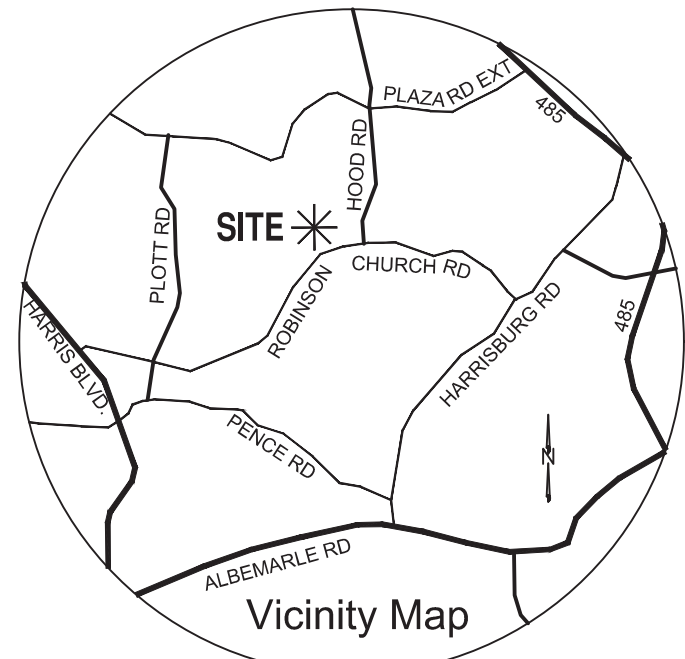


The Reserve at Canyon Hills - Phase 2

Civil Construction Documents City of Charlotte, North Carolina



Contact Information

Developer

David Hensley
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(844) 566-3400
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Engineer

Evan C Mooney, PE
Merrick & Company
1001 Morehead Square Drive
Charlotte, NC 28203
(704) 529-6500 /office



ENGINEERING
PCO / DETENTION / DRAINAGE PLAN

EROSION CONTROL

URBAN FORESTRY
TREE ORDINANCE

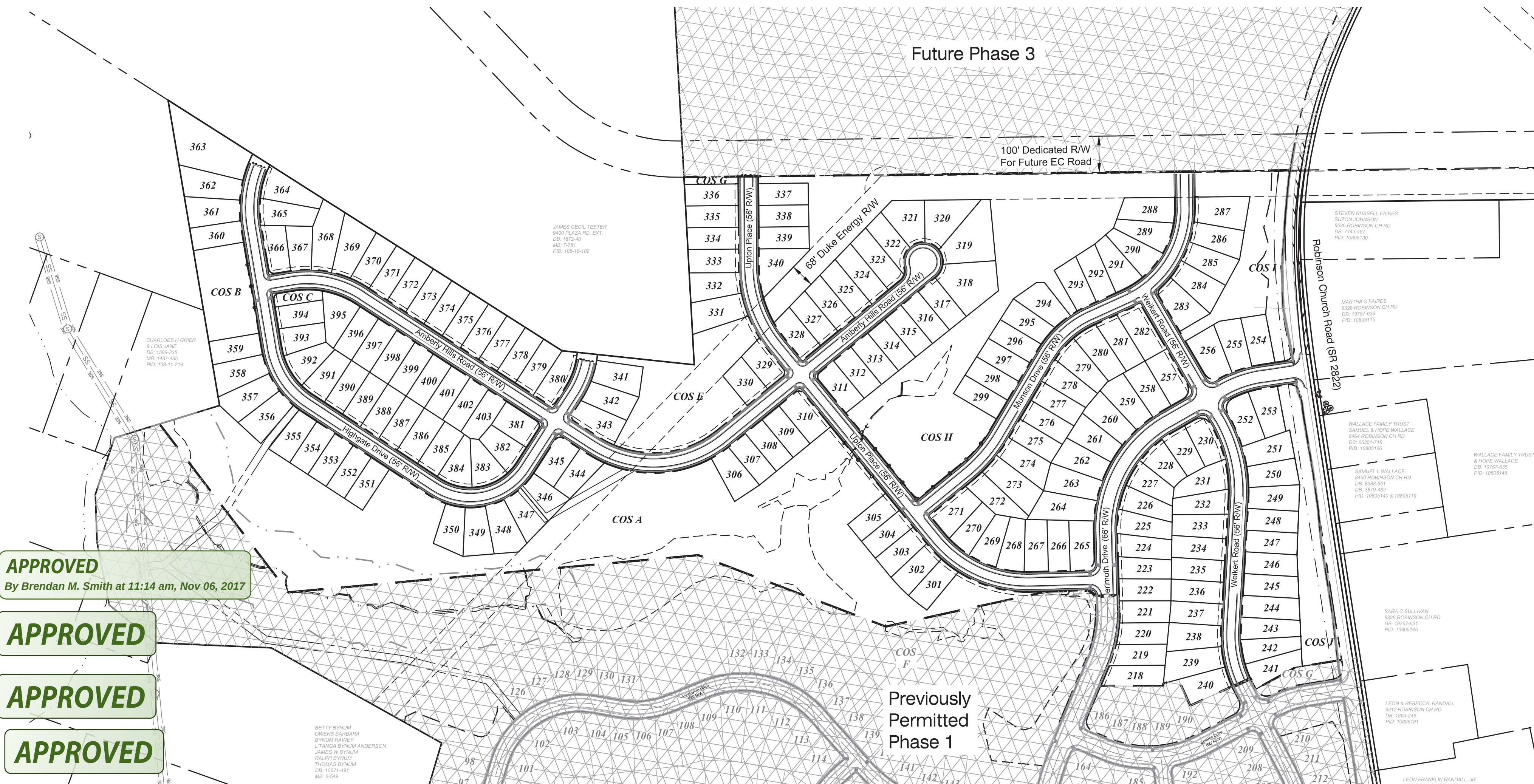
CDOT

NOTE: SCHEDULE PRE-CONSTRUCTION MEETING
AT LEAST 48 HRS. PRIOR TO ANY LAND
DISTURBING ACTIVITY USING THE ONLINE
FORM AT <http://development.charmeck.org>

**APPROVED FOR
CONSTRUCTION**
CHARLOTTE-MECKLENBURG PLANNING DEPARTMENT
By: Joshua Weaver 11-6-2017 1 of 2



Know what's below.
Call before you dig.



APPROVED
By Brendan M. Smith at 11:14 am, Nov 06, 2017

APPROVED

APPROVED

APPROVED

PCCO SUMMARY						
Original Parcel ID Number(s):	10818101					
Development Type:	Single-Family					
Subject to PCCO? Y/N	Y					
If NO, why?	Click for Dropdown					
Watershed:	Yadkin					
Disturbed Area (ac):	54.2					
Site Area (ac):	78.14					
	Wet Pond F*	Wet Pond G	Sand Filter H	Sand Filter I	Sand Filter J	
Total on-site Drainage Area (ac):	19.9	12.74	4.75	8.33	7.39	
Existing Built-upon-area (SF):	0	0	0	0	0	
Existing BUA to be removed (SF):	0	0	0	0	0	
Existing BUA to remain (SF):	0	0	0	0	0	
Proposed New BUA (SF):	364,074	227,531	64,142	198,684	180,269	
Proposed % BUA:	42	41	31	52	56	
Density (High / Low)	24%	High	High	High	High	
Total Post-Project BUA for site:	24%					
Development or Redevelopment?	Development					
Natural Area Required (ac):	13.67					
Natural Area provided, total (ac):	14.77					
Undisturbed Treed Natural Area Preserved (ac):	9.54					
Total stream buffer protected on-site (ac):	6.87					
Transit Station Area? Y/N	N					
Distressed Business District? Y/N	N					
Mitigation Type (if applicable)	N/A					
Natural Area mitigation? Y/N	N					
Buffer Mitigation? Y/N	N					
Total Phosphorous Mitigation? Y/N	N					
* Wet Pond F was previously designed in Phase 1, but some of it's drainage area is included in Phase 2.						

Project Information

Address: 8813 Robinson Church Road
Tax Parcel Number: 10818101
Phase 2 Area: 78.14 ac
Zoning Classification: Current Zoning R-3
Developed as R-3 with cluster provisions only
Yadkin SE Catawba Watershed
Environmental:

The Reserve at Canyon Hills - Roadway Improvement Phasing Schedule

Phase	Phase Build Year	Lots in Phase	Total Lots	Description of Improvements*	Improvement Plans Designed and Approved Deadline	Improvements Completion Deadline
1	2017	217	217	• Site Drive 4, 3, & 2 (Phase 1 & 2 entrances and frontage improvements as shown on plan sheet C900) • Turn lane improvements at Plott Rd/Highland Ave. intersection	Plans are included in Phase 1 Construction Documents Before the 101st lot is platted	Before the 51st lot is platted Before the 218th lot is platted
2	2018	173	390	None	N/A	N/A
3	2021	245	635	• Site Drive 1 (Phase 3 entrance and all remaining frontage improvements) • Turn lane improvements at Harrisburg Rd. intersection • Add northbound protected/permitted phase with flashing yellow arrow signal head at Harrisburg Rd. intersection • Install A traffic signal at Plott Rd/Highland Ave. intersection	Before the 391st lot is platted Before the 391st lot is platted Before the 391st lot is platted Before the 391st lot is platted	Before the 441st lot is platted (51st lot of Ph. 3) Before the 441st lot is platted (51st lot of Ph. 3) Before the 441st lot is platted (51st lot of Ph. 3) Before the 58th lot is platted (halfway into of Ph. 3)

* Refer to the approved Traffic Impact Study by Ramey Kemp & Associates, Inc. for detailed descriptions of improvements

Sheet Index

C100	Cover Sheet	10/12/17
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-	Sealed Existing Topographic Survey	
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C202	Site Plan	10/12/17
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C204	Site Plan	10/12/17
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C301	Erosion Control Initial Plan	10/12/17
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C305	Erosion Control Final Plan	10/12/17
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C401	Grading & Drainage Plan	10/12/17
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C600	Road Plan & Profile - Weikert Road	10/12/17
C601	Road Plan & Profile - Jerimoth Drive	10/12/17
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C604	Road Plan & Profile - Upton Place	10/12/17
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C703	Construction Details	10/12/17
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C901	Traffic Control Plan	10/12/17
C910	Traffic Control Details	10/12/17
C911	Traffic Control Details	10/12/17

Scale: 1" = 200'



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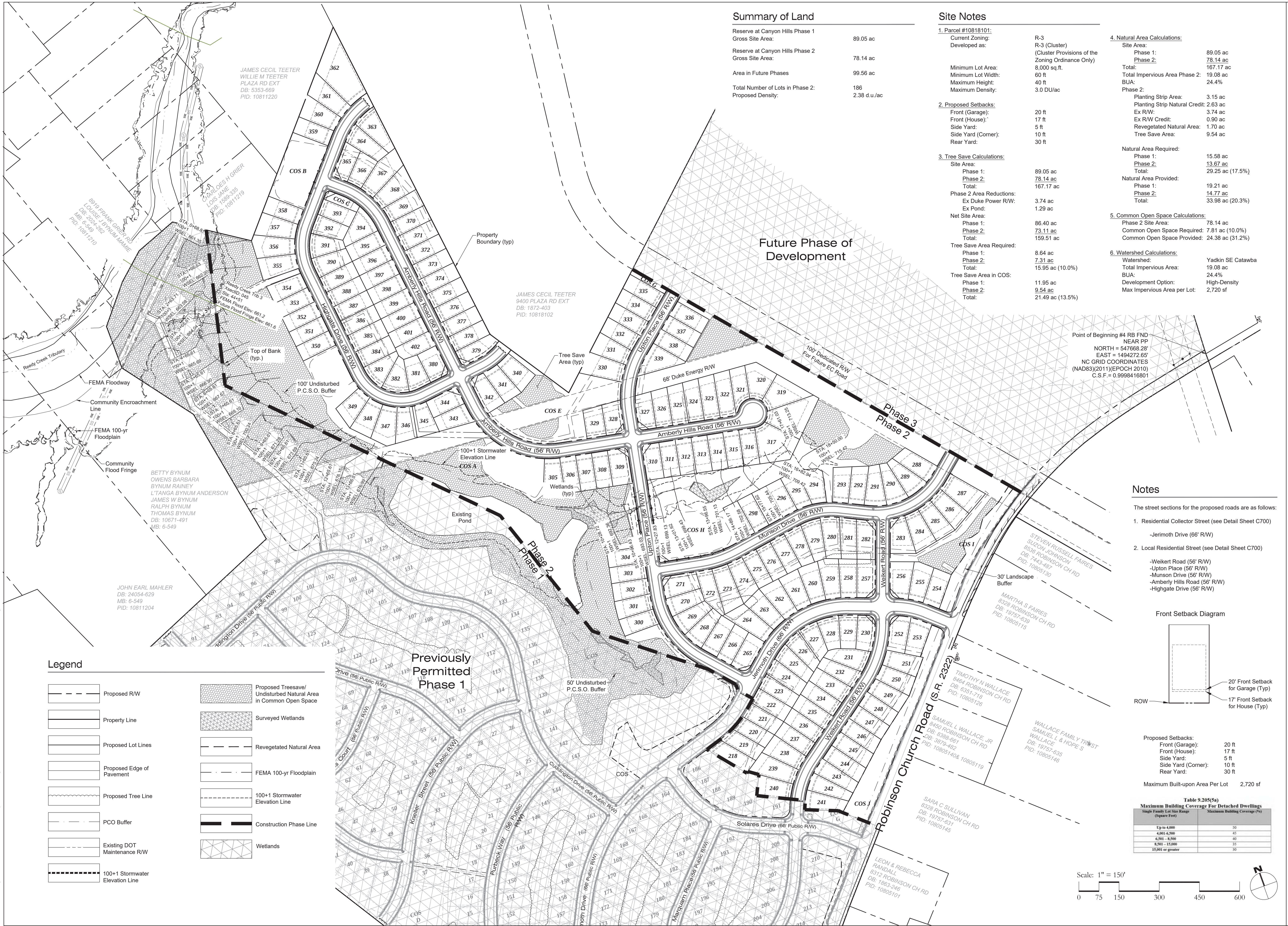
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DESIGN BY:	DATE:	CHECKED BY:	DATE:	APPROVED BY:	DATE:
EV/AM	02/24/17	EV/AM	02/24/17	EV/AM	02/24/17

The Reserve at Canyon Hills Ph. 2
Charlotte, North Carolina
Cover Sheet

PROFESSIONAL SEAL
EVAN C. MOONEY
P.E.
042655
Digitally signed by
Evan C. Mooney
Date: 2017.10.12
15:42:13 -0400

JOB NO: 6519033-01
DATE: 02/24/2017
SHEET C100



Summary of Land

Reserve at Canyon Hills Phase 1	
Gross Site Area:	89.05 ac
Reserve at Canyon Hills Phase 2	
Gross Site Area:	78.14 ac
Area in Future Phases	99.56 ac
Total Number of Lots in Phase 2:	186
Proposed Density:	2.38 d.u./ac

Site Notes

1. Parcel #10818101:	
Current Zoning:	R-3
Developed as:	R-3 (Cluster)
	(Cluster Provisions of the Zoning Ordinance Only)
Minimum Lot Area:	8,000 sq.ft.
Minimum Lot Width:	60 ft
Maximum Height:	40 ft
Maximum Density:	3.0 DU/ac
2. Proposed Setbacks:	
Front (Garage):	20 ft
Front (House):	17 ft
Side Yard:	5 ft
Side Yard (Corner):	10 ft
Rear Yard:	30 ft
3. Tree Save Calculations:	
Site Area:	
Phase 1:	89.05 ac
Phase 2:	78.14 ac
Total:	167.17 ac
Phase 2 Area Reductions:	
Ex Duke Power R/W:	3.74 ac
Ex Pond:	1.29 ac
Net Site Area:	
Phase 1:	86.40 ac
Phase 2:	73.11 ac
Total:	159.51 ac
Tree Save Area Required:	
Phase 1:	8.64 ac
Phase 2:	7.31 ac
Total:	15.95 ac (10.0%)
Tree Save Area in COS:	
Phase 1:	11.95 ac
Phase 2:	9.54 ac
Total:	21.49 ac (13.5%)

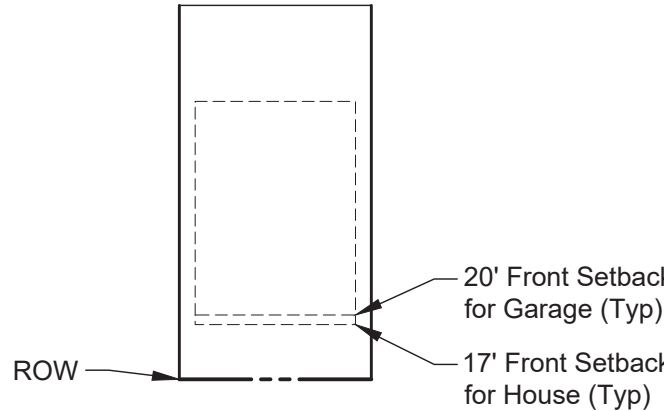
4. Natural Area Calculations:	
Site Area:	
Phase 1:	89.05 ac
Phase 2:	78.14 ac
Total:	167.17 ac
Total Impervious Area Phase 2:	19.08 ac
BUA:	24.4%
Phase 2:	
Planting Strip Area:	3.15 ac
Planting Strip Natural Credit:	2.63 ac
Ex R/W:	3.74 ac
Ex R/W Credit:	0.90 ac
Revegetated Natural Area:	1.70 ac
Tree Save Area:	9.54 ac
Natural Area Required:	
Phase 1:	15.58 ac
Phase 2:	13.67 ac
Total:	29.25 ac (17.5%)
Natural Area Provided:	
Phase 1:	19.21 ac
Phase 2:	14.77 ac
Total:	33.98 ac (20.3%)
5. Common Open Space Calculations:	
Phase 2 Site Area:	78.14 ac
Common Open Space Required:	7.81 ac (10.0%)
Common Open Space Provided:	24.38 ac (31.2%)
6. Watershed Calculations:	
Watershed:	Yadkin SE Catawba
Total Impervious Area:	19.08 ac
BUA:	24.4%
Development Option:	High-Density
Max Impervious Area per Lot:	2,720 sf

Notes

The street sections for the proposed roads are as follows:

- Residential Collector Street (see Detail Sheet C700)
 - Jerimoth Drive (66' R/W)
- Local Residential Street (see Detail Sheet C700)
 - Weikert Road (56' R/W)
 - Upton Place (56' R/W)
 - Munson Drive (56' R/W)
 - Amberly Hills Road (56' R/W)
 - Highgate Drive (56' R/W)

Front Setback Diagram

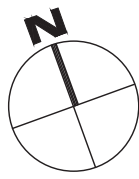


Proposed Setbacks:	
Front (Garage):	20 ft
Front (House):	17 ft
Side Yard:	5 ft
Side Yard (Corner):	10 ft
Rear Yard:	30 ft

Maximum Built-upon Area Per Lot 2,720 sf

Table 9.205(5a)	
Maximum Building Coverage For Detached Dwellings	
Single Family Lot Size Range (Square Feet)	Maximum Building Coverage (%)
Up to 4,000	30
4,001 - 6,500	40
6,501 - 8,500	40
8,501 - 15,000	35
15,001 or greater	30

Scale: 1" = 150'



Legend

	Proposed R/W		Proposed Treesave/Undisturbed Natural Area in Common Open Space
	Property Line		Surveyed Wetlands
	Proposed Lot Lines		Revegetated Natural Area
	Proposed Edge of Pavement		FEMA 100-yr Floodplain
	Proposed Tree Line		100+1 Stormwater Elevation Line
	PCO Buffer		Construction Phase Line
	Existing DOT Maintenance R/W		Wetlands
	100+1 Stormwater Elevation Line		

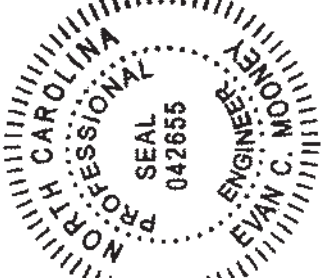
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EGH/AM	02/24/17	EGH	EGH	EGH
DRAWN BY:	DATE:	BY:	CHKD:	APPD:
EGH/AM	02/24/17	EGH	EGH	EGH
CHECKED BY:	DATE:	BY:	CHKD:	APPD:
EGH	02/24/17	EGH	EGH	EGH
APPROVED BY:	DATE:	BY:	CHKD:	APPD:
EGH	02/24/17	EGH	EGH	EGH

The Reserve at Canyon Hills Ph. 2

Charlotte, North Carolina

Overall Site Plan



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Date: 2017.10.12 15:44:11 -0400

JOB NO: 65119033-01	DATE: 02/24/2017	SHEET C201
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2630 South Tryon Street
Suite D
Charlotte, NC 28203

Notes

The street sections for the proposed roads are as follows:

1. Residential Collector Street (see Detail Sheet C700)

-Jerimoth Drive (66' R/W)

2. Local Residential Street (see Detail Sheet C700)

-Weikert Road (56' R/W)
-Upton Place (56' R/W)
-Munson Drive (56' R/W)
-Amberly Hills Road (56' R/W)
-Highgate Drive (56' R/W)

Proposed Setbacks:
Front (Garage): 20 ft
Front (House): 17 ft
Side Yard: 5 ft
Side Yard (Corner): 10 ft
External Side Yard: 6 ft
Rear Yard: 30 ft
External Rear Yard: 45 ft
Maximum Built-upon Area Per Lot 2,720 sf

Matchline - See Sheet C202

Legend

- Proposed R/W
- Property Line
- Proposed Lot Lines
- Proposed Edge of Pavement
- Construction Phase Line
- Proposed Tree Save Line
- Revegetated Natural Area
- Proposed Road Name Signage Per NCDOT Standards
- Proposed Stop Sign Per NCDOT Standards
- Proposed 24" Stop Bar Per NCDOT Standards
- Treesave/ Undisturbed Natural Area
- 15' S.D.E.
- Proposed Gravel / Stabilized Firm Vehicular Access
- P.C.C.E.
- Post Construction Control & Maintenance Easement
- 100+1 Stormwater Elevation Line
- Wetlands

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DESIGN BY:	EAH	02/24/17
DRAWN BY:	EAH	02/24/17
CHECKED BY:	RET	02/24/17
APPROVED BY:	EAH	02/24/17

The Reserve at Canyon Hills Ph. 2
Charlotte, North Carolina

Site Plan



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Date: 2017.10.12 15:45:03 -0400

JOB NO: 65119033-01
DATE: 02/24/2017
SHEET C202

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