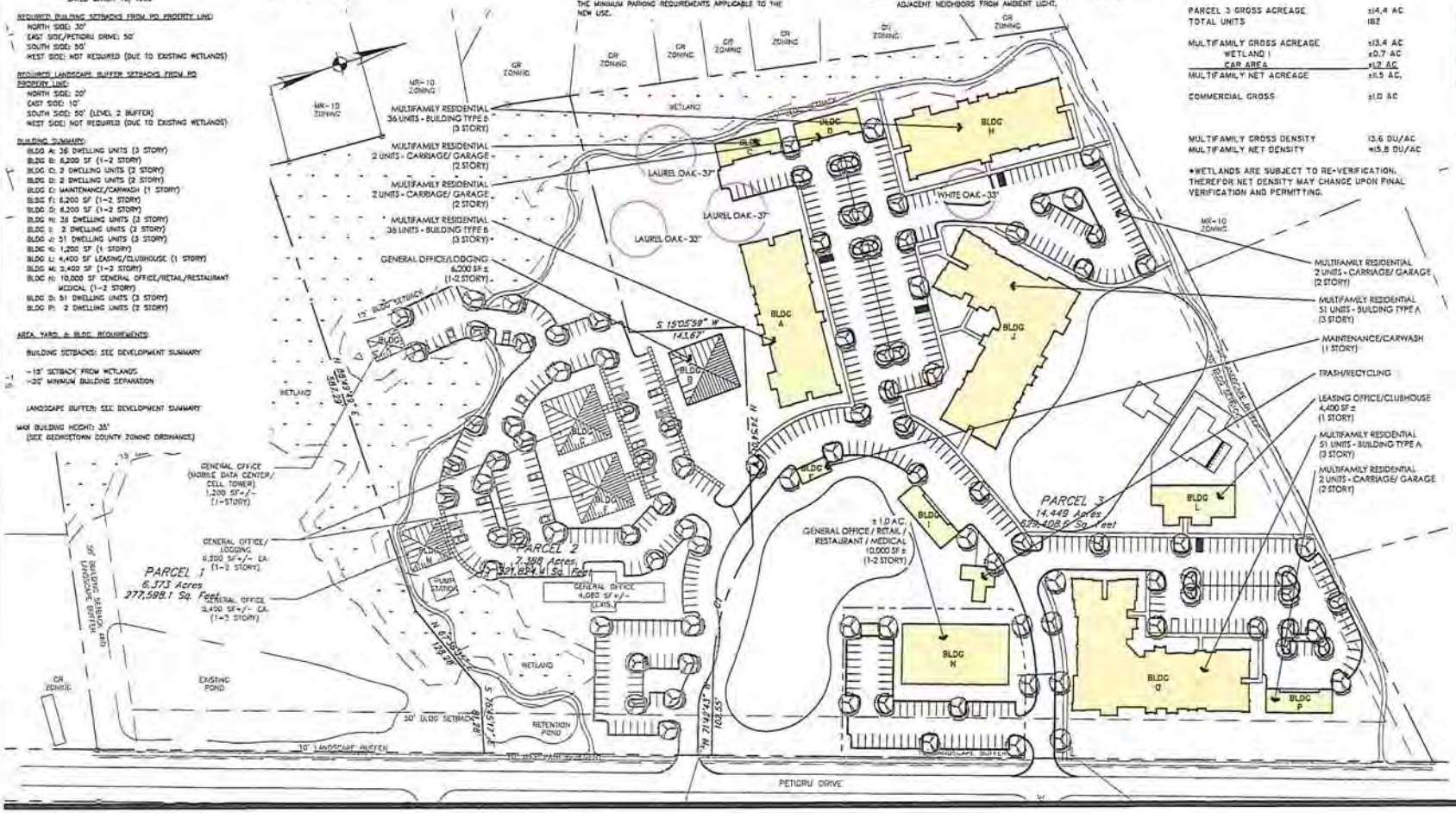
TYPE	Studio	1 BR	2 BR	3 BR	Total
Building A	3	21	21	6	51
Building A	3	21	21	6	51
Building B	0	15	21	0	36
Building B	0	15	21	0	36
Carriage	0	0	2	0	2
Carriage	0	0	2	0	2
Carriage	0	0	2	0	2
Carriage	0	0	2	0	2
Total	6	72	92	12	182
	3%	40%	51%	7%	100%
Parking Req	1.25	1.5	2	2	
	7.5	108	184	24	323.5

INTENT FOR DEVELOPMENT:

PLANNED DEVELOPMENT BASED ON RESORT SERVICES DISTRICT.

THE INTENT OF THE RESORT SERVICE DISTRICT IS TO PROMOTE AREAS FOR RESORT RELATED SERVICES AND INDUSTRIES WHICH ARE NOT SIGNIFICANTLY OBJECTIONABLE IN TERMS OF NOISE, ODOR, FUMES, ETC., AND EACH OPERATION IS COMPLETELY CONFINED WITHIN AN ENCLOSED BUILDING. THE RESORT-RELATED SERVICES SHOULD NOT HAVE A NEGATIVE EFFECT ON THE EXISTING LIFESTYLE OF THE AREA. THE REGULATIONS WHICH APPLY WITHIN THIS DISTRICT ARE DESIGNED TO ENCOURAGE THE FORMATION AND CONTINUANCE OF A COMPATIBLE ENVIRONMENT FOR USES GENERALLY CLASSIFIED TO BE SUPPORTIVE OF RESORT AREAS; PROTECT AND RESERVE UNDEVELOPED AREAS IN GEORGETOWN COUNTY WHICH ARE SUITABLE FOR SUCH PURPOSES, AND DISCOURAGE ENCROACHMENT BY THOSE INDUSTRIAL USES OR OTHER CAPABLE OF ADVERSELY AFFECTING THE BASIC RESORT CHARACTER OF THIS DISTRICT.

THE FOLLOWING USES SHALL BE PERMITTED WITHIN THIS PD:
-MULTIFAMILY RESIDENTIAL
-OFFICE
-RESEARCH CENTER
-REPAIR SERVICE(EXCLUDING AUTOMOTIVE)
-CALL CENTER
-BUSINESS SERVICES
-EDUCATIONAL FACILITY
-PRINTING BUSINESS
-RESTAURANT
-RETAIL STORE
-BOOK STORE
-GIFT SHOP
-DAY CARE CENTER
-SPA
-MEDICAL CLINIC
-WAREHOUSE
-PUBLIC USE
-ACCESSORY USES
-CONFERENCE CENTER/SPECIAL EVENTS
-LODGING
-CLEMOSYNARY, RELIGIOUS OR PHILANTHROPIC INSTITUTION
-COMMUNICATION TOWERS (SUBJECT TO THE GEORGETOWN COUNTY COMMUNICATIONS TOWER ORDINANCE)
-LIGHT MANUFACTURING (PROVIDED ALL ACTIVITIES ARE INSIDE ENCLOSED BUILDING AND NO DISCERNIBLE NOISE OR FUMES ARE GENERATED)



PREPARED FOR:

GRAYCLIFF CAPITAL

GRAPHIC SCALE: 1 INCH = 40 FEET

ZONING EXHIBIT
Pawleys Island Business Commons Planned Development

GEORGETOWN COUNTY, SC
SEPTEMBER 16, 2020

THOMAS & HUTTON
611 Burroughs & Chapin Blvd.; Suite 202
Myrtle Beach, SC 29577 • 843-839-8422
www.thomasandhutton.com

This map illustrates a general plan of the development which is for discussion purposes only, does not bind or bind the owner/developer, and is subject to change and revision without prior written notice to the holder. Dimensions, boundaries and position locations are for illustrative purposes only and are subject to an accurate survey and property description.
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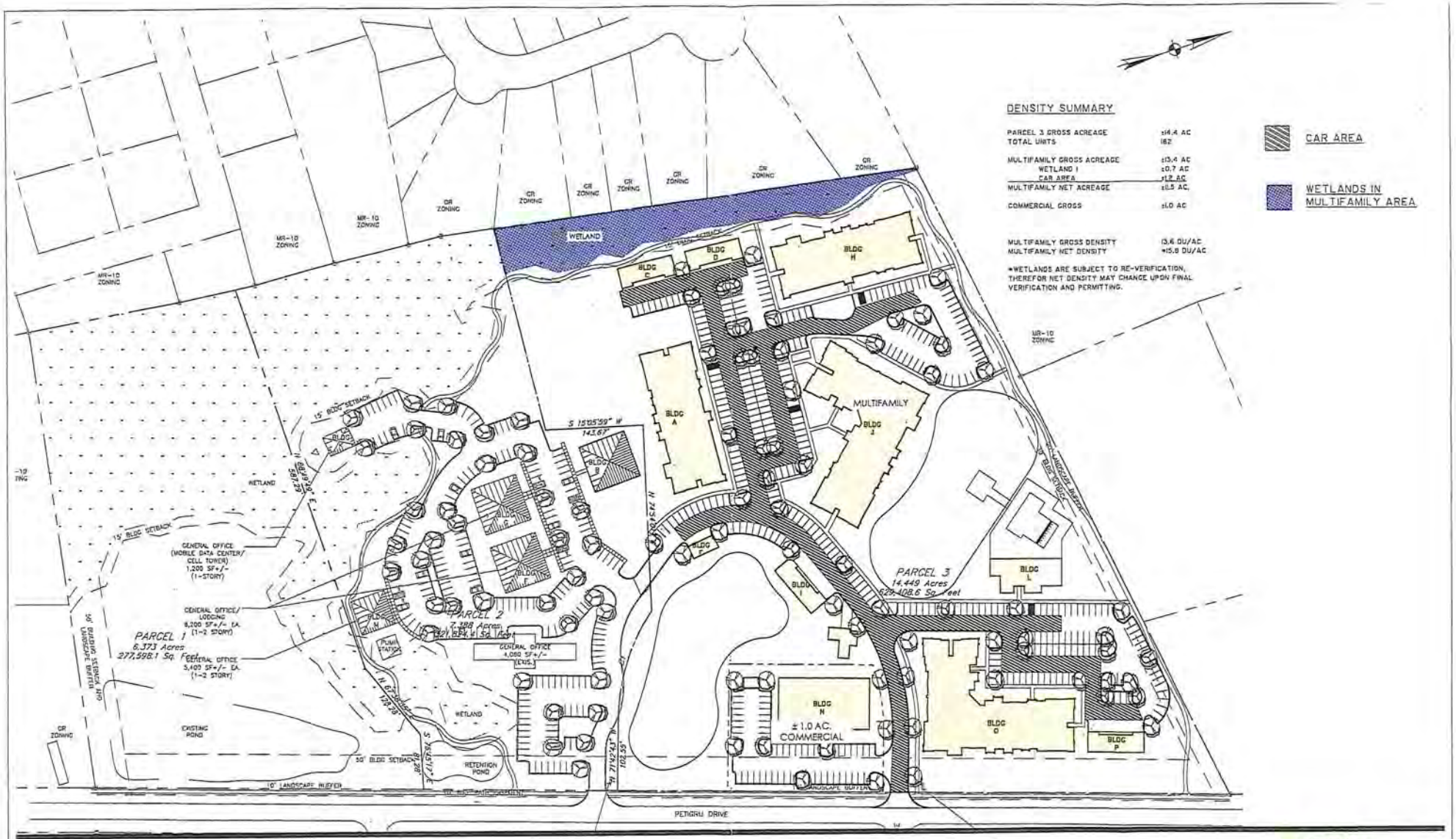

PREPARED FOR:

GRAYCLIFF CAPITAL

GRAPHIC SCALE: 1 INCH = 40 FEET

GROSS AND NET DENSITY EXHIBIT

Pawleys Island Business Commons Planned Development

GEORGETOWN COUNTY, SC

SEPTEMBER 16, 2020

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