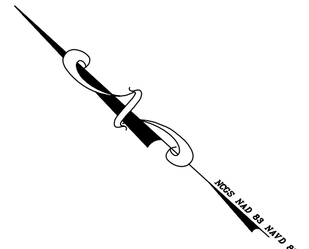


NEUSE RIVER BASIN MANAGEMENT STRATEGY
NITROGEN EXPORT CALCULATIONS
WATERSHED MANAGEMENT DATA

FULLY DEVELOPED

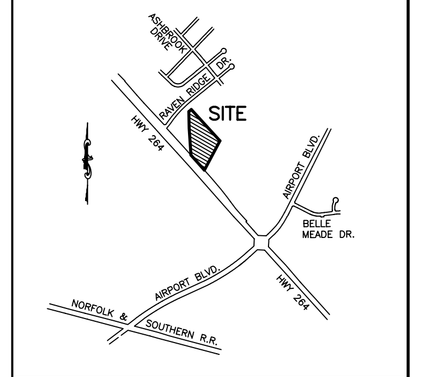
Lot #	Acreage	Maximum Impervious Percentage	Undisturbed Open Space (ac)	Nitrogen Loading (lbs)	Managed Open Space (ac	Nitrogen Loading (lbs)	Impervious Area (ac)	Nitrogen Loading (lbs)	TOTAL N Loading w/o BMP's (lbs)	BMP's	Nitrogen Reduction Factor	TOTAL Nitrogen Loading with BMP's (lbs)	TOTAL Nitrogen lbs/ac/yr	Excess Nitrogen lbs/ac/yr	Excess Nitrogen lbs/YR	Distributed Nitrogen (lbs) to buydown	Maximum Offset Payment	Distributed Maximum Offset Payment
116-A	1.050	0.60		0	0.420	0.504	0.630	13.356	13.860	S/D	0.72	9.979	9.504	5.904	6.1992	16.850	$5,272.42	$14,330.89
116-B	1.390	0.60		0	0.556	0.667	0.834	17.681	18.348	S/P	0.8	14.678	10.560	6.960	9.6744	0.000	$8,228.08	$0.00
116-C	5.630	0.60		0	2.252	2.702	3.378	71.614	74.316	S/P	0.6	44.590	7.920	4.320	24.3216	26.574	$20,685.52	$22,601.56
R/W	0.390	0.60			0.156	0.19	0.234	4.961	5.148	D	0.9	4.633	11.880	8.280	3.2292	0.000	$2,746.43	$0.00
Totals	8.460							111.672				73.880					$36,932.45	$36,932.45

BMP	Type	TN Removal Rate
P	Pond	25%
SF	Sand Filter	35%
S	Open Channel	20%
B	Bioretention	25%
W	Constructed Wetlands	40%
RP	Riparian Buffers	30%
FS	Veg. Filter Strips	20%
D	Dry Detention	10%
PRO	Proprietary BMP's	Varies

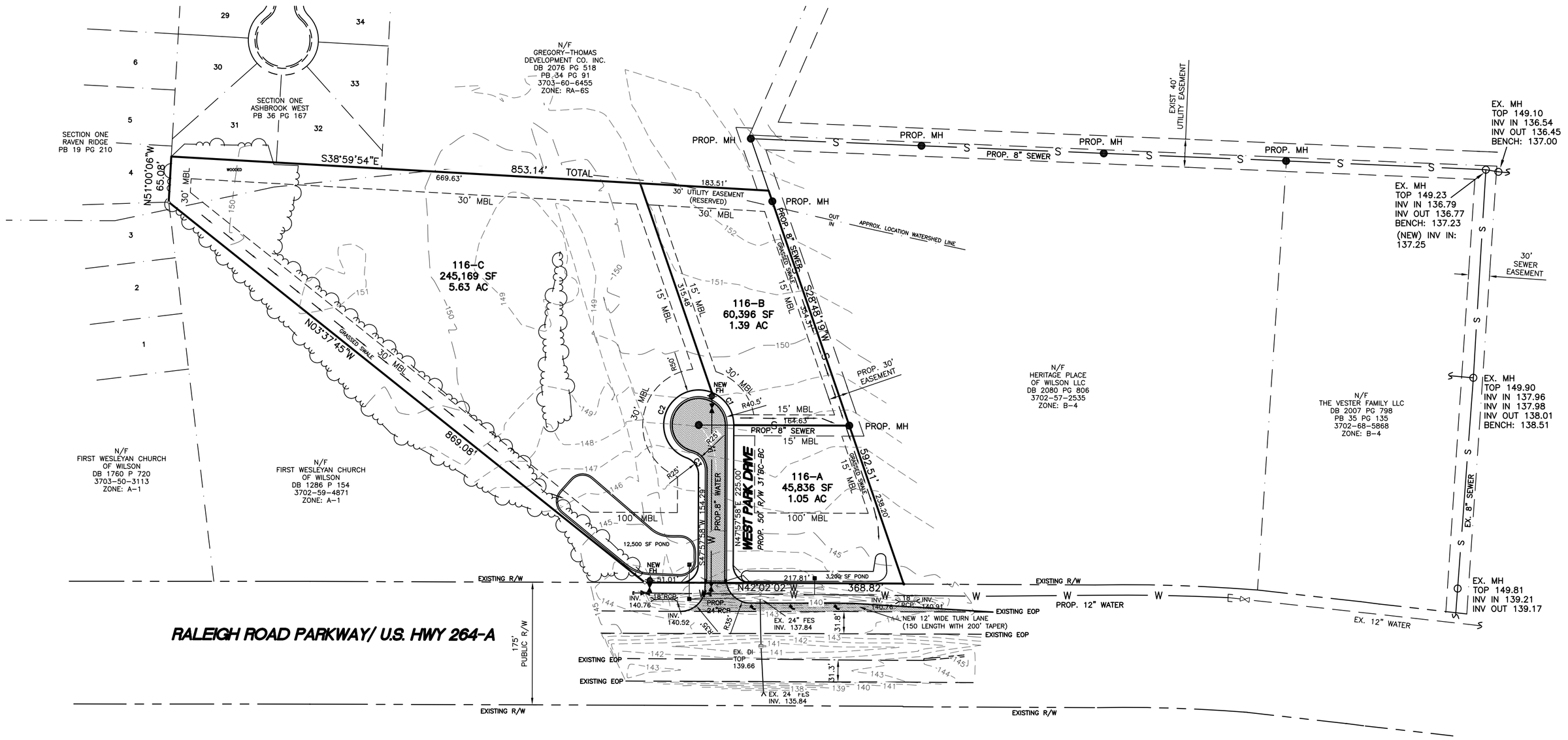
Nitrogen Reduction from BMP's (lbs)	37.792
Nitrogen Reduction by Offset Payments	43.424
Total Development Acreage	8.46

PRELIMINARY POND DESIGN DATA

POND	LOT 116-C	LOT 116-A AND ROW	
DRAINAGE AREA (ACRES)	5.63	1.44	
IMPERVIOUS AREA	3.38	0.86	
MAX IMPERVIOUS AREA	60%	60%	
AVG. POOL DEPTH (FEET)	3	3	
TSS REMOVAL	85%	85%	COASTAL
SA/DA RATIO	5	5	(From NCDWQ Stormwater BMP Chart)
SURFACE AREA REQUIRED (SF)	12,262	3,136	
SURFACE AREA PROPOSED (SF)	12,500	3,200	



LOCATION MAP
NO SCALE



SITE DATA

TOTAL AREA	8.46 ACRES (368,617 SF)
AREA IN R/W	0.39 ACRES (17,214 SF)
ZONING	B-4
MIN. BUILDING LINES	MIN. LOT WIDTH: NONE MIN. LOT SIZE: NONE FRONT (HDD): 100' FRONT: 30' SIDE: 15' STREET SIDE: 30' REAR: 15'
NUMBER OF LOTS	3
PHASE 1:	LOT 116-B
PHASE 2:	LOT 116-A
PHASE 3:	LOT 116-C
PROPOSED LAND USE	COMMERCIAL
DEVELOPER	GREGORY-THOMAS DEV. CO. INC. 2408 WINDING CREEK DR. SW WILSON, NC 27893
REFERENCE:	DEED BOOK 2076 PAGE 518 DEED BOOK 1747 PAGE 125 PLAT BOOK 1 PAGE 291
PIN No:	3703-60-6455

NOTES:
PEAK RUNOFF TO BE REDUCED IN ACCORDANCE WITH CITY POLICY.

THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD AREA (PANEL NO. 3720370300J & 3720370200J DATED NOV. 3, 2004.

A PORTION OF THIS PROPERTY IS LOCATED IN THE WS4-P CONTENTNEA CREEK PROTECTED WATERSHED AREA.

NO BUILDING PERMIT SHALL BE ISSUED PRIOR TO THE PROPOSED STREET INSTALLED AND LAYERED WITH AT LEAST A GRAVEL SURFACE.

NO BUILDING PERMIT SHALL BE ISSUED PRIOR TO DEVELOPMENT SERVICES RECEIVING THE DIGITAL FILE FOR THE ABOVE-REFERENCED SITE PLAN. PLEASE CONTACT JANET HOLLAND AT (252) 399-2215 FOR ADDITIONAL INFORMATION. ALSO ANY CHANGES THROUGHOUT THE DEVELOPMENT PROCESS SHALL REQUIRE AN "AS-BUILT" SITE PLAN PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

ALL PUBLIC WATER, SEWER AND STORM SEWER INFRASTRUCTURE SHALL BE INSTALLED BY THE DEVELOPER TO THE STANDARDS OF THE CITY OF WILSON PUBLIC SERVICES OR FINANCIALLY SECURED PRIOR TO RECORDING OF FINAL PLATS.

ALL PUBLIC IMPROVEMENTS SHALL BE INSPECTED PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY. CONTACT THE CONSTRUCTION INSPECTORS FOR FURTHER INFORMATION AT (252) 399-2195.

THE PROPOSED FIRE HYDRANTS SHALL BE INSTALLED ON SITE AND APPROVED BY THE CITY OF WILSON FIRE MARSHALL AND PUBLIC SERVICES DEPARTMENTS PRIOR TO ANY ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

AN APPROVED FINAL PLAT DEPICTING THE PROPERTY AS SHOWN ON THE APPROVED PRELIMINARY PLAN MUST BE PROPERLY RECORDED AT THE WILSON COUNTY REGISTER OF DEEDS PRIOR TO ISSUANCE OF BUILDING PERMITS.

IF GAS SERVICE IS REQUESTED FROM THE CITY OF WILSON UTILITIES - GAS DIVISION, PLEASE CONTACT THE DEPARTMENT AT (252) 296-3339. IT IS IMPERATIVE THE GAS DIVISION IS NOTIFIED AND GIVEN AMPLE TIME TO RUN NATURAL GAS LINES BEFORE ANY ROCK, ASPHALT OR CONCRETE IS INSTALLED. THE GAS SERVICE CANNOT BE INSTALLED WITHIN AN ENCLOSURE OR FENCED AREA. NO BUILDING OR STRUCTURE SHALL BE INSTALLED OVER THE GAS PIPELINE.

ALL LOTS TO HAVE POSITIVE DRAINAGE.

THE LOCATION OF ALL GAS LINES ARE SHOWN APPROXIMATE AND NOT FOR CONSTRUCTION PURPOSES, CALL ULOCO TO FIELD LOCATE @ 1-800-632-4949.

LOT 116 MUST OBTAIN A HDD CONDITIONAL USE PERMIT PRIOR TO DEVELOPMET.

SYMBOL LEGEND

- EXISTING IRON
- PROPOSED SEWER MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED PLUG
- PROPOSED TEE
- PROPOSED VALVE
- PROPOSED HYDRANT
- EXISTING POWER POLE
- EXISTING SEWER MANHOLE
- EXISTING CATCH BASIN
- EXISTING DROP INLET
- EXISTING VALVE
- EXISTING HYDRANT

NEUSE RIVER BASIN MANAGEMENT STRATEGY
NITROGEN EXPORT CALCULATIONS
WATERSHED MANAGEMENT DATA

PHASE 1 ONLY
NO PEAK FLOW <15% IMPERVIOUS

Lot #	Acreage	Maximum Impervious Percentage	Undisturbed Open Space (ac)	Nitrogen Loading (lbs)	Managed Open Space (ac	Nitrogen Loading (lbs)	Impervious Area (ac)	Nitrogen Loading (lbs)	TOTAL N Loading w/o BMP's (lbs)	BMP's	Nitrogen Reduction Factor	TOTAL Nitrogen Loading with BMP's (lbs)	TOTAL Nitrogen lbs/ac/yr	Excess Nitrogen lbs/ac/yr	Excess Nitrogen lbs/YR	Distributed Nitrogen (lbs) to buydown	Maximum Offset Payment	Distributed Maximum Offset Payment
116-A	1.050	0.00		0	1.050	1.260	0.000	0.000	1.260		1	1.260	1.200	-2.4	-2.52	0.000	-$2,143.26	$0.00
116-B	1.390	0.60		0	0.556	0.667	0.834	17.681	18.348	S	0.8	14.678	10.560	6.960	9.6744	0.000	$8,228.08	$0.00
116-C	5.630	0.00		0	5.630	6.756	0.000	0.000	6.756		1	6.756	1.200	-2.400	-13.512	0.000	-$11,491.96	$0.00
R/W	0.390	0.60			0.156	0.19	0.234	4.961	5.148		1	5.148	13.200	9.600	3.744	0.000	$3,184.27	$0.00
Totals	8.460								31.512			27.842					-$2,222.87	$0.00

BMP	Type	TN Removal Rate
P	Pond	25%
SF	Sand Filter	35%
S	Open Channel	20%
B	Bioretention	25%
W	Constructed Wetlands	40%
RP	Riparian Buffers	30%
FS	Veg. Filter Strips	20%
D	Dry Detention	10%
PRO	Proprietary BMP's	Varies

Nitrogen Reduction from BMP's (lbs)	3.670
Nitrogen Reduction by Offset Payments	-2.614
Total Development Acreage	8.46

NEUSE RIVER BASIN MANAGEMENT STRATEGY
NITROGEN EXPORT CALCULATIONS
WATERSHED MANAGEMENT DATA

PHASE 1&2
DRY DETENTION FOR PEAK FLOW
LOT 116 A AND ROW

Lot #	Acreage	Maximum Impervious Percentage	Undisturbed Open Space (ac)	Nitrogen Loading (lbs)	Managed Open Space (ac	Nitrogen Loading (lbs)	Impervious Area (ac)	Nitrogen Loading (lbs)	TOTAL N Loading w/o BMP's (lbs)	BMP's	Nitrogen Reduction Factor	TOTAL Nitrogen Loading with BMP's (lbs)	TOTAL Nitrogen lbs/ac/yr	Excess Nitrogen lbs/ac/yr	Excess Nitrogen lbs/YR	Distributed Nitrogen (lbs) to buydown	Maximum Offset Payment	Distributed Maximum Offset Payment
116-A	1.050	0.60		0	0.420	0.504	0.630	13.356	13.860	S/D	0.72	9.979	9.504	5.904	6.1992	16.850	$5,272.42	$14,330.89
116-B	1.390	0.60		0	0.556	0.667	0.834	17.681	18.348	S	0.8	14.678	10.560	6.960	9.6744	0.000	$8,228.08	$0.00
116-C	5.630	0.00		0	5.630	6.756	0.000	0.000	6.756		1	6.756	1.200	-2.400	-13.512	0.000	-$11,491.96	$0.00
R/W	0.390	0.60			0.156	0.19	0.234	4.961	5.148	D	0.9	4.633	11.880	8.280	3.2292	0.000	$2,746.43	$0.00
Totals	8.460								44.112			36.047					$4,754.98	$14,330.89

BMP	Type	TN Removal Rate
P	Pond	25%
SF	Sand Filter	35%
S	Open Channel	20%
B	Bioretention	25%
W	Constructed Wetlands	40%
RP	Riparian Buffers	30%
FS	Veg. Filter Strips	20%
D	Dry Detention	10%
PRO	Proprietary BMP's	Varies

Nitrogen Reduction from BMP's (lbs)	8.065
Nitrogen Reduction by Offset Payments	5.591
Total Development Acreage	8.46

CERTIFICATE OF OWNERSHIP AND INTENT

I (WE) HEREBY CERTIFY THAT I (WE) AM (ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AND THAT I (WE) INTEND TO SUBDIVIDE THE PROPERTY AS INDICATED IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS OF THE CITY OF WILSON, WILSON CO., NC.

OWNER DATE

OWNER DATE

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

A PORTION OF THIS PROPERTY IS LOCATED IN THE WS4-P WATERSHED. THE DEVELOPER IS UTILIZING THE HIGH DENSITY OPTION OF 70% IMPERVIOUS AREA WITH STORM WATER CONTROL.

I CERTIFY THAT THE (PLAT/DEVELOPMENT PLAN) SHOWN HEREON COMPLIES WITH THE WATERSHED PROTECTION REGULATIONS FOR THE CITY OF WILSON.

PUBLIC SERVICES/WATERSHED ADMINISTRATOR DATE

CERTIFICATION OF APPROVAL UNDER NEUSE RIVER BASIN STORMWATER PROGRAM FOR NITROGEN REMOVAL REGULATIONS:

I CERTIFY THAT THE (PLAT/DEVELOPMENT PLAN) SHOWN HEREON COMPLIES WITH THE NEUSE RIVER STORMWATER PROGRAM FOR NITROGEN REMOVAL REGULATIONS FOR THE CITY OF WILSON.

PUBLIC SERVICES/STORMWATER DATE

BARTLETT
ENGINEERING & SURVEYING, PC
1906 NASH STREET NORTH
WILSON, N.C. 27893-1726
LICENSE# C-1551
TELE: (252) 399-0704
FAX: (252) 399-0804
www.bartlett.us.com

TRC APPROVAL

CITY COUNCIL APPROVAL

PRELIMINARY SUBDIVISION PLAN

ASHBROOK COMMERICAL PARK
US 264 -A / RALEIGH ROAD PARKWAY

DATE: MARCH 2010
SCALE: 1" = 100'

PROJECT: 10037
CLIENT CODE: GTP
CADFILE: 10037PR1
FIELD BOOK:
DRAWN BY: LR,CP,PPH
SURVEY BY: TB, LP

REVISIONS:

CITY OF WILSON WILSON COUNTY
NORTH CAROLINA ZONE: B-4
PIN # 3703-60-6455 SHEET PR1

P:_CADD_LANDPROJECTS\GTP\10037\DWG\10037PR1.DWG 3/26/2010 11:45:38 AM