

305 Chestnut Street
PO Box 1810
Wilmington, NC 28402
Ph: (910) 341-3258
Fax: (910) 341-7801
www.wmpo.org

October 3, 2016

Eddie Wetherill, PE
Wetherill Engineering
1223 Jones Franklin Rd.
Raleigh, NC 27606

RE: Approved Scope for the Traffic Impact Analysis (TIA) associated with the proposed
Hampstead Retail and Apartments Development
Pender County, NC

Dear Mr. Wetherill:

Based on the information provided, and conversations held to date, it is our understanding that the proposed development will consist of:

- 89,000 SF Shopping Center
- 196 Apartments

This development is located east of US 17 between Hughes Road and Deerfield Drive in Pender County, North Carolina.

The site plan provided proposes access at the following points:

- US 17 and Entrance 1
- SR 1618 (Hughes Road) and Entrance 2
- New Connector and Entrance 3

Below please find the scope to be used for the Traffic Impact Analysis:

1. Data Collection - Analysis Parameters:
 - a. Existing Conditions

Wilmington Urban Area Metropolitan Planning Organization

i. Turning movement counts weekday AM (6:30 AM – 8:30 AM) and PM (4:00 PM – 7:00 PM) peak periods, Signal Timing (if applicable) and Lane Geometry;

- US 17 and NC 210
- US 17 and Deerfield Drive
- US 17 and Washington Acres Drive
- US 17 and site drive
- US 17 & Hughes Road
- Hughes Road and Site Access
- Hughes Road and New Connector Road
- Deerfield Drive and New Connector Road
- Deerfield Drive and Creekview Drive

ii. Signal plans may be acquired by sending an email request to NCDOT Traffic Services: Ross Kimbro, rkimbrot@ncdot.gov or by calling (910) 341-0300

b. Site Trip Generation, Site Trip Distribution and Background Traffic Assumptions

i. Site Trip Generation Estimate

- See attached

ii. Site Trip Distribution

- Approved with attached modifications

iii. Adjacent Development (approved (but as of yet to be built)) development including but limited to;

- Trihabitat

iv. Planned Roadway Improvements

- U-5732

v. Background Traffic Assumptions

- Horizon year – 2021
- Growth rate – 1% per year

2. **Capacity Analysis: Week day AM & PM Peak Hour (as listed and for locations per 1.a.i)**

a. Existing – 2016

b. 2021 Future No-Build Conditions
[existing +1% background growth]

c. 2021 Full Build Conditions
[existing +1% background growth + site trips]

3. Final Report Submittal:

- a. Completed TIA Application
- b. Signed and sealed by a Professional Engineer
- c. Five bound copies
- d. Five Electronic copies to include PDF of TIA and Synchro files and Synchro analysis files in digital format

4. Notes:

- i. TIA's shall be prepared according to NCDOT Congestion Management Guidelines. Any deviations from such shall be approved prior to preparation of the TIA.
- ii. This scope shall remain valid for three months from the date of this letter.
- iii. Please note that if any changes occur (including but not limited to; land use, intensity, phasing, and/or site access) additional analysis may be required.
- iv.

Please contact me at 910-473-5130 with any questions regarding this scope.

Sincerely,



Amy Kimes, PE
Project Manager
Wilmington Metropolitan Planning Organization

Attachments: Trip Generation Summary (provided by Wetherill)
Site Map (provided by Wetherill)
Approved Trip Distribution (provided by Wetherill, amended)

Cc: Patrick Riddle, District Engineer, NCDOT
Jessi Leonard, PE, Division Traffic Engineer, NCDOT
Stoney Mathis, PE, Deputy Traffic Engineer, NCDOT
Kyle Breuer, Planning Director, Pender County
Megan Crowe, Senior Planner, Pender County
Bill McDow, Transportation Planner, WMPO
Mike Kozlosky, Executive Director, WMPO

Trip Generation Summary - Alternative 1
Average Weekday Driveway Volumes

Project: Hampstead Retail & Apartments
Alternative: Alternative A'Z

Open Date: 9/29/2016
Analysis 9/29/2016

ITE	Land Use	Average Daily Trips			AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Adjacent Street Traffic			Adjacent Street Traffic		
					Enter	Exit	Total	Enter	Exit	Total
220	APT 1	656	655	1311	20	80	100	81	44	125
	196 Dwelling Units									
820	CENTERSHOPPING 1	3148	3148	6296	90	55	145	266	288	554
	89 Gross Leasable Area 1000 SF									
Unadjusted Driveway Volume		3804	3803	7607	110	135	245	347	332	679
Unadjusted Pass-By Trips		0	0	0	0	0	0	90	98	188
Internal Capture Trips		0	0	0	1	1	2	55	55	110
Adjusted Driveway Volume		3804	3803	7607	109	134	243	292	277	569
Adjusted Pass-By Trips		0	0	0	0	0	0	76	82	158
Adjusted Volume Added to Adjacent Streets		3804	3803	7607	109	134	243	216	195	411

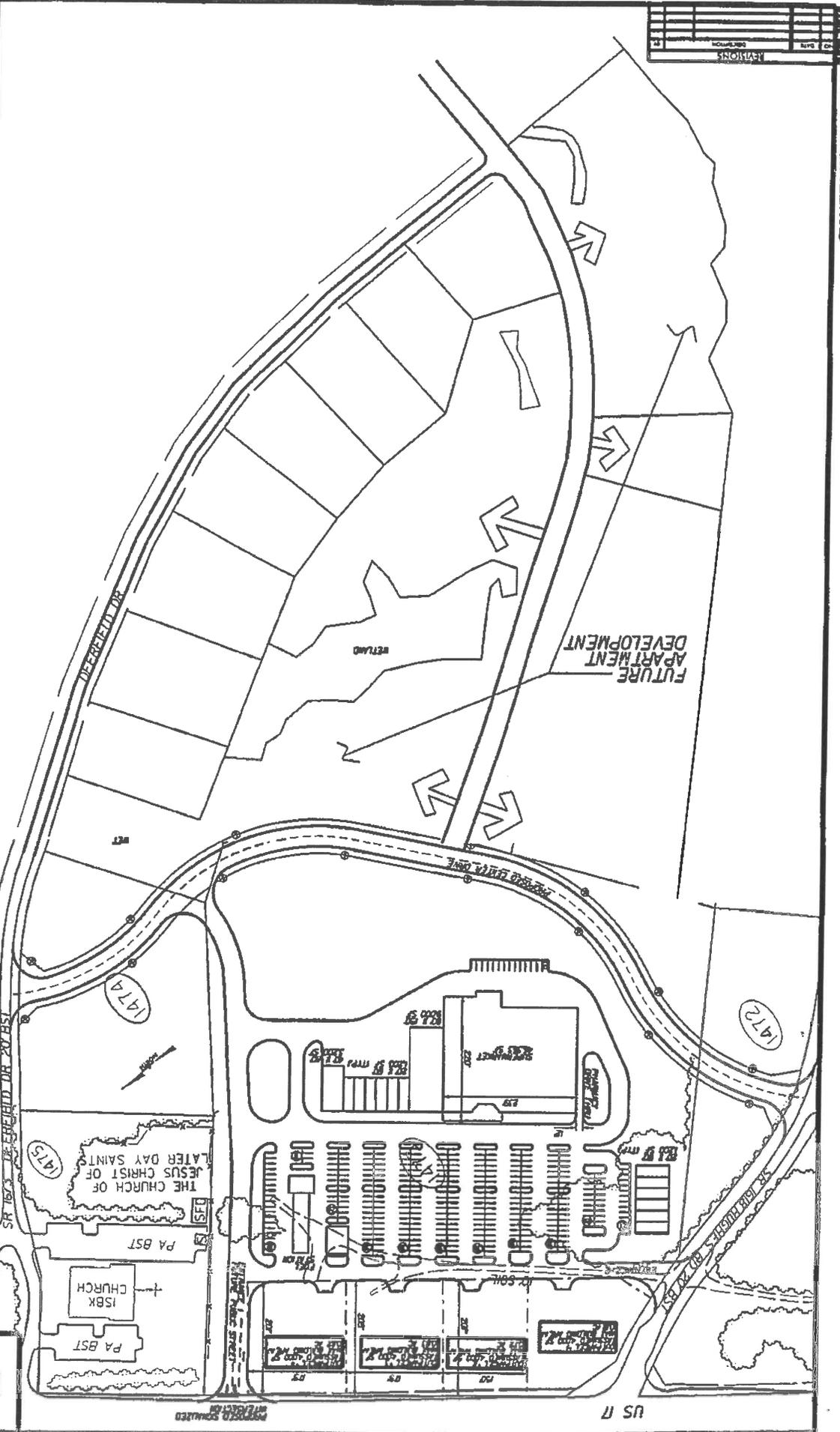
Total AM Peak Hour Internal Capture = 1 Percent

Total PM Peak Hour Internal Capture = 16 Percent

DATE	1/11/74
BY	...
CHECKED	...
APPROVED	...

HANSTAD RETAIL DEVELOPMENT
 PROJECT CONSULTANT
 100 WEST 10TH
 MINNEAPOLIS, MN 55402

FIGURE 1 - ANDERSON CONCEPT SITE PLAN

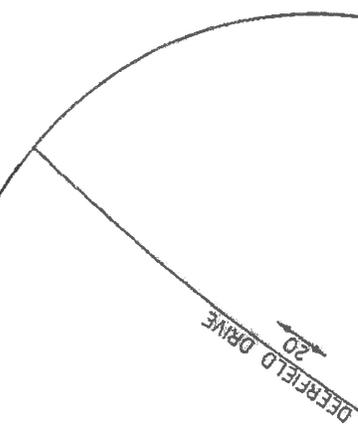


US 77



DAN OWEN DRIVE

HUGHES ROAD



CENTER DRIVE

SITE ENTRANCE 1

SITE

ENTRANCE 1

ENTRANCE 2

US 17

WILMINGTON

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RALEIGH, N.C. 27606
BUS: 919 8518077
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ETHERILL
ENGINEERING



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FIGURE 1
2021 SHOPPING CENTER
DIRECTIONAL DISTRIBUTION

HAMPSTEAD RETAIL & APARTMENT
DEVELOPMENT
US 17 & HUGHES ROAD
PENDER COUNTY

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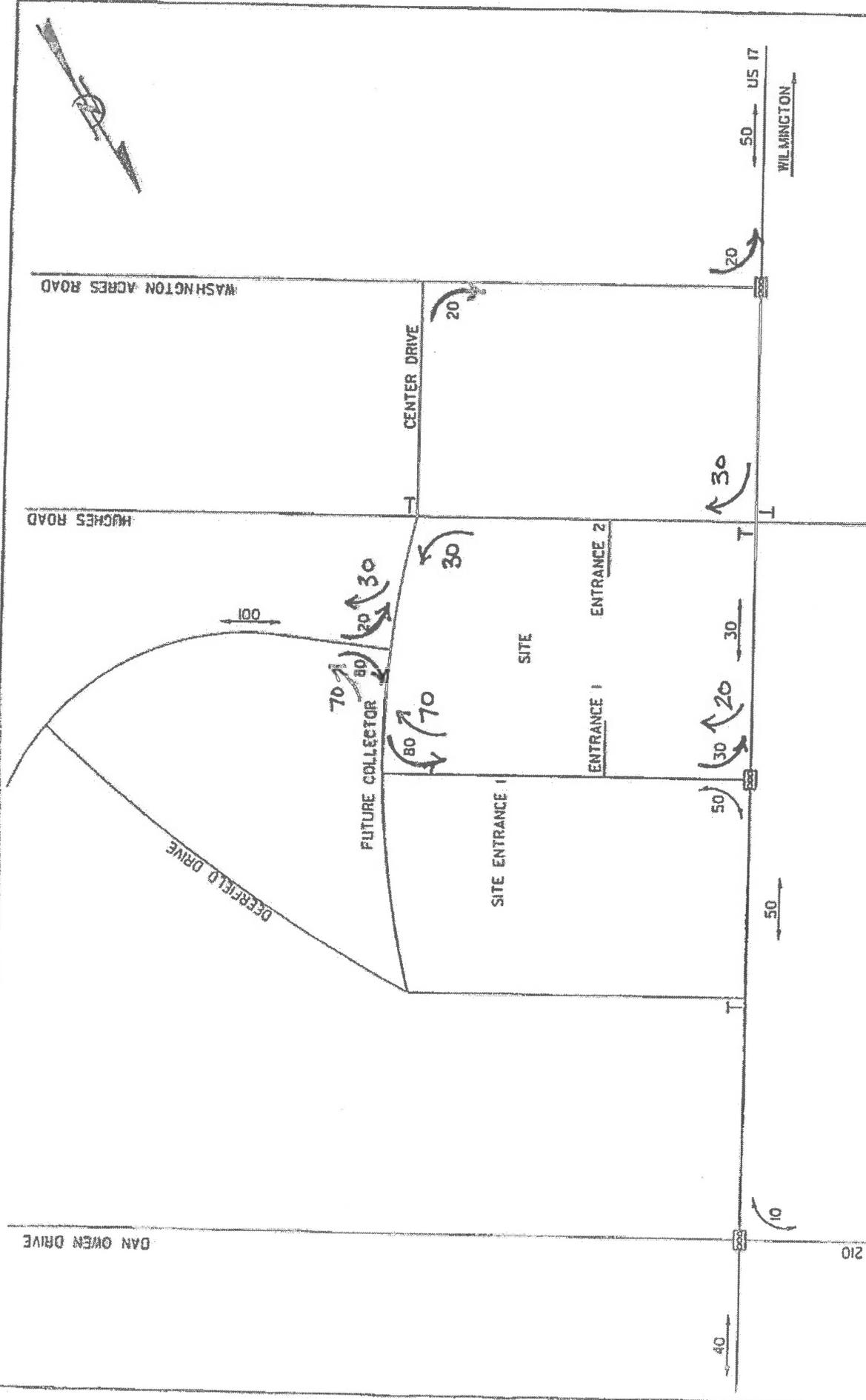
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FIGURE 2
 2021 APARTMENT
 DIRECTIONAL DISTRIBUTION

HAMPSTEAD RETAIL & APARTMENT
 DEVELOPMENT
 US 17 & HUGHES ROAD
 PENDER COUNTY

XX 2
 NOT TO SCALE