



LINCOLN COUNTY PLANNING & INSPECTIONS DEPARTMENT
302 NORTH ACADEMY STREET, SUITE A, LINCOLNTON, NORTH CAROLINA 28092
704-736-8440 OFFICE 704-736-8434 INSPECTION REQUEST LINE 704-732-9010 FAX

To: Board of Commissioners
Planning Board

From: Randy Hawkins, Zoning Administrator

Date: October 19, 2018

Re: PD #2018-4
Provident Land Services, Inc., applicant
Parcel ID# 02465, 34170, 34189, 34190, 55690, 57451, 74300, 86960 and
portions of 34201 and 86959

The following information is for use by the Lincoln County Board of Commissioners and Planning Board at their joint meeting/public hearing on November 5, 2018.

REQUEST

The applicant is requesting the rezoning of 123 acres from R-SF (Residential Single-Family) and R-T (Transitional Residential) to PD-R (Planned Development-Residential) to permit a subdivision with up to 225 lots for single-family detached homes. Under the Lincoln County Unified Development Ordinance, any proposed subdivision with 50 or more lots is subject to approval through the planned development process. The applicant is also proposing lots smaller in size than the minimum area permitted in the R-SF and R-T districts.

A concept plan and a PD-R report with terms and conditions for the proposed development, Bella Vista, have been submitted as part of the rezoning application and would serve as the master plan for the development if the rezoning request is approved. The PD-R report includes commitments by the applicant to provide certain traffic improvements. The improvements are based on a traffic impact analysis that is included with the application. In addition, the applicant has provided minutes from a community involvement meeting that was held on Oct. 8.

SITE AREA AND DESCRIPTION

The property is located on the west side of Little Egypt Road about 2,000-4,000 feet north of N.C. 73. It is adjoined by property zoned R-SF, R-T, PD-R and CU R-S (Conditional Use Residential Suburban). Adjoining properties include Christ Church, the Windsor Forest subdivision, and the site of the planned Creek Park residential development. (A secondary access to Bella Vista would be provided via a connection to

Creek Park.) Land uses in this area are primarily residential. A portion of the subject property along Killian Creek is located in a 100-year floodplain.

PUBLIC UTILITIES

The proposed development would be served by public water and public sewer. A water main is located along Little Egypt Road, and a sewer line that serves Windsor Forest crosses the subject property and connects with a sewer main that runs through the western end of the Bella Vista site along Killian Creek.

The applicant has been advised that Lincoln County currently could not allocate sewer capacity for the proposed development.

LAND USE PLAN AND UDO CONFORMANCE

The subject property is part of an area designated by the Lincoln County Land Use Plan as Single-Family Neighborhood, suitable for densities of 1-2 dwelling units per acre. The proposed density for Bella Vista is 1.83 units per acre.

The UDO requires that a planned development include a minimum of 12.5% recreation and open space. Approximately 30% of the acreage in this proposed development would be reserved as recreation and open space.

The proposed plan complies with the UDO's subdivision standards for external access, internal connectivity, block length and cul-de-sac length.

STAFF'S RECOMMENDATION

Staff recommends that the rezoning request be approved. See staff's proposed statement on following page.



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302 NORTH ACADEMY STREET, SUITE A, LINCOLNTON, NORTH CAROLINA 28092
704-736-8440 OFFICE 704-736-8434 INSPECTION REQUEST LINE 704-732-9010 FAX

Zoning Amendment Staff's Proposed Statement of Consistency and Reasonableness

Case No. **PD #2018-4**

Applicant **Provident Land Services, Inc.**

Parcel ID# **02465, 34170, 34189, 34190, 55690, 57451, 74300, 86960 and portions of 34201 and 86959**

Location **west side of Little Egypt Road about 2,000-4,000 feet north of N.C. 73**

Proposed amendment **rezone from R-T to PD-R to permit a subdivision with 215 single-family detached houses**

This proposed amendment **is consistent** with the Lincoln County Comprehensive Land Use Plan and other adopted plans in that:

This property is part of an area designated by Land Use Plan as Single Family Neighborhood, suitable for densities of 1-2 dwelling units per acre. The proposed development will be served by public water and public sewer. The proposed density is 1.83 units per acre.

This proposed amendment **is reasonable and in the public interest** in that:

The surrounding area is primarily residential and includes existing and planned subdivisions of similar density. A water main is located along Little Egypt Road, and sewer lines cross this property. Approximately 30% of this site will be reserved as recreation and open space. As part of the rezoning, road improvements will be provided to mitigate the impact of the development.



Planned Development Rezoning Application

Lincoln County Planning and Inspections Department
Zoning Administrator
302 N. Academy St., Lincolnton, NC 28092
Phone: (704)736-8440 Fax: (704)732-9010

PART I

Applicant Name Provident Land Services, Inc Attn: Tom Waters

Applicant Address 6707 Fairview Road, Suite B Charlotte, NC 28210

Applicant Phone Number 704 201 5150

Property Owner Name See Attachment A

Property Owner Address See Attachment A

Property Owner Phone Number See Attachment A

PART II

Property Location Little Egypt Road, South of Creek Park

Property ID (10 digits) See Attachment A Property size +/-125

Parcel # (5 digits) See Attached Deed Book(s) See Attached Page(s) See Attached

PART III

Existing Zoning District R-SF Proposed Zoning District PD-R

Briefly describe how the property is being used and any existing structures.

Vacant Property

Briefly described the proposed planned development.

To create a master planned residential community utilizing the PD-R district standard.

***SEE PLANNING DEPT. FOR PLANNED DEVELOPMENT FEES.**

I hereby certify that all knowledge of the information provided for this application and attachments is true and correct to the best of my knowledge.

Tom Mandle
Applicant's Signature

8/20/18

Date

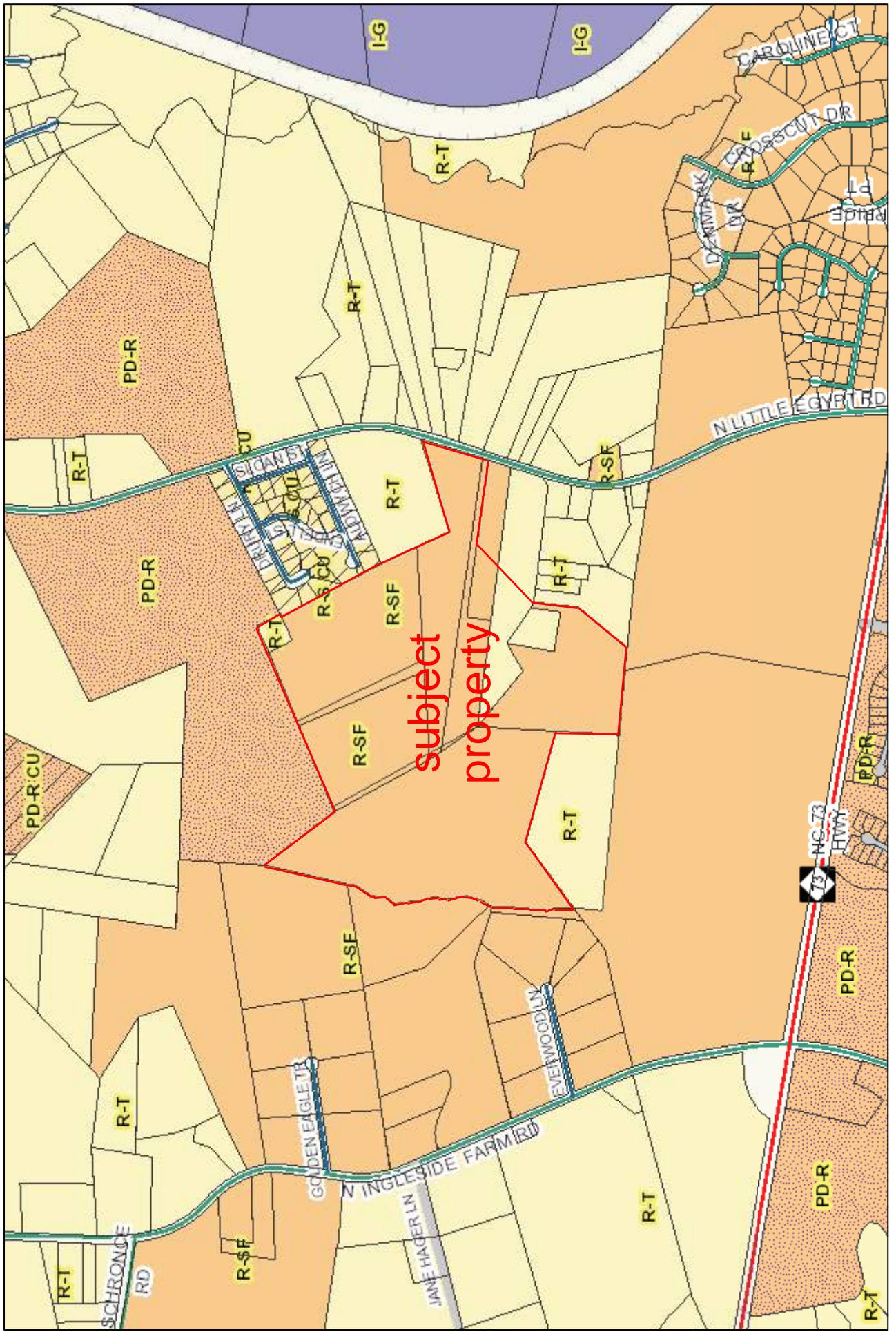
SIGN HERE

Please send all correspondence to:
ESP Associates, Inc.
Matt Mandle
Mobile - 704 280 4218
Email - mmandle@espassociates.com

PD #2018-4
Provident Land Services, Inc., applicant

<u>Parcel #</u>	<u>Property ID</u>	<u>Deed Book, Page</u>	<u>Owner</u>	<u>Acreage</u>
02465	3692-69-6236	2543-433	Sampada Investments, LLC	13.982
34170	3692-59-4803	504-860	Frank Hunter Jr. et al	13.931
34189	3692-49-7248	1096-283	Harold Robert Hunter et al	41.906
34190	3692-69-1965	2064-807	Heirs of Mary Hunter Key	21.825
55690	3693-60-2515	1048-45	Walter Clark	1.004
57451	3692-58-8394	1096-283	Harold Robert Hunter et al	15.593
74300	3692-68-2567	1058-294	Mary Hunter Young, Rudolph Young	1.996
86960	3692-59-8079	2543-443	Sampada Investments, LLC	6.343
34201	3692-68-6743	2722-163	Christ Church, ARP	portion
86959	3692-68-7937	2463-839	Christ Church, ARP	portion

Parcel #2018-4
subject property is outlined in red



September 17, 2018

Erie, Inc. Lincoln County, NC

1 inch = 1,000 feet

BELLA VISTA SUBDIVISION PD-R REPORT

**LITTLE EGYPT ROAD
LINCOLN COUNTY, NC
Revised: October 11, 2018**

1. PROJECT INFORMATION

Bella Vista Subdivision is a proposed single-family residential community consisting of single family detached homes on an approximately 124 -acre site on the west side of Little Egypt Road and west of Aldwych Lane (see Preliminary Development Concept Plan). The project consists of the following tax parcel numbers 55690, 34201, 86959, 74300, 34170, 34190, 34189, 57451, 02465, and 86960. The current plan features a total of up to 225 single family lots with a density of approximately 1.83 units per acre.

Access to the site shall be from Little Egypt Road and via connection to the Creek Park Subdivision, as generally depicted on the Preliminary Development Concept Plan. Land uses surrounding the site consist of single family residential homes and vacant land. The Preliminary Development Concept Plan with vicinity map is included for reference.

A key feature of the proposed community shall be the ample open spaces, existing streams, trails, and the community amenity area. Approximately +/-30% of the site shall be left undeveloped as natural buffer area and/or passive and active open space.

The property is currently zoned R-SF and R-T. Proposed zoning shall be PD-R.

2. GENERAL PROVISIONS

The Planned Development Concept Plan is intended to reflect a generalized arrangement of the site in terms of lot layout, street network, and open space areas. Final lot configuration, placement and size of the individual site elements, streets alignments, etc. may be altered or modified within the limits of the Lincoln County Unified Development Ordinance and the standards established within these conditional notes during the design development (platting) and construction documentation phases. The Petitioner reserves the right to make minor modifications and adjustments to the approved Planned Development Concept Plan, including minor reconfiguration of lots and street layout, subject to staff approval, provided that the total number of residential units does not exceed the maximum permitted. Any major modifications shall require resubmittal to the Board of Commissioners per section 9.5.12 of the UDO.

3. DEVELOPMENT STANDARDS

Pursuant to Sections 2.4.9 and 9.5 of the Lincoln County Unified Development Ordinance entitled Planned Development Districts and Planned Development Review respectively; the Petitioner seeks to obtain approval of the use of the following Development Standards concurrently with the approval of the Rezoning Petition. These standards, as established both by the conditional notes as set out below and as depicted on the Planned Development Concept Plan shall be followed for the development of the property. Unless otherwise approved as part of these conditional notes, the Lincoln County Unified Development Ordinance shall prevail when developing the site. Homes shall be sided with Brick, Concrete Fiber Cement boards (ex: Hardiplank), architectural concrete, stone, stone veneer, stucco or a combination of these materials. Vinyl siding shall not be allowed as a siding material, except for soffits.

4. PERMITTED USES

- 1) The project shall be limited to detached single family residential dwellings along with any incidental or accessory uses and amenity.
- 2) Uses on the Common Open Space (COS) may include a pool, clubhouse, landscaping, fences, walls, berms, pedestrian trails, recreational uses, entry signage, monuments, and storm water BMPs (if required).

5.. DENSITY

Gross residential density for the project shall not exceed 1.83 units per acre. Open space areas shall be included in the calculations for gross residential density.

6. LOT STANDARDS

The proposed development includes a 20' Perimeter buffer around the perimeter of the project per section 3.4.6 of the UDO. Existing vegetation shall be used to meet the buffer requirements where possible. Grading shall be permitted within the perimeter buffer. Residential lots shall have the following minimum setbacks:

Front Minimum Setback:	30 feet (from right of way)
Side Minimum Setback:	5', Aggregate 10 feet building separation
Side Corner Minimum Setback:	10 feet (from right of way)
Rear Minimum Setback:	20 feet

Building height shall be limited to 40 feet. Lot platting shall meet Lincoln County subdivision regulations.

Overhanging roofs, eaves, gutters, chimneys, bay windows, cornice or other architectural features and awnings may extend into required yards in conjunction with yard encroachments discussed in section 2.6.10.B in the UDO.

7.. GENERAL SITE DESIGN

The following items are offered as part of this development:

- 1) Streets within the subdivision shall be designed per NCDOT and County guidelines. Roadways shall be dedicated to NCDOT for maintenance once density requirements are met. Any roadways or sections not accepted by NCDOT shall be maintained by the HOA. The developer has agreed to have curbs, gutters, and sidewalks (one side of the street) constructed throughout the neighborhood.
- 2) The project shall contain the following proposed amenity features, to be installed as part of the third phase of the development or sooner:
 - a. Swimming Pool and Cabana
 - b. Landscape areas
 - c. Pedestrian walking trails
 - d. Entrance monumentation applicable to the community shall only be located on Bella Vista Subdivision property. A signage plan shall be submitted at the time construction drawings are prepared for the first section of the development. Signage shall conform to standards of the Lincoln County Unified Development Ordinance.
- 3) Canopy street trees, with a minimum of 1.5-inch caliper at time of planting, shall be placed at the rate of one canopy tree per lot or one canopy tree for every 40 linear feet (spaced a maximum of 50 feet apart) along both sides of the proposed streets. Driveway locations and street intersections may vary the placement of street trees.

- 4) Street lighting shall be used throughout the project.
- 5) Mailbox kiosks shall be located and reviewed by the Postmaster.
- 6) Telephone, cable TV, electricity, and natural gas shall be provided by local utility companies. Utilities within the community shall be placed underground. The main feed lines and transformers from the main road may be located above ground.
- 7) Open Space & Buffers
 - a. The project shall provide 30% +/- common open space. Common open space shall be provided as generally depicted on the Planned Development Concept Plan and may include required buffers. A portion of the open space shall be active open space.
 - b. The project shall offer a 20' buffer around the perimeter of the site. Grading shall be permitted within the 20' buffer where necessary. Areas of the buffer that are disturbed shall be replanted to satisfy the minimum requirements established by the Lincoln County UDO.

8. STORMWATER COMPLIANCE

The development shall be subject to Lincoln County's stormwater management regulations in place at the time of preliminary plat submittal. Stream buffers shall be provided along all jurisdictional streams in accordance with NCDEQ and Lincoln County requirements. No erosion control or stormwater structures to be installed within required stream buffers.

9. ESTABLISHMENT OF A HOME OWNERS ASSOCIATION

A Home Owners Association shall be established and shall be responsible for maintaining all rights-of-way, landscaping, signs, amenity features, storm water BMPs, trails and common open space areas. The documents covering the structure of the association shall be filed with the recorded final plat.

10. RESTRICTIVE COVENANTS

Restrictive Covenants shall be created and recorded prior to final plat recordation, to establish, among other items, permitted uses and maintenance responsibility of the Homeowners Association (HOA). Restrictive covenants shall include language that ensures stream buffers, perimeter buffers, and setback areas are protected.

11. VEHICULAR ACCESS AND ROAD IMPROVEMENTS

Vehicular Access

Access shall be provided via one (1) main entrance with the primary entrance off of Little Egypt Road and a secondary access to the community from the Creek Park Subdivision as generally depicted on the Preliminary Development Concept Plan. The local residential streets shall have a 50' right-of-way with a minimum five-foot wide sidewalk and six-foot wide planting median on one side of the street only as depicted on the Preliminary Development Concept Plan. Access location depicted on the Preliminary Development Concept Plan are subject to NCDOT approval and may be modified as needed to meet NCDOT requirements.

The Bella Vista entrance off of Little Egypt Road shall be the primary entrance to the neighborhood.

During construction, the Little Egypt Road entrance shall be the only entrance to be used by construction traffic to access Bella Vista Subdivision. No construction traffic shall be allowed in the Creek Park Neighborhood. The developer shall post prominent signage at both entrances to this effect.

Improvements to Existing Roads

A Traffic Impact Analysis (TIA) has been prepared for this project and shall be reviewed by NCDOT. Improvements by the developer required by NCDOT shall be installed prior to the recording of the plat for the first phase of development. The TIA recommends the following improvements:

North Little Egypt Road and Optimist Club Road

Construct a westbound right turn lane with 100 feet of storage and appropriate taper on Optimist Club Road.

North Little Egypt Road and Site Driveway 1

Construct a northbound left turn lane on North Little Egypt Road with 100 feet of storage and appropriate taper. Construct Site Driveway 1 with one ingress lane and one shared egress lane (left-right).

12. PERMITTING

The Petitioner understands that all permits from Lincoln County and appropriate agencies must be obtained prior to grading or construction activities.

13. CONSTRUCTION SCHEDULE AND PHASING

This proposed residential community shall be constructed in no more than six (6) phases, and phase lines are preliminarily identified on the Preliminary Development Concept Plan. Actual Phase lines are subject to change based on infrastructure and design considerations. Construction of infrastructure is scheduled to begin in the third quarter of 2019 depending on market conditions.

14. MODEL HOMES / SALES OFFICES

Model homes may be constructed within residential areas. Mobile temporary sales offices shall be allowed at the developer's discretion and shall be subject to any special permits required by Lincoln County.

15. WATER AND SEWER AVAILABILITY

The property is within the Lincoln County Sewer District and Lincoln County Water District. The Petitioner understands that water and sewer availability must be approved by Lincoln County prior to development. It is the Petitioner's responsibility to incur all permit fees, availability fees, infrastructure costs for providing the water and sewer throughout the project for all buildings. The Petitioner shall comply with all the County's water and sewer standards. The petitioner understands that Lincoln County currently cannot allocate sewer capacity for this development.

16. APPLICABLE ORDINANCES & PLANS

Development shall be subject to the standards and requirements of the Lincoln County UDO in effect at the date of submission of the application for rezoning. The development is also subject to the Lincoln County Land Use Plan and recommendations thereof.

17. BINDING EFFECT

All conditions applicable to the development of the property approved with this rezoning, unless amended by the manner provided in the UDO, shall be binding to the Petitioner and subsequent owners of the site and their assignees.

18. AMENDMENTS TO THE APPROVED CONDITIONAL DISTRICT PLAN

It is understood that the owner of the property must apply for any future amendments to the Development Standards, Conditional Notes and in accordance to the provisions of the UDO.

**BELLA VISTA
COMMUNITY MEETING REPORT
October 8, 2018
7 pm - 8 pm**

**PERSONS AND ORGANIZATIONS CONTACTED WITH DATE AND EXPLANATION
OF HOW CONTACTED:**

The Lincoln County Planning Department mailed a written notice of the date, time and location of the Community Meeting to the individuals and organizations set out by Lincoln County. A copy of the written notice (**Exhibit A**) is attached.

DATE, TIME AND LOCATION OF MEETING:

The Neighborhood Meeting for Bella Vista was held on Monday October 8, 2018 from 7:00 to 8:00 p.m. at the East Lincoln Community Center located at 8160 Optimist Club Rd., Denver, North Carolina.

PERSONS IN ATTENDANCE AT MEETING (see attached copy of sign-in sheet):

The Neighborhood Meeting was attended by those individuals identified on the attached sign-in sheet (**Exhibit B**). Development team members in attendance at the meeting included: Tom Waters and Kristin Dillard from Provident Land Services; Alan Kerley from Taylor Morrison; Andrew Eagle from Ramey Kemp; Matt Mandle, Alex Bonda, Dan Brewer, and Skylar White from ESP Associates. In addition to the development team, Robert Davis, Commissioners Martin Oakes and Rich Permeter, Planning Board member Keith Gaskill, and Planning and Zoning Director Andrew Bryant were in attendance.

INTRODUCTION & SUMMARY OF PROJECT:

At the Community Meeting a Presentation (**Exhibit C-1**) was presented to attendees. Boards with slides from the presentation were displayed afterwards.

DISCUSSION POINTS & QUESTIONS RAISED BY MEETING PARTICIPANTS:

- Provident Land Services has filed a rezoning application with Lincoln County to rezone the property from R-SF and R-T to PD-R that would allow a single-family residential subdivision with up to 225 single-family detached homes.
- This evening's Community Meeting is being held in order to update neighbors about the project and timing of next steps for the project.

- The initial rezoning application was filed with the county on September 6, 2018. County staff has reviewed the application and plans. Initial comments were returned to the applicant on September 24, 2018. Revised plans addressing staff comments will be resubmitted on October 12, 2018.
- The current schedule for the project is as follows:
 - Planning Board / Board of Commissioners - November 5, 2018
 - Board of Commissioners / Final Decision – November 19, 2018
- A resident expressed concern over Tree Save and Open Space. A representative of the project team explained that 30% of the site would remain as open space, which is more than double what is required (12.5%).
- A 20' perimeter buffer would remain around the site and if grading occurs within this buffer the areas will be replanted accordingly.
- Many residents asked for the proposed street stubs to be explained. A representative informed resident that they are required by the County to provide future connectivity to adjoining parcels when they develop.
- It was explained that the development would not begin until sewer was put in place during the summer of 2019 at the earliest. There will be a total of six phases. The development would have a build out period of 4.5-5 years. The initial phases consist of about 30 lots. Typically, Taylor Morrison closes about four homes per month.
- The residents made several comments in support of the housing products and the materials used. Vinyl is only proposed for the soffits. Homes shall be sided with Brick, Concrete Fiber Cement Boards, architectural concrete, stone, stone veneer, stucco or a combination of these materials.
- A resident expressed concern with the narrow lanes on Little Egypt Road, lack of shoulder, and lack of bike and pedestrian facilities.
- A representative of Ramey Kemp spoke regarding traffic concerns. A traffic study has been reviewed by NCDOT and the County. A final revised study shall be resubmitted to NCDOT and the County soon. Planned developments around the area were taken into consideration. Proposed improvements necessary for the site based on the TIA include:
 - North Little Egypt and Optimist Club Road
 - Construct a westbound turn lane with 100 feet of storage and appropriate taper on Optimist Club Road
 - North Little Egypt Road and Site Driveway 1
 - Construct a northbound left turn lane on North Little Egypt Road with 100 feet of storage and appropriate taper. Construct Site Driveway 1 with one ingress land and one shared egress lane (left-right)
- It was noted that traffic concerns outside of the project's realm of influence should be discussed with local representatives, NCDOT, School Board, Council members etc.

- Sight distance at the entrance from Little Egypt Road was discussed. It was noted that the entrance location and sight distance lines would be evaluated in more detail during engineering/design of the site.

Exhibit A



LINCOLN COUNTY PLANNING & INSPECTIONS DEPARTMENT

302 NORTH ACADEMY STREET, SUITE A, LINCOLNTON, NORTH CAROLINA 28092
704-736-8440 OFFICE 704-736-8434 INSPECTION REQUEST LINE 704-732-9010 FAX

PROPOSED SUBDIVISION ON LITTLE EGYPT ROAD

Provident Land Services, Inc., is requesting the rezoning of 123 acres from R-SF (Residential Single-Family) and R-T (Transitional Residential) to PD-R (Planned Development Residential) to permit a subdivision with up to 225 single-family detached houses. The property (Parcel ID# 02465, 34170, 34189, 34190, 55690, 57451, 74300, 86960 and portions of 34201 and 86959) is located on the west side of Little Egypt Road about 2,000-4,000 feet north of N.C. 73 in Catawba Springs Township.

A community involvement meeting will be held on Monday, October 8, 2018, at 7:00 p.m. at the East Lincoln Community Center at 8160 Optimist Club Rd., Denver, N.C., to provide information about the proposal and to receive comments prior to a public hearing.

For more information, contact the Lincoln County Planning and Inspections Department at (704) 736-8440.

Exhibit B

Bella Vista
Community Meeting
Monday, October 8, 2018
7:00 PM

SIGN-IN SHEET

Name: Natalie Robertson
Address: 7923 Kings Shore
Phone: _____
Email: natalie@natalierobertson
nc.com

Name: JOE CALLOWAY
Address: 1289 WINGED FARM DR
Phone: 407-467-8710
Email: WLC1954@gmail.com

Name: Buddy Hege
Address: 6907 Bridlewood Ln
Phone: 1 Ron Station, N.C.
Email: bhege@GSR.C.NET

Name: Donna Blantin
Address: 1394 Verdict Ridge Dr.
Phone: 704.915.8687
Email: Donna.blantin@gmail
.com

Name: Kay Killian
Address: 1624 Killian Rd.
Phone: 704-827-4241
Email: Killianfarm@gmail.com

Name: Holly Cook
Address: 1823 Oakmont Dr.
Phone: _____
Email: hpcook@charter.net

Name: Shelley Keever
Address: 7918 Manners Pt Cir
Phone: _____
Email: shelleyjrd74@gmail.com

Name: Sylvia Binger
Address: 1316 Brook Path Trl
Phone: _____
Email: sharo68@aol.com

Name: Melodie Williams
Address: 2431 BICKARD ROZELLE LLC
Phone: _____
Email: MELY7@yahoo.com

Name: HATTIE ROSEBRO
Address: 494 N. LITTLE EGYPT RD.
Phone: Denver, NC
Email: Melx7@yahoo.com

Name: Megan Matz
Address: 1839 Sapona Ct
Phone: 203 733 1321
Email: Matz.megan@gmail.com

Name: Barrett Gentry
Address: 7206 Grist Mill Ct.
Phone: 943-6017-7788
Email: barrett.gentry6@gmail.com

Name: YOLANDA ELMORE
Address: 177 8th Ave. SW CONOVER
Phone: _____
Email: tytyzap@yahoo.com

Name: Jeffery Rinehardt
Address: 1335 2nd St. SW Hickory NC
28602
Phone: _____
Email: jeff.rinehardt62@gmail.com

Bella Vista
Community Meeting
Monday, October 8, 2018
7:00 PM

SIGN-IN SHEET

Name: Nancy Calloway
Address: 1289 Whipped Foot Dr Denver
Phone: 786-222-7084
Email: nwl1958@hotmail.com

Name: Sarah C Johnson
Address: 1896 St. James Ch. Rd
Phone: 704-966-0648
Email: sarahjohn417@aol.com

Name: Trish Coffin
Address: 1546 Withers Dr Denver
Phone: 704-530-2707
Email: trishcoffin@att.net

Name: Bonnie Gromer
Address: 1521 Baltzmore Dr
Phone: _____
Email: bfzgme@me.com

Name: Dennis Norman
Address: 350 N. Indeside Farm Rd
Phone: LARRY LINDSEY
Email: _____

Name: Ben Voring
Address: 6922 Everwood Ln
Phone: 704-607-9659
Email: voring64@yahoo.com

Name: Isiah Lindsey
Address: _____
Phone: _____
Email: _____

Name: Troy Wilson
Address: 7257 Drum Ln
Phone: 704-562-3070
Email: tch1022@hotmail.com

Name: Mornie Lawing
Address: 409 N. Little Egypt
Phone: 704-763-8060
Email: mornie.lawing@gmail.com

Name: Danielle Lindsey
Address: 327 N. Little Egypt Rd
Phone: 704-577-0188
Email: _____

Name: Leanne Newton
Address: 2296 Pine Valley Drive
Phone: _____
Email: jeanne-newton@hotmail.com

Name: Crystal King
Address: 1402 Verdict Ridge Dr.
Phone: _____
Email: Crystalk-7979@yahoo.com

Name: Stephanie Pettit
Address: 7270 Alder Creek
Phone: 732-789-3702
Email: SMPETTIT5@gmail.com

Name: Jannie Purse
Address: 1929 Pecan Rd
Phone: 828-465-0320
Email: _____

**Bella Vista
Community Meeting
Monday, October 8, 2018
7:00 PM**

SIGN-IN SHEET

Name: Harold Hunter
Address: 316 N. L. A. Yerby Rd.
Phone: 704-483-5533
Email: _____

Name: Keith Gaskill
Address: 465 Timber Rd
Phone: 704-736-9465
Email: keith-gaskill@yahoo.com

Name: Justin Lee
Address: 240 Devine Rd
Phone: (980) 329-9509
Email: _____

Name: Michele Weaver
Address: 2044 Harmony Hills Dr.
Phone: 704-903-87294
Email: micheleweaver74@gmail.com

Name: Paul Samison
Address: 430 N Little Egypt
Phone: 704-400-9803
Email: P17 Samison@gmail.com

Name: Robert Ester
Address: 500 Points Dr. Lt.
Phone: 227 531-1932
Email: robert.e.ester@bellsouth.net

Name: Gordon Brager
Address: 1316 Brook Path
Phone: _____
Email: _____

Name: Troy Perry
Address: 2174 Calley Lane
Phone: 980-722-7386
Email: Troy.Perry@TroyPerry.US

Name: Gary Gechters
Address: 610 Chipmunk Rd
Phone: _____
Email: Gary.Gechters@GroundTech.com

Name: Wendy Key
Address: 2940 Devine Rd
Phone: (980) 329-9509
Email: _____

Name: Aaron & Holly Zammiello
Address: 7250 Alowych Ln
Phone: 704-495-5543
Email: HOLLYZSELLS11@GMAIL.COM

Name: Mary & Young
Address: 115 Everett Dr. StoneCay II
Phone: 704 390 4550
Email: _____

Name: Genesa Tandy
Address: 324 N. Little Egypt Rd
Phone: 704 966 4278
Email: _____

Name: _____
Address: _____
Phone: _____
Email: _____

**Bella Vista
Community Meeting
Monday, October 8, 2018
7:00 PM**

SIGN-IN SHEET

Name: TOM WATERS
Address: PROVIDENT
Phone: _____
Email: _____

Name: ALAN KERLEY
Address: Taylor Morrison
Phone: 704-971-8854
Email: akerley@taylor-morrison.com

Name: DEX PAROD
Address: ESP
Phone: _____
Email: _____

Name: DON BREWER
Address: ESP
Phone: _____
Email: _____

Name: MARK JOYCE
Address: _____
Phone: _____
Email: _____

Name: TRISH PATRICK
Address: 7234 HAZETTINE CT.
Phone: 704-966-0904
Email: tepintx12@gmail.com

Name: Patti Wallace
Address: 722 ENDELL ST.
Phone: _____
Email: PHWALLACE3@CHARTER.NET

Name: KIRSTIN DUNN
Address: PROVIDENT
Phone: _____
Email: _____

Name: MATT MANDOLF
Address: ESP
Phone: _____
Email: _____

Name: SKYLAR WHITE
Address: ESP
Phone: _____
Email: _____

Name: ANDREW FABIE
Address: PENNEY KEMP
Phone: _____
Email: _____

Name: MARTIN OAKES
Address: _____
Phone: _____
Email: MAOAKES@CHARTER.

Name: Denise Edwards^{NET}
Address: _____
Phone: 704-616-5752
Email: denise.edwards@carolinas.org

Name: Elizabeth Hambrick
Address: 7066 OLD PLANK RD.
Phone: _____
Email: _____

Bella Vista

EXHIBIT C-1



AGENDA

I. INTRODUCTION

II. PROVIDENT LAND SERVICES & TAYLOR MORRISON

III. BELLA VISTA

IV. BREAKOUT SESSIONS



INTRODUCTION



INTRODUCTION



- **Provident Land Services**
 - Tom Waters
 - Kristin Dillard
- **Taylor Morrison Homes**
 - Alan Kerley
- **ESP Associates – Land Planning / Rezoning / Civil Engineering**
 - Matt Mandle
 - Dan Brewer
 - Alex Bonda
 - Skylar White
- **Ramey Kemp & Associates – Traffic Engineering**
 - Andrew Eagle
- **Robert Davis - Old North State Developers, LLC**

PROCESS/PROJECT SCHEDULE



○ September 6, 2018	Rezoning 1 st Submittal to Lincoln County
○ September 24, 2018	Initial Comments Provided by Staff
○ October 8, 2018 **	Required Community Meeting
○ October 12, 2018 **	Submittal Deadline – Submit Revised Plans Addressing Staff Comments
○ November 5, 2018 – 6:30 PM**	Planning Board/Board of Commissioners
○ November 19, 2018 – 6:30 PM**	Board of Commissioners – Final Decision

** Note: All meeting dates identified are preliminary, based on the Lincoln County calendar for upcoming schedule meetings. Timing of proposed schedule is based on favorable recommendations to insure that project is placed on designated agenda for dates specified.

DEVELOPMENT TEAM



ABOUT PROVIDENT LAND SERVICES



- Throughout his 44-year career in real estate, Tom Waters and his team at Provident Land Services has completed more than \$100 million worth of real estate development.
- Tom has experience in all levels of land development, including land acquisition, disposition, due diligence analysis, financing, entitlements & rezoning, as well as real estate consulting.

CHARLOTTE AREA PROJECTS – PROVIDENT LAND SERVICES



- Charlotte Area Projects – Provident Land Services, Inc.

- **The Vineyards at Lake Wylie** - Charlotte, North Carolina
 - Award-winning single-family residential community on Lake Wylie
 - Prices range from the \$200's - \$500's
- **Christenbury Hall** - Concord, North Carolina
 - Custom built homes
 - Prices range from the \$500's - \$900's
- **The Preserve at Robbins Park** - Cornelius, North Carolina
 - Prices range from the \$500's - \$900's
- **Huntington Forest** - Charlotte, North Carolina
 - Prices range from the \$200's – mid \$300's.
- **Stonecroft** - Charlotte, North Carolina
 - Custom built homes in South Charlotte
 - Prices range from the \$900's - \$2m+
- **Preservation Pointe** - Charlotte, North Carolina
 - On Mountain Island Lake
 - Prices range from the Mid \$400's – \$1m+
- **Reverdy Glen and The Forest** - Matthews, North Carolina
 - Custom built homes in South Charlotte
 - Prices range from the \$700's-\$2m+
- **Fullwood Station** - Matthews, North Carolina
 - Prices range from the Mid \$400's – Mid \$500's



ABOUT TAYLOR MORRISON



- In 2017 Taylor Morrison ranked as the 7th Largest Builder in the United States for overall home closings. We anticipate moving up the chart in 2018 due to our recent acquisition of AV Homes/Bonterra Builders.
- We are also a land developer, with a portfolio of lifestyle and master-planned communities, providing a diverse assortment of homes across a wide range of price points. Currently we have thousands of lots under development in the Country.
- Taylor Morrison provides financial services to customers through our wholly owned mortgage subsidiary, Taylor Morrison Home Funding, LLC ("TMHF"), and title insurance and closing settlement services through our title company, Inspired Title Services, LLC ("Inspired Title").
- We have operations in Arizona, California, Colorado, Florida, Georgia, Illinois, North Carolina and Texas. We are a Top 10 builder in 16 of our 19 markets.
- In 2016, 2017 and 2018 Taylor Morrison received the "America's Most Trusted Home Builder" award presented by Lifestory Research. We're the only builder to win this award three years in a row.

CHARLOTTE AREA PROJECTS – TAYLOR MORRISON



- Taylor Morrison is currently building in 13 Communities in the Charlotte Metro Area.
 - In 2018 we will build 320+/- Homes
 - Our Homes range from the mid \$200's to the upper \$600's.
- Bella Vista:
 - We anticipate Bella Vista to consist of two home series with base pricing ranging from the Upper \$200's to the Upper \$300s.
 - Average sales price is anticipated to be \$350K+ at Bella Vista.



CONCEPTUAL HOME ELEVATIONS

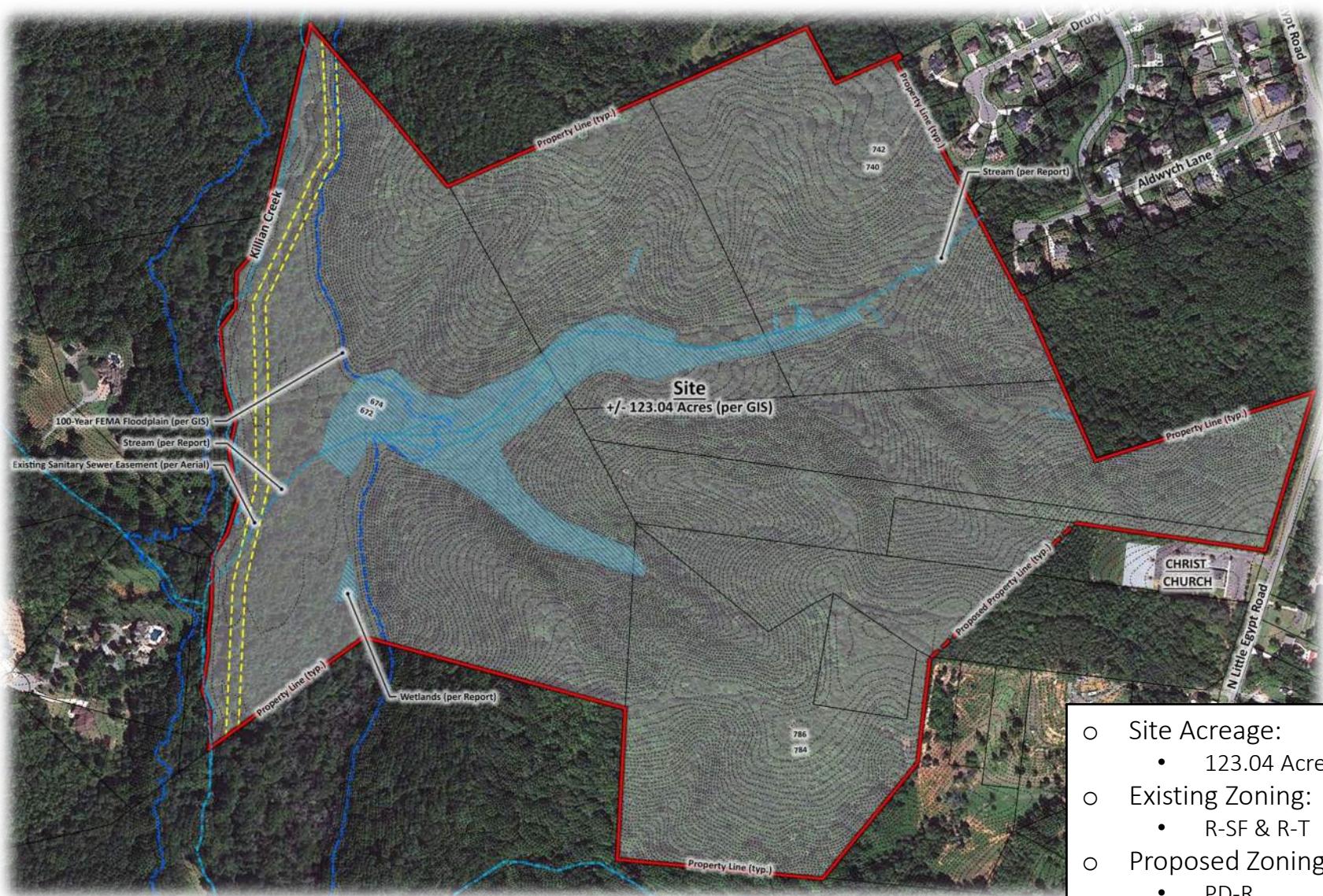


- Homes shall be sided with Brick, Concrete Fiber Cement Boards (ex. Hardiplank) architectural concrete, stone, stone veneer, stucco or a combination of these materials. Vinyl siding shall not be allowed as a siding material, except for soffits.

BELLA VISTA

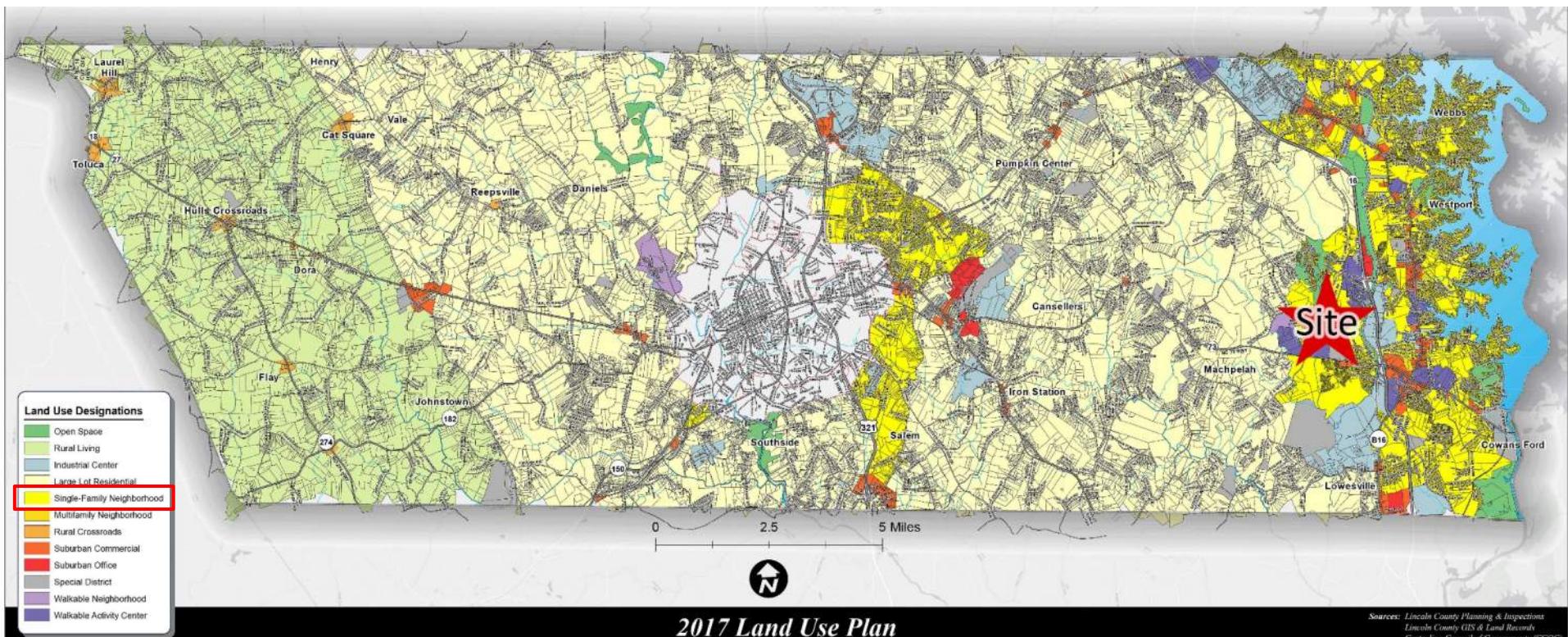


SITE AERIAL



- Site Acreage:
 - 123.04 Acres
- Existing Zoning:
 - R-SF & R-T
- Proposed Zoning:
 - PD-R

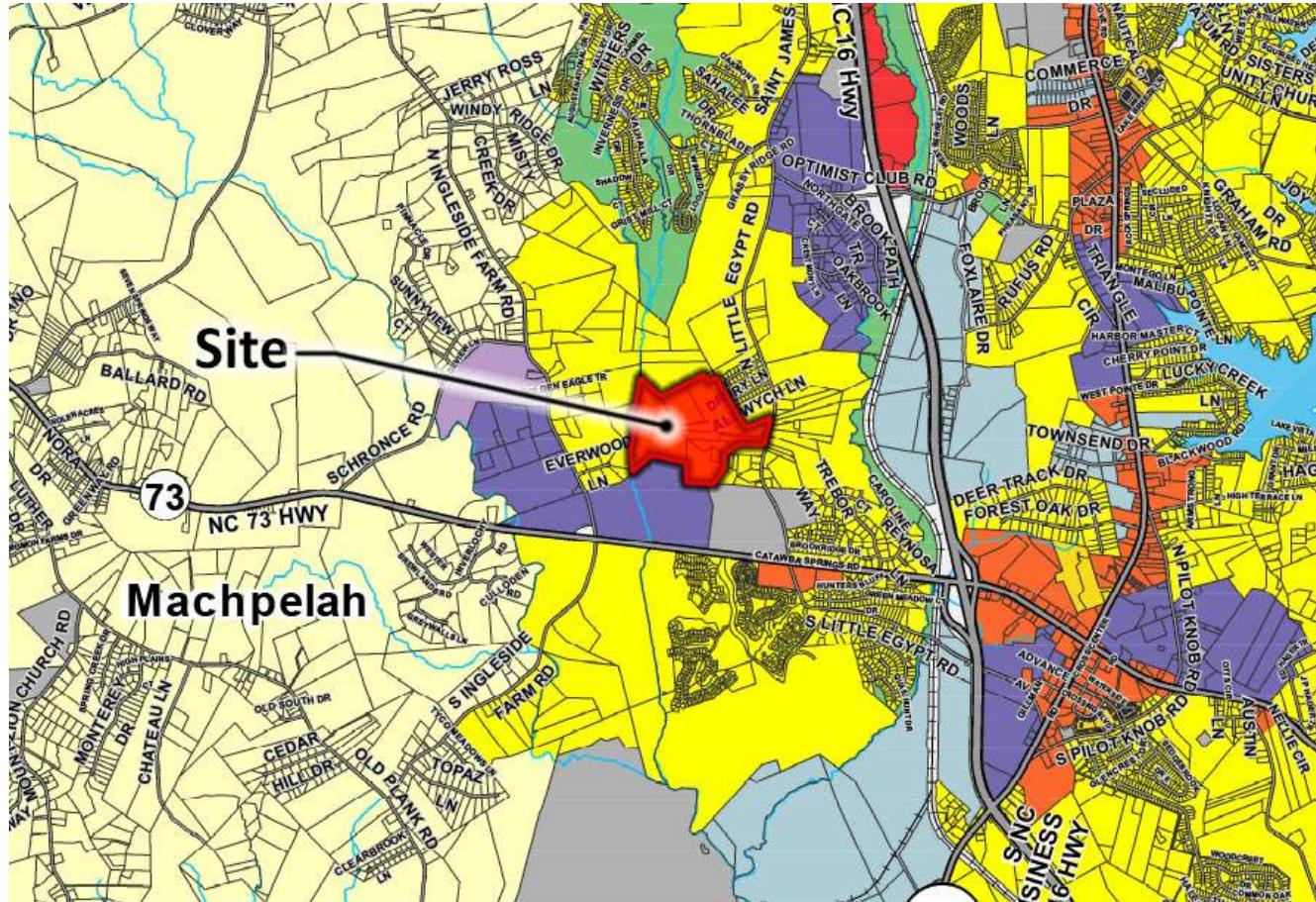
FUTURE LAND USE MAP



2017 Land Use Plan

Sources: Lincoln County Planning & Inspections
Lincoln County GIS & Land Records
Centralina Council of Governments (CCOG)

FUTURE LAND USE MAP

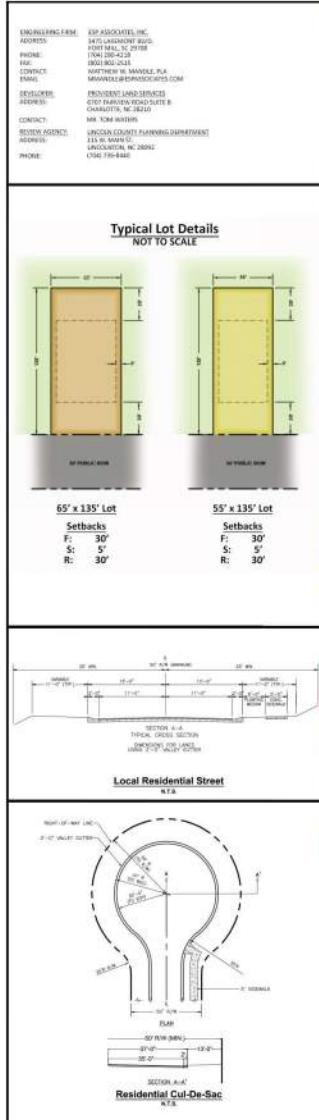


Land Use Designations

Open Space
Rural Living
Industrial Center
Large Lot Residential
Single-Family Neighborhood
Multifamily Neighborhood
Rural Crossroads
Suburban Commercial
Suburban Office
Special District
Walkable Neighborhood
Walkable Activity Center

- Adopted Land Use Plan permits up to 2 units per acre.

REZONING PLAN



BELLA VISTA



ILLUSTRATIVE PLAN



OPEN SPACE



Open Space:

- Required Open Space:
+/- 15.38 Acres (12.5%)
- Proposed Open Space 30%
+/- 36.91 Acres (30%)
- Buffers:
20' Perimeter Buffer
- Amenity to include swimming pool, cabana, landscape areas, & pedestrian walking trails
- Street trees on each side of the street. They shall be placed at the rate of one canopy tree per lot or one every 40 linear feet.

CONCEPTUAL HOME ELEVATIONS



- Homes shall be sided with Brick, Concrete Fiber Cement Boards (ex. Hardiplank) architectural concrete, stone, stone veneer, stucco or a combination of these materials. Vinyl siding shall not be allowed as a siding material, except for soffits.

AMENITY/COMMUNITY CHARACTER CONCEPTS

Amenity to include swimming pool, cabana, landscape areas, & pedestrian walking trails



PROCESS/PROJECT SCHEDULE



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BREAKOUT SESSIONS



- I. SITE PLAN / REZONING
- II. TRAFFIC / TRAFFIC IMPACT ANALYSIS
- III. ARCHITECTURE / TAYLOR MORRISON HOMES
- IV. PROVIDENT LAND SERVICES



Traffic Impact Study

Bella Vista

Denver, North Carolina

October 2018



TRAFFIC IMPACT STUDY

FOR THE

Bella Vista Development

LOCATED
IN
DENVER, NORTH CAROLINA

Prepared For:
Provident Land Services, Inc.
6707 Fairview Road, Suite B
Charlotte, NC 28210

and

Taylor Morrison of Carolinas, Inc.
1410 W. Morehead Street, Suite 100
Charlotte, NC 28208

Prepared By:
Ramey Kemp & Associates, Inc.
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October, 2018
RKA Project #18279

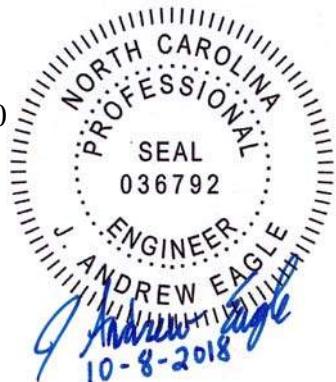


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Appendix A	Figures
Appendix B	Traffic Count Data
Appendix C	Adjacent Development Information
Appendix D	Signal Timing Data
Appendix E	NC 73 and North Little Egypt Road – Synchro Reports
Appendix F	Optimist Club Road and North Little Egypt Road - Synchro Reports
Appendix G	Optimist Club Road and NC 16 Bypass – Synchro Reports
Appendix H	North Little Egypt Road and Site Driveway 1 Synchro Reports and Turn Lane Warrants
Appendix I	SimTraffic Reports

TRAFFIC IMPACT STUDY

BELLA VISTA

DENVER, NORTH CAROLINA

1. EXECUTIVE SUMMARY

This report summarizes the findings of the Traffic Impact Study (TIS) that was performed for the proposed Bella Vista development to be located along the west side of North Little Egypt Road, north of NC 73 in Denver, North Carolina. The purpose of this study is to determine the potential impact to the surrounding transportation system caused by the traffic generated by the development.

The site is proposed to consist of 225 single-family homes. One full access driveway is proposed on North Little Egypt Road. The site is expected to be fully built by the year 2021.

The study area for the TIS was determined through coordination with NCDOT and Lincoln County and consists of the following intersections:

1. North Little Egypt Road and NC 73
2. North Little Egypt Road and Optimist Club Road
3. Optimist Club Road and NC 16
4. North Little Egypt Road and Site Drive 1

Based on coordination with NCDOT and Lincoln County, six offsite developments were determined to have an impact on the project study area. Carolina Ridge Development is a residential housing development located south of NC 73. The development consists of 1,350 age-restricted homes and 300 single-family homes. Creek Park and Little Egypt Road Development are residential developments located on North Little Egypt Road north of the proposed site. The Creek Park development will consist of 170 single-family homes. The Little Egypt Road Development will consist of 250 single-family homes. Canopy Creek and Killian Creek will be located on Little Egypt Road north of Optimist Club Road. Canopy Creek will consist of 152 single-family homes. Killian Creek will consist of 58 single-family homes. Ingleside will be located along NC 73 and will consist of 290 single-family homes and 132 senior homes. For

purposes of this study, it was assumed all of these developments and their roadway improvements would be in place during the future analysis year.

Several scenarios were analyzed using traffic analysis software. Traffic operations during the weekday AM and PM peak hours were modeled for each scenario. The results of each scenario were compared in order to determine impacts from background traffic growth and the proposed development. The following scenarios were modeled:

- 2018 Existing
- 2022 No-Build
- 2022 Build

Based on the analysis results, some impacts are expected by the proposed development. The following recommendations and improvements should be made by the developer prior to the recording of the plat for the first phase of the development:

NC 73 and North Little Egypt Road

- NCDOT is planning improvements at this intersection. Based on coordination with NCDOT and Lincoln County, no improvements by the developer are required at this intersection.

North Little Egypt Road and Optimist Club Road

- Construct a westbound right turn lane on Optimist Club Road with 100 feet of storage and appropriate taper.

Optimist Club Road and NC 16 Bypass

- NCDOT is planning improvements at this intersection. Based on coordination with NCDOT and Lincoln County, no improvements by the developer are required at this intersection.

North Little Egypt Road and Site Driveway 1

- Construct a northbound left turn lane on North Little Egypt Road with 100 feet of storage and appropriate taper.
- Construct Site Driveway 1 with one ingress lane and one shared egress lane (left-right).

2. INTRODUCTION

2.1. Purpose of Report

This report summarizes the findings of the Traffic Impact Study (TIS) that was performed for the proposed Bella Vista development to be located along the west side of North Little Egypt Road, north of NC 73 in Denver, North Carolina. The purpose of this study is to determine the potential impact to the surrounding transportation system caused by the traffic generated by the development.

2.2. Study Objectives

The site is proposed to consist of 225 single-family homes. One full access driveway is proposed on North Little Egypt Road. The site is expected to be fully built by the year 2021.

Refer to Figure 1 in Appendix A for an illustration of the site location. Refer to Figure 2 for the preliminary site plan. The objective of this report is to determine what geometric improvements are necessary to mitigate traffic conditions on the transportation network surrounding the site with the proposed development fully built out.

3. AREA CONDITIONS

3.1. Transportation Network Study Area

3.1.1. Area Roadway System

The project study area for this TIS was determined through coordination with the North Carolina Department of Transportation (NCDOT) and Lincoln County. Table 1 summarizes the characteristics of the roadways within the study area. The NCDOT Functional Class map was used to determine the classification of each road. Traffic Volume maps from NCDOT were used to find the average daily traffic (ADT) volumes in vehicles per day (vpd) for the roadways. A field visit was conducted to verify the existing cross-sections and speed limits in mph.

TABLE 1
STUDY AREA ROADS

ROADWAY	CLASSIFICATION	CROSS-SECTION	ADT (vpd)	SPEED LIMIT (mph)
NC 73	Principal Arterial	Two-Lane	11,000	45
North Little Egypt Road	Local	Two-Lane	3,400	45
Optimist Club Road	Local	Two-Lane	No Data	45
NC 16 Bypass	Principal Arterial	Four-Lane	22,000	60
Aldwych Lane	Local	Two-Lane	No Data	No Data

3.1.1.1. Existing Roadway Conditions

Existing lane configurations (number of traffic lanes on the intersection approach), storage capacities, and other intersection and roadway information within the study area was collected by Ramey Kemp and Associates, Inc. (RKA). Refer to Figure 3 for the existing lane configurations and traffic control at study intersections.

3.1.1.2. Future Roadway Conditions

Based on coordination with NCDOT and Lincoln County, no NCDOT roadway projects were included in the analysis.

3.1.2. Study Area and Existing Traffic Volumes

The study area for the TIS was determined through coordination with NCDOT and Lincoln County and consists of the following intersections:

1. North Little Egypt Road and NC 73
2. North Little Egypt Road and Optimist Club Road
3. Optimist Club Road and NC 16
4. North Little Egypt Road and Site Drive 1

Existing traffic volumes were determined through traffic counts conducted during the AM peak period (7:00-9:00 AM) and the PM peak period (4:00-6:00 PM). Through volumes at the proposed site drives were determined from traffic counts taken at the intersection of Optimist Club

Road and North Little Egypt Road. Traffic counts at North Little Egypt Road and NC 73 were performed in June 2016. The intersection of Optimist Club Road and North Little Egypt Road was counted in February 2017. NCDOT provided traffic counts at the intersection of Optimist Club Road and NC 16 Bypass. These counts were performed in September 2016. All traffic counts were performed while schools were in session. The counts performed in 2016 and 2017 were projected to the year 2018 using a growth rate of 1% per year. A copy of the traffic count data can be found in Appendix B of this report. The peak hour traffic volumes were not balanced between Optimist Club Road and NC 73 on North Little Egypt Road due to the locations of school driveways on North Little Egypt Road. Refer to Figure 4 for an illustration of the existing peak hour traffic volumes.

3.2. Study Area – Adjacent Land Use

3.2.1. Existing Land Uses

The existing site is undeveloped. The surrounding land is primarily undeveloped, residential, and institutional.

3.2.2. Anticipated or Approved Future Development

Based on coordination with NCDOT and Lincoln County, six offsite developments were determined to have an impact on the project study area. Carolina Ridge Development is a residential housing development located south of NC 73. The development consists of 1,350 age-restricted homes and 300 single-family homes. Creek Park and Little Egypt Road Development are residential developments located on North Little Egypt Road north of the proposed site. The Creek Park development will consist of 170 single-family homes and is expected to be built by the year 2019. The Little Egypt Road Development will consist of 250 single-family homes and is expected to be fully built by the year 2020. This development includes improvements at the intersection of NC 73 and Little Egypt Road which were included in the future year analysis. Ingleside is a residential housing development located on the east and west sides of Ingleside Farm Road and South of NC 73. The development plans for 290 single-family homes and 132 “age-restricted” detached homes. Canopy Creek is a residential development located in the northwest quadrant of St. James Church Road and Verdict Ridge Road. The development consists of 152 single-family homes. Killian Creek is a residential housing development located in the

southwest quadrant of St. James Church Road and Verdict Ridge Road. Killian Creek will consist of 58 single-family homes. Refer to Appendix C for data related to these developments. The total trip assignment for these offsite developments is illustrated on Figure 5.

4. PROJECTED TRAFFIC

4.1. Site Traffic

In order to determine the future traffic conditions after the proposed development is completed, an estimate of traffic projected to travel to / from the proposed development is required. The average weekday daily, AM peak hour, and PM peak hour site trips for this study were calculated based on the ITE *Trip Generation Manual, 10th Edition*.

4.1.1. Trip Generation

The site is proposed to consist of 225 single-family homes. Table 2 presents a summary of the trip generation calculations for the proposed development.

TABLE 2
PROPOSED SITE TRIP GENERATION

LAND USE	SIZE	DAILY TRIPS (VPD)	PEAK HOUR TRIPS (VPH)			
			AM		PM	
			ENTER	EXIT	ENTER	EXIT
Single-Family Detached Housing (210)	225 DU	2,194	41	124	139	82

4.1.2. Trip Distribution and Assignment

The trip distribution percentages were developed based on existing traffic patterns, location of employment centers, and engineering judgment. Figure 6 illustrates the site trip distribution percentages. These trip distribution percentages were applied to the total new trip generation data to calculate the site trip assignments shown in Figure 7.

5. TRAFFIC ANALYSIS

5.1. Traffic Analysis Scenarios

Several scenarios were analyzed using traffic analysis software, Synchro 9.1. Traffic operations during the AM and PM peak hours were modeled for each scenario. The results of each scenario

were compared in order to determine impacts from background traffic growth and the proposed development. The following scenarios were modeled:

- 2018 Existing
- 2022 No-Build
- 2022 Build

The 2018 Existing scenario included the traffic characteristics that currently exist in the study area. Existing peak hour traffic volumes were used from the intersection counts (Figure 4). Existing signal timing data was obtained from NCDOT and referenced in all traffic models. Refer to Appendix D for the signal timing data. Congestion Management guidelines recommend a minimum cycle length of 120 seconds for signals with four or more phases. The cycle length for the intersection of NC 73 and North Little Egypt Road was set to 120 seconds for all scenarios and the splits were optimized. No changes to the existing lane configurations were made. Congestion Management guidelines recommend prohibiting right turns during a red traffic signal phase. Right turns on red were allowed on the northbound and southbound approaches at the intersection of NC 73 and North Little Egypt Road. These right turn movements are currently operated under yield control. Right turns on red were prohibited on the remaining approaches. It should be noted that during the AM peak hour, the speed limit on the southbound, westbound, and eastbound approaches of NC 73 and North Little Egypt Road is reduced to 35mph to account for traffic from the neighboring schools. All AM peak hour scenarios account for the school zone by using a 35 mph speed limit on these legs of the intersection.

The 2022 No-Build scenario was analyzed to determine the expected future traffic operations. Existing peak hour traffic counts were projected to the year 2022 using a compounded growth rate of 1% per year. Refer to Figure 8 for the 2022 projected peak hour traffic volumes. The 2022 projected volumes were added to the traffic from the offsite developments (Figure 5) to determine the 2022 No-Build peak hour traffic volumes. The 2022 No-Build peak hour traffic volumes are illustrated in Figure 9. The existing signal timing data was used. The splits at the signalized intersection were optimized. Improvements to the intersection of NC 73 and Little Egypt Road were included as expected to be done by the Little Egypt Road Development.

The 2022 Build scenario was compared to the 2022 No-Build scenario to determine expected impacts caused by the proposed site. This scenario included the same assumptions as the 2022 No-Build scenario. The trips expected to be generated by the proposed site (Figure 7) were added to the 2022 No-Build peak hour volumes (Figure 9) to determine the 2022 Build peak hour traffic volumes. Refer to Figure 10 for the 2022 Build peak hour traffic volumes. The existing signal timing data was used. The splits at the signalized intersection were optimized. Site Drive 1 was added to existing lane configurations.

5.2. Traffic Analysis Procedure

All study intersections (both unsignalized and signalized) were analyzed using the methodology outlined in the Highway Capacity Manual (HCM) published by the Transportation Research Board. A computer software package, Synchro and SimTraffic (Version 9.1), was used to complete the analyses for all of the study area intersections. Synchro was developed by Trafficware Corporation and allows the user to input data into the Synchro software and calculate the output based on methodologies in the HCM. SimTraffic creates a traffic simulation model from the Synchro inputs. SimTraffic was used in this study to determine expected queue lengths.

Analysis results for signalized intersections provide delay and level of service (LOS) for all movements and approaches. The overall intersection delay and LOS is also provided. The capacity analysis for an unsignalized intersection does not provide an overall LOS for the intersection, rather a LOS for movements and/or approaches that have a conflicting movement.

The HCM defines capacity as “the maximum hourly rate at which persons or vehicles can reasonably be expected to traverse a point or uniform section of a lane or roadway during a given time period under prevailing roadway, traffic, and control conditions”. LOS is a term used to represent different driving conditions, and is defined as a “qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers”. LOS varies from Level “A” representing free flow, to Level “F” where greater vehicle delays are evident.

Refer to Table 3 for HCM levels of service and related average control delay per vehicle for both signalized and unsignalized intersections. Control delay as defined by the HCM includes “initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay”. As shown in Table 3, an average control delay of 40 seconds at a signalized intersection results in a LOS D.

TABLE 3
HIGHWAY CAPACITY MANUAL - LEVELS OF SERVICE AND DELAY

UNSIGNALIZED INTERSECTION		SIGNALIZED INTERSECTION	
LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)	LEVEL OF SERVICE	AVERAGE CONTROL DELAY PER VEHICLE (SECONDS)
A	0-10	A	0-10
B	10-15	B	10-20
C	15-25	C	20-35
D	25-35	D	35-55
E	35-50	E	55-80
F	>50	F	>80

5.3. Mitigation Requirements

Based on the Lincoln County Unified Development Ordinance, developments must provide mitigation at an intersection when the proposed trips degrade any intersection leg below LOS C. If an intersection is expected to operate at a level worse the LOS C without the development, the developer will be required to maintain the current level of service.

NCDOT has guidelines for determining when improvements are needed by the developer. The District Engineer is responsible for the final determination of the improvements. NCDOT typically requires mitigation to be identified when developments are expected to impact the traffic operations as described below:

- Overall intersection or intersection approach delay increases by 25% or more.
- LOS degrades by at least one level
- LOS is F
- Synchro 95th or SimTraffic maximum queue results are greater than the existing turn lane storage length

5.4. Capacity and Level of Service at Study Intersections

5.4.1. NC 73 and North Little Egypt Road

The intersection of NC 73 and North Little Egypt Road was analyzed as a four-leg signalized intersection with existing lane configurations. Table 4 summarizes the capacity analysis results. Refer to Appendix E for the Synchro reports for this intersection. Impacts requiring mitigation are highlighted in yellow. All SimTraffic reports can be found in Appendix I.

Improvements by the Little Egypt Road development were assumed to be in place during the 2022 No-Build and 2022 Build scenarios. These improvements included construction of a southbound right turn lane, restriping the existing shared through/right lane to a through lane, and providing 120 feet of storage on both of these lanes.

Full build out of the site is expected to have some impact during the AM peak hour. The level of service is expected to degrade on the eastbound approach. The delay is expected to increase more than 25% on the southbound approach. The southbound approach also operates at LOS F during the No-Build and Build scenarios. During the PM peak hour the site is expected to increase delay more than 25% on the westbound and southbound approaches. The overall intersection level of service is expected to degrade to LOS D and the overall delay is expected to increase more than 25%. SimTraffic results show queues over 500 feet long could be expected on the eastbound and southbound approaches during the 2020 No-Build AM peak hour. The proposed development is expected to increase queues on the eastbound and southbound approaches during the AM peak hour.

Improvements have been identified to mitigate the impacts expected to be caused by full build out of the proposed development. These improvements would fully mitigate all impacts except the drop in overall level of service during the PM peak hour. However, during the 2022 No-Build scenario, the delay is only 0.4 seconds below LOS D. Construction of a second southbound North Little Egypt Road left turn lane would mitigate the remaining drops in level of service and increased queues. However, the existing NC 73 facility does not accept dual left turn lanes. An additional eastbound NC 73 departure lane would be needed with 1,000 feet of full width followed by an appropriate taper. Widening along NC 73 for the departure lane may present some issues

with grading due to steep slopes. The existing guardrail would need to be relocated and a section of the widening would require fill to bring the existing ground up to the roadway grade. Modifications to the traffic signal would be needed as well.

It is not recommended the developer construct the southbound North Little Egypt Road left turn lane. NCDOT is planning improvements at this intersection. Based on coordination with NCDOT and Lincoln County, no improvements by the developer are required at this intersection.

TABLE 4
ANALYSIS SUMMARY OF
NC 73 AND NORTH LITTLE EGYPT ROAD

ANALYSIS SCENARIO	A P P R O A C H	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
			Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2018 Existing	EB	1 LT, 1 TH-RT	C (25.2)	C (22.7)	B (15.8)	B (16.4)
	WB	1 LT, 1 TH, 1 RT	B (16.4)		B (15.4)	
	NB	1 LT-TH, 1 RT	C (32.3)		B (14.6)	
	SB	1 LT, 1 TH-RT	C (28.3)		C (29.5)	
2022 No-Build	EB	1 LT, 1 TH-RT	E (75.3)	(58.0)	C (23.0)	C (34.6)
	WB	1 LT, 1 TH, 1 RT	C (22.4)		D (37.8)	
	NB	1 LT-TH, 1 RT	D (39.3)		C (25.4)	
	SB	1 LT, 1 TH, 1 RT	F (95.0)		E (58.4)	
2022 Build	EB	1 LT, 1 TH-RT	F (88.0)	(69.2)	C (26.1)	D (43.6)
	WB	1 LT, 1 TH, 1 RT	C (23.4)		D (48.9)	
	NB	1 LT-TH, 1 RT	D (39.3)		C (25.7)	
	SB	1 LT, 1 TH, 1 RT	F (119.3)		E (73.3)	
2022 Build Improvements	EB	1 LT, 1 TH-RT	E (58.9)	(47.7)	C (24.2)	D (40.6)
	WB	1 LT, 1 TH, 1 RT	C (20.5)		D (45.3)	
	NB	1 LT-TH, 1 RT	D (41.2)		C (26.0)	
	SB	2 LT, 1 TH-RT	E (73.5)		E (67.9)	

Bold denotes improvement on approach.

5.4.2. Optimist Club Road and North Little Egypt Road

The intersection of Optimist Club Road and North Little Egypt Road was analyzed as a three-leg unsignalized intersection with existing lane configurations. Table 5 summarizes the capacity analysis results. Refer to Appendix F for the Synchro reports. Impacts requiring mitigation are highlighted in yellow. All SimTraffic reports can be found in Appendix I.

Analysis indicates the proposed development would degrade the westbound approach from LOS C to LOS D during the AM peak hour. Similarly, the development would degrade the westbound approach from LOS B to LOS C during the PM peak hour. No delays are expected to increase more than 25%.

It is recommended the developer construct a westbound right turn lane with 100 feet of storage and appropriate taper. This improvement would mitigate the drop in LOS caused by the development.

TABLE 5
ANALYSIS SUMMARY OF
OPTIMIST CLUB ROAD AND NORTH LITTLE EGYPT ROAD

ANALYSIS SCENARIO	A P P R O A C H	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
			Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2018 Existing	WB ² NB SB ¹	1 LT-RT 1 TH-RT 1 LT-TH	B (13.1) - A (5.8)	NA ³	A (9.8) - A (4.1)	NA ³
2022 No-Build	WB ² NB SB ¹	1 LT-RT 1 TH-RT 1 LT-TH	C (22.5) - A (6.3)	NA ³	B (13.5) - A (3.7)	NA ³
2022 Build	WB ² NB SB ¹	1 LT-RT 1 TH-RT 1 LT-TH	D (27.4) - A (6.4)	NA ³	C (15.4) - A (3.5)	NA ³
2022 Build Improvements	WB ² NB SB ¹	1 LT, 1 RT 1 TH-RT 1 LT-TH	C (17.3) - A (6.4)	NA ³	B (12.0) - A (3.5)	NA ³

1. Major street left-turn movement for unsignalized intersection.

2. Stop controlled approach for unsignalized intersection.

3. Overall intersection LOS is not provided for unsignalized intersections

Bold denotes improvement on approach.

5.4.3. Optimist Club Road and NC 16 Bypass

The intersection of Optimist Club Road and NC 16 Bypass was analyzed as a four-leg unsignalized directional crossover intersection with existing lane configurations. Table 6 summarizes the capacity analysis results. Refer to Appendix G for the Synchro reports for this intersection. Impacts requiring mitigation are highlighted in yellow. All SimTraffic reports can be found in Appendix I.

Full build out of the site is expected to have little impact at this intersection. No change in level of service is expected to be caused by the proposed development. The eastbound approach is expected to operate at LOS F during the AM peak hour of the 2022 No-Build scenario. The westbound approach is expected to operate at LOS F during the PM peak hour of the 2022 No-Build scenario. The proposed development is not expected to increase delay more than 25%. SimTraffic indicates the queue on the eastbound approach is expected to be less than 450 feet. The westbound queue is expected to be less than 250 feet.

No improvements by the developer are recommended at this intersection. The impacts to traffic operations are minimal. NCDOT plans to make improvements at this intersection; possibly signalizing the intersection or grade separating the intersection. Based on coordination with NCDOT and Lincoln County, no improvements by the developer are required at this intersection.

TABLE 6
ANALYSIS SUMMARY OF
OPTIMIST CLUB ROAD AND NC 16 BYPASS

ANALYSIS SCENARIO	A P P R O A C H	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
			Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2018 Existing	EB ² WB ² NB ¹ SB ¹	1 RT 1 RT 1 LT, 2 TH, 1 RT 1 LT, 2 TH, 1 RT	D (33.5) C (20.1) B (13.7) B (10.9)	NA ³	B (13.2) E (39.3) B (11.3) C (15.4)	NA ³
2021 No-Build	EB ² WB ² NB ¹ SB ¹	1 RT 1 RT 1 LT, 2 TH, 1 RT 1 LT, 2 TH, 1 RT	F (101.9) D (26.1) C (15.4) B (11.7)	NA ³	C (16.2) F (84.1) B (13.8) C (17.0)	NA ³
2021 Build	EB ² WB ² NB ¹ SB ¹	1 RT 1 RT 1 LT, 2 TH, 1 RT 1 LT, 2 TH, 1 RT	F (120.1) D (26.4) C (15.5) B (11.7)	NA ³	C (16.7) F (85.0) B (14.2) C (17.0)	NA ³

1. Major street left-turn movement for unsignalized intersection.

2. Stop controlled approach for unsignalized intersection.

3. Overall intersection LOS is not provided for unsignalized intersections

5.4.4. North Little Egypt Road and Site Drive 1

The intersection of North Little Egypt Road and Site Drive 1 was analyzed as a three-leg unsignalized intersection with full access. Table 7 summarizes the capacity analysis results. Refer to Appendix H for the Synchro reports and turn lane warrants for this intersection. All SimTraffic reports can be found in Appendix I.

After reviewing NCDOT warrants for left and right turn lanes, it was determined a northbound left turn lane is warranted on North Little Egypt Road. It is recommended this turn lane have 100 feet of storage and appropriate taper. The turn lane warrants can be found in Appendix H. It is recommended that Site Driveway 1 be constructed with one ingress lane and one shared left / right egress lane.

Analysis indicates that the intersection will operate at acceptable levels of service in the 2022 Build scenario. SimTraffic results show no queuing issues at the intersection. A preliminary review of the sight distances at the intersection did not identify any issues.

TABLE 7
ANALYSIS SUMMARY OF
NORTH LITTLE EGYPT ROAD AND SITE DRIVE 1

ANALYSIS SCENARIO	A P P R O A C H	LANE CONFIGURATIONS	AM PEAK HOUR		PM PEAK HOUR	
			Approach LOS (Delay)	Overall LOS (Delay)	Approach LOS (Delay)	Overall LOS (Delay)
2022 Build	EB ² NB ¹ SB	1 LT-RT 1 LT, 1 TH 1 TH-RT	B (13.7) A (8.1) -	N/A ³	B (13.7) A (8.3) -	N/A ³

1. Major street left-turn movement for unsignalized intersection.

2. Stop controlled approach for unsignalized intersection.

3. Overall intersection LOS is not provided for unsignalized intersections

Bold denotes improvement on approach.

6. CONCLUSIONS

This report summarizes the findings of the Traffic Impact Study (TIS) that was performed for the proposed Bella Vista development to be located along the west side of North Little Egypt Road, north of NC 73 in Denver, North Carolina. The purpose of this study is to determine the potential impact to the surrounding transportation system caused by the traffic generated by the development.

The site is proposed to consist of 225 single-family homes. One full access driveway is proposed on North Little Egypt Road. The site is expected to be fully built by the year 2021.

6.1. Summary of Recommended Improvements

Based on the analysis results, some impacts are expected by the proposed development. Figure 11 illustrates the improvements recommended to be completed by the developer. The following recommendations and improvements should be made by the developer prior to the recording of the plat for the first phase of the development:

NC 73 and North Little Egypt Road

- NCDOT is planning improvements at this intersection. Based on coordination with NCDOT and Lincoln County, no improvements by the developer are required at this intersection.

North Little Egypt Road and Optimist Club Road

- Construct a westbound right turn lane on Optimist Club Road with 100 feet of storage and appropriate taper.

Optimist Club Road and NC 16 Bypass

- NCDOT is planning improvements at this intersection. Based on coordination with NCDOT and Lincoln County, no improvements by the developer are required at this intersection.

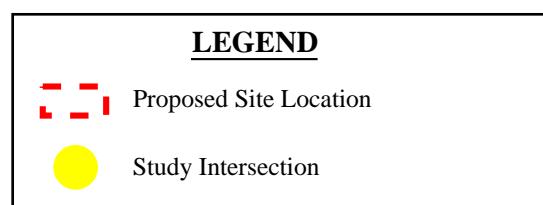
North Little Egypt Road and Site Driveway 1

- Construct a northbound left turn lane on North Little Egypt Road with 100 feet of storage and appropriate taper.
- Construct Site Driveway 1 with one ingress lane and one shared egress lane (left-right).

TECHNICAL APPENDIX

APPENDIX A

FIGURES



Bella Vista
Lincoln County, NC

Site Location Map

Scale: Not to Scale

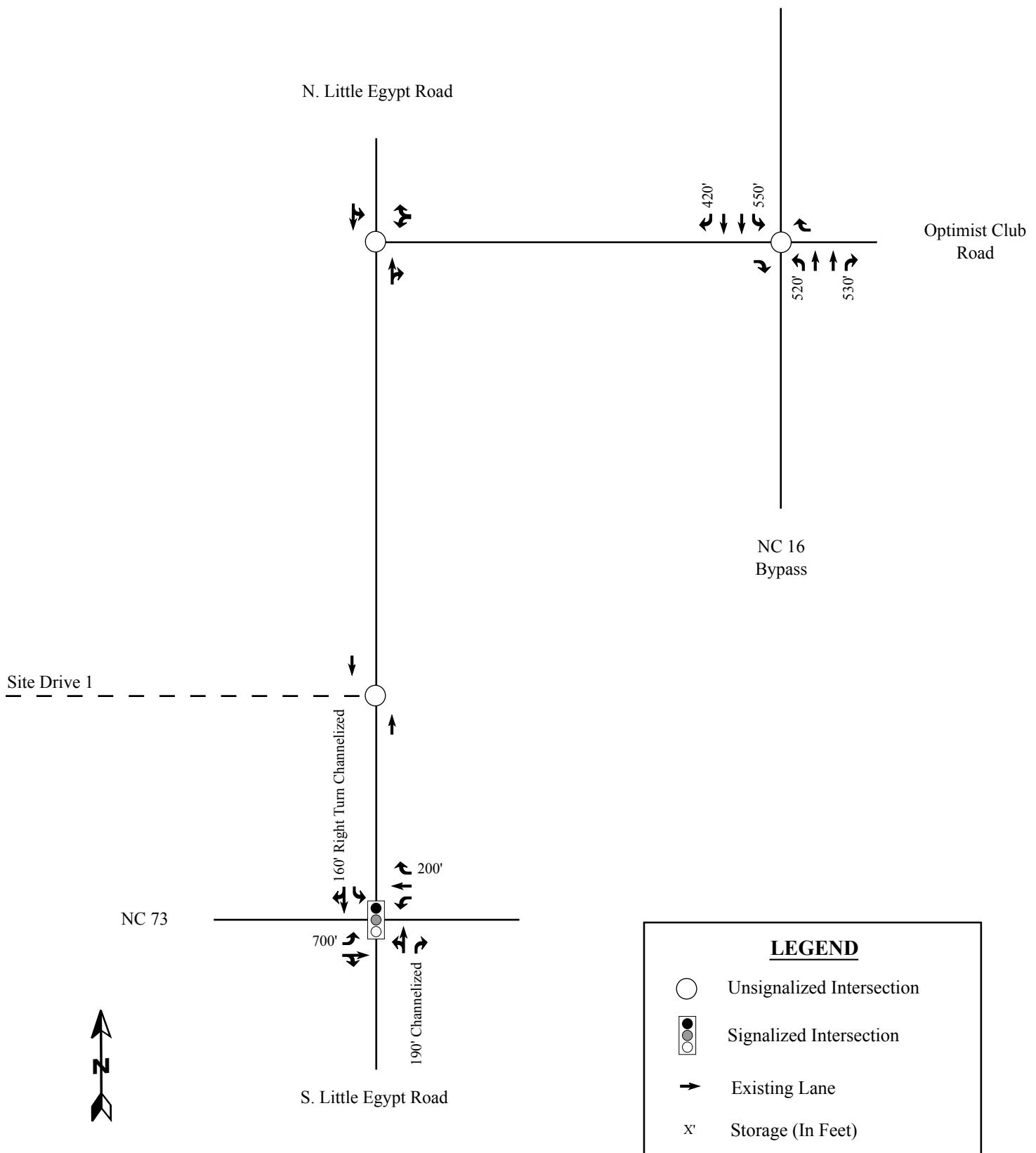
Figure 1

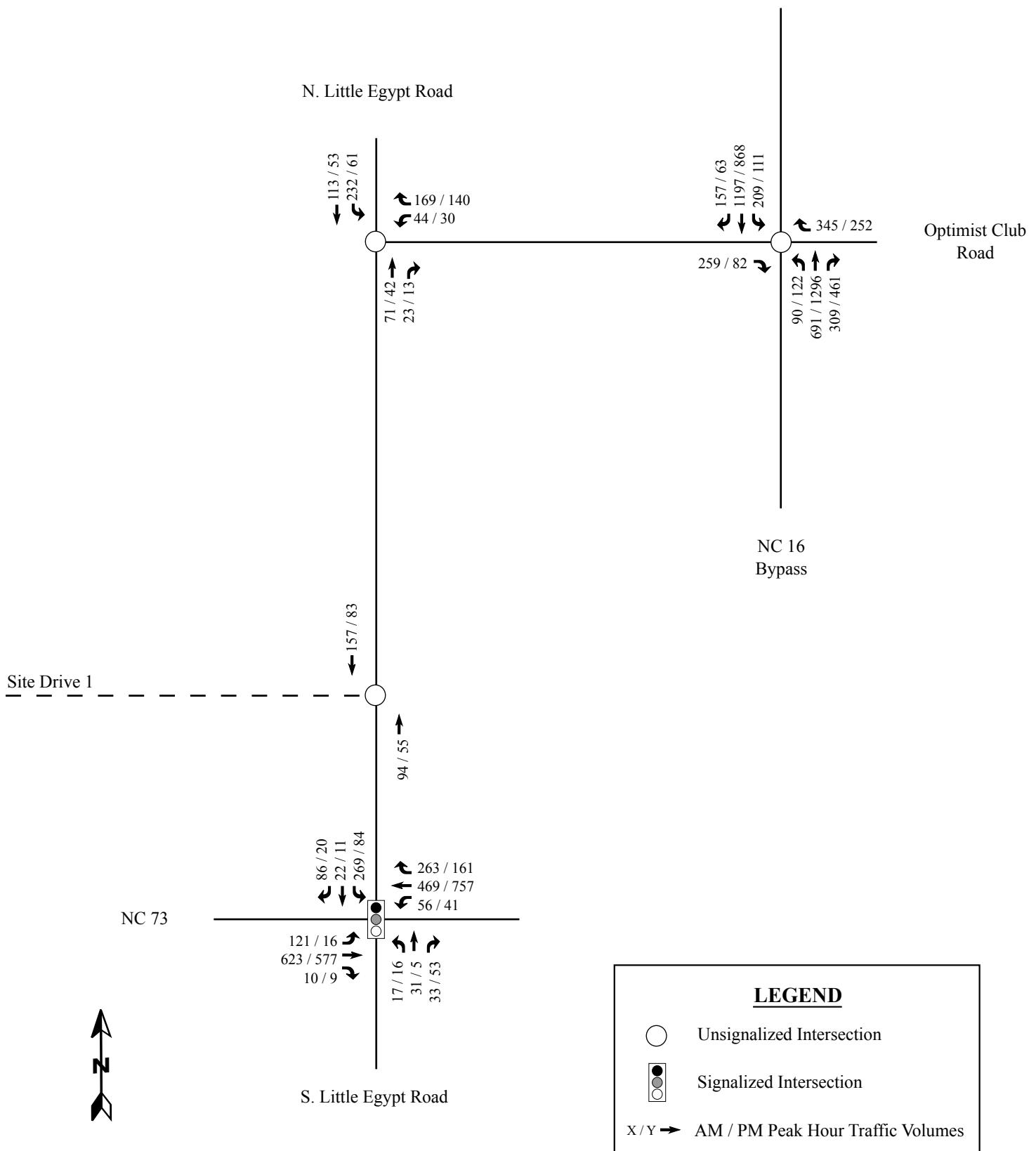


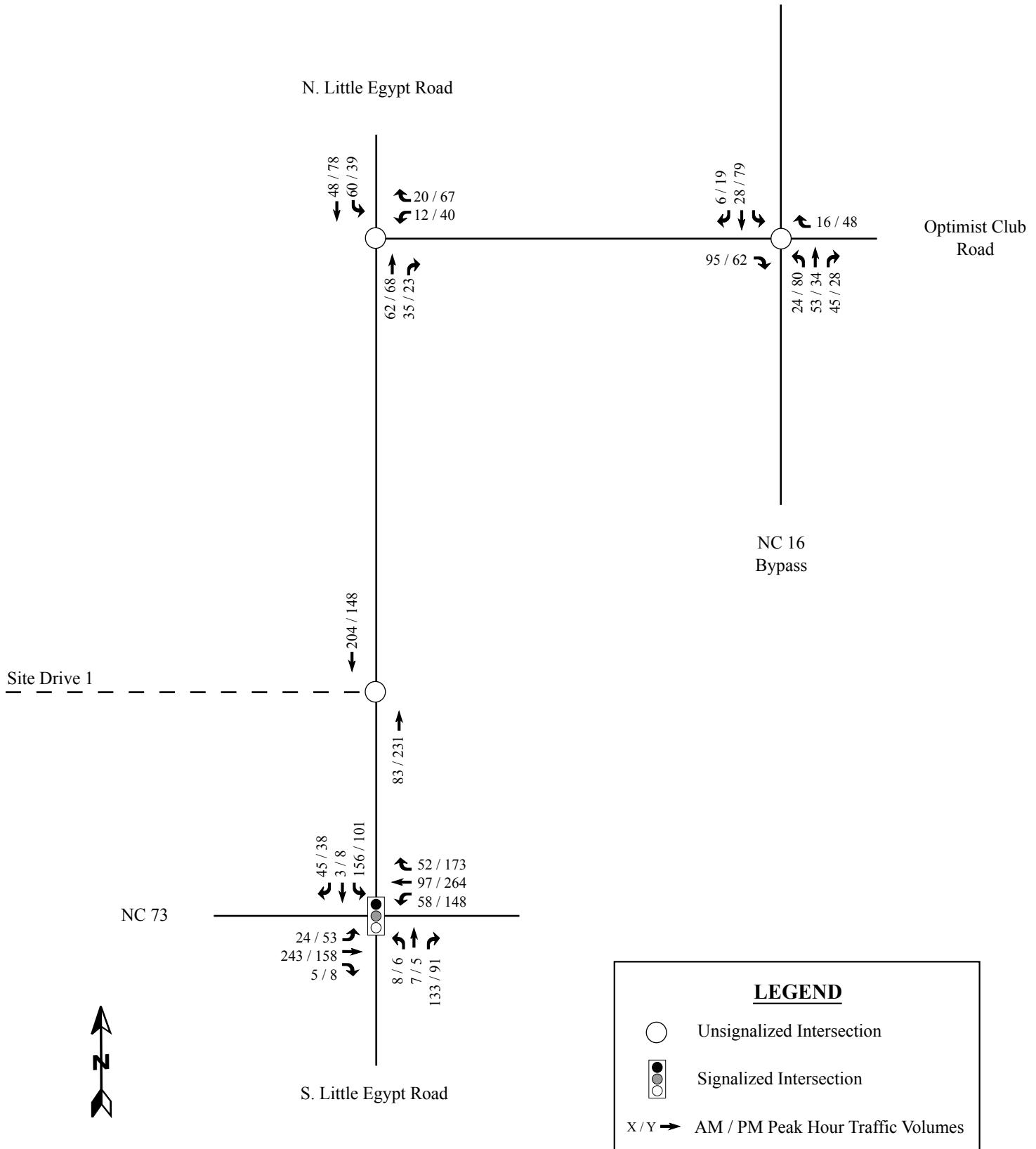
Bella Vista Lincoln County, NC

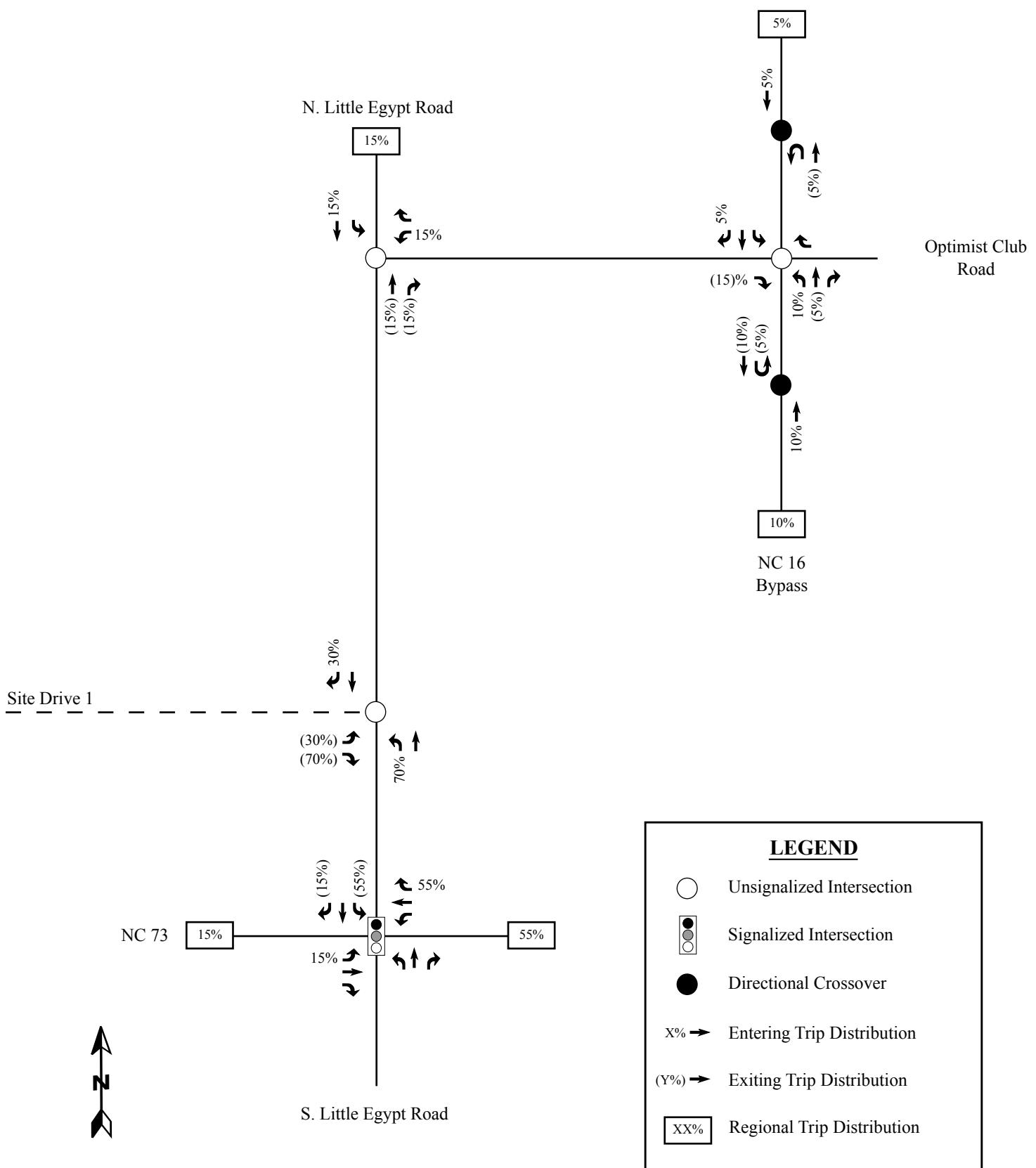
Preliminary Site Plan

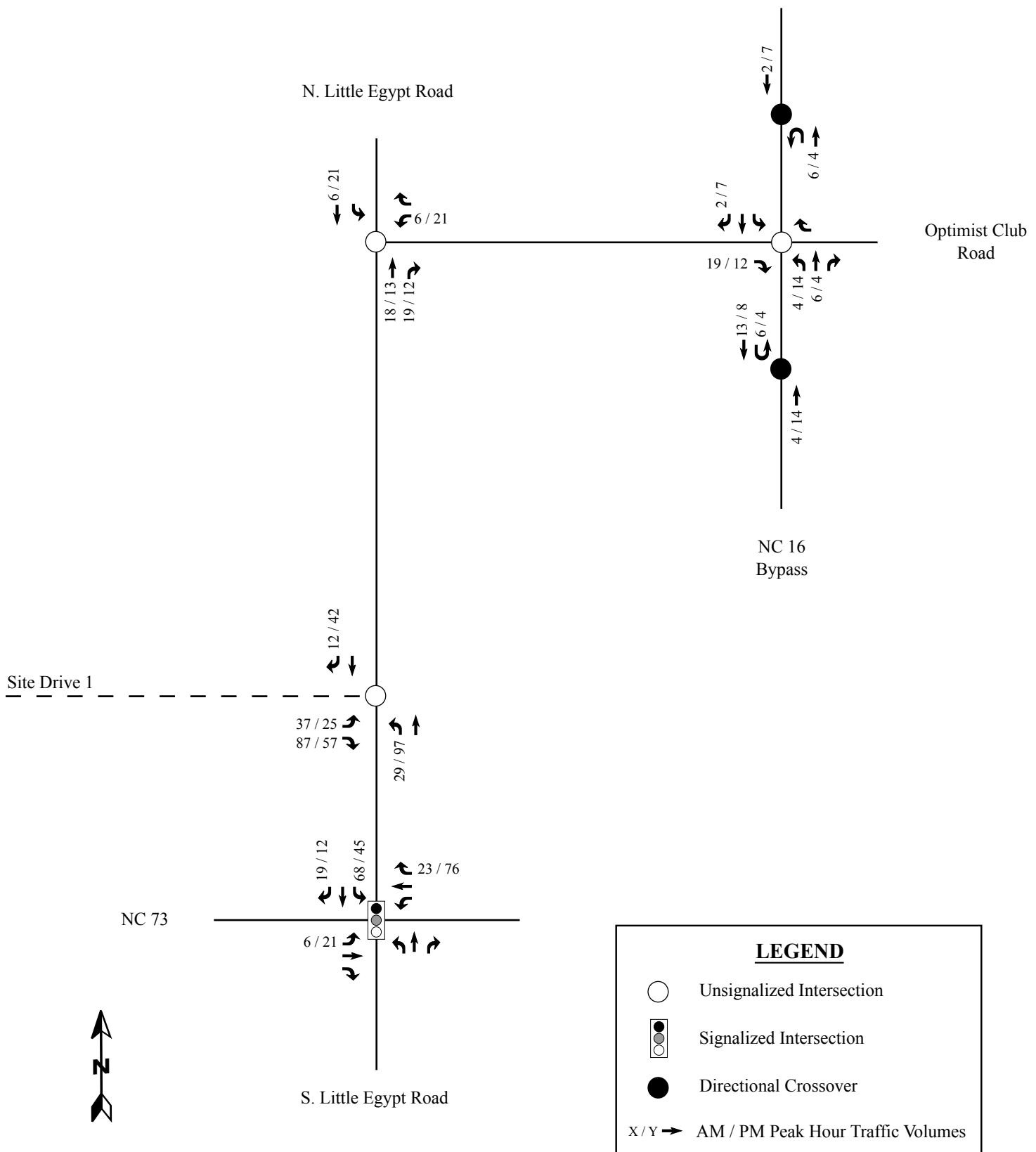
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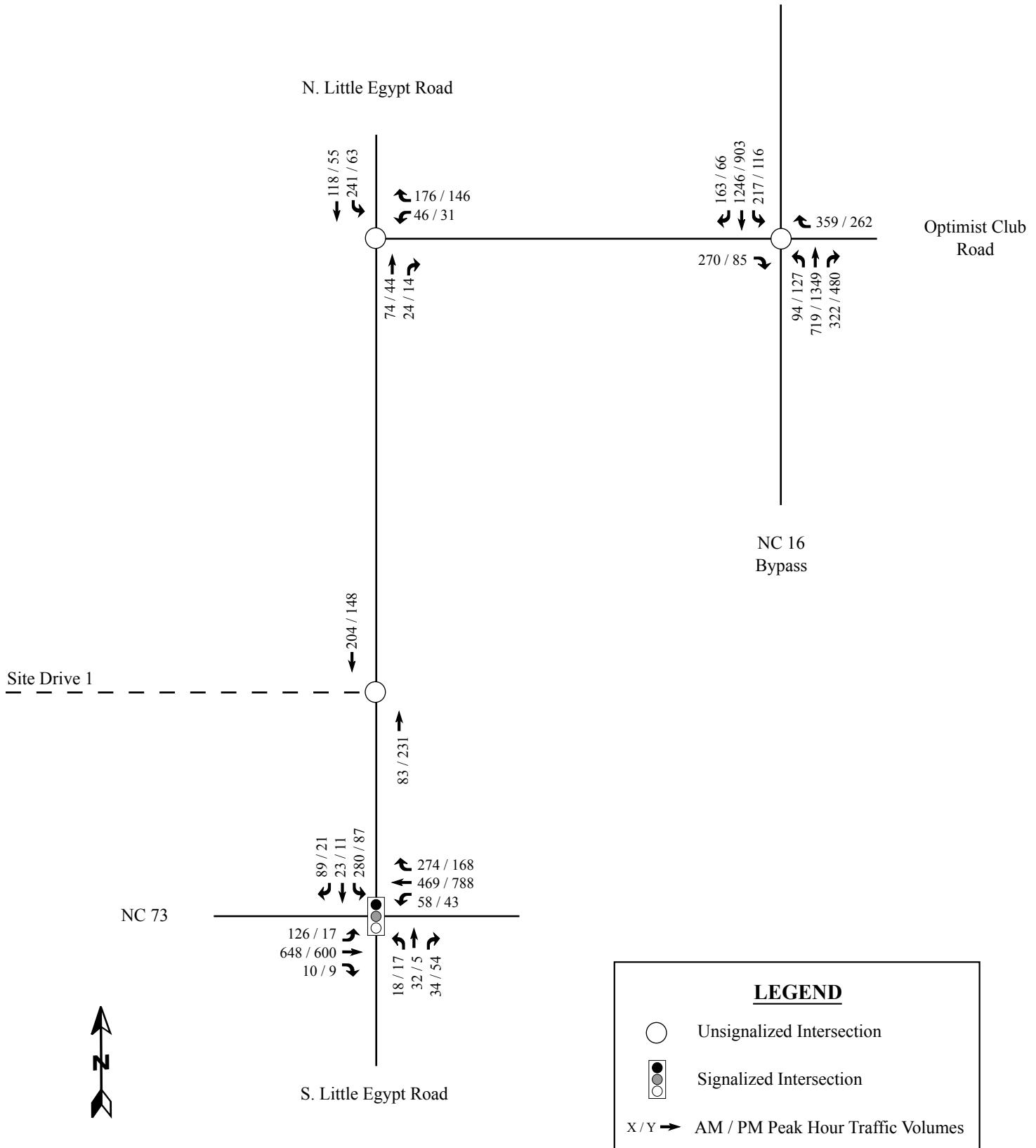


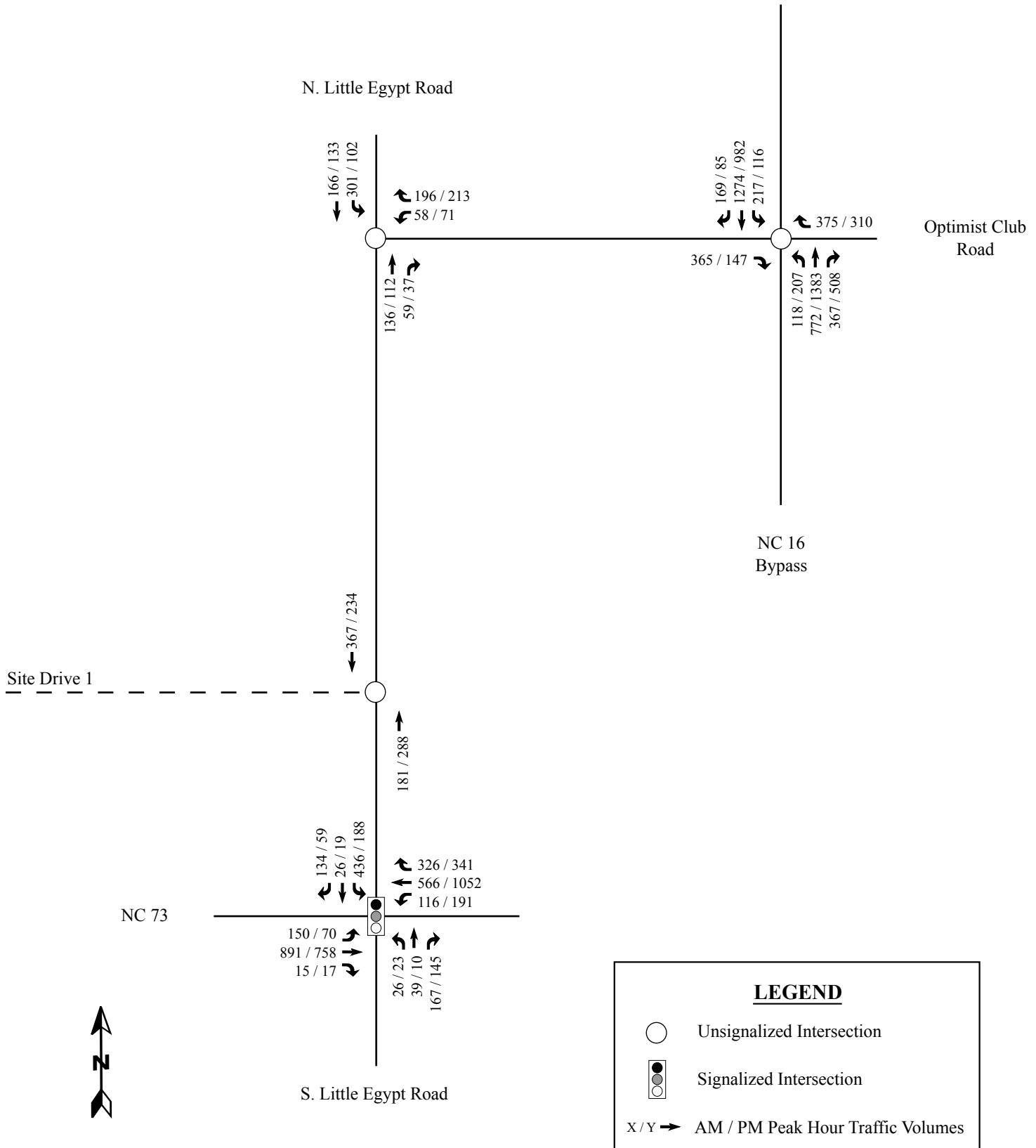


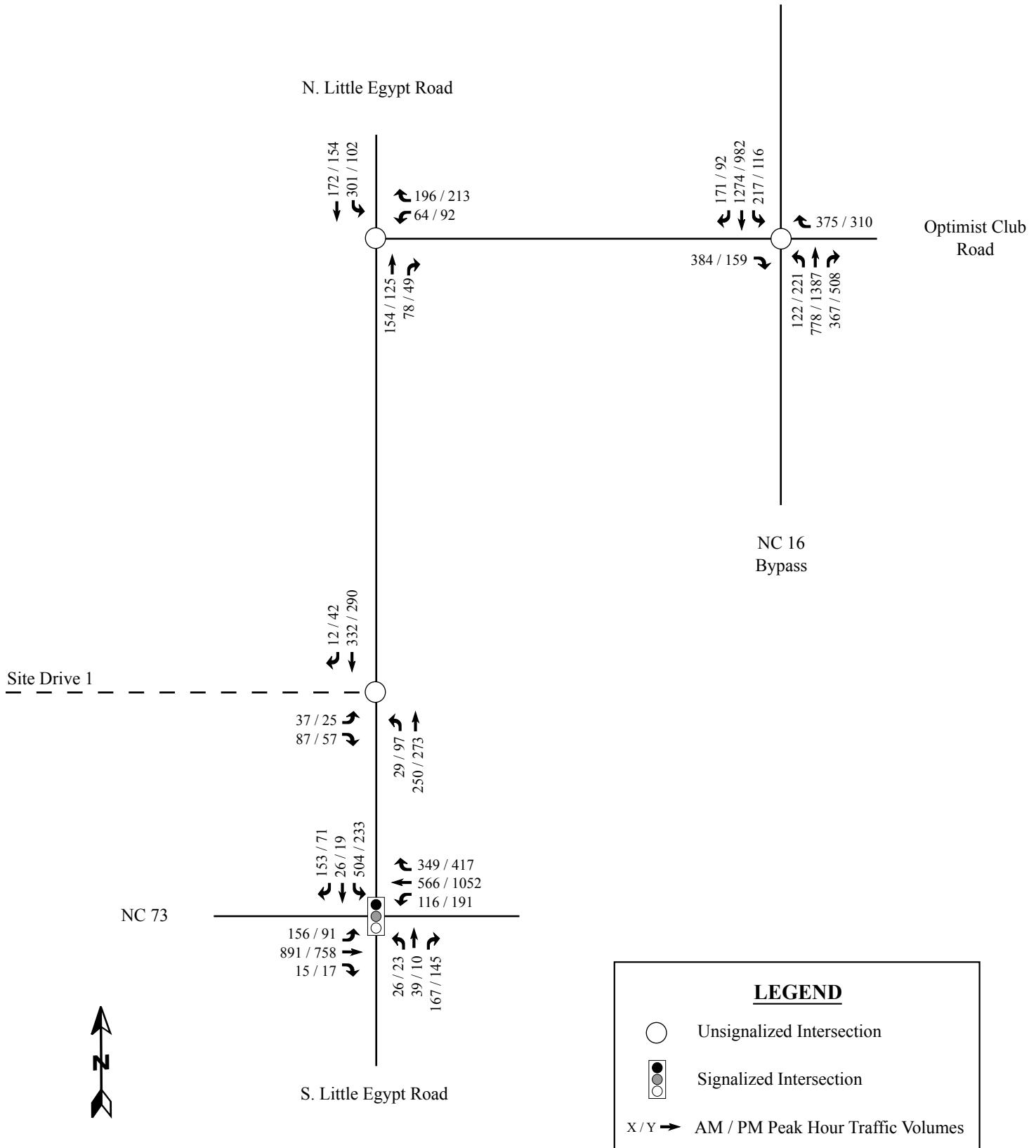


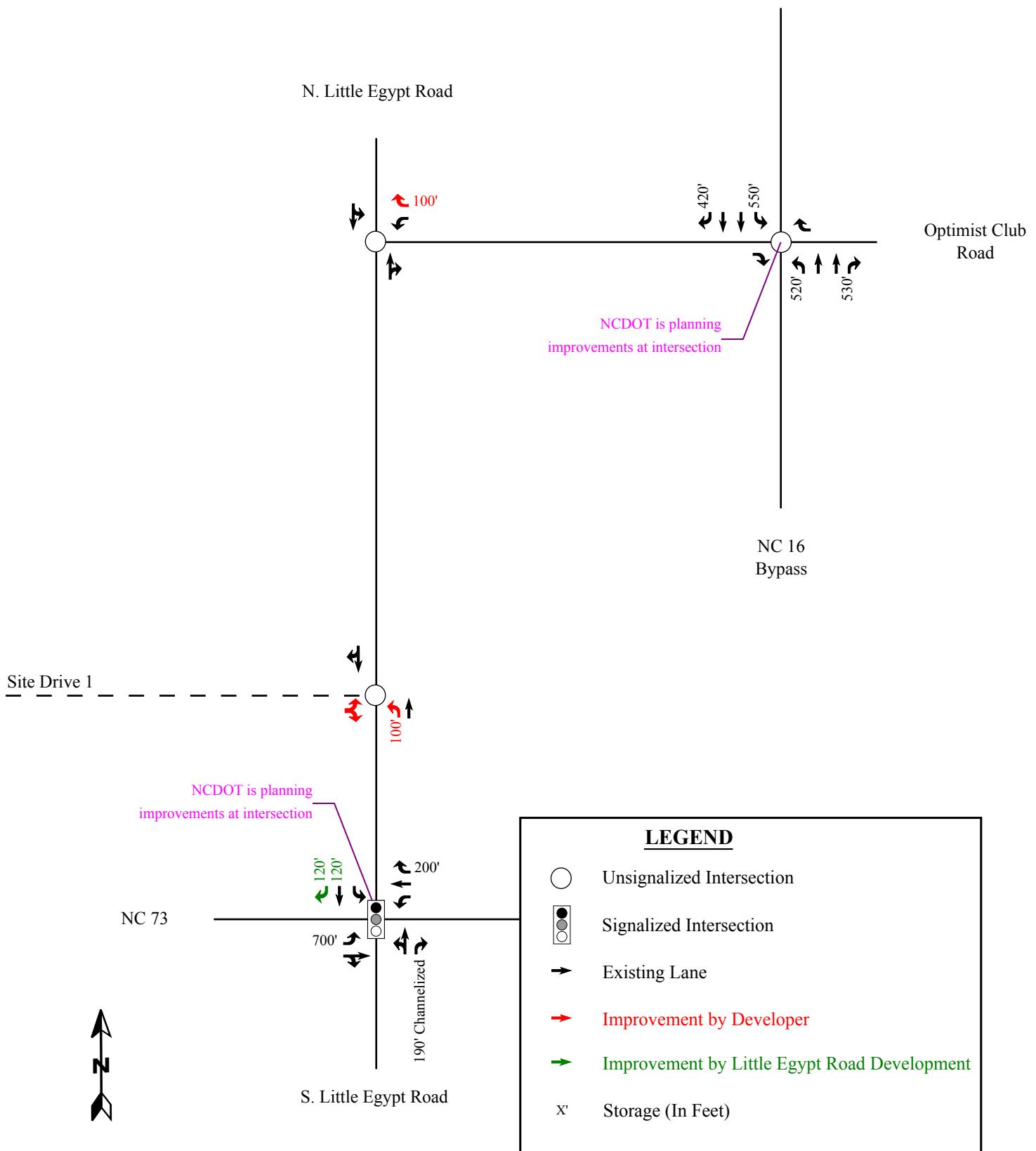












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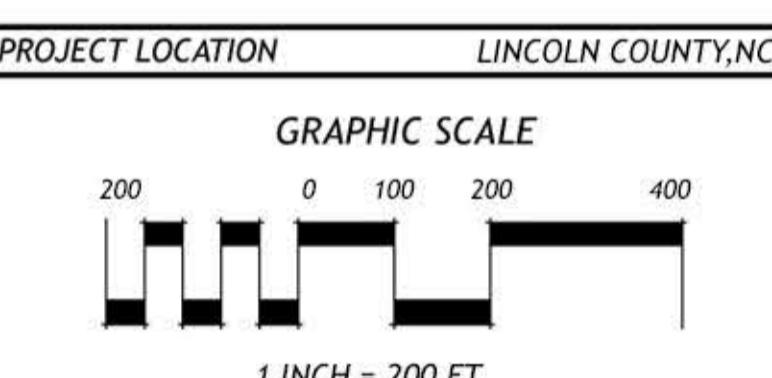
taylor
morrison

Homes Inspired by You



BELLA VISTA

PRELIMINARY DEVELOPMENT CONCEPT PLAN



PROJECT NUMBER GQ04

DRAWING NAME GQ04-Bella Vista-Little Egypt Submittal

DATE September 6, 2018

DRAWN BY SE

CHECKED BY MM

AGENCY / SUBMITTAL REVISION

NO.	DATE	BY	REVISION
1	10/11/18	SE	Per Staff Comments

SECTION A-A

SECTION A-A'

SECTION A-A'