PLANNING & ZONING COMMISSION
Meeting Agenda
Tuesday, August 18, 2015 at 6:00 P.M.
City Hall
26 Union Street, 2nd Floor

I. CALL TO ORDER

II. CHANGES TO THE AGENDA

III. APPROVAL OF THE MINUTES

IV. OLD BUSINESS

V. NEW BUSINESS

1. Case Z (CUD)-24-07 (LEGISLATIVE HEARING) TO BE REMOVED FROM THE AGENDA UNTIL FURTHER NOTICE

NVR Inc. dba Ryan Homes has submitted a zoning map amendment application for property generally located at 1180 Crestmont Road to amend a previously approved Residential Compact Conditional District (RC-CD) to address architectural requirements and amenity/common open space issues. PINs – various including 5630-92-6070

2. Case Z (CD)-15-15 (LEGISLATIVE HEARING)

MGP Retail Consulting, LLC has submitted a zoning map amendment application for property generally located at 4460 Weddington Road from Residential Village (RV) to Light Commercial – Conditional District (C1-CD) for the development of a retail grocery store. PIN 5600-74-6703

a. Open Public Hearing by Motion
b. Staff Presentation
c. Staff Recommendation: No objection
d. Applicant's Testimony
e. Opponent's Testimony
f. Close Public Hearing by Motion
g. Approve Statement of Consistency by Motion
h. Approve/Deny Zoning Amendment by Motion

3. Case Z (CD)-06-15 (LEGISLATIVE HEARING)

Jack Chapic has submitted a zoning map amendment application for property located at 166 Union Street, North from Conditional Use Office Institutional (CUO-I) to Residential Village Conditional District (RV-CD) for the conversion of an institutional/office structure into a two family dwelling. 5620-79-5720

i. Open Public Hearing by Motion
j. Staff Presentation

PLEASE NOTE: IN ACCORDANCE WITH ADA REGULATIONS, ANYONE WHO NEEDS A SPECIAL ACCOMMODATION TO PARTICIPATE IN THE MEETING SHOULD NOTIFY THE DEVELOPMENT SERVICES DEPARTMENT AT 704-920-5152 AT LEAST TWENTY-FOUR (24) HOURS PRIOR THE MEETING.

k. Staff Recommendation: No objection
l. Applicant's Testimony
m. Opponent's Testimony
n. Close Public Hearing by Motion
o. Approve Statement of Consistency by Motion
p. Approve/Deny Zoning Amendment by Motion

4. Case Z (CD)-18-15 (LEGISLATIVE HEARING) STAFF REQUESTS CONTINUANCE UNTIL THE SEPTEMBER MEETING

Josh Collins has submitted a zoning map amendment application for property located at 576 Piegler Street from Residential Medium Density (RM-2) to Residential Compact Conditional District (RC-CD) for development of a single family subdivision. 5610-67-4096, 4225

5. Case Z-21-15 (LEGISLATIVE HEARING)

Administrative Zoning Map Amendment for recently annexed property located generally at 3550 US Highway 601, South from Cabarrus County GC (General Commercial) to City of Concord C-2 (Commercial General) 5539-82-4636

a. Open Public Hearing by Motion
b. Staff Presentation
c. Staff Recommendation: Approval
d. Applicant's Testimony
e. Opponent's Testimony
f. Close Public Hearing by Motion
g. Approve Statement of Consistency by Motion
h. Approve/Deny Zoning Amendment by Motion

6. Case Z-22-15 (LEGISLATIVE HEARING)

Administrative Zoning Map Amendment for recently annexed property located generally at 770 Derita Road from Cabarrus County GI-SU (General Industrial Special Use) to City of Concord Light Industrial – Conditional District (I-1CD) 4680-86-9222

a. Open Public Hearing by Motion
b. Staff Presentation
c. Staff Recommendation: Approval
d. Applicant's Testimony
e. Opponent's Testimony
f. Close Public Hearing by Motion
g. Approve Statement of Consistency by Motion
h. Approve/Deny Zoning Amendment by Motion

7. Case Z-23-15 (LEGISLATIVE HEARING)

Administrative Zoning Map Amendment for recently annexed property located generally at 4950 Stough Road from Cabarrus County LI (Limited Industrial) to City of Concord Light Industrial. 5518-95-4109

a. Open Public Hearing by Motion
b. Staff Presentation
c. Staff Recommendation: Approval
d. Applicant's Testimony
e. Opponent's Testimony
f. Close Public Hearing by Motion
g. Approve Statement of Consistency by Motion
h. Approve/Deny Zoning Amendment by Motion

VI. PETITIONS AND REQUESTS –NO PUBLIC HEARINGS REQUIRED

8. Case S-04-15 Lantana

Shea Homes has submitted an application for a preliminary plat for property generally located at 10625, 10629, 10633 and 10727 Ellenwood Road PINs 4670-54-9617, 64-3275, 63-4959, 64-6164, 63-6820

a. Staff Presentation
b. Staff Recommendation: Approval
c. Approve/Deny Preliminary Plat by Motion

9. Case S-06-15 Allen Farm

Pulte Homes has submitted an application for a preliminary plat for property generally located on the west side of Cox Mill Road, south of Poplar Tent Road. PINs 4680-16-6357.

a. Staff Presentation
b. Staff Recommendation: Approval
c. Approve/Deny Preliminary Plat by Motion

10. Case S-07-15 Pleasant Oaks

Geosam Capital US, LLC has requested an exetension of the approved prelmianry plat for a period of two (2) years.

a. Staff Presentation
b. Staff Recommendation: Approval
c. Approve/Deny Preliminary Plat Extension by Motion

PLEASE NOTE: IN ACCORDANCE WITH ADA REGULATIONS, ANYONE WHO NEEDS A SPECIAL ACCOMMODATION TO PARTICIPATE IN THE MEETING SHOULD NOTIFY THE DEVELOPMENT SERVICES DEPARTMENT AT 704-920-5152 AT LEAST TWENTY-FOUR (24) HOURS PRIOR THE MEETING.

VII. PRESENTATIONS AND DISCUSSION

11. Downtown Parking Study and Master Plan

Planning staff will present a summary of the propsed study and master plan.

VIII. RECOGNITION OF PERSONS REQUESTING TO BE HEARD

IX. MATTERS NOT ON THE AGENDA

PLEASE NOTE: IN ACCORDANCE WITH ADA REGULATIONS, ANYONE WHO NEEDS A SPECIAL ACCOMMODATION TO PARTICIPATE IN THE MEETING SHOULD NOTIFY THE DEVELOPMENT SERVICES DEPARTMENT AT 704-920-5152 AT LEAST TWENTY-FOUR (24) HOURS PRIOR THE MEETING.

Concord
NORTH CAROLINA
High Performance Living
66 Union Street South, PO Box 308, Concord, NC 28026 – concordnc.gov

Memo

To: Planning and Zoning Commission Members

From: Kevin E. Ashley, AICP Planning and Development Manager

Date: August 18, 2015

Re: Case Z(CUD)-24-07 – Pendleton Subdivision

The developer is continuing to work on the stormwater easement issue which would preclude the Commission from approving this petition. This item needs to be removed from the agenda until further notice. Staff will provide the required notice and place the item back on the agenda when the legal issue is resolved.

Staff Report
Planning and Zoning Commission

DATE:	August 18, 2015
CASE #:	Z (CD)-15-15
DESCRIPTION:	Zoning Map Amendment – RV (Residential Village) to C-1CD (Light Commercial and Office Conditional District)
OWNER:	Kenneth E. Moss Jr.
Applicant:	MGP Retail Consulting
LOCATION:	Intersection of George W. Liles Parkway and Weddington Road
PIN#:	5600-74-6703
AREA:	4.879 +/- acres
ZONING:	Current: RV (Residential Village) Proposed: C-1CD (Light Commercial and Office, Conditional District)
PREPARED BY:	Kevin E. Ashley, AICP Planning and Development Manager

BACKGROUND

The subject property consists of one parcel comprising approximately 4.879 acres. The parcel is currently vacant. The site has approximately 380 feet of road frontage on Weddington Road and approximately 760 feet of frontage on the newly constructed portion of George W. Liles Boulevard.

HISTORY

The subject property was annexed as part of a large involuntary annexation in December, 1995. The property was zoned Medium Density Residential (MDR) by Cabarrus County, and subsequently zoned to Medium Density Residential (R-3) after the annexation. With the adoption of the Unified Development Ordinance (now the CDO) in 2000, all R-3 properties within the City were converted to RV, RC (Residential Compact) and in some cases, RM-2. This property was part of the land to the west (where the Publix shopping center is being constructed) but the parcel was bisected by the George W. Liles right-of-way acquisition. The subject property is vacant land.

SUMMARY OF REQUEST

The petitioner proposes to rezone the property from RV to C-1CD to allow a grocery store as a permissible use. The applicant has conducted at least one meeting with the adjacent neighborhood (in accordance with Section 3.2.3) to meet with the Home Owners Association and residents. One concern of the residents was the proximity of the store to their homes. The applicant has responded by positioning the building further from the homes and proposing an enhanced landscape buffer.

The applicant has submitted a site plan, as required with a conditional district petition, which illustrates the enhanced buffer. The CDO requires a buffer of 15 feet adjacent to the residential properties to the east, and a buffer of 35 feet is being proposed. The plan also indicates right-in/right-out access on George W. Liles and a full movement drive on Weddington Road. Indicated street improvements on Weddington include both a westbound left turn lane and an eastbound right turn lane. Improvements on George W. Liles include a right turn lane. Sidewalks are proposed on both street frontages. The applicant has also committed to coordinate with NCDOT for the provision of enhanced landscaping within the right-of-way of George W. Liles Parkway.

The applicant has also submitted architectural renderings that generally demonstrate compliance with the nonresidential design standards of Article VII. More detailed renderings and architectural plans will be required during the technical site plan approval process, should the petition be approved. The site plan has been reviewed by the applicable City departments and the plan meets all ordinance requirements.

Land to the east and south is zoned RC and is developed with single family residential. Land to the north is zoned RV and C-2 (General Commercial) and is also vacant. Land to the west is zoned Conditional District General Commercial (CD-C-2) and is the site of the new Publix shopping center. Land to the northwest is zoned Mixed Use Neighborhood Center (MX-NC) and is vacant land. This zoning petition would place all four corners of this intersection into commercial zoning, with this corner being the least intensive from a planning perspective.

Existing Zoning and Land Uses					
Current Zoning of Subject Property	**Zoning Within 500 Feet**		**Land Uses(s) of Subject Property**	**Land Uses within 500 Feet**	
RV	**North**	C-2 and RV	Vacant	**North**	Vacant
	South	RC		**South**	Single-family
	East	RC		**East**	Single-family
	West	CD C-2 and MX-NC		**West**	Currently under construction; commercial and vacant

COMPLIANCE WITH 2015 LAND USE PLAN

The 2015 Land Use Plan (LUP) designates the subject property as "Village Center". This village center designation encompasses the area generally between I-85 and Weddington Road. While the C-1 district is not listed as being specifically consistent with the village center designation, it is the opinion of the planning staff that the petition is consistent in this instance. The relatively small size and odd shape of the parcel makes the development of the site with a mixed use project (which is encouraged in the village center) highly unlikely from a planning perspective. Furthermore there is no opportunity for assembly into an adjacent parcel for larger scale development. With the development of sidewalks on both frontages, the site provides the framework for walkability and pedestrian connections as encouraged in the village center designation. Furthermore, development as a residential site (either single or multi-family) with its current zoning is highly unlikely.

Additionally, the site in on the northeast of the "Concord Parkway/Roberta Church Road Small Area Plan" boundary. The intersection is shown as being the site of a neighborhood retail center, of which a grocery store obviously would be a component. The graphic encompassed in the plan indicates a development with the structures located along the frontage of George W. Liles and Weddington. During the neighborhood meeting process, adjacent residents in Sheffield Manor, to the east expressed the desire to have the structure as opposed to the parking, nearest their property line. Given the preference of the neighbors and the commitment of the developers to work with NCDOT on enhanced landscaping within the right-of-way, it is the staff's opinion that the petition is also consistent with the Small Area Plan.

SUGGESTED STATEMENT OF CONSISTENCY

- The subject property is approximately 4.879 acres and is zoned RV (Residential Village).
- The subject property is currently vacant and undeveloped.
- The proposed zoning amendment is consistent with both the 2015 Land Use Plan (LUP) and the Small Area Plan in that the proposed use provides an important component of a village center and development under its current zoning is unlikely.
- The zoning amendment is reasonable and in the public interest because the petition provides an appropriate use within the village center designation and the site plan demonstrates pedestrian connections which make the petition consistent with both the LUP and the small area plan.

SUGGESTED RECOMMENDATION AND CONDITIONS

The staff finds the request consistent with the 2015 Land Use Plan and the requirements of the Concord Development Ordinance. The staff (and Development Review Committee) has no objections to the petition. Because this petition is a parallel conditional district request, the Commission, should they decide to approve the request, may, according to Section 3.2.8.E of the CDO, suggest "**reasonable additional conditions or augment those already provided with the petition, but only those conditions mutually agreed upon by the petitioner and the Commission or Council may be incorporated into the approval. Any such condition should relate to the relationship of the proposed use to surrounding property, proposed support facilities such as parking areas and driveways, pedestrian and vehicular circulation systems,**

screening and buffer areas, the timing of development, street and right-of-way improvements, water and sewer improvements, storm water drainage, the provision of open space and other matters that the Commission or Council may find appropriate."

The petitioner has consented to the following conditions:

1. Compliance with the "Rezoning Exhibit" dated 8/10/15 and the submitted architectural elevations.

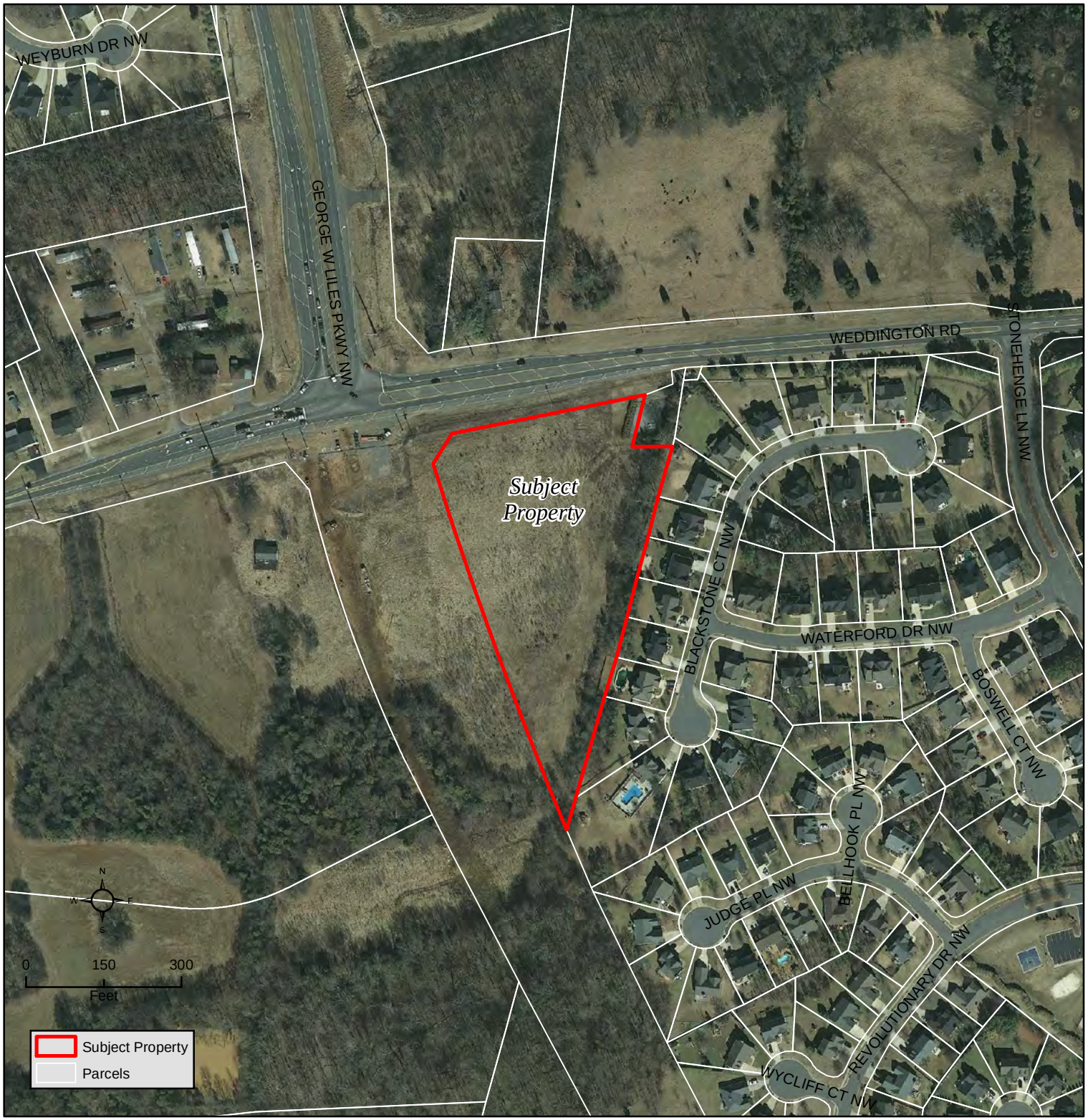
PROCEDURAL CONSIDERATIONS

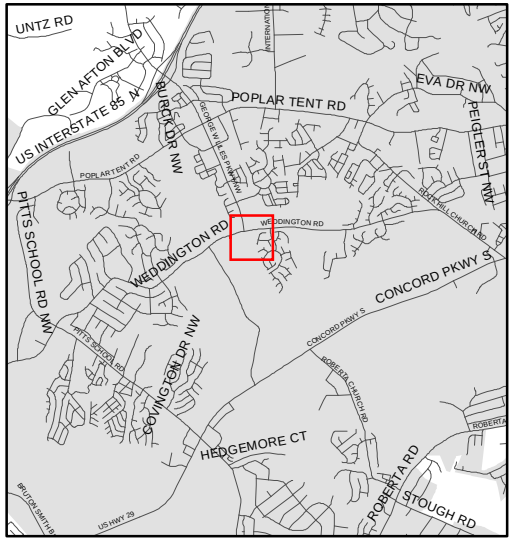
This particular rezoning case is considered "legislative" in nature as stated in Section 3.2.7 of the CDO. Legislative hearings DO NOT require sworn testimony or findings of fact for approval or denial.

Z(CD)-15-15
AERIAL

Zoning map amendment application Residential Village (RV) to Light Commercial – Conditional District (C1-CD) for the development of a retail grocery store

Weddington Rd
PIN: 5600-74-6703





Source: City of Concord
Planning Department

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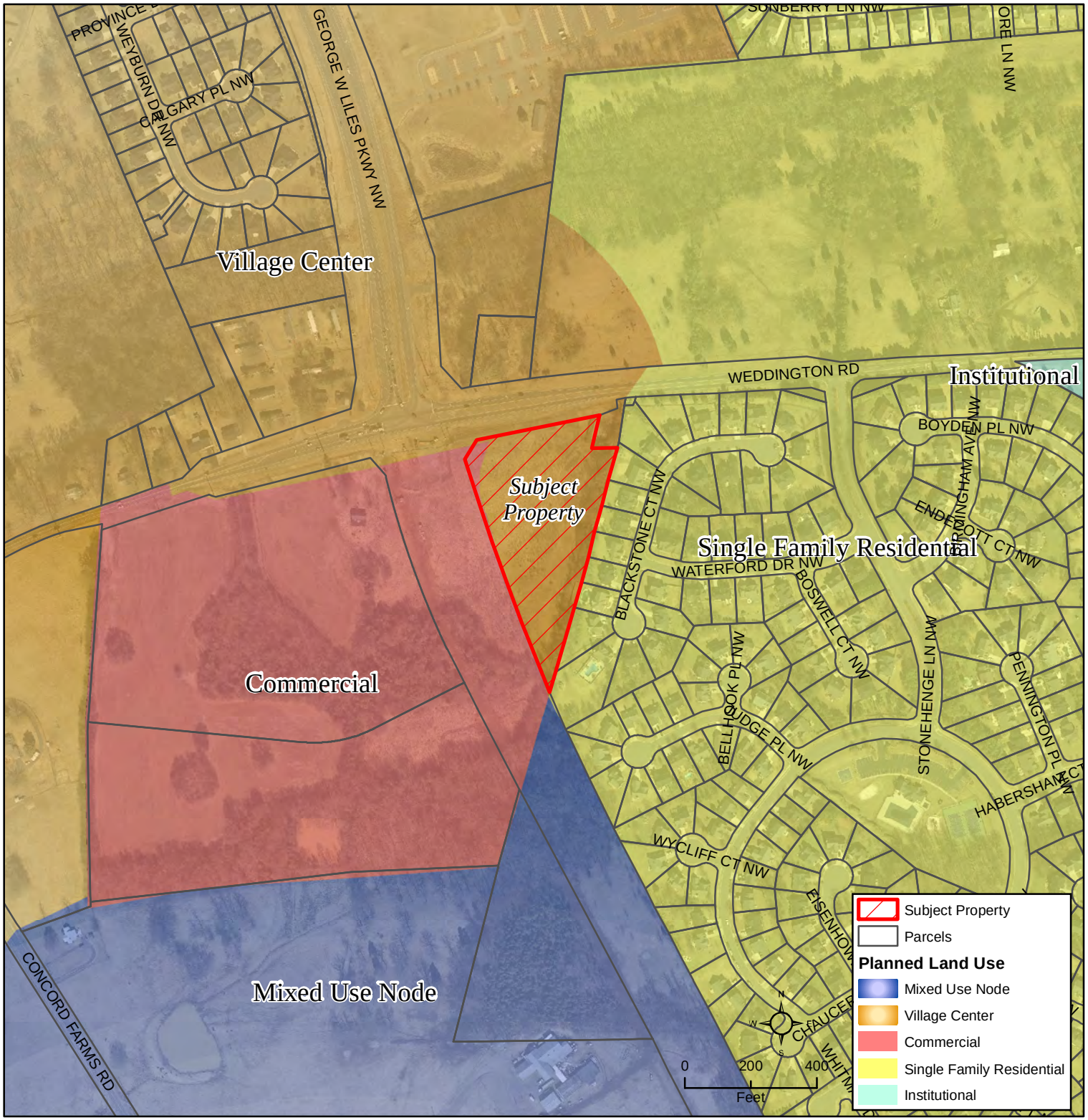
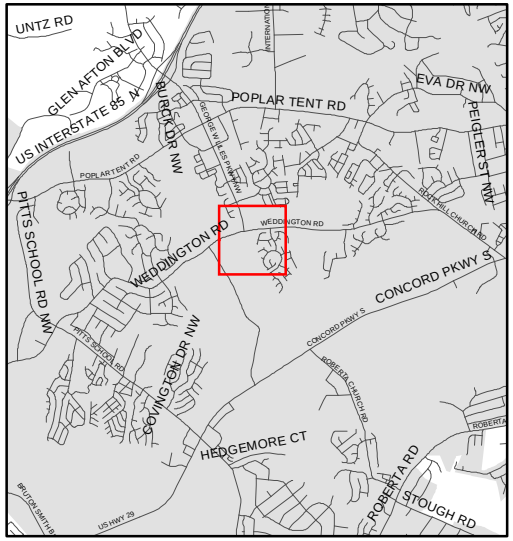
Z(CD)-15-15
LAND USE PLAN

Zoning map amendment application Residential Village (RV) to Light Commercial – Conditional District (C1-CD) for the development of a retail grocery store



Weddington Rd
PIN: 5600-74-6703



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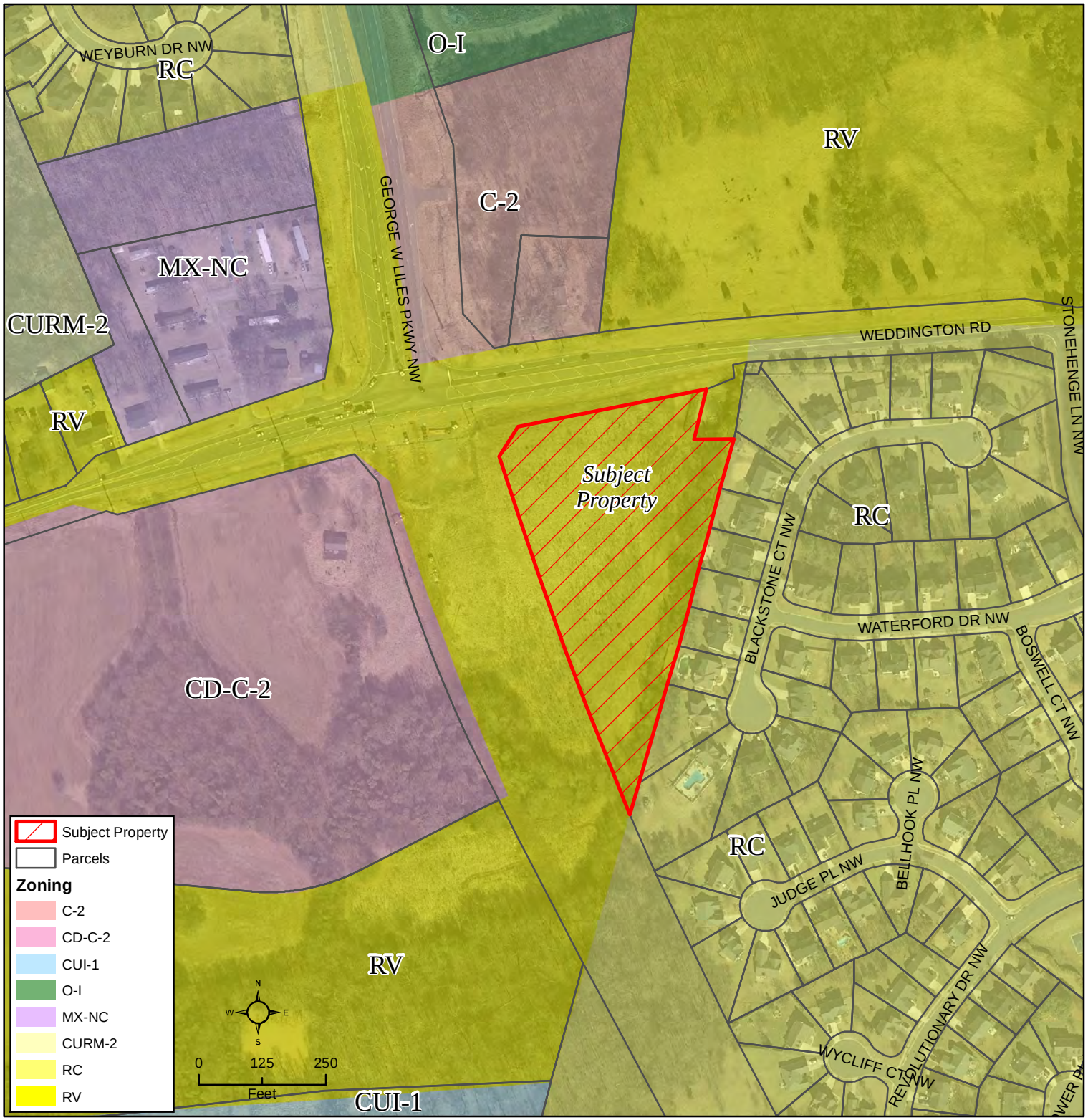
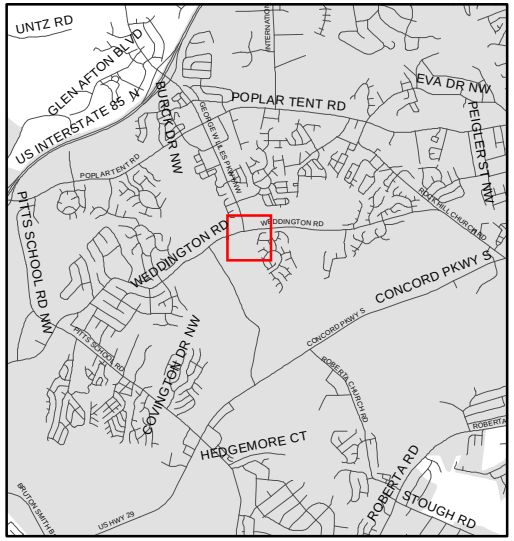
Z(CD)-15-15
ZONING MAP

Zoning map amendment application Residential Village (RV) to Light Commercial – Conditional District (C1-CD) for the development of a retail grocery store

Weddington Rd
PIN: 5600-74-6703





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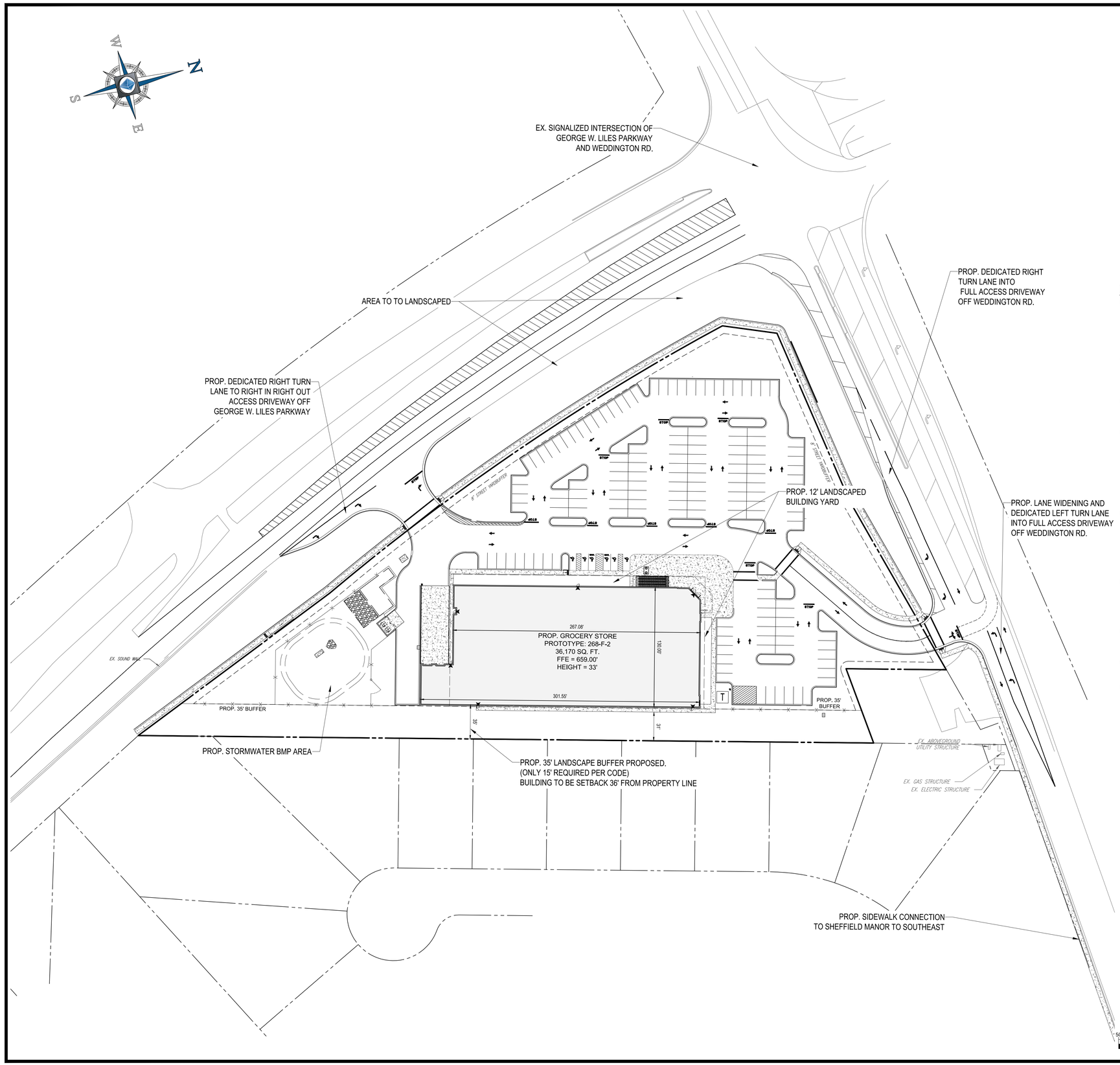

LOCATION MAP

COPYRIGHT 2003
DELORME STREET ATLAS 2004 PLUS USA
SCALE: 1"=2000'

DEVELOPMENT STANDARDS

GENERAL PROVISIONS

DEVELOPMENT OF THE SITE WILL BE GOVERNED BY THE SCHEMATIC SITE PLAN, THESE DEVELOPMENT STANDARDS, AND THE APPLICABLE PROVISIONS OF THE CONCORD ZONING ORDINANCE. THE DEVELOPMENT DEPICTED ON THIS SITE PLAN IS INTENDED TO REFLECT THE GENERAL ARRANGEMENT OF PROPOSED USES ON THIS SITE. HOWEVER THE CONFIGURATIONS, PLACEMENTS, SIZE OF BUILDING FOOTPRINT, AND PARKING AREAS SHOWN ARE SCHEMATIC IN NATURE AND MAY BE ALTERED OR MODIFIED DURING DESIGN DEVELOPMENT AND CONSTRUCTION PHASES, WITHIN THE LIMITS SET FORTH BY THE ORDINANCE.

A. PURPOSE

THE PURPOSE OF THIS REZONING APPLICATION IS TO PROVIDE A DEVELOPMENT AT THE INTERSECTION OF GEORGE W. LILES PARKWAY AND WEDDINGTON ROAD. THIS DEVELOPMENT WILL PROVIDE THE LOCATION WITH A GROCERY STORE. THIS REZONING WILL REVISE THE EXISTING ZONING OF THE SUBJECT PARCEL FROM RESIDENTIAL VILLAGE TO C-1 ALLOWING FOR THE DEVELOPMENT OF THIS PARCEL.

B. PERMITTED USES

IF REZONED THE PROJECT AREA WOULD BE BOUND BY THE SCHEMATIC REZONING PLAN TO HAVE A PERMITTED USE AS A GROCERY STORE.

C. TRANSPORTATION

THE PROPOSED SITE PLAN SHOWS TWO ACCESS DRIVEWAYS. WE PROPOSE A RIGHT-IN-RIGHT-OUT DRIVEWAY ACCESS FROM THE EXTENSION OF GEORGE W. LILES PARKWAY. THE SECOND ACCESS IS PROPOSED AS A FULL ACCESS DRIVEWAY CONNECTING FROM WEDDINGTON ROAD. THE EXACT LOCATION AND DESIGN DETAIL OF THESE DRIVEWAYS WILL BE DETERMINED DURING THE DEVELOPMENT REVIEW PROCESS AND WILL BE SUBJECT TO MODIFICATIONS REQUIRED FOR APPROVAL BY THE CITY OF CONCORD AND/OR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION.

PARKING AREAS ARE GENERALLY DEPICTED ON THE CONCEPT PLAN OF THIS SITE.

PETITIONER WILL CONSTRUCT A FIVE FOOT CONCRETE SIDEWALK CONNECTING OUR ACCESS ON WEDDINGTON ROAD TO THE ACCESS OF SHEFFIELD MANOR TO BE DEDICATED TO THE CITY FOR MAINTENANCE.

D. SCREENING AND LANDSCAPED AREAS

AT A MINIMUM, SCREENING AND LANDSCAPING SHALL CONFORM TO THE STANDARDS SPECIFIED IN THE ORDINANCE.

THE PETITIONER SHALL PROVIDE A 35' PLANTED BUFFER IN EXCESS OF THE ORDINANCE REQUIRED BUFFER BETWEEN THE REAR OF THE DEVELOPMENT AND SHEFFIELD MANOR. ONLY A 15' BUFFER IS REQUIRED PER CODE REQUIREMENTS.

A 12' BUILDING YARD WILL BE PROVIDED ADJACENT TO THE BUILDING PER CODE REQUIREMENTS.

ADDITIONAL LANDSCAPING WILL BE PROVIDED ALONG GEORGE LILES PARKWAY

E. ARCHITECTURAL STANDARDS

THE SUBJECT PARCEL SHALL BE DESIGNED WITH MATERIALS COMPATIBLE WITH ADJACENT AREAS. THE PROPOSED BUILDING SHOULD UTILIZE EXTERIOR FINISHES SUCH AS BRICK, GLASS, WOOD.

THE BUILDINGS MUST BE DESIGNED TO ENCOURAGE AND COMPLEMENT THE PEDESTRIAN SCALE INTEREST AND ACTIVITY SO THAT THE USES ARE VISIBLE FROM AND/OR ACCESSIBLE TO THE STREET.

F. LIGHTING

ALL SITE LIGHTING SHALL BE INWARDLY DIRECTED SO AS NOT TO REFLECT OR BEAM TOWARD ADJACENT PROPERTY. LIMIT HEIGHT OF FREE STANDING LIGHTING TO 25 FEET.

G. SIGNAGE

ALL SIGNAGE SHALL MEET APPLICABLE REGULATIONS AS A MINIMUM IN EFFECT AT TIME OF PERMITTING.

H. STORMWATER MANAGEMENT

THE PETITIONER SHALL COMPLY WITH ALL CITY OF CONCORD AND STATE OF NORTH CAROLINA ORDINANCES IN REFERENCE TO STORMWATER DISCHARGES.

CONCEPT PLAN GENERAL NOTES

1. THIS PLAN IS BASED ON CITY OF CONCORD GIS AS WELL AS SURVEYED INFORMATION..

2. THE CONCEPT REPRESENTED HEREIN IDENTIFIES A DESIGN CONCEPT RESULTING FROM LAYOUT PREFERENCES IDENTIFIED BY OWNER COUPLED WITH A PRELIMINARY REVIEW OF ZONING AND LAND DEVELOPMENT REQUIREMENTS AND ISSUES. THE FEASIBILITY WITH RESPECT TO OBTAINING LOCAL, COUNTY, STATE, AND OTHER APPLICABLE APPROVALS IS NOT WARRANTED AND CAN ONLY BE ASSESSED AFTER FURTHER EXAMINATION AND VERIFICATION OF SAME REQUIREMENTS AND PROCUREMENT OF JURISDICTIONAL APPROVALS.

3. THE CONCEPTUAL PLAN IS PREPARED FOR CONCEPTUAL PRESENTATION PURPOSES ONLY AND IS NOT INTENDED FOR UTILIZATION AS A ZONING AND/OR CONSTRUCTION DOCUMENT. THE EXISTING CONDITIONS SHOWN HEREON ARE BASED UPON INFORMATION THAT WAS SUPPLIED TO BOHLER ENGINEERING AT THE TIME OF PLAN PREPARATION AND MAY BE SUBJECT TO CHANGE UPON AVAILABILITY OF ADDITIONAL INFORMATION.

PRELIMINARY INFORMATION	
PARCEL	
GROCERY STORE SITE	4.88± AC
TOTAL	4.88± AC
JURISDICTIONAL	
EXISTING ZONING	RV (RESIDENTIAL VILLAGE)
NEEDED ZONING	C-1
PARKING REQUIRED	36,170 SF 1/300 (3,33/1,000) = 121
PROVIDED PARKING	156 SPACES, INCLUDING 6 ADA SPACES (4,31-1,000)
FRONT BUILDING SETBACK	10'
SIDE BUILDING SETBACK	8'
REAR BUILDING SETBACK	15'
LANDSCAPE BUFFER	8' LANDSCAPE STRIP / 36' RESIDENTIAL BUFFER PROVIDED

BOHLER ENGINEERING NC, PLLC
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING · LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN · PROGRAM MANAGEMENT · TRANSPORTATION SERVICES
UPSTATE NEW YORK · LEHIGH VALLEY, PA · NORTHERN VIRGINIA
NEW ENGLAND · SOUTHEASTERN, PA · CENTRAL VIRGINIA
NEW YORK METRO · DELAWARE · MARYLAND · CHARLOTTE, NC
NEW JERSEY · PHILADELPHIA, PA · BALTIMORE, MD · RALEIGH, NC · TAMPA, FL

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REVISIONS

REV	DATE	COMMENT	BY

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PROJECT No.:	NCC142059
DRAWN BY:	JRP
CHECKED BY:	CRC
DATE:	08/10/15
SCALE:	1"=50'-0"
CAD I.D.:	CC0

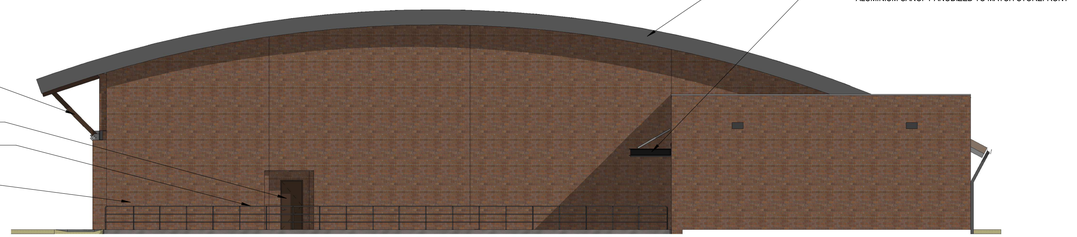
PROJECT:
PROPOSED GROCERY
FOR
MGP RETAIL CONSULTING
LOCATION OF SITE
4460 WEDDINGTON RD NW
CITY OF CONCORD, NC

BOHLER ENGINEERING
NC, PLLC NCBELS P-1132
800 WEST HILL STREET, SUITE 101
CHARLOTTE, NC 28208
Phone: (980) 272-3400
Fax: (980) 272-3401
NC@BohlerEng.com

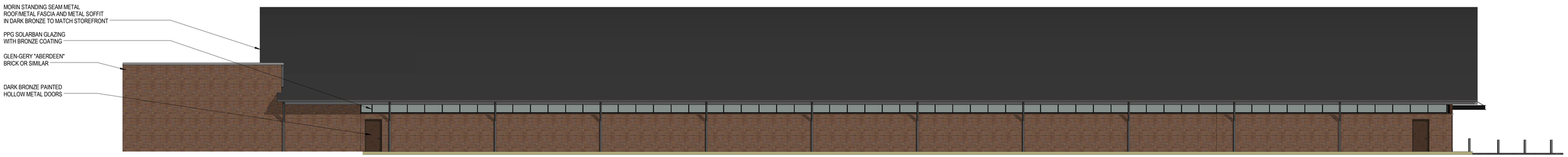
SHEET TITLE:
REZONING EXHIBIT

SHEET NUMBER:
1

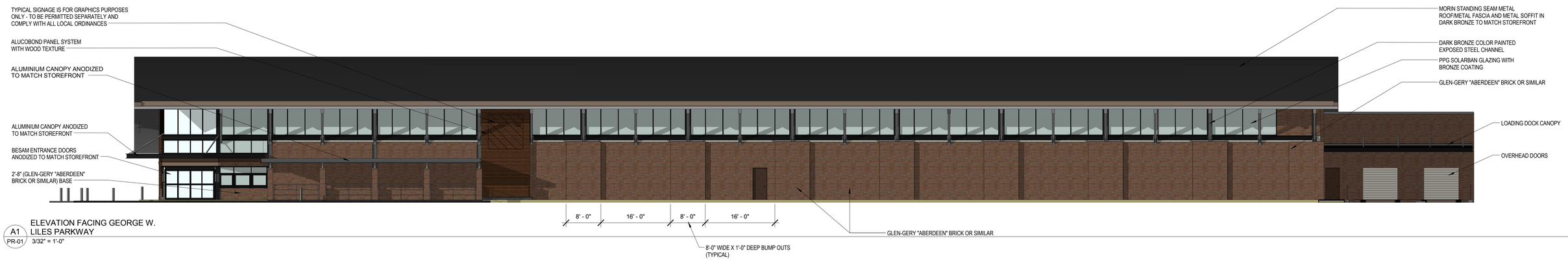
C1 PR-01 ELEVATION FACING WEDDINGTON ROAD
3/32" = 1'-0"



C2 PR-01 LOADING DOCK ELEVATION FACING GEORGE W. LILES PARKWAY
3/32" = 1'-0"



B1 PR-01 ELEVATION FACING RESIDENTIAL PLOTS
3/32" = 1'-0"



A1 PR-01 ELEVATION FACING GEORGE W. LILES PARKWAY
3/32" = 1'-0"

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ai DESIGN GROUP / ARCHITECTURE + INTERIORS
330 S. Tryon Street, Suite 500 / Charlotte, NC 28202
aiDGinc.com / 704-731-8080

MGP RETAIL

G. W. L. PRKWY. AND
WEDDINGTON CONCORD, NC

ELEVATIONS

08-06-2015

Concord
NORTH CAROLINA
High Performance Living

Application for
Zoning Map Amendment

(Please type or print)

Applicant Name, Address, Telephone Number and email address:
MGP Retail Consulting, LLC - 1500 Sunday Drive, Suite 101, Raleigh, NC 27607
703.755.5478 ryan.berger@mgpretail.us

Owner Name, Address, Telephone Number:
Kenneth E. Moss Jr. - 4530 Weddington Rd NW, Concord, NC 28027

Project Location/Address: 4460 Weddington Rd NW, Concord, NC 28027

P.I.N.: 5600746703

Area of Subject Property (acres or square feet): 4.879 Acres

Lot Width: Approx. 830' Lot Depth: Approx. 430'

Current Zoning Classification: RV (Residential Village)

Proposed Zoning Classification: C-1

Existing Land Use: Vacant - Open

Future Land Use Designation: Village Center

Surrounding Land Use: North Village Center South Residential
East Residential West Commercial

Reason for request: The Applicant would like to develop the parcel for commercial use as a grocery store

Has a pre-application meeting been held with a staff member? Yes, Kevin Ashley

Staff member signature: KGR Date: 4/3/15

THIS PAGE APPLICABLE TO CONDITIONAL DISTRICT REQUESTS ONLY

(Please type or print)

1. List the Use(s) Proposed in the Project:
   The Applicant would like to develop this property as a grocery store. The grocery store would have a right-in-right-out access on the extension of George Liles Parkway as well as a full access on Weddington Road. The structure will be adjacent to the property line shared with Sheffield Manor. The development would feature approximately 161 parking spaces.

2. List the Condition(s) you are offering as part of this project. Be specific with each description. (You may attach other sheets of paper as needed to supplement the information):
   The Applicant offers to locate the structure along the Sheffield Manor property line in order to protect residents from having parking located near their homes. There is no activity or extensive lighting planned against the rear property line including pedestrian or vehicular access. In addition, a 30' buffer is planned to further isolate the residential use from the grocery store. The proposed loading dock is also located in the front of the building opposite the residential use. We feel that these considerations provide excellent protection for residents.

I make this request for Conditional district zoning voluntarily. The uses and conditions described above are offered of my own free will. I understand and acknowledge that if the property in question is rezoned as requested to a Conditional District the property will be perpetually bound to the use(s) specifically authorized and subject to such conditions as are imposed, unless subsequently amended as provided under the City of Concord Development Ordinance (CDO). All affected property owners (or agents) must sign the application.

Signature of Applicant — Date 5/29/15

Signature of Owner(s) — Date 5/28/15

Certification

I hereby acknowledge and say that the information contained herein and herewith is true. and that this application shall not be scheduled for official consideration until all of the required contents are submitted in proper form to the City of Concord Development Services Department.

Date: 5/29/15

Applicant Signature: [illegible]

Property Owner or Agent of the Property Owner Signature:
[illegible] 5/28/15

Staff Report
Planning and Zoning Commission

DATE:	August 18, 2015
CASE #:	Z (CD)-06-15
DESCRIPTION:	Zoning Map Amendment - CUO-I (Conditional Use Office Institutional) to RV-CD (Residential Village Conditional District)
OWNER:	Jack T Chapic
LOCATION:	166 Union St. North
PIN#s:	5620-79-0572
AREA:	0.29 +/- acres
ZONING:	CUO-I (Conditional Use Office Institutional)
PREPARED BY:	Starla Rogers, Sr. Planner

BACKGROUND

The subject property consists of approximately 0.29 acres and is the location of a vacant, former, nursing home, currently zoned for professional offices within the Historic Preservation Overlay District. The subject property was improved with a one-story brick structure in approximately 1950 that is now considered to be "intrusive" to the historic district by the Historic Survey. The Historic Handbook and Historic Survey describe "intrusive" properties as: "Those properties which have a definite negative impact on the historical, architectural, or cultural characteristics for which the District is significant."

The property was rezoned in 2006 to allow professional offices but has remained vacant under the current zoning. Over the years several rezoning petitions have been discussed by potential developers for higher intensity uses such as group homes, social service institutions, and office uses. None of the above proposals made it to the rezoning process due to neighbor opposition and concern.

SUMMARY OF REQUEST

The new property owner/petitioner proposes to rezone the property and modify the site/structure to allow for a (2) unit single-family attached building with rear tenant/owner parking. As part of the conditional district rezoning, the applicant has offered the site plan and elevation renderings as conditions of the requested zoning classification.

The project is considered single-family attached residential and as such does not require plan review. However, the Transportation Department has reviewed the site plan due to the narrow one-way design of Marsh, and has approved the parking and garage accesses.

The Historic Preservation Commission has reviewed the request for consistency with the Historic Guidelines as well as conformance with the residential character of the neighborhood and has approved the site plan and elevations as currently submitted. Copies of these approved plans and elevations are included as part of this staff report.

Existing Zoning and Land Uses					
Current Zoning of Subject Property	**Zoning Within 500 Feet**		**Land Uses(s) of Subject Property**	**Land Uses within 500 Feet**	
CUOI	**North**	RC and C-1	Vacant Structure	**North**	Single-family and commercial/office
	South	RC and RM-1		**South**	Single-family
	East	RM-1		**East**	Single-family and commercial/office
	West	RC, RM-1 and CDC-2		**West**	Single-family and institutional

COMPLIANCE WITH 2015 LAND USE PLAN

The 2003 Center City Plan (CCP), incorporated into the 2015 Land Use Plan by reference, designates the subject property as "Office." The Land Use Plan was modified in 2006 with the rezoning to CUOI for zoning/land use consistency. Single-family and multifamily zoning districts are shown in the Land Use Plan matrix as potentially consistent with the Office Land Use category in some circumstances. Although the Land Use Plan does not specify what those circumstances may be, the property is in the middle of a residential neighborhood and was previously zoned residential. Therefore, staff feels that it is not only consistent but more consistent than the current office zoning/land use. RV (Residential Village) is a corresponding zoning classification.

SUGGESTED STATEMENT OF CONSISTENCY

- The subject property is approximately 0.29 acres and is zoned CUO-I (Conditional Use Office Institutional)

- The subject property is the site of a vacant former nursing home.

- The existing structure on the site is approximately 5,600 square feet in size, was constructed in approximately 1950, and according to the Concord Historic Districts Survey is considered an "intrusive" structure in the North Union Street Historic District.

- The proposed zoning amendment is consistent with the 2003 Center City Plan, incorporated into the 2015 Land Use Plan by reference, as RV and conditional district variations are corresponding zoning classifications to the Office Land Use category on a case by case basis.

- The zoning amendment is reasonable and in the public interest because the petition reduces the intensity of zoning on the Union Street property to allow a less intense residential use.

SUGGESTED RECOMMENDATION AND CONDITIONS

The staff finds the request consistent with the 2003 Center City Plan, 2015 Land Use Plan, and the requirements of the Concord Development Ordinance. The staff (and Development Review Committee) has no objections to the petition. Because this petition is a parallel conditional district request, the Commission, should they decide to approve the request, may, according to Section 3.2.8.E of the CDO, suggest "**reasonable additional conditions or augment those already provided with the petition, but only those conditions mutually agreed upon by the petitioner and the Commission or Council may be incorporated into the approval. Any such condition should relate to the relationship of the proposed use to surrounding property, proposed support facilities such as parking areas and driveways, pedestrian and vehicular circulation systems, screening and buffer areas, the timing of development, street and right-of-way improvements, water and sewer improvements, storm water drainage, the provision of open space and other matters that the Commission or Council may find appropriate."**

The petitioner has consented to the following conditions:

1. Compliance with the site plan and elevations as approved by the Historic Preservation Commission (HPC).
2. The uses on the site shall be limited to the following: Single-family attached. (2 total units)

PROCEDURAL CONSIDERATIONS

This particular case is a rezoning to a parallel conditional district, which under the CDO, is "legislative" in nature. Legislative hearings DO NOT require the swearing or affirming of witnesses prior to testimony at the public hearing.

Concord
NORTH CAROLINA
High Performance Living

Application for
Zoning Map Amendment

(Please type or print)

Applicant Name, Address, Telephone Number and email address:
Susan & Jack Chapic (704) 652-2471
6019 Bost Cutoff Rd Concord NC 28025

Owner Name, Address, Telephone Number:
Same

Project Location/Address: 1616 Union St N

P.I.N.: 5620-79-0572

Area of Subject Property (acres or square feet): .33

Lot Width: 65.97 Lot Depth: 219.85

Current Zoning Classification: CUO-1

Proposed Zoning Classification: RV(CD)

Existing Land Use: vacant

Future Land Use Designation: Single family attached residential

Surrounding Land Use: North Res/Com South Res

East Com. West Res

Reason for request: To convert old nursing home/office into (2) attached single-family homes.

Has a pre-application meeting been held with a staff member? Yes (Starla & Kevin)

Staff member signature: Starla Rogers Date: 7-23-15

THIS PAGE APPLICABLE TO CONDITIONAL DISTRICT REQUESTS ONLY

(Please type or print)

1. List the Use(s) Proposed in the Project:
(2) single family residences (attached)

2. List the Condition(s) you are offering as part of this project. Be specific with each description. (You may attach other sheets of paper as needed to supplement the information):
See attached site plan & elevations approved by the Historic Preservation Commission.

I make this request for Conditional district zoning voluntarily. The uses and conditions described above are offered of my own free will. I understand and acknowledge that if the property in question is rezoned as requested to a Conditional District the property will be perpetually bound to the use(s) specifically authorized and subject to such conditions as are imposed, unless subsequently amended as provided under the City of Concord Development Ordinance (CDO). All affected property owners (or agents) must sign the application.

Susan Chopic — Signature of Applicant — Date

Susan Chopic — Signature of Owner(s) — Date 7-23-15

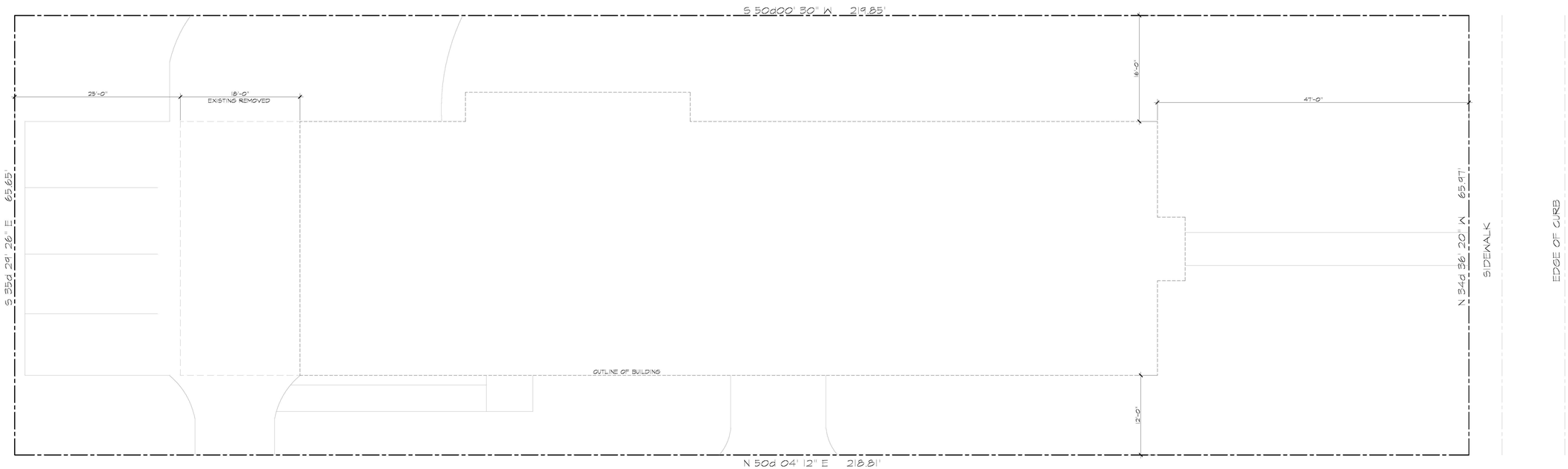
Certification

I hereby acknowledge and say that the information contained herein and herewith is true, and that this application shall not be scheduled for official consideration until all of the required contents are submitted in proper form to the City of Concord Development Services Department.

Date: 7-23-15

Applicant Signature: Susan Chapie

Property Owner or Agent of the Property Owner Signature:
Susan Chapie



MARSH STREET

1 / A1 **SITE PLAN**

SCALE: 1/8" = 1'-0"

ADDITIONAL NOTES

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3. ALL FEDERAL, STATE AND LOCAL CODES, ORDINANCES AND REGULATION SHALL BE CONSIDERED AS PART OF THESE DRAWINGS AND DETAILS FOR THIS BUILDING AND SHALL TAKE PREFERENCE OVER ANYTHING SHOWN, DESCRIBED OR IMPLIED WHERE VARIANCES OCCUR.
4. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS BEFORE BEGINNING CONSTRUCTION AND COORDINATE ANY CORRECTIONS OR REVISIONS WITH THE OWNER AND DESIGNER. CROWE DESIGN WILL ASSUME NO LIABILITY FOR DIMENSIONAL ERRORS ONCE CONSTRUCTION BEGINS.

THESE DRAWINGS ARE AN INSTRUMENT OF SERVICE. CROWE DESIGN & ASSOCIATES HAVE EXERTED THEIR BEST PROFESSIONAL EFFORT AND CAREFUL ATTENTION TO DETAIL IN GENERALLY DESCRIBING THE DESIGN AND EXECUTION OF THESE DOCUMENTS, BUT DOES NOT GUARANTEE PERFECT DOCUMENTS. THE GENERAL CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR REVIEWING THE DOCUMENTS AND REPORT ANY CONCERNS BEFORE CONSTRUCTION BEGINS.

CERTIFIED PROFESSIONAL BUILDING DESIGNER
NATIONAL COUNCIL OF
DANIEL T. CROWE
CERTIFICATION NO. 34-101

CROWE DESIGN & ASSOCIATES
CORPORATE SEAL 2015
NORTH CAROLINA

Crowe Design & Associates
P.O. Box 1346 Cornelius, NC 28031 (704) 895-4584

166 UNION STREET NORTH
Chapin Construction
CONCORD, NORTH CAROLINA

1 FEBRUARY 26, 2015
2 JUNE 19, 2015

SITE PLAN

A6.0

3 / A2 PROPOSED SIDE ELEVATION "A"
SCALE: 1/4" = 1'-0"

2 / A2 PROPOSED SIDE ELEVATION "A"
SCALE: 1/4" = 1'-0"

1 / A2 PROPOSED FRONT ELEVATION "A"
SCALE: 1/4" = 1'-0"

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CERTIFIED PROFESSIONAL BUILDING DESIGNER
NATIONAL COUNCIL OF
DANIEL T. CROWE
CERTIFICATION NO. 84-015

CROWE DESIGN & ASSOCIATES
CORPORATE SEAL 2015
NORTH CAROLINA

Crowe Design & Associates
P.O. Box 1346 Cornelius, NC. 28031 (704) 895-4584

166 UNION STREET NORTH
Chapin Construction
CONCORD, NORTH CAROLINA

1 FEBRUARY 26, 2015

PROPOSED
ELEVATIONS
UNIT "A"

A2.0

3 / A3 **PROPOSED SIDE ELEVATION "B"**
SCALE: 1/4" = 1'-0"

2 / A3 **PROPOSED REAR ELEVATION "B"**
SCALE: 1/4" = 1'-0"

1 / A3 **PROPOSED SIDE ELEVATION "B" (MARSH STREET)**
SCALE: 1/4" = 1'-0"

ADDITIONAL NOTES

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CERTIFIED PROFESSIONAL BUILDING DESIGNER
NATIONAL COUNCIL OF
DANIEL T. CROWE
CERTIFICATION NO. 34-103

CROWE DESIGN & ASSOCIATES
CORPORATE
SEAL
2015
NORTH CAROLINA

Crowe Design & Associates
P.O. Box 1346 Cornelius, NC. 28031 (704) 895-4584

166 UNION STREET NORTH
Chapin Construction
CONCORD, NORTH CAROLINA

1 FEBRUARY 26, 2015
2 JUNE 19, 2015

PROPOSED
ELEVATIONS
UNIT "B"

A3.0

FACADE 03/02/06
166 Union Street, North

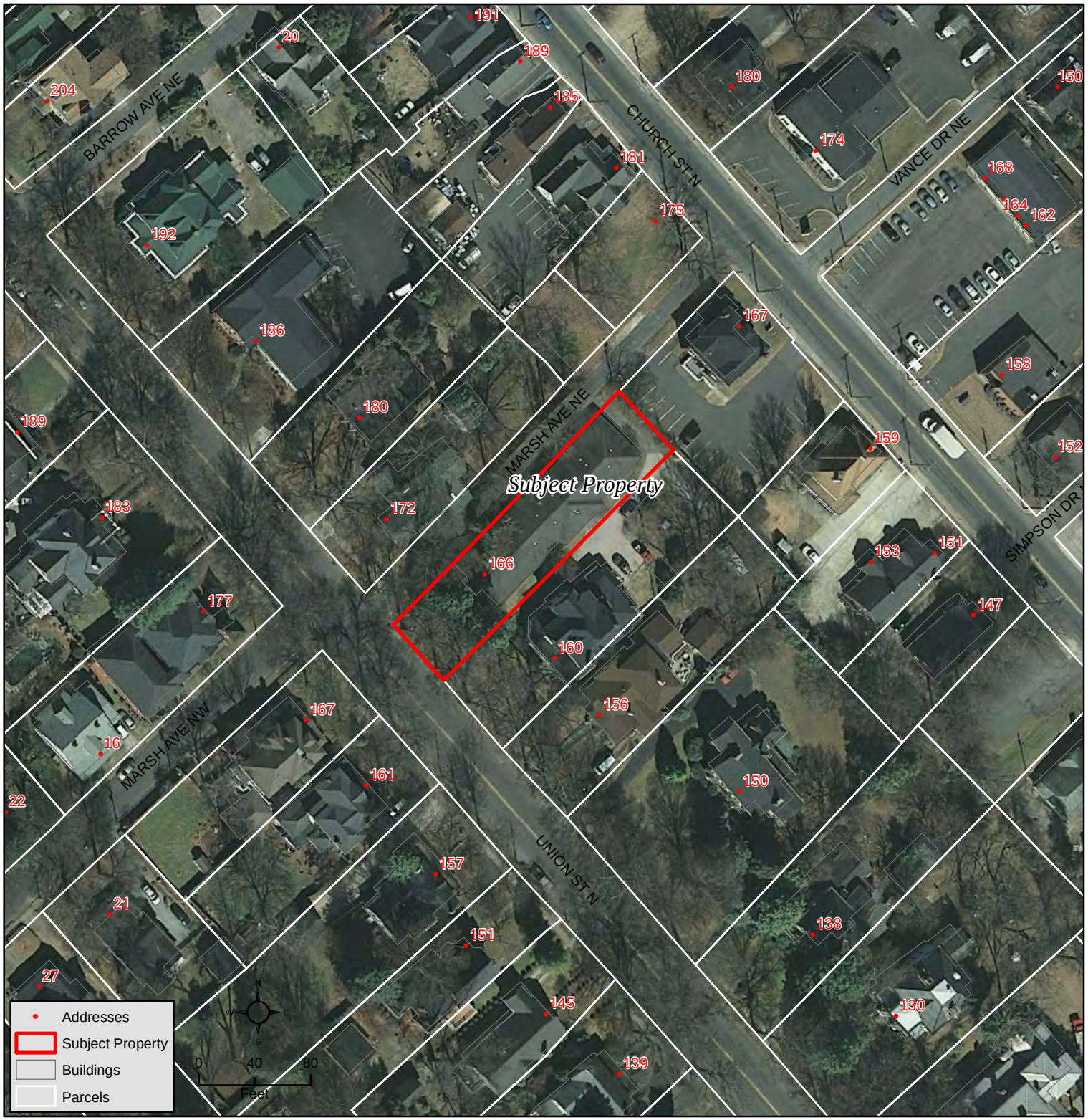
NORTHWEST OBLIQUE 03/02/06
166 Union Street, North

SOUTHWEST OBLIQUE 03/02/06
166 Union Street, North

NORTHEAST OBLIQUE 03/02/06
166 Union Street, North

SOUTH ELEVATION 03/02/06
166 Union Street, North

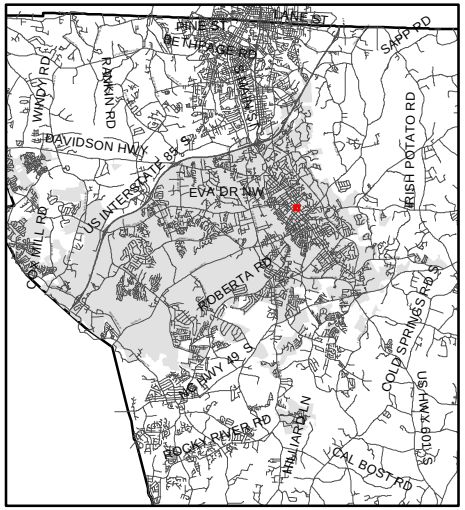
SOUTHEAST OBLIQUE 03/02/06
166 Union Street, North



Z(CD)-06-15
AERIAL

Zoning Map Amendment Application Conditional Use Office Institutional (CUO-I) to Residential Village Conditional District (RV-CD) for the conversion of an office structure to a two family dwelling.

166 Union St N
PIN: 5620-79-5720



Source: City of Concord
Planning Department

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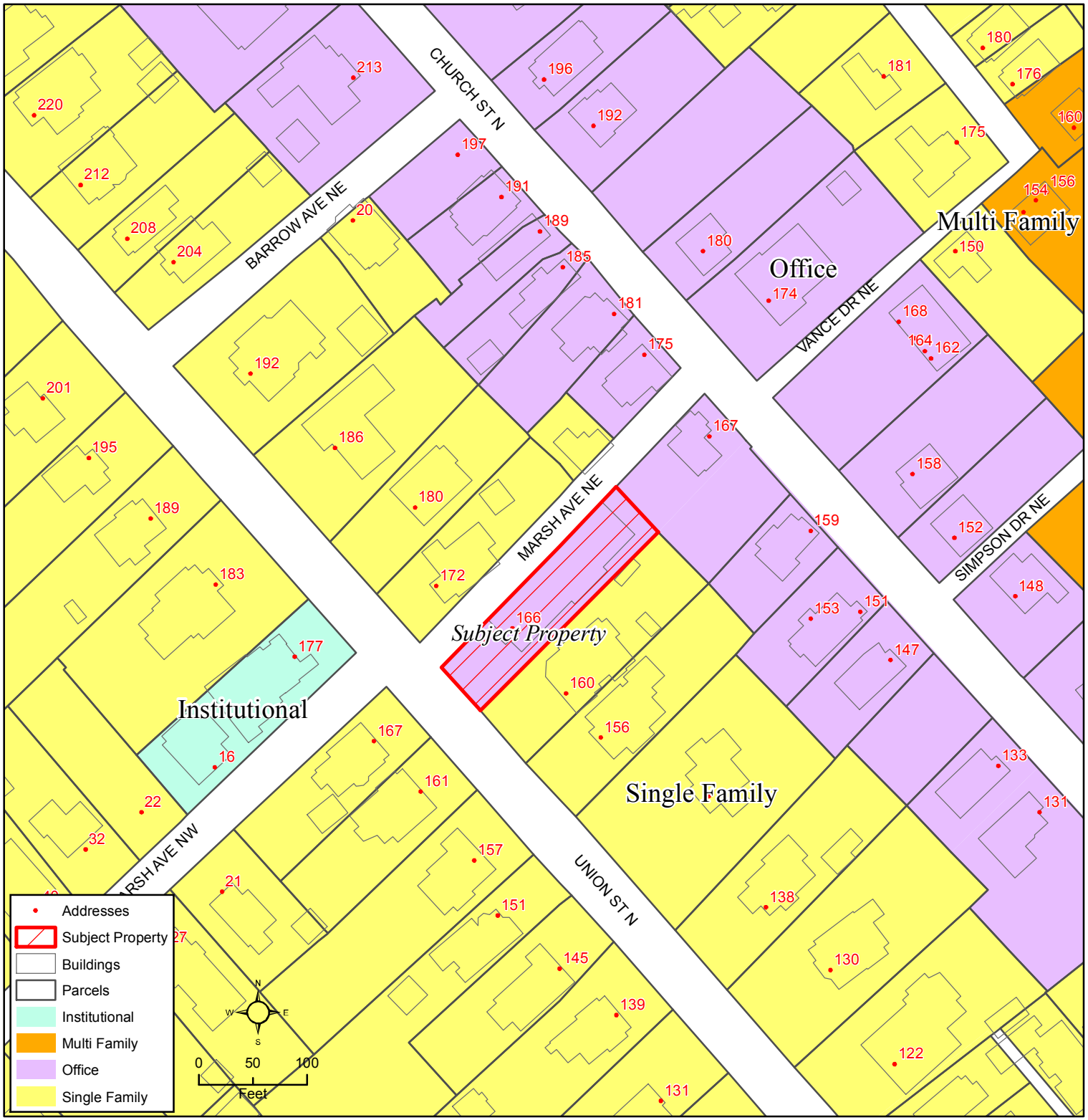
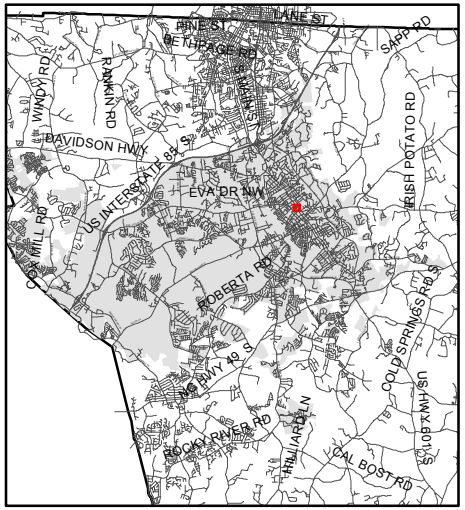
Z(CD)-06-15
LAND USE PLAN

Zoning Map Amendment Application Conditional Use Office Institutional (CUO-I) to Residential Village Conditional District (RV-CD) for the conversion of an office structure to a two family dwelling.

166 Union St N
PIN: 5620-79-5720





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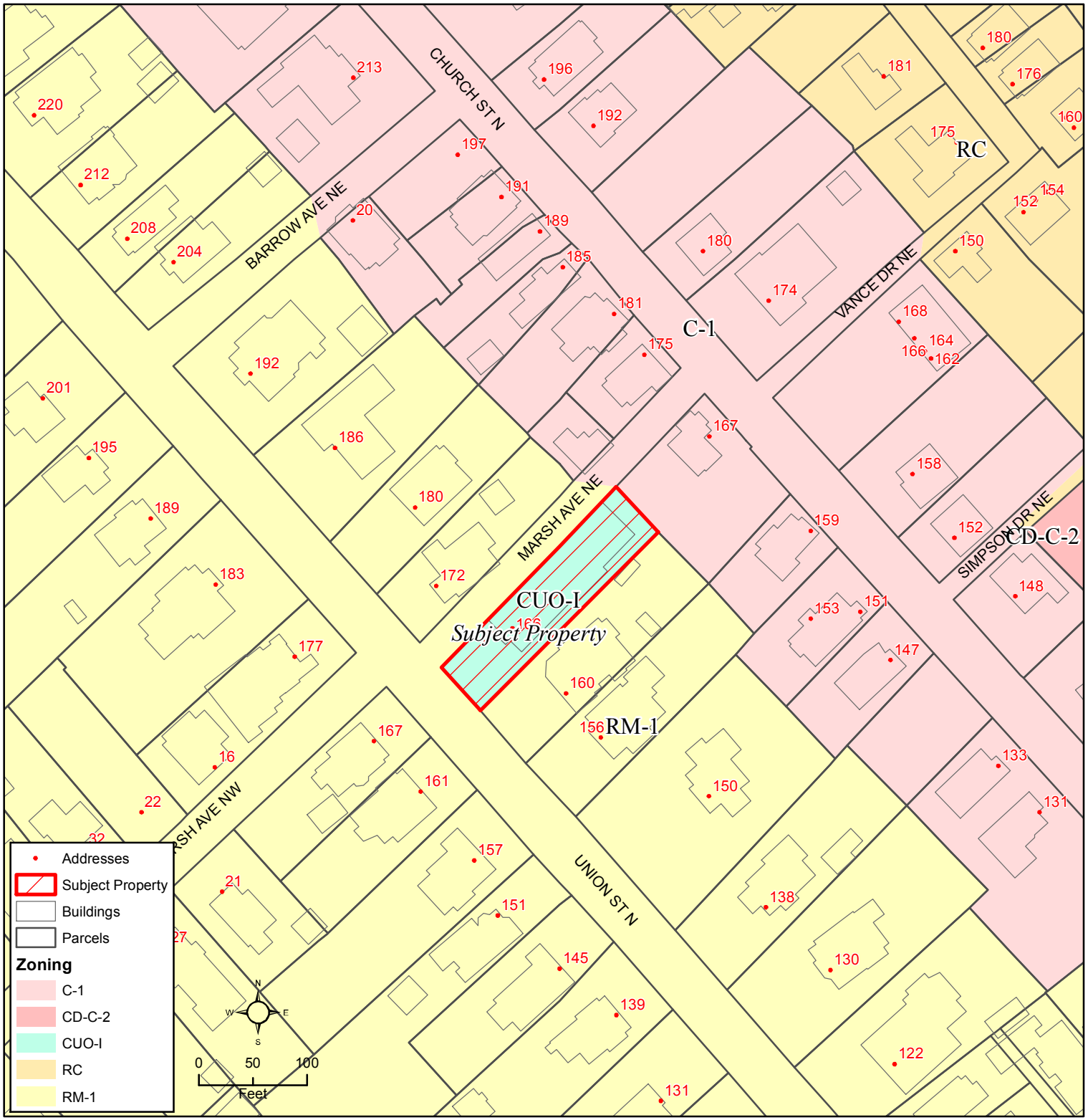
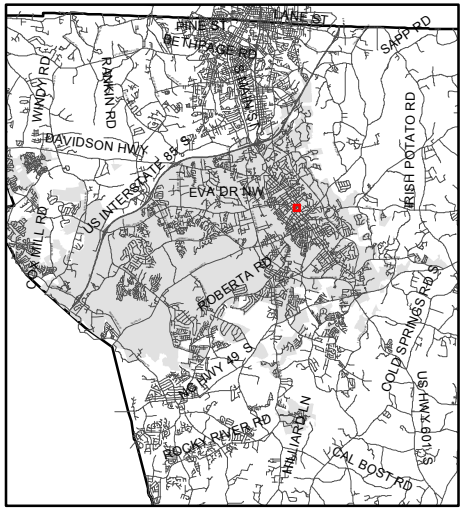
Z(CD)-06-15
ZONING MAP

Zoning Map Amendment Application Conditional Use Office Institutional (CUO-I) to Residential Village Conditional District (RV-CD) for the conversion of an office structure to a two family dwelling.

166 Union St N
PIN: 5620-79-5720





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Concord
NORTH CAROLINA
High Performance Living
66 Union Street South, PO Box 308, Concord, NC 28026 – concordnc.gov

Memo

To: Planning and Zoning Commission Members

From: Kevin E. Ashley, AICP Planning and Development Manager

Date: August 18, 2015

Re: Case Z(CD)-18-15

Staff is requesting continuance of this item in order allow the applicant to work on revisions to the site plan.

Staff Report
Planning and Zoning Commission

DATE:	August 18, 2015
CASE #:	Z-21-15
DESCRIPTION:	Zoning Map Amendment Cabarrus County GC (General Commercial) to City C-2 (General Commercial)
APPLICANT/OWNERS:	Administrative – David & Wilma Parker
LOCATION:	3550 US HWY 601, South
PIN#s:	PIN: 5539-82-4636
AREA:	.67 +/- acres
ZONING:	Cabarrus County GC (General Commercial)
PREPARED BY:	Starla Rogers, Sr. Planner

BACKGROUND

The subject property consists of approximately 0.67 acres generally on the west side of US Highway 601 South and is developed as single-family residential.

HISTORY

The property was effectively annexed into the City of Concord on June 9th, 2015. The surrounding property (29.16 acres) was annexed in December 2014 and was rezoned to General Commercial (C-2) in January 2015.

SUMMARY OF REQUEST

As the property is now within the City limits, City zoning must be applied to the properties. The property has approximately 123 feet of frontage on US HWY 601 South and is improved with a single-family residential dwelling and a detached two-story garage. This parcel will be assembled into the larger, previously annexed parcel for retail development. Technical site plan review is currently underway for a grocery store development on the site.

Cabarrus County GC (General Commercial) zoning is on the site and surrounding the subject property on the south, west, northwest and east. City of Concord C-2 (General Commercial) is located across HWY 601 to the northeast. Cabarrus County GC zoning is the functional equivalent of Concord's C-2 district, and the request represents an extension of the established zoning.

The entirety of the property lies within a "mixed use node" as specified in the 2015 Land Use Plan (LUP). The Plan specifically states that C-2 is a consistent district within the mixed use node.

Property to the north is zoned GC or C-2 and is developed commercially or remains vacant. Land to the east is zoned GC and Cabarrus County LDR (Low Density Residential) and consists of commercial development or remains vacant. Land to the south is Cabarrus County GC, Cabarrus County LDR (Low Density Residential) and City of Concord OI (Office Institutional). Property to the south is either vacant or improved with a religious institution. Land to the west is zoned Cabarrus County GC or Cabarrus County LDR and remains vacant.

Existing Zoning and Land Uses					
Current Zoning of Subject Property	**Zoning Within 500 Feet**		**Land Uses(s) of Subject Property**	**Land Uses within 500 Feet**	
Cabarrus County General Commercial (GC)	**North**	C-2 and GC	Single-Family Residential	**North**	Commercial and vacant
	South	GC, LDR, and OI		**South**	Vacant and institutional
	East	GC and LDR		**East**	Commercial and vacant
	West	GC and LDR		**West**	Vacant

COMPLIANCE WITH 2015 LAND USE PLAN

The 2015 Land Use Plan (LUP) designates the subject property as a "Mixed Use Node." The Highway 49/Highway 601 Mixed Use Node is features a variety of development, having two significant interchanges converging.

SUGGESTED STATEMENT OF CONSISTENCY

The subject property is approximately .67 acres and is zoned Cabarrus County GC (General Commercial).

- The proposed zoning amendment is consistent with the 2015 Land Use Plan (LUP) as C-2 is listed as a corresponding zoning classification to this particular Mixed Use Node.

- The zoning amendment is reasonable and in the public interest because the petition places the entire property one zoning classification that is consistent with that that surrounds it on three sides.

SUGGESTED RECOMMENDATION AND CONDITIONS

The staff finds the request consistent with the 2015 Land Use Plan and the requirements of the Concord Development Ordinance and has no objections to the request. Because this petition is conventional district request, sworn testimony and findings of fact are not required, and the Commission may not impose conditions on the approval.

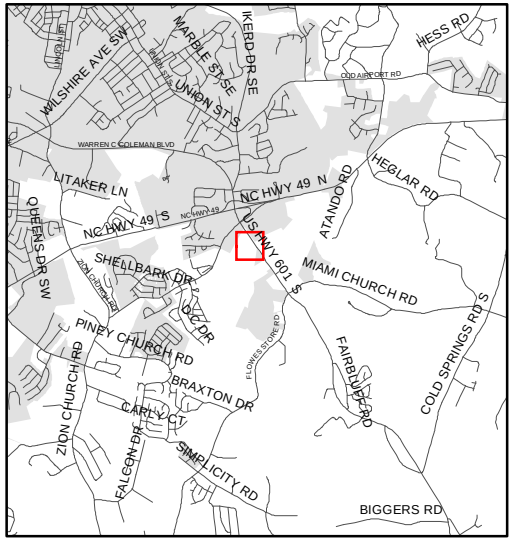
PROCEDURAL CONSIDERATIONS

This particular case is a rezoning to a parallel conditional district, which under the CDO, is "legislative" in nature. Legislative hearings DO NOT require the swearing or affirming of witnesses prior to testimony at the public hearing.

Z-21-15
AERIAL

Administrative zoning map amendment for recently annexed property from Cabarrus County GC (General Commercial) to City of Concord C-2 (Commercial General)

3550 US Hwy 601 S
PIN: 5539-82-4636



Source: City of Concord
Planning Department

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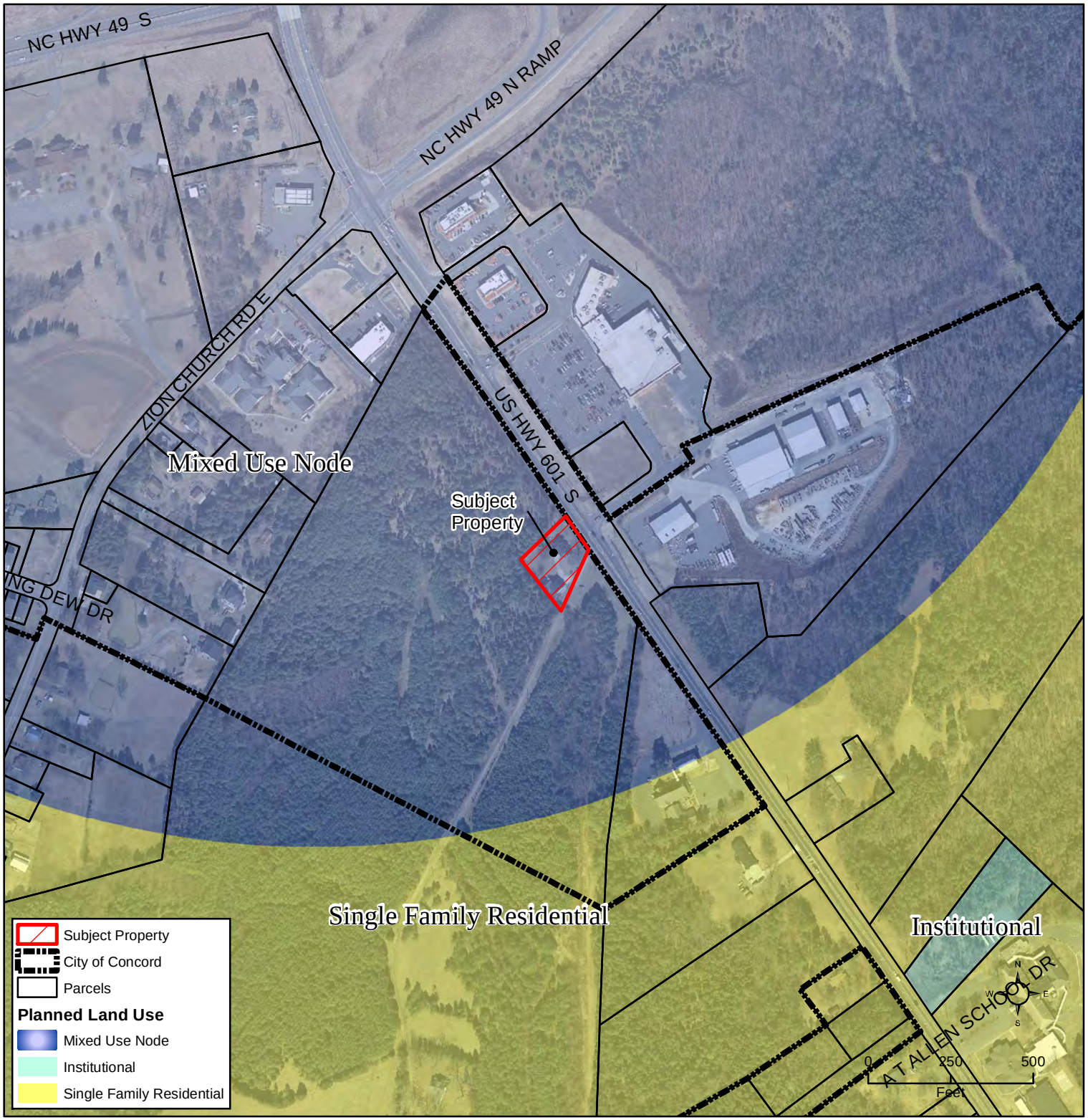
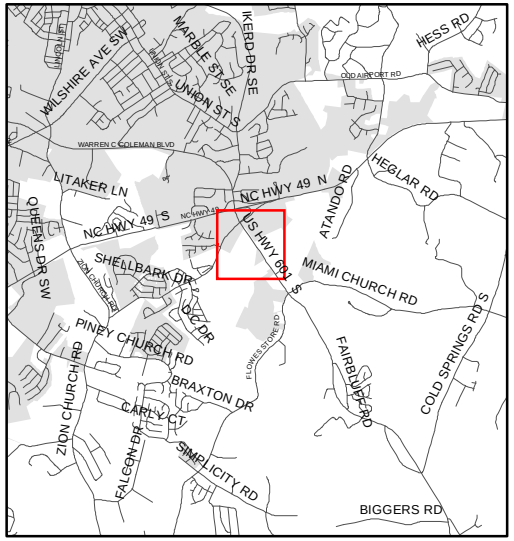
Z-21-15
LAND USE PLAN

Administrative zoning map amendment for recently annexed property from Cabarrus County GC (General Commercial) to City of Concord C-2 (Commercial General)

3550 US Hwy 601 S
PIN: 5539-82-4636





Source: City of Concord
Planning Department

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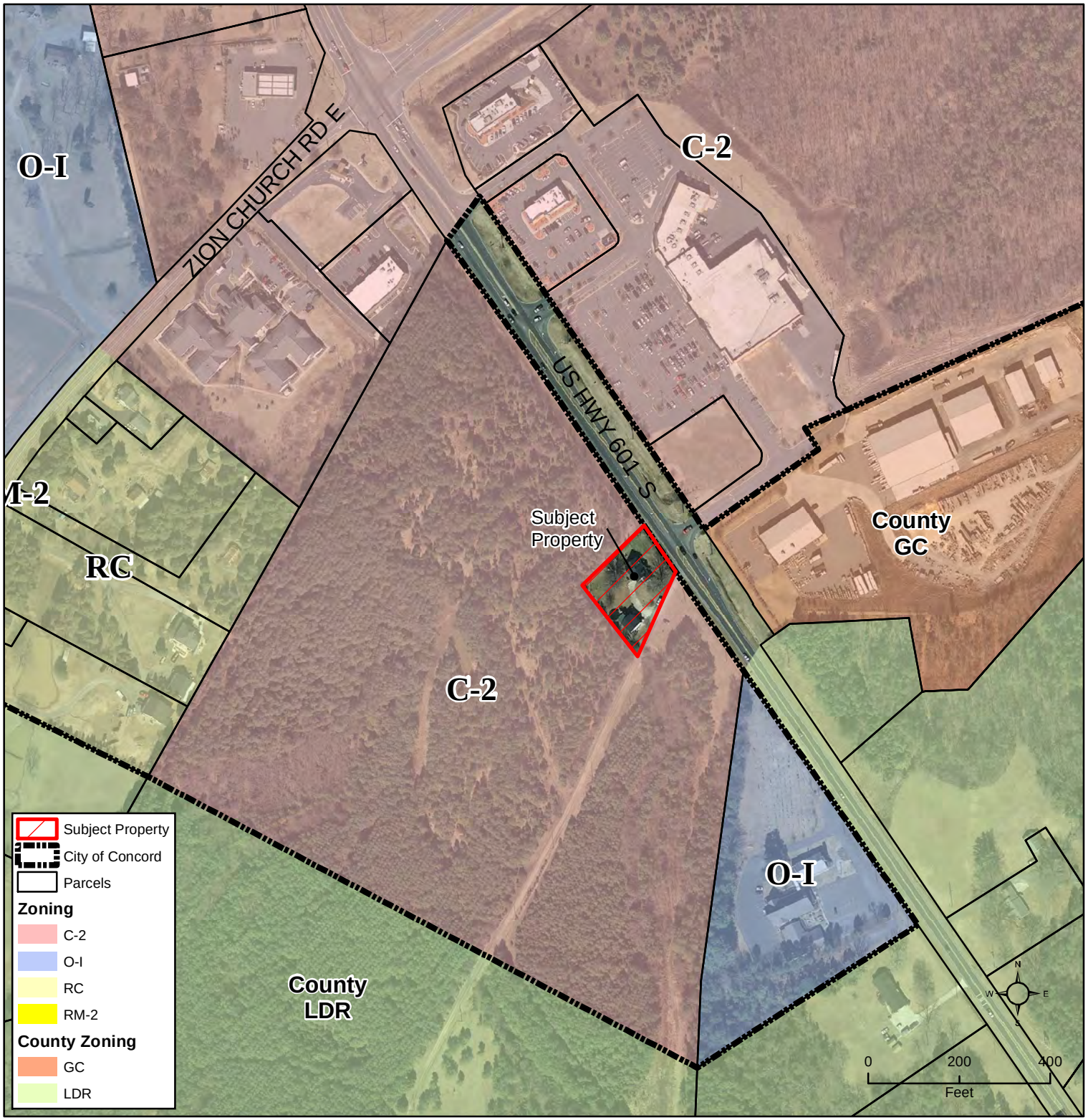
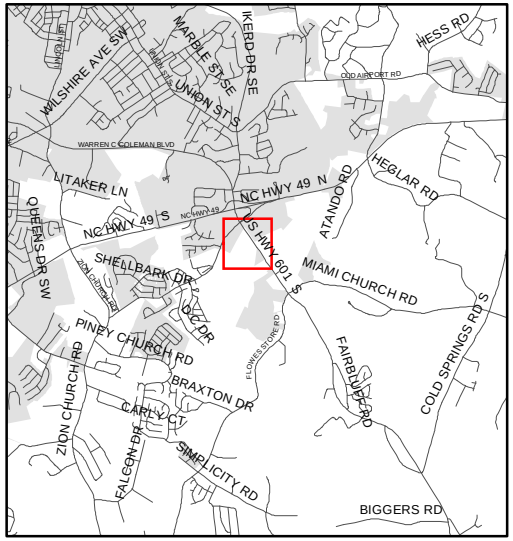
Z-21-15
ZONING MAP

Administrative zoning map amendment for recently annexed property from Cabarrus County GC (General Commercial) to City of Concord C-2 (Commercial General)

3550 US Hwy 601 S
PIN: 5539-82-4636





Source: City of Concord
Planning Department

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Staff Report
Planning and Zoning Commission

DATE:	August 18, 2015
CASE #:	Z-22-15
DESCRIPTION:	Zoning Map Amendment Cabarrus County GI-SU (General Industrial Special Use) to City of Concord (I-1CD) Light Industrial Conditional District
APPLICANT/OWNERS:	Administrative – RiverOaks Land LLC c/o Beacon Partners
LOCATION:	770 Derita Rd
PIN#s:	PIN: 4680-86-9222
AREA:	.88 +/- acres
ZONING:	Cabarrus County GI-SU (General Industrial Special Use)
PREPARED BY:	Kevin E. Ashley, AICP Planning and Development Manager

BACKGROUND

The subject property consists of approximately 0.88 acres on the west side of Derita Road.

HISTORY

The property was annexed on a voluntary basis with an effective date of July 9, 2015. The developer seeks to assemble the subject property into the overall development plan for the River Oaks Industrial Park. The parcel was previously owned by Edna and Edwin Starnes, but was acquired by RiverOaks Land LLC (Beacon Partners) on July 9th. According to Cabarrus County property appraiser records, a single family home is situated on the property. The owner will demolish this home and assemble the parcel into the site.

The surrounding River Oaks development was zoned to Conditional District Heavy Industrial (CDI-2) in April 2014 for the development of 1.468 million square feet of warehousing and industrial uses. If the Commission recalls, the owners petitioned for Light Industrial Conditional District (I-1CD) in May of 2015 (Case Z(CD)-12-15) as they determined that light industrial zoning would be more conducive to their overall development plans. Staff indicated at both previous hearings that this subject property was not included in the approval as it was not yet annexed.

At this point, with the property effectively in the City limits, it is appropriate to apply the I-1CD zoning to the subject property in order to match the approved zoning on the rest of the River Oaks

development. The owner has specifically requested that this parcel be rezoned to I-1CD with the conditions present on the rest of the River Oaks property.

SUMMARY OF REQUEST

At this point, with the property effectively in the City limits, it is appropriate to apply the I-1CD zoning to the subject property in order to match the approved zoning on the rest of the River Oaks development. The owner has specifically requested that this parcel be rezoned to I-1CD with the conditions present on the rest of the River Oaks property. Following are the approved conditions for the adjacent property, into which this parcel will be assembled:

1. The following uses shall not be permissible: "asphalt and concrete plants, foundries/iron, steel mills; railroad stations and storage yard; sawmill; slaughterhouse/meat packaging; truck stop/truck terminal; communications tower- standalone cellular tower; salvage yard; airport, commercial; airstrip; coliseum and stadium; extraction of earth products; landfill, demolition – more than one acre; landfill/sanitary; race tracks/animal and mechanical; and tire recapping of more than 30,000 square feet of floor area."
2. The specific use "truck terminal", referenced above as being prohibited, shall be defined as follows: "a facility which accommodates the trucking industry by providing fueling stations, weigh stations, restaurants, convenience foods, and occasionally, overnight rooming accommodations. These facilities are typically located near state, federal or interstate highways."
3. Development shall be limited to a maximum of 1,468,520 square feet of industrial uses as illustrated on the site plan dated 3/14/14 which is included as part of this staff report.
4. Buffers adjacent to the residentially zoned Beach Bluff neighborhood to the west shall be installed in accordance with the site plan and the following plans which are included as part of this staff report:
    i. Schematic Site Sections, Page 3 dated 4/10/14;
    ii. Proposed A-A1 and B-B1, dated 4/10/14; and
    iii. Proposed C-C1 and D-D1, dated 4/10/14
5. The applicant shall provide screening adjacent to the Beech Bluff neighborhood in accordance with the document entitled "Beech Bluff Proposed Setback and Site Compromise" dated April 10, 2014, which is included as part of the staff report.
6. Fencing shall be installed around two (2) Water Quality BMPs (stormwater ponds) on site.
7. Technical site plan submission for all development on the site shall include architectural plans in order to demonstrate compliance with Section 7.10 of the CDO.

A site plan with the subject property highlighted is included as part of the staff report.

Land to the north, south and west is zoned I-1CD and is part of the River Oaks project, and is currently undergoing site development. Land to the east is zoned I-1 Light Industrial and is developed industrially.

Existing Zoning and Land Uses					
Current Zoning of Subject Property	**Zoning Within 500 Feet**		**Land Uses(s) of Subject Property**	**Land Uses within 500 Feet**	
Cabarrus County GI-SU	**North**	I-1CD	Single family residential	**North**	Industrial (under development)
	South	I-1CD		**South**	Industrial (under development)
	East	I-1		**East**	Industrial
	West	I-1CD		**West**	Industrial (under development)

COMPLIANCE WITH 2015 LAND USE PLAN

The 2015 Land Use Plan (LUP) designates the subject property as "industrial." I-1 zoning (including conditional district) is specifically listed as being consistent with the industrial land use designation. The proposed rezoning is clearly consistent with the LUP.

SUGGESTED STATEMENT OF CONSISTENCY

- The subject property is approximately 0.88 acres, and was annexed on a voluntary basis with an effective date of July 9, 2015.

- The 2015 Land Use Plan designates the subject property as "industrial."

- The proposed zoning amendment is consistent with the 2015 Land Use Plan (LUP) because the proposed zoning of I-1CD is specifically listed as a consistent district within the "industrial" land use designation, and the proposed Light Industrial district is more indicative of the permitted uses than the County's Heavy Industrial. Furthermore the petition will zone the subject property to the rest of the property in the River Oaks ownership.

- The zoning amendment is reasonable and in the public interest because the petition "downzones" the property from Heavy to Light Industrial and is consistent with the LUP and the approved site plan for the rest of the River Oaks ownership.

SUGGESTED RECOMMENDATION AND CONDITIONS

The staff finds the request consistent with the 2015 Land Use Plan and the requirements of the Concord Development Ordinance. The staff has no objections to the petition. Because this petition is a parallel conditional district request, the Commission, should they decide to approve the request, may, according to Section 3.2.8.E of the CDO, suggest "**reasonable additional conditions or augment those already provided with the petition, but only those conditions mutually agreed upon by the petitioner and the Commission or Council may be incorporated into the approval. Any such condition should relate to the relationship of the proposed use to surrounding property, proposed support facilities such as parking areas and driveways, pedestrian and vehicular circulation systems, screening and buffer areas, the timing of development, street and right-of-way improvements, water and sewer**

improvements, storm water drainage, the provision of open space and other matters that the Commission or Council may find appropriate."

The petitioner has consented to the following conditions (which are those in effect for the adjacent property (as approved with Case Z (CD)-12-15) into which this parcel will be assembled):

1. The following uses shall not be permissible: "asphalt and concrete plants, foundries/iron, steel mills; railroad stations and storage yard; sawmill; slaughterhouse/meat packaging; truck stop/truck terminal; communications tower- standalone cellular tower; salvage yard; airport, commercial; airstrip; coliseum and stadium; extraction of earth products; landfill, demolition – more than one acre; landfill/sanitary; race tracks/animal and mechanical; and tire recapping of more than 30,000 square feet of floor area."
2. The specific use "truck terminal", referenced above as being prohibited, shall be defined as follows: "a facility which accommodates the trucking industry by providing fueling stations, weigh stations, restaurants, convenience foods, and occasionally, overnight rooming accommodations. These facilities are typically located near state, federal or interstate highways."
3. Development shall be limited to a maximum of 1,468,520 square feet of industrial uses as illustrated on the site plan dated 3/14/14 which is included as part of this staff report.
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6. Fencing shall be installed around two (2) Water Quality BMPs (stormwater ponds) on site.
7. Technical site plan submission for all development on the site shall include architectural plans in order to demonstrate compliance with Section 7.10 of the CDO.

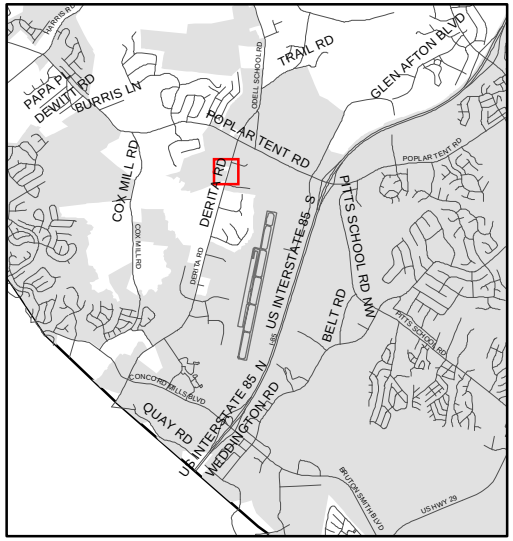
PROCEDURAL CONSIDERATIONS

This particular case is a rezoning to a parallel conditional district, which under the CDO, is "legislative" in nature. Legislative hearings DO NOT require the swearing or affirming of witnesses prior to testimony at the public hearing.

Z-22-15
AERIAL

Administrative zoning map amendment for recently annexed property from Cabarrus County GI-SU (General Industrial Special Use) to City of Concord Light Industrial – Conditional District (I-1CD)

770 Derita Rd
PIN: 4680-86-9222



Source: City of Concord
Planning Department

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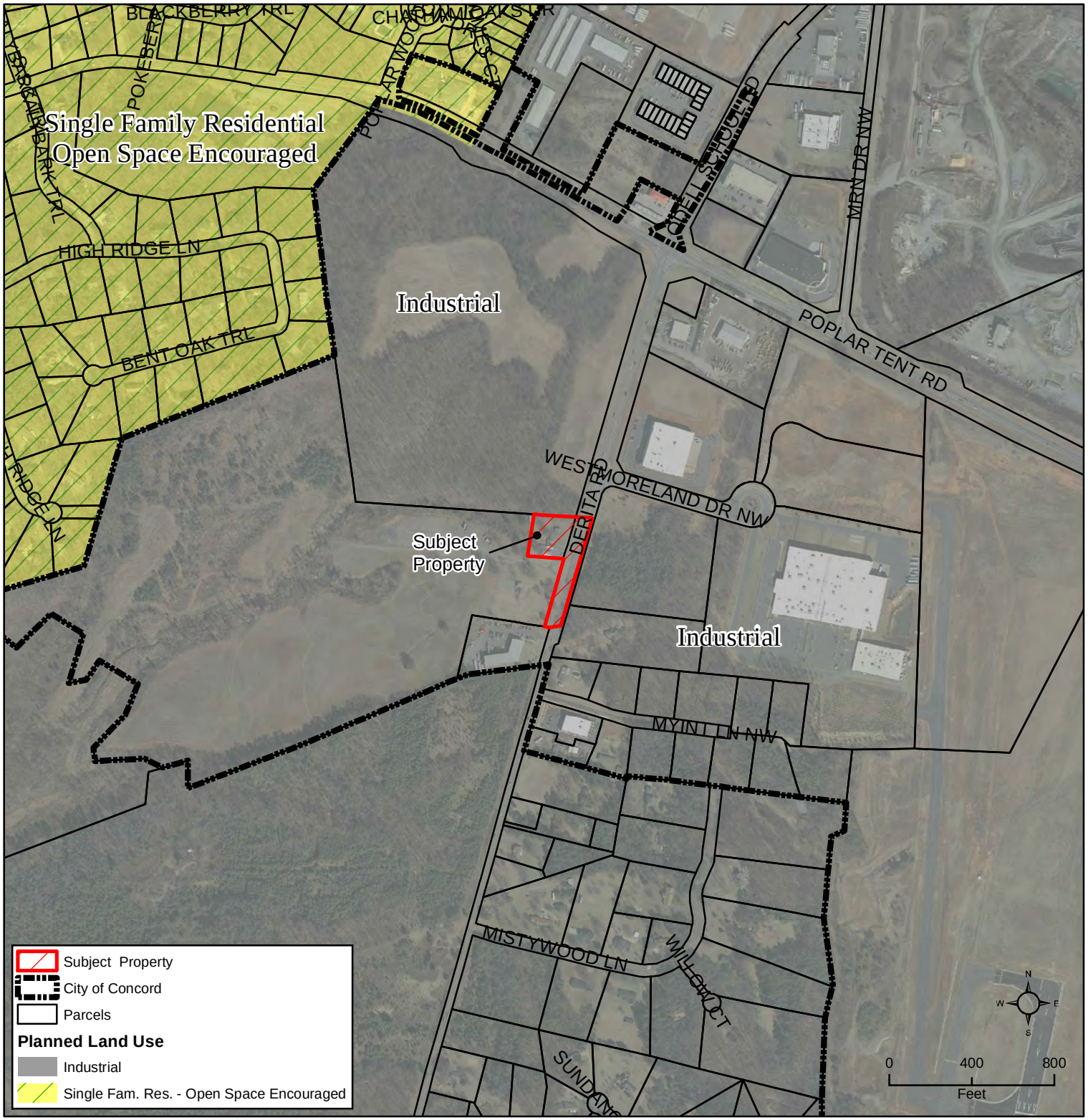
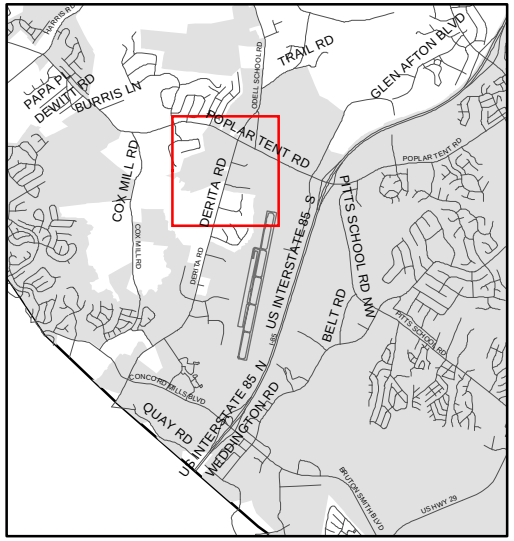
Z-22-15
LAND USE PLAN

Administrative zoning map amendment for recently annexed property from Cabarrus County GI-SU (General Industrial Special Use) to City of Concord Light Industrial – Conditional District (I-1CD)

770 Derita Rd
PIN: 4680-86-9222





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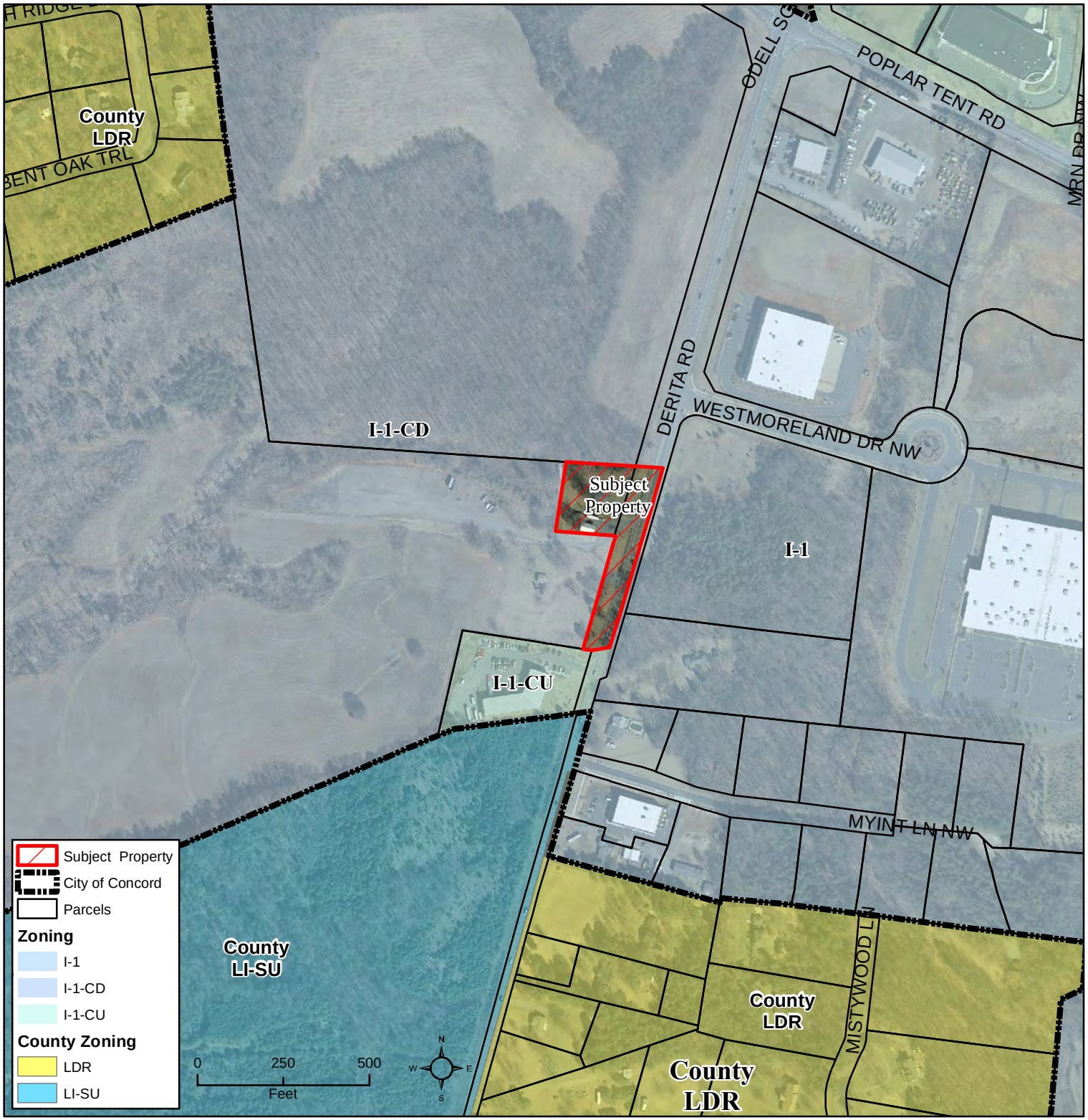
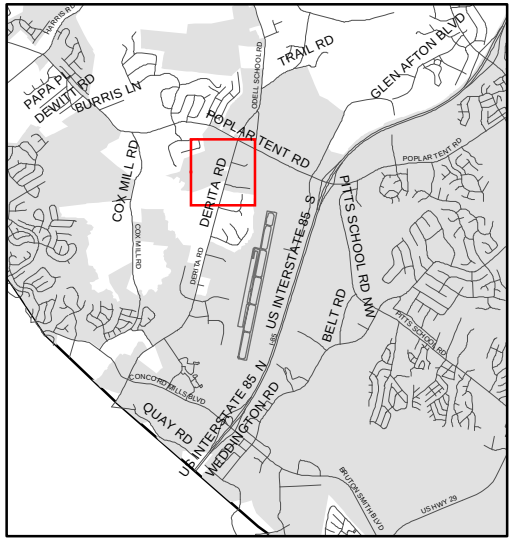


Z-22-15
ZONING MAP

Administrative zoning map amendment for recently annexed property from Cabarrus County GI-SU (General Industrial Special Use) to City of Concord Light Industrial – Conditional District (I-1CD)

770 Derita Rd
PIN: 4680-86-9222



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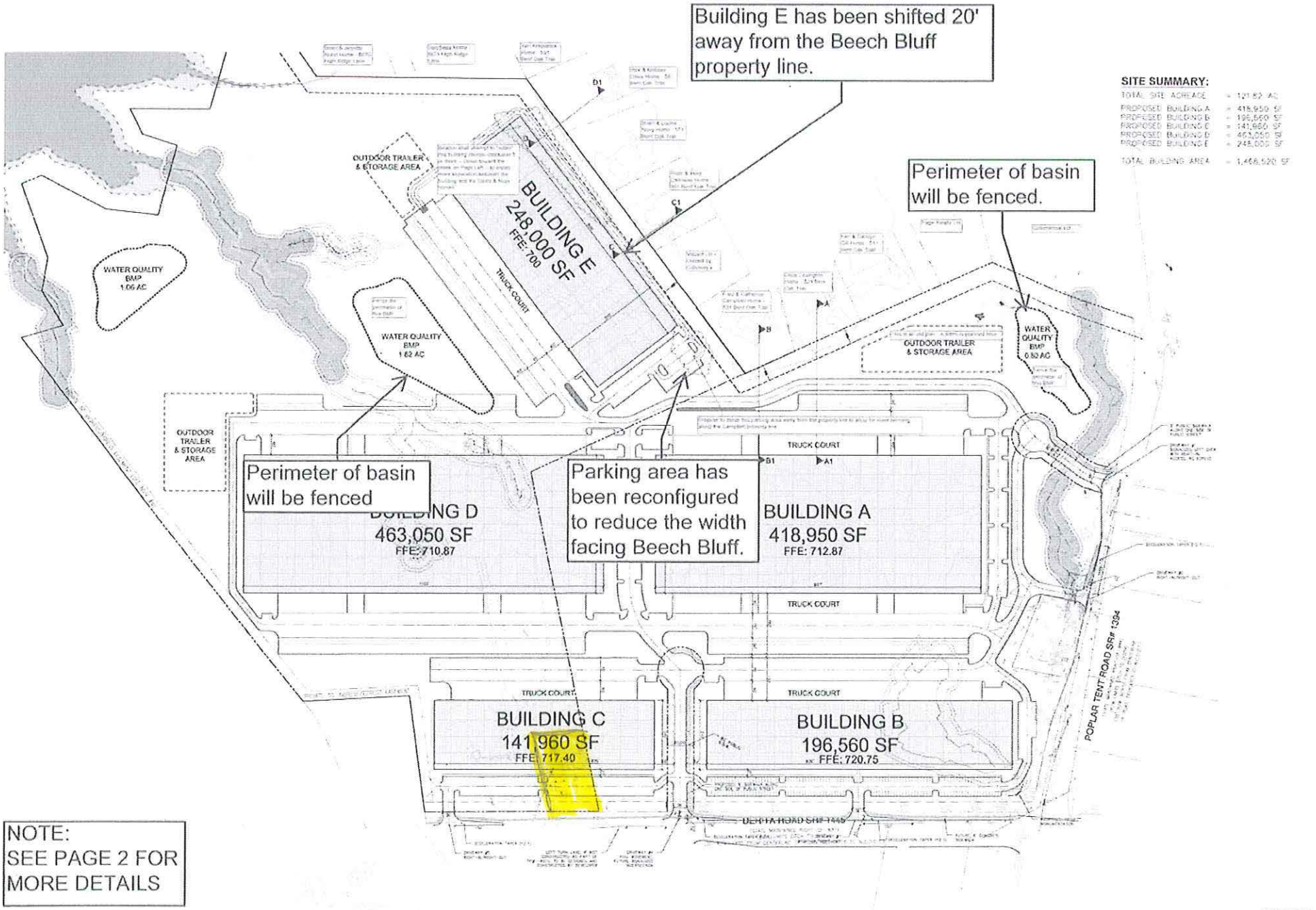


NOTE:
SEE PAGE 2 FOR MORE DETAILS

ColeJenest & Stone

RIVEROAKS CORPORATE CENTER

BEACON PARTNERS

PAGE 1

SCHEMATIC SITE PLAN

Project No. 4066 Issued 3.14.14

Staff Report
Planning and Zoning Commission

DATE:	August 18, 2015
CASE #:	Z-23-15
DESCRIPTION:	Zoning Map Amendment for Cabarrus County LI (Light Industrial) to City of Concord I-1 (Light Industrial)
APPLICANT/OWNERS:	Administrative – William and Debra Valentine
LOCATION:	4950 Stough Rd
PIN#s:	5518-95-4109
AREA:	2.69 +/- acres
ZONING:	Cabarrus County LI (Light Industrial)
PREPARED BY:	Starla Rogers, Sr. Planner

BACKGROUND
This property consists of approximately 2.69 acres on the west side of Stough Road, just north of NC Highway 49 and is currently vacant.

HISTORY
The property was effectively annexed into the City of Concord on June 9th, 2015.

SUMMARY OF REQUEST
As the property is now within the City limits, City zoning must be applied to the property. The property has approximately 273 feet of frontage on Stough Rd.

The property is currently undergoing technical site plan review for an industrial structure (which was initiated in the County's zoning jurisdiction).

Cabarrus County LI (Light Industrial) zoning is on the site and surrounding the subject property on the south, west, and northwest while properties to the north are zoned Cabarrus County GI (General Industrial). Properties to the east are zoned Cabarrus County GC-SU (General Commercial Special Use) and City of Concord C-2 (General Commercial). Cabarrus County LI zoning is the functional equivalent of Concord's I-1 district.

Properties to the north, east, and northeast are developed as either industrial, single-family residential, commercial storage, or vacant. One property to the south is developed a heavy

automotive repair facility and all other properties in the near vicinity both south and west are vacant.

The entirety of the property and all other parcels within a minimum of 650ft are also a part of the Industrial category of the 2015 Land Use Plan. The Plan specifically states that I-1 is a consistent district within the industrial classification.

Existing Zoning and Land Uses					
Current Zoning of Subject Property	**Zoning Within 500 Feet**		**Land Uses(s) of Subject Property**	**Land Uses within 500 Feet**	
County Light Industrial (LI)	**North**	LI and GI	Single-Family Residential	**North**	Industrial and single-family
	South	LI		**South**	Vacant and Heavy auto repair
	East	GI, GC-SU, and C-2		**East**	Vacant, storage, and industrial
	West	LI		**West**	Vacant

COMPLIANCE WITH 2015 LAND USE PLAN

The 2015 Land Use Plan (LUP) designates the subject property as "Industrial." The City of Concord's I-1 (Light Industrial) zoning classification is consistent with the industrial Land Use category. Additionally, I-1 is the most compatible City zoning classification to the existing Cabarrus County zoning classification of LI.

SUGGESTED STATEMENT OF CONSISTENCY

The subject property is approximately 2.69 acres and is zoned Cabarrus County Light Industrial (LI).

- The proposed zoning amendment is consistent with the 2015 Land Use Plan (LUP) because I-1 is considered a corresponding zoning classification to the Industrial land use category and I-1 is the most compatible City zoning classification to the existing County zoning classification of LI.

- The zoning amendment is reasonable and in the public interest because it brings the last parcel on the southwest side of Stough Road into the City limits and creates consistency of zoning on that quadrant.

SUGGESTED RECOMMENDATION AND CONDITIONS

The staff finds the request consistent with the 2015 Land Use Plan and the requirements of the Concord Development Ordinance and has no objections to the request. Because this petition is conventional district request, sworn testimony and findings of fact are not required, and the Commission may not impose conditions on the approval.

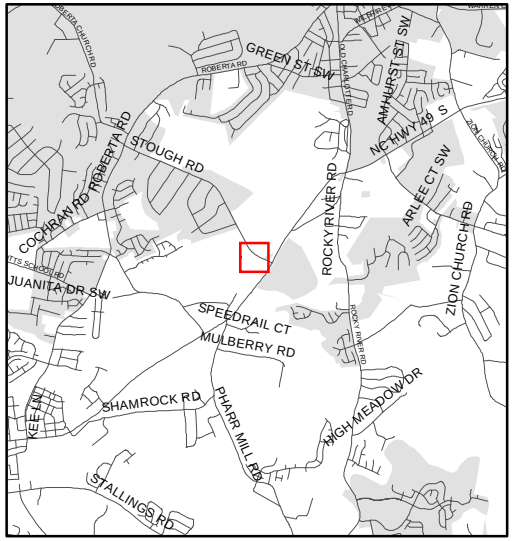
PROCEDURAL CONSIDERATIONS

This particular case is a rezoning to a parallel conditional district, which under the CDO, is "legislative" in nature. Legislative hearings DO NOT require the swearing or affirming of witnesses prior to testimony at the public hearing.

Z-23-15
AERIAL

Administrative zoning map amendment for recently annexed property from Cabarrus County LI (Limited Industrial) to City of Concord Light Industrial (I-1)

4950 Stough Rd
PIN: 5518-95-4109



Source: City of Concord
Planning Department

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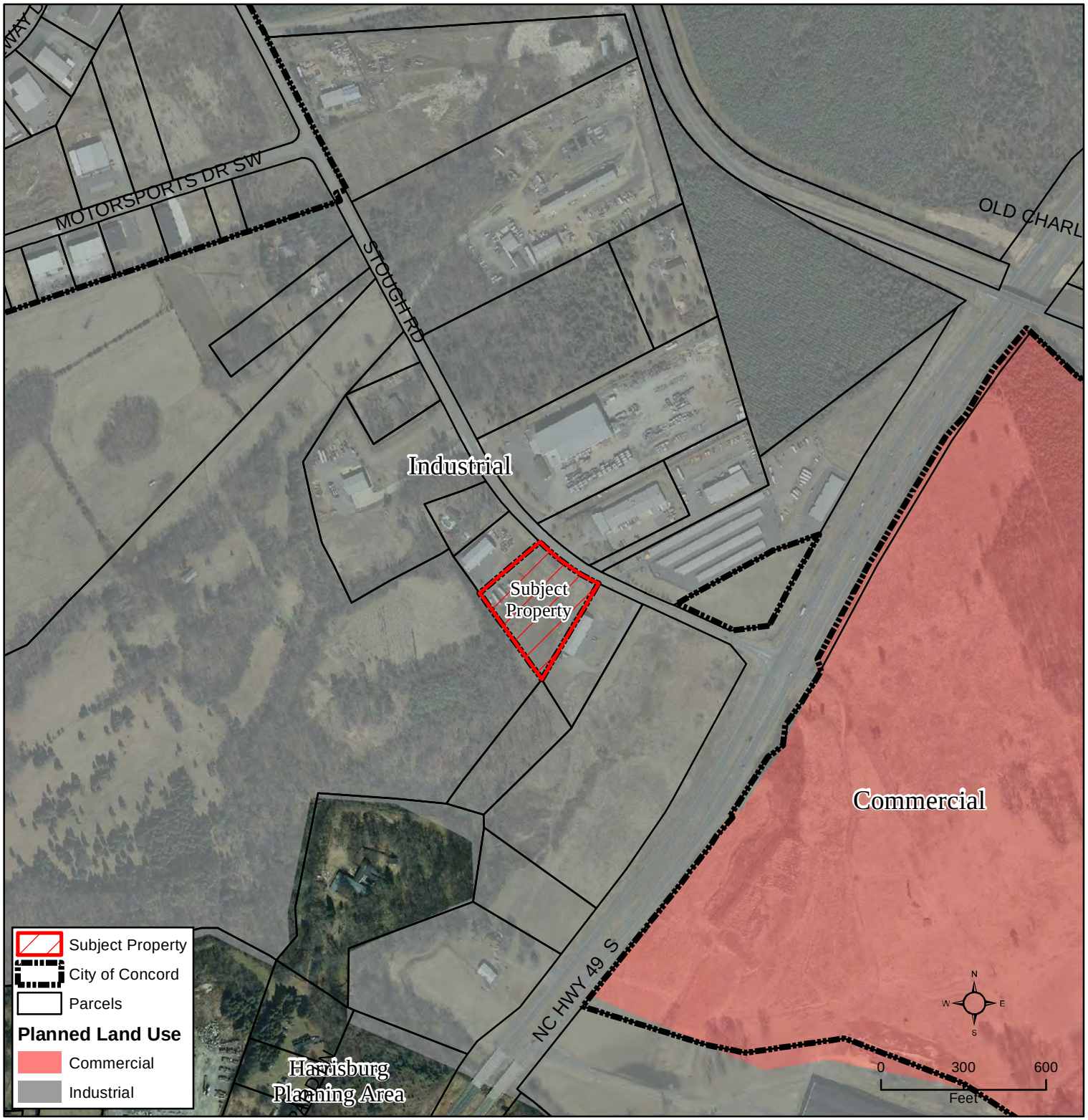
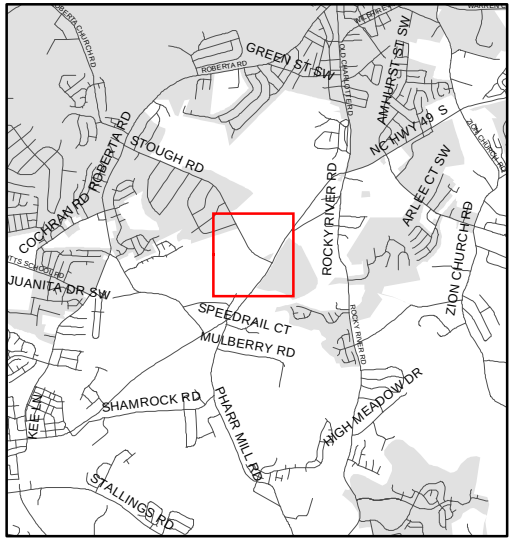
Z-23-15
LAND USE PLAN

Administrative zoning map amendment for recently annexed property from Cabarrus County LI (Limited Industrial) to City of Concord Light Industrial (I-1)

4950 Stough Rd
PIN: 5518-95-4109





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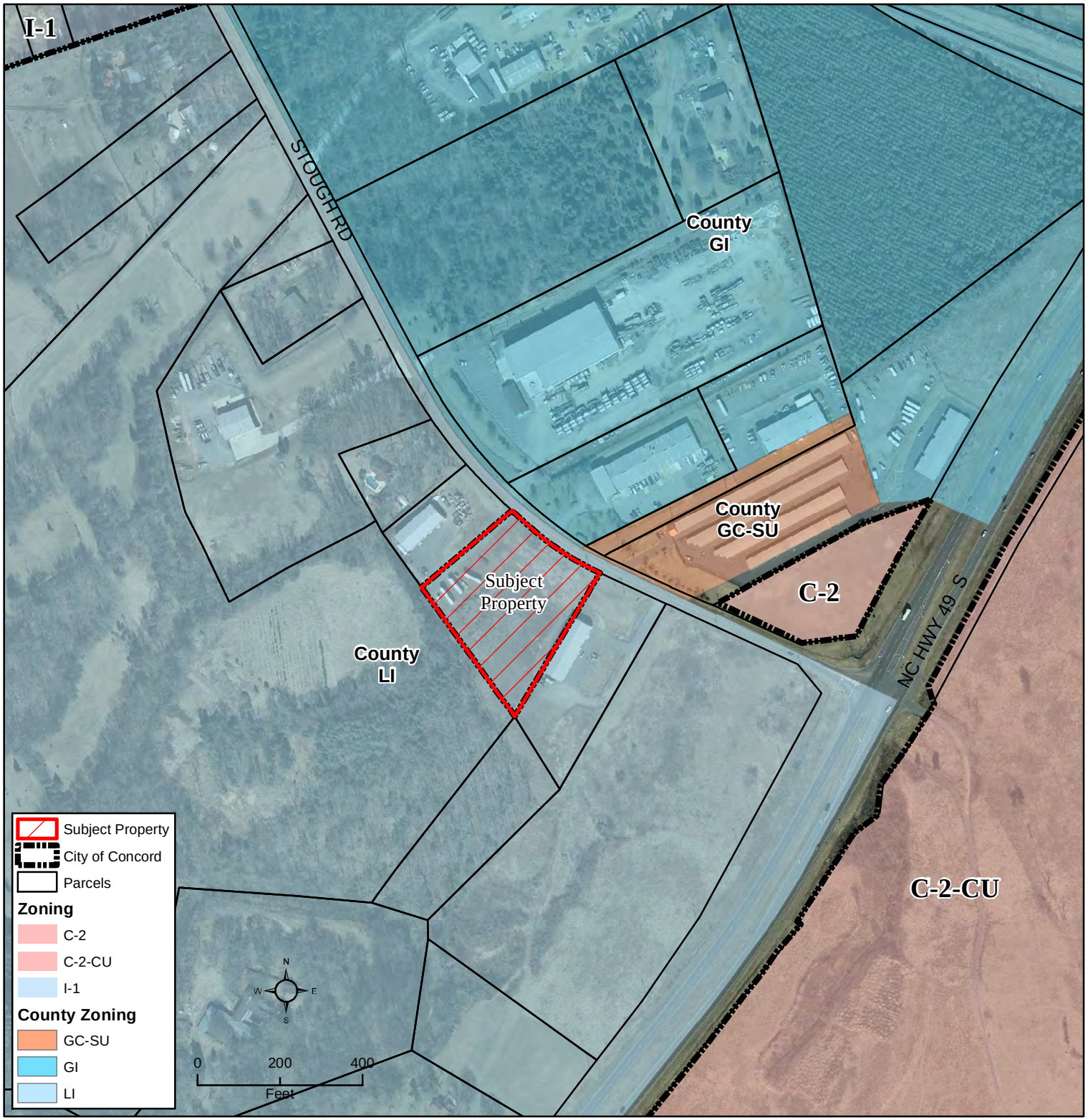
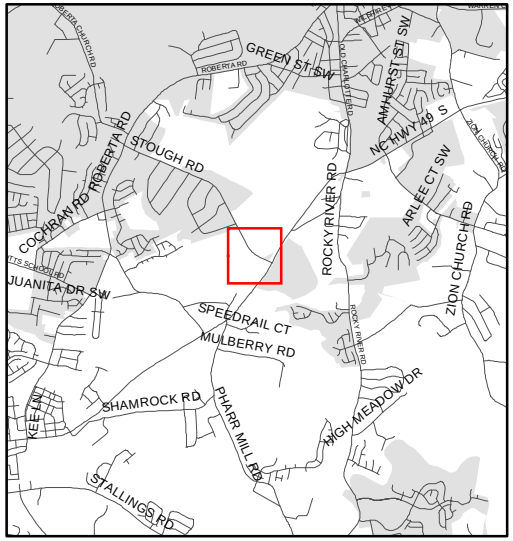
Z-23-15
ZONING MAP

Administrative zoning map amendment for recently annexed property from Cabarrus County LI (Limited Industrial) to City of Concord Light Industrial (I-1)

4950 Stough Rd
PIN: 5518-95-4109





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DATE:	August 18, 2015
SUBJECT:	Preliminary Plat for Lantana
CASE NUMBER:	# S-04-15
OWNER/DEVELOPER:	Shea Homes
LOCATION:	Ellenwood Road
PARCEL IDENTIFICATION NUMBER:	4670-54-9617, 4670-64-3275, 4670-63-4959, 4670-64-6164 and 4670-63-6820
AREA:	30.59 Acres
ZONING:	CD-RV, Conditional District Residential Village
REPORT PREPARD BY:	Boyd V. Stanley AICP, Development Review Administrator

This proposed subdivision lies on the south side of Ellenwood Road near its intersection with Harris Road. This property was the subject of a conditional district zoning request at the May 19, 2015 Planning and Zoning Commission Meeting. The Commission approved the request (and associated rezoning site plan) for the development of 88 lots on the subject property. The submitted preliminary plat is for the larger portion of a single-family residential development that extends into Mecklenburg County and the City of Charlotte.

The project includes two planned connections with one being in the City of Concord onto Ellenwood Drive and the other in the City of Charlotte onto Northridge Drive.

The 2015 Land Use Plan designates the subject property as "residential."

All respective City departments have reviewed the plat, and the proposed development meets the standards of the Concord Development Ordinance.

SUGGESTED STATEMENT OF CONSISTENCY (Not required, but offered as information)

The proposed preliminary plat is consistent with the standards outlined in the Concord Development Ordinance and 2015 Land Use Plan. The City of Concord Land Use Plan recommends residential uses for the subject property.

SUGGESTED RECOMMENDATION AND CONDITIONS

The staff recommends approval of the revised subdivision plat. If the Commission concurs and chooses to approve the proposed preliminary plat, approval should be subject to the following conditions:

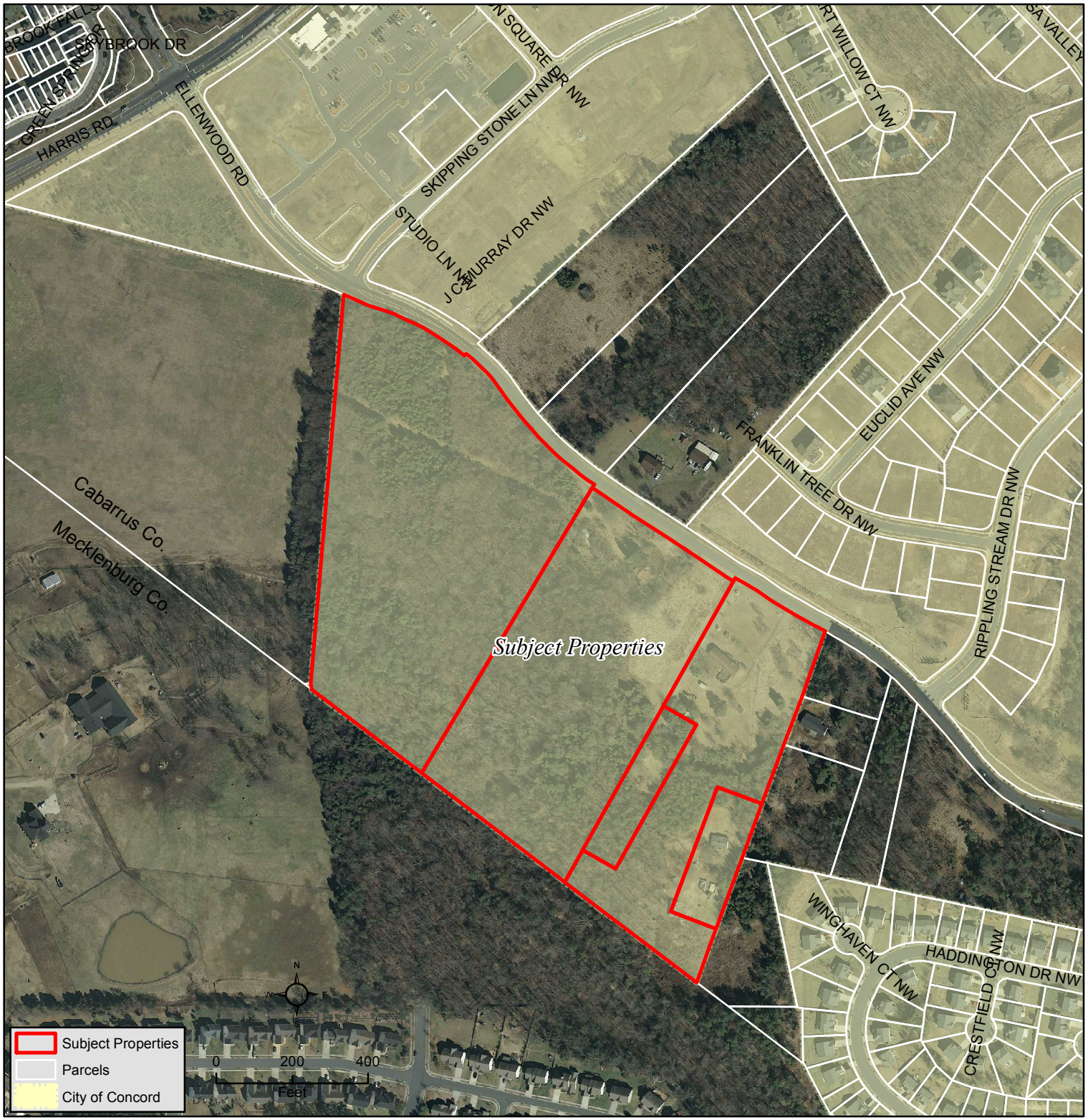
- The applicant must submit a mylar copy of the approved preliminary plat, after addressing any additional comments added by the Commission.
- The developer shall comply with NCDOT and City of Concord requirements for street connections, as well as NC Fire Code and applicable stormwater treatment requirements.

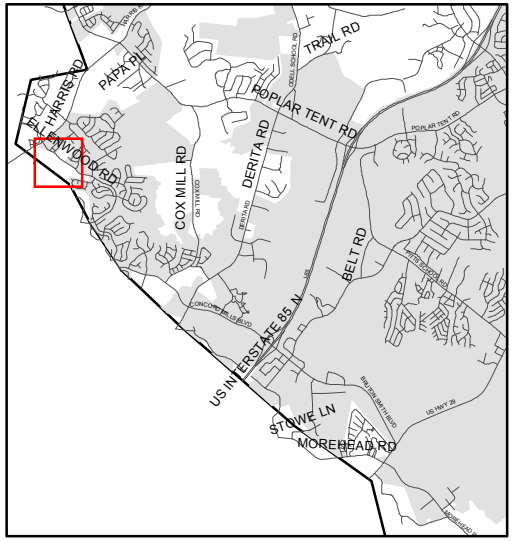
S-04-15
AERIAL

Preliminary Plat

Lantana

Ellenwood Rd
PINs: 4670-63-6820, 54-9617, 63-4959, 64-6164, 3275





Source: City of Concord
Planning Department

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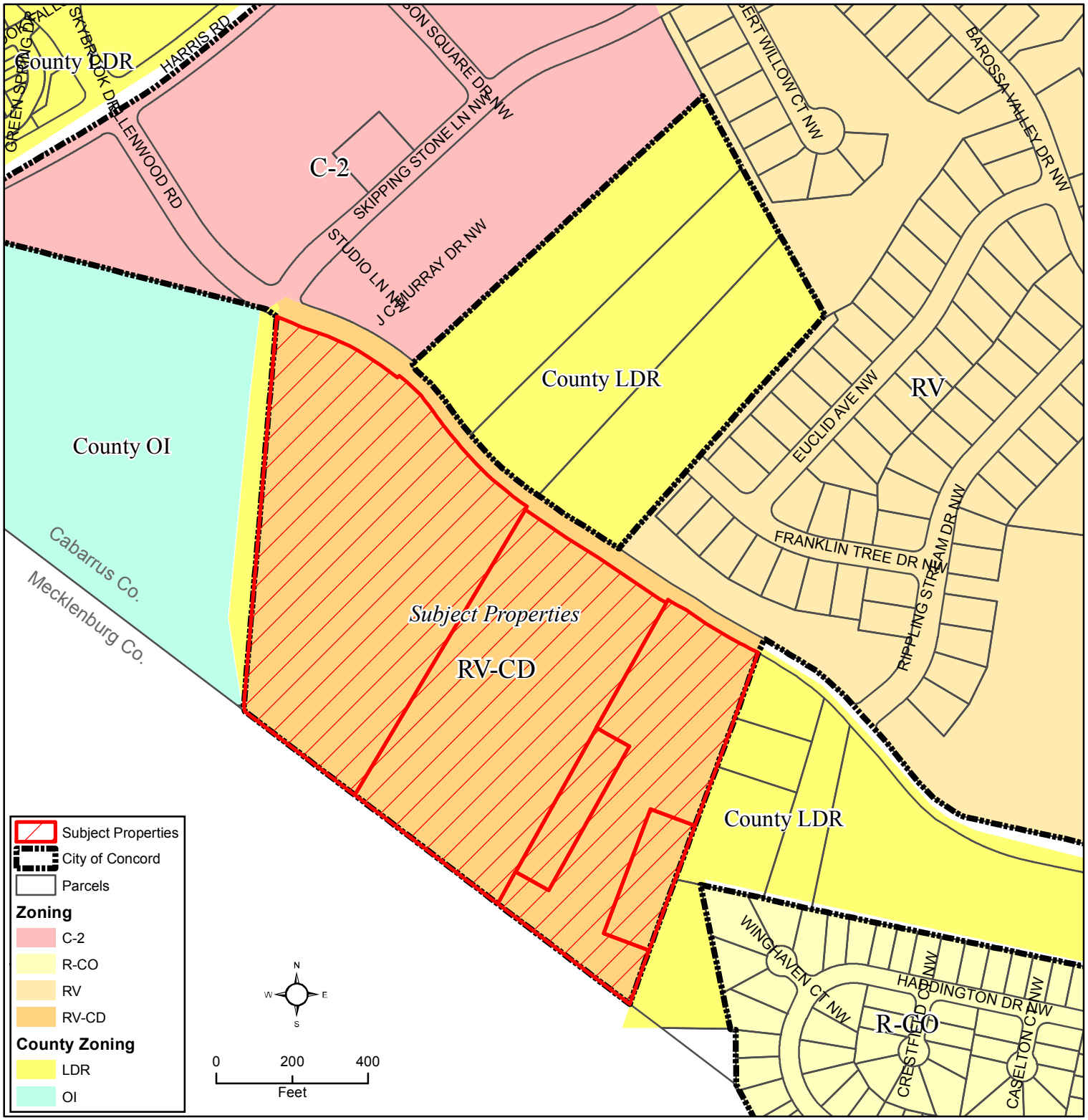
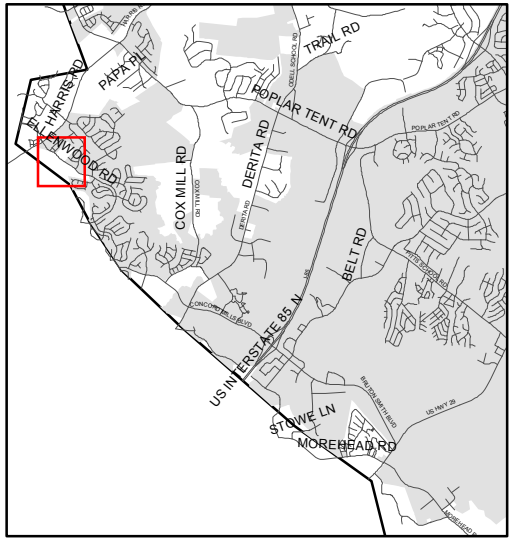
S-04-15
ZONING MAP

Preliminary Plat

Lantana

Ellenwood Rd
PINs: 4670-63-6820, 54-9617, 63-4959, 64-6164, 3275





Concord
NORTH CAROLINA

Source: City of Concord
Planning Department

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Concord
NORTH CAROLINA
High Performance Living

Application for
Preliminary Plat Approval for Major Subdivision

Application for Preliminary Plat Approval – Major Subdivision

(Please type or print)

1. Name of subdivision: Lantana
2. Name, address, telephone number, and fax number of owner(s)/developer(s):
   Shea Homes, 8008 Corporate Center Dr. Suite 300, Charlotte, NC 28226
3. Name, address, telephone number, and fax number of surveyor/engineer:
   American Engineering, 8008 Corporate Center Dr. Suite 110, Charlotte, NC 28226
4. Name, address and e-mail address of person to whom comments should be sent:
   Barry M. Fay, bfay@american-ea.com
5. Telephone number of person to whom comments should be sent: (704) 375-2438
   Fax: (704) 332-9361
6. Location of subdivision: 10625, 10629, 10633, 10727 Ellenwood Road, Concord, NC 28269
7. Cabarrus County P.I.N.#: 46705496170000,46706432750000,46706349590000, 46706461640000, & 46706368200000
8. Current zoning classification: RV
9. Total acres: 30.59 AC Total lots: 88 lots

REQUIRED ATTACHMENTS/SUBMITTALS

1. A fee of $100.00 for land less than 2 acres, $200.00 2-10 acres, $300.00 10-25acres, $ 400.00 for more than 25 acres shall accompany the preliminary plat.
2. Legal deed description of the property.
3. Six (6) **FOLDED** black/blue line copies of the plat are required at the time of submission.
4. One (1) Mylar should be submitted **after** approval has been granted by the Planning and Zoning Commission and any conditions placed on the plat by the Commission have been met.
5. Completed "Street Name Review and Confirmation" sheet.

7/1/15
Date

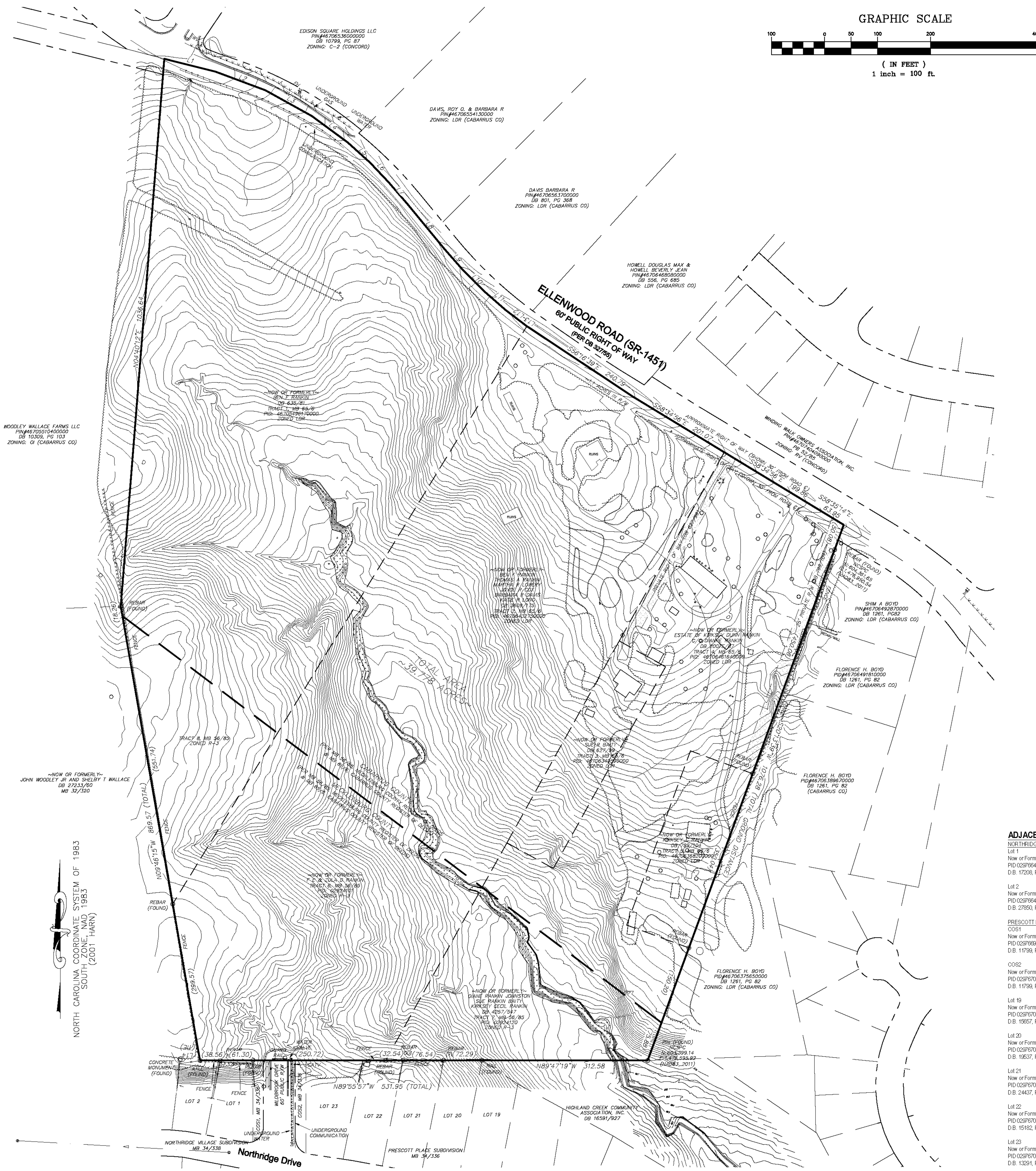
Signature of Owner/Agent

NOTE: *By affixing his or her signature hereto, the sub divider acknowledges understanding of and agreement to comply with all provisions of the Concord Subdivision Regulations which include, but are not limited to, the requirement to pay costs of construction inspections of improvements to be owned and maintained by the City of Concord as conditions precedent to approval of the final plat for recording.*

Staff Use Only:

Fee: _____ Received by: _____ Date: _____

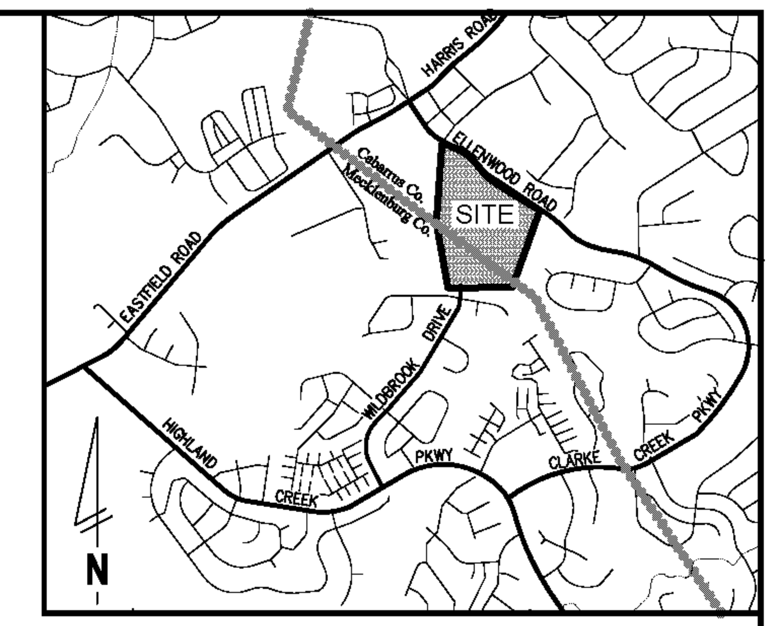
Planning & Neighborhood Development
66 Union St S • P. O. Box 308 • Concord, NC 28025
Phone (704) 920-5152 • Fax (704) 786-1212 • www.concordnc.gov



LEGEND:

EIP = EXISTING IRON PIN
OIP = OLD IRON PIPE
SIP = SET IRON PIN
PWR = POWER PAD
PM = POWER METER
GM = GAS METER
AC = AIR CONDITIONING
TELE = TELEPHONE PEDESTAL
CATV = CABLE TELEVISION
WM = WATER METER
R/W = RIGHT OF WAY
PP = POWER POLE
LP = LIGHT POLE
CO = SEWER CLEAN OUT
YI = YARD INLET
FES = FLARED END SECTION
CB = CATCH BASIN
SDE = STORM DRAINAGE EASEMENT
SSE = SANITARY SEWER EASEMENT
SDMH = STORM DRAIN MANHOLE
SSMH = SANITARY SEWER MANHOLE
BC = BACK OF CURB
OE = OVERHEAD ELECTRICITY
CP = COVERED PORCH

SIP SET IRON PIN
EIP EXISTING IRON PIN
CP CALCULATED POINT
GV GAS VALVE
WV WATER VALVE
MB MAIL BOX
WM WATER METER
FH FIRE HYDRANT
SSMH SANITARY SEWER MANHOLE
SDMH STORM DRAIN MANHOLE
LOCATED TREE/SHRUB
LP LIGHT POLE
TP TELECOMMUNICATION BOX
TP TELECOMMUNICATIONS PEDESTAL
PP POWER POLE
BFP BACK FLOW PREVENTOR
GW GUY WIRE
CB CATCH BASIN
DI DROP INLET
X FENCE
W UNDERGROUND WATER
UE UNDERGROUND ELECTRIC
OVERHEAD ELECTRIC
SANITARY SEWER PIPE
GAS UNDERGROUND GAS
T UNDERGROUND TELECOMMUNICATIONS
STORM DRAIN PIPE



NOTES

1. ANTICIPATED DATE OF FINAL PLATTING IS JUNE, 2016.
2. CITY OF CONCORD REQUIRES CONSTRUCTION PLANS TO BE APPROVED AND ALL INFRASTRUCTURE EXCEPT FINAL SURFACE COURSE OF ASPHALT, SIDEWALKS, STREET TREES AND STORMWATER BMP'S TO BE COMPLETED BEFORE RECORDING THE FINAL PLAT. ALL OTHER ITEMS NOT COMPLETED MUST HAVE A PERFORMANCE SECURITY AGREEMENT.
3. BOUNDARY INFORMATION TAKEN FROM MAP ENTITLED "AN ALTA SURVEY SHOWING PROPERTY ON ELLENWOOD ROAD (NEAR THE INTERSECTION OF SKIPPING STONE LANE) SURVEYED FOR: AMERICAN ENGINEERING TOTAL AREA: 39.778 ACRES CITY OF CHARLOTTE, MECKLENBURG COUNTY, NORTH CAROLINA" PREPARED BY CAROLINA SURVEYORS, INC.
4. THIS PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION X BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP (FIRM) NO. 3710467000K, WITH A DATE OF IDENTIFICATION OF 03/02/2009.
5. PER SECTION 18-175(e) OF CITY CODE AND SECTION 10.0 OF THE CITY POST CONSTRUCTION CONTROLS ADMINISTRATIVE MANUAL, ALL REQUIRED NATURAL AREAS AND/OR POST CONSTRUCTION CONTROL EASEMENTS (PCCEs) MUST BE RECORDED AT TIME OF PLATTING.
6. WETLANDS SHOWN PER "SKETCH - 11-23-14 SHEA HOMES, RANKIN PROPERTIES CABARRUS AND MECKLENBURG COUNTIES, NC" PREPARED BY WETLAND AND NATURAL RESOURCE CONSULTANTS.
7. PRIOR THE CONSTRUCTION OF THE 30TH HOUSE A SECOND ROAD CONNECTION MUST BE INSTALLED AND OPERATIONAL.
8. STREET MUST BE IN AND HYDRANTS INSTALLED OPERATIONAL AND APPROVED BEFORE VERTICAL CONSTRUCTION.
9. DEVELOPER MUST ENTER INTO A BMP MAINTENANCE AGREEMENT WITH THE CITY AND PROVIDE EASEMENTS FROM A PUBLIC ROAD TO AND AROUND THE MEASURES SUFFICIENT TO ALLOW ACCESS OF EQUIPMENT AND PERSONNEL TO MAINTAIN THE MEASURES IF NECESSARY. THE AGREEMENT REQUIRES THE OWNERS TO MAINTAIN AND IF IT IS NOT THEN THE CITY CAN AN THEN BILL FOR WORK PERFORMED. PERIODIC INSPECTIONS THROUGHOUT THE YEAR ARE REQUIRED WITH ANNUAL RECERTIFICATION BY A PROFESSIONAL ENGINEER. AGREEMENT IS DEVELOPED BY CITY ATTORNEY AND EASEMENTS MUST BE ACCEPTED BY CITY COUNCIL PRIOR TO ANY LOTS BEING RECORDED OR COC BEING ISSUED.

LINE TABLE

LINE	BEARING	LENGTH
L1	S75°48'59"E	100.00
L2	S69°20'59"E	100.00
L3	S60°52'59"E	100.00
L4	S53°30'37"E	84.55
L5	S47°49'39"E	56.71
L6	S43°06'49"E	50.41
L7	S40°46'01"E	53.88
L8	S39°17'38"E	110.60
L9	S41°16'26"E	53.76
L10	S44°52'08"E	55.88
L11	S48°43'45"E	54.54
L12	S52°32'56"E	48.27
L13	S56°16'39"E	1.27
L14	N88°57'51"W	37.68

ADJACENT PROPERTY OWNERS

NORTHRIDGE VILLAGE SUBDIVISION - Zoned R-9PUD

Lot 1
Now or Formerly Jose A Garcia & Alejandra Gomez
PID 02976649
D.B. 17208, Pg. 989

Lot 2
Now or Formerly Fallou Fay & Yaye Fatim Faye
PID 02976648
D.B. 27850, P.g 935

PRESCOTT PLACE SUBDIVISION - Zoned R-9PUD

COS1
Now or Formerly Association Inc Highland Creek Community
PID 02976692
D.B. 11799, Pg. 499

COS2
Now or Formerly Association Inc Highland Creek Community
PID 02976701
D.B. 11799, Pg. 499

Lot 19
Now or Formerly John Bishop
PID 02976706
D.B. 15657, Pg. 63

Lot 20
Now or Formerly David M. Owens & Tracy M. Owens
PID 02976705
D.B. 19537, Pg. 393

Lot 21
Now or Formerly Jeffrey Goldenberg
PID 02976704
D.B. 24437, Pg. 785

Lot 22
Now or Formerly Brian J. Ramold & Wendy K. Ramold
PID 02976703
D.B. 15182, Pg. 635

Lot 23
Now or Formerly Josepth A. Papillion, Jr., & Stephanie S. Papillion
PID 02976702
D.B. 13291, Pg. 848

LEGAL DESCRIPTIONS

TRACT 1:
BEING ALL THAT CERTAIN TRACT OF LAND LOCATED IN CABARRUS COUNTY, NORTH CAROLINA AND BEING MORE PARTICULARLYDESCRIBED AS ALL OF "TRACT 1, 13.385 ACS." AS SHOWN ON PLAT RECORDED IN PLAT BOOK 65, PAGE 6, CABARRUS COUNTY REGISTRY AND IN MAP BOOK 56, PAGE 85, MECKLENBURG COUNTY REGISTRY.

TRACT 2:
BEING ALL THAT CERTAIN TRACT OF LAND LOCATED IN CABARRUS COUNTY, NORTH CAROLINA AND BEING MORE PARTICULARLY DESCRIBED AS ALL OF "TRACT 2, 9.707 ACS." AS SHOWN ON PLAT RECORDED IN PLAT BOOK 65, PAGE 6, CABARRUS COUNTY REGISTRY AND IN MAP BOOK 56, PAGE 85, MECKLENBURG COUNTY REGISTRY.

TRACT 3:
BEING ALL THAT CERTAIN TRACT OF LAND LOCATED IN CABARRUS COUNTY, NORTH CAROLINA AND BEING MORE PARTICULARLY DESCRIBED AS ALL OF "TRACT 3, 1.000 ACS." AS SHOWN ON PLAT RECORDED IN PLAT BOOK 65, PAGE 6, CABARRUS
COUNTY REGISTRY AND IN MAP BOOK 56, PAGE 85, MECKLENBURG COUNTY REGISTRY. TOGETHER WITH EASEMENTS CONTAINED OR CONVEYED IN THAT CERTAIN DEED RECORDED IN BOOK 627, PAGE 99, CABARRUS COUNTY REGISTRY.

TRACT 4:
BEING ALL THAT CERTAIN TRACT OF LAND LOCATED IN CABARRUS COUNTY, NORTH CAROLINA AND BEING MORE PARTICULARLY DESCRIBED AS ALL OF "TRACT 4, 5.494 ACS." AS SHOWN ON PLAT RECORDED IN PLAT BOOK 65, PAGE 6, CABARRUS
COUNTY REGISTRY AND IN MAP BOOK 56, PAGE 85, MECKLENBURG COUNTY REGISTRY.

TRACT 5:
BEING ALL THAT CERTAIN TRACT OF LAND LOCATED IN CABARRUS COUNTY, NORTH CAROLINA AND BEING MORE PARTICULARLY DESCRIBED AS ALL OF "TRACT 5, 1.004 ACS." AS SHOWN ON PLAT RECORDED IN PLAT BOOK 65, PAGE 6, CABARRUS
COUNTY REGISTRY AND IN MAP BOOK 56, PAGE 85, MECKLENBURG COUNTY REGISTRY. TOGETHER WITH EASEMENTS CONTAINED OR CONVEYED IN THAT CERTAIN DEED RECORDED IN BOOK 799, PAGE 104, CABARRUS COUNTY REGISTRY.

TRACT 6:
BEING ALL THAT CERTAIN TRACT OF LAND LOCATED IN MECKLENBURG COUNTY, NORTH CAROLINA AND BEING MORE PARTICULARLY DESCRIBED AS ALL OF "TRACT 6, 5.398 ACS." AS SHOWN ON PLAT RECORDED IN PLAT BOOK 65, PAGE 6, CABARRUS COUNTY REGISTRY AND IN MAP BOOK 56, PAGE 85, MECKLENBURG COUNTY REGISTRY.

TRACT 7:
BEING ALL THAT CERTAIN TRACT OF LAND LOCATED IN MECKLENBURG COUNTY, NORTH CAROLINA AND BEING MORE PARTICULARLY DESCRIBED AS ALL OF "TRACT 7, 2.202 ACS." AS SHOWN ON PLAT RECORDED IN PLAT BOOK 65, PAGE 6, CABARRUS COUNTY REGISTRY AND IN MAP BOOK 56, PAGE 85, MECKLENBURG COUNTY REGISTRY.

TRACT 8:
BEING ALL THAT CERTAIN TRACT OF LAND LOCATED IN MECKLENBURG COUNTY, NORTH CAROLINA AND BEING MORE PARTICULARLY DESCRIBED AS ALL OF "TRACT 8, 1585 ACS." AS SHOWN ON PLAT RECORDED IN PLAT BOOK 65, PAGE 6, CABARRUS COUNTY REGISTRY AND IN MAP BOOK 56, PAGE 85, MECKLENBURG COUNTY REGISTRY.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 33046 8/6/15 BARRY M. FAY

*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON A SPECIFIC SITE, LANTANA, CITIES OF CONCORD AND CHARLOTTE, NC CONTEMPORANEOUSLY WITH ITS ISSUE DATE ON 6/26/15. AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

PRELIMINARY PLAT OF LANTANA

Mecklenburg & Cabarrus County
North Carolina

MODIFICATION LOG

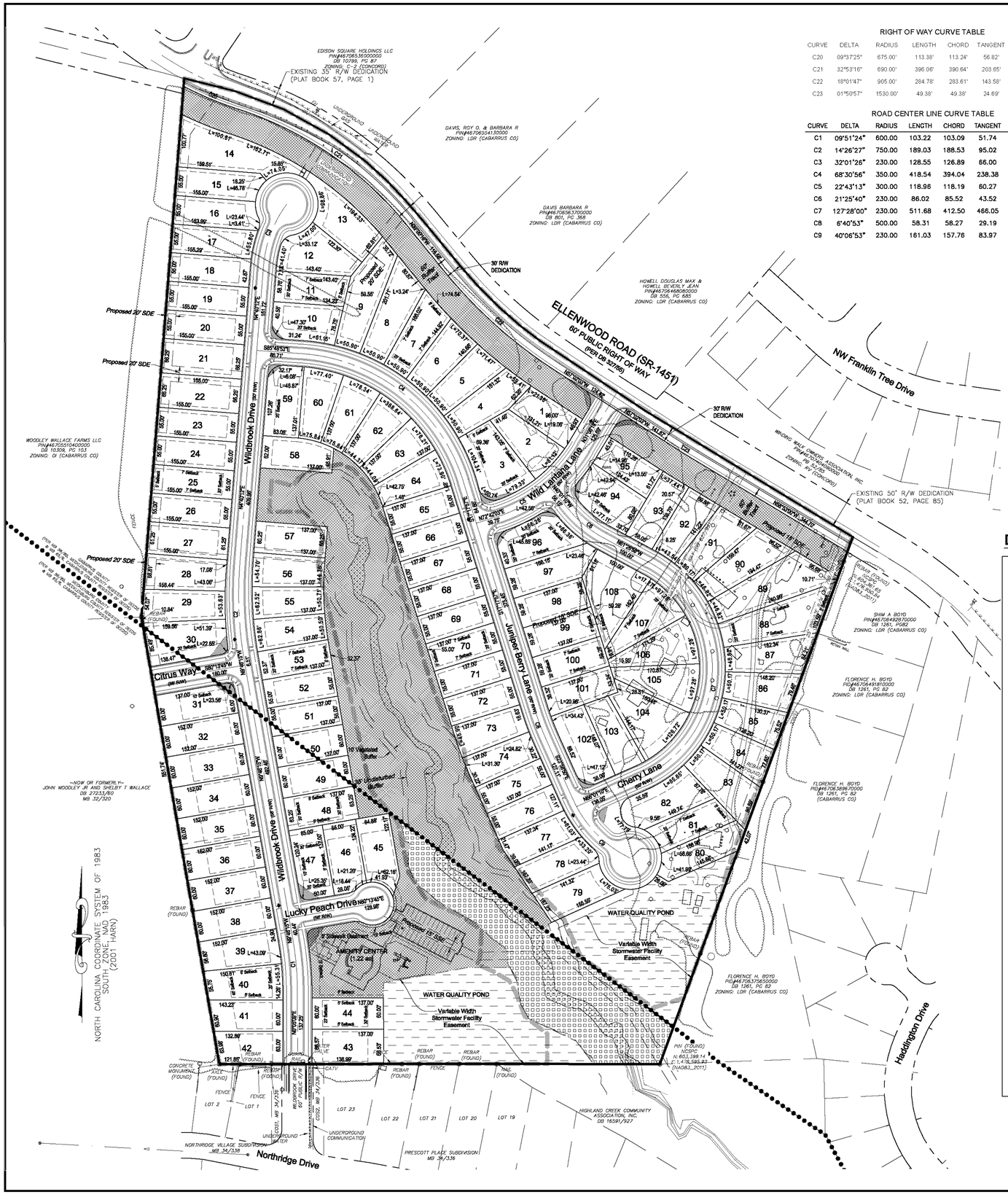
1	8/6/15	REV. PER CITY COMMENTS

JOB NUMBER:	C140032.4
CHECKED BY:	BMF
DRAWN BY:	BMF/PAYF
DATE:	6/26/15

FIRM # C-3881
AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
8008 Corporate Center Dr - Suite 110
Charlotte, NC 28226
704-375-2438

EXISTING CONDITIONS

SHEET: C1.0



RIGHT OF WAY CURVE TABLE

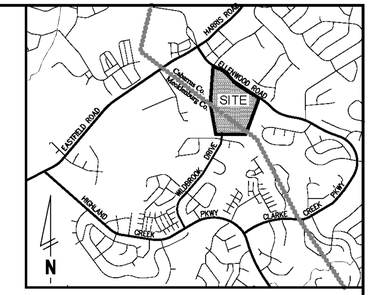
CURVE	DELTA	RADIUS	LENGTH	CHORD	TANGENT	CHD BEARING
C20	09°37'25"	675.00'	113.38'	113.24'	56.82'	S 67°04'50" E
C21	32°53'16"	690.00'	396.06'	390.64'	203.65'	S 55°26'54" E
C22	18°01'47"	905.00'	284.78'	283.61'	143.58'	S 48°01'10" E
C23	01°50'57"	1530.00'	49.38'	49.38'	24.69'	N 57°57'32" W

ROAD CENTER LINE CURVE TABLE

CURVE	DELTA	RADIUS	LENGTH	CHORD	TANGENT	CHD BEARING
C1	09°51'24"	600.00	103.22	103.09	51.74	S 04°50'33" E
C2	14°26'27"	750.00	189.03	188.53	95.02	N 02°33'02" W
C3	32°01'26"	230.00	128.55	126.89	66.00	S 20°40'55" W
C4	68°30'56"	350.00	418.54	394.04	238.38	N 51°33'25" W
C5	22°43'13"	300.00	118.96	118.19	60.27	N 61°20'26" E
C6	21°25'40"	230.00	86.02	85.52	43.52	N 50°44'00" W
C7	127°28'00"	230.00	511.68	412.50	466.05	S 2°17'10" W
C8	6°40'53"	500.00	58.31	58.27	29.19	S 20°38'23" E
C9	40°06'53"	230.00	161.03	157.78	83.97	S 44°02'16" E

LOT AREAS

Lot No.	Area	Lot No.	Area	Lot No.	Area	Lot No.	Area	Lot No.	Area
1	7,915 SF	23	8,525 SF	45	8,732 SF	67	7,535 SF	89	14,884 SF
2	8,344 SF	24	8,525 SF	46	8,678 SF	68	7,535 SF	90	11,036 SF
3	12,209 SF	25	8,525 SF	47	8,857 SF	69	7,535 SF	91	9,654 SF
4	9,570 SF	26	8,525 SF	48	8,865 SF	70	7,535 SF	92	8,437 SF
5	8,787 SF	27	9,494 SF	49	8,220 SF	71	7,535 SF	93	8,128 SF
6	8,565 SF	28	10,014 SF	50	8,220 SF	72	7,535 SF	94	10,174 SF
7	9,416 SF	29	9,386 SF	51	7,535 SF	73	8,190 SF	95	7,535 SF
8	11,527 SF	30	11,674 SF	52	7,535 SF	74	7,985 SF	96	10,361 SF
9	12,598 SF	31	9,072 SF	53	7,535 SF	75	7,535 SF	97	9,690 SF
10	9,913 SF	32	9,120 SF	54	7,766 SF	76	7,536 SF	98	8,121 SF
11	8,157 SF	33	9,120 SF	55	7,756 SF	77	8,351 SF	99	8,121 SF
12	10,583 SF	34	9,120 SF	56	8,345 SF	78	8,707 SF	100	8,121 SF
13	10,614 SF	35	9,120 SF	57	8,254 SF	79	9,246 SF	101	7,706 SF
14	15,031 SF	36	9,120 SF	58	8,128 SF	80	9,220 SF	102	10,029 SF
15	8,896 SF	37	9,120 SF	59	9,127 SF	81	8,168 SF	103	8,287 SF
16	8,856 SF	38	9,120 SF	60	8,273 SF	82	11,218 SF	104	11,918 SF
17	8,724 SF	39	9,452 SF	61	8,471 SF	83	10,154 SF	105	9,624 SF
18	8,526 SF	40	9,211 SF	62	8,294 SF	84	8,445 SF	106	9,708 SF
19	8,525 SF	41	8,281 SF	63	8,241 SF	85	8,037 SF	107	9,643 SF
20	8,525 SF	42	8,024 SF	64	8,193 SF	86	8,790 SF	108	12,768 SF
21	10,269 SF	43	9,117 SF	65	7,535 SF	87	10,127 SF		
22	10,269 SF	44	8,220 SF	66	7,535 SF	88	13,831 SF		



LEGEND

- WETLANDS
- TREE SAVE
- OPEN SPACE
- WATER QUALITY POND
- DI — DROP INLET
- CB — CATCH BASIN
- RCP — REINFORCED CONCRETE PIPE
- FES — FLARED END SECTION
- CMUD — CHARLOTTE MECKLENBURG UTILITIES
- SSRW — SANITARY SEWER RIGHT OF WAY
- SDE — STORM DRAIN EASEMENT
- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EASEMENT LINE
- STORM DRAIN INLET & PIPE
- STORM DRAIN MANHOLE & PIPE
- SANITARY SEWER MANHOLE & PIPE
- WATER PIPE
- CONSTRUCTION LIMITS
- BUILDING PAD
- SITE TRIANGLES

DEVELOPMENT DATA

CITY OF CHARLOTTE

ZONING:	R-3
# OF LOTS BEFORE SUBDIVISION	3
PARCEL ID #:	02924101, 02924120, & TRACT 8
DEED BOOK / PAGE:	MB 56/85, 4257/547, & MB 56/85
ADDRESS:	
02924101 - N/A	
02924120 - N/A	
TRACT 8 - N/A	
TOTAL SITE AREA:	9.19 AC
EXISTING BUILT UPON AREA:	0 SF
PROPOSED BUILT UPON AREA:	129,325 SF
MAX DENSITY:	3 DU/AC
MAX ALLOWABLE LOTS:	27 LOTS
PROPOSED DENSITY:	2.18 DU/AC
PROPOSED LOT:	20 LOTS
PROPOSED AREA IN LOTS:	3.97 AC
PROPOSED AREA IN R/W:	1.26 AC
PROPOSED OPEN SPACE:	
OTHER	1.22 AC
WQ TRACT	1.24 AC
TREE SAVE	1.50 AC (16.3%)
TOTAL OPEN SPACE	4.06 AC
ACTIVE OPEN SPACE	1.22 AC
PASSIVE OPEN SPACE	2.84 AC
LINEAR FEET OF STREET:	
WILDBROOK DRIVE	687 FT
LUCKY PEACH DRIVE	162 FT
CITRUS WAY	180 FT
TOTAL LINEAR FEET OF STREET:	1029 FT

SETBACKS

MIN FRONT YARD:	20 FT (BACK OF SIDEWALK)
MIN SIDE YARD (INTERIOR):	5 FT
MIN SIDE YARD (CORNER):	10 FT
MIN REAR YARD:	30 FT (INTERIOR LOTS)
	45 FT (EXTERIOR LOTS)

LOTS

MIN. LOT WIDTH REQUIRED:	60 FT
MIN LOT AREA:	8,000 SF
AVG. LOT AREA PROVIDED:	8,647 SF

TREE SAVE AREA

REQUIRED MINIMUM TREE SAVE AREA:	
TOTAL AREA:	9.19 AC
TREE SAVE REQUIRED:	0.92 AC (10%)
TREE SAVE AREA PROVIDED:	1.50 AC

NATURAL AREA

REQUIRED MINIMUM NATURAL AREA:	
TOTAL AREA:	9.19 AC
TOTAL BUA:	2.97 AC
NATURAL AREA REQUIRED:	1.61 AC (17.5% X 9.19 AC)
NATURAL AREA PROVIDED:	1.69 AC

CITY OF CONCORD

ZONING:	RV
# OF LOTS BEFORE SUBDIVISION:	5
PARCEL ID #:	4670549617000 0, 4670643275000 0, 4670634959000 0, 4670646164000 0, & 4670636820000 0
DEED BOOK / PAGE:	635/81, 3609/175, 627/99, 2007E/87, & 799/104
ADDRESS:	
4670549617000 0 - N/A	
4670643275000 0 - 10727 ELLENWOOD ROAD	
4670634959000 0 - 10629 ELLENWOOD ROAD	
4670646164000 0 - 10633 ELLENWOOD ROAD	
4670636820000 0 - 10625 ELLENWOOD ROAD	
TOTAL SITE AREA:	30.59 AC
EXISTING IMPERVIOUS AREA:	3,035 SF
PROPOSED IMPERVIOUS AREA:	455,362 SF
MAX DENSITY:	8 DU/AC
MAX ALLOWABLE LOTS:	213 LOTS
PROPOSED DENSITY:	2.89 DU/AC
PROPOSED LOT:	88 LOTS
PROPOSED AREA IN LOTS:	18.46 AC
PROPOSED AREA IN R/W:	
ELLENWOOD ROAD	1.08 AC
RESIDENTIAL ROADS	4.68 AC
PROPOSED OPEN SPACE:	
50' BUFFER	1.72 AC
50% WQ TRACT	0.57 AC
OTHER	3.43 AC
TOTAL OPEN SPACE	5.72 AC
ACTIVE OPEN SPACE	0 AC
PASSIVE OPEN SPACE	5.72 AC
LINEAR FEET OF STREET:	
WILDBROOK DRIVE	985 FT
JUNIPER BERRY LANE	1,315 FT
CHERRY LANE	1,088 FT
PINK DAWN LANE	383 FT
TOTAL LINEAR FEET OF STREET:	3,771 FT

SETBACKS

MIN FRONT YARD:	20 FT
MIN SIDE YARD (INTERIOR):	7 FT
MIN REAR YARD:	5 FT

LOTS

MIN. LOT WIDTH REQUIRED:	50 FT
MIN LOT AREA PROVIDED:	7,512 SF
AVG. LOT AREA PROVIDED:	9,138 SF

COMBINED DEVELOPMENT DATA

# OF LOTS BEFORE SUBDIVISION	8
TOTAL SITE AREA:	39.78 AC
EXISTING IMPERVIOUS AREA:	3,035 SF
PROPOSED IMPERVIOUS AREA:	584,687 SF
PROPOSED DENSITY:	2.71 DU/AC
PROPOSED LOT:	108 LOTS
PROPOSED AREA IN LOTS:	22.43 AC
PROPOSED AREA IN R/W:	6.90 AC
PROPOSED TOTAL OPEN SPACE:	9.78 AC
LINEAR FEET OF STREET:	4,795 FT

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 33046 8/6/15 BARRY M. FAY

North 811 Carolina
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

STIPULATION FOR REUSE

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PRELIMINARY PLAT OF LANTANA

Mecklenburg & Cabarrus County
North Carolina

MODIFICATION LOG

1	8/6/15	REV. PER CITY COMMENTS

JOB NUMBER:	C140032.4
CHECKED BY:	BMF
DRAWN BY:	BMF/PAYF
DATE:	6/26/15

AMERICAN Engineering
FIRM # C-3681
American Engineering Associates - Southeast, P.A.
8008 Corporate Center Dr - Suite 110
Charlotte, NC 28226
704-375-2438

PRELIMINARY LAYOUT PLAN

SHEET: C1.1

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

LEGEND

- WETLANDS
- TREE SAVE
- OPEN SPACE
- WATER QUALITY POND
- DI — DROP INLET
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- STORM DRAIN MANHOLE & PIPE
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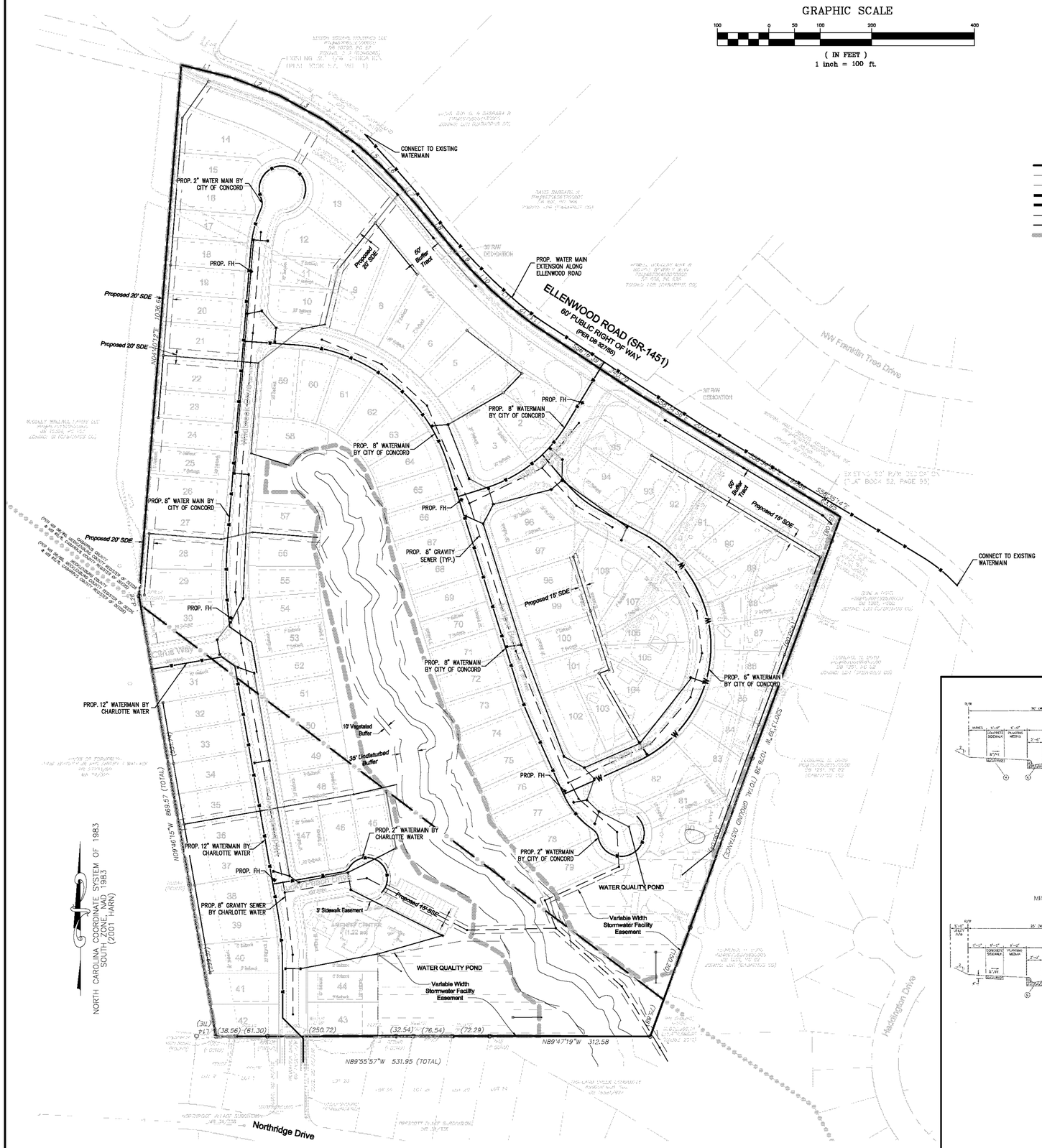
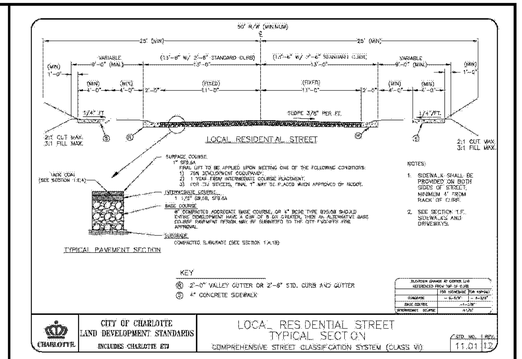
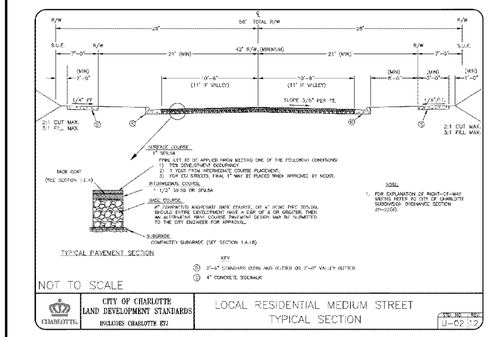
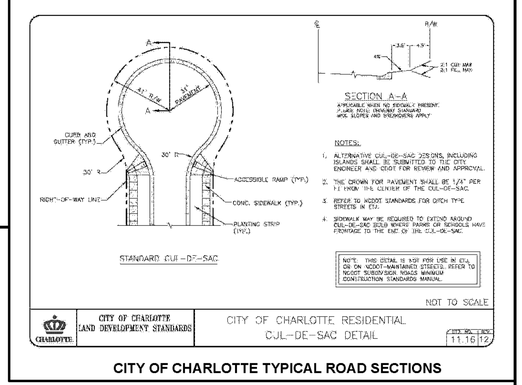
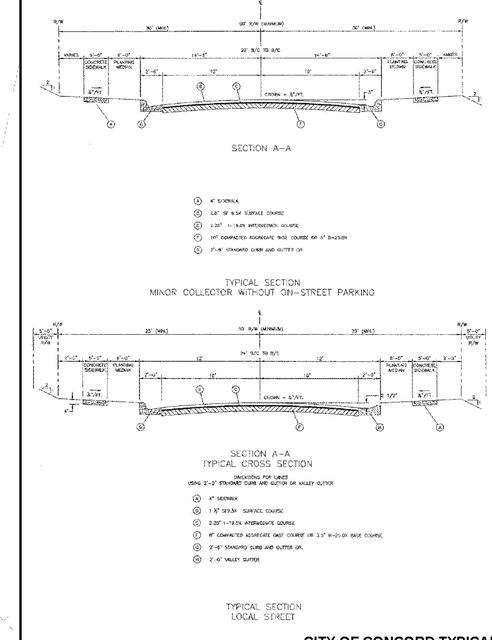


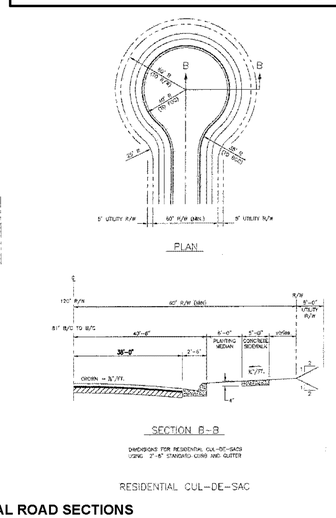






CITY OF CHARLOTTE TYPICAL ROAD SECTIONS





CITY OF CONCORD TYPICAL ROAD SECTIONS

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON A SPECIFIC SITE, LANTANA, CITIES OF CONCORD AND CHARLOTTE, NC CONTEMPORANEOUSLY WITH ITS ISSUE DATE ON 6/26/15, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

PRELIMINARY PLAT
OF
LANTANA
Mecklenburg & Cabarrus County
North Carolina

MODIFICATION LOG

1	8/6/15	REV. PER CITY COMMENTS

JOB NUMBER:	C140032.4
CHECKED BY:	BMF
DRAWN BY:	BMF/PAYF
DATE:	6/26/15

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
8008 Corporate Center Dr - Suite 110
Charlotte, NC 28226
704-375-2438
FIRM # C-3881

PRELIMINARY UTILITY PLAN AND TYPICAL ROAD SECTIONS

NORTH CAROLINA PROFESSIONAL SEAL 33046 8/6/15 ENGINEER BARRY M. FAY

North Carolina 811
*** 3 Days Before Digging ***
North Carolina 811
811 or 1-800-632-4949
Remote Ticket Entry
http://nc811.org/remoteticketentry.htm

SHEET:
C1.2

DATE:	August 18, 2015
SUBJECT:	Allen Farm
CASE NUMBER:	# S-06-15
OWNER/DEVELOPER:	Pulte Homes
LOCATION:	Cox Mill Road
PARCEL IDENTIFICATION NUMBER:	4680-16-6357
AREA:	257.4 Acres
ZONING:	CD-PRD, Conditional District Planned Residential Development
REPORT PREPARD BY:	Boyd V. Stanley AICP, Development Review Administrator

This proposed subdivision lies on the northwest side of Cox Mill Road between Christenbury Parkway and Poplar Tent Road. This property was the subject of a conditional district zoning request in 2007. The Commission approved the request (and associated rezoning site plan) for the development of 485 lots on the subject property. The submitted preliminary plat is a revision of the approved rezoning site plan and original preliminary plat which reduces the number of total single-family residential lots to 452 along with other minor site revisions.

The project includes two planned connections onto Cox Mill Road along with 3 proposed stub streets to adjoining properties.

The 2015 Land Use Plan designates the subject property as "residential."

All respective City departments have reviewed the plat, and the proposed development meets the standards of the Concord Development Ordinance.

SUGGESTED STATEMENT OF CONSISTENCY (Not required, but offered as information)

The proposed preliminary plat is consistent with the standards outlined in the Concord Development Ordinance and 2015 Land Use Plan. The City of Concord Land Use Plan recommends residential uses for the subject property.

SUGGESTED RECOMMENDATION AND CONDITIONS

The staff recommends approval of the revised subdivision plat. If the Commission concurs and chooses to approve the proposed preliminary plat, approval should be subject to the following conditions:

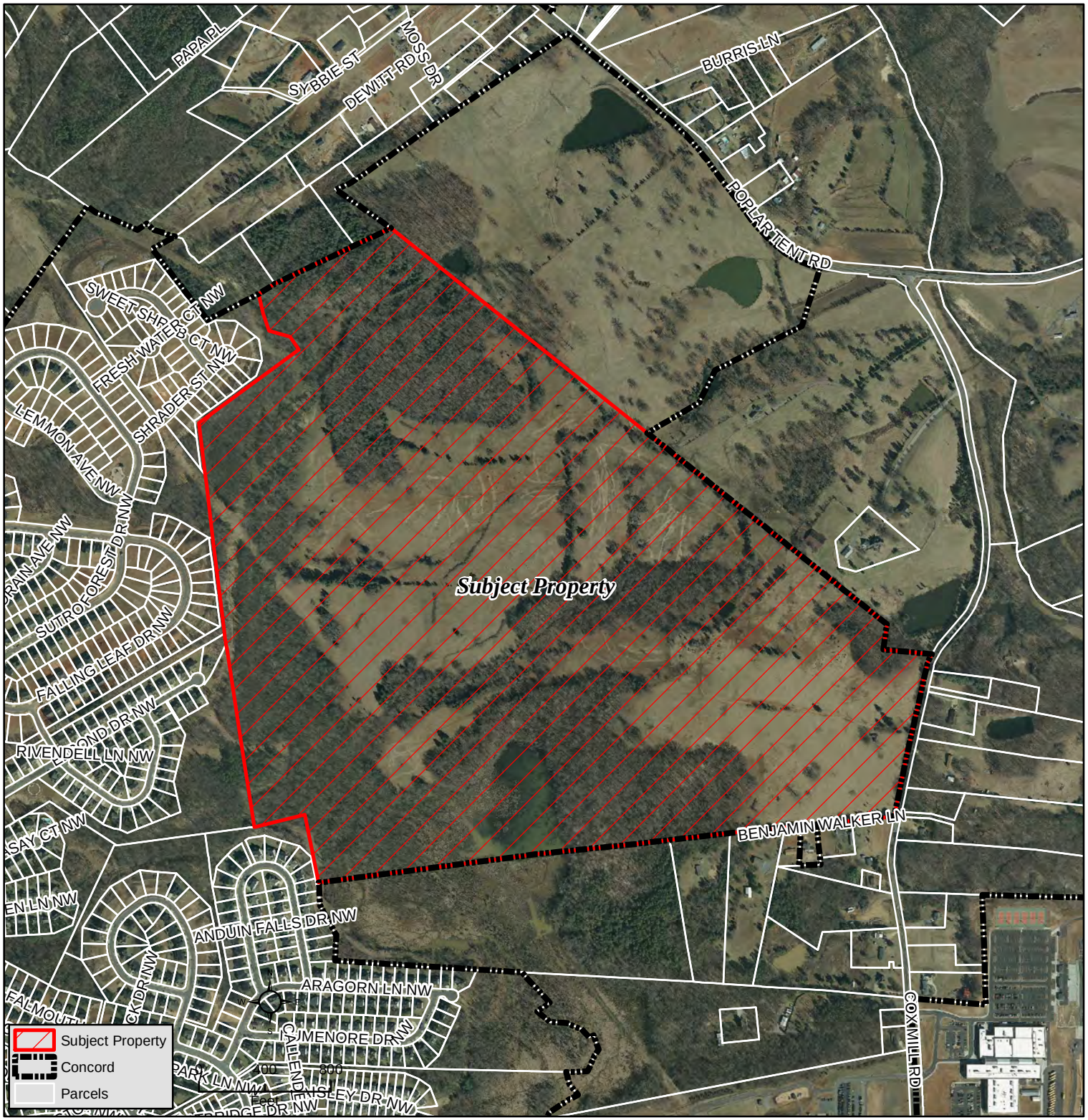
- The applicant must submit a mylar copy of the approved preliminary plat, after addressing any additional comments added by the Commission.
- The developer shall comply with NCDOT and City of Concord requirements for street connections, as well as NC Fire Code and applicable stormwater treatment requirements.

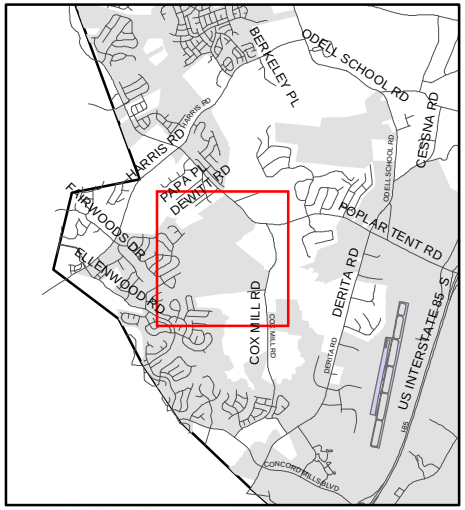
S-06-15
Aerial

Preliminary Plat

Allen Farm

Cox Mill Rd
PIN: 4680-16-6357





Source: City of Concord
Planning Department

Disclaimer

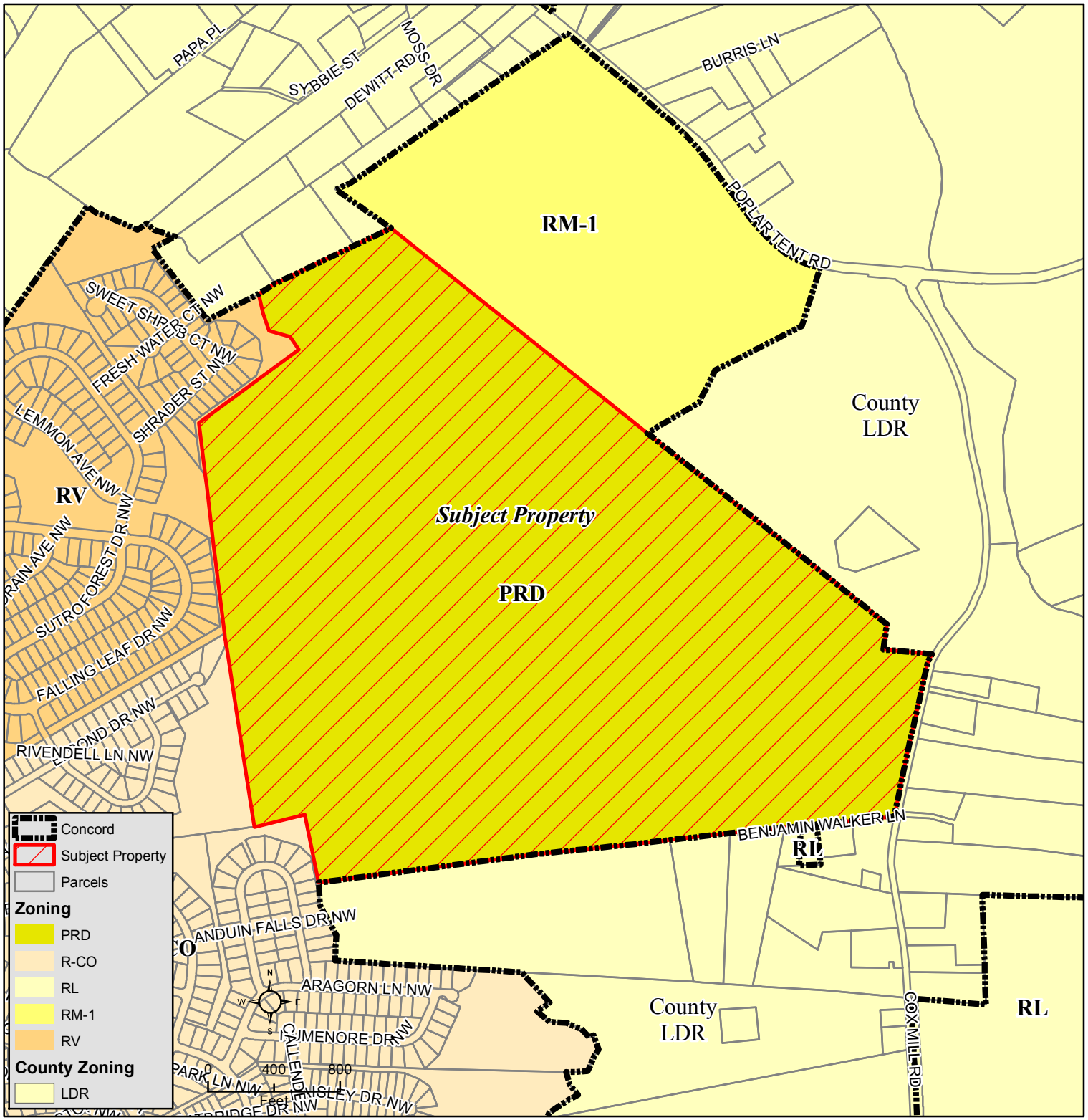
These maps and products are designed for general reference only and data contained herein is subject to change. The City Of Concord, it's employees or agents make no warranty of merchantability or fitness for any purpose, expressed or implied, and assume no legal responsibility for the information contained therein. Data used is from multiple sources with various scales and accuracy. Additional research such as field surveys may be necessary to determine actual conditions.

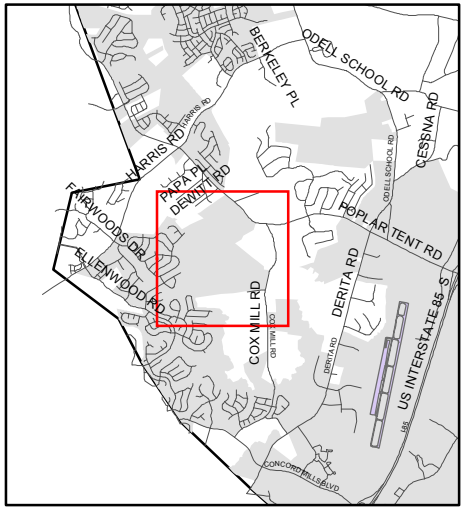
S-06-15
Zoning Map

Preliminary Plat

Allen Farm

Cox Mill Rd
PIN: 4680-16-6357





Concord
NORTH CAROLINA

Source: City of Concord
Planning Department

Disclaimer

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Concord
NORTH CAROLINA
High Performance Living

Application for
Preliminary Plat Approval for Major Subdivision

Application for Preliminary Plat Approval – Major Subdivision

(Please type or print)

1. Name of subdivision: Allen Farm
2. Name, address, telephone number, and fax number of owner(s)/developer(s):
   Pulte Homes, Attn: Mr. Francisco Garcia PE, 11121 Carmel Commons Blvd., Suite 450, Charlotte, NC 28226, Tel: 704-543-4992
3. Name, address, telephone number, and fax number of surveyor/engineer:
   ESP Associates P.A., Attn: Mr. Danis E. Simmons PE, 3475 Lakemont Blvd., Fort Mill SC 29708, Tel: 803-835-0943
4. Name, address and e-mail address of person to whom comments should be sent:
   ESP Associates P.A., Attn: Mr. Matt Levesque, 3475 Lakemont Blvd., Fort Mill SC 29708, mlevesque@espassociates.com
5. Telephone number of person to whom comments should be sent: Matt Levesque, 704-634-2056
   Fax:
6. Location of subdivision: 1022 Cox Mill Road, just north of Benjamin Walker Lane (Private Road)
7. Cabarrus County P.I.N.#: 4680-16-6357
8. Current zoning classification: PRD
9. Total acres: 257.407 Total lots:-

REQUIRED ATTACHMENTS/SUBMITTALS

1. A fee of $100.00 for land less than 2 acres, $200.00 2-10 acres, $300.00 10-25acres, $ 400.00 for more than 25 acres shall accompany the preliminary plat.
2. Legal deed description of the property.
3. Six (6) **FOLDED** black/blue line copies of the plat are required at the time of submission.
4. One (1) Mylar should be submitted **after** approval has been granted by the Planning and Zoning Commission and any conditions placed on the plat by the Commission have been met.
5. Completed "Street Name Review and Confirmation" sheet.

(Please see attached Joinder Agreement)

Date

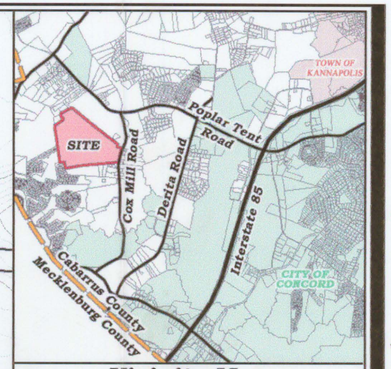
Signature of Owner/Agent

NOTE: *By affixing his or her signature hereto, the sub divider acknowledges understanding of and agreement to comply with all provisions of the Concord Subdivision Regulations which include, but are not limited to, the requirement to pay costs of construction inspections of improvements to be owned and maintained by the City of Concord as conditions precedent to approval of the final plat for recording.*

Staff Use Only:

Fee: Received by: Date:

Planning & Neighborhood Development
66 Union St S • P. O. Box 308 • Concord, NC 28025
Phone (704) 920-5152 • Fax (704) 786-1212 • www.concordnc.gov



Vicinity Map

Not To Scale

Development Data

Parcel Number:	4680-16-6357
Existing Zoning:	LDR (Cabarrus County)
Proposed Zoning:	PRD - RM-2 (City of Concord)
Municipality:	Cabarrus County
Acreage:	**+/- 257.36 Acres**
Proposed Density:	**+/- 1.89 Du/Ac**
Proposed Units:	**485**
Village "A" 70' x 150' (10,500 s.f.)	237 (49%)
Village "B" and "C" 60' x 145' (8,700 s.f.)	248 (51%)

Total Open Space Req.: +/- 48.58 Acres (19%)
(Primary and Additional)

Primary Required Open Space: +/- 41.18 Acres (16%)
Additional Req. Open Space: +/- 7.40 Acres (per PRD)
(Assumes RM-2 Zoning Classification per Staff's Recommendation)
Formula: (10,000 S.F. - 8,700 S.F.) * 248 = 322,400 S.F.
322,400 S.F. / 43,560 = +/- 7.40 Acres

Open Space Provided: +/- 102 Acres (39%)
Within Floodplain: +/- 77 Acres
Outside Floodplain: +/- 25 Acres

Improved Open Space: +/- 31 Acres
Within Trail: +/- 1.5 Acres
Within Parks: +/- 29.5 Acres

Tree Save Req.: +/- 46.45 Acres (33%)
Formula: +/- 139.34 Acres of Trees * 1/3 = +/- 46.45 Acres

Tree Save Provided: +/- 48 Acres (34%)

Total Road Length +/-27,660 L.F.
60' ROW +/- 1,400 L.F.
50' ROW +/- 26,260 L.F.

Links / Nodes Ratio

Required Ratio	1.40
Provided Ratio	1.51

Links = 53 Total Nodes = 35 Total
Ratio = 53 Links / 35 Nodes = 1.51

Development Notes

1. All base information received from Cabarrus County GIS and needs to be verified. Boundary Survey and floodplain information received from cox-FM.dwg prepared by F. Donald Lawrence & Associates, P.A. dated 01/10/07.
2. All site plan, zoning, and wetland information utilized in the preparation of this sketch plan is considered to be preliminary in nature and subject to final verification.

Wetland / Stream / Floodplain Information
All wetland, stream, and floodplain information shown on this plan was received from The Wetland and Natural Resource Consultants, the file named sh-coxmill_wlsketch122206.dwg, dated 01/03/07. The location of these features were verified by cox-FM.dwg prepared by F. Donald Lawrence & Associates, P.A. dated 01/10/07.

Easements
The utility easments shown on this plan was obtained from Cabarrus County GIS information and the survey by cox-FM.dwg prepared by F. Donald Lawrence & Associates, P.A. dated 01/10/07.

Access Points Driveway/Streets
1. Proposed project site entrance locations are considered preliminary in nature and need to be verified for adequate sight distance.
2. All roadway and street systems are considered to be preliminary and will need to be verified for sufficiency to satisfy or exceed minimum requirements established in the City of Concord UDO and applicable standards identified in the NCDOT Land Development Standards Manual. Street connections are conceptual and may be subject to change based on agency input and review.

Open Space / Tree Save
Open space and Tree Save areas are conceptual and preliminary. The exact location of these areas may change as the client finalizes decisions regarding final yield, product allocation, and as other spatially dependent project components such as detention, wetland areas, utility features, and buffers, (as applicable) for this project are better defined.

Public Information
ESP Associates is not responsible for plan deficiencies created by incorrect, incomplete, missing or outdated information derived from public sources such as GIS, Planning and Zoning Departments.

Preliminary Site Plan
The Preliminary Site Plan includes design concepts that illustrate the petitioners intent in terms of overall development of the site. The Preliminary Site Plan is not intended to be used during the development review process to determine actual building locations, lot lines, details of the open space area design, land uses, project components, entrance locations, or exact public/ private street alignment. This Conditional Use District Plan represents the development concept for this property. Upon approval from the City of Concord Planning and Zoning Commission, alterations that increase density or other modifications greater than 10% shall require an amendment to the approved Plan.

ESP

ESP Associates, P.A.

P.O. Box 7030 Charlotte, NC 28241 NC – 704.583.4949
3475 Lakemont Blvd. Fort Mill, SC 29708 SC – 803.802.2440
www.espassociates.com

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FEB 08 2007
BY:.....

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CLIENT

SheaHomes
Caring since 1881

3436 Torringdon Way, Suite 100
Charlotte, North Carolina 28227
p: 704-319-5000
f: 704-543-6327

SHEET TITLE

Preliminary Site Plan

PROJECT

Cox Mill Neighborhood

1/511/21

PROJECT LOCATION Cabarrus County, North Carolina

GRAPHIC SCALE
200 0 100 200 400
1 INCH = 200 FT.

PROJECT NUMBER	UB46.100
DRAWING NAME	UB46 - Yield P-Submittal-.psd
DATE	February 2, 2007
DRAWN BY	ML / JM
CHECKED BY	PT

ESP / CLIENT REVISION

NO.	DATE	BY	REVISION
1	12-15-06	JM	Rezonong Submittal
2	2-2-07	JM	Revised Rezoning Submittal

AGENCY / SUBMITTAL REVISION

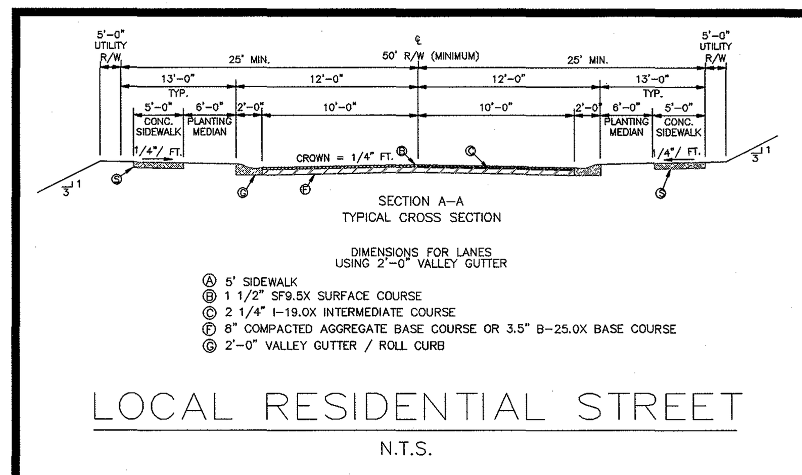
NO.	DATE	BY	REVISION
1	2-2-07	JM	Adjusting plan per staff comments

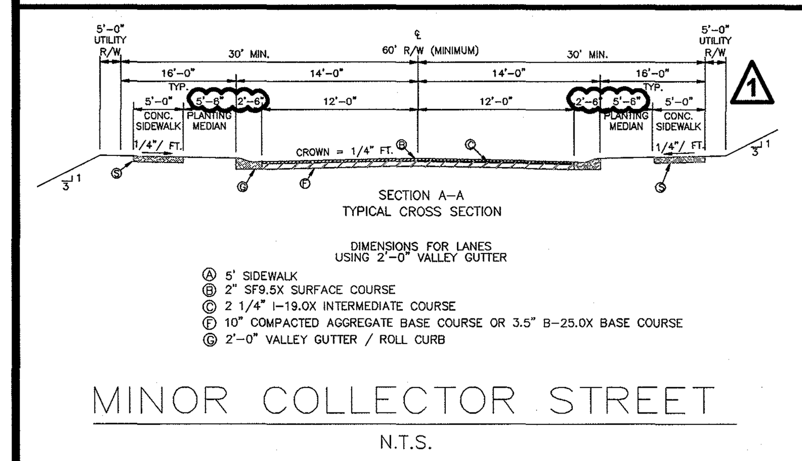
Allen Farm

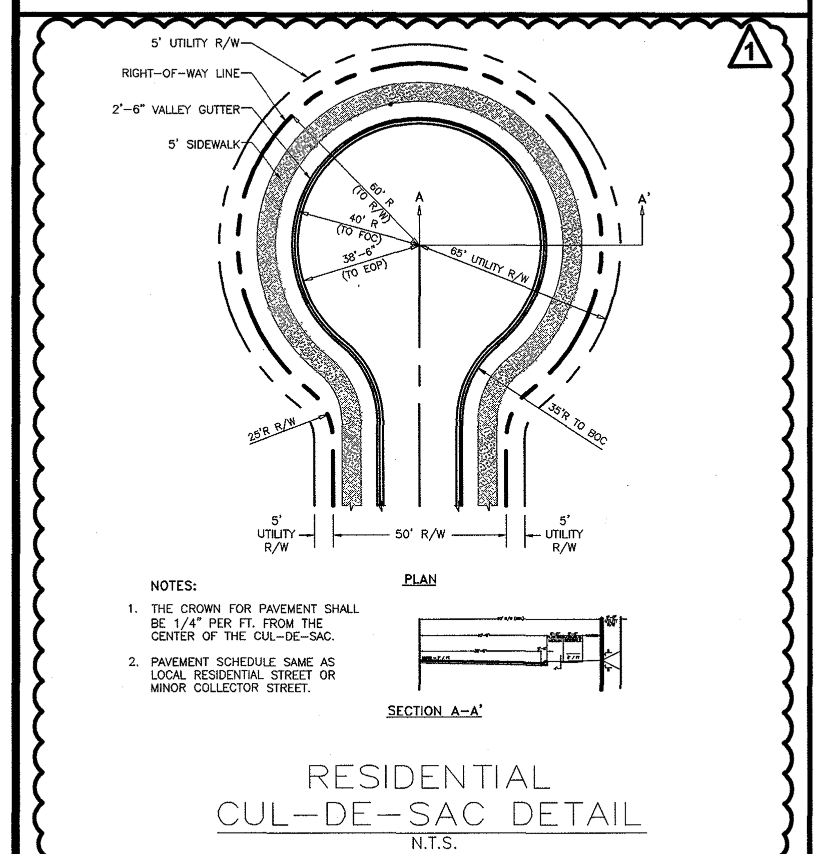
LOCATED IN

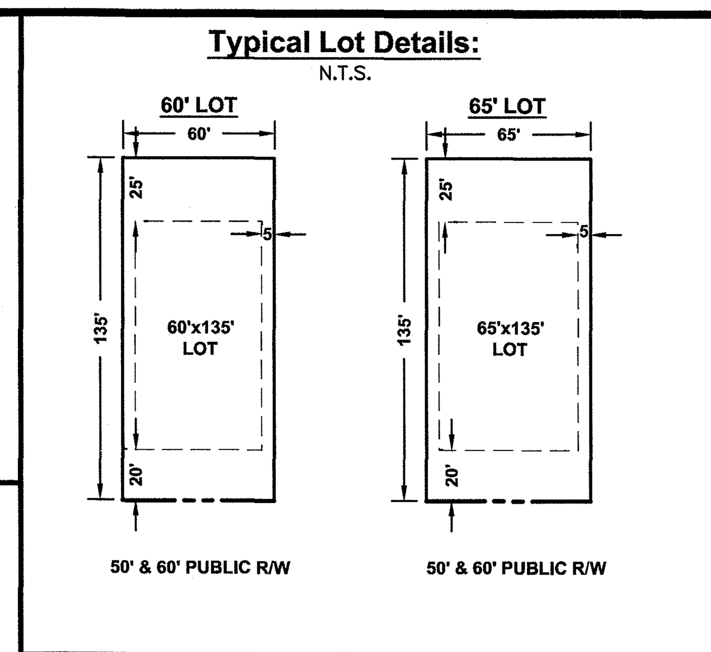
CITY OF CONCORD, CABARRUS COUNTY

NORTH CAROLINA





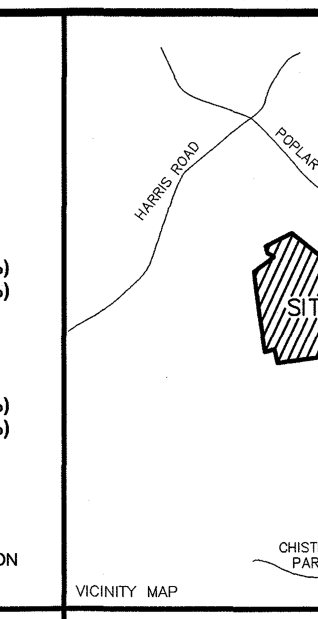




Development Phasing:

PHASE 1:	**PHASE 4:**
60' LOTS = 51 (53.6%)	60' LOTS = 25 (50%)
65' LOTS = 44 (46.4%)	65' LOTS = 25 (50%)
TOTAL LOTS = 95	TOTAL LOTS = 50
PHASE 2:	**PHASE 5:**
60' LOTS = 64 (64.0%)	60' LOTS = 53 (65.4%)
65' LOTS = 36 (36.0%)	65' LOTS = 28 (34.6%)
TOTAL LOTS = 100	TOTAL LOTS = 81
PHASE 3:	**PHASE 6:**
60' LOTS = 43 (58.9%)	60' LOTS = 32 (60.4%)
65' LOTS = 30 (41.1%)	65' LOTS = 21 (39.6%)
TOTAL LOTS = 73	TOTAL LOTS = 53

NOTE:
PHASING IS SUBJECT TO MODIFICATION(S) DURING CONSTRUCTION DOCUMENT PREPARATION & BASED ON DETAILED DESIGN.



Development Data:

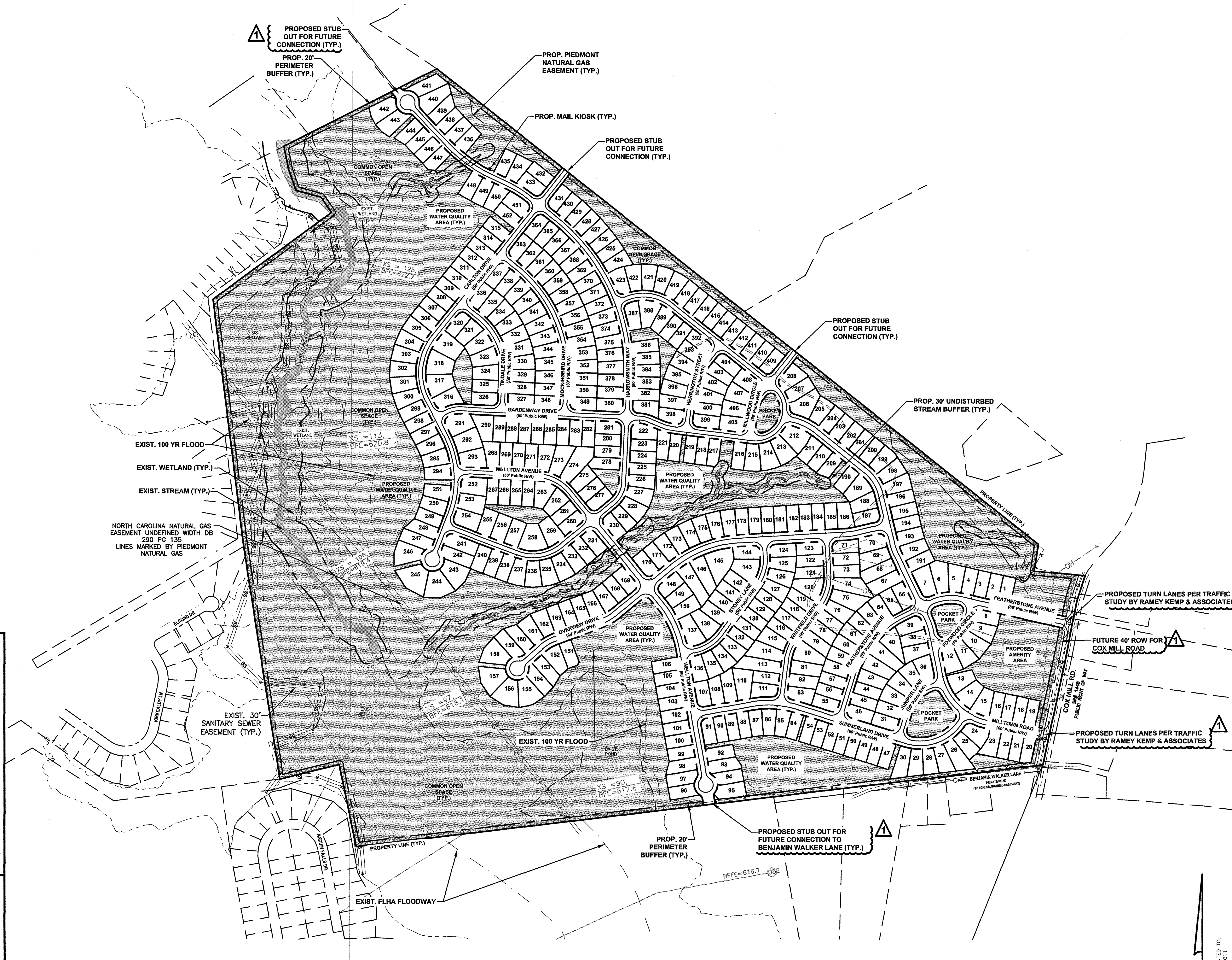
Zoning:	PRD-RM2 (Planned Residential Development)
Total Site Area:	257.407 Acres
Tax Map Numbers:	4680-16-6357
Subject Tract Deed/Plat Reference:	DB 5335 PG 25, DB 3381 PG 05
Property Owner:	Pulte Homes, Inc.
Location:	Concord, NC
Proposed Use:	Single-Family Residential
Total Lots:	452 Lots
Proposed Lot Size:	
60'x135' Lots (8,100 sf)	268 Lots (59.3%)
65'x135' Lots (8,775 sf)	184 Lots (40.7%)
Maximum Density Allowed:	1.98 Du/Ac
Proposed Density:	1.76 Du/Ac
Links & Nodes Required:	1.40
Links & Nodes Provided:	1.47 (53 Links / 36 Nodes)
Total Open Space Required:	48.91 Acres (19%)
Total Open Space Provided:	± 79.80 Acres (31%)
Passive Open Space: (Buffers/Easements/ Water Quality Areas/Natural):	± 74.40 Acres
Active Space: (Pocket Parks, Amenity):	± 5.40 Acres
Total R.O.W. Acreage Provided:	± 28.76 Acres
Net Acreage Included in Lots:	± 99.13 Acres

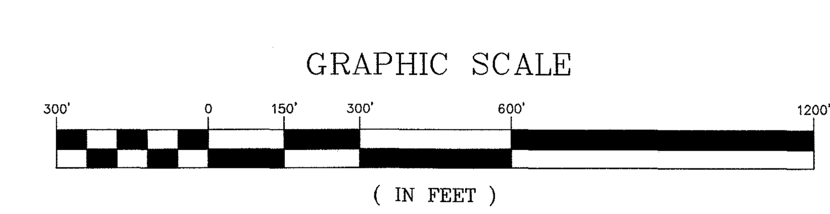
PRD-RM2 Lot Standards:

Minimum Lot Width:	60'
Setbacks:	
Front:	20'
Side:	5'
Rear:	25'

DEVELOPMENT NOTES:

1. PROPOSED LOTS WILL MEET MINIMUM LOT REQUIREMENTS SET FORTH BY SECTION 7.6.2 OF THE CITY OF CONCORD UNIFIED DEVELOPMENT ORDINANCE AND THE CONDITIONS ESTABLISHED BY THE PRD, RM 2 ZONING PLAN.
2. DESIGN STANDARDS AND SPECIFICATIONS FOR WATER AND SEWER IMPROVEMENTS SHALL CONFORM TO THE MOST CURRENT ADOPTED VERSION OF THE CITY OF CONCORD WATER AND SEWER POLICY.
3. DEVELOPER WILL SECURE ALL APPROVAL PERMITS FROM LOCAL, STATE, AND FEDERAL AGENCIES PRIOR TO STREAM OR WETLAND IMPACTS.
4. ALL BUILDING PADS SHALL BE ABOVE THE 100 YR. FLOOD ELEVATION.
5. THE APPLICANT MUST APPLY FOR AND OBTAIN A NCDOT AND/OR CITY OF CONCORD DRIVEWAY PERMIT AND INSTALL ANY IMPROVEMENTS THAT MAY BE REQUIRED AS PART OF A TRAFFIC IMPACT STUDY (TIS).
6. DEVELOPER SHALL PROVIDE A LANDSCAPE EASEMENT AROUND ALL PROPOSED MONUMENT WALLS/SIGNS. PROPOSED MONUMENTS SHALL BE LOCATED OUTSIDE OF ALL SIGHT DISTANCE EASEMENTS.
7. ALL PROPOSED STREETS WILL BE PUBLIC RIGHTS-OF-WAY.
8. A STREET TREE PLAN SHALL BE PROVIDED AT CONSTRUCTION DOCUMENT PHASE IN ACCORDANCE WITH THE CITY OF CONCORD TECHNICAL STANDARDS MANUAL, ARTICLE VII.
9. IRON PINS SHALL BE PROVIDED AT ALL CORNERS, UNLESS OTHERWISE NOTED.
10. THIS PROJECT WILL BE SERVED BY CITY OF CONCORD WATER, SEWER AND ELECTRICITY.
11. NO LOTS SHALL HAVE DIRECT ACCESS TO COX MILL ROAD (LOTS TO BE ACCESSED BY PROPOSED PUBLIC STREETS)
12. FROM PROPOSED FEATHERSTONE AVENUE TO MILLTOWN ROAD, MILLTOWN ROAD TO GARDENWAY DRIVE, ALL OF OVERVIEW DRIVE, & WELLTON AVENUE TO HARROWSMITH WAY SHALL BE MINOR COLLECTOR STREETS.
13. PROPOSED AMENITY AREA SHOWN ON PRELIMINARY PLAN IS APPROXIMATE. DEVELOPER RESERVES THE RIGHT TO ALTER SITE PLAN AT CONSTRUCTION DOCUMENT PHASE.
14. STORMWATER MANAGEMENT PLAN TO BE PROVIDED DURING CONSTRUCTION DOCUMENT PHASE PER ARTICLE 4 AND 6.1.
15. OPEN SPACE PROVISION & MAINTENANCE PLAN TO BE PROVIDED DURING CONSTRUCTION DOCUMENT PHASE.
16. SEE SHEETS 1-11 FOR DETAILED LOT DIMENSIONS.
17. PROPOSED LOCATIONS OF WATER, SEWER, AND STORM DRAINAGE SYSTEMS DEPICTED ON PRELIMINARY PLAT ARE PRELIMINARY AND HAVE NOT BEEN DESIGNED. DESIGN DETAILS TO BE PROVIDED DURING CONSTRUCTION DOCUMENT PHASE.
18. ROAD GRADING & ROAD PROFILES TO BE PROVIDED DURING CONSTRUCTION DOCUMENT PHASE.
19. SITE GRADING AND CUT/FILL TO BE DETERMINED DURING CONSTRUCTION DOCUMENT PHASE.
20. LOCATION OF PROPOSED WATER QUALITY AREAS ARE CONCEPTUAL & PRELIMINARY. THE EXACT LOCATION, SIZE, AND DESIGN OF THESE FEATURES TO BE DETERMINED DURING THE CONSTRUCTION DOCUMENT PHASE.
21. PROPOSED BUILT UPON & IMPERVIOUS AREA TO BE DETERMINED DURING CONSTRUCTION DOCUMENT PHASE.
22. SEE SHEET INDEX FOR ROAD CENTERLINE TABLES AND CURVE TABLES.
23. CURB AND GUTTER ALONG WITH SIDEWALK SHALL BE PROVIDED ALONG THE SUBJECT SITE FRONTAGE OF COX MILL ROAD.
24. SIGNS SHALL BE POSTED AT THE END OF FUTURE STREET CONNECTIONS THAT STATE THE POTENTIAL FOR CONNECTION. DETAILS TO BE SHOWN IN CONSTRUCTION PLANS.
25. ADA RAMPS TO CONFORM TO NCDOT STANDARD DETAIL #848.05.





Know what's below. Call before you dig.

Road Names & Lengths:

ROAD NAMES:	CLASSIFICATION:	LENGTH:
MILLTOWN RD	MINOR COLLECTOR	± 2,311.88 LF
FEATHERSTONE AVE.	MINOR COLLECTOR/LOCAL	± 1,549.51 LF
FOXWOOD CIR.	LOCAL STREET	± 322.64 LF
JUNIPER LN.	LOCAL STREET	± 392.20 LF
SUMMERLAND DR.	MINOR COLLECTOR	± 1,489.77 LF
WHITFIELD DR.	LOCAL STREET	± 922.53 LF
STONEY LN.	LOCAL STREET	± 780.26 LF
OVERVIEW DR.	MINOR COLLECTOR	± 2,139.59 LF
WELLTON AVE.	MINOR COLLECTOR/LOCAL	± 2,346.82 LF
HARROWSMITH WAY	LOCAL STREET	± 3,568.17 LF
CARLTON DR.	LOCAL STREET	± 2,333.34 LF
TINDALE DR.	LOCAL STREET	± 634.91 LF
MOCKINGBIRD DR.	LOCAL STREET	± 938.21 LF
GARDENWAY DR.	LOCAL STREET	± 2,994.26 LF
HERRINGTON ST.	LOCAL STREET	± 484.94 LF
MILLWOOD CIR.	LOCAL STREET	± 514.61 LF
Total Length of Proposed Roads:		± 23,723.64 LF

ENGINEERING FIRM:	**ESP ASSOCIATES, P.A.**
ADDRESS:	**3475 LAKEMONT BLVD. FORT MILL, SC 29708**
PHONE:	**(803) 802-2440**
FAX:	**(802) 802-2515**
CONTACT:	**MATT LEVESQUE, RLA**
DEVELOPER:	**PULTE HOMES**
ADDRESS:	**11121 CARMEL COMMONS BLVD., SUITE 450 CHARLOTTE, NC 28226**
PHONE:	**(704) 543-4992**
CONTACT:	**MR. FRANCISCO GARCIA, PE.**
REVIEW AGENCY:	**CITY OF CONCORD - PLANNING & COMMUNITY DEVELOPMENT**
ADDRESS:	**66 UNION S. CONCORD, NC 28026**
PHONE:	**(704) 920-5152**

BOUNDARY INFORMATION

BOUNDARY INFORMATION OBTAINED FROM:

SURVEY BY ESP ASSOCIATES, P.A., ENTITLED "ALTA/ACSM LAND TITLE SURVEY OF TAX PARCEL #4680-16-6357", JUNE 18, 2015.

TOPOGRAPHIC INFORMATION

TOPOGRAPHIC INFORMATION BASED ON INFORMATION OBTAINED FROM PUBLIC LIDAR PROVIDED BY THE NOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES.

FLOODPLAIN, STREAM, AND WETLAND INFORMATION

WETLANDS SHOWN HERON ARE BASED ON FIELD SURVEY OF DELINEATIONS BY HUYSMAN & BANDY, INC., DATED MAY 11, 2015. FLOODPLAIN INFORMATION OBTAINED FROM FEMA FIRM MAP NUMBER 3710468000J, EFFECTIVE DATE OCTOBER 05, 2008.

ROAD IMPROVEMENT

ROAD IMPROVEMENTS ARE SUBJECT TO AVAILABLE RIGHT OF WAY AND COORDINATION WITH NCDOT. TRAFFIC IMPACT ANALYSIS TO BE PROVIDED BY DEVELOPER FOR APPROVAL BY THE CITY OF CONCORD.

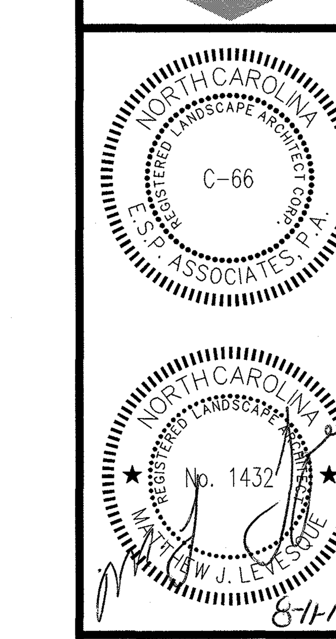
OFF SITE UTILITY IMPROVEMENTS

FINAL ALIGNMENT OF ALL OFF SITE UTILITY IMPROVEMENTS TO BE DETERMINED DURING CONSTRUCTION DOCUMENT DESIGN PHASE IN COORDINATION WITH THE CITY OF CONCORD.

TOTAL OPEN SPACE PROVIDED

TOTAL OPEN SPACE PROVIDED INCLUDES PROPERTY BUFFERS, NATURAL AREAS, AND WATER QUALITY AREAS.

ESP Associates, P.A.
P.O. Box 7030
Charlotte, NC 28241
3475 Lakemont Blvd.
Fort Mill, SC 29708
704-583-4949 (NC)
803-802-2440 (SC)
www.espassociates.com



NO.	DATE	REVISION	BY
1	08/11/2015	REVISED PER AGENCY COMMENTS	AC

PRELIMINARY PLAT (OVERALL)

ALLEN FARM

CITY OF CONCORD, NC

PULTE HOMES

PROJECT INFORMATION	
PROJECT MANAGER:	ML
DESIGNED BY:	MM
DRAWN BY:	CL/AH
PROJECT NUMBER:	CV43.100
ORIGINAL DATE:	07/01/2015

SHEET:

OVERALL

U:\2014 Projects (C)\CV43 - Allen Farm Site (Pulte)\Submittal Working Drawings\2015-08-10_Preliminary Plat_2nd Submittal\DWG\Sheets\CV43-PP1.dwg, OVERALL, aconway

ADJOINING PARCEL INFORMATION:

1. PIN#: 46804578820000
OWNER: QUINN ROBERT PATEL & SMITA P QUINN
ZONING: LDR

2. PIN#: 46804565240000
OWNER: PIEDMONT NATURAL GAS COMPANY INC.
ZONING: LDR

3. PIN#: 46804594160000
PIEDMONT NATURAL GAS COMPANY INC.
ZONING: LDR

4. PIN#: 46804553440000
OWNER: HART MIRIAM C & HORT HORACE GEORGE
ZONING: LDR

5. PIN#: 46805531480000
OWNER: HART MIRIAM C & HART HORACE GEORGE
ZONING: LDR

6. PIN#: 46805409950000
OWNER: GANT BRETT E & GANT TRACI
ZONING: LDR

7. PIN#: 46804447290000
OWNER: BOND SUZANNE R TRUSTEE &
BOND ROBERT & SUZANNE R
ZONING: LDR

8. PIN#: 46804476960000
OWNER: GURLEY DONALD R
ZONING: LDR

9. PIN#: 46804436930000
OWNER: HARVEY DONALD W & HARVEY JANET WF
ZONING: LDR

10. PIN#: 46804463690000
OWNER: KANCHARLA LAKSHMI SASANKA &
AKANI MURALI CHOWDARY SPOUSE
ZONING: LDR

11. PIN#: 46804405850000
OWNER: MCKENZIE ALICE W
ZONING: LDR

12. PIN#: 46803486600000
OWNER: MCKENZIE ALICE V LEE
ZONING: LDR

13. PIN#: 46803475150000
OWNER: JIMENEZ NOE ARNULFO PINEDA
ZONING: LDR

14. PIN#: 46803455940000
OWNER: AUSTRIE GLENROY
ZONING: LDR

15. PIN#: 46803431870000
OWNER: NEWCOMER EARL KEITH SR
ZONING: LDR

16. PIN#: 46803413150000
OWNER: NEWCOMER EARL KEITH SR
ZONING: LDR

17. PIN#: 4680144164000
OWNER: SOIL AND WATER CONSERVATION
ZONING: LDR

18. PIN#: 46800378370000
OWNER: OZIMEK ERIK WILLIAM
ZONING: NULL

19. PIN#: 46800379230000
OWNER: ABBOTT JOH G & ABBOTT LEE-MAY WF
ZONING: NULL

20. PIN#: 46800470100000
OWNER: PFEIFFER MONICA LYNETTE
ZONING: NULL

21. PIN#: 46800460970000
OWNER: HUFFMAN W RICHARD &
HUFFMAN RUTHER S/WIFE
ZONING: NULL

22. PIN#: 46800461630000
OWNER: WERNER JONATHAN H
ZONING: NULL

23. PIN#: 46800462400000
OWNER: FLAHERTY PATTI S
ZONING: NULL

24. PIN#: 46800462380000
OWNER: FITZGERALD EDWARD J &
FITZGERALD DENISE N/WIFE
ZONING: NULL

25. PIN#: 46800463160000
OWNER: FREEMAN ALEXANDER R &
FREEMAN AMY H WF
ZONING: NULL

26. PIN#: 4680045483000
OWNER: JACKSON JAMES & JACKSON DEBBIE WF
ZONING: NULL

27. PIN#: 46800454170000
OWNER: ROSS CHARLES S & ROSS ERIKA A/WIFE
ZONING: NULL

28. PIN#: 46800445300000
OWNER: FOSTER BRIAN TAVE &
FOSTER KATHERINE ANGEL WF
ZONING: NULL

29. PIN#: 46800435210000
OWNER: LAATSCH SHANNON LAWRENCE &
LAATSCH BRADLEY MICHAEL/SPOUSE
ZONING: NULL

30. PIN#: 46800424260000
OWNER: GOODEN CHARLES L
ZONING: NULL

31. PIN#: 46800413790000
OWNER: FRANCIS BRIAN DAVID
ZONING: NULL

32. PIN#: 46800413530000
OWNER: GRIFFIN PATRICK J III & GRIFFIN LINDA C
ZONING: NULL

33. PIN#: 46800436310000
OWNER: HIGHLAND CREEK COMMUNITY ASSOC
ZONING: NULL

34. PIN#: 46800501760000
OWNER: HIGHLAND CREEK COMMUNITY ASSOC
ZONING: NULL

35. PIN#: 46709477330000
OWNER: DAVIS SIMONE A & DAVIS JAMES HSB
ZONING: NULL

36. PIN#: 46709477990000
OWNER: AKELLA SRINIVAS & AKELLA JAYASRI WF
ZONING: NULL

37. PIN#: 46709478870000
OWNER: CONNICK PETER J &
CONNICK ANDREA D SPOUSE
ZONING: NULL

38. PIN#: 46709489070000
OWNER: ROGERS SCOTT A & ROGERS KAITLYN
ZONING: NULL

39. PIN#: 46709580230000
OWNER: BALSAMO GARY J
ZONING: NULL

40. PIN#: 46709580390000
OWNER: WASSWEILER GARY W &
WASSWEILER VERA A WF
ZONING: NULL

41. PIN#: 46709581680000
OWNER: HABEL MICHAEL E &
HABEL JOELLEN L WF
ZONING: NULL

42. PIN#: 46709582460000
OWNER: MCGOWAN MICHAEL &
MCGOWAN LUCIE H WF
ZONING: NULL

43. PIN#: 46709573750000
OWNER: HURD MICHAEL
ZONING: NULL

44. PIN#: 46709583680000
OWNER: TONG GARY CHIA-LUN &
TONG LORI ANNE WF
ZONING: NULL

45. PIN#: 46709594310000
OWNER: ELLIOTT EMMETT III & ELLIOTT WF
ZONING: NULL

46. PIN#: 46709594840000
OWNER: GROUSE CHRISTOPHER J &
GROUSE HOLLY WF
ZONING: NULL

47. PIN#: 46800506760000
OWNER: SMITH SARAH F & FLEETON BARBARA J
ZONING: NULL

48. PIN#: 46709596830000
OWNER: HOLM BRIAN J & HOLM SHERRI Y/ WF
ZONING: NULL

49. PIN#: 4680050970000
OWNER: PATIL PRATAPSINH SHANKARRAO &
DESAI MANGALA JAGANNATH WF
ZONING: RV

50. PIN#: 46800600140000
OWNER: RATHIKRINDA ANUJA & KASTALA
SIVANARAYANA RAO WF
ZONING: RV

51. PIN#: 46800601100000
OWNER: PATIL BASAVARAJ
& PATIL PRATHIBHA WF
ZONING: RV

52. PIN#: 46800601260000
OWNER: OATES CHARLES E JR
& OATES ALICIA S WF
ZONING: RV

53. PIN#: 46709692930000
OWNER: KAKARLA ANJANEYULU & KAKARLA
SOWJANYA WF
ZONING: RV

54. PIN#: 46709693700000
OWNER: PADIVAL VIKRAM M &
PADIVAL RAKSHA V WF
ZONING: RV

55. PIN#: 46709693360000
OWNER: MAJHI PARTHA P
ZONING: RV

56. PIN#: 46709686680000
OWNER: WINDING WALK OWNERS ASSOC. INC.
ZONING: RV

57. PIN#: 46709666860000
OWNER: KALIAPERUMAL ASHOK KUMAR &
NAGARAJAN PADMA PRIYADHARSHINI
ZONING: RV

58. PIN#: 46709677130000
OWNER: HAMMILL WILLIAM ALFRED &
HAMMILL CAROL ANNE WF
ZONING: RV

59. PIN#: 46709678300000
OWNER: HYDE JOHN CHARLES III &
HYDE BEVERLY KYLE WF
ZONING: RV

60. PIN#: 46709678380000
OWNER: MILLER DAVID S & MILLER KELLIE A WF
ZONING: RV

61. PIN#: 46709679280000
OWNER: ROBERTS REGINA N
ZONING: RV

62. PIN#: 46709790210000
OWNER: MOHAMMED MUDASSAR ALI
& JAHAN SABA ST WF
ZONING: RV & LDR

63. PIN#: 46709791310000
OWNER: NIPANIKAR GAUTAM S
ZONING: RV & LDR

64. PIN#: 46709791670000
OWNER: NAIR AKHILESHI MURALIDHARAN &
NAIR RARIMA RAJ SPOUSE
ZONING: RV & LDR

65. PIN#: 46800702010000
OWNER: SUNDARARAJ MONIMARAN &
MONIMARAN & JEGATHA WF
ZONING: RV & LDR

66. PIN#: 46800702550000
OWNER: VEMPATI SRINIVAS &
DWIJA FNU AITA WF
ZONING: RV & LDR

67. PIN#: 46800702990000
OWNER: SIMPSON BERNADETTE
ZONING: RV & LDR

68. PIN#: 46800713430000
OWNER: FIORILLO MERCEDES M & GATT CURTIS
ZONING: RV & LDR

69. PIN#: 46800713970000
OWNER: BODDY TERRA A
ZONING: RV & LDR

70. PIN#: 46800724400000
OWNER: VADIVELU SWAMINATHAN
ZONING: RV & LDR

71. PIN#: 46800734050000
OWNER: POLA PRADEEP &
SAMUDRALA GOWTHAMI WF
ZONING: RV & LDR

72. PIN#: 46800735250000
OWNER: KAKARLA ASHA
ZONING: RV & LDR

73. PIN#: 46800726620000
OWNER: HAMEED SALAVUDEEN ABDUL &
SUMAIYA MOHAMED SPOUSE
ZONING: RV & LDR

74. PIN#: 46800716750000
OWNER: MACEK NICHOLAS R &
MACEK AMANDA C WF
ZONING: RV & LDR

75. PIN#: 46800716040000
OWNER: PATEL BIJAL V &
PATEL MAMTA B SPOUSE
ZONING: RV & LDR

76. PIN#: 46800719850000
OWNER: LOVE HARRY JR
ZONING: LDR

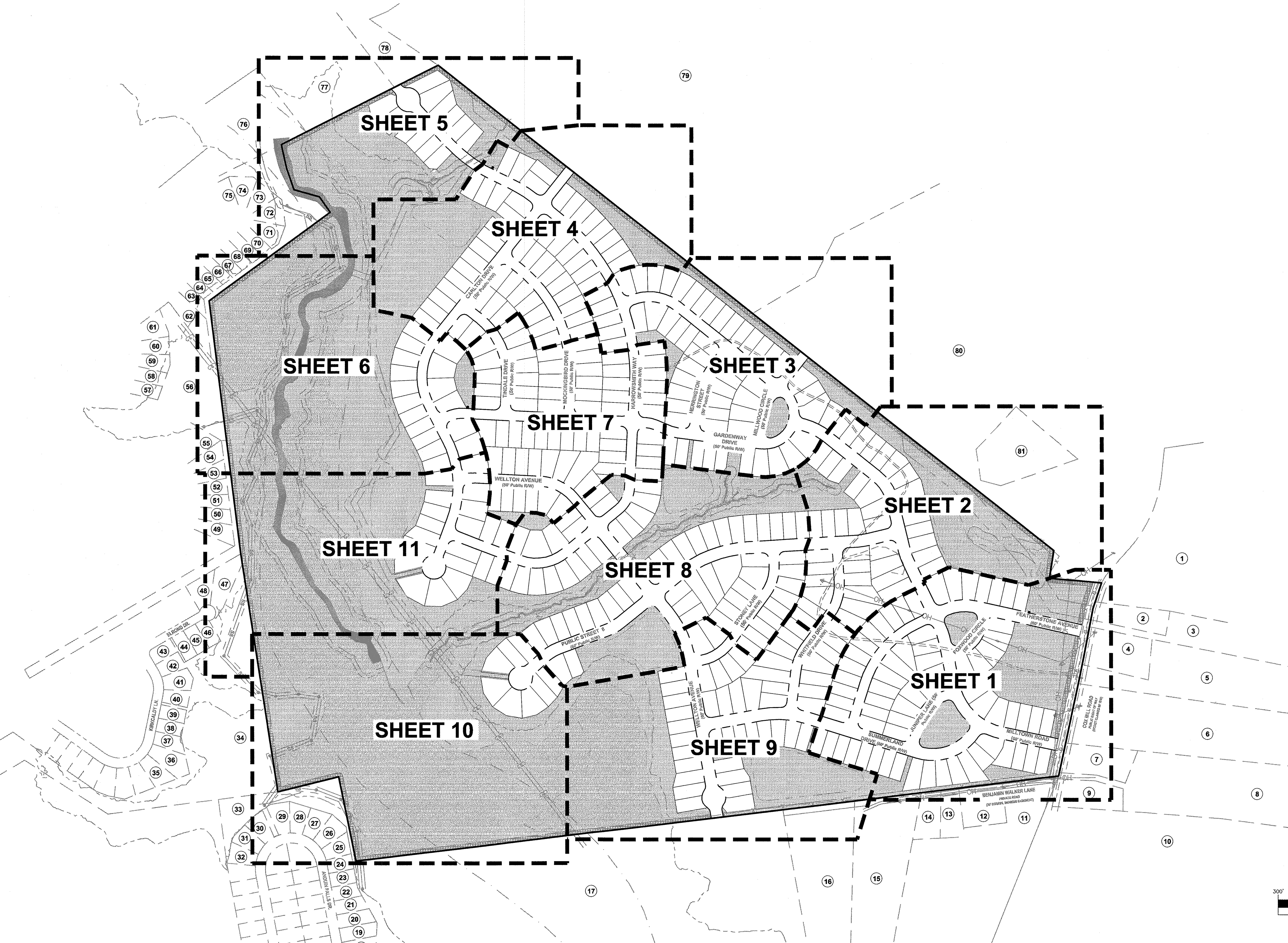
77. PIN#: 46800852450000
OWNER: POPLAR PARK LLC
ZONING: LDR

78. PIN#: 46800893250000
OWNER: JACKSON CALVIN
ZONING: LDR

79. PIN#: 4680283296000
OWNER: CAROLINA INTERNATIONAL SCHOOL
ZONING: RM-1

80. PIN#: 46804609360000
OWNER: HODGES FAMILY FARM LLC
ZONING: LDR

81. PIN#: 46804603690000
OWNER: HODGES DEWITT P & ANNE P
ZONING: LDR



STREET CENTERLINE CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	310.00'	361.94'	204.78'	341.73'	N 44°53'47" W	66°53'45"
C2	310.00'	77.28'	38.84'	77.08'	N 18°35'25" W	14°17'00"
C3	310.00'	66.11'	33.18'	65.98'	N 19°37'21" W	12°13'07"
C4	230.00'	152.04'	78.91'	149.28'	N 32°27'01" W	37°52'26"
C5	310.00'	126.24'	64.00'	125.36'	N 63°03'10" W	23°19'53"
C6	230.00'	153.99'	80.01'	151.13'	S 83°26'54" W	38°21'37"
C7	500.00'	409.48'	217.01'	398.13'	S 40°48'24" W	46°55'23"
C8	250.00'	320.86'	186.80'	299.28'	S 70°34'40" W	73°32'06"
C9	500.00'	238.75'	121.69'	236.49'	N 86°20'03" W	27°21'30"
C10	500.00'	255.76'	130.74'	252.98'	S 24°40'01" E	29°18'27"
C11	230.00'	191.72'	101.83'	186.22'	S 63°12'02" E	47°45'35"
C12	230.00'	26.64'	13.33'	26.62'	N 89°36'07" E	6°38'06"
C13	310.00'	54.59'	27.37'	54.52'	S 81°31'54" W	10°05'23"
C14	600.00'	375.91'	194.36'	369.80'	S 68°37'40" W	35°53'50"
C15	230.00'	74.69'	37.68'	74.37'	S 59°58'59" W	18°36'27"
C16	230.00'	83.41'	42.17'	82.95'	S 58°53'53" W	20°46'39"
C17	150.00'	172.59'	97.27'	163.22'	N 45°35'24" E	65°55'22"
C18	250.00'	173.33'	90.31'	169.88'	N 16°26'21" E	39°43'31"
C19	250.00'	126.44'	64.60'	125.09'	N 21°48'47" E	28°58'38"
C20	230.00'	159.47'	83.09'	156.29'	N 16°26'21" E	39°43'31"
C21	230.00'	175.36'	92.19'	171.15'	N 58°08'39" E	43°41'06"
C22	230.00'	238.48'	131.21'	227.94'	S 81°05'30" E	59°24'34"
C23	150.00'	389.65'	537.86'	288.97'	S 23°01'48" W	148°50'04"
C24	150.00'	39.07'	19.65'	38.96'	N 75°05'28" W	14°55'23"
C25	150.00'	50.92'	25.71'	50.68'	N 77°21'18" W	19°27'03"
C26	150.00'	79.52'	40.72'	78.59'	S 77°43'56" W	30°22'29"
C27	500.00'	421.55'	224.22'	409.18'	N 3°18'07" W	48°18'23"
C28	300.00'	345.93'	195.08'	327.08'	N 5°34'44" E	66°04'05"
C29	360.00'	341.22'	184.64'	328.59'	N 24°14'02" W	54°18'24"
C30	680.00'	644.52'	348.77'	620.67'	N 24°14'02" W	54°18'24"
C31	230.00'	241.55'	133.25'	230.60'	N 80°45'55" E	60°10'20"
C32	150.00'	125.03'	66.41'	121.45'	N 26°47'58" E	47°45'35"
C33	1000.00'	947.83'	512.90'	912.75'	N 24°14'02" W	54°18'24"
C34	625.00'	138.95'	69.77'	138.67'	N 57°45'23" W	12°44'18"
C35	750.00'	269.57'	136.26'	268.13'	N 53°49'43" W	20°35'38"
C36	425.00'	231.17'	118.52'	228.34'	N 23°01'48" E	31°09'56"
C37	150.00'	81.59'	41.83'	80.59'	N 23°01'48" E	31°09'56"
C38	200.00'	188.86'	102.13'	181.92'	S 44°23'48" W	54°06'12"

STREET CENTERLINE LINE TABLE

LINE	LENGTH	BEARING
L1	321.91'	N 78°20'40" W
L2	222.03'	N 11°26'55" W
L3	355.45'	N 25°43'54" W
L4	252.63'	N 13°30'48" W
L5	318.05'	N 51°23'14" W
L6	58.21'	N 74°43'07" W
L7	583.57'	N 77°22'17" W
L8	57.73'	S 64°16'06" W
L9	97.85'	S 64°16'06" W
L10	246.88'	S 17°20'43" W
L11	50.73'	S 33°48'37" W
L12	577.93'	N 72°39'17" W
L13	301.50'	S 79°59'12" W
L14	746.21'	S 10°00'48" E
L15	736.39'	S 39°19'15" E
L16	328.92'	S 87°04'50" E
L17	61.19'	N 86°17'04" E
L18	163.64'	S 76°29'12" W
L19	550.16'	S 86°34'35" W
L20	376.39'	S 50°40'45" W
L21	260.21'	S 69°17'12" W
L22	200.60'	S 48°30'33" W
L23	98.28'	N 12°37'43" E
L24	51.78'	N 78°33'05" E
L25	196.26'	N 3°25'25" W
L26	208.48'	N 36°18'06" E
L27	218.02'	N 7°19'29" E
L28	87.88'	N 3°25'25" W
L29	301.94'	N 36°18'06" E
L30	55.60'	N 79°59'12" E
L31	60.53'	N 69°12'13" E
L32	223.72'	S 51°23'14" E
L33	445.97'	S 51°23'14" E
L34	416.56'	N 82°33'09" W
L35	79.93'	N 67°37'46" W
L36	912.53'	N 87°04'50" W
L37	57.39'	S 62°32'41" W
L38	1085.26'	N 38°36'46" E
L39	194.51'	N 27°27'19" W
L40	286.09'	N 20°51'05" E
L41	110.53'	N 51°23'14" W
L42	183.16'	N 2°55'10" E
L43	110.53'	N 51°23'14" W
L44	183.16'	N 2°55'10" E
L45	390.42'	S 69°08'55" E
L46	342.99'	N 50°40'45" E
L47	512.69'	N 2°55'10" E
L48	161.33'	N 51°23'14" W
L49	101.82'	N 64°07'32" W
L50	335.98'	N 43°31'54" W
L51	108.43'	N 38°36'46" E
L52	145.33'	N 7°26'51" E
L53	292.32'	N 38°36'46" E
L54	140.70'	N 7°26'51" E
L55	53.28'	S 71°26'54" W
L56	150.06'	S 17°20'43" W

GRAPHIC SCALE

300' 0 150' 300' 600' 1200'

(IN FEET)
1 inch = 300 ft.

Know what's below. Call before you dig.

ESP Associates, P.A.
P.O. Box 7030
Charlotte, NC 28241
3475 Lakemont Blvd.
Fort Mill, SC 29708
704-583-4949 (NC)
803-802-2440 (SC)
www.espassociates.com

NO.	DATE	REVISION	BY
1	08/11/2015	REVISED PER AGENCY COMMENTS	AC

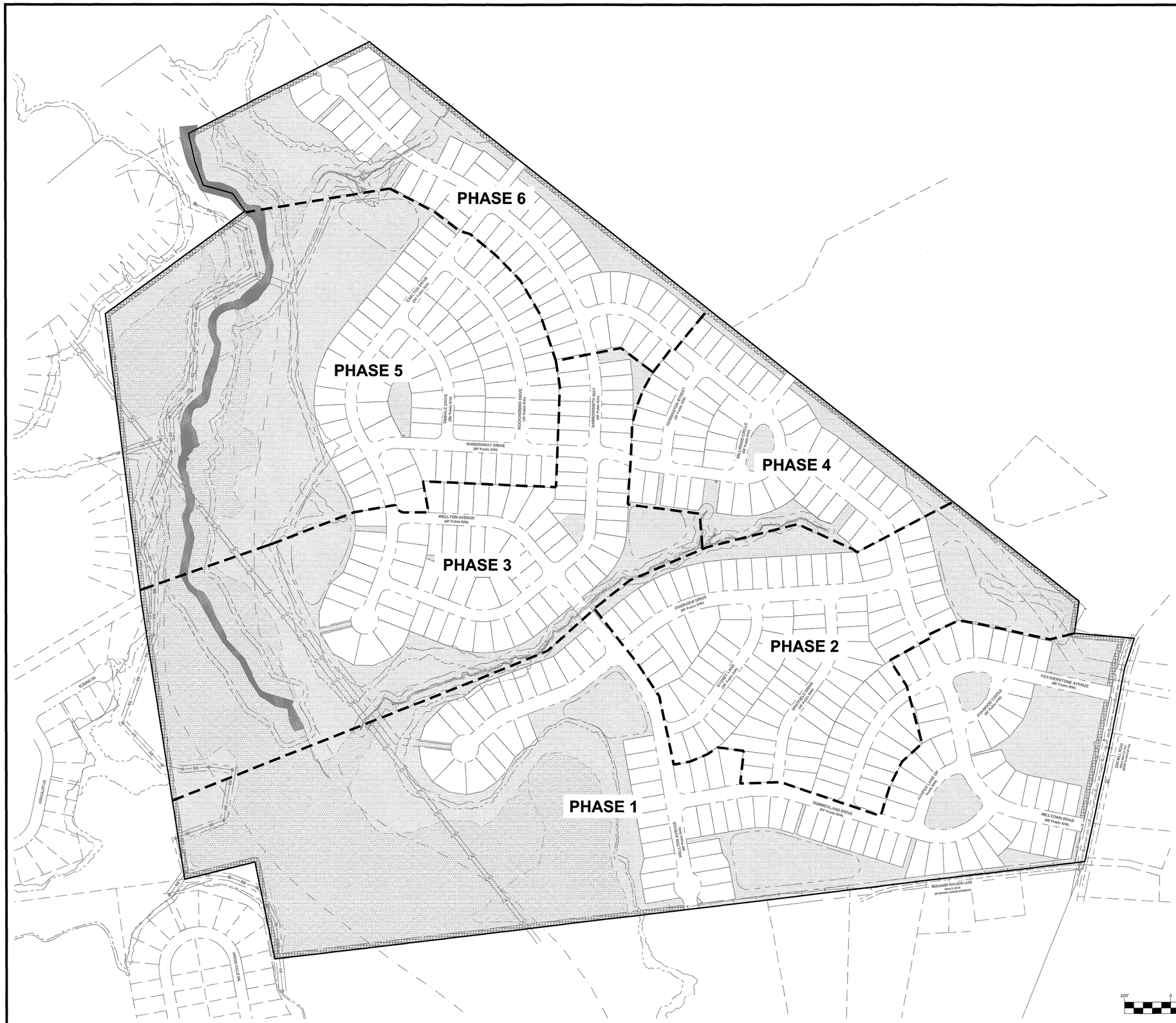
PRELIMINARY PLAT (INDEX)

ALLEN FARM

CITY OF CONCORD, NC

PULTE HOMES

PROJECT INFORMATION	
PROJECT MANAGER:	ML
DESIGNED BY:	MM
DRAWN BY:	CL/AH
PROJECT NUMBER:	CV43.100
ORIGINAL DATE:	07/01/2015
SHEET:	INDEX



DEVELOPMENT PHASING:

PHASE 1:
60' LOTS = 51 (53.6%)
65' LOTS = 44 (46.4%)

TOTAL LOTS = 95

PHASE 2:
60' LOTS = 64 (64.0%)
65' LOTS = 36 (36.0%)

TOTAL LOTS = 100

PHASE 3:
60' LOTS = 43 (58.9%)
65' LOTS = 30 (41.1%)

TOTAL LOTS = 73

PHASE 4:
60' LOTS = 25 (50%)
65' LOTS = 25 (50%)

TOTAL LOTS = 50

PHASE 5:
60' LOTS = 53 (65.4%)
65' LOTS = 28 (34.6%)

TOTAL LOTS = 81

PHASE 6:
60' LOTS = 32 (60.4%)
65' LOTS = 21 (39.6%)

TOTAL LOTS = 53

NOTE:
PHASING IS SUBJECT TO MODIFICATION(S) DURING CONSTRUCTION DOCUMENT PREPARATION & BASED ON DETAILED DESIGN.

DEVELOPMENT SUMMARY:

60' LOTS =	268 LOTS (59.3%)
65' LOTS =	184 LOTS (40.7%)
TOTAL LOTS =	452 LOTS (100%)

GRAPHIC SCALE
200' 0 100' 200' 400' 800'
(IN FEET)
1 inch = 200 ft.

NORTH ORIENTED TO: NC NAD83/2011

Know what's below. Call before you dig.

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Fort Mill, SC 29708
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www.espassociates.com

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECTURAL CORPORATION C-66 ESP ASSOCIATES, P.A.

NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 1432 MATTHEW J. LOVE 8-11-15

NO.	DATE	REVISION	BY
1	08/11/2015	REVISED PER AGENCY COMMENTS	AC

PRELIMINARY PLAT (PHASING PLAN)

ALLEN FARM

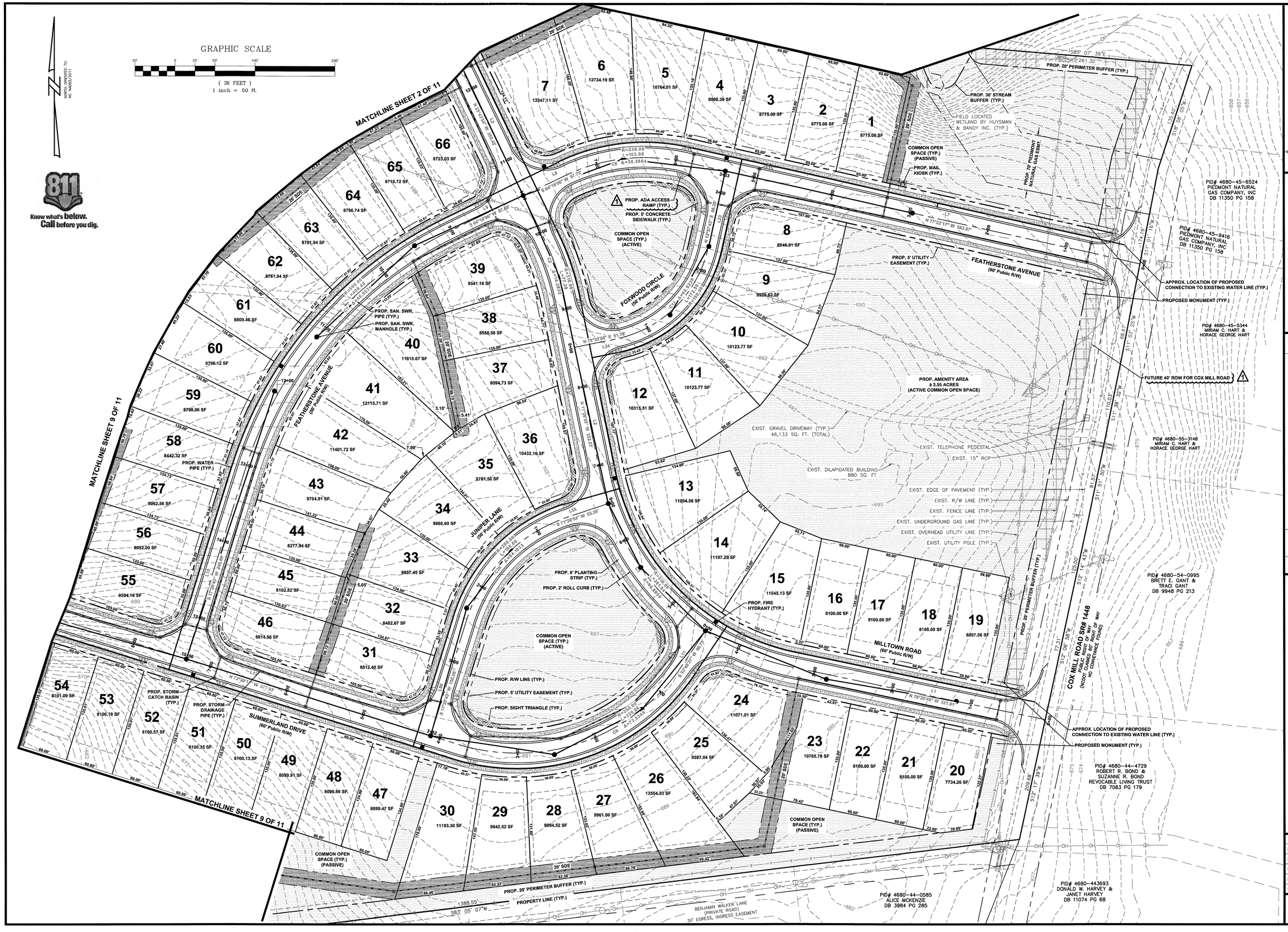
CITY OF CONCORD, NC

PULTE HOMES

PROJECT INFORMATION	
PROJECT MANAGER:	ML
DESIGNED BY:	MM
DRAWN BY:	CL/AH
PROJECT NUMBER:	CV43.100
ORIGINAL DATE:	07/01/2015

SHEET:
PHASING

U:\2014 Projects (O)\CV43 - Allen Farm Site (Pulte)\Submittal Working Drawings\2015-08-10_Preliminary Plat_2nd Submittal\DWG\Sheets\CV43-PP1.dwg, PHASING, aconway



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NORTH CAROLINA PROFESSIONAL ENGINEERING CORPORATE ESP ASSOCIATES, P.A. C-66

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL No. 1432 MATTHEW J. LEVESQUE 8-11-15

NO.	DATE	REVISION	BY
1	08/11/2015	REVISED PER AGENCY COMMENTS	AC

PRELIMINARY PLAT (SHEET 1 OF 11)

ALLEN FARM

CITY OF CONCORD, NC

PULTE HOMES

PROJECT INFORMATION	
PROJECT MANAGER:	ML
DESIGNED BY:	MM
DRAWN BY:	CL/AH
PROJECT NUMBER:	CV43.100
ORIGINAL DATE:	07/01/2015
SHEET:	1

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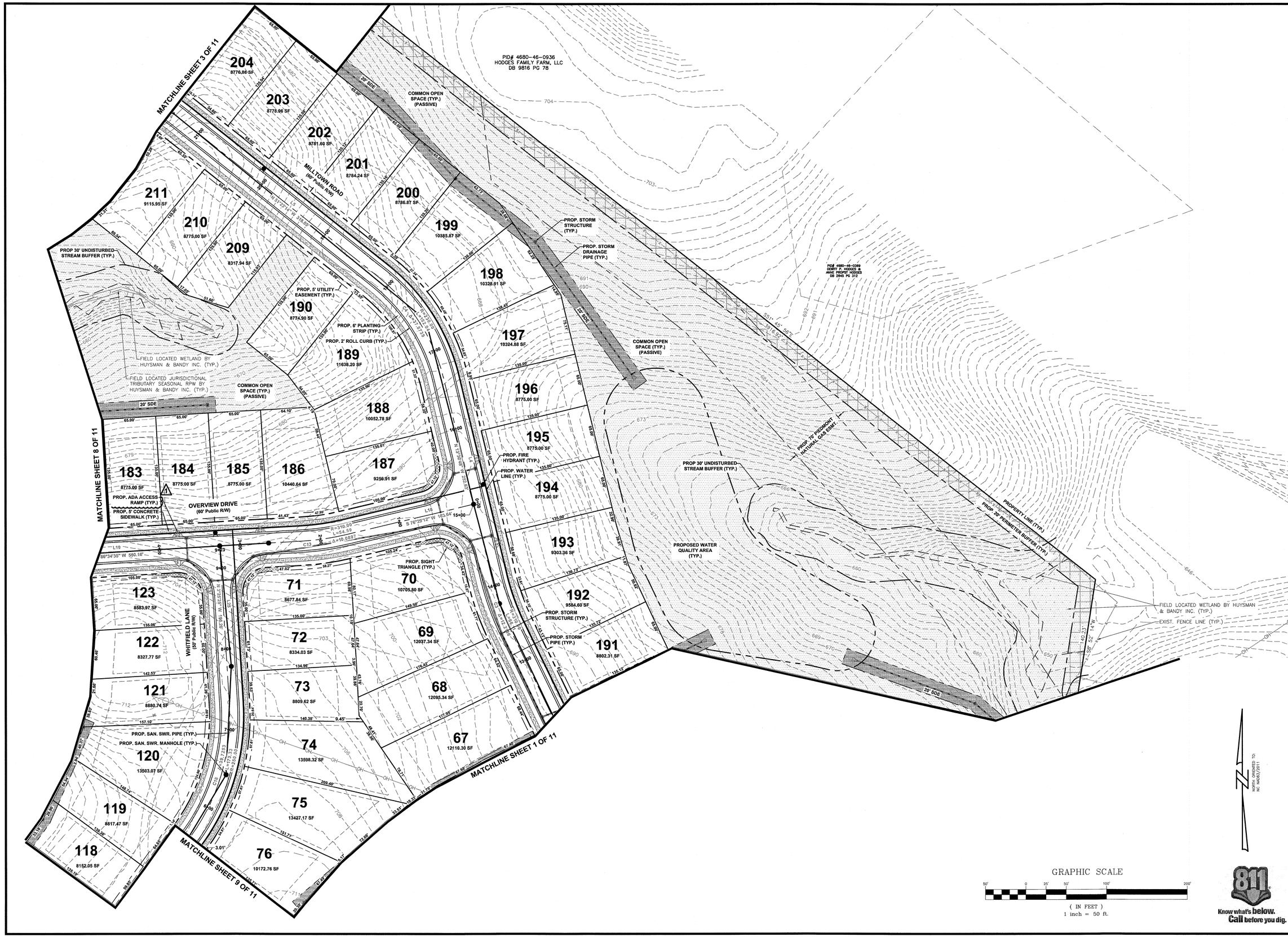

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803-802-2440 (SC)
www.espassociates.com

NORTH CAROLINA PROFESSIONAL SEAL ENGINEERING ESP ASSOCIATES, P.A. C-66

NORTH CAROLINA PROFESSIONAL SEAL PRELIMINARY PLAT No. 14324 MATTHEW J. LEVESQUE 8-11-15

NO.	DATE	REVISION	BY
1	08/11/2015	REVISED PER AGENCY COMMENTS	AC

PRELIMINARY PLAT (SHEET 2 OF 11)

ALLEN FARM

CITY OF CONCORD, NC

PULTE HOMES

PROJECT INFORMATION	
PROJECT MANAGER:	ML
DESIGNED BY:	MM
DRAWN BY:	CL/AH
PROJECT NUMBER:	CV43.100
ORIGINAL DATE:	07/01/2015
SHEET:	2

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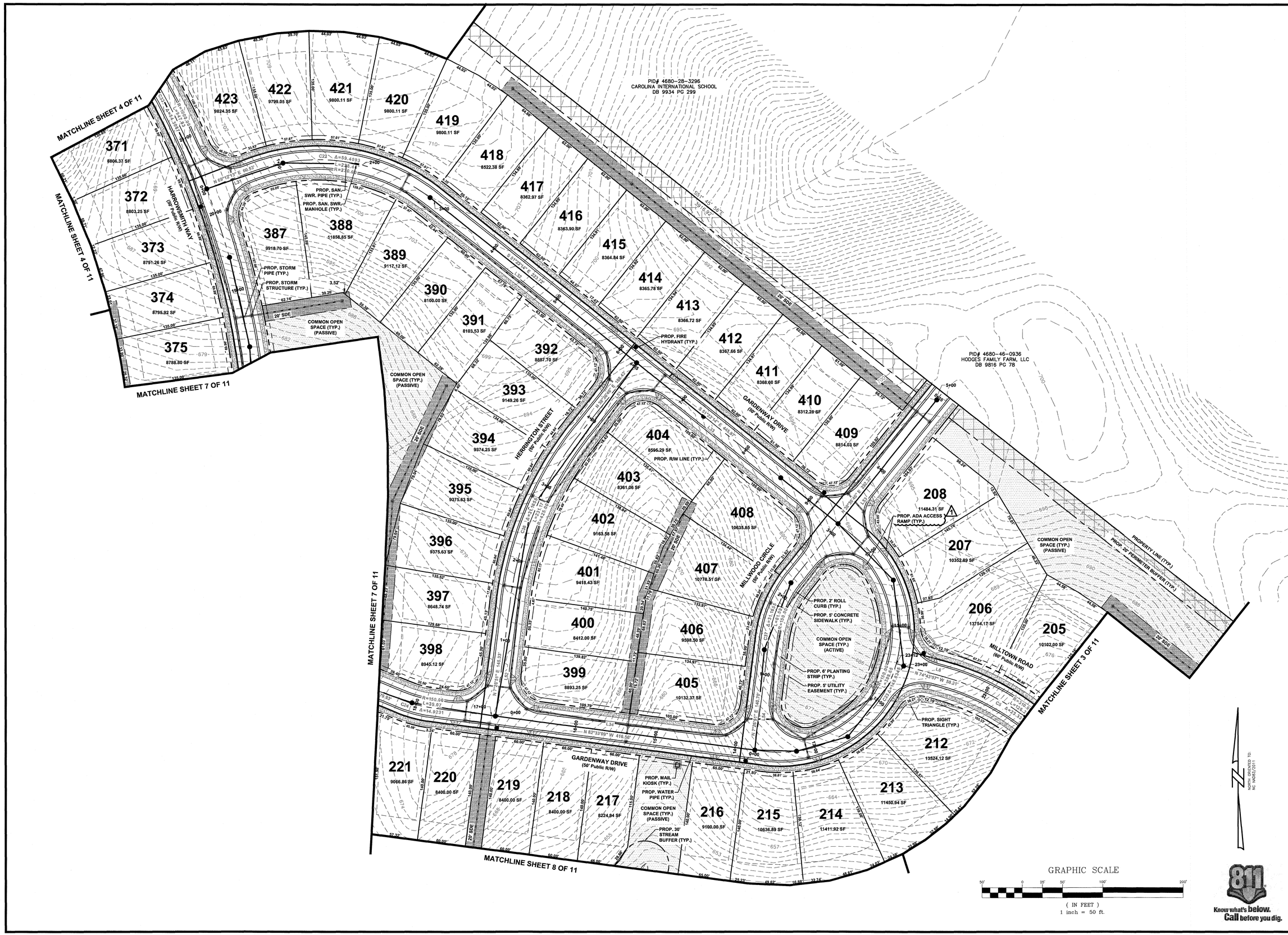

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NORTH CAROLINA PROFESSIONAL ENGINEERING FIRM C-66 ESP ASSOCIATES, P.A.

NORTH CAROLINA PROFESSIONAL SEAL No. 1432 ENGINEER MATTHEW J. LEVESQUE 8-11-15

NO.	DATE	REVISION	BY
1	08/11/2015	REVISED PER AGENCY COMMENTS	AC

PRELIMINARY PLAT (SHEET 3 OF 11)

ALLEN FARM

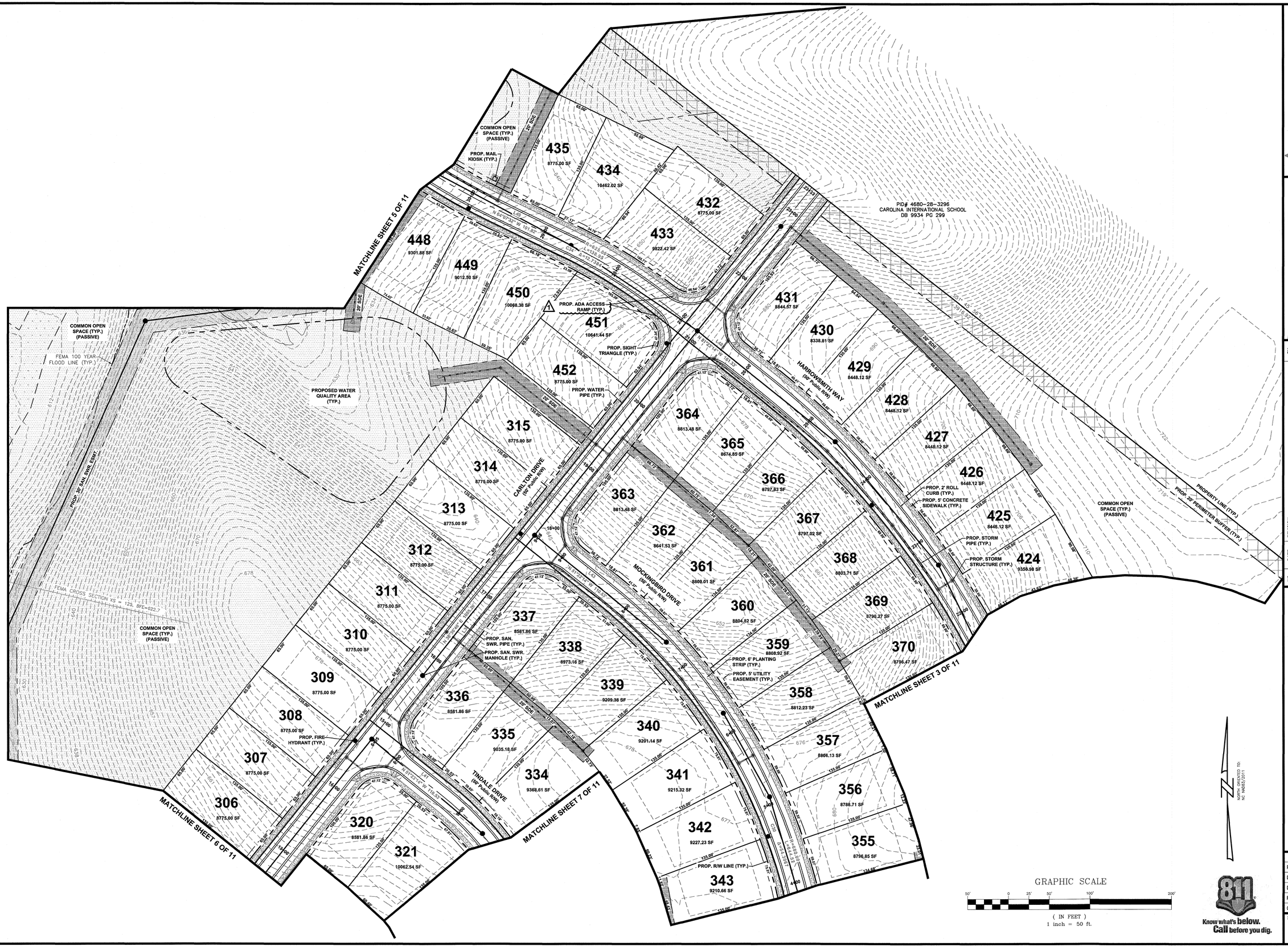
CITY OF CONCORD, NC

PULTE HOMES

PROJECT INFORMATION	
PROJECT MANAGER:	ML
DESIGNED BY:	MM
DRAWN BY:	CL/AH
PROJECT NUMBER:	CV43.100
ORIGINAL DATE:	07/01/2015
SHEET:	3

811 Know what's below. Call before you dig.

U:\2014 Projects (C)\CV43 - Allen Farm Site (Pulte)\Submittal Working Drawings\2015-08-10_Preliminary Plat_2nd Submittal\DWG\Sheets\CV43-PP2.dwg, 3, anorway



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NORTH CAROLINA PROFESSIONAL SEAL No. 14321 MATTHEW J. LEVESQUE 8/11/15

NO.	DATE	REVISION	BY
1	08/11/2015	REVISED PER AGENCY COMMENTS	AC

PRELIMINARY PLAT (SHEET 4 OF 11)

ALLEN FARM

CITY OF CONCORD, NC

PULTE HOMES

PROJECT INFORMATION	
PROJECT MANAGER:	ML
DESIGNED BY:	MM
DRAWN BY:	CL/AH
PROJECT NUMBER:	CV43.100
ORIGINAL DATE:	07/01/2015
SHEET:	4

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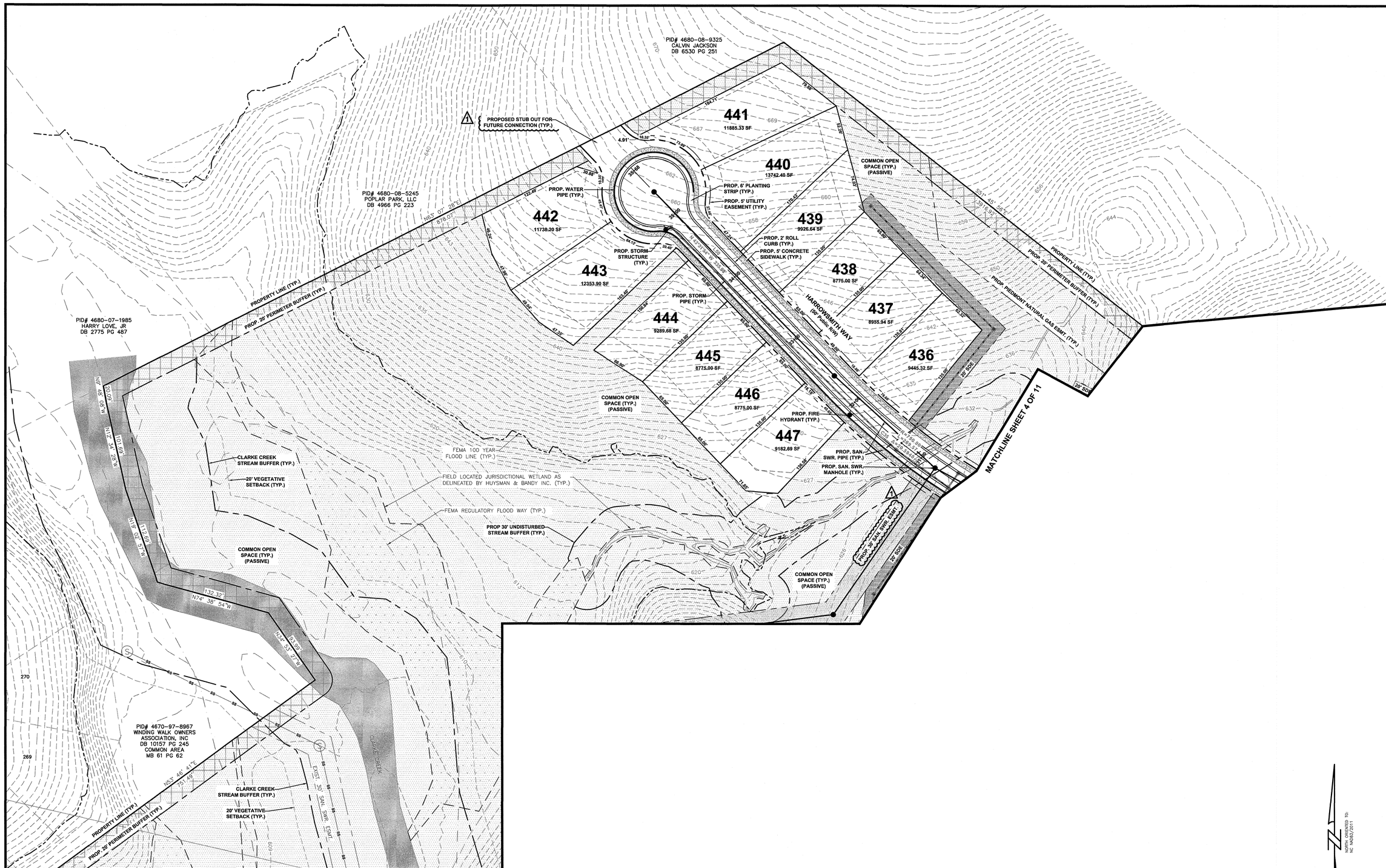

GRAPHIC SCALE

50' 0 25' 50' 100' 200'

(IN FEET)
1 inch = 50 ft.

NORTH ORIENTED TO: NC NAD83/2011

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NORTH CAROLINA PROFESSIONAL SEAL LICENSED LANDSCAPE ARCHITECT C-66 ESP ASSOCIATES, P.A.

NORTH CAROLINA PROFESSIONAL SEAL LICENSED PROFESSIONAL ENGINEER No. 1432 MATTHEW J. LEFESSIER 8-11-15

NO.	DATE	REVISION	BY
1	08/11/2015	REVISED PER AGENCY COMMENTS	AC

PRELIMINARY PLAT (SHEET 5 OF 11)

ALLEN FARM

CITY OF CONCORD, NC

PULTE HOMES

PROJECT INFORMATION	
PROJECT MANAGER:	ML
DESIGNED BY:	MM
DRAWN BY:	CL/AH
PROJECT NUMBER:	CV43.100
ORIGINAL DATE:	07/01/2015

SHEET: 5

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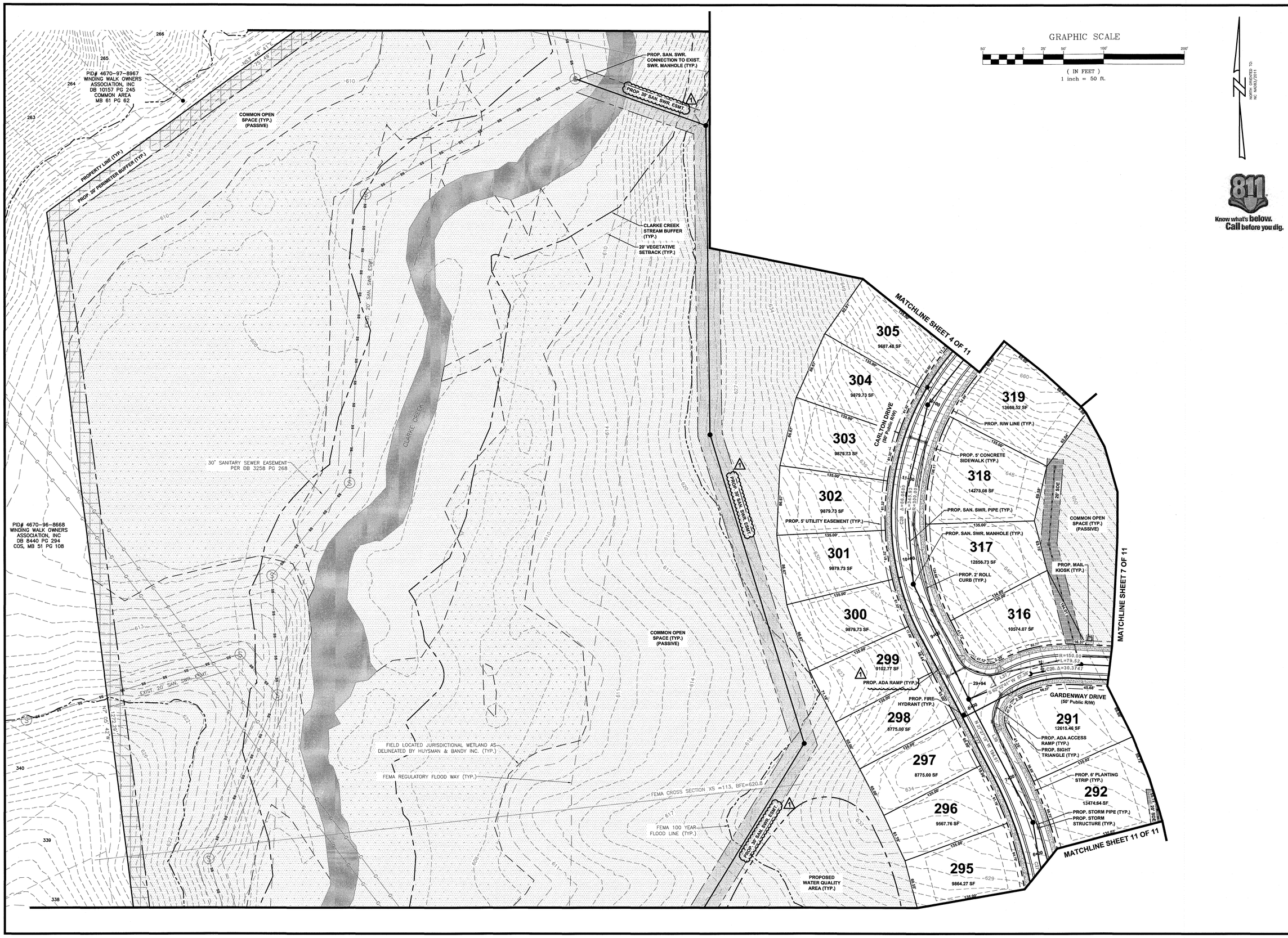

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NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 14324 MATTHEW J. LEVESQUE

8/11/15

NO.	DATE	REVISION	BY
1	08/11/2015	REVISED PER AGENCY COMMENTS	AC

PRELIMINARY PLAT (SHEET 6 OF 11)

ALLEN FARM

CITY OF CONCORD, NC

PULTE HOMES

PROJECT INFORMATION	
PROJECT MANAGER:	ML
DESIGNED BY:	MM
DRAWN BY:	CL/AH
PROJECT NUMBER:	CV43.100
ORIGINAL DATE:	07/01/2015
SHEET:	6

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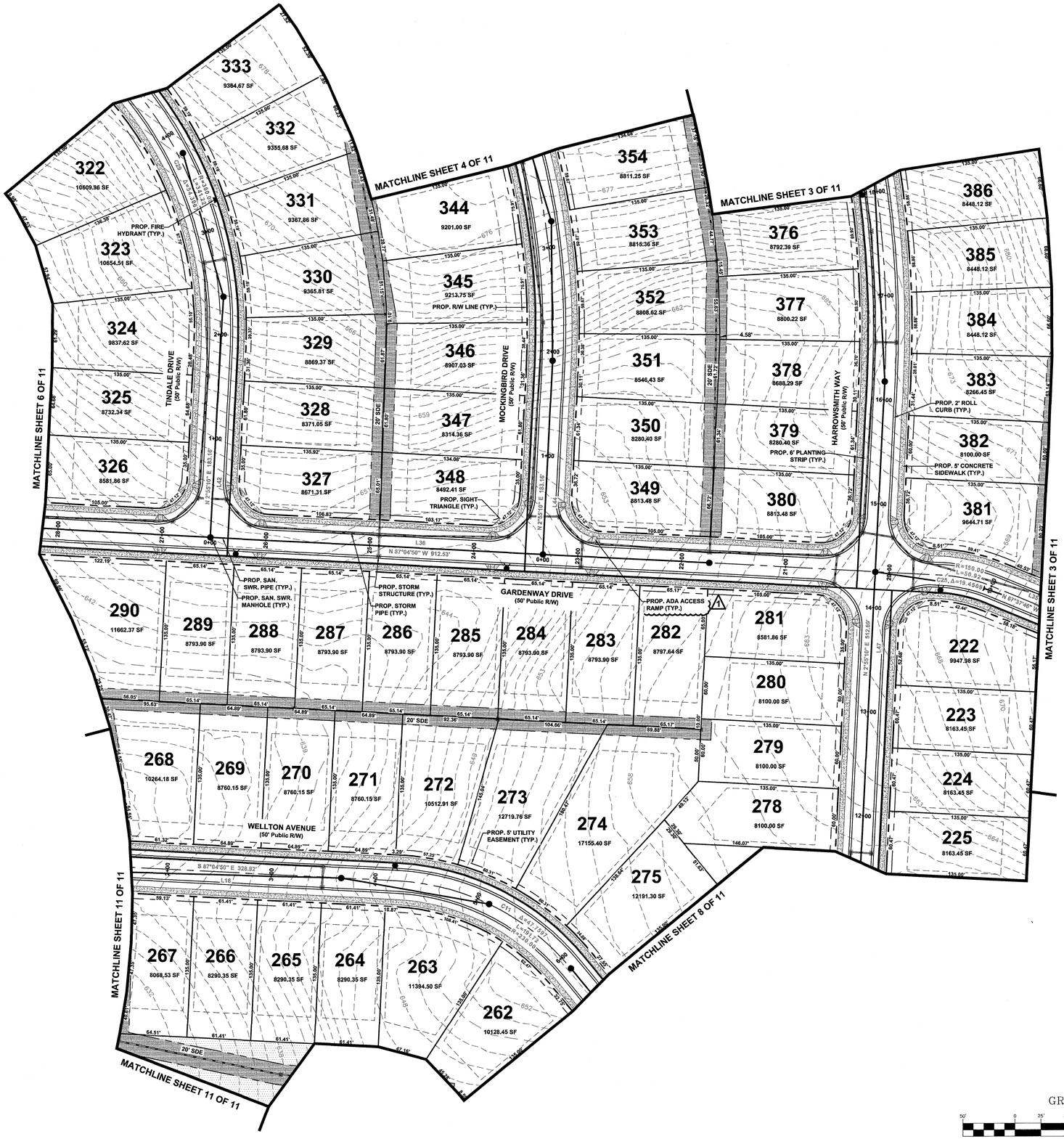

GRAPHIC SCALE

50' 0 25' 50' 100' 200'

(IN FEET)
1 inch = 50 ft.

NORTH ORIENTED TO: NC NAD83/2011

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NORTH CAROLINA PROFESSIONAL SEAL No. 14321 MATTHEW J. LEVESQUE 8-11-15

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PRELIMINARY PLAT (SHEET 7 OF 11)

ALLEN FARM

CITY OF CONCORD, NC

PULTE HOMES

PROJECT INFORMATION	
PROJECT MANAGER:	ML
DESIGNED BY:	MM
DRAWN BY:	CL/AH
PROJECT NUMBER:	CV43.100
ORIGINAL DATE:	07/01/2015
SHEET:	7

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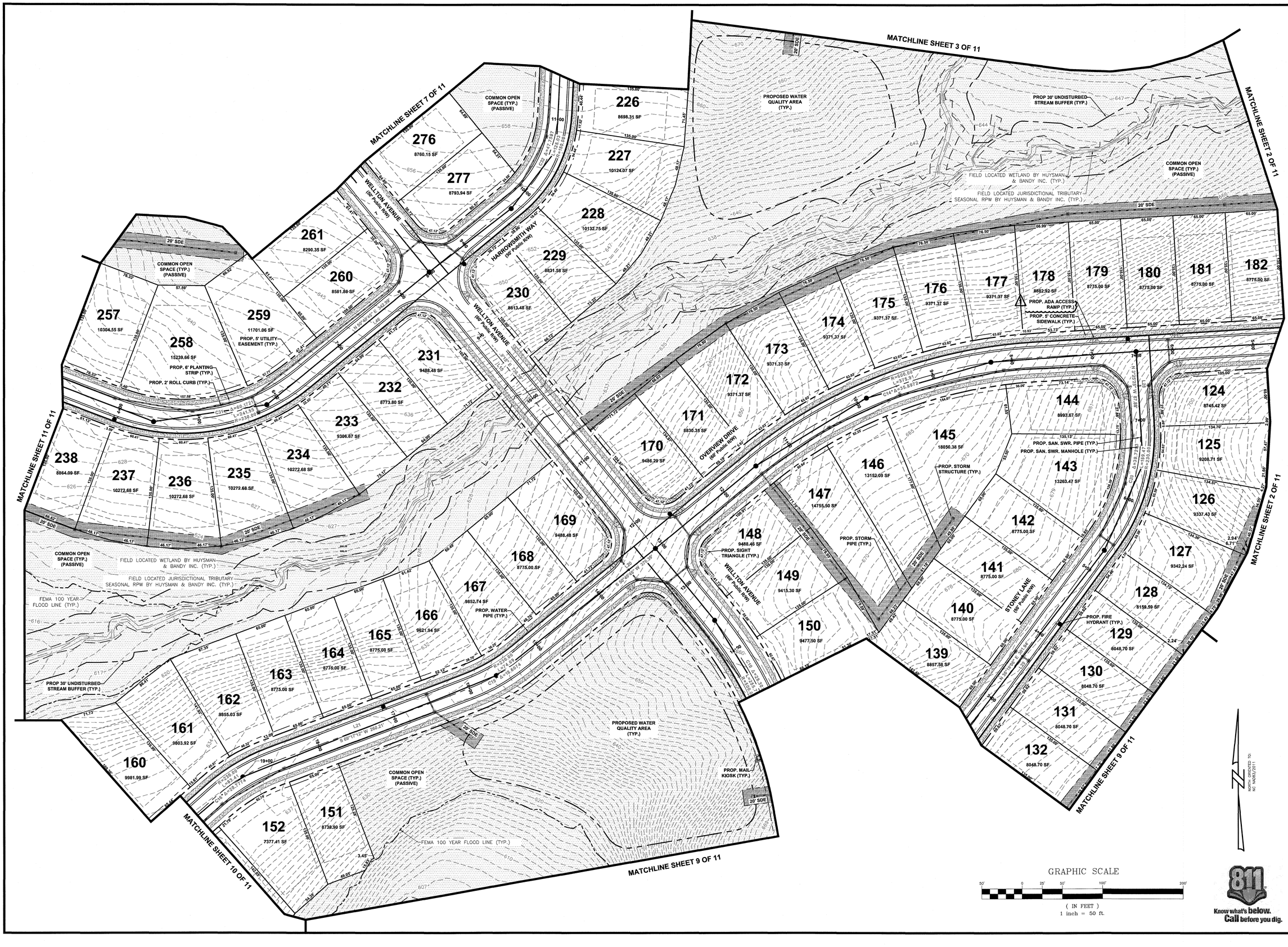

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NORTH CAROLINA PROFESSIONAL ENGINEERING FIRM C-66 ESP ASSOCIATES, P.A.

NORTH CAROLINA PROFESSIONAL SEAL No. 14321 MATTHEW J. LEWSHE

NO.	DATE	REVISION	BY
1	08/11/2015	REVISED PER AGENCY COMMENTS	AC

PRELIMINARY PLAT (SHEET 8 OF 11)

ALLEN FARM

CITY OF CONCORD, NC

PULTE HOMES

PROJECT INFORMATION	
PROJECT MANAGER:	ML
DESIGNED BY:	MM
DRAWN BY:	CL/AH
PROJECT NUMBER:	CV43.100
ORIGINAL DATE:	07/01/2015
SHEET:	8

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NORTH CAROLINA PROFESSIONAL ENGINEERING COMPANY C-66 ESP ASSOCIATES, P.A.

NORTH CAROLINA PROFESSIONAL SEAL No. 1432 MATTHEW J. LEWIS-SOUE 8/11/15

NO.	DATE	REVISION	BY
1	08/11/2015	REVISED PER AGENCY COMMENTS	AC

PRELIMINARY PLAT (SHEET 9 OF 11)

ALLEN FARM

CITY OF CONCORD, NC

PULTE HOMES

PROJECT INFORMATION	
PROJECT MANAGER:	ML
DESIGNED BY:	MM
DRAWN BY:	CL/AH
PROJECT NUMBER:	CV43.100
ORIGINAL DATE:	07/01/2015
SHEET:	9

MATCHLINE SHEET 11 OF 11

MATCHLINE SHEET 8 OF 11

MATCHLINE SHEET 9 OF 11

TOP OF BANK (TYP.)

CLARKE CREEK

FIELD LOCATED JURISDICTIONAL TRIBUTARY SEASONAL RPW BY HUYSMAN & BANDY INC. (TYP.)

FIELD LOCATED WETLAND BY HUYSMAN & BANDY INC. (TYP.)

20' VEGETATIVE SETBACK (TYP.)

CLARKE CREEK STREAM BUFFER (TYP.)

PROP 30' UNDISTURBED STREAM BUFFER (TYP.)

COMMON OPEN SPACE (TYP.) (PASSIVE)

PROP. 30' SAN. SWR. ESMT.

PROP. STORM PIPE (TYP.)

PROP. STORM STRUCTURE (TYP.)

FIELD LOCATED WETLAND BY HUYSMAN & BANDY INC. (TYP.)

NORTH CAROLINA NATURAL GAS EASEMENT UNDEFINED WIDTH DB 290 PG 135 LINES MARKED BY PIEDMONT NATURAL GAS

30' SANITARY SEWER EASEMENT PER DB 3258 PG 268

EXIST. 30' SAN. SWR. ESMT.

FEMA REGULATORY FLOOD WAY (TYP.)

FEMA CROSS SECTION XS =97, BFE=616

FEMA 100 YEAR FLOOD LINE (TYP.)

FIELD LOCATED WETLAND BY HUYSMAN & BANDY INC. (TYP.)

APPROXIMATE LOCATION AREA INUNDATED BY WATER

PROPERTY LINE (TYP.)

PROP. 20' PERIMETER BUFFER (TYP.)

PID# 4680-05-0176
HIGLAND CREEK COMMUNITY ASSOCIATION, INC
DB 6758 PG 276
MB 46 PG 109

N 47° 27' 30.01" W

313.63'
S76° 10' 41"W

COS

PID# 4680-04-3631
HIGHLAND CREEK COMMUNITY ASSOCIATION, INC
DB 5692 PG 257
MB 45 PG 48

N 11° 29' 45" W
420.07'

PROPERTY LINE (TYP.)

PROP. 20' PERIMETER BUFFER (TYP.)

COMMON OPEN SPACE (TYP.) (PASSIVE)

FEMA CROSS SECTION XS =90, BFE=617.6

2150.10'
S83° 11' 36"W

PID# 4680-04-3631
HIGHLAND CREEK COMMUNITY ASSOCIATION, INC
DB 5692 PG 257
MB 45 PG 48

PROP. 20' PERIMETER BUFFER (TYP.)

PROPERTY LINE (TYP.)

OVERVIEW DRIVE
(60' Public R/W)

159	10388.25 SF	
158	13780.94 SF	
157	17207.72 SF	
156	14743.95 SF	
155	12671.41 SF	
154	10540.61 SF	
153	9448.46 SF	

PROP. FIRE HYDRANT (TYP.)

PROP. SAN. SWR. PIPE (TYP.)

PROP. SAN. SWR. MANHOLE (TYP.)

PROP. 2' ROLL CURB (TYP.)

PROP. 2' ROLL CURB (TYP.)

PROP. 5' CONCRETE SIDEWALK (TYP.)

PROP. 5' UTILITY EASEMENT (TYP.)

PROP. WATER PIPE (TYP.)

PROP. 6' PLANTING STRIP (TYP.)

L23

N 89° 50' 00" W 200.60'

NORTH CAROLINA GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

NORTH ORIENTED TO: NC NAD83/2011

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NORTH CAROLINA LICENSED LANDSCAPE ARCHITECTURAL ASSOCIATES, P.A. C-66

NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 14324 JAMES W. LYVERSOE

8-11-15

NO.	DATE	REVISION	BY
1	08/11/2015	REVISED PER AGENCY COMMENTS	AC

PRELIMINARY PLAT (SHEET 10 OF 11)

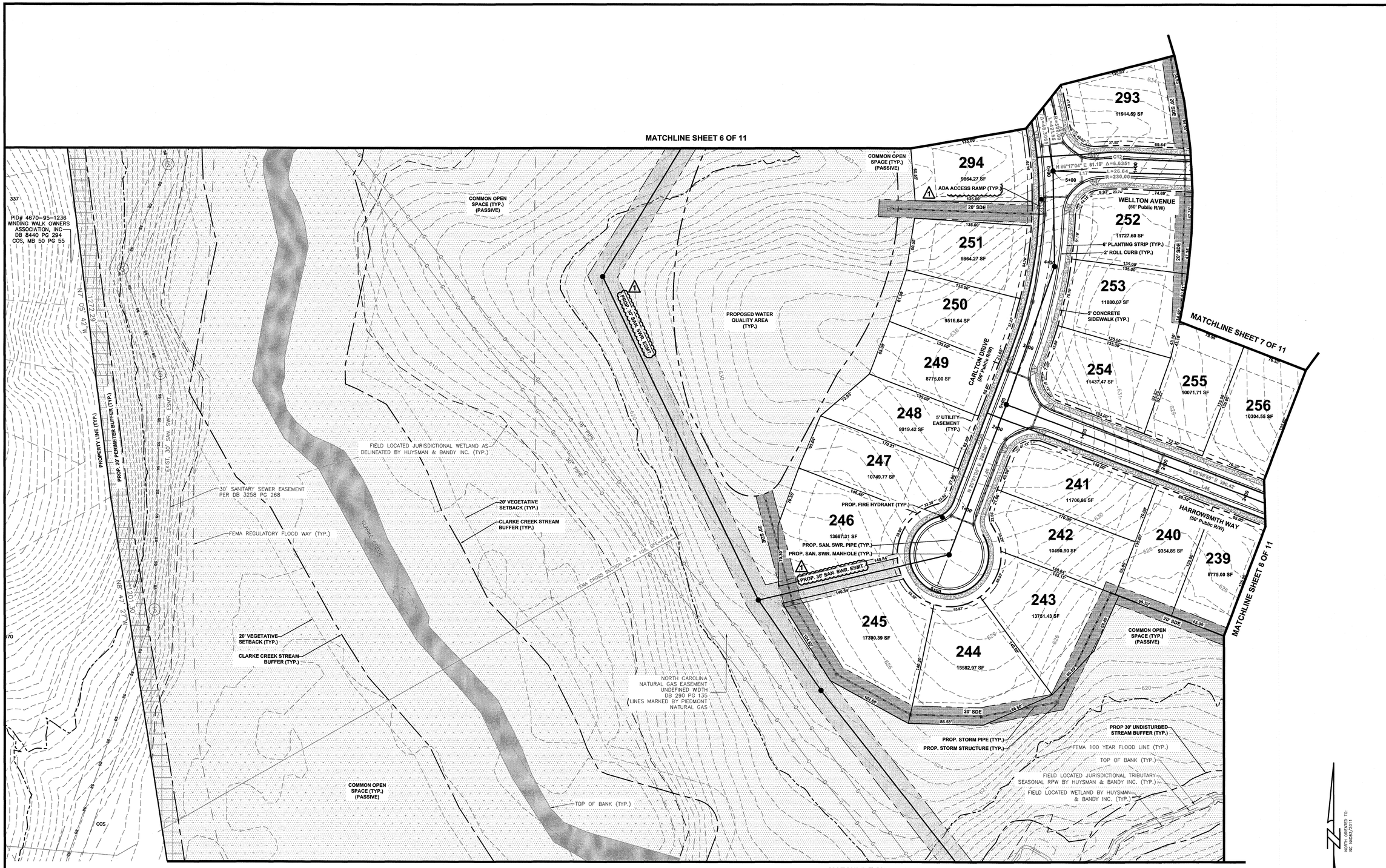
ALLEN FARM

CITY OF CONCORD, NC

PULTE HOMES

PROJECT INFORMATION	
PROJECT MANAGER:	ML
DESIGNED BY:	MM
DRAWN BY:	CL/AH
PROJECT NUMBER:	CV43.100
ORIGINAL DATE:	07/01/2015

SHEET: 10



GRAPHIC SCALE

50' 0 25' 50' 100' 200'

(IN FEET)
1 inch = 50 ft.

NORTH, ORIENTED TO: NC NAD83/2011

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NORTH CAROLINA LANDSCAPE ARCHITECTURAL ASSOCIATES, P.A. C-66

NORTH CAROLINA PROFESSIONAL LANDSCAPE ARCHITECT No. 1432 JEFFREY J. EVESON 07/15

NO.	DATE	REVISION	BY
1	08/11/2015	REVISED PER AGENCY COMMENTS	AC

PRELIMINARY PLAT (SHEET 11 OF 11)

ALLEN FARM

CITY OF CONCORD, NC

PULTE HOMES

PROJECT INFORMATION	
PROJECT MANAGER:	ML
DESIGNED BY:	MM
DRAWN BY:	CL/AH
PROJECT NUMBER:	CV43.100
ORIGINAL DATE:	07/01/2015
SHEET:	11

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MEMO

To: Planning and Zoning Commission
From: Boyd Stanley, AICP Development Review Administrator
Date: August 18, 2015
Re: Proposed Preliminary Plat Extension for the Pleasant Oaks Subdivision

The Pleasant Oaks preliminary plat originally received approval in Cabarrus County in 2005 and has been valid since that time through development activity. The preliminary plat approval is scheduled to expire on August 31, 2015 and the owners of the property (Jeff Ratka-Geosam Capital) seek an additional two (2) year extension pursuant to Section 5.2.5.I of the CDO.

Please find attached a letter from the owners relative to the request, as well as a copy of the approved plat.

Planning staff has no objection to the proposed extension.

S-07-15
Aerial

Preliminary Plat Extension Request

Pleasant Oaks

NC Hwy 73 E & Meadow Oaks Dr SE

Source: City of Concord
Planning Department

Disclaimer

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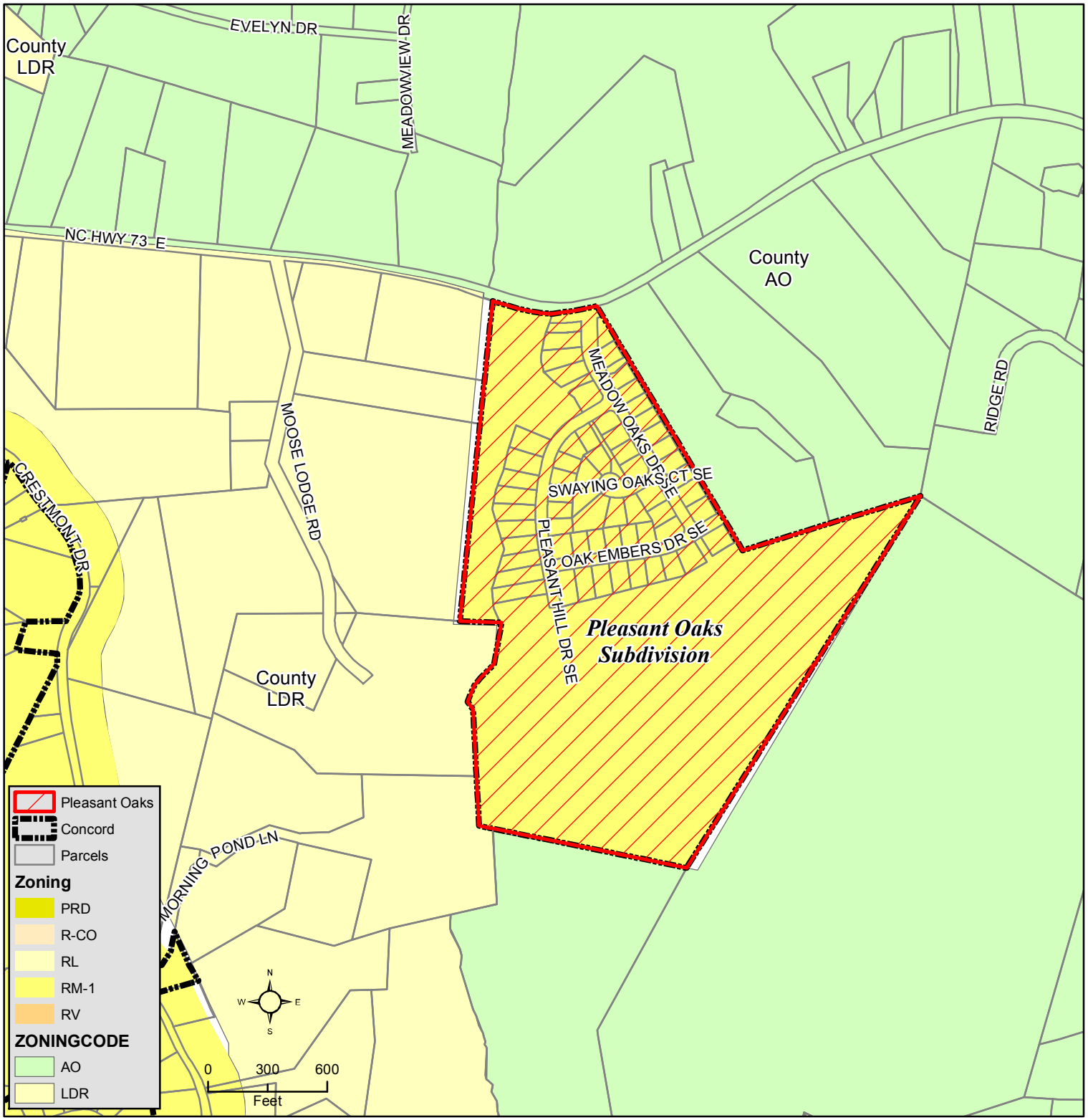
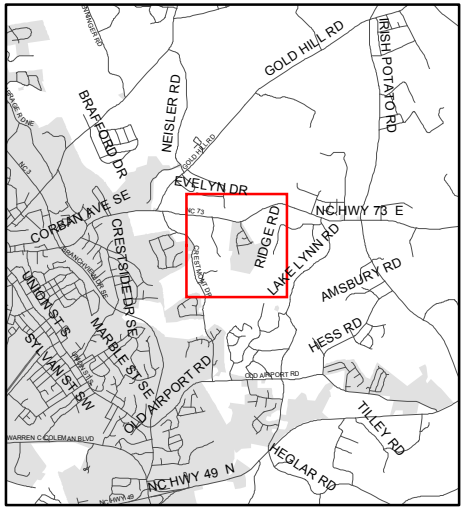
S-07-15
Zoning Map

Preliminary Plat Extension Request

Pleasant Oaks

NC Hwy 73 E & Meadow Oaks Dr SE





Concord
NORTH CAROLINA

Source: City of Concord
Planning Department

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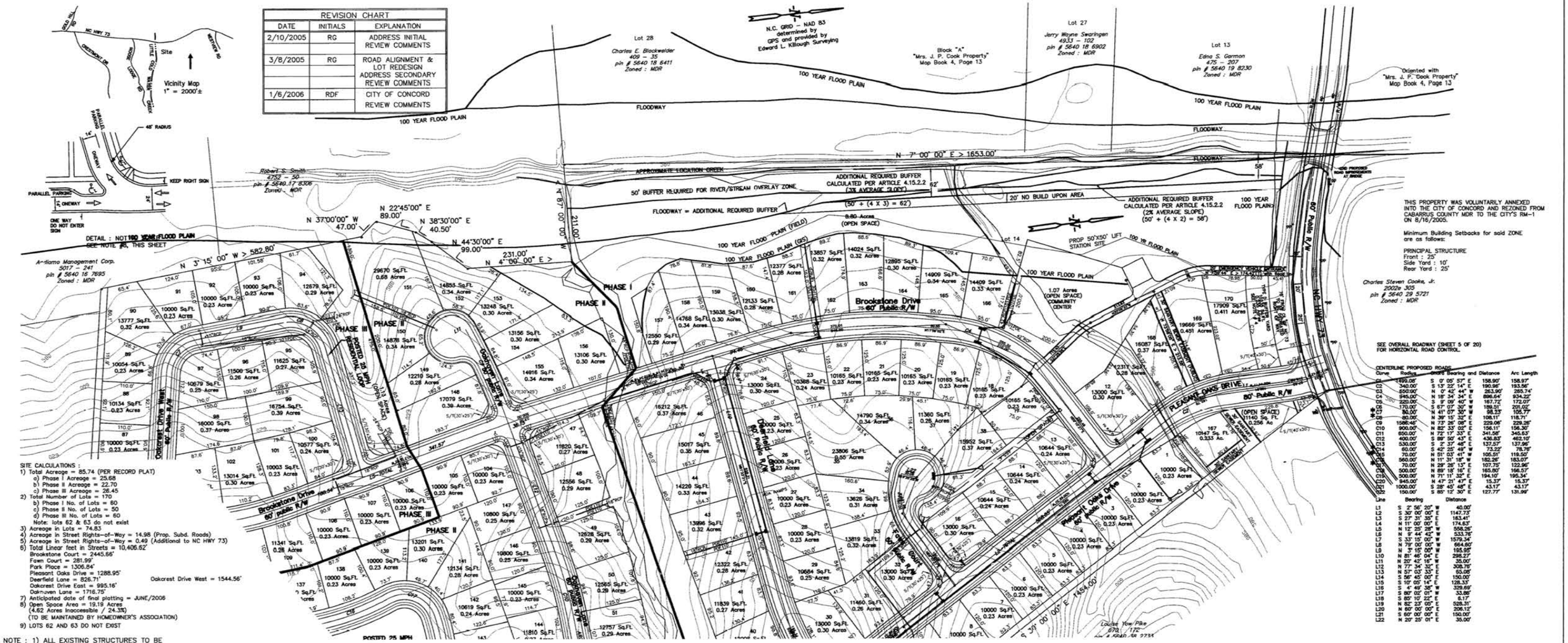
REVISION CHART		
DATE	INITIALS	EXPLANATION
2/10/2005	RG	ADDRESS INITIAL REVIEW COMMENTS
3/8/2005	RG	ROAD ALIGNMENT & LOT REDESIGN ADDRESS SECONDARY REVIEW COMMENTS
1/6/2006	RDF	CITY OF CONCORD REVIEW COMMENTS



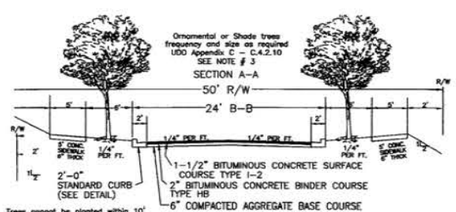
SITE CALCULATIONS :
1) Total Acreage = 85.74 (PER RECORD PLAT)
   a) Phase I Acreage = 25.68
   b) Phase II Acreage = 22.70
   c) Phase III Acreage = 26.45
2) Total Number of Lots = 170
   b) Phase I No. of Lots = 60
   c) Phase II No. of Lots = 50
   d) Phase III No. of Lots = 60
   Note: lots 62 & 63 do not exist
3) Acreage in Lots = 74.83
4) Acreage in Street Rights-of-Way = 14.98 (Prop. Subd. Roads)
5) Acreage in Street Rights-of-Way = 0.49 (Additional to NC HWY 73)
6) Total Linear feet in Streets = 10,405.62'
   Brookstone Court = 2445.66'
   Fawn Court = 281.99'
   Park Place = 1306.84'
   Pleasant Oaks Drive = 1288.95'
   Deerfield Lane = 826.71'
   Oakcrest Drive East = 995.16'
   Oakhaven Lane = 1716.75'
   Oakcrest Drive West = 1544.56'
7) Anticipated date of final platting = JUNE/2006
8) Open Space Area = 19.19 Acres
   (4.62 Acres inaccessible / 24.3%)
   (TO BE MAINTAINED BY HOMEOWNER'S ASSOCIATION)
9) LOTS 62 AND 63 DO NOT EXIST

NOTE : 1) ALL EXISTING STRUCTURES TO BE REMOVED BEFORE PROPOSED DEVELOPMENT.
2) SOIL TYPES
   A) CHEWACLA SANDY LOAM (Ch)
   B) MECKLENBURG LOAM (MeB, MeD)
   C) POINDEXTER LOAM (PoF)
3) STREET TREES AS REQUIRED BY UDO APPENDIX C C.4.2.10 – SHADE 1 PER 100 FT OR ORNAMENTAL 1 PER 50' SEE STREET DETAILS
4) 50 FT TYPE "D" BUFFER ALONG NC HWY 73 SHALL BE LANDSCAPED PER UDO ARTICLE 6.6.8 AND DESCRIBED IN TABLE 7.4–2, WIDTH 50', SHADE TREES 1 PER 100 FT AND ORNAMENTAL TREES 1 PER 50'
5) THE APPROXIMATE REPRESENTATION OF THE TOPOGRAPHIC FEATURES (CONTOURS AT 4' INTERVALS) AND THE FLOODPLAIN AREA SHOWN HERE WERE PROVIDED COURTESY OF THE CABARRUS COUNTY THE GIS DEPARTMENT.
6) THE EMERGENCY VEHICLE ACCESS ROAD SHALL BE ENGINEERED AND CONSTRUCTED TO THE 2000 INTERNATIONAL FIRE CODE, APPENDIX D, AND SHALL INCLUDE THE FOLLOWING:
   A) UNOBSTRUCTED WIDTH OF NOT LESS THAN 20 F.T. WITH A MINIMUM INSIDE EDGE OF PAVEMENT RADIUS OF 48 F.T.
   B) ROAD SHALL BE DESIGNED AND MAINTAINED TO SUPPORT LOADS OF 80,000 LBS. AND SHALL BE OF AN ALL WEATHER SURFACE
   C) THE GATED ACCESS SHALL BE EQUIPED WITH A SIREN–ACTIVATED GATE (KNOX BOX)
7) THE EXACT LOCATION OF THE LIFT STATION WILL BE DETERMINED AFTER THE SEWER PROFILES HAVE BEEN RUN IN THE FIELD. THIS LOCATION WILL BE MUTUALLY ACCEPTABLE TO BOTH THE DEVELOPER AND THE CITY OF CONCORD. THE DEVELOPER IS NEGOTIATING WITH THE CITY OF CONCORD TO DETERMINE IF A PORTION OF THE FORCE MAIN SHALL BE ENGINEERED IN SUCH A WAY THAT IT CAN BE CONVERTED TO A GRAVITY LINE IN THE FUTURE TO TIE INTO THE COLD WATER CREEK INTERCEPTOR.
8) OAKCREST DRIVE HAS BEEN DESIGNED FOR STOP CONDITION IN LEJ OF HORIZONTAL CURVES AT LOTS 95 & 97.
9) THE PORTION OF PARK PLACE THAT RUNS FROM LOTS 131 TO 143 HAS BEEN DESIGNED FOR A 25 MPH SPEED LIMIT AND IS ALSO DESIGNED FOR ONE–WAY TRAFFIC WITH PARKING ON THE OUTSIDE PORTION OF THE ROAD. THE HORIZONTAL CURVES HAVE BEEN DESIGNED AT A 48 F.T. RADIUS MINIMUM, INSIDE EDGE OF PAVEMENT. THIS RADIUS WILL ACCOMODATE THE CITY OF CONCORD'S FIRE EQUIPMENT.
10) SITE CLEANUP–PER UDO 6.4.14.1, THE APPLICANT SHALL BE RESPONSIBLE FOR REMOVAL OF ALL EQUIPMENT, MATERIAL, AND GENERAL CONSTRUCTION DEBRIS FROM THE SUBDIVISION AND FROM ANY LOT, STREET, PUBLIC WAY OR PROPERTY THEREIN OR ADJACENT THERETO. DUMPING OF SUCH DEBRIS INTO SEWERS, ONTO ADJACENT PROPERTY OR ONTO OTHER LAND IN THE CITY IS PROHIBITED.

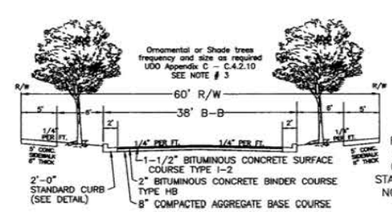
CENTERLINE PROPOSED ROADS

Curve	Radius	Chord Bearing	and Distance	Arc Length
C1	1499.00'	S 0° 05' 57" E	158.90'	158.97'
C2	340.00'	S 13° 22' 14" E	190.98'	193.56'
C3	650.00'	N 0° 42' 44" W	263.90'	265.74'
C4	945.00'	N 18° 34' 34" E	896.94'	934.22'
C5	220.00'	S 9° 09' 40" W	167.72'	172.07'
C6	170.00'	S 67° 07' 30" W	189.51'	201.02'
C7	80.00'	N 41° 07' 30" W	98.33'	105.77'
C8	90.00'	N 39° 15' 32" E	108.11'	118.71'
C9	1586.46'	N 73° 28' 08" E	229.06'	229.28'
C10	900.00'	N 82° 33' 02" E	156.11'	156.30'
C11	650.00'	N 72° 17' 33" E	341.58'	345.63'
C12	400.00'	S 89° 52' 43" E	436.83'	462.10'
C13	530.00'	S 2° 37' 46" E	137.57'	137.96'
C14	60.00'	S 42° 25' 49" W	73.22'	78.78'
C15	70.00'	N 51° 03' 41" W	105.51'	118.50'
C16	560.00'	N 11° 31' 18" W	182.26'	183.07'
C17	70.00'	N 29° 26' 13" E	107.75'	122.96'
C18	500.00'	N 89° 18' 16" E	165.80'	166.57'
C19	500.00'	N 71° 11' 32" E	194.10'	195.34'
C20	945.00'	N 47° 21' 47" E	15.37'	15.37'
C21	1000.00'	S 28° 45' 46" E	43.17'	43.17'
C22	150.00'	S 80° 12' 30" E	127.77'	131.99'

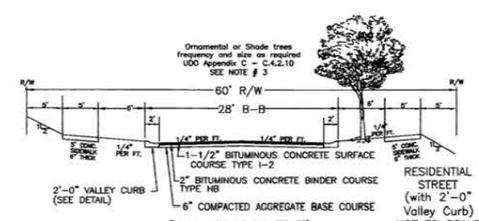
Line	Bearing	Distance
L1	S 2° 56' 20" W	40.00'
L2	S 30° 00' 00" E	1147.73'
L3	S 27° 31' 35" E	183.41'
L4	N 11° 00' 00" E	174.63'
L5	N 12° 25' 28" W	558.26'
L6	N 9° 44' 42" W	533.78'
L7	S 33° 15' 00" W	1579.34'
L8	N 79° 00' 00" W	664.60'
L9	N 3° 15' 00" W	195.95'
L10	N 81° 46' 04" E	298.27'
L11	N 20° 43' 16" W	35.00'
L12	N 77° 34' 32" E	308.78'
L13	N 57° 03' 33" E	65.08'
L14	S 56° 45' 00" E	150.00'
L15	S 10° 05' 14" E	128.33'
L16	S 4° 49' 38" W	329.69'
L17	S 80° 02' 01" W	33.86'
L18	S 85° 10' 22" E	6.17'
L19	N 82° 23' 00" E	528.31'
L20	N 60° 00' 00" E	206.12'
L21	S 60° 00' 00" E	150.00'
L22	N 20° 25' 01" E	35.00'



RESIDENTIAL LANE (with 2'-0" STANDARD CURB) NOT TO SCALE



RESIDENTIAL COLLECTOR (with 2'-0" STANDARD CURB) NOT TO SCALE



RESIDENTIAL STREET (with 2'-0" Valley Curb) NOT TO SCALE

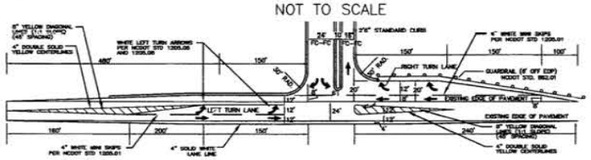
ADA RAMPS = TYPICAL AT INTERSECTIONS – AS REQUIRED
= CENTERLINE ROAD – PT/PC
= Proposed Sewer Line with Manholes
PDE = Public Drainage Easement
= Fire Hydrant
FM = Proposed Force Main
W = Proposed Water Line
SS = Proposed Sewer Line
= Flared End Section
= Catch Basin
= Headwall
S/T = SIGHT TRIANGLE

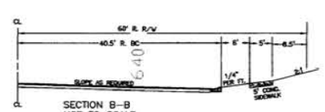
This plat is subject to any rights-of-way, easements, or agreements of record prior to date of survey.

e.i.p. = Existing Iron Pipe, as described (FOUND)
e.i.r. = Existing Iron Rod, as described (FOUND)
n.i.p. = New Iron Pin, (SET)
cp = Computed Point / No Physical Monumentation

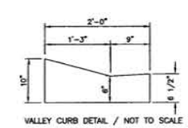
As of the date (December 20, 2004) of this survey, a portion of this property along Little Cold Water Creek does lie in a Special Flood Hazard Zone.
Reference : Map # 3702C50086 D & 3702C0090 D
Published by : Federal Emergency Management Agency
Effective Date : November 2, 1994

ENTRANCE AND IMPROVEMENTS TO NC HWY 73
NOT TO SCALE



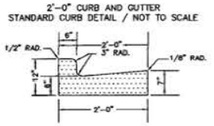


SECTION B–B
NOT TO SCALE

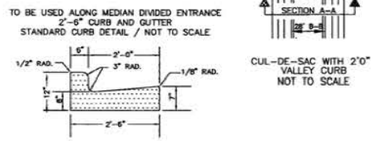


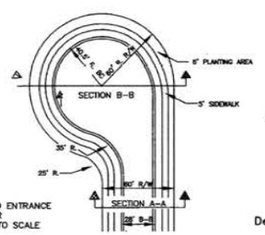
VALLEY CURB DETAIL / NOT TO SCALE

2'-0" CURB AND GUTTER
STANDARD CURB DETAIL / NOT TO SCALE



TO BE USED ALONG MEDIAN DIVIDED ENTRANCE
2'-6" CURB AND GUTTER
STANDARD CURB DETAIL / NOT TO SCALE





CUL-DE-SAC WITH 2'0" VALLEY CURB
NOT TO SCALE

NORTHEAST ENGINEERING, P.A.
250 BRANCHVIEW DR.
SUITE I
P.O. BOX 931
CONCORD, NC 28026–0931
TELEPHONE (704) 788 – 6372

and

Mel C. Thompson & Associates, PA
PROFESSIONAL LAND SURVEYORS
303 South Main Street
Kannapolis, N.C. 28081
Telephone (704) 938–4661

PRELIMINARY PLAT

"Pleasant Oaks Subdivision"

85.74 Acres

being Lots 14, 15, and 29
"Property of Mrs. J.P. Cook"
Map Book 4, Page 13

FOR

KISER DEVELOPMENT COMPANY

1400 BRANTLEY RD
KANNAPOLIS, NC 28083
(704) 795 – 4952

Located : Twp #11, Cabarrus Co., N.C.
Tax Ref. : pin #'s 5640 27 9557, 5640 28 2501, and 5640 29 5092
Deed Ref. : Dbk 220, Pg. 196 & Dbk 1039, Pg. 248
Cabarrus County Zoning Classification : MDR
PLAT PREPARED : DECEMBER 20, 2004

Scale : 1" = 100' Job # 04 12 04

0' 20' 50' 100' 200' 300' 400'

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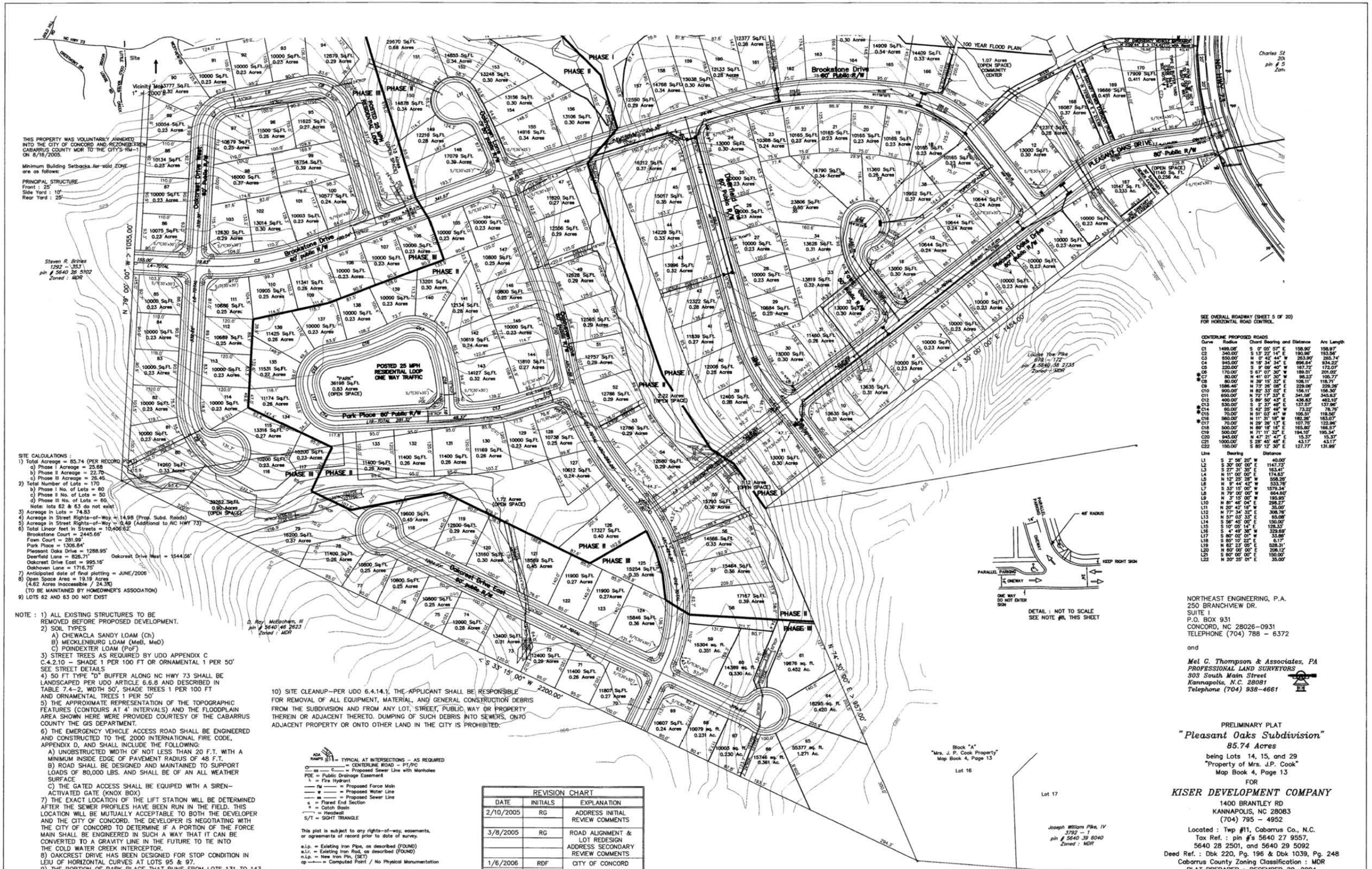

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0' 25' 50' 100' 200' 300' 400'

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Downtown Master Plan – Overview

The **Downtown Master Plan** update will develop a set of goals and strategies for downtown's future development and investment. The Downtown Master Plan consists of three components: **Parking Management**, **Market Analysis for Economic Development** and **Urban Design for Public/Private Investment**. The main goal of the Plan is to identify public and private investment opportunities within the downtown area. The previous master plans have been a collaborative effort between the community, businesses, property owners and the City/County. The following sections give a brief outline of each key component of the plan including a tentative timeline.

Parking Management

(March – September 2015)

- **Inventory** – How many parking spaces do we currently have? Public? Private? What are the time limits of the spaces?

- **Usage** – What are the occupancy percentages by the hour and day for a week period? Are there opportunities to further increase usage on-street and off-street? Could or should parking be increased by altering the traffic flow on Union Street? Also evaluate the impact of removing some on-street spaces on Union Street for additional public space. (dining, trees, walking room)

- **Enforcement** – What are the current time limits on parking spaces? Should this change? Evaluate the need for paid parking. Is it warranted or financially feasible?

- **Wayfinding and Signage** – Do existing signs make it easy to get around downtown? Need more, less or better signage? Note- the current wayfinding signs are outdated due to the "brand" changing and the location of the new City Hall.

Market Analysis

(August 2015 – August 2016)

- **Demographics** – Who currently lives, works, or plays downtown? Who will be here in 5 years?

- **Residential Supply/Demand** – How much housing do we have and how much will the market support and at what rates?

- **Retail Supply/Demand** – How much retail do we have and how much can Downtown support? What are the rent rates that have to be achieved for projects to be successful?

- **Marketing Strategies and Marketing**– Based on market findings, what are ways we can grow downtown? How can we best market Downtown?

Urban Design

(TBD)

- **Vacant/Underutilized Buildings** – What are good uses for publicly and privately-owned buildings?

- **Streetscape** – How can we use our streets for a full spectrum of uses (parking, outdoor dining, etc.)? Any proposed modifications will be based on data that comes out of the parking study.

- **Development Scenarios** – How can we combine private uses and public spaces for a sense of place?

- **Ordinance Updates** – How can local land use and zoning policies be updated to support downtown?

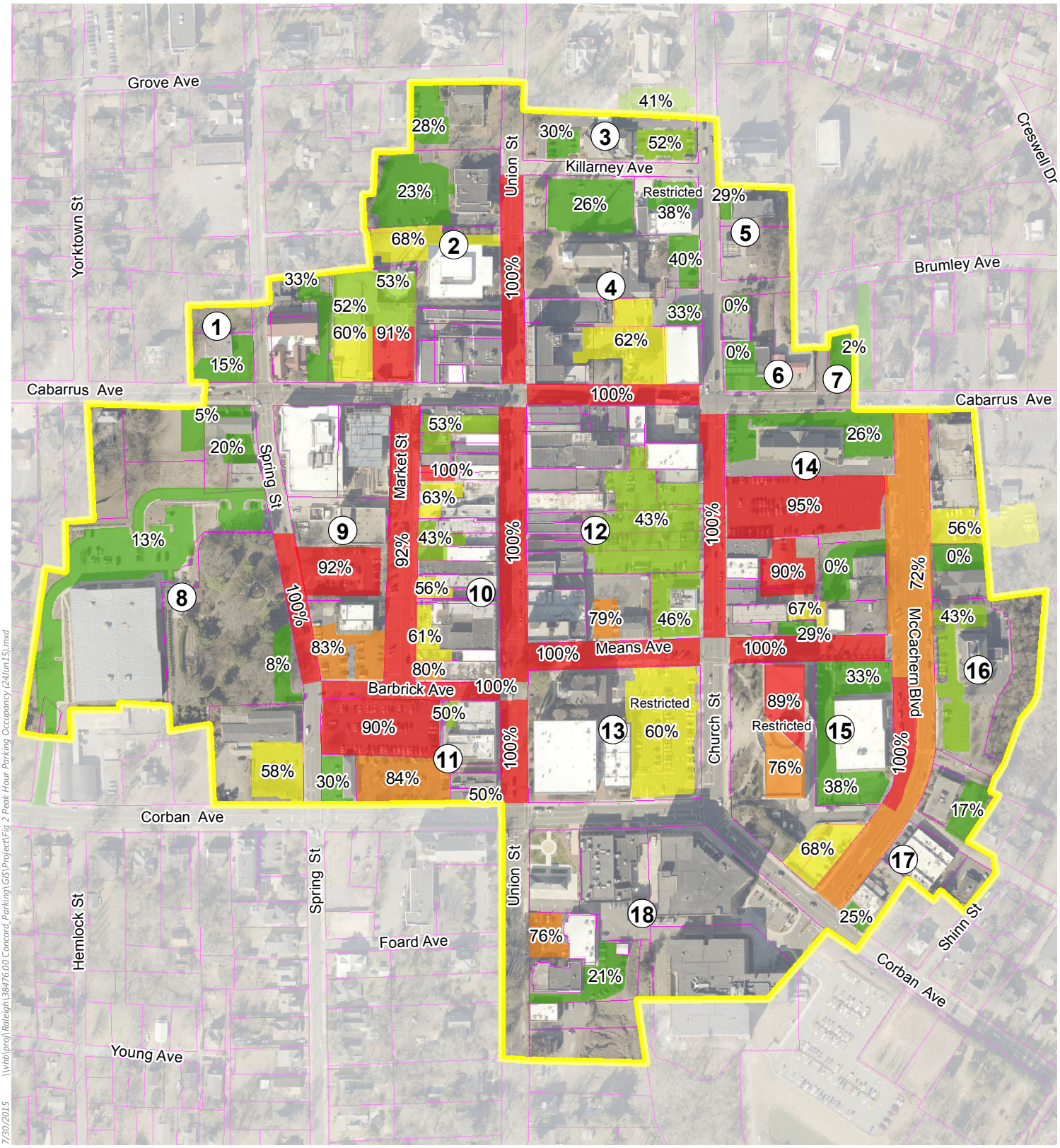

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FIGURE 2

Peak Hour Parking Occupancy

Peak Occupancy

- <= 40%
- 41% - 55%
- 56% - 70%
- 71% - 85%
- > 85%

Study Area Boundary

(#) Block Number

Data Sources:

NC One Map; NCDOT; City of Concord

\\vhb\proj\Raleigh\38476.00 Concord Parking\GIS\Project\Fig 2 Peak Hour Parking Occupancy (24Jun15).mxd

7/30/2015

On-street parking demand was greatest during the 10 am hour on Monday, where 201 vehicles were observed within 213 on-street parking spaces (94% occupancy). This condition is critically important because the targeted parking occupancy rate is 85%, or one (1) empty space for every seven (7) spaces. McCachern Blvd was the only street with more than one available parking space during this peak hour. On-street parking is free, with no parking meters or pay stations in Concord. Free parking is the likely reason for this (very) high parking occupancy.

Table 4 – Parking Occupancy Counts by Day

Day	Total Vehicles Observed	# Hours Observed	Peak Vehicles Observed (1-hr)
Friday	10,320	10	1,179
Monday	11,201	10	1,333
Wednesday	10,117	10	1,160
Saturday	3,652	6	664

**Based on field data collected 3/2015*

The afternoon peak for on-street parking occurred during the 2 pm hour of Monday (85%), representing only a slight decline from the AM peak (~20 vehicles), however all other afternoon periods were below 75% occupied. An afternoon peak that is slightly lower than the AM peak is typical for most downtowns.

Public Parking Utilization

During the AM peak hour there were 310 cars observed within the 498 parking spaces maintained by the City of Concord, for an occupancy of 62%. Some of these occupied spaces include Police and fleet vehicle parking within the Cabarrus Ave Garage. Many of these vehicles are utilized during the weekday, however remain idle for a majority of a typical weekday. As parking demand for the garage increases in the future, the city should consider relocating any of the "storage" vehicles to an off-site location and free up these spaces for visitor or employee purposes.

For comparison there were 427 cars observed within the 527 parking spaces maintained by Cabarrus County for an occupancy of 81%. The parking industry targets 85% as the ideal parking occupancy for on-street and public off-street lots.

The combined parking utilization for both city and county lots is 72%, which is manageable for both entities. If Cabarrus County chose to "run off" vehicles that were not parked for official county-business, then these vehicles would likely park within city lots. The Cabarrus Ave Garage (city parking) would likely experience utilization greater than 85% as a result. The parking cycle described would possibly continue until visitors chose to park within other (illegal) parking areas to avoid the frustration. This condition would be a negative for all involved, and should be avoided through collaboration and active parking management (discussed further in section 6).

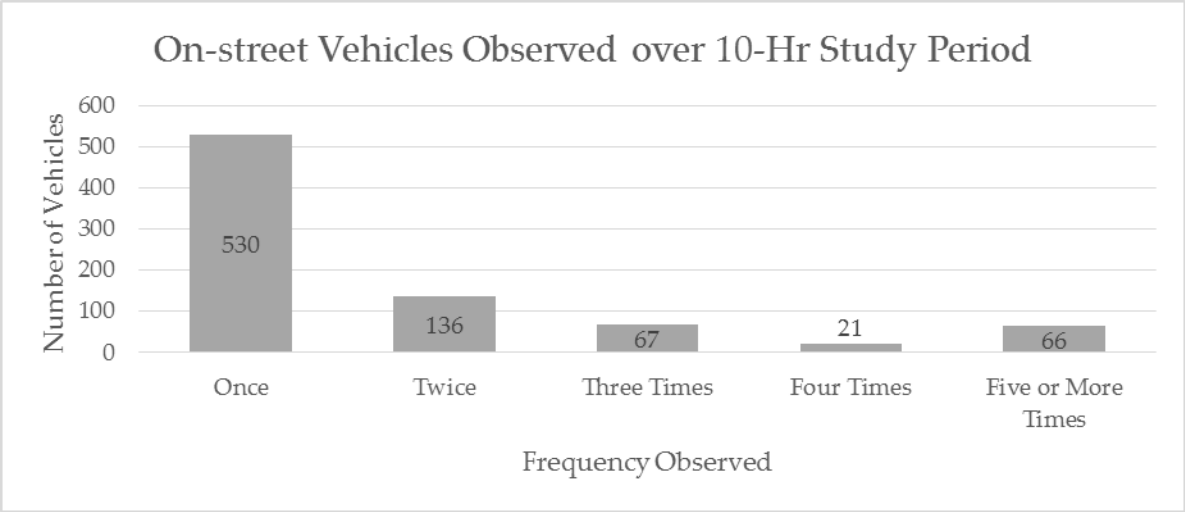
Parking Turnover Analysis

On-street parking is free of charge and limited to 2-hours for most of the study area. The project team observed unique vehicle license plates each hour along on-street parking areas to confirm the existence of an

employee parking "shuffle". The parking shuffle, also referred to as the "employee ballet" is a condition where downtown employees choose to park for a majority of an 8-hour day within on-street spaces and systematically re-park every 2-hours to avoid parking citations.

The project team observed 1,546 total license plates, finding 820 unique plates during the 10-hour period of analysis. Results suggest that as many as 33 vehicles, all of which were observed on five (5) or more occasions, were parking on-street for a majority of the day (Figure 3).

Figure 3 – On-street Parking Turnover – Frequency Observed



The typical on-street parking time limit is 2-hours, however some 3-hour parking is allowed within the Bicentennial lot, as well as some all-day parking allowed along McCachern Blvd and Spring St (Figure 4). Vehicles that were observed parking within these areas constitute the "Legally Parked" column (Table 5).

Table 5 – On-street Parking Turnover – Vehicles Observed on 5 or more Occasions

Frequency Observed	# Vehicles	Legally Parked	Possibly Illegal	
10 occasions	4	3	1	
9 occasions	9	6	3	
8 occasions	13	9	4	
7 occasions	13	8	5	
6 occasions	8	3	5	
5 occasions	19	4	15	
Subtotal 5+	**66**	**33**	**33**	50%

* Legally parked includes (a) All-day parking along McCachern Blvd or Spring St; and (b) Private/leased parking within the Bicentennial lot

Of these 33 possibly illegal parkers, more than half (21) remained parked in a single parking space, suggesting that parking enforcement was ineffective on this particular day. Ten (10) vehicles were observed parking in two (2) different parking spaces, and two (2) vehicles were observed in three (3) different parking spaces, suggesting that the driver was attempting to avoid a citation by frequently "shuffling" their vehicle (Table 6).

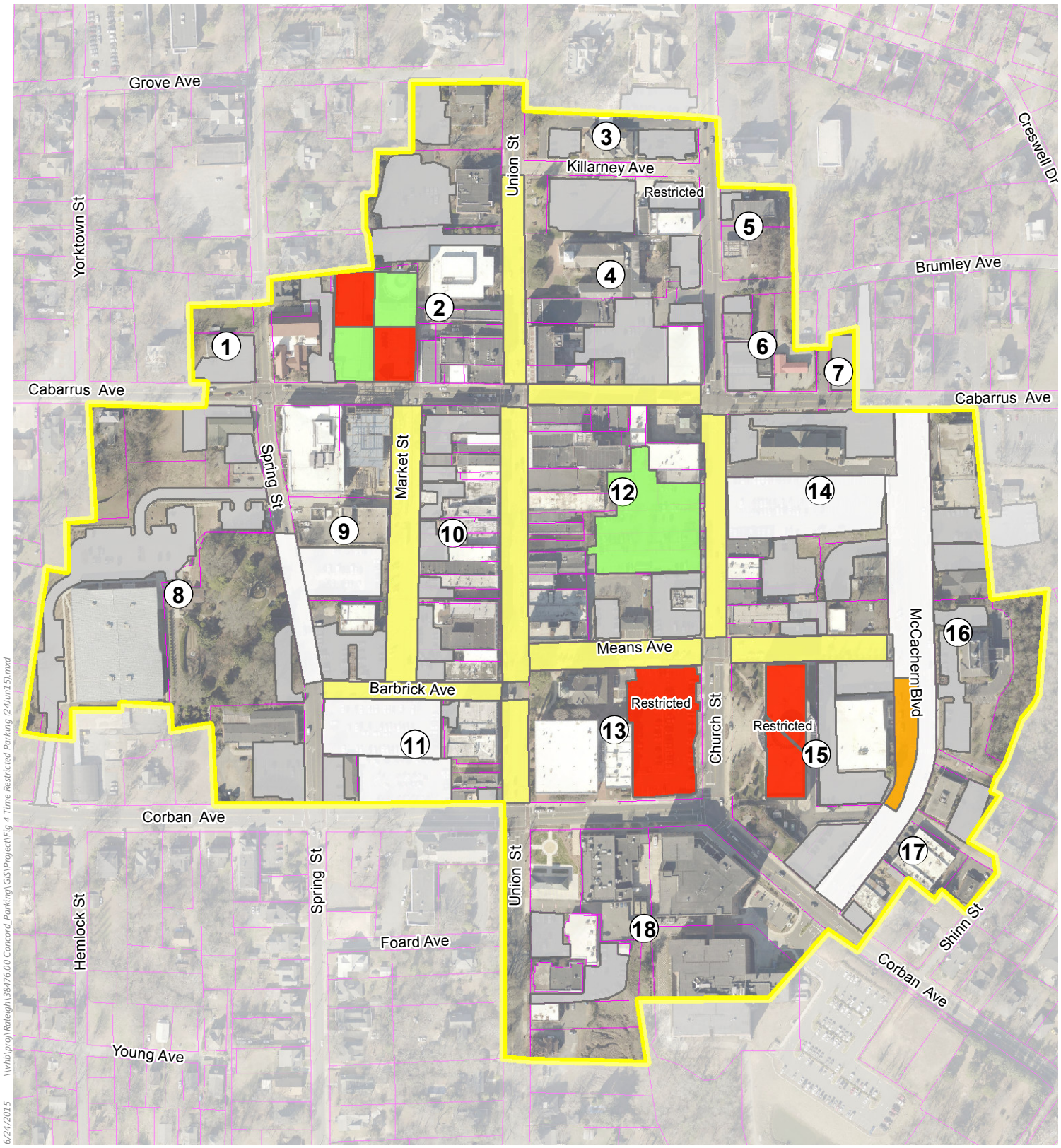


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FIGURE 4

Time Restricted Parking

Restriction

- Reserved
- 30-Min
- 2-Hour
- 3-Hour
- All Day Parking
- Private Parking
- Study Area Boundary
- # Block Number

Data Sources:

NC One Map; NCDOT; City of Concord

6/24/2015 \\vhb\proj\Raleigh\38476.00 Concord Parking\GIS\Project\Fig 4 Time Restricted Parking (24Jun15).mxd

Table 6 – On-Street Parking "Shuffle" to Avoid a Citation

Possibly Illegal Parkers	1 Space	2 Spaces	3 Spaces
33 license plates observed 5+ occasions	21	10	2
Subtotal	64%	30%	6%

The results suggest that the parking shuffle is occurring, to a relatively small extent (33 vehicles of 820), along the following streets: (a) Union St; (b) Bicentennial lot; (c) Barbrick Ave; and (d) Market St.

The City should not be alarmed by the 33 vehicles observed to be shuffling throughout the day. This magnitude (4% of 820 unique plates) does not appear to be disrupting the ability to find available parking spaces. The City should be aware of this phenomenon and discourage it through adjustments to parking operations, enforcement and management so that it does not become a problem in the future. The objective would be to guide these individuals toward longer-term parking options that are currently under-utilized, and avoid the need to re-park every 2-hours.

4

Future Parking Conditions

Future Parking Conditions

This section will quantify the anticipated future parking demand based on identified development projects, identify locations of parking surplus and shortfall, and present best practice management strategies that may be useful to the City of Concord. It will build upon the existing parking conditions section and estimate future parking demand that can be expected by near-term development projects.

Parking Surplus

The existing parking utilization analysis suggests a total of 1,023 unoccupied parking spaces during the busiest hour (10-11 am) of the busiest day (Monday) of a typical weekday, as collected during the field inventory phase of this project.

Margin of Error

The project team observed 1,333 vehicles parked during the peak hour. This number does not account for individuals who may have been (a) working from home; (b) sick; (c) on vacation; (d) away from the office running errands; (e) attending an out of office meeting; or otherwise not present on the day of collection.

A future parking demand model begins with conversion of these empty spaces into a raw surplus value, which factors in the assumed number of employees, visitors, or merchants who were not present on the day of data collection. For the purposes of this study, a margin of error of 10% is applied to the number of vehicles observed to determine the existing effective demand and raw surplus (Table 7).

The number of empty parking spaces was never lower than 1,023 during the study period, which represents the observed parking surplus. For future demand estimation, this equates to a raw parking surplus of only 875 to account for the estimated 148 vehicles that were not present (Figure 5).

City parking areas account for 154 of these surplus parking spaces, while an estimated 19 surplus parking spaces are present within Cabarrus County parking areas. *The remaining raw surplus parking (more than 700 spaces) belong to private parking lots, which are beyond the jurisdiction of the city*, save for a shared parking arrangement (section 5).

Table 7 – Calculating the Existing Surplus

Parking Supply	2,356	Includes public and private spaces
Peak Occupancy (cars)	1,333	AM peak hour (Monday 10-11 am)
Margin of Error	10%	Accounts for non-present vehicles
Effective Demand	1,481	Assumed parking demand
Raw Surplus	875	Assumed surplus of existing parking

Note: This is the estimated existing parking surplus for the peak hour (10 am) of the peak day (Monday) of a typical week, while County Court is in session. This assumed parking surplus will be higher for non-peak days, and potentially smaller for special events within downtown that are considered non-typical.

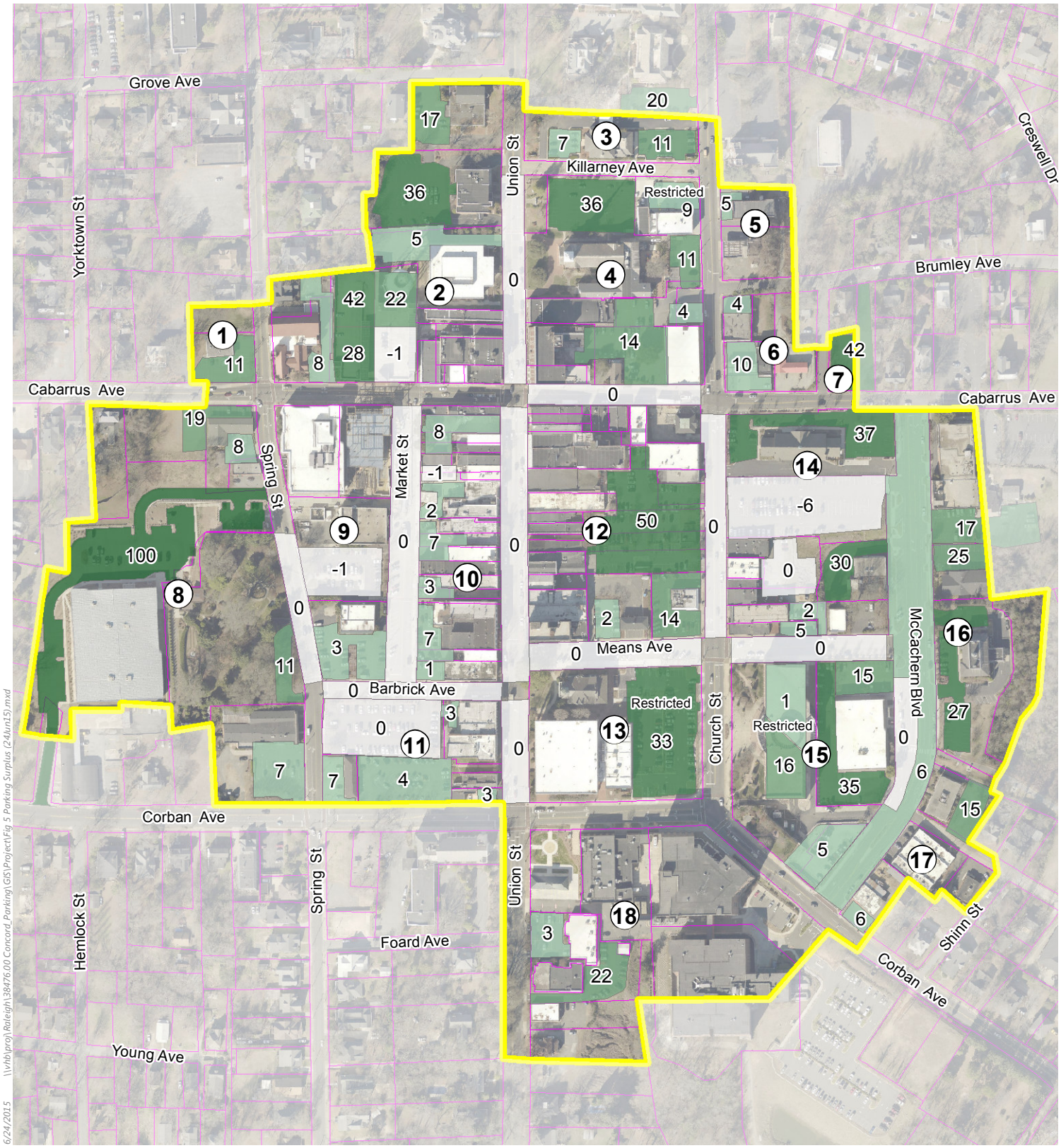

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FIGURE 5

Parking Surplus

Raw Surplus

- 0 Spaces
- 1 - 10
- 11 - 25
- 26 - 50
- > 50 Spaces

- Study Area Boundary
- # Block Number

Label represents estimated raw surplus;
Negative values result from existing occupancy greater than 85%

Data Sources:

NC One Map; NCDOT; City of Concord

6/24/2015 \\vhb\proj\Raleigh\38476.00 Concord Parking\GIS\Project\Fig 5 Parking Surplus (24Jun15).mxd

Parking Demand Model

This section presents near-term development projects and quantifies their parking demand. Based on discussions with the project steering committee and members of the city, there are 15 projects that are expected to generate new parking demand (Table 8). These projects have been vetted by City staff as most likely to be constructed within the next five (5) years.

Table 8 – Future Development Projects

Address	Project Name	Heated SF	Uses(s)
4 Union Street N	Concord Teleph. Co. (rear of Hotel Concord, facing Cabarrus Ave.)	5,280	Residential
4 Union Street N	Historic Bank (Hotel Concord)	1,844	Office/Services
14-18 Union Street N	Hotel Concord	27,512	Residential/Event
22 Union Street N	Old Theater Building	9,690	Retail
26 Union Street S	City Hall (old)	20,000	Office
30 Union Street S	Kitty City	8,180	Retail/Residential
57 Union Street S	Cabarrus Savings Bank Building (upper floors)	15,000	Residential
66 Union Street S	City Hall Annex (old)	14,304	Office
2 Corban Ave SW	Vacant Gas Station	1,156	Retail
16 Church Street N	Mills Building (former Electric Supply)	3,780	Retail
24 Church Street N	Serv Co (vacant building)	600	Retail
29 Cabarrus Ave E	Church St Lofts	30,149	Residential
61 Cabarrus Ave W	New Restaurant	2,800	Restaurant
35 Cabarrus Ave W	City Hall (new)	76,176	Office
Spring Street Lot	City Park (new)	0	Recreation

* Generated through discussions with City staff, in collaboration with Concord Downtown Development Corporation.

Parking Demand Model

The project team created a spreadsheet-based parking demand model to estimate the number of parking spaces needed to meet the expected demand for these developments. The model may be adjusted or updated as additional information is obtained, or assumptions are revised.

Parking Demand Estimation

The Institute of Transportation Engineers (ITE) Parking Generation manual 4th edition was utilized for this analysis. This manual converts square footage of varying land uses into future parking demand based on a broad spectrum of case studies across the US. The manual provides a low, median, and high ratio for estimating parking demand, and the range for many land uses was quite large. The parking ratios selected for this analysis are displayed in Table 9.

Table 9 – Future Parking Demand Estimation

Future Land Use	Est. New SF	Parking Ratio per 1,000 SF	Est. New Parking Demand
Residential	97 beds	1.5 per bed	146
Retail	15,226*	2.5	62*
Office	78,020	3.0	234
Restaurant	2,800	4.0	14
Courthouse (increased visitors)	-	-	142
Subtotal			**598**

*.Some retail space already exists, however is vacant; therefore new parking demand is generated without new SF.

Visualization of Demand

Figure 6 displays the locations of future parking demand that is generated by these development projects. Block number 4 near the Concord Hotel and Church Street Lofts is estimated to generate demand for 164 new parking spaces.

Blocks 9 and 10 will collectively generate demand for 248 new parking spaces. The new City Hall building is estimated to only generate a net demand for 126 new parking spaces because many existing employees are currently working within the current City Hall and Annex buildings. To avoid double-counting these individuals the project team decided to reduce the new City Hall estimate and account for new office employees that will back-fill the current City Hall (60) and Annex (43) office space. The actual estimate for the 76,000 SF City Hall building is 229 future parking spaces.

Block 12 is expected to generate demand for 35 new parking spaces as upper floors are converted to an estimated 23 residential units.

Increased daily visitors to the Cabarrus County Courthouse is expected to generate a demand for 142 additional parking spaces during the peak hour (Mondays).

The resulting parking demand generated was linked with GIS resources to display the pattern of supply, demand, and future parking balance for the downtown study area. Various GIS maps of existing raw surplus, future parking demand, and parking balance per block are provided in Appendix C.

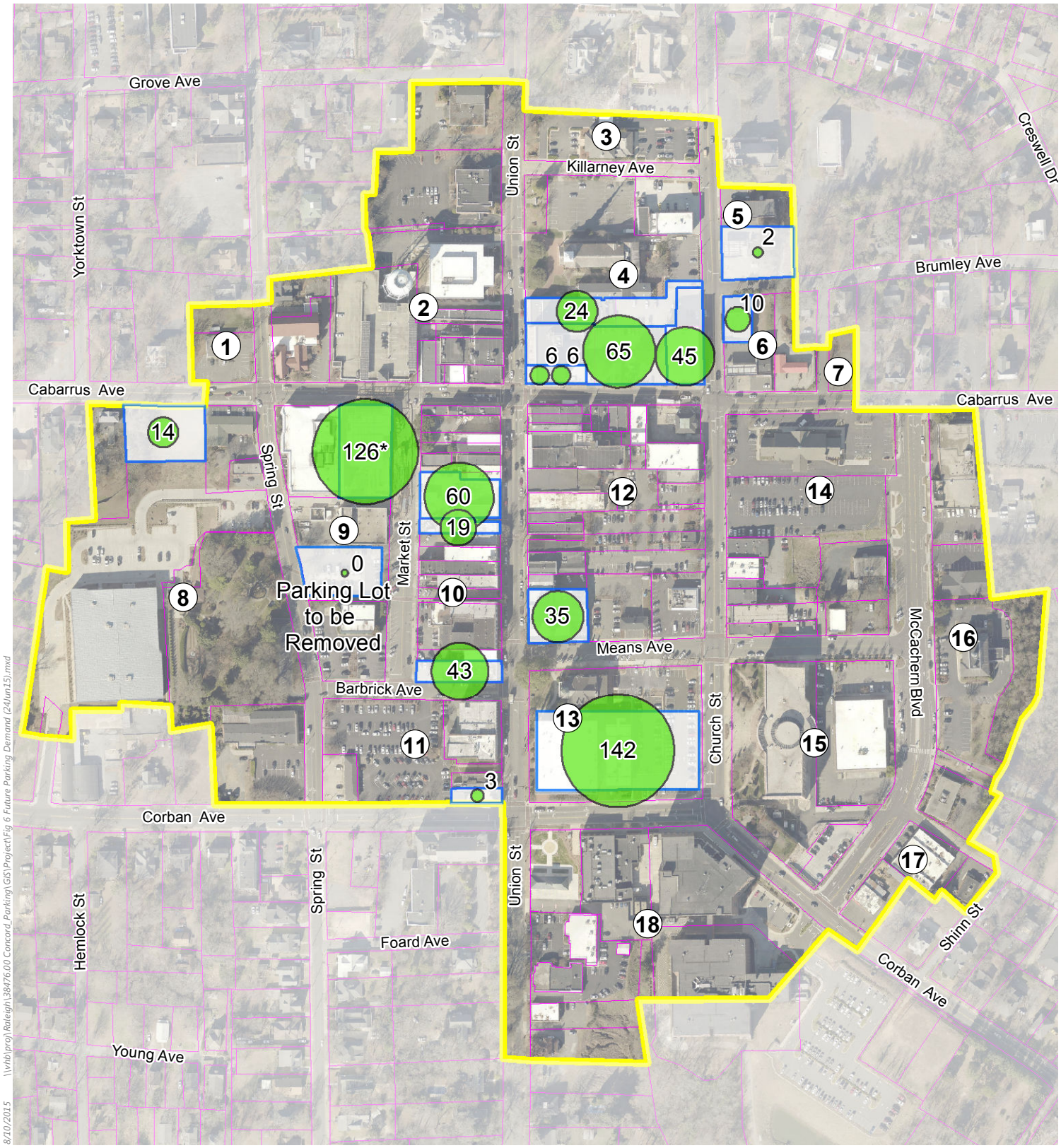

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FIGURE 6

Future Parking Demand

Estimated Future Demand

Size is proportional

Study Area Boundary

(#) Block Number

Future Development Project

Data Sources:

NC One Map; NCDOT; City of Concord

* New City Hall represents net new parking demand.
Current employees will relocate from City Hall (60) and Annex (43) locations.

8/10/2015 \\vhb\proj\Raleigh\38476.00 Concord Parking\GIS\Project\Fig 6 Future Parking Demand (24Jun15).mxd

Parking Supply Changes

One of the plan objectives is to evaluate locations for constructing future parking supply (lots/garages). The project team examined four (4) locations and presented findings to the steering committee. Two of the most relevant locations are briefly summarized below. A more detailed summary of site-specific parking supply, net parking change, and estimated costs to construct is included within Appendix C.

County lot on Barbrick/Corban

The existing County lots on Barbrick Ave. and Corban Ave. are physically separated by wheel stops and sign posts. There are 128 total parking spaces within these two lots. Parking is for County-business Monday through Friday between 7 am and 5 pm. Lots are open to the public after 5 pm and all weekend. The County is currently in initial discussions on design options for a parking garage within this footprint.

The project team estimates that a parking garage footprint of 180′ x 221′ (39,890 sq. ft.) would fit on this site. Assuming a 4-level garage, the future parking garage capacity could be 480 parking spaces, at a construction cost of $8.64 million. This garage could feature three (3) points of entry/exit for Barbrick Ave, Spring St, and Corban Ave, as well as a courthouse visitor parking pay lot on the first level. If the pay lot were appropriately priced and actively managed over time, then this location would be ideal for courthouse visitors. The accessible path to the courthouse would be less than 400′ along the Corban Ave sidewalk.

Constructing this garage would displace 128 existing parking spaces, and disrupt additional on-street spaces along Barbrick Ave. The net parking gain of this potential garage would be approximately 364 new spaces, assuming that some exterior parking spaces could remain near Spring St. This garage would provide additional public parking for the courthouse and help leverage the redevelopment of adjancent buildings and underutilized surface parking lots. To improve vehicular access to the garage Barbrick Ave. could be converted from one-way to a two-way street. An alternative that maximizes on-street parking would retain one-way traffic for Barbrick Ave and convert parallel spaces to reverse-angle parking. This change would yield a net gain of four (4) new on-street spaces over the current 15 spaces, and maintain entry/exit into the proposed parking garage.

These estimates are planning-level and do not represent an engineering site/civil analysis.

County lot on Church

The existing County lot on Church contains 114 parking spaces, between Church St (NC 73) and McCachern Blvd. This lot is open to the general public after 5 pm and all weekend long. The County is not currently considering design options for a parking garage within this footprint.

The project team estimates that a parking garage footprint of 120′ x 341′ (40,920 sq. ft.) would fit on this (sloping) site. Assuming a similar 4-level garage, the future parking garage capacity could be 496 parking spaces, at a construction cost of $8.9 million. The garage could feature two (2) points of entry/exit for Church St and McCachern Blvd. The width of the site is less than the ideal 180′ that would support three (3) parking bays, with the center bay serving as the ramp. For this reason, the garage would have to feature two (2) bays, both of which would serve as the ramp to the next level. This would merely be a constraint of the site, however the garage could function well from a traffic perspective. This garage would displace the existing 114 parking spaces. The net parking gain would be approximately 382 new spaces.

These estimates are planning-level and do not represent an engineering site/civil analysis.

5

Management Strategies

Management Strategies of Parking Systems

The project team was challenged to provide examples of educational programs for the general public relating to parking, implications for paid versus free on-street parking systems, and costs associated with construction and maintenance of parking facilities.

Innovative Public Educational Programs

This section outlines several examples of parking system management approaches that educate the general public in the hope of changing behaviors. There are many resources available for a broad perspective on parking management strategies, one quality example may be found at the Victoria Transport Policy Institute: http://www.vtpi.org/

Bend, OR

The City of Bend, Oregon adopted a comprehensive parking plan to address both on and off-street parking in its downtown. To implement its zonal strategy for prioritizing parking, it needed to convey appropriate parking locations to various groups (customers, employees, etc.). The City used directional wayfinding signage to guide drivers to appropriate lots and standardized signage for both owner-operated lots and city lots, to avoid confusion. In conjunction with a marketing/communication campaign, the city hoped to segment the city spatially by parking/trip purpose. The City implemented its two hour limit policy and new signage in 2007, and problems arose almost immediately. Signage had to be reworded in 2008 to improve clarity, and there were even proposals to cover up the signs to solve confusion and congestion surrounding downtown parking. In 2014, the City acknowledged that the program recommendations were poorly executed, and confusion persisted amongst parking consumers in regards to their parking options and inconsistent signage.

For additional information: http://www.bendoregon.gov/index.aspx?page=769

Action Item: CDDC should work with employers to develop targeted parking areas for downtown employees.

Salem, MA

While Salem already boasted a robust signage program to guide drivers and pedestrians (potential drivers) to an appropriate lot, redundancy was somewhat of an issue. The City placed wayfinding signage at key "decision points", with an appropriate level of information conveyed at each point.The takeaway message is that municipalities can save resources by supplying necessary information while cutting redundant signage facilities.

Images from Google Street View near the following addresses:

- 278 Essex St, Salem MA, at intersection with Crombie St;
- 73 Church St, Salem, MA, at entrance to parking lot

Note: These examples have been created with elements of the MUTCD, however they are not official MUTCD standard signs.

For additional information:
http://salem.com/pages/salemma_dpcd/studiesreports/SALEM%20FINAL%20Report.pdf

Action Item: The CVB, County, City, and CDDC should coordinate a system of "Most General" to "Most Specific" levels of wayfinding signage. For example, "Short Term/Long Term" parking signs could be placed at key gateways into downtown, directing drivers to parking based on their time needs.

Salem, OR

Salem, Oregon modified parking along one of its busy downtown corridors. In order to address challenges presented by identified Title VI communities (low income & Hispanic), the city applied a battery of programs to involve and educate these members of the community. In addition to mailing invitations for public meetings in both English and Spanish, parking marketing materials were also bilingual. Advisory partners such as the CAN-DO Neighborhood Association and the Salem Human Rights and Relations Advisory Committee were also selected for their sensitivity to these issues. These were important participants in the spectrum of public workshops and public hearings.

For additional information:
http://www.cityofsalem.net/Departments/CommunityDevelopment/Planning/NorthBroadway-HighStreetParkingManagementPlan/Documents/Draft%20Public%20Outreach%20Plan.pdf

Action Item: Wayfinding should seek to be as simple and informative as possible, using symbols in place of text when possible in order to mostly broadly communicate with people who may have limited literacy or English skills.

Wilmington, NC

In addition to an option to pay meter fees via mobile phone, the city also has initiated a parking token program. Instead of struggling with exact change, customers can purchase tokens from participating local stores. The stores pre-pay for the parking tokens, so the City is guaranteed its parking revenue. This program also has the benefit of encouraging entry into stores that would otherwise have not been patronized. These stores are identified by a "Lots More" decal (marketing campaign slogan) displayed in the storefront window. Wilmington has an exemplary program for public education and encouragement initiatives relating to parking.

For additional information:
http://www.wilmingtonnc.gov/Portals/0/documents/City%20Manager/Parking/ParkingBrochure.pdf

Action Item: If paid parking is implemented, CDDC and the City should develop a merchant token program.

Shared Parking Strategies

This section will outline several examples of special event valet parking systems and other examples of shared residential-employee parking areas.

Woodstock, GA

Rather than forcing downtown patrons to navigate various individual valet programs, the Downtown Development Authority of Woodstock created a centralized valet service for downtown restaurants and attractions. Partnering with lot owners that do not have competing peak periods with these evening attractions (banks, churches, etc.) ensured that these facilities are efficiently utilized rather than allowing inventory to be wasted. This shifts the burden away from public parking facilities and balances periods of irregular demand with under-utilized private lots.

For additional information:
http://patch.com/georgia/woodstock/downtown-woodstock-valet-parking-program-works

Action Item: CDDC should coordinate with stakeholders (Cabarrus Arts Council, Carolina Courts, or other event coordinators) for valet parking during special events. This could also include temporarily suspending the 3-hour time limit for the Cabarrus Ave Garage to accommodate overflow parking.

Iowa City, IA

The pilot valet program receives financial support from 11 different downtown businesses. The service operates twice a week, Friday 5-10 PM and Saturday Noon-10 PM. Visitors drop their cars off at a local bank, and the valet service utilizes the top floor of a parking garage. This ensures that these otherwise less desirable spaces are used. Additionally, the garage spaces are numbered for easy vehicle tracking. The valet fee is $10.

For additional information: http://www.press-citizen.com/story/news/local/2015/05/11/downtown-valet-pilot-program-kick/27113449/

Similar parking valet services are available within these cities, with varying hours of operation:

- **Pensacola, FL** http://www.downtownpensacola.com/about/news/press-releases/222-new-valet-parking-program-introduced-downtown
- **Plymouth, MI** http://www.freep.com/story/money/business/michigan/2014/12/03/plymouth-downtown-valet-service-parking/19826893/
- **Springfield, MA** http://springfielddowntown.com/whats-happening/parkwithease/

Alexandria, VA

The City of Alexandria suggests there are two approaches to shared parking: (1) contractual agreement between parties, or (2) parking management districts. Contractual agreements must receive municipal permits to ensure potential conflicts are detected. Special parking management districts generally must charge for parking and reinvest those funds back into the district. On-street parking is actively managed and metered in these districts.

For additional information:
https://alexandriava.gov/uploadedFiles/planning/info/SharedParkingFactSheet.pdf

Action Item: The City currently utilizes option 1 for parking with the Cabarrus Ave Garage and could explore option 2 if demand warrants this type of system.

Sacramento, CA

Sacramento's old zoning code included parking requirement minimums. The City removed many of these minimum requirements to alleviate the burden on downtown businesses and allow mixed uses with non-competing peak periods to share parking. The City found that building additional off-street parking does not necessarily relieve on-street parking demand, and parking requirements can be a burden to existing businesses and a barrier to new businesses.

For additional info: http://uli.org/infrastructure-initiative/parking-its-not-just-about-where-to-store-cars/

Similar discussions of parking maximums, rather than minimums, and how they contribute to streetscape walkability are presented in the Redwood City, CA parking plan. For additional information:
http://shoup.bol.ucla.edu/Downtown%20Redwood%20City%20Parking%20Plan.pdf

Action Item: The City's Center City (CC) zoning classification applies no parking minimums, so this Best Practice is already in place. Individual property owners/developers may choose to allocate a certain number of parking spaces based on anticipated demand and financing requirements for parking.

Employee-Visitor Parking Balance

This section will outline several examples of management strategies to encourage employee parking within low-demand, periphery locations that allow visitors to use the high-demand on-street parking spaces.

Palo Alto, CA

The City will begin to issue free permits to neighborhood residents in order to give locals priority over commuting employees for on-street parking. Without this permit, a two hour limit will be applied to any cars parked on neighborhood streets. Since this program is specifically designed to discourage employees, enforcement only happens during traditional business hours (8 AM-5 PM, Mon.-Fri.). Commuting employees may obtain a permit, but must pay a fee for it. This program has the additional benefit of encouraging the use of underutilized parking (garages and lots) through different pricing options, in addition to freeing up on-street parking.

For additional information:
http://cityofpaloalto.org/gov/depts/pln/transit/parking/downtown_rpp_program.asp

Belmont, MA

Like many cities, Belmont needed to ensure relatively high turnover rates in its downtown core. The City implemented a tiered price system that combined a unique time element. While customers still pay for time, there is a certain amount of free time associated with each zone. For instance, "core" spaces will have 15 minutes free and then cost $1.00 per hour, while more periphery spaces will allow 30 minutes free and only cost $0.50 per hour. The most peripheral lots will allow monthly permits that cost as little as $0.67 per day. This is an example of offering multiple options and incentivizing more distant options.

For additional information:
http://www.belmont-ma.gov/sites/belmontma/files/file/file/final_parking_management_plan.pdf

Lynchburg, VA

The City uses a progressive fee system to discourage longer stays. While no time limit is imposed, certain locations become more expensive per hour, beyond the first hour (first hour is $0.25, then $0.25 per 15 minutes afterward). It also has mixed payment facilities, hourly spaces and monthly permits, throughout the city to allow a limited number of employees access to certain locations within the city while preserving turnover in hourly spaces.

For additional information:
http://www.lynchburgva.gov/sites/default/files/COLFILES/Parking/Parking%20Brochure.pdf

Fort Collins, CO also suggested a progressive pricing schemes, among many other management strategies. For additional information: http://www.fcgov.com/planning/parkingplan.php and report:
http://www.fcgov.com/planning/pdf/parking-plan.pdf

Salem, MA

Rather than using time limits to encourage turnover in high demand locations, Salem uses demand-sensitive, market pricing to ensure adequate occupancy rates ("Market rate" defined as a price that produces 85% occupancy). The price of parking is still tied to an hourly rate, but rather than forcing customers out, demand pricing will indirectly discourage long-term parking (employees for instance). This method also eases the phenomenon of "ticket anxiety," commonly associated with strict time limits for downtown customers. For

employees and longer term stays, monthly permits can be issued to underutilized lots and can be enforced through traditional ticketing.

For additional information:
http://salem.com/pages/salemma_dpcd/studiesreports/SALEM%20FINAL%20Report.pdf

Old Pasadena, CA

Originally, Old Pasadena had time limited parking with no meters. The City experienced difficulties balancing employees and visitors, as employees tended to take advantage of the free on-street spaces. There was also a cultural resistance to metered parking in any form. In response, the city established an improvement district downtown to reinvest meter money back into the area, rather than let it sit in the general fund. This business improvement district (BID) is managed by a non-profit business entity, the Old Pasadena Management District. By ensuring that parking meter money was reinvested back into the source, the landscape and storefronts of the downtown, the city managed to convince local stakeholders to agree to metering. The city experienced positive reactions from the downtown community after the program was implemented.

For additional information: http://articles.latimes.com/2004/mar/02/local/me-wheel2

Redwood City, CA

The most coveted (on-street) spaces should be the most expensive, and the price should decline as desirability declines. On-street parking does not need to be incentivized, as it is already attractive. Despite the need for a financial return on investment, garages should not be more expensive than on-street facilities. If they were more expensive, then garage parking would become even less desirable and only drive people toward already congested desirable areas.

> *"Market-rate prices are the only known way to consistently create available parking spaces in popular areas. If we institute market-rate prices, and adequate spaces are made available, then what purpose do time limits serve? None, other than to inconvenience customers. If there is a space or two available on all blocks, then who cares how long each individual car is there? The reality is that it doesn't matter." (p. 22)*

For additional information:
http://shoup.bol.ucla.edu/Downtown%20Redwood%20City%20Parking%20Plan.pdf

Paid versus Free On-street Parking

The case studies above reference different methods for actively managing a system of parking. The term "actively" is deliberately placed because a system that is left unmanaged will quickly be abused, forgotten, and become stagnant. There are as many unique examples of active parking management as there are unique cities, and each must recognize the staff experience, financial constraints, and existing parking "culture".

There is no "trigger" to identify the exact moment that on-street parking meters are needed. Support for the installation of parking meters will come from the city, business owners, employees, and residents. This support will likely arise from a commonly observed parking problem or recurring challenge that is shared by

all user groups and verified by data collected over time. Without the supporting data, perspectives towards parking will be varied and often conflicting.

Time Restricted Parking

The City of Concord has offered (time restricted) on-street parking for free as far back as 1989, which is as far back as City staff is able to recall. Historic photos from the 1960s show parking meters along Union St. and these were likely removed with streetscaping in the mid-1980s.

Photo Courtesy of Jim Ramseur (text by Independent Tribune)

Concord Fire Department personnel check a fire hydrant while a Concord police officer stands to the left in this undated photo. This image was shot from the square in Concord, looking south down Union Street, sometime after the 1965 renaming and renumbering of Concord streets. The quadrant grid system was laid out at that time, and South Union Street became Union Street South as shown on the street sign on the far left. The car stopped at the intersection is a 1957 Chevrolet, a classic today. Parking meters were still a dominant feature of the streetscape, and many merchants gave free parking tokens to those who made purchases.

Photo Courtesy of Jim Ramseur (text by Independent Tribune)

This image of Belk's in downtown Concord shows the building much as it looked after the 1950 renovation, and it is recognizable today as Union Street Square. It is still known to many longtime residents as the "old Belk building." Prior to this renovation, the left-hand portion was occupied by Yorke & Wadsworth Hardware, which had previously moved to South Church Street. The old Belk's facade and the Yorke & Wadsworth facade were combined into the storefront shown in this image. Prior to moving to the Carolina Mall around 1970, the Belk's men's department was on the left side of the main floor. Appropriately, that same space is now J. Talbert's Ltd., a men's store. The right side of the main floor is now being remodeled for a new restaurant. The building to the right of Belk's became McClellan's Dime Store and today is Cabarrus Creamery. The west side of South Union is reflected in Belk's show windows, revealing the Gold Shop, the Pastime Theater and Citizen's Bank. Parking meters dotted the sidewalks in downtown Concord during this era.

Parking enforcement is tasked with promoting vehicle turnover every 2-hours. The current method involves a process of tire chalking and the issuance of citations. This process is important to the City and merchants because on-street parking is the most desirable for potential customers, but also highly desirable for employees who are looking to remain parked for up to eight (8) hours or more. Parking enforcement is in a difficult position, balancing the needs of many in a fair and equitable method, on a regular but not predictable basis throughout the day, week, month, and year.

Over the previous three (3) years Parking Enforcement has issued an average of 2,391 citations per year, 94% of which are paid without appeal. Of the 6% that are appealed, most appeals were granted (378, 88%). Revenue generated by citations averaged $7,661 per year, or $3.20 per citation issued. Enforcement is not a revenue generating operation.

Advantages of Current System

Low capital investment in labor, equipment, and materials to perform daily parking enforcement are the immediate advantages for the City. The current system is managed by one (1) non-sworn officer of the Police Department, also tasked with non-parking related duties. Parking citations are hand-written currently. Regulatory signs are installed along a majority of streets stating "Two Hour Parking" with the hours of enforcement "9 am to 6 pm". The City utilizes a compact (Firefly) electric vehicle for parking enforcement, which allows the officer to quickly move within and among parking lots and on-street spaces.

Disadvantages of Current System

Disadvantages of the current system include a reliance on regular schedule of enforcement "tours". The parking enforcement officer must make one cycle through parking lots and along on-street spaces to mark tires, followed by a second pass more than 2-hours later to identify vehicles that have not moved. To avoid a citation the driver could simply wash the chalk mark from their tire, or re-park their vehicle within an adjacent space. Additional disadvantages include the following:

- Time restriction signs are passive, as drivers must still choose to voluntarily comply;
- On-street enforcement hours are different than off-street parking lots
  - On-street signs state "2-hour parking, 9 am to 6 pm"
  - County parking lots state "7 am to 5 pm"; as well as "Open to the public after 6 pm…"
  - Bicentennial lot states "3-hour parking, 8 am to 5 pm", with 35 spaces marked as "Reserved"
- Enforcement is reactionary, occurring after vehicles have parked for more than 2-hours;
- The City is tasked with collecting citation fees, which can be a costly process involving staff time as well as a collections agency;
- Enforcement vehicle is conspicuous, and is not large enough to carry boot equipment for repeat offenders;

Metered Parking

There are other methods to promote vehicle turnover, most successfully through the installing parking meters or pay stations. This alternative incentivizes the driver (or downtown employee) to limit their parking time or seek a lower-cost (free) option that is further away. Enforcement is still needed with meters or pay stations, however the process of enforcement is much easier for one officer to manage.

There are several types of meter technologies to consider, each offers unique advantages or challenges. Traditional meters are the least expensive option, though many are needed and they offer fewer payment and enforcement options.

Multi-space pay stations are growing in popularity because one station can replace many individual meters along a block. Pay stations accept payment tokens, credit cards, and even payment via cell phone. Some pay station systems will print a receipt and require the user to *pay-&-display* the receipt on the dash board. A second option is to number every on-street parking space and utilize pay-by-space stations. A third option is pay-by-plate, where the user enters their vehicle license plate regardless of where they park. There are advantages and tradeoffs for each technology.

Advantages of Metered Parking

Regardless of the meter type, linking the payment and enforcement software together will improve the enforcement process by alerting the officer of an overstay vehicle in real time. The system can then navigate the officer directly to the parking space in question. This technology would also provide the assurance that no violations exist and they can focus their efforts to other tasks.

Payment flexibility is a convenience to the user, such as a text message to remind them that their time is about to expire and offering the ability to add additional time via their phone and credit card. Additional features of a pay station system would include a merchant validation option, where a set of pre-paid digital codes could be distributed to customers, and redeemed at the pay station or via cell phone.

Installation of meters or *pay stations* on a limited basis or in a limited geographic location would be a good way to gauge potential success. A pilot program could be developed for Union Street to quantify the number of drivers who suddenly find less-expensive parking alternatives. Duncan Solutions, among others, offers meter pilot programs through their website http://www.duncansolutions.com/LibertyPilotProgram/.

Disadvantages of Metered Parking

The capital costs of meter installation and the software integration with Parking Enforcement represents a significant investment. There are many metering systems available depending upon the size and complexity of the parking system. Meters may be solar powered or hard-wired, and each option has different advantages or tradeoffs. Pay stations are much more expensive per unit to purchase, however only one or two units are needed per block-face. Individual *spaces will need to be numbered* either with a small sign or a weather-resistent thermoplastic paint. The user is required to remember their parking space number and key it into the pay station machine to pay for parking. Some pay station systems are set up for pay-and-display,

where the user is required to return to their vehicle to place the receipt on their dashboard for the enforcement officer. Other systems are do not require the receipt to be displayed because the pay station is electronically linked to hand-held units that inform the officer which spaces have a valid receipt, and which are without payment.

Individual space meters are less expensive per unit than pay stations, however one meter is needed for each space (or two meters may be mounted on one pole and serve two spaces).

Maintaining individual space meters is quite simple with a supply of surplus meter heads it is easy to swap malfunctioning meters immediately. Maintaining a malfunctioning pay station would be more challenging depending upon whether the repair may be made electronically (to the software) or may require a physical repair by a service technicial, in which case the pay station may be inoperable for an extended period of time.

Parking Enforcement equipment and technology must be paired appropriately for the metered parking technology. For example, if a pay station allows for cell phone payment (pay by license plate), then there is no receipt to display on the vehicle. In this scenario the Parking Enforcement vehicle should include an automated license plate scanning technology to quickly identify license plates and compare them with the list of paid parking. If pay stations allow pay-&-display of receipts then enforcement must be able to read or scan the receipt from the dash board. This process may be more time consuming for the City's lone enforcement officer, however given the relatively small size of the enforced area within downtown Concord this option may be more practical than the high cost of license plate scanning technology.

The most appropriate system for the City may come from the recommendation of a nearby municipality with successful implementation of a meter or pay station system. The project team suggests the City reach out to members of the Carolina's Parking Association, and discuss technologies with other municipalities before contacting a local distributor.

Construction and Maintenance Costs

Construction cost estimates for parking lots and garages will vary greatly depending on size, location, design, materials, and labor. The parking industry standard practice is to compare the final construction costs with the number of (gross) parking spaces built, and report the cost per space.

Maintenance costs for surface parking lots and garages will include cleaning, lighting, security, landscaping, snow and ice removal, access control equipment, insurance, labor, and administrative efforts.

Garage Construction and Maintenance

The median construction cost for a parking garage in 2014 was just over $18,000 per space. This estimate reflects the median cost from many cities, several which opened parking garages for less than $16,000 per space (Carl Walker Inc.).

For the City of Concord this means that the cost of building a garage that is comparable to the Cabarrus Ave Garage (334 spaces, opened in 2002) would be $6.02 million.

Operation and maintenance costs for a parking garage should be factored into the amount of revenue needed to pay off the annual debt from construction. Repair and renovation projects will increase in cost and complexity over time, however with regular inspection and minor repairs the City may avoid a disruption of service for significant repairs. A typical rule of thumb is to collect an additional 2-5% of the construction cost

per space to cover the annual operation and maintenance costs. Garages with paid attendants or complex access control equipment will trend towards the higher end of this range, while basic garages without gate equipment and labor will trend towards the lower end.

Surface Lot Construction and Maintenance

The median construction cost of a surface parking lot is likely between $4,000 and $6,000 per space, depending upon site constraints, landscaping or storm water options, lighting, signage and/or access control equipment.

Maintaining a surface parking lot is less expensive than a garage, however occurs more frequently. Sealing or repaving is recommended every 5-10 years, as necessary, and dependent upon climate conditions. Operation and maintenance costs for a surface parking lot should likewise be factored into any permit revenue forecasts. Maintenance budgets can vary between $200 and $800 per space, the higher range for lots with paid attendants or gate control equipment (VTPI).

Parking and maintenance cost estimate sources:

Carl Walker Inc. (2014), "Parking Structure Cost Outlook for 2014," *Industry Insights,* http://www.carlwalker.com/wp-content/uploads/2014/04/April-Newsletter-2014.pdf

Nelson/Nygaard Consulting Associates Inc. (2012), "Parking Structure Technical Report," Metropolitan Transportation Commission, http://www.vtpi.org/tca/tca0504.pdf

Victoria Transport Policy Institute (VTIP) (2013), "Transportation Cost and Benefit Analysis II – parking Costs," http://www.mtc.ca.gov/planning/smart_growth/parking/6-12/MTC_Parking_Structure.pdf

6

Recommendations

Implementation Plan Recommendations

This parking study is structured as a five-year improvement plan, with recommendations for the near-term (0-3 years) and the long-term (3-5 years). Recommendations have been compiled from stakeholder discussions, steering committee meeting topics, and best practices from the parking and transportation industry.

Near-term Recommendations (0-3 years)

Near-term improvement recommendations may be described as "low-hanging fruit" initiates. Many of the following recommendations may be initiated by the City, County, and/or Downtown Development Corporation and have immediate results. Recommendations have been grouped into categories for the purpose of organization. Many of these recommendations may be implemented simultaneously, however the City should attempt to evaluate the before and after impact of these strategies and report their level of "effectiveness."

Education/Encouragement Improvements

These recommendations help explain parking management strategies, and encourage the use of all available parking spaces, rather than the ones located immediately at the front door of their destination.

- ❒ Treat on-street parking as a scare resource and prioritize its use for short-term visitors and customers with high turnover
  - Discuss this management strategy with downtown merchants, and encourage their employees to reserve on-street for shoppers
  - Offer multiple options for employees with longer-term parking needs (see Bend, Oregon example)
- ❒ Perform an audit of existing public/private parking signage; signs located *within* the public right-of-way must conform with design standards from the Manual for Uniform Traffic Control Devices (MUTCD); signs beyond the public right-of-way may be non-standard, however should be consistent
  - Limit the number of reserved parking signs/spaces for specific persons or departments

- Require individuals or departments to pay a premium price to rent a guaranteed parking space 24-hours per day, 7-days per week

- Encourage City and County staff at all levels to park their vehicles in under-utilized spaces, and walk
  - Provide incentives such as discount coupons to downtown merchant stores, public recognition on a City website or bulletin board, giveaway prizes, or similar employee appreciation efforts
- Display the same level of respect for parking that is expected of citizens and visitors
- Explore valet parking services for Union St for lunch and evening/weekend events. Administer the valet program through public, private or shared agreement, and involve nearby businesses with under-utilized parking spaces (Woodstock, GA and other examples).
  - Contact parking department staff from similar municipalities that offer a valet service and discuss their experiences, benefits, and challenges
- Utilize Cabarrus Ave Garage for special event overflow parking (e.g. Carolina Courts, or Cabarrus Arts Council), including a suspention of the 3-hour time restriction if needed.
  - Consider a nominal administrative fee to cover/remove signage, and/or provide traffic control personnel, as well as to discourage this from becoming a regular weekly trend

Enforcement Improvements

The goal of any parking management system is to provide multiple options so that individuals choose to "voluntarily comply" with regulations. These recommendations help with the difficult task of enforcing parking regulations.

- Adopt downtown ambassador approach for parking enforcement
  - Interact with downtown merchants more regularly; ask what their customer's parking needs are
  - Perform more frequent "tours" of on-street parking areas; be visible, and friendly
- Review parking enforcement process and make adjustments to offer a streamlined citation appeals process; be fair and consistent with members of the public, merchants, City/County government, and other agencies in downtown. Avoid the appearance of favoritism at all costs.
  - Anticipate an increased number of citation appeals over the current trend (6% of citations issued are appealed) as changes are made to the parking system, enforcement, and its administration
    - Currently the City issues an average of 2,391 citations per year, 6% are appealed (143), and 88% of appeals are granted (126)
- Institute a no-charge warning citation for first-time citations. This will require connecting a vehicle license plate to a citation database.
- Explore solution with City IT Department for establishing a database of repeat offenders
- Offer discounted citation amount if paid within 96 hours (or other specified time); escalating fee if paid after 96 hours

- Reserve escalating citation fee option for last-resort situations, where all other methods have proven unsuccessful

- Promote vehicle turnover for on-street parking areas, particularly Union St
  - Maintain the on-street parking time restriction for Union St while promoting time-tiered parking on nearby streets
  - Promote the use of the Cabarrus Ave Garage and other on-street parking areas for longer-term visitor parking needs
- In collaboration with Engineering and Police Departments, perform a review of City parking lots based on principles of Crime Prevention Through Environmental Design (CPTED).
  - Generate a prioritized list of retrofit projects, and complete them as funding allows

Evaluation Improvements

These recommendations help the City establish existing data, identify parking trends over time, and confirm or refute perceptions of parking.

- Utilize existing team of staff to perform annual peak hour occupancy counts, as well as additional occupancy counts as needed or requested. These data points are important for separating fact from opinion, and may be used to justify future parking management changes.
- Identify under-utilized private parking lots (based on field count data) and allow CDDC to pursue shared parking agreements with downtown businesses. This will balance future parking demand without the capital costs needed to acquire land and construct new parking lots, mutually benefitting the City and downtown business owners.
  - Prioritize banks and churches nearest Union St and Market St that have low parking demand during weekday business hours
- Adopt a goal of effective utilization of all parking areas (even distant lots) to balance demand
  - Create a hierarchy of timed on-street parking with 2, 3, 4, and 24-hour on-street parking areas
    - Same recommendation from Enforcement section, different objective
    - Encourage users to park and walk from further distances if they need additional time

Long term Recommendations (3-5 years)

Long-term improvement recommendations may need to be explored further before implementing, or may require some additional coordination with City, County, and/or Downtown Development Corporation stakeholders. Some of these recommendations may be partially initiated in the near-term. However, their impact will not be immediately apparent.

- Become a member and attend a Carolinas Parking Association fall conference and tradeshow to establish a network of similar municipalities that deal with parking management challenges

- http://www.carolinasparking.org/

- Establish a board/committee to administer the parking management program
  - Include representatives from City, County, CDDC, merchants, property owners, and Police (enforcement)
  - Include special events coordination within the duties/tasks of this board
- Implement on-street pay stations that accept multiple forms of payment (coins, cash, cards, cellular), and select a provider based on recommendations from similar North Carolina municipalities
  - Include options for merchant parking validation, via smart phone mobile application, printed codes or tokens for use at pay stations, or discounts on merchandize purchased
    - Include parking token option (Wilmington, NC example)
- Pursue construction design options with Cabarrus County for a joint-use parking garage to be located on existing County parking lots (Barbrick and Corban lots)
  - Include options for hourly pay lot within first floor nearest Courthouse
    - Consider options for hourly pay lot, as well as County-validation options
      - Negotiate reduced hourly rate for validation option
      - Evaluate demand for pay lot over time and expand/reduce accordingly using temporary bollards (plastic or concrete)
  - Reserve upper level parking for permit-only options during business hours

Appendix A –

Stakeholder Interview Memorandum

Memorandum

To: City of Concord

Date: April 17, 2015

Project #: 38476.00

From: Timothy Tresohlavy
VHB Engineering

Re: Concord Downtown Parking - Stakeholder Interview Themes

This memo describes the common themes discussed with various individuals or groups during stakeholder interviews on Thursday April 9th, 2015. Prior to stakeholder interviews the project team observed the following from field work:

- The busiest time of the busiest day of the week for parking is Monday morning, between 10-11 am;
    - The busiest 3-hour time was also found to be Monday, between 9 am – 12 pm;
- Monday afternoons also experienced a peak parking demand between 2-3 pm;
- Friday (154 vehicles fewer) and Wednesday (173 vehicles fewer) were found to be short of Monday's parking demand of 1,333 vehicles observed.

Themes displayed in this font style were found to be noteworthy by the project team.

Cabarrus County / Clerk of Courts Meeting

- The County courthouse generates the greatest short-term parking demand; *estimated 1,200-1,600 individuals visiting the courthouse during a typical Monday*; this has increased from an estimated ~900 only 3-years ago.
    - Civil jurors arrive after lunch; this is the PM peak hour on the observed busiest day.
    - Criminal jurors arrive ~ 9 am (Tuesday); this is assumed to be an off-peak day.
- Potential jurors are instructed by mail to seek parking within one of three County-owned parking lots:
    - County lot on Barbrick: 70 spaces; observed to be 90-94% occupied during peak periods;
    - County lot on Corban: 58 spaces; observed to be 84-91% occupied during peak periods;
    - County lot on Church: 114 spaces; observed to be 68-95% occupied during peak periods;
    - Subtotal of 242 parking spaces; observed 220 vehicles during peak periods (91%).
- Unknown whether there is an existing regulation that stipulates the maximum distance from the courthouse that jurors are allowed/expected to park.
- In the near term (3 years) the County is exploring the feasibility of constructing a *parking deck on the current Barbrick/Corban parking lot site*; There is concern over the maximum height restriction (72'; Hotel Concord).
- In the near term (5 years) the County is exploring the feasibility of constructing a second courthouse and underground parking on the current Sheriff/Court parking lot.
- In the longer term (10 years) the County would consider feasibility of construction a parking deck on the current Church St parking lot, though slope and width may be challenges.
- County employees pay $5-10 per month to park within the Gov Complex parking garage.
- County parking areas are *available to the public after 6 pm* weekdays, and all weekend long.
- 'What-a-Burger' routinely tows (Courthouse visitor) vehicles that are illegally parked.

- Law Enforcement Center on Corban Ave can house up to 600 inmates within 3 separate buildings; visiting hours for inmates are offered during regular weekday business hours. Visitors are asked to park in the County lot on Church (2-blocks north).
- Corban Ave and Union St around Courthouse must remain as *no* on-street parking areas for security.

Project Steering Committee Meeting

- Many Union St restaurants are closed during the peak hour (10-11 am Mondays), which is fortunate, however could raise future parking demand issues.
- *Evening events are perceived as very difficult for parking* (comment by President/CEO of Cabarrus Arts Council); impression that this only relates to on-street parking, which is a challenge all day long; this is where drop-off or valet service options should be explored.
- McCachern Blvd and Spring St were converted to 24-hour on-street parking because of low utilization; also, McCachern has steep slope walking up Means Ave.
- Bicentennial lot leased parking spaces are probably below market rate for a 24-hour per day, 7-day per week reserved parking space.

Downtown Business Merchants Meeting

- *Local merchants expressed support for on-street meters or pay stations along Union St* to limit the length of stay and frequent 100% occupancy of this street.
    - Revenue generated from meters MUST remain within downtown, for use in streetscape or other downtown improvements;
- Discussed support for as much angled parking as possible to maximize the on-street capacity.
    - Even if the sidewalks are not widened, angled parking is preferred.
- Streetscape improvements should be business-focused, meaning (a) slower speeds for safety; and (b) maximum visibility of store/shops.
- Once City Hall is complete: *Will City sell its Union St buildings, or back-fill its offices?* (Yes, this was confirmed with City staff)
    - Will City Hall employees park in Cabarrus Ave deck; opening parking along Market and Spring St lot? (Yes, this was confirmed with City staff)
- Some recommend developing Church St corridor with stores/shops, and parking deck (hidden) behind on current County Lot of Church site; Same development concept could be applied to Means Ave and Church St around Bicentennial lot area.
- Lack of on-street parking (at times) is the #1 complaint of customers to merchants.
- Explore the possibility of converting two traffic signals (Union @ Cabarrus; Union @ Corban) to 4-way stop sign intersections, then remove left-turn lane, reduce to two-lanes of travel and provide on-street parking or sidewalk improvements along one side of the street.

Parking Enforcement Meeting

- City parking enforcement exists for the following facilities (682 spaces); typical enforcement tour lasts 1-hour:

    - Spring Street Lot (39 spaces; 24 hours)
    - Bicentennial Lot (96 spaces; 3-hour limit; some reserved)
    - Cabarrus Ave Garage (334 spaces; 3-hour limit on first floor and ramp only, other floors are by permit only from 8-5 M-F; 35 spaces reserved)
    - On-street parking along Spring St, and McCachern Blvd (24-hour)
    - On-street parking along Market St, Union St, Church St, Means Ave, Barbrick Ave, and Cabarrus Ave (2-hour limit)
- City parking areas are *enforced from 7:30 am to 4:30 pm* Monday to Friday, using wheel chalking.
- City on-street signs specify 2-hour parking between **9 am and 6 pm**; *some* signs suggest Monday to Friday.
- City parking lot signs specify 3-hour parking between **8 am and 5 pm**; Bicentennial lot; Cabarrus Garage.
- Over-night parking is not allowed within the Cabarrus County parking lots.
- Parking enforcement supports on-street parking meters or pay stations, because technology will make enforcement easier.
- Parking enforcement suggests that merchant vehicles are commonly found parking on-street (Union St) in front of their own store(s).
- Parking citations ($10 violations) are written by hand, using a carbon-copy ticket book; without electronic database there is no possibility of identifying repeat offenders (scofflaw list) or issuing an escalating citation amount;
- Parking boot equipment is not applied to repeat offenders; estimated that some repeat offenders may owe $8,000 to $10,000 in previous citations; police are currently working with City Legal department to improve the language of parking citations and appeals process.
- Currently only 20% of citation revenue is retained by the City; the remaining 80% goes towards Cabarrus County Schools, which is common within the State of NC.
- The Police Department is recommending that all future citations be $10, and only escalate to $50 after payment is not received following a 30-60 day period of notice. At this time an outside collections agency that is not affiliated with the Police Department would handle the collections.

City Council Meetings

- Angled parking makes on-street parking signs difficult to read.
- There is a perception of unsafe parking decks; find best engineering practices to minimize perception.
- City and County have mutual interests in another downtown parking garage; site to be determined.
- Public has perception that on-street parking along Union St renders outdoor dining impossible.

Community Workshop Event

- Examine whether the Union St spaces are greater than the typical on-street parking stall length (22' max).

Appendix B –

Existing Conditions Analysis

Existing Conditions Analysis - Parking Inventory and Utilization

	Parking Supply				% Supply				Cars - Friday										Cars - Monday										Cars - Wednesday										Cars - Saturday					
Lot Type	UnRSVD	ADA	Other	TOTAL	UnRSVD	ADA	Other	TOTAL	8 am	9 am	10 am	11 am	12 pm	1 pm	2pm	3 pm	4 pm	5 pm	8 am	9 am	10 am	11 am	12 pm	1 pm	2pm	3 pm	4 pm	5 pm	8 am	9 am	10 am	11 am	12 pm	1 pm	2pm	3 pm	4 pm	5 pm	9 am	10 am	11 am	12 pm	1 pm	2pm
On-Street	209	3	1	213	9%	0%	0%	9%	183	179	175	169	165	146	123	131	105	68	120	180	201	196	191	152	181	136	105	74	102	123	132	126	123	129	129	118	91	75	86	113	108	131	120	117
Parking Lot	2,023	68	52	2,143	86%	3%	2%	91%	872	930	1,001	1,010	924	960	952	867	807	553	777	1,094	1,132	1,131	1,027	1,014	1,005	993	880	612	772	967	1,013	1,033	1,037	893	909	887	849	609	428	514	533	533	494	475
	2,232	71	53	2,356	95%	3%	2%		1,055	1,109	1,176	1,179	1,089	1,106	1,075	998	912	621	897	1,274	1,333	1,327	1,218	1,166	1,186	1,129	985	686	874	1,090	1,145	1,159	1,160	1,022	1,038	1,005	940	684	514	627	641	664	614	592
									10,320										11,201										10,117										3,652					
Lot Owner																																												
Private	1,072	38	8	1,118	46%	2%	0%	47%	373	411	460	471	444	420	417	383	376	336	254	386	395	407	382	366	365	372	359	290	264	380	388	429	445	377	366	364	361	298	249	317	338	318	269	268
Public	1,160	33	45	1,238	49%	1%	2%	53%	682	698	716	708	645	686	658	615	536	285	643	888	938	920	836	800	821	757	626	396	610	710	757	730	715	645	672	641	579	386	265	310	303	346	345	324
Ownership Type																																												
Municipal-On-Street	209	3	1	213	9%	0%	0%	9%	183	179	175	169	165	146	123	131	105	68	120	180	201	196	191	152	181	136	105	74	102	123	132	126	123	129	129	118	91	75	86	113	108	131	120	117
Municipal-Off-Street	951	30	44	1,025	40%	1%	2%	44%	499	519	541	539	480	540	535	484	431	217	523	708	737	724	645	648	640	621	521	322	508	587	625	604	592	516	543	523	488	311	179	197	195	215	225	207
Private	1,072	38	8	1,118	46%	2%	0%	47%	373	411	460	471	444	420	417	383	376	336	254	386	395	407	382	366	365	372	359	290	264	380	388	429	445	377	366	364	361	298	249	317	338	318	269	268
Owner																																												
City On-Street	209	3	1	213	9%	0%	0%	9%	183	179	175	169	165	146	123	131	105	68	120	180	201	196	191	152	181	136	105	74	102	123	132	126	123	129	129	118	91	75	86	113	108	131	120	117
City	446	15	37	498	19%	1%	2%	21%	193	213	234	260	251	255	251	243	232	171	227	313	310	307	306	291	281	274	253	228	208	273	304	313	320	272	287	259	238	243	140	144	140	162	169	153
County	505	15	7	527	21%	1%	0%	22%	306	306	307	279	229	285	284	241	199	46	296	395	427	417	339	357	359	347	268	94	300	314	321	291	272	244	256	264	250	68	39	53	55	53	56	54
Private	1,072	38	8	1,118	46%	2%	0%	47%	373	411	460	471	444	420	417	383	376	336	254	386	395	407	382	366	365	372	359	290	264	380	388	429	445	377	366	364	361	298	249	317	338	318	269	268
Block Num	Includes On-Street and Off-Street																																											
1	12	1	0	13	1%	0%	0%	1%	0	3	3	4	5	3	6	2	5	4	0	2	2	5	5	6	8	3	4	2	0	1	1	1	2	2	1	1	3	1	0	1	3	3	0	0
2	427	15	2	444	18%	1%	0%	19%	105	130	159	166	158	168	177	165	151	114	167	216	258	269	252	219	237	240	218	193	158	238	263	267	268	216	223	229	218	207	54	74	93	93	106	92
3	67	5	0	72	3%	0%	0%	3%	4	19	36	40	41	23	19	24	27	32	6	41	31	36	37	41	25	24	31	23	9	37	37	40	46	28	25	24	27	26	7	15	14	10	6	7
4	145	7	0	152	6%	0%	0%	6%	33	42	53	75	65	66	55	48	47	38	36	59	72	79	79	65	71	66	62	55	28	40	55	74	107	83	64	56	48	52	24	58	65	50	34	43
5	7	0	0	7	0%	0%	0%	0%	1	1	2	2	2	2	2	3	3	5	3	2	2	2	2	2	2	2	2	2	1	2	2	1	2	2	2	1	1	3	0	0	0	0	0	0
6	14	0	0	14	1%	0%	0%	1%	0	1	2	2	1	1	1	2	1	0	0	0	0	0	1	0	0	2	0	0	2	1	1	1	1	1	2	1	0	0	0	0	0	0	0	0
7	43	0	0	43	2%	0%	0%	2%	1	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
8	181	8	0	189	8%	0%	0%	8%	147	142	139	141	139	141	137	118	108	115	24	41	41	41	38	34	35	38	31	23	33	39	31	49	45	41	42	45	38	37	111	127	130	135	117	129
9	112	2	0	114	5%	0%	0%	5%	93	90	89	93	80	73	75	77	61	37	58	106	102	98	85	70	83	54	41	25	47	52	54	54	53	46	56	45	34	30	38	43	43	59	50	38
10	114	1	1	116	5%	0%	0%	5%	71	69	65	70	79	77	61	73	55	46	62	69	81	75	67	70	72	65	54	47	43	56	62	66	60	64	62	52	59	50	39	50	53	60	51	46
11	160	6	0	166	7%	0%	0%	7%	143	134	124	107	102	109	104	88	69	39	129	145	137	134	115	128	130	122	101	55	112	88	83	81	111	71	72	89	78	33	46	54	56	62	58	60
12	125	4	35	164	5%	0%	1%	7%	95	105	115	119	117	96	87	81	90	69	60	125	91	82	109	107	92	89	86	78	66	95	105	113	122	114	104	95	86	88	90	95	81	92	101	89
13	112	3	3	118	5%	0%	0%	5%	23	44	64	69	59	84	72	58	40	18	68	78	78	80	77	97	91	73	50	31	63	69	72	69	59	68	68	74	54	14	17	24	17	20	18	17
14	240	6	0	246	10%	0%	0%	10%	86	95	108	87	70	65	73	73	68	32	60	117	162	155	122	99	101	104	94	56	51	86	99	104	88	74	86	81	74	47	20	20	20	21	16	15
15	262	7	12	281	11%	0%	1%	12%	192	170	149	140	117	138	147	132	131	39	153	190	189	180	148	149	160	169	137	43	191	201	195	152	128	140	145	135	143	47	44	43	42	36	35	31
16	151	4	0	155	6%	0%	0%	7%	35	37	39	47	36	39	42	38	41	26	46	56	59	64	59	56	57	55	56	42	48	59	60	58	53	50	61	55	59	39	20	19	20	20	20	21
17	12	0	0	12	1%	0%	0%	1%	6	5	5	3	3	5	1	1	2	1	6	5	5	5	7	4	4	6	1	0	3	3	1	3	1	4	4	2	3	2	2	2	2	1	0	2
18	48	2	0	50	2%	0%	0%	2%	20	22	24	14	15	16	16	15	13	6	18	21	22	21	15	19	18	17	17	11	18	22	23	25	13	18	21	20	15	8	2	2	2	2	2	2
	UnRSVD	ADA	Other	TOTAL	UnRSVD	ADA	Other	TOTAL	8 am	9 am	10 am	11 am	12 pm	1 pm	2pm	3 pm	4 pm	5 pm	8 am	9 am	10 am	11 am	12 pm	1 pm	2pm	3 pm	4 pm	5 pm	8 am	9 am	10 am	11 am	12 pm	1 pm	2pm	3 pm	4 pm	5 pm	9 am	10 am	11 am	12 pm	1 pm	2pm
	Supply				Parking Supply				Cars - Friday										Cars - Monday										Cars - Wednesday										Cars - Saturday					

Data collected in March 2015

Existing Conditions Analysis - Parking Inventory and Utilization Summary - City Parking ONLY

City Parking Lots					Existing Supply				Cars - Friday						Cars - Monday						Cars - Wednesday										
Block Num	Id	Lot_Name	Restriction	Owner	UnRSVD	ADA	Other	TOTAL	9 am	10 am	11 am	12 pm	1 pm	2pm	9 am	10 am	11 am	12 pm	1 pm	2pm	9 am	10 am	11 am	12 pm	1 pm	2pm	10 am	11 am	12 pm	1 pm	2pm
2	6	Deck 1	3 hour	City	79	4	2	85	11	16	22	25	29	40	26	51	53	49	37	39	28	32	34	45	34	35	9	16	23	32	26
2	7	Deck 2	Reserved	City	94	3		97	64	70	70	60	70	64	90	88	85	79	78	82	88	87	85	78	82	80	19	19	19	22	22
2	8	Deck 3	Reserved	City	96	3		99	23	29	29	32	33	35	44	51	47	47	40	38	51	61	63	67	26	43	15	15	15	15	15
2	9	Deck 4	3 hour	City	51	2		53	14	15	17	15	16	16	27	28	37	25	26	27	27	28	27	24	27	24	7	7	7	8	8
4	15	Fire Dept	None	City	16			16	8	6	9	9	10	9	7	6	10	7	5	7	6	6	7	7	6	6	7	8	8	8	9
9	30	Spring St Lot	All Day	City	39			39	38	38	39	39	38	37	39	36	37	35	36	31	20	24	23	25	22	28	28	25	37	28	21
10	36	City Hall	None	City	8			8	3	3	3	5	6	6	5	5	5	4	5	7	1	3	5	2	5	7	0	3	3	3	4
10	40	City Hall Annex	None	City	5			5	1	1	3	3	2	2	4	4	4	3	3	2	2	2	1	1	2	2	2	2	2	2	2
12	51	Bicentennial Lot	3 hour	City	58	3	35	96	51	56	68	63	51	42	71	41	29	57	61	48	50	61	68	71	68	62	57	45	48	51	46
				Subtotal	446	15	37	498	213	234	260	251	255	251	313	310	307	306	291	281	273	304	313	320	272	287	144	140	162	169	153

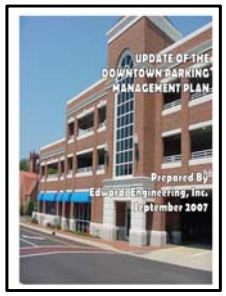
City On-street Parking					Existing Supply				Cars - Friday						Cars - Monday						Cars - Wednesday										
Block Num	Id	Lot_Name	Restriction	Owner	UnRSVD	ADA	Other	TOTAL	9 am	10 am	11 am	12 pm	1 pm	2pm	9 am	10 am	11 am	12 pm	1 pm	2pm	9 am	10 am	11 am	12 pm	1 pm	2pm	10 am	11 am	12 pm	1 pm	2pm
2	10	Union St	2 Hour	City On-Street	3			3	3	3	3	3	3	2	0	3	3	3	2	1	2	3	1	2	3	1	3	3	3	3	3
4	19	Union St	2 Hour	City On-Street	15			15	15	15	15	15	18	14	15	15	15	15	15	14	5	9	14	14	14	13	7	7	11	10	15
8	29	Spring St	All Day	City On-Street	11			11	8	7	6	5	9	9	10	11	11	11	9	10	3	3	3	3	4	4	6	7	8	6	6
9	32	Market St	2 Hour	City On-Street	29	2		31	23	23	23	8	7	11	29	29	29	26	7	26	4	6	6	5	4	4	3	2	5	7	3
9	33	Spring St	2 Hour	City On-Street	4			4	4	4	4	3	3	3	4	4	3	4	1	4	3	1	1	1	2	2	2	3	4	3	2
10	41	Union St	2 Hour	City On-Street	21		1	22	18	13	7	22	22	9	22	22	19	20	22	22	19	18	19	16	16	17	19	18	22	21	19
10	42	Barbrick Ave	2 Hour	City On-Street	3			3	3	3	3	3	2	3	3	3	3	3	3	3	3	2	1	1	3	2	2	2	2	2	1
10	43	Market St	2 Hour	City On-Street	7			7	5	3	7	8	4	2	7	6	7	7	7	7	3	2	1	2	1	2	5	5	5	3	1
11	49	Barbrick Ave	2 Hour	City On-Street	11			11	11	11	11	11	7	6	11	11	11	11	11	5	11	11	6	9	7	6	6	5	6	5	5
11	50	Union St	2 Hour	City On-Street	5			5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	4	5	5	5	5	5	5
12	54	Cabarrus Ave	2 Hour	City On-Street	6			6	6	6	3	6	6	4	6	6	6	6	4	6	4	4	3	5	4	1	2	3	5	4	6
12	55	Church St	2 Hour	City On-Street	3			3	3	3	3	3	1	1	1	3	3	3	1	3	2	3	3	1	2	3	2	2	2	2	2
12	56	Means Ave	2 Hour	City On-Street	4			4	3	4	4	4	1	4	4	4	4	4	1	4	4	4	4	4	4	2	4	3	4	4	1
12	57	Union St	2 Hour	City On-Street	13			13	13	13	13	13	11	13	13	13	13	13	13	12	8	13	13	13	11	11	12	13	13	13	14
13	59	Means Ave	2 Hour	City On-Street	16	1		17	17	17	17	17	17	12	16	17	17	17	17	16	14	17	15	15	16	17	14	7	13	9	10
14	66	McCachern Blvd	All Day	City On-Street	13			13	11	13	9	9	6	6	7	12	11	9	8	13	10	7	6	8	6	7	8	8	9	8	8
14	67	Means Ave	2 Hour	City On-Street	4			4	3	3	3	2	2	1	2	4	4	4	1	4	4	2	3	3	4	4	2	2	2	4	4
14	68	Church St	2 Hour	City On-Street	9			9	9	9	9	9	7	6	5	9	7	7	9	5	4	3	6	4	4	7	0	2	3	3	1
15	74	Means Ave	2 Hour	City On-Street	7			7	6	7	4	3	3	2	6	7	7	4	3	7	4	6	4	3	7	6	0	1	0	0	0
15	75	McCachern Blvd	30 Min	City On-Street	5			5	4	3	5	5	5	5	5	5	4	5	2	4	3	3	4	3	4	1	3	3	2	2	2
16	80	McCachern Blvd	All Day	City On-Street	16			16	5	6	13	9	3	5	6	9	11	10	9	7	7	10	6	6	7	12	6	5	6	6	7
17	82	McCachern Blvd	All Day	City On-Street	4			4	4	4	2	2	4	0	3	3	3	4	3	3	1	0	2	0	2	2	2	2	1	0	2
				Subtotal	209	3	1	213	179	175	169	165	146	123	180	201	196	191	152	181	123	132	126	123	129	129	113	108	131	120	117

Downtown Parking Trend (2001-2015)

Parking Type	2001	2007	2015	% Change 2001-2007	% Change 2007-2015
On-Street (City)	212	192	213	-9%	+11% [1]
Off-Street (City/County)	1,036	1,043	1,025	+1%	-2%
Off-Street (Private)	1,225	1,036	1,118	-15%	+8% [2]
TOTAL	**2,473**	**2,271**	**2,356**	**-8%**	**+4%**

From 2007 Parking Master Plan

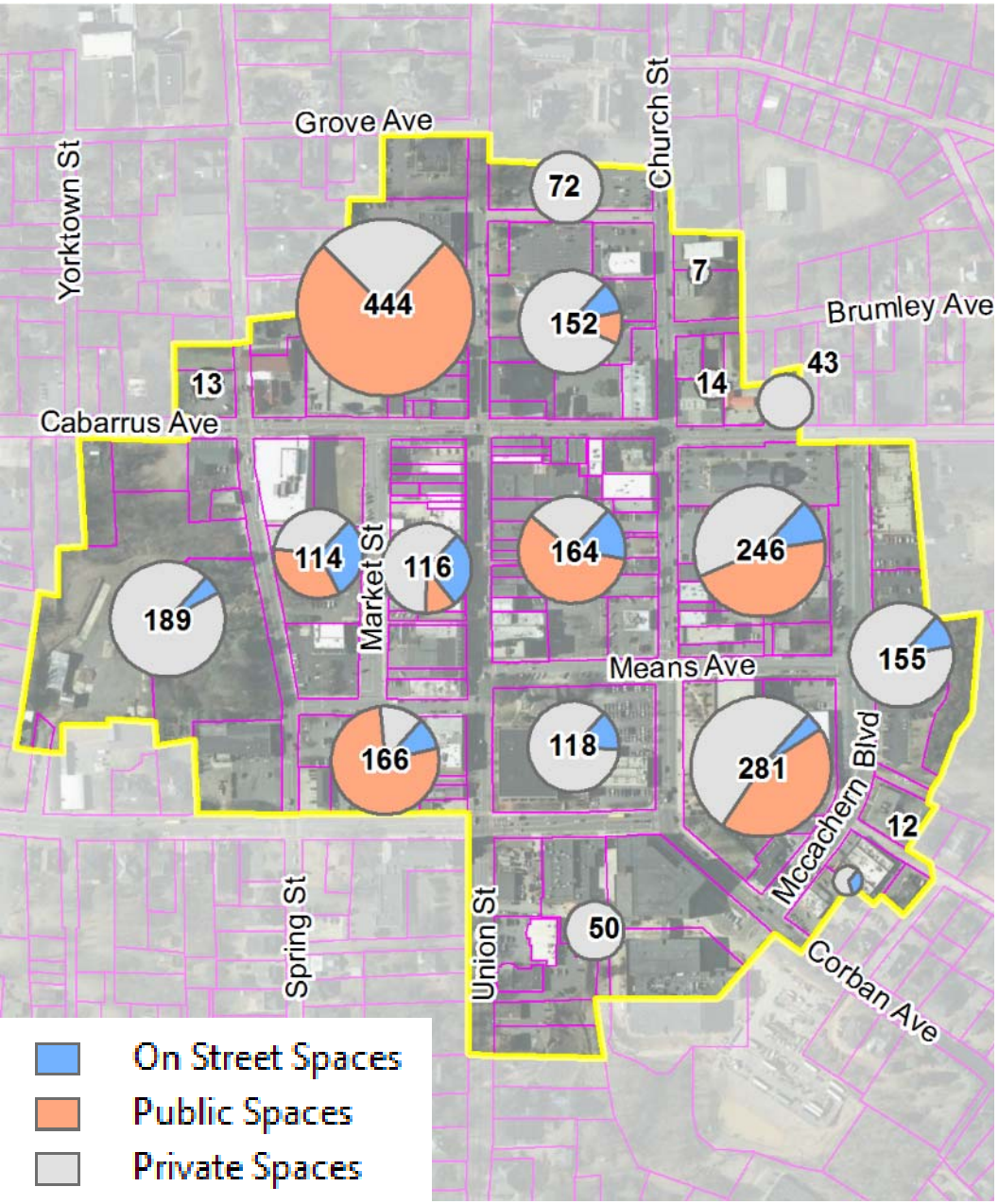
Collected March 20, 2015



[1] – Restriping of parking (on/off street)

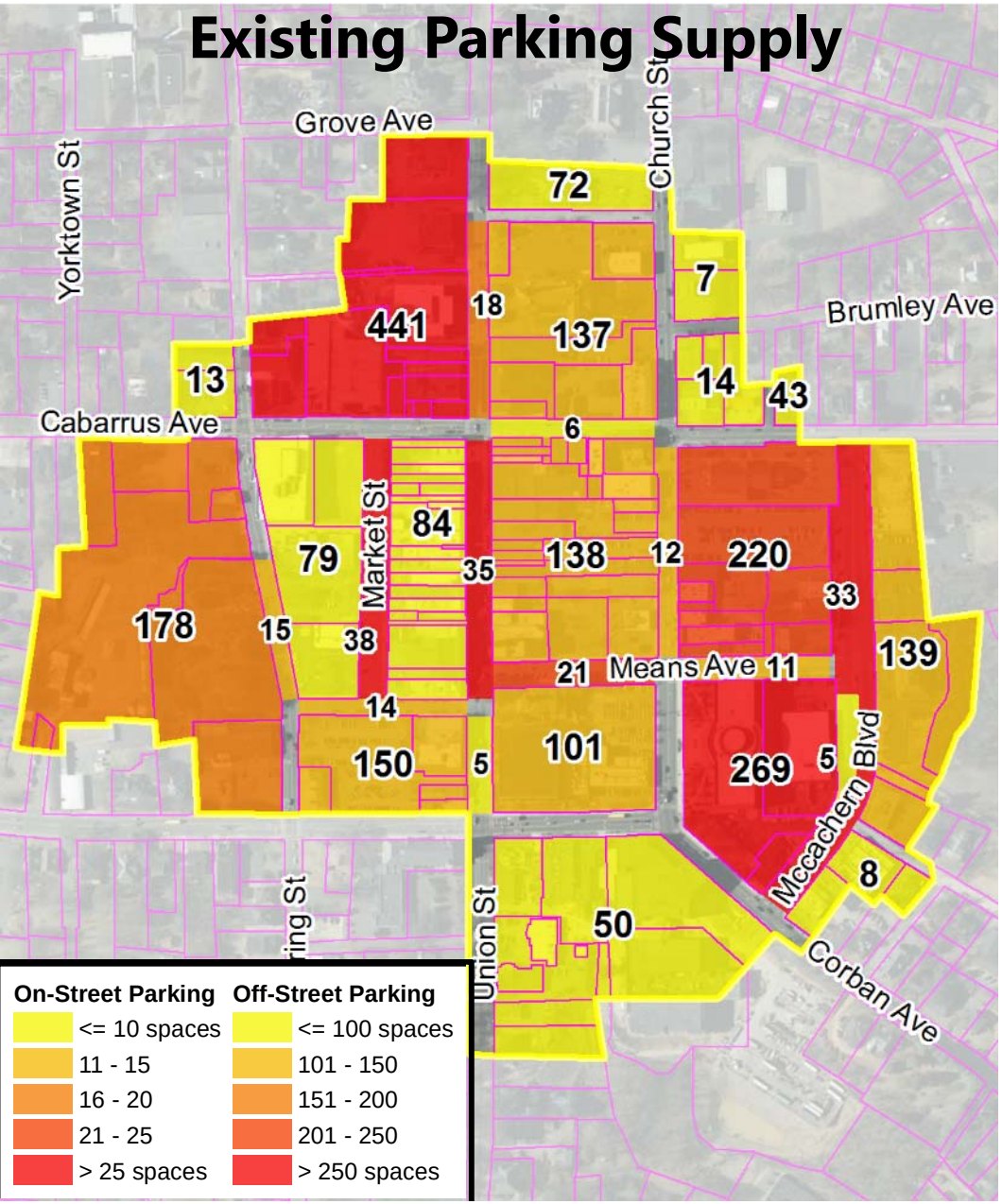
[2] – Opening of Carolina Courts

Existing Conditions



	Supply				Parking Supply			
Lot Type	UnRSVD	ADA	Other	TOTAL	UnRSVD	ADA	Other	TOTAL
On-Street	209	3	1	213	9%	0%	0%	9%
Parking Lot	2,023	68	52	2,143	86%	3%	2%	91%
	2,232	71	53	2,356	95%	3%	2%	
Lot Owner								
Private	1,168	40	11	1,219	50%	2%	0%	52%
Public	1,064	31	42	1,137	45%	1%	2%	48%
Ownership Type								
Municipal-On-Street	209	3	1	213	9%	0%	0%	9%
Municipal-Off-Street	793	28	41	862	34%	1%	2%	37%
Private	1,168	40	11	1,219	50%	2%	0%	52%
Block Num	Includes On-Street and Off-Street							
1	12	1	0	13	1%	0%	0%	1%
2	427	15	2	444	18%	1%	0%	19%
3	67	5	0	72	3%	0%	0%	3%
4	145	7	0	152	6%	0%	0%	6%
5	7	0	0	7	0%	0%	0%	0%
6	14	0	0	14	1%	0%	0%	1%
7	43	0	0	43	2%	0%	0%	2%
8	181	8	0	189	8%	0%	0%	8%
9	112	2	0	114	5%	0%	0%	5%
10	114	1	1	116	5%	0%	0%	5%
11	160	6	0	166	7%	0%	0%	7%
12	125	4	35	164	5%	0%	1%	7%
13	112	3	3	118	5%	0%	0%	5%
14	240	6	0	246	10%	0%	0%	10%
15	262	7	12	281	11%	0%	1%	12%
16	151	4	0	155	6%	0%	0%	7%
17	12	0	0	12	1%	0%	0%	1%
18	48	2	0	50	2%	0%	0%	2%

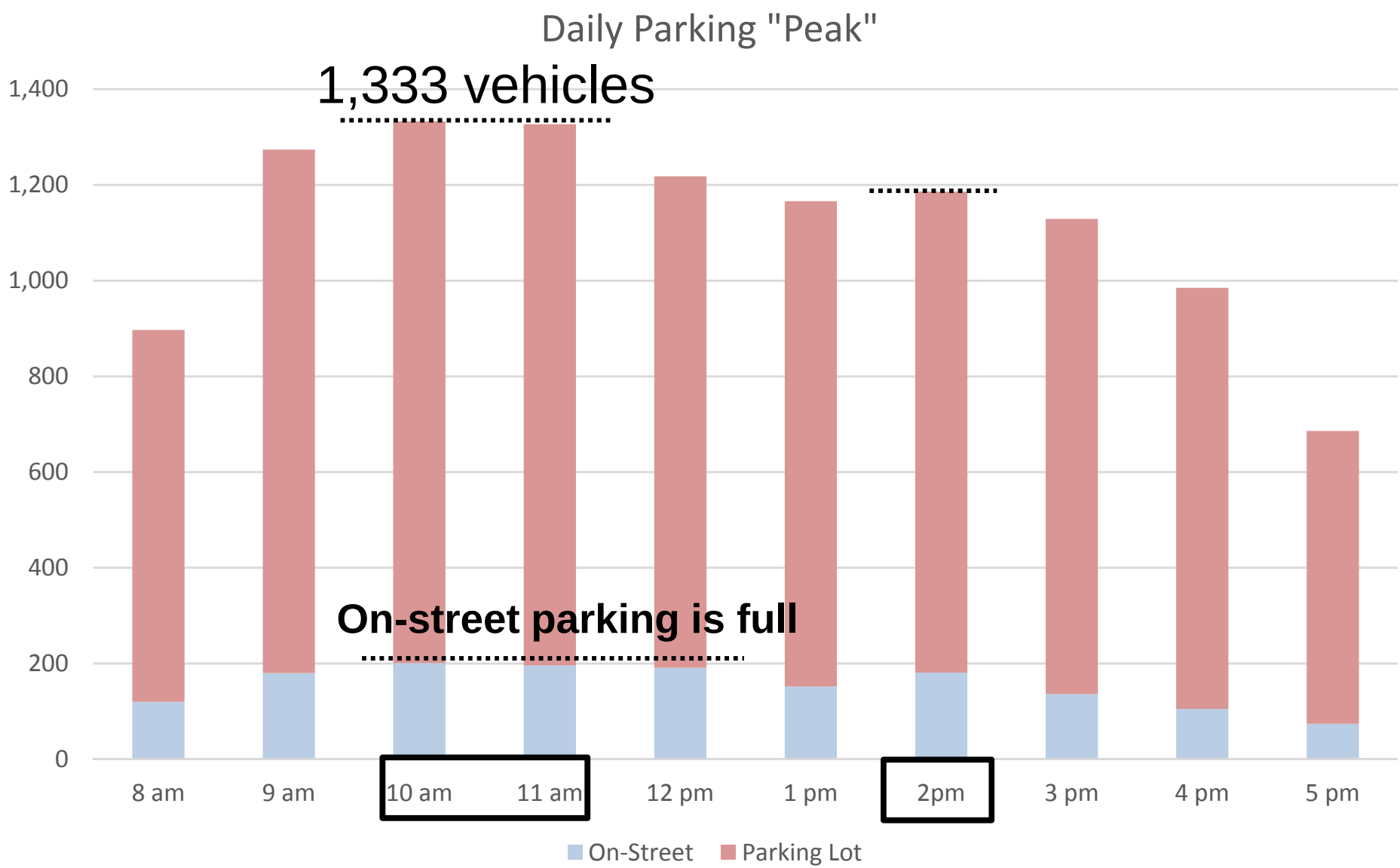
Existing Conditions



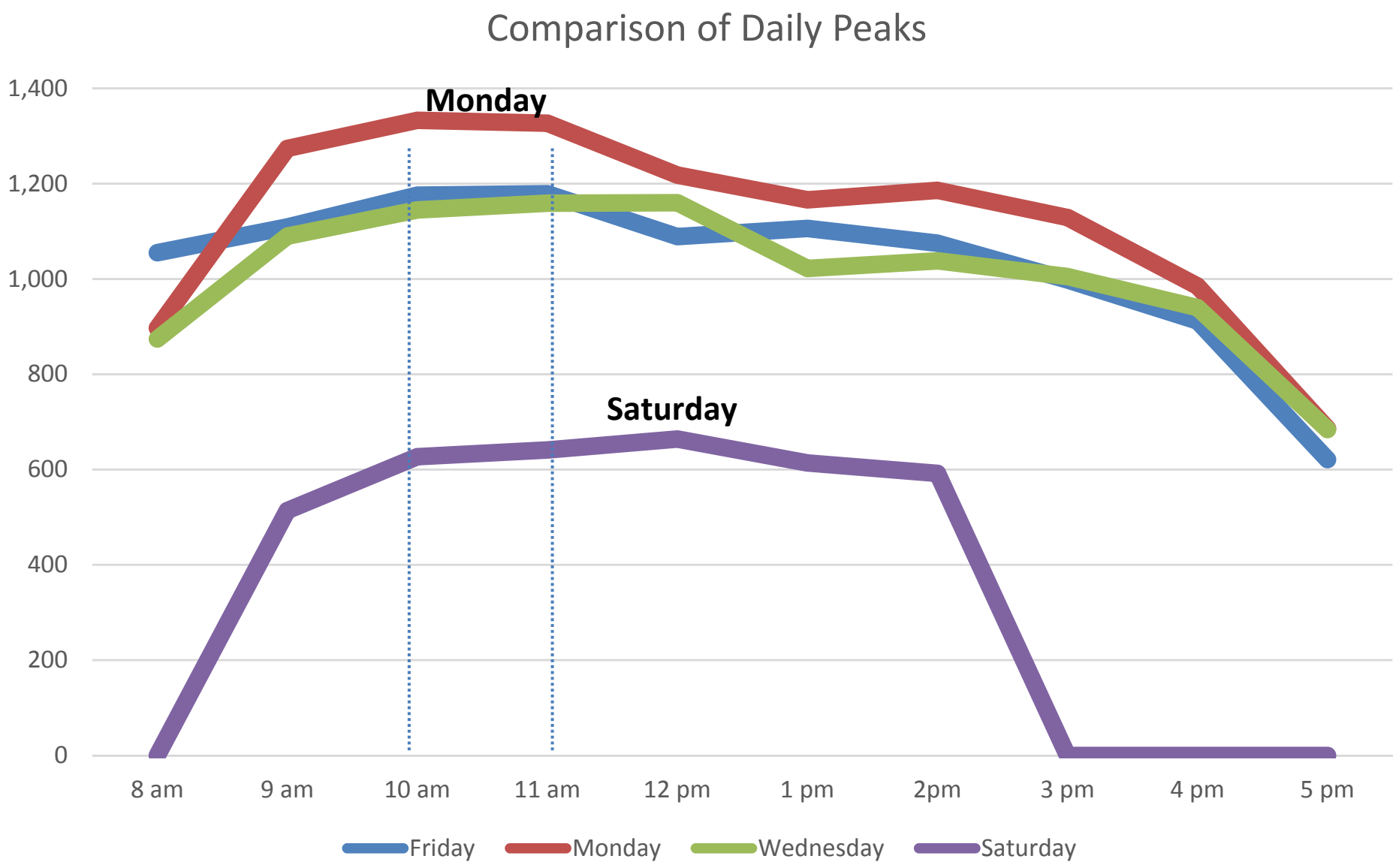
Highest Supply Blocks

1. Cabarrus Ave Garage (441)
2. County Office Complex (269)
3. County Lot on Church (220)

“Peak” Hour Parking = Max # Vehicles



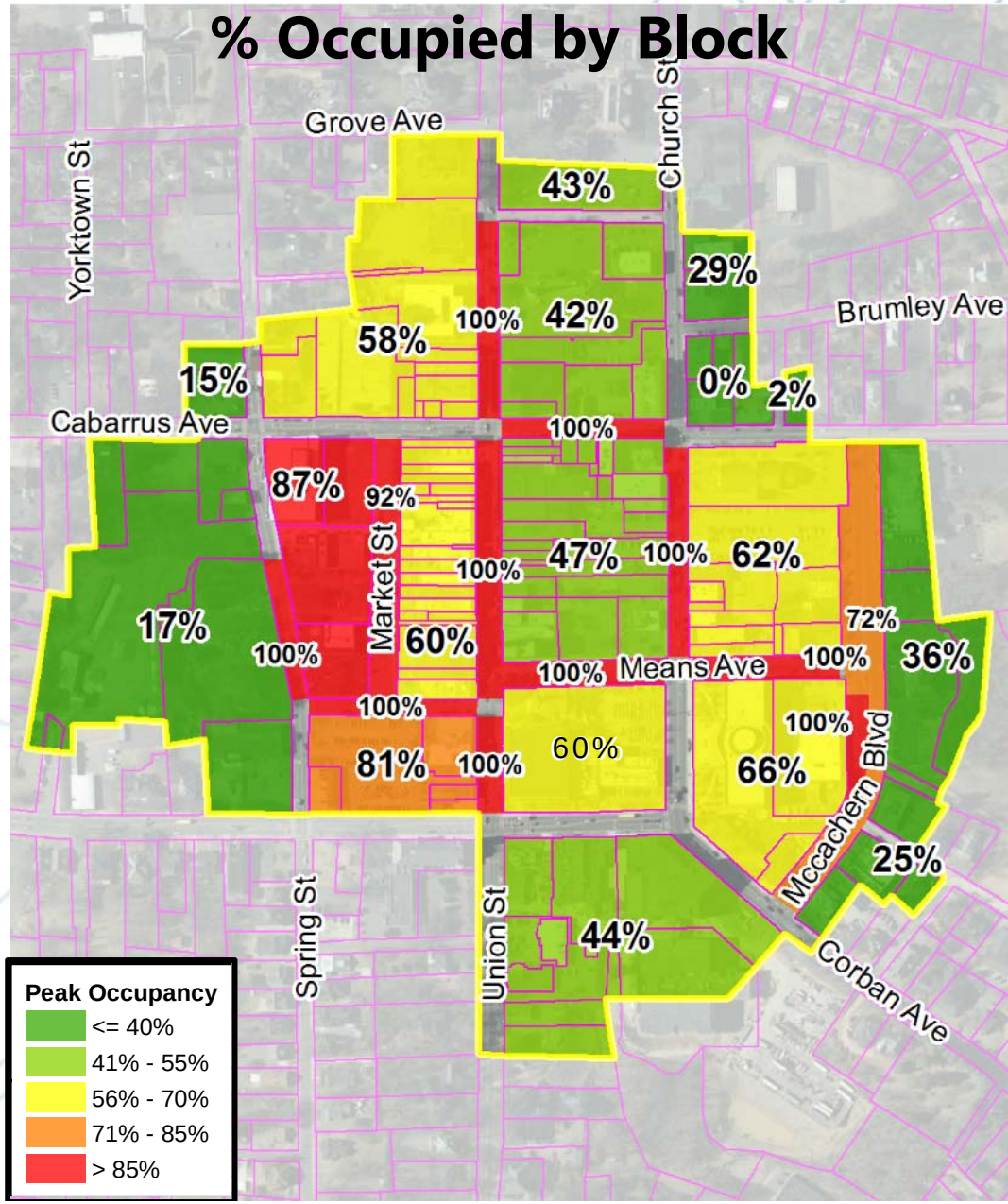
Peak Hour Parking Comparison



Monday @ 10 am Peak Hour

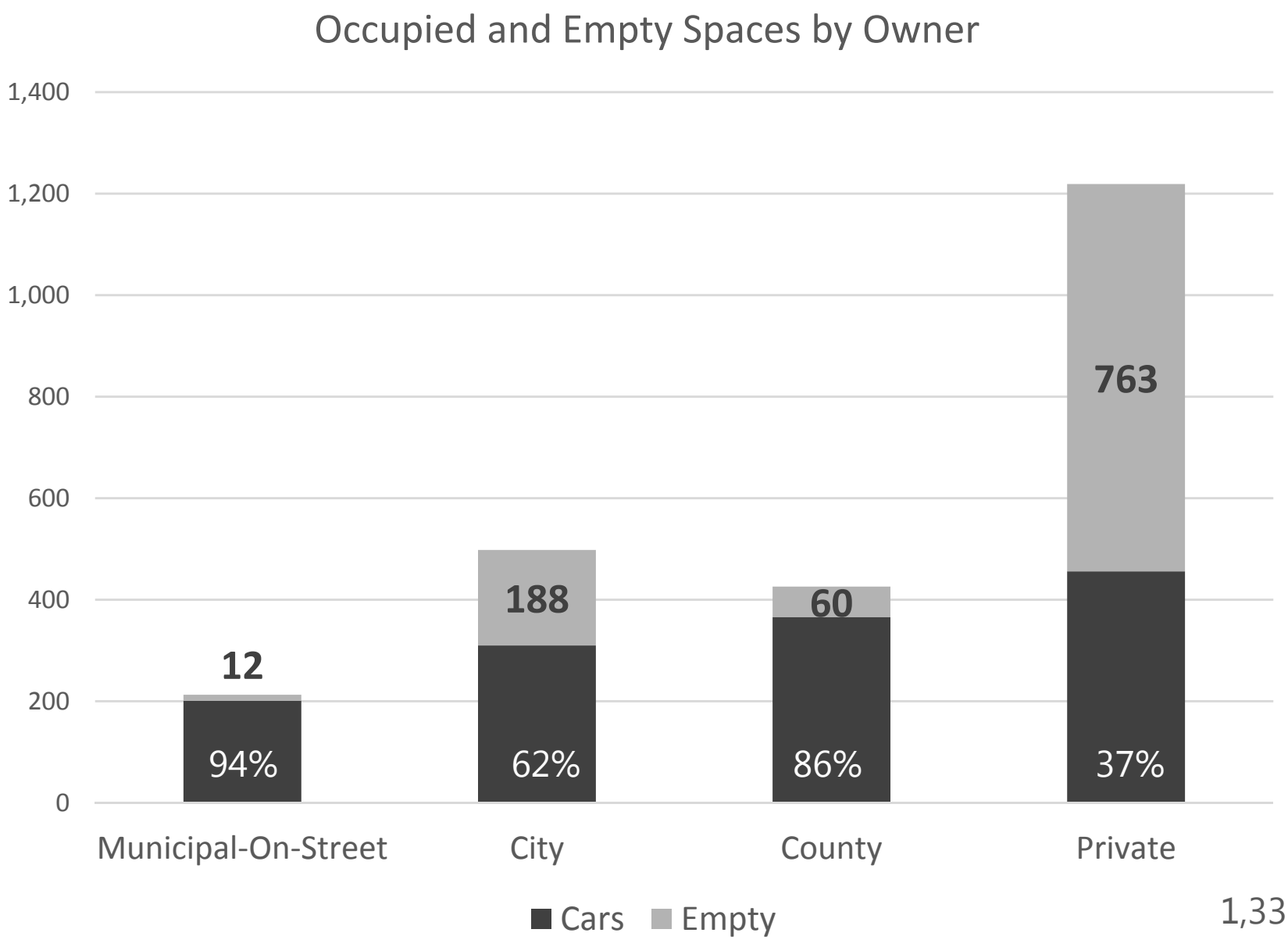
Highest Demand Areas

1. On-Street Parking
2. City lot on Spring St
3. County lots on Barbrick/Corban



Parking Space Type	Spaces	Cars	%
Municipal-On-Street	213	201	94%
Municipal-Off-Street	924	676	73%
Private	1,219	456	37%
	2,356	1,333	57%

Monday @ 10 am Peak Hour



1,333 cars
1,023 empty

Appendix C –

Future Conditions Analysis

Future Parking Demand Analysis - Projects List

Num	Address	Name	Heated SF	Block	Floors	Street Use	Upper Floor use	Vacant	Restaurant	Retail	Office	Residential	TOTAL	Residential Units	Residential Beds	Parking Demand Ratios (per 1,000 FW) Vacant	Restaurant	Retail	Office	Residential	Other	Parking Demand
																	4	2.5	3	1.5	1	
4	Union Street N	vacant Concord Telephone Co. bldg.	5,280	4	2	residential	residential					5,280	**5,280**	4	4	-	-	-	-	6.0	-	6.00
14	Union Street N	vacant historic bank building	1,844	4	1	office					1,844		**1,844**			-	-	-	5.5	-	-	5.53
14/18	Union Street N	Hotel Concord - vacant upper floors	27,512	4	5	retail	residential			5,502		22,010	**27,512**	34	34	-	-	13.8	-	51.0	-	64.76
22	Union Street N	Old theater building	9,690	4	1	retail				9,690			**9,690**			-	-	24.2	-	-	-	24.23
26	Union Street S	City Hall	20,000	10	2	office	office				20,000		**20,000**			-	-	-	60.0	-	-	60.00
30	Union Street S	Kitty City	8,180	10	2	retail	residential			4,090		4,090	**8,180**	3	6	-	-	10.2	-	9.0	-	19.23
57	Union Street S	Cabarrus Savings Bank Bldg (upper floors)	15,888	12	5	retail	residential			888		15,000	**15,888**	23	23	-	-	-	-	34.5	-	34.50
66	Union Street S	City Hall Annex	14,304	10	2	office	office				14,304		**14,304**			-	-	-	42.9	-	-	42.91
2	Corban Ave SW	Vacant gas station	1,156	11	1	retail				1,156			**1,156**			-	-	2.9	-	-	-	2.89
16	Church St N	Vacant building (Mills Bldg., former electric supply)	3,780	6	1	retail				3,780			**3,780**			-	-	9.5	-	-	-	9.45
24	Church St N	Vacant building (Serv Co)	600	5	1	retail				600			**600**			-	-	1.5	-	-	-	1.50
29	Cabarrus Ave E	Church Street Lofts	30,149	4	3	vacant	residential	10,050				20,099	**30,149**	26	30	-	-	-	-	45.0	-	45.00
61	Cabarrus Ave W	New restaurant near Carolina Courts	2,800	8	1	restaurant			2,800				**2,800**			-	14.0	-	-	-	-	14.00
35	Cabarrus Ave W	New City Hall	76,176	9	4	office	office				76,176		**76,176**			-	-	-	125.6	-	-	125.62
77	Union St S	Cabarrus County Courhouse	-	13	1	government															142.0	142.00
		Totals	**217,359**					**10,050**	**2,800**	**25,706**	**112,324**	**66,479**	**217,359**	**90**	**97**	**-**	**14.0**	**62.0**	**234.1**	**145.5**	**142.0**	**597.6**
								5%	1%	12%	52%	31%										

Note:

Cabarrus County Courthouse visitors are expected to increase by 500 daily visitors by 2020

2% are expected to arrive via transit

4% are expected to arrive via drop off

94% are expected to drive, and would need parking

472 New daily visitor parking demand (94% x 500)

30% assumed peak-hour adjustment factor (10-11 am)

142 New peak-hour parking demand generated by 2020

Future Parking Demand Analysis

Total Inventory (Square Foot)

	Vacant	Restaurant	Retail	Office	Residential	Other	Total	Vacancy Rate
Street Level	10,050	2,800	25,706	38,040	2,640	0	79,236	12.7%
Upper Floor	0	0	0	74,284	63,839	0	138,123	0.0%
Total Floor Area	**10,050**	**2,800**	**25,706**	**112,324**	**66,479**	**0**	**217,359**	4.6%

Note:	Examples Include…
Vacant	Anything not currently occupied; under construction
Restaurant	Fast food; seated dining; coffee shop; bakery, café, ice cream shop; wine bar; etc.
Retail	Most other commercial uses (see above table)
Office	Government; law; professional offices
Residential	Upstairs lofts; currently no apartments/condos in study area
Other	Library; recreation;

	Vacant	Restaurant	Retail	Office	Residential	Other	Total	Vacancy Rate
Existing SF	**253,222**	**37,498**	**120,331**	**653,759**	**2,100**	**65,061**	**1,131,971**	
Redeveloped Properties (Existing)	154,775	0	9,592	34,304	0	0	198,671	
Redeveloped Properties (Future)	10,050	2,800	25,706	112,324	66,479	0	217,359	
Net SF Change	-144,725	2,800	16,114	78,020	66,479	0	18,688	
% SF Change	-57%		13%	12%	3166%			
Future SF	108,496	40,298	136,446	731,779	68,579	65,061	**1,150,659**	

Existing Conditions

Land Uses	SqFt	% SqFt	Dwellings	Parking Rate	Est Spaces	Actual Spaces
Vacant	253,222	22%		0.0	-	2,356
Other	65,061	6%		1.0	65	
Residential	2,100	0%	2	1.5	3	
Retail	120,331	11%		2.5	301	
Office	653,759	58%		3.0	1,961	
Restaurant	37,498	3%		4.0	150	
	1,131,971		**2**		**2,480**	**2,356**

Future Conditions

Land Uses	SqFt	% SqFt	Beds	Parking Rate	Est Spaces	Actual Spaces
Vacant	108,496	9.4%		0.0	-	2,317
Other	65,061	5.7%		1.0	65	
Residential	68,579	6.0%	97	1.5	146	
Retail	136,446	11.9%		2.5	341	
Office	731,779	63.6%		3.0	2,195	
Restaurant	40,298	3.5%		4.0	161	
	1,150,659		**97**		**2,908**	**2,317**

Note

2,480	ITE manual estimated number of spaces
2,356	Current parking supply (number of spaces)
124	Over-estimated existing parking demand
0.95	Reduction-factor
1,132	AM Peak Hour maximum number of vehicles observed
1,224	AM Peak Hour empty spaces
48%	AM Peak Hour occupancy rate
90%	Parking demand margin of error
1,258	Effective demand (assumes 10% cushion for non-observed workers)
1,098	Raw surplus parking spaces
1,223	Surplus of parking between ITE and Effective demand
0.51	Reduction-factor (Effective demand / ITE estimated)

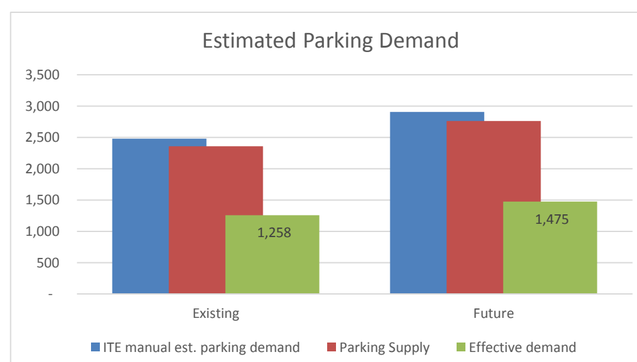
Includes:

Private
Public
On-Street

Note

2,908	ITE manual estimated number of spaces
2,317	Current number of spaces
(591)	Estimated total shortfall of parking
85%	Desired Peak Hour occupancy rate (search margin)
428	ITE manual estimated new parking demand
0.51	Reduction-factor
217	Estimated new parking demand from identified future projects

Existing	**Future**	
2,480	2,908	ITE manual est. parking demand
2,356	2,762	Parking Supply **Needed to maintain existing ratio of spaces:demand*
1,258	1,475	Effective demand



217 Number of spaces needed based on maintaining the existing ratio of "Demand":Supply
This represents a 0.51 reduction factor of the ITE parking generation estimate

Future Development Projects

1.	Concord Telephone Co Building	Residential
2.	Historic Bank Building (hotel)	Office/Services
3.	Hotel Concord	Residential/Event
4.	Old Theater Building	Retail
5.	City Hall	Office
6.	Kitty City	Retail/Residential
7.	Cabarrus Savings Bank Bldg.	Residential
8.	City Hall Annex	Office
9.	Vacant Gas Station Corban Ave	Retail
10.	Mills Building	Retail
11.	Vacant Serv Co Church St	Retail
12.	Church Street Lofts	Residential
13.	61 Cabarrus Ave (Carolina Courts)	Retail (restaurant)
14.	New City Hall	Office
15.	New City Park	Recreation

Future Land Uses by SqFt

- Data from City of Concord, Planning Department

Land Uses	SqFt	% SqFt	Change	Change
Vacant	108,496	9%	-144,725	-13%
Other	65,061	6%	-	-
Residential	53,579	5%	+51,479	+5%
Retail	135,558	12%	+15,226	+1%
Office	731,779	64%	+78,020	+7%
Restaurant	40,298	4%	+2,800	0.2%
	1,134,771		**2,800**	

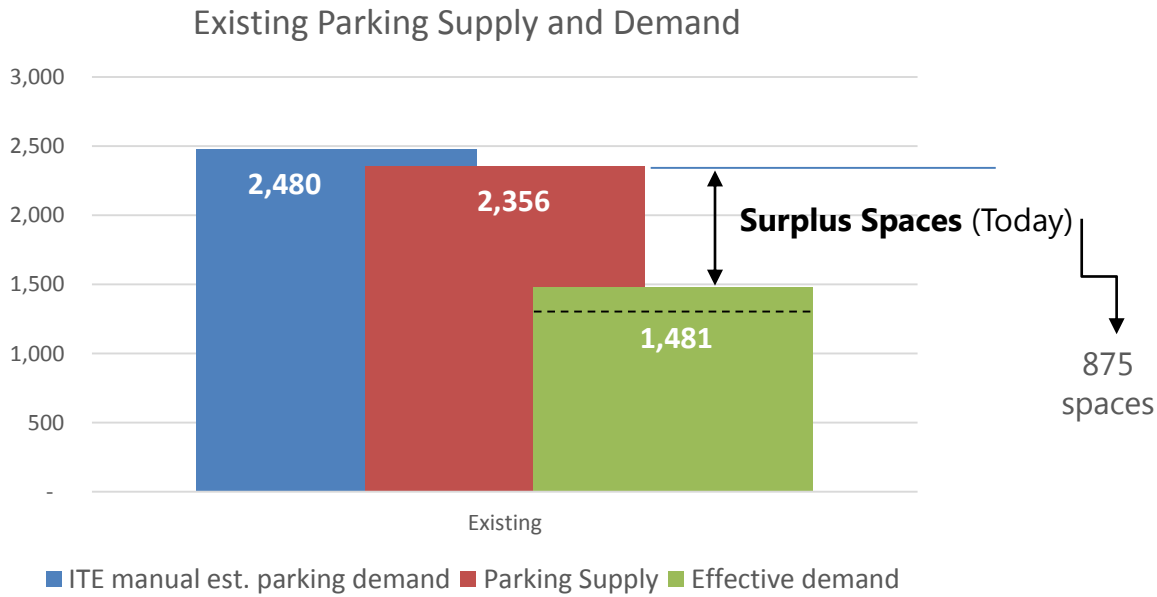
What does this mean?

- ITE manual suggests **2,906** parking spaces are needed by 2020
  - Downtown currently has **2,356** parking spaces
  - Balance of **550** spaces (shortfall)

Land Uses	SqFt	Parking per 1,000 SqFt	Est Demand
Vacant	108,496	-	-
Other	65,061	1.0	65
Residential	53,579	1.5 x 97 beds	146
Retail	135,558	2.5	339
Office	731,779	3.0	2,195
Restaurant	40,298	4.0	161
	1,134,771		**2,906**

What does this *really* mean?

- ITE manual suggests **2,480** parking spaces are needed TODAY
  - Downtown currently has **2,356** parking spaces
  - ITE manual probably over-estimates demand for Concord (~5%)



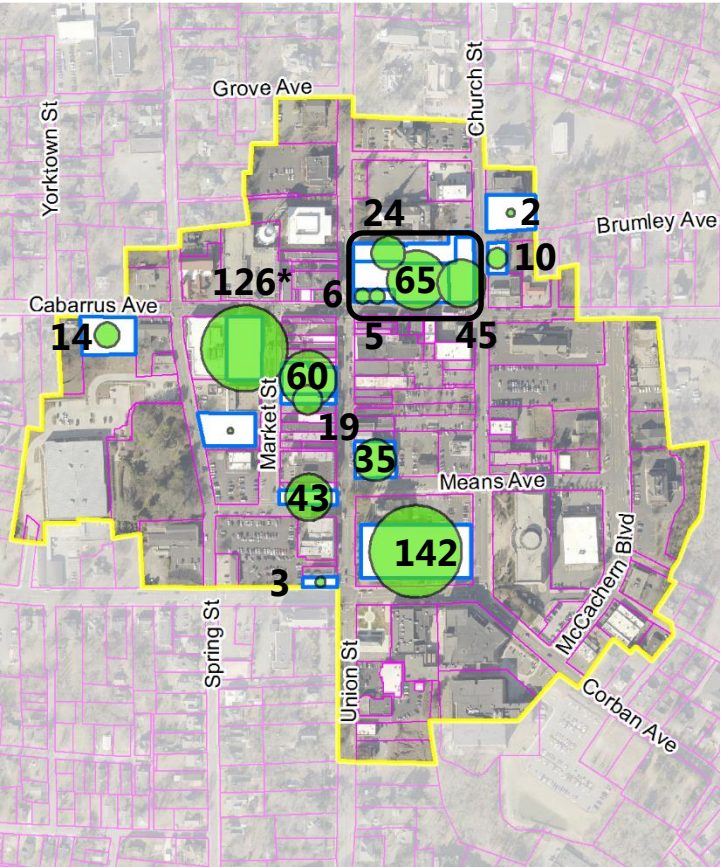
Who owns those surplus spaces?

Ownership	Spaces	Peak Cars	% Occupied	Demand*	Surplus
On-Street	213	201	94%	223	-10
CITY	498	310	62%	344	154
COUNTY	426	366	86%	407	19
Private	1,219	456	37%	507	712
Total	**2,356**	**1,333**	**57%**	**1,481**	**875**

Cabarrus Ave Garage

Private owners control 81% of unoccupied spaces (i.e. surplus)

Locations of Future Demand



Where are the future projects?

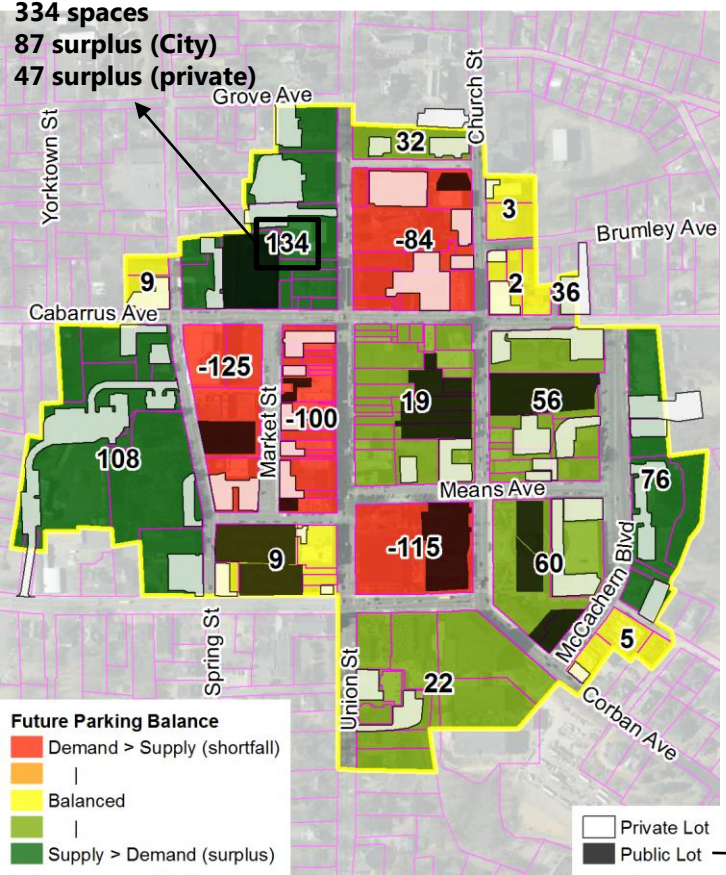
- 598 new parking demand
  - 14 restaurant
  - 62 retail use
  - 234* office use
  - 146 residential use
  - 142 courthouse

+146 Hotel Concord block

126* ***Net*** new parking demand; employees relocating from City Hall & Annex

Locations of Surplus/Shortfall

222 cars ~ 247 demand
334 spaces
87 surplus (City)
47 surplus (private)



Where is Demand > Supply?

- **RED**

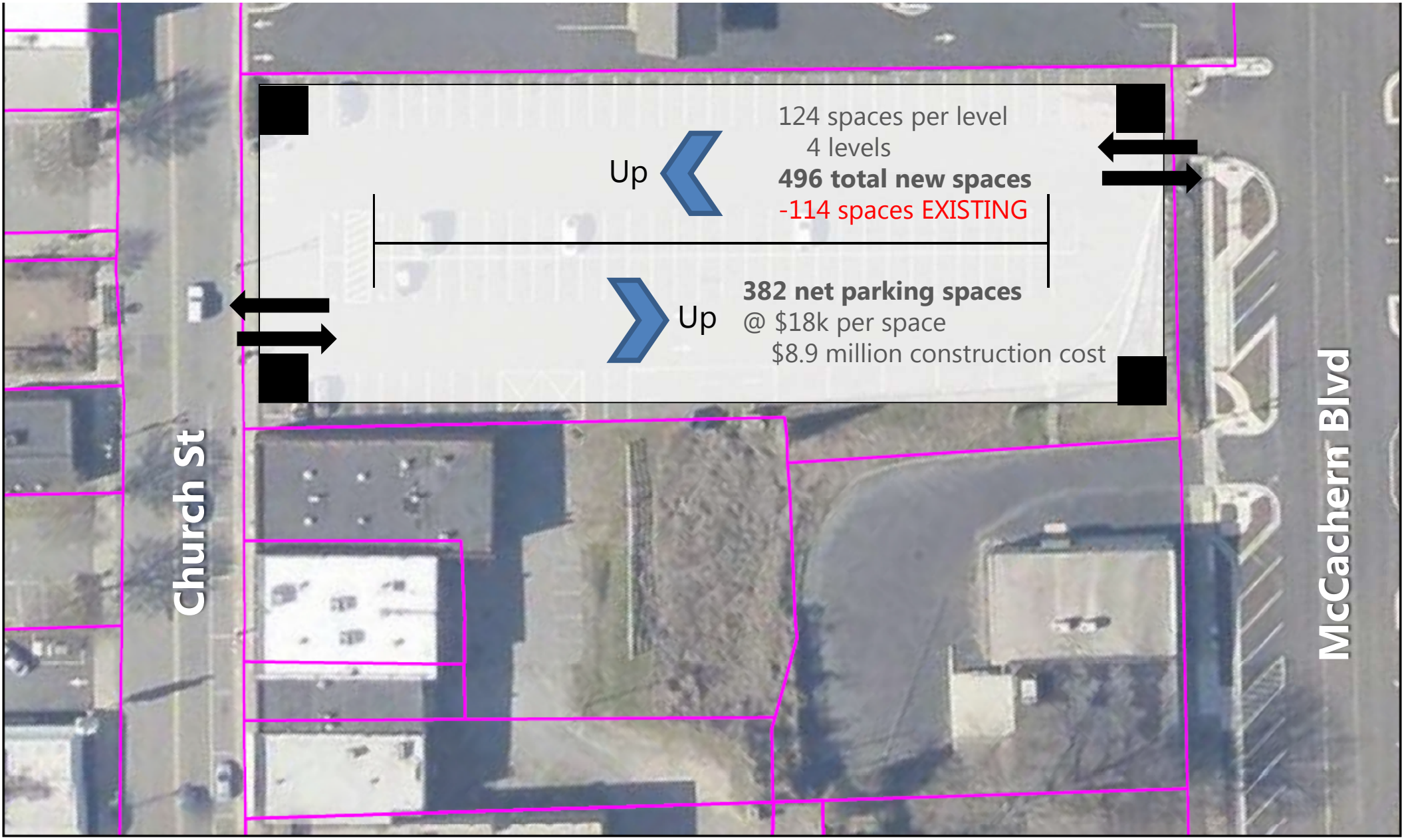
Where is Supply > Demand?

- **GREEN**

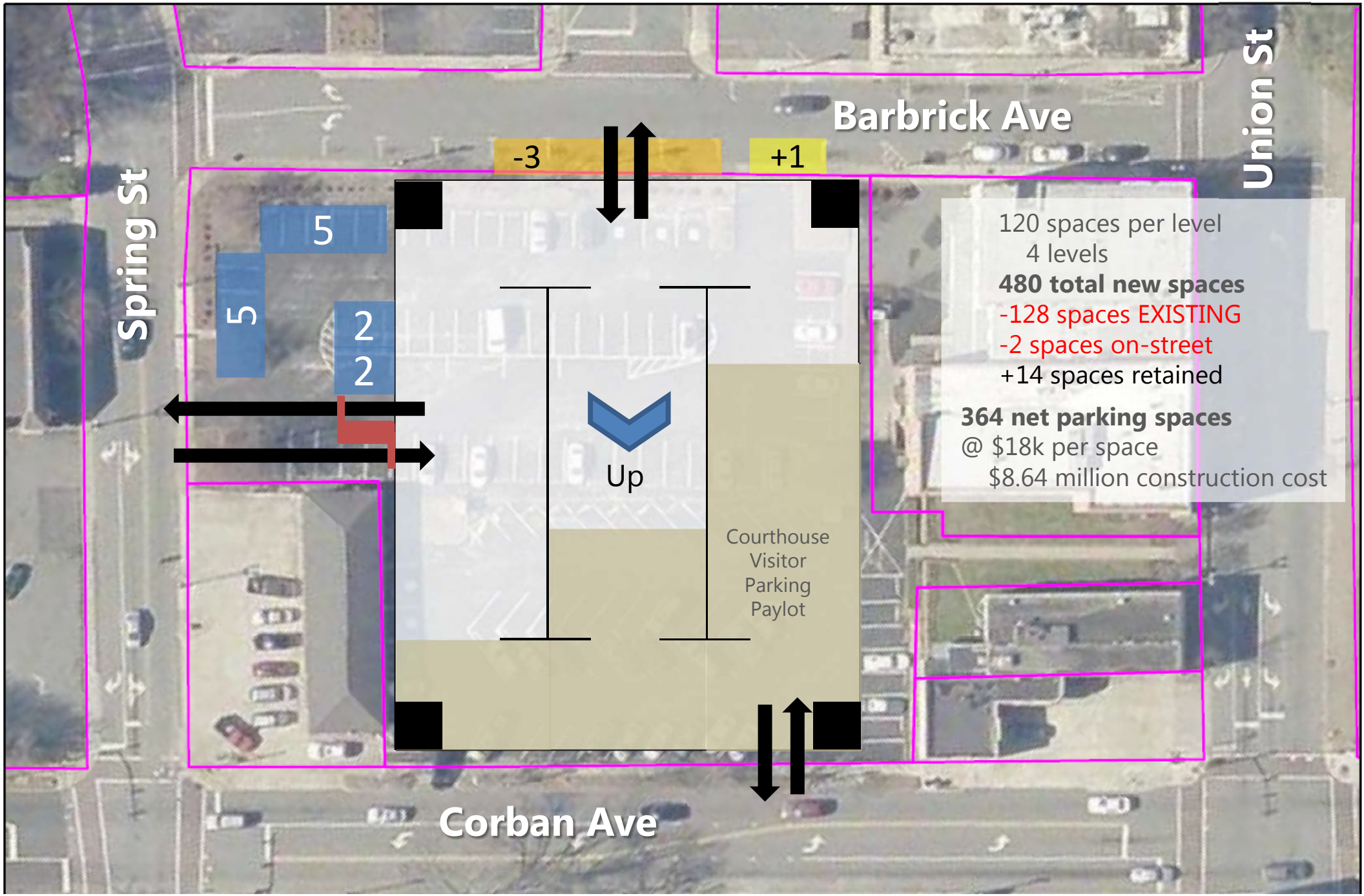
[Surplus] – [New Demand] = [Balance]

City + County lots in **BLACK**

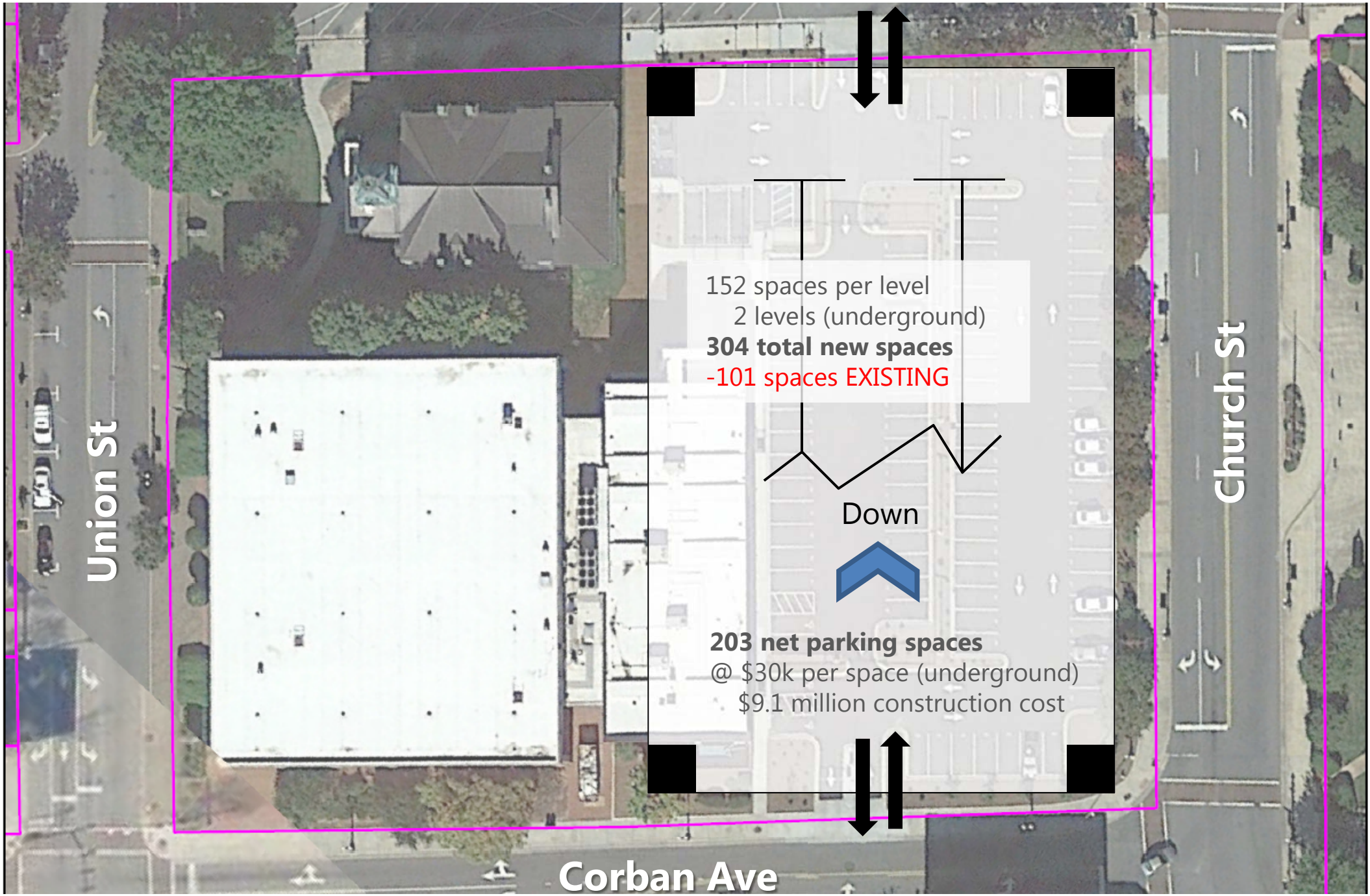
County Lot on Church



County Lot on Barbrick-Corban



County Courthouse



Does Concord NEED a Garage? …

- **Not yet!** … however, in the near future we will need one. Planning/design may occur in 1-2 years and construction in 2-4 years. The timeline will be dependent on any changes to the Cabarrus County Courthouse.

- Low-Cost / Quick-win Improvements
- Higher-Cost / Challenging Improvements

- These will *delay* the need for a garage

Appendix D –

Traffic Operations Memorandum

Memorandum

To: City of Concord
66 Union St. South
Concord, North Carolina 28025

Date: June 25, 2015

Project #: 38476.00

From: Anthony Tagliaferri, PE

Re: Traffic Operations and Circulation – One-Way vs. Two-Way Operation of Market and Union Streets

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The City of Concord is considering the conversion of two streets in their downtown core from two-way operation to one way operation. Union and Market Streets (depicted in Figure 1) are parallel downtown streets but have quite different characteristics.

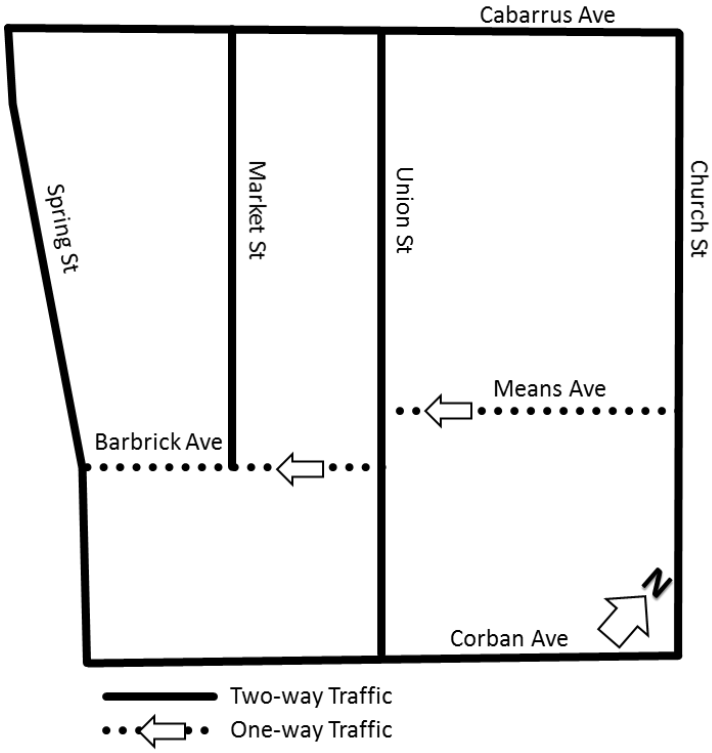


Figure 1. Existing Traffic Flow in Downtown Concord, NC

Downtown Study Area Streets

The following is a descriptive account of the streets that make up the study area in this analysis:

Union Street

- Union Street is a two-lane roadway with businesses fronting both sides of the street throughout the two-block study area. There is a mid-block, unsignalized, pedestrian crossing on Union Street, 40 parallel parking spaces on both sides of the street, and storefront sidewalks on both sides of the street.

- There is a two-phase traffic signal (one phase for east/west traffic, the other phase for north/south traffic) at the intersection of Union Street and Cabarrus Avenue, at the northern terminus of the study area, and a three-phase traffic signal (one additional phase for 'protected' left turning movements) at the intersection of Union Street and Corban Avenue, just southeast of the study area. All other intersections of Union Street in the study area, including the intersection of Union Street and Barbrick Avenue (which provides access to Market Street), are unsignalized.
- According to the NCDOT, the 2012 Average Annual Daily Traffic (AADT) along Union Street was 6,200 vehicles per day (vpd) in the two-block section of roadway under consideration for conversion. This value is for both directions of Union Street; therefore, if Union Street were to be converted to one-way operation, this volume is expected to decrease by a significant amount.

Market Street SW

- Market Street is a two-lane roadway throughout the two-block study area. The northeast side of the street is fronted by the backside of Union Street businesses (with adjacent off-street parking spaces) and the southwest side of the street is fronted by parking lots and the future Concord City Hall (including a drive-thru bill payment area). Market Street has a more rolling terrain over its length, while Union Street is flatter. There are seven (7) parallel parking spaces on the northeast side of the street, 31 angle parking spaces on the southwest side of the street, and curbside sidewalks on both sides of the street.
- Both terminal intersections of Market Street are unsignalized.
- No NCDOT AADT information is available on Market Street.

Barbrick Avenue SW

- Barbrick Avenue is a one-way, one lane roadway running from Union Street toward Spring Street, with an intersection with the terminus of Market Street in between. There are 14 total parallel parking spaces on both sides of the street.
- No NCDOT AADT information is available on Barbrick Avenue.

Means Avenue SE

- Means Avenue is a one-way, one lane roadway running from Church Street toward Union Street, terminating just to the northwest of the Union Street/Barbrick Avenue intersection. There are 17 angle parking spaces on the southeast side of the street and four (4) parallel parking spaces available on the northwest side of the street.
- No NCDOT AADT information is available on Means Avenue.

Cabarrus Avenue

- Cabarrus Avenue is a two-lane roadway in the study area. There are no parking spaces within the short one-block study area along Cabarrus Avenue. Storefronts and sidewalks are present on both sides of the street, and the new Concord City Hall and Police Department are located on the southeast corner of the intersection of Cabarrus Avenue and Market Street.
- There is a two-phase traffic signal at the intersection of Union Street and Cabarrus Avenue, at the northern terminus of the study area, and a two-phase traffic signal at the intersection of Spring Street and Cabarrus Avenue, just southwest of the study area. The City of Concord parking deck

access is located just to the southwest of the intersection of Cabarrus Avenue and the northern terminus of Market Street.

- According to the NCDOT, the 2012 Average Annual Daily Traffic (AADT) along Union Street was 6,200 vehicles per day (vpd) in the two-block section of roadway under consideration for conversion. This value is for both directions of Union Street; therefore, assuming half the traffic travels in each direction over the course of a day, the 2012 AADT along Union Street is approximately 3,100 vpd in each direction.

Two-Way to One-Way (and vice versa) Street Conversions

The trend in the past several decades is toward the conversion of one-way streets to two-way operation. In fact, no research of substance could be found on a conversion of two-way streets to one-way operation. A comprehensive analysis of one-way versus two-way operation was performed for the Transportation Research Board (TRB) by Walker, Kulash, and McHugh (1998). This research highlighted several aspects of one-way and two-way street operation for all users of the transportation facility.

The researchers found motorists, especially "occasional visitors" to downtown that are not regular users of the study area roadways, "are often confused and disoriented on encountering a one-way street network. Often, these motorists are able to see their destination but are shunted away from it by the one-way streets." Meanwhile, pedestrians encounter fewer potential conflicts with moving vehicles along one-way streets, but the "number of potential conflict sequences increases" because the pedestrian can be unsure which direction traffic is moving on a particular one-way street or intersection of streets, causing additional confusion and factoring in crossing decisions.

Transit users can also become discouraged when "a visitor who is dropped off at a stop downtown on a one-way street may not realize that the transit stop for his [or her] return trip is actually located one block away on a different street," while "in a two-way system, transit stops for a particular route can be located across the street from each other, eliminating this confusing situation." Additionally, downtown business owners in the researched communities cited one-way street operations as a deterrent to their sustainability because their storefronts are inaccessible to half the motorists or transit users on a particular one-way street segment. Vine Street in Cincinnati was singled out in the research document, as "40% of businesses in this economically depressed downtown corridor closed after the street was converted from two-way to one-way."

Conversions from one-way streets to two-way operation have recently been undertaken or are being undertaken in cities such as:

- Rochester, New York (2014-ongoing)
- Lexington, Kentucky (2015-ongoing)
- Charleston, South Carolina (2011-2012)
- Fargo, North Dakota (2009-2010)
- Owensboro, Kentucky (2009-2010)
- Louisville, Kentucky (2009-2010)
- Sacramento, California (2006-ongoing)
- Charlotte, North Carolina (2008-ongoing)
- Durham, North Carolina (2009)
- Harrisburg, Pennsylvania (2015)
- Napa, California (2014)
- Cedar Rapids, Iowa (2015-ongoing)

These conversions provide evidence that the trend in urban downtowns is to either maintain or re-establish two-way roadway operations. However, one common theme among these projects is the scope of the two-way

conversion. The street networks in question are much larger than Concord's proposed conversion of Union and Market Streets, impacting many more businesses.

Both one-way and two- way street systems have a number of technical advantages and disadvantages relating to transportation. Both systems can be engineered to be functional and as safe as possible for all modes of travel.

Some of the advantages and disadvantages of one-way and two-way street systems for this particular study area are as follows:

Advantages of Two-Way Union and Market Streets

- Create less-confusing circulation patterns which are more intuitive to users.
- Reduce indirect routes, which can reduce travel time, fuel consumption, and emissions.
- Allow for direct emergency vehicle access instead of a circuitous route.
- Maintain increased exposure of adjacent businesses on Union Street to passing motorists.
- Two-way streets with bike lanes or routes are preferable to bicyclists for wayfinding. Two-way streets are favored by transit users for improved transfers between routes.
- Provides consistent two-way traffic pattern along the entirety of the Union Street corridor, instead of two-way/ one-way/ two-way inconsistency from segment to segment.

Disadvantages of Two-Way Union and Market Streets

- Traffic congestion at the two-way intersections could generally be higher for a longer segment, but for this short segment, this is likely negligible.
- Angle parking on Union Street might be feasible under its current cross-section width, through this would require narrowing of both travel lanes and parallel on-street parking spaces.
- Two-way streets increase the number of conflict points at intersections, and may increase certain types of crashes, but again for this short segment, this is likely negligible.
- Reduces opportunity to increase traffic capacity if ever needed.
- With only one lane in each direction, traffic control may be required during emergencies.
- Two-way operation provides fewer opportunities for street trees along the street frontage, unless lanes are significantly narrowed.

Advantages of One-Way Union and Market Streets

- Fewer automobile conflict points at intersections and pedestrians need only watch for traffic in one direction. The pedestrian must know what direction traffic is moving for this advantage to be realized.
- Left turns into the street from driveways or side streets have fewer conflicts.
- Barbrick Avenue and Cabarrus Avenue can provide circulation for Union and Market Street users, if Union Street is marked southeast-bound only and Market Street is marked northwest-bound only.
- One-way streets generally provide more vehicular capacity and long lines of turning vehicles don't block through lanes.
- One-way streets can accommodate more on-street angle parking, and perhaps more sidewalk width if desired, on Union and Market Streets. Drivers have the option to park on both sides of the street.
- One-way Union Street could accommodate more street trees and provide a long-term tree canopy along the street frontage.

Disadvantages of One-Way Union and Market Streets

- One-way street systems without uniform patterns are confusing, especially to visitors and to users who have been used to the current two-way operation for long periods of time.
- One-way streets can result in higher speeds and be perceived as a barrier to pedestrian crossings.
- One-way streets can increase certain types of pedestrian accidents.
- Higher speeds on one-way streets can increase crash severity, and one-way streets have the potential for wrong way, head-on collisions.
- Undesirable for transit users as they separate routes and transit stop locations.
- One-way streets can create circuitous emergency response routes.
- One-way streets that eliminate turning movements at some intersections will increase them at others.
- Reduces exposure of businesses to passing motorists.

Impacts on Parking and Pedestrian Facilities

Maximizing on-street parking has been the primary driver of this analysis, followed by increasing the available sidewalk width along Union Street storefronts. Traffic volumes, capacities, and speeds are not necessarily the most pressing issue, as it is in many cases, making this a unique case. *The City has analyzed several alternatives for additional parking spaces with a conversion of Market and Union Streets to one-way and determined the following parking gains* that could be realized on Union Street, Market Street, Barbrick Avenue, and Means Avenue:

- Existing Parking Conditions: 104 total on-street parking spaces (Figure 2)
- Alternative 1: Maximize existing parking (no traffic conversions): 1 space gained on Union, 4 spaces gained on Market, 2 spaces gained on Barbrick, 3 spaces gained on Means; 114 total spaces (Figure 3)
- Alternative 2: Maximize on-street parking along Barbrick by converting to reverse-angle parking, 4 spaces gained (Figures 4 & 5)
- Additional Alternatives discussed at the end of this memo:
    - Convert **only Market Street** to one-way: 6 spaces gained on Market Street; 122 total spaces (Figures 7 & 8)
    - Convert both Union and Market Streets to one-way (clockwise): 23 spaces gained on Union Street; 145 total spaces (no parking permitted in front of Courthouse) (Figure 9)
    - Convert both Union and Market Streets to one-way (counterclockwise): 19 total spaces gained on Union Street; 141 total spaces (Figure 10)

The provision of sidewalk dining could result in the removal of up to 12 existing parking spaces on Union Street according to City analysis. Widening of the entire sidewalk without removing parking could be accommodated by converting to a one-way traffic operation along Union Street, and shifting the curb and parking by 12'. This would be a substantial capital improvement project involving underground utilities.

An alternative approach would be to maintain two-way operation but adjustments made to favor sidewalk width directly in front of restaurants, and maintaining parking spaces at other frontages. This approach could be challenging to implement without displaying favoritism towards existing restaurant business owners. The

resulting curbline would be irregular, alternating from parking to sidewalk, and back to parking. The irregular curbline would be minor inconvenience compared with the capital expense of relocating curb, gutter, and utilities.

Additional options for improving the sidewalk environment include the conversion of parking spaces into parklets (http://www.seattle.gov/transportation/parklets_history.htm), which are small extensions of the sidewalk into the roadway for seating, landscaping, or other sidewalk amenities. Parklets are best implemented as temporary, pilot projects to gauge public interest, and then transitioning to permanent over time.

A final consideration includes permitting limited sidewalk dining (one or two tables per restaurant) located adjacent to specific storefronts. Many will argue that diners feel uncomfortable as they sit closer to parked cars, so limiting the number of tables is the most appropriate compromise for diners, pedestrians, and parkers.

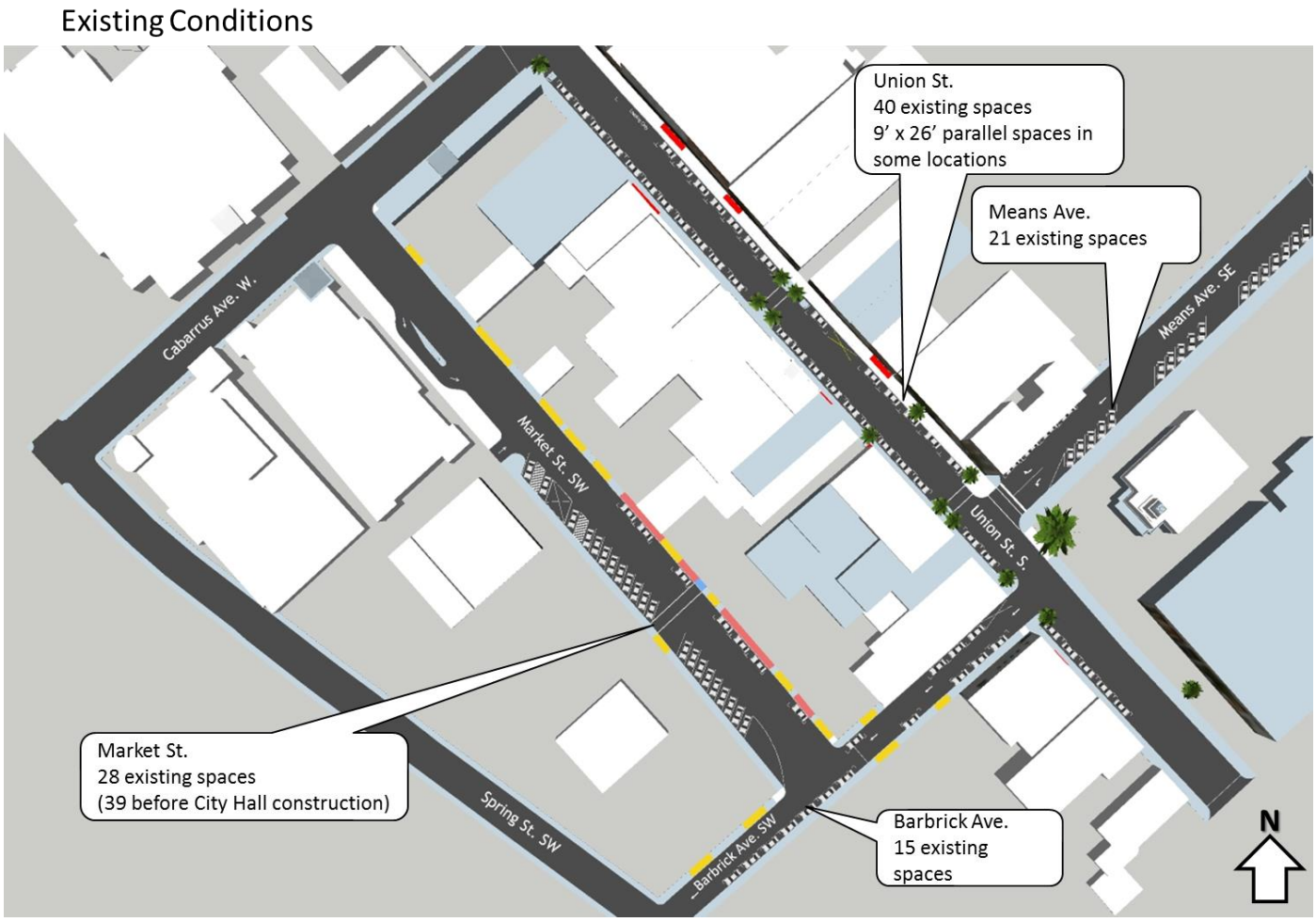


Figure 2. Existing Parking Conditions near Union and Market Streets

Yellow curbfaces are no-parking areas

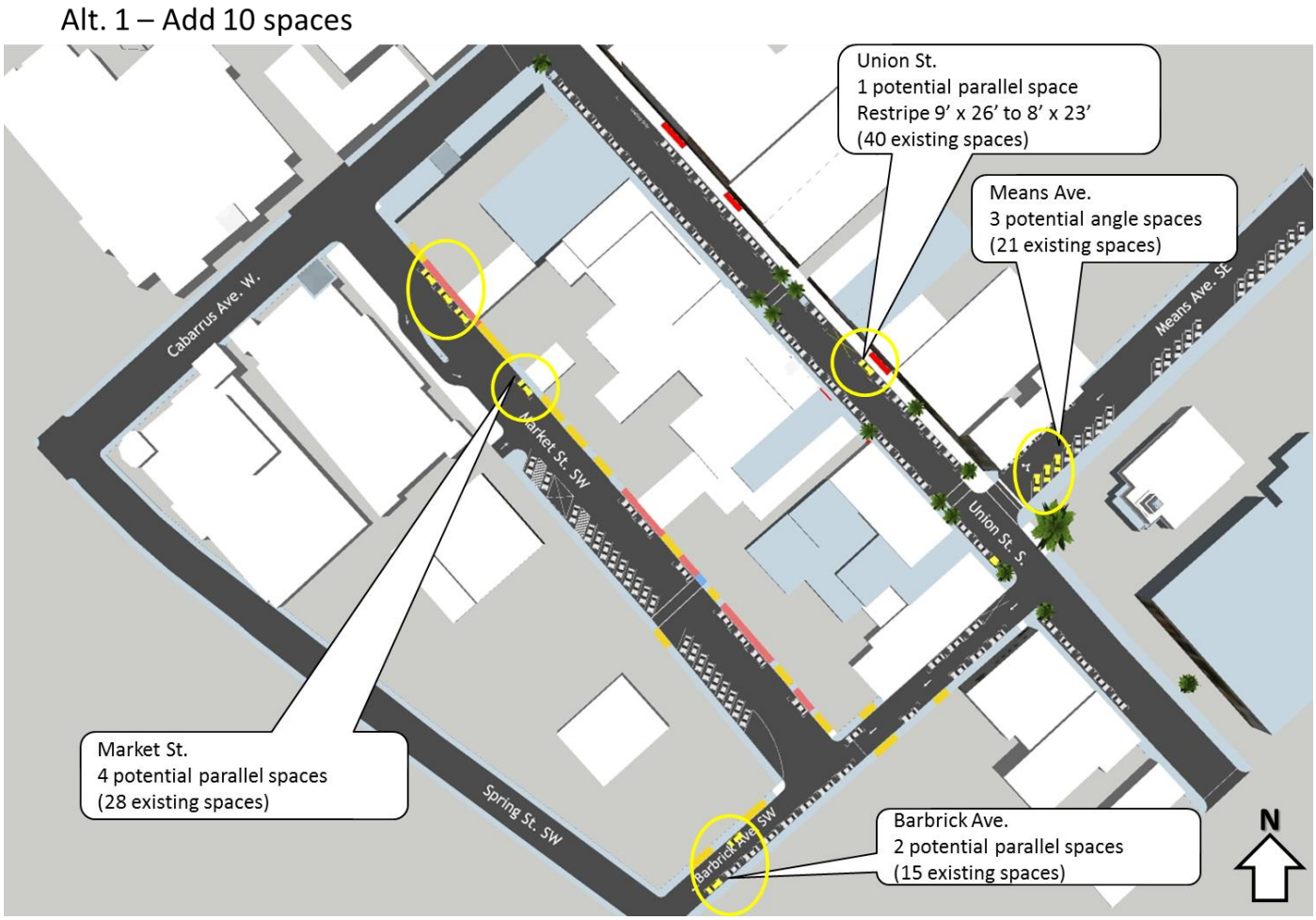


Figure 3. Alternative #1 Parking Design for Union, Market, Means, and Barbrick

New spaces gained are circled in yellow.

Alt. 2 – Add 12 spaces

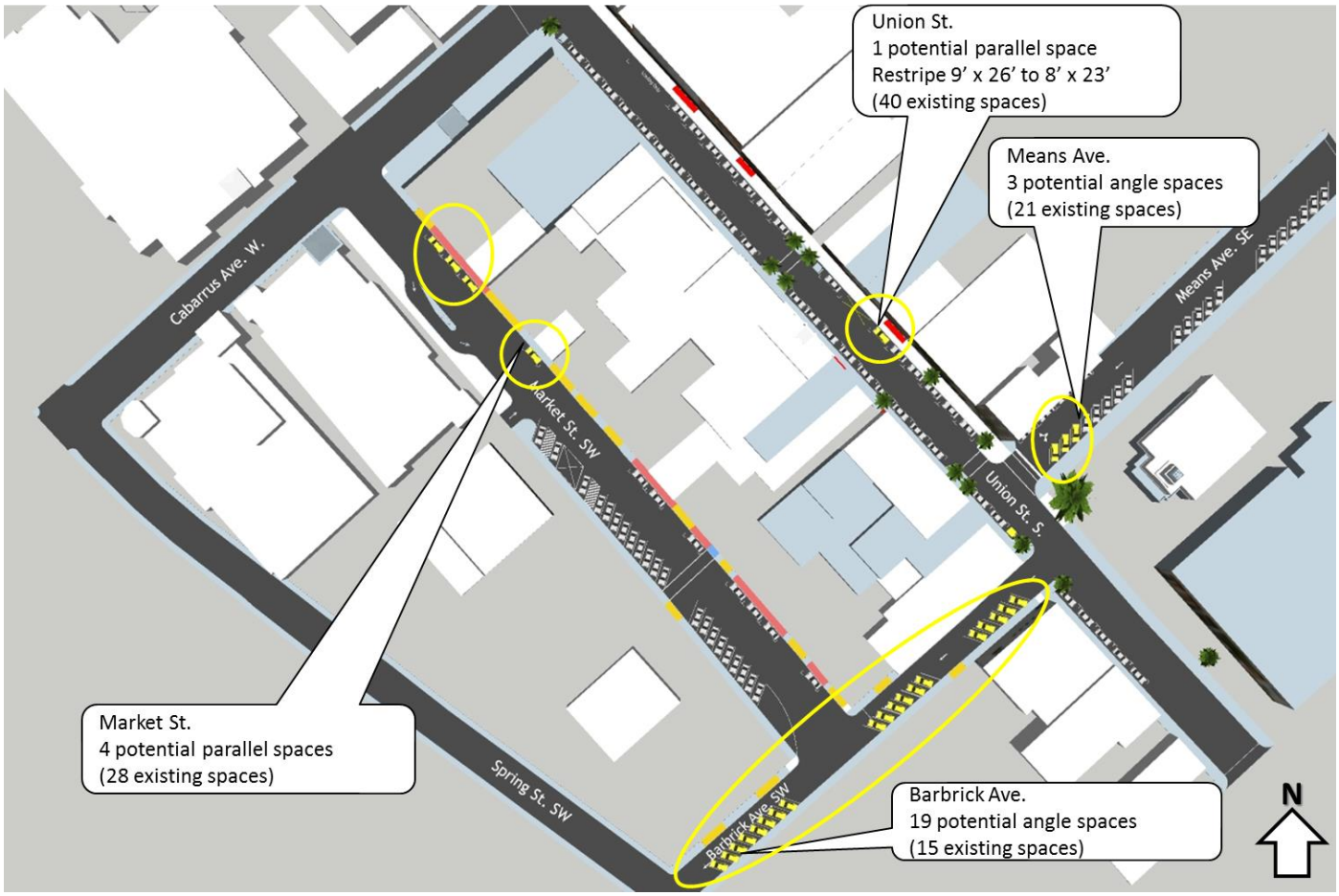


Figure 4. Alternative #2 Parking Design for Barbrick Ave

New spaces gained are circled in yellow; Barbrick Ave is a net gain of +2 over the alternative #1 design, and maintains one-way traffic flow southwest-bound.

Includes alternative #1 design for Union, Market, and Means Streets.

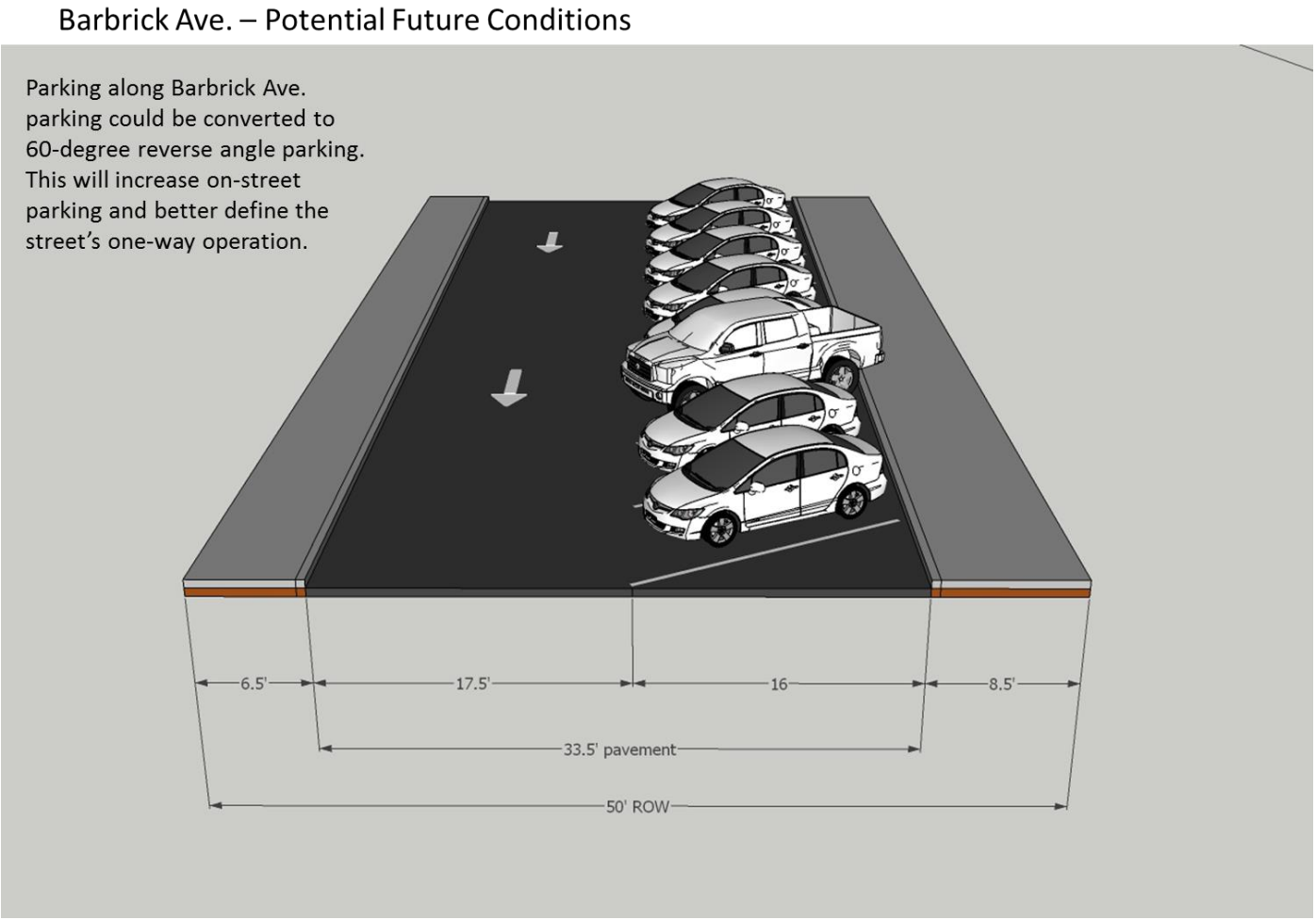


Figure 5. Alternative #2 Parking Design for Barbrick Ave – Street Cross-section

Four new spaces could be gained by this redesign.

Narrowing of Travel Lanes

The City has also discussed narrowing of travel lanes along Union St from the current 11.5' width to 10' wide in conjunction with narrowing of the on-street parking stalls from the current 9' width to 8' wide. This alternative would allow for a 2.5' shift of (both sides of) the curb & gutter, storm drain utility, and sidewalk, as well as increased street tree infiltration areas along both sides of Union St (Figure 6).

While the ability to maintain two-way operation is favorable, 10-foot travel lanes can create disadvantages such as the potential for sideswipe collisions, difficulty for service trucks to make deliveries, possible requirements to restrict any truck traffic larger than a smaller box-type or delivery truck, and visibility issues if these lanes are narrowed. This alternative is feasible, and would have to be evaluated by a certified traffic engineer, with approval from the City engineer, and District engineer (NCDOT).

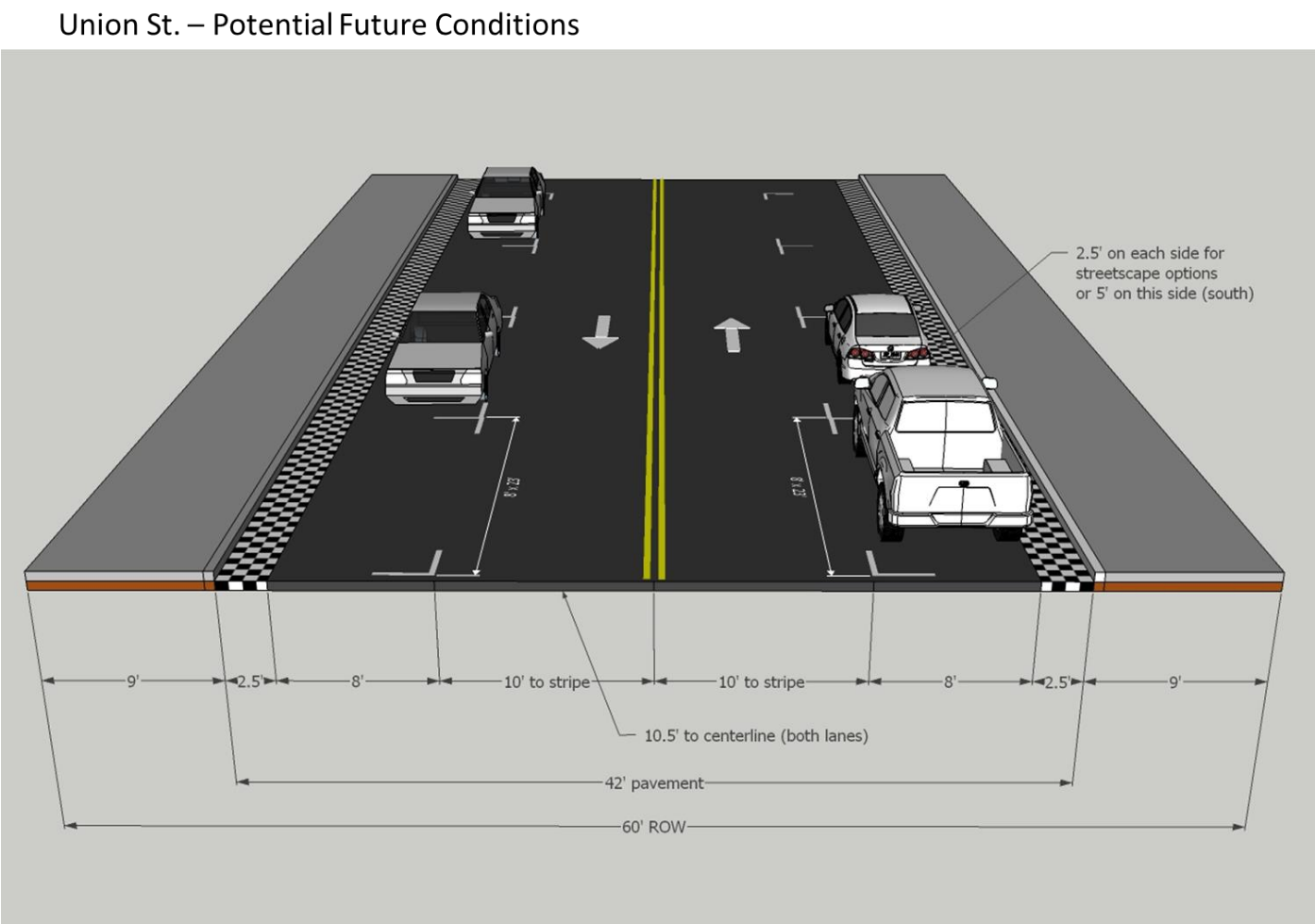


Figure 6. Potential Union Street Cross Section Alternative

Potential width gained is indicated in white/ black checkerboard texture, totaling 5' of sidewalk width.

Conversion Recommendations

It is not recommended to convert Union or Market Streets from two-way to one-way operation for several reasons, most notably:

- The short one-way segment length causes inconsistency along Union Street, which could lead to confusion and wrong-way driving/ crashes.
- On-street parking gains could be realized on adjacent streets or through other parking maximization techniques (narrowing lanes, wayfinding to adjacent lots, valet, etc.), allowing for more street trees, sidewalk widening, sidewalk dining, and parklets.
- Visibility of businesses on Union Street would be significantly reduced due to loss of all traffic heading in the opposite direction of the one-way street alignment.

It appears that opportunities are available to narrow the two lanes of Union Street and use the narrowed-lane width to provide, parklets, street tree spaces, and/ or wider sidewalks along the corridor (Figure 6). *This concept is preferred to a one-way conversion and should be further studied from an engineering perspective before any conversion is considered*.

While maintaining two-way operation is the recommended alternative, if a one-way conversion was to take place, *Market Street is a more viable candidate* than Union Street. Market Street does not have the business frontage of Union Street, and the City Hall drive-thru bill payment facility can be accommodated by either a one-way or two-way facility. Market Street would operate more efficiently as a one-way street in a northwest-bound direction, away from Barbrick Avenue toward Cabarrus Avenue. This would allow for a familiar clockwise circulation pattern for drivers making only right-turns: Barbrick Avenue, right to Market Street, right to Cabarrus Avenue, and right to Union Street (Figure 7).

Additional Alternatives Considered

If Market Street traffic flow were reversed to southwest-bound, drivers would have to turn right on Barbrick Avenue and utilize Spring Street and either Corban Avenue or Cabarrus Avenue to return to Union Street, resulting in increased driver confusion (Figure 8). This is not a preferred alternative.

If Union Street were to be converted to one-way operation, in keeping the pattern established by Figure 7, it would operate more efficiently as a one-way street in the southeast-bound direction. This would allow the following circulation pattern: Union Street, left to Barbrick Avenue, right to Market Street, right to Cabarrus Avenue, and right to Union Street. This direction of operation would also allow better one-way operation from Cabarrus Avenue all the way to Corban Avenue, if desired (Figure 9). This is not a preferred alternative, however clockwise direction would be preferable.

If the City desired to reverse the directions of both Union and Market Streets in a one-way scenario, where Union Street operated in a northwest-bound direction and Market Street operated in a southeast-bound direction, consideration should be made to reversing the operation of Barbrick Avenue from southwest-bound to northeast-bound. That conversion would allow for counter-clockwise traffic circulation (Figure 10). Failing to reverse Barbrick Avenue, vehicles along Market Street would be forced to turn right on Barbrick Avenue and utilize Spring Street and either Corban Avenue or Cabarrus Avenue to return to Union Street, resulting in additional turns and increased driver confusion.

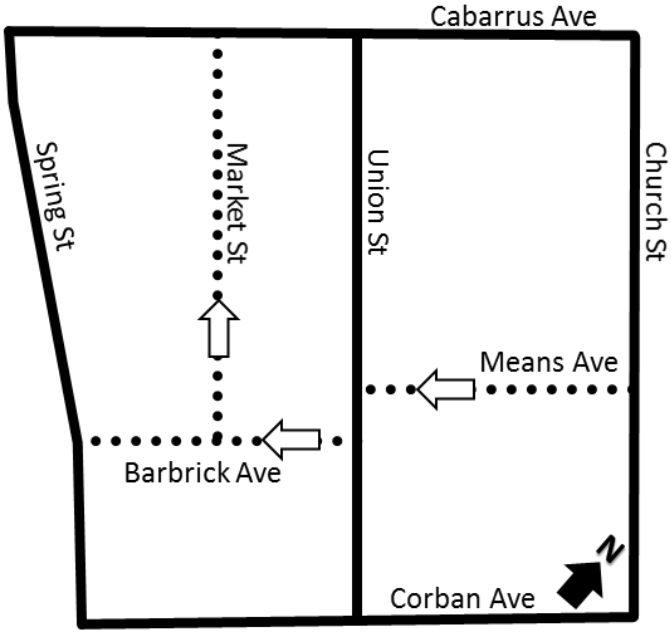


Figure 7. Market Street One-way (northwestbound)

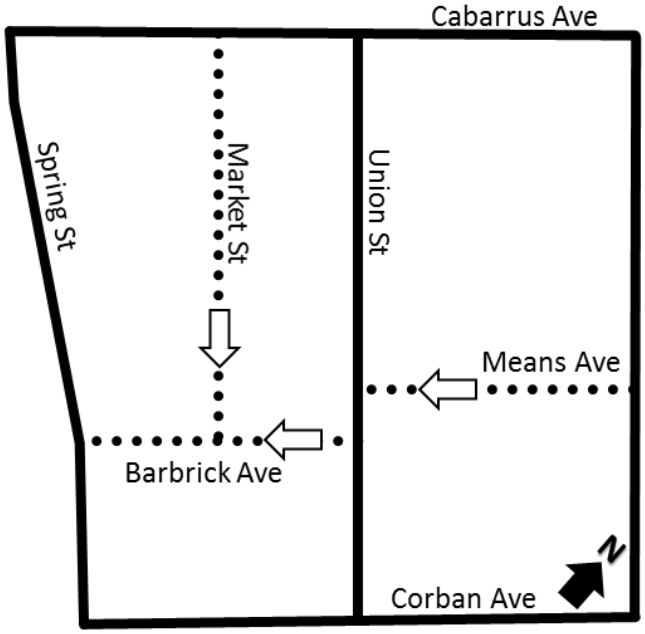


Figure 8. Market Street One-way (southwestbound)

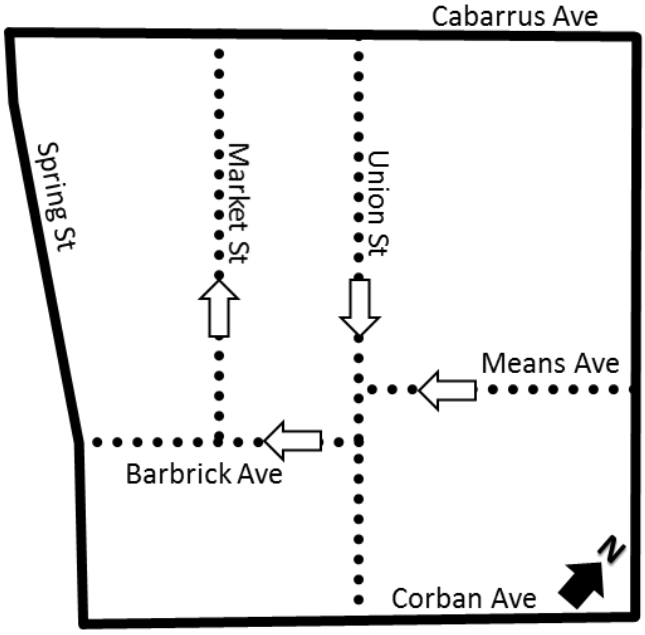


Figure 9. Union and Market Street One-way (clockwise)

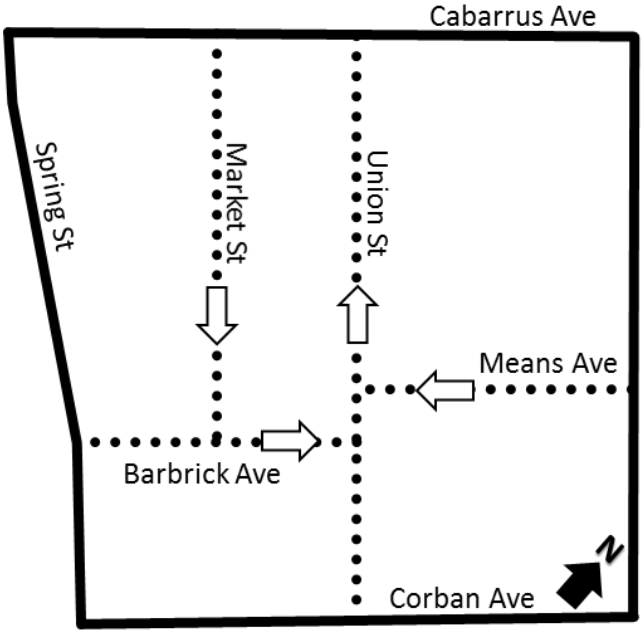


Figure 10. Union and Market Street One-way (counter-clockwise)

Note: For illustrative purposes only; none of these are to be considered a preferred alternative.

Appendix E –

Wayfinding Memorandum

Memorandum

To: City of Concord
66 Union St. South
Concord, North Carolina 28025

Date: June 25, 2015

Project #: 37476.00

From: Anthony Tagliaferri, PE

Re: Downtown Concord Vehicle and Pedestrian Wayfinding

The City of Concord is considering its downtown parking and wayfinding networks. VHB Engineering NC, PC has been retained to investigate these networks and provide a planning-level analysis and recommendations that are not to intended to be used for construction within the right of way. Figure 1 provides a visual perspective of Concord's downtown parking system and existing pedestrian wayfinding signage.

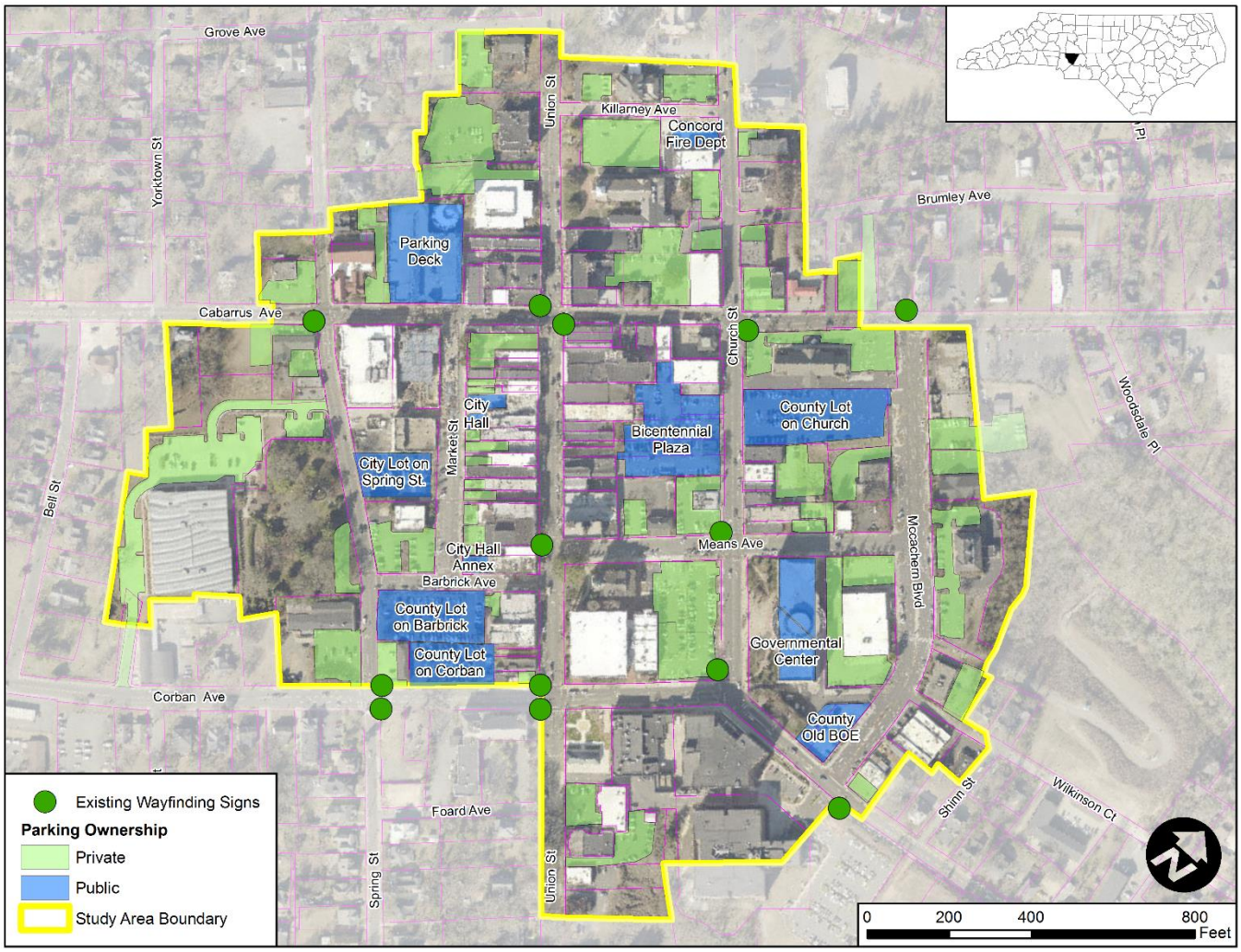


Figure 1. Downtown Concord Parking and Wayfinding.

Vehicular Wayfinding

Drivers entering downtown Concord have a variety of parking options, especially on weeknights and weekends, throughout the downtown core. It may not always be obvious to the driver which lots are open to them and at what times. Additionally, there are varied time limits for parking in different locations.

The two signs above are found at the entrances to two separate Cabarrus County parking lots. The lots appear welcoming to drivers, with the large, familiar green "P" prominently displayed. However, the parking restrictions, which are quite strict on weekdays during business hours, are printed toward the bottom of the sign, in a font that is very small for a driver in motion to read. The driver may only be capable of reading this text after parking and approaching the sign on foot.

The Bicentennial Plaza parking lot and Cabarrus Avenue parking deck are the most accessible parking facilities to drivers on weekdays during business hours. These lots display 3-hour parking restrictions that are again difficult for a driver in motion to read. The picture above left is the sign displayed to drivers at the entrance to the Bicentennial Lot and the picture above right displays the small bollard sign displayed to drivers upon entering the Cabarrus Avenue Deck. Both parking facilities provide the driver a clear message that public parking is available, but the restrictions attached to each facility are much smaller and difficult to read.

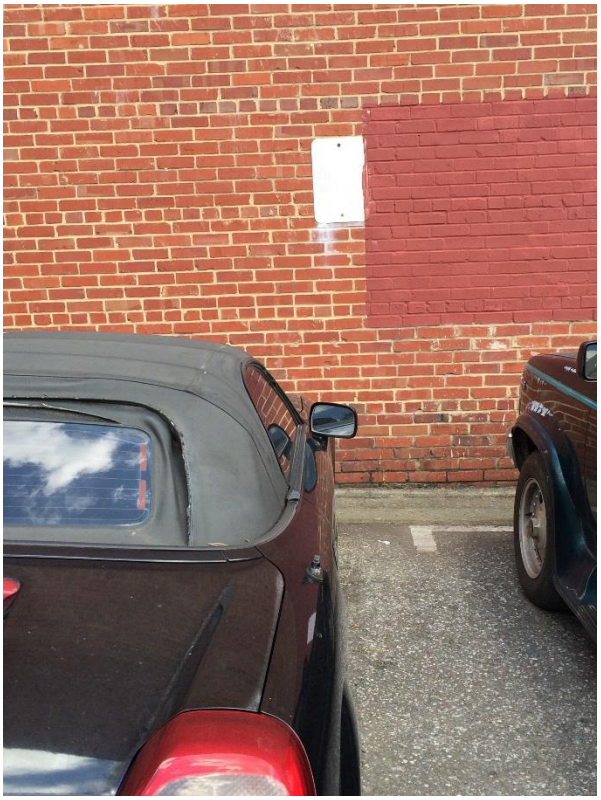
The Bicentennial Lot contains a portion of reserved parking spaces that are not open to the public. These spaces are marked on the pavement but the driver does not anticipate them until he or she is in the lot and arrives at the spaces. Larger signs notifying drivers of both the time and space restrictions would help wayfinding at all public lots. The large green "P" is inviting, but drivers are not always welcome where they are being invited. All public parking lots could benefit from a more consistent message to drivers as to their limitations before the driver enters the facility.

Private parking is much more restrictive in most cases. Almost all lots are restricted in one way or another, and many signs are faded, small, or otherwise difficult to read. Most private parking signs do not follow guidelines from the Manual on Uniform Traffic Control Devices (MUTCD) and violate driver expectation. This mix of different signs may be contributing to the perception that "there is no place to park downtown." Any efforts to work with stakeholders to upgrade private parking and wayfinding signs to a more consistent standard could prove beneficial to those seeking parking downtown. The following examples of mixed parking signage types and inconsistent messages were spotted within downtown Concord:

RESERVED
PARKING
ONLY

Kitty
City
Parking
Only
TOWING ENFORCED

NO
PARKING
AFTER 7PM
VIOLATORS WILL BE
TOWED AT OWNERS
EXPENSE



PRIVATE
PARKING
VIOLATORS
WILL BE
TOWED AWAY
AT OWNERS
EXPENSE

NO
PARKING
EXCEPT FOR
BOB'S WIFE

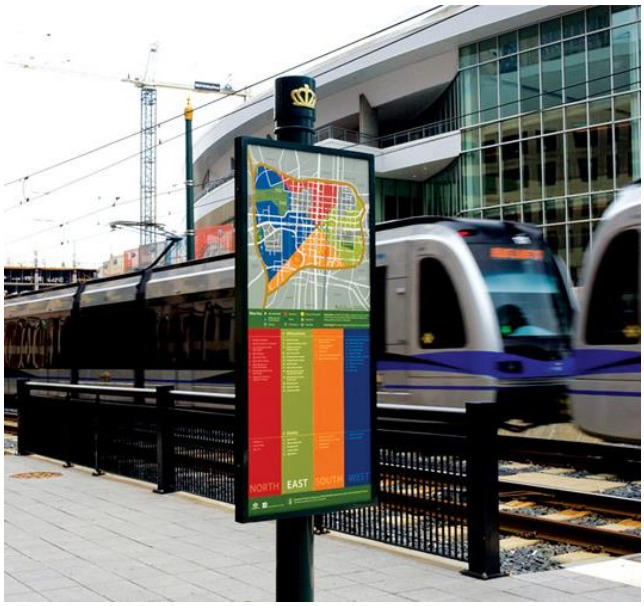
ABSOLUTELY
NO PARKING
ON THESE PREMISES
Mon. - Fri. 7am-5pm
UNLESS BY PERMIT

PARKING FOR
WHAT-A-BURGER
CUSTOMERS ONLY
UNAUTHORIZED CARS
WILL BE TOWED AT
OWNERS EXPENSE
704-467-2692

Pedestrian Wayfinding

Once parked in a space or once a pedestrian or bicyclist has entered downtown Concord, an existing *pedestrian wayfinding system* is provided to guide users of municipal facilities. These signs are attached to traffic signal or street light poles. These 13 guide signs provide clear messages to users and are well-crafted and located.

There is limited available information for the pedestrian toward non-municipal destinations. Some cities, such as Charlotte, have introduced a "directory" style pedestrian wayfinding system, similar to that shown below:



The scope and level of detail of a Concord pedestrian wayfinding system could be narrower than that of Charlotte, but it could become a mechanism in which attractions, restaurants, and shops could provide better guidance to patrons once they have parked in strategic locations.

Signage could be created that minimizes the City's or CDDC's necessary maintenance to a semi-annual, annual, or biannual update. Sign assemblies, similar to those found at many bus shelters, with a weatherproof enclosure housing a poster-grade color map could provide a strong message to patrons while being easy to update or maintain. Additionally, these poster-grade maps could be updated with technology such as QR code links or other web links to allow anyone to scan the link and receive a replica of the map in digital form on a smartphone or tablet.

Other Considerations and Recommendations

Pedestrian traffic signals were not observed at any signalized crosswalks in the downtown core area, with the exception of the intersection of Corban Avenue and Church Street. Pedestrian traffic signals with countdown displays can provide a measure of comfort for the pedestrian that has parked a short distance away and must navigate to his or her final destination through one or more of these signalized intersections.

The MUTCD regulates only signs that are within the public right-of-way (directly visible from the street), and does not have authority over parking signs on private property. The MUTCD does, however, provide a standardized, consistent message for the City to use as a template for consideration within its development ordinance guidelines. This should not preclude the City from encouraging the use of MUTCD-compliant sign types, with standard font sizes and design. The City may also revise their downtown development ordinance to *require* MUTCD-compliant signage for private businesses. Anything less than an ordinance would merely be a recommendation, not a requirement. Signage can be adorned with additional backplates or external designs that maintain the MUTCD-standard message while providing a personalized look for the City and especially the downtown area. Even something as simple as adorning the top of a parking sign with a City logo can provide a decorative touch while maintaining the driver's focus on the sign's message and consistency.

The current pedestrian wayfinding signage installed by the City is a significant aid to those who have parked their car or entered the downtown core area on foot or by bicycle, if they are navigating to a municipal facility. Consideration of a more robust pedestrian wayfinding system, providing the user visual access to more downtown attractions, could prove beneficial to efforts to encourage parkers to use public parking facilities that require a short walk to the downtown core area. This improved vehicular wayfinding system (Figure 2) should direct visitors from the north (Church St heading southbound) to the Cabarrus Ave Garage. Visitors arriving from the east (Cabarrus Ave heading westbound) and west (Cabarrus Ave heading eastbound) should be directed to the same parking destination. Visitors approaching from the south (Corban Ave or Union St heading northbound) should be directed to either the County Lot(s) on Barbrick and Corban, or the County lot on Church. This type of system encourages unfamiliar users toward peripheral parking areas, though they may still choose to search for on-street spaces if they desire.

Existing vehicle wayfinding signage does lead the user to open parking facilities, but often the welcoming large green "P" is followed by limiting restrictions in small fonts or on small signs that the driver may not see or read correctly, or read just enough to create confusion and uncertainty when navigating downtown. Parking area signage in private parking lots carries many mixed messages, many of which are not compliant with the MUTCD. This inconsistency can further discourage or confuse drivers navigating through downtown. Efforts to create a clear, legible, and consistent message across parking signage could prove beneficial to users of downtown Concord parking facilities.

Additionally, the Cabarrus County Convention and Visitors Bureau (CVB) has been developing a county-wide wayfinding system to bring travelers to certain areas of the County. Downtown Concord will be a focus area of this wayfinding system, where the City's and CDDC's wayfinding efforts can complement this regional system. Collaboration with the CVB's work can provide a specific downtown message that is consistent with the CVB's efforts.

For examples of municipal wayfinding systems, the City should view projects undertaken by Cloud Gehshan Associates (http://cloudgehshan.com/work/by-client) or similar design firms that develop comprehensive signage plans.

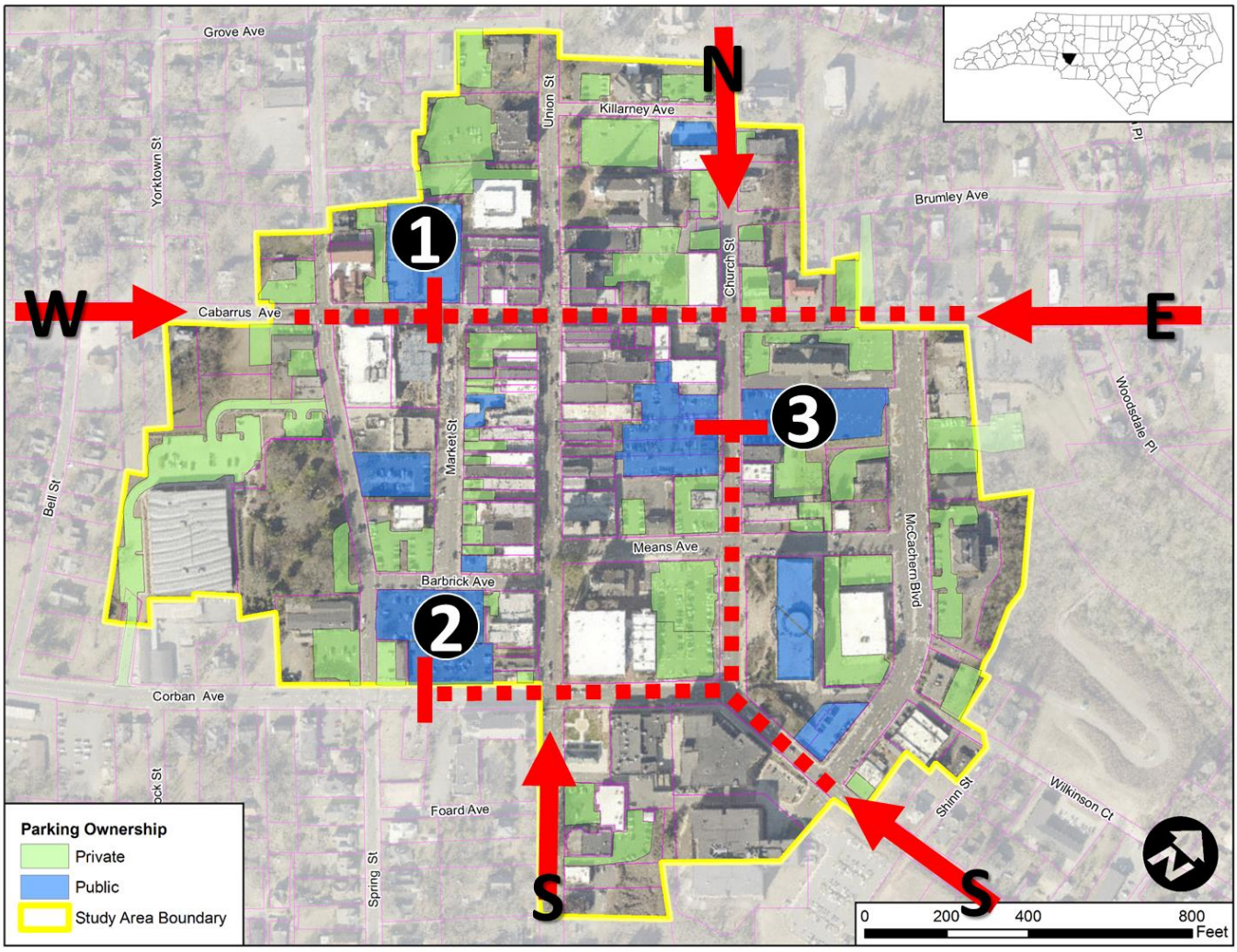


Figure 2. Vehicular Routing to Nearest Public Parking Areas by Direction.