

CAROLINA BEACH

Planning and Zoning Meeting

Thursday, September 12, 2024 – 6:00 PM

Council Chambers, 1121 N. Lake Park Boulevard, Carolina Beach, NC



AGENDA

CALL TO ORDER

CONFLICT OF INTEREST

Members of Planning and Zoning shall not vote on recommendations, permits, approvals, or other issues where the outcome of the matter being considered is reasonably likely to have a direct, substantial, and readily identifiable financial impact on the member or a member has a close familial, business, or other associational relationship. No member shall be excused from voting except upon those matters as noted, above, or upon those others involving the consideration of his own financial interest or official conduct. (160D-109)

APPROVAL OF MINUTES

1. August 8th, 2024 – P&Z Minutes

STAFF REPORT ON RECENT COUNCIL MEETINGS

STAFF REPORT ON RECENT DEVELOPMENTS

PUBLIC DISCUSSION

2. Consider a preliminary plat for a 4-lot subdivision located at 1231 Saint Joseph Street.
Applicant: Black Lotus Properties, LLC

DISCUSSION ITEMS

3. Appoint a Chair and Co-chair of the Planning & Zoning Commission

NON-AGENDA ITEMS

ADJOURNMENT



AGENDA ITEM COVERSHEET

PREPARED BY: Gloria Abbotts, Senior Planner

DEPARTMENT: Community
Development

MEETING: Planning & Zoning Commission – September 12th, 2024

SUBJECT: August 8th, 2024 – P&Z Minutes

Action:

Approve the August 8th, 2024 Minutes

CAROLINA BEACH

Planning and Zoning Commission

Thursday, August 8, 2024 - 6:00 PM

Council Chambers, 1121 N. Lake Park Boulevard, Carolina Beach, NC



MINUTES

CALL TO ORDER

Chairman Rouse called the meeting to order at 6:00 PM.

PRESENT

- Chairman Wayne Rouse
- Vice Chairman Jeff Hogan
- Commissioner Melanie Boswell
- Commissioner Todd Piper
- Commissioner Bill Carew
- Commissioner Lynn Conto

ABSENT

- Commissioner Ethan Crouch

ALSO PRESENT

- Community Development Director Jeremy Hardison
- Senior Planner Gloria Abbotts

CONFLICT OF INTEREST

Members of Planning and Zoning shall not vote on recommendations, permits, approvals, or other issues where the outcome of the matter being considered is reasonably likely to have a direct, substantial, and readily identifiable financial impact on the member or a member has a close familial, business, or other associational relationship. No member shall be excused from voting except upon those matters as noted, above, or upon those others involving the consideration of his own financial interest or official conduct. (160D-109)

APPROVAL OF MINUTES

1. June 13, 2024 – P&Z Minutes

ACTION: Motion to approve the minutes as written

Motion made by Chairman Rouse, seconded by Vice Chairman Hogan

Voting Yea: Chairman Rouse, Vice Chairman Hogan, Commissioner Boswell, Commissioner Piper, Commissioner Carew, Commissioner Conto

Motion passed 6-0

STAFF REPORT ON RECENT DEVELOPMENTS

Ms. Abbotts reported the following statistics for June/July:

Permitting

- 32 permits (renovation, repair, grading, additions, fences)
- 5 residential new construction
- 13 certificates of occupancy

Code Enforcement

- 20 complaints received
- 8 resolved

Commissioner Carew asked about the low resolution percentage of Code Enforcement complaints. Ms. Abbotts said some of the complaints are unfounded and wouldn't have a resolution, such as a neighbor dispute or other issues that are not part of Town ordinances. Commissioner Conto said that might be a good category to track, and Vice Chairman Hogan said this would make the resolution percentage higher. Ms. Abbotts said staff will update that next month.

Demos

- 309 Cape Fear Boulevard
- 925 Carolina Sands Drive

New Businesses – Recently Opened

- Face First Aesthetics and Acne Clinic – 703 Saint Joseph St.
- Brunches Restaurant – 300 North Lake Park Boulevard
- Juarez Auto Repair – 306 North Lake Park Boulevard

New Businesses – Applied

- Riko's Thin Crust Pizza – 1000 North Lake Park Boulevard, Unit 151 (Proximity)
- Axis Fitness – 902 North Lake Park Boulevard (Proximity)
- Surfs Up Mini Golf – 1360 Bridge Barrier Road

Town Council and Other Updates

- Conditional Zoning (CZ) 2 North Carolina Avenue – approved by Council
- Wine and beer shop text amendment – approved by Council
- Unified Development Ordinance (UDO) – in effect August 9
- Seaside Chapel School – upcoming TBD
- 1300 block of Spot Lane paving assessment – upcoming to Council in September
- 1231 Saint Joseph Street subdivision (4 lots) – upcoming to Technical Review Committee (TRC) in August

Chairman Rouse asked for an explanation of the paving assessment. Mr. Hardison said this is an application to improve the street, which is currently unimproved and impassable. He said this is a wooded area that was not part of the Wilmington Beach paving project because at that time there

were wetlands, but some hydrology has changed since then so property owners have applied for Council to consider paving that road and in turn, there would be an assessment to adjacent properties.

PUBLIC COMMENT

None

PUBLIC HEARING

2. Conditional Zoning to Consider an Addition to a Bar at 3 Cape Fear Boulevard
Applicant: Ant Bates Motel LLC

Applicant Ant Bates Motel LLC applied for a Conditional Zoning (CZ) application for an addition to The Silver Dollar, an existing bar/tavern in the Central Business District (CBD). The establishment provides on-premise wine, beer, and liquor. According to the ordinance, if alcohol is served on-premise and the establishment does not meet the criteria for a standard restaurant, it is classified as a bar. The Alcoholic Beverage Control (ABC) Commission stipulates that a restaurant must have food sales constituting at least 30% of sales to avoid being classified as a bar. A bar and any additions made to the bar is allowed through the approval of a CZ district in the CBD.

The applicant is proposing to construct a second story on an existing bar. The proposal includes the addition of a staircase, a second-floor enclosed area (837 square feet), an open deck area (648 square feet), and updating plumbing, mechanical, and electrical. The proposed height of the building is 21 feet.

The existing building is a commercial building built in 1945. It meets the current lot coverage and setbacks requirements. The addition proposed is within the current footprint. The parking requirement for bars is 1 per 110 square feet of indoor gross floor area. Where properties are located within the CBD, parking requirements may be waived if public parking spaces adequate to meet the requirement are located within 500 feet of the use.

The project is in general conformity with the 2020 Land Use Plan, and staff recommends approval of the project as proposed.

Ms. Abbotts presented the details. She reviewed the current use, site photos, adjacent properties, floor plans, and criteria that the Commission shall consider in making a recommendation. Ms. Abbotts said the proposed addition will be similar to the second floor of nearby Sunny Daze Smokehouse, which has a covered bar area with seating as well as open decking.

As part of the application process, a community meeting is required. The applicant held the required meeting on June 17, 2024. Ms. Abbotts said no one attended, so there were no concerns or changes to the plans, although some people reached out with questions that were answered via email or phone.

Staff proposed conditions

1. All Federal, State, and Local ordinances shall be met
2. Building is in an AE 10 flood zone; renovations must be below 49% of the value of the building
3. Sloped railing shall be used on second floor

4. Use of non-combustible materials
5. Alleyway shall be free of obstructions and debris
6. Remove paint/markings from public right-of-way

The Commission may include additional standards.

Vice Chairman Hogan asked if the existing restrooms, which are narrow, will have to come up to Town code. Ms. Abbotts said the application was reviewed by the New Hanover County Building Safety Department, and as far as she knows the existing restrooms do not need to be upgraded. Vice Chairman Hogan asked if this will still be a non-handicapped-accessible building, and Ms. Abbotts said yes.

ACTION: Motion to open the public hearing

Motion made by Chairman Rouse, seconded by Vice Chairman Hogan

Voting Yea: Chairman Rouse, Vice Chairman Hogan, Commissioner Boswell, Commissioner Piper, Commissioner Carew, Commissioner Conto

Motion passed 6-0

Dan Wilcox, representing the applicant, said the owner asked him to be present tonight to answer questions. He said it's a straightforward project that will not obstruct the views of the building next door, and the new restroom upstairs will meet handicapped requirements. Mr. Wilcox said the lines were painted in the right-of-way when The Silver Dollar held an event in the lot across the way, and the purpose was to control the flow of patrons between the two sites for alcohol purposes.

Commissioner Conto asked if The Silver Dollar is still moving forward with plans to purchase adjacent business Nauti Dog. She said she is less opposed to this project if it's just the existing building vs. extending over multiple buildings. Mr. Wilcox said he is just a contractor, not the owner or operator, and he doesn't know anything about these plans. He said the permit is standalone for the existing property of The Silver Dollar.

No one else requested to speak.

ACTION: Motion to close the public hearing

Motion made by Chairman Rouse, seconded by Vice Chairman Hogan

Voting Yea: Chairman Rouse, Vice Chairman Hogan, Commissioner Boswell, Commissioner Piper, Commissioner Carew, Commissioner Conto

Motion passed 6-0

Commissioner Carew said he is excited somebody is putting money into the Boardwalk in one of the older buildings, and he is in favor of the project.

Commissioner Piper said rooftop decks have been approved for multiple other bars and restaurants in that general location, so he doesn't see how this is any different.

Commissioner Conto said she loves the plans for rejuvenation, although she is leery of allowing the expansion of bars in that area due to the Boardwalk's past.

Commissioner Boswell said she agrees that rejuvenation of the Boardwalk and restoration of an existing building are good things, and she thinks Mr. Wilcox's work will make this project an asset for the Town. She said she appreciates that plans call for the building height to stay well below the 50-foot limit, and although it's a bar it will be regulated. Commissioner Boswell said she thinks it will make The Silver Dollar newer and better, so she is in favor of it.

Vice Chairman Hogan said he is in favor of allowing businesses to advance, and the owners have spent a lot of money on the building and he has no problem with them investing more. He said every time the area adds a rooftop, it adds to the excitement of people coming to the Boardwalk to see summer fireworks.

Chairman Rouse said he's excited to see someone willing to invest their money in the Boardwalk area, which is as close as the Town gets to having a historic district. He said he will vote to support the motion with the conditions laid out by staff's recommendation.

Mr. Hardison said the application before the Commission tonight is just for the expansion of the second floor as presented, and if there is a proposed expansion to another building as a bar it would have to come back before the Commission for consideration or the owners would have to change the use to a restaurant, reapply with the ABC Commission as a restaurant, and be subject to an audit of beverages with food sales.

ACTION: Motion of approval, whereas in accordance with the provisions of the North Carolina General Statutes, the Planning and Zoning Commission does hereby find and determine that the adoption of the Conditional Use District to allow for an addition to a bar located at 3 Cape Fear Boulevard is consistent with the goals and objectives of the adopted Land Use Plan and other long-range plans and the potential impacts on the surrounding area are mitigated by the approved conditions

Motion made by Vice Chairman Hogan, seconded by Commissioner Boswell

Voting Yea: Chairman Rouse, Vice Chairman Hogan, Commissioner Boswell, Commissioner Piper, Commissioner Carew

Voting Nay: Commissioner Conto

Motion passed 5-1

NON-AGENDA ITEMS

None

ADJOURNMENT

Chairman Rouse adjourned the meeting at 6:22 PM.



AGENDA ITEM COVERSHEET

PREPARED BY: Gloria Abbotts, Sr Planner

DEPARTMENT: Community
Development

MEETING: Planning and Zoning – 9/12/2024

SUBJECT: Consider a preliminary plat for a 4-lot subdivision located at 1231 Saint Joseph Street

Applicant: Black Lotus Properties, LLC

BACKGROUND:

Black Lotus Properties, LLC, has submitted a request for a preliminary plat approval for the Kybalion Creek subdivision at 1231 Saint Joseph Street. The property is 49,437 square feet (1.14 acres). This subdivision will consist of 4 lots between 7,224 – 10,231 sq. ft. The existing single-family home on the property will become Lot 2 of the subdivision.

The applicant proposes to install a private road, Reef Rd., which will meet the minimum width of 22'. The road will be constructed with impervious material that meets the standards of DOT & Fire Code, subject to P&Z approval. To remain within the 10,000 square feet impervious surface limit for a state stormwater permit, a pervious road surface is proposed. The existing ditch that runs along the rear of the property will be relocated closer to the rear property line, with a riprap lined swale to manage drainage. The existing ditch carries flow from other properties, which the engineer has provided calculations to account for additional drainage. The only proposed fill would be for the ditch relocation. Most of the dirt from the new ditch will be repurposed to fill in the old ditch, with only a minimal amount of additional fill required. The site will be graded to maintain natural flow from south to north. An 85' x 60' hammerhead at the end of Reef Rd will be installed for turnaround access. The entire subdivision is in an AE 11 flood zone. There is an existing fire hydrant in front of Forest by the Sea to service the subdivision. Water and sewer will be off St. Joseph Street with private lines extended to service the lots. Streetlamps will be required, and street trees will be installed for every 50' of lot frontage. Existing vegetation can be used and is encouraged. Sidewalks are not proposed along the street, but P&Z may require applicant to construct a sidewalk. The proposed 8' multi-use path will be in the right-of-way in front of the subdivision.

Single-family dwellings are permitted by right in the R-2 zoning district, which has a minimum lot size of 7,000 square feet. Setbacks for structures in this district are 25 feet from the front, 10 feet from the rear, and 7.5 feet from the side yards, and 12.5 feet required on corner lots. The maximum height for structures is 45 feet, with a maximum lot coverage of 40% and a maximum impervious coverage of 65% per lot.

ACTION REQUESTED:

Consider recommending approval or denial of a 4-lot subdivision located at 1231 Saint Joseph Street.

STAFF RECOMMENDATION:

Staff recommends approval of this preliminary plat subject to the following conditions. Final plat may not be submitted for approval until all conditions, revisions, changes and submissions are made. The conditions, revisions, changes and submissions to be made are as follows:

1. Street trees shall be installed according to preliminary plat submittal. Existing vegetation can be used for this requirement.
2. Permanent monuments of stone or concrete shall be placed at one or more corners of the subdivision to be designated as control corners.
3. A drainage plan that will include all portions of the development shall be submitted. This plan shall be prepared and sealed by a registered surveyor or engineer.
4. Surfacing shall be done in accordance with plans and standard specifications approved by the Planning and Zoning Commission and the state Department of Transportation.
5. The Planning and Zoning Commission may require the construction of a concrete sidewalk on one side of all frontage streets and potentially on one or both sides of all other streets within the subdivision, in accordance with approved plans and specifications.
6. The installation of a street sign, light pole, and stop sign is required.
7. Electrical lines shall be buried.
8. Lot coverage for any lot located within the subdivision shall not exceed 40%.
9. The plan must clearly designate the location of open space, recreation areas, and stormwater ponds, as well as ownership details.
10. Grading, surfacing, curb and gutters, sidewalks, street lighting, street trees, sewage disposal facilities, stormwater drainage facilities, and other utilities shall be installed and certified by a surveyor and/or engineer, or Performance Guarantee provided prior to recordation of the final plat.

MOTION:

Motion to approve or deny the preliminary plat with the proposed conditions.



Application for Subdivision Preliminary Plat TOWN OF CAROLINA BEACH, N.C.

Each application must be printed or typewritten and have all information answered. Incomplete or illegible applications will not be accepted. **All plans must be folded to 8 ½ X 11.** No application will be accepted unless accompanied by a drawing of the proposed lot development drawn to scale with the requirements indicated in Chapter 36.

The Technical Review Committee, Planning and Zoning Commission and/or Town Council reserves the right to require additional information if needed to assure that the use in its proposed location will be harmonious with the area in which it is proposed to be located and in accordance with the Code of Ordinances of the Town of Carolina Beach. Applications must be reviewed by the Planning Department for completeness prior to acceptance. A fee payable to the Town of Carolina Beach must accompany this application. Fees are nonrefundable after review by the Technical Review Committee. The fee shall be in accordance with the Town's annually adopted Rates and Fee Schedule.

In accordance with the requirements of the **Town of Carolina Beach Subdivision Ordinance**, there is submitted herewith for approval a preliminary plan of the following subdivision:

Name of Subdivision:	St. Joseph St. 1 ac Tract	# of Lots Proposed: <u>4</u>
Tax Parcel(s) #:	R08810-004-004-000	
Acreage and/or square footage:	1.14 ac	Existing Zone: <u>R-2-WB</u>
Name of Applicant:	Black Lotus Properties, LLC	703-568-7220
Signature of Applicant:		(Phone Number)
Owner Name and Address:	Sherif Fouad	5 W Hargett St. Rm 202
	(Print Name)	(Address)
	Raleigh, NC, 27601	sherif@blacklotusproperties.com
	(City, State, Zip)	(Email Address)

This preliminary plan contains all the information required by Chapter 36 of the Town Code. I certify that this application package contains all requirements of the Town of Carolina Beach Code of Ordinances. The registered Engineer, Landscape Architect or Surveyor under whose supervision this subdivision is being developed is:

Headwaters Engineering of the Cape Fear, PLLC	Thomas J. Sch
(Engineer, Architect, or Surveyor)	(Contact Name)

910-465-3304	tscheetz@headwaterscapefear.com
(Telephone Number)	(E-Mail Address)

Signature of Owner:

	Date: <u>7/17/24</u>
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Final Plat Procedure

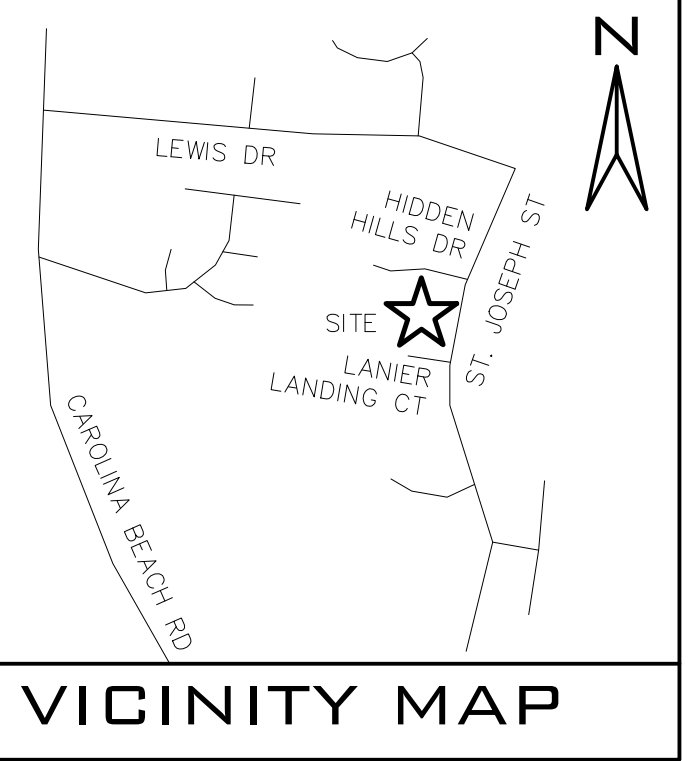
Submittal, authorization, and recording.

Subsequent to the review and approval of preliminary subdivision plans and construction plans the developer shall submit final plats for recording to the Planning Department. The plat to be recorded in the office of the New Hanover County Register of Deeds shall contain all information required by Chapter 36 of the Town Code. One (1) copy of this plat shall be signed and sealed by a registered surveyor and submitted on mylar material. Four paper copies of the plat shall be submitted to the Planning Director for review by other Departments of the Town. The Planning Director shall review the final plat and compare it to the approved preliminary subdivision plan and conditions of approval. After review the Planning Director may then:

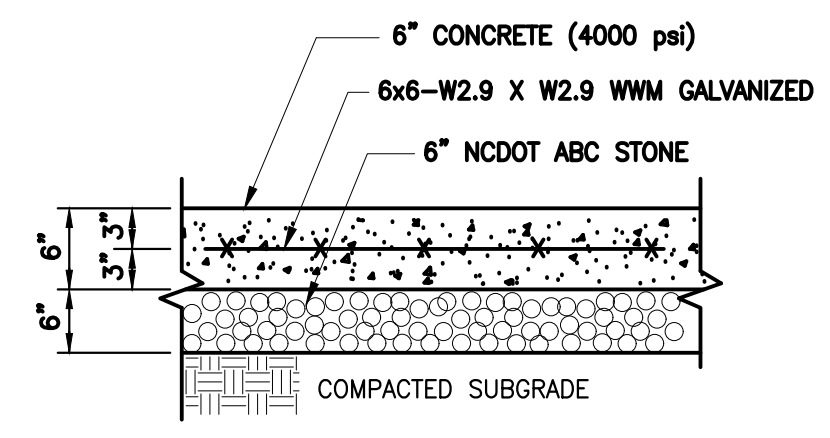
a) Certify the plat for recording, in writing on the mylar copy; or, b) Request revisions of the plat to complete information required by Town Code or to cause the plat to conform to the preliminary subdivision plan.

Fees

In accordance with the Town's Rate and Fee schedule.

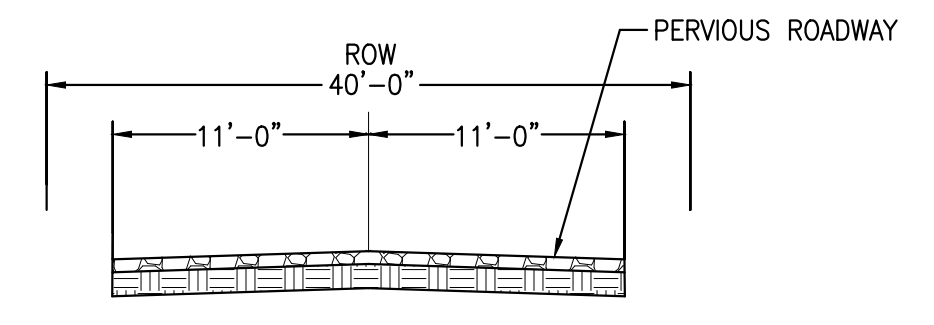


VICINITY MAP

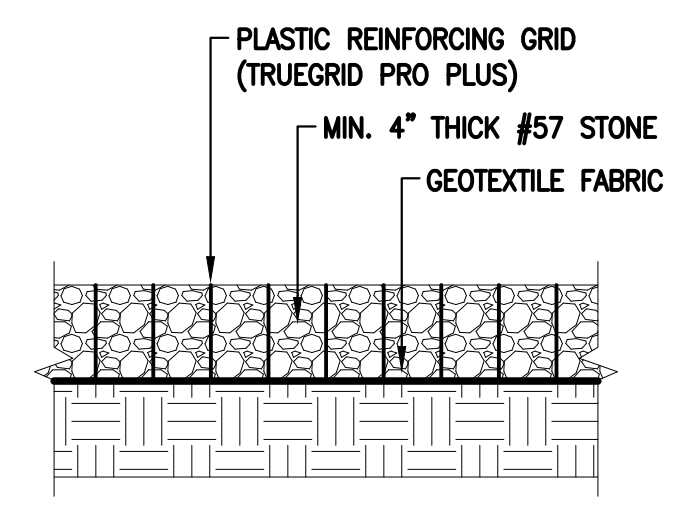


NOTES:
 1. CONTROL JOINTS SHALL BE EVERY 15 FT. (MAX.) AND EXPANSION JOINTS SHALL BE EVERY 50 FT. (MAX).
 2. PAVEMENT SECTION MAY VARY DEPENDING UPON FIELD CONDITIONS. THE PAVING CONTRACTOR SHALL COORDINATE WITH OWNER REPRESENTATIVE AND GEOTECHNICAL ENGINEER TO DETERMINE ACTUAL PAVEMENT SECTION.

CONCRETE DRIVEWAY SECTION



TYPICAL STREET CROSS-SECTION



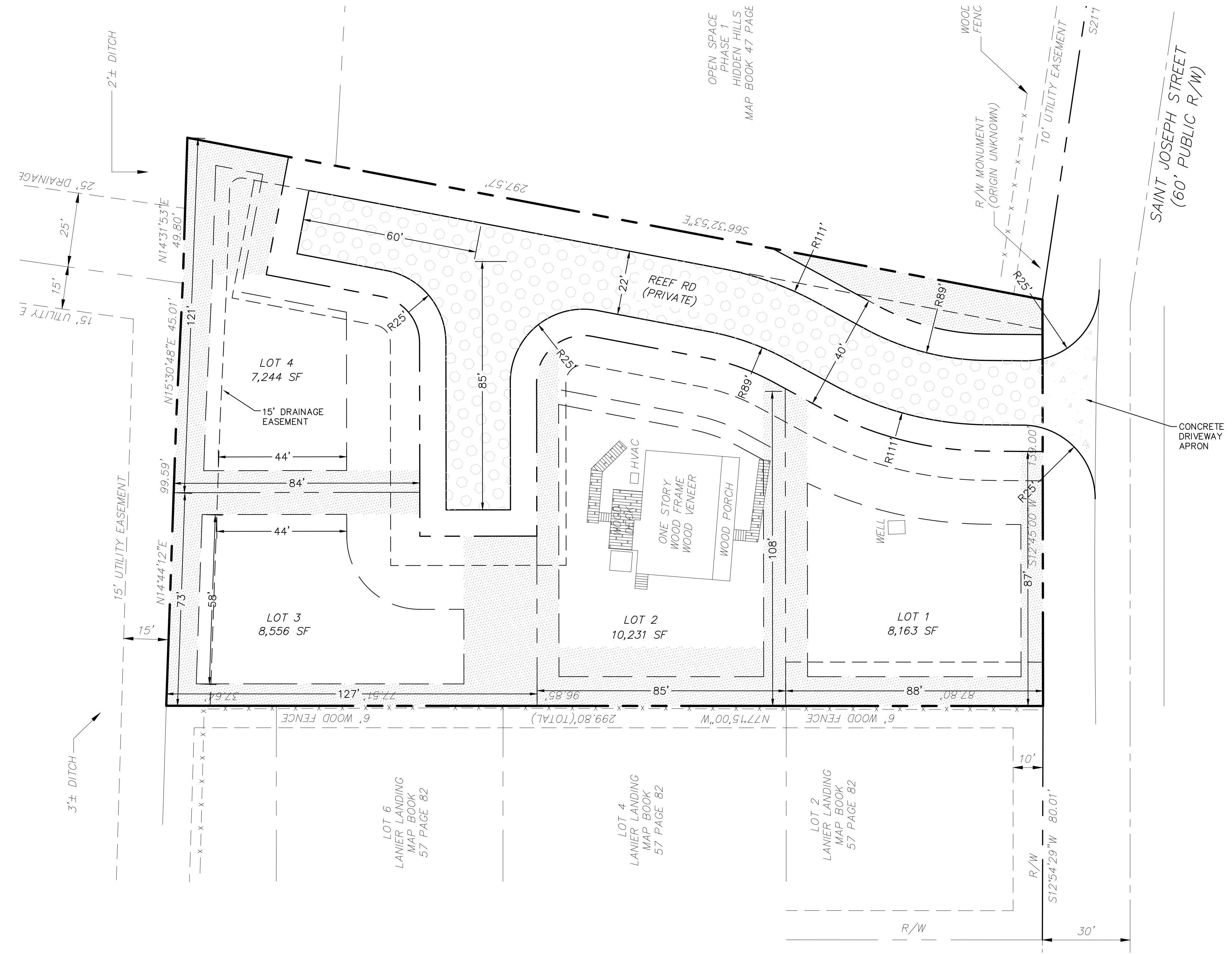
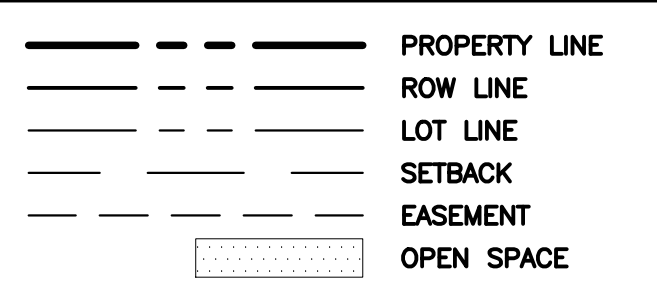
NOTE:
 1. GRAVEL SHALL BE DUSTLESS IN NATURE.

PERVIOUS ROADWAY SECTION

SITE DATA

PARCEL #:	R08810-004-004-000
SITE AREA:	49,437 SF / 1.14 AC
ZONING:	CB-R-2-WB
DENSITY MAX:	6.2 UNITS/AC
DENSITY PROPOSED:	3.5 UNITS/AC
HEIGHT MAX:	45'
OPEN SPACE REQ.:	12,359 SF (25%)
OPEN SPACE PROV.:	12,495 SF (25%)
SETBACKS:	
FRONT:	25'
REAR:	10'
SIDE:	7.5'
LOT SIZE MIN.:	7,000 SF
LOT WIDTH MIN.:	70'
IMPERVIOUS AREAS:	
LOTS:	10,000 SF
FUTURE:	460 SF
REMOVED:	-460 SF
TOTAL:	10,000 SF / 0.23 AC
IMP %:	20.23%
IMP/LOT:	2,500 SF

LEGEND



NOTES:
 1. THIS PROPERTY FALLS WITHIN THE AE FLOOD ZONE; BASE FLOOD ELEVATION = 11 FT.
 2. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION FROM SURVEY BY MIKE UNDERWOOD AND ASSOCIATES, PA AND PROVIDED BY OWNER.

THE TOWN PLANNING AND ZONING COMMISSION HEREBY APPROVES THE PRELIMINARY PLAT OF THE "KYBALION CREEK" SUBDIVISION.

DATE: _____
 CHAIRMAN: _____

SHEET INDEX

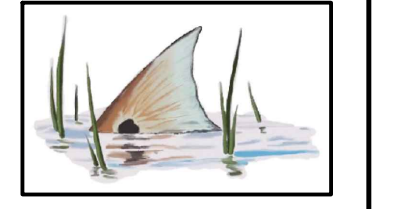
C0:	SITE PLAN
C1:	EXISTING CONDITIONS
C2:	TREE REMOVAL PLAN
C3:	GRADING & UTILITY PLAN
C4:	PLAN & PROFILE
C5:	SITE DETAILS
C6:	UTILITY DETAILS



SITE PLAN
 KYBALION CREEK
 1231 ST JOSEPH ST, CAROLINA BEACH, NC
 BLACK LOTUS PROPERTIES
 5 W HARGETT ST, RM 202, RALEIGH, NC 27601
 703-568-7220 sherrif@blacklotusproperties.com

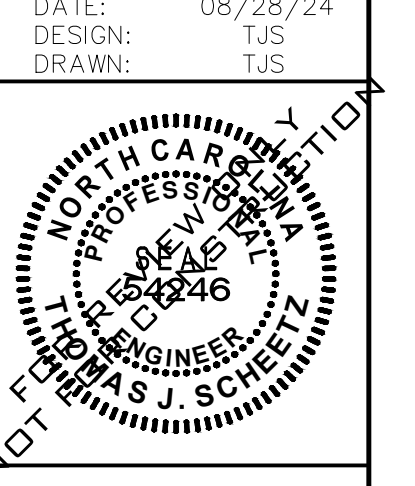
REVISIONS

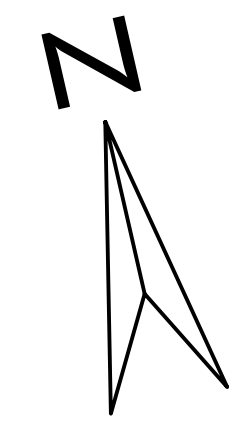
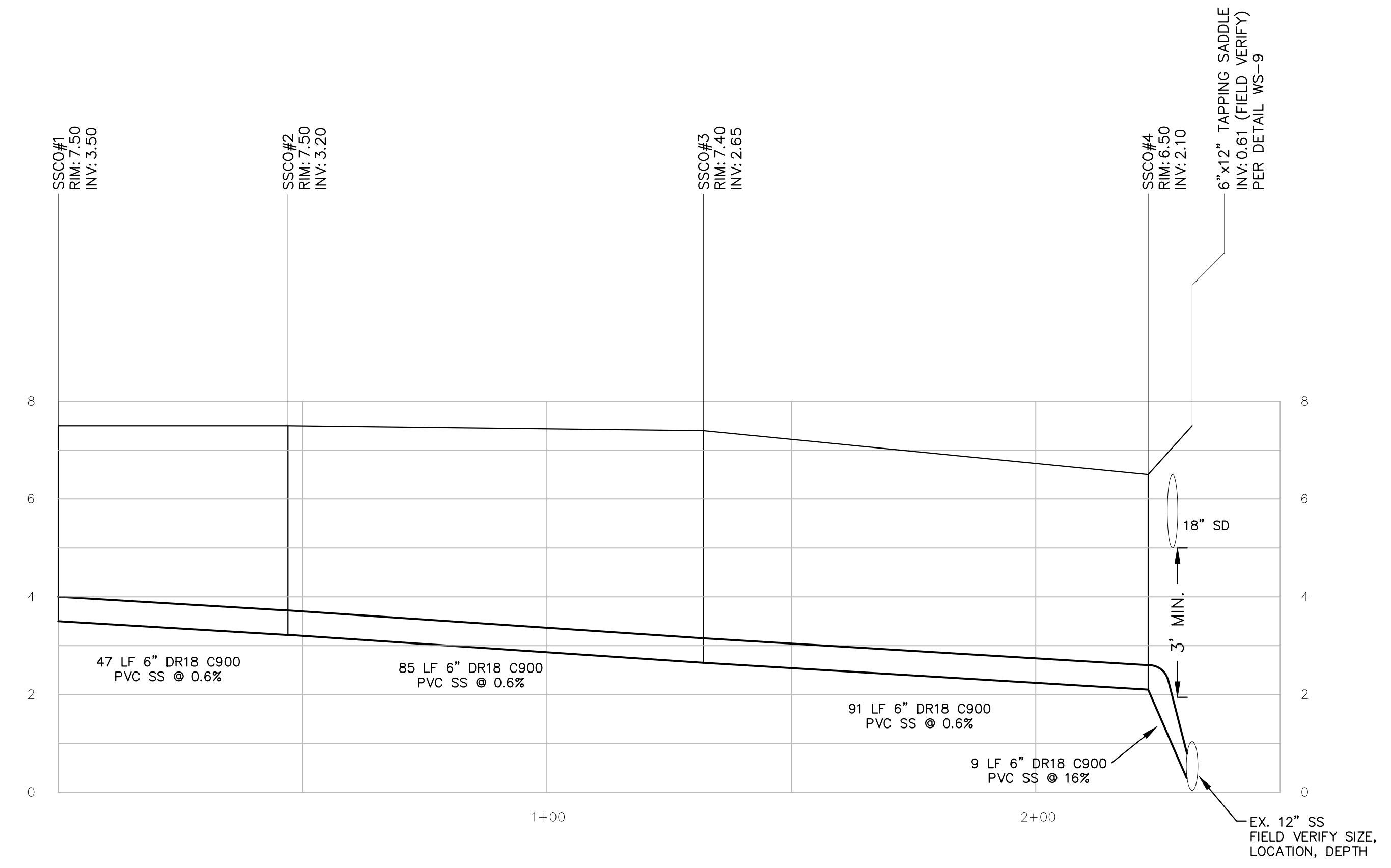
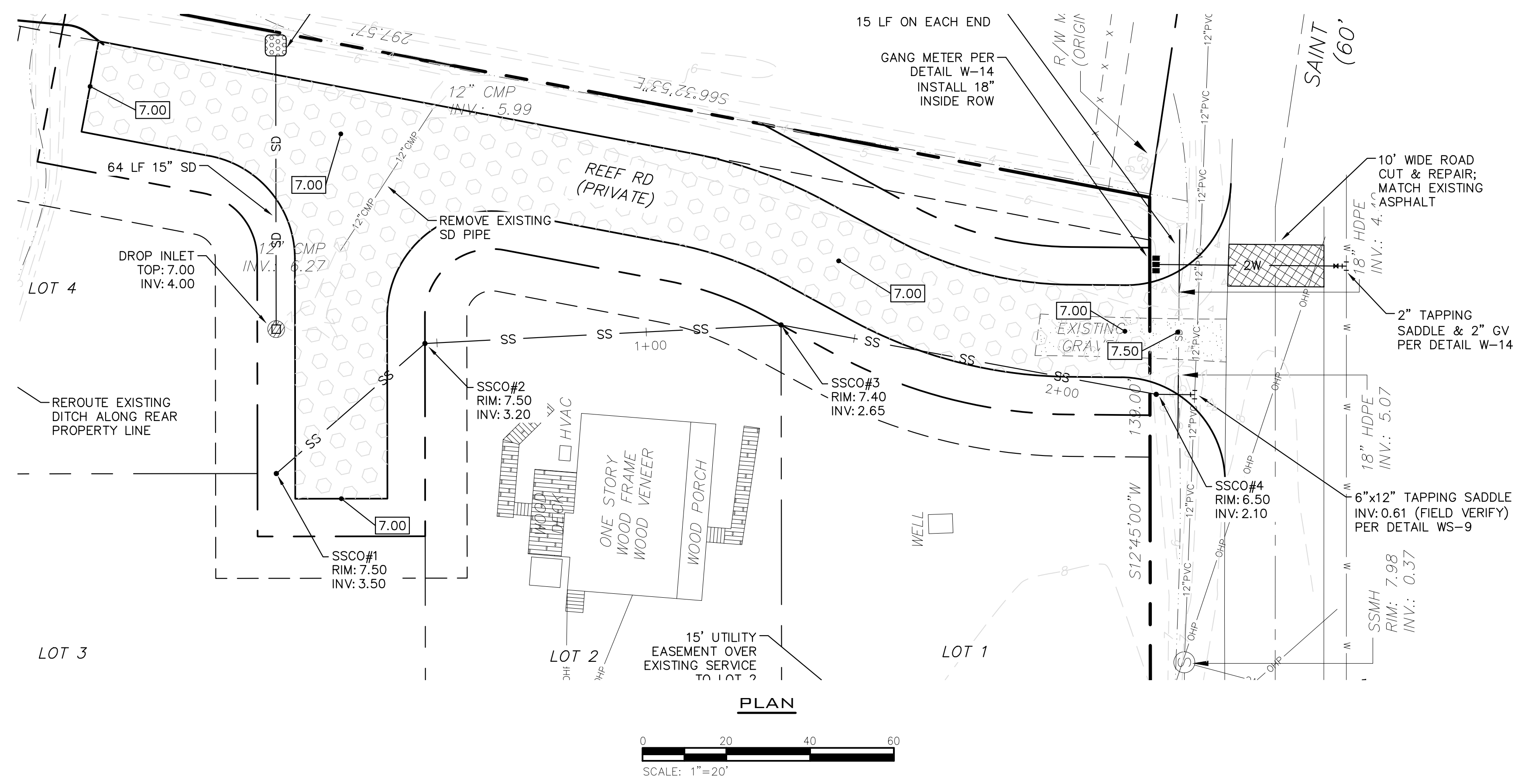
#	DATE	DESCRIPTION	BY



HEADWATERS ENGINEERING
 OF THE CAPE FEAR, PLLC
 P-2714
 LELAND, NORTH CAROLINA
 (910) 465-3304
 TSCHEETZ@HEADWATERSCAPEFEAR.COM

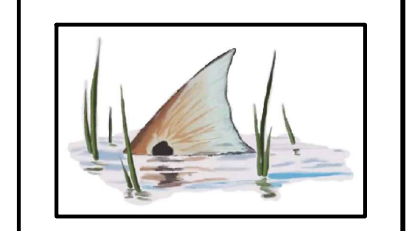
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 DATE: 08/28/24
 DESIGN: TJS
 DRAWN: TJS





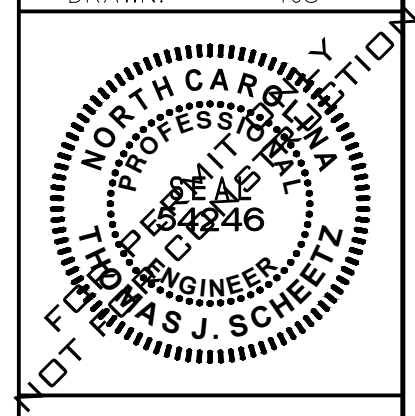
PLAN & PROFILE
KYBALION CREEK
 1231 ST JOSEPH ST, CAROLINA BEACH, NC
 BLACK LOTUS PROPERTIES
 5 W HARGETT ST, RM. 202, RALEIGH, NC 27601
 703-568-7220 sherrif@blacklotusproperties.com

#	DATE	DESCRIPTION	BY



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 (910)465-3304
 TSCHEETZ@HEADWATERSCAPEFEAR.COM

#24-006
 DATE: 08/28/24
 DESIGN: TJS
 DRAWN: TJS



C4

DETAIL: SEWER SERVICE CONNECTION - MAIN TO LATERAL (LESS THAN 8' DEEP)

SCALE: NOT TO SCALE CFPWA DETAIL DATE: 01/01/2024

CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)332-6560

Stewardship. Sustainability. Service.

DETAIL NO: **S-11**
SHEET NO: -

DETAIL: SEWER SERVICE CONNECTION - TYPICAL CLEAN-OUT

SCALE: NOT TO SCALE CFPWA DETAIL DATE: 01/01/2024

CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)332-6560

Stewardship. Sustainability. Service.

DETAIL NO: **S-13**
SHEET NO: -

DETAIL: GANG METER DETAIL

SCALE: NOT TO SCALE CFPWA DETAIL DATE: 01/01/2024

CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)332-6560

Stewardship. Sustainability. Service.

DETAIL NO: **W-14**
SHEET NO: -

DETAIL: CITY OF WILMINGTON PAVEMENT REPAIRS-UTILITY CUTS

SCALE: NOT TO SCALE CFPWA DETAIL DATE: 01/01/2024

CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)332-6560

Stewardship. Sustainability. Service.

DETAIL NO: **WS-1**
SHEET NO: -

DETAIL: PIPE EMBEDMENT TYPES

SCALE: NOT TO SCALE CFPWA DETAIL DATE: 01/01/2024

CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)332-6560

Stewardship. Sustainability. Service.

DETAIL NO: **WS-4**
SHEET NO: -

**DETAIL: TAPPING SLEEVE AND VALVE ASSEMBLY (4\"/>

SCALE: NOT TO SCALE CFPWA DETAIL DATE: 01/01/2024

CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)332-6560

Stewardship. Sustainability. Service.

DETAIL NO: **WS-9**
SHEET NO: -**

DETAIL: STRUCTURAL BRIDGING OVER WATER & SEWER PIPELINES

SCALE: NOT TO SCALE CFPWA DETAIL DATE: 01/01/2024

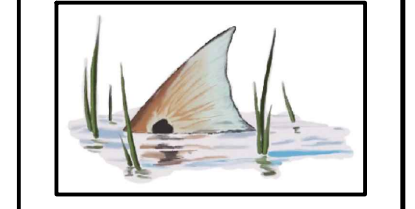
CAPE FEAR PUBLIC UTILITY AUTHORITY
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WILMINGTON, NC 28403
OFFICE: (910)332-6560

Stewardship. Sustainability. Service.

DETAIL NO: **WS-12**
SHEET NO: -

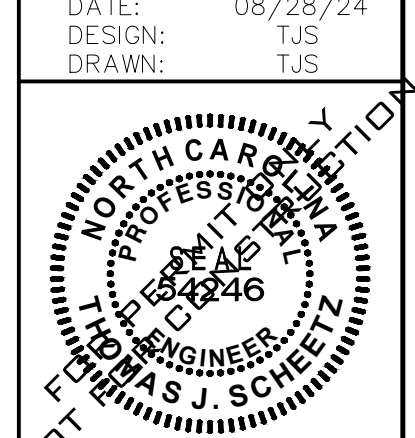
UTILITY DETAILS
KYBALION CREEK
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BLACK LOTUS PROPERTIES
5 W HARGETT ST, RM 202, RALEIGH, NC 27601
703-568-7220 sherriff@blacklotusproperties.com

#	DATE	DESCRIPTION	BY



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OF THE CAPE FEAR, PLLC
P-2714
LELAND, NORTH CAROLINA
(910)465-3304
TSCHIELT@HEADWATERSCAPEFEAR.COM

#24-006
DATE: 08/28/24
DESIGN: TJS
DRAWN: TJS



C6



HEADWATERS ENGINEERING
of the Cape Fear, PLLC

Jeremy Hardison
Director Of Community Dev.
Town of Carolina Beach
1121 N. Lake Park Blvd.
Carolina Beach, NC 28428

Project #: 24-006
Subject: St Joseph St 1 Ac Tract – Permeable Pavers
Date: August 22, 2024

Mr. Hardison,

The purpose of this letter is to ensure the Town that the proposed “Truegrid Pro Plus” permeable paver product, as described by the manufacturer in the attached brochure, meets or exceeds all requirements described in the NCDOT Subdivision Roads standards and USPS National Delivery Planning Standards.

Please see the below specifications & facts of this product:

- Strength: Over 17,000 psi compared to 4000 psi +/- (asphalt)
- HS20 rated: 16,000 lbs. per wheel/32,000 lbs. per axle
- Variable subbase, 8” minimum can be increased to add bearing capacity to meet emergency vehicle requirements if needed
- 100% permeable to reduce stormwater runoff
- Permeability also captures pollutants
- Made from 100% recycled HDPE

Sincerely,

Thomas J. Scheetz, P.E., President
Headwaters Engineering of the Cape Fear, PLLC
1108 New Pointe Blvd Unit 130 #151, Leland, NC 28451
(910)465-3304 – tscheetz@headwaterscapefear.com



Stormwater Calculations

For

"Kybalion Creek"

St Joseph St 1 ac Tract
Black Lotus Properties, LLC
24-006



Revised 08/28/24 TJS



HEADWATERS ENGINEERING
of the Cape Fear, PLLC

Leland, NC
(910) 465-3304
tscheetz@headwaterscapefear.com

NCBELS License P-2714

Date: 8/22/2024	Design: TJS	Headwaters Engineering of the Cape Fear, PLLC	Sheet: 1
Title: SW Calculations		For: St Joseph St 1 ac Tract	Job #: 24-006

Swale

Q 10 = CiA = 155.5 cfs
C = 0.4
i 10 = 7.61 in/hr
A = 51.10 ac

NOAA Rainfall Data

Average recurrence interval = 10 yrs
Duration = 24 hr
i 10 = 7.61 in/hr

Channel Report

Item 2.

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc.

Tuesday, Aug 20 2024

Swale

Triangular

Side Slopes (z:1) = 3.00, 3.00

Total Depth (ft) = 3.00

Invert Elev (ft) = 5.00

Slope (%) = 0.50

N-Value = 0.020

Calculations

Compute by: Known Q

Known Q (cfs) = 155.50

Highlighted

Depth (ft) = 2.85

Q (cfs) = 155.50

Area (sqft) = 24.37

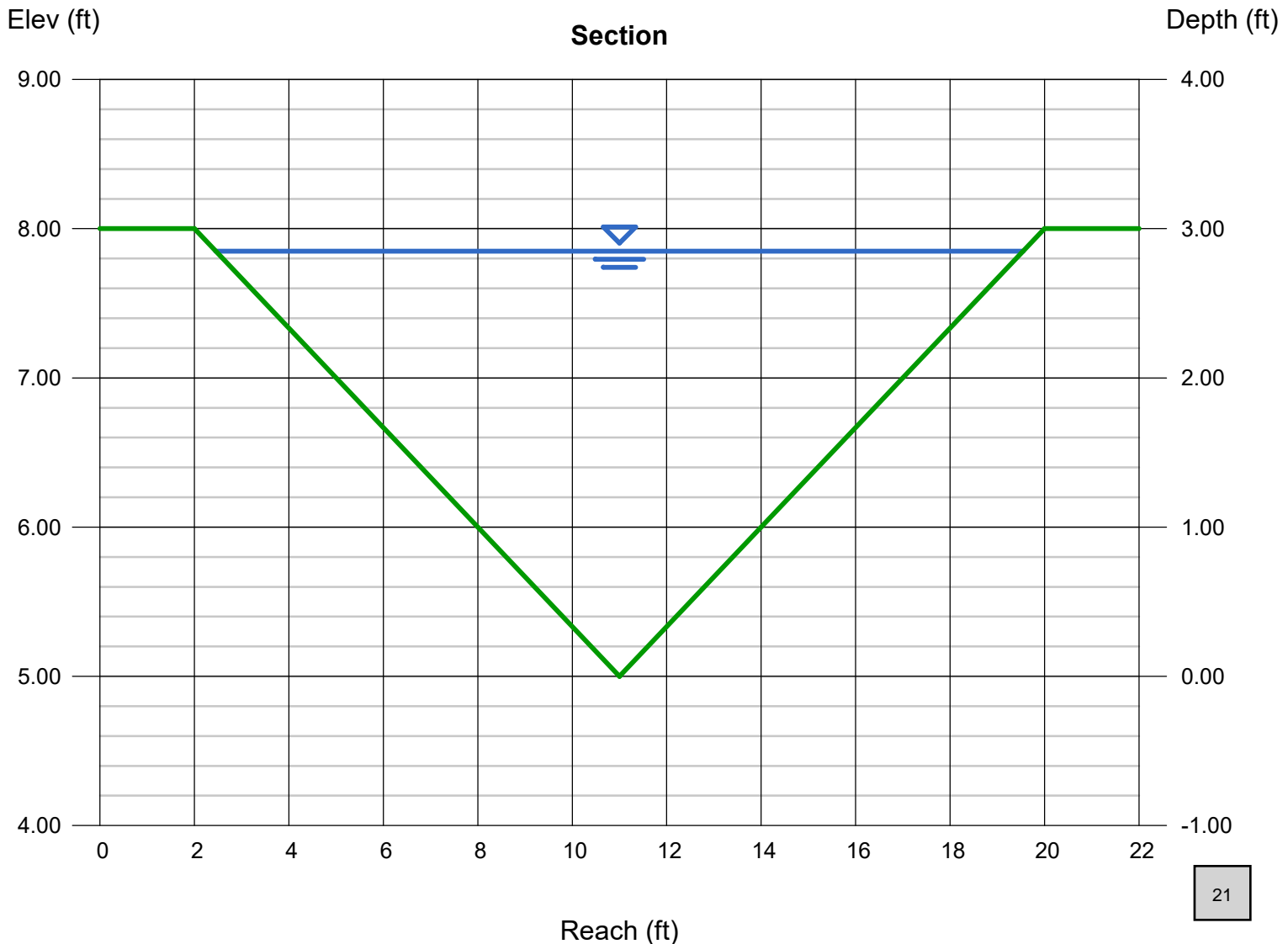
Velocity (ft/s) = 6.38

Wetted Perim (ft) = 18.02

Crit Depth, Yc (ft) = 2.79

Top Width (ft) = 17.10

EGL (ft) = 3.48





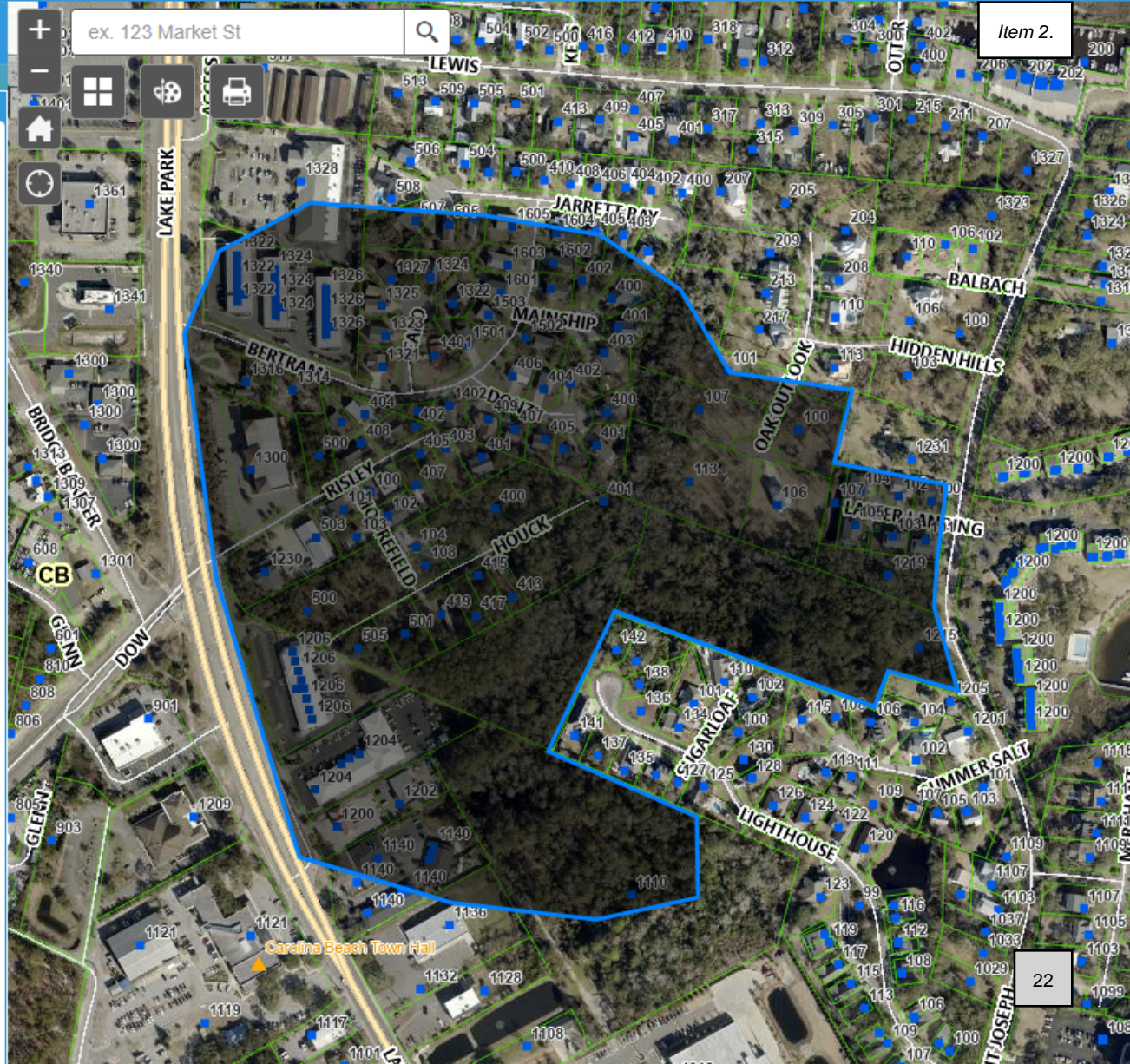
Measurement

Acres

51.1 Acres

Clear

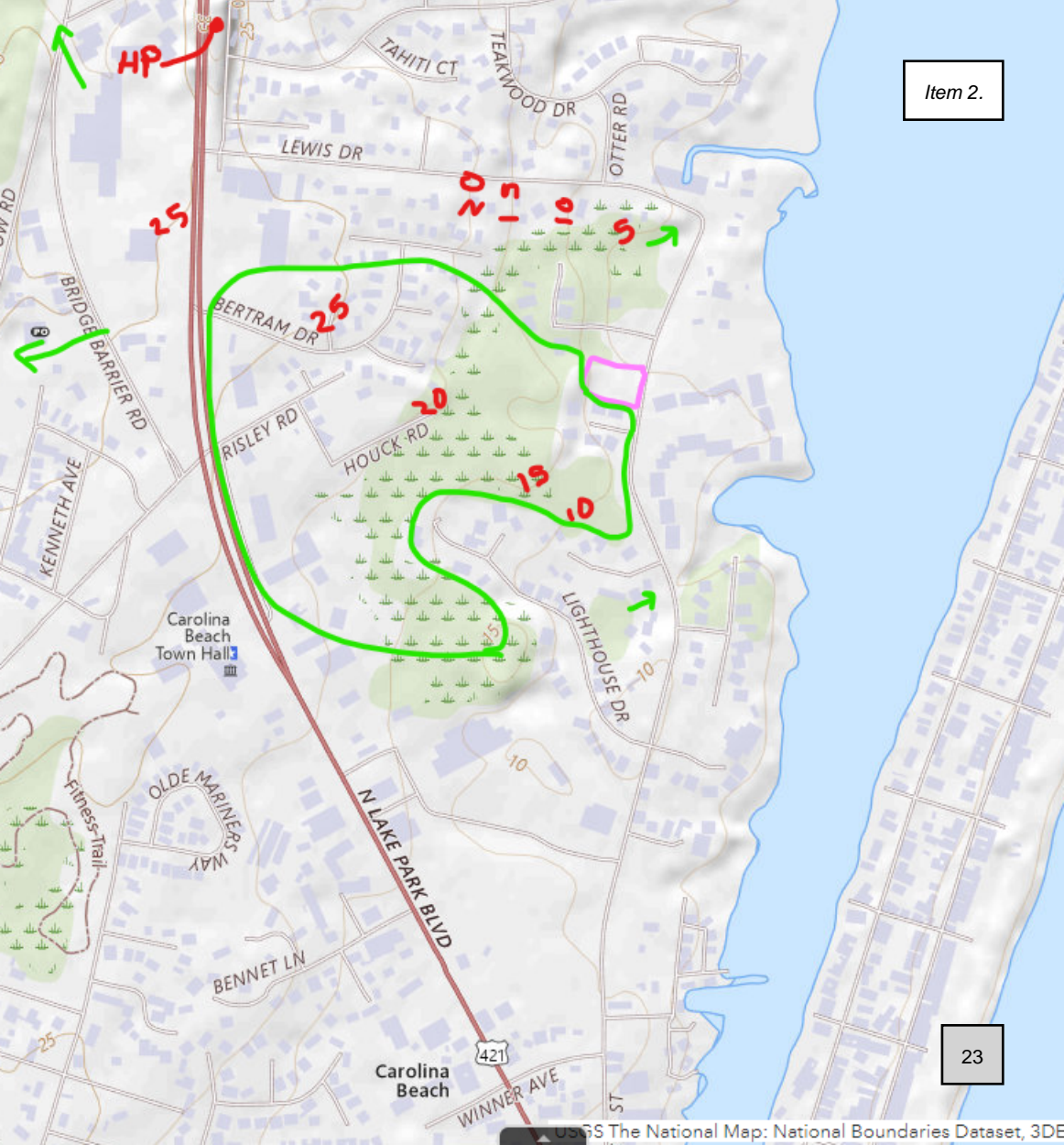
Press CTRL to enable snapping



Item 2.

22

Item 2.



23



NOAA Atlas 14, Volume 2, Version 3
Location name: Carolina Beach, North Carolina, USA*

Latitude: 34.0486°, Longitude: -77.8936°

Elevation: 6 ft**

* source: ESRI Maps

** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M.Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps & aerials](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.540 (0.502-0.584)	0.644 (0.598-0.695)	0.751 (0.696-0.810)	0.834 (0.772-0.900)	0.941 (0.866-1.01)	1.02 (0.937-1.10)	1.10 (1.01-1.19)	1.19 (1.07-1.28)	1.30 (1.16-1.40)	1.39 (1.23-1.51)
10-min	0.863 (0.803-0.933)	1.03 (0.956-1.11)	1.20 (1.12-1.30)	1.33 (1.23-1.44)	1.50 (1.38-1.61)	1.63 (1.49-1.75)	1.76 (1.60-1.89)	1.88 (1.70-2.03)	2.05 (1.84-2.22)	2.18 (1.94-2.37)
15-min	1.08 (1.00-1.17)	1.29 (1.20-1.40)	1.52 (1.41-1.64)	1.69 (1.56-1.82)	1.90 (1.75-2.05)	2.06 (1.89-2.22)	2.22 (2.02-2.39)	2.37 (2.15-2.56)	2.58 (2.31-2.79)	2.74 (2.43-2.98)
30-min	1.48 (1.38-1.60)	1.79 (1.66-1.93)	2.16 (2.00-2.33)	2.44 (2.26-2.64)	2.82 (2.59-3.03)	3.10 (2.84-3.34)	3.40 (3.09-3.66)	3.70 (3.34-3.99)	4.11 (3.68-4.45)	4.44 (3.94-4.82)
60-min	1.84 (1.72-1.99)	2.24 (2.08-2.42)	2.77 (2.57-2.99)	3.18 (2.94-3.44)	3.75 (3.45-4.04)	4.20 (3.85-4.53)	4.68 (4.26-5.04)	5.18 (4.69-5.60)	5.89 (5.28-6.38)	6.48 (5.75-7.04)
2-hr	2.19 (2.02-2.39)	2.68 (2.47-2.93)	3.40 (3.13-3.71)	3.99 (3.66-4.36)	4.84 (4.42-5.28)	5.56 (5.05-6.06)	6.34 (5.72-6.92)	7.20 (6.44-7.84)	8.45 (7.48-9.23)	9.54 (8.37-10.4)
3-hr	2.33 (2.14-2.57)	2.85 (2.62-3.14)	3.64 (3.33-4.00)	4.30 (3.93-4.73)	5.29 (4.80-5.81)	6.15 (5.54-6.74)	7.10 (6.34-7.77)	8.14 (7.22-8.91)	9.73 (8.51-10.7)	11.1 (9.62-12.2)
6-hr	2.94 (2.69-3.25)	3.59 (3.29-3.98)	4.59 (4.19-5.08)	5.45 (4.96-6.02)	6.72 (6.07-7.40)	7.82 (7.02-8.62)	9.06 (8.07-9.97)	10.4 (9.20-11.5)	12.6 (10.9-13.8)	14.4 (12.4-15.9)
12-hr	3.44 (3.12-3.84)	4.21 (3.82-4.69)	5.42 (4.91-6.04)	6.47 (5.83-7.20)	8.04 (7.18-8.92)	9.42 (8.36-10.4)	11.0 (9.65-12.2)	12.7 (11.1-14.1)	15.4 (13.2-17.1)	17.9 (15.1-19.8)
24-hr	4.04 (3.70-4.46)	4.90 (4.50-5.41)	6.35 (5.81-7.00)	7.61 (6.95-8.39)	9.56 (8.64-10.5)	11.3 (10.1-12.4)	13.3 (11.7-14.6)	15.5 (13.5-17.2)	19.0 (16.2-21.1)	22.1 (18.5-24.8)
2-day	4.66 (4.29-5.12)	5.64 (5.20-6.20)	7.24 (6.64-7.96)	8.62 (7.87-9.49)	10.7 (9.70-11.8)	12.6 (11.3-13.9)	14.7 (13.0-16.3)	17.1 (14.9-19.0)	20.7 (17.7-23.2)	23.9 (20.1-27.0)
3-day	4.90 (4.52-5.36)	5.92 (5.46-6.48)	7.54 (6.94-8.27)	8.94 (8.19-9.81)	11.0 (10.0-12.1)	12.9 (11.6-14.2)	14.9 (13.3-16.5)	17.2 (15.1-19.1)	20.8 (17.9-23.2)	24.0 (20.2-27.1)
4-day	5.14 (4.75-5.61)	6.20 (5.73-6.77)	7.85 (7.24-8.58)	9.26 (8.50-10.1)	11.4 (10.3-12.4)	13.2 (11.9-14.4)	15.2 (13.6-16.7)	17.4 (15.4-19.2)	20.9 (18.1-23.2)	24.2 (20.3-27.2)
7-day	5.82 (5.42-6.29)	7.01 (6.53-7.58)	8.82 (8.19-9.54)	10.3 (9.55-11.2)	12.5 (11.5-13.6)	14.4 (13.1-15.6)	16.4 (14.8-17.8)	18.6 (16.6-20.3)	21.8 (19.2-24.0)	24.5 (21.2-27.5)
10-day	6.54 (6.10-7.04)	7.83 (7.30-8.43)	9.70 (9.02-10.5)	11.3 (10.4-12.1)	13.5 (12.5-14.6)	15.4 (14.1-16.7)	17.4 (15.9-18.9)	19.7 (17.7-21.4)	22.9 (20.2-25.1)	25.5 (22.3-28.3)
20-day	8.76 (8.22-9.39)	10.4 (9.79-11.2)	12.7 (11.9-13.6)	14.6 (13.6-15.7)	17.3 (16.0-18.5)	19.5 (18.0-20.9)	21.8 (20.0-23.5)	24.3 (22.0-26.3)	27.8 (24.9-30.4)	30.7 (27.1-33.8)
30-day	10.8 (10.2-11.5)	12.9 (12.1-13.7)	15.4 (14.5-16.5)	17.5 (16.5-18.7)	20.4 (19.1-21.8)	22.7 (21.1-24.3)	25.1 (23.2-26.9)	27.6 (25.3-29.7)	31.0 (28.1-33.6)	33.7 (30.3-36.7)
45-day	13.6 (12.9-14.4)	16.1 (15.2-17.1)	19.1 (18.0-20.3)	21.5 (20.2-22.8)	24.8 (23.2-26.4)	27.5 (25.6-29.2)	30.2 (27.9-32.2)	32.9 (30.3-35.3)	36.7 (33.4-39.6)	39.7 (35.9-43.1)
60-day	16.5 (15.6-17.5)	19.4 (18.4-20.6)	22.8 (21.5-24.1)	25.4 (24.0-26.8)	28.9 (27.2-30.6)	31.6 (29.7-33.5)	34.4 (32.1-36.5)	37.1 (34.4-39.5)	40.8 (37.5-43.7)	43.6 (39.8-47.0)

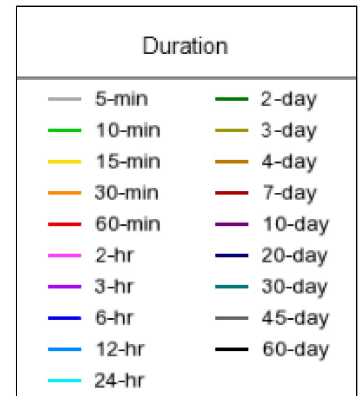
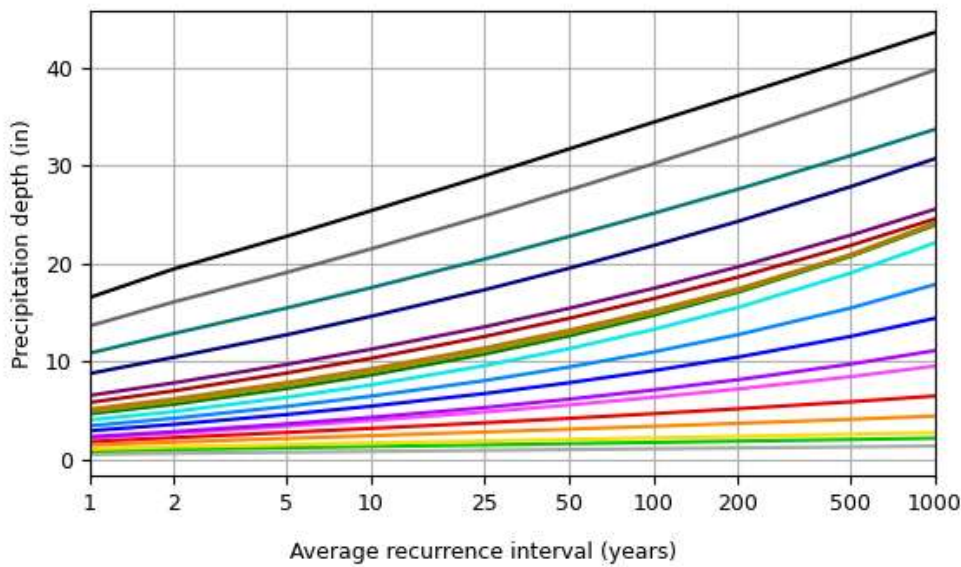
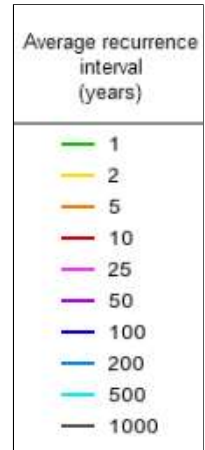
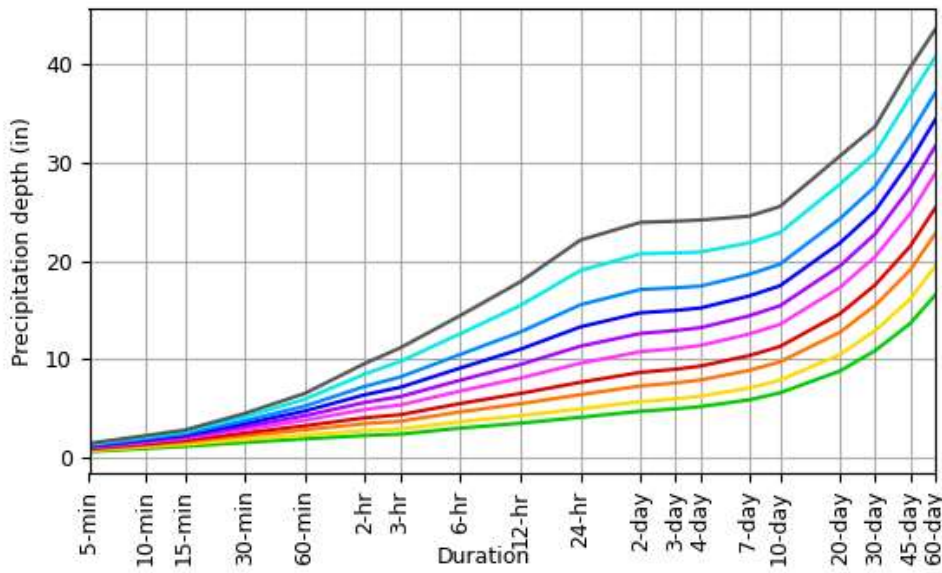
¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

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PF graphical

PDS-based depth-duration-frequency (DDF) curves

Latitude: 34.0486°, Longitude: -77.8936°



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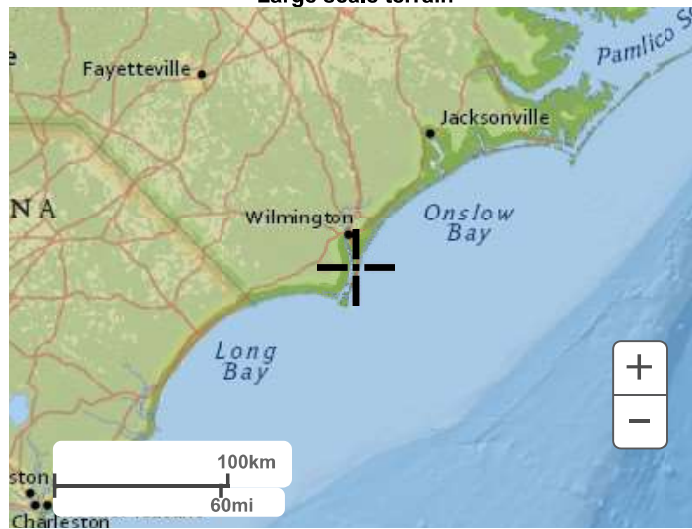
Maps & aeriels

Small scale terrain

Item 2.



Large scale terrain

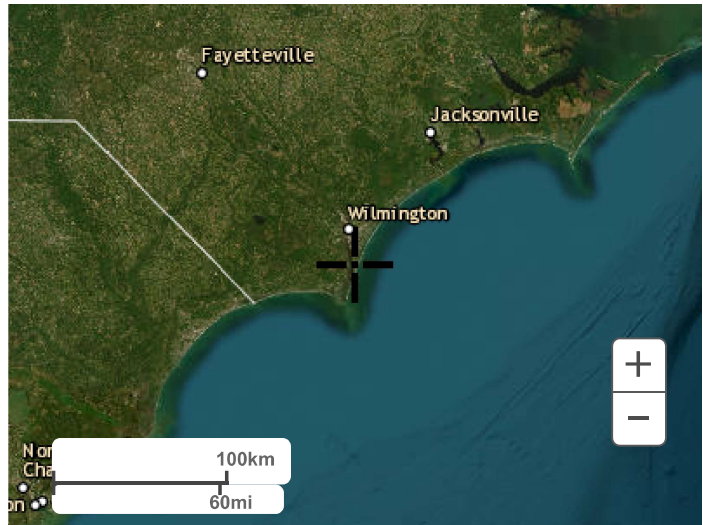


Large scale map



Large scale aerial

Item 2.



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[US Department of Commerce](#)
[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)



AGENDA ITEM COVERSHEET

PREPARED BY: Gloria Abbotts, Senior Planner

DEPARTMENT: Community
Development

MEETING: Planning & Zoning Commission – 9/12/2024

SUBJECT: Appoint a Chair and Co-chair of the Planning & Zoning Commission

Action:

The Commission will need to appoint a Chair and Co-chair.