

LEVEY KILDAIRE

GRADING & POST DEVELOPMENT EROSION CONTROL PLAN

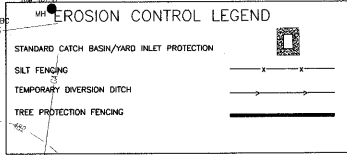
CLIENT:  
LRC DEVELOPMENT COMPANY, LLC  
1505 FREDRICK BLVD  
AKRON, OH 44320  
330-253-6958

SURVEYOR:  
ELINGBURG LAND SURVEY CO, INC  
624 W CHATHAM ST  
APEX, NC 27509  
919-393-5371

WALGREENS STORE# 10541

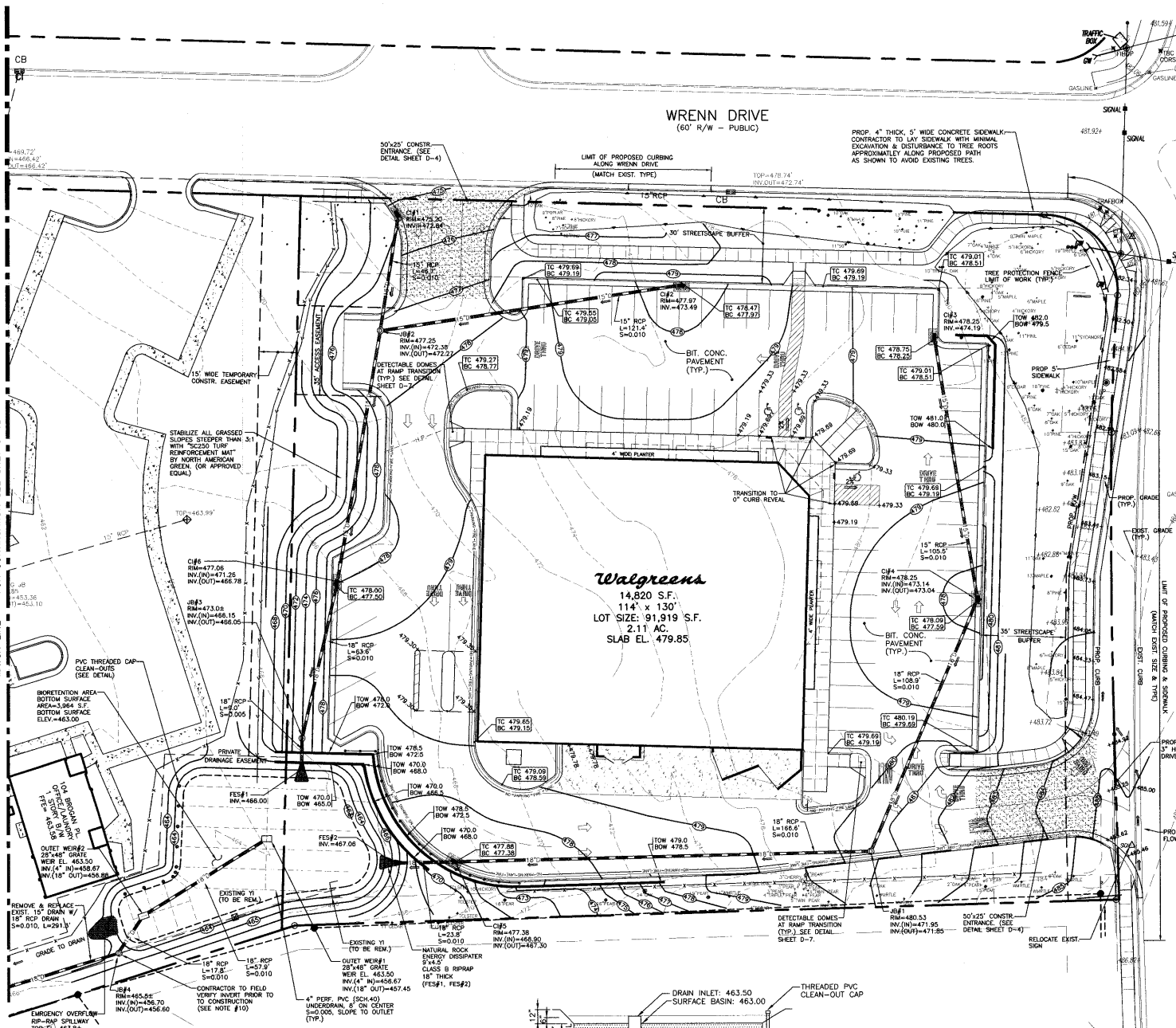
Drawn By: BMH  
Checked By: BN  
Date: 2-10-06  
Proj#: 2511009

Revisions  
REV 3/31/06 CARY REVIEW COMMENTS  
REV 5/15/06 CARY REVIEW COMMENTS  
REV 6/30/06 CARY REVIEW COMMENTS  
REV 7/21/06 CARY & WALGREENS REV  
REV 10/16/06 ADDED DETECTABLE DOMES & SLOPE STABILIZATION NOTE



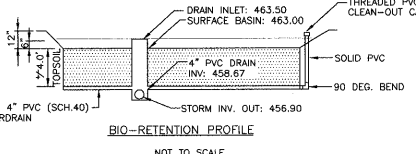
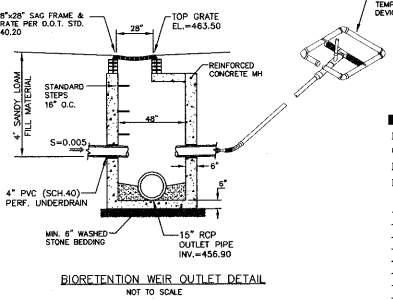
### GRADING NOTES

- 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 (1-800-632-4849) 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 27509 PHONE (919-393-5377).
- TO MINIMIZE DAMAGE TO EXISTING TREES NEAR THE INTERIOR EDGE OF BUFFERS AND STREETSCAPES, 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 GRADES WILL BE A MINIMUM OF 1.5% AND A MAXIMUM OF 5%. HANDICAP SPACES AND RAMPS SHALL COMPLY WITH ALL ADA CODES. RAMPS SHALL BE A MINIMUM OF 8% AND SPACES SHALL BE A 6% OF 2X.
- 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 #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 CONVERTED TO A BIORETENTION AREA. (SEE BIORETENTION WEIR OUTLET DETAIL THIS DRAWING.)



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

KILDAIRE FARM ROAD  
(60' R/W - PUBLIC)



**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 = 6.49 CFS  
SITE POST-DEVELOPMENT DISCHARGE Q10 = 7.39 CFS

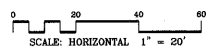
**BIORETENTION AREA SIZING CALCULATION**

INLET	PAVE SF (C=0.90)	GRASS SF (C=0.25)	TOTAL C* <sup>2</sup> 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	6,832/1,658	11,462
Ci#5	17,996/16,196	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

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	456.88			

DISTURBED AREA: 2.08 ACRES



MATCH LINE - FOR CONTINUATION SEE SHEET G-1B

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