

**TECHNICAL REVIEW COMMITTEE AGENDA
March 25, 2009**

New Hanover County's Technical Review Committee (TRC) will meet on Wednesday, March 25, 2009 at **2:00 p.m.** in the Engineering Conference Room - 105 New Hanover County Government Center, 230 Government Center Drive, to discuss the following site plan proposal(s):

2:00 p.m. Item 1: Liberty Landing (Performance Site Plan) – Request by Paramounte Engineering on behalf of Bill Clark Homes for TRC to consider an 88 lot division located adjacent to Battle Park subdivision, east side of Carolina Beach Road. Sam Burgess will present this item.

Project Data

Zoning: **R-15 Residential**
Water: **Public (CFPUA)**
Sewer: **Public (CFPUA)**
Road(s): **Private**
Lots/Units: **88**
Acreage: **35.82**
Traffic: **356 ADT @ Carolina Bch Rd/Manassas Dr. (04/05 WMPO Data)**
LOS: **F (breakdown of traffic flow)**
Land Class: **Aquifer &Wetland Resource Protection**

Liberty Landing Development History

None. Cape Fear Public Utility Authority water and sewer capacity letters have not been received to support this 88 lot division.



LOCATION MAP
NOT TO SCALE

PARCEL DATA
 SITE NAME: LIBERTY LANDING
 SITE ADDRESS: 6113 SHILOH DRIVE
 CURRENT ZONING: R-15 RESIDENTIAL DISTRICT
 NEW HANOVER COUNTY TAX PARCEL ID#: R07900-003-040-000
 CHLA LAND USE CLASSIFICATION: TRANSITION

ZONING REQUIREMENTS (R-15 ZONING)
 FRONT YARD = 25 FT
 SIDE YARD = 10 FT
 REAR YARD = 20 FT
 MAXIMUM HEIGHT = 35 FT

R-15 PERFORMANCE RESIDENTIAL DISTRICT REQUIREMENTS:
 1. BUILDINGS ON THE PERIPHERY OF A PERFORMANCE RESIDENTIAL DEVELOPMENT SHALL SETBACK NO LESS THAN TWENTY (20) FEET FROM THE ADJOINING PROPERTY LINE.
 2. IN NO CASE SHALL ANY PART OF A DETACHED SINGLE-FAMILY DWELLING UNIT BE LOCATED CLOSER THAN TEN (10) FEET TO ANY PART OF ANY OTHER DETACHED SINGLE-FAMILY DWELLING.
 3. IN NO CASE SHALL ANY PART OF A MULTI-FAMILY DWELLING UNIT BE LOCATED CLOSER THAN TWENTY (20) FEET TO ANY PART OF ANOTHER DWELLING UNIT.

DENSITY CALCULATIONS
 GROSS TRACT AREA: 35.92 ACRES
 LESS:
 1. AREA IN LAKES, PONDS, RIVERS, MARSHES: 0 ACRES
 2. AREA IN CLASS IV SOILS AS CONFIRMED BY SOIL CONSERVATION SERVICE, (IN LIEU OF SUBSTANTIATION DOROVAN, JOHNSTON AND/OR PAULKO SOILS THE DEVELOPER MAY CHOOSE TO PRESERVE 100% OF SUCH AREAS AS CONSERVATION SPACE): 5.57 ACRES
 3. AREA OF CLASS IV SOILS PRESERVED AS CONSERVATION SPACE: 5.47 ACRES
 NET TRACT AREA: 35.72± ACRES
 MAXIMUM DENSITY FOR APPLICABLE ZONE: R-15 = 2.5 UNITS PER ACRE
 TOTAL NUMBER OF UNITS PERMITTED: 89 UNITS

SITE DATA AND LOT INFORMATION
 1. TAX PARCEL ID # R07900-003-040-000
 2. TOTAL ACREAGE IN TRACT: 35.92± AC
 3. AVERAGE LOT SIZE: 8,455± S.F. (0.19 AC)
 4. RECREATIONAL AREA/OPEN SPACE:
 TOTAL AREA REQ'D (16% OF PER LOT): 2.64 AC TOTAL AREA PROVIDED: 12.20 AC
 ACTIVE AREA REQ'D (50%): 1.32 AC TOTAL AREA PROVIDED: 1.72 AC
 PASSIVE AREA (50%): 1.32 AC TOTAL AREA PROVIDED: 10.48 AC
 5. ALL OPEN SPACE AND RECREATION AREA TO BE DEDICATED TO AND MAINTAINED BY THE LIBERTY LANDING DEVELOPMENT HOME OWNERS ASSOCIATION.
 6. TOTAL WETLAND AREA = 242,348 SF (5.57 AC)
 7. WETLANDS ON THIS SITE WERE CONFIRMED BY COE ON 08-08-08.
 8. CONSERVATION RESOURCE AREAS
 AMOUNT OF CONSERVATION RESOURCE: 0.00 AC
 AMOUNT OF CONSERVATION SPACE PRESERVED: 0.00 AC
 9. PARCEL DOES NOT LIE WITHIN THE 100 YEAR FLOODPLAIN.
 10. TOTAL NUMBER OF LOTS: 88 SINGLE FAMILY
 11. SINGLE FAMILY RESIDENCE WITH APPROXIMATELY 3 BEDROOMS.
 12. ALL LOTS SUBJECT TO A 10' PUBLIC UTILITY EASEMENT ALONG THE RIGHT OF WAY OF ALL STREETS
 13. THE SOILS ON SITE CONSIST OF LYNN HAVEN, KUREAL, FM3R AND LEON SOILS.

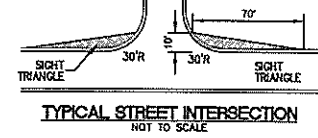
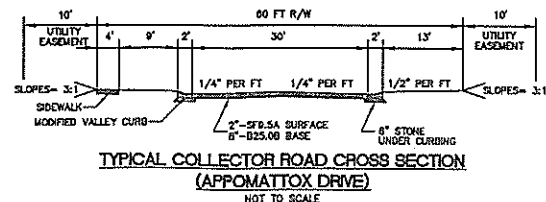
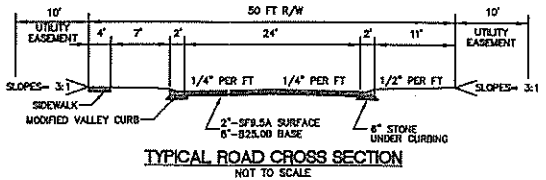
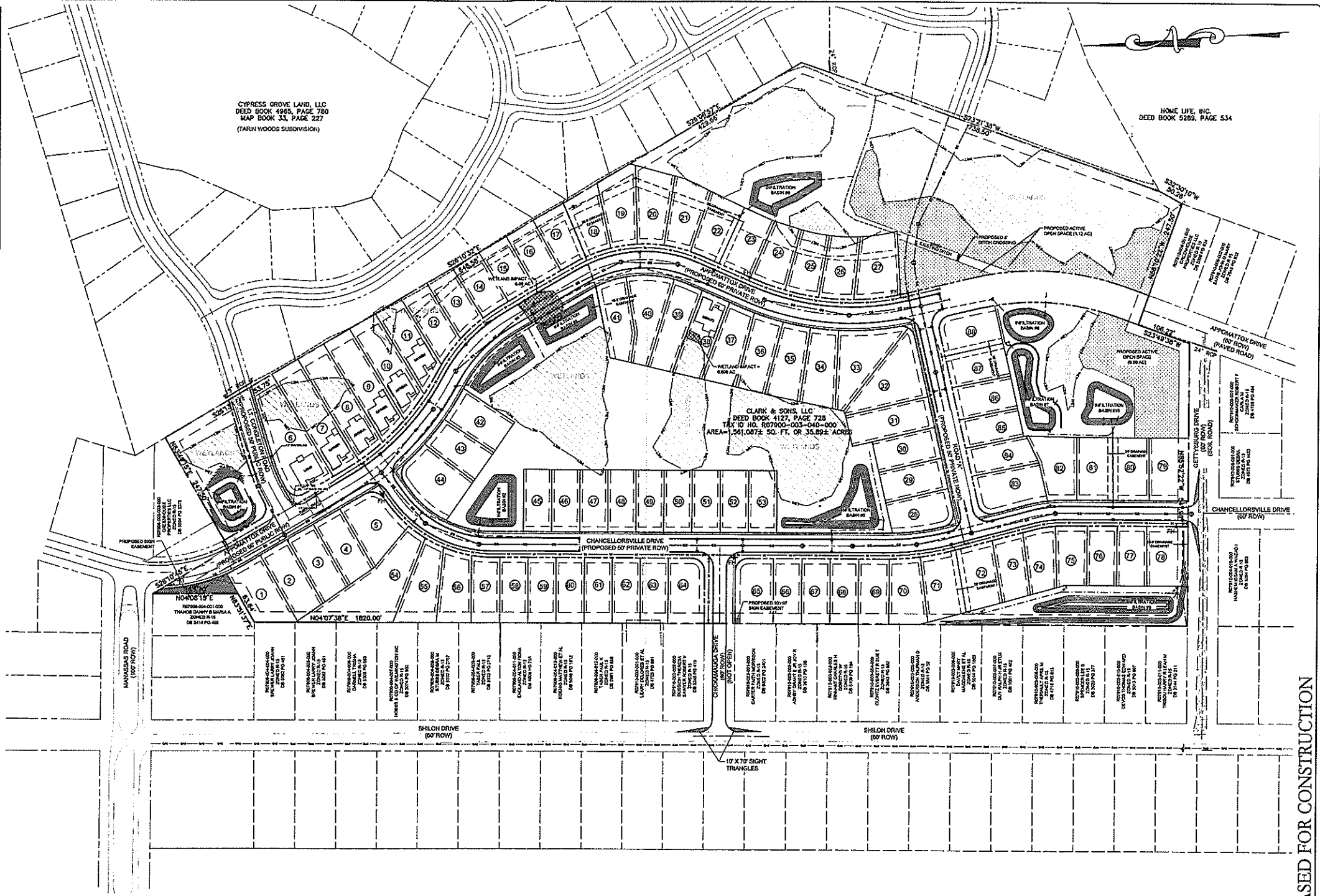
ROADS
 1. ALL STREETS SHALL BE PRIVATE AND CONSTRUCTED TO HCDOT STANDARDS AND INSPECTED AND CERTIFIED BY ENGINEER TO VERIFY THEY WERE BUILT TO HCDOT STANDARDS.
 2. CONNECTIVITY RATIO: 9 LINKS/45 NODES = 1.8
 3. AREA WITHIN STREET RIGHT OF WAY = 245,550 SF (5.58 AC)

UTILITIES
 1. WATER PROVIDED BY CAPE FEAR PUBLIC UTILITY AUTHORITY.
 2. SANITARY SEWER PROVIDED BY CAPE FEAR PUBLIC UTILITY AUTHORITY.
 3. STREET LIGHTS WILL BE PROVIDED.
 4. VERTICAL OBSTRUCTIONS, FENCES, WALLS, ETC. ARE NOT ALLOWED IN UTILITY/EASEMENT AREAS.
 5. ALL LOTS ARE SUBJECT TO A 10' UTILITY EASEMENT RUNNING PARALLEL TO THE RIGHT OF WAY.

SURVEY NOTE:
 TOPOGRAPHIC AND BOUNDARY SURVEY COMPLETED BY PARAMOUNT ENGINEERING, INC. AND SEALED BY DAVID M. EDWARDS, PLS.

LAND DISTURBANCE NOTE:
 SITE EXCEEDS ONE ACRE IN DISTURBANCE. ALL STATE PERMITS WILL HAVE TO BE SECURED PRIOR TO ISSUANCE OF A BUILDING PERMIT.

FEMA NOTE:
 THIS TRACT LIES WITHIN DESIGNATED FLOOD ZONE X (500-YR FLOOD ZONE), ACCORDING TO FEMA FIRM COMMUNITY-PANEL NUMBER 37203133001, BEARING AN EFFECTIVE DATE OF APRIL 3, 2006. ZONE X REPRESENTS AREAS OF 0.2% ANNUAL CHANCE OF FLOOD.



LEGEND

EXISTING	PROPOSED
—○—	PH+ = PROPOSED FIRE HYDRANT
—V—	—M— = PROPOSED WATER VALVE
—T—	—W— = PROPOSED WATER VALVE
—R—	—P— = PROPOSED WATER LINE
—F—	—S— = PROPOSED STORM SEWER
—C—	—D— = PROPOSED DRAINAGE MANHOLE
—I—	—O— = PROPOSED DRAINAGE MANHOLE
—R—	—S— = PROPOSED SANITARY SEWER
—S—	—S— = PROPOSED SANITARY SEWER
—W—	—O— = PROPOSED OPEN SPACE
—W—	

PRELIMINARY DESIGN - NOT RELEASED FOR CONSTRUCTION

OVERALL SITE PLAN
 PERFORMANCE RESIDENTIAL SUBDIVISION
 LIBERTY LANDING
 NEW HANOVER COUNTY
 NORTH CAROLINA

PARAMOUNT ENGINEERING, INC.
 591 Oleander Drive, Suite 201
 Wilmington, North Carolina 28403
 (910) 791-6707 (O) (910) 791-6700 (F)

BILL CLARK HOMES
 430 EASTWOOD ROAD
 WILMINGTON, NORTH CAROLINA 28403

PROJECT STATUS
 CONCEPTUAL LAYOUT: []
 PRELIMINARY DESIGN: []
 FINAL DESIGN: []
 RELEASED FOR CONSTRUCTION: []

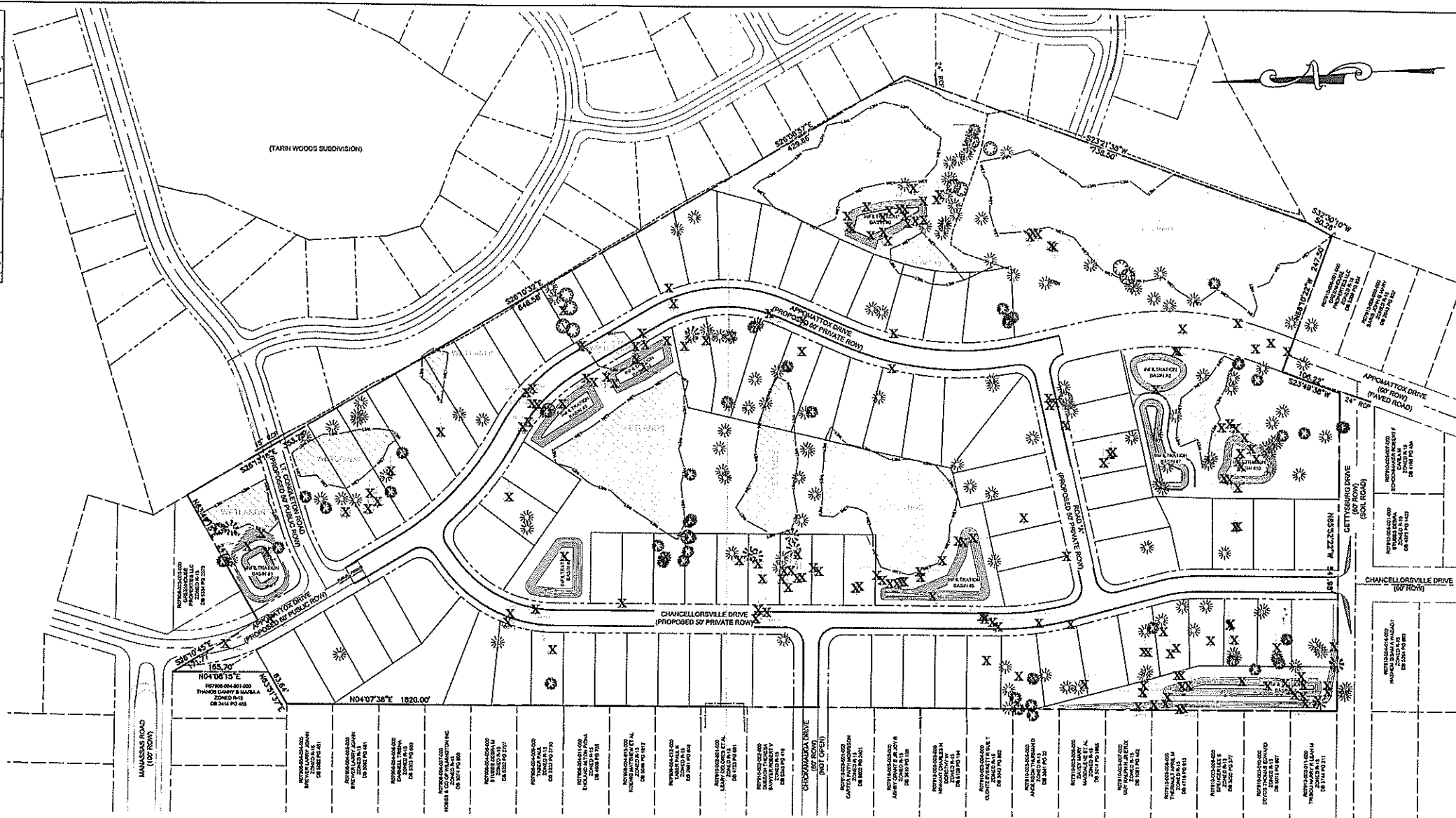
DRAWING INFORMATION
 DRAWN BY: []
 DATE: []
 SCALE: []
 REVISIONS: []

SEAL
 NORTH CAROLINA
 PROFESSIONAL ENGINEER
 DAVID M. EDWARDS
 01581
 01/27

C-1.0
 PEI JOB#: 08164.PE



LOCATION MAP
NOT TO SCALE



TREES TO BE REMOVED FROM PROPOSED RIGHT OF WAY

REGULATED	TREE SIZE	WHY REMOVED	NO. OF TREES
1.	PINE	12"	25
2.	PINE	15"	5
3.	PINE	16"	2
4.	PINE	18"	2
5.	PINE	20"	1
6.	OAK	8"	2
7.	OAK	10"	5
8.	OAK	12"	1
9.	GUM	10"	1
10.	ELM	10"	1
11.	TREE	8"	1
			46

SIGNIFICANT

TREE SIZE	WHY REMOVED	NO. OF TREES
PINE 24"	WITHIN PROPOSED RIGHT OF WAY	2

TREES TO BE REMOVED FOR PROPOSED STORMWATER

REGULATED	TREE SIZE	WHY REMOVED	NO. OF TREES
1.	PINE	12"	31
2.	PINE	14"	1
3.	PINE	15"	9
4.	PINE	17"	1
5.	PINE	18"	8
6.	PINE	20"	1
7.	OAK	8"	7
7.	OAK	9"	1
8.	OAK	10"	3
9.	OAK	11"	1
10.	OAK	12"	5
11.	OAK	15"	1
12.	GUM	12"	1
13.	MAPLE	8"	1
14.	MAPLE	9"	1
15.	MAPLE	10"	1
16.	MAPLE	12"	2
			75

SIGNIFICANT

TREE SIZE	WHY REMOVED	NO. OF TREES	
1.	PINE 24"	STORMWATER	6
2.	PINE 30"	STORMWATER	2
3.	OAK 24"	STORMWATER	1
4.	MAPLE 30"	STORMWATER	1
			10

TREES TO BE REMOVED FROM BUILDABLE FOOTPRINT

REGULATED	TREE SIZE	WHY REMOVED	NO. OF TREES
1.	PINE	12"	15
2.	PINE	13"	1
3.	PINE	14"	5
4.	PINE	15"	2
5.	PINE	18"	11
6.	PINE	19"	1
7.	PINE	20"	1
8.	OAK	8"	7
9.	OAK	10"	1
10.	OAK	12"	1
11.	OAK	16"	1
			46

SIGNIFICANT

TREE SIZE	WHY REMOVED	NO. OF TREES	
1.	PINE 24"	FOOTPRINT	1
2.	PINE 30"	FOOTPRINT	1
3.	MAGNOLIA 6"	FOOTPRINT	1
			3

TREES TO BE PRESERVED

REGULATED	TREE SIZE	NO. OF TREES	
1.	PINE	12"	82
2.	PINE	13"	3
3.	PINE	14"	17
4.	PINE	15"	3
5.	PINE	16"	2
6.	PINE	17"	1
7.	PINE	18"	19
8.	PINE	20"	2
9.	OAK	8"	22
10.	OAK	10"	3
11.	OAK	10"	5
12.	OAK	12"	1
13.	OAK	13"	1
14.	OAK	15"	2
15.	OAK	18"	1
16.	MAPLE	8"	4
17.	MAPLE	9"	1
18.	MAPLE	10"	6
19.	MAPLE	12"	5
20.	CYPRESS	12"	1
21.	CYPRESS	15"	1
22.	GUM	12"	1
23.	TREE	8"	2
			189

SIGNIFICANT

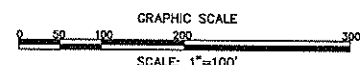
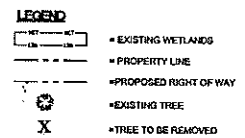
TREE SIZE	NO. OF TREES	
1.	PINE 24"	1
2.	PINE 30"	3
3.	PINE 36"	3
4.	OAK 24"	3
5.	MAPLE 30"	1
6.	JUNIPER 36"	1
7.	CHERRY 8"	1
		16

SIGNIFICANT TREE NOTES:

1. THE TOTAL CALIPER INCHES OF ALL SIGNIFICANT TREES TO BE REMOVED MUST BE TOTALED AND DOUBLED TO DETERMINE THE NUMBER OF CALIPER INCHES THAT MUST BE PLANTED BACK ON THE SITE WITH 2-3" CALIPER TREES AS A MINIMUM.
2. IF THE ZONING ADMINISTRATOR DETERMINES THAT THE SITE CANNOT ACCOMMODATE THE REQUIRED NUMBER OF TREES, THE AMOUNT OF TREES THAT CAN BE ACCOMMODATED SHALL BE PLANTED ON SITE AND THE REMAINING REQUIRED TREES SHALL BE MITIGATED THROUGH A PAYMENT IN LIEU OF PLANTING. THE MITIGATION COST IS \$295 PER TREE TO BE REPLANTED.

MITIGATION CALCULATIONS:

1. TOTAL NUMBER OF REGULATED TREES TO BE REMOVED FROM RIGHT OF WAY = 46
2. TOTAL NUMBER OF SIGNIFICANT TREES TO BE REMOVED FROM RIGHT OF WAY = 2
3. TOTAL CALIPER INCHES OF SIGNIFICANT TREES TO BE REMOVED FROM RW = 48 CALIPER INCHES
4. TOTAL CALIPER INCHES TO BE MITIGATED (2 X INCHES REMOVED) = 96 CALIPER INCHES
5. TOTAL NUMBER OF REGULATED TREES TO BE PRESERVED = 184
6. TOTAL NUMBER OF SIGNIFICANT TREES TO BE PRESERVED = 17



PRELIMINARY DESIGN - NOT RELEASED FOR CONSTRUCTION

REVISIONS:

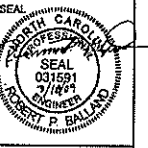
NO.	DATE	DESCRIPTION
1	01/15/20	AS SHOWN ON THESE DRAWINGS

CLIENT INFORMATION:
BILL CLARK HOMES
 430 EASTWOOD ROAD
 WILMINGTON, NORTH CAROLINA 28403

PARAMOUNT ENGINEERING
 5911 Oleander Drive, Suite 201
 Wilmington, North Carolina 28403
 (910) 791-6707 (C) (910) 791-6760 (F)

TREE SURVEY
 PERFORMANCE RESIDENTIAL SUBDIVISION
 LIBERTY LANDING
 NEW HANOVER COUNTY
 NORTH CAROLINA

PROJECT STATUS:
 CONCEPTUAL LAYOUT:
 FINAL DESIGN:
 RELEASED FOR CONSTRUCTION:
 DRAWING INFORMATION:
 DATE: 01/15/20
 SCALE: 1"=100'
 DRAWING NO.: C-1.1
 DRAWN: P. BALLARD
 CHECKED: P. BALLARD



C-1.1
 PE JOB#: 08164.PE