

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT TOWN OF GARNER STANDARDS AND SPECIFICATIONS

SYMBOLS AND ABBREVIATIONS

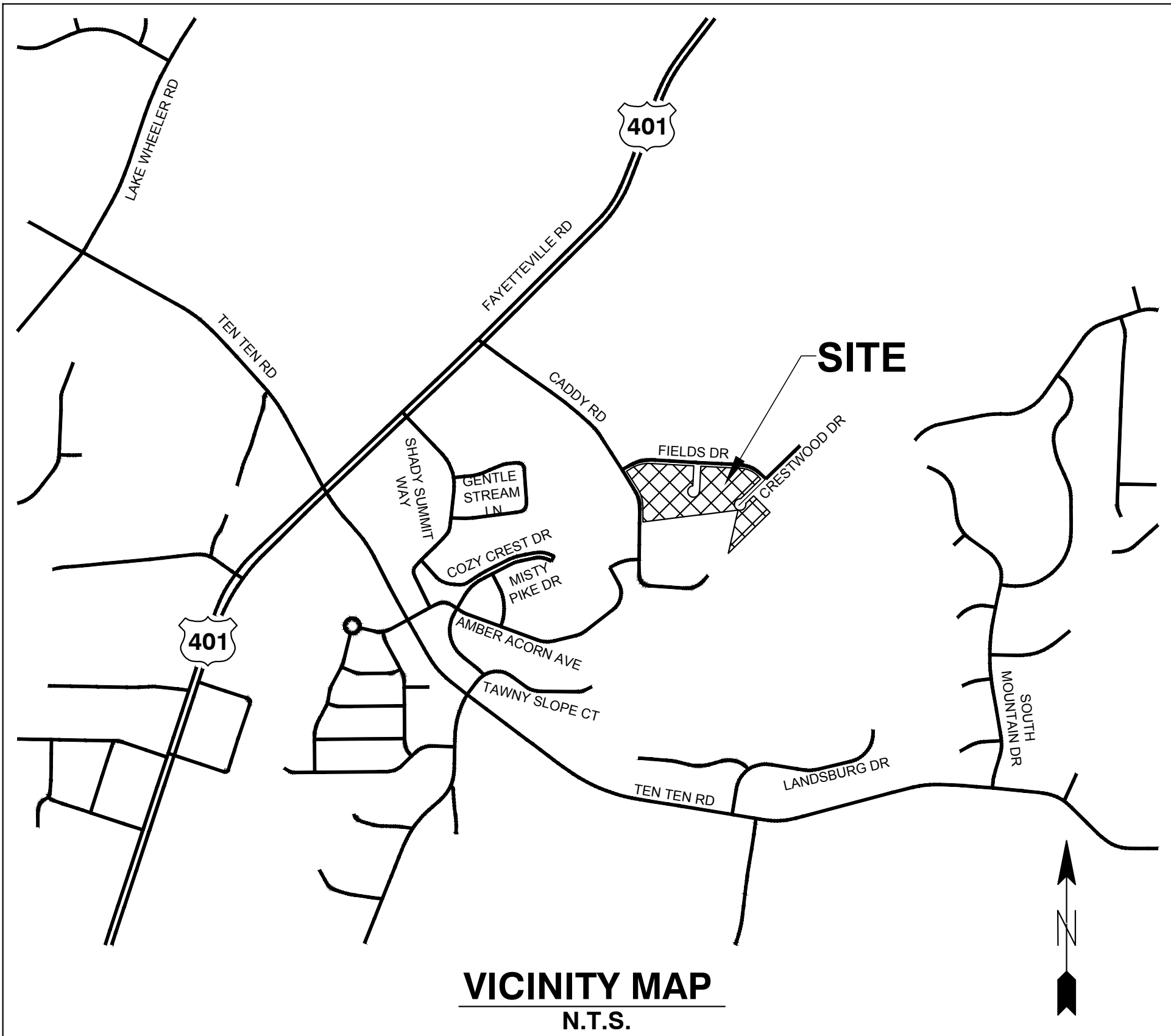
ABC	AGGREGATE BASE COURSE		EXISTING CURB INLET
ALUM	ALUMINUM		EXISTING GRATE INLET/YARD INLET
AST2	ALUMINIZED STEEL – TYPE 2		EXISTING FLARED END SECTION
B-B	BACK TO BACK		EXISTING FIRE HYDRANT
BOA	BLOW-OFF ASSEMBLY		EXISTING BLOW-OFF ASSEMBLY
C&G	CURB AND GUTTER		EXISTING GATE VALVE
CFS	CUBIC FEET PER SECOND		EXISTING REDUCER
CI	CURB INLET		EXISTING WATER METER
CL	CENTER LINE		EXISTING SAN SEWER MANHOLE
CMF	CORRUGATED METAL PIPE		EXISTING CLEAN OUT
CO	CLEAN OUT		EXISTING POWER POLE
COM	COMMUNICATION		EXISTING TELEPHONE PEDESTAL
CONC	CONCRETE		EXISTING AREA LIGHT
DCV	DOUBLE CHECK VALVE		EXISTING SIGN
DDCV	DOUBLE DETECTOR CHECK VALVE		NEW CURB INLET
DI	DROP INLET		NEW GRATE INLET/YARD INLET
DIP	DUCTILE IRON PIPE		NEW FLARED END SECTION
EASE	EASEMENT		NEW FIRE HYDRANT
ELEC	ELECTRIC		NEW BLOW-OFF ASSEMBLY
EX	EXISTING		NEW GATE VALVE
FES	FLARED END SECTION		NEW REDUCER
FH	FIRE HYDRANT		NEW WATER METER
FM	FORCE MAIN		NEW TEE
FT	FEET		NEW PLUG
FT/SEC	FEET PER SEC		NEW MANHOLE
GALV	GALVANIZED		NEW CLEAN OUT
GV	GATE VALVE		NEW SIGN
HDPE	HIGH DENSITY POLYETHYLENE		IRON PIPE
L	LENGTH		BENCHMARK
LF	LINEAR FEET		TEMP SILT FENCE
MH	MANHOLE		TEMP TREE PROTECTION FENCE
PAVE	PAVEMENT		TEMP COMBINATION SILT/TREE PROTECTION FENCE
PE	FINISHED PAD ELEVATION		TEMP DIVERSION DITCH
PP	POWER POLE		DISTURBED LIMITS
PVC	POLYVINYL CHLORIDE		STREAM
R	RADIUS		EXISTING GAS LINE
R/W	RIGHT-OF-WAY		EXISTING COMMUNICATIONS LINE
RED	REDUCER		EXISTING UNDERGROUND TELEPHONE
RCP	REINFORCED CONCRETE PIPE		EXISTING UNDERGROUND ELECTRIC
RPZ	REDUCED PRESSURE ZONE		EXISTING OVERHEAD ELECTRIC
SS	SANITARY SEWER		EXISTING WATER LINE
STA	STATION		EXISTING SANITARY SEWER FORCE MAIN
TDD	TEMPORARY DIVERSION DITCH		EXISTING SANITARY SEWER
TELE	TELEPHONE		EXISTING STORM DRAINAGE
TSB	TEMPORARY SEDIMENT BASIN		NEW STORM DRAINAGE
UG	UNDERGROUND		NEW WATER LINE
WCR	WHEELCHAIR RAMP		NEW SANITARY SEWER
W/L	WATER LINE		NEW SANITARY SEWER FORCE MAIN
WM	WATER METER		NEW GAS MAIN
YI	YARD INLET		HANDICAPPED ACCESSIBLE ROUTE

NOTE: ALL CONSTRUCTION ACTIVITY MUST BE IN ACCORDANCE WITH THE ACCEPTED POLICIES OF THE TOWN OF GARNER AND NCDOT

WOODCREST SUBDIVISION
MAJOR SUBDIVISION

TOWN OF GARNER, WAKE COUNTY, NORTH CAROLINA

TOWN OF GARNER PROJECT NO.
XX-XX-XX



OWNER/DEVELOPER:

BLUE SKY SERVICES, LLC
2810-2A YONKERS ROAD
RALEIGH, NC 27604

CONTACT: DAVID MEDVETZ
PHONE: (919) 743-0030
EMAIL: davemedvetz@gmail.com

SHEET INDEX

COVER	
C0.1	EXISTING CONDITIONS & DEMOLITION PLAN
C1.1	SITE PLAN
C2.1	UTILITY PLAN
C3.1	GRADING AND DRAINAGE PLAN
C3.2	SCM DETAILS
L1.1	LANDSCAPE PLAN
SL101	SITE LIGHTING PLAN

SITE DATA

PROJECT NAME:	WOODCREST SUBDIVISION		
PIN:	MULTIPLE (SEE TABLE BELOW)		
REAL ID NUMBER:	MULTIPLE (SEE TABLE BELOW)		
ADDRESS:	MULTIPLE (SEE TABLE BELOW)		
ZONING:	R-15		
EXISTING:	R-15, RCD (RESIDENTIAL CLUSTER DISTRICT)		
PROPOSED:	R-15, RCD (RESIDENTIAL CLUSTER DISTRICT)		
USE:	VACANT		
EXISTING:	SINGLE-FAMILY DETACHED RESIDENTIAL		
PROPOSED:	SINGLE-FAMILY DETACHED RESIDENTIAL		
SITE AREA:	11.03 AC (480,413 SF)		
LOT NUMBER (EXISTING):	23 RECORDED LOTS IN WAKE COUNTY AS LAKESIDE ESTATES RECORDED ON OR BEFORE 02-07-1973		
LOT NUMBER (PROPOSED):	27		
PROPOSED DENSITY:	2.45 UNITS/ACRE		
MINIMUM LOT SIZE (REQUIRED):	6,000 SF		
MINIMUM LOT SIZE (PROPOSED):	6,003 SF		
AVERAGE LOT SIZE:	6,830 SF		
MAXIMUM LOT SIZE:	8,886 SF		
MINIMUM LOT WIDTH:	50 FT		
BUILDING SETBACKS:	REQUIRED	PROPOSED	
FRONT:	20 FT	20 FT	
REAR:	20 FT	20 FT	
SIDE YARD:	10 FT	10 FT	
CORNER LOT SIDE YARD:	20 FT	20 FT	
MAXIMUM BUILDING HEIGHT:	35 FT		
OPEN SPACE REQUIREMENT:	25% OF GROSS SITE AREA: 120,103 SF		
PROVIDED:	38% OF GROSS SITE AREA: 182,508 SF		
OPEN SPACE LOT ABUTMENT PERCENTAGE REQUIREMENT:	40% (11 LOTS)		
PROVIDED:	78% (21 LOTS)		
DISTURBED AREA:	7.96 AC (346,537 SF)		
QUANTITIES:			
STREETS:	1,537 LF		
SIDEWALKS:	4,005 LF		
SEWER (8"):	2,102 LF		
WATER (8"):	2,582 LF		
WATER (6"):	235 LF		

Parcel No	PIN	Real Estate ID	Site Address	City	County	State	Zip
1	0 699179259	78861	0 CADDY RD	Raleigh	Wake	NC	27603
2	0 699260987	78898	0 CADDY RD	Raleigh	Wake	NC	27603
3	0 699268828	78894	0 CRESTWOOD DR	Raleigh	Wake	NC	27603
4	0 699269906	320430	0 CRESTWOOD DR	Raleigh	Wake	NC	27603
5	0 699270087	78897	0 CADDY RD	Raleigh	Wake	NC	27603
6	0 699270185	78896	0 CADDY RD	Raleigh	Wake	NC	27603
7	0 699270341	78857	0 FIELDS DR	Raleigh	Wake	NC	27603
8	0 699271351	78858	0 FIELDS DR	Raleigh	Wake	NC	27603
9	0 699272153	78895	0 MONTCLAIR ST	Raleigh	Wake	NC	27603
10	0 699272320	78835	0 FIELDS DR	Raleigh	Wake	NC	27603
11	0 699273023	78901	0 MONTCLAIR ST	Raleigh	Wake	NC	27603
12	0 699273300	78864	0 FIELDS DR	Raleigh	Wake	NC	27603
13	0 699273380	51234	0 FIELDS DR	Raleigh	Wake	NC	27603
14	0 699274054	78900	0 MONTCLAIR ST	Raleigh	Wake	NC	27603
15	0 699275131	78899	0 MONTCLAIR ST	Raleigh	Wake	NC	27603
16	0 699275259	78860	0 FIELDS DR	Raleigh	Wake	NC	27603
17	0 699276043	78833	0 CRESTWOOD DR	Raleigh	Wake	NC	27603
18	0 699276269	78867	0 FIELDS DR	Raleigh	Wake	NC	27603
19	0 699277113	78862	0 CRESTWOOD DR	Raleigh	Wake	NC	27603
20	0 699277351	78837	0 FIELDS DR	Raleigh	Wake	NC	27603
21	0 699278220	78866	0 CRESTWOOD DR	Raleigh	Wake	NC	27603
22	0 699279030	320431	0 CRESTWOOD DR	Raleigh	Wake	NC	27603
23	0 699279074	51237	0 CRESTWOOD DR	Raleigh	Wake	NC	27603
24	0 699279209	12881	0 CRESTWOOD DR	Raleigh	Wake	NC	27603

ENGINEER:

BNK

BASS, NIXON & KENNEDY, INC.
CONSULTING ENGINEERS

6310 CHAPEL HILL ROAD, SUITE 250
RALEIGH, NORTH CAROLINA 27607
TELEPHONE: (919) 851-4422
FAX: (919) 851-8968

CERTIFICATION NUMBERS: NCBELS (C-0110)
NCBOLA (C-0267)

CONTACT: JOHN WOODLIEF, PE
EMAIL: John.Woodlief@BNKinc.com

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE MUNICIPALITY STANDARDS, SPECIFICATIONS, AND DETAILS. WORK IN THIS PROJECT SHALL ALSO CONFORM TO THESE PLANS, THE LATEST EDITIONS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) ROAD AND BRIDGE SPECIFICATIONS, THE ROAD AND BRIDGE STANDARDS, THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL HANDBOOK, THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL REGULATIONS, THE FINAL GEOTECHNICAL REPORT, AND GENERAL DESIGN STANDARDS. IN THE EVENT OF CONFLICT BETWEEN ANY OF THESE STANDARDS, SPECIFICATIONS, OR PLANS, THE MOST STRINGENT SHALL GOVERN.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR TRENCH SAFETY DURING ALL PHASES OF CONSTRUCTION.
- THE LOCATION AND SIZE OF EXISTING UTILITIES AS SHOWN IS APPROXIMATE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR HORIZONTALLY AND VERTICALLY LOCATING AND PROTECTING ALL PUBLIC OR PRIVATE UTILITIES WHICH LIE IN OR ADJACENT TO THE CONSTRUCTION SITE. AT LEAST 48 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE NORTH CAROLINA ONE-CALL UTILITIES LOCATION SERVICE (ULOCAL) AT 1-800-632-4949 FOR PROPER IDENTIFICATION OF EXISTING UTILITIES WITHIN THE SITE.
- THE CONTRACTOR SHALL SALVAGE AND PROTECT ALL EXISTING POWER POLES, SIGNS, MANHOLES, TELEPHONE RISERS, WATER VALVES, ETC. DURING ALL CONSTRUCTION PHASES. THE CONTRACTOR SHALL REPAIR, AT HIS OWN EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
- TRAFFIC CONTROL ON PUBLIC STREETS SHALL BE IN CONFORMANCE WITH THE TRAFFIC CONTROL PLAN, THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AND AS FURTHER DIRECTED BY CITY AND STATE INSPECTORS.
- ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS AND SPECIFICATIONS AND SITE CONDITIONS OR ANY INCONSISTENCIES OR AMBIGUITIES IN DRAWINGS OR SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER, IN WRITING, WHO SHALL PROMPTLY ADDRESS SUCH INCONSISTENCIES OR AMBIGUITIES. WORK DONE BY THE CONTRACTOR AFTER HIS DISCOVERY OF SUCH DISCREPANCIES, INCONSISTENCIES, OR AMBIGUITIES SHALL BE DONE AT THE CONTRACTOR'S RISK.
- A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ARRANGE THE MEETING WITH THE CITY ENGINEERING DIVISION.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL REQUIRED PERMITS AND APPROVALS PRIOR TO COMMENCING CONSTRUCTION.
- ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE, AND AS SHOWN ON THESE PLANS, THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE SILT FENCES (OR OTHER METHODS APPROVED BY THE ENGINEER AND APPLICABLE MUNICIPALITY) AS REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL EROSION, CONSERVATION, AND SILTATION ORDINANCES. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND THE ESTABLISHMENT OF A STAND OF GRASS OR OTHER GROWTH TO PREVENT EROSION.
- THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOISTURE CONDITION ALL FILL PER THE PROJECT GEOTECHNICAL ENGINEER'S SPECIFICATIONS. THE FILL MATERIAL TO BE USED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.
- MATERIALS USED TO CONSTRUCT EMBANKMENTS FOR ANY PURPOSE, BACKFILL AROUND DRAINAGE STRUCTURES, OR IN UTILITY TRENCHES FOR ANY OTHER DEPRESSION REQUIRING FILL OR BACKFILL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AS SET OUT IN ASTM STANDARD D698. STONE BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST AS SET OUT IN ASTM STANDARD D1557. THE CONTRACTOR SHALL, PRIOR TO ANY OPERATIONS INVOLVING FILLING OR BACKFILLING, SUBMIT THE RESULTS OF THE PROCTOR TEST TOGETHER WITH A CERTIFICATION THAT THE SOIL TESTED IS REPRESENTATIVE OF THE MATERIALS TO BE USED ON THE PROJECT. TESTS SHALL BE CONDUCTED BY A CERTIFIED MATERIALS TESTING LABORATORY AND THE CERTIFICATIONS MADE BY A LICENSED PROFESSIONAL ENGINEER REPRESENTING THE LABORATORY.
- PROPOSED CONTOURS AND GUTTER GRADIENTS ARE APPROXIMATE. PROPOSED SPOT ELEVATIONS AND ROADWAY PROFILES/SUPERELEVATIONS ARE TO BE USED IN CASE OF DISCREPANCY.
- THE CONTRACTOR SHALL REVIEW, VERIFY AND COORDINATE ALL DIMENSIONS SHOWN ON PLANS, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF CURB INLETS AND GRATE INLETS AND ALL UTILITIES CROSSING THE STORM SEWER PRIOR TO STARTING PROJECT.
- ALL CURB JOINTS SHALL EXTEND THROUGH THE CURB. MINIMUM LENGTH OF OFFSET JOINTS AT RADIUS POINTS IS 1.5 FEET. ALL JOINTS SHALL BE SEALED WITH JOINT SEALANT.
- ALL HANDICAP RAMPING, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO ADA REQUIREMENTS AND THE NORTH CAROLINA STATE BUILDING CODE, VOL. 1-C ACCESSIBILITY CODE.
- OWNER SHALL PROVIDE FENCING AND OTHER SAFETY MEASURES NECESSARY IN AND AROUND ANY PROPOSED STORMWATER MANAGEMENT MEASURES (PONDS, WETLANDS, ETC.) OBTAINING PROPER PERMITS SHALL BE THE RESPONSIBILITY OF THE OWNER.
- RETAINING WALLS EXCEEDING 30 INCHES IN HEIGHT SHALL INCLUDE FALL PROTECTION IN THE FORM OF A HANDRAIL OR FENCING ON THE HIGH SIDE OF THE RETAINING WALL.
- PROPER COMPACTION OF ALL FILL SOILS PLACED ON SITE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COMPACTION SHALL BE ADEQUATE TO SUPPORT THE PROPOSED USE OF AREAS IN WHICH FILL SOILS ARE PLACED. THE CONTRACTOR SHALL HIRE A GEOTECHNICAL ENGINEER TO TEST AND VERIFY THAT COMPACTION IS ADEQUATE FOR THE PROPOSED USE OF IN THE AREA OF FILL PLACEMENT.
- ALL ASPECTS OF THIS PROJECT SHALL BE IN FULL COMPLIANCE WITH CURRENT ADA STANDARDS. IF THE CONTRACTOR NOTES ANY ASPECTS OF THE PROJECT WHICH ARE NOT IN COMPLIANCE, THE ENGINEER SHALL BE NOTIFIED PRIOR TO ANY FURTHER WORK BEING PERFORMED. ANY WORK PERFORMED AFTER THE CONTRACTOR NOTES SUCH A NON COMPLIANCE IS SUBJECT TO REMOVAL AND REPAIR AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR OR OWNER SHALL EMPLOY A GEOTECHNICAL ENGINEER TO TEST ALL EMBANKMENTS AND FILL PLACEMENT FOR PROPER COMPACTION. PROPER COMPACTION SHALL BE PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS OR THESE PLANS, WHICHEVER IS MORE STRINGENT. EMBANKMENTS FOR PONDS SHALL BE PLACED IN 6 INCH LOOSE LAYERS AND SHALL BE COMPACTED TO A DENSITY OF NO LESS THAN 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY AT A MOISTURE CONTENT OF 4% OR TWO PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698. THE CONTRACTOR SHALL TAKE PHOTOGRAPHS OF THE OUTLET STRUCTURE AT ALL AT ALL PHASES OF INSTALLATION AND SHALL RETAIN WITH GEOTECHNICAL TESTING DATA. THE CONTRACTOR SHALL ALSO RETAIN ALL SHIPPING RECORDS AND SPECIFICATIONS FOR THE OUTLET STRUCTURE MATERIALS AND STRUCTURES. ALL OF THE ABOVE DATA MAY BE REQUIRED AS PART OF THE MUNICIPALITY AS-BUILT PROCESS AND SHALL BE MADE AVAILABLE TO THE ENGINEER UPON REQUEST. THE CONTRACTOR AND OWNER SHALL HAVE DOCUMENTATION OF THESE TESTS AVAILABLE UPON REQUEST.
- RETAINING WALLS SHOWN HEREIN SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL ENGINEER WITH EXPERIENCE DESIGNING RETAINING WALLS. AT LEAST 14 DAYS PRIOR TO BEGINNING CONSTRUCTION OF RETAINING WALLS, THE CONTRACTOR SHALL CONTACT THE OWNER'S GEOTECHNICAL ENGINEER TO SCHEDULE AND COORDINATE ALL APPROPRIATE INSPECTIONS, TESTING, AND VERIFICATION NECESSARY DURING RETAINING WALL CONSTRUCTION. THE GEOTECHNICAL ENGINEER SHALL PROVIDE CONTINUOUS INSPECTION, TESTING AND VERIFICATION FOR THE DURATION OF RETAINING WALL CONSTRUCTION. PROPER SCHEDULING, EXECUTION, AND RECORD KEEPING FOR ALL REQUIRED INSPECTIONS, TESTING, AND VERIFICATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH RECORDS SHALL BE RETAINED AND SHALL BE PROVIDED TO THE OWNER AND BASS, NIXON & KENNEDY, INC. ALL MONITORING, TESTING, AND VERIFICATION SHALL CONFORM TO THE MOST RECENT VERSION OF THE NC BUILDING CODE CHAPTER 18, SECTION 1806 OR THE WALL DESIGN ENGINEER'S SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.



191	07-30-21	RAW
NO.	DATE	DRAWN

**EXISTING
CONDITIONS PLAN**

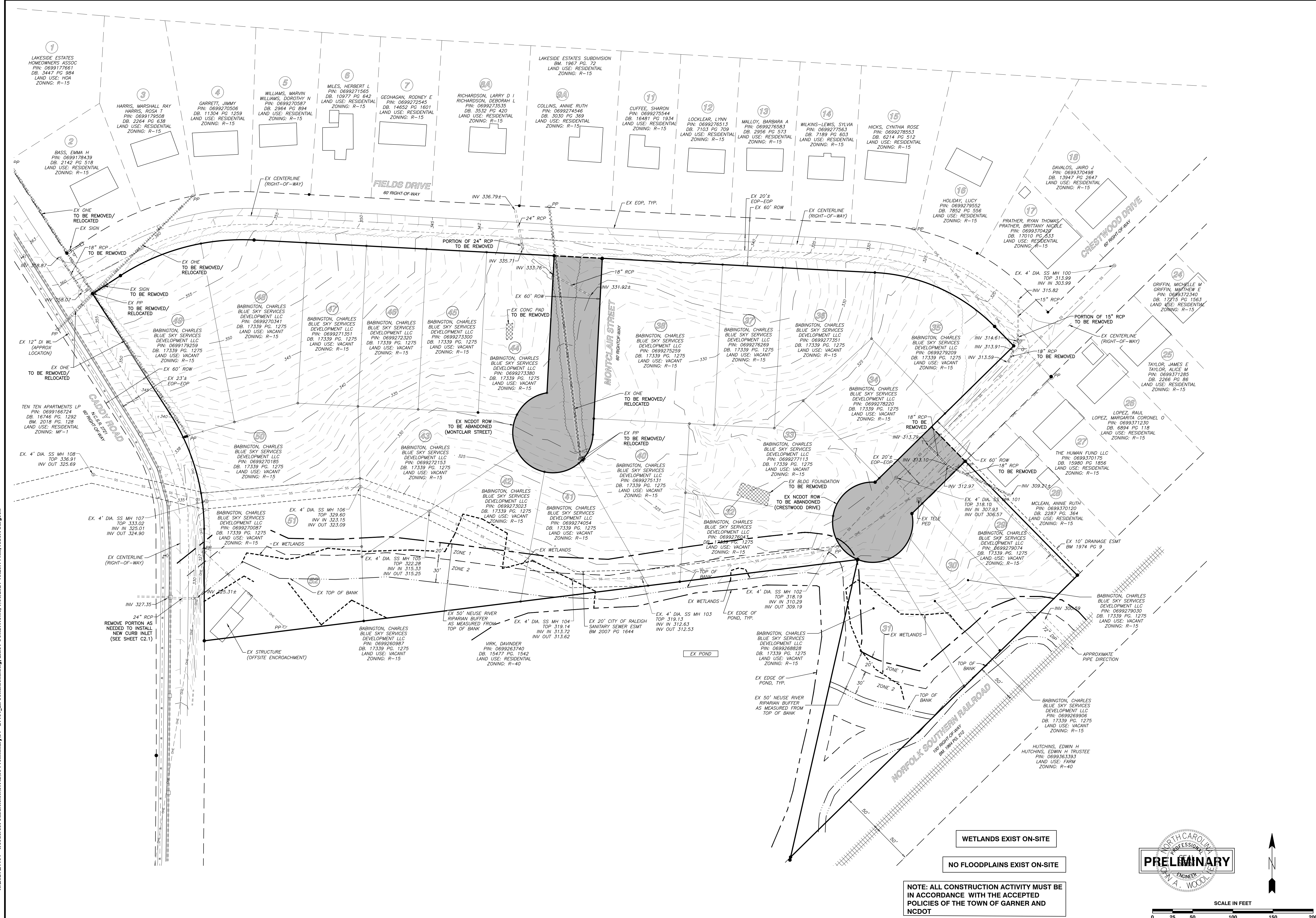
CHK BY: _____
 E: 1" = 50'

WOODCREST SUBDIVISION

SHEET
C0.1

TOWN OF GARNER, WAKE COUNTY, NORTH CAROLINA

NOT RELEASED FOR CONSTRUCTION OR BID SOLICITATION





SHEET

C1.1

WOODCREST SUBDIVISION

TOWN OF GARNER, WAKE COUNTY, NORTH CAROLINA

1. PRIOR TO RELEASE OF THE CERTIFICATE OF OCCUPANCY, THE OWNER/BUILDER MUST SUPPLY THE TOWN WITH A FINAL LETTER OF CERTIFICATION FROM LIGHTING ENGINEER AND LIGHTING MANUFACTURER.
2. CONTACT THE TOWN OF GARNER ENGINEERING DEPARTMENT AT (919) 773-4458 OR CGALLANT@GARNERN.COV TO SCHEDULE A PRECONSTRUCTION MEETING PRIOR TO OBTAINING BUILDING PERMITS FOR THIS PLAN.

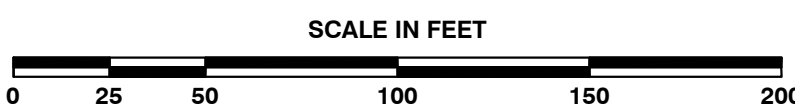


CURVE #	LENGTH	RADIUS
C1	201.36'	225.52'
C2	175.01'	279.70'
C3	28.27'	18.00'
C4	33.44'	264.86'
C5	73.34'	264.86'
C6	44.60'	264.86'

PROPOSED BOUNDARY LINE TABLE		
LINE #	LENGTH	DIRECTION
L13	115.27'	S0° 05' 59.80"E
L14	200.00'	N82° 54' 49.23"E
L15	196.87'	N82° 54' 49.23"E
L16	159.96'	N82° 54' 49.23"E
L17	40.04'	N82° 54' 49.23"E
L18	223.10'	N82° 54' 49.23"E
L19	379.85'	S12° 44' 05.41"W
L20	303.10'	N45° 31' 04.94"E
L21	122.55'	N45° 31' 04.94"E
L22	75.00'	N45° 31' 04.94"E
L23	215.66'	N44° 30' 54.87"W
L24	43.75'	N44° 30' 54.87"W

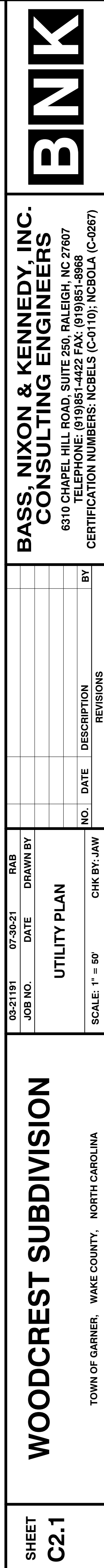
Line #	Length	Direction
L1	60.33'	S3°00'05.13"W
L3	39.72'	S3°10'10.22"E
L4	17.13'	N75°00'02.77"E
L7	112.58'	S81°34'37.29"E
L9	97.49'	N86°10'36.13"E
L11	131.52'	S72°24'46.17"E
L13	55.83'	N45°29'05.13"E

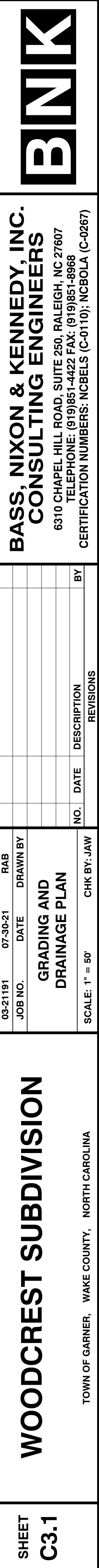
Curve #	Length	Radius
C1	107.70'	1000.00'
C2	70.52'	340.00'
C3	68.47'	340.00'
C4	112.75'	527.50'
C5	101.83'	272.50'
C6	246.59'	227.50'

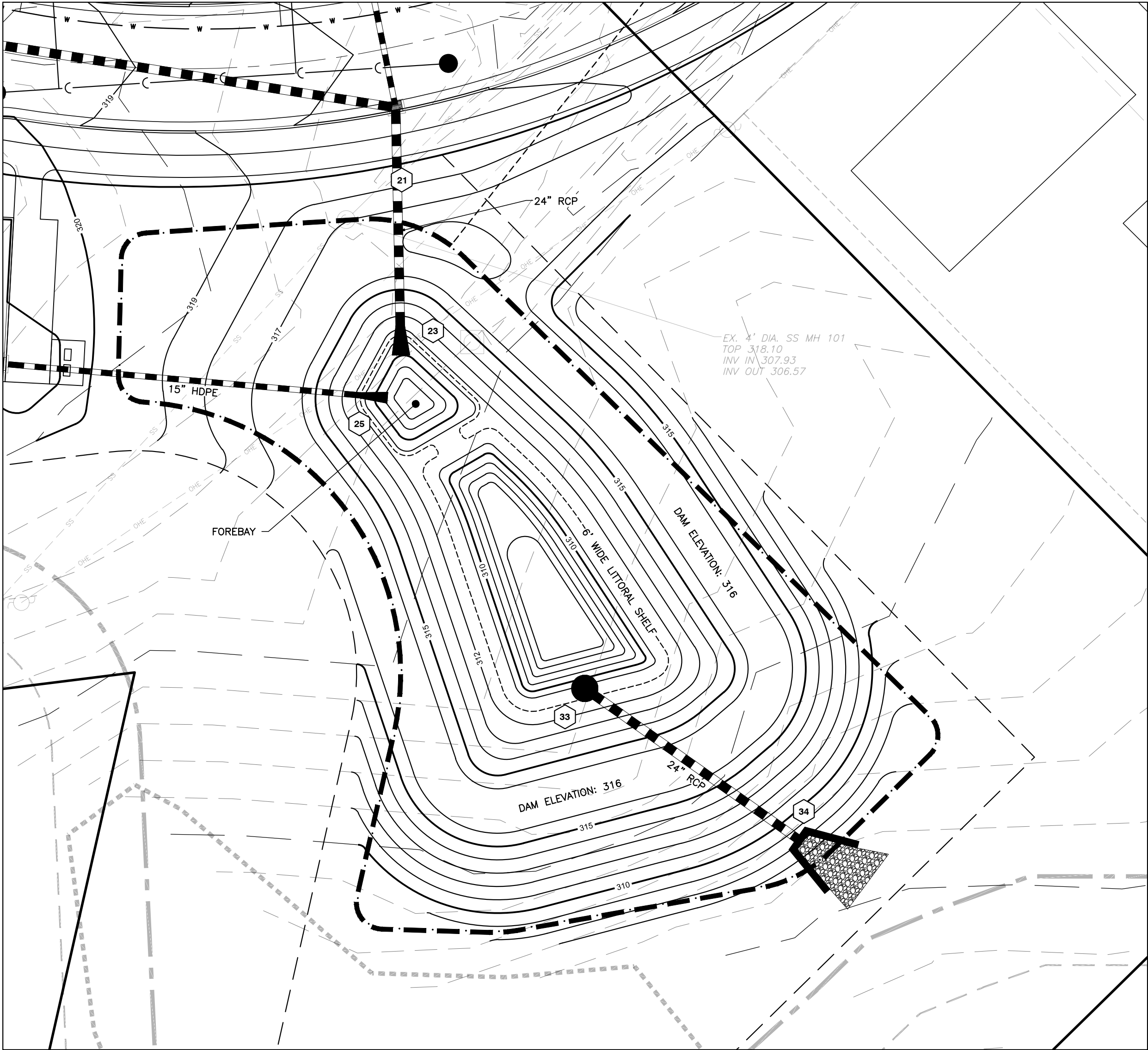
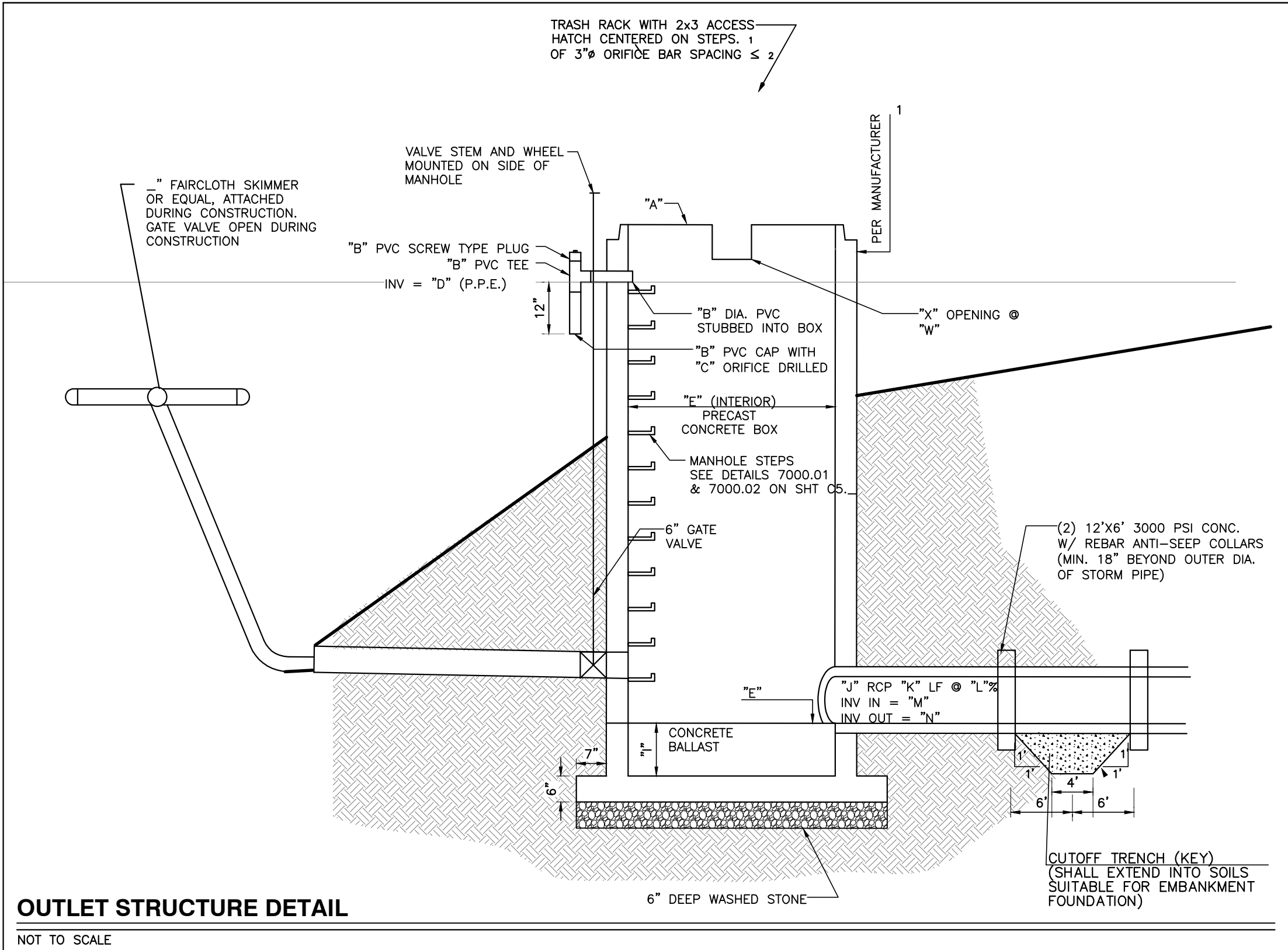


NO FLOODPLAINS EXIST ON-SITE

NOTE: ALL CONSTRUCTION ACTIVITY MUST BE IN ACCORDANCE WITH THE ACCEPTED POLICIES OF THE TOWN OF GARNER AND NCDOT







WET DETENTION BASIN

SCALE: 1" = 20'

WET DETENTION BASIN CONSTRUCTION SEQUENCE

1. UNDER NO CIRCUMSTANCES SHALL THE WET DETENTION BASIN BE FINALIZED AND PLANTED PRIOR TO COMPLETION OF CONSTRUCTION AND STABILIZATION OF ALL AREAS WHICH DRAIN TO IT.
2. IF WET DETENTION BASIN IS TO BE USED AS A SEDIMENT BASIN DURING CONSTRUCTION, ROUGH GRADE PER PLANS, FILL PLACEMENT AND OUTLET STRUCTURE CONSTRUCTION SHALL BE IN COMPLIANCE WITH DETAILS AND WET DETENTION BASIN CONSTRUCTION NOTES HEREON. IF THE WET DETENTION BASIN HAS BEEN PREVIOUSLY ROUGH GRADED AND/OR USED AS A SEDIMENT BASIN, REMOVE AND DISPOSE OF SEDIMENT DEPOSITS WITHIN THE BASIN AREA.
3. ROUGH GRADE WET DETENTION BASIN AS NECESSARY AFTER SEDIMENT REMOVAL AND TO FINALIZE BASIN GRADES. ALL FILL PLACEMENT SHALL BE IN COMPLIANCE WITH THE SPECIFICATION IN THE CONSTRUCTION NOTES ON THIS SHEET.
4. AFTER ROUGH GRADING WET DETENTION BASIN, BEGIN FINE GRADING TO CONSTRUCT FOREBAY BERMS/WALLS AND MAIN POOL AREA. GRADING TOLERANCE FOR THE WET DETENTION BASIN SHALL BE +/- 0.20 FEET FROM GRADES SHOWN ON THIS PLAN.
5. IN CONJUNCTION WITH GRADING AND FILL PLACEMENT, CONSTRUCT OUTLET STRUCTURES TO BRING IT INTO COMPLIANCE WITH THESE PLANS. IF OUTLET STRUCTURES WERE CONSTRUCTED WITH ROUGH GRADING WHEN USING THE WET DETENTION BASIN AS SEDIMENT BASIN, SKIP TO NEXT STEP.
6. WHEN FINE GRADING AND OUTLET STRUCTURE IS COMPLETE, CALL SURVEYOR AND ENGINEER FOR ASBUILT SURVEY AND EVALUATION.
7. IF SURVEYOR AND ENGINEER DETERMINE THAT GRADING IS NOT IN COMPLIANCE WITH THESE DRAWINGS, MAKE CORRECTIONS AS REQUIRED BY THE ENGINEER, AND REPEAT PREVIOUS STEP. OTHERWISE PROCEED TO NEXT STEP.
8. UPON NOTIFICATION FROM THE ENGINEER AND TOWN OF CARY THAT THE WET DETENTION BASIN IS IN COMPLIANCE WITH THESE DRAWINGS, PROVIDE LANDSCAPING IN COMPLIANCE WITH THE PLAN SHOWN ON THIS SHEET AND ANY ADDITIONAL SPECIFICATIONS FROM THE OWNER. IF TIMING IS SUCH THAT PLANTINGS WOULD OCCUR IN SUMMER MONTHS, COORDINATE WITH THE ENGINEER, OWNER, AND THE LOCAL MUNICIPALITY ABOUT DELAYING PLANTINGS UNTIL FALL OR EARLY WINTER FOR MAXIMUM SURVIVABILITY OF PLANTINGS.
9. SEED ALL DISTURBED AREAS PER THE SEEDING SCHEDULE SHOWN IN THESE PLANS.
10. CALL TOWN OF CARY STORMWATER INSPECTOR FOR APPROVAL OF STABILIZATION.
11. CONTRACTOR SHALL WATER NEW PLANT MATERIAL PLANTED IN THE WET DETENTION BASIN DAILY UNTIL COMPLETION OF ALL OTHER SITE RELATED CONSTRUCTION. AFTER THE FULL SCOPE OF THE CONTRACTOR'S WORK IS COMPLETED, IT SHALL BE THE OWNER'S RESPONSIBILITY TO WATER PLANTS DAILY UNTIL PLANTS HAVE BECOME WELL ESTABLISHED AND WATERING IS NO LONGER NECESSARY.

WET DETENTION BASIN CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF CARY AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL WARRANTY ALL PLANTED MATERIALS FOR A PERIOD OF 2 YEARS FROM DATE OF INSTALLATION. AT THE END OF THE FIRST YEAR AND AT THE END OF THE SECOND YEAR, THE CONTRACTOR SHALL REPLACE ALL PLANTS WHICH DO NOT SURVIVE. ANY HEALTHY PLANTS DAMAGED DURING PLANT REPLACEMENT SHALL ALSO BE REPLACED.
3. SOIL BELOW ELEVATION 424.0 FOR WETPOND SHALL BE TESTED BY THE USDA AGRICULTURAL EXTENSION OFFICE FOR PH, WHICH MUST FALL BETWEEN 5.5 AND 7.0. TESTS SHALL ALSO BE PERFORMED FOR NUTRIENTS SUCH AS NITROGEN, PHOSPHORUS, AND POTASSIUM, AND FOR MINERALS SUCH AS CHELATED IRON AND LIME. AMENDMENTS TO SOIL RECOMMENDED BY USDA SHALL BE INCORPORATED INTO SOIL TO PROMOTE VIGOROUS VEGETATION AND PLANT GROWTH. RECORDS OF TESTS AND AMENDMENTS PROVIDED BY CONTRACTOR SHALL BE PROVIDED TO THE ENGINEER.
4. LANDSCAPING PLANTINGS SHOWN HEREON SHALL BE INSTALLED DURING FALL SEASON OR EARLY WINTER IF POSSIBLE FOR MAXIMUM PLANT SURVIVABILITY.
5. THE CONTRACTOR OR OWNER SHALL EMPLOY A GEOTECHNICAL ENGINEER TO TEST ALL EMBANKMENTS AND FILL PLACEMENT FOR PROPER COMPACTION. PROPER COMPACTION SHALL BE PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS OR THESE PLANS, WHICHEVER IS MORE STRINGENT. EMBANKMENTS FOR BASINS SHALL BE PLACED IN 6 INCH LOOSE LAYERS AND SHALL BE COMPACTED TO A DENSITY OF NO LESS THAN 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY AT A MOISTURE CONTENT OF + OR - TWO PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698. THE CONTRACTOR SHALL TAKE PHOTOGRAPHS OF THE OUTLET STRUCTURE AT ALL PHASES OF INSTALLATION AND SHALL RETAIN WITH GEOTECHNICAL TESTING DATA. THE CONTRACTOR SHALL ALSO RETAIN ALL SHIPPING RECORDS AND SPECIFICATIONS FOR THE OUTLET STRUCTURE MATERIALS AND STRUCTURES. ALL OF THE ABOVE DATA MAY BE REQUIRED AS PART OF THE MUNICIPALITY AS-BUILT PROCESS AND SHALL BE MADE AVAILABLE TO THE ENGINEER UPON REQUEST. THE CONTRACTOR AND OWNER SHALL HAVE DOCUMENTATION OF THESE TESTS AVAILABLE UPON REQUEST.
6. TOLERANCES FOR FINAL GRADES SHALL BE WITHIN +/- 0.20 FEET. THE TOWN OF CARY WILL REQUIRE AN ASBUILT SURVEY OF THE CONSTRUCTED WET DETENTION BASIN THEREFORE STRICT ADHERENCE TO THE GRADING ON THIS PLAN AND THE TOLERANCES SPECIFIED HEREON SHALL BE REQUIRED PRIOR TO CERTIFICATION BY THE ENGINEER THAT THE WET DETENTION BASIN HAS BEEN BUILT IN COMPLIANCE WITH THESE DRAWINGS. UPON COMPLETION OF THE FINAL GRADING (PRIOR TO PLACEMENT OF ANY PLANT MATERIAL) THE CONTRACTOR SHALL CONTACT THE SURVEYOR TO SURVEY THE ASBUILT CONSTRUCTED WET DETENTION BASIN. THE CONTRACTOR SHALL NOTIFY THE ENGINEER THAT THE CONSTRUCTED WET DETENTION BASIN HAS BEEN COMPLETED AND THE ENGINEER SHALL EVALUATE THE ASBUILT SURVEY DATA FOR COMPLIANCE WITH THESE DRAWINGS. IF THE WET DETENTION BASIN IS FOUND TO BE OUT OF COMPLIANCE WITH THESE DRAWINGS, THE CONTRACTOR SHALL REGRADE THE WET DETENTION BASIN AS NECESSARY TO BRING THE WET DETENTION BASIN INTO COMPLIANCE WITH THESE DRAWINGS. THE COST OF ANY ADDITIONAL SURVEY OR ENGINEERING EVALUATION REQUIRED RESULTING FROM INCOMPLETE OR INCORRECT GRADING OF THE WET DETENTION BASIN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. SAFETY WALLS ARE REQUIRED FOR ALL WALLS GREATER THAN 30 INCHES IN HEIGHT AND SHOULD BE INSTALLED IMMEDIATELY AFTER WALL IS COMPLETE. TEMP SAFETY FENCE SHOULD BE IMPLEMENTED DURING INSTALLATION OF WALL.

GENERAL NOTES

1. THE PROJECT WILL MEET ALL OF THE REQUIREMENTS RELATIVE TO BEST MANAGEMENT PRACTICES AND ENGINEERED STORMWATER CONTROL STRUCTURES AS OUTLINED IN THE TOWN OF CARY LAND DEVELOPMENT ORDINANCE. (CHAPTER 4, PART 4.6, LDO).

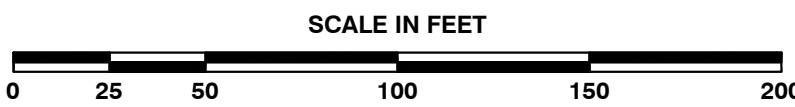
CLAY LINER SPECIFICATIONS

1. A 6" THICK LINER OF A COMPACTED CLAY SHALL BE INSTALLED IN THE BOTTOM AND SIDE SLOPES (UP TO THE TEMPORARY POOL ELEVATION) OF THE FACILITY. THE INFILTRATION RATE OF THE CLAY LINER SHALL BE NO MORE THAN 0.01 INCHES PER HOUR. A GEOTECHNICAL ENGINEER SHALL BE RESPONSIBLE FOR OBSERVING, TESTING AND PROVIDING DIRECTION FOR THE INSTALLATION OF THE CLAY LINER TO ENSURE THE FACILITY WILL HOLD WATER FOR TREATMENT WHEN CONVERTED TO A PERMANENT STORMWATER FACILITY AT THE END OF CONSTRUCTION. AS AN ALTERNATIVE TO INSTALLING A 6" THICK COMPACTED CLAY LINER, THE CONTRACTOR MAY INSTALL A 30 MIL POLY-LINER OR BENTONITE LINER TO PREVENT WATER FROM MIGRATING INTO THE SOILS IF A POLY-LINER IS USED, THE LINER SHOULD BE APPROXIMATELY 12" BELOW GRADE TO PREVENT DAMAGE DURING MAINTENANCE OF THE FACILITY AND/OR DEGRADATION DUE TO SUNLIGHT, ETC. IT IS RECOMMENDED THAT A GEOTECHNICAL ENGINEER BE CONSULTED FOR THE BEST METHOD TO IMPLEMENT BASED ON THE SITE SOILS ENCOUNTERED DURING CONSTRUCTION OF THE STORMWATER FACILITY AND MONITOR THE INSTALLATION OF THE LINER.

WETLANDS EXIST ON-SITE

NO FLOODPLAINS EXIST ON-SITE

NOTE: ALL CONSTRUCTION ACTIVITY MUST BE IN ACCORDANCE WITH THE ACCEPTED POLICIES OF THE TOWN OF GARNER AND NCDOT



WOODCREST SUBDIVISION

SHEET C3.2

BASS, NIXON & KENNEDY, INC.
CONSULTING ENGINEERS
6310 CHAPEL HILL ROAD, SUITE 250, RALEIGH, NC 27607
TELEPHONE: (919) 851-4422 FAX: (919) 851-8868
CERTIFICATION NUMBERS: NCBELLS (C-0110); NCBOLA (C-0267)

NO.	DATE	DESCRIPTION	BY

03-21-191	07-30-21	RAB	
JOB NO.	DATE	DRAWN BY	
SCM PLAN AND DETAILS			
SCALE: 1" = 60'	CHK BY: JAW		

TOWN OF GARNER, WAKE COUNTY, NORTH CAROLINA

NOT RELEASED FOR CONSTRUCTION OR BID SOLICITATION

BASS, NIXON & KENNEDY, INC.
CONSULTING ENGINEERS
6310 CHAPEL HILL ROAD, SUITE 250, RALEIGH, NC 27607
TELEPHONE: (919)851-4422 FAX: (919)851-8968
CERTIFICATION NUMBERS: NCBELS (C-0110); NCBOLA (C-0267)

DIVISIONS			
NO.	DATE	DESCRIPTION	BY
			GPW

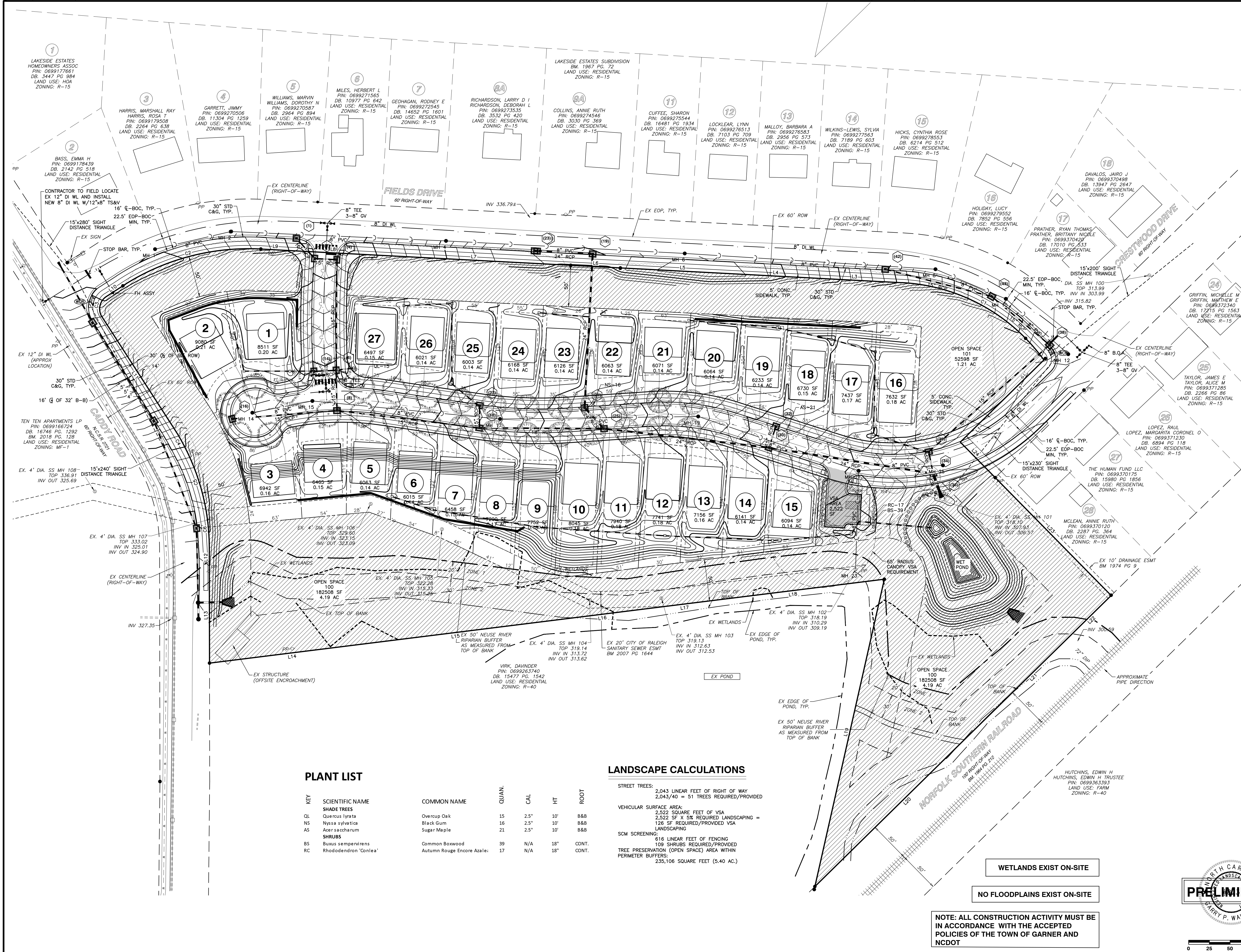
03-21191	PROGRESS	LK
JOB NO.	DATE	DRAWN BY
LANDSCAPE PLAN		
SCALE: 1" = 50'		
CHK BY: GPW		

WOODCREST SUBDIVISION

TOWN OF GARNER, WAKE COUNTY, NORTH CAROLINA

SHEET
L1.1

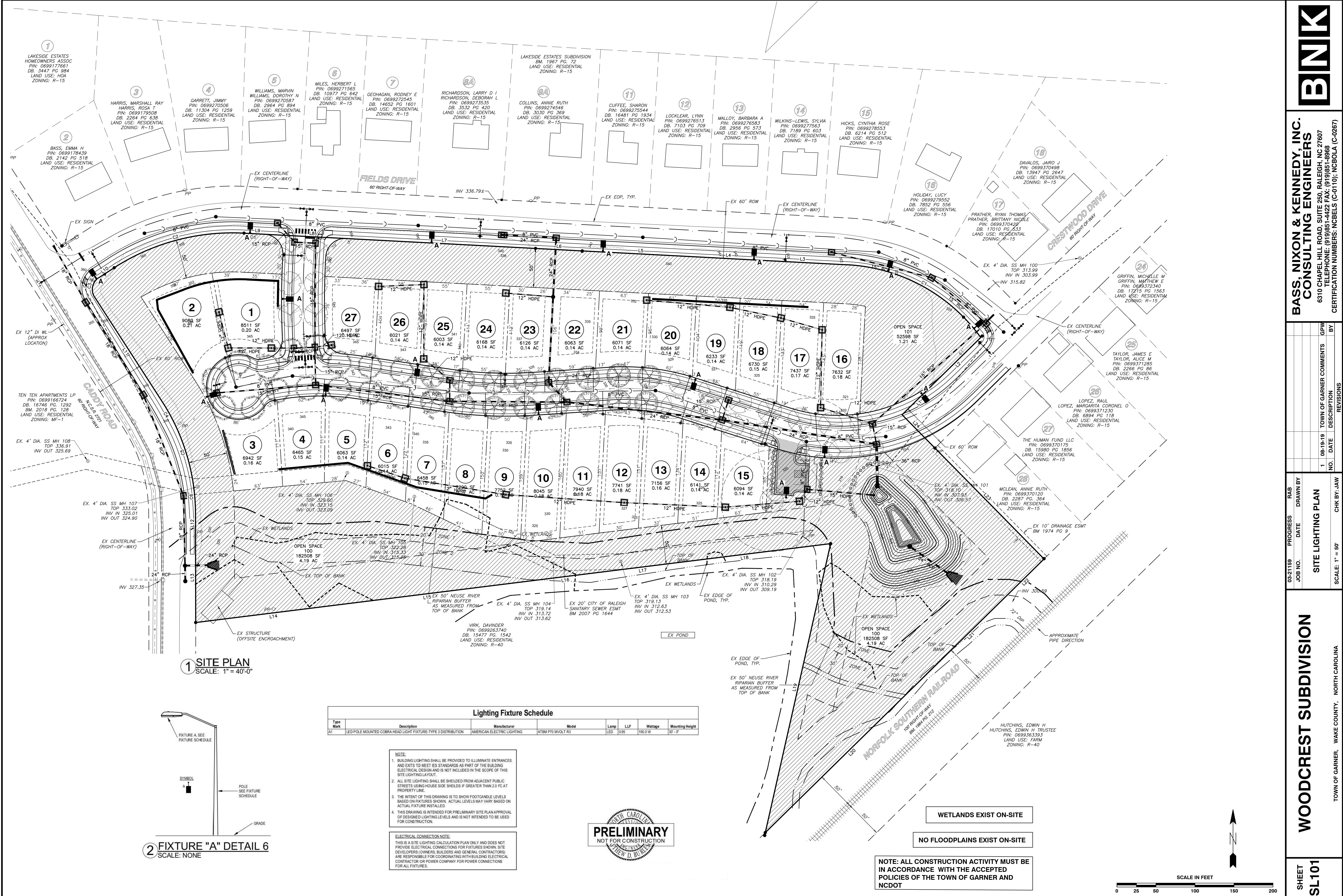
NOT RELEASED FOR CONSTRUCTION OR BID SOLICITATION



A circular seal for the North Carolina Landscaping Board is partially visible. Overlaid on the seal is a rectangular stamp with the word "PRELIMINARY" in bold, black, capital letters.

SCALE IN FEET

TOWN OF GARNER PROJECT NO. XX-XX-XX



BANK

BASS, NIXON & KENNEDY, INC.
CONSULTING ENGINEERS
6310 CHAPEL HILL ROAD, SUITE 250, RALEIGH, NC 27607
TELEPHONE: (919) 851-4422 FAX: (919) 851-8868
CERTIFICATION NUMBERS: NCBELS (C-0110); NCBOLA (C-0267)

TOWN OF GARNER COMMENTS		DATE	BY
1	08-19-19	NO.	REVISIONS
TOWN OF GARNER COMMENTS		DATE	BY
DESCRIPTION		DATE	BY

WOODCREST SUBDIVISION

SHEET SL101

TOWN OF GARNER, WAKE COUNTY, NORTH CAROLINA

TOWN OF GARNER PROJECT NO. XX-XX-XX