

SEE SHEET L.1-1 FOR EXISTING TREE INVENTORY
AND ESSENTIAL SITE IMPROVEMENT REMOVAL.

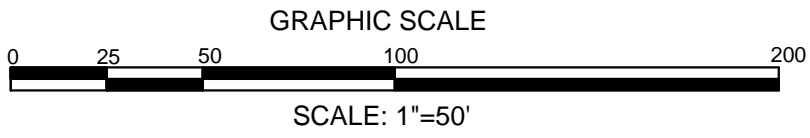
NCDENR PWSS WATER PERMIT #: _____
WATER CAPACITY: _____ GPD
DWQ SEWER PERMIT #: _____
SEWER CAPACITY: _____ GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

Approved Construction Plan

	Name	Date
Planning		
Traffic		
Fire		

For each open utility cut of
City streets, a \$325 permit
shall be required from the
City prior to occupancy
and/or project acceptance.

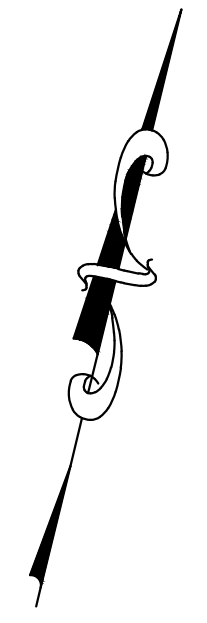
WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit #: _____
Signed: _____



PRELIMINARY DESIGN - NOT RELEASED FOR CONSTRUCTION

PROJECT STATUS PRELIMINARY DESIGN: _____ FINAL DESIGN: _____ RELEASED FOR CONSTRUCTION: _____		CLIENT INFORMATION: S&H CENTRE DEVELOPMENT CORP. 1611 CASTLE HAYNE ROAD, BUILDING B WILMINGTON, NC 28401
DRAWING INFORMATION DATE: 1.31.17 SCALE: 1"=50' DRAWN: D.F. CHECKED: D.F.		
SEAL		PARAMOUNTE ENGINEERING, INC. 122 Cinema Drive Wilmington, North Carolina 28403 (910) 791-6707 (O) (910) 791-6760 (F) NC License #: C-2846
C-2.0		
PEI JOB#: 15315.PE		

PEI JOB#: 15315.PE



PARAMOUNT ENTERTAINMENT
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

PROJECT STATUS CONCEPTUAL LAYOUT: PRELIMINARY LAYOUT: FINAL DESIGN: RELEASED FOR CONST:	DRAWING INFORMATION DATE: SCALE: DESIGNED: DRAWN: CHECKED:
------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------

C-3.1

<p>NCDENR PWSS WATER PERMIT #: _____</p> <p>WATER CAPACITY: _____ GPD</p> <p>DWQ SEWER PERMIT #: _____</p> <p>SEWER CAPACITY: _____ GPD</p> <p>SEWER SHED # AND PLANT: _____</p> <p>SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)</p>	<p>For each open utility cut out of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____


CITY OF
WILMINGTON
NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN


Date: _____ Permit # _____

Signed: _____



**Know what's below.
Call before you dig.**

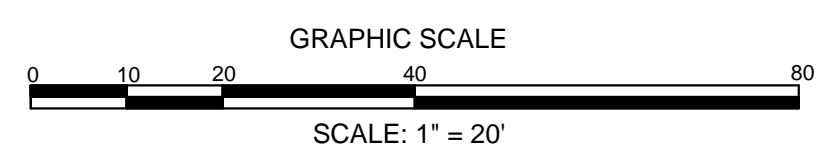
GRAPHIC SCALE

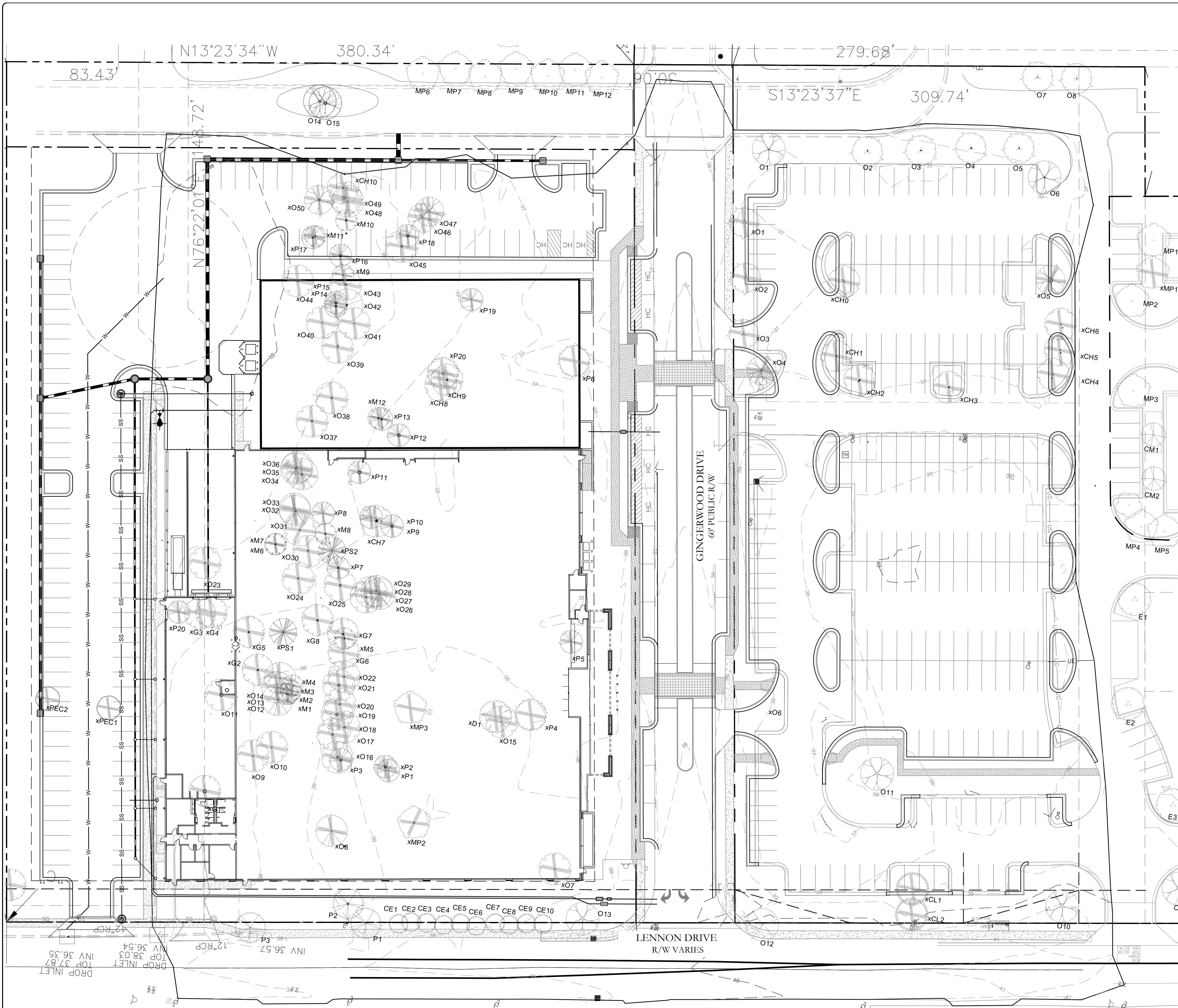


SCALE: 1" = 20'



**Know what's below.
Call before you dig.**





Retained Tree Credits

TREE ID	CAL	Tree Typ	Location	Credit
O1	8	Live Oak		2
O2	7	Sawtooth		2
O3	6	Sawtooth		2
O4	9	Sawtooth		2
O5	7	Sawtooth		2
O6	8	Live Oak		2
O7	4	Sawtooth		2
O8	4	Sawtooth		2
O9	36	Live Oak		6
O10	36	Live Oak		6
O11	30	Live Oak		5
O12	20	Laurel		4
O13	48	Live Oak		8
O14	13	Live Oak		3
O15	20	Live Oak		4
				52

P1	12	Loblolly	Building	3
P2	16	Loblolly	Building	3
P3	18	Loblolly	Building	3
				10

MP1	5	Red Maple	Building	1
MP2	4	Red Maple	Building	1
MP3	5	Red Maple	Building	1
MP4	4	Red Maple	Building	1
MP5	4	Red Maple	Building	1
MP6	4	Red Maple	Building	1
MP7	5	Red Maple	Building	1
MP8	5	Red Maple	Building	1
MP9	4	Red Maple	Building	1
MP10	4	Red Maple	Building	1
MP11	4	Red Maple	Building	1
MP12	4	Red Maple	Building	1
				12

Protected Tree Mitigation Calculations

xO1	5	Sawtooth	Building	-	-
xO2	7	Sawtooth	Building	-	-
xO3	7	Sawtooth	Building	-	-
xO4	8	Live Oak	Building	Reg	3
xO5	24	Live Oak*	Building	SICK	-
xO6	6	Sawtooth	Building	-	-
xO7	20	Water Oak	Building	Reg	7
xO8	48	Laurel Oak	Building	Sig	32
xO9	4	Water Oak	Building	-	-
xO10	6	Water Oak	Building	-	-
xO11	22	Water Oak	Building	Reg	7
xO12	5	Laurel Oak	Building	-	5
xO13	6	Laurel Oak	Building	-	6
xO14	9	Laurel Oak	Building	Reg	3
xO15	20	Water Oak	ServicePad	Reg	7
xO16	13	Water Oak*	Building	SICK	-
xO17	12	Water Oak	Building	Reg	4
xO18	8	Water Oak*	Building	SICK	-
xO19	18	Water Oak	Building	Reg	6
xO20	9	Water Oak*	Building	SICK	-
xO21	17	Water Oak	Building	Reg	6
xO22	9	Water Oak	Building	Reg	3
xO23	20	Water Oak	Building	Reg	7
xO24	8	Water Oak	Building	Reg	3
xO25	18	Water Oak	Building	Reg	6
xO26	8	Water Oak	Building	Reg	3
xO27	9	Water Oak	Building	Reg	3
xO28	20	Laurel Oak	Building	Reg	7
xO29	10	Laurel Oak	Building	Reg	3
xO30	9	Water Oak	Building	Reg	3
xO31	9	Southern Red	Building	Reg	3
xO32	8	Laurel Oak	Building	Reg	3
xO33	6	Laurel Oak	Building	Reg	2
xO34	10	Laurel Oak	Building	Reg	3
xO35	10	Laurel Oak	Building	Reg	3
xO36	8	Laurel Oak	Building	Reg	3
xO37	8	Water Oak	Building	Reg	3
xO38	8	Water Oak	Building	Reg	3
xO39	8	Water Oak	Building	Reg	3
xO40	10	Water Oak	Building	Reg	3
xO41	10	Water Oak	Building	Reg	3
xO42	7	Water Oak	Island	Reg	2
xO43	9	Water Oak	Parking	Reg	3
xO44	14	Water Oak	Lennon	Reg	5
xO45	16	Water Oak	Parking-E	Reg	5
xO46	16	Live Oak	Parking-E	Reg	5
xO47	22	Live Oak	Parking-E	Reg	7
xO48	8	Water Oak	Reg	Reg	3
xO49	13	Water Oak	Lennon	Reg	4
xO50	14	Live Oak	Lennon	Reg	5
					193

xP1	16	Loblolly	Building	Reg	5
xP2	11	Loblolly	Building	Reg	4
xP3	18	Long Leaf	Building	Reg	6
xP4	22	Long Leaf	Building	Reg	7
xP5	24	Loblolly	Building	Reg	8
xP6	18	Long Leaf	Building	Reg	6
xP7	12	Loblolly	Building	Reg	4
xP8	9	Loblolly	Building	-	-
xP9	16	Loblolly	Building	Reg	5
xP10	16	Loblolly	Building	Reg	5
xP11	20	Loblolly	Building	Reg	7
xP12	20	Loblolly	Building	Reg	7
xP13	16	Loblolly	Building	Reg	5
xP14	12	Loblolly	Building	Reg	4
xP15	9	Loblolly	Building	-	-
xP16	16	Loblolly	Building	Reg	5
xP17	13	Loblolly	Building	Reg	4
xP18	19	Loblolly	Building	Reg	6
xP19	18	Loblolly	Building	Reg	6
xP20	19	Long Leaf	Building	Reg	6
					102

TREE ID	CAL	Tree Typ	Location	Credit
CM1	5	Crape Myrtle	Building	1
CM2	5	Crape Myrtle	Building	1
				2
E1	7	Lacebark Elm	Building	2
E2	6	Lacebark Elm	Building	2
E3	7	Lacebark Elm	Building	2
				6
CE1	12	Cedar	Lennon	3
CE2	12	Cedar	Lennon	3
CE3	12	Cedar	Lennon	3
CE4	12	Cedar	Lennon	3
CE5	12	Cedar	Lennon	3
CE6	10	Cedar	Lennon	3
CE7	10	Cedar	Lennon	3
CE8	10	Cedar	Lennon	3
CE9	10	Cedar	Lennon	3
CE10	10	Cedar	Lennon	3
				30

Total Retained Caliper Inches	112
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TREE ID	CAL	Tree Typ	Location	Type	RMV
xMP1	4	Red Maple	Building	-	-
xMP2	14	Red Maple	Building	Reg	5
xMP3	6	Red Maple	Building	-	-
					5
xG1	19	Sweet Gum	Building	Reg	6
xG2	12	Sweet Gum	Building	Reg	4
xG3	12	Sweet Gum	Building	Reg	4
xG4	10	Sweet Gum	Building	Reg	3
xG5	11	Sweet Gum	Building	Reg	3
xG6	8	Sweet Gum	Building	Reg	3
xG7	12	Sweet Gum	Building	Reg	4
xG8	13	Sweet Gum	Building	Reg	4
					32
xM1	4	Magnolia	Building	Reg	1
xM2	6	Magnolia	Building	Reg	2
xM3	6	Magnolia	Building	Reg	2
xM4	4	Magnolia	Building	Reg	1
xM5	9	Magnolia	Building	Sig	6
xM6	4	Magnolia	Building	Reg	1
xM7	6	Magnolia	Building	Reg	2
xM8	10	Magnolia	Building	Sig	7
xM9	6	Magnolia	Building	Reg	2
xM10	8	Magnolia	Building	Sig	5
xM11	12	Magnolia	Building	Sig	8
xM12	8	Magnolia	Building	Sig	5
					43

xP51	10	Persimmon	Building	Reg	2
xP52	8	Persimmon	Building	Reg	1
					3

xCL1	16	Cherry Laurel	Building	Reg	3
xCL2	16	Cherry Laurel	Building	Reg	3
					5

xCH0	5	Black Cherry	Building	Reg	1
xCH1	8	Black Cherry	Building	Sig	5
xCH2	8	Black Cherry	Building	Sig	5
xCH3	8	Black Cherry	Building	Sig	5
xCH4	4	Black Cherry	Building	Reg	1
xCH5	6	Black Cherry	Building	Reg	1
xCH6	5	Black Cherry	Building	Reg	1
xCH7	6	Black Cherry	Building	Reg	1
xCH8	8	Black Cherry	Building	Sig	5
xCH9	8	Black Cherry	Building	Sig	5
xCH10	8	Black Cherry	Building	Sig	5
					36

xD1	4	Dogwood	Building	Reg	1
					1

Total Mitigation Inches Required	422
----------------------------------	-----

REVISIONS:
REVISIONS PER 10.10.16 TRC COMMENTS

CLIENT INFORMATION:
S&H CENTRE DEVELOPMENT CORP.
1611 CASTLE HAYNE ROAD, BUILDING B
WILMINGTON, NC 28401

PARAMOUNT ENGINEERING
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846


TREE INVENTORY & REMOVAL PLAN
S&H CENTER - LOT 1C & 2
5309 GINGERWOOD DRIVE
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS:
DATE: 1/31/17
SCALE: 1" = 30'
DRAWN: JRC
CHECKED: AHE


SEAL

L-1.0
PEI JOB#: 15315.PE

PRELIMINARY DESIGN - NOT RELEASED FOR CONSTRUCTION



Know what's below.
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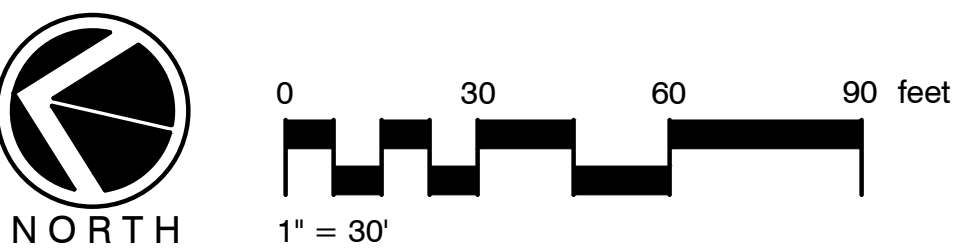






















Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan

Name	_____	Date	_____
Planning	_____		
Traffic	_____		
Fire	_____		

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.



PLANT SCHEDULE					
TREES	CODE	BOTANICAL NAME	SIZE	QTY	
	BHM	ACER RUBRUM 'BOWHALL' Bowhall Maple	2.5" CAL.	39	
	SH	ILEX X ATTENUATA 'SAVANNAH' Savannah Holly	2.5" CAL.	42	
	LLP	PINUS PALUSTRIS Longleaf Pine	PLUGS	46	
	SRO	QUERCUS FALCATA Southern Red Oak	2.5" CAL.	4	
	LO	QUERCUS VIRGINIANA Southern Live Oak	2.5" CAL.	47	
EXISTING TREES TO REMAIN	CODE	BOTANICAL NAME	SIZE	QTY	
	ECM	GRAPE MYRTLE Existing Grape Myrtle	EXISTING	2	
	ECD	EXISTING CEDAR Existing Cedar	EXISTING	8	
	ELE	LACEBARK ELM Existing Lacebark Elm	EXISTING	3	
	ELA	LAUREL OAK Existing Laurel Oak	EXISTING	1	
	ELO	LIVE OAK Existing to Remain	EXISTING	8	
	ERM	RED MAPLE Existing Red Maple	EXISTING	13	
	EST	SAWTOOTH OAK Existing Sawtooth Oak	EXISTING	6	
SHRUBS	CODE	BOTANICAL NAME	CONT	QTY	
	AIZ	AZALEA L. 'FORMOSA' Formosa Azalea (10' x 6' - Purple)	3 GAL	17	
	IC	ILEX C. 'SOFT TOUCH' Soft Touch Holly (2' x 3')	3 GAL	183	
	DBH	ILEX CORNUTA 'BURFORDII NANA' Dwarf Burford Holly	3 GAL	178	
	BH	ILEX CORNUTA 'BURFORDII' Burford Chinese Holly	7 GAL	77	
	DYH	ILEX VOMITORIA 'NANA' Dwarf Yaupon (5' x 5')	3 GAL	539	
	EBL	LIGUSTRUM J. 'EAST BAY' East Bay Privet	3 GAL	137	
	RL	LOROPETALUM C. 'RUBY' Rutby Loropetalum	3 GAL	19	
	MA	MISCANTHUS S. 'ADAGIO' Adagio Grass	3 GAL	113	
	PM	MUHLLENBERGIA CAPILLARIS Pink Muhly	3 GAL	128	
	DPS	SPIRAEA J. DOUBLE PLAY ARTISAN 'GALEN' Galen Spirea	3 GAL	62	
GROUND COVERS	CODE	BOTANICAL NAME	CONT	SPACING	QTY
	AJ	TRACHELOSPERMUM A. 'ASIATIC' Asiatic Jasmine	4" POT	18" o.c.	1,455

LANDSCAPE NOTES:
1. ALL PLANT BEDS SHALL RECEIVE PINE STRAW MULCH 3" DEPTH MIN. - 4" DEPTH MAX.
2. SEED ALL DISTURBED AREAS OUTSIDE OF MULCH AREAS WITH BERMUDA 'BLACKJACK'

LANDSCAPE CALCULATIONS:

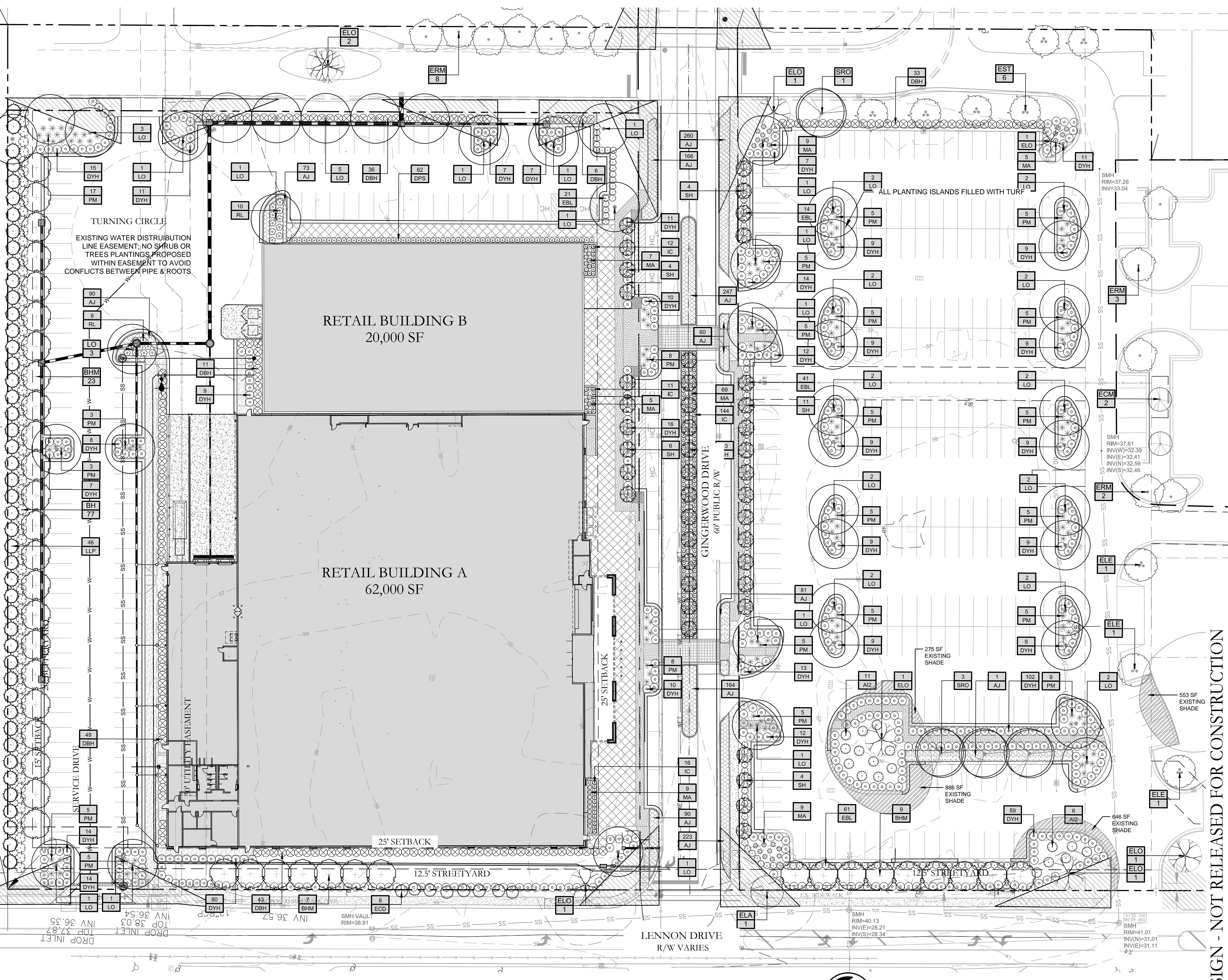
STREETYARDS			
LENNON DR. SECONDARY STREETYARD 690 LF * 130 LF OF DRIVEWAYS = 560 LF 560 LF * 25 = 14,000 SF * 0.5 (SECONDARY) = 7,000 SF 7,000 SF / 600 SF = 11.6	REQ'D 7,000 SF	PROV 7,000 SF	
1 CANOPY / 600 SF 6 SHRUBS / 600 SF	12 72	18 106	
GINGERWOOD DR. PRIMARY STREETYARD - (NORTH) 469 LF * 25 = 11,725 SF 11,725 SF / 600 SF = 19.5	REQ'D 11,725 SF	PROV 11,725 SF (7,095 UNDER)	
1 CANOPY / 600 SF 6 SHRUBS / 600 SF	20 120	12 125	
GINGERWOOD DR. PRIMARY STREETYARD - (SOUTH) 520 LF * 64 LF OF DRIVEWAY = 456 LF 456 LF * 25 = 11,400 SF 11,400 SF / 600 SF = 19.0	REQ'D 11,400 SF	PROV 5,262 SF (6,138 UNDER)	
1 CANOPY / 600 SF 6 SHRUBS / 600 SF	19 114	24 180	










The streetyard provided along Gingerwood Drive totals 13,233 sf, while 23,125 sf is required. However, we believe that the combination of tree preservation, efficient parking layout, safe pedestrian spaces, and the proposed landscape plan that integrates with the design intent of the Cohesive Development Project, will satisfy the City's streetyard requirement.

PARKING AREA INTERIOR			
152,936 SF * 20% SHADING	REQ'D 30,591 SF	PROV 47,050 SF	
EXISTING 49 @ 707 SF 32 @ 314 SF	2,359 SF 34,643 SF 10,048 SF	2,359 SF 34,643 SF 47,050 SF	

FOUNDATION PLANTINGS			
550 LF * 40 FT HGT = 22,000 SF * 0.12	REQ'D 2,640 SF	PROV 2,760 SF	

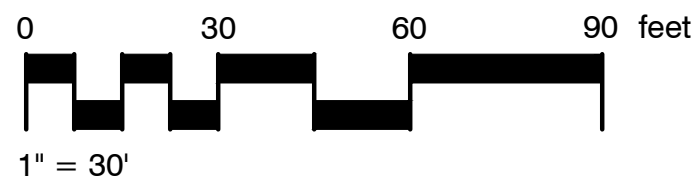
OVERALL SITE TREE PLANTING REQUIREMENTS			
7.4 AC * 15 TREES / AC	REQ'D 111	PROV 111	
PROTECTED MITIGATION TREES REQUIRED (422 CAL. INCHES / 2.5")	169		
TOTAL TREES REQ. 280			
CREDITS FOR RETAINED TREES	112		
2.5" CAL MIN. TREES PROVIDED	132		
TOTAL TREES PROVIDED 244			
(43 PINE PLUGS NOT INCLUDED IN COUNT)			



LEGEND	
	= EXISTING PROPERTY LINE
	= PROPOSED CONCRETE SIDEWALK
	= PROPOSED SPECIALTY PAVING
	= PROPOSED PERVIOUS CONCRETE PAVING
	= PROPOSED BUILDING FOOTPRINT
	= PROPOSED BUFFER AREAS
	= EXISTING WATER MAIN
	= EXISTING SANITARY SEWER MAIN
	= EXISTING OVERHEAD ELECTRIC

REFER TO DETAIL SHEET,
L-1.2 FOR LANDSCAPE NOTES

BUILDING B EXTERIOR
ELEVATIONS SHALL
SUFFICIENTLY MATCH
PROPOSED BUILDING A &
COSTCO ELEVATIONS



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NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
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Approved Construction Plan
Name _____ Date _____
Planning _____
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Fire _____

PRELIMINARY DESIGN - NOT RELEASED FOR CONSTRUCTION

REVISIONS:
REVISIONS PER 10.10.18 TRC COMMENTS

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NC License #: C-2846

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FINAL DESIGN
RELEASED FOR CONSTRUCTION

SEAL

DRAWING INFORMATION:
DATE: 1.31.17
SCALE: 1" = 30'
DRAWN: JNC
CHECKED: JNE

L-1.1

PEI JOB#: 15315.PE

