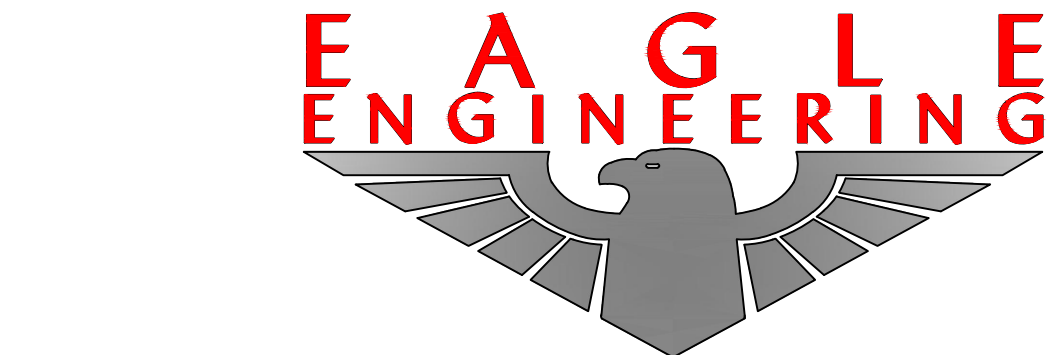


SITE AND DEVELOPMENT DATA	
JURISDICTION	CHARLOTTE
TAX PARCEL(S)	10515330
SITE ADDRESS	4740 ROCKY RIVER ROAD
ZONING	R-3 (CLUSTER DEVELOPMENT)
USE CLASSIFICATION	SINGLE FAMILY, RESIDENTIAL
TOTAL AREA	40.09 ACRES
MAXIMUM LOTS ALLOWED	120 (3 LOTS PER ACRE)
LOTS PROPOSED	110 (2.7 LOTS PER ACRE)
COMMON AREA REQUIRED	10% MINIMUM (4.09 ACRES)
COMMON AREA PROVIDED	25.25% (10.12 ACRES)
MINIMUM FRONT SETBACK	27' MIN., 30' PROPOSED
MINIMUM CORNER/SIDE SETBACK	13.5' / 6'
MINIMUM REAR SETBACK	45' EXTERIOR LOTS, 30' INTERIOR
MAXIMUM BUILDING COVERAGE	40%
MINIMUM LOT SIZE	8,000 SQ. FT.
MINIMUM LOT WIDTH	60'
PC DISTRICT	YADKIN SOUTHEAST CATAWBA
DISTURBED AREA	40.0 ACRES
REQUIRED TREE SAVE AREA	4.009 ACRES
PROPOSEDED TREE SAVE AREA	4.54 ACRES



FIRM LICENSE # C-0873
2013A Van Buren Avenue P.O. BOX 551
Indian Trail, NC 28079 Alpharetta, GA 30009
(704) 882-4222 (678) 339-0640
www.eagleonline.net

PROJECT ENGINEER: JOHN H. ROSS, P.E.
STREET ADDRESS: 2013A VAN BUREN AVENUE
CITY, STATE, ZIP: INDIAN TRAIL, NC 28079
PHONE: 704.882.4222
FAX: 704.882.4232

PREPARED FOR: KAHUNA GROUP
STREET ADDRESS: 5615 POTTER ROAD
CITY, STATE , ZIP: MATTHEWS, NC
PHONE: 704-821-8972
EMAIL: TPRICE@KAHUNA-GROUP.COM
CONTACT: TOMMY PRICE



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NO.	DATE	BY	ISSUE
1	8/2/17	KEL	CITY COMMENTS
2	9/26/17	SAP	CITY COMMENTS, NCDOT COMMENTS
3	11/06/17	SAP	NCDOT COMMENTS
4	12/11/17	SAP	CITY COMMENTS



FINAL APPROVAL

PROJECT NUMBER:

SDRSF-2017-00046

ENGINEERING

PCSO / DETENTION / DRAINAGE PLAN

EROSION CONTROL

URBAN FORESTRY

TREE ORDINANCE

CDOT

NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM FOUND AT <http://charlottenc.gov/ld>

APPROVED

By mark chapman at 3:39 pm, Mar 12, 2018

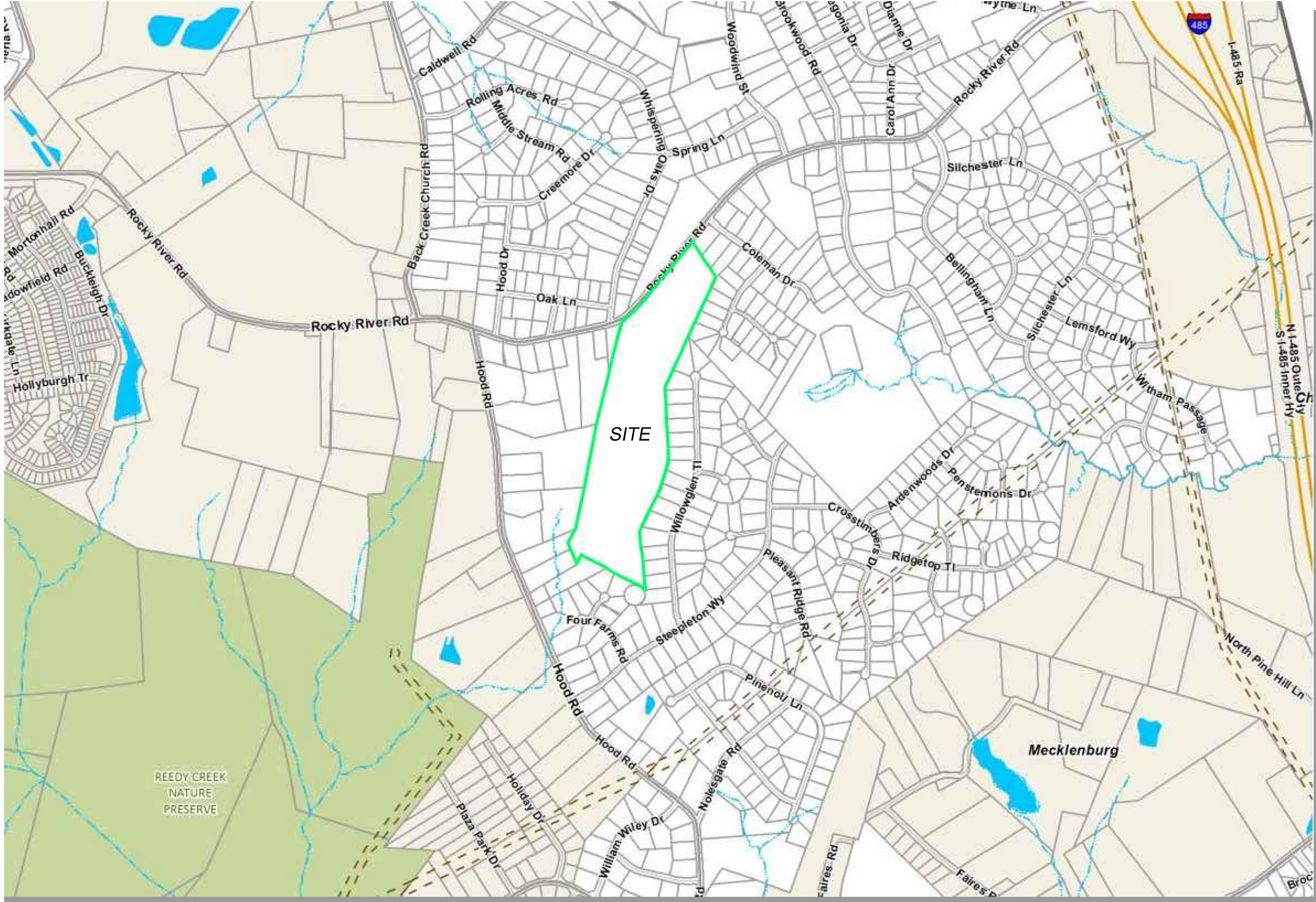
APPROVED

APPROVED

APPROVED

APPROVED FOR CONSTRUCTION

CHARLOTTE-MECKLENBURG PLANNING DEPARTMENT
By: Joshua Weaver 3-22-2018 1 of 3



VICINITY MAP

NOT TO SCALE

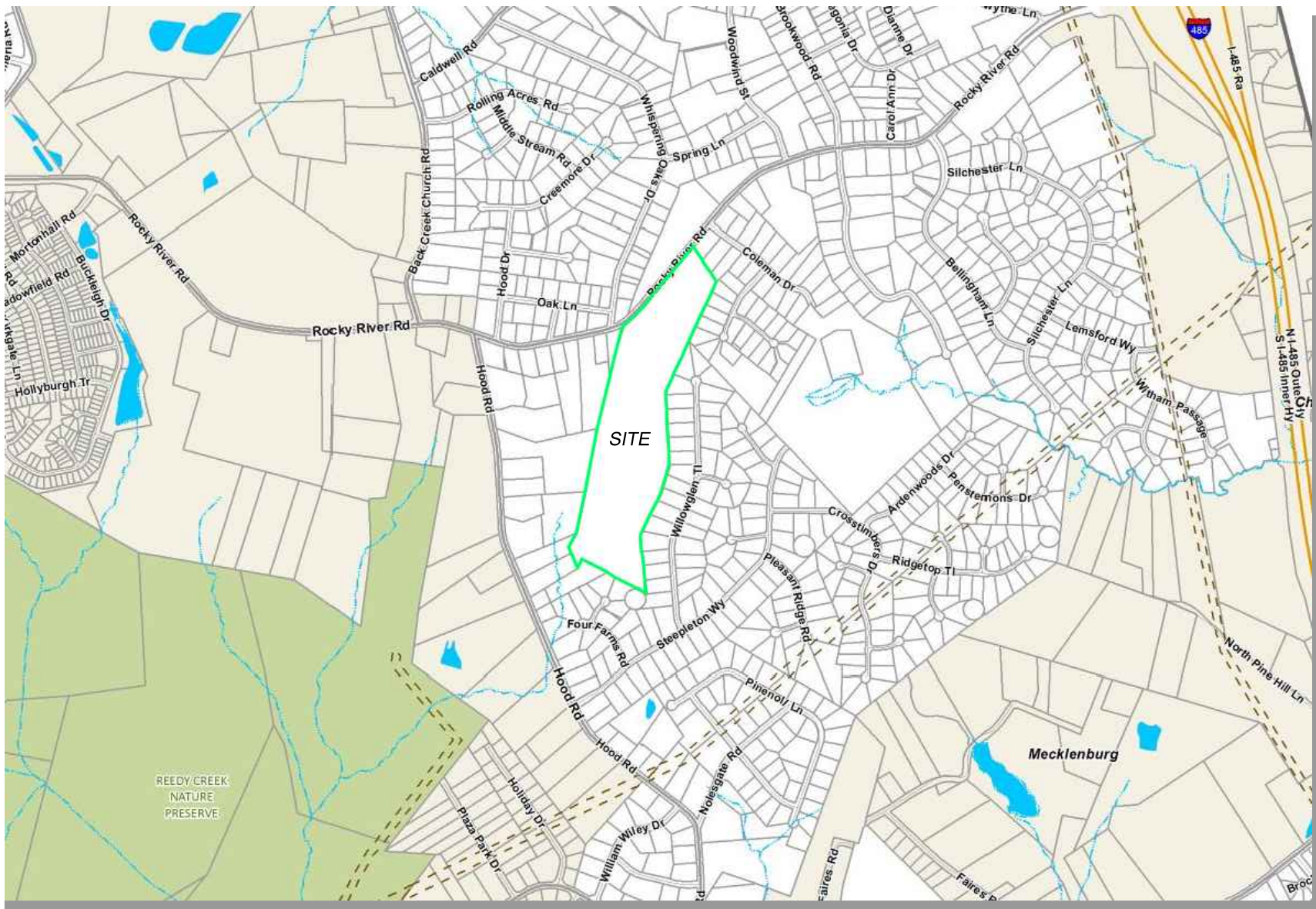
NOTES :
COORDINATE ALL CURB AND STREET GRADES IN INTERSECTION WITH INSPECTOR.
ALL ROAD IMPROVEMENTS ARE TO BE COORDINATED WITH THE CITY OF CHARLOTTE ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.
DEVELOPER WILL PROVIDE STREET SIGNS PER CLDSMM 50.05 (8" SIGNS ONLY).
SIGHT TRIANGLES SHOWN ARE THE MINIMUM REQUIRED.
DIRECT VEHICULAR ACCESS TO FROM LOTS IS PROHIBITED.
IN ROLLING AND HILLY TERRAINS, SWEEPING OF THE STONE BASE AND/OR APPLICATION OF A TACK COAT MAY BE REQUIRED NEAR INTERSECTIONS. THESE REQUIREMENTS WILL BE ESTABLISHED BY THE INSPECTOR AND BASED ON FIELD CONDITIONS.
APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
IN ORDER TO ENSURE PROPER DRAINAGE, KEEP A MINIMUM OF 0.5% SLOPE ON THE CURB.
SUBSURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE INSPECTOR.
CURB AND GUTTER SHOWN ON PLANS ALONG MAY BE ADJUSTED BASED UPON FIELD STAKING BY CITY ENGINEERING. ASSOCIATED STORM DRAINAGE MAY ALSO REQUIRE MODIFICATION BASED UPON FIELD CONDITIONS.
THE PURPOSE OF THE STORM DRAINAGE EASEMENT (SDE) IS TO PROVIDE STORM WATER CONVEYANCE. BUILDINGS ARE NOT PERMITTED IN THE EASEMENT AREA, ANY OTHER OBJECTS WHICH IMPEDE STORM WATER FLOW OR SYSTEM MAINTENANCE ARE ALSO PROHIBITED.
HIGH-DENSITY POLYETHYLENE (HDPE) STORM DRAINAGE PIPE INSTALLED WITHIN EXISTING OR PROPOSED PUBLIC STREET RIGHT-OF-WAY MUST BE APPROVED BY THE CITY'S INSPECTOR PRIOR TO ANY BACKFILL BEING PLACED.
BACKFILL MATERIAL MUST BE APPROVED BY THE CITY INSPECTOR PRIOR TO PLACEMENT OF THE MATERIAL WITHIN THE PUBLIC STREET RIGHT-OF-WAY.
THE DEVELOPER SHALL MAINTAIN EACH STREAM, CREEK, OR BACKWASH CHANNEL IN AN UNOBSTRUCTED STATE AND SHALL REMOVE FROM THE CHANNEL AND BANKS OF THE STREAM ALL DEBRIS, LOGS, TIMBER, JUNK AND OTHER ACCUMULATIONS.
ANY BUILDING WITHIN THE 100+1 STORMWATER ELEVATION LINE IS SUBJECT TO THE RESTRICTIONS OF THE (CITY OF CHARLOTTE/MECKLENBURG COUNTY) SUBDIVISION ORDINANCE, SECTION 7.200.8.
ANY CONSTRUCTION OR USE WITHIN THE FUTURE CONDITIONS FLOOD FRINGE LINE IS SUBJECT TO THE RESTRICTIONS IMPOSED BY THE FLOODWAY REGULATIONS OF THE CITY OF CHARLOTTE AND MECKLENBURG COUNTY.
ALL OPENINGS (E.G., DOORS, WINDOWS, VENTS) IN STRUCTURES BUILT ON LOT #S SHOULD BE LOCATED A MINIMUM OF ONE FOOT ABOVE THE ADJACENT FINISHED GROUND SURFACE (APPLIES TO LOTS WHICH MAY EXPERIENCE SIGNIFICANT OVERLAND FLOW NOT CONSIDERED IN THE 100+1 FLOOD ANALYSIS).
PE SEALED SHOP DRAWINGS FOR RETAINING WALL MUST BE SUBMITTED TO CITY ENGINEER PRIOR TO CONSTRUCTION.
"AS-BUILT" DRAWINGS AND PLANS OF THE STORM DRAINAGE SYSTEM, INCLUDING DESIGNED DITCHES, MUST BE SUBMITTED PRIOR TO SUBDIVISION FINAL INSPECTION TO THE CITY/COUNTY ENGINEERING DEPARTMENT IN ACCORDANCE WITH THE CITY/COUNTY SUBDIVISION ORDINANCE.
PRIOR TO INSTALLATION, PE SEALED SHOP DRAWINGS FOR UNDERGROUND DETENTION SYSTEMS MUST BE FURNISHED TO CITY OF CHARLOTTE ENGINEERING FOR APPROVAL.
PRIOR TO GO, SURVEYOR SEALED AS-BUILT DRAWINGS OF ALL WATER QUALITY BMP'S AND DETENTION SYSTEMS MUST BE PROVIDED.
PRIOR TO PLAT RECORDATION, OFFSITE R/W AND/OR CONSTRUCTION EASEMENTS ARE REQUIRED TO BE OBTAINED ACCORDING TO THE GUIDELINES OF THE "OFFSITE R/W ACQUISITION PROCESS". THESE NEEDED R/W AND CONSTRUCTION LIMITS ARE CLEARLY SHOWN ON THE ROADWAY IMPROVEMENT PLAN.
PER SECTION 16-179(E) OF CITY CODE AND SECTION 10.0 OF THE CITY'S POST CONSTRUCTION CONTROLS ADMINISTRATIVE MANUAL, ALL REQUIRED NATURAL AREAS AND/OR POST CONSTRUCTION CONTROLS EASEMENTS (PCEES) MUST BE RECORDED PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
PAGE 12 OF 12 REVISED 01/2016

THE DEVELOPER SHALL CONTACT THE CHARLOTTE DEPARTMENT OF TRANSPORTATION (GUS JORDI, 704-336-7088) TO IDENTIFY ANY CONFLICTS WITH TRAFFIC SIGNALIZATION EQUIPMENT. 60-90 DAYS WILL BE REQUIRED TO COORDINATE RELOCATION.
DEVELOPER SHALL BE RESPONSIBLE FOR ALL RELATED RELOCATION COST AND/OR ANY REPAIR COST CAUSED BY THE CONTRACTOR/DEVELOPER.
CERTIFICATION AND STREET CUT PERMITS ARE REQUIRED FOR UTILITY CUTS ON CITY STREETS. ALLOW 7 DAYS PROCESSING FOR PERMIT.
FOR INFORMATION CONTACT CHARLOTTE DEPARTMENT OF TRANSPORTATION (704-336-4025) OR VISIT [HTTP://WWW.CHARMECK.ORG/DEPARTMENTS/TRANSPORTATION/STREET+MAINTENANCE/HOME.HTM](http://www.charmeck.org/departments/transportation/street+maintenance/home.htm)
NON-STANDARD ITEMS (IE: PAVERS, IRRIGATION SYSTEMS, ETC.) IN THE RIGHT-OF-WAY REQUIRE A RIGHT-OF-WAY ENCROACHMENT AGREEMENT WITH THE CHARLOTTE DEPARTMENT OF TRANSPORTATION/NORTH CAROLINA DEPARTMENT OF TRANSPORTATION BEFORE INSTALLATION. FOR CITY OF CHARLOTTE MAINTAINED STREETS, CONTACT CDOT AT (704) 336-3888.
SIDEWALK WITHIN THE CITY'S R/W THAT REQUIRES REPLACEMENT AS PART OF THE DEVELOPMENT AND/OR STREET IMPROVEMENTS SHOULD BE PHASED IN SUCH A WAY AS TO MINIMIZE THE DURATION OF THE SIDEWALK CLOSURE TO THE EXTENT FEASIBLE. THE DEVELOPER SHOULD MAKE EVERY ATTEMPT TO HAVE SIDEWALK REPAIRED AND REOPENED FOR PUBLIC USE WITHIN 30 DAYS OF REMOVAL.
ANY WORK WITHIN THE CITY'S R/W THAT REQUIRES CLOSURE OF THE SIDEWALK OR TRAVEL LANE FOR LESS THAN 30 DAYS REQUIRES A R/W USE PERMIT. TRAFFIC CONTROL PLANS FOR ANY SIDEWALK OR TRAVEL LANE CLOSURES MUST BE SUBMITTED AS PART OF THE R/W USE PERMIT REQUEST. TRAFFIC CONTROL PLANS MUST BE IN ACCORDANCE WITH CDOT'S WORK AREA TRAFFIC CONTROL HANDBOOK (WATCH) AND MUST BE REVIEWED AND APPROVED. CONTRACTOR SHALL CONTACT CDOT AT LEAST 5 BUSINESS DAYS IN ADVANCE OF BEGINNING OF WORK AT (704) 432-1682.
RIGHT-OF-WAY CLOSURES LONGER THAN 30 DAYS REQUIRE A R/W LEASE AGREEMENT WHICH WILL INCLUDE THE SUBMITTAL OF A TRAFFIC CONTROL PLAN. TRAFFIC CONTROL PLANS REQUIRED THROUGH A LEASE AGREEMENT MAY BE DIFFERENT FROM THE ONE REQUIRED DURING THE LAND DEVELOPMENT PLAN REVIEW AND ARE SUBJECT TO REVISIONS. THE REVISED TRAFFIC CONTROL PLANS MUST BE SUBMITTED AS PART OF THE LEASE AGREEMENT PROCESS FOR APPROVAL PRIOR TO START OF R/W CLOSURES. CONTRACTOR SHALL CONTACT CDOT AT (704) 336-8348.
CONSTRUCTION STAGING WITHIN CITY R/W LASTING MORE THAN 30 DAYS REQUIRES A R/W LEASE AGREEMENT. CONTRACTOR SHALL CONTACT CDOT AT (704) 336-8348.
CONSTRUCTION SEQUENCE (CITY OF CHARLOTTE)
THE CONSTRUCTION SEQUENCE MUST BE PROJECT SPECIFIC AND INCLUDE THE FOLLOWING (ADDITIONAL ITEMS SHALL BE ADDED DEPENDING ON SITE CONDITIONS):
1. OBTAIN GRADING/EROSION CONTROL PLAN APPROVAL FROM THE CITY OF CHARLOTTE ENGINEERING DEPARTMENT.
2. SET UP A ON-SITE PRE-CONSTRUCTION CONFERENCE WITH EROSION CONTROL INSPECTOR OF THE CITY ENGINEERING DEPARTMENT TO DISCUSS EROSION CONTROL MEASURES. FAILURE TO SCHEDULE SUCH CONFERENCE 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY IS A VIOLATION OF CHAPTER 17 OF THE CITY CODE AND IS SUBJECT TO FINE.
3. INSTALL SILT FENCE, INLET PROTECTION, SEDIMENT TRAPS, DIVERSION DITCHES, TREE PROTECTION, AND OTHER MEASURES AS SHOWN ON PLANS.
4. CALL FOR ON-SITE INSPECTION BY INSPECTOR. WHEN APPROVED, INSPECTOR ISSUES THE GRADING PERMIT AND CLEARING AND GRUBBING MAY BEGIN.
5. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.
6. FOR PHASED EROSION CONTROL PLANS, CONTRACTOR SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH EACH PHASE OF EROSION CONTROL MEASURES.
7. STABILIZE SITE AS AREAS ARE BROUGHT TO FINISHED GRADE.
8. COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURE.
9. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N. C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U. S. DEPT. OF AGRICULTURE

Sheet List Table

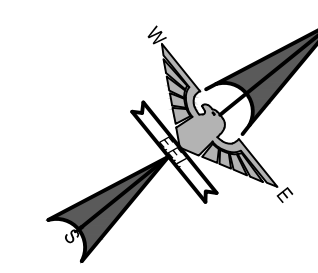
Sheet Number	Sheet Title
C-0.0	COVER SHEET
C-1.0	EXISTING CONDITIONS
C-2.0	SITE PLAN OVERALL
C-2.1	SITE PLAN, DETAIL 1 OF 2
C-2.2	SITE PLAN, DETAIL 2 OF 2
C-3.0	EROSION CONTROL PHASE I
C-3.1	EROSION CONTROL PHASE I
C-3.2	EROSION CONTROL PHASE II
C-3.3	EROSION CONTROL PHASE II
C-4.0	GRADING PLAN OVERALL
C-4.1	DETAILED GRADING PLAN (1 OF 2)
C-4.2	DETAILED GRADING PLAN (2 OF 2)
C-4.3	STORM DRAINAGE CHART
C-4.4	SIGHT DISTANCE MAIN ROAD ENTRANCE PROFILE
C-4.5	SIGHT DISTANCE PRIMARY ENTRANCE PROFILE
C-4.6	BLUFF HILL LANE 0+00 - 11+00
C-4.7	BLUFF HILL LANE 11+00 - 22+00
C-4.8	BLUFF HILL LANE 22+00 - END
C-4.9	MILTON OAK AVENUE
C-4.10	HANOVER CROSSING DRIVE & BIRCH ARBOR COURT
C-4.11	MAPLE RUN CIRCLE 0+00 - 6+50
C-4.12	MAPLE RUN CIRCLE 6+50 - END
C-5.0	SITE DETAILS
C-5.1	SITE DETAILS
C-5.2	SITE DETAILS
C-5.3	SITE DETAILS
C-5.4	EROSION DETAILS
C-5.5	EROSION DETAILS
C-5.6	EROSION DETAILS
C-5.7	BMP DETAIL SAND FILTER
C-5.8	BMP DETAIL SAND FILTER 2
C-5.9	BMP DETAIL WET POND
C-6.0	ROCKY RIVER ROAD IMPROVEMENT PLAN
C-6.1	ROCKY RIVER ROAD STRIPING PLAN
C-6.2	ROCKY RIVER ROAD GRADING PLAN
C-6.3	ROCKY RIVER ROAD TRAFFIC CONTROL PLAN - PHASE 1
C-6.4	ROCKY RIVER ROAD TRAFFIC CONTROL PLAN - PHASE 2
C-6.5	ROCKY RIVER ROAD 0+00 - 1+00
C-6.6	ROCKY RIVER ROAD 1+50 - 2+50
C-6.7	ROCKY RIVER ROAD 3+00 - 3+84
C-6.8	ROCKY RIVER ROAD 4+00 - 4+50
C-6.9	ROCKY RIVER ROAD 5+00 - 6+00
C-6.10	ROCKY RIVER ROAD 6+50 - 7+50
C-6.11	ROCKY RIVER ROAD 8+00 - 9+00
C-6.12	ROCKY RIVER ROAD 9+50 - 10+50
C-6.13	ROCKY RIVER ROAD 11+00 - 12+00
C-6.14	ROCKY RIVER ROAD 12+50 - 13+00
C-6.15	ROAD IMPROVEMENT DETAILS
L-1.0	LANDSCAPE PLAN
L-1.1	BMP WET POND PLANTING PLAN
L-1.2	BMP WET POND PLANT LEGEND, NOTES, SPECS
L-1.3	BMP WET POND DETAILS
L-1.4	LANDSCAPE DETAILS
PRE-DA	PRE-DEVELOPMENT DRAINAGE AREA MAP
POST-DA	POST-DEVELOPMENT DRAINAGE AREA MAP
POST-DA2	POST-DEVELOPMENT BMP DRAINAGE AREA MAP

EEI Project Number: 5775



VICINITY MAP
NOT TO SCALE

NOTE: DIRECT VEHICULAR
ACCESS TO ROCKY RIVER
ROAD FROM LOTS 103-110
IS PROHIBITED



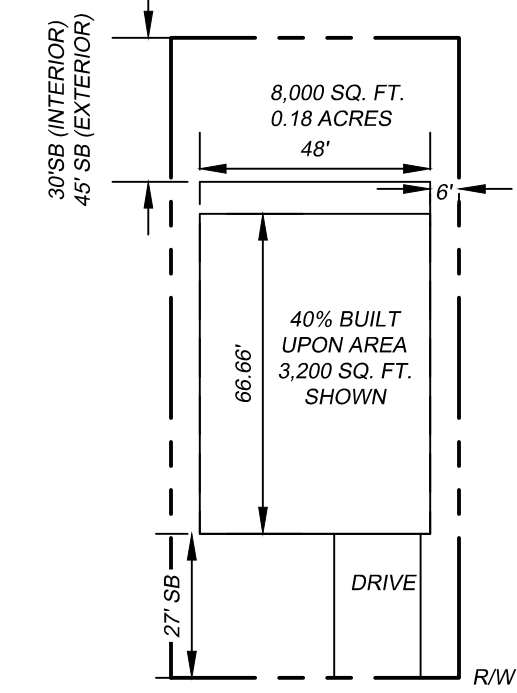
ROCKY RIVER ROAD
S.R. 2828
VARIABLE PUBLIC R/W
50' FROM C/L DEDICATED
PROJECT SIDE

SHEET C-2.1
SHEET C-2.2

HANOVER CROSSING DR.

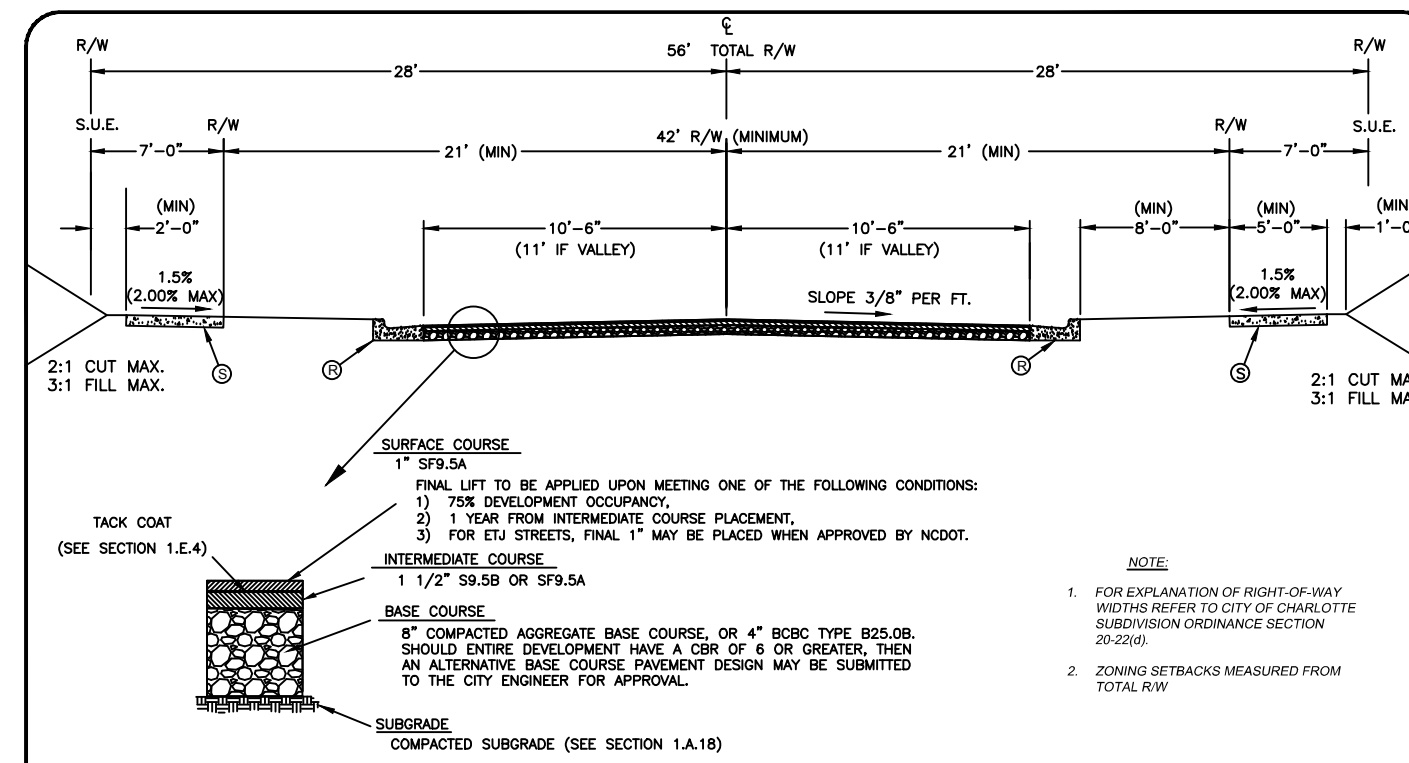
SHEET C-2.1
SHEET C-2.2

BMP AREA
10,923 sq ft
(AREA REMOVED FROM
OPEN SPACE CALCULATION)



TYPICAL LOT DETAIL
1"=40'

SITE AND DEVELOPMENT DATA	
JURISDICTION	CHARLOTTE
TAX PARCEL(S)	10515330
SITE ADDRESS	4740 ROCKY RIVER ROAD
ZONING	R-3 (CLUSTER DEVELOPMENT)
USE CLASSIFICATION	SINGLE FAMILY, RESIDENTIAL
TOTAL AREA	43.09 ACRES
MAXIMUM LOTS ALLOWED	120 (3 LOTS PER ACRE)
LOTS PROPOSED	110 (2.7 LOTS PER ACRE)
COMMON AREA REQUIRED	10% MINIMUM (4.09 ACRES)
COMMON AREA PROVIDED	25.25% (10.12 ACRES)
MINIMUM FRONT SETBACK	27' MIN., 30' PROPOSED
MINIMUM CORNER/SIDE SETBACK	13.5' / 6'
MINIMUM REAR SETBACK	45' EXTERIOR LOTS, 30' INTERIOR
MAXIMUM BUILDING COVERAGE	40%
MINIMUM LOT SIZE	8,000 SQ. FT.
MINIMUM LOT WIDTH	60'
PC DISTRICT	YADKIN SOUTHEAST CATAWBA
DISTURBED AREA	38.22
REQUIRED TREE SAVE AREA	4.263 ACRES
PROPOSED TREE SAVE AREA	4.289 ACRES

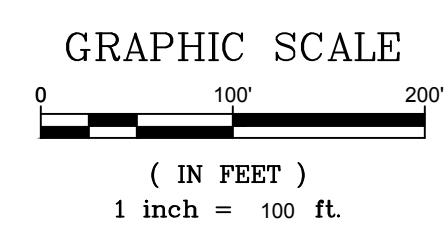


TYPICAL PAVEMENT SECTION
NOT TO SCALE

CITY OF CHARLOTTE
LAND DEVELOPMENT STANDARDS
INCLUDES CHARLOTTE ETJ

LOCAL RESIDENTIAL MEDIUM STREET
TYPICAL SECTION

NOTE: ALL STREET
RIGHT OF WAYS
ARE TO BE PUBLIC.



THE RETREAT AT ROCKY RIVER
ROCKY RIVER RD CHARLOTTE, NC

KAHUNA GROUP
5615 POTTER ROAD
MATTHEWS, NC

SITE PLAN OVERALL

DESIGNED BY	KEL	CHECKED BY	JHR
DRAWN BY	KEL	DATE	5/15/2017
AS SHOWN	Scale	JCB NUMBER	5175



Sheet

C-2.0

NO.	DATE	BY	CITY COMMENTS
4	12/11/17	SAP	CITY COMMENTS

ENGINEERING
FIRM LICENSE # C-0873
P.O. BOX 351
Alpharetta, GA 30009
(770) 339-0540
www.eagleonline.net

- GENERAL NOTES:
1. ESTIMATED TIME OF COMPLETION: DEC. 2018
 2. THERE WILL BE NO DEMOLITION LANDFILL ON SITE.