

PLANNING COMMISSION

August 10, 2023 at 4pm City Council Chambers, 3rd Floor, 1737 Main Street, Columbia, SC 29201

PRELIMINARY PLAT CASE SUMMARY 25.35 ACRES, TRINITY DRIVE, 1458 AND 1482 CAROLINE ROAD, TMS#16414-08-02, -03, AND -04 TRINITY ROAD TOWNHOME DEVELOPMENT

Council District:	4	
Proposal:	Request pro	eliminary plat approval to construct an attached townhome subdivision
Applicant:	Luke Boatr	ight, Stanley Martin Homes
Proposed Use:	Residential	
Staff Recommendation:	Approval v	vith staff comments.
Detail:	This property is bounded by Trinity Drive, Patterson Road, and Caroline Drive. The proposed subdivision will contain 210-attached single-family residences on 25.35 acres. The single-family residences will contain approximately 1,800 sq. ft. and the lots will contain a minimum of 1,620 sq. ft. Two off-street parking spaces will be provided for each townhome and an additional 59 parking spaces for guests will be provided. In addition, some of the property will be preserved as open space with walking trails. In accordance with Section 17-2.5. Application-Specific Review Procedures and Decision Standards (j) Subdivision of the Unified Development Ordinance, a preliminary plat shall be approved upon a finding that the proposed Preliminary Plat is in substantial conformity with the approved Sketch Plan and complies with the standards in Article 6: Land Development (Subdivision) Standards, any other applicable standards in this Ordinance, and any other applicable City ordinances and regulations. The sketch plan and sketch plan approval letter for this project is attached for Planning Commission review. Should the Commission be inclined to grant approval of this preliminary plat, staff requests that the Commission make the finding that all of the requirements of Section 17-2.5. listed above are met and conditioned upon the following staff comments.	
Dianning and Davalanma	CI' nt Services	TY KEVIEWING AGENCY COMMENTS Pagammand approval with conditions:
Utilities	in Services	 Fire rating of walls less than 5' to the property lines. In each townhome grouping the end units appear to have zero lot lines on the outside ends. Tree protection plan for the existing trees to remain must be provided prior to the issuance of any permits. Must meet all applicable building codes.

	1. Any needed upgrade, extension or relocation of City utilities must be
	provided by the developer and must meet the City's minimum design
	standards.
	2. Any privately owned/maintained utilities or permanent structures cannot
	be located inside City of Columbia utility easements.
	3. Water mains, water meters that are 4" or larger or any privately
	maintained utilities will not be allowed inside public right-of-ways or
	under sidewalks without an approved encroachment permit and written
	approval from the City Engineer. Coordination between the Civil
	Engineer, Architect and Mechanical Engineer to allow room for these
	utilities on the developed property is strongly suggested.
	4. If sewer flows for this project result in flows of 4,000 gallons per day or
	above calculations must be submitted to the City's Engineering
	department to determine how the proposed project will affect the City's
	sewer system. Depending upon the effects of the projected flows this
	project may or may not be approved. If required, these calculations
	should be submitted to the Engineering department as soon as possible.
	5. Sidewalks to be installed around the entire road ROW and in accordance
	with City of Columbia Engineering Regulations.
Traffic Engineering	Recommend approval.
Fire Department	Recommend approval.
Fire Department Forestry	Recommend approval. Recommend approval with condition:
Fire Department Forestry	Recommend approval. Recommend approval with condition: 1. New landscaping or irrigation installed in the right of way must be
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Fire Department Forestry Stormwater	 Recommend approval. Recommend approval with condition: New landscaping or irrigation installed in the right of way must be maintained by the adjacent property owner in a manner to not interfere with vehicular and pedestrian traffic. New Trees must be planted in Right of Way in accordance with City ordinance. New trees must be watered and maintained for 2 years from planting. Be sure to use a species variety to prevent canopy monoculture. Recommend approval with condition:
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Fire Department Forestry Stormwater Parking Services	 Recommend approval. Recommend approval with condition: New landscaping or irrigation installed in the right of way must be maintained by the adjacent property owner in a manner to not interfere with vehicular and pedestrian traffic. New Trees must be planted in Right of Way in accordance with City ordinance. New trees must be watered and maintained for 2 years from planting. Be sure to use a species variety to prevent canopy monoculture. Recommend approval with condition: Development must comply with all applicable land disturbance requirements.
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Trinity Townhomes





CITY OF COLUMBIA GIS DATA DISCLAIMER

The City of Columbia GIS data represented on this map or plan is the product of compilation, as produced by others. It is provided for informational purposes only and the City of Columbia makes no representation as to its accuracy. Its use without field verification is at the sole risk of the user.



Trinity Townhomes





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Tuesday, February 21, 2023



Checklist for All Applications

A complete preliminary plat application shall include the following information. Please initial to signify that the requested information has been provided.

		Applicant Initials	Staff Initials
A copy of this Application Checklist, completed by the	e applicant.	DKB	
A completed and signed Application Form		DKB	
Letters of Agency for all applications where the applicant is not the owner of the subject property		DKB	
Payment of the required fee (see the Fee Schedule in A Manual)	ppendix <> of the Procedures	TO BE PAID IN THE PORTAL	
Preliminary Plat Multiple sheets may be required. Please see page 4 below for required content.	1 copy: min. 18 x 24 inches or 1 digital copy (pdf format)	DKB	
Landscape Plan Please see below for required content	1 copy: min. 18 x 24 inches or 1 digital copy (pdf	DKB	
	iormal)		



1. Applicant Information

Name Luke Boatright	
Company (if applicable)	anley Martin Homes
Address (street, city, state, zip)	00 Executive Center Drive Suite 200 Columbia, SC 29210
Phone 803.466.3747	Email boatrightLT@stanleymartin.com

2. Property Information

Address	7300 Patterson Ro	ad		
Tax Map Reference	Number(s)	R164	14-08-02,03,04	
Current use	Vacant (Wooded)		Proposed use Town	homes
Current zoning	OI	Number of l	ots	Total acreage 25.35

3. Property Status

Pursuant to S.C. Code § 6-29-1145, is this tract or parcel restricted by any recorded covenant that is contrary to, conflicts with, or prohibits the activity described in this permit?

4. Property Ownership

If the applicant <u>does not</u> own the property, complete the **Letter of Agency** for each property owner that authorizes the applicant to submit this application on the property owner's behalf.

	For staff use only	
Date received (M/D/Y):	//	Ву:

City of Columbia, Department of Planning and Development 1136 Washington St., Columbia, SC 29201 https://www.columbiasc.net/planning-development



5. Approved Sketch Plan

Please provide the case number of the approved sketch plan related to this application:

SPLAT-2023-0008

6. Additional Submission Requirements

Preliminary Plat

The proposed preliminary plat shall be prepared to scale and fully dimensioned, and include the following:

Applicant	Staff
\bowtie	
Ø	
×	
X	
\bowtie	
X	
\bowtie	
	Applicant

Existing Conditions	Applicant	Staff
Topography by contours (at vertical intervals of not more than 5 feet)		
Deed record names of adjoining property owners or subdivisions	Ø	
If a resubdivision, a copy of the existing plat with the proposed resubdivisions superimposed thereon	N/A	
Location of lakes, rivers, streams, swamps/wetlands, other bodies of water, and 100-year floodplains and floodway	図	
Location of existing adjoining property lines	X	
Location of existing buildings on the property to be subdivided	N/A []	
Location of parking and access/driveways	NJ	
Location of rights-of-way and/or easements for streets, railroads, and utility	凶	
Location of utility lines, identification of whether lines are in easements or rights-of-way, and identify the location of poles or towers, width of right-of-way, and name of each utility	X	
Location of streets, alleys, railroads, and utility lines upon and abutting subject property	\boxtimes	
Location of intersections within 200 feet of the property	×	
Size and location of existing sewers, water mains, drains, culverts, or other underground facilities within the street or within the right-of-way of streets or roads adjoining or within the tract.	⊠	
Grades, invert, and rim elevations of existing sewers shall be shown.	\bowtie	
If relocation of existing sewers is proposed, a complete plan and profile of existing conditions, as well as a plan and profile of proposed conditions, must be shown	Ν/Α[]	
Acreage of each drainage area affecting the proposed subdivision	∑]	
Location of city limit lines and county lines, if applicable	\boxtimes	

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Major Subdivision – Preliminary Plat

Application and Checklist

Existing Conditions	Applicant	Staff
Tax map reference number(s)	\boxtimes	
Existing zoning	図	
Proposed Conditions	Applicant	Staff
Layout of streets, roads, sidewalks, and alleys, with widths	×	
Construction plans for streets showing natural and finished grades and cross sections. Where a proposed street is an extension of an existing street, the profile shall be extended to include 300 feet of the existing roadways; the cross section of the existing street also shall be shown	×	
Layout of all lots, scaled dimensions on lots, lot and block numbers, utility easements with width and use, and street names as approved on the sketch plan		
Construction plan and profile for sanitary sewers (if applicable), with grade, pipe size, and material, location of manholes, and points of discharge		
Construction plans for the storm drainage system, with grade, pipe size and material, and location of outlets. Storm drains shall be designed in accordance with criteria outlined in the city storm drainage ordinance. Storm drainage plans shall show sufficient off-site information and include the method and computations where indicated, and a statement by a registered engineer or architect that storm drainage designs meet city ordinances must be provided		
Construction plans for the water supply system, with hydraulic calculation, pipe sizes, material and location of hydrants and valves;	Ø	
Total number of lots, total acreage, acreage per phase, and total length of new streets	×	
Proposed major contour changes in areas where substantial cut or fill is to be done	Ø	
Topography by contours (at vertical intervals of not more than 5 feet) of existing conditions	Ø	
Proposed setbacks (front, side, rear, secondary front)	X	
Location of mailbox kiosks (if applicable)	Ø	

Landscape Plan Requirements		Applicant	Staff
Proposed location for street trees			
Proposed location of trees used to meet Site Tree Density and Tre Standards	e Canopy Cover Retention	×	
Location of all Grand trees	NO GRAND TREES		
Open Space Set-Aside (excluding stormwater management areas amenities)	unless designed as site	\boxtimes	

7. Signature

Signature of Applicant	
Print Name Luke Boatright	Date 4/10/2023

TRINITY TOWNHOMES TRINITY DRIVE FOR **STANLEY MARTIN**





SITE MAP

PROJECT NUMBER 1821007 MAY, 2023



DRAWING INDEX

CIVIL

C0.0	COVER SHEET
C1.0	EXISTING CONDITIONS
C2.0	OVERALL SITE PLAN
C2.1-C2.4	SITE PLANS
C2.5	PROPERTY TABLES
C3.0	OVERALL GRADING AND DRAINAGE PLAN
C3.1-C3.4	CRADING AND DRAINAGE PLANS
C4.1-C4.4	UTILITY PLANS
L1.0	LANDSCAPE PLAN

STANLEY MARTIN HOMES

ATTN:LUKE BOATRIGHT LAND ACQUISITION MANAGER 100 EXECUTIVE CENTER DR, UNIT 200 COLUMBIA, SC 29210 BOATRIGHTLT@STANLEYMARTIN.COM | 803.466.3747



06.20.2023

PROJECT NO.

1821007

APPROVED

DKB









Parcel Area Table		
Parcel #	Area (Ac,)	Area (sf)
1	0.04	1,622.91
2	0.04	1,621.49
3	0.04	1,620.06
4	0.04	1,618.64
5	0.04	1,617.22
6	0.04	1,614.73
7	0.04	1,613.30
8	0.04	1,611.88
9	0.04	1,610.46
10	0.04	1,609.04
11	0.04	1,606.55
12	0.04	1,605.13
13	0.04	1,603.70
14	0.04	1,603.89
15	0.04	1,605.59
16	0.04	1,608.37
17	0.04	1,609.96
18	0.04	1,611.55
19	0.04	1,613.14
20	0.04	1,614.66

Parcel Area Table		
Parcel #	Area (Ac,)	Area (sf)
21	0.04	1,616.80
22	0.04	1,618.95
23	0.04	1,621.09
24	0.04	1,620.07
25	0.04	1,620.19
26	0.04	1,620.31
27	0.04	1,620.43
28	0.04	1,620.55
29	0.04	1,620.77
30	0.04	1,620.89
31	0.04	1,621.00
32	0.04	1,620.33
33	0.04	1,619.04
34	0.04	1,637.35
35	0.04	1,658.30
36	0.04	1,679.26
37	0.04	1,693.65
38	0.04	1,671.00
39	0.04	1,619.67
40	0.04	1,613.85

Parcel Area Table		
Parcel #	Area (Ac,)	Area (sf)
41	0.04	1,611.03
42	0.04	1,611.23
43	0.04	1,614.43
44	0.04	1,624.80
45	0.04	1,622.04
46	0.04	1,622.29
47	0.04	1,625.54
48	0.04	1,631.81
49	0.04	1,771.40
50	0.04	1,684.60
51	0.04	1,633.40
52	0.04	1,618.23
53	0.04	1,638.72
54	0.04	1,621.61
55	0.04	1,620.00
56	0.04	1,620.00
57	0.04	1,620.00
58	0.04	1,620.00
59	0.04	1,620.00
60	0.04	1,620.00

Parc	el Area T	able
Parcel #	Area (Ac,)	Area (sf)
181	0.04	1,680.21
182	0.04	1,701.68
183	0.04	1,726.34
184	0.04	1,754.18
185	0.04	1,785.20
186	0.04	1,849.10
187	0.04	1,889.09
188	0.04	1,932.29
189	0.05	1,978.71
190	0.05	2,028.37
191	0.04	1,620.18
192	0.04	1,615.54
193	0.04	1,614.91
194	0.04	1,641.58
195	0.04	1,704.59
196	0.04	1,701.92
197	0.04	1,643.71
198	0.04	1,621.71
199	0.04	1,635.37
200	0.04	1,685.03

Parcel Area Table		
Parcel #	Area (Ac,)	Area (sf)
61	0.04	1,620.00
62	0.04	1,620.00
63	0.04	1,620.00
64	0.04	1,782.00
65	0.04	1,620.00
66	0.04	1,620.00
67	0.04	1,620.00
68	0.04	1,620.00
69	0.04	1,620.00
70	0.04	1,620.00
71	0.04	1,782.00
72	0.04	1,620.00
73	0.04	1,620.00
74	0.04	1,620.00
75	0.04	1,620.00
76	0.04	1,620.00
77	0.04	1,620.00
78	0.04	1,620.00
79	0.04	1,620.00
80	0.04	1,620.00

Parcel Area Table		
Parcel #	Area (Ac,)	Area (sf)
81	0.04	1,620.00
82	0.04	1,616.40
83	0.04	1,652.22
84	0.04	1,657.04
85	0.04	1,632.69
86	0.04	1,578.77
87	0.04	1,637.06
88	0.04	1,630.76
89	0.04	1,627.11
90	0.04	1,626.47
91	0.04	1,628.83
92	0.04	1,634.35
93	0.04	1,634.01
94	0.04	1,633.39
95	0.04	1,632.78
96	0.04	1,632.16
97	0.04	1,632.25
98	0.04	1,631.64
99	0.04	1,631.02
100	0.04	1,630.40

Parcel Area Table		able
Parcel #	Area (Ac,)	Area (sf)
101	0.04	1,629.78
102	0.04	1,652.05
103	0.04	1,628.13
104	0.04	1,625.20
105	0.04	1,646.94
106	0.04	1,700.00
107	0.04	1,649.34
108	0.04	1,623.66
109	0.04	1,622.67
110	0.04	1,646.36
111	0.04	1,630.78
112	0.04	1,630.40
113	0.04	1,630.40
114	0.04	1,630.40
115	0.04	1,630.40
116	0.04	1,630.40
117	0.04	1,630.40
118	0.04	1,630.40
119	0.04	1,630.40
120	0.04	1,630.40

Parcel Area Table		
Parcel #	Area (Ac,)	Area (sf)
161	0.04	1,620.39
162	0.04	1,620.07
163	0.04	1,619.85
164	0.04	1,619.74
165	0.04	1,619.72
166	0.04	1,620.58
167	0.04	1,620.18
168	0.04	1,619.88
169	0.04	1,619.67
170	0.04	1,619.57
171	0.04	1,621.27
172	0.04	1,620.35
173	0.04	1,619.76
174	0.04	1,619.75
175	0.04	1,619.61
176	0.04	1,619.46
177	0.04	1,621.27
178	0.04	1,627.52
179	0.04	1,636.95
180	0.04	1,649.55

Parcel Area Table		
Parcel #	Area (Ac,)	Area (sf)
121	0.04	1,630.40
122	0.04	1,630.40
123	0.04	1,630.40
124	0.04	1,630.40
125	0.04	1,630.40
126	0.04	1,609.60
127	0.04	1,609.60
128	0.04	1,609.60
129	0.04	1,609.60
130	0.04	1,609.60
131	0.04	1,609.60
132	0.04	1,609.60
133	0.04	1,609.60
134	0.04	1,609.60
135	0.04	1,609.60
136	0.04	1,609.60
137	0.04	1,609.60
138	0.04	1,609.60
139	0.04	1,609.60
140	0.04	1,609.60

Parcel Area Table		
Parcel #	Area (Ac,)	Area (sf)
141	0.04	1,620.69
142	0.04	1,612.50
143	0.04	1,628.92
144	0.04	1,670.17
145	0.04	1,736.75
146	0.04	1,658.82
147	0.04	1,629.64
148	0.04	1,625.18
149	0.04	1,640.94
150	0.04	1,649.92
151	0.04	1,690.97
152	0.04	1,722.15
153	0.04	1,736.24
154	0.04	1,733.34
155	0.04	1,713.34
156	0.04	1,620.37
157	0.04	1,620.11
158	0.04	1,619.95
159	0.04	1,619.89
160	0.04	1,619.85

Table

;,)	Area (sf)
	1,680.21
	1,701.68
	1,726.34
	1,754.18
	1,785.20
	1,849.10
	1,889.09
	1,932.29
	1,978.71
	2,028.37
	1,620.18
	1,615.54
	1,614.91
	1,641.58
	1,704.59
	1,701.92
	1,643.71
	1,621.71
	1,635.37
	1,685.03

Parcel #Area (Ac,)Area (sf2010.041,663.862020.041,634.242030.041,621.472040.041,624.082050.041,642.062060.041,639.822070.041,639.822080.041,635.942090.041,637.323000.031,296.533010.3213,875.73020.208,769.833030.104,381.633040.031,296.003050.031,296.003070.031,296.00			
201 0.04 1,663.86 202 0.04 1,634.24 203 0.04 1,621.47 204 0.04 1,624.08 205 0.04 1,642.06 206 0.04 1,639.82 207 0.04 1,630.20 208 0.04 1,630.20 209 0.04 1,635.94 209 0.04 1,635.94 209 0.04 1,637.32 300 0.03 1,296.53 301 0.32 13,875.7 302 0.20 8,769.83 303 0.10 4,381.63 304 0.03 1,296.00 305 0.03 1,296.00 306 0.03 1,296.00	Parcel #	Area (Ac,)	Area (sf)
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307 0.03 1,296.00	306	0.03	1,296.00
	307	0.03	1,296.00
308 0.08 3,537.43	308	0.08	3,537.43
309 0.08 3,426.75	309	0.08	3,426.75

Parcel Area Table

Parcel #	Area (Ac,)	Area (sf)
310	0.06	2,592.00
311	0.06	2,592.00
312	1.02	44,391.00
313	0.04	1,785.10
500	4.80	209,054.76
	Parcel # 310 311 312 313 500	Parcel #Area (Ac,)3100.063110.063121.023130.045004.80

We Are Columbia

1136 Washington Street, Columbia, SC 29201 • Phone: 803-545-3206 • Fax: 803-733-8699

May 22, 2023

VIA EMAIL: boatrightLT@stanleymatin.com

Luke Boatright Stanley Martin Homes 100 Executive Center Drive, Suite 200 Columbia, SC 29210

RE: SKETCH PLAN: 5.35 ACRES, TRINITY DRIVE, 1458 AND 1482 CAROLINE ROAD, TMS#16414-08-02, -03, AND -04 ENERGOV PLAN NUMBER: SPLAT-2023-0008

Dear Mr. Boatright:

This letter is to confirm that, in accordance with \$17-2.5(j)(5) of the City of Columbia Unified Development Ordinance (UDO), the above referenced sketch plan application for the construction of a 193-lot, attached single-family residential subdivision on ± 25.35 acres Trinity Drive, 1458 and 1482 Caroline Road, more specifically TMS#16414-08-02, -03, and -04, was reviewed and approved.

After review of the sketch plan application and plan, we I find the following:

- 1. The properties are zoned O-I (Office and Institutional District) and attached single-family residential is permitted by special exception.
- 2. On January 5, 2023 the Board of Zoning Appeals granted a special exception for the construction of a 193-lot, townhome development at this location.
- 3. A 193-lot attached single-family residential subdivision is within the allowable maximum density of 16.4 units per acre.

The sketch plan is approved conditioned upon compliance with all reviewing agency comments as outlined in the table below.

CITY AGENCY COMMENTS FOR CONCEPTUAL PLAN REVIEW			
Planning and Recommend approval with conditions:			
Development Services	1. Fire rating of walls less than 5' to the property		
	lines. In each townhome grouping the end units appear to have zero lot lines on the		
	outside ends.		
	2. Must meet all applicable building codes.		

	3. Provide a typical lot layout plan with sidewalk,
	driveway, curb cut, and tree placement.
Utilities	Recommend approval with conditions:
	1. Any needed upgrade, extension or relocation
	of City utilities must be provided by the
	developer.
	2. Any privately owned/maintained utilities or
	permanent structures cannot be located inside
	exclusive City of Columbia utility easements.
	3. Water mains, sewer mains, water meters that
	are 4" or larger or any privately maintained
	utilities will not be allowed inside public right-
	of-ways or under sidewalks without an
	approved encroachment permit and written
	approval from the City Engineer. Coordination
	between the Civil Engineer, Architect and
	Mechanical Engineer to allow room for these
	utilities on the developed property is strongly
	encouraged.
	4. If sewer flows for this project result in flows of
	4,000 gallons per day or above calculations
	must be submitted to the City's Engineering
	department to determine how the proposed
	project will affect the City's sewer system.
	Depending upon the effects of the projected
	flows this project may or may not be
	approved. If required, these calculations
	should be submitted to the Engineering
	department as soon as possible.
	5. Sidewalks must be provided around the entire
	road row.
Traffic Engineering	Recommend approval with condition:
	1. If decorative street lighting is desired the
	following criteria exist. All Cost Associated
	with Decorative Street Lighting to be paid by
	developer. Decorative street lighting conduits
	to be underground from a Milbank installed by
	developer. Light fixtures to be approved by
	City of Columbia, installed by developer,
	inspected during installation by the City of
	Columbia and turned over to the City of
	Columbia upon final inspection. Underground
	Conduits to remain exposed within 2 feet of J
	Boxes, Light Bases and Pedestals for
	inspections. Poles Base foundations to be
	inspected prior to concrete pour. Lighting and
	power to be inspected prior to acceptance by

	City of Columbia. Contact Electrical Supervisor			
	for inspections: 803-545-3820			
Fire Department				
	Recommend approval.			
Forestry	Recommend approval with condition:			
	1. New Trees must be planted in Right of Way in			
	accordance with City ordinance. New trees			
	must be watered and maintained for 2 years			
	from planting. Be sure to use a species variety			
	to prevent canopy monoculture. Existing trees			
	in right of way must be protected with fencing			
	to keep all people, equipment and vehicles out			
	of the tree area during construction. If any			
	new landscaping or irrigation is installed in the			
	nght of way, it must be approved by Forestry			
	and Deducification and maintained by the			
	interfere with vehicular and pedestrian traffic			
	SCDOT must approve any new landscaping			
	installed along SCDOT roadways			
Stormwater	Recommend approval with condition:			
Stormwater	1 Development must comply with all applicable			
	land disturbance requirements.			
	2. If there will be disturbance in the wetlands			
	while installing the boardwalk please submit a			
	corps permit or provide an explanation why			
	one isn't needed.			
Parking	Recommend approval.			
Street Division	Recommend approval with condition:			
	1. Remove the parallel parking spaces that are			
	located in the road that is in front of the units			
	that are adjacent to Trinity Drive.			
Solid Waste	Recommend approval.			

In accordance with \$17-2.5(j)(5)4(ii) of the City of Columbia Unified Development Ordinance (UDO) and \$6-29-1540 of the South Carolina Code of Laws this site specific development plan expires on May 23, 2025.

In accordance with \$17-2.4(j) and \$17-2.5 of the Unified Development Ordinance, and \$6-29-1150 of the South Carolina Code of Laws an appeal of the approval of this sketch plan may be made in accordance with \$17-2.5(v)of the Unified Development Ordinance (UDO).

For information regarding commercial building plan review and obtaining land disturbance, building and other permits for this project, please visit our

website at <u>www.columbiadevelopmentservices.net</u> or contact the Development Center at (803) 545-3483.

This letter is neither a building permit, zoning permit, nor any similar authorization to occupy the property or begin construction; rather it confirms that this site specific development plan has been reviewed and approved in accordance with the Unified Development Ordinance (UDO).

For your convenience, I have attached a copy of the documents reviewed and approved. Should you have any questions or need additional information, please feel free to contact me at (803) 545-3206.

Sincerely

ohnathan E. Chambers Land Development Administrator

Attachments

cc: Krista M. Hampton, Director of Planning and Development Services

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Attachments

cc: Krista M. Hampton, Director of Planning and Development Services

Trinity Townhomes

CITY OF COLUMBIA GIS DATA DISCLAIMER

The City of Columbia GIS data represented on this map or plan is the product of compilation, as produced by others. It is provided for informational purposes only and the City of Columbia makes no representation as to its accuracy. Its use without field verification is at the sole risk of the user.

Trinity Townhomes

CITY OF COLUMBIA GIS DATA DISCLAIMER

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W

Tuesday, February 21, 2023

Checklist for All Applications

A complete sketch plan application shall include the following information. Please initial to signify that the requested information has been provided.

	Applicant Initials	Staff Initials
A copy of this Application Checklist, completed by the applicant.	DKB	
A completed and signed Application Form	DKB	
Letters of Agency for all applications where the applicant is not the owner of the subject property	DKB	
Payment of the required fee (see Unified Development Ordinance Fee Schedule)	DKB	

Sketch Plan Please see page 4 below for required content.

1 copy: min. 18 x 24 inches or	
1 digital copy (pdf format)	

Application and Checklist

1. Applicant Information

Name Luke Boatright	
Company (if applicable)	
Sta	nley Martin Homes
Address (street, city, state, zip)	100 Executive Center Drive Suite 200 Columbia, SC 29210
Phone 803.466.3747	Email boatrightLT@stanleymartin.com

2. Property Information

Address 7300 Patterson Road			
Tax Map Reference Number(s)			
R16414-08-02,03,0	4		
Current use Vacant (Wooded)		Proposed use Townhome	es
Current zoning	Number of lo	ots	Total acreage
OI	193	3	25.35

3. Property Status

Pursuant to S.C. Code § 6-29-1145, is this tract or parcel restricted by any recorded covenant that is contrary to, conflicts with, or prohibits the activity described in this permit? \Box Yes \Box No

4. Property Ownership

Does the applicant own the property?

□ Y es XN o

If the applicant <u>does not</u> own the property, complete the **Letter of Agency** for each property owner that authorizes the applicant to submit this application on the property owner's behalf.

	For staff use only	
Date received (M/D/Y):	//	Ву:

Major Subdivision – Sketch Plan

Application and Checklist

5. Project Description

Provide a brief description of the project.

On 25.35 Ac, construct up to 223 townhomes to be individually platted for home ownership. Has been approved as special exception by BOZA.

Includes one entrance and one emergency entrance. Includes a detailed traffic impact analysis recommending no off site improvements required. Intersection operations are at A or B.

Includes significant open space above the requirement for approval - 9.09 Acres vs. 6.34 required. Tree canopy will be retained at 30% or greater.

6. Additional Submission Requirements

Sketch Plan

The proposed site plan shall be prepared to scale and fully dimensioned, and include the following:

	Applic	ant Staff
Total acreage	C2.1 🛛	
Tentative phasing plan, including total acreage per phase (if applicable)		
Location and arrangement of streets, driveways, and lots (fully dimensione	d) One Phase	
Location of rights-of-way and ingress/egress easements (fully dimensioned	l) C2.1 X	
Lot area and number of lots or dwelling units in multifamily dwellings	C2.1 🛛	
Existing and proposed uses of land throughout the subdivision	C2.1 🛛	
Existing uses of land surrounding the subdivision, including 1) existing str widths abutting the subdivision and 2) locations of intersections within 200	eet right-of-way) feet of the property C2.1 ⊠	
Topography by contours (at vertical intervals of not more than 5 feet)	C1.0 🛛	
Proposed name of the subdivision To	be determined	
Percentage of open space	C2.1 🕅	


10

23

3/



Property Owner	
Signature	Date
Print Name of Property Owner Graeme C. Moore	
Address (street, city, name, zip)	
2931 Devine Street	
Columbia, 527205	
Email of Property Owner	Phone
groom @ the mour company. com	803.378.3492
Signature of Witness	Date 12/1/22
Print Name of Witness Peyton Byant	
uthorized Agent	
ignature	Date
Lilaf	12-2-22
Print Name Lulue Boutrich L	
ddress (street, city, name, zip)	
100 ERECUTIN Centre Vrie, soite 200	
Colorabia SC 29210	
mail of Authorized Agent	none
Boatrick LTP Stealer Madin com	203-411-57517

City of Columbia, Department of Planning and Development 1136 Washington St., Columbia, SC 29201 https://www.columbiasc.net/planning-development



Property Owner	
Signature E. G. Hattaron TRUST	Date
BY: 17. JOURD MUMMIN, TEE	12-2-2022
Print Name of Property Owner H. Forkes Patterson	
Address (street, city, name, zip)	
Email of Property Owner	Phone 110 and 10 and
	(803) 429 - 1392
Signature of Witness	Date
Teobra #Dial	12-2-2022
Print Name of Witness	
ROBIN H DIAL	
Authorized Agent	

Signature	Date (2/2/22
Print Name Lule Bootright	
Address (street, city, name, zip)	
100 Executive Center Unive, Suite 200	
Colombia SC 29210	
Email of Authorized Agent Phone	
Boatright LT @ Stanley Montin. com 803-	466-3747

City of Columbia, Department of Planning and Development 1136 Washington St., Columbia, SC 29201 https://www.columbiasc.net/planning-development



Circulary 1 1 11-	
Signature Joma I Pattinson	Date
BY: A. Former Pattimon POA	12-2-2027
Print Name of Property Owner	11-1 a rwad
A. Forles Patterson	
Address (street, city, name, zip)	
Email of Property Owner	Phone
(813) 479-1342
Signature of Witness	Date
Elm # Niel	
Print Name of Witness	2-2-20
FILM WALLESS BIN H DIAI	
I DIFIC	
uthorized Agent	
Signature	Date
m m	0-2-222
Print Name	
LUIG DOGTTISHT	
Address (street, city, name, zip)	1. 4, 200
Address (street, city, name, zip) 100 Education Center Prive, S.	orte200
Address (street, city, name, zip) 100 Educatia Center Prive, S. Columbia SC 24210	orte200

Email of Authorized Agent Boatright LT@ Starley martin.com 803-466-3242

City of Columbia, Department of Planning and Development 1136 Washington St., Columbia, SC 29201 https://www.columbiasc.net/planning-development



Property Owner

Signature	Date
H. Jallys tattuson	12-2-2022
Print Name of Property Owner O 1/	
H. Forkes Patterson	
Address (street, city, name, zip)	
	1
Email of Property Owner	Phone (803) 429-1392
Signature of Witness	Date
Formth Mil	12-2-212
Print Name of Witness	
KUBIN H DIAL	
Authorized Agent	
Signature	Date
	12/2/22
Print Name Lula Bogtrich	
Address (street, city, name, zip)	
100 Executive Center Prive, SU	:te 200
CI la Sa 19212	
Colon Un De 29210	
Email of Authorized Agent	Phone
Boatright LT & Starley Martin. com	803-411-3747

City of Columbia, Department of Planning and Development 1136 Washington St., Columbia, SC 29201 https://www.columbiasc.net/planning-development











TRAFFIC IMPACT AND ACCESS STUDY

TRINITY TOWNHOMES COLUMBIA, SC

Prepared for:

THE LANDPLAN GROUP SOUTH, INC. 1206 Scott Street Columbia, SC 29201

Prepared by:

RIDGEWAY TRAFFIC CONSULTING, LLC

1720 Dutch Fork Road, Suite F Irmo, SC 29063



FINALIZED JANUARY 2023

Ridgeway Traffic Consulting (RTC) has been retained to evaluate the traffic and transportation impacts resulting from the construction/occupancy of a proposed townhome (duplex) development along the north side of Trinity Drive between Greenlawn Drive and Patterson Road in Columbia, South Carolina.

Evaluation of the transportation impacts associated with the proposed project first requires a thorough description and quantification of the proposed project and the project site, which is included in the following sections.

PROJECT DESCRIPTION

The project proposal is to construct a new townhome development with 223 units along the north side of Trinity Drive between Greenlawn Drive and Patterson Road. The site is currently undeveloped. Figure 1 depicts the site location in relation to the local and regional roadway system. Figure 2 depicts the development plan as currently proposed.

Direct access for the development is currently proposed via one access drive to Trinity Drive for resident traffic. An additional gated emergency access is proposed near the eastern limits of the site. Recommendations regarding site access is provided in the Mitigation section of this report.

The project is expected to be developed and occupied by 2024, which is the horizon year reviewed for this report.

GEOMETRICS AND TRAFFIC CONTROL

A comprehensive field inventory of the site and study area has been conducted. The field inventory included a collection of geometric data, traffic volumes, and traffic control within the study area. The study area for this project consists of the following intersections:

- 1 Trinity Drive at Greenlawn Drive; and
- 2 Trinity Drive at Patterson Road.

The existing lane geometrics and traffic control characteristics for the study area roadways/intersections are graphically depicted in **Figure 3**.

TRAFFIC VOLUMES

In order to determine the existing traffic volume flow patterns within the study area, manual turning movement counts were gathered for the weekday morning (7:00-9:00 AM) and evening (4:00 – 6:00 PM) peak time periods for the study area intersections in May of 2022 with public schools in session.

The existing 2022 peak-hour traffic flow networks for the weekday AM and PM peak-hour periods are shown graphically in **Figure 4**. Count data sheets are provided in the Appendix of this report for both intersections.





Figure 1 SITE LOCATION MAP

Trinity Townhomes: Columbia, SC









To estimate the impact of site-generated traffic volumes on the roadway network under Future conditions, Existing traffic volumes in the study area were projected to the Year 2024, which is when the proposed development is expected to be constructed and occupied. Traffic volumes on the roadway network at this time will include all existing traffic, any new traffic due to normal traffic growth, and any traffic related to specific developments that are presently approved and expected to be completed by 2024 (in excess of normal traffic volume growth). Consideration of these factors resulted in the development of 2024 No-Build traffic volumes. Anticipated site-generated traffic volumes were then super-imposed upon the 2024 No-Build traffic flow networks to reflect 2024 Build conditions including the proposed development.

BACKGROUND TRAFFIC GROWTH

Traffic growth on area roadways is a function of the expected land development both within the immediate area as well as the surrounding region. Several methods can be used to estimate this growth. A procedure frequently employed identifies the location and type of approved/permitted development. This produces a realistic estimate of growth for local traffic. However, the drawback of this procedure is that the potential growth in population and traffic growth external to the study area would not be accounted for in the traffic projections.

An alternative procedure estimates an annual percentage increase in traffic growth and applies that percentage to all traffic volumes under study. The drawback to such a procedure is that some turning movement volumes may be growing at either a higher or lower rate at particular intersections. To provide a conservative analysis framework, both procedures have been applied.

Annual Growth

A review of SCDOT count data for Greenlawn Drive (Station 40-0365) and Patterson Road (Station 40-0649) on each side of the project indicates that volumes decreased slightly between 2018 and 2019 for both roadways. Volumes also dropped in 2020 due to the pandemic and have been excluded from the growth rate calculation. Based on this information, a typical 2-percent annual growth was developed for this report.

Specific Development

No specific background developments have been identified for inclusion in background traffic.

The anticipated 2024 No-Build AM and PM peak-hour traffic volumes, which include the 2-percent annual growth rate, are graphically depicted in **Figure 5**.

PLANNED ROADWAY IMPROVEMENTS

There are no proposed funded roadway improvements that are expected to provide additional capacity for the study area for 2024 conditions.



SITE-GENERATED TRAFFIC

Traffic volumes generated by the development were forecasted using the Eleventh Edition of the Institute of Transportation Engineers (ITE) *Trip Generation* Manual¹. Land-Use Code #220 (Multi-Family Housing:Low-Rise) was used to project site traffic. **Table 1** summarizes the anticipated trip generation characteristics for the project.

Trinity Townhomes	Trinity Townhomes – Columbia, SC223 Multi-FamilyTime PeriodUnits													
Time Period	223 Multi-Family Units													
Week day Daily	1,505													
AM Peak-Hour														
Enter	22													
Exit	<u>70</u>													
Total	92													
PM Peak-Hour														
Enter	73													
Exit	<u>43</u>													
Total	116													

 Table 1

 PROJECT TRIP GENERATION SUMMARY¹

 Trinity Townhomes – Columbia, SC

1. ITE *Trip Generation* Manual, 11th Ed., LUC 220 Multi-Family Housing (Low-Rise)

As shown, this development can be expected to generate a total of 1,505 two-way trips on a weekday daily basis with 92 trips (22 entering, 70 exiting) during the AM peak hour. During the PM peak hour, a total of 116 trips (73 entering, 43 exiting) are expected.

TRIP DISTRIBUTION

Based on a review of traffic patterns near the site, the following distribution percentages have been developed for project trips:

- Greenlawn Drive To/From North (Leesburg Road): 25%
- Greenlawn Drive To/From South (Garners Ferry Road): 40%
- Patterson Road To/From North: 5%
- Patterson Road To/From South (Garners Ferry Road): 30%

¹ Trip Generation, Eleventh Edition; Institute of Transportation Engineers; Washington, DC.

The site-generated traffic presented in Table 1 has been distributed within the study area based on the pattern described above. This has resulted in the site-generated specific volumes for the study area as depicted in **Figure 6**.

2024 BUILD TRAFFIC VOLUMES

The site-generated traffic volumes shown in Figure 6 have been added to the 2024 No-Build traffic volumes (Figure 5) to represent 2024 Build traffic volume conditions which are depicted graphically in **Figure 7**.





Measuring existing and future traffic volumes quantifies traffic flow within the study area. To assess quality of flow, capacity analyses were conducted under Existing, No-Build, and Build traffic volume conditions. Capacity analyses provide an indication of how well the study area intersections serve existing and future traffic demands.

METHODOLOGY

Level-of-Service

A primary result of capacity analyses is the assignment of level-of-service (LOS) to traffic facilities under various traffic flow conditions. The concept of level-of-service is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A level-of-service definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Six levels-of-service are defined for each type of facility. They are given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst.

Since the level-of-service of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of levels-of-service, depending on the time of day, day of week, or period of a year.

ANALYSIS RESULTS

Intersection analyses have been conducted for the study area intersection under Existing, Future 2024 (No-Build & Build) conditions. The results of these analyses are shown in **Table 2**. The intersection analysis worksheets are contained in the Appendix at the end of this report.

Table 2 LEVEL-OF-SERVICE SUMMARY Trinity Townhomes – Columbia, SC

UNSIGNALIZED INTERSECTIONS		2022 EX CONDI	ISTING TIONS	2024 NO CONDII <i>WITHOUT</i> I	-BUILD TIONS P <i>ROJECT</i>	2024 B CONDII <i>WITH PR</i>	UILD TIONS <i>OJECT</i>
Greenlawn Drive at Trinity Drive	Time <u>Period</u>	<u>Delay^a</u>	LOS ^b	<u>Delay</u>	LOS	Delay	LOS
SB Greenlawn Drive Left Turn WB Trinity Drive	AM	7.6 10.1	A B	7.6 10.2	A B	7.6 11.4	A B
SB Greenlawn Drive Left Turn WB Trinity Drive	РМ	7.9 10.7	A B	8.0 10.9	A B	8.1 12.0	A B
Patterson Road at Trinity Drive							
NB Patterson Road Left Tum EB Trinity Drive	AM	7.9 11.0	A B	7.9 11.2	A B	8.0 11.5	A B
NB Patterson Road Left Tum EB Trinity Drive	РМ	7.5 9.3	A A	7.5 9.4	A A	7.6 9.5	A A
Trinity Drive at Site Access							
EB Trinity Drive Left Turn SB Site Access	AM					7.4 9.1	A A
EB Trinity Drive Left Turn SB Site Access	РМ					7.5 9.3	A A

a. Delay in seconds-per-vehicle.

b. LOS = Level-of-Service.

As shown, under Existing 2022 conditions, good operations are present within the study area with LOS A or B operations for STOP controlled approaches of Trinity Drive at Greenlawn Drive and Patterson Road during both peak hours. Left turns onto Trinity Drive at each intersection operate with minimal delays.

A review of 2024 No-Build conditions, which account for normal background growth in traffic indicate that operations will continue to be favorable at both intersections during both peak hours.

A review of 2024 Build Conditions, which account for specific volumes related to the proposed townhome project, indicates that impacts to both site intersections are expected to be low with no changes in service levels when compared to 2024 No-Build Conditions.

Delays for the direct access drive to Trinity Drive are expected to be minimal (LOS A) during both peak hours due to low conflicting through volumes along Trinity Drive. Recommendations for the access intersection are provided in the next section of this report.

MITIGATION

The final phase of the analysis process is to identify mitigating measures which may either minimize the impact of the project on the transportation system or tend to alleviate poor service levels not caused by the project. Measures considered necessary to mitigate roadway system deficiencies are discussed below as they relate to the impacts of the proposed project.

SITE ACCESS

Direct access for the development is proposed via one primary access drive located approximately 110-ft. east of the eastern access for the Pine Haven Villas located on the south side of Trinity Drive. This separation distance is in compliance with the SCDOT ARMS Manual for a 30 MPH roadway servicing less than 2,000 vpd which is the case based on collected volumes.

Analyses indicate that the access will operate efficiently with one entering lane and one exiting lane placed under STOP sign control. A review of SCDOT criteria with regards to turn lanes for Trinity Drive indicates that dedicated turn lanes within Trinity Drive are not warranted.

An additional gated emergency access is proposed near the eastern limits of the site that will not be utilized for day-to-day traffic.

OFF-SITE IMPACTS

Analyses indicate no changes in service levels for the intersections of Trinity Drive with Greenlawn Drive to the west and Patterson Road to the east with the inclusion of site traffic. Based on this information, no offsite mitigation is recommended to support the project.

CONCLUSIONS

This traffic study has been prepared to evaluate the traffic impacts of a proposed 223-unit townhome development along the north side of Trinity Drive between Greenlawn Drive and Patterson Road in Columbia, SC. The project is expected to be developed and occupied by 2024, which is the horizon year reviewed for this report.

Direct access for the development is proposed via one primary access drive located approximately 110-ft. east of the eastern access for the Pine Haven Villas located on the south side of Trinity Drive. An additional gated emergency access is proposed near the eastern limits of the site that will not be utilized for day-to-day traffic. Analyses indicate that the access will operate efficiently with one entering lane and one exiting lane placed under STOP sign control. A review of SCDOT criteria with regards to turn lanes for Trinity Drive indicates that dedicated turn lanes within Trinity Drive are not warranted.

Off site traffic impacts have been analyzed to be minimal and no off-site mitigation is recommended to support the project.

APPENDIX

- Count Data
- Capacity Analyses

COUNT DATA

TURNING MOVEMENT COUNT FORM

CITY	Columbia, SC				LOCATIO	DN	Greenlawr	n Drive at Ti	inity Drive		Show North		INTERSI DIAG	ECTION RAM	
DATE	5/10/2022				DAY OF	WEEK	Tuesdav								
	0/10/2022				27.11 01		lacoudy								
COUNTED	BY	GAR			INTERSE	CTION NUM	IBER								
COMMENT	s														
тім		NOR	THBOUND	ON	SO	UTHBOUND	ON	EAS	TBOUND	ON	WE		ON		ΡΕΔΚ
FROM	ТО	L	T	R	L	T	R	L	т	R	L	T	R	TOTAL	TOTAL
	•					AN	I Peak Per	iod							
														0	255
7:00	7:15		18	3	8	33					6		10	78	330
7:15	7:30		29	4	10	49					7		15	114	340
7:30	7:45		18	3	7	29					2		4	63	303
7:45	8:00		25	3	2	36					3		6	75	314
8:00	8:15		27	3	7	40					3		8	88	322
8:15	8:30		28	2	4	37					5		1	77	236
8:30	8:45		24	3	3	40					I		3	74	
6:45	9:00		41	3	2	30					5		1	03	
					0	1					0		1	2	
PK HR TO	TALS	0	99	13	26	154	0	0	0	0	15	0	33	340	
1 101110	PHF		00	10	20	104					10	0		0.75	
TOTAL		0	210	24	43	295	0	0	0	0	32	0	50	654	
						PN	l Peak Per	iod							
														0	401
4:00	4:15		56	7	7	43					4		10	127	528
4:15	4:30		73	6	4	37					3		12	135	523
4:30	4:45		68	9	6	44					3		9	139	526
4:45	5:00		67	8	5	34					1		12	127	508
5:00	5:15		68	4	/	33					1		9	122	486
5:15	5:30		/3	/	5	40					4		9	100	304
5:45	6:00		59	0 5	3	37					4		5	121	220
J.4J	0.00		57	5	5	51								105	105
														0	
														0	
PK HR TO	TALS	0	264	30	22	158	0	0	0	0	11	0	43	528	
	PHF													0.95	
TOTAL		0	521	54	42	299	0	0	0	0	24	0	74	1 0 1 4	

TURNING MOVEMENT COUNT FORM

CITY	Columbia, SC					DN .	Patterson	Road at Tri	nity Drive		Show North		INTERS DIAG	ECTION RAM	
DAIL	5/10/2022	<u>-</u>			DATOP		Tuesuay								
COUNTED	BY	JRR			INTERSE	ECTION NUM	IBER								
COMMENT	S														
TIN		NOR		ON	so		ON	EAS		ON	WE	STBOUND	ON		DEAK
FROM		L	T	au R	F	T	R	L	T	R	L	т	R	TOTAL	TOTAL
						AN	Peak Per	iod							
		T 1												0	328
7:00	7:15	2	35			47	14	6		8				112	372
7:15	7:30	4	48			54	18	8		10				142	310
7:30	7:45	8	17			29	6	2		12				74	217
7:45	8:00	5	14			19	3	0		3				44	177
8:00	8:15	7	8			25	1	1		8				50	173
8:15	8:30	3	17			24	2	0		3				49	123
8:30	8:45	3	13			13	0	1		4				34	
8:45	9:00	3	11			18	1	2		5				40	
														0	
PK HR TO	TALS	19	114	0	0	149	41	16	0	33	0	0	0	372	
	PHF	10		5										0.65	
TOTAL		35	163	0	0	229	45	20	0	53	0	0	0	545	
						PM	Peak Per	iod							
														0	257
4:00	4:15	5	50			25	1	0		10				91	320
4:15	4:30	14	39			19	1	2		10				85	292
4:30	4:45	12	3/			24	0	0		8				81	299
4.40 5.00	5:15	12	20			10	1	1		10				63	310
5:15	5:30	11	50			19	1	1		10				92	268
5:30	5:45	13	40			29	3	0		7				92	176
5:45	6:00	14	44			14	2	3		7				84	84
														0	
														0	
														0	
								-							
PK HR TO	IALS	51	158	0	0	81	7	6	0	28	0	0	0	331	
														0.90	
ITUTAL	1	94	310	0	0	162	10	9	0	66	0	0	0	651	

CAPACITY ANALYSES

Intersection

Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		t,			ŧ
Traffic Vol, veh/h	15	33	99	13	26	154
Future Vol, veh/h	15	33	99	13	26	154
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	,# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	44	132	17	35	205

Major/Minor	Minor1	Ν	/lajor1	Ν	/lajor2		
Conflicting Flow All	416	141	0	0	149	0	
Stage 1	141	-	-	-	-	-	
Stage 2	275	-	-	-	-	-	
Critical Hdwy	6.42	6.22	-	-	4.12	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	-	
Follow-up Hdwy	3.518	3.318	-	-	2.218	-	
Pot Cap-1 Maneuver	593	907	-	-	1432	-	
Stage 1	886	-	-	-	-	-	
Stage 2	771	-	-	-	-	-	
Platoon blocked, %			-	-		-	
Mov Cap-1 Maneuver	576	907	-	-	1432	-	
Mov Cap-2 Maneuver	576	-	-	-	-	-	
Stage 1	886	-	-	-	-	-	
Stage 2	749	-	-	-	-	-	
Approach	WB		NB		SB		
HCM Control Delay, s	10.1		0		1.1		

HCM LOS В

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT	
Capacity (veh/h)	-	- 769	1432	-	
HCM Lane V/C Ratio	-	- 0.083	0.024	-	
HCM Control Delay (s)	-	- 10.1	7.6	0	
HCM Lane LOS	-	- B	А	А	
HCM 95th %tile Q(veh)	-	- 0.3	0.1	-	

06/01/202

Intersection						
Int Delay, s/veh	1.8					
Movement	FBI	FBR	NBI	NBT	SBT	SBR
			HDL			OBIC
Lane Configurations	Y			र्स	F	
Traffic Vol, veh/h	16	33	19	114	149	41
Future Vol, veh/h	16	33	19	114	149	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	51	29	175	229	63

Major/Minor	Minor2		Major1	Ма	ajor2		
Conflicting Flow All	494	261	292	0	-	0	
Stage 1	261	-	-	-	-	-	
Stage 2	233	-	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	-	
Pot Cap-1 Maneuver	535	778	1270	-	-	-	
Stage 1	783	-	-	-	-	-	
Stage 2	806	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	522	778	1270	-	-	-	
Mov Cap-2 Maneuver	522	-	-	-	-	-	
Stage 1	763	-	-	-	-	-	
Stage 2	806	-	-	-	-	-	
Approach	FB		NB		SB		

Approach	EB	NB	SB	
HCM Control Delay, s	11	1.1	0	
HCM LOS	В			

Minor Lane/Major Mvmt	NBL	NBT E	BLn1	SBT	SBR
Capacity (veh/h)	1270	-	671	-	-
HCM Lane V/C Ratio	0.023	- ().112	-	-
HCM Control Delay (s)	7.9	0	11	-	-
HCM Lane LOS	А	А	В	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection

Int Delay, s/veh	1.4							
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations	Y		t,			ŧ		
Traffic Vol, veh/h	11	43	264	30	22	158		
Future Vol, veh/h	11	43	264	30	22	158		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-	None	-	None	-	None		
Storage Length	0	-	-	-	-	-		
Veh in Median Storage	, # 0	-	0	-	-	0		
Grade, %	0	-	0	-	-	0		
Peak Hour Factor	95	95	95	95	95	95		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	12	45	278	32	23	166		

Major/Minor	Minor1	N	1ajor1	Μ	lajor2		
Conflicting Flow All	506	294	0	0	310	0	
Stage 1	294	-	-	-	-	-	
Stage 2	212	-	-	-	-	-	
Critical Hdwy	6.42	6.22	-	-	4.12	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	-	
Follow-up Hdwy	3.518	3.318	-	- :	2.218	-	
Pot Cap-1 Maneuver	526	745	-	-	1250	-	
Stage 1	756	-	-	-	-	-	
Stage 2	823	-	-	-	-	-	
Platoon blocked, %			-	-		-	
Mov Cap-1 Maneuver	515	745	-	-	1250	-	
Mov Cap-2 Maneuver	515	-	-	-	-	-	
Stage 1	756	-	-	-	-	-	
Stage 2	807	-	-	-	-	-	
-							
Approach	WB		NB		SB		
HCM Control Delay, s	10.7		0		1		

HCM LOS В

Minor Lane/Major Mvmt	NBT	NBRWB	Ln1	SBL	SBT	
Capacity (veh/h)	-	-	683	1250	-	
HCM Lane V/C Ratio	-	- 0.	083	0.019	-	
HCM Control Delay (s)	-	- ´	10.7	7.9	0	
HCM Lane LOS	-	-	В	Α	А	
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-	

06/01/2	2022
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Intersection Int Delay, s/veh 2.1 EBL Movement EBR NBL NBT SBT SBR Y **1** Lane Configurations 4 6 158 Traffic Vol, veh/h 28 51 7 Future Vol, veh/h 6 28 51 158 81 7 Conflicting Peds, #/hr 0 0 0 0 0 0 Stop Sign Control Stop Free Free Free Free RT Channelized -None -None -None Storage Length 0 -----Veh in Median Storage, # 0 -_ 0 0 -Grade, % 0 0 0 ---Peak Hour Factor 90 90 90 90 90 90 Heavy Vehicles, % 2 2 2 2 2 2 Mvmt Flow 7 31 57 176 90 8

Major/Minor	Minor2		Major1	Ма	jor2		
Conflicting Flow All	384	94	98	0	-	0	
Stage 1	94	-	-	-	-	-	
Stage 2	290	-	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	-	
Pot Cap-1 Maneuver	619	963	1495	-	-	-	
Stage 1	930	-	-	-	-	-	
Stage 2	759	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	593	963	1495	-	-	-	
Mov Cap-2 Maneuver	593	-	-	-	-	-	
Stage 1	891	-	-	-	-	-	
Stage 2	759	-	-	-	-	-	
Annroach	FR		NR		SB		
HCM Control Delay	0.3		1.8		00		
LOW CONTO Delay, S	9.5		1.0		0		
HCM Control Delay, s HCM LOS	9.3 A		1.8		0		

Minor Lane/Major Mvmt	NBL	NBT E	BLn1	SBT	SBR
Capacity (veh/h)	1495	-	867	-	-
HCM Lane V/C Ratio	0.038	- ().044	-	-
HCM Control Delay (s)	7.5	0	9.3	-	-
HCM Lane LOS	А	А	А	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection

Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		t,			÷.
Traffic Vol, veh/h	16	34	103	14	27	160
Future Vol, veh/h	16	34	103	14	27	160
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	,# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	45	137	19	36	213

Major/Minor	Minor1	Ν	1ajor1	Ν	/lajor2		
Conflicting Flow All	432	147	0	0	156	0	
Stage 1	147	-	-	-	-	-	
Stage 2	285	-	-	-	-	-	
Critical Hdwy	6.42	6.22	-	-	4.12	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	-	
Follow-up Hdwy	3.518	3.318	-	-	2.218	-	
Pot Cap-1 Maneuver	581	900	-	-	1424	-	
Stage 1	880	-	-	-	-	-	
Stage 2	763	-	-	-	-	-	
Platoon blocked, %			-	-		-	
Mov Cap-1 Maneuver	564	900	-	-	1424	-	
Mov Cap-2 Maneuver	564	-	-	-	-	-	
Stage 1	880	-	-	-	-	-	
Stage 2	741	-	-	-	-	-	
-							
Approach	WB		NB		SB		
HCM Control Delay, s	10.2		0		1.1		

HCM LOS В

Minor Lane/Major Mvmt	NBT	NBRWB	BLn1	SBL	SBT	
Capacity (veh/h)	-	-	756	1424	-	
HCM Lane V/C Ratio	-	- 0.	.088	0.025	-	
HCM Control Delay (s)	-	- '	10.2	7.6	0	
HCM Lane LOS	-	-	В	Α	А	
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-	

06/01/	2022
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Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			ŧ	t)	
Traffic Vol, veh/h	17	34	20	119	155	42
Future Vol, veh/h	17	34	20	119	155	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	52	31	183	238	65

Major/Minor	Minor2		Major1	Ma	jor2		
Conflicting Flow All	516	271	303	0	-	0	
Stage 1	271	-	-	-	-	-	
Stage 2	245	-	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	-	
Pot Cap-1 Maneuver	519	768	1258	-	-	-	
Stage 1	775	-	-	-	-	-	
Stage 2	796	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	505	768	1258	-	-	-	
Mov Cap-2 Maneuver	505	-	-	-	-	-	
Stage 1	754	-	-	-	-	-	
Stage 2	796	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay, s	11.3		1.1		0		

HCM LOS B

Minor Lane/Major Mvmt	NBL	NBT E	BLn1	SBT	SBR
Capacity (veh/h)	1258	-	654	-	-
HCM Lane V/C Ratio	0.024	-	0.12	-	-
HCM Control Delay (s)	7.9	0	11.3	-	-
HCM Lane LOS	А	Α	В	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection

Int Delay, s/veh	1.5						
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	Y		1.			4	
Traffic Vol, veh/h	11	45	275	31	23	164	
Future Vol, veh/h	11	45	275	31	23	164	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	-	-	-	
Veh in Median Storage,	# 0	-	0	-	-	0	
Grade, %	0	-	0	-	-	0	
Peak Hour Factor	95	95	95	95	95	95	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	12	47	289	33	24	173	

Major/Minor	Minor1	Ν	lajor1	Μ	ajor2				
Conflicting Flow All	527	306	0	0	322	0			
Stage 1	306	-	-	-	-	-			
Stage 2	221	-	-	-	-	-			
Critical Hdwy	6.42	6.22	-	-	4.12	-			
Critical Hdwy Stg 1	5.42	-	-	-	-	-			
Critical Hdwy Stg 2	5.42	-	-	-	-	-			
Follow-up Hdwy	3.518	3.318	-	- 2	2.218	-			
Pot Cap-1 Maneuver	512	734	-	-	1238	-			
Stage 1	747	-	-	-	-	-			
Stage 2	816	-	-	-	-	-			
Platoon blocked, %			-	-		-			
Mov Cap-1 Maneuver	501	734	-	-	1238	-			
Mov Cap-2 Maneuver	501	-	-	-	-	-			
Stage 1	747	-	-	-	-	-			
Stage 2	799	-	-	-	-	-			
Approach	WB		NB		SB				

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	1
CMLOS	В		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT	
Capacity (veh/h)	-	- 673	1238	-	
HCM Lane V/C Ratio	-	- 0.088	0.02	-	
HCM Control Delay (s)	-	- 10.9	8	0	
HCM Lane LOS	-	- B	А	А	
HCM 95th %tile Q(veh)	-	- 0.3	0.1	-	
Intersection

Int Delay, s/veh	2.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			ŧ	et.	
Traffic Vol, veh/h	6	29	53	164	84	7
Future Vol, veh/h	6	29	53	164	84	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	,# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	32	59	182	93	8

Major/Minor	Minor2		Major1	Ma	jor2		
Conflicting Flow All	397	97	101	0	-	0	
Stage 1	97	-	-	-	-	-	
Stage 2	300	-	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	-	
Pot Cap-1 Maneuver	608	959	1491	-	-	-	
Stage 1	927	-	-	-	-	-	
Stage 2	752	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	581	959	1491	-	-	-	
Mov Cap-2 Maneuver	581	-	-	-	-	-	
Stage 1	886	-	-	-	-	-	
Stage 2	752	-	-	-	-	-	
Annroach	FB		NR		SB		
					00		

HCM Control Delay, s9.41.80HCM LOSA	Approach	EB	INB	5B	
HCM LOS A	HCM Control Delay, s	9.4	1.8	0	
	HCM LOS	А			

Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT	SBR
Capacity (veh/h)	1491	- 863	-	-
HCM Lane V/C Ratio	0.039	- 0.045	-	-
HCM Control Delay (s)	7.5	0 9.4	-	-
HCM Lane LOS	А	A A		-
HCM 95th %tile Q(veh)	0.1	- 0.1	-	-

Intersection

Int Delay, s/veh	3.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		t,			÷.
Traffic Vol, veh/h	44	51	103	23	33	160
Future Vol, veh/h	44	51	103	23	33	160
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	,# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	68	137	31	44	213

Major/Minor	Minor1	Ν	lajor1	N	1ajor2		
Conflicting Flow All	454	153	0	0	168	0	
Stage 1	153	-	-	-	-	-	
Stage 2	301	-	-	-	-	-	
Critical Hdwy	6.42	6.22	-	-	4.12	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	-	
Follow-up Hdwy	3.518	3.318	-	- 3	2.218	-	
Pot Cap-1 Maneuver	564	893	-	-	1410	-	
Stage 1	875	-	-	-	-	-	
Stage 2	751	-	-	-	-	-	
Platoon blocked, %			-	-		-	
Mov Cap-1 Maneuver	544	893	-	-	1410	-	
Mov Cap-2 Maneuver	544	-	-	-	-	-	
Stage 1	875	-	-	-	-	-	
Stage 2	725	-	-	-	-	-	
Approach	WB		NB		SB		
HCM Control Delay, s	11.4		0		1.3		

HCM LOS В

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT	
Capacity (veh/h)	-	- 688	1410	-	
HCM Lane V/C Ratio	-	- 0.184	0.031	-	
HCM Control Delay (s)	-	- 11.4	7.6	0	
HCM Lane LOS	-	- B	А	Α	
HCM 95th %tile Q(veh)	-	- 0.7	0.1	-	

Int Delay, s/veh 2.6 Movement EBL EBL EBR NBL NBT SBT SBR Lane Configurations Y Traffic Vol. veh/h 20 56 26 110 155
Movement EBL EBR NBL NBT SBT SBR Lane Configurations Y Image: Configuration of the second s
Lane Configurations Y 4 1
Traffic V(a) v(a)/b 20 56 26 110 155 44
Trailic Vol, Veli/IT 20 50 20 119 155 44
Future Vol, veh/h 20 56 26 119 155 44
Conflicting Peds, #/hr 0 0 0 0 0 0
Sign Control Stop Stop Free Free Free Free
RT Channelized - None - None - None
Storage Length 0
Veh in Median Storage, # 0 0 0 -
Grade, % 0 0 0 -
Peak Hour Factor 65 65 65 65 65 65
Heavy Vehicles, % 2 2 2 2 2 2 2
Mvmt Flow 31 86 40 183 238 68

Major/Minor	Minor2		Major1	Ma	jor2		
Conflicting Flow All	535	272	306	0	-	0	
Stage 1	272	-	-	-	-	-	
Stage 2	263	-	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	-	
Pot Cap-1 Maneuver	506	767	1255	-	-	-	
Stage 1	774	-	-	-	-	-	
Stage 2	781	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	488	767	1255	-	-	-	
Mov Cap-2 Maneuver	488	-	-	-	-	-	
Stage 1	747	-	-	-	-	-	
Stage 2	781	-	-	-	-	-	
Approach	EB		NB		SB		

Approach	EB	NB	SB	
HCM Control Delay, s	11.5	1.4	0	
HCM LOS	В			

Minor Lane/Major Mvmt	NBL	NBT EBI	_n1	SBT	SBR
Capacity (veh/h)	1255	- (667	-	-
HCM Lane V/C Ratio	0.032	- 0.1	175	-	-
HCM Control Delay (s)	8	0 1	1.5	-	-
HCM Lane LOS	А	А	В	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

Intersection

MovementEBLEBTWBTWBRSBLSBRLane ConfigurationsImage: Configuration serviceImage: Configuration serviceImage: Configuration serviceImage: Configuration serviceTraffic Vol, veh/h15415072545
Lane Configurations 4 1 1 17 17 17 17 17 17 17 17 17 17 17 17
Traffic Vol, veh/h 15 41 50 7 25 45
Future Vol, veh/h 15 41 50 7 25 45
Conflicting Peds, #/hr 0 0 0 0 0 0
Sign Control Free Free Free Stop Stop
RT Channelized - None - None - None
Storage Length 0 -
Veh in Median Storage, # - 0 0 - 0 -
Grade, % - 0 0 - 0 -
Peak Hour Factor 92 92 92 92 92 92
Heavy Vehicles, % 2 2 2 2 2 2 2
Mvmt Flow 16 45 54 8 27 49

Major/Minor	Major1	Ν	/lajor2		Minor2			
Conflicting Flow All	62	0	-	0	135	58		
Stage 1	-	-	-	-	58	-		
Stage 2	-	-	-	-	77	-		
Critical Hdwy	4.12	-	-	-	6.42	6.22		
Critical Hdwy Stg 1	-	-	-	-	5.42	-		
Critical Hdwy Stg 2	-	-	-	-	5.42	-		
Follow-up Hdwy	2.218	-	-	-	3.518	3.318		
Pot Cap-1 Maneuver	1541	-	-	-	859	1008		
Stage 1	-	-	-	-	965	-		
Stage 2	-	-	-	-	946	-		
Platoon blocked, %		-	-	-				
Mov Cap-1 Maneuver	1541	-	-	-	850	1008		
Mov Cap-2 Maneuver	• -	-	-	-	850	-		
Stage 1	-	-	-	-	954	-		
Stage 2	-	-	-	-	946	-		
Approach	EB		WB		SB			
HCM Control Delay, s	s 2		0		9.1			
HCM LOS					А			
Minor Lane/Major Mv	mt	EBL	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)		1541				945		
HCM Lane V/C Ratio		0.011	_	_	-	0.081		
HCM Control Delay (s	5)	7.4	0	-	-	9.1		
HCM Lane LOS		A	A	-	-	A		
HCM 95th %tile Q(veh	h)	0	-	-	-	0.3		

nt	er	se	ct	io	n		

Movement WBL WBR NBT NBR SBL SBT
Lane Configurations 🦞 🥵 🦨
Traffic Vol, veh/h 28 56 275 60 42 164
Future Vol, veh/h 28 56 275 60 42 164
Conflicting Peds, #/hr 0 0 0 0 0 0
Sign Control Stop Stop Free Free Free Free
RT Channelized - None - None - None
Storage Length 0
Veh in Median Storage, # 0 - 0 0
Grade, % 0 - 0 0
Peak Hour Factor 95 95 95 95 95 95
Heavy Vehicles, % 2 2 2 2 2 2 2
Mvmt Flow 29 59 289 63 44 173

Major/Minor	Minor1	Ν	lajor1	Ν	lajor2		
Conflicting Flow All	582	321	0	0	352	0	
Stage 1	321	-	-	-	-	-	
Stage 2	261	-	-	-	-	-	
Critical Hdwy	6.42	6.22	-	-	4.12	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	-	
Follow-up Hdwy	3.518	3.318	-	-	2.218	-	
Pot Cap-1 Maneuver	475	720	-	-	1207	-	
Stage 1	735	-	-	-	-	-	
Stage 2	783	-	-	-	-	-	
Platoon blocked, %			-	-		-	
Mov Cap-1 Maneuver	456	720	-	-	1207	-	
Mov Cap-2 Maneuver	456	-	-	-	-	-	
Stage 1	735	-	-	-	-	-	
Stage 2	752	-	-	-	-	-	
Approach	WB		NB		SB		
HCM Control Delay, s	12		0		1.7		

HCM LOS В

Minor Lane/Major Mvmt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)	-	-	604	1207	-
HCM Lane V/C Ratio	-	-	0.146	0.037	-
HCM Control Delay (s)	-	-	12	8.1	0
HCM Lane LOS	-	-	В	А	Α
HCM 95th %tile Q(veh)	-	-	0.5	0.1	-

Int	ers	ect	ior	ı
	0.0	000		

Int Delay, s/veh	2.7						
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	Y			ŧ	t,		
Traffic Vol, veh/h	8	42	75	164	84	10	
Future Vol, veh/h	8	42	75	164	84	10	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	
Storage Length	0	-	-	-	-	-	
Veh in Median Storage	, # 0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	90	90	90	90	90	90	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	9	47	83	182	93	11	
Conflicting Peds, #/hr Sign Control RT Channelized Storage Length Veh in Median Storage Grade, % Peak Hour Factor Heavy Vehicles, % Mvmt Flow	5top - 0 , # 0 90 2 9	0 Stop None - - - 90 2 47	0 Free - - - 90 2 83	0 Free None - 0 0 90 2 182	0 Free - - 0 0 90 2 93	0 Free None - - - 90 2 11	

Major/Minor	Minor2		Major1	Ма	jor2	
Conflicting Flow All	447	99	104	0	-	0
Stage 1	99	-	-	-	-	-
Stage 2	348	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	569	957	1488	-	-	-
Stage 1	925	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	534	957	1488	-	-	-
Mov Cap-2 Maneuver	534	-	-	-	-	-
Stage 1	868	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Approach	FB		NB		SB	

Approach	EB	NB	SB	
HCM Control Delay, s	9.5	2.4	0	
HCM LOS	А			

Minor Lane/Major Mvmt	NBL	NBT EB	Ln1	SBT	SBR
Capacity (veh/h)	1488	-	849	-	-
HCM Lane V/C Ratio	0.056	- 0.	065	-	-
HCM Control Delay (s)	7.6	0	9.5	-	-
HCM Lane LOS	А	А	А	-	-
HCM 95th %tile Q(veh)	0.2	-	0.2	-	-

Int Delay, s/veh	3.3							
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations		با	t,		Y			
Traffic Vol, veh/h	48	54	56	25	15	28		
Future Vol, veh/h	48	54	56	25	15	28		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Free	Free	Free	Free	Stop	Stop		
RT Channelized	-	None	-	None	-	None		
Storage Length	-	-	-	-	0	-		
Veh in Median Storage	, # -	0	0	-	0	-		
Grade, %	-	0	0	-	0	-		
Peak Hour Factor	92	92	92	92	92	92		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	52	59	61	27	16	30		

Major/Minor	Major1	Ν	/lajor2		Minor2	
Conflicting Flow All	88	0	-	0	238	75
Stage 1	-	-	-	-	75	-
Stage 2	-	-	-	-	163	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1508	-	-	-	750	986
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	866	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1508	-	-	-	723	986
Mov Cap-2 Maneuver	-	-	-	-	723	-
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	866	-
Approach	EB		WB		SB	
HCM Control Delay, s	3.5		0		9.3	
HCM LOS	0.0		•		A	
	-4		гот			0011
	nt	EBL	EBI	VVBI	WBR	SBLNI
Capacity (veh/h)		1508	-	-	-	8/5
HCM Lane V/C Ratio	`	0.035	-	-	-	0.053
HCM Control Delay (s)	7.5	0	-	-	9.3
HCM Lane LOS	\	A	А	-	-	A
HUIVI 95th %tile Q(veh)	0.1	-	-	-	0.2