



LEVEY KILDAIRE

GRADING & POST DEVELOPMENT  
 EROSION CONTROL PLAN

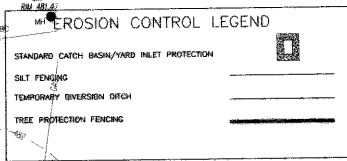
CLIENT:  
 LRC DEVELOPMENT COMPANY, LLC  
 1505 FRESHBICK BLVD  
 ALEXANDRIA, VA 44320  
 330-253-8958

SURVEYOR:  
 ELINGBURG LAND SURVEY CO., INC  
 624 W CHATHAM ST  
 APEX, NC 27539  
 919-303-9371

WALGREENS  
 STORE# 10541

Drawn By: BMH  
 Checked By: EN  
 Date: 2-10-06  
 Proj#: 2511009

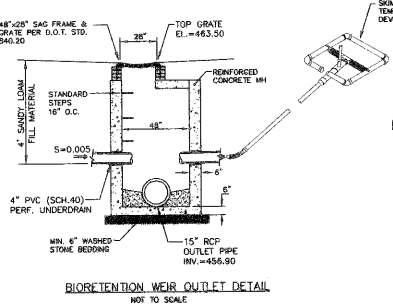
Revisions:  
 REV 2/15/06 GARY REVIEW COMMENTS  
 REV 2/17/06 ENY REVIEW COMMENTS  
 REV 2/20/06 GARY REVIEW COMMENTS  
 REV 2/17/06 GARY & WAMBROS REVIEW



### GRADING NOTES

- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF CARY AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.
- CONTRACTOR SHALL HAVE NORTH CAROLINA ONE CALL (1-800-632-6849) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
- BOUNDARY AND SURVEY INFORMATION IS TAKEN FROM A SURVEY BY ELINGBURG LAND SURVEY CO., INC. 624 WEST CHATHAM STREET APEX, NC 27539 PHONE (919) 303-5327.
- TO MINIMIZE DAMAGE TO EXISTING TREES NEAR THE INTERIOR EDGE OF BUFFERS AND STREETSAPES, THE CONTRACTOR SHALL CUT MINIMUM 2" TRENCHES ALONG THE LIMITS OF DISTURBANCE, SO AS TO CUT, RATHER THAN TEAR, ROOTS.
- THE TREE PROTECTION FENCING SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION PRIOR TO THE CERTIFICATE OF OCCUPANCY (CO) IS SCHEDULED. THE FENCING SHALL BE REMOVED PRIOR TO FINAL SITE INSPECTION FOR THE CO.
- PERMANENT GROUND COVER WILL BE ESTABLISHED WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS, WHICHEVER IS SHORTER.
- SITE GRADERS WILL BE A MINIMUM OF 1.5% AND A MAXIMUM OF 5% HANDICAP SPACES AND RAMP SPACES SHALL COMPLY WITH ALL ADA CODES. RAMP SHALL BE A MINIMUM OF 8% AND SPACES SHALL BE A OF 2%.
- THE SITE IS LOCATED IN THE SWIFT CREEK WATERSHED OVERLAY PROTECTION DISTRICT (NON-CRITICAL ZONE). THE PROPOSED ADDITIONAL IMPERVIOUS AREA FOR THE SITE IS ABOVE THE 12% THRESHOLD AND IS CONSIDERED A "HIGH DENSITY" PROJECT. THE PROPOSED STORMWATER MANAGEMENT SYSTEM HAS BEEN DESIGNED TO PROCESS & TREAT THE FIRST ONE INCH OF RAINFALL AND WILL SERVE TO PROVIDE ADEQUATE WATERSHED PROTECTION TO THE DOWN STREAM WATERSHED.
- CONTRACTOR TO INSTALL DRAINAGE PIPE RUN #84 TO FES#3 PRIOR TO GRADING THE SITE. THE BIORETENTION AREA SHALL FUNCTION AS A TEMPORARY SEDIMENT BASIN DURING CONSTRUCTION. OUTLET DEVICE WEIR #2 SHALL ACT AS A RISER DEVICE FOR THE TEMP. SEDIMENT BASIN. A SKIMMER SHALL BE CONNECTED TO THE UNDER DRAIN INLET AT WEIR STRUCTURE #2. WHEN GRADING IS COMPLETE AND THE SITE IS STABILIZED, THE BASIN CAN BE CLEANED. WEIR #1 CAN BE INSTALLED AND THE SEDIMENT BASIN CAN BE COMPLETED TO A BIORETENTION AREA. (SEE BIORETENTION WEIR OUTLET DETAIL THIS DRAWING.)

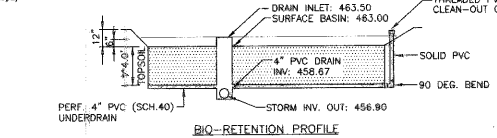
SEE SHEET E-1 FOR FULL TREE SURVEY  
 NO GRADING WITHIN TREE PROTECT. LIMITS  
 NECESSARY DUE TO ROADWAY CONSTRUCTION  
 (RAPID GRADING WITHIN TREE PROTECT. LIMITS  
 REMOVED SHALL BE REPLACED INCH PER INCH.)



ONE-YEAR PRE AND POST-DEVELOPMENT DISCHARGE  
 SITE PRE - DEVELOPMENT DISCHARGE Q1 = 3.86 CFS  
 SITE POST - DEVELOPMENT DISCHARGE Q1 = 3.28 CFS

TEN-YEAR PRE AND POST-DEVELOPMENT DISCHARGE  
 SITE PRE - DEVELOPMENT DISCHARGE Q10 = 8.48 CFS  
 SITE POST - DEVELOPMENT DISCHARGE Q10 = 7.39 CFS

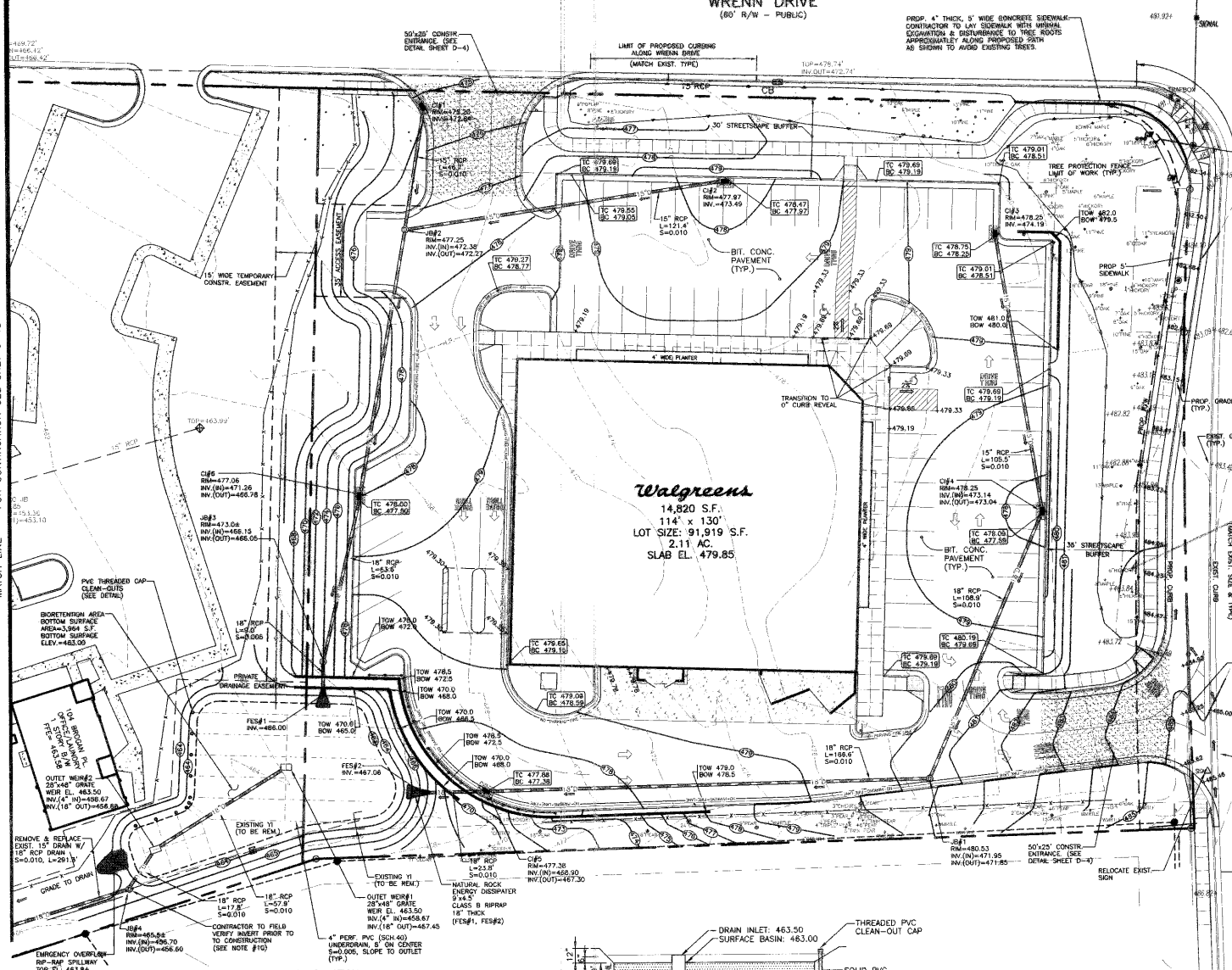
DISTURBED AREA: 2.08 ACRES



TOP WEIR ELEV.	INV. FRENCH DRAIN	INV. STORM SEWER OUT	SURFACE RETENTION BASIN ELEVATION	BOTTOM TOP SOIL RETENTION BASIN	INV. EMERGENCY OVERFLOW WEIR
#1 463.50	458.67	457.45	463.00	459.00	463.80
#2 463.50	458.67	456.86			

**Walgreens**  
 14,820 S.F.  
 114' x 130'  
 LOT SIZE: 91,919 S.F.  
 2.11 AC.  
 SLAB EL. 479.85

WRENN DRIVE  
 (60' R/W - PUBLIC)



### BIORETENTION AREA SIZING CALCULATION

	PAVE SF (C=0.90)	GRASS SF (C=0.25)	TOTAL C* A SF
CI#1	2,842/2,558	410/103	2,660
CI#2	16,095/14,486		14,486
CI#3	3,918/3,526	6,468/1,617	5,143
CI#4	10,893/9,804	6,632/1,658	11,462
CI#5	17,986/16,196	565/141	16,337
CI#6	6,945/6,251		6,251
			56,339

56,339 X 0.07 (W/OUT SAND BED) = 3,943 S.F. REQUIRED / 3,964 PROVIDED

MATCH LINE - FOR CONTINUATION SEE SHEET G-1B