MAJOR SUBDIVISON – PRELIMINARY PLAN FOR:

ANNANDALE
AT CREEK WOOD

ECE GENERAL NOTES

GENERAL NOTES

1. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM SURVEY DATA SUPPLIED BY R. S. JONES AND ASSOCIATES, INC.
2. WORK WITHIN PUBLIC RIGHT-OF-WAYS SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS, NOTIFICATIONS, STANDARDS AND POLICIES.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL MEASURES FOR ALL WORK W/IN PUBLIC R/W PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE N.C. SUPPLEMENT TO THE MUTCD, AND LOCAL CITY INSPECTORS DIRECTION.
4. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT PLANS AND/OR SPECIFICATIONS, LOCAL STANDARD DETAILS AND CONSTRUCTION STANDARDS, STATE CONSTRUCTION STANDARDS, AND OTHER APPLICABLE CONTRACT DOCUMENTS.
5. CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING ALL APPROPRIATE PARTIES AND ASSURING THAT UTILITIES ARE LOCATED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CALL NC ONE CALL (PREVIOUSLY ULOCO) AT 1-800-632-4949 FOR UTILITY LOCATING SERVICES 48 HOURS PRIOR TO COMMENCEMENT OF ANY WORK. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
6. UNDERGROUND UTILITIES SHOWN USING BEST AVAILABLE INFORMATION. ALL LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE MORE UNDERGROUND UTILITIES THAN ARE SHOWN HEREON. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES PRIOR TO ANY EXCAVATIONS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO REMAIN DURING ALL DEMOLITION AND CONSTRUCTION ACTIVITIES.
8. ALL CLEARING, GRUBBING AND UNSUITABLE FILL MATERIAL SHALL BE DISPOSED OF LEGALLY.
9. ALL PAVEMENT, CURB, STORM DRAINAGE PIPE, AND STRUCTURES TO BE REMOVED SHALL BE HAULED OFFSITE AND DISPOSED OF LEGALLY.
10. ALL SHALL BE SERVED BY WELL AND SEPTIC.

CONTRACTOR SHALL NOT MAKE ANY MODIFICATIONS TO THE APPROVED DRAWINGS WITHOUT PRIOR APPROVAL OF BOTH THE DESIGN ENGINEER AND LOCAL INSPECTOR.

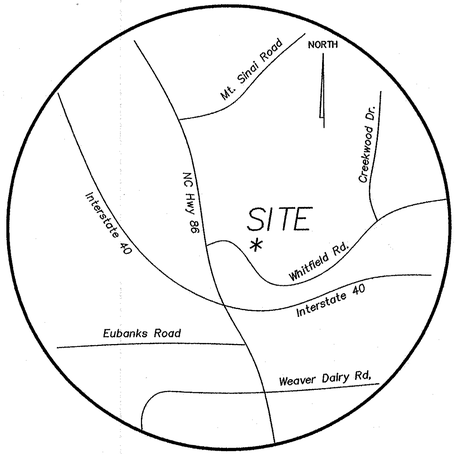
GRADING & STORM DRAINAGE NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL CONSTRUCTION STANDARDS, SPECIFICATIONS, AND PROCEDURES AND THE NCDENR'S SEDIMENTATION AND EROSION CONTROL STANDARDS, SPECS., AND PROCEDURES.
2. CONTRACTOR SHALL VERIFY THAT ALL APPLICABLE STATE AND LOCAL PERMITS REQUIRED FOR THE COMMENCEMENT OF GRADING OPERATIONS HAVE BEEN OBTAINED PRIOR TO START OF GRADING.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING UTILITIES PRIOR TO THE BEGINNING OF DEMOLITION AND/OR CONSTRUCTION.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO REMAIN DURING ALL CONSTRUCTION ACTIVITIES.
5. ALL STORMWATER MANAGEMENT FACILITIES SHALL BE DESIGNED AND CONSTRUCTED TO MEET ALL STATE AND LOCAL REQUIREMENTS, INCLUDING 2007 STATE STANDARDS FOR WATER QUALITY AND DETENTION FACILITIES.
6. EROSION CONTROL MEASURES SHALL BE PROVIDED AS NEEDED TO PROTECT ADJACENT PROPERTIES.
7. CONTRACTOR SHALL PROVIDE ALL STAKING, FLAGGING AND/OR FENCING NECESSARY TO PROVIDE PROPER PROTECTION OF THE STREAM BUFFER.

LEGEND

	NEW	EXISTING
PROPERTY LINE		
EASEMENT		
SETBACK		
RIGHT-OF-WAY		
CENTERLINES		
CURB & GUTTER		
EDGE OF PAVEMENT		
SIDEWALK		
CREEK		
STRUCTURE NO.	T	
CATCH BASIN		
YARD INLET		
STORM DRAINAGE JUNCTION BOX	D	
CURB INLET		
SANITARY SEWER MANHOLE	S	S
SANITARY SEWER CLEANOUT	C.O.	C.O.
METER BOX		
VALVE		
FIRE HYDRANT		
FIRE DEPARTMENT CONNECTION		
LIGHT POLE	LP	LP
UTILITY POLE AND GUY WIRE	UP	UP
CABLE TV LINE	TV	XTV
ELECTRIC	E	XE
FIBER OPTIC CABLE	FO	XFO
GAS LINE	G	XG
OVERHEAD UTILITY LINE	OH	XOH
SANITARY SEWER	SS	XSS
STORM DRAIN PIPE	SD	XSD
TELEPHONE	T	XT
WATER LINE	W	XW
GRADE CONTOUR	400	
FINISHED GRADE SPOT ELEVATION	356.44	356.44
CLEARING LIMIT/TREE LINE		
LIMITS OF DISTURBANCE		
DITCH OR SWALE FLOWLINE		
TREE PROTECTION FENCE		
SILT FENCE	SF	SF
FENCE	X	X
RIP RAP APRON		
CHECK DAM		
SEDIMENT FENCE OUTLET		
INLET PROTECTION		
WHEELCHAIR RAMP	WCR	
ELECTRICAL TRANSFORMER	T	

EIP	EXISTING IRON PIPE	○
EIR	EXISTING IRON ROD	●
IPS	IRON PIPE SET	⊙
NS	PK NAIL SET	X
CP	COMPUTED POINT R/W	⊠



VICINITY MAP (NOT TO SCALE)

PROJECT DATA

SITE INFORMATION:

PIN NUMBER:	9880-28-1953
DEED REFERENCE:	BOOK 5368, PAGE 194
ACREAGE:	36.46 ACRES
ZONING:	RB – RURAL BUFFER
WATERSHED:	JORDAN LAKE UNPROTECTED OVERLAY
TOWNSHIP:	7
SCHOOL DISTRICT:	CHAPEL HILL – CARRBORO
FIRE DISTRICT:	NEW HOPE

PROPOSED SITE DATA:

NUMBER OF LOTS:	11 WELL & SEPTIC LOTS
AVERAGE LOT SIZE:	2.06 ACRES
MIN. LOT SIZE:	2.00 ACRES
OVERALL DENSITY:	11 LOTS / 36.46 ACRES 0.30 UNITS PER ACRE
LINEAR FEET OF NEW ROADS:	1,260.84 LF
ACRES IN OPEN SPACE:	12.16 ACRES
SLOPES >15% DISTURBED:	1,732 SF
FRONT SETBACKS:	40'
SIDE & REAR SETBACKS:	20'
LAND USE BUFFER:	75', TYPE B, OPTION 1 MIXED

PROPOSED ROADWAY DATA:

DUMFRIES LANE
- 0.49 ACRES RIGHT-OF-WAY
- 314 LINEAR FEET OF CENTER LINE
- 11,977 SF IMPERVIOUS AREA

LOCKWOOD COURT
- 1.11ACRES RIGHT-OF-WAY
- 853 LINEAR FEET OF CENTER LINE
- 26,542 SF IMPERVIOUS AREA

OPEN SPACE CALCULATIONS:

75' LAND USE BUFFER ALONG WHITFIELD	= 2.61 ACRES
OPEN SPACE LOCATED EAST OF LOCKWOOD	= 0.24 ACRES
OPEN SPACE LOCATED WEST OF DUMFRIES	= 2.22 ACRES
OPENS SPACE LOCATED AROUND STREAM	= 6.76 ACRES
OPEN SPACE LOCATED IN POSA	= 0.33 ACRES
TOTAL OPEN SPACE PROVIDED	= 12.16 ACRES

IMPERVIOUS SURFACE CALCULATIONS:

PROPOSED IMPERVIOUS SURFACE LIMIT =	10.81%
TOTAL LOT AREA =	36.46 ACRES (1,588,198 SF)
TOTAL IMPERVIOUS ALLOWED =	3.94 ACRES (171,684 SF)
IMPERVIOUS AREA FOR DUMFRIES =	0.27 ACRES (11,977 SF)
IMPERVIOUS AREA FOR LOCKWOOD =	0.61 ACRES (26,542 SF)
TOTAL ROADWAY IMPERVIOUS AREA =	0.88 ACRES (38,519 SF)
IMPERVIOUS ALLOWED FOR EACH LOT =	0.25 ACRES (11,000 SF)
TOTAL NUMBER OF PROPOSED LOTS =	X 11
SUBTOTAL IMPERVIOUS FOR ALL LOTS =	2.78 ACRES (121,000 SF)
10% OVERAGE ALLOWANCE =	0.28 ACRES (12,100 SF)
TOTAL IMPERVIOUS FOR ALL LOTS =	3.06 ACRES (133,100 SF)
TOTAL ROADWAY IMPERVIOUS =	0.88 ACRES (38,519 SF)
TOTAL LOT IMPERVIOUS =	3.06 ACRES (133,100 SF)
TOTAL PROPOSED PROJECT IMP. =	3.94 ACRES (171,619 SF)

OWNER/DEVELOPER:
WHITFIELD LOTS, LLC
C/O TOM HEFFNER
200 KENILWORTH PLACE
PHONE: (919) 929-9653
MOBILE: (919) 880-6279
TOM@CHAPELHILLNC.COM

ENGINEER:
CHARLES P. KOCH P.E.
EARTHCENTRIC ENGINEERING, INC.
204 WEST CLAY STREET
MEBANE, NC 27302
PHONE: (919) 563-9041
FAX: (919) 304-3234
PHIL.KOCH@EARTHCENTRIC.COM

SURVEYOR:
ROBERT S. JONES
R.S. JONES @ ASSOCIATES, INC.
121 WEST CLAY STREET
SUITE A
MEBANE, NC 27302
PHONE: (919) 563-3623
FAX: (919) 563-0086
BOBBYJ@RSJONESANDASSOCIATES .COM

LAND PLANNER:
THE DESIGN RESPONSE
1616 EVANS ROAD
SUITE 205
CARY, NC 27513
PHONE: (919) 678-8050
FAX: (919) 678-8150
LKING@THEDESIGNRESPONSE.COM

INDEX OF DRAWINGS:

C-1 COVER SHEET
C-2 EXIST. COND. / DEMOLITION
C-3 SITE & UTILITY PLAN
C-4 GRADING & STORM DRAINAGE

P-1 DUMFRIES LN PLAN & PROFILE
P-2 LOCKWOOD CT PLAN & PROFILE

D-1 STORMWATER DETAILS
D-2 DOT ROADWAY DETAILS

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NORTH CAROLINA GENERAL STATUTE 87-102

APPROVAL STAMP

EarthCentric Engineering, Inc.
LICENCE # C-2638
204 W. Clay Street
Mebane, NC 27302
Phone: (919) 563-9041
Fax: (919) 304-3234
E-Mail: Phil.Koch@EarthCentric.com

ECE Incorporated

PRINCIPAL ENGINEER
PHIL KOCH - NCPE #22634

ANNANDALE
AT CREEK WOOD
ORANGE COUNTY, NORTH CAROLINA
COVER SHEET

REV	DATE	DESCRIPTION	BY
1	09/13/12	ADDITIONAL INFO PER STAFF	EJK
2	12/07/12	PRELIM PLAN SUBMITTAL	CPK
3	01/04/13	PER OC COMMENTS	SCS
4	01/16/13	COVER SHEET REVISION	SCS
5	02/21/13	LOT LINE REVISION	SCS

DATE:	SEPTEMBER 5, 2012
HORIZONTAL SCALE:	1" = 80'
VERTICAL SCALE:	N/A
PROJECT MANAGER:	CPK
DRAWN BY:	CPK
PROJECT NO:	12-017
DRAWING NAME:	12-017 REVIEW

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SHEET NO.
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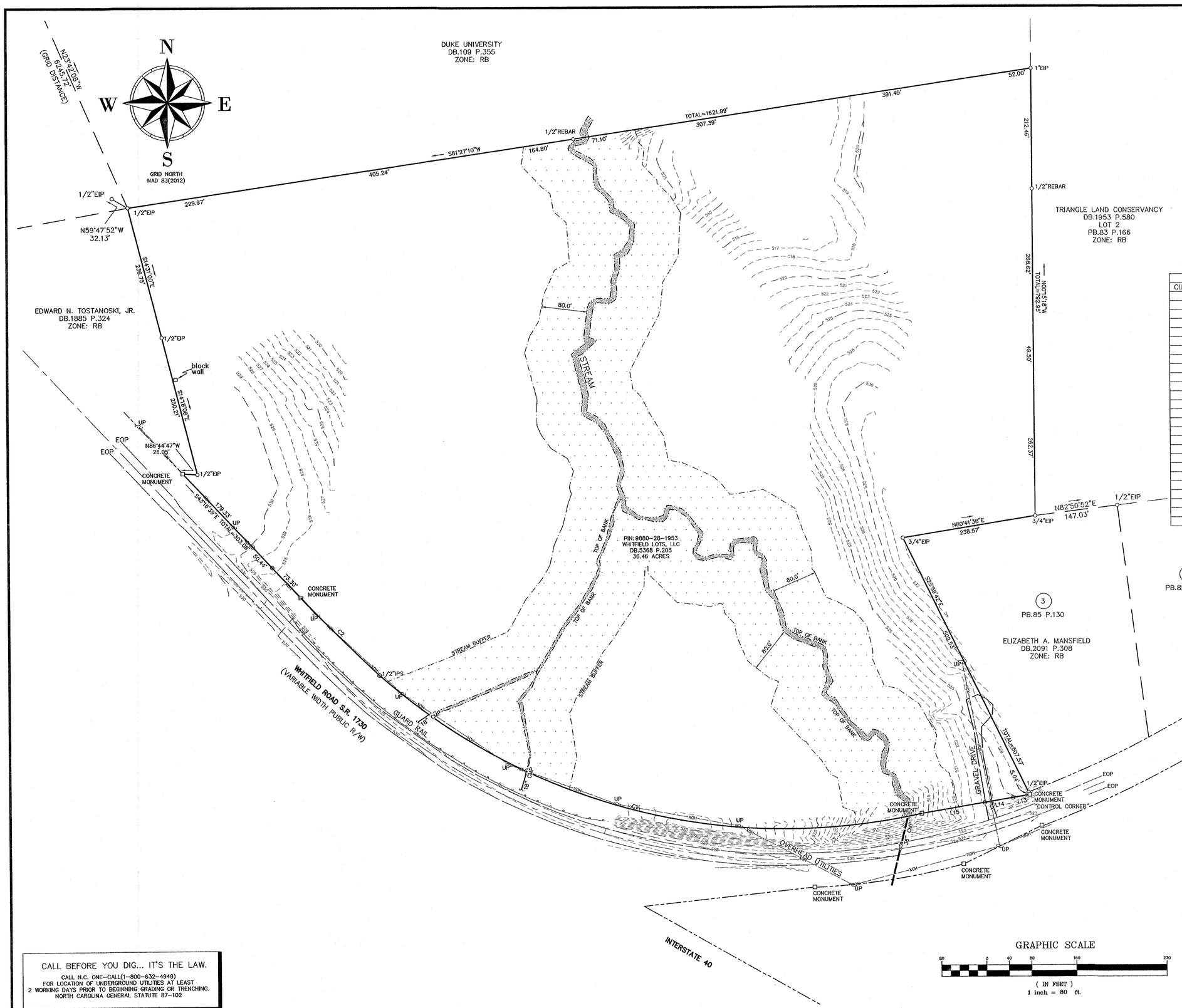
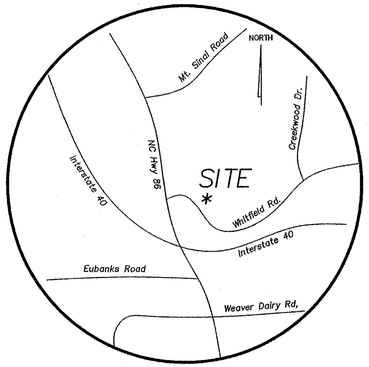
PRELIMINARY MAJOR SUBDIVISION PLAN





VICINITY MAP (NOT TO SCALE)

CURVE TABLE						
CURVE	RADIUS	DELTA	ARC	TANGENT	CHD. BEARING	CHORD
C1	1090.92'	54°08'00"	1030.70'	557.45'	S75°24'30"E	992.79'
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L9	122.43	N60°11'28"W
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L13	30.66	S80°26'07"W
L14	50.34	S80°26'07"W
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GRAPHIC SCALE

(IN FEET)
1 inch = 80 ft.

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ANNANDALE
AT CREEK WOOD

ORANGE COUNTY, NORTH CAROLINA

EXISTING CONDITIONS & DEMOLITION PLAN

REV.	DATE	DESCRIPTION	BY
1	09/13/12	ADDITIONAL INFO PER STAFF	EJK
2	12/07/12	PRELIM PLAN SUBMITTAL	CPK
3	01/04/13	PER CC COMMENTS	SCS
4	01/16/13	COVER SHEET REVISION	SCS
5	02/21/13	LOT LINE REVISION	SCS

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VERTICAL SCALE:	N/A
PROJECT MANAGER:	CPK
DRAWN BY:	CPK
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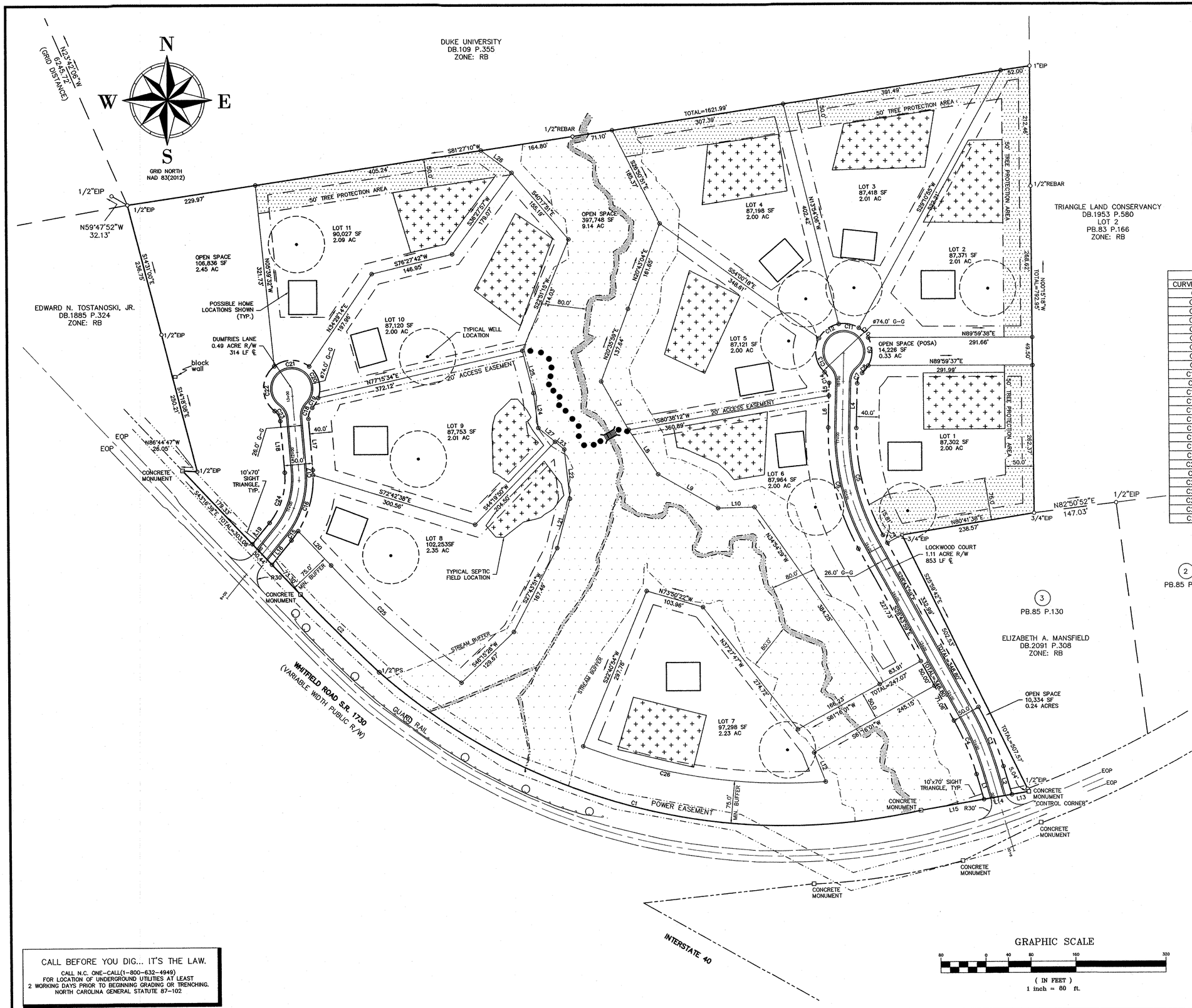
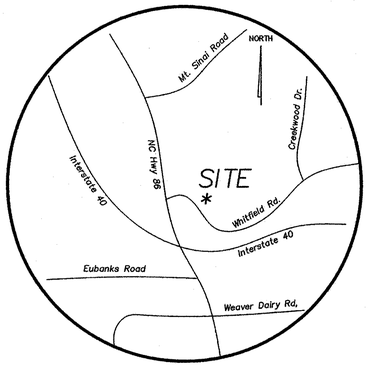
PRELIMINARY MAJOR SUBDIVISION PLAN

PIN #9880-28-1953





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ORANGE COUNTY, NORTH CAROLINA
SITE & UTILITY PLAN

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5	02/21/13	LOT LINE REVISION	SCS
6	02/25/13	ADD. ANNOTATION	SCS

DATE:	SEPTEMBER 5, 2012
HORIZONTAL SCALE:	1" = 80'
VERTICAL SCALE:	N/A
PROJECT MANAGER:	CPK
DRAWN BY:	CPK
PROJECT NO:	12-017
DRAWING NAME:	12-017 REVIEW

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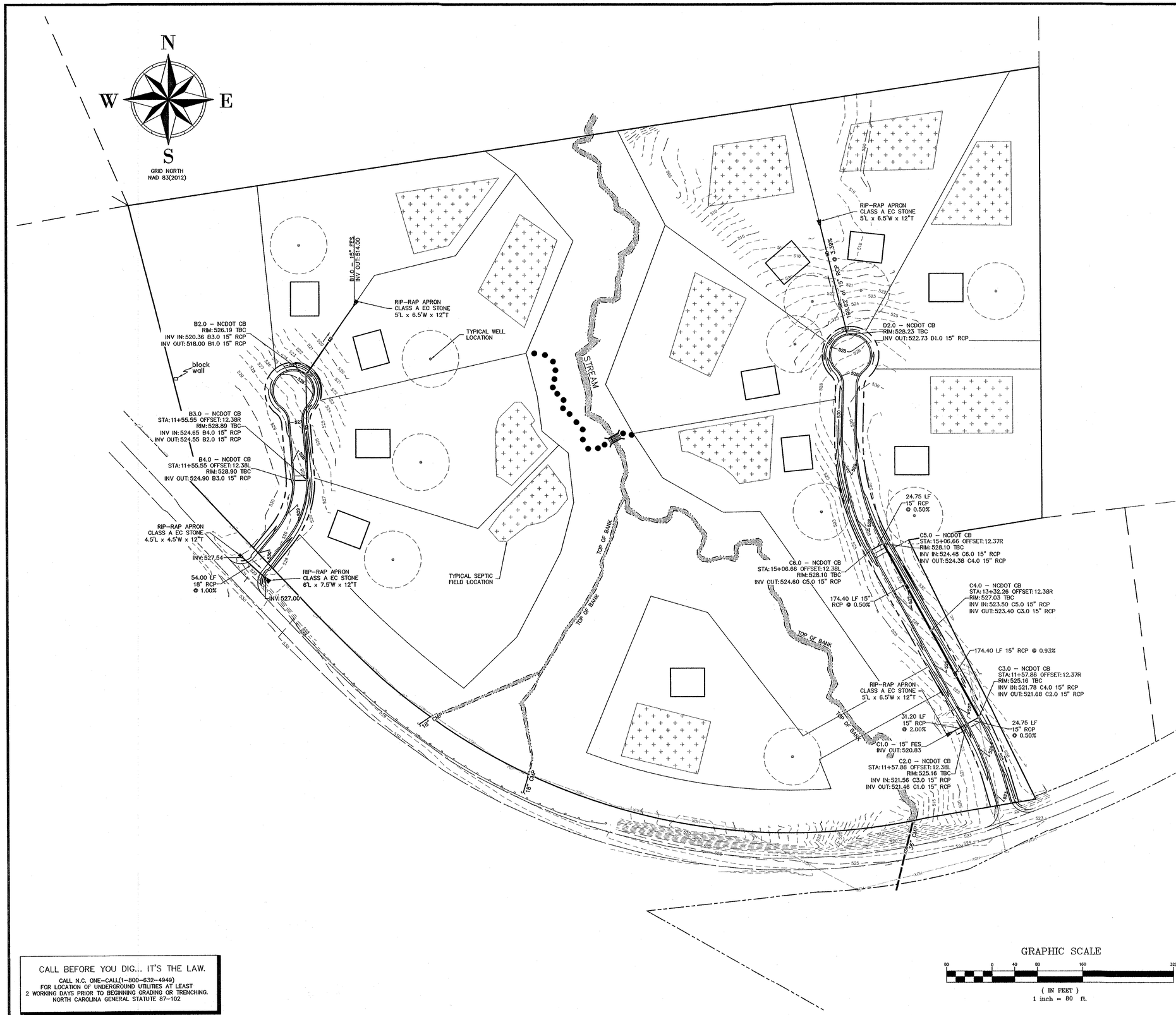
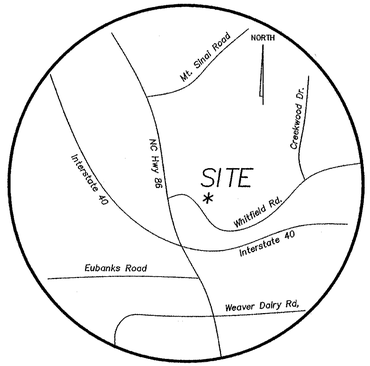
SHEET NO.

C3.0

PRELIMINARY MAJOR SUBDIVISION PLAN

P:\12-017\12-017 Drawings\Review\12-017 Review.dwg, Site Plan, 2/25/2013 1:10:07 PM





VICINITY MAP (NOT TO SCALE)

CURVE TABLE						
CURVE	RADIUS	DELTA	ARC	TANGENT	CHD. BEARING	CHORD
C1	1090.92'	54°08'00"	1030.70'	557.45'	S75°24'30"E	992.79'
C2	3018.50'	3°43'01"	195.83'	97.95'	S45°08'10"E	195.79'
C3	525.00'	12°28'13"	114.27'	57.36'	N22°29'52"W	114.04'
C4	475.00'	12°28'13"	103.38'	51.90'	N22°29'52"W	103.18'
C5	375.00'	30°14'33"	197.94'	101.33'	S13°36'42"E	195.65'
C6	425.00'	30°14'33"	224.33'	114.84'	S13°36'42"E	221.73'
C7	25.00'	48°11'23"	21.03'	11.18'	S25°36'15"W	20.41'
C8	50.00'	19°54'10"	17.37'	8.77'	N39°44'52"E	17.28'
C9	50.00'	59°20'26"	51.78'	28.49'	N00°07'33"E	49.50'
C10	50.00'	27°48'21"	24.27'	12.38'	N43°26'50"W	24.03'
C11	50.00'	42°51'18"	37.40'	19.62'	N78°46'40"W	36.53'
C12	50.00'	50°56'01"	44.45'	23.81'	S54°19'40"W	43.00'
C13	50.00'	75°32'29"	65.92'	38.74'	S08°54'35"E	61.25'
C14	25.00'	48°11'23"	21.03'	11.18'	N22°35'08"W	20.41'
C15	175.00'	6°46'07"	20.67'	10.35'	N35°48'01"E	20.66'
C16	175.00'	34°04'32"	104.08'	53.63'	N15°22'42"E	102.55'
C17	175.00'	2°50'34"	8.68'	4.34'	N03°04'51"W	8.68'
C18	25.00'	48°11'23"	21.03'	11.18'	S19°35'34"W	20.41'
C19	50.00'	23°41'46"	20.68'	10.49'	N31°50'22"E	20.53'
C20	50.00'	71°13'01"	62.15'	35.81'	N15°37'02"W	58.22'
C21	50.00'	76°40'32"	66.91'	39.54'	N89°33'48"W	62.03'
C22	50.00'	104°47'27"	91.45'	64.92'	S00°17'47"E	79.22'
C23	25.00'	48°11'23"	21.03'	11.18'	N28°35'49"W	20.41'
C24	125.00'	43°41'13"	95.31'	50.11'	N17°20'29"E	93.02'
C25	1692.02'	10°32'37"	311.37'	156.12'	S47°44'02"E	310.93'
C26	1015.92'	24°44'13"	438.61'	222.78'	S81°22'55"E	435.22'

LINE TABLE		
LINE	LENGTH	BEARING
L1	46.10	S16°15'45"E
L2	51.97	S16°15'45"E
L3	29.60	N61°36'33"E
L4	79.30	S01°30'34"W
L5	22.83	S01°30'34"W
L6	56.47	S01°30'34"W
L7	98.42	N29°23'36"W
L8	94.26	N33°20'57"W
L9	122.43	N60°11'28"W
L10	64.75	S88°42'58"W
L12	55.32	N21°19'32"W
L13	30.66	S80°26'07"W
L14	50.34	S80°26'07"W
L15	113.79	S80°26'07"W
L16	55.19	N39°11'05"E
L17	91.43	S04°30'08"E
L18	91.43	N04°30'08"W
L19	48.57	N39°11'05"E
L20	84.46	S43°16'39"E
L21	90.33	N14°56'29"E
L22	88.12	N06°10'51"W
L23	21.28	N50°07'09"W
L24	62.38	N07°42'23"W
L25	77.55	N14°14'06"W
L26	67.10	N54°09'51"W
L27	38.39	N50°07'09"W

GRAPHIC SCALE

80 0 40 80 160 320

(IN FEET)
1 inch = 80 ft.

CALL BEFORE YOU DIG... IT'S THE LAW.

CALL N.C. ONE-CALL(1-800-632-4949)
FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST
2 WORKING DAYS PRIOR TO BEGINNING GRADING OR TRENCHING.
NORTH CAROLINA GENERAL STATUTE 87-102

EarthCentric Engineering, Inc.
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E-Mail: Phil.Koch@EarthCentric.com

ECE Incorporated

PRINCIPAL ENGINEER
PHIL KOCH - NCPE #22634

ANNANDALE
AT CREEK WOOD
ORANGE COUNTY, NORTH CAROLINA
GRADING & STORM DRAINAGE PLAN

REV.	DATE	DESCRIPTION	BY
1	09/13/12	ADDITIONAL INFO PER STAFF	EJK
2	12/07/12	PRELIM PLAN SUBMITTAL	CPK
3	01/04/13	FEB'CO COMMENTS	SCS
4	01/16/13	COVER SHEET REVISION	SCS
5	02/21/13	LOT LINE REVISION	SCS

DATE:	SEPTEMBER 6, 2012
HORIZONTAL SCALE:	1" = 80'
VERTICAL SCALE:	N/A
PROJECT MANAGER:	CPK
DRAWN BY:	CPK
PROJECT NO:	12-017
DRAWING NAME:	12-017 REVIEW

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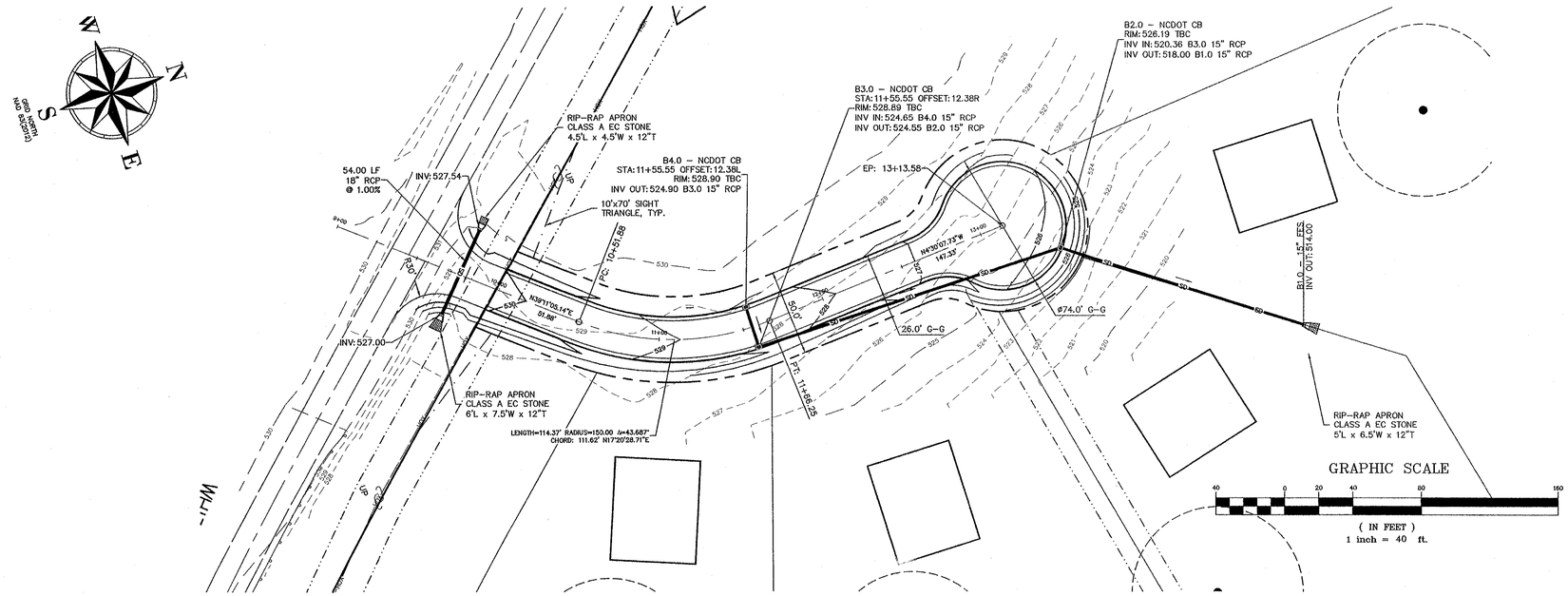
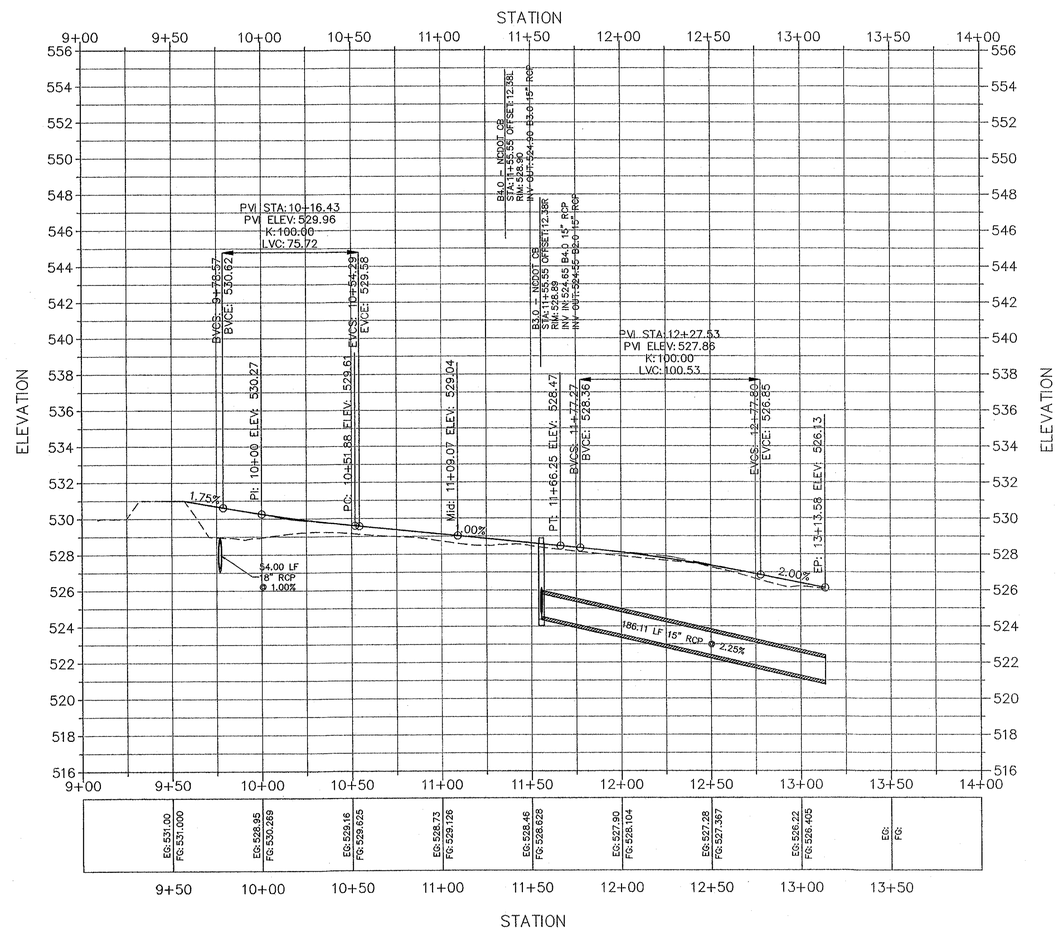
SHEET NO.

C4.0

PRELIMINARY MAJOR SUBDIVISION PLAN





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ANNANDALE
AT CREEK WOOD

ORANGE COUNTY, NORTH CAROLINA

DUMFRIES LN. - PLAN & PROFILE
STA:10+00 TO STA:13+14

REV.	DATE	DESCRIPTION	BY
1	09/13/12	ADDITIONAL INFO PER STAFF	EJK
2	12/07/12	PRELIM PLAN SUBMITTAL	CPK
3	01/04/13	PER OC COMMENTS	SCS
4	01/16/13	COVER SHEET REVISION	SCS
5	02/21/13	LOT LINE REVISION	SCS

DATE:	SEPTEMBER 5, 2012
HORIZONTAL SCALE:	1" = 40'
VERTICAL SCALE:	1" = 4'
PROJECT MANAGER:	CPK
DRAWN BY:	TMM
PROJECT NO:	12-017
DRAWING NAME:	12-017 REVIEW

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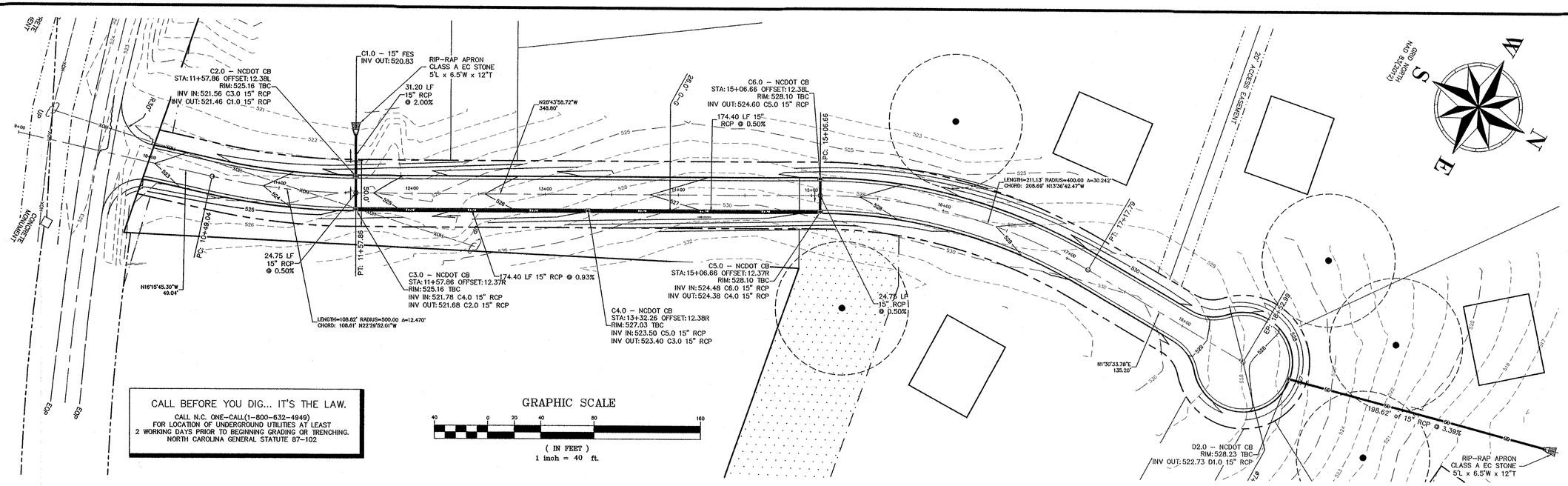
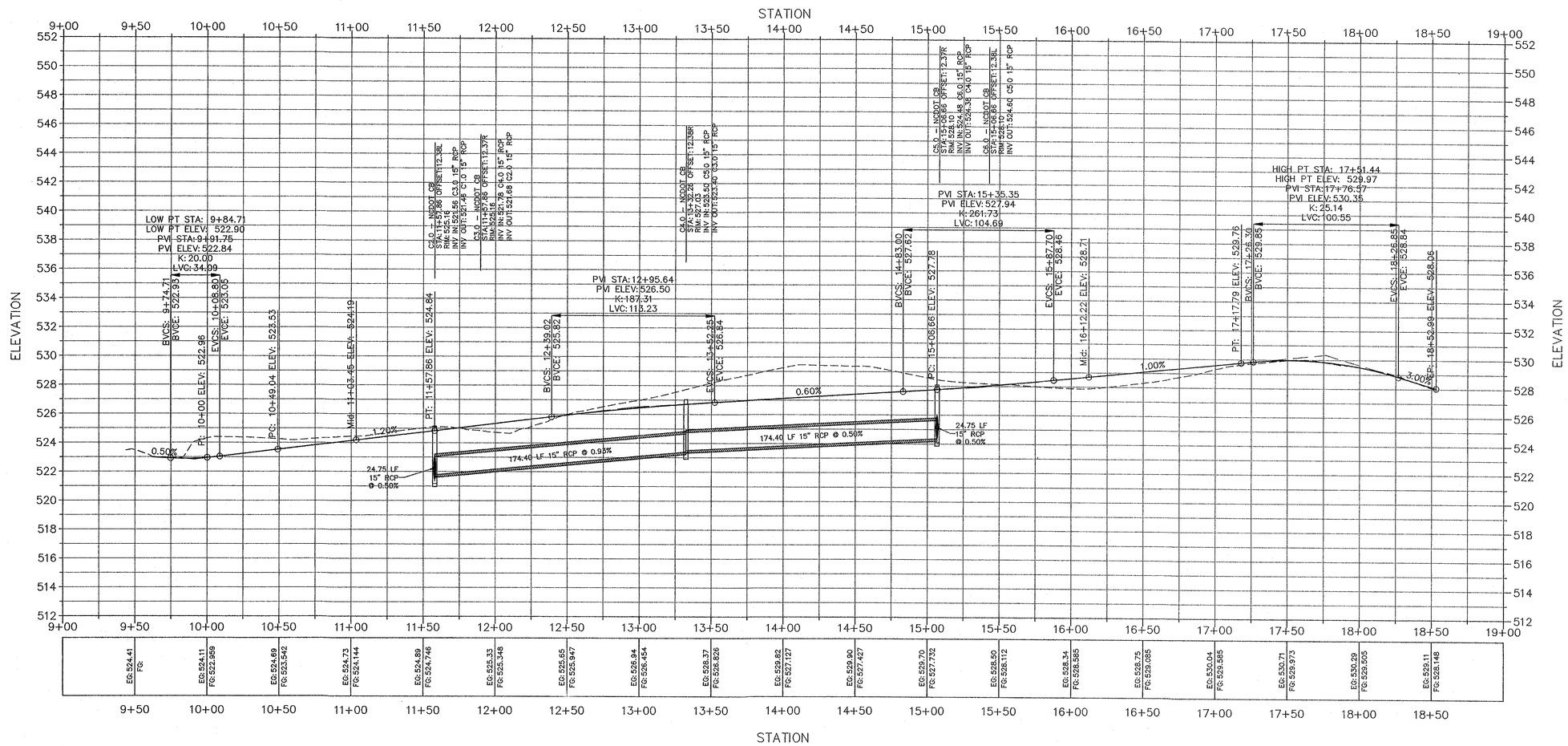
P1.0

PRELIMINARY MAJOR SUBDIVISION PLAN

PIN #9880-28-1953





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ANNANDALE
AT CREEK WOOD
ORANGE COUNTY, NORTH CAROLINA
LOCKWOOD CT. – PLAN & PROFILE
STA:10+00 TO STA:18+53

REV.	DATE	DESCRIPTION	BY
1	09/13/12	ADDITIONAL INFO PER STAFF	EJK
2	12/07/12	PRELIM PLAN SUBMITTAL	CPK
3	01/04/13	PER OC COMMENTS	SCS
4	01/16/13	COVER SHEET REVISION	SCS
5	02/21/13	LOT LINE REVISION	SCS

DATE:	SEPTEMBER 5, 2012
HORIZONTAL SCALE:	1" = 40'
VERTICAL SCALE:	1" = 4'
PROJECT MANAGER:	CPK
DRAWN BY:	TMM
PROJECT NO:	12-017
DRAWING NAME:	12-017 REVIEW

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SHEET NO.
P2.0

PRELIMINARY MAJOR SUBDIVISION PLAN

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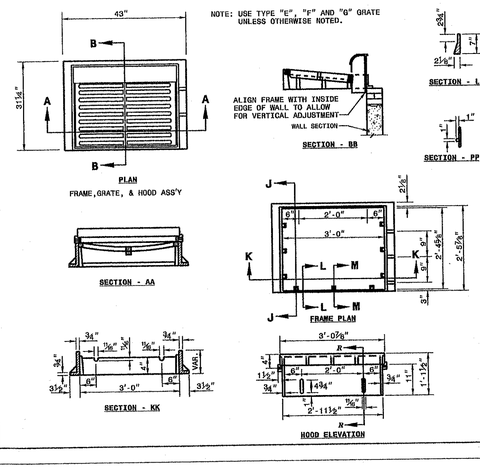
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR **FRAME, GRATES, AND HOOD** FOR USE ON STANDARD CATCH BASIN

NOTE: USE TYPE "E", "F" AND "G" GRATE UNLESS OTHERWISE NOTED.



SHEET 1 OF 2
840.03

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR **FRAME, GRATES, AND HOOD** FOR USE ON STANDARD CATCH BASIN

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR **CONCRETE CATCH BASIN** 12" THRU 54" PIPE

GENERAL NOTES:

USE CLASS "B" CONCRETE THROUGHOUT.

PROVIDE ALL CATCH BASINS OVER 3'-0" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS MEETING STD. DRAWING 840.66.

OPTIONAL CONSTRUCTION - MONOLITHIC POUR. 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.

USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.

IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.

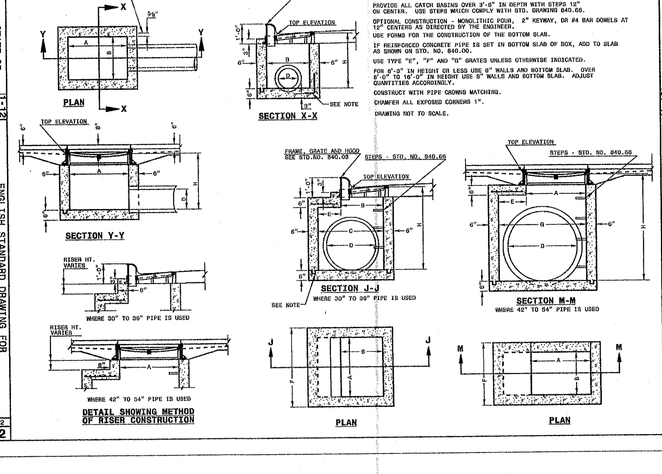
USE TYPE "E", "F" AND "G" GRATES UNLESS OTHERWISE INDICATED.

FOR 0'-0" IN HEIGHT OR LESS USE 6" WALLS AND BOTTOM SLAB. OVER 6'-0" TO 16'-0" IN HEIGHT USE 8" WALLS AND BOTTOM SLAB. ADJUST QUANTITIES ACCORDINGLY.

CONSTRUCT WITH PIPE GROWND MATCHING.

CHAMFER ALL EXPOSED CORNERS 1".

DRAWING NOT TO SCALE.



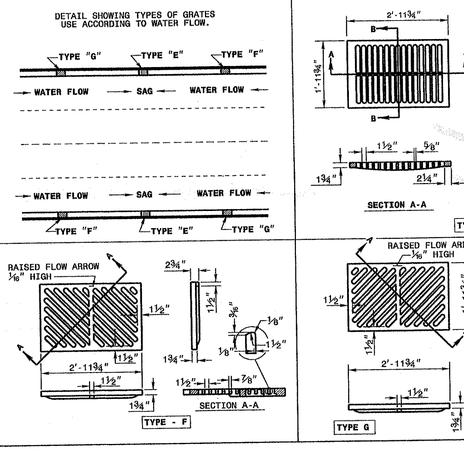
SHEET 1 OF 2
840.02

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR **FRAME, GRATES, AND HOOD** FOR USE ON STANDARD CATCH BASIN

DETAIL SHOWING TYPES OF GRATES USE ACCORDING TO WATER FLOW.

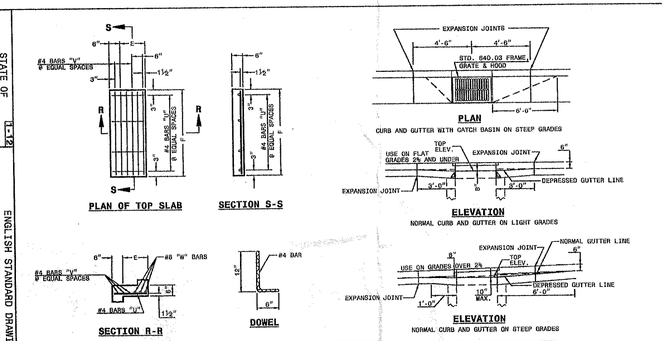


SHEET 2 OF 2
840.03

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR **CONCRETE CATCH BASIN** 12" THRU 54" PIPE

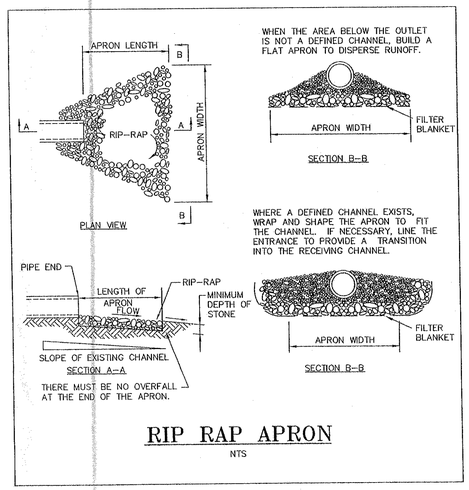


MINIMUM DIMENSIONS AND QUANTITIES FOR CONCRETE CATCH BASIN(BASED ON MIN. HEIGHT, H, WITH NO RISER) *

DIMENSIONS OF BOX AND PIPE						COVER DIMENSION		BARS-U		BARS-V		BARS-W		TOTAL LBS.	CU.YDS. CONC. IN BOX			DEDUCTIONS OVER PIPE	
PIPE D	SPAN A	WIDTH B	WIDTH C	SPAN G	MIN. HEIGHT H	E	F	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH		TOP SLAB	BOTTOM SLAB	BOX WALLS (EACH)	C.Y.	B.C.
12"	3'-0"	2'-2"	--	--	2'-0"	--	--	--	--	--	--	--	--	--	--	0.225	0.772	0.010	0.026
15"	3'-0"	2'-2"			3'-0"											0.235	0.829	0.013	0.035
18"	3'-0"	2'-2"			3'-3"											0.235	0.887	0.033	0.049
24"	3'-0"	2'-2"			3'-0"											0.235	1.001	0.059	0.085
30"	3'-0"	2'-2"	3'-4"		4'-0"	1'-0"	4'-0"	4	1'-6"	2	3'-9"	3	3'-9"	39	0.183	0.221	1.493	0.092	0.127
36"	3'-0"	2'-2"	3'-10"		4'-9"	1'-8"	4'-0"	4	1'-11"	3	3'-9"	3	3'-9"	43	0.161	0.256	1.714	0.132	0.170
42"	3'-0"	2'-2"		6'-5"	5'-3"	1'-6"	3'-2"	4	1'-8"	2	2'-11"	3	2'-11"	32	0.112	0.318	1.738	0.165	0.243
48"	3'-0"	2'-2"		6'-6"	5'-9"	2'-0"	3'-2"	4	2'-3"	3	2'-11"	3	2'-11"	35	0.145	0.352	2.068	0.205	0.317
54"	3'-0"	2'-2"		6'-7"	6'-3"	2'-7"	3'-2"	4	2'-10"	5	2'-11"	3	2'-11"	41	0.188	0.388	2.337	0.237	0.401

* RISER HAS .228 CUBIC YARDS OF CONCRETE PER FOOT HEIGHT

SHEET 2 OF 2
840.02



RIP RAP APRON

NTS

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PRINCIPAL ENGINEER
PHIL KOCH - NCPE #22634

ANNANDALE
AT CREEK WOOD
ORANGE COUNTY, NORTH CAROLINA
STORMWATER DETAILS

REV.	DATE	DESCRIPTION	BY
1	09/13/12	ADDITIONAL INFO PER STAFF	EJK
2	12/06/12	PRELIM PLAN SUBMITTAL	CPK

DATE:	SEPTEMBER 5, 2012
HORIZONTAL SCALE:	N/A
VERTICAL SCALE:	N/A
PROJECT MANAGER:	CPK
DRAWN BY:	CPK
PROJECT NO:	12-017
DRAWING NAME:	12-017 DETAILS

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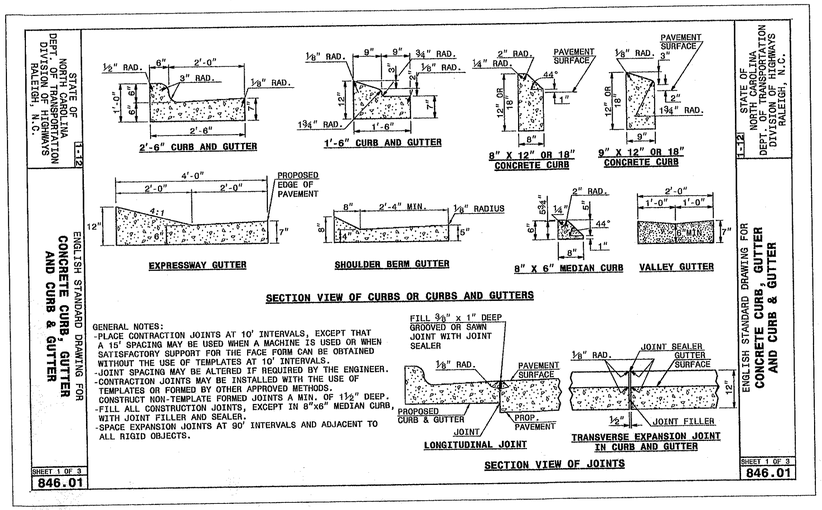
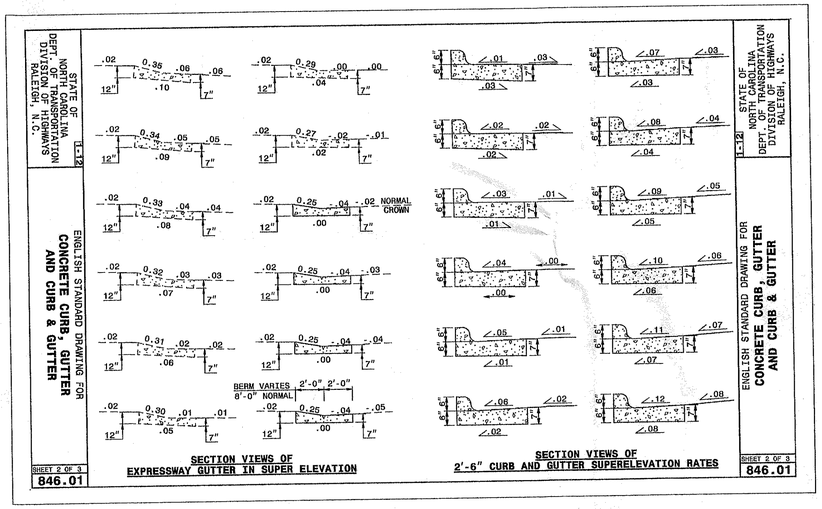
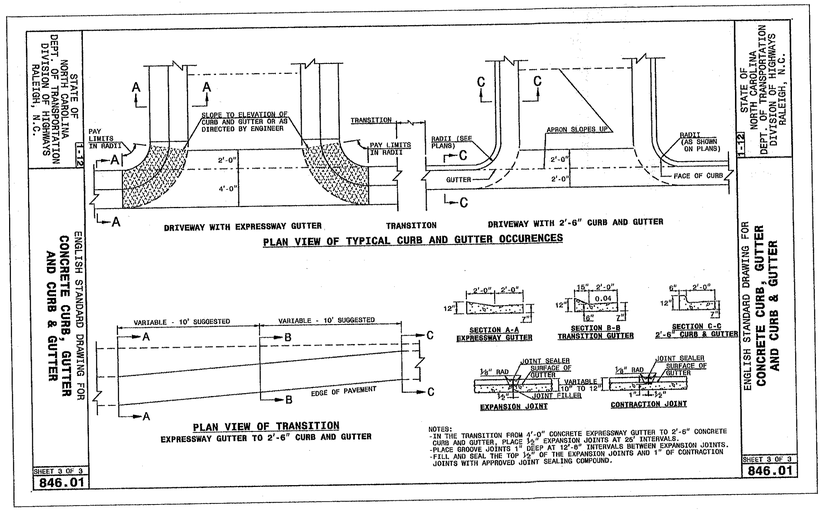
SHEET NO.

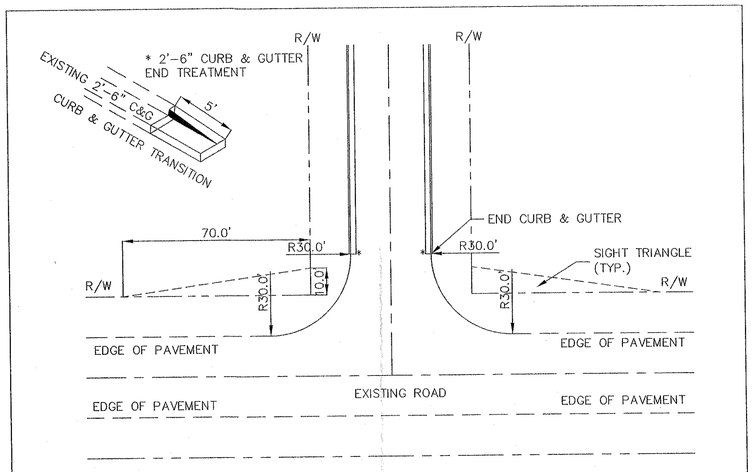
D1.0

PRELIMINARY MAJOR SUBDIVISION PLAN







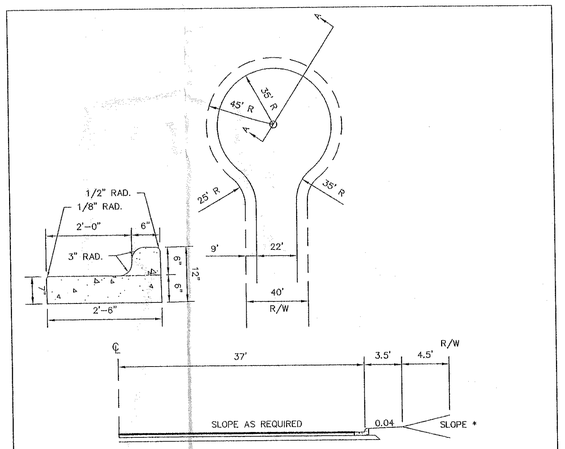


NOTE: DRAINAGE EASEMENTS MAY BE REQUIRED TO ACCOMODATE DRAINAGE BEYOND THE RIGHT-OF-WAY.

FIGURE 3

RECOMMENDED ROAD CONNECTION TO STATE MAINTAINED SYSTEM

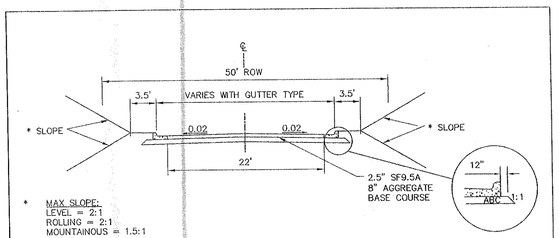
NEW RESIDENTIAL LOCAL ROAD OR RESIDENTIAL COLLECTOR ROAD WITH CURB & GUTTER AND EXISTING STATE MAINTAINED ROAD WITH SHOULDER SECTION



* TERRAIN	MAX SLOPE
LEVEL	2:1
ROLLING	2:1
HILLY	1.5:1

SECTION AA

FIGURE 7
SYMMETRICAL CUL-DE-SAC
CURB & GUTTER



* MAX SLOPE:
LEVEL = 2:1
ROLLING = 2:1
MOUNTAINOUS = 1.5:1

RESIDENTIAL LOCAL ROAD
TYPICAL CURB & GUTTER SECTION
SCALE: 1"=10'

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ANNANDALE
AT CREEK WOOD
ORANGE COUNTY, NORTH CAROLINA
SITE & PAVING DETAILS

REV.	DATE	DESCRIPTION	BY
1	09/13/12	ADDITIONAL INFO PER STAFF	EJK
2	12/06/12	PRELIM PLAN SUBMITTAL	CPK

DATE:	SEPTEMBER 6, 2012
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VERTICAL SCALE:	N/A
PROJECT MANAGER:	CPK
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PROJECT NO:	12-017
DRAWING NAME:	12-017 DETAILS

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