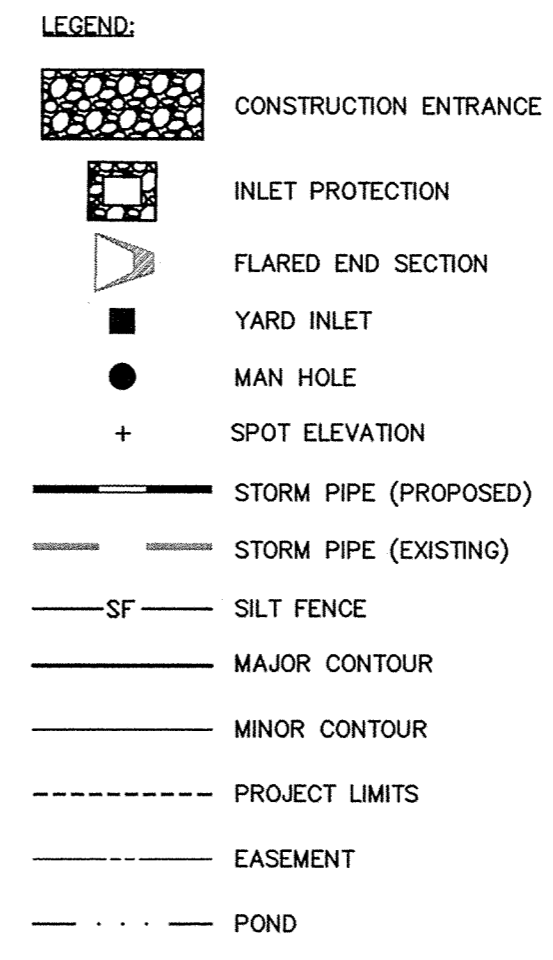
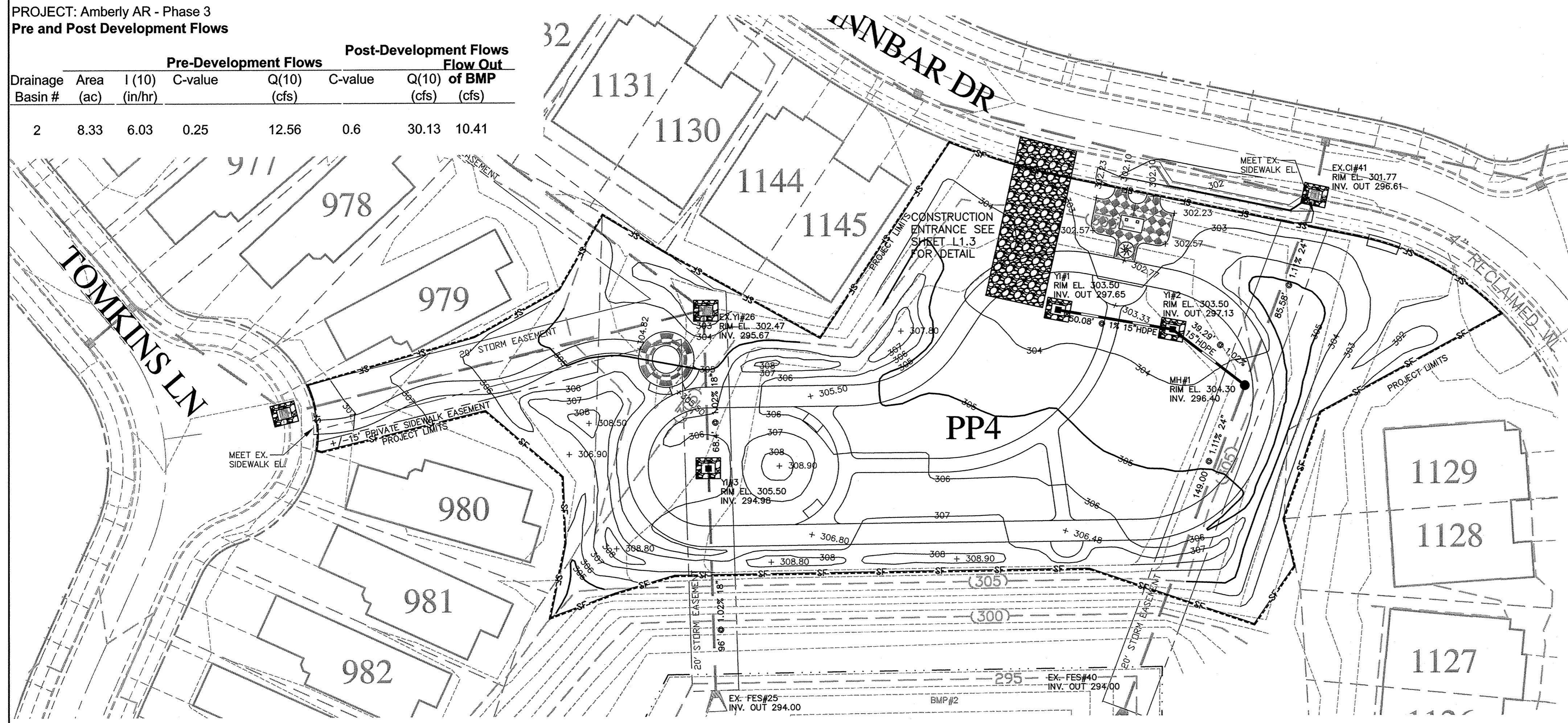


PROJECT: Amberly AR - Phase 3
Pre and Post Development Flows

| Drainage Basin # | Pre-Development Flows | | | Post-Development Flows | | |
|------------------|-----------------------|----------------|---------|------------------------|---------|--------------------|
| | Area (ac) | I (10) (in/hr) | C-value | Q(10) (cfs) | C-value | Q(10) of BMP (cfs) |
| 2 | 8.33 | 6.03 | 0.25 | 12.56 | 0.6 | 30.13 10.41 |



Plan Submittal Requirements

Page 1 of 1

Project Title: POCKET PARK 4 - AMBERLY
Type of Project: New Expansion Exempt
Basis for exemption: _____

Part I. Riparian Buffers
Area includes riparian buffers? No Yes Exempt
If yes, River Basin? 50 foot 100 foot
Basis for exemption: Neuse Cape Fear
Show buffers on site plan.

Part II. Nitrogen Calculations (Method 2, Appendix C):
a. Site Information
Total area of property incl. R/W: 1.3 Acres
Denuded Area: 1.3 Acres
Impervious Area incl. R/W: 0.2 Acres
Managed open space: 1.1 Acres
Protected open space: _____

b. Pre-development loading:

| Type of Land Cover | Area (acres) | TN export coeff. (lbs/ac/yr) | TN export from use (lbs/yr) |
|--|--------------|------------------------------|-----------------------------|
| Permanently protected undisturbed open space (forest, unimproved meadow) | | 0.60 | |
| Permanently protected managed open space (grass, landscaping, etc.) | <u>1.3</u> | 1.20 | 1.56 |
| Impervious Area | | | |
| TOTAL | | 21.20 | |

Nitrogen Loading Rate (lbs/ac/yr) = 1.2

c. Post-development loading:

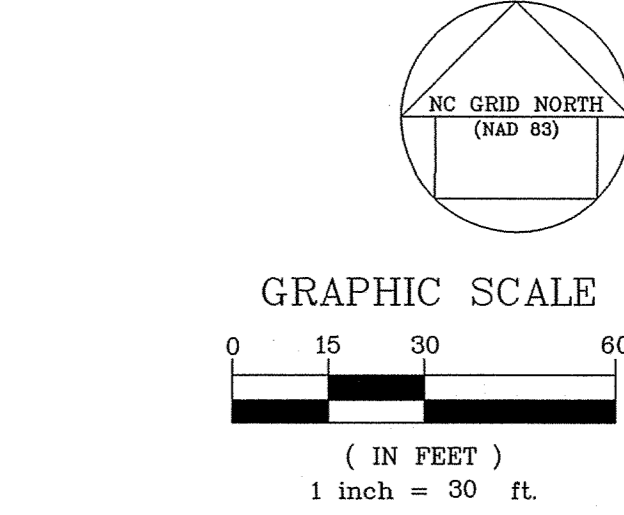
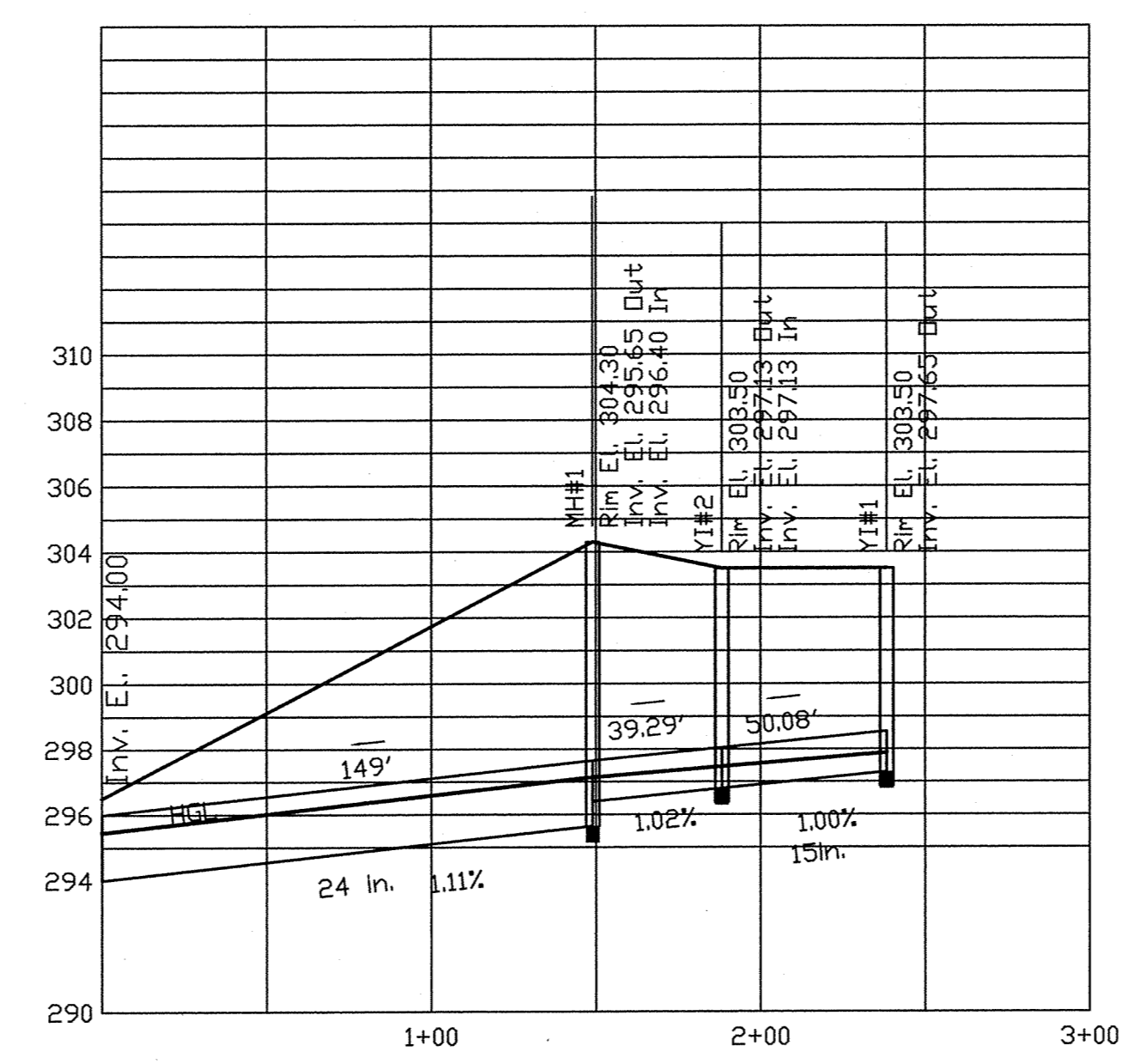
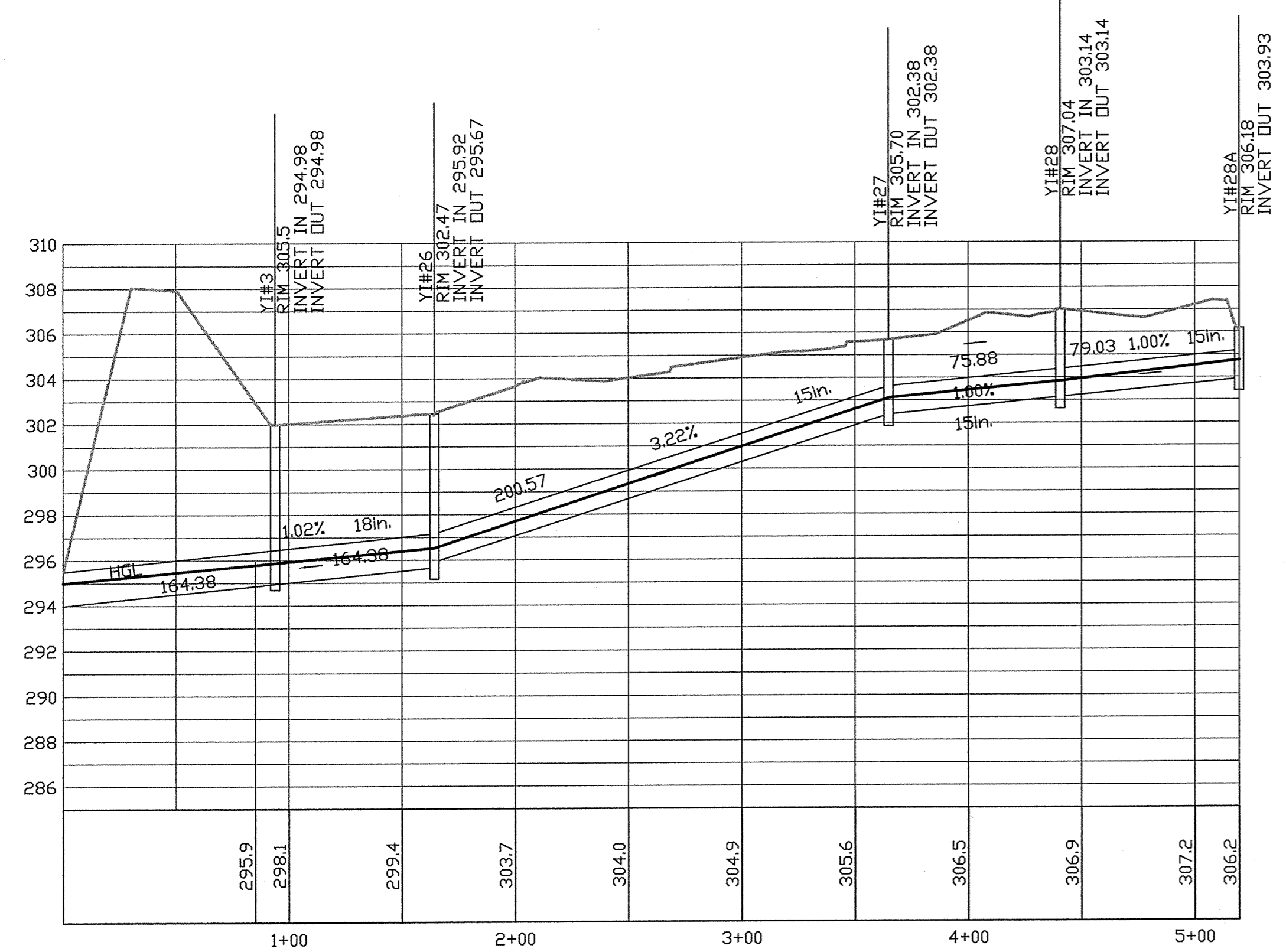
| Type of Land Cover | Area (acres) | TN export coeff. (lbs/ac/yr) | TN export from use (lbs/yr) |
|--|--------------|------------------------------|-----------------------------|
| Permanently protected undisturbed open space (forest, unimproved meadow) | | 0.60 | |
| Permanently protected managed open space (grass, landscaping, etc.) | <u>1.1</u> | 1.20 | 1.32 |
| Impervious Area | <u>0.2</u> | 21.20 | 4.24 |
| TOTAL | | | 5.56 |

Nitrogen Loading Rate (lbs/ac/yr) = 4.3

Proposed BMP(s): Constructed Wetlands
Nitrogen Load after BMPs = 3.0
Nitrogen Load Offset by Payments = _____
Net change in on-site N Load = 1.8

Part III. Control of Peak Stormwater Flow (for 1 year, design storm)
Calculated Pre-development Peak Flow: 1.04
Calculated Post-development Peak Flow: 1.3
Proposed BMP(s): Constructed Wetlands
Post BMP Peak Flow: 0.1 cfs (offset flow)
 $(1.3)(0.5)(2) = 1.3$
 $(1.3)(0.5)(2) = 1.3$

I, the undersigned, certify to the best of my knowledge that the above information is correct (after see _____).
8/14/2008
http://www.townofcary.org/depts/dsdept/engineering/engproj/stormwater/nitrogenform-co... 8/14/2008



CAROLINA PRESERVE BY DEL WEBB AT AMBERLY PHASE THREE PREVIOUSLY APPROVED ON: 9-17-07 T.O.C. # 06-SP-079

08-SP-044
APPROVED
TOWN OF CARY

Approved by: DRC Date: 9/2/08
Planning: KAH Date: 9/23/08
Engineering: SS Date: 9/23/08

CHAS. H. SELLS, INC.
Civil Engineering, Surveying and Planning

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Suite 100
Cary, NC 27513
Tel: 919-678-0035
Fax: 919-678-0206
www.chasells.com

POCKET PARK FOUR
CAROLINA PRESERVE BY DEL WEBB - PHASE III
FINNBAR DRIVE - CARY, NC

Carolina Preserve by Del Webb
107 Arched Oaks Circle
Cary, NC 27519

| REVISIONS | |
|-----------|------------------------------|
| 1. | PER T.O.C. COMMENTS 07-10-08 |
| 2. | PER T.O.C. COMMENTS 08-14-08 |

PROJECT #: 06-4050 DATE: 09/22/08
DRAWN BY: AP CHECKED BY: DS
TITLE: DRAINAGE PLAN
SHEET: L1.3A